wwPDB EM Validation Summary Report

Feb 20, 2023 – 03:35 pm GMT

PDB ID	:	7PIW
EMDB ID	:	EMD-13455
Title	:	Stacked stretched Dunaliella PSII
Authors	:	Caspy, I.; Fadeeva, M.; Mazor, Y.; Nelson, N.
Deposited on	:	2021-08-23
Resolution	:	4.00 Å(reported)
Based on initial model	:	6KAC

This is a wwPDB EM Validation Summary Report for a publicly released PDB entry.

We welcome your comments at *validation@mail.wwpdb.org*
A user guide is available at
https://www.wwpdb.org/validation/2017/EMValidationReportHelp
with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at
http://www.wwpdb.org/validation/2017/FAQs#types.

The following versions of software and data (see references ⓘ) were used in the production of this report:

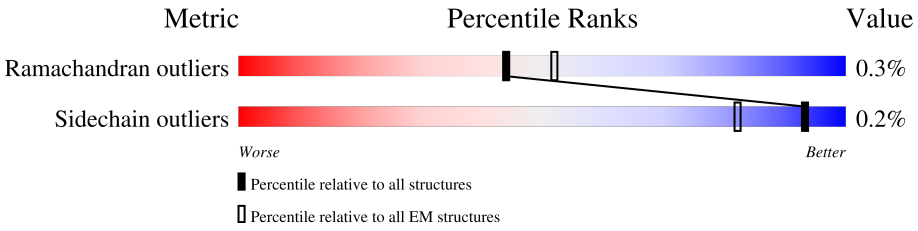
EMDB validation analysis	:	0.0.1.dev43
Mogul	:	1.8.4, CSD as541be (2020)
MolProbity	:	4.02b-467
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ	:	1.9.9
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.32.1

1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure:
ELECTRON MICROSCOPY

The reported resolution of this entry is 4.00 Å.

Percentile scores (ranging between 0-100) for global validation metrics of the entry are shown in the following graphic. The table shows the number of entries on which the scores are based.



Metric	Whole archive (#Entries)	EM structures (#Entries)
Ramachandran outliers	154571	4023
Sidechain outliers	154315	3826

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for >=3, 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions <=5% The upper red bar (where present) indicates the fraction of residues that have poor fit to the EM map (all-atom inclusion < 40%). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	A	336	31% 99%
1	A1	336	16% 100%
1	a	336	37% 99%
1	a1	336	42% 99%
2	B	484	53% 99%
2	B1	484	16% 100%
2	b	484	56% 100%
2	b1	484	33% 100%
3	V	32	59% 100%

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Mol	Chain	Length	Quality of chain
3	V1	32	28% 100%
3	v	32	84% 100%
3	v1	32	66% 100%
4	C	449	28% 99%
4	C1	449	11% 100%
4	c	449	46% 99%
4	c1	449	36% 99%
5	D	348	41% 99%
5	D1	348	18% 100%
5	d	348	41% 99%
5	d1	348	43% 99%
6	E	76	58% 100%
6	E1	76	12% 100%
6	e	76	75% 100%
6	e1	76	45% 100%
7	F	31	45% 100%
7	F1	31	100%
7	f	31	65% 100%
7	f1	31	29% 100%
8	H	67	70% 97%
8	H1	67	34% 100%
8	h	67	78% 99%
8	h1	67	46% 99%
9	I	35	40% 100%
9	I1	35	20% 100%

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Mol	Chain	Length	Quality of chain
9	i	35	37% 100%
9	i1	35	46% 100%
10	J	36	39% 100%
10	J1	36	36% 100%
10	j	36	72% 100%
10	j1	36	47% 100%
11	K	37	51% 97%
11	K1	37	19% 97%
11	k	37	57% 100%
11	k1	37	46% 100%
12	L	38	53% 97%
12	L1	38	39% 100%
12	l	38	50% 100%
13	M	32	62% 97%
13	m	32	84% 97%
14	O	238	79% 98%
14	O1	238	24% 98%
14	o	238	82% 98%
14	o1	238	33% 98%
15	P	187	100% 99%
15	P1	187	94% 99%
15	p	187	100% 100%
15	p1	187	93% 100%
16	T	30	53% 97%
16	T1	30	40% 97%

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Mol	Chain	Length	Quality of chain
16	t	30	53% 97%
16	t1	30	63% 100%
17	W	44	68% 98%
17	W1	44	14% 98%
17	w	44	59% 100%
17	w1	44	41% 100%
18	X	30	73% 100%
18	X1	30	20% 100%
18	x	30	73% 100%
18	x1	30	60% 100%
19	Z	61	75% 100%
19	Z1	61	15% 100%
19	z	61	92% 100%
19	z1	61	46% 100%
20	N	222	65% 99%
20	N1	222	9% 100%
20	n	222	88% 98%
20	n1	222	26% 100%
21	G	221	83% 99%
21	G1	221	10% 100%
21	g	221	89% 99%
21	g1	221	23% 100%
22	R	202	97% 100%
22	r	202	94% 100%
23	S	243	77% 98%

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Mol	Chain	Length	Quality of chain
23	S1	243	9% 98%
23	s	243	87% 99%
23	s1	243	44% 98%
24	Y	222	56% 98%
24	Y1	222	11% 100%
24	y	222	64% 99%
24	y1	222	27% 99%
25	U	27	89% 100%
25	U1	27	41% 100%
25	u	27	78% 100%
25	u1	27	52% 93% 7%
26	M1	31	65% 100%
26	m1	31	55% 100%
27	R1	202	39% 97%
27	r1	202	41% 96%

The following table lists non-polymeric compounds, carbohydrate monomers and non-standard residues in protein, DNA, RNA chains that are outliers for geometric or electron-density-fit criteria:

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
31	CLA	A	405	X	-	-	-
31	CLA	A	406	X	-	-	-
31	CLA	A	407	X	-	-	-
31	CLA	A	410	X	-	-	-
31	CLA	A1	405	X	-	-	-
31	CLA	A1	406	X	-	-	-
31	CLA	A1	407	X	-	-	-
31	CLA	A1	410	X	-	-	-
31	CLA	B	602	X	-	-	-
31	CLA	B	603	X	-	-	-
31	CLA	B	604	X	-	-	-
31	CLA	B	605	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
31	CLA	B	606	X	-	-	-
31	CLA	B	607	X	-	-	-
31	CLA	B	608	X	-	-	-
31	CLA	B	609	X	-	-	-
31	CLA	B	610	X	-	-	-
31	CLA	B	611	X	-	-	-
31	CLA	B	612	X	-	-	-
31	CLA	B	613	X	-	-	-
31	CLA	B	614	X	-	-	-
31	CLA	B	615	X	-	-	-
31	CLA	B	616	X	-	-	-
31	CLA	B	617	X	-	-	-
31	CLA	B1	602	X	-	-	-
31	CLA	B1	603	X	-	-	-
31	CLA	B1	604	X	-	-	-
31	CLA	B1	605	X	-	-	-
31	CLA	B1	606	X	-	-	-
31	CLA	B1	607	X	-	-	-
31	CLA	B1	608	X	-	-	-
31	CLA	B1	609	X	-	-	-
31	CLA	B1	610	X	-	-	-
31	CLA	B1	611	X	-	-	-
31	CLA	B1	612	X	-	-	-
31	CLA	B1	613	X	-	-	-
31	CLA	B1	614	X	-	-	-
31	CLA	B1	615	X	-	-	-
31	CLA	B1	616	X	-	-	-
31	CLA	B1	617	X	-	-	-
31	CLA	C	501	X	-	-	-
31	CLA	C	502	X	-	-	-
31	CLA	C	503	X	-	-	-
31	CLA	C	504	X	-	-	-
31	CLA	C	505	X	-	-	-
31	CLA	C	506	X	-	-	-
31	CLA	C	507	X	-	-	-
31	CLA	C	508	X	-	-	-
31	CLA	C	509	X	-	-	-
31	CLA	C	510	X	-	-	-
31	CLA	C	511	X	-	-	-
31	CLA	C	512	X	-	-	-
31	CLA	C	513	X	-	-	-
31	CLA	C1	501	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
31	CLA	C1	502	X	-	-	-
31	CLA	C1	503	X	-	-	-
31	CLA	C1	504	X	-	-	-
31	CLA	C1	505	X	-	-	-
31	CLA	C1	506	X	-	-	-
31	CLA	C1	507	X	-	-	-
31	CLA	C1	508	X	-	-	-
31	CLA	C1	509	X	-	-	-
31	CLA	C1	510	X	-	-	-
31	CLA	C1	511	X	-	-	-
31	CLA	C1	512	X	-	-	-
31	CLA	C1	513	X	-	-	-
31	CLA	D	402	X	-	-	-
31	CLA	D	403	X	-	-	-
31	CLA	D1	402	X	-	-	-
31	CLA	D1	403	X	-	-	-
31	CLA	G	602	X	-	-	-
31	CLA	G	603	X	-	-	-
31	CLA	G	604	X	-	-	-
31	CLA	G	610	X	-	-	-
31	CLA	G	611	X	-	-	-
31	CLA	G	612	X	-	-	-
31	CLA	G	613	X	-	-	-
31	CLA	G	614	X	-	-	-
31	CLA	G1	602	X	-	-	-
31	CLA	G1	603	X	-	-	-
31	CLA	G1	604	X	-	-	-
31	CLA	G1	610	X	-	-	-
31	CLA	G1	611	X	-	-	-
31	CLA	G1	612	X	-	-	-
31	CLA	G1	613	X	-	-	-
31	CLA	G1	614	X	-	-	-
31	CLA	N	602	X	-	-	-
31	CLA	N	603	X	-	-	-
31	CLA	N	604	X	-	-	-
31	CLA	N	610	X	-	-	-
31	CLA	N	611	X	-	-	-
31	CLA	N	612	X	-	-	-
31	CLA	N	613	X	-	-	-
31	CLA	N	614	X	-	-	-
31	CLA	N1	602	X	-	-	-
31	CLA	N1	603	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
31	CLA	N1	604	X	-	-	-
31	CLA	N1	610	X	-	-	-
31	CLA	N1	611	X	-	-	-
31	CLA	N1	612	X	-	-	-
31	CLA	N1	613	X	-	-	-
31	CLA	N1	614	X	-	-	-
31	CLA	R	602	X	-	-	-
31	CLA	R	603	X	-	-	-
31	CLA	R	604	X	-	-	-
31	CLA	R	608	X	-	-	-
31	CLA	R	609	X	-	-	-
31	CLA	R	610	X	-	-	-
31	CLA	R	611	X	-	-	-
31	CLA	R	612	X	-	-	-
31	CLA	R	613	X	-	-	-
31	CLA	R1	602	X	-	-	-
31	CLA	R1	603	X	-	-	-
31	CLA	R1	604	X	-	-	-
31	CLA	R1	608	X	-	-	-
31	CLA	R1	609	X	-	-	-
31	CLA	R1	610	X	-	-	-
31	CLA	R1	612	X	-	-	-
31	CLA	S	602	X	-	-	-
31	CLA	S	603	X	-	-	-
31	CLA	S	604	X	-	-	-
31	CLA	S	605	X	-	-	-
31	CLA	S	609	X	-	-	-
31	CLA	S	610	X	-	-	-
31	CLA	S	611	X	-	-	-
31	CLA	S	612	X	-	-	-
31	CLA	S	613	X	-	-	-
31	CLA	S	614	X	-	-	-
31	CLA	S	617	X	-	-	-
31	CLA	S1	602	X	-	-	-
31	CLA	S1	603	X	-	-	-
31	CLA	S1	604	X	-	-	-
31	CLA	S1	605	X	-	-	-
31	CLA	S1	609	X	-	-	-
31	CLA	S1	610	X	-	-	-
31	CLA	S1	611	X	-	-	-
31	CLA	S1	612	X	-	-	-
31	CLA	S1	613	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
31	CLA	S1	614	X	-	-	-
31	CLA	S1	617	X	-	-	-
31	CLA	Y	602	X	-	-	-
31	CLA	Y	603	X	-	-	-
31	CLA	Y	604	X	-	-	-
31	CLA	Y	608	X	-	-	-
31	CLA	Y	610	X	-	-	-
31	CLA	Y	611	X	-	-	-
31	CLA	Y	612	X	-	-	-
31	CLA	Y	613	X	-	-	-
31	CLA	Y	614	X	-	-	-
31	CLA	Y1	602	X	-	-	-
31	CLA	Y1	603	X	-	-	-
31	CLA	Y1	604	X	-	-	-
31	CLA	Y1	608	X	-	-	-
31	CLA	Y1	610	X	-	-	-
31	CLA	Y1	611	X	-	-	-
31	CLA	Y1	612	X	-	-	-
31	CLA	Y1	613	X	-	-	-
31	CLA	Y1	614	X	-	-	-
31	CLA	a	405	X	-	-	-
31	CLA	a	406	X	-	-	-
31	CLA	a	407	X	-	-	-
31	CLA	a	410	X	-	-	-
31	CLA	a1	405	X	-	-	-
31	CLA	a1	406	X	-	-	-
31	CLA	a1	407	X	-	-	-
31	CLA	a1	410	X	-	-	-
31	CLA	b	602	X	-	-	-
31	CLA	b	603	X	-	-	-
31	CLA	b	604	X	-	-	-
31	CLA	b	605	X	-	-	-
31	CLA	b	606	X	-	-	-
31	CLA	b	607	X	-	-	-
31	CLA	b	608	X	-	-	-
31	CLA	b	609	X	-	-	-
31	CLA	b	610	X	-	-	-
31	CLA	b	611	X	-	-	-
31	CLA	b	612	X	-	-	-
31	CLA	b	613	X	-	-	-
31	CLA	b	614	X	-	-	-
31	CLA	b	615	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
31	CLA	b	616	X	-	-	-
31	CLA	b	617	X	-	-	-
31	CLA	b1	602	X	-	-	-
31	CLA	b1	603	X	-	-	-
31	CLA	b1	604	X	-	-	-
31	CLA	b1	605	X	-	-	-
31	CLA	b1	606	X	-	-	-
31	CLA	b1	607	X	-	-	-
31	CLA	b1	608	X	-	-	-
31	CLA	b1	609	X	-	-	-
31	CLA	b1	610	X	-	-	-
31	CLA	b1	611	X	-	-	-
31	CLA	b1	612	X	-	-	-
31	CLA	b1	613	X	-	-	-
31	CLA	b1	614	X	-	-	-
31	CLA	b1	615	X	-	-	-
31	CLA	b1	616	X	-	-	-
31	CLA	b1	617	X	-	-	-
31	CLA	c	501	X	-	-	-
31	CLA	c	502	X	-	-	-
31	CLA	c	503	X	-	-	-
31	CLA	c	504	X	-	-	-
31	CLA	c	505	X	-	-	-
31	CLA	c	506	X	-	-	-
31	CLA	c	507	X	-	-	-
31	CLA	c	508	X	-	-	-
31	CLA	c	509	X	-	-	-
31	CLA	c	510	X	-	-	-
31	CLA	c	511	X	-	-	-
31	CLA	c	512	X	-	-	-
31	CLA	c	513	X	-	-	-
31	CLA	c1	501	X	-	-	-
31	CLA	c1	502	X	-	-	-
31	CLA	c1	503	X	-	-	-
31	CLA	c1	504	X	-	-	-
31	CLA	c1	505	X	-	-	-
31	CLA	c1	506	X	-	-	-
31	CLA	c1	507	X	-	-	-
31	CLA	c1	508	X	-	-	-
31	CLA	c1	509	X	-	-	-
31	CLA	c1	510	X	-	-	-
31	CLA	c1	511	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
31	CLA	c1	512	X	-	-	-
31	CLA	c1	513	X	-	-	-
31	CLA	d	402	X	-	-	-
31	CLA	d	403	X	-	-	-
31	CLA	d1	402	X	-	-	-
31	CLA	d1	403	X	-	-	-
31	CLA	g	602	X	-	-	-
31	CLA	g	603	X	-	-	-
31	CLA	g	604	X	-	-	-
31	CLA	g	610	X	-	-	-
31	CLA	g	611	X	-	-	-
31	CLA	g	612	X	-	-	-
31	CLA	g	613	X	-	-	-
31	CLA	g	614	X	-	-	-
31	CLA	g1	602	X	-	-	-
31	CLA	g1	603	X	-	-	-
31	CLA	g1	604	X	-	-	-
31	CLA	g1	610	X	-	-	-
31	CLA	g1	611	X	-	-	-
31	CLA	g1	612	X	-	-	-
31	CLA	g1	613	X	-	-	-
31	CLA	g1	614	X	-	-	-
31	CLA	n	602	X	-	-	-
31	CLA	n	603	X	-	-	-
31	CLA	n	604	X	-	-	-
31	CLA	n	610	X	-	-	-
31	CLA	n	611	X	-	-	-
31	CLA	n	612	X	-	-	-
31	CLA	n	613	X	-	-	-
31	CLA	n	614	X	-	-	-
31	CLA	n1	602	X	-	-	-
31	CLA	n1	603	X	-	-	-
31	CLA	n1	604	X	-	-	-
31	CLA	n1	610	X	-	-	-
31	CLA	n1	611	X	-	-	-
31	CLA	n1	612	X	-	-	-
31	CLA	n1	613	X	-	-	-
31	CLA	n1	614	X	-	-	-
31	CLA	r	602	X	-	-	-
31	CLA	r	603	X	-	-	-
31	CLA	r	604	X	-	-	-
31	CLA	r	608	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
31	CLA	r	609	X	-	-	-
31	CLA	r	610	X	-	-	-
31	CLA	r	611	X	-	-	-
31	CLA	r	612	X	-	-	-
31	CLA	r	613	X	-	-	-
31	CLA	r1	602	X	-	-	-
31	CLA	r1	603	X	-	-	-
31	CLA	r1	604	X	-	-	-
31	CLA	r1	608	X	-	-	-
31	CLA	r1	609	X	-	-	-
31	CLA	r1	610	X	-	-	-
31	CLA	r1	612	X	-	-	-
31	CLA	s	602	X	-	-	-
31	CLA	s	603	X	-	-	-
31	CLA	s	604	X	-	-	-
31	CLA	s	605	X	-	-	-
31	CLA	s	609	X	-	-	-
31	CLA	s	610	X	-	-	-
31	CLA	s	611	X	-	-	-
31	CLA	s	612	X	-	-	-
31	CLA	s	613	X	-	-	-
31	CLA	s	614	X	-	-	-
31	CLA	s	617	X	-	-	-
31	CLA	s1	602	X	-	-	-
31	CLA	s1	603	X	-	-	-
31	CLA	s1	604	X	-	-	-
31	CLA	s1	605	X	-	-	-
31	CLA	s1	609	X	-	-	-
31	CLA	s1	610	X	-	-	-
31	CLA	s1	611	X	-	-	-
31	CLA	s1	612	X	-	-	-
31	CLA	s1	613	X	-	-	-
31	CLA	s1	614	X	-	-	-
31	CLA	s1	617	X	-	-	-
31	CLA	y	602	X	-	-	-
31	CLA	y	603	X	-	-	-
31	CLA	y	604	X	-	-	-
31	CLA	y	608	X	-	-	-
31	CLA	y	610	X	-	-	-
31	CLA	y	611	X	-	-	-
31	CLA	y	612	X	-	-	-
31	CLA	y	613	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
31	CLA	y	614	X	-	-	-
31	CLA	y1	602	X	-	-	-
31	CLA	y1	603	X	-	-	-
31	CLA	y1	604	X	-	-	-
31	CLA	y1	608	X	-	-	-
31	CLA	y1	610	X	-	-	-
31	CLA	y1	611	X	-	-	-
31	CLA	y1	612	X	-	-	-
31	CLA	y1	613	X	-	-	-
31	CLA	y1	614	X	-	-	-
37	C7Z	B	620	X	-	-	-
37	C7Z	B1	620	X	-	-	-
37	C7Z	b	620	X	-	-	-
37	C7Z	b1	620	X	-	-	-
42	LMK	C	527	X	-	-	-
42	LMK	C1	527	X	-	-	-
42	LMK	c	627	X	-	-	-
42	LMK	c1	527	X	-	-	-
46	RRX	H	101	X	-	-	-
46	RRX	H1	101	X	-	-	-
46	RRX	h	101	X	-	-	-
46	RRX	h1	101	X	-	-	-
47	CHL	G	601	X	-	-	-
47	CHL	G	605	X	-	-	-
47	CHL	G	606	X	-	-	-
47	CHL	G	607	X	-	-	-
47	CHL	G	608	X	-	-	-
47	CHL	G	609	X	-	-	-
47	CHL	G1	601	X	-	-	-
47	CHL	G1	605	X	-	-	-
47	CHL	G1	606	X	-	-	-
47	CHL	G1	607	X	-	-	-
47	CHL	G1	608	X	-	-	-
47	CHL	G1	609	X	-	-	-
47	CHL	N	601	X	-	-	-
47	CHL	N	605	X	-	-	-
47	CHL	N	606	X	-	-	-
47	CHL	N	607	X	-	-	-
47	CHL	N	608	X	-	-	-
47	CHL	N	609	X	-	-	-
47	CHL	N1	601	X	-	-	-
47	CHL	N1	605	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
47	CHL	N1	606	X	-	-	-
47	CHL	N1	607	X	-	-	-
47	CHL	N1	608	X	-	-	-
47	CHL	N1	609	X	-	-	-
47	CHL	R	606	X	-	-	-
47	CHL	R	607	X	-	-	-
47	CHL	R1	606	X	-	-	-
47	CHL	R1	607	X	-	-	-
47	CHL	S	601	X	-	-	-
47	CHL	S	606	X	-	-	-
47	CHL	S	607	X	-	-	-
47	CHL	S	608	X	-	-	-
47	CHL	S1	601	X	-	-	-
47	CHL	S1	606	X	-	-	-
47	CHL	S1	607	X	-	-	-
47	CHL	S1	608	X	-	-	-
47	CHL	Y	601	X	-	-	-
47	CHL	Y	605	X	-	-	-
47	CHL	Y	606	X	-	-	-
47	CHL	Y	607	X	-	-	-
47	CHL	Y	609	X	-	-	-
47	CHL	Y1	601	X	-	-	-
47	CHL	Y1	605	X	-	-	-
47	CHL	Y1	606	X	-	-	-
47	CHL	Y1	607	X	-	-	-
47	CHL	Y1	609	X	-	-	-
47	CHL	g	601	X	-	-	-
47	CHL	g	605	X	-	-	-
47	CHL	g	606	X	-	-	-
47	CHL	g	607	X	-	-	-
47	CHL	g	608	X	-	-	-
47	CHL	g	609	X	-	-	-
47	CHL	g1	601	X	-	-	-
47	CHL	g1	605	X	-	-	-
47	CHL	g1	606	X	-	-	-
47	CHL	g1	607	X	-	-	-
47	CHL	g1	608	X	-	-	-
47	CHL	g1	609	X	-	-	-
47	CHL	n	601	X	-	-	-
47	CHL	n	605	X	-	-	-
47	CHL	n	606	X	-	-	-
47	CHL	n	607	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
47	CHL	n	608	X	-	-	-
47	CHL	n	609	X	-	-	-
47	CHL	n1	601	X	-	-	-
47	CHL	n1	605	X	-	-	-
47	CHL	n1	606	X	-	-	-
47	CHL	n1	607	X	-	-	-
47	CHL	n1	608	X	-	-	-
47	CHL	n1	609	X	-	-	-
47	CHL	r	606	X	-	-	-
47	CHL	r	607	X	-	-	-
47	CHL	r1	606	X	-	-	-
47	CHL	r1	607	X	-	-	-
47	CHL	s	601	X	-	-	-
47	CHL	s	606	X	-	-	-
47	CHL	s	607	X	-	-	-
47	CHL	s	608	X	-	-	-
47	CHL	s1	601	X	-	-	-
47	CHL	s1	606	X	-	-	-
47	CHL	s1	607	X	-	-	-
47	CHL	s1	608	X	-	-	-
47	CHL	y	601	X	-	-	-
47	CHL	y	605	X	-	-	-
47	CHL	y	606	X	-	-	-
47	CHL	y	607	X	-	-	-
47	CHL	y	609	X	-	-	-
47	CHL	y1	601	X	-	-	-
47	CHL	y1	605	X	-	-	-
47	CHL	y1	606	X	-	-	-
47	CHL	y1	607	X	-	-	-
47	CHL	y1	609	X	-	-	-
48	LUT	G	621	X	-	-	-
48	LUT	R1	620	X	-	-	-
48	LUT	S	620	X	-	-	-
48	LUT	Y	621	X	-	-	-
48	LUT	g1	621	X	-	-	-
48	LUT	n	621	X	-	-	-
48	LUT	s	620	X	-	-	-
49	XAT	G	622	X	-	-	-
49	XAT	G1	622	X	-	-	-
49	XAT	N	622	X	-	-	-
49	XAT	N1	622	X	-	-	-
49	XAT	R	621	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
49	XAT	Y	622	X	-	-	-
49	XAT	Y1	622	X	-	-	-
49	XAT	g	622	X	-	-	-
49	XAT	g1	622	X	-	-	-
49	XAT	n1	622	X	-	-	-
49	XAT	r	622	X	-	-	-
49	XAT	r1	621	X	-	-	-
56	ERG	R1	626	X	-	-	-
56	ERG	r1	626	X	-	-	-

2 Entry composition (i)

There are 57 unique types of molecules in this entry. The entry contains 151508 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

- Molecule 1 is a protein called Photosystem II protein D1.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	A	336	Total	C	N	O	S	1	0
			2638	1721	432	468	17		
1	a	336	Total	C	N	O	S	1	0
			2638	1721	432	468	17		
1	A1	336	Total	C	N	O	S	1	0
			2638	1721	432	468	17		
1	a1	336	Total	C	N	O	S	1	0
			2638	1721	432	468	17		

- Molecule 2 is a protein called Photosystem II CP47 reaction center protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	B	484	Total	C	N	O	S	0	0
			3783	2480	630	663	10		
2	b	484	Total	C	N	O	S	0	0
			3783	2480	630	663	10		
2	B1	484	Total	C	N	O	S	0	0
			3783	2480	630	663	10		
2	b1	484	Total	C	N	O	S	0	0
			3783	2480	630	663	10		

There are 8 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
B	298	VAL	LEU	variant	UNP D0FY05
B	415	SER	LEU	variant	UNP D0FY05
b	298	VAL	LEU	variant	UNP D0FY05
b	415	SER	LEU	variant	UNP D0FY05
B1	298	VAL	LEU	variant	UNP D0FY05
B1	415	SER	LEU	variant	UNP D0FY05
b1	298	VAL	LEU	variant	UNP D0FY05
b1	415	SER	LEU	variant	UNP D0FY05

- Molecule 3 is a protein called Photosystem II reaction center protein Ycf12.

Mol	Chain	Residues	Atoms				AltConf	Trace
3	V	32	Total 227	C 152	N 37	O 38	0	0
3	v	32	Total 227	C 152	N 37	O 38	0	0
3	V1	32	Total 227	C 152	N 37	O 38	0	0
3	v1	32	Total 227	C 152	N 37	O 38	0	0

- Molecule 4 is a protein called Photosystem II CP43 reaction center protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	C	449	Total 3483	C 2282	N 581	O 607	S 13	0	0
4	c	449	Total 3483	C 2282	N 581	O 607	S 13	0	0
4	C1	449	Total 3483	C 2282	N 581	O 607	S 13	0	0
4	c1	449	Total 3483	C 2282	N 581	O 607	S 13	0	0

- Molecule 5 is a protein called Photosystem II D2 protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
5	D	348	Total 2766	C 1824	N 454	O 477	S 11	0	0
5	d	348	Total 2766	C 1824	N 454	O 477	S 11	0	0
5	D1	348	Total 2766	C 1824	N 454	O 477	S 11	0	0
5	d1	348	Total 2766	C 1824	N 454	O 477	S 11	0	0

There are 4 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
D	319	ILE	LEU	variant	UNP D0FXW8
d	319	ILE	LEU	variant	UNP D0FXW8
D1	319	ILE	LEU	variant	UNP D0FXW8
d1	319	ILE	LEU	variant	UNP D0FXW8

- Molecule 6 is a protein called Cytochrome b559 subunit alpha.

Mol	Chain	Residues	Atoms				AltConf	Trace
6	E	76	Total 621	C 404	N 102	O 115	0	0
6	e	76	Total 621	C 404	N 102	O 115	0	0
6	E1	76	Total 621	C 404	N 102	O 115	0	0
6	e1	76	Total 621	C 404	N 102	O 115	0	0

- Molecule 7 is a protein called Cytochrome b559 subunit beta.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	F	31	Total 252	C 172	N 42	O 37	S 1	0	0
7	f	31	Total 252	C 172	N 42	O 37	S 1	0	0
7	F1	31	Total 252	C 172	N 42	O 37	S 1	0	0
7	f1	31	Total 252	C 172	N 42	O 37	S 1	0	0

- Molecule 8 is a protein called Photosystem II reaction center protein H.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	H	67	Total 503	C 334	N 76	O 92	S 1	0	0
8	h	67	Total 503	C 334	N 76	O 92	S 1	0	0
8	H1	67	Total 503	C 334	N 76	O 92	S 1	0	0
8	h1	67	Total 503	C 334	N 76	O 92	S 1	0	0

There are 4 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
H	85	ALA	SER	variant	UNP D0FY02
h	85	ALA	SER	variant	UNP D0FY02
H1	85	ALA	SER	variant	UNP D0FY02
h1	85	ALA	SER	variant	UNP D0FY02

- Molecule 9 is a protein called Photosystem II reaction center protein I.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	I	35	Total	C	N	O	S	0	0
			279	190	42	46	1		
9	i	35	Total	C	N	O	S	0	0
			279	190	42	46	1		
9	I1	35	Total	C	N	O	S	0	0
			279	190	42	46	1		
9	i1	35	Total	C	N	O	S	0	0
			279	190	42	46	1		

- Molecule 10 is a protein called Photosystem II reaction center protein J.

Mol	Chain	Residues	Atoms				AltConf	Trace
10	J	36	Total	C	N	O	0	0
			266	183	40	43		
10	j	36	Total	C	N	O	0	0
			266	183	40	43		
10	J1	36	Total	C	N	O	0	0
			266	183	40	43		
10	j1	36	Total	C	N	O	0	0
			266	183	40	43		

There are 12 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
J	7	ILE	THR	variant	UNP D0FXW2
J	28	ALA	GLY	variant	UNP D0FXW2
J	42	LEU	GLN	variant	UNP D0FXW2
j	7	ILE	THR	variant	UNP D0FXW2
j	28	ALA	GLY	variant	UNP D0FXW2
j	42	LEU	GLN	variant	UNP D0FXW2
J1	7	ILE	THR	variant	UNP D0FXW2
J1	28	ALA	GLY	variant	UNP D0FXW2
J1	42	LEU	GLN	variant	UNP D0FXW2
j1	7	ILE	THR	variant	UNP D0FXW2
j1	28	ALA	GLY	variant	UNP D0FXW2
j1	42	LEU	GLN	variant	UNP D0FXW2

- Molecule 11 is a protein called Photosystem II reaction center protein K.

Mol	Chain	Residues	Atoms				AltConf	Trace
11	K	37	Total	C	N	O	0	0
			297	207	43	47		

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Mol	Chain	Residues	Atoms				AltConf	Trace
11	k	37	Total 297	C 207	N 43	O 47	0	0
11	K1	37	Total 297	C 207	N 43	O 47	0	0
11	k1	37	Total 297	C 207	N 43	O 47	0	0

- Molecule 12 is a protein called Photosystem II reaction center protein L.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	L	38	Total 313	C 209	N 51	O 52	S 1	0	0
12	l	38	Total 313	C 209	N 51	O 52	S 1	0	0
12	L1	38	Total 313	C 209	N 51	O 52	S 1	0	0

- Molecule 13 is a protein called Photosystem II reaction center protein M.

Mol	Chain	Residues	Atoms				AltConf	Trace
13	M	32	Total 243	C 164	N 34	O 45	0	0
13	m	32	Total 243	C 164	N 34	O 45	0	0

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
M	9	THR	ILE	variant	UNP D0FXZ3
m	9	THR	ILE	variant	UNP D0FXZ3

- Molecule 14 is a protein called PsbO.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	O	238	Total 1820	C 1149	N 295	O 370	S 6	0	0
14	o	238	Total 1820	C 1149	N 295	O 370	S 6	0	0
14	O1	238	Total 1820	C 1149	N 295	O 370	S 6	0	0
14	o1	238	Total 1820	C 1149	N 295	O 370	S 6	0	0

- Molecule 15 is a protein called PsbP.

Mol	Chain	Residues	Atoms					AltConf	Trace
15	P	187	Total	C	N	O	S	0	0
			1444	916	242	285	1		
15	p	187	Total	C	N	O	S	0	0
			1444	916	242	285	1		
15	P1	187	Total	C	N	O	S	0	0
			1444	916	242	285	1		
15	p1	187	Total	C	N	O	S	0	0
			1444	916	242	285	1		

- Molecule 16 is a protein called Photosystem II reaction center protein T.

Mol	Chain	Residues	Atoms					AltConf	Trace
16	T	30	Total	C	N	O	S	0	0
			247	171	36	39	1		
16	t	30	Total	C	N	O	S	0	0
			247	171	36	39	1		
16	T1	30	Total	C	N	O	S	0	0
			247	171	36	39	1		
16	t1	30	Total	C	N	O	S	0	0
			247	171	36	39	1		

- Molecule 17 is a protein called PsbW.

Mol	Chain	Residues	Atoms					AltConf	Trace
17	W	44	Total	C	N	O	S	0	0
			332	215	53	63	1		
17	w	44	Total	C	N	O	S	0	0
			332	215	53	63	1		
17	W1	44	Total	C	N	O	S	0	0
			332	215	53	63	1		
17	w1	44	Total	C	N	O	S	0	0
			332	215	53	63	1		

- Molecule 18 is a protein called PsbX.

Mol	Chain	Residues	Atoms				AltConf	Trace
18	X	30	Total	C	N	O	0	0
			201	132	32	37		
18	x	30	Total	C	N	O	0	0
			201	132	32	37		
18	X1	30	Total	C	N	O	0	0
			201	132	32	37		

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Mol	Chain	Residues	Atoms				AltConf	Trace
18	x1	30	Total 201	C 132	N 32	O 37	0	0

- Molecule 19 is a protein called PsbZ.

Mol	Chain	Residues	Atoms					AltConf	Trace
19	Z	61	Total 457	C 312	N 68	O 76	S 1	0	0
19	z	61	Total 457	C 312	N 68	O 76	S 1	0	0
19	Z1	61	Total 457	C 312	N 68	O 76	S 1	0	0
19	z1	61	Total 457	C 312	N 68	O 76	S 1	0	0

- Molecule 20 is a protein called LHCII M3.

Mol	Chain	Residues	Atoms					AltConf	Trace
20	N	222	Total 1703	C 1100	N 277	O 321	S 5	0	0
20	n	222	Total 1703	C 1100	N 277	O 321	S 5	0	0
20	N1	222	Total 1703	C 1100	N 277	O 321	S 5	0	0
20	n1	222	Total 1703	C 1100	N 277	O 321	S 5	0	0

- Molecule 21 is a protein called LHCII M2.

Mol	Chain	Residues	Atoms					AltConf	Trace
21	G	221	Total 1680	C 1085	N 271	O 321	S 3	0	0
21	g	221	Total 1680	C 1085	N 271	O 321	S 3	0	0
21	G1	221	Total 1680	C 1085	N 271	O 321	S 3	0	0
21	g1	221	Total 1680	C 1085	N 271	O 321	S 3	0	0

- Molecule 22 is a protein called CP29.

Mol	Chain	Residues	Atoms					AltConf	Trace
22	R	202	Total	C	N	O	S	0	0
			1533	974	258	298	3		
22	r	202	Total	C	N	O	S	0	0
			1533	974	258	298	3		

- Molecule 23 is a protein called CP26.

Mol	Chain	Residues	Atoms					AltConf	Trace
23	S	242	Total	C	N	O	S	0	0
			1849	1195	297	354	3		
23	s	243	Total	C	N	O	S	0	0
			1856	1200	298	355	3		
23	S1	243	Total	C	N	O	S	0	0
			1856	1200	298	355	3		
23	s1	243	Total	C	N	O	S	0	0
			1856	1200	298	355	3		

- Molecule 24 is a protein called LHCII M1.

Mol	Chain	Residues	Atoms					AltConf	Trace
24	Y	222	Total	C	N	O	S	0	0
			1667	1080	272	312	3		
24	y	222	Total	C	N	O	S	0	0
			1667	1080	272	312	3		
24	Y1	222	Total	C	N	O	S	0	0
			1667	1080	272	312	3		
24	y1	222	Total	C	N	O	S	0	0
			1667	1080	272	312	3		

- Molecule 25 is a protein called PsbU.

Mol	Chain	Residues	Atoms					AltConf	Trace
25	U	27	Total	C	N	O	S	0	0
			224	134	42	47	1		
25	u	27	Total	C	N	O	S	0	0
			224	134	42	47	1		
25	U1	27	Total	C	N	O	S	0	0
			224	134	42	47	1		
25	u1	27	Total	C	N	O	S	0	0
			224	134	42	47	1		

- Molecule 26 is a protein called Photosystem II reaction center protein M.

Mol	Chain	Residues	Atoms				AltConf	Trace
26	M1	31	Total 234	C 159	N 33	O 42	0	0
26	m1	31	Total 234	C 159	N 33	O 42	0	0

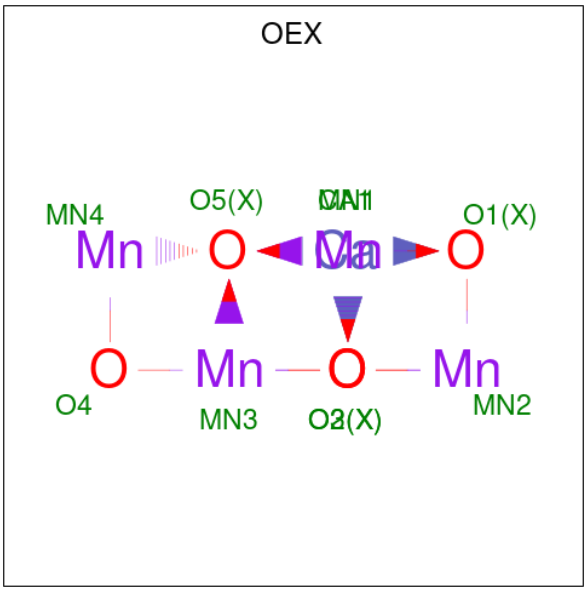
There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
M1	9	THR	ILE	variant	UNP D0FXZ3
m1	9	THR	ILE	variant	UNP D0FXZ3

- Molecule 27 is a protein called CP29.

Mol	Chain	Residues	Atoms						AltConf	Trace
27	R1	196	Total 1490	C 943	N 251	O 292	P 1	S 3	0	0
27	r1	196	Total 1490	C 943	N 251	O 292	P 1	S 3	0	0

- Molecule 28 is CA-MN4-O5 CLUSTER (three-letter code: OEX) (formula: $CaMn_4O_5$).



Mol	Chain	Residues	Atoms				AltConf
28	A	1	Total 10	Ca 1	Mn 4	O 5	0
28	a	1	Total 10	Ca 1	Mn 4	O 5	0

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Mol	Chain	Residues	Atoms				AltConf
28	A1	1	Total 10	Ca 1	Mn 4	O 5	0
28	a1	1	Total 10	Ca 1	Mn 4	O 5	0

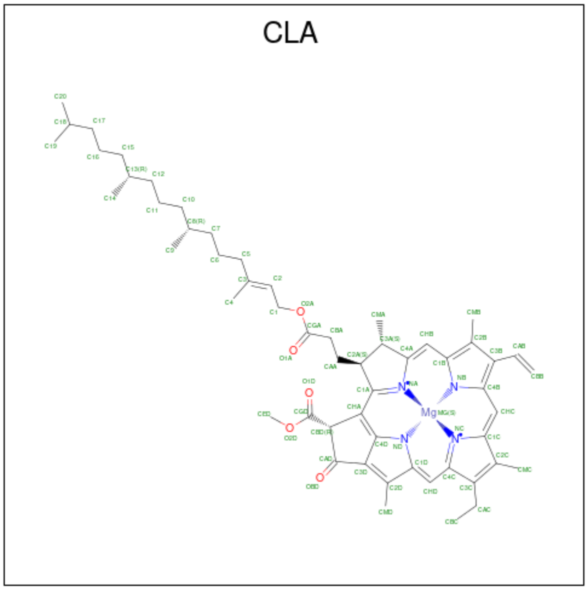
- Molecule 29 is FE (II) ION (three-letter code: FE2) (formula: Fe).

Mol	Chain	Residues	Atoms		AltConf
29	A	1	Total 1	Fe 1	0
29	a	1	Total 1	Fe 1	0
29	A1	1	Total 1	Fe 1	0
29	a1	1	Total 1	Fe 1	0

- Molecule 30 is CHLORIDE ION (three-letter code: CL) (formula: Cl).

Mol	Chain	Residues	Atoms		AltConf
30	A	2	Total 2	Cl 2	0
30	a	2	Total 2	Cl 2	0
30	A1	2	Total 2	Cl 2	0
30	a1	2	Total 2	Cl 2	0

- Molecule 31 is CHLOROPHYLL A (three-letter code: CLA) (formula: $C_{55}H_{72}MgN_4O_5$).



Mol	Chain	Residues	Atoms	AltConf
31	A	1	Total C Mg N O 65 55 1 4 5	0
31	A	1	Total C Mg N O 65 55 1 4 5	0
31	A	1	Total C Mg N O 49 39 1 4 5	0
31	A	1	Total C Mg N O 60 50 1 4 5	0
31	B	1	Total C Mg N O 65 55 1 4 5	0
31	B	1	Total C Mg N O 65 55 1 4 5	0
31	B	1	Total C Mg N O 65 55 1 4 5	0
31	B	1	Total C Mg N O 65 55 1 4 5	0
31	B	1	Total C Mg N O 65 55 1 4 5	0
31	B	1	Total C Mg N O 65 55 1 4 5	0
31	B	1	Total C Mg N O 65 55 1 4 5	0
31	B	1	Total C Mg N O 65 55 1 4 5	0
31	B	1	Total C Mg N O 65 55 1 4 5	0
31	B	1	Total C Mg N O 65 55 1 4 5	0

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Mol	Chain	Residues	Atoms					AltConf
31	B	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	B	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	B	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	B	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	B	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	B	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	C	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	C	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	C	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	C	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	C	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	C	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	C	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	C	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	C	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	C	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	C	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	C	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	C	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	D	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	D	1	Total 65	C 55	Mg 1	N 4	O 5	0

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Mol	Chain	Residues	Atoms					AltConf
31	N	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	N	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	N	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	N	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	N	1	Total	C	Mg	N	O	0
			49	39	1	4	5	
31	N	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
31	N	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	N	1	Total	C	Mg	N	O	0
			49	39	1	4	5	
31	G	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	G	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	G	1	Total	C	Mg	N	O	0
			49	39	1	4	5	
31	G	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	G	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
31	G	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
31	G	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	G	1	Total	C	Mg	N	O	0
			49	39	1	4	5	
31	R	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
31	R	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
31	R	1	Total	C	Mg	N	O	0
			49	39	1	4	5	
31	R	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
31	R	1	Total	C	Mg	N	O	0
			60	50	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
31	R	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
31	R	1	Total	C	Mg	N	O	0
			46	36	1	4	5	
31	R	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
31	R	1	Total	C	Mg	N	O	0
			46	36	1	4	5	
31	S	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
31	S	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	S	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
31	S	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
31	S	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
31	S	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	S	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	S	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
31	S	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
31	S	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
31	S	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
31	Y	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	Y	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	Y	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	Y	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
31	Y	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	Y	1	Total	C	Mg	N	O	0
			65	55	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
31	Y	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	Y	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	Y	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	a	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	a	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	a	1	Total 49	C 39	Mg 1	N 4	O 5	0
31	a	1	Total 60	C 50	Mg 1	N 4	O 5	0
31	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	b	1	Total 65	C 55	Mg 1	N 4	O 5	0

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Mol	Chain	Residues	Atoms	AltConf
31	b	1	Total C Mg N O 65 55 1 4 5	0
31	b	1	Total C Mg N O 65 55 1 4 5	0
31	c	1	Total C Mg N O 65 55 1 4 5	0
31	c	1	Total C Mg N O 65 55 1 4 5	0
31	c	1	Total C Mg N O 65 55 1 4 5	0
31	c	1	Total C Mg N O 65 55 1 4 5	0
31	c	1	Total C Mg N O 65 55 1 4 5	0
31	c	1	Total C Mg N O 65 55 1 4 5	0
31	c	1	Total C Mg N O 65 55 1 4 5	0
31	c	1	Total C Mg N O 65 55 1 4 5	0
31	c	1	Total C Mg N O 65 55 1 4 5	0
31	c	1	Total C Mg N O 65 55 1 4 5	0
31	c	1	Total C Mg N O 65 55 1 4 5	0
31	c	1	Total C Mg N O 65 55 1 4 5	0
31	c	1	Total C Mg N O 65 55 1 4 5	0
31	d	1	Total C Mg N O 65 55 1 4 5	0
31	d	1	Total C Mg N O 65 55 1 4 5	0
31	n	1	Total C Mg N O 65 55 1 4 5	0
31	n	1	Total C Mg N O 65 55 1 4 5	0
31	n	1	Total C Mg N O 65 55 1 4 5	0
31	n	1	Total C Mg N O 65 55 1 4 5	0

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Mol	Chain	Residues	Atoms					AltConf
31	n	1	Total	C	Mg	N	O	0
			49	39	1	4	5	
31	n	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
31	n	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	n	1	Total	C	Mg	N	O	0
			49	39	1	4	5	
31	g	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	g	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	g	1	Total	C	Mg	N	O	0
			49	39	1	4	5	
31	g	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	g	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
31	g	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
31	g	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	g	1	Total	C	Mg	N	O	0
			49	39	1	4	5	
31	r	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
31	r	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
31	r	1	Total	C	Mg	N	O	0
			49	39	1	4	5	
31	r	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
31	r	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
31	r	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
31	r	1	Total	C	Mg	N	O	0
			46	36	1	4	5	
31	r	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
31	r	1	Total	C	Mg	N	O	0
			46	36	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
31	s	1	Total 60	C 50	Mg 1	N 4	O 5	0
31	s	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	s	1	Total 55	C 45	Mg 1	N 4	O 5	0
31	s	1	Total 50	C 40	Mg 1	N 4	O 5	0
31	s	1	Total 60	C 50	Mg 1	N 4	O 5	0
31	s	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	s	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	s	1	Total 45	C 35	Mg 1	N 4	O 5	0
31	s	1	Total 55	C 45	Mg 1	N 4	O 5	0
31	s	1	Total 55	C 45	Mg 1	N 4	O 5	0
31	s	1	Total 50	C 40	Mg 1	N 4	O 5	0
31	y	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	y	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	y	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	y	1	Total 50	C 40	Mg 1	N 4	O 5	0
31	y	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	y	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	y	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	y	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	y	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	A1	1	Total 65	C 55	Mg 1	N 4	O 5	0

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Mol	Chain	Residues	Atoms	AltConf
31	A1	1	Total C Mg N O 65 55 1 4 5	0
31	A1	1	Total C Mg N O 50 40 1 4 5	0
31	A1	1	Total C Mg N O 60 50 1 4 5	0
31	B1	1	Total C Mg N O 65 55 1 4 5	0
31	B1	1	Total C Mg N O 65 55 1 4 5	0
31	B1	1	Total C Mg N O 65 55 1 4 5	0
31	B1	1	Total C Mg N O 65 55 1 4 5	0
31	B1	1	Total C Mg N O 65 55 1 4 5	0
31	B1	1	Total C Mg N O 65 55 1 4 5	0
31	B1	1	Total C Mg N O 65 55 1 4 5	0
31	B1	1	Total C Mg N O 65 55 1 4 5	0
31	B1	1	Total C Mg N O 65 55 1 4 5	0
31	B1	1	Total C Mg N O 65 55 1 4 5	0
31	B1	1	Total C Mg N O 65 55 1 4 5	0
31	B1	1	Total C Mg N O 65 55 1 4 5	0
31	B1	1	Total C Mg N O 65 55 1 4 5	0
31	B1	1	Total C Mg N O 65 55 1 4 5	0
31	B1	1	Total C Mg N O 65 55 1 4 5	0
31	B1	1	Total C Mg N O 65 55 1 4 5	0
31	C1	1	Total C Mg N O 65 55 1 4 5	0
31	C1	1	Total C Mg N O 65 55 1 4 5	0

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Mol	Chain	Residues	Atoms					AltConf
31	C1	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	C1	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	C1	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	C1	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	C1	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	C1	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	C1	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	C1	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	C1	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	C1	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	C1	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	D1	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	D1	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	N1	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	N1	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	N1	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	N1	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	N1	1	Total 49	C 39	Mg 1	N 4	O 5	0
31	N1	1	Total 45	C 35	Mg 1	N 4	O 5	0
31	N1	1	Total 65	C 55	Mg 1	N 4	O 5	0
31	N1	1	Total 49	C 39	Mg 1	N 4	O 5	0

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Mol	Chain	Residues	Atoms					AltConf
31	G1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	G1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	G1	1	Total	C	Mg	N	O	0
			49	39	1	4	5	
31	G1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	G1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	G1	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
31	G1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	G1	1	Total	C	Mg	N	O	0
			49	39	1	4	5	
31	R1	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
31	R1	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
31	R1	1	Total	C	Mg	N	O	0
			49	39	1	4	5	
31	R1	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
31	R1	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
31	R1	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
31	R1	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
31	S1	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
31	S1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	S1	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
31	S1	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
31	S1	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
31	S1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
31	S1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	S1	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
31	S1	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
31	S1	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
31	S1	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
31	Y1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	Y1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	Y1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	Y1	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
31	Y1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	Y1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	Y1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	Y1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	Y1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	a1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	a1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	a1	1	Total	C	Mg	N	O	0
			49	39	1	4	5	
31	a1	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
31	b1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	b1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	b1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	

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Mol	Chain	Residues	Atoms	AltConf
31	b1	1	Total C Mg N O 65 55 1 4 5	0
31	b1	1	Total C Mg N O 65 55 1 4 5	0
31	b1	1	Total C Mg N O 65 55 1 4 5	0
31	b1	1	Total C Mg N O 65 55 1 4 5	0
31	b1	1	Total C Mg N O 65 55 1 4 5	0
31	b1	1	Total C Mg N O 65 55 1 4 5	0
31	b1	1	Total C Mg N O 65 55 1 4 5	0
31	b1	1	Total C Mg N O 65 55 1 4 5	0
31	b1	1	Total C Mg N O 65 55 1 4 5	0
31	b1	1	Total C Mg N O 65 55 1 4 5	0
31	b1	1	Total C Mg N O 65 55 1 4 5	0
31	b1	1	Total C Mg N O 65 55 1 4 5	0
31	b1	1	Total C Mg N O 65 55 1 4 5	0
31	c1	1	Total C Mg N O 65 55 1 4 5	0
31	c1	1	Total C Mg N O 65 55 1 4 5	0
31	c1	1	Total C Mg N O 65 55 1 4 5	0
31	c1	1	Total C Mg N O 65 55 1 4 5	0
31	c1	1	Total C Mg N O 65 55 1 4 5	0
31	c1	1	Total C Mg N O 65 55 1 4 5	0
31	c1	1	Total C Mg N O 65 55 1 4 5	0
31	c1	1	Total C Mg N O 65 55 1 4 5	0

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Mol	Chain	Residues	Atoms					AltConf
31	c1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	c1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	c1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	c1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	c1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	d1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	d1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	n1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	n1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	n1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	n1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	n1	1	Total	C	Mg	N	O	0
			49	39	1	4	5	
31	n1	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
31	n1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	n1	1	Total	C	Mg	N	O	0
			49	39	1	4	5	
31	g1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	g1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	g1	1	Total	C	Mg	N	O	0
			49	39	1	4	5	
31	g1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	g1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	g1	1	Total	C	Mg	N	O	0
			43	35	1	4	3	

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Mol	Chain	Residues	Atoms					AltConf
31	g1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	g1	1	Total	C	Mg	N	O	0
			49	39	1	4	5	
31	r1	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
31	r1	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
31	r1	1	Total	C	Mg	N	O	0
			49	39	1	4	5	
31	r1	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
31	r1	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
31	r1	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
31	r1	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
31	s1	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
31	s1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	s1	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
31	s1	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
31	s1	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
31	s1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	s1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	s1	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
31	s1	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
31	s1	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
31	s1	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
31	y1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	

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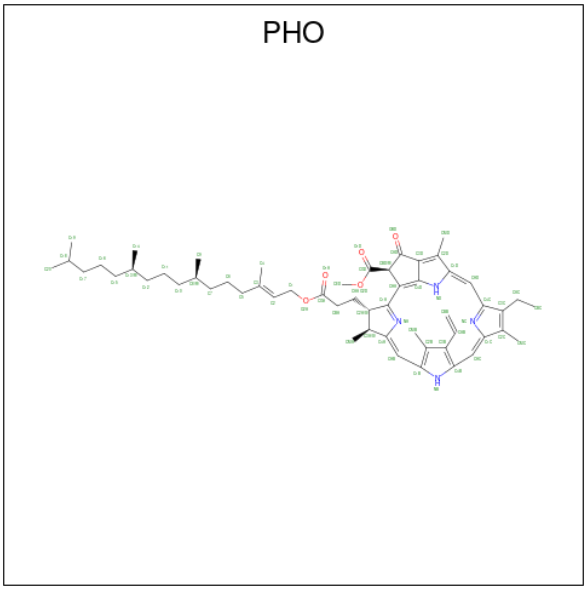
Mol	Chain	Residues	Atoms					AltConf
31	y1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	y1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	y1	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
31	y1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	y1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	y1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	y1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
31	y1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	

- Molecule 32 is PHEOPHYTIN A (three-letter code: PHO) (formula: $C_{55}H_{74}N_4O_5$).



Mol	Chain	Residues	Atoms				AltConf
32	A	1	Total	C	N	O	0
			64	55	4	5	
32	A	1	Total	C	N	O	0
			64	55	4	5	
32	a	1	Total	C	N	O	0
			64	55	4	5	

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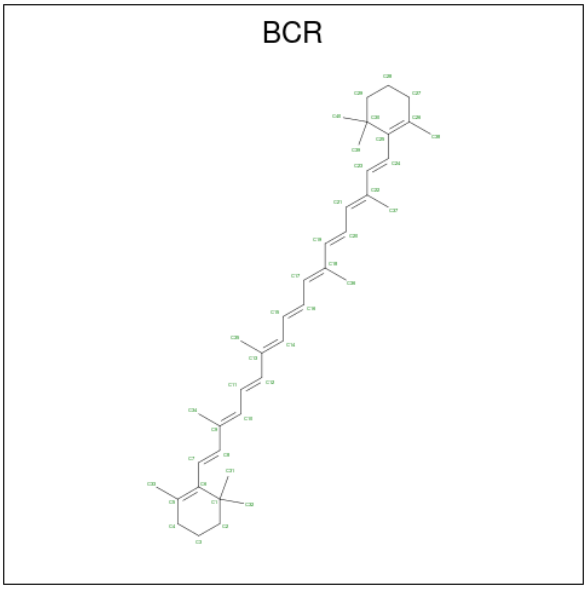
Mol	Chain	Residues	Atoms				AltConf
32	a	1	Total	C	N	O	0
			64	55	4	5	
32	A1	1	Total	C	N	O	0
			64	55	4	5	
32	A1	1	Total	C	N	O	0
			64	55	4	5	
32	a1	1	Total	C	N	O	0
			64	55	4	5	
32	a1	1	Total	C	N	O	0
			64	55	4	5	

- Molecule 33 is BETA-CAROTENE (three-letter code: BCR) (formula: $C_{40}H_{56}$).



Mol	Chain	Residues	Atoms		AltConf
33	A	1	Total	C	0
			40	40	
33	B	1	Total	C	0
			40	40	
33	B	1	Total	C	0
			40	40	
33	C	1	Total	C	0
			40	40	
33	C	1	Total	C	0
			40	40	
33	C	1	Total	C	0
			40	40	

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Mol	Chain	Residues	Atoms	AltConf
33	C	1	Total C 40 40	0
33	D	1	Total C 40 40	0
33	a	1	Total C 40 40	0
33	b	1	Total C 40 40	0
33	b	1	Total C 40 40	0
33	c	1	Total C 40 40	0
33	c	1	Total C 40 40	0
33	c	1	Total C 40 40	0
33	c	1	Total C 40 40	0
33	d	1	Total C 40 40	0
33	A1	1	Total C 40 40	0
33	B1	1	Total C 40 40	0
33	B1	1	Total C 40 40	0
33	C1	1	Total C 40 40	0
33	C1	1	Total C 40 40	0
33	C1	1	Total C 40 40	0
33	C1	1	Total C 40 40	0
33	D1	1	Total C 40 40	0
33	a1	1	Total C 40 40	0
33	b1	1	Total C 40 40	0
33	b1	1	Total C 40 40	0

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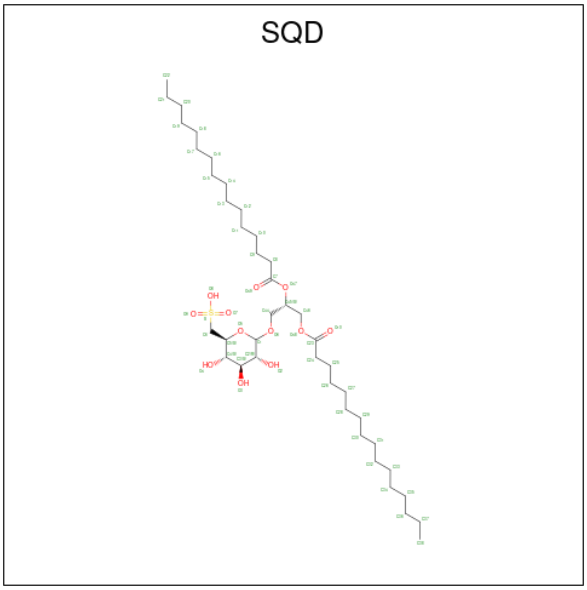
Mol	Chain	Residues	Atoms	AltConf
33	c1	1	Total C 40 40	0
33	c1	1	Total C 40 40	0
33	c1	1	Total C 40 40	0
33	c1	1	Total C 40 40	0
33	d1	1	Total C 40 40	0

- Molecule 34 is 1,2-DI-O-ACYL-3-O-[6-DEOXY-6-SULFO-ALPHA-D-GLUCOPYRANOSYL]-SN-GLYCEROL (three-letter code: SQD) (formula: $C_{41}H_{78}O_{12}S$).



Mol	Chain	Residues	Atoms	AltConf
34	A	1	Total C O S 51 38 12 1	0
34	B	1	Total C O S 54 41 12 1	0
34	C	1	Total C O S 54 41 12 1	0
34	a	1	Total C O S 51 38 12 1	0
34	b	1	Total C O S 54 41 12 1	0
34	c	1	Total C O S 54 41 12 1	0

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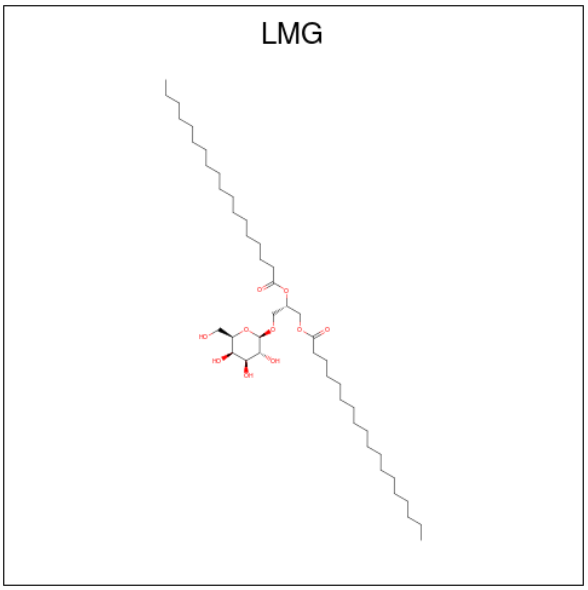
Mol	Chain	Residues	Atoms				AltConf
34	A1	1	Total	C	O	S	0
			51	38	12	1	
34	B1	1	Total	C	O	S	0
			42	29	12	1	
34	B1	1	Total	C	O	S	0
			54	41	12	1	
34	C1	1	Total	C	O	S	0
			54	41	12	1	
34	M1	1	Total	C	O	S	0
			42	29	12	1	
34	a1	1	Total	C	O	S	0
			51	38	12	1	
34	b1	1	Total	C	O	S	0
			42	29	12	1	
34	b1	1	Total	C	O	S	0
			54	41	12	1	
34	c1	1	Total	C	O	S	0
			54	41	12	1	
34	m1	1	Total	C	O	S	0
			42	29	12	1	

- Molecule 35 is 1,2-DISTEAROYL-MONOGALACTOSYL-DIGLYCERIDE (three-letter code: LMG) (formula: $C_{45}H_{86}O_{10}$).



Mol	Chain	Residues	Atoms			AltConf
35	A	1	Total	C	O	0
			48	38	10	

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Mol	Chain	Residues	Atoms			AltConf
35	B	1	Total	C	O	0
			44	34	10	
35	C	1	Total	C	O	0
			51	41	10	
35	D	1	Total	C	O	0
			46	36	10	
35	H	1	Total	C	O	0
			48	38	10	
35	J	1	Total	C	O	0
			45	35	10	
35	a	1	Total	C	O	0
			48	38	10	
35	b	1	Total	C	O	0
			44	34	10	
35	c	1	Total	C	O	0
			51	41	10	
35	d	1	Total	C	O	0
			46	36	10	
35	h	1	Total	C	O	0
			48	38	10	
35	j	1	Total	C	O	0
			45	35	10	
35	A1	1	Total	C	O	0
			48	38	10	
35	B1	1	Total	C	O	0
			44	34	10	
35	C1	1	Total	C	O	0
			51	41	10	
35	C1	1	Total	C	O	0
			55	45	10	
35	D1	1	Total	C	O	0
			46	36	10	
35	H1	1	Total	C	O	0
			48	38	10	
35	W1	1	Total	C	O	0
			39	29	10	
35	a1	1	Total	C	O	0
			48	38	10	
35	b1	1	Total	C	O	0
			44	34	10	
35	c1	1	Total	C	O	0
			51	41	10	

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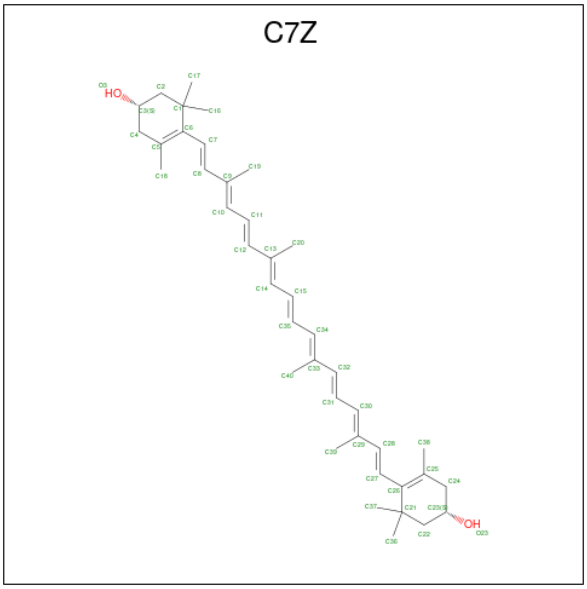
Mol	Chain	Residues	Atoms	AltConf
35	c1	1	Total C O 55 45 10	0
35	d1	1	Total C O 46 36 10	0
35	h1	1	Total C O 48 38 10	0
35	w1	1	Total C O 39 29 10	0

- Molecule 36 is SODIUM ION (three-letter code: NA) (formula: Na).

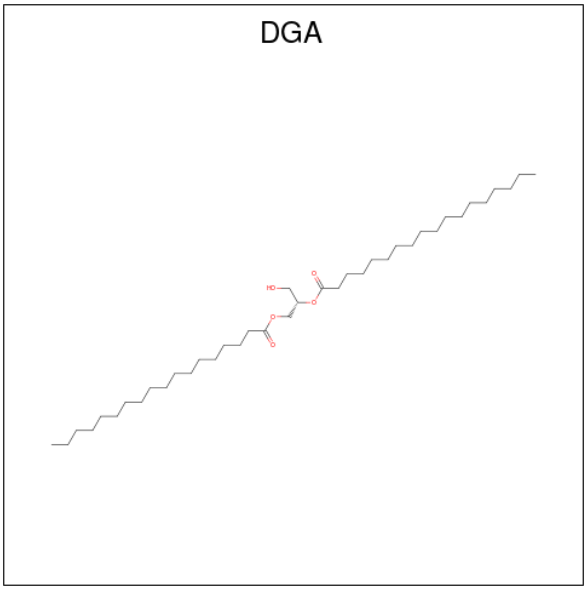
Mol	Chain	Residues	Atoms	AltConf
36	A	1	Total Na 1 1	0
36	a	1	Total Na 1 1	0
36	A1	1	Total Na 1 1	0
36	a1	1	Total Na 1 1	0

- Molecule 37 is (1 {S})-3,5,5-trimethyl-4-[(1 {E},3 {E},5 {E},7 {E},9 {E},11 {E},13 {E},15 {E},17 {E})-3,7,12,16-tetramethyl-18-[(4 {S})-2,6,6-trimethyl-4-oxidanyl-cyclohexen-1-yl]octadeca-1,3,5,7,9,11,13,15,17-nonaenyl]cyclohex-3-en-1-ol (three-letter code: C7Z) (formula: $C_{40}H_{56}O_2$).



Mol	Chain	Residues	Atoms	AltConf
37	B	1	Total C O 42 40 2	0
37	b	1	Total C O 42 40 2	0
37	B1	1	Total C O 42 40 2	0
37	b1	1	Total C O 42 40 2	0

- Molecule 38 is DIACYL GLYCEROL (three-letter code: DGA) (formula: $C_{39}H_{76}O_5$).



Mol	Chain	Residues	Atoms	AltConf
38	B	1	Total C O 44 39 5	0
38	C	1	Total C O 44 39 5	0
38	b	1	Total C O 44 39 5	0
38	c	1	Total C O 44 39 5	0
38	B1	1	Total C O 44 39 5	0
38	C1	1	Total C O 44 39 5	0
38	J1	1	Total C O 29 24 5	0
38	b1	1	Total C O 44 39 5	0

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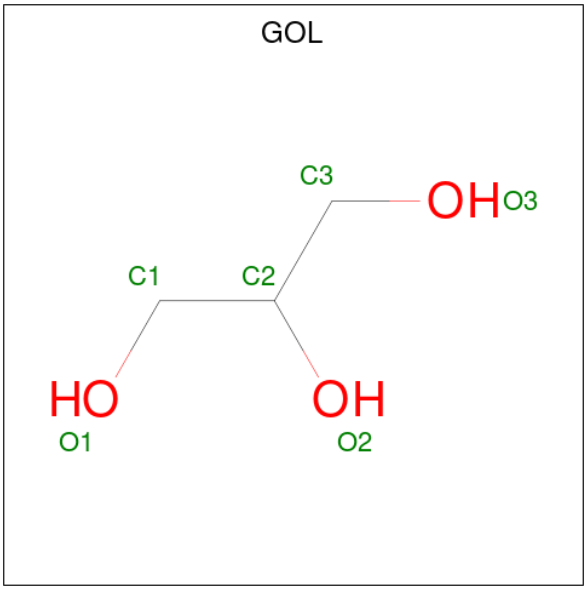
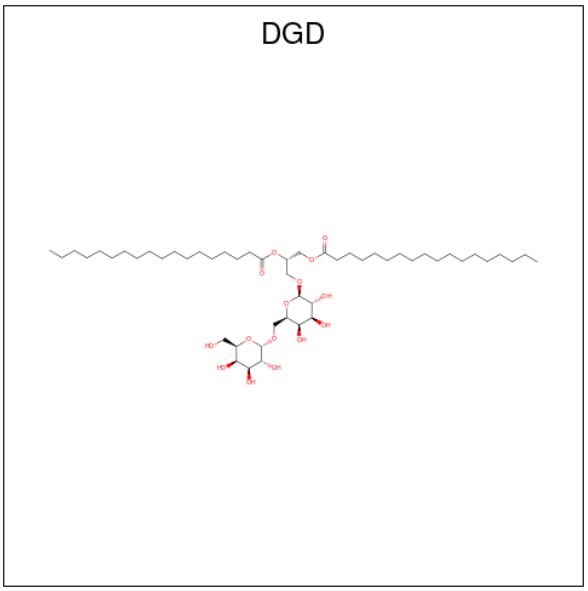
Mol	Chain	Residues	Atoms	AltConf
38	c1	1	Total C O 44 39 5	0
38	j1	1	Total C O 29 24 5	0

- Molecule 39 is GLYCEROL (three-letter code: GOL) (formula: $C_3H_8O_3$).



Mol	Chain	Residues	Atoms	AltConf
39	B	1	Total C O 6 3 3	0
39	b	1	Total C O 6 3 3	0
39	b	1	Total C O 6 3 3	0
39	y	1	Total C O 6 3 3	0
39	I1	1	Total C O 6 3 3	0

- Molecule 40 is DIGALACTOSYL DIACYL GLYCEROL (DGDG) (three-letter code: DGD) (formula: $C_{51}H_{96}O_{15}$).



Mol	Chain	Residues	Atoms	AltConf
40	C	1	Total C O 55 40 15	0
40	C	1	Total C O 62 47 15	0
40	C	1	Total C O 59 44 15	0
40	C	1	Total C O 66 51 15	0
40	c	1	Total C O 55 40 15	0
40	c	1	Total C O 62 47 15	0
40	c	1	Total C O 59 44 15	0
40	c	1	Total C O 66 51 15	0
40	B1	1	Total C O 43 28 15	0
40	C1	1	Total C O 55 40 15	0
40	C1	1	Total C O 62 47 15	0
40	C1	1	Total C O 59 44 15	0
40	b1	1	Total C O 43 28 15	0
40	c1	1	Total C O 55 40 15	0

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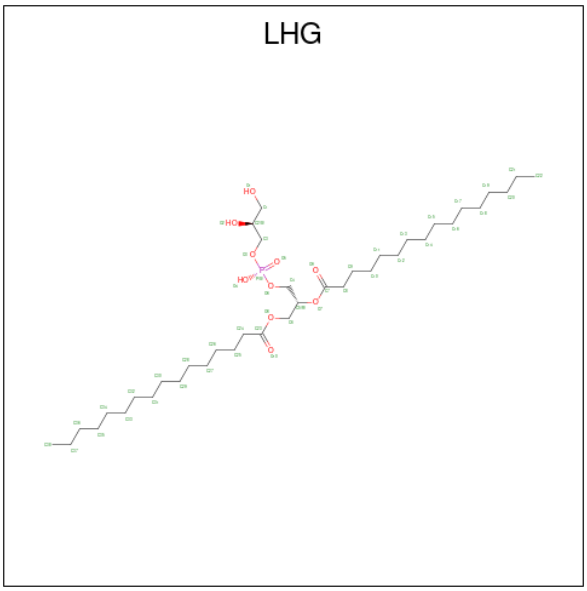
Mol	Chain	Residues	Atoms	AltConf
40	c1	1	Total C O 62 47 15	0
40	c1	1	Total C O 59 44 15	0

- Molecule 41 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (three-letter code: LHG) (formula: $C_{38}H_{75}O_{10}P$).



Mol	Chain	Residues	Atoms	AltConf
41	C	1	Total C O P 47 36 10 1	0
41	D	1	Total C O P 44 33 10 1	0
41	D	1	Total C O P 49 38 10 1	0
41	D	1	Total C O P 39 28 10 1	0
41	L	1	Total C O P 49 38 10 1	0
41	N	1	Total C O P 49 38 10 1	0
41	G	1	Total C O P 49 38 10 1	0
41	S	1	Total C O P 45 34 10 1	0
41	Y	1	Total C O P 49 38 10 1	0

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Mol	Chain	Residues	Atoms				AltConf
41	c	1	Total	C	O	P	0
			47	36	10	1	
41	d	1	Total	C	O	P	0
			44	33	10	1	
41	d	1	Total	C	O	P	0
			49	38	10	1	
41	d	1	Total	C	O	P	0
			39	28	10	1	
41	l	1	Total	C	O	P	0
			49	38	10	1	
41	n	1	Total	C	O	P	0
			49	38	10	1	
41	g	1	Total	C	O	P	0
			49	38	10	1	
41	s	1	Total	C	O	P	0
			45	34	10	1	
41	y	1	Total	C	O	P	0
			49	38	10	1	
41	C1	1	Total	C	O	P	0
			47	36	10	1	
41	D1	1	Total	C	O	P	0
			44	33	10	1	
41	D1	1	Total	C	O	P	0
			49	38	10	1	
41	D1	1	Total	C	O	P	0
			39	28	10	1	
41	L1	1	Total	C	O	P	0
			49	38	10	1	
41	N1	1	Total	C	O	P	0
			49	38	10	1	
41	G1	1	Total	C	O	P	0
			49	38	10	1	
41	S1	1	Total	C	O	P	0
			45	34	10	1	
41	Y1	1	Total	C	O	P	0
			49	38	10	1	
41	c1	1	Total	C	O	P	0
			47	36	10	1	
41	d1	1	Total	C	O	P	0
			44	33	10	1	
41	d1	1	Total	C	O	P	0
			49	38	10	1	

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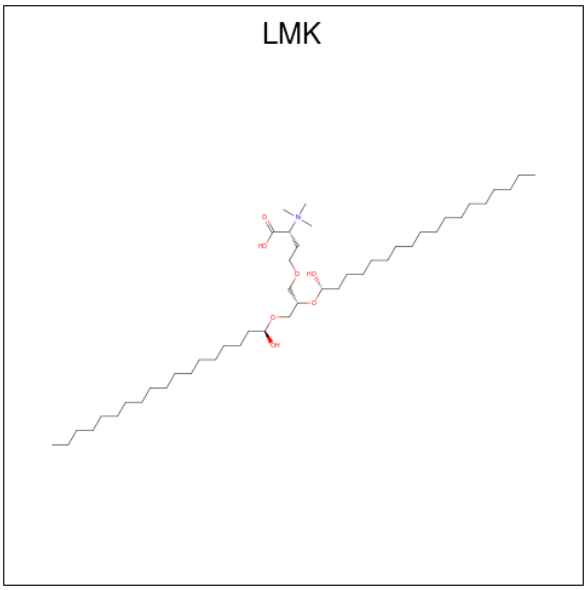
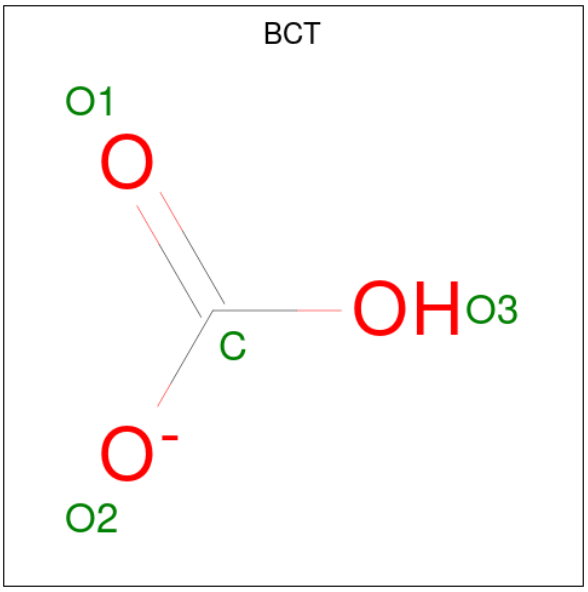
Mol	Chain	Residues	Atoms				AltConf
41	d1	1	Total	C	O	P	0
			39	28	10	1	
41	n1	1	Total	C	O	P	0
			49	38	10	1	
41	g1	1	Total	C	O	P	0
			49	38	10	1	
41	s1	1	Total	C	O	P	0
			45	34	10	1	
41	y1	1	Total	C	O	P	0
			49	38	10	1	

- Molecule 42 is trimethyl-[(2 {R})-1-oxidanyl-1-oxidanylidene-4-[(2 {S})-2-[(1 {S})-1-oxidanyloctadecoxy]-3-[(1 {R})-1-oxidanyloctadecoxy]propoxy]butan-2-yl]azanium (three-letter code: LMK) (formula: $C_{46}H_{94}NO_7$).



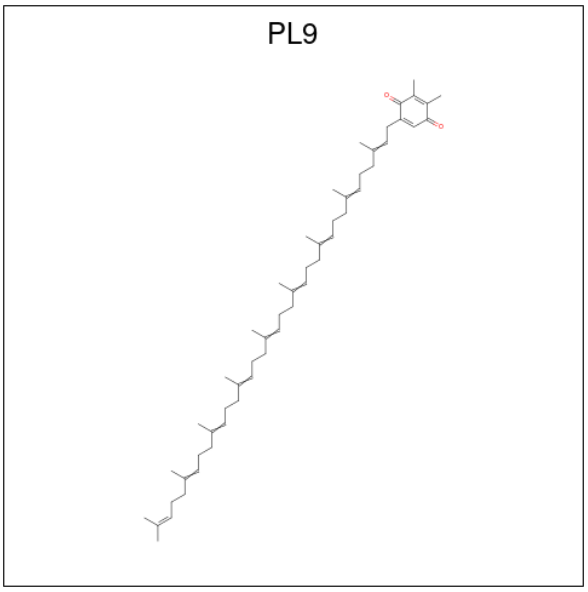
Mol	Chain	Residues	Atoms				AltConf
42	C	1	Total	C	N	O	0
			40	32	1	7	
42	c	1	Total	C	N	O	0
			40	32	1	7	
42	C1	1	Total	C	N	O	0
			40	32	1	7	
42	c1	1	Total	C	N	O	0
			40	32	1	7	

- Molecule 43 is BICARBONATE ION (three-letter code: BCT) (formula: CHO_3).



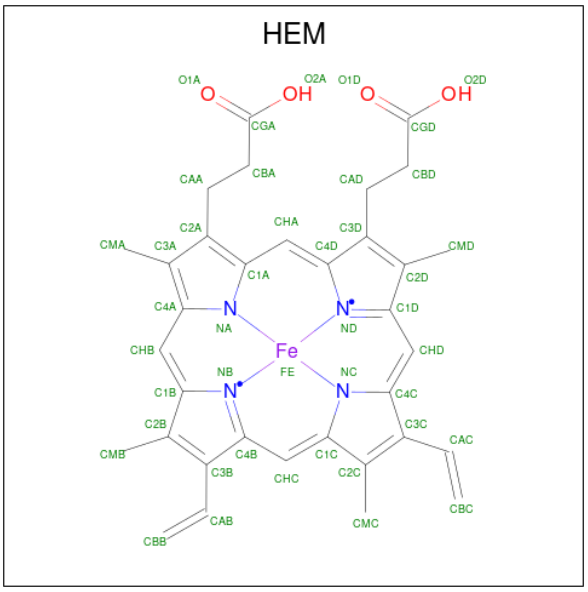
Mol	Chain	Residues	Atoms			AltConf
43	D	1	Total	C	O	0
			4	1	3	
43	d	1	Total	C	O	0
			4	1	3	
43	D1	1	Total	C	O	0
			4	1	3	
43	d1	1	Total	C	O	0
			4	1	3	

- Molecule 44 is 2,3-DIMETHYL-5-(3,7,11,15,19,23,27,31,35-NONAMETHYL-2,6,10,14,18,22,26,30,34-HEXATRIACONTANONAENYL-2,5-CYCLOHEXADIENE-1,4-DIONE-2,3-DIMETHYL-5-SOLANESYL-1,4-BENZOQUINONE (three-letter code: PL9) (formula: $C_{53}H_{80}O_2$).



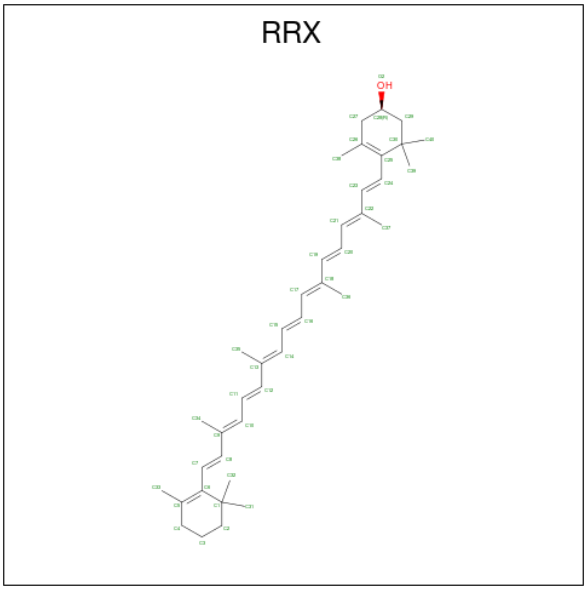
Mol	Chain	Residues	Atoms	AltConf
44	D	1	Total C O 55 53 2	0
44	d	1	Total C O 55 53 2	0
44	D1	1	Total C O 55 53 2	0
44	d1	1	Total C O 55 53 2	0

- Molecule 45 is PROTOPORPHYRIN IX CONTAINING FE (three-letter code: HEM) (formula: $C_{34}H_{32}FeN_4O_4$).



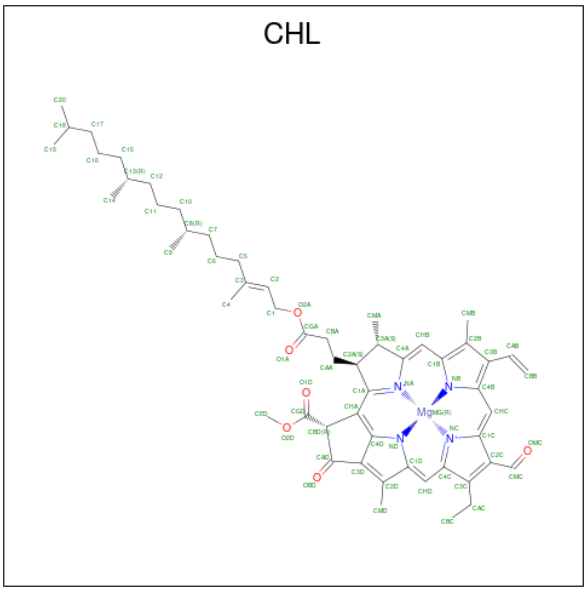
Mol	Chain	Residues	Atoms					AltConf
45	F	1	Total	C	Fe	N	O	0
			43	34	1	4	4	
45	f	1	Total	C	Fe	N	O	0
			43	34	1	4	4	
45	F1	1	Total	C	Fe	N	O	0
			43	34	1	4	4	
45	f1	1	Total	C	Fe	N	O	0
			43	34	1	4	4	

- Molecule 46 is (3R)-beta,beta-caroten-3-ol (three-letter code: RRX) (formula: $C_{40}H_{56}O$).



Mol	Chain	Residues	Atoms			AltConf
46	H	1	Total	C	O	0
			41	40	1	
46	h	1	Total	C	O	0
			41	40	1	
46	H1	1	Total	C	O	0
			41	40	1	
46	h1	1	Total	C	O	0
			41	40	1	

- Molecule 47 is CHLOROPHYLL B (three-letter code: CHL) (formula: $C_{55}H_{70}MgN_4O_6$).



Mol	Chain	Residues	Atoms					AltConf
47	N	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	N	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	N	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	N	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	N	1	Total	C	Mg	N	O	0
			50	39	1	4	6	
47	N	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	G	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	G	1	Total	C	Mg	N	O	0
			48	37	1	4	6	
47	G	1	Total	C	Mg	N	O	0
			50	39	1	4	6	
47	G	1	Total	C	Mg	N	O	0
			50	39	1	4	6	
47	G	1	Total	C	Mg	N	O	0
			44	35	1	4	4	
47	G	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	R	1	Total	C	Mg	N	O	0
			44	35	1	4	4	
47	R	1	Total	C	Mg	N	O	0
			50	39	1	4	6	

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Mol	Chain	Residues	Atoms					AltConf
47	S	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
47	S	1	Total	C	Mg	N	O	0
			44	35	1	4	4	
47	S	1	Total	C	Mg	N	O	0
			43	34	1	4	4	
47	S	1	Total	C	Mg	N	O	0
			61	50	1	4	6	
47	Y	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	Y	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
47	Y	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	Y	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	Y	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	n	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	n	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	n	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	n	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	n	1	Total	C	Mg	N	O	0
			50	39	1	4	6	
47	n	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	g	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	g	1	Total	C	Mg	N	O	0
			48	37	1	4	6	
47	g	1	Total	C	Mg	N	O	0
			50	39	1	4	6	
47	g	1	Total	C	Mg	N	O	0
			50	39	1	4	6	
47	g	1	Total	C	Mg	N	O	0
			44	35	1	4	4	
47	g	1	Total	C	Mg	N	O	0
			66	55	1	4	6	

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Mol	Chain	Residues	Atoms					AltConf
47	r	1	Total	C	Mg	N	O	0
			44	35	1	4	4	
47	r	1	Total	C	Mg	N	O	0
			50	39	1	4	6	
47	s	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
47	s	1	Total	C	Mg	N	O	0
			44	35	1	4	4	
47	s	1	Total	C	Mg	N	O	0
			43	34	1	4	4	
47	s	1	Total	C	Mg	N	O	0
			61	50	1	4	6	
47	y	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	y	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
47	y	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	y	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	y	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	N1	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	N1	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	N1	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	N1	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	N1	1	Total	C	Mg	N	O	0
			50	39	1	4	6	
47	N1	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	G1	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	G1	1	Total	C	Mg	N	O	0
			48	37	1	4	6	
47	G1	1	Total	C	Mg	N	O	0
			50	39	1	4	6	
47	G1	1	Total	C	Mg	N	O	0
			66	55	1	4	6	

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Mol	Chain	Residues	Atoms					AltConf
47	G1	1	Total	C	Mg	N	O	0
			44	35	1	4	4	
47	G1	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	R1	1	Total	C	Mg	N	O	0
			44	35	1	4	4	
47	R1	1	Total	C	Mg	N	O	0
			50	39	1	4	6	
47	S1	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
47	S1	1	Total	C	Mg	N	O	0
			44	35	1	4	4	
47	S1	1	Total	C	Mg	N	O	0
			43	34	1	4	4	
47	S1	1	Total	C	Mg	N	O	0
			61	50	1	4	6	
47	Y1	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	Y1	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
47	Y1	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	Y1	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	Y1	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	n1	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	n1	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	n1	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	n1	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	n1	1	Total	C	Mg	N	O	0
			50	39	1	4	6	
47	n1	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	g1	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	g1	1	Total	C	Mg	N	O	0
			48	37	1	4	6	

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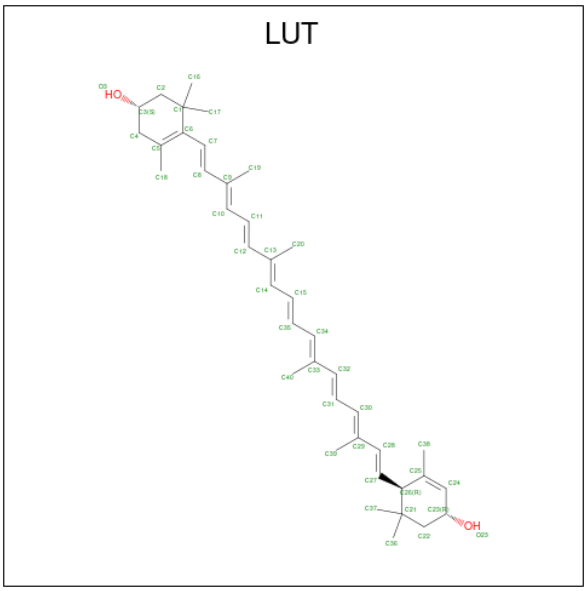
Mol	Chain	Residues	Atoms					AltConf
47	g1	1	Total	C	Mg	N	O	0
			50	39	1	4	6	
47	g1	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	g1	1	Total	C	Mg	N	O	0
			44	35	1	4	4	
47	g1	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	r1	1	Total	C	Mg	N	O	0
			44	35	1	4	4	
47	r1	1	Total	C	Mg	N	O	0
			50	39	1	4	6	
47	s1	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
47	s1	1	Total	C	Mg	N	O	0
			44	35	1	4	4	
47	s1	1	Total	C	Mg	N	O	0
			43	34	1	4	4	
47	s1	1	Total	C	Mg	N	O	0
			61	50	1	4	6	
47	y1	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	y1	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
47	y1	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	y1	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
47	y1	1	Total	C	Mg	N	O	0
			66	55	1	4	6	

- Molecule 48 is (3R,3'R,6S)-4,5-DIDEHYDRO-5,6-DIHYDRO-BETA,BETA-CAROTENE-3 ,3'-DIOL (three-letter code: LUT) (formula: $C_{40}H_{56}O_2$).



Mol	Chain	Residues	Atoms	AltConf
48	N	1	Total C O 42 40 2	0
48	N	1	Total C O 42 40 2	0
48	G	1	Total C O 42 40 2	0
48	G	1	Total C O 42 40 2	0
48	R	1	Total C O 42 40 2	0
48	S	1	Total C O 42 40 2	0
48	S	1	Total C O 42 40 2	0
48	Y	1	Total C O 42 40 2	0
48	Y	1	Total C O 42 40 2	0
48	n	1	Total C O 42 40 2	0
48	n	1	Total C O 42 40 2	0
48	g	1	Total C O 42 40 2	0
48	g	1	Total C O 42 40 2	0
48	r	1	Total C O 42 40 2	0

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Mol	Chain	Residues	Atoms			AltConf
48	s	1	Total	C	O	0
			42	40	2	
48	s	1	Total	C	O	0
			42	40	2	
48	y	1	Total	C	O	0
			42	40	2	
48	y	1	Total	C	O	0
			42	40	2	
48	N1	1	Total	C	O	0
			42	40	2	
48	N1	1	Total	C	O	0
			42	40	2	
48	G1	1	Total	C	O	0
			42	40	2	
48	G1	1	Total	C	O	0
			42	40	2	
48	R1	1	Total	C	O	0
			42	40	2	
48	S1	1	Total	C	O	0
			42	40	2	
48	S1	1	Total	C	O	0
			42	40	2	
48	Y1	1	Total	C	O	0
			42	40	2	
48	Y1	1	Total	C	O	0
			42	40	2	
48	n1	1	Total	C	O	0
			42	40	2	
48	n1	1	Total	C	O	0
			42	40	2	
48	g1	1	Total	C	O	0
			42	40	2	
48	g1	1	Total	C	O	0
			42	40	2	
48	r1	1	Total	C	O	0
			42	40	2	
48	s1	1	Total	C	O	0
			42	40	2	
48	s1	1	Total	C	O	0
			42	40	2	
48	y1	1	Total	C	O	0
			42	40	2	

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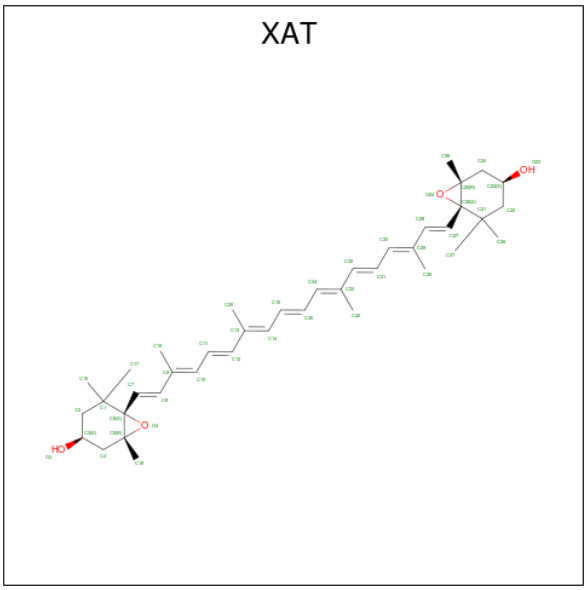
Mol	Chain	Residues	Atoms	AltConf
48	y1	1	Total C O 42 40 2	0

- Molecule 49 is (3S,5R,6S,3'S,5'R,6'S)-5,6,5',6'-DIEPOXY-5,6,5',6'- TETRAHYDRO-BETA ,BETA-CAROTENE-3,3'-DIOL (three-letter code: XAT) (formula: $C_{40}H_{56}O_4$).



Mol	Chain	Residues	Atoms	AltConf
49	N	1	Total C O 44 40 4	0
49	G	1	Total C O 44 40 4	0
49	R	1	Total C O 44 40 4	0
49	Y	1	Total C O 44 40 4	0
49	n	1	Total C O 44 40 4	0
49	g	1	Total C O 44 40 4	0
49	r	1	Total C O 44 40 4	0
49	y	1	Total C O 44 40 4	0
49	N1	1	Total C O 44 40 4	0
49	G1	1	Total C O 44 40 4	0

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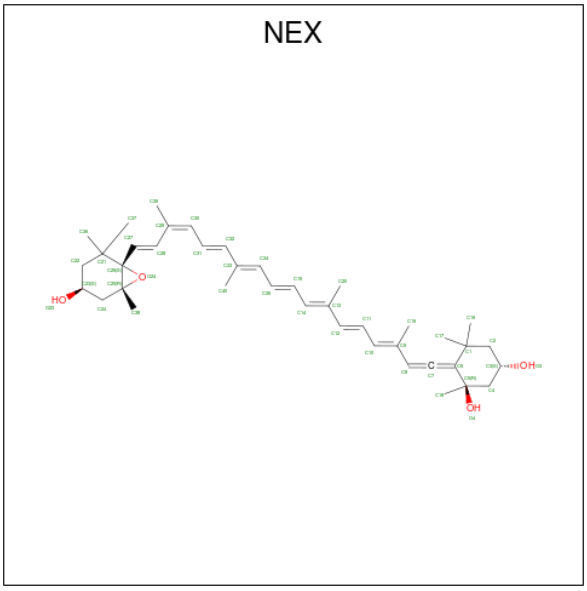
Mol	Chain	Residues	Atoms	AltConf
49	R1	1	Total C O 44 40 4	0
49	Y1	1	Total C O 44 40 4	0
49	n1	1	Total C O 44 40 4	0
49	g1	1	Total C O 44 40 4	0
49	r1	1	Total C O 44 40 4	0
49	y1	1	Total C O 44 40 4	0

- Molecule 50 is (1R,3R)-6-{(3E,5E,7E,9E,11E,13E,15E,17E)-18-[(1S,4R,6R)-4-HYDROXY-2,2,6-TRIMETHYL-7-OXABICYCLO[4.1.0]HEPT-1-YL]-3,7,12,16-TETRAMETHYLOCTADECA-1,3,5,7,9,11,13,15,17-NONAENYLIDENE}-1,5,5-TRIMETHYLCYCLOHEXANE-1,3-DIOL (three-letter code: NEX) (formula: $C_{40}H_{56}O_4$).



Mol	Chain	Residues	Atoms	AltConf
50	N	1	Total C O 44 40 4	0
50	G	1	Total C O 44 40 4	0
50	R	1	Total C O 44 40 4	0
50	S	1	Total C O 44 40 4	0

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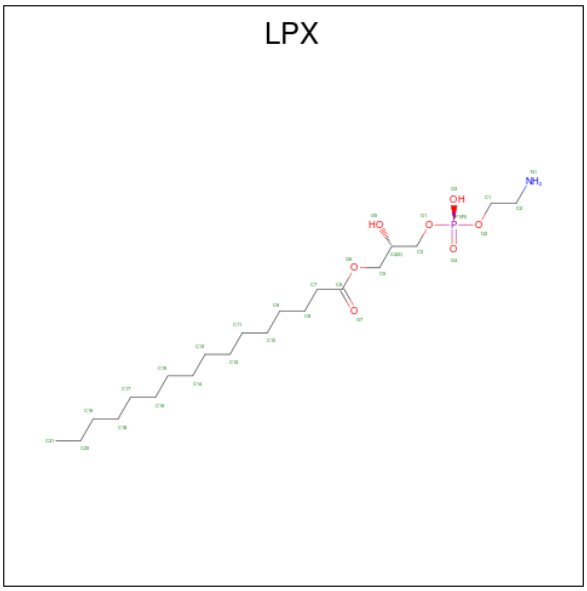
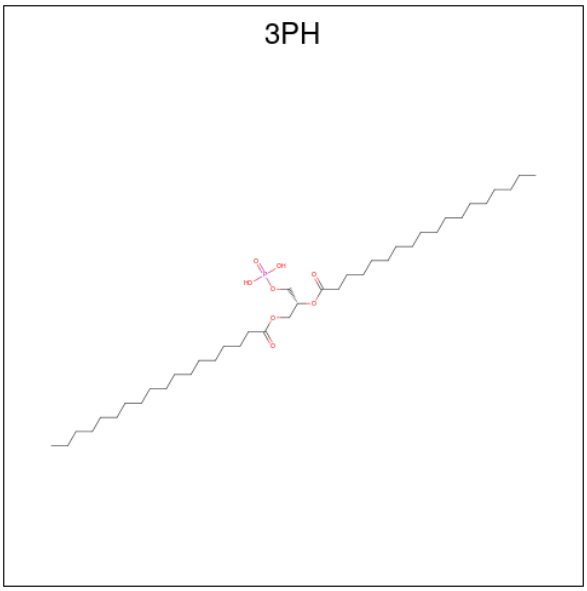
Mol	Chain	Residues	Atoms			AltConf
50	Y	1	Total	C	O	0
			44	40	4	
50	n	1	Total	C	O	0
			44	40	4	
50	g	1	Total	C	O	0
			44	40	4	
50	r	1	Total	C	O	0
			44	40	4	
50	s	1	Total	C	O	0
			44	40	4	
50	y	1	Total	C	O	0
			44	40	4	
50	N1	1	Total	C	O	0
			44	40	4	
50	G1	1	Total	C	O	0
			44	40	4	
50	R1	1	Total	C	O	0
			44	40	4	
50	S1	1	Total	C	O	0
			44	40	4	
50	Y1	1	Total	C	O	0
			44	40	4	
50	n1	1	Total	C	O	0
			44	40	4	
50	g1	1	Total	C	O	0
			44	40	4	
50	r1	1	Total	C	O	0
			44	40	4	
50	s1	1	Total	C	O	0
			44	40	4	
50	y1	1	Total	C	O	0
			44	40	4	

- Molecule 51 is (2S)-3-{[(R)-(2-aminoethoxy)(hydroxy)phosphoryl]oxy}-2-hydroxypropyl hexadecanoate (three-letter code: LPX) (formula: $C_{21}H_{44}NO_7P$).



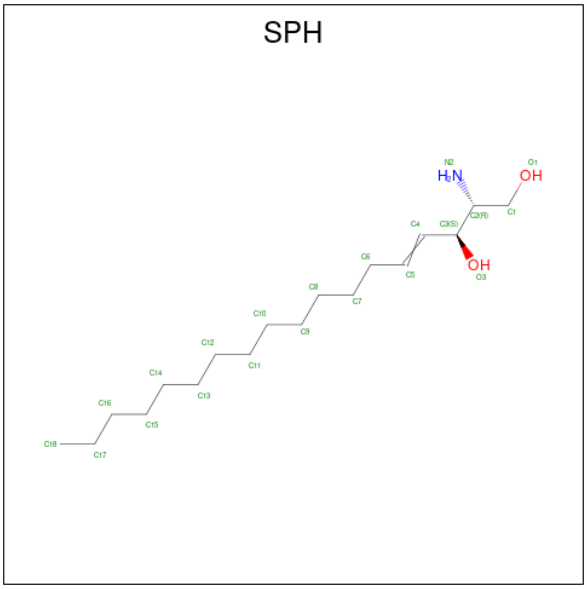
Mol	Chain	Residues	Atoms					AltConf
51	S	1	Total	C	N	O	P	0
			30	21	1	7	1	
51	s	1	Total	C	N	O	P	0
			30	21	1	7	1	
51	S1	1	Total	C	N	O	P	0
			30	21	1	7	1	
51	s1	1	Total	C	N	O	P	0
			30	21	1	7	1	

- Molecule 52 is 1,2-DIACYL-GLYCEROL-3-SN-PHOSPHATE (three-letter code: 3PH) (formula: $C_{39}H_{77}O_8P$).



Mol	Chain	Residues	Atoms				AltConf
52	S	1	Total	C	O	P	0
			48	39	8	1	
52	i	1	Total	C	O	P	0
			48	39	8	1	
52	s	1	Total	C	O	P	0
			48	39	8	1	
52	B1	1	Total	C	O	P	0
			48	39	8	1	
52	T1	1	Total	C	O	P	0
			48	39	8	1	
52	S1	1	Total	C	O	P	0
			48	39	8	1	
52	b1	1	Total	C	O	P	0
			48	39	8	1	
52	t1	1	Total	C	O	P	0
			48	39	8	1	
52	s1	1	Total	C	O	P	0
			48	39	8	1	

- Molecule 53 is SPHINGOSINE (three-letter code: SPH) (formula: $C_{18}H_{37}NO_2$).



Mol	Chain	Residues	Atoms				AltConf
53	Y	1	Total	C	N	O	0
			21	18	1	2	
53	y	1	Total	C	N	O	0
			21	18	1	2	
53	A1	1	Total	C	N	O	0
			21	18	1	2	

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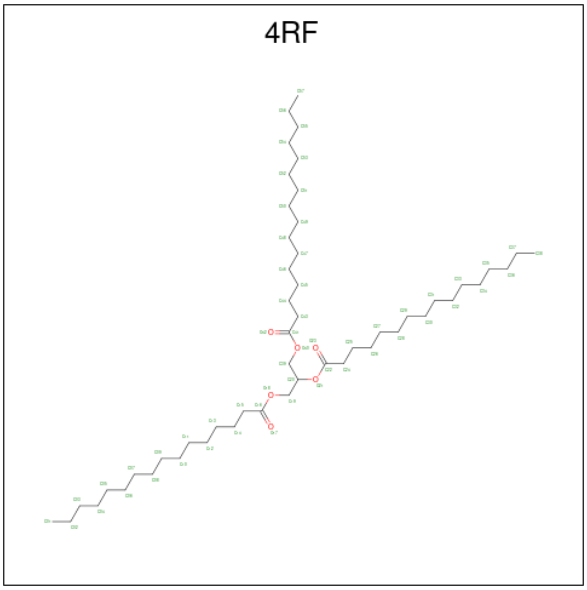
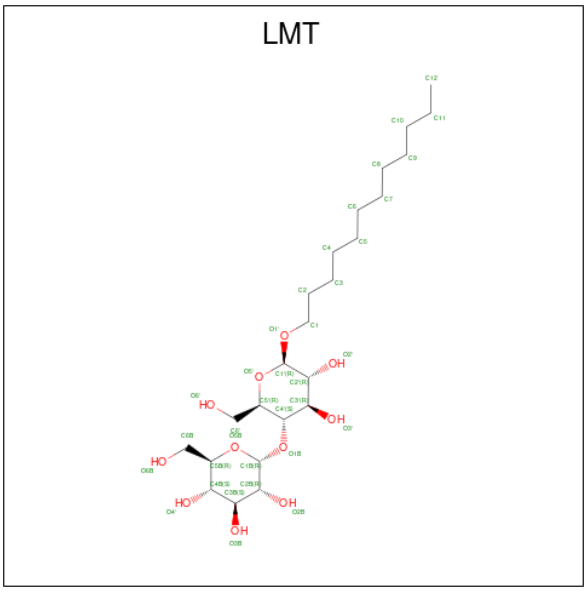
Mol	Chain	Residues	Atoms				AltConf
53	Y1	1	Total	C	N	O	0
			21	18	1	2	
53	a1	1	Total	C	N	O	0
			21	18	1	2	
53	y1	1	Total	C	N	O	0
			21	18	1	2	

- Molecule 54 is Tripalmitoylglycerol (three-letter code: 4RF) (formula: $C_{51}H_{98}O_6$).



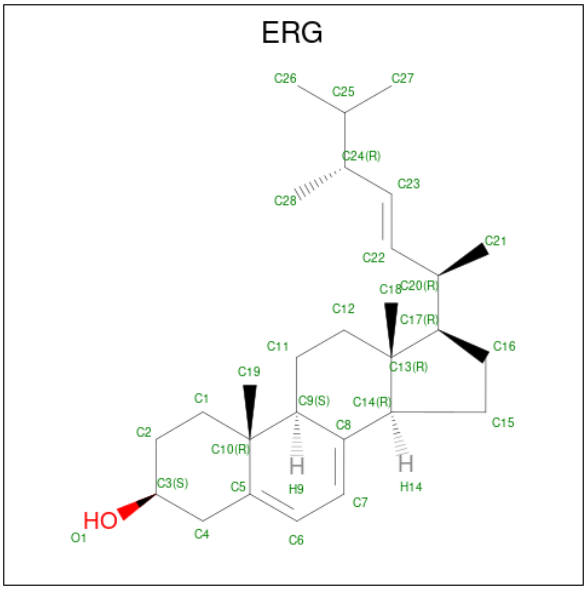
Mol	Chain	Residues	Atoms			AltConf
54	I1	1	Total	C	O	0
			57	51	6	
54	K1	1	Total	C	O	0
			57	51	6	
54	i1	1	Total	C	O	0
			57	51	6	
54	k1	1	Total	C	O	0
			57	51	6	

- Molecule 55 is DODECYL-BETA-D-MALTOSIDE (three-letter code: LMT) (formula: $C_{24}H_{46}O_{11}$).



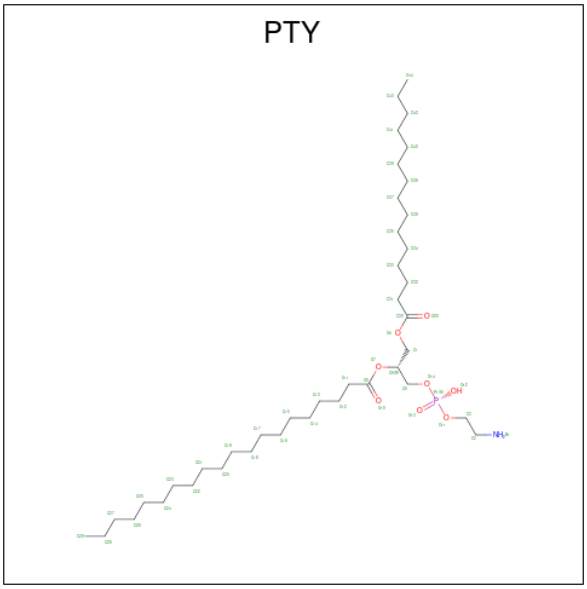
Mol	Chain	Residues	Atoms			AltConf
55	R1	1	Total	C	O	0
			35	24	11	
55	r1	1	Total	C	O	0
			35	24	11	

- Molecule 56 is ERGOSTEROL (three-letter code: ERG) (formula: $C_{28}H_{44}O$).



Mol	Chain	Residues	Atoms			AltConf
56	R1	1	Total	C	O	0
			29	28	1	
56	r1	1	Total	C	O	0
			29	28	1	

- Molecule 57 is PHOSPHATIDYLETHANOLAMINE (three-letter code: PTY) (formula: $C_{40}H_{80}NO_8P$).



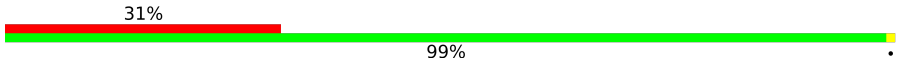
Mol	Chain	Residues	Atoms					AltConf
57	Y1	1	Total	C	N	O	P	0
			50	40	1	8	1	
57	Y1	1	Total	C	N	O	P	0
			19	9	1	8	1	
57	y1	1	Total	C	N	O	P	0
			50	40	1	8	1	
57	y1	1	Total	C	N	O	P	0
			19	9	1	8	1	

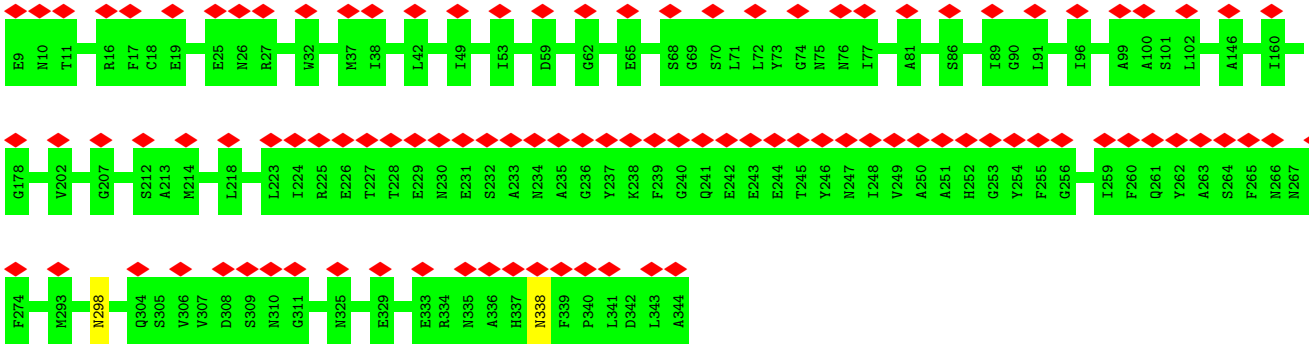
3 Residue-property plots (i)

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion in map density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

• Molecule 1: Photosystem II protein D1

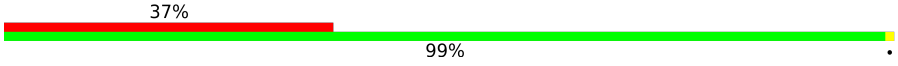
Chain A:

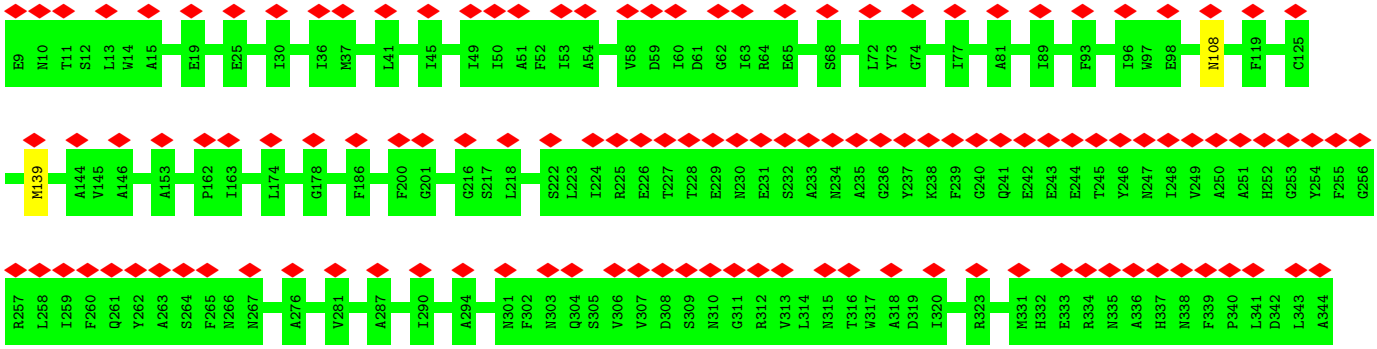




• Molecule 1: Photosystem II protein D1

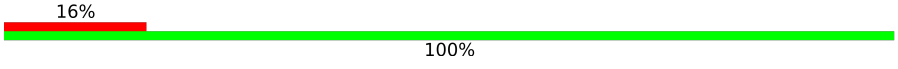
Chain a:

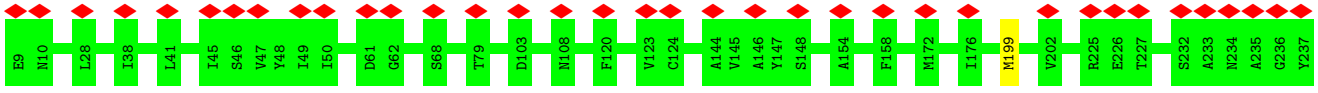


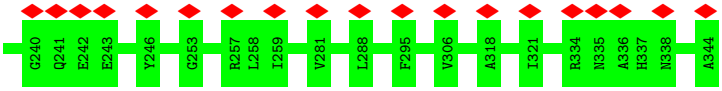


• Molecule 1: Photosystem II protein D1

Chain A1:

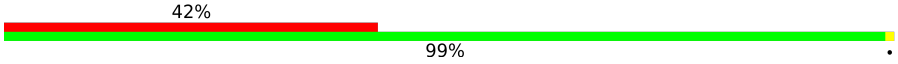


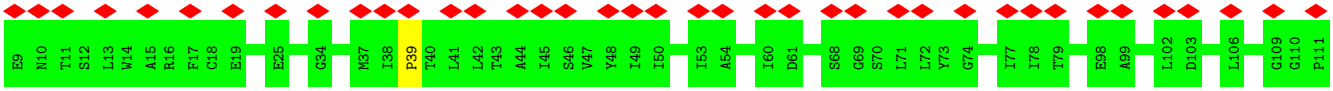


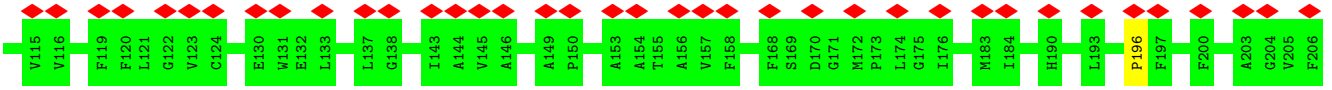


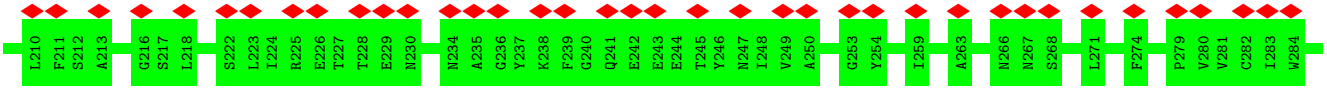
• Molecule 1: Photosystem II protein D1

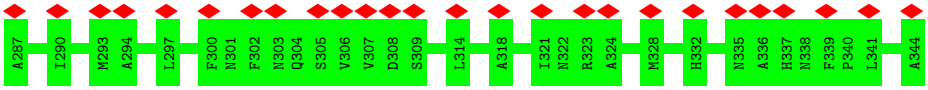
Chain a1:





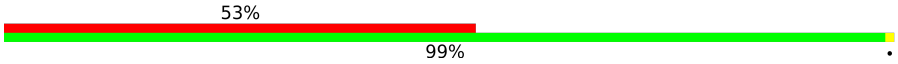


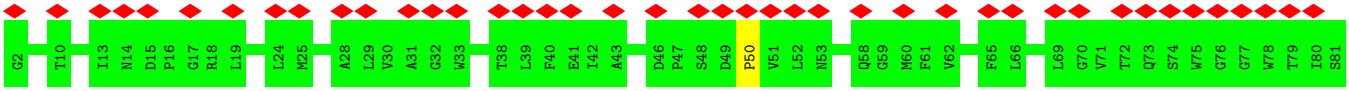


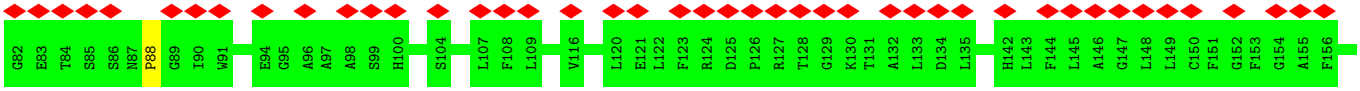


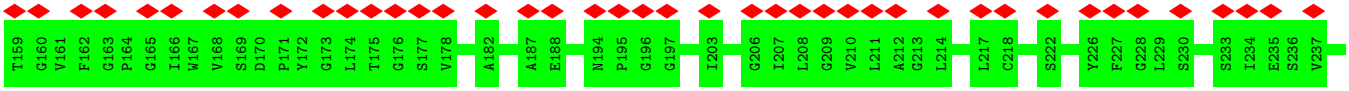
• Molecule 2: Photosystem II CP47 reaction center protein

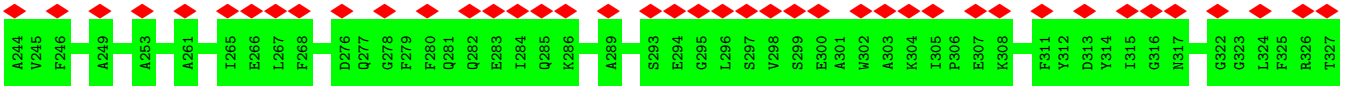
Chain B:

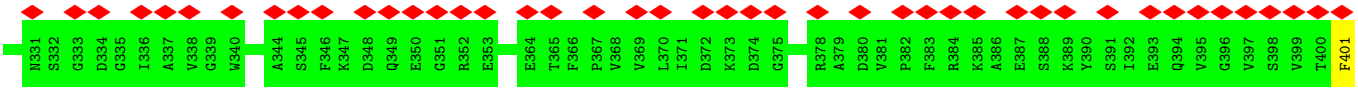


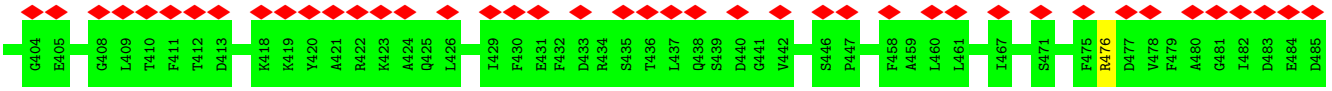






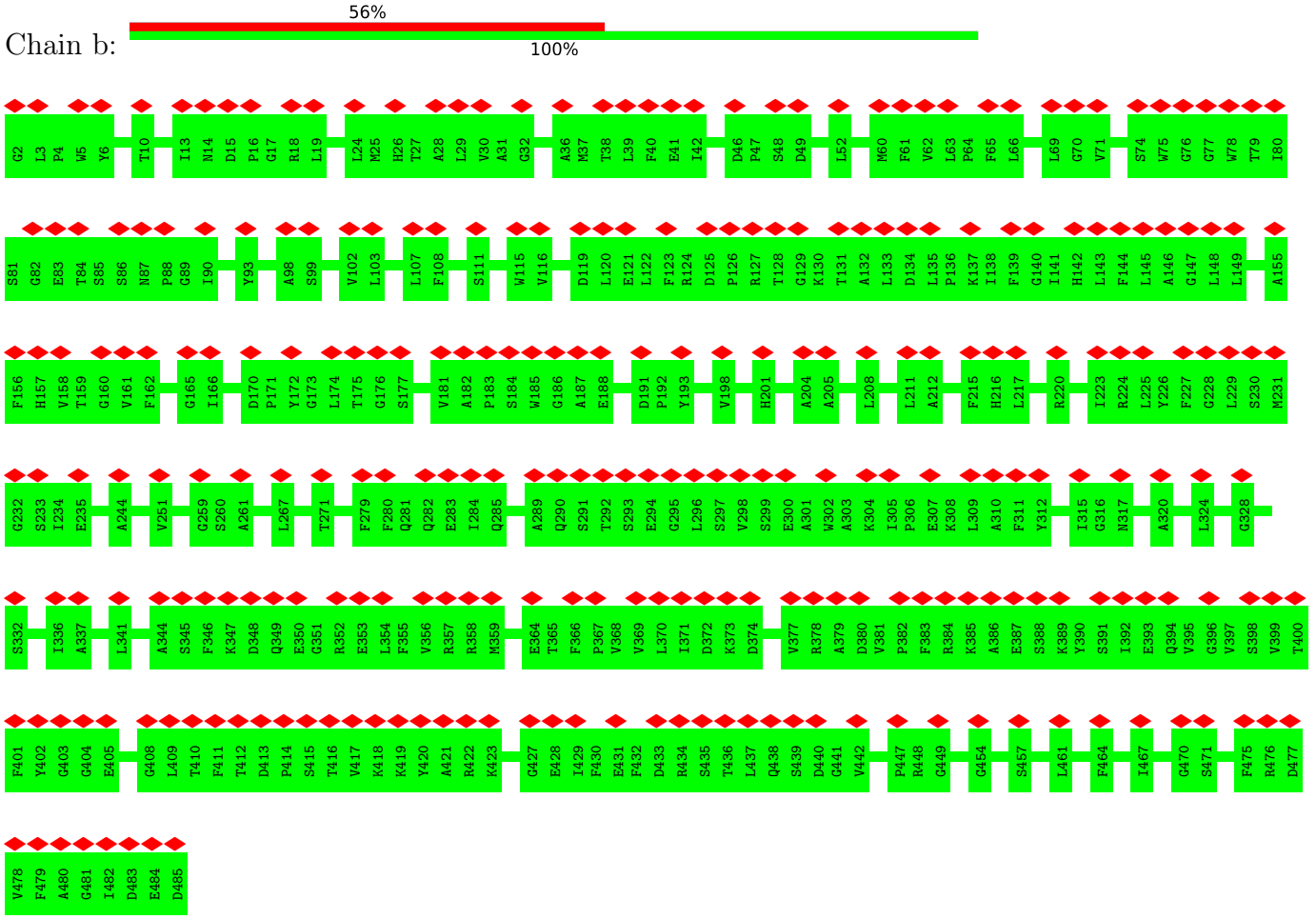






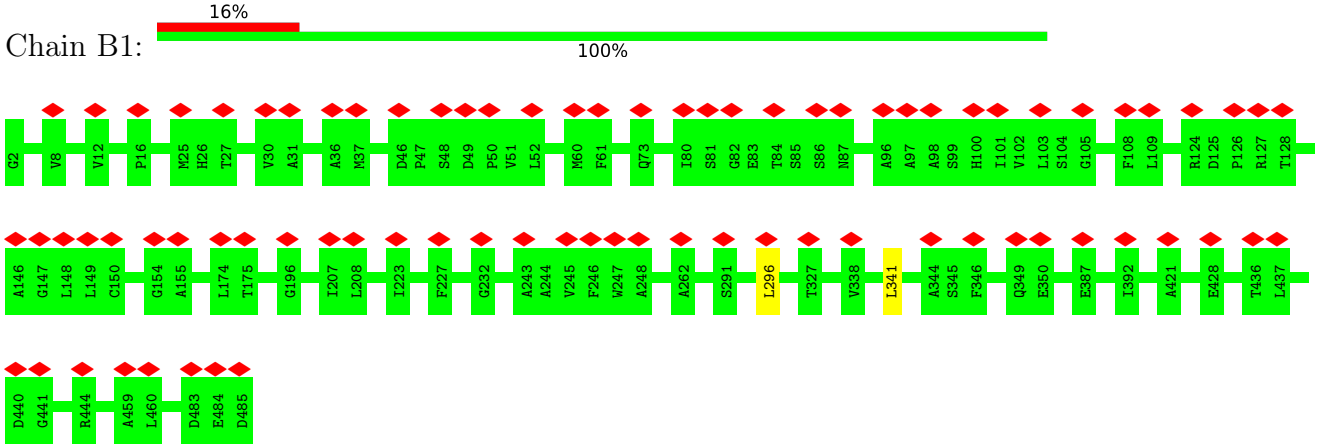
• Molecule 2: Photosystem II CP47 reaction center protein

Chain b:



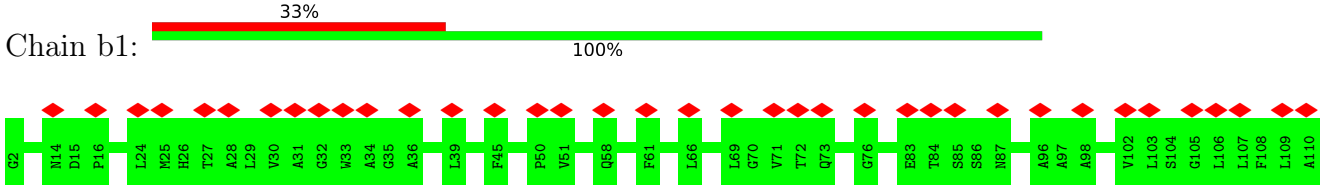
• Molecule 2: Photosystem II CP47 reaction center protein

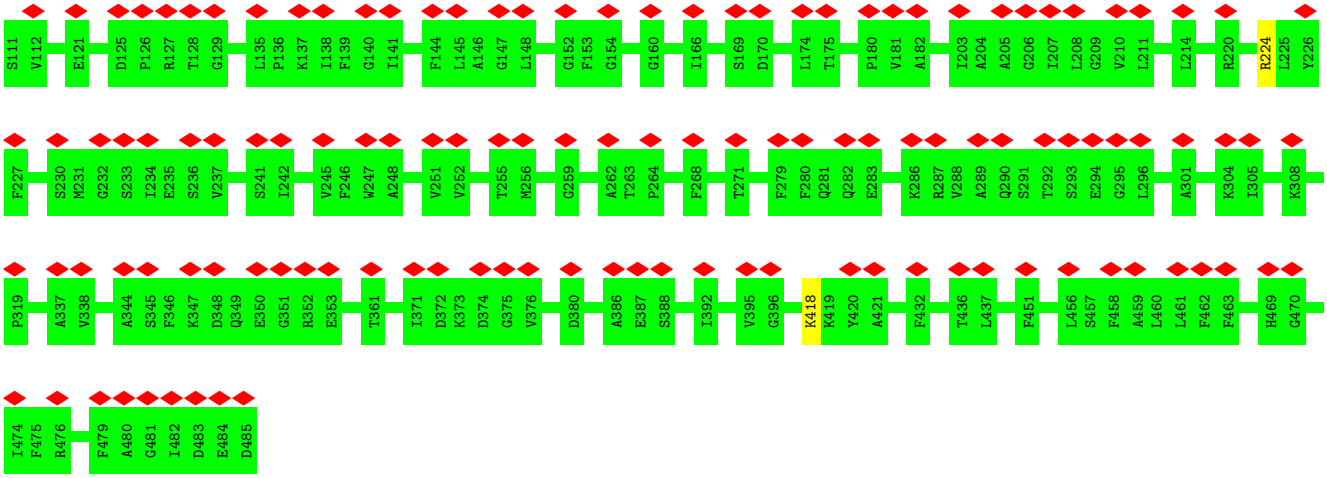
Chain B1:



• Molecule 2: Photosystem II CP47 reaction center protein

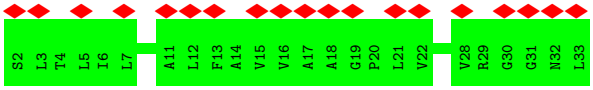
Chain b1:





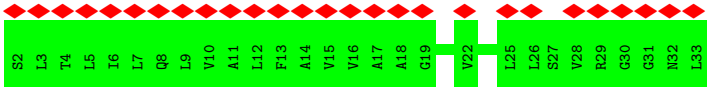
• Molecule 3: Photosystem II reaction center protein Ycf12

Chain V:



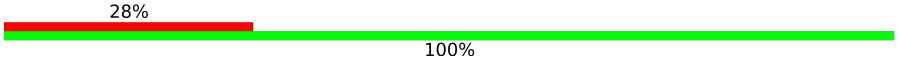
• Molecule 3: Photosystem II reaction center protein Ycf12

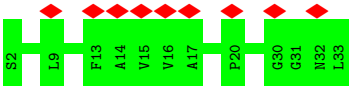
Chain v:



• Molecule 3: Photosystem II reaction center protein Ycf12

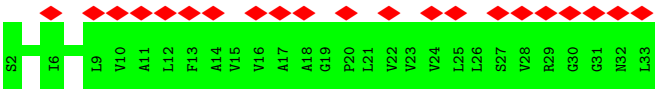
Chain V1:





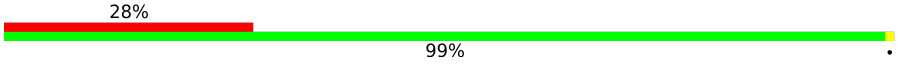
• Molecule 3: Photosystem II reaction center protein Ycf12

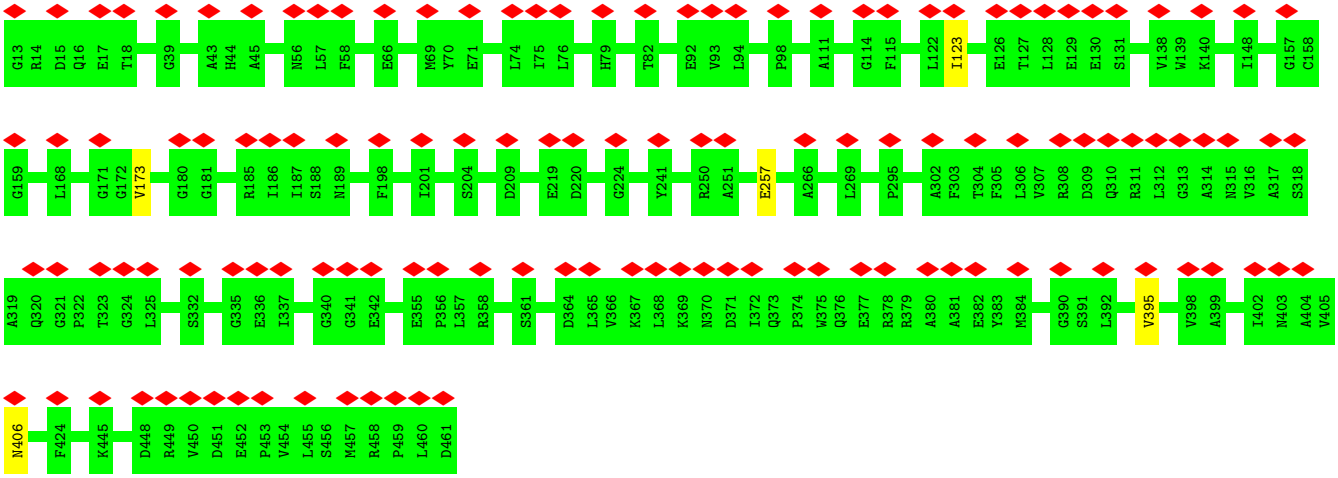
Chain v1:



• Molecule 4: Photosystem II CP43 reaction center protein

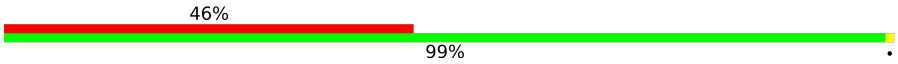
Chain C:

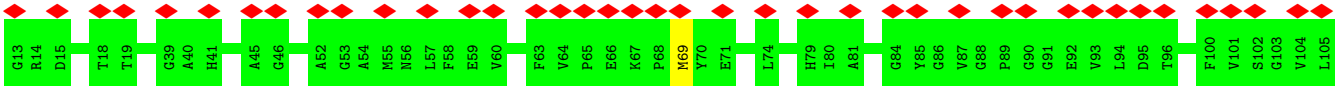


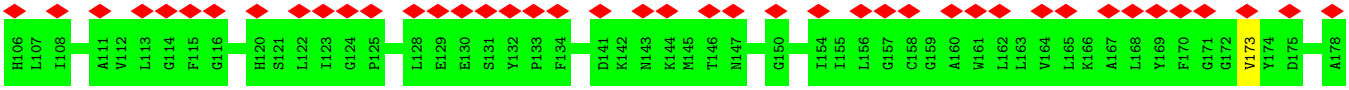


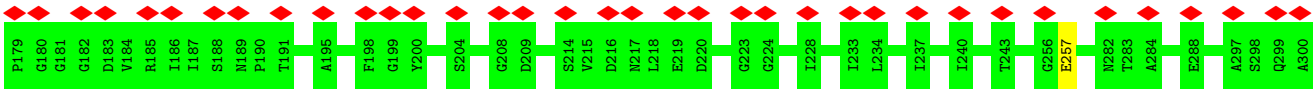
• Molecule 4: Photosystem II CP43 reaction center protein

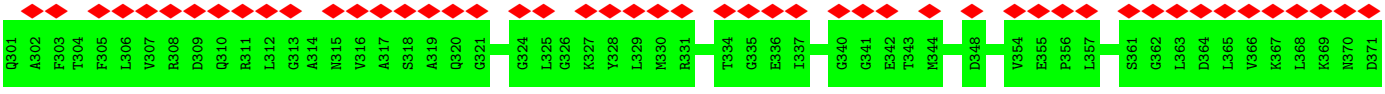
Chain c:

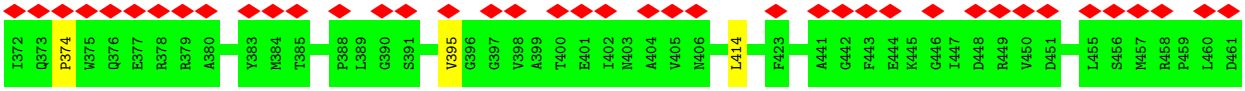






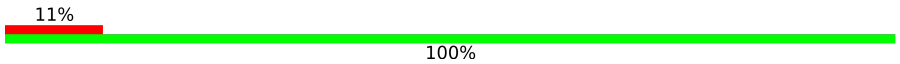


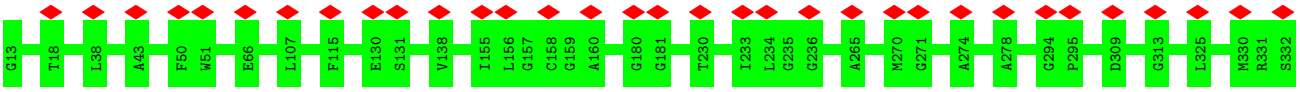


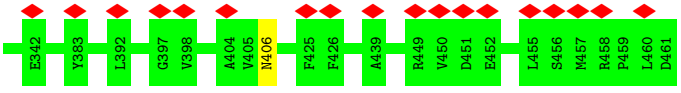


• Molecule 4: Photosystem II CP43 reaction center protein

Chain C1:





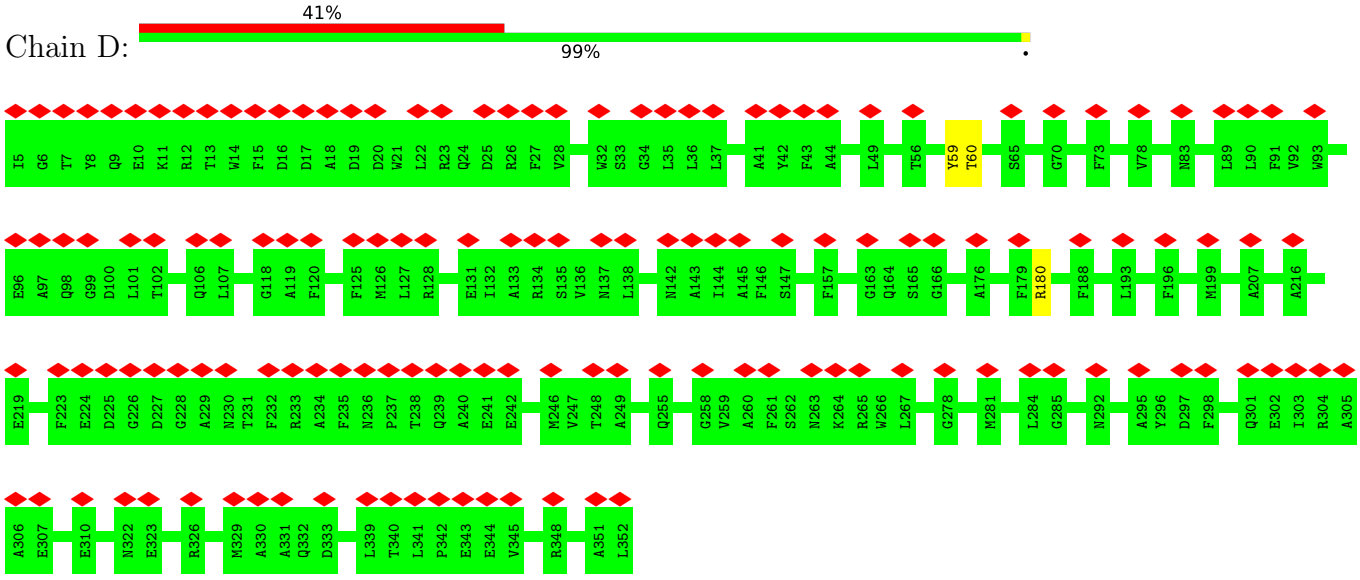


• Molecule 4: Photosystem II CP43 reaction center protein

Chain c1:

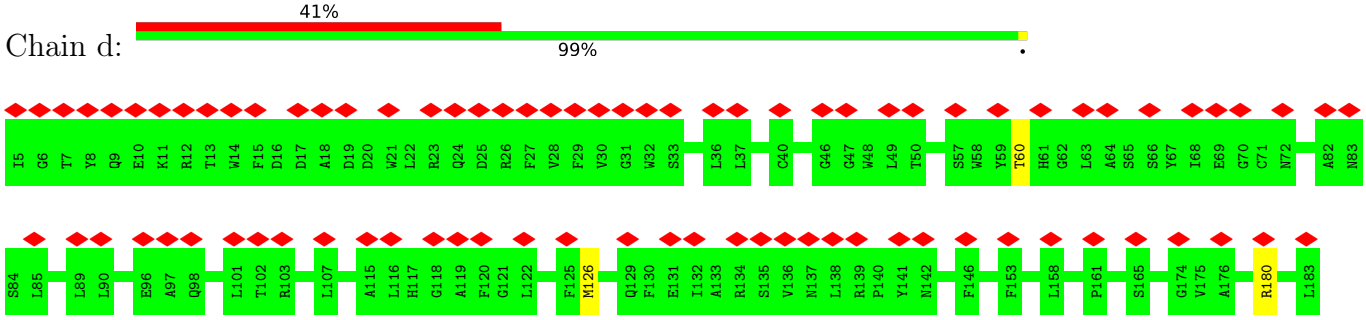
• Molecule 5: Photosystem II D2 protein

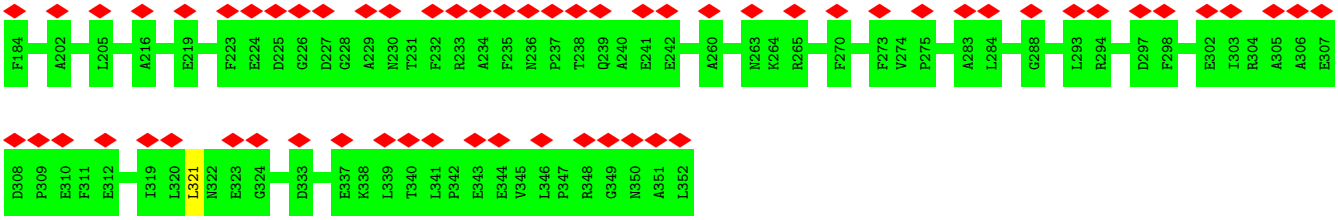
Chain D:



• Molecule 5: Photosystem II D2 protein

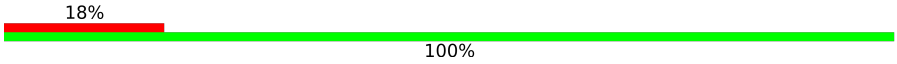
Chain d:

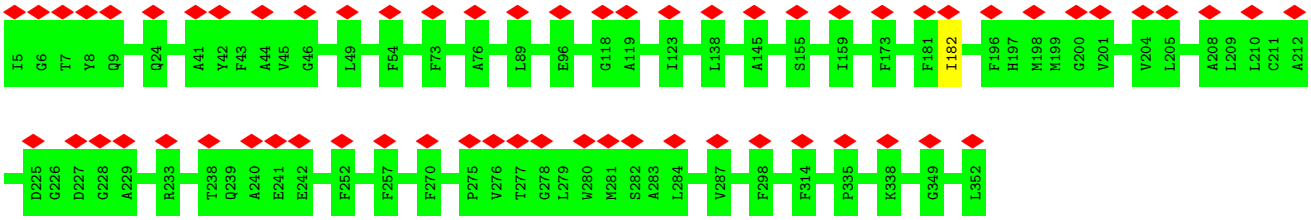




• Molecule 5: Photosystem II D2 protein

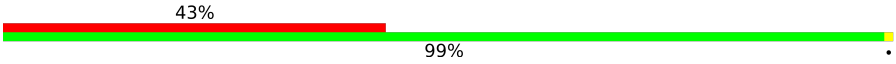
Chain D1:

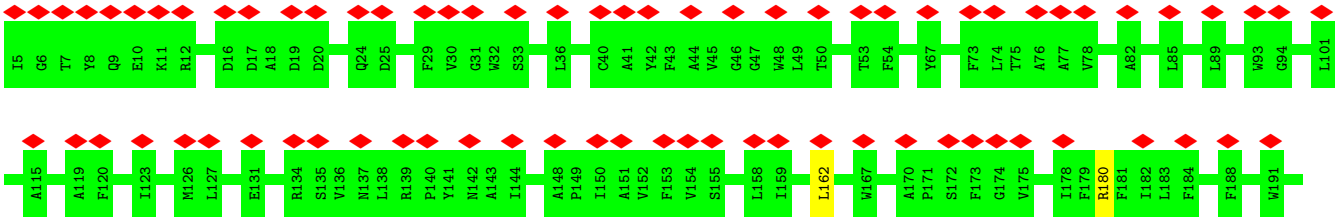




• Molecule 5: Photosystem II D2 protein

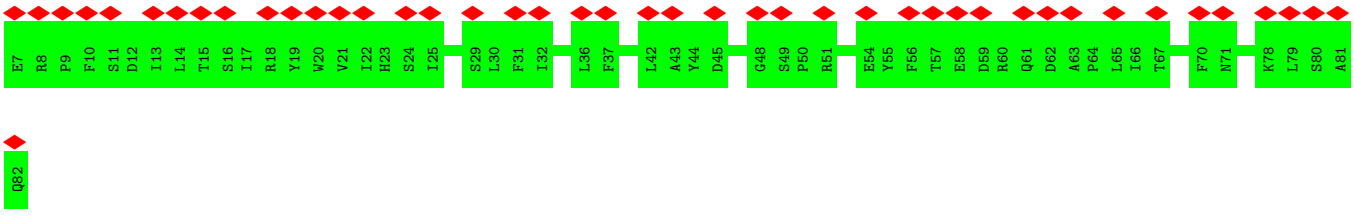
Chain d1:





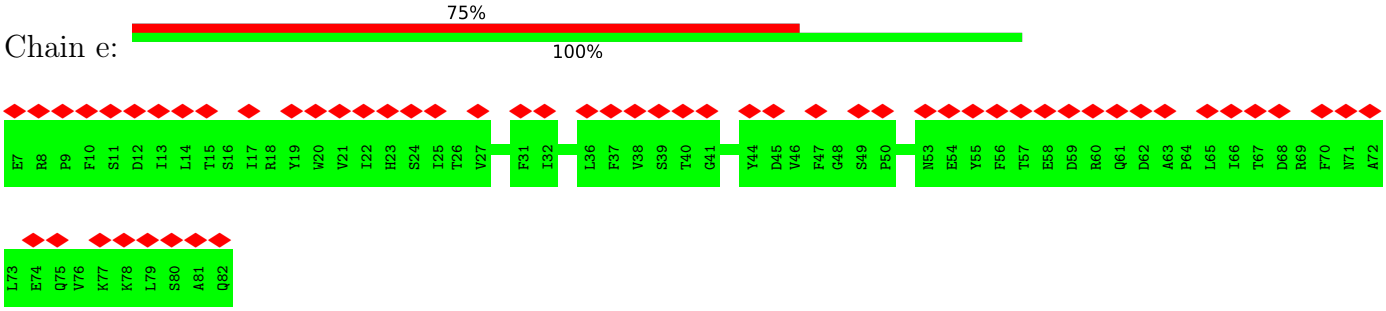
• Molecule 6: Cytochrome b559 subunit alpha

Chain E:



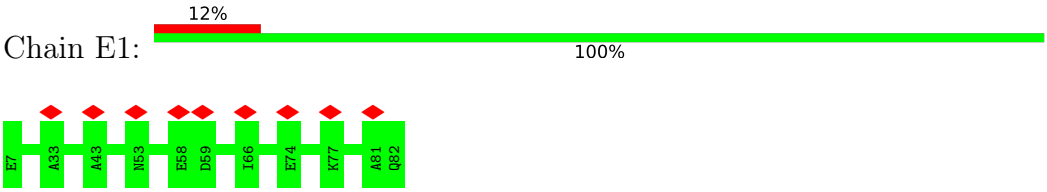
• Molecule 6: Cytochrome b559 subunit alpha

Chain e:



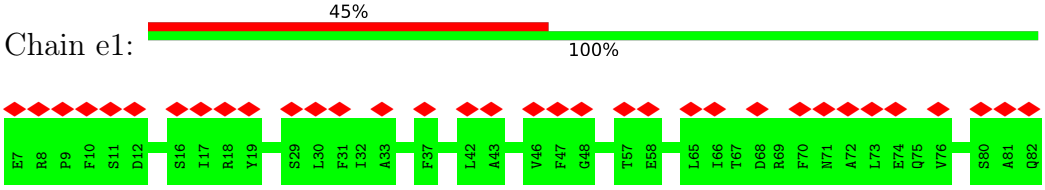
• Molecule 6: Cytochrome b559 subunit alpha

Chain E1:



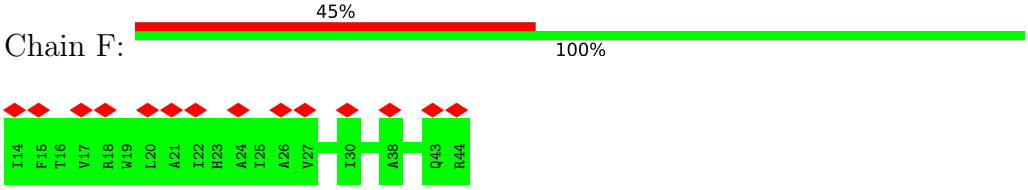
• Molecule 6: Cytochrome b559 subunit alpha

Chain e1:



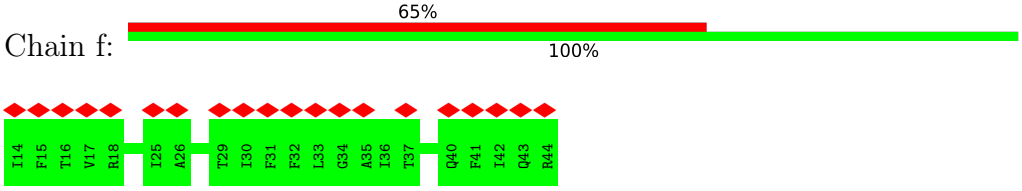
• Molecule 7: Cytochrome b559 subunit beta

Chain F:



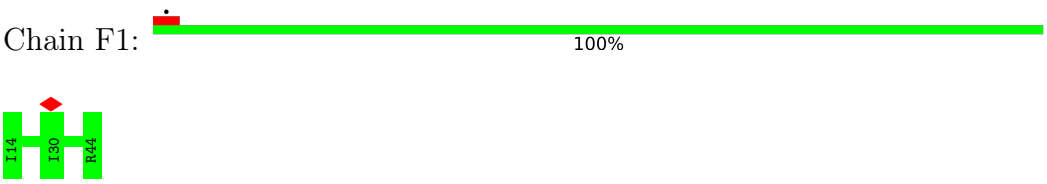
• Molecule 7: Cytochrome b559 subunit beta

Chain f:



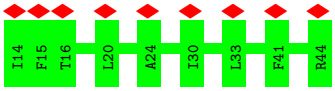
• Molecule 7: Cytochrome b559 subunit beta

Chain F1:



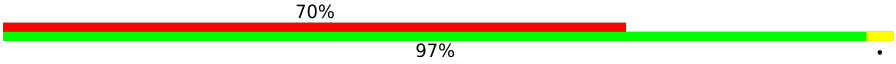
• Molecule 7: Cytochrome b559 subunit beta

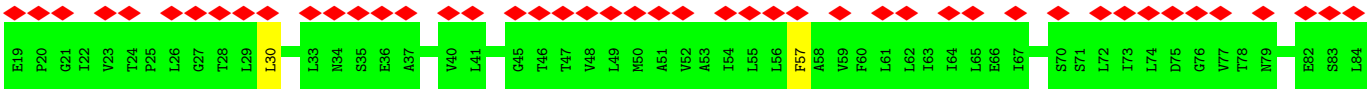
Chain f1:



• Molecule 8: Photosystem II reaction center protein H

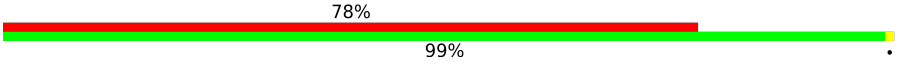
Chain H:

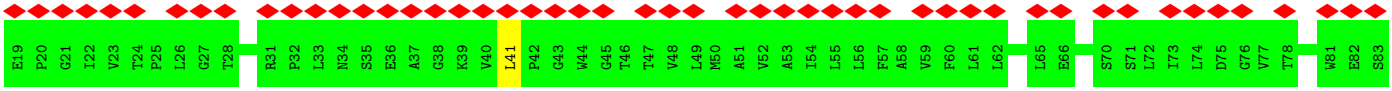




• Molecule 8: Photosystem II reaction center protein H

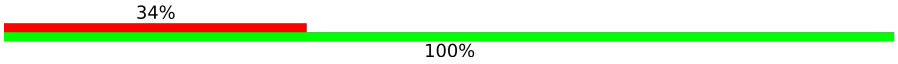
Chain h:

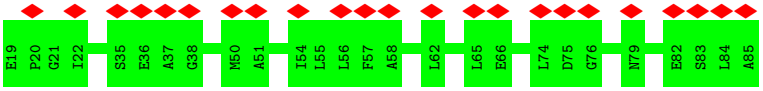




• Molecule 8: Photosystem II reaction center protein H

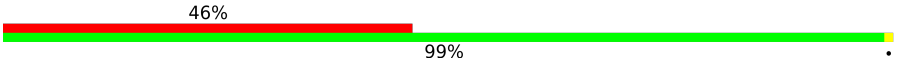
Chain H1:

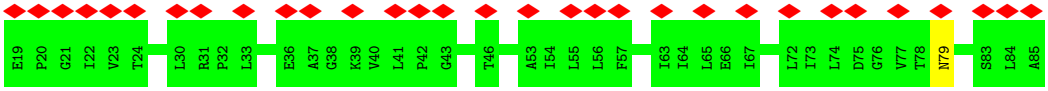




• Molecule 8: Photosystem II reaction center protein H

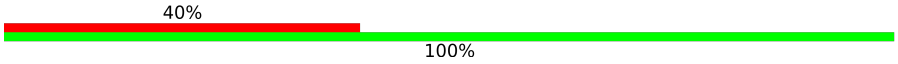
Chain h1:

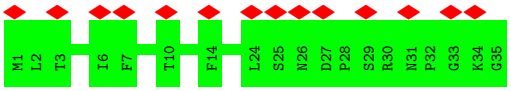




• Molecule 9: Photosystem II reaction center protein I

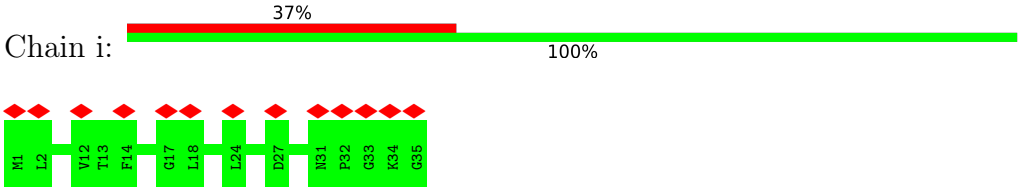
Chain I:





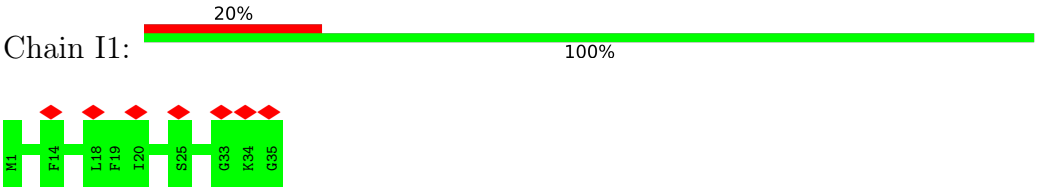
• Molecule 9: Photosystem II reaction center protein I

Chain i:



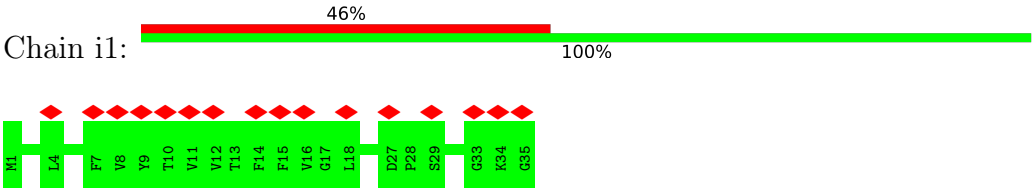
• Molecule 9: Photosystem II reaction center protein I

Chain I1:



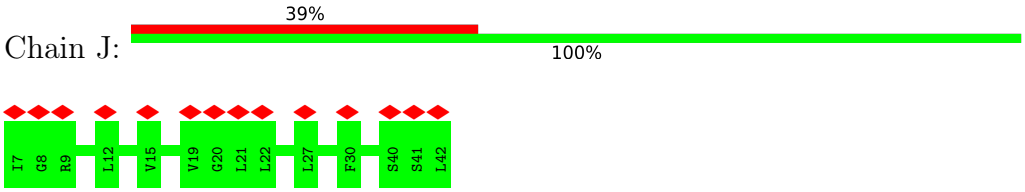
• Molecule 9: Photosystem II reaction center protein I

Chain i1:



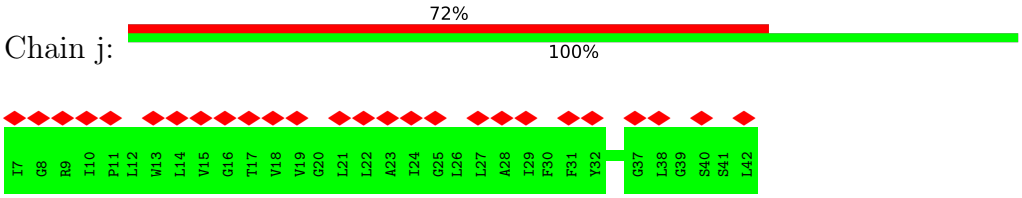
• Molecule 10: Photosystem II reaction center protein J

Chain J:



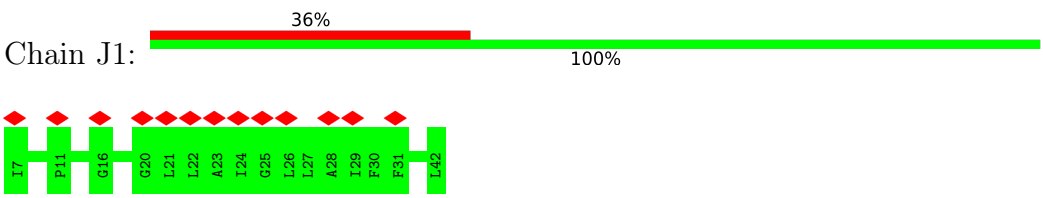
• Molecule 10: Photosystem II reaction center protein J

Chain j:



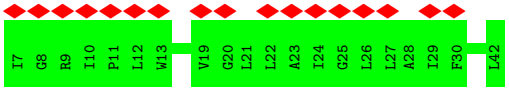
• Molecule 10: Photosystem II reaction center protein J

Chain J1:

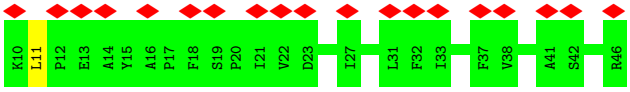


• Molecule 10: Photosystem II reaction center protein J

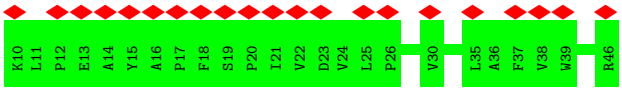
Chain j1:



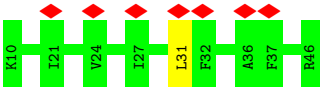
• Molecule 11: Photosystem II reaction center protein K



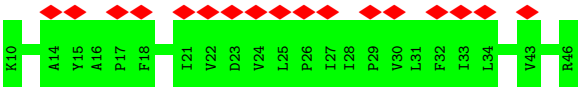
• Molecule 11: Photosystem II reaction center protein K



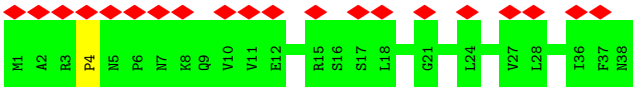
• Molecule 11: Photosystem II reaction center protein K



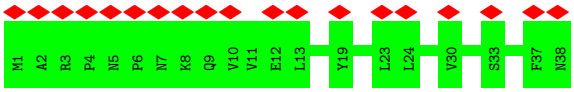
• Molecule 11: Photosystem II reaction center protein K



• Molecule 12: Photosystem II reaction center protein L

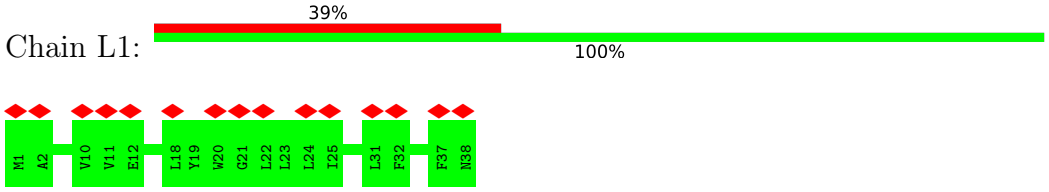


• Molecule 12: Photosystem II reaction center protein L



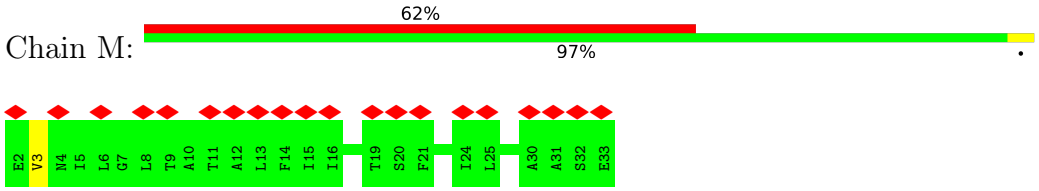
• Molecule 12: Photosystem II reaction center protein L

Chain L1:



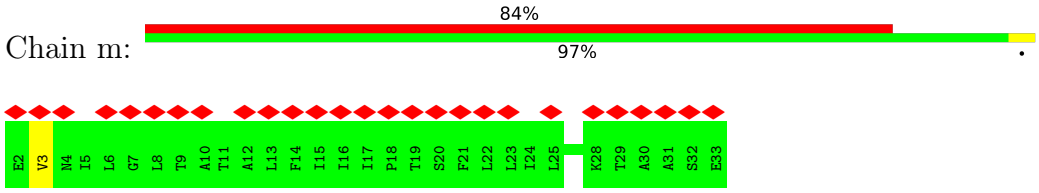
• Molecule 13: Photosystem II reaction center protein M

Chain M:



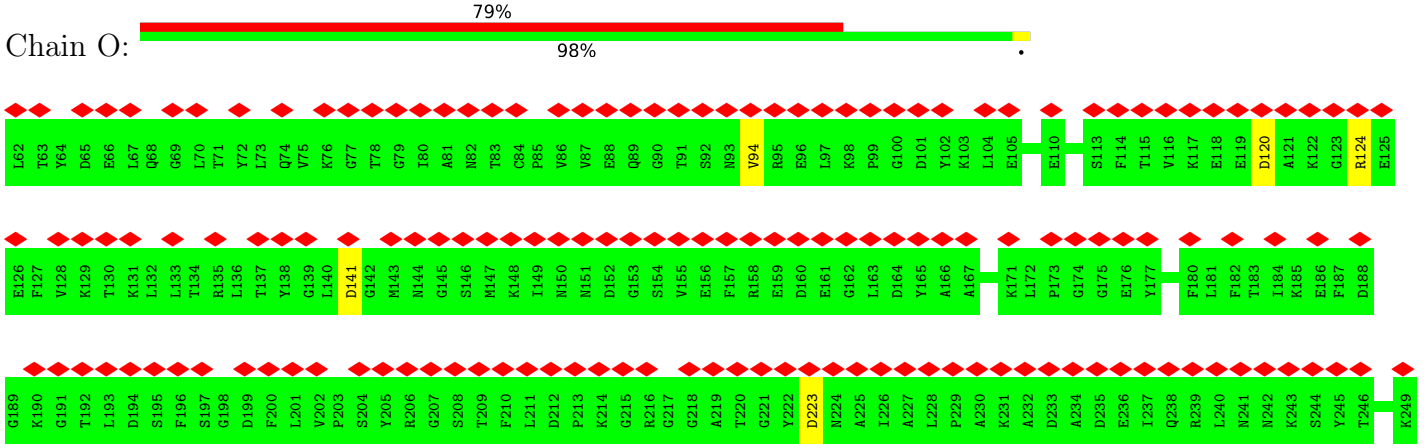
• Molecule 13: Photosystem II reaction center protein M

Chain m:



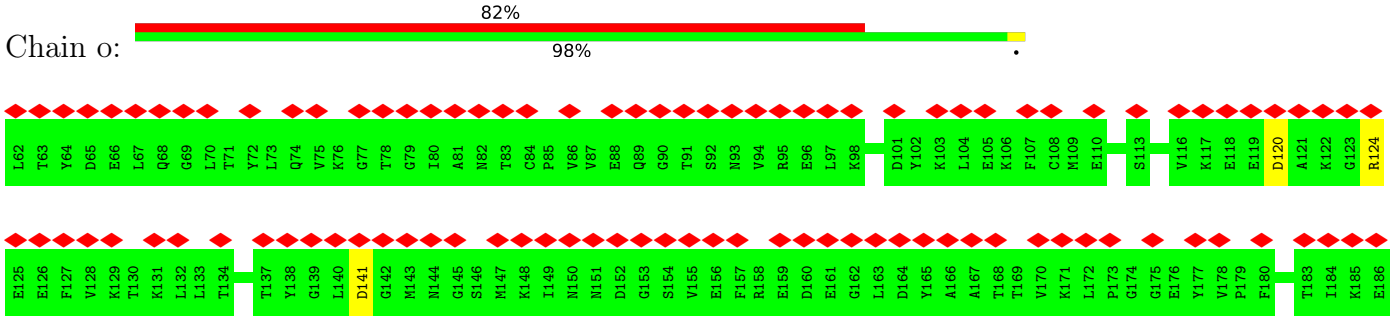
• Molecule 14: PsbO

Chain O:



• Molecule 14: PsbO

Chain o:



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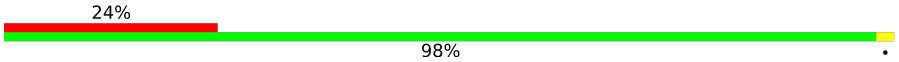
P247 G248 K249 G250 S251 A252 V253 F254 S255 V256 A257 K258 V259 D260 T261 E262 T263 G264 E265 I266 A267 E271 S272 I273 Q274 P275 S276 D277 T278 E279 M280 G281 A282 H283 P284 A285 K286 D287 I288 K289 T290 T291 G292 L293 W294 Y295 G296 Q297 L298 T299

- Molecule 14: PsbO

Chain O1:



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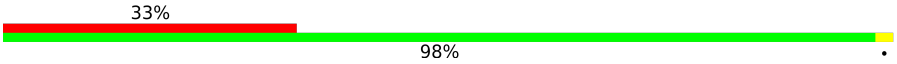
A225 I226 A227 L228 P229 A230 K231 A232 D233 A234 D235 E236 I237 Q238 R239 L240 N241 N242 K243 S244 Y245 T246 P247 G248 K249 T263 G281 K286 T299

- Molecule 14: PsbO

Chain o1:



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A166 A167 T168 T169 V170 K171 L172 P173 G174 Y177 V178 P179 F180 L181 F182 T183 I184 K185 E186 F187 D188 L201 Y205 D212 P213 K214 G215 R216 G221 Y222 D223 N224 A227 L228 P229 A230 K231 A232 D233 A234 D235 E236 I237 Q238 R239 L240 N241 N242 T246 P275

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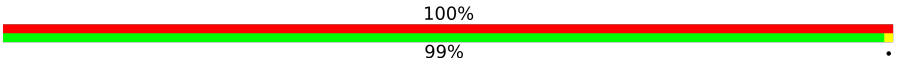
- Molecule 15: PsbP

Chain P:



A58 Y59 G60 E61 G62 A63 N64 V65 F66 G67 R68 V69 T70 N71 K72 S73 G74 F75 V76 P77 Y78 A79 G80 D81 S82 F83 A84 L85 L86 L87 P88 S89 K90 W91 N92 P93 S94 D95 E96 K97 E98 V99 D100 S101 I102 V103 L104 R105 Y106 A107 D108 N109 F110 D111 A112 V113 N114 N115 V116 Y117

V118 I119 A120 Q121 D122 T123 D124 K125 S126 S127 I128 Q129 D130 Y131 G132 S133 P134 E135 E136 F137 I138 S139 Q140 F141 G142 Y143 L144 L145 G146 R147 Q148 A149 W150 A151 G152 Q153 T154 Y155 S156 E157 G158 G159 F160 D161 A162 N163 K164 V165 S166 S167 A168 A169 L170 L171 G172 V173 A174 T175 E176 K177

D178 K179 K180 G181 K182 T183 Y184 Y185 K186 F187 E188 I189 L190 S191 R192 T193 A194 D195 G196 N197 E198 G199 G200 R201 H202 Q203 L204 V205 K206 A207 T208 V209 S210 N211 C212 K213 L214 Y215 L216 L217 K218 V219 Q220 A221 G222 D223 K224 R225 W226 F227 K228 G229 T230 D231 K232 E233 C234 L235 G236 V237

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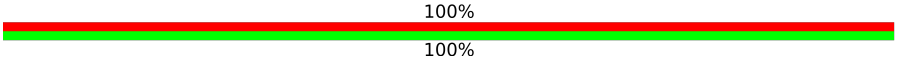
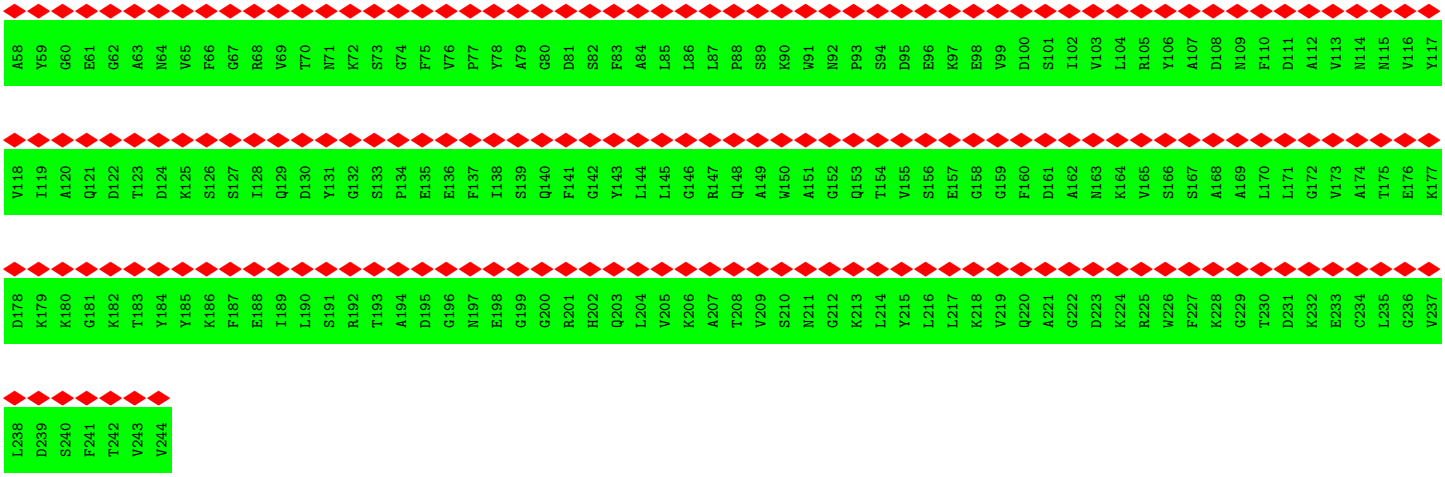
• Molecule 15: PsbP

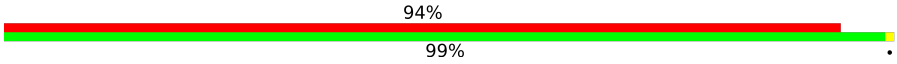
Chain p:

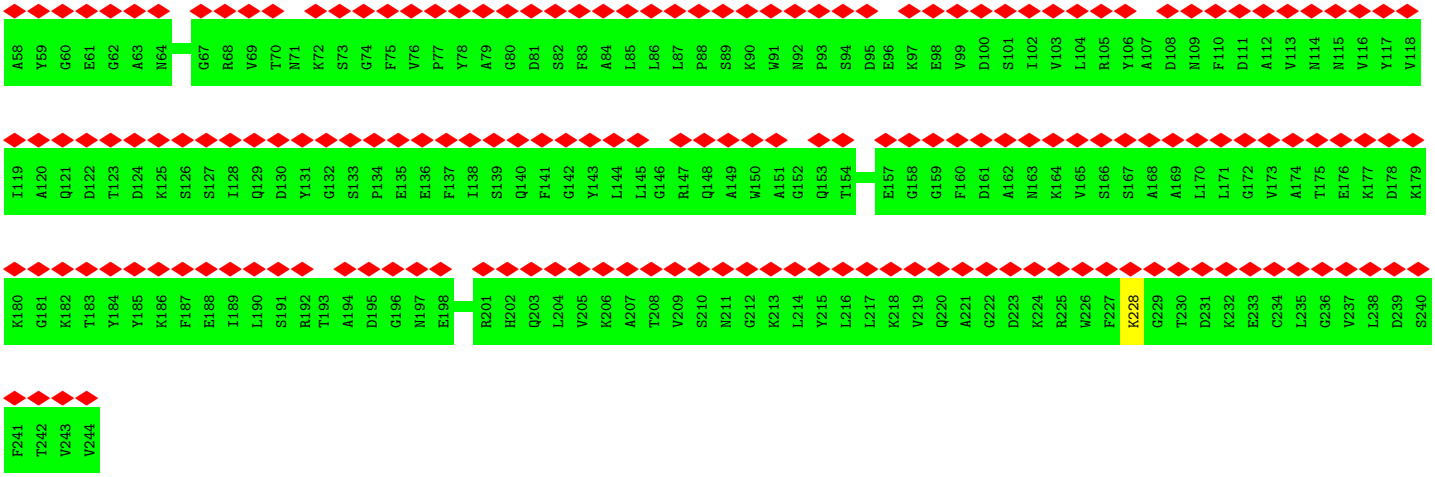




• Molecule 15: PsbP

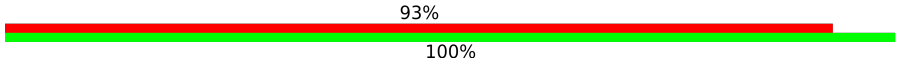
Chain P1:

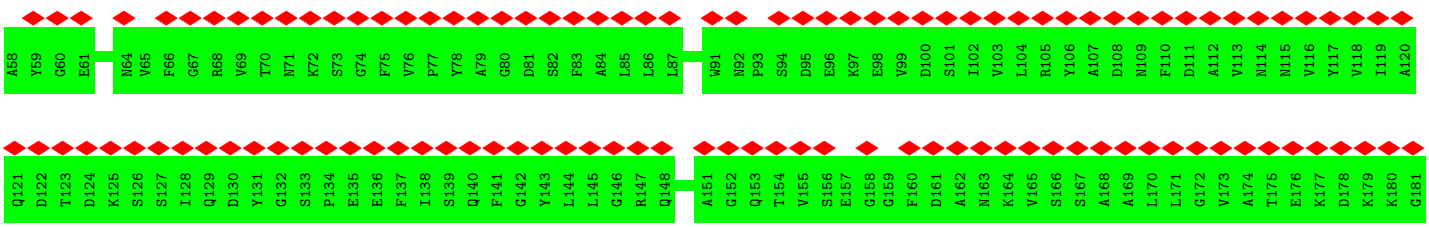




• Molecule 15: PsbP

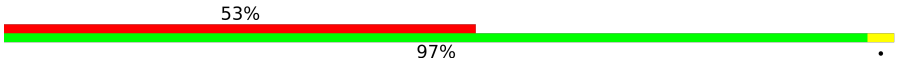
Chain p1:

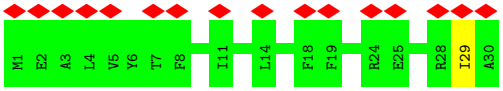




• Molecule 16: Photosystem II reaction center protein T

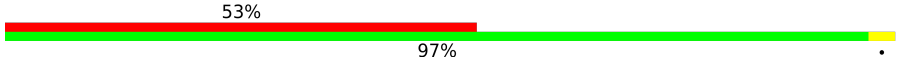
Chain T:

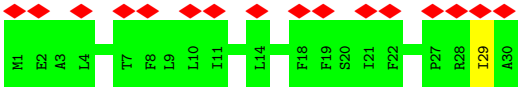




• Molecule 16: Photosystem II reaction center protein T

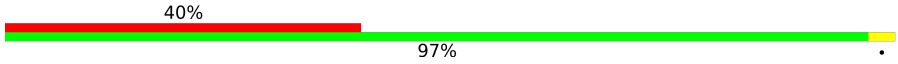
Chain t:

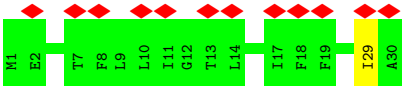




• Molecule 16: Photosystem II reaction center protein T

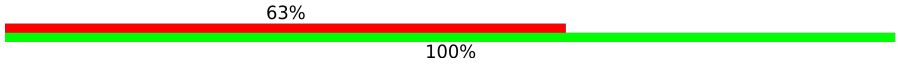
Chain T1:

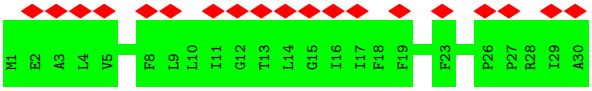




• Molecule 16: Photosystem II reaction center protein T

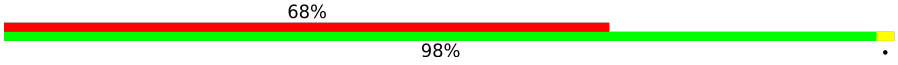
Chain t1:

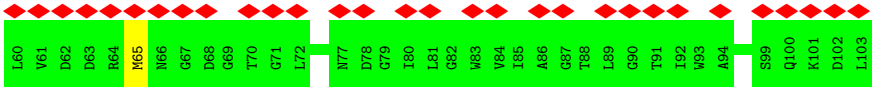




• Molecule 17: PsbW

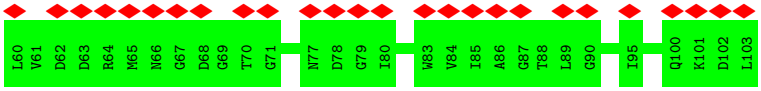
Chain W:





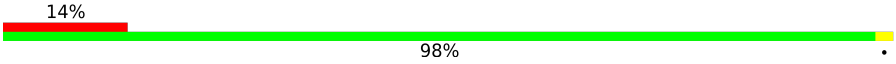
• Molecule 17: PsbW

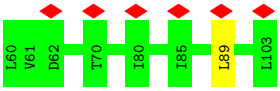
Chain w:



• Molecule 17: PsbW

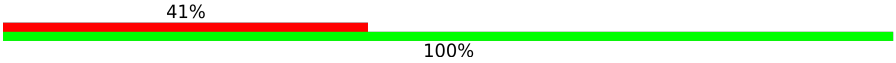
Chain W1:

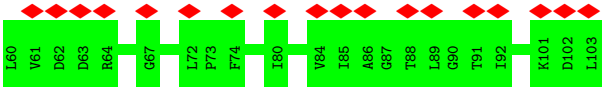




• Molecule 17: PsbW

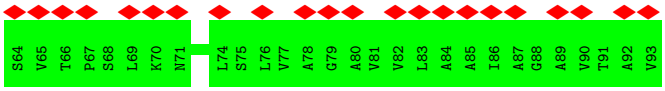
Chain w1:





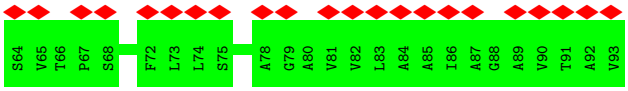
• Molecule 18: PsbX

Chain X:



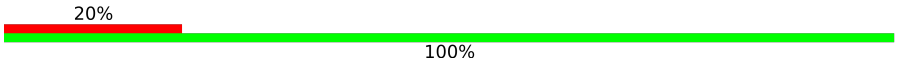
• Molecule 18: PsbX

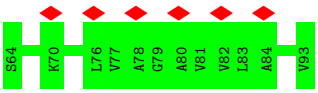
Chain x:



• Molecule 18: PsbX

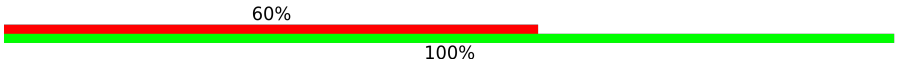
Chain X1:

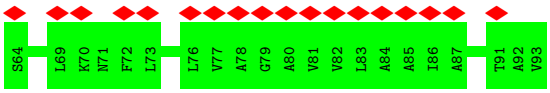




• Molecule 18: PsbX

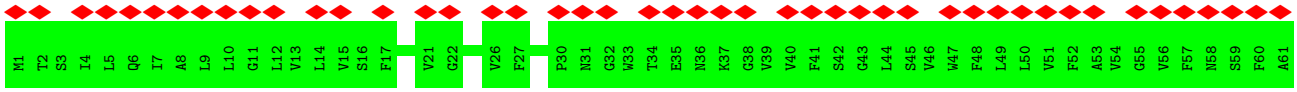
Chain x1:





• Molecule 19: PsbZ

Chain Z:

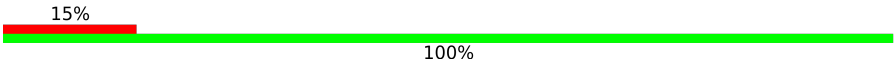


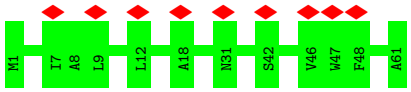
• Molecule 19: PsbZ

Chain z:

• Molecule 19: PsbZ

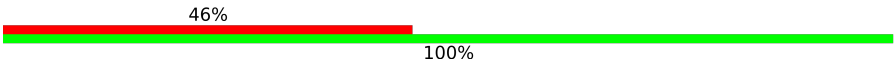
Chain Z1:

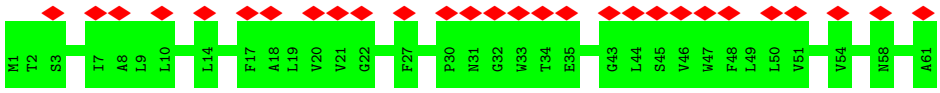




• Molecule 19: PsbZ

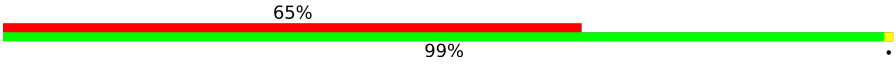
Chain z1:

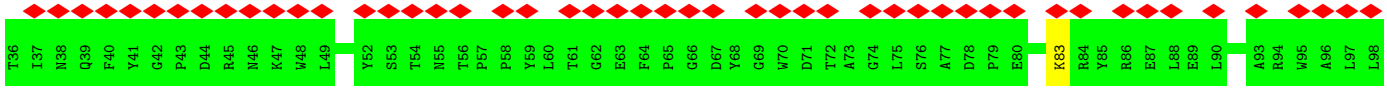


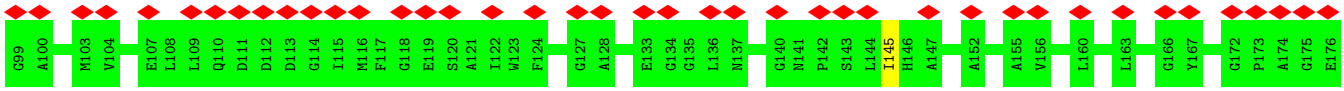


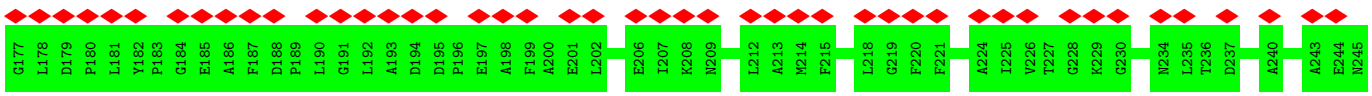
• Molecule 20: LHCII M3

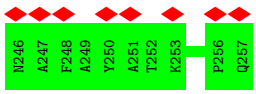
Chain N:





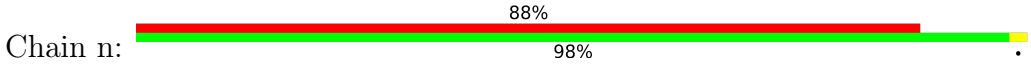


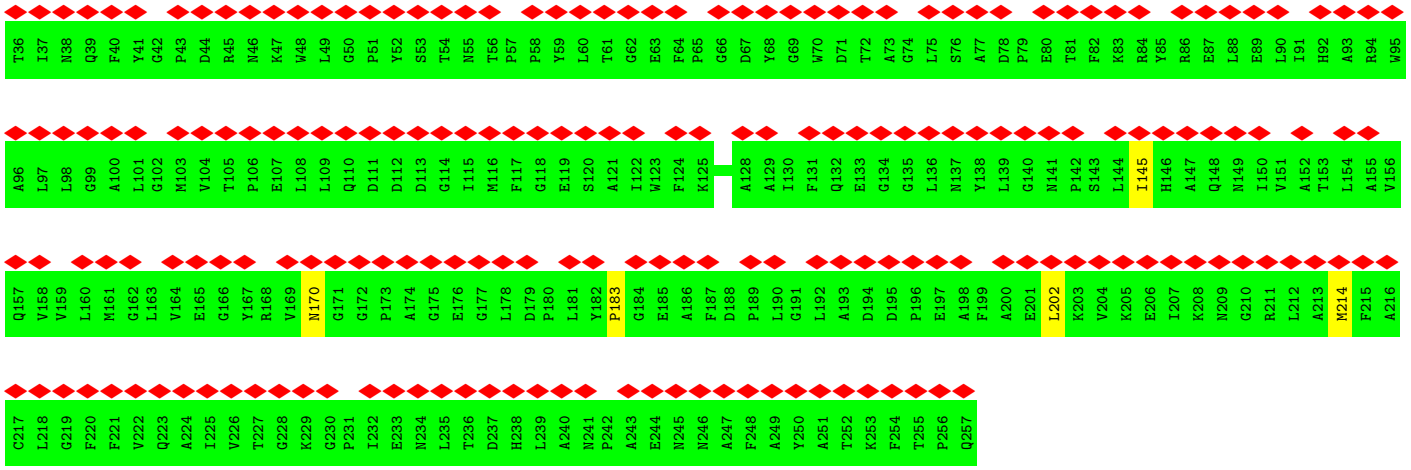




• Molecule 20: LHCII M3

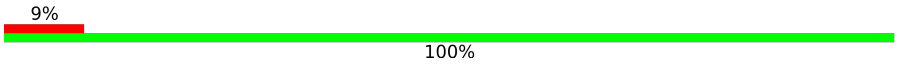
Chain n:

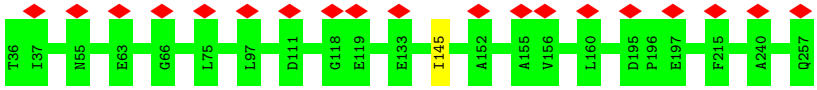




• Molecule 20: LHCII M3

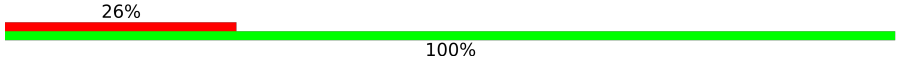
Chain N1:

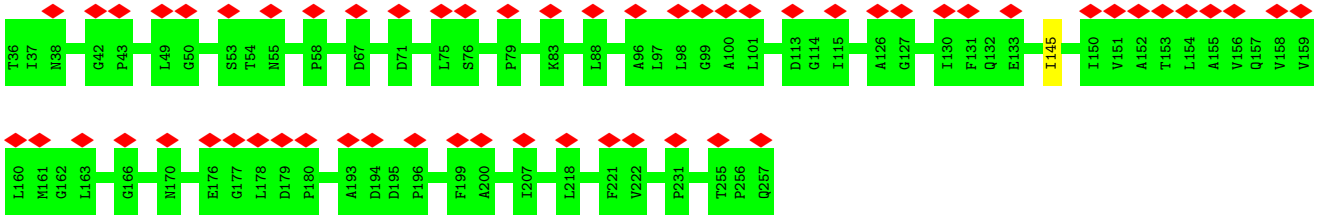




• Molecule 20: LHCII M3

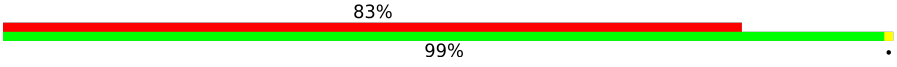
Chain n1:

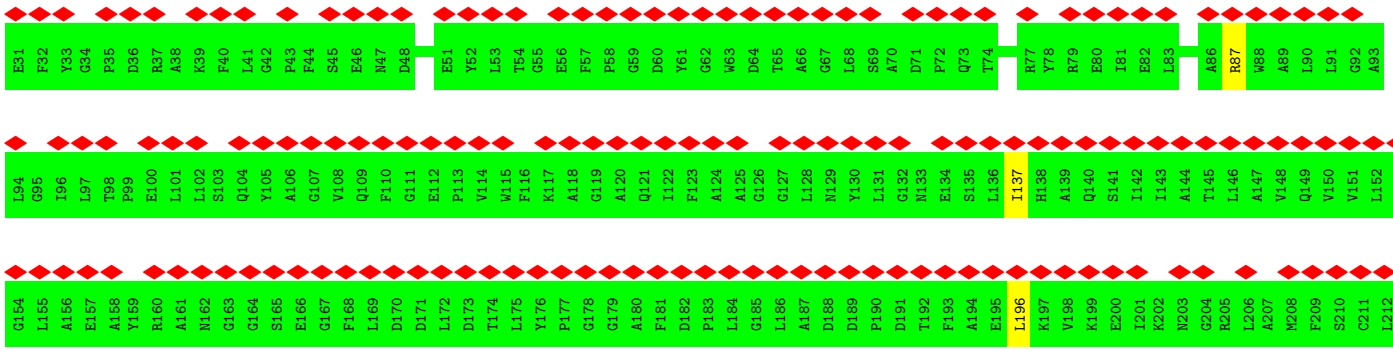


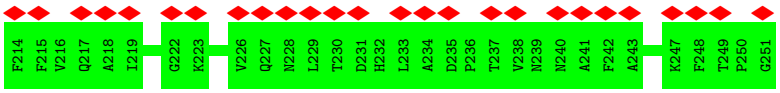


• Molecule 21: LHCII M2

Chain G:

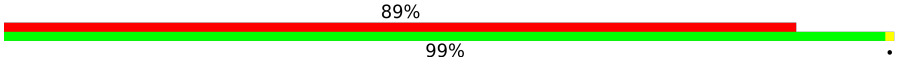


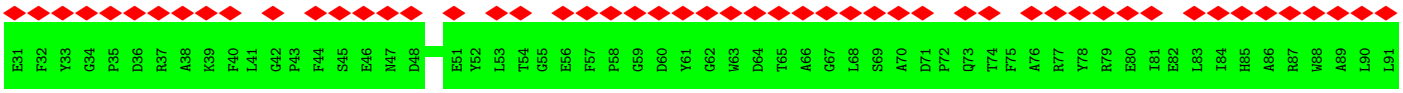


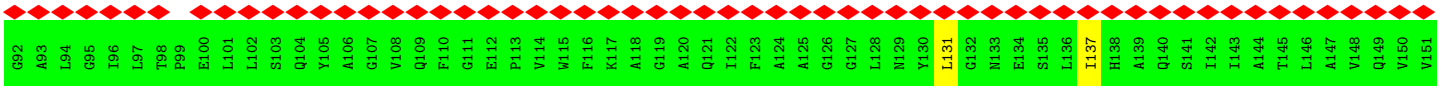


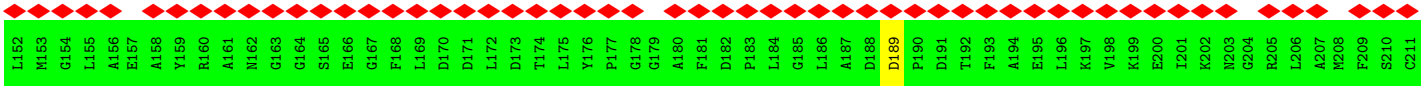
• Molecule 21: LHCII M2

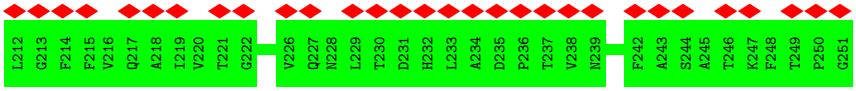
Chain g:





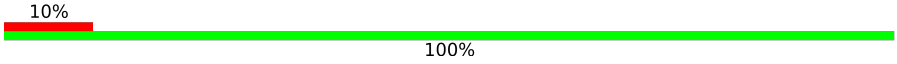


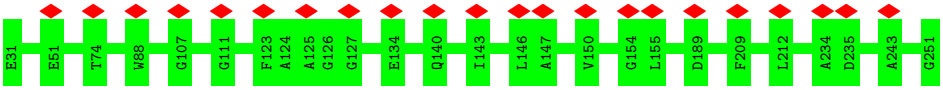




• Molecule 21: LHCII M2

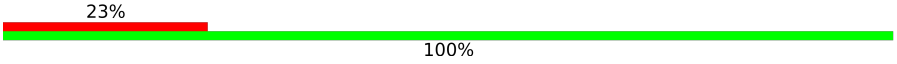
Chain G1:

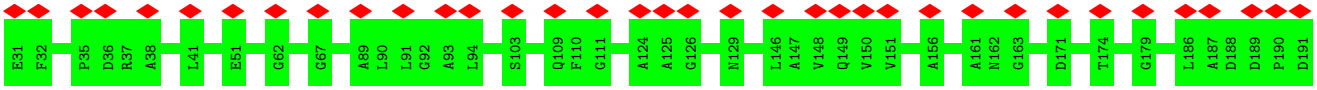


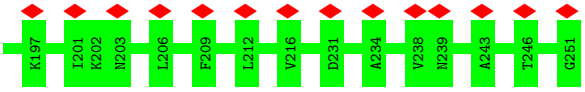


• Molecule 21: LHCII M2

Chain g1:

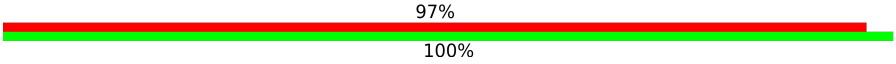


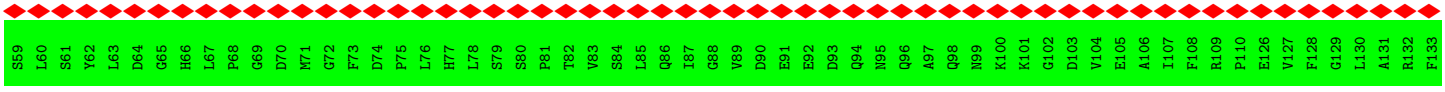


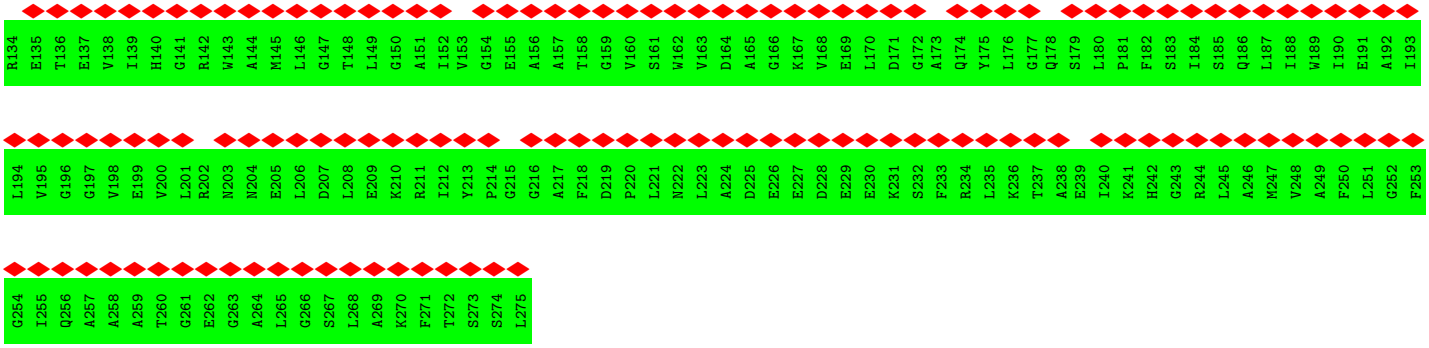


• Molecule 22: CP29

Chain R:

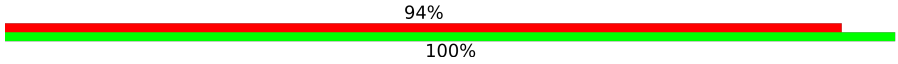


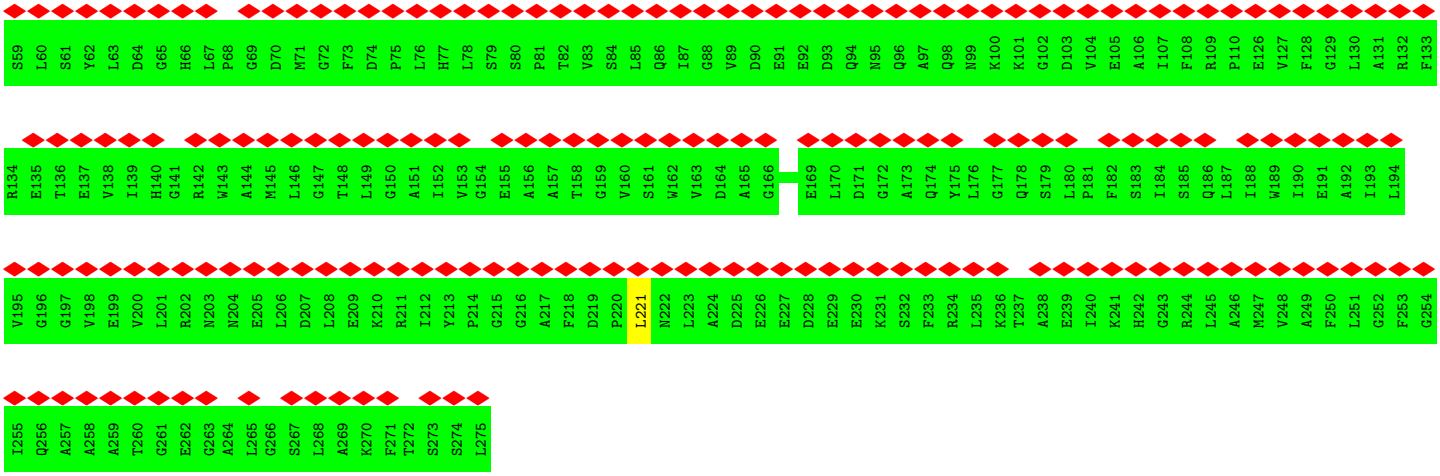




• Molecule 22: CP29

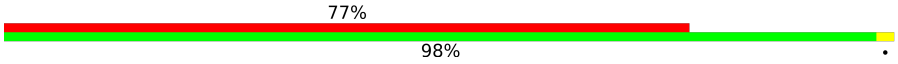
Chain r:

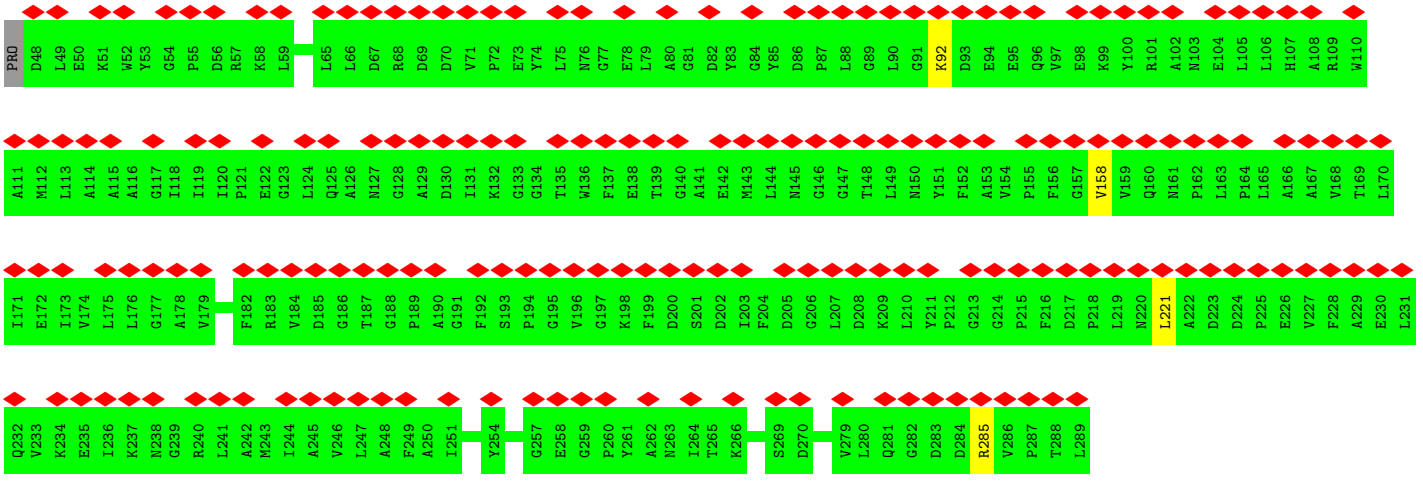




• Molecule 23: CP26

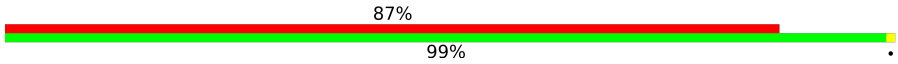
Chain S:

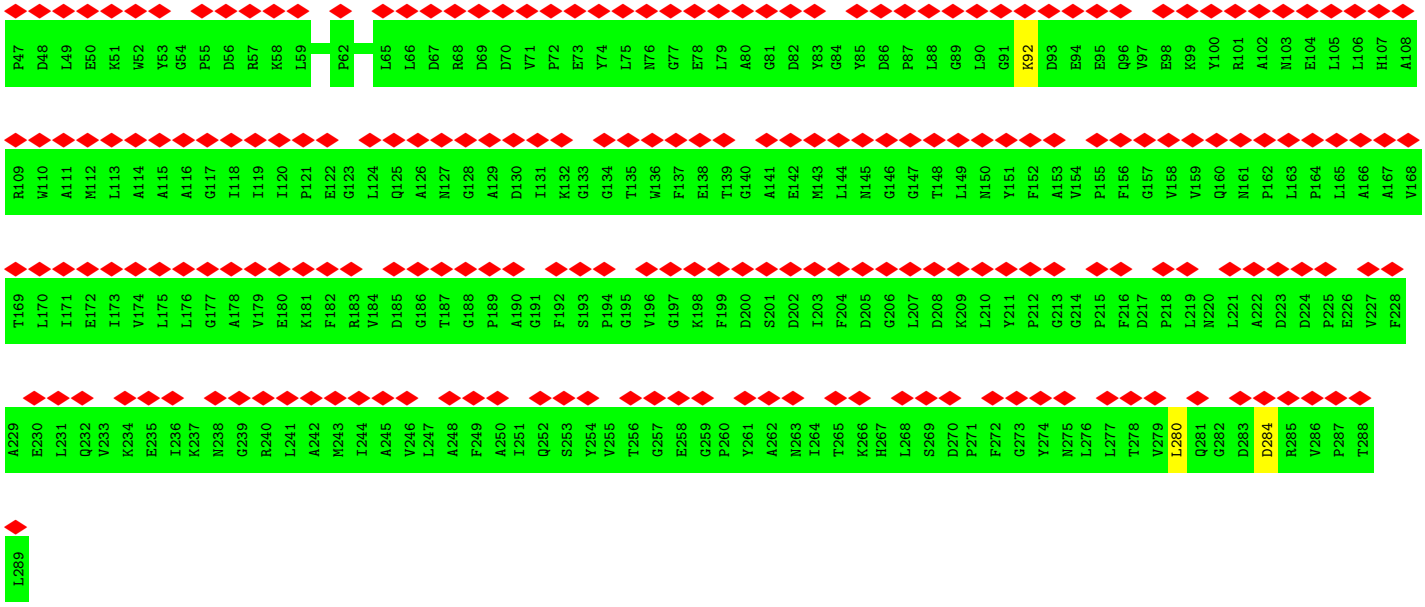




• Molecule 23: CP26

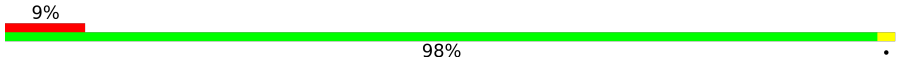
Chain s:

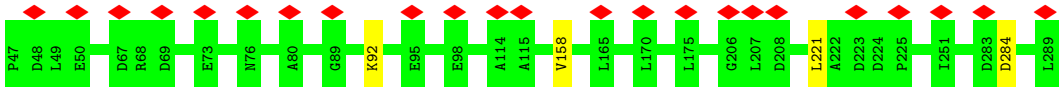




• Molecule 23: CP26

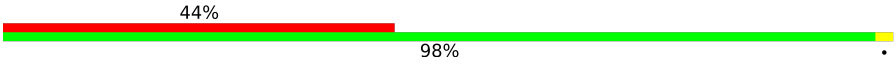
Chain S1:

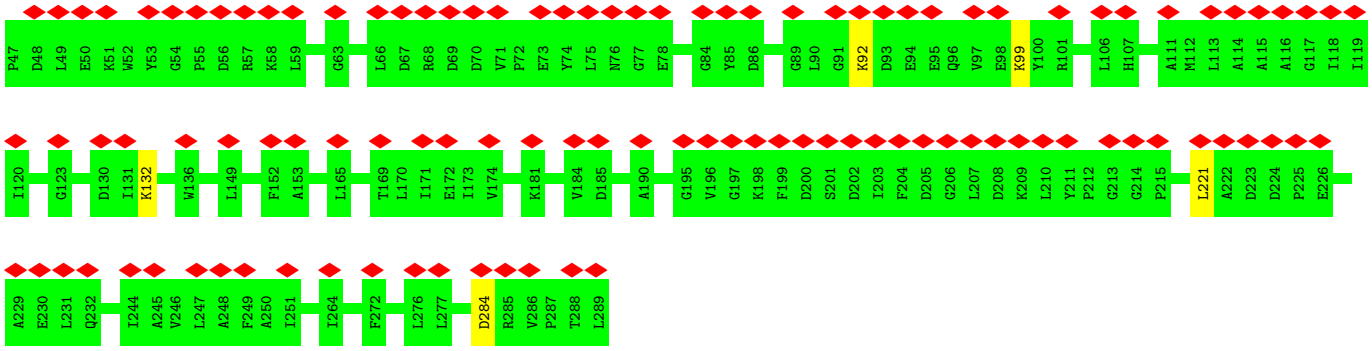




• Molecule 23: CP26

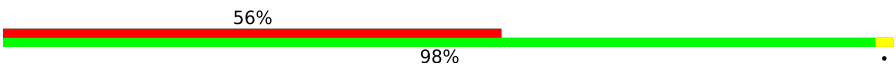
Chain s1:

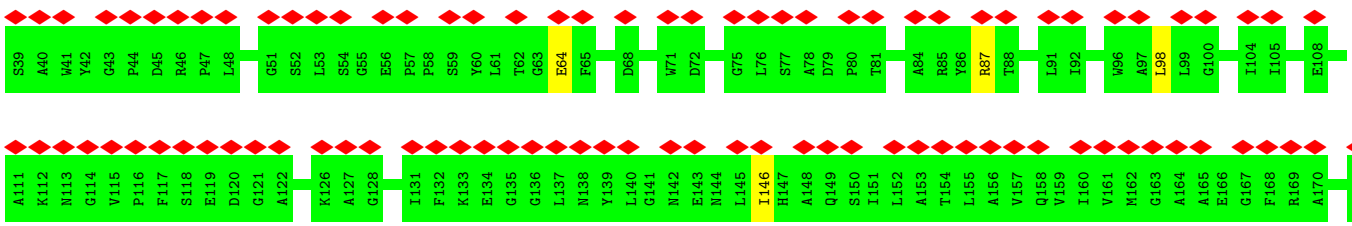


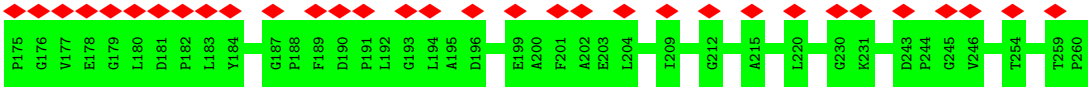


• Molecule 24: LHCII M1

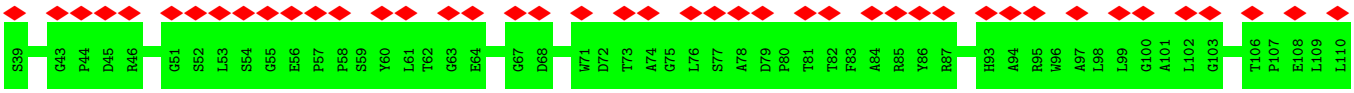
Chain Y:

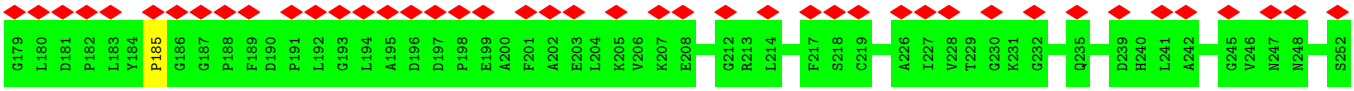


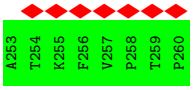




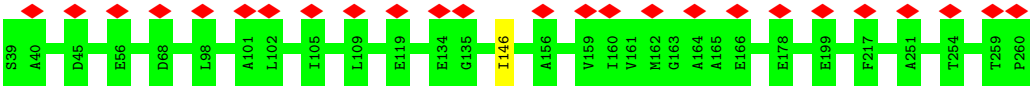
• Molecule 24: LHCII M1



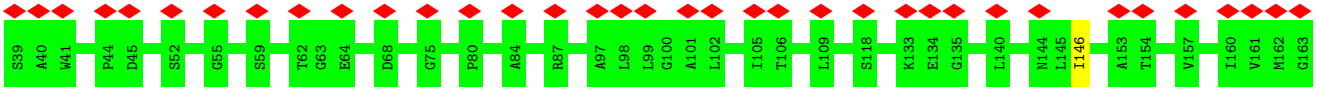


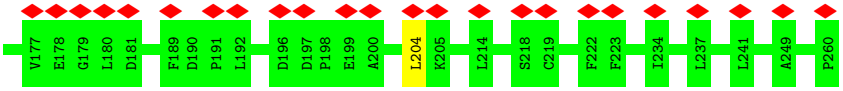


• Molecule 24: LHCII M1

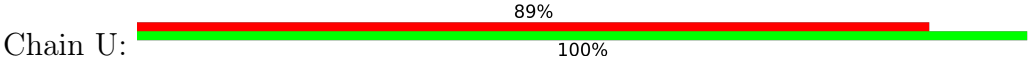


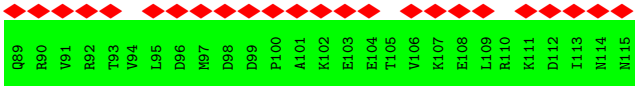
• Molecule 24: LHCII M1





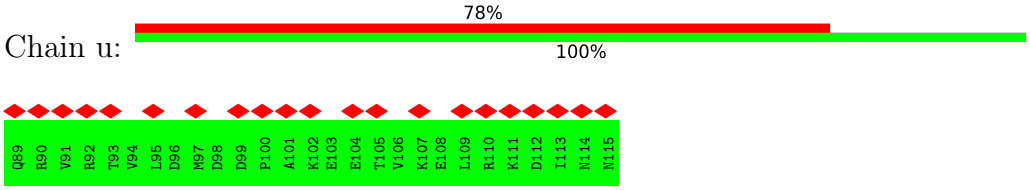
• Molecule 25: PsbU





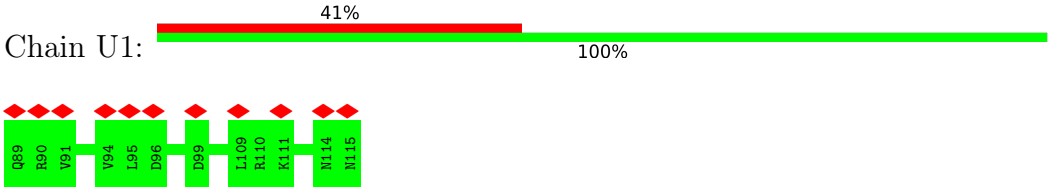
• Molecule 25: PsbU

Chain u:



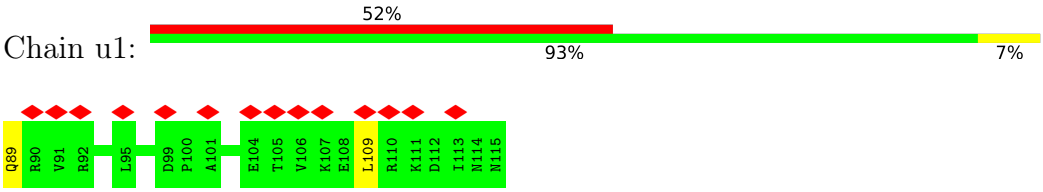
• Molecule 25: PsbU

Chain U1:



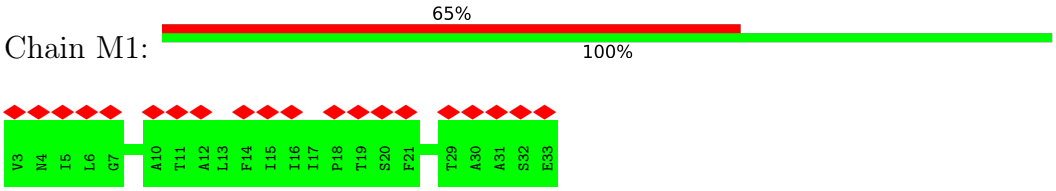
• Molecule 25: PsbU

Chain u1:



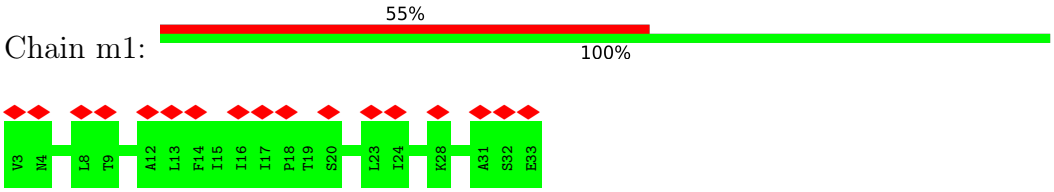
• Molecule 26: Photosystem II reaction center protein M

Chain M1:



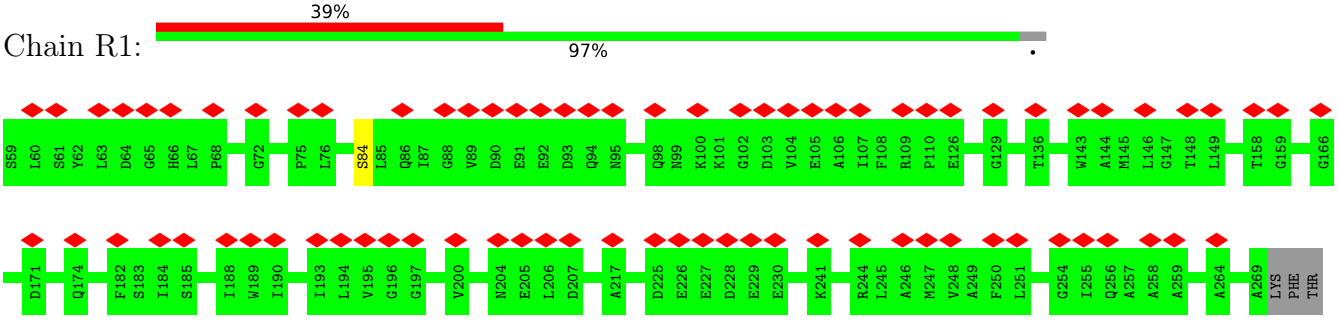
• Molecule 26: Photosystem II reaction center protein M

Chain m1:



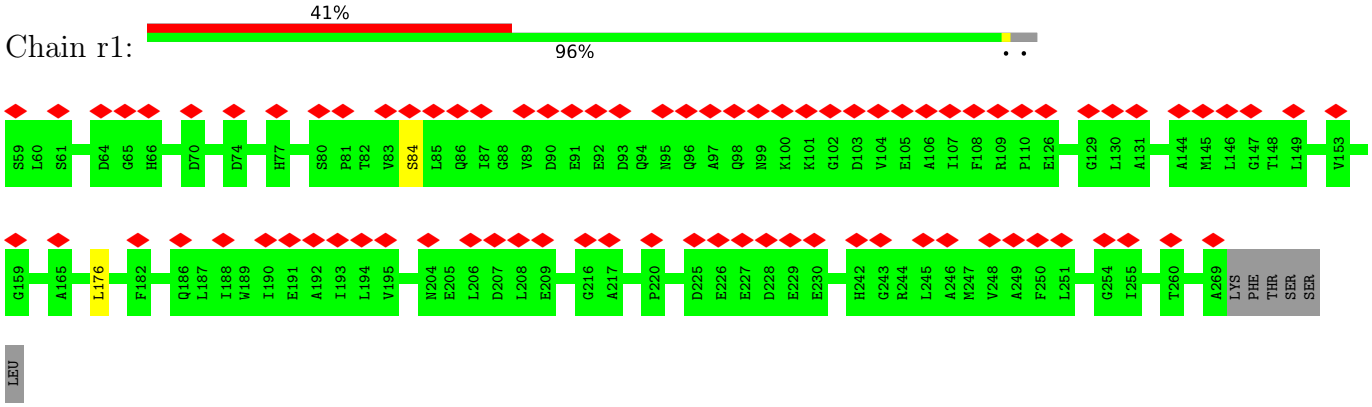
• Molecule 27: CP29

Chain R1:



• Molecule 27: CP29

Chain r1:


41%
96%
S59 L60 S61 D64 G65 H66 D70 D74 H77 S80 P81 T82 V83 S84 L85 Q86 I87 G88 V89 D90 E91 E92 D93 Q94 N95 Q96 A97 Q98 N99 K100 K101 G102 D103 V104 E105 A106 I107 F108 R109 P110 E126 G129 L130 A131 A144 M145 L146 G147 T148 L149 V153
G159 A165 L176 F182 Q186 L187 I188 W189 I190 E191 A192 I193 L194 V195 N204 E205 L206 D207 L208 E209 G216 A217 P220 D225 E226 E227 D228 E229 E230 H242 G243 R244 L245 A246 M247 V248 A249 F250 L251 G254 I255 T260 A269 LYS PHE THR SER SER
LEU

4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	14307	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	NONE	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/Å^2$)	51.81	Depositor
Minimum defocus (nm)	Not provided	
Maximum defocus (nm)	Not provided	
Magnification	Not provided	
Image detector	GATAN K3 BIOQUANTUM (6k x 4k)	Depositor
Maximum map value	0.063	Depositor
Minimum map value	-0.035	Depositor
Average map value	0.000	Depositor
Map value standard deviation	0.005	Depositor
Recommended contour level	0.0175	Depositor
Map size (Å)	460.8, 460.8, 460.8	wwPDB
Map dimensions	480, 480, 480	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	0.96, 0.96, 0.96	Depositor

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: LMT, LPX, PTY, DGD, CHL, LMG, DGA, NEX, RRX, HEM, GOL, LMK, LUT, PL9, 4RF, SEP, CL, CLA, FE2, 3PH, SQD, SPH, NA, PHO, C7Z, XAT, ERG, LHG, BCT, OEX, BCR

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 5$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#$\|Z\|$ >5	RMSZ	#$\|Z\|$ >5
1	A	0.33	0/2723	0.61	1/3715 (0.0%)
1	A1	0.31	0/2723	0.59	1/3715 (0.0%)
1	a	0.35	0/2723	0.63	1/3715 (0.0%)
1	a1	0.31	1/2723 (0.0%)	0.59	3/3715 (0.1%)
2	B	0.40	2/3912 (0.1%)	0.66	6/5327 (0.1%)
2	B1	0.29	0/3912	0.56	2/5327 (0.0%)
2	b	0.31	0/3912	0.59	0/5327
2	b1	0.29	0/3912	0.56	0/5327
3	V	0.26	0/228	0.58	0/311
3	V1	0.25	0/228	0.65	0/311
3	v	0.28	0/228	0.57	0/311
3	v1	0.24	0/228	0.58	0/311
4	C	0.32	0/3602	0.59	1/4913 (0.0%)
4	C1	0.29	0/3602	0.55	0/4913
4	c	0.43	1/3602 (0.0%)	0.74	6/4913 (0.1%)
4	c1	0.32	0/3602	0.57	1/4913 (0.0%)
5	D	0.32	0/2860	0.62	1/3899 (0.0%)
5	D1	0.30	0/2860	0.59	1/3899 (0.0%)
5	d	0.33	0/2860	0.62	3/3899 (0.1%)
5	d1	0.30	0/2860	0.58	2/3899 (0.1%)
6	E	0.30	0/639	0.57	0/870
6	E1	0.27	0/639	0.53	0/870
6	e	0.30	0/639	0.59	0/870
6	e1	0.26	0/639	0.51	0/870
7	F	0.28	0/259	0.59	0/351
7	F1	0.29	0/259	0.53	0/351
7	f	0.27	0/259	0.54	0/351
7	f1	0.25	0/259	0.49	0/351
8	H	6.04	6/513 (1.2%)	0.91	5/703 (0.7%)
8	H1	0.26	0/513	0.60	0/703
8	h	0.31	0/513	0.66	1/703 (0.1%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
8	h1	0.28	0/513	0.56	0/703
9	I	0.31	0/287	0.60	0/386
9	I1	0.35	0/287	0.66	0/386
9	i	0.32	0/287	0.65	0/386
9	i1	0.27	0/287	0.50	0/386
10	J	0.26	0/272	0.54	0/369
10	J1	0.26	0/272	0.55	0/369
10	j	0.26	0/272	0.50	0/369
10	j1	0.27	0/272	0.56	0/369
11	K	0.36	0/308	0.69	1/423 (0.2%)
11	K1	0.32	0/308	0.65	1/423 (0.2%)
11	k	0.36	0/308	0.66	0/423
11	k1	0.37	0/308	0.63	0/423
12	L	0.43	0/321	0.73	1/435 (0.2%)
12	L1	0.29	0/321	0.64	0/435
12	l	0.31	0/321	0.55	0/435
13	M	0.29	0/246	0.55	0/335
13	m	0.29	0/246	0.66	0/335
14	O	0.30	0/1855	0.64	3/2505 (0.1%)
14	O1	0.28	0/1855	0.64	3/2505 (0.1%)
14	o	0.29	0/1855	0.61	2/2505 (0.1%)
14	o1	0.29	0/1855	0.66	3/2505 (0.1%)
15	P	0.28	0/1473	0.56	0/1988
15	P1	0.27	0/1473	0.57	0/1988
15	p	0.26	0/1473	0.51	0/1988
15	p1	0.26	0/1473	0.54	0/1988
16	T	0.30	0/254	0.57	0/342
16	T1	0.29	0/254	0.56	0/342
16	t	0.32	0/254	0.62	0/342
16	t1	0.29	0/254	0.65	0/342
17	W	0.29	0/339	0.54	0/460
17	W1	0.26	0/339	0.60	1/460 (0.2%)
17	w	0.28	0/339	0.52	0/460
17	w1	0.25	0/339	0.52	0/460
18	X	0.25	0/202	0.53	0/276
18	X1	0.28	0/202	0.49	0/276
18	x	0.28	0/202	0.58	0/276
18	x1	0.28	0/202	0.42	0/276
19	Z	0.29	0/469	0.58	0/641
19	Z1	0.26	0/469	0.48	0/641
19	z	0.27	0/469	0.46	0/641
19	z1	0.28	0/469	0.48	0/641
20	N	0.31	0/1751	0.60	0/2386

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
20	N1	0.30	0/1751	0.55	0/2386
20	n	0.33	0/1751	0.67	2/2386 (0.1%)
20	n1	0.27	0/1750	0.52	0/2382
21	G	0.31	0/1725	0.62	1/2348 (0.0%)
21	G1	0.28	0/1725	0.54	0/2348
21	g	0.31	0/1725	0.59	2/2348 (0.1%)
21	g1	0.28	0/1725	0.54	0/2348
22	R	0.27	0/1561	0.57	0/2110
22	r	0.28	0/1561	0.59	1/2110 (0.0%)
23	S	0.30	0/1895	0.59	1/2579 (0.0%)
23	S1	0.27	0/1903	0.56	1/2590 (0.0%)
23	s	0.28	0/1902	0.57	1/2587 (0.0%)
23	s1	0.27	0/1903	0.54	1/2590 (0.0%)
24	Y	0.38	0/1715	0.71	3/2338 (0.1%)
24	Y1	0.32	0/1715	0.56	0/2338
24	y	0.45	2/1715 (0.1%)	0.75	4/2338 (0.2%)
24	y1	0.28	0/1715	0.54	1/2338 (0.0%)
25	U	0.25	0/224	0.66	0/298
25	U1	0.30	0/224	0.61	0/298
25	u	0.32	0/224	0.79	0/298
25	u1	0.30	0/224	0.70	1/298 (0.3%)
26	M1	0.27	0/237	0.57	0/323
26	m1	0.27	0/237	0.48	0/323
27	R1	0.26	0/1506	0.52	0/2035
27	r1	0.27	0/1506	0.59	1/2035 (0.0%)
All	All	0.50	12/118105 (0.0%)	0.60	70/160649 (0.0%)

The worst 5 of 12 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
8	H	57	PHE	CE2-CZ	63.39	2.57	1.37
8	H	57	PHE	CD2-CE2	62.87	2.65	1.39
8	H	57	PHE	CE1-CZ	62.87	2.56	1.37
8	H	57	PHE	CD1-CE1	61.06	2.61	1.39
8	H	57	PHE	CG-CD2	38.86	1.97	1.38

The worst 5 of 70 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	y	185	PRO	N-CD-CG	-17.70	76.65	103.20
4	c	374	PRO	N-CD-CG	-16.63	78.26	103.20
2	B	88	PRO	N-CD-CG	-13.67	82.69	103.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	y	185	PRO	CA-CB-CG	-11.49	82.17	104.00
2	B	50	PRO	CA-N-CD	-10.86	96.29	111.50

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts (i)

Due to software issues we are unable to calculate clashes - this section is therefore empty.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	335/336 (100%)	304 (91%)	30 (9%)	1 (0%)	41	75
1	A1	335/336 (100%)	313 (93%)	22 (7%)	0	100	100
1	a	335/336 (100%)	313 (93%)	22 (7%)	0	100	100
1	a1	335/336 (100%)	316 (94%)	19 (6%)	0	100	100
2	B	482/484 (100%)	460 (95%)	21 (4%)	1 (0%)	47	79
2	B1	482/484 (100%)	459 (95%)	23 (5%)	0	100	100
2	b	482/484 (100%)	454 (94%)	28 (6%)	0	100	100
2	b1	482/484 (100%)	462 (96%)	20 (4%)	0	100	100
3	V	30/32 (94%)	29 (97%)	1 (3%)	0	100	100
3	V1	30/32 (94%)	29 (97%)	1 (3%)	0	100	100
3	v	30/32 (94%)	28 (93%)	2 (7%)	0	100	100
3	v1	30/32 (94%)	29 (97%)	1 (3%)	0	100	100
4	C	447/449 (100%)	410 (92%)	34 (8%)	3 (1%)	22	61
4	C1	447/449 (100%)	427 (96%)	20 (4%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
4	c	447/449 (100%)	413 (92%)	31 (7%)	3 (1%)	22	61
4	c1	447/449 (100%)	425 (95%)	22 (5%)	0	100	100
5	D	346/348 (99%)	330 (95%)	15 (4%)	1 (0%)	41	75
5	D1	346/348 (99%)	332 (96%)	14 (4%)	0	100	100
5	d	346/348 (99%)	332 (96%)	13 (4%)	1 (0%)	41	75
5	d1	346/348 (99%)	331 (96%)	15 (4%)	0	100	100
6	E	74/76 (97%)	70 (95%)	4 (5%)	0	100	100
6	E1	74/76 (97%)	69 (93%)	5 (7%)	0	100	100
6	e	74/76 (97%)	67 (90%)	7 (10%)	0	100	100
6	e1	74/76 (97%)	72 (97%)	2 (3%)	0	100	100
7	F	29/31 (94%)	29 (100%)	0	0	100	100
7	F1	29/31 (94%)	28 (97%)	1 (3%)	0	100	100
7	f	29/31 (94%)	29 (100%)	0	0	100	100
7	f1	29/31 (94%)	29 (100%)	0	0	100	100
8	H	65/67 (97%)	61 (94%)	4 (6%)	0	100	100
8	H1	65/67 (97%)	61 (94%)	4 (6%)	0	100	100
8	h	65/67 (97%)	64 (98%)	1 (2%)	0	100	100
8	h1	65/67 (97%)	62 (95%)	3 (5%)	0	100	100
9	I	33/35 (94%)	33 (100%)	0	0	100	100
9	I1	33/35 (94%)	32 (97%)	1 (3%)	0	100	100
9	i	33/35 (94%)	33 (100%)	0	0	100	100
9	i1	33/35 (94%)	32 (97%)	1 (3%)	0	100	100
10	J	34/36 (94%)	34 (100%)	0	0	100	100
10	J1	34/36 (94%)	34 (100%)	0	0	100	100
10	j	34/36 (94%)	34 (100%)	0	0	100	100
10	j1	34/36 (94%)	34 (100%)	0	0	100	100
11	K	35/37 (95%)	35 (100%)	0	0	100	100
11	K1	35/37 (95%)	35 (100%)	0	0	100	100
11	k	35/37 (95%)	33 (94%)	2 (6%)	0	100	100
11	k1	35/37 (95%)	33 (94%)	2 (6%)	0	100	100
12	L	36/38 (95%)	35 (97%)	1 (3%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
12	L1	36/38 (95%)	35 (97%)	1 (3%)	0	100	100
12	l	36/38 (95%)	36 (100%)	0	0	100	100
13	M	30/32 (94%)	29 (97%)	0	1 (3%)	4	30
13	m	30/32 (94%)	28 (93%)	1 (3%)	1 (3%)	4	30
14	O	236/238 (99%)	210 (89%)	25 (11%)	1 (0%)	34	71
14	O1	236/238 (99%)	214 (91%)	21 (9%)	1 (0%)	34	71
14	o	236/238 (99%)	215 (91%)	20 (8%)	1 (0%)	34	71
14	o1	236/238 (99%)	217 (92%)	18 (8%)	1 (0%)	34	71
15	P	185/187 (99%)	167 (90%)	17 (9%)	1 (0%)	29	67
15	P1	185/187 (99%)	175 (95%)	10 (5%)	0	100	100
15	p	185/187 (99%)	173 (94%)	12 (6%)	0	100	100
15	p1	185/187 (99%)	171 (92%)	14 (8%)	0	100	100
16	T	28/30 (93%)	26 (93%)	1 (4%)	1 (4%)	3	28
16	T1	28/30 (93%)	27 (96%)	0	1 (4%)	3	28
16	t	28/30 (93%)	27 (96%)	0	1 (4%)	3	28
16	t1	28/30 (93%)	28 (100%)	0	0	100	100
17	W	42/44 (96%)	40 (95%)	2 (5%)	0	100	100
17	W1	42/44 (96%)	41 (98%)	1 (2%)	0	100	100
17	w	42/44 (96%)	41 (98%)	1 (2%)	0	100	100
17	w1	42/44 (96%)	41 (98%)	1 (2%)	0	100	100
18	X	28/30 (93%)	27 (96%)	1 (4%)	0	100	100
18	X1	28/30 (93%)	28 (100%)	0	0	100	100
18	x	28/30 (93%)	26 (93%)	2 (7%)	0	100	100
18	x1	28/30 (93%)	28 (100%)	0	0	100	100
19	Z	59/61 (97%)	59 (100%)	0	0	100	100
19	Z1	59/61 (97%)	57 (97%)	2 (3%)	0	100	100
19	z	59/61 (97%)	58 (98%)	1 (2%)	0	100	100
19	z1	59/61 (97%)	59 (100%)	0	0	100	100
20	N	220/222 (99%)	204 (93%)	15 (7%)	1 (0%)	29	67
20	N1	220/222 (99%)	201 (91%)	18 (8%)	1 (0%)	29	67
20	n	220/222 (99%)	201 (91%)	17 (8%)	2 (1%)	17	55

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
20	n1	218/222 (98%)	198 (91%)	19 (9%)	1 (0%)	29	67
21	G	219/221 (99%)	203 (93%)	15 (7%)	1 (0%)	29	67
21	G1	219/221 (99%)	201 (92%)	18 (8%)	0	100	100
21	g	219/221 (99%)	209 (95%)	9 (4%)	1 (0%)	29	67
21	g1	219/221 (99%)	202 (92%)	17 (8%)	0	100	100
22	R	198/202 (98%)	188 (95%)	10 (5%)	0	100	100
22	r	198/202 (98%)	181 (91%)	17 (9%)	0	100	100
23	S	240/243 (99%)	218 (91%)	20 (8%)	2 (1%)	19	58
23	S1	241/243 (99%)	221 (92%)	17 (7%)	3 (1%)	13	49
23	s	239/243 (98%)	219 (92%)	18 (8%)	2 (1%)	19	58
23	s1	241/243 (99%)	219 (91%)	20 (8%)	2 (1%)	19	58
24	Y	220/222 (99%)	208 (94%)	11 (5%)	1 (0%)	29	67
24	Y1	220/222 (99%)	205 (93%)	14 (6%)	1 (0%)	29	67
24	y	220/222 (99%)	209 (95%)	10 (4%)	1 (0%)	29	67
24	y1	220/222 (99%)	208 (94%)	11 (5%)	1 (0%)	29	67
25	U	25/27 (93%)	25 (100%)	0	0	100	100
25	U1	25/27 (93%)	25 (100%)	0	0	100	100
25	u	25/27 (93%)	25 (100%)	0	0	100	100
25	u1	25/27 (93%)	24 (96%)	1 (4%)	0	100	100
26	M1	29/31 (94%)	29 (100%)	0	0	100	100
26	m1	29/31 (94%)	28 (97%)	1 (3%)	0	100	100
27	R1	191/202 (95%)	183 (96%)	8 (4%)	0	100	100
27	r1	191/202 (95%)	181 (95%)	10 (5%)	0	100	100
All	All	14651/14872 (98%)	13772 (94%)	839 (6%)	40 (0%)	44	75

5 of 40 Ramachandran outliers are listed below:

Mol	Chain	Res	Type
4	C	257	GLU
4	C	395	VAL
14	O	94	VAL
4	c	257	GLU
4	c	395	VAL

5.3.2 Protein sidechains (i)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	276/275 (100%)	276 (100%)	0	100	100
1	A1	276/275 (100%)	276 (100%)	0	100	100
1	a	276/275 (100%)	275 (100%)	1 (0%)	91	94
1	a1	276/275 (100%)	276 (100%)	0	100	100
2	B	388/388 (100%)	387 (100%)	1 (0%)	92	95
2	B1	388/388 (100%)	388 (100%)	0	100	100
2	b	388/388 (100%)	388 (100%)	0	100	100
2	b1	388/388 (100%)	386 (100%)	2 (0%)	88	93
3	V	25/25 (100%)	25 (100%)	0	100	100
3	V1	25/25 (100%)	25 (100%)	0	100	100
3	v	25/25 (100%)	25 (100%)	0	100	100
3	v1	25/25 (100%)	25 (100%)	0	100	100
4	C	350/350 (100%)	349 (100%)	1 (0%)	92	95
4	C1	350/350 (100%)	349 (100%)	1 (0%)	92	95
4	c	350/350 (100%)	350 (100%)	0	100	100
4	c1	350/350 (100%)	348 (99%)	2 (1%)	86	92
5	D	279/279 (100%)	278 (100%)	1 (0%)	91	94
5	D1	279/279 (100%)	279 (100%)	0	100	100
5	d	279/279 (100%)	278 (100%)	1 (0%)	91	94
5	d1	279/279 (100%)	278 (100%)	1 (0%)	91	94
6	E	68/68 (100%)	68 (100%)	0	100	100
6	E1	68/68 (100%)	68 (100%)	0	100	100
6	e	68/68 (100%)	68 (100%)	0	100	100
6	e1	68/68 (100%)	68 (100%)	0	100	100
7	F	25/25 (100%)	25 (100%)	0	100	100
7	F1	25/25 (100%)	25 (100%)	0	100	100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
7	f	25/25 (100%)	25 (100%)	0	100	100
7	f1	25/25 (100%)	25 (100%)	0	100	100
8	H	56/56 (100%)	56 (100%)	0	100	100
8	H1	56/56 (100%)	56 (100%)	0	100	100
8	h	56/56 (100%)	56 (100%)	0	100	100
8	h1	56/56 (100%)	55 (98%)	1 (2%)	59	77
9	I	31/31 (100%)	31 (100%)	0	100	100
9	I1	31/31 (100%)	31 (100%)	0	100	100
9	i	31/31 (100%)	31 (100%)	0	100	100
9	i1	31/31 (100%)	31 (100%)	0	100	100
10	J	27/27 (100%)	27 (100%)	0	100	100
10	J1	27/27 (100%)	27 (100%)	0	100	100
10	j	27/27 (100%)	27 (100%)	0	100	100
10	j1	27/27 (100%)	27 (100%)	0	100	100
11	K	33/33 (100%)	33 (100%)	0	100	100
11	K1	33/33 (100%)	33 (100%)	0	100	100
11	k	33/33 (100%)	33 (100%)	0	100	100
11	k1	33/33 (100%)	33 (100%)	0	100	100
12	L	35/35 (100%)	35 (100%)	0	100	100
12	L1	35/35 (100%)	35 (100%)	0	100	100
12	l	35/35 (100%)	35 (100%)	0	100	100
13	M	27/27 (100%)	27 (100%)	0	100	100
13	m	27/27 (100%)	27 (100%)	0	100	100
14	O	195/195 (100%)	194 (100%)	1 (0%)	88	93
14	O1	195/195 (100%)	195 (100%)	0	100	100
14	o	195/195 (100%)	194 (100%)	1 (0%)	88	93
14	o1	195/195 (100%)	195 (100%)	0	100	100
15	P	151/151 (100%)	150 (99%)	1 (1%)	84	90
15	P1	151/151 (100%)	150 (99%)	1 (1%)	84	90
15	p	151/151 (100%)	151 (100%)	0	100	100
15	p1	151/151 (100%)	151 (100%)	0	100	100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
16	T	26/26 (100%)	26 (100%)	0	100	100
16	T1	26/26 (100%)	26 (100%)	0	100	100
16	t	26/26 (100%)	26 (100%)	0	100	100
16	t1	26/26 (100%)	26 (100%)	0	100	100
17	W	34/34 (100%)	33 (97%)	1 (3%)	42	65
17	W1	34/34 (100%)	34 (100%)	0	100	100
17	w	34/34 (100%)	34 (100%)	0	100	100
17	w1	34/34 (100%)	34 (100%)	0	100	100
18	X	21/21 (100%)	21 (100%)	0	100	100
18	X1	21/21 (100%)	21 (100%)	0	100	100
18	x	21/21 (100%)	21 (100%)	0	100	100
18	x1	21/21 (100%)	21 (100%)	0	100	100
19	Z	50/50 (100%)	50 (100%)	0	100	100
19	Z1	50/50 (100%)	50 (100%)	0	100	100
19	z	50/50 (100%)	50 (100%)	0	100	100
19	z1	50/50 (100%)	50 (100%)	0	100	100
20	N	171/171 (100%)	170 (99%)	1 (1%)	86	92
20	N1	171/171 (100%)	171 (100%)	0	100	100
20	n	171/171 (100%)	170 (99%)	1 (1%)	86	92
20	n1	171/171 (100%)	171 (100%)	0	100	100
21	G	168/168 (100%)	167 (99%)	1 (1%)	86	92
21	G1	168/168 (100%)	168 (100%)	0	100	100
21	g	168/168 (100%)	168 (100%)	0	100	100
21	g1	168/168 (100%)	168 (100%)	0	100	100
22	R	158/158 (100%)	158 (100%)	0	100	100
22	r	158/158 (100%)	158 (100%)	0	100	100
23	S	189/190 (100%)	188 (100%)	1 (0%)	88	93
23	S1	190/190 (100%)	190 (100%)	0	100	100
23	s	190/190 (100%)	190 (100%)	0	100	100
23	s1	190/190 (100%)	188 (99%)	2 (1%)	73	85
24	Y	167/167 (100%)	167 (100%)	0	100	100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
24	Y1	167/167 (100%)	167 (100%)	0	100 100
24	y	167/167 (100%)	167 (100%)	0	100 100
24	y1	167/167 (100%)	167 (100%)	0	100 100
25	U	26/26 (100%)	26 (100%)	0	100 100
25	U1	26/26 (100%)	26 (100%)	0	100 100
25	u	26/26 (100%)	26 (100%)	0	100 100
25	u1	26/26 (100%)	25 (96%)	1 (4%)	33 59
26	M1	26/26 (100%)	26 (100%)	0	100 100
26	m1	26/26 (100%)	26 (100%)	0	100 100
27	R1	151/157 (96%)	151 (100%)	0	100 100
27	r1	151/157 (96%)	151 (100%)	0	100 100
All	All	11856/11865 (100%)	11832 (100%)	24 (0%)	93 96

5 of 24 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
15	P1	228	LYS
4	c1	384	MET
2	b1	418	LYS
4	c1	406	ASN
20	N	83	LYS

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 43 such sidechains are listed below:

Mol	Chain	Res	Type
1	a1	26	ASN
4	c1	429	HIS
1	a1	181	ASN
3	v1	8	GLN
5	d1	336	HIS

5.3.3 RNA (i)

There are no RNA molecules in this entry.

5.4 Non-standard residues in protein, DNA, RNA chains (i)

2 non-standard protein/DNA/RNA residues are modelled in this entry.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
27	SEP	r1	84	27	8,9,10	1.55	1 (12%)	8,12,14	1.26	1 (12%)
27	SEP	R1	84	27	8,9,10	1.56	1 (12%)	8,12,14	1.86	2 (25%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
27	SEP	r1	84	27	-	3/5/8/10	-
27	SEP	R1	84	27	-	3/5/8/10	-

All (2) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	r1	84	SEP	P-O1P	3.40	1.61	1.50
27	R1	84	SEP	P-O1P	3.37	1.61	1.50

All (3) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
27	R1	84	SEP	OG-CB-CA	3.54	111.59	108.14
27	R1	84	SEP	P-OG-CB	-3.40	108.92	118.30
27	r1	84	SEP	P-OG-CB	-2.20	112.25	118.30

There are no chirality outliers.

5 of 6 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
27	R1	84	SEP	CB-OG-P-O1P
27	R1	84	SEP	CB-OG-P-O2P
27	R1	84	SEP	CB-OG-P-O3P
27	r1	84	SEP	CB-OG-P-O2P
27	r1	84	SEP	CB-OG-P-O1P

There are no ring outliers.

No monomer is involved in short contacts.

5.5 Carbohydrates (i)

There are no monosaccharides in this entry.

5.6 Ligand geometry (i)

Of 703 ligands modelled in this entry, 16 are monoatomic - leaving 687 for Mogul analysis.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
35	LMG	h	102	-	48,48,55	1.00	5 (10%)	56,56,63	1.10	2 (3%)
31	CLA	b	614	-	65,73,73	1.32	6 (9%)	76,113,113	1.96	18 (23%)
47	CHL	n1	605	-	66,74,74	0.82	3 (4%)	73,114,114	1.22	12 (16%)
31	CLA	C1	504	-	65,73,73	1.34	7 (10%)	76,113,113	2.06	15 (19%)
31	CLA	b1	607	-	65,73,73	1.34	7 (10%)	76,113,113	1.99	17 (22%)
41	LHG	C1	525	-	46,46,48	0.40	0	49,52,54	1.11	2 (4%)
45	HEM	F1	101	6	41,50,50	1.47	5 (12%)	45,82,82	1.29	4 (8%)
47	CHL	Y	605	24	46,54,74	1.00	2 (4%)	49,90,114	1.45	9 (18%)
48	LUT	S1	621	-	42,43,43	2.36	1 (2%)	51,60,60	2.00	13 (25%)
31	CLA	N	604	-	65,73,73	1.34	8 (12%)	76,113,113	2.02	20 (26%)
48	LUT	G1	620	-	42,43,43	2.35	1 (2%)	51,60,60	2.05	10 (19%)
31	CLA	c1	502	-	65,73,73	1.33	7 (10%)	76,113,113	2.06	19 (25%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
34	SQD	b1	626	-	53,54,54	0.80	0	62,65,65	0.90	2 (3%)
49	XAT	y	622	-	39,47,47	0.67	1 (2%)	54,74,74	3.73	19 (35%)
57	PTY	y1	627	-	18,18,49	1.30	3 (16%)	21,23,54	1.42	2 (9%)
31	CLA	c	508	-	65,73,73	1.34	8 (12%)	76,113,113	2.03	15 (19%)
32	PHO	a	409	-	51,69,69	1.02	4 (7%)	47,99,99	1.23	5 (10%)
41	LHG	D1	408	-	43,43,48	0.41	0	46,49,54	1.07	4 (8%)
41	LHG	Y	624	-	48,48,48	0.38	0	51,54,54	1.05	3 (5%)
31	CLA	n	614	-	49,57,73	1.55	9 (18%)	55,93,113	2.26	17 (30%)
31	CLA	n1	602	-	65,73,73	1.33	7 (10%)	76,113,113	2.03	18 (23%)
38	DGA	J1	101	-	28,28,43	1.30	3 (10%)	30,30,45	1.26	2 (6%)
31	CLA	B1	603	-	65,73,73	1.35	9 (13%)	76,113,113	2.00	18 (23%)
31	CLA	S	617	-	50,58,73	1.54	8 (16%)	58,95,113	2.24	17 (29%)
35	LMG	d1	411	-	46,46,55	0.92	3 (6%)	54,54,63	1.17	2 (3%)
31	CLA	n1	604	-	65,73,73	1.35	8 (12%)	76,113,113	1.98	18 (23%)
31	CLA	r1	602	-	60,68,73	1.41	9 (15%)	70,107,113	2.07	21 (30%)
48	LUT	s1	621	-	42,43,43	2.33	1 (2%)	51,60,60	2.08	14 (27%)
31	CLA	Y	612	-	65,73,73	1.36	8 (12%)	76,113,113	1.97	17 (22%)
31	CLA	d1	403	-	65,73,73	1.35	8 (12%)	76,113,113	2.06	18 (23%)
31	CLA	B1	609	-	65,73,73	1.36	7 (10%)	76,113,113	2.04	18 (23%)
31	CLA	A1	406	-	65,73,73	1.33	7 (10%)	76,113,113	2.05	18 (23%)
31	CLA	c1	505	-	65,73,73	1.39	9 (13%)	76,113,113	1.92	15 (19%)
31	CLA	s1	610	-	65,73,73	1.36	7 (10%)	76,113,113	1.95	16 (21%)
33	BCR	c1	516	-	41,41,41	1.85	4 (9%)	56,56,56	4.44	16 (28%)
35	LMG	c1	523	-	55,55,55	1.13	6 (10%)	63,63,63	1.02	2 (3%)
47	CHL	Y	601	-	66,74,74	0.83	2 (3%)	73,114,114	1.20	10 (13%)
49	XAT	g1	622	-	39,47,47	0.71	1 (2%)	54,74,74	1.80	13 (24%)
47	CHL	n	605	-	66,74,74	0.86	3 (4%)	73,114,114	1.22	12 (16%)
47	CHL	g	601	21	66,74,74	0.84	3 (4%)	73,114,114	1.28	12 (16%)
40	DGD	c	519	-	63,63,67	1.10	6 (9%)	77,77,81	1.04	3 (3%)
34	SQD	A1	412	-	50,51,54	0.82	0	59,62,65	0.93	3 (5%)
52	3PH	S1	626	-	47,47,47	0.85	4 (8%)	51,52,52	4.44	4 (7%)
31	CLA	r1	608	-	60,68,73	1.43	8 (13%)	70,107,113	2.03	15 (21%)
33	BCR	C1	517	-	41,41,41	1.91	4 (9%)	56,56,56	4.60	18 (32%)
31	CLA	c1	507	-	65,73,73	1.38	9 (13%)	76,113,113	1.93	18 (23%)
47	CHL	n1	606	-	66,74,74	0.85	3 (4%)	73,114,114	1.17	9 (12%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
31	CLA	a	407	-	49,57,73	1.57	8 (16%)	55,93,113	2.23	17 (30%)
31	CLA	c	502	-	65,73,73	1.33	7 (10%)	76,113,113	2.07	18 (23%)
31	CLA	C1	506	-	65,73,73	1.36	8 (12%)	76,113,113	1.98	18 (23%)
33	BCR	c	515	-	41,41,41	1.86	4 (9%)	56,56,56	4.26	18 (32%)
43	BCT	D1	401	-	2,3,3	1.24	0	2,3,3	4.24	2 (100%)
35	LMG	c	521	-	51,51,55	1.08	5 (9%)	59,59,63	1.19	3 (5%)
47	CHL	y1	609	-	66,74,74	0.83	3 (4%)	73,114,114	1.22	10 (13%)
31	CLA	A	406	-	65,73,73	1.32	6 (9%)	76,113,113	2.08	16 (21%)
47	CHL	Y	606	-	66,74,74	0.84	3 (4%)	73,114,114	1.20	11 (15%)
31	CLA	G	611	-	45,53,73	1.64	9 (20%)	52,89,113	2.22	16 (30%)
31	CLA	N1	610	-	65,73,73	1.36	8 (12%)	76,113,113	1.99	13 (17%)
47	CHL	Y1	601	24	66,74,74	0.83	2 (3%)	73,114,114	1.13	7 (9%)
33	BCR	c	517	-	41,41,41	1.85	4 (9%)	56,56,56	4.33	15 (26%)
33	BCR	C	517	-	41,41,41	1.83	4 (9%)	56,56,56	4.22	12 (21%)
34	SQD	c1	526	-	53,54,54	0.79	0	62,65,65	0.90	3 (4%)
33	BCR	d	404	-	41,41,41	1.86	4 (9%)	56,56,56	4.14	17 (30%)
31	CLA	a1	405	-	65,73,73	1.33	6 (9%)	76,113,113	2.10	21 (27%)
31	CLA	R	612	-	60,68,73	1.42	8 (13%)	70,107,113	2.03	18 (25%)
48	LUT	S	621	-	42,43,43	2.34	1 (2%)	51,60,60	2.06	15 (29%)
35	LMG	c1	521	-	51,51,55	1.07	6 (11%)	59,59,63	1.13	3 (5%)
31	CLA	S	610	-	65,73,73	1.39	9 (13%)	76,113,113	1.93	17 (22%)
47	CHL	Y1	607	-	66,74,74	0.76	2 (3%)	73,114,114	1.29	12 (16%)
31	CLA	R1	602	-	60,68,73	1.40	8 (13%)	70,107,113	2.13	18 (25%)
31	CLA	Y	608	-	50,58,73	1.56	9 (18%)	58,95,113	2.20	16 (27%)
47	CHL	N	601	20	66,74,74	0.84	3 (4%)	73,114,114	1.20	9 (12%)
50	NEX	Y	623	-	38,46,46	3.29	9 (23%)	50,70,70	2.05	15 (30%)
41	LHG	D1	409	-	48,48,48	0.39	0	51,54,54	1.10	5 (9%)
35	LMG	A1	413	-	48,48,55	1.00	5 (10%)	56,56,63	1.16	4 (7%)
31	CLA	b1	605	-	65,73,73	1.34	6 (9%)	76,113,113	2.26	19 (25%)
47	CHL	G	606	-	50,58,74	0.99	3 (6%)	52,94,114	1.38	9 (17%)
37	C7Z	b	620	-	43,43,43	5.42	26 (60%)	58,60,60	2.17	18 (31%)
31	CLA	c1	510	-	65,73,73	1.35	6 (9%)	76,113,113	1.96	15 (19%)
47	CHL	R1	607	-	50,58,74	0.94	2 (4%)	52,94,114	1.39	10 (19%)
31	CLA	s1	611	-	65,73,73	1.39	8 (12%)	76,113,113	1.99	19 (25%)
47	CHL	r1	607	-	50,58,74	0.95	2 (4%)	52,94,114	1.34	9 (17%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
31	CLA	S1	614	-	55,63,73	1.47	7 (12%)	64,101,113	2.10	16 (25%)
31	CLA	G1	610	-	65,73,73	1.34	8 (12%)	76,113,113	2.03	18 (23%)
31	CLA	C1	503	-	65,73,73	1.35	8 (12%)	76,113,113	2.00	17 (22%)
31	CLA	c1	506	-	65,73,73	1.35	7 (10%)	76,113,113	1.94	15 (19%)
38	DGA	b	623	-	43,43,43	1.13	2 (4%)	45,45,45	1.52	3 (6%)
54	4RF	k1	101	-	56,56,56	1.05	3 (5%)	59,59,59	0.90	3 (5%)
38	DGA	B	625	-	43,43,43	1.13	2 (4%)	45,45,45	1.50	3 (6%)
31	CLA	g1	611	-	65,73,73	1.35	9 (13%)	76,113,113	1.98	17 (22%)
31	CLA	g1	603	-	65,73,73	1.36	9 (13%)	76,113,113	2.01	18 (23%)
31	CLA	b	602	-	65,73,73	1.37	9 (13%)	76,113,113	2.01	17 (22%)
47	CHL	g	605	-	48,56,74	0.95	2 (4%)	51,92,114	1.39	11 (21%)
31	CLA	S1	613	-	55,63,73	1.48	8 (14%)	64,101,113	2.13	14 (21%)
31	CLA	Y1	608	-	50,58,73	1.56	10 (20%)	58,95,113	2.23	16 (27%)
34	SQD	a	412	-	50,51,54	0.81	0	59,62,65	0.92	2 (3%)
47	CHL	Y1	609	-	66,74,74	0.85	3 (4%)	73,114,114	1.28	13 (17%)
31	CLA	y1	602	-	65,73,73	1.33	7 (10%)	76,113,113	2.03	17 (22%)
48	LUT	N1	620	-	42,43,43	2.40	1 (2%)	51,60,60	1.89	10 (19%)
56	ERG	R1	626	-	31,32,32	7.76	19 (61%)	47,50,50	2.68	20 (42%)
31	CLA	b	608	-	65,73,73	1.36	7 (10%)	76,113,113	2.02	17 (22%)
31	CLA	d	403	-	65,73,73	1.38	7 (10%)	76,113,113	1.99	15 (19%)
47	CHL	y	605	24	46,54,74	0.98	2 (4%)	49,90,114	1.37	11 (22%)
57	PTY	Y1	627	-	18,18,49	1.29	3 (16%)	21,23,54	1.39	2 (9%)
40	DGD	C	518	-	56,56,67	0.99	4 (7%)	70,70,81	1.01	3 (4%)
41	LHG	S1	624	-	44,44,48	0.41	0	47,50,54	1.11	4 (8%)
50	NEX	R	622	-	38,46,46	3.32	12 (31%)	50,70,70	1.89	11 (22%)
31	CLA	B1	615	-	65,73,73	1.37	10 (15%)	76,113,113	1.96	15 (19%)
55	LMT	R1	625	-	36,36,36	1.16	5 (13%)	47,47,47	1.00	2 (4%)
50	NEX	N	623	-	38,46,46	3.39	9 (23%)	50,70,70	1.81	13 (26%)
47	CHL	n	607	-	66,74,74	0.77	2 (3%)	73,114,114	1.28	9 (12%)
31	CLA	A1	410	-	60,68,73	1.39	8 (13%)	70,107,113	2.16	20 (28%)
31	CLA	N1	613	-	65,73,73	1.37	9 (13%)	76,113,113	1.96	17 (22%)
47	CHL	N1	607	-	66,74,74	0.76	2 (3%)	73,114,114	1.21	11 (15%)
47	CHL	G1	605	-	48,56,74	0.94	2 (4%)	51,92,114	1.37	9 (17%)
31	CLA	S	611	-	65,73,73	1.38	8 (12%)	76,113,113	1.95	16 (21%)
31	CLA	S1	602	-	60,68,73	1.40	8 (13%)	70,107,113	2.10	20 (28%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
31	CLA	c1	512	-	65,73,73	1.36	7 (10%)	76,113,113	2.02	18 (23%)
31	CLA	S1	612	-	45,53,73	1.60	7 (15%)	52,89,113	2.22	14 (26%)
47	CHL	G	608	-	44,52,74	1.01	3 (6%)	46,87,114	1.46	9 (19%)
47	CHL	S1	601	23	46,54,74	1.01	3 (6%)	49,90,114	1.37	7 (14%)
31	CLA	N	603	-	65,73,73	1.35	8 (12%)	76,113,113	2.04	18 (23%)
41	LHG	n	624	-	48,48,48	0.39	0	51,54,54	1.05	3 (5%)
33	BCR	a	411	-	41,41,41	1.85	4 (9%)	56,56,56	4.32	15 (26%)
48	LUT	y	620	-	42,43,43	2.33	1 (2%)	51,60,60	2.14	15 (29%)
31	CLA	A1	405	-	65,73,73	1.40	8 (12%)	76,113,113	2.15	23 (30%)
33	BCR	C1	514	-	41,41,41	1.86	4 (9%)	56,56,56	4.45	17 (30%)
48	LUT	G1	621	-	42,43,43	2.36	1 (2%)	51,60,60	2.14	12 (23%)
40	DGD	C	519	-	63,63,67	1.12	6 (9%)	77,77,81	1.09	5 (6%)
41	LHG	d1	410	-	38,38,48	0.42	0	41,44,54	1.16	3 (7%)
50	NEX	R1	622	-	38,46,46	3.29	9 (23%)	50,70,70	1.82	11 (22%)
47	CHL	r	606	-	44,52,74	1.04	3 (6%)	46,87,114	1.32	7 (15%)
31	CLA	S	614	-	55,63,73	1.46	7 (12%)	64,101,113	2.09	14 (21%)
31	CLA	B	612	-	65,73,73	1.36	7 (10%)	76,113,113	1.94	15 (19%)
49	XAT	N1	622	-	39,47,47	0.68	1 (2%)	54,74,74	2.01	14 (25%)
33	BCR	A1	411	-	41,41,41	1.82	4 (9%)	56,56,56	4.39	15 (26%)
31	CLA	Y1	614	-	65,73,73	1.37	9 (13%)	76,113,113	1.92	18 (23%)
57	PTY	y1	626	-	49,49,49	0.88	3 (6%)	52,54,54	1.06	2 (3%)
31	CLA	s	611	-	65,73,73	1.36	8 (12%)	76,113,113	2.00	17 (22%)
31	CLA	s	603	-	65,73,73	1.37	9 (13%)	76,113,113	1.91	15 (19%)
53	SPH	Y	625	-	19,20,20	0.62	0	18,21,21	1.13	1 (5%)
31	CLA	s1	613	-	55,63,73	1.50	9 (16%)	64,101,113	2.13	15 (23%)
31	CLA	n	610	-	65,73,73	1.35	7 (10%)	76,113,113	2.09	18 (23%)
32	PHO	A	408	-	51,69,69	1.01	4 (7%)	47,99,99	1.15	5 (10%)
31	CLA	B1	605	-	65,73,73	1.32	7 (10%)	76,113,113	2.10	19 (25%)
31	CLA	C	503	-	65,73,73	1.37	9 (13%)	76,113,113	1.99	17 (22%)
47	CHL	S1	608	-	61,69,74	0.88	3 (4%)	67,108,114	1.33	11 (16%)
41	LHG	y1	624	-	48,48,48	0.39	0	51,54,54	0.97	2 (3%)
31	CLA	n	611	-	49,57,73	1.59	9 (18%)	55,93,113	2.31	16 (29%)
35	LMG	C1	521	-	51,51,55	1.06	5 (9%)	59,59,63	1.11	4 (6%)
35	LMG	B	622	-	44,44,55	0.87	2 (4%)	52,52,63	1.02	2 (3%)
31	CLA	N	610	-	65,73,73	1.39	8 (12%)	76,113,113	2.02	19 (25%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
33	BCR	C	515	-	41,41,41	1.84	4 (9%)	56,56,56	4.29	16 (28%)
47	CHL	Y1	606	-	66,74,74	0.86	3 (4%)	73,114,114	1.16	7 (9%)
31	CLA	g	613	-	65,73,73	1.36	9 (13%)	76,113,113	2.00	17 (22%)
33	BCR	D	404	-	41,41,41	1.86	4 (9%)	56,56,56	4.21	18 (32%)
37	C7Z	B1	620	-	43,43,43	5.36	26 (60%)	58,60,60	2.40	21 (36%)
31	CLA	G	613	-	65,73,73	1.36	9 (13%)	76,113,113	2.12	22 (28%)
31	CLA	c	512	-	65,73,73	1.35	8 (12%)	76,113,113	1.95	19 (25%)
50	NEX	S1	623	-	38,46,46	3.31	10 (26%)	50,70,70	1.84	12 (24%)
48	LUT	g	620	-	42,43,43	2.38	1 (2%)	51,60,60	2.09	12 (23%)
41	LHG	Y1	624	-	48,48,48	0.39	0	51,54,54	1.00	3 (5%)
31	CLA	r	603	-	60,68,73	1.42	9 (15%)	70,107,113	1.99	15 (21%)
31	CLA	R1	612	-	60,68,73	1.42	10 (16%)	70,107,113	2.07	17 (24%)
47	CHL	G	601	-	66,74,74	0.91	4 (6%)	73,114,114	1.21	10 (13%)
47	CHL	n	606	-	66,74,74	0.87	4 (6%)	73,114,114	1.21	10 (13%)
47	CHL	g	606	-	50,58,74	0.88	2 (4%)	52,94,114	1.52	10 (19%)
48	LUT	g1	621	-	42,43,43	2.38	1 (2%)	51,60,60	1.90	12 (23%)
47	CHL	S1	607	-	43,51,74	1.01	3 (6%)	45,86,114	1.47	10 (22%)
31	CLA	B1	612	-	65,73,73	1.33	6 (9%)	76,113,113	1.99	16 (21%)
31	CLA	y	612	-	65,73,73	1.37	7 (10%)	76,113,113	1.95	14 (18%)
31	CLA	C	508	-	65,73,73	1.35	7 (10%)	76,113,113	1.99	18 (23%)
31	CLA	S	613	-	55,63,73	1.49	8 (14%)	64,101,113	2.34	18 (28%)
31	CLA	y1	614	-	65,73,73	1.36	9 (13%)	76,113,113	1.96	17 (22%)
31	CLA	G1	613	-	65,73,73	1.35	9 (13%)	76,113,113	2.03	15 (19%)
31	CLA	s	609	-	60,68,73	1.43	10 (16%)	70,107,113	2.01	16 (22%)
31	CLA	B	615	-	65,73,73	1.34	7 (10%)	76,113,113	2.18	19 (25%)
53	SPH	y1	625	-	19,20,20	0.64	0	18,21,21	1.05	0
31	CLA	B	617	-	65,73,73	1.37	7 (10%)	76,113,113	4.32	18 (23%)
31	CLA	s1	604	-	55,63,73	1.49	10 (18%)	64,101,113	2.17	17 (26%)
31	CLA	c	513	-	65,73,73	1.39	9 (13%)	76,113,113	1.94	15 (19%)
47	CHL	N1	601	20	66,74,74	0.84	3 (4%)	73,114,114	1.27	12 (16%)
51	LPX	S	625	-	29,29,29	1.01	2 (6%)	31,33,33	0.96	1 (3%)
41	LHG	d	410	-	38,38,48	0.42	0	41,44,54	1.17	3 (7%)
39	GOL	B	627	-	5,5,5	0.56	0	5,5,5	0.26	0
31	CLA	Y1	604	-	65,73,73	1.33	7 (10%)	76,113,113	2.01	21 (27%)
31	CLA	n	604	-	65,73,73	1.32	6 (9%)	76,113,113	2.14	21 (27%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
41	LHG	N1	624	-	48,48,48	0.39	0	51,54,54	1.08	3 (5%)
31	CLA	G1	614	-	49,57,73	1.56	9 (18%)	55,93,113	2.26	15 (27%)
41	LHG	c1	525	-	46,46,48	0.39	0	49,52,54	1.02	3 (6%)
47	CHL	R1	606	-	44,52,74	1.04	2 (4%)	46,87,114	1.27	5 (10%)
50	NEX	G1	623	-	38,46,46	3.33	9 (23%)	50,70,70	1.87	14 (28%)
33	BCR	d1	404	-	41,41,41	1.84	4 (9%)	56,56,56	4.21	18 (32%)
47	CHL	Y	607	-	66,74,74	0.76	2 (3%)	73,114,114	1.24	10 (13%)
34	SQD	A	412	-	50,51,54	0.81	0	59,62,65	0.92	2 (3%)
35	LMG	J	101	-	45,45,55	0.91	3 (6%)	53,53,63	1.08	3 (5%)
31	CLA	c	507	-	65,73,73	1.36	8 (12%)	76,113,113	2.02	18 (23%)
35	LMG	d	411	-	46,46,55	0.91	3 (6%)	54,54,63	1.20	3 (5%)
34	SQD	C1	526	-	53,54,54	0.79	0	62,65,65	0.91	2 (3%)
54	4RF	I1	102	-	56,56,56	1.07	3 (5%)	59,59,59	0.95	3 (5%)
52	3PH	i	101	-	47,47,47	0.86	4 (8%)	51,52,52	1.18	2 (3%)
31	CLA	g	604	-	49,57,73	1.57	8 (16%)	55,93,113	2.31	19 (34%)
47	CHL	G1	601	21	66,74,74	0.83	3 (4%)	73,114,114	1.30	14 (19%)
31	CLA	N	613	-	65,73,73	1.35	8 (12%)	76,113,113	2.00	17 (22%)
47	CHL	Y1	605	24	46,54,74	0.98	3 (6%)	49,90,114	1.39	9 (18%)
52	3PH	T1	101	-	47,47,47	0.85	4 (8%)	51,52,52	1.10	2 (3%)
34	SQD	B1	626	-	53,54,54	0.80	0	62,65,65	0.91	2 (3%)
41	LHG	L	101	-	48,48,48	0.40	0	51,54,54	0.96	2 (3%)
31	CLA	R	608	-	60,68,73	1.43	10 (16%)	70,107,113	2.01	14 (20%)
31	CLA	A	410	-	60,68,73	1.43	10 (16%)	70,107,113	2.13	19 (27%)
47	CHL	G1	607	-	66,74,74	0.80	2 (3%)	73,114,114	1.18	9 (12%)
31	CLA	G	612	-	43,51,73	1.68	8 (18%)	49,86,113	2.22	13 (26%)
52	3PH	B1	624	-	47,47,47	0.86	3 (6%)	51,52,52	1.11	2 (3%)
31	CLA	s	610	-	65,73,73	1.38	9 (13%)	76,113,113	2.02	17 (22%)
48	LUT	S	620	-	42,43,43	2.38	1 (2%)	51,60,60	2.05	13 (25%)
55	LMT	r1	625	-	36,36,36	1.18	5 (13%)	47,47,47	0.99	2 (4%)
31	CLA	d	402	-	65,73,73	1.37	8 (12%)	76,113,113	1.88	16 (21%)
42	LMK	c	627	-	38,39,53	1.47	2 (5%)	41,46,60	1.36	2 (4%)
31	CLA	Y1	602	-	65,73,73	1.35	8 (12%)	76,113,113	1.95	19 (25%)
47	CHL	N1	609	-	66,74,74	0.81	2 (3%)	73,114,114	1.17	9 (12%)
31	CLA	G1	604	-	49,57,73	1.56	9 (18%)	55,93,113	2.22	18 (32%)
31	CLA	y	603	-	65,73,73	1.33	7 (10%)	76,113,113	2.05	18 (23%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
31	CLA	G1	612	-	43,51,73	1.68	9 (20%)	49,86,113	2.18	13 (26%)
34	SQD	B	621	-	53,54,54	0.79	0	62,65,65	0.91	2 (3%)
31	CLA	B	616	-	65,73,73	1.35	8 (12%)	76,113,113	1.98	18 (23%)
48	LUT	R1	620	-	42,43,43	2.34	1 (2%)	51,60,60	2.14	14 (27%)
49	XAT	Y	622	-	39,47,47	0.70	1 (2%)	54,74,74	3.73	17 (31%)
47	CHL	g1	609	-	66,74,74	0.85	2 (3%)	73,114,114	1.14	10 (13%)
31	CLA	y1	612	-	65,73,73	1.35	9 (13%)	76,113,113	1.97	16 (21%)
31	CLA	C1	507	-	65,73,73	1.34	8 (12%)	76,113,113	2.04	17 (22%)
31	CLA	B1	606	-	65,73,73	1.36	8 (12%)	76,113,113	2.08	16 (21%)
49	XAT	n	622	-	39,47,47	0.69	1 (2%)	54,74,74	1.94	11 (20%)
35	LMG	H1	102	-	48,48,55	1.00	4 (8%)	56,56,63	1.09	2 (3%)
32	PHO	A1	409	-	51,69,69	0.99	4 (7%)	47,99,99	1.29	5 (10%)
31	CLA	b1	602	-	65,73,73	1.37	8 (12%)	76,113,113	1.98	16 (21%)
47	CHL	y	609	-	66,74,74	0.84	3 (4%)	73,114,114	1.18	10 (13%)
41	LHG	s1	624	-	44,44,48	0.41	0	47,50,54	1.02	3 (6%)
31	CLA	S1	609	-	60,68,73	1.41	10 (16%)	70,107,113	2.09	18 (25%)
41	LHG	d1	409	-	48,48,48	0.41	0	51,54,54	0.98	2 (3%)
31	CLA	r	604	-	49,57,73	1.53	8 (16%)	55,93,113	2.28	15 (27%)
48	LUT	s	621	-	42,43,43	2.33	1 (2%)	51,60,60	1.91	14 (27%)
31	CLA	g	602	-	65,73,73	1.31	8 (12%)	76,113,113	2.05	19 (25%)
31	CLA	C1	505	-	65,73,73	1.35	8 (12%)	76,113,113	2.01	16 (21%)
41	LHG	g1	624	-	48,48,48	0.39	0	51,54,54	1.05	3 (5%)
57	PTY	Y1	626	-	49,49,49	0.87	3 (6%)	52,54,54	1.05	2 (3%)
31	CLA	a1	406	-	65,73,73	1.32	8 (12%)	76,113,113	2.05	17 (22%)
47	CHL	N	609	-	66,74,74	0.80	2 (3%)	73,114,114	1.23	11 (15%)
31	CLA	b1	604	-	65,73,73	1.33	8 (12%)	76,113,113	2.01	18 (23%)
31	CLA	N1	614	-	49,57,73	1.55	9 (18%)	55,93,113	2.33	17 (30%)
48	LUT	n1	621	-	42,43,43	2.40	1 (2%)	51,60,60	2.19	16 (31%)
31	CLA	n	612	-	45,53,73	1.63	7 (15%)	52,89,113	2.06	17 (32%)
39	GOL	y	626	-	5,5,5	0.53	0	5,5,5	0.33	0
40	DGD	C1	520	-	60,60,67	1.07	6 (10%)	74,74,81	0.98	3 (4%)
31	CLA	r	608	-	60,68,73	1.41	8 (13%)	70,107,113	2.04	14 (20%)
47	CHL	n	608	-	50,58,74	0.92	2 (4%)	52,94,114	1.37	8 (15%)
31	CLA	c1	509	-	65,73,73	1.34	6 (9%)	76,113,113	1.94	16 (21%)
33	BCR	D1	404	-	41,41,41	1.86	4 (9%)	56,56,56	4.18	16 (28%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
31	CLA	b	605	-	65,73,73	1.36	7 (10%)	76,113,113	2.12	18 (23%)
38	DGA	j1	101	-	28,28,43	1.29	3 (10%)	30,30,45	1.30	2 (6%)
31	CLA	A1	407	-	50,58,73	1.53	8 (16%)	58,95,113	2.27	20 (34%)
33	BCR	b1	618	-	41,41,41	1.86	4 (9%)	56,56,56	4.49	20 (35%)
31	CLA	r1	610	-	60,68,73	1.42	8 (13%)	70,107,113	2.00	17 (24%)
38	DGA	c1	524	-	43,43,43	1.13	3 (6%)	45,45,45	1.52	3 (6%)
45	HEM	f1	101	-	41,50,50	1.46	4 (9%)	45,82,82	1.41	5 (11%)
44	PL9	d	405	-	55,55,55	1.26	6 (10%)	68,69,69	1.50	11 (16%)
31	CLA	G1	611	-	65,73,73	1.35	7 (10%)	76,113,113	2.01	17 (22%)
31	CLA	b1	616	-	65,73,73	1.38	8 (12%)	76,113,113	1.92	15 (19%)
31	CLA	b	617	-	65,73,73	1.35	7 (10%)	76,113,113	4.30	17 (22%)
38	DGA	C1	524	-	43,43,43	1.13	3 (6%)	45,45,45	1.51	3 (6%)
41	LHG	g	624	-	48,48,48	0.39	0	51,54,54	1.09	3 (5%)
44	PL9	D	405	-	55,55,55	1.27	4 (7%)	68,69,69	1.56	13 (19%)
31	CLA	n1	611	-	49,57,73	1.56	9 (18%)	55,93,113	2.26	15 (27%)
41	LHG	D	410	-	38,38,48	0.44	0	41,44,54	1.03	2 (4%)
31	CLA	s1	603	-	65,73,73	1.37	9 (13%)	76,113,113	2.08	17 (22%)
48	LUT	N	621	-	42,43,43	2.36	1 (2%)	51,60,60	2.06	12 (23%)
49	XAT	r	622	-	39,47,47	0.68	1 (2%)	54,74,74	2.15	17 (31%)
31	CLA	c1	513	-	65,73,73	1.36	8 (12%)	76,113,113	2.08	21 (27%)
31	CLA	G	603	-	65,73,73	1.34	7 (10%)	76,113,113	2.09	20 (26%)
31	CLA	c1	511	-	65,73,73	1.35	8 (12%)	76,113,113	2.16	21 (27%)
31	CLA	S1	603	-	65,73,73	1.37	8 (12%)	76,113,113	2.10	19 (25%)
50	NEX	y	623	-	38,46,46	3.22	9 (23%)	50,70,70	1.93	15 (30%)
31	CLA	N1	602	-	65,73,73	1.30	7 (10%)	76,113,113	2.02	19 (25%)
41	LHG	y	624	-	48,48,48	0.38	0	51,54,54	1.08	3 (5%)
31	CLA	C1	501	-	65,73,73	1.36	9 (13%)	76,113,113	2.00	18 (23%)
31	CLA	G	610	-	65,73,73	1.34	8 (12%)	76,113,113	2.07	18 (23%)
40	DGD	B1	623	-	44,44,67	0.84	1 (2%)	58,58,81	1.26	5 (8%)
31	CLA	Y	610	-	65,73,73	1.36	9 (13%)	76,113,113	2.03	18 (23%)
31	CLA	C	504	-	65,73,73	1.32	8 (12%)	76,113,113	2.09	18 (23%)
50	NEX	s1	623	-	38,46,46	3.43	12 (31%)	50,70,70	1.81	10 (20%)
31	CLA	c1	501	-	65,73,73	1.36	8 (12%)	76,113,113	2.02	18 (23%)
47	CHL	s1	601	23	46,54,74	0.98	2 (4%)	49,90,114	1.28	7 (14%)
31	CLA	B1	604	-	65,73,73	1.38	9 (13%)	76,113,113	1.90	16 (21%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
52	3PH	b1	624	-	47,47,47	0.86	4 (8%)	51,52,52	1.16	2 (3%)
31	CLA	B	614	-	65,73,73	1.33	6 (9%)	76,113,113	1.96	17 (22%)
47	CHL	N	607	-	66,74,74	0.78	2 (3%)	73,114,114	1.33	11 (15%)
47	CHL	g	607	-	50,58,74	0.87	2 (4%)	52,94,114	1.40	11 (21%)
47	CHL	y	601	24	66,74,74	0.81	2 (3%)	73,114,114	1.17	11 (15%)
31	CLA	B	605	-	65,73,73	1.36	8 (12%)	76,113,113	2.14	17 (22%)
31	CLA	c	505	-	65,73,73	1.37	9 (13%)	76,113,113	1.97	15 (19%)
39	GOL	b	624	-	5,5,5	0.58	0	5,5,5	0.23	0
31	CLA	D	403	-	65,73,73	1.37	9 (13%)	76,113,113	1.99	19 (25%)
33	BCR	c	516	-	41,41,41	1.85	4 (9%)	56,56,56	4.28	20 (35%)
47	CHL	g1	601	-	66,74,74	0.83	3 (4%)	73,114,114	1.21	9 (12%)
31	CLA	s1	612	-	45,53,73	1.58	6 (13%)	52,89,113	2.31	17 (32%)
31	CLA	B	606	-	65,73,73	1.35	9 (13%)	76,113,113	1.99	17 (22%)
50	NEX	g1	623	-	38,46,46	3.37	10 (26%)	50,70,70	2.07	13 (26%)
31	CLA	N1	603	-	65,73,73	1.35	8 (12%)	76,113,113	2.05	17 (22%)
31	CLA	G1	602	-	65,73,73	1.34	7 (10%)	76,113,113	2.04	17 (22%)
41	LHG	N	624	-	48,48,48	0.37	0	51,54,54	1.16	3 (5%)
31	CLA	c	504	-	65,73,73	1.31	6 (9%)	76,113,113	2.20	20 (26%)
34	SQD	B1	621	-	41,42,54	0.87	0	50,53,65	0.95	3 (6%)
47	CHL	y	607	-	66,74,74	0.76	2 (3%)	73,114,114	1.25	9 (12%)
41	LHG	d	408	-	43,43,48	0.41	0	46,49,54	1.13	3 (6%)
31	CLA	g1	612	-	43,51,73	1.67	8 (18%)	49,86,113	2.21	13 (26%)
47	CHL	N1	606	-	66,74,74	0.86	3 (4%)	73,114,114	1.22	12 (16%)
31	CLA	S	603	-	65,73,73	1.37	10 (15%)	76,113,113	1.90	13 (17%)
34	SQD	b	621	-	53,54,54	0.80	0	62,65,65	0.89	2 (3%)
35	LMG	a	413	-	48,48,55	1.01	5 (10%)	56,56,63	1.20	4 (7%)
48	LUT	G	620	-	42,43,43	2.35	1 (2%)	51,60,60	1.99	12 (23%)
31	CLA	G	602	-	65,73,73	1.34	7 (10%)	76,113,113	2.02	19 (25%)
31	CLA	A	405	-	65,73,73	1.34	6 (9%)	76,113,113	2.01	18 (23%)
31	CLA	S	609	-	60,68,73	1.42	10 (16%)	70,107,113	1.99	18 (25%)
47	CHL	N1	605	20	66,74,74	0.85	2 (3%)	73,114,114	1.25	11 (15%)
31	CLA	b	610	-	65,73,73	1.35	8 (12%)	76,113,113	1.94	15 (19%)
35	LMG	H	102	-	48,48,55	1.01	5 (10%)	56,56,63	1.08	2 (3%)
48	LUT	y1	620	-	42,43,43	2.39	1 (2%)	51,60,60	1.96	9 (17%)
31	CLA	B1	608	-	65,73,73	1.36	7 (10%)	76,113,113	2.03	16 (21%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
31	CLA	C1	511	-	65,73,73	1.34	6 (9%)	76,113,113	2.00	18 (23%)
31	CLA	b	611	-	65,73,73	1.36	9 (13%)	76,113,113	2.02	18 (23%)
47	CHL	s	606	-	44,52,74	1.02	3 (6%)	46,87,114	1.42	9 (19%)
48	LUT	y1	621	-	42,43,43	2.37	1 (2%)	51,60,60	2.08	13 (25%)
41	LHG	c	625	-	46,46,48	0.41	0	49,52,54	1.03	4 (8%)
31	CLA	c	501	-	65,73,73	1.35	9 (13%)	76,113,113	2.01	17 (22%)
47	CHL	g1	606	-	50,58,74	0.99	3 (6%)	52,94,114	1.40	11 (21%)
40	DGD	C1	518	-	56,56,67	0.98	4 (7%)	70,70,81	0.93	2 (2%)
41	LHG	s	624	-	44,44,48	0.41	0	47,50,54	1.11	3 (6%)
47	CHL	n1	608	-	50,58,74	0.89	2 (4%)	52,94,114	1.42	10 (19%)
47	CHL	G1	606	-	50,58,74	0.95	3 (6%)	52,94,114	1.38	8 (15%)
38	DGA	b1	625	-	43,43,43	1.13	2 (4%)	45,45,45	1.47	3 (6%)
49	XAT	r1	621	-	39,47,47	0.67	1 (2%)	54,74,74	1.92	16 (29%)
31	CLA	B	608	-	65,73,73	1.35	7 (10%)	76,113,113	1.96	17 (22%)
31	CLA	r	610	-	60,68,73	1.42	9 (15%)	70,107,113	2.05	19 (27%)
51	LPX	s1	625	-	29,29,29	1.03	2 (6%)	31,33,33	0.96	1 (3%)
28	OEX	A	401	1,4	0,15,15	-	-	-		
31	CLA	Y	613	-	65,73,73	1.35	7 (10%)	76,113,113	2.03	18 (23%)
43	BCT	d	401	29	2,3,3	1.26	0	2,3,3	4.15	2 (100%)
46	RRX	H1	101	-	42,42,42	4.85	24 (57%)	57,58,58	2.65	21 (36%)
31	CLA	s	612	-	45,53,73	1.62	8 (17%)	52,89,113	2.21	15 (28%)
31	CLA	a1	407	-	49,57,73	1.53	7 (14%)	55,93,113	2.35	19 (34%)
31	CLA	N1	604	-	65,73,73	1.35	8 (12%)	76,113,113	2.07	19 (25%)
43	BCT	d1	401	-	2,3,3	1.16	0	2,3,3	4.35	2 (100%)
40	DGD	c	518	-	56,56,67	0.99	4 (7%)	70,70,81	0.97	2 (2%)
47	CHL	s	601	23	46,54,74	1.02	4 (8%)	49,90,114	1.40	7 (14%)
50	NEX	n1	623	-	38,46,46	3.28	10 (26%)	50,70,70	1.78	13 (26%)
31	CLA	S	612	-	45,53,73	1.63	8 (17%)	52,89,113	2.14	13 (25%)
31	CLA	b1	617	-	65,73,73	1.38	8 (12%)	76,113,113	2.00	16 (21%)
40	DGD	c	523	-	67,67,67	1.17	7 (10%)	81,81,81	0.95	2 (2%)
54	4RF	K1	101	-	56,56,56	1.05	3 (5%)	59,59,59	0.85	3 (5%)
40	DGD	c1	518	-	56,56,67	1.01	4 (7%)	70,70,81	0.97	3 (4%)
46	RRX	h	101	-	42,42,42	4.90	24 (57%)	57,58,58	1.94	17 (29%)
35	LMG	b1	622	-	44,44,55	0.87	3 (6%)	52,52,63	1.16	3 (5%)
31	CLA	r1	604	-	49,57,73	1.54	8 (16%)	55,93,113	2.31	16 (29%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
31	CLA	B1	611	-	65,73,73	1.34	7 (10%)	76,113,113	1.99	18 (23%)
47	CHL	N	606	-	66,74,74	0.89	3 (4%)	73,114,114	1.20	9 (12%)
47	CHL	G	607	-	50,58,74	0.89	2 (4%)	52,94,114	1.45	10 (19%)
53	SPH	A1	414	-	19,20,20	0.67	0	18,21,21	0.92	0
52	3PH	S	626	-	47,47,47	0.87	4 (8%)	51,52,52	1.10	2 (3%)
31	CLA	G1	603	-	65,73,73	1.36	8 (12%)	76,113,113	1.99	16 (21%)
31	CLA	b	603	-	65,73,73	1.37	9 (13%)	76,113,113	2.00	19 (25%)
31	CLA	R1	610	-	60,68,73	1.38	7 (11%)	70,107,113	2.05	19 (27%)
31	CLA	s1	609	-	60,68,73	1.41	8 (13%)	70,107,113	2.09	17 (24%)
31	CLA	D1	402	-	65,73,73	1.37	7 (10%)	76,113,113	1.94	14 (18%)
31	CLA	a	410	-	60,68,73	1.41	8 (13%)	70,107,113	2.13	17 (24%)
31	CLA	N	612	-	45,53,73	1.64	8 (17%)	52,89,113	2.13	12 (23%)
31	CLA	B1	616	-	65,73,73	1.35	7 (10%)	76,113,113	1.94	16 (21%)
33	BCR	b1	619	-	41,41,41	1.84	4 (9%)	56,56,56	4.37	16 (28%)
48	LUT	r	620	-	42,43,43	2.36	1 (2%)	51,60,60	2.12	13 (25%)
31	CLA	B	603	-	65,73,73	1.35	7 (10%)	76,113,113	2.06	19 (25%)
31	CLA	B1	614	-	65,73,73	1.33	7 (10%)	76,113,113	1.93	18 (23%)
31	CLA	b	609	-	65,73,73	1.41	9 (13%)	76,113,113	2.09	18 (23%)
47	CHL	r	607	-	50,58,74	0.95	3 (6%)	52,94,114	1.38	8 (15%)
41	LHG	D1	410	-	38,38,48	0.42	0	41,44,54	1.09	3 (7%)
31	CLA	D1	403	-	65,73,73	1.36	8 (12%)	76,113,113	1.99	17 (22%)
34	SQD	C	526	-	53,54,54	0.79	0	62,65,65	0.90	2 (3%)
47	CHL	G1	609	-	66,74,74	0.84	2 (3%)	73,114,114	1.17	10 (13%)
32	PHO	A	409	-	51,69,69	1.00	4 (7%)	47,99,99	1.22	4 (8%)
50	NEX	s	623	-	38,46,46	3.33	12 (31%)	50,70,70	1.81	12 (24%)
51	LPX	s	625	-	29,29,29	1.02	2 (6%)	31,33,33	0.96	1 (3%)
31	CLA	S	605	-	50,58,73	1.54	8 (16%)	58,95,113	2.38	19 (32%)
31	CLA	G	614	-	49,57,73	1.54	7 (14%)	55,93,113	2.30	18 (32%)
31	CLA	C	505	-	65,73,73	1.36	8 (12%)	76,113,113	1.98	16 (21%)
31	CLA	B1	607	-	65,73,73	1.35	7 (10%)	76,113,113	1.93	17 (22%)
44	PL9	d1	405	-	55,55,55	1.07	2 (3%)	68,69,69	1.57	12 (17%)
53	SPH	y	625	-	19,20,20	0.64	0	18,21,21	1.13	2 (11%)
41	LHG	d	409	-	48,48,48	0.39	0	51,54,54	0.97	2 (3%)
47	CHL	g	609	-	66,74,74	0.87	3 (4%)	73,114,114	1.16	10 (13%)
31	CLA	b1	608	-	65,73,73	1.34	6 (9%)	76,113,113	2.02	19 (25%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
31	CLA	n1	612	-	45,53,73	1.64	9 (20%)	52,89,113	2.09	14 (26%)
31	CLA	S1	617	23	50,58,73	1.54	8 (16%)	58,95,113	2.26	16 (27%)
31	CLA	y	602	-	65,73,73	1.32	8 (12%)	76,113,113	2.12	20 (26%)
47	CHL	y1	601	24	66,74,74	0.82	2 (3%)	73,114,114	1.17	8 (10%)
28	OEX	a1	401	1,4	0,15,15	-	-	-		
48	LUT	s1	620	-	42,43,43	2.38	1 (2%)	51,60,60	2.05	14 (27%)
31	CLA	s1	602	-	60,68,73	1.39	8 (13%)	70,107,113	2.03	21 (30%)
33	BCR	a1	411	-	41,41,41	1.85	4 (9%)	56,56,56	4.43	15 (26%)
33	BCR	A	411	-	41,41,41	1.83	4 (9%)	56,56,56	4.25	13 (23%)
41	LHG	S	624	-	44,44,48	0.41	0	47,50,54	1.13	3 (6%)
33	BCR	c	514	-	41,41,41	1.88	4 (9%)	56,56,56	4.51	19 (33%)
31	CLA	b	604	-	65,73,73	1.37	9 (13%)	76,113,113	1.91	16 (21%)
33	BCR	C	514	-	41,41,41	1.84	4 (9%)	56,56,56	4.39	12 (21%)
50	NEX	S	622	-	38,46,46	3.27	9 (23%)	50,70,70	1.81	11 (22%)
31	CLA	g1	602	-	65,73,73	1.35	8 (12%)	76,113,113	1.99	20 (26%)
31	CLA	s	614	-	55,63,73	1.47	7 (12%)	64,101,113	2.22	16 (25%)
31	CLA	R1	608	-	60,68,73	1.42	9 (15%)	70,107,113	2.03	17 (24%)
31	CLA	R	603	-	60,68,73	1.43	10 (16%)	70,107,113	2.10	16 (22%)
31	CLA	Y1	610	-	65,73,73	1.33	7 (10%)	76,113,113	2.06	15 (19%)
33	BCR	c1	514	-	41,41,41	1.83	4 (9%)	56,56,56	4.43	18 (32%)
31	CLA	b	613	-	65,73,73	1.35	6 (9%)	76,113,113	1.91	15 (19%)
56	ERG	r1	626	-	31,32,32	7.81	19 (61%)	47,50,50	3.08	18 (38%)
35	LMG	C	521	-	51,51,55	1.06	6 (11%)	59,59,63	1.08	4 (6%)
31	CLA	C	501	-	65,73,73	1.35	9 (13%)	76,113,113	2.08	18 (23%)
47	CHL	s	608	-	61,69,74	0.85	3 (4%)	67,108,114	1.28	12 (17%)
31	CLA	R	610	-	60,68,73	1.39	7 (11%)	70,107,113	2.12	21 (30%)
31	CLA	y	608	-	50,58,73	1.56	8 (16%)	58,95,113	2.24	17 (29%)
47	CHL	S	601	-	46,54,74	1.04	3 (6%)	49,90,114	1.42	7 (14%)
41	LHG	G1	624	-	48,48,48	0.40	0	51,54,54	0.98	2 (3%)
38	DGA	c	524	-	43,43,43	1.13	3 (6%)	45,45,45	1.51	3 (6%)
31	CLA	n	613	-	65,73,73	1.36	9 (13%)	76,113,113	2.09	19 (25%)
47	CHL	G	609	-	66,74,74	0.91	4 (6%)	73,114,114	1.21	11 (15%)
31	CLA	b1	613	-	65,73,73	1.39	8 (12%)	76,113,113	1.95	13 (17%)
49	XAT	g	622	-	39,47,47	0.68	1 (2%)	54,74,74	1.96	14 (25%)
47	CHL	y	606	-	66,74,74	0.87	3 (4%)	73,114,114	1.19	11 (15%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
31	CLA	C1	512	-	65,73,73	1.35	7 (10%)	76,113,113	2.09	19 (25%)
28	OEX	A1	401	1,4	0,15,15	-	-	-		
31	CLA	y1	608	-	50,58,73	1.54	9 (18%)	58,95,113	2.26	17 (29%)
39	GOL	b	625	-	5,5,5	0.58	0	5,5,5	0.31	0
53	SPH	a1	414	-	19,20,20	0.66	0	18,21,21	1.03	1 (5%)
31	CLA	b1	609	-	65,73,73	1.37	8 (12%)	76,113,113	2.07	18 (23%)
38	DGA	B1	625	-	43,43,43	1.13	2 (4%)	45,45,45	1.44	3 (6%)
33	BCR	C	516	-	41,41,41	1.86	4 (9%)	56,56,56	4.36	15 (26%)
48	LUT	Y1	621	-	42,43,43	2.37	1 (2%)	51,60,60	1.98	11 (21%)
42	LMK	C	527	-	38,39,53	1.49	2 (5%)	41,46,60	1.27	2 (4%)
47	CHL	y1	606	-	66,74,74	0.85	3 (4%)	73,114,114	1.17	11 (15%)
35	LMG	A	413	-	48,48,55	1.00	5 (10%)	56,56,63	1.14	3 (5%)
33	BCR	B	619	-	41,41,41	1.85	4 (9%)	56,56,56	4.34	20 (35%)
31	CLA	s	602	-	60,68,73	1.39	7 (11%)	70,107,113	2.04	15 (21%)
33	BCR	c1	517	-	41,41,41	1.81	4 (9%)	56,56,56	4.50	20 (35%)
32	PHO	a1	408	-	51,69,69	1.01	3 (5%)	47,99,99	1.15	4 (8%)
31	CLA	C	506	-	65,73,73	1.36	7 (10%)	76,113,113	2.04	19 (25%)
31	CLA	R	602	-	60,68,73	1.41	7 (11%)	70,107,113	2.05	20 (28%)
31	CLA	B1	617	-	65,73,73	1.36	7 (10%)	76,113,113	1.93	17 (22%)
40	DGD	C1	519	-	63,63,67	1.13	7 (11%)	77,77,81	1.00	3 (3%)
47	CHL	s1	607	-	43,51,74	1.01	2 (4%)	45,86,114	1.46	7 (15%)
41	LHG	D	409	-	48,48,48	0.39	0	51,54,54	1.07	3 (5%)
50	NEX	y1	623	-	38,46,46	3.30	9 (23%)	50,70,70	1.97	13 (26%)
34	SQD	m1	101	-	41,42,54	0.90	0	50,53,65	0.98	2 (4%)
31	CLA	c	503	-	65,73,73	1.37	8 (12%)	76,113,113	2.06	19 (25%)
31	CLA	S1	611	-	65,73,73	1.36	7 (10%)	76,113,113	2.01	17 (22%)
47	CHL	g	608	-	44,52,74	0.99	3 (6%)	46,87,114	1.51	10 (21%)
33	BCR	b	619	-	41,41,41	1.87	4 (9%)	56,56,56	4.43	19 (33%)
50	NEX	G	623	-	38,46,46	3.33	9 (23%)	50,70,70	1.84	11 (22%)
31	CLA	B	602	-	65,73,73	1.37	8 (12%)	76,113,113	2.00	16 (21%)
31	CLA	R1	609	-	60,68,73	1.39	8 (13%)	70,107,113	4.52	21 (30%)
47	CHL	g1	607	-	66,74,74	0.78	2 (3%)	73,114,114	1.18	9 (12%)
35	LMG	w1	201	-	39,39,55	0.86	2 (5%)	47,47,63	1.20	3 (6%)
48	LUT	g1	620	-	42,43,43	2.36	1 (2%)	51,60,60	1.94	11 (21%)
44	PL9	D1	405	-	55,55,55	0.99	5 (9%)	68,69,69	1.60	10 (14%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
31	CLA	c1	508	-	65,73,73	1.32	7 (10%)	76,113,113	1.97	14 (18%)
35	LMG	B1	622	-	44,44,55	0.87	3 (6%)	52,52,63	1.12	3 (5%)
31	CLA	N	602	-	65,73,73	1.36	10 (15%)	76,113,113	1.98	19 (25%)
31	CLA	R	611	-	46,54,73	1.63	10 (21%)	53,90,113	2.18	14 (26%)
31	CLA	C	512	-	65,73,73	1.34	7 (10%)	76,113,113	1.90	17 (22%)
31	CLA	Y1	613	-	65,73,73	1.33	8 (12%)	76,113,113	2.10	18 (23%)
35	LMG	D	411	-	46,46,55	0.91	4 (8%)	54,54,63	1.17	4 (7%)
40	DGD	c1	519	-	63,63,67	1.12	7 (11%)	77,77,81	0.98	5 (6%)
35	LMG	b	622	-	44,44,55	0.87	3 (6%)	52,52,63	1.11	3 (5%)
32	PHO	a1	409	-	51,69,69	0.99	4 (7%)	47,99,99	1.28	6 (12%)
49	XAT	R1	621	-	39,47,47	0.64	1 (2%)	54,74,74	1.91	14 (25%)
31	CLA	R	613	-	46,54,73	1.61	9 (19%)	53,90,113	2.22	15 (28%)
31	CLA	y1	603	-	65,73,73	1.35	9 (13%)	76,113,113	2.03	17 (22%)
31	CLA	c	511	-	65,73,73	1.37	9 (13%)	76,113,113	2.01	19 (25%)
47	CHL	S1	606	-	44,52,74	1.06	3 (6%)	46,87,114	1.38	8 (17%)
31	CLA	r1	609	-	60,68,73	1.41	8 (13%)	70,107,113	2.06	16 (22%)
31	CLA	s1	614	-	55,63,73	1.48	7 (12%)	64,101,113	2.03	13 (20%)
31	CLA	r	602	-	60,68,73	1.41	8 (13%)	70,107,113	2.09	20 (28%)
35	LMG	D1	411	-	46,46,55	0.93	4 (8%)	54,54,63	1.07	2 (3%)
47	CHL	S	607	-	43,51,74	1.00	3 (6%)	45,86,114	1.46	9 (20%)
31	CLA	g1	614	-	49,57,73	1.57	9 (18%)	55,93,113	2.27	15 (27%)
28	OEX	a	401	1,4	0,15,15	-	-	-		
31	CLA	B1	610	-	65,73,73	1.35	7 (10%)	76,113,113	1.99	19 (25%)
31	CLA	C1	509	-	65,73,73	1.31	6 (9%)	76,113,113	2.01	17 (22%)
41	LHG	l	101	-	48,48,48	0.39	0	51,54,54	0.96	2 (3%)
48	LUT	r1	620	-	42,43,43	2.37	1 (2%)	51,60,60	2.13	15 (29%)
47	CHL	s	607	-	43,51,74	0.99	2 (4%)	45,86,114	1.45	10 (22%)
33	BCR	c1	515	-	41,41,41	1.88	5 (12%)	56,56,56	4.30	16 (28%)
48	LUT	s	620	-	42,43,43	2.39	1 (2%)	51,60,60	2.38	17 (33%)
31	CLA	B	604	-	65,73,73	1.38	9 (13%)	76,113,113	1.96	18 (23%)
31	CLA	C1	510	-	65,73,73	1.36	7 (10%)	76,113,113	1.94	16 (21%)
34	SQD	a1	412	-	50,51,54	0.81	0	59,62,65	0.91	2 (3%)
31	CLA	n1	610	-	65,73,73	1.34	7 (10%)	76,113,113	2.03	19 (25%)
31	CLA	G	604	-	49,57,73	1.58	9 (18%)	55,93,113	2.29	15 (27%)
31	CLA	r1	603	-	60,68,73	1.43	8 (13%)	70,107,113	2.00	15 (21%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
31	CLA	S1	604	-	55,63,73	1.47	7 (12%)	64,101,113	2.26	18 (28%)
39	GOL	I1	101	-	5,5,5	0.56	0	5,5,5	0.25	0
31	CLA	C1	513	-	65,73,73	1.33	8 (12%)	76,113,113	2.05	20 (26%)
31	CLA	n1	603	-	65,73,73	1.36	10 (15%)	76,113,113	2.04	18 (23%)
31	CLA	g1	610	-	65,73,73	1.35	9 (13%)	76,113,113	1.98	19 (25%)
42	LMK	C1	527	-	38,39,53	1.51	2 (5%)	41,46,60	1.43	2 (4%)
46	RRX	H	101	-	42,42,42	11.48	26 (61%)	57,58,58	6.22	24 (42%)
31	CLA	Y	602	24	65,73,73	1.36	7 (10%)	76,113,113	1.92	17 (22%)
43	BCT	D	401	29	2,3,3	1.16	0	2,3,3	4.53	2 (100%)
54	4RF	i1	101	-	56,56,56	1.05	3 (5%)	59,59,59	0.91	3 (5%)
47	CHL	s1	606	-	44,52,74	0.95	2 (4%)	46,87,114	1.44	9 (19%)
31	CLA	R	609	-	60,68,73	1.43	8 (13%)	70,107,113	2.01	16 (22%)
32	PHO	a	408	-	51,69,69	1.02	4 (7%)	47,99,99	1.18	5 (10%)
49	XAT	n1	622	-	39,47,47	0.70	1 (2%)	54,74,74	1.88	14 (25%)
51	LPX	S1	625	-	29,29,29	1.03	2 (6%)	31,33,33	0.96	1 (3%)
31	CLA	B1	602	-	65,73,73	1.35	8 (12%)	76,113,113	1.96	15 (19%)
31	CLA	C	502	-	65,73,73	1.35	8 (12%)	76,113,113	2.05	16 (21%)
42	LMK	c1	527	-	38,39,53	1.49	2 (5%)	41,46,60	1.32	2 (4%)
31	CLA	Y	611	-	65,73,73	1.36	7 (10%)	76,113,113	1.90	14 (18%)
31	CLA	Y	603	-	65,73,73	1.33	9 (13%)	76,113,113	2.03	20 (26%)
48	LUT	n1	620	-	42,43,43	2.43	1 (2%)	51,60,60	1.80	13 (25%)
33	BCR	b	618	-	41,41,41	1.85	4 (9%)	56,56,56	4.33	16 (28%)
33	BCR	B1	619	-	41,41,41	1.86	4 (9%)	56,56,56	4.42	15 (26%)
49	XAT	R	621	-	39,47,47	0.70	1 (2%)	54,74,74	2.03	14 (25%)
31	CLA	S	604	-	55,63,73	1.46	7 (12%)	64,101,113	2.16	17 (26%)
31	CLA	b1	606	-	65,73,73	1.35	8 (12%)	76,113,113	1.99	19 (25%)
37	C7Z	B	620	-	43,43,43	5.40	26 (60%)	58,60,60	2.21	17 (29%)
40	DGD	C	520	-	60,60,67	1.07	6 (10%)	74,74,81	0.99	2 (2%)
47	CHL	n	609	-	66,74,74	0.83	3 (4%)	73,114,114	1.30	12 (16%)
53	SPH	Y1	625	-	19,20,20	0.64	0	18,21,21	1.05	1 (5%)
49	XAT	Y1	622	-	39,47,47	0.69	1 (2%)	54,74,74	3.76	17 (31%)
41	LHG	C	525	-	46,46,48	0.39	0	49,52,54	1.07	2 (4%)
47	CHL	g1	605	-	48,56,74	0.96	2 (4%)	51,92,114	1.35	9 (17%)
31	CLA	c	509	-	65,73,73	1.37	7 (10%)	76,113,113	1.99	15 (19%)
35	LMG	W1	201	-	39,39,55	0.86	2 (5%)	47,47,63	1.21	2 (4%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
31	CLA	S	602	23	60,68,73	1.41	8 (13%)	70,107,113	2.02	15 (21%)
50	NEX	r	623	-	38,46,46	3.32	9 (23%)	50,70,70	1.68	9 (18%)
31	CLA	C1	508	-	65,73,73	1.32	7 (10%)	76,113,113	1.99	18 (23%)
31	CLA	R1	604	-	49,57,73	1.56	8 (16%)	55,93,113	2.33	13 (23%)
31	CLA	b	616	-	65,73,73	1.36	7 (10%)	76,113,113	1.95	16 (21%)
47	CHL	R	607	-	50,58,74	0.94	2 (4%)	52,94,114	1.37	8 (15%)
49	XAT	N	622	-	39,47,47	0.71	1 (2%)	54,74,74	1.90	13 (24%)
31	CLA	c	510	-	65,73,73	1.34	9 (13%)	76,113,113	2.04	18 (23%)
52	3PH	t1	101	-	47,47,47	0.87	4 (8%)	51,52,52	1.11	2 (3%)
47	CHL	S	606	-	44,52,74	0.99	3 (6%)	46,87,114	1.43	9 (19%)
40	DGD	b1	623	-	44,44,67	0.87	2 (4%)	58,58,81	1.17	4 (6%)
31	CLA	n1	613	-	65,73,73	1.36	8 (12%)	76,113,113	2.09	18 (23%)
31	CLA	B	610	-	65,73,73	1.37	8 (12%)	76,113,113	1.95	15 (19%)
31	CLA	c1	503	-	65,73,73	1.37	8 (12%)	76,113,113	2.06	20 (26%)
31	CLA	C	507	-	65,73,73	1.37	8 (12%)	76,113,113	1.94	18 (23%)
48	LUT	Y	620	-	42,43,43	2.38	1 (2%)	51,60,60	2.03	11 (21%)
48	LUT	N1	621	-	42,43,43	2.34	1 (2%)	51,60,60	2.05	11 (21%)
31	CLA	y1	604	-	65,73,73	1.36	8 (12%)	76,113,113	1.99	17 (22%)
41	LHG	G	630	-	48,48,48	0.39	0	51,54,54	1.06	3 (5%)
41	LHG	d1	408	-	43,43,48	0.41	0	46,49,54	1.06	3 (6%)
35	LMG	C1	523	-	55,55,55	1.13	6 (10%)	63,63,63	1.10	2 (3%)
33	BCR	C1	515	-	41,41,41	1.86	4 (9%)	56,56,56	4.37	14 (25%)
31	CLA	b1	603	-	65,73,73	1.36	8 (12%)	76,113,113	2.18	18 (23%)
41	LHG	n1	624	-	48,48,48	0.39	0	51,54,54	1.08	3 (5%)
31	CLA	S1	605	-	50,58,73	1.56	9 (18%)	58,95,113	2.29	18 (31%)
31	CLA	b1	610	-	65,73,73	1.36	9 (13%)	76,113,113	1.97	14 (18%)
35	LMG	h1	102	-	48,48,55	1.00	4 (8%)	56,56,63	1.10	2 (3%)
31	CLA	b	612	-	65,73,73	1.35	8 (12%)	76,113,113	1.99	18 (23%)
31	CLA	d1	402	-	65,73,73	1.37	9 (13%)	76,113,113	1.89	17 (22%)
31	CLA	N1	611	-	49,57,73	1.57	8 (16%)	55,93,113	2.20	14 (25%)
41	LHG	D	408	-	43,43,48	0.42	0	46,49,54	1.07	3 (6%)
31	CLA	Y1	612	-	65,73,73	1.36	8 (12%)	76,113,113	1.97	16 (21%)
31	CLA	B1	613	-	65,73,73	1.34	8 (12%)	76,113,113	1.94	15 (19%)
47	CHL	n	601	-	66,74,74	0.82	3 (4%)	73,114,114	1.22	11 (15%)
37	C7Z	b1	620	-	43,43,43	5.33	26 (60%)	58,60,60	2.26	21 (36%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
34	SQD	c	626	-	53,54,54	0.79	0	62,65,65	0.90	2 (3%)
49	XAT	y1	622	-	39,47,47	0.68	1 (2%)	54,74,74	3.69	16 (29%)
31	CLA	g	612	-	43,51,73	1.68	9 (20%)	49,86,113	2.25	15 (30%)
31	CLA	g1	613	-	65,73,73	1.34	8 (12%)	76,113,113	2.03	18 (23%)
35	LMG	a1	413	-	48,48,55	1.00	5 (10%)	56,56,63	1.05	2 (3%)
31	CLA	B	611	-	65,73,73	1.35	8 (12%)	76,113,113	1.95	17 (22%)
31	CLA	Y	604	-	65,73,73	1.35	9 (13%)	76,113,113	2.04	17 (22%)
48	LUT	R	620	-	42,43,43	2.33	1 (2%)	51,60,60	2.14	13 (25%)
31	CLA	A	407	-	49,57,73	1.56	9 (18%)	55,93,113	2.22	15 (27%)
31	CLA	B	613	-	65,73,73	1.35	8 (12%)	76,113,113	1.99	15 (19%)
31	CLA	s	605	-	50,58,73	1.57	9 (18%)	58,95,113	2.33	19 (32%)
34	SQD	b1	621	-	41,42,54	0.88	0	50,53,65	0.96	2 (4%)
31	CLA	b1	612	-	65,73,73	1.34	6 (9%)	76,113,113	2.04	17 (22%)
47	CHL	n1	609	-	66,74,74	0.78	2 (3%)	73,114,114	1.28	11 (15%)
50	NEX	r1	622	-	38,46,46	3.39	10 (26%)	50,70,70	1.74	11 (22%)
45	HEM	F	101	7,6	41,50,50	1.51	3 (7%)	45,82,82	1.55	8 (17%)
47	CHL	g1	608	-	44,52,74	1.02	3 (6%)	46,87,114	1.37	9 (19%)
47	CHL	n1	601	20	66,74,74	0.81	3 (4%)	73,114,114	1.21	8 (10%)
52	3PH	s	626	-	47,47,47	0.86	4 (8%)	51,52,52	1.12	2 (3%)
47	CHL	G1	608	-	44,52,74	1.01	3 (6%)	46,87,114	1.49	9 (19%)
31	CLA	r	612	-	60,68,73	1.43	9 (15%)	70,107,113	1.98	15 (21%)
31	CLA	a	406	-	65,73,73	1.32	6 (9%)	76,113,113	2.05	16 (21%)
33	BCR	B	618	-	41,41,41	1.82	4 (9%)	56,56,56	4.40	14 (25%)
47	CHL	Y	609	-	66,74,74	0.83	3 (4%)	73,114,114	1.22	12 (16%)
47	CHL	s1	608	-	61,69,74	0.87	3 (4%)	67,108,114	1.27	10 (14%)
38	DGA	C	524	-	43,43,43	1.12	3 (6%)	45,45,45	1.51	3 (6%)
45	HEM	f	101	7,6	41,50,50	1.53	3 (7%)	45,82,82	1.54	9 (20%)
31	CLA	N	611	-	49,57,73	1.58	10 (20%)	55,93,113	2.30	16 (29%)
31	CLA	n	603	-	65,73,73	1.35	7 (10%)	76,113,113	2.11	17 (22%)
31	CLA	g	611	-	45,53,73	1.62	8 (17%)	52,89,113	2.26	15 (28%)
31	CLA	g	603	-	65,73,73	1.35	8 (12%)	76,113,113	2.05	16 (21%)
31	CLA	b1	611	-	65,73,73	1.34	8 (12%)	76,113,113	1.93	16 (21%)
47	CHL	y1	607	-	66,74,74	0.76	2 (3%)	73,114,114	1.25	10 (13%)
31	CLA	r	611	-	46,54,73	1.62	10 (21%)	53,90,113	2.14	14 (26%)
49	XAT	G1	622	-	39,47,47	0.71	1 (2%)	54,74,74	1.88	14 (25%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
50	NEX	Y1	623	-	38,46,46	3.37	10 (26%)	50,70,70	2.02	12 (24%)
31	CLA	b	615	-	65,73,73	1.36	8 (12%)	76,113,113	2.19	21 (27%)
31	CLA	s	617	-	50,58,73	1.53	9 (18%)	58,95,113	2.26	18 (31%)
50	NEX	n	623	-	38,46,46	3.38	9 (23%)	50,70,70	1.77	13 (26%)
48	LUT	g	621	-	42,43,43	2.34	1 (2%)	51,60,60	2.09	12 (23%)
47	CHL	r1	606	-	44,52,74	1.04	2 (4%)	46,87,114	1.25	5 (10%)
33	BCR	C1	516	-	41,41,41	1.67	5 (12%)	56,56,56	4.31	17 (30%)
31	CLA	g	610	-	65,73,73	1.33	6 (9%)	76,113,113	2.03	18 (23%)
35	LMG	j	101	-	45,45,55	0.91	3 (6%)	53,53,63	1.05	2 (3%)
40	DGD	c	520	-	60,60,67	1.06	5 (8%)	74,74,81	1.02	2 (2%)
31	CLA	r	613	-	46,54,73	1.60	8 (17%)	53,90,113	2.22	14 (26%)
31	CLA	a	405	-	65,73,73	1.33	6 (9%)	76,113,113	2.06	19 (25%)
31	CLA	y	611	-	65,73,73	1.35	7 (10%)	76,113,113	1.96	16 (21%)
31	CLA	c1	504	-	65,73,73	1.35	7 (10%)	76,113,113	2.04	17 (22%)
31	CLA	D	402	-	65,73,73	1.35	7 (10%)	76,113,113	2.00	15 (19%)
31	CLA	b	607	-	65,73,73	1.38	8 (12%)	76,113,113	2.09	17 (22%)
49	XAT	G	622	-	39,47,47	0.71	1 (2%)	54,74,74	1.88	13 (24%)
47	CHL	N1	608	-	50,58,74	0.94	3 (6%)	52,94,114	1.48	11 (21%)
40	DGD	c1	520	-	60,60,67	1.08	4 (6%)	74,74,81	1.00	3 (4%)
48	LUT	S1	620	-	42,43,43	2.34	1 (2%)	51,60,60	2.02	10 (19%)
31	CLA	y	610	-	65,73,73	1.36	8 (12%)	76,113,113	2.04	19 (25%)
31	CLA	R	604	-	49,57,73	1.55	7 (14%)	55,93,113	2.27	18 (32%)
48	LUT	Y	621	-	42,43,43	2.30	1 (2%)	51,60,60	1.98	15 (29%)
31	CLA	r1	612	-	60,68,73	1.44	10 (16%)	70,107,113	2.02	17 (24%)
31	CLA	g1	604	-	49,57,73	1.57	8 (16%)	55,93,113	2.22	19 (34%)
31	CLA	R1	603	-	60,68,73	1.44	9 (15%)	70,107,113	1.95	15 (21%)
47	CHL	y1	605	-	46,54,74	0.97	3 (6%)	49,90,114	1.42	7 (14%)
31	CLA	s	613	-	55,63,73	1.48	7 (12%)	64,101,113	2.28	14 (21%)
48	LUT	G	621	-	42,43,43	2.38	1 (2%)	51,60,60	2.07	16 (31%)
31	CLA	n1	614	-	49,57,73	1.57	9 (18%)	55,93,113	2.28	18 (32%)
47	CHL	S	608	-	61,69,74	0.86	3 (4%)	67,108,114	1.26	10 (14%)
31	CLA	b1	615	-	65,73,73	1.37	8 (12%)	76,113,113	1.95	16 (21%)
34	SQD	M1	101	-	41,42,54	0.89	0	50,53,65	0.96	2 (4%)
31	CLA	B	609	-	65,73,73	1.38	8 (12%)	76,113,113	2.09	21 (27%)
41	LHG	L1	101	-	48,48,48	0.38	0	51,54,54	4.47	5 (9%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
31	CLA	y1	610	-	65,73,73	1.34	7 (10%)	76,113,113	1.98	17 (22%)
50	NEX	N1	623	-	38,46,46	3.33	9 (23%)	50,70,70	1.72	13 (26%)
48	LUT	n	620	-	42,43,43	2.36	1 (2%)	51,60,60	2.11	13 (25%)
31	CLA	n	602	-	65,73,73	1.34	7 (10%)	76,113,113	2.07	21 (27%)
31	CLA	N1	612	-	45,53,73	1.62	8 (17%)	52,89,113	2.15	13 (25%)
31	CLA	Y1	611	-	65,73,73	1.35	7 (10%)	76,113,113	1.93	14 (18%)
31	CLA	Y1	603	-	65,73,73	1.36	8 (12%)	76,113,113	2.06	18 (23%)
31	CLA	a1	410	-	60,68,73	1.39	7 (11%)	70,107,113	2.06	19 (27%)
52	3PH	s1	626	-	47,47,47	0.88	4 (8%)	51,52,52	4.43	4 (7%)
31	CLA	C	509	-	65,73,73	1.34	7 (10%)	76,113,113	1.99	17 (22%)
48	LUT	n	621	-	42,43,43	2.39	1 (2%)	51,60,60	2.00	12 (23%)
40	DGD	C	523	-	67,67,67	1.18	7 (10%)	81,81,81	1.07	3 (3%)
31	CLA	N	614	-	49,57,73	1.55	9 (18%)	55,93,113	2.25	16 (29%)
31	CLA	c	506	-	65,73,73	1.38	8 (12%)	76,113,113	2.03	19 (25%)
47	CHL	n1	607	-	66,74,74	0.78	2 (3%)	73,114,114	1.17	9 (12%)
47	CHL	R	606	-	44,52,74	1.04	3 (6%)	46,87,114	1.32	8 (17%)
31	CLA	C	510	-	65,73,73	1.35	8 (12%)	76,113,113	1.99	15 (19%)
31	CLA	r	609	-	60,68,73	1.41	7 (11%)	70,107,113	2.03	17 (24%)
47	CHL	N	608	-	50,58,74	0.92	2 (4%)	52,94,114	1.38	9 (17%)
31	CLA	b1	614	-	65,73,73	1.35	8 (12%)	76,113,113	1.92	18 (23%)
48	LUT	y	621	-	42,43,43	2.30	1 (2%)	51,60,60	2.02	12 (23%)
31	CLA	s1	605	23	50,58,73	1.58	8 (16%)	58,95,113	2.28	17 (29%)
31	CLA	S1	610	-	65,73,73	1.37	8 (12%)	76,113,113	2.00	20 (26%)
46	RRX	h1	101	-	42,42,42	4.93	24 (57%)	57,58,58	2.53	21 (36%)
31	CLA	C	513	-	65,73,73	1.33	7 (10%)	76,113,113	2.07	18 (23%)
31	CLA	y	604	-	65,73,73	1.36	7 (10%)	76,113,113	1.97	17 (22%)
47	CHL	N	605	-	66,74,74	0.86	3 (4%)	73,114,114	1.16	9 (12%)
31	CLA	C	511	-	65,73,73	1.36	8 (12%)	76,113,113	2.08	19 (25%)
31	CLA	s1	617	-	50,58,73	1.52	8 (16%)	58,95,113	2.27	19 (32%)
47	CHL	G	605	21	48,56,74	0.94	2 (4%)	51,92,114	1.39	11 (21%)
31	CLA	s	604	-	55,63,73	1.47	8 (14%)	64,101,113	2.17	18 (28%)
31	CLA	g	614	-	49,57,73	1.56	8 (16%)	55,93,113	2.28	17 (30%)
50	NEX	g	623	-	38,46,46	3.32	10 (26%)	50,70,70	1.84	14 (28%)
31	CLA	B	607	-	65,73,73	1.37	9 (13%)	76,113,113	1.96	18 (23%)
31	CLA	y	613	-	65,73,73	1.34	8 (12%)	76,113,113	2.02	17 (22%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
31	CLA	y	614	-	65,73,73	1.35	7 (10%)	76,113,113	1.96	16 (21%)
48	LUT	Y1	620	-	42,43,43	2.37	1 (2%)	51,60,60	2.01	14 (27%)
32	PHO	A1	408	-	51,69,69	0.99	4 (7%)	47,99,99	1.12	5 (10%)
31	CLA	y1	611	-	65,73,73	1.36	8 (12%)	76,113,113	1.96	16 (21%)
33	BCR	B1	618	-	41,41,41	1.88	4 (9%)	56,56,56	4.50	18 (32%)
31	CLA	y1	613	-	65,73,73	1.33	7 (10%)	76,113,113	1.98	17 (22%)
48	LUT	N	620	-	42,43,43	2.37	1 (2%)	51,60,60	2.07	15 (29%)
31	CLA	Y	614	-	65,73,73	1.36	7 (10%)	76,113,113	1.99	16 (21%)
31	CLA	b	606	-	65,73,73	1.34	8 (12%)	76,113,113	2.05	14 (18%)
31	CLA	C1	502	-	65,73,73	1.39	8 (12%)	76,113,113	1.94	15 (19%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
35	LMG	h	102	-	-	13/43/63/70	0/1/1/1
31	CLA	b	614	-	1/1/15/20	17/37/115/115	-
47	CHL	n1	605	-	4/4/20/26	11/39/137/137	-
31	CLA	C1	504	-	1/1/15/20	15/37/115/115	-
31	CLA	b1	607	-	1/1/15/20	16/37/115/115	-
41	LHG	C1	525	-	-	32/51/51/53	-
45	HEM	F1	101	6	-	1/12/54/54	-
47	CHL	Y	605	24	3/3/16/26	1/15/113/137	-
48	LUT	S1	621	-	-	3/29/67/67	0/2/2/2
31	CLA	N	604	-	1/1/15/20	17/37/115/115	-
48	LUT	G1	620	-	-	4/29/67/67	0/2/2/2
31	CLA	c1	502	-	1/1/15/20	14/37/115/115	-
34	SQD	b1	626	-	-	23/49/69/69	0/1/1/1
49	XAT	y	622	-	-	3/31/93/93	0/4/4/4
57	PTY	y1	627	-	-	14/20/20/53	-
31	CLA	c	508	-	1/1/15/20	13/37/115/115	-
32	PHO	a	409	-	-	11/37/103/103	0/5/6/6
41	LHG	D1	408	-	-	30/48/48/53	-
41	LHG	Y	624	-	-	32/53/53/53	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
31	CLA	n	614	-	1/1/11/20	5/18/96/115	-
31	CLA	n1	602	-	1/1/15/20	18/37/115/115	-
38	DGA	J1	101	-	-	11/30/30/45	-
31	CLA	B1	603	-	1/1/15/20	18/37/115/115	-
31	CLA	S	617	-	1/1/12/20	9/19/97/115	-
35	LMG	d1	411	-	-	12/41/61/70	0/1/1/1
31	CLA	n1	604	-	1/1/15/20	14/37/115/115	-
31	CLA	r1	602	-	1/1/14/20	13/31/109/115	-
48	LUT	s1	621	-	-	2/29/67/67	0/2/2/2
31	CLA	Y	612	-	1/1/15/20	9/37/115/115	-
31	CLA	d1	403	-	1/1/15/20	11/37/115/115	-
31	CLA	B1	609	-	1/1/15/20	15/37/115/115	-
31	CLA	A1	406	-	1/1/15/20	16/37/115/115	-
31	CLA	c1	505	-	1/1/15/20	17/37/115/115	-
31	CLA	s1	610	-	1/1/15/20	17/37/115/115	-
49	XAT	g1	622	-	2/2/12/26	0/31/93/93	0/4/4/4
33	BCR	c1	516	-	-	12/29/63/63	0/2/2/2
47	CHL	Y	601	-	4/4/20/26	7/39/137/137	-
35	LMG	c1	523	-	-	14/50/70/70	0/1/1/1
47	CHL	n	605	-	4/4/20/26	5/39/137/137	-
47	CHL	g	601	21	4/4/20/26	7/39/137/137	-
40	DGD	c	519	-	-	22/51/91/95	0/2/2/2
34	SQD	A1	412	-	-	15/46/66/69	0/1/1/1
52	3PH	S1	626	-	-	23/49/49/49	-
31	CLA	r1	608	-	1/1/14/20	22/31/109/115	-
33	BCR	C1	517	-	-	12/29/63/63	0/2/2/2
31	CLA	c1	507	-	1/1/15/20	19/37/115/115	-
47	CHL	n1	606	-	4/4/20/26	5/39/137/137	-
31	CLA	a	407	-	1/1/11/20	5/18/96/115	-
31	CLA	c	502	-	1/1/15/20	13/37/115/115	-
31	CLA	C1	506	-	1/1/15/20	19/37/115/115	-
33	BCR	c	515	-	-	11/29/63/63	0/2/2/2
47	CHL	y1	609	-	4/4/20/26	9/39/137/137	-
35	LMG	c	521	-	-	20/46/66/70	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
31	CLA	A	406	-	1/1/15/20	16/37/115/115	-
47	CHL	Y	606	-	4/4/20/26	6/39/137/137	-
31	CLA	G	611	-	1/1/11/20	4/13/91/115	-
31	CLA	N1	610	-	1/1/15/20	18/37/115/115	-
47	CHL	Y1	601	24	4/4/20/26	2/39/137/137	-
33	BCR	c	517	-	-	11/29/63/63	0/2/2/2
33	BCR	C	517	-	-	8/29/63/63	0/2/2/2
34	SQD	c1	526	-	-	17/49/69/69	0/1/1/1
33	BCR	d	404	-	-	11/29/63/63	0/2/2/2
31	CLA	a1	405	-	1/1/15/20	14/37/115/115	-
31	CLA	R	612	-	1/1/14/20	13/31/109/115	-
48	LUT	S	621	-	-	1/29/67/67	0/2/2/2
35	LMG	c1	521	-	-	12/46/66/70	0/1/1/1
31	CLA	S	610	-	1/1/15/20	14/37/115/115	-
47	CHL	Y1	607	-	4/4/20/26	8/39/137/137	-
31	CLA	R1	602	-	1/1/14/20	13/31/109/115	-
31	CLA	Y	608	-	1/1/12/20	6/19/97/115	-
47	CHL	N	601	20	4/4/20/26	5/39/137/137	-
50	NEX	Y	623	-	-	3/27/83/83	0/3/3/3
41	LHG	D1	409	-	-	31/53/53/53	-
35	LMG	A1	413	-	-	14/43/63/70	0/1/1/1
31	CLA	b1	605	-	1/1/15/20	19/37/115/115	-
47	CHL	G	606	-	4/4/16/26	6/20/118/137	-
37	C7Z	b	620	-	1/1/12/26	8/29/67/67	0/2/2/2
31	CLA	c1	510	-	1/1/15/20	17/37/115/115	-
47	CHL	R1	607	-	3/3/16/26	6/20/118/137	-
31	CLA	s1	611	-	1/1/15/20	15/37/115/115	-
47	CHL	r1	607	-	3/3/16/26	6/20/118/137	-
31	CLA	S1	614	-	1/1/13/20	10/25/103/115	-
31	CLA	G1	610	-	1/1/15/20	14/37/115/115	-
31	CLA	C1	503	-	1/1/15/20	15/37/115/115	-
31	CLA	c1	506	-	1/1/15/20	17/37/115/115	-
38	DGA	b	623	-	-	27/45/45/45	-
54	4RF	k1	101	-	-	35/59/59/59	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
38	DGA	B	625	-	-	28/45/45/45	-
31	CLA	g1	611	-	1/1/15/20	16/37/115/115	-
31	CLA	g1	603	-	1/1/15/20	20/37/115/115	-
31	CLA	b	602	-	1/1/15/20	23/37/115/115	-
47	CHL	g	605	-	3/3/16/26	3/18/116/137	-
31	CLA	S1	613	-	1/1/13/20	8/25/103/115	-
31	CLA	Y1	608	-	1/1/12/20	9/19/97/115	-
47	CHL	Y1	609	-	4/4/20/26	9/39/137/137	-
34	SQD	a	412	-	-	13/46/66/69	0/1/1/1
31	CLA	y1	602	-	1/1/15/20	16/37/115/115	-
48	LUT	N1	620	-	-	5/29/67/67	0/2/2/2
56	ERG	R1	626	-	5/5/11/15	7/13/71/71	0/4/4/4
31	CLA	b	608	-	1/1/15/20	25/37/115/115	-
31	CLA	d	403	-	1/1/15/20	11/37/115/115	-
47	CHL	y	605	24	3/3/16/26	6/15/113/137	-
57	PTY	Y1	627	-	-	12/20/20/53	-
40	DGD	C	518	-	-	12/44/84/95	0/2/2/2
41	LHG	S1	624	-	-	27/49/49/53	-
50	NEX	R	622	-	-	11/27/83/83	0/3/3/3
31	CLA	B1	615	-	1/1/15/20	17/37/115/115	-
55	LMT	R1	625	-	-	9/21/61/61	0/2/2/2
50	NEX	N	623	-	-	7/27/83/83	0/3/3/3
47	CHL	n	607	-	4/4/20/26	11/39/137/137	-
31	CLA	A1	410	-	1/1/14/20	8/31/109/115	-
31	CLA	N1	613	-	1/1/15/20	18/37/115/115	-
47	CHL	N1	607	-	4/4/20/26	6/39/137/137	-
47	CHL	G1	605	-	4/4/16/26	5/18/116/137	-
31	CLA	S	611	-	1/1/15/20	16/37/115/115	-
31	CLA	S1	602	-	1/1/14/20	17/31/109/115	-
31	CLA	c1	512	-	1/1/15/20	17/37/115/115	-
31	CLA	S1	612	-	1/1/11/20	6/13/91/115	-
47	CHL	G	608	-	3/3/15/26	0/13/111/137	-
47	CHL	S1	601	23	3/3/16/26	2/15/113/137	-
31	CLA	N	603	-	1/1/15/20	13/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
41	LHG	n	624	-	-	31/53/53/53	-
33	BCR	a	411	-	-	10/29/63/63	0/2/2/2
48	LUT	y	620	-	-	2/29/67/67	0/2/2/2
31	CLA	A1	405	-	1/1/15/20	14/37/115/115	-
33	BCR	C1	514	-	-	16/29/63/63	0/2/2/2
48	LUT	G1	621	-	-	4/29/67/67	0/2/2/2
40	DGD	C	519	-	-	18/51/91/95	0/2/2/2
41	LHG	d1	410	-	-	25/43/43/53	-
50	NEX	R1	622	-	-	6/27/83/83	0/3/3/3
47	CHL	r	606	-	3/3/15/26	1/13/111/137	-
31	CLA	S	614	-	1/1/13/20	8/25/103/115	-
31	CLA	B	612	-	1/1/15/20	22/37/115/115	-
49	XAT	N1	622	-	1/1/12/26	1/31/93/93	0/4/4/4
33	BCR	A1	411	-	-	12/29/63/63	0/2/2/2
31	CLA	Y1	614	-	1/1/15/20	14/37/115/115	-
57	PTY	y1	626	-	-	24/53/53/53	-
31	CLA	s	611	-	1/1/15/20	16/37/115/115	-
31	CLA	s	603	-	1/1/15/20	18/37/115/115	-
53	SPH	Y	625	-	-	12/21/21/21	-
31	CLA	s1	613	-	1/1/13/20	9/25/103/115	-
31	CLA	n	610	-	1/1/15/20	16/37/115/115	-
32	PHO	A	408	-	-	6/37/103/103	0/5/6/6
31	CLA	B1	605	-	1/1/15/20	14/37/115/115	-
31	CLA	C	503	-	1/1/15/20	20/37/115/115	-
47	CHL	S1	608	-	4/4/19/26	10/33/131/137	-
41	LHG	y1	624	-	-	27/53/53/53	-
31	CLA	n	611	-	1/1/11/20	13/18/96/115	-
35	LMG	C1	521	-	-	12/46/66/70	0/1/1/1
35	LMG	B	622	-	-	11/39/59/70	0/1/1/1
31	CLA	N	610	-	1/1/15/20	9/37/115/115	-
33	BCR	C	515	-	-	11/29/63/63	0/2/2/2
47	CHL	Y1	606	-	4/4/20/26	8/39/137/137	-
31	CLA	g	613	-	1/1/15/20	18/37/115/115	-
33	BCR	D	404	-	-	13/29/63/63	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
37	C7Z	B1	620	-	1/1/12/26	11/29/67/67	0/2/2/2
31	CLA	G	613	-	1/1/15/20	18/37/115/115	-
31	CLA	c	512	-	1/1/15/20	21/37/115/115	-
50	NEX	S1	623	-	-	3/27/83/83	0/3/3/3
48	LUT	g	620	-	-	6/29/67/67	0/2/2/2
41	LHG	Y1	624	-	-	26/53/53/53	-
31	CLA	r	603	-	1/1/14/20	14/31/109/115	-
31	CLA	R1	612	-	1/1/14/20	14/31/109/115	-
47	CHL	G	601	-	4/4/20/26	6/39/137/137	-
47	CHL	n	606	-	4/4/20/26	5/39/137/137	-
47	CHL	g	606	-	3/3/16/26	6/20/118/137	-
48	LUT	g1	621	-	1/1/12/27	3/29/67/67	0/2/2/2
47	CHL	S1	607	-	3/3/15/26	3/12/110/137	-
31	CLA	B1	612	-	1/1/15/20	11/37/115/115	-
31	CLA	y	612	-	1/1/15/20	12/37/115/115	-
31	CLA	C	508	-	1/1/15/20	15/37/115/115	-
31	CLA	S	613	-	1/1/13/20	9/25/103/115	-
31	CLA	y1	614	-	1/1/15/20	11/37/115/115	-
31	CLA	G1	613	-	1/1/15/20	11/37/115/115	-
31	CLA	s	609	-	1/1/14/20	14/31/109/115	-
31	CLA	B	615	-	1/1/15/20	10/37/115/115	-
53	SPH	y1	625	-	-	11/21/21/21	-
31	CLA	B	617	-	1/1/15/20	16/37/115/115	-
31	CLA	s1	604	-	1/1/13/20	12/25/103/115	-
31	CLA	c	513	-	1/1/15/20	21/37/115/115	-
47	CHL	N1	601	20	4/4/20/26	3/39/137/137	-
51	LPX	S	625	-	-	13/31/31/31	-
41	LHG	d	410	-	-	32/43/43/53	-
39	GOL	B	627	-	-	0/4/4/4	-
31	CLA	Y1	604	-	1/1/15/20	18/37/115/115	-
31	CLA	n	604	-	1/1/15/20	15/37/115/115	-
41	LHG	N1	624	-	-	39/53/53/53	-
31	CLA	G1	614	-	1/1/11/20	11/18/96/115	-
47	CHL	R1	606	-	3/3/15/26	2/13/111/137	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
41	LHG	c1	525	-	-	35/51/51/53	-
50	NEX	G1	623	-	-	2/27/83/83	0/3/3/3
33	BCR	d1	404	-	-	12/29/63/63	0/2/2/2
47	CHL	Y	607	-	4/4/20/26	8/39/137/137	-
34	SQD	A	412	-	-	18/46/66/69	0/1/1/1
35	LMG	J	101	-	-	15/40/60/70	0/1/1/1
31	CLA	c	507	-	1/1/15/20	20/37/115/115	-
35	LMG	d	411	-	-	9/41/61/70	0/1/1/1
34	SQD	C1	526	-	-	24/49/69/69	0/1/1/1
54	4RF	I1	102	-	-	35/59/59/59	-
52	3PH	i	101	-	-	21/49/49/49	-
31	CLA	g	604	-	1/1/11/20	8/18/96/115	-
47	CHL	G1	601	21	4/4/20/26	11/39/137/137	-
31	CLA	N	613	-	1/1/15/20	18/37/115/115	-
47	CHL	Y1	605	24	3/3/16/26	1/15/113/137	-
52	3PH	T1	101	-	-	29/49/49/49	-
34	SQD	B1	626	-	-	24/49/69/69	0/1/1/1
41	LHG	L	101	-	-	33/53/53/53	-
31	CLA	R	608	-	1/1/14/20	17/31/109/115	-
31	CLA	A	410	-	1/1/14/20	10/31/109/115	-
47	CHL	G1	607	-	4/4/20/26	12/39/137/137	-
31	CLA	G	612	-	1/1/10/20	4/11/89/115	-
52	3PH	B1	624	-	-	23/49/49/49	-
31	CLA	s	610	-	1/1/15/20	22/37/115/115	-
48	LUT	S	620	-	1/1/12/27	3/29/67/67	0/2/2/2
55	LMT	r1	625	-	-	9/21/61/61	0/2/2/2
31	CLA	d	402	-	1/1/15/20	17/37/115/115	-
42	LMK	c	627	-	1/1/6/6	11/46/46/60	-
31	CLA	Y1	602	-	1/1/15/20	20/37/115/115	-
47	CHL	N1	609	-	4/4/20/26	8/39/137/137	-
31	CLA	G1	604	-	1/1/11/20	8/18/96/115	-
31	CLA	y	603	-	1/1/15/20	10/37/115/115	-
31	CLA	G1	612	-	1/1/10/20	5/11/89/115	-
34	SQD	B	621	-	-	18/49/69/69	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
31	CLA	B	616	-	1/1/15/20	13/37/115/115	-
48	LUT	R1	620	-	1/1/12/27	5/29/67/67	0/2/2/2
49	XAT	Y	622	-	1/1/12/26	4/31/93/93	0/4/4/4
47	CHL	g1	609	-	4/4/20/26	5/39/137/137	-
31	CLA	y1	612	-	1/1/15/20	13/37/115/115	-
31	CLA	C1	507	-	1/1/15/20	16/37/115/115	-
31	CLA	B1	606	-	1/1/15/20	7/37/115/115	-
49	XAT	n	622	-	-	2/31/93/93	0/4/4/4
35	LMG	H1	102	-	-	14/43/63/70	0/1/1/1
32	PHO	A1	409	-	-	14/37/103/103	0/5/6/6
31	CLA	b1	602	-	1/1/15/20	18/37/115/115	-
47	CHL	y	609	-	4/4/20/26	6/39/137/137	-
41	LHG	s1	624	-	-	24/49/49/53	-
31	CLA	S1	609	-	1/1/14/20	12/31/109/115	-
41	LHG	d1	409	-	-	32/53/53/53	-
31	CLA	r	604	-	1/1/11/20	9/18/96/115	-
48	LUT	s	621	-	-	1/29/67/67	0/2/2/2
31	CLA	g	602	-	1/1/15/20	22/37/115/115	-
31	CLA	C1	505	-	1/1/15/20	19/37/115/115	-
41	LHG	g1	624	-	-	30/53/53/53	-
57	PTY	Y1	626	-	-	19/53/53/53	-
31	CLA	a1	406	-	1/1/15/20	16/37/115/115	-
47	CHL	N	609	-	4/4/20/26	8/39/137/137	-
31	CLA	b1	604	-	1/1/15/20	16/37/115/115	-
31	CLA	N1	614	-	1/1/11/20	5/18/96/115	-
48	LUT	n1	621	-	-	3/29/67/67	0/2/2/2
31	CLA	n	612	-	1/1/11/20	3/13/91/115	-
39	GOL	y	626	-	-	0/4/4/4	-
40	DGD	C1	520	-	-	14/48/88/95	0/2/2/2
31	CLA	r	608	-	1/1/14/20	15/31/109/115	-
47	CHL	n	608	-	3/3/16/26	5/20/118/137	-
31	CLA	c1	509	-	1/1/15/20	15/37/115/115	-
33	BCR	D1	404	-	-	11/29/63/63	0/2/2/2
31	CLA	b	605	-	1/1/15/20	18/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
38	DGA	j1	101	-	-	15/30/30/45	-
31	CLA	A1	407	-	1/1/12/20	9/19/97/115	-
33	BCR	b1	618	-	-	8/29/63/63	0/2/2/2
31	CLA	r1	610	-	1/1/14/20	17/31/109/115	-
38	DGA	c1	524	-	-	23/45/45/45	-
45	HEM	f1	101	-	-	0/12/54/54	-
44	PL9	d	405	-	-	10/53/73/73	0/1/1/1
31	CLA	G1	611	-	1/1/15/20	15/37/115/115	-
31	CLA	b1	616	-	1/1/15/20	9/37/115/115	-
31	CLA	b	617	-	1/1/15/20	14/37/115/115	-
38	DGA	C1	524	-	-	34/45/45/45	-
41	LHG	g	624	-	-	28/53/53/53	-
44	PL9	D	405	-	-	20/53/73/73	0/1/1/1
31	CLA	n1	611	-	1/1/11/20	11/18/96/115	-
41	LHG	D	410	-	-	27/43/43/53	-
31	CLA	s1	603	-	1/1/15/20	17/37/115/115	-
48	LUT	N	621	-	-	3/29/67/67	0/2/2/2
49	XAT	r	622	-	1/1/12/26	12/31/93/93	0/4/4/4
31	CLA	c1	513	-	1/1/15/20	20/37/115/115	-
31	CLA	G	603	-	1/1/15/20	22/37/115/115	-
31	CLA	c1	511	-	1/1/15/20	13/37/115/115	-
31	CLA	S1	603	-	1/1/15/20	17/37/115/115	-
50	NEX	y	623	-	-	5/27/83/83	0/3/3/3
31	CLA	N1	602	-	1/1/15/20	12/37/115/115	-
41	LHG	y	624	-	-	28/53/53/53	-
31	CLA	C1	501	-	1/1/15/20	12/37/115/115	-
31	CLA	G	610	-	1/1/15/20	13/37/115/115	-
40	DGD	B1	623	-	-	16/32/72/95	0/2/2/2
31	CLA	Y	610	-	1/1/15/20	18/37/115/115	-
31	CLA	C	504	-	1/1/15/20	15/37/115/115	-
50	NEX	s1	623	-	-	3/27/83/83	0/3/3/3
31	CLA	c1	501	-	1/1/15/20	18/37/115/115	-
47	CHL	s1	601	23	3/3/16/26	3/15/113/137	-
31	CLA	B1	604	-	1/1/15/20	19/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
52	3PH	b1	624	-	-	21/49/49/49	-
31	CLA	B	614	-	1/1/15/20	13/37/115/115	-
47	CHL	N	607	-	4/4/20/26	8/39/137/137	-
47	CHL	g	607	-	3/3/16/26	3/20/118/137	-
47	CHL	y	601	24	4/4/20/26	9/39/137/137	-
31	CLA	B	605	-	1/1/15/20	18/37/115/115	-
31	CLA	c	505	-	1/1/15/20	19/37/115/115	-
39	GOL	b	624	-	-	1/4/4/4	-
31	CLA	D	403	-	1/1/15/20	15/37/115/115	-
33	BCR	c	516	-	-	12/29/63/63	0/2/2/2
47	CHL	g1	601	-	4/4/20/26	17/39/137/137	-
31	CLA	s1	612	-	1/1/11/20	6/13/91/115	-
31	CLA	B	606	-	1/1/15/20	14/37/115/115	-
50	NEX	g1	623	-	-	3/27/83/83	0/3/3/3
31	CLA	N1	603	-	1/1/15/20	16/37/115/115	-
31	CLA	G1	602	-	1/1/15/20	19/37/115/115	-
41	LHG	N	624	-	-	27/53/53/53	-
31	CLA	c	504	-	1/1/15/20	13/37/115/115	-
34	SQD	B1	621	-	-	14/37/57/69	0/1/1/1
47	CHL	y	607	-	4/4/20/26	7/39/137/137	-
41	LHG	d	408	-	-	30/48/48/53	-
31	CLA	g1	612	-	1/1/10/20	4/11/89/115	-
47	CHL	N1	606	-	4/4/20/26	12/39/137/137	-
31	CLA	S	603	-	1/1/15/20	10/37/115/115	-
34	SQD	b	621	-	-	19/49/69/69	0/1/1/1
35	LMG	a	413	-	-	18/43/63/70	0/1/1/1
48	LUT	G	620	-	-	3/29/67/67	0/2/2/2
31	CLA	G	602	-	1/1/15/20	22/37/115/115	-
31	CLA	A	405	-	1/1/15/20	12/37/115/115	-
31	CLA	S	609	-	1/1/14/20	12/31/109/115	-
47	CHL	N1	605	20	4/4/20/26	5/39/137/137	-
31	CLA	b	610	-	1/1/15/20	16/37/115/115	-
35	LMG	H	102	-	-	10/43/63/70	0/1/1/1
48	LUT	y1	620	-	-	4/29/67/67	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
31	CLA	B1	608	-	1/1/15/20	24/37/115/115	-
31	CLA	C1	511	-	1/1/15/20	12/37/115/115	-
31	CLA	b	611	-	1/1/15/20	10/37/115/115	-
47	CHL	s	606	-	3/3/15/26	1/13/111/137	-
48	LUT	y1	621	-	-	4/29/67/67	0/2/2/2
41	LHG	c	625	-	-	34/51/51/53	-
31	CLA	c	501	-	1/1/15/20	17/37/115/115	-
47	CHL	g1	606	-	3/3/16/26	4/20/118/137	-
40	DGD	C1	518	-	-	14/44/84/95	0/2/2/2
47	CHL	n1	608	-	3/3/16/26	3/20/118/137	-
41	LHG	s	624	-	-	27/49/49/53	-
47	CHL	G1	606	-	3/3/16/26	2/20/118/137	-
38	DGA	b1	625	-	-	23/45/45/45	-
49	XAT	r1	621	-	1/1/12/26	2/31/93/93	0/4/4/4
31	CLA	B	608	-	1/1/15/20	21/37/115/115	-
31	CLA	r	610	-	1/1/14/20	15/31/109/115	-
51	LPX	s1	625	-	-	15/31/31/31	-
31	CLA	Y	613	-	1/1/15/20	21/37/115/115	-
46	RRX	H1	101	-	1/1/11/25	5/29/65/65	0/2/2/2
31	CLA	s	612	-	1/1/11/20	8/13/91/115	-
31	CLA	a1	407	-	1/1/11/20	7/18/96/115	-
31	CLA	N1	604	-	1/1/15/20	13/37/115/115	-
40	DGD	c	518	-	-	8/44/84/95	0/2/2/2
47	CHL	s	601	23	3/3/16/26	5/15/113/137	-
50	NEX	n1	623	-	-	4/27/83/83	1/3/3/3
31	CLA	S	612	-	1/1/11/20	4/13/91/115	-
31	CLA	b1	617	-	1/1/15/20	17/37/115/115	-
40	DGD	c	523	-	-	16/55/95/95	0/2/2/2
54	4RF	K1	101	-	-	31/59/59/59	-
40	DGD	c1	518	-	-	16/44/84/95	0/2/2/2
46	RRX	h	101	-	1/1/11/25	7/29/65/65	0/2/2/2
35	LMG	b1	622	-	-	15/39/59/70	0/1/1/1
31	CLA	r1	604	-	1/1/11/20	9/18/96/115	-
31	CLA	B1	611	-	1/1/15/20	14/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
47	CHL	N	606	-	4/4/20/26	5/39/137/137	-
47	CHL	G	607	-	3/3/16/26	3/20/118/137	-
53	SPH	A1	414	-	-	13/21/21/21	-
52	3PH	S	626	-	-	19/49/49/49	-
31	CLA	G1	603	-	1/1/15/20	17/37/115/115	-
31	CLA	b	603	-	1/1/15/20	19/37/115/115	-
31	CLA	R1	610	-	1/1/14/20	13/31/109/115	-
31	CLA	s1	609	-	1/1/14/20	14/31/109/115	-
31	CLA	D1	402	-	1/1/15/20	22/37/115/115	-
31	CLA	a	410	-	1/1/14/20	9/31/109/115	-
31	CLA	N	612	-	1/1/11/20	6/13/91/115	-
31	CLA	B1	616	-	1/1/15/20	12/37/115/115	-
33	BCR	b1	619	-	-	7/29/63/63	0/2/2/2
48	LUT	r	620	-	-	8/29/67/67	0/2/2/2
31	CLA	B	603	-	1/1/15/20	19/37/115/115	-
31	CLA	B1	614	-	1/1/15/20	11/37/115/115	-
31	CLA	b	609	-	1/1/15/20	11/37/115/115	-
47	CHL	r	607	-	3/3/16/26	6/20/118/137	-
41	LHG	D1	410	-	-	22/43/43/53	-
31	CLA	D1	403	-	1/1/15/20	17/37/115/115	-
47	CHL	G1	609	-	4/4/20/26	9/39/137/137	-
34	SQD	C	526	-	-	17/49/69/69	0/1/1/1
32	PHO	A	409	-	-	8/37/103/103	0/5/6/6
50	NEX	s	623	-	-	7/27/83/83	0/3/3/3
51	LPX	s	625	-	-	13/31/31/31	-
31	CLA	S	605	-	1/1/12/20	10/19/97/115	-
31	CLA	G	614	-	1/1/11/20	10/18/96/115	-
31	CLA	C	505	-	1/1/15/20	14/37/115/115	-
31	CLA	B1	607	-	1/1/15/20	17/37/115/115	-
44	PL9	d1	405	-	-	22/53/73/73	0/1/1/1
53	SPH	y	625	-	-	13/21/21/21	-
41	LHG	d	409	-	-	29/53/53/53	-
47	CHL	g	609	-	4/4/20/26	6/39/137/137	-
31	CLA	b1	608	-	1/1/15/20	24/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
31	CLA	n1	612	-	1/1/11/20	6/13/91/115	-
31	CLA	S1	617	23	1/1/12/20	7/19/97/115	-
31	CLA	y	602	-	1/1/15/20	21/37/115/115	-
47	CHL	y1	601	24	4/4/20/26	2/39/137/137	-
48	LUT	s1	620	-	-	4/29/67/67	0/2/2/2
31	CLA	s1	602	-	1/1/14/20	11/31/109/115	-
33	BCR	a1	411	-	-	13/29/63/63	0/2/2/2
33	BCR	A	411	-	-	13/29/63/63	0/2/2/2
41	LHG	S	624	-	-	28/49/49/53	-
33	BCR	c	514	-	-	12/29/63/63	0/2/2/2
31	CLA	b	604	-	1/1/15/20	18/37/115/115	-
33	BCR	C	514	-	-	10/29/63/63	0/2/2/2
50	NEX	S	622	-	-	12/27/83/83	0/3/3/3
31	CLA	g1	602	-	1/1/15/20	19/37/115/115	-
31	CLA	s	614	-	1/1/13/20	10/25/103/115	-
31	CLA	R1	608	-	1/1/14/20	13/31/109/115	-
31	CLA	R	603	-	1/1/14/20	16/31/109/115	-
31	CLA	Y1	610	-	1/1/15/20	15/37/115/115	-
33	BCR	c1	514	-	-	14/29/63/63	0/2/2/2
31	CLA	b	613	-	1/1/15/20	18/37/115/115	-
56	ERG	r1	626	-	5/5/11/15	8/13/71/71	0/4/4/4
35	LMG	C	521	-	-	20/46/66/70	0/1/1/1
31	CLA	C	501	-	1/1/15/20	16/37/115/115	-
47	CHL	s	608	-	4/4/19/26	3/33/131/137	-
31	CLA	R	610	-	1/1/14/20	15/31/109/115	-
31	CLA	y	608	-	1/1/12/20	6/19/97/115	-
47	CHL	S	601	-	3/3/16/26	5/15/113/137	-
41	LHG	G1	624	-	-	30/53/53/53	-
47	CHL	G	609	-	4/4/20/26	12/39/137/137	-
31	CLA	n	613	-	1/1/15/20	16/37/115/115	-
49	XAT	g	622	-	2/2/12/26	1/31/93/93	0/4/4/4
31	CLA	b1	613	-	1/1/15/20	20/37/115/115	-
38	DGA	c	524	-	-	22/45/45/45	-
47	CHL	y	606	-	4/4/20/26	9/39/137/137	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
31	CLA	C1	512	-	1/1/15/20	19/37/115/115	-
31	CLA	y1	608	-	1/1/12/20	9/19/97/115	-
39	GOL	b	625	-	-	2/4/4/4	-
53	SPH	a1	414	-	-	12/21/21/21	-
31	CLA	b1	609	-	1/1/15/20	12/37/115/115	-
38	DGA	B1	625	-	-	24/45/45/45	-
33	BCR	C	516	-	-	15/29/63/63	0/2/2/2
48	LUT	Y1	621	-	-	2/29/67/67	0/2/2/2
42	LMK	C	527	-	1/1/6/6	12/46/46/60	-
47	CHL	y1	606	-	4/4/20/26	5/39/137/137	-
35	LMG	A	413	-	-	12/43/63/70	0/1/1/1
33	BCR	B	619	-	-	3/29/63/63	0/2/2/2
31	CLA	s	602	-	1/1/14/20	14/31/109/115	-
33	BCR	c1	517	-	-	8/29/63/63	0/2/2/2
32	PHO	a1	408	-	-	5/37/103/103	0/5/6/6
31	CLA	C	506	-	1/1/15/20	23/37/115/115	-
31	CLA	R	602	-	1/1/14/20	12/31/109/115	-
31	CLA	B1	617	-	1/1/15/20	15/37/115/115	-
47	CHL	s1	607	-	3/3/15/26	1/12/110/137	-
40	DGD	C1	519	-	-	21/51/91/95	0/2/2/2
41	LHG	D	409	-	-	32/53/53/53	-
50	NEX	y1	623	-	-	7/27/83/83	0/3/3/3
34	SQD	m1	101	-	-	21/37/57/69	0/1/1/1
31	CLA	c	503	-	1/1/15/20	18/37/115/115	-
31	CLA	S1	611	-	1/1/15/20	18/37/115/115	-
47	CHL	g	608	-	3/3/15/26	3/13/111/137	-
33	BCR	b	619	-	-	9/29/63/63	0/2/2/2
50	NEX	G	623	-	-	4/27/83/83	0/3/3/3
31	CLA	B	602	-	1/1/15/20	21/37/115/115	-
31	CLA	R1	609	-	1/1/14/20	11/31/109/115	-
47	CHL	g1	607	-	4/4/20/26	9/39/137/137	-
35	LMG	w1	201	-	-	16/34/54/70	0/1/1/1
48	LUT	g1	620	-	-	5/29/67/67	0/2/2/2
44	PL9	D1	405	-	-	17/53/73/73	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
31	CLA	c1	508	-	1/1/15/20	15/37/115/115	-
35	LMG	B1	622	-	-	17/39/59/70	0/1/1/1
31	CLA	N	602	-	1/1/15/20	15/37/115/115	-
31	CLA	R	611	-	1/1/11/20	4/15/93/115	-
31	CLA	C	512	-	1/1/15/20	18/37/115/115	-
31	CLA	Y1	613	-	1/1/15/20	21/37/115/115	-
35	LMG	D	411	-	-	9/41/61/70	0/1/1/1
40	DGD	c1	519	-	-	18/51/91/95	0/2/2/2
35	LMG	b	622	-	-	12/39/59/70	0/1/1/1
32	PHO	a1	409	-	-	11/37/103/103	0/5/6/6
49	XAT	R1	621	-	-	2/31/93/93	0/4/4/4
31	CLA	R	613	-	1/1/11/20	8/15/93/115	-
31	CLA	y1	603	-	1/1/15/20	17/37/115/115	-
31	CLA	c	511	-	1/1/15/20	14/37/115/115	-
47	CHL	S1	606	-	3/3/15/26	2/13/111/137	-
31	CLA	r1	609	-	1/1/14/20	13/31/109/115	-
31	CLA	s1	614	-	1/1/13/20	9/25/103/115	-
31	CLA	r	602	-	1/1/14/20	6/31/109/115	-
35	LMG	D1	411	-	-	11/41/61/70	0/1/1/1
47	CHL	S	607	-	4/4/15/26	1/12/110/137	-
31	CLA	g1	614	-	1/1/11/20	11/18/96/115	-
31	CLA	B1	610	-	1/1/15/20	14/37/115/115	-
31	CLA	C1	509	-	1/1/15/20	15/37/115/115	-
41	LHG	l	101	-	-	28/53/53/53	-
48	LUT	r1	620	-	-	6/29/67/67	0/2/2/2
47	CHL	s	607	-	4/4/15/26	1/12/110/137	-
33	BCR	c1	515	-	-	15/29/63/63	0/2/2/2
48	LUT	s	620	-	1/1/12/27	3/29/67/67	0/2/2/2
31	CLA	B	604	-	1/1/15/20	17/37/115/115	-
31	CLA	C1	510	-	1/1/15/20	18/37/115/115	-
34	SQD	a1	412	-	-	18/46/66/69	0/1/1/1
31	CLA	n1	610	-	1/1/15/20	18/37/115/115	-
31	CLA	G	604	-	1/1/11/20	8/18/96/115	-
31	CLA	r1	603	-	1/1/14/20	15/31/109/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
31	CLA	S1	604	-	1/1/13/20	10/25/103/115	-
39	GOL	I1	101	-	-	0/4/4/4	-
31	CLA	C1	513	-	1/1/15/20	19/37/115/115	-
31	CLA	n1	603	-	1/1/15/20	15/37/115/115	-
31	CLA	g1	610	-	1/1/15/20	17/37/115/115	-
42	LMK	C1	527	-	2/2/6/6	14/46/46/60	-
46	RRX	H	101	-	1/1/11/25	10/29/65/65	0/2/2/2
31	CLA	Y	602	24	1/1/15/20	21/37/115/115	-
54	4RF	i1	101	-	-	27/59/59/59	-
47	CHL	s1	606	-	3/3/15/26	3/13/111/137	-
31	CLA	R	609	-	1/1/14/20	17/31/109/115	-
32	PHO	a	408	-	-	12/37/103/103	0/5/6/6
49	XAT	n1	622	-	1/1/12/26	5/31/93/93	0/4/4/4
51	LPX	S1	625	-	-	10/31/31/31	-
31	CLA	B1	602	-	1/1/15/20	22/37/115/115	-
31	CLA	C	502	-	1/1/15/20	18/37/115/115	-
42	LMK	c1	527	-	2/2/6/6	13/46/46/60	-
31	CLA	Y	611	-	1/1/15/20	13/37/115/115	-
31	CLA	Y	603	-	1/1/15/20	17/37/115/115	-
48	LUT	n1	620	-	-	4/29/67/67	0/2/2/2
49	XAT	R	621	-	1/1/12/26	14/31/93/93	0/4/4/4
33	BCR	b	618	-	-	10/29/63/63	0/2/2/2
33	BCR	B1	619	-	-	7/29/63/63	0/2/2/2
31	CLA	S	604	-	1/1/13/20	11/25/103/115	-
31	CLA	b1	606	-	1/1/15/20	12/37/115/115	-
37	C7Z	B	620	-	1/1/12/26	11/29/67/67	0/2/2/2
40	DGD	C	520	-	-	13/48/88/95	0/2/2/2
47	CHL	n	609	-	4/4/20/26	10/39/137/137	-
53	SPH	Y1	625	-	-	11/21/21/21	-
49	XAT	Y1	622	-	2/2/12/26	2/31/93/93	0/4/4/4
41	LHG	C	525	-	-	28/51/51/53	-
47	CHL	g1	605	-	4/4/16/26	7/18/116/137	-
31	CLA	c	509	-	1/1/15/20	14/37/115/115	-
35	LMG	W1	201	-	-	16/34/54/70	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
31	CLA	S	602	23	1/1/14/20	13/31/109/115	-
50	NEX	r	623	-	-	8/27/83/83	0/3/3/3
31	CLA	C1	508	-	1/1/15/20	14/37/115/115	-
31	CLA	R1	604	-	1/1/11/20	10/18/96/115	-
31	CLA	b	616	-	1/1/15/20	11/37/115/115	-
47	CHL	R	607	-	3/3/16/26	4/20/118/137	-
49	XAT	N	622	-	1/1/12/26	3/31/93/93	0/4/4/4
31	CLA	c	510	-	1/1/15/20	13/37/115/115	-
52	3PH	t1	101	-	-	28/49/49/49	-
47	CHL	S	606	-	3/3/15/26	1/13/111/137	-
40	DGD	b1	623	-	-	11/32/72/95	0/2/2/2
31	CLA	n1	613	-	1/1/15/20	21/37/115/115	-
31	CLA	B	610	-	1/1/15/20	19/37/115/115	-
31	CLA	c1	503	-	1/1/15/20	19/37/115/115	-
31	CLA	C	507	-	1/1/15/20	18/37/115/115	-
48	LUT	Y	620	-	-	6/29/67/67	0/2/2/2
48	LUT	N1	621	-	-	4/29/67/67	0/2/2/2
31	CLA	y1	604	-	1/1/15/20	17/37/115/115	-
41	LHG	G	630	-	-	30/53/53/53	-
41	LHG	d1	408	-	-	29/48/48/53	-
35	LMG	C1	523	-	-	16/50/70/70	0/1/1/1
33	BCR	C1	515	-	-	11/29/63/63	0/2/2/2
31	CLA	b1	603	-	1/1/15/20	15/37/115/115	-
41	LHG	n1	624	-	-	35/53/53/53	-
31	CLA	S1	605	-	1/1/12/20	8/19/97/115	-
31	CLA	b1	610	-	1/1/15/20	15/37/115/115	-
35	LMG	h1	102	-	-	14/43/63/70	0/1/1/1
31	CLA	b	612	-	1/1/15/20	19/37/115/115	-
31	CLA	d1	402	-	1/1/15/20	17/37/115/115	-
31	CLA	N1	611	-	1/1/11/20	9/18/96/115	-
41	LHG	D	408	-	-	31/48/48/53	-
31	CLA	Y1	612	-	1/1/15/20	13/37/115/115	-
31	CLA	B1	613	-	1/1/15/20	15/37/115/115	-
47	CHL	n	601	-	4/4/20/26	6/39/137/137	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
37	C7Z	b1	620	-	1/1/12/26	15/29/67/67	0/2/2/2
34	SQD	c	626	-	-	19/49/69/69	0/1/1/1
49	XAT	y1	622	-	-	4/31/93/93	0/4/4/4
31	CLA	g	612	-	1/1/10/20	6/11/89/115	-
31	CLA	g1	613	-	1/1/15/20	16/37/115/115	-
35	LMG	a1	413	-	-	14/43/63/70	0/1/1/1
31	CLA	B	611	-	1/1/15/20	8/37/115/115	-
31	CLA	Y	604	-	1/1/15/20	19/37/115/115	-
48	LUT	R	620	-	-	9/29/67/67	0/2/2/2
31	CLA	A	407	-	1/1/11/20	4/18/96/115	-
31	CLA	B	613	-	1/1/15/20	15/37/115/115	-
31	CLA	s	605	-	1/1/12/20	8/19/97/115	-
34	SQD	b1	621	-	-	18/37/57/69	0/1/1/1
31	CLA	b1	612	-	1/1/15/20	12/37/115/115	-
47	CHL	n1	609	-	4/4/20/26	6/39/137/137	-
50	NEX	r1	622	-	-	9/27/83/83	0/3/3/3
45	HEM	F	101	7,6	-	2/12/54/54	-
47	CHL	g1	608	-	3/3/15/26	3/13/111/137	-
47	CHL	n1	601	20	4/4/20/26	10/39/137/137	-
52	3PH	s	626	-	-	31/49/49/49	-
47	CHL	G1	608	-	3/3/15/26	1/13/111/137	-
31	CLA	r	612	-	1/1/14/20	11/31/109/115	-
31	CLA	a	406	-	1/1/15/20	11/37/115/115	-
47	CHL	Y	609	-	4/4/20/26	9/39/137/137	-
47	CHL	s1	608	-	4/4/19/26	5/33/131/137	-
33	BCR	B	618	-	-	12/29/63/63	0/2/2/2
38	DGA	C	524	-	-	26/45/45/45	-
45	HEM	f	101	7,6	-	2/12/54/54	-
31	CLA	N	611	-	1/1/11/20	10/18/96/115	-
31	CLA	n	603	-	1/1/15/20	26/37/115/115	-
31	CLA	g	611	-	1/1/11/20	5/13/91/115	-
31	CLA	g	603	-	1/1/15/20	16/37/115/115	-
31	CLA	b1	611	-	1/1/15/20	12/37/115/115	-
47	CHL	y1	607	-	4/4/20/26	9/39/137/137	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
31	CLA	r	611	-	1/1/11/20	5/15/93/115	-
49	XAT	G1	622	-	1/1/12/26	1/31/93/93	0/4/4/4
50	NEX	Y1	623	-	-	8/27/83/83	0/3/3/3
31	CLA	b	615	-	1/1/15/20	11/37/115/115	-
31	CLA	s	617	-	1/1/12/20	9/19/97/115	-
50	NEX	n	623	-	-	4/27/83/83	0/3/3/3
48	LUT	g	621	-	-	2/29/67/67	0/2/2/2
47	CHL	r1	606	-	3/3/15/26	2/13/111/137	-
33	BCR	C1	516	-	-	15/29/63/63	0/2/2/2
31	CLA	g	610	-	1/1/15/20	13/37/115/115	-
35	LMG	j	101	-	-	14/40/60/70	0/1/1/1
40	DGD	c	520	-	-	15/48/88/95	0/2/2/2
31	CLA	r	613	-	1/1/11/20	8/15/93/115	-
31	CLA	a	405	-	1/1/15/20	15/37/115/115	-
31	CLA	y	611	-	1/1/15/20	18/37/115/115	-
31	CLA	c1	504	-	1/1/15/20	14/37/115/115	-
31	CLA	D	402	-	1/1/15/20	18/37/115/115	-
31	CLA	b	607	-	1/1/15/20	16/37/115/115	-
49	XAT	G	622	-	2/2/12/26	0/31/93/93	0/4/4/4
47	CHL	N1	608	-	3/3/16/26	5/20/118/137	-
40	DGD	c1	520	-	-	12/48/88/95	0/2/2/2
48	LUT	S1	620	-	-	3/29/67/67	0/2/2/2
31	CLA	y	610	-	1/1/15/20	17/37/115/115	-
31	CLA	R	604	-	1/1/11/20	10/18/96/115	-
48	LUT	Y	621	-	1/1/12/27	2/29/67/67	0/2/2/2
31	CLA	r1	612	-	1/1/14/20	16/31/109/115	-
31	CLA	g1	604	-	1/1/11/20	8/18/96/115	-
31	CLA	R1	603	-	1/1/14/20	12/31/109/115	-
47	CHL	y1	605	-	3/3/16/26	1/15/113/137	-
31	CLA	s	613	-	1/1/13/20	10/25/103/115	-
48	LUT	G	621	-	1/1/12/27	6/29/67/67	0/2/2/2
31	CLA	n1	614	-	1/1/11/20	7/18/96/115	-
47	CHL	S	608	-	4/4/19/26	3/33/131/137	-
31	CLA	b1	615	-	1/1/15/20	21/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
34	SQD	M1	101	-	-	18/37/57/69	0/1/1/1
31	CLA	B	609	-	1/1/15/20	17/37/115/115	-
41	LHG	L1	101	-	-	35/53/53/53	-
31	CLA	y1	610	-	1/1/15/20	13/37/115/115	-
50	NEX	N1	623	-	-	5/27/83/83	0/3/3/3
48	LUT	n	620	-	-	6/29/67/67	0/2/2/2
31	CLA	n	602	-	1/1/15/20	19/37/115/115	-
31	CLA	N1	612	-	1/1/11/20	7/13/91/115	-
31	CLA	Y1	611	-	1/1/15/20	14/37/115/115	-
31	CLA	Y1	603	-	1/1/15/20	19/37/115/115	-
31	CLA	a1	410	-	1/1/14/20	9/31/109/115	-
52	3PH	s1	626	-	-	23/49/49/49	-
31	CLA	C	509	-	1/1/15/20	12/37/115/115	-
48	LUT	n	621	-	1/1/12/27	5/29/67/67	0/2/2/2
40	DGD	C	523	-	-	17/55/95/95	0/2/2/2
31	CLA	N	614	-	1/1/11/20	6/18/96/115	-
31	CLA	c	506	-	1/1/15/20	23/37/115/115	-
47	CHL	n1	607	-	4/4/20/26	5/39/137/137	-
47	CHL	R	606	-	3/3/15/26	5/13/111/137	-
31	CLA	C	510	-	1/1/15/20	17/37/115/115	-
31	CLA	r	609	-	1/1/14/20	17/31/109/115	-
47	CHL	N	608	-	3/3/16/26	7/20/118/137	-
31	CLA	b1	614	-	1/1/15/20	13/37/115/115	-
48	LUT	y	621	-	-	3/29/67/67	0/2/2/2
31	CLA	s1	605	23	1/1/12/20	9/19/97/115	-
31	CLA	S1	610	-	1/1/15/20	20/37/115/115	-
46	RRX	h1	101	-	1/1/11/25	9/29/65/65	0/2/2/2
31	CLA	C	513	-	1/1/15/20	21/37/115/115	-
31	CLA	y	604	-	1/1/15/20	20/37/115/115	-
47	CHL	N	605	-	4/4/20/26	8/39/137/137	-
31	CLA	C	511	-	1/1/15/20	12/37/115/115	-
31	CLA	s1	617	-	1/1/12/20	7/19/97/115	-
47	CHL	G	605	21	3/3/16/26	4/18/116/137	-
31	CLA	s	604	-	1/1/13/20	11/25/103/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
31	CLA	g	614	-	1/1/11/20	9/18/96/115	-
50	NEX	g	623	-	-	4/27/83/83	0/3/3/3
31	CLA	B	607	-	1/1/15/20	19/37/115/115	-
31	CLA	y	613	-	1/1/15/20	19/37/115/115	-
31	CLA	y	614	-	1/1/15/20	14/37/115/115	-
48	LUT	Y1	620	-	-	5/29/67/67	0/2/2/2
32	PHO	A1	408	-	-	6/37/103/103	0/5/6/6
31	CLA	y1	611	-	1/1/15/20	12/37/115/115	-
33	BCR	B1	618	-	-	11/29/63/63	0/2/2/2
31	CLA	y1	613	-	1/1/15/20	24/37/115/115	-
48	LUT	N	620	-	-	6/29/67/67	0/2/2/2
31	CLA	Y	614	-	1/1/15/20	11/37/115/115	-
31	CLA	b	606	-	1/1/15/20	13/37/115/115	-
31	CLA	C1	502	-	1/1/15/20	12/37/115/115	-

The worst 5 of 3725 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
46	H	101	RRX	C21-C22	66.78	2.24	1.35
56	R1	626	ERG	C1-C10	-23.16	1.10	1.54
56	r1	626	ERG	C1-C10	-22.95	1.10	1.54
56	r1	626	ERG	C10-C9	-20.09	1.28	1.55
56	R1	626	ERG	C10-C9	-19.60	1.29	1.55

The worst 5 of 8419 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
46	H	101	RRX	C37-C22-C23	-30.79	69.57	118.08
41	L1	101	LHG	O7-C7-C8	23.38	161.90	111.50
31	R1	609	CLA	C4-C3-C5	-22.81	76.90	115.27
52	S1	626	3PH	O21-C21-C22	22.50	160.00	111.50
31	B	617	CLA	C4-C3-C5	-22.49	77.43	115.27

5 of 694 chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
31	A	405	CLA	ND
31	A	406	CLA	ND
31	A	407	CLA	ND

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Mol	Chain	Res	Type	Atom
31	A	410	CLA	ND
31	B	602	CLA	ND

5 of 8670 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
31	A	405	CLA	CBD-CGD-O2D-CED
31	A	406	CLA	C1A-C2A-CAA-CBA
31	A	406	CLA	C3A-C2A-CAA-CBA
31	A	406	CLA	CHA-CBD-CGD-O1D
31	A	406	CLA	CHA-CBD-CGD-O2D

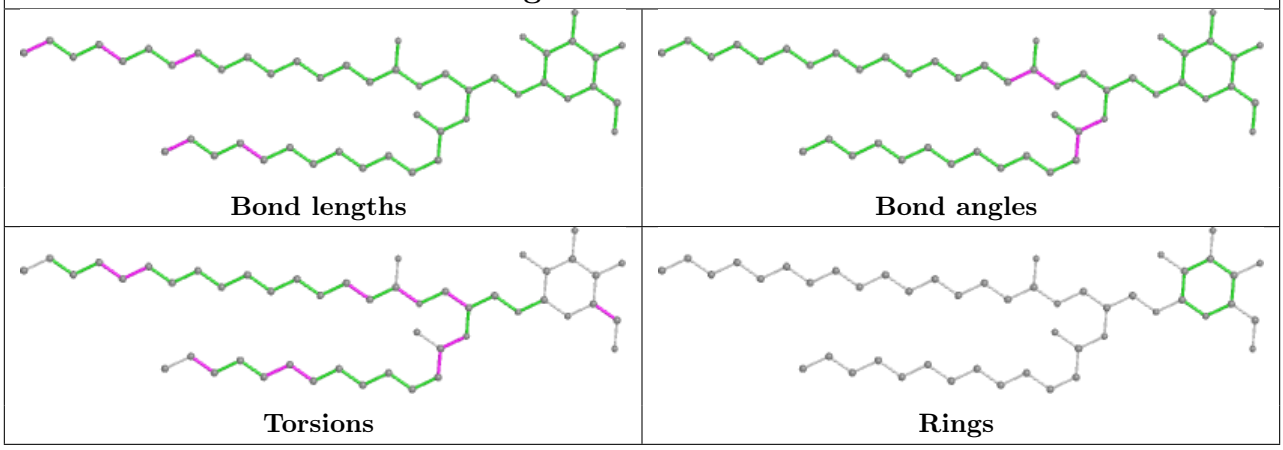
All (1) ring outliers are listed below:

Mol	Chain	Res	Type	Atoms
50	n1	623	NEX	C1-C2-C3-C4-C5-C6

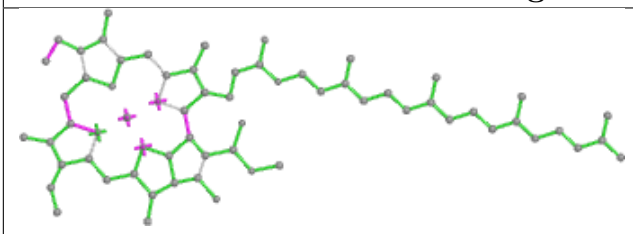
No monomer is involved in short contacts.

The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less then 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.

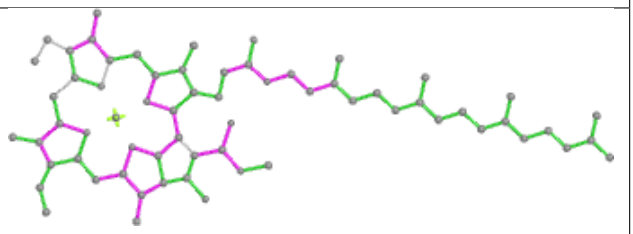
Ligand LMG h 102



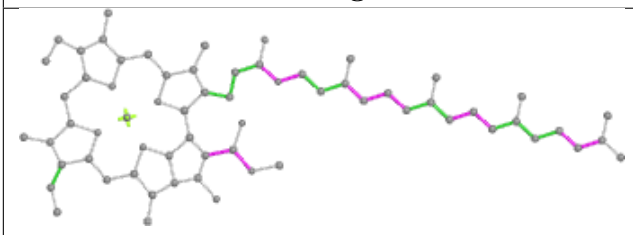
Ligand CLA b 614



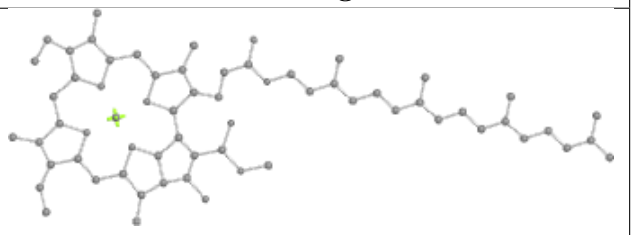
Bond lengths



Bond angles

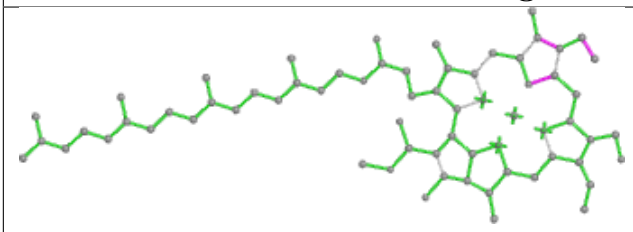


Torsions



Rings

Ligand CHL n1 605



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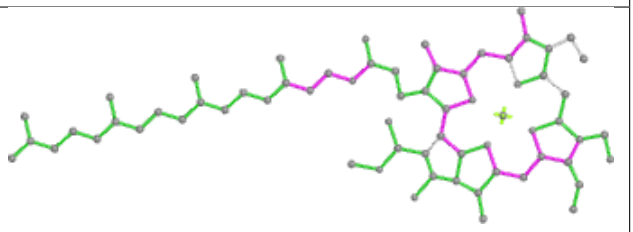
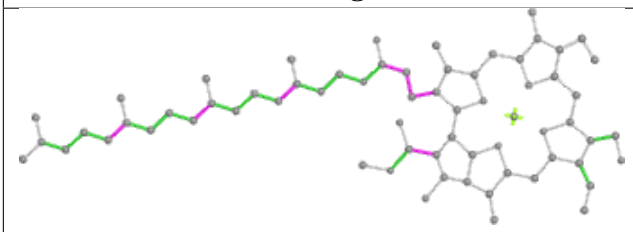
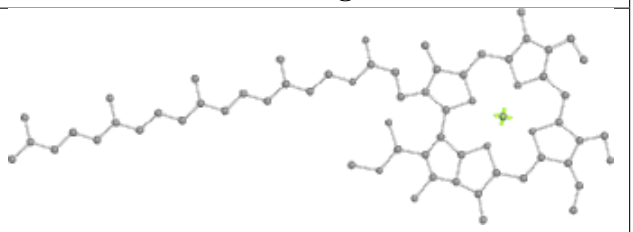


Bond angles

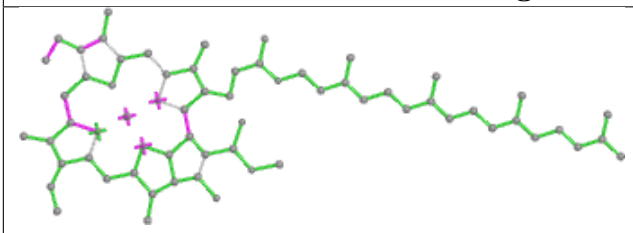


Torsions



Rings

Ligand CLA C1 504



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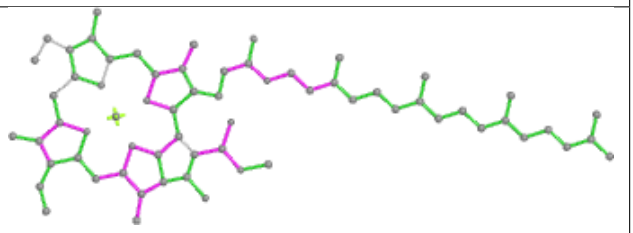
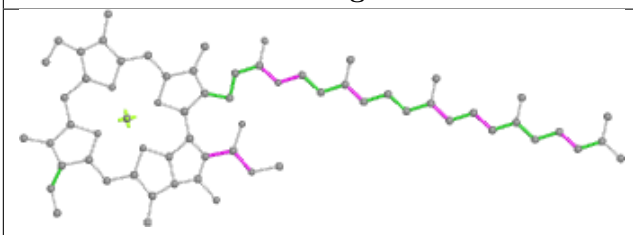


Bond angles



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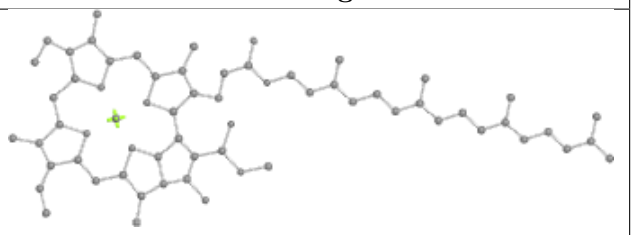
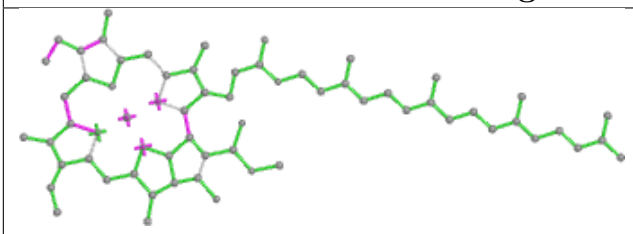


Rings

Ligand CLA b1 607



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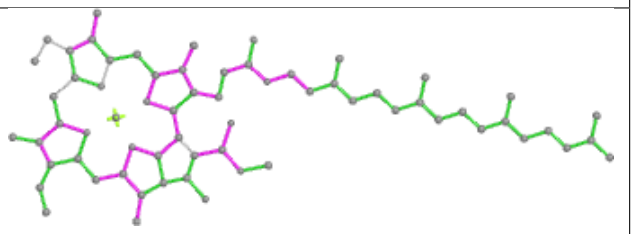

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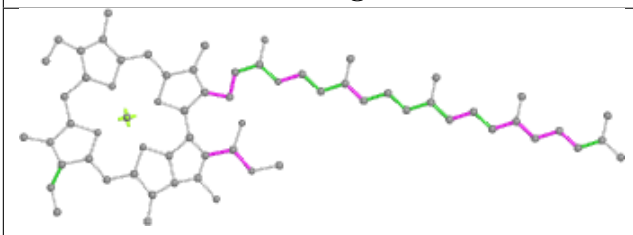
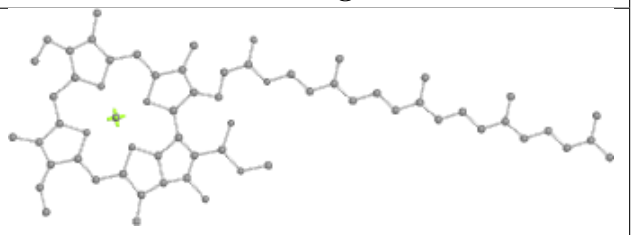
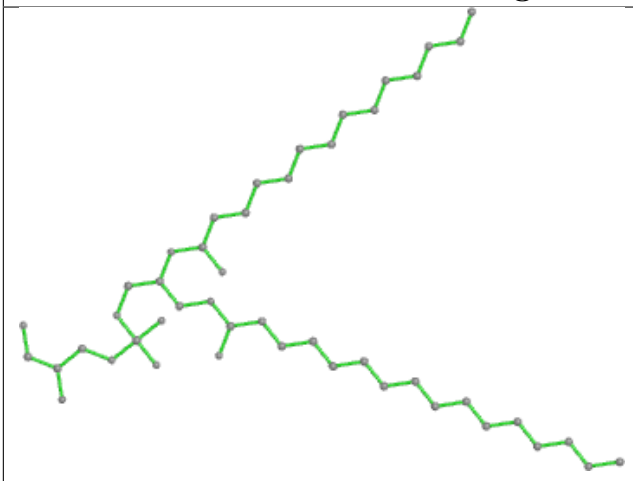


Torsions



Rings

Ligand LHG C1 525



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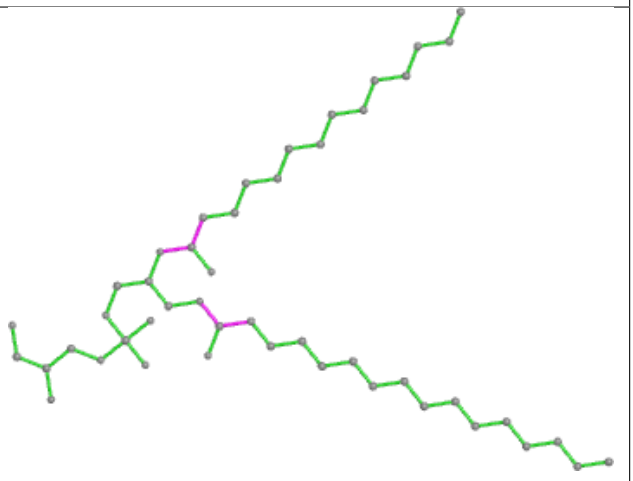
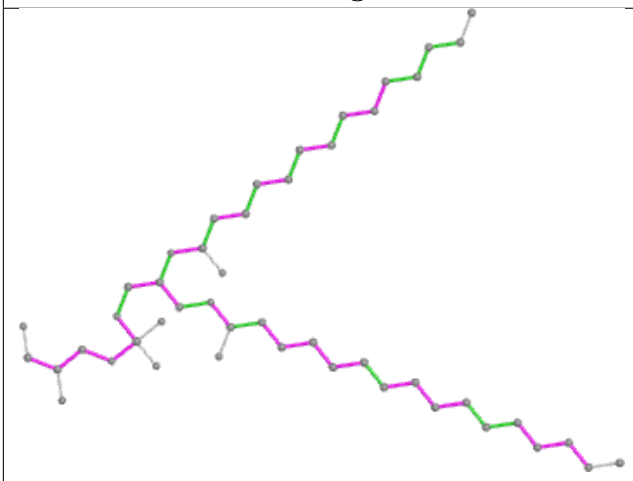


Bond angles



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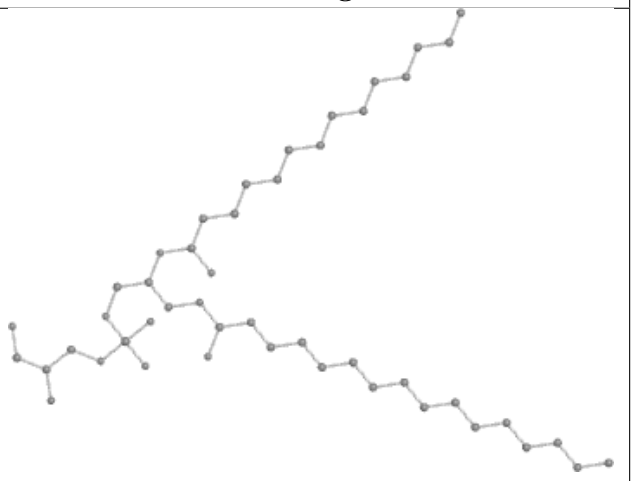
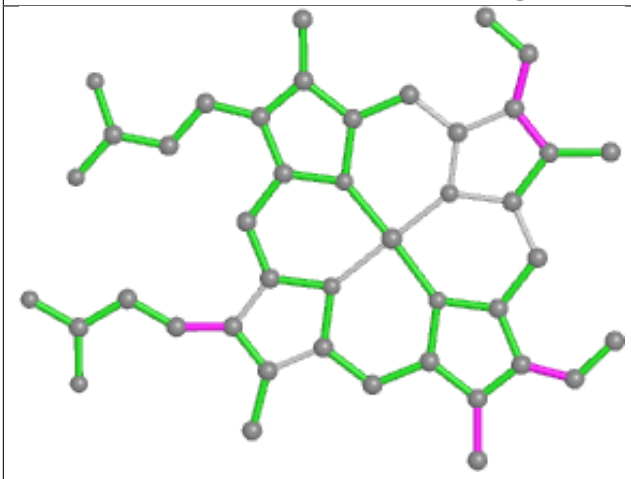


Rings

Ligand HEM F1 101



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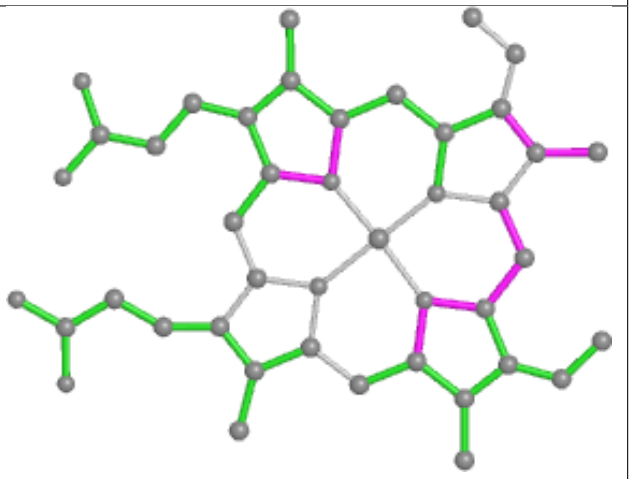
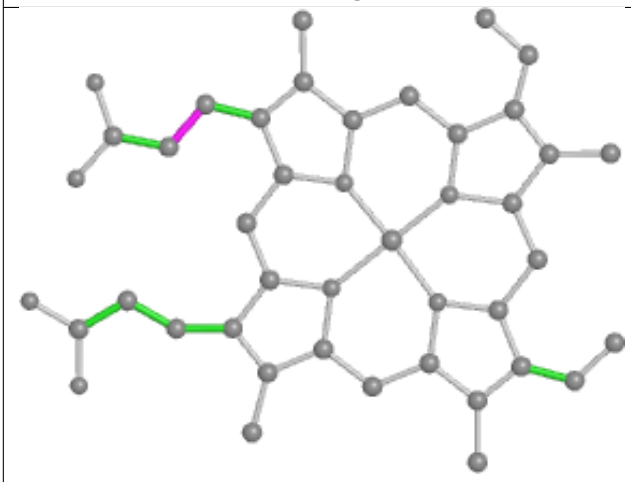


Bond angles



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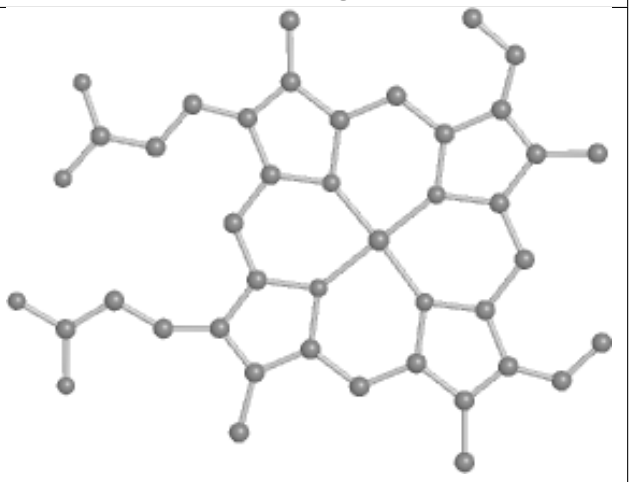
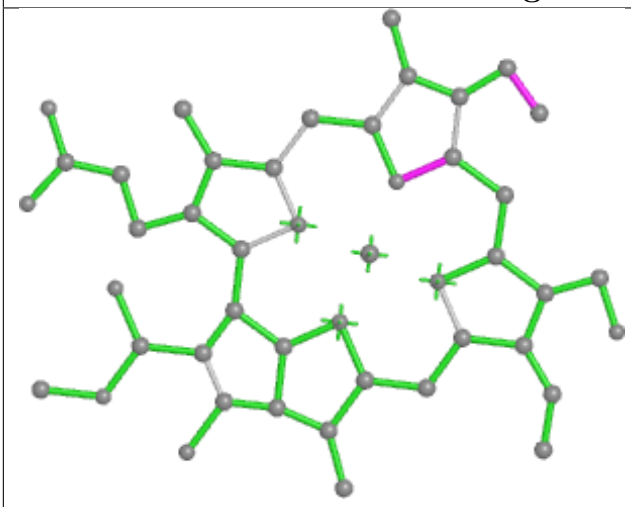
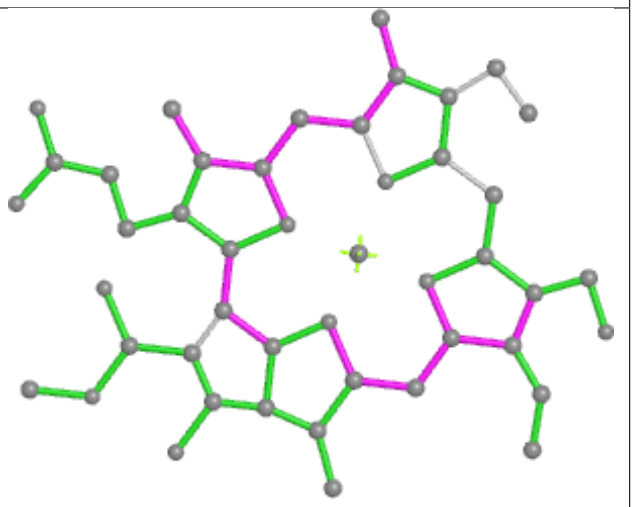
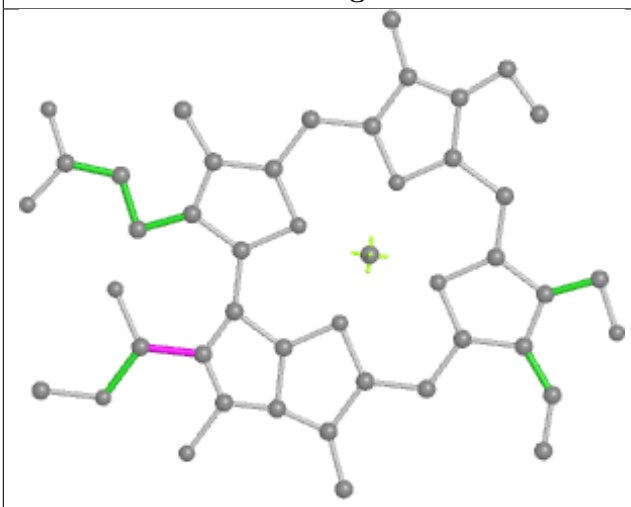
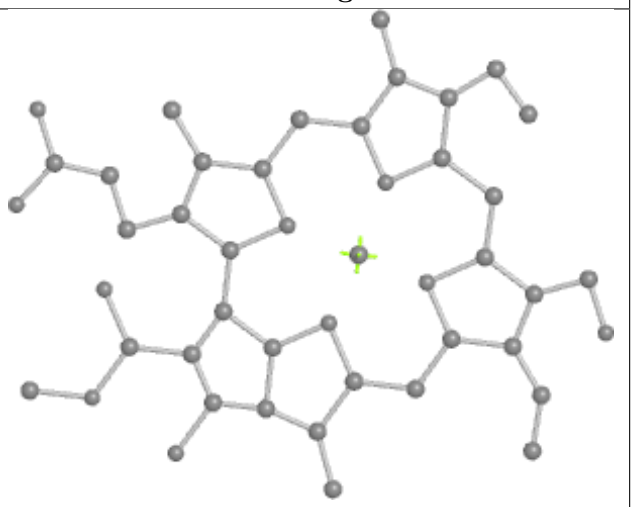
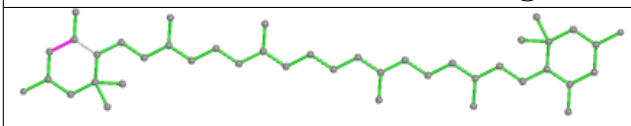
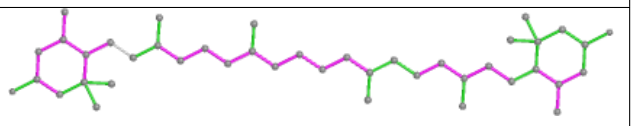
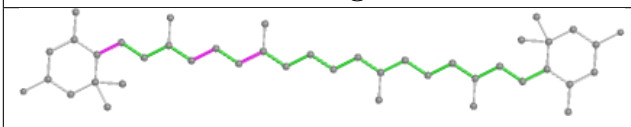
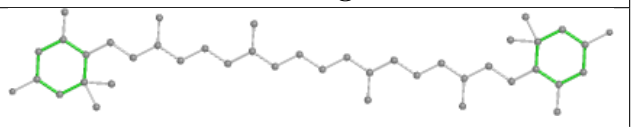
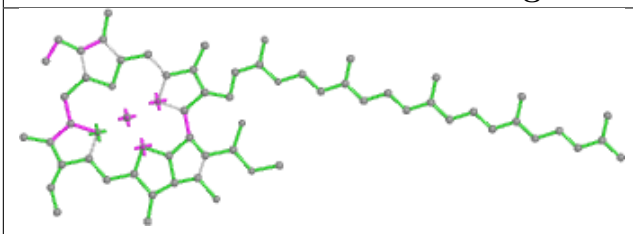


Rings

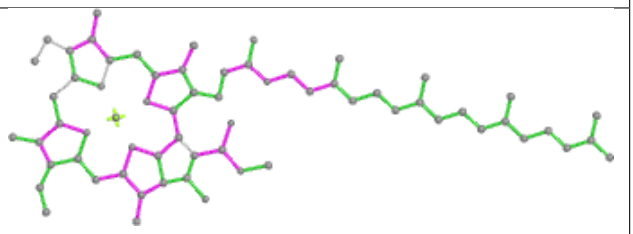
Ligand CHL Y 605	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand LUT S1 621	
	
Bond lengths	Bond angles
	
Torsions	Rings

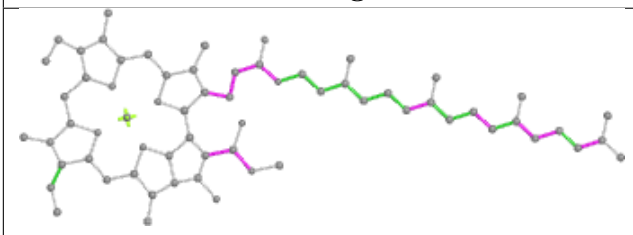
Ligand CLA N 604



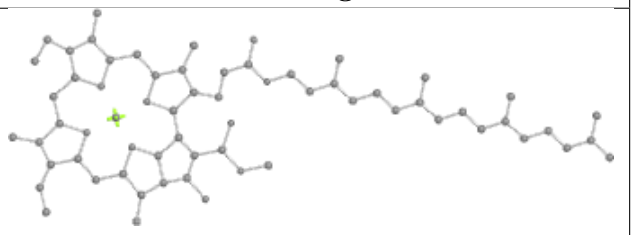
Bond lengths



Bond angles

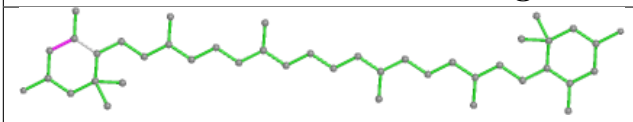


Torsions



Rings

Ligand LUT G1 620



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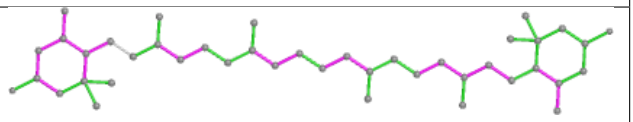
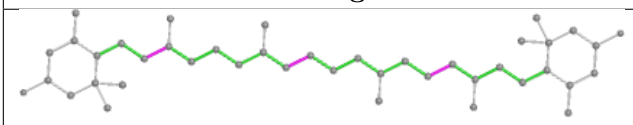


Bond angles



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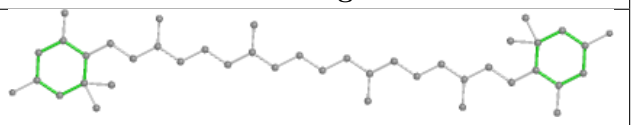
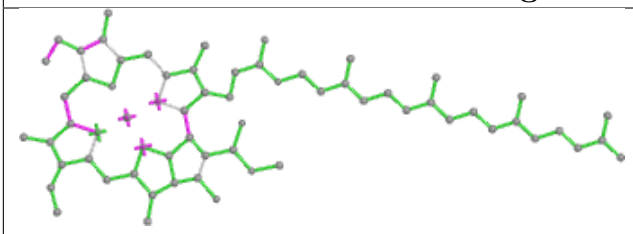


Rings

Ligand CLA c1 502



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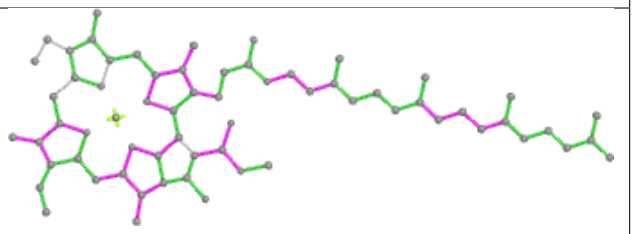
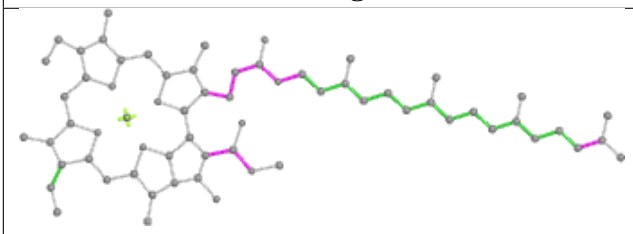


Bond angles



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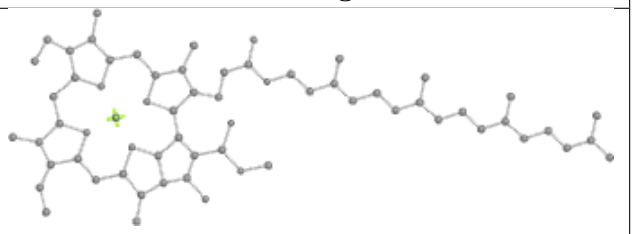
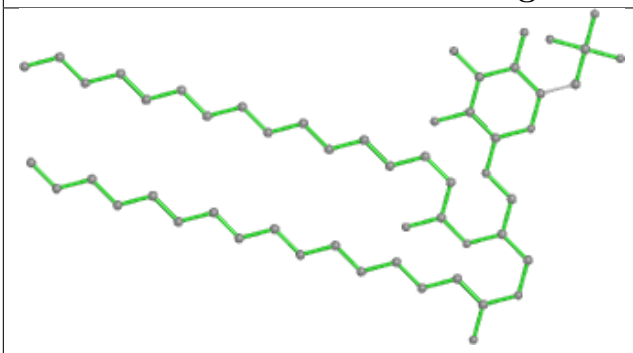


Rings

Ligand SQD b1 626



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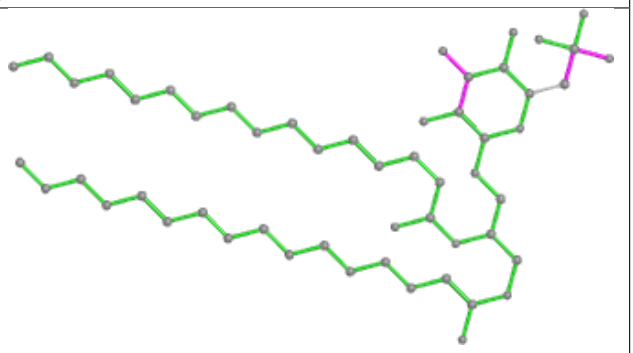
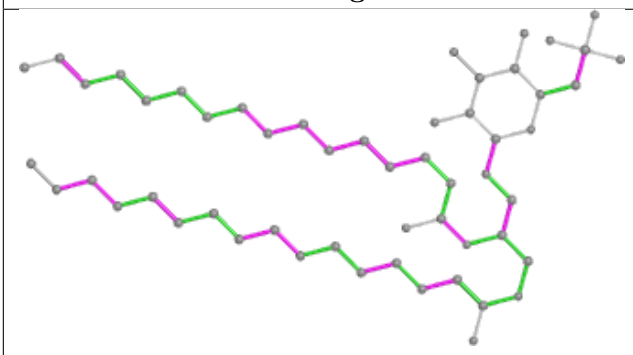
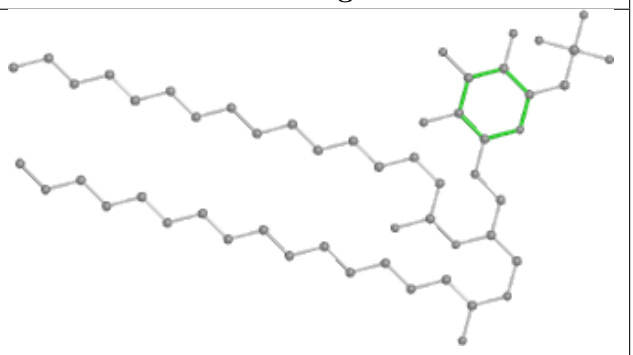


Bond angles

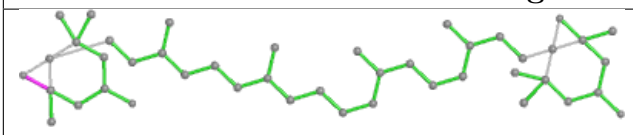


Torsions



Rings

Ligand XAT y 622



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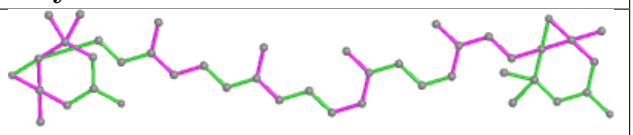
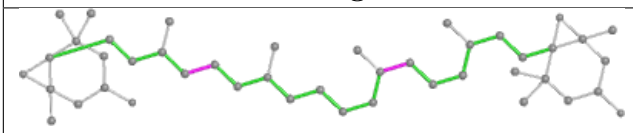
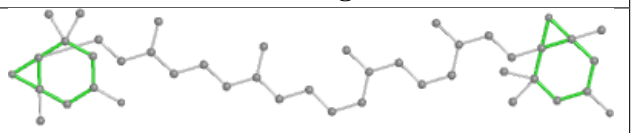


Bond angles

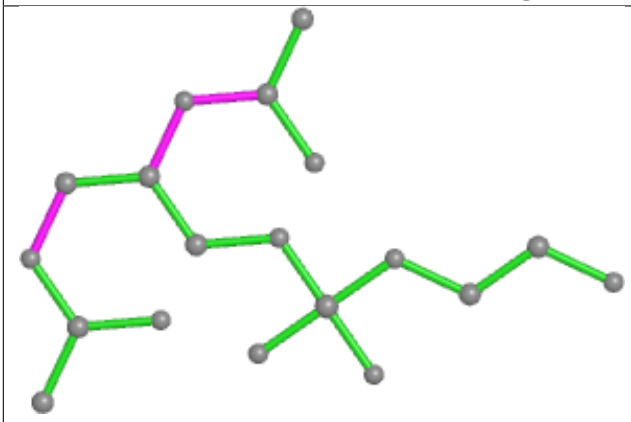


Torsions

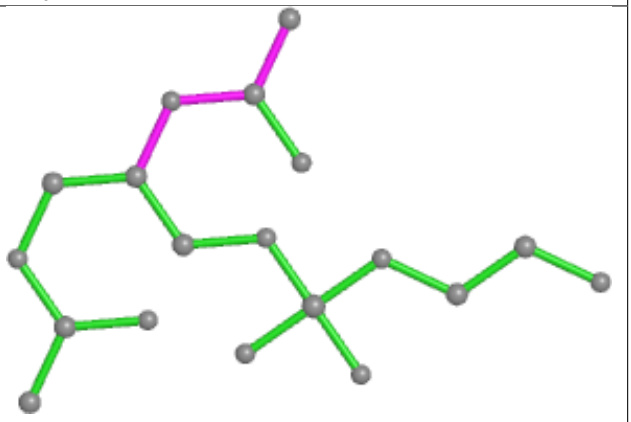


Rings

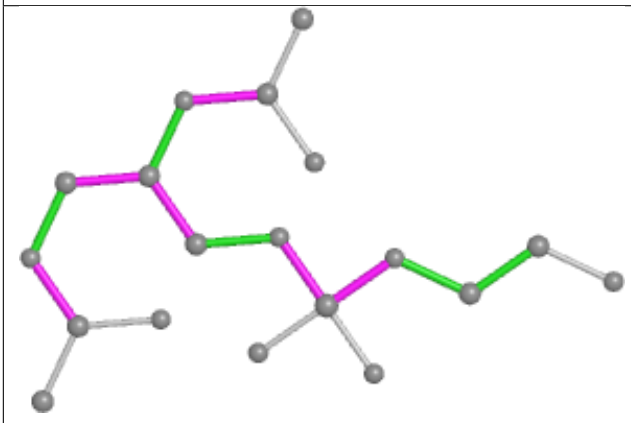
Ligand PTY y1 627



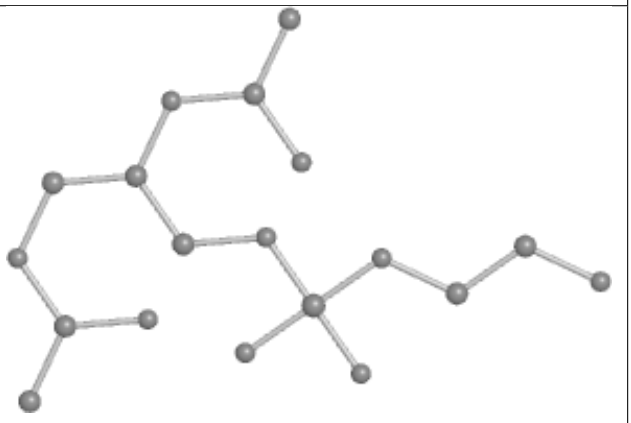
Bond lengths



Bond angles

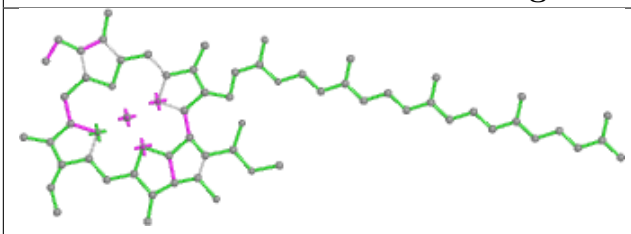


Torsions

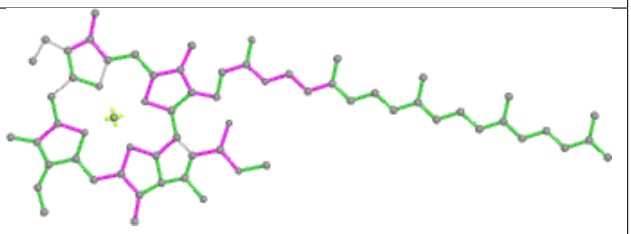


Rings

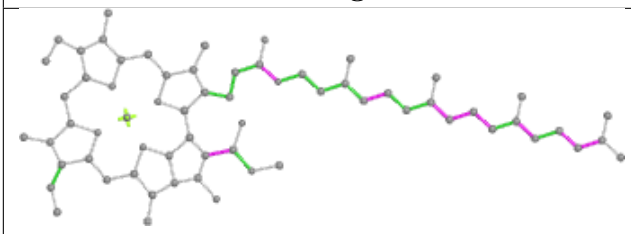
Ligand CLA c 508



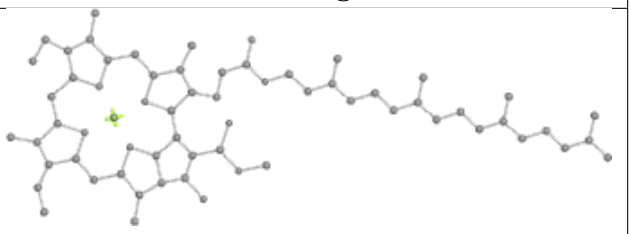
Bond lengths



Bond angles

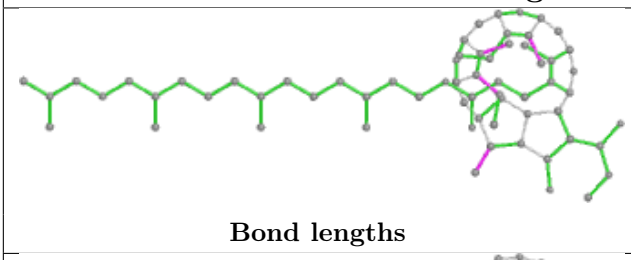


Torsions

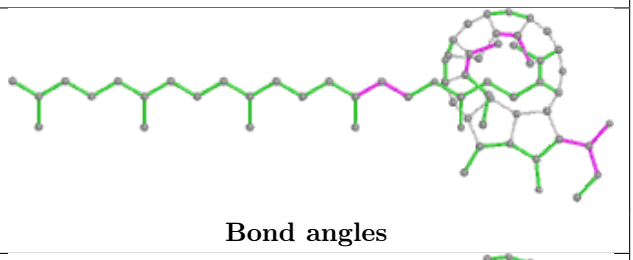


Rings

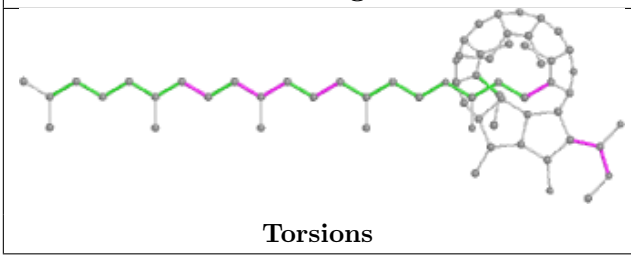
Ligand PHO a 409



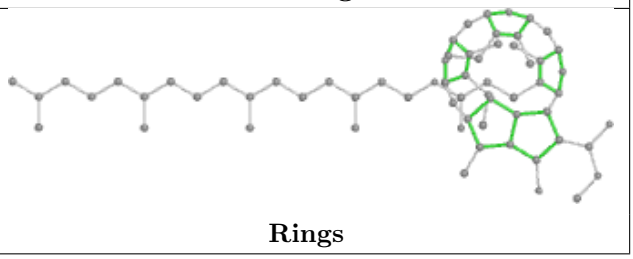
Bond lengths



Bond angles

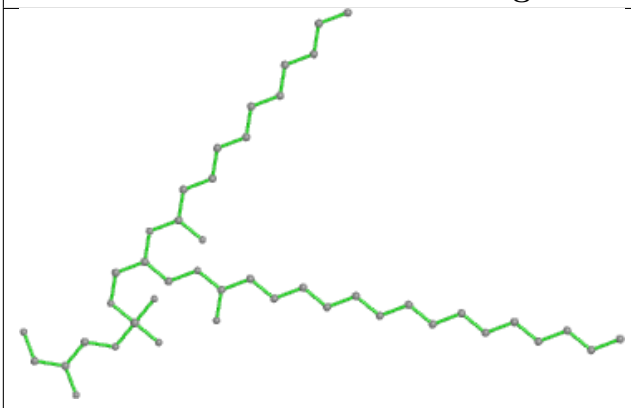


Torsions



Rings

Ligand LHG D1 408



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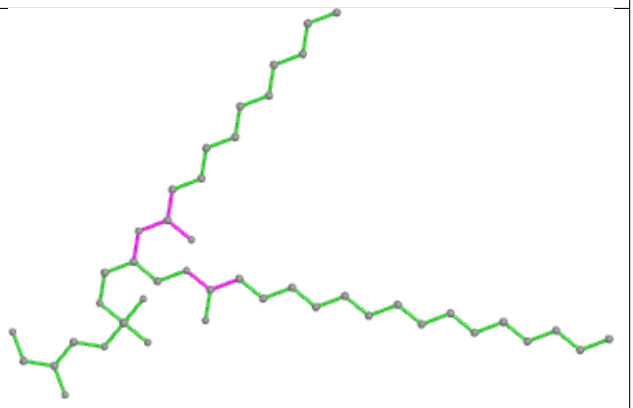
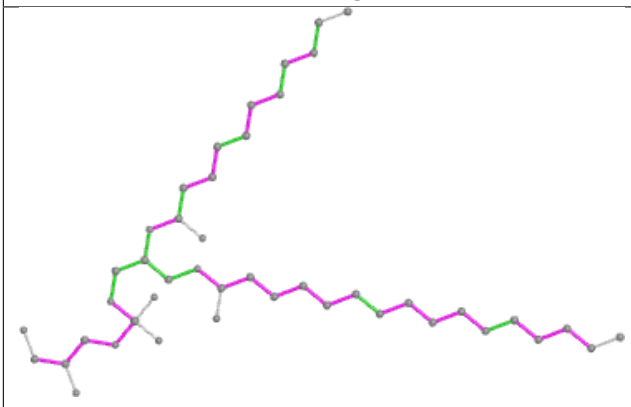
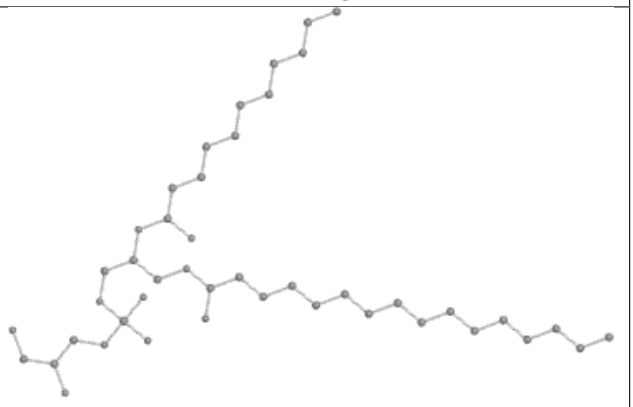


Bond angles

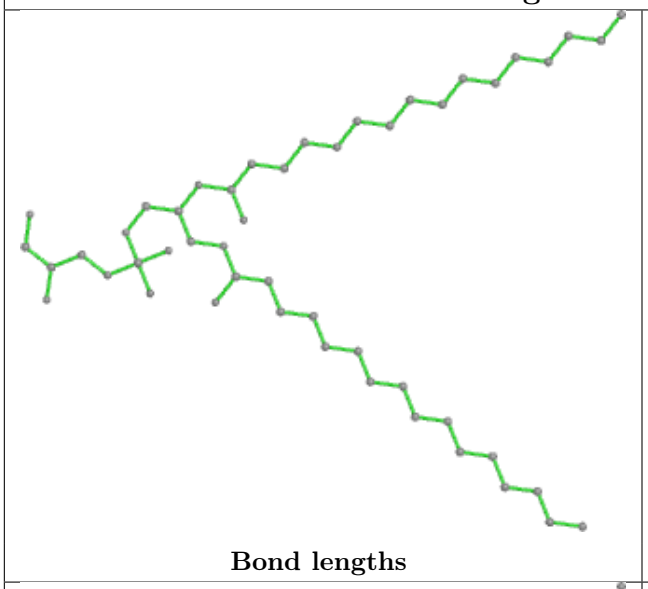


Torsions



Rings

Ligand LHG Y 624



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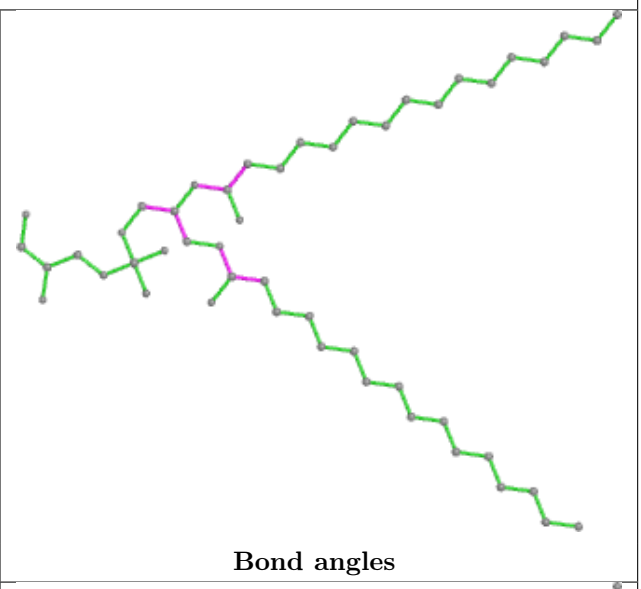
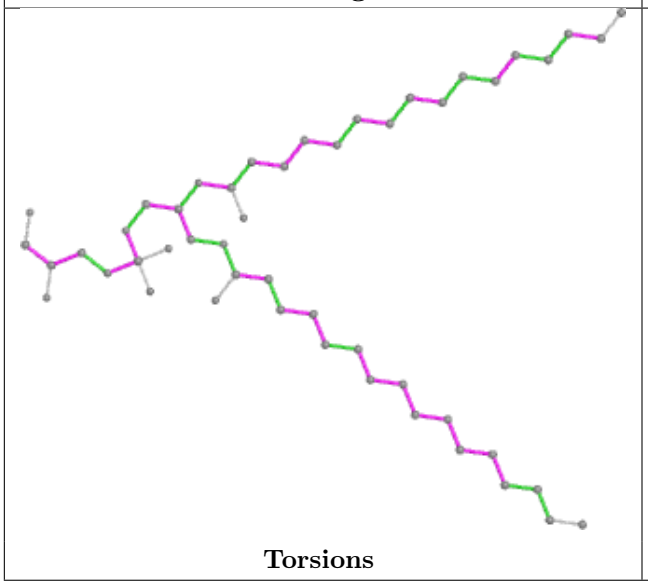


Bond angles



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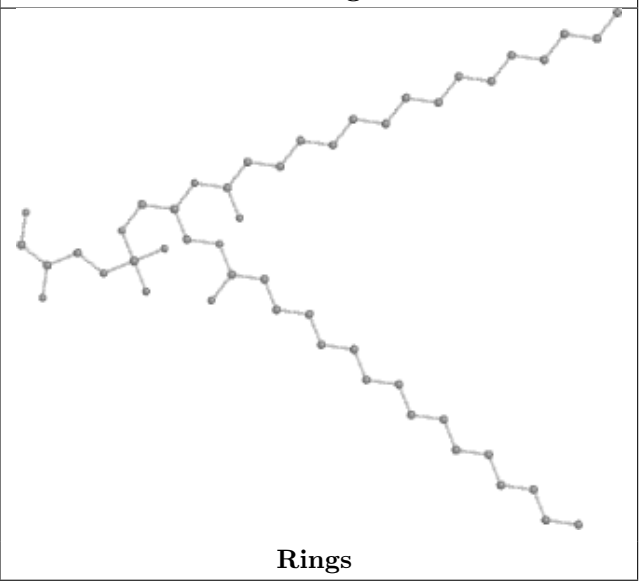
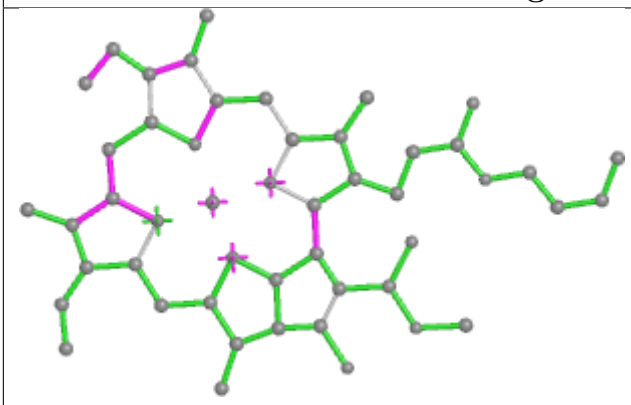


Rings

Ligand CLA n 614



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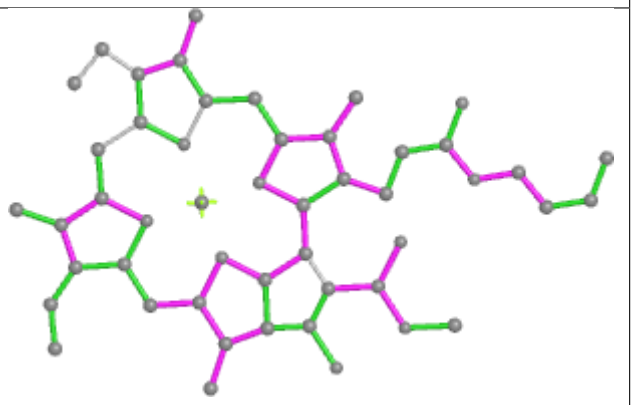

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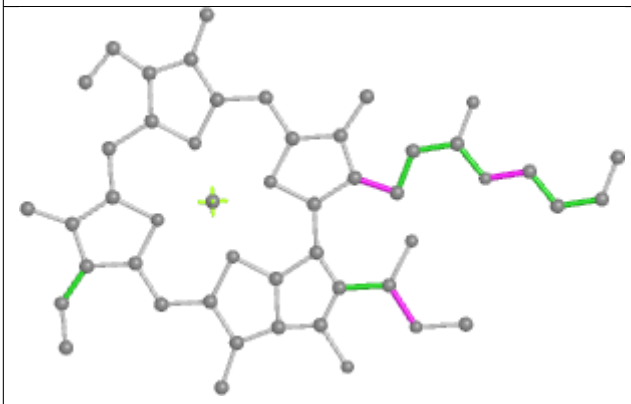
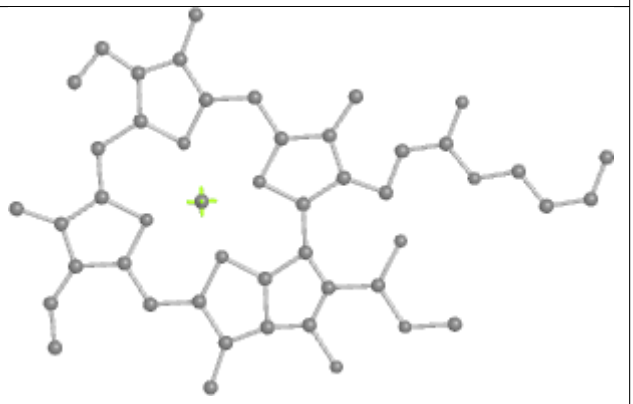
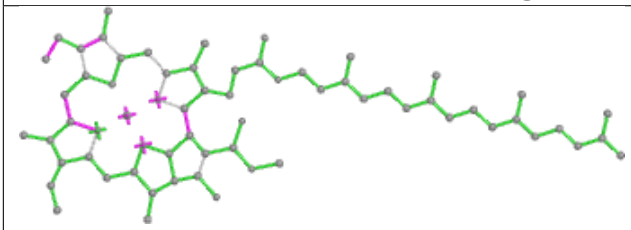


Torsions



Rings

Ligand CLA n1 602



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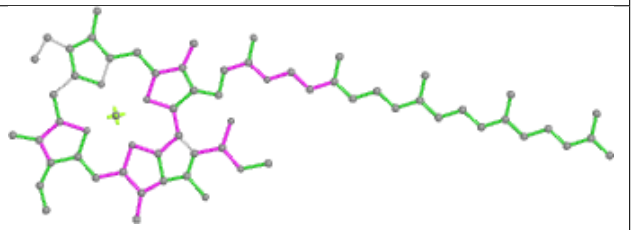
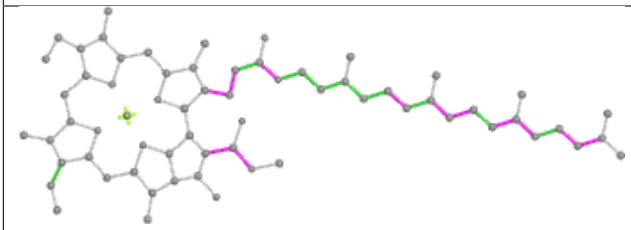


Bond angles



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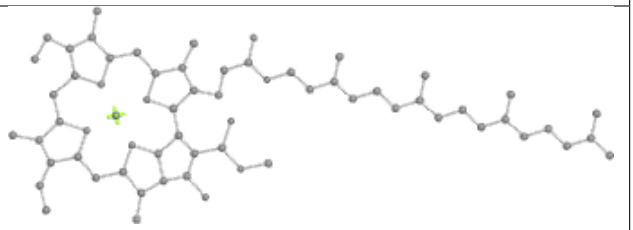
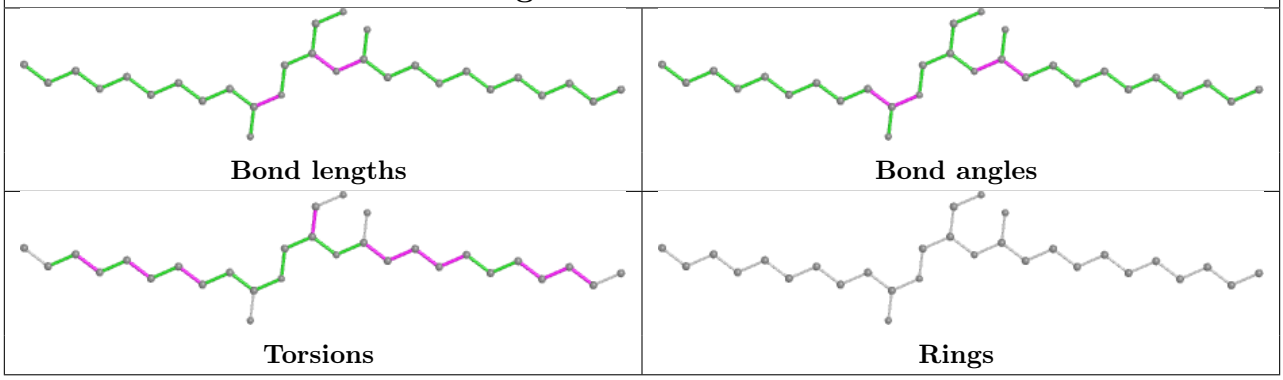
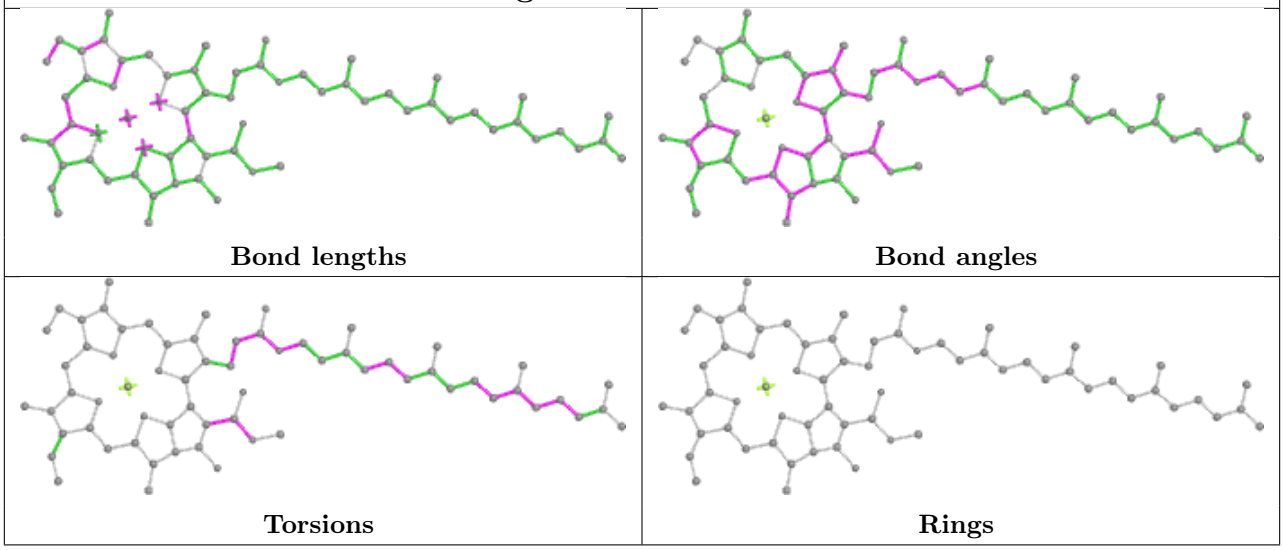


Rings

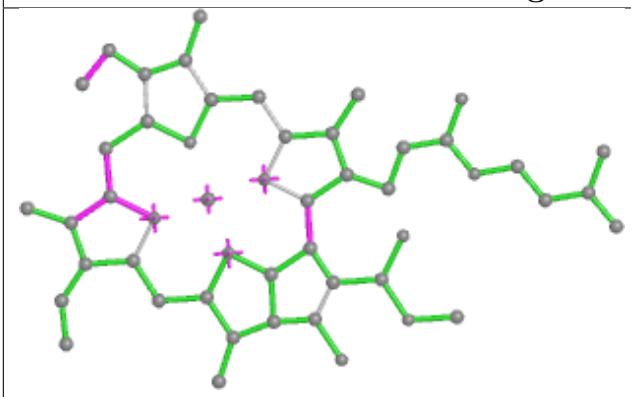
Ligand DGA J1 101



Ligand CLA B1 603



Ligand CLA S 617



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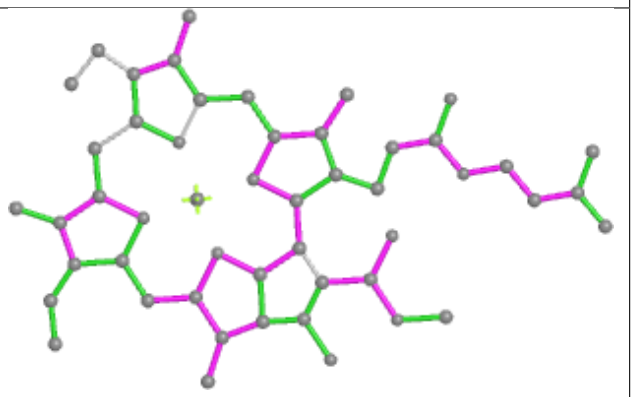
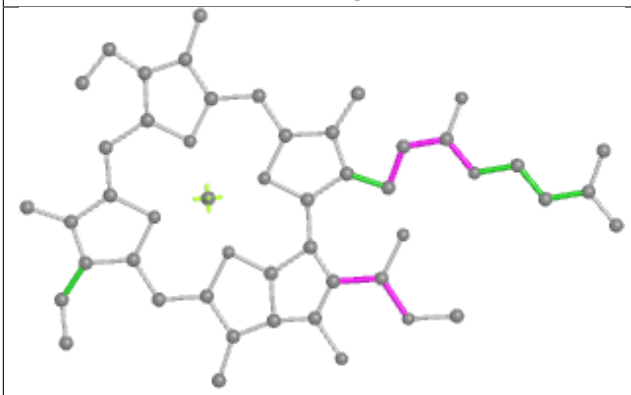


Bond angles



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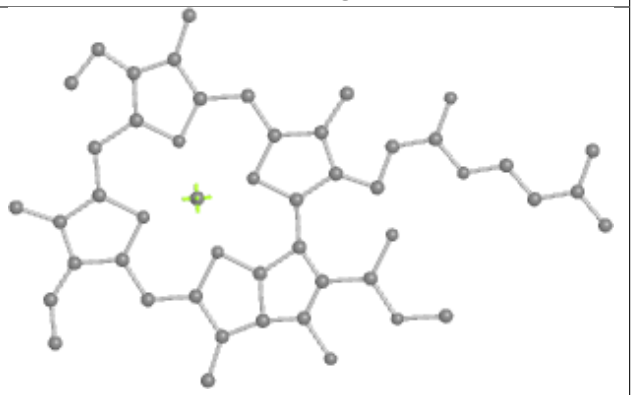
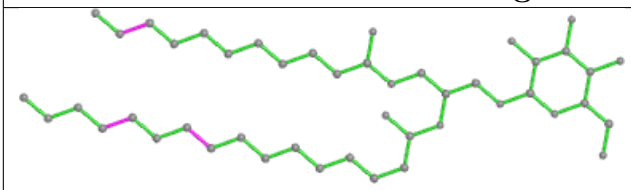


Rings

Ligand LMG d1 411



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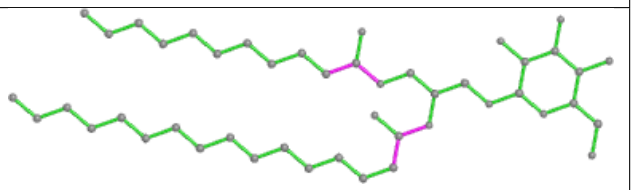
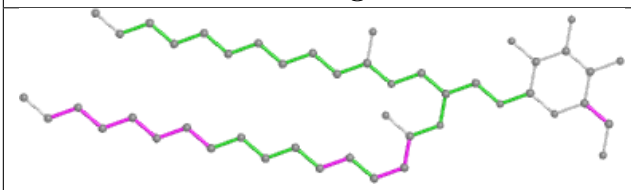
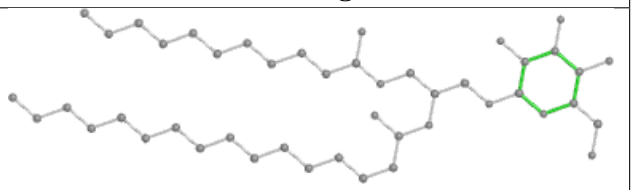


Bond angles

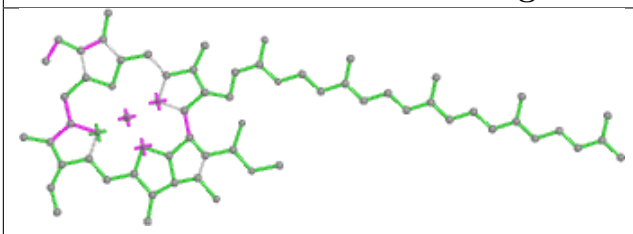


Torsions



Rings

Ligand CLA n1 604



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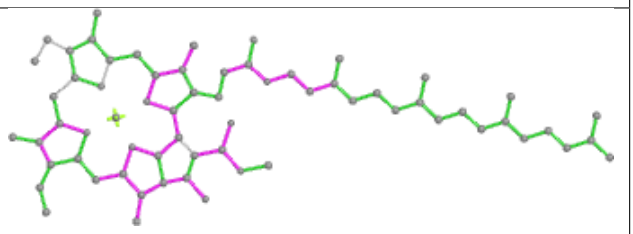
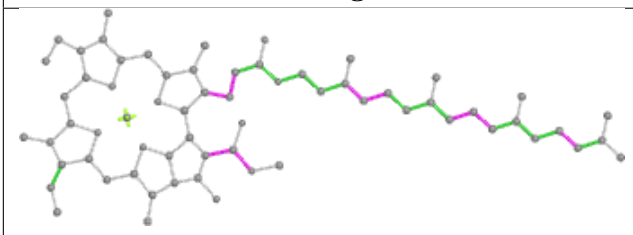
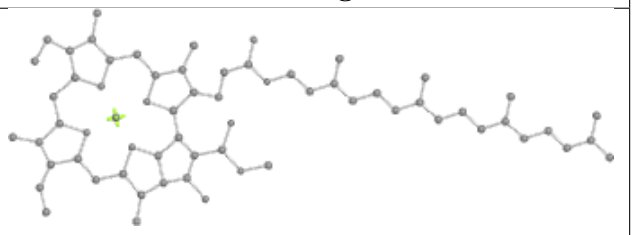


Bond angles

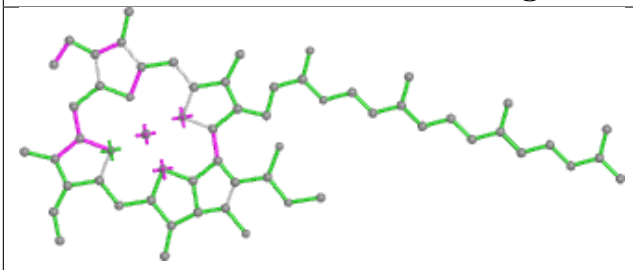


Torsions



Rings

Ligand CLA r1 602



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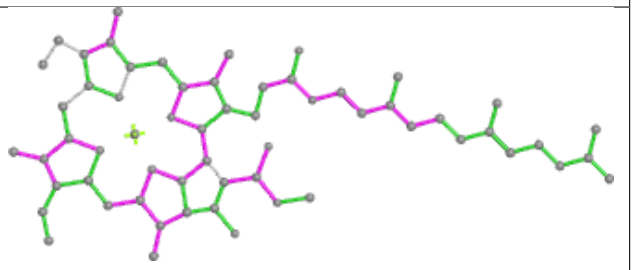
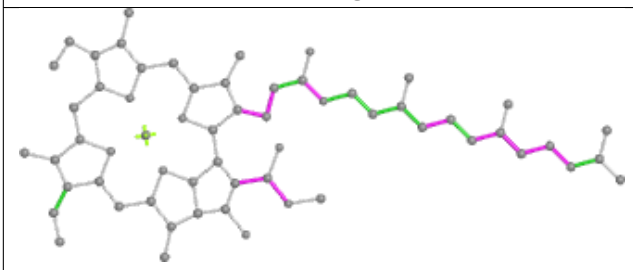


Bond angles



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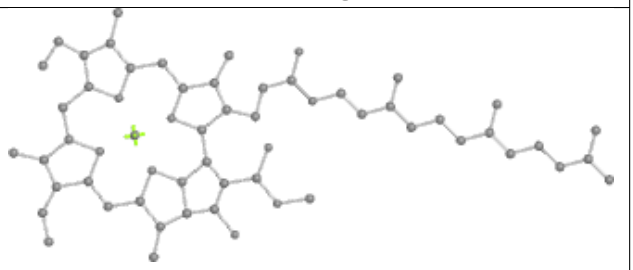
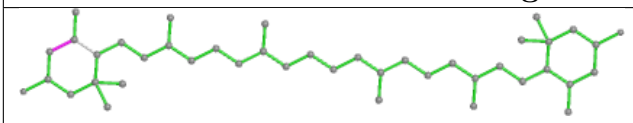


Rings

Ligand LUT s1 621



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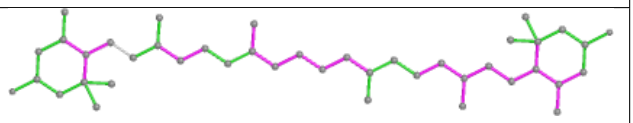
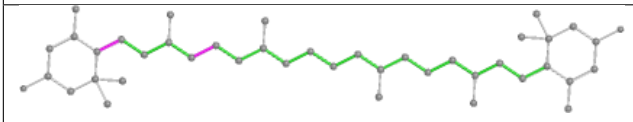
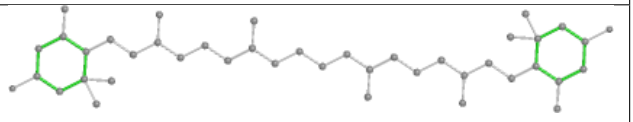


Bond angles

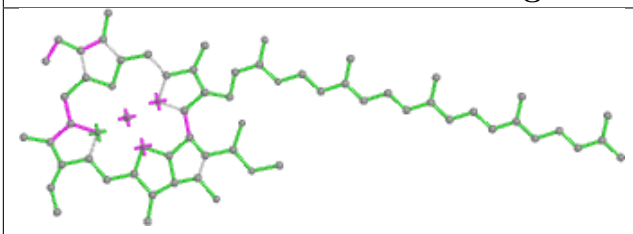


Torsions



Rings

Ligand CLA Y 612



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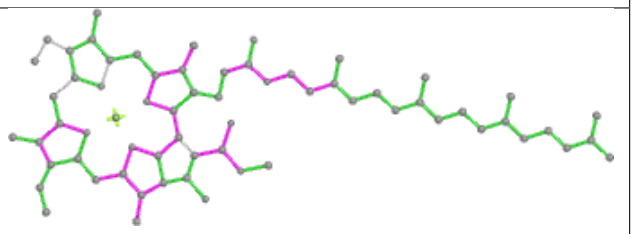
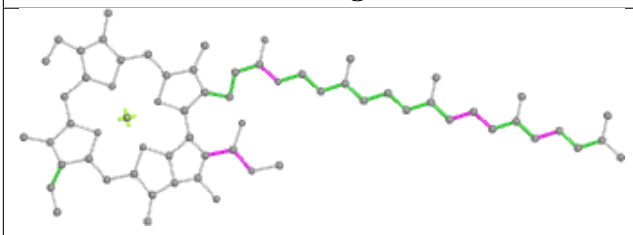


Bond angles



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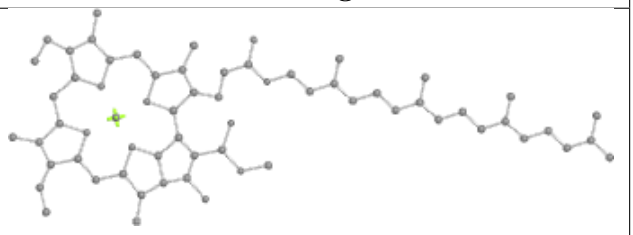
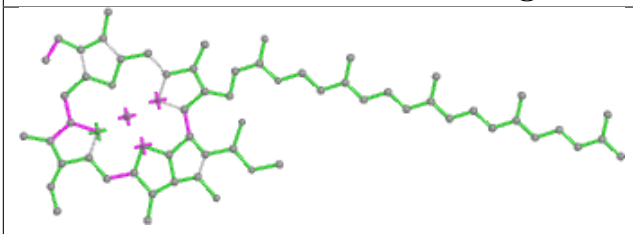


Rings

Ligand CLA d1 403



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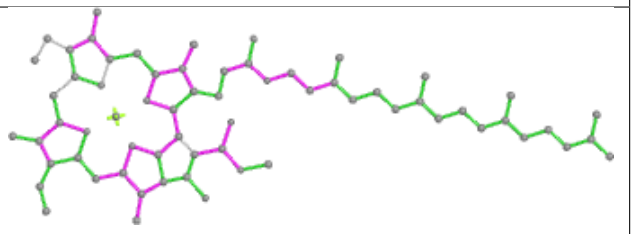
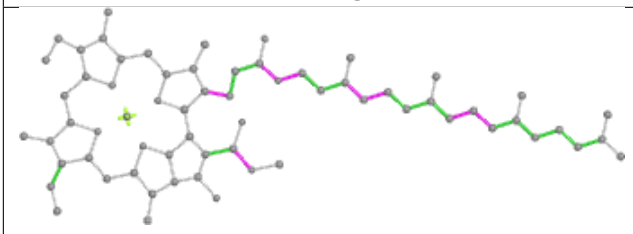


Bond angles



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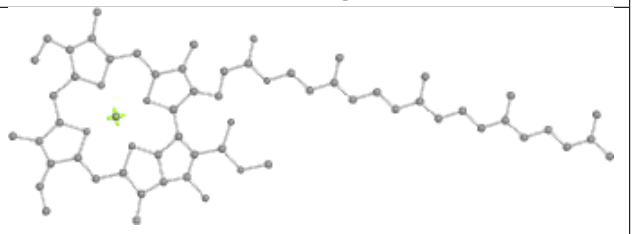
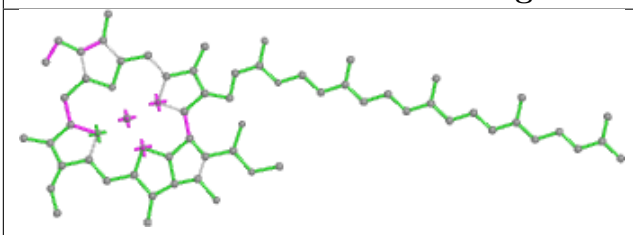
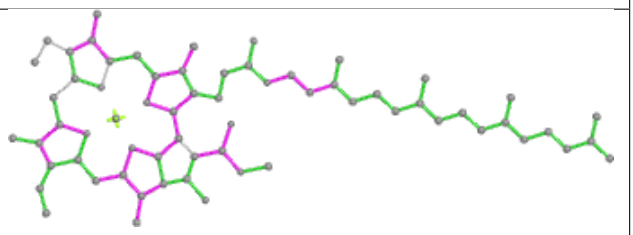


Rings

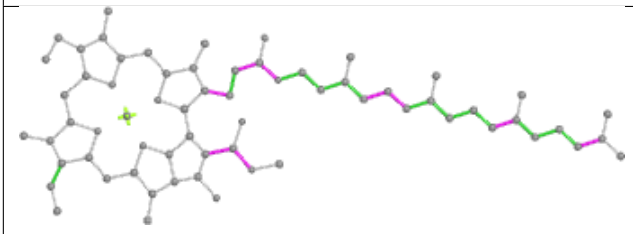
Ligand CLA B1 609



Bond lengths



Bond angles



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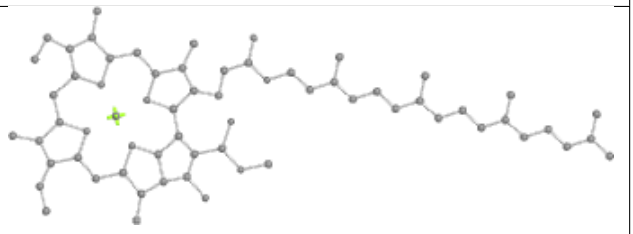
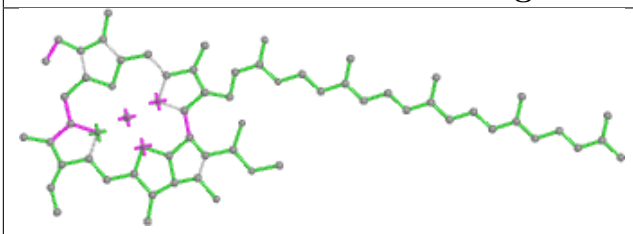
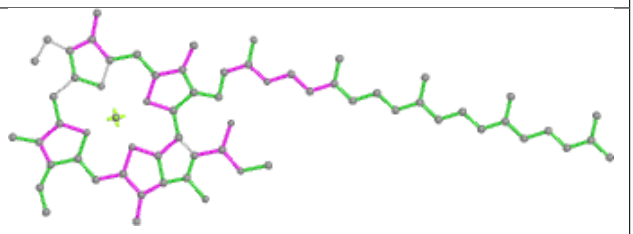


Rings

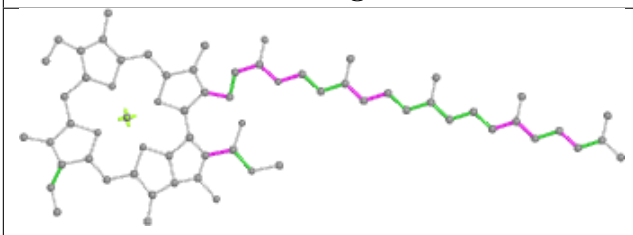
Ligand CLA A1 406



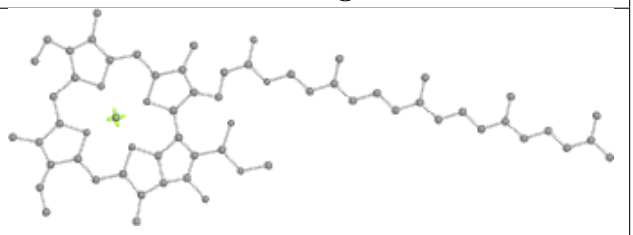
Bond lengths



Bond angles

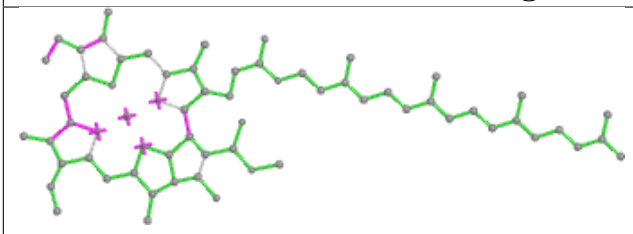


Torsions

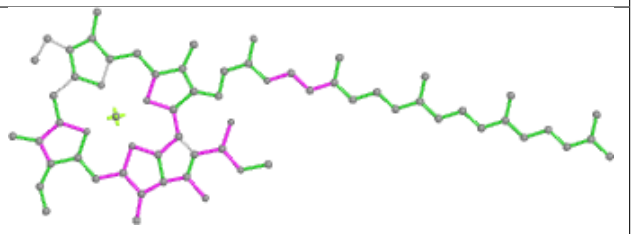


Rings

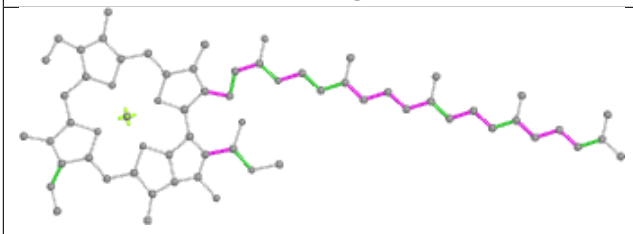
Ligand CLA c1 505



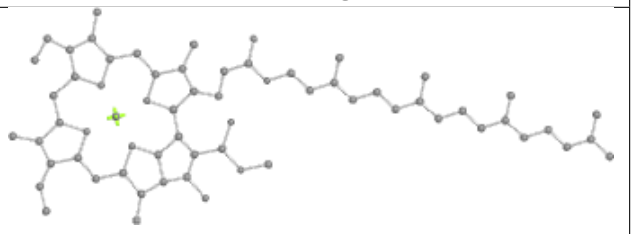
Bond lengths



Bond angles

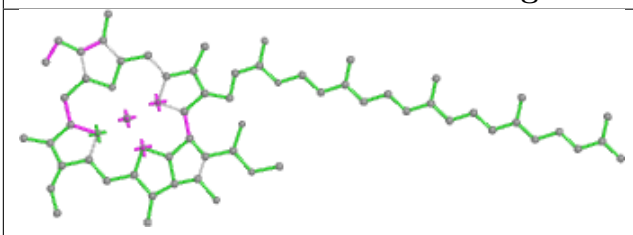


Torsions

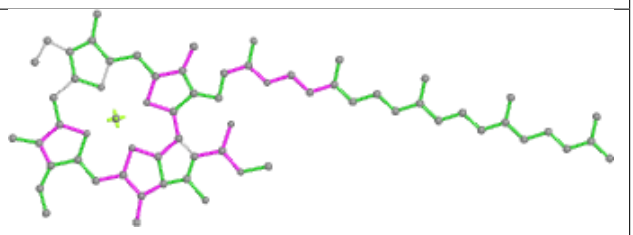


Rings

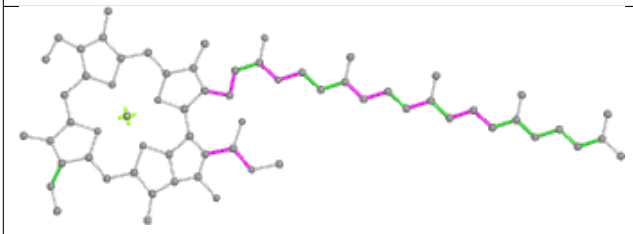
Ligand CLA s1 610



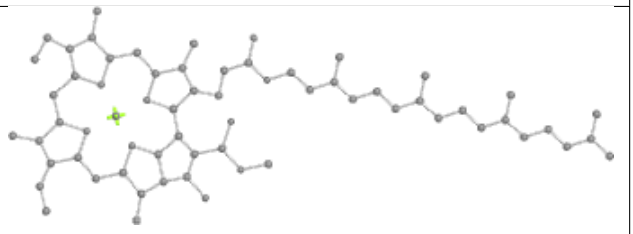
Bond lengths



Bond angles

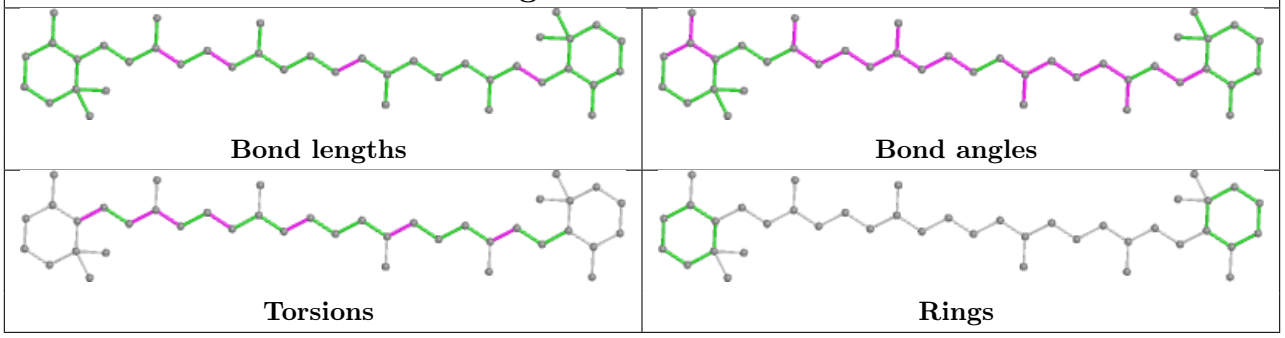


Torsions

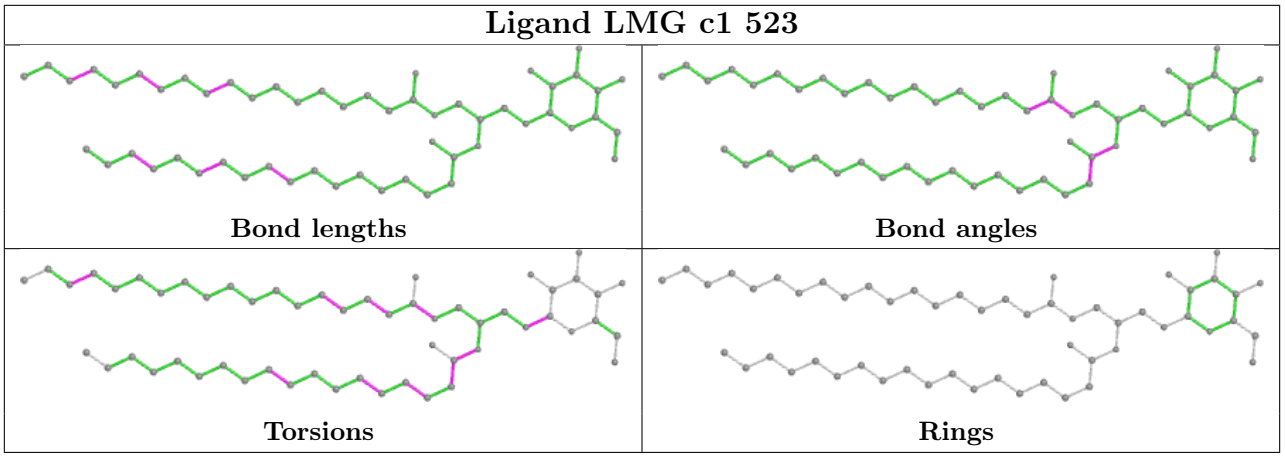


Rings

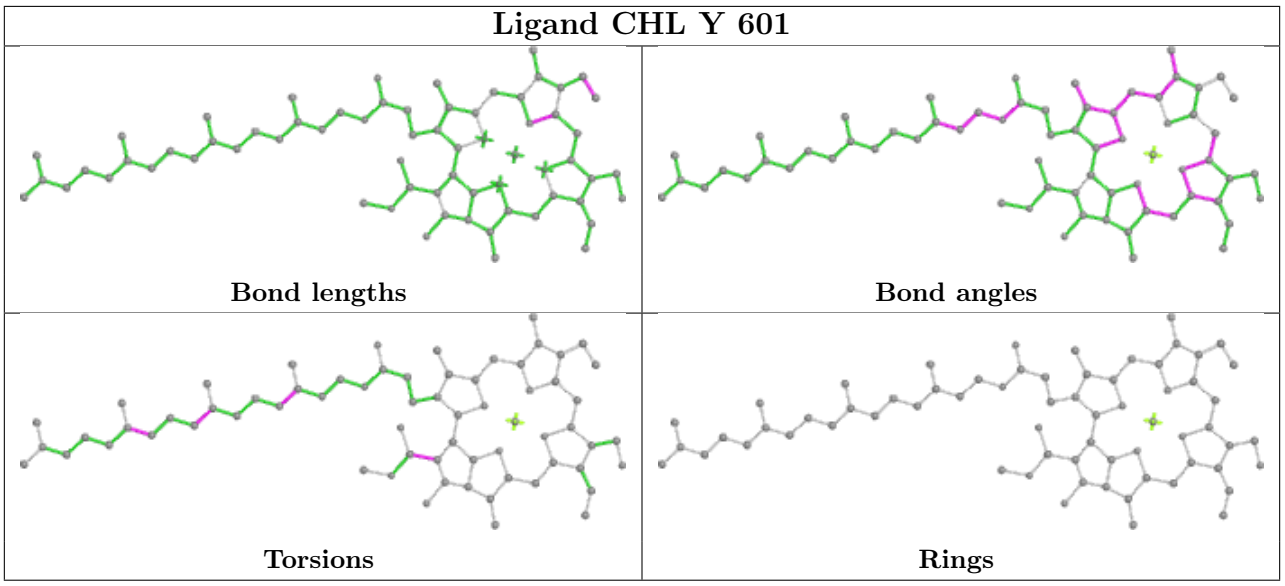
Ligand BCR c1 516



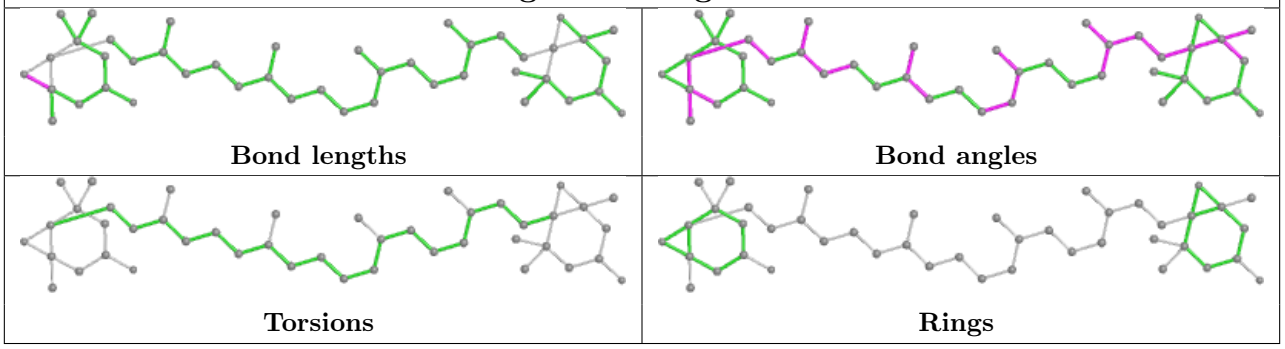
Ligand LMG c1 523



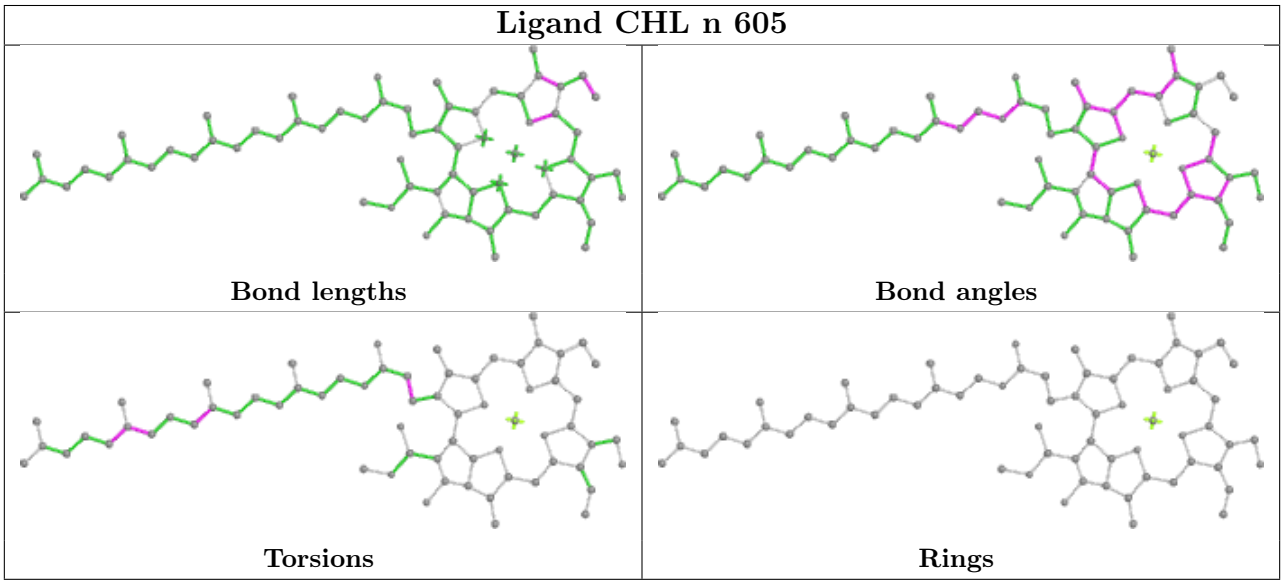
Ligand CHL Y 601



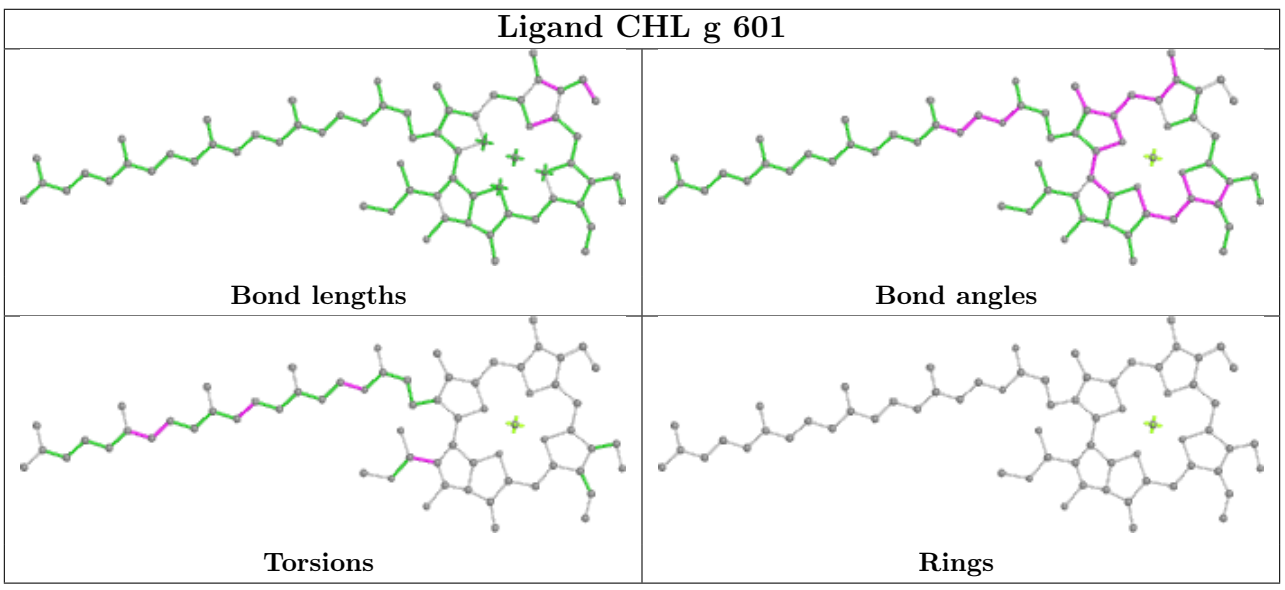
Ligand XAT g1 622



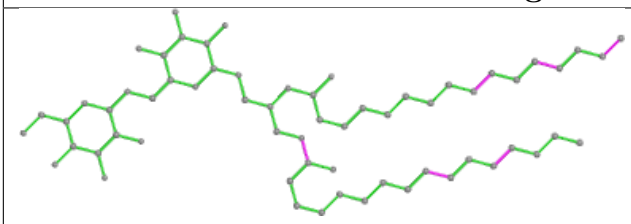
Ligand CHL n 605



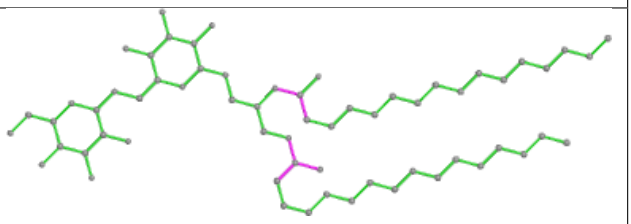
Ligand CHL g 601



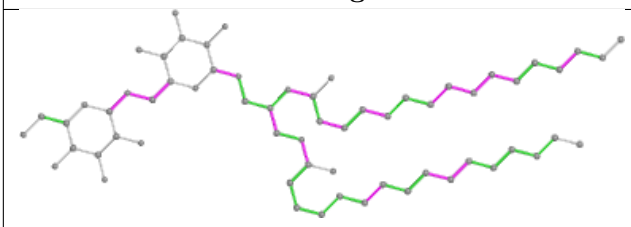
Ligand DGD c 519



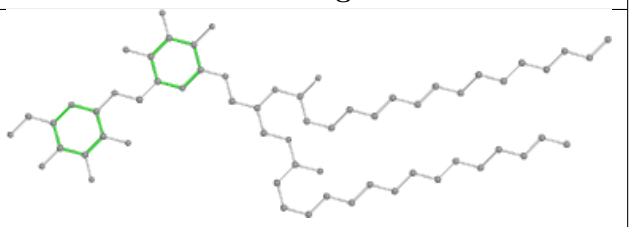
Bond lengths



Bond angles

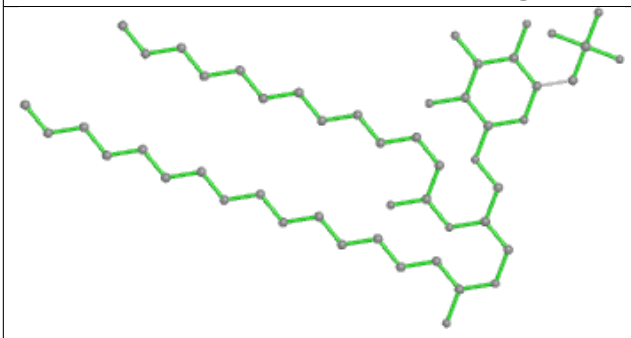


Torsions

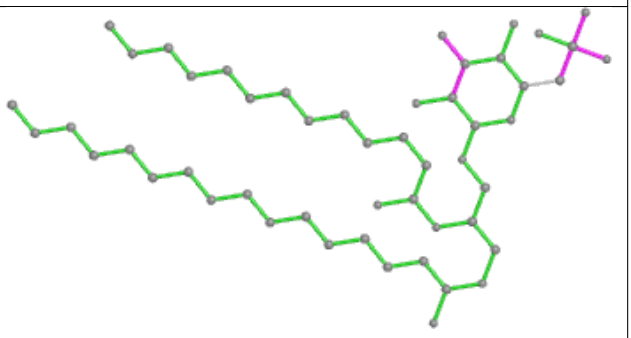


Rings

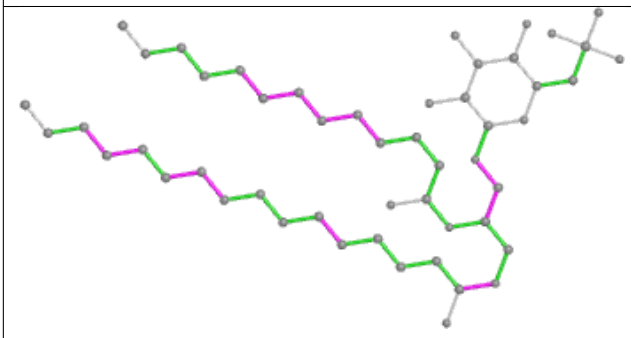
Ligand SQD A1 412



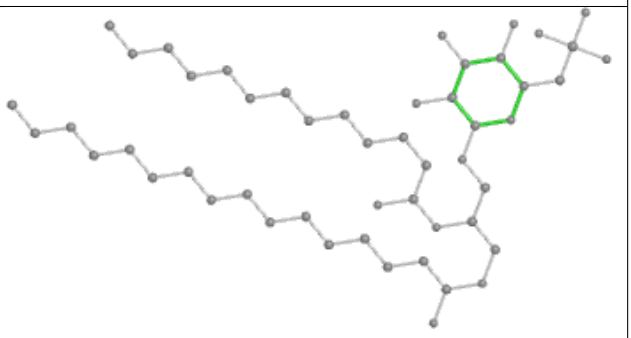
Bond lengths



Bond angles

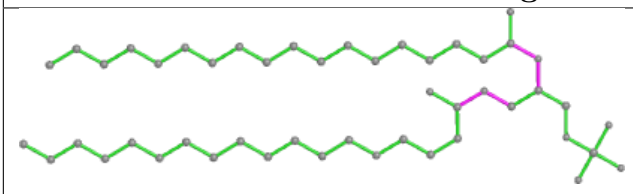


Torsions



Rings

Ligand 3PH S1 626



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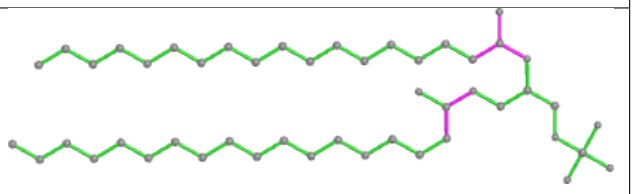
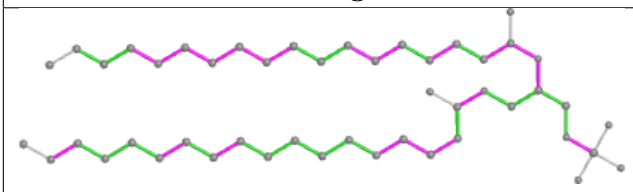
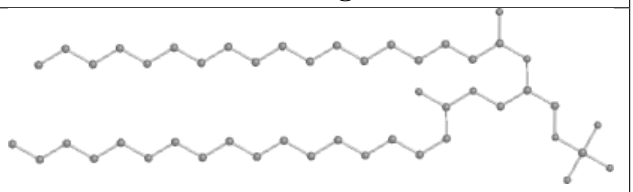


Bond angles

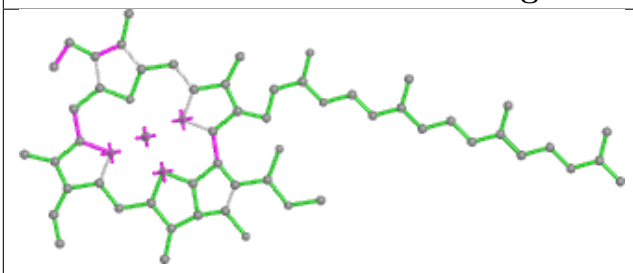


Torsions



Rings

Ligand CLA r1 608



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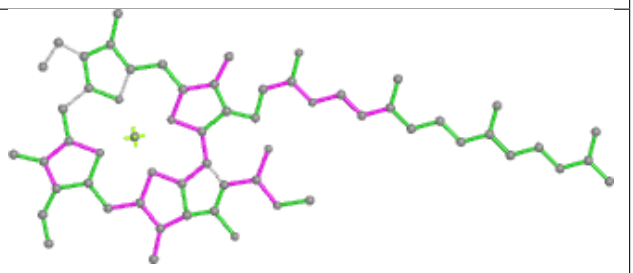
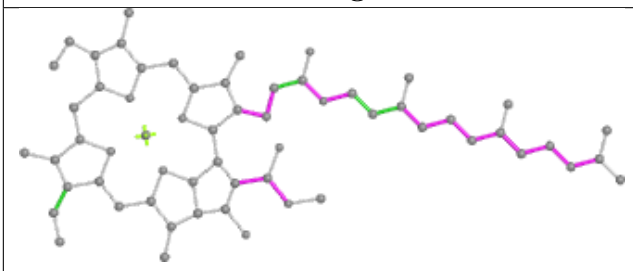
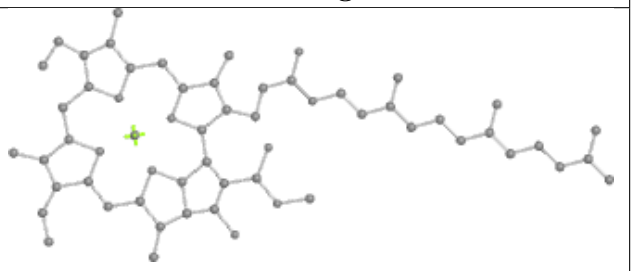


Bond angles

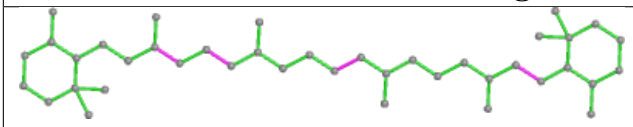


Torsions

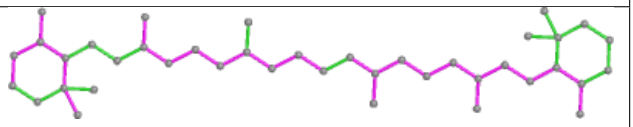


Rings

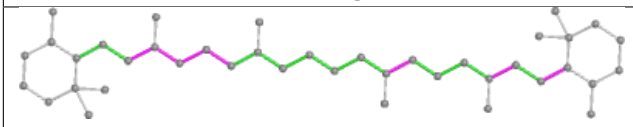
Ligand BCR C1 517



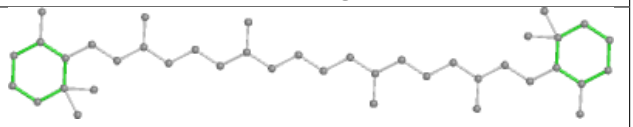
Bond lengths



Bond angles

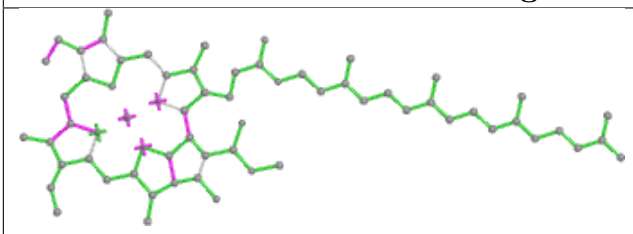


Torsions



Rings

Ligand CLA c1 507



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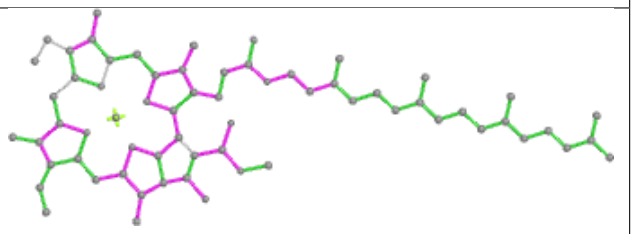
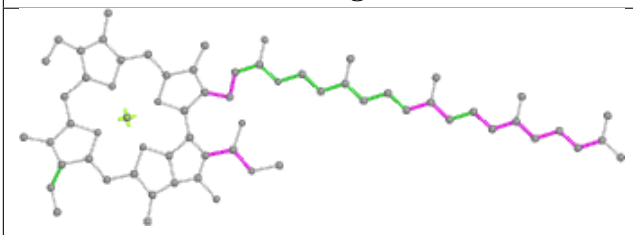


Bond angles



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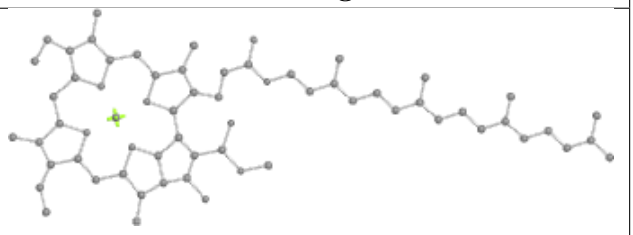
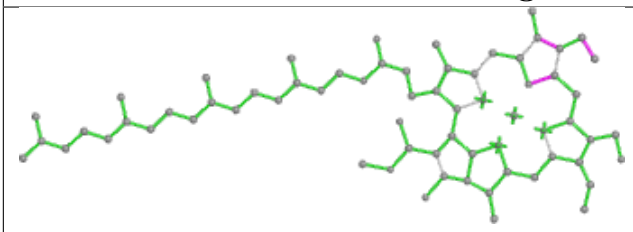


Rings

Ligand CHL n1 606



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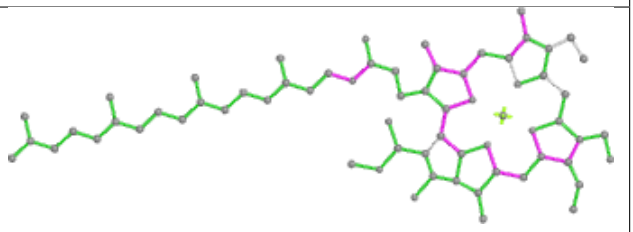
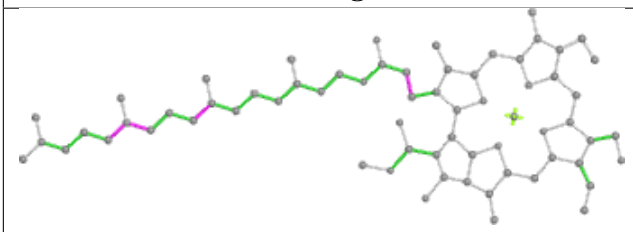
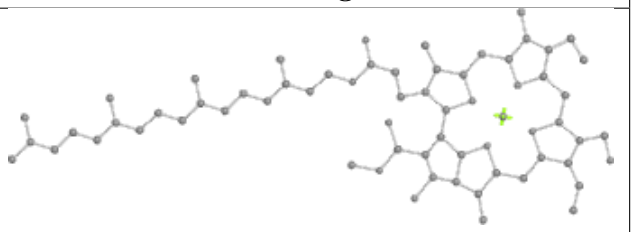


Bond angles

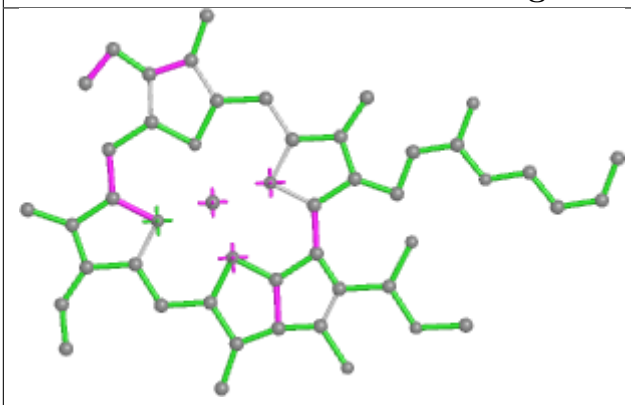


Torsions

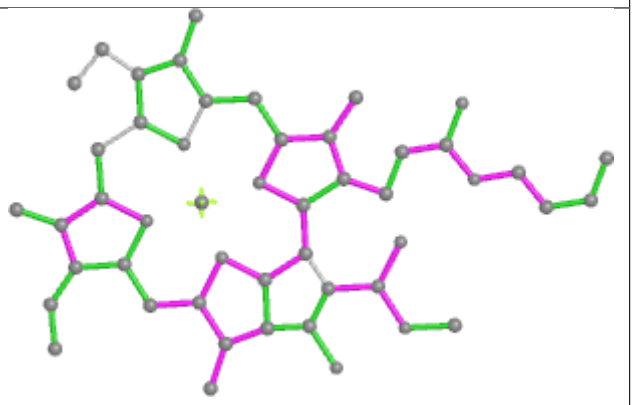


Rings

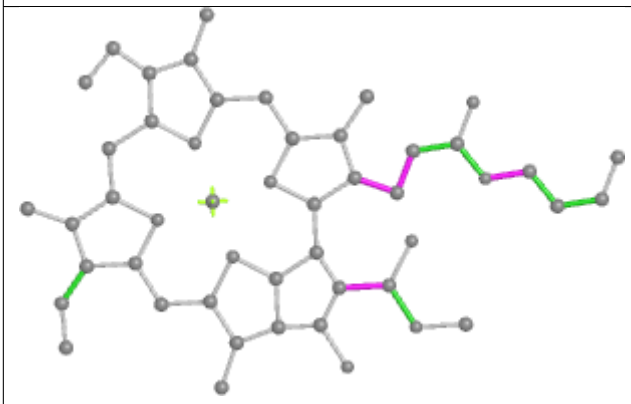
Ligand CLA a 407



Bond lengths



Bond angles



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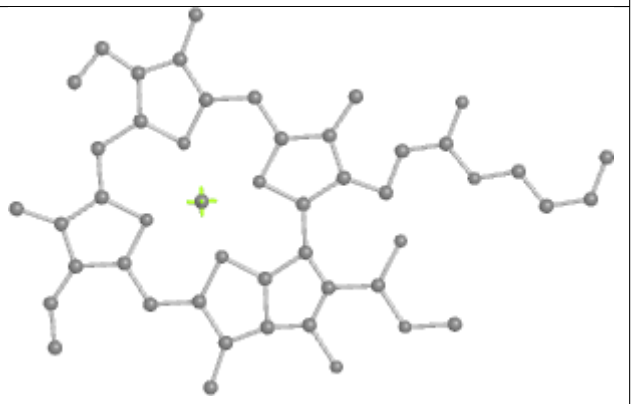
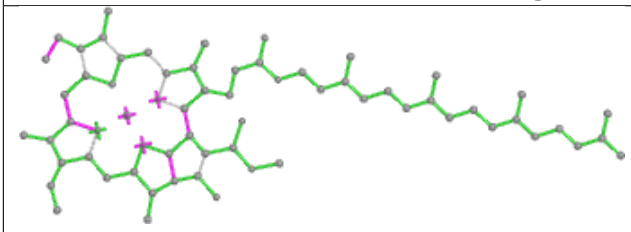
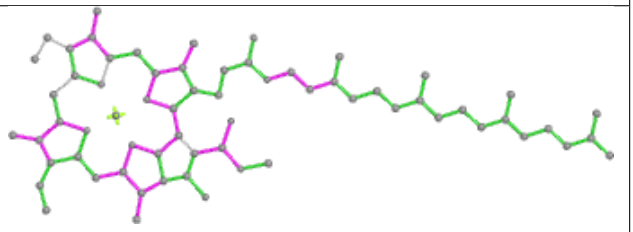


Rings

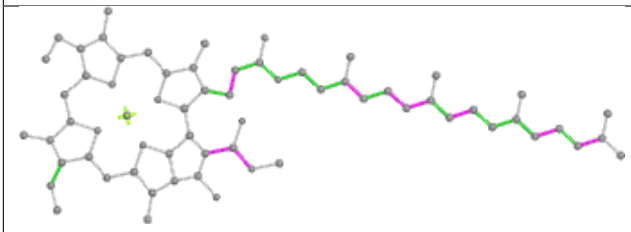
Ligand CLA c 502



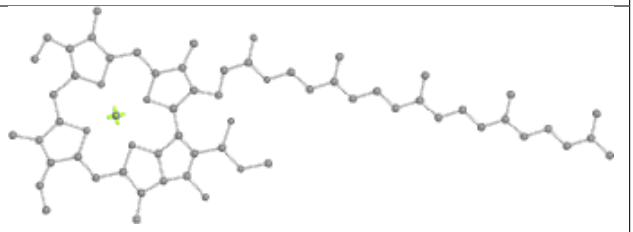
Bond lengths



Bond angles

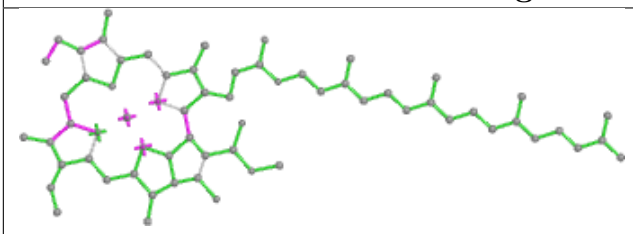


Torsions

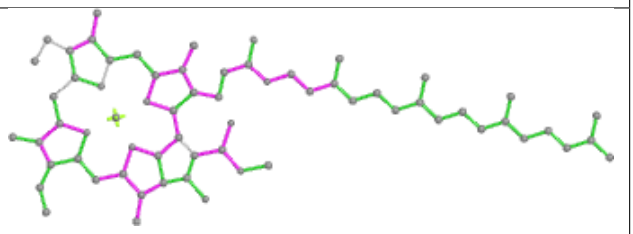


Rings

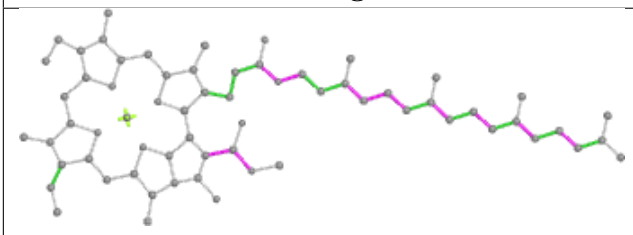
Ligand CLA C1 506



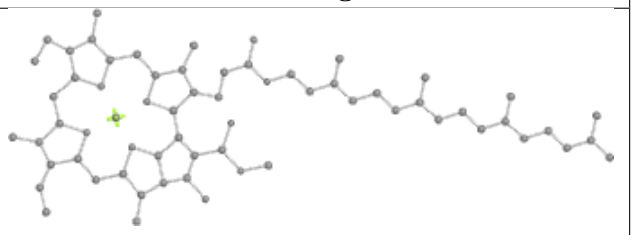
Bond lengths



Bond angles

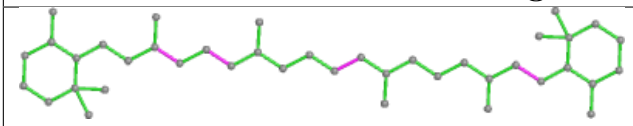


Torsions

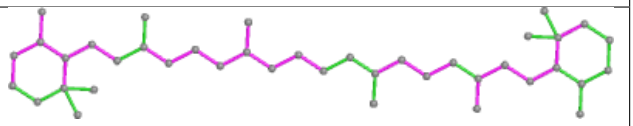


Rings

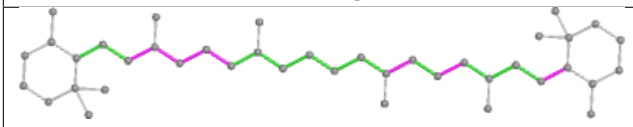
Ligand BCR c 515



Bond lengths



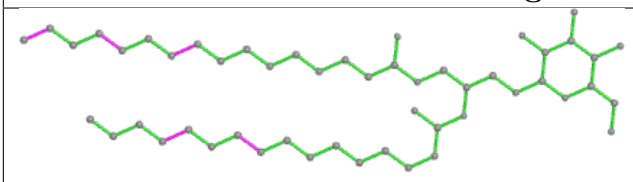
Bond angles



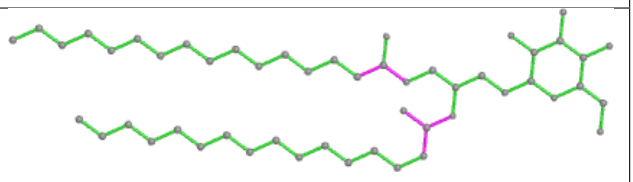
Torsions

Rings

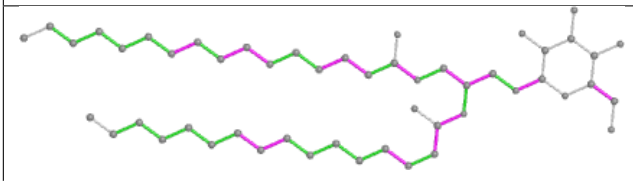
Ligand LMG c 521



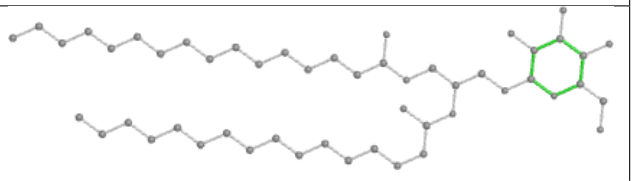
Bond lengths



Bond angles

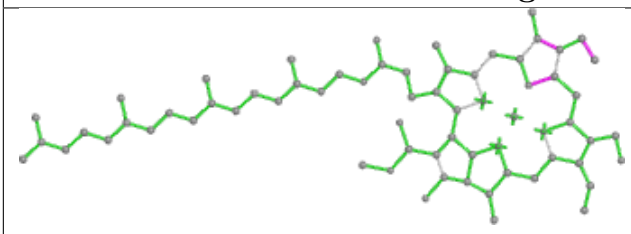


Torsions

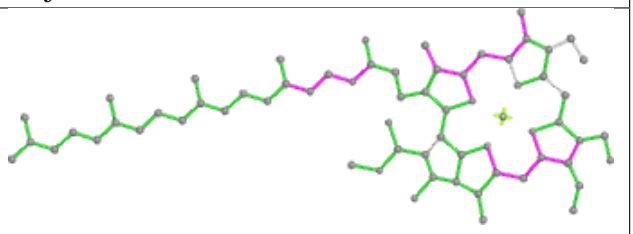


Rings

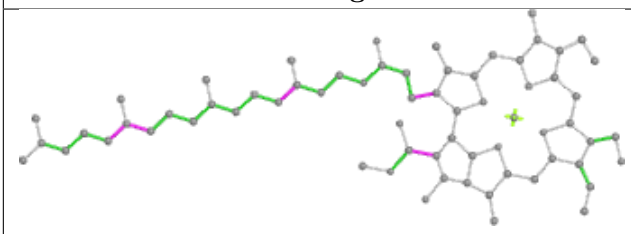
Ligand CHL y1 609



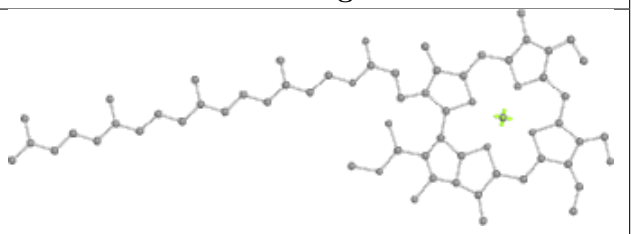
Bond lengths



Bond angles

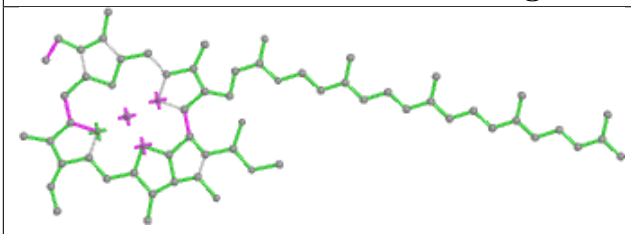


Torsions

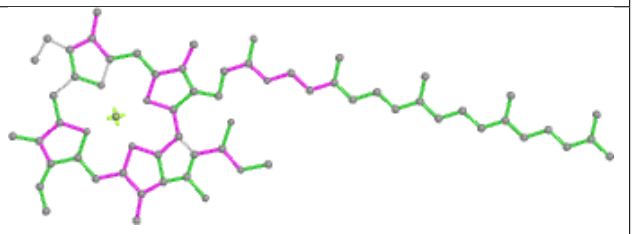


Rings

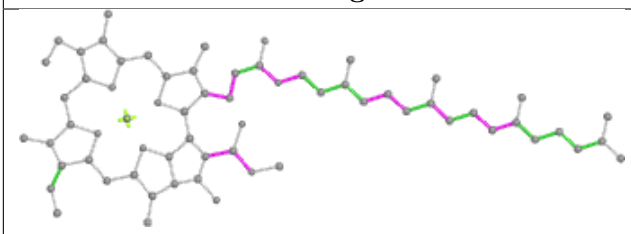
Ligand CLA A 406



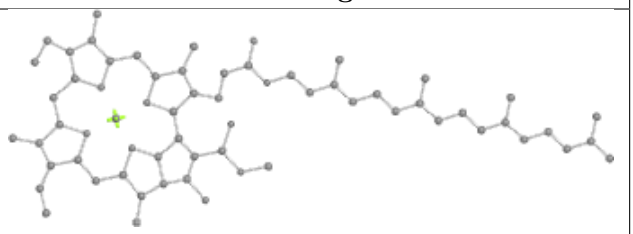
Bond lengths



Bond angles

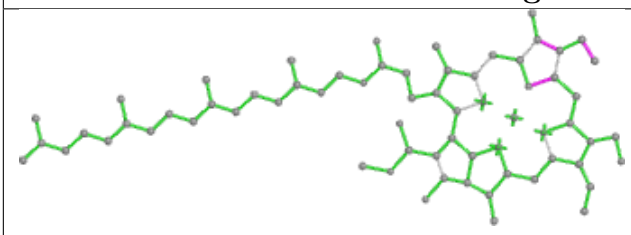


Torsions

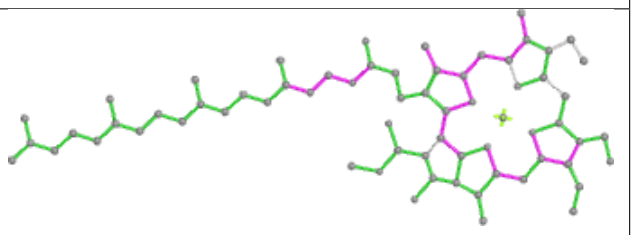


Rings

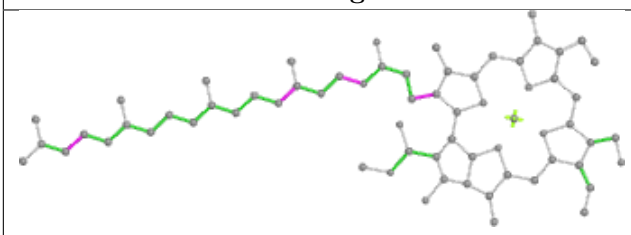
Ligand CHL Y 606



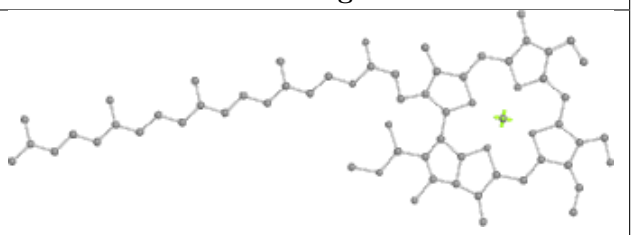
Bond lengths



Bond angles

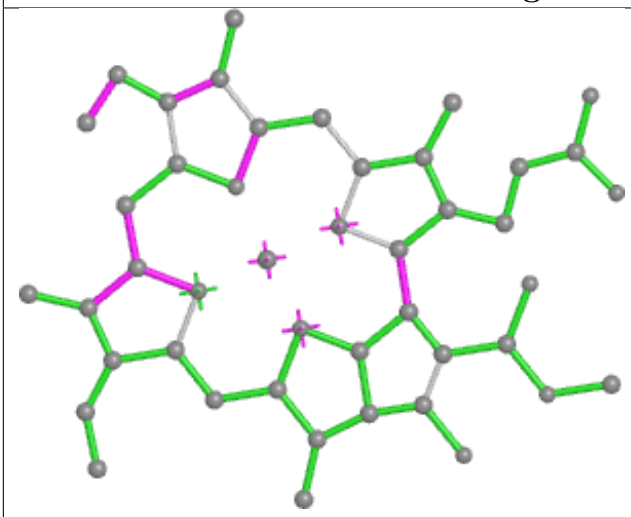


Torsions

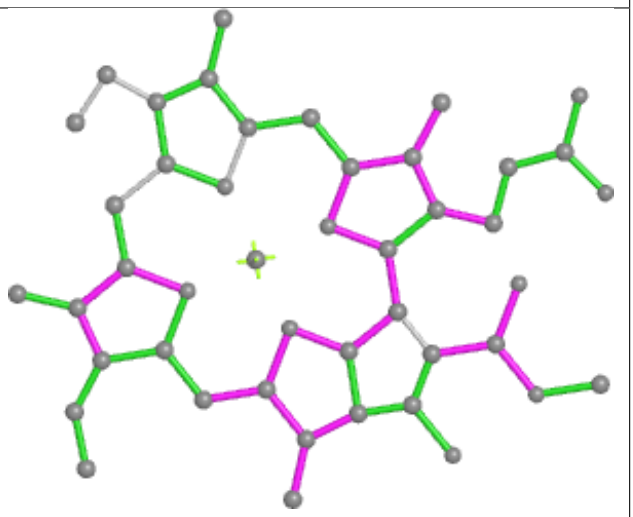


Rings

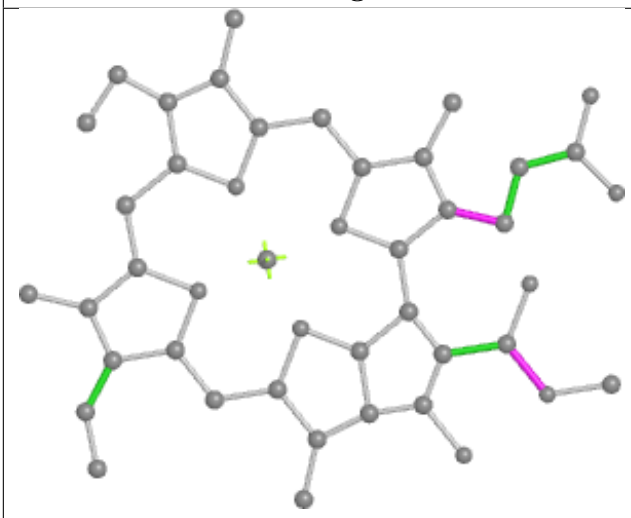
Ligand CLA G 611



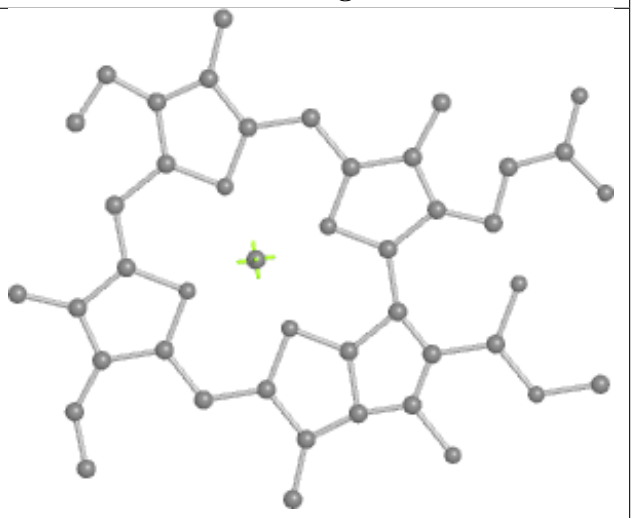
Bond lengths



Bond angles

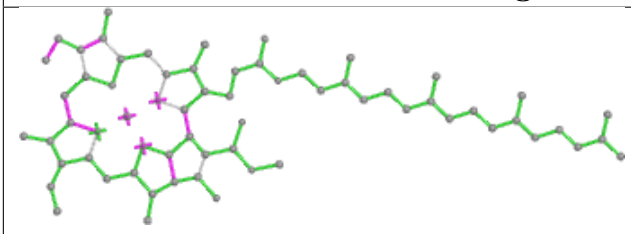


Torsions

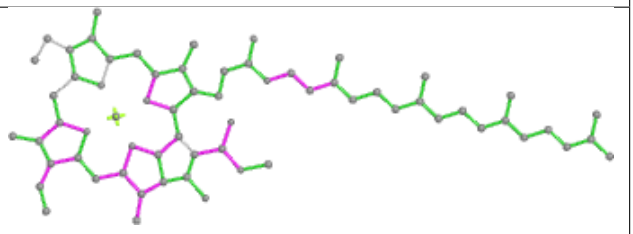


Rings

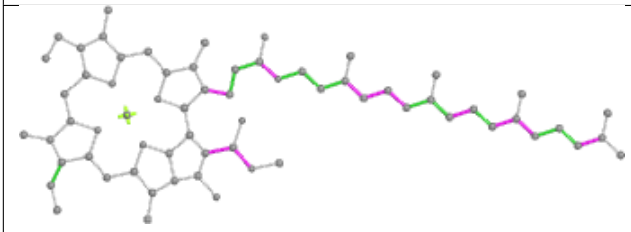
Ligand CLA N1 610



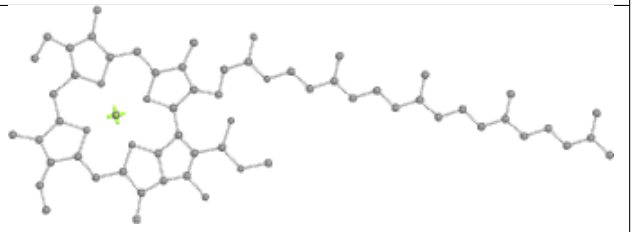
Bond lengths



Bond angles

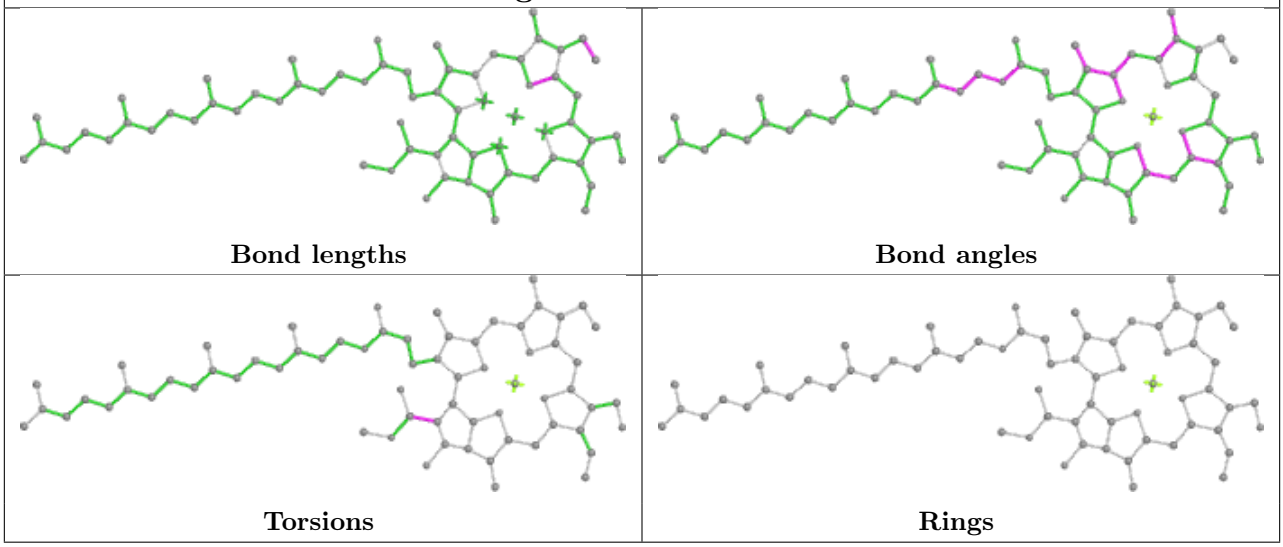


Torsions

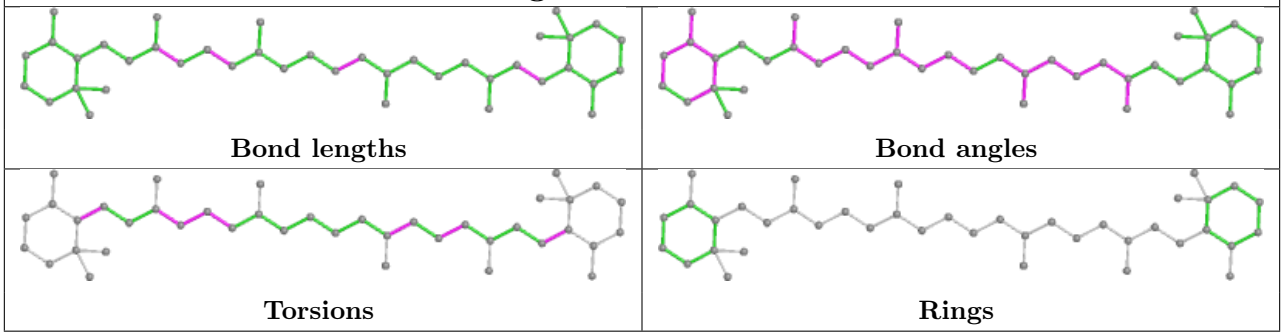


Rings

Ligand CHL Y1 601



Ligand BCR c 517



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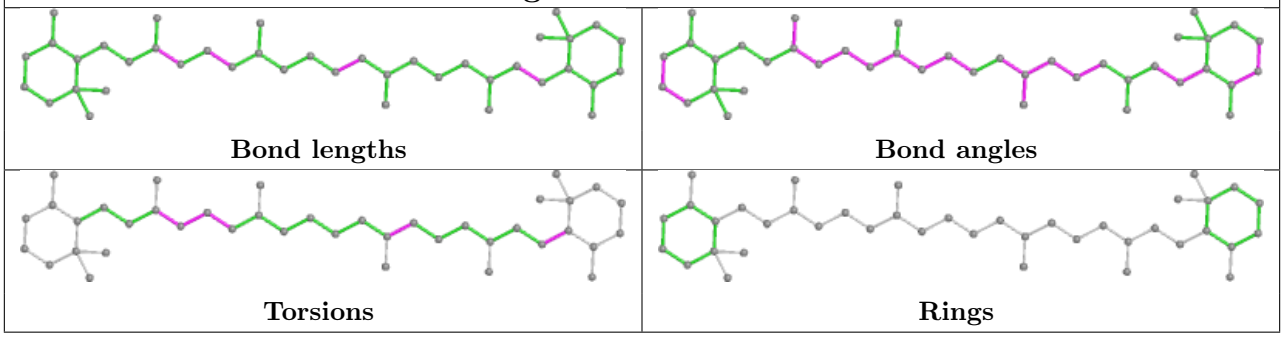
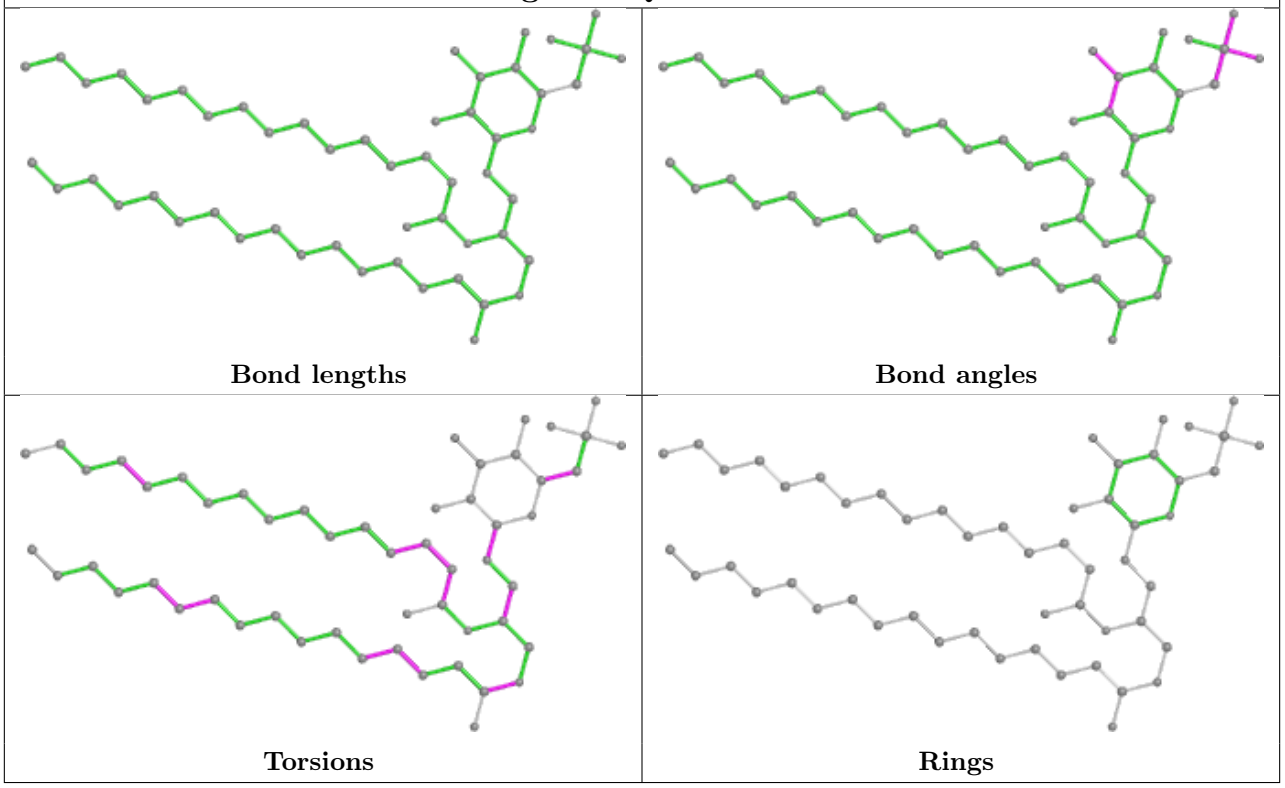
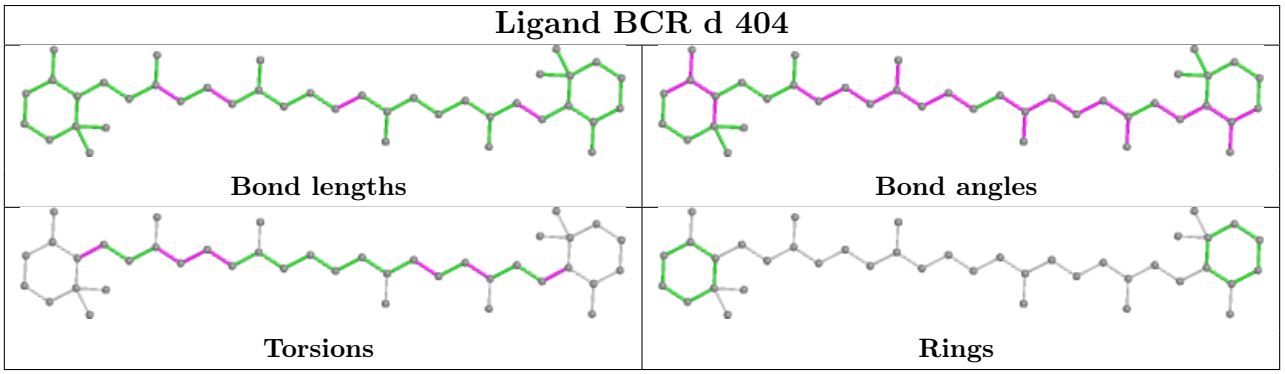


Ligand SQD c1 526



Ligand BCR d 404



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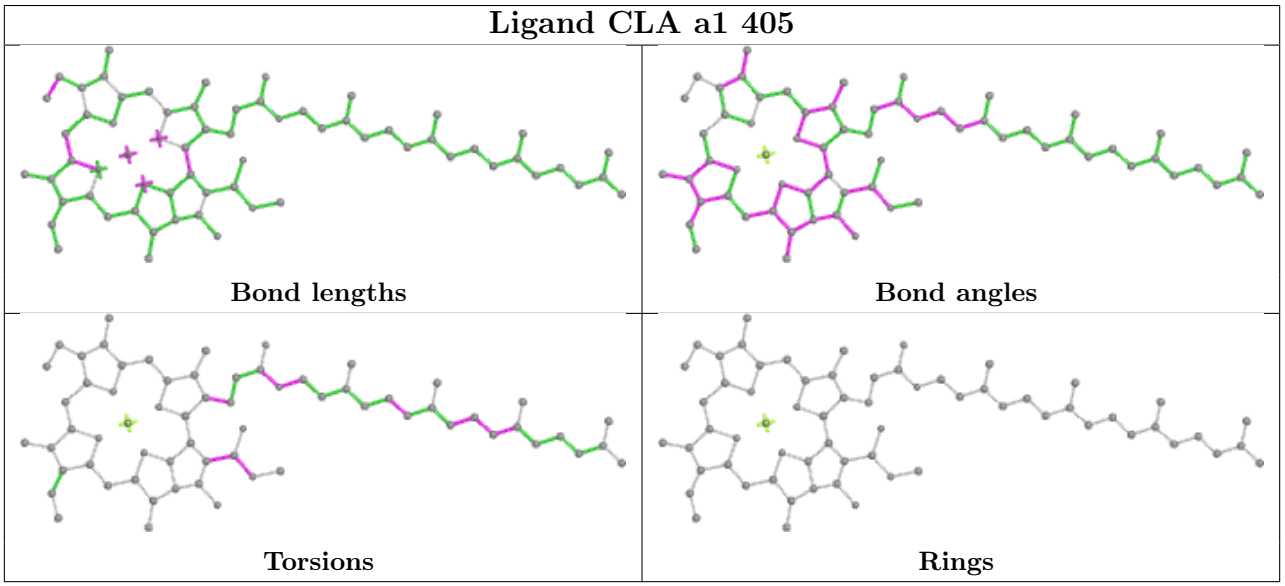
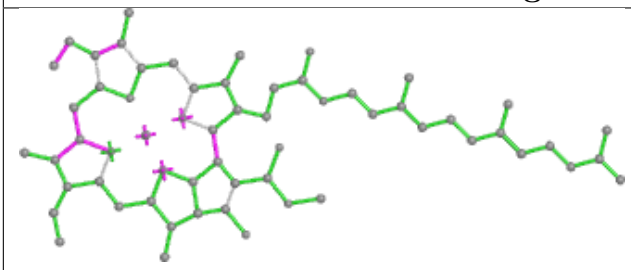
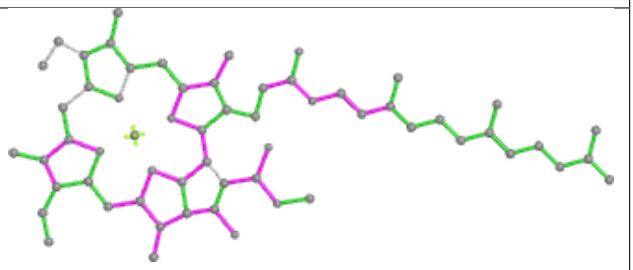


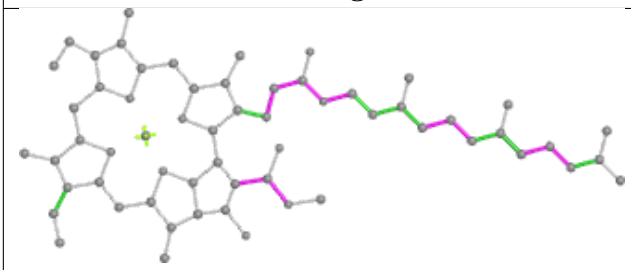
Ligand CLA R 612



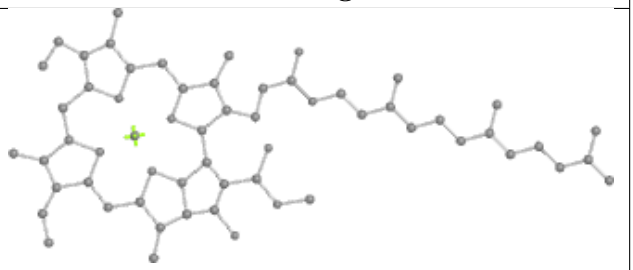
Bond lengths



Bond angles

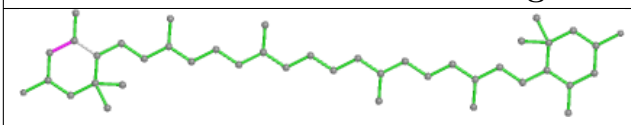


Torsions

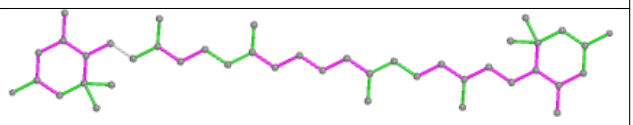


Rings

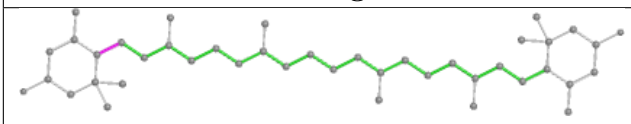
Ligand LUT S 621



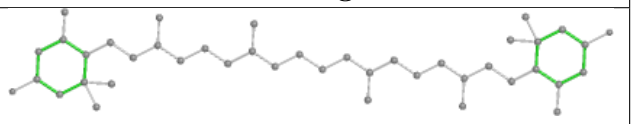
Bond lengths



Bond angles

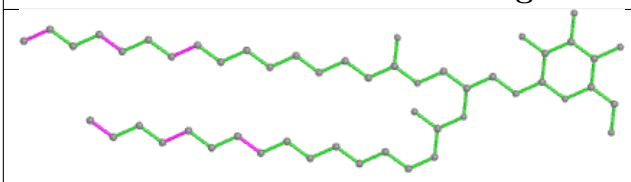


Torsions



Rings

Ligand LMG c1 521



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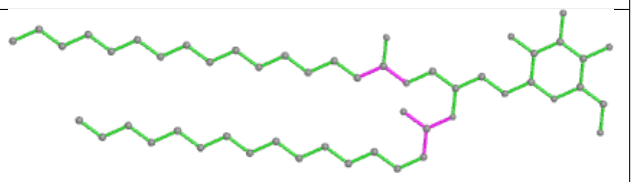
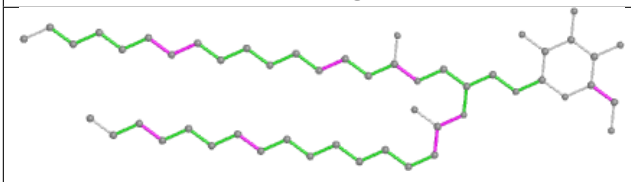
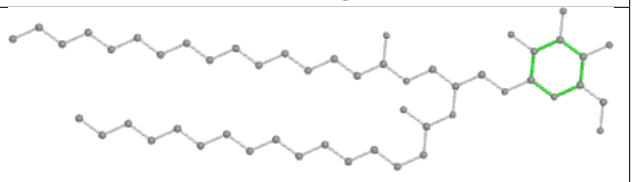


Bond angles

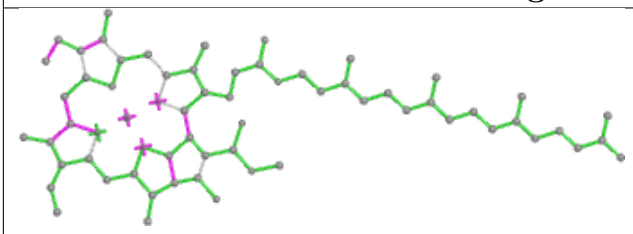


Torsions

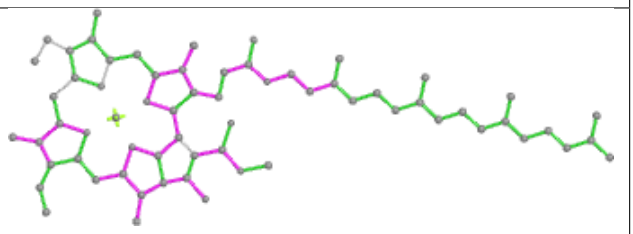


Rings

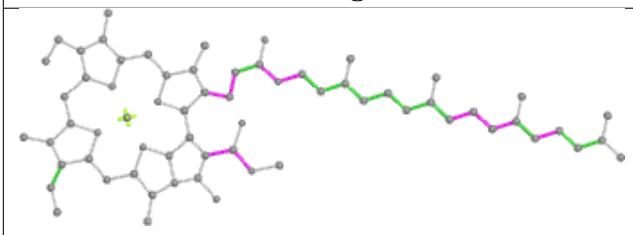
Ligand CLA S 610



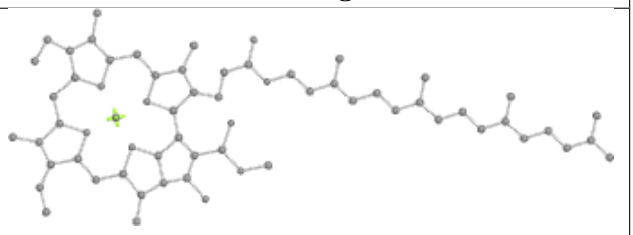
Bond lengths



Bond angles

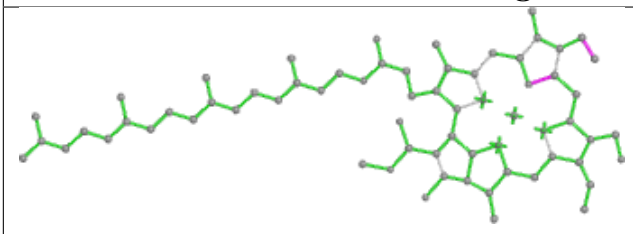


Torsions

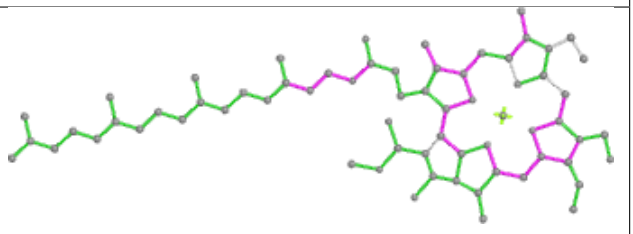


Rings

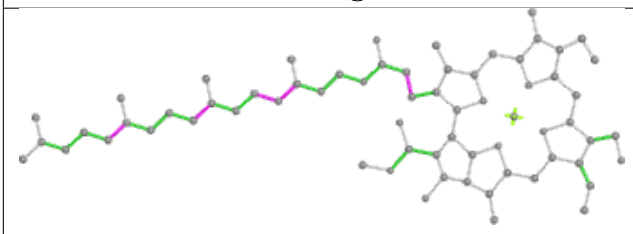
Ligand CHL Y1 607



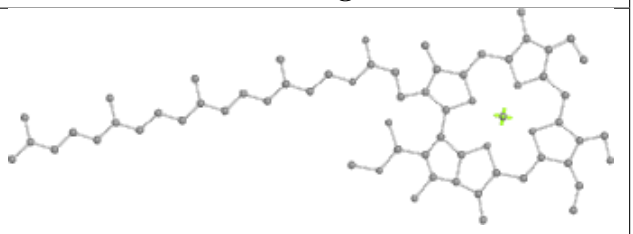
Bond lengths



Bond angles

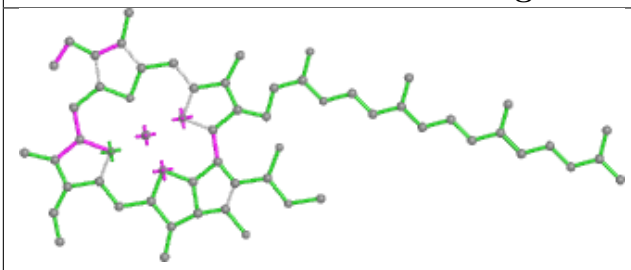


Torsions

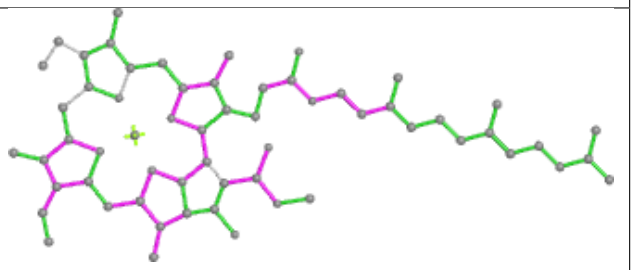


Rings

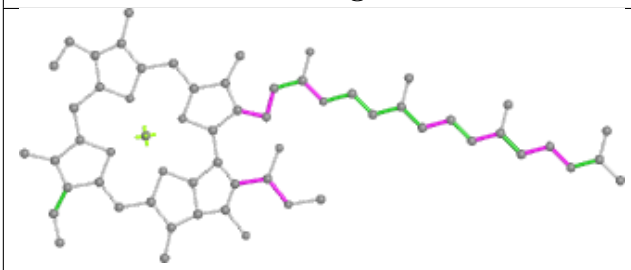
Ligand CLA R1 602



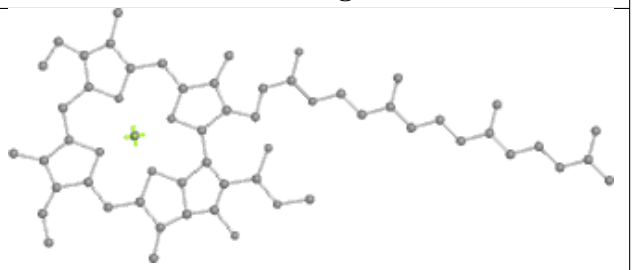
Bond lengths



Bond angles

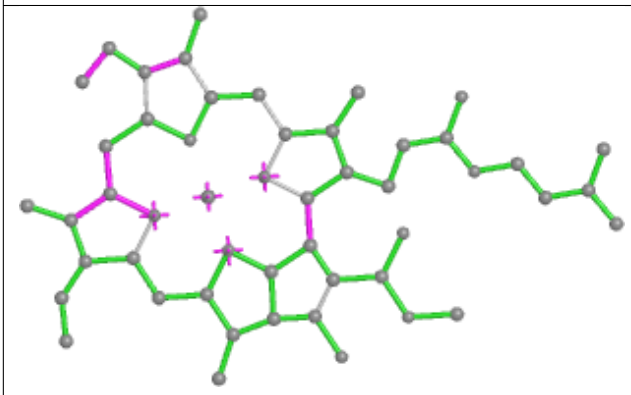


Torsions

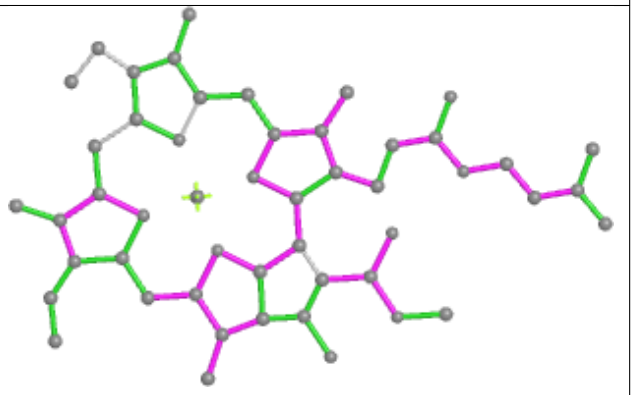


Rings

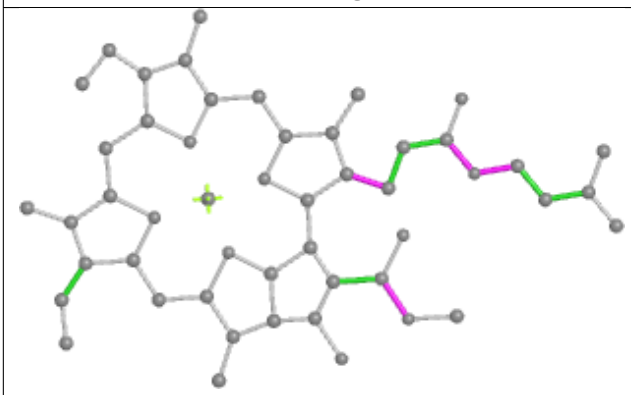
Ligand CLA Y 608



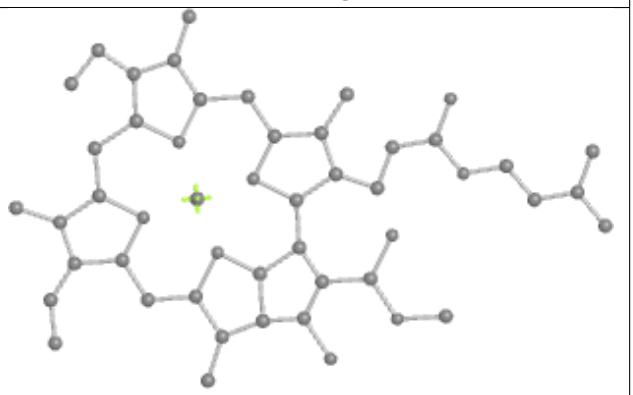
Bond lengths



Bond angles

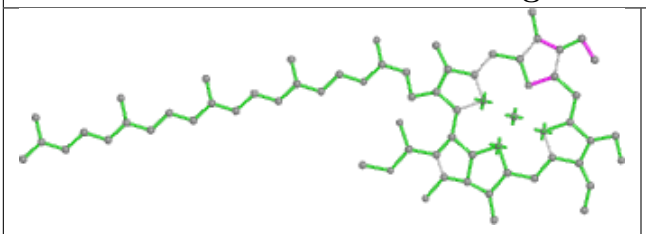


Torsions

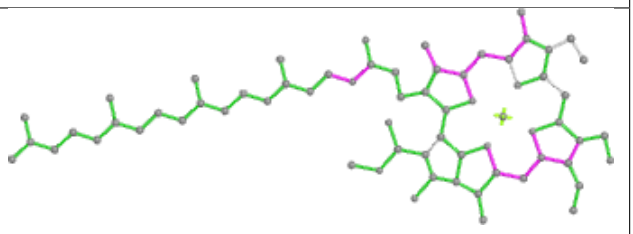


Rings

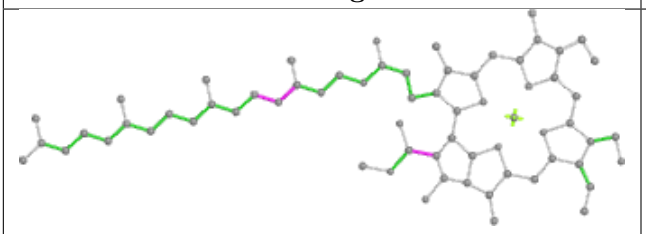
Ligand CHL N 601



Bond lengths



Bond angles



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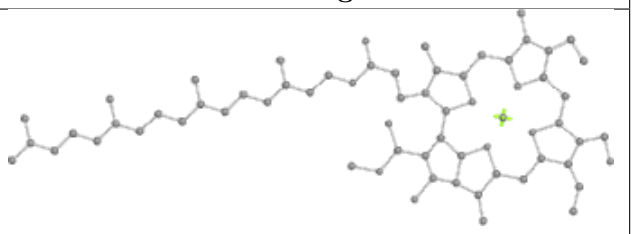
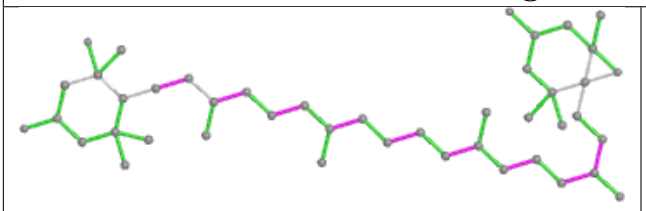


Rings

Ligand NEX Y 623



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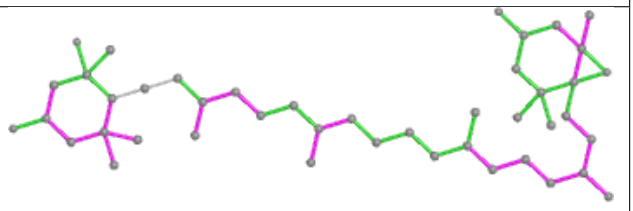
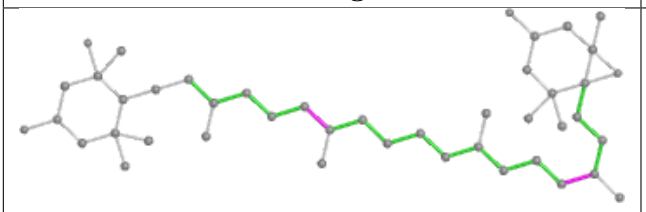


Bond angles



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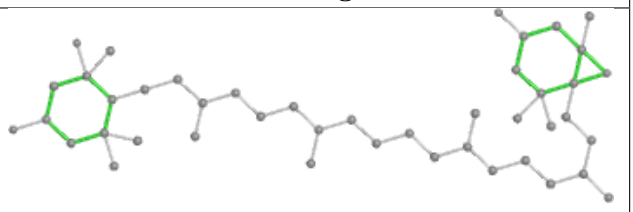
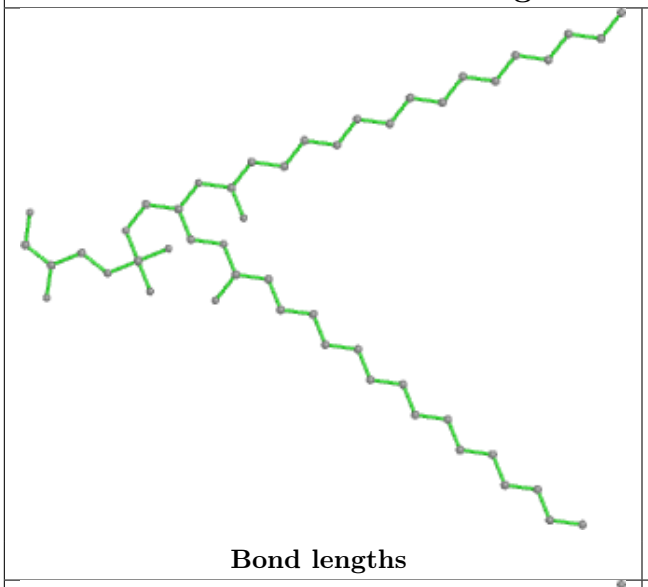


Rings

Ligand LHG D1 409



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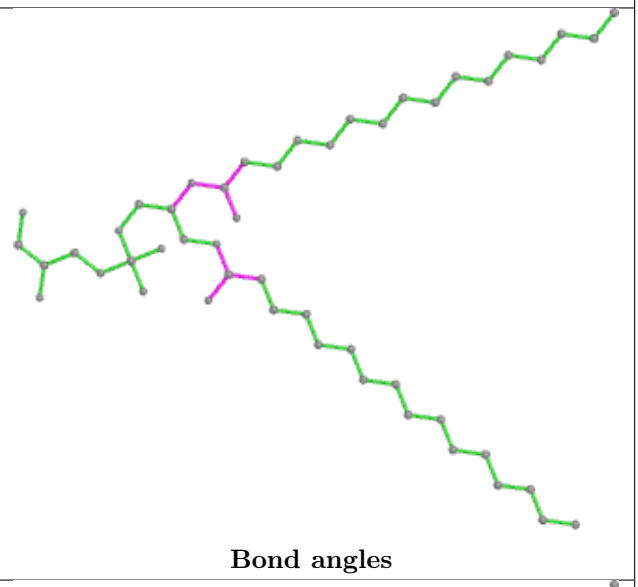

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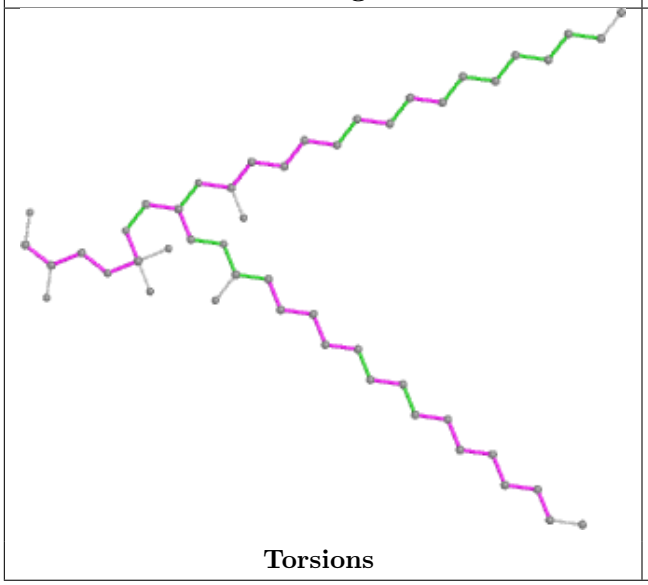

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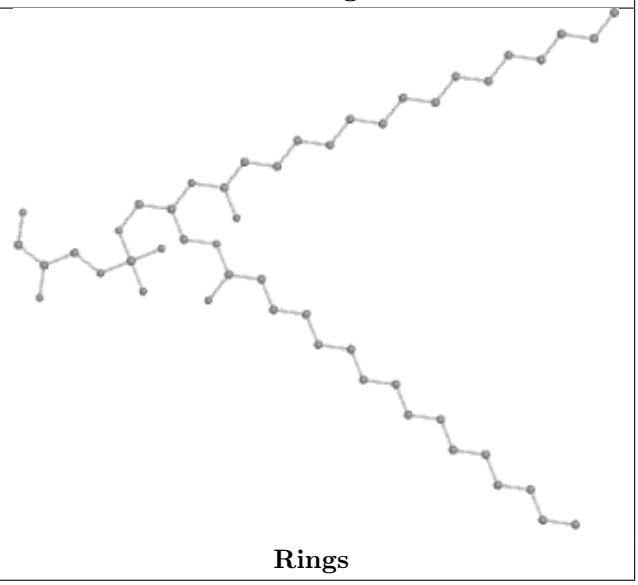
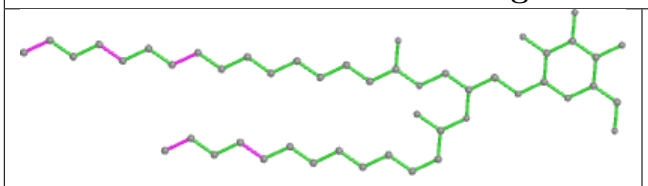


Rings

Ligand LMG A1 413



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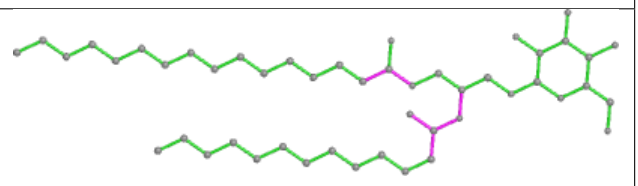

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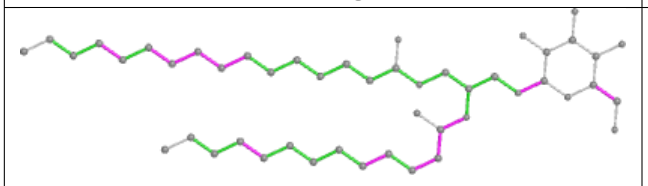

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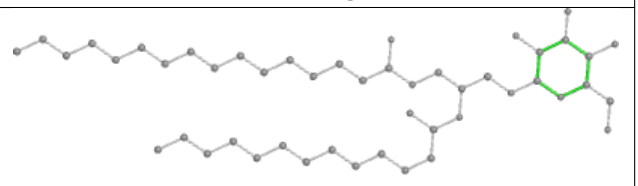
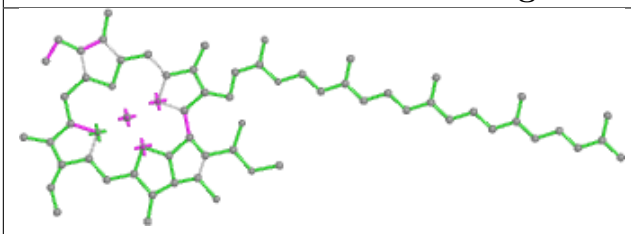


Rings

Ligand CLA b1 605



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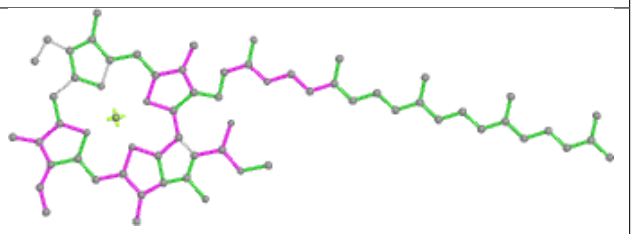
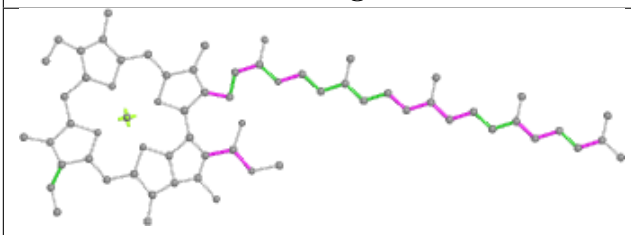


Bond angles



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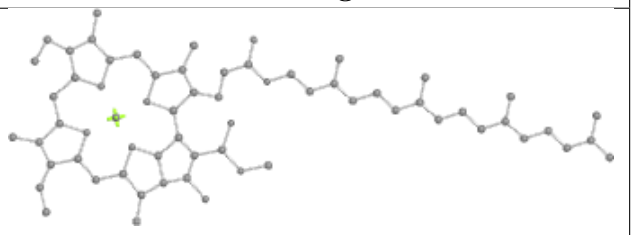
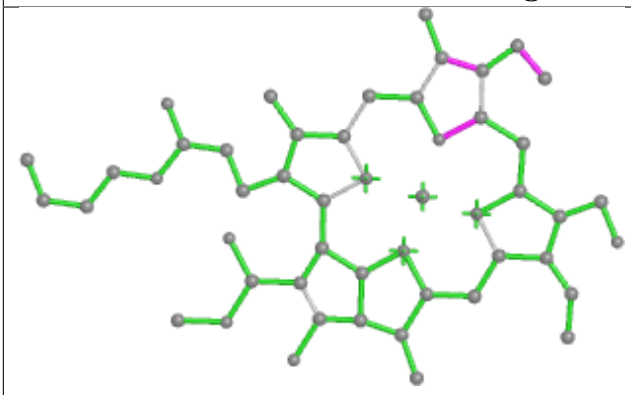


Rings

Ligand CHL G 606



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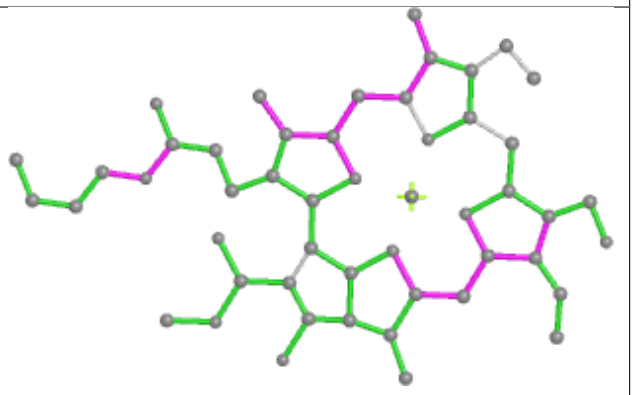
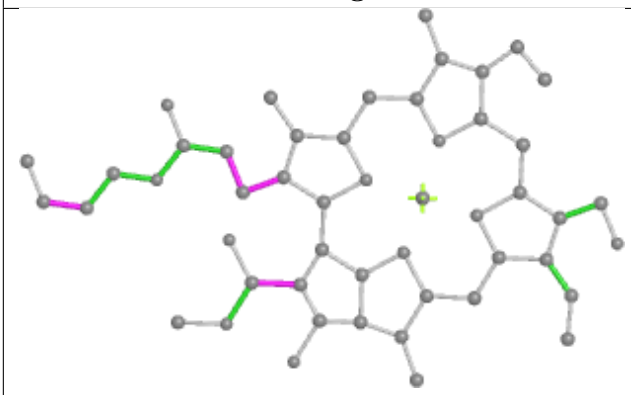


Bond angles



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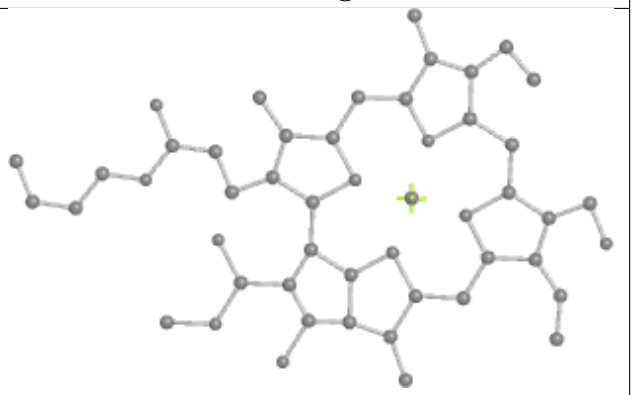
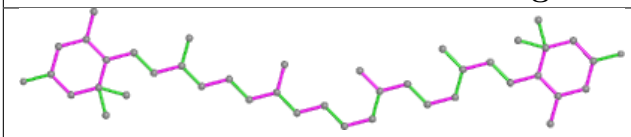
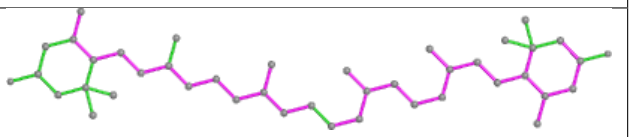
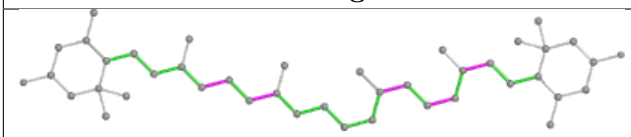
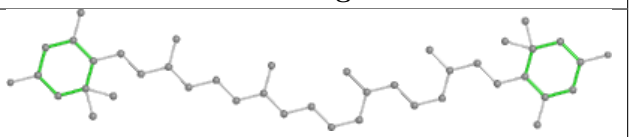
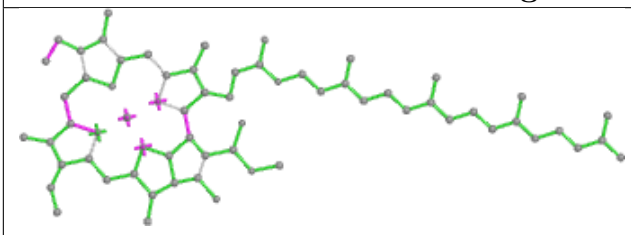
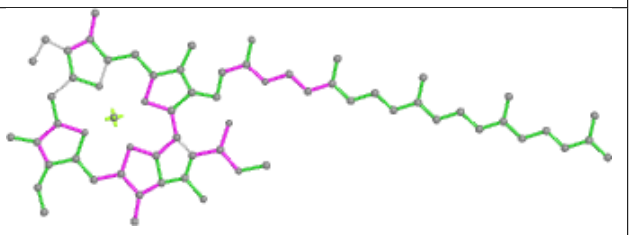
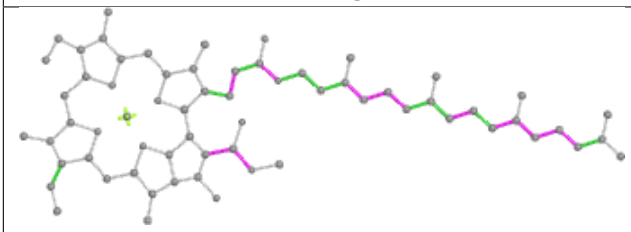
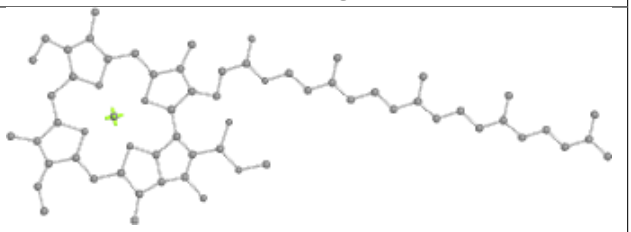
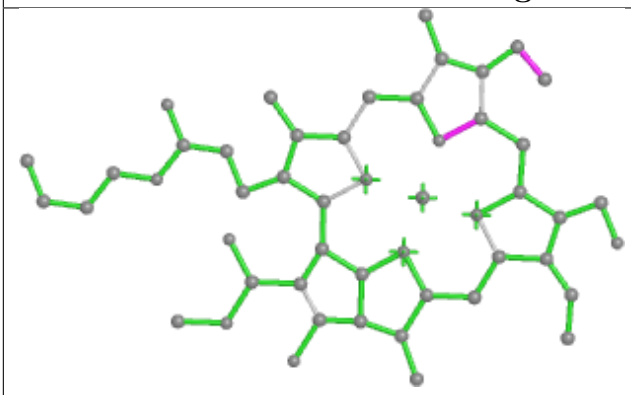


Rings

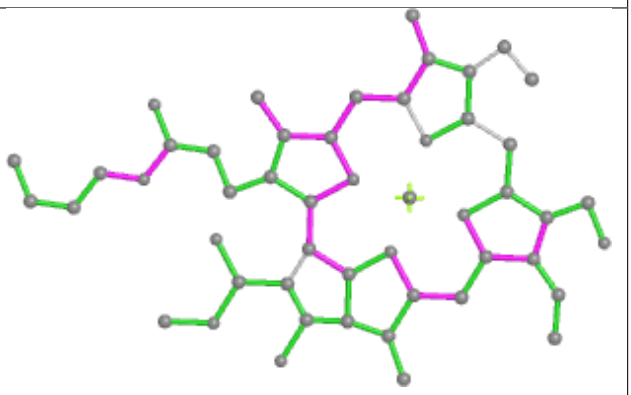
Ligand C7Z b 620	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA c1 510	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CHL R1 607



Bond lengths



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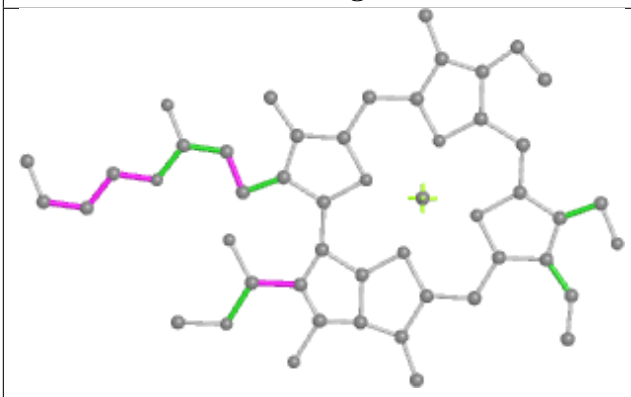

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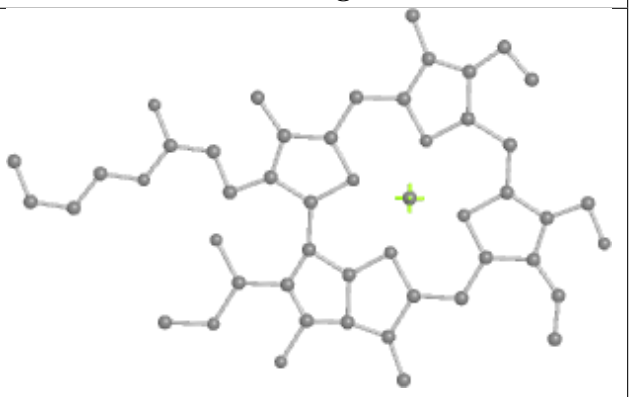
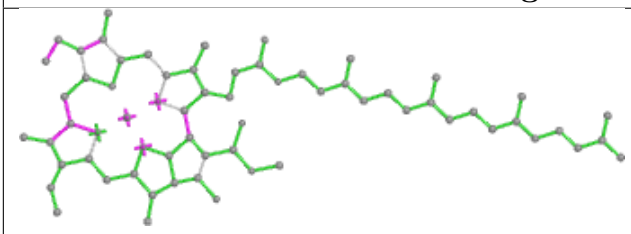


Rings

Ligand CLA s1 611



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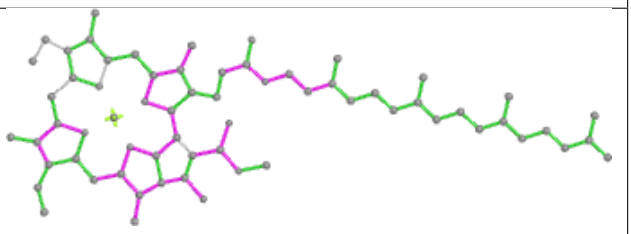

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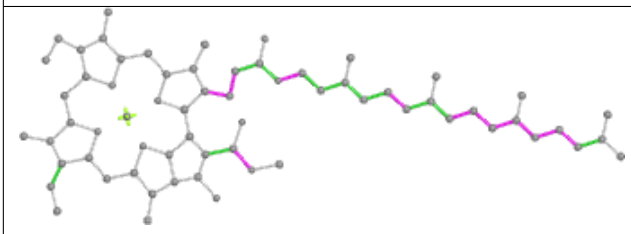

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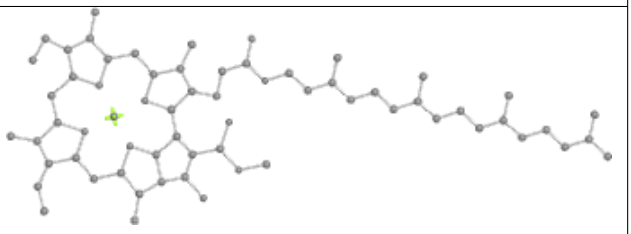
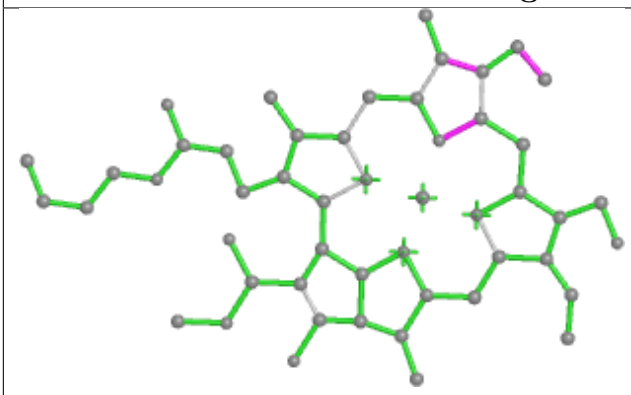


Rings

Ligand CHL r1 607



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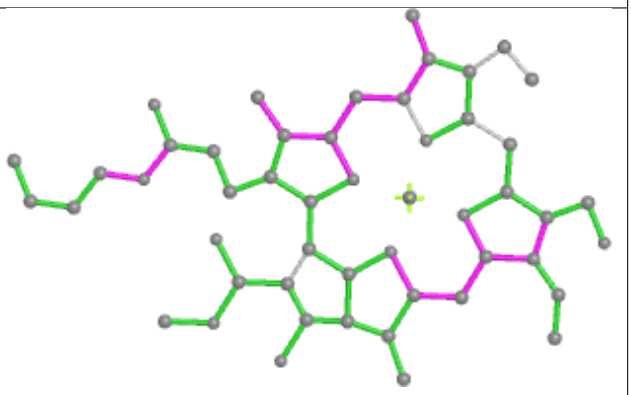
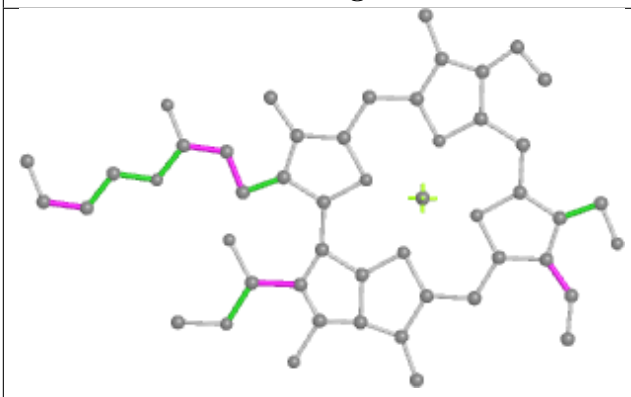


Bond angles



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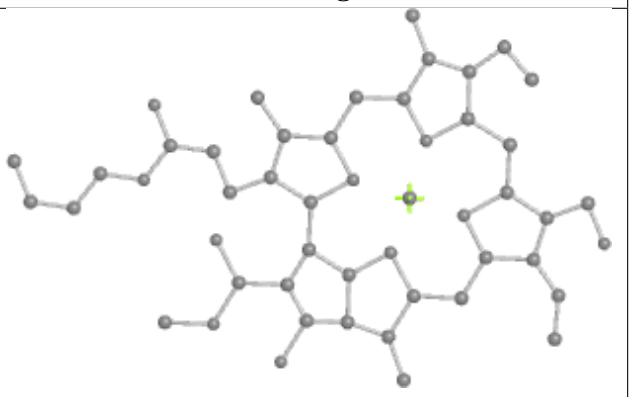
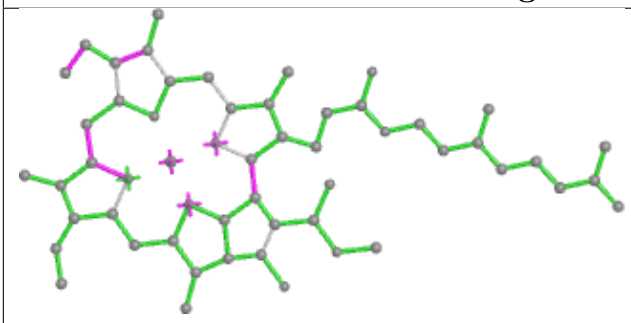


Rings

Ligand CLA S1 614



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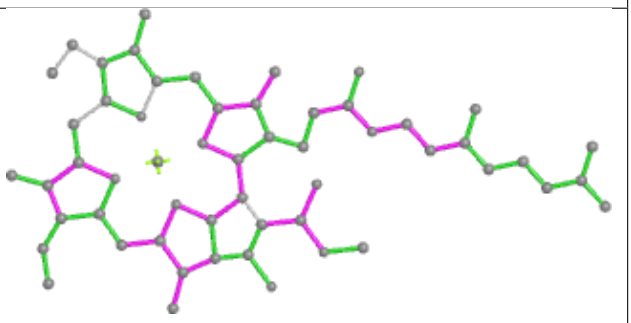
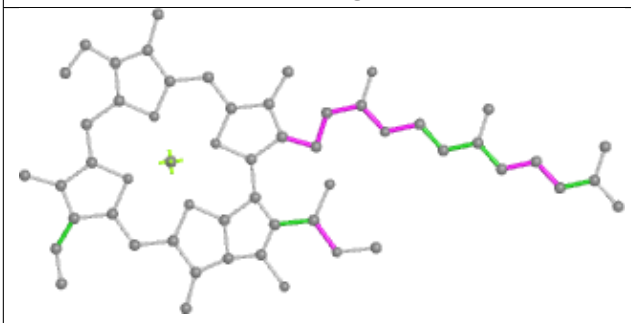


Bond angles



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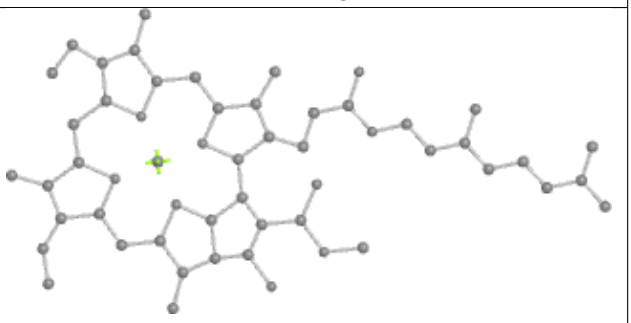
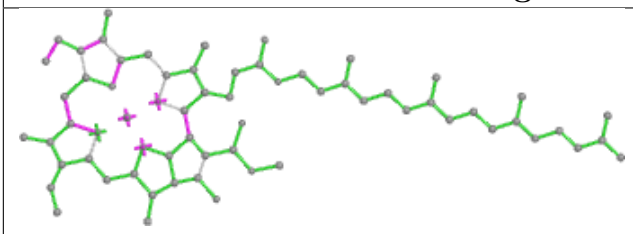


Rings

Ligand CLA G1 610



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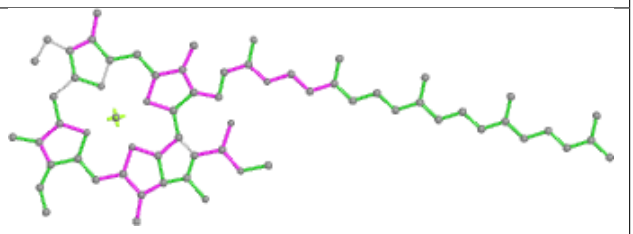
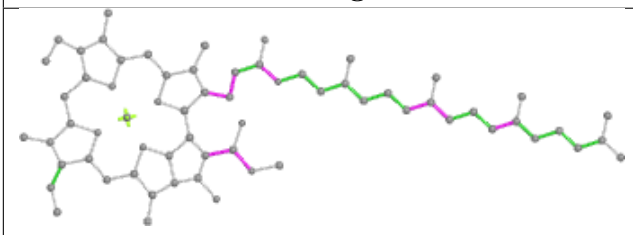


Bond angles



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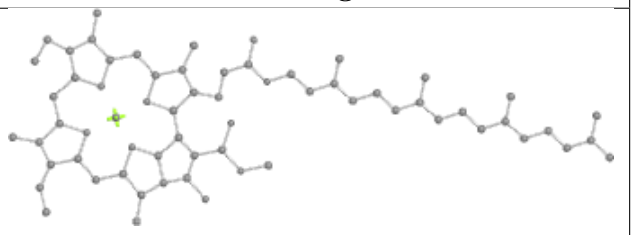
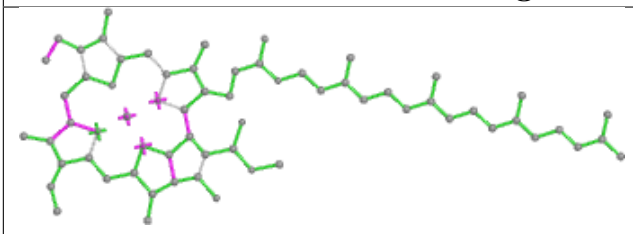


Rings

Ligand CLA C1 503



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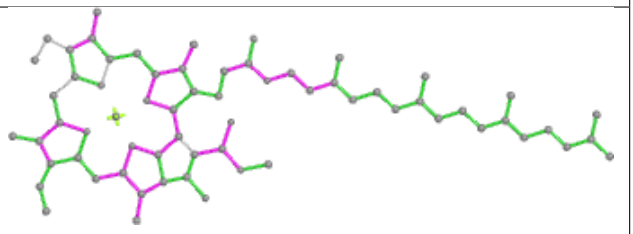
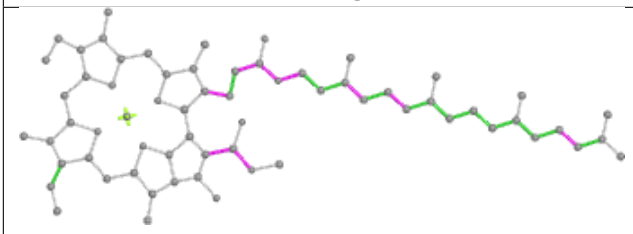


Bond angles



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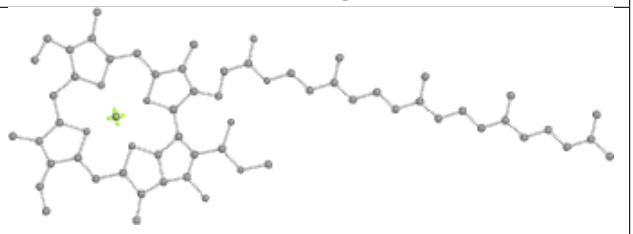
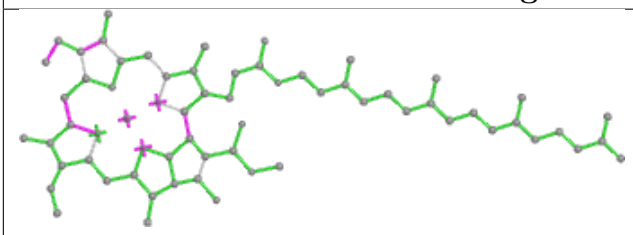
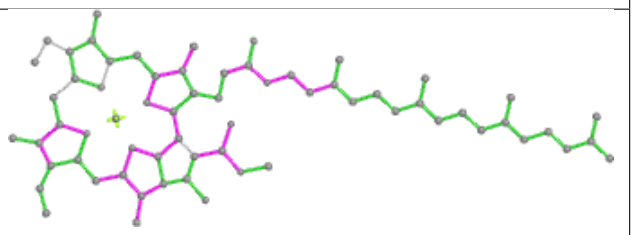


Rings

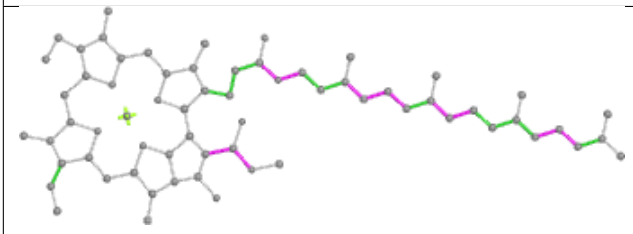
Ligand CLA c1 506



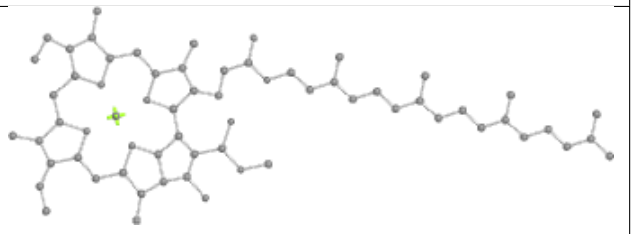
Bond lengths



Bond angles

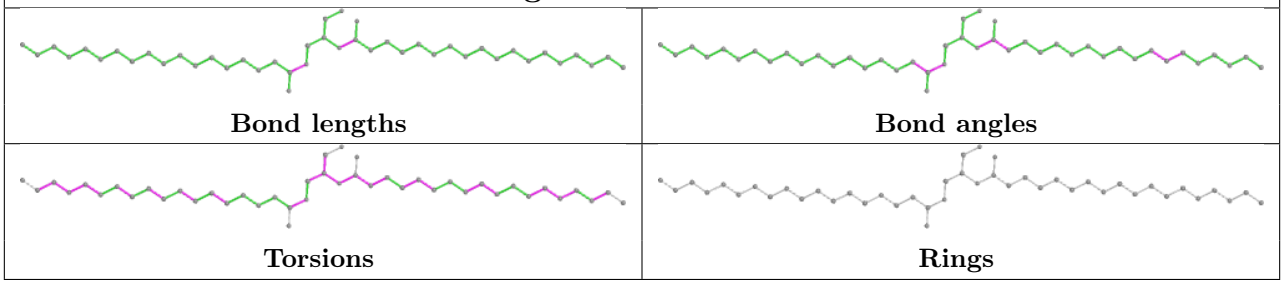


Torsions

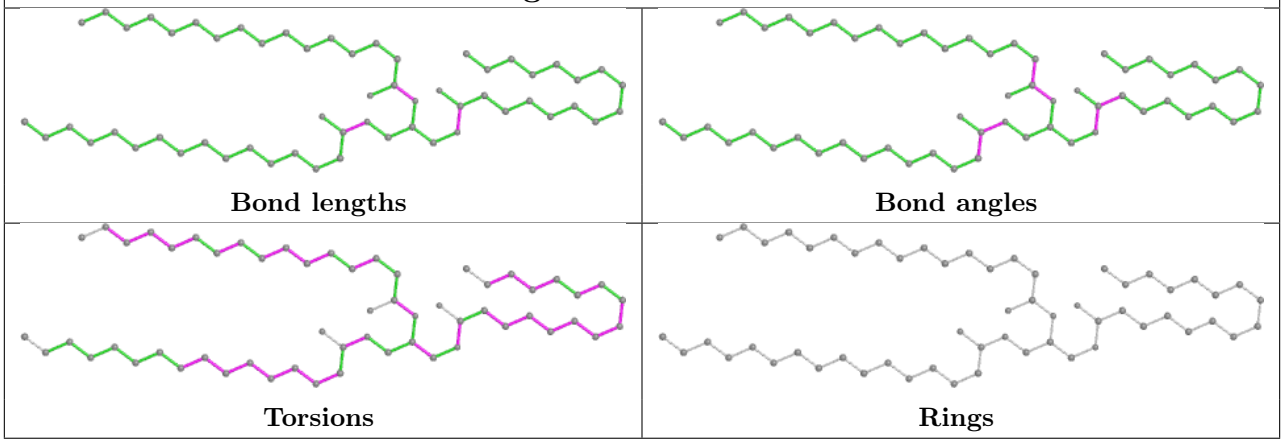


Rings

Ligand DGA b 623



Ligand 4RF k1 101



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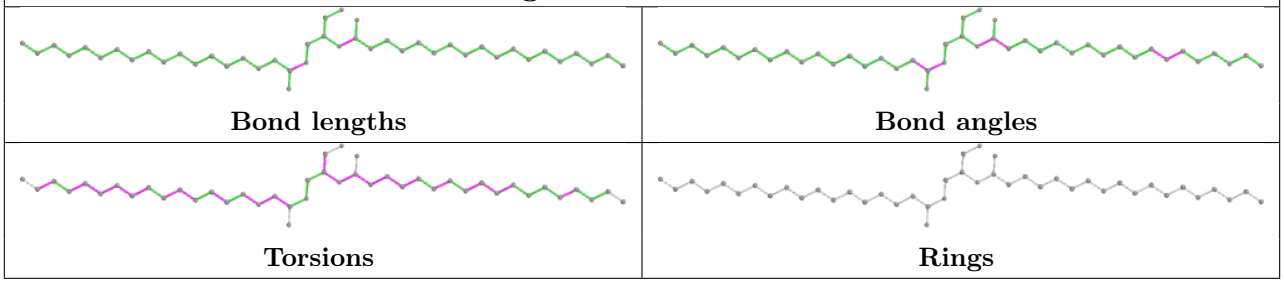
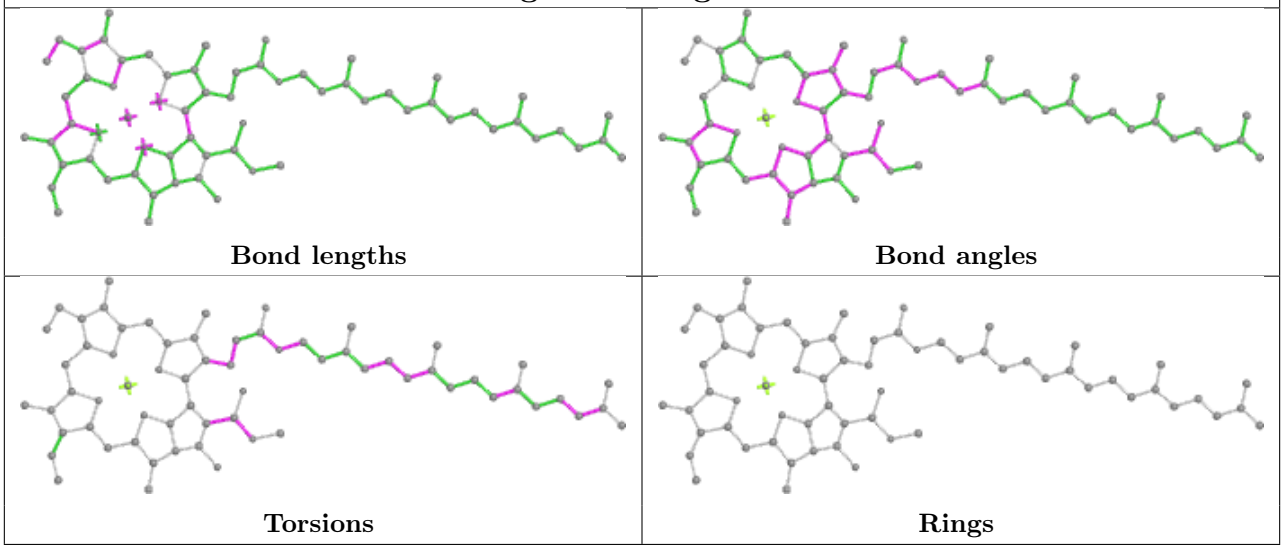
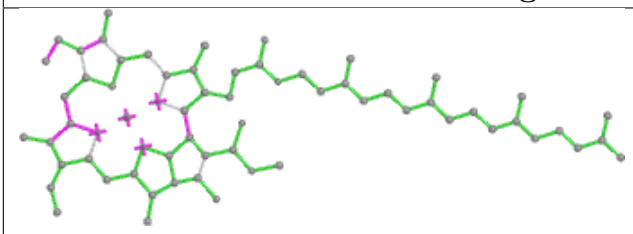


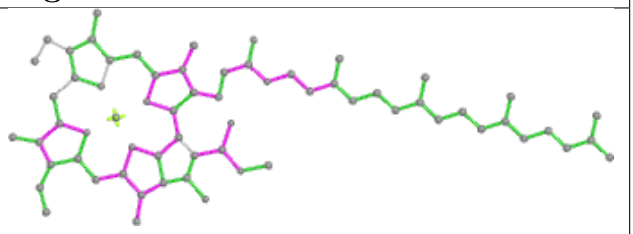
Ligand CLA g1 611



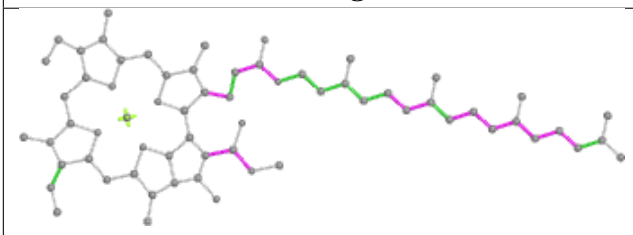
Ligand CLA g1 603



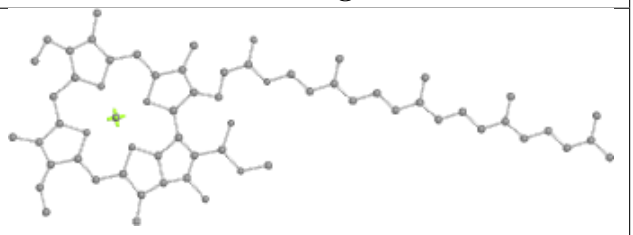
Bond lengths



Bond angles

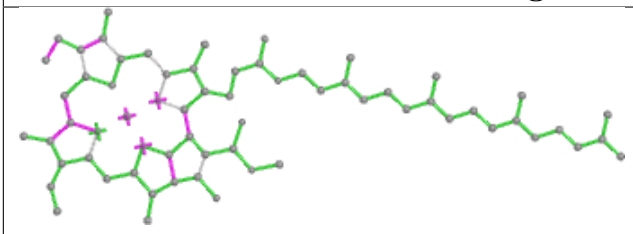


Torsions



Rings

Ligand CLA b 602



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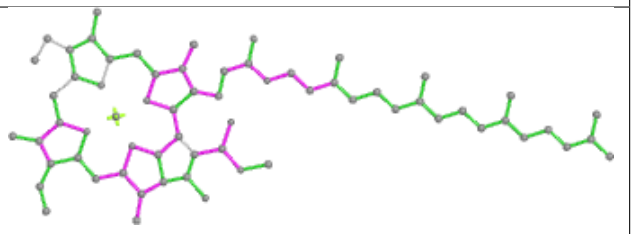
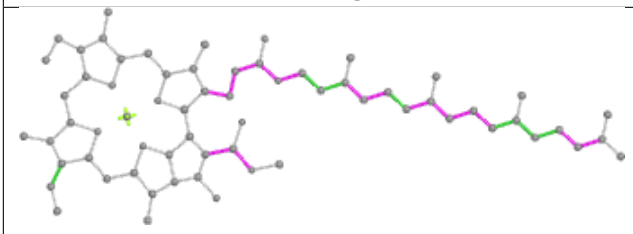


Bond angles



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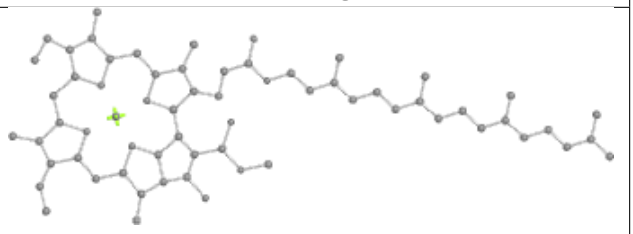
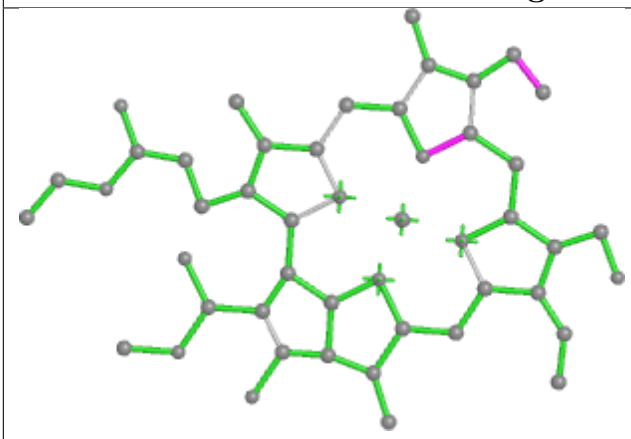
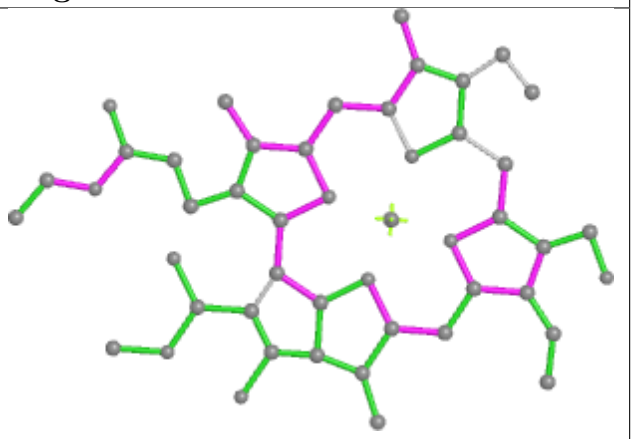


Rings

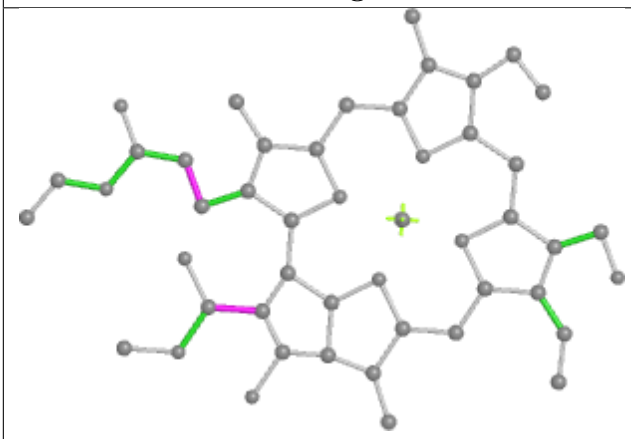
Ligand CHL g 605



Bond lengths



Bond angles



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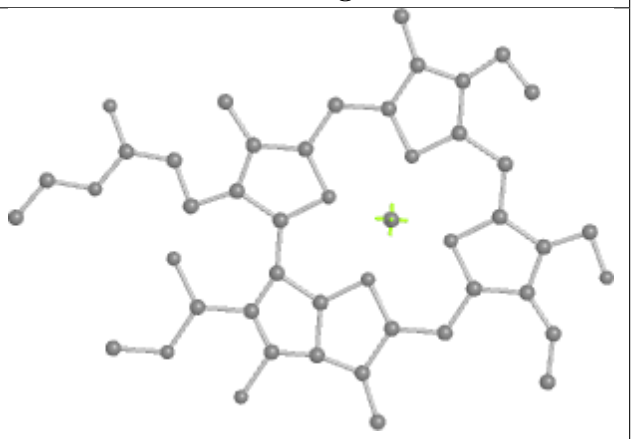
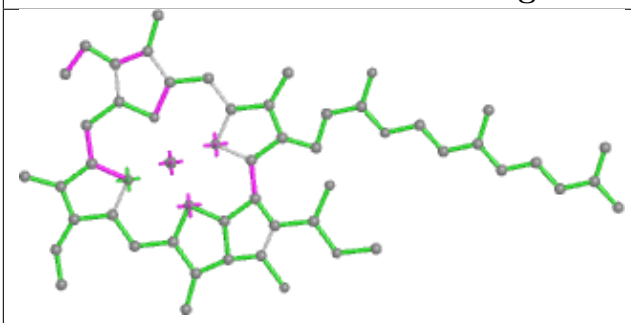


Rings

Ligand CLA S1 613



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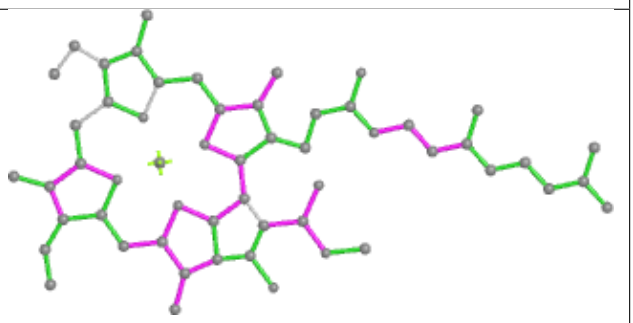
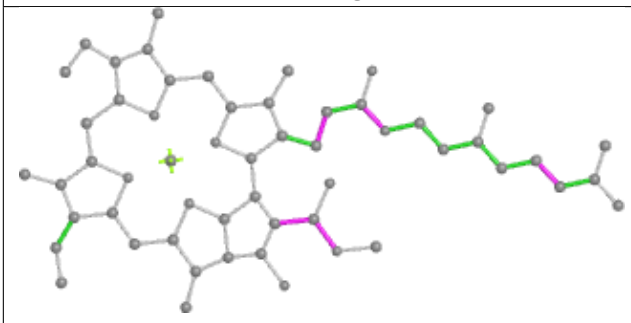


Bond angles



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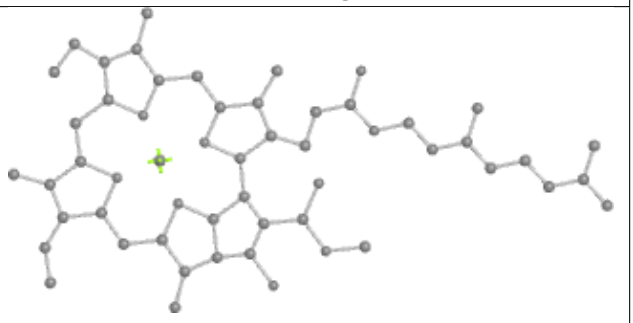
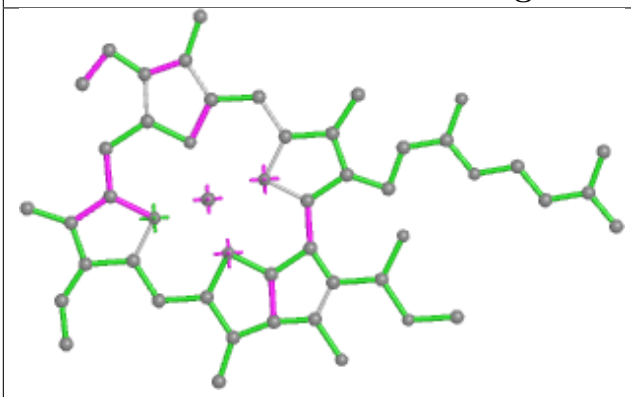


Rings

Ligand CLA Y1 608



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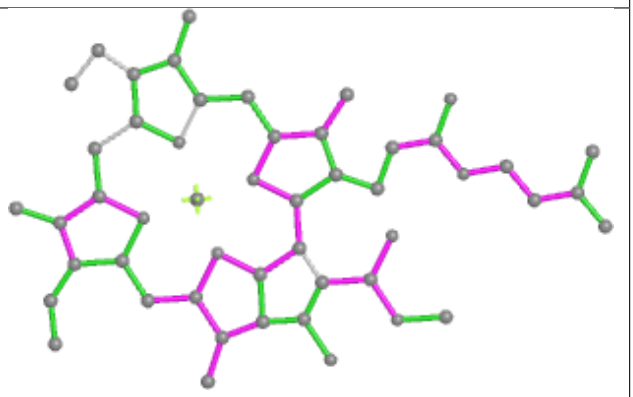
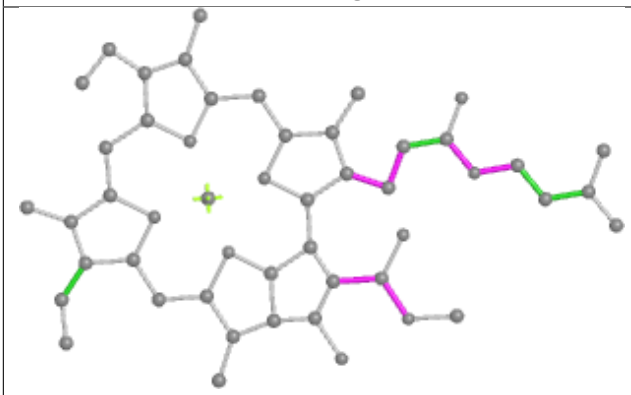


Bond angles



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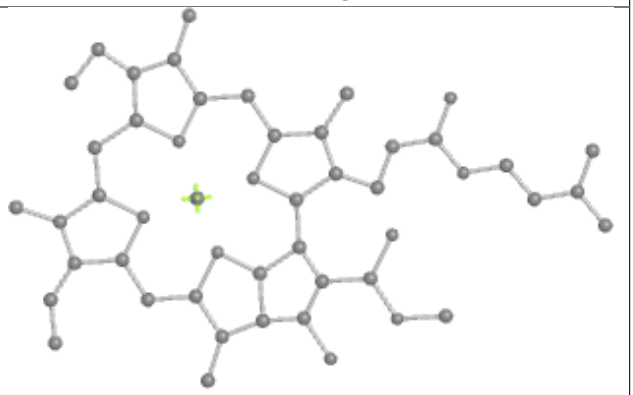
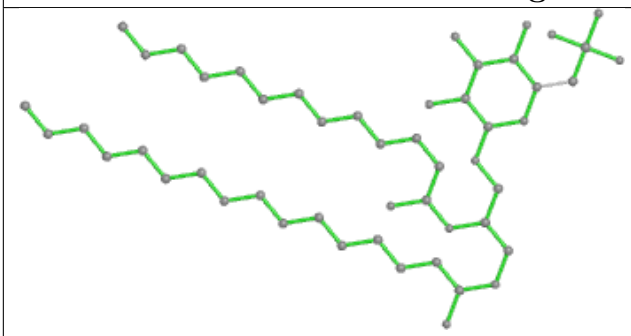


Rings

Ligand SQD a 412



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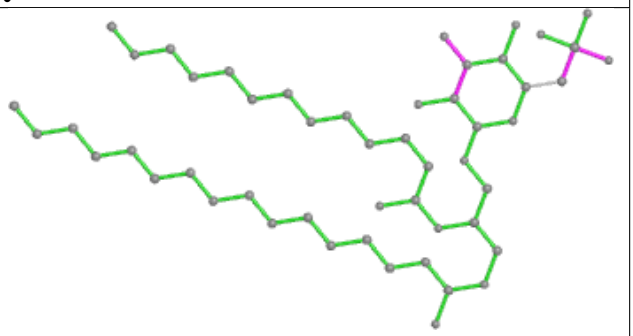
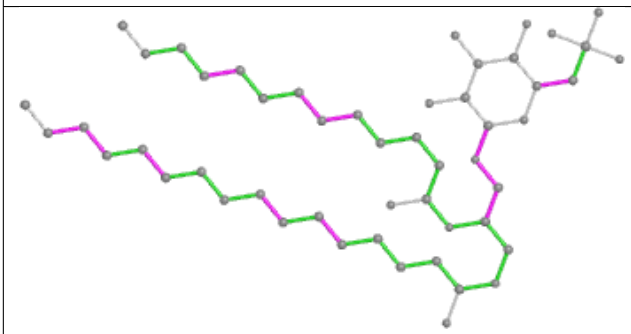


Bond angles



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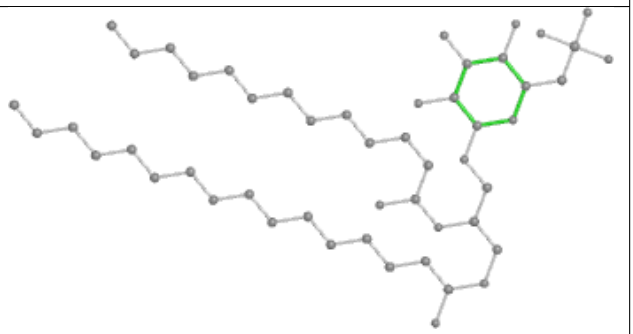
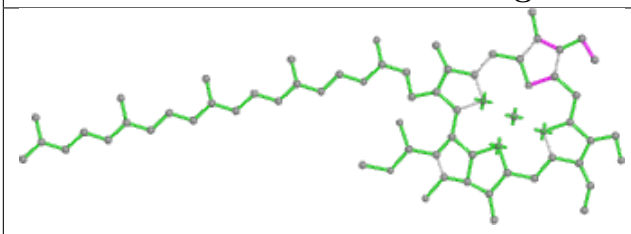


Rings

Ligand CHL Y1 609



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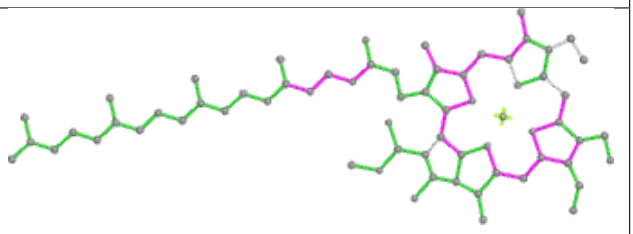
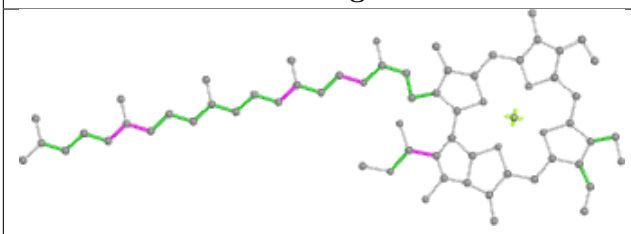


Bond angles



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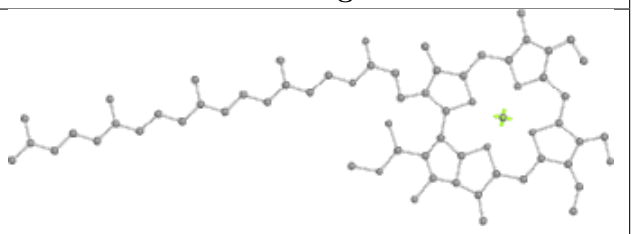
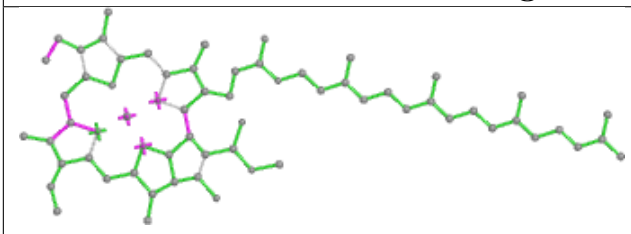


Rings

Ligand CLA y1 602



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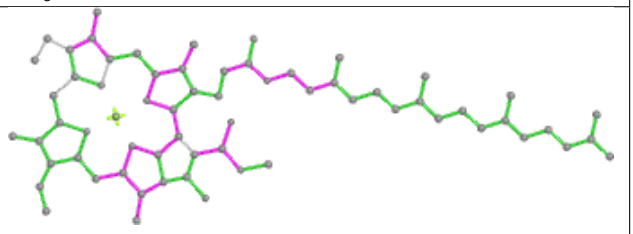
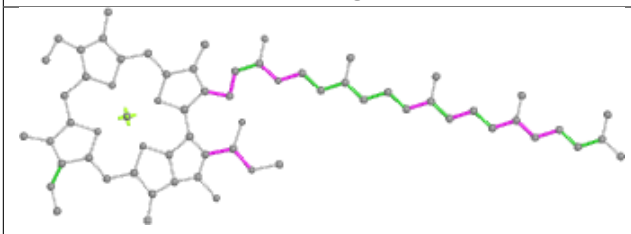


Bond angles



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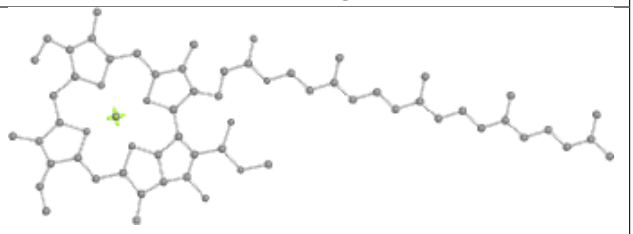
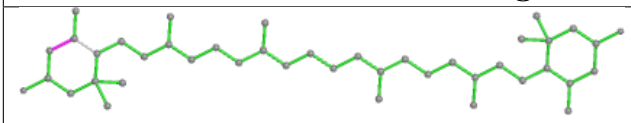


Rings

Ligand LUT N1 620



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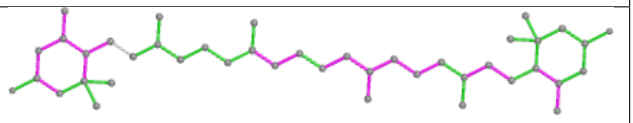
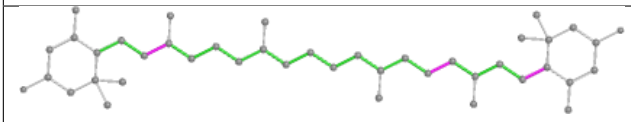


Bond angles



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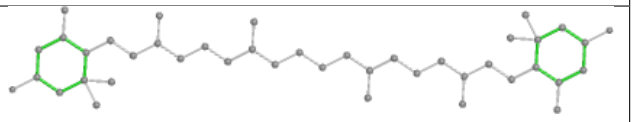
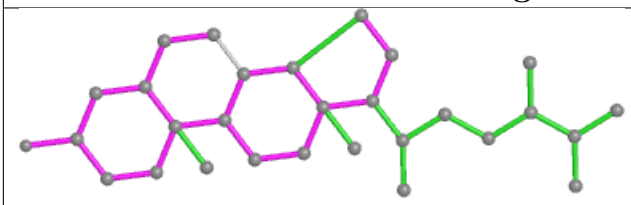
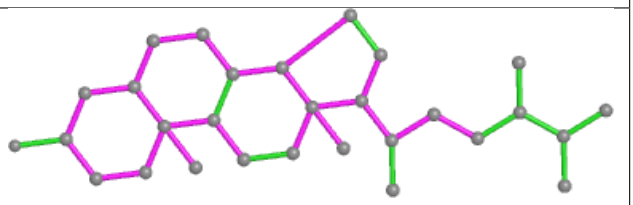


Rings

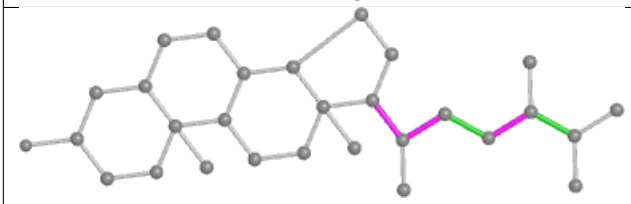
Ligand ERG R1 626



Bond lengths



Bond angles



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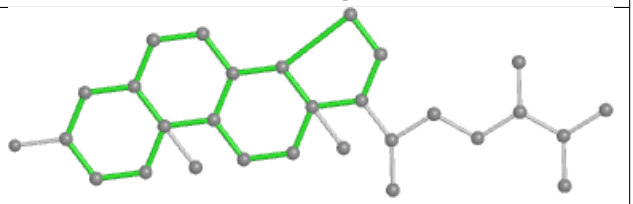
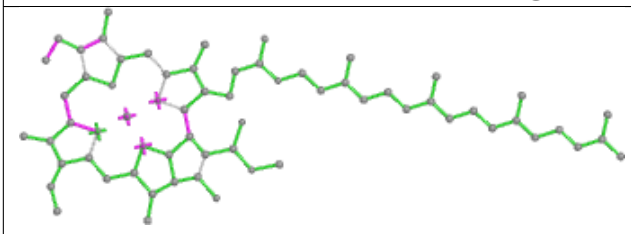


Rings

Ligand CLA b 608



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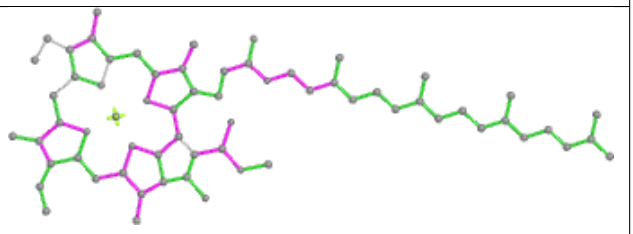
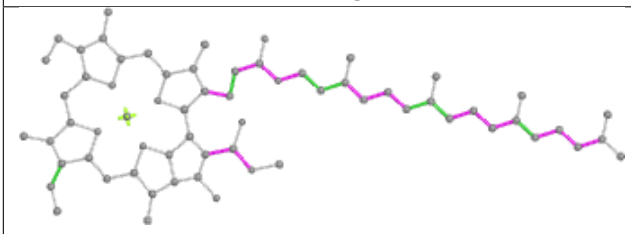
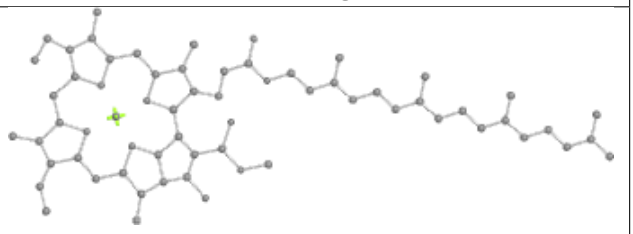


Bond angles

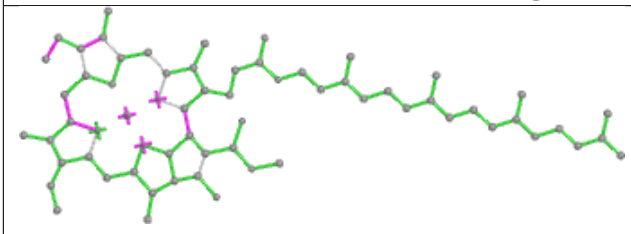


Torsions

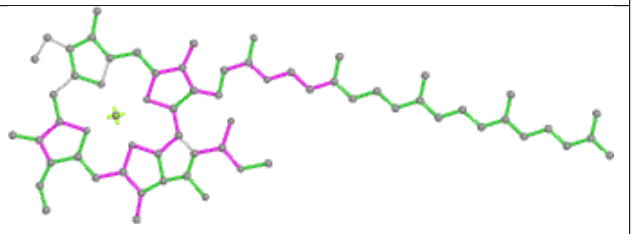


Rings

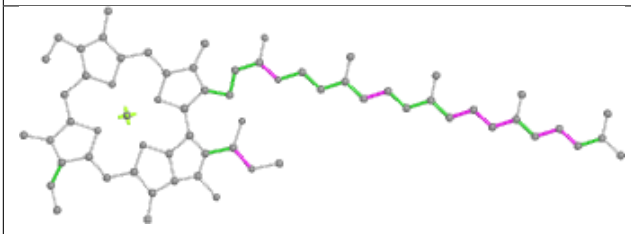
Ligand CLA d 403



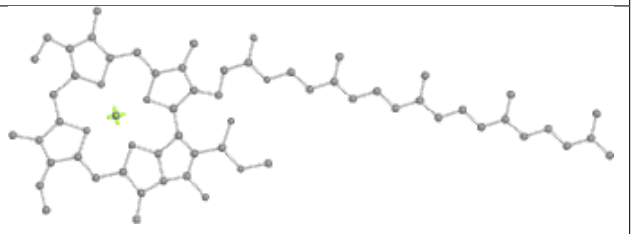
Bond lengths



Bond angles

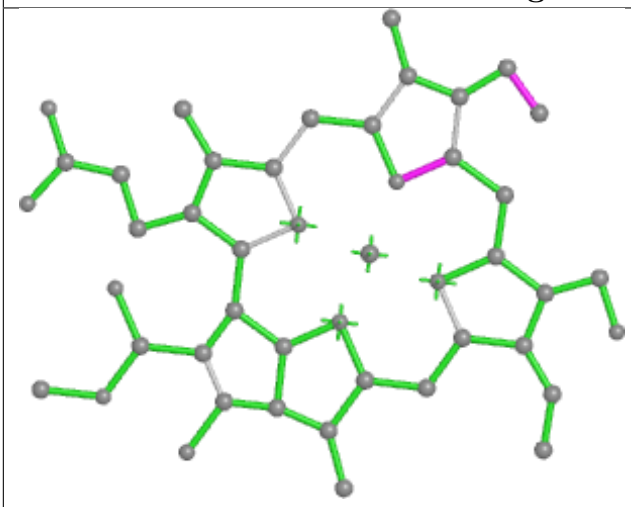


Torsions

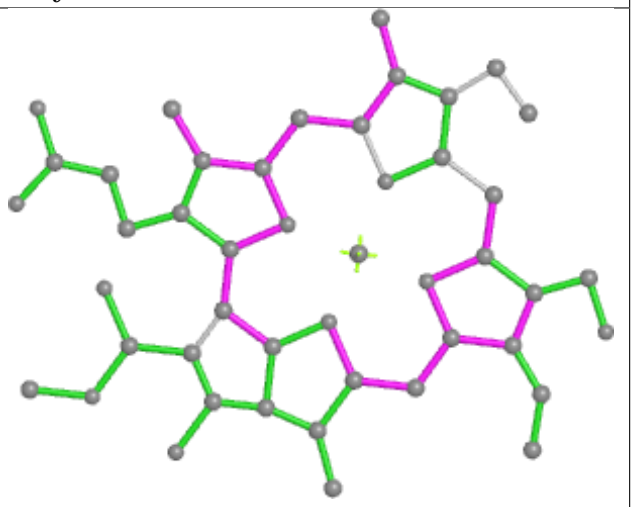


Rings

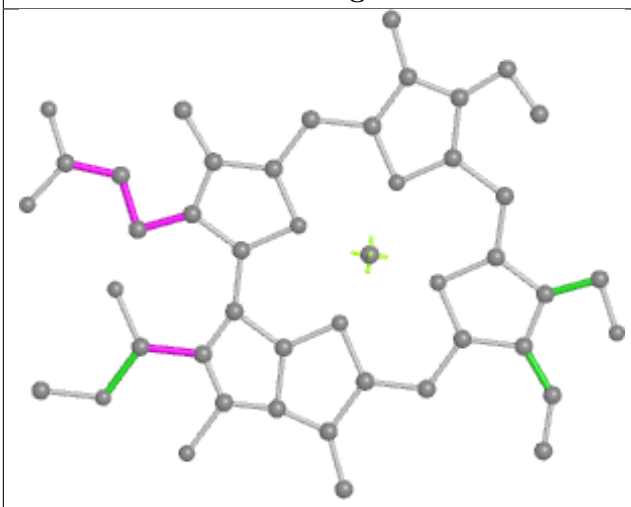
Ligand CHL y 605



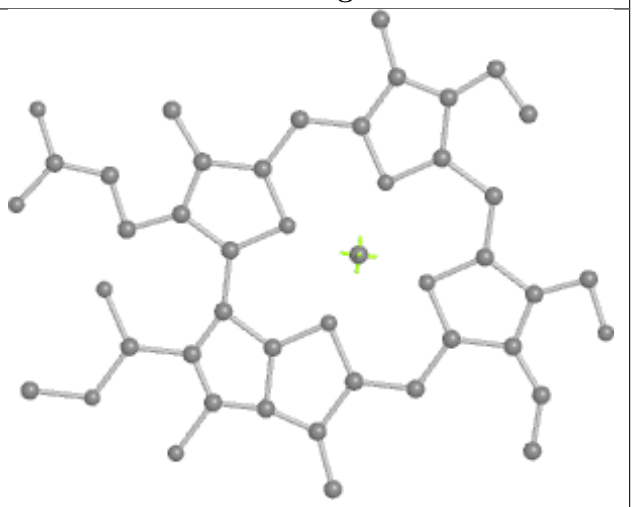
Bond lengths



Bond angles

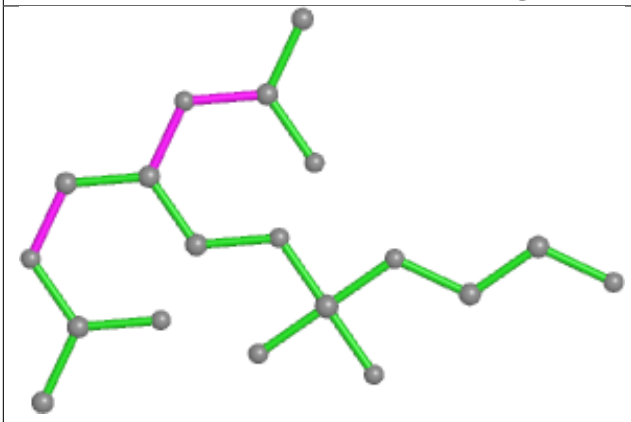


Torsions



Rings

Ligand PTY Y1 627



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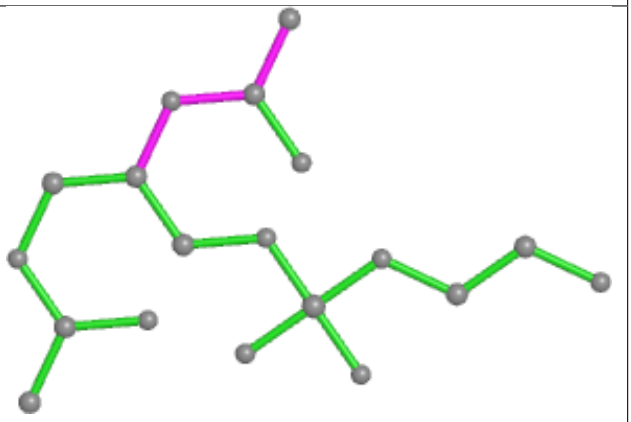
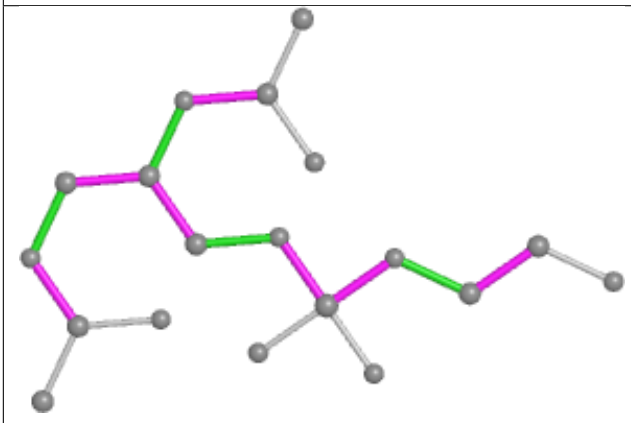
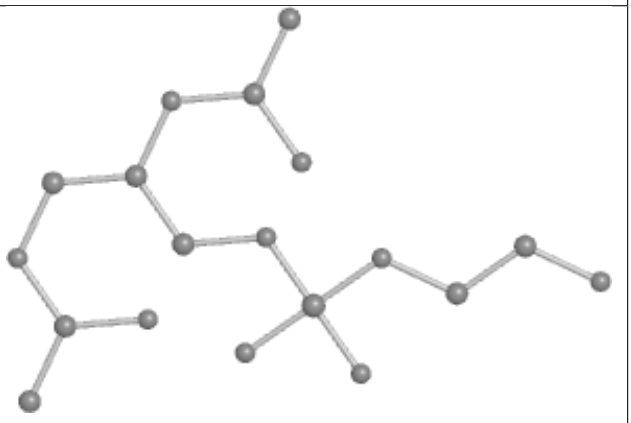


Bond angles

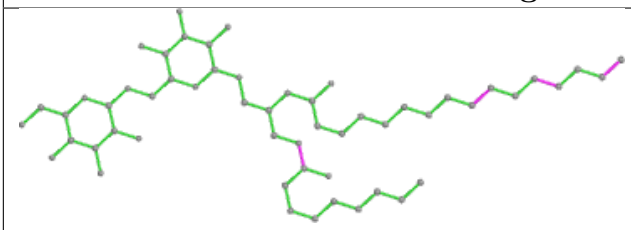


Torsions



Rings

Ligand DGD C 518



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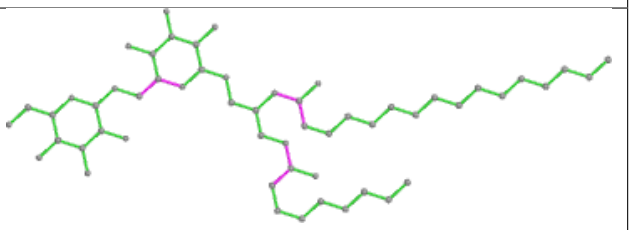
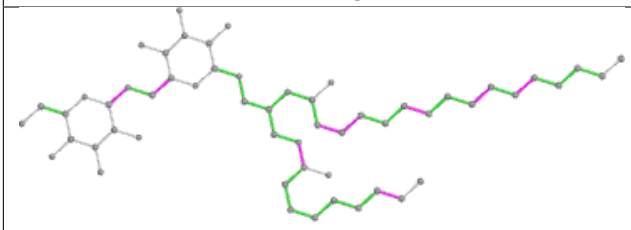
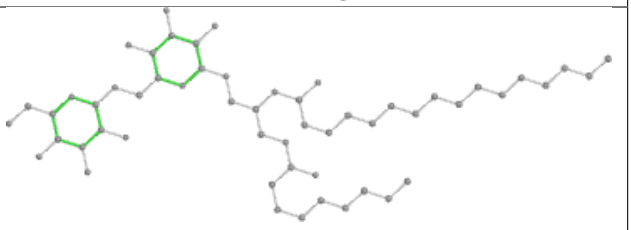


Bond angles

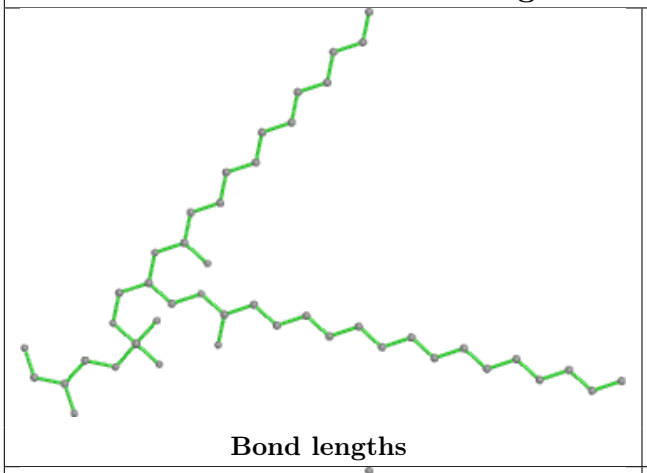


Torsions



Rings

Ligand LHG S1 624



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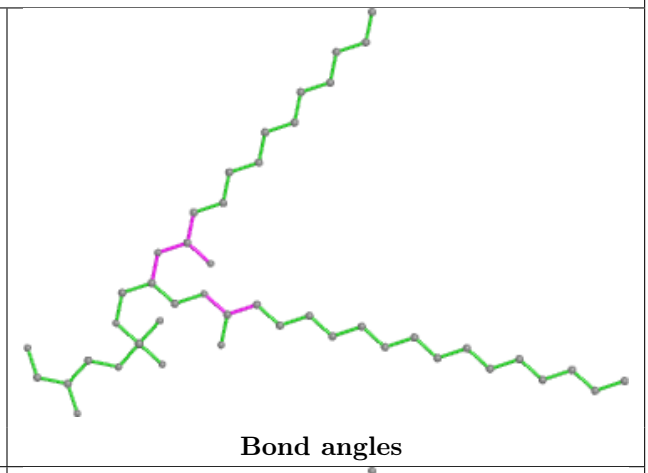
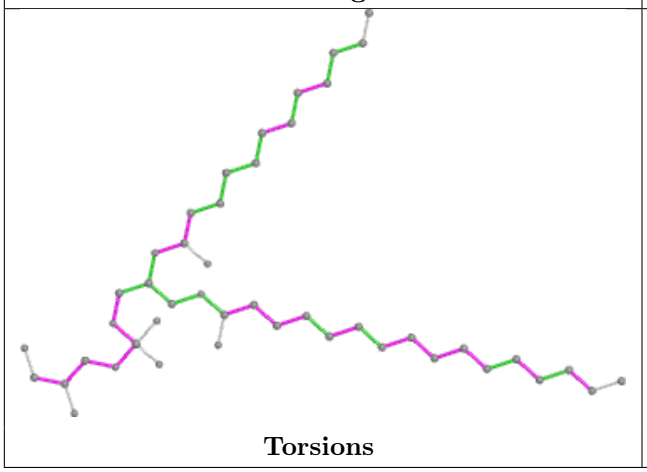
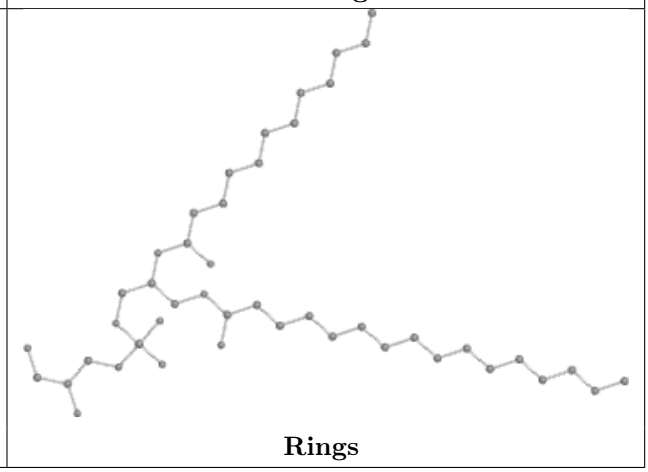


Bond angles

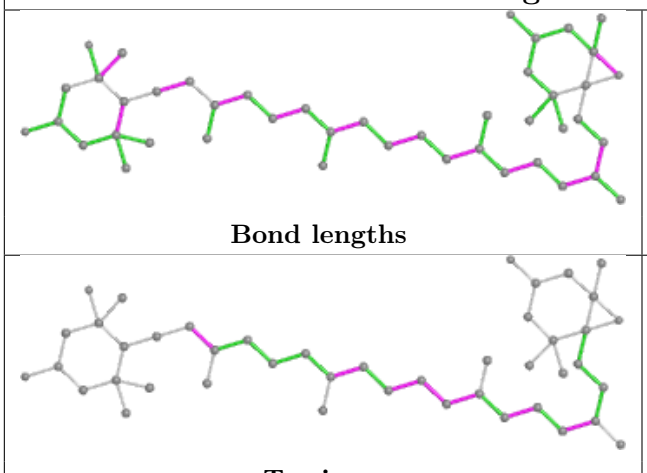


Torsions



Rings

Ligand NEX R 622



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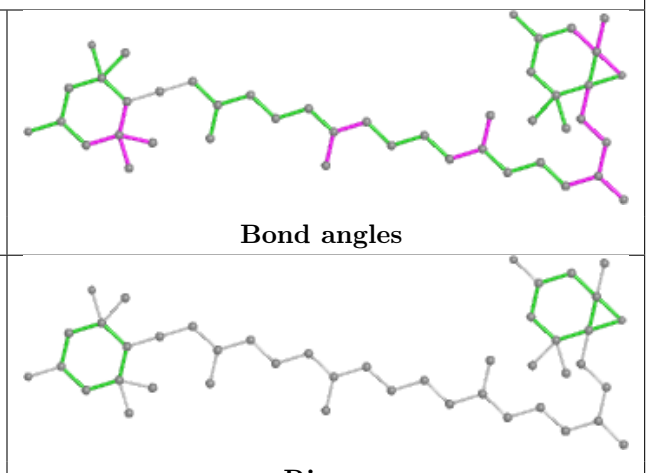
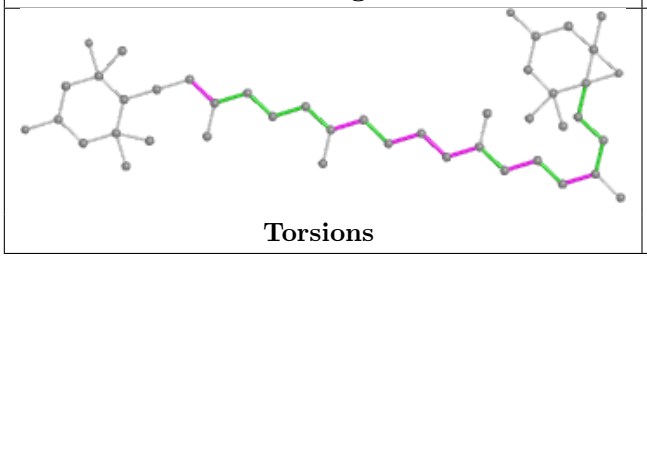


Bond angles



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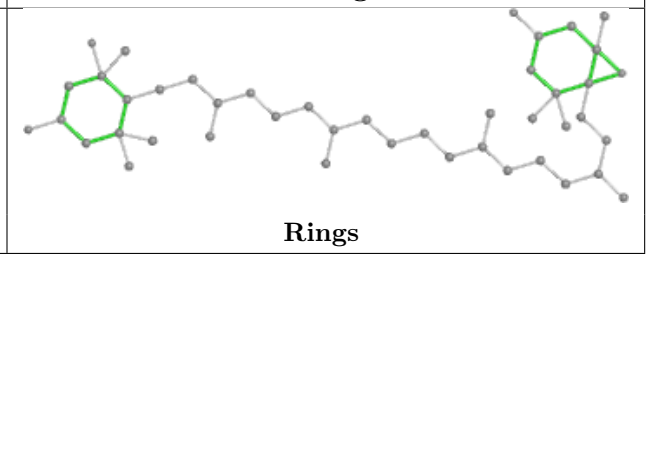
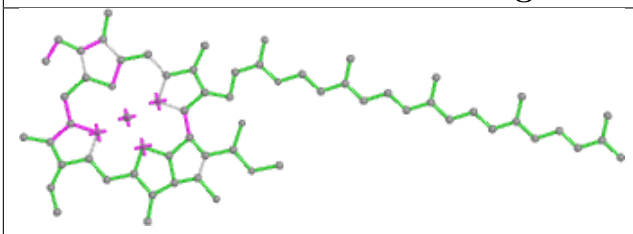


Rings

Ligand CLA B1 615



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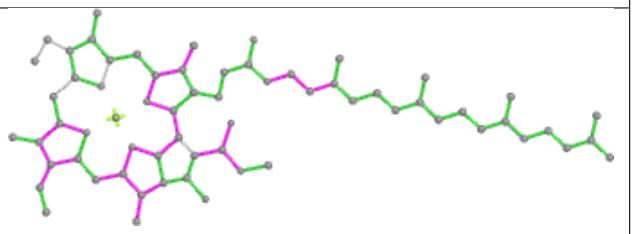
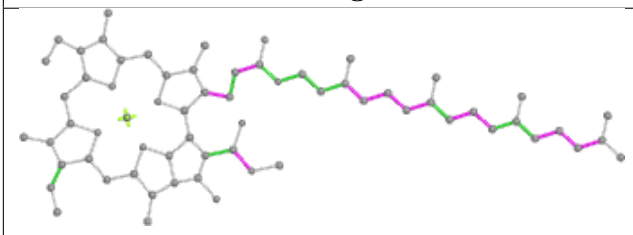


Bond angles



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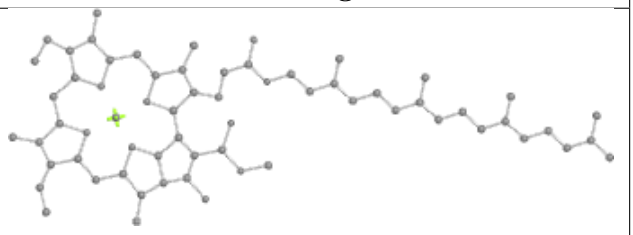
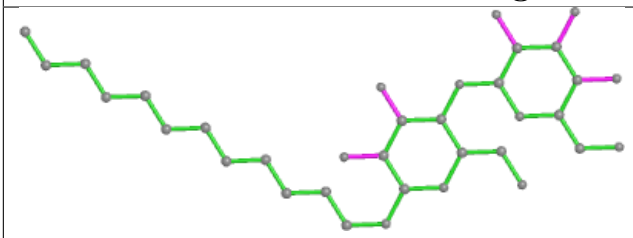
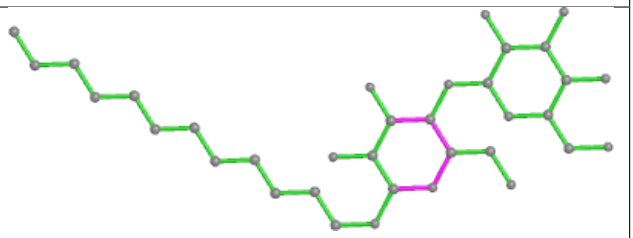


Rings

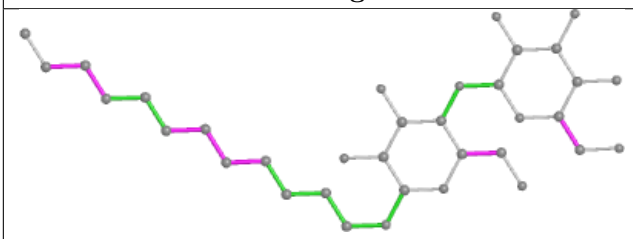
Ligand LMT R1 625



Bond lengths



Bond angles



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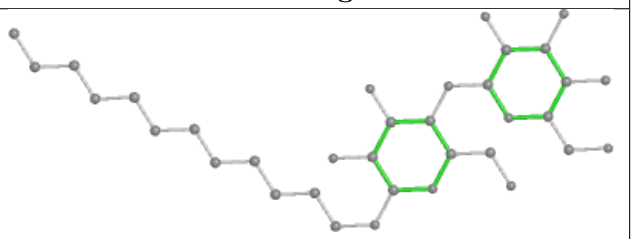
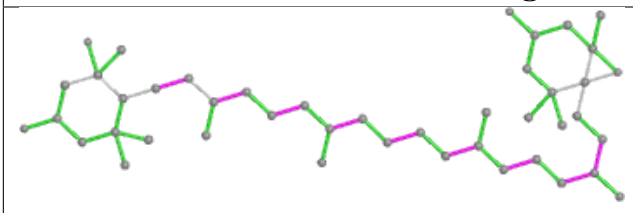


Rings

Ligand NEX N 623



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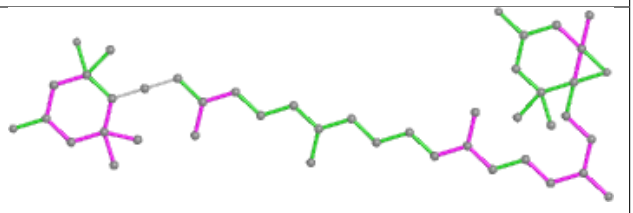
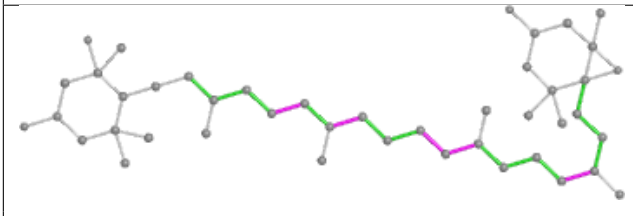
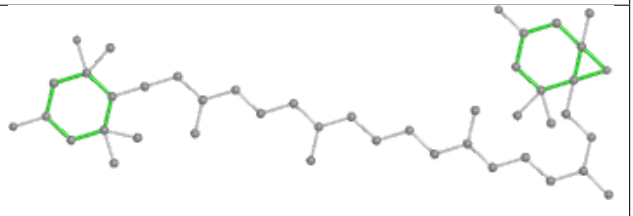


Bond angles

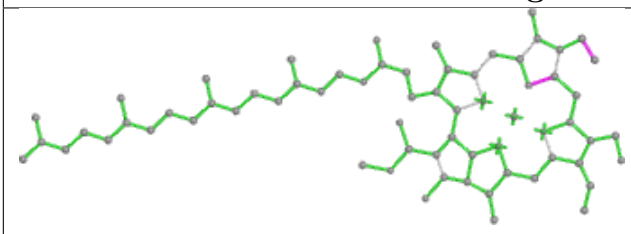


Torsions

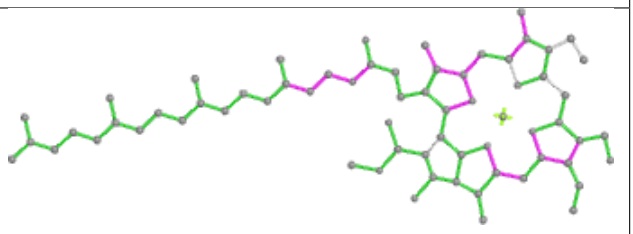


Rings

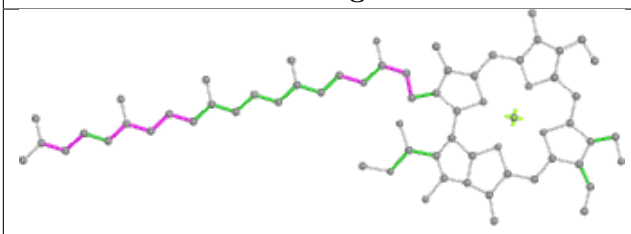
Ligand CHL n 607



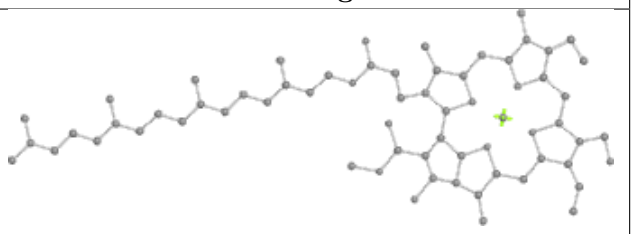
Bond lengths



Bond angles

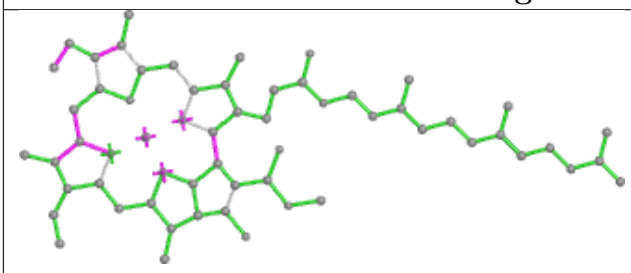


Torsions



Rings

Ligand CLA A1 410



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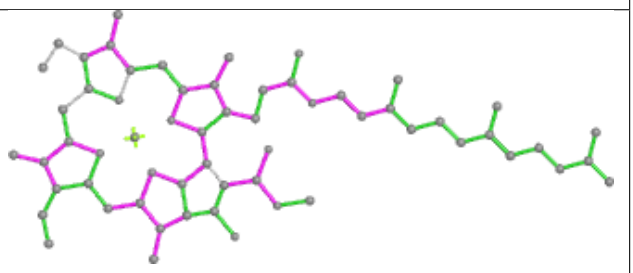
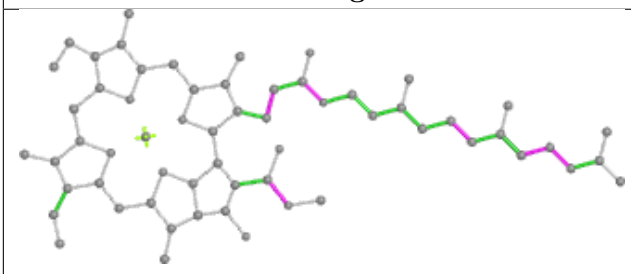


Bond angles



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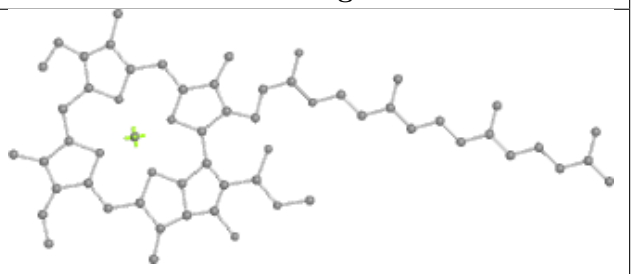
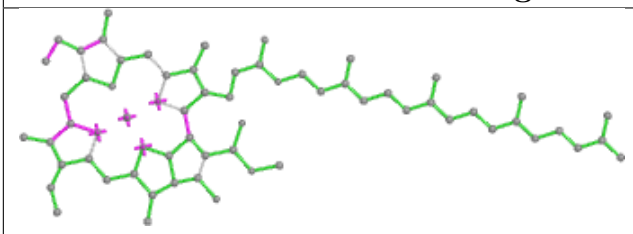


Rings

Ligand CLA N1 613



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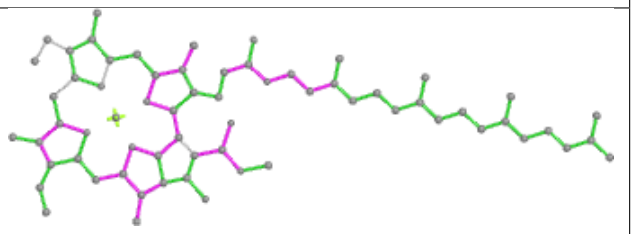
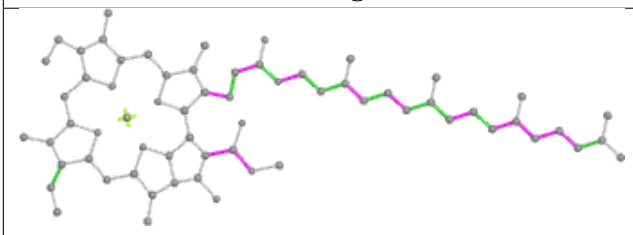


Bond angles



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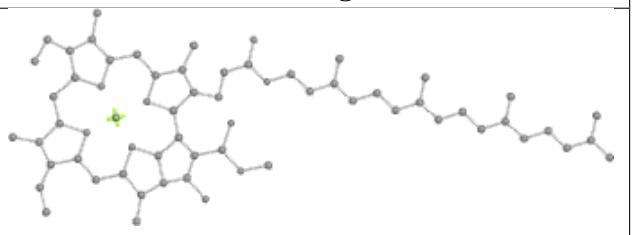
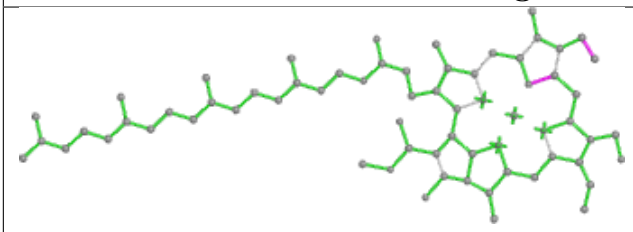


Rings

Ligand CHL N1 607



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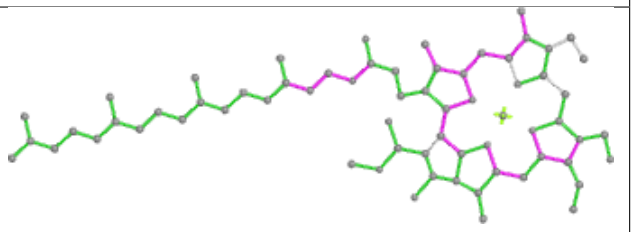
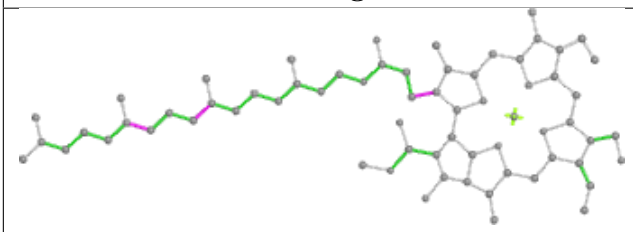


Bond angles



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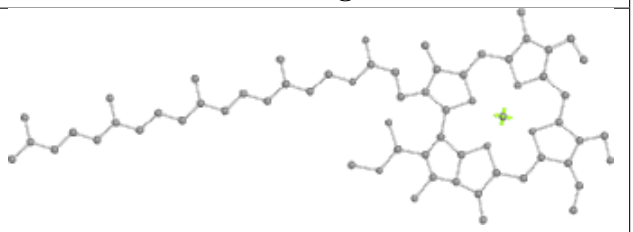
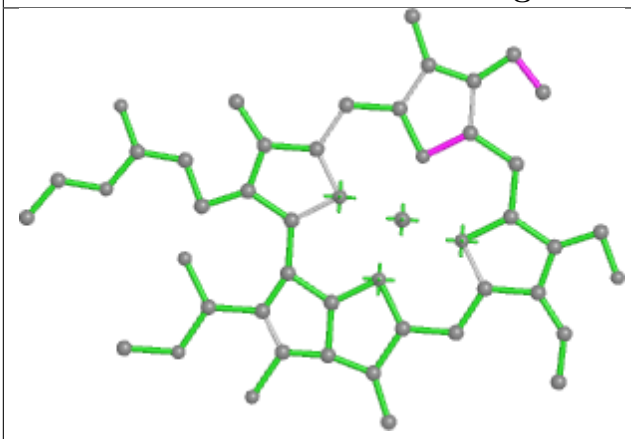


Rings

Ligand CHL G1 605



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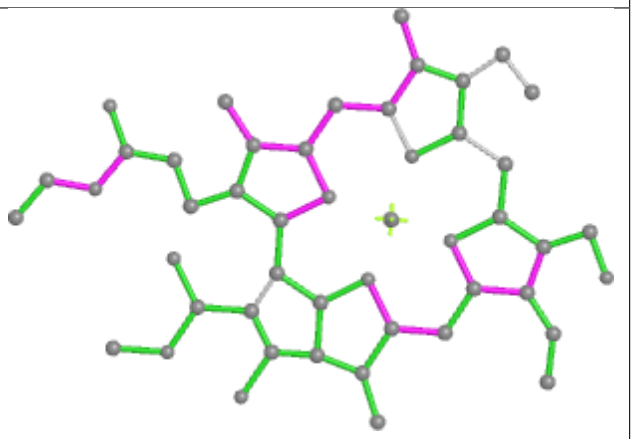
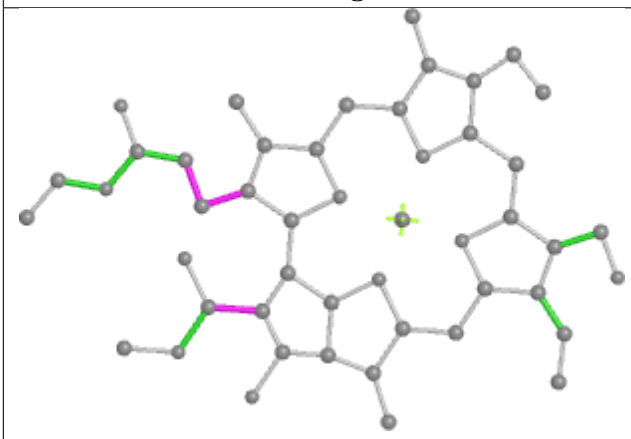


Bond angles



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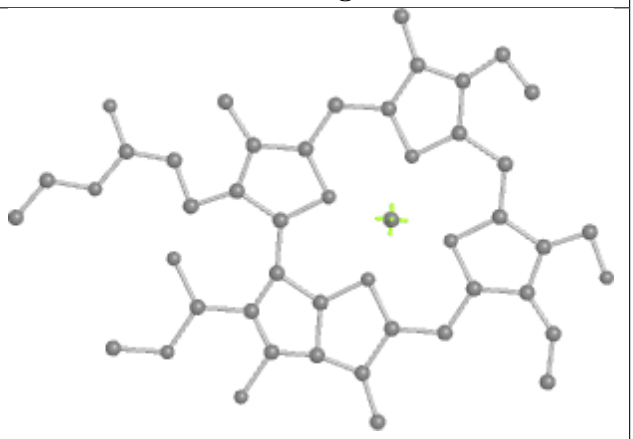
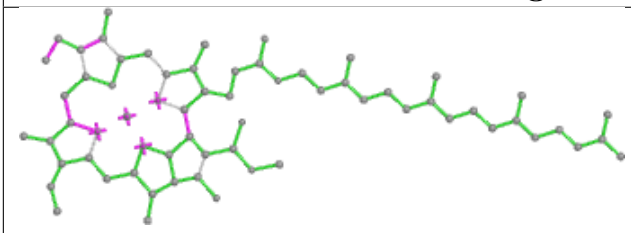
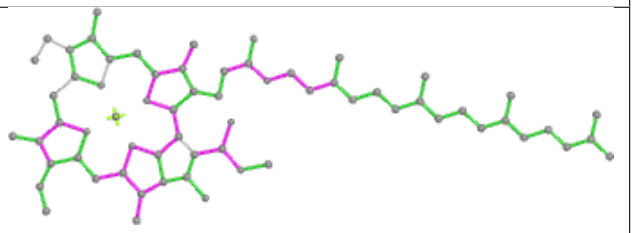


Rings

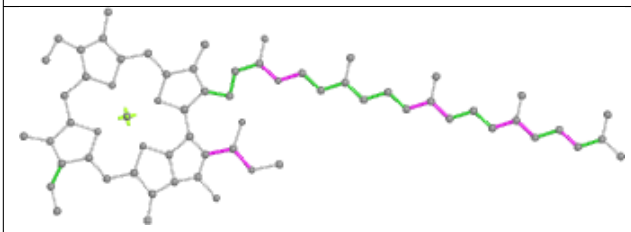
Ligand CLA S 611



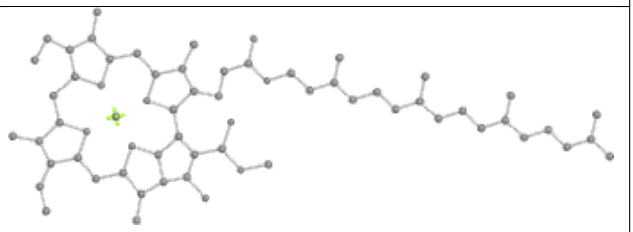
Bond lengths



Bond angles

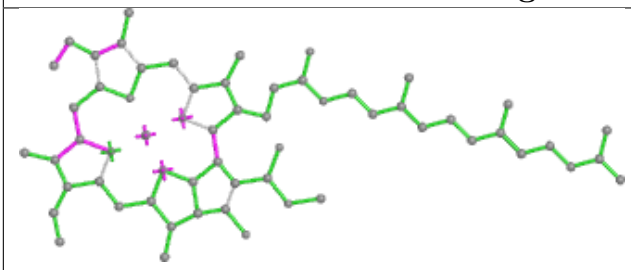


Torsions

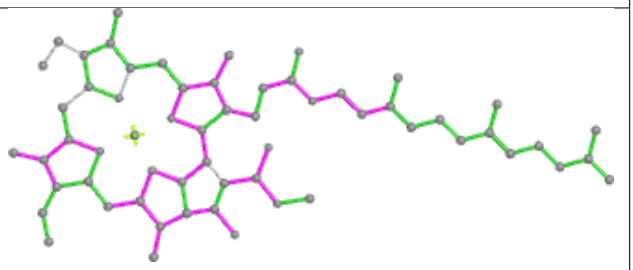


Rings

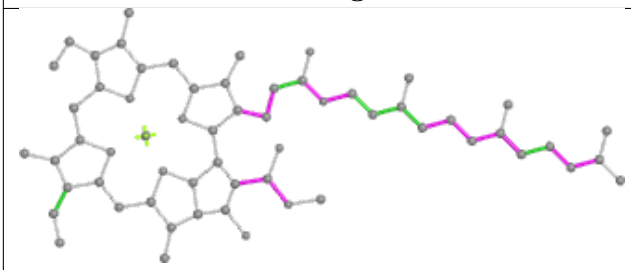
Ligand CLA S1 602



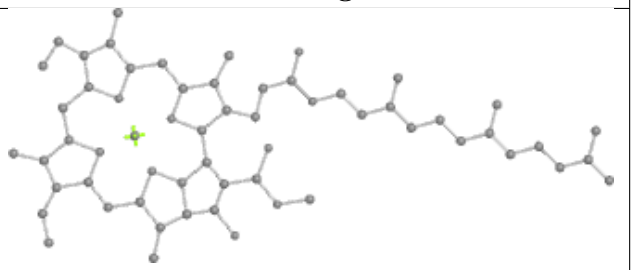
Bond lengths



Bond angles

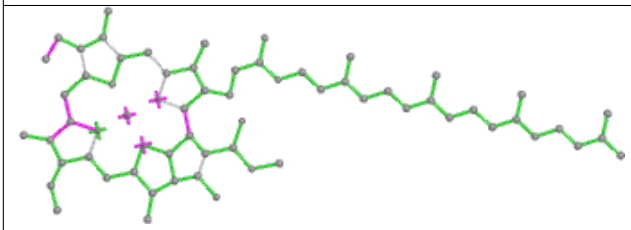


Torsions



Rings

Ligand CLA c1 512



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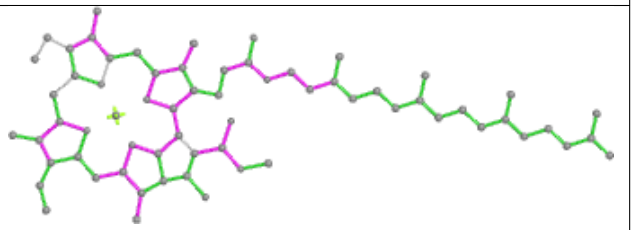
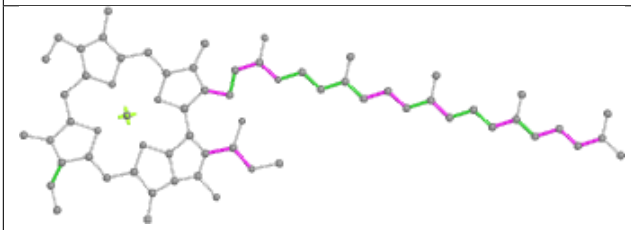


Bond angles



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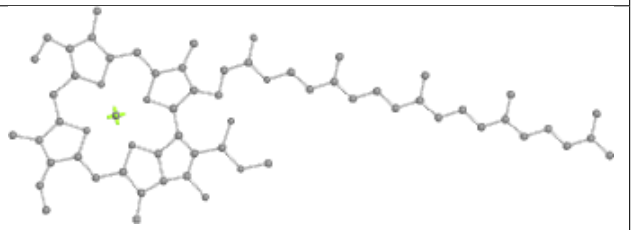
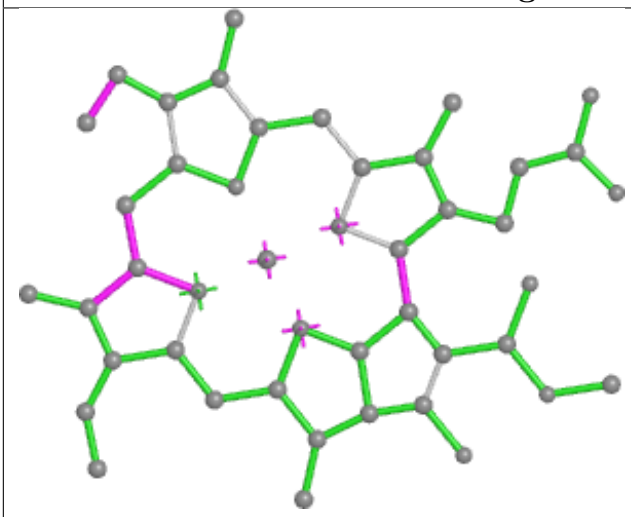


Rings

Ligand CLA S1 612



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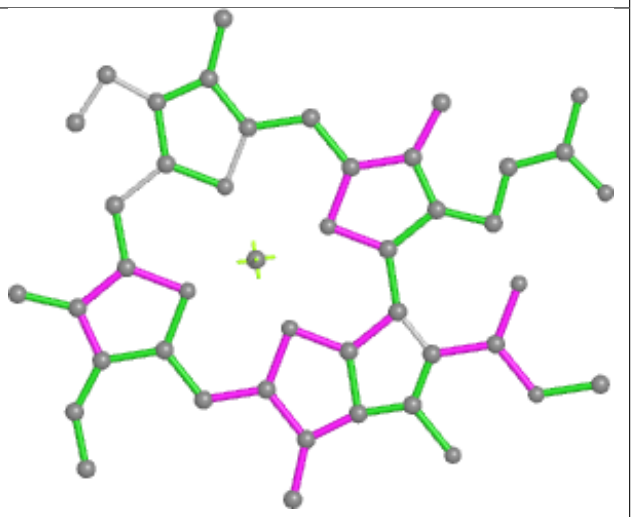

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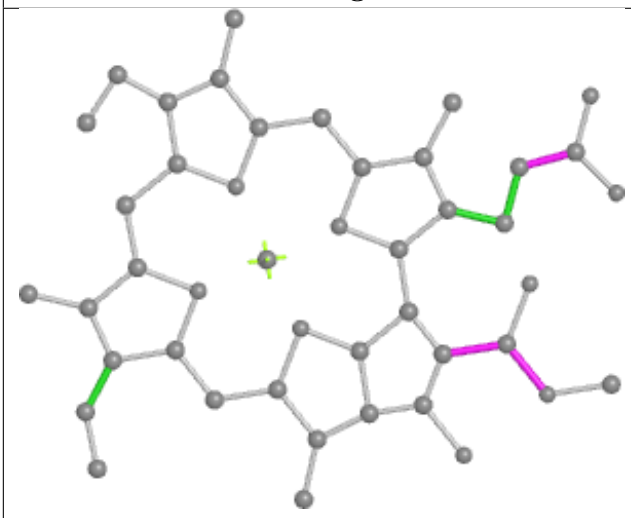

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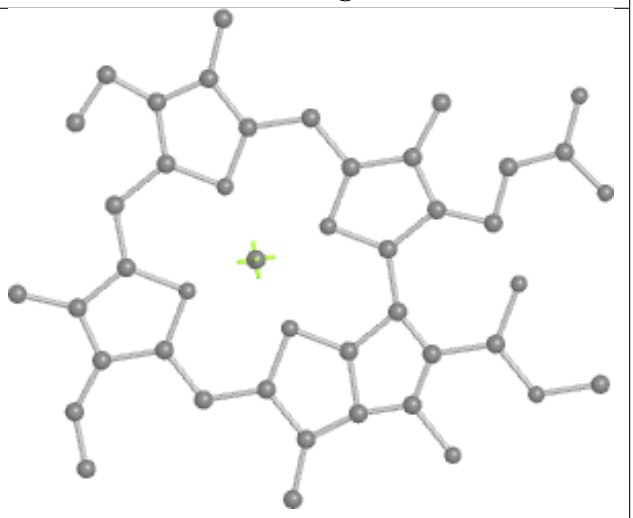
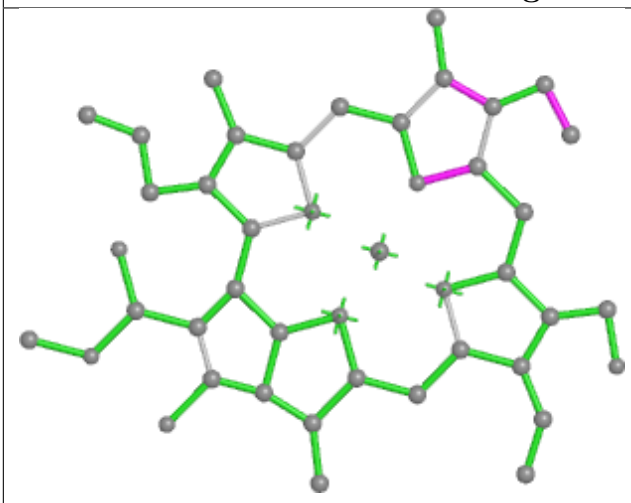


Rings

Ligand CHL G 608



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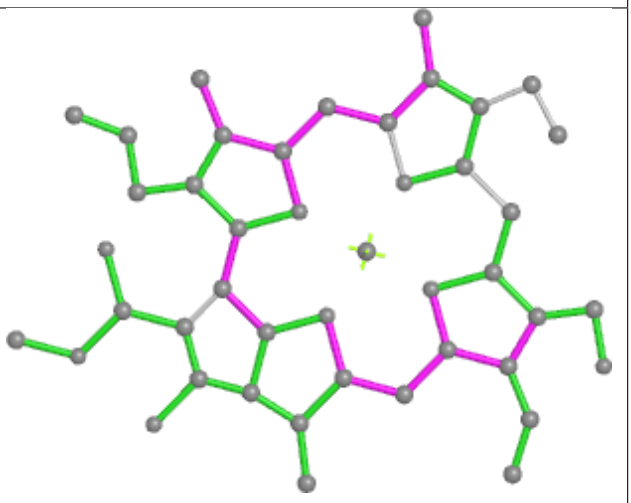
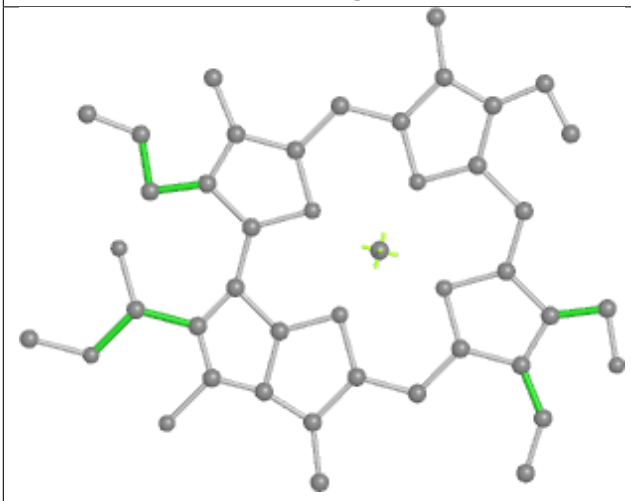


Bond angles



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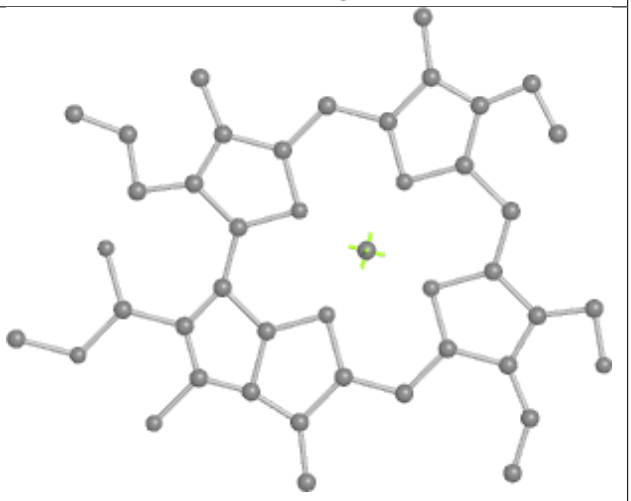
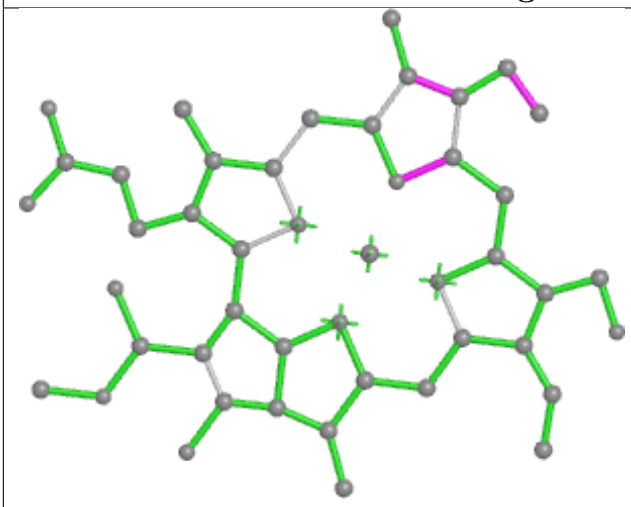


Rings

Ligand CHL S1 601



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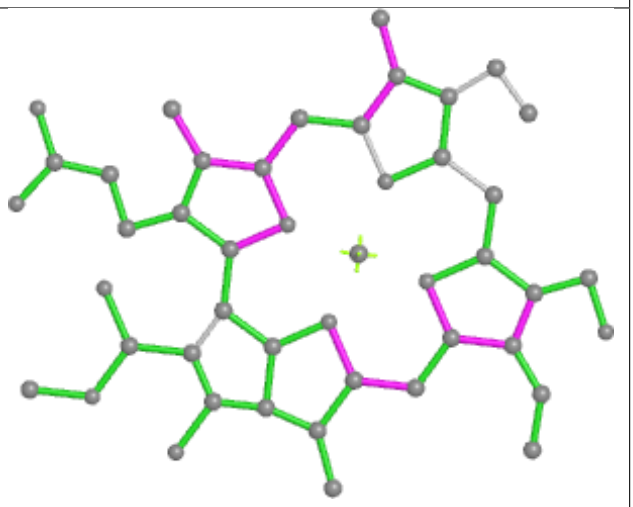

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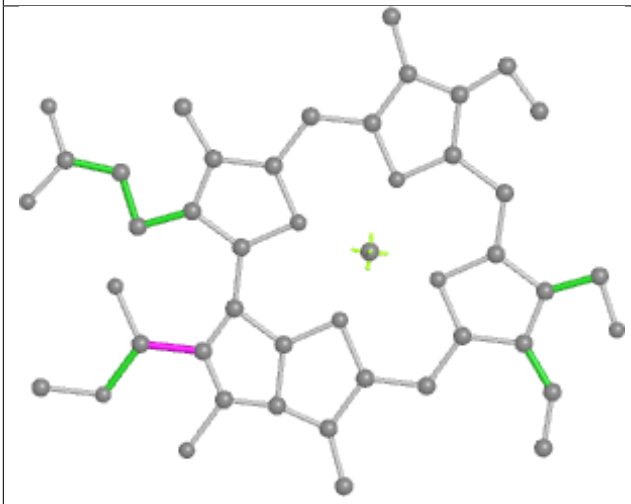

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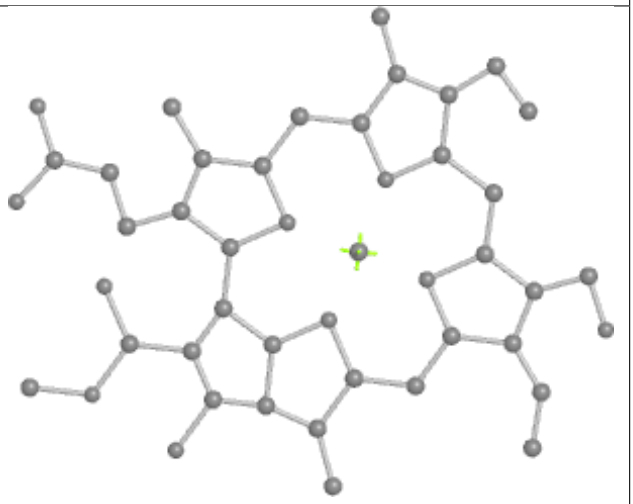
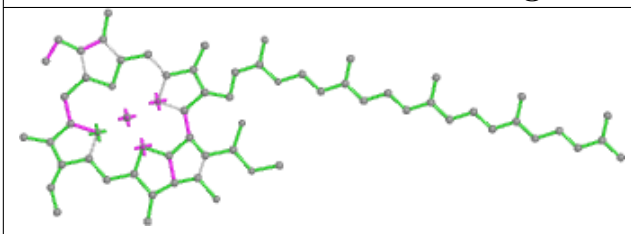


Rings

Ligand CLA N 603



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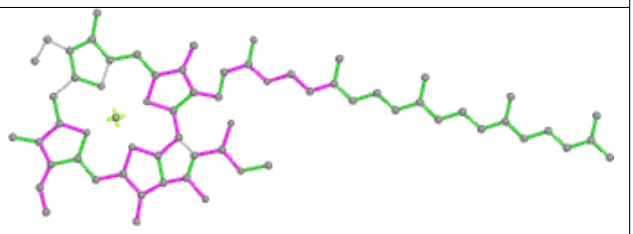
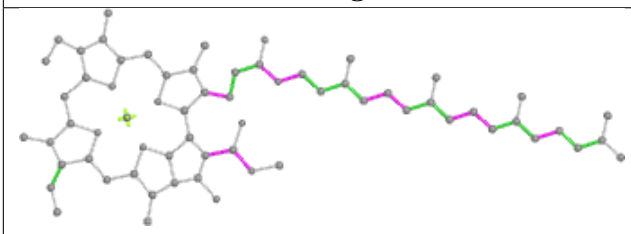


Bond angles



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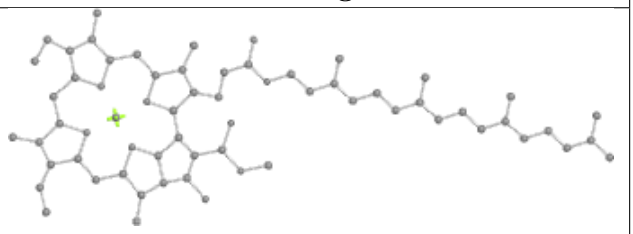
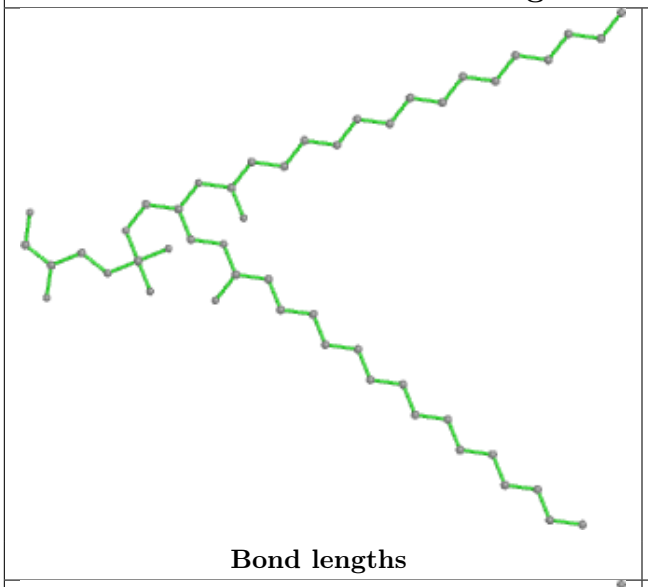


Rings

Ligand LHG n 624



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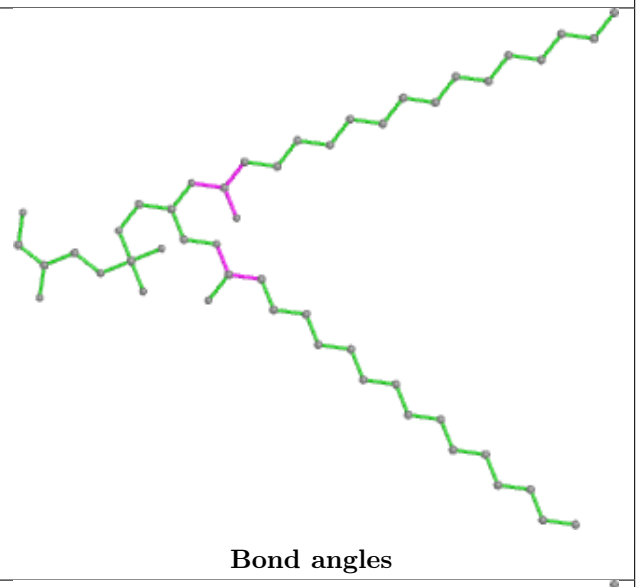
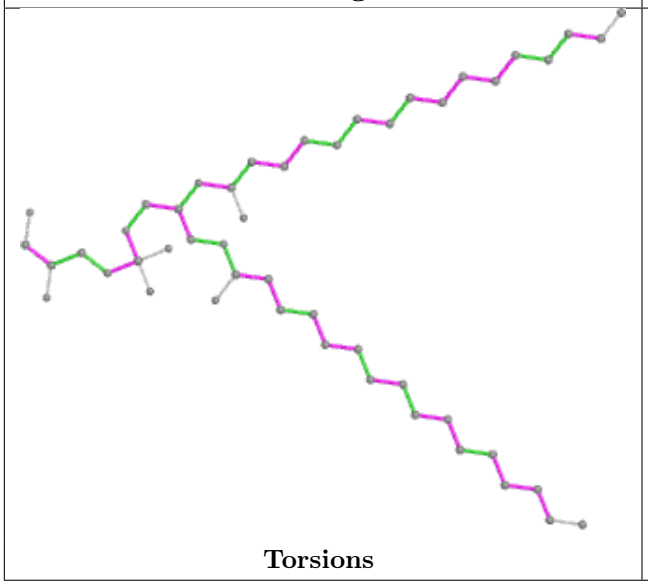


Bond angles



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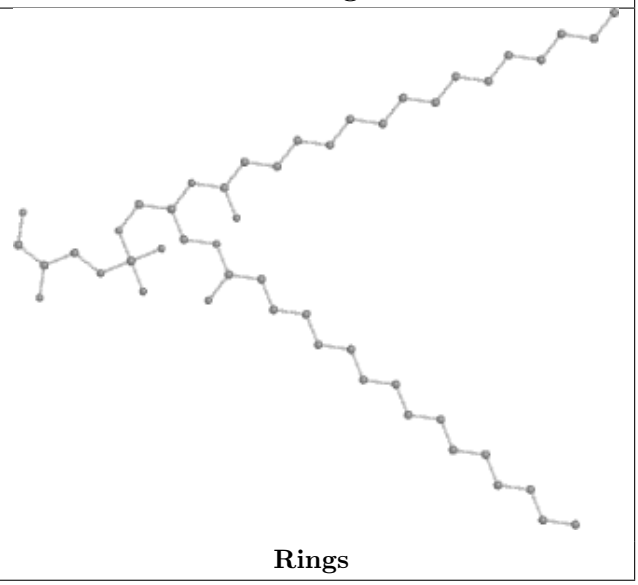
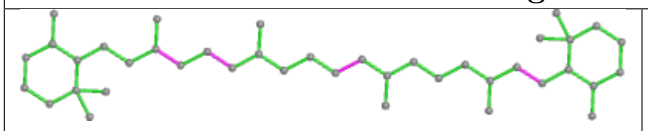


Rings

Ligand BCR a 411



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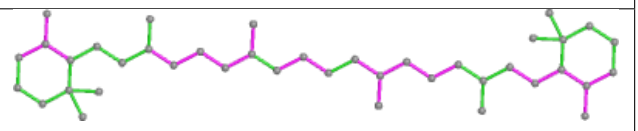
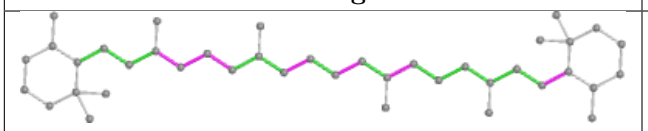


Bond angles



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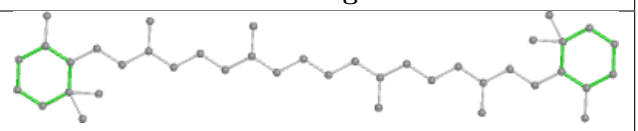
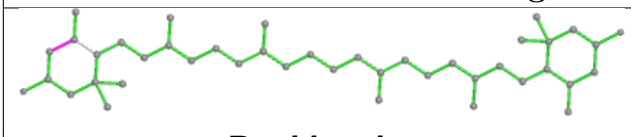
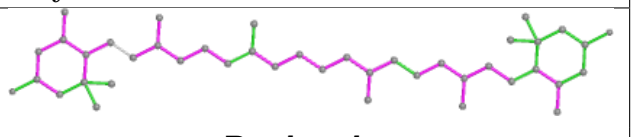
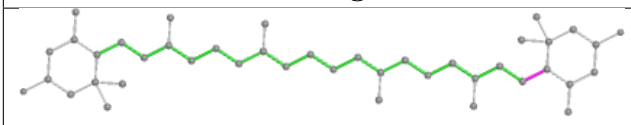


Rings

Ligand LUT y 620


Bond lengths


Bond angles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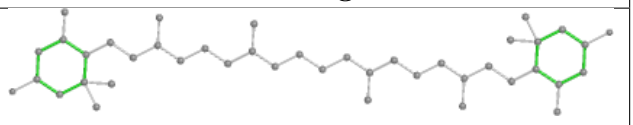
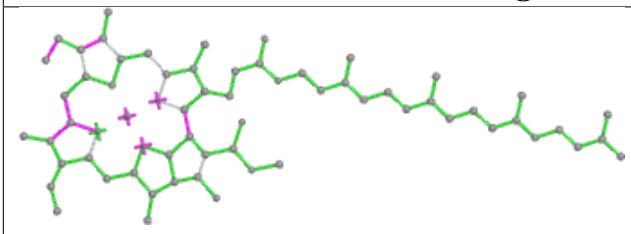

Rings

Ligand CLA A1 405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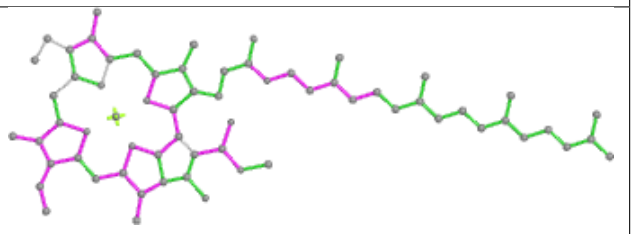
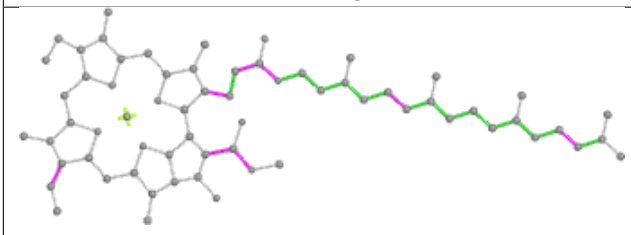

Bond angles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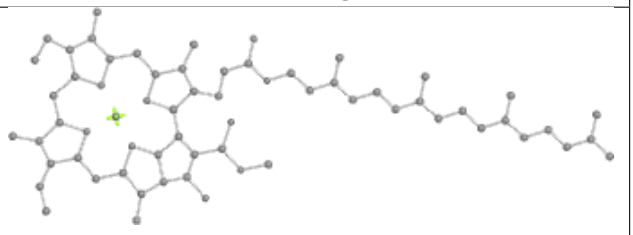
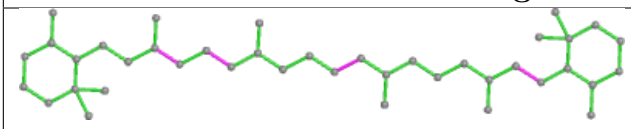

Rings

Ligand BCR C1 514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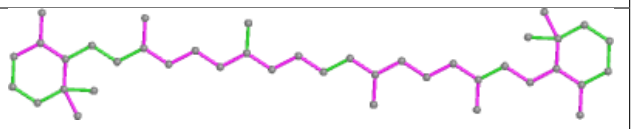
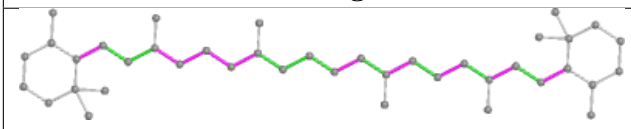

Bond angles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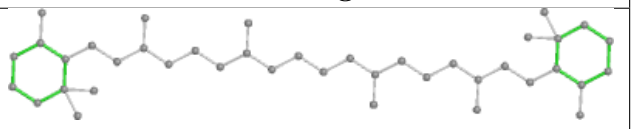
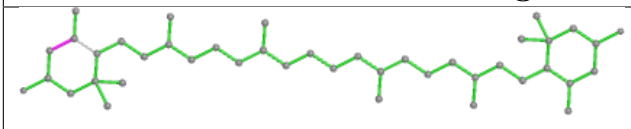

Rings

Ligand LUT G1 621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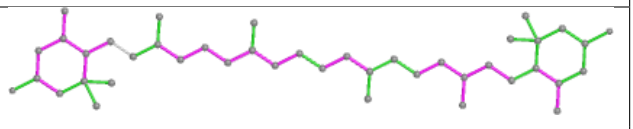
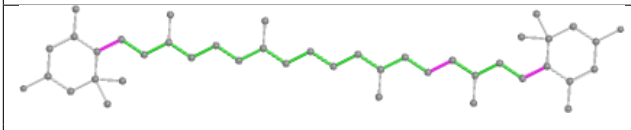

Bond angles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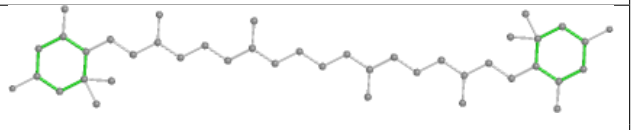
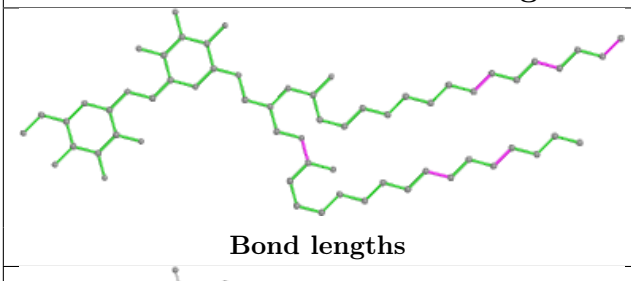

Rings

Ligand DGD C 519



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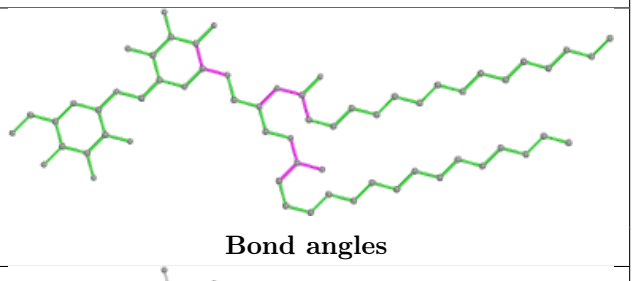
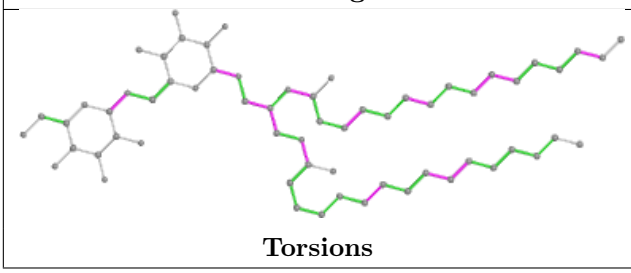


Bond angles



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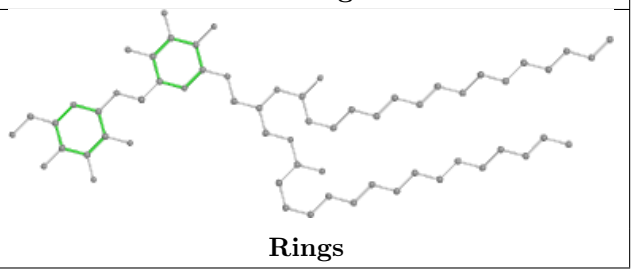
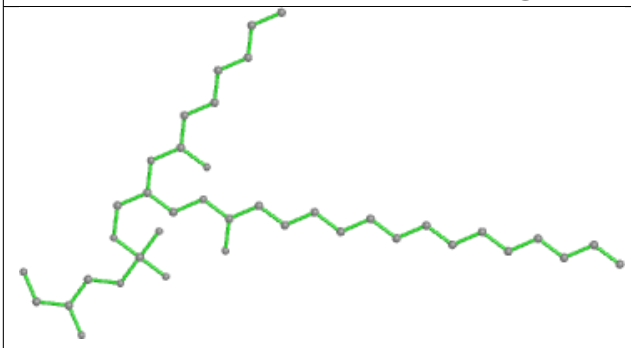


Rings

Ligand LHG d1 410



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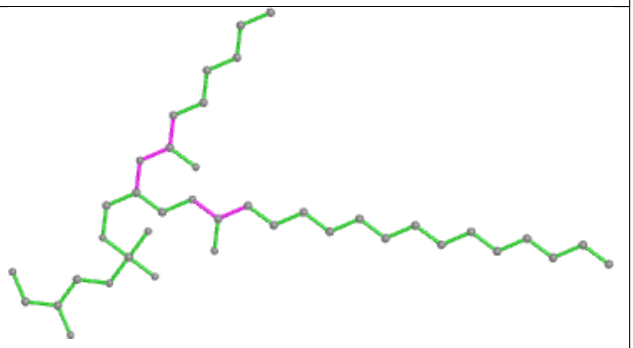
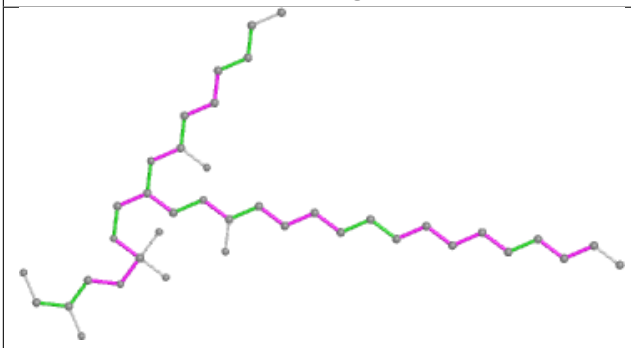


Bond angles



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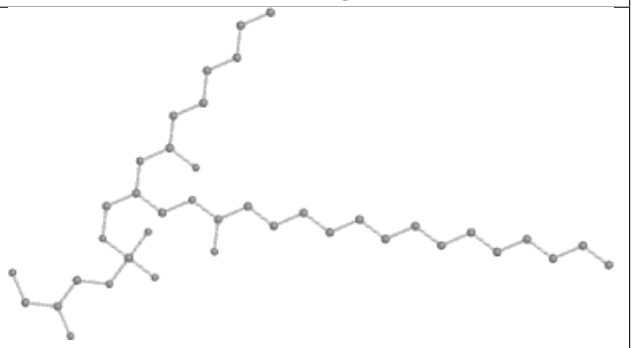
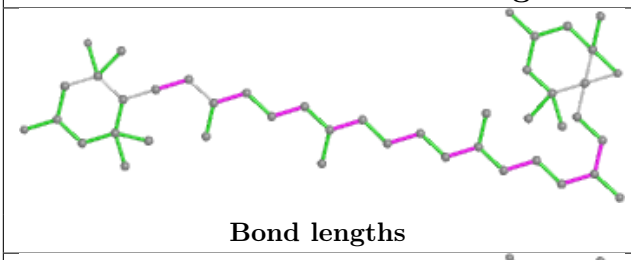
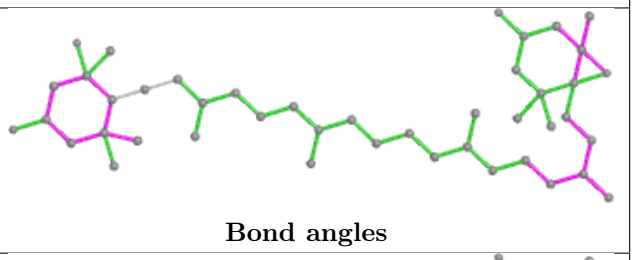


Rings

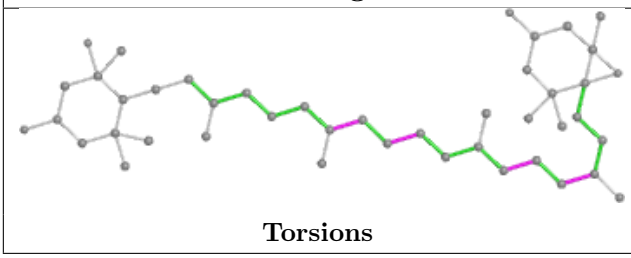
Ligand NEX R1 622



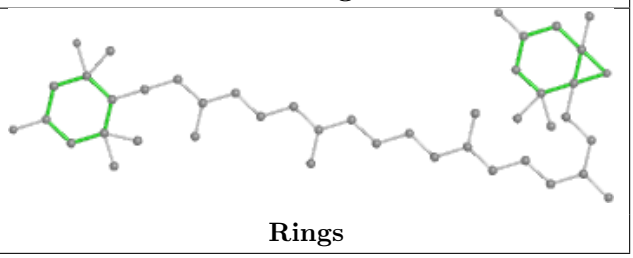
Bond lengths



Bond angles

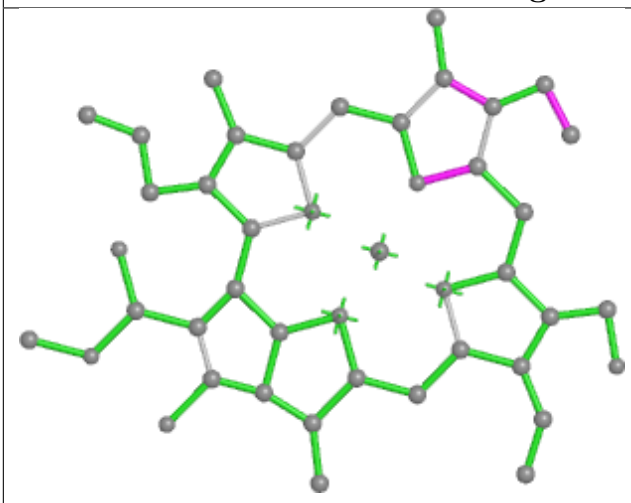


Torsions

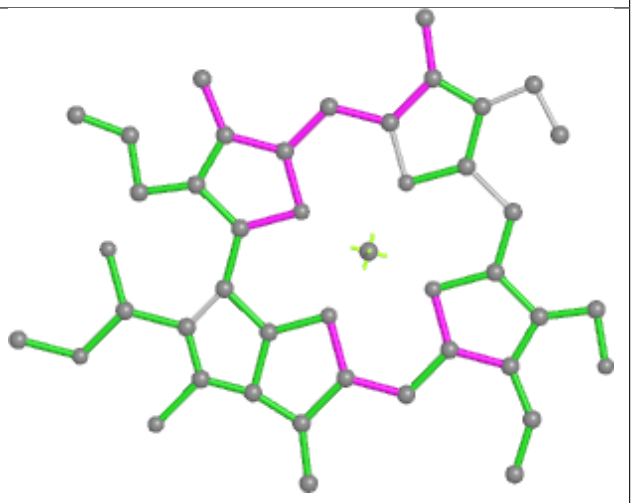


Rings

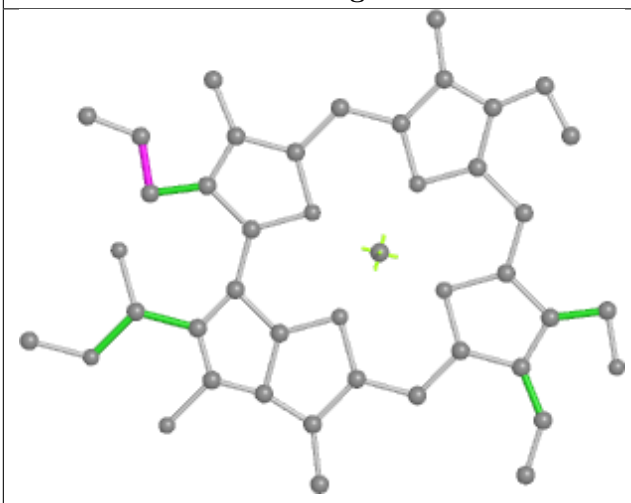
Ligand CHL r 606



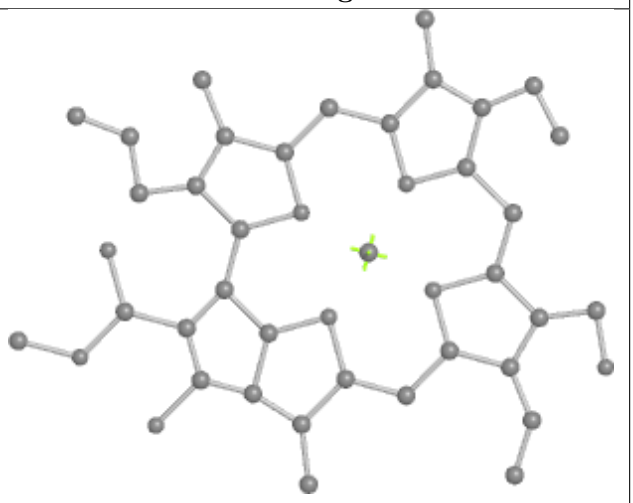
Bond lengths



Bond angles

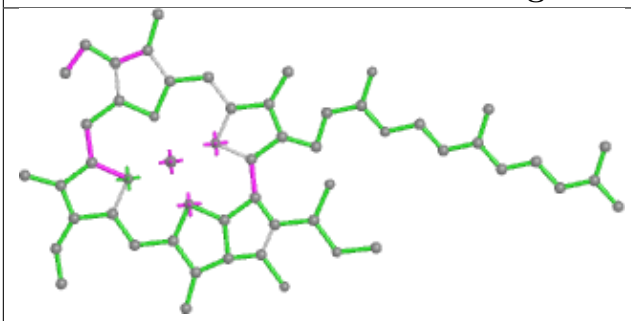


Torsions

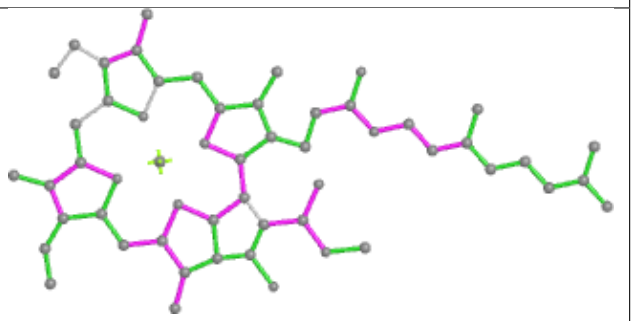


Rings

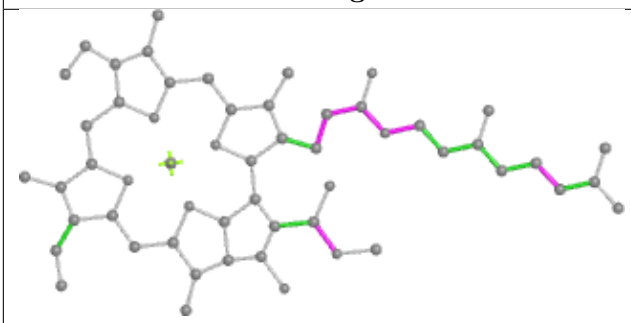
Ligand CLA S 614



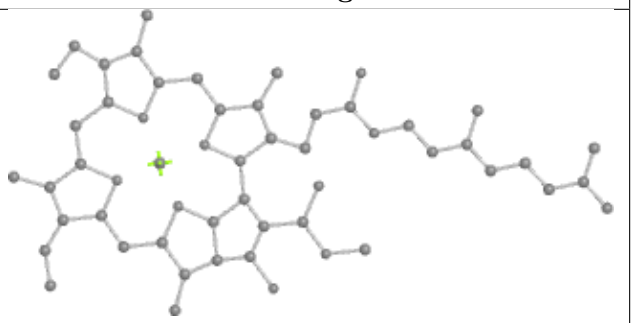
Bond lengths



Bond angles

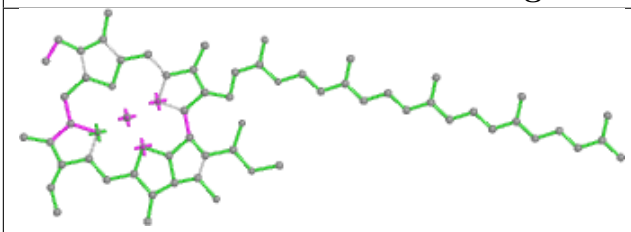


Torsions

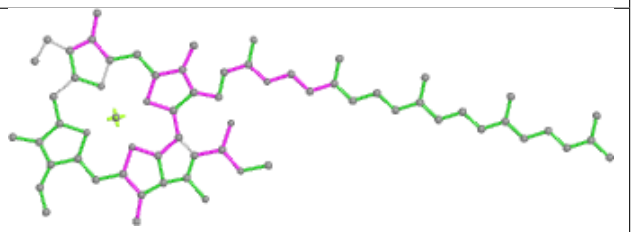


Rings

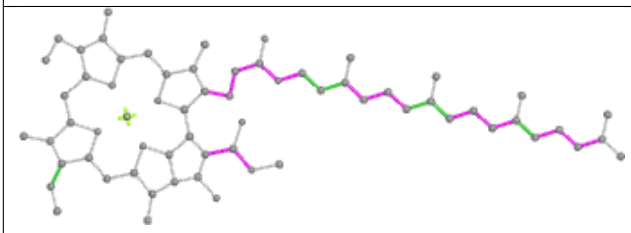
Ligand CLA B 612



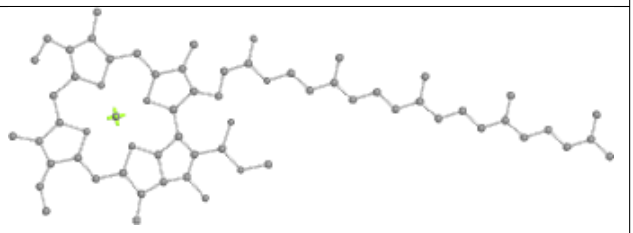
Bond lengths



Bond angles

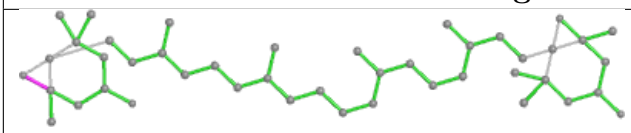


Torsions

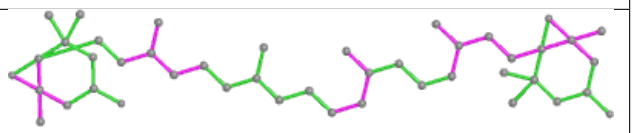


Rings

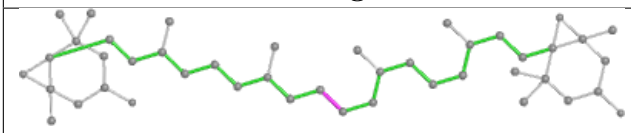
Ligand XAT N1 622



Bond lengths



Bond angles



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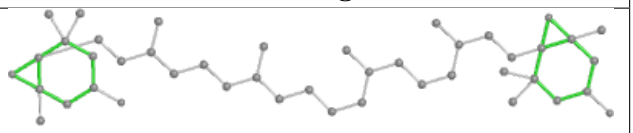
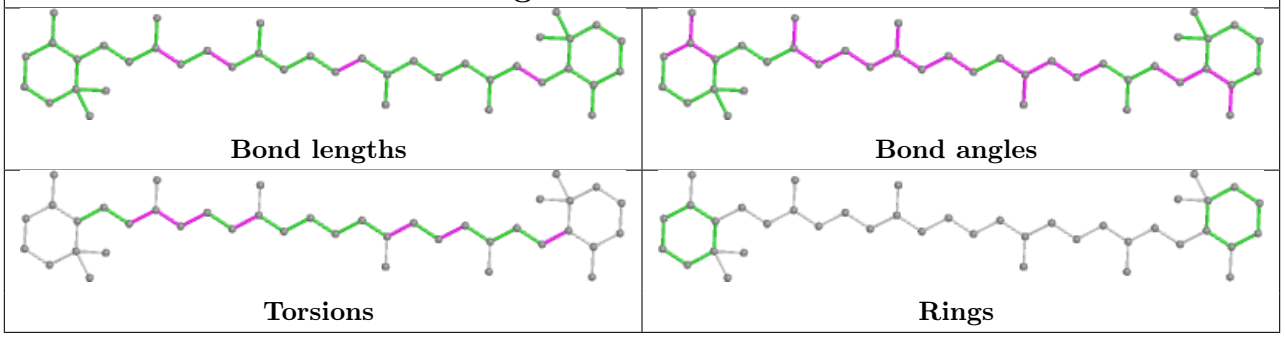
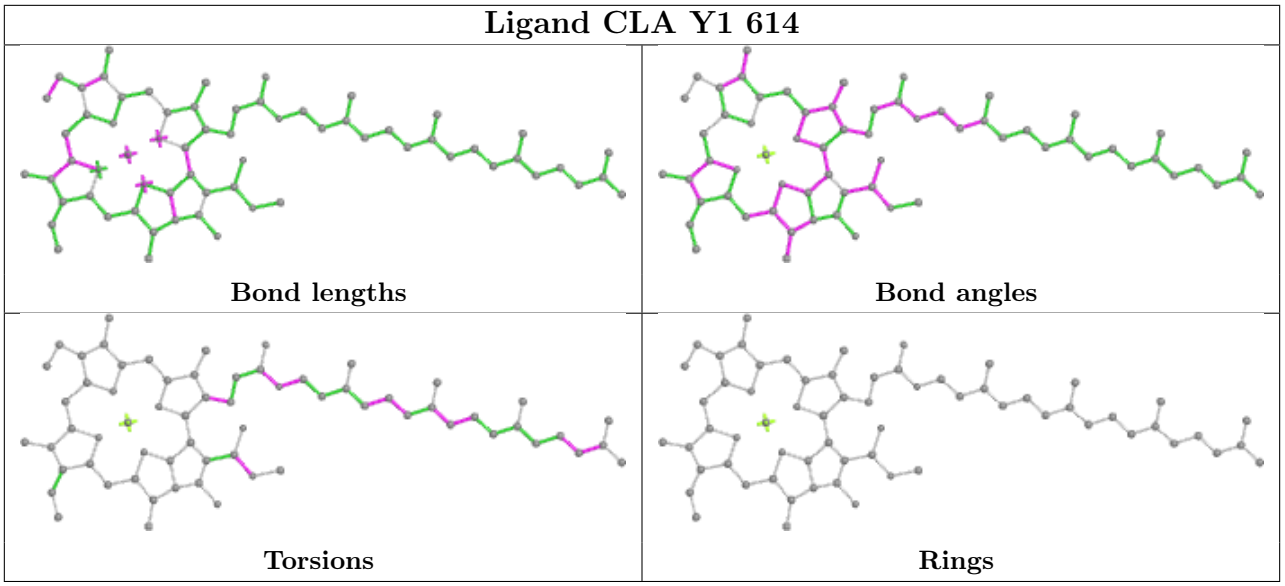


Rings

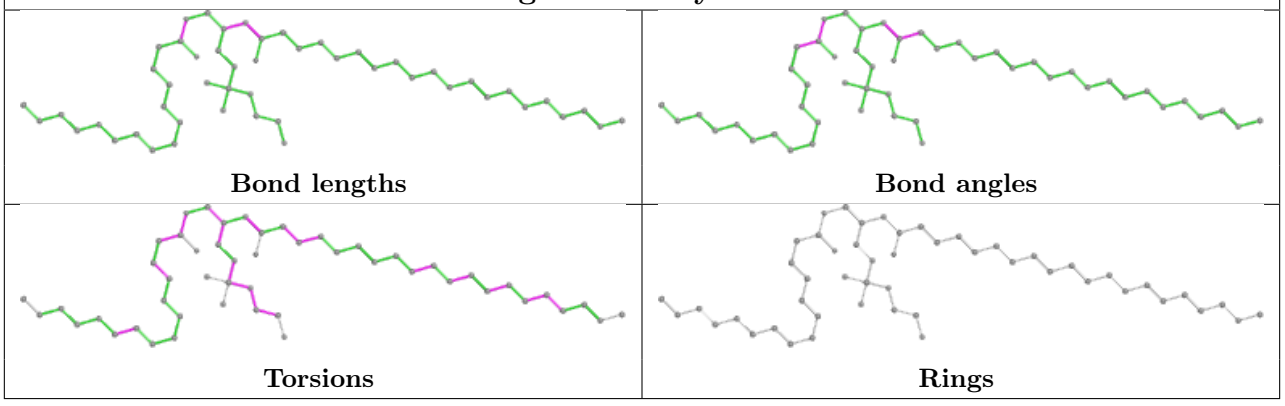
Ligand BCR A1 411



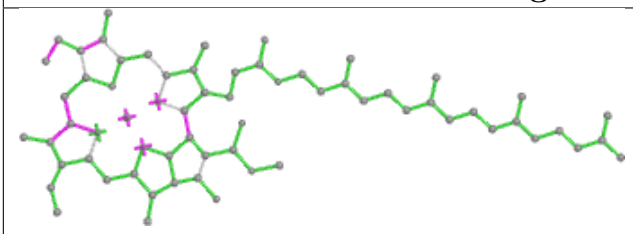
Ligand CLA Y1 614



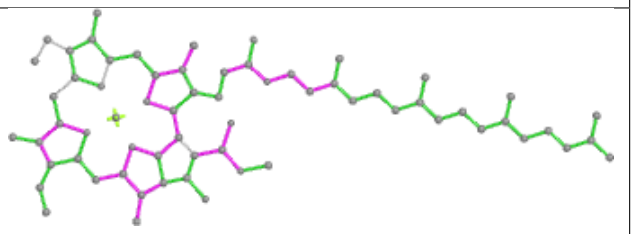
Ligand PTY y1 626



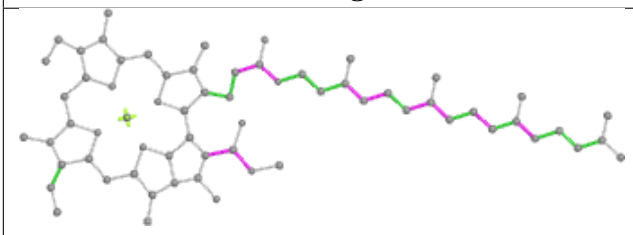
Ligand CLA s 611



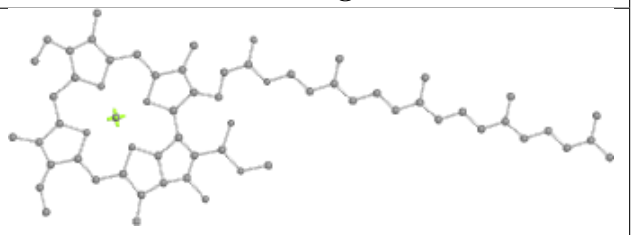
Bond lengths



Bond angles

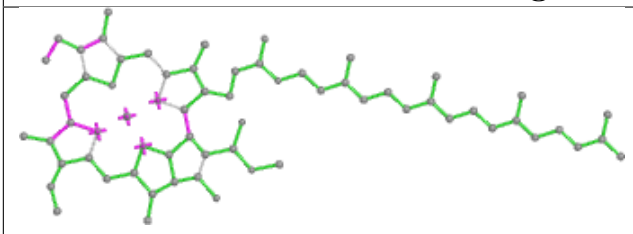


Torsions

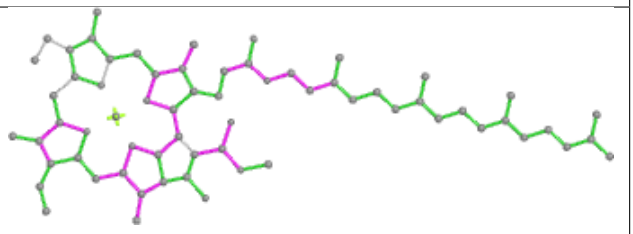


Rings

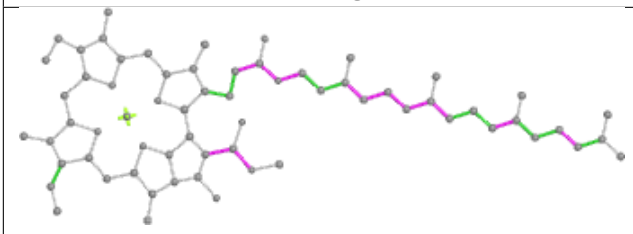
Ligand CLA s 603



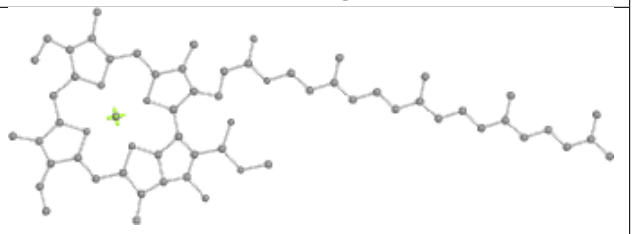
Bond lengths



Bond angles

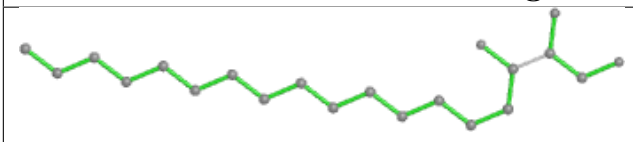


Torsions



Rings

Ligand SPH Y 625



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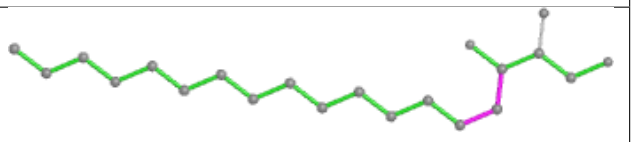
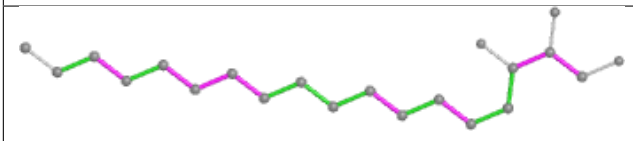


Bond angles



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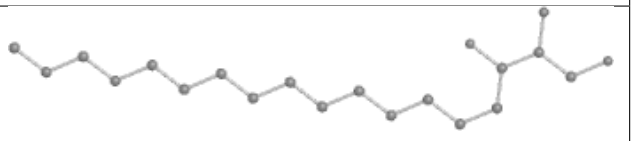
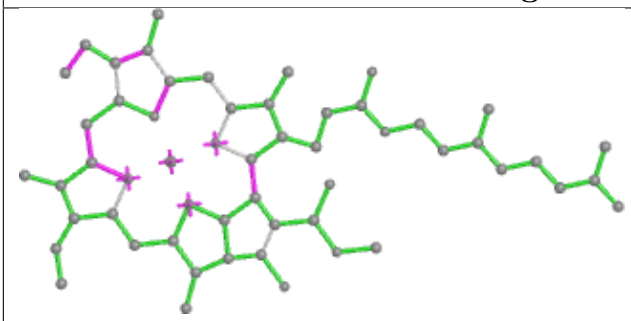
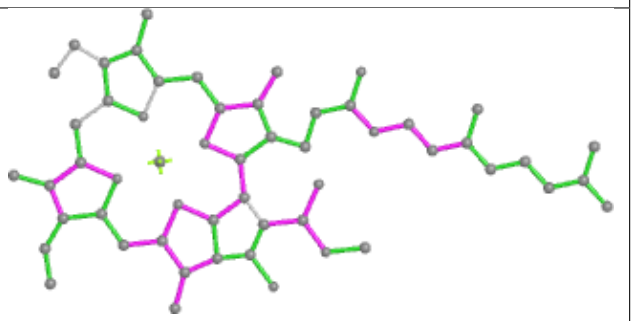


Rings

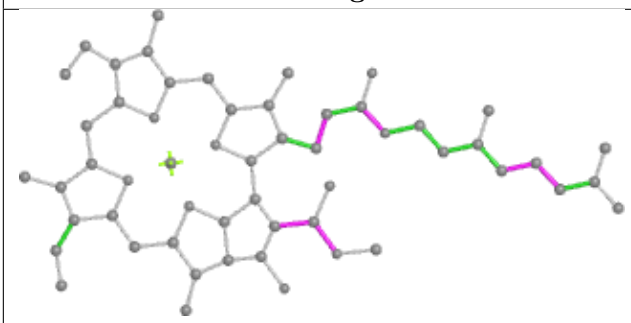
Ligand CLA s1 613



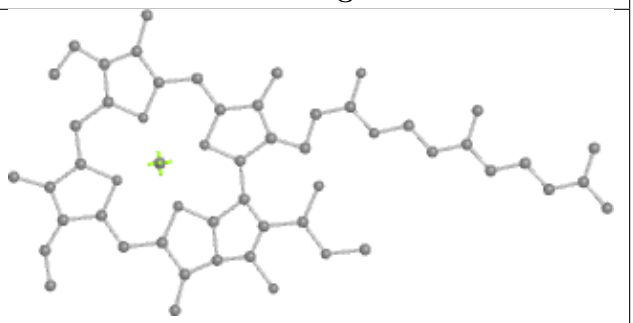
Bond lengths



Bond angles

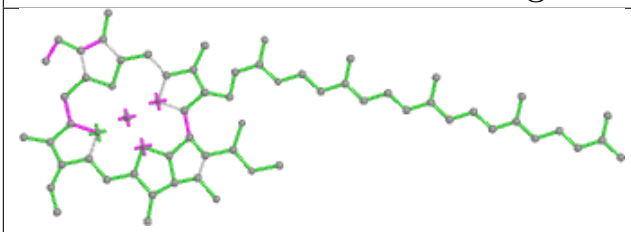


Torsions

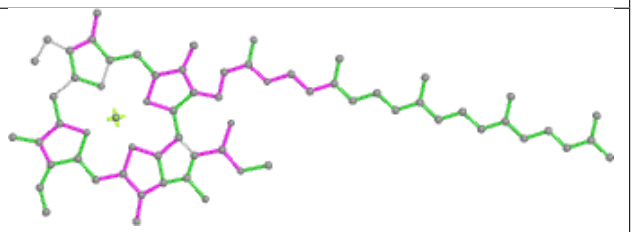


Rings

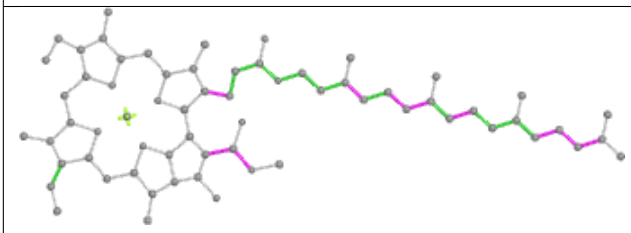
Ligand CLA n 610



Bond lengths



Bond angles



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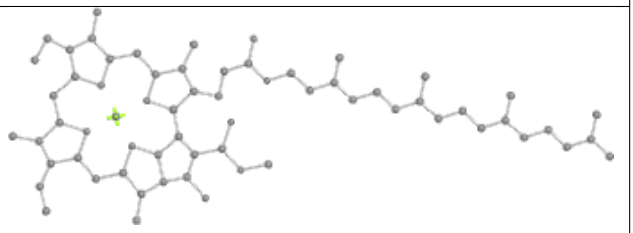
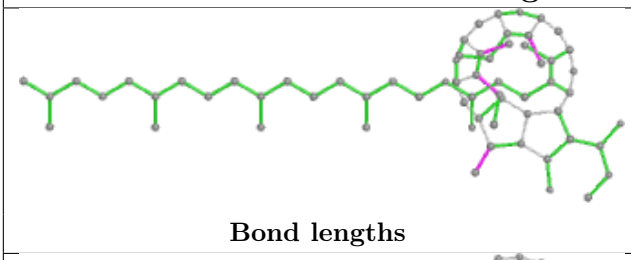


Rings

Ligand PHO A 408



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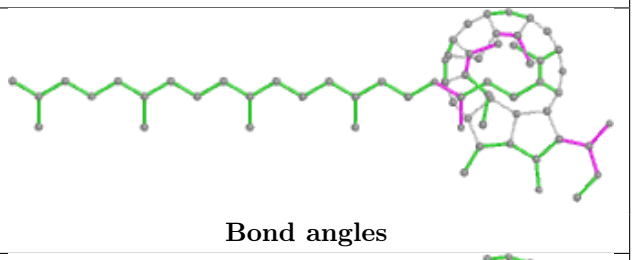
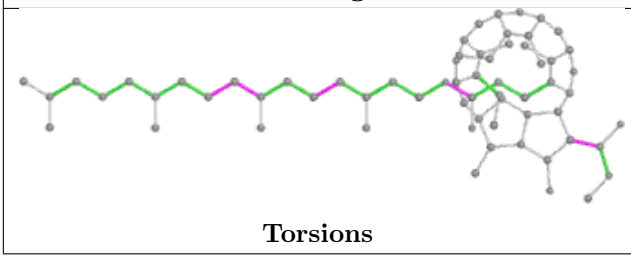


Bond angles



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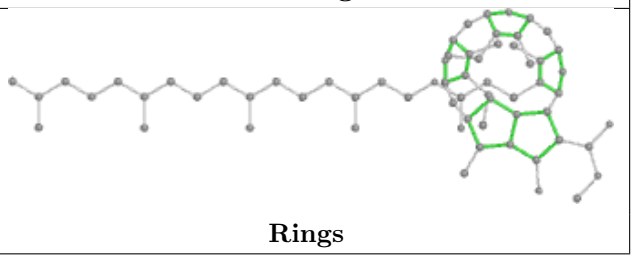
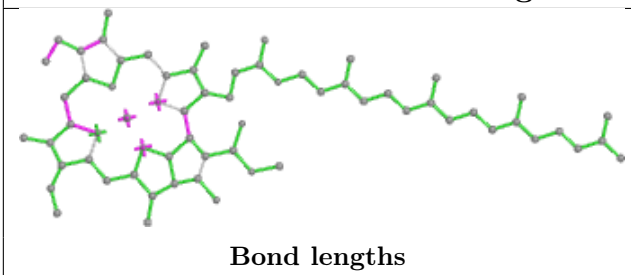


Rings

Ligand CLA B1 605



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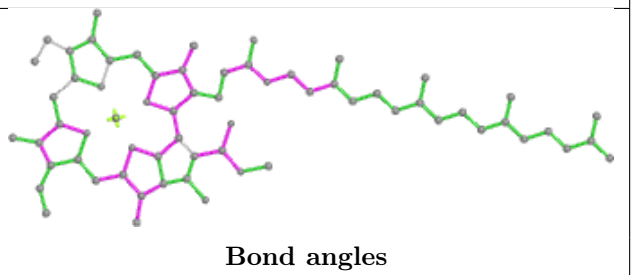
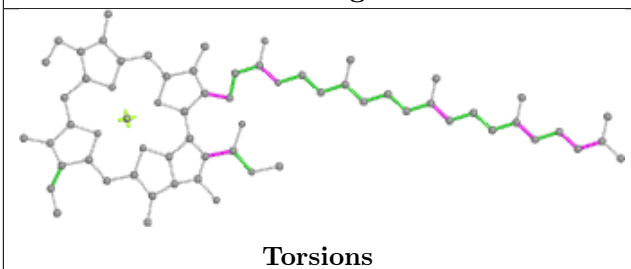
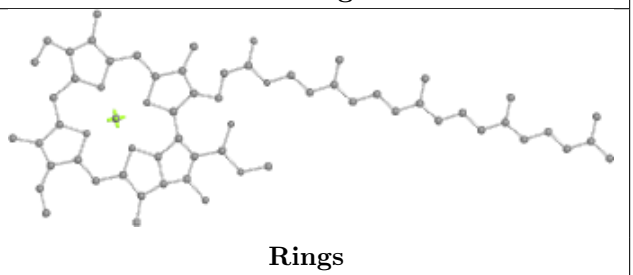


Bond angles

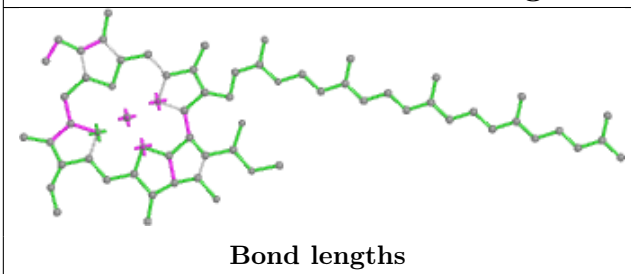


Torsions

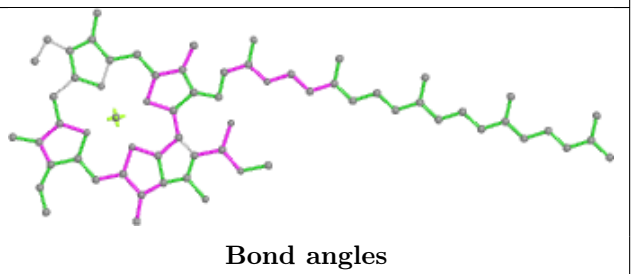


Rings

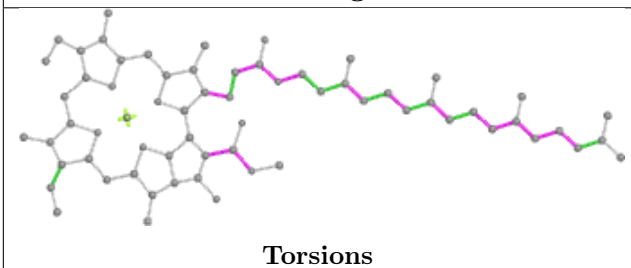
Ligand CLA C 503



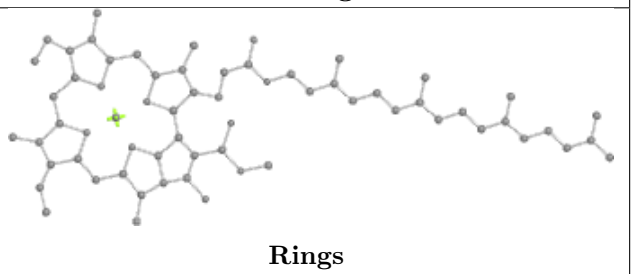
Bond lengths



Bond angles

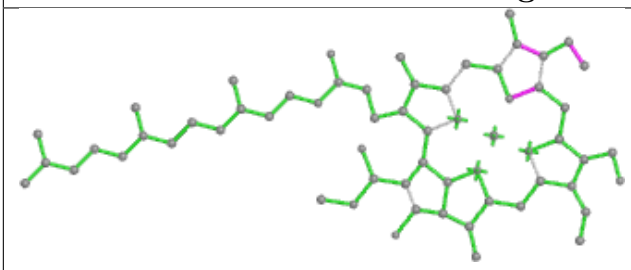


Torsions

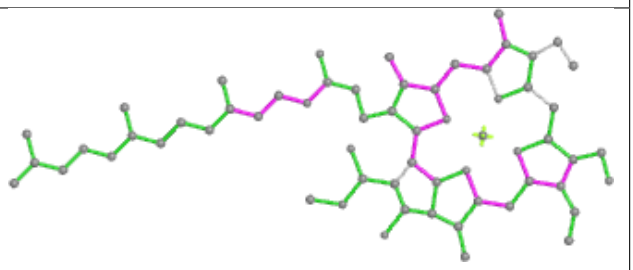


Rings

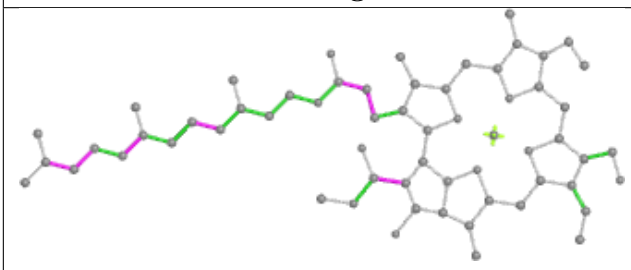
Ligand CHL S1 608



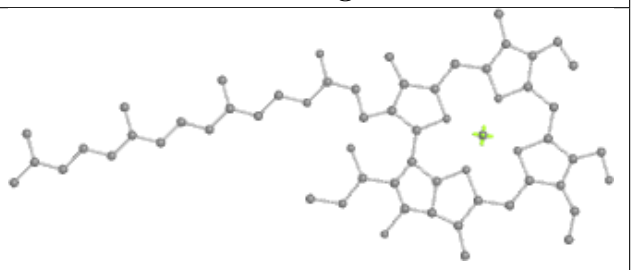
Bond lengths



Bond angles

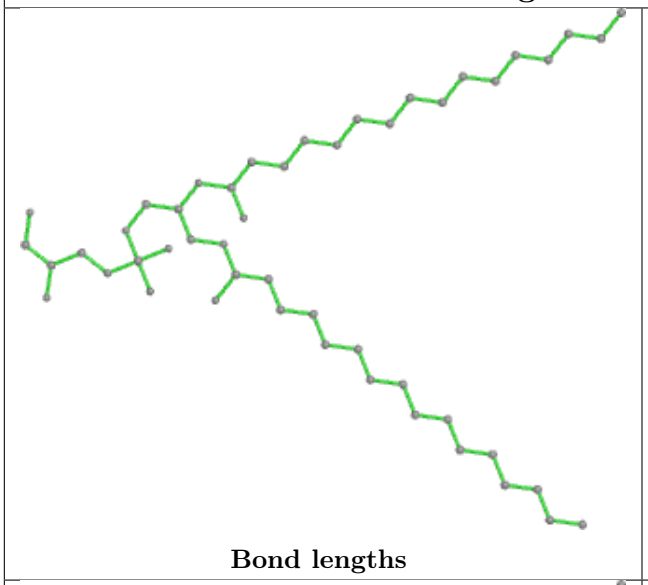


Torsions

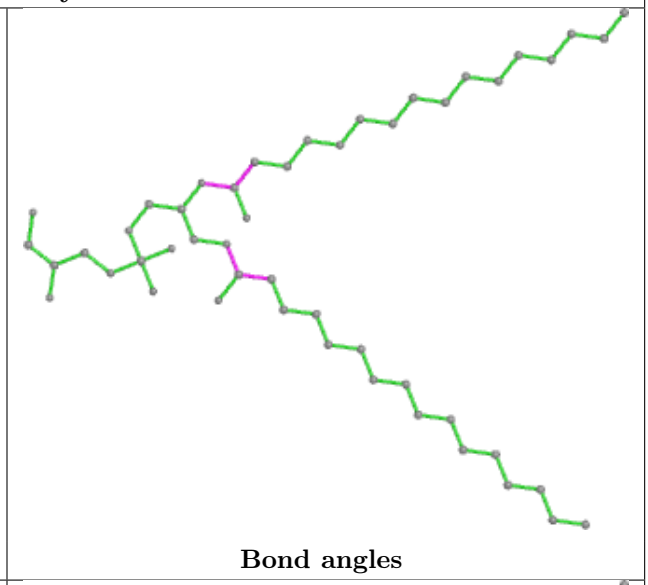


Rings

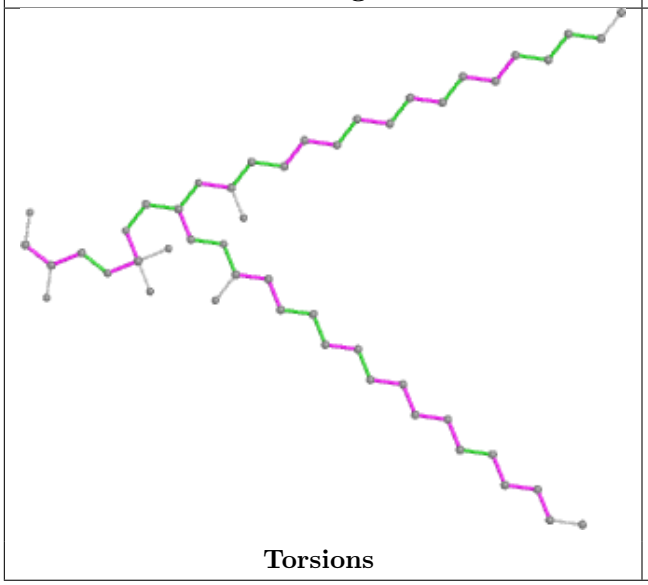
Ligand LHG y1 624



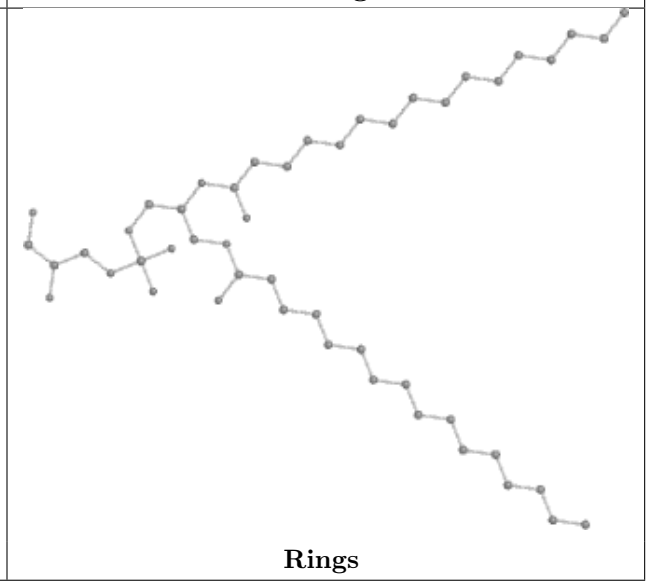
Bond lengths



Bond angles

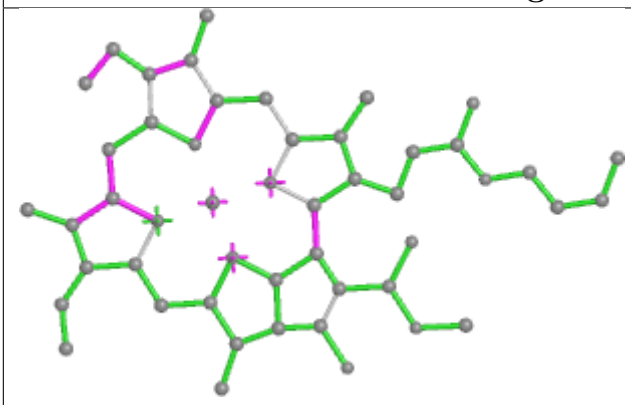


Torsions

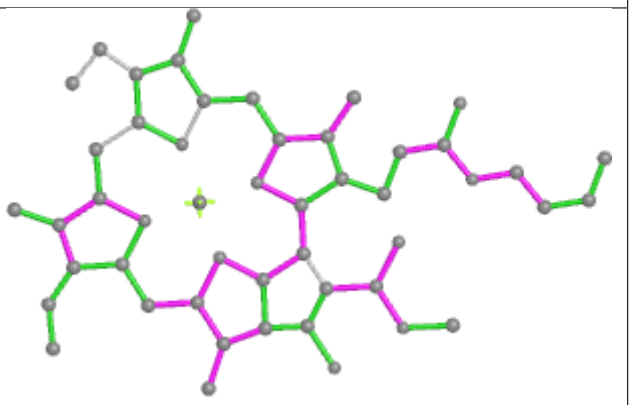


Rings

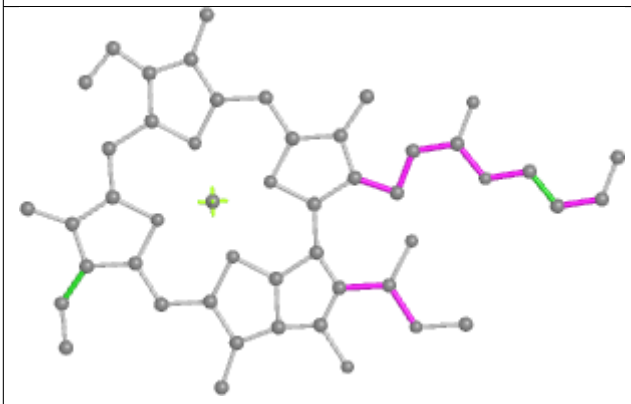
Ligand CLA n 611



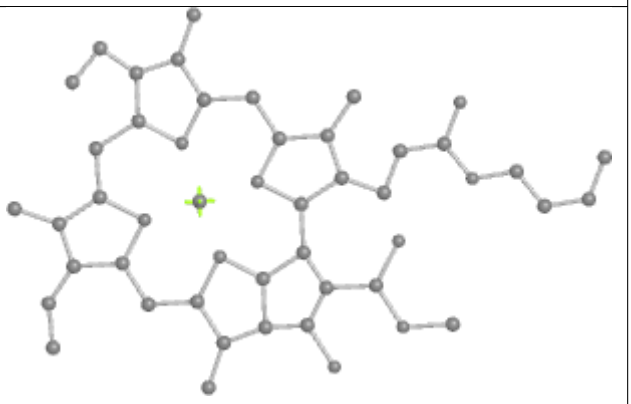
Bond lengths



Bond angles

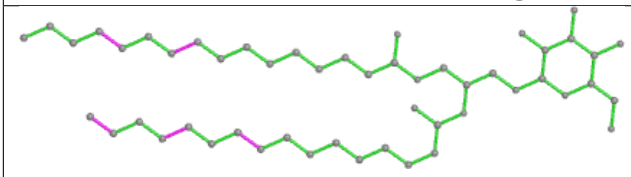


Torsions



Rings

Ligand LMG C1 521



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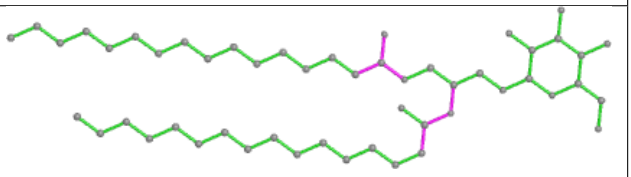
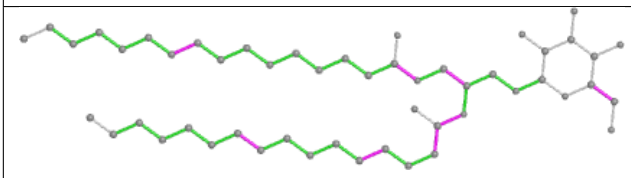
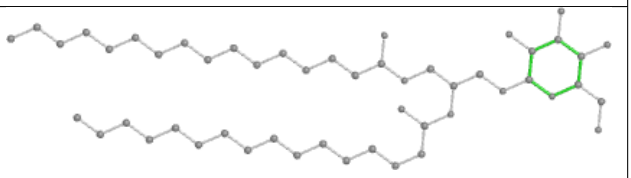


Bond angles

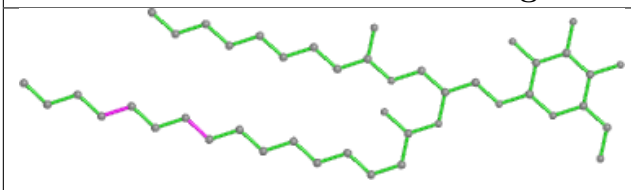


Torsions

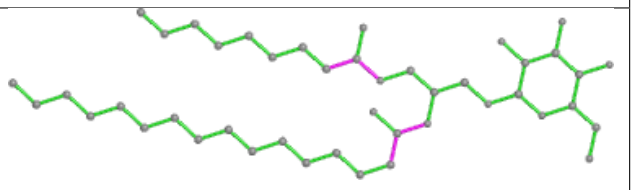


Rings

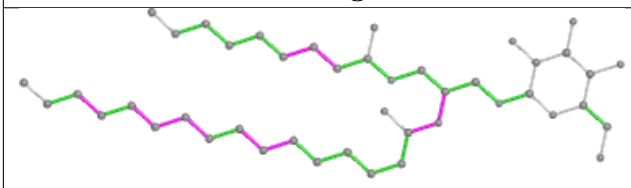
Ligand LMG B 622



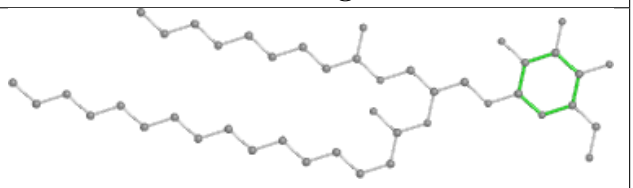
Bond lengths



Bond angles

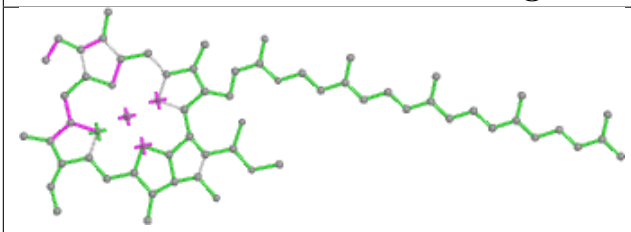


Torsions

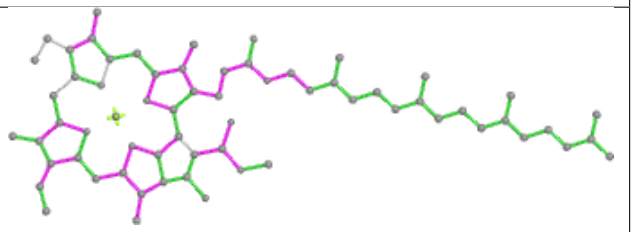


Rings

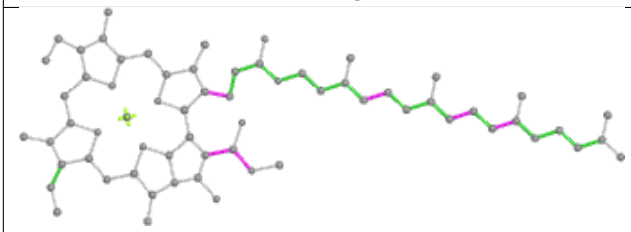
Ligand CLA N 610



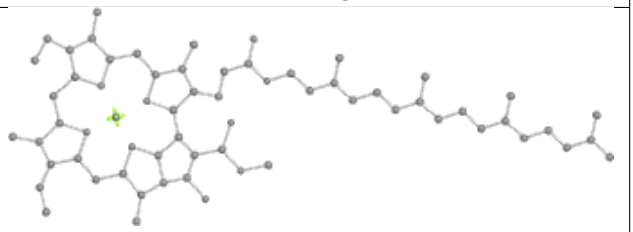
Bond lengths



Bond angles

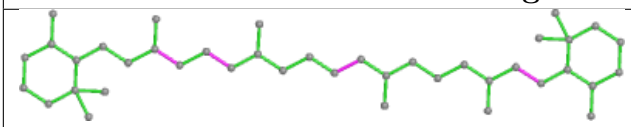


Torsions

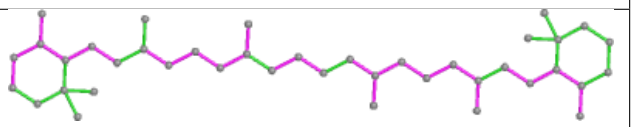


Rings

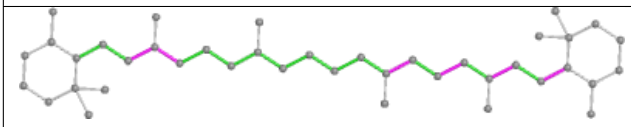
Ligand BCR C 515



Bond lengths



Bond angles



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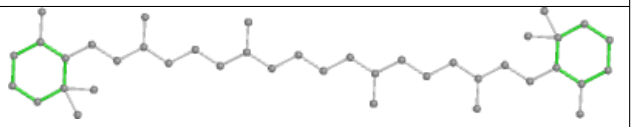
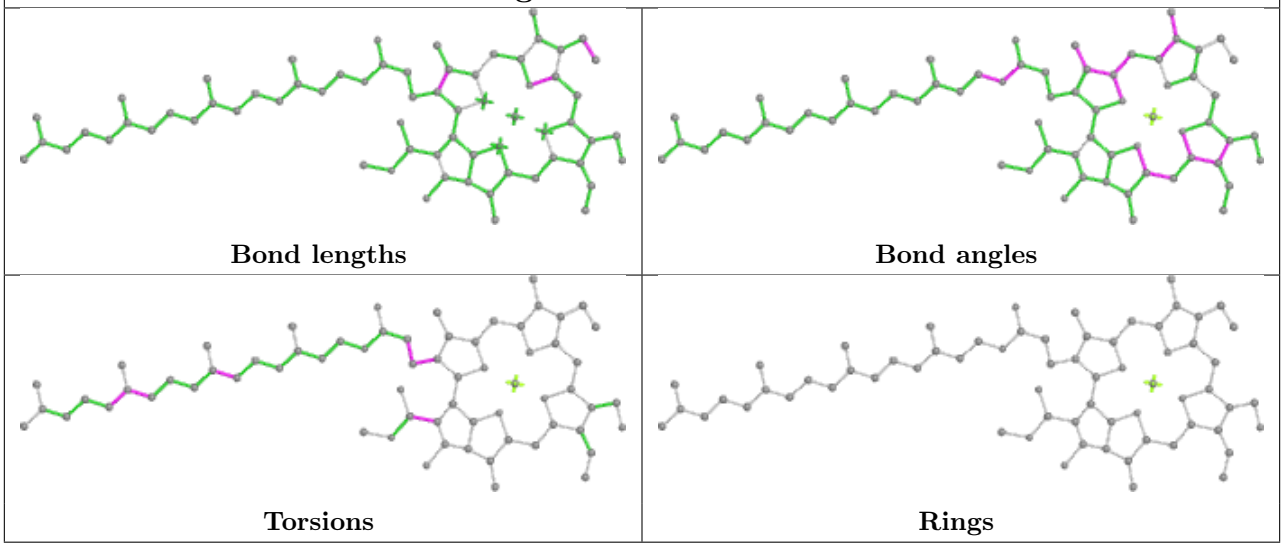
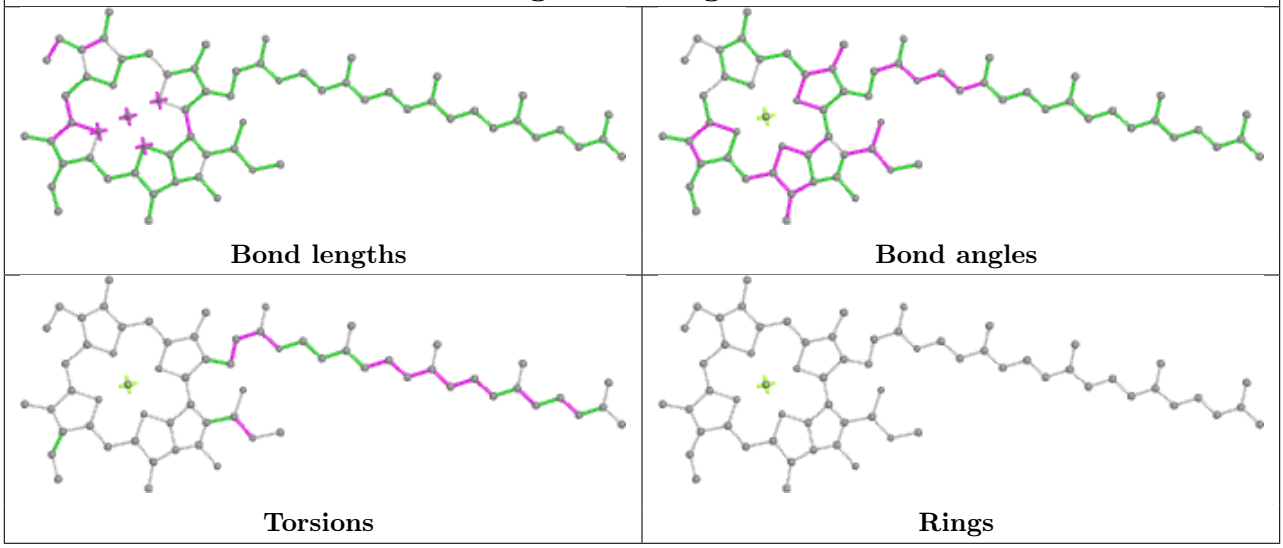


Rings

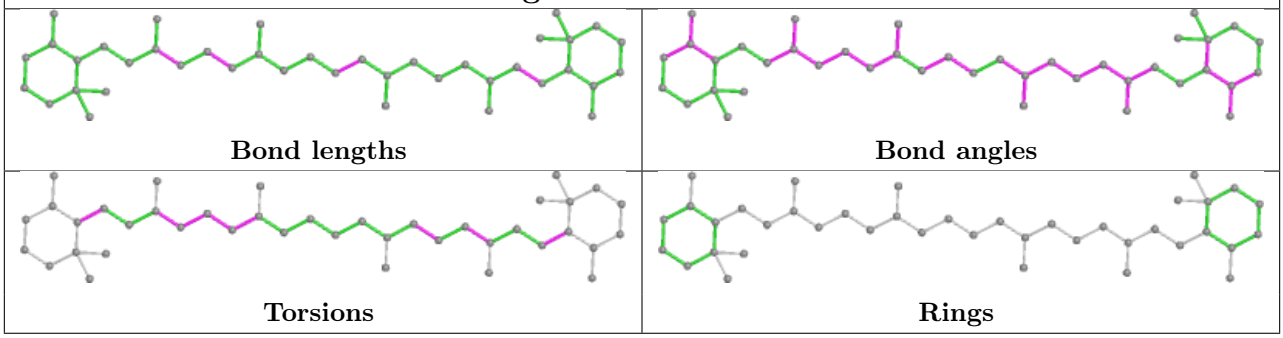
Ligand CHL Y1 606



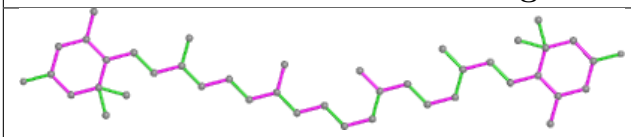
Ligand CLA g 613



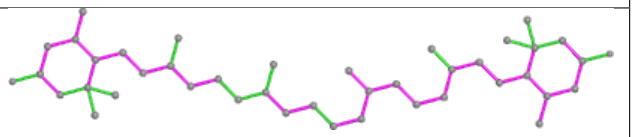
Ligand BCR D 404



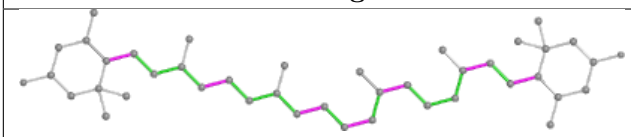
Ligand C7Z B1 620



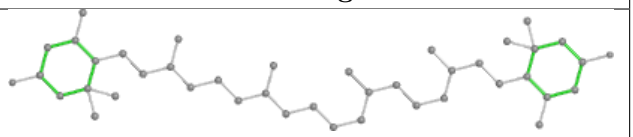
Bond lengths



Bond angles

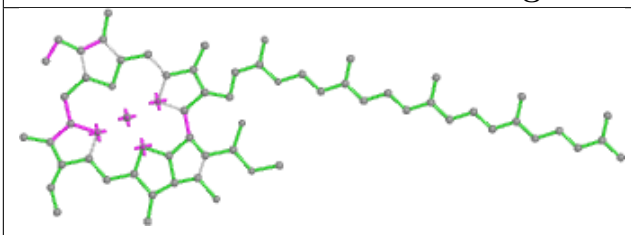


Torsions



Rings

Ligand CLA G 613



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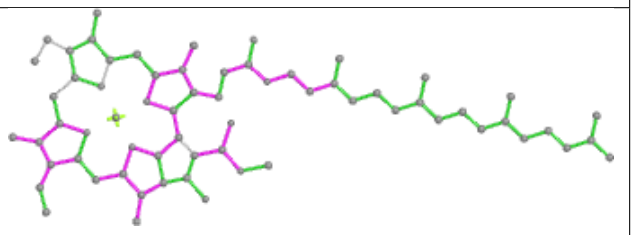
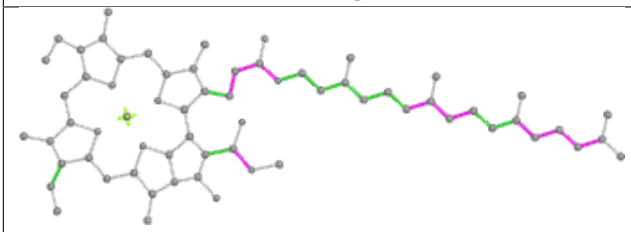


Bond angles



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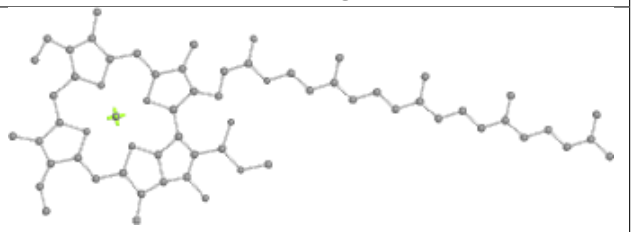
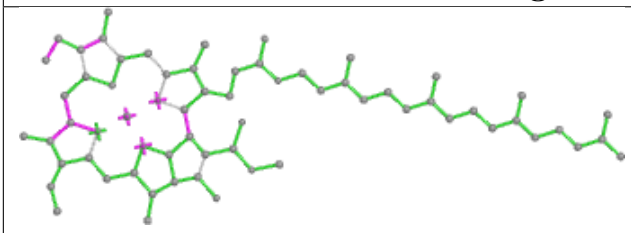
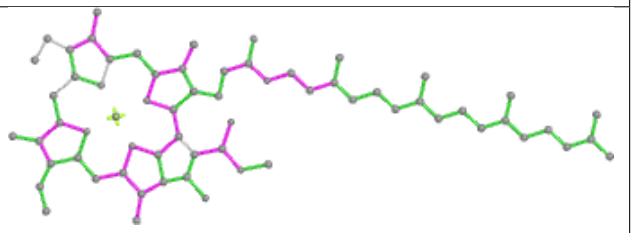


Rings

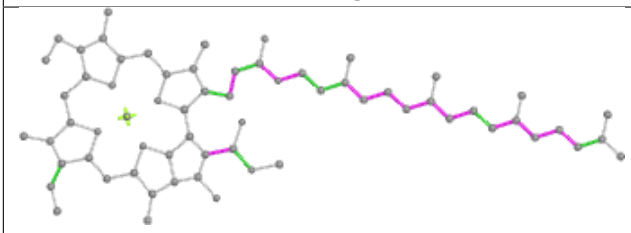
Ligand CLA c 512



Bond lengths



Bond angles



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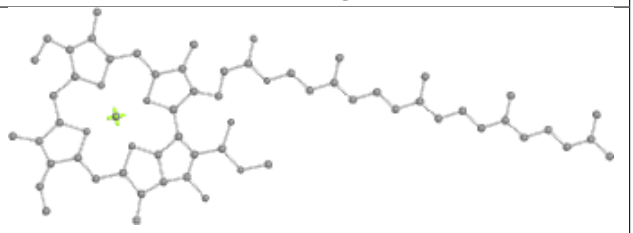
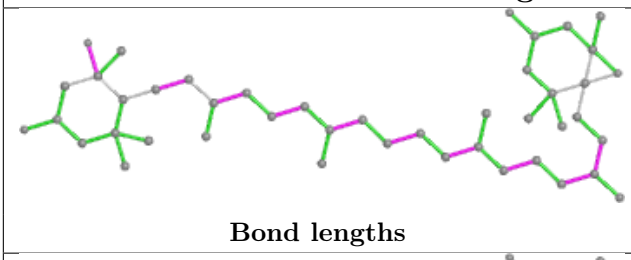


Rings

Ligand NEX S1 623



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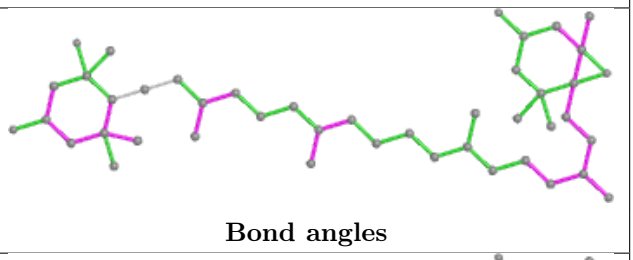
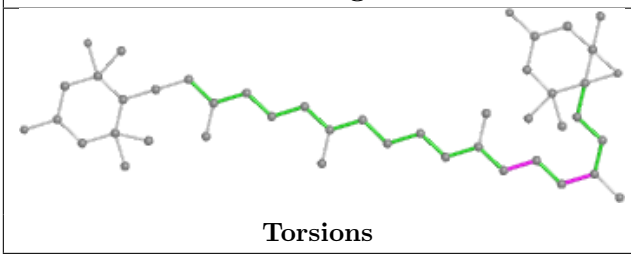


Bond angles



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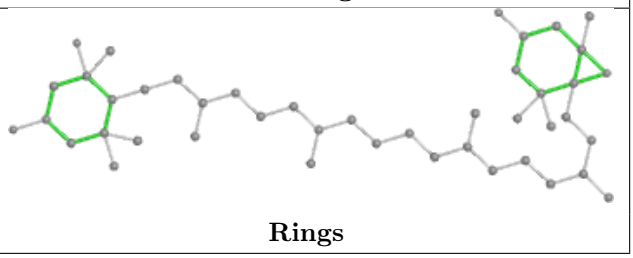
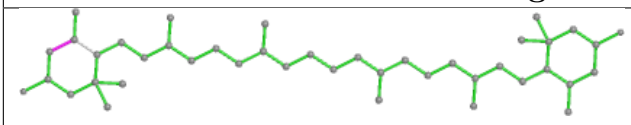


Rings

Ligand LUT g 620



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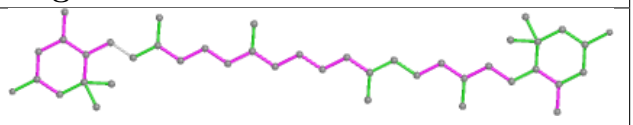
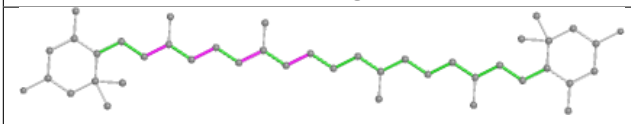


Bond angles



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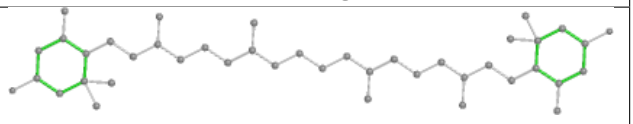
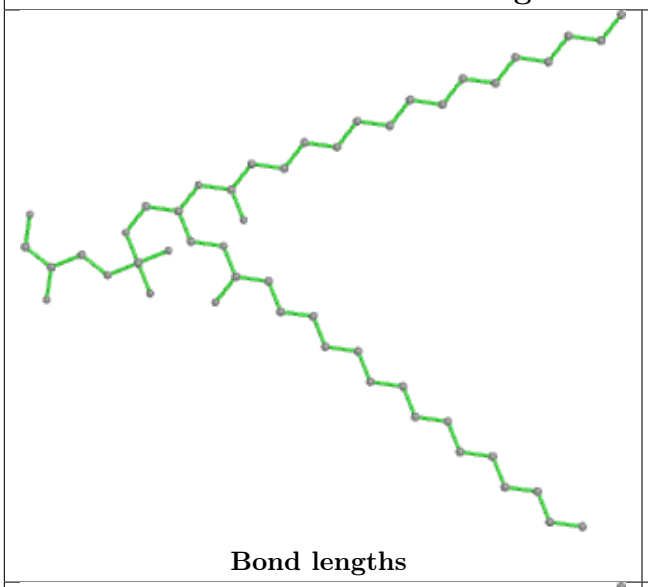
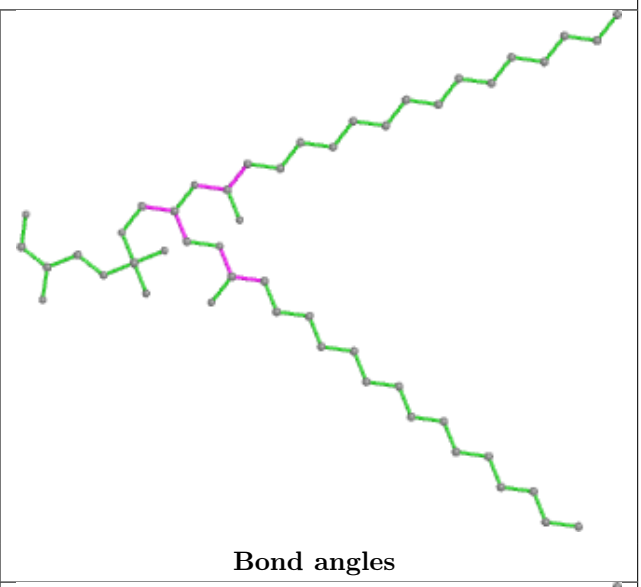


Rings

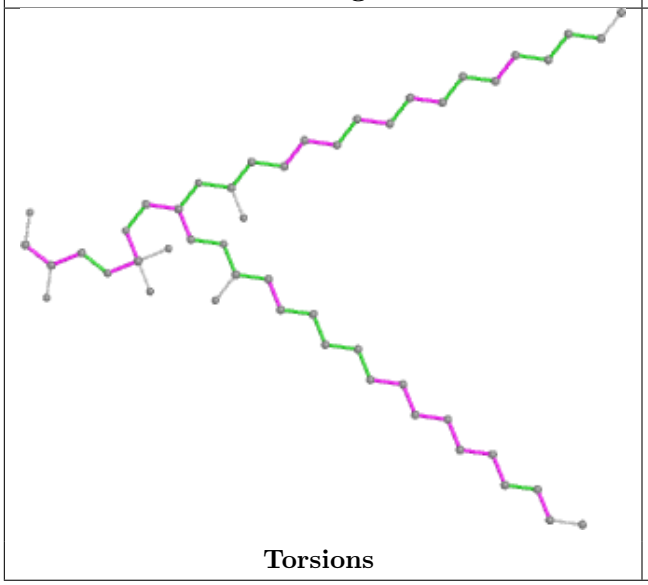
Ligand LHG Y1 624



Bond lengths



Bond angles



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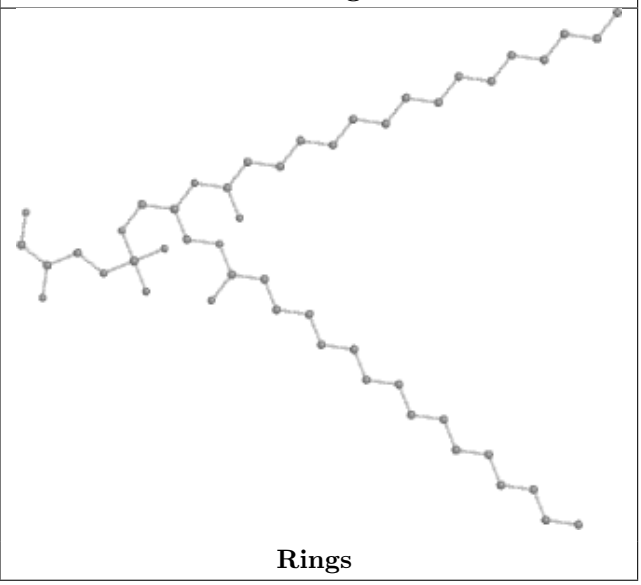
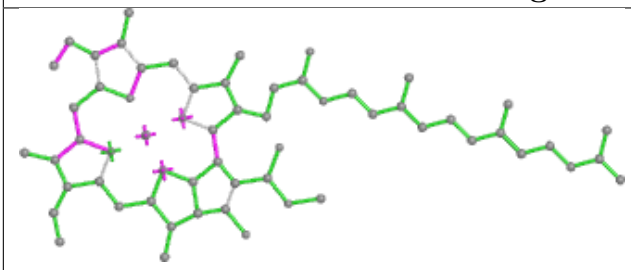
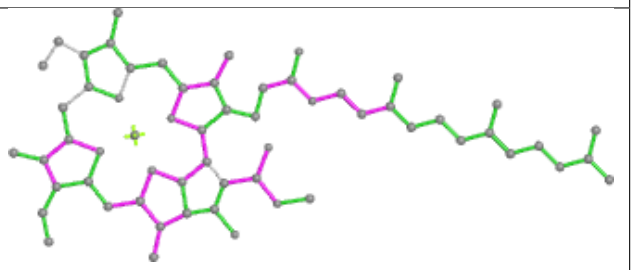


Rings

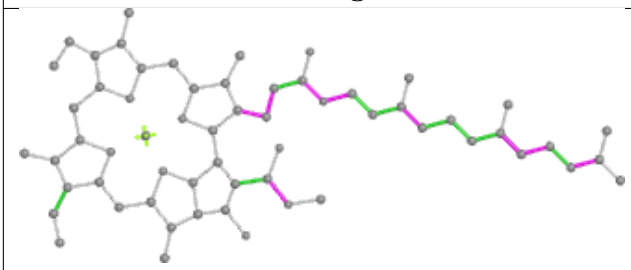
Ligand CLA r 603



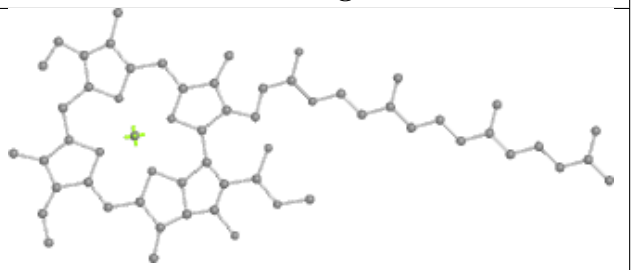
Bond lengths



Bond angles

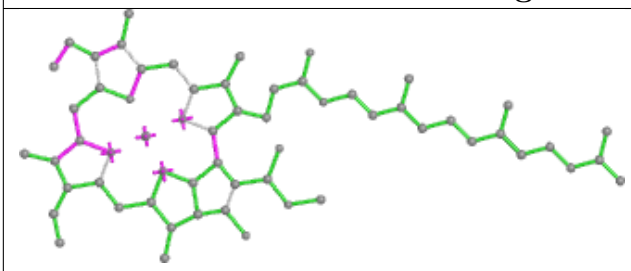


Torsions

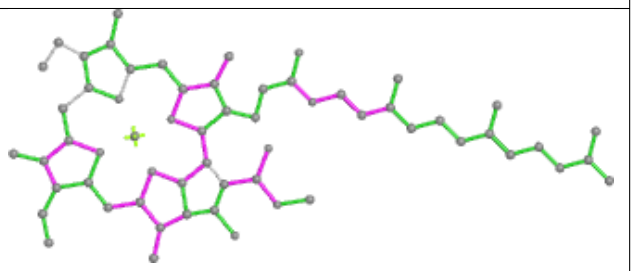


Rings

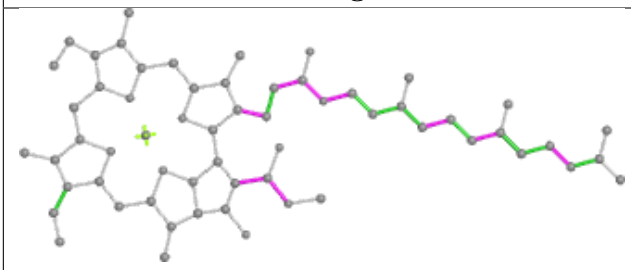
Ligand CLA R1 612



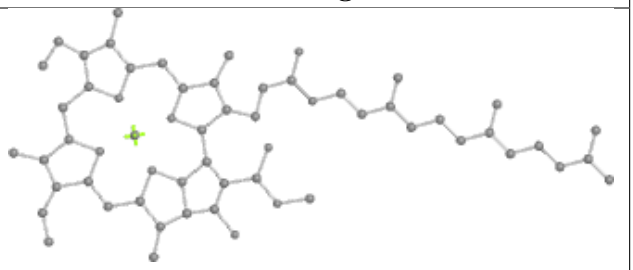
Bond lengths



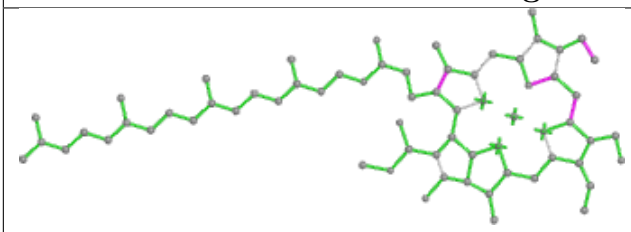
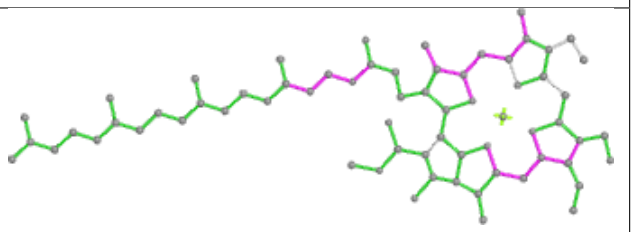
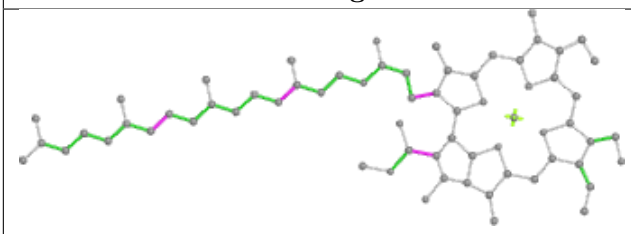
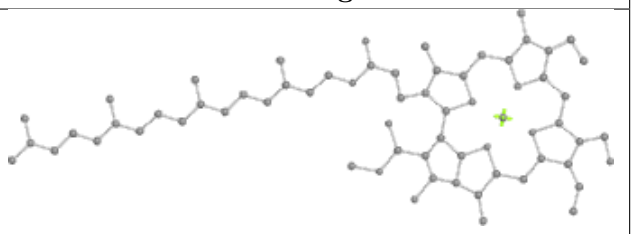
Bond angles

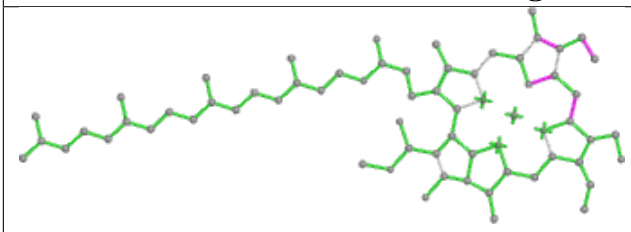
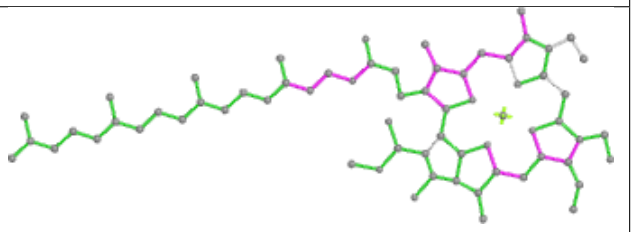
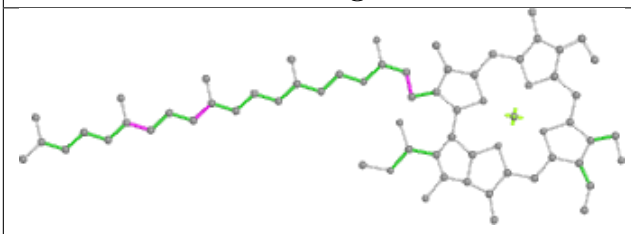
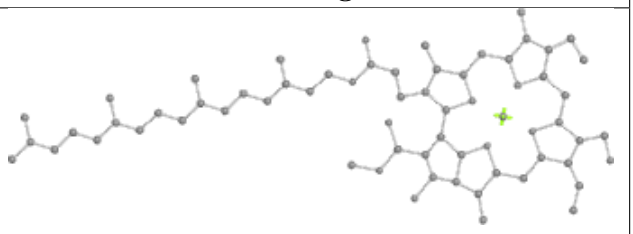


Torsions

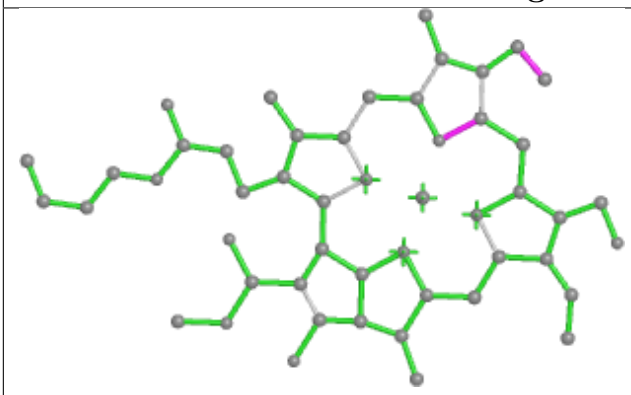


Rings

Ligand CHL G 601	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CHL n 606	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CHL g 606



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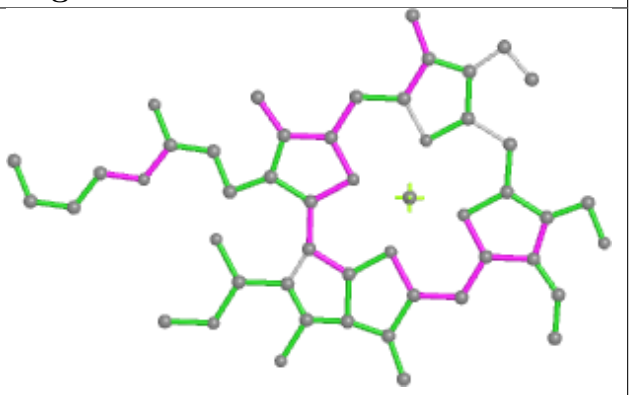

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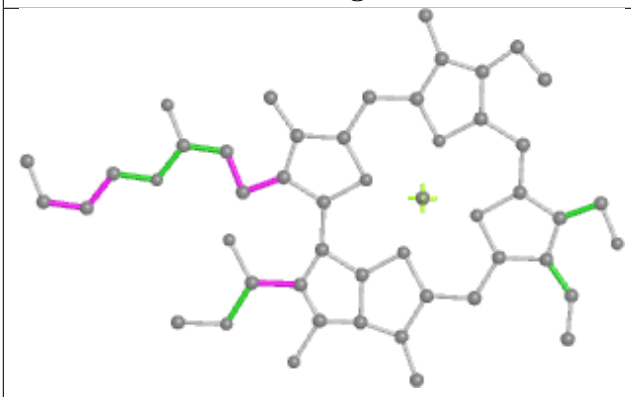

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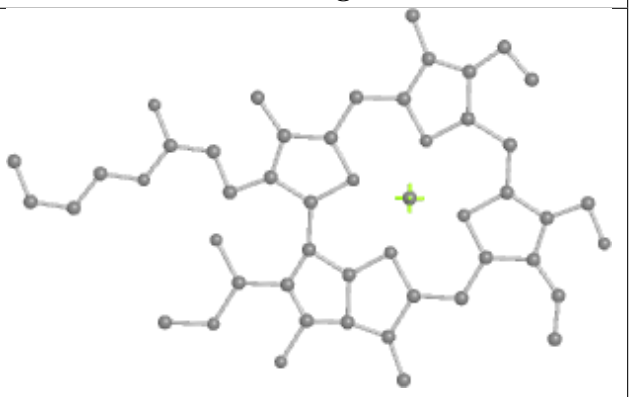
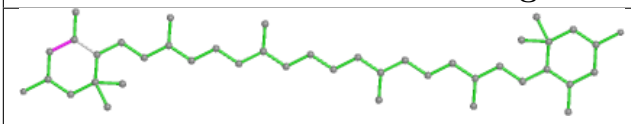


Rings

Ligand LUT g1 621



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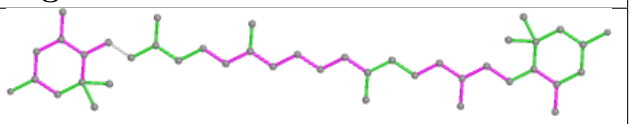

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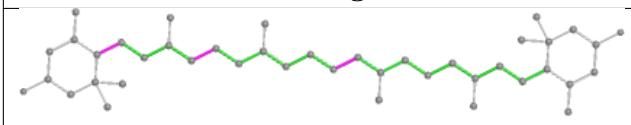
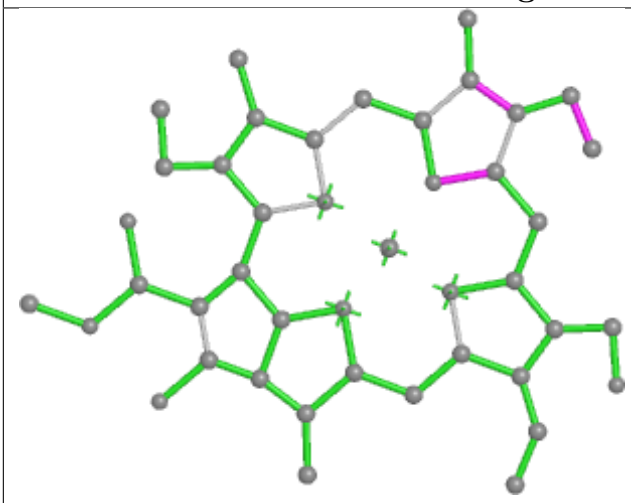


Torsions

Rings

Ligand CHL S1 607



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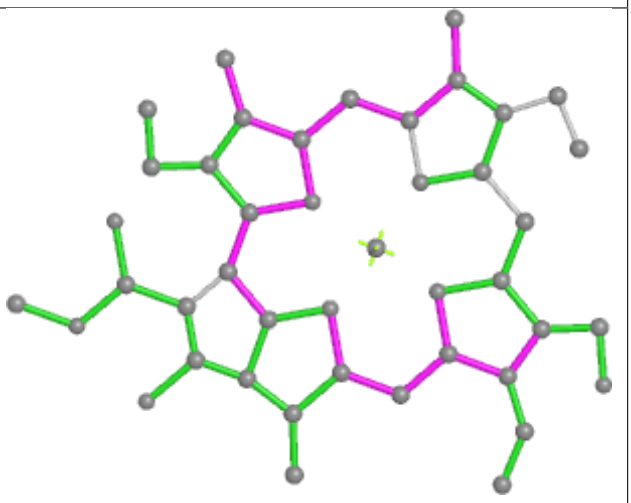

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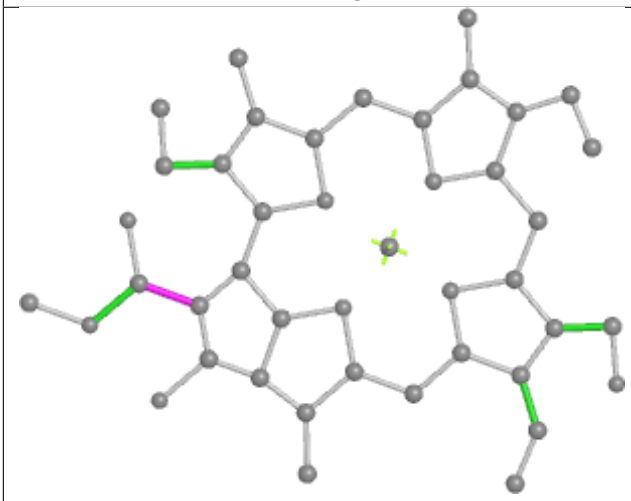

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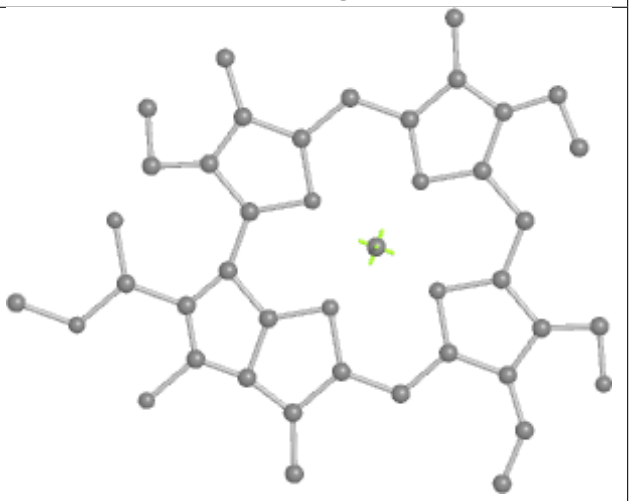
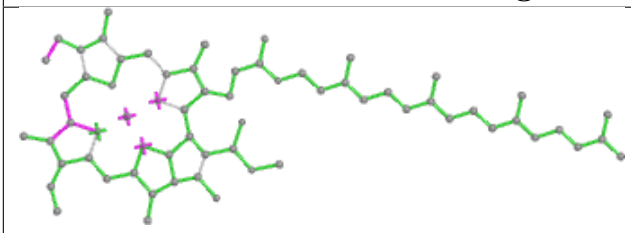


Rings

Ligand CLA B1 612



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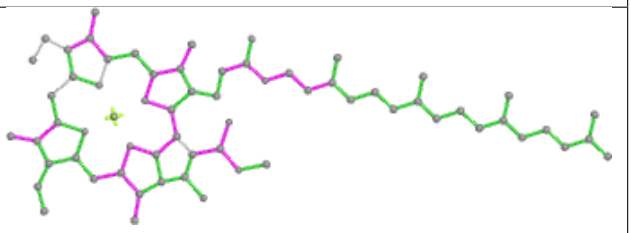

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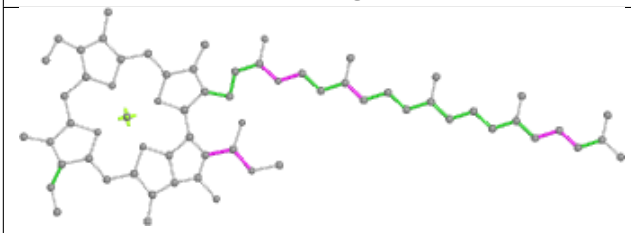

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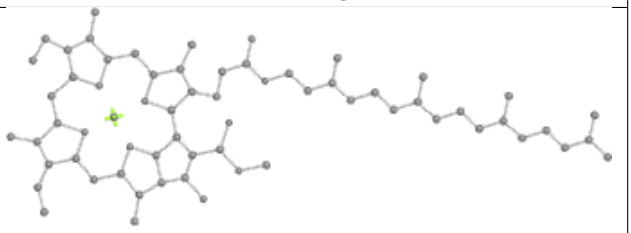
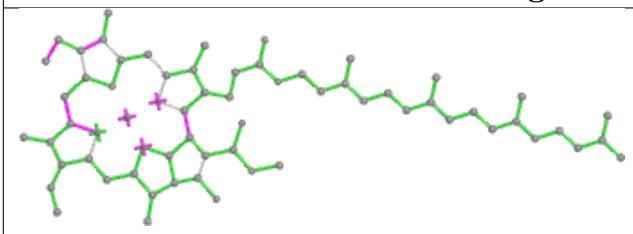


Rings

Ligand CLA y 612



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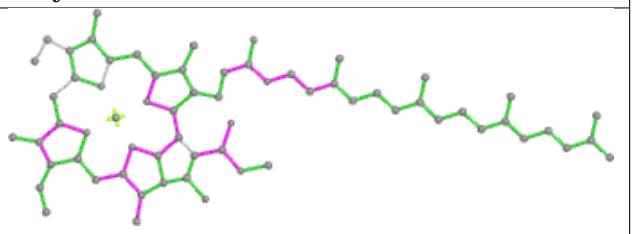

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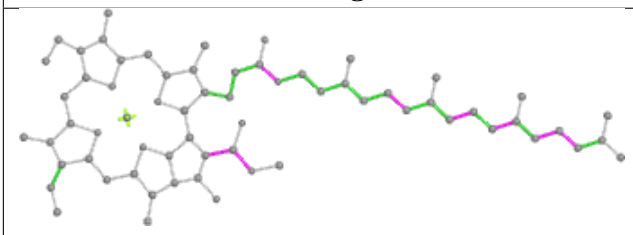

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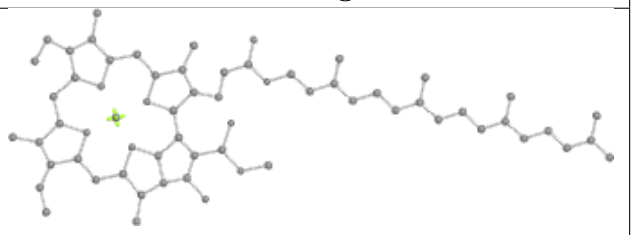
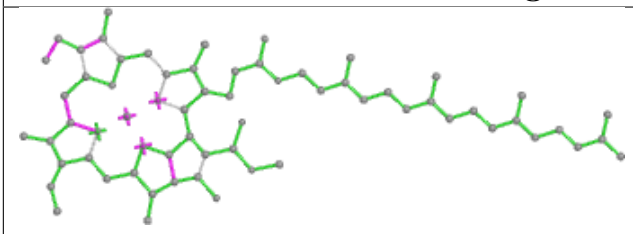


Rings

Ligand CLA C 508



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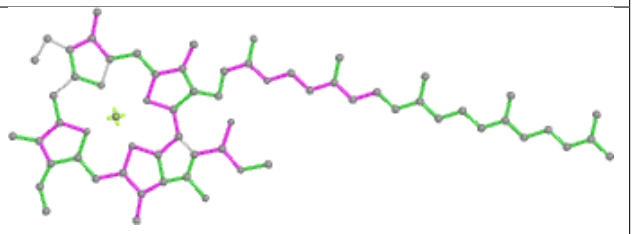

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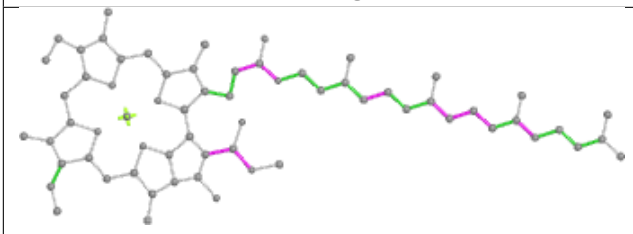

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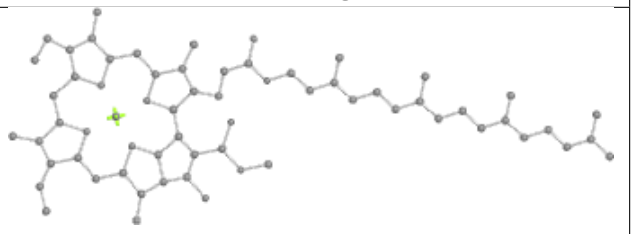
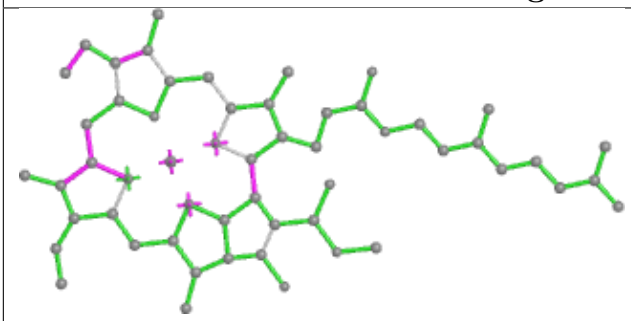


Rings

Ligand CLA S 613



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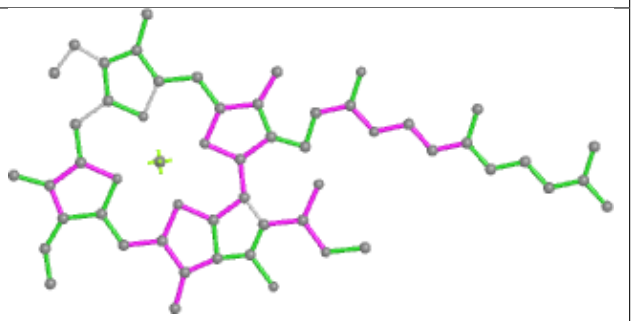

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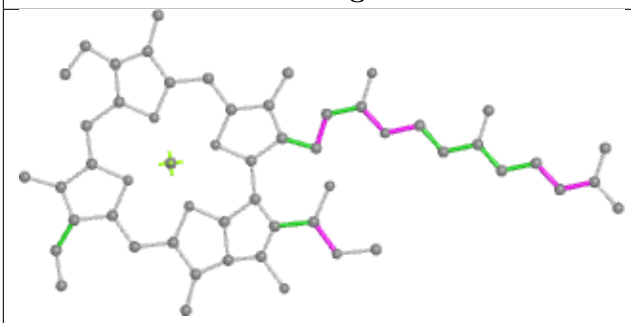

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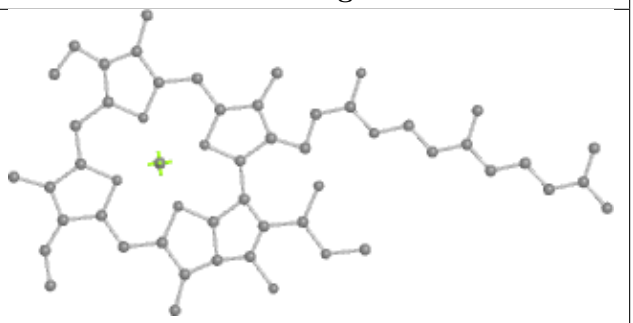
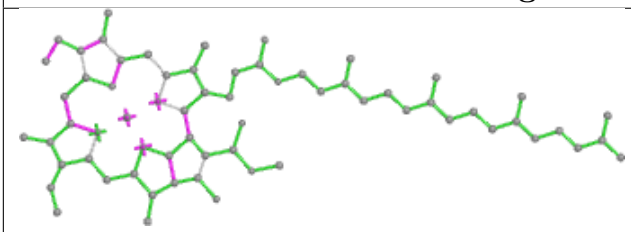


Rings

Ligand CLA y1 614



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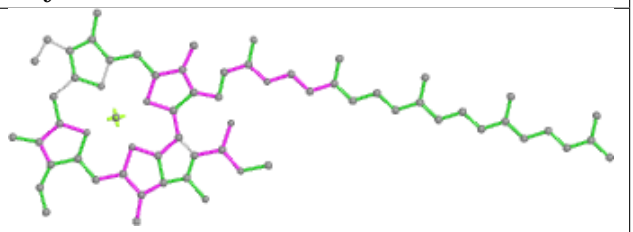

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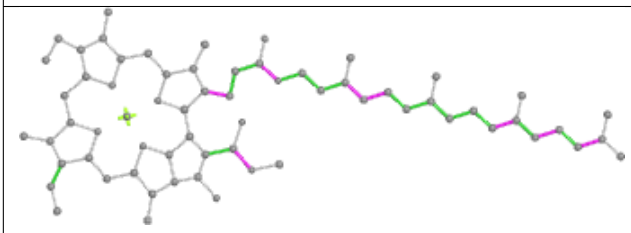

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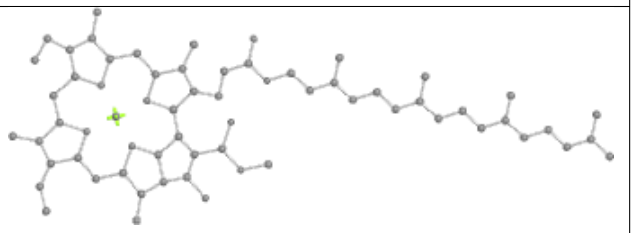

Rings

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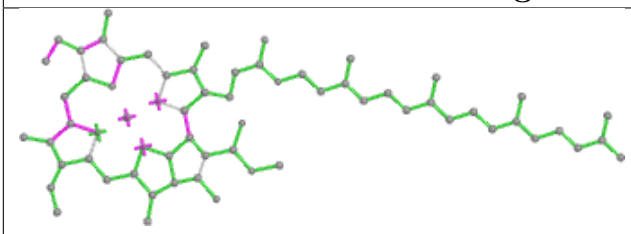
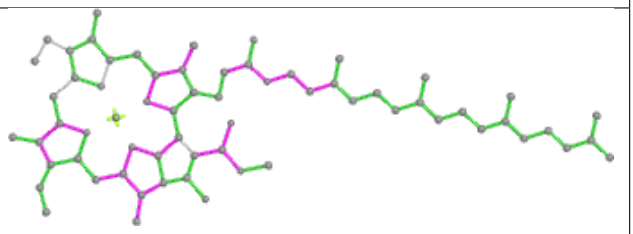
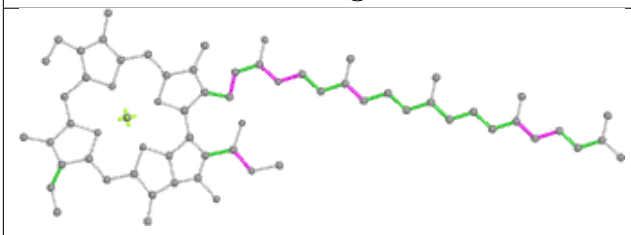
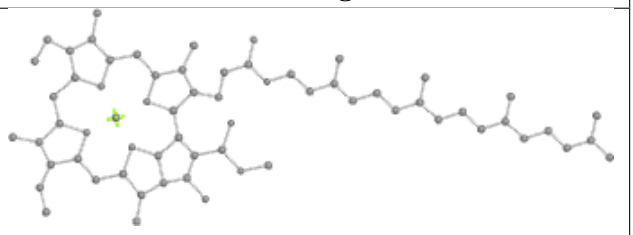
 Bond lengths	 Bond angles
 Torsions	 Rings

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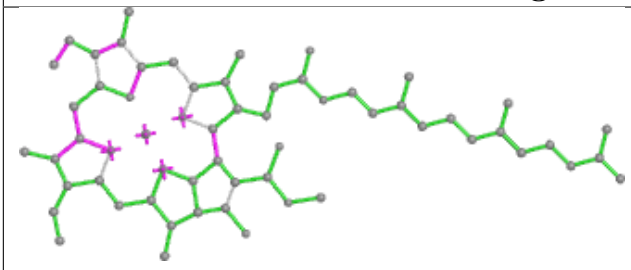
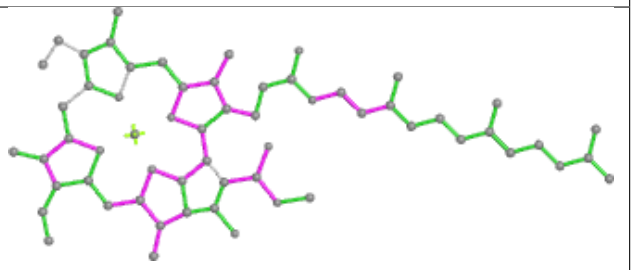
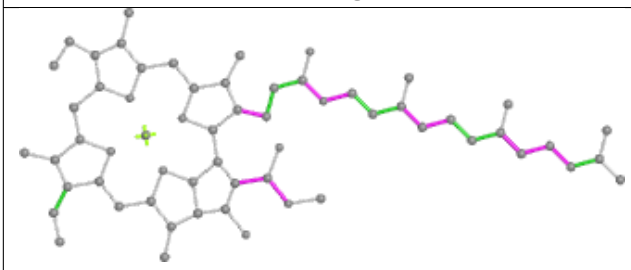
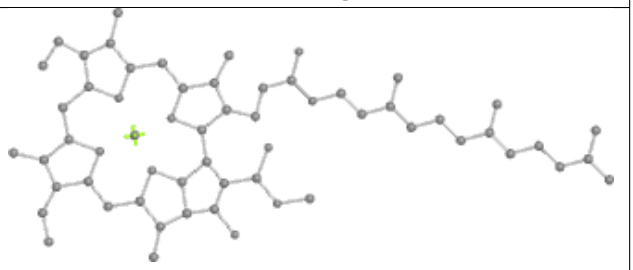
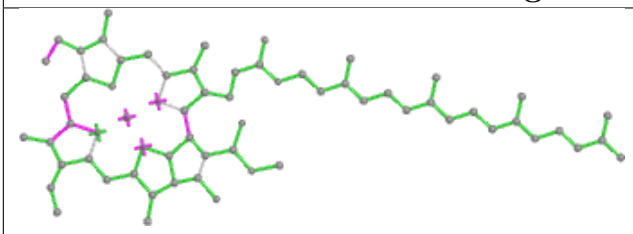
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA B 615



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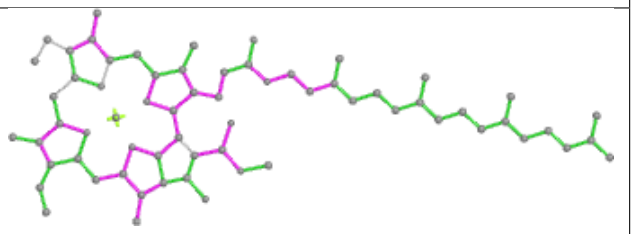
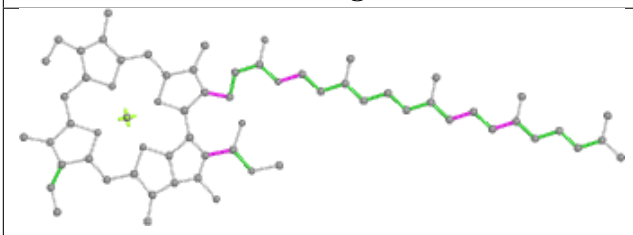


Bond angles



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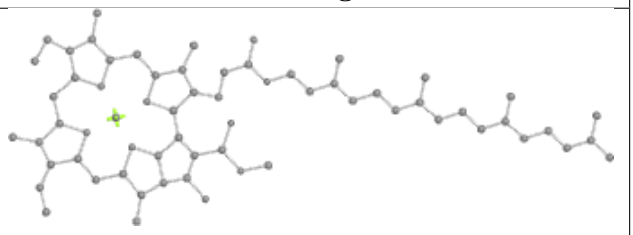
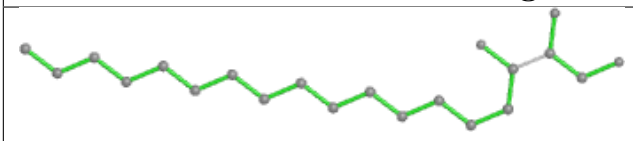


Rings

Ligand SPH y1 625



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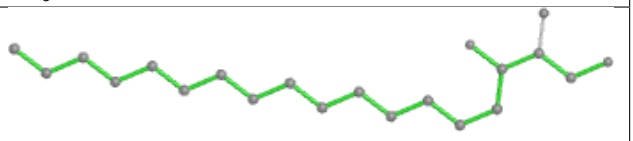
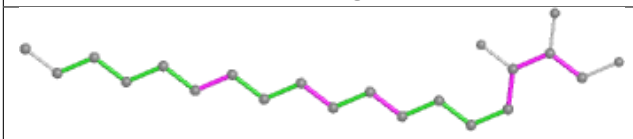


Bond angles



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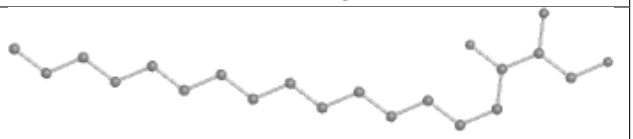
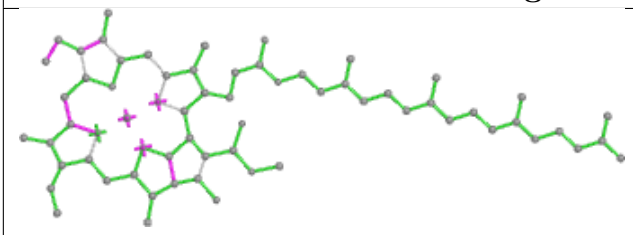


Rings

Ligand CLA B 617



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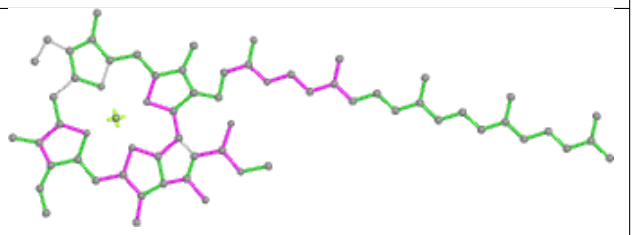
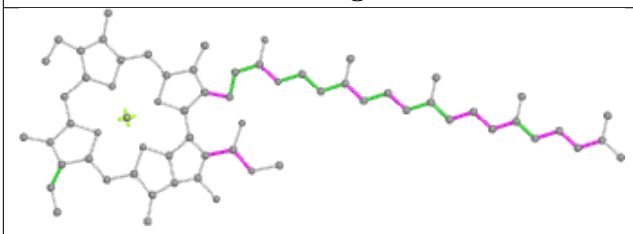


Bond angles



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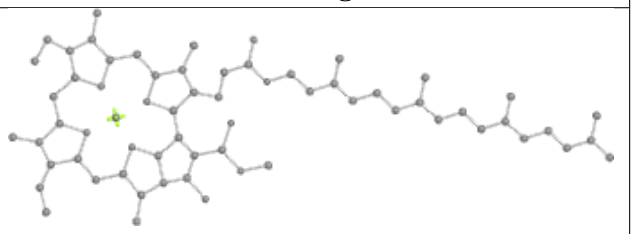
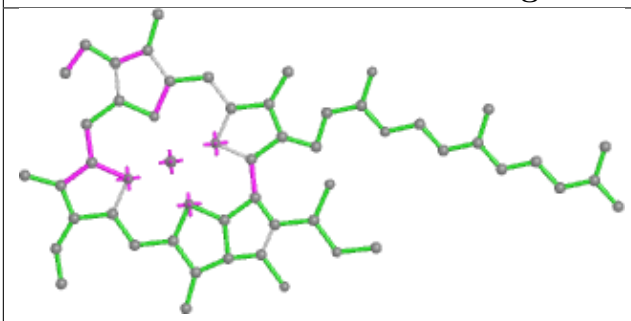
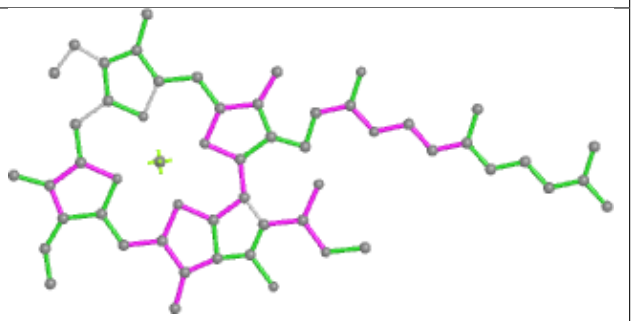


Rings

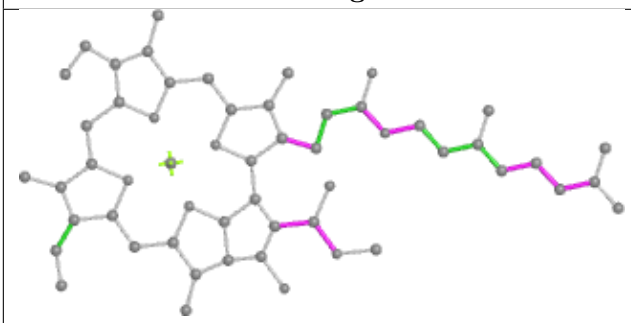
Ligand CLA s1 604



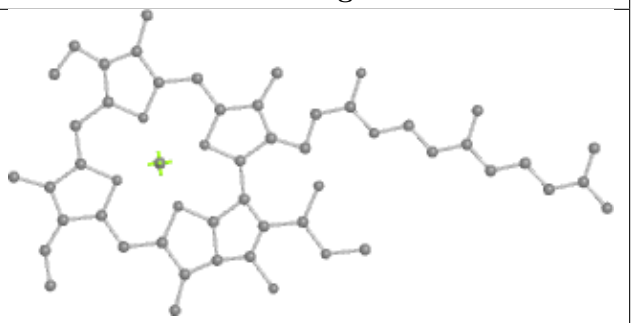
Bond lengths



Bond angles

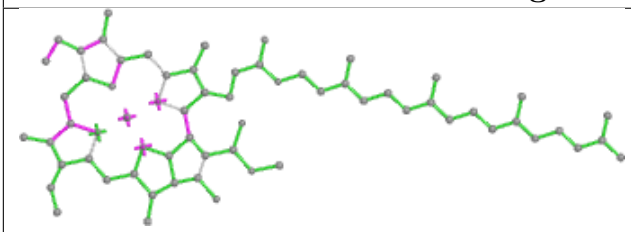


Torsions



Rings

Ligand CLA c 513



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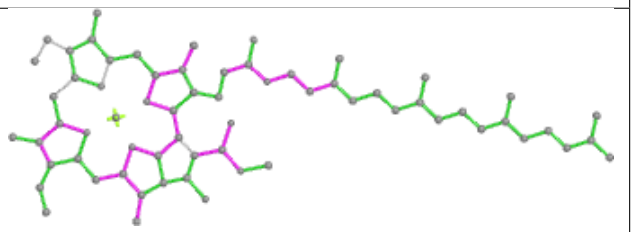

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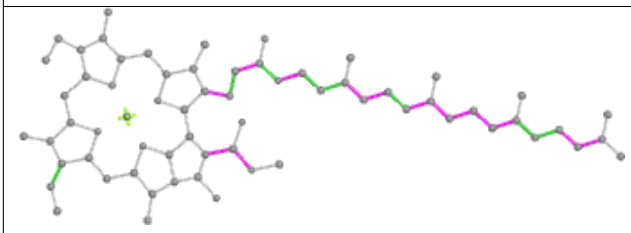

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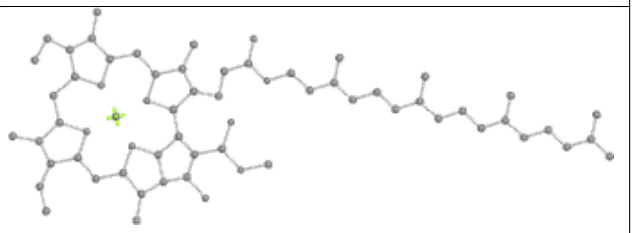
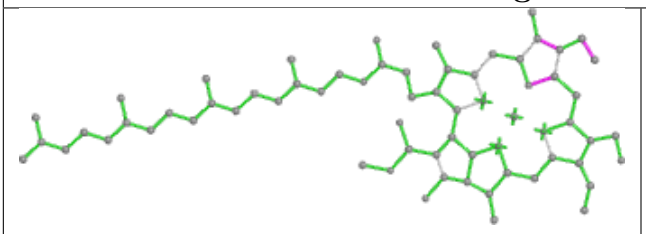


Rings

Ligand CHL N1 601



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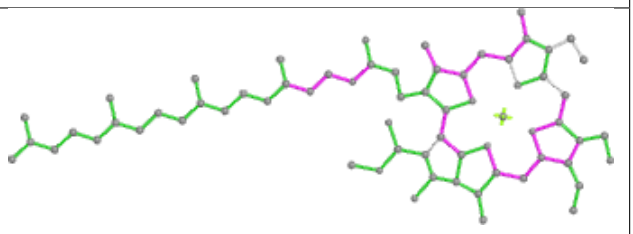
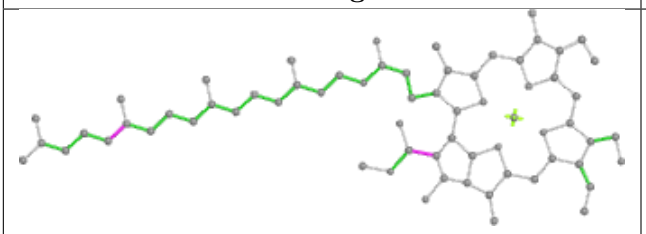


Bond angles



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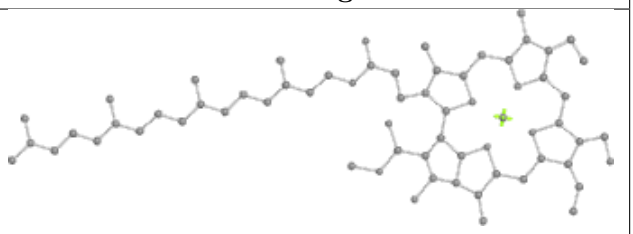
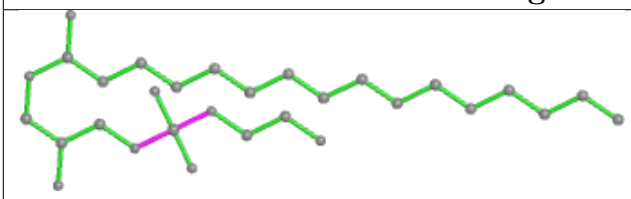


Rings

Ligand LPX S 625



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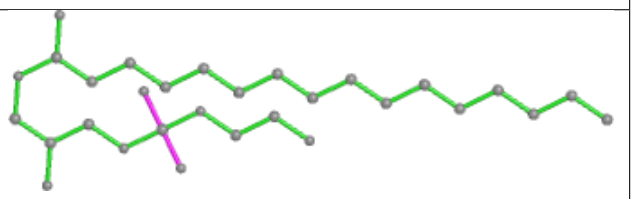
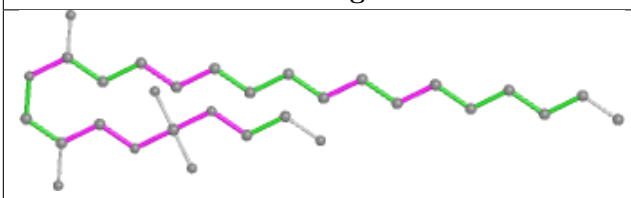


Bond angles



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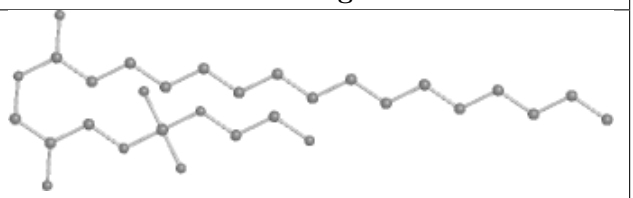
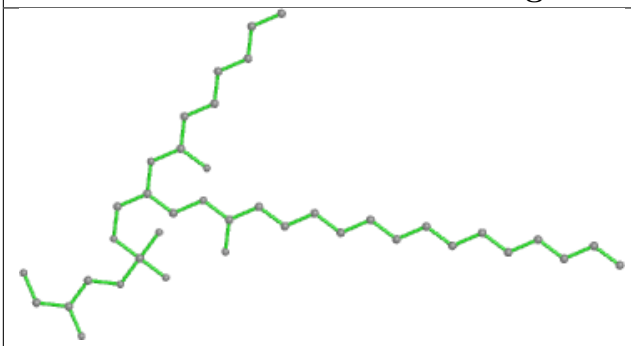


Rings

Ligand LHG d 410



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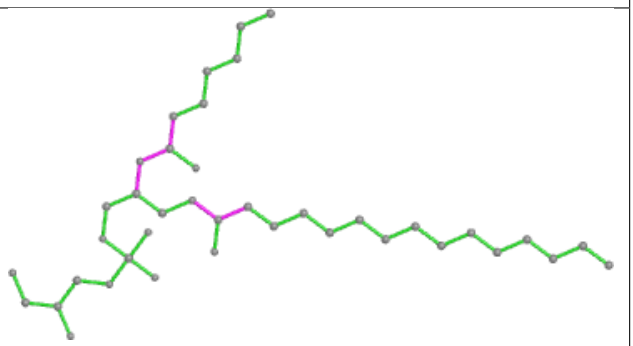
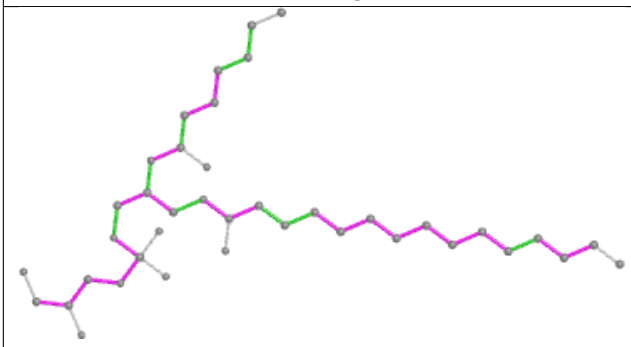


Bond angles



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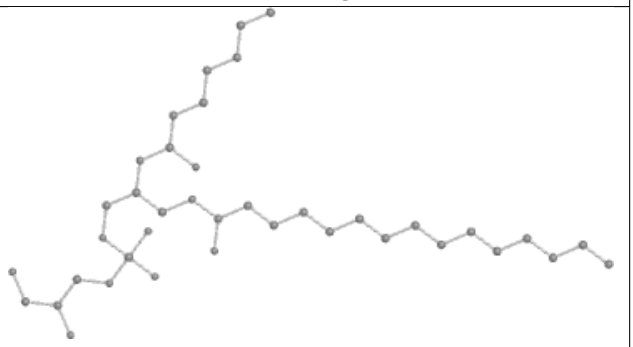
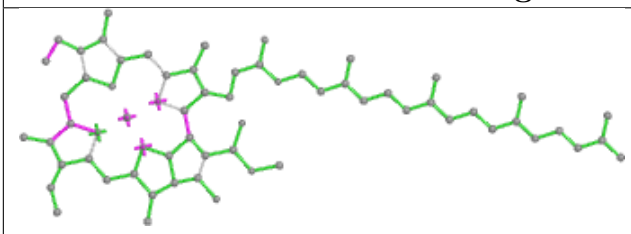


Rings

Ligand CLA Y1 604



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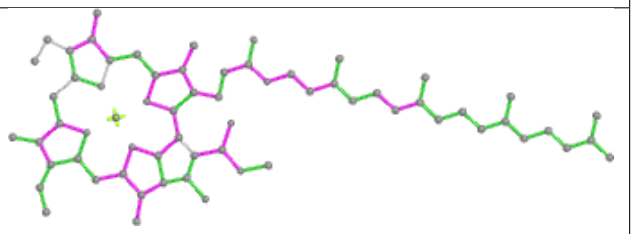
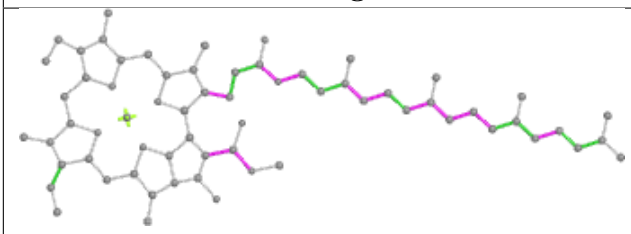


Bond angles



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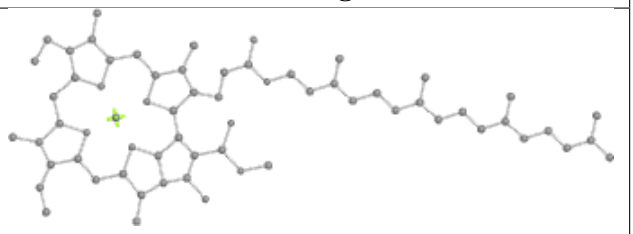
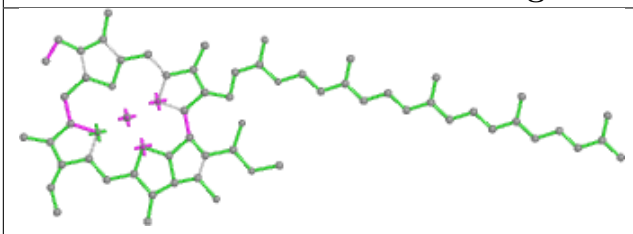


Rings

Ligand CLA n 604



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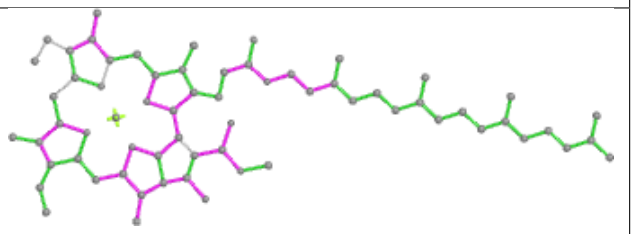
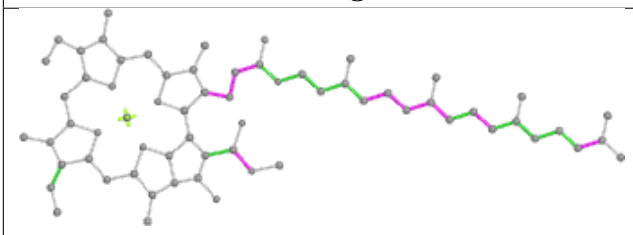


Bond angles



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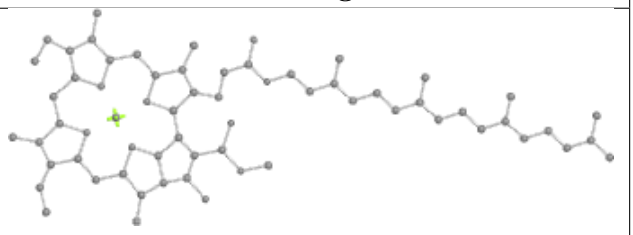
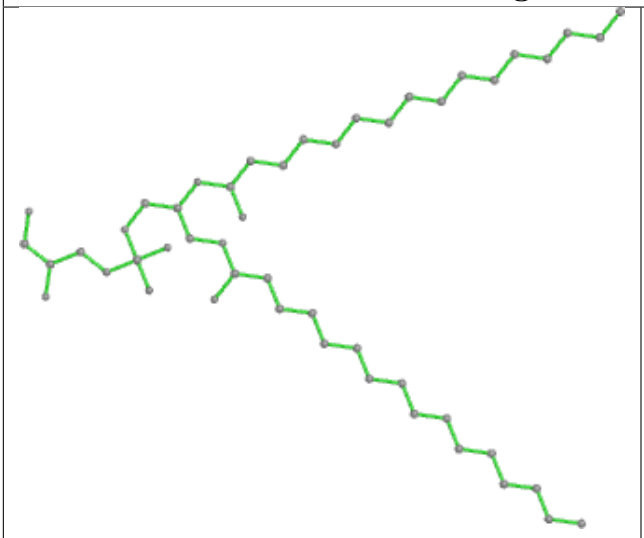


Rings

Ligand LHG N1 624



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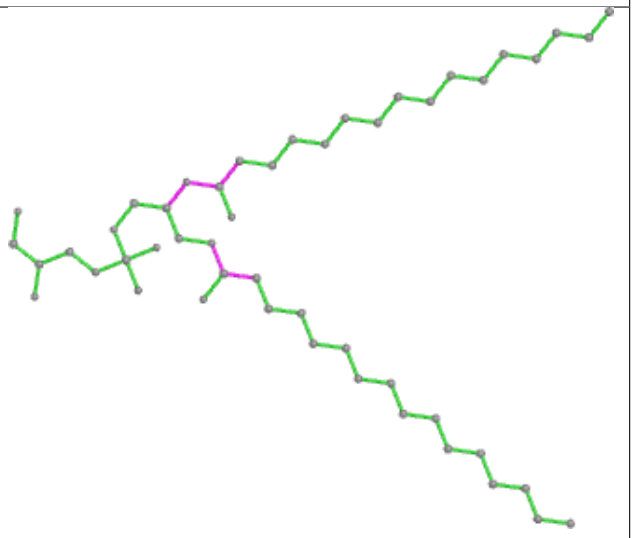
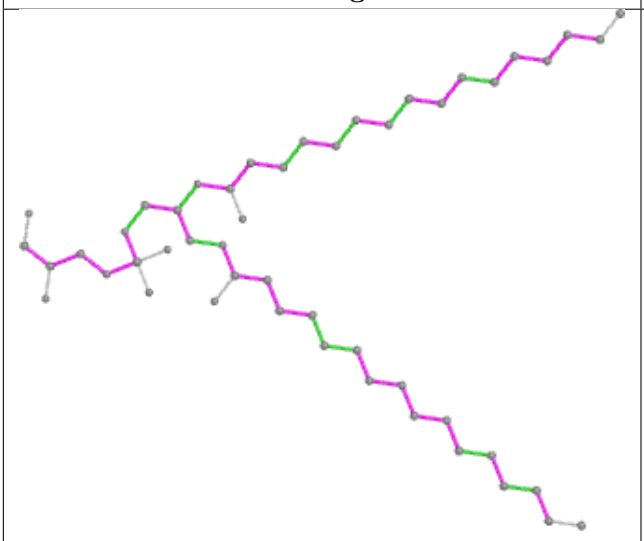


Bond angles



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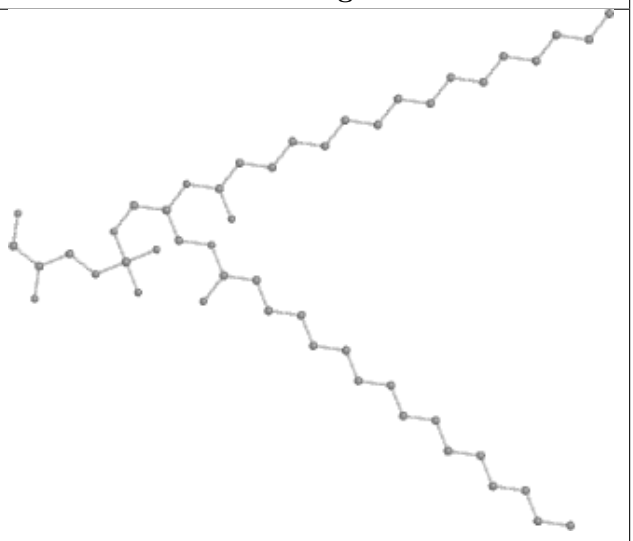
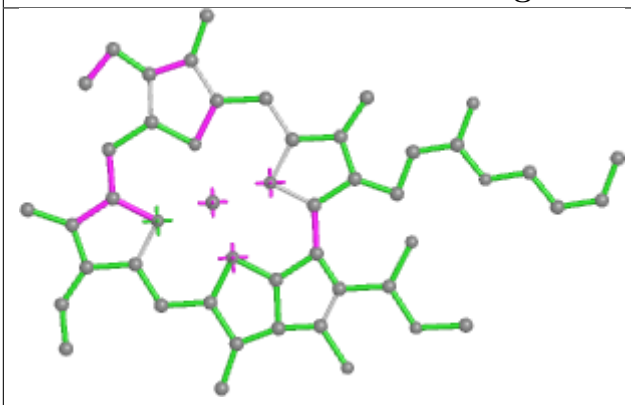


Rings

Ligand CLA G1 614



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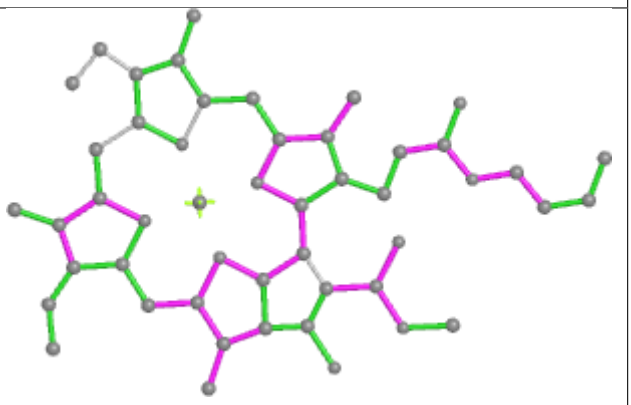
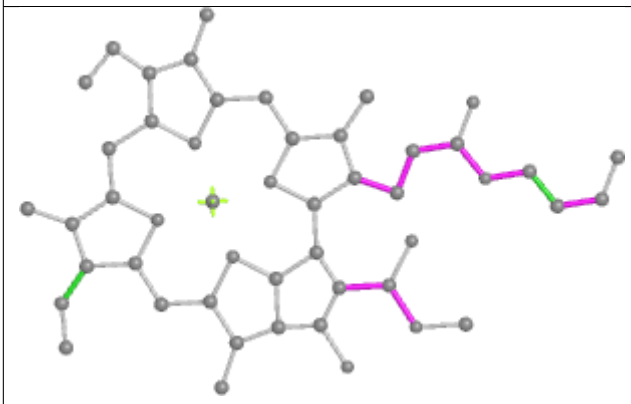


Bond angles



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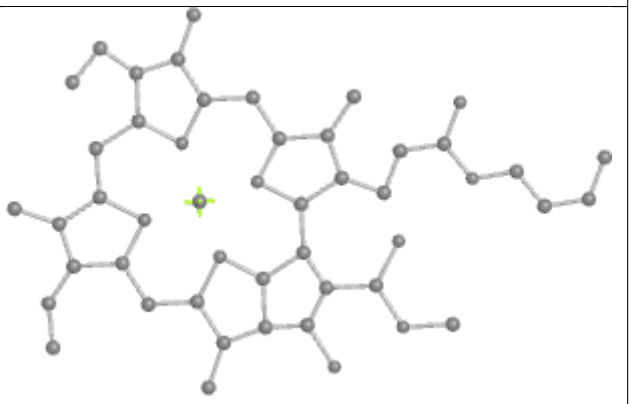
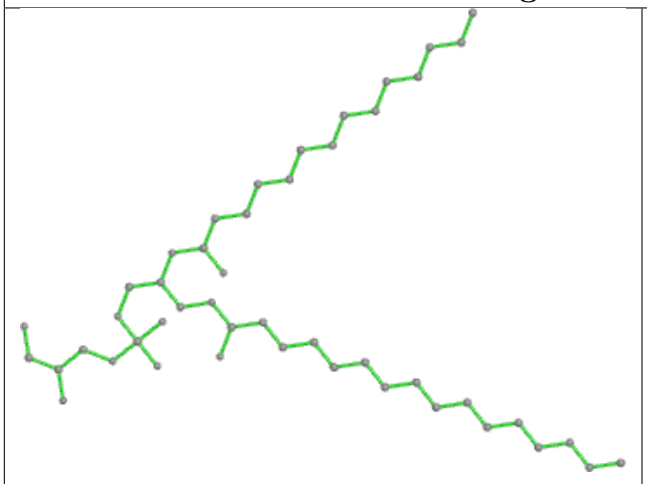


Rings

Ligand LHG c1 525



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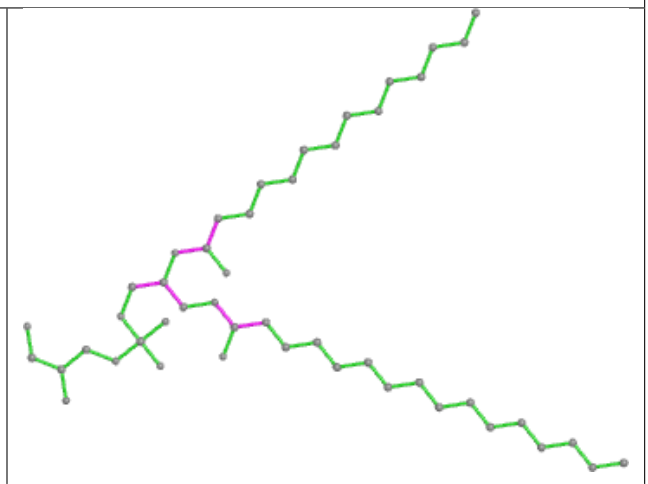
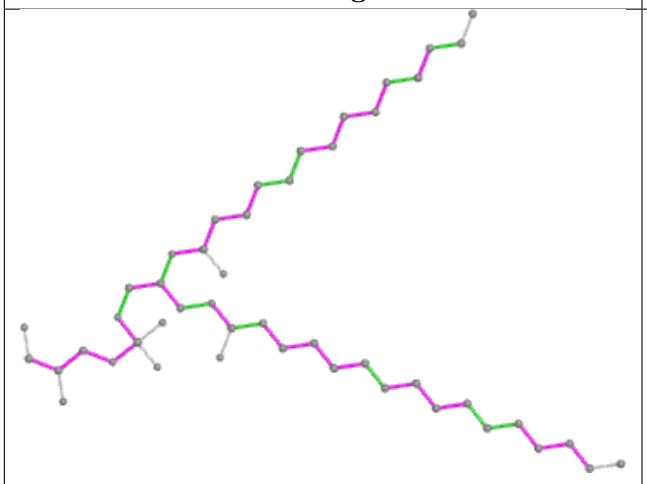


Bond angles



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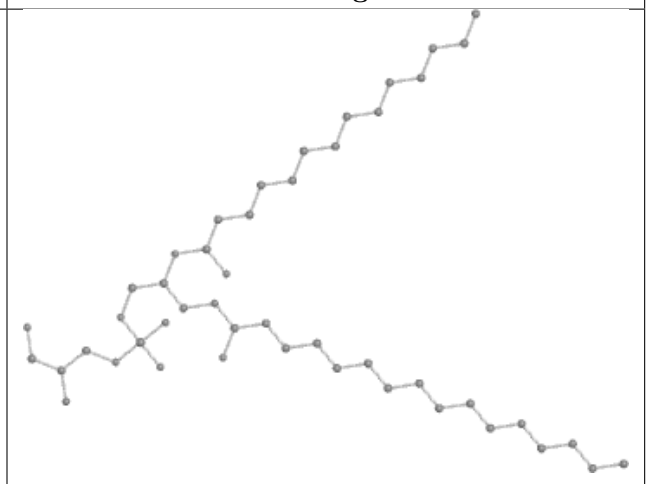
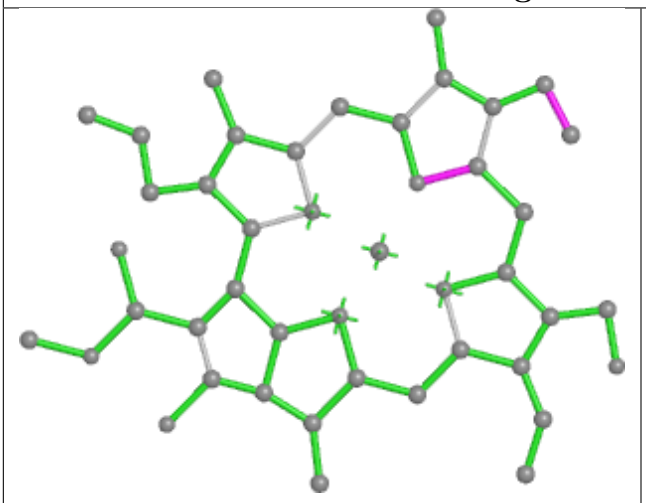


Rings

Ligand CHL R1 606



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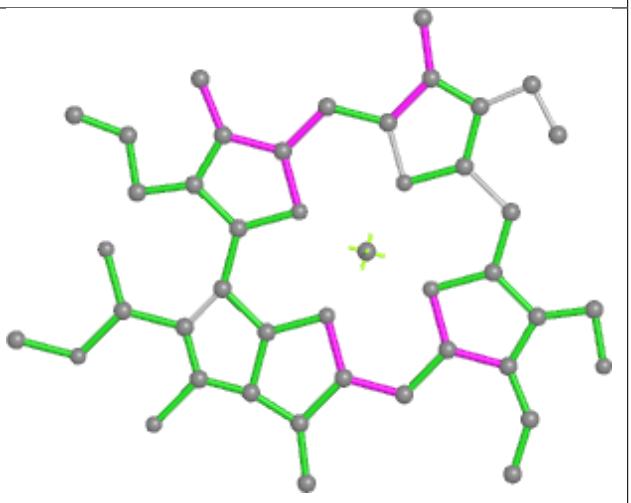
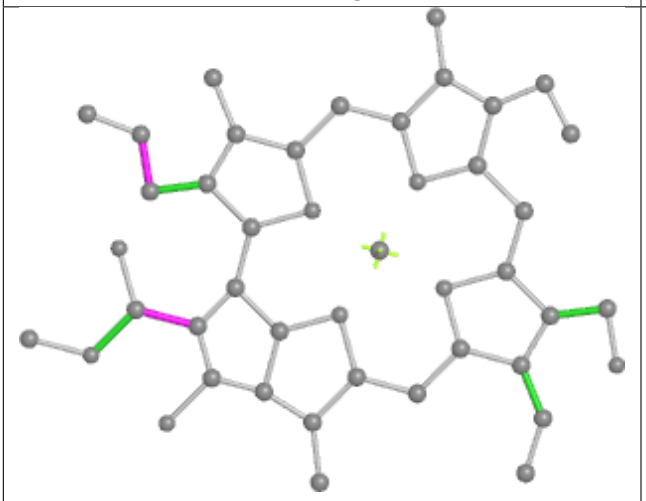


Bond angles



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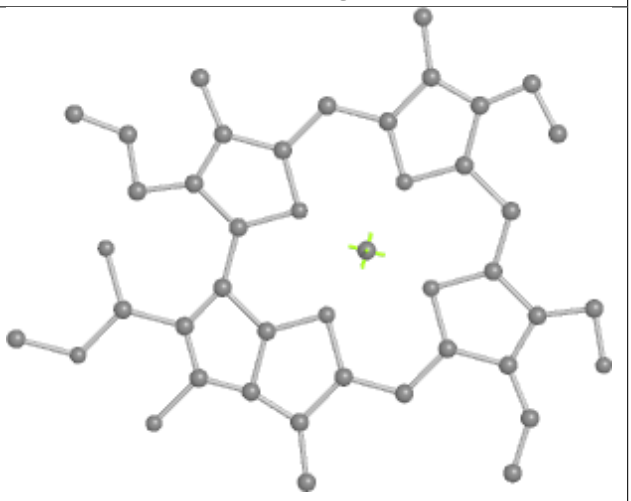
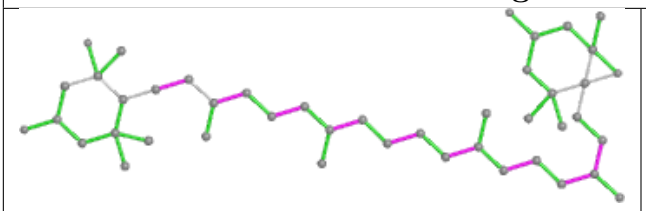


Rings

Ligand NEX G1 623



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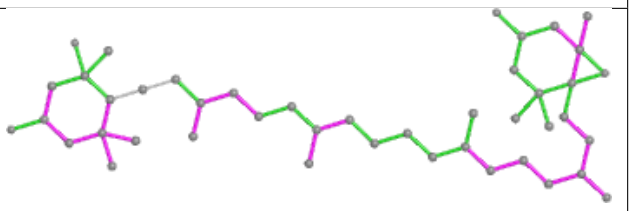
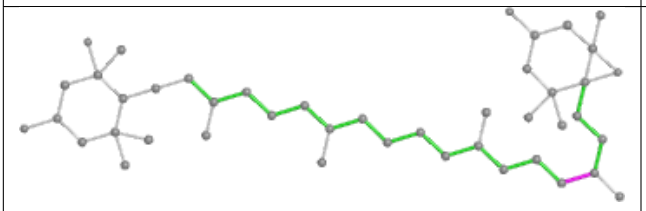
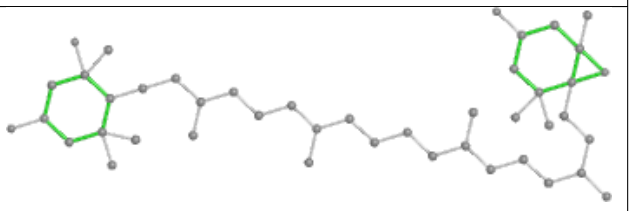


Bond angles

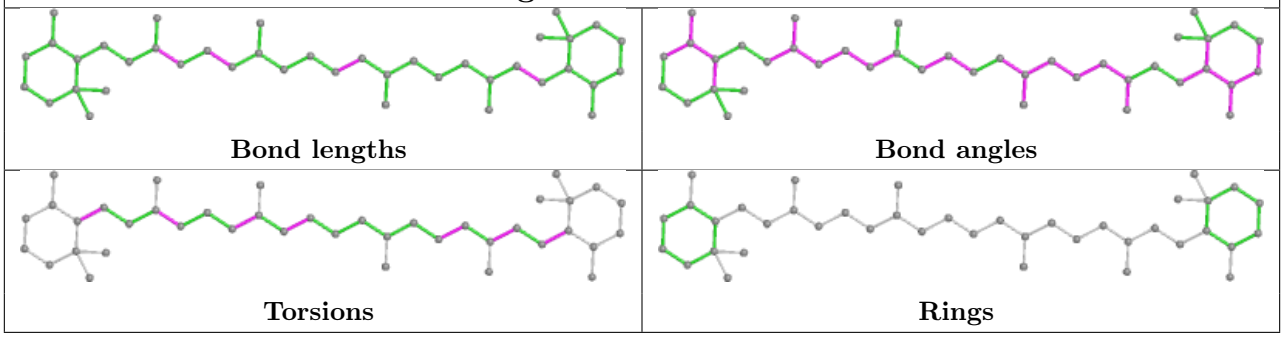


Torsions

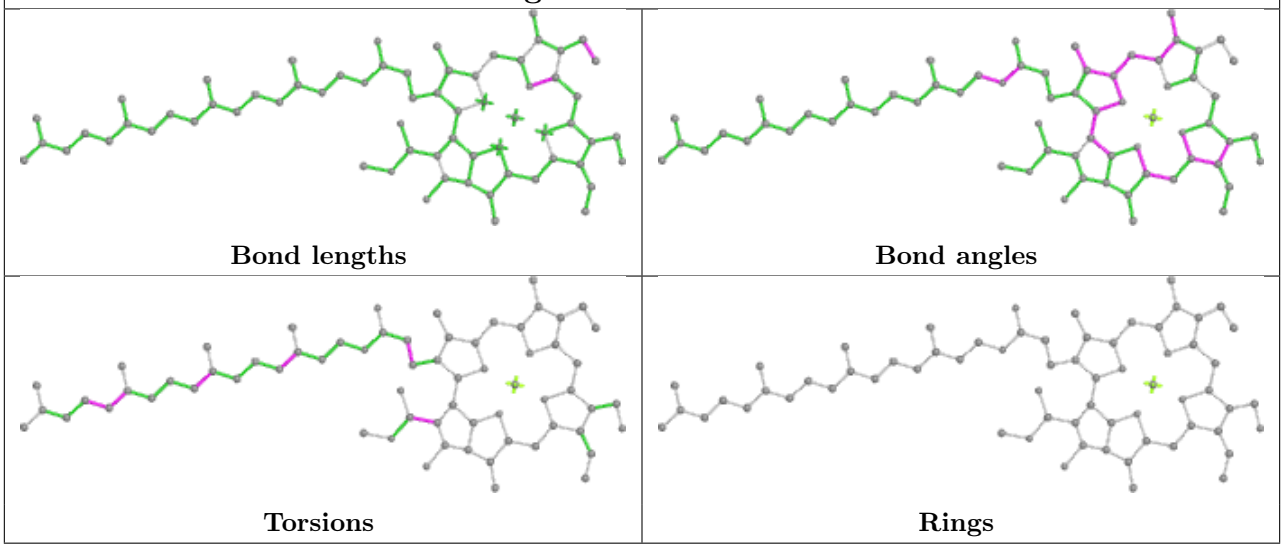


Rings

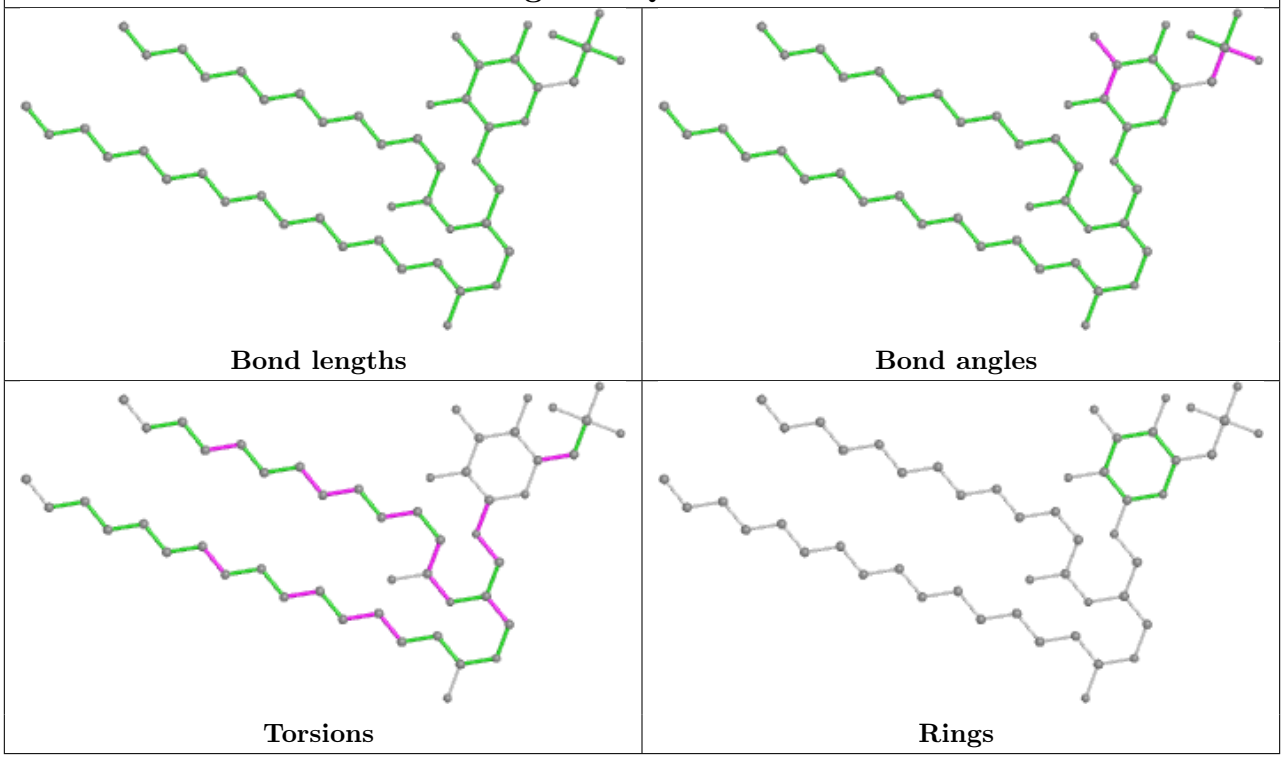
Ligand BCR d1 404



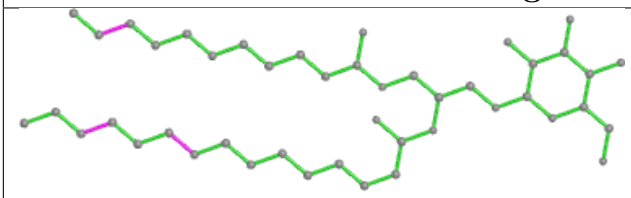
Ligand CHL Y 607



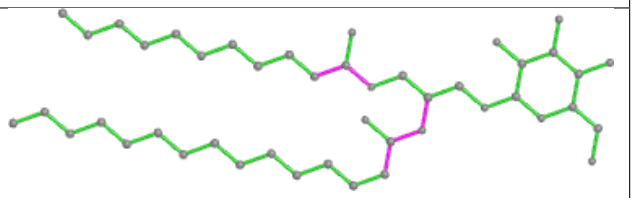
Ligand SQD A 412



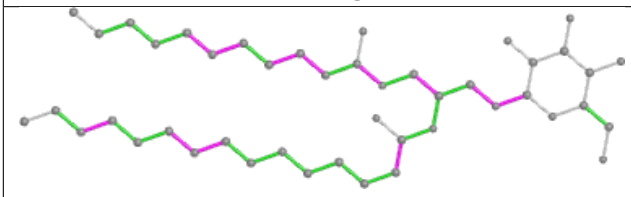
Ligand LMG J 101



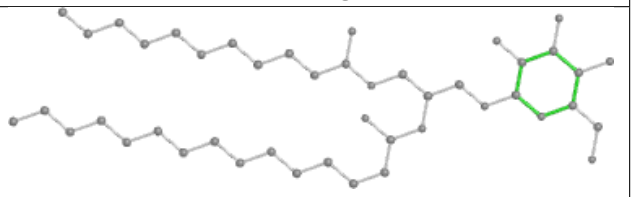
Bond lengths



Bond angles

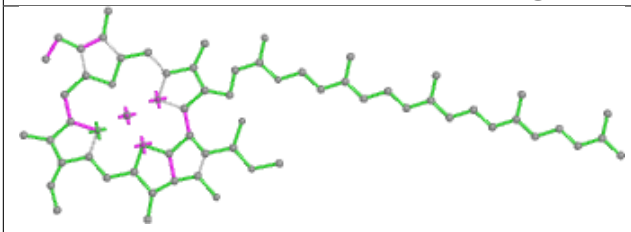


Torsions

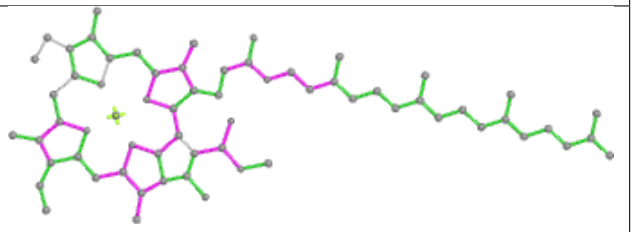


Rings

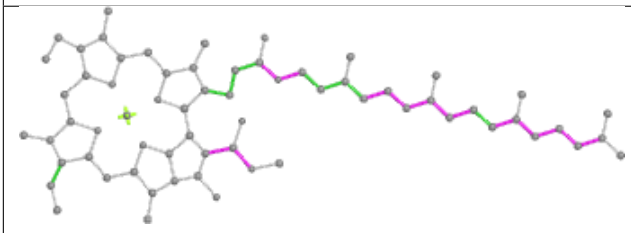
Ligand CLA c 507



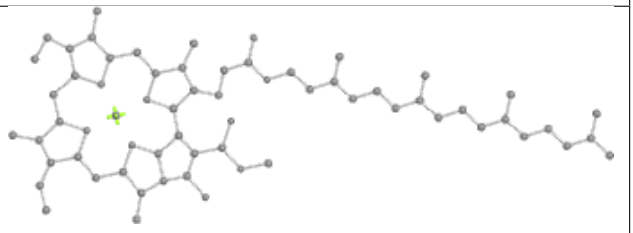
Bond lengths



Bond angles

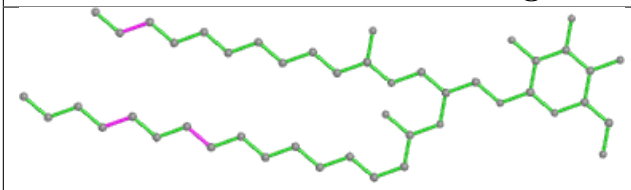


Torsions



Rings

Ligand LMG d 411



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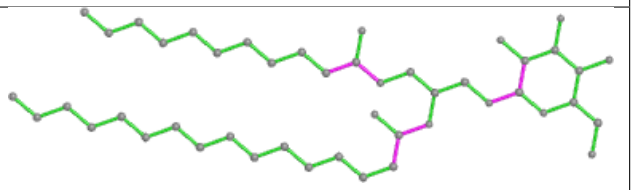

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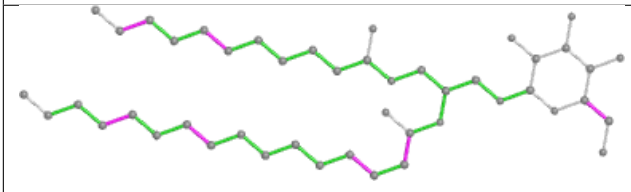

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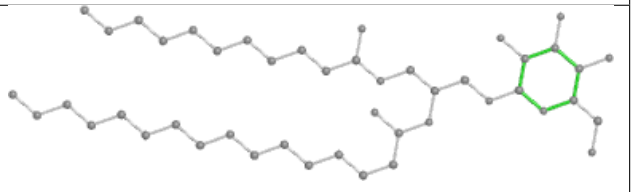
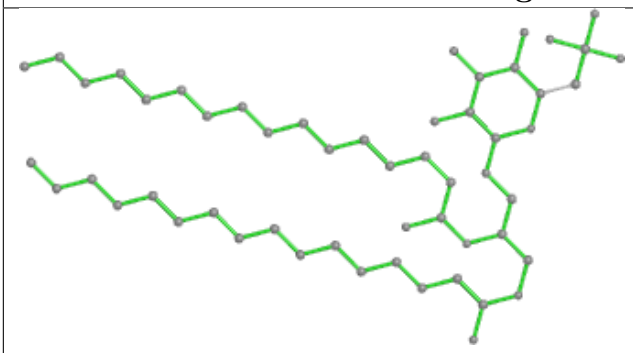


Rings

Ligand SQD C1 526



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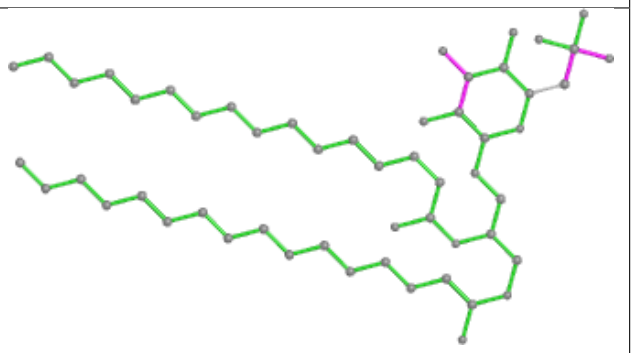

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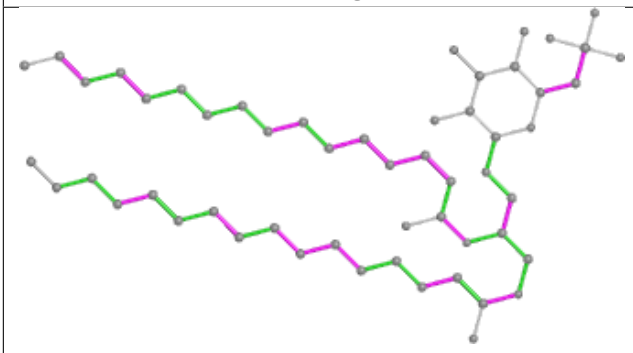

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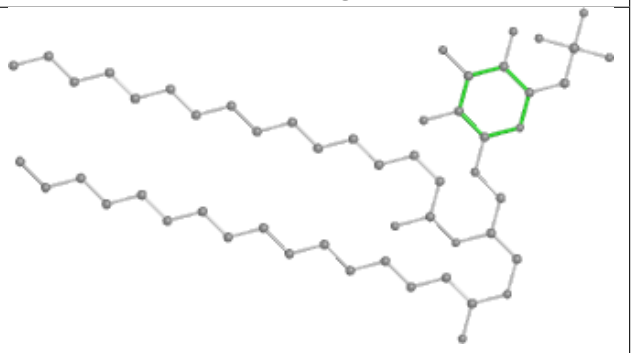
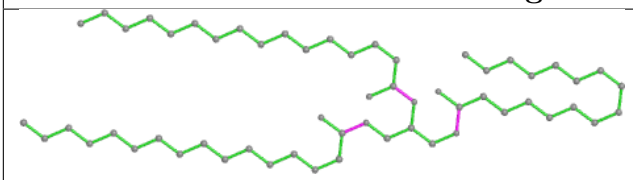


Rings

Ligand 4RF I1 102



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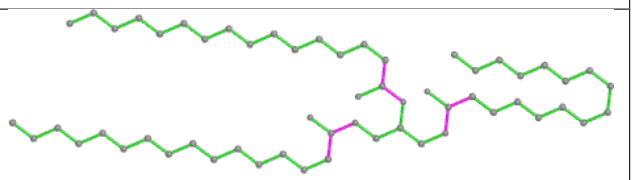

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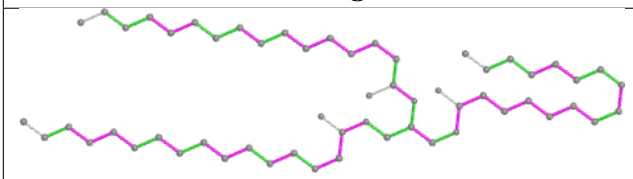

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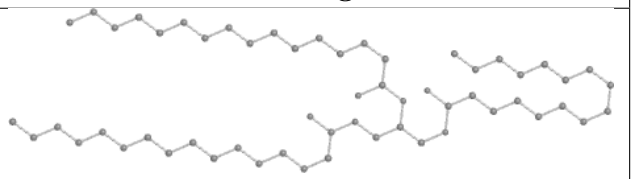
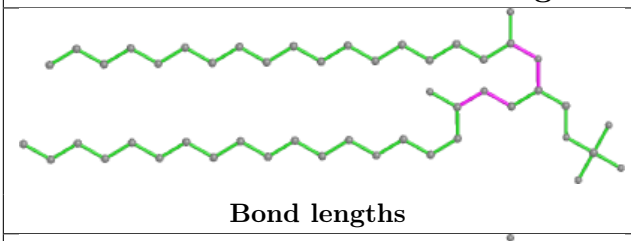


Rings

Ligand 3PH i 101



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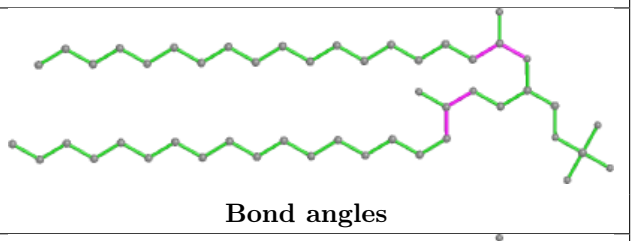

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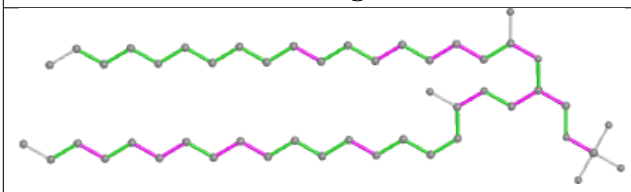

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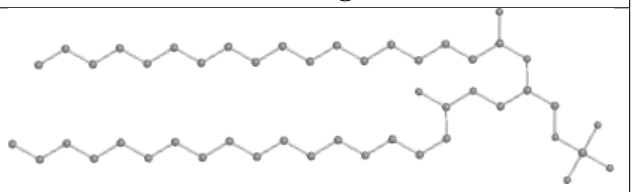
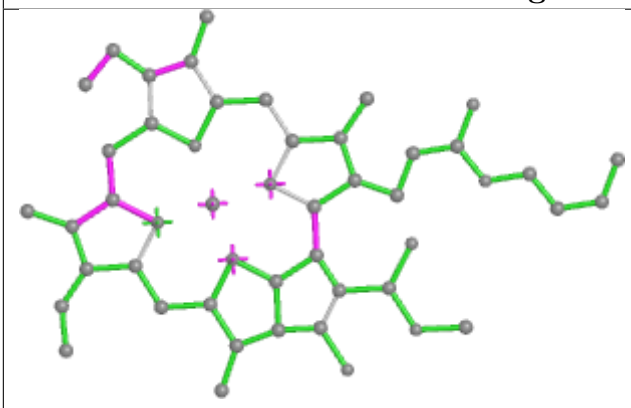


Rings

Ligand CLA g 604



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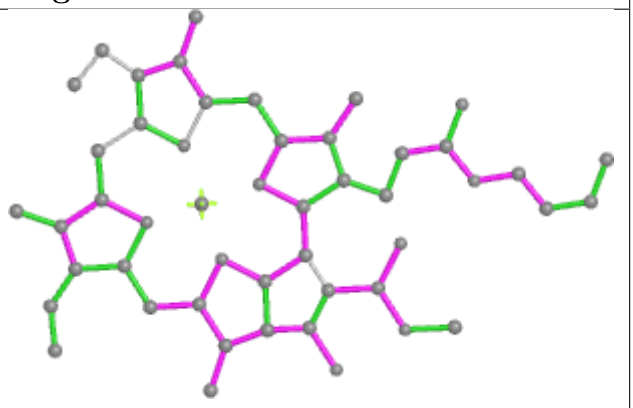

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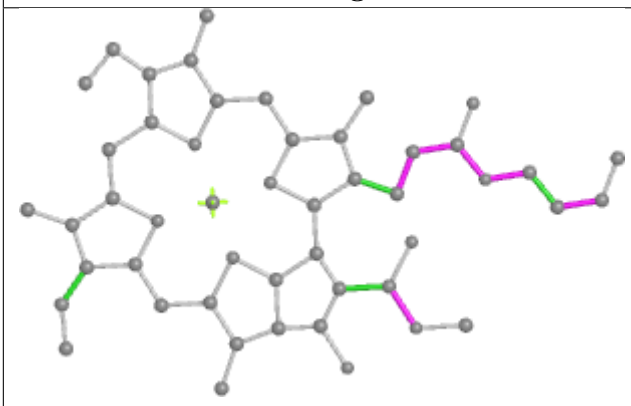

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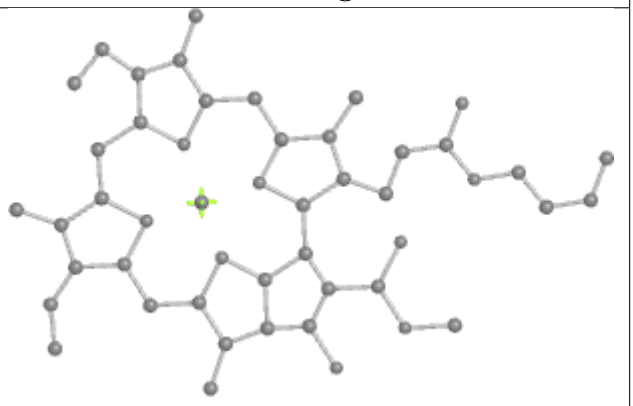
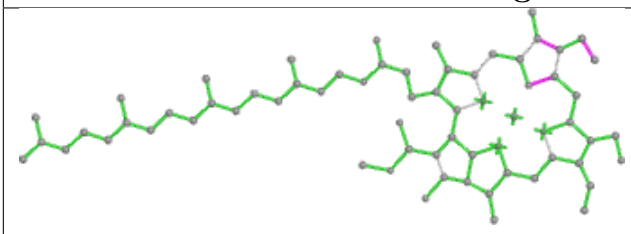


Rings

Ligand CHL G1 601



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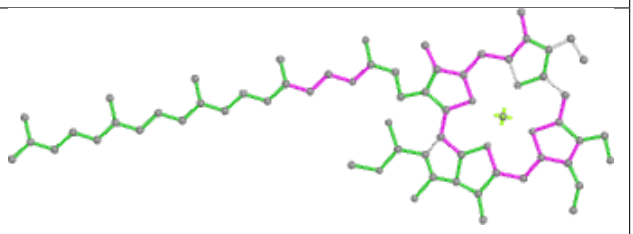

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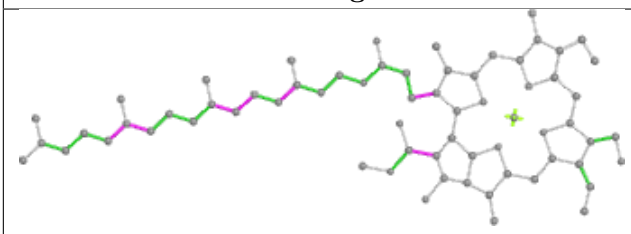

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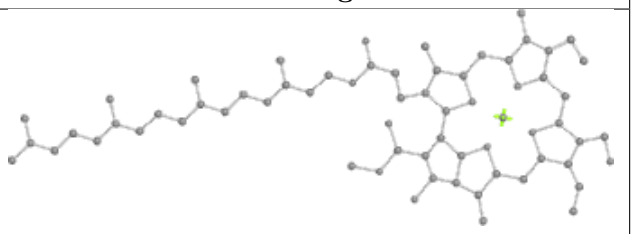
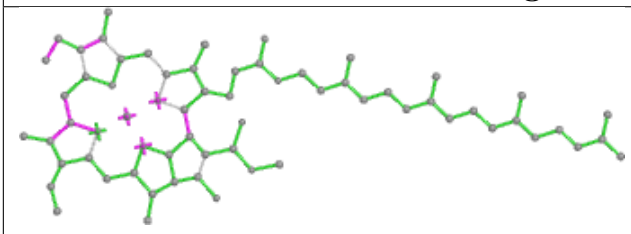


Rings

Ligand CLA N 613



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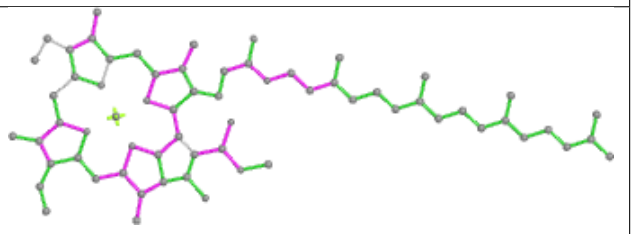

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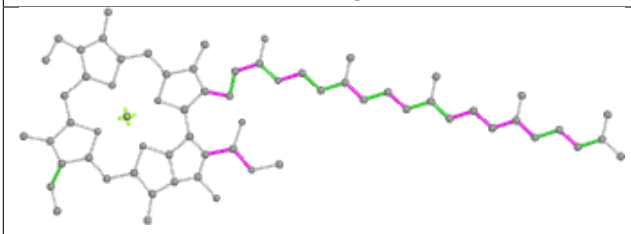

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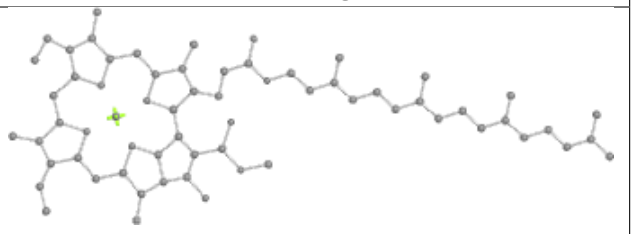
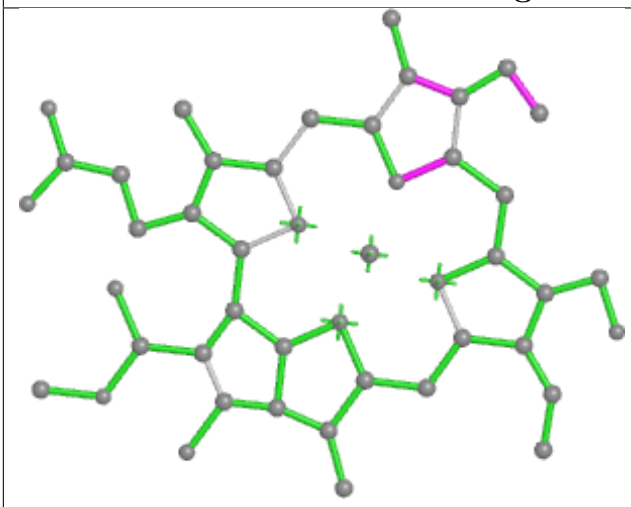


Rings

Ligand CHL Y1 605



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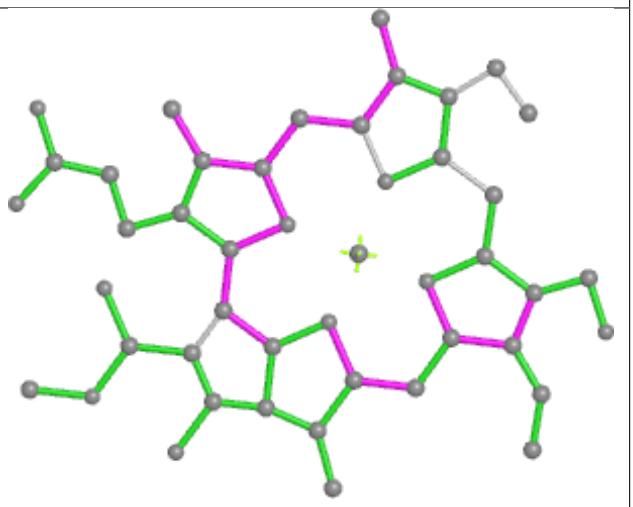

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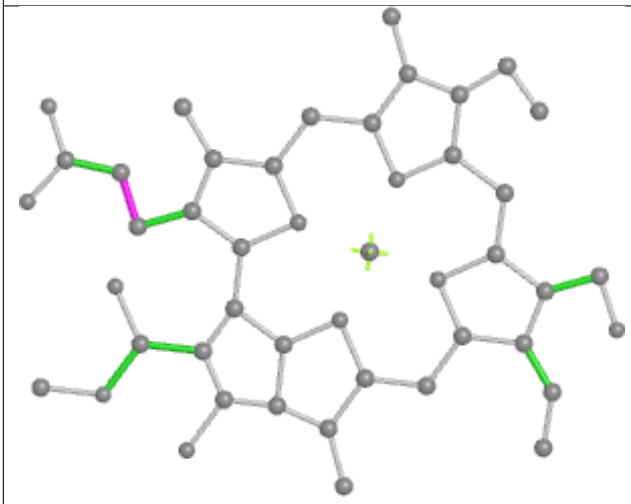

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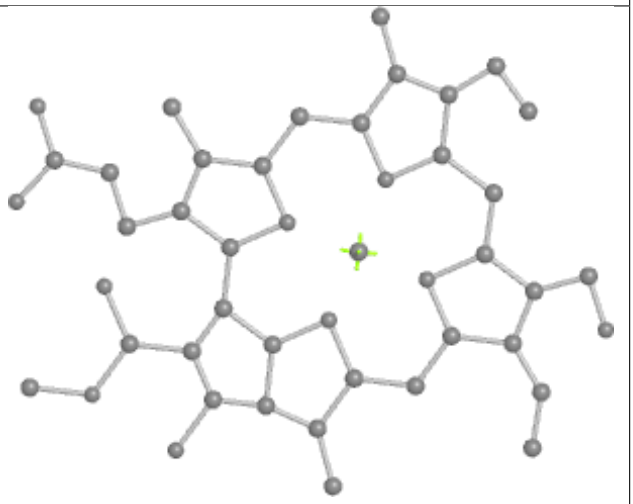
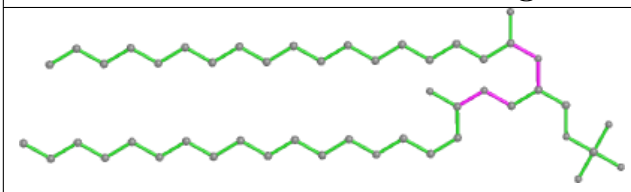


Rings

Ligand 3PH T1 101



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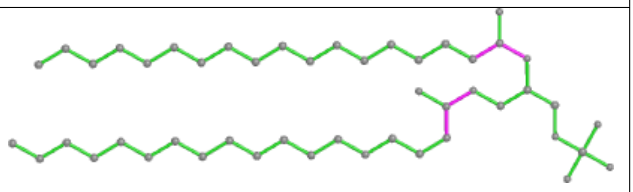

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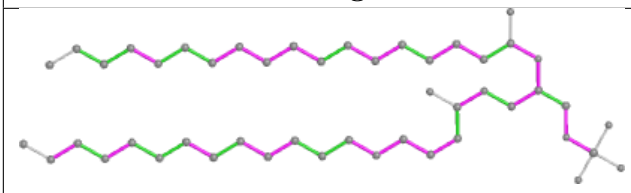

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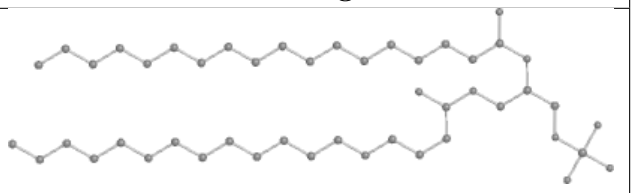
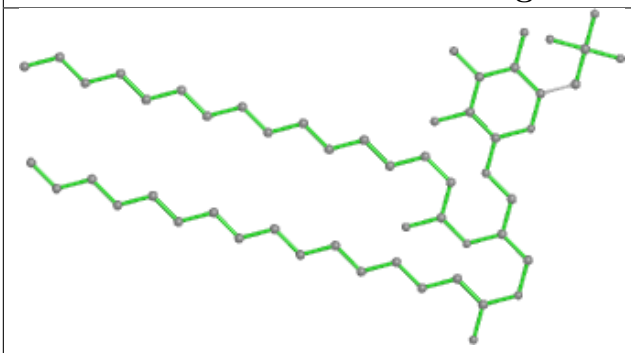


Rings

Ligand SQD B1 626



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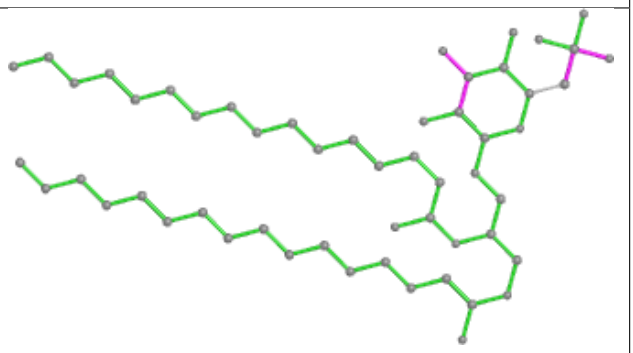
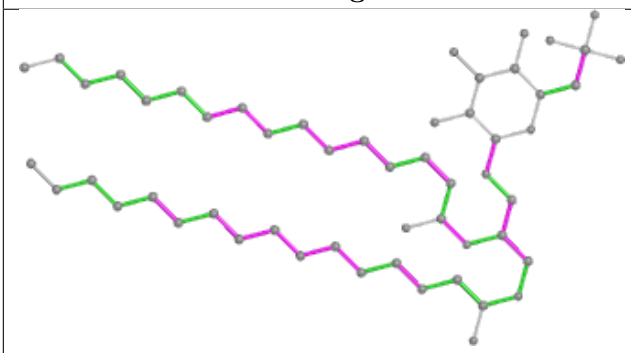


Bond angles



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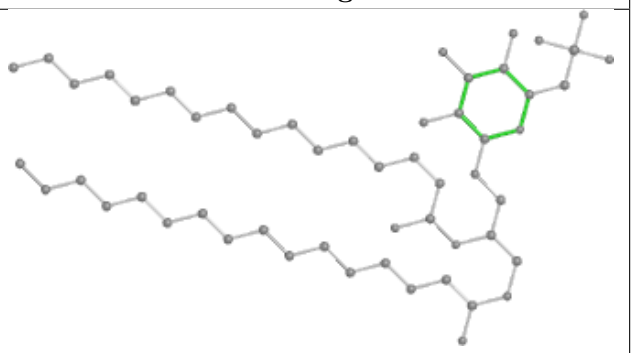
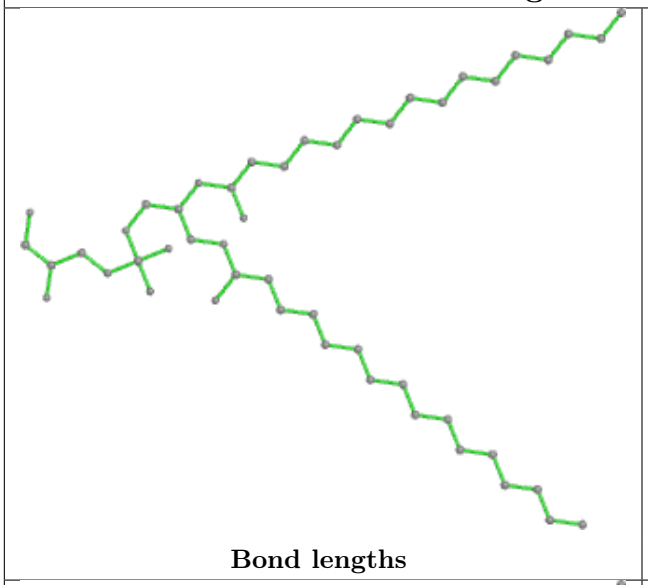


Rings

Ligand LHG L 101



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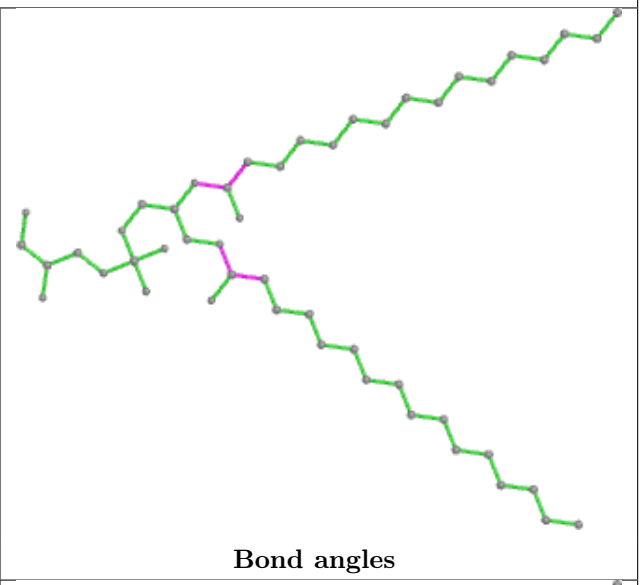
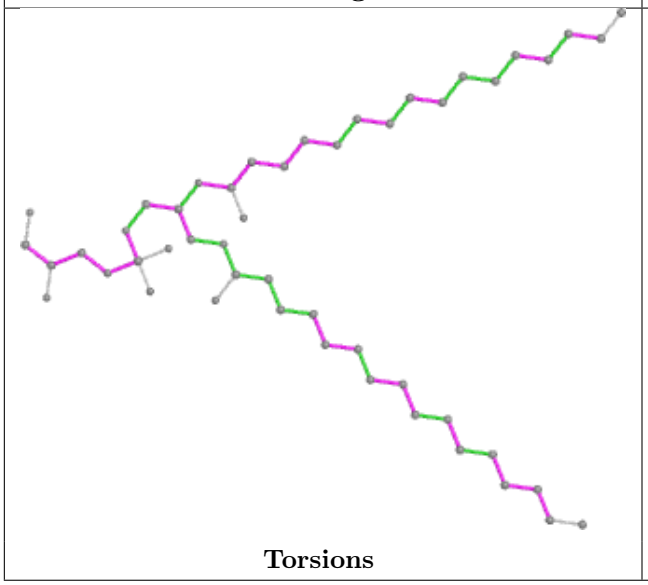


Bond angles



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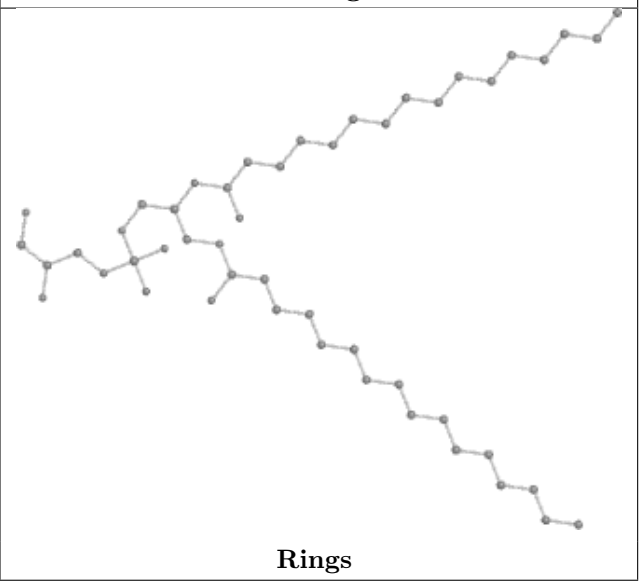
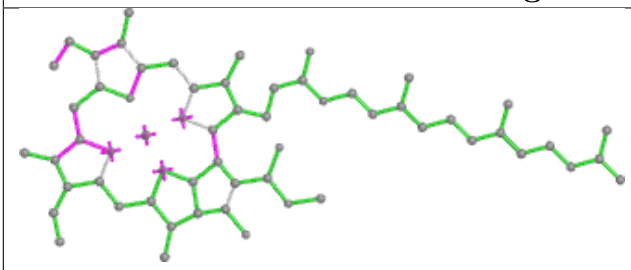


Rings

Ligand CLA R 608



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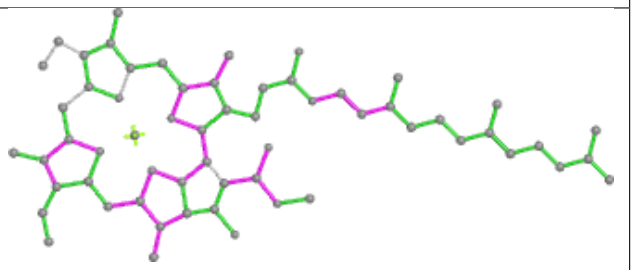
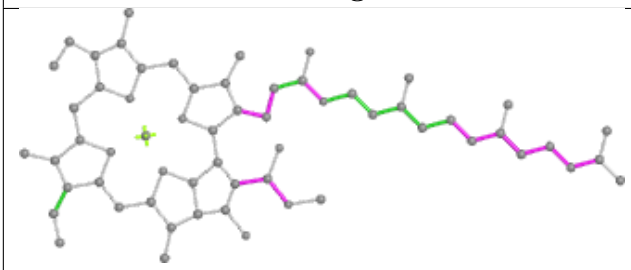


Bond angles



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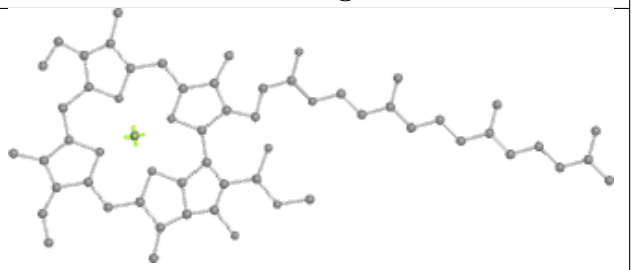
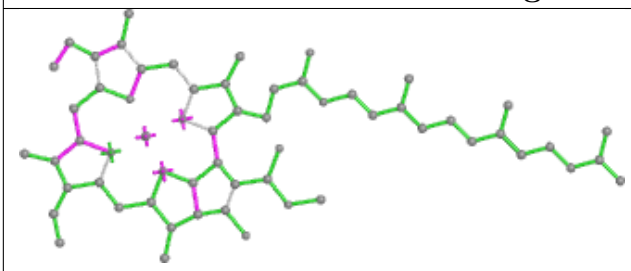


Rings

Ligand CLA A 410



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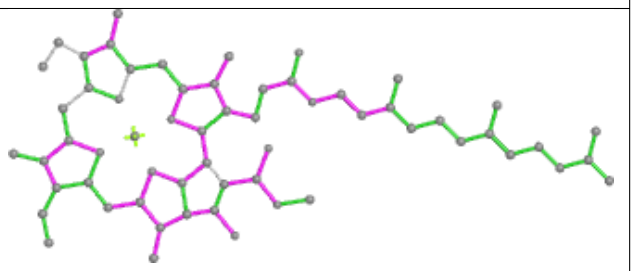
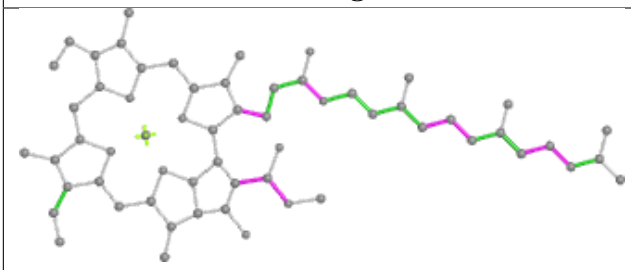


Bond angles



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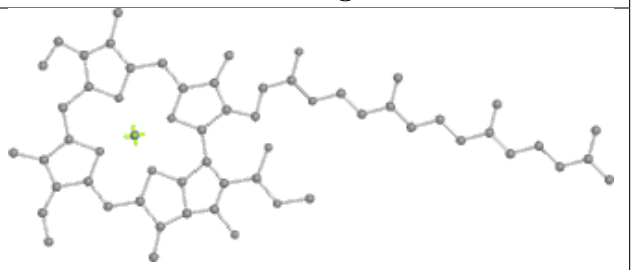
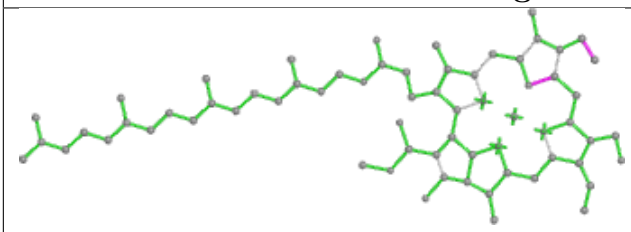


Rings

Ligand CHL G1 607



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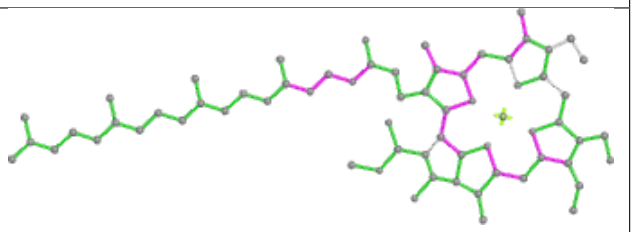
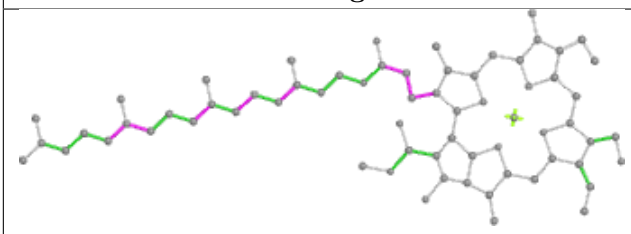


Bond angles



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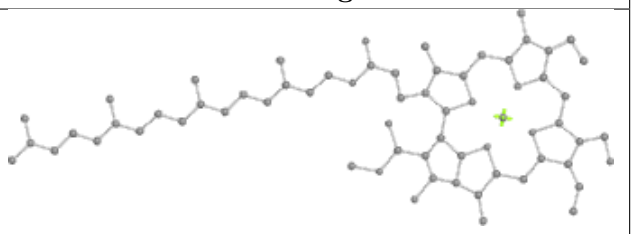
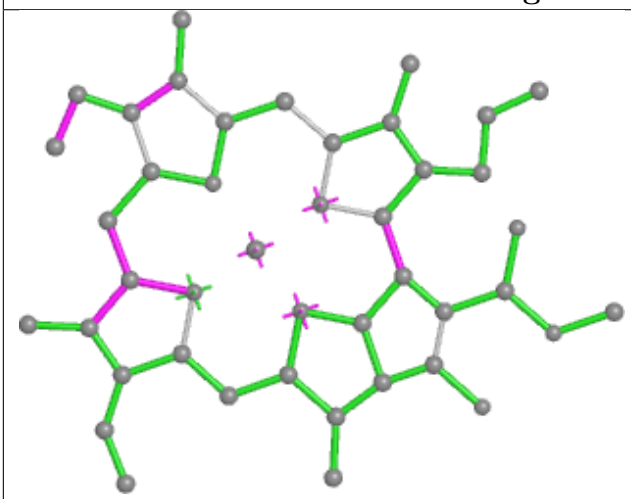
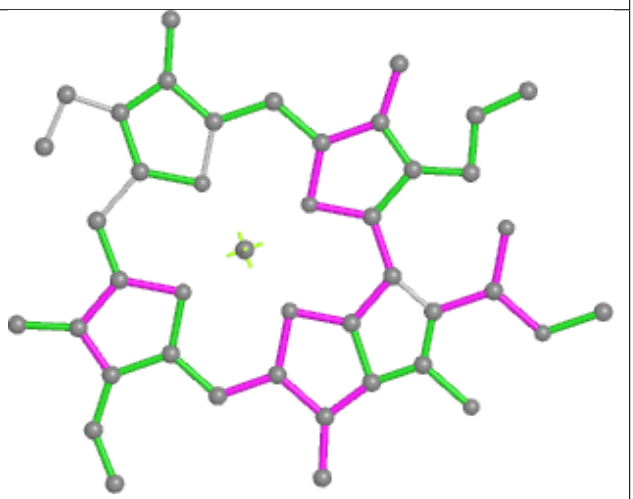


Rings

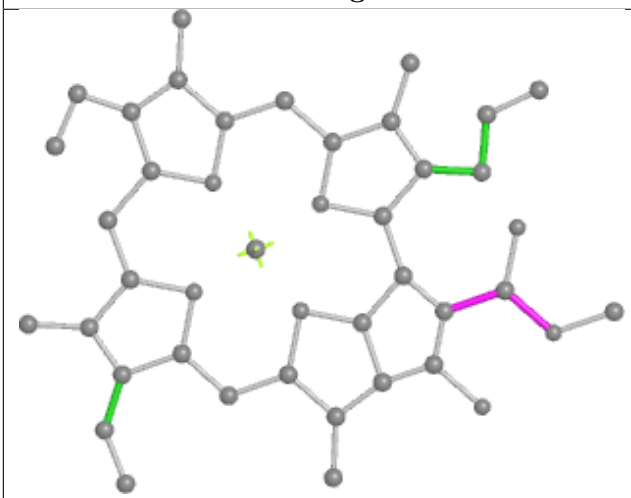
Ligand CLA G 612



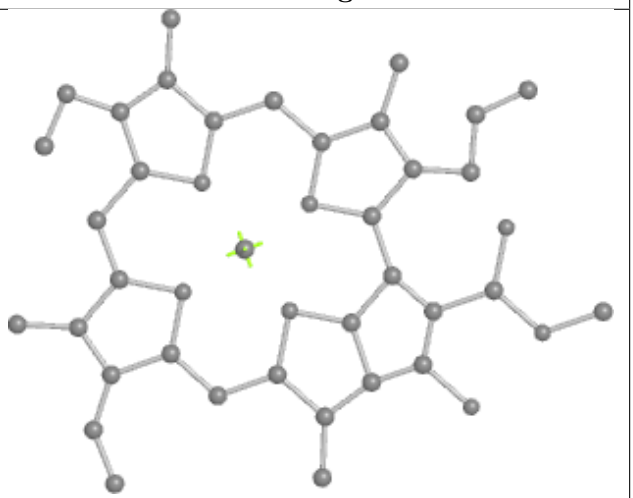
Bond lengths



Bond angles

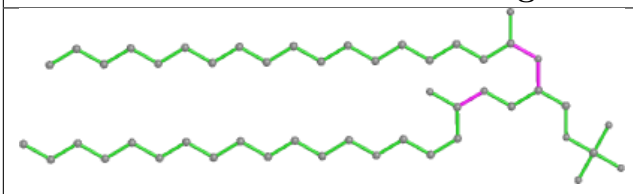


Torsions



Rings

Ligand 3PH B1 624



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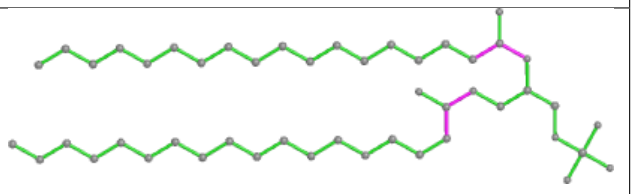

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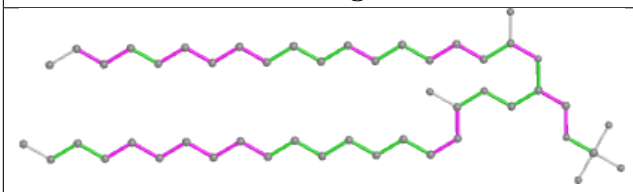

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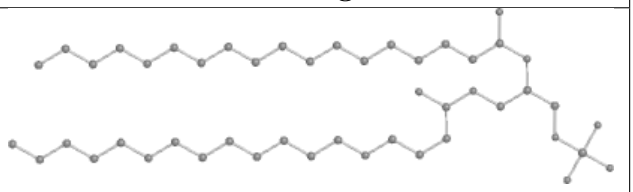
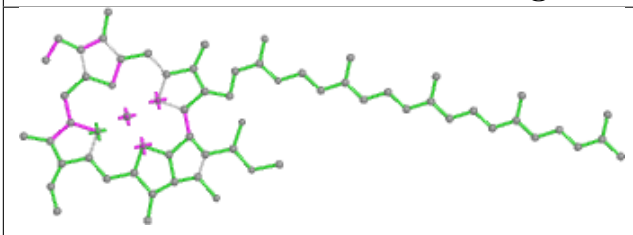


Rings

Ligand CLA s 610



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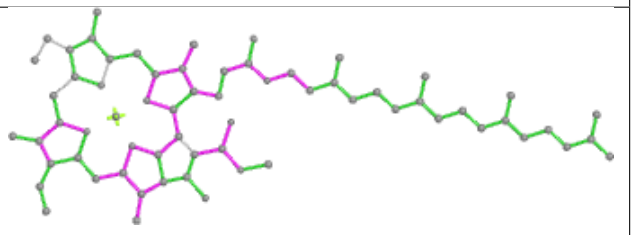

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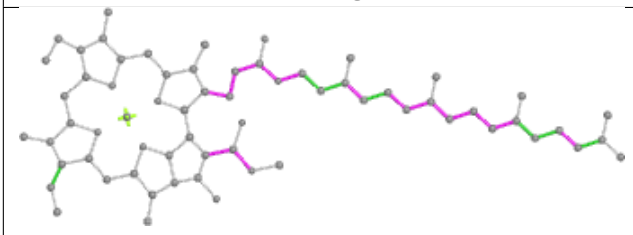

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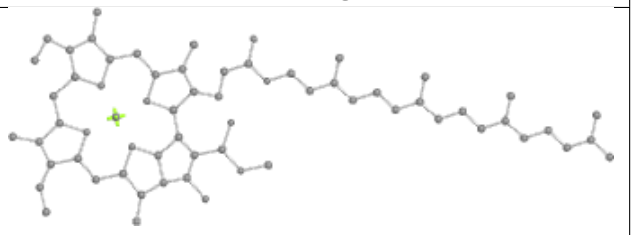
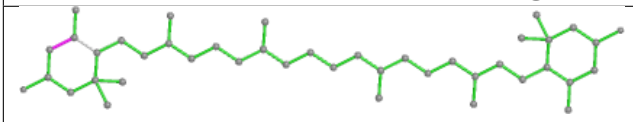


Rings

Ligand LUT S 620



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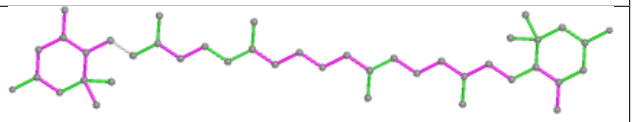

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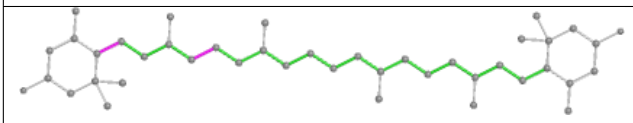

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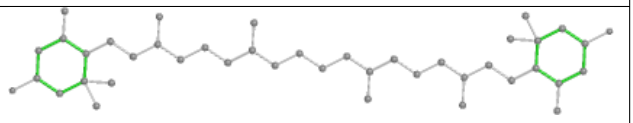
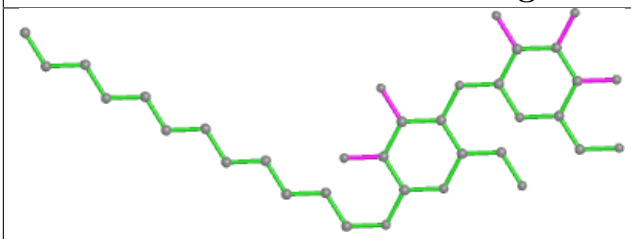


Rings

Ligand LMT r1 625



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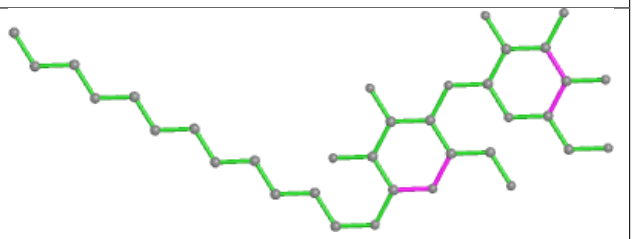
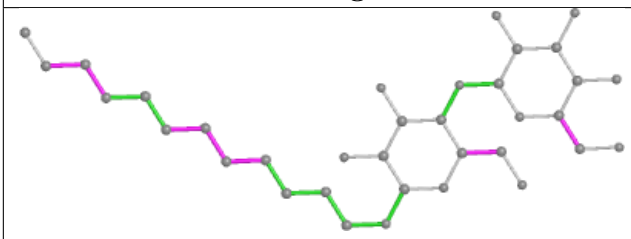


Bond angles



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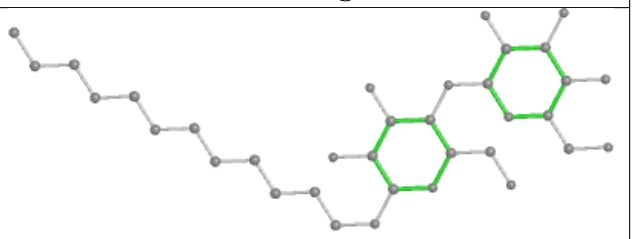
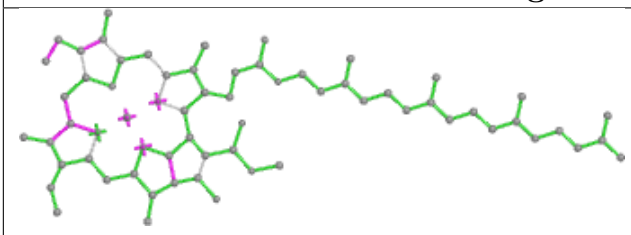


Rings

Ligand CLA d 402



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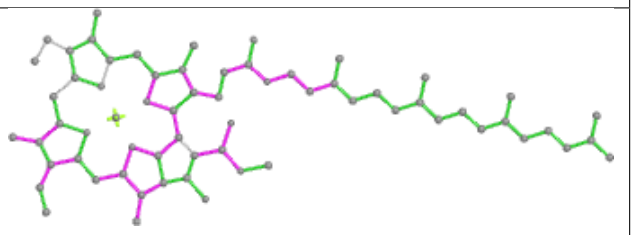
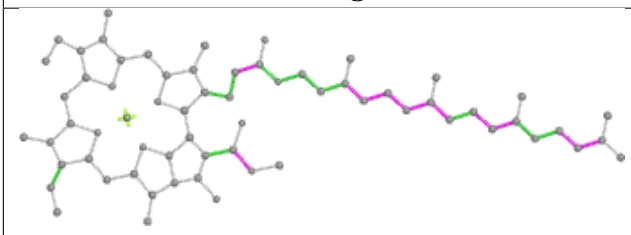


Bond angles



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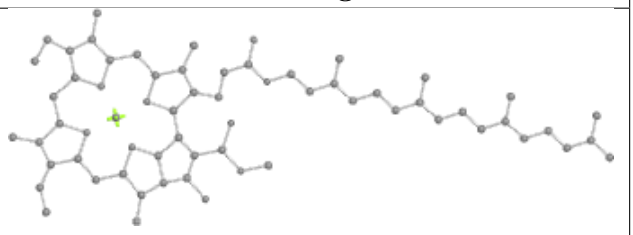
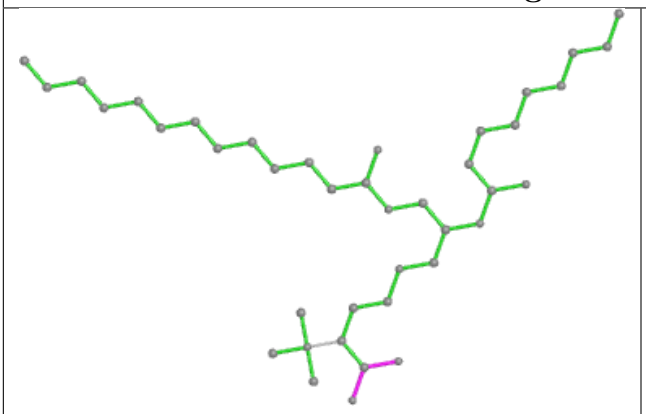


Rings

Ligand LMK c 627



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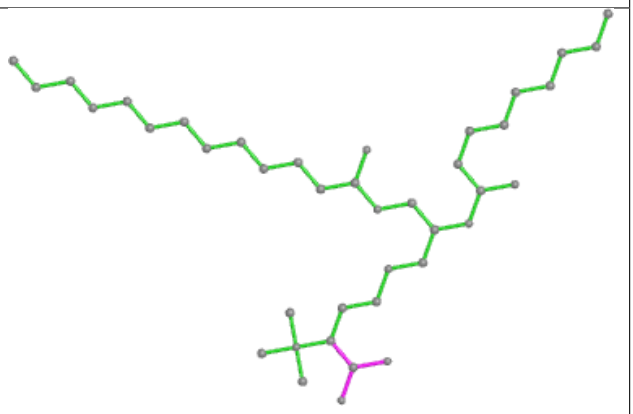

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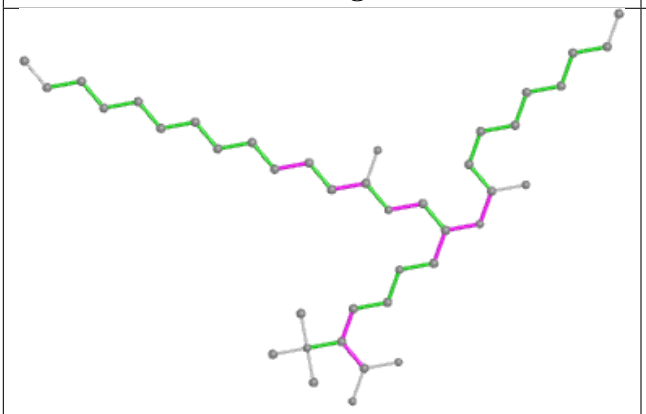

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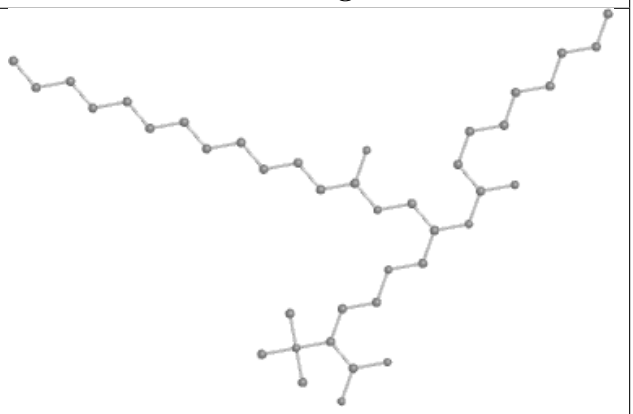
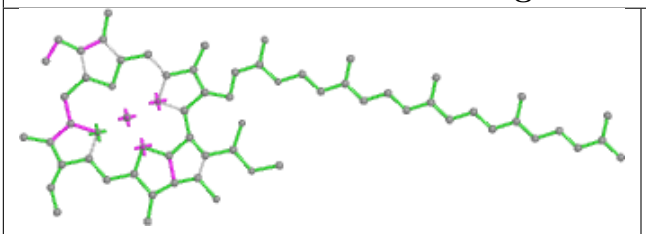


Rings

Ligand CLA Y1 602



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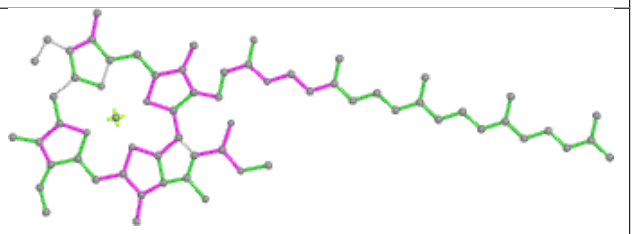
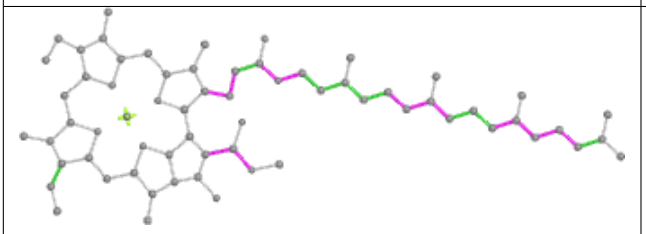


Bond angles



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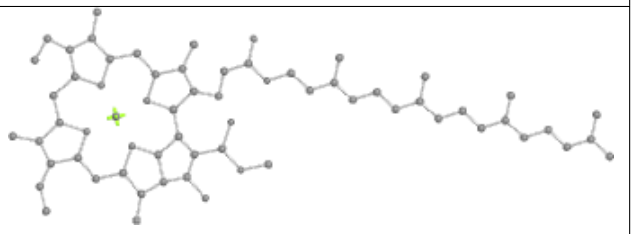
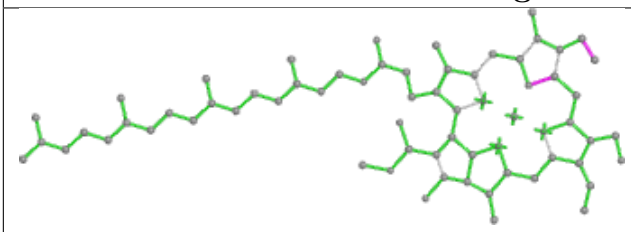


Rings

Ligand CHL N1 609



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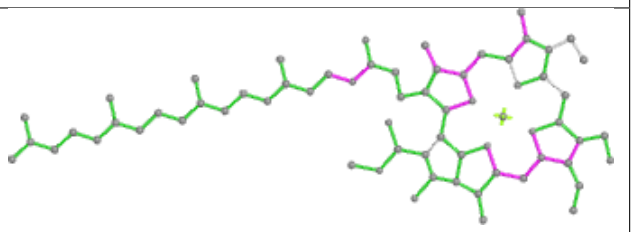

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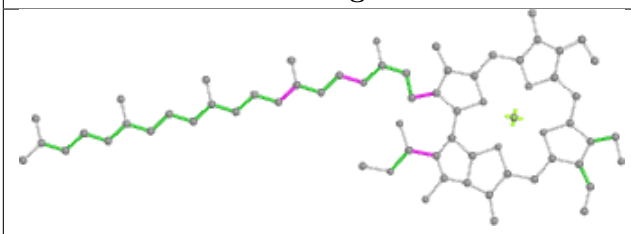

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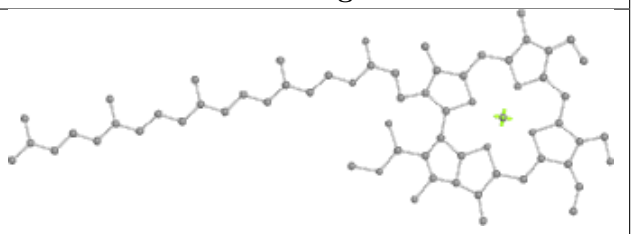
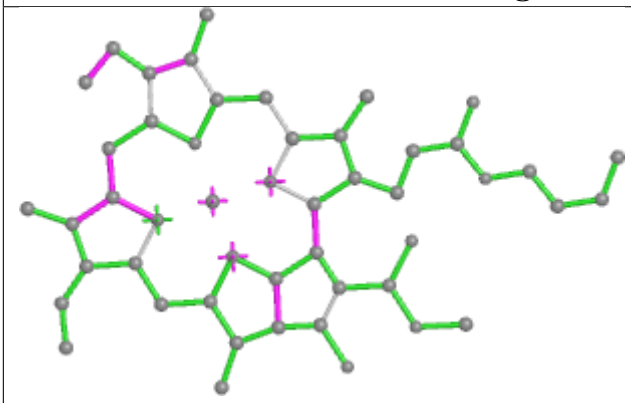


Rings

Ligand CLA G1 604



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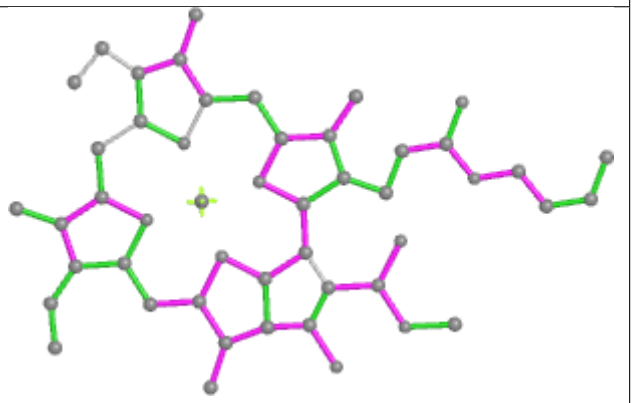

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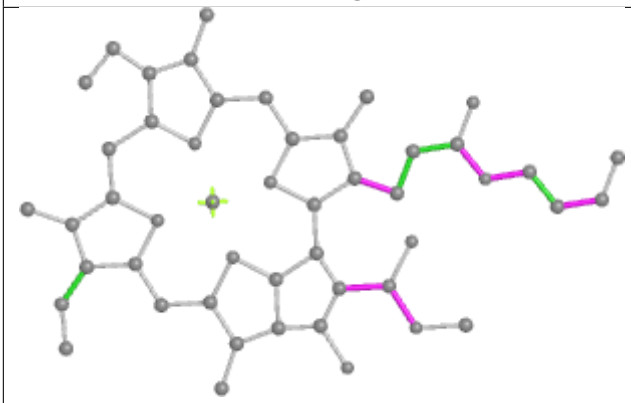

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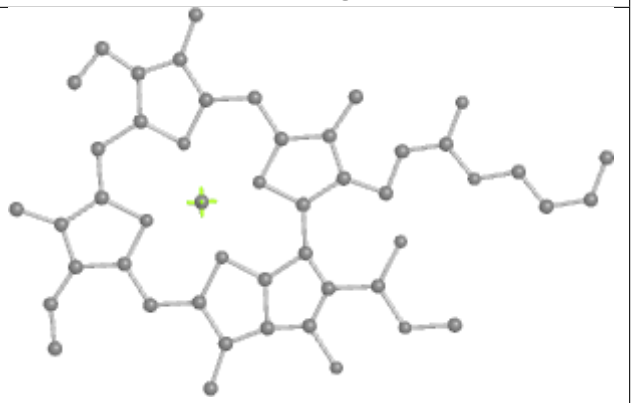
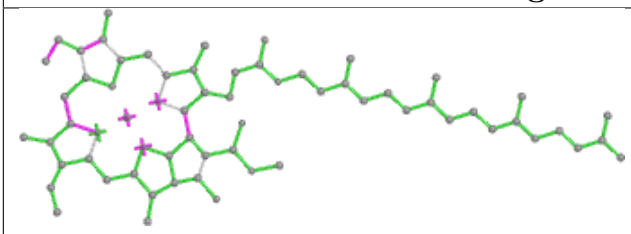


Rings

Ligand CLA y 603



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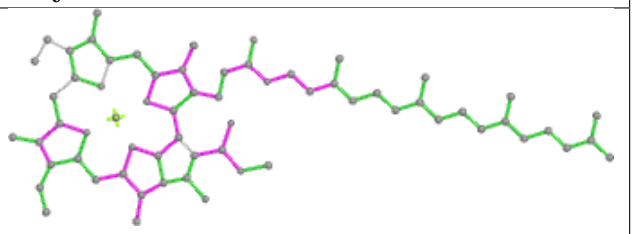
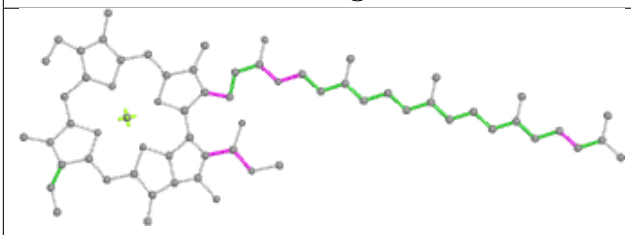


Bond angles



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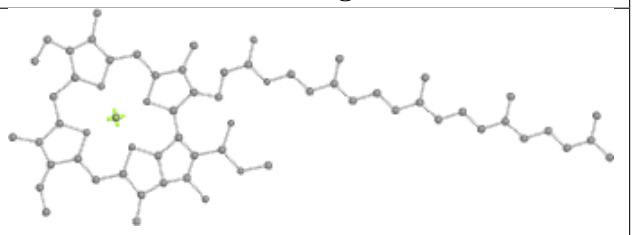
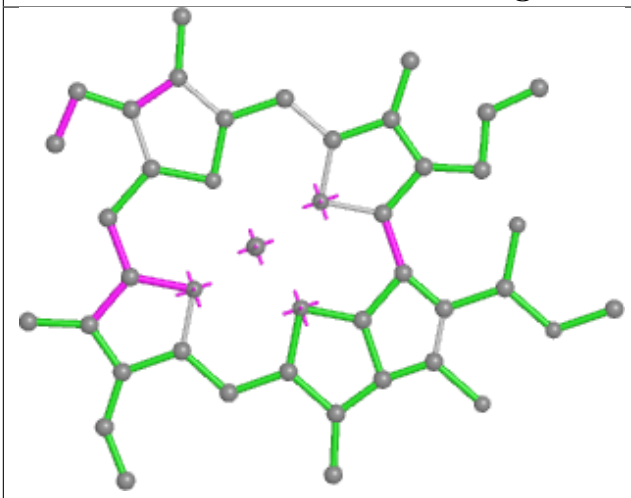


Rings

Ligand CLA G1 612



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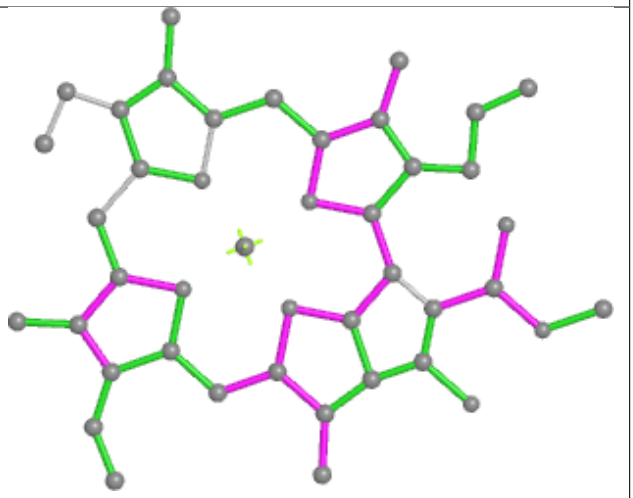
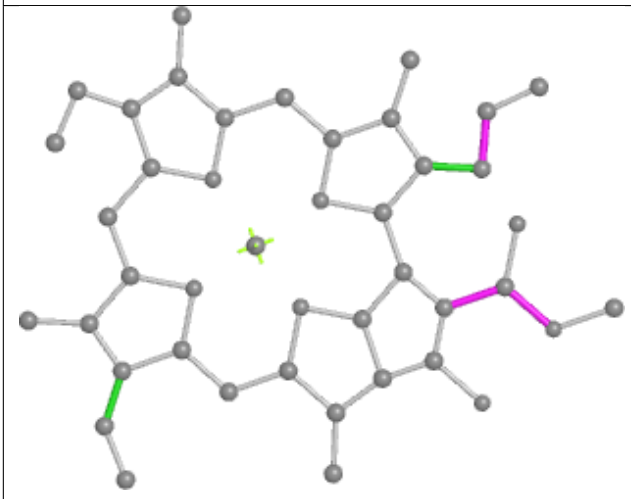


Bond angles



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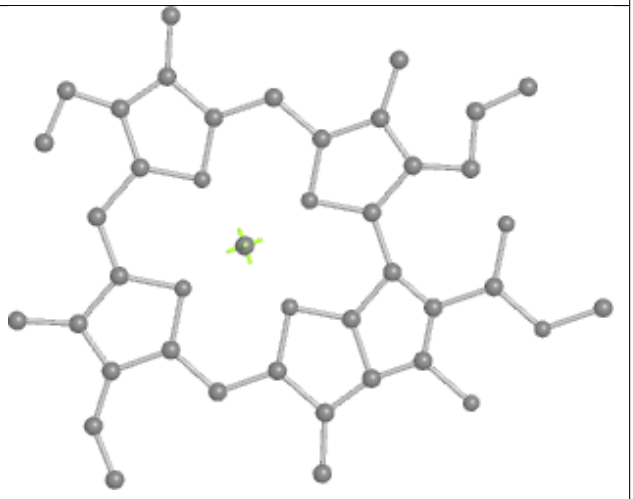
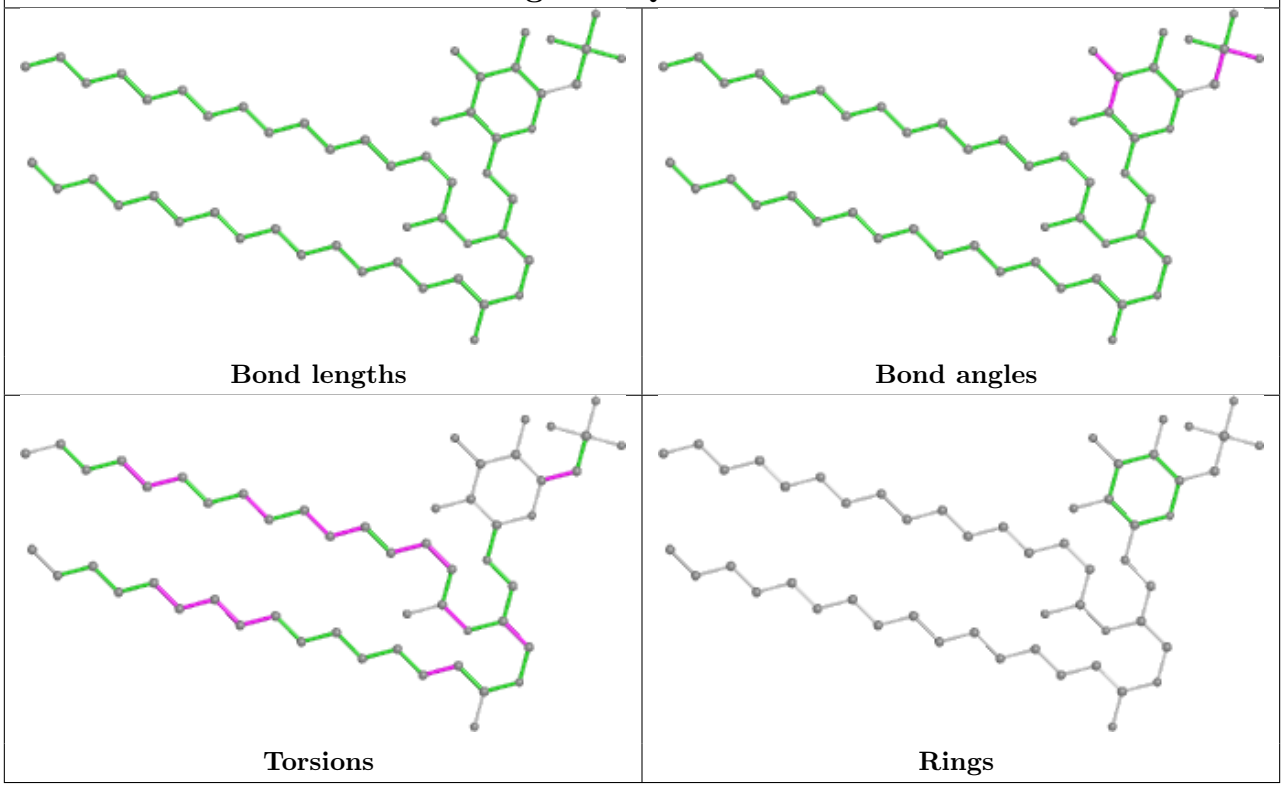


Rings

Ligand SQD B 621



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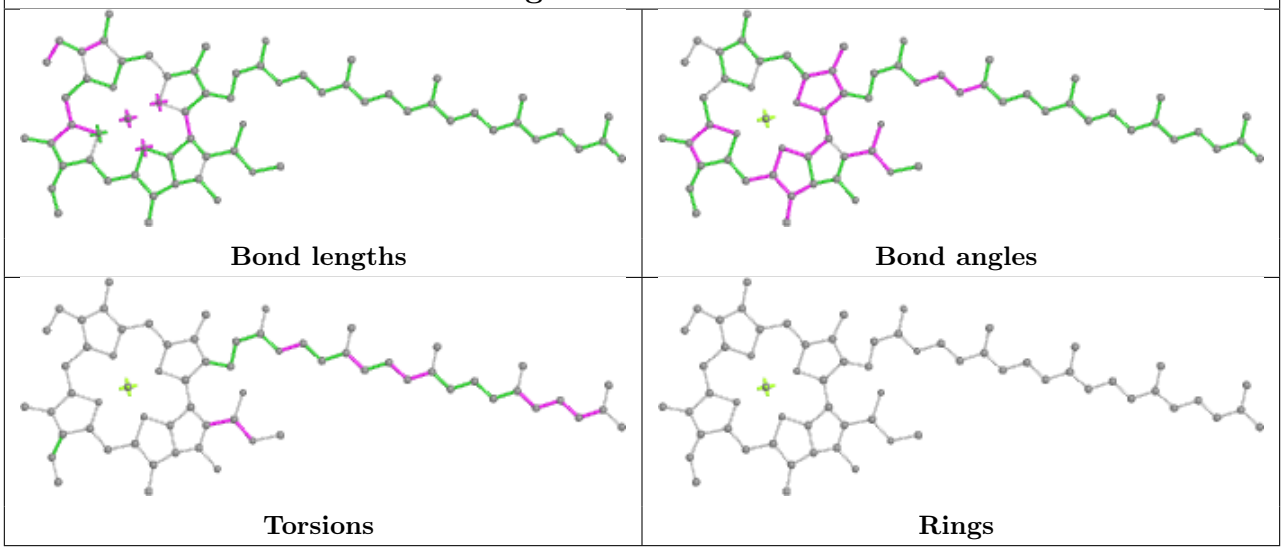
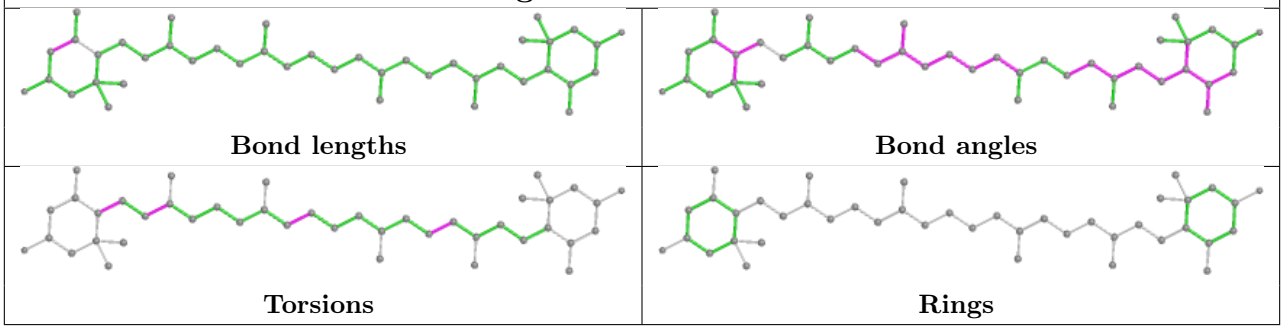
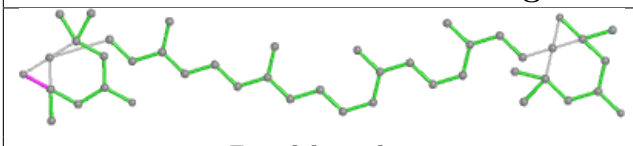


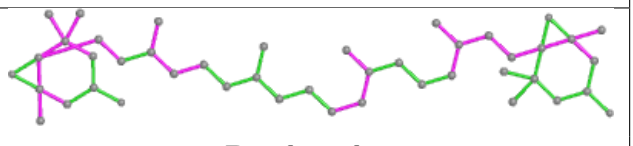
Ligand LUT R1 620



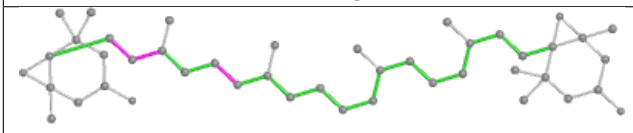
Ligand XAT Y 622



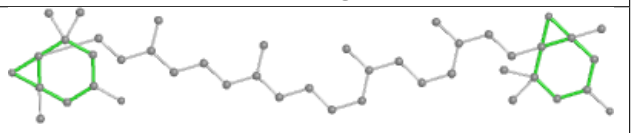
Bond lengths



Bond angles

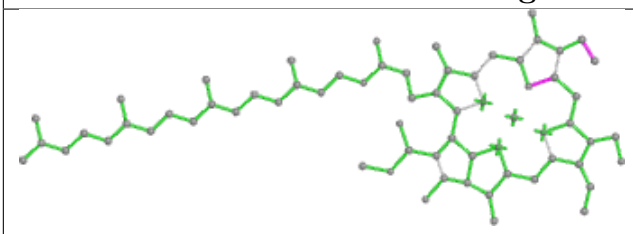


Torsions

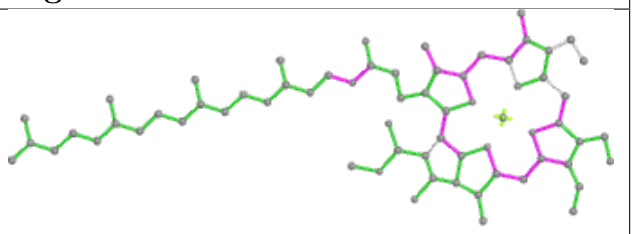


Rings

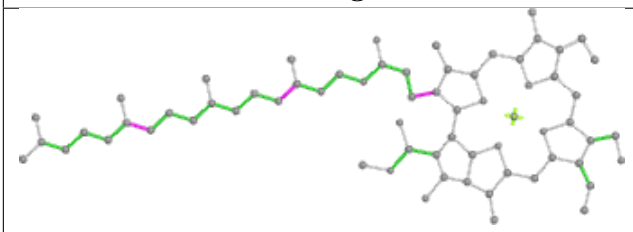
Ligand CHL g1 609



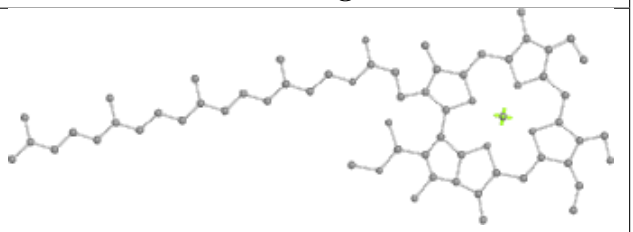
Bond lengths



Bond angles

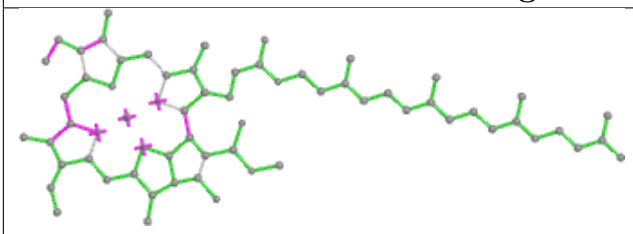


Torsions

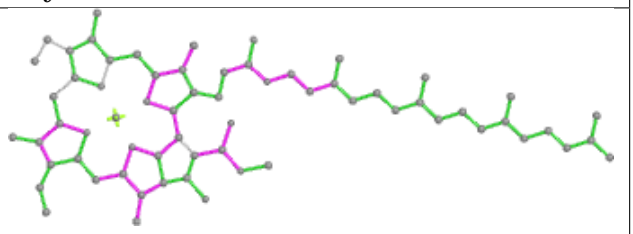


Rings

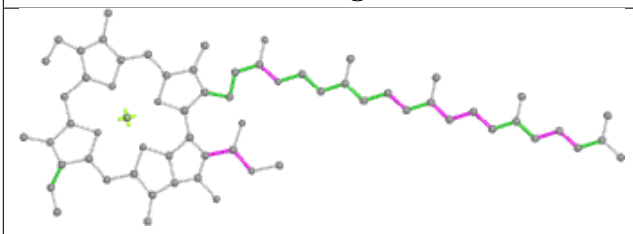
Ligand CLA y1 612



Bond lengths



Bond angles



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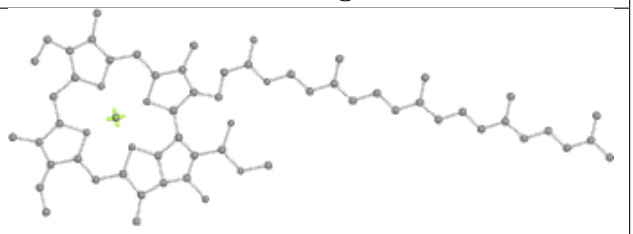
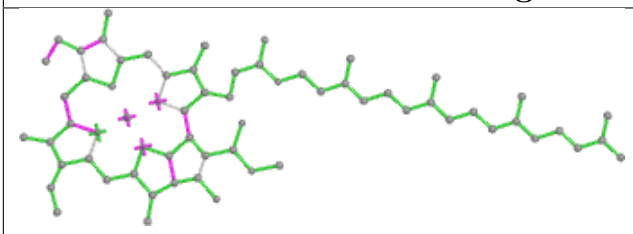


Rings

Ligand CLA C1 507



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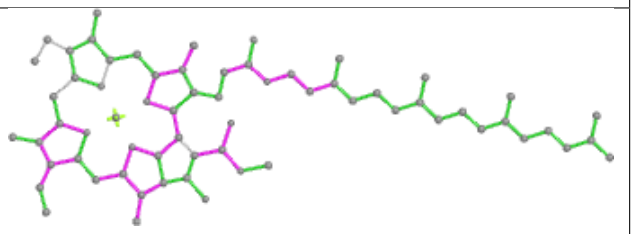
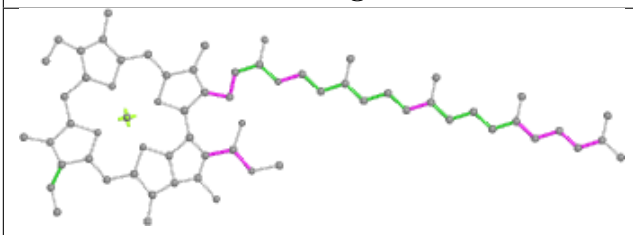


Bond angles



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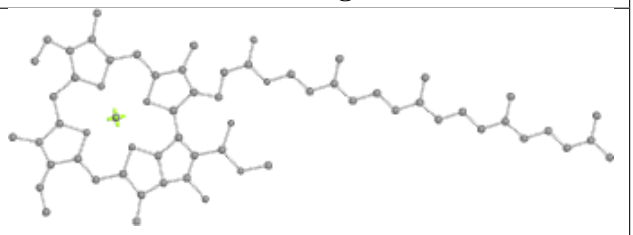
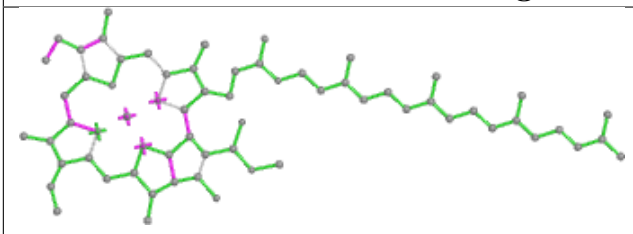


Rings

Ligand CLA B1 606



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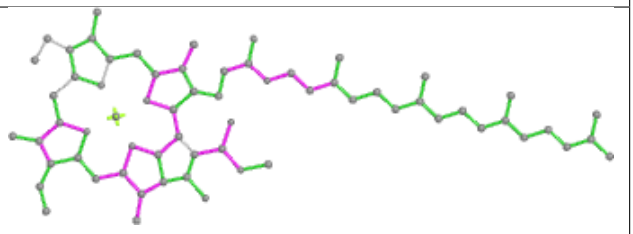
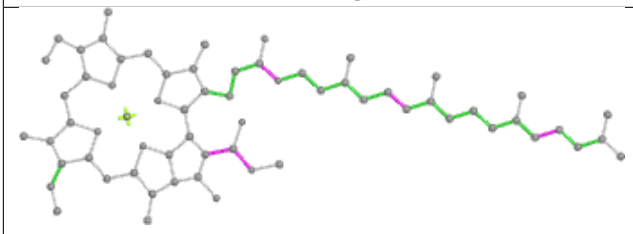


Bond angles



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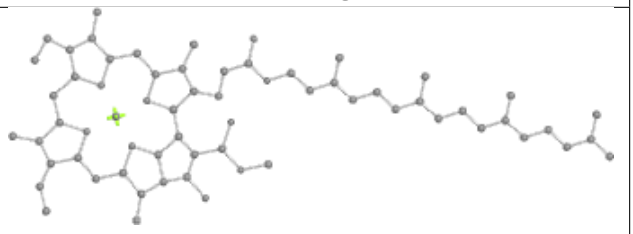
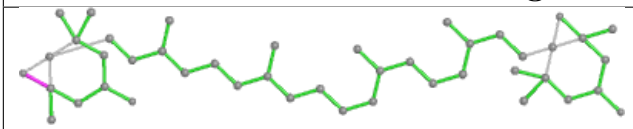


Rings

Ligand XAT n 622



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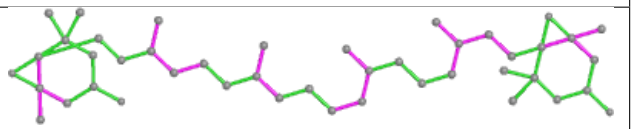
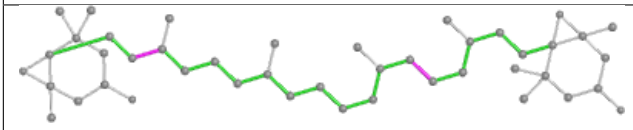
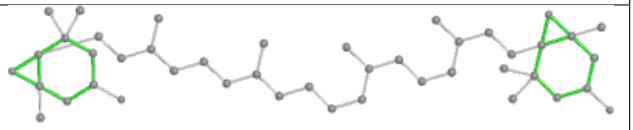


Bond angles

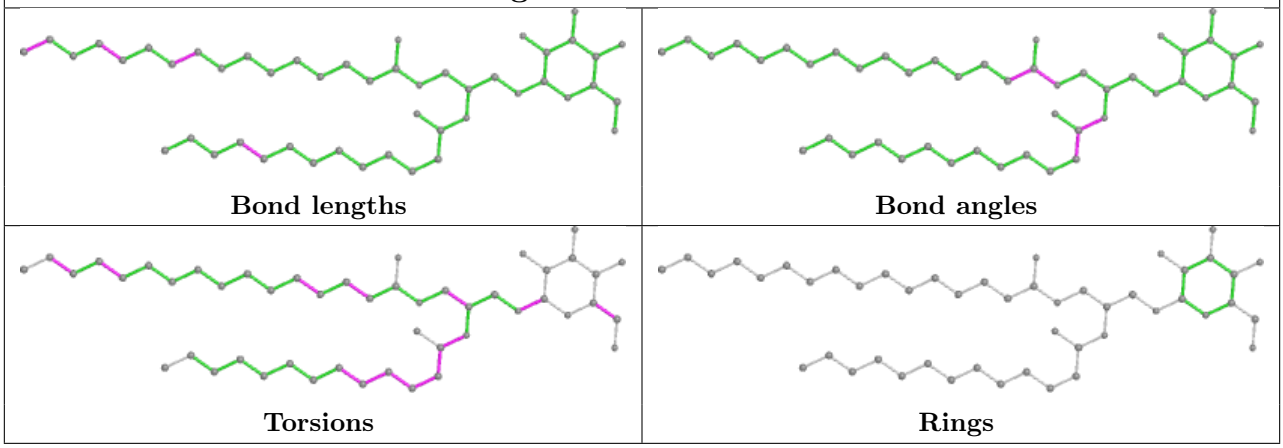


Torsions

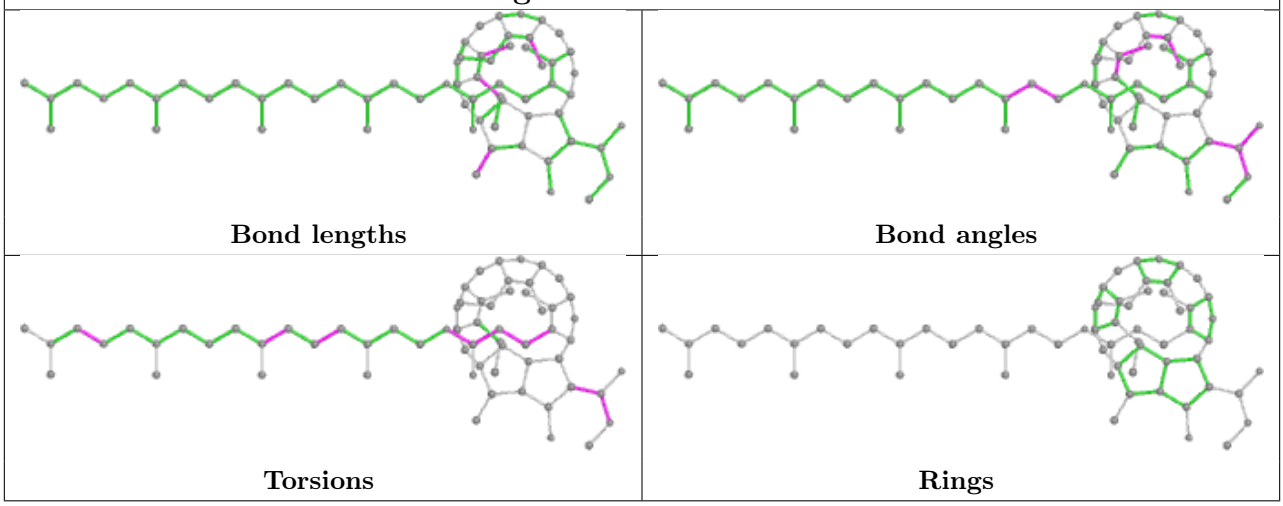


Rings

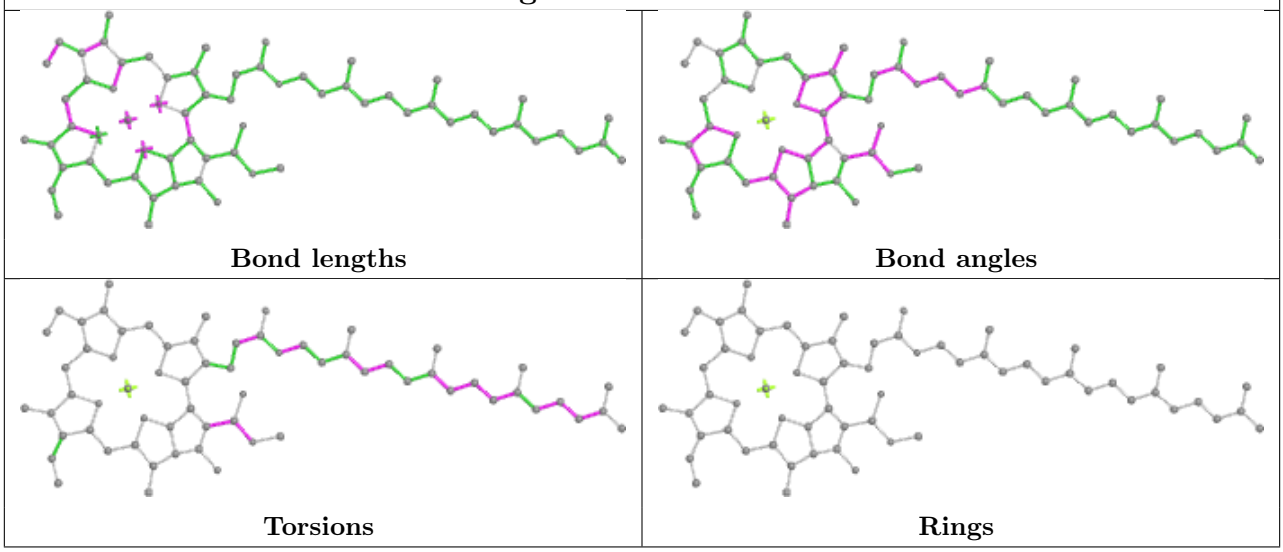
Ligand LMG H1 102



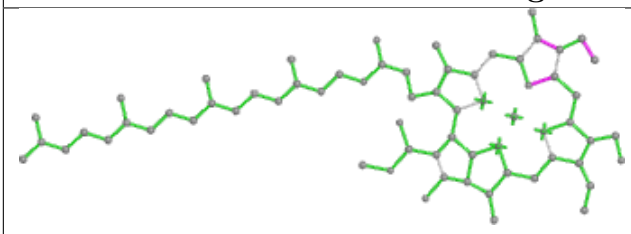
Ligand PHO A1 409



Ligand CLA b1 602



Ligand CHL y 609



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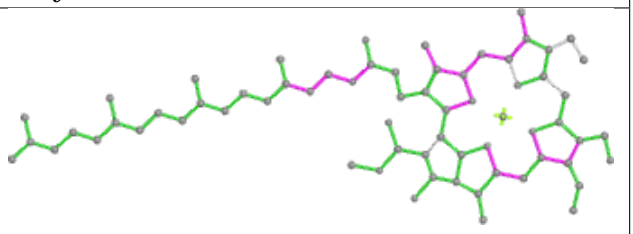
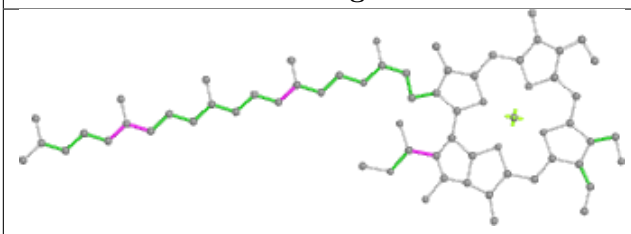


Bond angles



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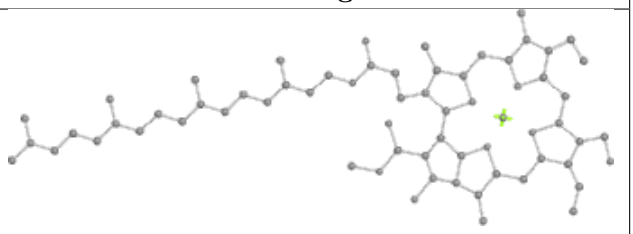
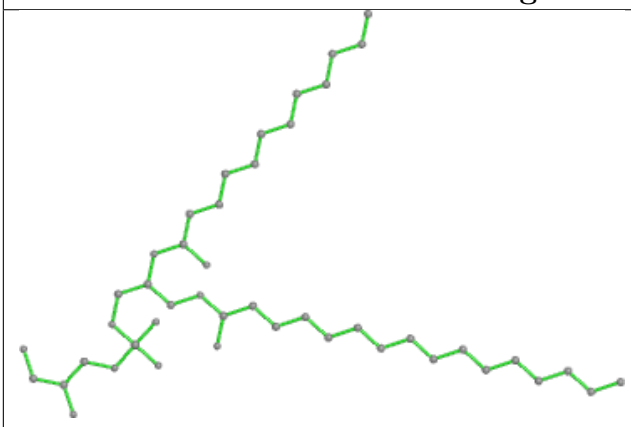


Rings

Ligand LHG s1 624



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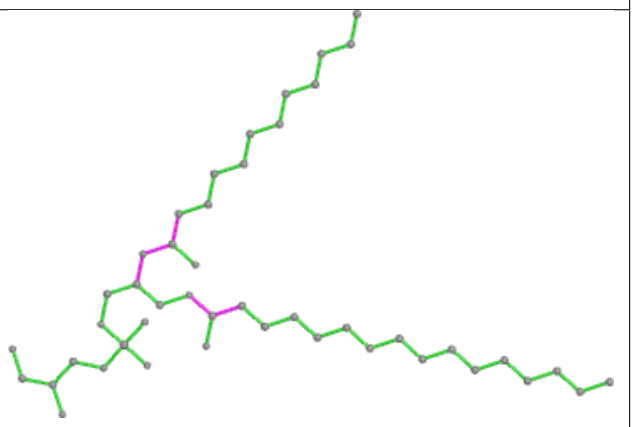
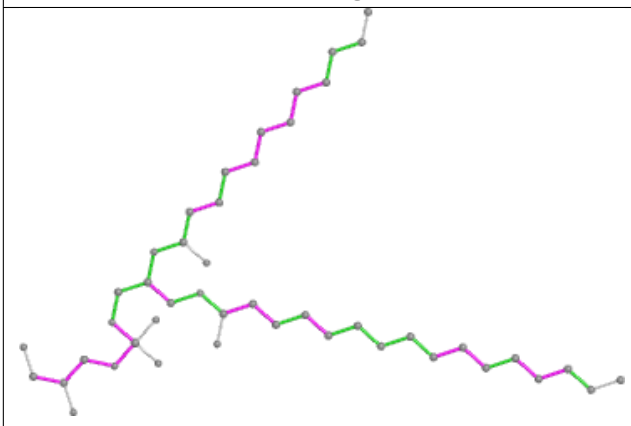


Bond angles



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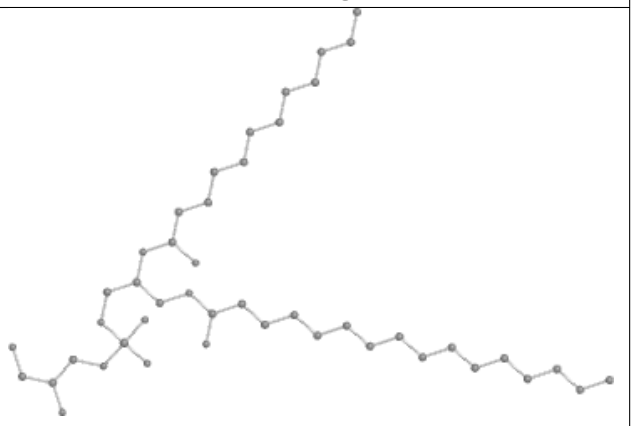

Rings

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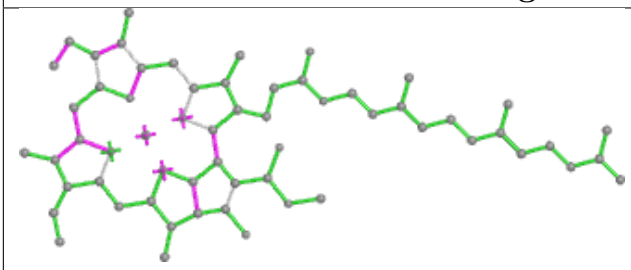

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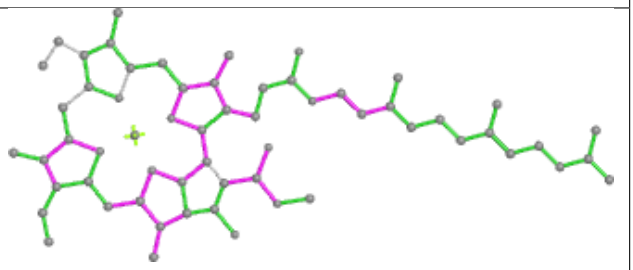
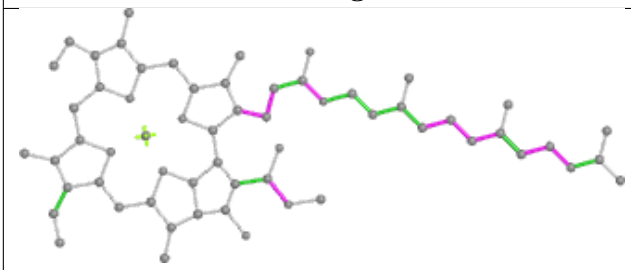


Bond angles



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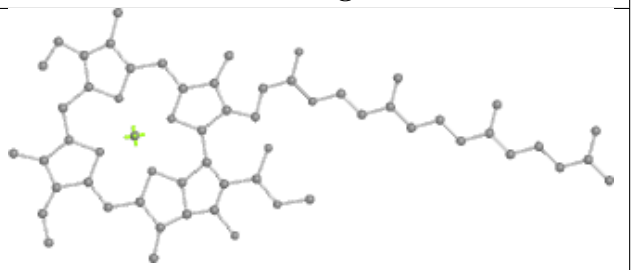
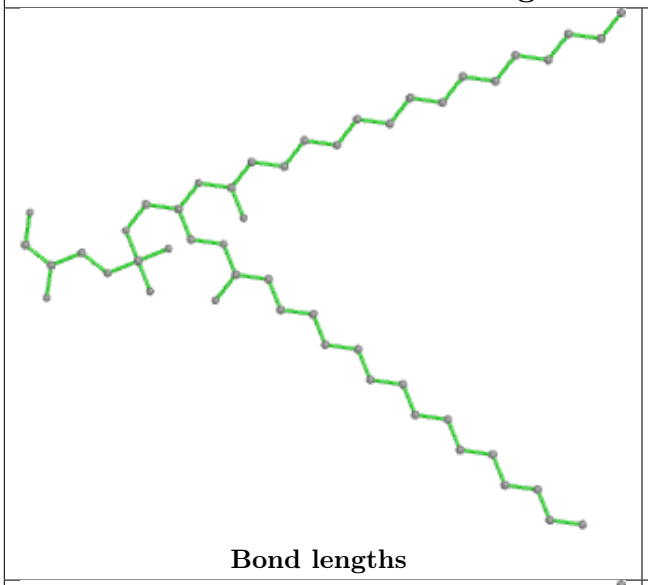


Rings

Ligand LHG d1 409



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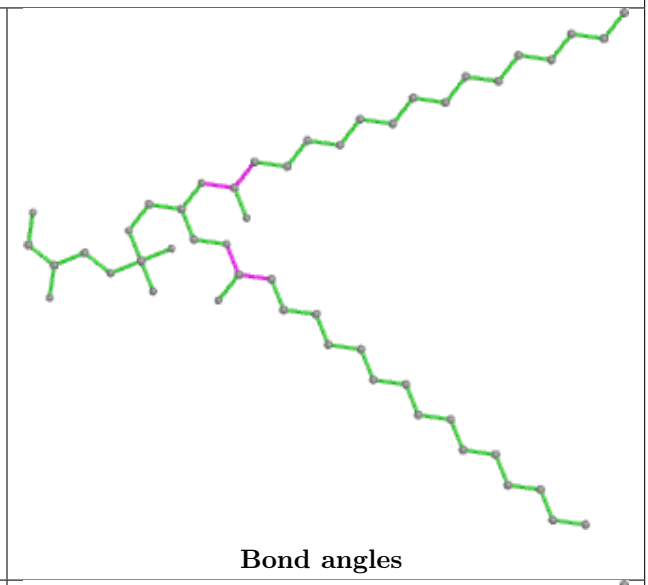
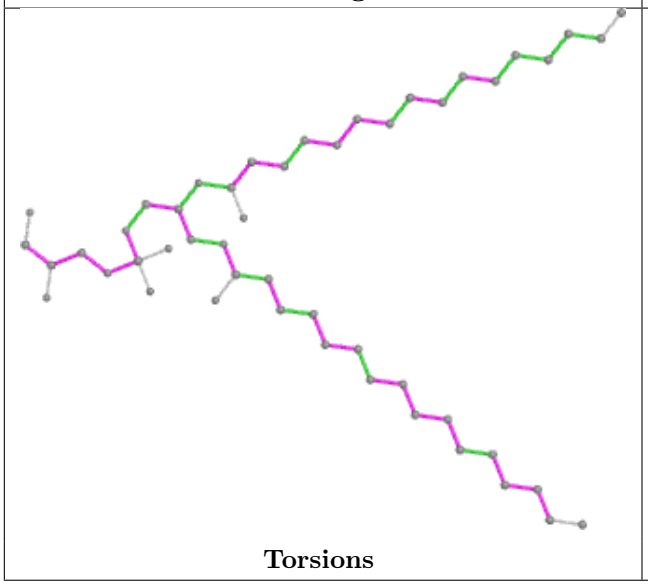


Bond angles



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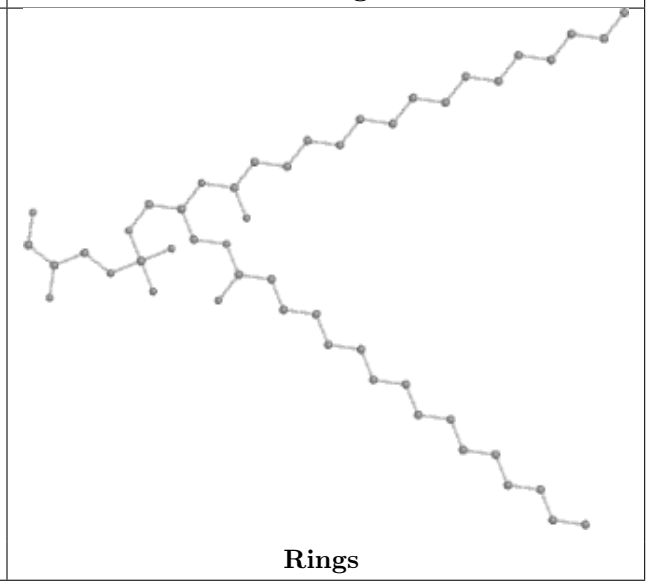
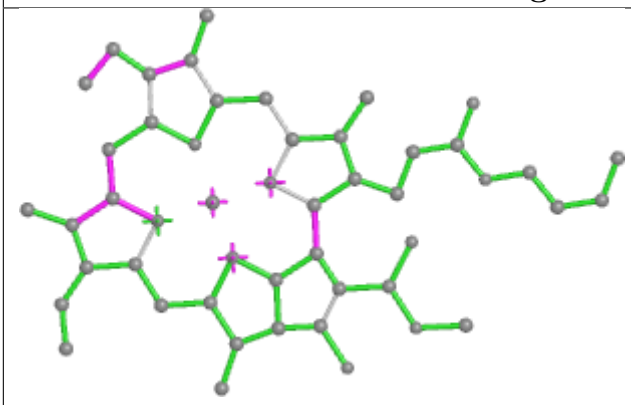


Rings

Ligand CLA r 604



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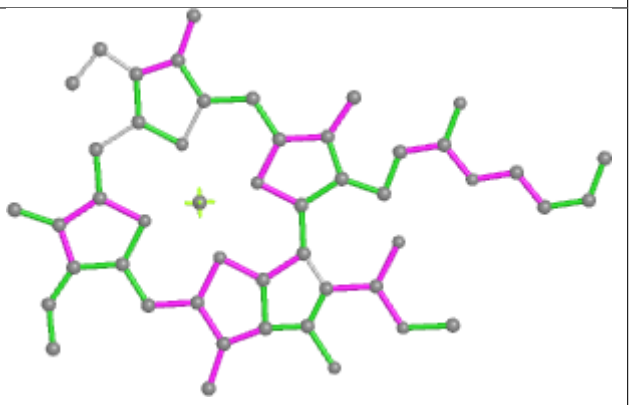
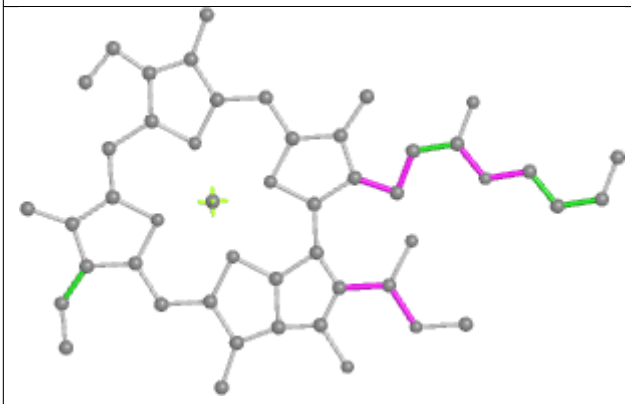


Bond angles



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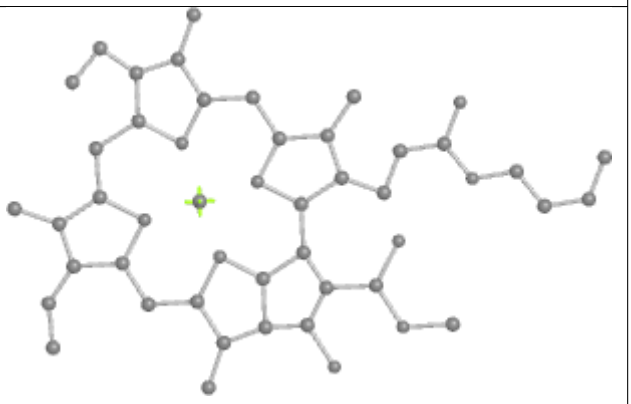
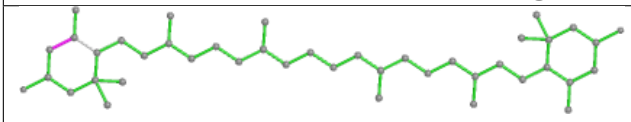


Rings

Ligand LUT s 621



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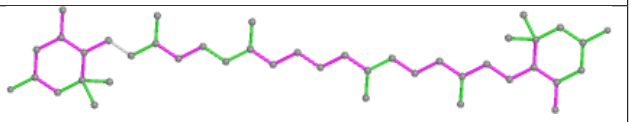
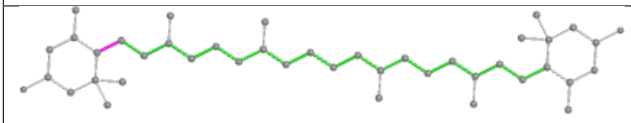


Bond angles



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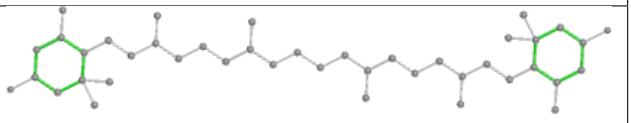
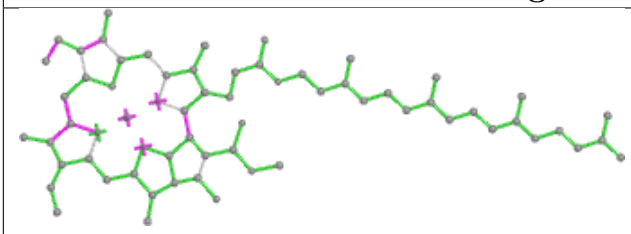


Rings

Ligand CLA g 602



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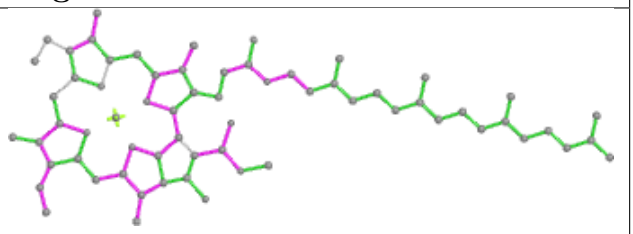
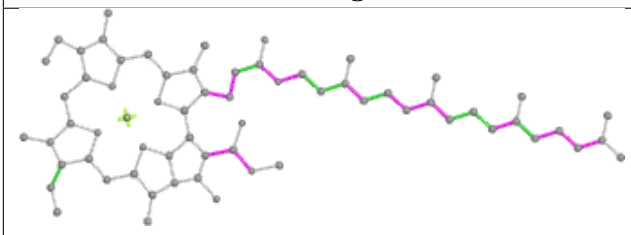


Bond angles



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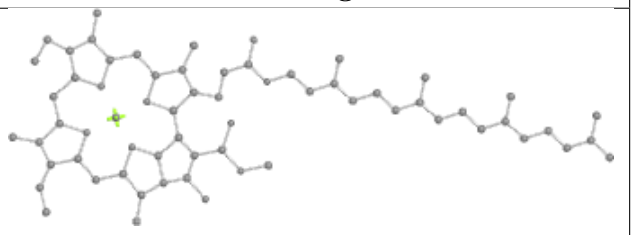
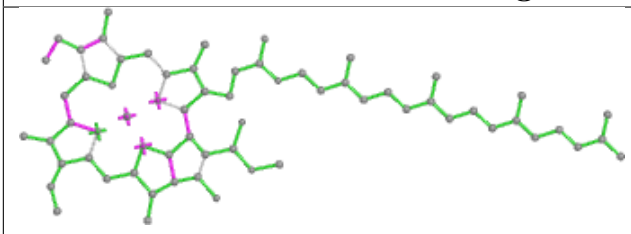


Rings

Ligand CLA C1 505



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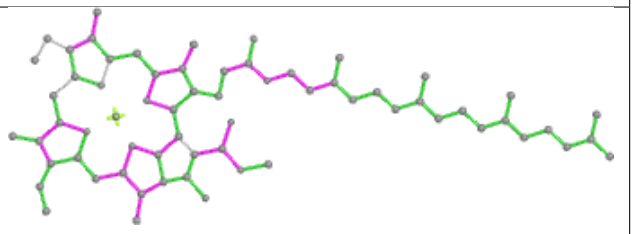
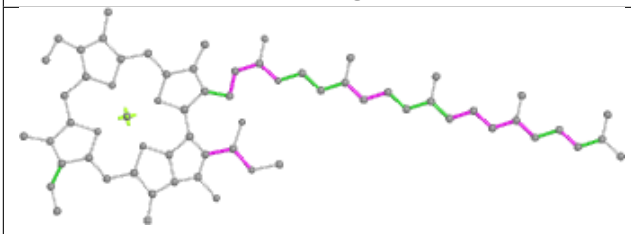


Bond angles



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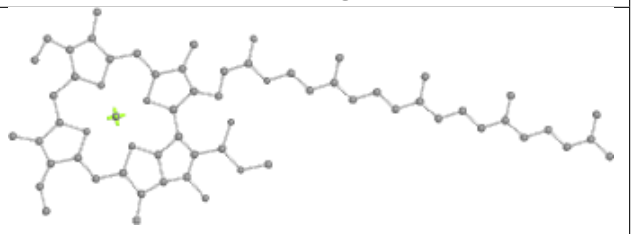
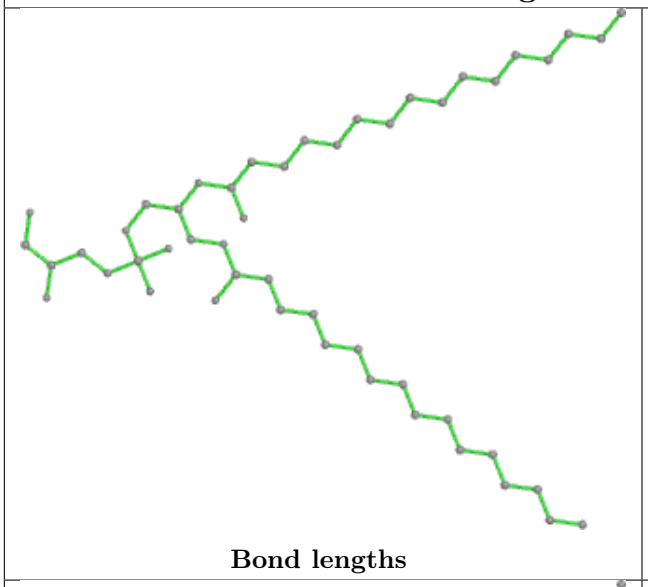


Rings

Ligand LHG g1 624



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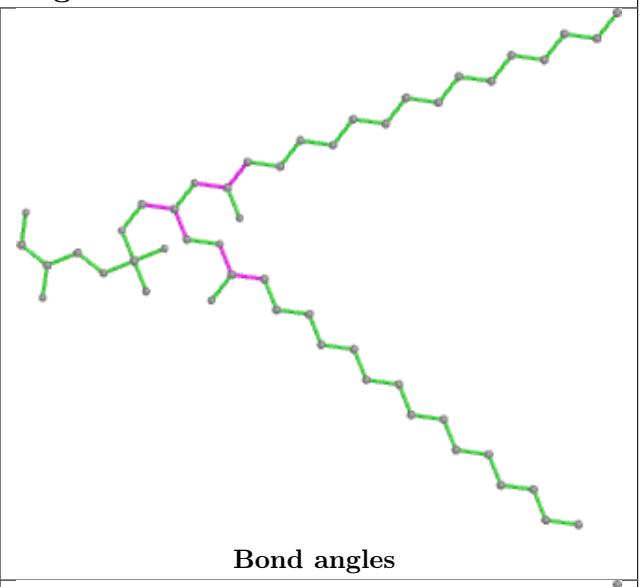
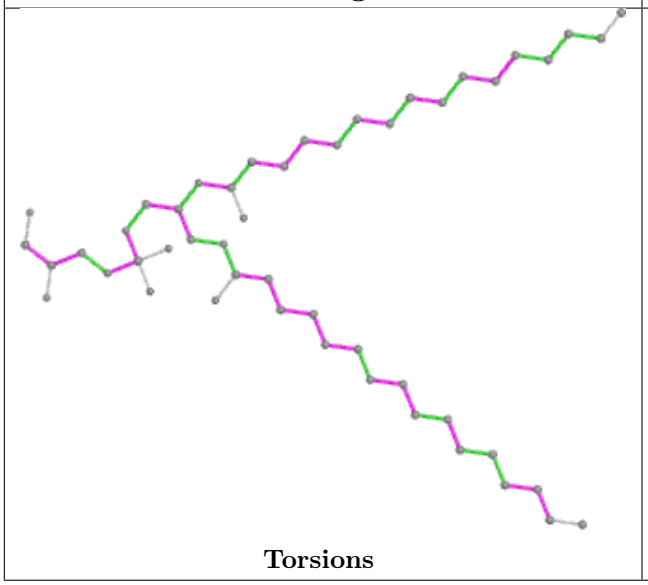


Bond angles



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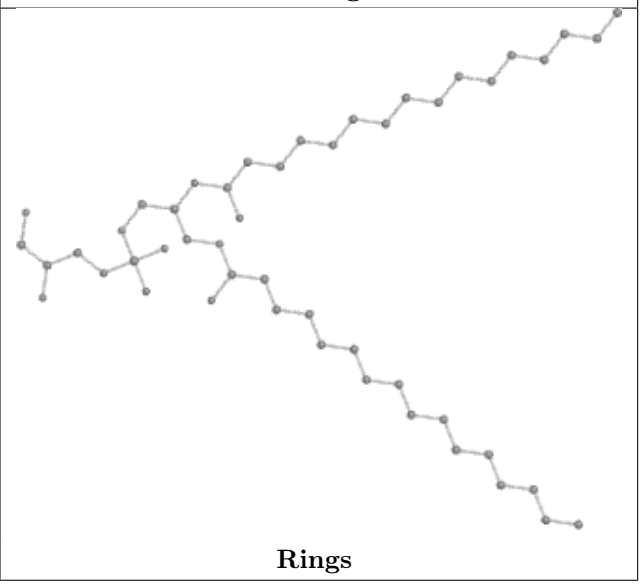
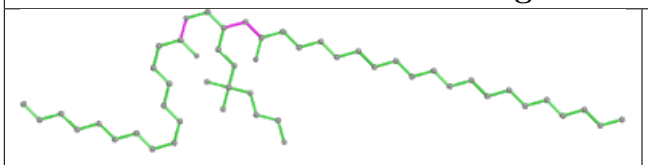
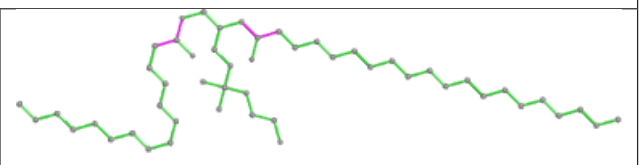


Rings

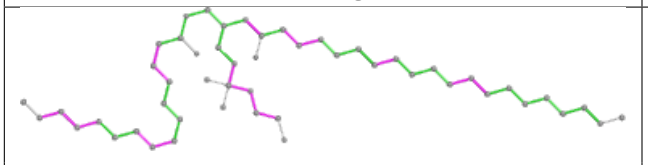
Ligand PTY Y1 626



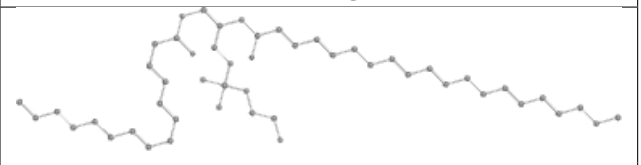
Bond lengths



Bond angles

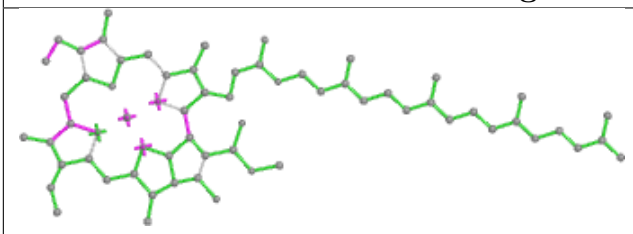


Torsions



Rings

Ligand CLA a1 406



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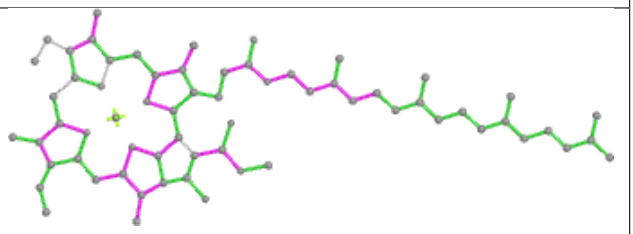
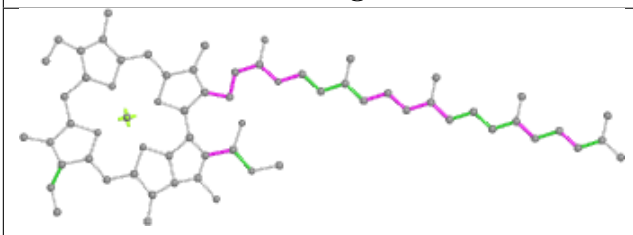
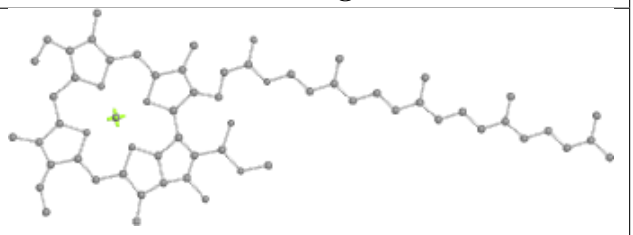


Bond angles

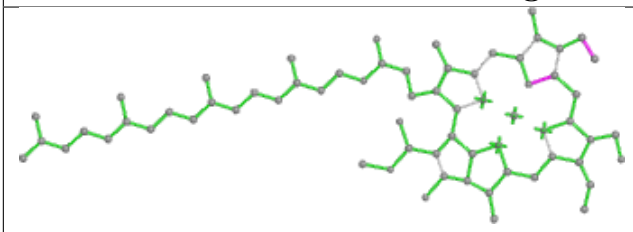


Torsions



Rings

Ligand CHL N 609



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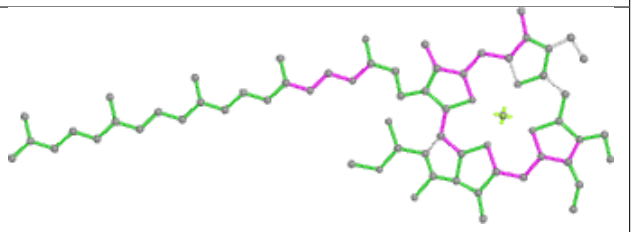
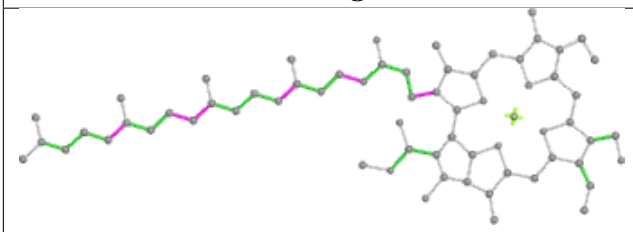
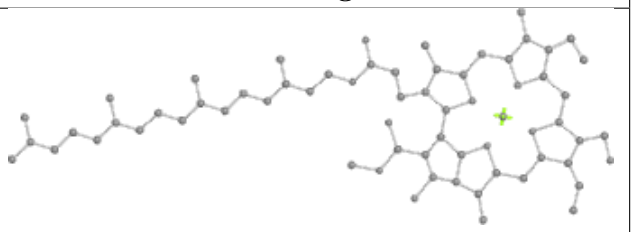


Bond angles

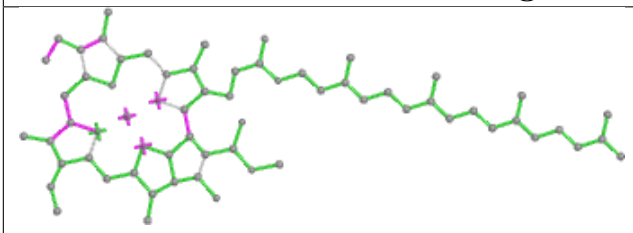


Torsions



Rings

Ligand CLA b1 604



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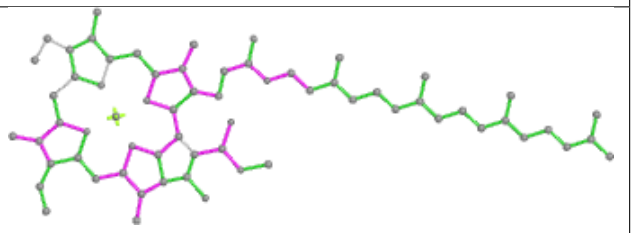
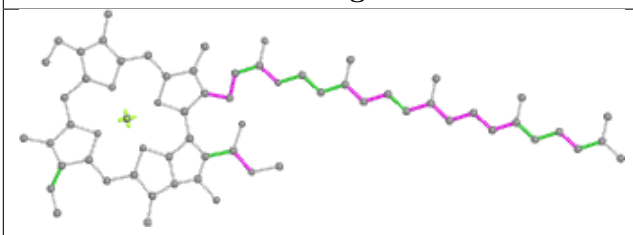


Bond angles



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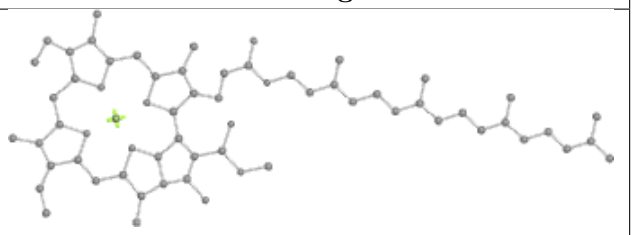
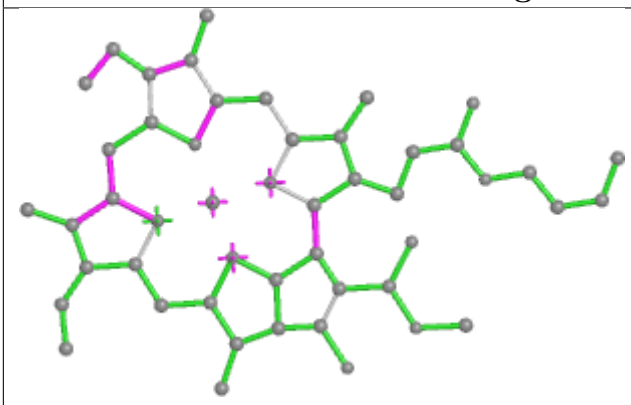


Rings

Ligand CLA N1 614



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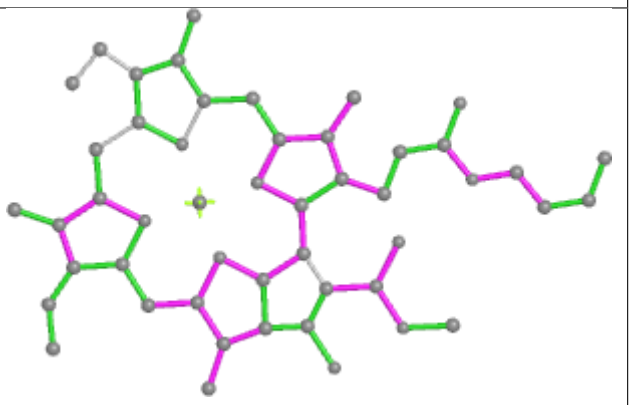
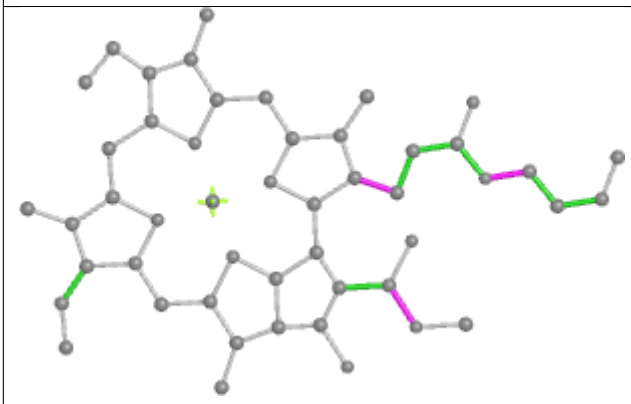
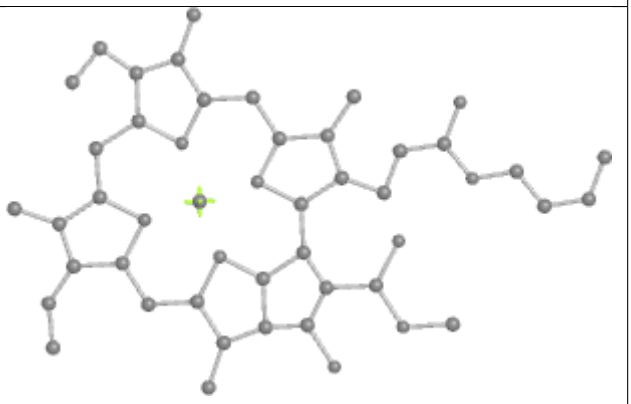


Bond angles

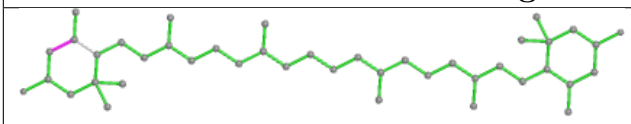


Torsions



Rings

Ligand LUT n1 621



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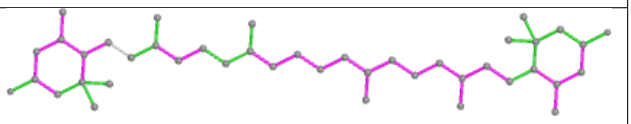
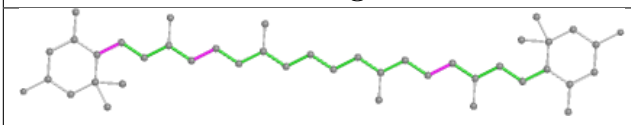


Bond angles



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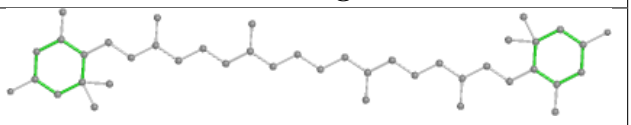
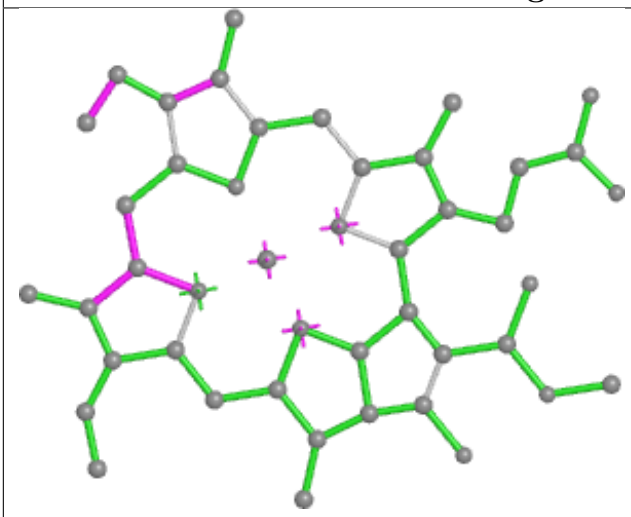


Rings

Ligand CLA n 612



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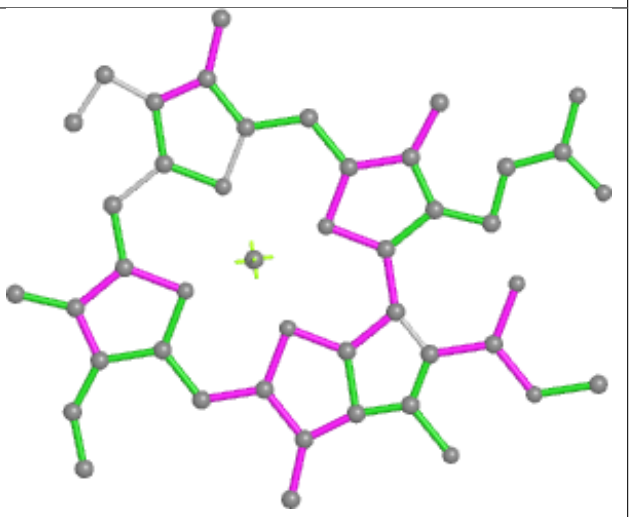
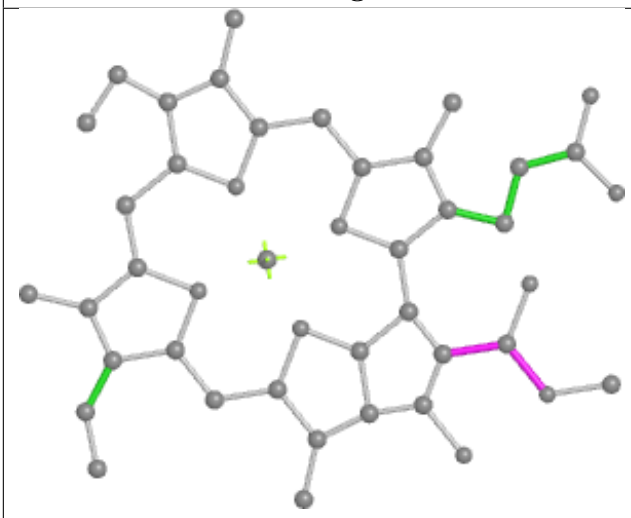


Bond angles



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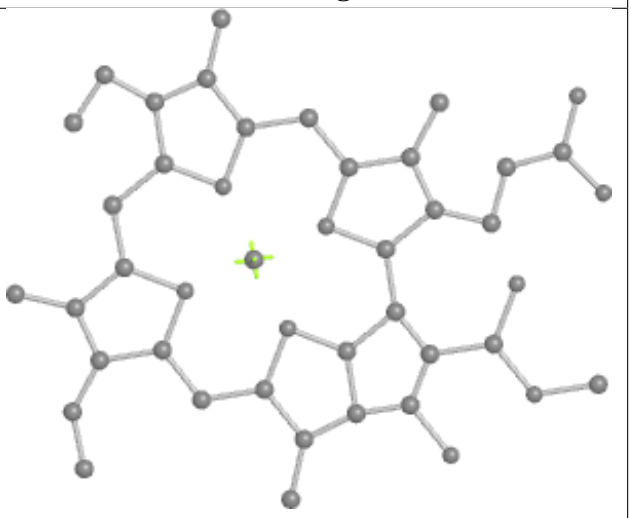
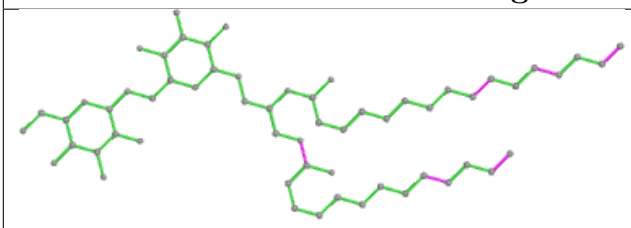


Rings

Ligand DGD C1 520



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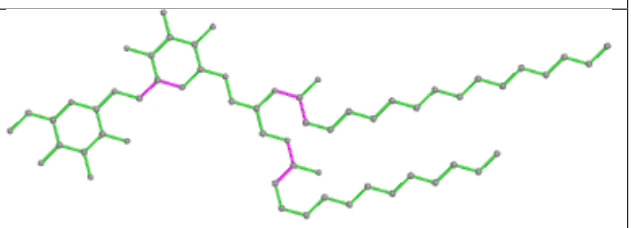
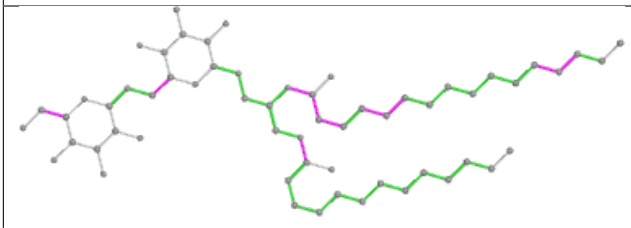


Bond angles



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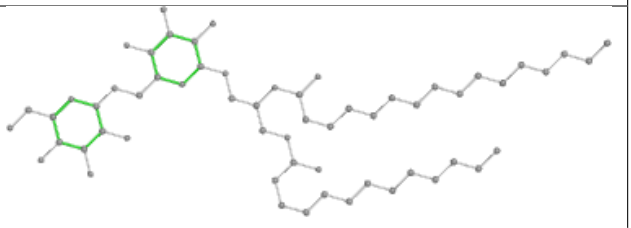
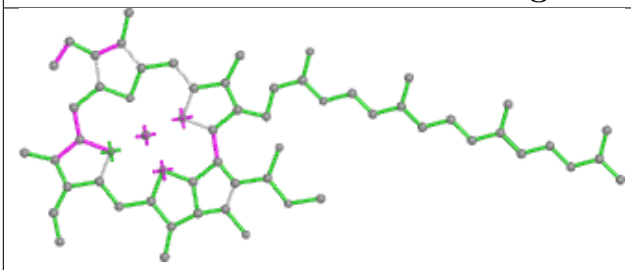


Rings

Ligand CLA r 608



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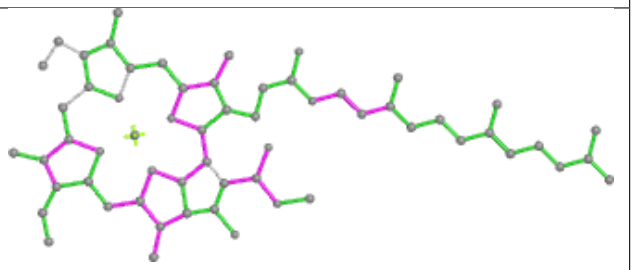
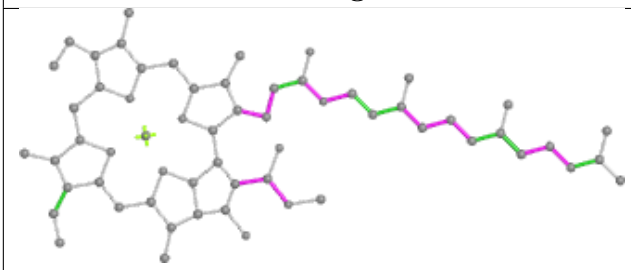


Bond angles



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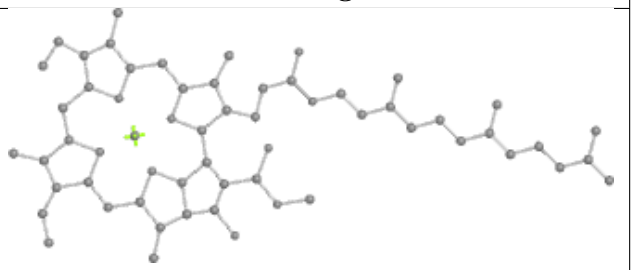
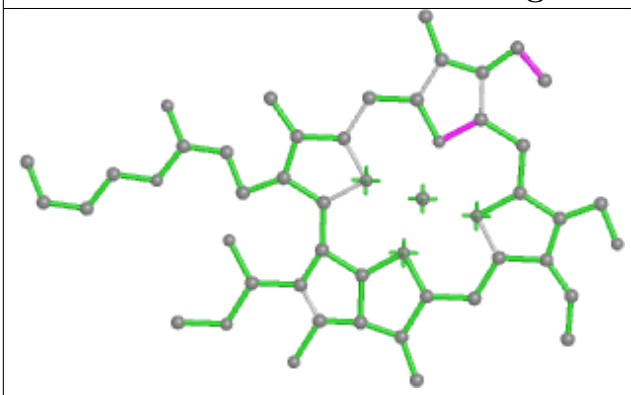


Rings

Ligand CHL n 608



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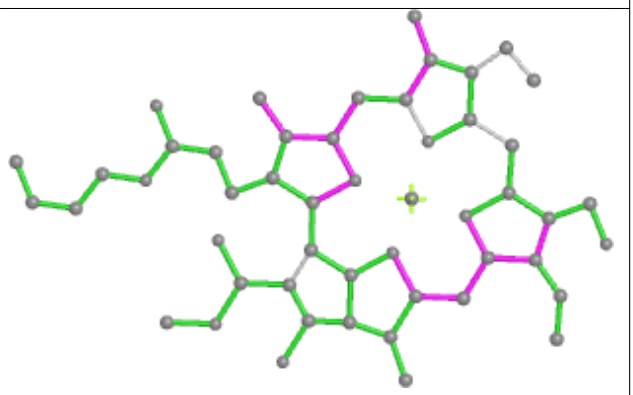
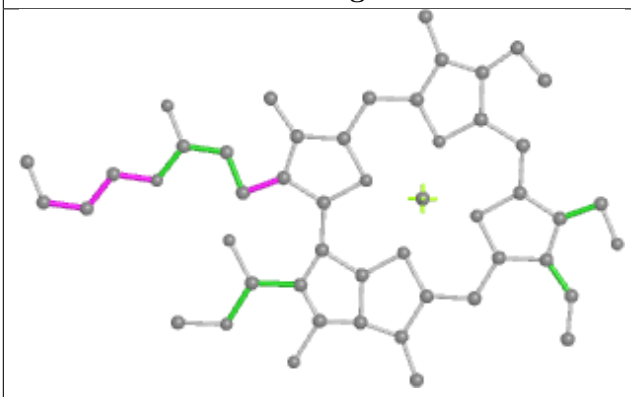
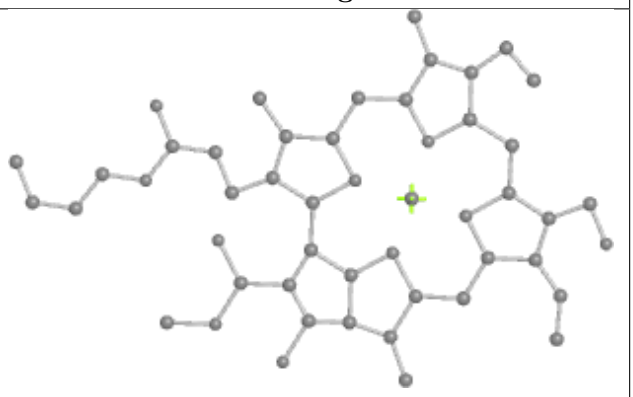


Bond angles

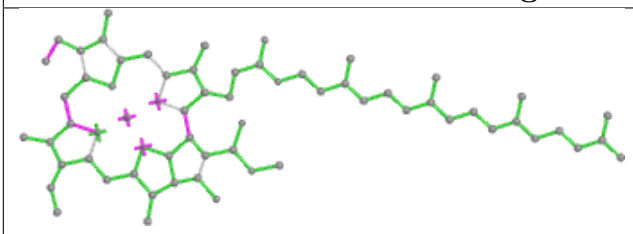


Torsions



Rings

Ligand CLA c1 509



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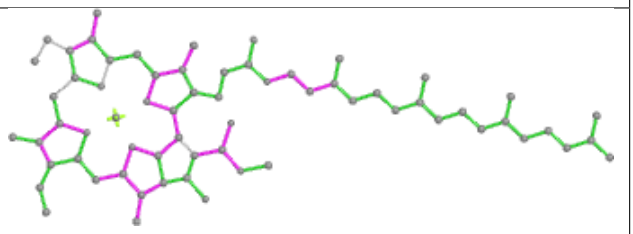
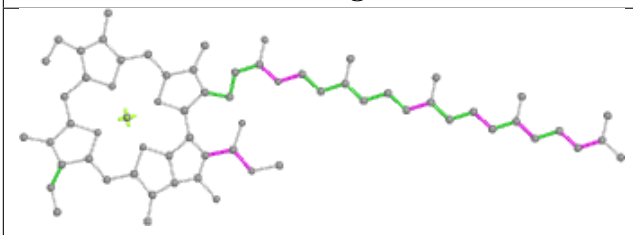


Bond angles



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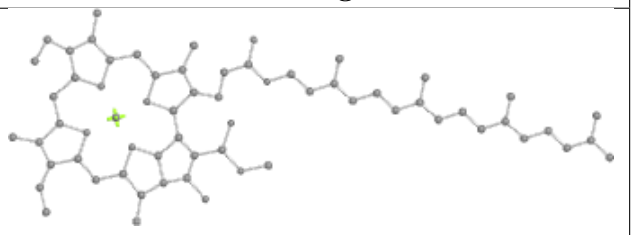
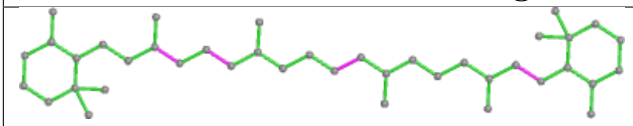


Rings

Ligand BCR D1 404



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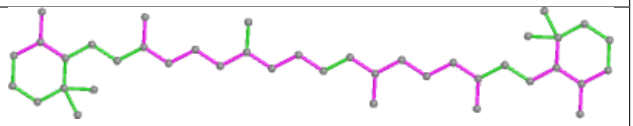
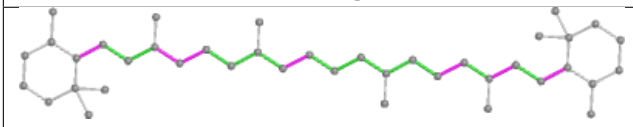


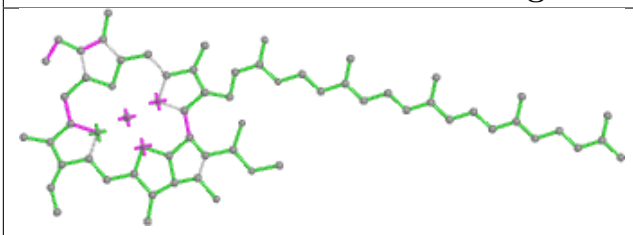
Bond angles



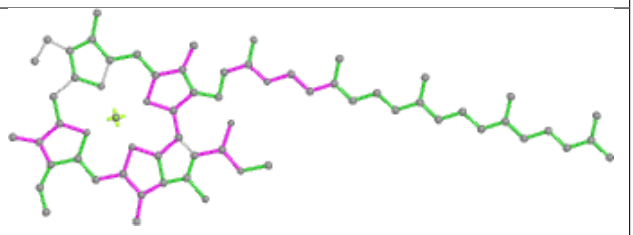
Torsions

Rings

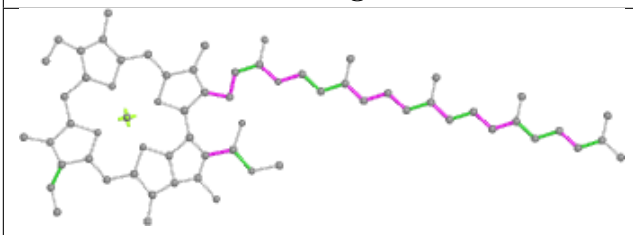
Ligand CLA b 605



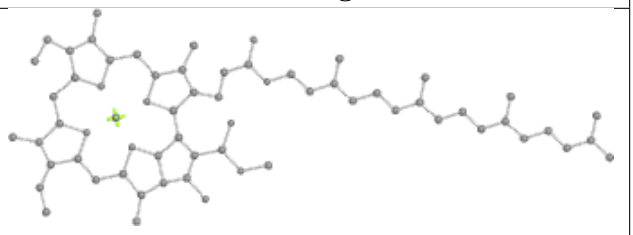
Bond lengths



Bond angles

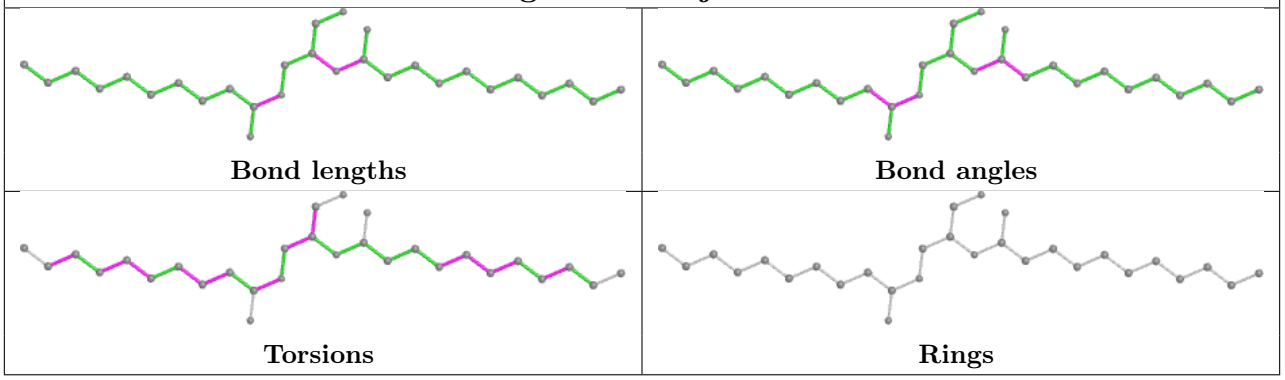


Torsions

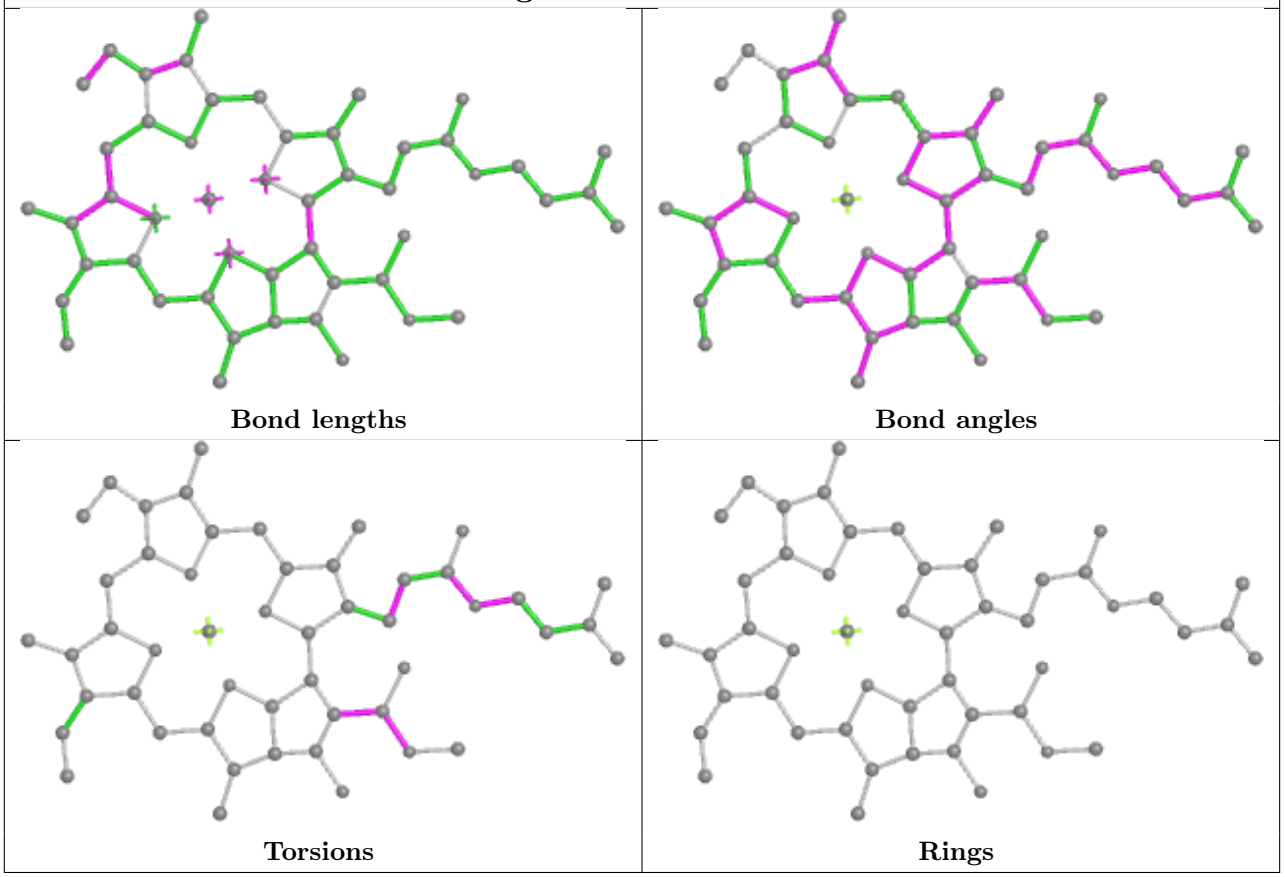


Rings

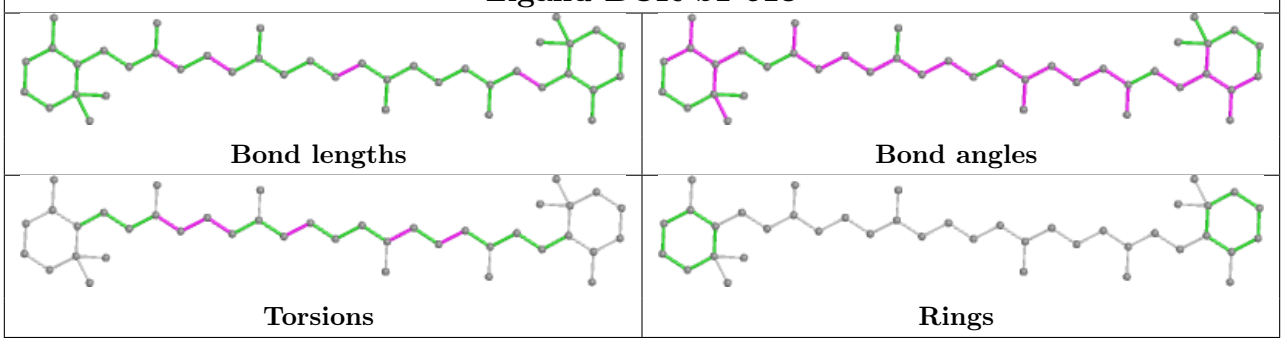
Ligand DGA j1 101



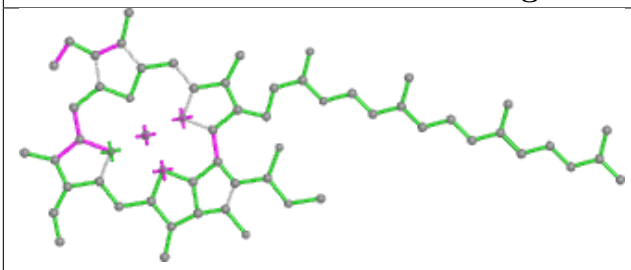
Ligand CLA A1 407



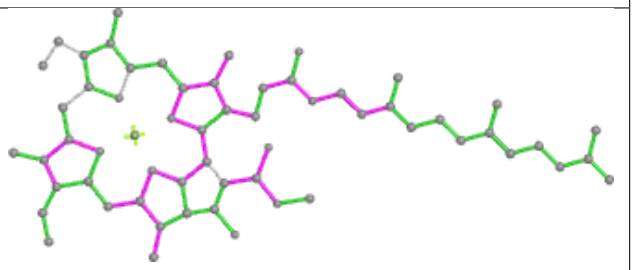
Ligand BCR b1 618



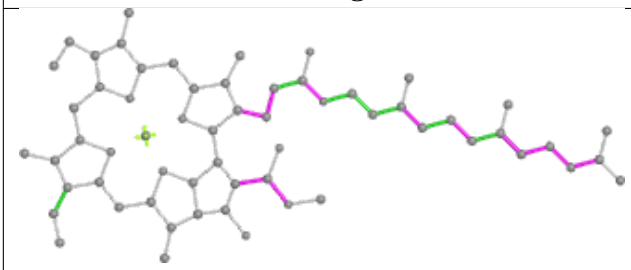
Ligand CLA r1 610



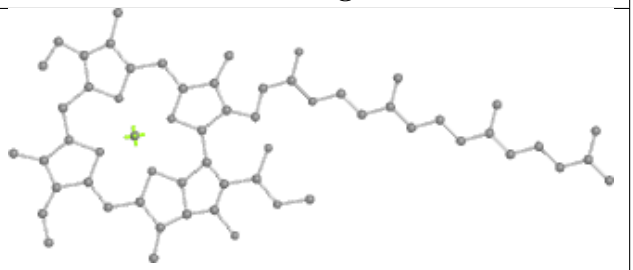
Bond lengths



Bond angles

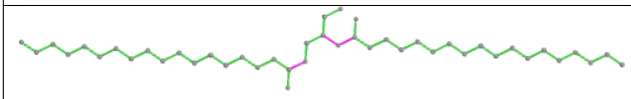


Torsions

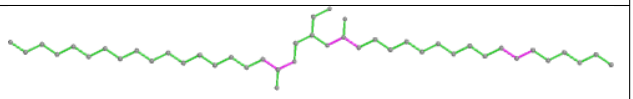


Rings

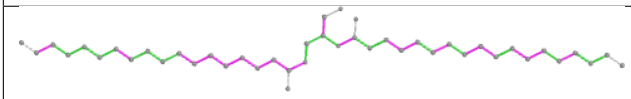
Ligand DGA c1 524



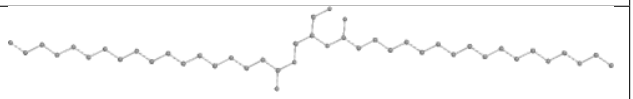
Bond lengths



Bond angles

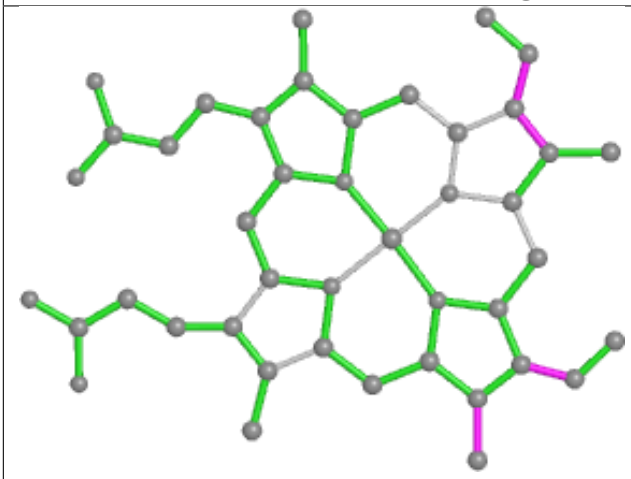


Torsions

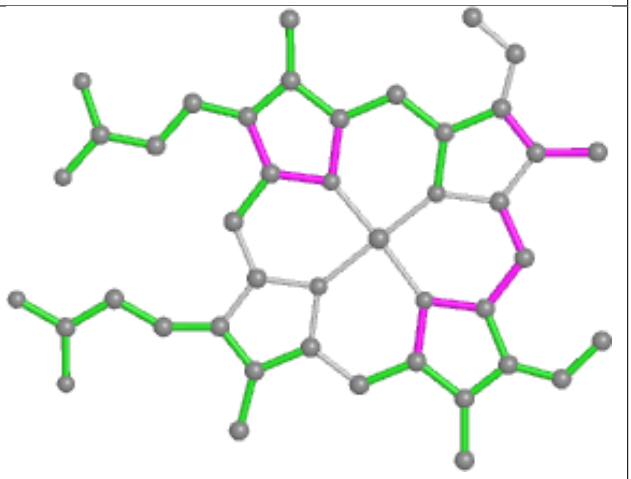


Rings

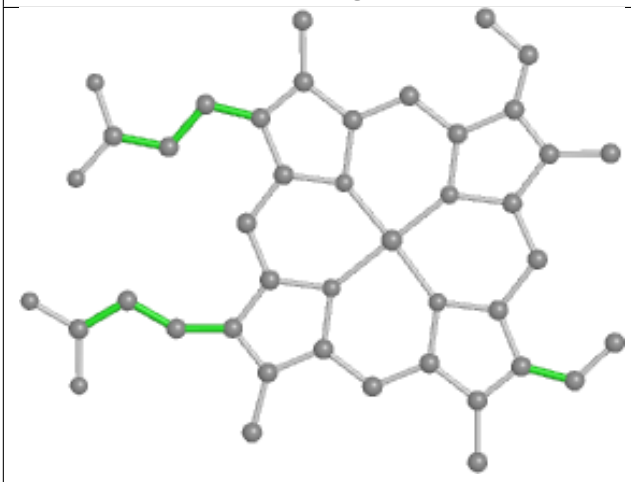
Ligand HEM f1 101



Bond lengths



Bond angles



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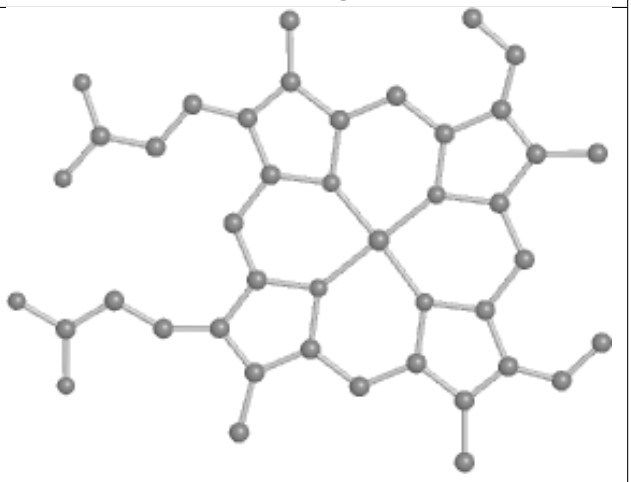
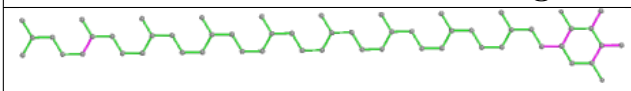


Rings

Ligand PL9 d 405



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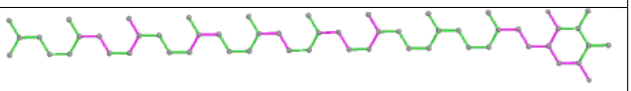
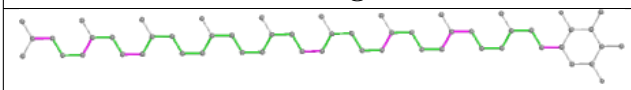


Bond angles



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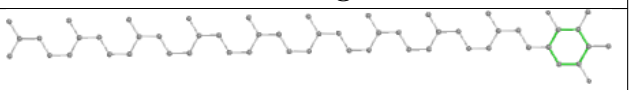
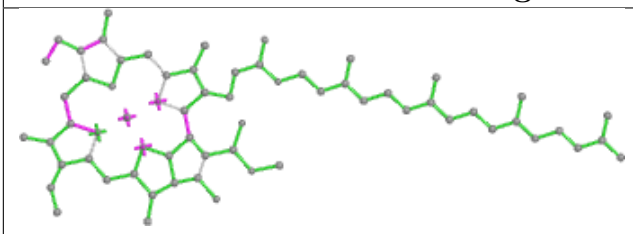


Rings

Ligand CLA G1 611



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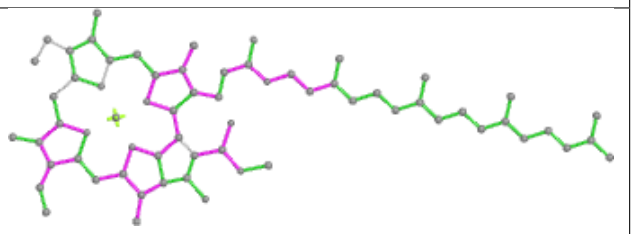
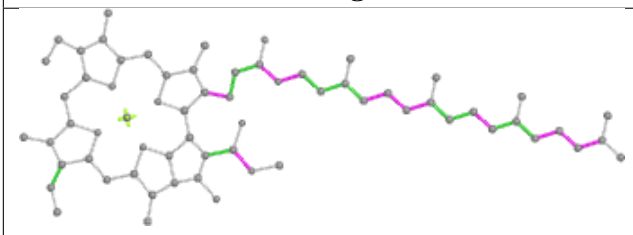


Bond angles



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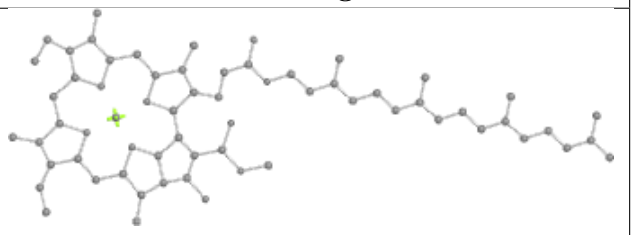
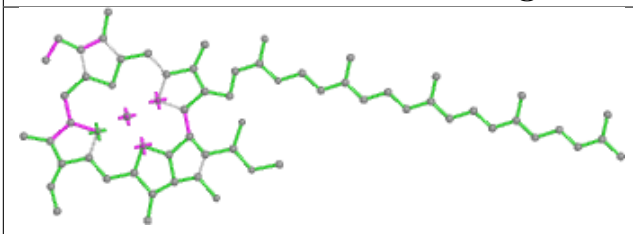


Rings

Ligand CLA b1 616



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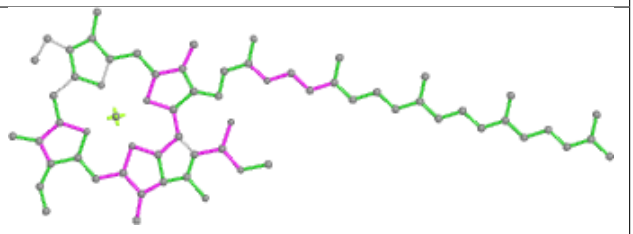
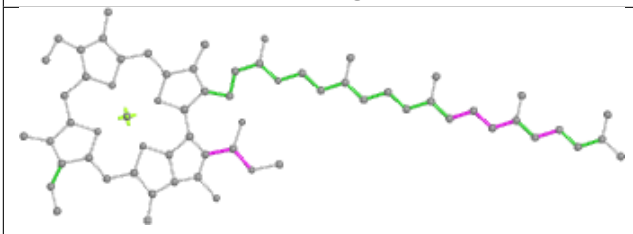


Bond angles



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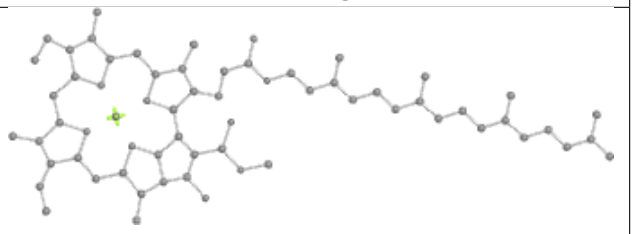
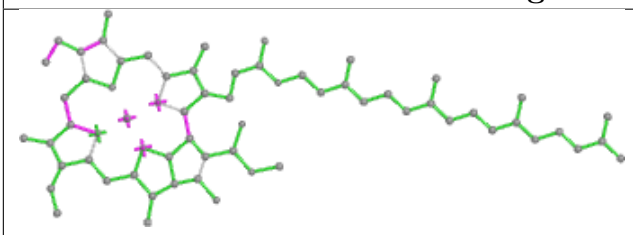


Rings

Ligand CLA b 617



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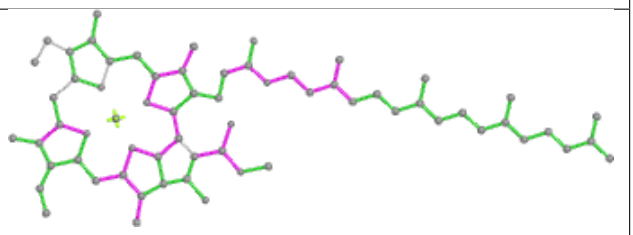
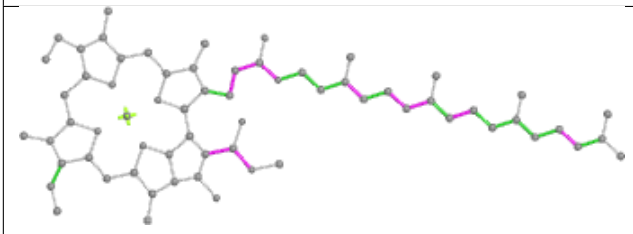


Bond angles



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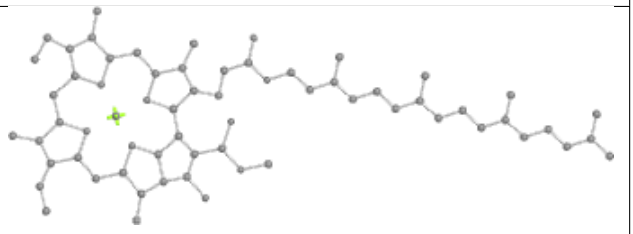
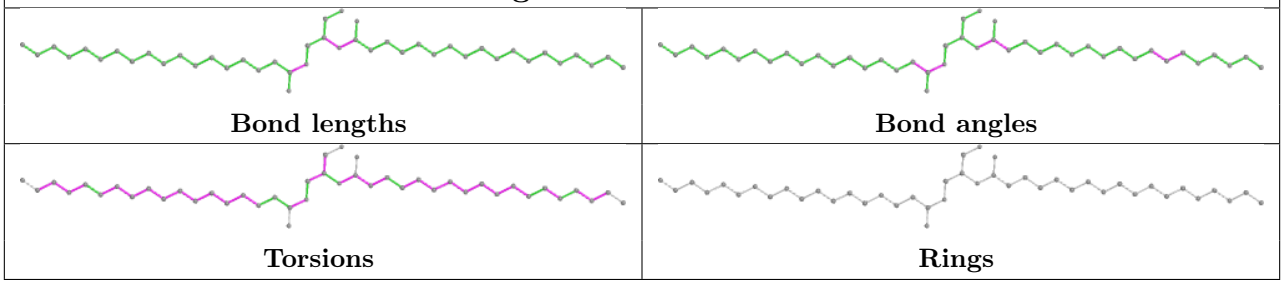
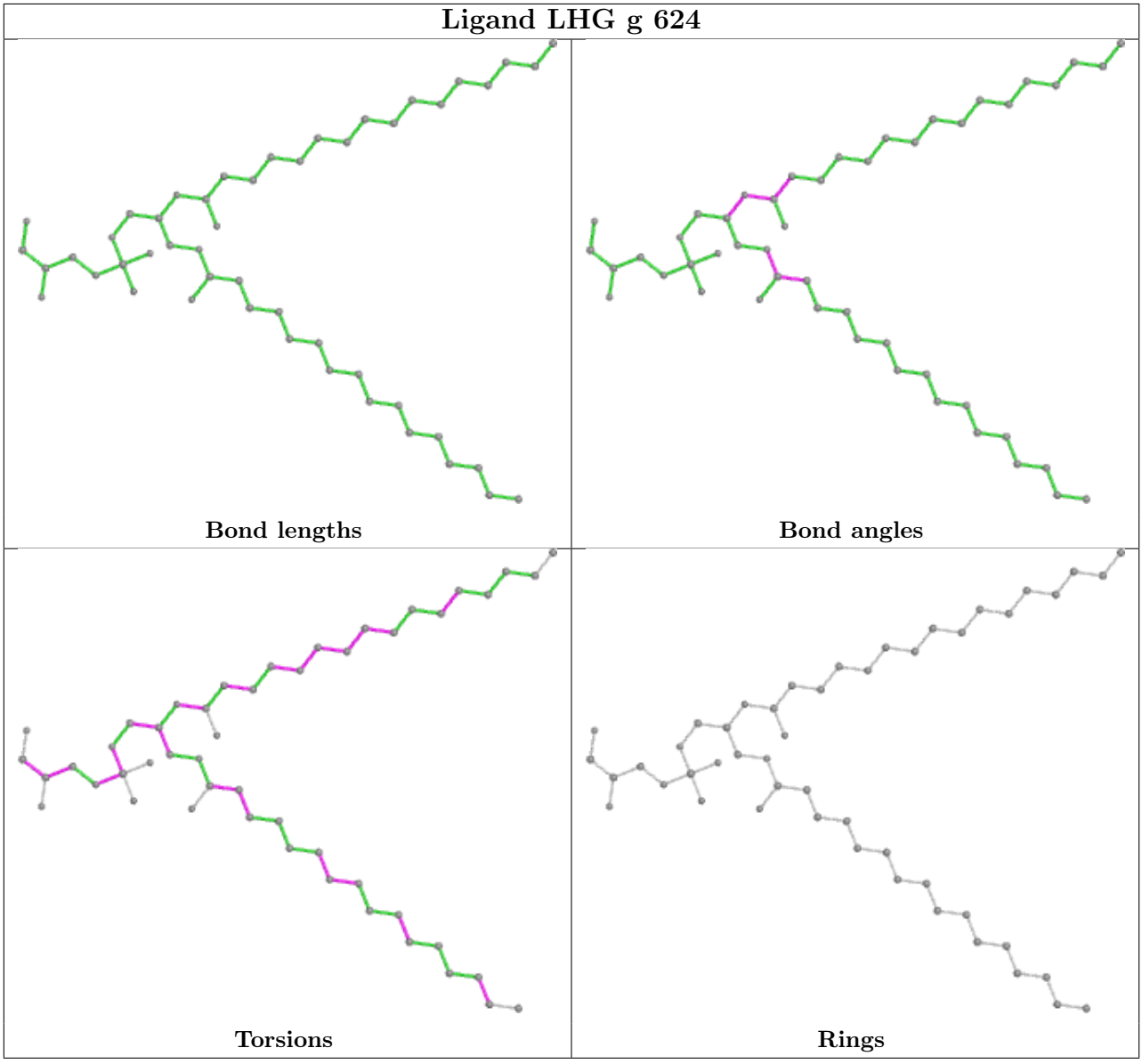


Rings

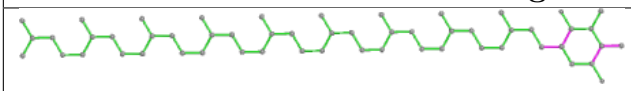
Ligand DGA C1 524



Ligand LHG g 624



Ligand PL9 D 405



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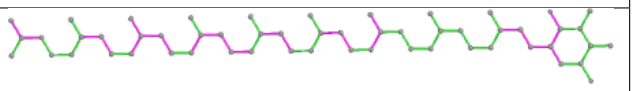
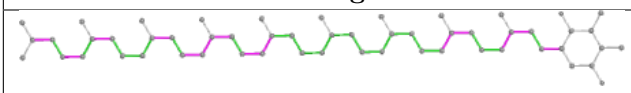


Bond angles



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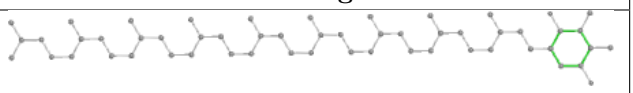
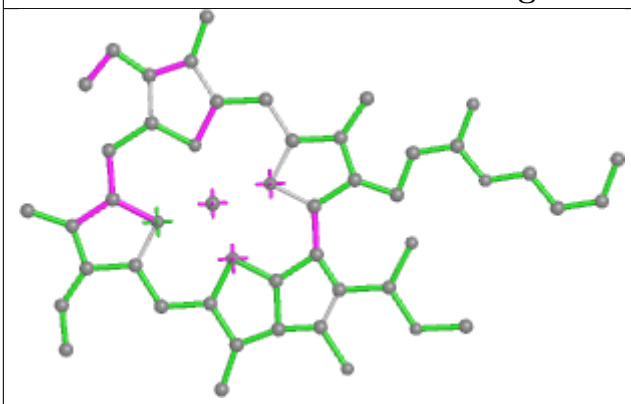


Rings

Ligand CLA n1 611



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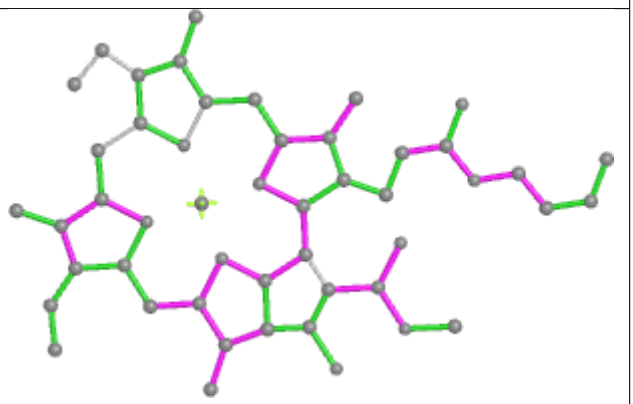
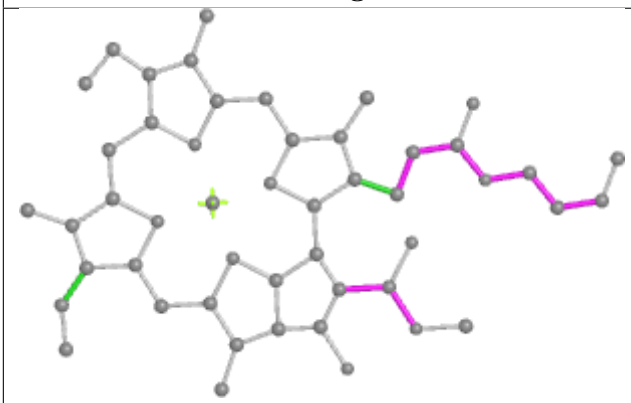


Bond angles



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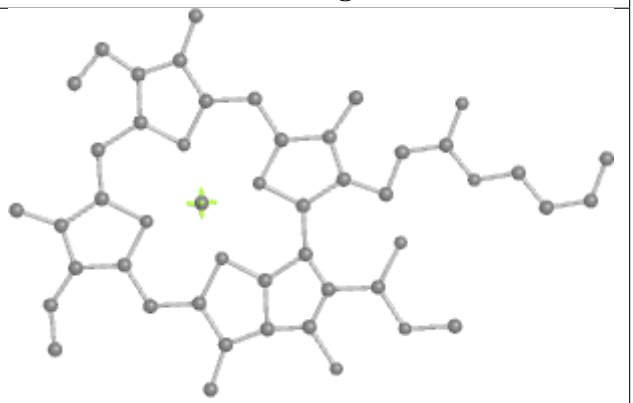
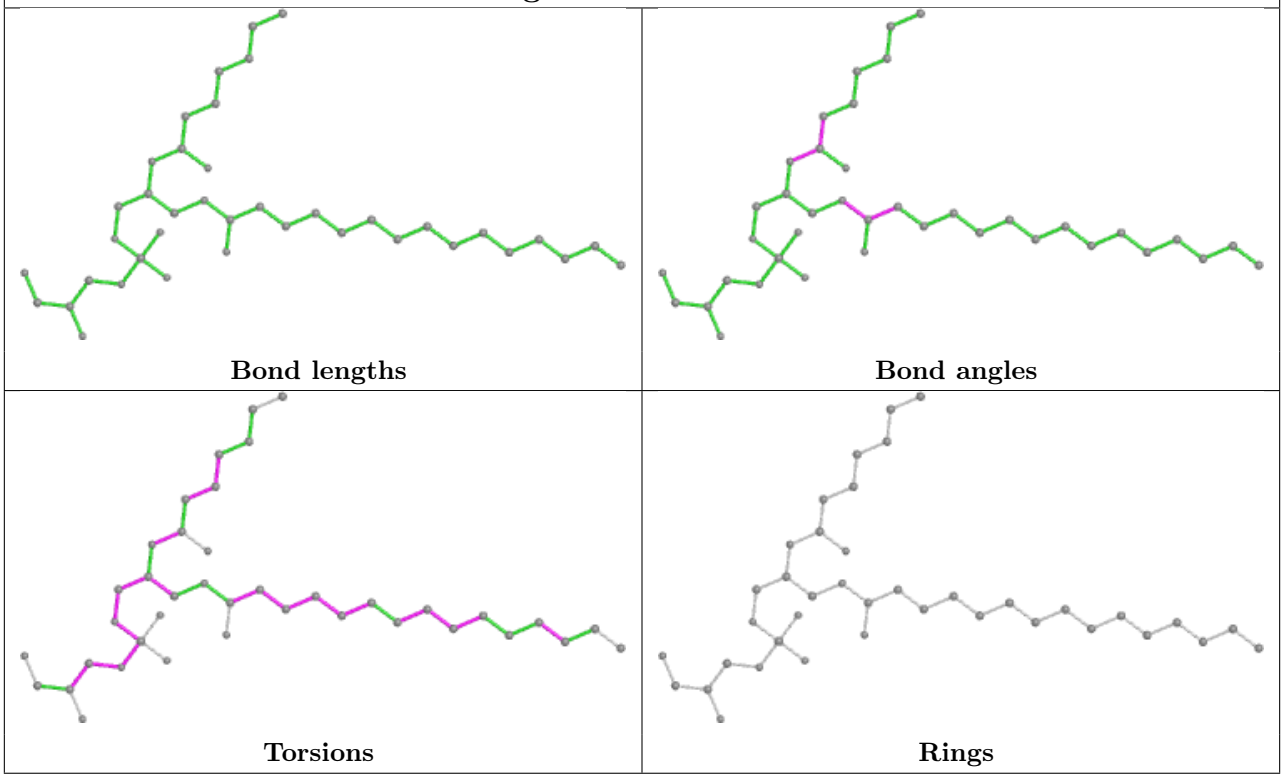
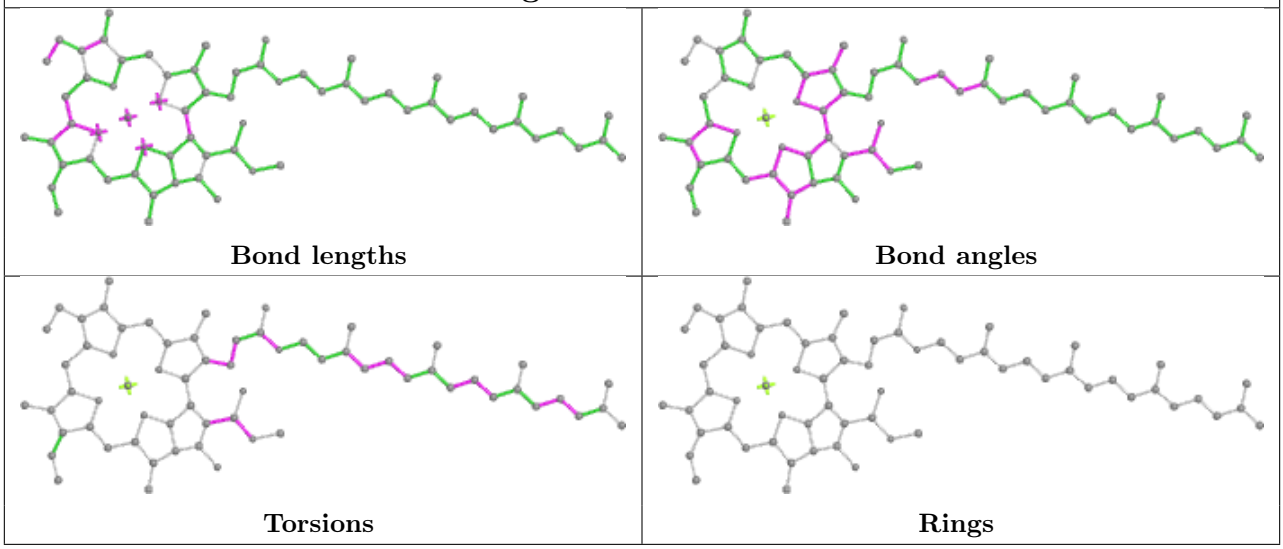


Rings

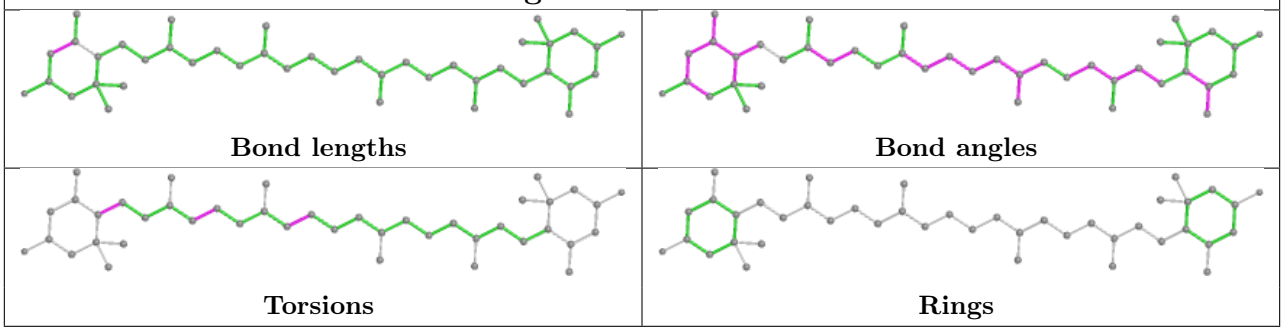
Ligand LHG D 410



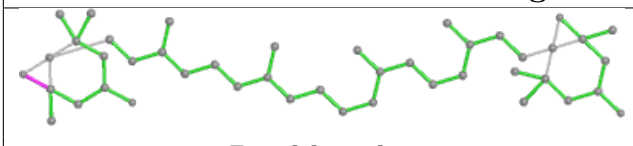
Ligand CLA s1 603

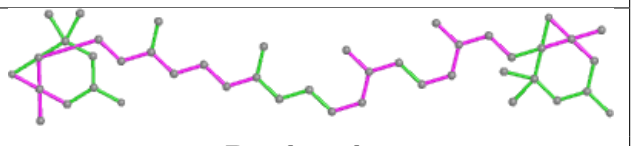


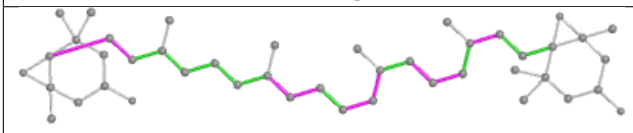
Ligand LUT N 621

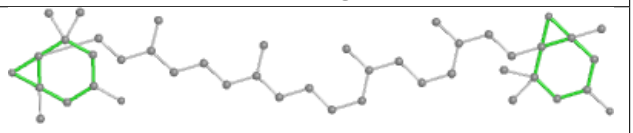


Ligand XAT r 622

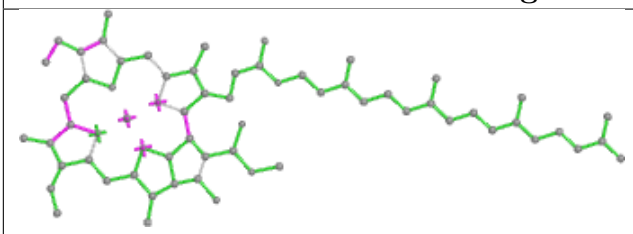

Bond lengths


Bond angles


Torsions


Rings

Ligand CLA c1 513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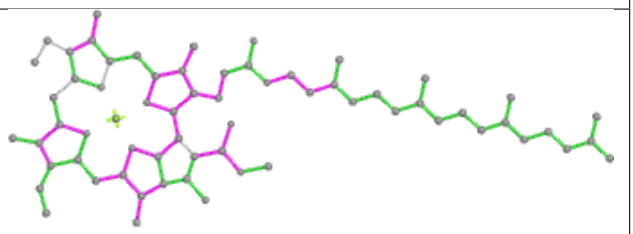
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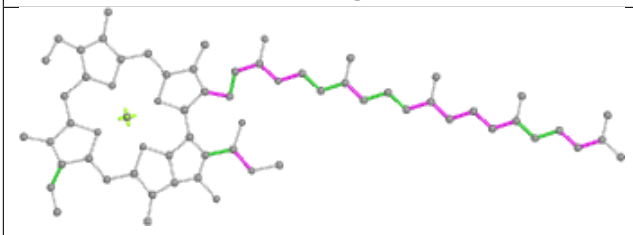
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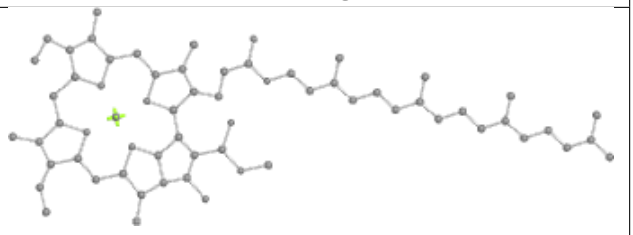
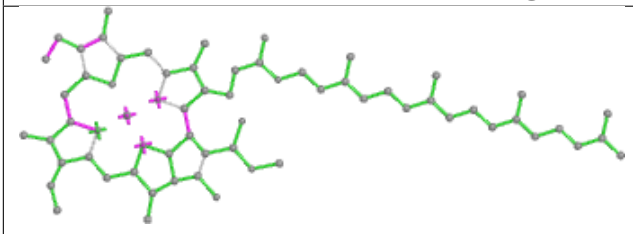

Rings

Ligand CLA G 603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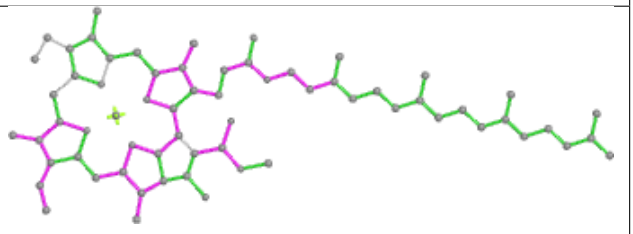
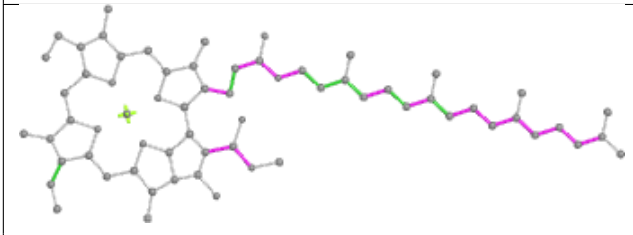
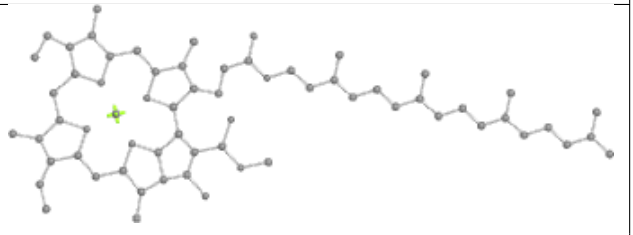
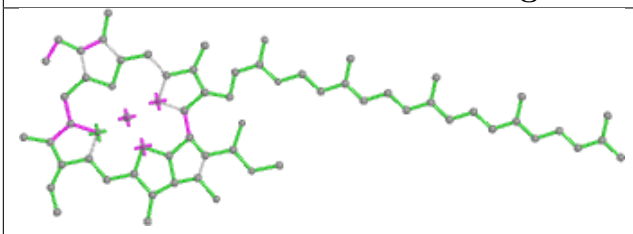

Bond angles

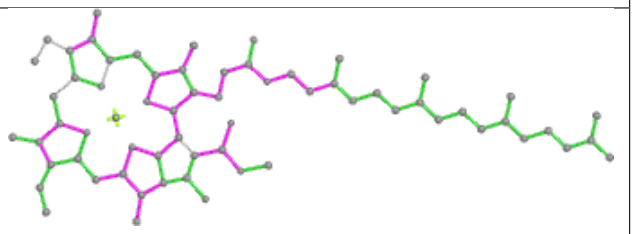

Torsions


Rings

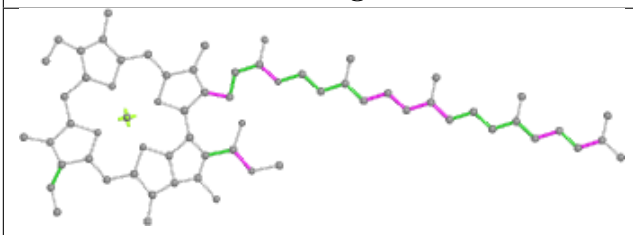
Ligand CLA c1 511



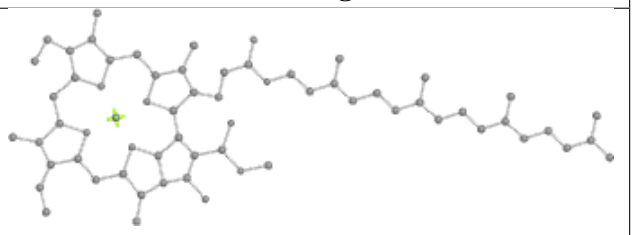
Bond lengths



Bond angles

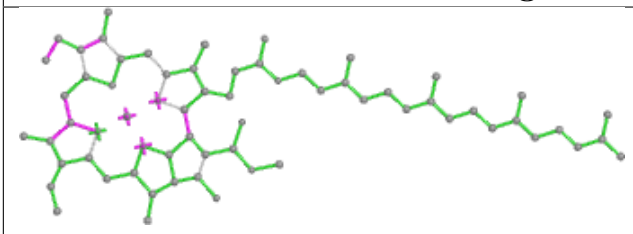


Torsions



Rings

Ligand CLA S1 603



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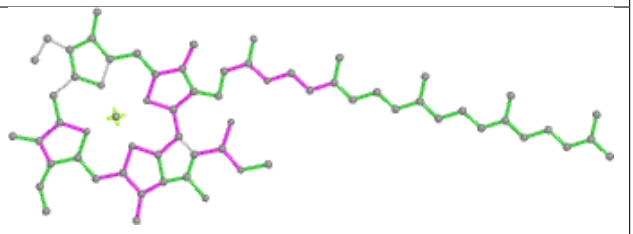
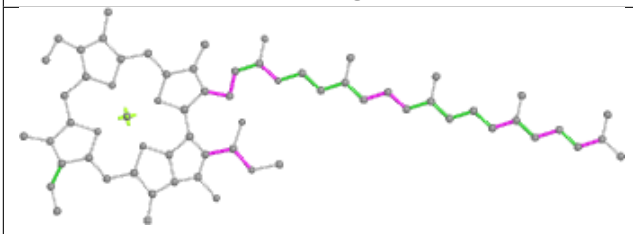
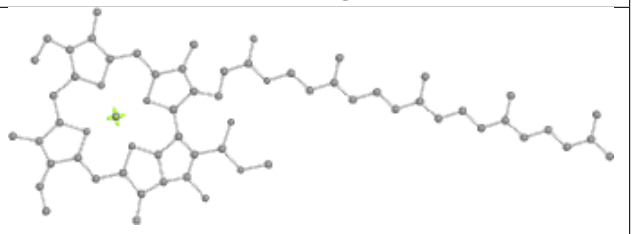


Bond angles

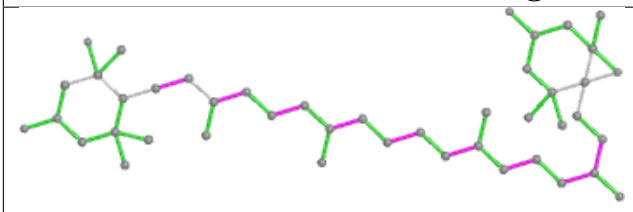


Torsions

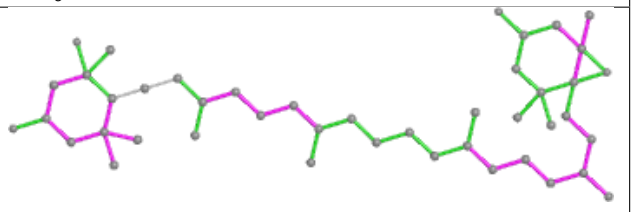


Rings

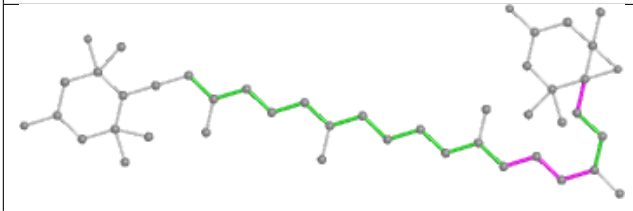
Ligand NEX y 623



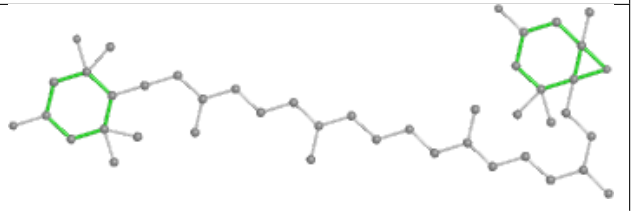
Bond lengths



Bond angles

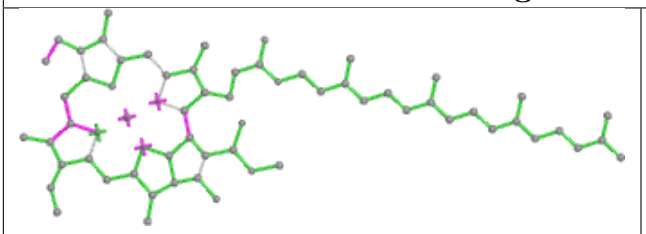


Torsions



Rings

Ligand CLA N1 602



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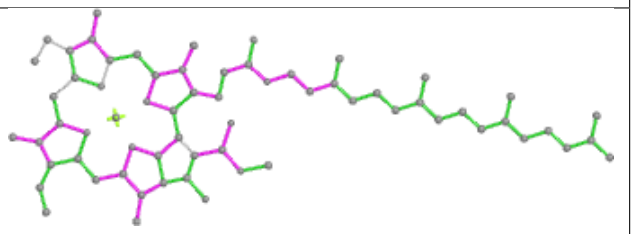
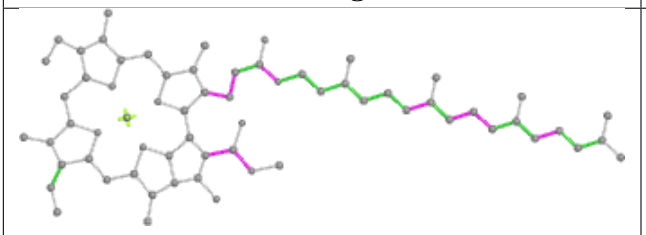


Bond angles



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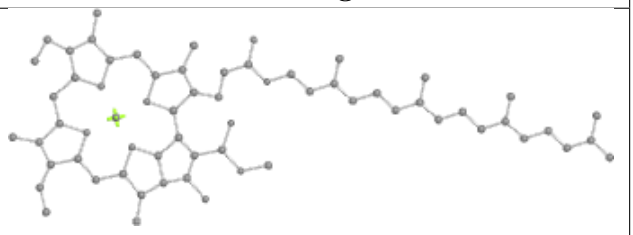
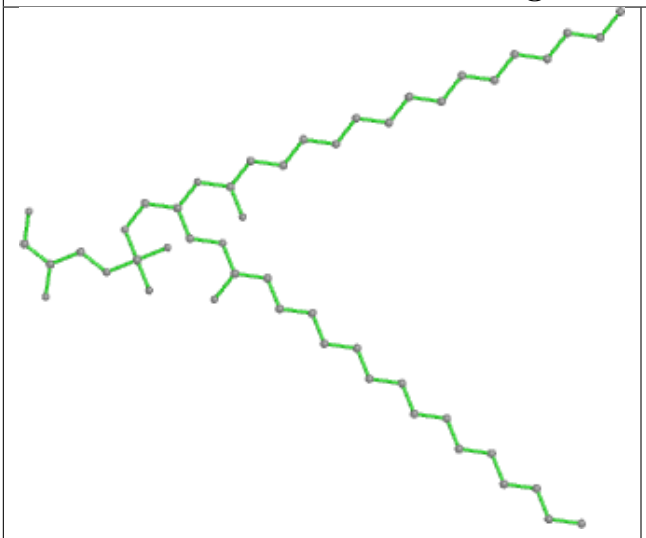


Rings

Ligand LHG y 624



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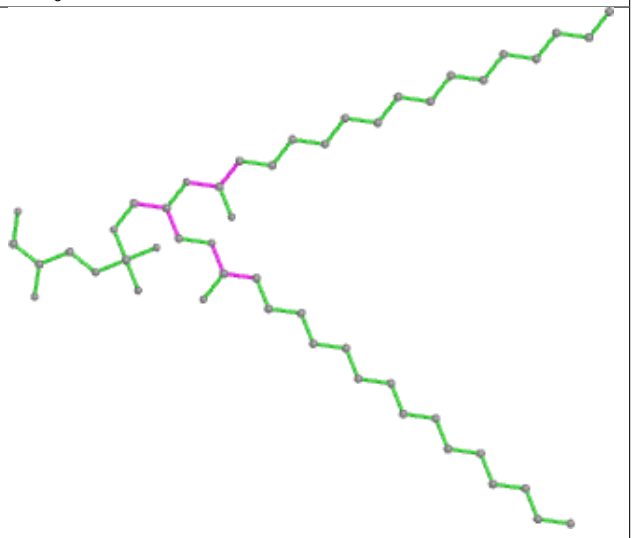

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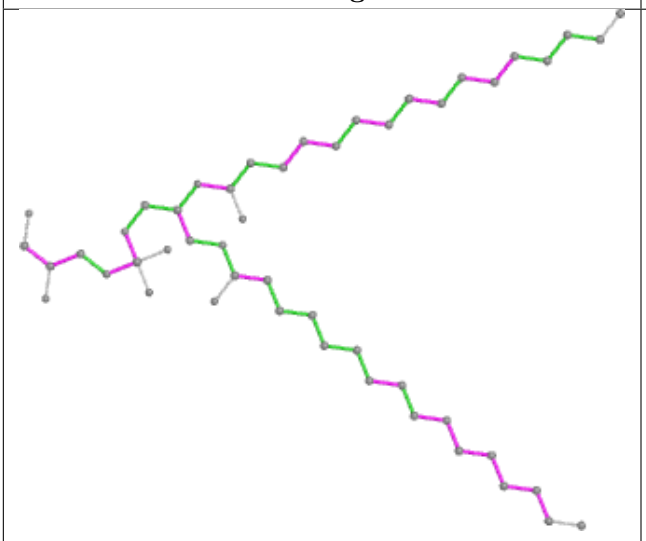

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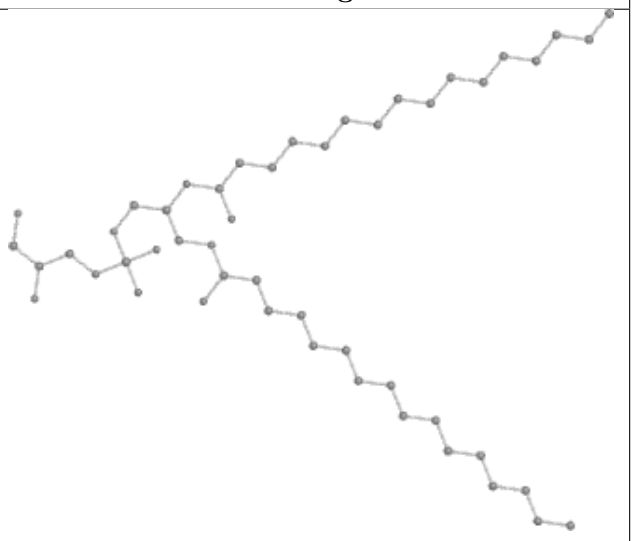
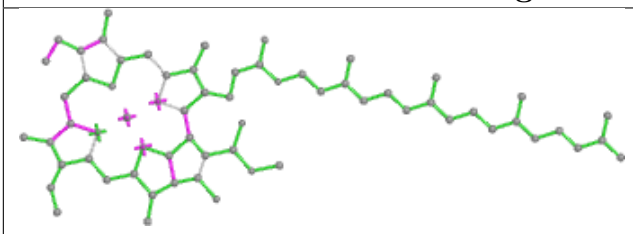


Rings

Ligand CLA C1 501



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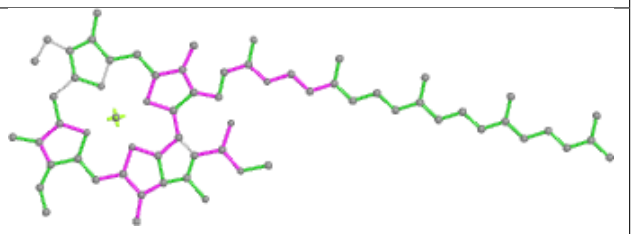
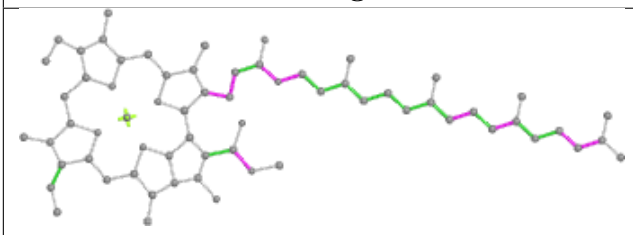


Bond angles



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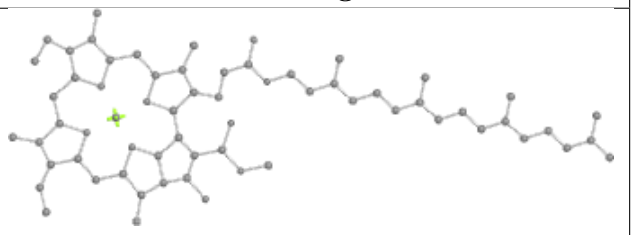
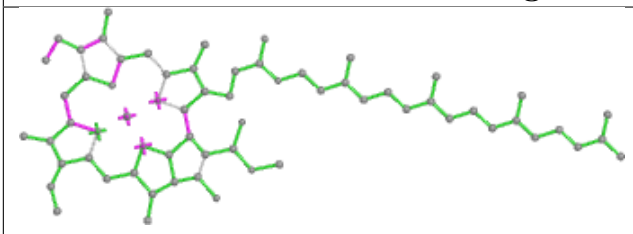


Rings

Ligand CLA G 610



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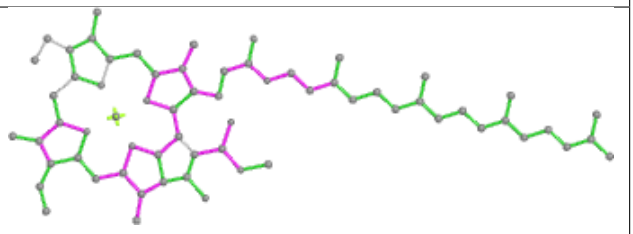
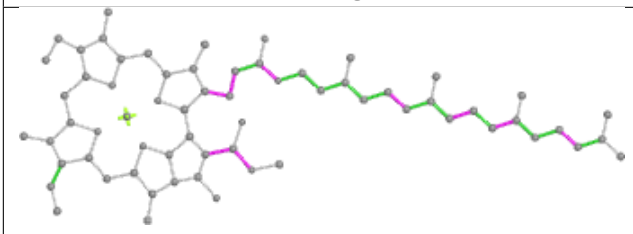


Bond angles



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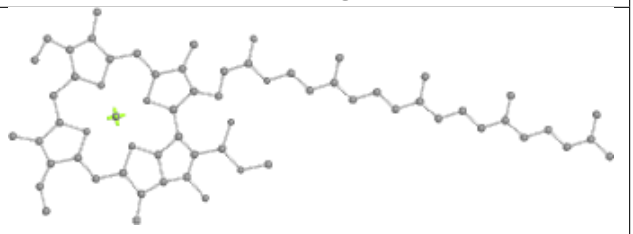
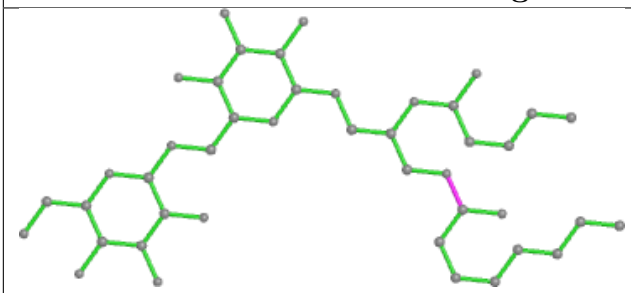


Rings

Ligand DGD B1 623



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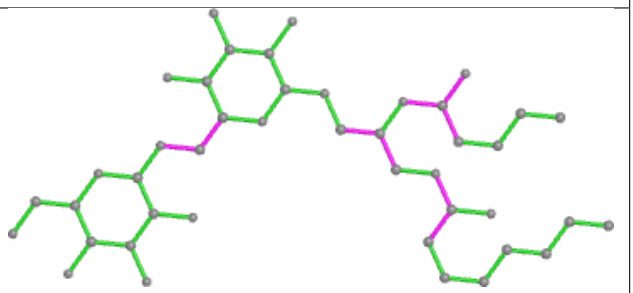
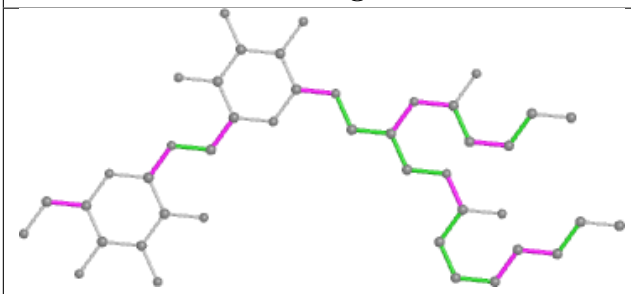


Bond angles



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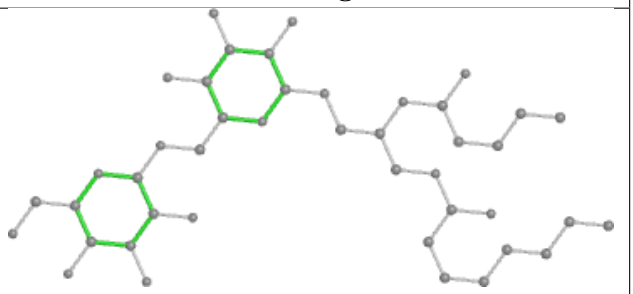
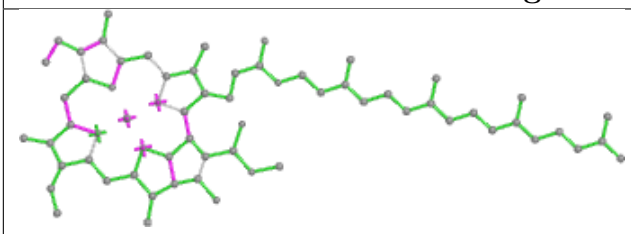


Rings

Ligand CLA Y 610



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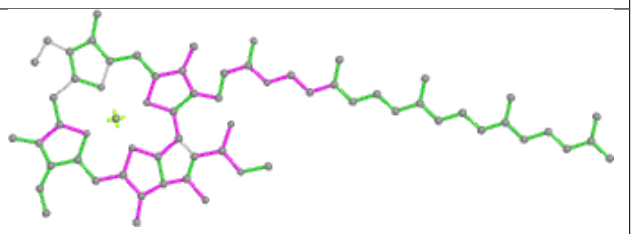
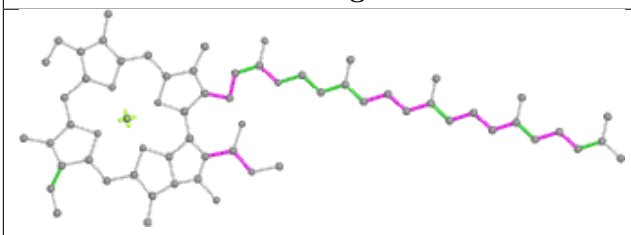
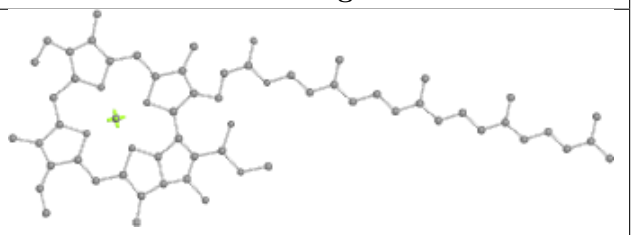


Bond angles

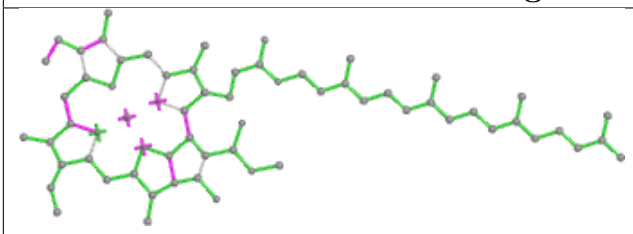


Torsions



Rings

Ligand CLA C 504



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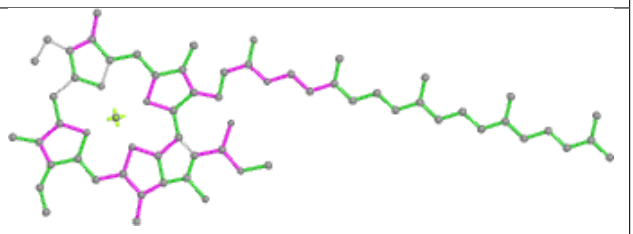
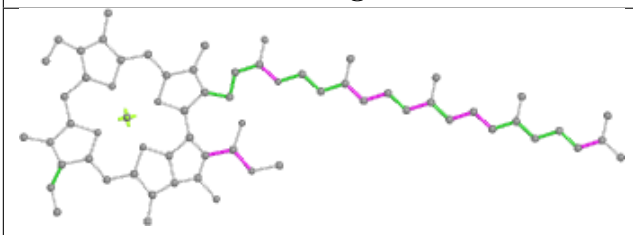
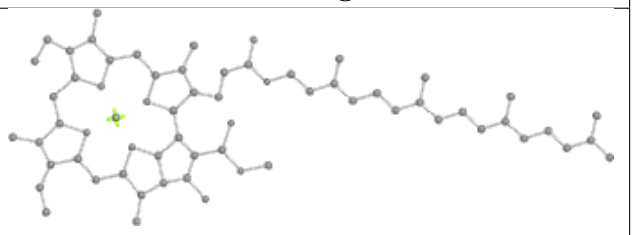


Bond angles

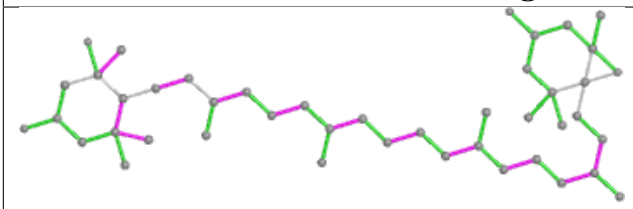


Torsions



Rings

Ligand NEX s1 623



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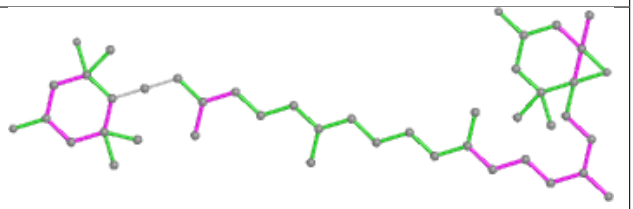
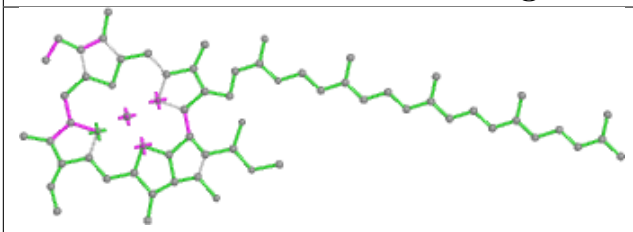


Bond angles

Torsions

Rings

Ligand CLA c1 501



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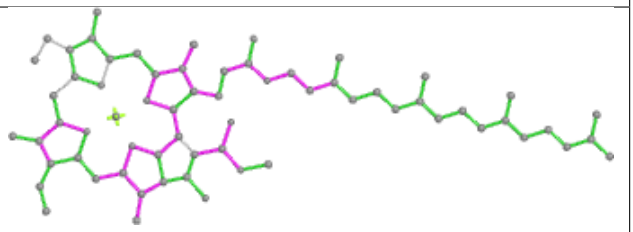
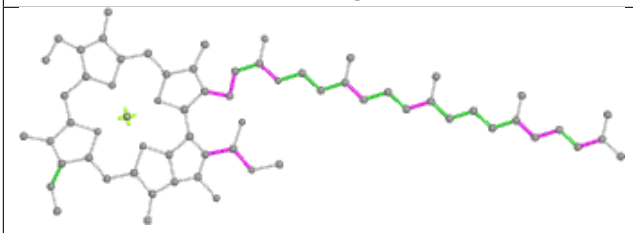
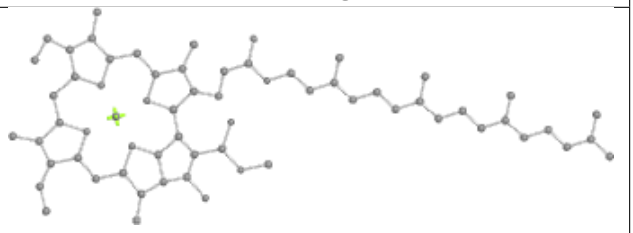


Bond angles

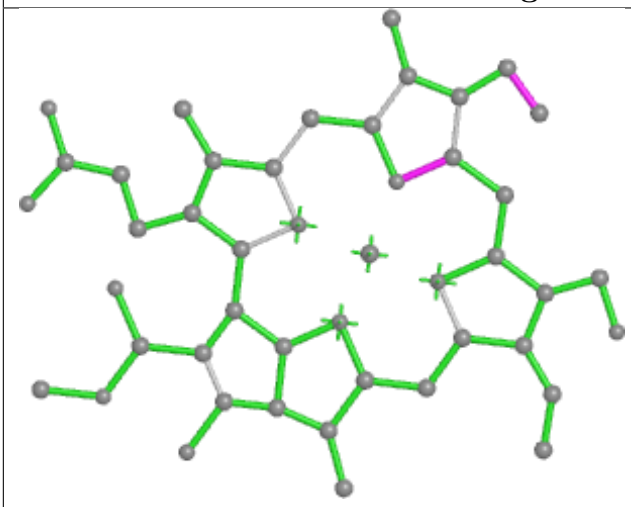


Torsions



Rings

Ligand CHL s1 601



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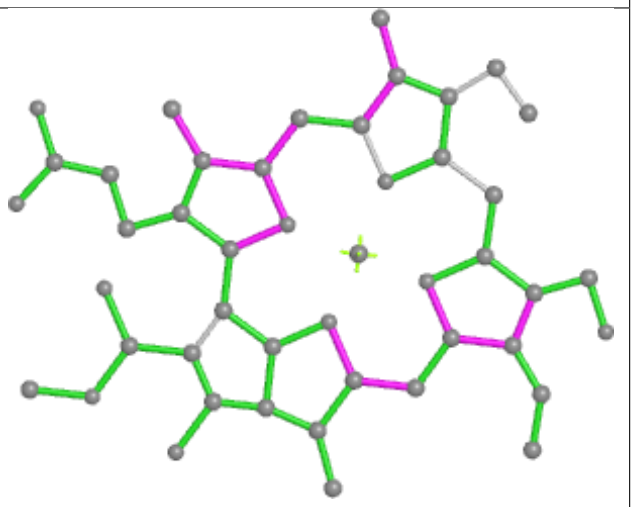
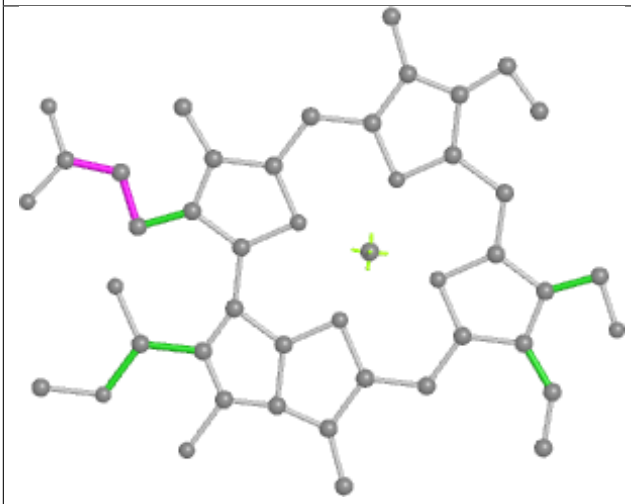


Bond angles



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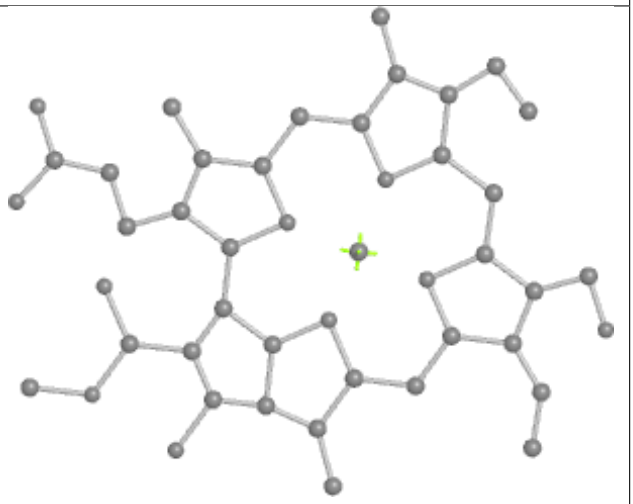
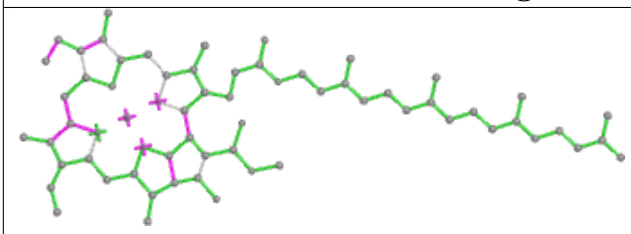


Rings

Ligand CLA B1 604



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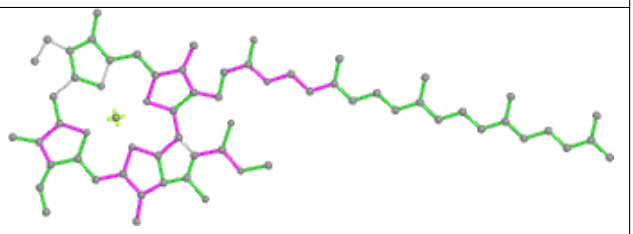
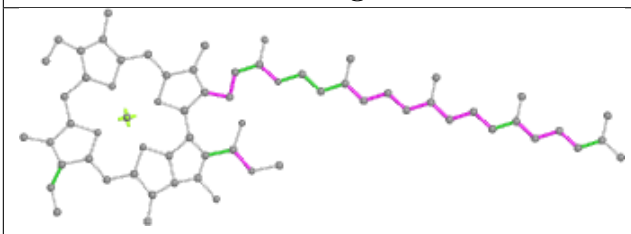


Bond angles



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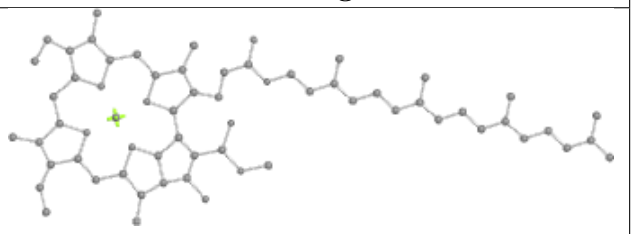
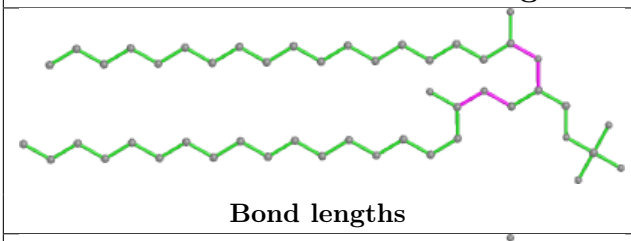


Rings

Ligand 3PH b1 624



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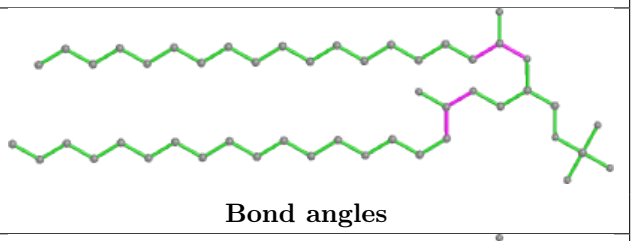
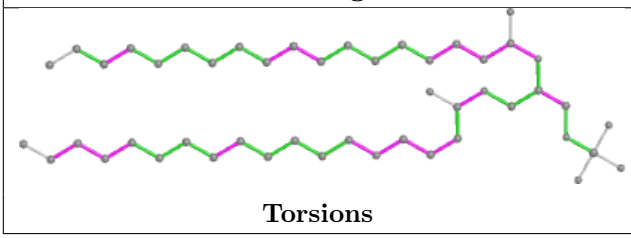


Bond angles



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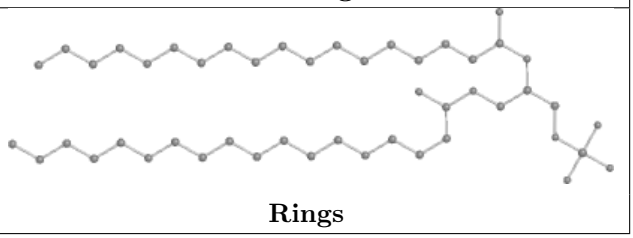
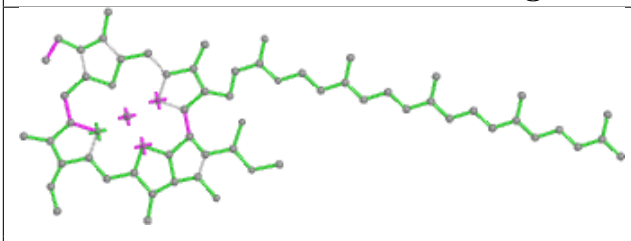
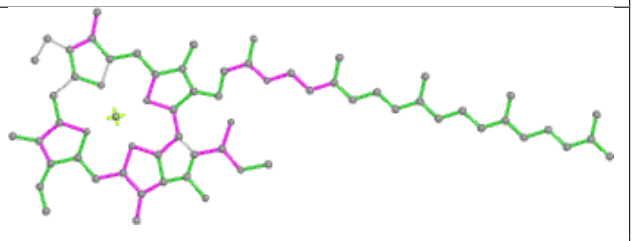


Rings

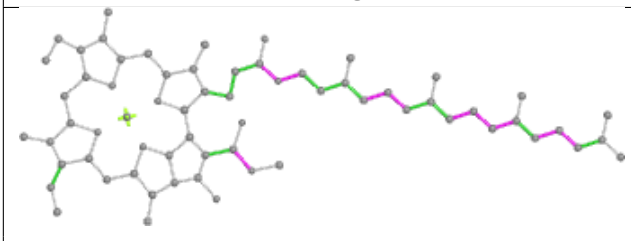
Ligand CLA B 614



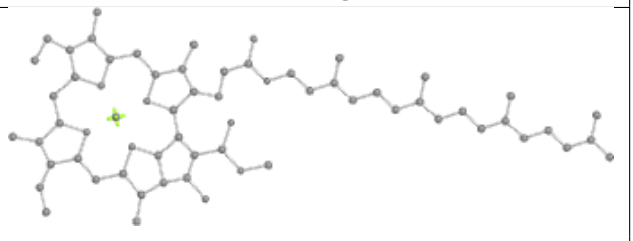
Bond lengths



Bond angles

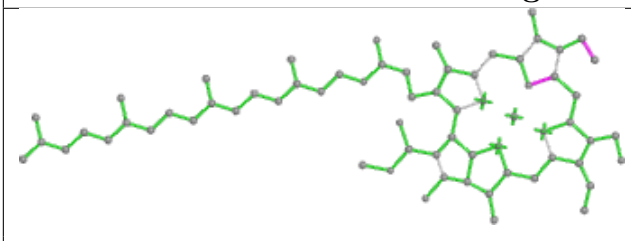


Torsions

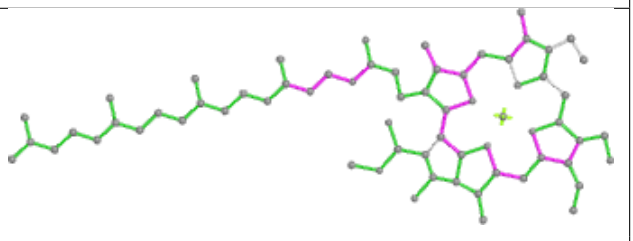


Rings

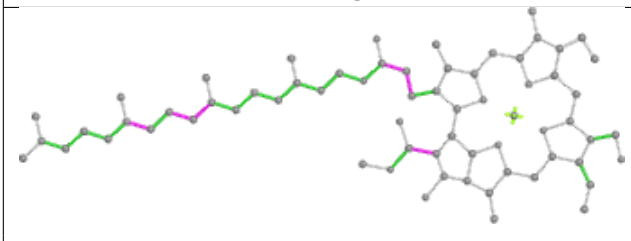
Ligand CHL N 607



Bond lengths



Bond angles



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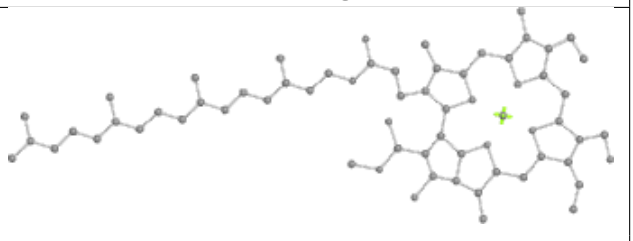
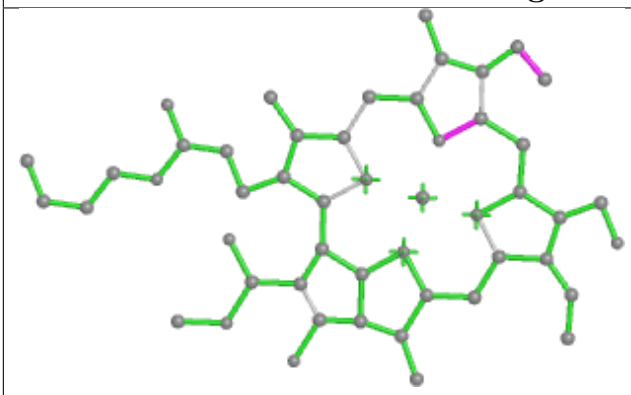
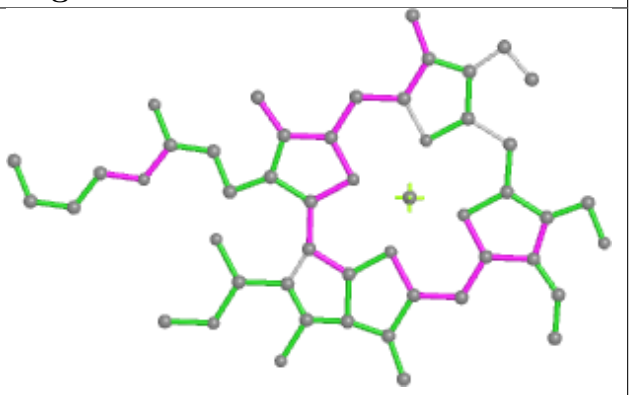


Rings

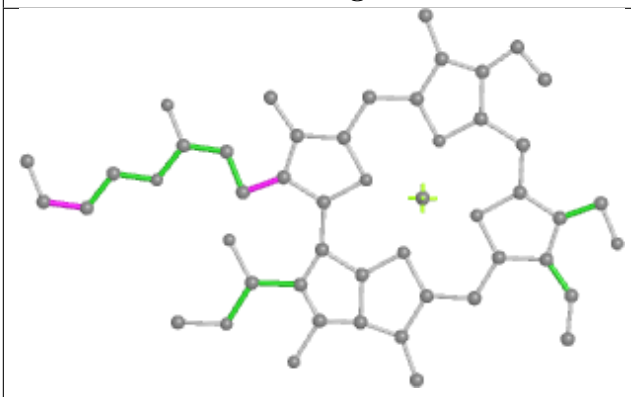
Ligand CHL g 607



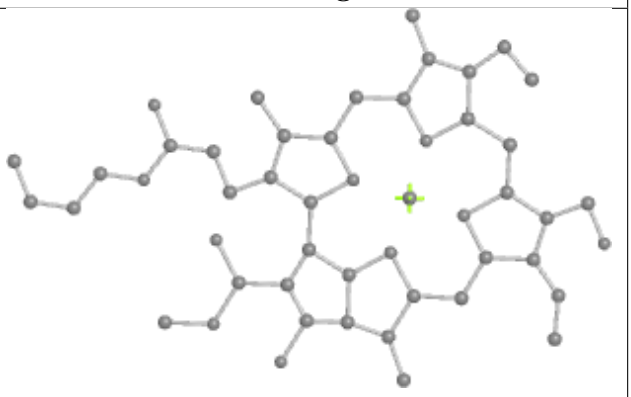
Bond lengths



Bond angles

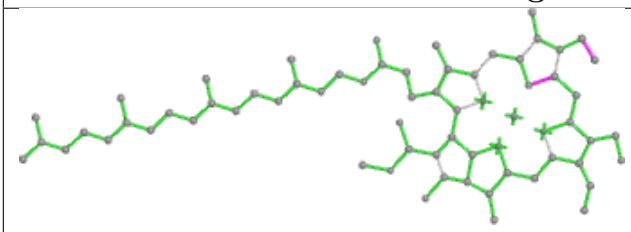


Torsions

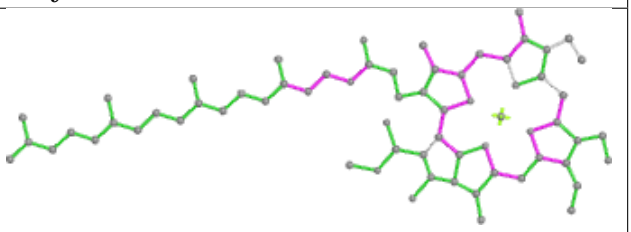


Rings

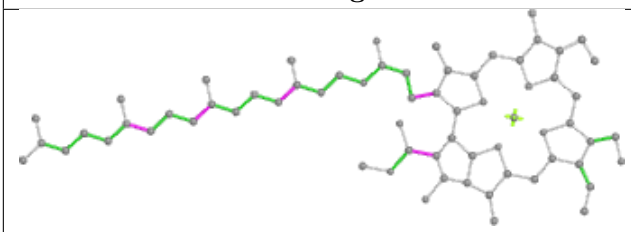
Ligand CHL y 601



Bond lengths



Bond angles



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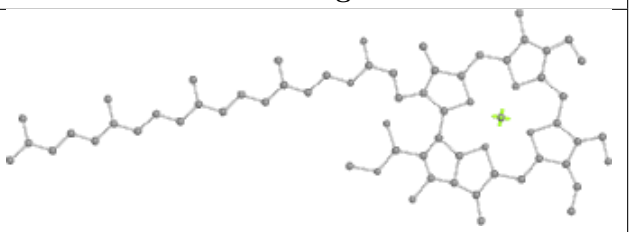
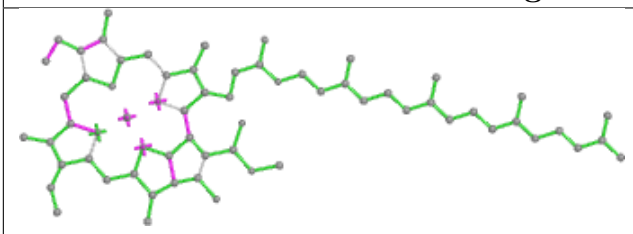


Rings

Ligand CLA B 605



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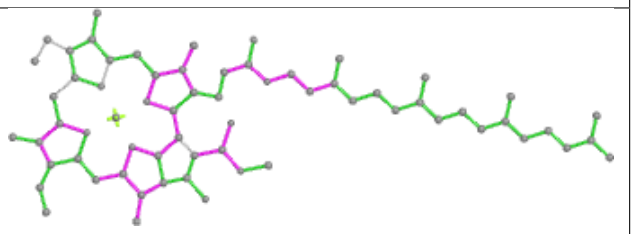
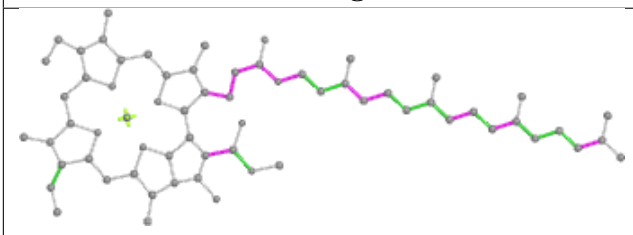
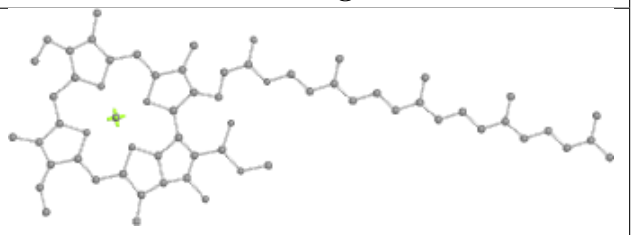


Bond angles

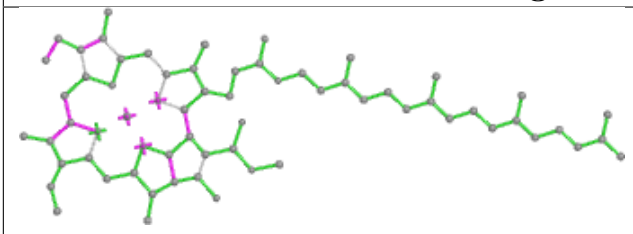


Torsions

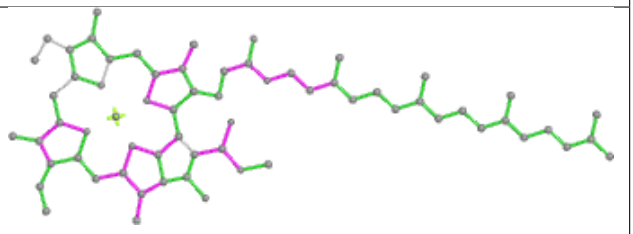


Rings

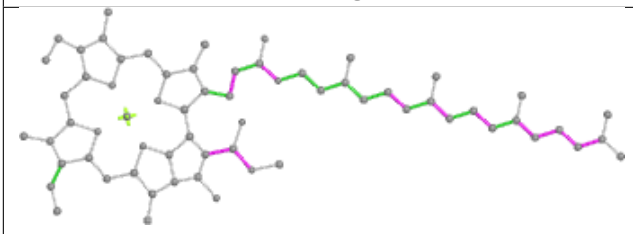
Ligand CLA c 505



Bond lengths



Bond angles



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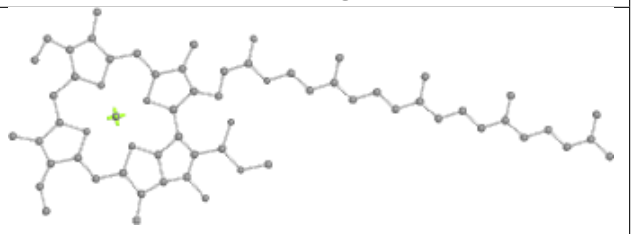
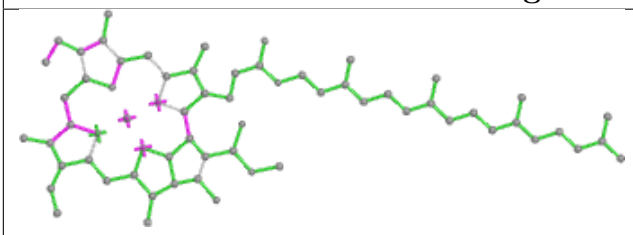


Rings

Ligand CLA D 403



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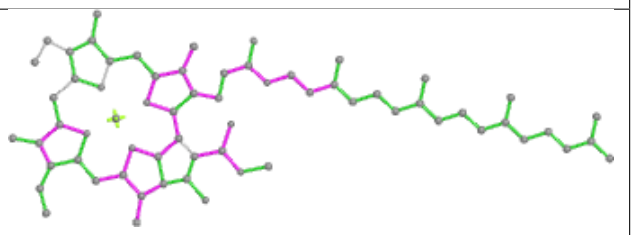

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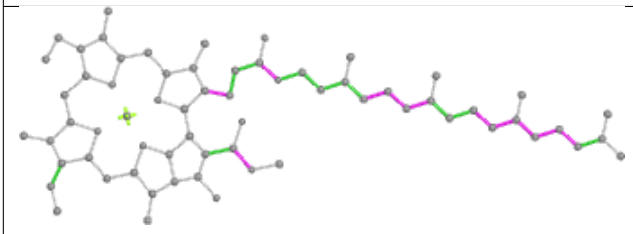
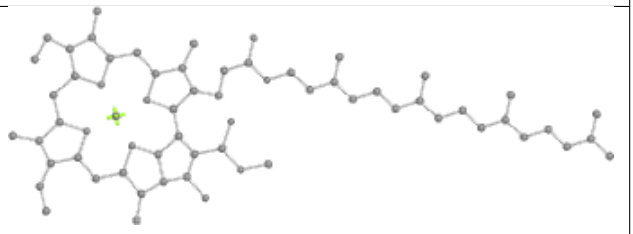


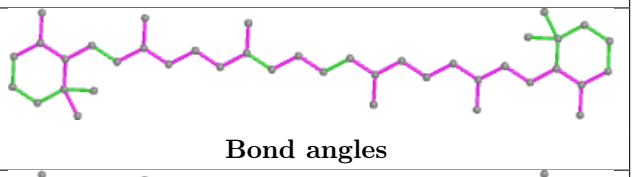
Torsions



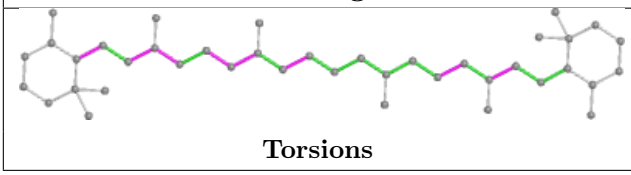
Rings

Ligand BCR c 516

Bond lengths



Bond angles



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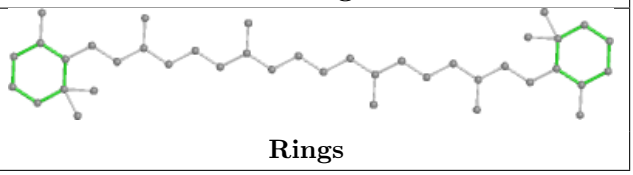
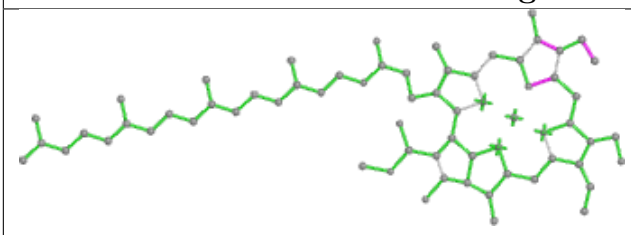


Rings

Ligand CHL g1 601



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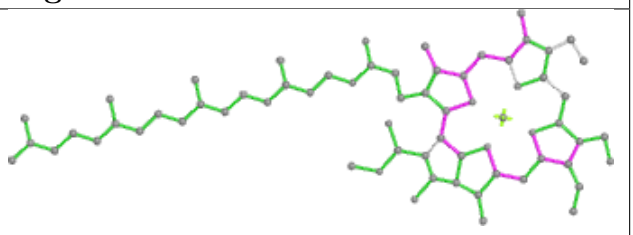
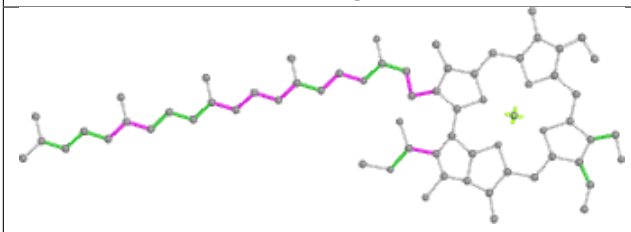


Bond angles



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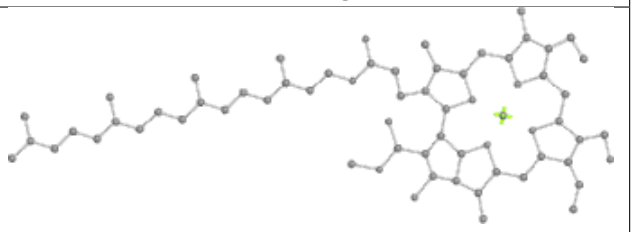
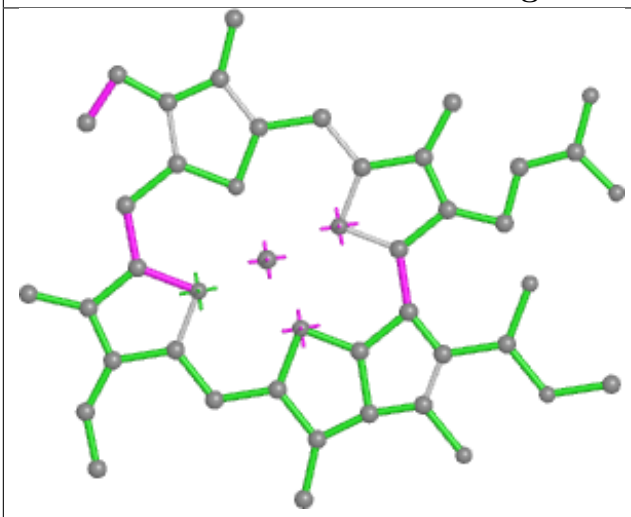


Rings

Ligand CLA s1 612



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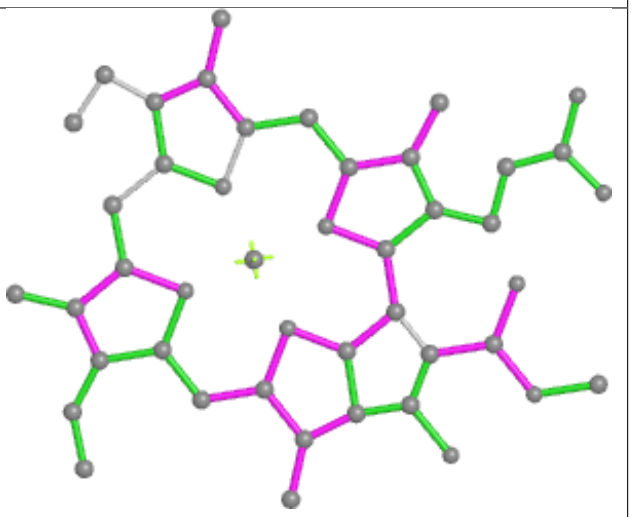
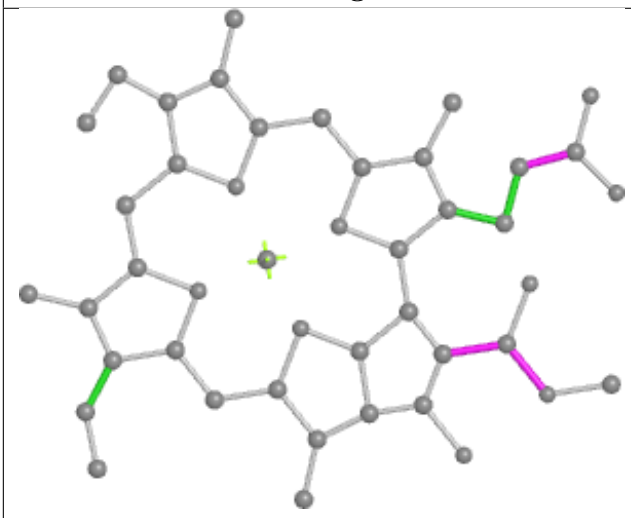


Bond angles



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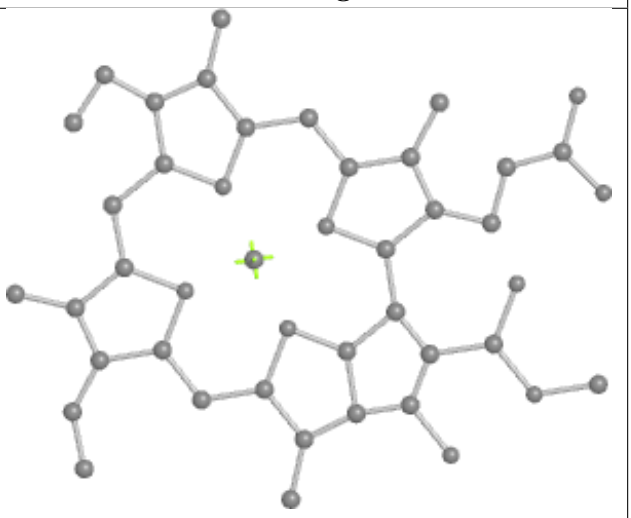
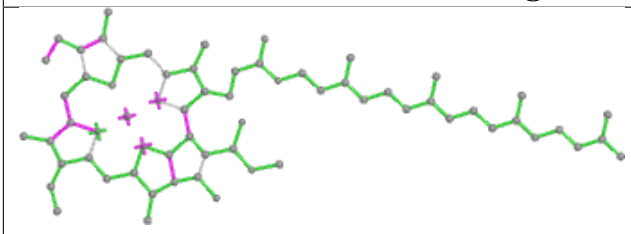


Rings

Ligand CLA B 606



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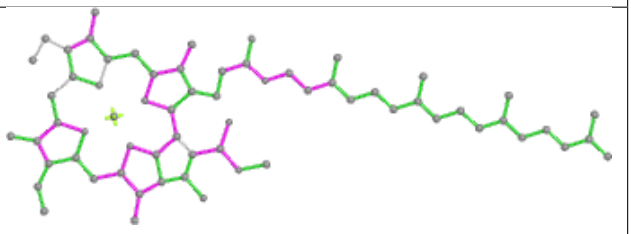
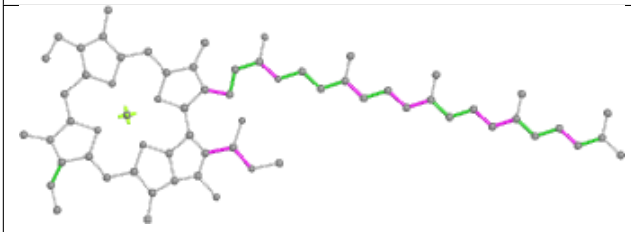
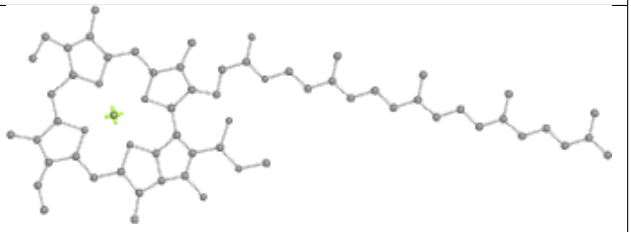


Bond angles

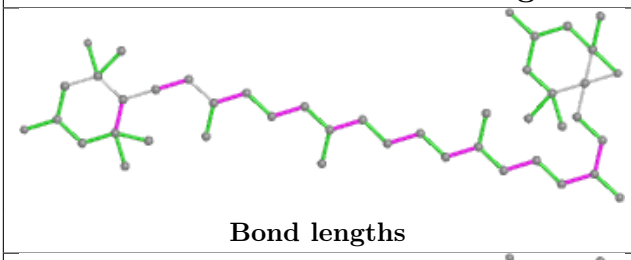


Torsions



Rings

Ligand NEX g1 623



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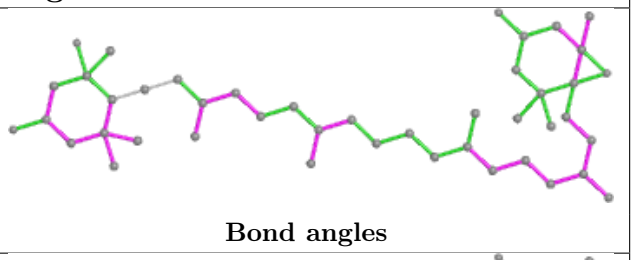
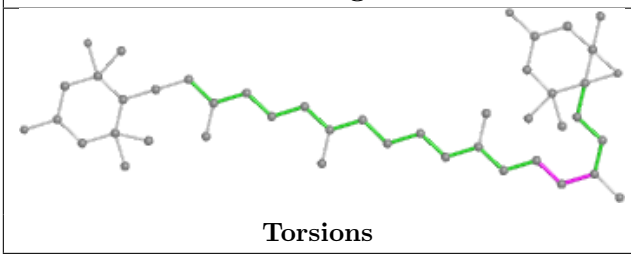
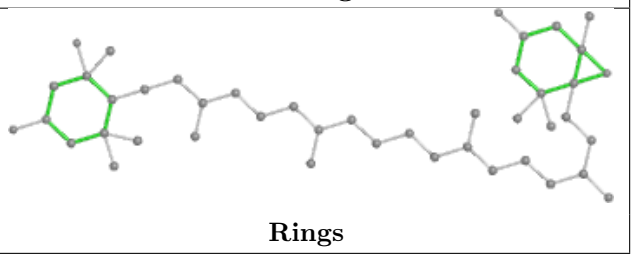


Bond angles

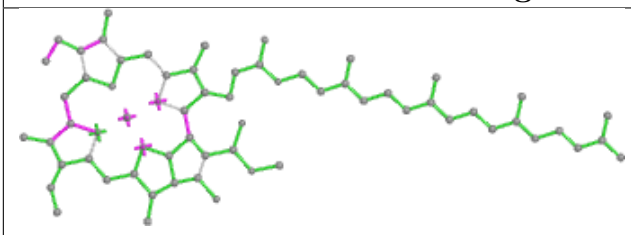


Torsions



Rings

Ligand CLA N1 603



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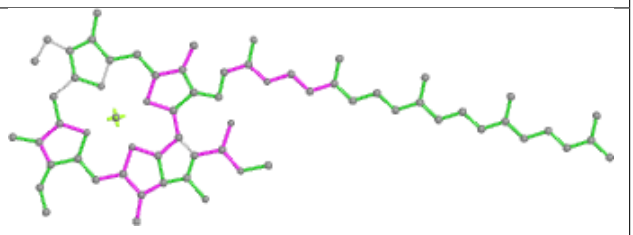
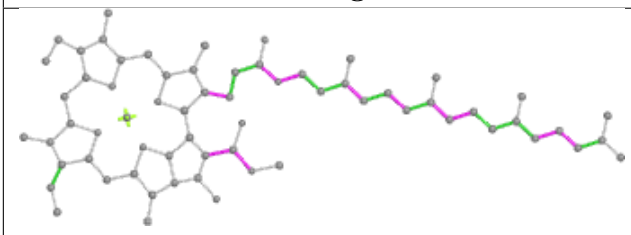


Bond angles



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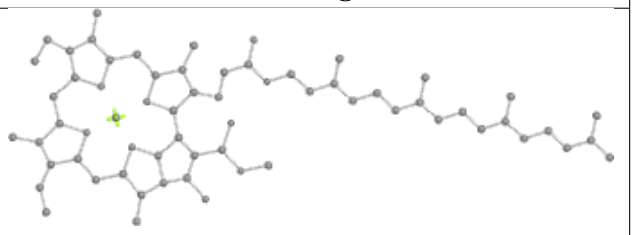
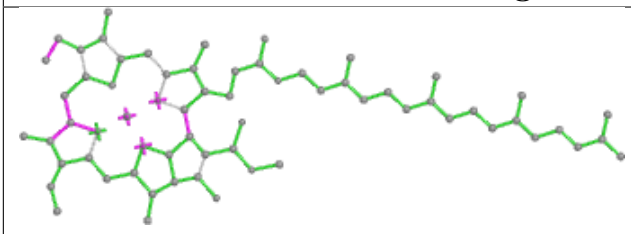


Rings

Ligand CLA G1 602



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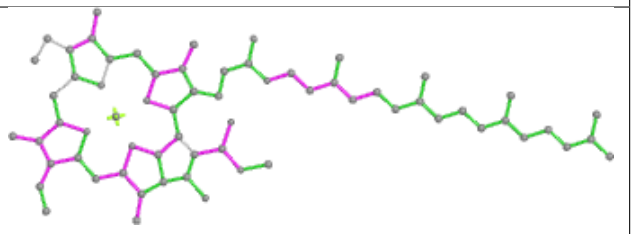
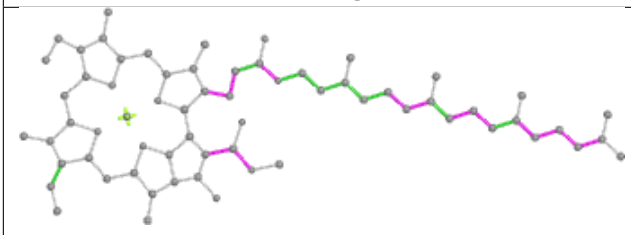


Bond angles



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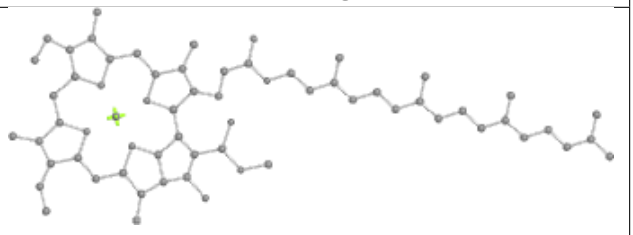
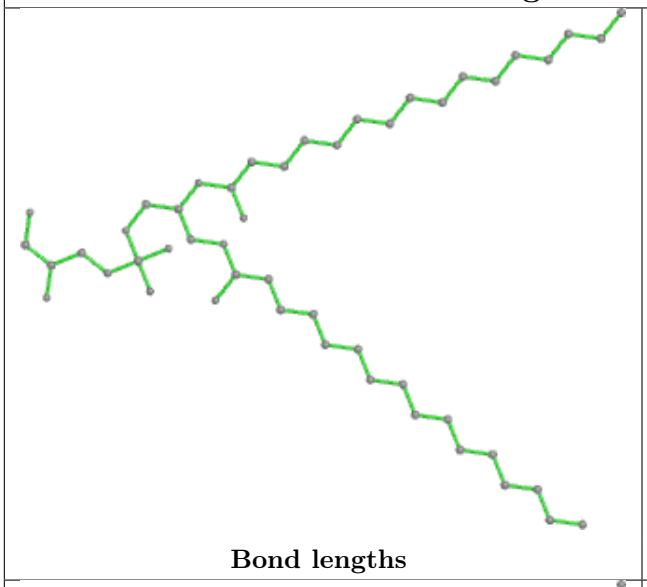
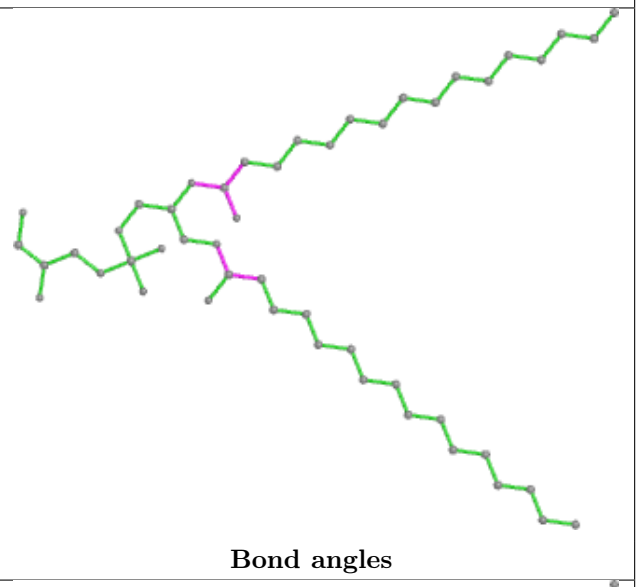


Rings

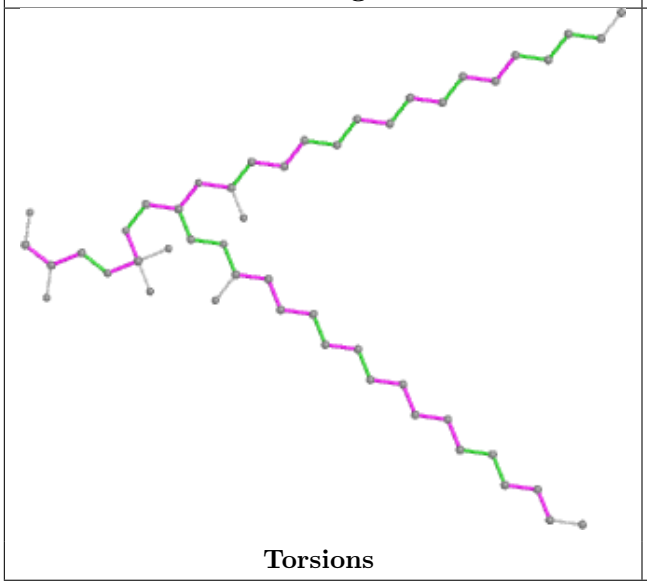
Ligand LHG N 624



Bond lengths



Bond angles



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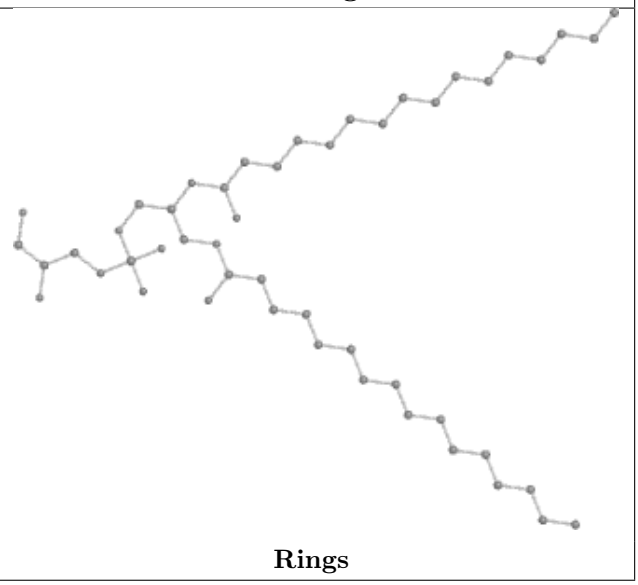
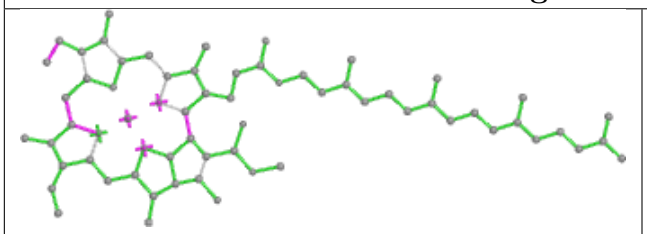
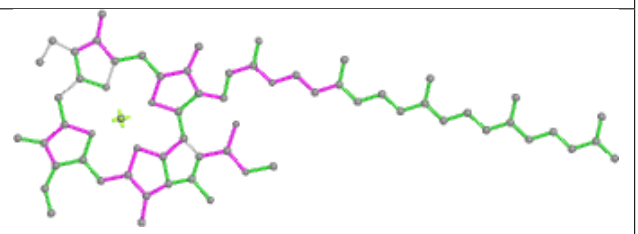


Rings

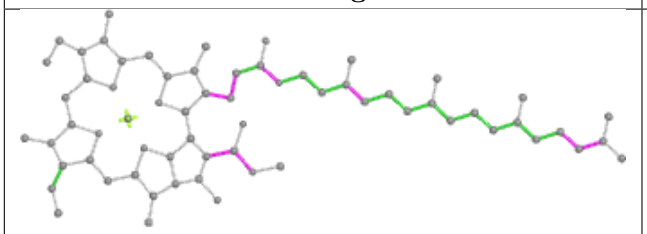
Ligand CLA c 504



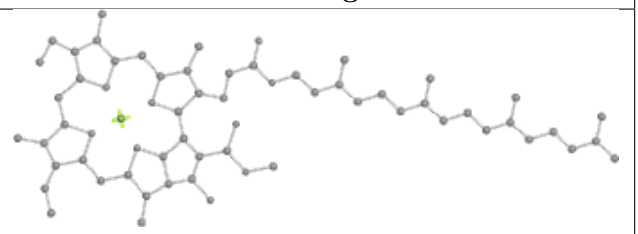
Bond lengths



Bond angles

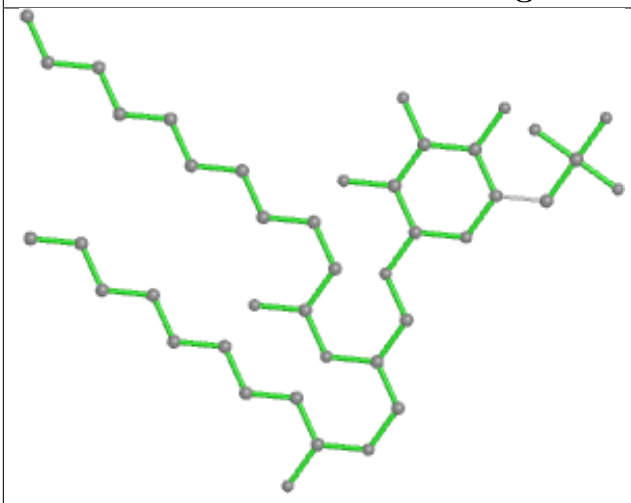


Torsions

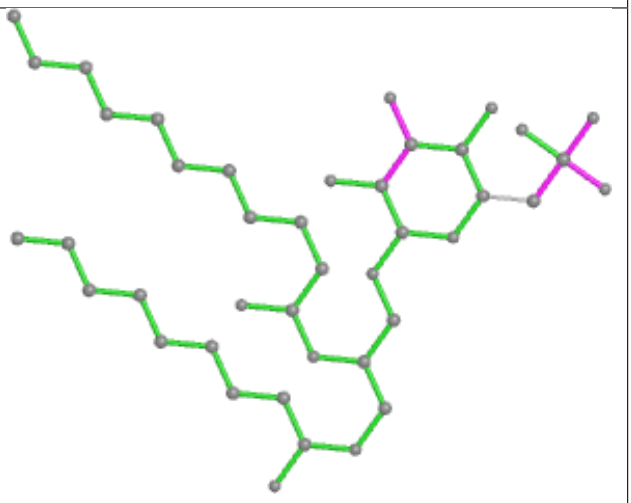


Rings

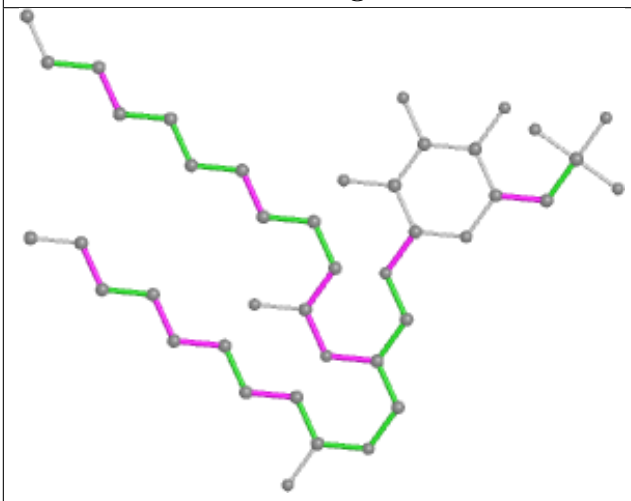
Ligand SQD B1 621



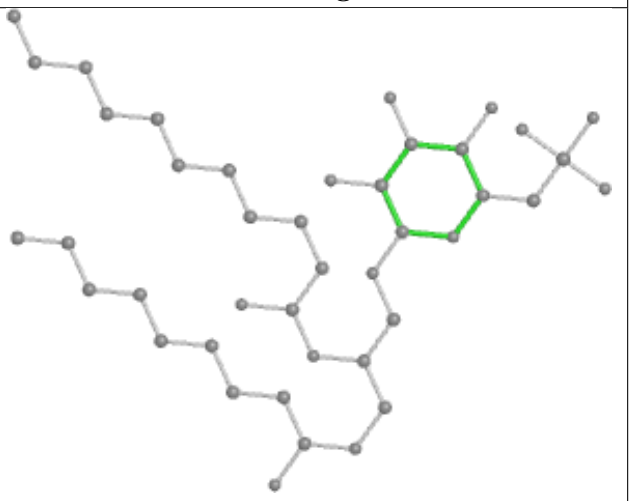
Bond lengths



Bond angles

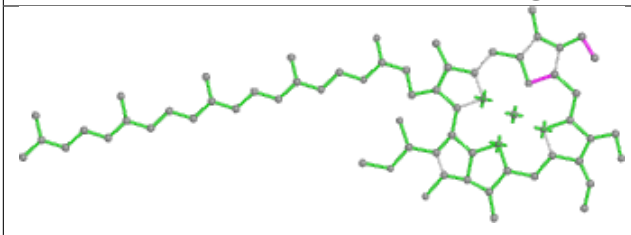


Torsions

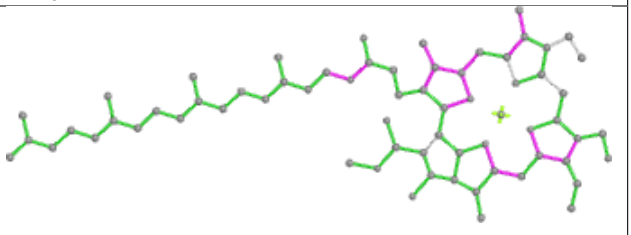


Rings

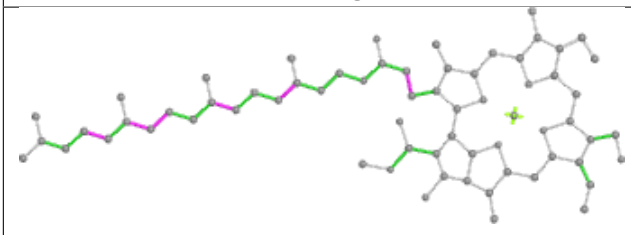
Ligand CHL y 607



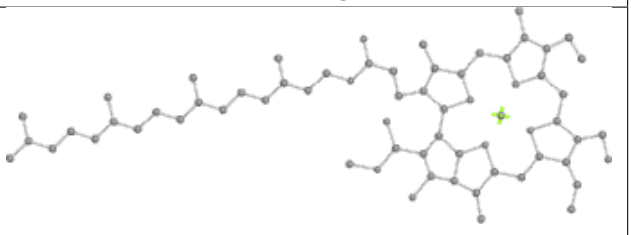
Bond lengths



Bond angles

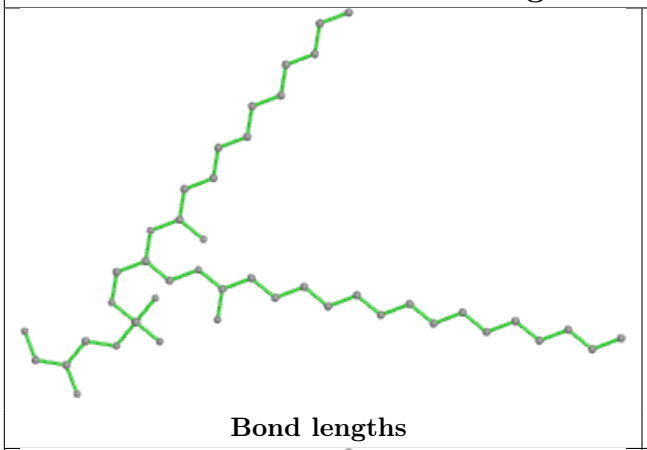


Torsions

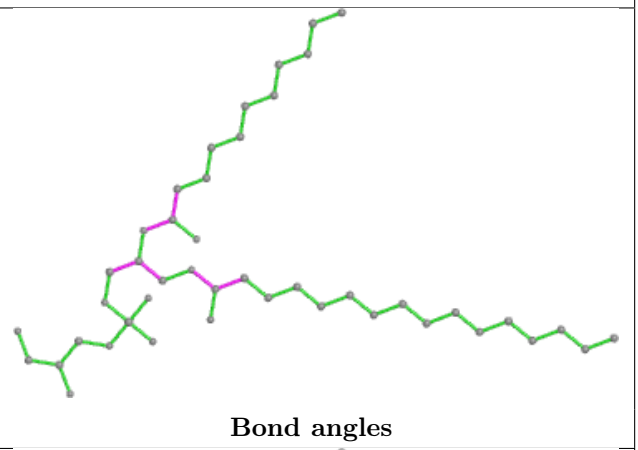


Rings

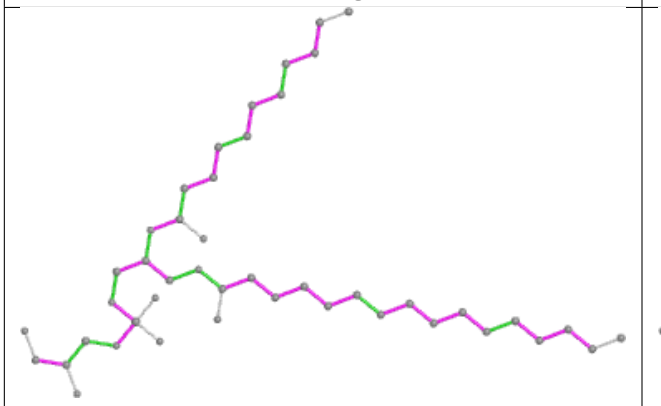
Ligand LHG d 408



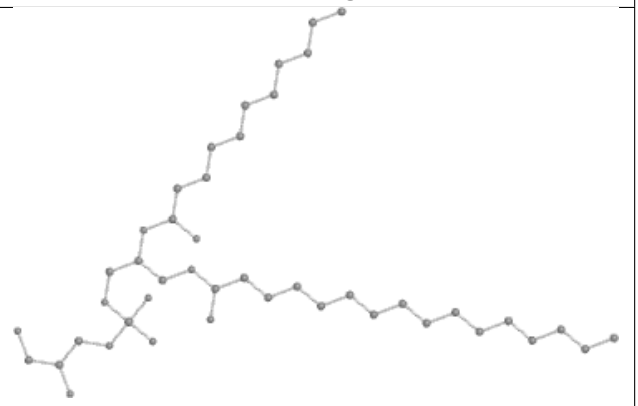
Bond lengths



Bond angles

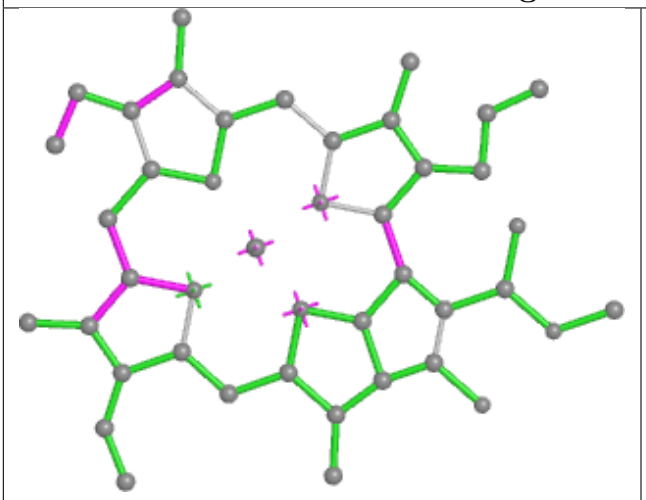


Torsions



Rings

Ligand CLA g1 612



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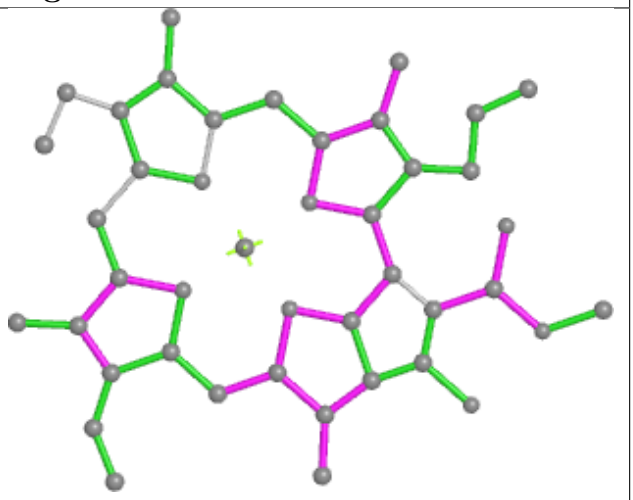
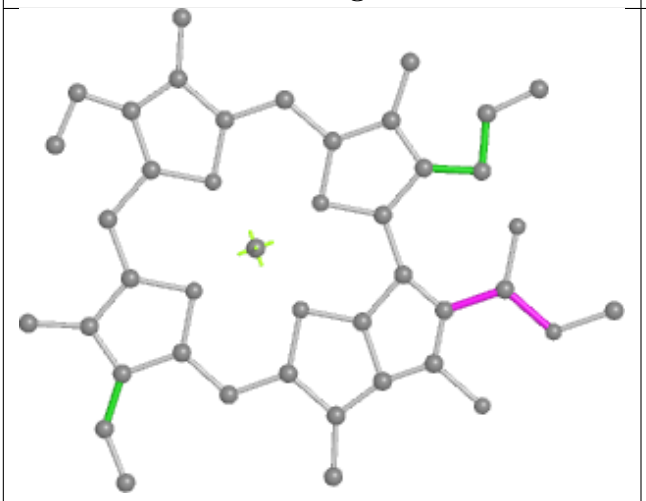
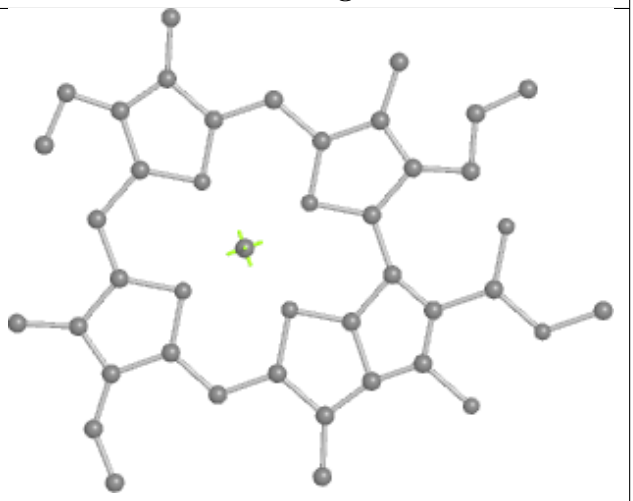


Bond angles

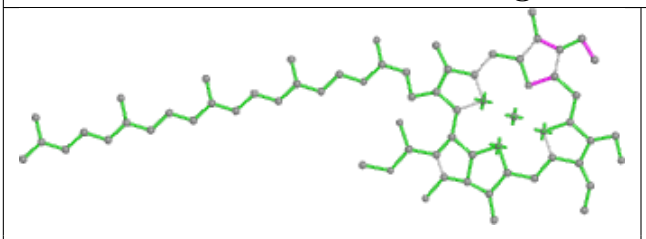


Torsions

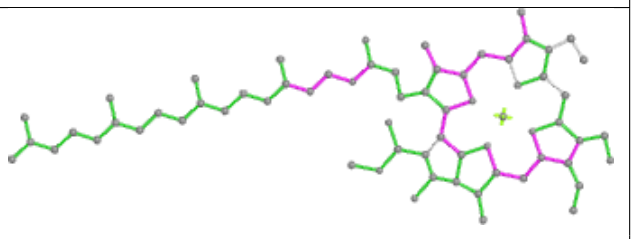


Rings

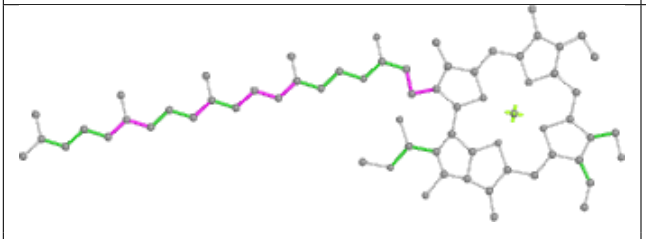
Ligand CHL N1 606



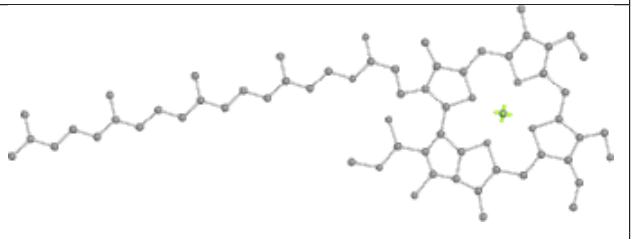
Bond lengths



Bond angles

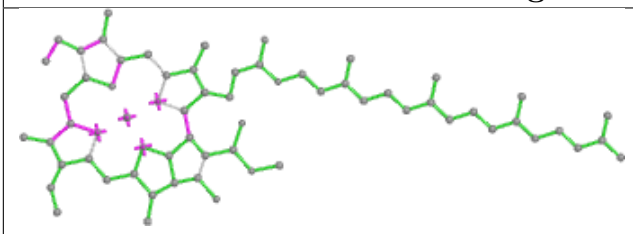


Torsions



Rings

Ligand CLA S 603



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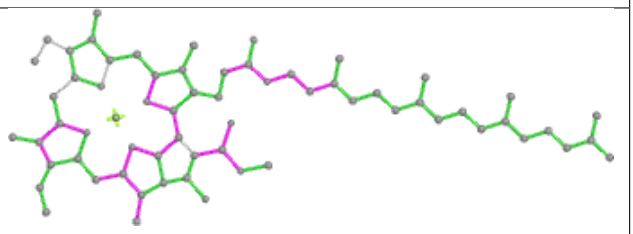
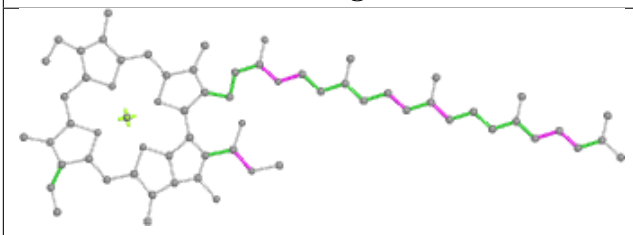


Bond angles



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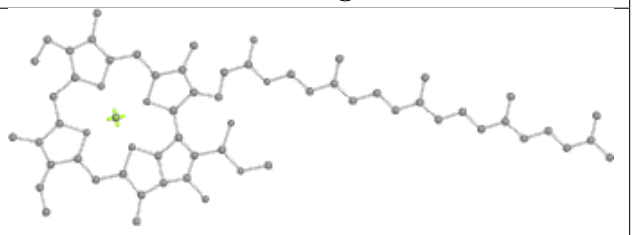
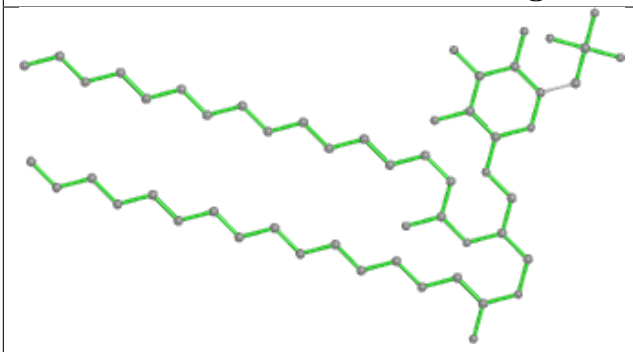


Rings

Ligand SQD b 621



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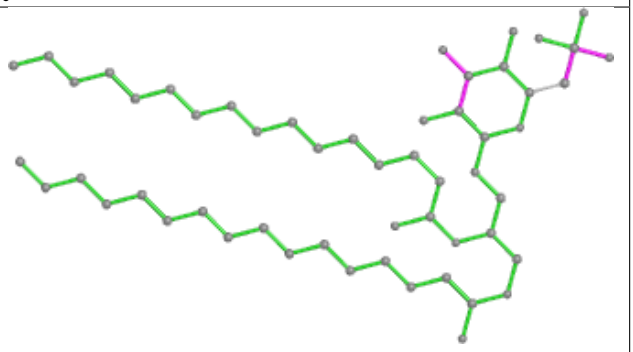
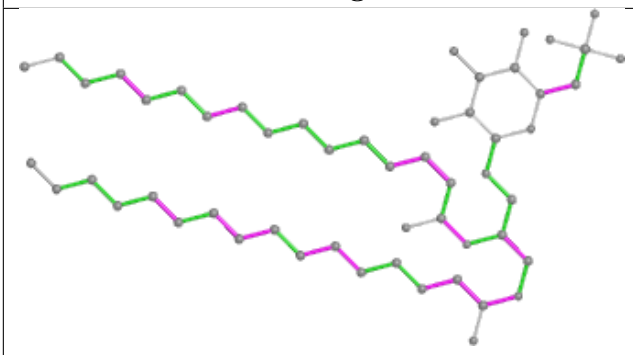


Bond angles



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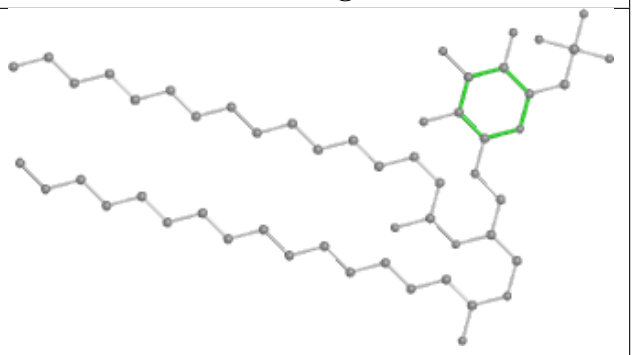
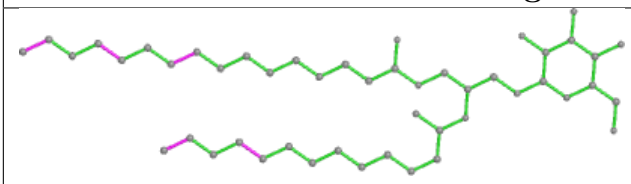
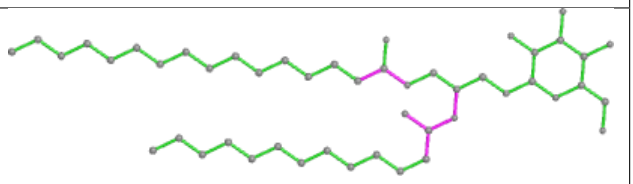


Rings

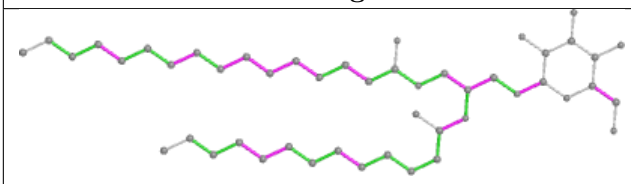
Ligand LMG a 413



Bond lengths



Bond angles



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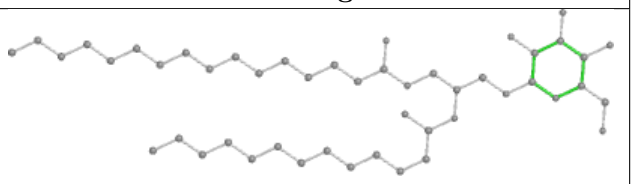
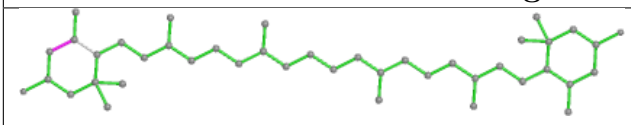


Rings

Ligand LUT G 620



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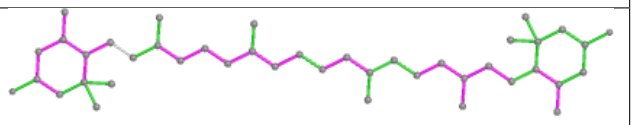
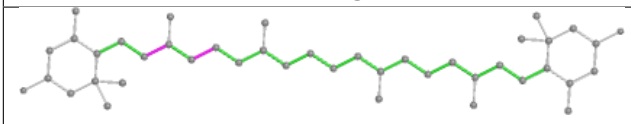


Bond angles



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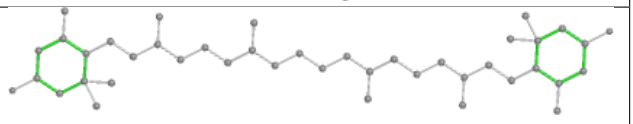
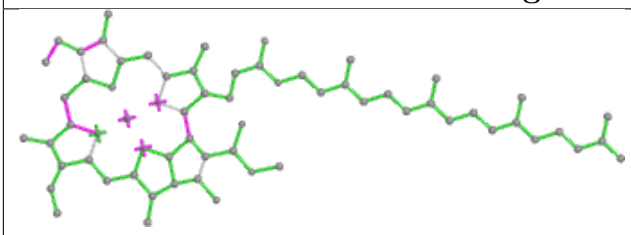
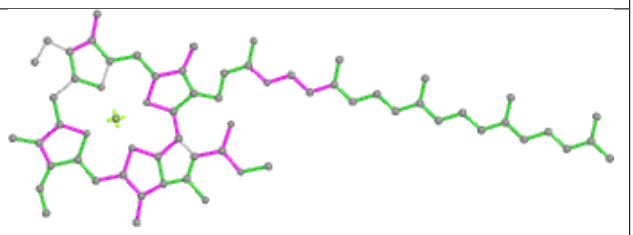


Rings

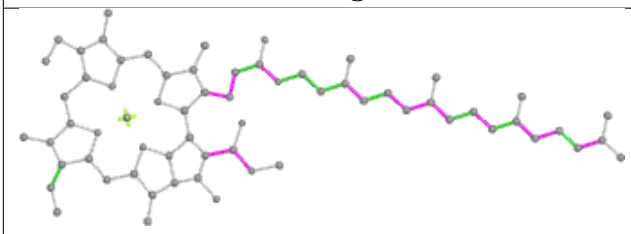
Ligand CLA G 602



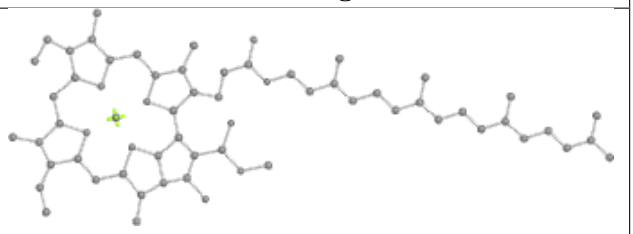
Bond lengths



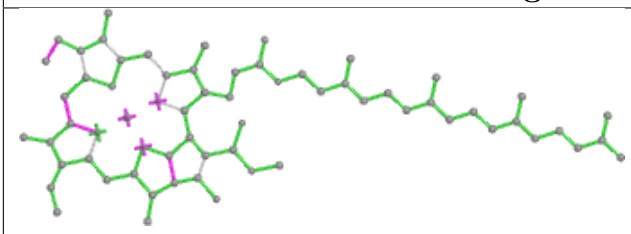
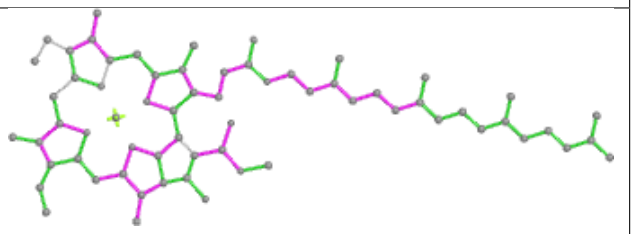
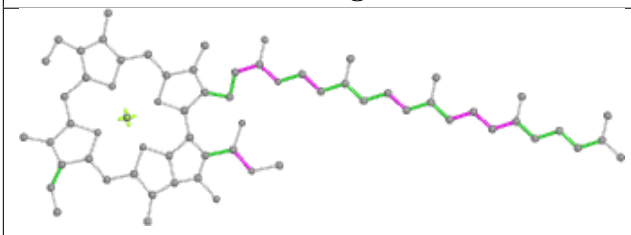
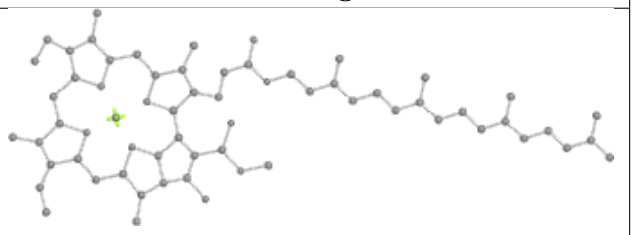
Bond angles

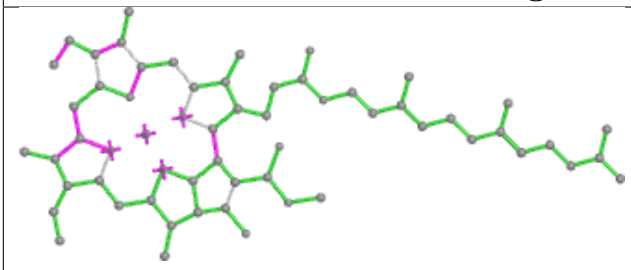
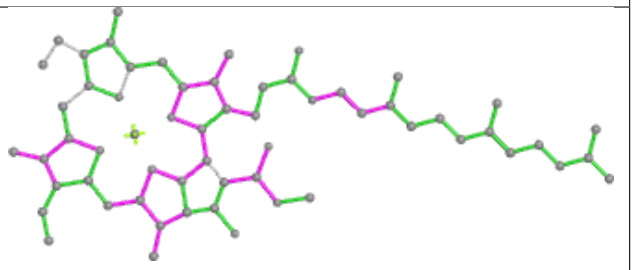
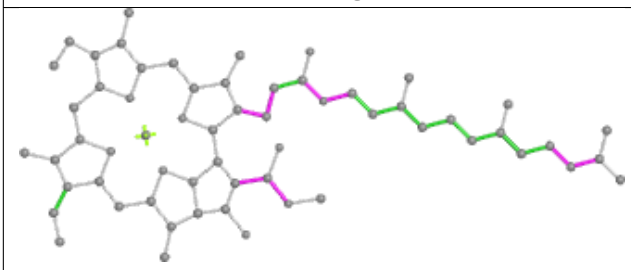
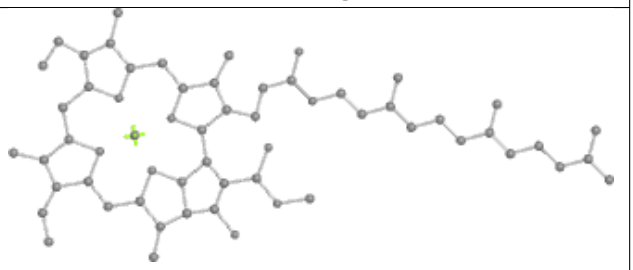


Torsions

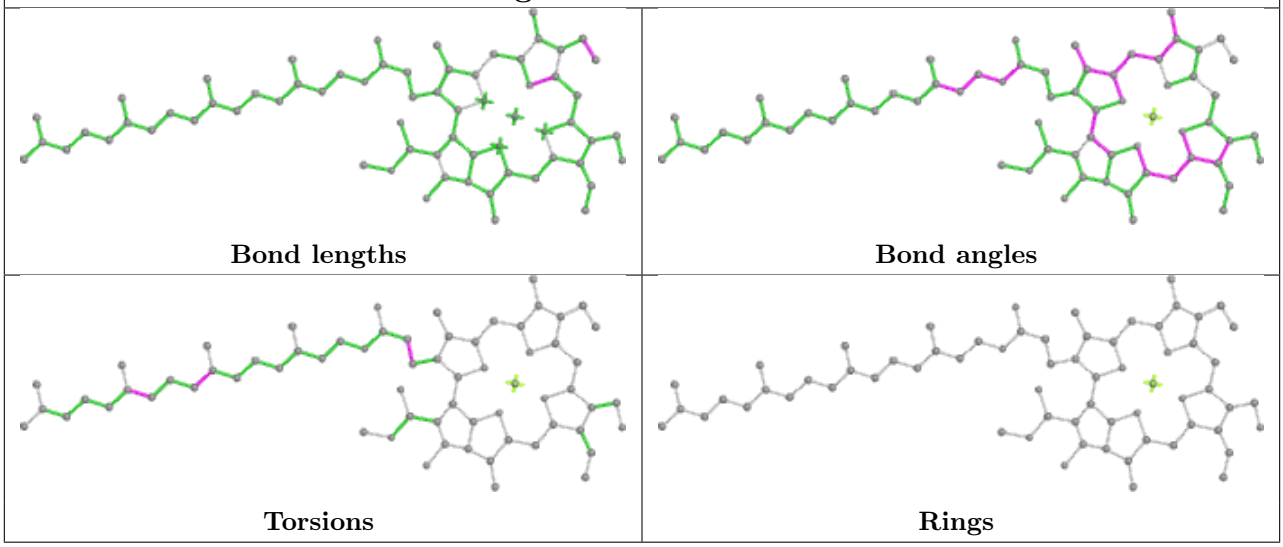


Rings

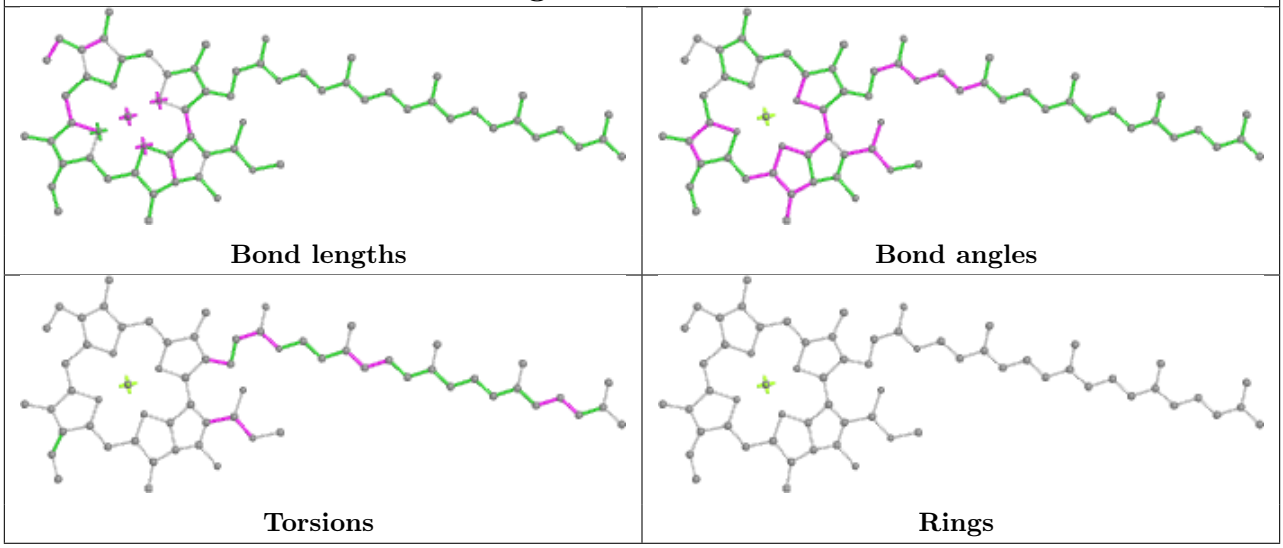
Ligand CLA A 405	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA S 609	
 Bond lengths	 Bond angles
 Torsions	 Rings

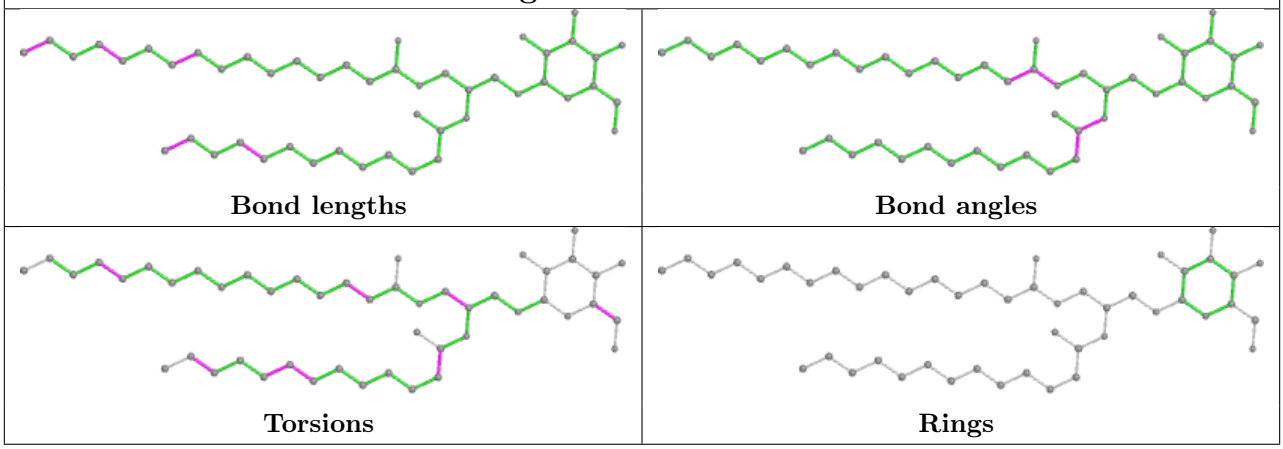
Ligand CHL N1 605



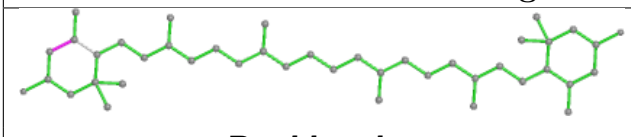
Ligand CLA b 610



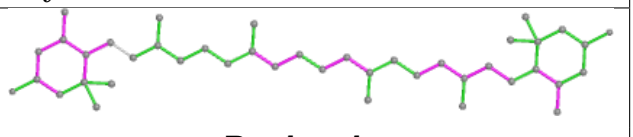
Ligand LMG H 102



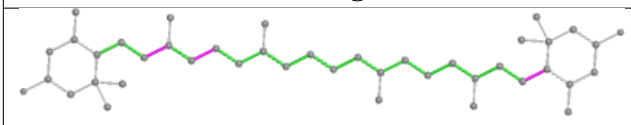
Ligand LUT y1 620



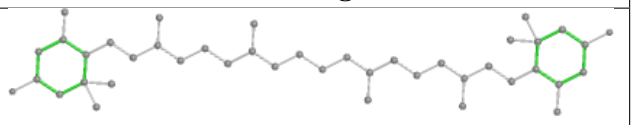
Bond lengths



Bond angles

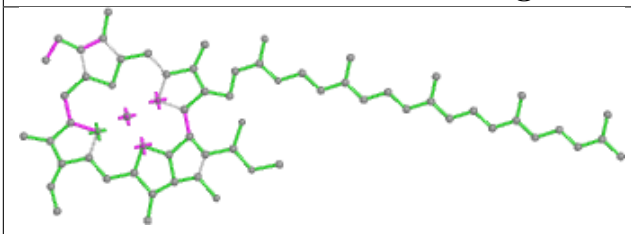


Torsions

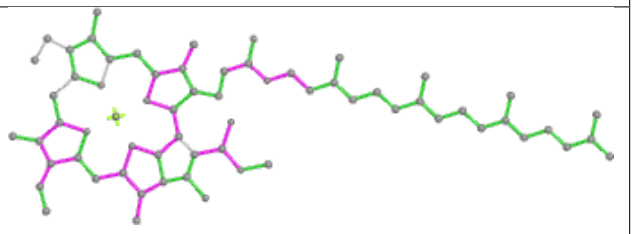


Rings

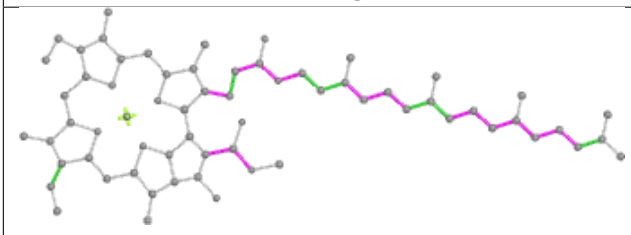
Ligand CLA B1 608



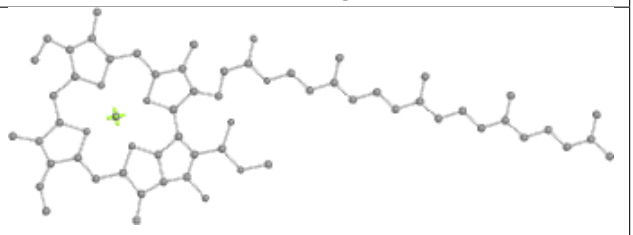
Bond lengths



Bond angles

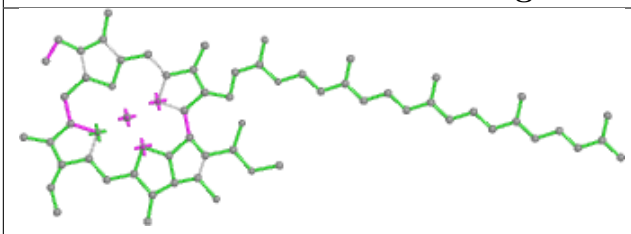


Torsions

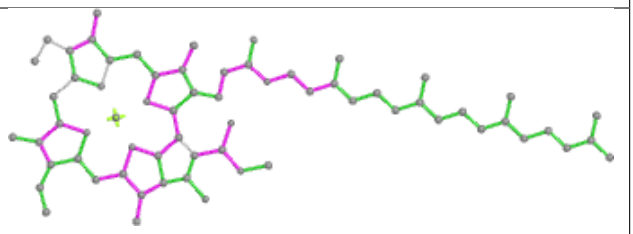


Rings

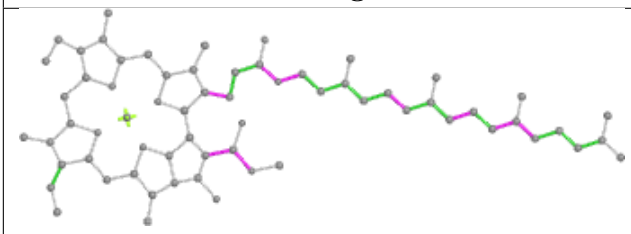
Ligand CLA C1 511



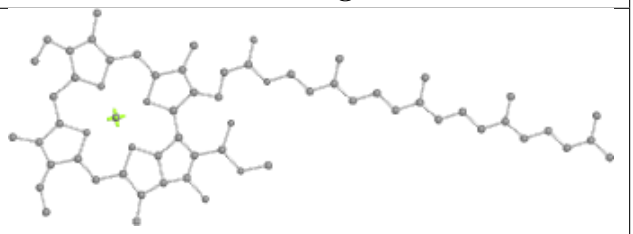
Bond lengths



Bond angles

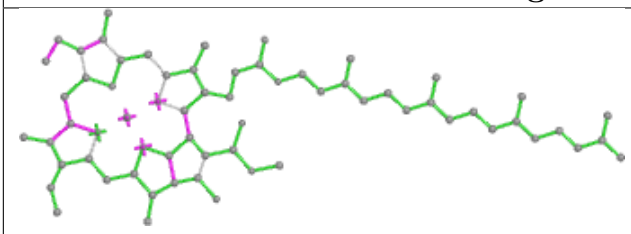


Torsions

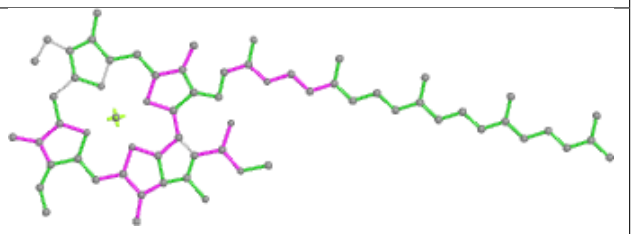


Rings

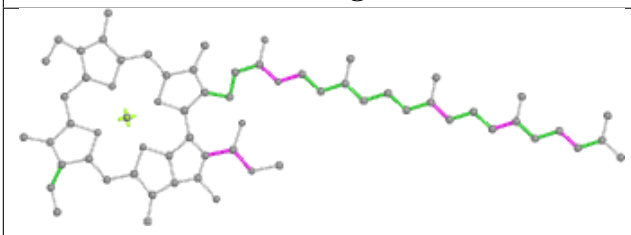
Ligand CLA b 611



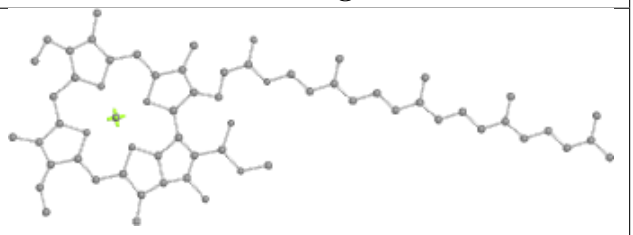
Bond lengths



Bond angles

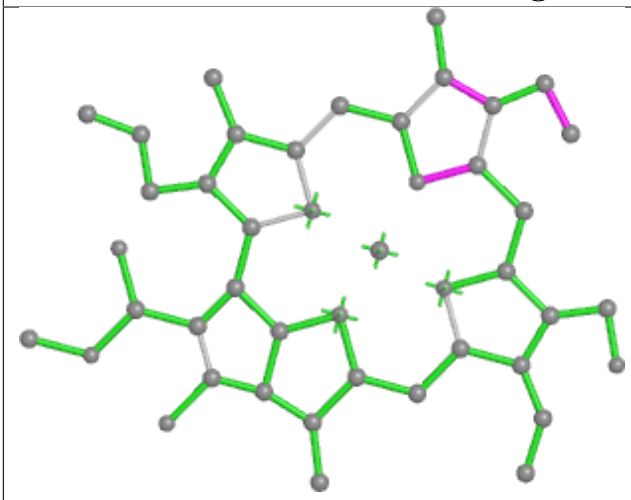


Torsions

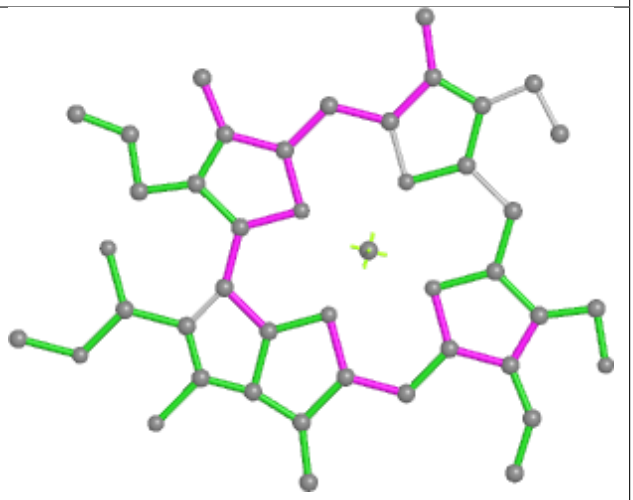


Rings

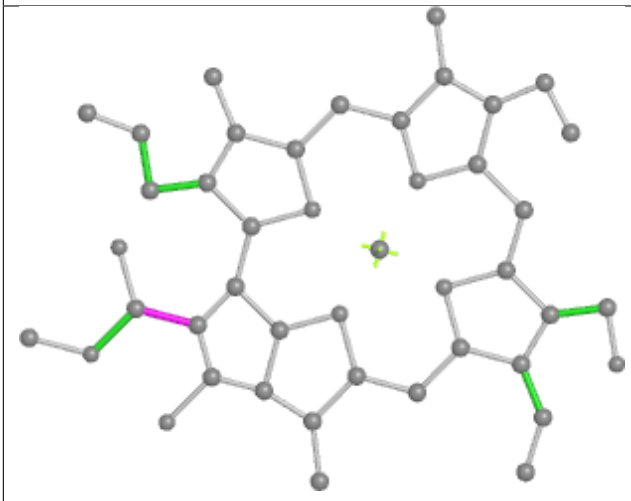
Ligand CHL s 606



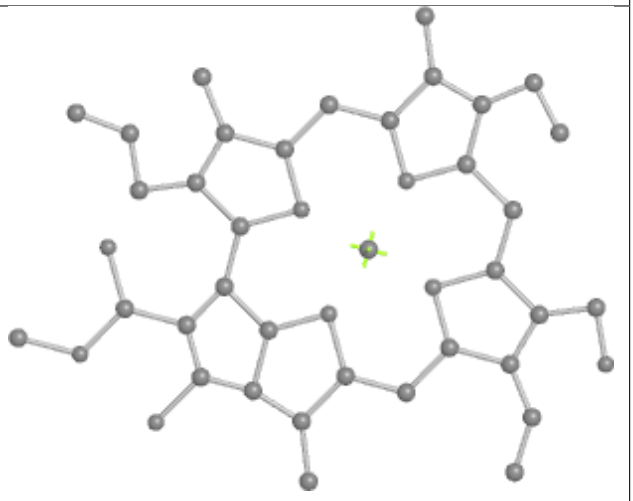
Bond lengths



Bond angles

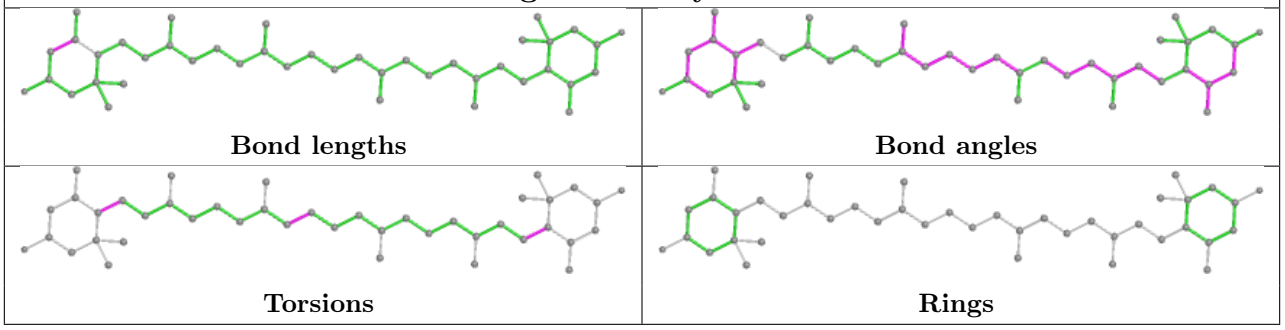


Torsions

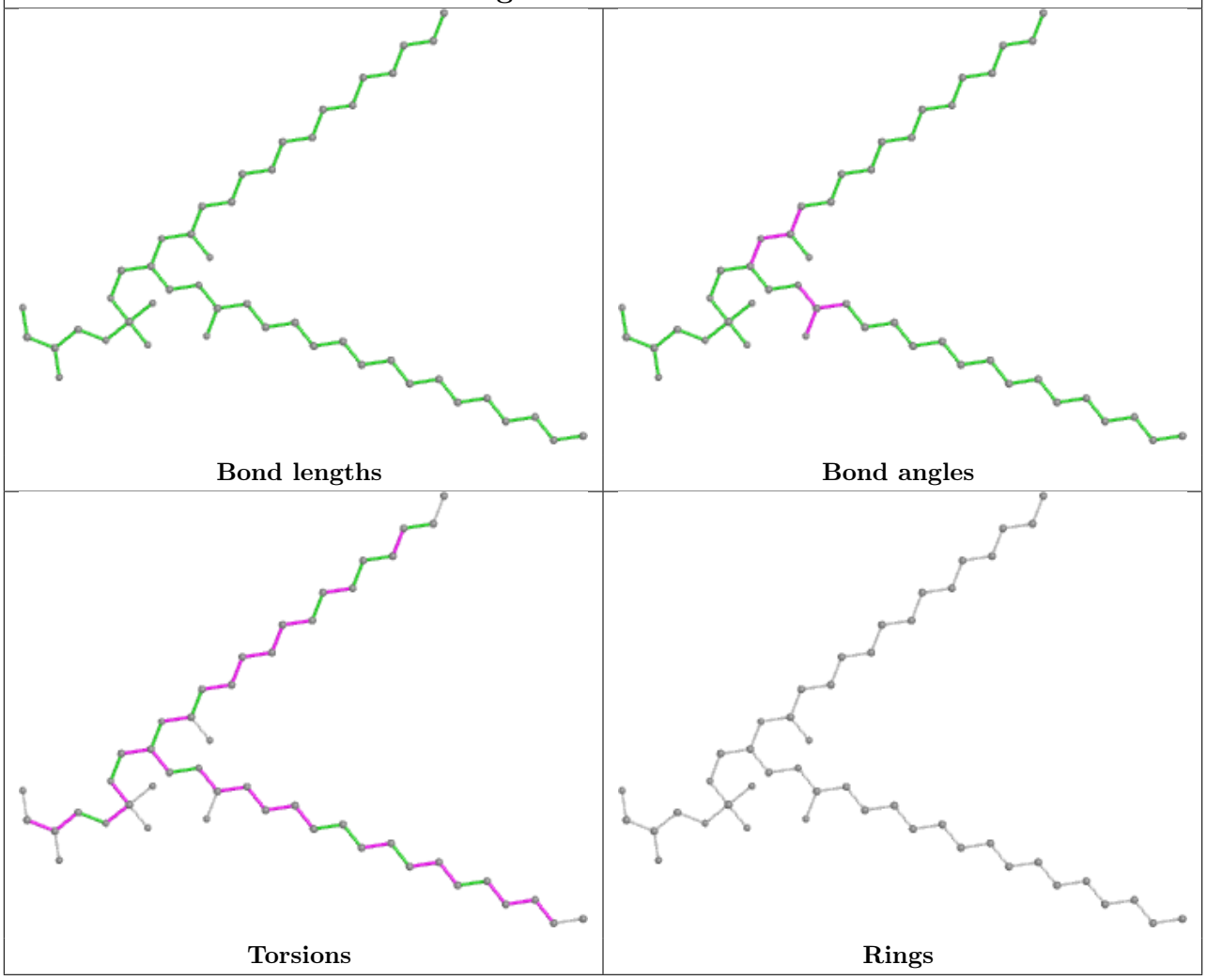


Rings

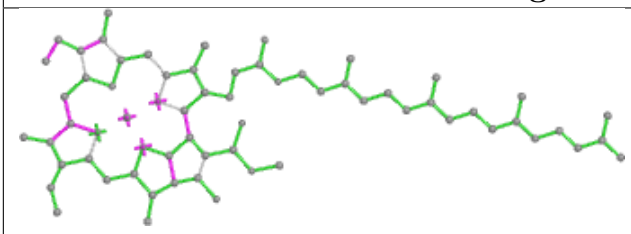
Ligand LUT y1 621



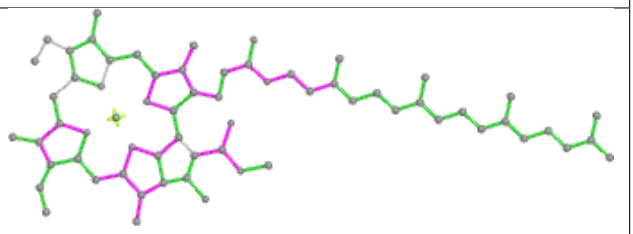
Ligand LHG c 625



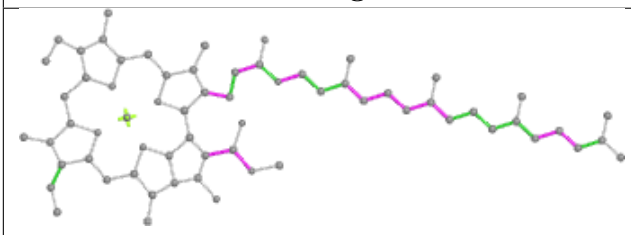
Ligand CLA c 501



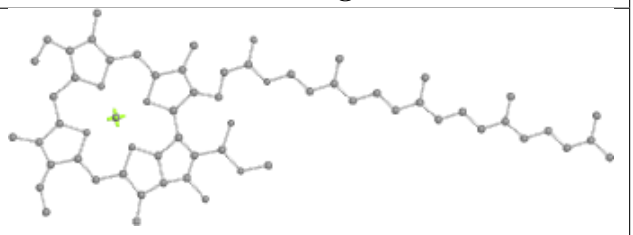
Bond lengths



Bond angles

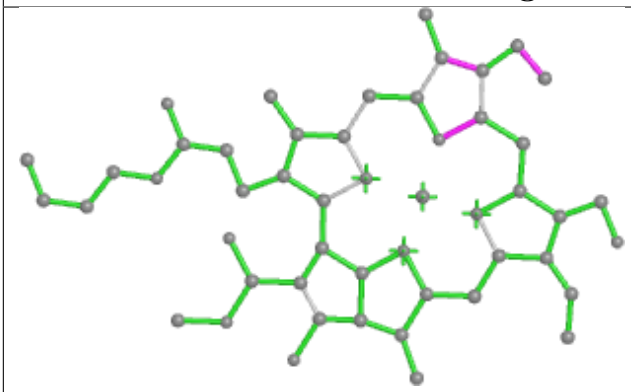


Torsions

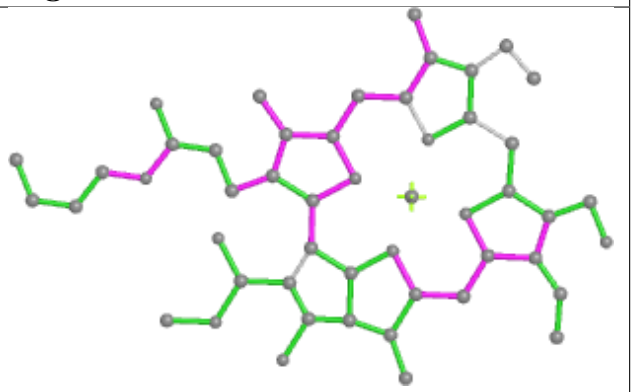


Rings

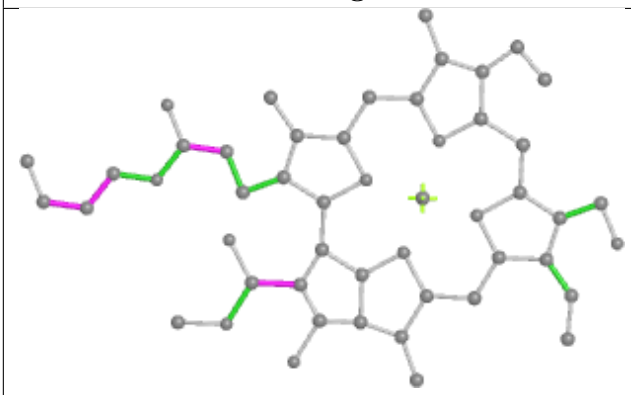
Ligand CHL g1 606



Bond lengths



Bond angles



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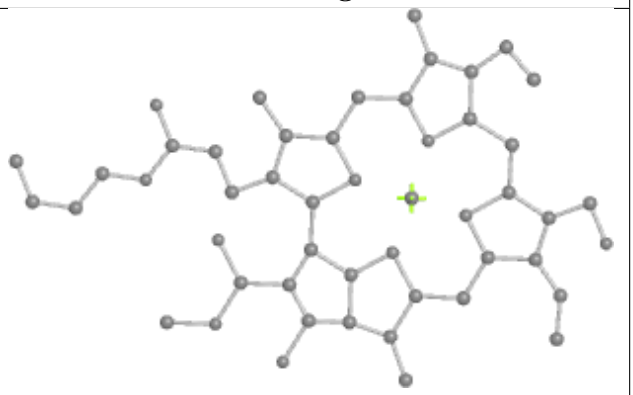
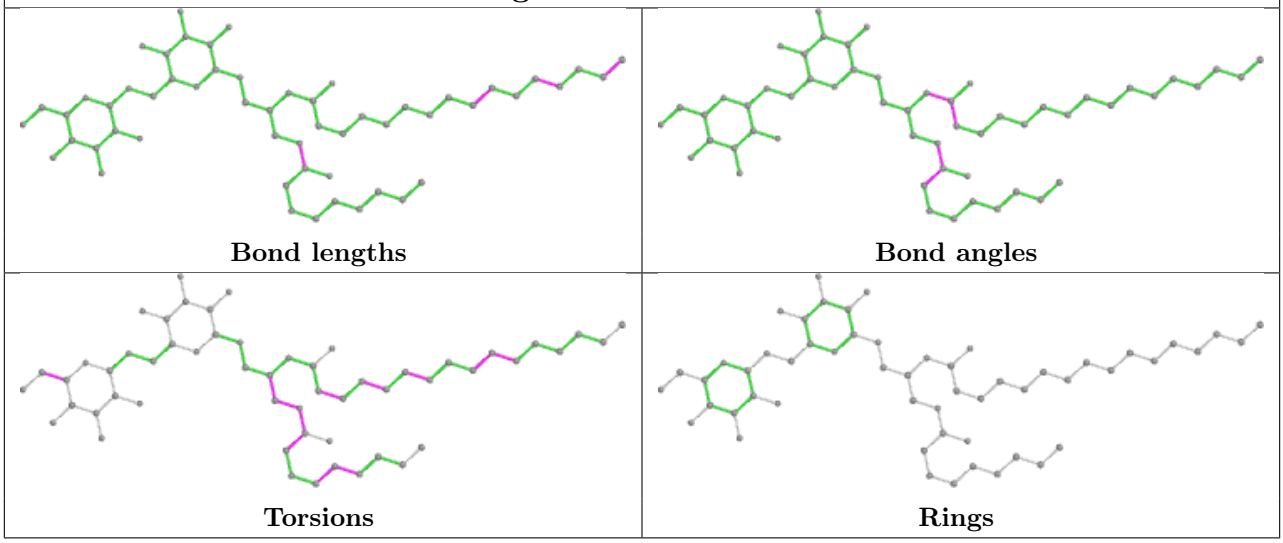
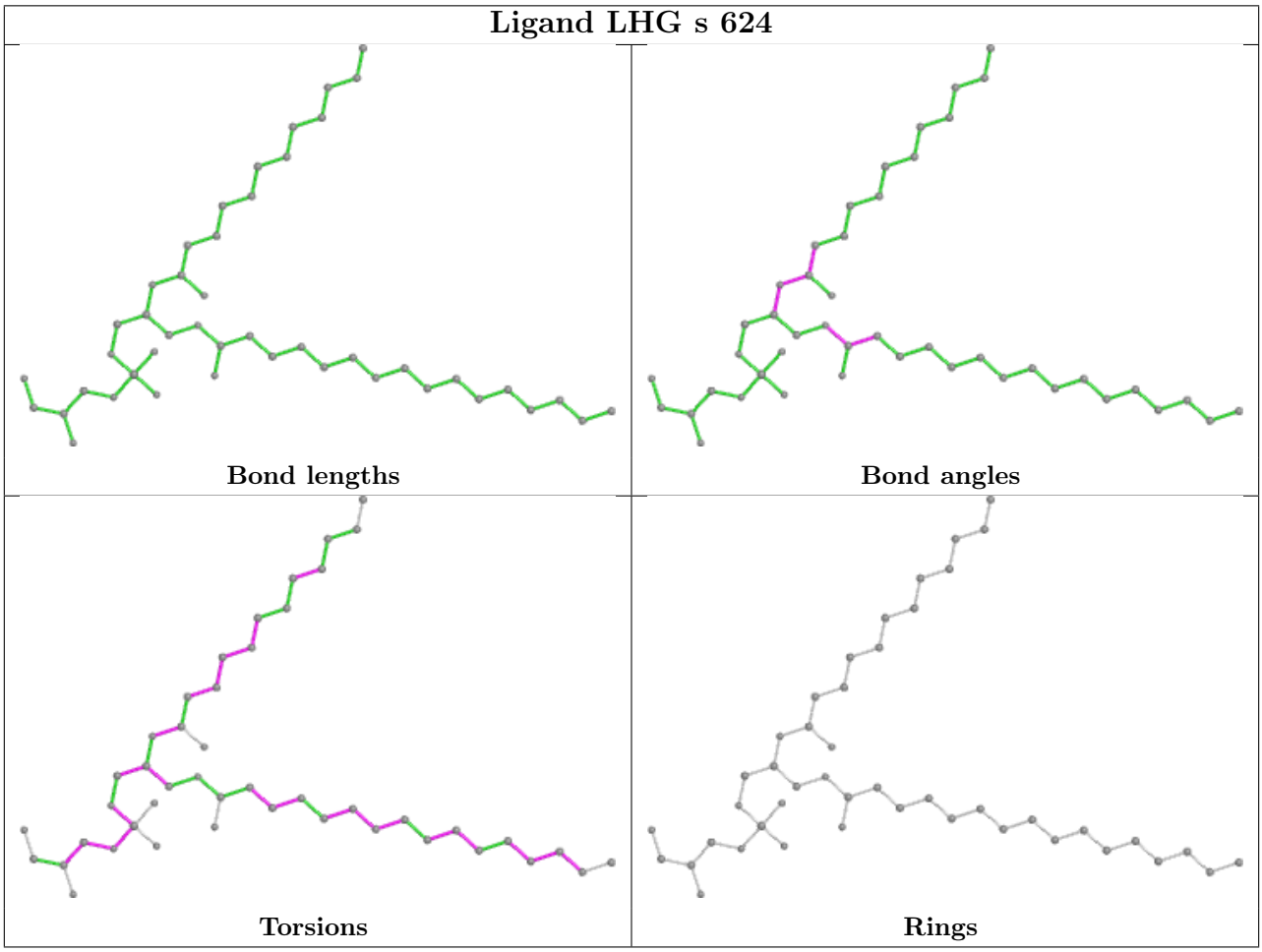


Rings

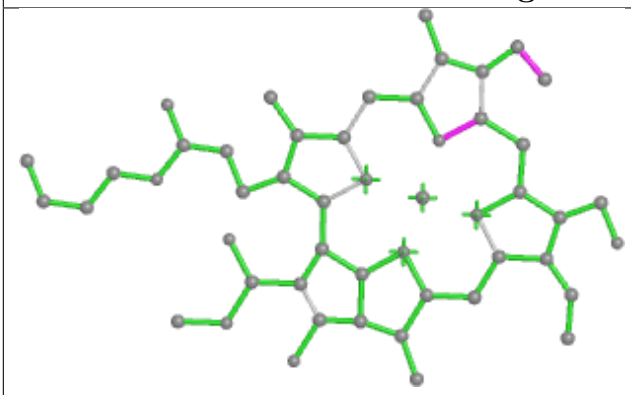
Ligand DGD C1 518



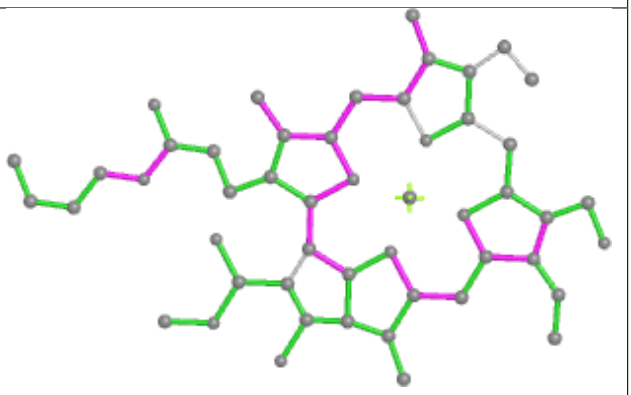
Ligand LHG s 624



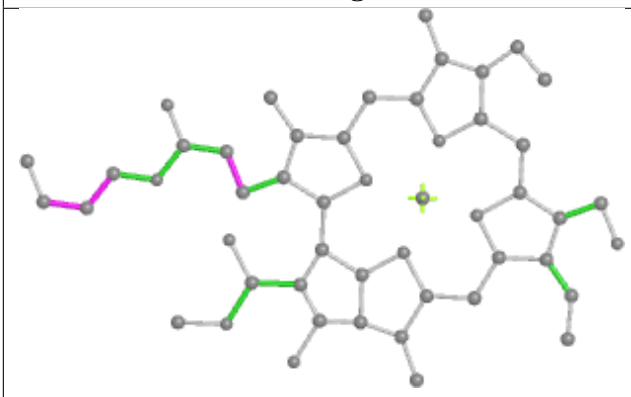
Ligand CHL n1 608



Bond lengths



Bond angles



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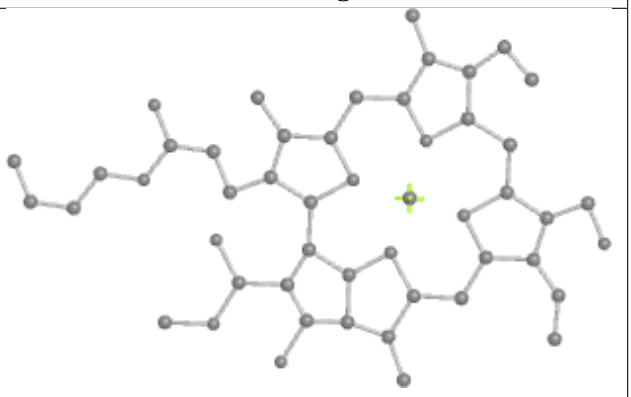
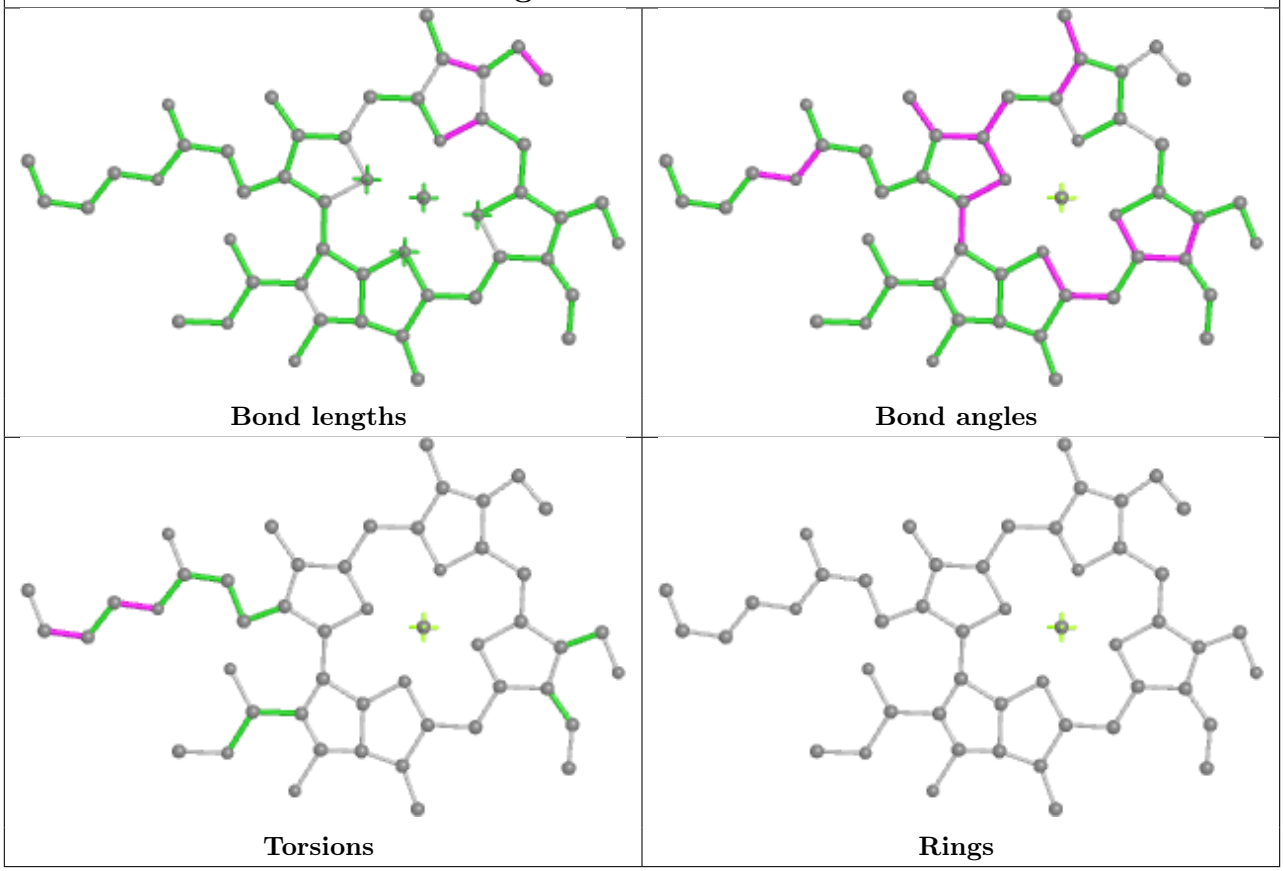
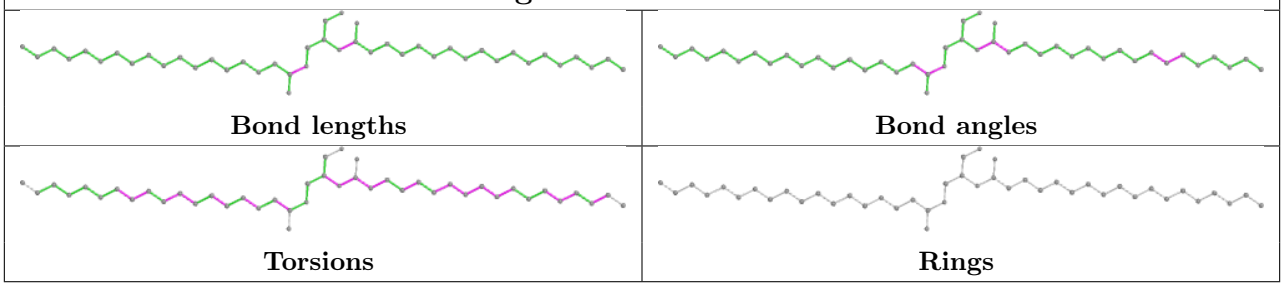


Rings

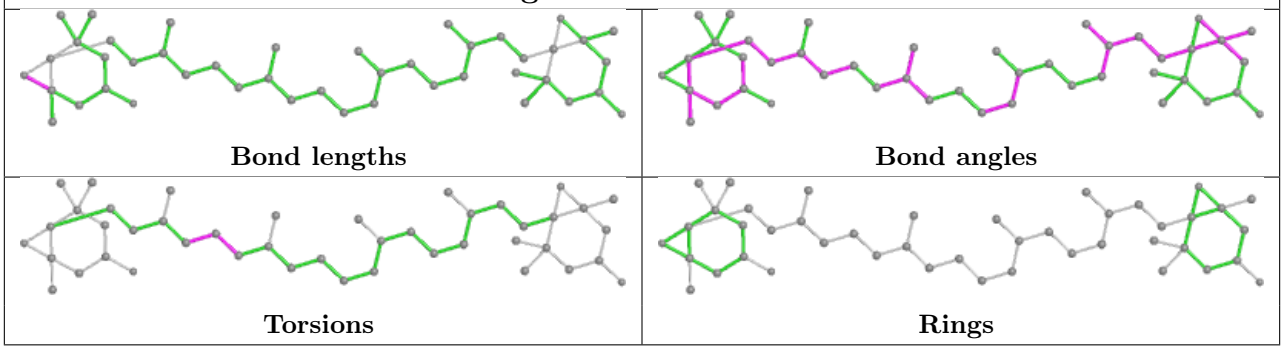
Ligand CHL G1 606



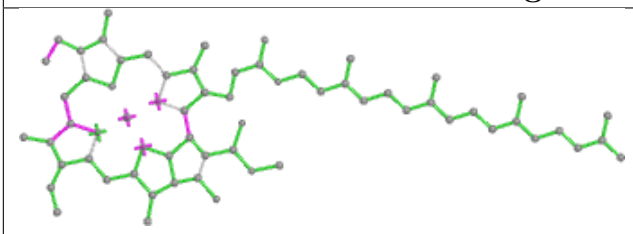
Ligand DGA b1 625



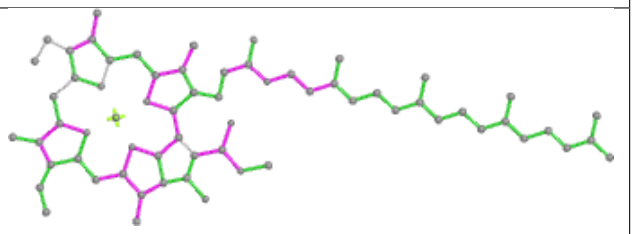
Ligand XAT r1 621



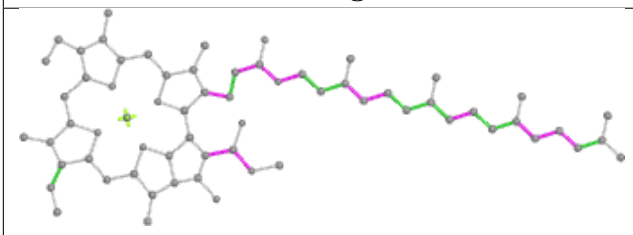
Ligand CLA B 608



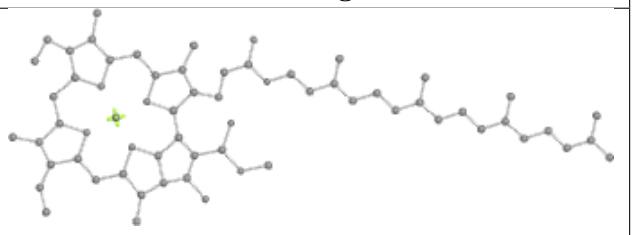
Bond lengths



Bond angles

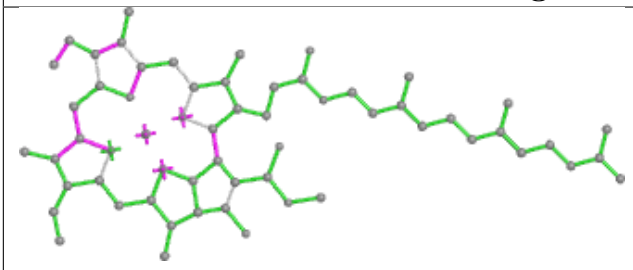


Torsions

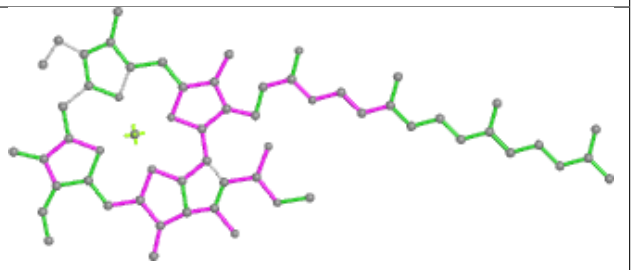


Rings

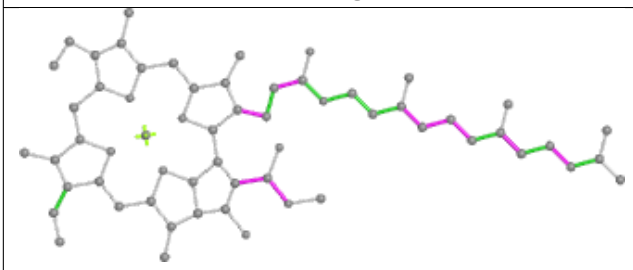
Ligand CLA r 610



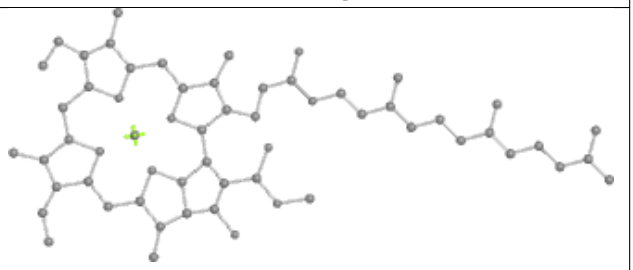
Bond lengths



Bond angles

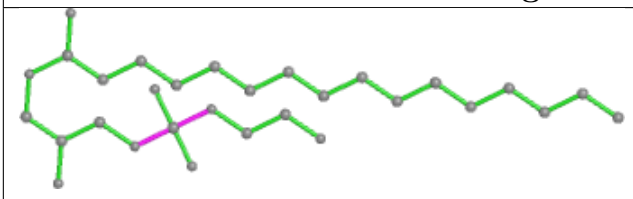


Torsions



Rings

Ligand LPX s1 625



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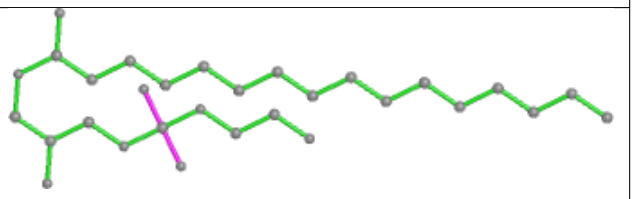
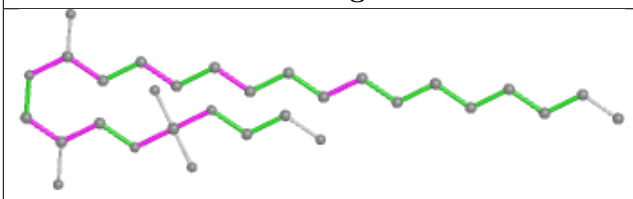
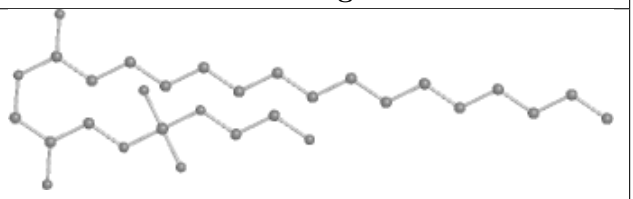


Bond angles

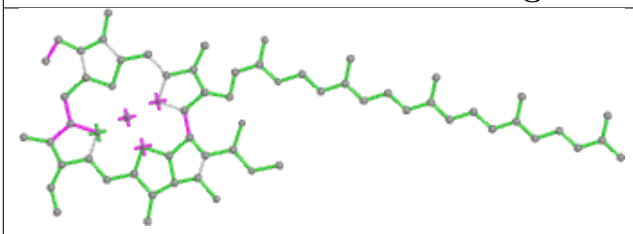


Torsions

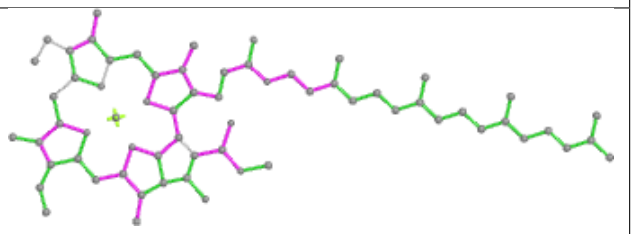


Rings

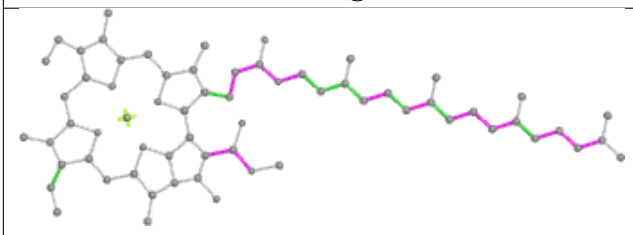
Ligand CLA Y 613



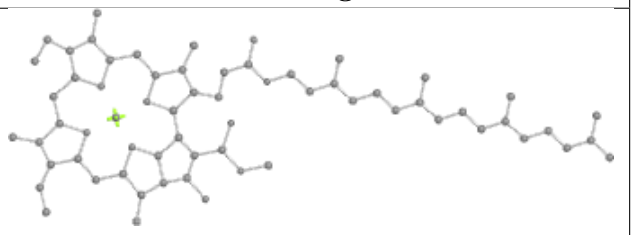
Bond lengths



Bond angles

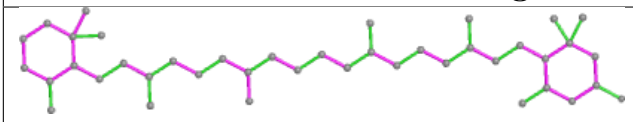


Torsions

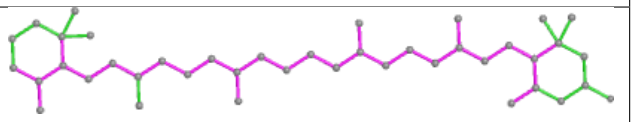


Rings

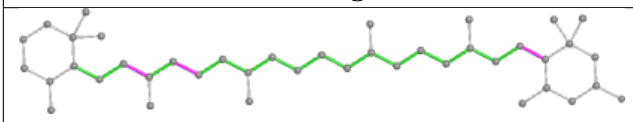
Ligand RRX H1 101



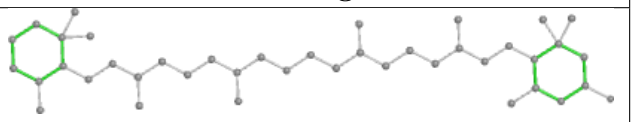
Bond lengths



Bond angles

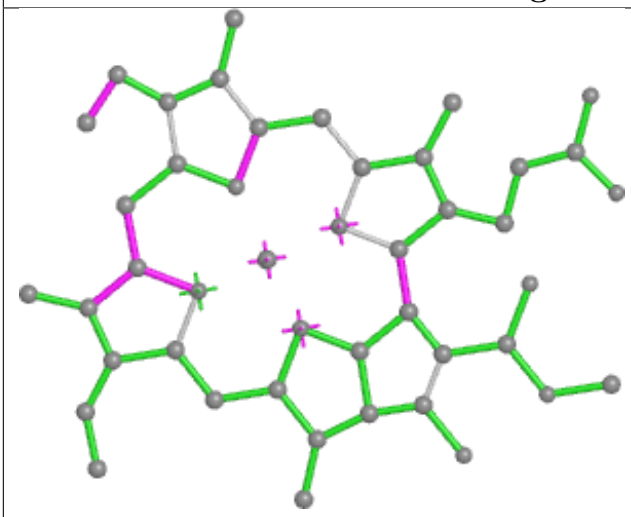


Torsions

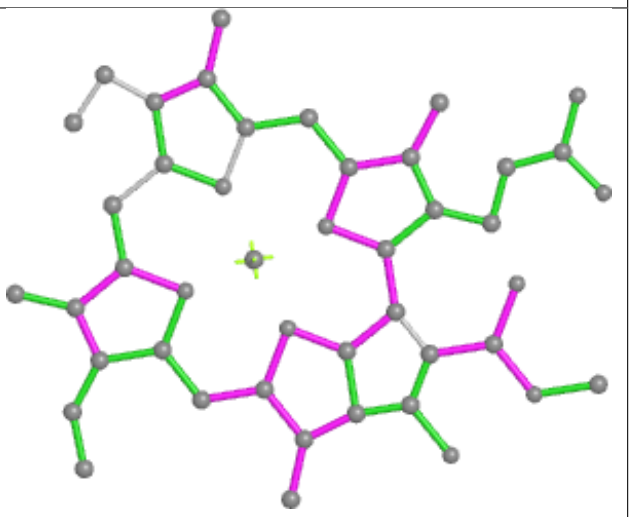


Rings

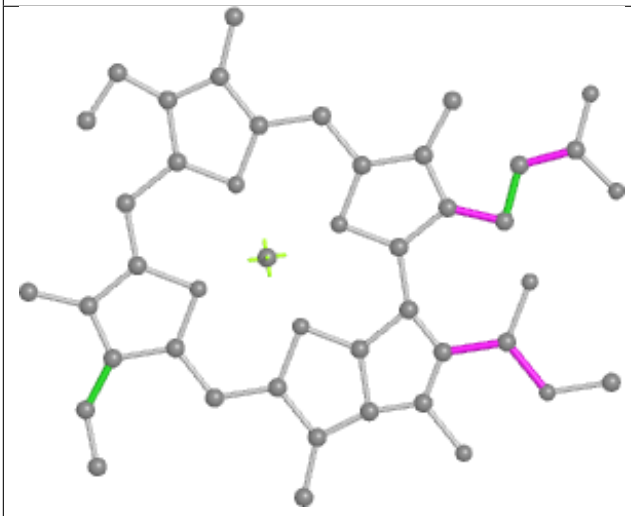
Ligand CLA s 612



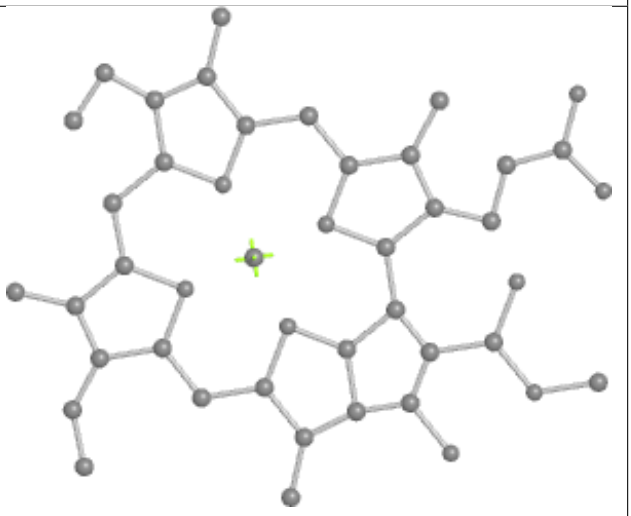
Bond lengths



Bond angles

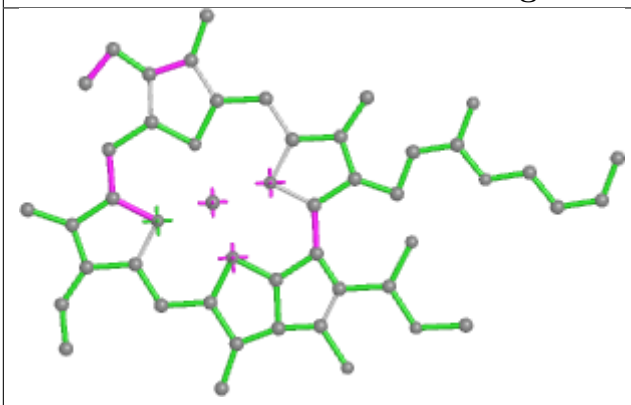


Torsions

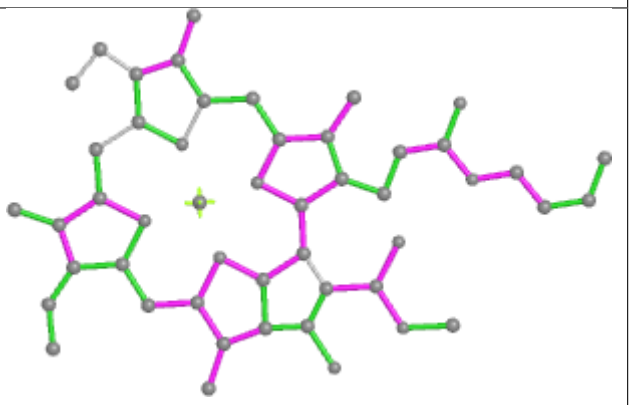


Rings

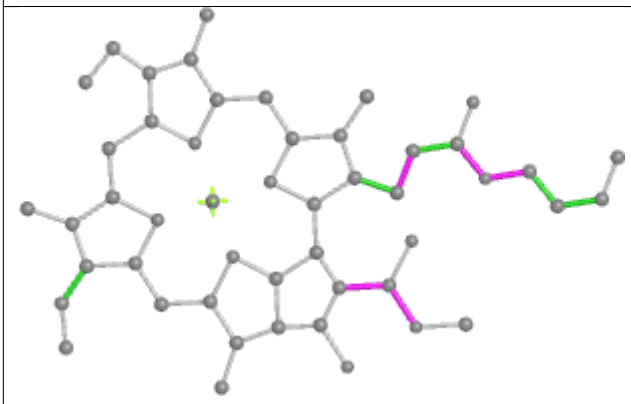
Ligand CLA a1 407



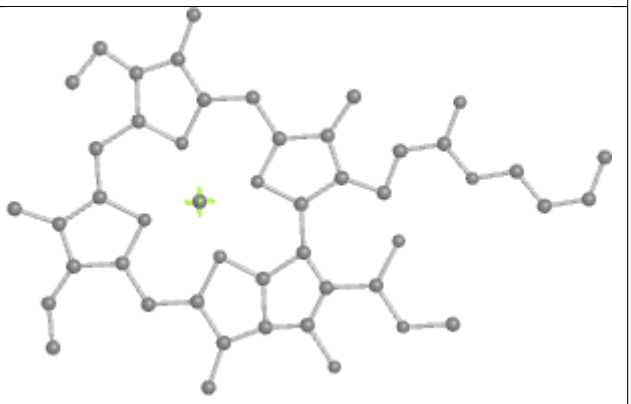
Bond lengths



Bond angles

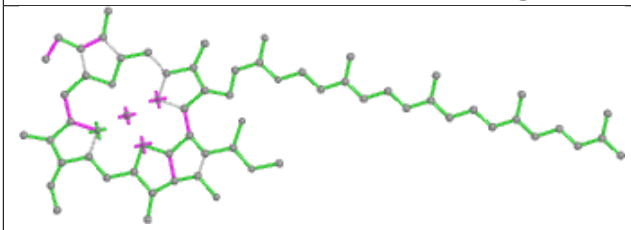


Torsions

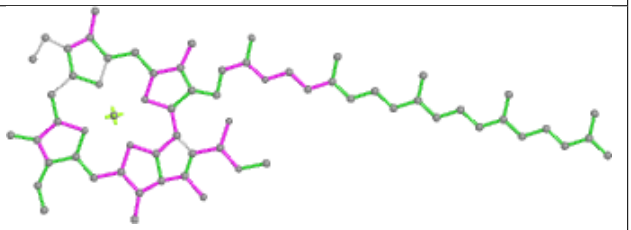


Rings

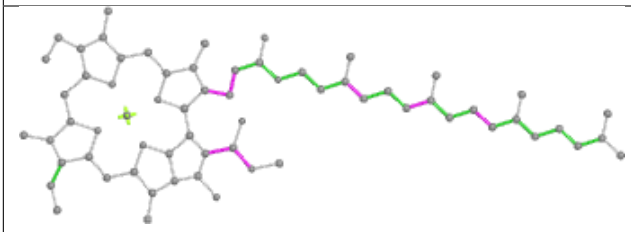
Ligand CLA N1 604



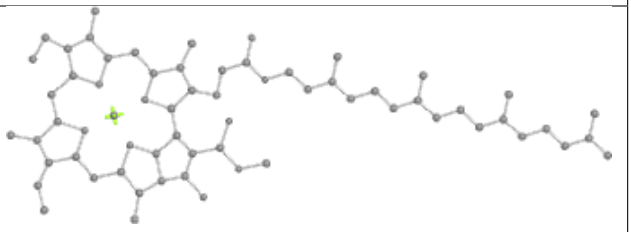
Bond lengths



Bond angles

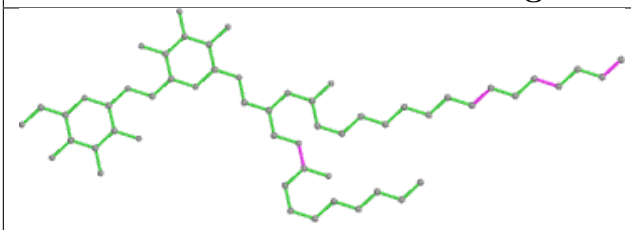


Torsions



Rings

Ligand DGD c 518



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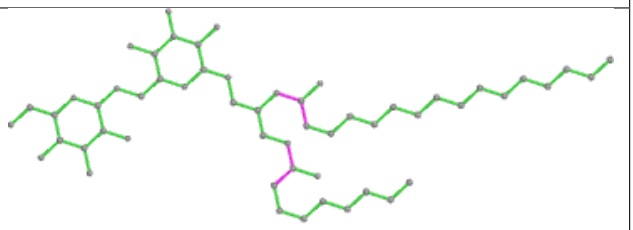

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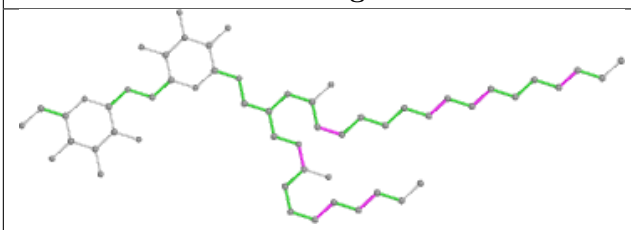
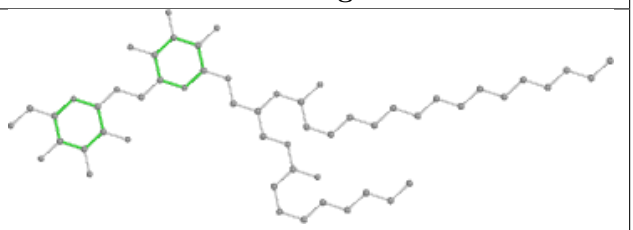
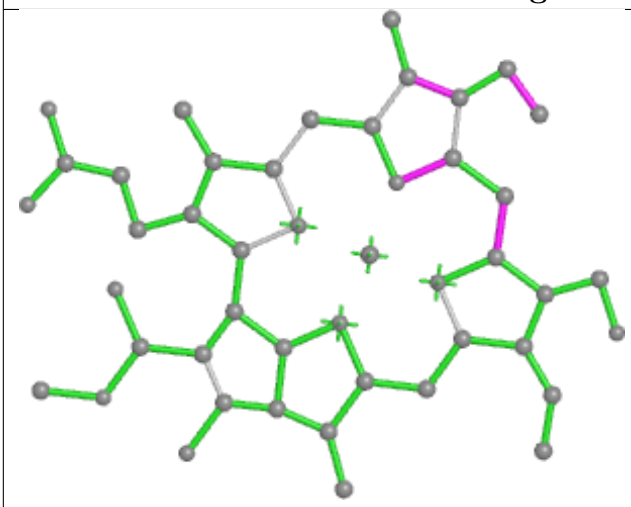


Torsions



Rings

Ligand CHL s 601



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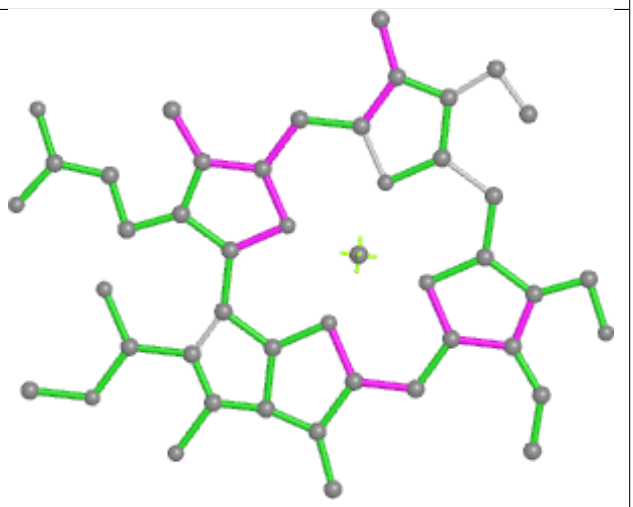
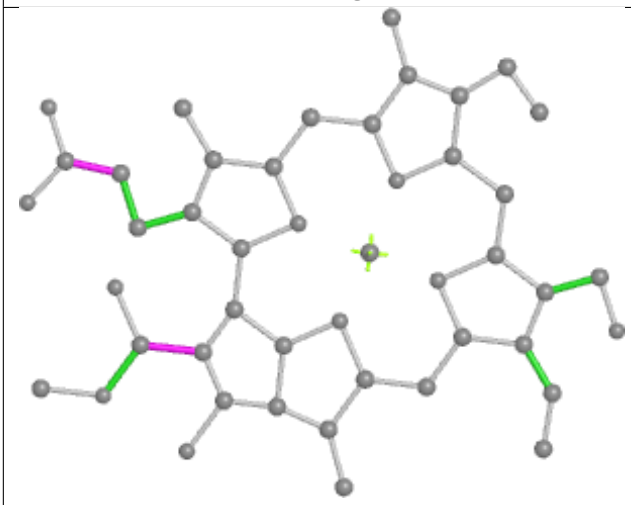


Bond angles



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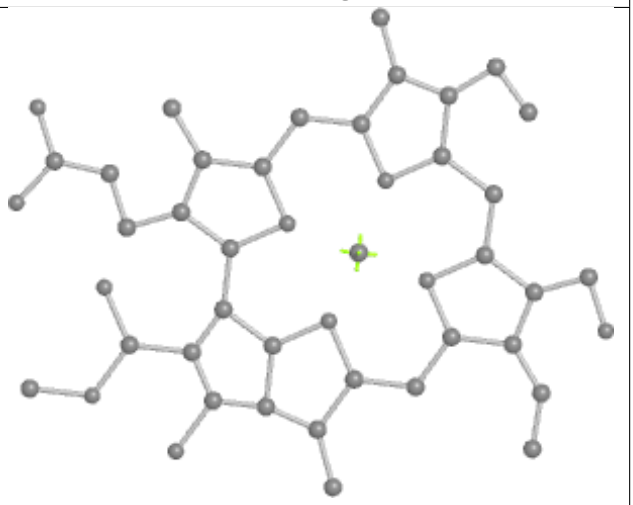
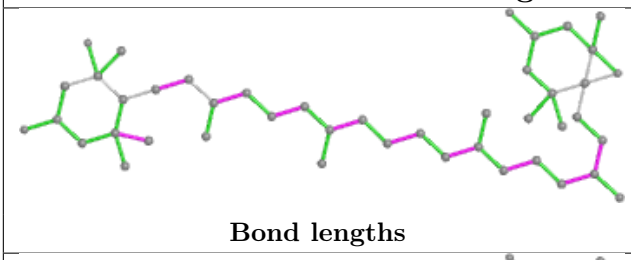


Rings

Ligand NEX n1 623



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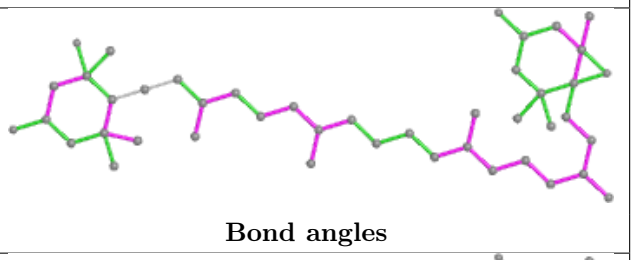
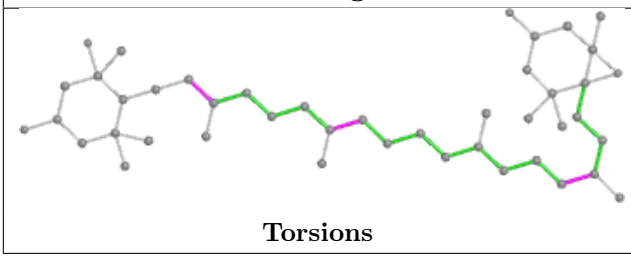


Bond angles



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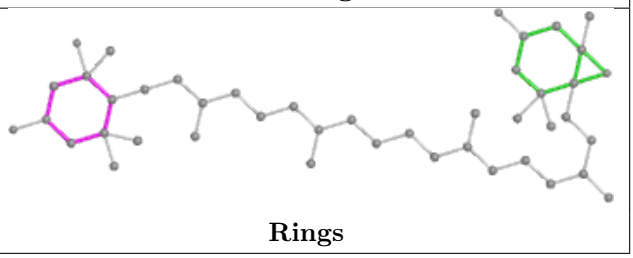
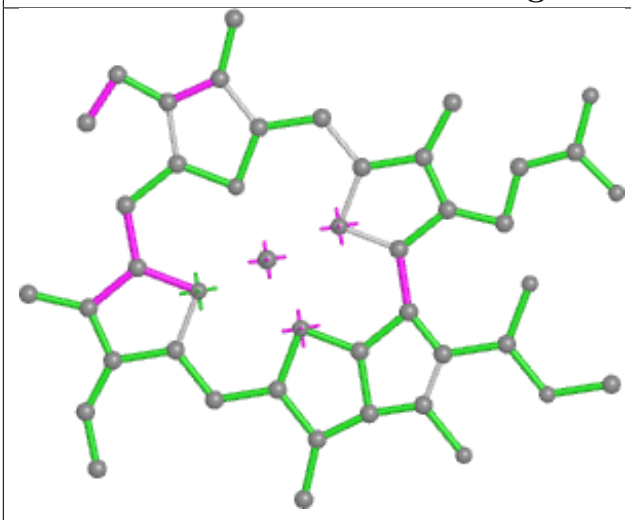


Rings

Ligand CLA S 612



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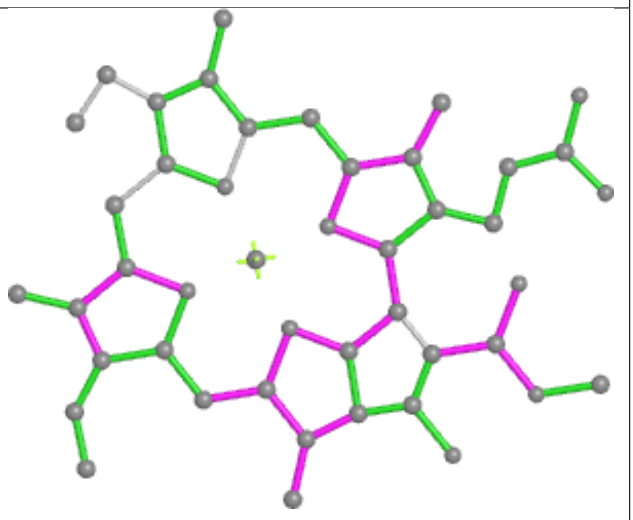
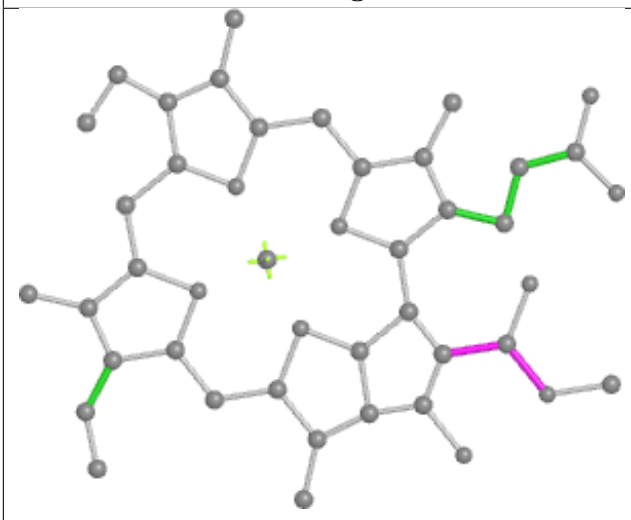


Bond angles



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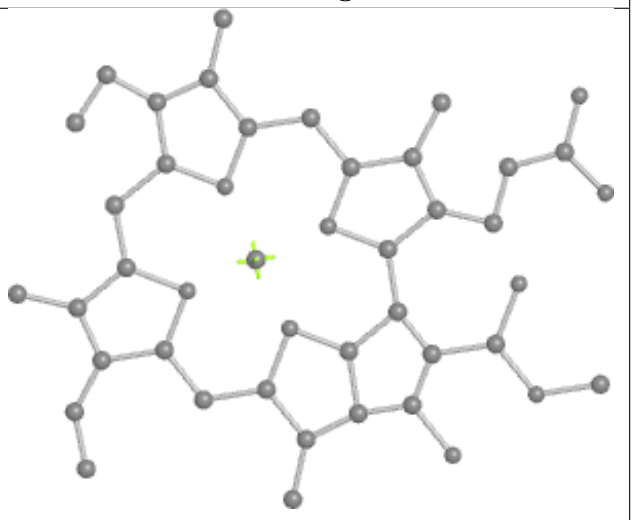
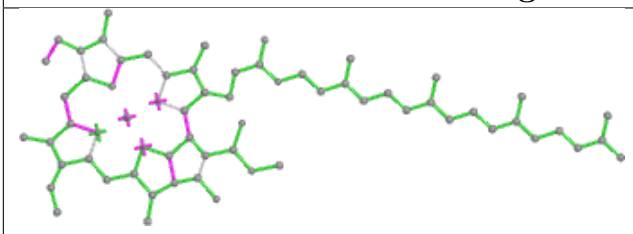


Rings

Ligand CLA b1 617



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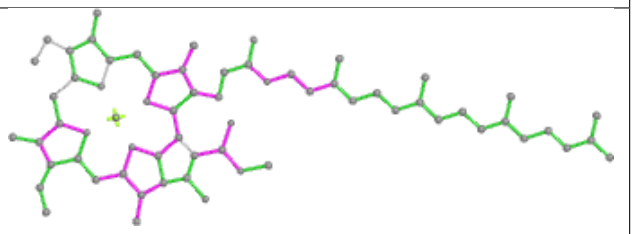
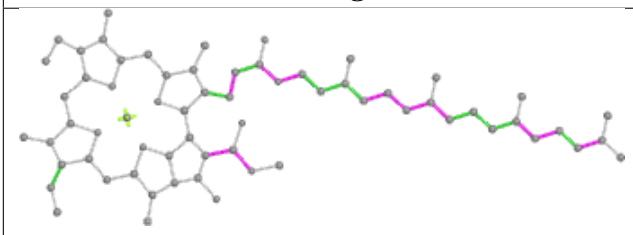


Bond angles



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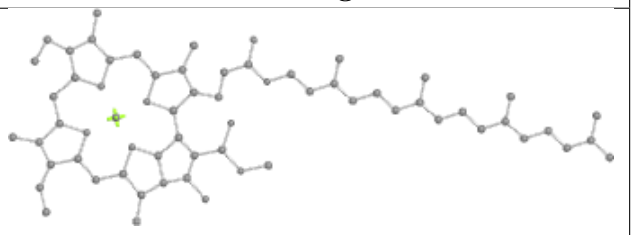
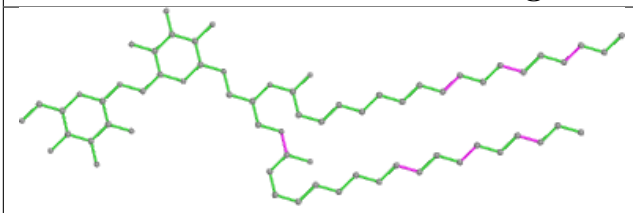
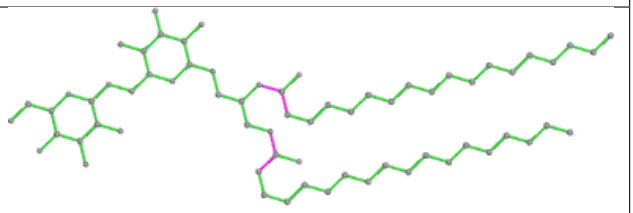


Rings

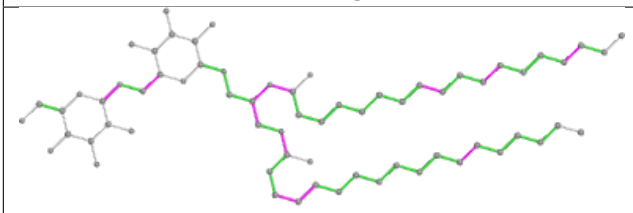
Ligand DGD c 523



Bond lengths



Bond angles



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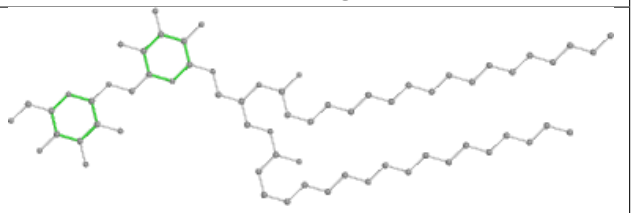
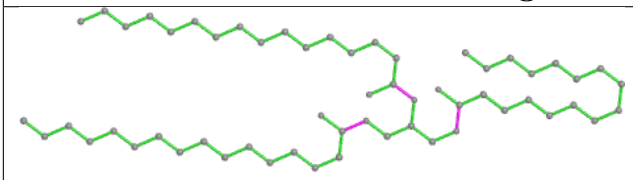


Rings

Ligand 4RF K1 101



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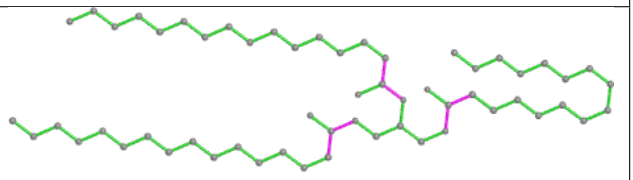
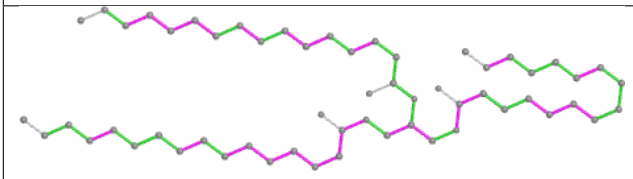


Bond angles



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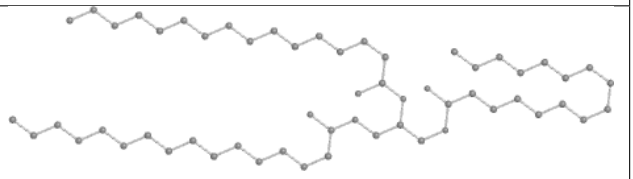
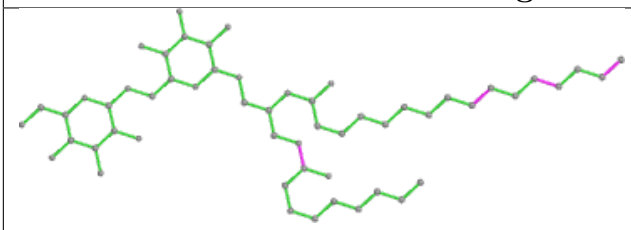
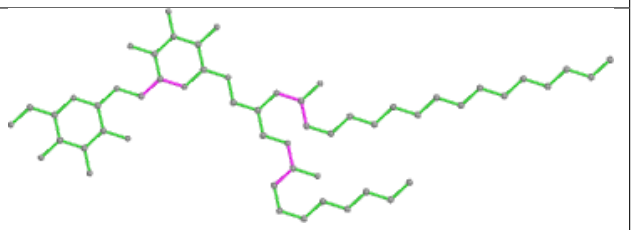


Rings

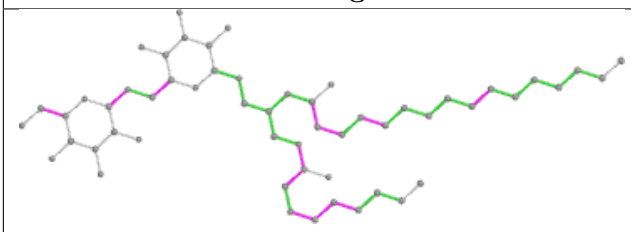
Ligand DGD c1 518



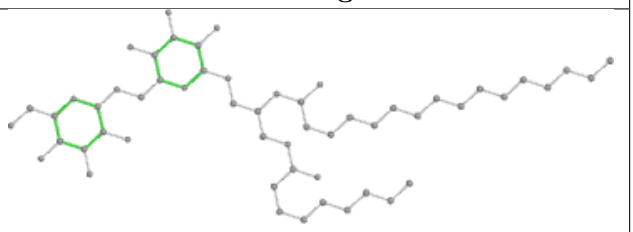
Bond lengths



Bond angles

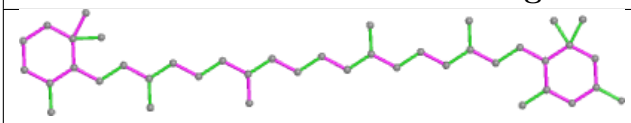


Torsions

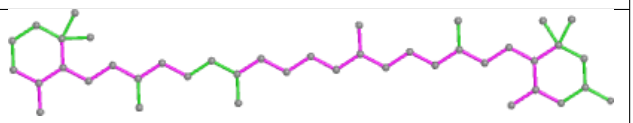


Rings

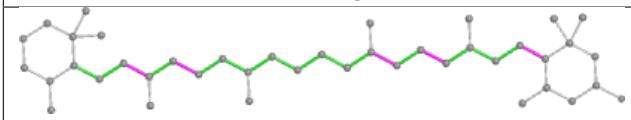
Ligand RRX h 101



Bond lengths



Bond angles



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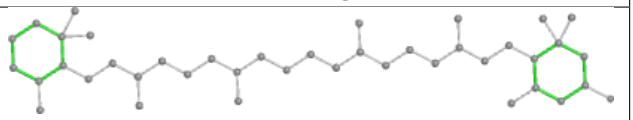
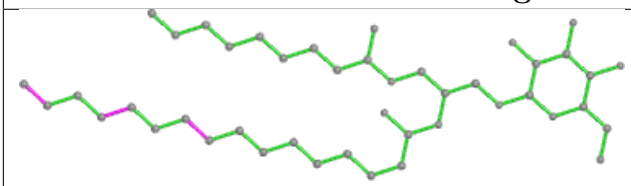
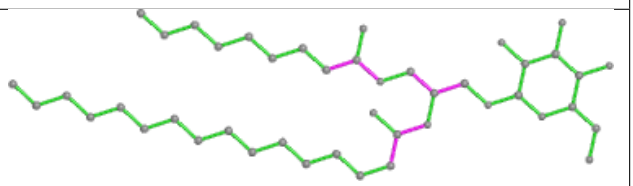


Rings

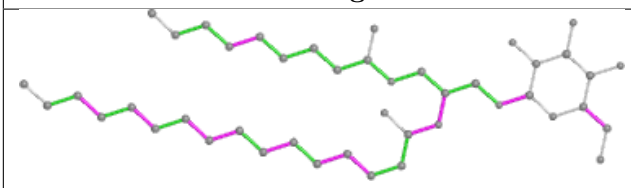
Ligand LMG b1 622



Bond lengths



Bond angles



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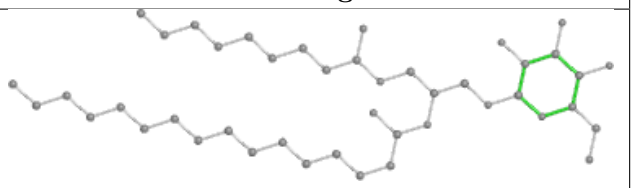
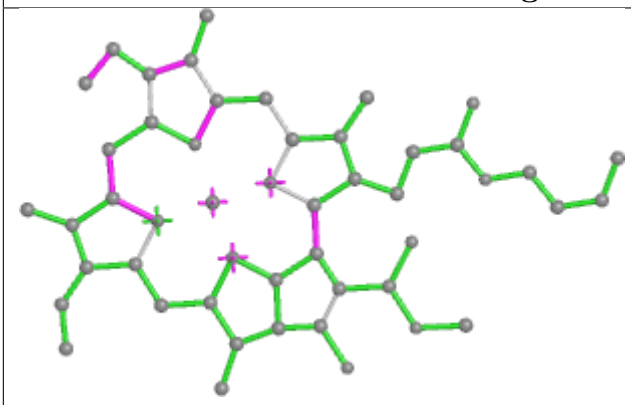
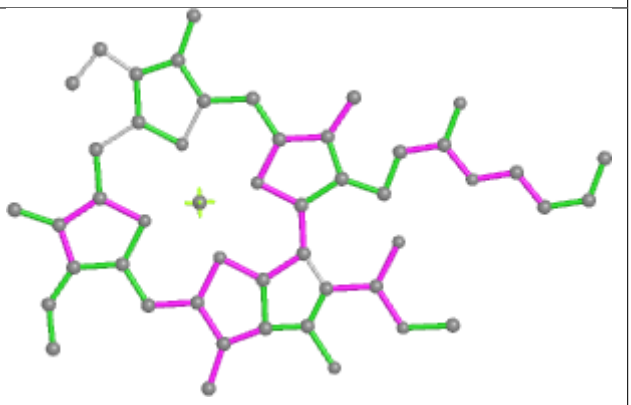
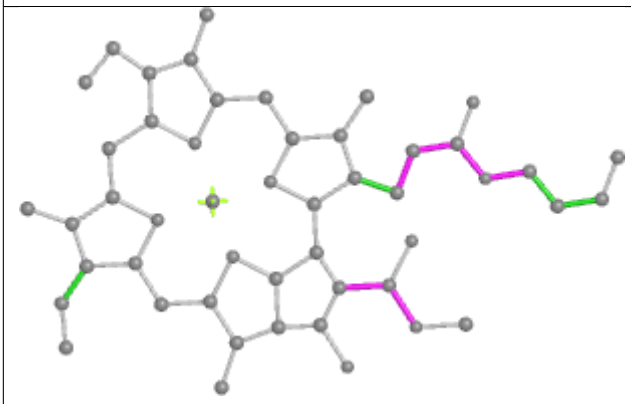
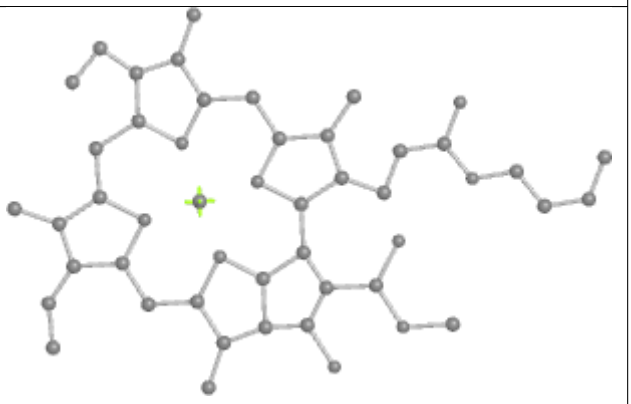
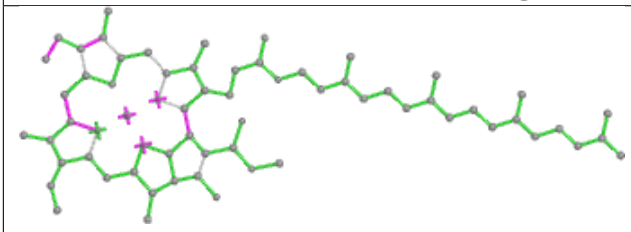
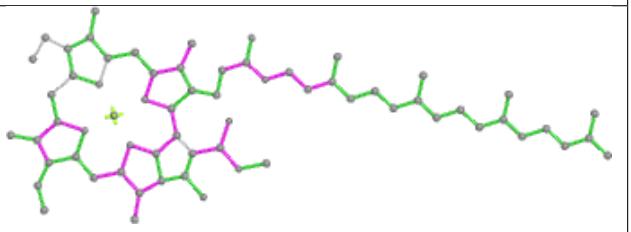
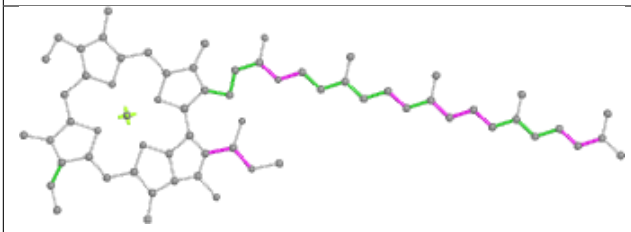
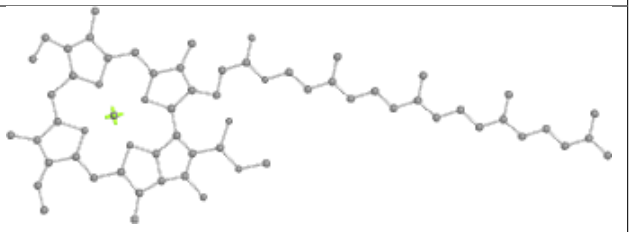
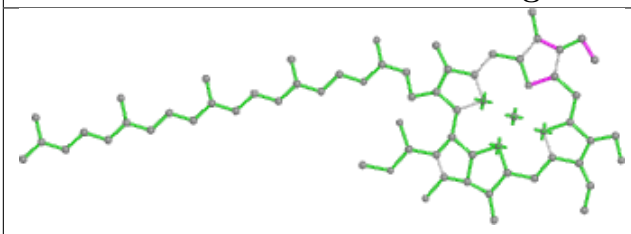


Rings

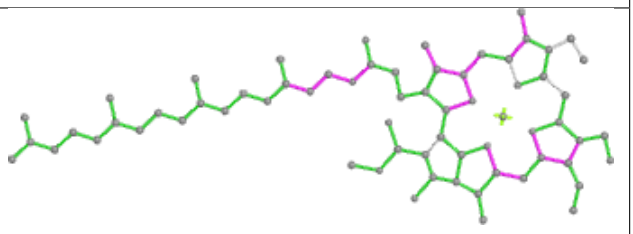
Ligand CLA r1 604	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA B1 611	
 Bond lengths	 Bond angles
 Torsions	 Rings

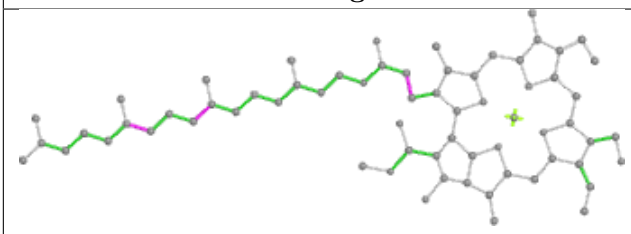
Ligand CHL N 606



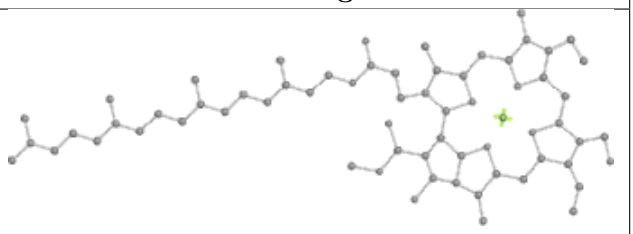
Bond lengths



Bond angles

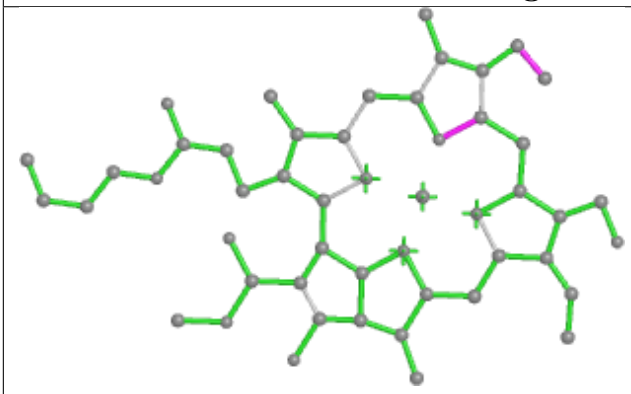


Torsions

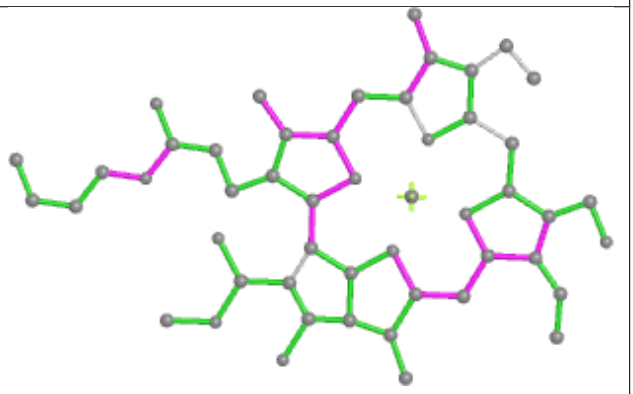


Rings

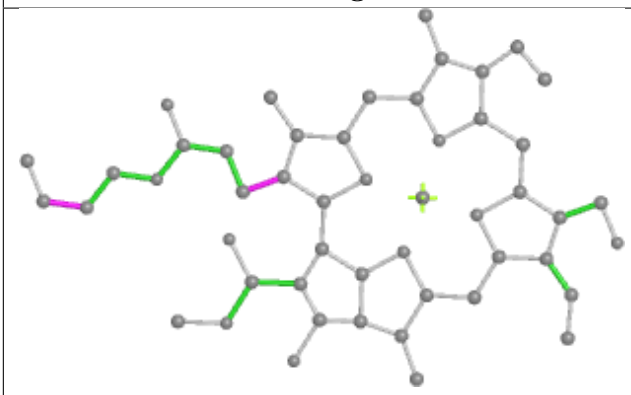
Ligand CHL G 607



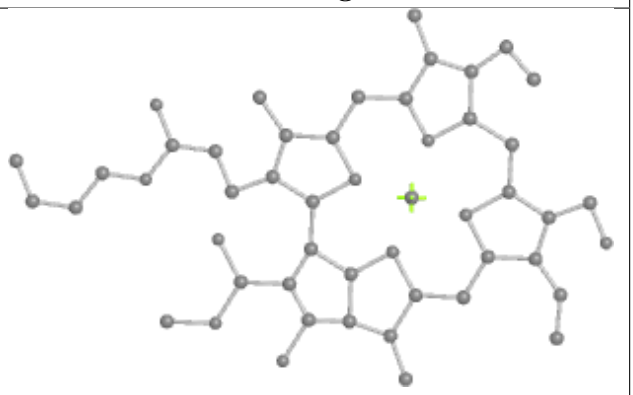
Bond lengths



Bond angles

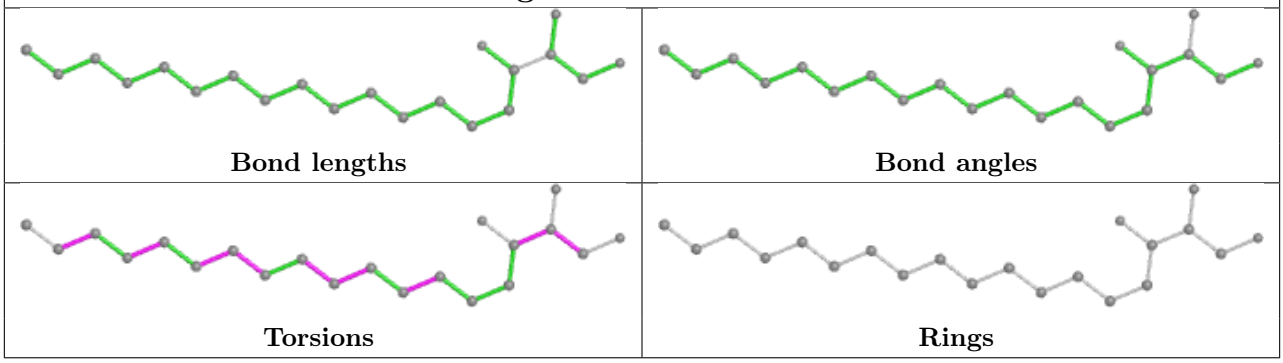


Torsions

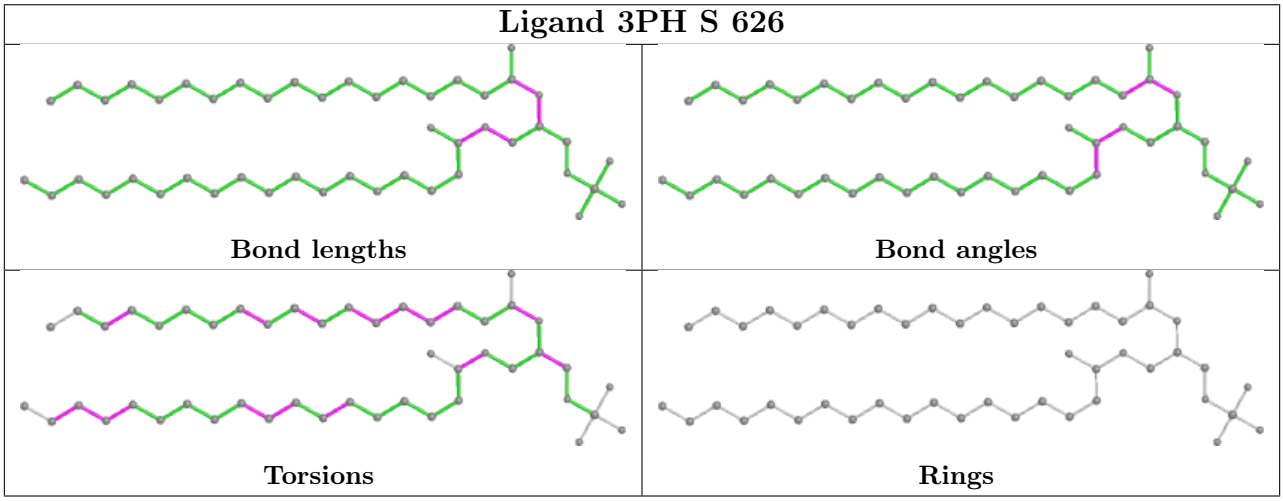


Rings

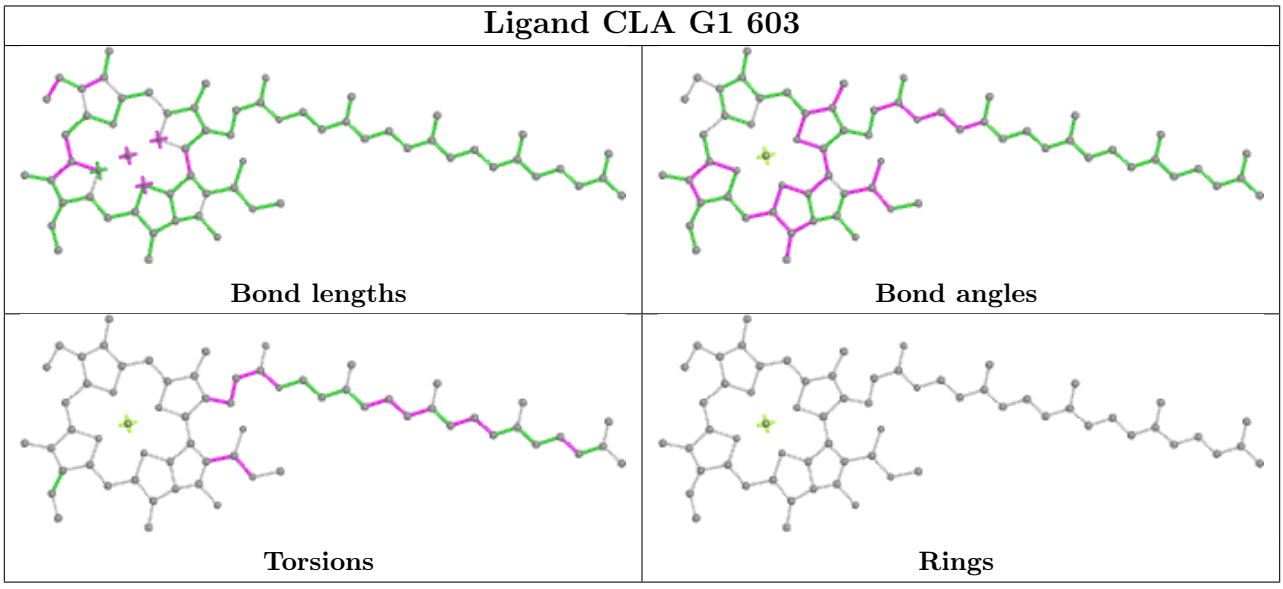
Ligand SPH A1 414

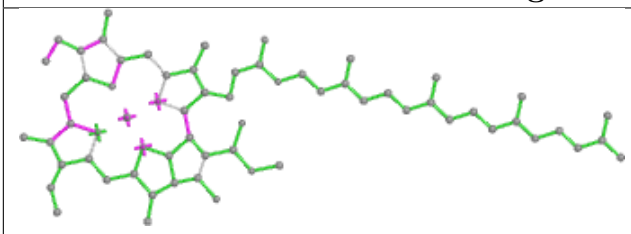
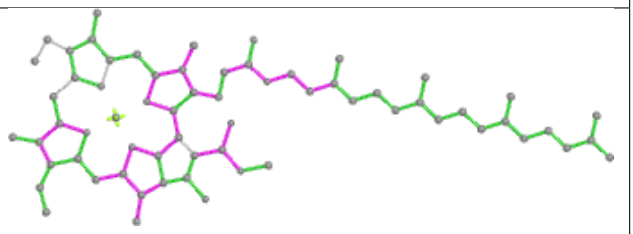
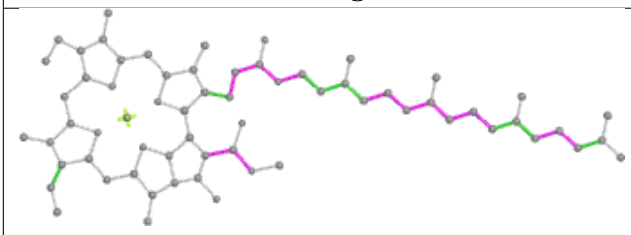
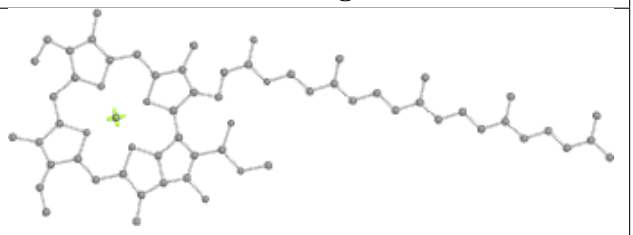


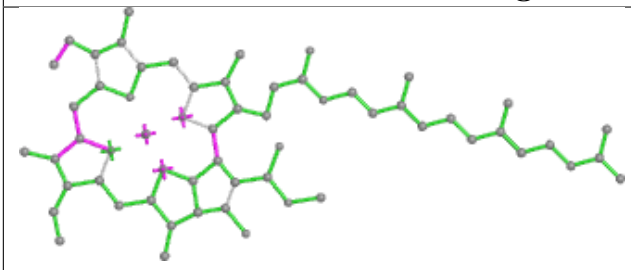
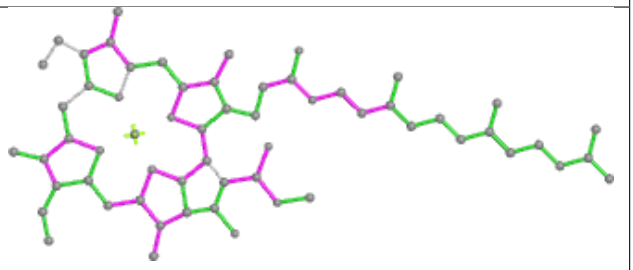
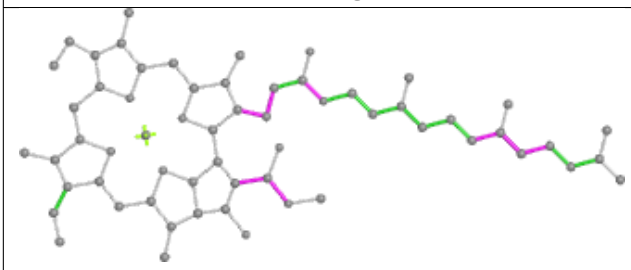
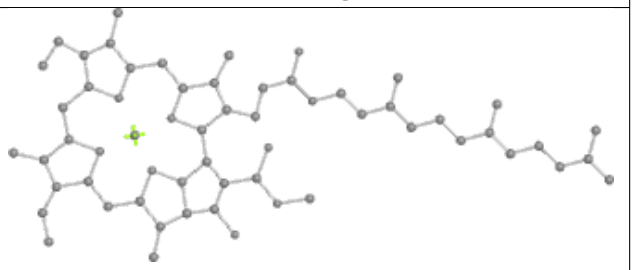
Ligand 3PH S 626



Ligand CLA G1 603



Ligand CLA b 603	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA R1 610	
 Bond lengths	 Bond angles
 Torsions	 Rings

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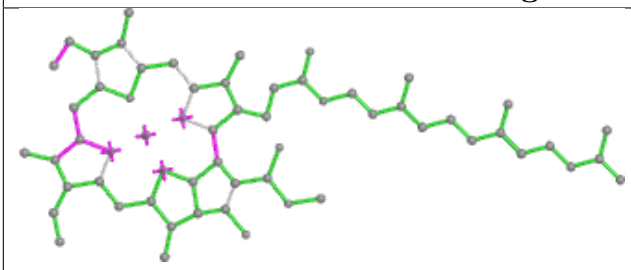
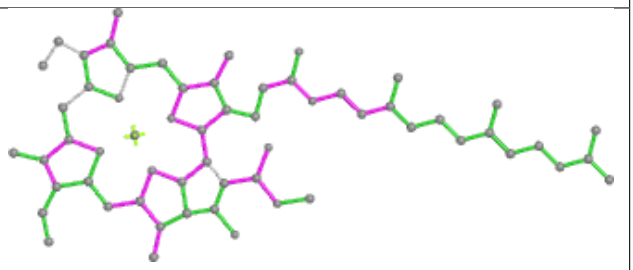
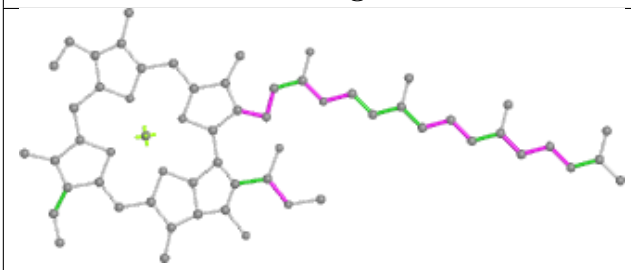
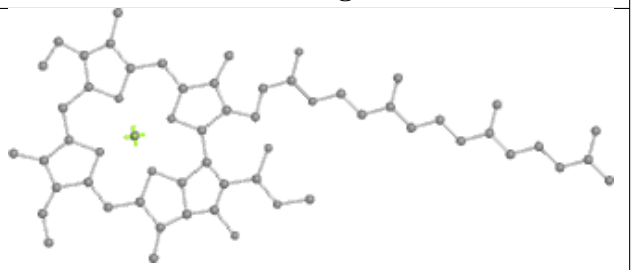
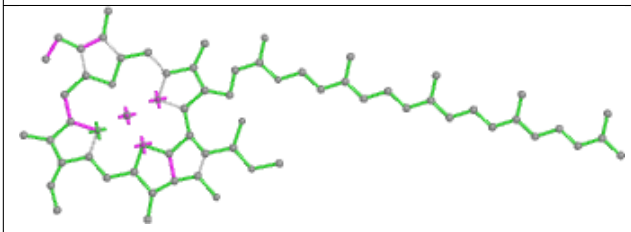
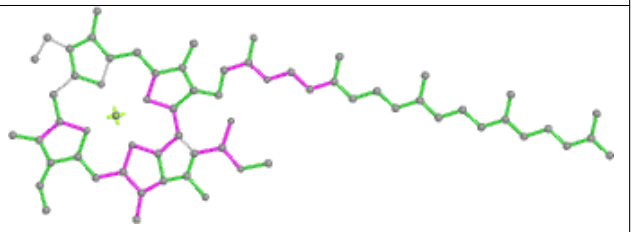
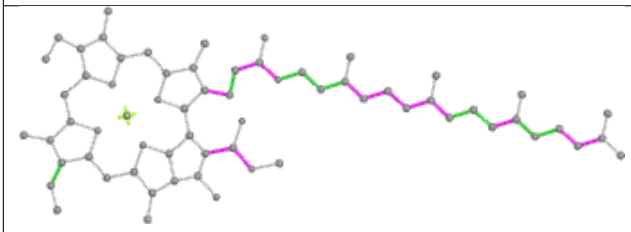
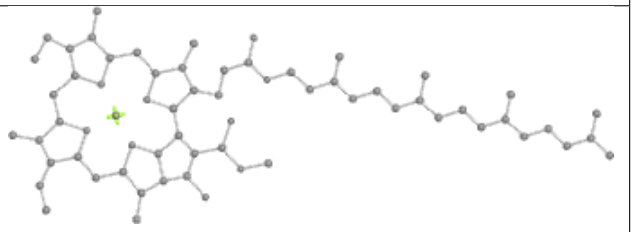
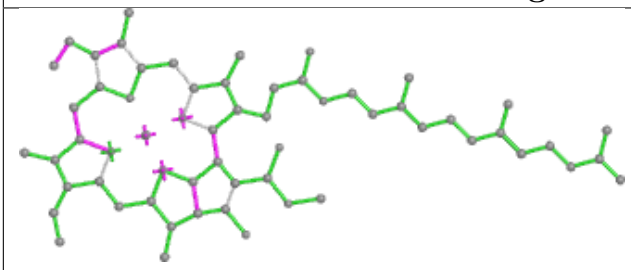
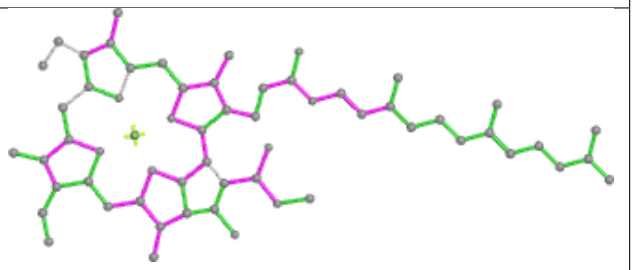
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA D1 402	
 Bond lengths	 Bond angles
 Torsions	 Rings

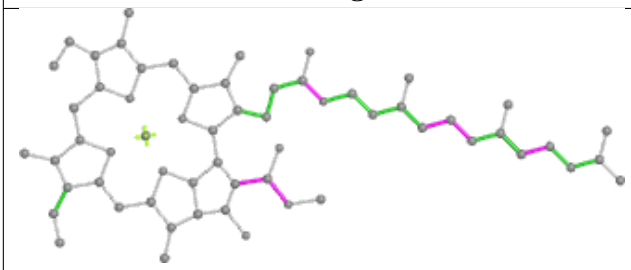
Ligand CLA a 410



Bond lengths



Bond angles



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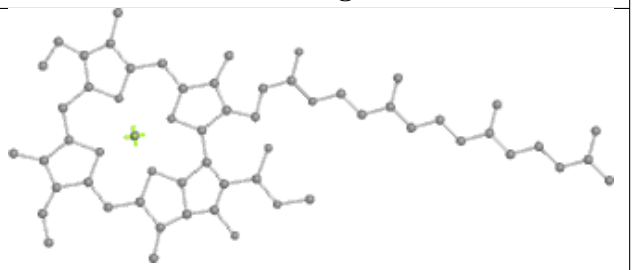
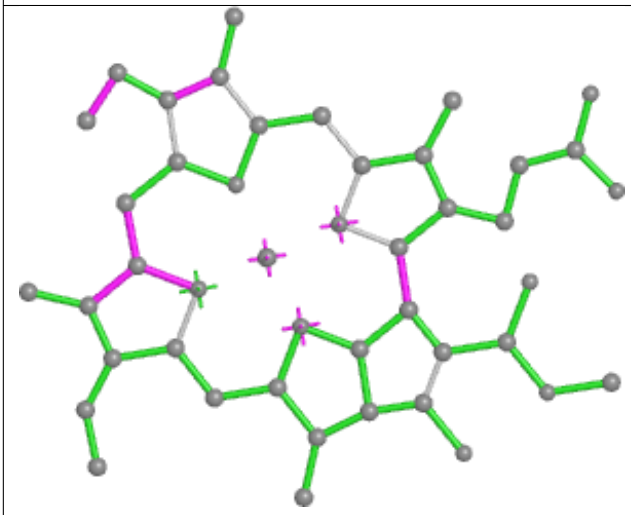


Rings

Ligand CLA N 612



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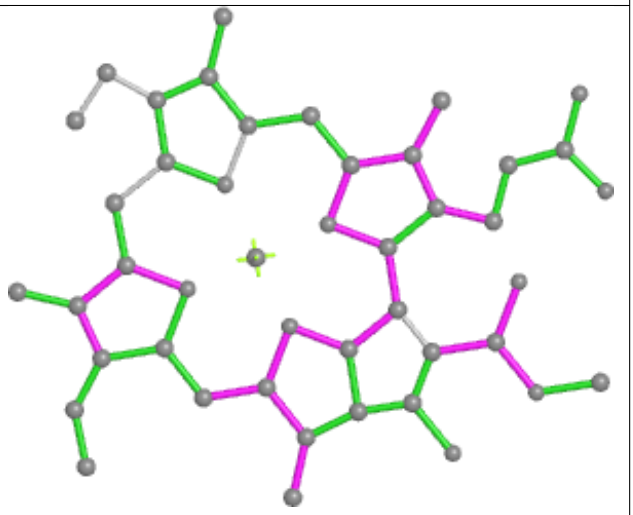
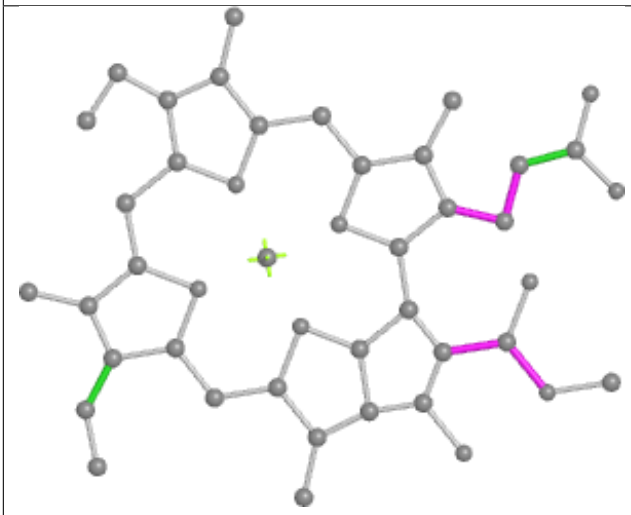


Bond angles



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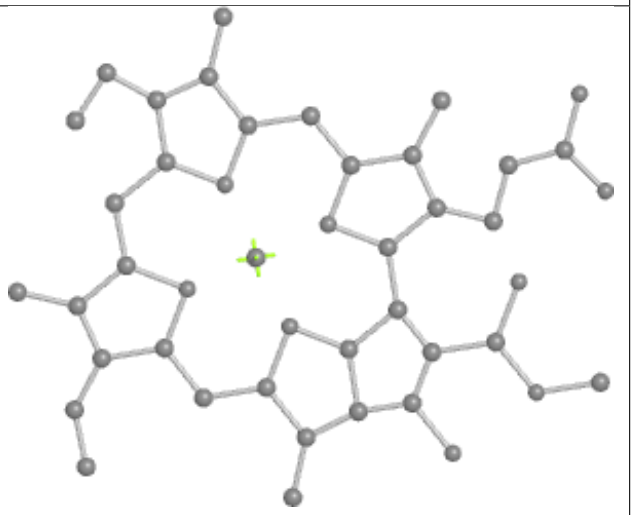
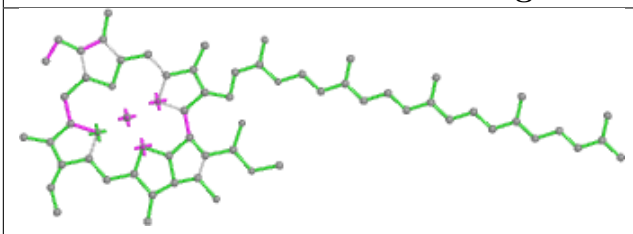


Rings

Ligand CLA B1 616



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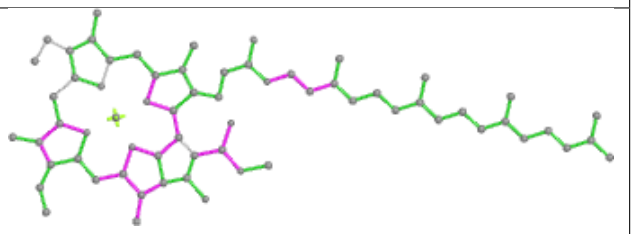

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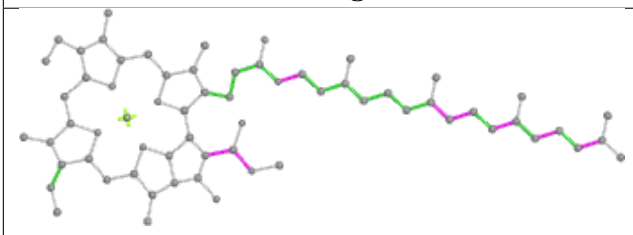
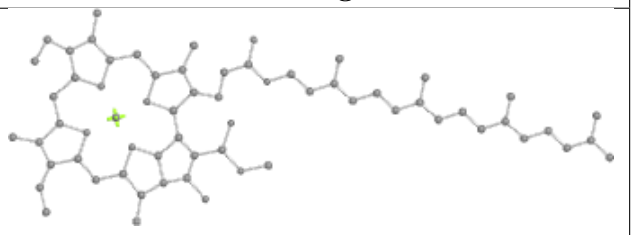
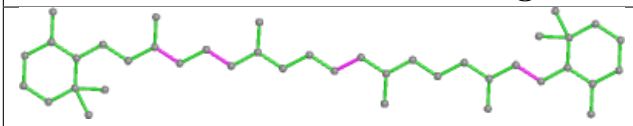


Torsions



Rings

Ligand BCR b1 619



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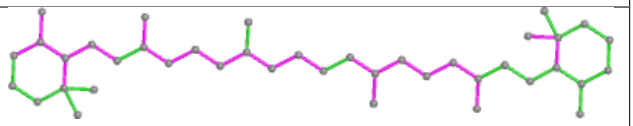
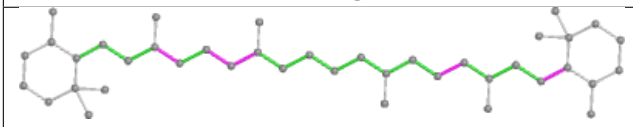


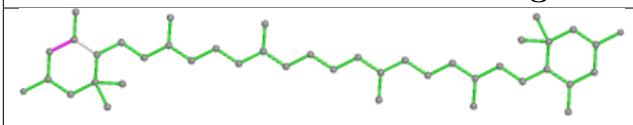
Bond angles



Torsions

Rings

Ligand LUT r 620



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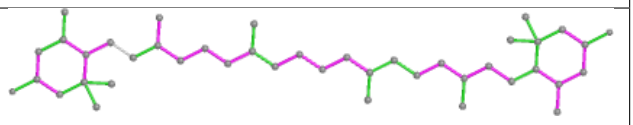

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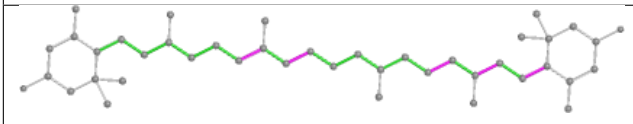

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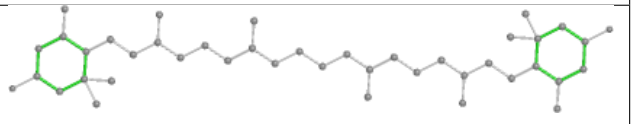
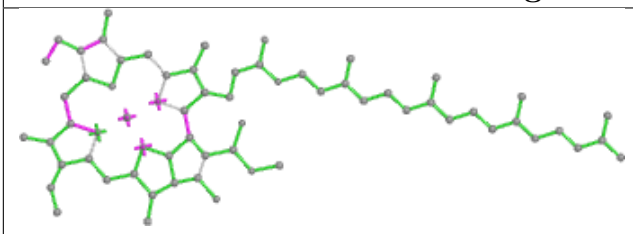


Rings

Ligand CLA B 603



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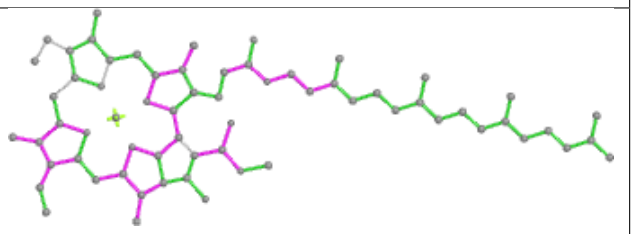

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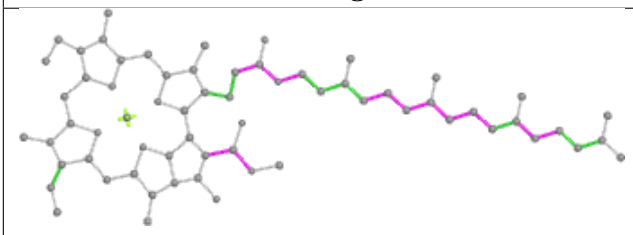

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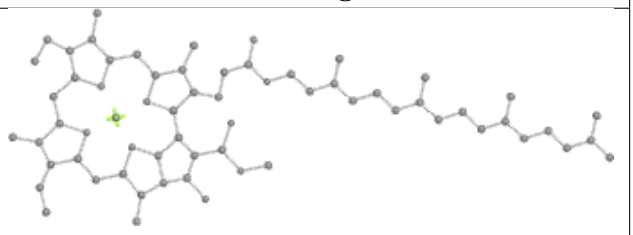
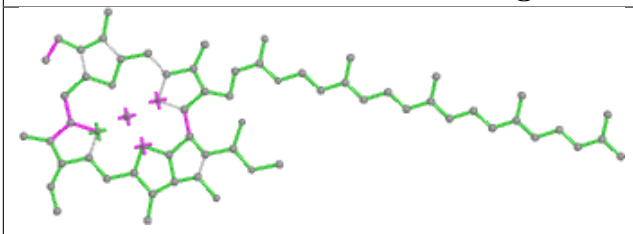


Rings

Ligand CLA B1 614



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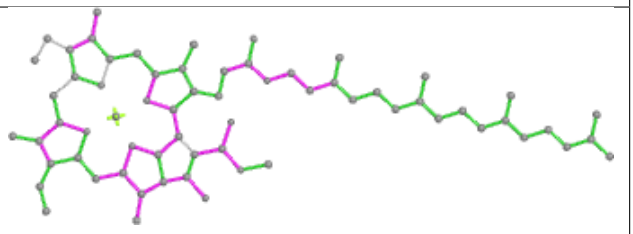

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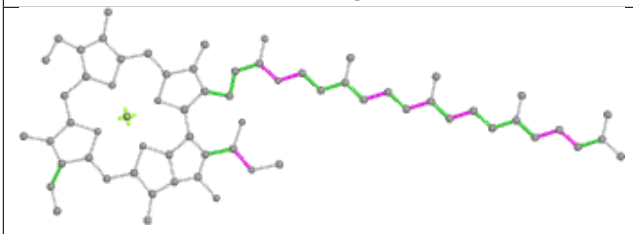

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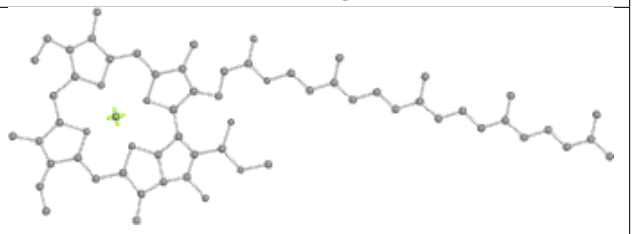
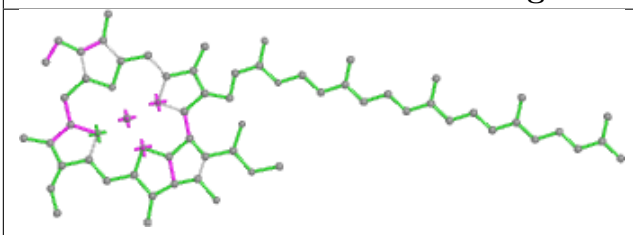


Rings

Ligand CLA b 609



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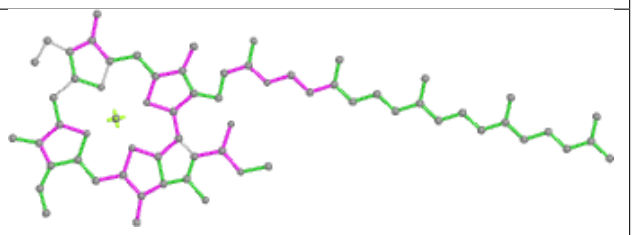
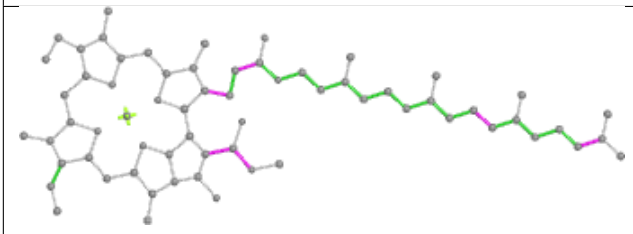


Bond angles



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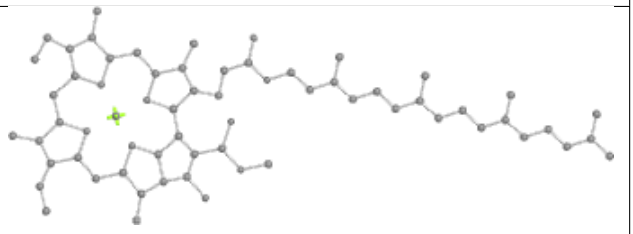
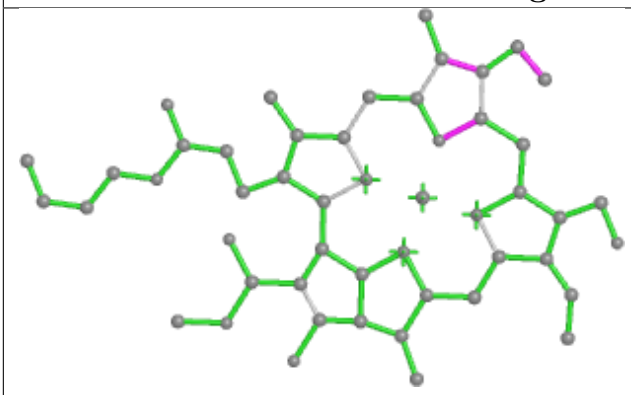
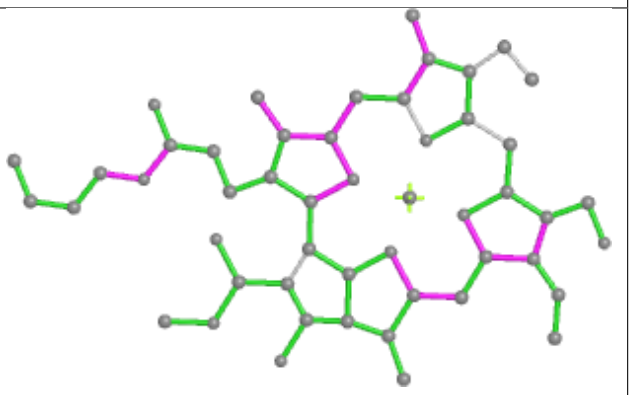


Rings

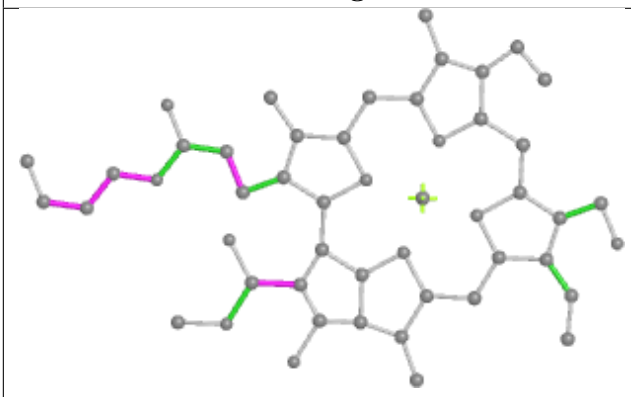
Ligand CHL r 607



Bond lengths



Bond angles



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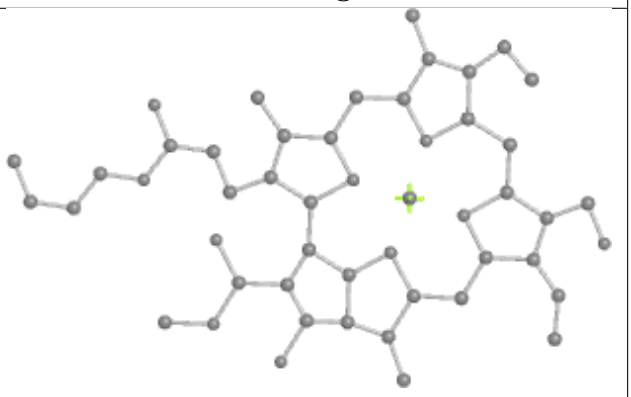
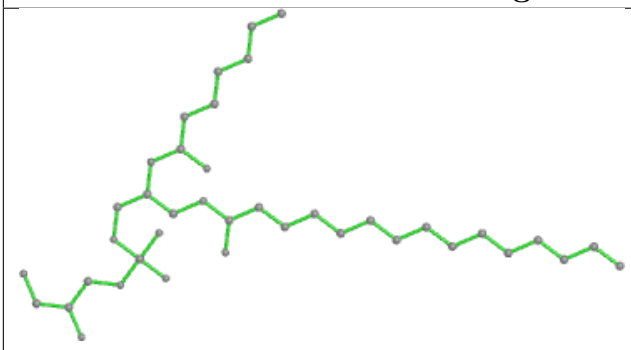
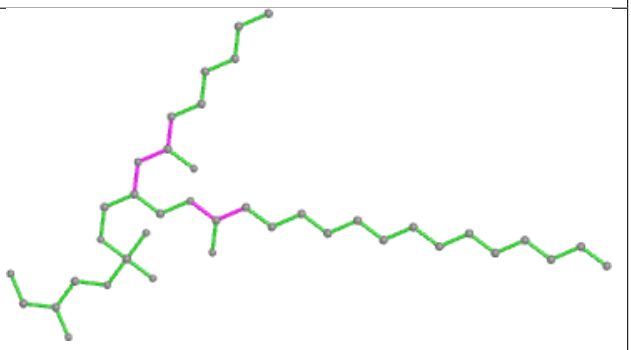


Rings

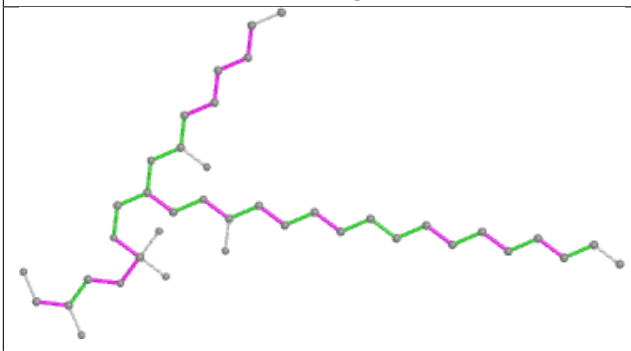
Ligand LHG D1 410



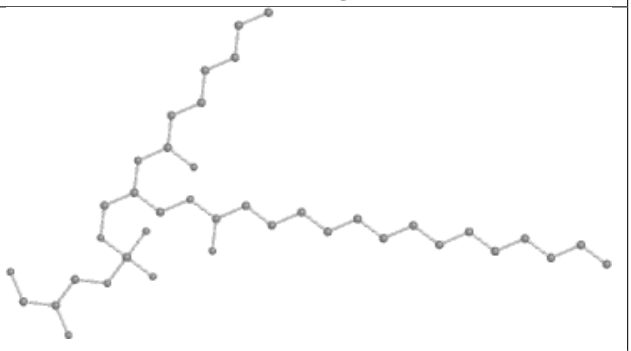
Bond lengths



Bond angles

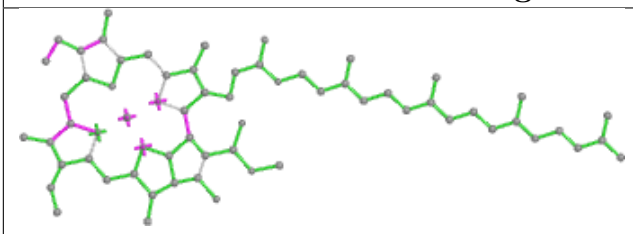


Torsions

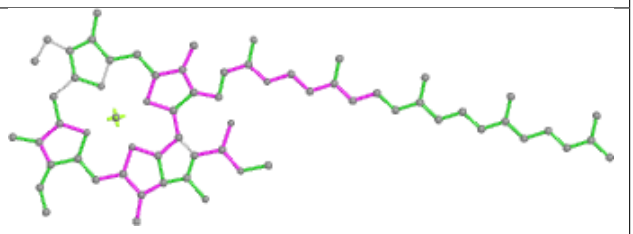


Rings

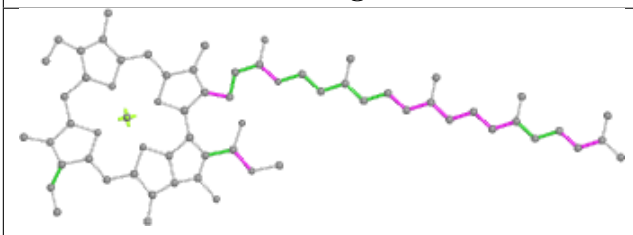
Ligand CLA D1 403



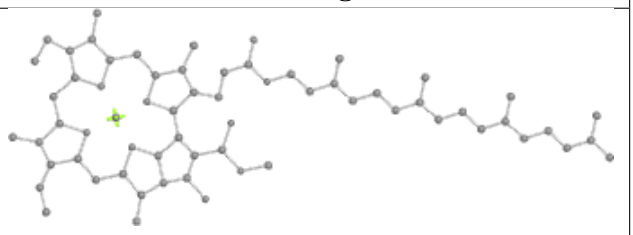
Bond lengths



Bond angles

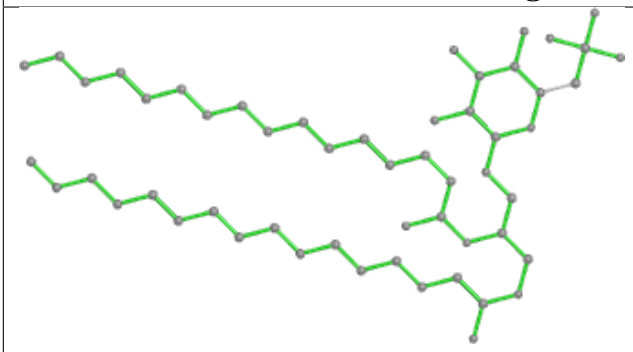


Torsions

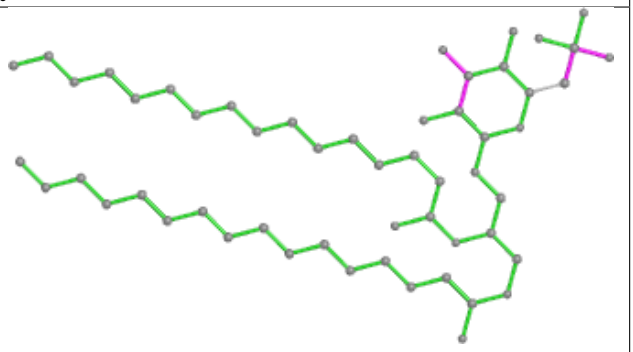


Rings

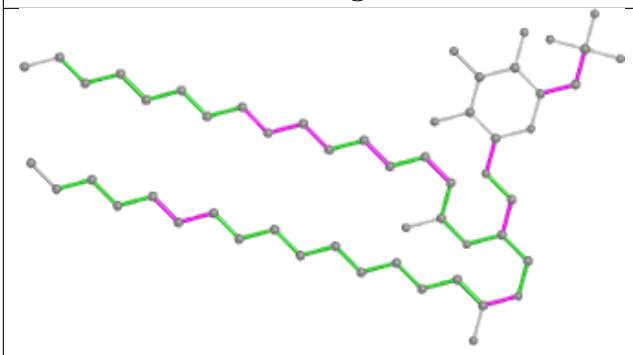
Ligand SQD C 526



Bond lengths



Bond angles



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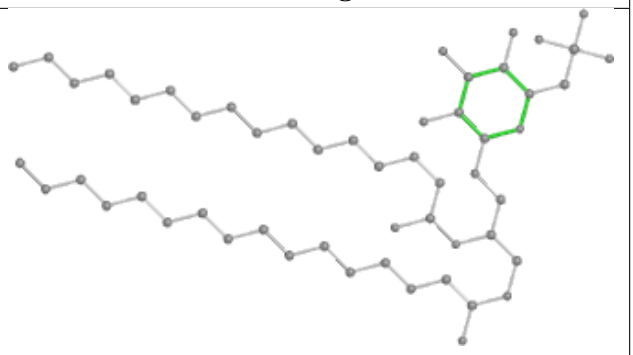
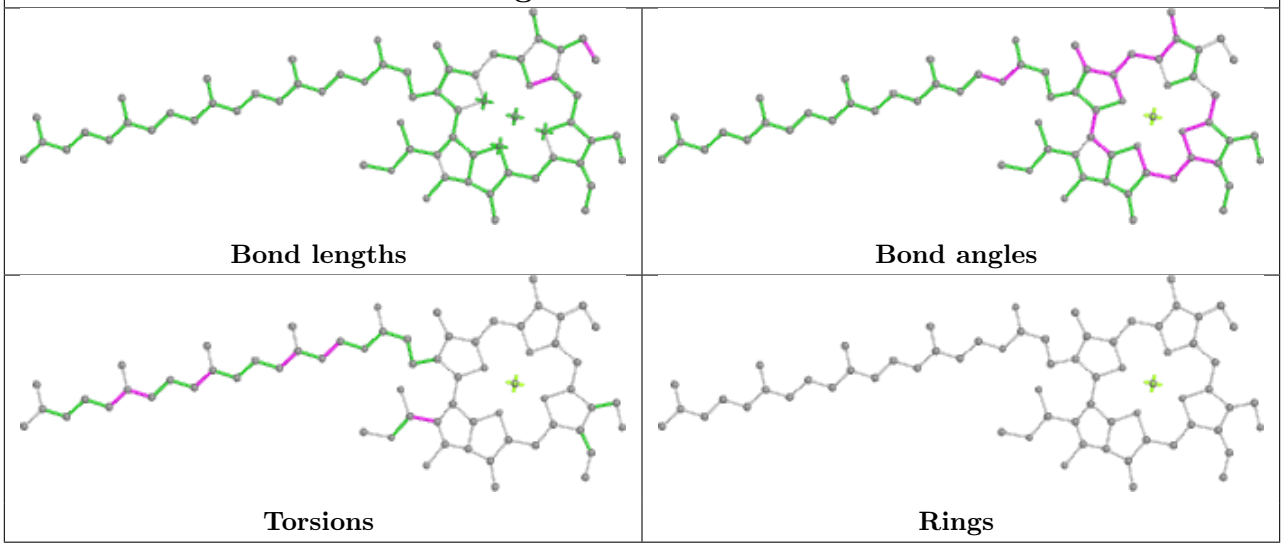
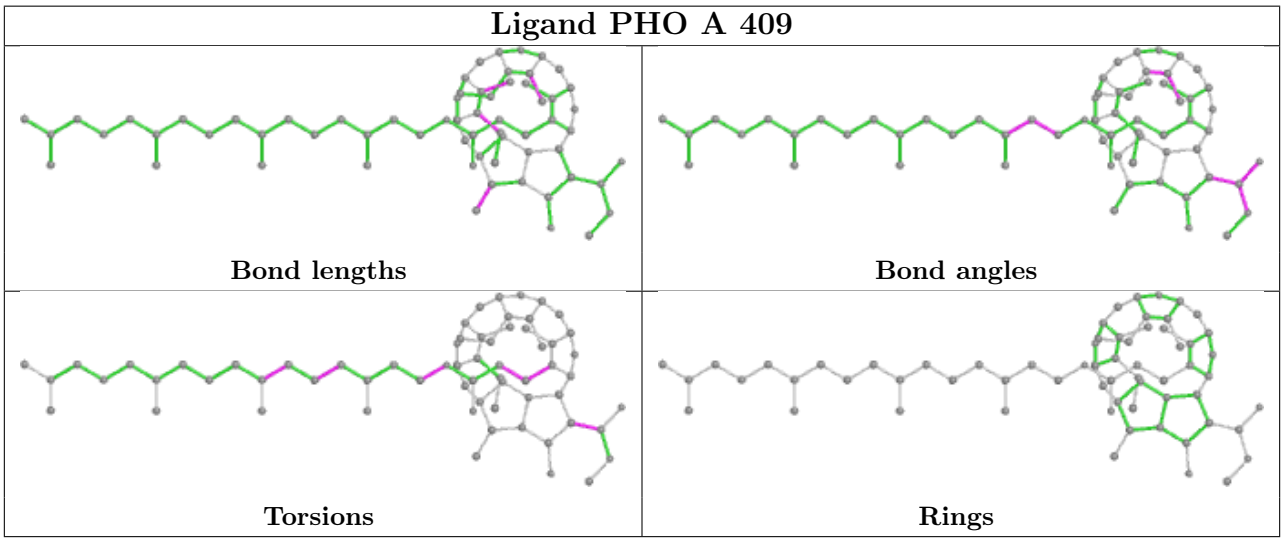


Rings

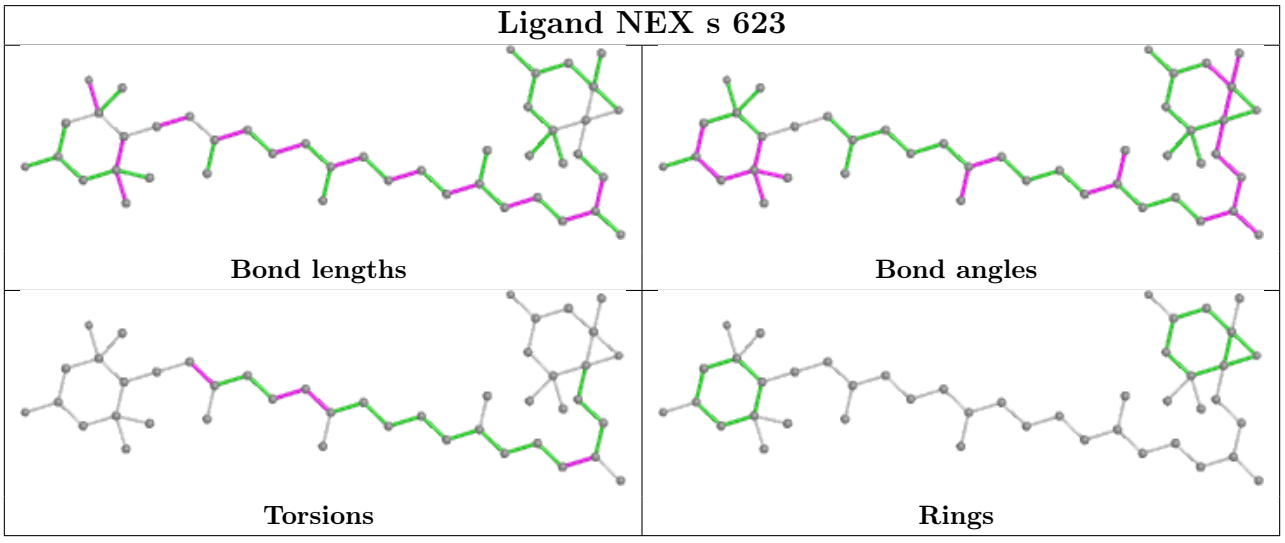
Ligand CHL G1 609



Ligand PHO A 409



Ligand NEX s 623



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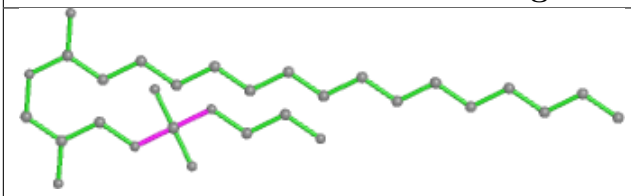
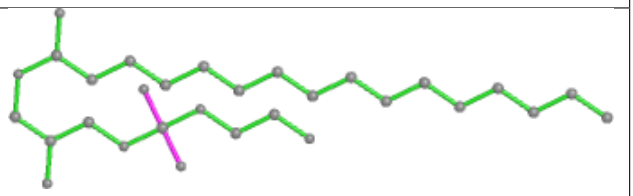
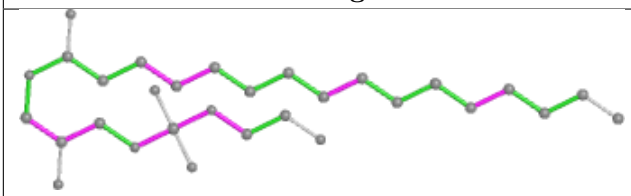


Bond lengths



Bond angles



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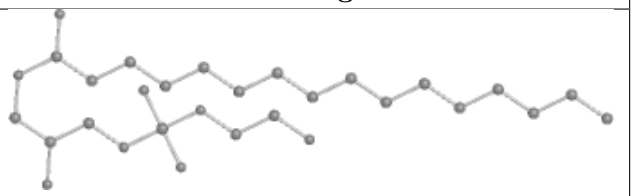
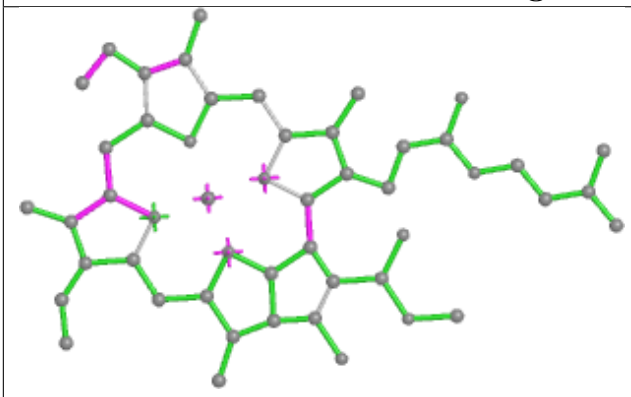


Rings

Ligand CLA S 605



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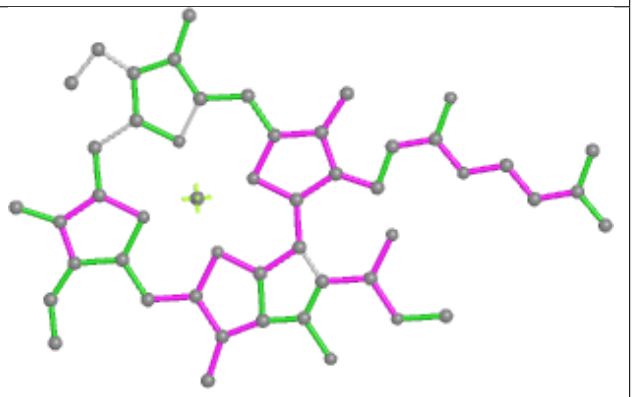
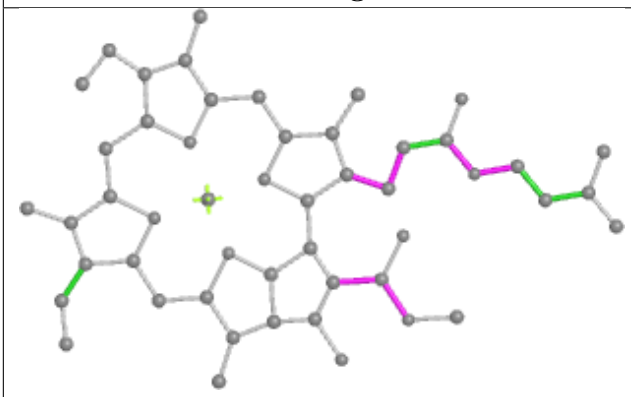


Bond angles



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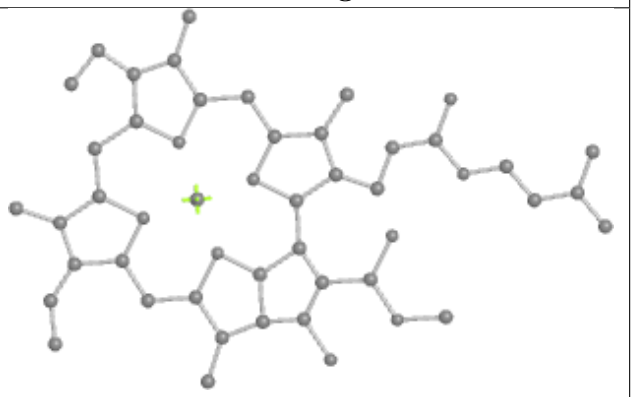
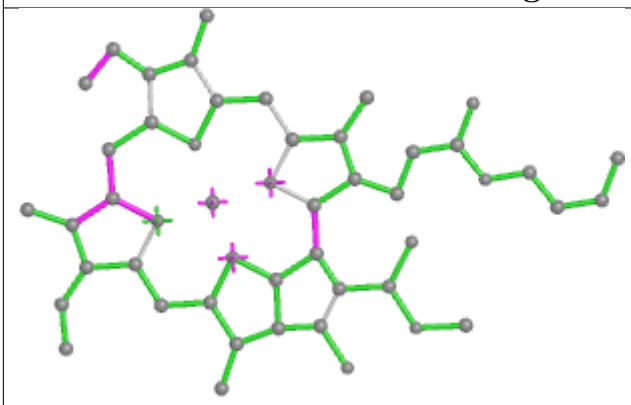


Rings

Ligand CLA G 614



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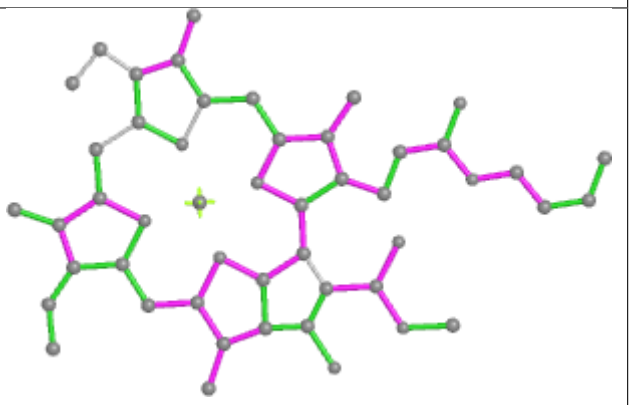
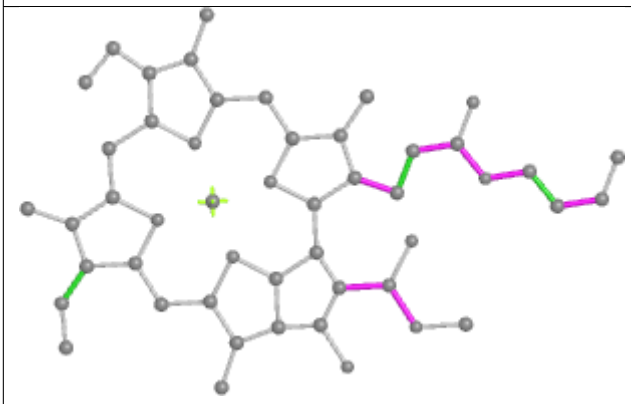


Bond angles



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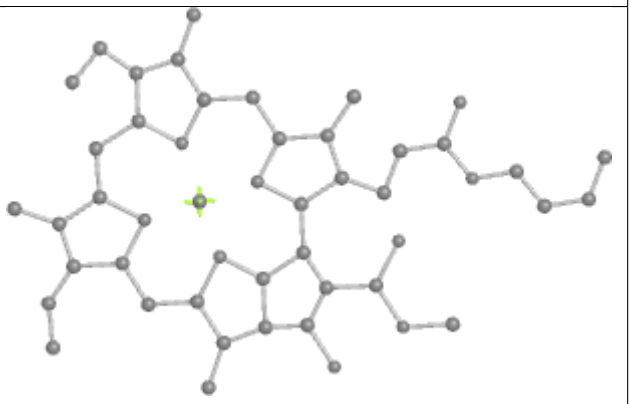
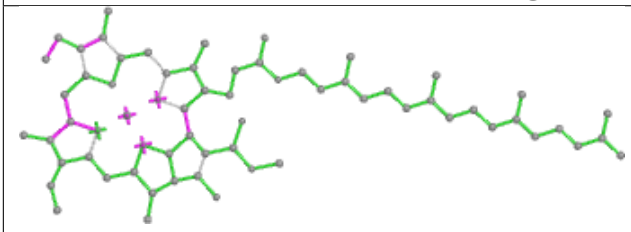


Rings

Ligand CLA C 505



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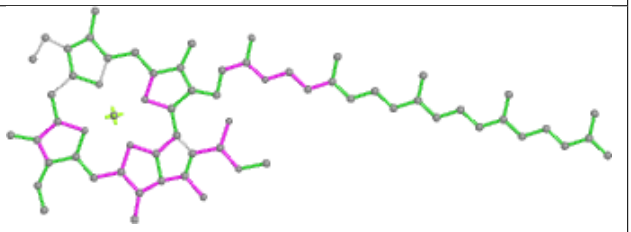
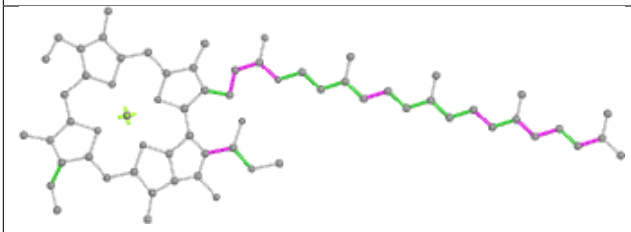


Bond angles



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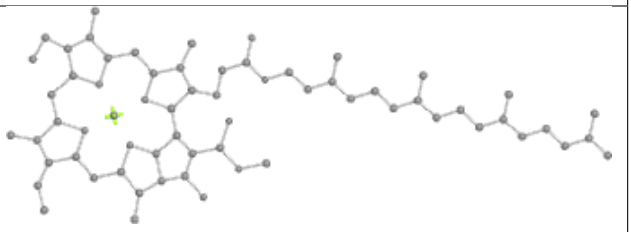
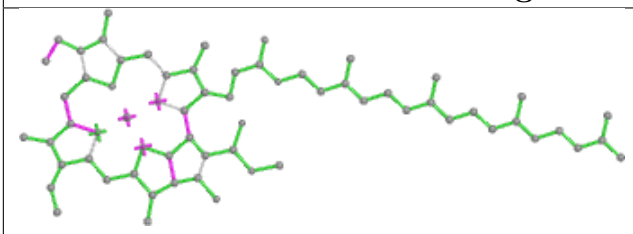


Rings

Ligand CLA B1 607



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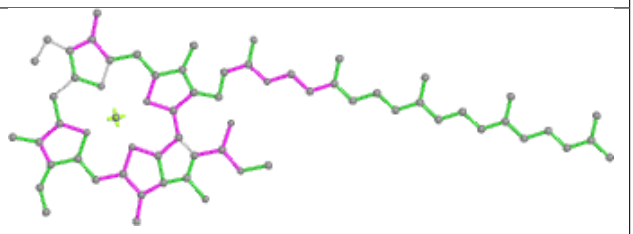
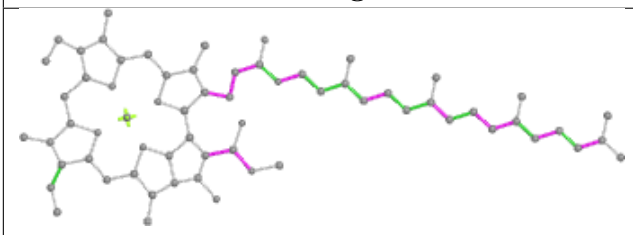


Bond angles



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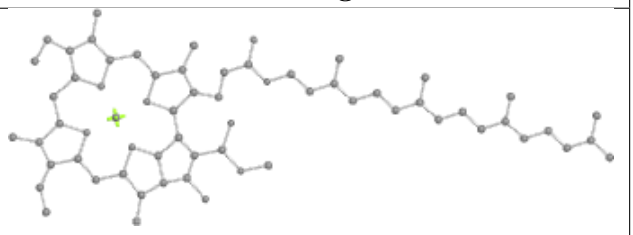
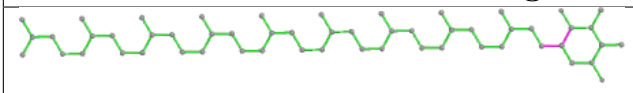


Rings

Ligand PL9 d1 405



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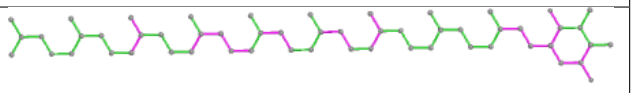
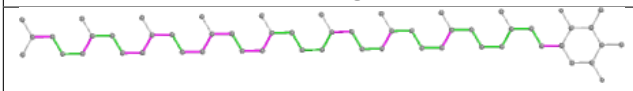


Bond angles



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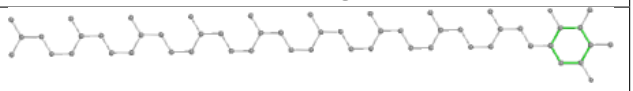
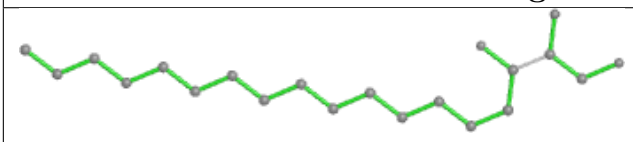


Rings

Ligand SPH y 625



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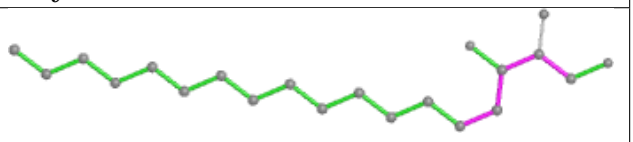
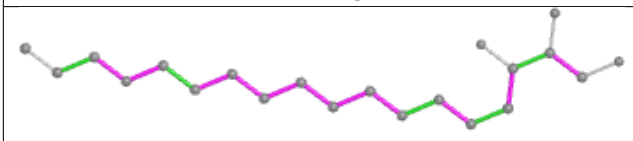


Bond angles



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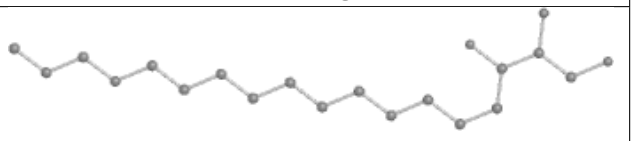
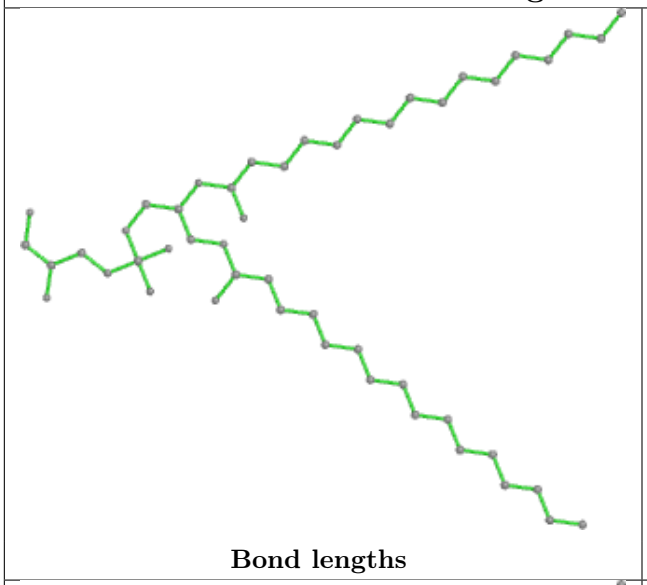


Rings

Ligand LHG d 409



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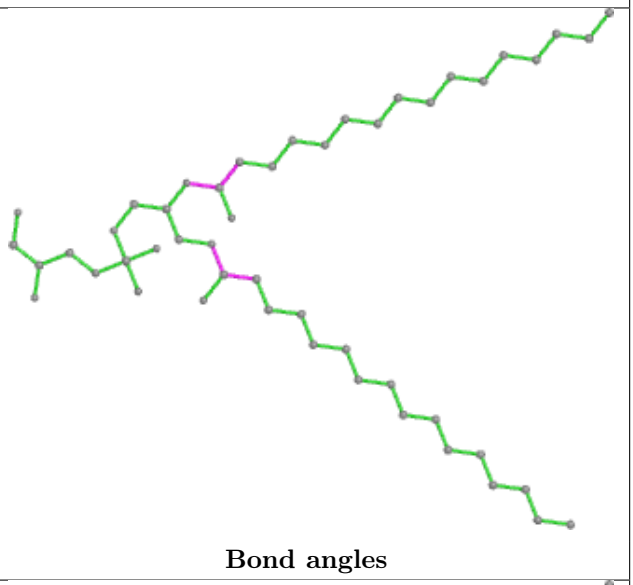
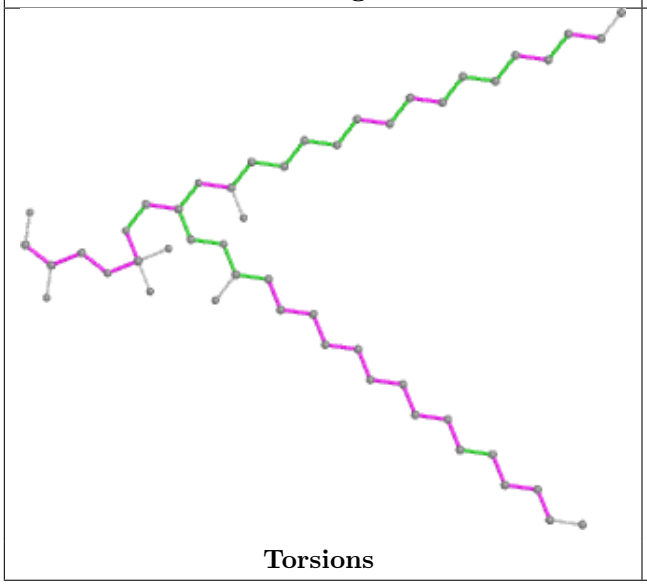


Bond angles



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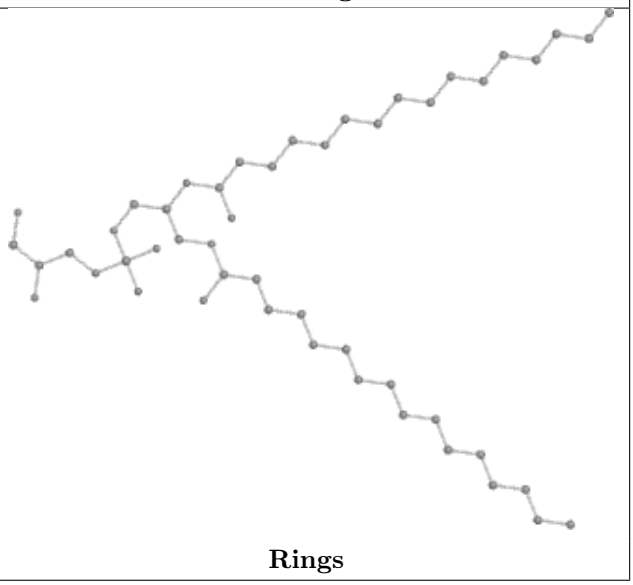
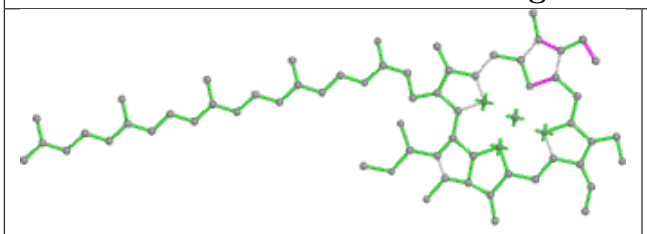


Rings

Ligand CHL g 609



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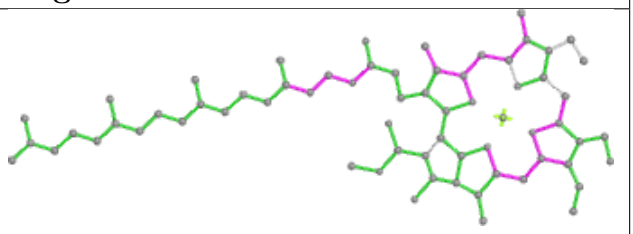
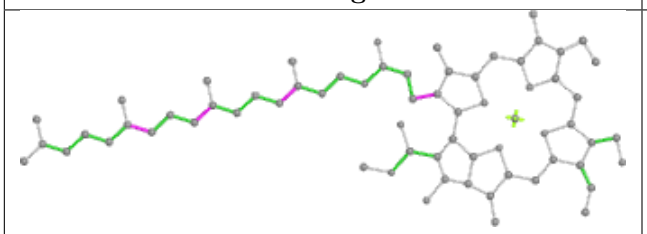


Bond angles



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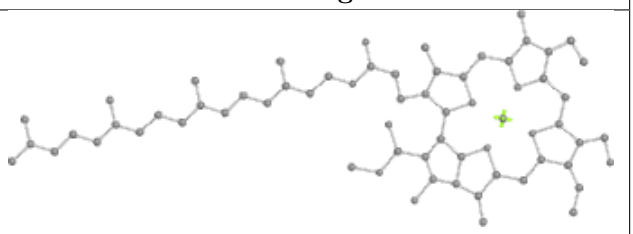
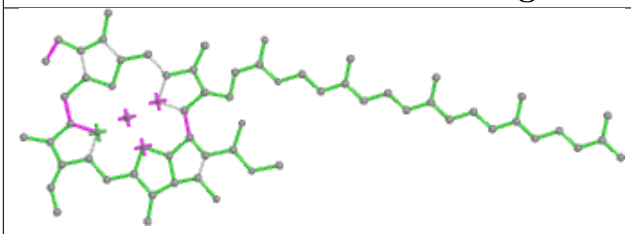


Rings

Ligand CLA b1 608



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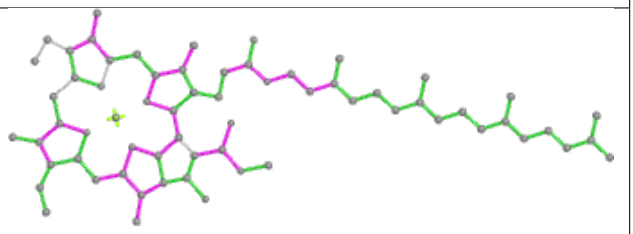
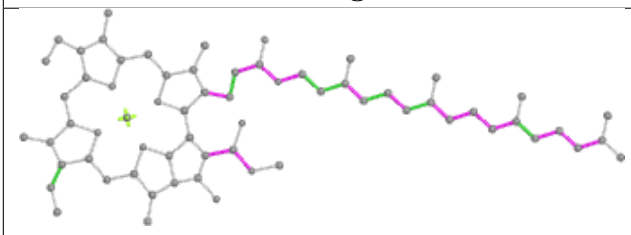


Bond angles



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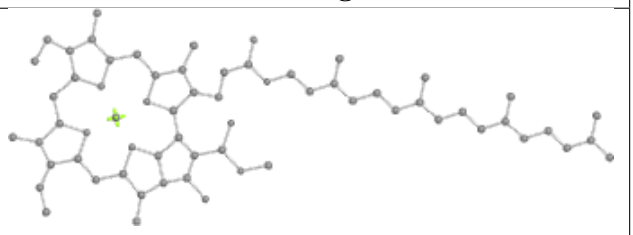
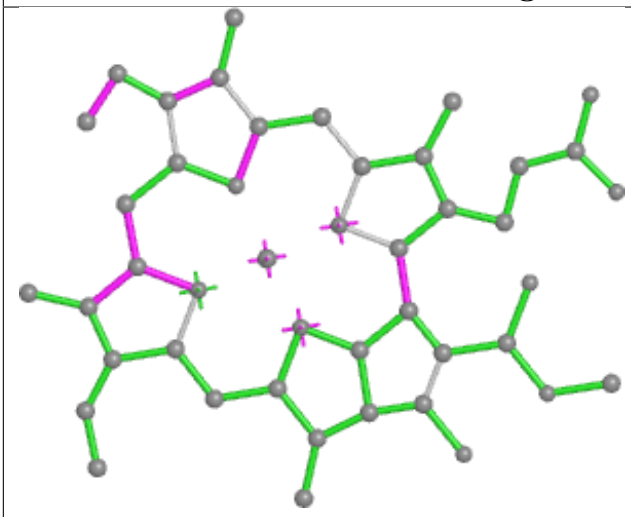


Rings

Ligand CLA n1 612



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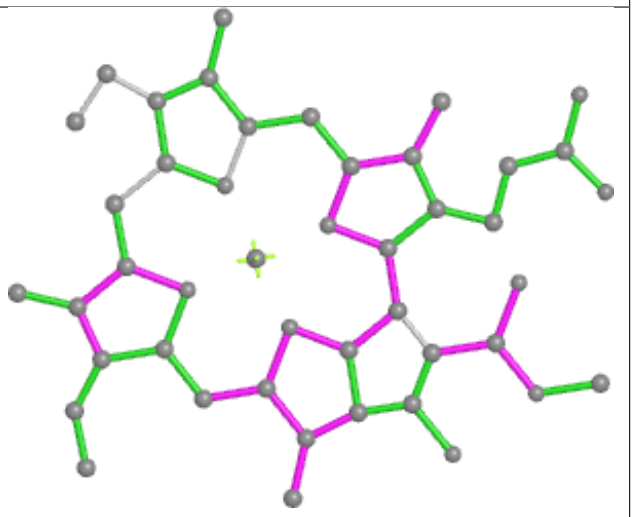
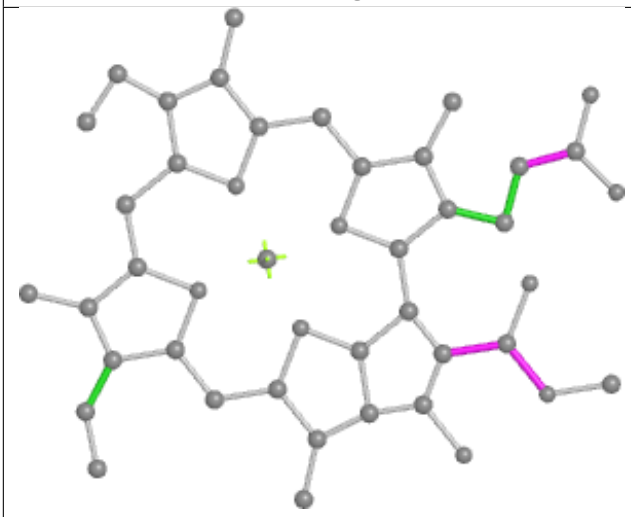
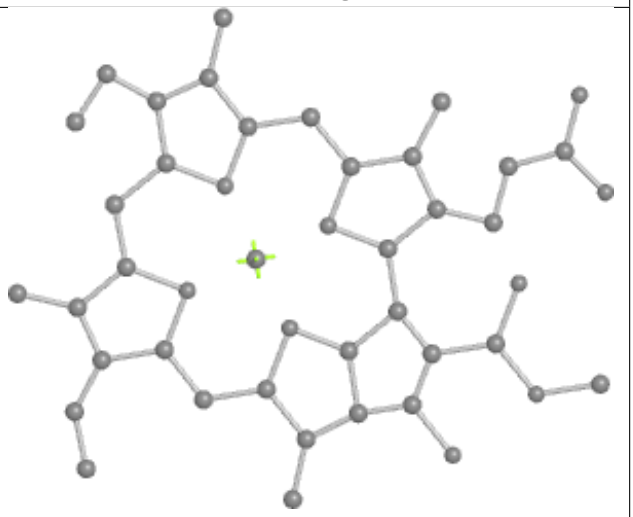


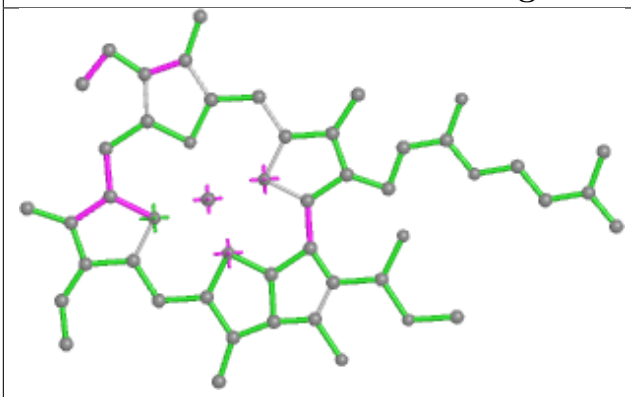
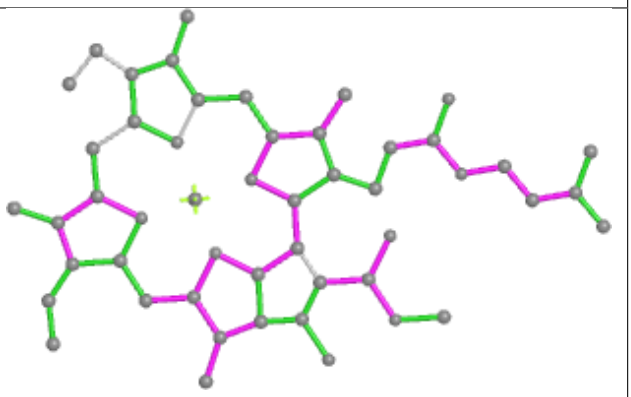
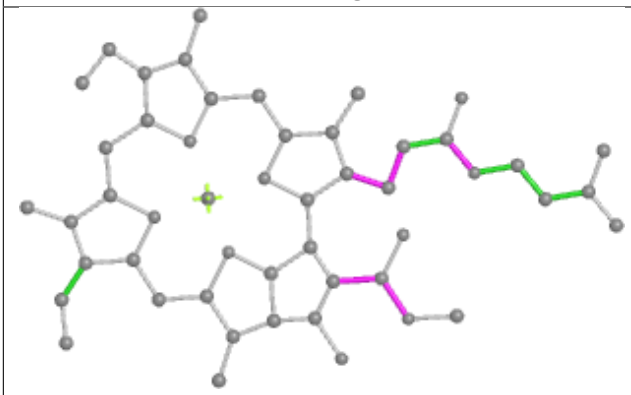
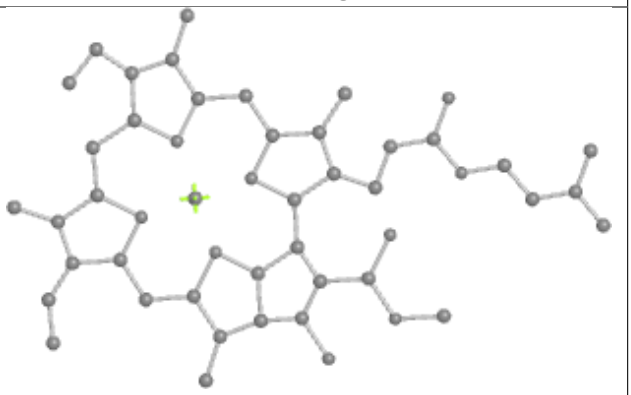
Bond angles

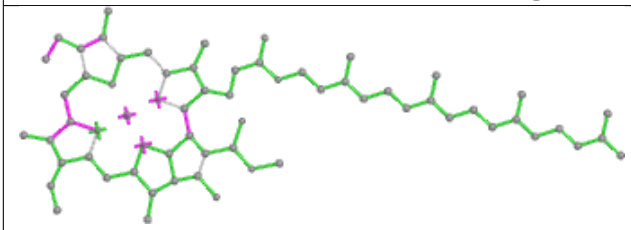
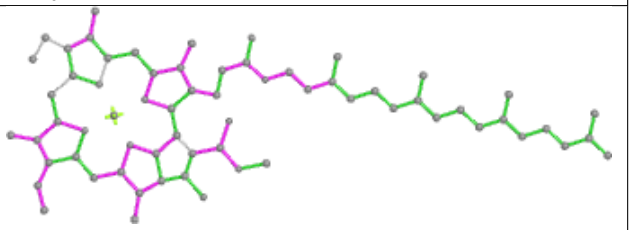
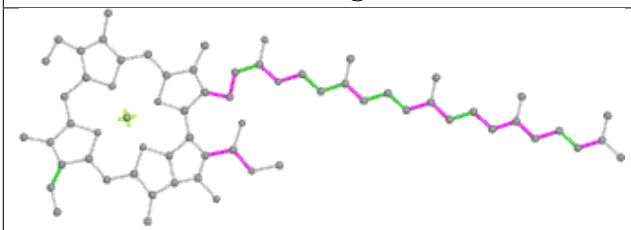
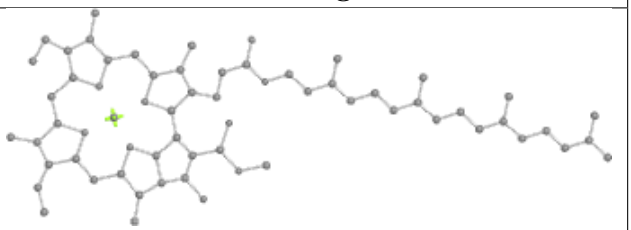


Torsions

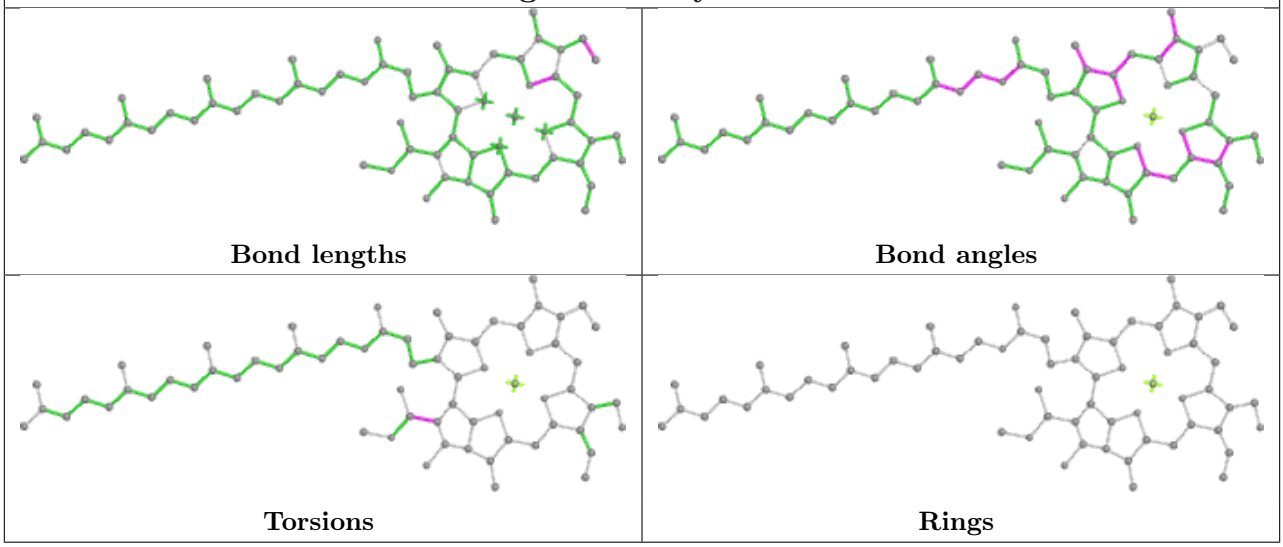


Rings

Ligand CLA S1 617	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA y 602	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CHL y1 601



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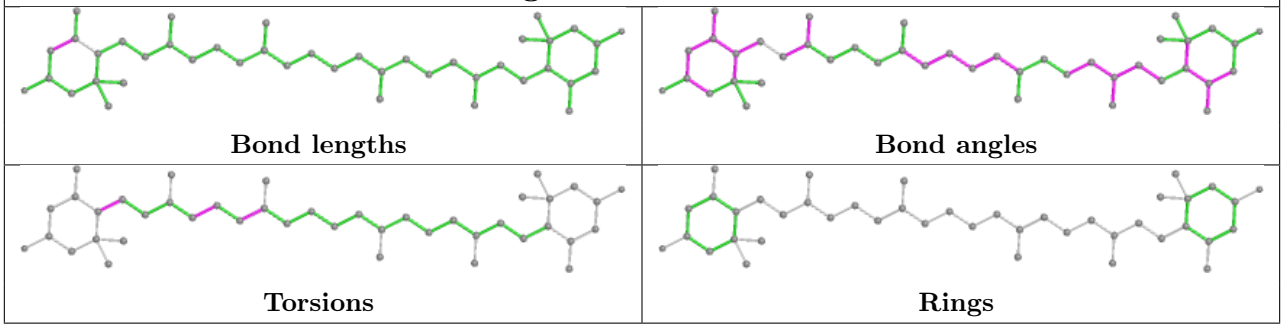

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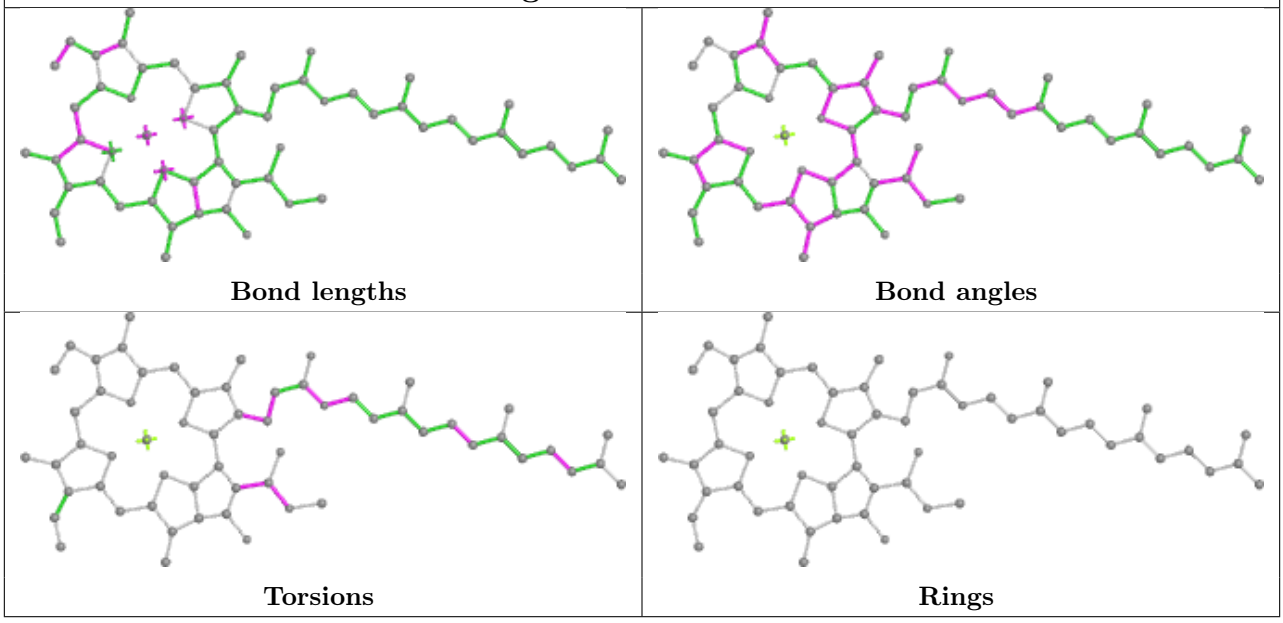

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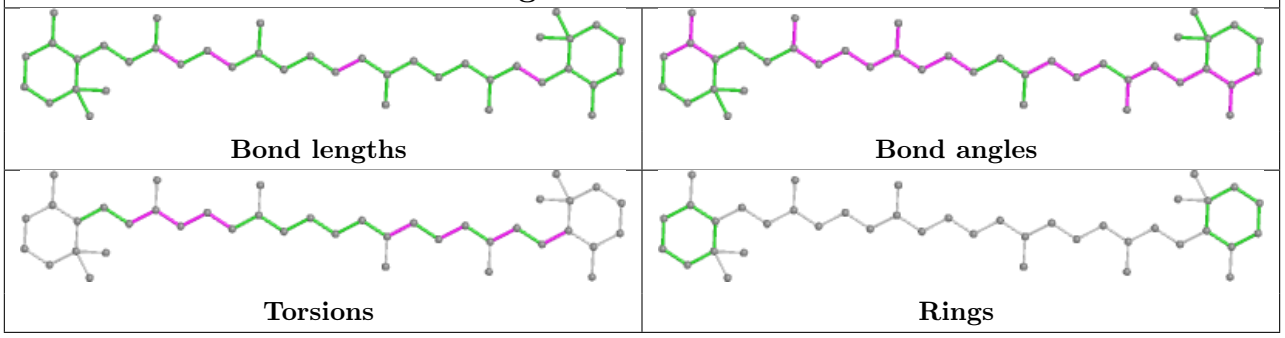

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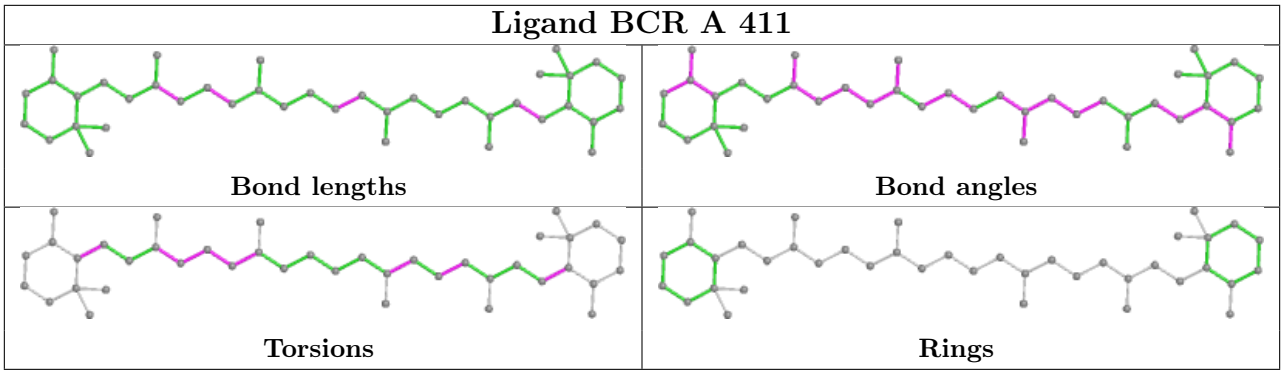

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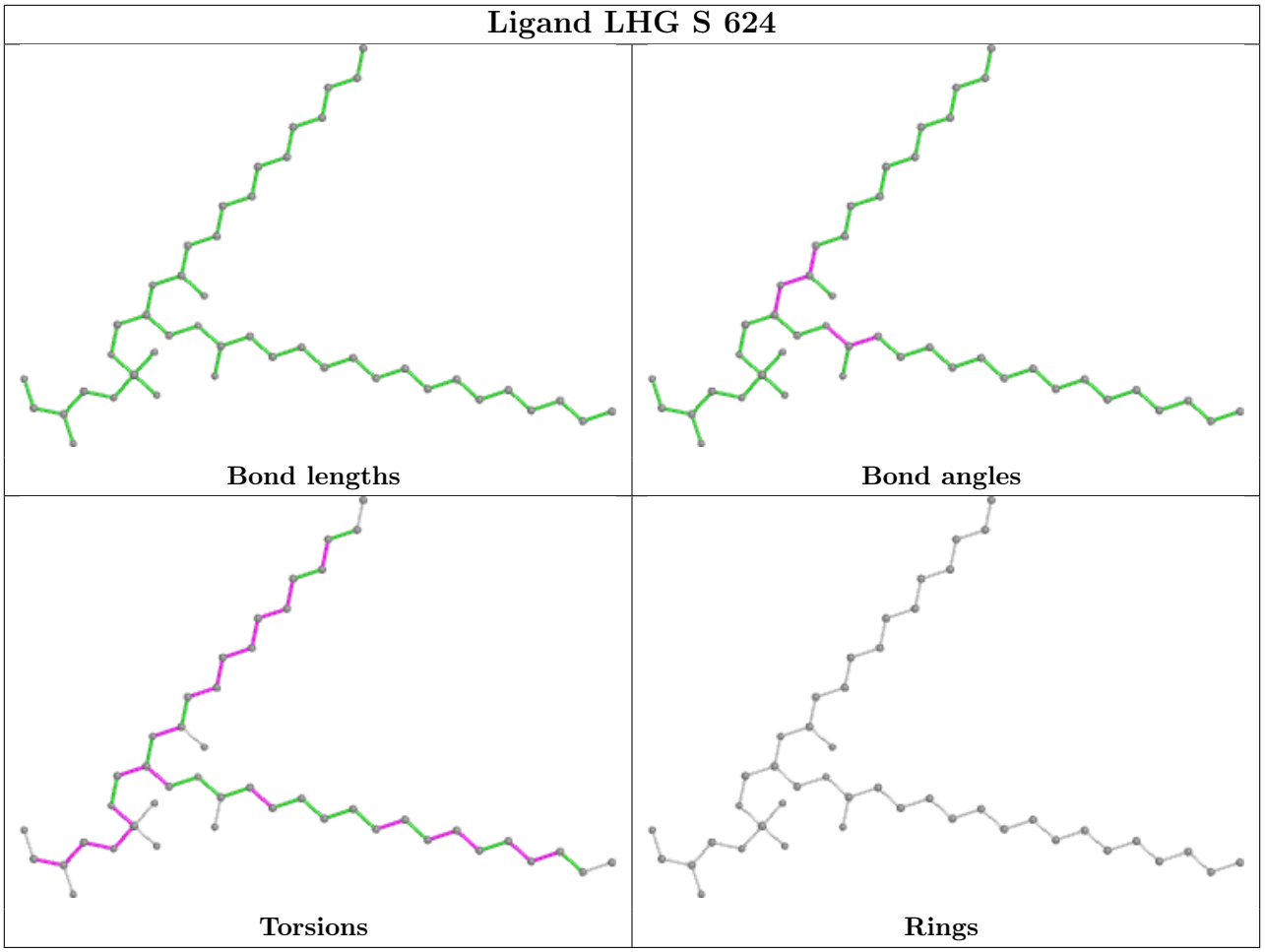
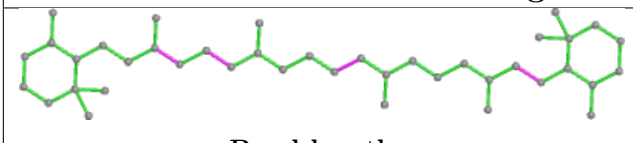
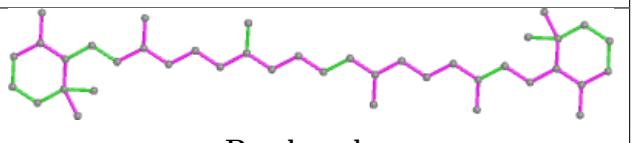


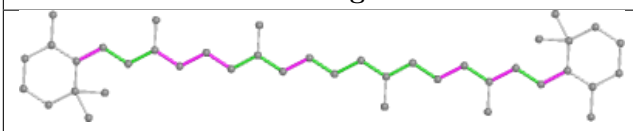
Ligand BCR c 514



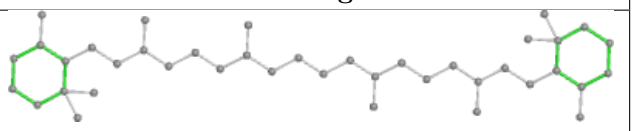
Bond lengths



Bond angles

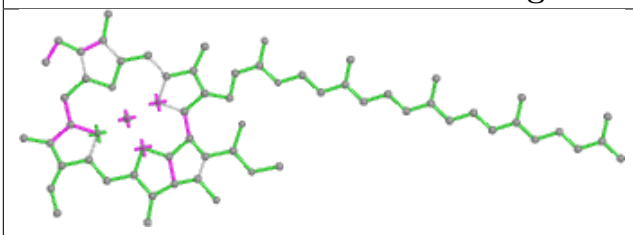


Torsions

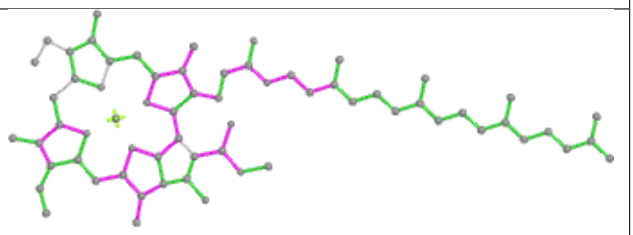


Rings

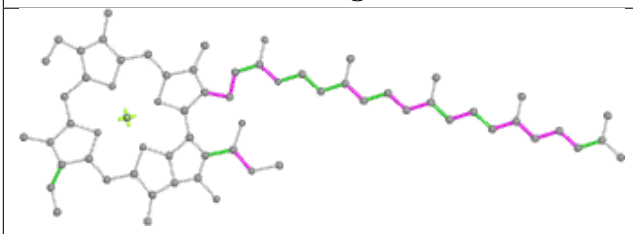
Ligand CLA b 604



Bond lengths



Bond angles



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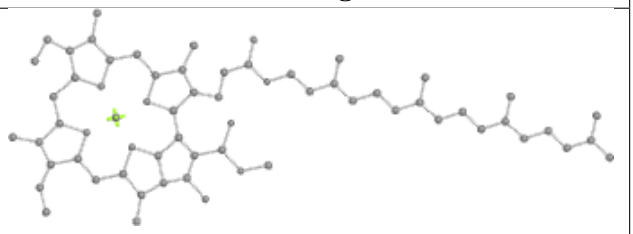
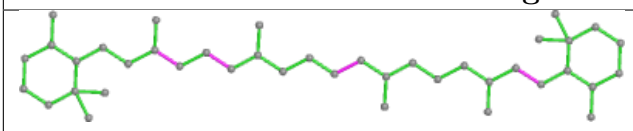
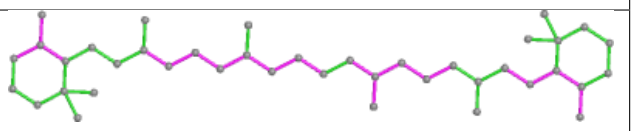


Rings

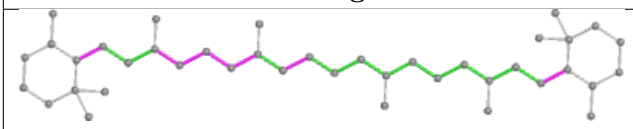
Ligand BCR C 514



Bond lengths



Bond angles



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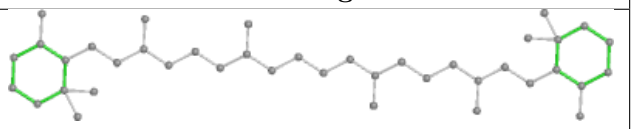
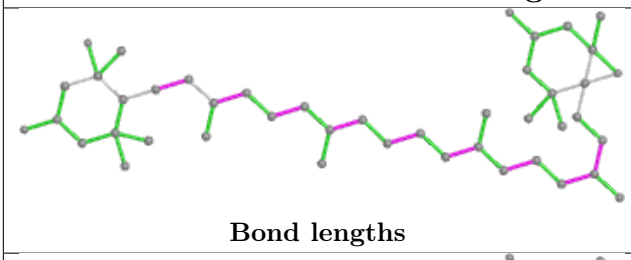
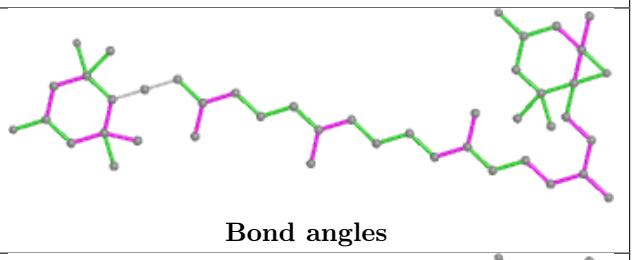


Rings

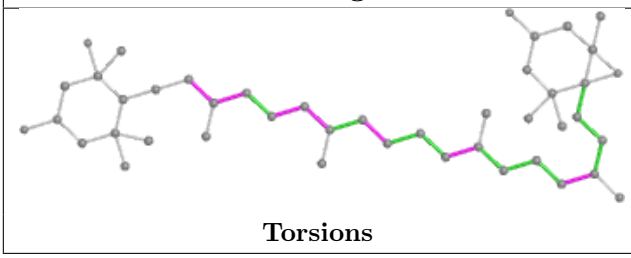
Ligand NEX S 622



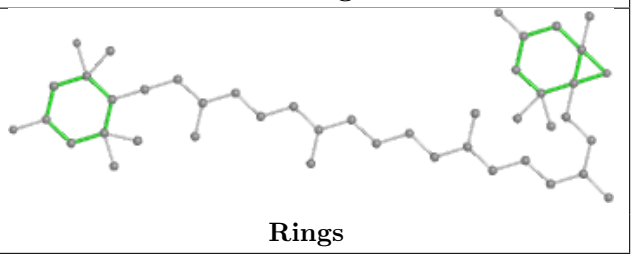
Bond lengths



Bond angles

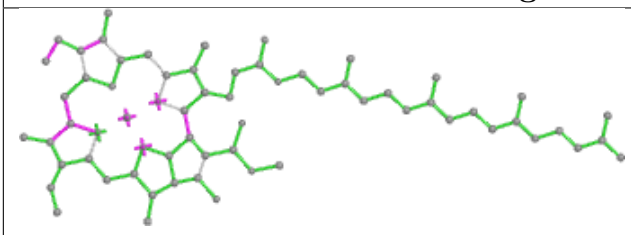


Torsions

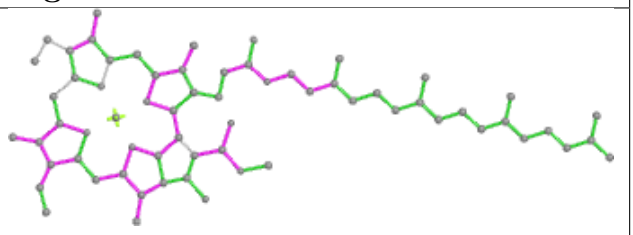


Rings

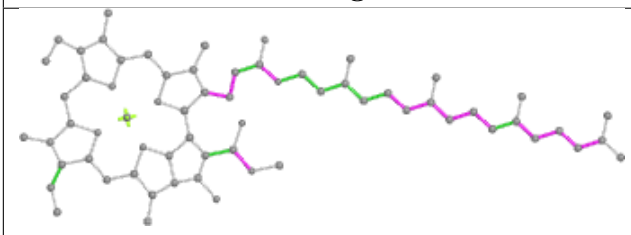
Ligand CLA g1 602



Bond lengths



Bond angles



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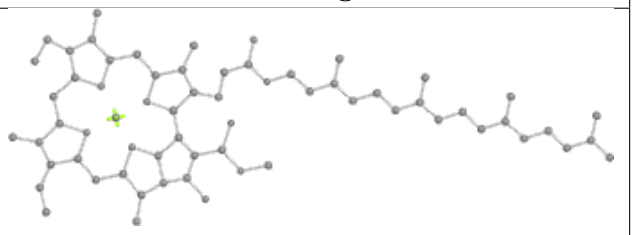
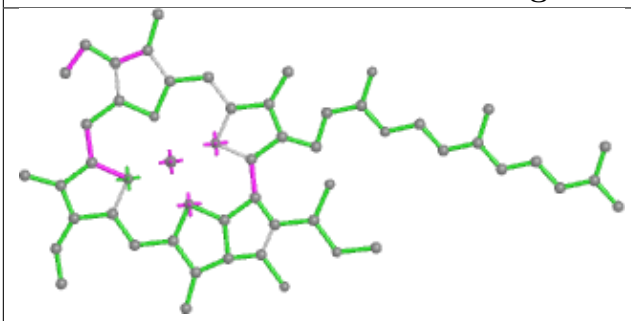
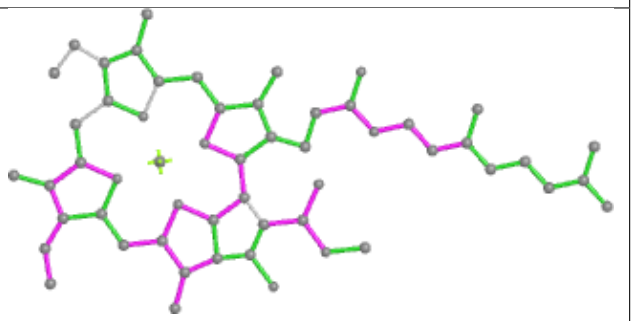


Rings

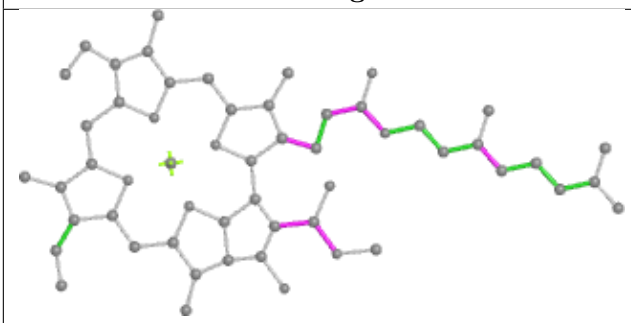
Ligand CLA s 614



Bond lengths



Bond angles



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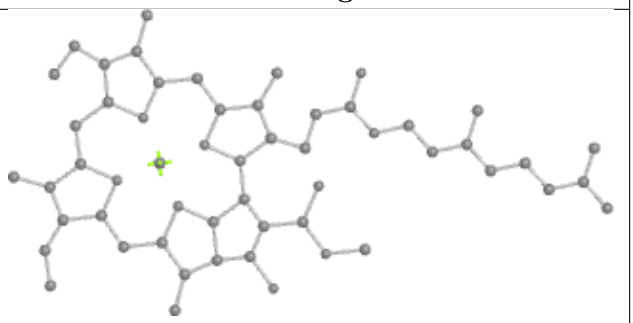
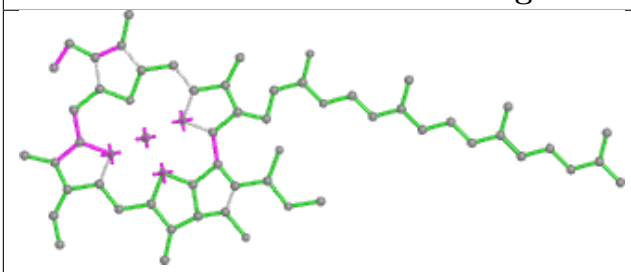
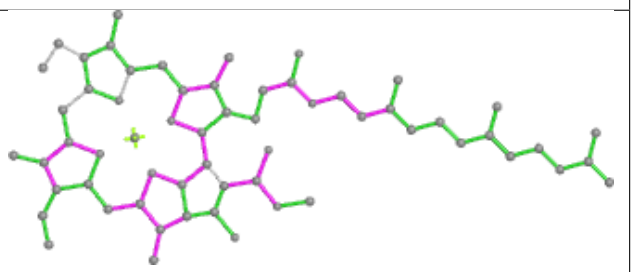


Rings

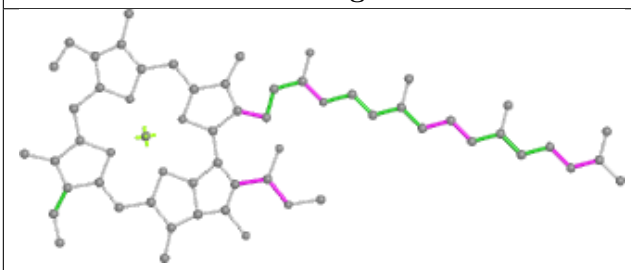
Ligand CLA R1 608



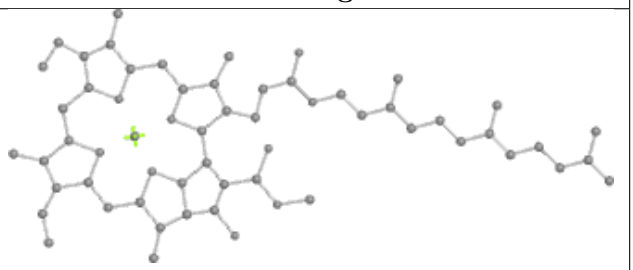
Bond lengths



Bond angles

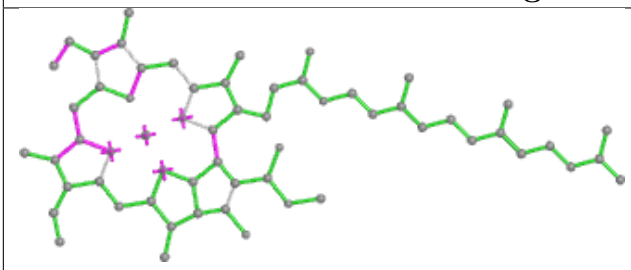


Torsions



Rings

Ligand CLA R 603



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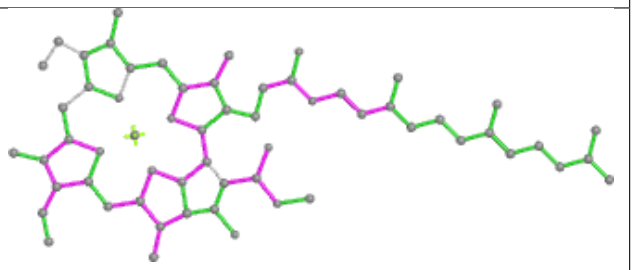
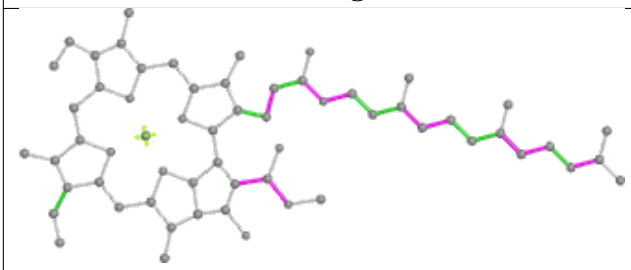
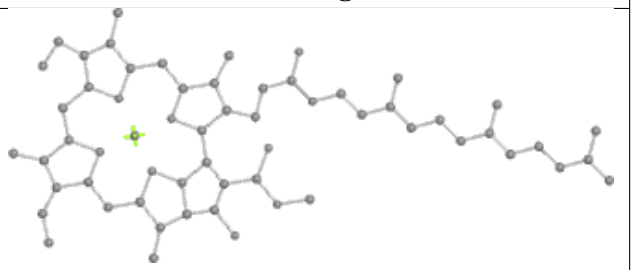


Bond angles

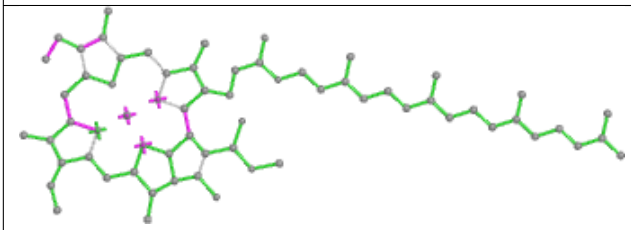


Torsions

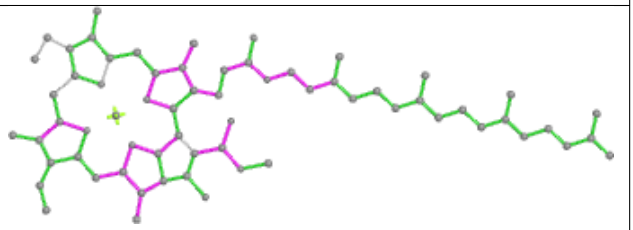


Rings

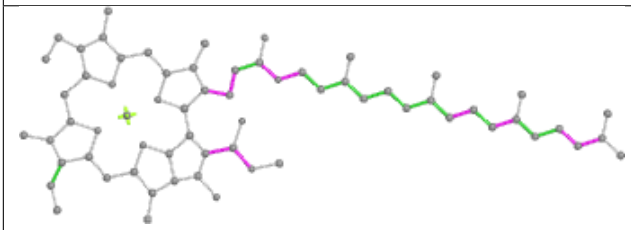
Ligand CLA Y1 610



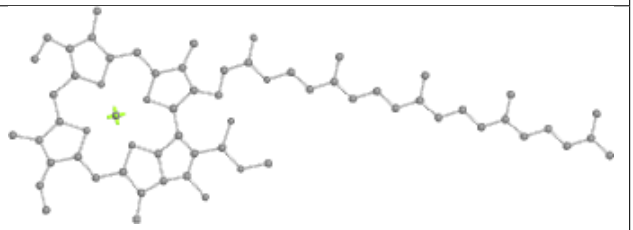
Bond lengths



Bond angles

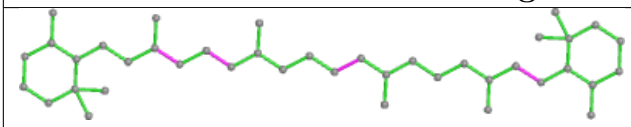


Torsions

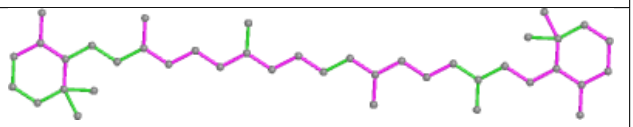


Rings

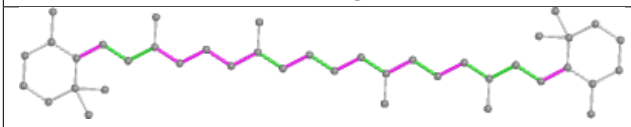
Ligand BCR c1 514



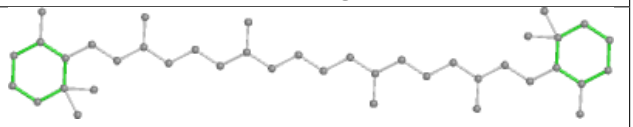
Bond lengths



Bond angles

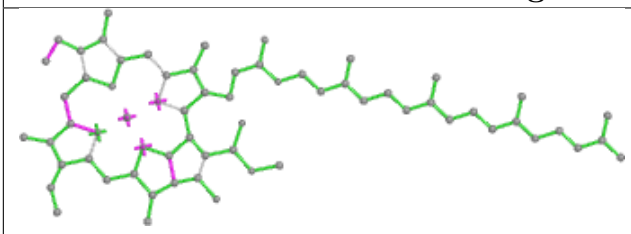


Torsions

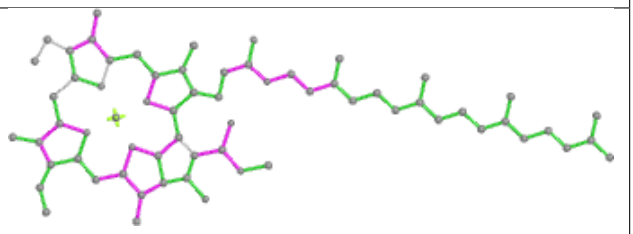


Rings

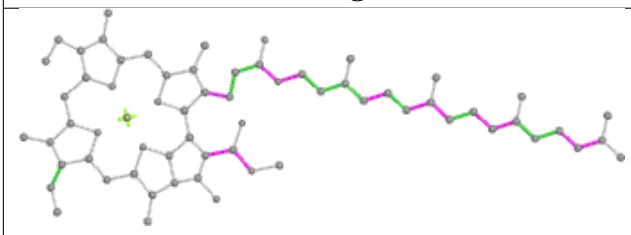
Ligand CLA b 613



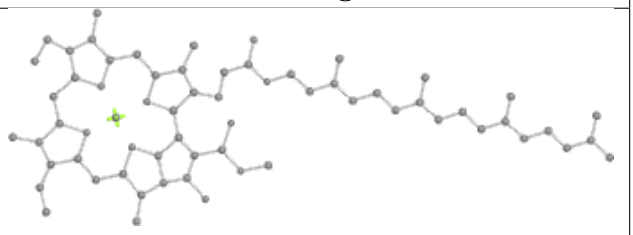
Bond lengths



Bond angles

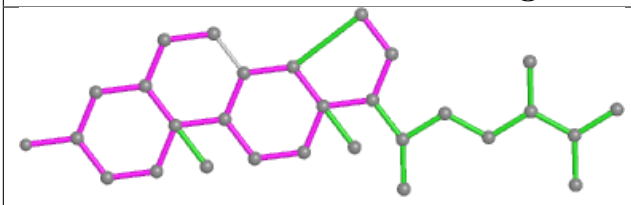


Torsions

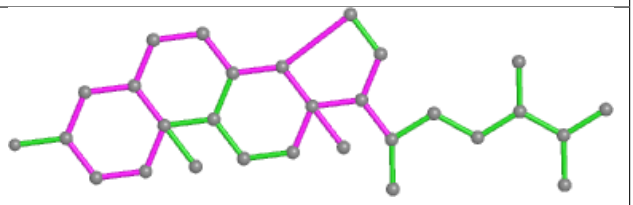


Rings

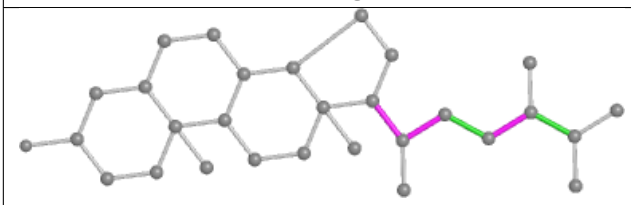
Ligand ERG r1 626



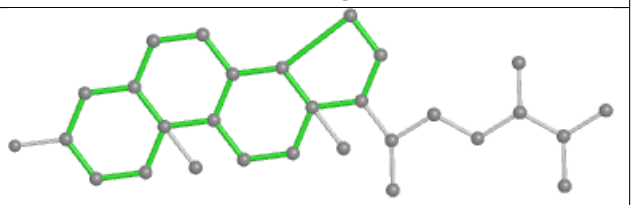
Bond lengths



Bond angles

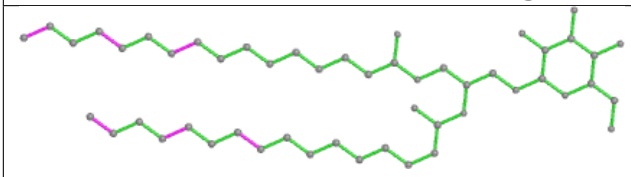


Torsions



Rings

Ligand LMG C 521



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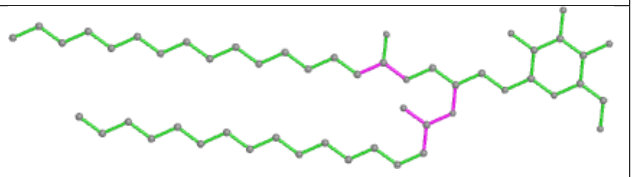
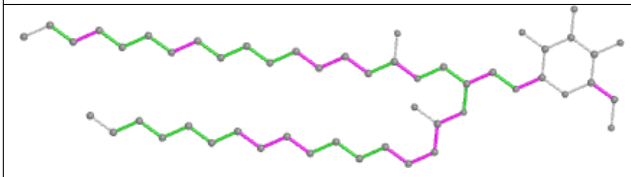


Bond angles



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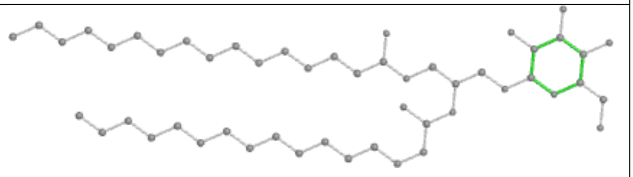
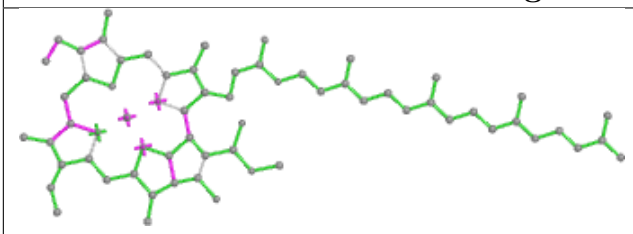


Rings

Ligand CLA C 501



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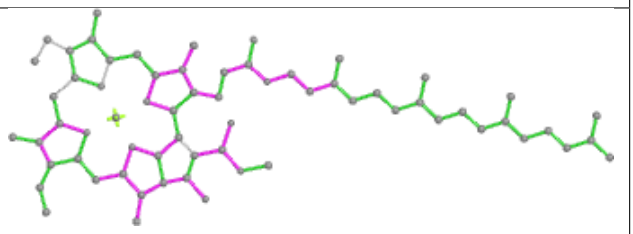
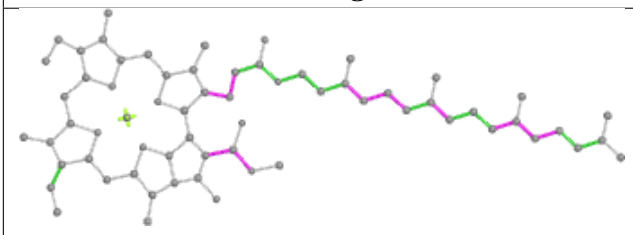


Bond angles



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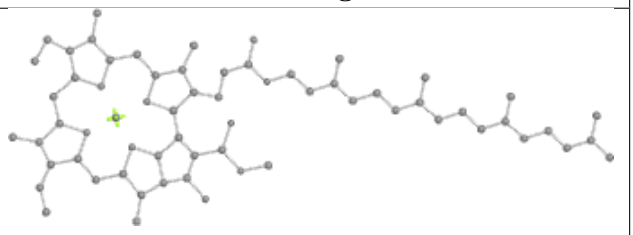
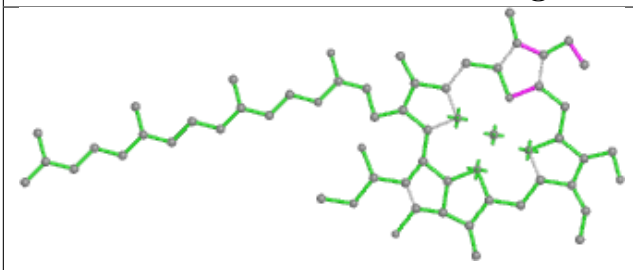


Rings

Ligand CHL s 608



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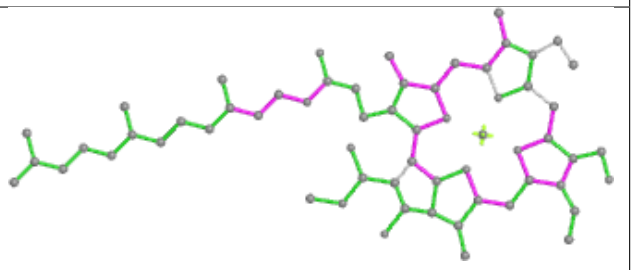
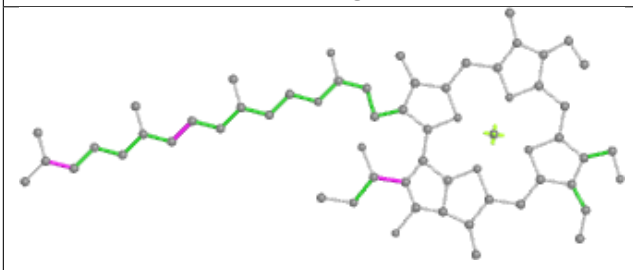


Bond angles



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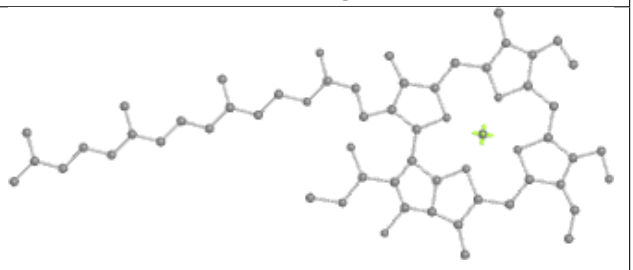
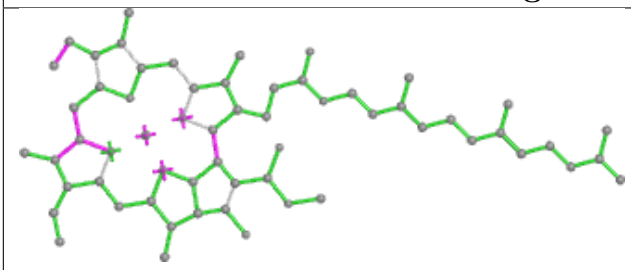


Rings

Ligand CLA R 610



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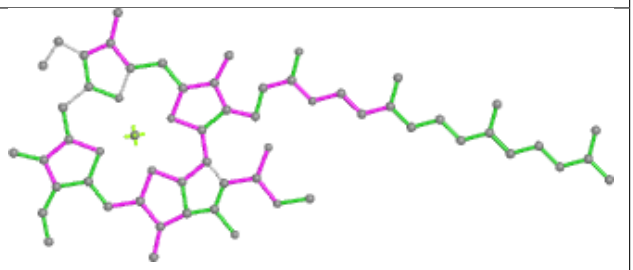
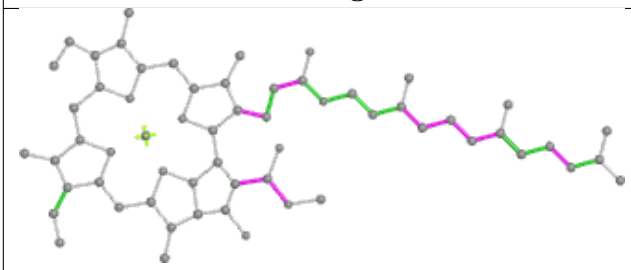


Bond angles



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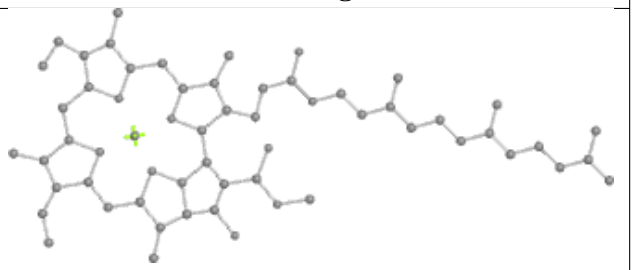
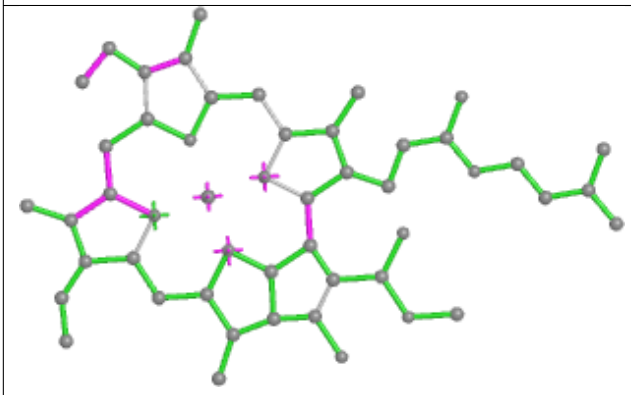


Rings

Ligand CLA y 608



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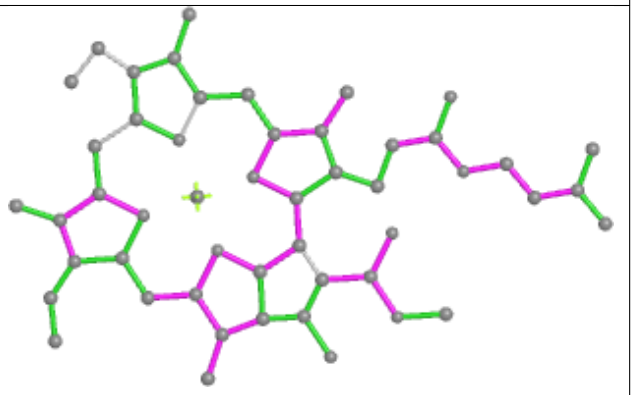
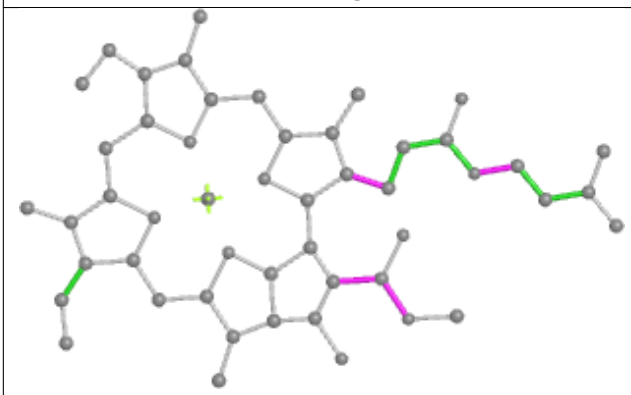


Bond angles



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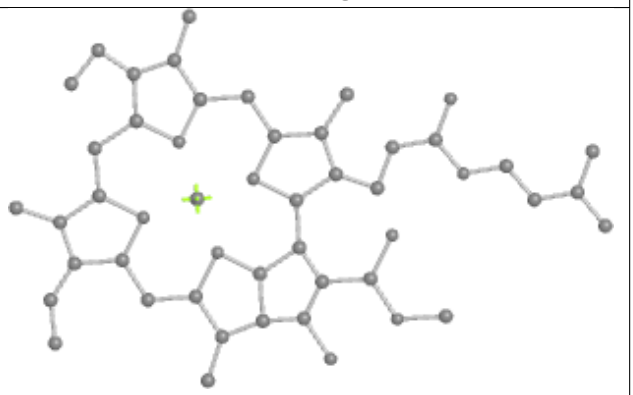
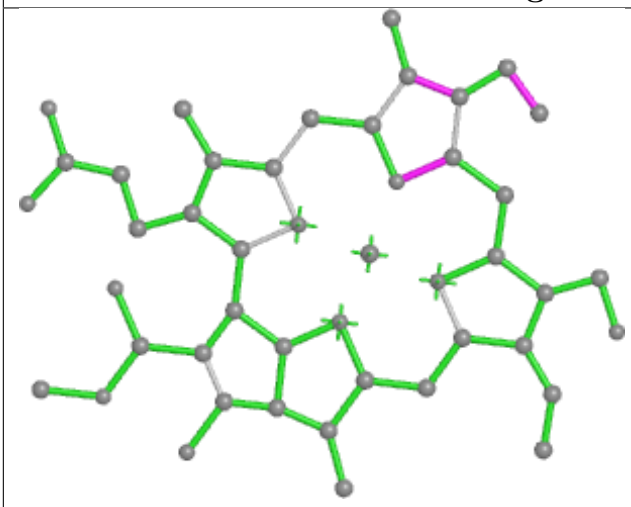


Rings

Ligand CHL S 601



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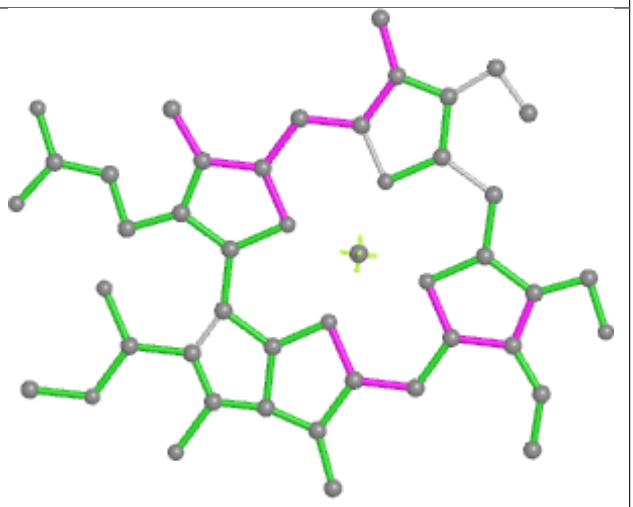
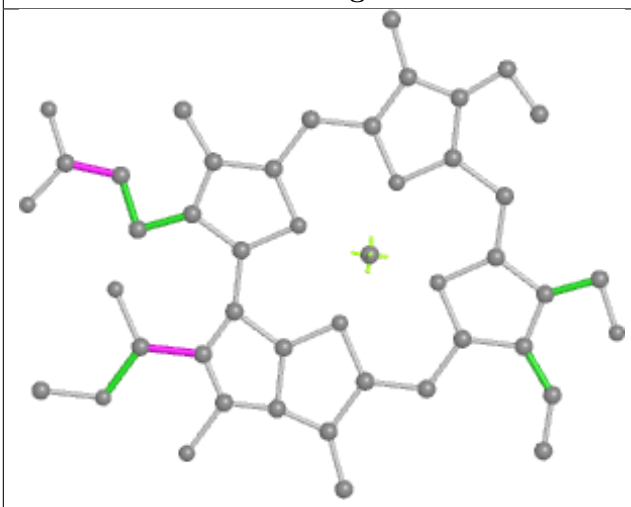


Bond angles



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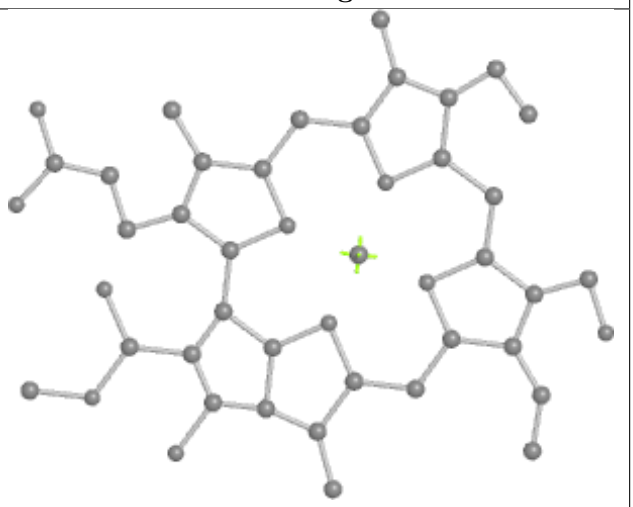
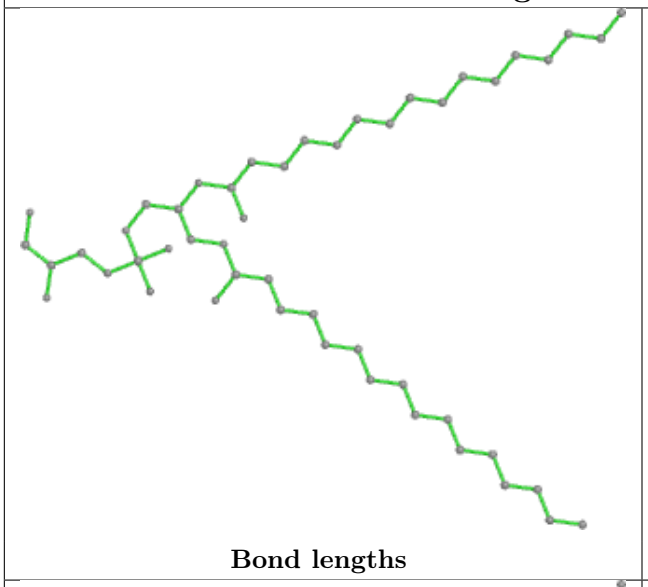


Rings

Ligand LHG G1 624



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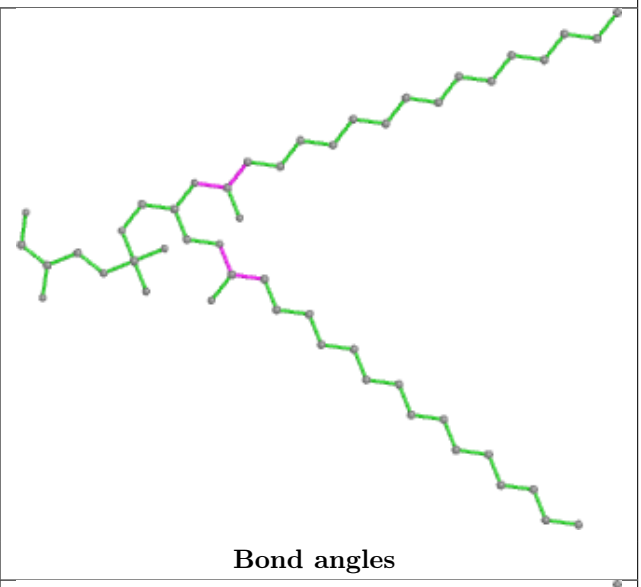
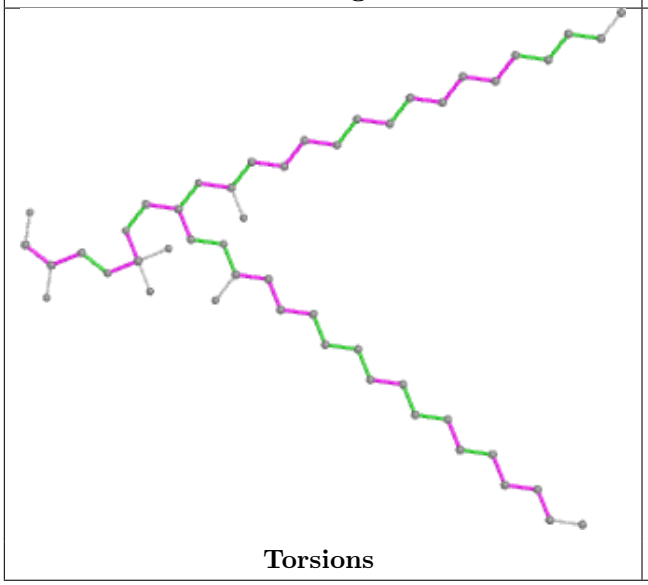


Bond angles



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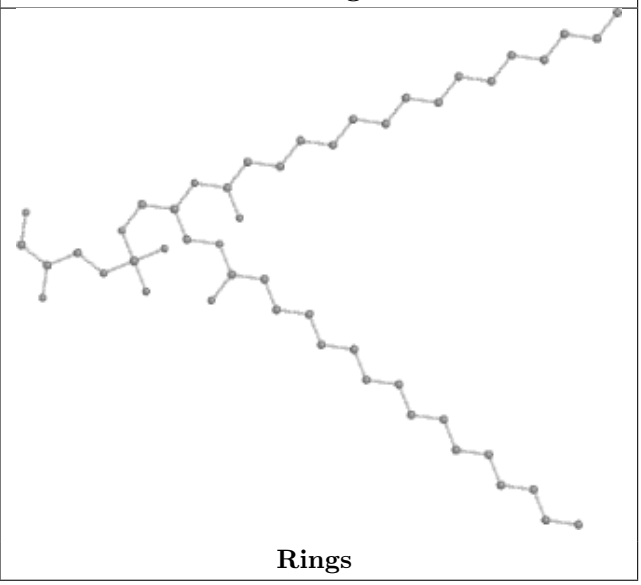
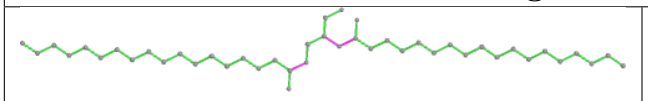


Rings

Ligand DGA c 524



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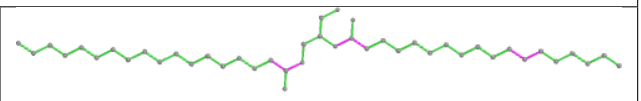
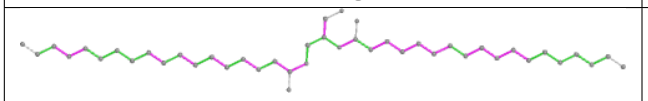


Bond angles



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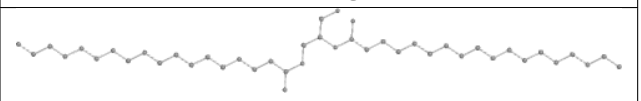
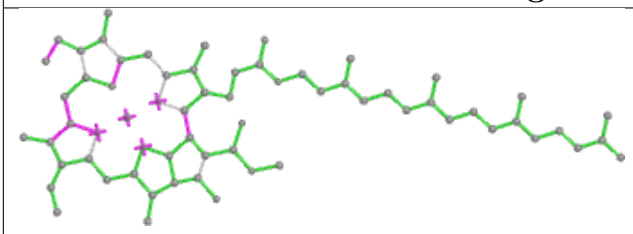


Rings

Ligand CLA n 613



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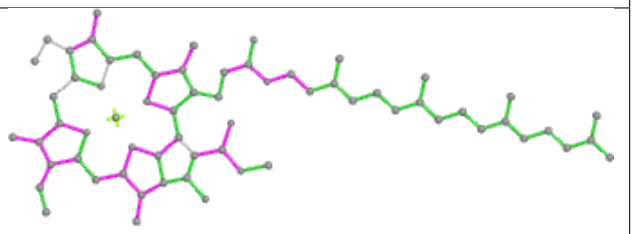
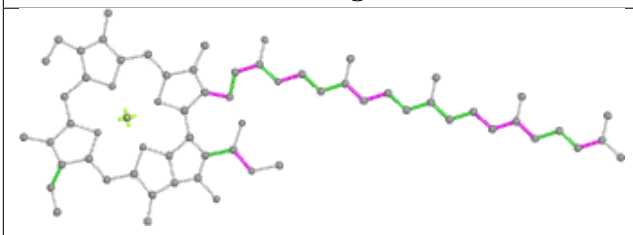


Bond angles



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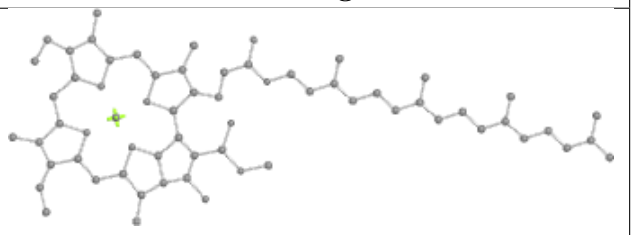
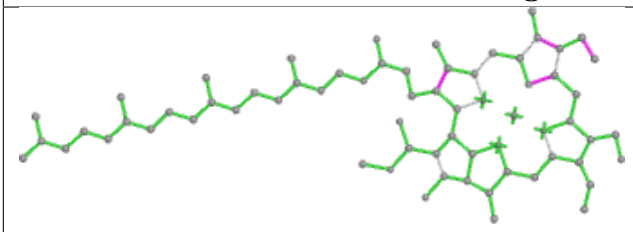


Rings

Ligand CHL G 609



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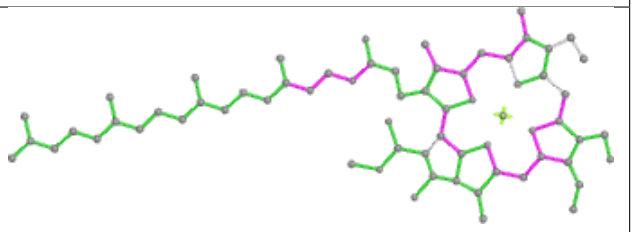

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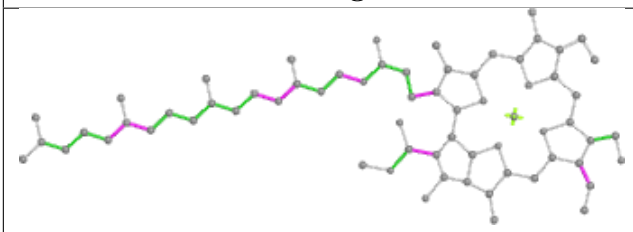

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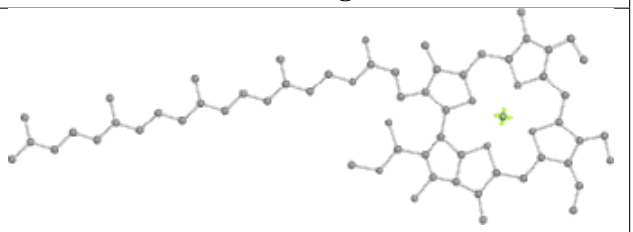
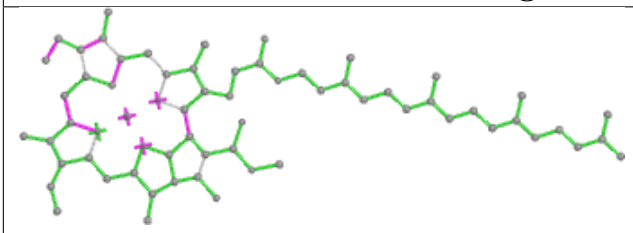


Rings

Ligand CLA b1 613



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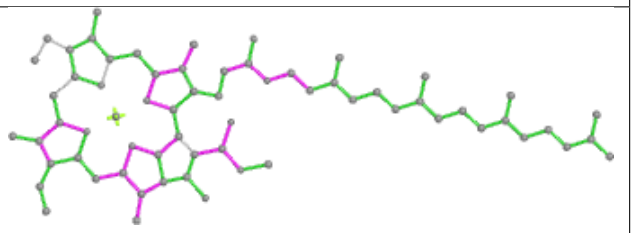
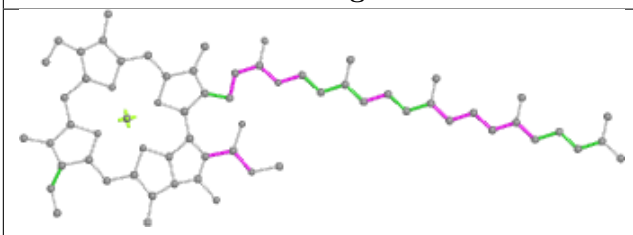


Bond angles



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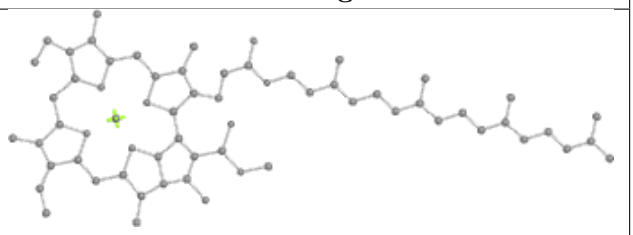
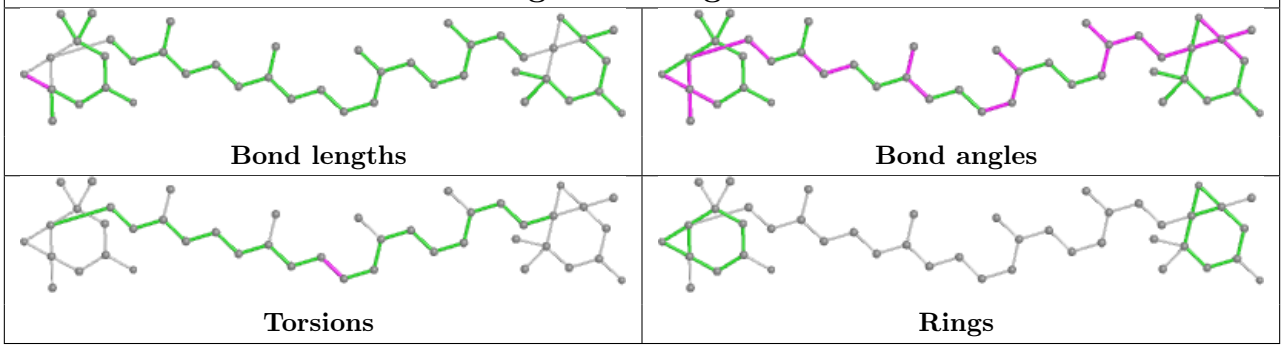
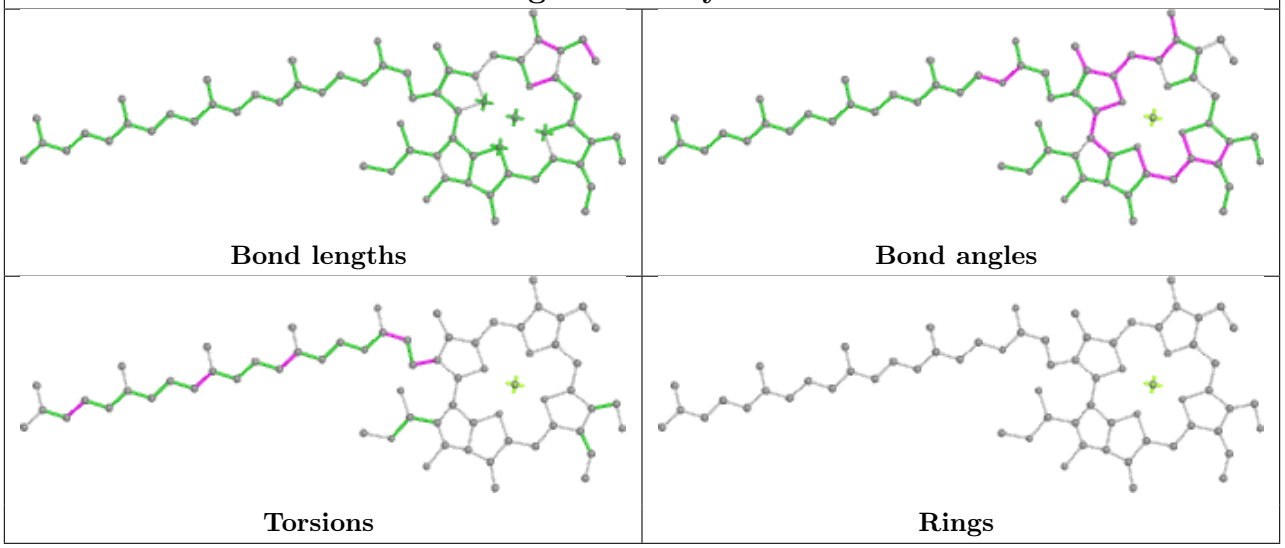


Rings

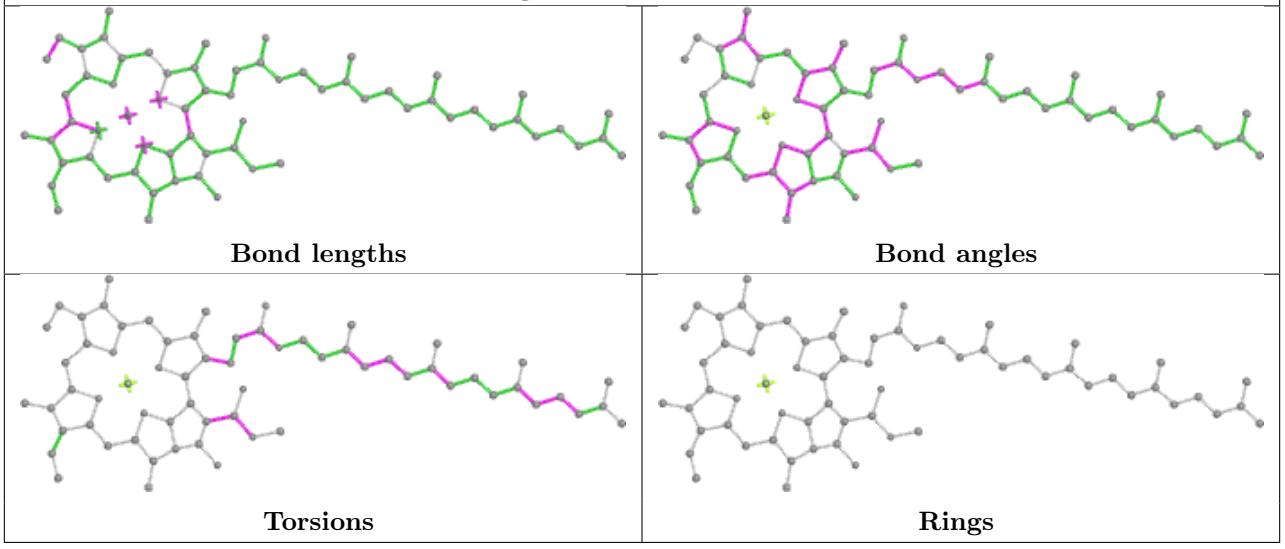
Ligand XAT g 622



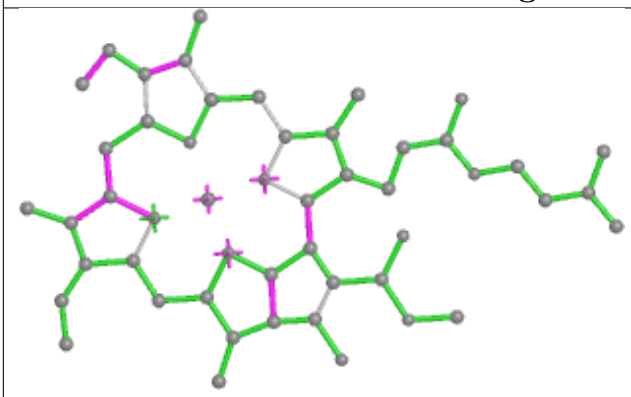
Ligand CHL y 606



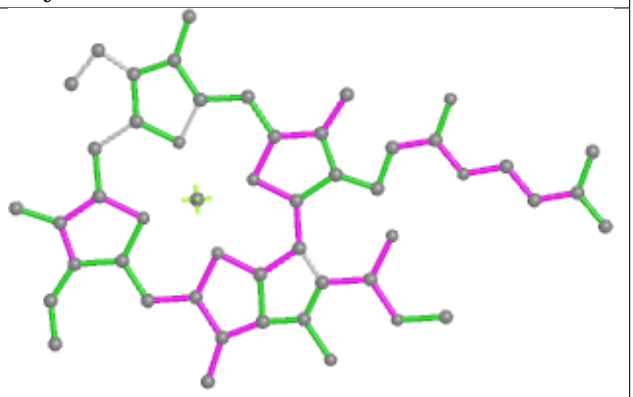
Ligand CLA C1 512



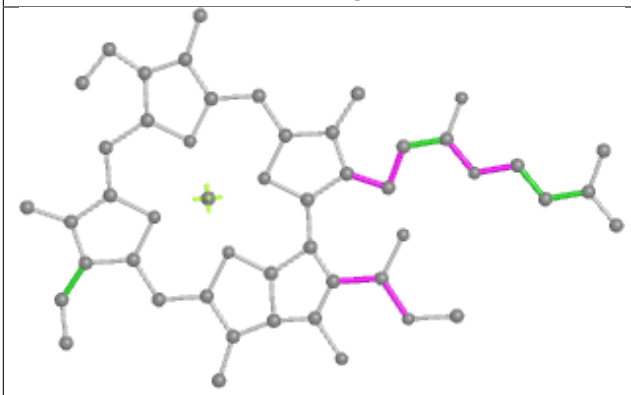
Ligand CLA y1 608



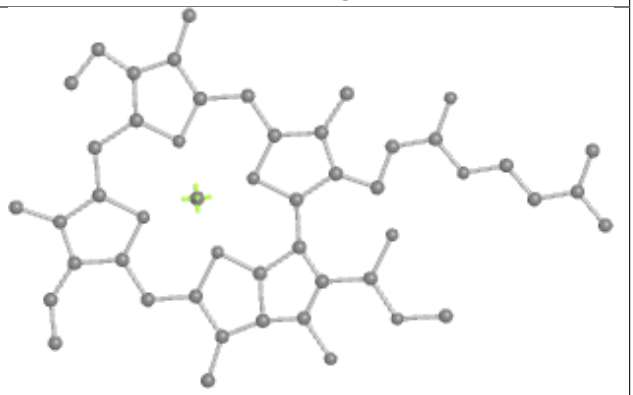
Bond lengths



Bond angles

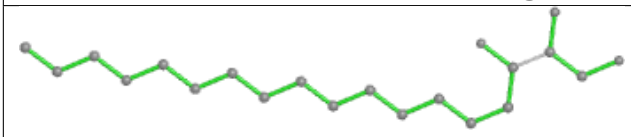


Torsions

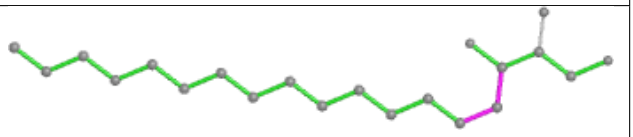


Rings

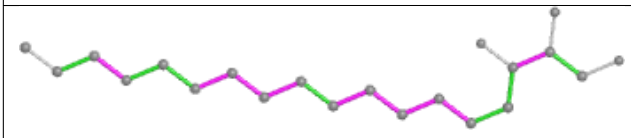
Ligand SPH a1 414



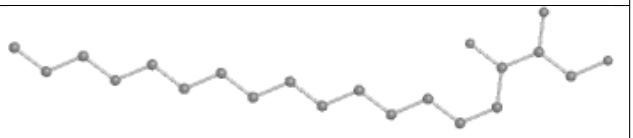
Bond lengths



Bond angles

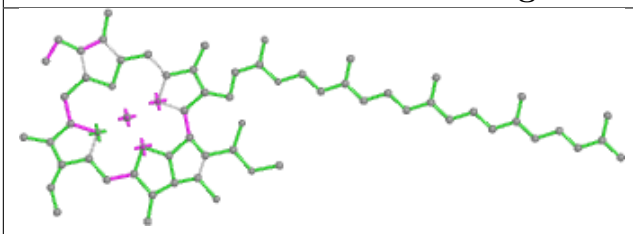


Torsions

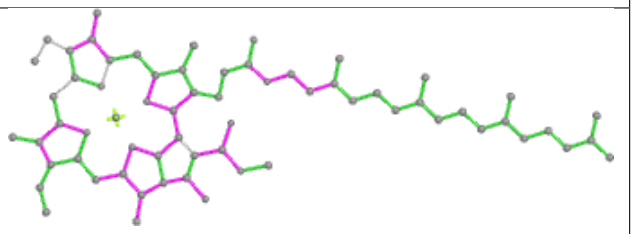


Rings

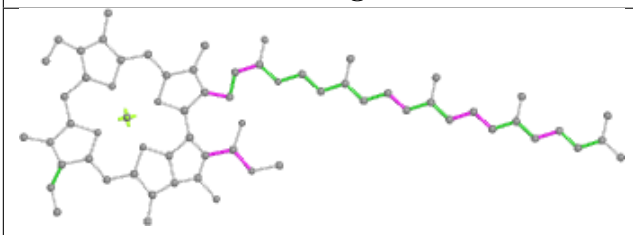
Ligand CLA b1 609



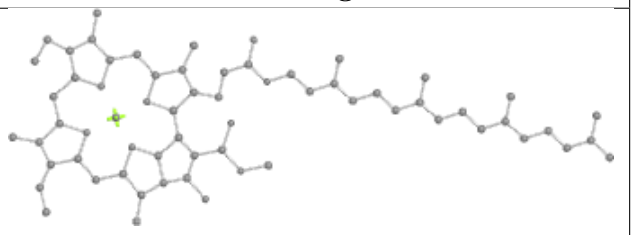
Bond lengths



Bond angles

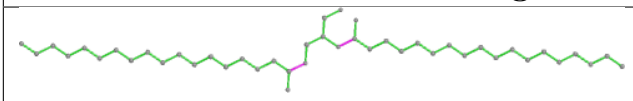


Torsions

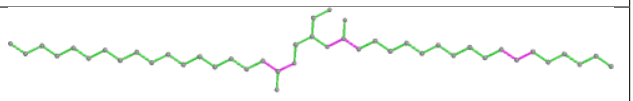


Rings

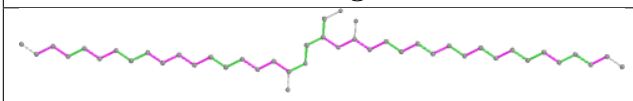
Ligand DGA B1 625



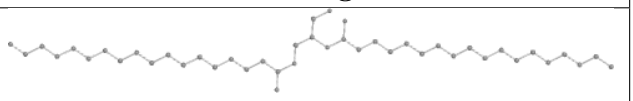
Bond lengths



Bond angles

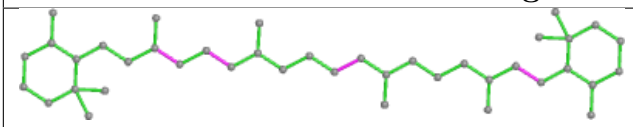


Torsions

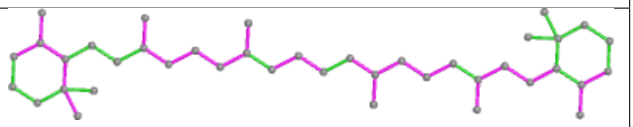


Rings

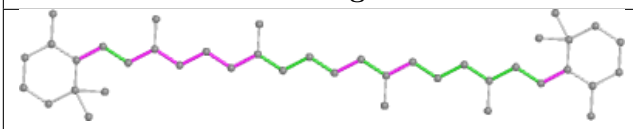
Ligand BCR C 516



Bond lengths



Bond angles



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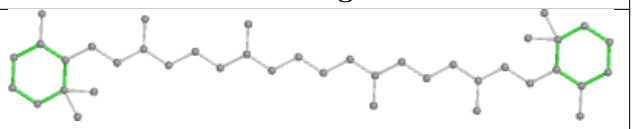
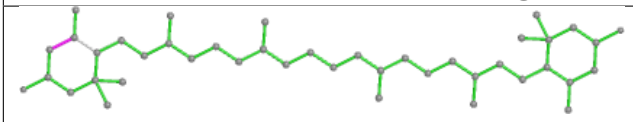
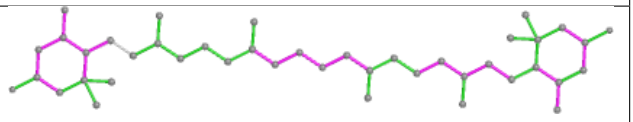


Rings

Ligand LUT Y1 621



Bond lengths



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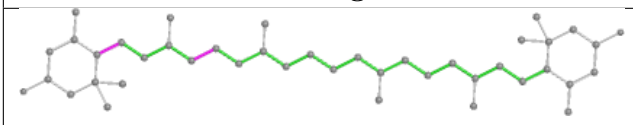

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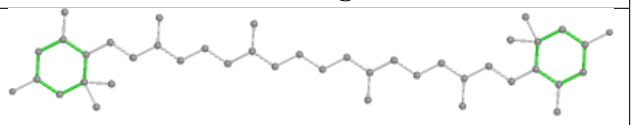
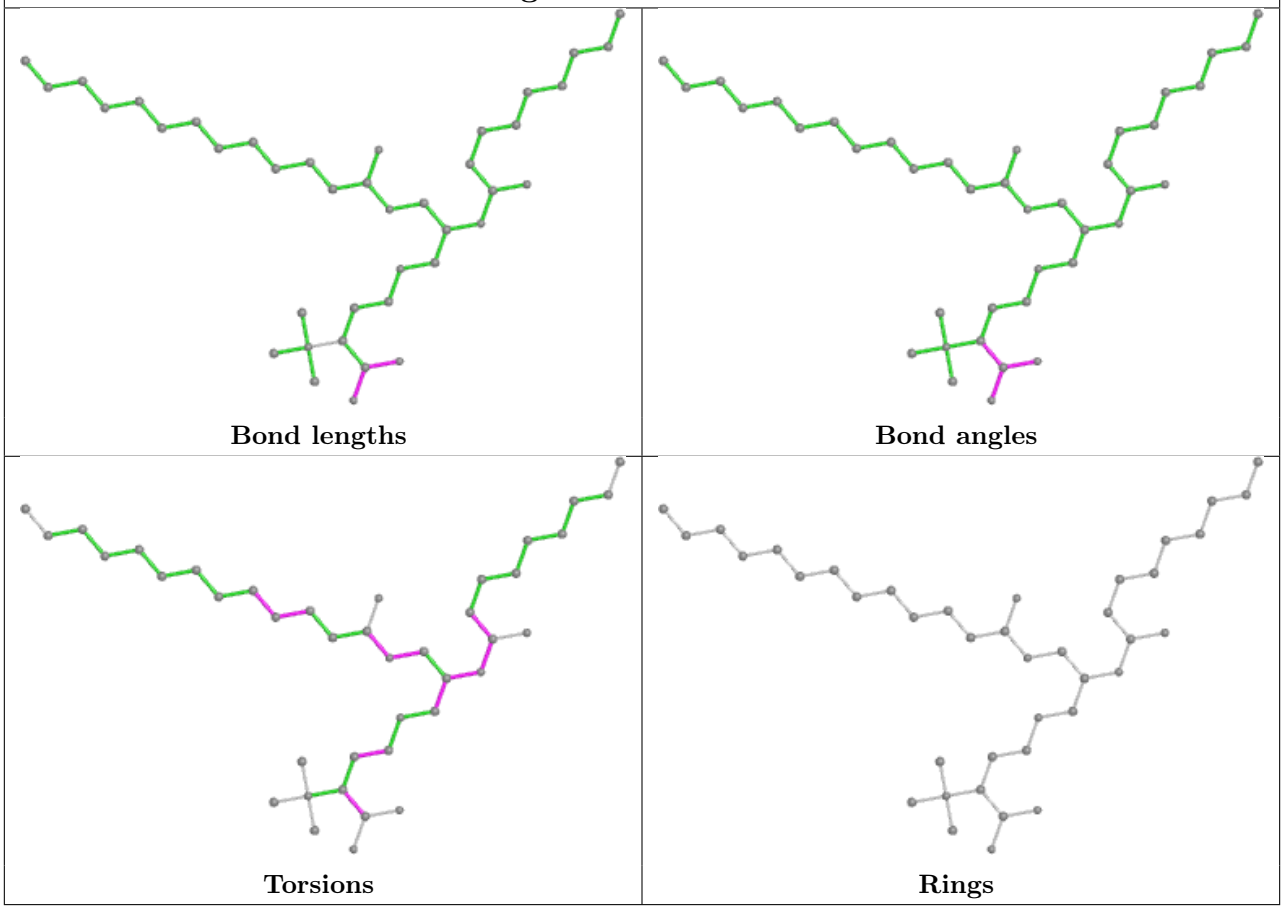
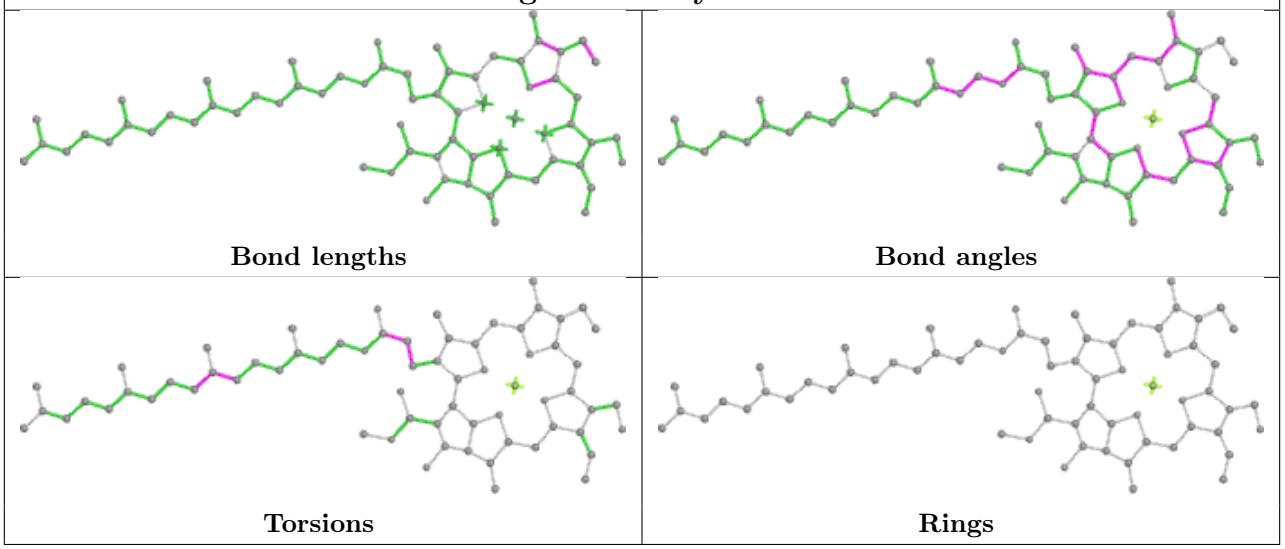


Rings

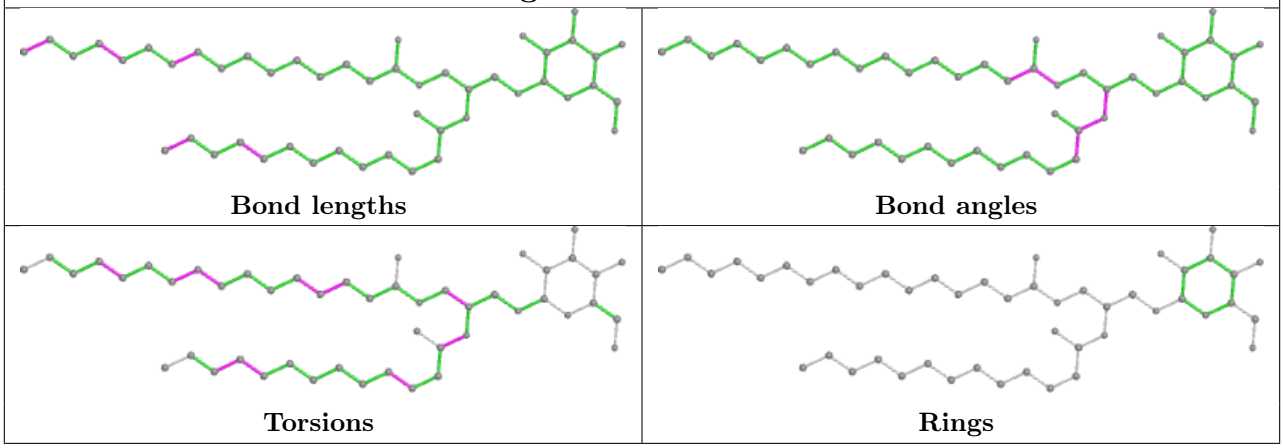
Ligand LMK C 527



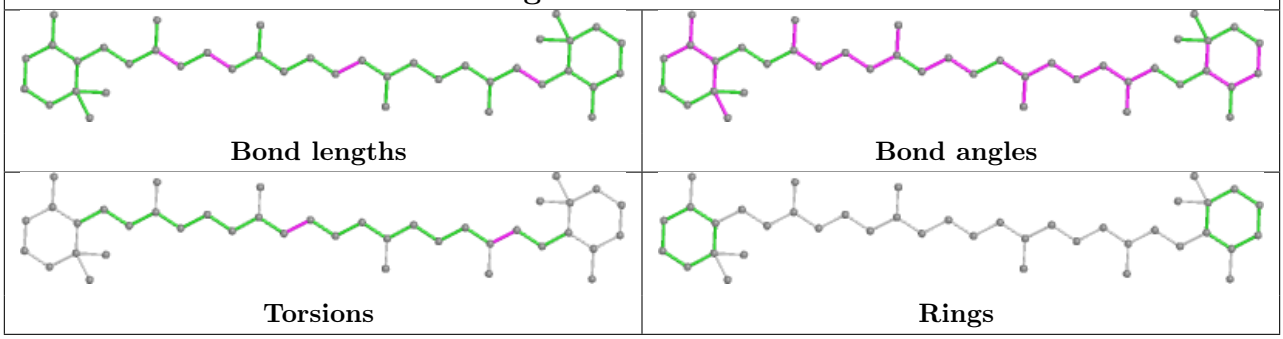
Ligand CHL y1 606



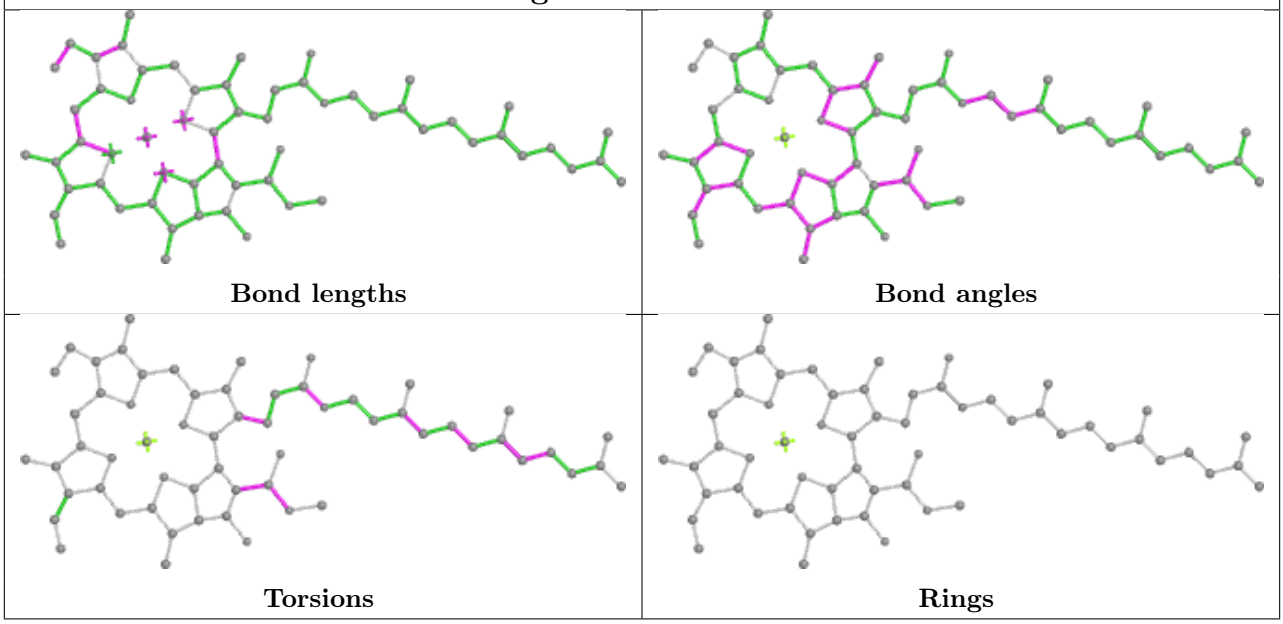
Ligand LMG A 413



Ligand BCR B 619



Ligand CLA s 602



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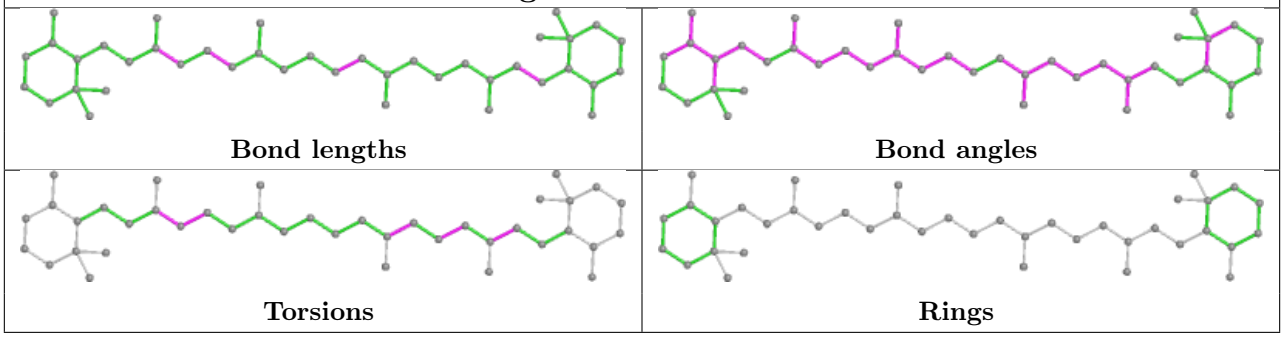
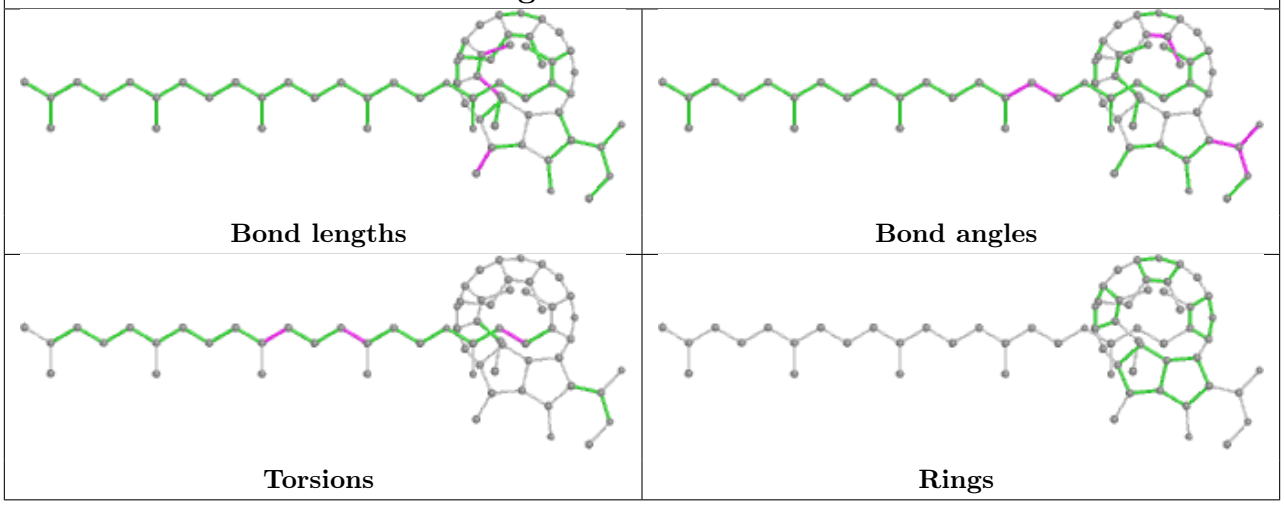


Ligand PHO a1 408



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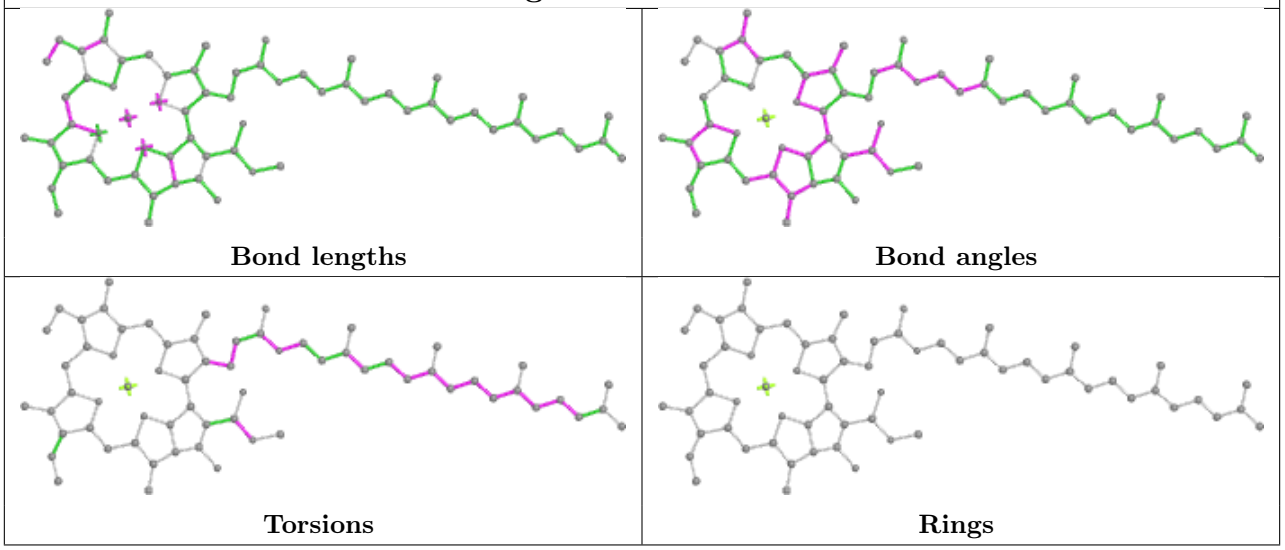
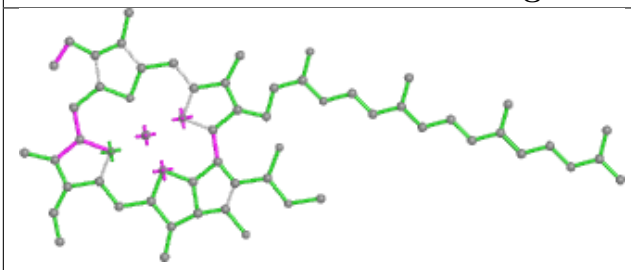
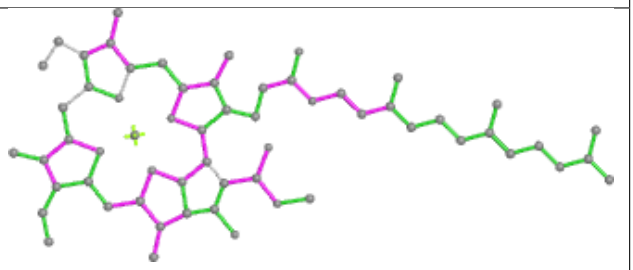
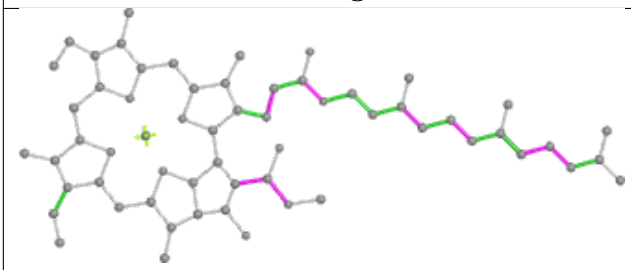
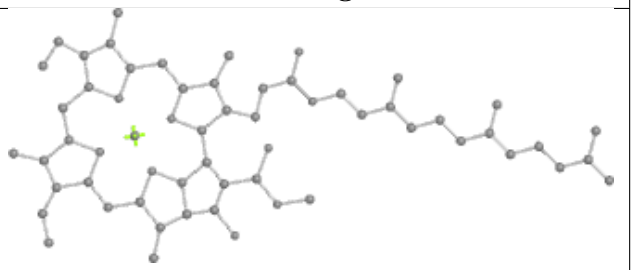


Ligand CLA R 602	
 Bond lengths	 Bond angles
 Torsions	 Rings

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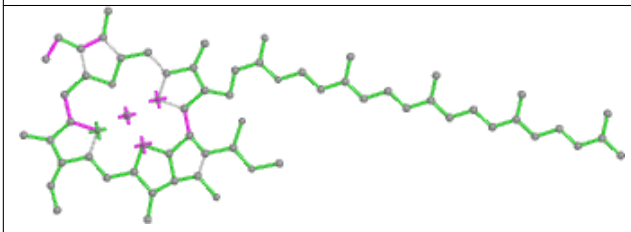
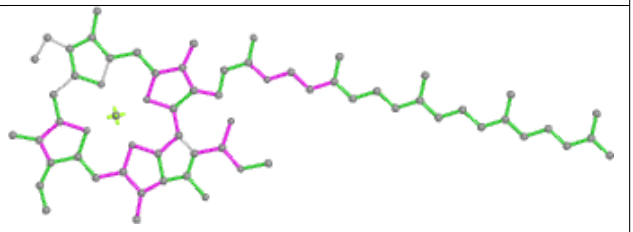
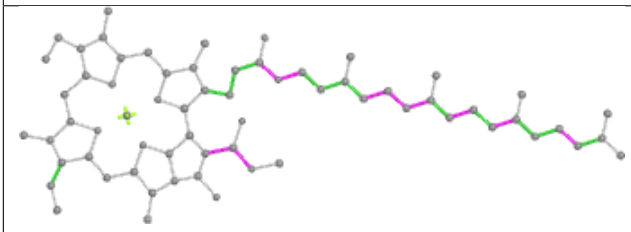
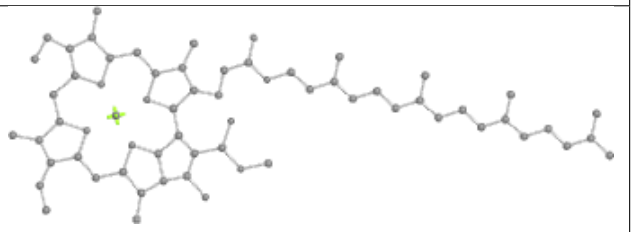
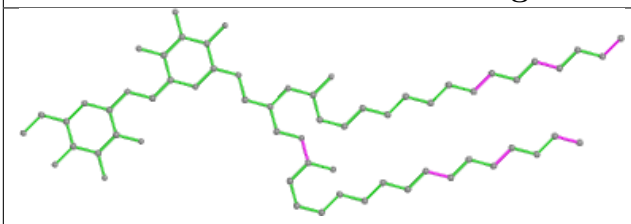
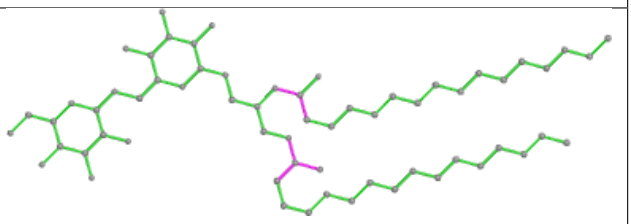
 Bond lengths	 Bond angles
 Torsions	 Rings

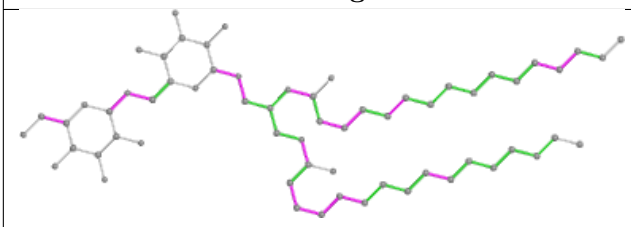
Ligand DGD C1 519



Bond lengths



Bond angles



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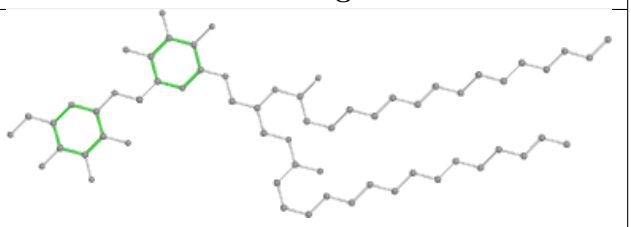
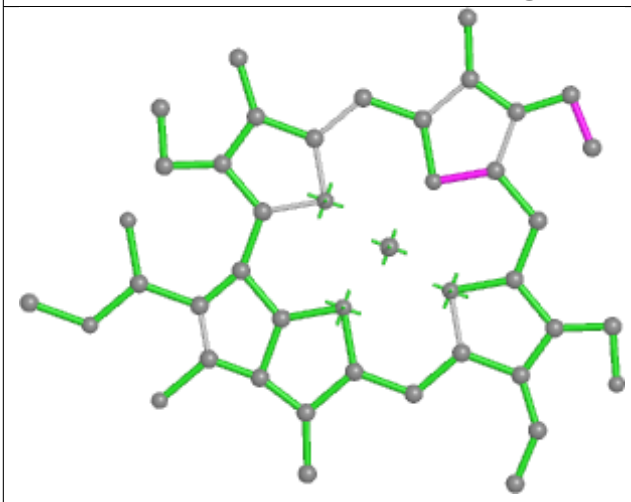


Rings

Ligand CHL s1 607



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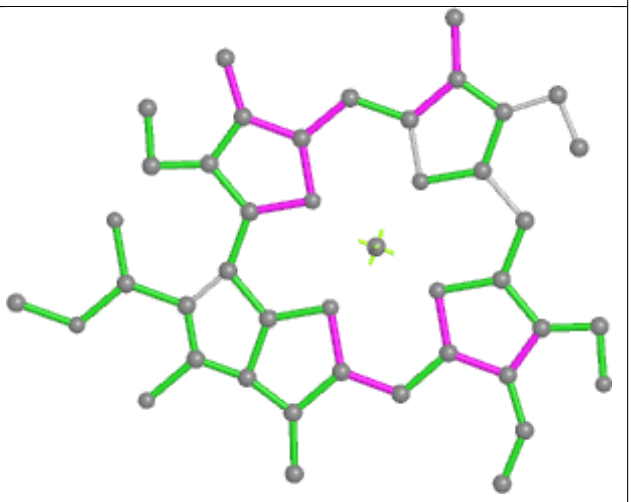
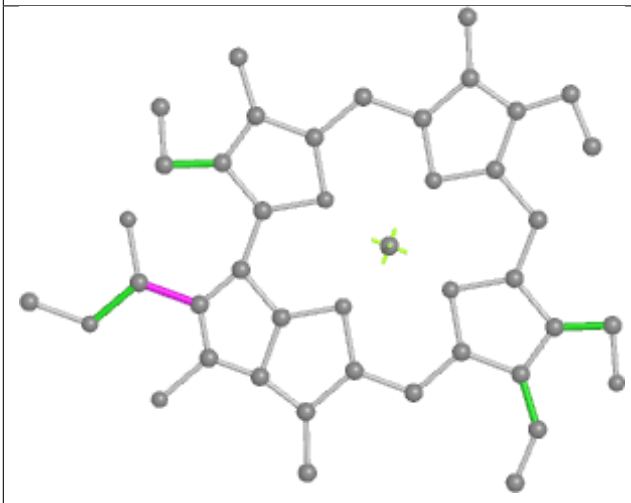


Bond angles



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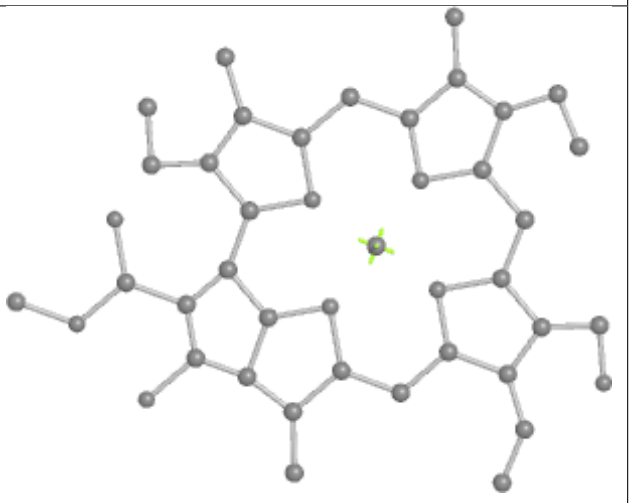
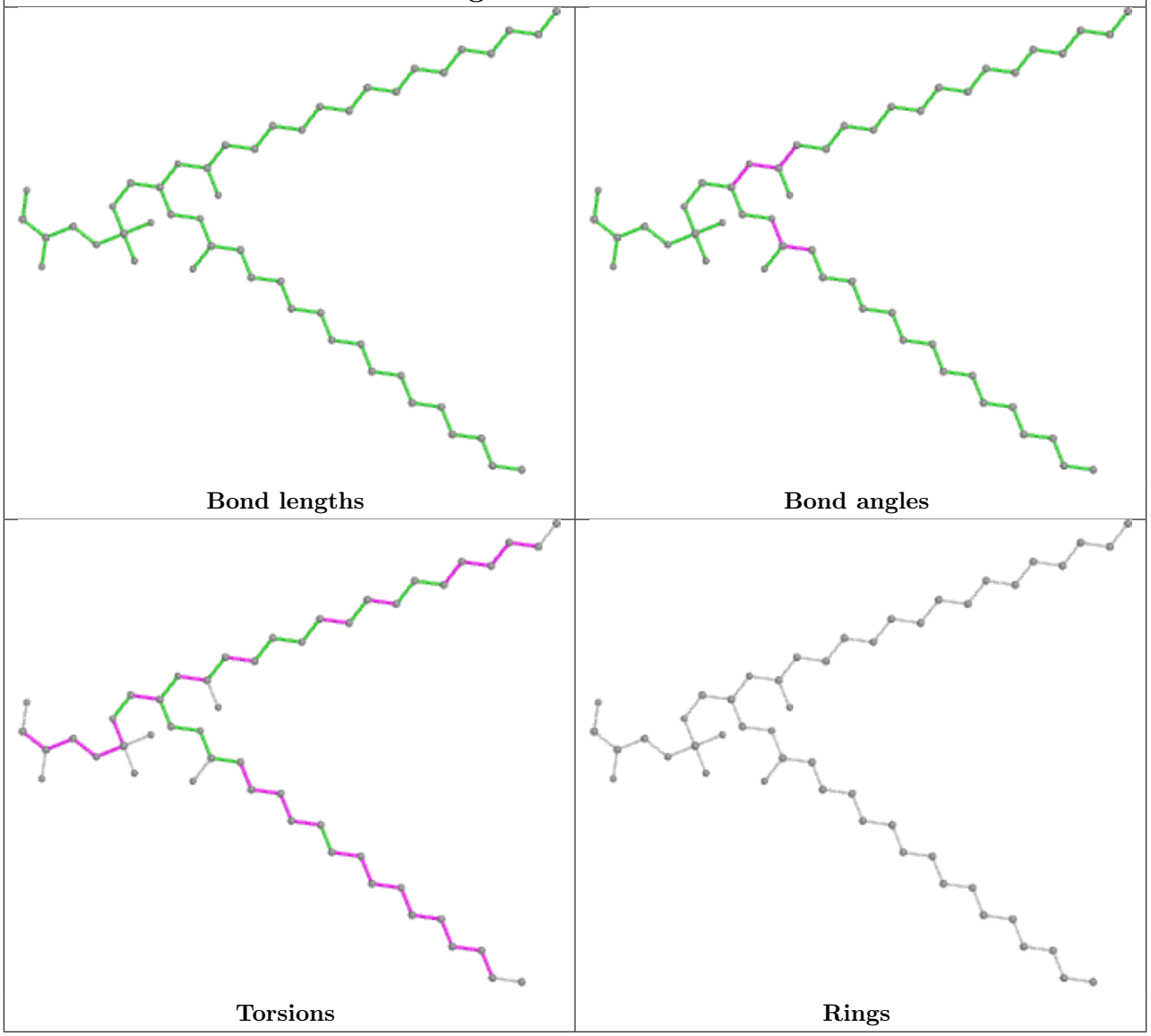
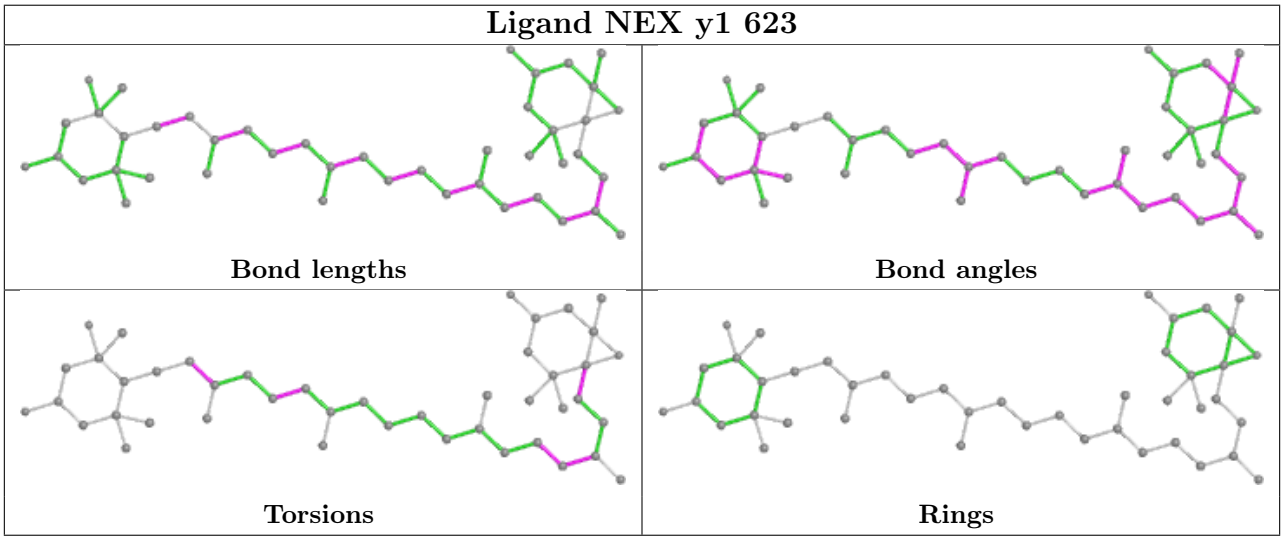


Rings

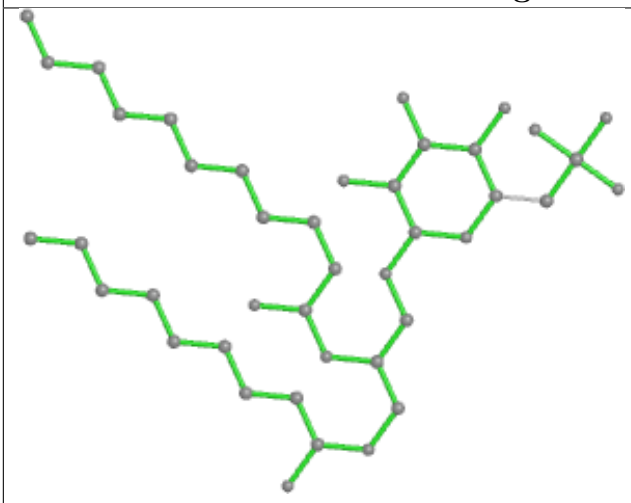
Ligand LHG D 409



Ligand NEX y1 623



Ligand SQD m1 101



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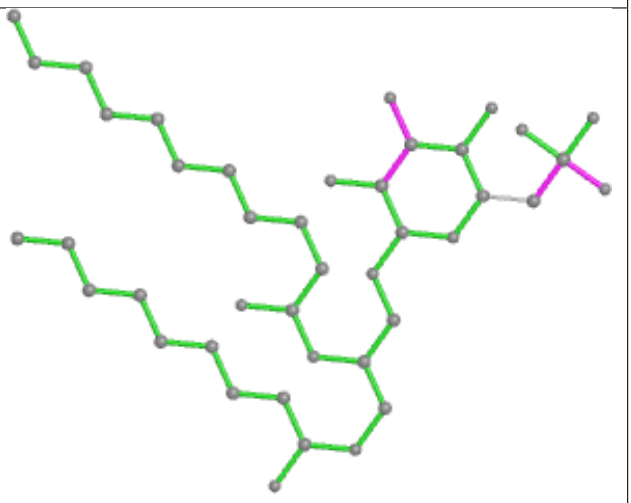
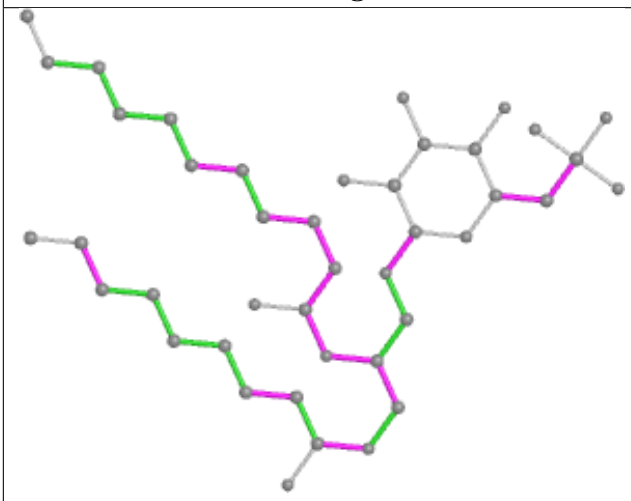


Bond angles



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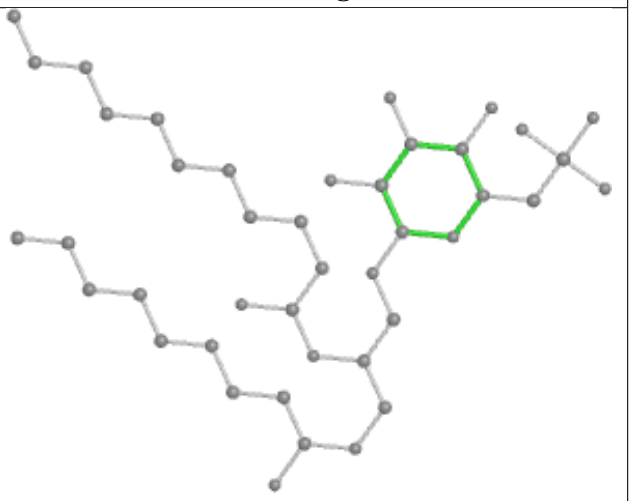
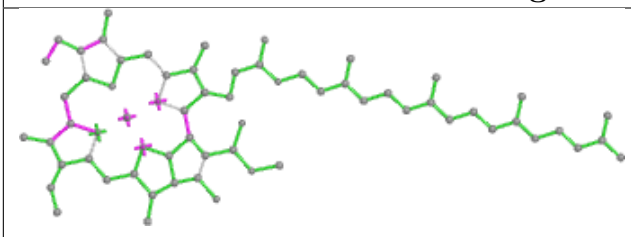
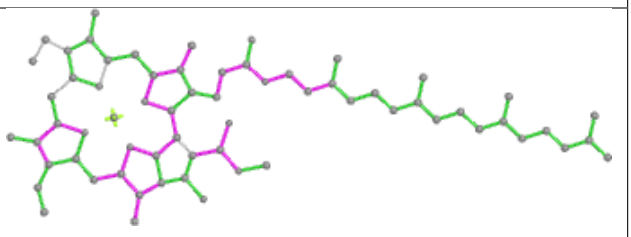


Rings

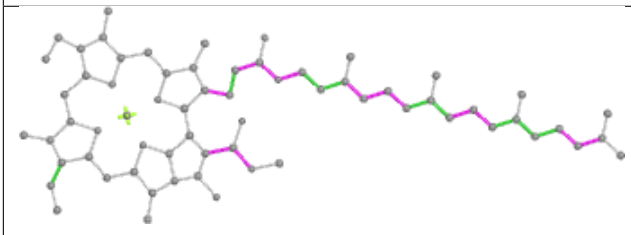
Ligand CLA c 503



Bond lengths



Bond angles



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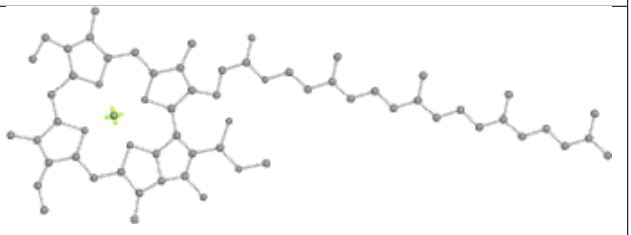
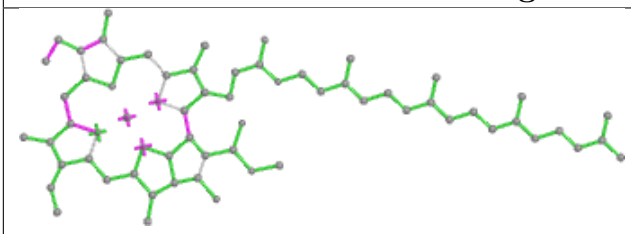


Rings

Ligand CLA S1 611



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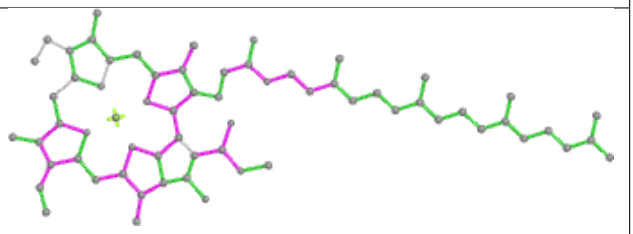
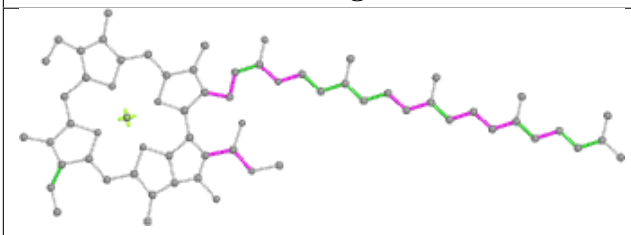


Bond angles



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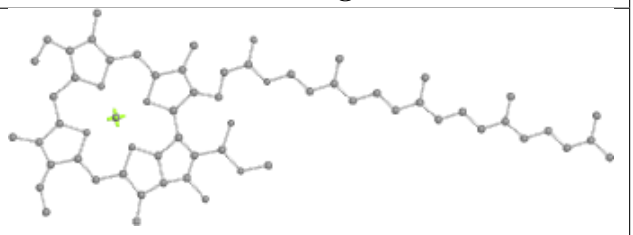
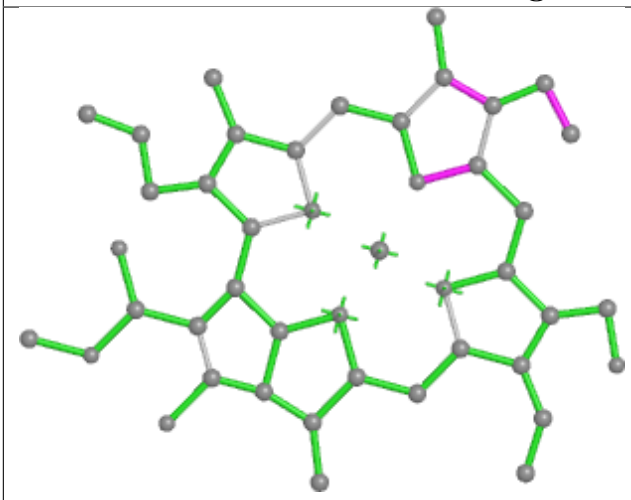


Rings

Ligand CHL g 608



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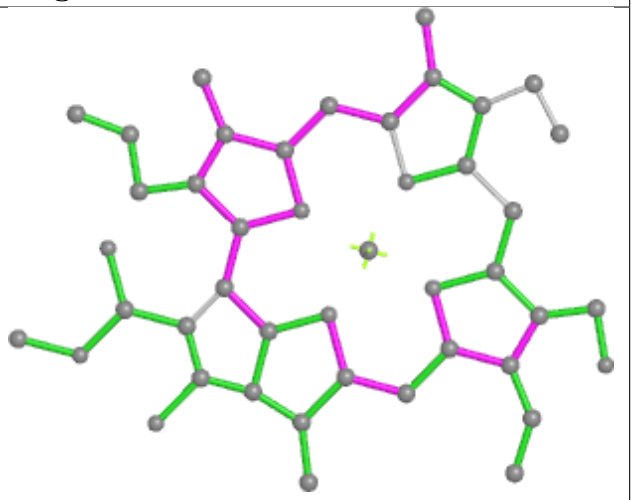
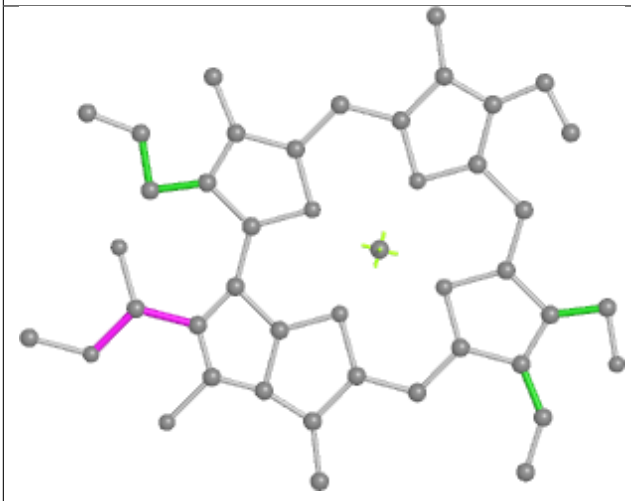
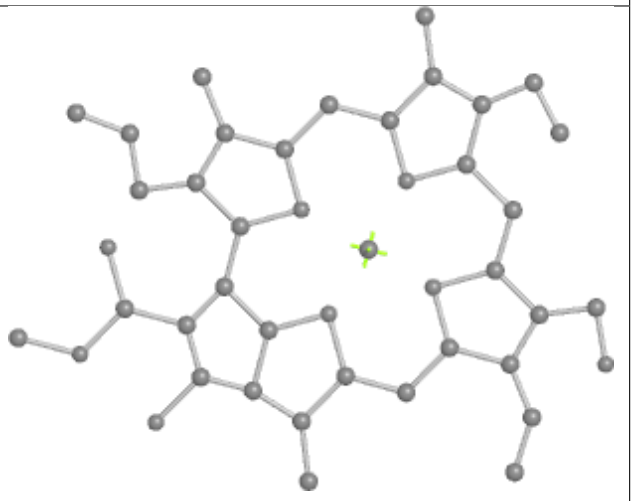


Bond angles



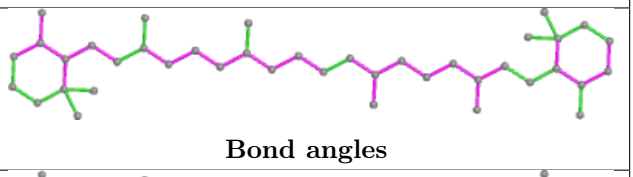
Torsions



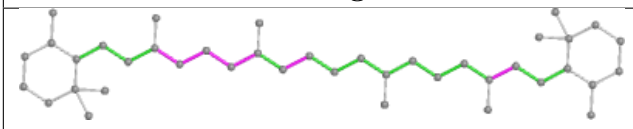
Rings

Ligand BCR b 619

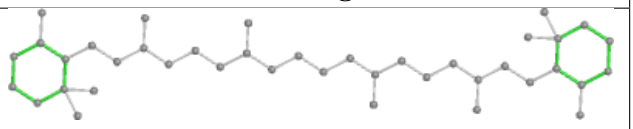
Bond lengths



Bond angles

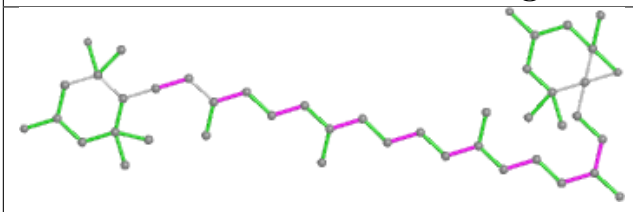


Torsions



Rings

Ligand NEX G 623



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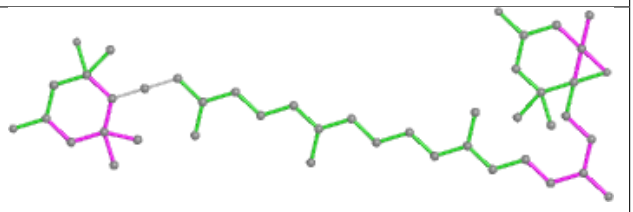
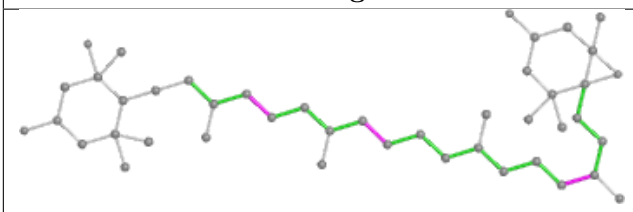


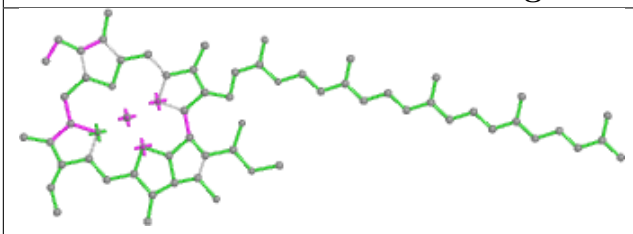
Bond angles



Torsions

Rings

Ligand CLA B 602



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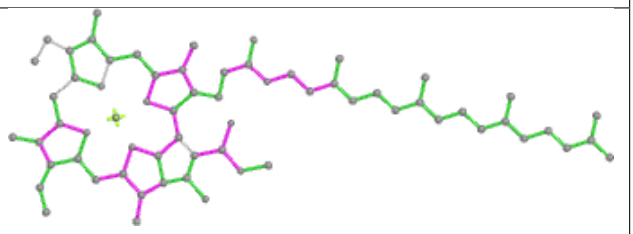
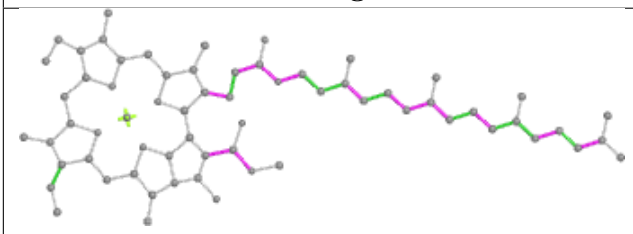


Bond angles



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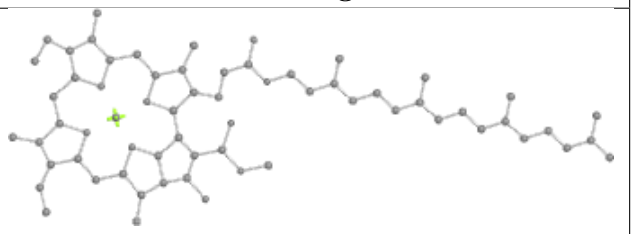
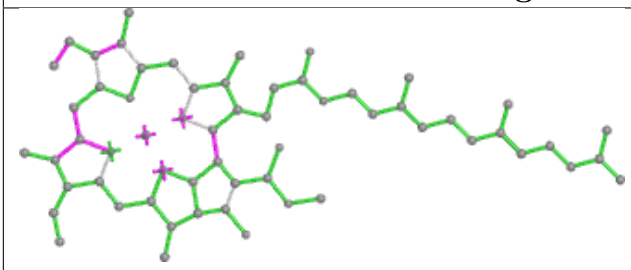


Rings

Ligand CLA R1 609



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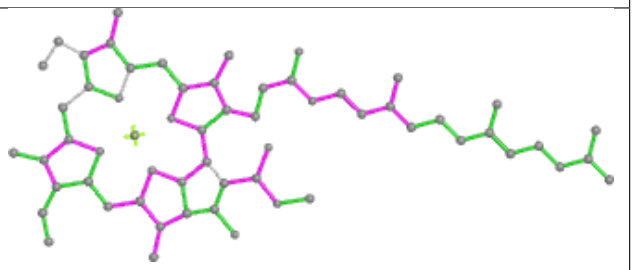
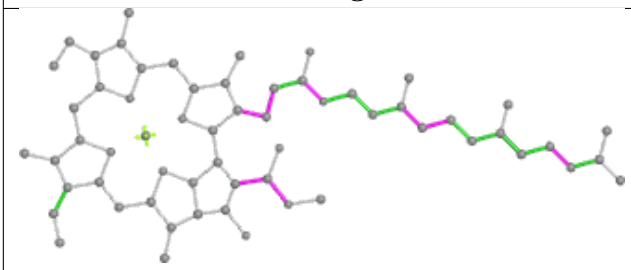


Bond angles



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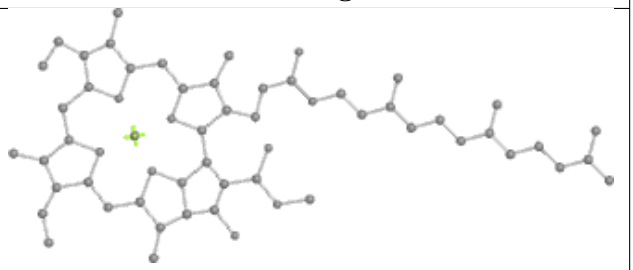
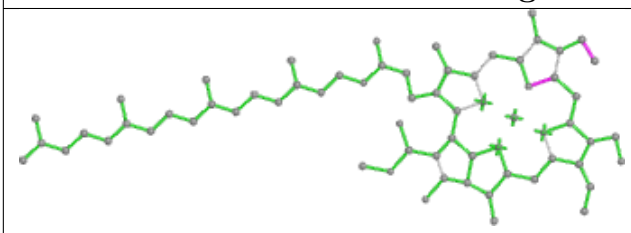


Rings

Ligand CHL g1 607



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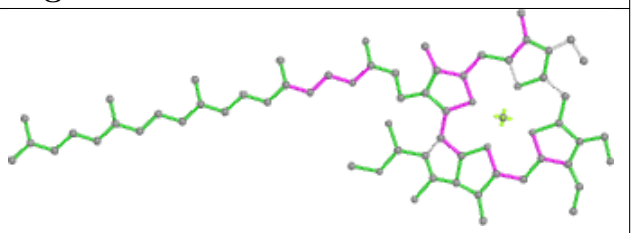
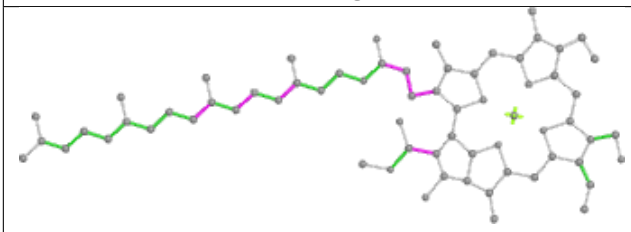


Bond angles



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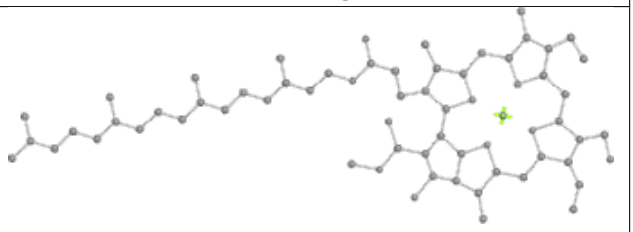
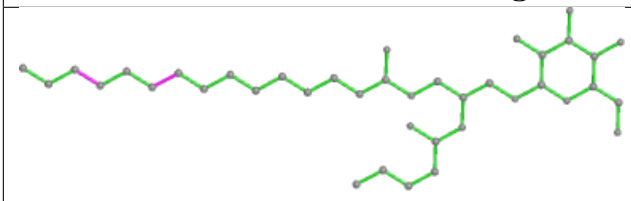
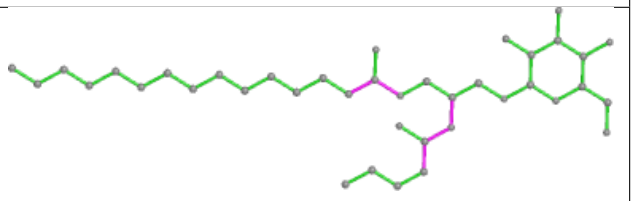


Rings

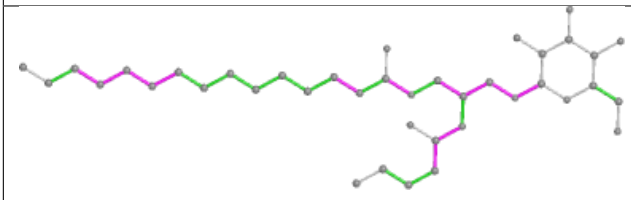
Ligand LMG w1 201



Bond lengths



Bond angles



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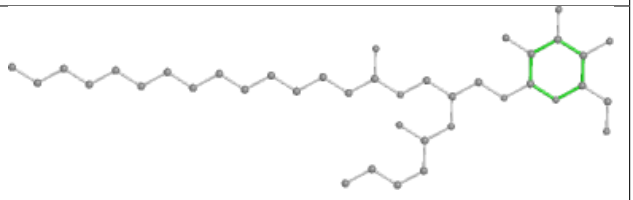
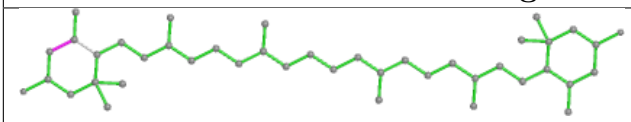


Rings

Ligand LUT g1 620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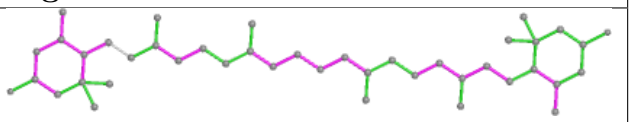
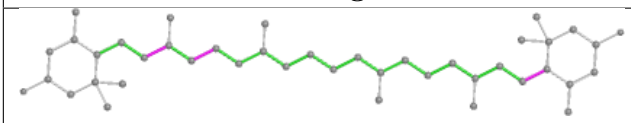

Bond angles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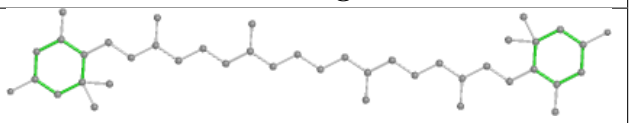
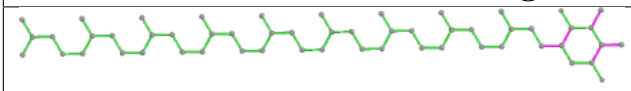

Rings

Ligand PL9 D1 405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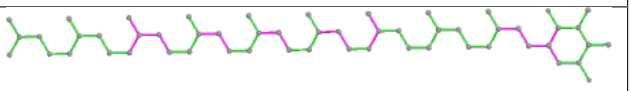
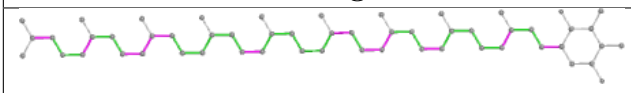

Bond angles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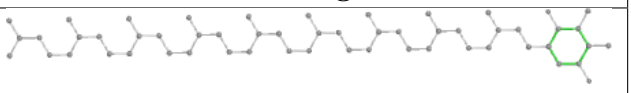
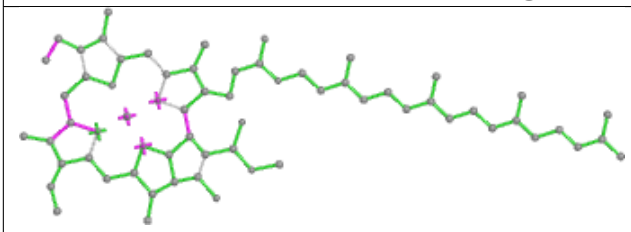

Rings

Ligand CLA c1 508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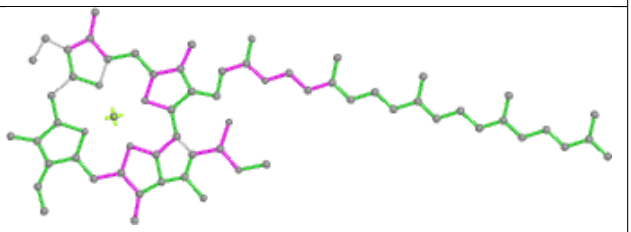
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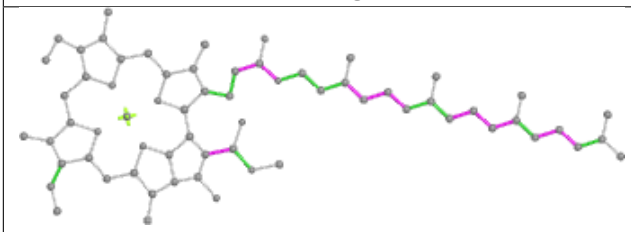
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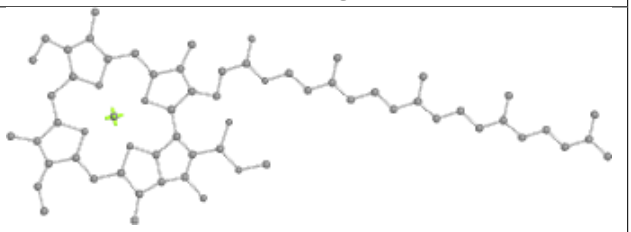
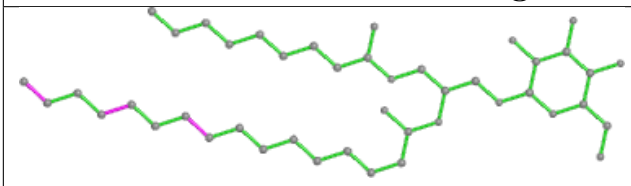

Rings

Ligand LMG B1 622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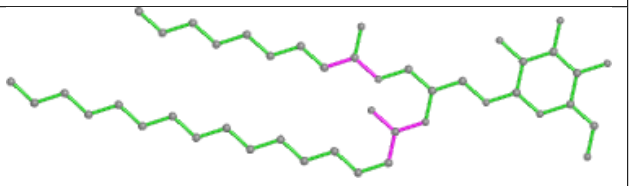
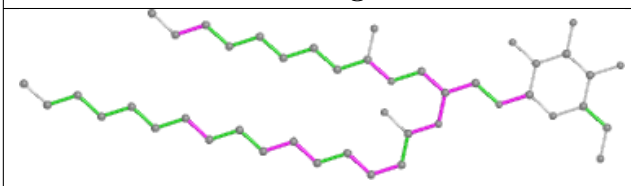

Bond angles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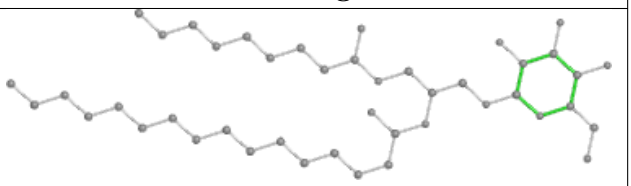
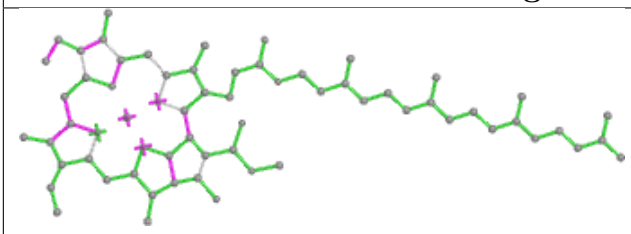

Rings

Ligand CLA N 602



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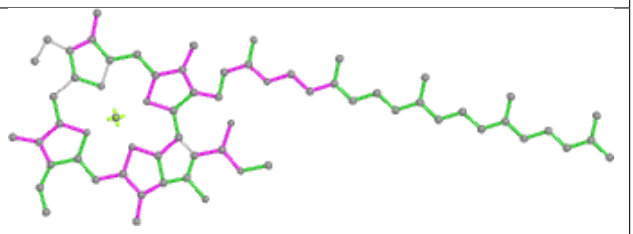
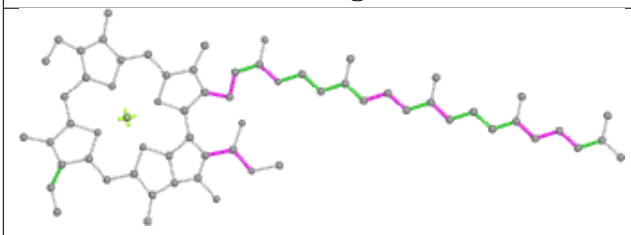


Bond angles



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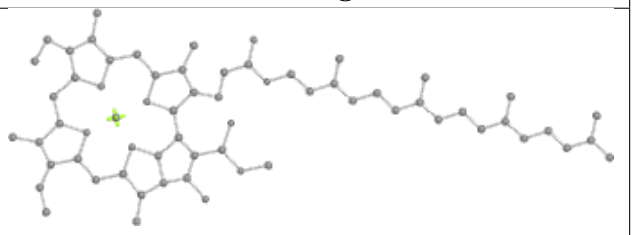
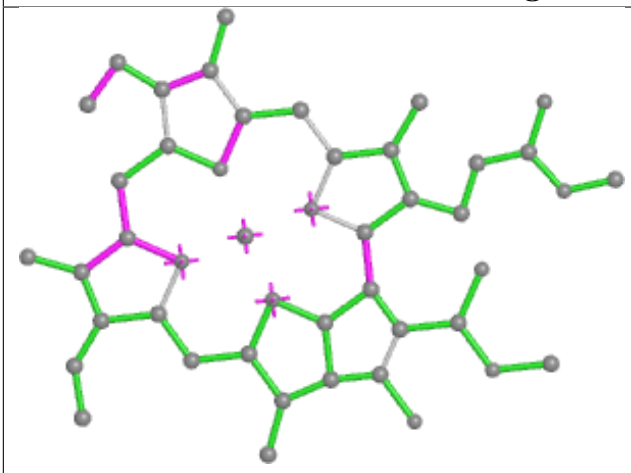


Rings

Ligand CLA R 611



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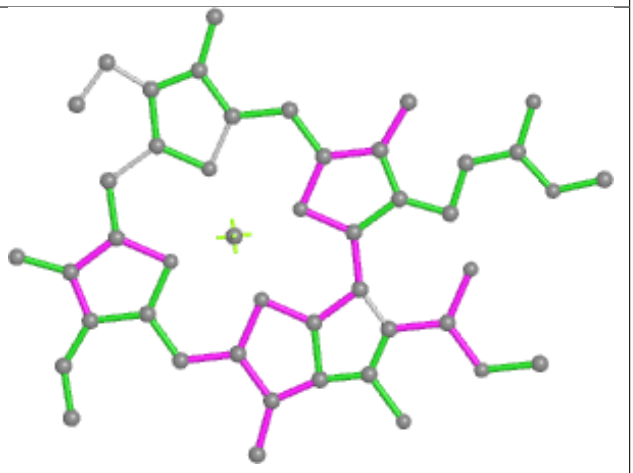
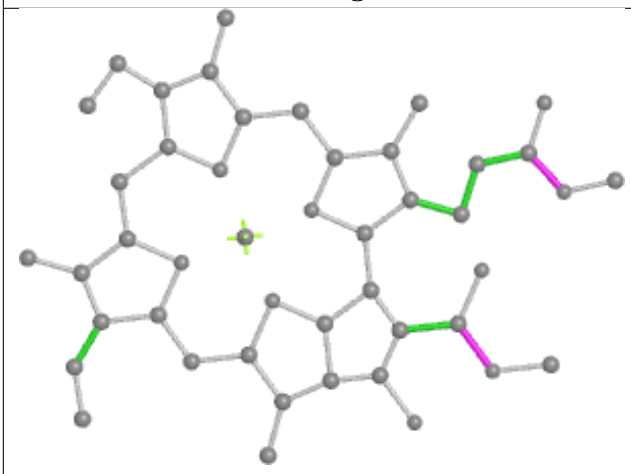
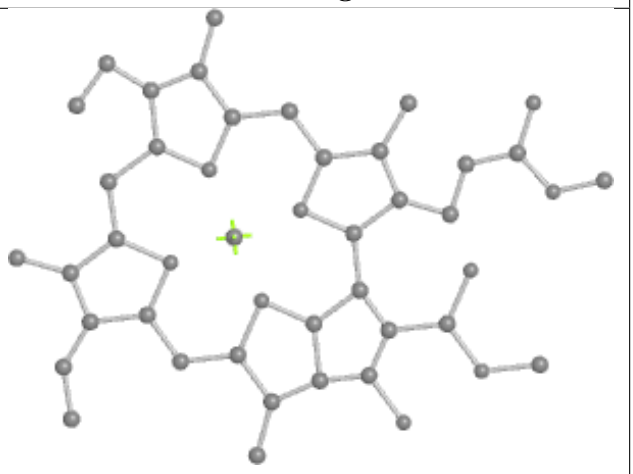


Bond angles

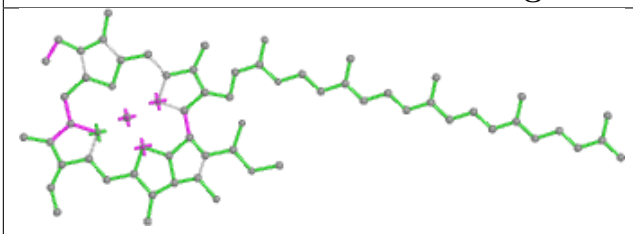


Torsions

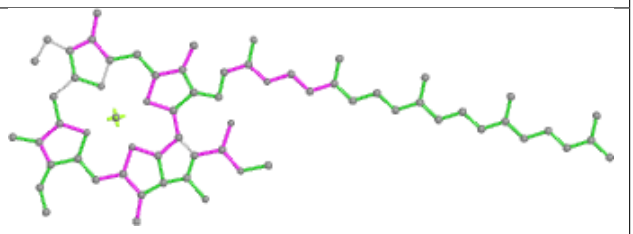


Rings

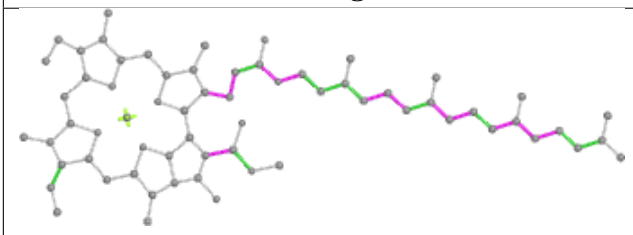
Ligand CLA C 512



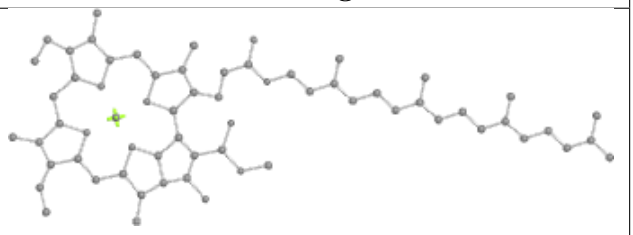
Bond lengths



Bond angles

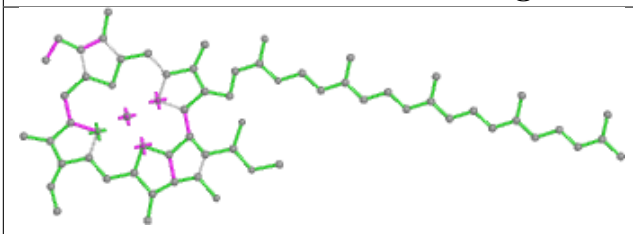


Torsions

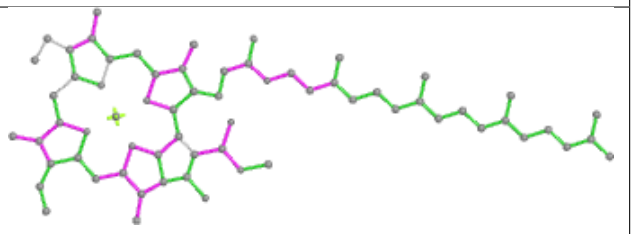


Rings

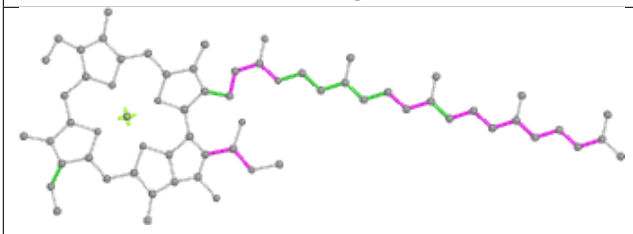
Ligand CLA Y1 613



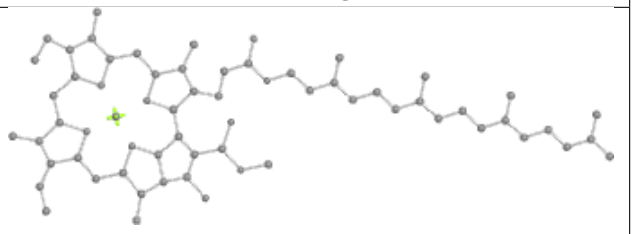
Bond lengths



Bond angles

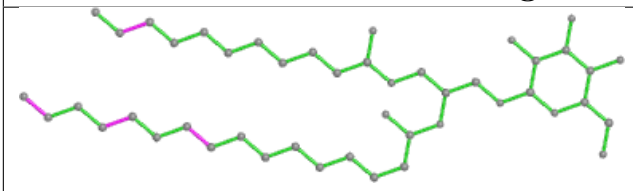


Torsions

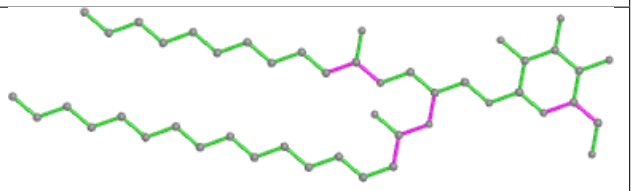


Rings

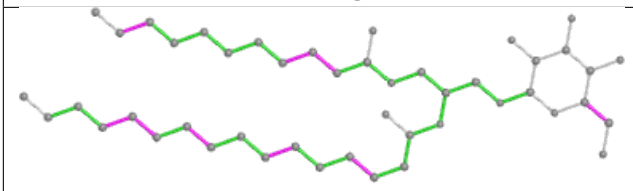
Ligand LMG D 411



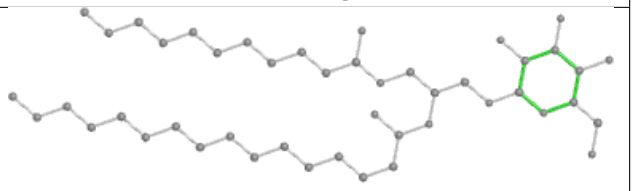
Bond lengths



Bond angles

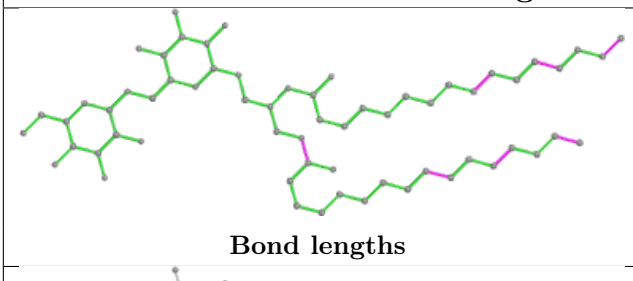


Torsions



Rings

Ligand DGD c1 519



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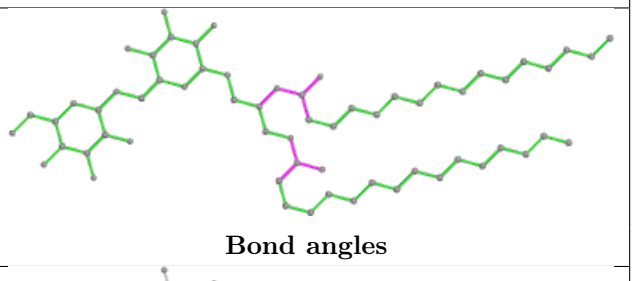

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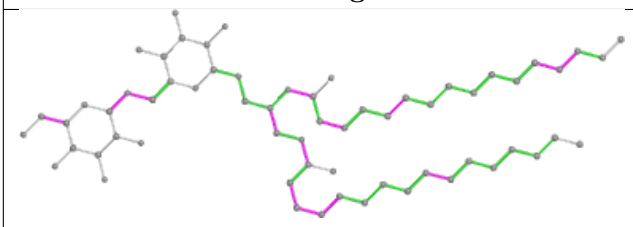

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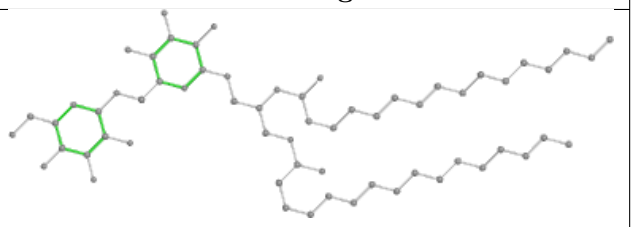
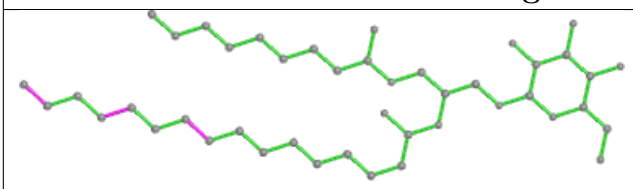


Rings

Ligand LMG b 622



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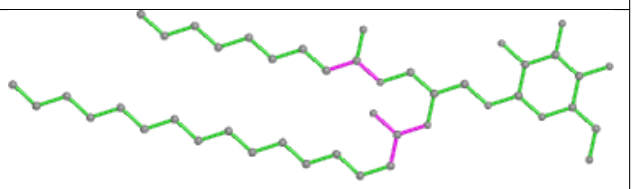
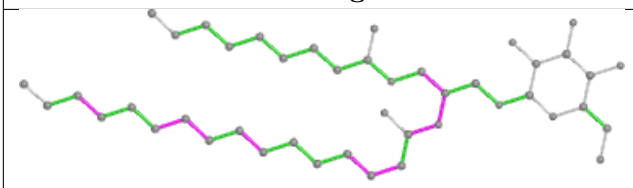


Bond angles



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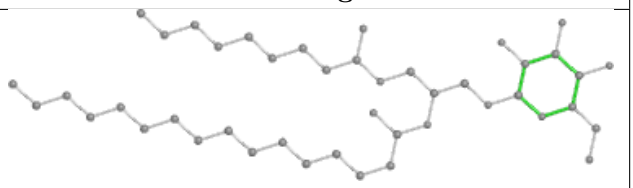
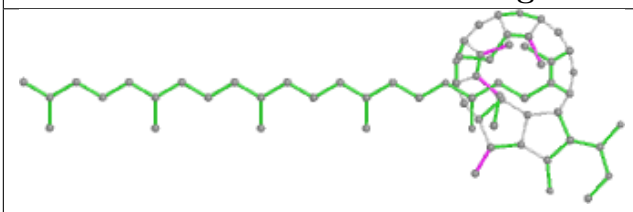


Rings

Ligand PHO a1 409



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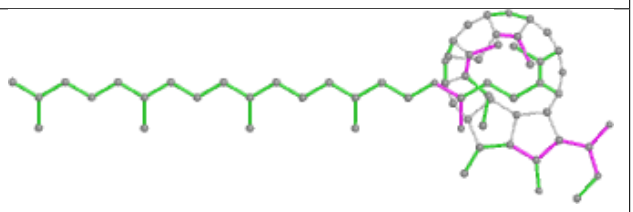
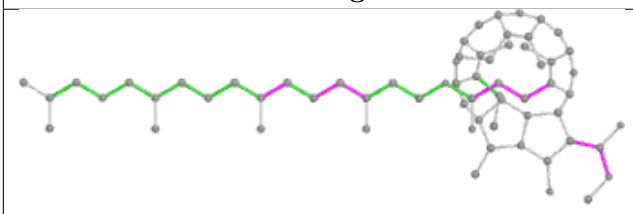


Bond angles



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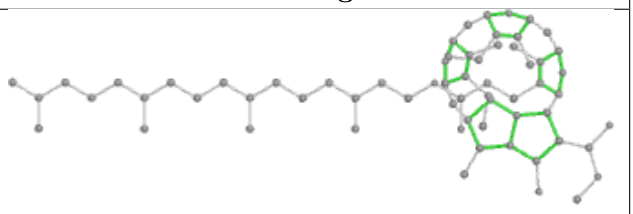
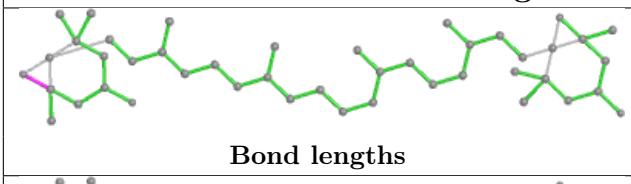


Rings

Ligand XAT R1 621



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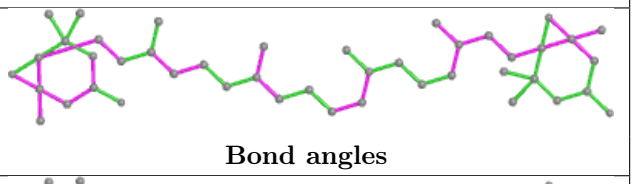
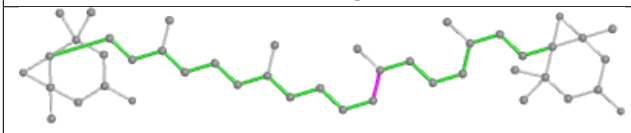


Bond angles



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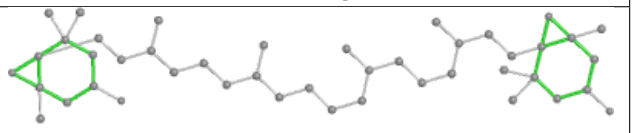
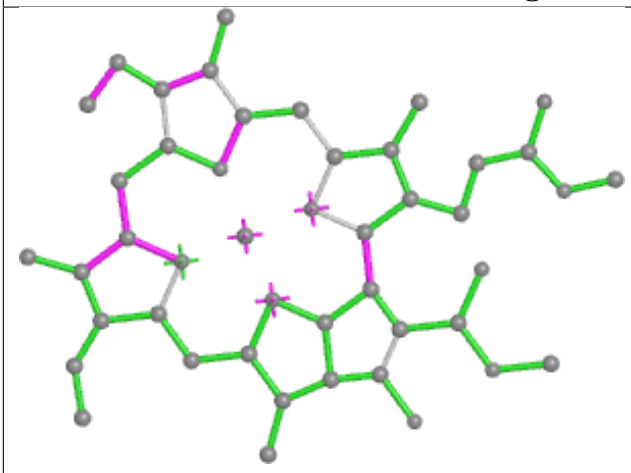


Rings

Ligand CLA R 613



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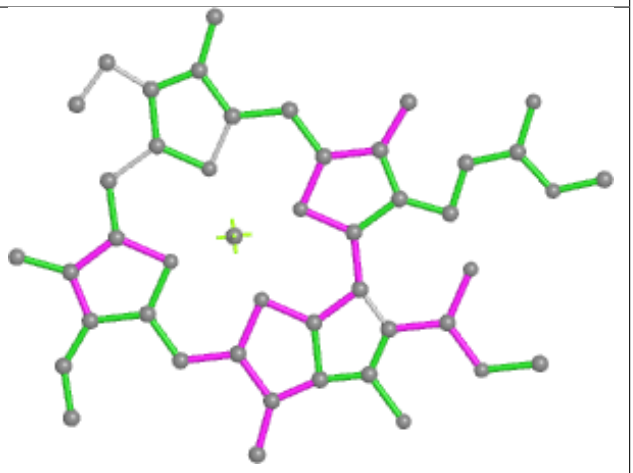
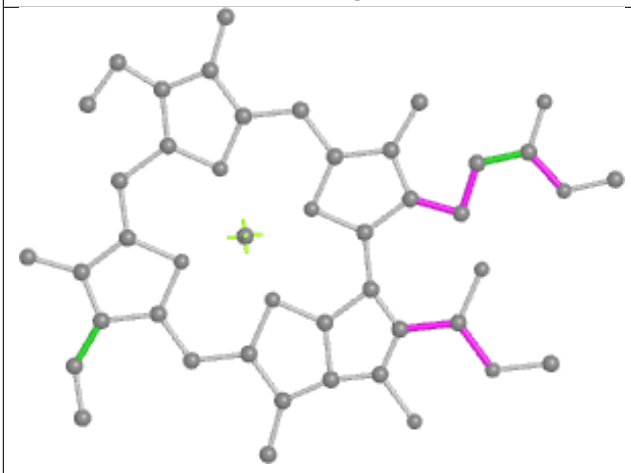


Bond angles



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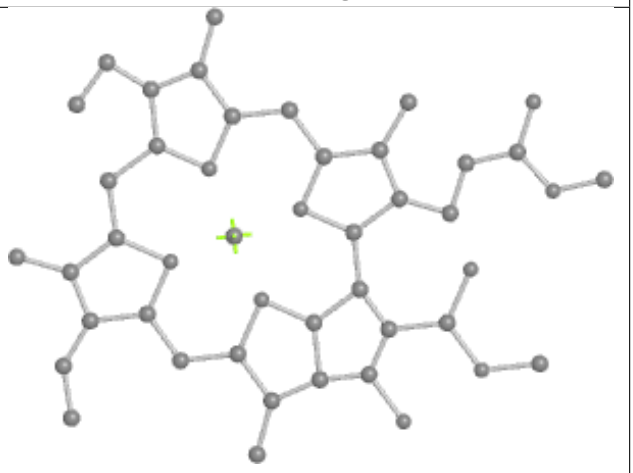
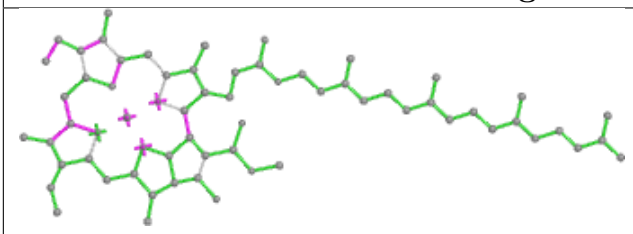


Rings

Ligand CLA y1 603



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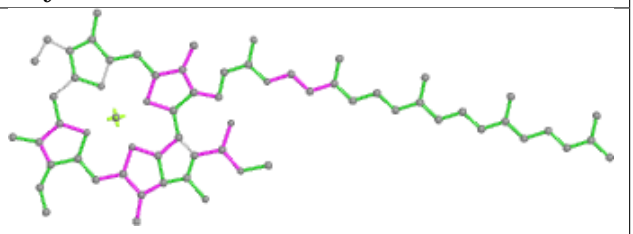

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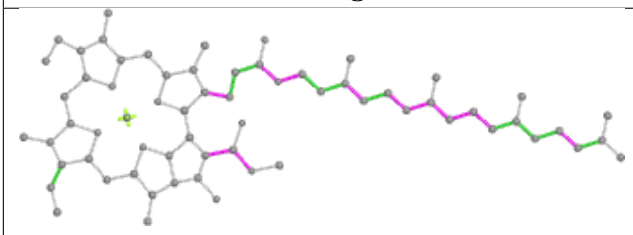

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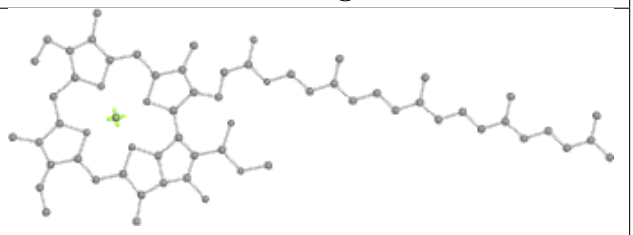
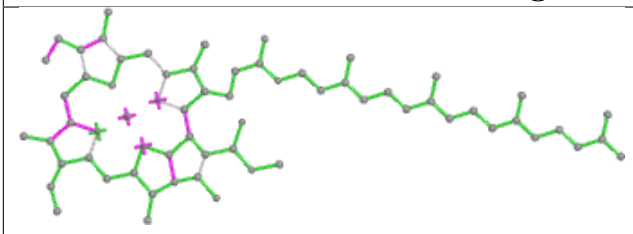


Rings

Ligand CLA c 511



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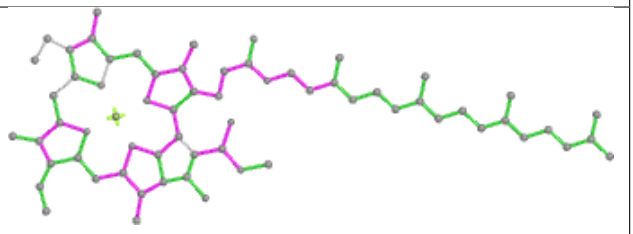

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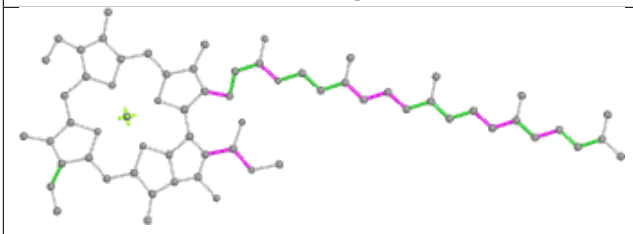

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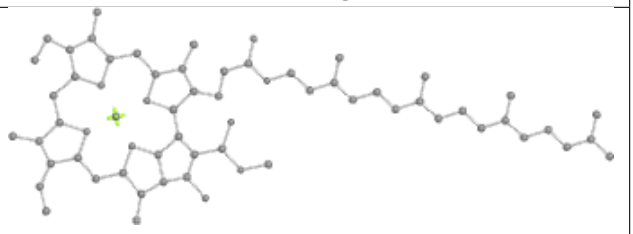
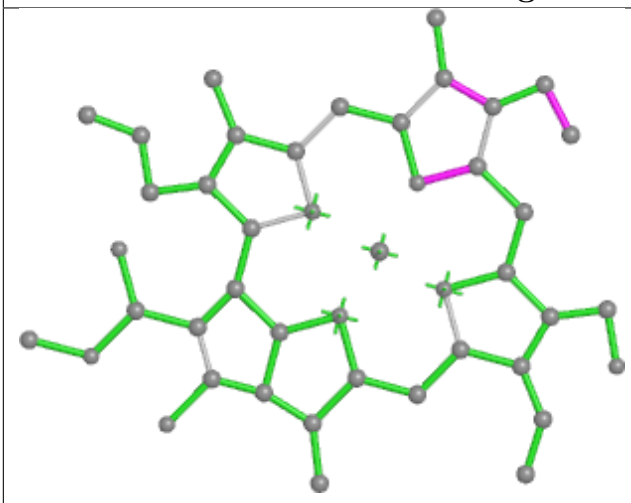


Rings

Ligand CHL S1 606



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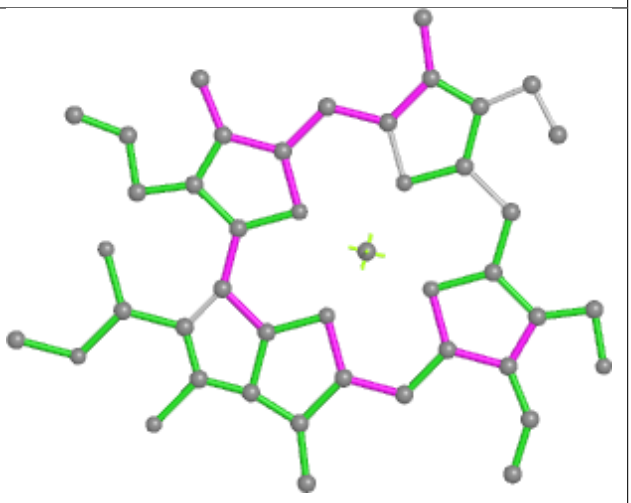
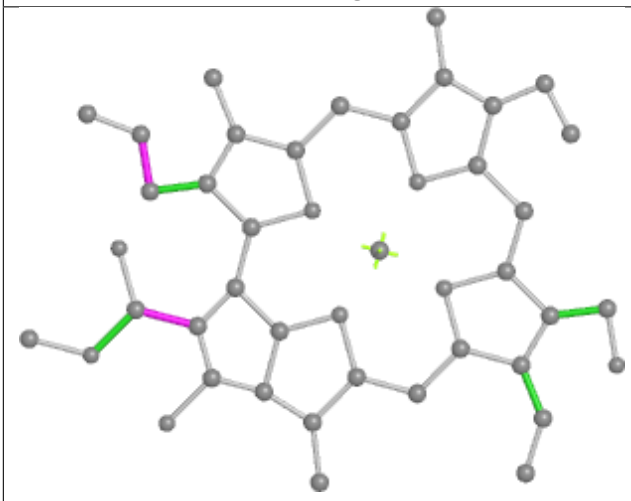


Bond angles



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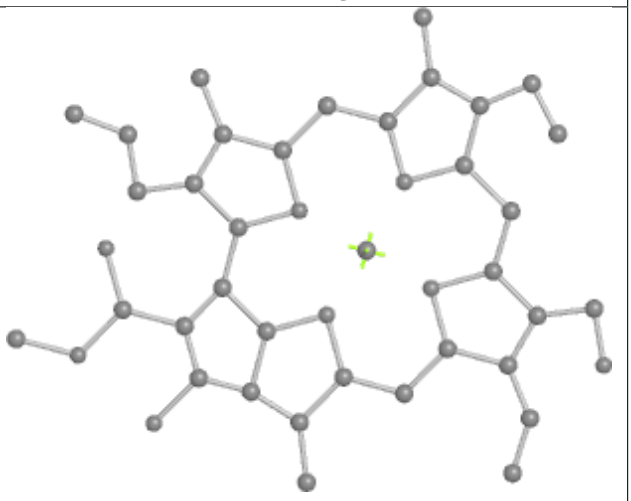
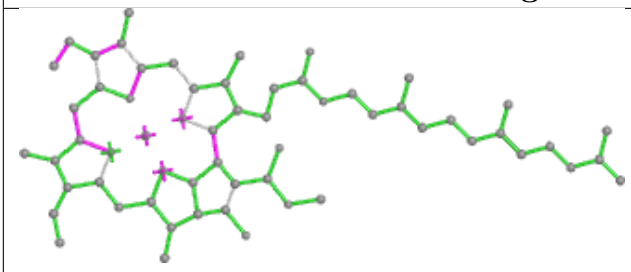


Rings

Ligand CLA r1 609



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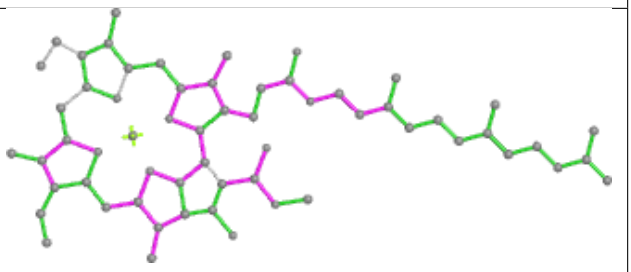

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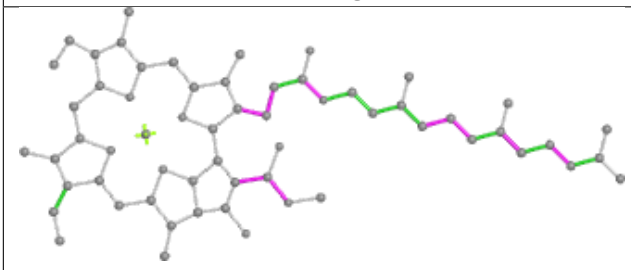

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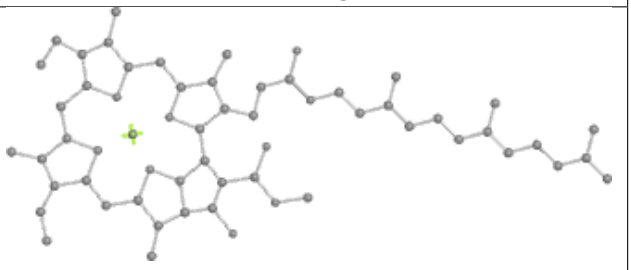

Rings

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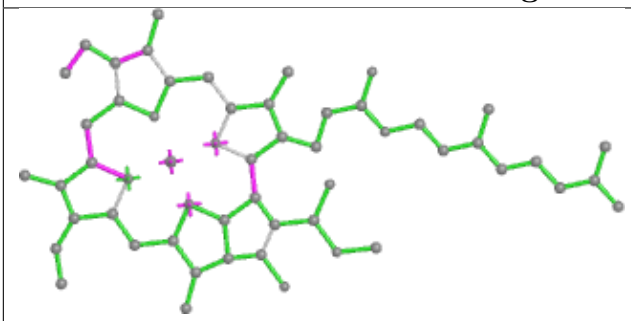

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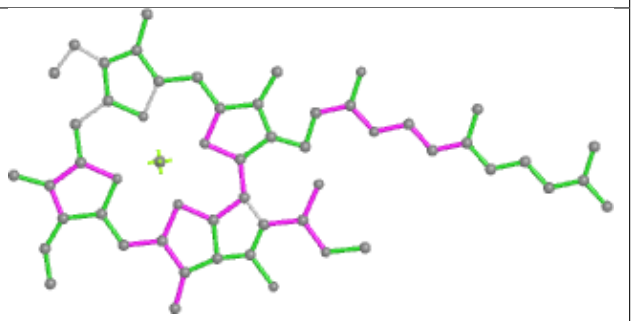
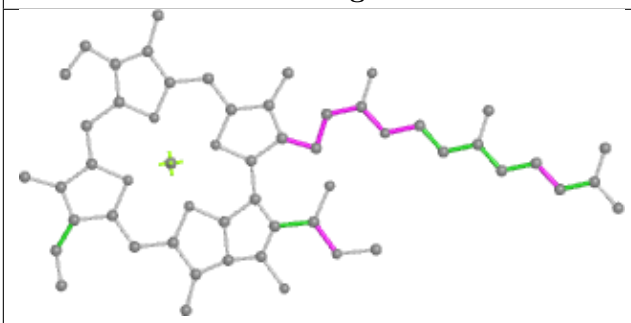


Bond angles



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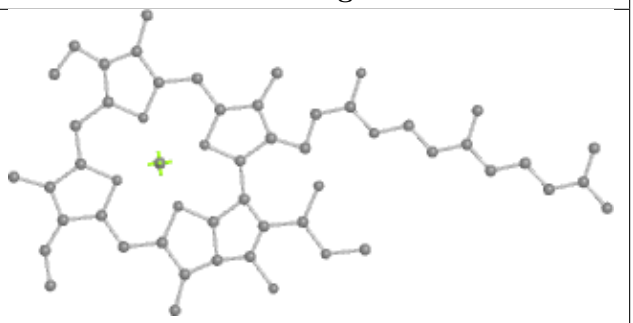
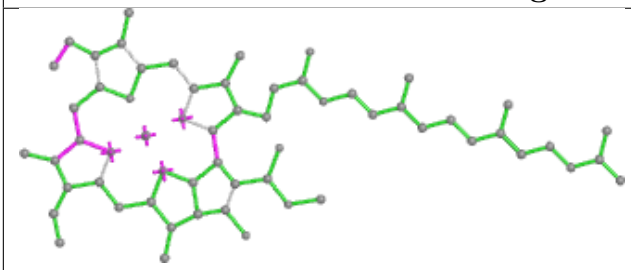


Rings

Ligand CLA r 602



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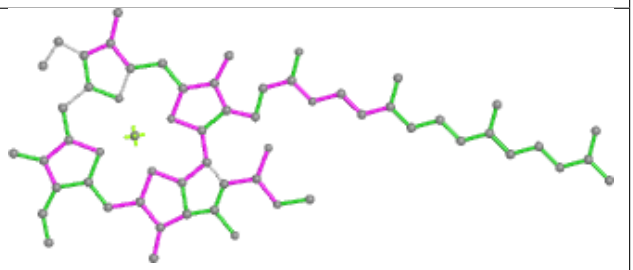
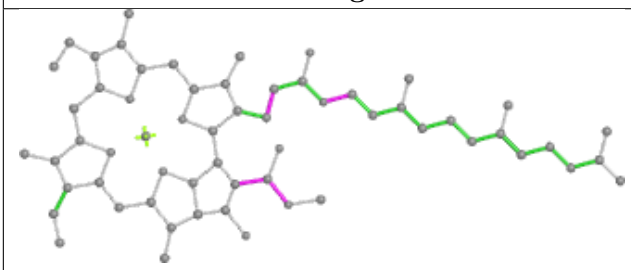


Bond angles



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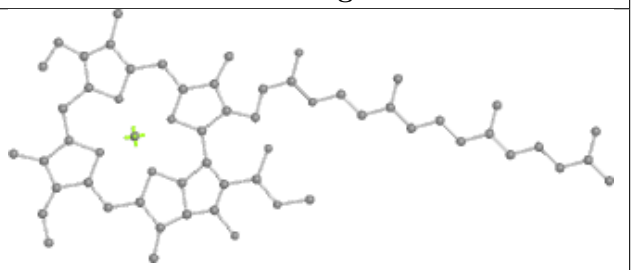
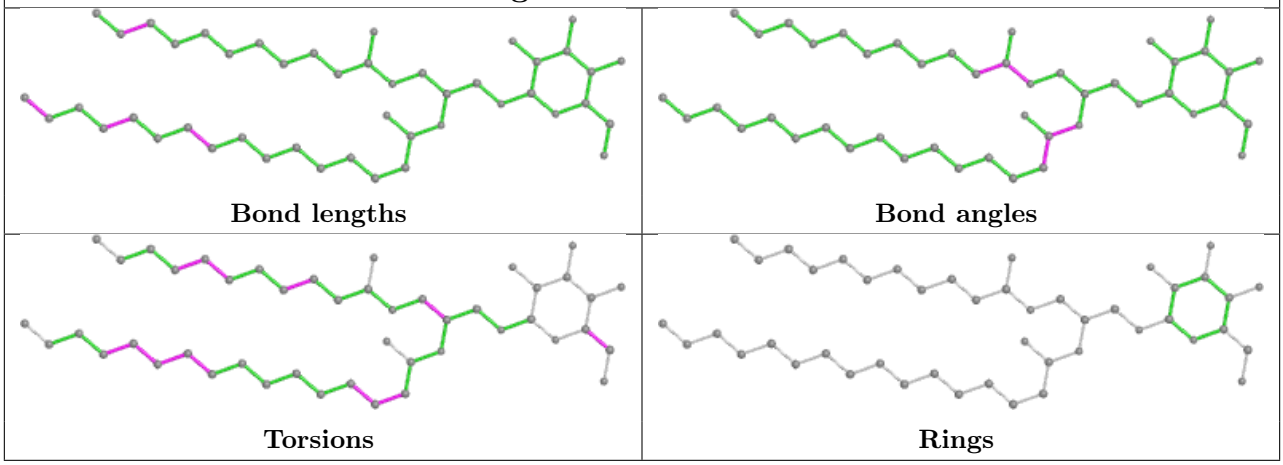
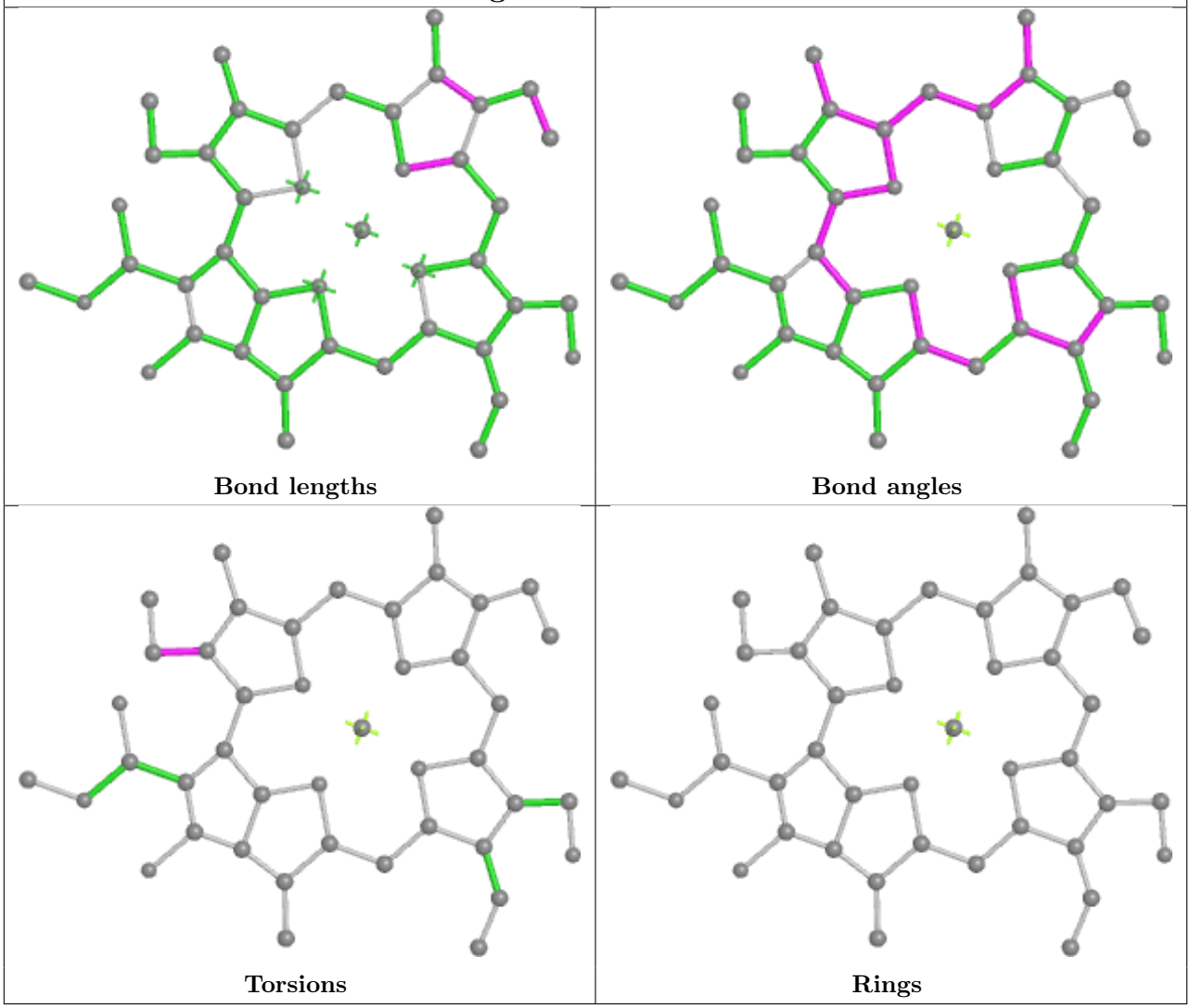


Rings

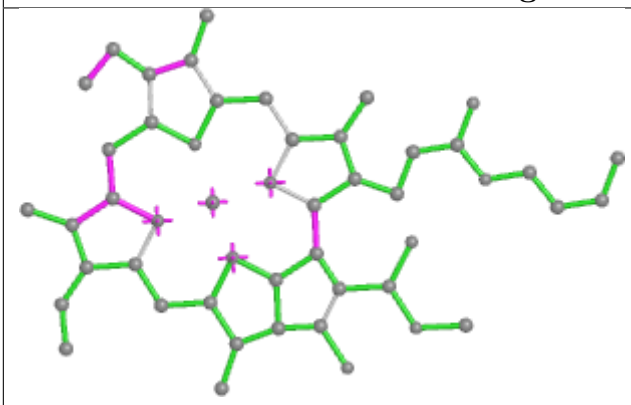
Ligand LMG D1 411



Ligand CHL S 607



Ligand CLA g1 614



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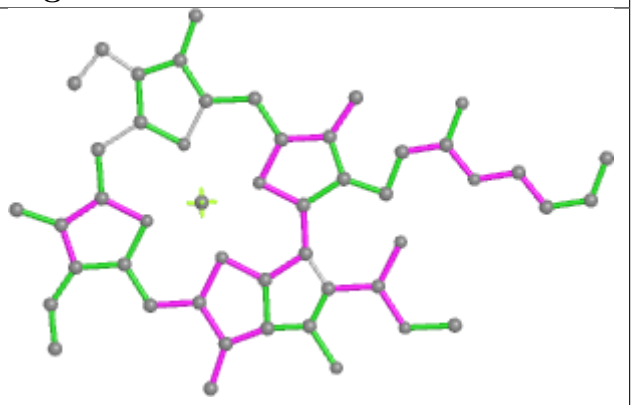
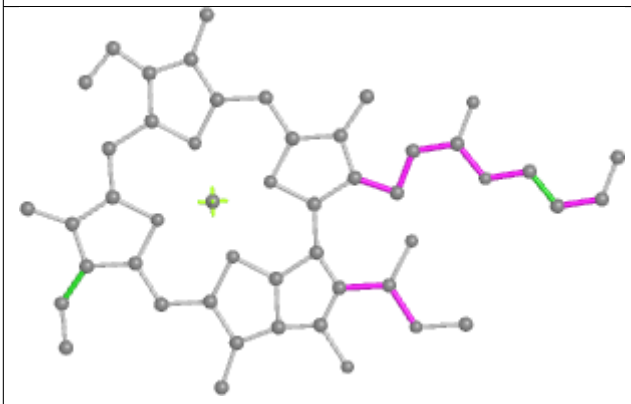


Bond angles



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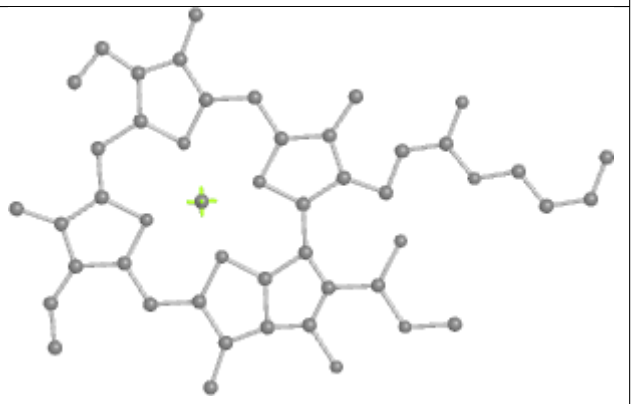
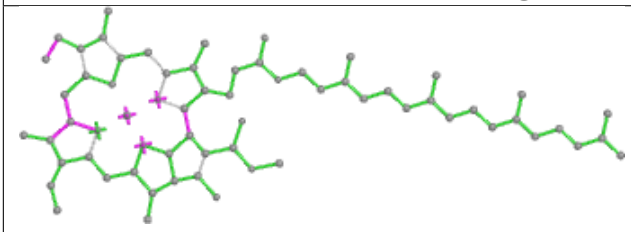


Rings

Ligand CLA B1 610



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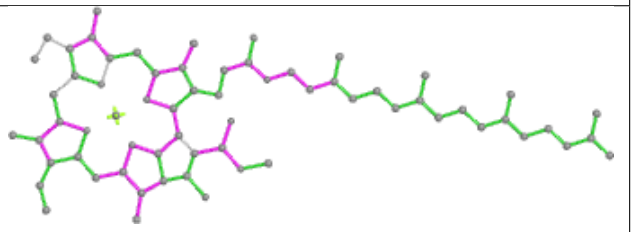
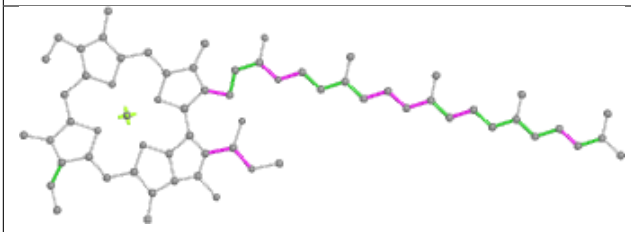
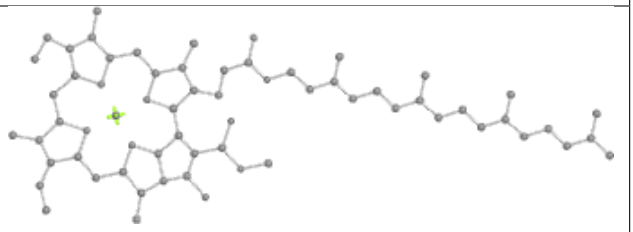


Bond angles

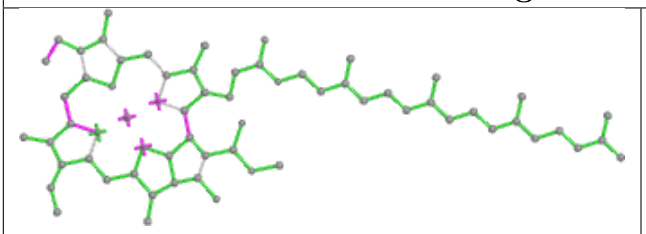


Torsions

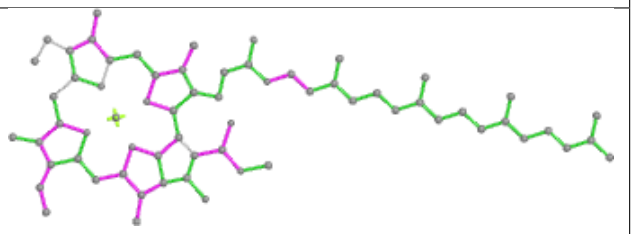


Rings

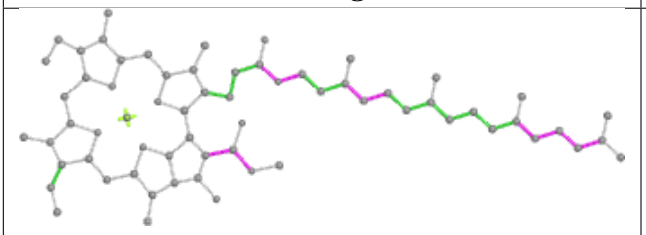
Ligand CLA C1 509



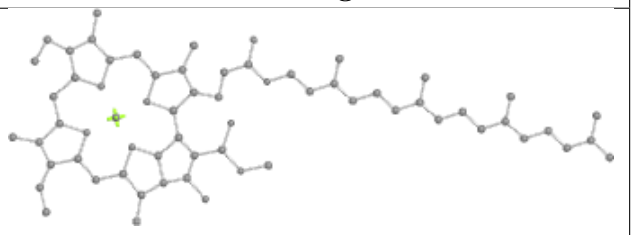
Bond lengths



Bond angles

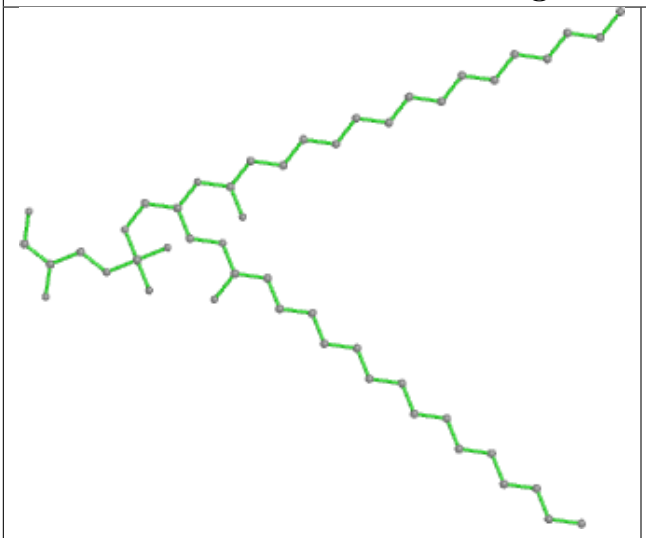


Torsions



Rings

Ligand LHG l 101



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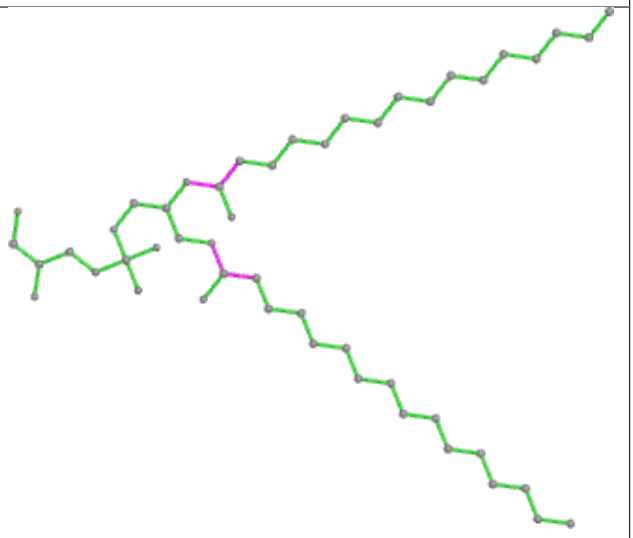
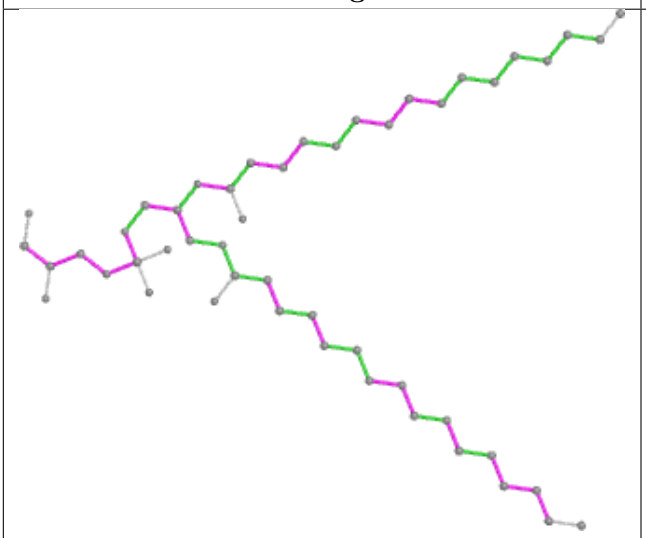
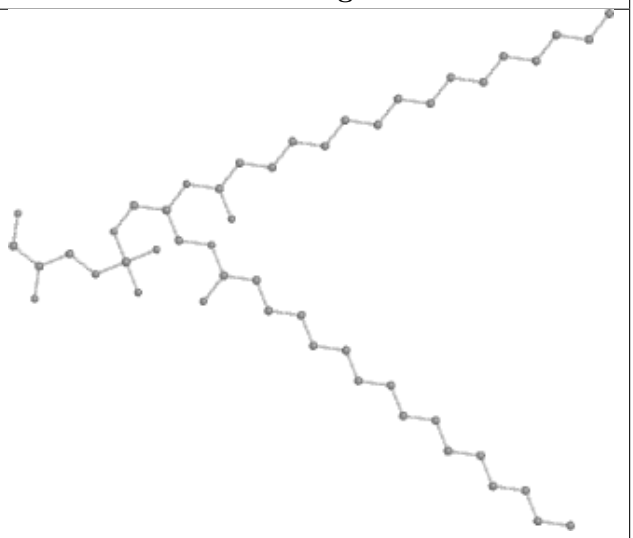


Bond angles

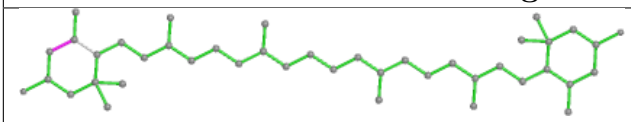


Torsions



Rings

Ligand LUT r1 620



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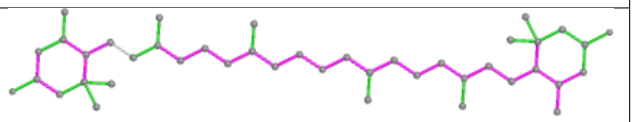
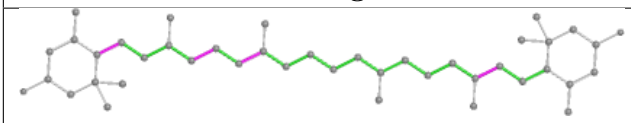
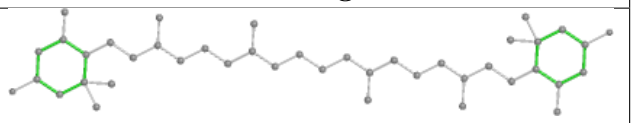


Bond angles

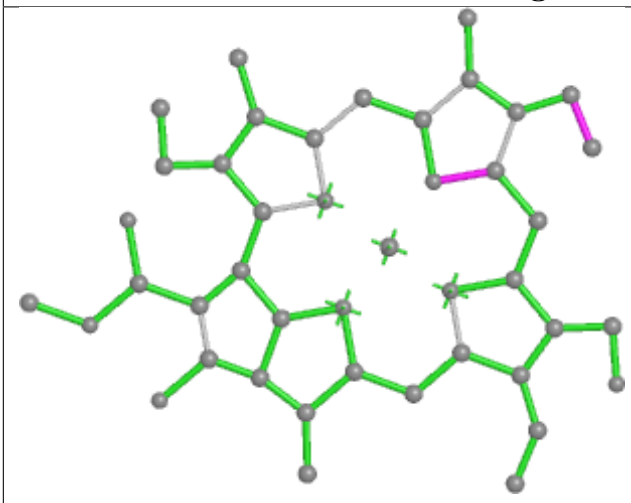


Torsions



Rings

Ligand CHL s 607



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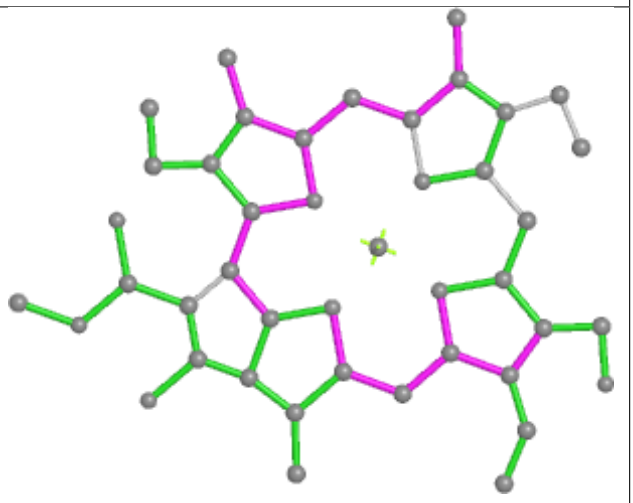
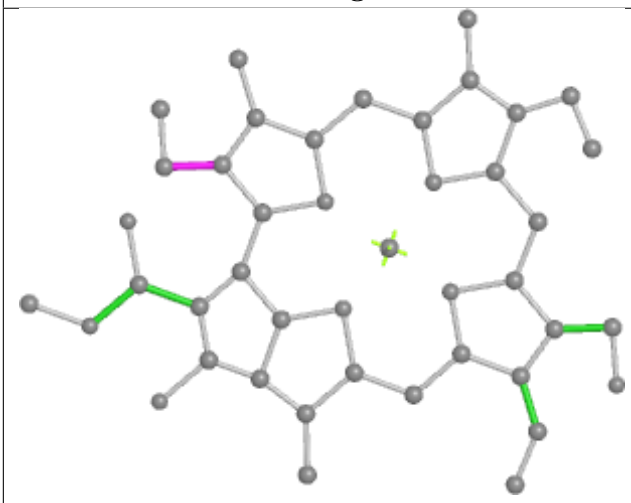


Bond angles



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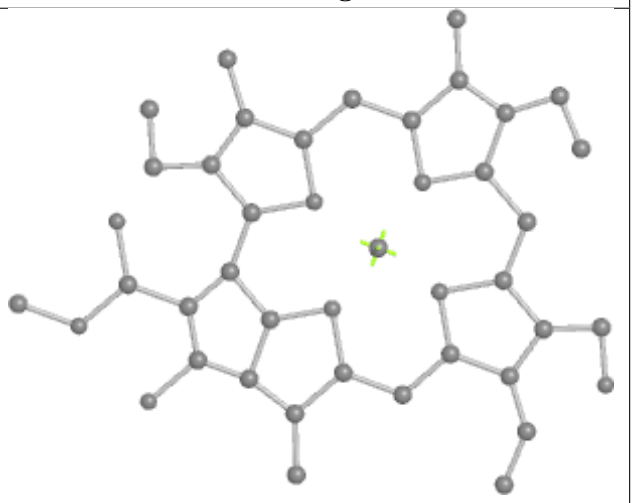
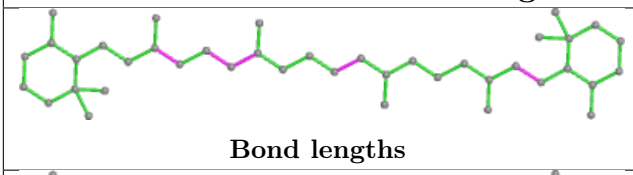
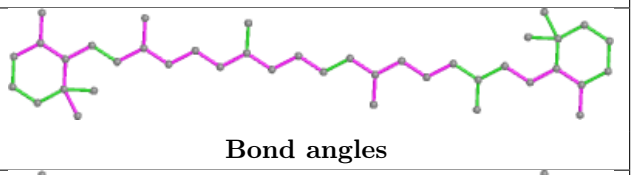


Rings

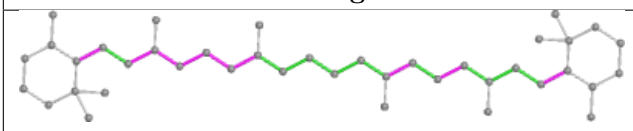
Ligand BCR c1 515



Bond lengths



Bond angles



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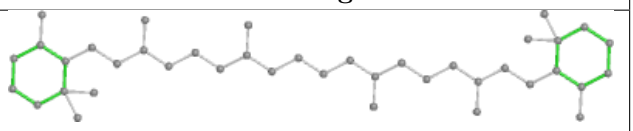
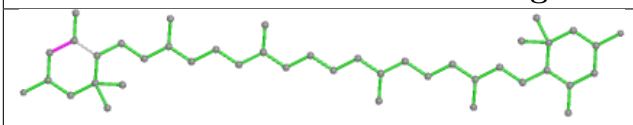


Rings

Ligand LUT s 620



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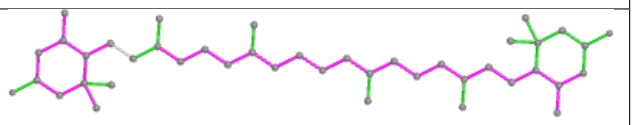
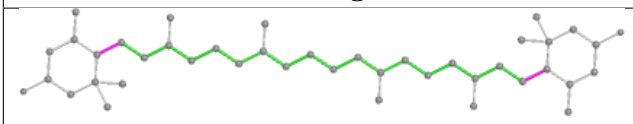


Bond angles



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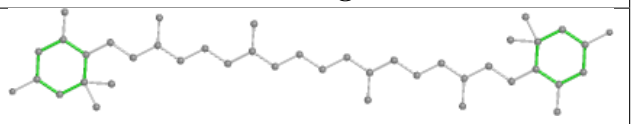
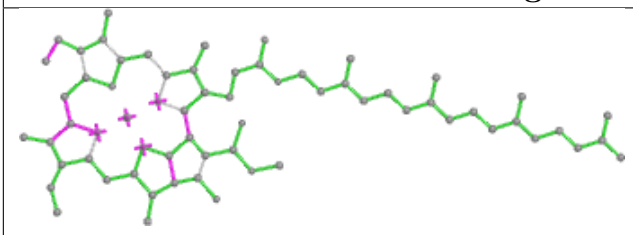


Rings

Ligand CLA B 604



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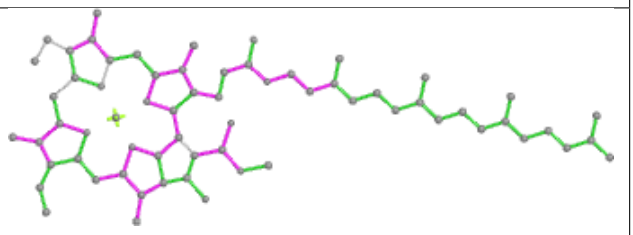
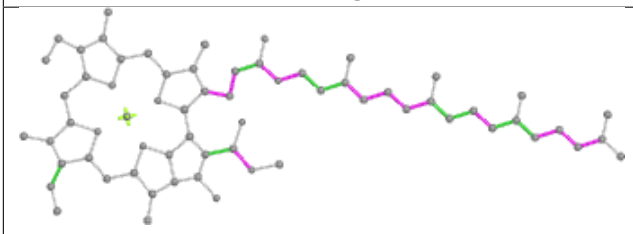


Bond angles



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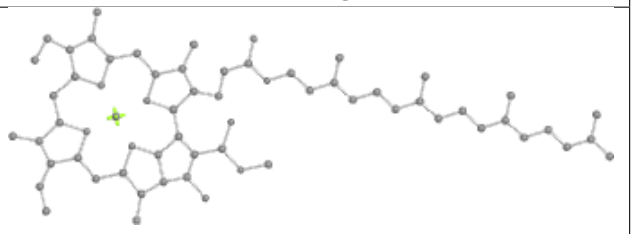
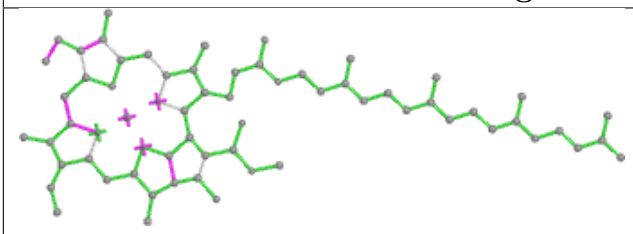


Rings

Ligand CLA C1 510



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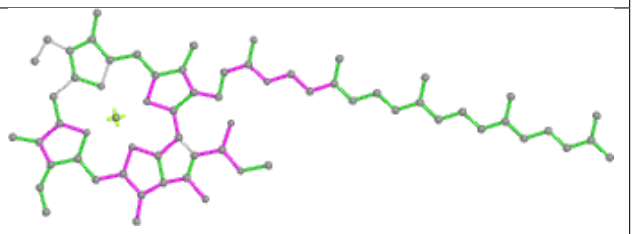
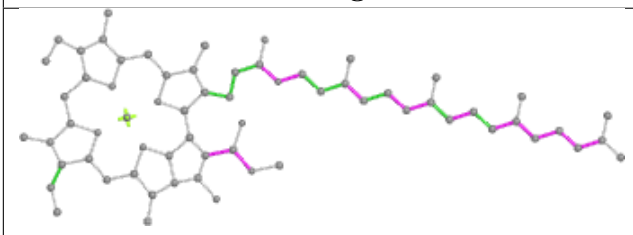


Bond angles



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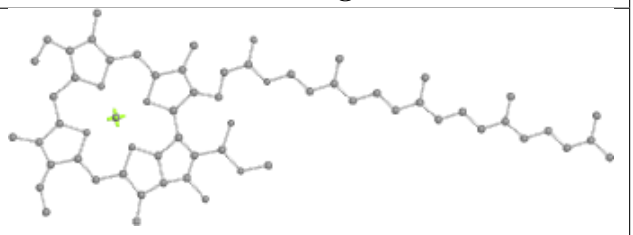
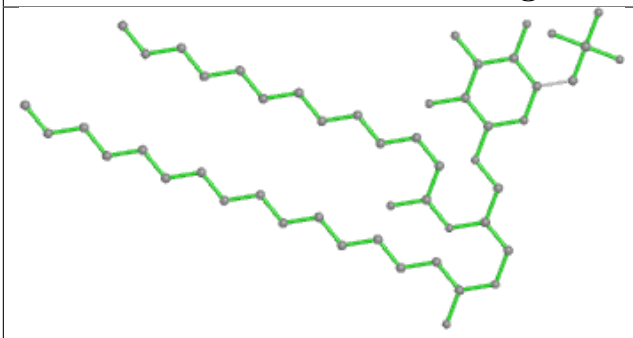


Rings

Ligand SQD a1 412



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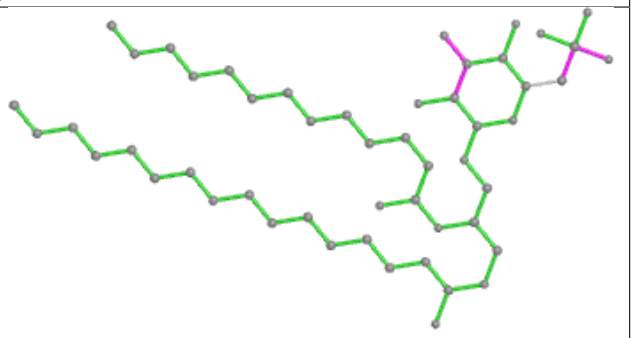
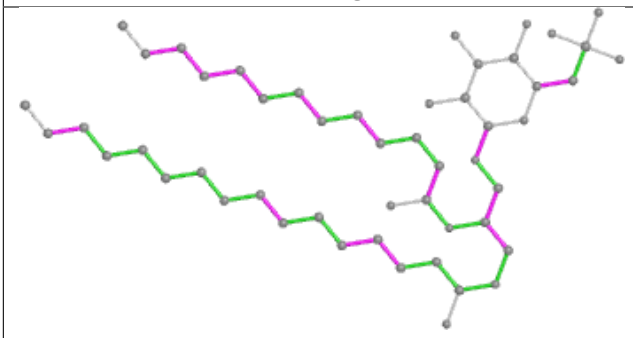
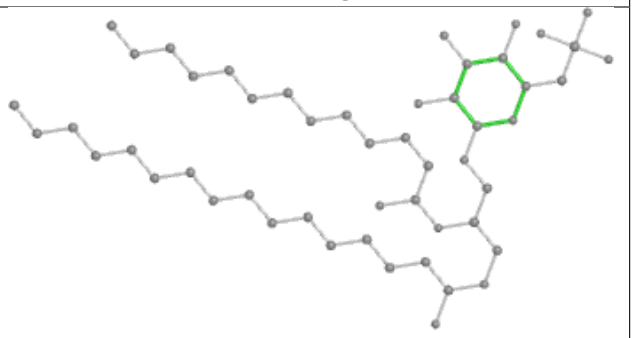


Bond angles

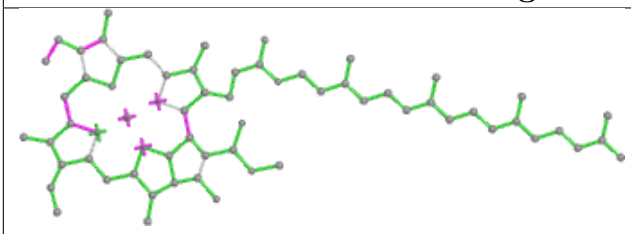


Torsions



Rings

Ligand CLA n1 610



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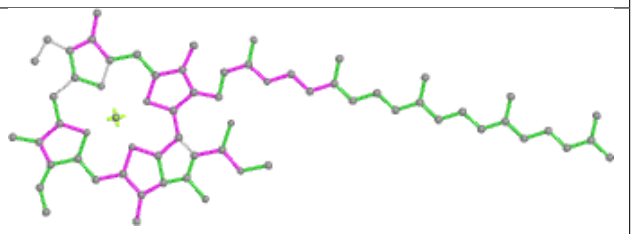
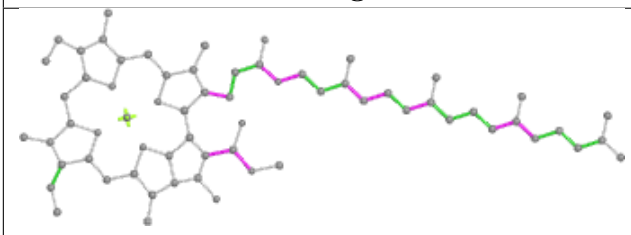


Bond angles



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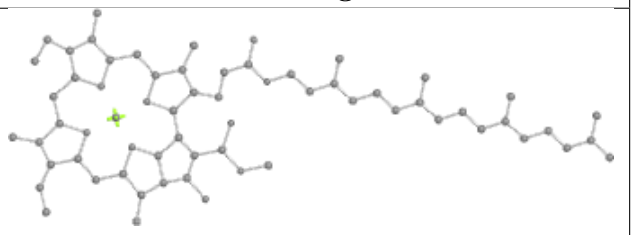
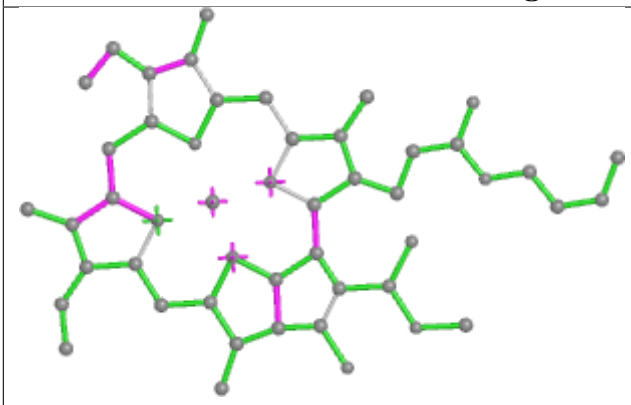


Rings

Ligand CLA G 604



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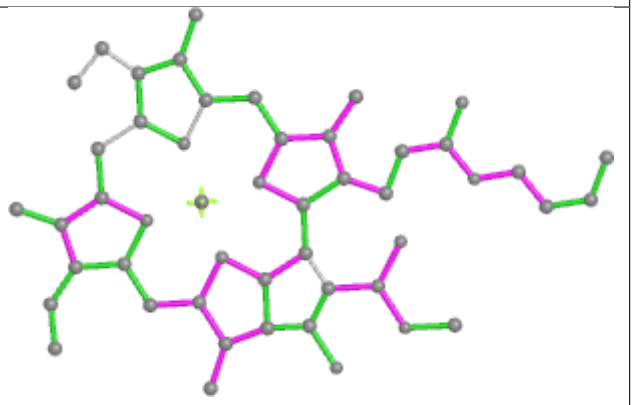
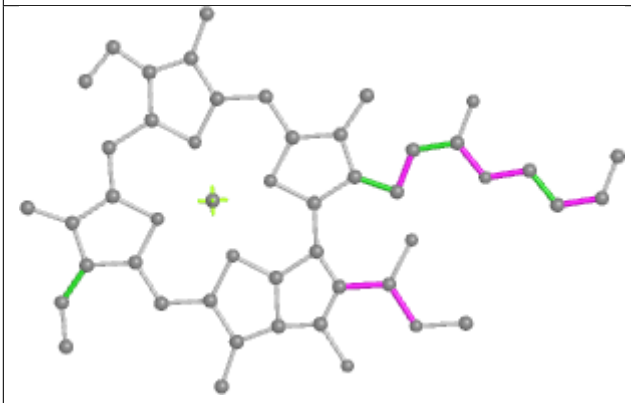


Bond angles



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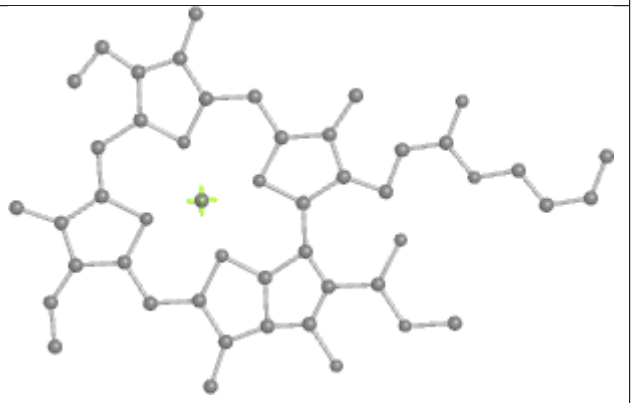
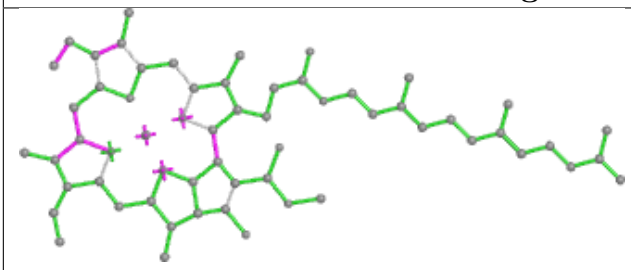


Rings

Ligand CLA r1 603



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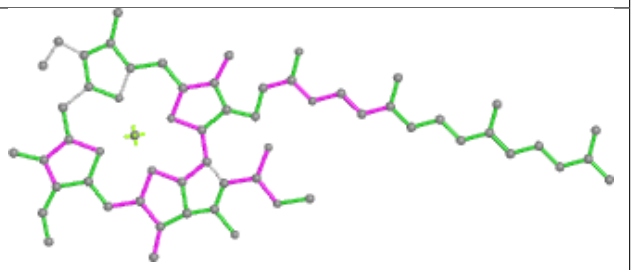
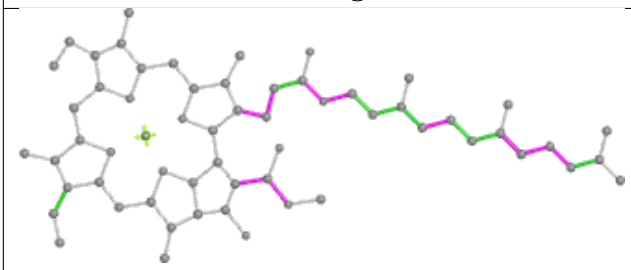


Bond angles



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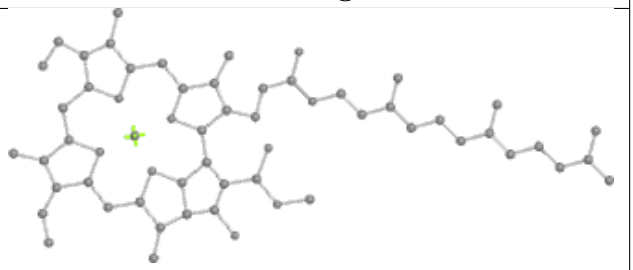
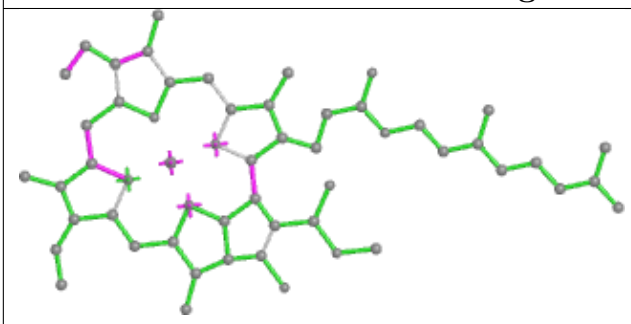


Rings

Ligand CLA S1 604



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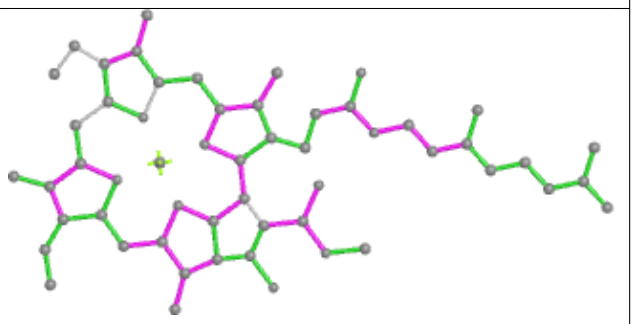
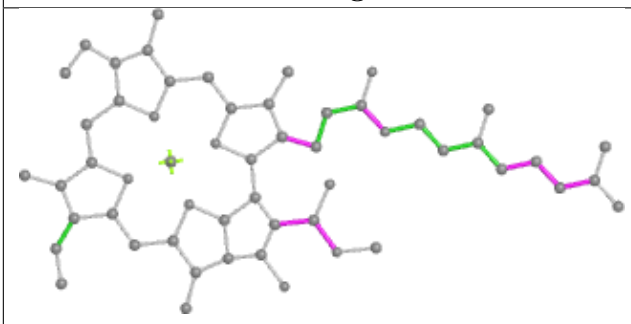


Bond angles



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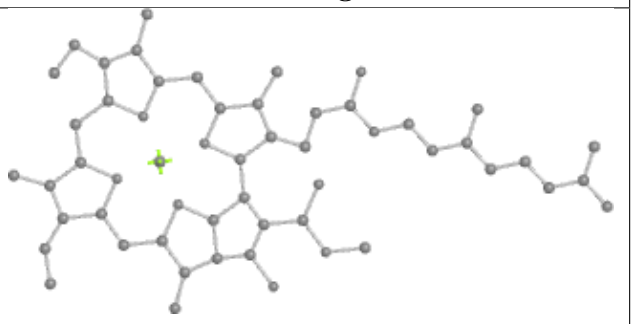
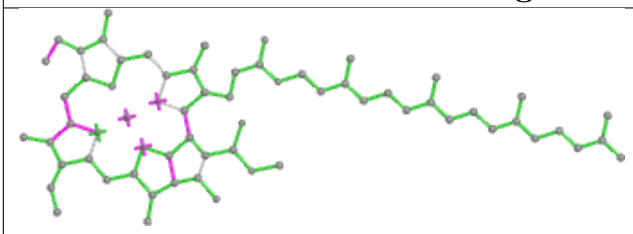


Rings

Ligand CLA C1 513



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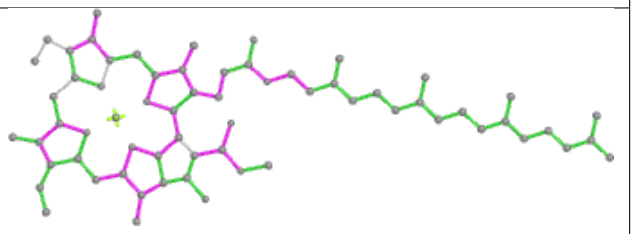
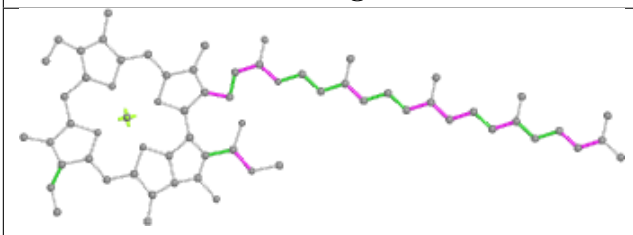


Bond angles



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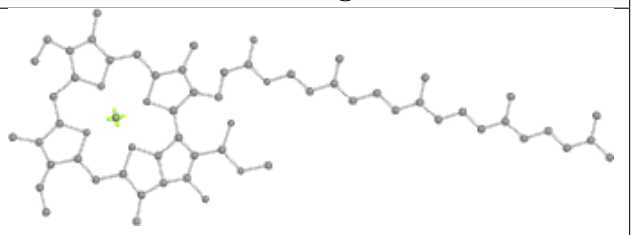
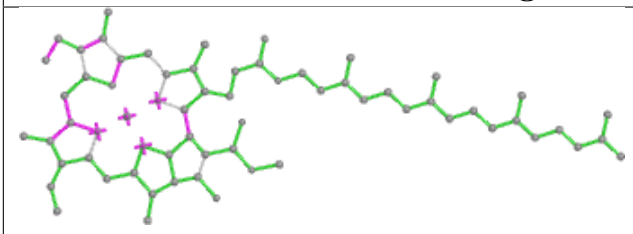


Rings

Ligand CLA n1 603



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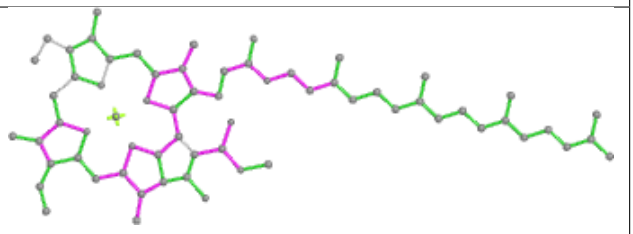
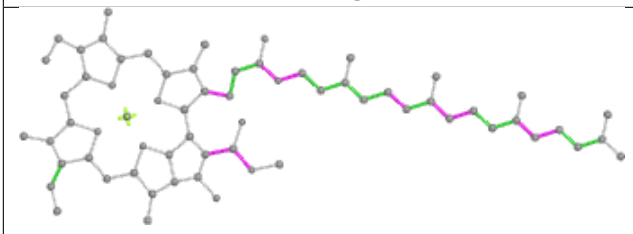
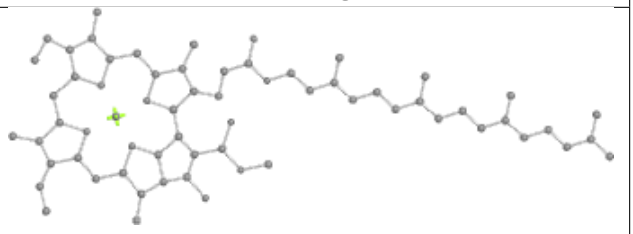


Bond angles

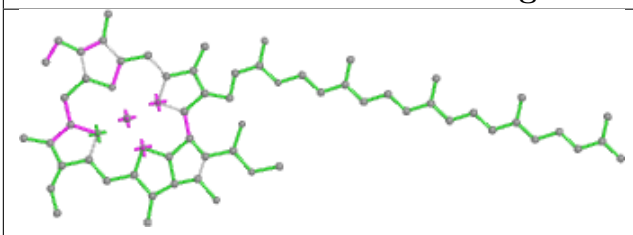


Torsions



Rings

Ligand CLA g1 610



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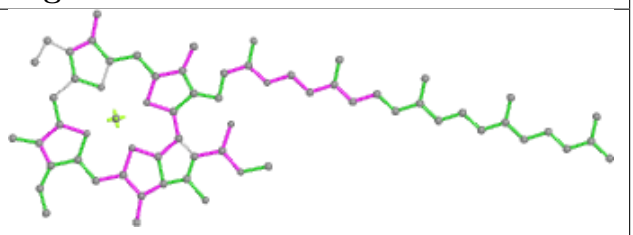

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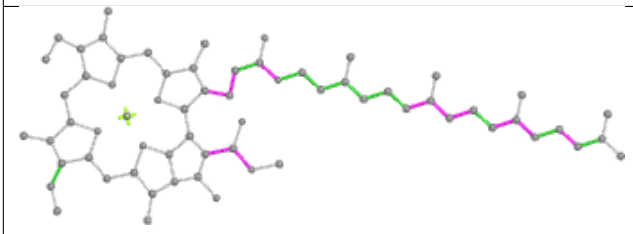

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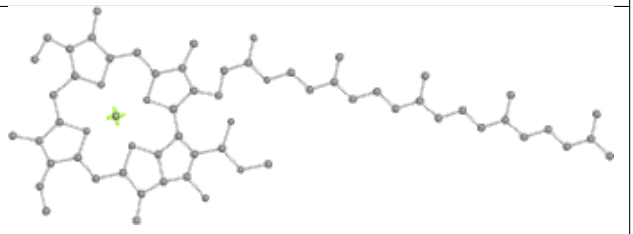
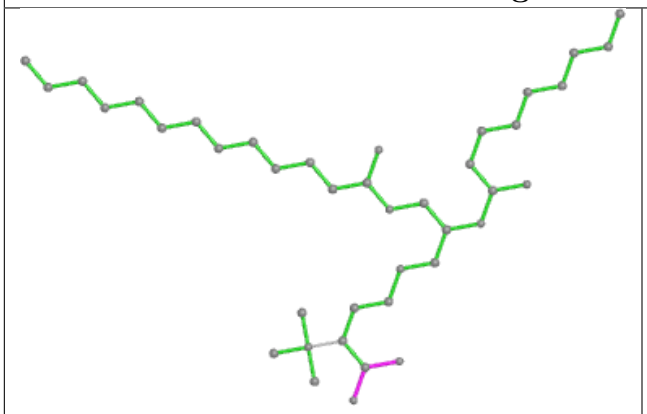


Rings

Ligand LMK C1 527



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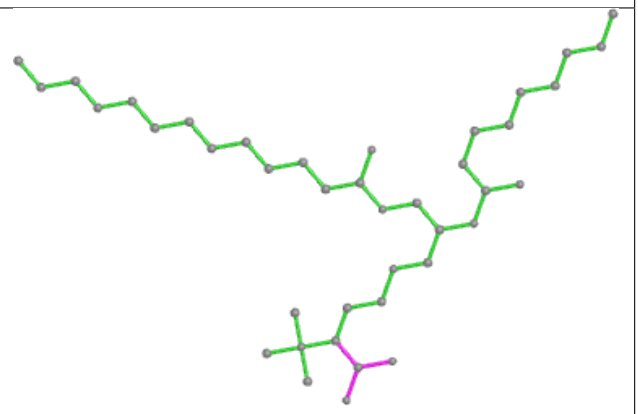

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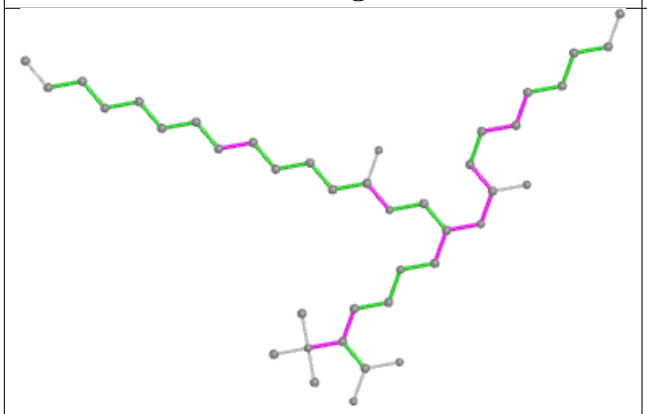

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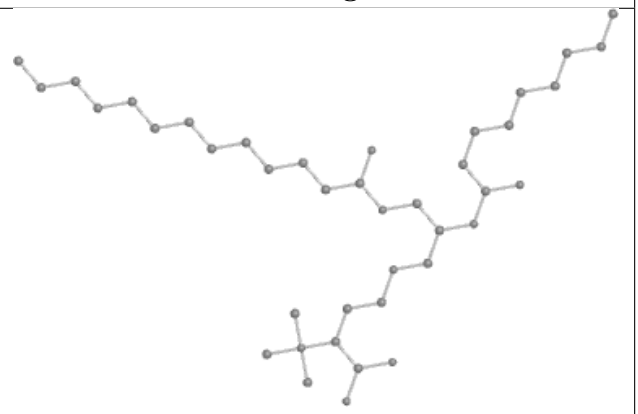
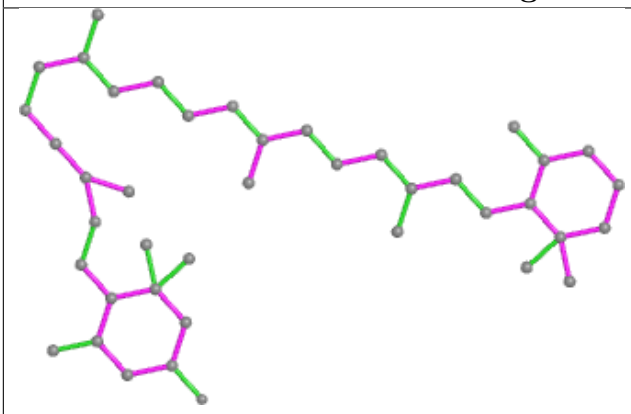


Rings

Ligand RRX H 101



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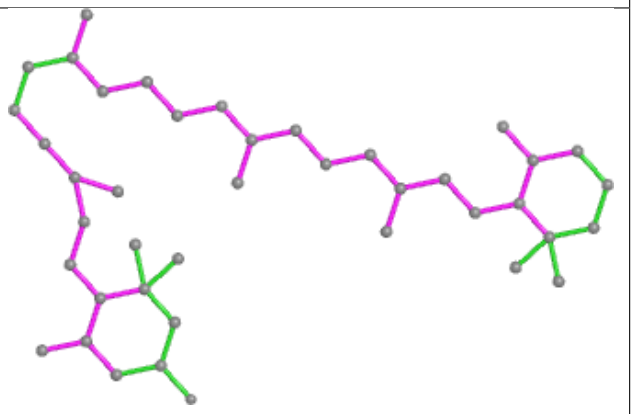

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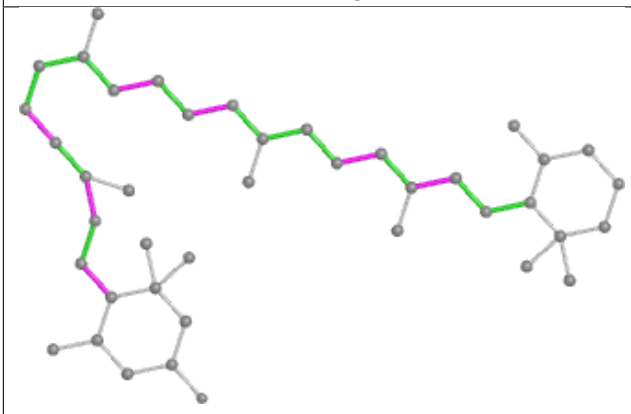

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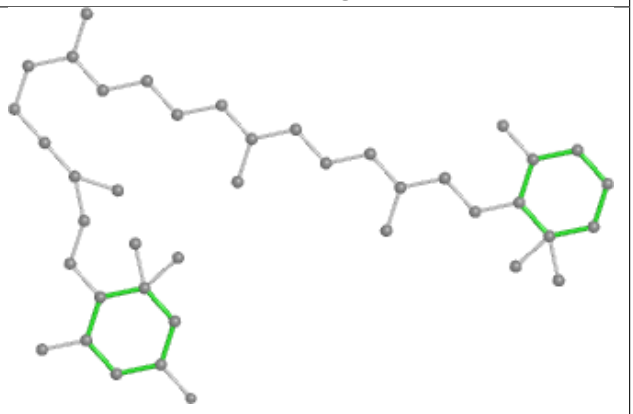
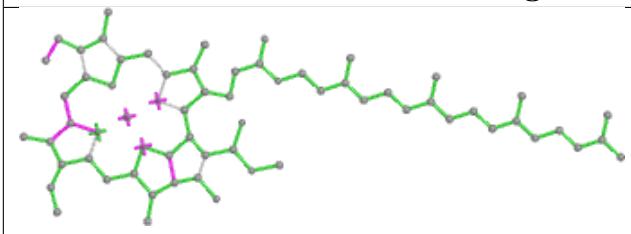


Rings

Ligand CLA Y 602



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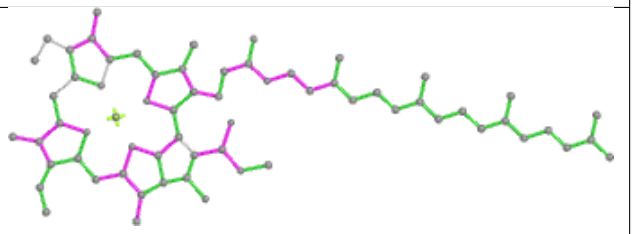

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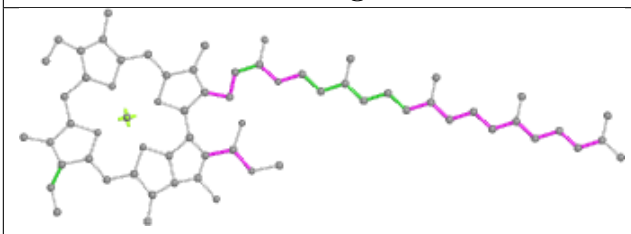

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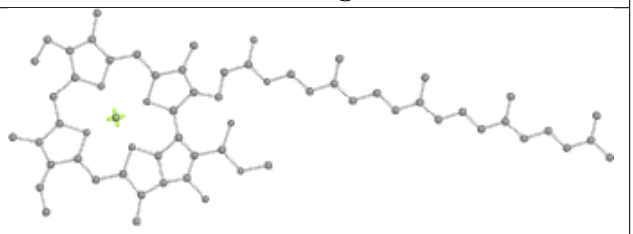
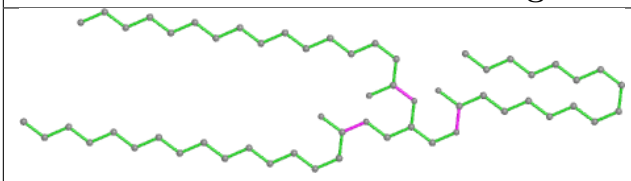


Rings

Ligand 4RF i1 101



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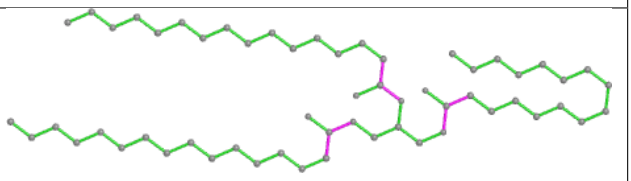

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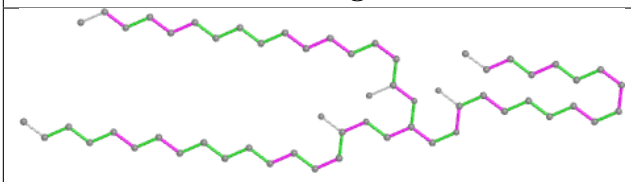

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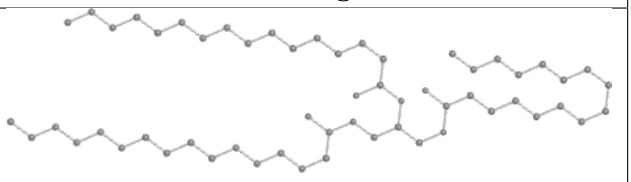
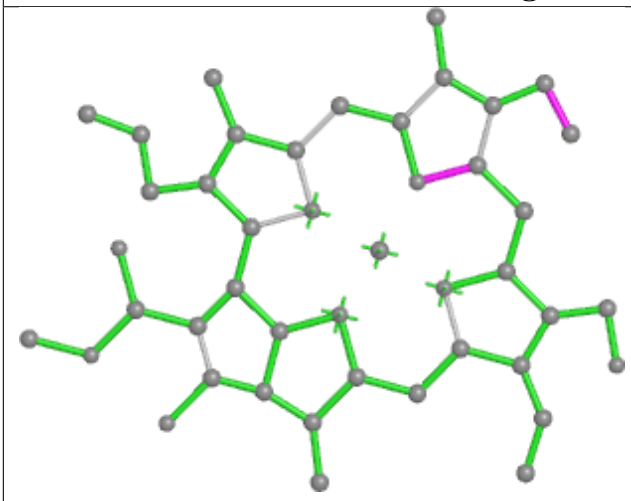


Rings

Ligand CHL s1 606



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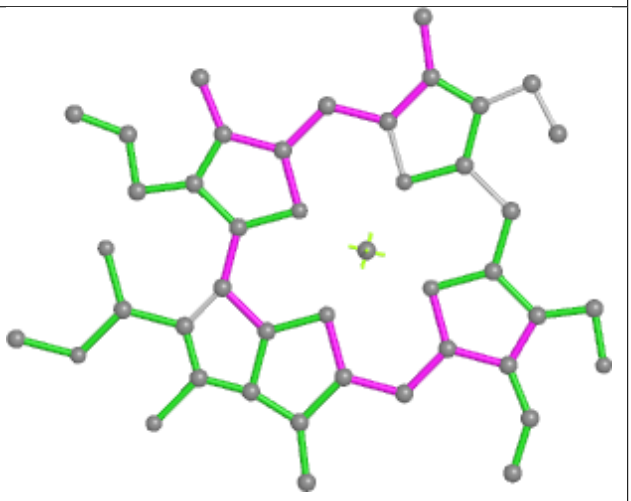

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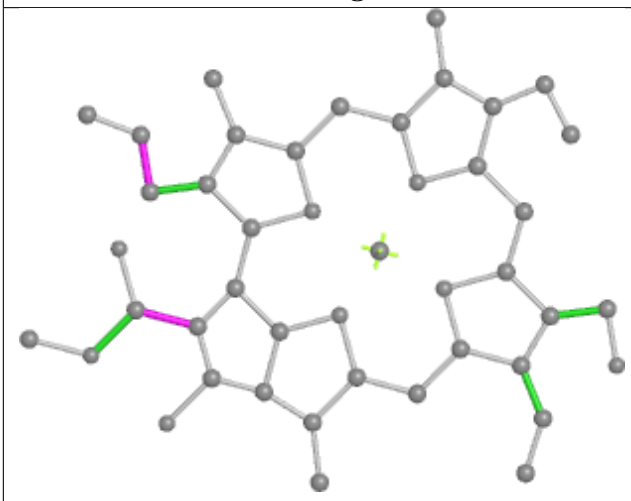

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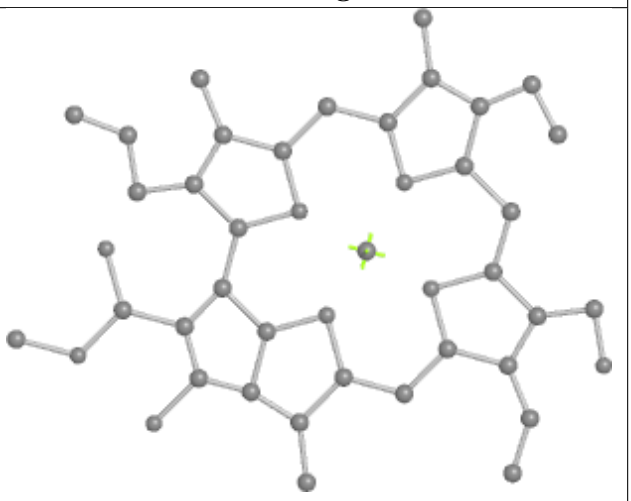
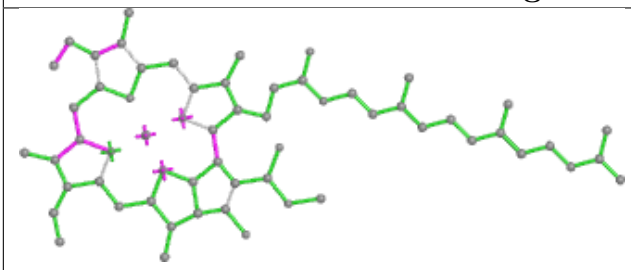


Rings

Ligand CLA R 609



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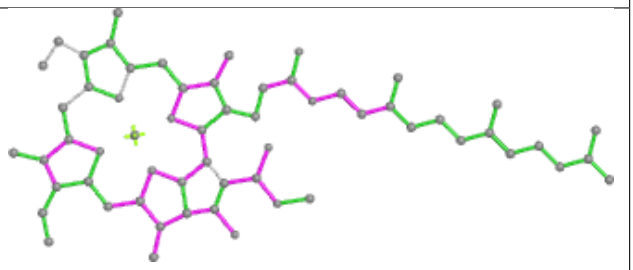

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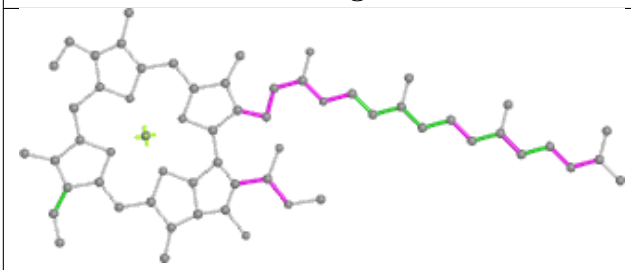

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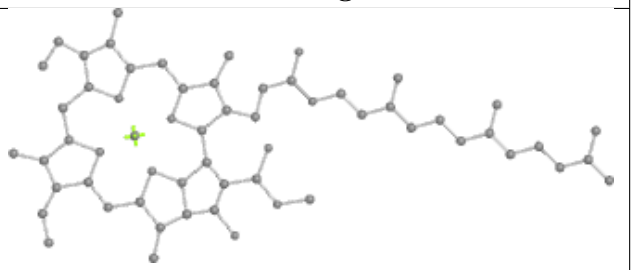
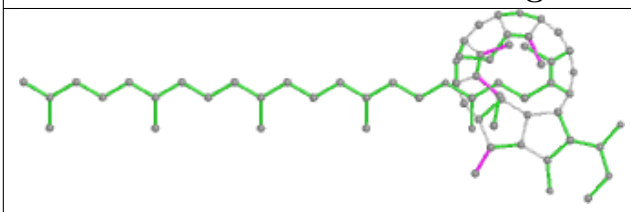


Rings

Ligand PHO a 408



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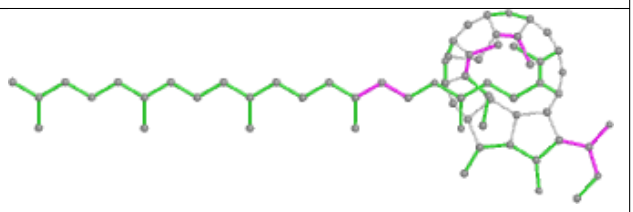

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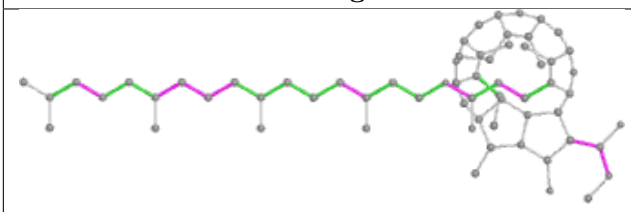

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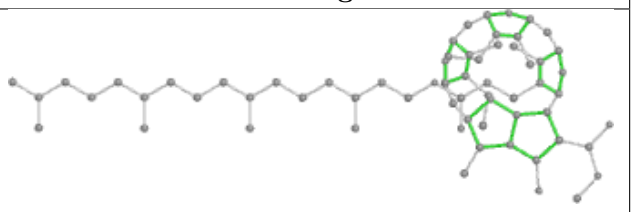
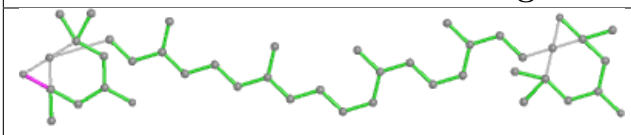


Rings

Ligand XAT n1 622



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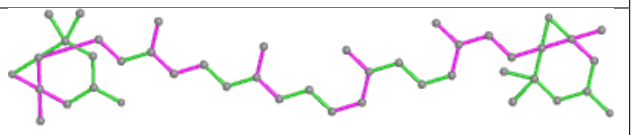

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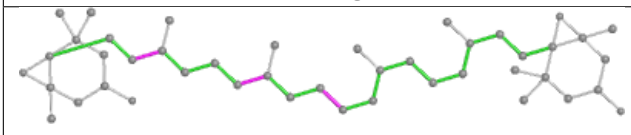

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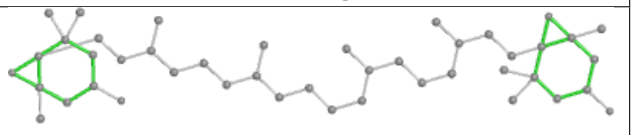
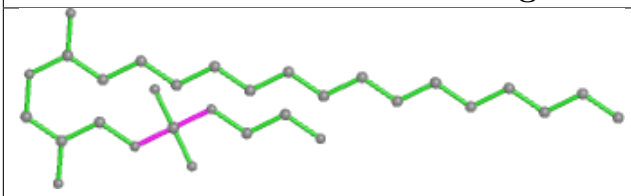


Rings

Ligand LPX S1 625



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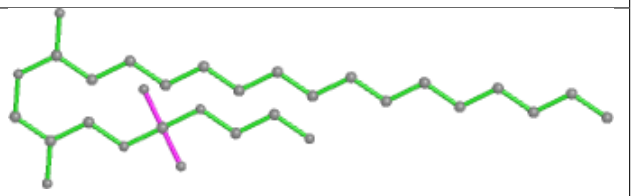

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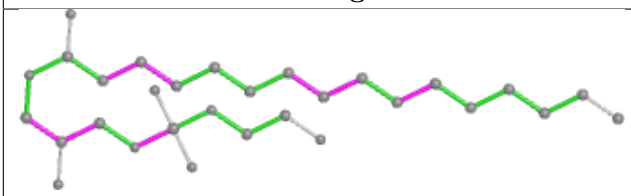

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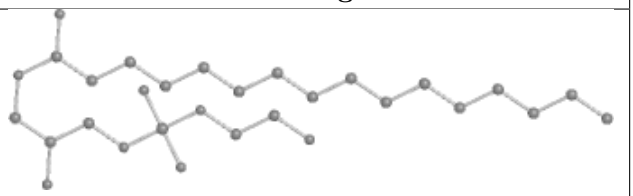
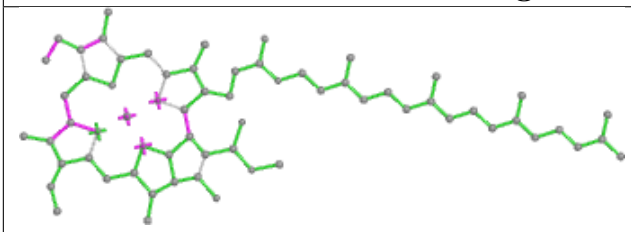


Rings

Ligand CLA B1 602



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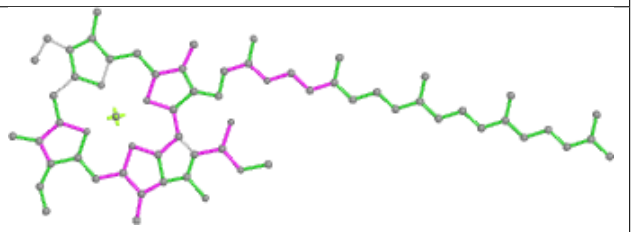
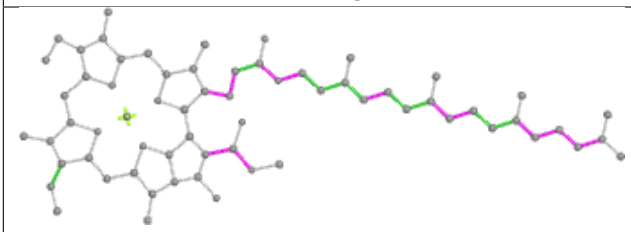


Bond angles



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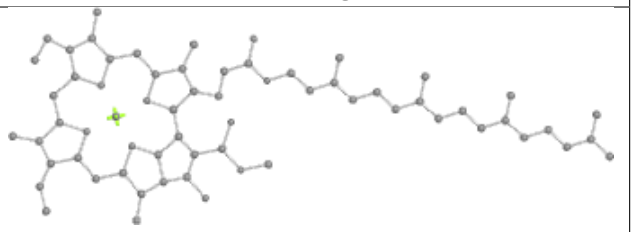
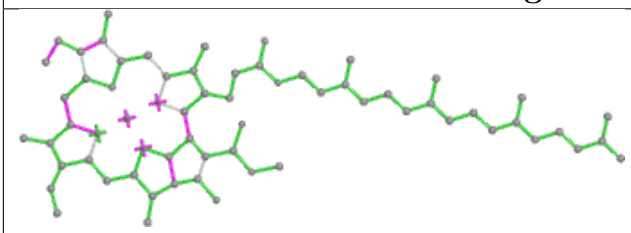


Rings

Ligand CLA C 502



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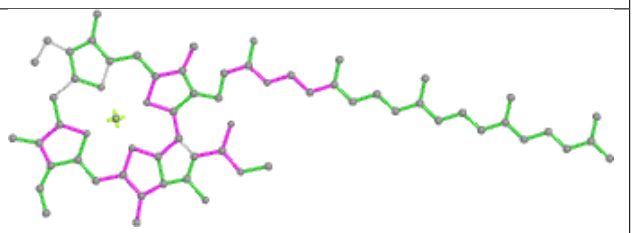
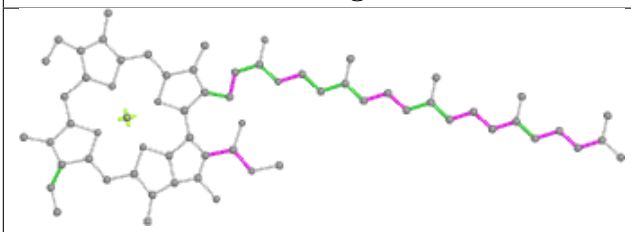


Bond angles



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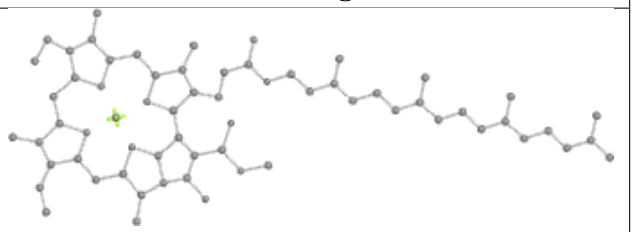
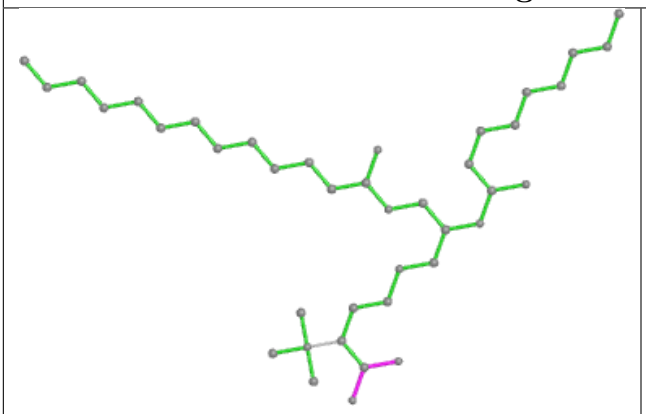


Rings

Ligand LMK c1 527



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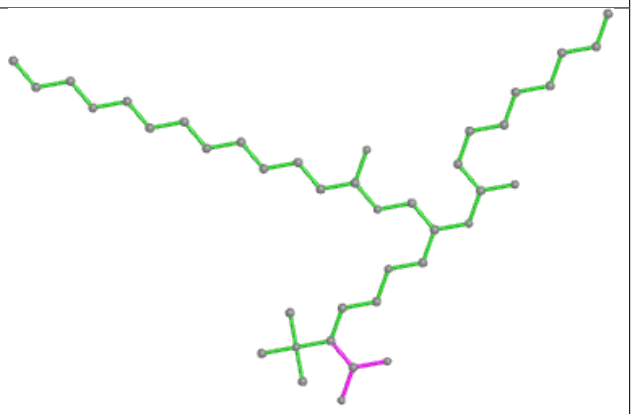
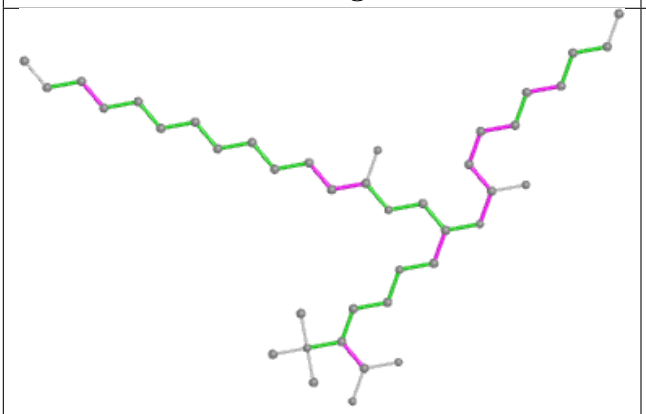


Bond angles



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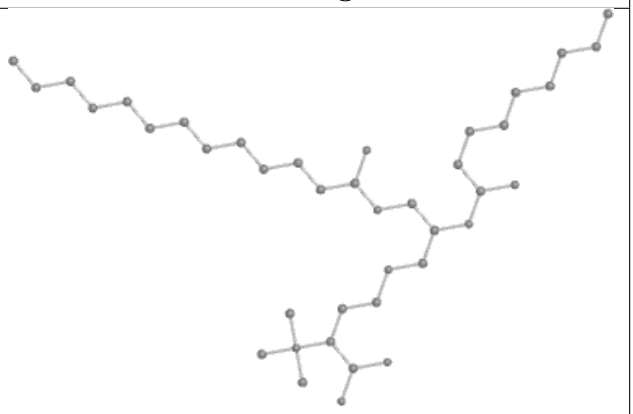
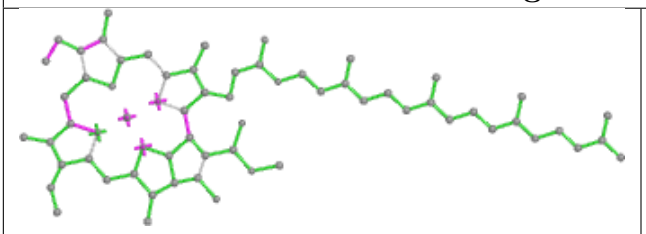


Rings

Ligand CLA Y 611



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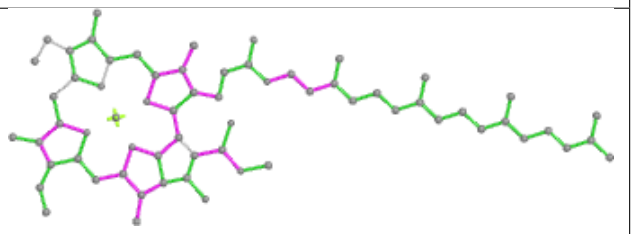
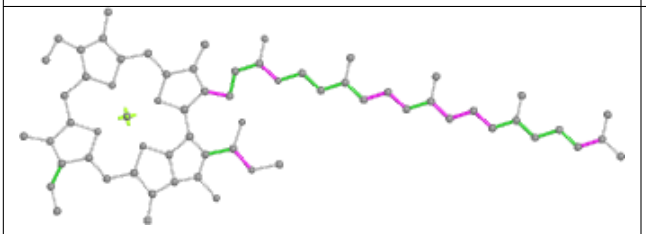


Bond angles



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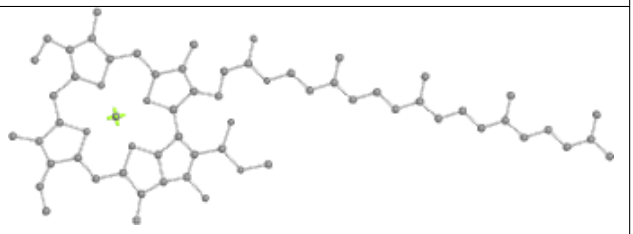
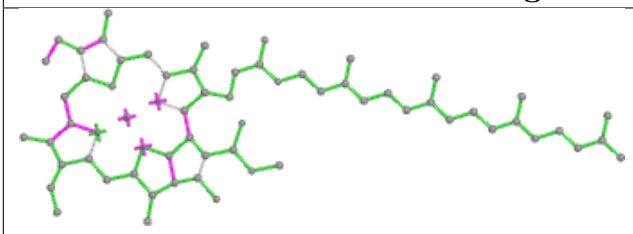
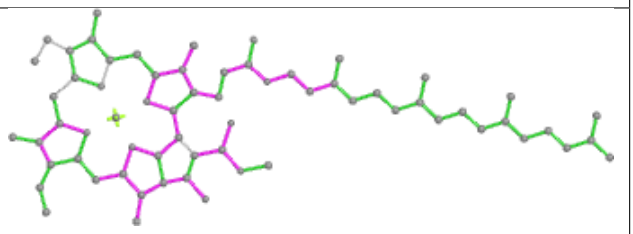


Rings

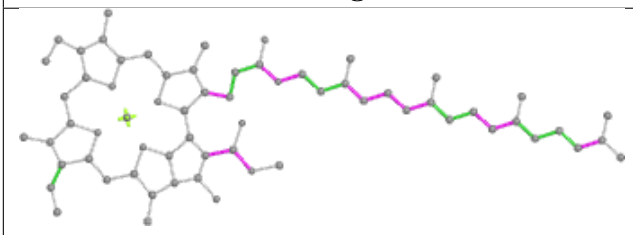
Ligand CLA Y 603



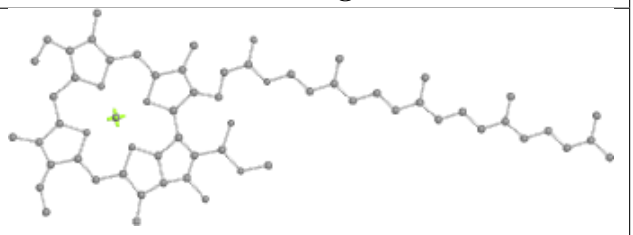
Bond lengths



Bond angles

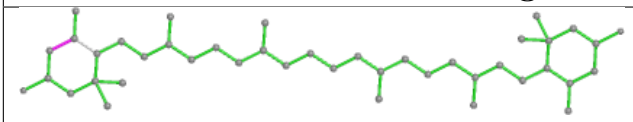


Torsions



Rings

Ligand LUT n1 620



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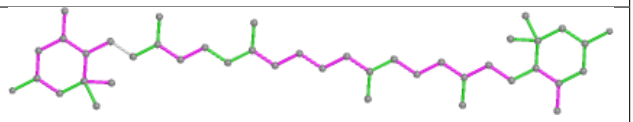

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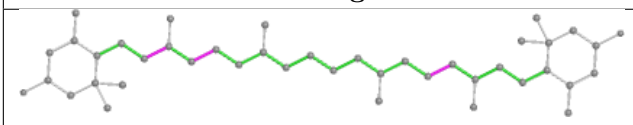
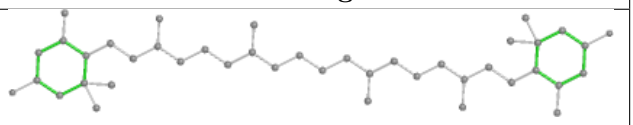
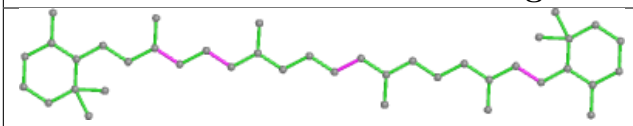


Torsions



Rings

Ligand BCR b 618



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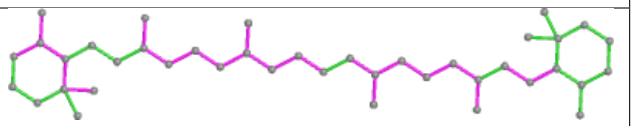
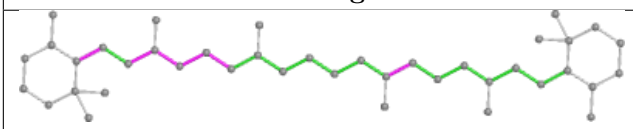
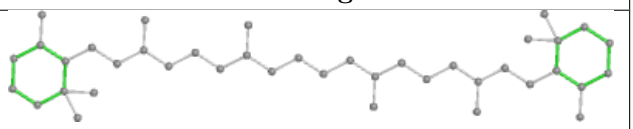


Bond angles

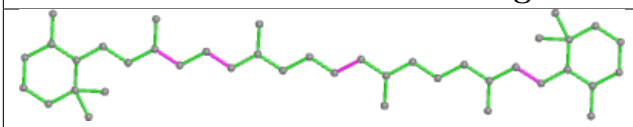


Torsions



Rings

Ligand BCR B1 619



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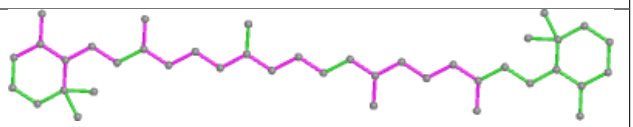
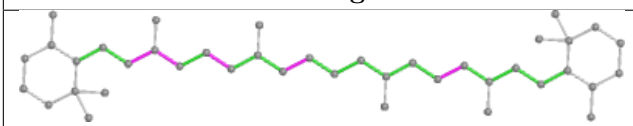


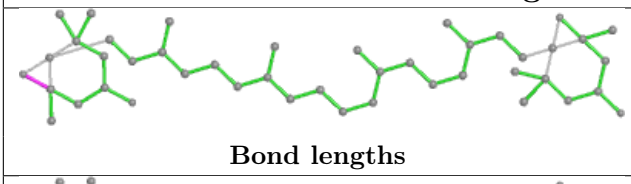
Bond angles



Torsions

Rings

Ligand XAT R 621



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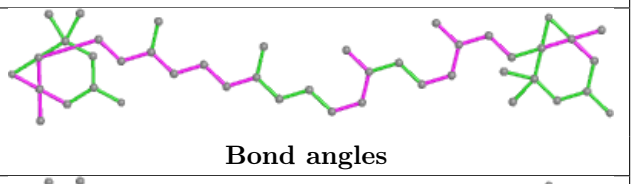
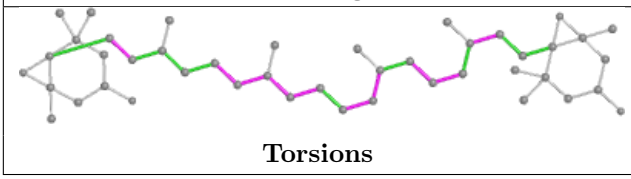
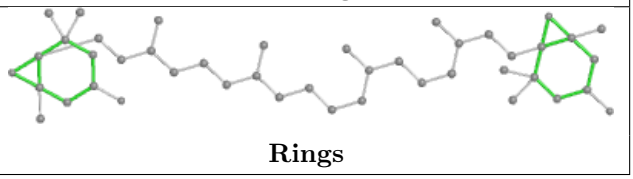


Bond angles

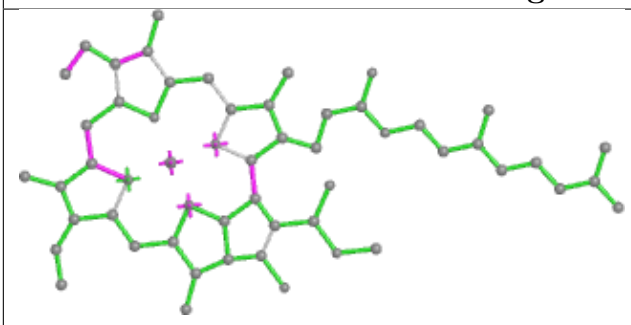


Torsions



Rings

Ligand CLA S 604



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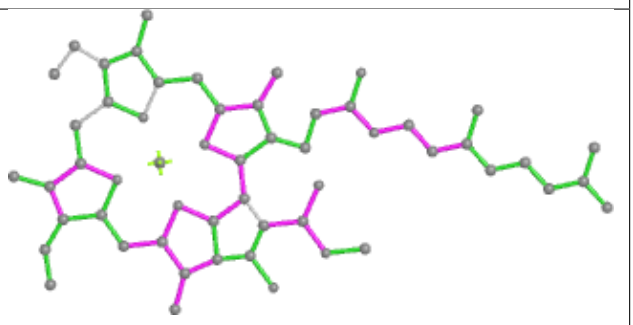
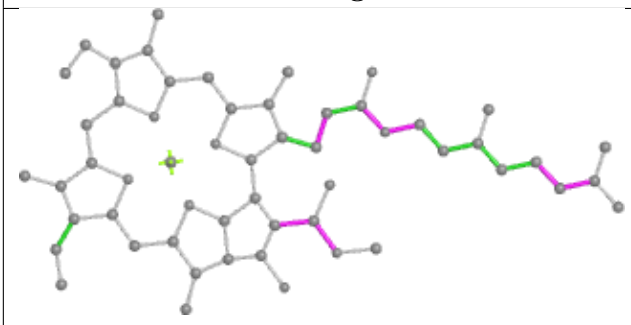


Bond angles



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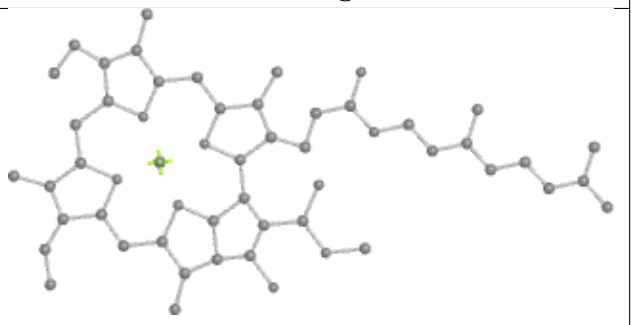
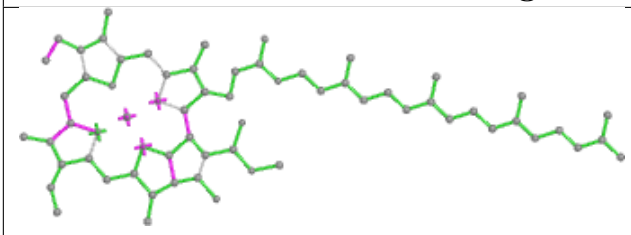


Rings

Ligand CLA b1 606



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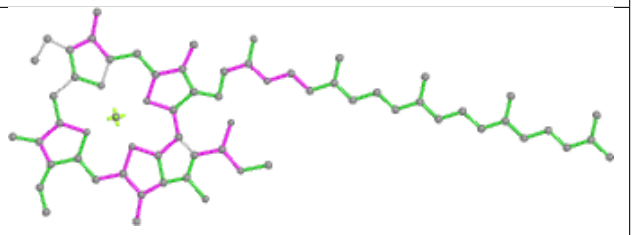
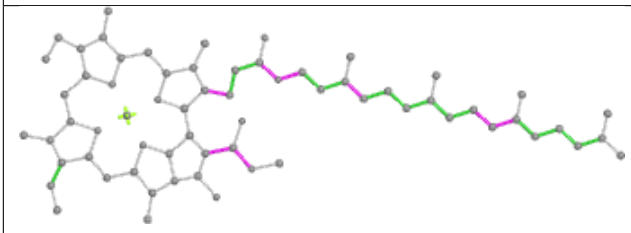


Bond angles



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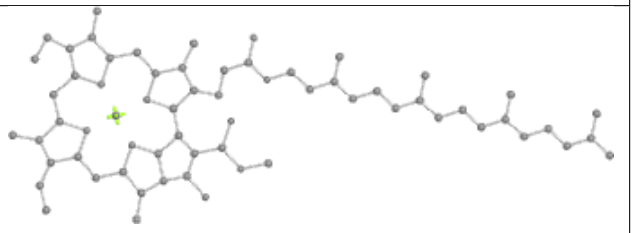
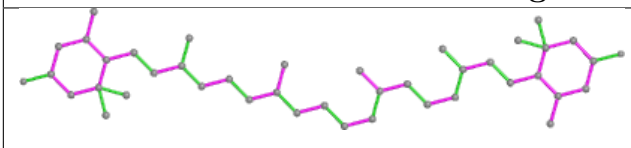


Rings

Ligand C7Z B 620



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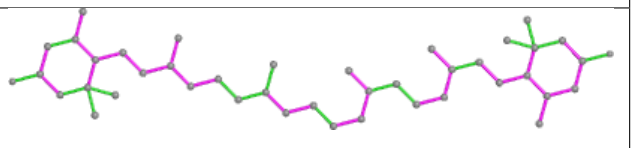
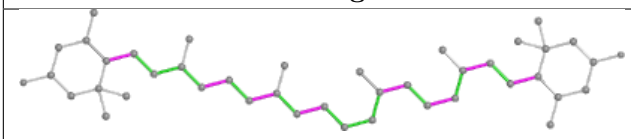
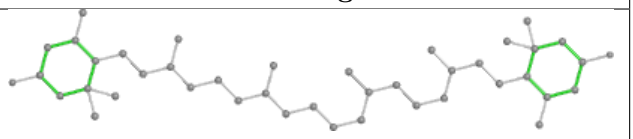


Bond angles

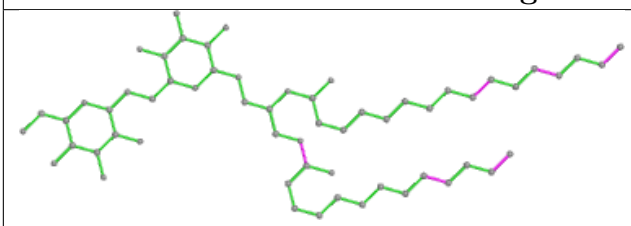


Torsions



Rings

Ligand DGD C 520



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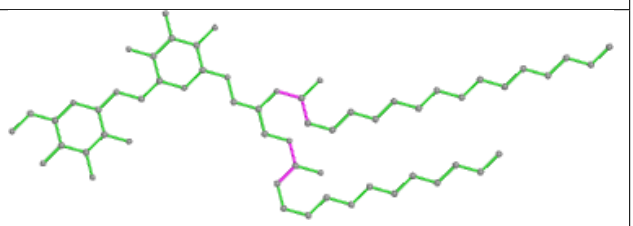
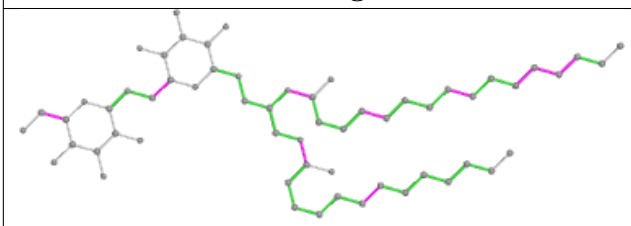
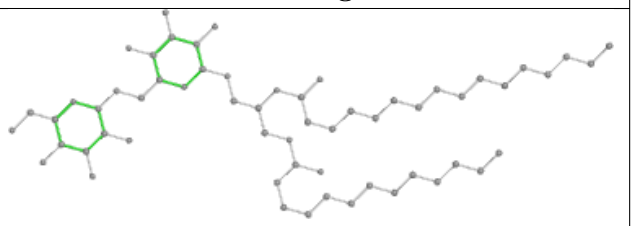


Bond angles

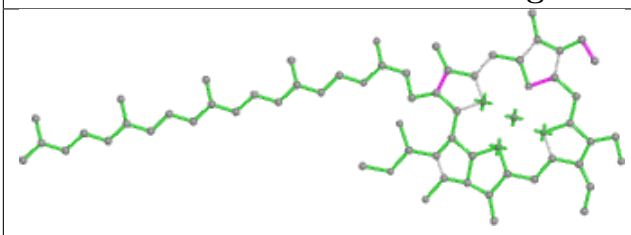


Torsions



Rings

Ligand CHL n 609



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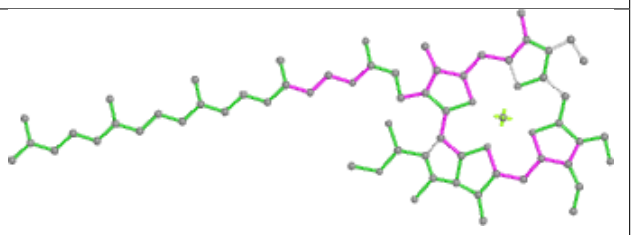
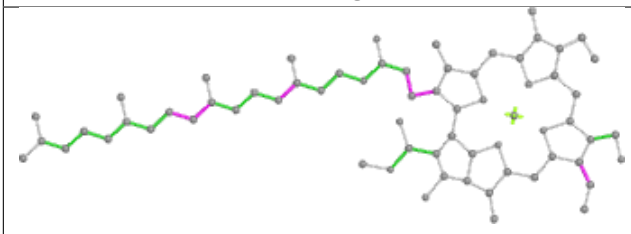


Bond angles



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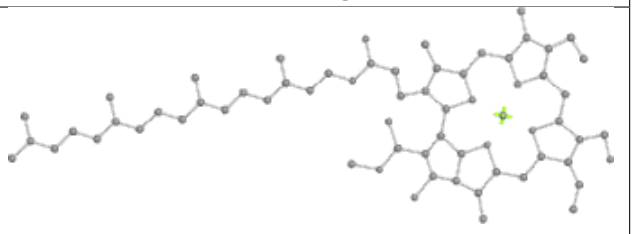
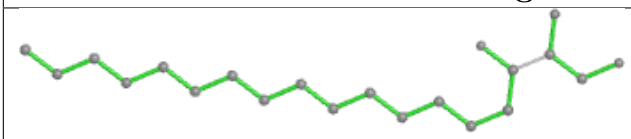


Rings

Ligand SPH Y1 625



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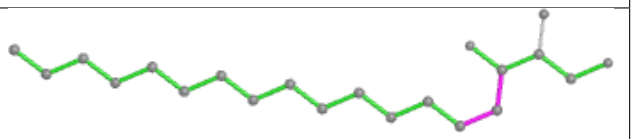

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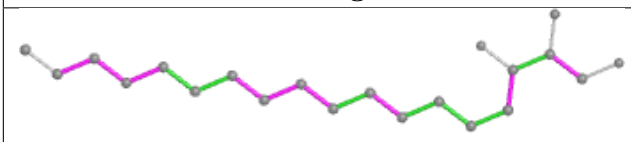

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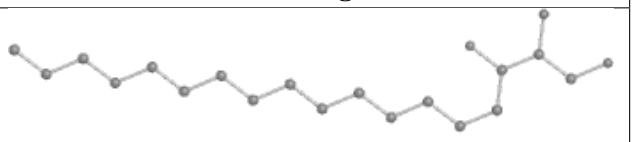
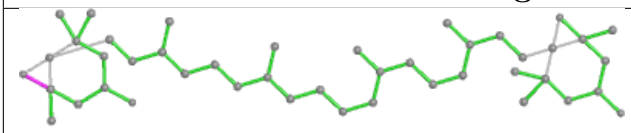


Rings

Ligand XAT Y1 622



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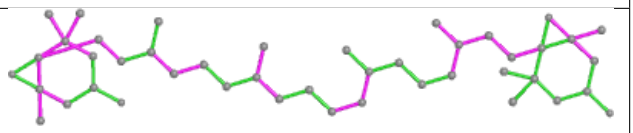
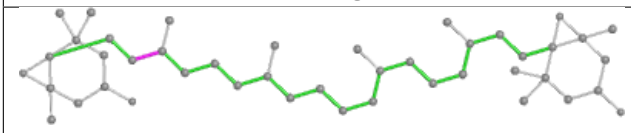


Bond angles



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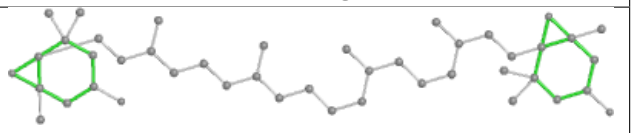
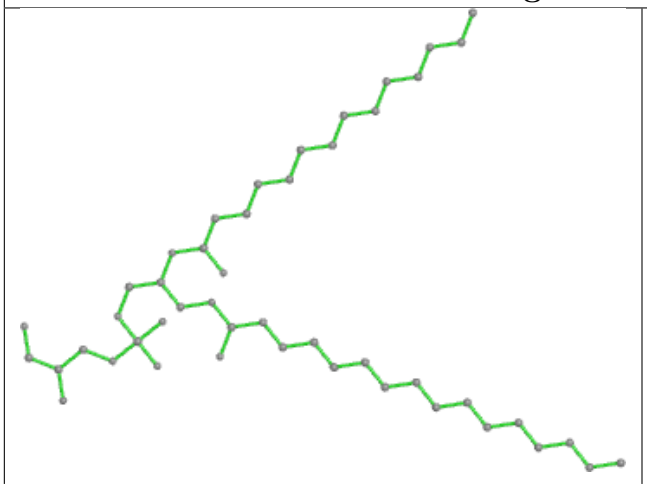
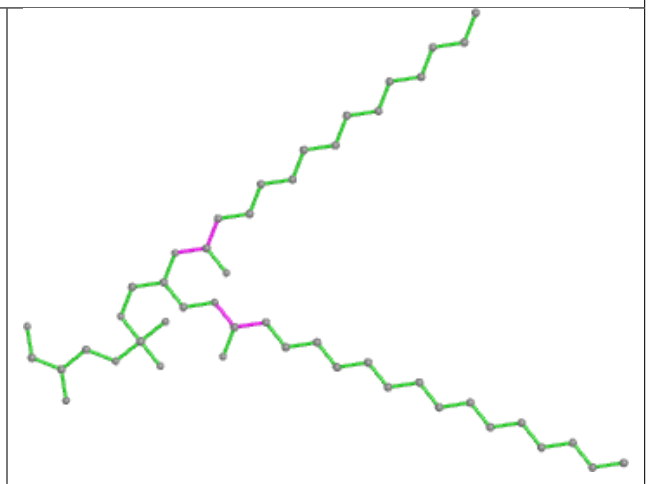


Rings

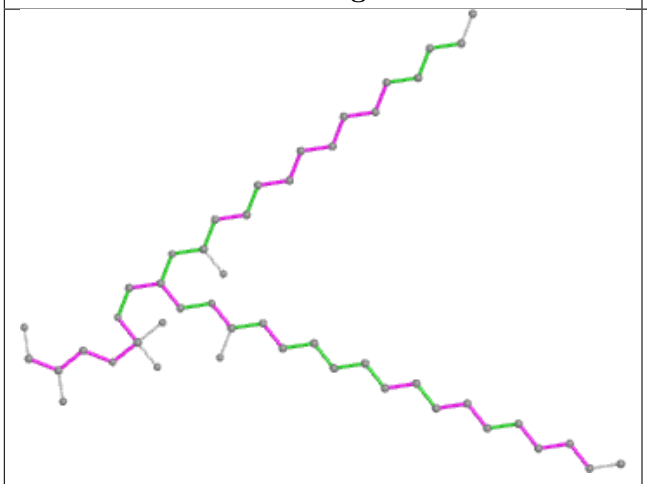
Ligand LHG C 525



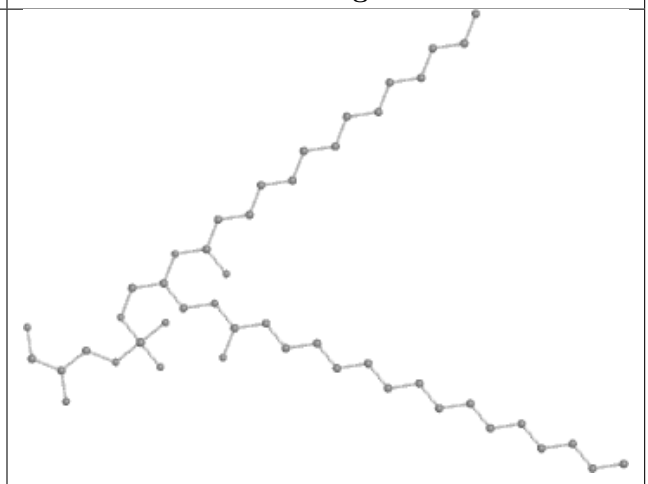
Bond lengths



Bond angles

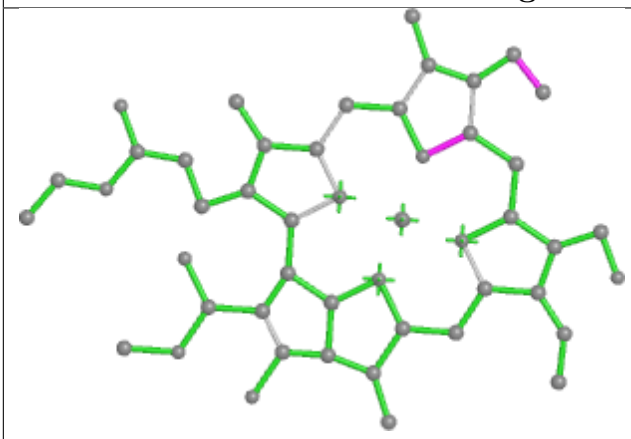


Torsions



Rings

Ligand CHL g1 605



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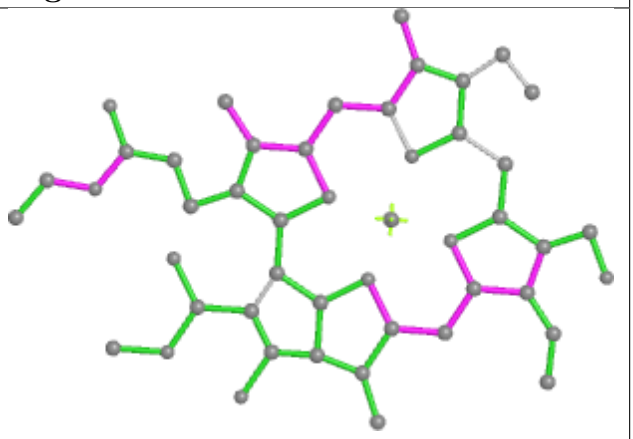
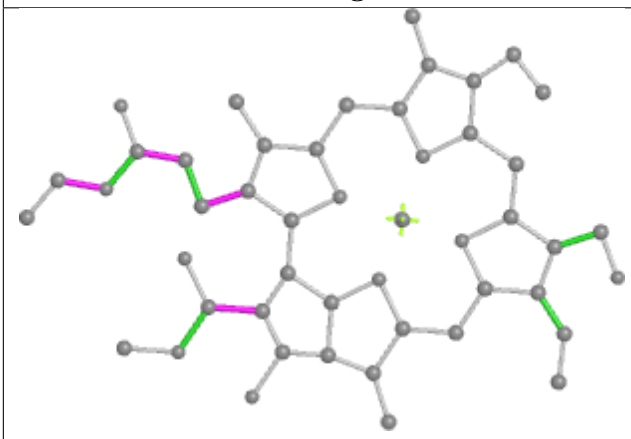
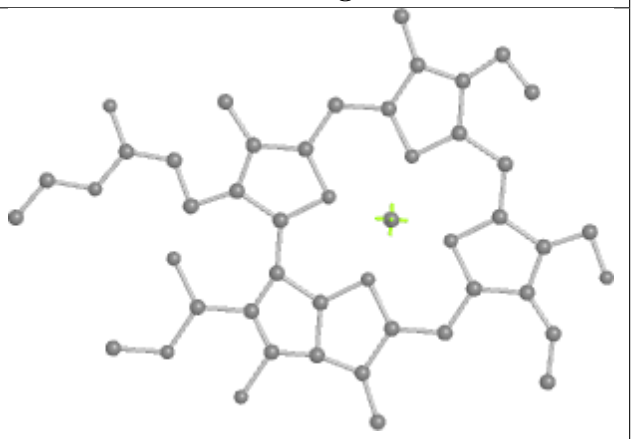


Bond angles

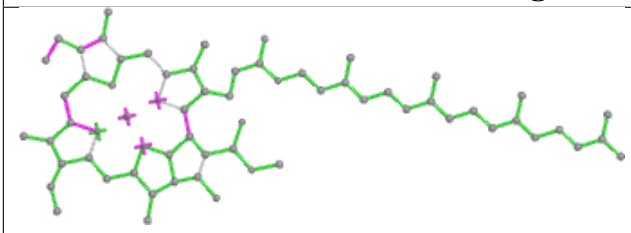


Torsions

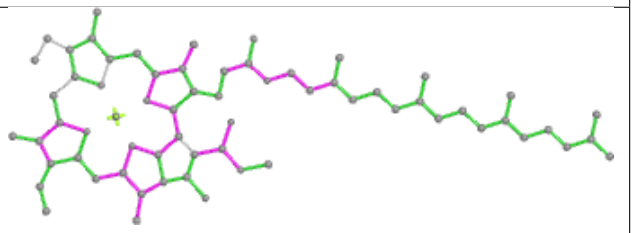


Rings

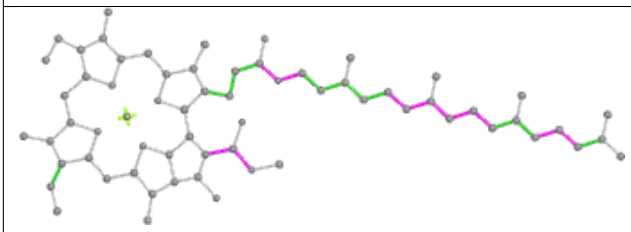
Ligand CLA c 509



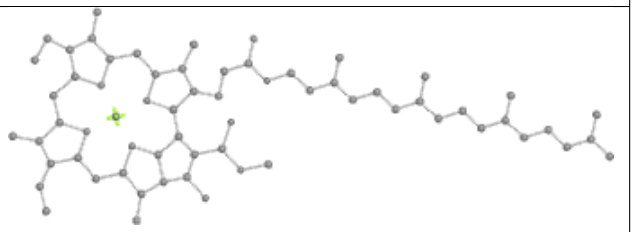
Bond lengths



Bond angles

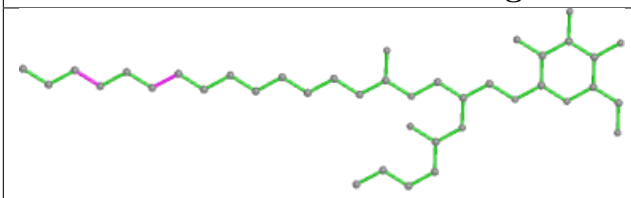


Torsions

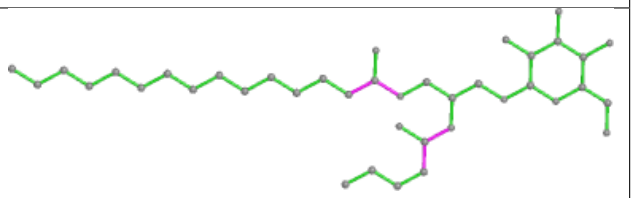


Rings

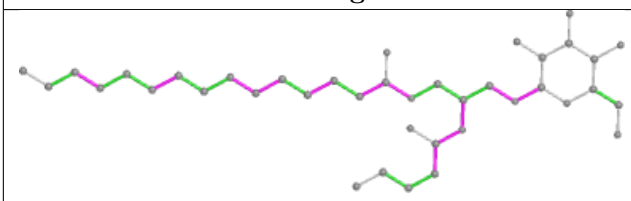
Ligand LMG W1 201



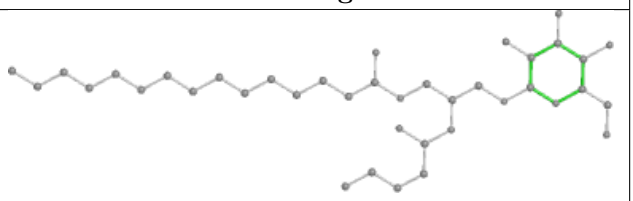
Bond lengths



Bond angles

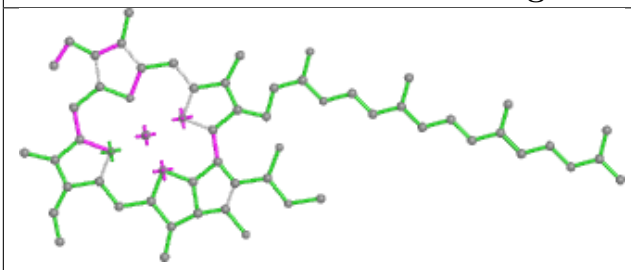


Torsions



Rings

Ligand CLA S 602



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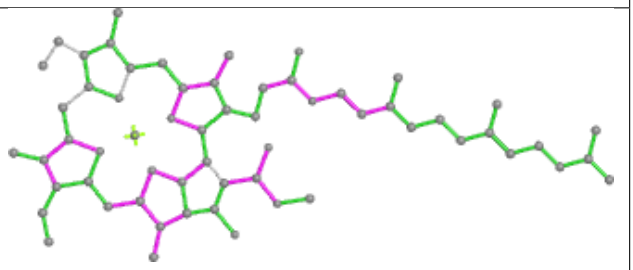
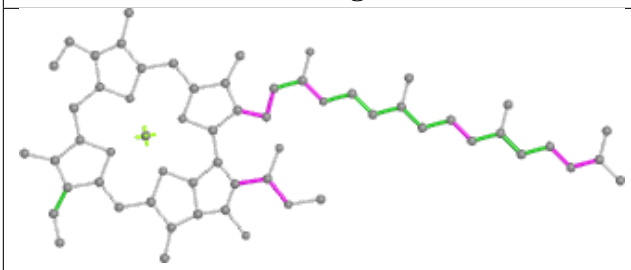


Bond angles



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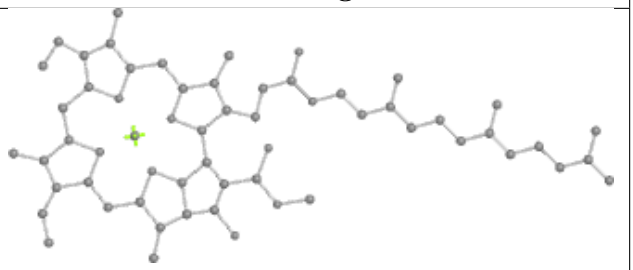
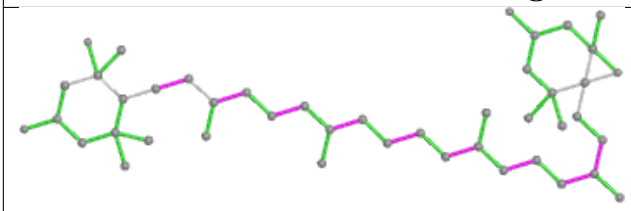


Rings

Ligand NEX r 623



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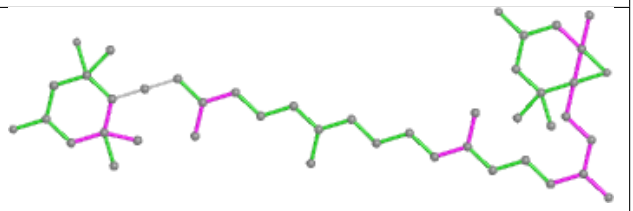

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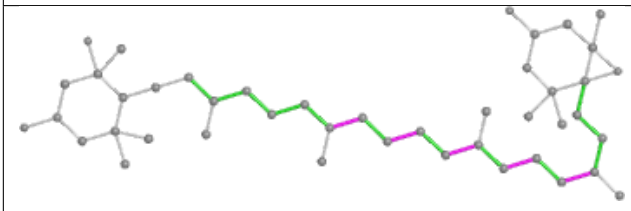

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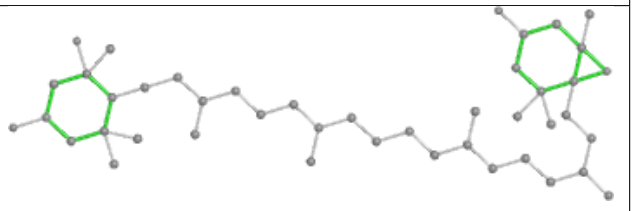
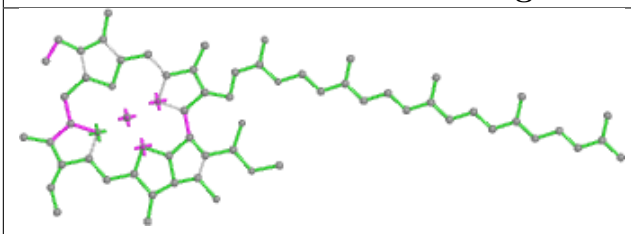


Rings

Ligand CLA C1 508



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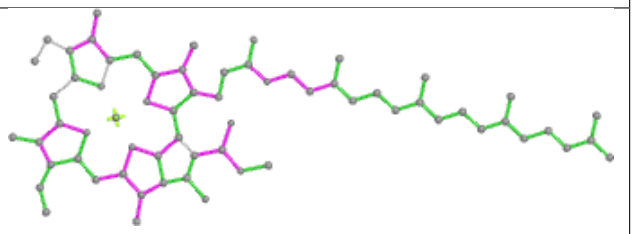

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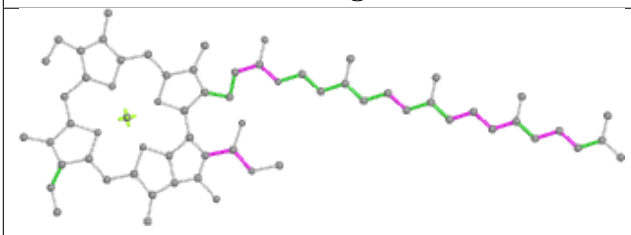

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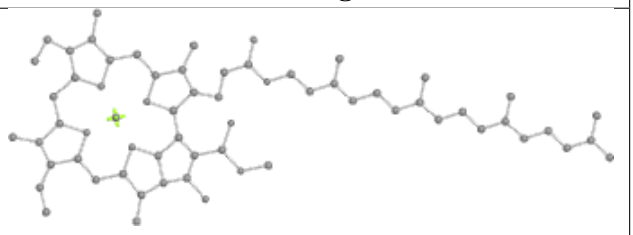
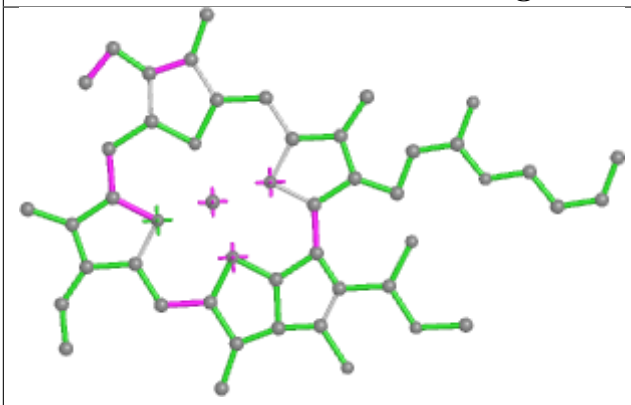


Rings

Ligand CLA R1 604



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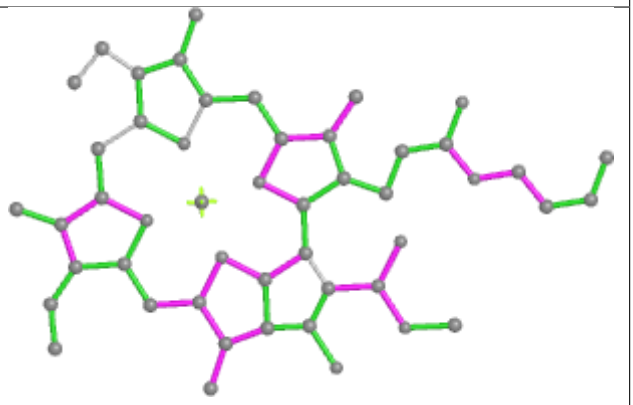
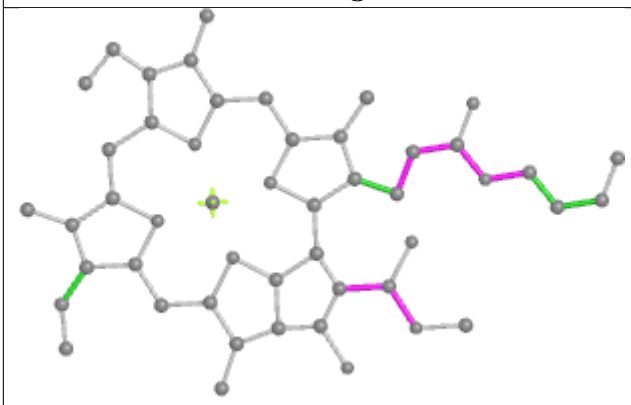


Bond angles



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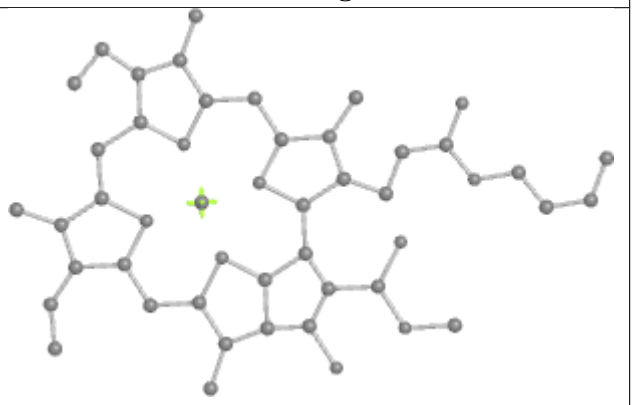
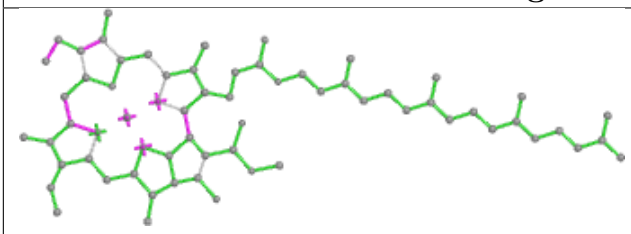


Rings

Ligand CLA b 616



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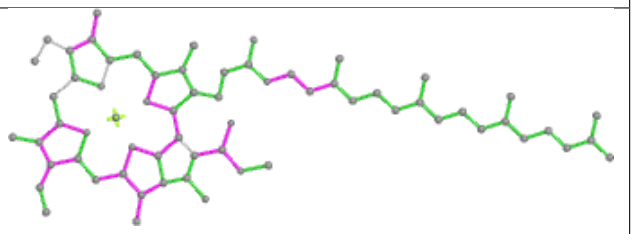
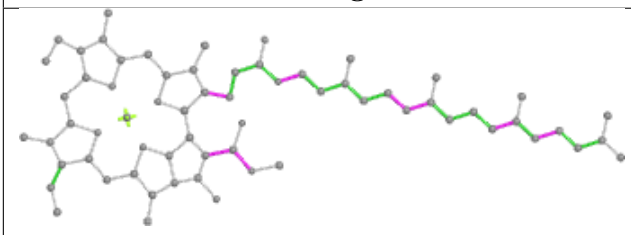


Bond angles



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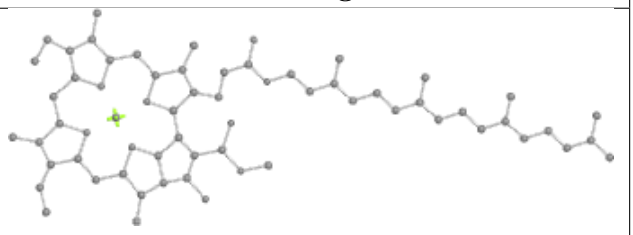
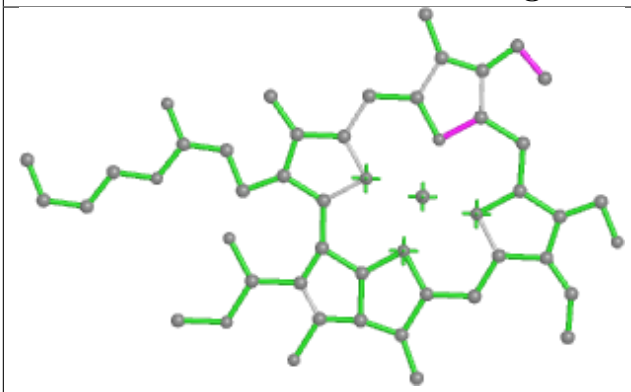


Rings

Ligand CHL R 607



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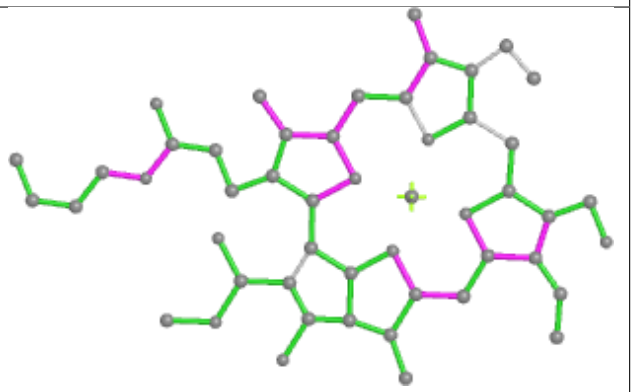
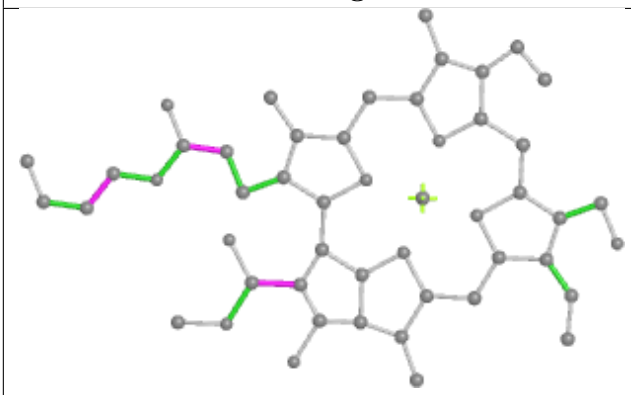


Bond angles



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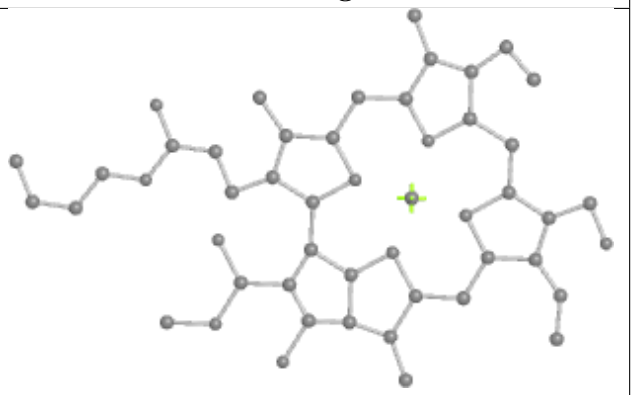
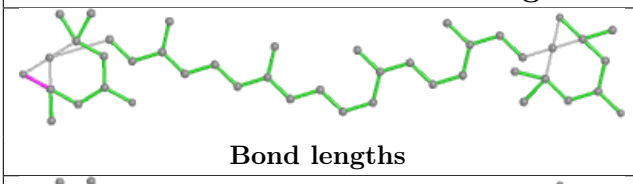


Rings

Ligand XAT N 622



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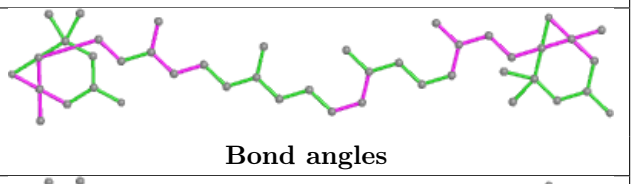
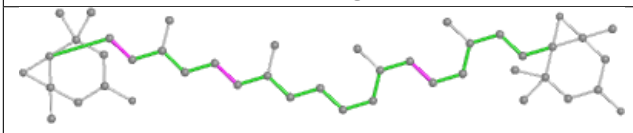


Bond angles



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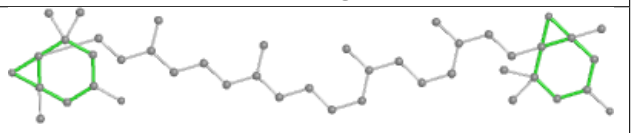
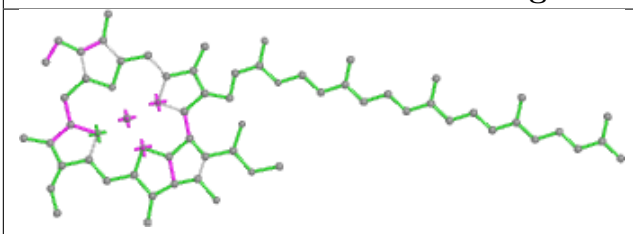


Rings

Ligand CLA c 510



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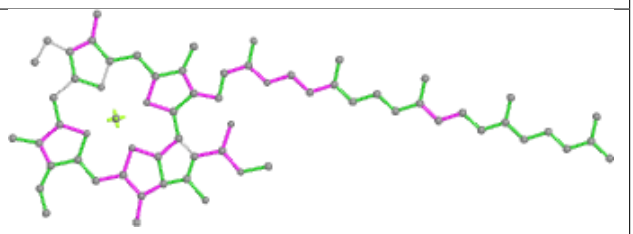
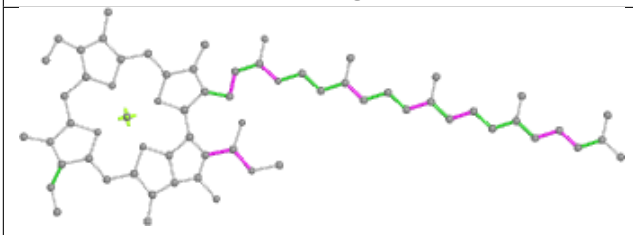


Bond angles



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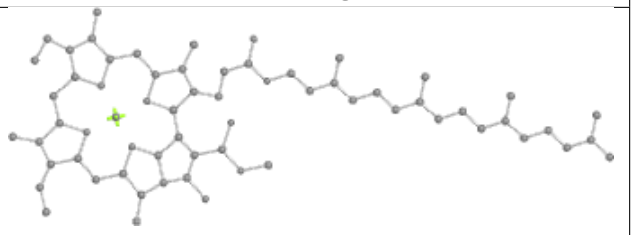
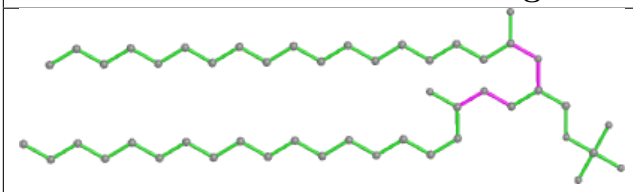


Rings

Ligand 3PH t1 101



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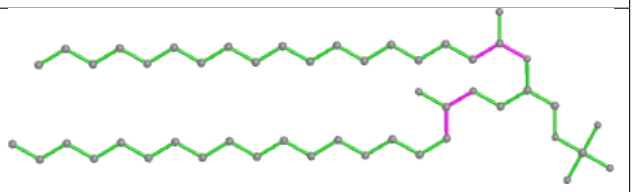
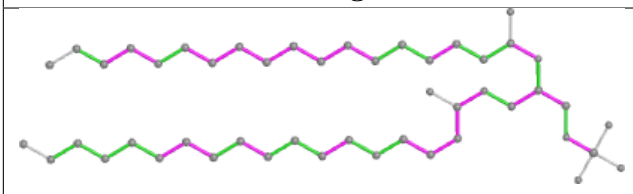


Bond angles



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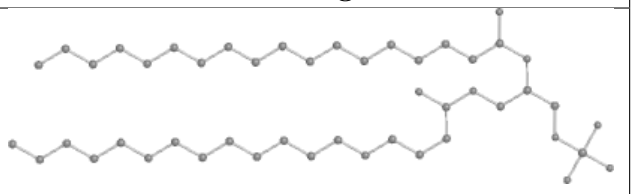
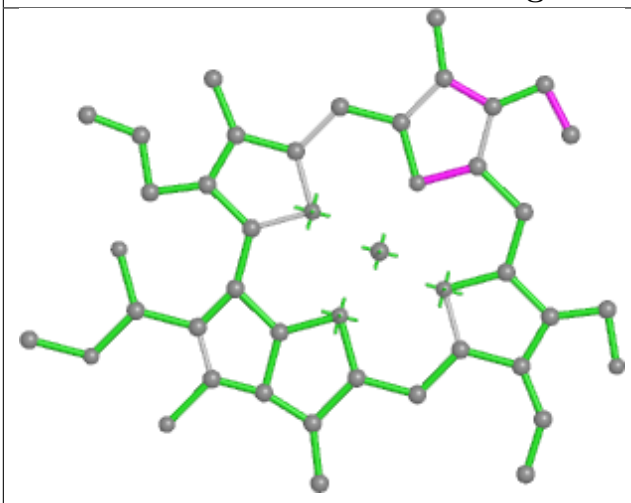


Rings

Ligand CHL S 606



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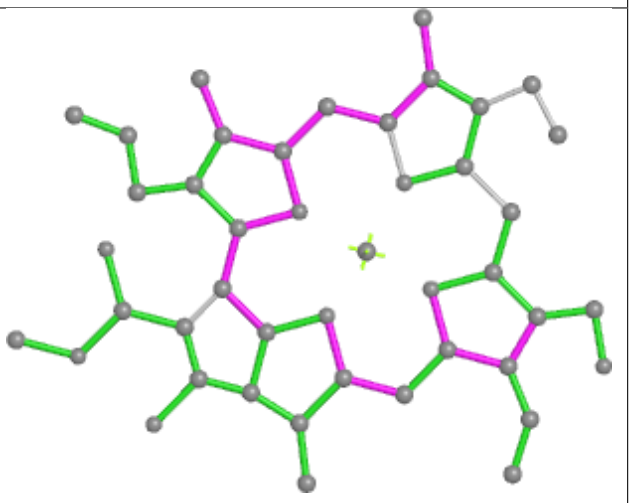
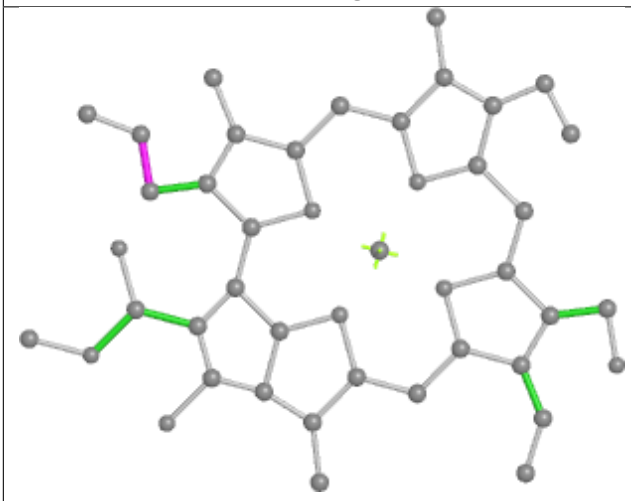


Bond angles



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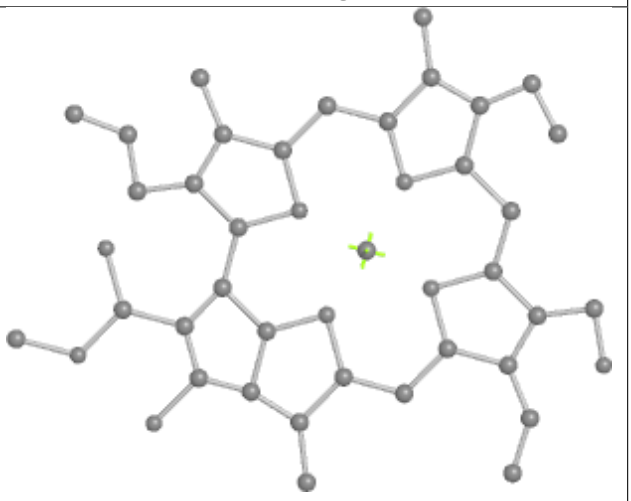
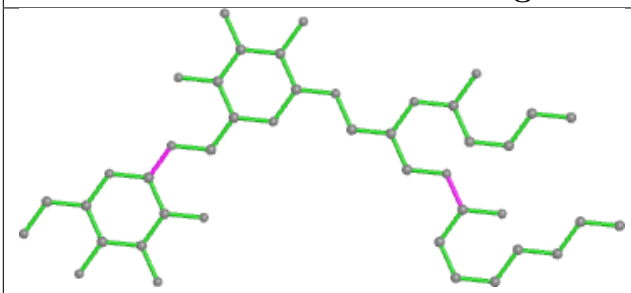


Rings

Ligand DGD b1 623



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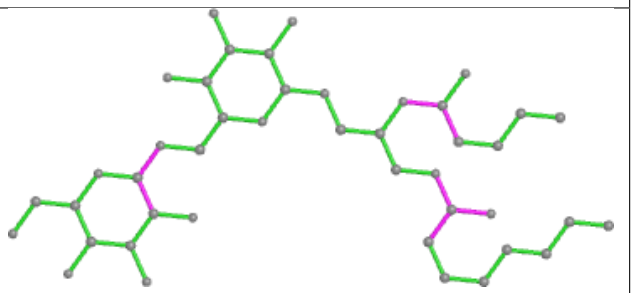
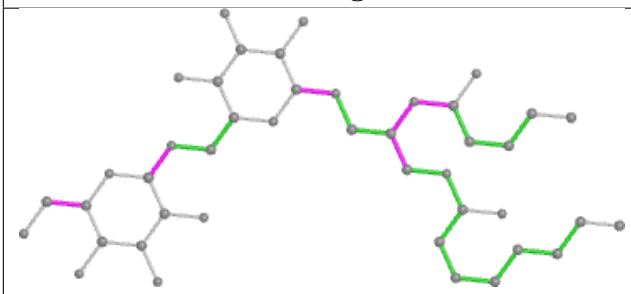


Bond angles



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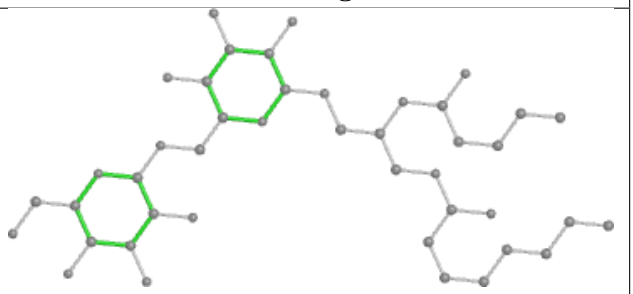
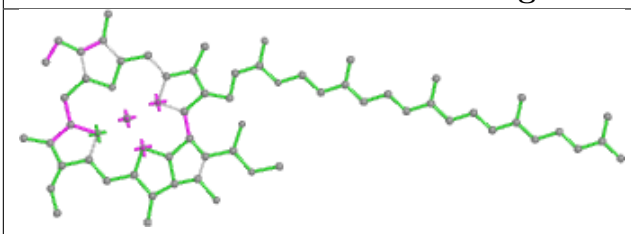


Rings

Ligand CLA n1 613



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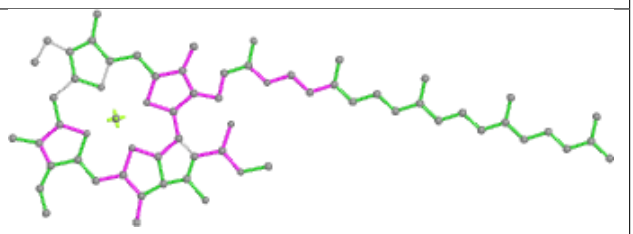
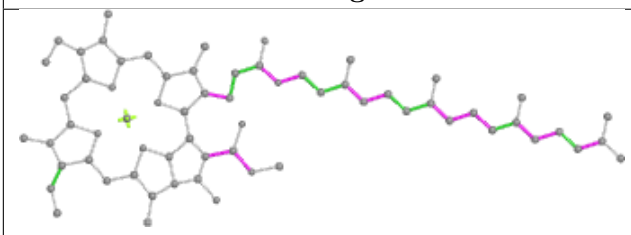
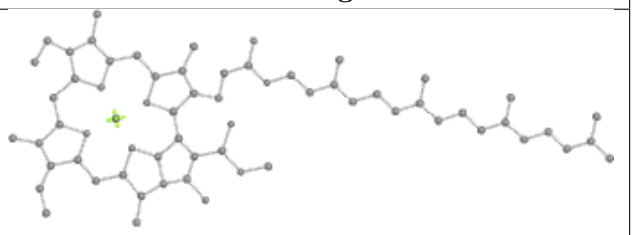


Bond angles

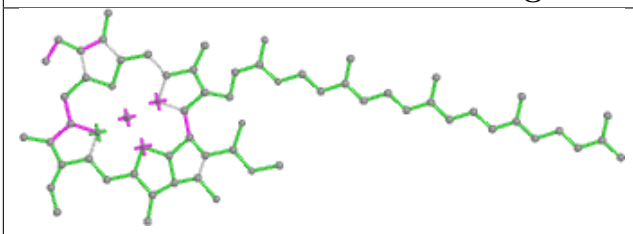


Torsions

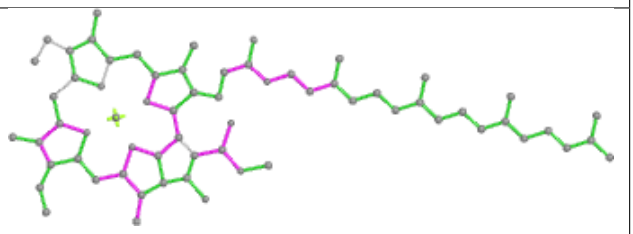


Rings

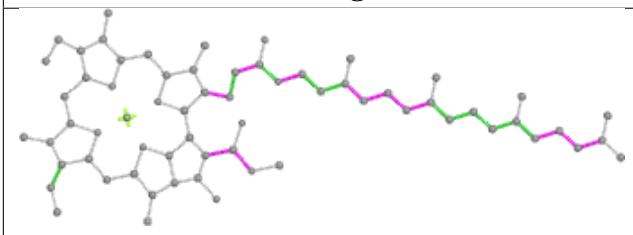
Ligand CLA B 610



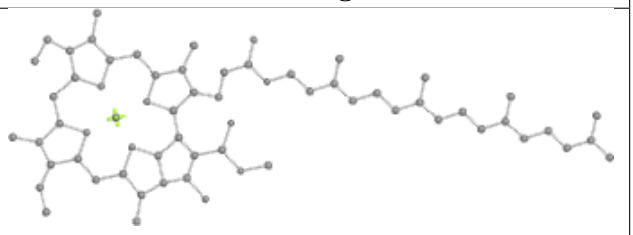
Bond lengths



Bond angles

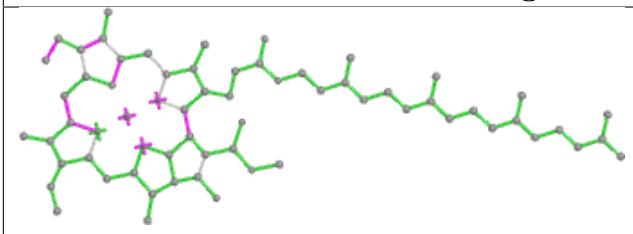


Torsions

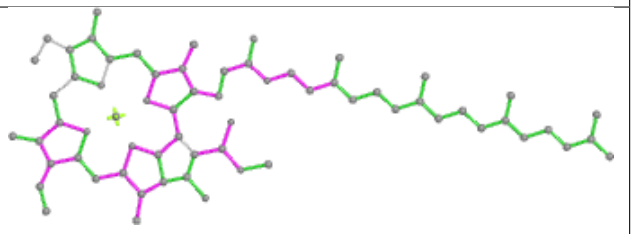


Rings

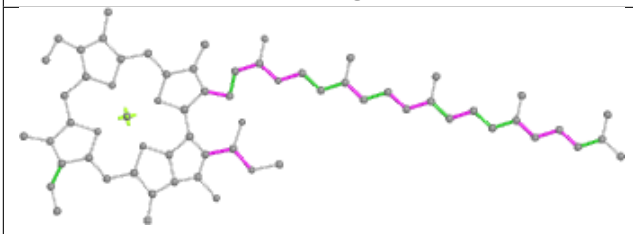
Ligand CLA c1 503



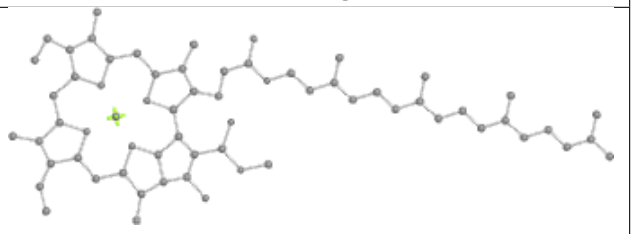
Bond lengths



Bond angles

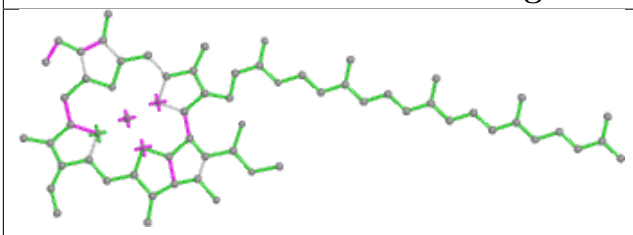


Torsions

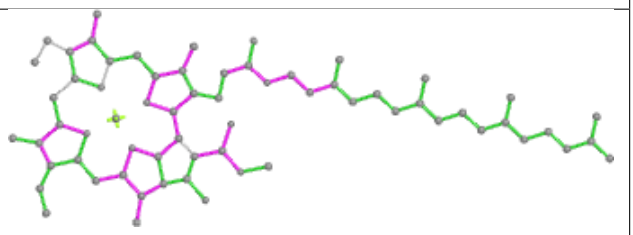


Rings

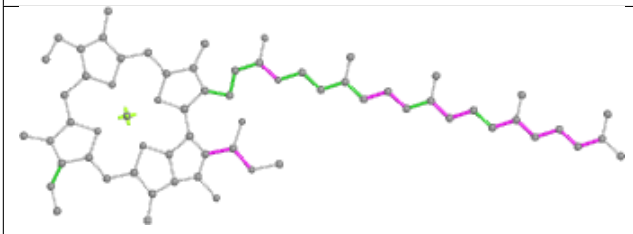
Ligand CLA C 507



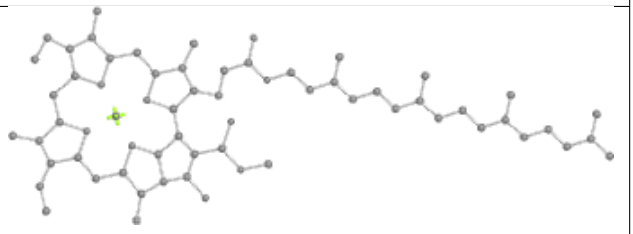
Bond lengths



Bond angles

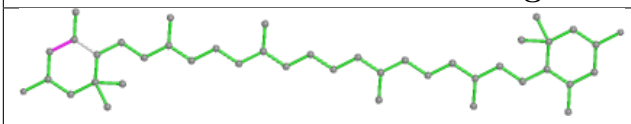


Torsions



Rings

Ligand LUT Y 620



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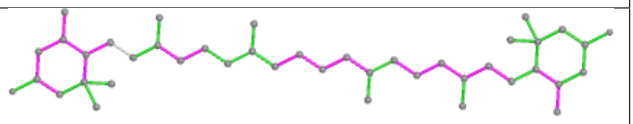
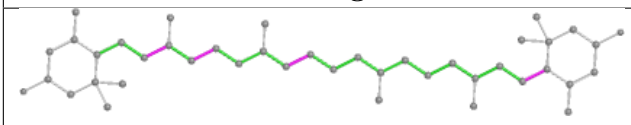
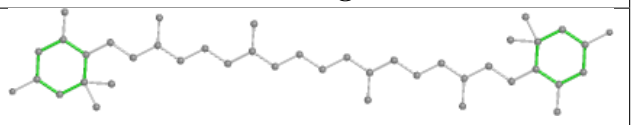


Bond angles

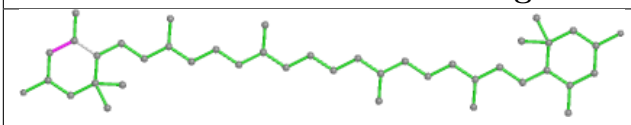


Torsions

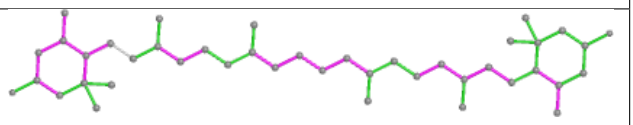


Rings

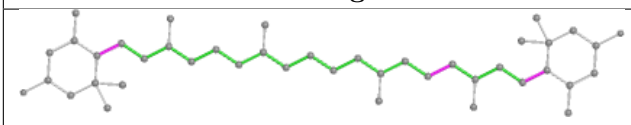
Ligand LUT N1 621



Bond lengths



Bond angles



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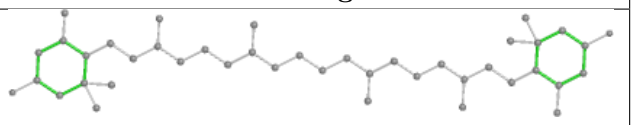
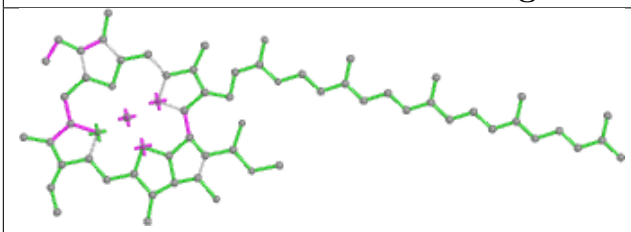


Rings

Ligand CLA y1 604



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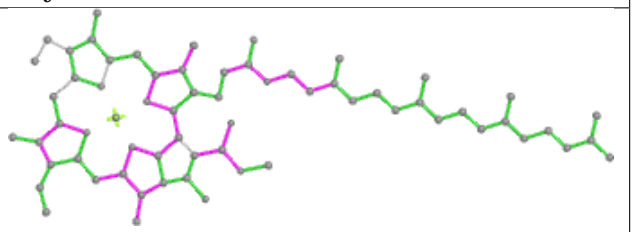
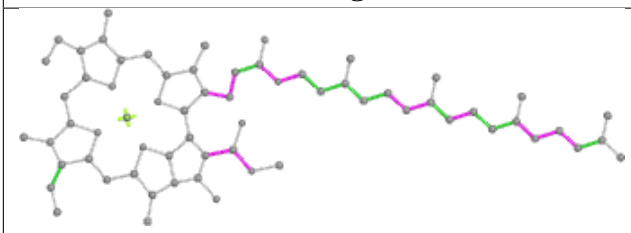


Bond angles



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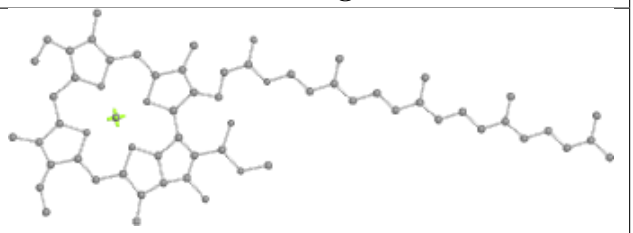
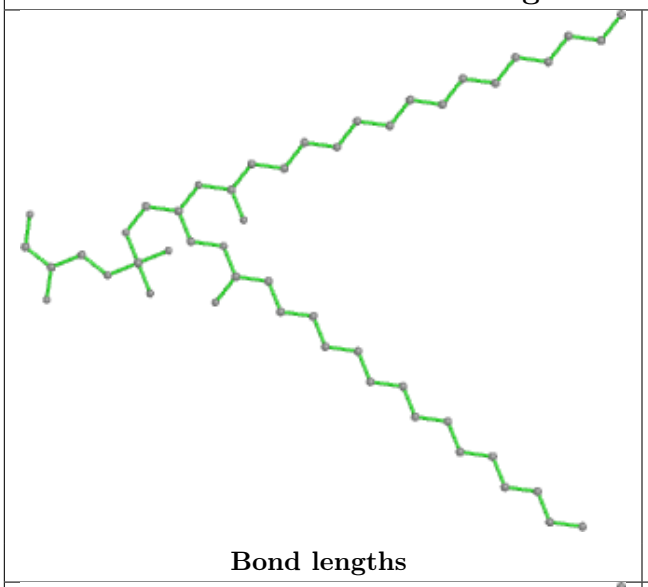
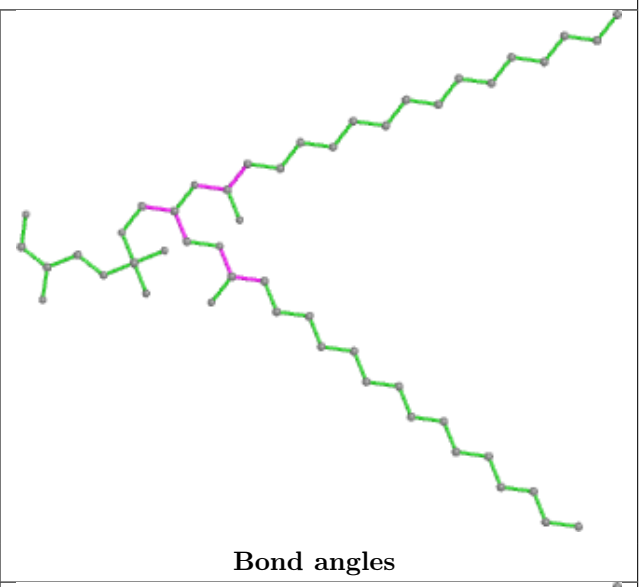


Rings

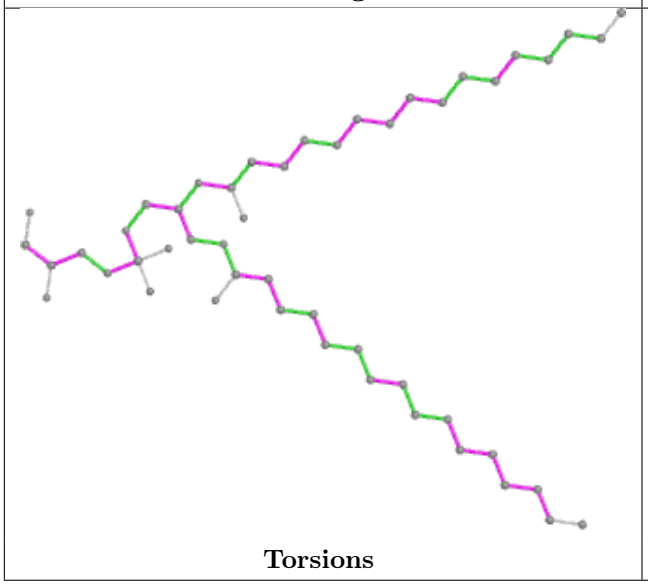
Ligand LHG G 630



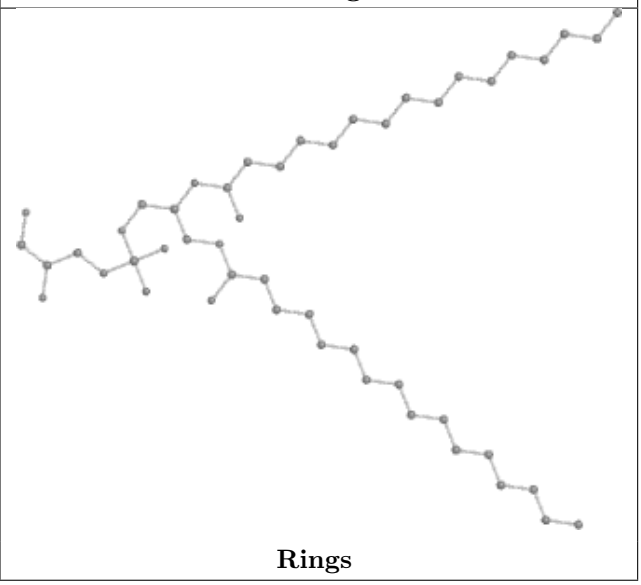
Bond lengths



Bond angles

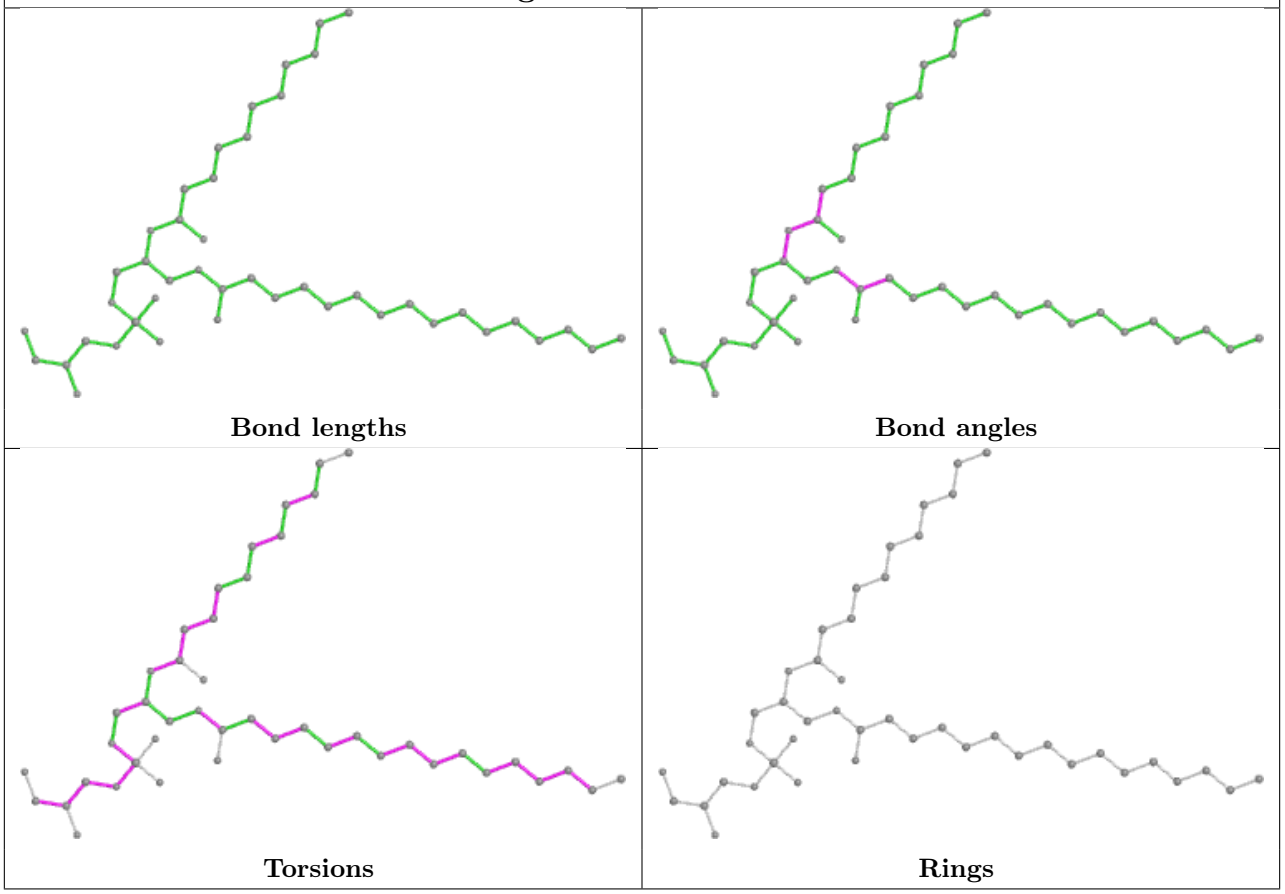


Torsions

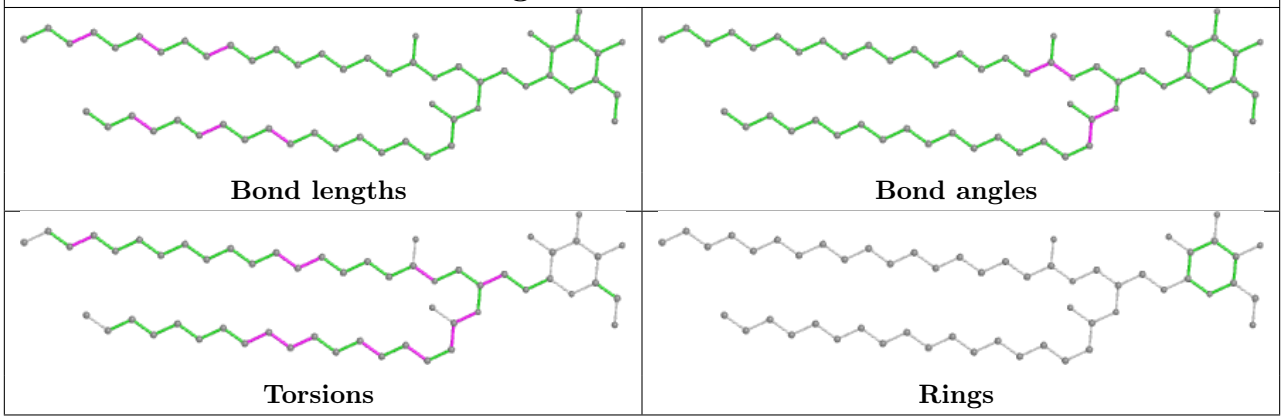


Rings

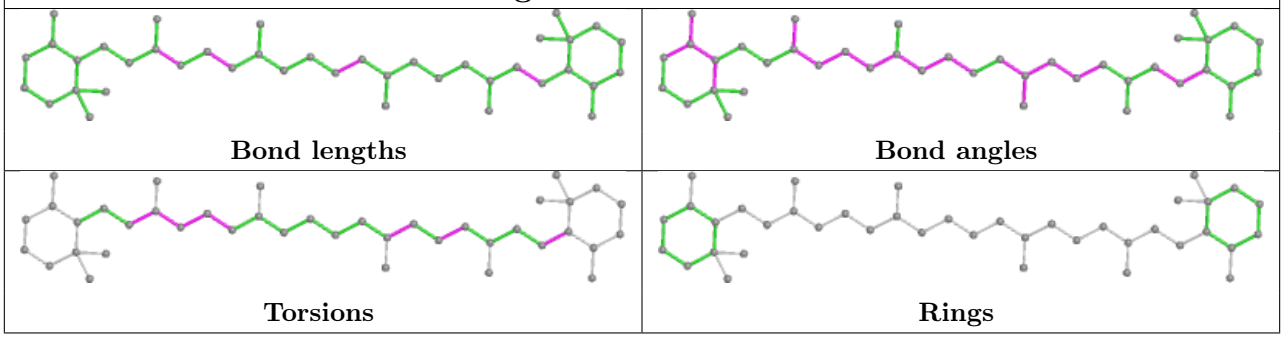
Ligand LHG d1 408



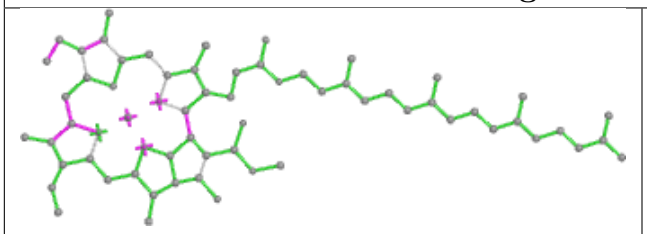
Ligand LMG C1 523



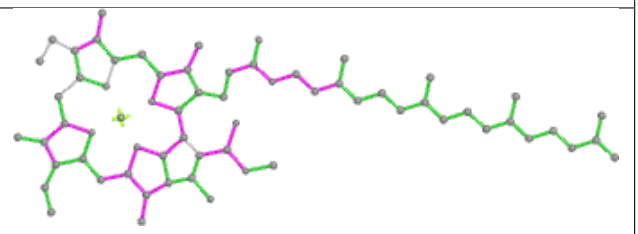
Ligand BCR C1 515



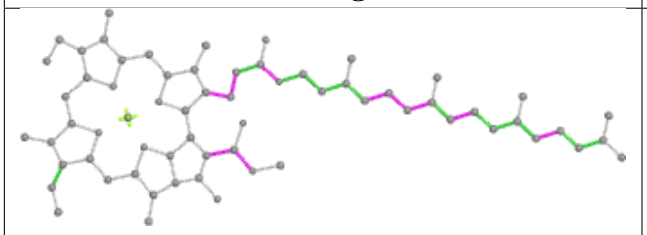
Ligand CLA b1 603



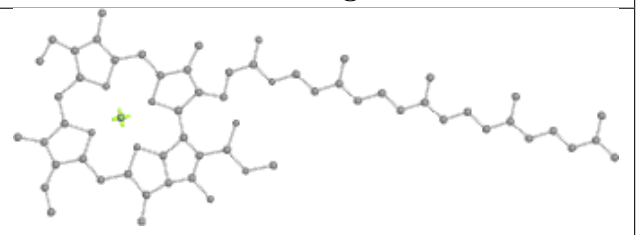
Bond lengths



Bond angles

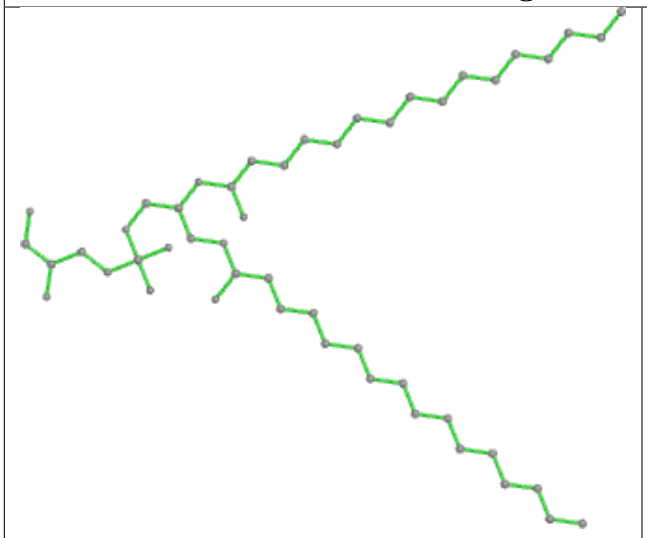


Torsions



Rings

Ligand LHG n1 624



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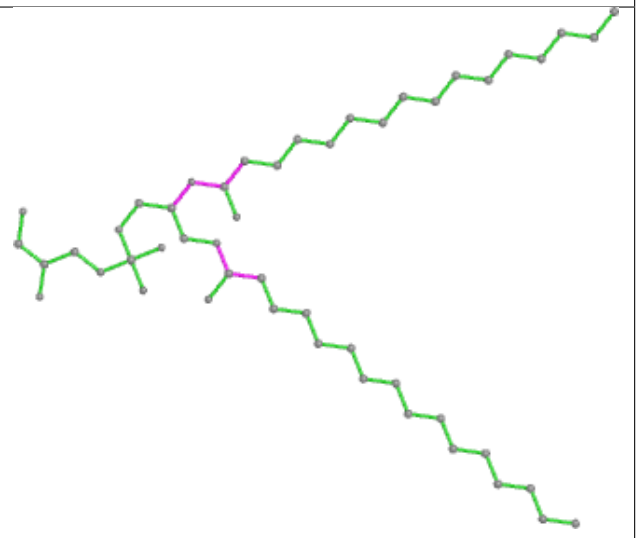
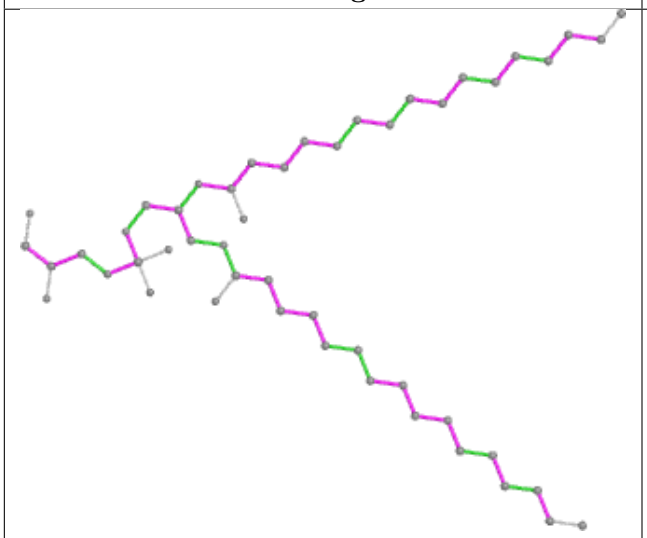
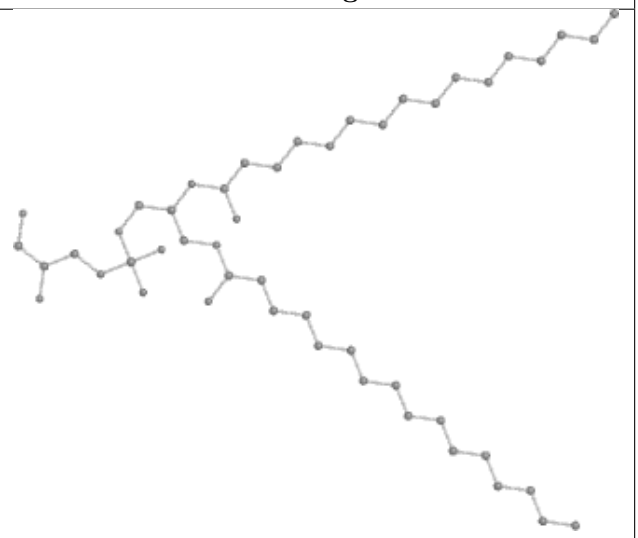


Bond angles

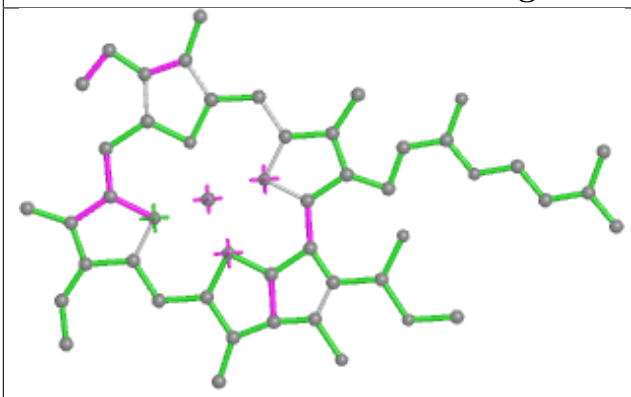


Torsions

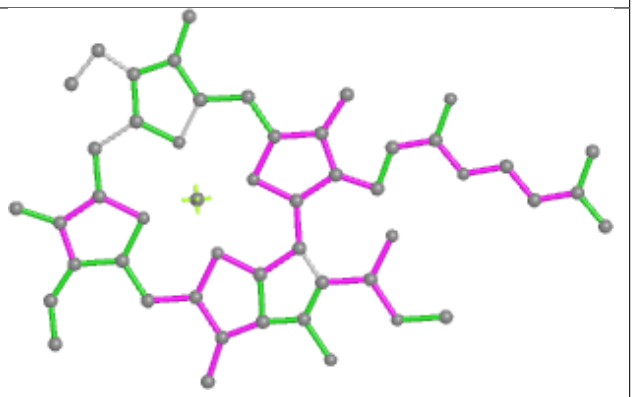


Rings

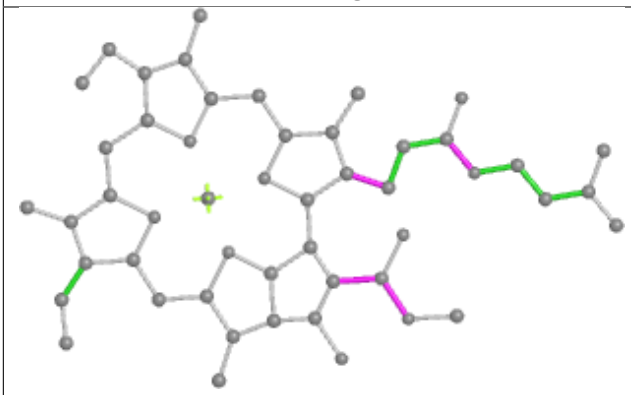
Ligand CLA S1 605



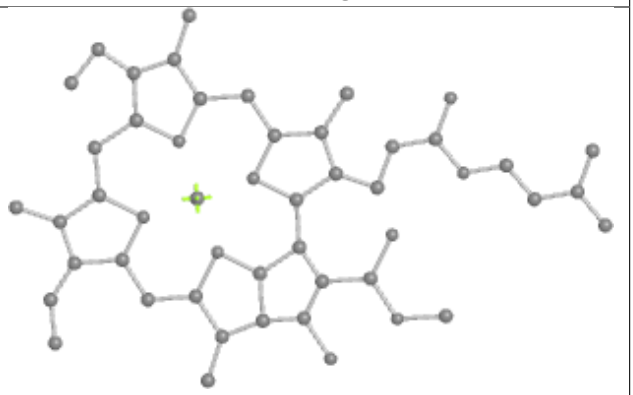
Bond lengths



Bond angles

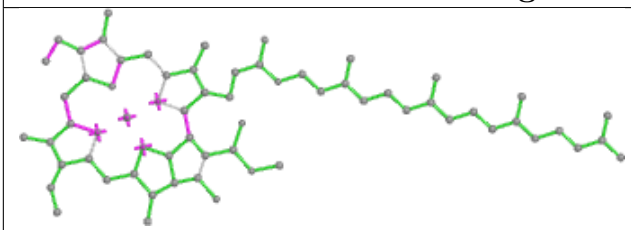


Torsions

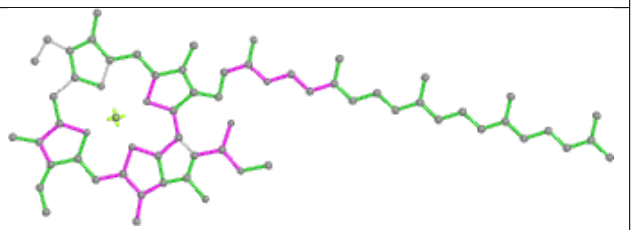


Rings

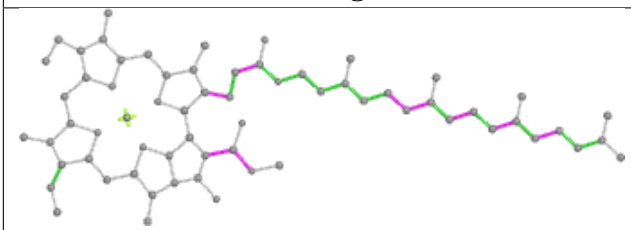
Ligand CLA b1 610



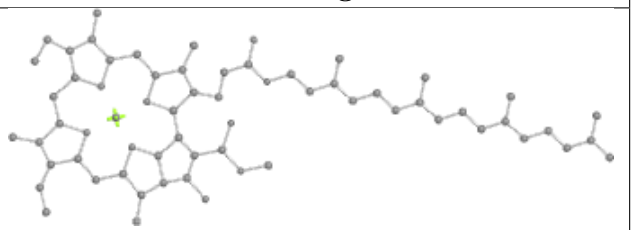
Bond lengths



Bond angles

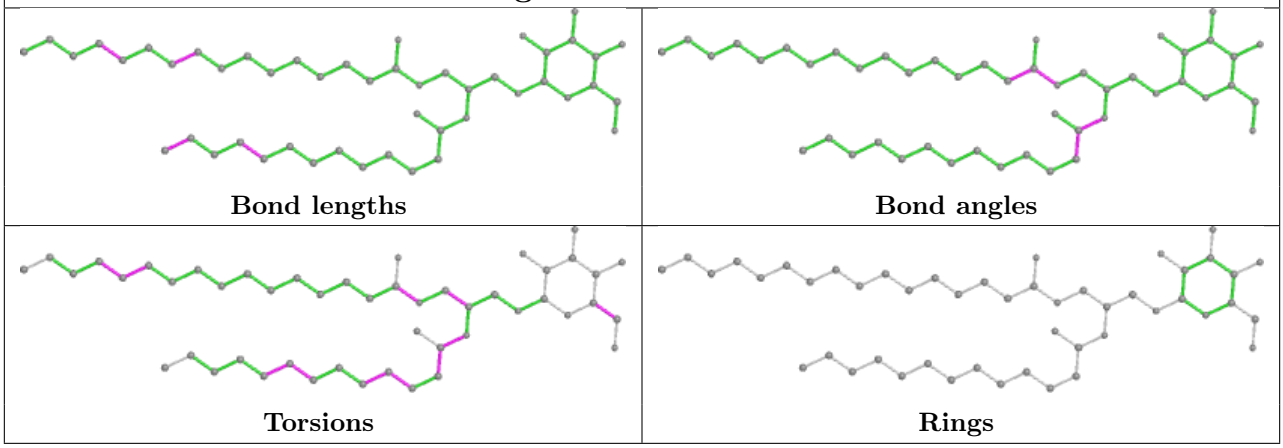


Torsions

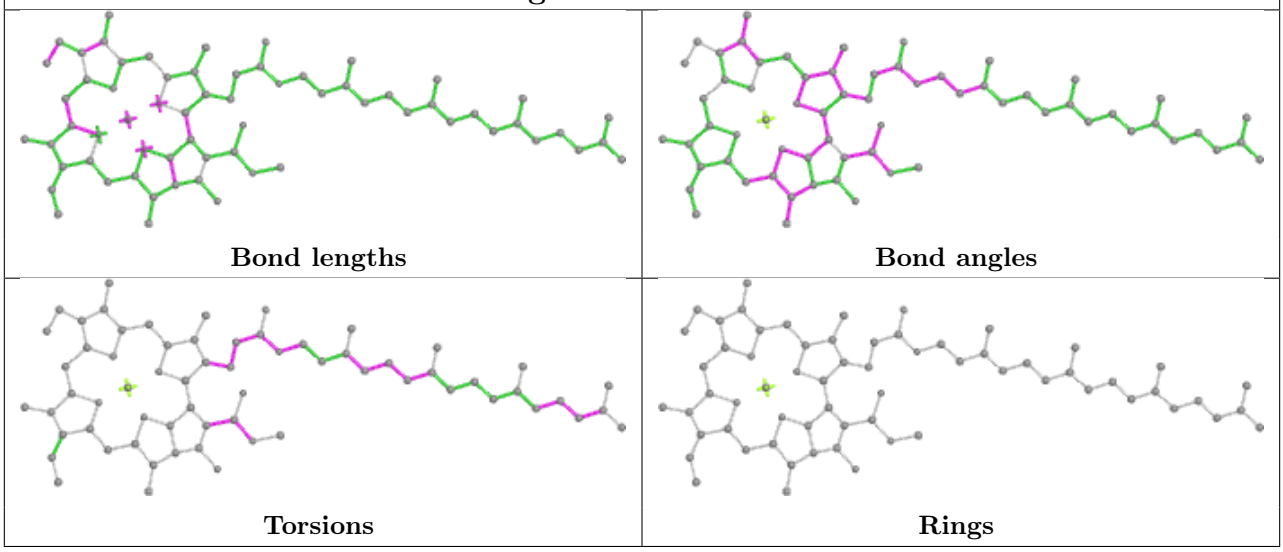


Rings

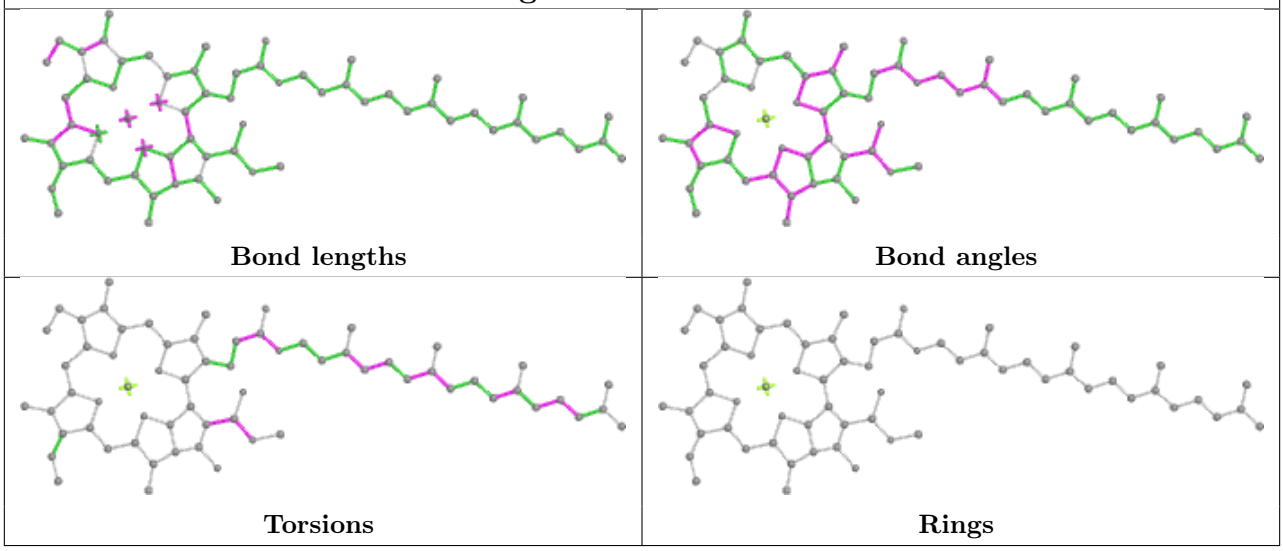
Ligand LMG h1 102



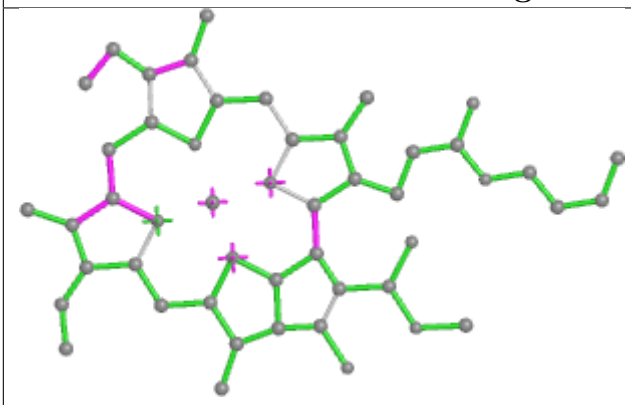
Ligand CLA b 612



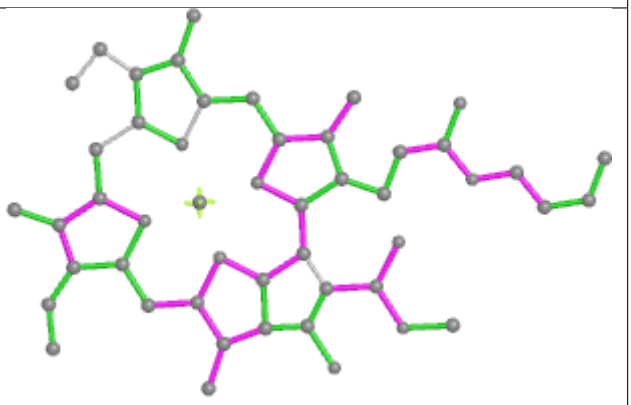
Ligand CLA d1 402



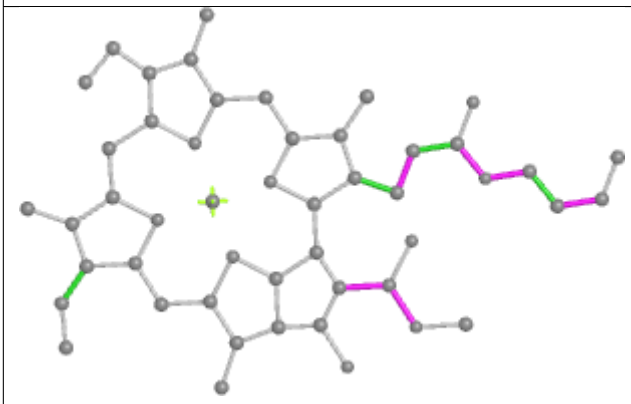
Ligand CLA N1 611



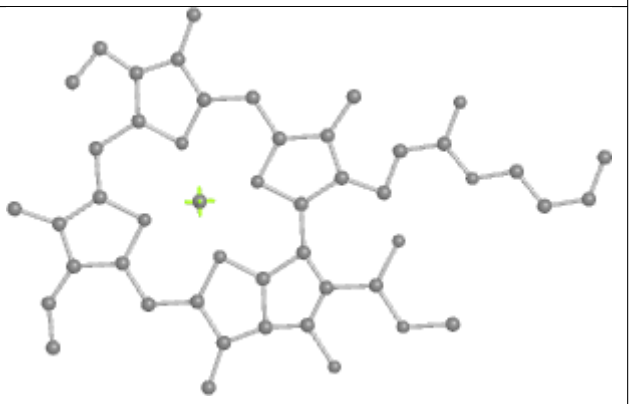
Bond lengths



Bond angles

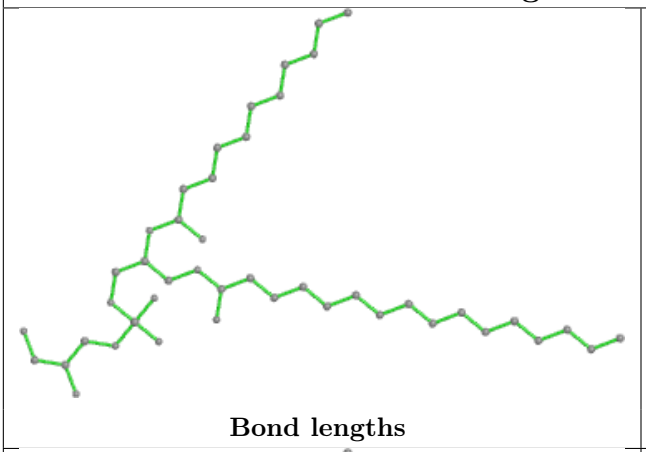


Torsions

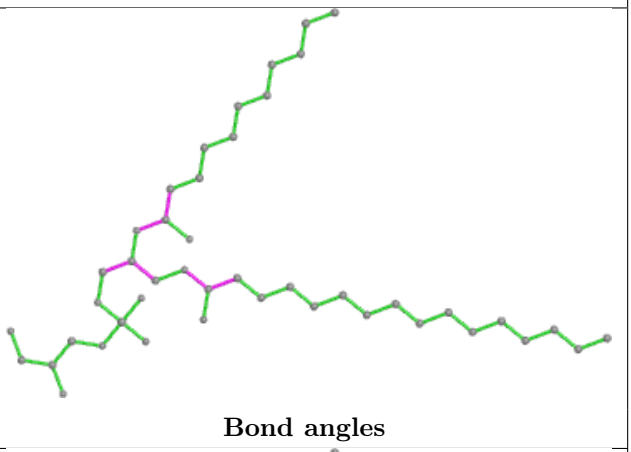


Rings

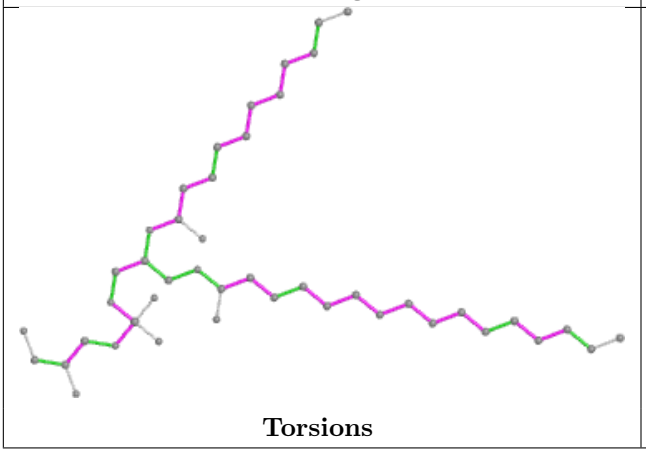
Ligand LHG D 408



Bond lengths



Bond angles



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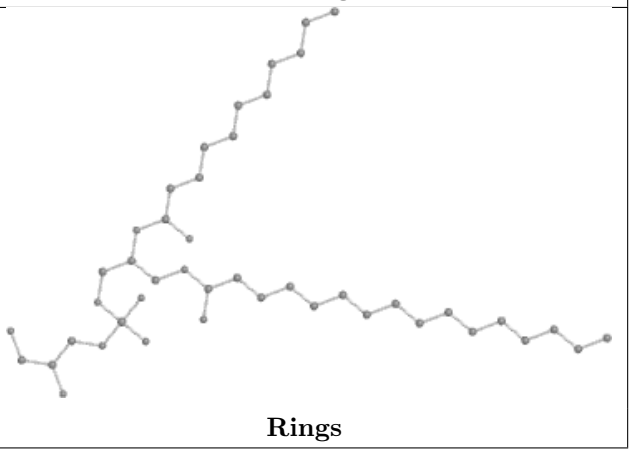
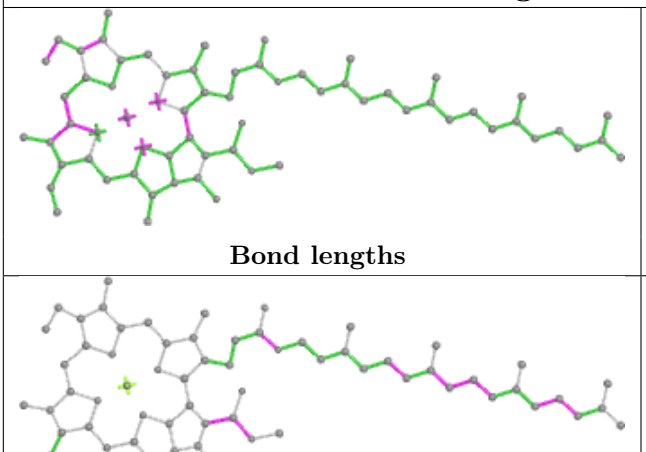
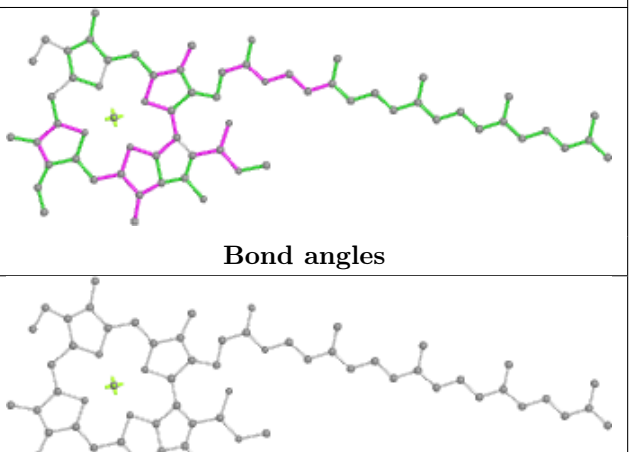


Rings

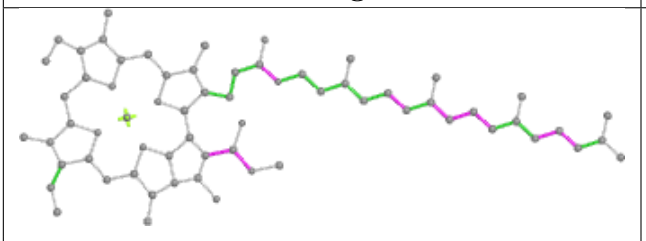
Ligand CLA Y1 612



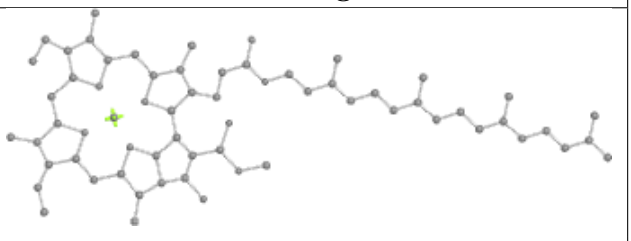
Bond lengths



Bond angles

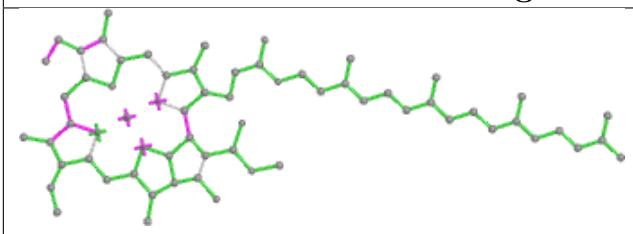


Torsions

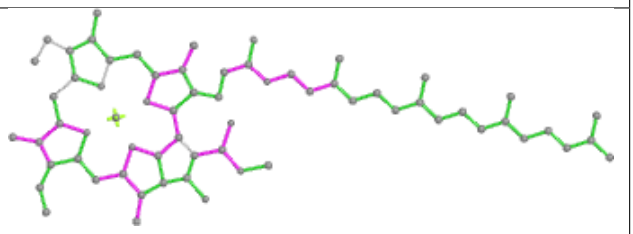


Rings

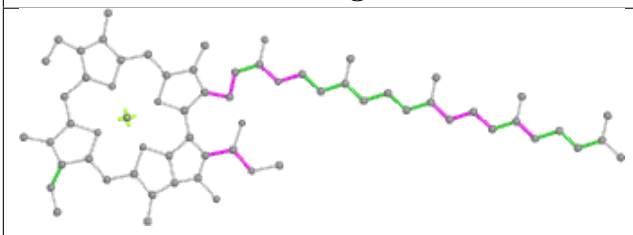
Ligand CLA B1 613



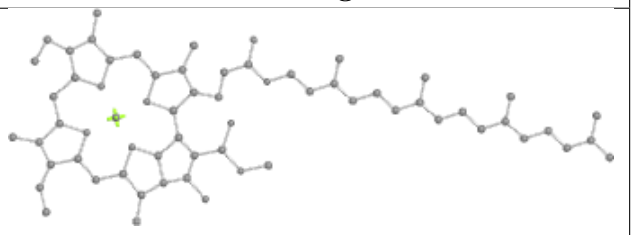
Bond lengths



Bond angles

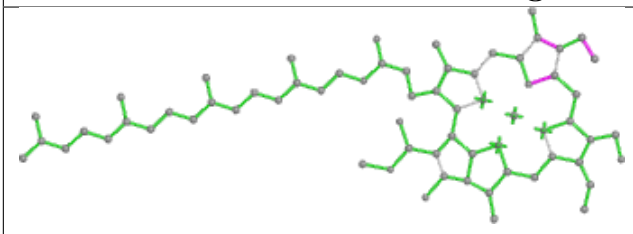


Torsions



Rings

Ligand CHL n 601



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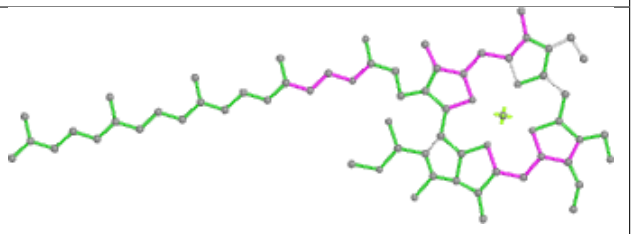
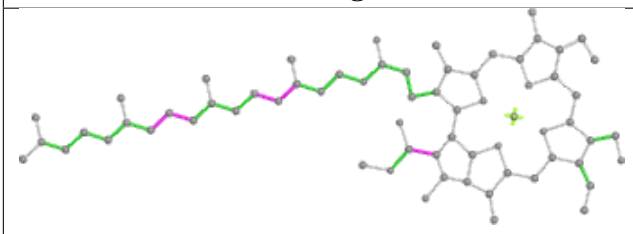
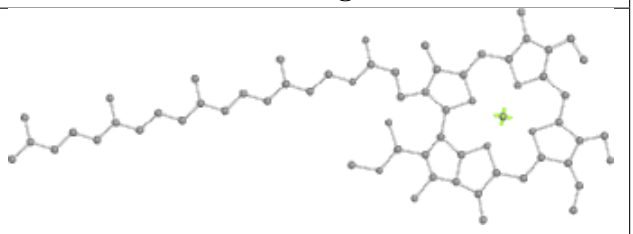


Bond angles

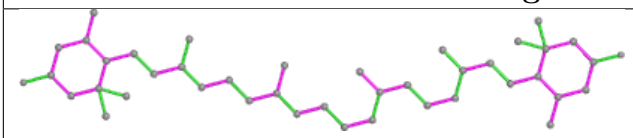


Torsions



Rings

Ligand C7Z b1 620



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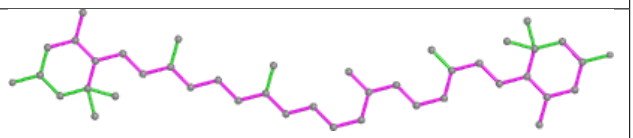
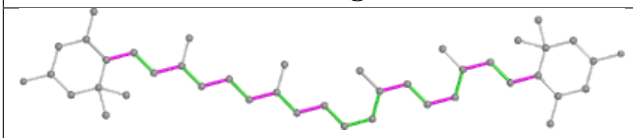


Bond angles



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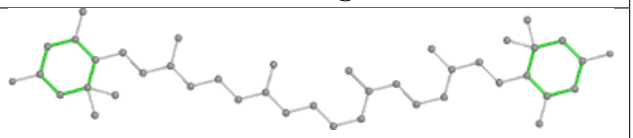
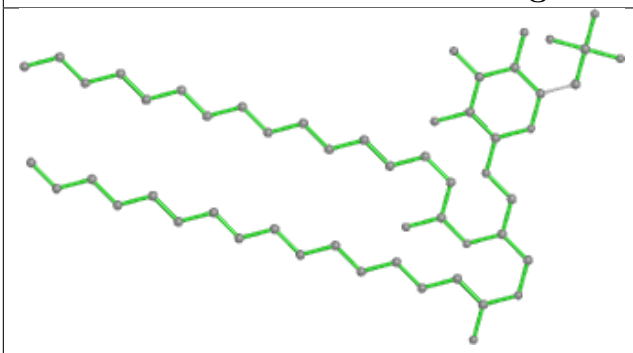
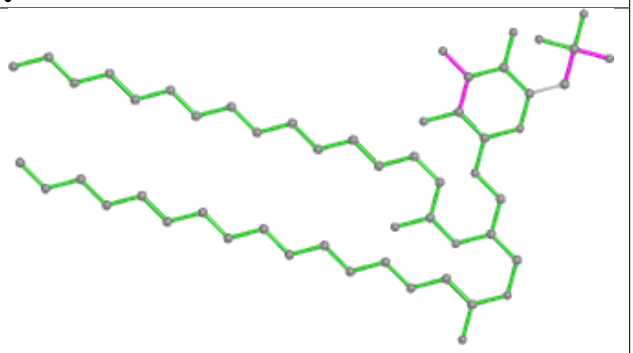


Rings

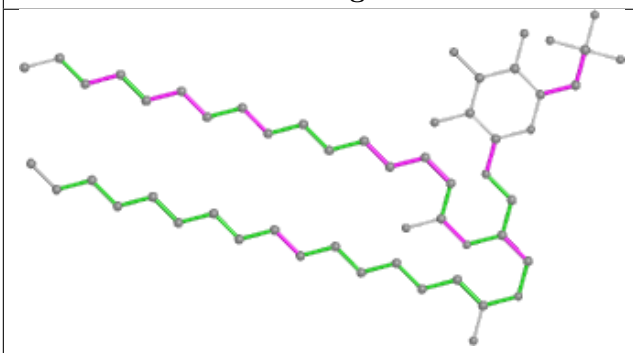
Ligand SQD c 626



Bond lengths



Bond angles



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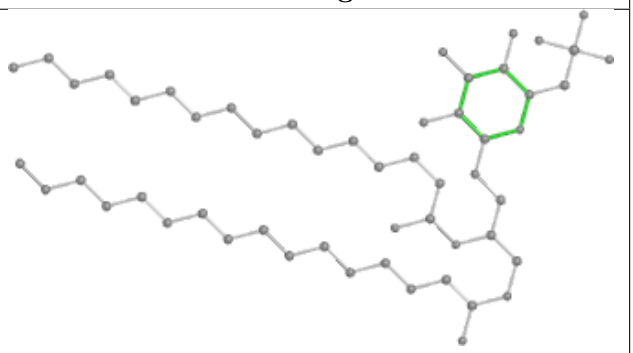
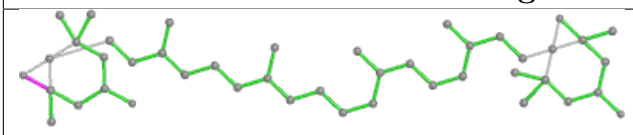
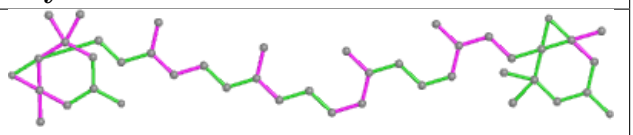


Rings

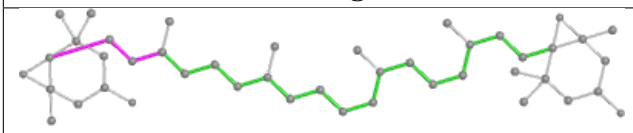
Ligand XAT y1 622



Bond lengths



Bond angles



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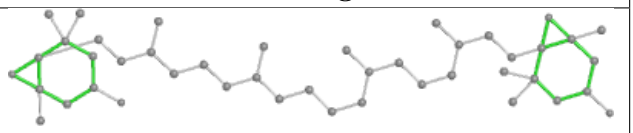
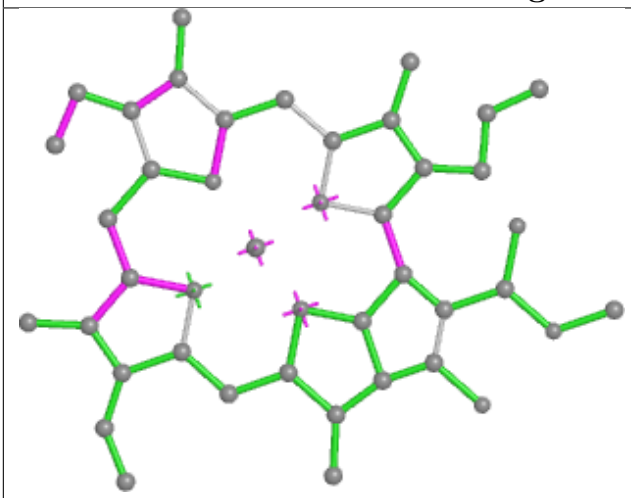


Rings

Ligand CLA g 612



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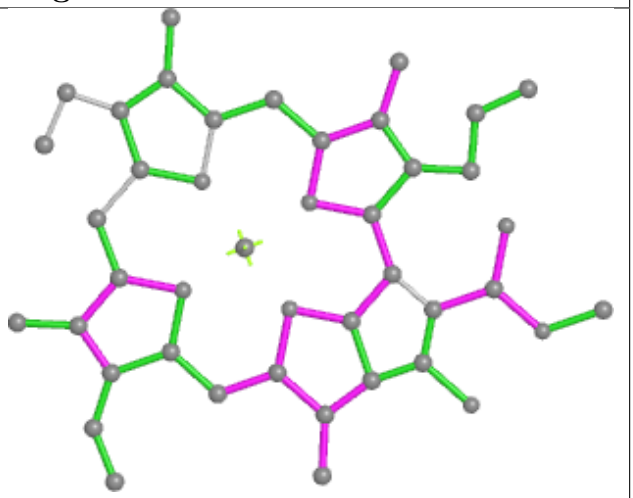
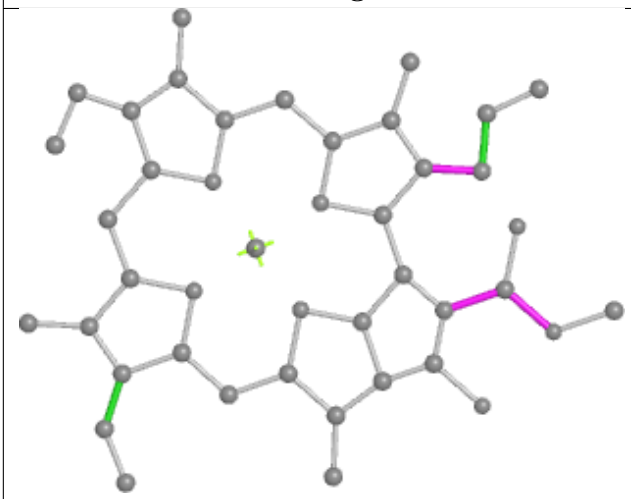


Bond angles



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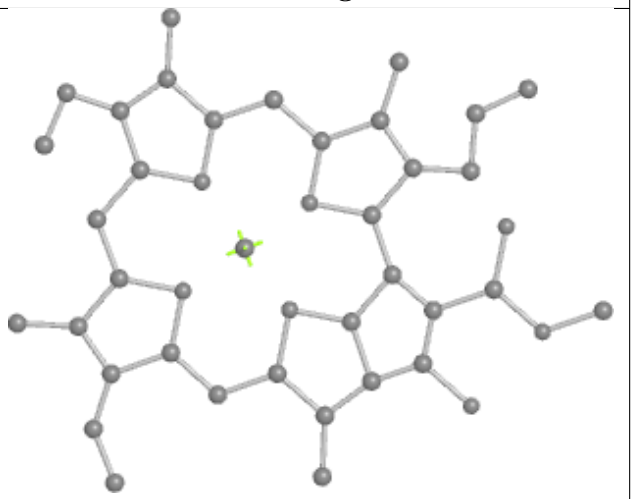
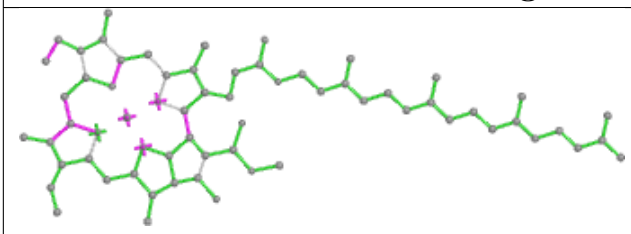


Rings

Ligand CLA g1 613



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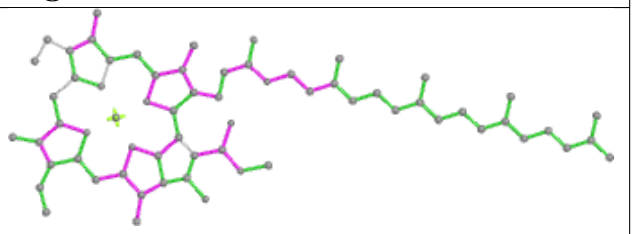
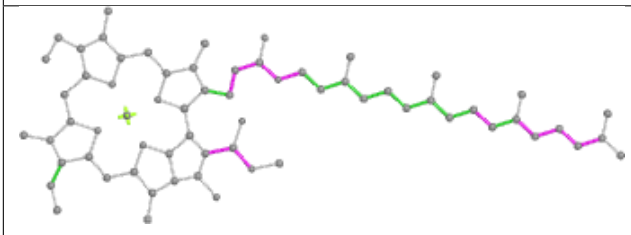


Bond angles



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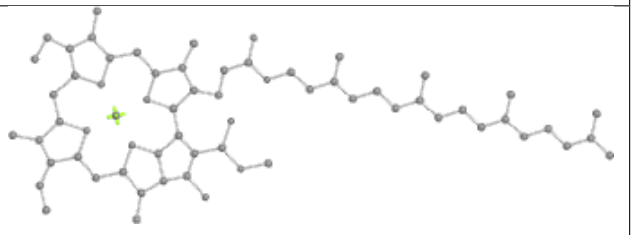
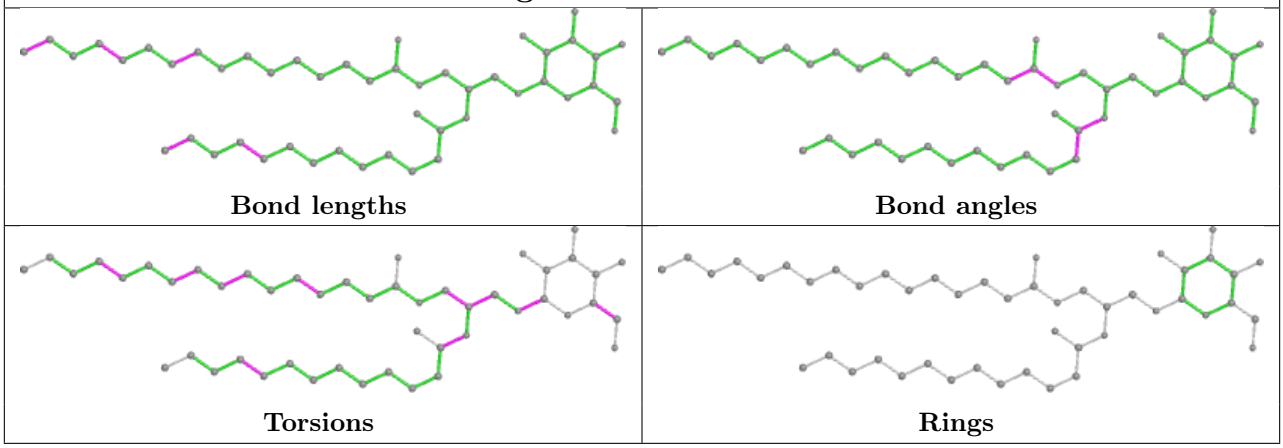


Rings

Ligand LMG a1 413



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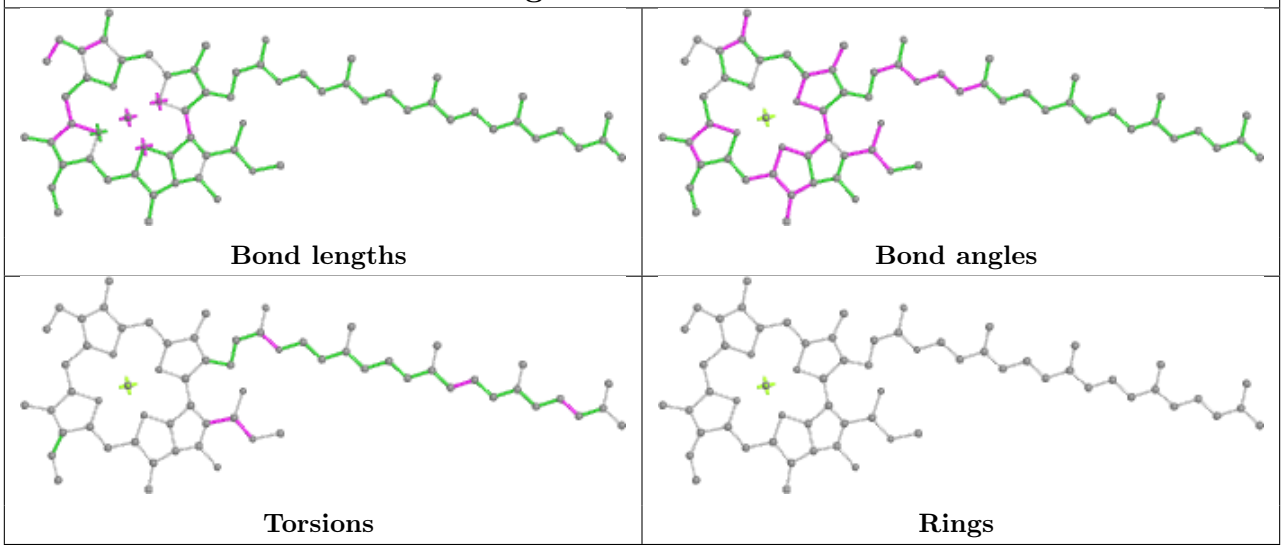
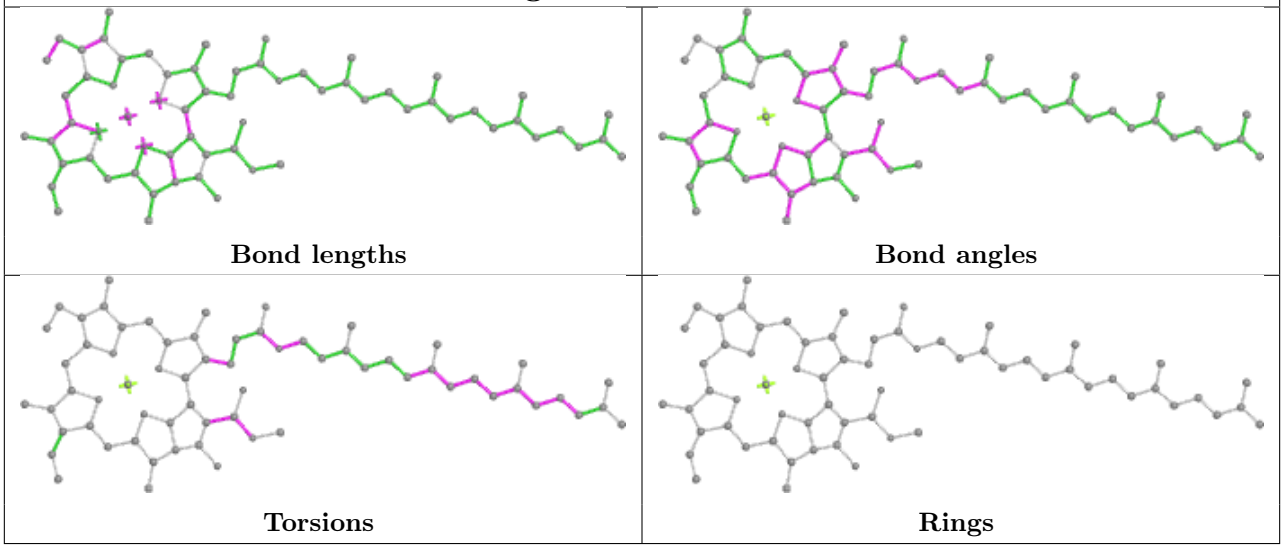
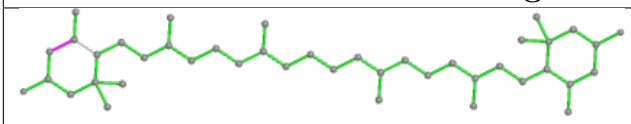


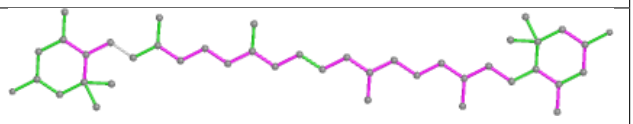
Ligand CLA Y 604



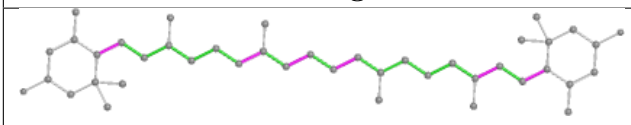
Ligand LUT R 620



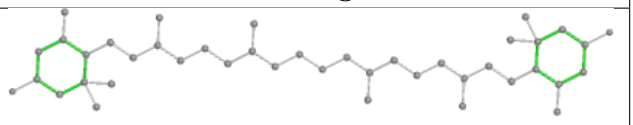
Bond lengths



Bond angles

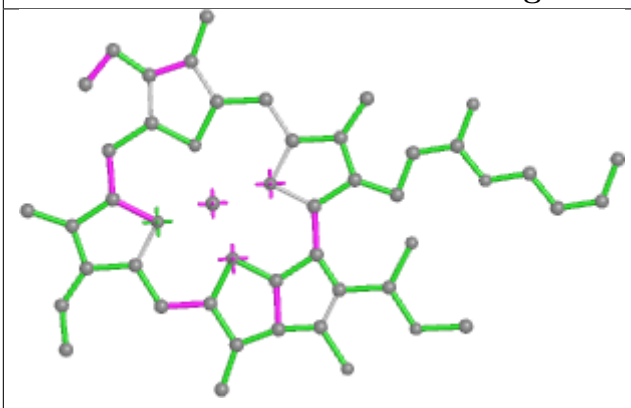


Torsions



Rings

Ligand CLA A 407



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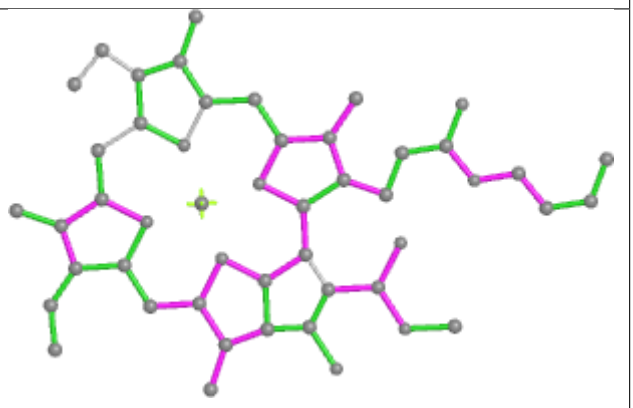
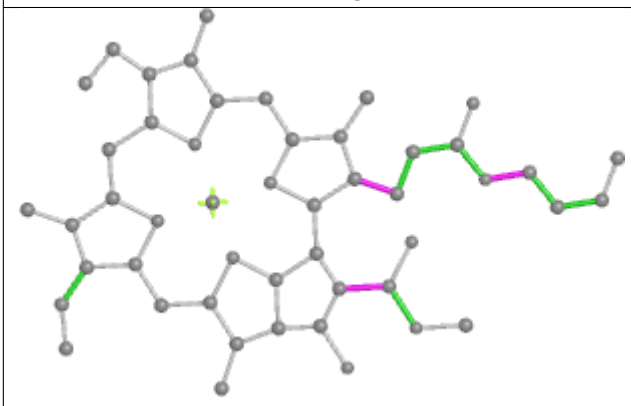


Bond angles



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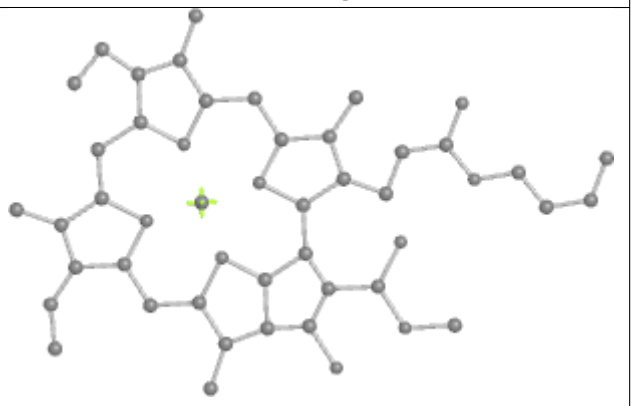
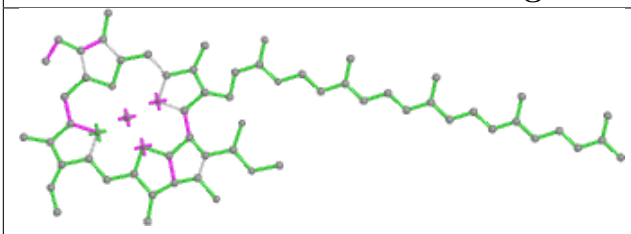


Rings

Ligand CLA B 613



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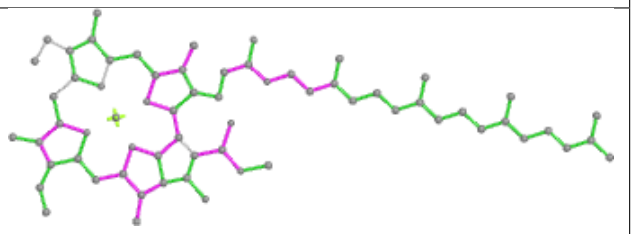
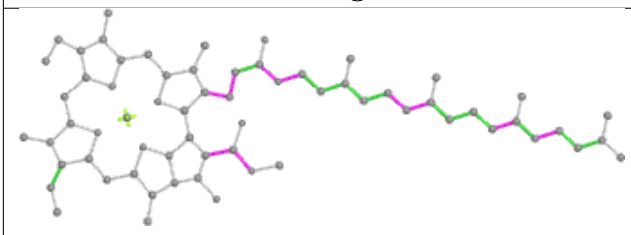


Bond angles



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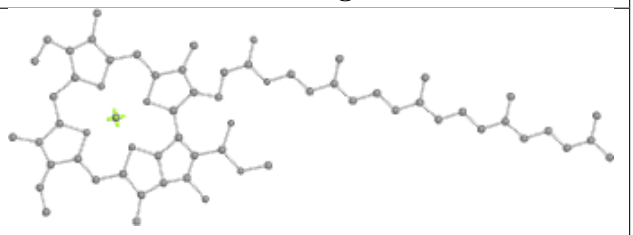
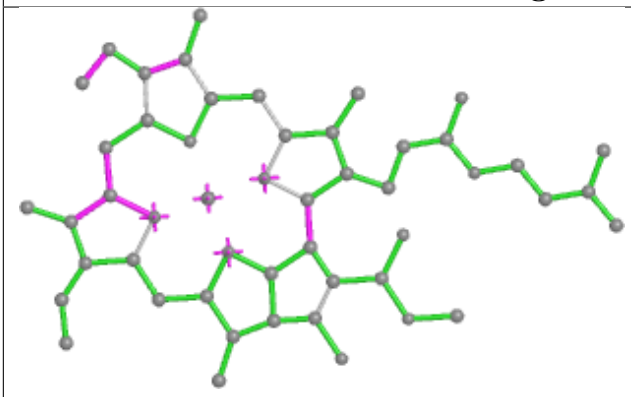


Rings

Ligand CLA s 605



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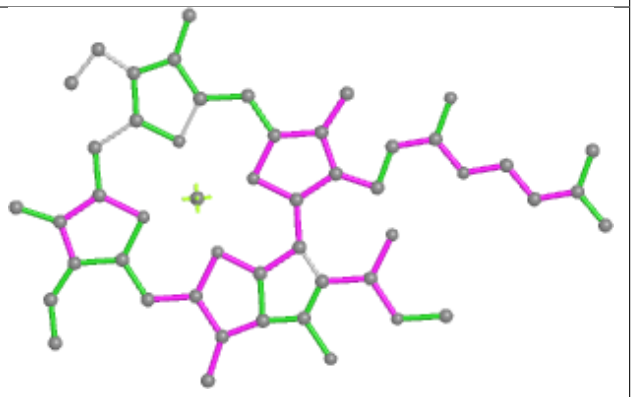
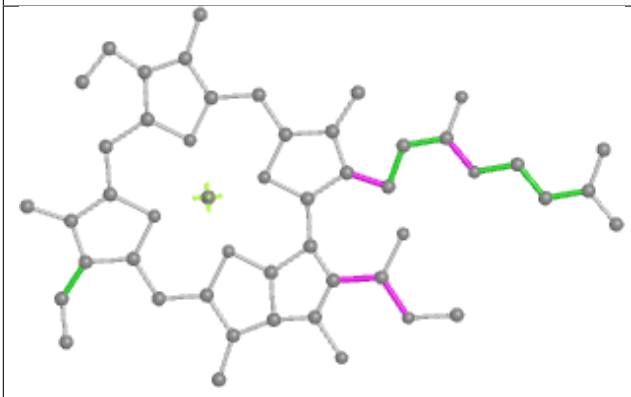


Bond angles



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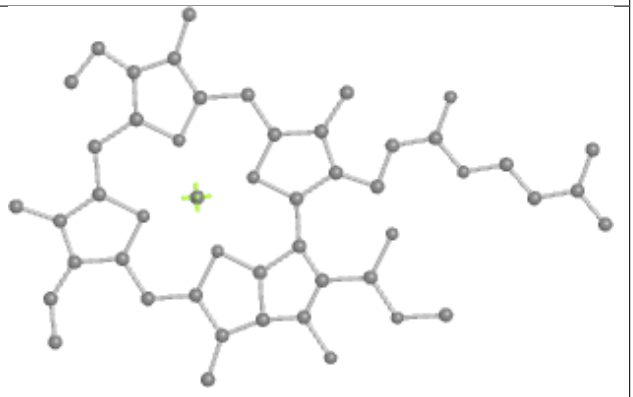
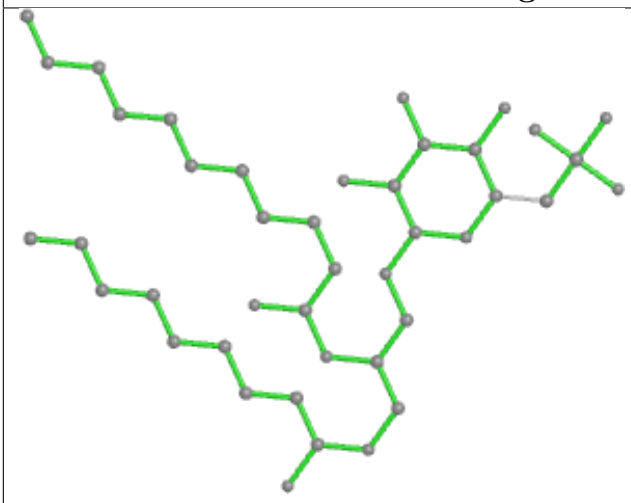


Rings

Ligand SQD b1 621



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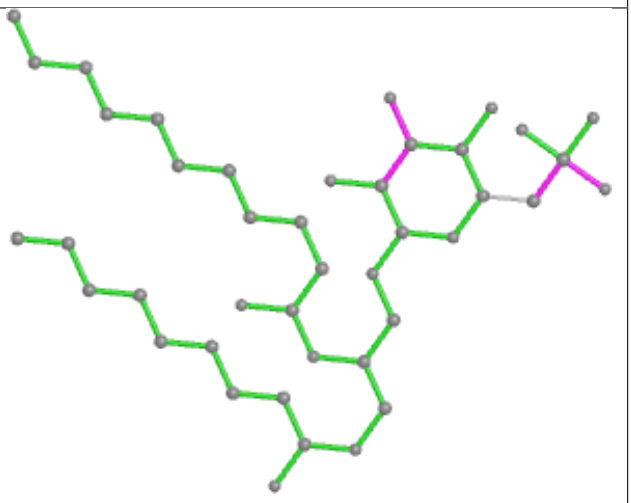
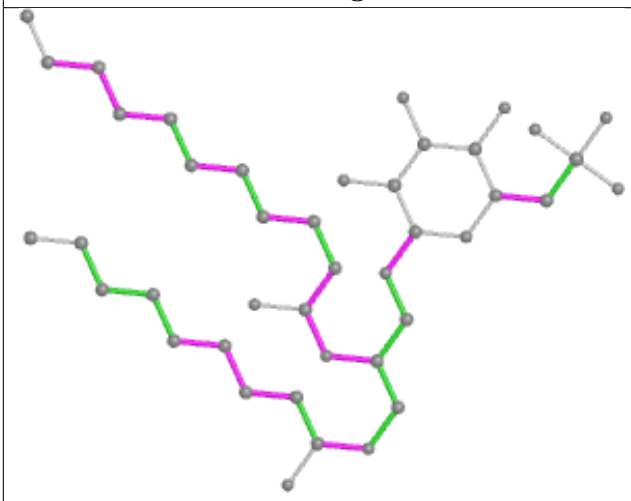
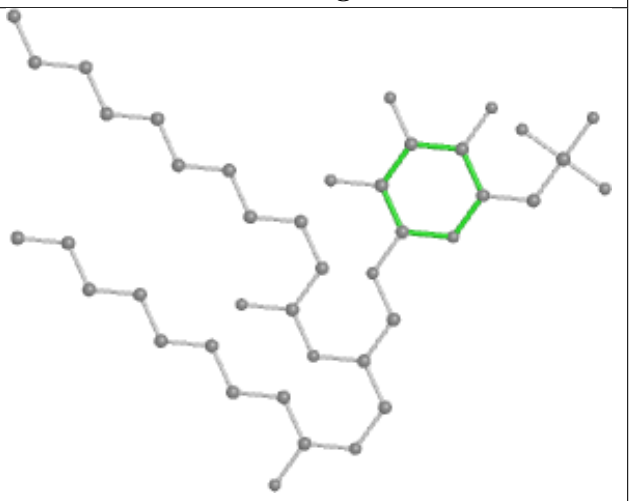


Bond angles

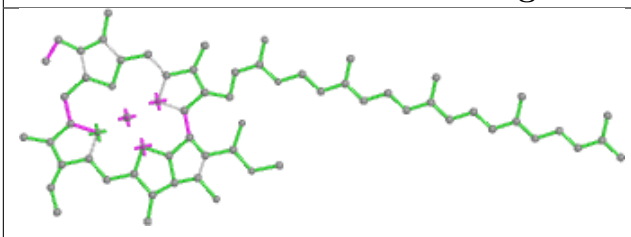


Torsions

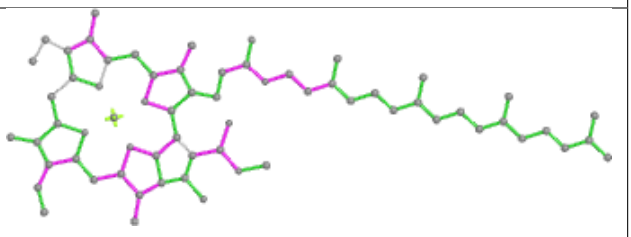


Rings

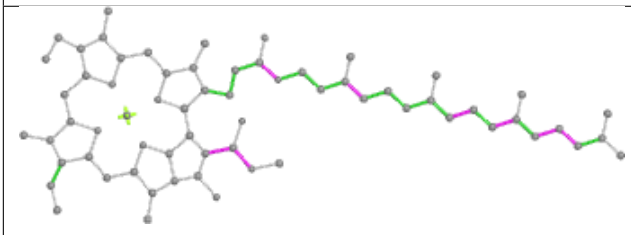
Ligand CLA b1 612



Bond lengths



Bond angles



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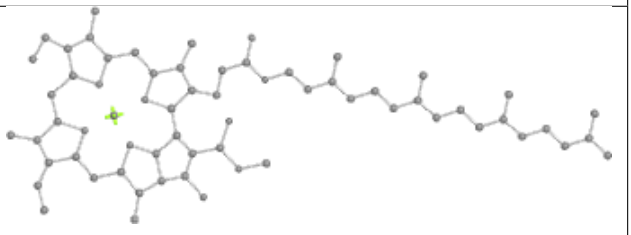
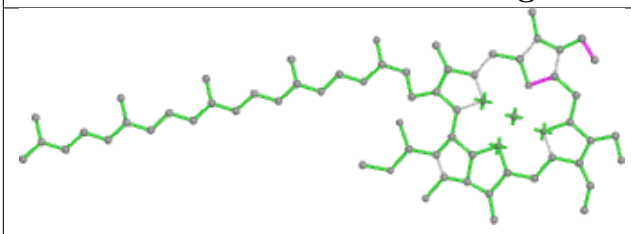
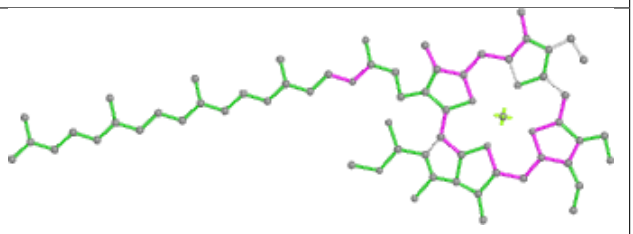


Rings

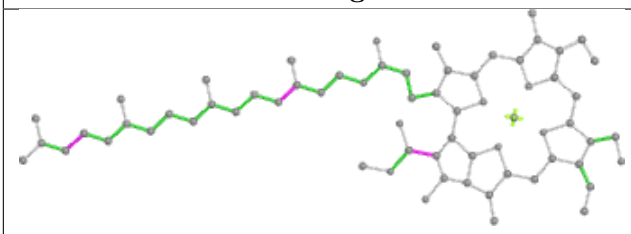
Ligand CHL n1 609



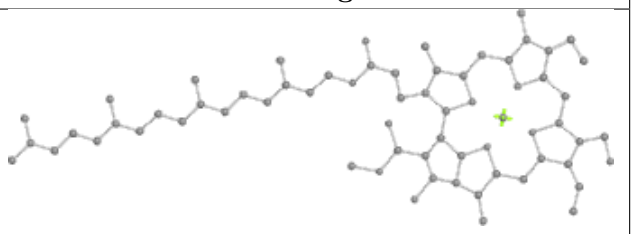
Bond lengths



Bond angles

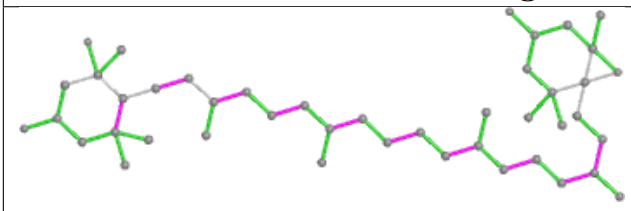


Torsions

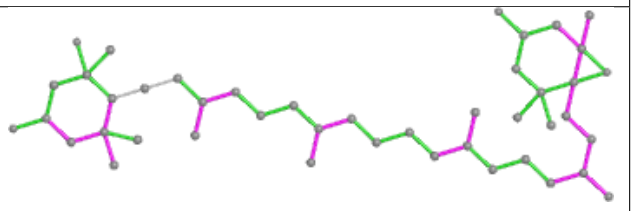


Rings

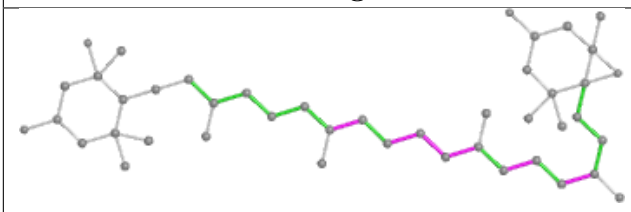
Ligand NEX r1 622



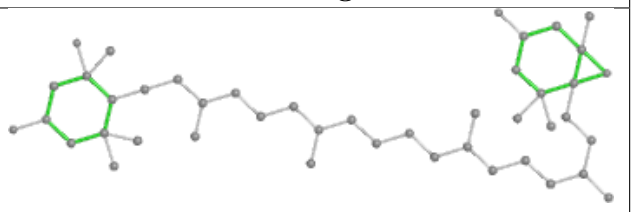
Bond lengths



Bond angles

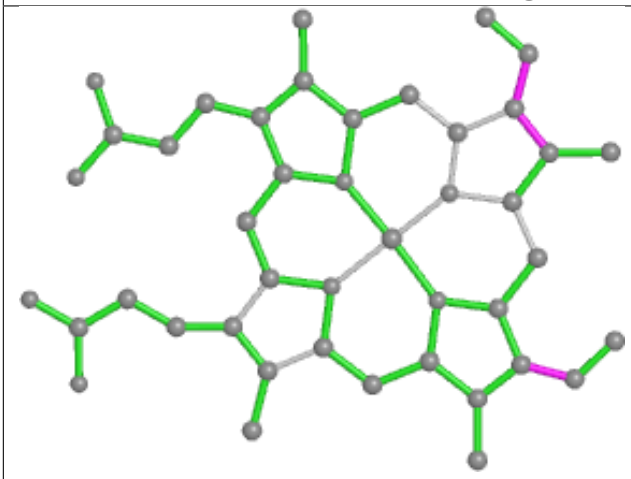


Torsions



Rings

Ligand HEM F 101



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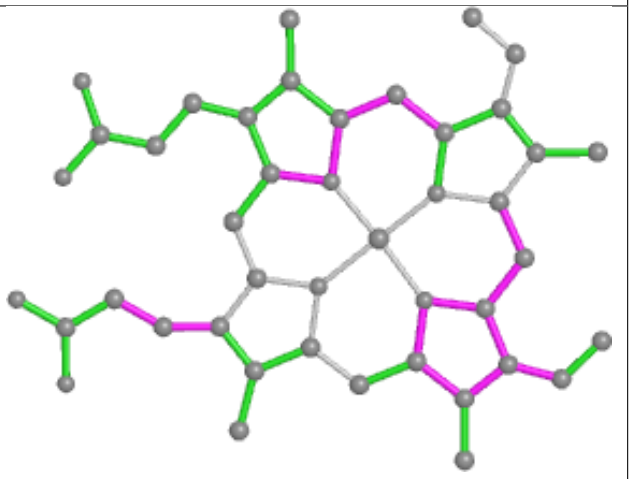
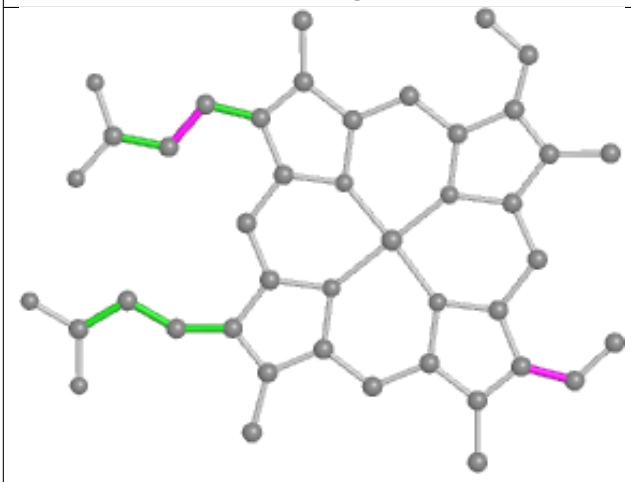
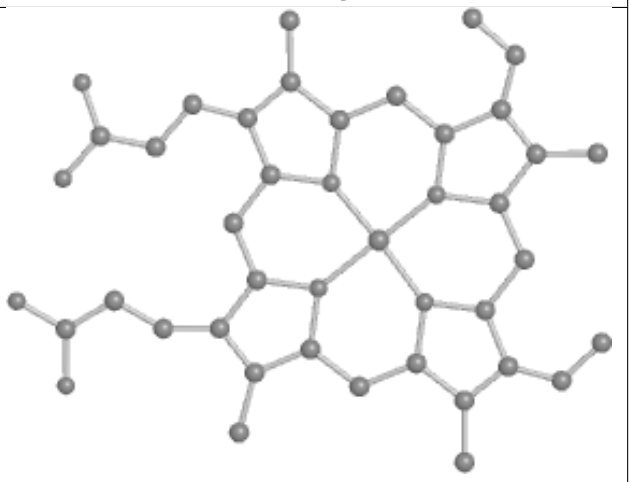


Bond angles

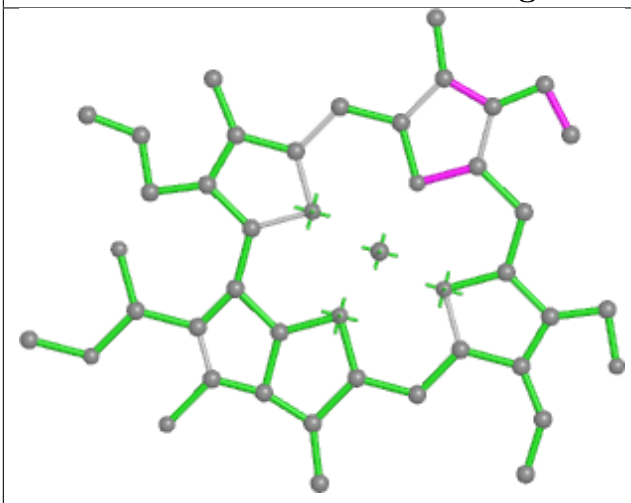


Torsions



Rings

Ligand CHL g1 608



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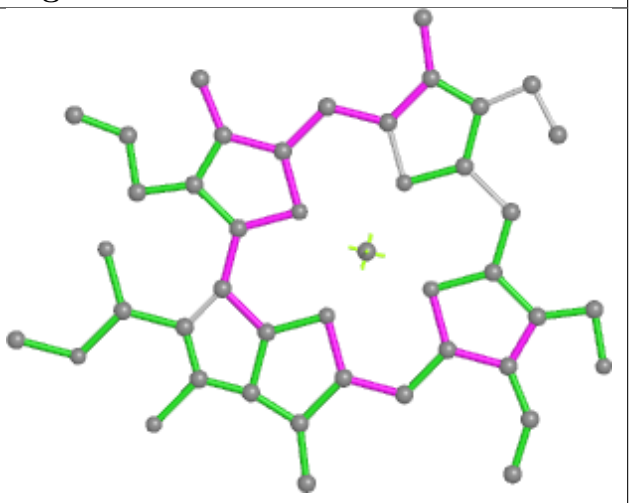
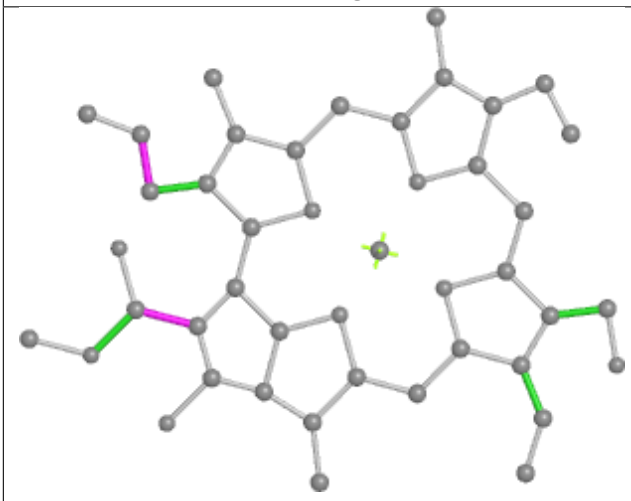


Bond angles



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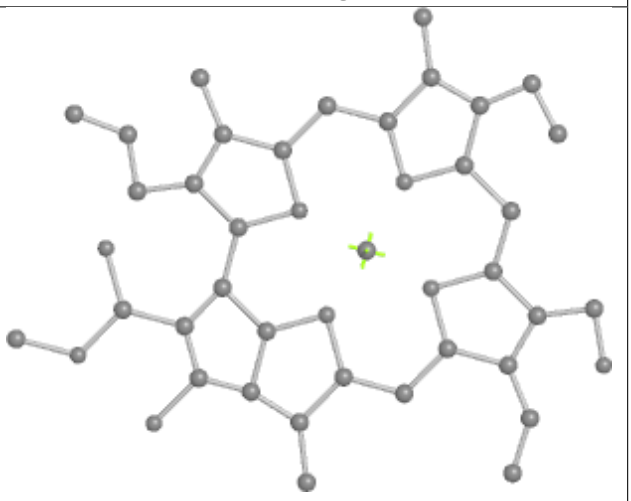
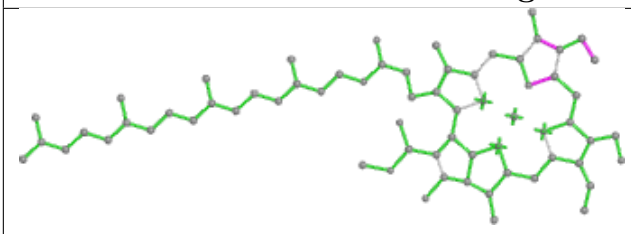


Rings

Ligand CHL n1 601



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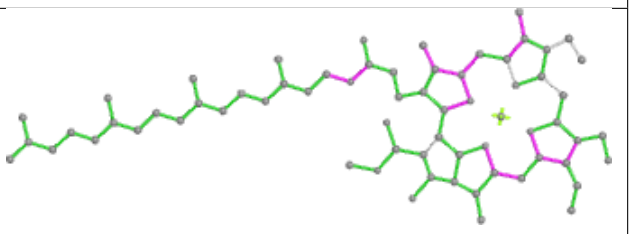
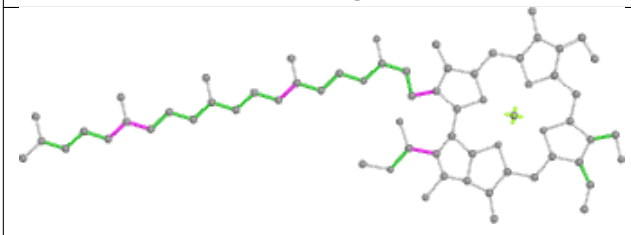


Bond angles



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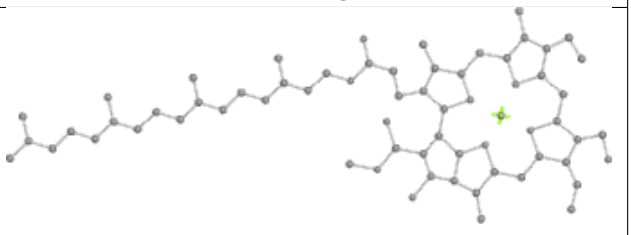
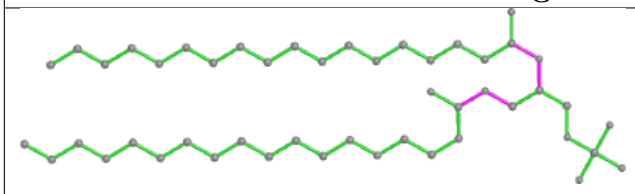


Rings

Ligand 3PH s 626



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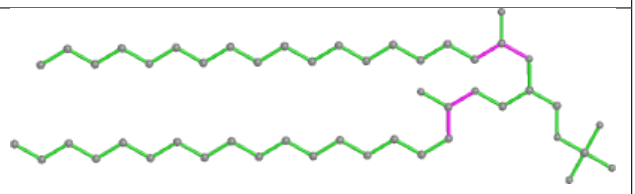
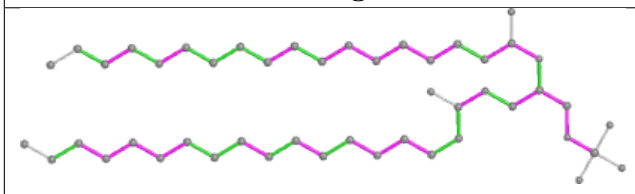


Bond angles



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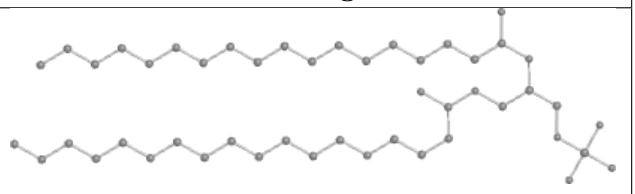
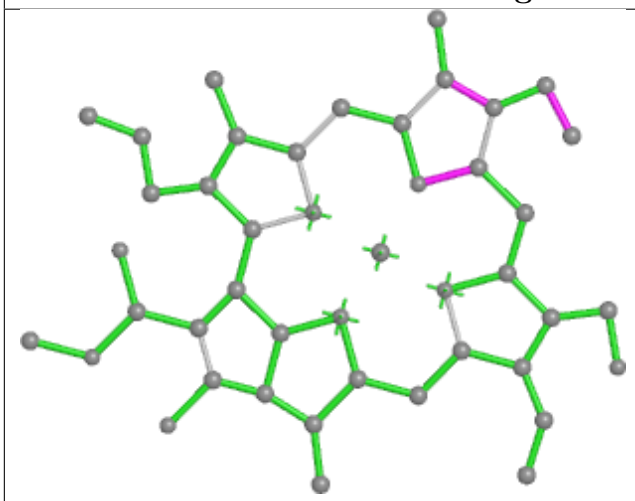


Rings

Ligand CHL G1 608



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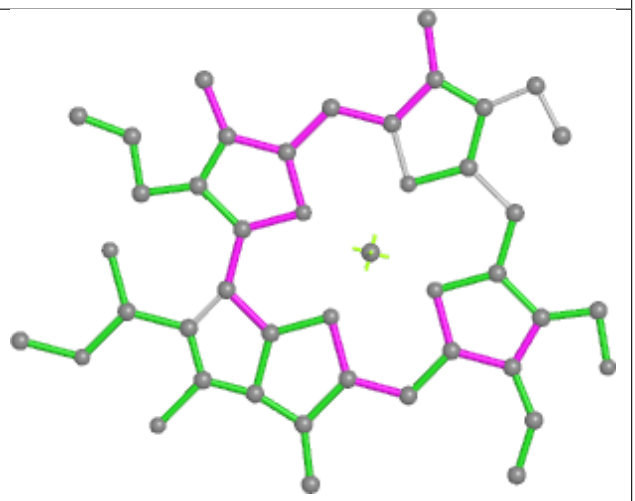
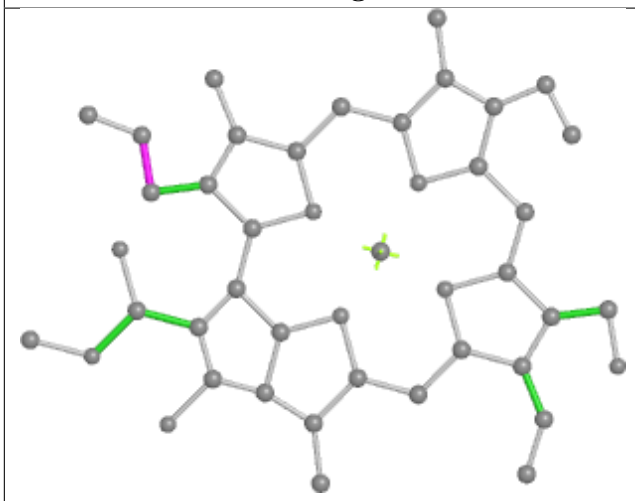


Bond angles



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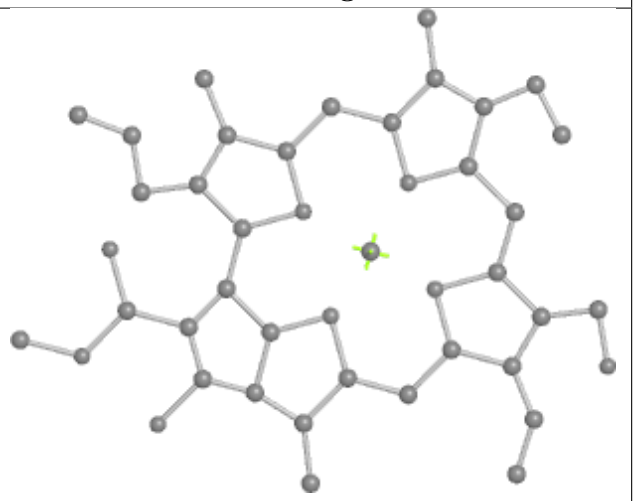
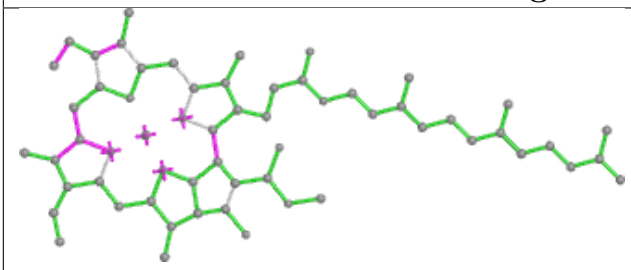


Rings

Ligand CLA r 612



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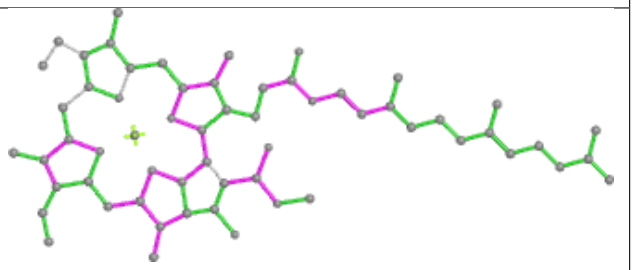
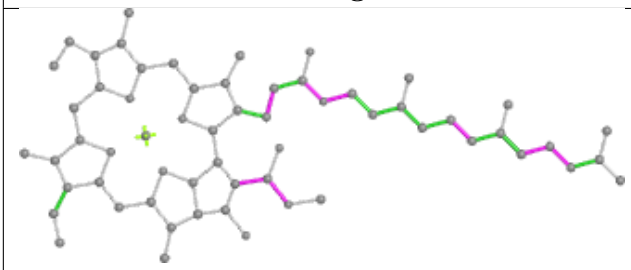


Bond angles



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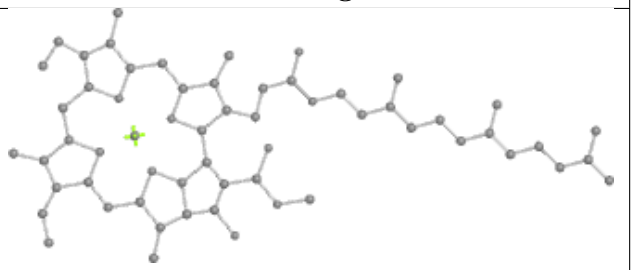
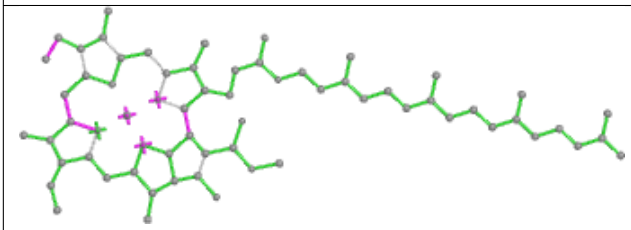


Rings

Ligand CLA a 406



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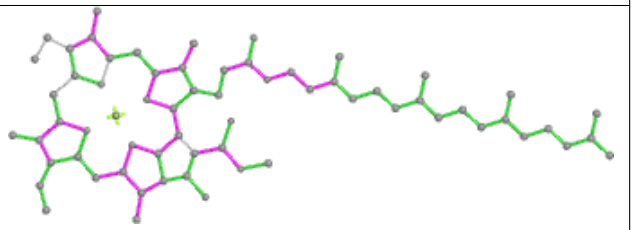
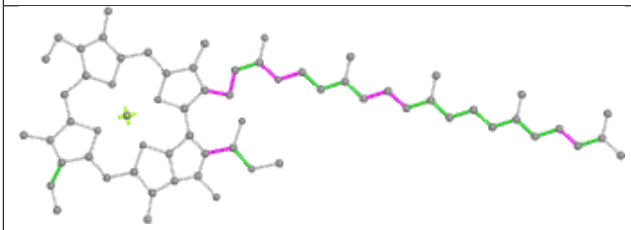


Bond angles



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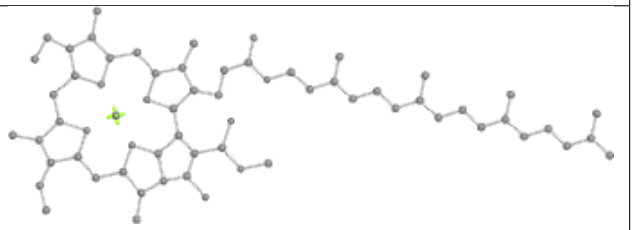
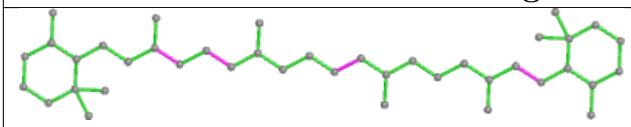


Rings

Ligand BCR B 618



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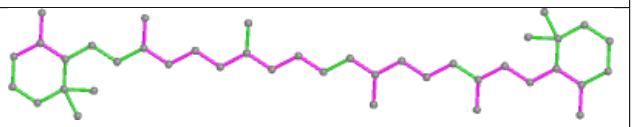
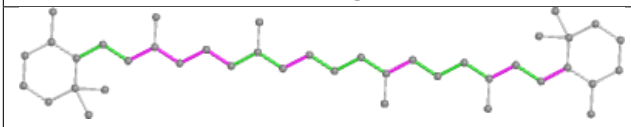
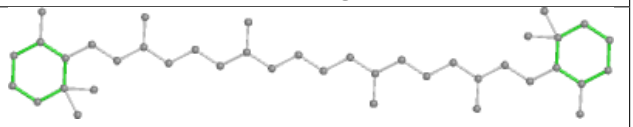


Bond angles

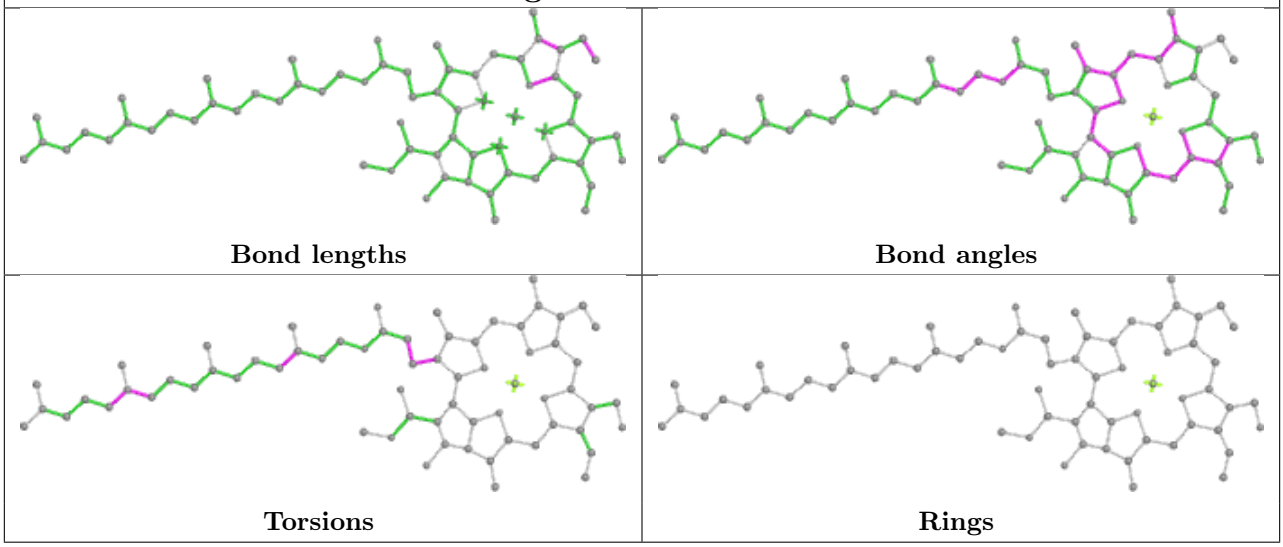


Torsions

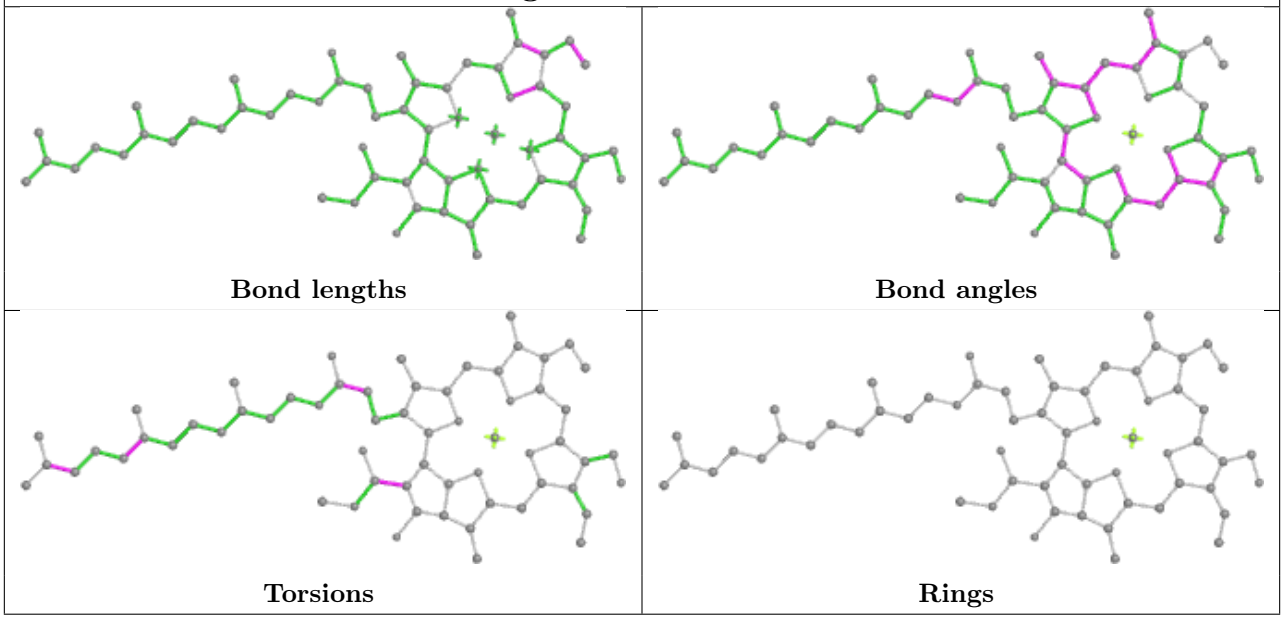


Rings

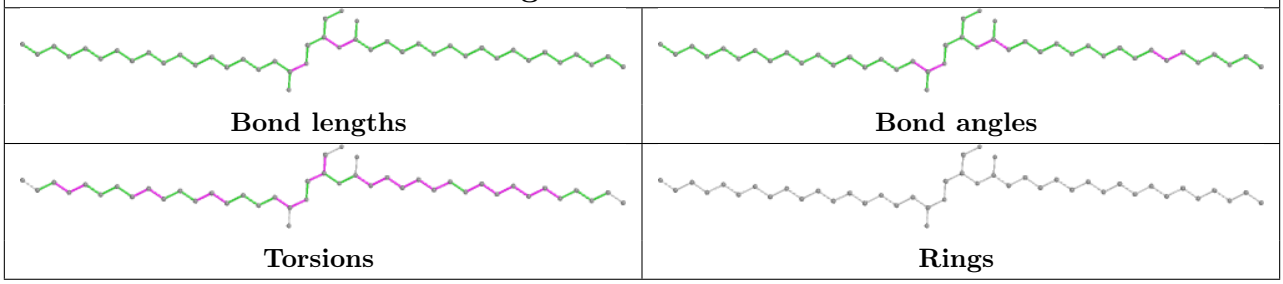
Ligand CHL Y 609



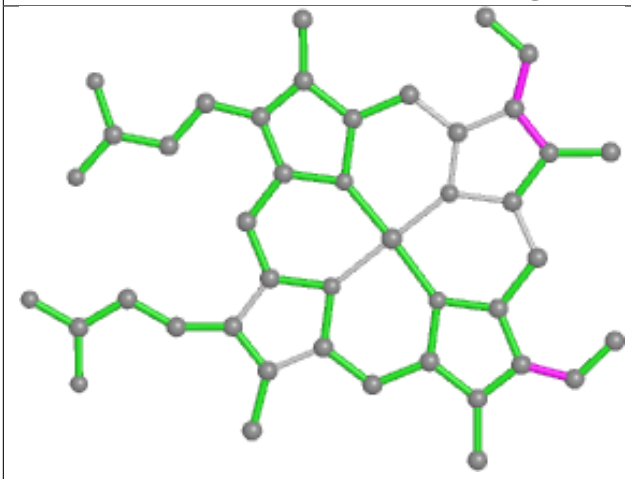
Ligand CHL s1 608



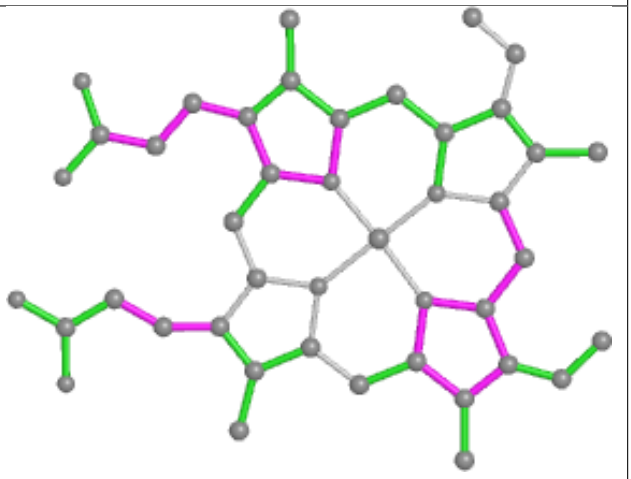
Ligand DGA C 524



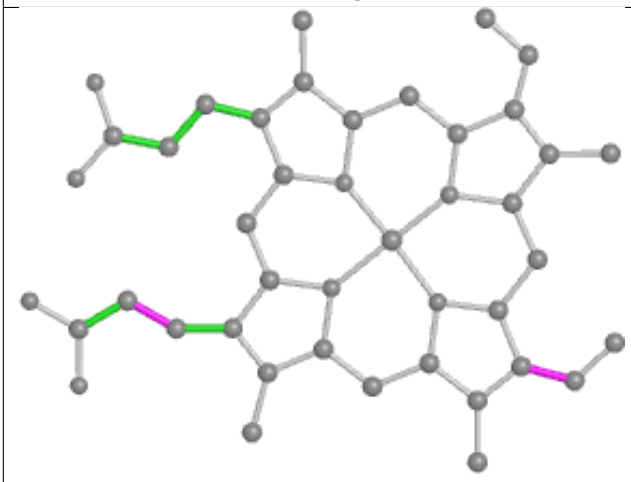
Ligand HEM f 101



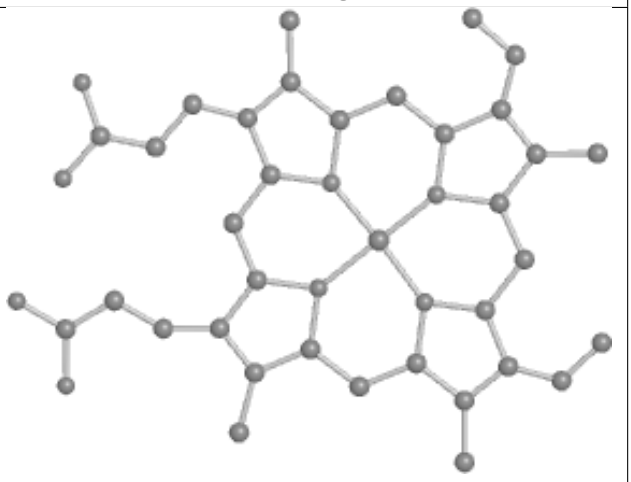
Bond lengths



Bond angles

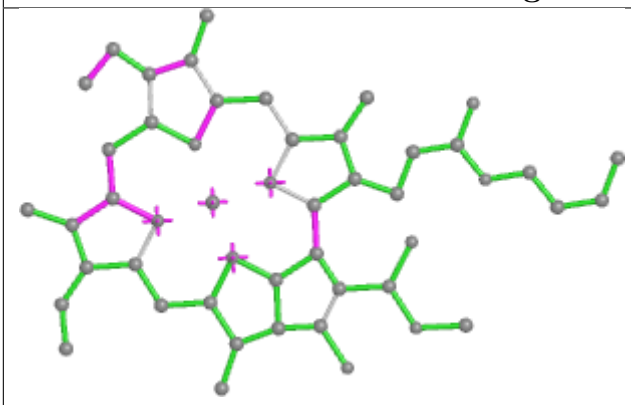


Torsions



Rings

Ligand CLA N 611



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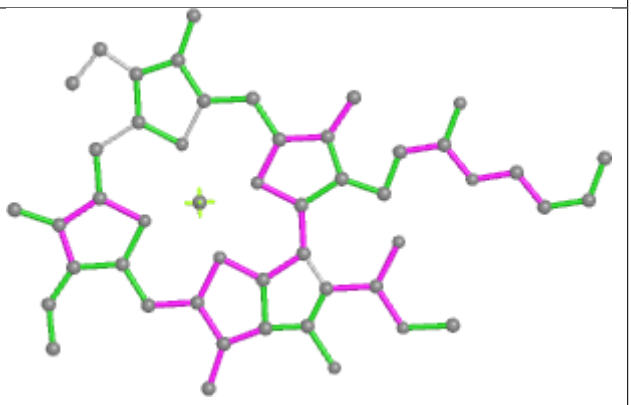
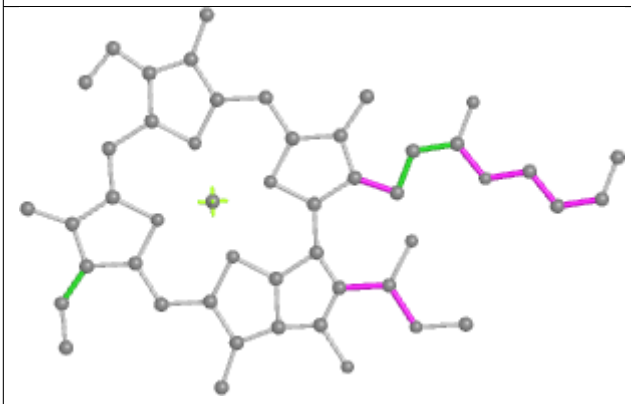
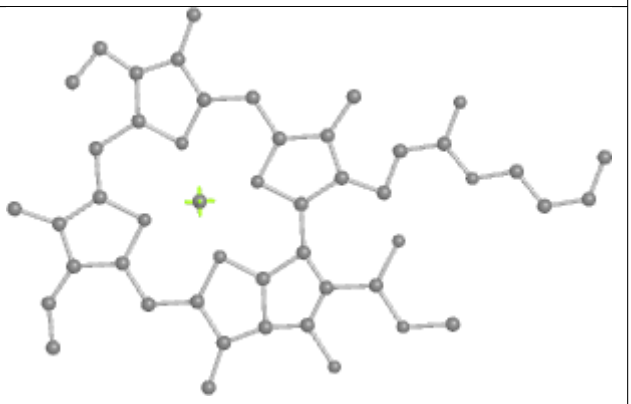


Bond angles

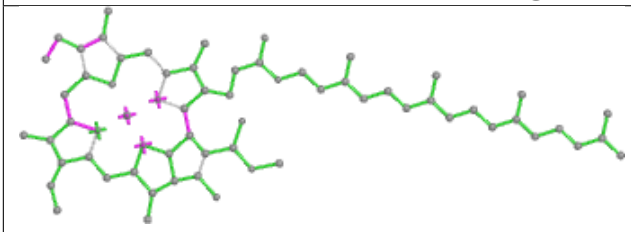


Torsions

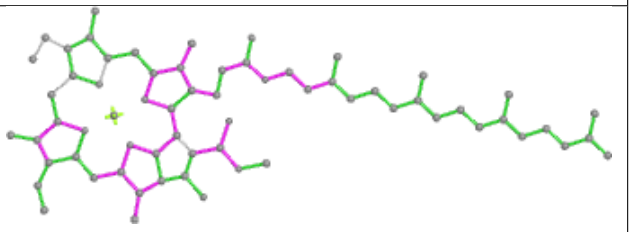


Rings

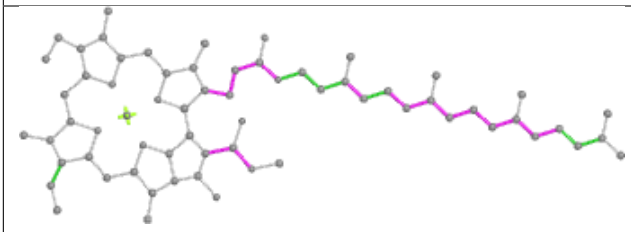
Ligand CLA n 603



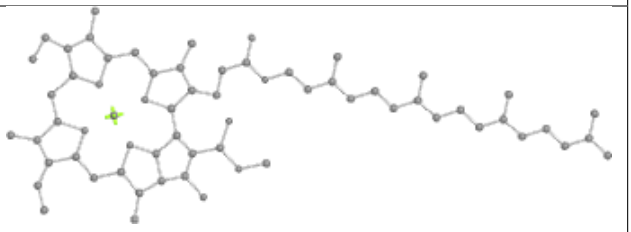
Bond lengths



Bond angles

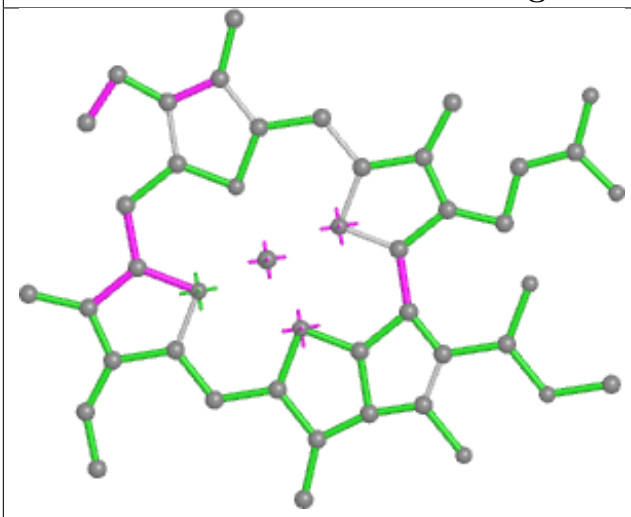


Torsions

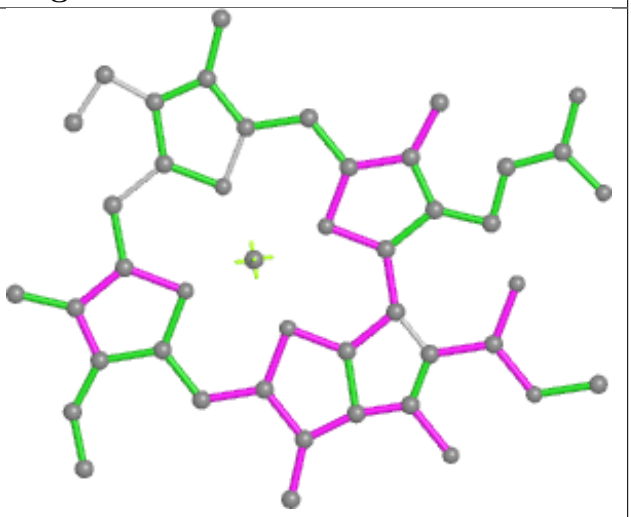


Rings

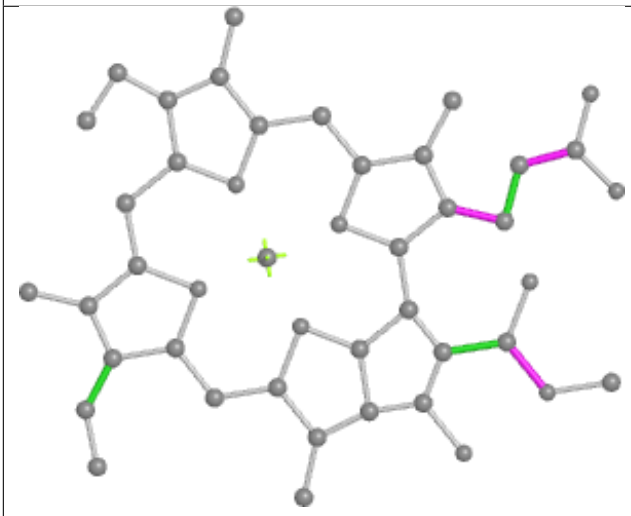
Ligand CLA g 611



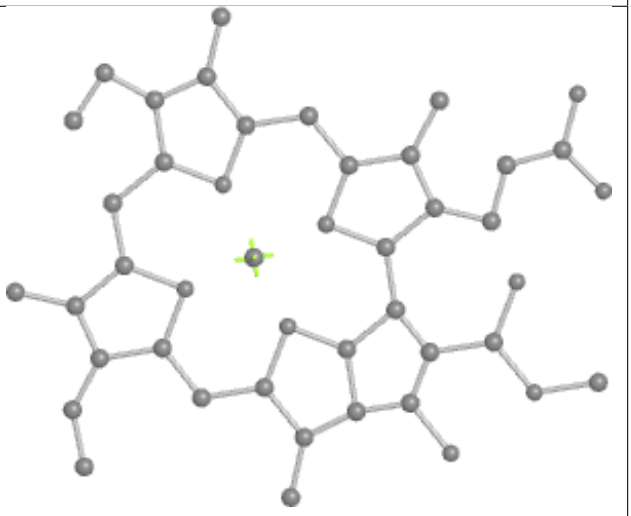
Bond lengths



Bond angles

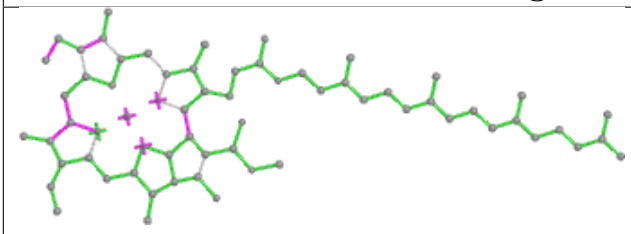


Torsions

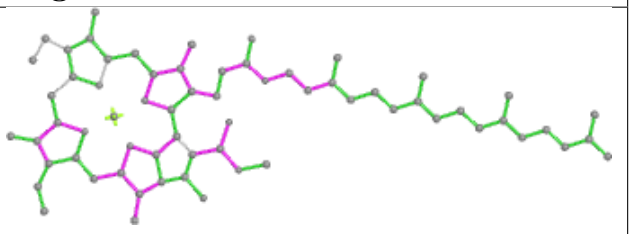


Rings

Ligand CLA g 603



Bond lengths



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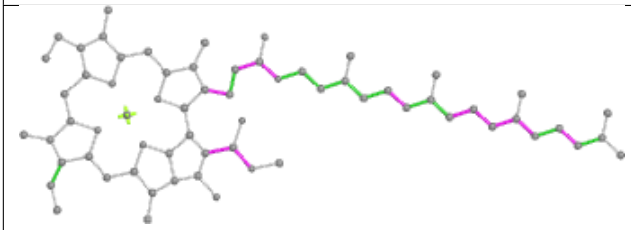
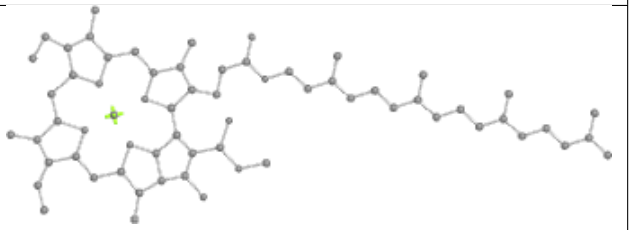
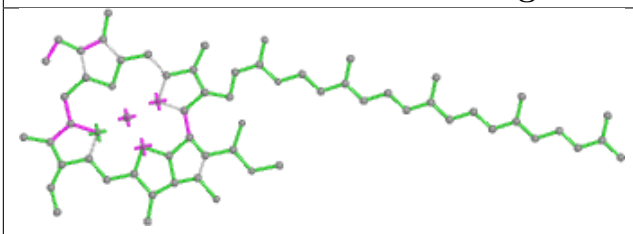


Torsions



Rings

Ligand CLA b1 611



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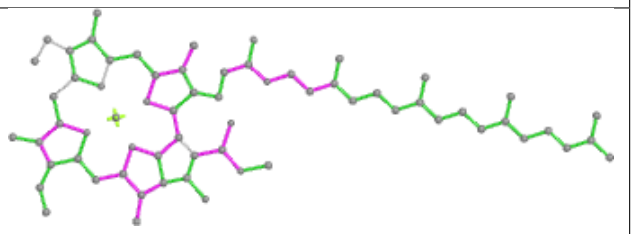

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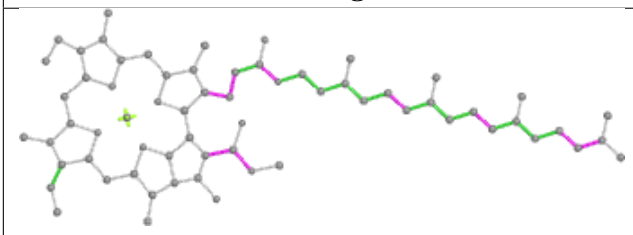

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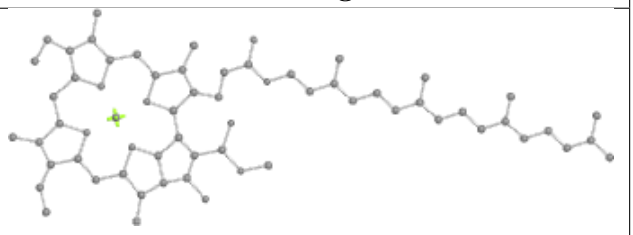
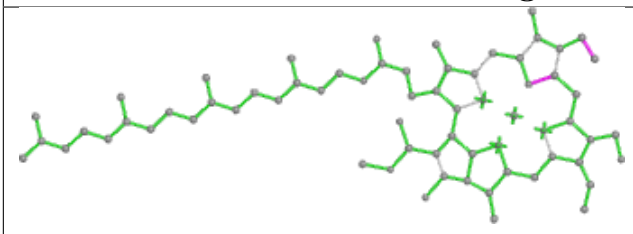


Rings

Ligand CHL y1 607



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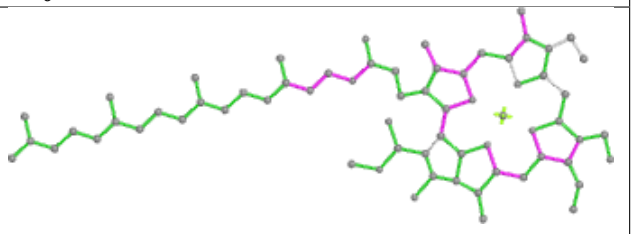

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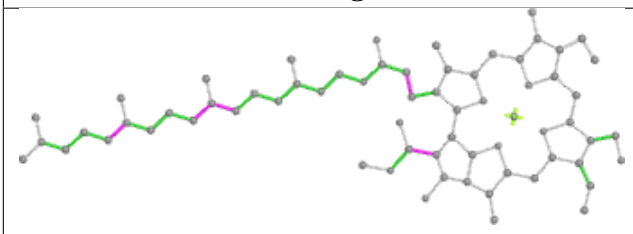

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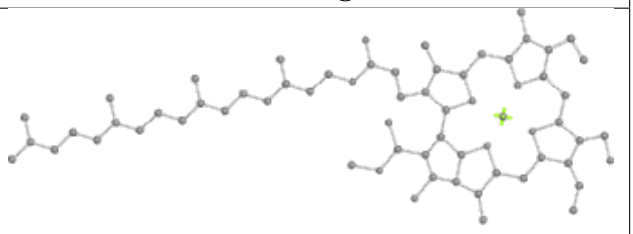
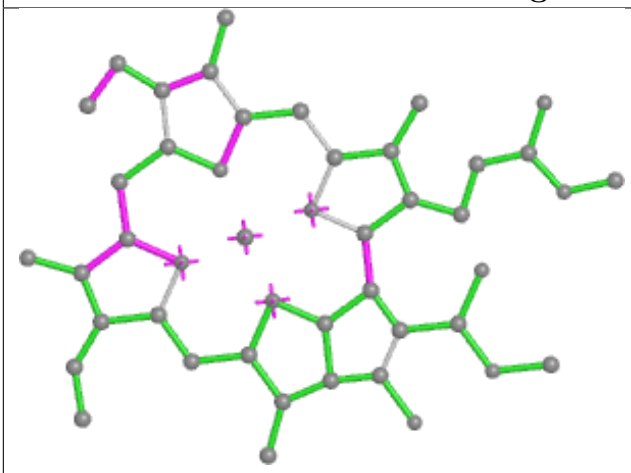


Rings

Ligand CLA r 611



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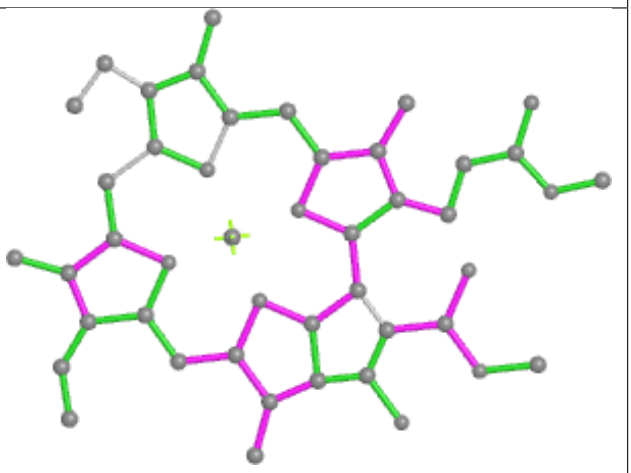

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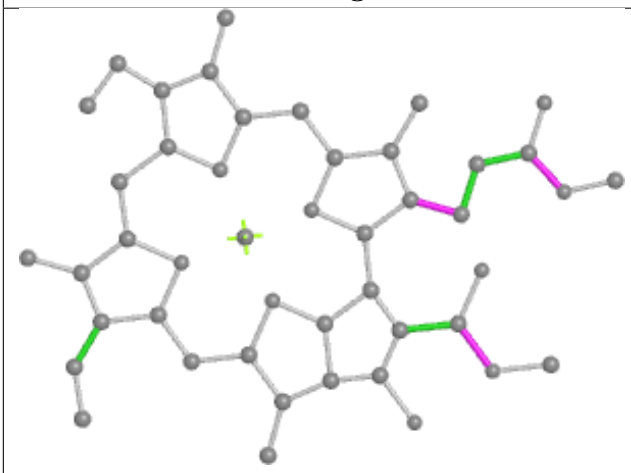

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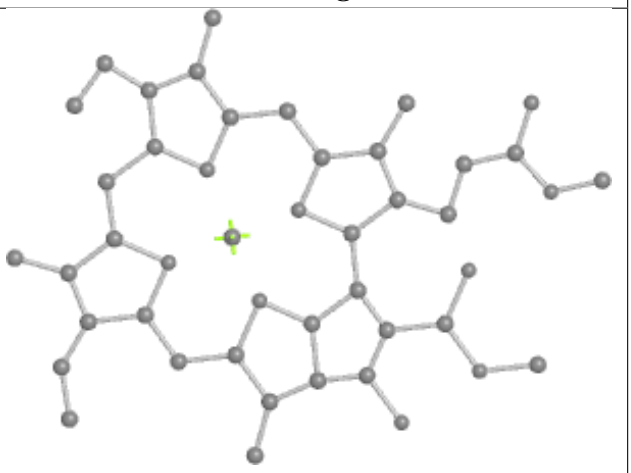
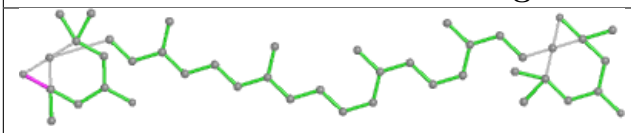


Rings

Ligand XAT G1 622



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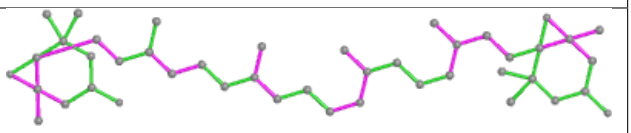

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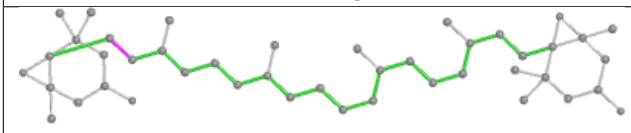

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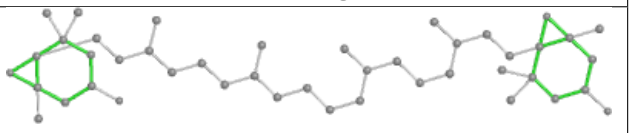
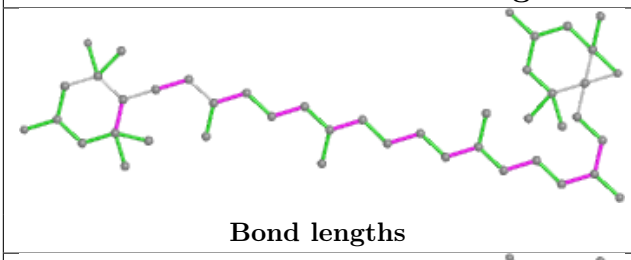


Rings

Ligand NEX Y1 623



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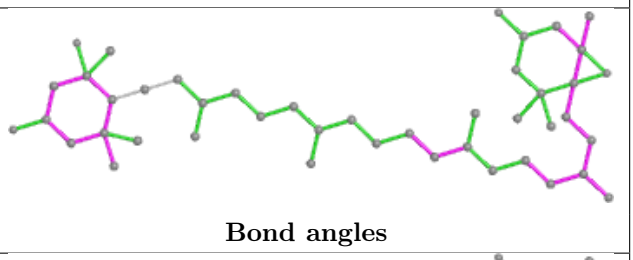

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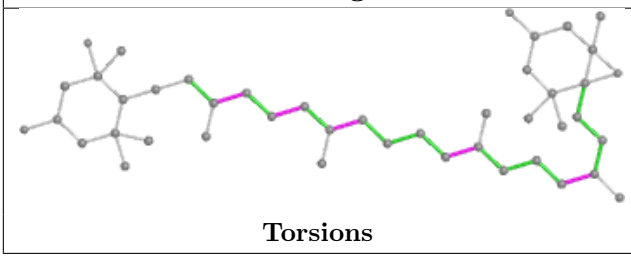

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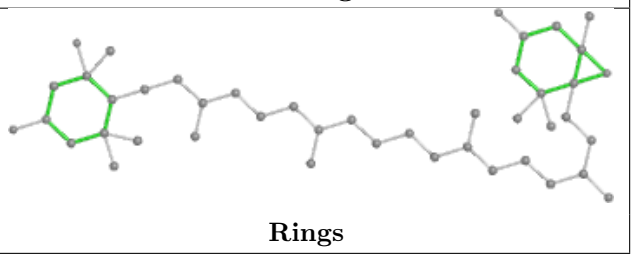
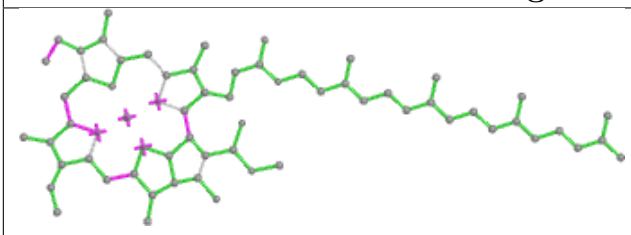


Rings

Ligand CLA b 615



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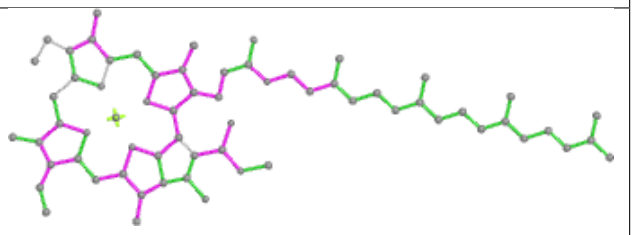
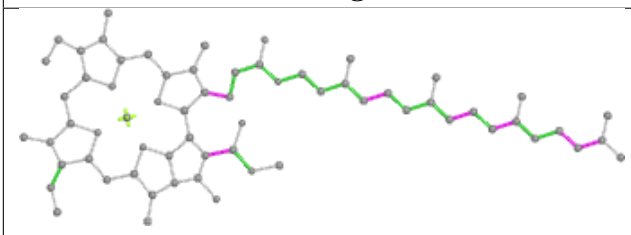


Bond angles



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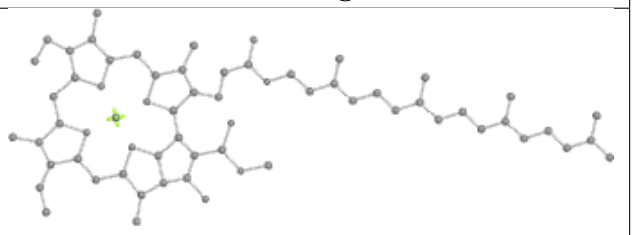
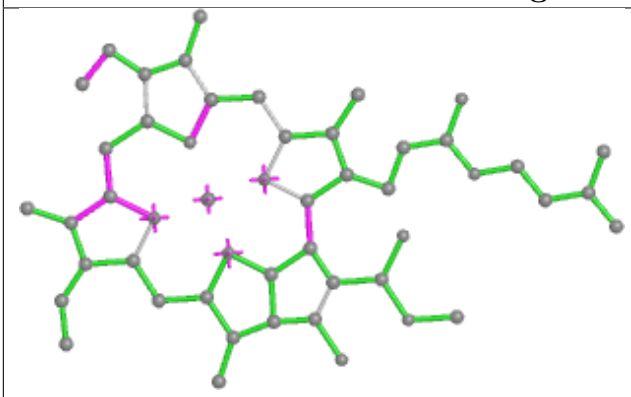


Rings

Ligand CLA s 617



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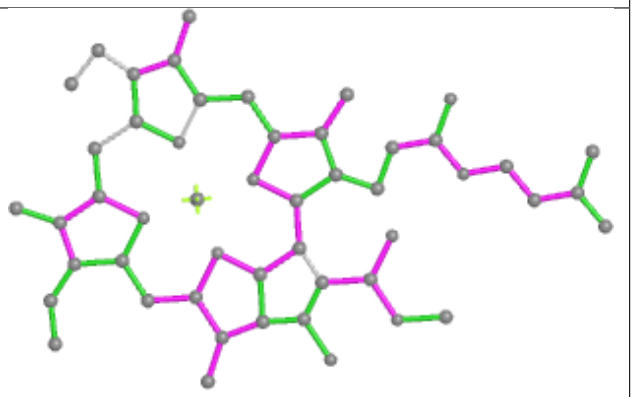

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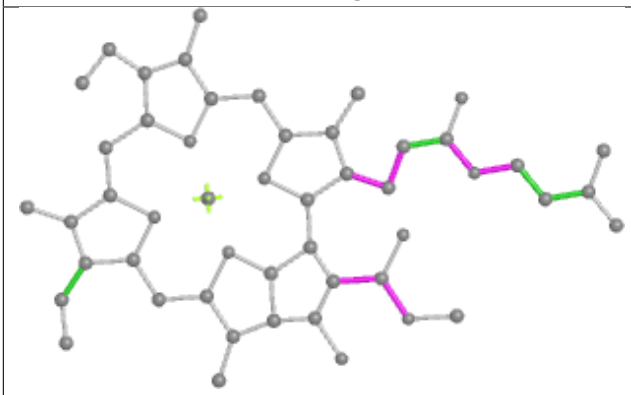

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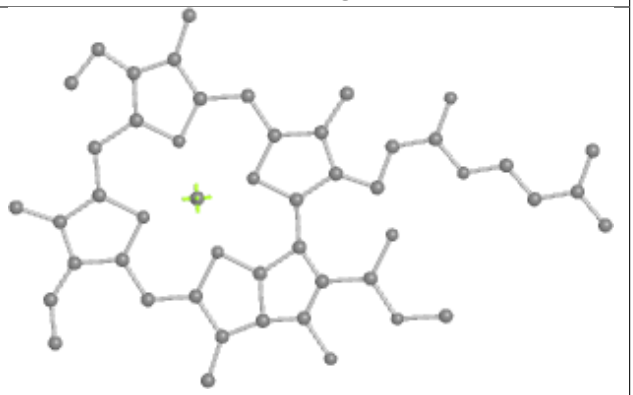
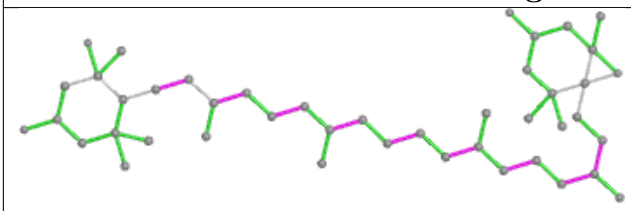


Rings

Ligand NEX n 623



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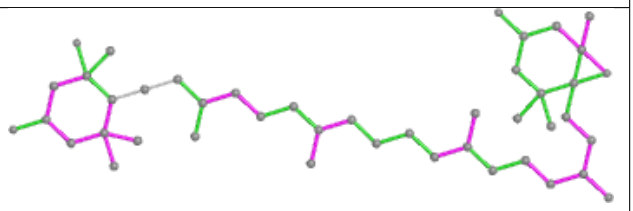
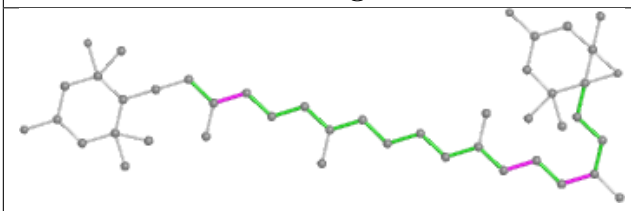


Bond angles



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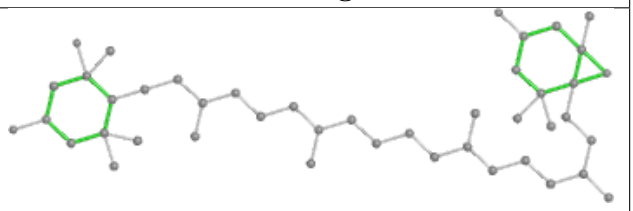
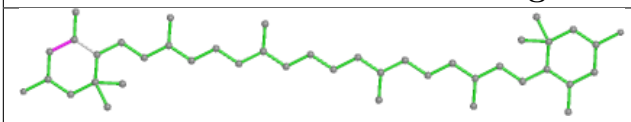


Rings

Ligand LUT g 621



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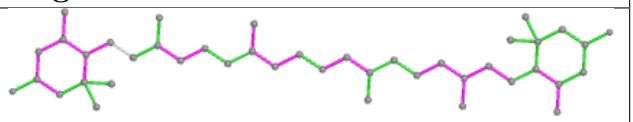

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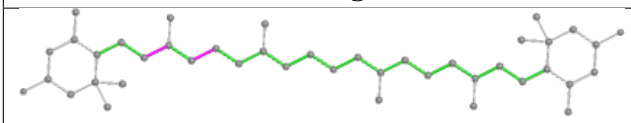

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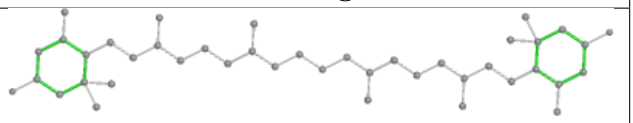
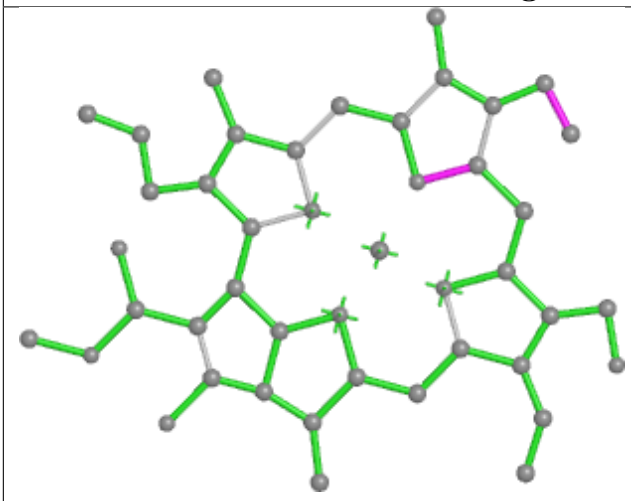


Rings

Ligand CHL r1 606



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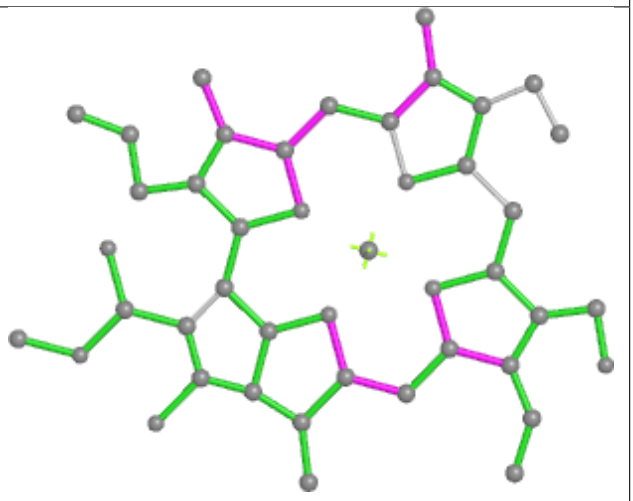
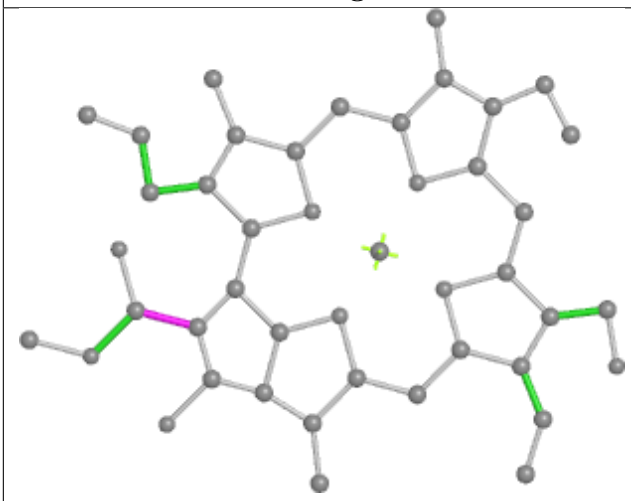


Bond angles



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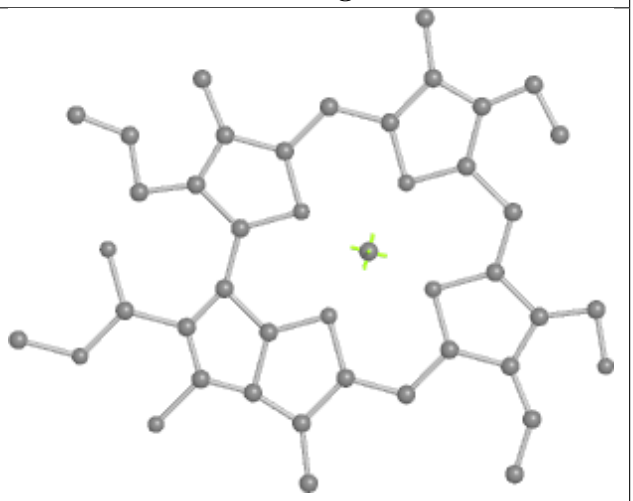
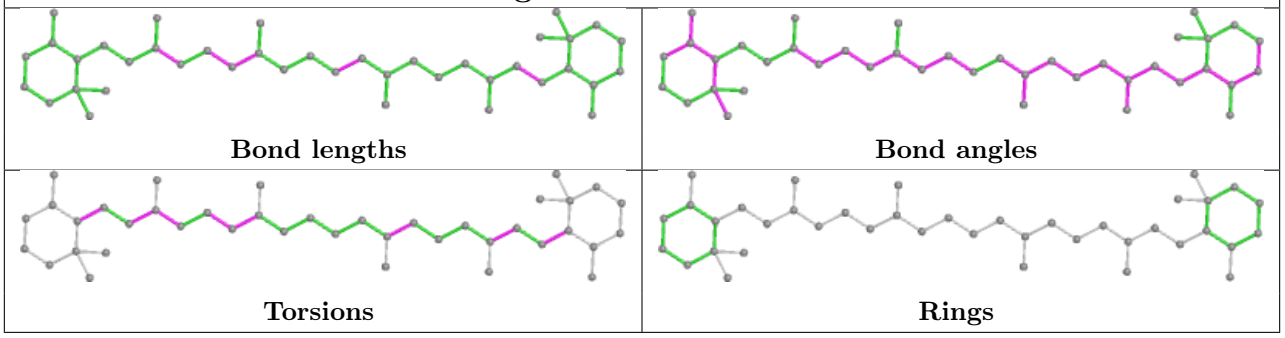
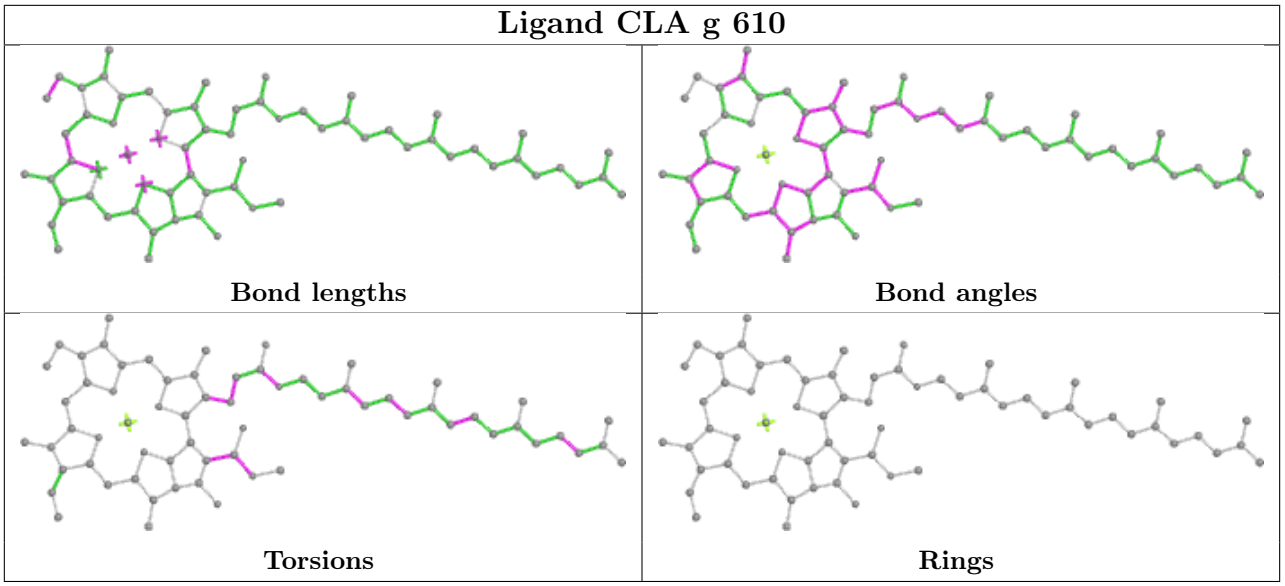


Rings

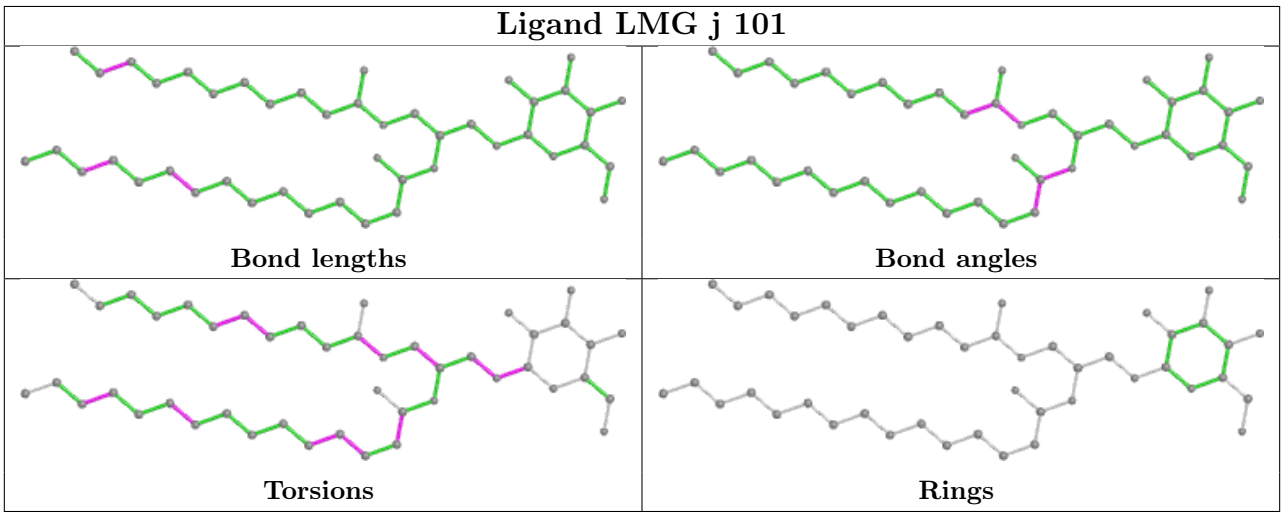
Ligand BCR C1 516



Ligand CLA g 610



Ligand LMG j 101



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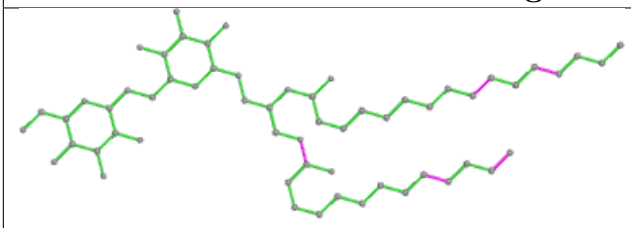
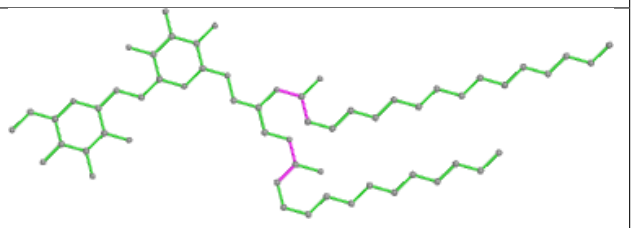
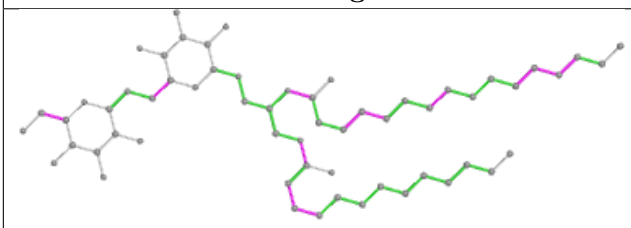


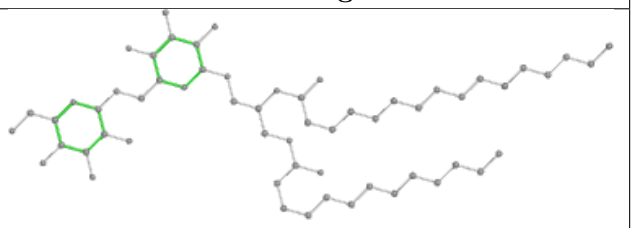
Bond lengths



Bond angles

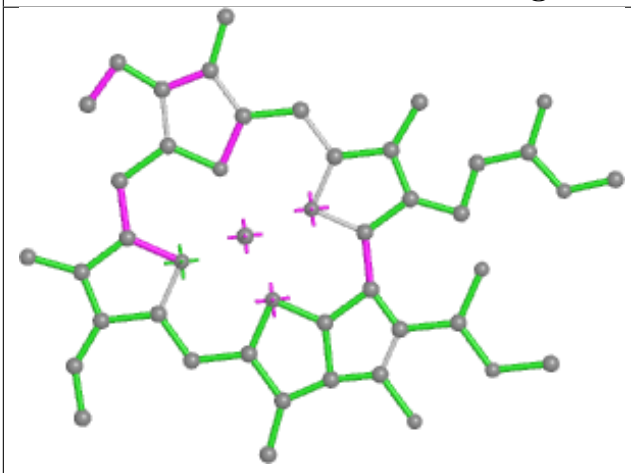


Torsions



Rings

Ligand CLA r 613



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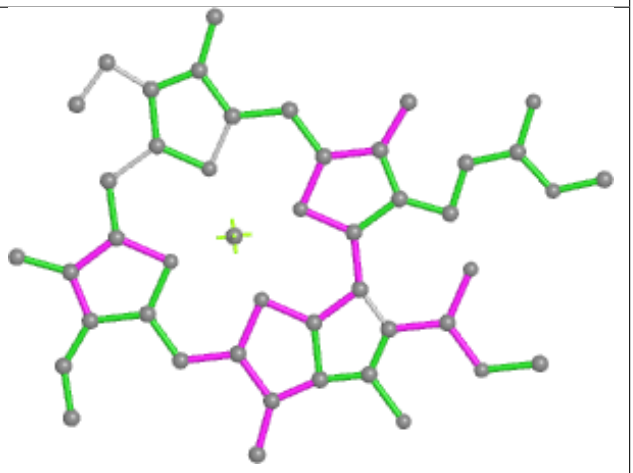
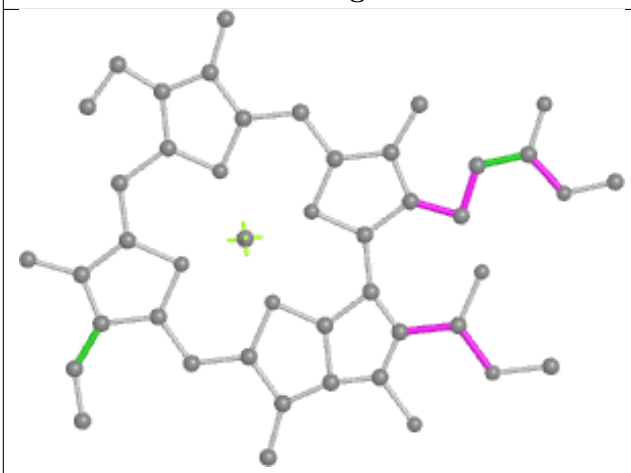


Bond angles



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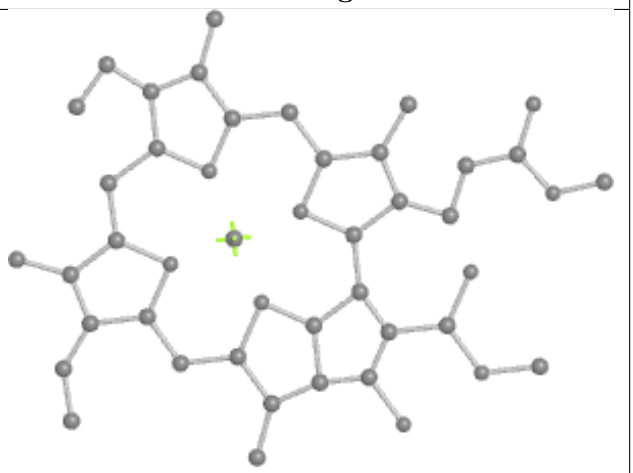
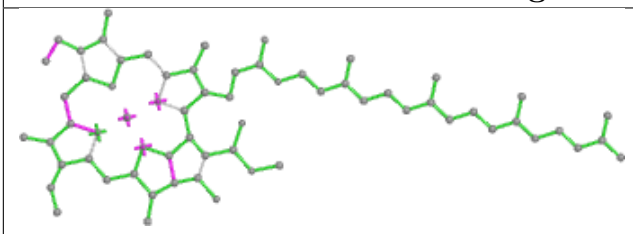


Rings

Ligand CLA a 405



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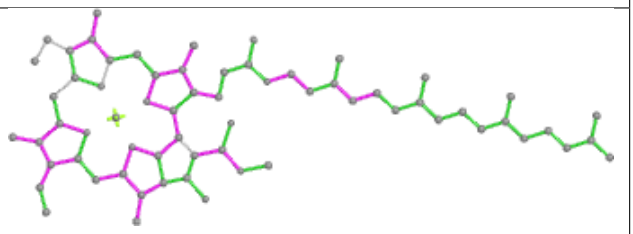
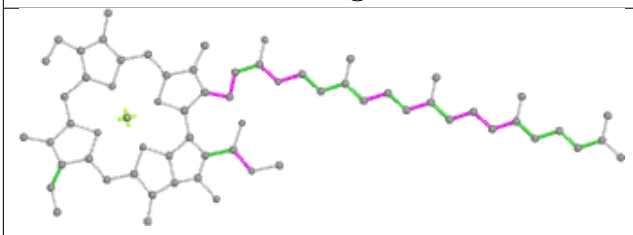
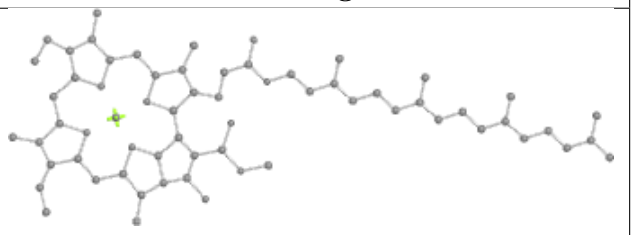


Bond angles

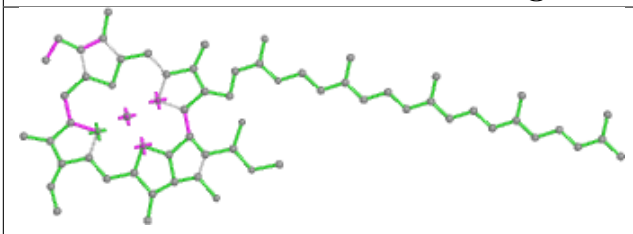


Torsions

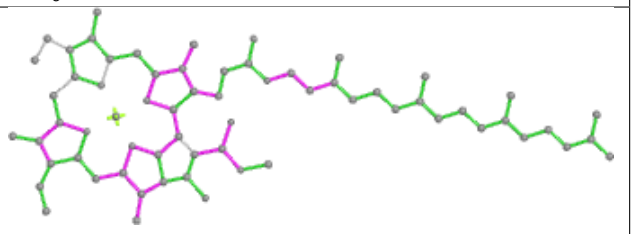


Rings

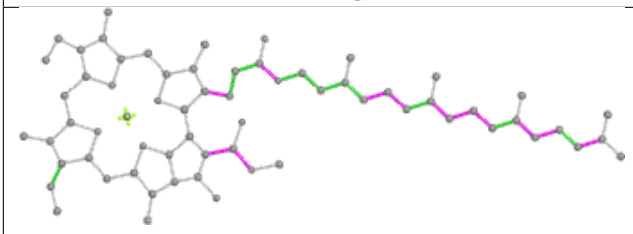
Ligand CLA y 611



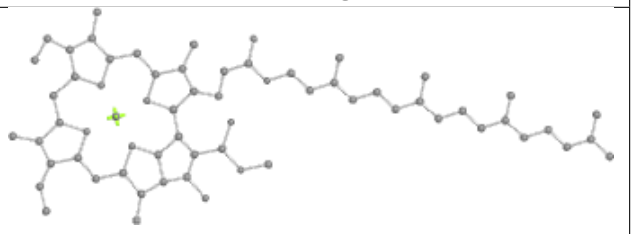
Bond lengths



Bond angles

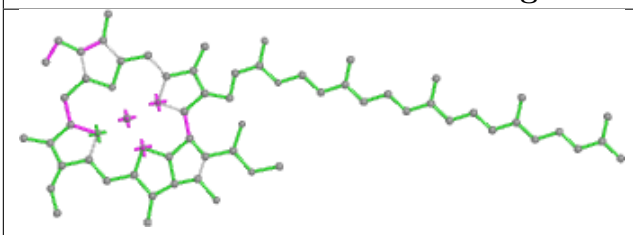


Torsions



Rings

Ligand CLA c1 504



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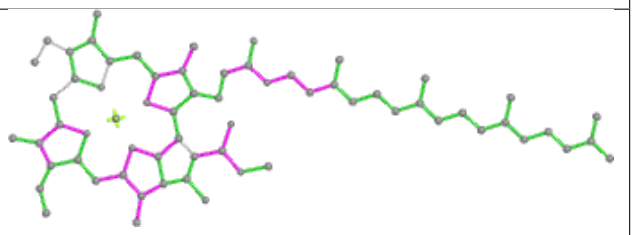
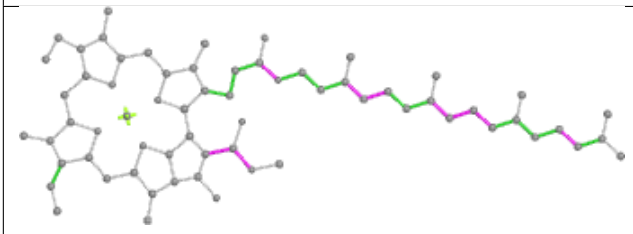
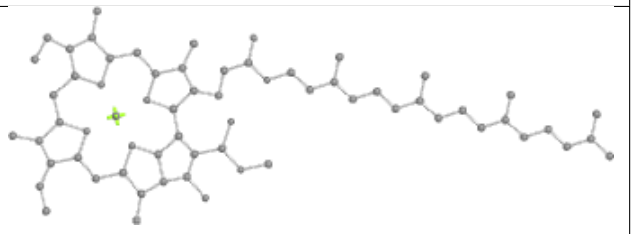


Bond angles

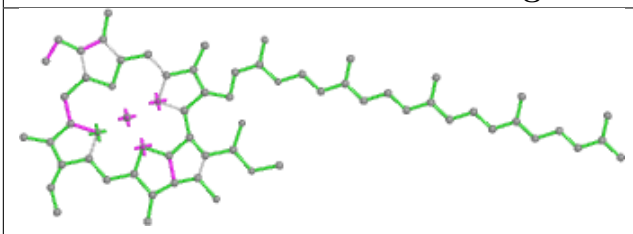


Torsions



Rings

Ligand CLA D 402



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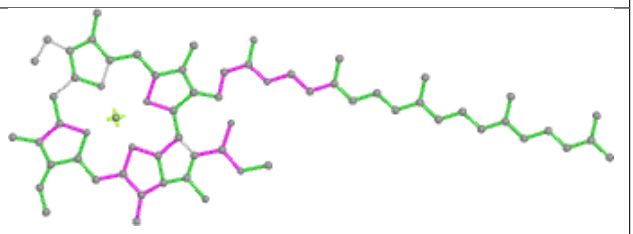
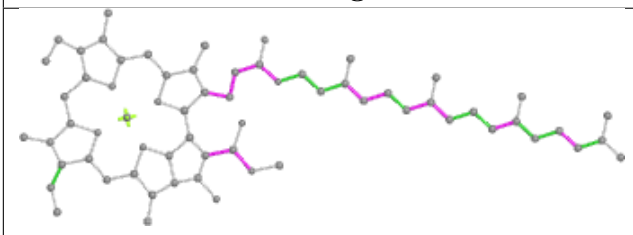
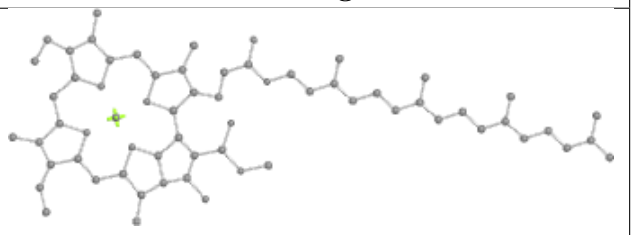


Bond angles

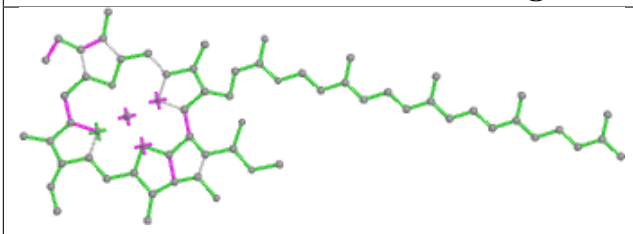


Torsions



Rings

Ligand CLA b 607



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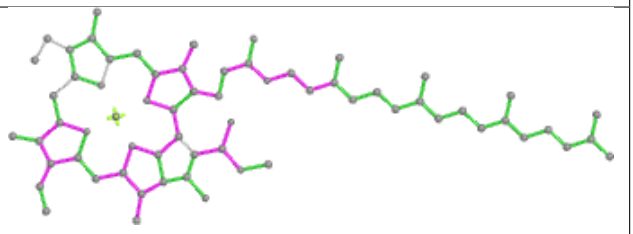
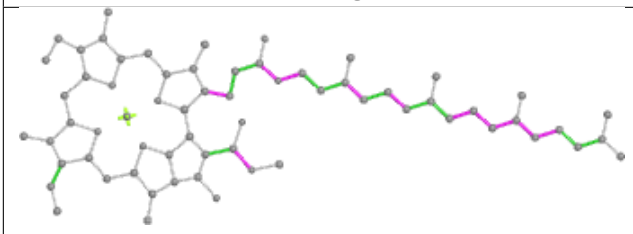


Bond angles



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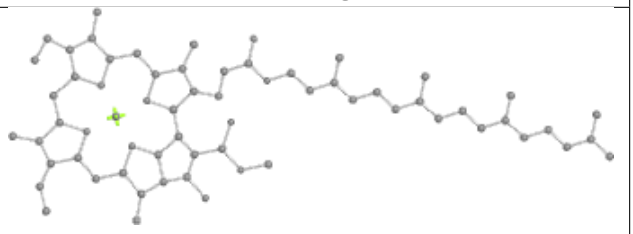
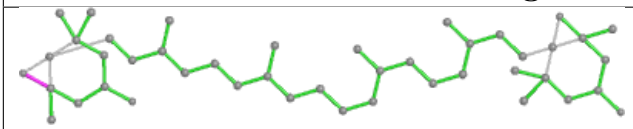


Rings

Ligand XAT G 622



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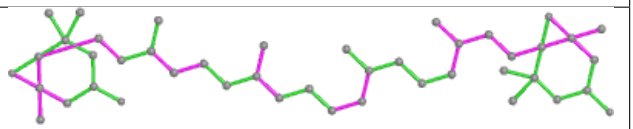
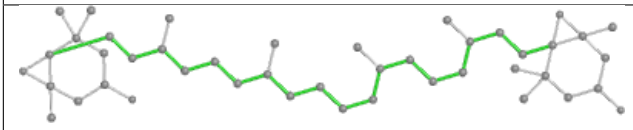


Bond angles



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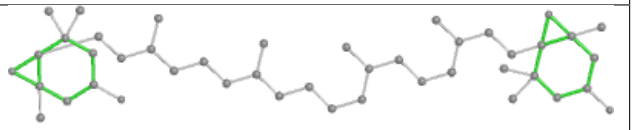
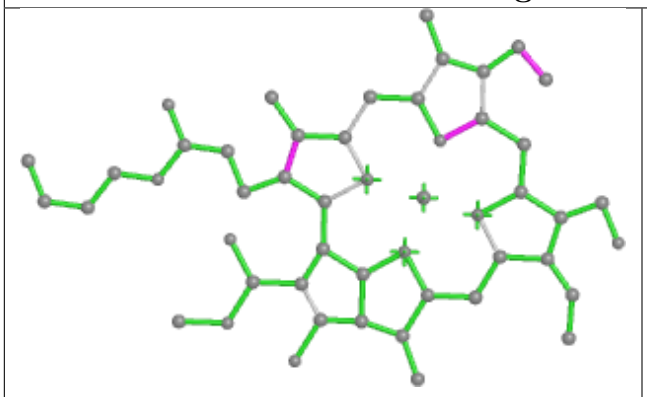


Rings

Ligand CHL N1 608



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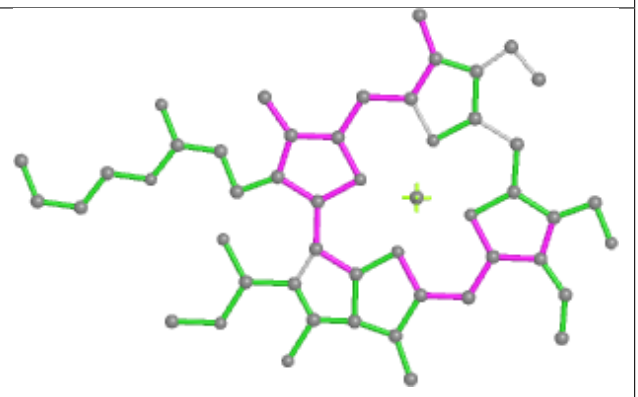
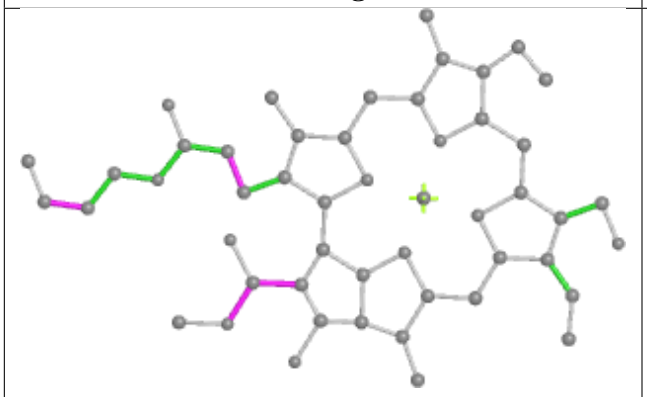


Bond angles



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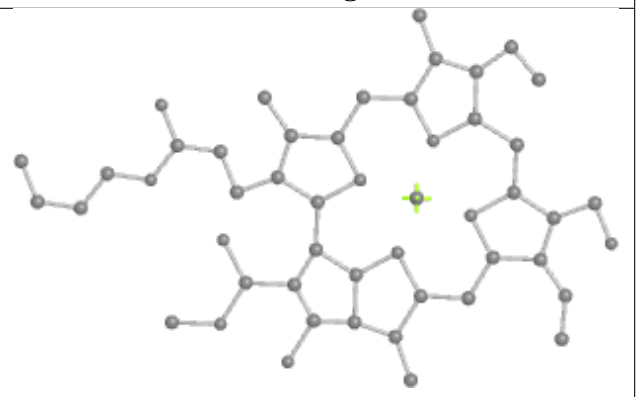
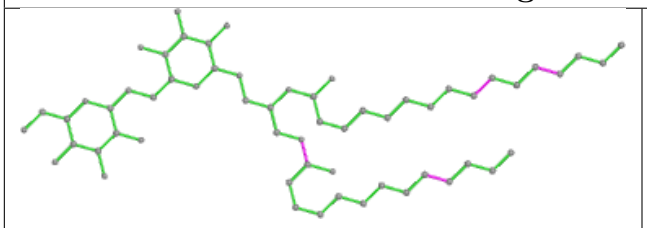


Rings

Ligand DGD c1 520



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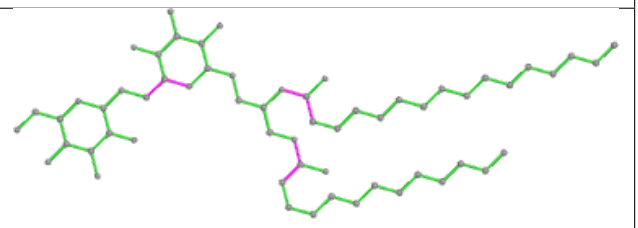
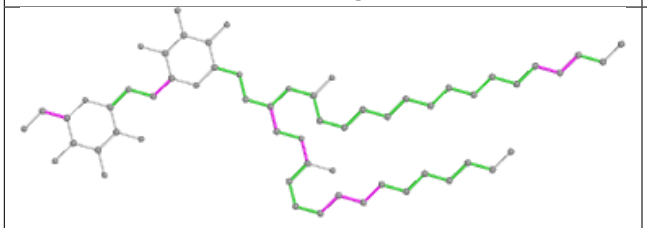


Bond angles



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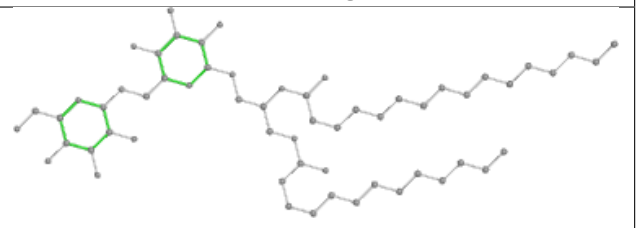
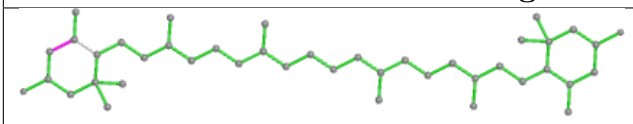


Rings

Ligand LUT S1 620



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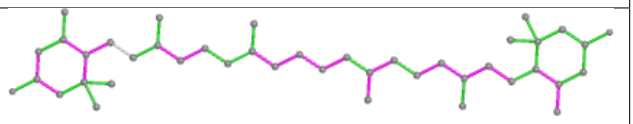
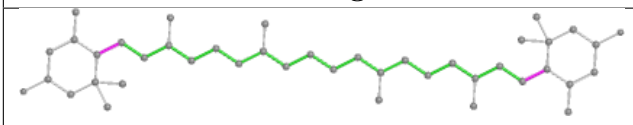


Bond angles



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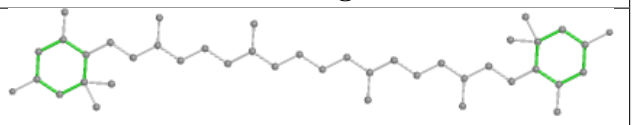
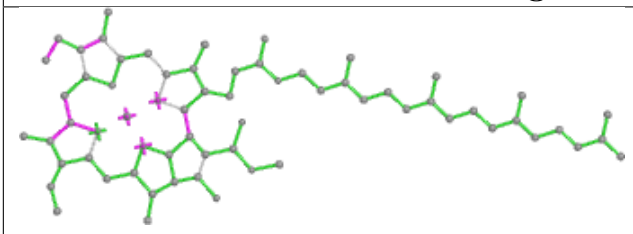


Rings

Ligand CLA y 610



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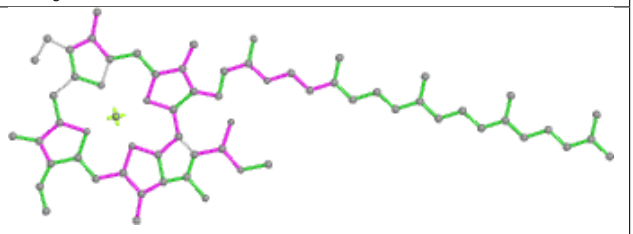
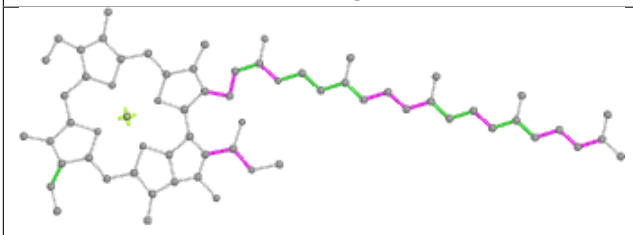


Bond angles



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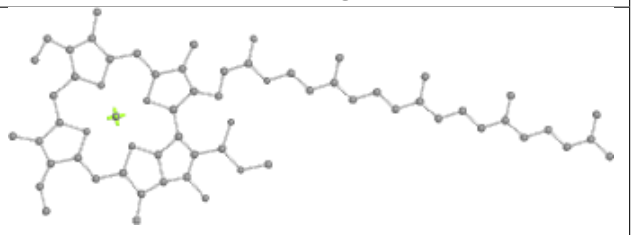
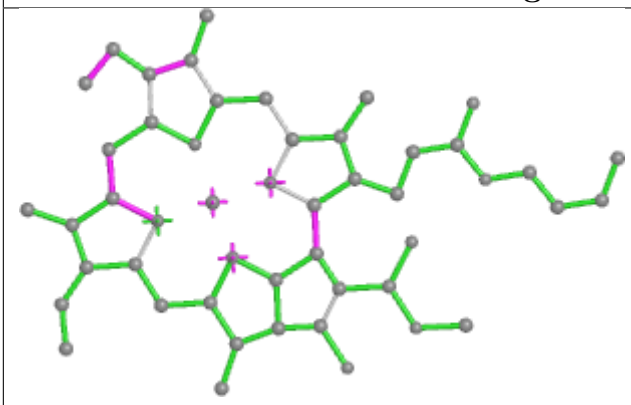


Rings

Ligand CLA R 604



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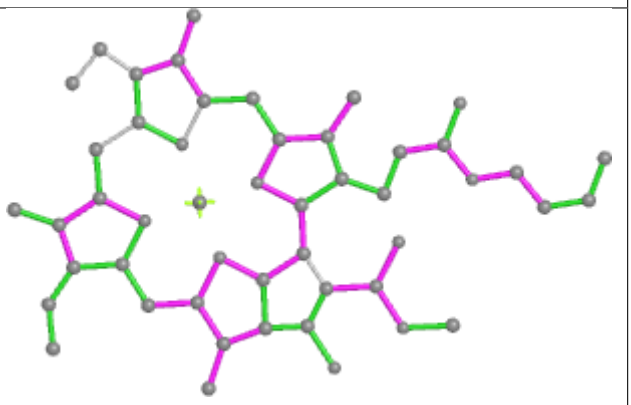
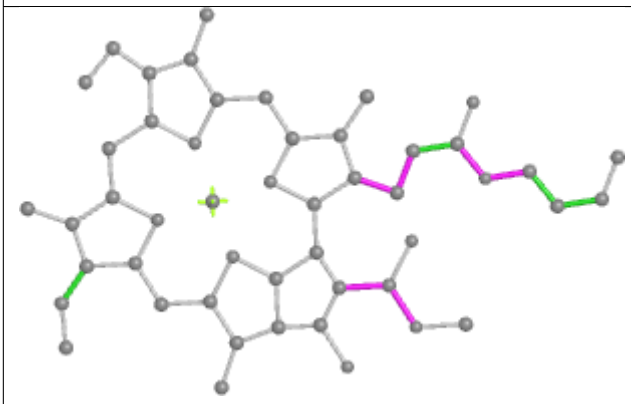
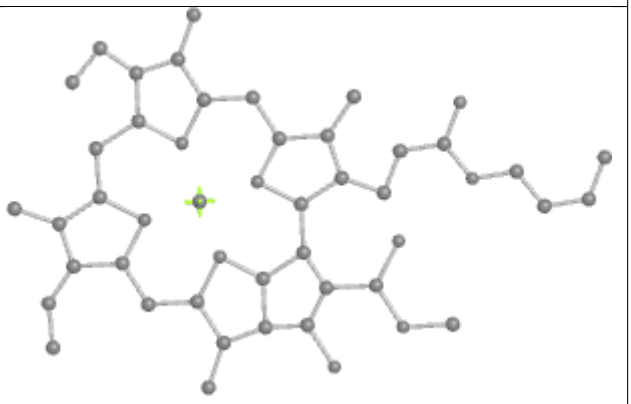


Bond angles

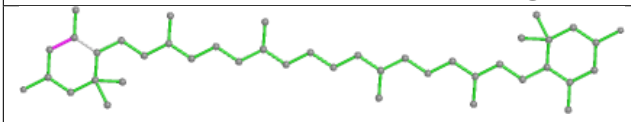


Torsions

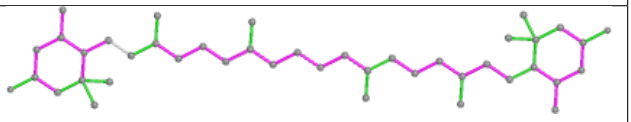


Rings

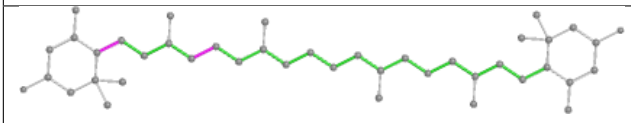
Ligand LUT Y 621



Bond lengths



Bond angles



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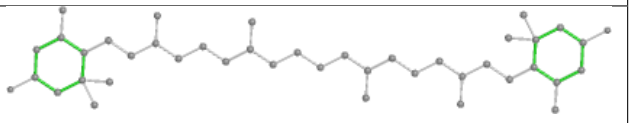
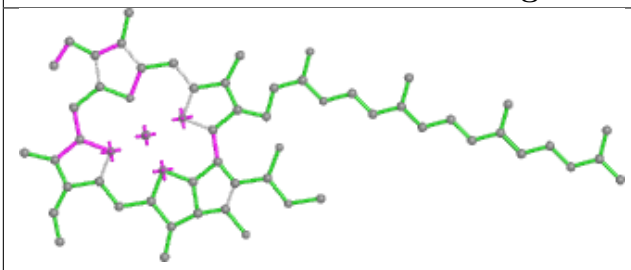


Rings

Ligand CLA r1 612



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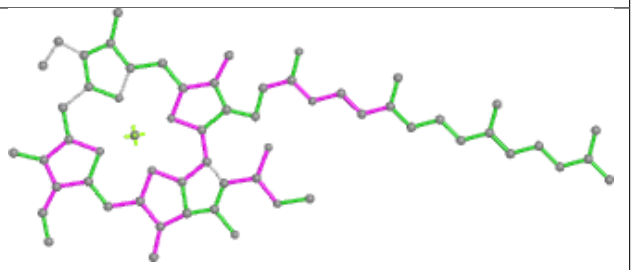
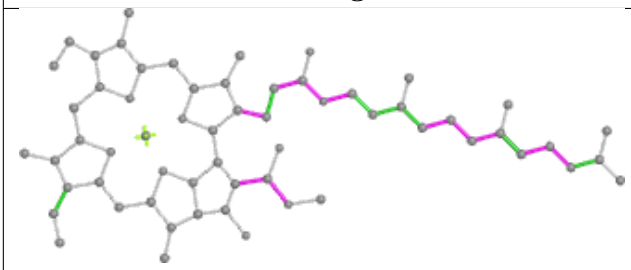


Bond angles



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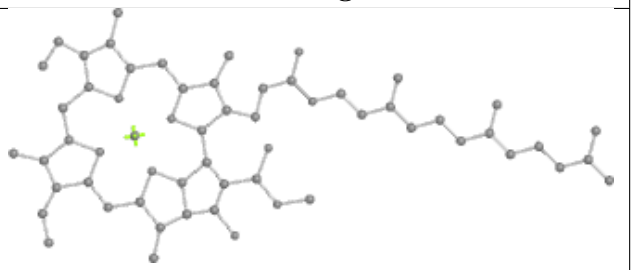
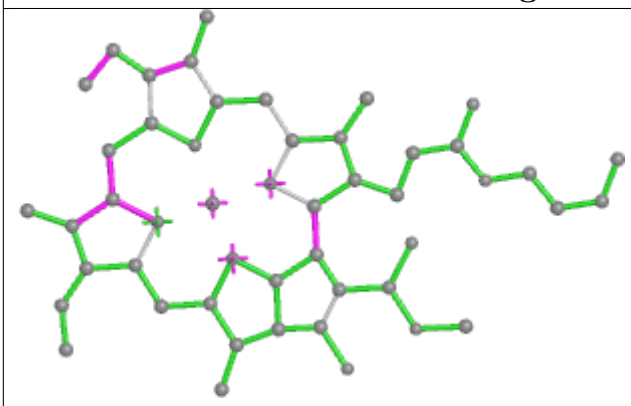


Rings

Ligand CLA g1 604



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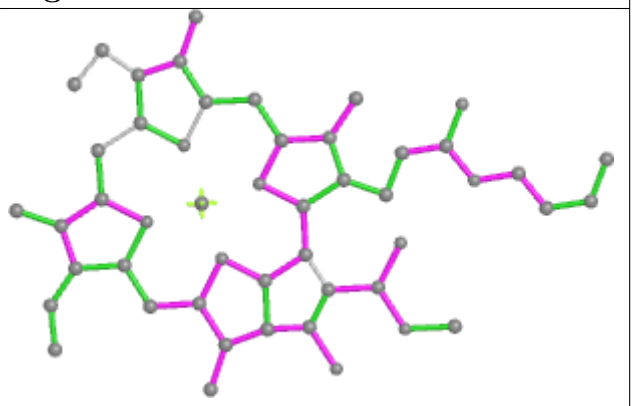
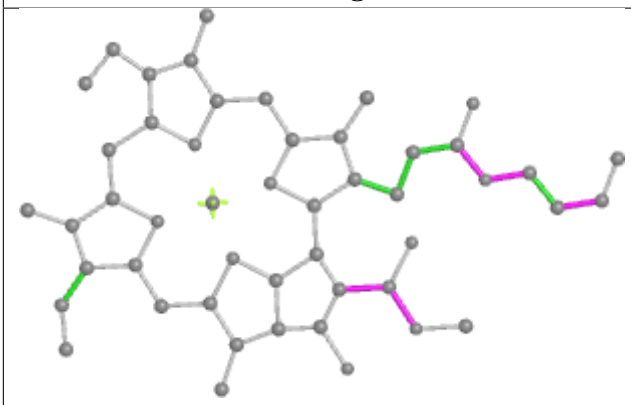
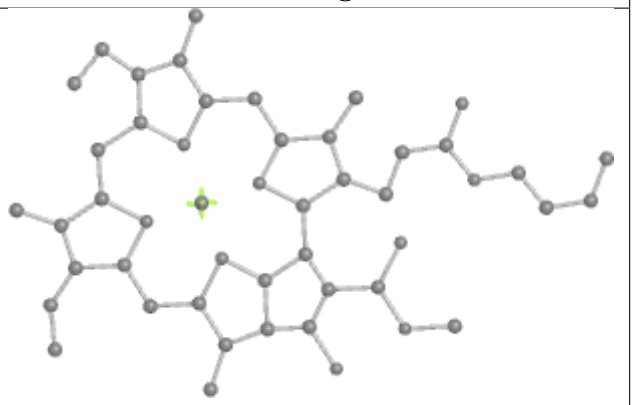


Bond angles

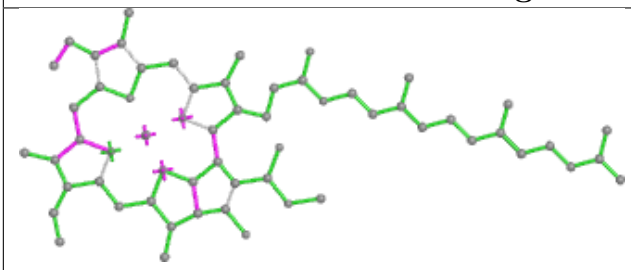


Torsions

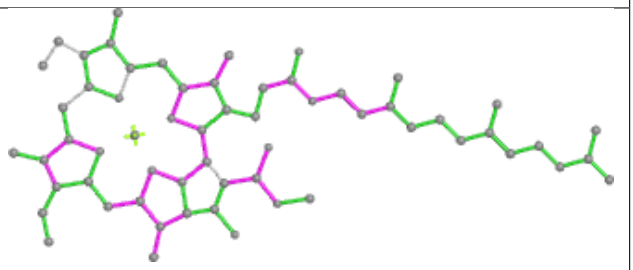


Rings

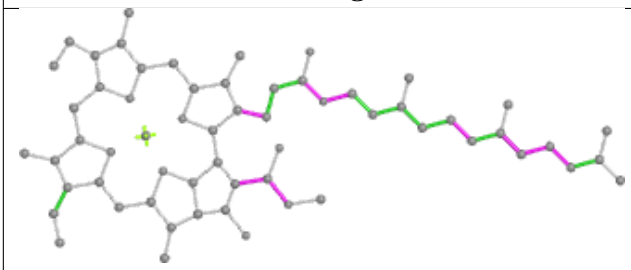
Ligand CLA R1 603



Bond lengths



Bond angles



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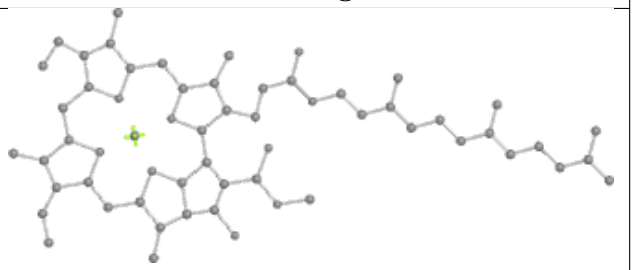
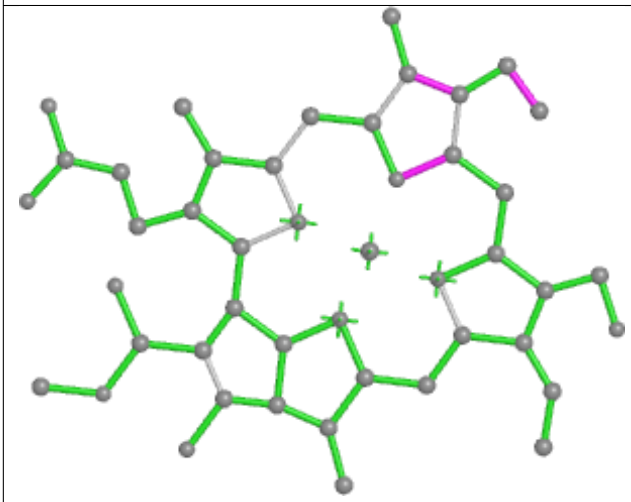
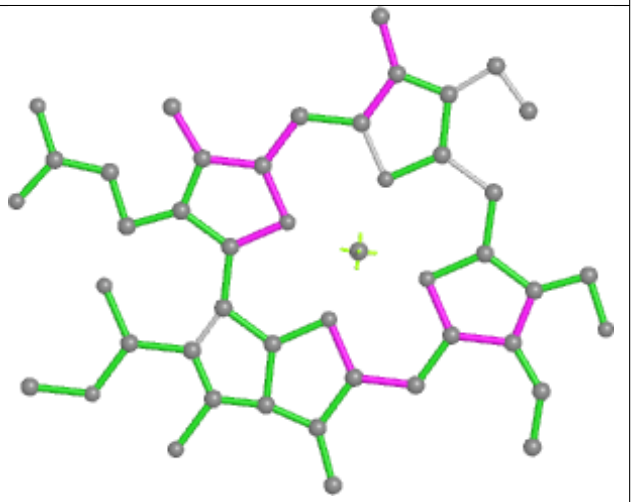


Rings

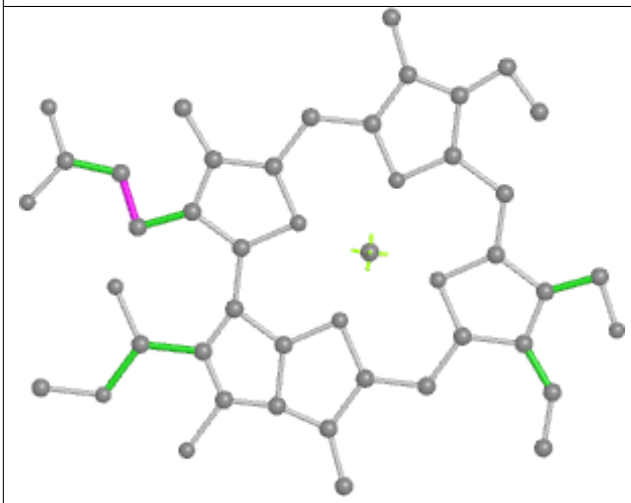
Ligand CHL y1 605



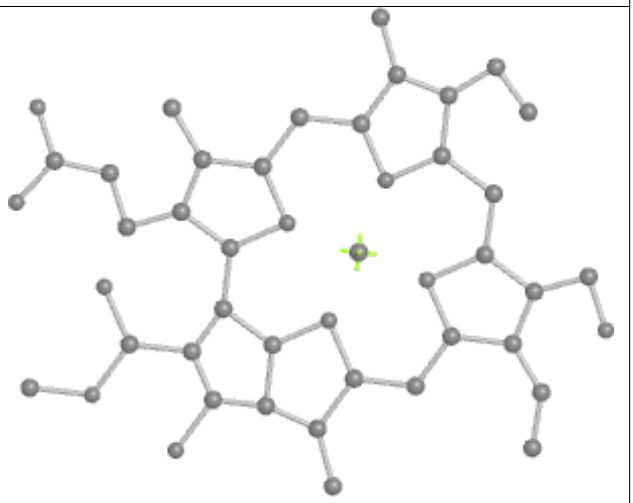
Bond lengths



Bond angles

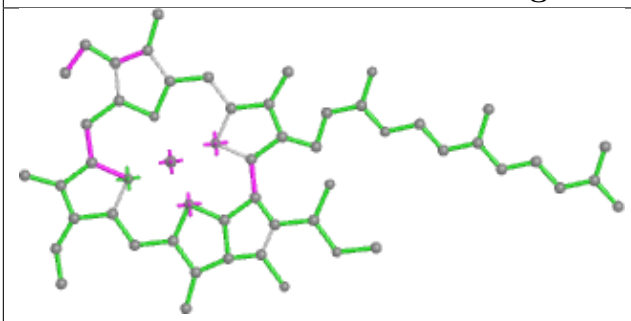


Torsions



Rings

Ligand CLA s 613



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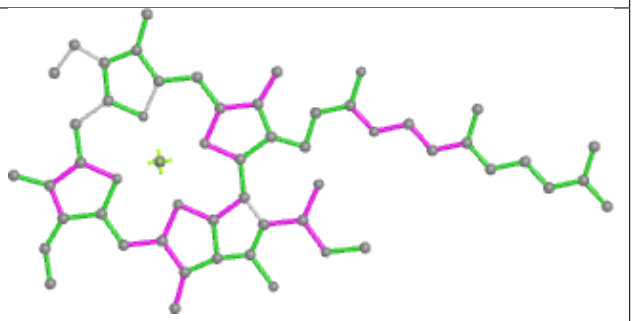
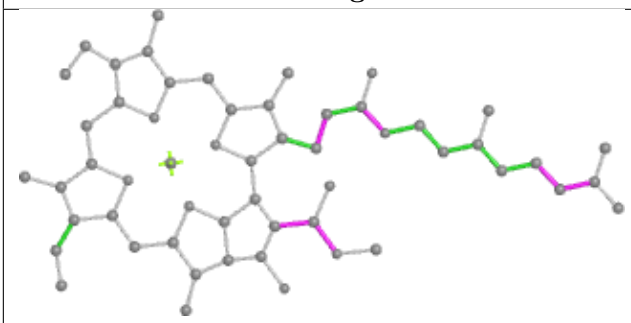
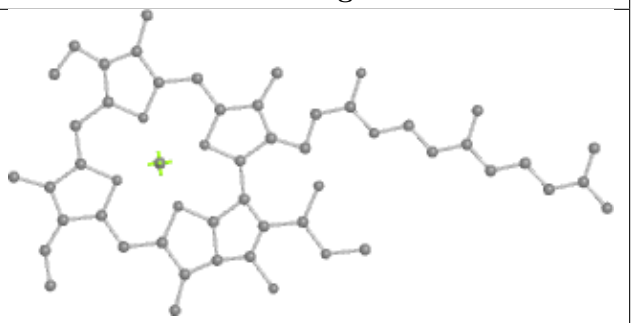


Bond angles

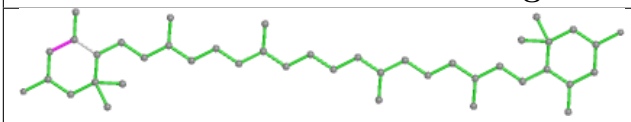


Torsions

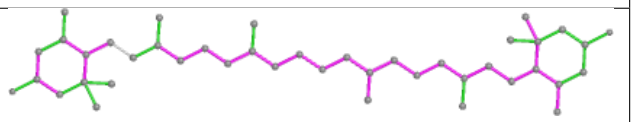


Rings

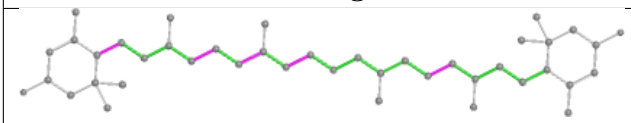
Ligand LUT G 621



Bond lengths



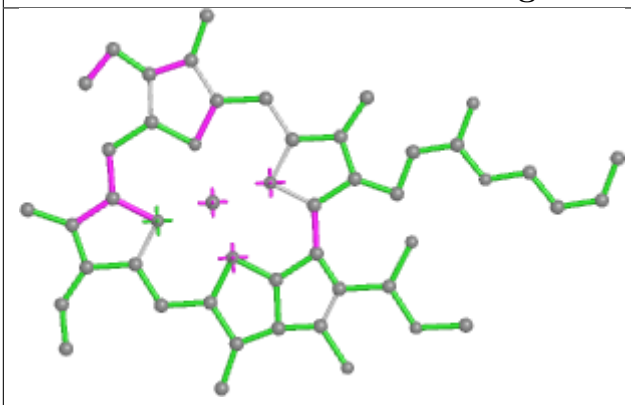
Bond angles



Torsions

Rings

Ligand CLA n1 614



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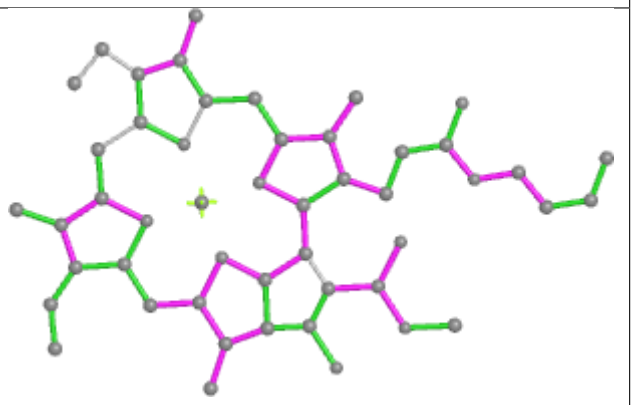
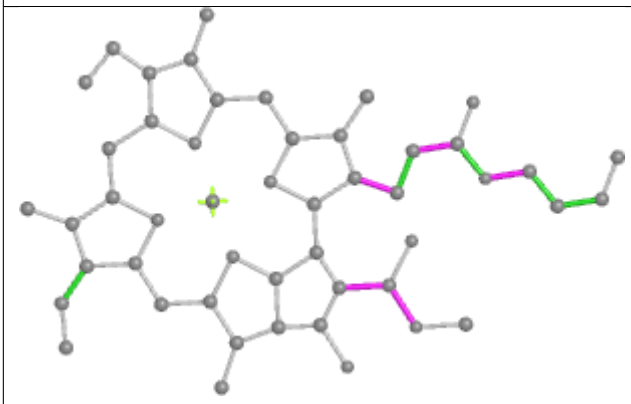
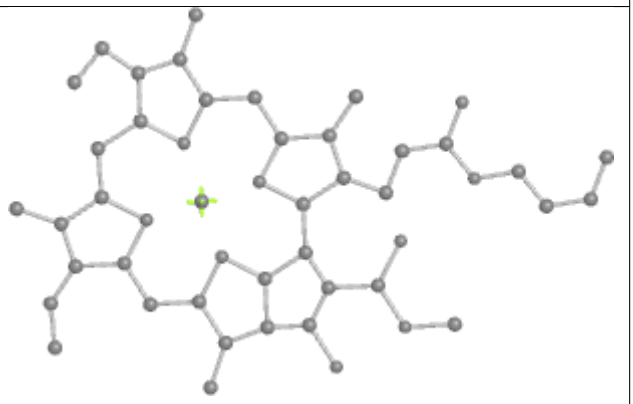


Bond angles

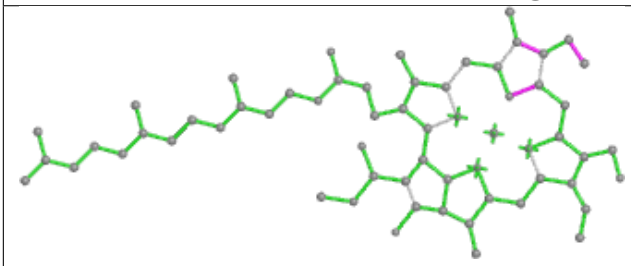


Torsions



Rings

Ligand CHL S 608



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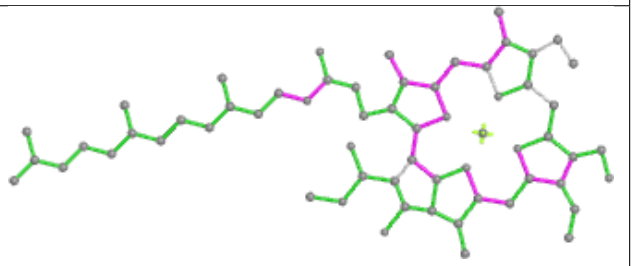
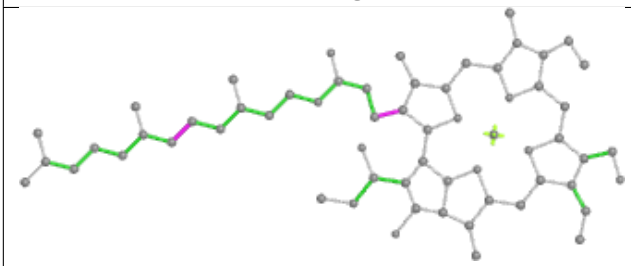


Bond angles



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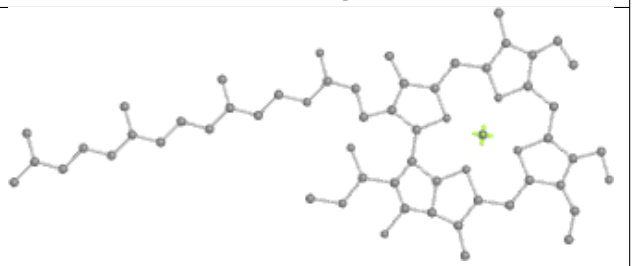
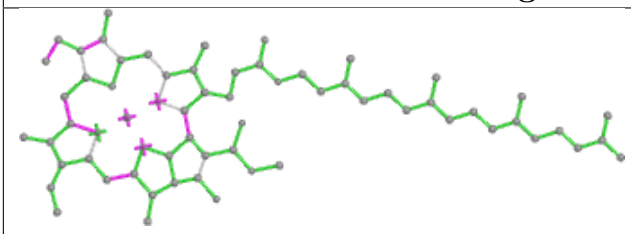


Rings

Ligand CLA b1 615



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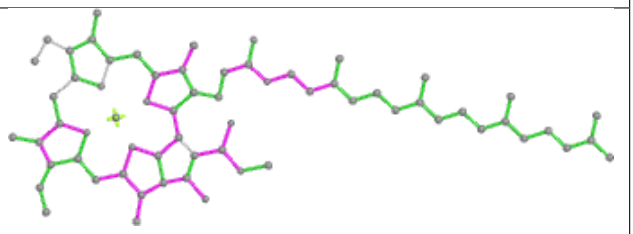
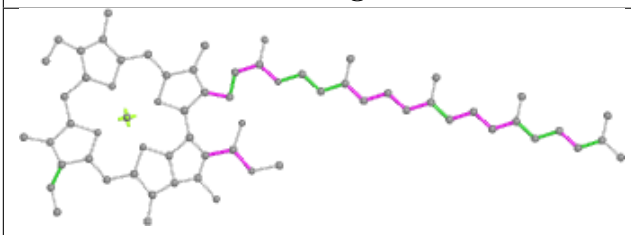


Bond angles



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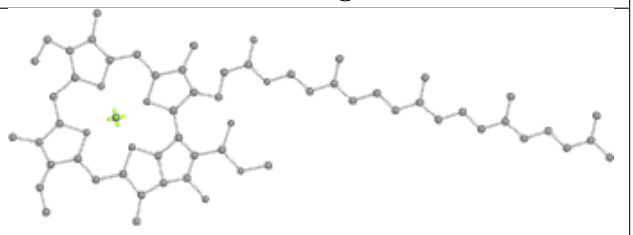
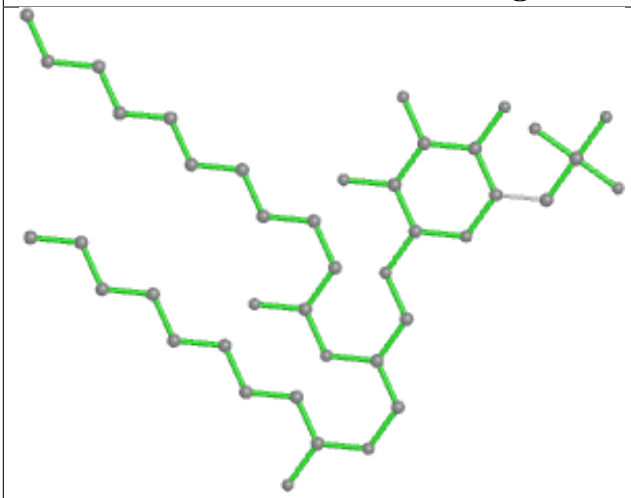


Rings

Ligand SQD M1 101



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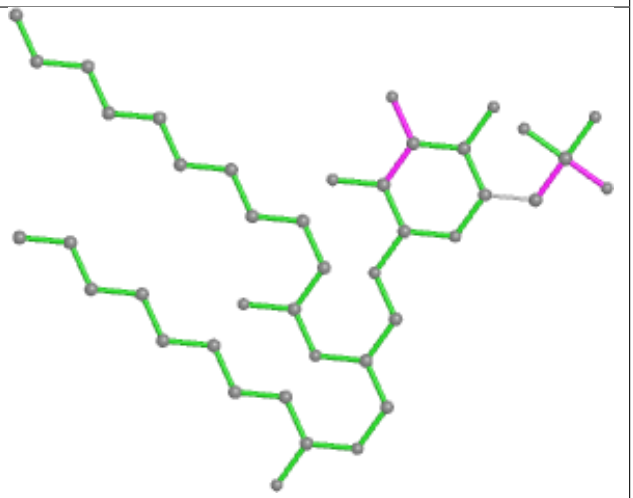
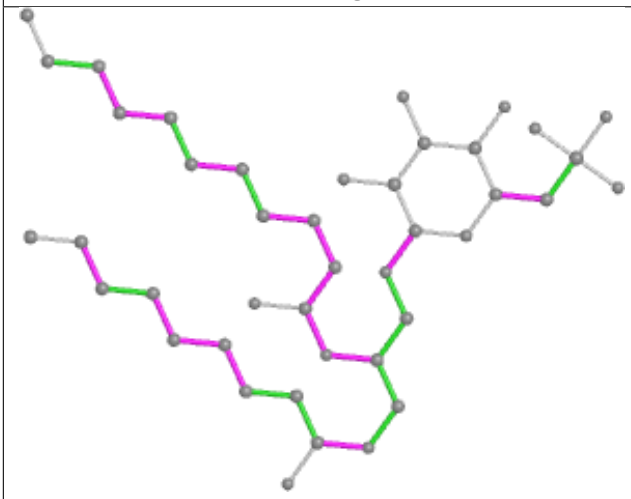
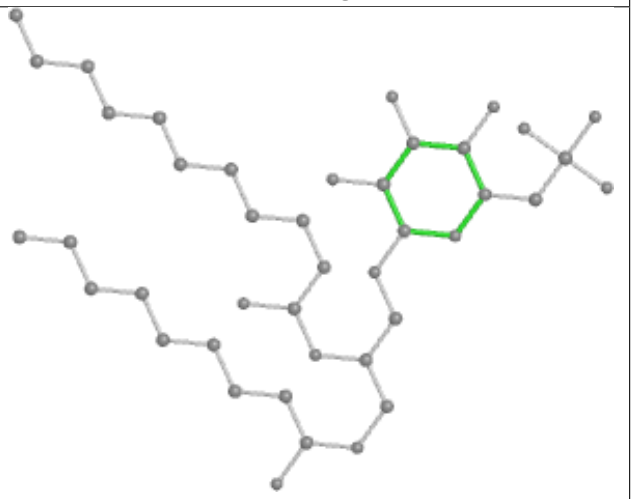


Bond angles

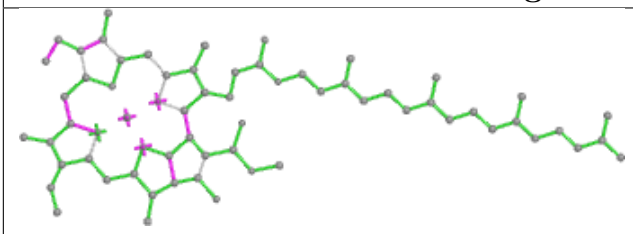


Torsions



Rings

Ligand CLA B 609



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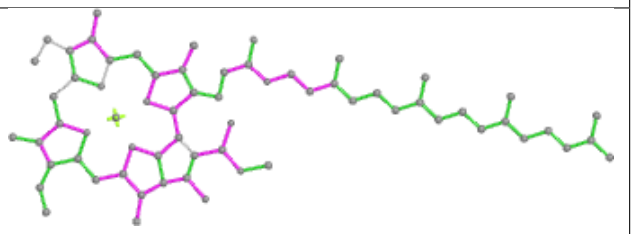
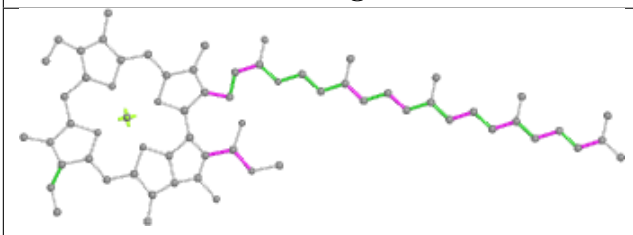
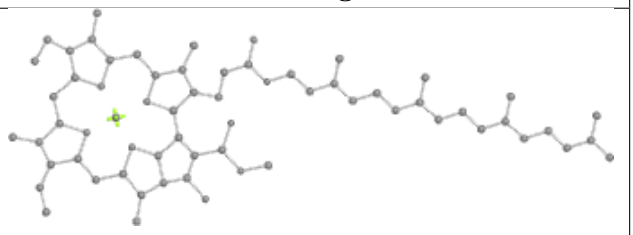


Bond angles

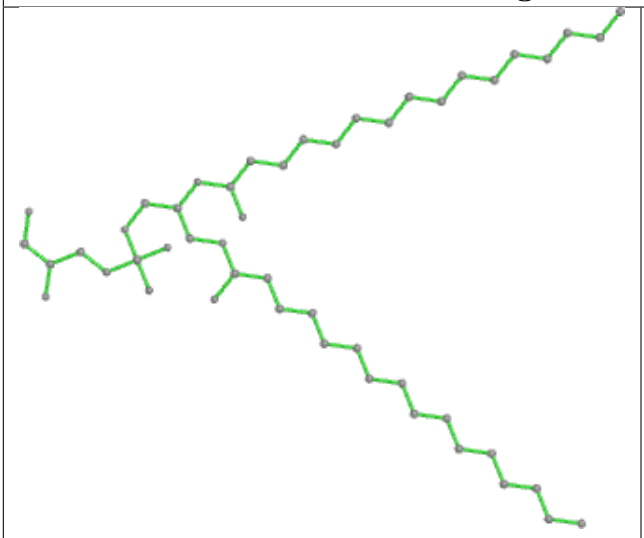


Torsions



Rings

Ligand LHG L1 101



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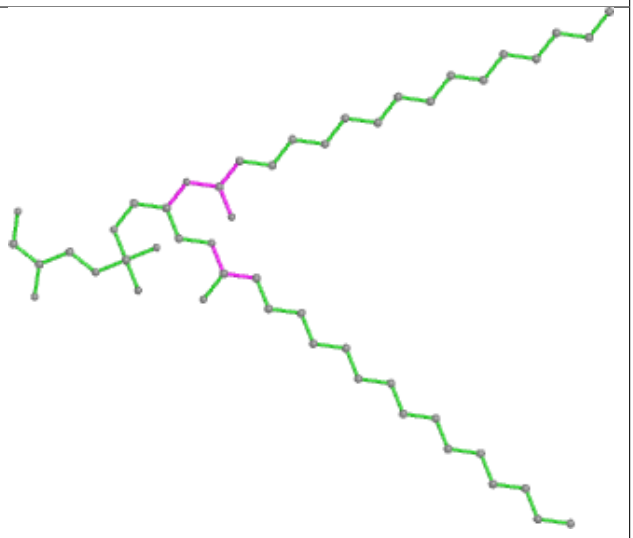
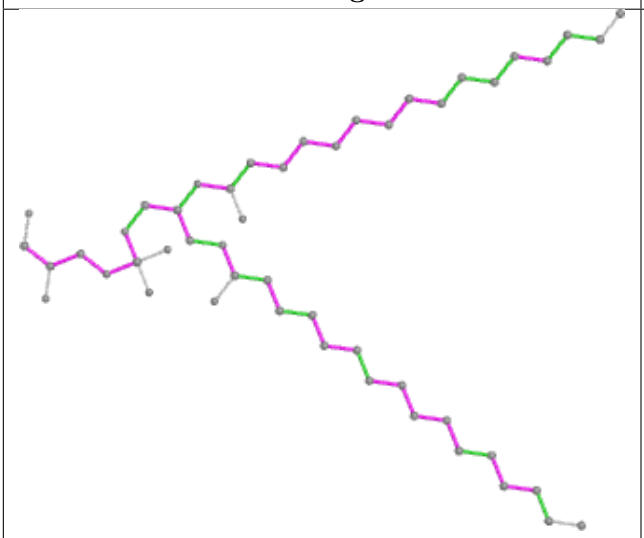
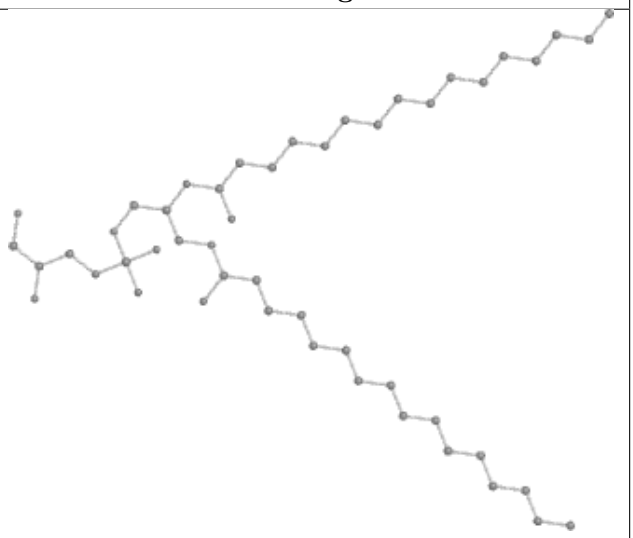


Bond angles

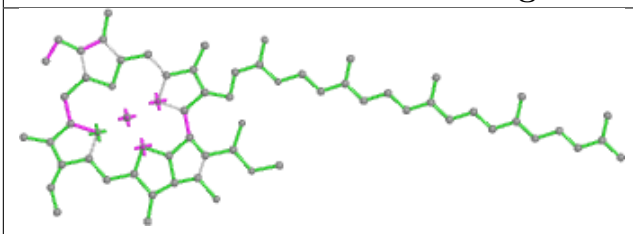


Torsions

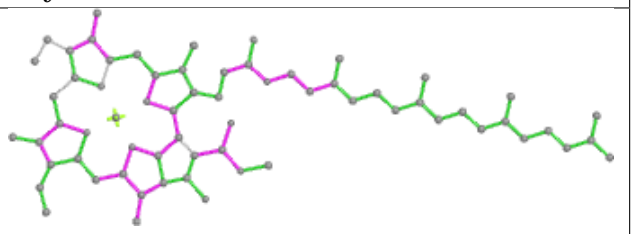


Rings

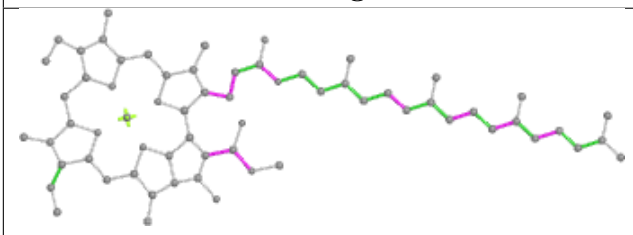
Ligand CLA y1 610



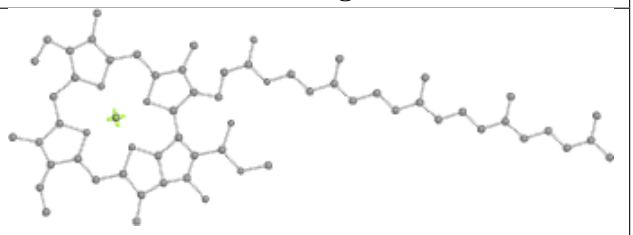
Bond lengths



Bond angles

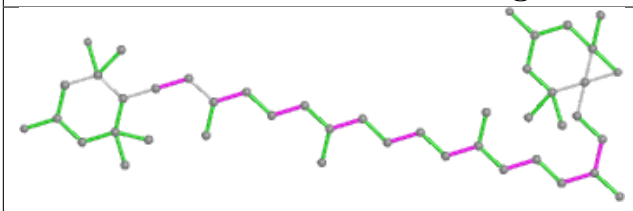


Torsions



Rings

Ligand NEX N1 623



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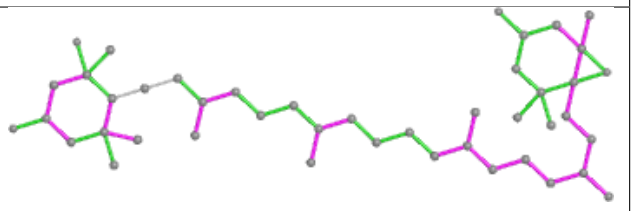
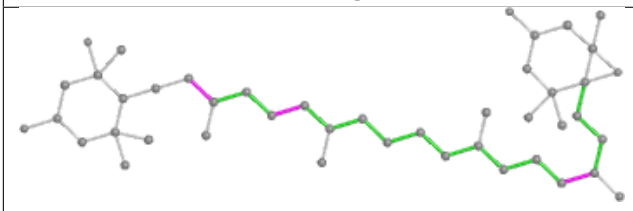


Bond angles



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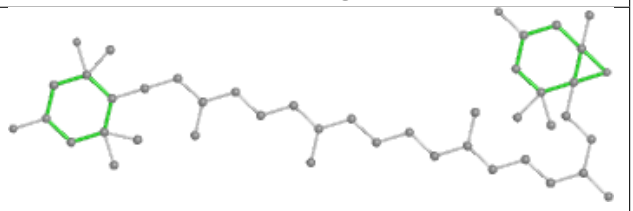
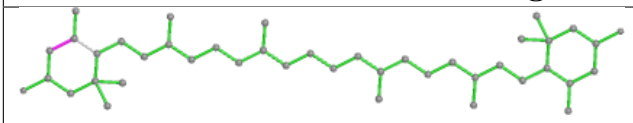


Rings

Ligand LUT n 620



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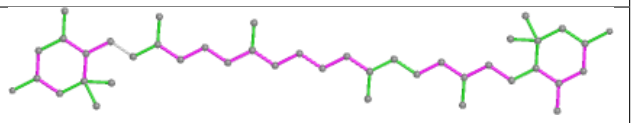
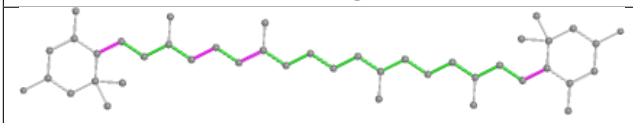


Bond angles



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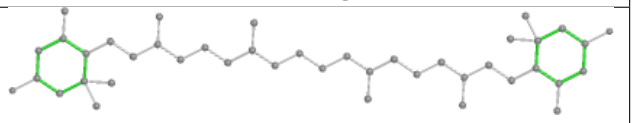
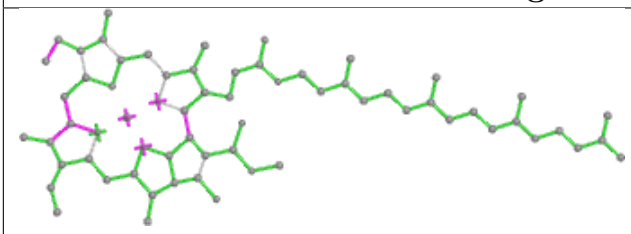


Rings

Ligand CLA n 602



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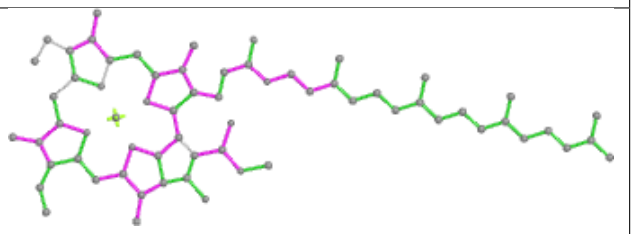
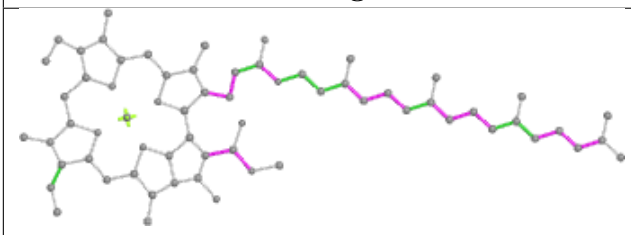


Bond angles



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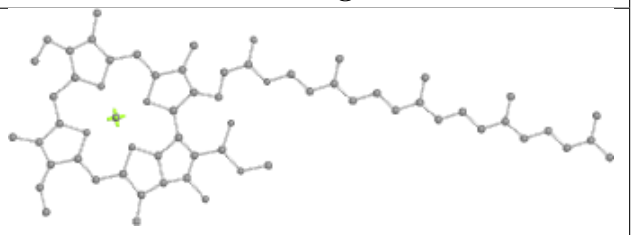
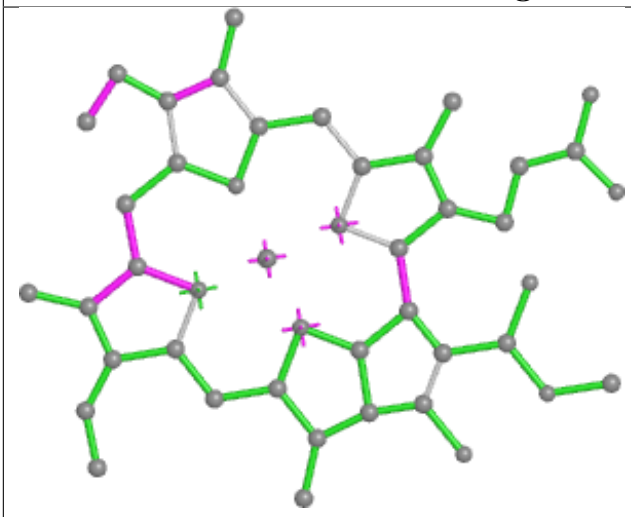


Rings

Ligand CLA N1 612



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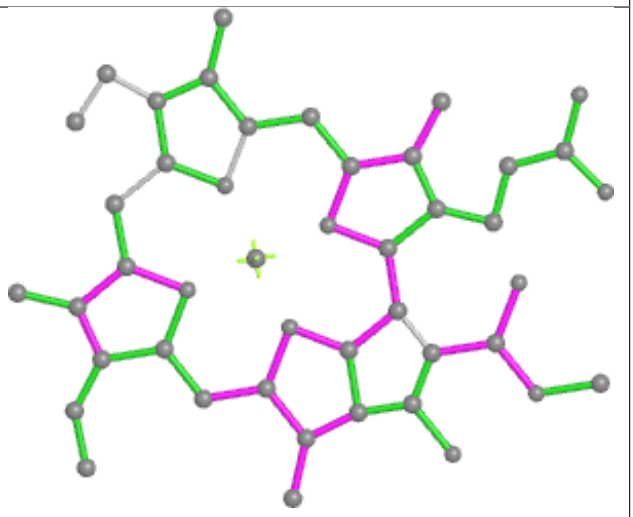
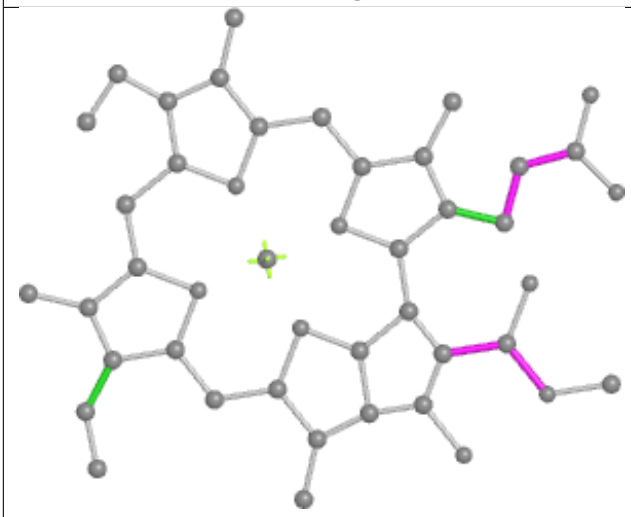
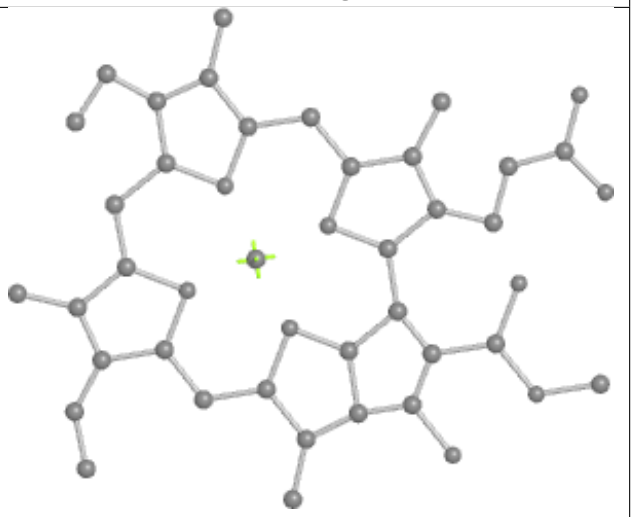


Bond angles

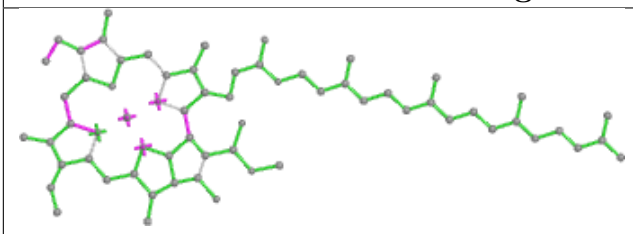


Torsions

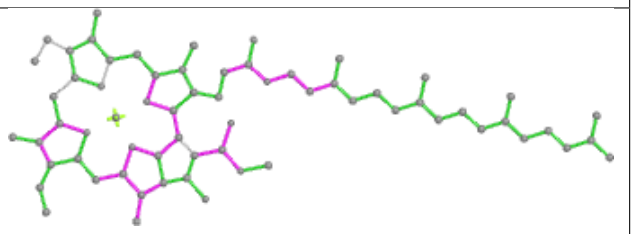


Rings

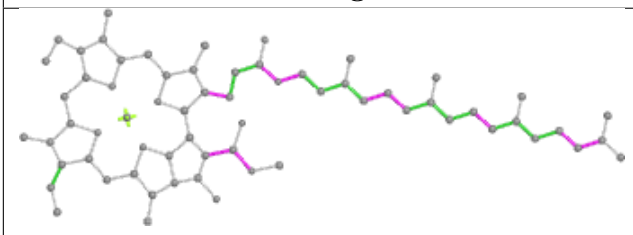
Ligand CLA Y1 611



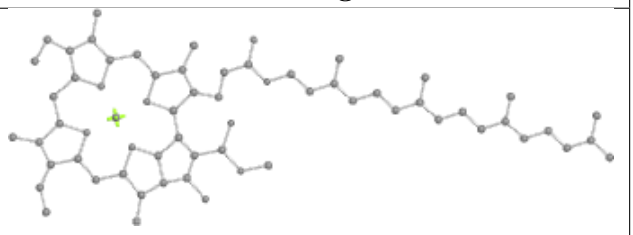
Bond lengths



Bond angles

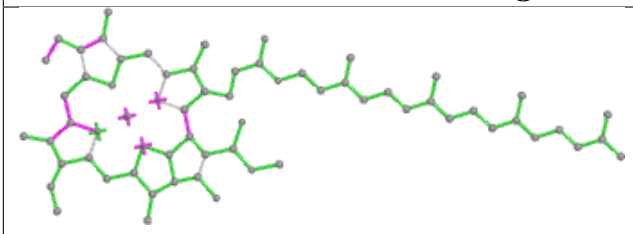


Torsions

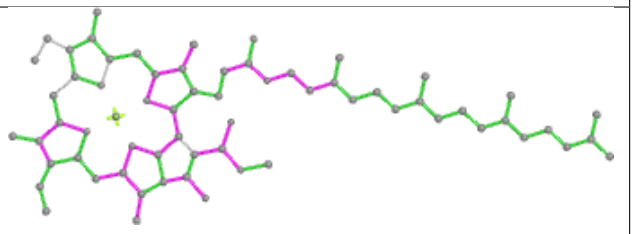


Rings

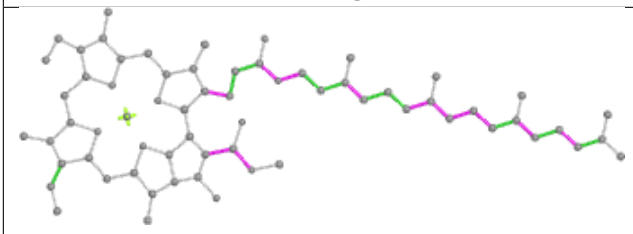
Ligand CLA Y1 603



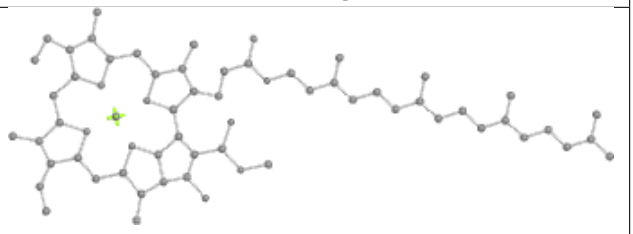
Bond lengths



Bond angles

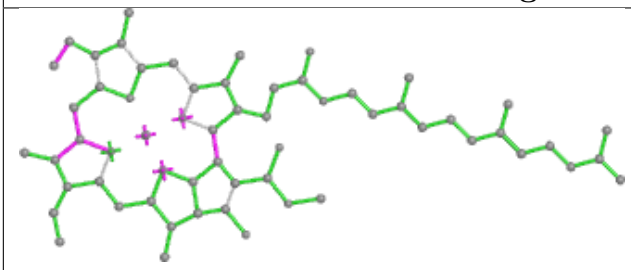


Torsions



Rings

Ligand CLA a1 410



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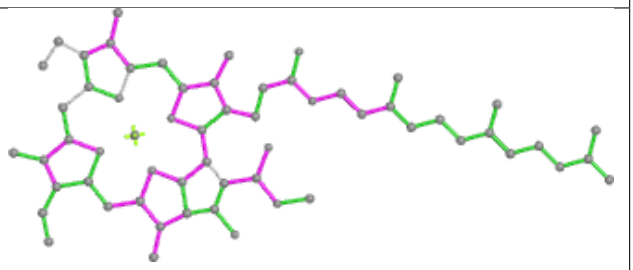
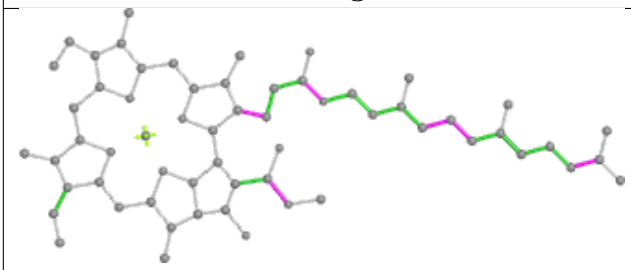
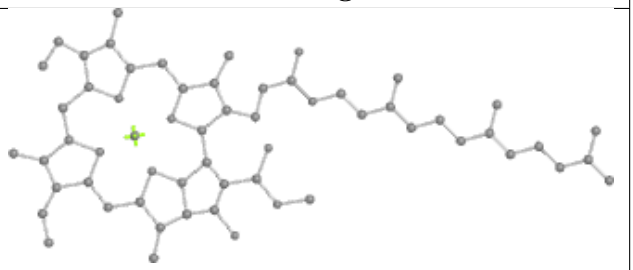


Bond angles

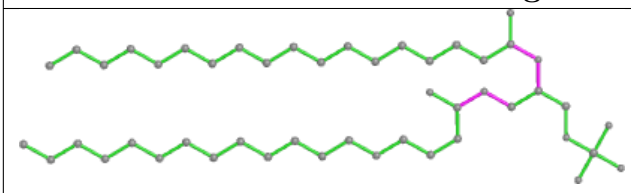


Torsions



Rings

Ligand 3PH s1 626



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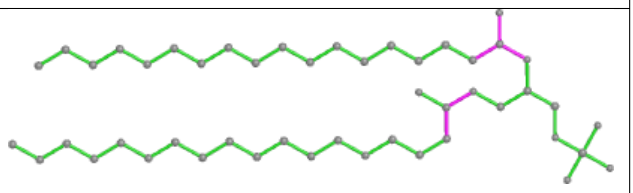
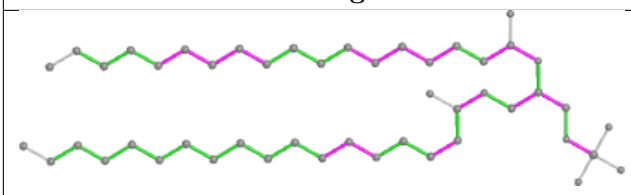


Bond angles



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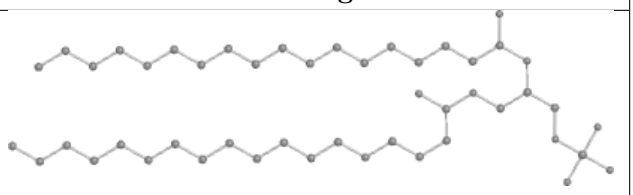
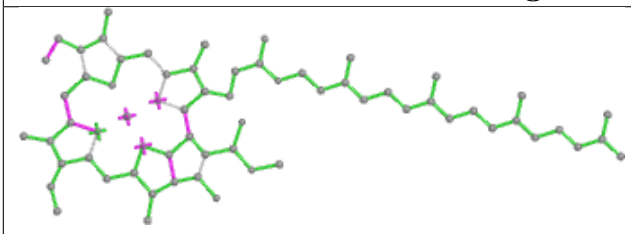


Rings

Ligand CLA C 509



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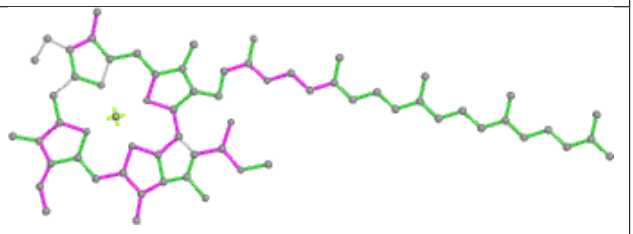
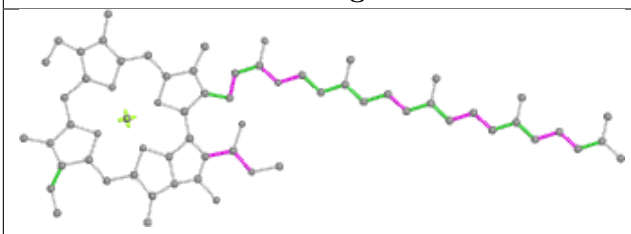


Bond angles



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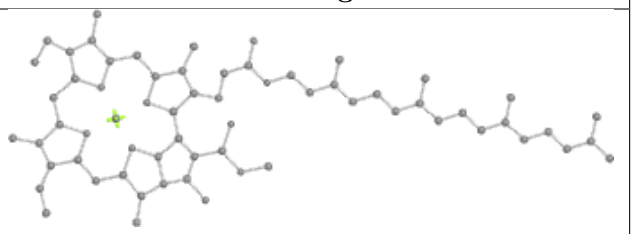
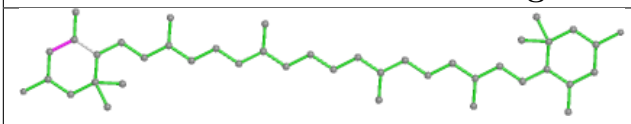


Rings

Ligand LUT n 621



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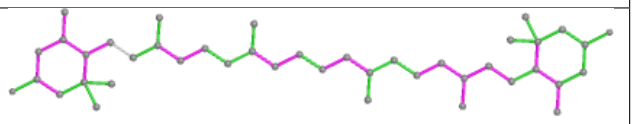
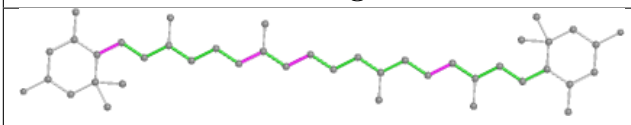


Bond angles



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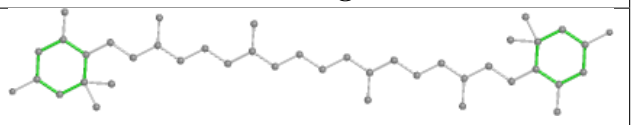
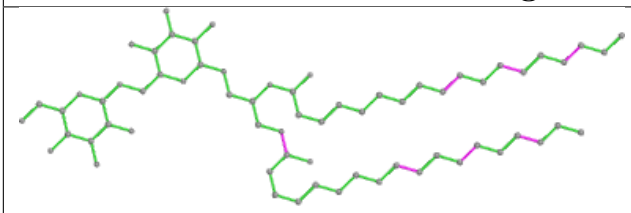


Rings

Ligand DGD C 523



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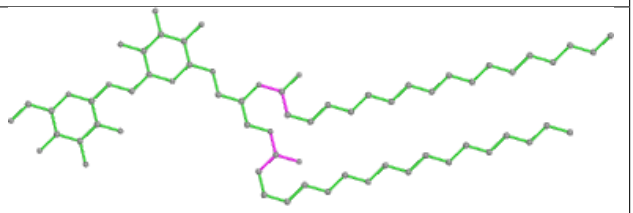
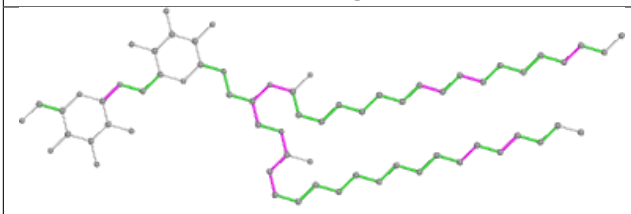


Bond angles



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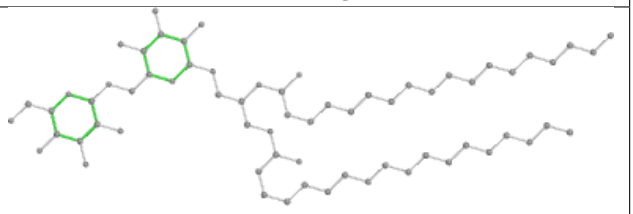
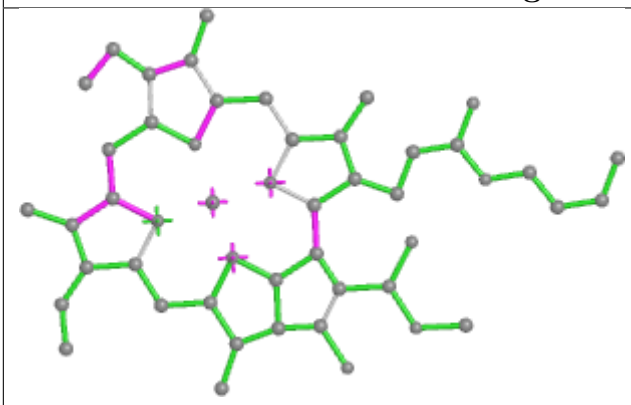


Rings

Ligand CLA N 614



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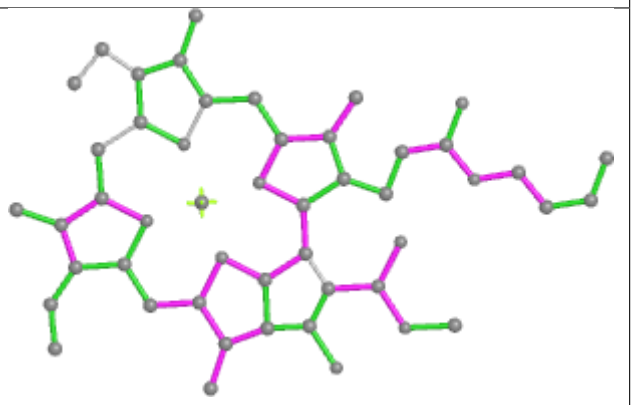
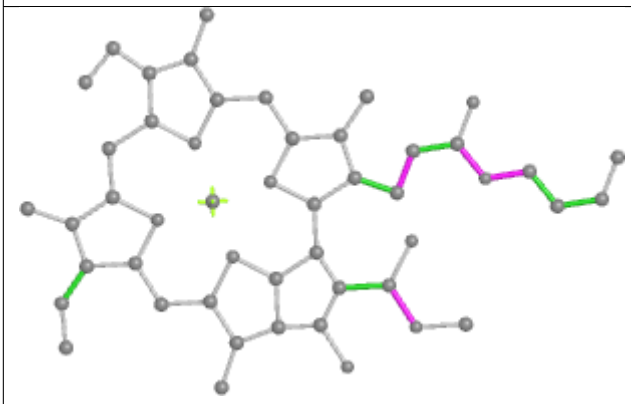


Bond angles



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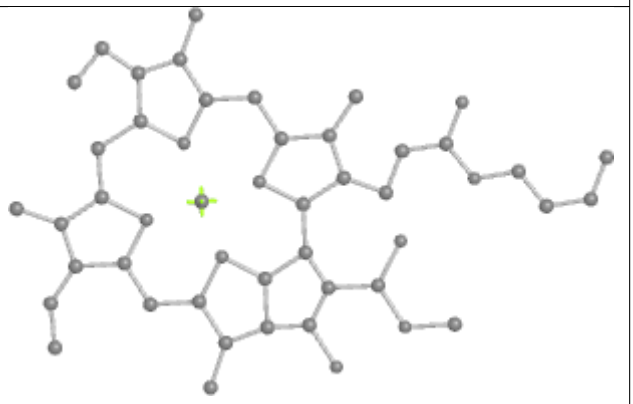
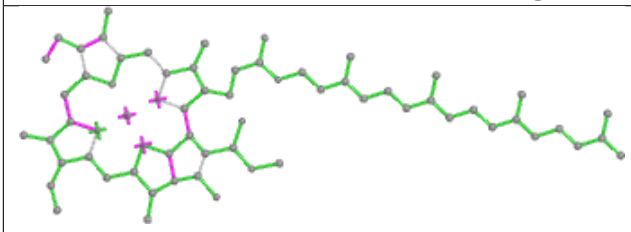


Rings

Ligand CLA c 506



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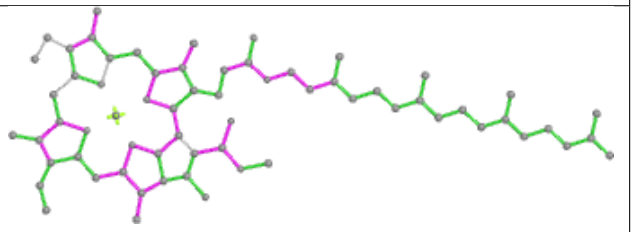
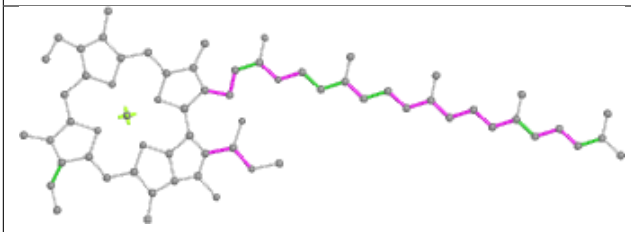


Bond angles



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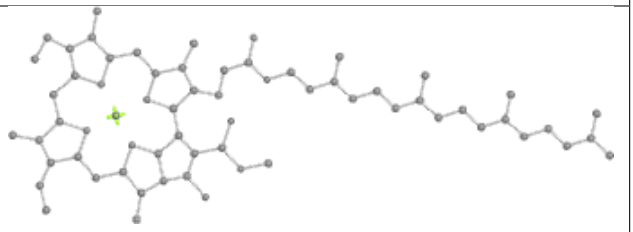
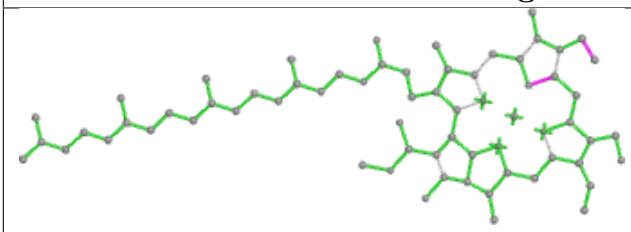


Rings

Ligand CHL n1 607



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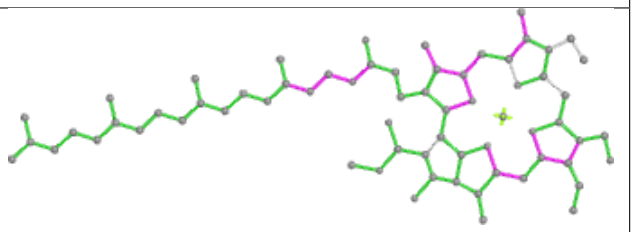
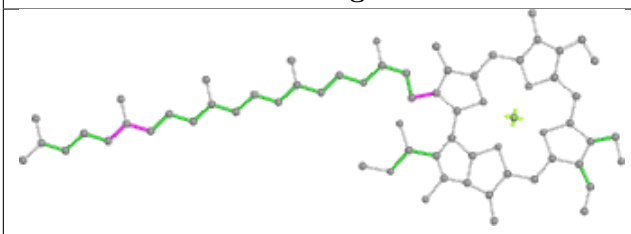


Bond angles



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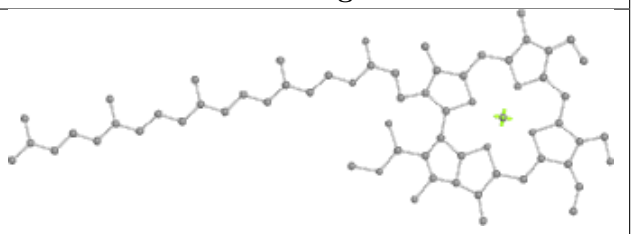
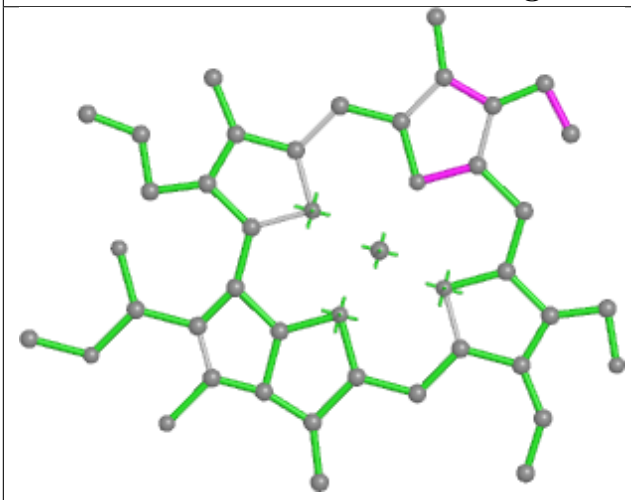


Rings

Ligand CHL R 606



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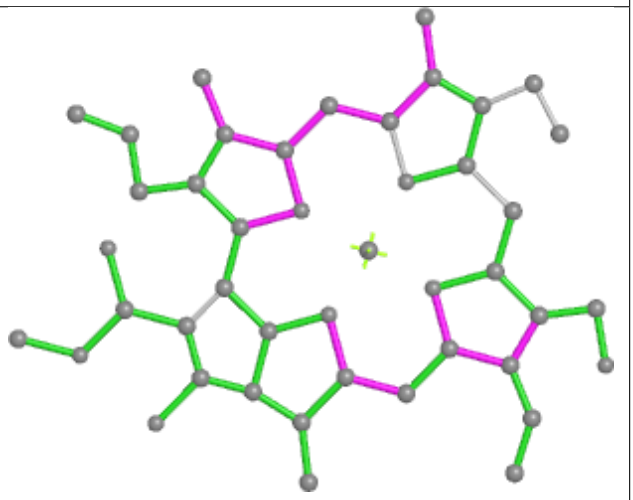
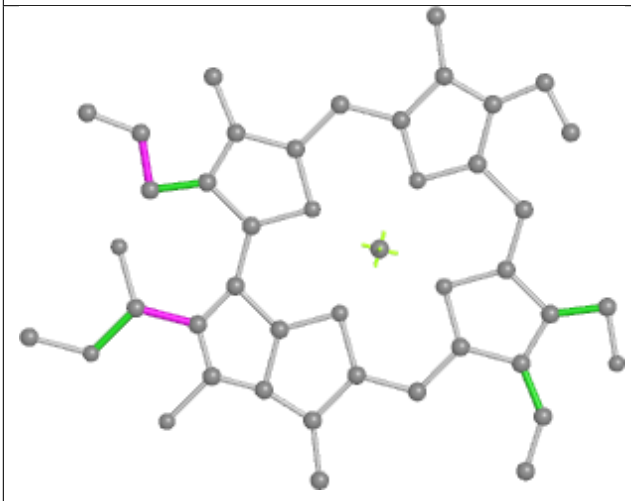
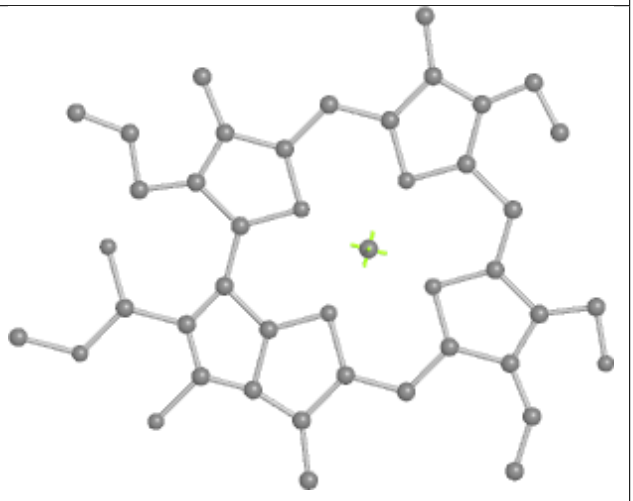


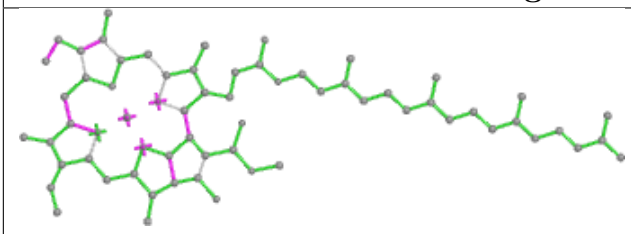
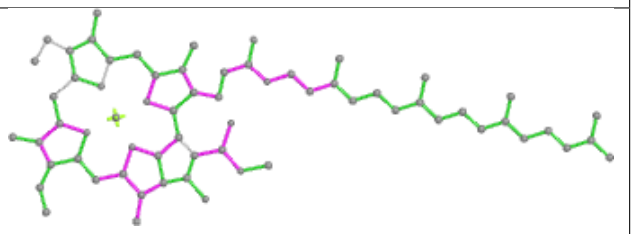
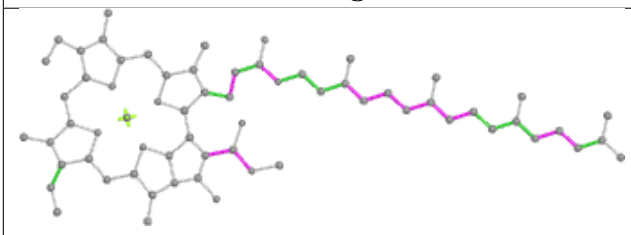
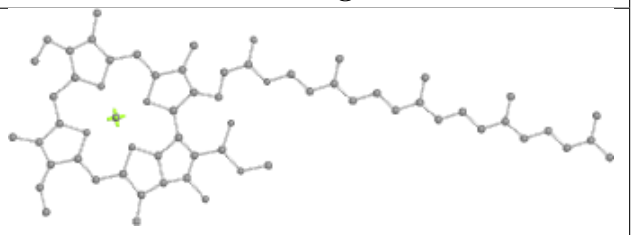
Bond angles

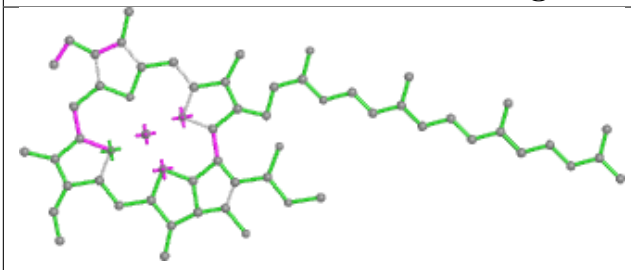
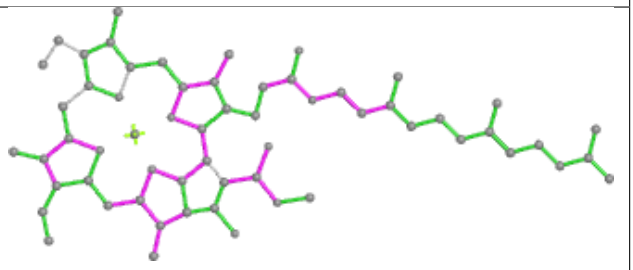
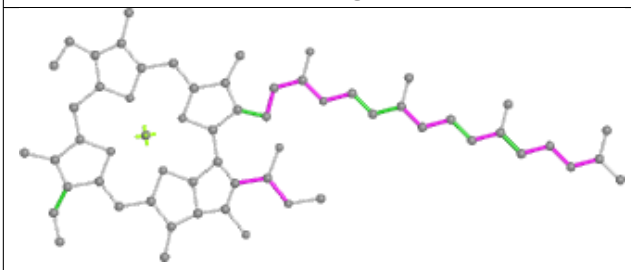
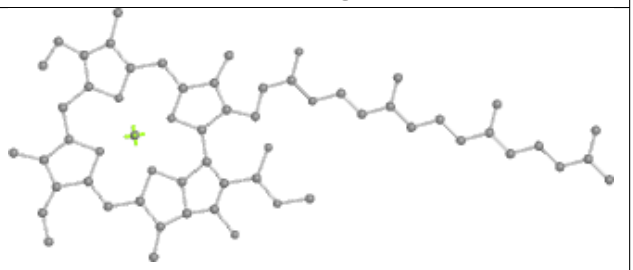


Torsions

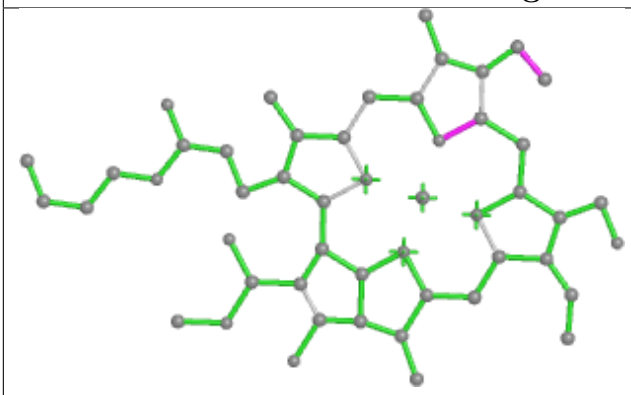


Rings

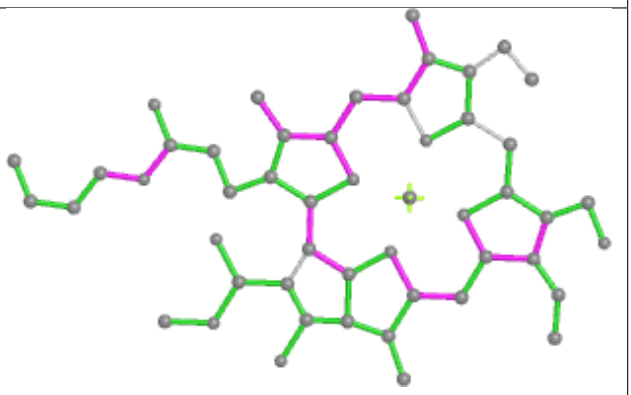
Ligand CLA C 510	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA r 609	
	
Bond lengths	Bond angles
	
Torsions	Rings

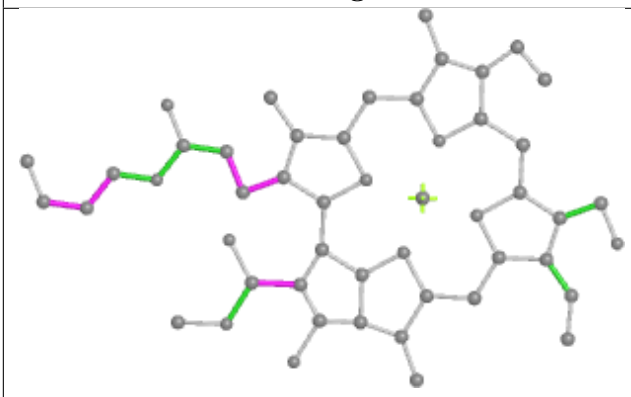
Ligand CHL N 608



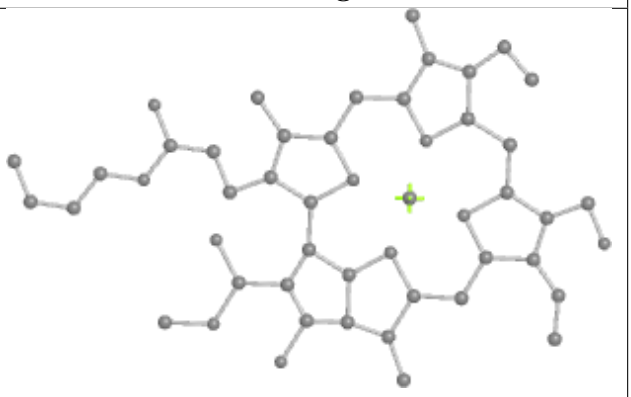
Bond lengths



Bond angles

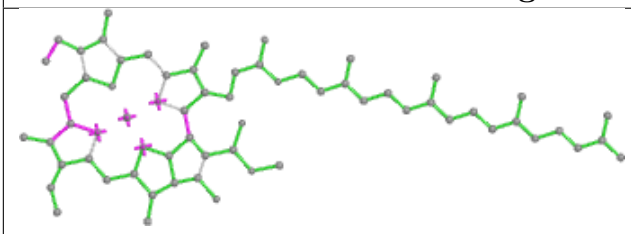


Torsions

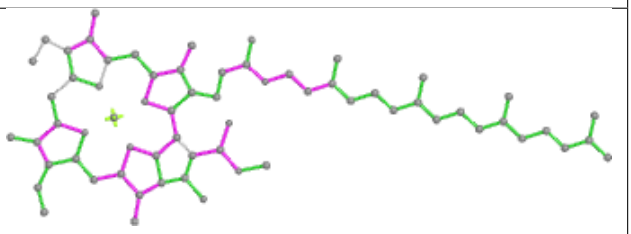


Rings

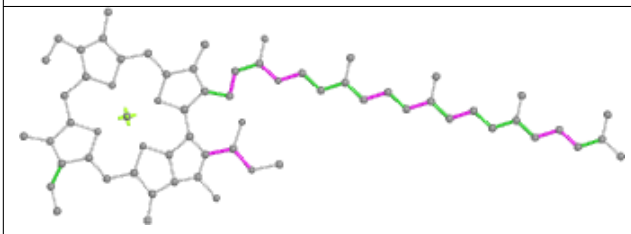
Ligand CLA b1 614



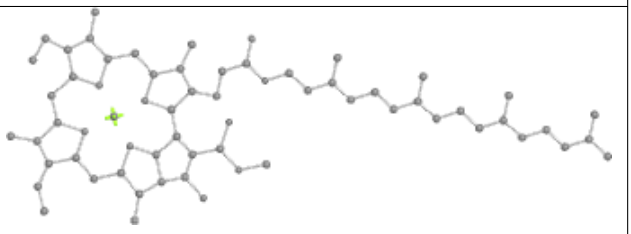
Bond lengths



Bond angles

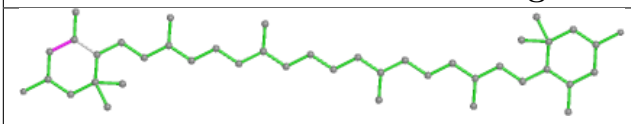


Torsions

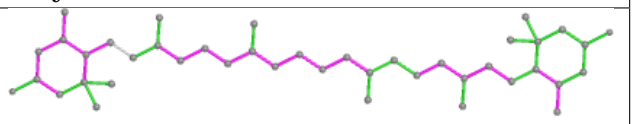


Rings

Ligand LUT y 621



Bond lengths



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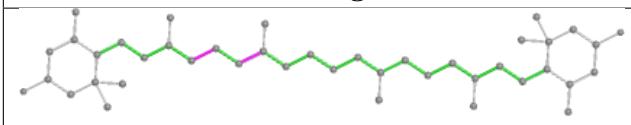
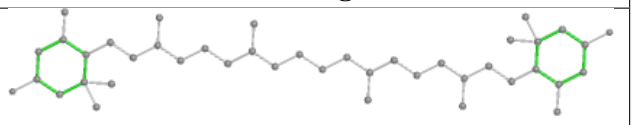
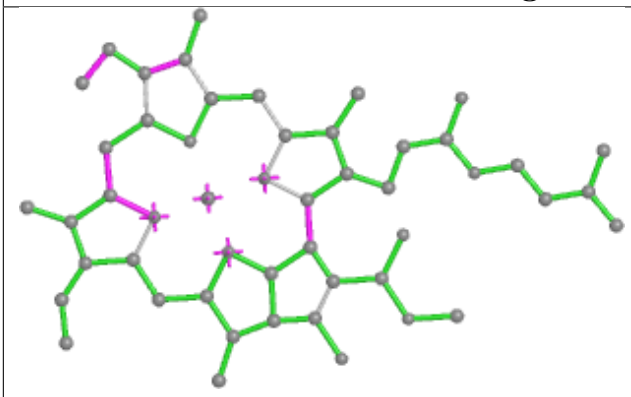


Torsions



Rings

Ligand CLA s1 605



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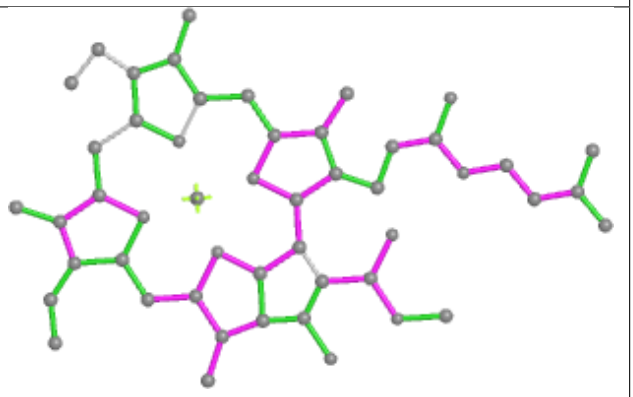

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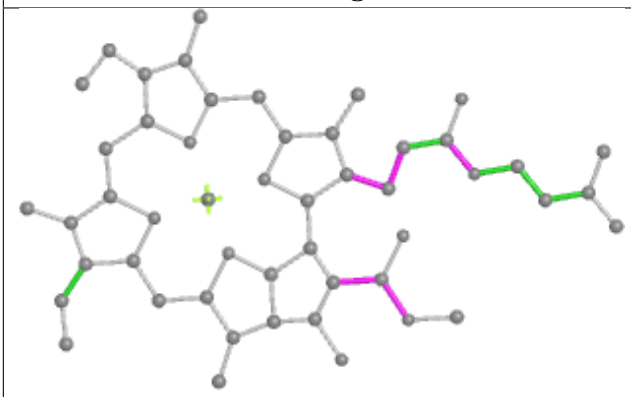

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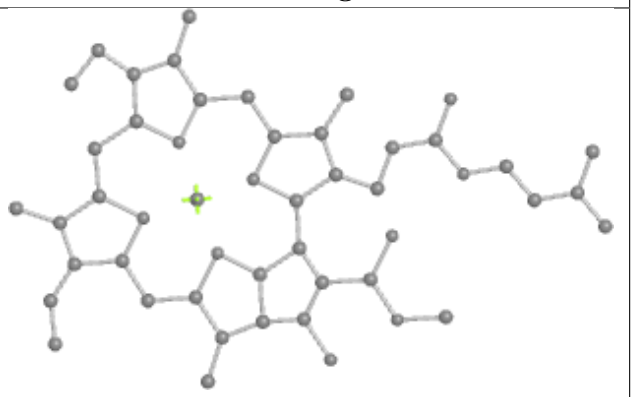
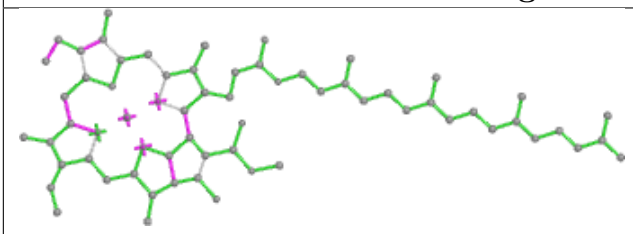


Rings

Ligand CLA S1 610



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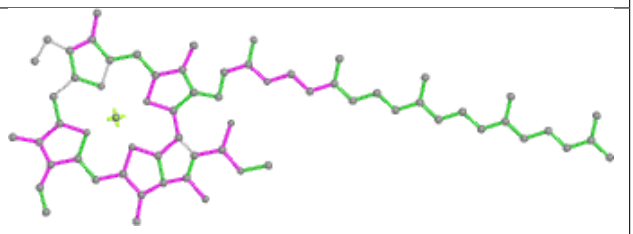
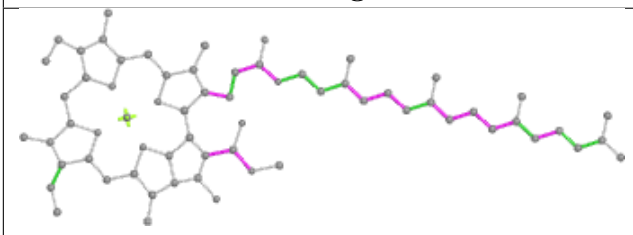


Bond angles



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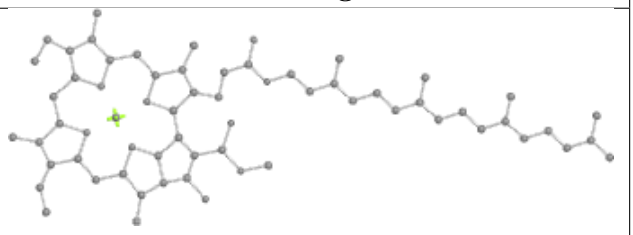
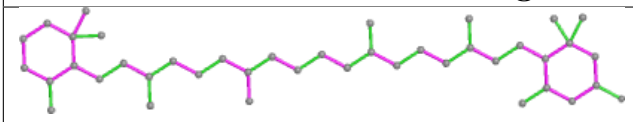


Rings

Ligand RRX h1 101



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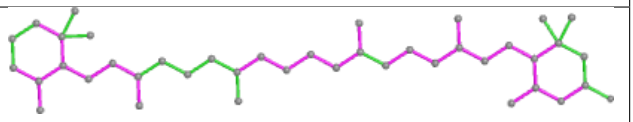
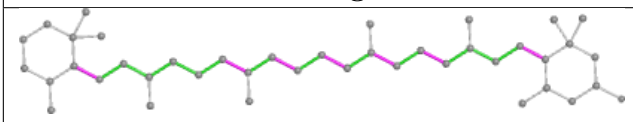


Bond angles



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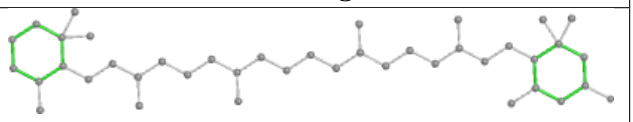
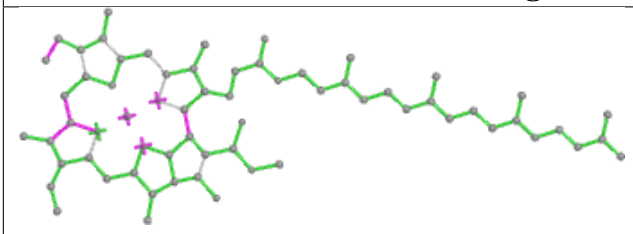


Rings

Ligand CLA C 513



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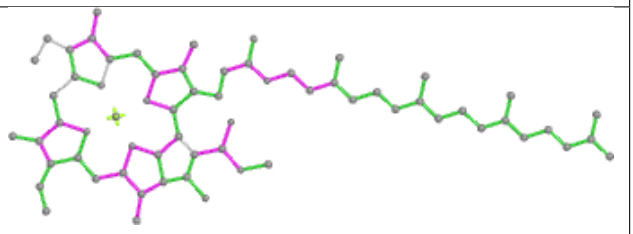

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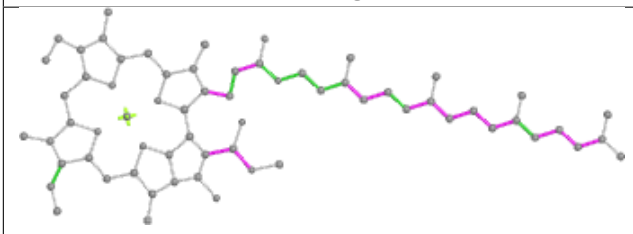

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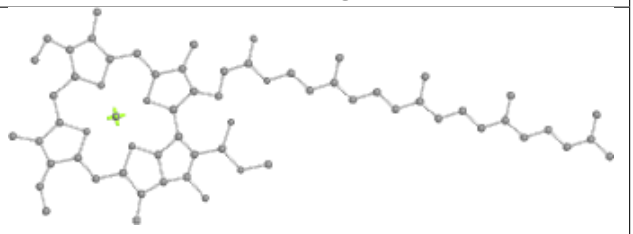
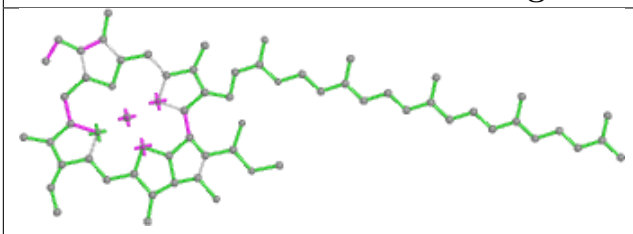


Rings

Ligand CLA y 604



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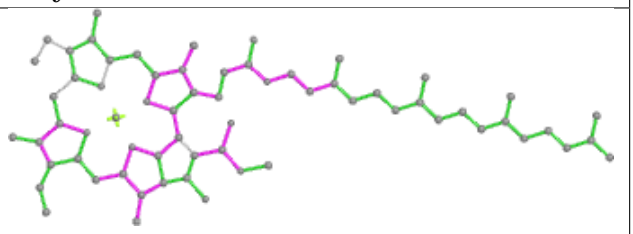
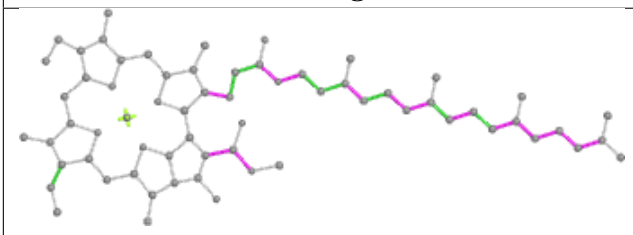


Bond angles



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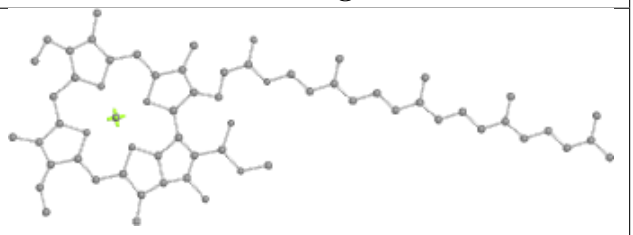
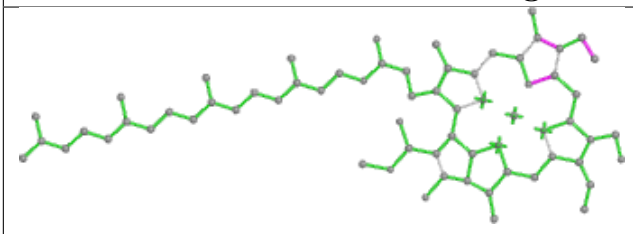


Rings

Ligand CHL N 605



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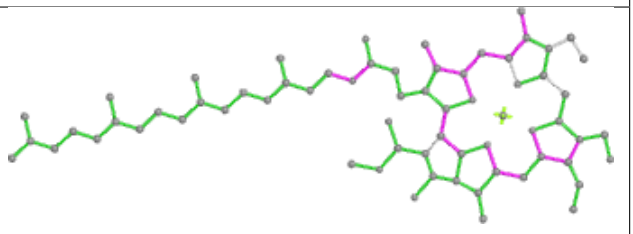

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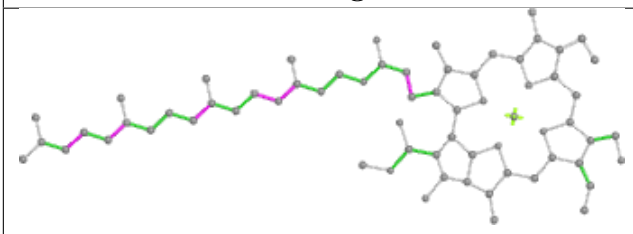

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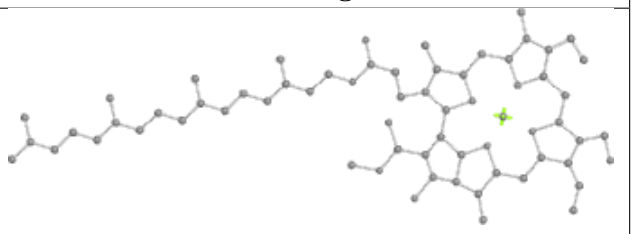
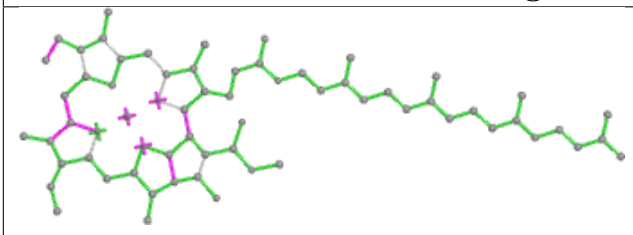


Rings

Ligand CLA C 511



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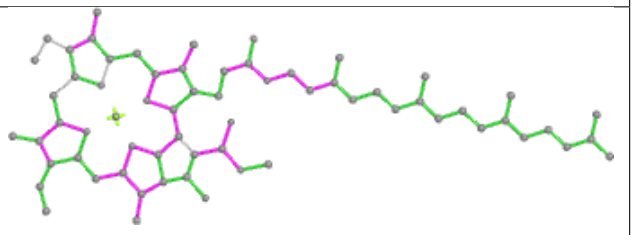

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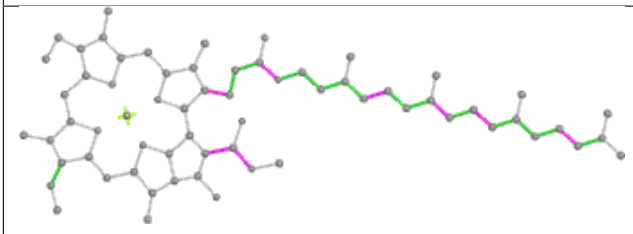

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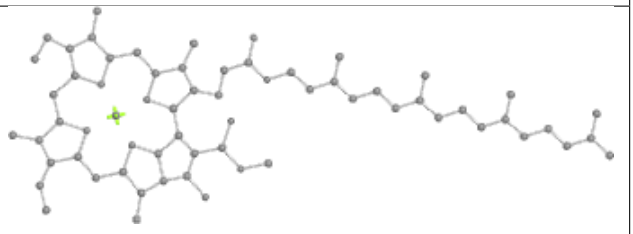
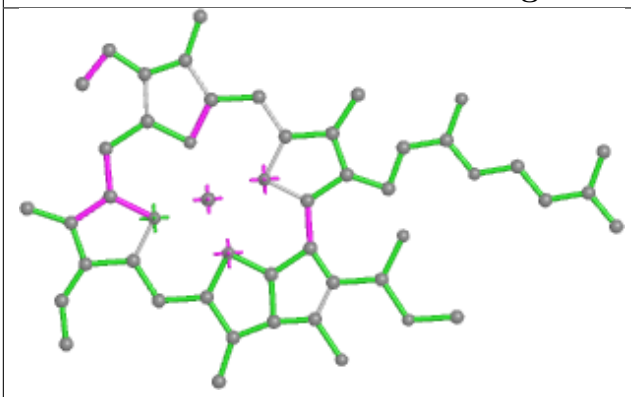


Rings

Ligand CLA s1 617



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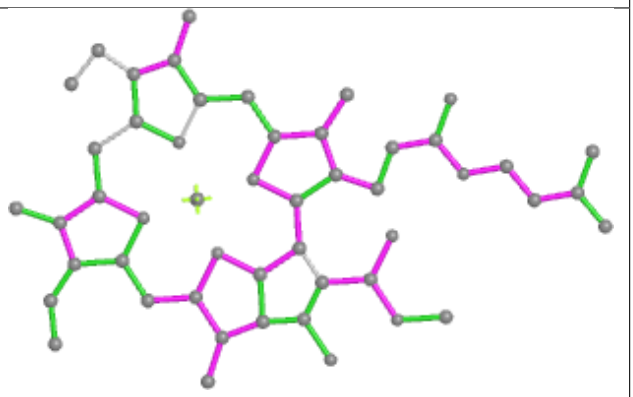
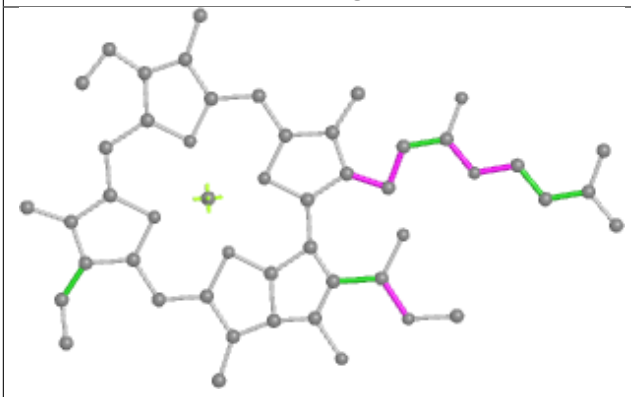


Bond angles



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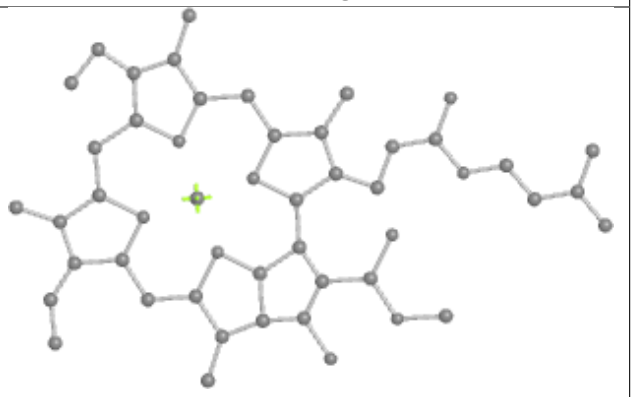
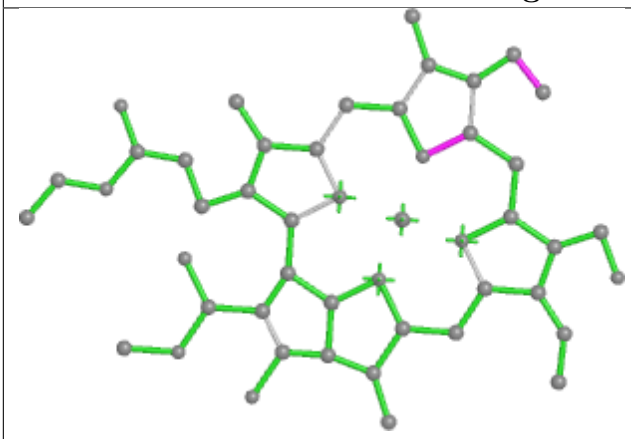


Rings

Ligand CHL G 605



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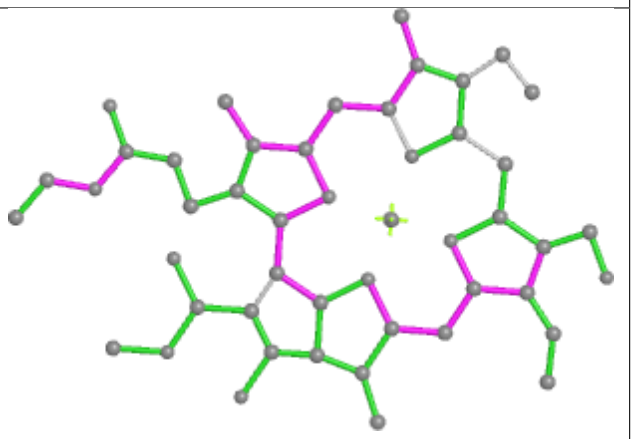

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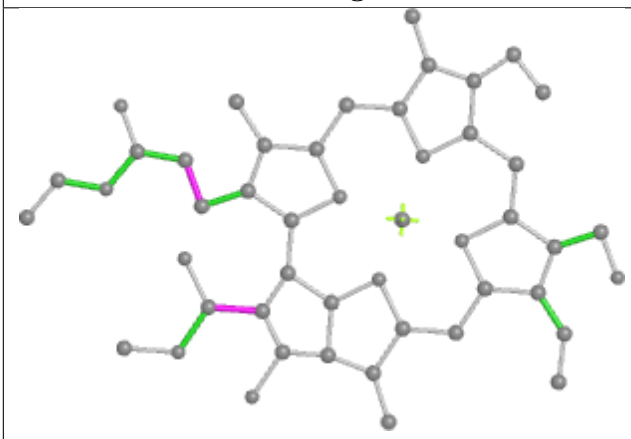

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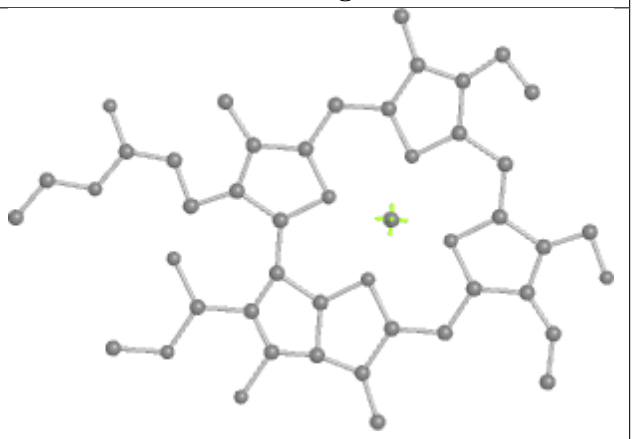
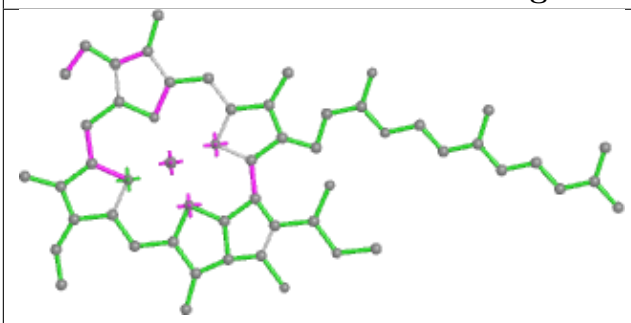


Rings

Ligand CLA s 604



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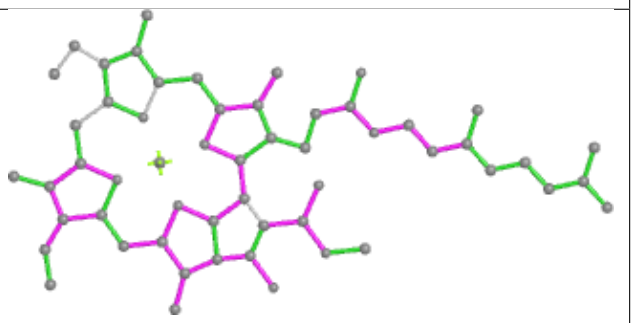

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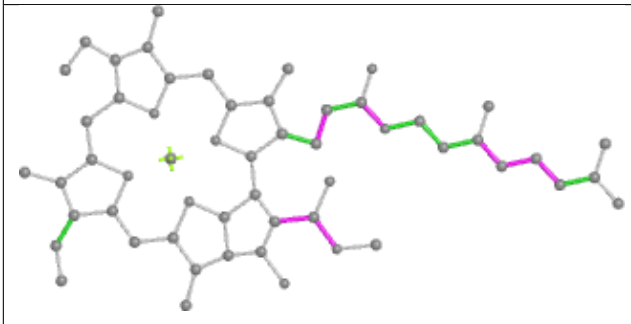

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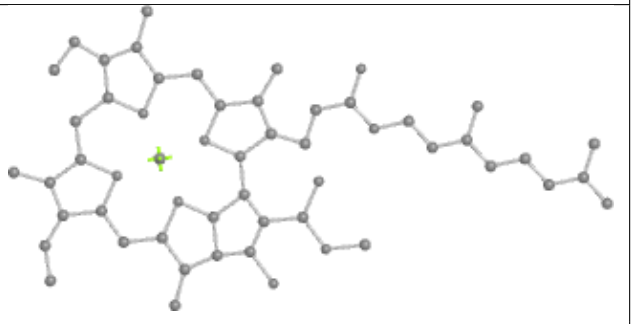
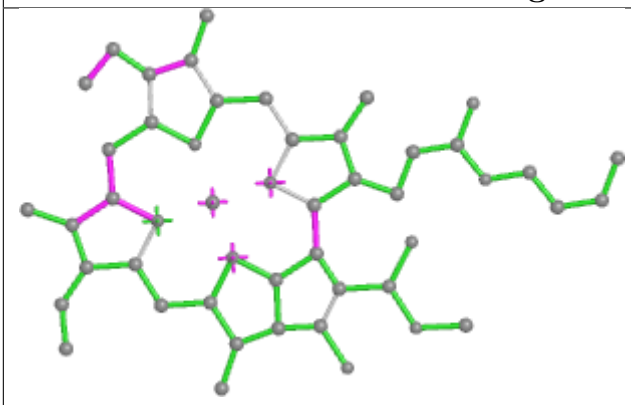


Rings

Ligand CLA g 614



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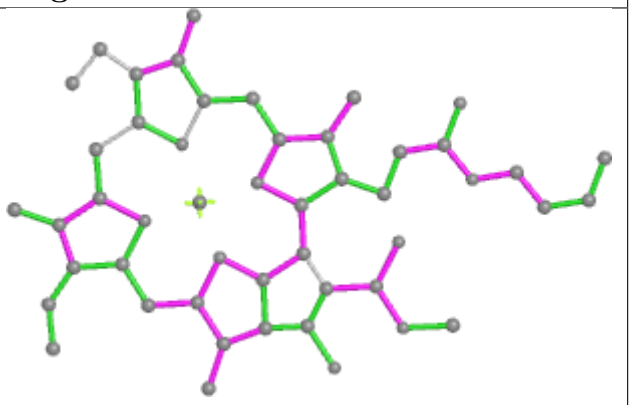

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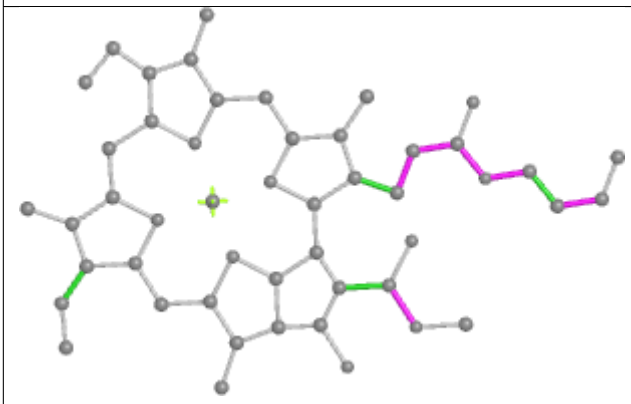

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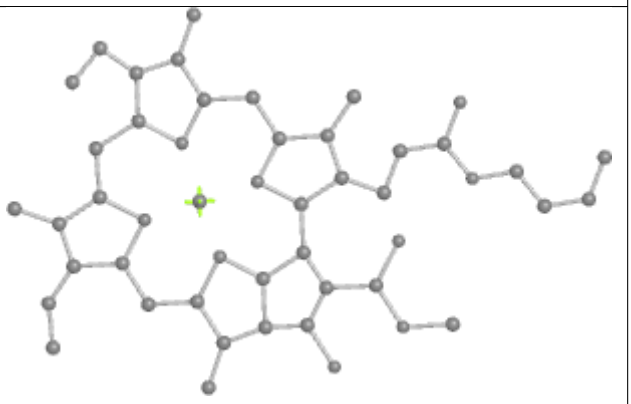
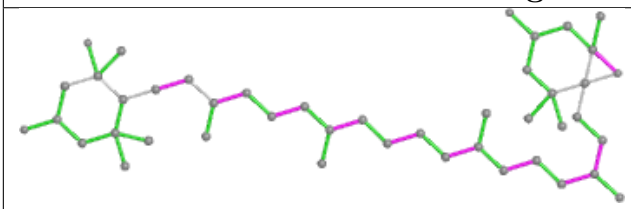


Rings

Ligand NEX g 623



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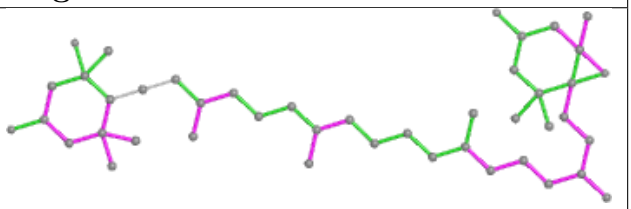
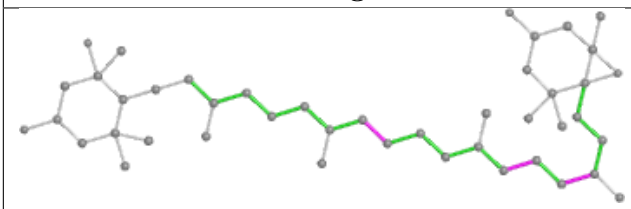


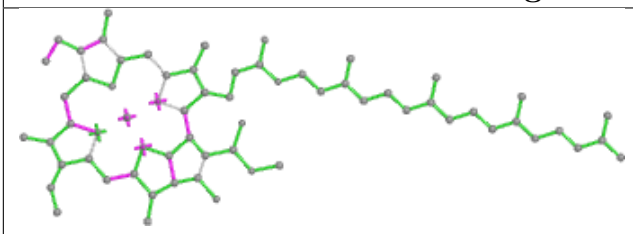
Bond angles



Torsions

Rings

Ligand CLA B 607



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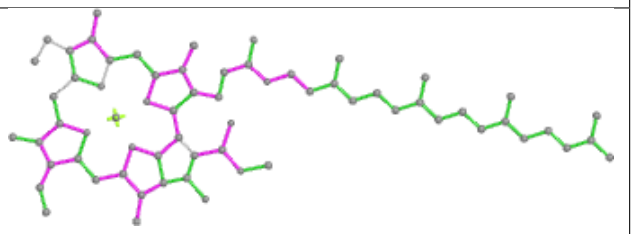
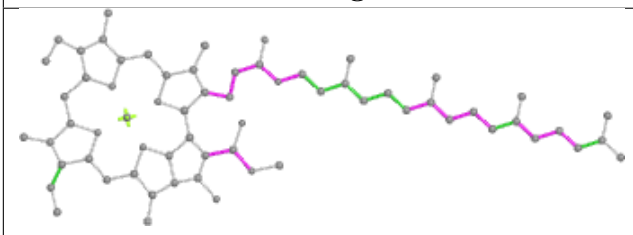


Bond angles



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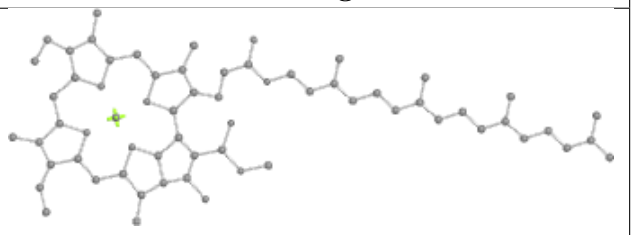
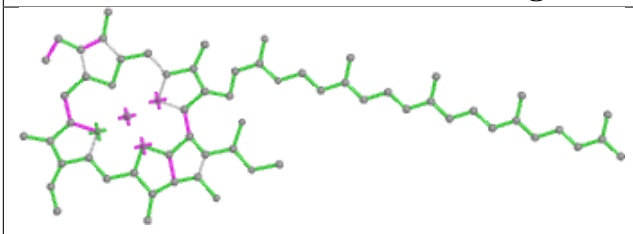


Rings

Ligand CLA y 613



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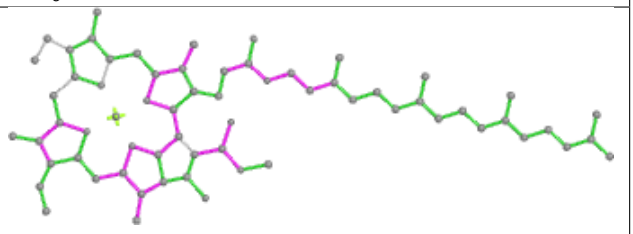
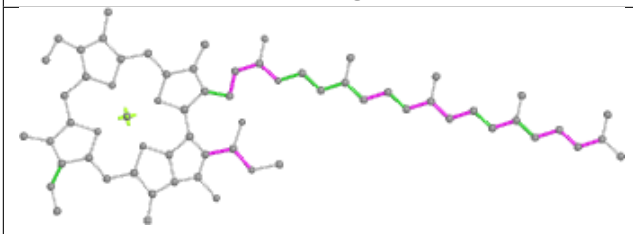
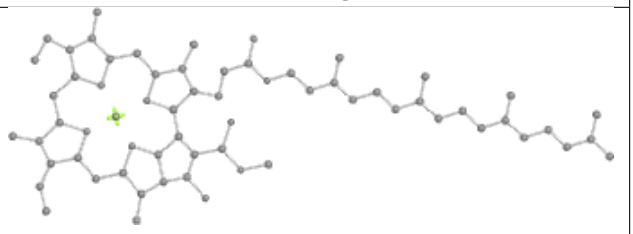


Bond angles

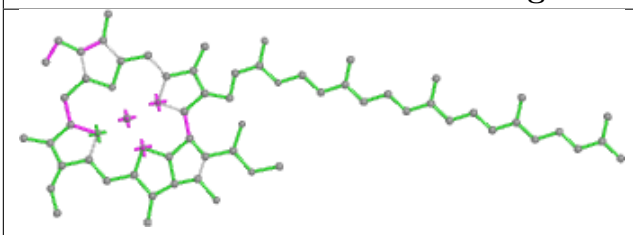


Torsions

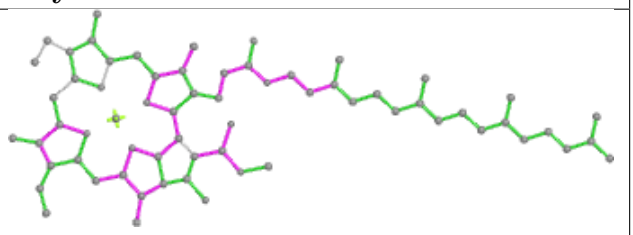


Rings

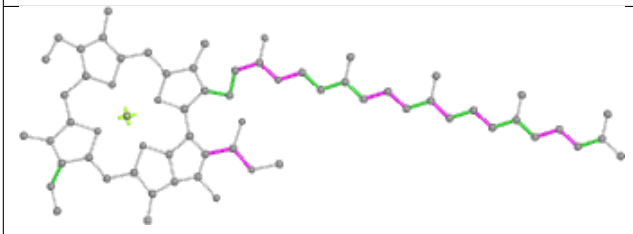
Ligand CLA y 614



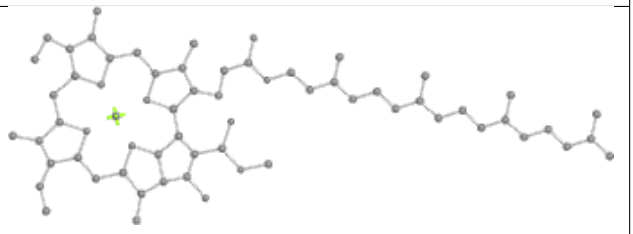
Bond lengths



Bond angles

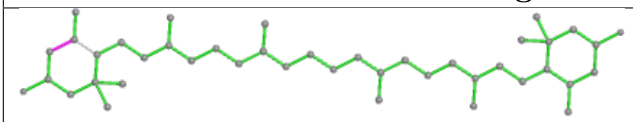


Torsions

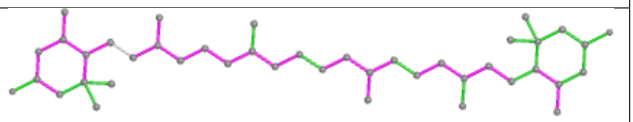


Rings

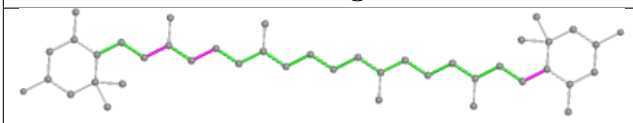
Ligand LUT Y1 620



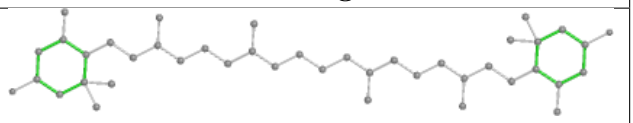
Bond lengths



Bond angles

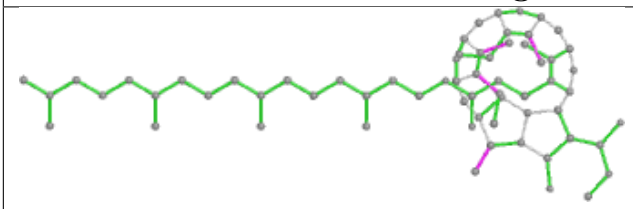


Torsions

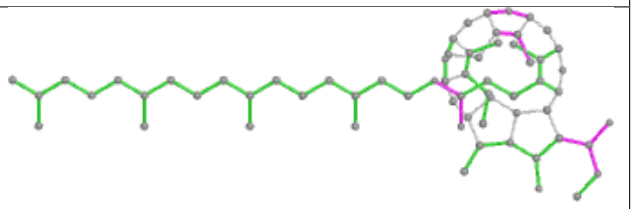


Rings

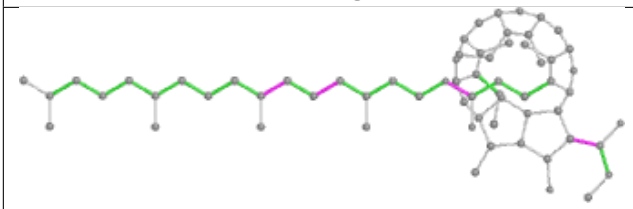
Ligand PHO A1 408



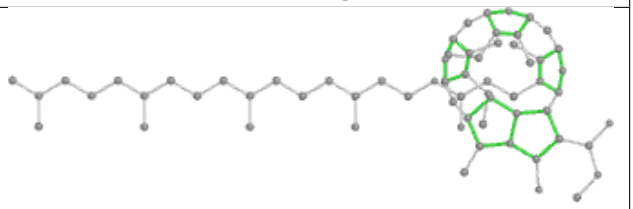
Bond lengths



Bond angles

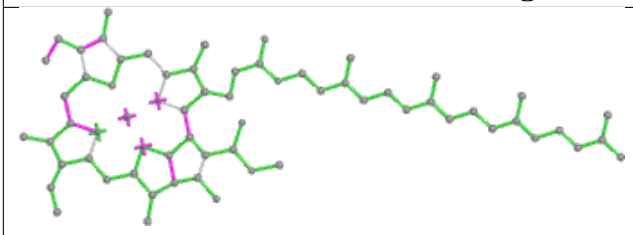


Torsions

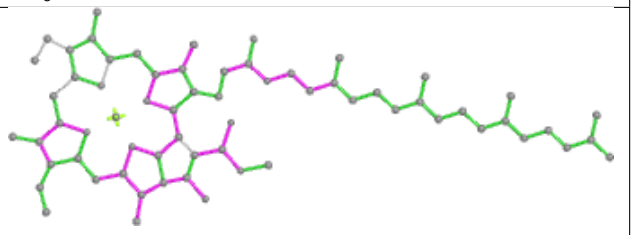


Rings

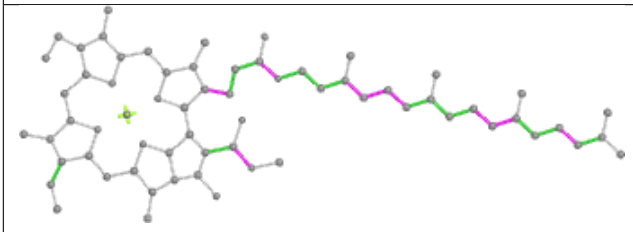
Ligand CLA y1 611



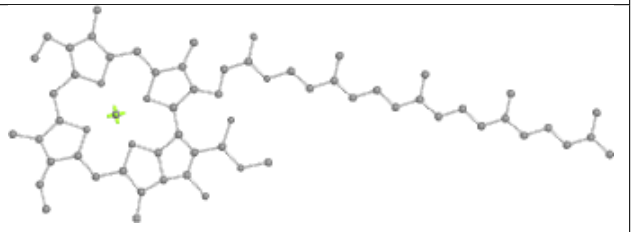
Bond lengths



Bond angles

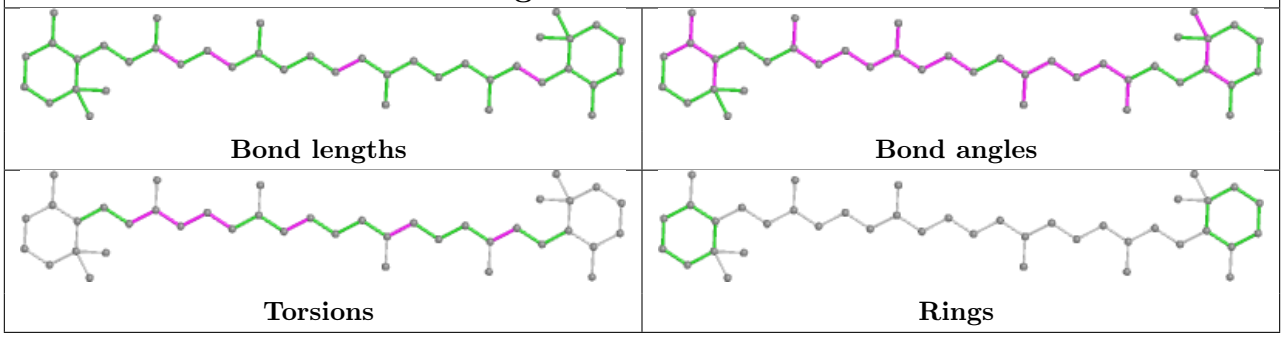


Torsions

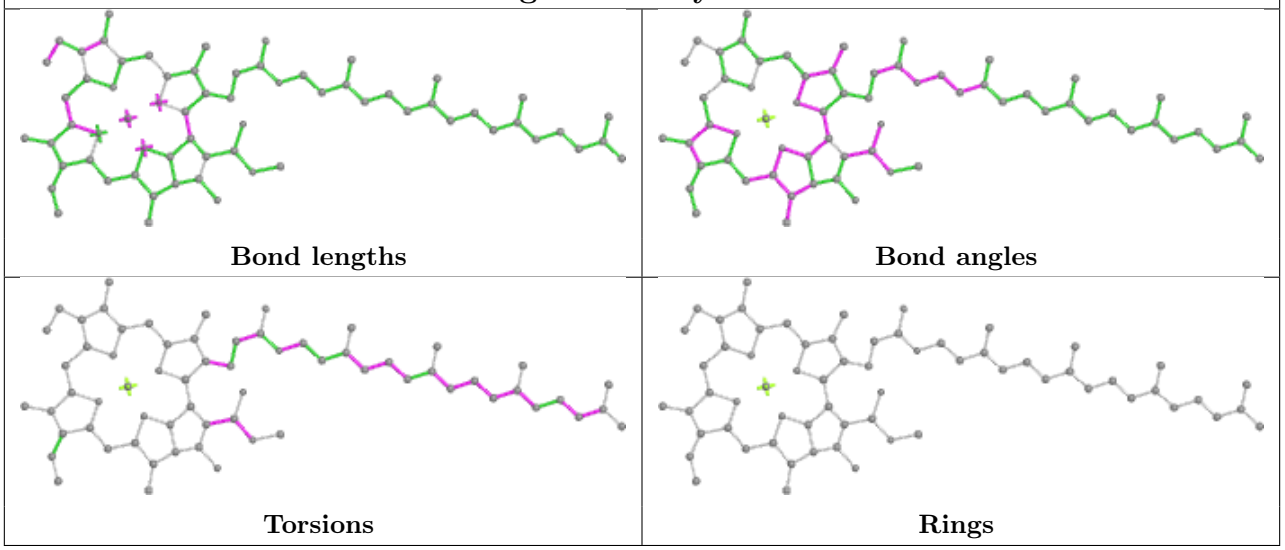


Rings

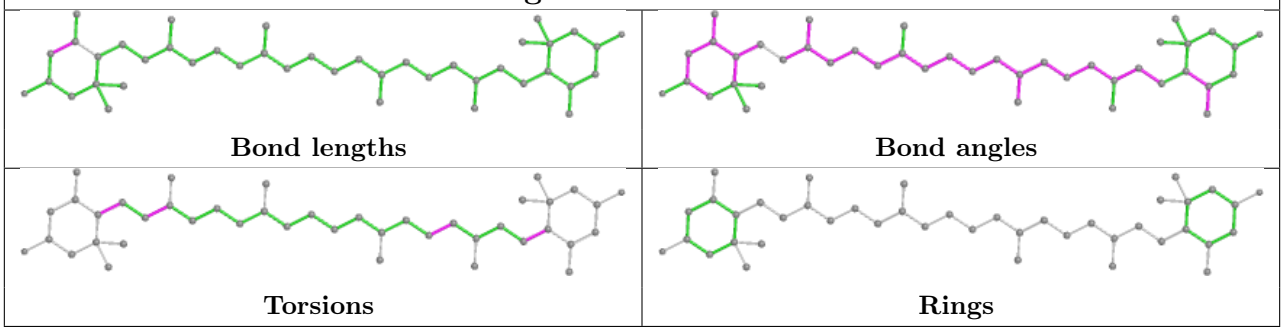
Ligand BCR B1 618



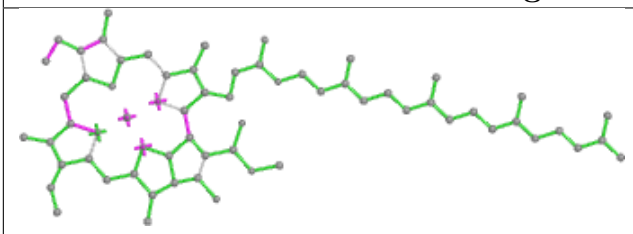
Ligand CLA y1 613



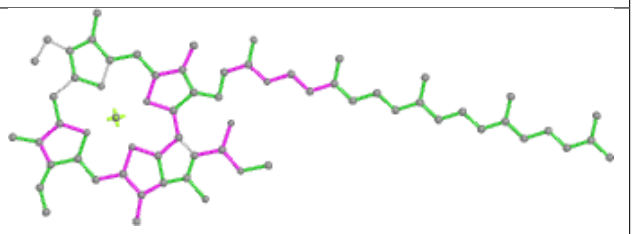
Ligand LUT N 620



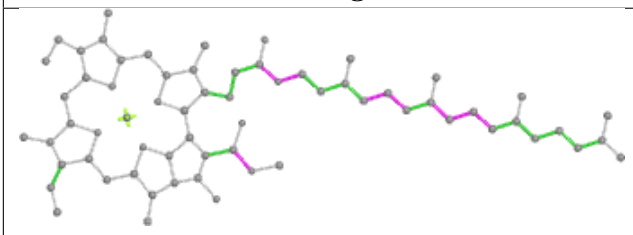
Ligand CLA Y 614



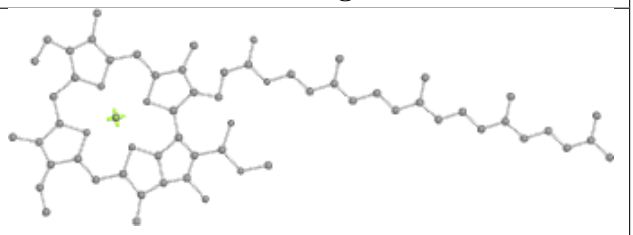
Bond lengths



Bond angles

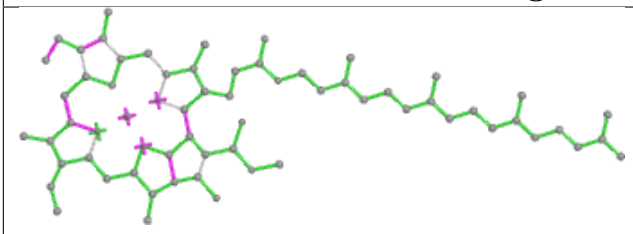


Torsions

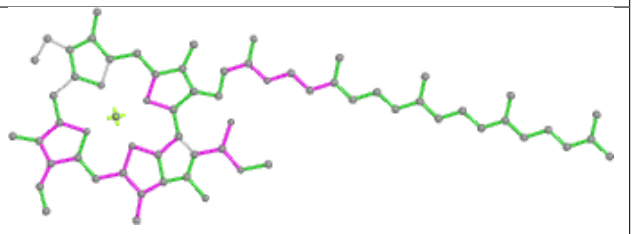


Rings

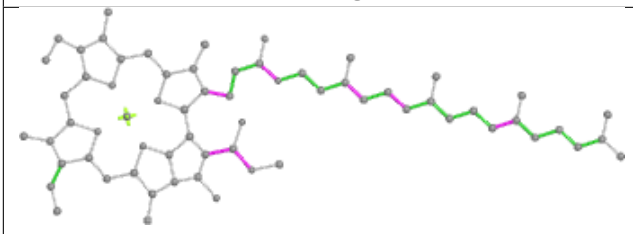
Ligand CLA b 606



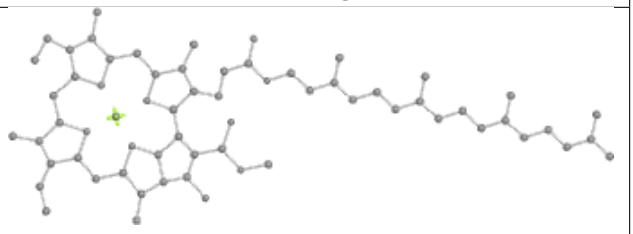
Bond lengths



Bond angles

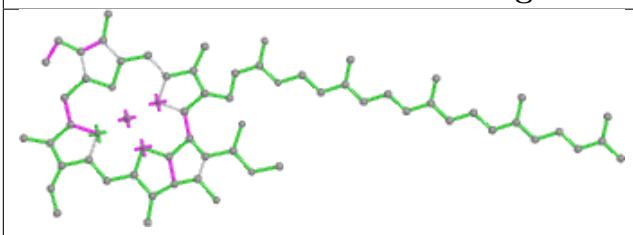


Torsions

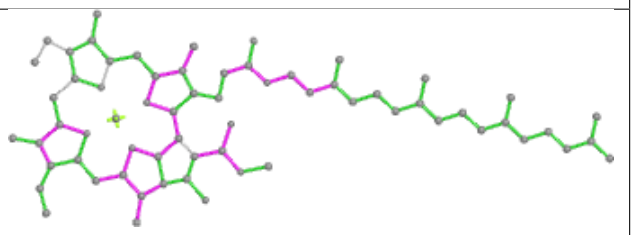


Rings

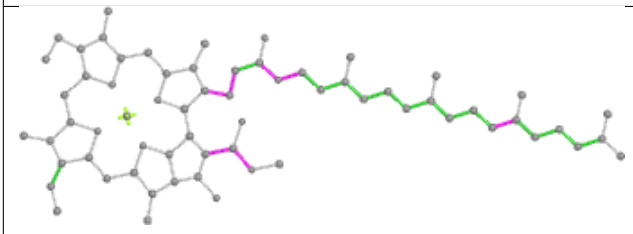
Ligand CLA C1 502



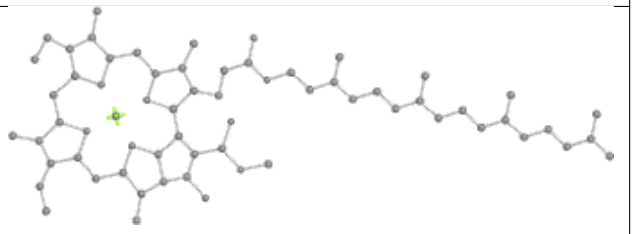
Bond lengths



Bond angles



Torsions



Rings

5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

The following chains have linkage breaks:

Mol	Chain	Number of breaks
22	r	1
22	R	1
27	r1	1
27	R1	1
23	s	1
20	n1	1

The worst 5 of 6 chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	r	110:PRO	C	126:GLU	N	18.97
1	R	110:PRO	C	126:GLU	N	18.01
1	r1	110:PRO	C	126:GLU	N	12.33
1	R1	110:PRO	C	126:GLU	N	11.82
1	s	285:ARG	C	286:VAL	N	3.41

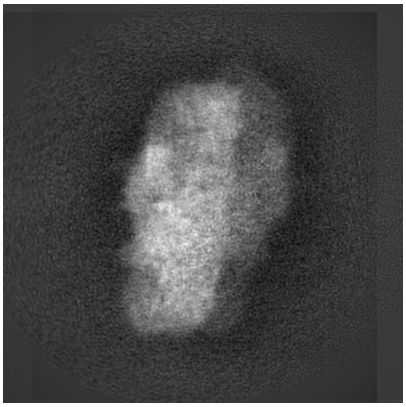
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-13455. These allow visual inspection of the internal detail of the map and identification of artifacts.

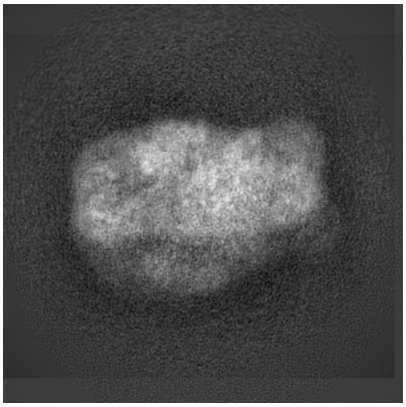
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections

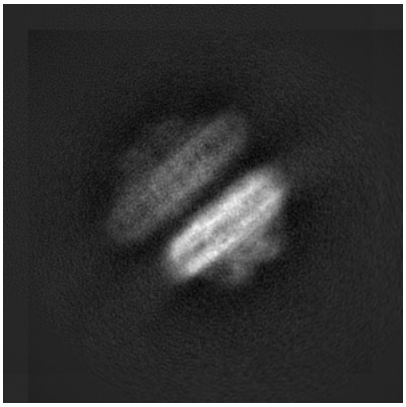
6.1.1 Primary map



X



Y

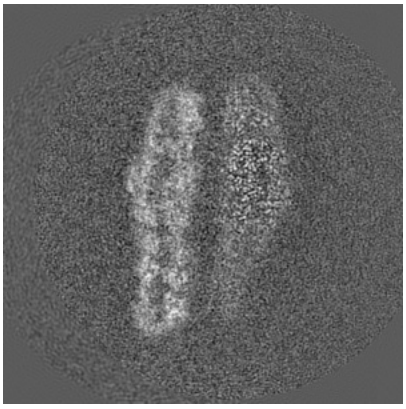


Z

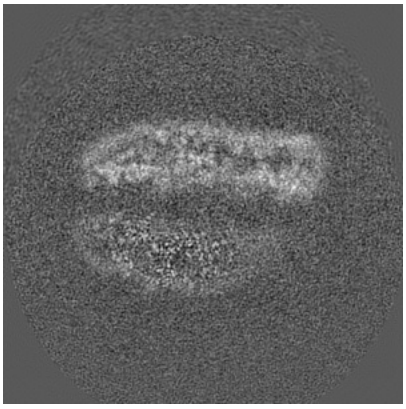
The images above show the map projected in three orthogonal directions.

6.2 Central slices

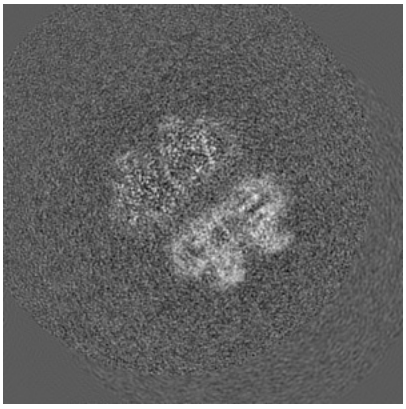
6.2.1 Primary map



X Index: 240



Y Index: 240

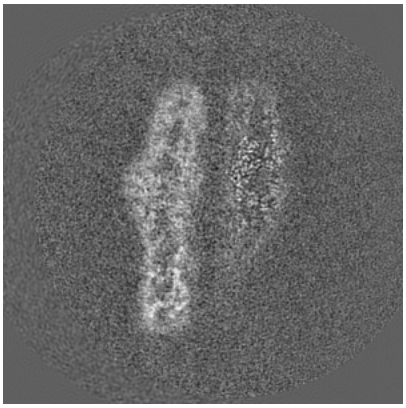


Z Index: 240

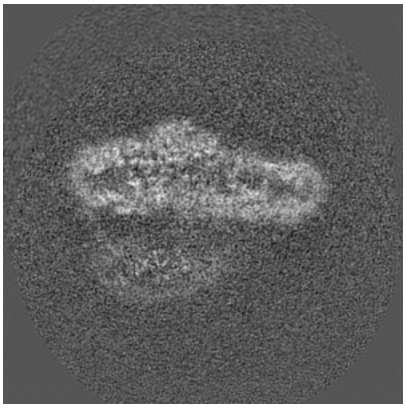
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

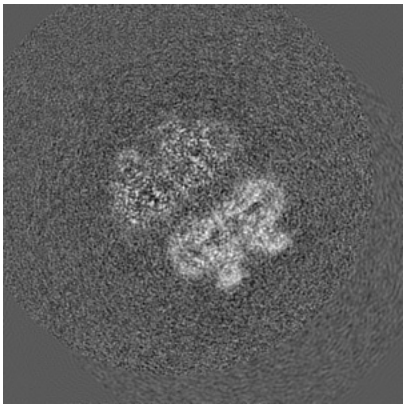
6.3.1 Primary map



X Index: 246



Y Index: 215



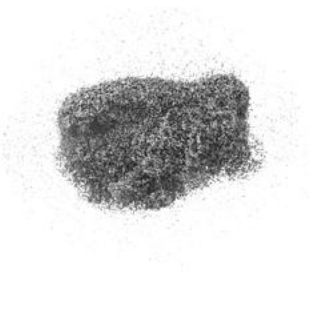
Z Index: 238

The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal surface views (i)

6.4.1 Primary map

X



Y

Z

The images above show the 3D surface view of the map at the recommended contour level 0.0175. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

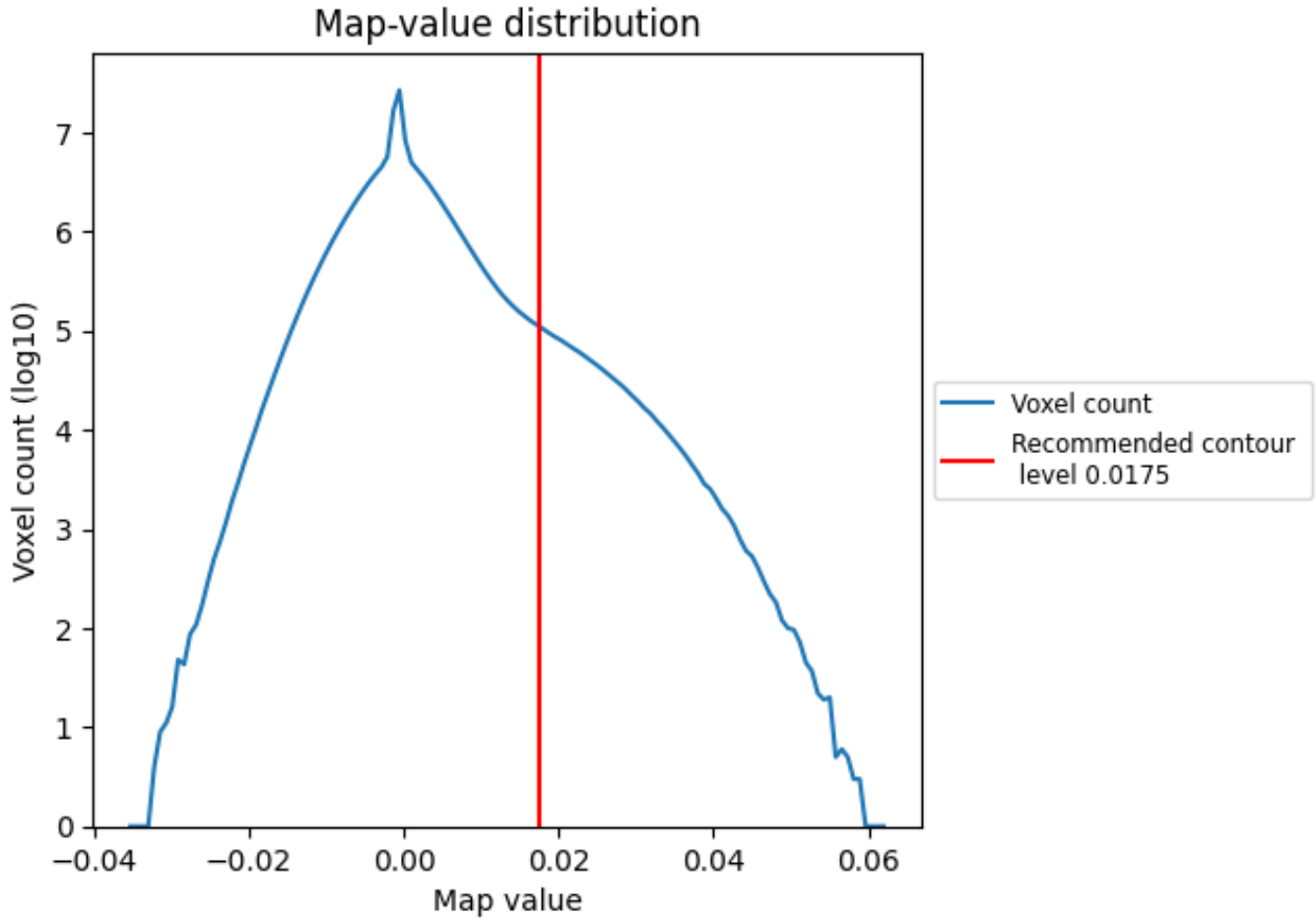
6.5 Mask visualisation (i)

This section was not generated. No masks/segmentation were deposited.

7 Map analysis

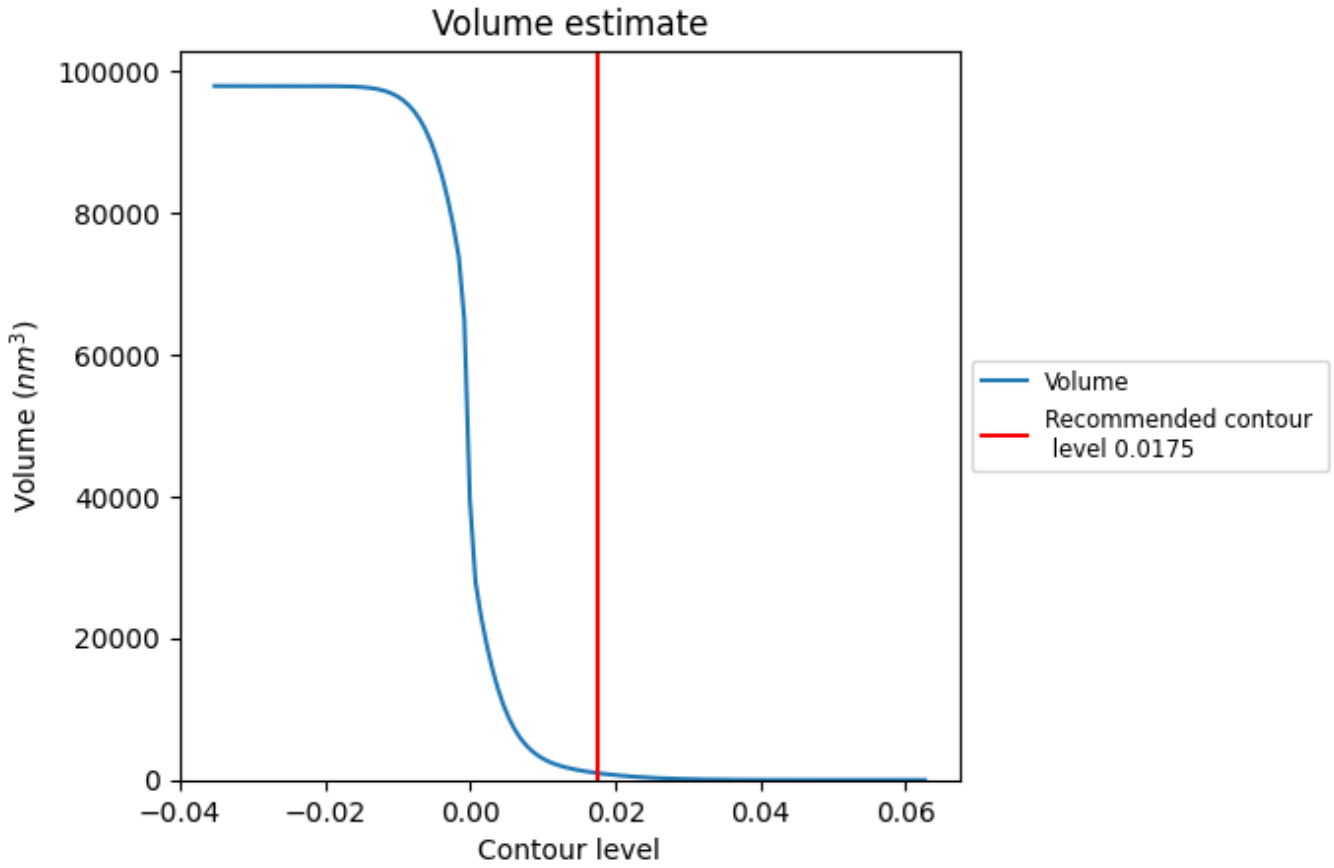
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution



The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

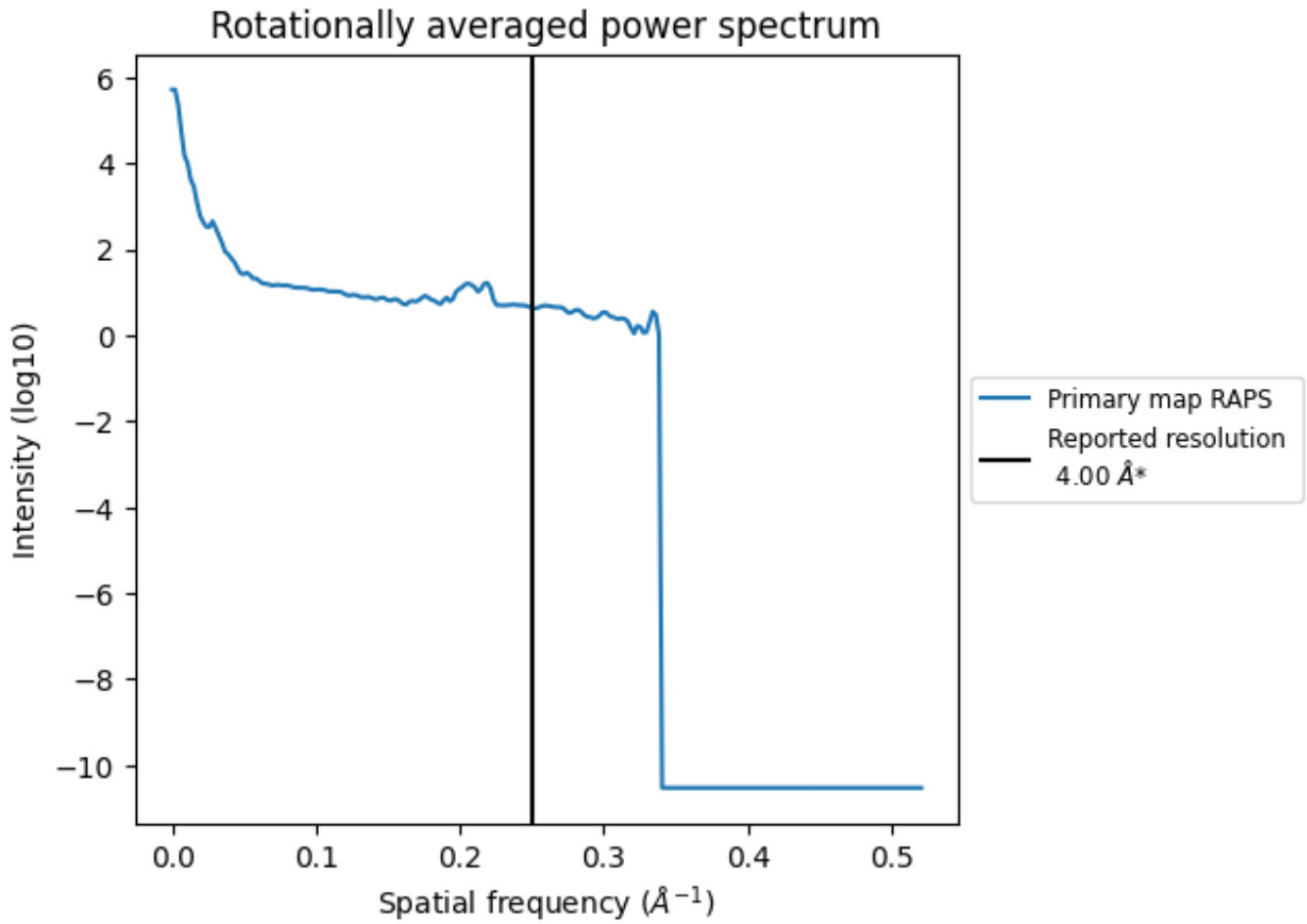
7.2 Volume estimate



The volume at the recommended contour level is 976 nm^3; this corresponds to an approximate mass of 881 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

7.3 Rotationally averaged power spectrum (i)

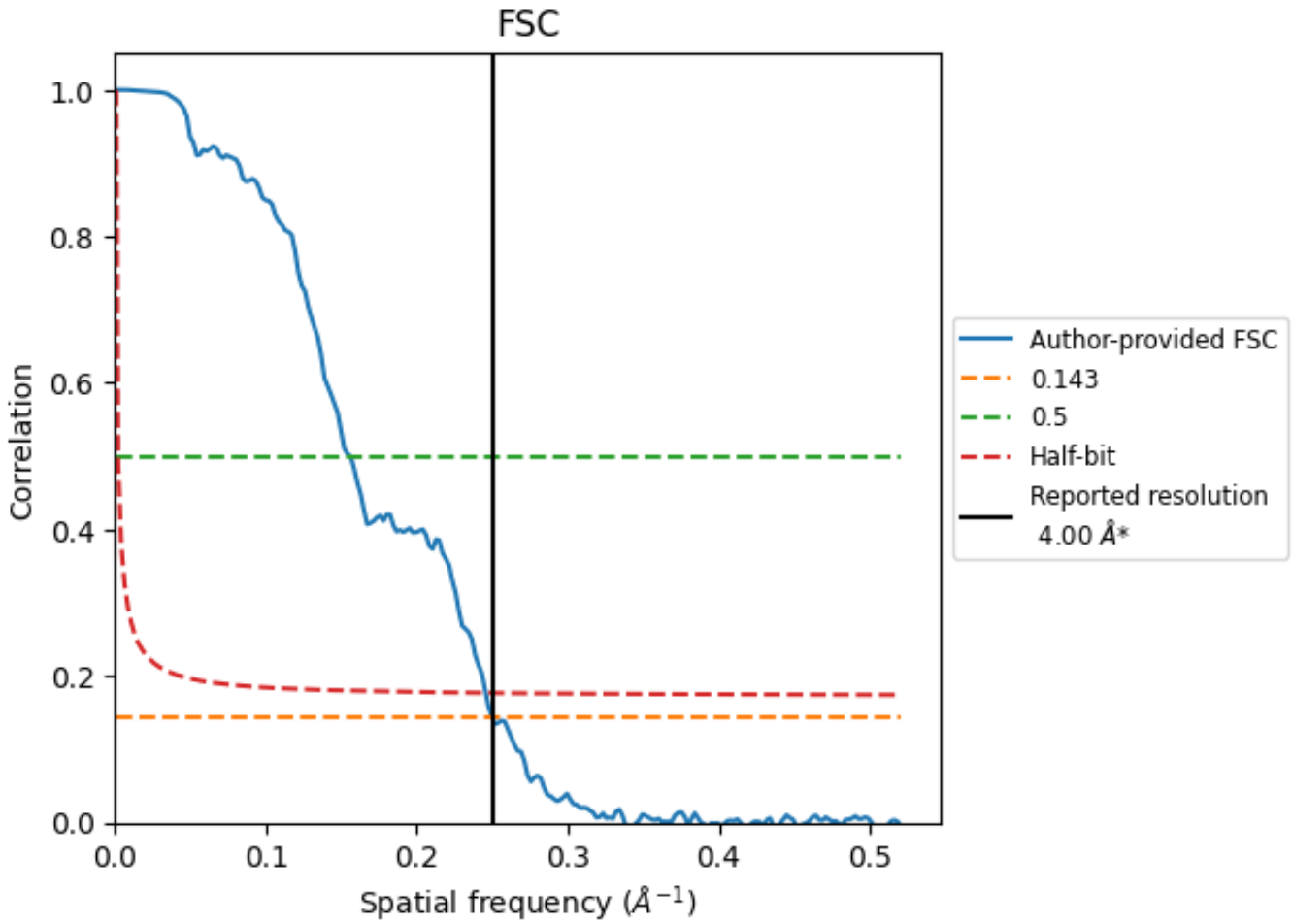


*Reported resolution corresponds to spatial frequency of 0.250 Å^{-1}

8 Fourier-Shell correlation

Fourier-Shell Correlation (FSC) is the most commonly used method to estimate the resolution of single-particle and subtomogram-averaged maps. The shape of the curve depends on the imposed symmetry, mask and whether or not the two 3D reconstructions used were processed from a common reference. The reported resolution is shown as a black line. A curve is displayed for the half-bit criterion in addition to lines showing the 0.143 gold standard cut-off and 0.5 cut-off.

8.1 FSC



*Reported resolution corresponds to spatial frequency of 0.250 Å^{-1}

8.2 Resolution estimates (i)

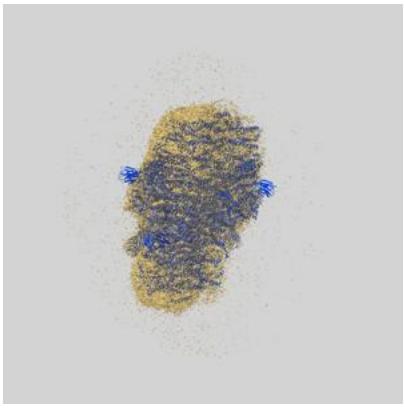
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	4.00	-	-
Author-provided FSC curve	4.00	6.41	4.07
Unmasked-calculated*	-	-	-

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps.

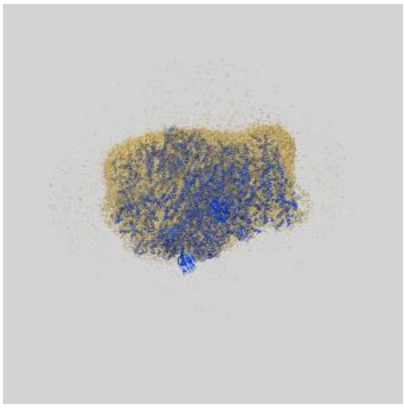
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-13455 and PDB model 7PIW. Per-residue inclusion information can be found in section 3 on page 74.

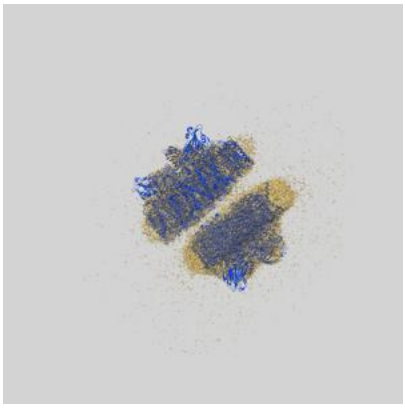
9.1 Map-model overlay



X



Y



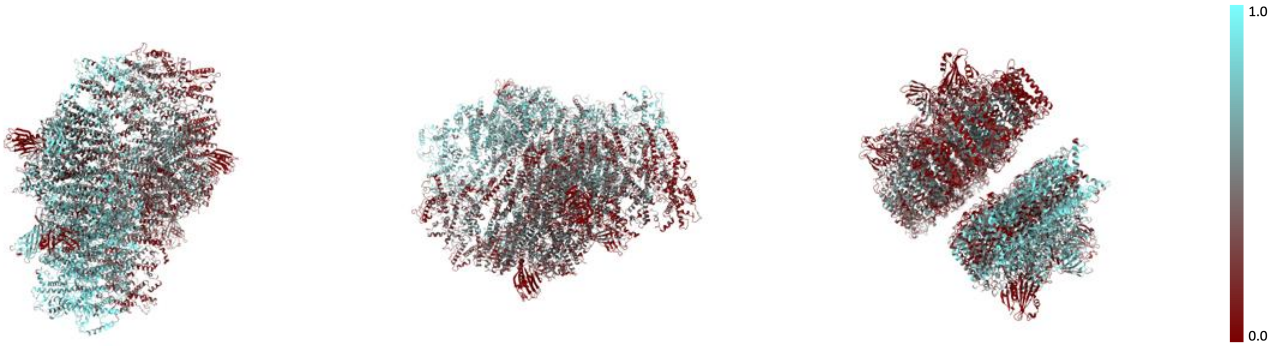
Z

The images above show the 3D surface view of the map at the recommended contour level 0.0175 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

9.2 Q-score mapped to coordinate model

This section was not generated.

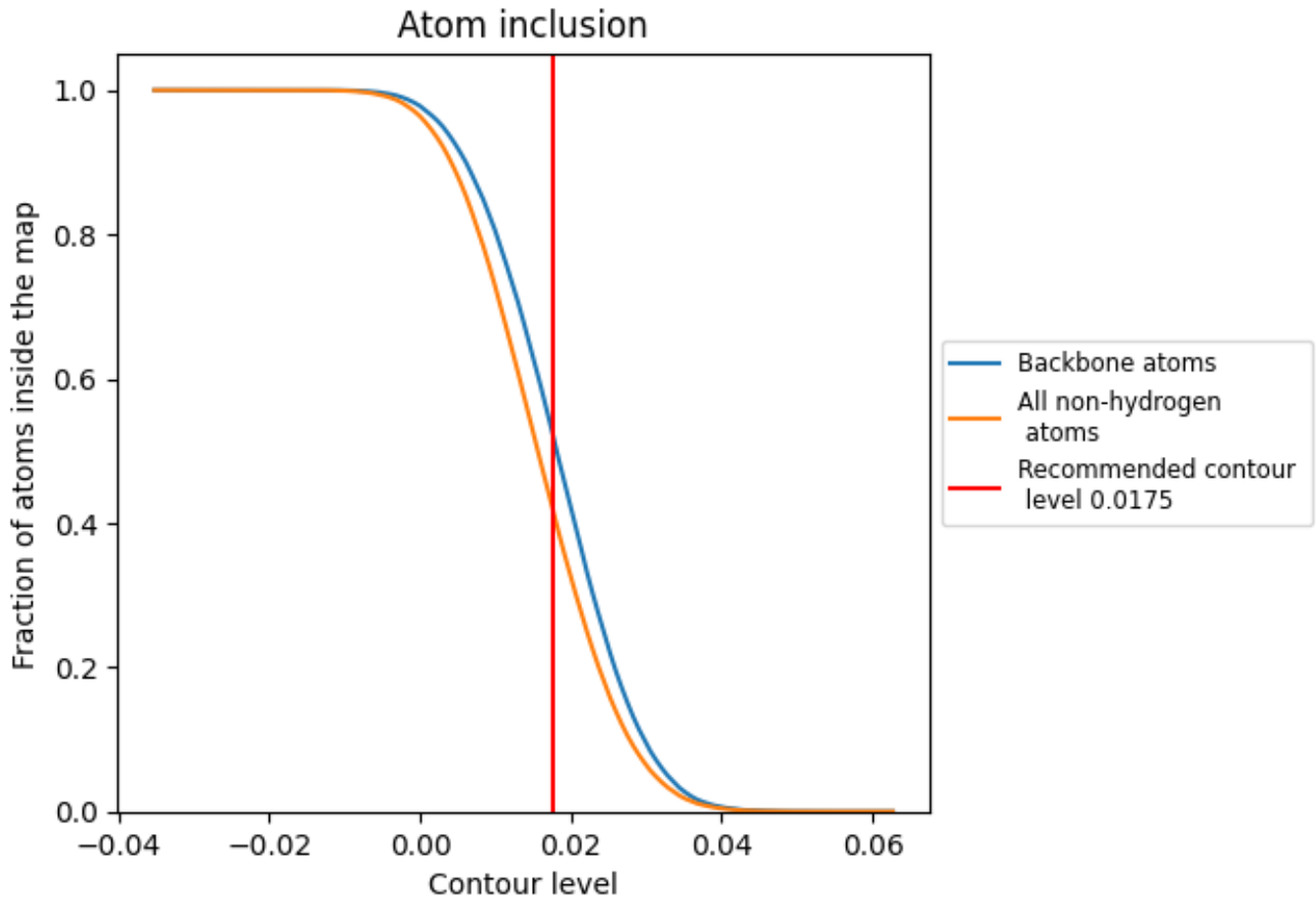
9.3 Atom inclusion mapped to coordinate model



X Y Z

The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.0175).

9.4 Atom inclusion (i)



At the recommended contour level, 53% of all backbone atoms, 42% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary

The table lists the average atom inclusion at the recommended contour level (0.0175) and Q-score for the entire model and for each chain.

Chain	Atom inclusion
All	0.4231
A	0.4924
A1	0.6122
B	0.3736
B1	0.5834
C	0.4931
C1	0.6259
D	0.4415
D1	0.5983
E	0.3812
E1	0.7459
F	0.4091
F1	0.7587
G	0.1979
G1	0.6689
H	0.2981
H1	0.5315
I	0.4674
I1	0.5398
J	0.3824
J1	0.5241
K	0.4164
K1	0.6514
L	0.3521
L1	0.4338
M	0.3306
M1	0.3818
N	0.2958
N1	0.6722
O	0.2273
O1	0.6067
P	0.0176
P1	0.0951
R	0.1040
R1	0.4664

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Chain	Atom inclusion
S	0.2682
S1	0.6810
T	0.3595
T1	0.3958
U	0.2202
U1	0.5413
V	0.3600
V1	0.6089
W	0.3150
W1	0.6038
X	0.2687
X1	0.6269
Y	0.3619
Y1	0.6266
Z	0.2725
Z1	0.6527
a	0.4668
a1	0.4716
b	0.3612
b1	0.4934
c	0.3995
c1	0.4770
d	0.4389
d1	0.4441
e	0.2426
e1	0.4653
f	0.3671
f1	0.5455
g	0.1416
g1	0.5719
h	0.2436
h1	0.4566
i	0.4503
i1	0.4144
j	0.2451
j1	0.4379
k	0.3481
k1	0.4057
l	0.3915
m	0.2479
m1	0.3745
n	0.1661

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Chain	Atom inclusion
n1	0.5485
o	0.2178
o1	0.5320
p	0.0077
p1	0.0859
r	0.1200
r1	0.4777
s	0.1607
s1	0.4603
t	0.3595
t1	0.3090
u	0.2064
u1	0.4128
v	0.2089
v1	0.3333
w	0.3364
w1	0.4699
x	0.2587
x1	0.3831
y	0.3305
y1	0.5281
z	0.1604
z1	0.4242