wwPDB EM Validation Summary Report (i)

Nov 14, 2022 – 10:34 pm GMT

PDB ID	:	7ZQC
EMDB ID	:	EMD-14870
Title	:	Monomeric PSI of Chlamydomonas reinhardtii at 2.31 A resolution
Authors	:	Naschberger, A.; Amunts, A.
Deposited on	:	2022-04-29
Resolution	:	2.31 Å(reported)

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 (i) 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 (i)) were used in the production of this report:

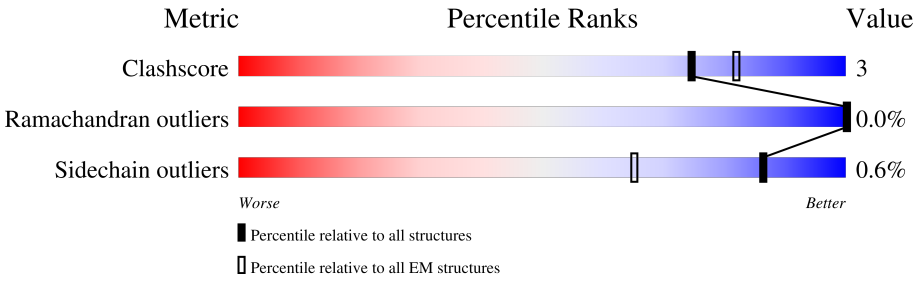
EMDB validation analysis	:	0.0.1.dev43
Mogul	:	1.8.4, CSD as541be (2020)
MolProbity	:	4.02b-467
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ	:	1.9.9
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.31.2

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 2.31 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)
Clashscore	158937	4297
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	751	94% 5%
2	B	735	95% 5%
3	C	81	83% 16%
4	D	196	15% 69% 27%
5	E	97	16% 66% 34%
6	F	227	9% 67% 5% 27%
7	G	126	63% 57% 6% 37%
8	I	106	10% 32% 65%

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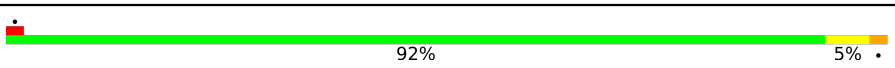
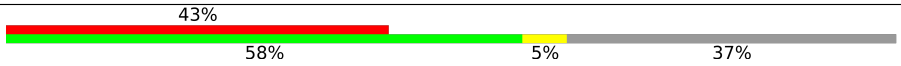
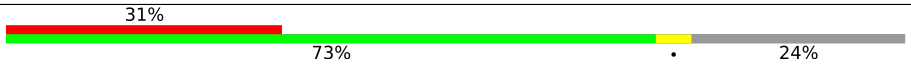
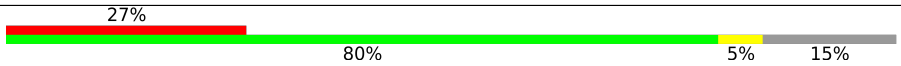
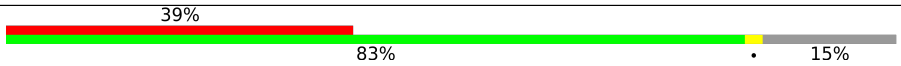
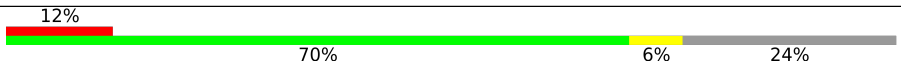
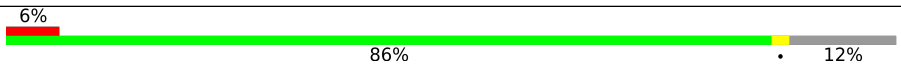
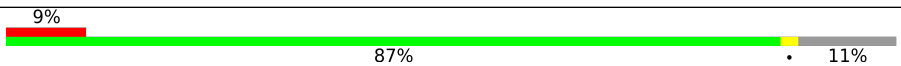
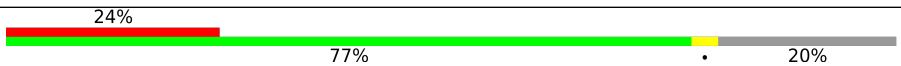
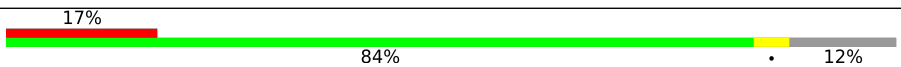
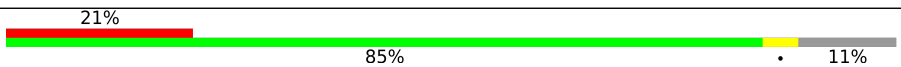
Mol	Chain	Length	Quality of chain
9	J	40	
10	L	196	
11	K	113	
12	1	228	
12	Z	228	
13	3	298	
14	7	241	
15	8	243	
16	4	264	
17	5	257	
18	6	257	
19	9	213	

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
20	CL0	A	801	X	-	-	-
21	CLA	1	602	X	-	-	-
21	CLA	1	603	X	-	-	-
21	CLA	1	604	X	-	-	-
21	CLA	1	608	X	-	-	-
21	CLA	1	609	X	-	-	-
21	CLA	1	610	X	-	-	-
21	CLA	1	611	X	-	-	-
21	CLA	1	612	X	-	-	-
21	CLA	1	613	X	-	-	-
21	CLA	1	614	X	-	-	-
21	CLA	1	616	X	-	-	-
21	CLA	3	602	X	-	-	-
21	CLA	3	603	X	-	-	-
21	CLA	3	604	X	-	-	-
21	CLA	3	606	X	-	-	-
21	CLA	3	607	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
21	CLA	3	609	X	-	-	-
21	CLA	3	610	X	-	-	-
21	CLA	3	611	X	-	-	-
21	CLA	3	612	X	-	-	-
21	CLA	3	613	X	-	-	-
21	CLA	3	614	X	-	-	-
21	CLA	3	615	X	-	-	-
21	CLA	3	617	X	-	-	-
21	CLA	4	602	X	-	-	-
21	CLA	4	603	X	-	-	-
21	CLA	4	604	X	-	-	-
21	CLA	4	609	X	-	-	-
21	CLA	4	610	X	-	-	-
21	CLA	4	611	X	-	-	-
21	CLA	4	612	X	-	-	-
21	CLA	4	613	X	-	-	-
21	CLA	4	614	X	-	-	-
21	CLA	4	616	X	-	-	-
21	CLA	5	601	X	-	-	-
21	CLA	5	602	X	-	-	-
21	CLA	5	603	X	-	-	-
21	CLA	5	604	X	-	-	-
21	CLA	5	609	X	-	-	-
21	CLA	5	610	X	-	-	-
21	CLA	5	611	X	-	-	-
21	CLA	5	612	X	-	-	-
21	CLA	5	613	X	-	-	-
21	CLA	5	614	X	-	-	-
21	CLA	5	616	X	-	-	-
21	CLA	5	617	X	-	-	-
21	CLA	5	621	X	-	-	-
21	CLA	6	602	X	-	-	-
21	CLA	6	603	X	-	-	-
21	CLA	6	604	X	-	-	-
21	CLA	6	609	X	-	-	-
21	CLA	6	610	X	-	-	-
21	CLA	6	611	X	-	-	-
21	CLA	6	612	X	-	-	-
21	CLA	6	613	X	-	-	-
21	CLA	6	614	X	-	-	-
21	CLA	6	617	X	-	-	-
21	CLA	6	622	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
21	CLA	7	602	X	-	-	-
21	CLA	7	603	X	-	-	-
21	CLA	7	604	X	-	-	-
21	CLA	7	608	X	-	-	-
21	CLA	7	609	X	-	-	-
21	CLA	7	610	X	-	-	-
21	CLA	7	611	X	-	-	-
21	CLA	7	612	X	-	-	-
21	CLA	7	613	X	-	-	-
21	CLA	7	614	X	-	-	-
21	CLA	7	616	X	-	-	-
21	CLA	7	620	X	-	-	-
21	CLA	8	602	X	-	-	-
21	CLA	8	603	X	-	-	-
21	CLA	8	604	X	-	-	-
21	CLA	8	608	X	-	-	-
21	CLA	8	609	X	-	-	-
21	CLA	8	610	X	-	-	-
21	CLA	8	611	X	-	-	-
21	CLA	8	612	X	-	-	-
21	CLA	8	613	X	-	-	-
21	CLA	8	614	X	-	-	-
21	CLA	8	616	X	-	-	-
21	CLA	9	601	X	-	-	-
21	CLA	9	602	X	-	-	-
21	CLA	9	603	X	-	-	-
21	CLA	9	604	X	-	-	-
21	CLA	9	609	X	-	-	-
21	CLA	9	610	X	-	-	-
21	CLA	9	611	X	-	-	-
21	CLA	9	612	X	-	-	-
21	CLA	9	613	X	-	-	-
21	CLA	9	614	X	-	-	-
21	CLA	A	802	X	-	-	-
21	CLA	A	803	X	-	-	-
21	CLA	A	804	X	-	-	-
21	CLA	A	805	X	-	-	-
21	CLA	A	806	X	-	-	-
21	CLA	A	807	X	-	-	-
21	CLA	A	808	X	-	-	-
21	CLA	A	809	X	-	-	-
21	CLA	A	810	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
21	CLA	A	811	X	-	-	-
21	CLA	A	812	X	-	-	-
21	CLA	A	813	X	-	-	-
21	CLA	A	814	X	-	-	-
21	CLA	A	815	X	-	-	-
21	CLA	A	816	X	-	-	-
21	CLA	A	817	X	-	-	-
21	CLA	A	818	X	-	-	-
21	CLA	A	819	X	-	-	-
21	CLA	A	820	X	-	-	-
21	CLA	A	821	X	-	-	-
21	CLA	A	822	X	-	-	-
21	CLA	A	823	X	-	-	-
21	CLA	A	824	X	-	-	-
21	CLA	A	825	X	-	-	-
21	CLA	A	826	X	-	-	-
21	CLA	A	827	X	-	-	-
21	CLA	A	828	X	-	-	-
21	CLA	A	829	X	-	-	-
21	CLA	A	830	X	-	-	-
21	CLA	A	831	X	-	-	-
21	CLA	A	832	X	-	-	-
21	CLA	A	833	X	-	-	-
21	CLA	A	834	X	-	-	-
21	CLA	A	835	X	-	-	-
21	CLA	A	836	X	-	-	-
21	CLA	A	837	X	-	-	-
21	CLA	A	838	X	-	-	-
21	CLA	A	839	X	-	-	-
21	CLA	A	840	X	-	-	-
21	CLA	A	841	X	-	-	-
21	CLA	A	842	X	-	-	-
21	CLA	A	843	X	-	-	-
21	CLA	A	845	X	-	-	-
21	CLA	A	854	X	-	-	-
21	CLA	B	802	X	-	-	-
21	CLA	B	803	X	-	-	-
21	CLA	B	804	X	-	-	-
21	CLA	B	805	X	-	-	-
21	CLA	B	806	X	-	-	-
21	CLA	B	807	X	-	-	-
21	CLA	B	808	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
21	CLA	B	809	X	-	-	-
21	CLA	B	810	X	-	-	-
21	CLA	B	811	X	-	-	-
21	CLA	B	812	X	-	-	-
21	CLA	B	813	X	-	-	-
21	CLA	B	814	X	-	-	-
21	CLA	B	815	X	-	-	-
21	CLA	B	816	X	-	-	-
21	CLA	B	817	X	-	-	-
21	CLA	B	818	X	-	-	-
21	CLA	B	819	X	-	-	-
21	CLA	B	820	X	-	-	-
21	CLA	B	821	X	-	-	-
21	CLA	B	822	X	-	-	-
21	CLA	B	823	X	-	-	-
21	CLA	B	824	X	-	-	-
21	CLA	B	825	X	-	-	-
21	CLA	B	826	X	-	-	-
21	CLA	B	827	X	-	-	-
21	CLA	B	828	X	-	-	-
21	CLA	B	829	X	-	-	-
21	CLA	B	830	X	-	-	-
21	CLA	B	831	X	-	-	-
21	CLA	B	832	X	-	-	-
21	CLA	B	833	X	-	-	-
21	CLA	B	834	X	-	-	-
21	CLA	B	835	X	-	-	-
21	CLA	B	836	X	-	-	-
21	CLA	B	837	X	-	-	-
21	CLA	B	838	X	-	-	-
21	CLA	B	839	X	-	-	-
21	CLA	B	840	X	-	-	-
21	CLA	B	841	X	-	-	-
21	CLA	F	301	X	-	-	-
21	CLA	F	303	X	-	-	-
21	CLA	F	304	X	-	-	-
21	CLA	G	203	X	-	-	-
21	CLA	G	204	X	-	-	-
21	CLA	J	101	X	-	-	-
21	CLA	K	201	X	-	-	-
21	CLA	K	203	X	-	-	-
21	CLA	K	204	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
21	CLA	K	206	X	-	-	-
21	CLA	L	203	X	-	-	-
21	CLA	L	204	X	-	-	-
21	CLA	Z	602	X	-	-	-
21	CLA	Z	603	X	-	-	-
21	CLA	Z	604	X	-	-	-
21	CLA	Z	608	X	-	-	-
21	CLA	Z	609	X	-	-	-
21	CLA	Z	610	X	-	-	-
21	CLA	Z	611	X	-	-	-
21	CLA	Z	612	X	-	-	-
21	CLA	Z	613	X	-	-	-
21	CLA	Z	614	X	-	-	-
21	CLA	Z	616	X	-	-	-
30	CHL	1	601	X	-	-	-
30	CHL	1	606	X	-	-	-
30	CHL	1	607	X	-	-	-
30	CHL	3	608	X	-	-	-
30	CHL	4	601	X	-	-	-
30	CHL	4	606	X	-	-	-
30	CHL	4	607	X	-	-	-
30	CHL	4	608	X	-	-	-
30	CHL	4	618	X	-	-	-
30	CHL	5	606	X	-	-	-
30	CHL	5	607	X	-	-	-
30	CHL	5	608	X	-	-	-
30	CHL	5	618	X	-	-	-
30	CHL	6	601	X	-	-	-
30	CHL	6	606	X	-	-	-
30	CHL	6	607	X	-	-	-
30	CHL	6	608	X	-	-	-
30	CHL	6	616	X	-	-	-
30	CHL	6	618	X	-	-	-
30	CHL	7	601	X	-	-	-
30	CHL	7	606	X	-	-	-
30	CHL	7	607	X	-	-	-
30	CHL	8	601	X	-	-	-
30	CHL	8	606	X	-	-	-
30	CHL	8	607	X	-	-	-
30	CHL	9	606	X	-	-	-
30	CHL	9	607	X	-	-	-
30	CHL	Z	601	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
30	CHL	Z	606	X	-	-	-
30	CHL	Z	607	X	-	-	-
31	XAT	1	618	X	-	-	-

2 Entry composition (i)

There are 33 unique types of molecules in this entry. The entry contains 101000 atoms, of which 50501 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 I P700 chlorophyll a apoprotein A1.

Mol	Chain	Residues	Atoms						AltConf	Trace
			Total	C	H	N	O	S		
1	A	742	11498	3808	5673	994	1001	22	0	0

- Molecule 2 is a protein called Photosystem I P700 chlorophyll a apoprotein A2.

Mol	Chain	Residues	Atoms						AltConf	Trace
			Total	C	H	N	O	S		
2	B	733	11400	3824	5576	977	1005	18	0	0

- Molecule 3 is a protein called Photosystem I iron-sulfur center.

Mol	Chain	Residues	Atoms						AltConf	Trace
			Total	C	H	N	O	S		
3	C	80	1183	369	582	103	117	12	0	0

- Molecule 4 is a protein called Photosystem I reaction center subunit II, chloroplastic.

Mol	Chain	Residues	Atoms						AltConf	Trace
			Total	C	H	N	O	S		
4	D	144	2284	725	1151	200	201	7	0	0

- Molecule 5 is a protein called Photosystem I reaction center subunit IV, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	H	N	O		
5	E	64	1011	322	505	89	95	0	0

- Molecule 6 is a protein called Photosystem I reaction center subunit III, chloroplastic.

Mol	Chain	Residues	Atoms						AltConf	Trace
			Total	C	H	N	O	S		
6	F	165	2568	817	1302	213	233	3	0	0

- Molecule 7 is a protein called Photosystem I reaction center subunit V, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	G	80	Total	C	H	N	O	0	0
			1177	379	583	103	112		

- Molecule 8 is a protein called Photosystem I reaction center subunit VIII.

Mol	Chain	Residues	Atoms						AltConf	Trace
8	I	37	Total	C	H	N	O	S	0	0
			573	195	292	39	46	1		

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

Mol	Chain	Residues	Atoms						AltConf	Trace
9	J	40	Total	C	H	N	O	S	0	0
			657	224	328	46	58	1		

- Molecule 10 is a protein called PSI subunit V.

Mol	Chain	Residues	Atoms						AltConf	Trace
10	L	124	Total	C	H	N	O	S	0	0
			1806	586	907	146	164	3		

- Molecule 11 is a protein called Photosystem I reaction center subunit psaK, chloroplastic.

Mol	Chain	Residues	Atoms						AltConf	Trace
11	K	86	Total	C	H	N	O	S	0	0
			1203	370	620	100	111	2		

- Molecule 12 is a protein called Chlorophyll a-b binding protein, chloroplastic.

Mol	Chain	Residues	Atoms						AltConf	Trace
12	1	194	Total	C	H	N	O	S	0	0
			2842	941	1397	240	261	3		
12	Z	194	Total	C	H	N	O	S	0	0
			2842	941	1397	240	261	3		

- Molecule 13 is a protein called Chlorophyll a-b binding protein, chloroplastic.

Mol	Chain	Residues	Atoms						AltConf	Trace
13	3	227	Total	C	H	N	O	S	0	0
			3431	1128	1695	283	317	8		

- Molecule 14 is a protein called Chlorophyll a-b binding protein, chloroplastic.

Mol	Chain	Residues	Atoms						AltConf	Trace
14	7	213	Total	C	H	N	O	S	0	0
			3240	1072	1590	274	298	6		

- Molecule 15 is a protein called Chlorophyll a-b binding protein, chloroplastic.

Mol	Chain	Residues	Atoms						AltConf	Trace
15	8	217	Total	C	H	N	O	S	0	0
			3279	1073	1629	280	293	4		

- Molecule 16 is a protein called Chlorophyll a-b binding protein, chloroplastic (Lhca4).

Mol	Chain	Residues	Atoms						AltConf	Trace
16	4	212	Total	C	H	N	O	S	0	0
			3251	1080	1603	268	295	5		

- Molecule 17 is a protein called Chlorophyll a-b binding protein, chloroplastic.

Mol	Chain	Residues	Atoms						AltConf	Trace
17	5	227	Total	C	H	N	O	S	0	0
			3522	1154	1747	297	316	8		

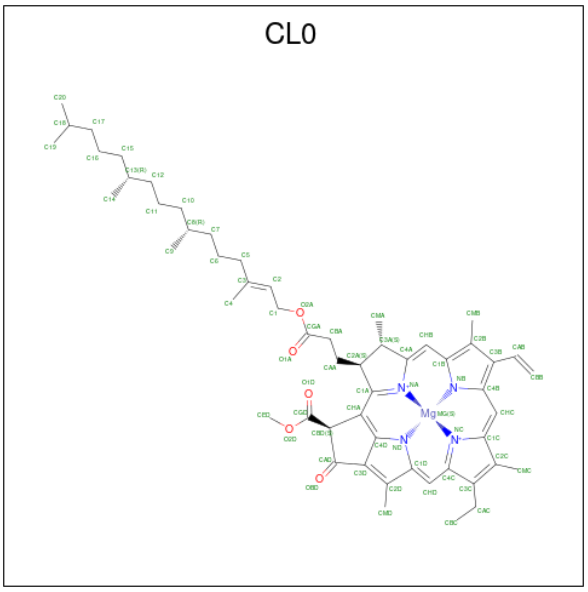
- Molecule 18 is a protein called Chlorophyll a-b binding protein, chloroplastic.

Mol	Chain	Residues	Atoms						AltConf	Trace
18	6	230	Total	C	H	N	O	S	0	0
			3542	1167	1770	293	306	6		

- Molecule 19 is a protein called Chlorophyll a-b binding protein, chloroplastic.

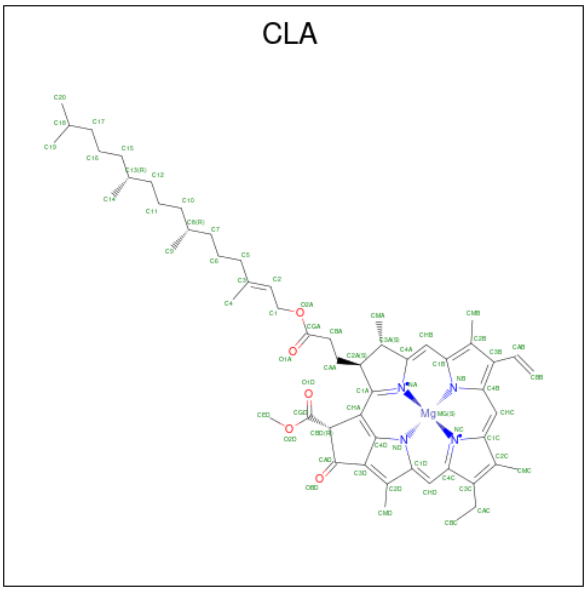
Mol	Chain	Residues	Atoms						AltConf	Trace
19	9	156	Total	C	H	N	O	S	0	0
			2386	775	1196	201	208	6		

- Molecule 20 is CHLOROPHYLL A ISOMER (three-letter code: CL0) (formula: $C_{55}H_{72}MgN_4O_5$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms						AltConf
20	A	1	Total	C	H	Mg	N	O	0
			137	55	72	1	4	5	

- Molecule 21 is CHLOROPHYLL A (three-letter code: CLA) (formula: $C_{55}H_{72}MgN_4O_5$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms						AltConf
21	A	1	Total	C	H	Mg	N	O	0
			5574	2278	2856	44	176	220	
21	A	1	Total	C	H	Mg	N	O	0
			5574	2278	2856	44	176	220	

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Mol	Chain	Residues	Atoms						AltConf
21	A	1	Total 5574	C 2278	H 2856	Mg 44	N 176	O 220	0
21	A	1	Total 5574	C 2278	H 2856	Mg 44	N 176	O 220	0
21	A	1	Total 5574	C 2278	H 2856	Mg 44	N 176	O 220	0
21	A	1	Total 5574	C 2278	H 2856	Mg 44	N 176	O 220	0
21	A	1	Total 5574	C 2278	H 2856	Mg 44	N 176	O 220	0
21	A	1	Total 5574	C 2278	H 2856	Mg 44	N 176	O 220	0
21	A	1	Total 5574	C 2278	H 2856	Mg 44	N 176	O 220	0
21	A	1	Total 5574	C 2278	H 2856	Mg 44	N 176	O 220	0
21	A	1	Total 5574	C 2278	H 2856	Mg 44	N 176	O 220	0
21	A	1	Total 5574	C 2278	H 2856	Mg 44	N 176	O 220	0
21	A	1	Total 5574	C 2278	H 2856	Mg 44	N 176	O 220	0
21	A	1	Total 5574	C 2278	H 2856	Mg 44	N 176	O 220	0
21	A	1	Total 5574	C 2278	H 2856	Mg 44	N 176	O 220	0
21	A	1	Total 5574	C 2278	H 2856	Mg 44	N 176	O 220	0
21	A	1	Total 5574	C 2278	H 2856	Mg 44	N 176	O 220	0
21	A	1	Total 5574	C 2278	H 2856	Mg 44	N 176	O 220	0
21	A	1	Total 5574	C 2278	H 2856	Mg 44	N 176	O 220	0
21	A	1	Total 5574	C 2278	H 2856	Mg 44	N 176	O 220	0
21	A	1	Total 5574	C 2278	H 2856	Mg 44	N 176	O 220	0
21	A	1	Total 5574	C 2278	H 2856	Mg 44	N 176	O 220	0
21	A	1	Total 5574	C 2278	H 2856	Mg 44	N 176	O 220	0

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Mol	Chain	Residues	Atoms						AltConf
21	A	1	Total	C	H	Mg	N	O	0
			5574	2278	2856	44	176	220	
21	A	1	Total	C	H	Mg	N	O	0
			5574	2278	2856	44	176	220	
21	A	1	Total	C	H	Mg	N	O	0
			5574	2278	2856	44	176	220	
21	A	1	Total	C	H	Mg	N	O	0
			5574	2278	2856	44	176	220	
21	A	1	Total	C	H	Mg	N	O	0
			5574	2278	2856	44	176	220	
21	A	1	Total	C	H	Mg	N	O	0
			5574	2278	2856	44	176	220	
21	A	1	Total	C	H	Mg	N	O	0
			5574	2278	2856	44	176	220	
21	A	1	Total	C	H	Mg	N	O	0
			5574	2278	2856	44	176	220	
21	A	1	Total	C	H	Mg	N	O	0
			5574	2278	2856	44	176	220	
21	A	1	Total	C	H	Mg	N	O	0
			5574	2278	2856	44	176	220	
21	A	1	Total	C	H	Mg	N	O	0
			5574	2278	2856	44	176	220	
21	A	1	Total	C	H	Mg	N	O	0
			5574	2278	2856	44	176	220	
21	A	1	Total	C	H	Mg	N	O	0
			5574	2278	2856	44	176	220	
21	A	1	Total	C	H	Mg	N	O	0
			5574	2278	2856	44	176	220	
21	A	1	Total	C	H	Mg	N	O	0
			5574	2278	2856	44	176	220	
21	A	1	Total	C	H	Mg	N	O	0
			5574	2278	2856	44	176	220	
21	A	1	Total	C	H	Mg	N	O	0
			5574	2278	2856	44	176	220	
21	A	1	Total	C	H	Mg	N	O	0
			5574	2278	2856	44	176	220	
21	A	1	Total	C	H	Mg	N	O	0
			5574	2278	2856	44	176	220	
21	A	1	Total	C	H	Mg	N	O	0
			5574	2278	2856	44	176	220	
21	A	1	Total	C	H	Mg	N	O	0
			5574	2278	2856	44	176	220	

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Mol	Chain	Residues	Atoms	AltConf
21	B	1	Total C H Mg N O 5043 2063 2580 40 160 200	0
21	B	1	Total C H Mg N O 5043 2063 2580 40 160 200	0
21	B	1	Total C H Mg N O 5043 2063 2580 40 160 200	0
21	B	1	Total C H Mg N O 5043 2063 2580 40 160 200	0
21	B	1	Total C H Mg N O 5043 2063 2580 40 160 200	0
21	B	1	Total C H Mg N O 5043 2063 2580 40 160 200	0
21	B	1	Total C H Mg N O 5043 2063 2580 40 160 200	0
21	B	1	Total C H Mg N O 5043 2063 2580 40 160 200	0
21	B	1	Total C H Mg N O 5043 2063 2580 40 160 200	0
21	B	1	Total C H Mg N O 5043 2063 2580 40 160 200	0
21	B	1	Total C H Mg N O 5043 2063 2580 40 160 200	0
21	B	1	Total C H Mg N O 5043 2063 2580 40 160 200	0
21	B	1	Total C H Mg N O 5043 2063 2580 40 160 200	0
21	B	1	Total C H Mg N O 5043 2063 2580 40 160 200	0
21	B	1	Total C H Mg N O 5043 2063 2580 40 160 200	0
21	B	1	Total C H Mg N O 5043 2063 2580 40 160 200	0
21	B	1	Total C H Mg N O 5043 2063 2580 40 160 200	0
21	B	1	Total C H Mg N O 5043 2063 2580 40 160 200	0
21	B	1	Total C H Mg N O 5043 2063 2580 40 160 200	0
21	B	1	Total C H Mg N O 5043 2063 2580 40 160 200	0
21	B	1	Total C H Mg N O 5043 2063 2580 40 160 200	0

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Mol	Chain	Residues	Atoms						AltConf
21	B	1	Total 5043	C 2063	H 2580	Mg 40	N 160	O 200	0
21	B	1	Total 5043	C 2063	H 2580	Mg 40	N 160	O 200	0
21	B	1	Total 5043	C 2063	H 2580	Mg 40	N 160	O 200	0
21	B	1	Total 5043	C 2063	H 2580	Mg 40	N 160	O 200	0
21	B	1	Total 5043	C 2063	H 2580	Mg 40	N 160	O 200	0
21	B	1	Total 5043	C 2063	H 2580	Mg 40	N 160	O 200	0
21	B	1	Total 5043	C 2063	H 2580	Mg 40	N 160	O 200	0
21	B	1	Total 5043	C 2063	H 2580	Mg 40	N 160	O 200	0
21	B	1	Total 5043	C 2063	H 2580	Mg 40	N 160	O 200	0
21	B	1	Total 5043	C 2063	H 2580	Mg 40	N 160	O 200	0
21	B	1	Total 5043	C 2063	H 2580	Mg 40	N 160	O 200	0
21	B	1	Total 5043	C 2063	H 2580	Mg 40	N 160	O 200	0
21	B	1	Total 5043	C 2063	H 2580	Mg 40	N 160	O 200	0
21	B	1	Total 5043	C 2063	H 2580	Mg 40	N 160	O 200	0
21	B	1	Total 5043	C 2063	H 2580	Mg 40	N 160	O 200	0
21	B	1	Total 5043	C 2063	H 2580	Mg 40	N 160	O 200	0
21	B	1	Total 5043	C 2063	H 2580	Mg 40	N 160	O 200	0
21	B	1	Total 5043	C 2063	H 2580	Mg 40	N 160	O 200	0
21	B	1	Total 5043	C 2063	H 2580	Mg 40	N 160	O 200	0
21	F	1	Total 352	C 145	H 177	Mg 3	N 12	O 15	0
21	F	1	Total 352	C 145	H 177	Mg 3	N 12	O 15	0

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Mol	Chain	Residues	Atoms	AltConf
21	F	1	Total C H Mg N O 352 145 177 3 12 15	0
21	G	1	Total C H Mg N O 198 86 92 2 8 10	0
21	G	1	Total C H Mg N O 198 86 92 2 8 10	0
21	J	1	Total C H Mg N O 104 45 49 1 4 5	0
21	L	1	Total C H Mg N O 215 90 105 2 8 10	0
21	L	1	Total C H Mg N O 215 90 105 2 8 10	0
21	K	1	Total C H Mg N O 354 156 158 4 16 20	0
21	K	1	Total C H Mg N O 354 156 158 4 16 20	0
21	K	1	Total C H Mg N O 354 156 158 4 16 20	0
21	K	1	Total C H Mg N O 354 156 158 4 16 20	0
21	1	1	Total C H Mg N O 1264 529 625 11 44 55	0
21	1	1	Total C H Mg N O 1264 529 625 11 44 55	0
21	1	1	Total C H Mg N O 1264 529 625 11 44 55	0
21	1	1	Total C H Mg N O 1264 529 625 11 44 55	0
21	1	1	Total C H Mg N O 1264 529 625 11 44 55	0
21	1	1	Total C H Mg N O 1264 529 625 11 44 55	0
21	1	1	Total C H Mg N O 1264 529 625 11 44 55	0
21	1	1	Total C H Mg N O 1264 529 625 11 44 55	0
21	1	1	Total C H Mg N O 1264 529 625 11 44 55	0
21	1	1	Total C H Mg N O 1264 529 625 11 44 55	0
21	1	1	Total C H Mg N O 1264 529 625 11 44 55	0

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Mol	Chain	Residues	Atoms	AltConf
21	3	1	Total C H Mg N O 1425 602 695 13 52 63	0
21	3	1	Total C H Mg N O 1425 602 695 13 52 63	0
21	3	1	Total C H Mg N O 1425 602 695 13 52 63	0
21	3	1	Total C H Mg N O 1425 602 695 13 52 63	0
21	3	1	Total C H Mg N O 1425 602 695 13 52 63	0
21	3	1	Total C H Mg N O 1425 602 695 13 52 63	0
21	3	1	Total C H Mg N O 1425 602 695 13 52 63	0
21	3	1	Total C H Mg N O 1425 602 695 13 52 63	0
21	3	1	Total C H Mg N O 1425 602 695 13 52 63	0
21	3	1	Total C H Mg N O 1425 602 695 13 52 63	0
21	3	1	Total C H Mg N O 1425 602 695 13 52 63	0
21	3	1	Total C H Mg N O 1425 602 695 13 52 63	0
21	3	1	Total C H Mg N O 1425 602 695 13 52 63	0
21	7	1	Total C H Mg N O 1250 534 598 12 48 58	0
21	7	1	Total C H Mg N O 1250 534 598 12 48 58	0
21	7	1	Total C H Mg N O 1250 534 598 12 48 58	0
21	7	1	Total C H Mg N O 1250 534 598 12 48 58	0
21	7	1	Total C H Mg N O 1250 534 598 12 48 58	0
21	7	1	Total C H Mg N O 1250 534 598 12 48 58	0
21	7	1	Total C H Mg N O 1250 534 598 12 48 58	0
21	7	1	Total C H Mg N O 1250 534 598 12 48 58	0

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Mol	Chain	Residues	Atoms	AltConf
21	7	1	Total C H Mg N O 1250 534 598 12 48 58	0
21	7	1	Total C H Mg N O 1250 534 598 12 48 58	0
21	7	1	Total C H Mg N O 1250 534 598 12 48 58	0
21	7	1	Total C H Mg N O 1250 534 598 12 48 58	0
21	8	1	Total C H Mg N O 1204 507 587 11 44 55	0
21	8	1	Total C H Mg N O 1204 507 587 11 44 55	0
21	8	1	Total C H Mg N O 1204 507 587 11 44 55	0
21	8	1	Total C H Mg N O 1204 507 587 11 44 55	0
21	8	1	Total C H Mg N O 1204 507 587 11 44 55	0
21	8	1	Total C H Mg N O 1204 507 587 11 44 55	0
21	8	1	Total C H Mg N O 1204 507 587 11 44 55	0
21	8	1	Total C H Mg N O 1204 507 587 11 44 55	0
21	8	1	Total C H Mg N O 1204 507 587 11 44 55	0
21	8	1	Total C H Mg N O 1204 507 587 11 44 55	0
21	8	1	Total C H Mg N O 1204 507 587 11 44 55	0
21	Z	1	Total C H Mg N O 1253 527 616 11 44 55	0
21	Z	1	Total C H Mg N O 1253 527 616 11 44 55	0
21	Z	1	Total C H Mg N O 1253 527 616 11 44 55	0
21	Z	1	Total C H Mg N O 1253 527 616 11 44 55	0
21	Z	1	Total C H Mg N O 1253 527 616 11 44 55	0
21	Z	1	Total C H Mg N O 1253 527 616 11 44 55	0

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Mol	Chain	Residues	Atoms	AltConf
21	Z	1	Total C H Mg N O 1253 527 616 11 44 55	0
21	Z	1	Total C H Mg N O 1253 527 616 11 44 55	0
21	Z	1	Total C H Mg N O 1253 527 616 11 44 55	0
21	Z	1	Total C H Mg N O 1253 527 616 11 44 55	0
21	Z	1	Total C H Mg N O 1253 527 616 11 44 55	0
21	4	1	Total C H Mg N O 1099 465 534 10 40 50	0
21	4	1	Total C H Mg N O 1099 465 534 10 40 50	0
21	4	1	Total C H Mg N O 1099 465 534 10 40 50	0
21	4	1	Total C H Mg N O 1099 465 534 10 40 50	0
21	4	1	Total C H Mg N O 1099 465 534 10 40 50	0
21	4	1	Total C H Mg N O 1099 465 534 10 40 50	0
21	4	1	Total C H Mg N O 1099 465 534 10 40 50	0
21	4	1	Total C H Mg N O 1099 465 534 10 40 50	0
21	4	1	Total C H Mg N O 1099 465 534 10 40 50	0
21	4	1	Total C H Mg N O 1099 465 534 10 40 50	0
21	5	1	Total C H Mg N O 1452 610 712 13 52 65	0
21	5	1	Total C H Mg N O 1452 610 712 13 52 65	0
21	5	1	Total C H Mg N O 1452 610 712 13 52 65	0
21	5	1	Total C H Mg N O 1452 610 712 13 52 65	0
21	5	1	Total C H Mg N O 1452 610 712 13 52 65	0
21	5	1	Total C H Mg N O 1452 610 712 13 52 65	0

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Mol	Chain	Residues	Atoms						AltConf
21	5	1	Total 1452	C 610	H 712	Mg 13	N 52	O 65	0
21	5	1	Total 1452	C 610	H 712	Mg 13	N 52	O 65	0
21	5	1	Total 1452	C 610	H 712	Mg 13	N 52	O 65	0
21	5	1	Total 1452	C 610	H 712	Mg 13	N 52	O 65	0
21	5	1	Total 1452	C 610	H 712	Mg 13	N 52	O 65	0
21	5	1	Total 1452	C 610	H 712	Mg 13	N 52	O 65	0
21	5	1	Total 1452	C 610	H 712	Mg 13	N 52	O 65	0
21	6	1	Total 1233	C 518	H 605	Mg 11	N 44	O 55	0
21	6	1	Total 1233	C 518	H 605	Mg 11	N 44	O 55	0
21	6	1	Total 1233	C 518	H 605	Mg 11	N 44	O 55	0
21	6	1	Total 1233	C 518	H 605	Mg 11	N 44	O 55	0
21	6	1	Total 1233	C 518	H 605	Mg 11	N 44	O 55	0
21	6	1	Total 1233	C 518	H 605	Mg 11	N 44	O 55	0
21	6	1	Total 1233	C 518	H 605	Mg 11	N 44	O 55	0
21	6	1	Total 1233	C 518	H 605	Mg 11	N 44	O 55	0
21	6	1	Total 1233	C 518	H 605	Mg 11	N 44	O 55	0
21	6	1	Total 1233	C 518	H 605	Mg 11	N 44	O 55	0
21	6	1	Total 1233	C 518	H 605	Mg 11	N 44	O 55	0
21	9	1	Total 962	C 417	H 445	Mg 10	N 40	O 50	0
21	9	1	Total 962	C 417	H 445	Mg 10	N 40	O 50	0
21	9	1	Total 962	C 417	H 445	Mg 10	N 40	O 50	0

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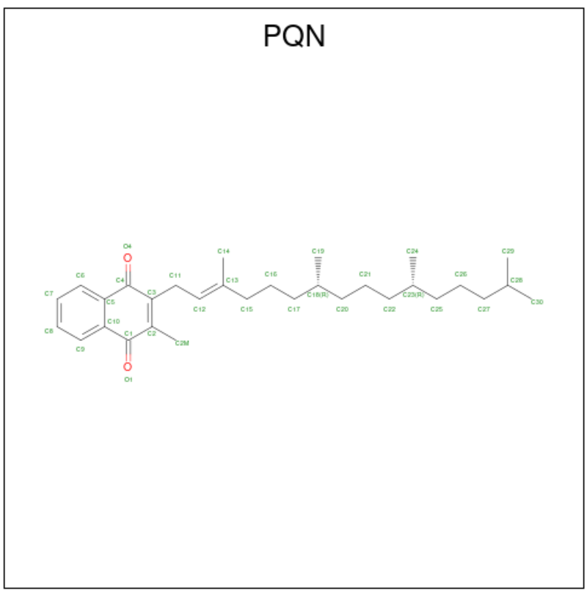
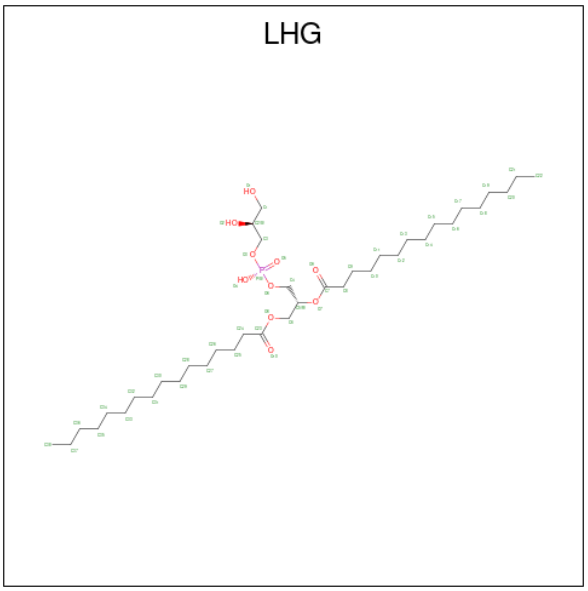
Mol	Chain	Residues	Atoms	AltConf
21	9	1	Total C H Mg N O 962 417 445 10 40 50	0
21	9	1	Total C H Mg N O 962 417 445 10 40 50	0
21	9	1	Total C H Mg N O 962 417 445 10 40 50	0
21	9	1	Total C H Mg N O 962 417 445 10 40 50	0
21	9	1	Total C H Mg N O 962 417 445 10 40 50	0
21	9	1	Total C H Mg N O 962 417 445 10 40 50	0
21	9	1	Total C H Mg N O 962 417 445 10 40 50	0

- Molecule 22 is PHYLLOQUINONE (three-letter code: PQN) (formula: $C_{31}H_{46}O_2$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms	AltConf
22	A	1	Total C H O 79 31 46 2	0
22	B	1	Total C H O 79 31 46 2	0

- Molecule 23 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (three-letter code: LHG) (formula: $C_{38}H_{75}O_{10}P$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms					AltConf
23	A	1	Total	C	H	O	P	0
			210	65	123	20	2	
23	A	1	Total	C	H	O	P	0
			210	65	123	20	2	
23	B	1	Total	C	H	O	P	0
			108	34	63	10	1	
23	1	1	Total	C	H	O	P	0
			102	33	58	10	1	
23	3	1	Total	C	H	O	P	0
			177	56	99	20	2	
23	3	1	Total	C	H	O	P	0
			177	56	99	20	2	
23	7	1	Total	C	H	O	P	0
			123	38	74	10	1	
23	8	1	Total	C	H	O	P	0
			105	33	61	10	1	
23	Z	1	Total	C	H	O	P	0
			87	28	48	10	1	
23	4	1	Total	C	H	O	P	0
			210	65	123	20	2	
23	4	1	Total	C	H	O	P	0
			210	65	123	20	2	
23	5	1	Total	C	H	O	P	0
			81	26	44	10	1	
23	6	1	Total	C	H	O	P	0
			201	63	116	20	2	
23	6	1	Total	C	H	O	P	0
			201	63	116	20	2	

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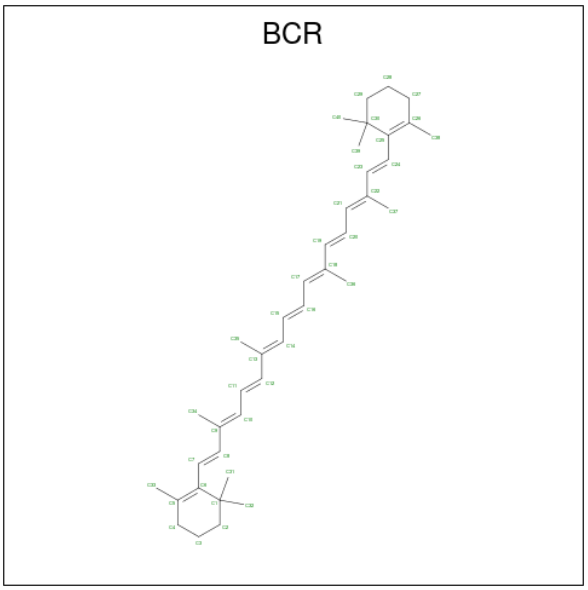
Mol	Chain	Residues	Atoms					AltConf
23	9	1	Total	C	H	O	P	0
			72	23	38	10	1	

- Molecule 24 is BETA-CAROTENE (three-letter code: BCR) (formula: $C_{40}H_{56}$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms			AltConf
24	A	1	Total	C	H	0
			480	200	280	
24	A	1	Total	C	H	0
			480	200	280	
24	A	1	Total	C	H	0
			480	200	280	
24	A	1	Total	C	H	0
			480	200	280	
24	A	1	Total	C	H	0
			480	200	280	
24	B	1	Total	C	H	0
			672	280	392	
24	B	1	Total	C	H	0
			672	280	392	
24	B	1	Total	C	H	0
			672	280	392	
24	B	1	Total	C	H	0
			672	280	392	
24	B	1	Total	C	H	0
			672	280	392	

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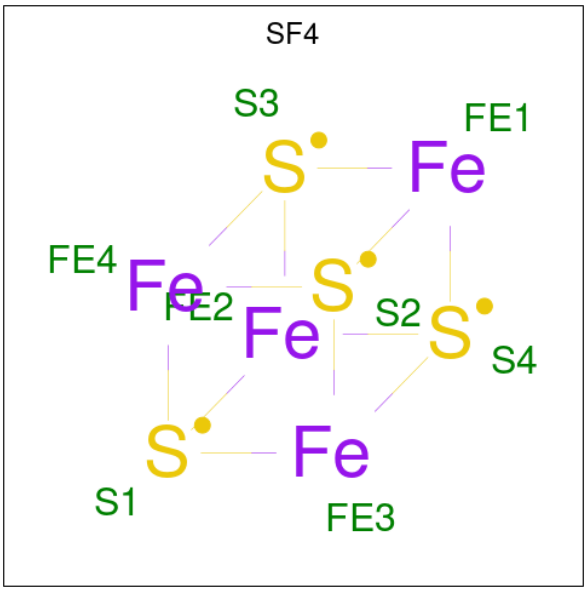
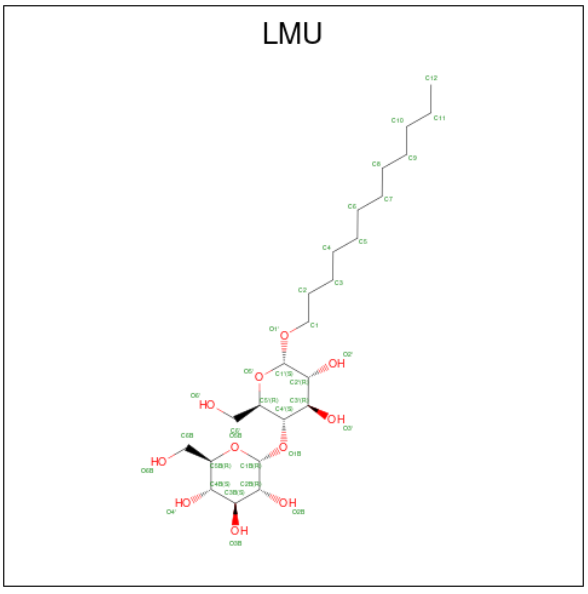
Mol	Chain	Residues	Atoms	AltConf
24	B	1	Total C H 672 280 392	0
24	B	1	Total C H 672 280 392	0
24	G	1	Total C H 96 40 56	0
24	I	1	Total C H 96 40 56	0
24	J	1	Total C H 96 40 56	0
24	L	1	Total C H 192 80 112	0
24	L	1	Total C H 192 80 112	0
24	K	1	Total C H 192 80 112	0
24	K	1	Total C H 192 80 112	0
24	3	1	Total C H 288 120 168	0
24	3	1	Total C H 288 120 168	0
24	3	1	Total C H 288 120 168	0
24	7	1	Total C H 96 40 56	0
24	8	1	Total C H 96 40 56	0
24	4	1	Total C H 96 40 56	0
24	5	1	Total C H 96 40 56	0
24	6	1	Total C H 96 40 56	0

- Molecule 25 is IRON/SULFUR CLUSTER (three-letter code: SF4) (formula: Fe_4S_4) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms	AltConf
25	A	1	Total Fe S 8 4 4	0
25	C	1	Total Fe S 16 8 8	0
25	C	1	Total Fe S 16 8 8	0

- Molecule 26 is DODECYL-ALPHA-D-MALTOSIDE (three-letter code: LMU) (formula: $C_{24}H_{46}O_{11}$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms				AltConf
26	A	1	Total 458	C 139	H 262	O 57	0
26	A	1	Total 458	C 139	H 262	O 57	0
26	A	1	Total 458	C 139	H 262	O 57	0
26	A	1	Total 458	C 139	H 262	O 57	0
26	A	1	Total 458	C 139	H 262	O 57	0
26	A	1	Total 458	C 139	H 262	O 57	0
26	A	1	Total 458	C 139	H 262	O 57	0
26	B	1	Total 81	C 24	H 46	O 11	0
26	G	1	Total 59	C 18	H 35	O 6	0
26	K	1	Total 59	C 18	H 35	O 6	0
26	1	1	Total 349	C 107	H 201	O 41	0
26	1	1	Total 349	C 107	H 201	O 41	0
26	1	1	Total 349	C 107	H 201	O 41	0
26	1	1	Total 349	C 107	H 201	O 41	0
26	1	1	Total 349	C 107	H 201	O 41	0
26	1	1	Total 349	C 107	H 201	O 41	0
26	7	1	Total 173	C 53	H 92	O 28	0
26	7	1	Total 173	C 53	H 92	O 28	0
26	7	1	Total 173	C 53	H 92	O 28	0
26	8	1	Total 258	C 78	H 151	O 29	0
26	8	1	Total 258	C 78	H 151	O 29	0
26	8	1	Total 258	C 78	H 151	O 29	0

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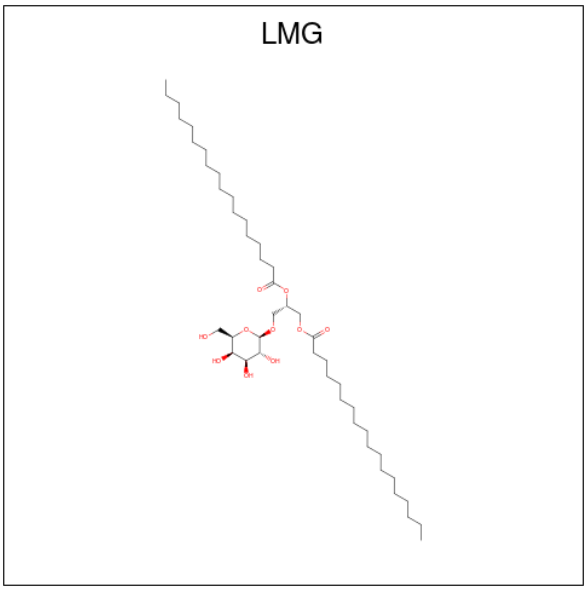
Mol	Chain	Residues	Atoms				AltConf
26	8	1	Total	C	H	O	0
			258	78	151	29	
26	Z	1	Total	C	H	O	0
			116	36	63	17	
26	Z	1	Total	C	H	O	0
			116	36	63	17	
26	4	1	Total	C	H	O	0
			116	36	63	17	
26	4	1	Total	C	H	O	0
			116	36	63	17	
26	5	1	Total	C	H	O	0
			59	18	35	6	
26	6	1	Total	C	H	O	0
			221	68	129	24	
26	6	1	Total	C	H	O	0
			221	68	129	24	
26	6	1	Total	C	H	O	0
			221	68	129	24	
26	6	1	Total	C	H	O	0
			221	68	129	24	

- Molecule 27 is 1,2-DISTEAROYL-MONOGALACTOSYL-DIGLYCERIDE (three-letter code: LMG) (formula: $C_{45}H_{86}O_{10}$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms				AltConf
27	A	1	Total	C	H	O	0
			156	52	84	20	

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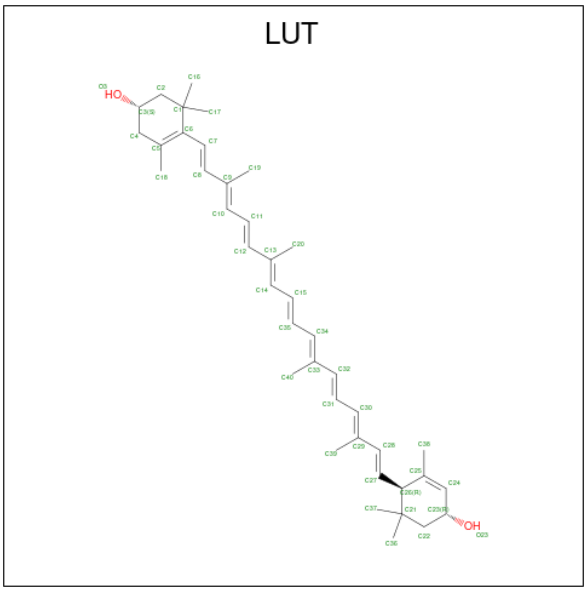
Mol	Chain	Residues	Atoms				AltConf
27	A	1	Total	C	H	O	0
			156	52	84	20	
27	B	1	Total	C	H	O	0
			177	59	98	20	
27	B	1	Total	C	H	O	0
			177	59	98	20	
27	J	1	Total	C	H	O	0
			174	57	97	20	
27	J	1	Total	C	H	O	0
			174	57	97	20	
27	1	1	Total	C	H	O	0
			198	65	113	20	
27	1	1	Total	C	H	O	0
			198	65	113	20	
27	3	1	Total	C	H	O	0
			120	40	75	5	
27	7	1	Total	C	H	O	0
			81	27	44	10	
27	8	1	Total	C	H	O	0
			165	54	91	20	
27	8	1	Total	C	H	O	0
			165	54	91	20	
27	4	1	Total	C	H	O	0
			156	53	88	15	
27	4	1	Total	C	H	O	0
			156	53	88	15	
27	6	1	Total	C	H	O	0
			55	18	35	2	

- Molecule 28 is (3R,3'R,6S)-4,5-DIDEHYDRO-5,6-DIHYDRO-BETA,BETA-CAROTENE-3 ,3'-DIOL (three-letter code: LUT) (formula: $C_{40}H_{56}O_2$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms	AltConf
28	A	1	Total C H O 98 40 56 2	0
28	F	1	Total C H O 98 40 56 2	0
28	1	1	Total C H O 196 80 112 4	0
28	1	1	Total C H O 196 80 112 4	0
28	3	1	Total C H O 294 120 168 6	0
28	3	1	Total C H O 294 120 168 6	0
28	3	1	Total C H O 294 120 168 6	0
28	7	1	Total C H O 196 80 112 4	0
28	7	1	Total C H O 196 80 112 4	0
28	8	1	Total C H O 98 40 56 2	0
28	Z	1	Total C H O 157 65 89 3	0
28	Z	1	Total C H O 157 65 89 3	0
28	4	1	Total C H O 98 40 56 2	0
28	5	1	Total C H O 196 80 112 4	0

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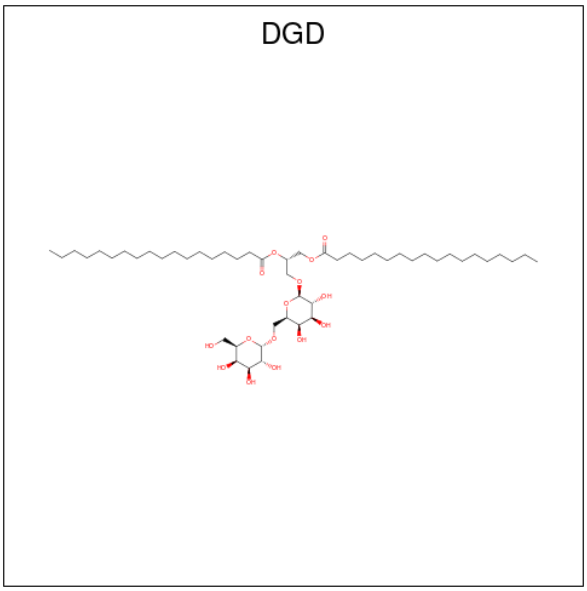
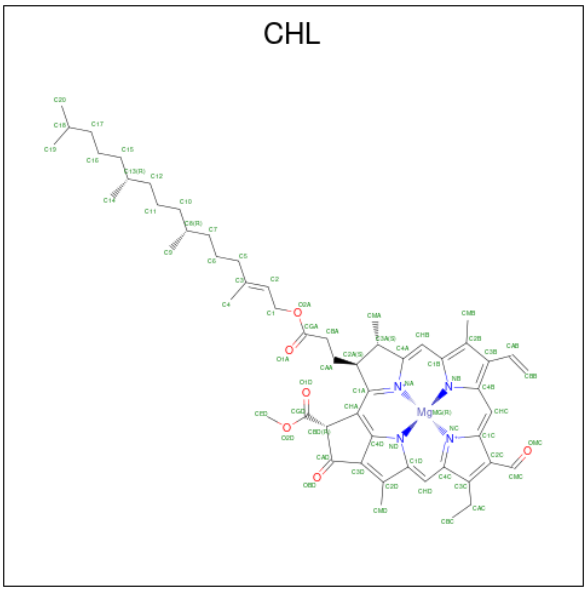
Mol	Chain	Residues	Atoms				AltConf
28	5	1	Total	C	H	O	0
			196	80	112	4	
28	6	1	Total	C	H	O	0
			98	40	56	2	
28	9	1	Total	C	H	O	0
			196	80	112	4	
28	9	1	Total	C	H	O	0
			196	80	112	4	

- Molecule 29 is DIGALACTOSYL DIACYL GLYCEROL (DGDG) (three-letter code: DGD) (formula: $C_{51}H_{96}O_{15}$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms				AltConf
29	B	1	Total	C	H	O	0
			138	44	79	15	

- Molecule 30 is CHLOROPHYLL B (three-letter code: CHL) (formula: $C_{55}H_{70}MgN_4O_6$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms						AltConf
30	1	1	Total	C	H	Mg	N	O	0
			290	125	132	3	12	18	
30	1	1	Total	C	H	Mg	N	O	0
			290	125	132	3	12	18	
30	1	1	Total	C	H	Mg	N	O	0
			290	125	132	3	12	18	
30	3	1	Total	C	H	Mg	N	O	0
			136	55	70	1	4	6	
30	7	1	Total	C	H	Mg	N	O	0
			310	133	144	3	12	18	
30	7	1	Total	C	H	Mg	N	O	0
			310	133	144	3	12	18	
30	7	1	Total	C	H	Mg	N	O	0
			310	133	144	3	12	18	
30	8	1	Total	C	H	Mg	N	O	0
			408	165	210	3	12	18	
30	8	1	Total	C	H	Mg	N	O	0
			408	165	210	3	12	18	
30	8	1	Total	C	H	Mg	N	O	0
			408	165	210	3	12	18	
30	Z	1	Total	C	H	Mg	N	O	0
			349	145	171	3	12	18	
30	Z	1	Total	C	H	Mg	N	O	0
			349	145	171	3	12	18	
30	Z	1	Total	C	H	Mg	N	O	0
			349	145	171	3	12	18	
30	4	1	Total	C	H	Mg	N	O	0
			621	255	311	5	20	30	

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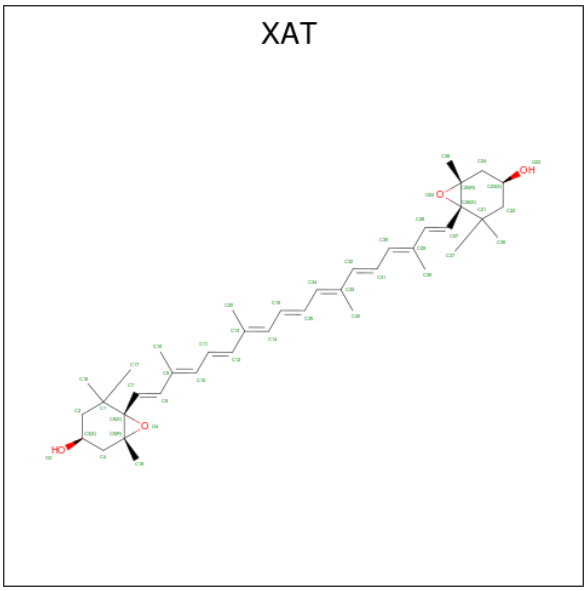
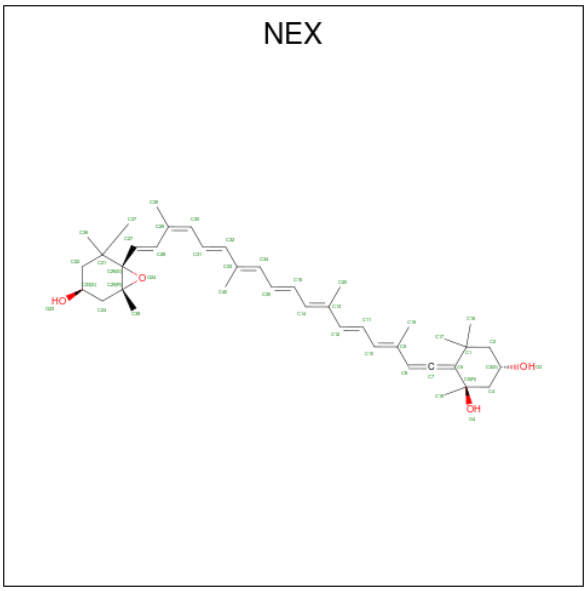
Mol	Chain	Residues	Atoms	AltConf
30	4	1	Total C H Mg N O 621 255 311 5 20 30	0
30	4	1	Total C H Mg N O 621 255 311 5 20 30	0
30	4	1	Total C H Mg N O 621 255 311 5 20 30	0
30	4	1	Total C H Mg N O 621 255 311 5 20 30	0
30	5	1	Total C H Mg N O 373 164 167 4 16 22	0
30	5	1	Total C H Mg N O 373 164 167 4 16 22	0
30	5	1	Total C H Mg N O 373 164 167 4 16 22	0
30	5	1	Total C H Mg N O 373 164 167 4 16 22	0
30	6	1	Total C H Mg N O 677 286 327 6 24 34	0
30	6	1	Total C H Mg N O 677 286 327 6 24 34	0
30	6	1	Total C H Mg N O 677 286 327 6 24 34	0
30	6	1	Total C H Mg N O 677 286 327 6 24 34	0
30	6	1	Total C H Mg N O 677 286 327 6 24 34	0
30	6	1	Total C H Mg N O 677 286 327 6 24 34	0
30	9	1	Total C H Mg N O 157 73 64 2 8 10	0
30	9	1	Total C H Mg N O 157 73 64 2 8 10	0

- Molecule 31 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: $C_{40}H_{56}O_{4}$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms				AltConf
31	1	1	Total	C	H	O	0
			100	40	56	4	
31	7	1	Total	C	H	O	0
			100	40	56	4	
31	8	1	Total	C	H	O	0
			100	40	56	4	
31	Z	1	Total	C	H	O	0
			100	40	56	4	
31	4	1	Total	C	H	O	0
			100	40	56	4	
31	5	1	Total	C	H	O	0
			100	40	56	4	
31	6	1	Total	C	H	O	0
			100	40	56	4	

- Molecule 32 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: $C_{40}H_{56}O_4$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms				AltConf
32	5	1	Total	C	H	O	0
			100	40	56	4	
32	6	1	Total	C	H	O	0
			100	40	56	4	

- Molecule 33 is water.

Mol	Chain	Residues	Atoms		AltConf
33	H	184	Total	O	0
			621	621	
33	H	171	Total	O	0
			621	621	
33	H	35	Total	O	0
			621	621	
33	H	23	Total	O	0
			621	621	
33	H	9	Total	O	0
			621	621	
33	H	28	Total	O	0
			621	621	
33	H	6	Total	O	0
			621	621	
33	H	2	Total	O	0
			621	621	
33	H	2	Total	O	0
			621	621	
33	H	21	Total	O	0
			621	621	

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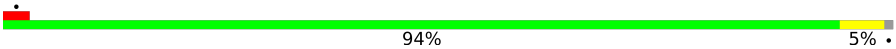
Mol	Chain	Residues	Atoms	AltConf
33	H	28	Total O 621 621	0
33	H	33	Total O 621 621	0
33	H	28	Total O 621 621	0
33	H	11	Total O 621 621	0
33	H	12	Total O 621 621	0
33	H	14	Total O 621 621	0
33	H	14	Total O 621 621	0

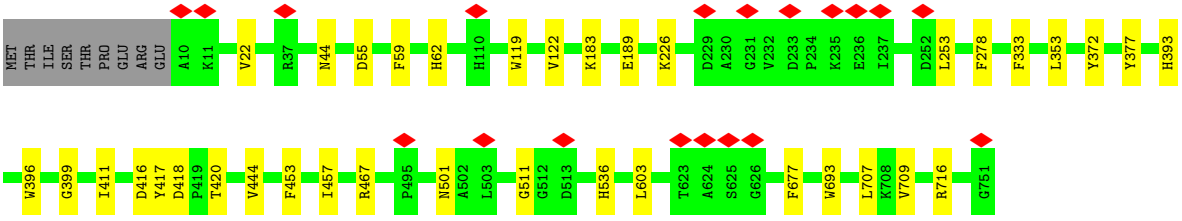
3 Residue-property plots (i)

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 I P700 chlorophyll a apoprotein A1

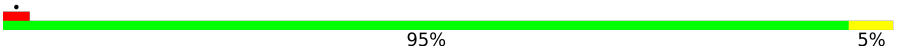
Chain A:

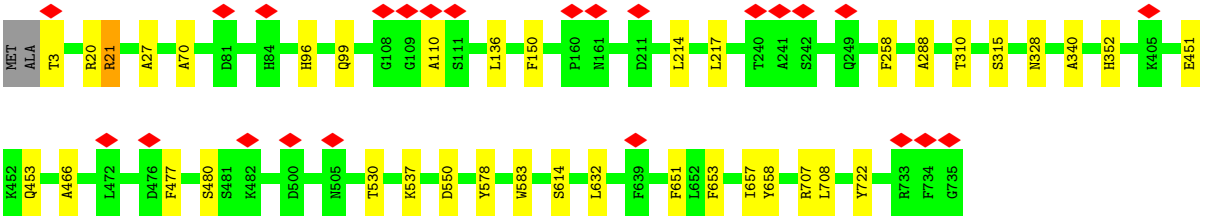




• Molecule 2: Photosystem I P700 chlorophyll a apoprotein A2

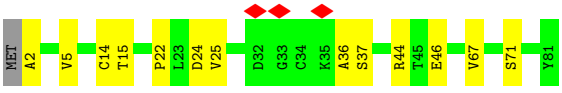
Chain B:





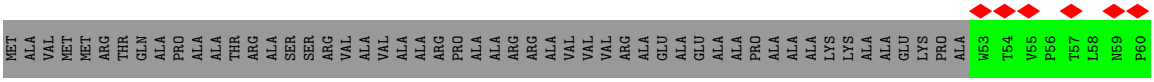
• Molecule 3: Photosystem I iron-sulfur center

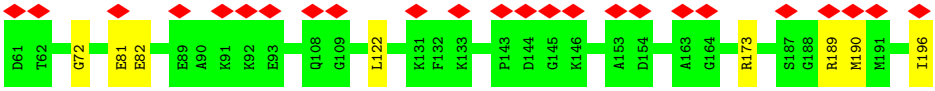
Chain C:



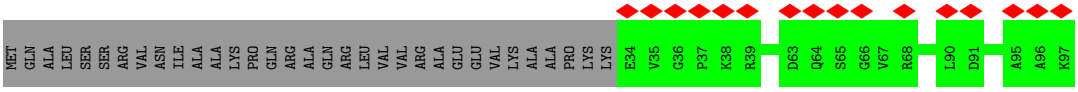
• Molecule 4: Photosystem I reaction center subunit II, chloroplastic

Chain D:

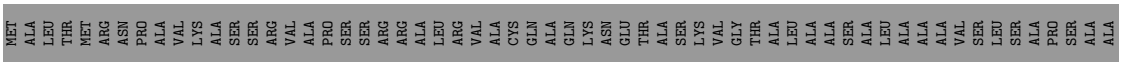


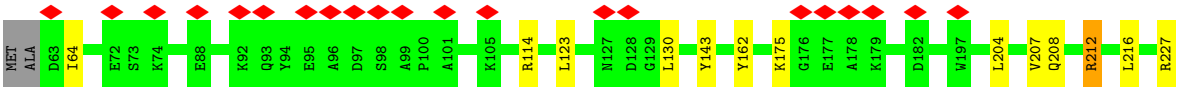


• Molecule 5: Photosystem I reaction center subunit IV, chloroplastic

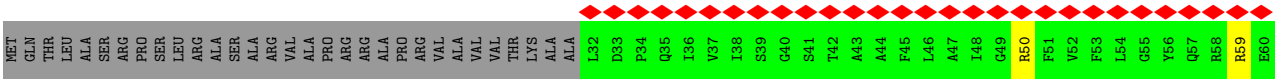


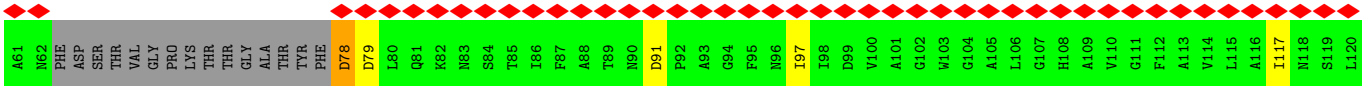
• Molecule 6: Photosystem I reaction center subunit III, chloroplastic

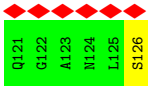




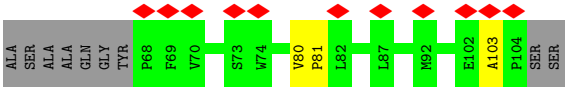
• Molecule 7: Photosystem I reaction center subunit V, chloroplastic



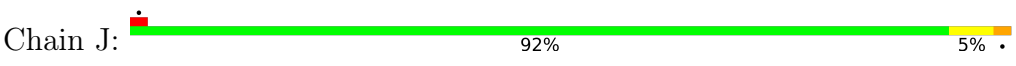


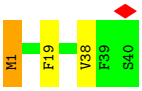


• Molecule 8: Photosystem I reaction center subunit VIII

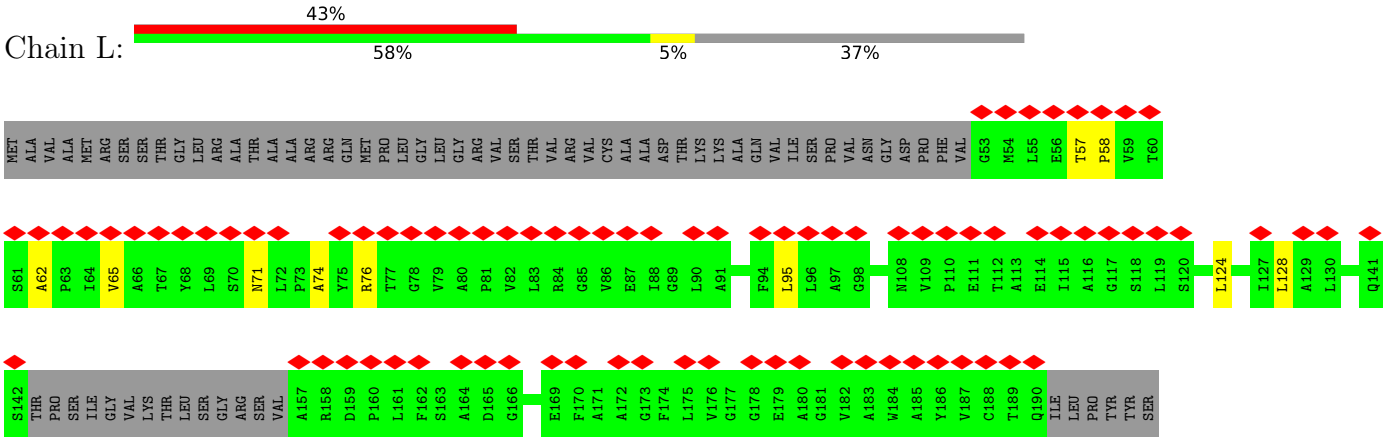


• Molecule 9: Photosystem I reaction center subunit IX

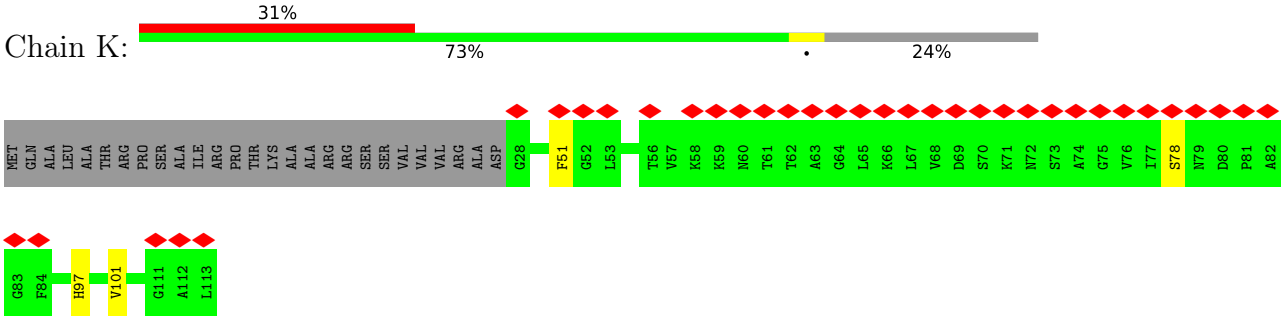




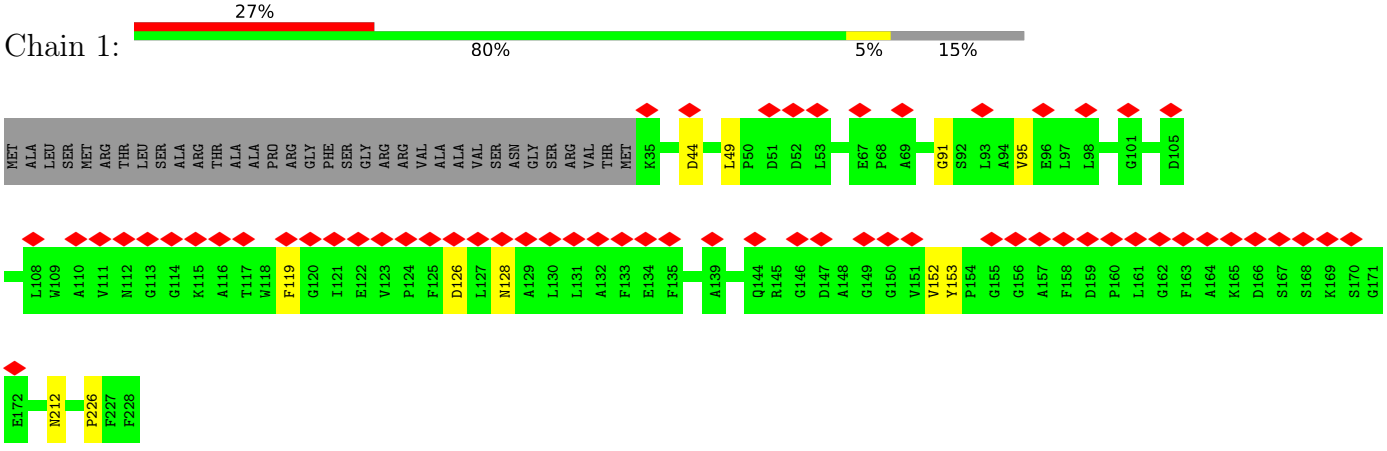
• Molecule 10: PSI subunit V



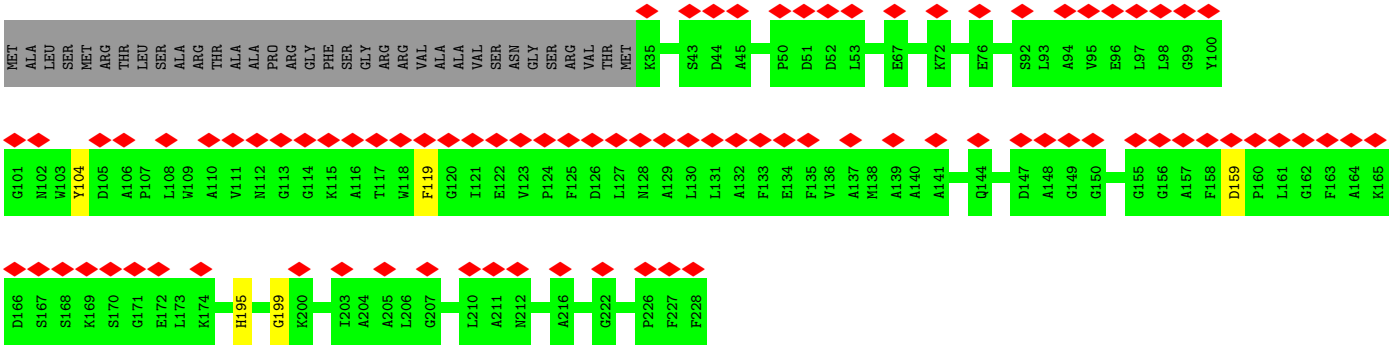
• Molecule 11: Photosystem I reaction center subunit psaK, chloroplastic



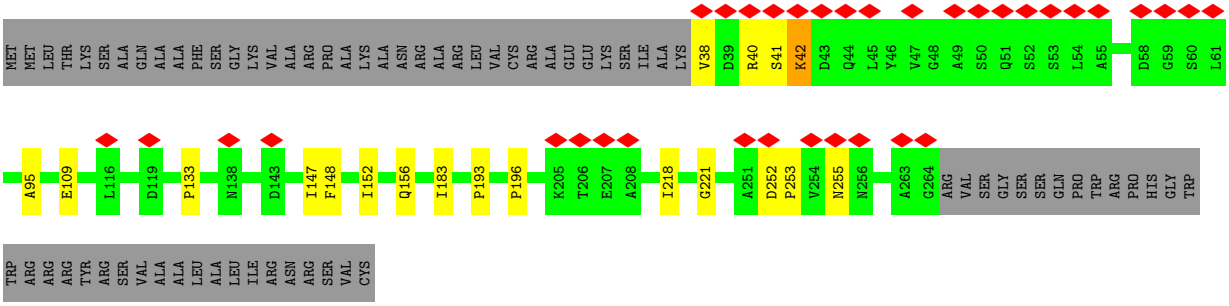
• Molecule 12: Chlorophyll a-b binding protein, chloroplastic



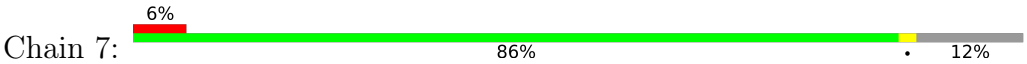
• Molecule 12: Chlorophyll a-b binding protein, chloroplastic

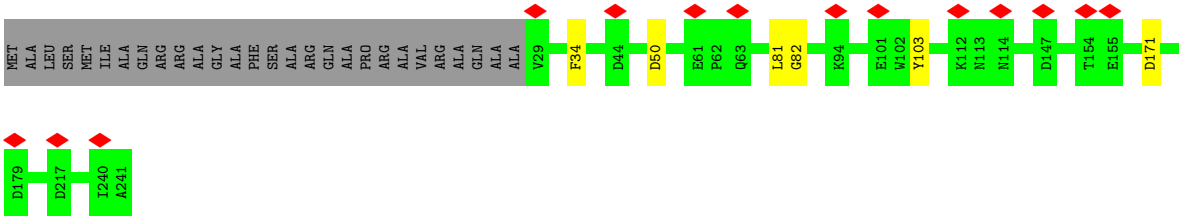


• Molecule 13: Chlorophyll a-b binding protein, chloroplastic

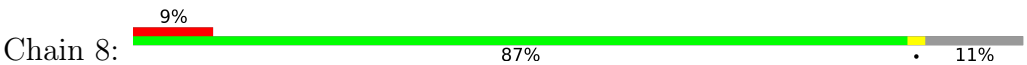


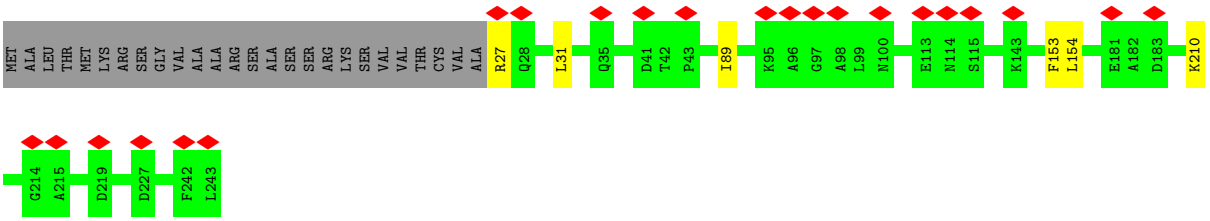
• Molecule 14: Chlorophyll a-b binding protein, chloroplastic



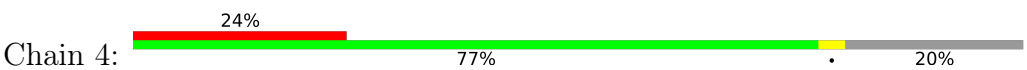


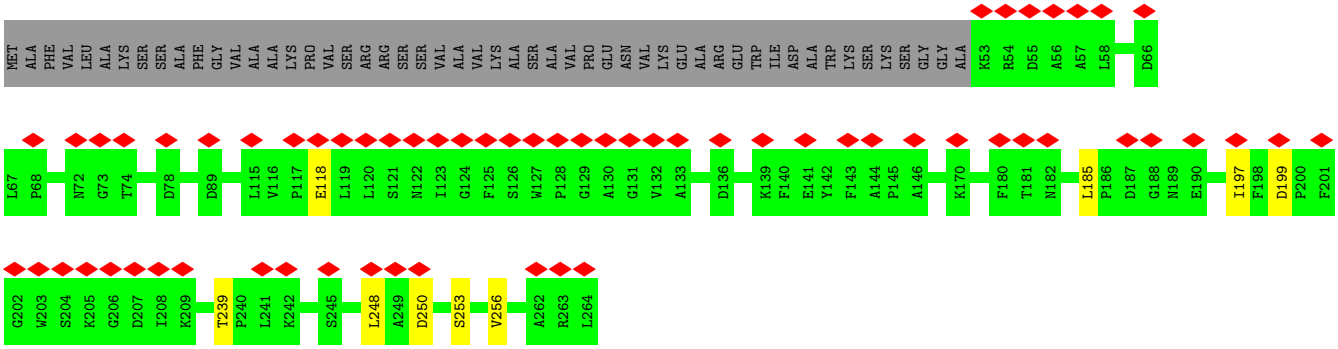
• Molecule 15: Chlorophyll a-b binding protein, chloroplastic





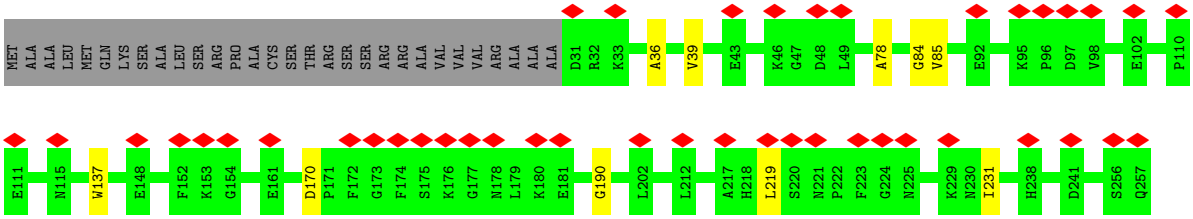
• Molecule 16: Chlorophyll a-b binding protein, chloroplastic (Lhca4)





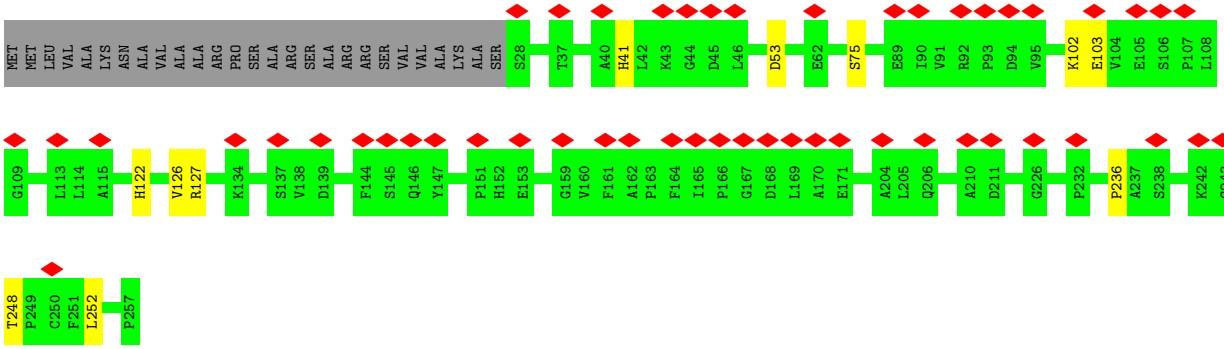
• Molecule 17: Chlorophyll a-b binding protein, chloroplastic

Chain 5:



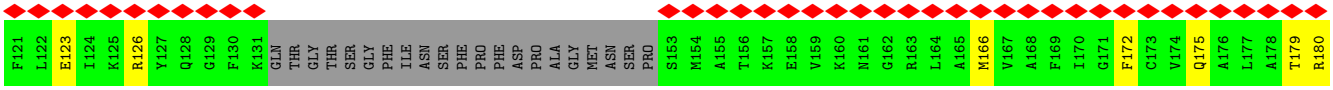
• Molecule 18: Chlorophyll a-b binding protein, chloroplastic

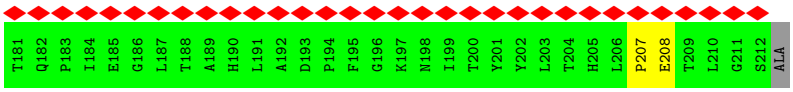
Chain 6:



• Molecule 19: Chlorophyll a-b binding protein, chloroplastic

Chain 9:


F121 L122 E123 I124 K125 R126 Y127 Q128 G129 F130 K131 GLN THR GLY THR SER GLY PHE ILE ASN SER PHE PRO PHE ASP PRO ALA GLY MET ASN SER PRO S153 M154 A155 T156 K157 E158 V159 K160 N161 G162 R163 L164 A165 M166 V167 A168 F169 I170 G171 F172 C173 V174 Q175 A176 L177 A178 T179 R180


T181 Q182 P183 I184 E185 G186 L187 T188 A189 H190 L191 A192 D193 P194 F195 G196 K197 N198 I199 T200 Y201 Y202 L203 T204 H205 L206 P207 E208 T209 L210 G211 S212 ALA

4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	74209	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING ONLY	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/Å^2$)	45.8	Depositor
Minimum defocus (nm)	1000	Depositor
Maximum defocus (nm)	5000	Depositor
Magnification	Not provided	
Image detector	GATAN K3 BIOQUANTUM (6k x 4k)	Depositor
Maximum map value	0.321	Depositor
Minimum map value	-0.124	Depositor
Average map value	0.000	Depositor
Map value standard deviation	0.005	Depositor
Recommended contour level	0.055	Depositor
Map size (Å)	420.0, 420.0, 420.0	wwPDB
Map dimensions	500, 500, 500	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	0.84, 0.84, 0.84	Depositor

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: CL0, SF4, LHG, BCR, LUT, DGD, CLA, AME, CHL, PQN, LMG, XAT, NEX, LMU

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	0.26	0/6021	0.44	0/8208
2	B	0.27	0/6036	0.43	0/8240
3	C	0.27	0/611	0.52	0/826
4	D	0.28	0/1161	0.49	0/1567
5	E	0.29	0/516	0.49	0/700
6	F	0.27	0/1292	0.45	0/1747
7	G	0.25	0/604	0.42	0/818
8	I	0.27	0/293	0.38	0/406
9	J	0.27	0/329	0.42	0/452
10	L	0.26	0/920	0.42	0/1257
11	K	0.26	0/588	0.42	0/795
12	1	0.26	0/1491	0.41	0/2028
12	Z	0.26	0/1491	0.41	0/2028
13	3	0.28	0/1784	0.44	0/2420
14	7	0.28	0/1702	0.42	0/2310
15	8	0.27	0/1701	0.42	0/2315
16	4	0.27	0/1703	0.41	0/2321
17	5	0.27	0/1830	0.42	0/2492
18	6	0.27	0/1834	0.42	0/2505
19	9	0.24	0/1221	0.41	0/1657
All	All	0.27	0/33128	0.43	0/45092

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts (i)

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogen atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, whereas Symm-Clashes lists symmetry-related clashes.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	5825	5673	5675	32	0
2	B	5824	5576	5577	28	0
3	C	601	582	581	9	0
4	D	1133	1151	1150	6	0
5	E	506	505	504	0	0
6	F	1266	1302	1301	9	0
7	G	594	583	581	7	0
8	I	281	292	292	2	0
9	J	329	328	328	4	0
10	L	899	907	905	8	0
11	K	583	620	620	3	0
12	1	1445	1397	1396	8	0
12	Z	1445	1397	1396	4	0
13	3	1736	1695	1694	12	0
14	7	1650	1590	1589	5	0
15	8	1650	1629	1629	3	0
16	4	1648	1603	1602	6	0
17	5	1775	1747	1746	9	0
18	6	1772	1770	1770	6	0
19	9	1190	1196	1192	11	0
20	A	65	72	72	0	0
21	1	639	625	625	10	0
21	3	730	695	695	14	0
21	4	565	534	534	11	0
21	5	740	712	712	14	0
21	6	628	605	605	6	0
21	7	652	598	598	6	0
21	8	617	587	587	8	0
21	9	517	445	445	7	0
21	A	2718	2856	2856	49	0
21	B	2463	2580	2580	40	0
21	F	175	177	177	1	0
21	G	106	92	92	2	0
21	J	55	49	49	2	0
21	K	196	158	158	2	0
21	L	110	105	105	2	0
21	Z	637	616	616	10	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
22	A	33	46	46	2	0
22	B	33	46	46	0	0
23	1	44	58	58	0	0
23	3	78	99	99	2	0
23	4	87	123	123	0	0
23	5	37	44	44	0	0
23	6	85	116	116	1	0
23	7	49	74	74	1	0
23	8	44	61	61	0	0
23	9	34	38	38	0	0
23	A	87	123	123	0	0
23	B	45	63	63	0	0
23	Z	39	48	48	1	0
24	3	120	168	168	2	0
24	4	40	56	56	1	0
24	5	40	56	56	1	0
24	6	40	56	56	3	0
24	7	40	56	56	0	0
24	8	40	56	56	0	0
24	A	200	280	280	12	0
24	B	280	392	392	9	0
24	G	40	56	56	2	0
24	I	40	56	56	0	0
24	J	40	56	56	2	0
24	K	80	112	112	4	0
24	L	80	112	112	2	0
25	A	8	0	0	0	0
25	C	16	0	0	0	0
26	1	148	201	201	1	0
26	4	53	63	63	0	0
26	5	24	35	35	1	0
26	6	92	129	129	0	0
26	7	81	92	92	1	0
26	8	107	151	151	0	0
26	A	196	262	262	2	0
26	B	35	46	46	2	0
26	G	24	35	35	0	0
26	K	24	35	35	0	0
26	Z	53	63	63	0	0
27	1	85	113	113	1	0
27	3	45	75	75	0	0
27	4	68	88	88	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
27	6	20	35	35	0	0
27	7	37	44	44	0	0
27	8	74	91	91	0	0
27	A	72	84	84	4	0
27	B	79	98	98	0	0
27	J	77	97	97	1	0
28	1	84	112	112	0	0
28	3	126	168	168	1	0
28	4	42	56	56	2	0
28	5	84	112	112	4	0
28	6	42	56	56	2	0
28	7	84	112	112	1	0
28	8	42	56	56	0	0
28	9	84	112	112	7	0
28	A	42	56	56	0	0
28	F	42	56	56	4	0
28	Z	68	89	89	3	0
29	B	59	79	79	1	0
30	1	158	132	132	0	0
30	3	66	70	70	1	0
30	4	310	311	311	2	0
30	5	206	167	167	3	0
30	6	350	327	327	2	0
30	7	166	144	144	1	0
30	8	198	210	210	2	0
30	9	93	64	64	0	0
30	Z	178	171	171	2	0
31	1	44	56	56	1	0
31	4	44	56	56	1	0
31	5	44	56	56	2	0
31	6	44	56	56	1	0
31	7	44	56	56	2	0
31	8	44	56	56	1	0
31	Z	44	56	56	1	0
32	5	44	56	56	0	0
32	6	44	56	56	0	0
33	H	621	0	0	25	0
All	All	50499	50501	50486	324	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 3.

The worst 5 of 324 close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:A:810:CLA:H143	21:A:812:CLA:H142	1.59	0.84
3:C:24:ASP:OD2	33:H:590:HOH:O	1.96	0.83
1:A:189:GLU:OE1	33:H:554:HOH:O	1.96	0.83
27:A:860:LMG:O2	9:J:1:AME:OT	1.97	0.82
27:A:859:LMG:O1	27:A:859:LMG:O4	2.00	0.79

There are no symmetry-related clashes.

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	740/751 (98%)	724 (98%)	16 (2%)	0	100	100
2	B	731/735 (100%)	710 (97%)	20 (3%)	1 (0%)	51	63
3	C	78/81 (96%)	76 (97%)	2 (3%)	0	100	100
4	D	142/196 (72%)	138 (97%)	4 (3%)	0	100	100
5	E	62/97 (64%)	61 (98%)	1 (2%)	0	100	100
6	F	163/227 (72%)	162 (99%)	1 (1%)	0	100	100
7	G	76/126 (60%)	73 (96%)	3 (4%)	0	100	100
8	I	35/106 (33%)	34 (97%)	1 (3%)	0	100	100
9	J	38/40 (95%)	38 (100%)	0	0	100	100
10	L	120/196 (61%)	118 (98%)	2 (2%)	0	100	100
11	K	84/113 (74%)	84 (100%)	0	0	100	100
12	1	192/228 (84%)	191 (100%)	1 (0%)	0	100	100
12	Z	192/228 (84%)	188 (98%)	4 (2%)	0	100	100
13	3	225/298 (76%)	218 (97%)	7 (3%)	0	100	100
14	7	211/241 (88%)	205 (97%)	6 (3%)	0	100	100
15	8	215/243 (88%)	212 (99%)	3 (1%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
16	4	210/264 (80%)	209 (100%)	1 (0%)	0	100	100
17	5	225/257 (88%)	222 (99%)	3 (1%)	0	100	100
18	6	228/257 (89%)	223 (98%)	5 (2%)	0	100	100
19	9	148/213 (70%)	145 (98%)	3 (2%)	0	100	100
All	All	4115/4897 (84%)	4031 (98%)	83 (2%)	1 (0%)	100	100

All (1) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	B	21	ARG

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	601/610 (98%)	598 (100%)	3 (0%)	88	95
2	B	596/597 (100%)	592 (99%)	4 (1%)	84	92
3	C	69/70 (99%)	69 (100%)	0	100	100
4	D	121/152 (80%)	121 (100%)	0	100	100
5	E	55/81 (68%)	55 (100%)	0	100	100
6	F	127/169 (75%)	124 (98%)	3 (2%)	49	65
7	G	59/94 (63%)	58 (98%)	1 (2%)	60	75
8	I	31/76 (41%)	31 (100%)	0	100	100
9	J	35/35 (100%)	35 (100%)	0	100	100
10	L	90/148 (61%)	90 (100%)	0	100	100
11	K	59/80 (74%)	59 (100%)	0	100	100
12	1	137/162 (85%)	137 (100%)	0	100	100
12	Z	137/162 (85%)	137 (100%)	0	100	100
13	3	174/230 (76%)	171 (98%)	3 (2%)	60	75

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
14	7	164/181 (91%)	163 (99%)	1 (1%)	86 93
15	8	163/183 (89%)	160 (98%)	3 (2%)	59 74
16	4	166/205 (81%)	166 (100%)	0	100 100
17	5	184/206 (89%)	184 (100%)	0	100 100
18	6	184/203 (91%)	183 (100%)	1 (0%)	88 95
19	9	117/159 (74%)	117 (100%)	0	100 100
All	All	3269/3803 (86%)	3250 (99%)	19 (1%)	86 93

5 of 19 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
14	7	34	PHE
15	8	210	LYS
18	6	75	SER
15	8	153	PHE
6	F	212	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (4) such sidechains are listed below:

Mol	Chain	Res	Type
2	B	453	GLN
16	4	182	ASN
17	5	257	GLN
19	9	40	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)

1 non-standard protein/DNA/RNA residue is 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	$\#\|Z\| > 2$
9	AME	J	1	9	9,10,11	0.49	0	9,11,13	0.93	1 (11%)

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
9	AME	J	1	9	-	4/9/10/12	-

There are no bond length outliers.

All (1) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
9	J	1	AME	O-C-CA	-2.60	117.97	124.78

There are no chirality outliers.

All (4) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
9	J	1	AME	C-CA-CB-CG
9	J	1	AME	N-CA-CB-CG
9	J	1	AME	CT2-CT1-N-CA
9	J	1	AME	OT-CT1-N-CA

There are no ring outliers.

1 monomer is involved in 2 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
9	J	1	AME	2	0

5.5 Carbohydrates (i)

There are no monosaccharides in this entry.

5.6 Ligand geometry (i)

351 ligands 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	$\#\|Z\| > 2$
24	BCR	B	843	-	41,41,41	0.14	0	56,56,56	0.29	0
26	LMU	B	853	-	36,36,36	0.10	0	47,47,47	0.33	0
21	CLA	6	610	18	60,68,73	1.05	4 (6%)	70,107,113	0.89	2 (2%)
21	CLA	9	603	19	55,63,73	1.14	3 (5%)	64,101,113	0.93	2 (3%)
21	CLA	G	204	7	46,54,73	1.25	3 (6%)	53,90,113	0.99	2 (3%)
21	CLA	8	604	33	60,68,73	1.06	4 (6%)	70,107,113	0.89	2 (2%)
21	CLA	A	819	-	60,68,73	1.02	4 (6%)	70,107,113	0.90	2 (2%)
21	CLA	4	613	16	65,73,73	1.04	3 (4%)	76,113,113	0.85	2 (2%)
21	CLA	7	614	-	43,51,73	1.25	4 (9%)	49,86,113	1.02	2 (4%)
21	CLA	5	614	-	45,53,73	1.23	3 (6%)	52,89,113	1.03	2 (3%)
21	CLA	A	820	-	65,73,73	0.99	4 (6%)	76,113,113	0.86	2 (2%)
26	LMU	Z	622	-	32,32,36	0.10	0	43,43,47	0.20	0
21	CLA	A	804	-	65,73,73	0.99	4 (6%)	76,113,113	0.81	2 (2%)
28	LUT	5	626	-	42,43,43	0.26	0	51,60,60	0.40	0
21	CLA	6	602	18	65,73,73	1.02	3 (4%)	76,113,113	0.87	2 (2%)
21	CLA	6	609	18	55,63,73	1.11	4 (7%)	64,101,113	0.91	2 (3%)
26	LMU	A	864	-	24,24,36	0.13	0	29,29,47	0.29	0
28	LUT	3	720	-	42,43,43	0.23	0	51,60,60	0.30	0
21	CLA	B	816	-	65,73,73	1.03	4 (6%)	76,113,113	0.85	2 (2%)
21	CLA	J	101	9	55,63,73	1.09	3 (5%)	64,101,113	0.93	2 (3%)
21	CLA	A	828	-	65,73,73	0.99	4 (6%)	76,113,113	0.79	2 (2%)
21	CLA	3	615	33	65,73,73	1.03	3 (4%)	76,113,113	0.88	2 (2%)
21	CLA	9	610	19	60,68,73	1.08	3 (5%)	70,107,113	0.89	3 (4%)
21	CLA	B	819	33	60,68,73	1.06	4 (6%)	70,107,113	0.90	2 (2%)
27	LMG	J	103	-	42,42,55	0.18	0	50,50,63	0.42	0
26	LMU	8	627	-	36,36,36	0.10	0	47,47,47	0.37	0
21	CLA	9	601	19	46,54,73	1.23	3 (6%)	53,90,113	1.02	2 (3%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
21	CLA	A	836	-	65,73,73	1.00	3 (4%)	76,113,113	0.84	2 (2%)
21	CLA	K	203	33	60,68,73	1.08	3 (5%)	70,107,113	0.92	2 (2%)
21	CLA	1	603	-	57,65,73	1.07	4 (7%)	66,103,113	0.93	2 (3%)
26	LMU	8	624	-	24,24,36	0.12	0	29,29,47	0.25	0
28	LUT	1	617	-	42,43,43	0.27	0	51,60,60	0.43	0
21	CLA	3	602	13	60,68,73	1.03	3 (5%)	70,107,113	0.88	2 (2%)
26	LMU	8	625	-	24,24,36	0.13	0	29,29,47	0.30	0
21	CLA	8	608	33	50,58,73	1.17	4 (8%)	58,95,113	0.97	2 (3%)
21	CLA	F	303	33	45,53,73	1.23	4 (8%)	52,89,113	1.00	2 (3%)
21	CLA	Z	612	12	45,53,73	1.26	3 (6%)	52,89,113	1.02	2 (3%)
21	CLA	8	610	15	65,73,73	0.97	4 (6%)	76,113,113	0.84	2 (2%)
21	CLA	6	604	-	65,73,73	1.02	4 (6%)	76,113,113	0.86	2 (2%)
21	CLA	A	842	-	65,73,73	0.95	4 (6%)	76,113,113	0.86	2 (2%)
21	CLA	5	604	33	55,63,73	1.12	3 (5%)	64,101,113	0.92	2 (3%)
21	CLA	9	613	19	65,73,73	1.04	3 (4%)	76,113,113	0.85	2 (2%)
21	CLA	B	814	-	60,68,73	1.05	3 (5%)	70,107,113	0.93	3 (4%)
24	BCR	G	205	-	41,41,41	0.12	0	56,56,56	0.31	0
23	LHG	8	620	21	43,43,48	0.27	0	46,49,54	0.27	0
24	BCR	B	846	-	41,41,41	0.15	0	56,56,56	0.36	0
30	CHL	4	601	16	66,74,74	2.02	10 (15%)	73,114,114	1.17	9 (12%)
21	CLA	A	831	-	65,73,73	1.00	3 (4%)	76,113,113	0.86	2 (2%)
21	CLA	B	838	-	50,58,73	1.17	3 (6%)	58,95,113	1.00	3 (5%)
21	CLA	4	614	-	55,63,73	1.15	3 (5%)	64,101,113	0.94	2 (3%)
30	CHL	4	606	33	66,74,74	1.99	10 (15%)	73,114,114	1.13	7 (9%)
21	CLA	4	602	16	60,68,73	1.06	4 (6%)	70,107,113	0.92	2 (2%)
21	CLA	6	617	-	45,53,73	1.22	4 (8%)	52,89,113	1.04	2 (3%)
21	CLA	A	840	-	65,73,73	1.02	4 (6%)	76,113,113	0.86	2 (2%)
21	CLA	B	834	-	60,68,73	1.02	4 (6%)	70,107,113	0.88	2 (2%)
30	CHL	8	607	33	66,74,74	1.95	9 (13%)	73,114,114	1.16	8 (10%)
24	BCR	A	852	-	41,41,41	0.15	0	56,56,56	0.39	0
26	LMU	Z	621	-	22,22,36	0.13	0	27,27,47	0.28	0
28	LUT	Z	619	-	26,26,43	0.36	0	34,35,60	0.36	0
21	CLA	B	824	33	65,73,73	1.06	3 (4%)	76,113,113	0.85	2 (2%)
21	CLA	B	822	-	59,67,73	1.06	4 (6%)	68,105,113	0.91	2 (2%)
30	CHL	6	608	33	51,59,74	2.30	10 (19%)	55,96,114	1.29	7 (12%)
25	SF4	C	102	3	0,12,12	-	-	-		
21	CLA	B	830	-	45,53,73	1.21	3 (6%)	52,89,113	0.99	2 (3%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
21	CLA	B	835	33	45,53,73	1.23	3 (6%)	52,89,113	0.99	2 (3%)
21	CLA	4	604	33	50,58,73	1.16	4 (8%)	58,95,113	1.00	3 (5%)
21	CLA	B	807	-	55,63,73	1.10	3 (5%)	64,101,113	0.91	2 (3%)
21	CLA	A	824	-	45,53,73	1.24	3 (6%)	52,89,113	1.02	2 (3%)
21	CLA	A	822	33	65,73,73	0.99	4 (6%)	76,113,113	0.88	2 (2%)
21	CLA	B	828	-	65,73,73	1.00	3 (4%)	76,113,113	0.85	2 (2%)
21	CLA	7	602	14	65,73,73	0.98	4 (6%)	76,113,113	0.86	2 (2%)
26	LMU	A	858	-	36,36,36	0.09	0	47,47,47	0.19	0
32	NEX	6	625	-	38,46,46	0.29	0	50,70,70	0.83	2 (4%)
20	CL0	A	801	-	65,73,73	1.95	9 (13%)	76,113,113	1.06	6 (7%)
30	CHL	9	606	-	42,50,74	2.63	10 (23%)	44,85,114	1.48	8 (18%)
27	LMG	8	626	-	32,32,55	0.21	0	40,40,63	0.16	0
21	CLA	Z	611	23	60,68,73	1.06	4 (6%)	70,107,113	0.89	2 (2%)
21	CLA	4	603	16	65,73,73	1.04	4 (6%)	76,113,113	0.83	2 (2%)
23	LHG	3	721	-	30,30,48	0.28	0	33,36,54	0.32	0
30	CHL	6	607	33	66,74,74	1.99	10 (15%)	73,114,114	1.15	7 (9%)
21	CLA	A	808	-	50,58,73	1.13	4 (8%)	58,95,113	0.96	2 (3%)
26	LMU	4	626	-	20,20,36	0.15	0	25,25,47	0.29	0
21	CLA	3	611	-	55,63,73	1.12	3 (5%)	64,101,113	0.95	2 (3%)
27	LMG	B	854	-	36,36,55	0.20	0	44,44,63	0.16	0
30	CHL	5	607	33	66,74,74	1.99	9 (13%)	73,114,114	1.12	7 (9%)
28	LUT	9	616	-	42,43,43	0.24	0	51,60,60	0.31	0
21	CLA	1	609	12	65,73,73	1.02	3 (4%)	76,113,113	0.82	2 (2%)
21	CLA	3	614	-	45,53,73	1.25	3 (6%)	52,89,113	1.04	2 (3%)
21	CLA	B	805	-	65,73,73	1.01	3 (4%)	76,113,113	0.85	2 (2%)
21	CLA	B	833	-	58,66,73	1.05	4 (6%)	67,104,113	0.96	3 (4%)
21	CLA	A	816	-	65,73,73	1.00	4 (6%)	76,113,113	0.85	2 (2%)
31	XAT	7	622	-	39,47,47	0.15	0	54,74,74	0.60	1 (1%)
21	CLA	A	809	1	65,73,73	0.99	3 (4%)	76,113,113	0.83	3 (3%)
23	LHG	6	629	-	35,35,48	0.28	0	38,41,54	0.31	0
21	CLA	8	613	15	65,73,73	1.02	4 (6%)	76,113,113	0.85	2 (2%)
23	LHG	6	619	21	48,48,48	0.24	0	51,54,54	0.34	0
30	CHL	8	606	33	66,74,74	1.94	10 (15%)	73,114,114	1.11	7 (9%)
21	CLA	1	608	33	65,73,73	1.04	3 (4%)	76,113,113	0.86	2 (2%)
21	CLA	Z	608	33	50,58,73	1.18	3 (6%)	58,95,113	0.99	2 (3%)
23	LHG	A	846	-	48,48,48	0.27	0	51,54,54	0.34	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
21	CLA	8	603	-	65,73,73	1.03	4 (6%)	76,113,113	0.85	2 (2%)
21	CLA	1	616	12	46,54,73	1.21	4 (8%)	53,90,113	1.04	2 (3%)
26	LMU	A	863	-	36,36,36	0.08	0	47,47,47	0.19	0
21	CLA	A	845	23	45,53,73	1.22	3 (6%)	52,89,113	0.99	2 (3%)
28	LUT	8	617	-	42,43,43	0.28	0	51,60,60	0.40	0
31	XAT	1	618	-	39,47,47	0.13	0	54,74,74	0.73	2 (3%)
21	CLA	3	603	-	65,73,73	1.01	4 (6%)	76,113,113	0.86	2 (2%)
24	BCR	A	849	-	41,41,41	0.17	0	56,56,56	0.29	0
27	LMG	4	624	-	41,41,55	0.20	0	49,49,63	0.49	0
21	CLA	1	611	23	61,69,73	1.04	3 (4%)	71,108,113	0.87	2 (2%)
30	CHL	4	618	16	46,54,74	2.39	10 (21%)	49,90,114	1.37	7 (14%)
21	CLA	B	820	-	56,64,73	1.11	3 (5%)	65,102,113	0.90	2 (3%)
21	CLA	1	613	33	65,73,73	1.01	4 (6%)	76,113,113	0.86	2 (2%)
21	CLA	5	609	17	65,73,73	1.00	4 (6%)	76,113,113	0.84	2 (2%)
21	CLA	3	607	13	55,63,73	1.11	4 (7%)	64,101,113	0.92	2 (3%)
21	CLA	B	825	33	65,73,73	1.01	4 (6%)	76,113,113	0.80	2 (2%)
23	LHG	7	625	21	48,48,48	0.25	0	51,54,54	0.27	0
21	CLA	Z	613	33	65,73,73	1.02	3 (4%)	76,113,113	0.86	2 (2%)
21	CLA	6	622	33	55,63,73	1.11	3 (5%)	64,101,113	0.92	2 (3%)
26	LMU	K	208	-	24,24,36	0.13	0	29,29,47	0.28	0
21	CLA	A	839	-	65,73,73	1.00	4 (6%)	76,113,113	0.88	2 (2%)
23	LHG	B	851	21	44,44,48	0.26	0	47,50,54	0.30	0
21	CLA	B	802	-	65,73,73	0.99	4 (6%)	76,113,113	0.78	2 (2%)
24	BCR	J	102	-	41,41,41	0.14	0	56,56,56	0.32	0
21	CLA	A	832	-	55,63,73	1.11	4 (7%)	64,101,113	0.89	2 (3%)
21	CLA	Z	610	12	60,68,73	1.06	3 (5%)	70,107,113	0.87	2 (2%)
21	CLA	6	612	18	45,53,73	1.24	3 (6%)	52,89,113	1.01	2 (3%)
30	CHL	3	608	33	66,74,74	1.97	9 (13%)	73,114,114	1.14	7 (9%)
27	LMG	4	627	-	26,26,55	0.26	0	28,28,63	0.19	0
27	LMG	7	626	-	37,37,55	0.21	0	45,45,63	0.33	0
21	CLA	5	616	17	53,61,73	1.13	3 (5%)	61,98,113	0.93	2 (3%)
26	LMU	7	629	-	28,28,36	0.11	0	39,39,47	0.28	0
30	CHL	1	606	33	46,54,74	2.38	10 (21%)	49,90,114	1.39	7 (14%)
30	CHL	Z	606	33	46,54,74	2.40	10 (21%)	49,90,114	1.35	8 (16%)
21	CLA	5	617	-	65,73,73	1.00	4 (6%)	76,113,113	0.85	2 (2%)
23	LHG	Z	620	21	38,38,48	0.27	0	41,44,54	0.29	0
21	CLA	Z	602	12	60,68,73	1.07	4 (6%)	70,107,113	0.92	2 (2%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
21	CLA	1	614	-	60,68,73	1.06	4 (6%)	70,107,113	0.90	2 (2%)
26	LMU	8	628	-	24,24,36	0.15	0	29,29,47	0.28	0
21	CLA	9	612	19	45,53,73	1.25	3 (6%)	52,89,113	1.01	2 (3%)
30	CHL	Z	607	33	66,74,74	2.01	9 (13%)	73,114,114	1.15	7 (9%)
28	LUT	6	621	-	42,43,43	0.26	0	51,60,60	0.43	0
30	CHL	6	616	18	66,74,74	2.02	10 (15%)	73,114,114	1.12	7 (9%)
21	CLA	B	821	-	65,73,73	1.01	4 (6%)	76,113,113	0.86	2 (2%)
21	CLA	8	609	15	45,53,73	1.20	4 (8%)	52,89,113	1.00	2 (3%)
30	CHL	6	601	18	66,74,74	1.97	9 (13%)	73,114,114	1.13	7 (9%)
21	CLA	B	831	-	55,63,73	1.09	4 (7%)	64,101,113	0.95	2 (3%)
26	LMU	4	625	-	34,34,36	0.12	0	45,45,47	0.26	0
21	CLA	B	811	-	65,73,73	1.02	4 (6%)	76,113,113	0.86	2 (2%)
30	CHL	7	606	33	46,54,74	2.33	10 (21%)	49,90,114	1.38	7 (14%)
21	CLA	3	609	13	61,69,73	1.06	4 (6%)	71,108,113	0.87	2 (2%)
21	CLA	8	614	-	57,65,73	1.13	3 (5%)	66,103,113	0.90	2 (3%)
30	CHL	7	601	14	66,74,74	2.00	10 (15%)	73,114,114	1.13	8 (10%)
21	CLA	G	203	-	60,68,73	1.10	3 (5%)	70,107,113	0.87	2 (2%)
21	CLA	A	837	1	57,65,73	1.10	3 (5%)	66,103,113	0.93	2 (3%)
24	BCR	3	620	-	41,41,41	0.21	0	56,56,56	0.40	0
26	LMU	5	627	-	24,24,36	0.13	0	29,29,47	0.24	0
26	LMU	G	206	-	24,24,36	0.13	0	29,29,47	0.27	0
21	CLA	3	606	33	42,50,73	1.25	4 (9%)	48,85,113	1.10	2 (4%)
27	LMG	3	722	-	44,44,55	0.23	0	46,46,63	0.27	0
23	LHG	3	623	-	46,46,48	0.24	0	49,52,54	0.28	0
21	CLA	1	604	33	50,58,73	1.17	3 (6%)	58,95,113	0.99	2 (3%)
30	CHL	4	607	33	66,74,74	1.98	9 (13%)	73,114,114	1.13	8 (10%)
21	CLA	3	604	33	65,73,73	1.02	4 (6%)	76,113,113	0.87	2 (2%)
31	XAT	8	618	-	39,47,47	0.17	0	54,74,74	0.66	1 (1%)
21	CLA	7	609	14	45,53,73	1.22	4 (8%)	52,89,113	1.03	2 (3%)
28	LUT	F	305	-	42,43,43	0.30	0	51,60,60	0.65	0
26	LMU	1	626	-	24,24,36	0.13	0	29,29,47	0.26	0
21	CLA	A	854	33	65,73,73	1.01	4 (6%)	76,113,113	0.83	2 (2%)
21	CLA	A	829	-	65,73,73	0.99	3 (4%)	76,113,113	0.82	3 (3%)
21	CLA	B	826	-	65,73,73	0.98	4 (6%)	76,113,113	0.85	2 (2%)
21	CLA	K	201	11	45,53,73	1.27	3 (6%)	52,89,113	0.98	2 (3%)
21	CLA	B	827	-	65,73,73	1.00	4 (6%)	76,113,113	0.91	3 (3%)
21	CLA	A	812	-	65,73,73	0.96	3 (4%)	76,113,113	0.82	2 (2%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
26	LMU	A	865	-	24,24,36	0.13	0	29,29,47	0.44	0
21	CLA	Z	603	-	65,73,73	1.06	4 (6%)	76,113,113	0.84	2 (2%)
21	CLA	7	616	14	46,54,73	1.21	4 (8%)	53,90,113	0.99	2 (3%)
21	CLA	5	612	17	45,53,73	1.25	3 (6%)	52,89,113	1.01	2 (3%)
24	BCR	5	622	-	41,41,41	0.20	0	56,56,56	0.35	0
21	CLA	A	806	-	65,73,73	0.98	4 (6%)	76,113,113	0.93	2 (2%)
24	BCR	B	847	-	41,41,41	0.18	0	56,56,56	0.45	0
21	CLA	B	812	-	65,73,73	1.02	4 (6%)	76,113,113	0.85	2 (2%)
21	CLA	1	602	12	60,68,73	1.04	4 (6%)	70,107,113	0.92	2 (2%)
30	CHL	8	601	15	66,74,74	1.98	10 (15%)	73,114,114	1.11	7 (9%)
21	CLA	3	617	13	46,54,73	1.18	4 (8%)	53,90,113	1.00	2 (3%)
25	SF4	C	101	3	0,12,12	-	-	-		
30	CHL	6	618	18	43,51,74	2.48	10 (23%)	45,86,114	1.45	7 (15%)
28	LUT	4	619	-	42,43,43	0.29	0	51,60,60	0.41	0
21	CLA	7	620	33	53,61,73	1.15	3 (5%)	61,98,113	0.92	2 (3%)
21	CLA	A	817	33	55,63,73	1.13	4 (7%)	64,101,113	0.93	2 (3%)
21	CLA	F	304	6	65,73,73	1.03	4 (6%)	76,113,113	0.88	2 (2%)
28	LUT	Z	617	-	42,43,43	0.25	0	51,60,60	0.36	0
21	CLA	4	612	16	45,53,73	1.24	3 (6%)	52,89,113	1.01	2 (3%)
24	BCR	B	845	-	41,41,41	0.15	0	56,56,56	0.36	0
28	LUT	A	856	-	42,43,43	0.25	0	51,60,60	0.50	1 (1%)
21	CLA	A	813	-	65,73,73	1.04	4 (6%)	76,113,113	0.84	2 (2%)
24	BCR	A	848	-	41,41,41	0.18	0	56,56,56	0.34	0
21	CLA	B	829	-	65,73,73	0.96	3 (4%)	76,113,113	0.83	2 (2%)
21	CLA	4	611	23	60,68,73	1.09	3 (5%)	70,107,113	0.88	2 (2%)
21	CLA	6	611	23	58,66,73	1.10	3 (5%)	67,104,113	0.90	2 (2%)
31	XAT	5	624	-	39,47,47	0.13	0	54,74,74	0.73	2 (3%)
21	CLA	B	806	2	65,73,73	1.03	3 (4%)	76,113,113	0.80	2 (2%)
21	CLA	Z	609	12	65,73,73	1.01	4 (6%)	76,113,113	0.94	3 (3%)
21	CLA	B	803	-	65,73,73	1.00	3 (4%)	76,113,113	0.89	3 (3%)
23	LHG	A	847	21	37,37,48	0.28	0	40,43,54	0.30	0
26	LMU	1	625	-	24,24,36	0.11	0	29,29,47	0.31	0
26	LMU	6	632	-	20,20,36	0.15	0	25,25,47	0.27	0
24	BCR	I	172	-	41,41,41	0.19	0	56,56,56	0.39	0
26	LMU	6	628	-	24,24,36	0.13	0	29,29,47	0.29	0
24	BCR	7	623	-	41,41,41	0.16	0	56,56,56	0.34	0
21	CLA	L	204	33	45,53,73	1.26	3 (6%)	52,89,113	1.06	2 (3%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
21	CLA	A	843	33	65,73,73	1.00	4 (6%)	76,113,113	0.95	3 (3%)
21	CLA	B	818	-	65,73,73	1.01	3 (4%)	76,113,113	0.86	2 (2%)
21	CLA	B	840	-	65,73,73	1.01	4 (6%)	76,113,113	0.87	2 (2%)
21	CLA	4	610	16	60,68,73	1.05	3 (5%)	70,107,113	0.90	2 (2%)
21	CLA	Z	616	12	60,68,73	1.06	4 (6%)	70,107,113	0.90	2 (2%)
31	XAT	Z	618	-	39,47,47	0.13	0	54,74,74	0.69	2 (3%)
21	CLA	B	832	-	65,73,73	1.02	4 (6%)	76,113,113	0.87	2 (2%)
21	CLA	9	611	23	45,53,73	1.27	3 (6%)	52,89,113	1.04	2 (3%)
30	CHL	7	607	33	54,62,74	2.21	10 (18%)	58,99,114	1.26	7 (12%)
21	CLA	8	602	15	65,73,73	1.00	4 (6%)	76,113,113	0.86	2 (2%)
28	LUT	7	624	-	42,43,43	0.23	0	51,60,60	0.28	0
21	CLA	B	809	2	65,73,73	1.00	3 (4%)	76,113,113	0.83	2 (2%)
21	CLA	A	814	-	65,73,73	1.01	4 (6%)	76,113,113	0.82	2 (2%)
24	BCR	K	202	-	41,41,41	0.17	0	56,56,56	0.38	0
21	CLA	B	836	-	60,68,73	1.05	4 (6%)	70,107,113	0.88	2 (2%)
30	CHL	1	601	12	66,74,74	1.96	10 (15%)	73,114,114	1.12	7 (9%)
21	CLA	A	838	-	51,59,73	1.14	3 (5%)	59,96,113	0.93	2 (3%)
21	CLA	9	609	19	51,59,73	1.18	3 (5%)	59,96,113	0.99	3 (5%)
21	CLA	5	613	17	56,64,73	1.09	3 (5%)	65,102,113	0.93	2 (3%)
25	SF4	A	853	2,1	0,12,12	-	-	-		
30	CHL	4	608	33	66,74,74	2.02	10 (15%)	73,114,114	1.13	7 (9%)
21	CLA	L	203	-	65,73,73	1.00	3 (4%)	76,113,113	0.84	3 (3%)
21	CLA	6	614	-	50,58,73	1.19	3 (6%)	58,95,113	0.97	2 (3%)
28	LUT	7	621	-	42,43,43	0.24	0	51,60,60	0.36	0
21	CLA	A	830	-	65,73,73	0.99	3 (4%)	76,113,113	0.83	2 (2%)
24	BCR	3	719	-	41,41,41	0.13	0	56,56,56	0.36	0
21	CLA	K	206	11	45,53,73	1.24	3 (6%)	52,89,113	1.02	2 (3%)
21	CLA	A	835	-	65,73,73	1.02	3 (4%)	76,113,113	0.85	2 (2%)
30	CHL	Z	601	12	66,74,74	2.01	10 (15%)	73,114,114	1.13	7 (9%)
21	CLA	5	602	17	65,73,73	1.01	4 (6%)	76,113,113	0.86	2 (2%)
26	LMU	6	631	-	24,24,36	0.13	0	29,29,47	0.26	0
21	CLA	A	807	1	65,73,73	1.02	4 (6%)	76,113,113	0.79	2 (2%)
21	CLA	A	841	-	65,73,73	0.96	4 (6%)	76,113,113	0.83	2 (2%)
28	LUT	3	621	-	42,43,43	0.24	0	51,60,60	0.34	0
26	LMU	1	622	-	19,19,36	0.14	0	24,24,47	0.31	0
30	CHL	5	618	17	43,51,74	2.49	8 (18%)	45,86,114	1.43	7 (15%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
21	CLA	F	301	33	65,73,73	1.01	4 (6%)	76,113,113	0.85	2 (2%)
21	CLA	9	604	19	45,53,73	1.25	3 (6%)	52,89,113	1.04	3 (5%)
21	CLA	A	827	33	65,73,73	0.96	4 (6%)	76,113,113	0.85	2 (2%)
24	BCR	B	844	-	41,41,41	0.16	0	56,56,56	0.41	0
21	CLA	A	826	33	65,73,73	1.03	3 (4%)	76,113,113	0.85	2 (2%)
21	CLA	Z	614	-	50,58,73	1.18	3 (6%)	58,95,113	0.98	2 (3%)
28	LUT	1	619	-	42,43,43	0.22	0	51,60,60	0.37	0
24	BCR	8	619	-	41,41,41	0.13	0	56,56,56	0.30	0
30	CHL	9	607	-	51,59,74	2.31	9 (17%)	55,96,114	1.31	7 (12%)
21	CLA	B	841	23	65,73,73	1.03	3 (4%)	76,113,113	0.86	2 (2%)
23	LHG	5	623	21	36,36,48	0.27	0	39,42,54	0.28	0
23	LHG	9	622	21	33,33,48	0.26	0	36,39,54	0.28	0
21	CLA	7	603	-	52,60,73	1.12	4 (7%)	60,97,113	0.98	2 (3%)
21	CLA	1	612	12	45,53,73	1.23	3 (6%)	52,89,113	0.99	2 (3%)
21	CLA	B	808	-	65,73,73	1.01	4 (6%)	76,113,113	0.83	2 (2%)
24	BCR	4	621	-	41,41,41	0.14	0	56,56,56	0.34	0
21	CLA	9	614	-	45,53,73	1.24	3 (6%)	52,89,113	1.02	2 (3%)
27	LMG	1	628	-	49,49,55	0.18	0	57,57,63	0.19	0
23	LHG	4	622	21	48,48,48	0.24	0	51,54,54	0.37	0
21	CLA	Z	604	33	57,65,73	1.09	3 (5%)	66,103,113	0.94	2 (3%)
26	LMU	1	623	-	24,24,36	0.15	0	29,29,47	0.28	0
21	CLA	B	837	-	65,73,73	1.00	4 (6%)	76,113,113	0.83	2 (2%)
27	LMG	A	860	-	32,32,55	0.22	0	40,40,63	0.48	1 (2%)
28	LUT	3	622	-	42,43,43	0.21	0	51,60,60	0.37	0
26	LMU	7	627	-	33,33,36	0.11	0	44,44,47	0.18	0
26	LMU	7	628	-	22,22,36	0.13	0	27,27,47	0.32	0
21	CLA	6	603	-	65,73,73	1.02	4 (6%)	76,113,113	0.84	2 (2%)
27	LMG	1	624	-	36,36,55	0.20	0	44,44,63	0.16	0
32	NEX	5	625	-	38,46,46	0.20	0	50,70,70	1.37	4 (8%)
26	LMU	A	862	-	20,20,36	0.13	0	25,25,47	0.28	0
21	CLA	7	611	23	65,73,73	1.03	4 (6%)	76,113,113	0.83	2 (2%)
24	BCR	K	207	-	41,41,41	0.14	0	56,56,56	0.24	0
26	LMU	A	857	-	35,35,36	0.09	0	46,46,47	0.21	0
21	CLA	A	834	-	65,73,73	1.02	4 (6%)	76,113,113	0.90	3 (3%)
21	CLA	B	810	-	65,73,73	1.00	4 (6%)	76,113,113	0.86	2 (2%)
24	BCR	L	205	-	41,41,41	0.22	0	56,56,56	0.41	0
21	CLA	5	610	17	60,68,73	1.04	3 (5%)	70,107,113	0.87	2 (2%)
22	PQN	A	844	-	34,34,34	0.30	0	42,45,45	0.42	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
21	CLA	A	825	-	55,63,73	1.12	4 (7%)	64,101,113	0.94	2 (3%)
21	CLA	B	804	-	45,53,73	1.20	3 (6%)	52,89,113	0.99	2 (3%)
24	BCR	B	801	-	41,41,41	0.11	0	56,56,56	0.40	0
26	LMU	1	627	-	22,22,36	0.14	0	27,27,47	0.35	0
28	LUT	9	617	-	42,43,43	0.20	0	51,60,60	0.33	0
21	CLA	K	204	-	46,54,73	1.22	4 (8%)	53,90,113	1.02	2 (3%)
27	LMG	J	104	-	35,35,55	0.20	0	43,43,63	0.17	0
29	DGD	B	850	-	60,60,67	0.18	0	74,74,81	0.39	1 (1%)
21	CLA	8	616	15	45,53,73	1.22	4 (8%)	52,89,113	1.03	2 (3%)
24	BCR	A	851	-	41,41,41	0.17	0	56,56,56	0.37	0
21	CLA	5	601	17	65,73,73	1.05	3 (4%)	76,113,113	0.85	2 (2%)
26	LMU	1	621	-	36,36,36	0.09	0	47,47,47	0.27	0
21	CLA	7	604	33	51,59,73	1.14	4 (7%)	59,96,113	0.96	2 (3%)
21	CLA	B	823	-	65,73,73	1.00	4 (6%)	76,113,113	0.84	2 (2%)
24	BCR	6	623	-	41,41,41	0.21	0	56,56,56	0.43	0
21	CLA	A	805	-	55,63,73	1.03	3 (5%)	64,101,113	0.91	2 (3%)
21	CLA	A	821	-	55,63,73	1.10	4 (7%)	64,101,113	0.90	2 (3%)
24	BCR	B	848	-	41,41,41	0.16	0	56,56,56	0.48	0
21	CLA	7	608	33	50,58,73	1.15	4 (8%)	58,95,113	0.97	2 (3%)
21	CLA	A	833	-	65,73,73	1.01	4 (6%)	76,113,113	0.84	2 (2%)
21	CLA	5	621	33	46,54,73	1.27	3 (6%)	53,90,113	1.14	5 (9%)
21	CLA	7	612	14	52,60,73	1.15	4 (7%)	60,97,113	0.96	2 (3%)
23	LHG	4	623	-	37,37,48	0.26	0	40,43,54	0.30	0
21	CLA	A	810	1	65,73,73	1.03	4 (6%)	76,113,113	0.91	2 (2%)
21	CLA	1	610	12	65,73,73	1.00	4 (6%)	76,113,113	0.86	2 (2%)
21	CLA	A	811	-	65,73,73	0.97	4 (6%)	76,113,113	0.87	2 (2%)
31	XAT	4	620	-	39,47,47	0.13	0	54,74,74	0.70	1 (1%)
27	LMG	8	629	-	42,42,55	0.19	0	50,50,63	0.17	0
21	CLA	A	803	33	65,73,73	1.01	3 (4%)	76,113,113	0.84	2 (2%)
21	CLA	8	612	15	55,63,73	1.11	3 (5%)	64,101,113	0.92	2 (3%)
22	PQN	B	842	-	34,34,34	0.31	0	42,45,45	0.36	0
23	LHG	1	620	21	43,43,48	0.26	0	46,49,54	0.26	0
24	BCR	3	718	-	41,41,41	0.23	0	56,56,56	0.32	0
21	CLA	3	612	13	46,54,73	1.25	4 (8%)	53,90,113	1.02	2 (3%)
30	CHL	6	606	33	58,66,74	2.12	10 (17%)	63,104,114	1.19	7 (11%)
21	CLA	5	611	23	55,63,73	1.11	3 (5%)	64,101,113	0.90	2 (3%)
21	CLA	8	611	23	45,53,73	1.20	4 (8%)	52,89,113	1.00	2 (3%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
21	CLA	7	613	14	65,73,73	1.00	4 (6%)	76,113,113	0.87	2 (2%)
21	CLA	4	609	16	60,68,73	1.10	3 (5%)	70,107,113	0.92	2 (2%)
30	CHL	5	606	33	46,54,74	2.37	10 (21%)	49,90,114	1.35	7 (14%)
21	CLA	B	817	-	65,73,73	1.00	4 (6%)	76,113,113	0.87	2 (2%)
21	CLA	B	815	-	65,73,73	1.03	3 (4%)	76,113,113	0.84	2 (2%)
30	CHL	1	607	33	46,54,74	2.42	9 (19%)	49,90,114	1.43	8 (16%)
27	LMG	B	852	-	43,43,55	0.18	0	51,51,63	0.21	0
21	CLA	5	603	-	65,73,73	1.03	4 (6%)	76,113,113	0.87	3 (3%)
21	CLA	B	839	33	65,73,73	1.01	3 (4%)	76,113,113	0.82	2 (2%)
21	CLA	7	610	14	65,73,73	0.98	4 (6%)	76,113,113	1.01	4 (5%)
21	CLA	A	818	-	65,73,73	1.00	4 (6%)	76,113,113	0.83	2 (2%)
21	CLA	3	613	13	60,68,73	1.05	4 (6%)	70,107,113	0.87	2 (2%)
21	CLA	A	815	-	55,63,73	1.08	4 (7%)	64,101,113	0.94	2 (3%)
26	LMU	6	630	-	24,24,36	0.15	0	29,29,47	0.25	0
24	BCR	L	201	-	41,41,41	0.12	0	56,56,56	0.40	0
31	XAT	6	624	-	39,47,47	0.13	0	54,74,74	0.67	1 (1%)
21	CLA	9	602	19	60,68,73	1.08	3 (5%)	70,107,113	0.90	2 (2%)
28	LUT	5	620	-	42,43,43	0.25	0	51,60,60	0.47	0
24	BCR	A	850	-	41,41,41	0.13	0	56,56,56	0.30	0
27	LMG	6	633	-	19,19,55	0.32	0	19,19,63	0.29	0
21	CLA	4	616	16	45,53,73	1.22	3 (6%)	52,89,113	1.05	3 (5%)
21	CLA	3	610	13	65,73,73	1.01	4 (6%)	76,113,113	0.83	2 (2%)
27	LMG	A	859	-	40,40,55	0.19	0	48,48,63	0.27	0
21	CLA	A	823	-	65,73,73	1.01	4 (6%)	76,113,113	0.85	2 (2%)
21	CLA	B	813	-	65,73,73	1.02	3 (4%)	76,113,113	0.84	2 (2%)
30	CHL	5	608	33	51,59,74	2.28	9 (17%)	55,96,114	1.32	7 (12%)
21	CLA	A	802	-	65,73,73	0.97	4 (6%)	76,113,113	0.81	2 (2%)
21	CLA	6	613	33	65,73,73	1.04	4 (6%)	76,113,113	0.88	2 (2%)
26	LMU	A	861	-	24,24,36	0.13	0	29,29,47	0.33	0

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
24	BCR	B	843	-	-	0/29/63/63	0/2/2/2
26	LMU	B	853	-	-	6/21/61/61	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
21	CLA	6	610	18	1/1/19/20	0/31/109/115	-
21	CLA	9	603	19	1/1/18/20	7/25/103/115	-
21	CLA	G	204	7	1/1/15/20	3/15/93/115	-
21	CLA	8	604	33	1/1/19/20	2/31/109/115	-
21	CLA	A	819	-	1/1/19/20	3/31/109/115	-
21	CLA	4	613	16	1/1/20/20	7/37/115/115	-
21	CLA	7	614	-	1/1/14/20	1/11/89/115	-
21	CLA	5	614	-	1/1/15/20	0/13/91/115	-
21	CLA	A	820	-	1/1/20/20	8/37/115/115	-
26	LMU	Z	622	-	-	4/17/57/61	0/2/2/2
21	CLA	A	804	-	1/1/20/20	2/37/115/115	-
28	LUT	5	626	-	-	2/29/67/67	0/2/2/2
21	CLA	6	602	18	1/1/20/20	1/37/115/115	-
21	CLA	6	609	18	1/1/18/20	1/25/103/115	-
26	LMU	A	864	-	-	2/15/35/61	0/1/1/2
28	LUT	3	720	-	-	0/29/67/67	0/2/2/2
21	CLA	B	816	-	1/1/20/20	1/37/115/115	-
21	CLA	J	101	9	1/1/18/20	4/25/103/115	-
21	CLA	A	828	-	1/1/20/20	2/37/115/115	-
21	CLA	3	615	33	1/1/20/20	11/37/115/115	-
21	CLA	9	610	19	1/1/19/20	3/31/109/115	-
21	CLA	B	819	33	1/1/19/20	1/31/109/115	-
27	LMG	J	103	-	-	1/37/57/70	0/1/1/1
26	LMU	8	627	-	-	9/21/61/61	0/2/2/2
21	CLA	9	601	19	1/1/15/20	0/15/93/115	-
21	CLA	A	836	-	1/1/20/20	2/37/115/115	-
21	CLA	K	203	33	1/1/19/20	4/31/109/115	-
21	CLA	1	603	-	1/1/18/20	5/28/106/115	-
26	LMU	8	624	-	-	1/15/35/61	0/1/1/2
28	LUT	1	617	-	-	2/29/67/67	0/2/2/2
21	CLA	3	602	13	1/1/19/20	2/31/109/115	-
26	LMU	8	625	-	-	2/15/35/61	0/1/1/2
21	CLA	8	608	33	1/1/17/20	1/19/97/115	-
21	CLA	F	303	33	1/1/15/20	2/13/91/115	-
21	CLA	Z	612	12	1/1/15/20	3/13/91/115	-
21	CLA	8	610	15	1/1/20/20	0/37/115/115	-
21	CLA	6	604	-	1/1/20/20	2/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
21	CLA	A	842	-	1/1/20/20	2/37/115/115	-
21	CLA	5	604	33	1/1/18/20	5/25/103/115	-
21	CLA	9	613	19	1/1/20/20	5/37/115/115	-
21	CLA	B	814	-	1/1/19/20	6/31/109/115	-
24	BCR	G	205	-	-	2/29/63/63	0/2/2/2
23	LHG	8	620	21	-	11/48/48/53	-
24	BCR	B	846	-	-	2/29/63/63	0/2/2/2
30	CHL	4	601	16	3/3/26/26	9/39/137/137	-
21	CLA	A	831	-	1/1/20/20	2/37/115/115	-
21	CLA	B	838	-	1/1/17/20	3/19/97/115	-
21	CLA	4	614	-	1/1/18/20	4/25/103/115	-
30	CHL	4	606	33	3/3/26/26	3/39/137/137	-
21	CLA	4	602	16	1/1/19/20	1/31/109/115	-
21	CLA	6	617	-	1/1/15/20	0/13/91/115	-
21	CLA	A	840	-	1/1/20/20	7/37/115/115	-
21	CLA	B	834	-	1/1/19/20	1/31/109/115	-
30	CHL	8	607	33	3/3/26/26	9/39/137/137	-
24	BCR	A	852	-	-	4/29/63/63	0/2/2/2
26	LMU	Z	621	-	-	2/13/33/61	0/1/1/2
28	LUT	Z	619	-	-	2/18/37/67	0/1/1/2
21	CLA	B	824	33	1/1/20/20	3/37/115/115	-
21	CLA	B	822	-	1/1/18/20	4/30/108/115	-
30	CHL	6	608	33	3/3/23/26	0/21/119/137	-
25	SF4	C	102	3	-	-	0/6/5/5
21	CLA	B	830	-	1/1/15/20	0/13/91/115	-
21	CLA	B	835	33	1/1/15/20	0/13/91/115	-
21	CLA	4	604	33	1/1/17/20	0/19/97/115	-
21	CLA	B	807	-	1/1/18/20	3/25/103/115	-
21	CLA	A	824	-	1/1/15/20	2/13/91/115	-
21	CLA	A	822	33	1/1/20/20	2/37/115/115	-
21	CLA	B	828	-	1/1/20/20	2/37/115/115	-
21	CLA	7	602	14	1/1/20/20	2/37/115/115	-
26	LMU	A	858	-	-	7/21/61/61	0/2/2/2
32	NEX	6	625	-	-	5/27/83/83	0/3/3/3
20	CL0	A	801	-	3/3/25/25	2/37/135/135	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
30	CHL	9	606	-	3/3/20/26	2/10/108/137	-
27	LMG	8	626	-	-	2/27/47/70	0/1/1/1
21	CLA	Z	611	23	1/1/19/20	4/31/109/115	-
21	CLA	4	603	16	1/1/20/20	4/37/115/115	-
23	LHG	3	721	-	-	9/35/35/53	-
30	CHL	6	607	33	3/3/26/26	9/39/137/137	-
21	CLA	A	808	-	1/1/17/20	0/19/97/115	-
26	LMU	4	626	-	-	0/11/31/61	0/1/1/2
21	CLA	3	611	-	1/1/18/20	1/25/103/115	-
27	LMG	B	854	-	-	2/31/51/70	0/1/1/1
30	CHL	5	607	33	3/3/26/26	4/39/137/137	-
28	LUT	9	616	-	-	2/29/67/67	0/2/2/2
21	CLA	1	609	12	1/1/20/20	6/37/115/115	-
21	CLA	3	614	-	1/1/15/20	0/13/91/115	-
21	CLA	B	805	-	1/1/20/20	8/37/115/115	-
21	CLA	B	833	-	1/1/18/20	4/29/107/115	-
21	CLA	A	816	-	1/1/20/20	2/37/115/115	-
31	XAT	7	622	-	-	0/31/93/93	0/4/4/4
21	CLA	A	809	1	1/1/20/20	5/37/115/115	-
23	LHG	6	629	-	-	12/40/40/53	-
21	CLA	8	613	15	1/1/20/20	3/37/115/115	-
30	CHL	8	606	33	3/3/26/26	9/39/137/137	-
23	LHG	6	619	21	-	13/53/53/53	-
21	CLA	1	608	33	1/1/20/20	5/37/115/115	-
21	CLA	Z	608	33	1/1/17/20	1/19/97/115	-
23	LHG	A	846	-	-	7/53/53/53	-
21	CLA	8	603	-	1/1/20/20	4/37/115/115	-
21	CLA	1	616	12	1/1/15/20	1/15/93/115	-
26	LMU	A	863	-	-	5/21/61/61	0/2/2/2
21	CLA	A	845	23	1/1/15/20	4/13/91/115	-
31	XAT	1	618	-	1/1/26/26	0/31/93/93	0/4/4/4
28	LUT	8	617	-	-	2/29/67/67	0/2/2/2
21	CLA	3	603	-	1/1/20/20	7/37/115/115	-
24	BCR	A	849	-	-	0/29/63/63	0/2/2/2
27	LMG	4	624	-	-	7/36/56/70	0/1/1/1
21	CLA	1	611	23	1/1/19/20	5/33/111/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
30	CHL	4	618	16	3/3/21/26	3/15/113/137	-
21	CLA	B	820	-	1/1/18/20	4/27/105/115	-
21	CLA	1	613	33	1/1/20/20	5/37/115/115	-
21	CLA	5	609	17	1/1/20/20	3/37/115/115	-
21	CLA	3	607	13	1/1/18/20	4/25/103/115	-
21	CLA	B	825	33	1/1/20/20	4/37/115/115	-
23	LHG	7	625	21	-	9/53/53/53	-
21	CLA	Z	613	33	1/1/20/20	2/37/115/115	-
21	CLA	6	622	33	1/1/18/20	1/25/103/115	-
26	LMU	K	208	-	-	3/15/35/61	0/1/1/2
21	CLA	A	839	-	1/1/20/20	3/37/115/115	-
23	LHG	B	851	21	-	12/49/49/53	-
21	CLA	B	802	-	1/1/20/20	3/37/115/115	-
24	BCR	J	102	-	-	2/29/63/63	0/2/2/2
21	CLA	A	832	-	1/1/18/20	1/25/103/115	-
21	CLA	Z	610	12	1/1/19/20	0/31/109/115	-
21	CLA	6	612	18	1/1/15/20	3/13/91/115	-
30	CHL	3	608	33	3/3/26/26	3/39/137/137	-
27	LMG	4	627	-	-	2/28/28/70	-
27	LMG	7	626	-	-	3/32/52/70	0/1/1/1
21	CLA	5	616	17	1/1/17/20	0/23/101/115	-
26	LMU	7	629	-	-	3/13/53/61	0/2/2/2
30	CHL	1	606	33	3/3/21/26	0/15/113/137	-
30	CHL	Z	606	33	3/3/21/26	4/15/113/137	-
21	CLA	5	617	-	1/1/20/20	5/37/115/115	-
23	LHG	Z	620	21	-	8/43/43/53	-
21	CLA	Z	602	12	1/1/19/20	3/31/109/115	-
21	CLA	1	614	-	1/1/19/20	6/31/109/115	-
26	LMU	8	628	-	-	4/15/35/61	0/1/1/2
21	CLA	9	612	19	1/1/15/20	3/13/91/115	-
30	CHL	Z	607	33	3/3/26/26	4/39/137/137	-
28	LUT	6	621	-	-	2/29/67/67	0/2/2/2
30	CHL	6	616	18	3/3/26/26	4/39/137/137	-
21	CLA	B	821	-	1/1/20/20	4/37/115/115	-
21	CLA	8	609	15	1/1/15/20	0/13/91/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
30	CHL	6	601	18	3/3/26/26	3/39/137/137	-
21	CLA	B	831	-	1/1/18/20	3/25/103/115	-
26	LMU	4	625	-	-	4/19/59/61	0/2/2/2
21	CLA	B	811	-	1/1/20/20	3/37/115/115	-
30	CHL	7	606	33	3/3/21/26	0/15/113/137	-
21	CLA	3	609	13	1/1/19/20	2/33/111/115	-
21	CLA	8	614	-	1/1/18/20	7/28/106/115	-
30	CHL	7	601	14	3/3/26/26	4/39/137/137	-
21	CLA	G	203	-	1/1/19/20	2/31/109/115	-
21	CLA	A	837	1	1/1/18/20	3/28/106/115	-
24	BCR	3	620	-	-	4/29/63/63	0/2/2/2
26	LMU	5	627	-	-	1/15/35/61	0/1/1/2
26	LMU	G	206	-	-	5/15/35/61	0/1/1/2
21	CLA	3	606	33	1/1/14/20	0/10/88/115	-
27	LMG	3	722	-	-	11/46/46/70	-
23	LHG	3	623	-	-	14/51/51/53	-
21	CLA	1	604	33	1/1/17/20	0/19/97/115	-
30	CHL	4	607	33	3/3/26/26	3/39/137/137	-
21	CLA	3	604	33	1/1/20/20	1/37/115/115	-
31	XAT	8	618	-	-	0/31/93/93	0/4/4/4
21	CLA	7	609	14	1/1/15/20	0/13/91/115	-
28	LUT	F	305	-	-	6/29/67/67	0/2/2/2
26	LMU	1	626	-	-	0/15/35/61	0/1/1/2
21	CLA	A	854	33	1/1/20/20	6/37/115/115	-
21	CLA	A	829	-	1/1/20/20	3/37/115/115	-
21	CLA	B	826	-	1/1/20/20	0/37/115/115	-
21	CLA	K	201	11	1/1/15/20	1/13/91/115	-
21	CLA	B	827	-	1/1/20/20	6/37/115/115	-
21	CLA	A	812	-	1/1/20/20	3/37/115/115	-
26	LMU	A	865	-	-	2/15/35/61	0/1/1/2
21	CLA	Z	603	-	1/1/20/20	4/37/115/115	-
21	CLA	7	616	14	1/1/15/20	3/15/93/115	-
21	CLA	5	612	17	1/1/15/20	5/13/91/115	-
24	BCR	5	622	-	-	2/29/63/63	0/2/2/2
21	CLA	A	806	-	1/1/20/20	14/37/115/115	-
24	BCR	B	847	-	-	2/29/63/63	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
21	CLA	B	812	-	1/1/20/20	2/37/115/115	-
21	CLA	1	602	12	1/1/19/20	2/31/109/115	-
30	CHL	8	601	15	3/3/26/26	6/39/137/137	-
21	CLA	3	617	13	1/1/15/20	0/15/93/115	-
25	SF4	C	101	3	-	-	0/6/5/5
30	CHL	6	618	18	3/3/20/26	2/12/110/137	-
28	LUT	4	619	-	-	2/29/67/67	0/2/2/2
21	CLA	7	620	33	1/1/17/20	0/23/101/115	-
21	CLA	A	817	33	1/1/18/20	2/25/103/115	-
21	CLA	F	304	6	1/1/20/20	7/37/115/115	-
28	LUT	Z	617	-	-	2/29/67/67	0/2/2/2
21	CLA	4	612	16	1/1/15/20	3/13/91/115	-
24	BCR	B	845	-	-	4/29/63/63	0/2/2/2
28	LUT	A	856	-	-	4/29/67/67	0/2/2/2
21	CLA	A	813	-	1/1/20/20	3/37/115/115	-
24	BCR	A	848	-	-	2/29/63/63	0/2/2/2
21	CLA	B	829	-	1/1/20/20	3/37/115/115	-
21	CLA	4	611	23	1/1/19/20	2/31/109/115	-
21	CLA	6	611	23	1/1/18/20	0/29/107/115	-
31	XAT	5	624	-	-	0/31/93/93	0/4/4/4
21	CLA	B	806	2	1/1/20/20	3/37/115/115	-
21	CLA	Z	609	12	1/1/20/20	10/37/115/115	-
21	CLA	B	803	-	1/1/20/20	2/37/115/115	-
23	LHG	A	847	21	-	4/42/42/53	-
26	LMU	1	625	-	-	3/15/35/61	0/1/1/2
26	LMU	6	632	-	-	3/11/31/61	0/1/1/2
24	BCR	I	172	-	-	0/29/63/63	0/2/2/2
26	LMU	6	628	-	-	2/15/35/61	0/1/1/2
24	BCR	7	623	-	-	2/29/63/63	0/2/2/2
21	CLA	L	204	33	1/1/15/20	3/13/91/115	-
21	CLA	A	843	33	1/1/20/20	7/37/115/115	-
21	CLA	B	818	-	1/1/20/20	3/37/115/115	-
21	CLA	B	840	-	1/1/20/20	2/37/115/115	-
21	CLA	4	610	16	1/1/19/20	0/31/109/115	-
21	CLA	Z	616	12	1/1/19/20	2/31/109/115	-
31	XAT	Z	618	-	-	0/31/93/93	0/4/4/4

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
21	CLA	B	832	-	1/1/20/20	4/37/115/115	-
21	CLA	9	611	23	1/1/15/20	0/13/91/115	-
30	CHL	7	607	33	3/3/23/26	0/25/123/137	-
21	CLA	8	602	15	1/1/20/20	5/37/115/115	-
28	LUT	7	624	-	-	1/29/67/67	0/2/2/2
21	CLA	B	809	2	1/1/20/20	9/37/115/115	-
21	CLA	A	814	-	1/1/20/20	5/37/115/115	-
24	BCR	K	202	-	-	2/29/63/63	0/2/2/2
21	CLA	B	836	-	1/1/19/20	3/31/109/115	-
30	CHL	1	601	12	3/3/26/26	10/39/137/137	-
21	CLA	A	838	-	1/1/17/20	3/21/99/115	-
21	CLA	9	609	19	1/1/17/20	3/21/99/115	-
21	CLA	5	613	17	1/1/18/20	0/27/105/115	-
25	SF4	A	853	2,1	-	-	0/6/5/5
30	CHL	4	608	33	3/3/26/26	5/39/137/137	-
21	CLA	L	203	-	1/1/20/20	7/37/115/115	-
21	CLA	6	614	-	1/1/17/20	0/19/97/115	-
28	LUT	7	621	-	-	2/29/67/67	0/2/2/2
21	CLA	A	830	-	1/1/20/20	4/37/115/115	-
24	BCR	3	719	-	-	2/29/63/63	0/2/2/2
21	CLA	K	206	11	1/1/15/20	2/13/91/115	-
21	CLA	A	835	-	1/1/20/20	3/37/115/115	-
30	CHL	Z	601	12	3/3/26/26	7/39/137/137	-
21	CLA	5	602	17	1/1/20/20	1/37/115/115	-
26	LMU	6	631	-	-	3/15/35/61	0/1/1/2
21	CLA	A	807	1	1/1/20/20	4/37/115/115	-
21	CLA	A	841	-	1/1/20/20	6/37/115/115	-
28	LUT	3	621	-	-	2/29/67/67	0/2/2/2
26	LMU	1	622	-	-	3/10/30/61	0/1/1/2
30	CHL	5	618	17	3/3/20/26	1/12/110/137	-
21	CLA	F	301	33	1/1/20/20	2/37/115/115	-
21	CLA	9	604	19	1/1/15/20	0/13/91/115	-
21	CLA	A	827	33	1/1/20/20	2/37/115/115	-
24	BCR	B	844	-	-	2/29/63/63	0/2/2/2
21	CLA	A	826	33	1/1/20/20	7/37/115/115	-
21	CLA	Z	614	-	1/1/17/20	0/19/97/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
28	LUT	1	619	-	-	2/29/67/67	0/2/2/2
30	CHL	9	607	-	3/3/23/26	2/21/119/137	-
24	BCR	8	619	-	-	4/29/63/63	0/2/2/2
21	CLA	B	841	23	1/1/20/20	9/37/115/115	-
23	LHG	5	623	21	-	10/41/41/53	-
23	LHG	9	622	21	-	8/38/38/53	-
21	CLA	7	603	-	1/1/17/20	3/22/100/115	-
21	CLA	1	612	12	1/1/15/20	3/13/91/115	-
21	CLA	B	808	-	1/1/20/20	6/37/115/115	-
24	BCR	4	621	-	-	2/29/63/63	0/2/2/2
21	CLA	9	614	-	1/1/15/20	4/13/91/115	-
27	LMG	1	628	-	-	5/44/64/70	0/1/1/1
23	LHG	4	622	21	-	13/53/53/53	-
21	CLA	Z	604	33	1/1/18/20	2/28/106/115	-
26	LMU	1	623	-	-	1/15/35/61	0/1/1/2
21	CLA	B	837	-	1/1/20/20	5/37/115/115	-
27	LMG	A	860	-	-	7/27/47/70	0/1/1/1
28	LUT	3	622	-	-	2/29/67/67	0/2/2/2
26	LMU	7	627	-	-	2/18/58/61	0/2/2/2
26	LMU	7	628	-	-	3/13/33/61	0/1/1/2
21	CLA	6	603	-	1/1/20/20	8/37/115/115	-
27	LMG	1	624	-	-	0/31/51/70	0/1/1/1
32	NEX	5	625	-	-	2/27/83/83	0/3/3/3
26	LMU	A	862	-	-	2/11/31/61	0/1/1/2
21	CLA	7	611	23	1/1/20/20	4/37/115/115	-
24	BCR	K	207	-	-	3/29/63/63	0/2/2/2
26	LMU	A	857	-	-	5/20/60/61	0/2/2/2
21	CLA	A	834	-	1/1/20/20	1/37/115/115	-
21	CLA	B	810	-	1/1/20/20	1/37/115/115	-
24	BCR	L	205	-	-	2/29/63/63	0/2/2/2
21	CLA	5	610	17	1/1/19/20	2/31/109/115	-
22	PQN	A	844	-	-	4/23/43/43	0/2/2/2
21	CLA	A	825	-	1/1/18/20	2/25/103/115	-
21	CLA	B	804	-	1/1/15/20	1/13/91/115	-
24	BCR	B	801	-	-	0/29/63/63	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
26	LMU	1	627	-	-	3/13/33/61	0/1/1/2
28	LUT	9	617	-	-	0/29/67/67	0/2/2/2
21	CLA	K	204	-	1/1/15/20	1/15/93/115	-
27	LMG	J	104	-	-	9/30/50/70	0/1/1/1
29	DGD	B	850	-	-	10/48/88/95	0/2/2/2
21	CLA	8	616	15	1/1/15/20	2/13/91/115	-
24	BCR	A	851	-	-	2/29/63/63	0/2/2/2
21	CLA	5	601	17	1/1/20/20	6/37/115/115	-
26	LMU	1	621	-	-	6/21/61/61	0/2/2/2
21	CLA	7	604	33	1/1/17/20	1/21/99/115	-
21	CLA	B	823	-	1/1/20/20	8/37/115/115	-
24	BCR	6	623	-	-	2/29/63/63	0/2/2/2
21	CLA	A	805	-	1/1/18/20	3/25/103/115	-
21	CLA	A	821	-	1/1/18/20	3/25/103/115	-
24	BCR	B	848	-	-	2/29/63/63	0/2/2/2
21	CLA	7	608	33	1/1/17/20	1/19/97/115	-
21	CLA	A	833	-	1/1/20/20	1/37/115/115	-
21	CLA	5	621	33	1/1/15/20	8/15/93/115	-
21	CLA	7	612	14	1/1/17/20	5/22/100/115	-
23	LHG	4	623	-	-	15/42/42/53	-
21	CLA	A	810	1	1/1/20/20	6/37/115/115	-
21	CLA	1	610	12	1/1/20/20	0/37/115/115	-
21	CLA	A	811	-	1/1/20/20	5/37/115/115	-
31	XAT	4	620	-	-	0/31/93/93	0/4/4/4
27	LMG	8	629	-	-	8/37/57/70	0/1/1/1
21	CLA	A	803	33	1/1/20/20	1/37/115/115	-
21	CLA	8	612	15	1/1/18/20	4/25/103/115	-
22	PQN	B	842	-	-	2/23/43/43	0/2/2/2
23	LHG	1	620	21	-	4/48/48/53	-
24	BCR	3	718	-	-	2/29/63/63	0/2/2/2
21	CLA	3	612	13	1/1/15/20	3/15/93/115	-
30	CHL	6	606	33	3/3/24/26	5/30/128/137	-
21	CLA	5	611	23	1/1/18/20	0/25/103/115	-
21	CLA	8	611	23	1/1/15/20	0/13/91/115	-
21	CLA	7	613	14	1/1/20/20	4/37/115/115	-
21	CLA	4	609	16	1/1/19/20	8/31/109/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
30	CHL	5	606	33	3/3/21/26	0/15/113/137	-
21	CLA	B	817	-	1/1/20/20	6/37/115/115	-
21	CLA	B	815	-	1/1/20/20	4/37/115/115	-
30	CHL	1	607	33	3/3/21/26	4/15/113/137	-
27	LMG	B	852	-	-	9/38/58/70	0/1/1/1
21	CLA	5	603	-	1/1/20/20	16/37/115/115	-
21	CLA	B	839	33	1/1/20/20	5/37/115/115	-
21	CLA	7	610	14	1/1/20/20	4/37/115/115	-
21	CLA	A	818	-	1/1/20/20	3/37/115/115	-
21	CLA	3	613	13	1/1/19/20	4/31/109/115	-
21	CLA	A	815	-	1/1/18/20	3/25/103/115	-
26	LMU	6	630	-	-	4/15/35/61	0/1/1/2
24	BCR	L	201	-	-	4/29/63/63	0/2/2/2
31	XAT	6	624	-	-	0/31/93/93	0/4/4/4
21	CLA	9	602	19	1/1/19/20	2/31/109/115	-
28	LUT	5	620	-	-	2/29/67/67	0/2/2/2
24	BCR	A	850	-	-	1/29/63/63	0/2/2/2
27	LMG	6	633	-	-	4/17/17/70	-
21	CLA	4	616	16	1/1/15/20	1/13/91/115	-
27	LMG	A	859	-	-	8/35/55/70	0/1/1/1
21	CLA	3	610	13	1/1/20/20	0/37/115/115	-
21	CLA	A	823	-	1/1/20/20	6/37/115/115	-
21	CLA	B	813	-	1/1/20/20	9/37/115/115	-
30	CHL	5	608	33	3/3/23/26	0/21/119/137	-
21	CLA	A	802	-	1/1/20/20	0/37/115/115	-
21	CLA	6	613	33	1/1/20/20	3/37/115/115	-
26	LMU	A	861	-	-	3/15/35/61	0/1/1/2

The worst 5 of 1000 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
30	9	606	CHL	C4B-NB	12.28	1.46	1.35
30	9	607	CHL	C4B-NB	12.10	1.46	1.35
30	6	616	CHL	C4B-NB	11.99	1.45	1.35
30	Z	601	CHL	C4B-NB	11.98	1.45	1.35
30	5	618	CHL	C4B-NB	11.95	1.45	1.35

The worst 5 of 661 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	5	625	NEX	C5-C6-C1	7.53	127.16	119.70
30	3	608	CHL	CHD-C1D-ND	-4.40	120.41	124.45
32	6	625	NEX	C5-C6-C1	4.36	124.03	119.70
21	9	609	CLA	C1D-ND-C4D	-4.30	103.28	106.33
21	Z	613	CLA	C1D-ND-C4D	-4.28	103.29	106.33

5 of 292 chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
20	A	801	CL0	NC
20	A	801	CL0	NA
20	A	801	CL0	ND
21	A	802	CLA	ND
21	A	803	CLA	ND

5 of 1192 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
21	A	806	CLA	C1A-C2A-CAA-CBA
21	A	816	CLA	O2A-C1-C2-C3
21	A	819	CLA	C1A-C2A-CAA-CBA
21	A	819	CLA	C3A-C2A-CAA-CBA
21	A	823	CLA	O2A-C1-C2-C3

There are no ring outliers.

189 monomers are involved in 241 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
24	B	843	BCR	2	0
26	B	853	LMU	2	0
21	6	610	CLA	1	0
21	G	204	CLA	2	0
21	4	613	CLA	4	0
21	7	614	CLA	1	0
21	5	614	CLA	1	0
21	A	820	CLA	2	0
21	A	804	CLA	1	0
28	5	626	LUT	1	0
21	6	602	CLA	1	0
21	6	609	CLA	1	0
21	B	816	CLA	2	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
21	J	101	CLA	2	0
21	3	615	CLA	4	0
21	9	610	CLA	3	0
21	B	819	CLA	3	0
27	J	103	LMG	1	0
21	1	603	CLA	4	0
21	3	602	CLA	1	0
21	8	608	CLA	1	0
21	8	610	CLA	2	0
21	6	604	CLA	1	0
21	5	604	CLA	1	0
21	9	613	CLA	2	0
21	B	814	CLA	1	0
24	G	205	BCR	2	0
24	B	846	BCR	1	0
30	4	601	CHL	1	0
21	A	831	CLA	1	0
21	B	838	CLA	3	0
21	4	614	CLA	1	0
21	4	602	CLA	2	0
21	A	840	CLA	1	0
24	A	852	BCR	4	0
21	B	824	CLA	3	0
30	6	608	CHL	1	0
21	B	830	CLA	1	0
21	A	822	CLA	2	0
21	B	828	CLA	1	0
21	7	602	CLA	1	0
21	4	603	CLA	1	0
23	3	721	LHG	1	0
21	3	611	CLA	1	0
30	5	607	CHL	1	0
28	9	616	LUT	3	0
21	1	609	CLA	2	0
21	3	614	CLA	1	0
21	B	833	CLA	3	0
31	7	622	XAT	2	0
21	A	809	CLA	1	0
23	6	619	LHG	1	0
21	Z	608	CLA	1	0
21	8	603	CLA	3	0
21	1	616	CLA	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
26	A	863	LMU	1	0
21	A	845	CLA	1	0
31	1	618	XAT	1	0
21	3	603	CLA	2	0
24	A	849	BCR	3	0
21	1	613	CLA	1	0
21	3	607	CLA	2	0
23	7	625	LHG	1	0
21	6	622	CLA	1	0
21	A	839	CLA	1	0
21	B	802	CLA	4	0
24	J	102	BCR	2	0
21	A	832	CLA	1	0
21	Z	610	CLA	2	0
30	3	608	CHL	1	0
21	5	616	CLA	3	0
21	5	617	CLA	2	0
23	Z	620	LHG	1	0
21	Z	602	CLA	2	0
30	Z	607	CHL	1	0
28	6	621	LUT	2	0
30	6	616	CHL	1	0
21	8	609	CLA	1	0
21	B	831	CLA	2	0
21	B	811	CLA	2	0
21	3	609	CLA	1	0
21	8	614	CLA	1	0
21	G	203	CLA	1	0
21	A	837	CLA	1	0
26	5	627	LMU	1	0
21	3	606	CLA	2	0
23	3	623	LHG	1	0
21	1	604	CLA	1	0
31	8	618	XAT	1	0
28	F	305	LUT	4	0
21	A	854	CLA	5	0
21	A	829	CLA	3	0
21	B	826	CLA	3	0
21	K	201	CLA	2	0
21	A	812	CLA	3	0
26	A	865	LMU	1	0
21	Z	603	CLA	3	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
21	5	612	CLA	1	0
24	5	622	BCR	1	0
21	A	806	CLA	2	0
24	B	847	BCR	1	0
21	1	602	CLA	1	0
30	8	601	CHL	2	0
28	4	619	LUT	2	0
21	7	620	CLA	1	0
21	A	817	CLA	1	0
28	Z	617	LUT	3	0
21	4	612	CLA	1	0
24	B	845	BCR	1	0
24	A	848	BCR	1	0
21	B	829	CLA	2	0
31	5	624	XAT	2	0
21	B	803	CLA	2	0
21	L	204	CLA	1	0
21	A	843	CLA	3	0
21	B	818	CLA	1	0
21	4	610	CLA	2	0
21	Z	616	CLA	1	0
31	Z	618	XAT	1	0
21	B	832	CLA	3	0
30	7	607	CHL	1	0
21	8	602	CLA	1	0
21	B	809	CLA	1	0
24	K	202	BCR	3	0
21	B	836	CLA	1	0
21	A	838	CLA	1	0
30	4	608	CHL	1	0
21	L	203	CLA	1	0
28	7	621	LUT	1	0
21	A	830	CLA	2	0
24	3	719	BCR	2	0
30	Z	601	CHL	1	0
21	5	602	CLA	2	0
21	A	841	CLA	2	0
21	F	301	CLA	1	0
24	B	844	BCR	2	0
21	A	826	CLA	2	0
21	B	841	CLA	2	0
21	B	808	CLA	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
24	4	621	BCR	1	0
27	1	628	LMG	1	0
21	Z	604	CLA	1	0
21	B	837	CLA	2	0
27	A	860	LMG	1	0
28	3	622	LUT	1	0
26	7	627	LMU	1	0
21	6	603	CLA	1	0
24	K	207	BCR	2	0
24	L	205	BCR	2	0
22	A	844	PQN	2	0
21	A	825	CLA	1	0
24	B	801	BCR	1	0
28	9	617	LUT	4	0
29	B	850	DGD	1	0
24	A	851	BCR	3	0
21	5	601	CLA	1	0
26	1	621	LMU	1	0
21	B	823	CLA	1	0
24	6	623	BCR	3	0
21	A	821	CLA	1	0
24	B	848	BCR	1	0
21	A	833	CLA	2	0
21	5	621	CLA	2	0
21	A	810	CLA	5	0
21	1	610	CLA	1	0
21	A	811	CLA	1	0
31	4	620	XAT	1	0
21	A	803	CLA	3	0
21	5	611	CLA	1	0
21	4	609	CLA	1	0
30	5	606	CHL	1	0
21	B	817	CLA	1	0
21	5	603	CLA	2	0
21	B	839	CLA	1	0
21	7	610	CLA	3	0
21	A	818	CLA	1	0
21	3	613	CLA	1	0
21	A	815	CLA	1	0
31	6	624	XAT	1	0
21	9	602	CLA	2	0
28	5	620	LUT	3	0

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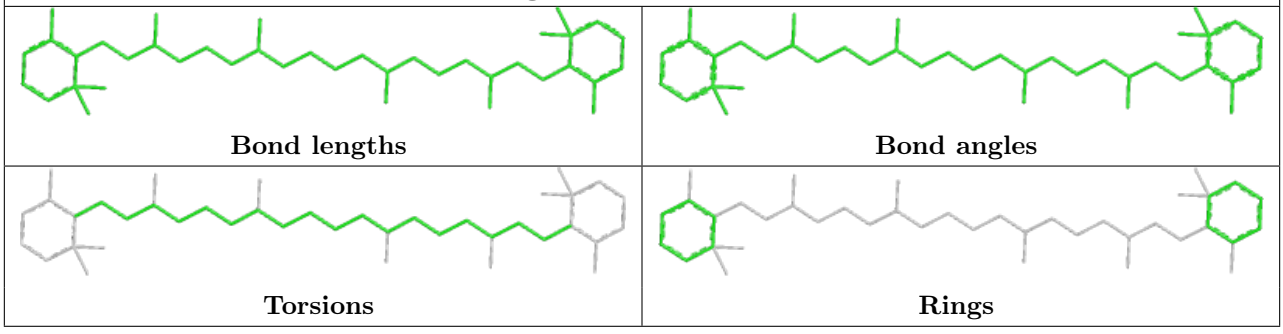
Mol	Chain	Res	Type	Clashes	Symm-Clashes
24	A	850	BCR	2	0
21	4	616	CLA	2	0
21	3	610	CLA	1	0
27	A	859	LMG	3	0
21	A	823	CLA	1	0
21	B	813	CLA	1	0
30	5	608	CHL	1	0
21	A	802	CLA	3	0

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 BCR B 843



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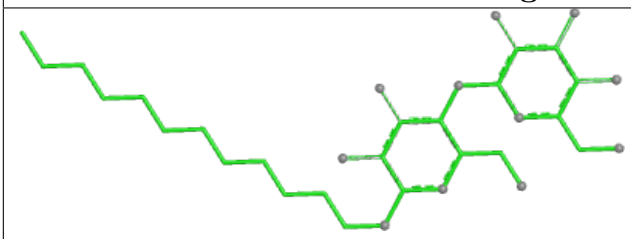
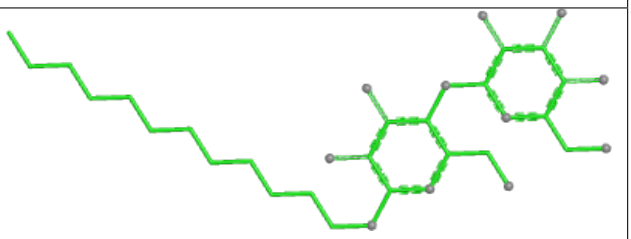
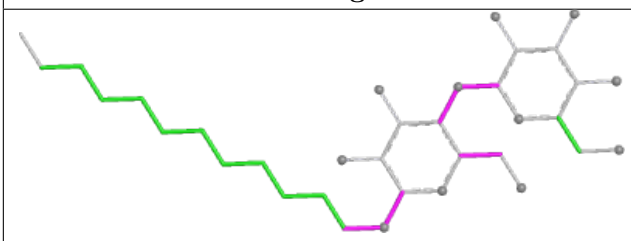
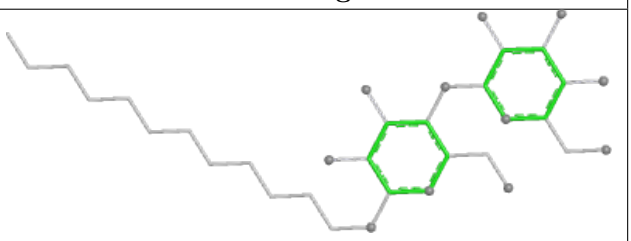
 Bond lengths	 Bond angles
 Torsions	 Rings

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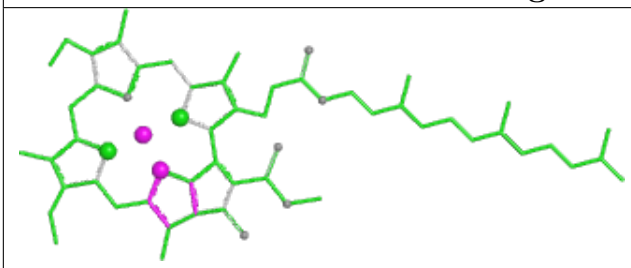
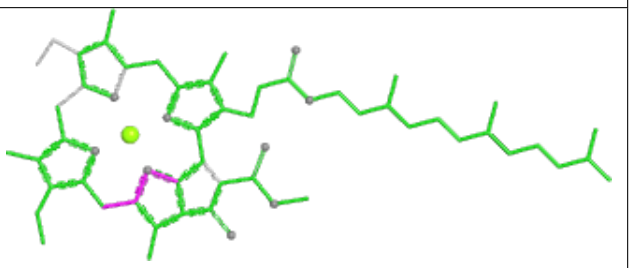
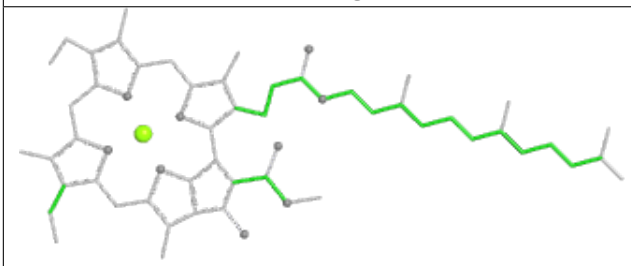
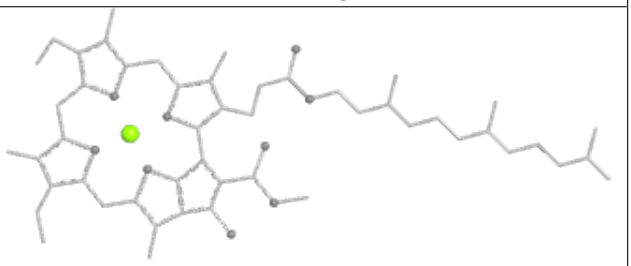
 Bond lengths	 Bond angles
 Torsions	 Rings

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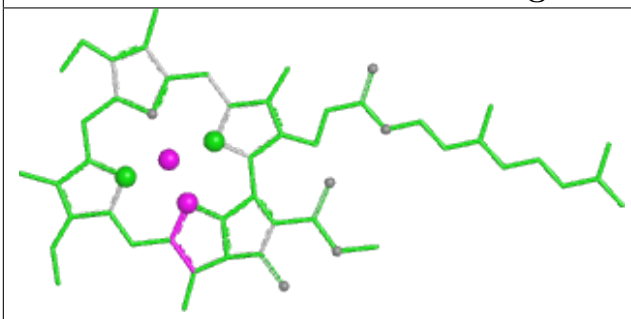	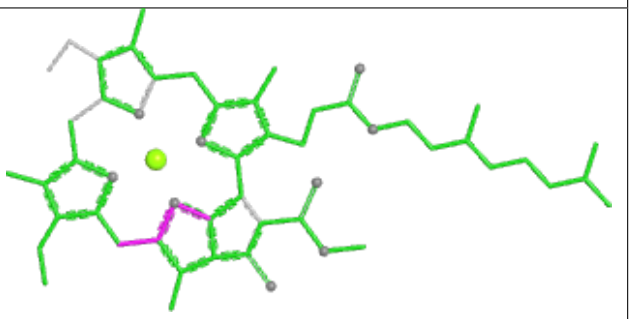
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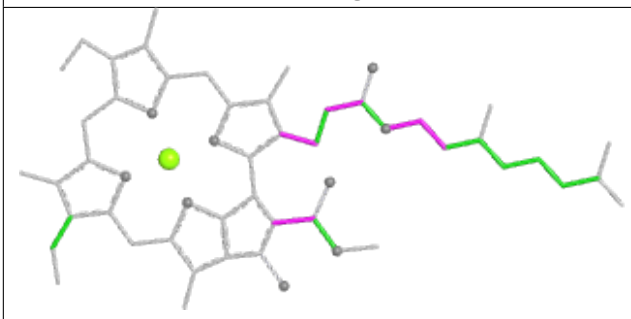	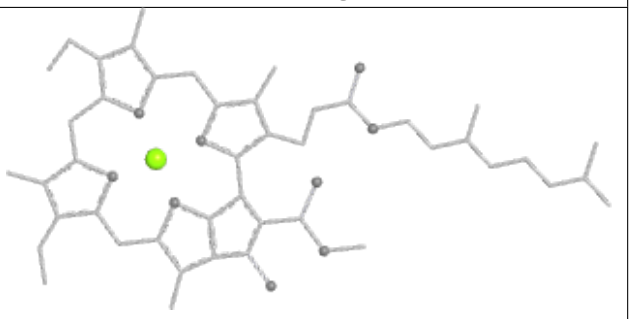
Torsions	**Rings**

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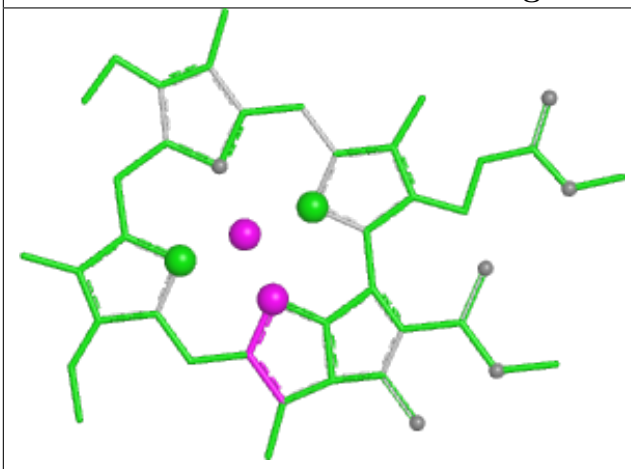	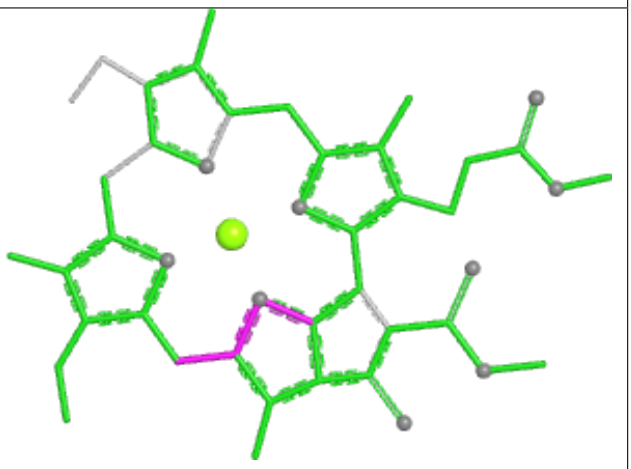
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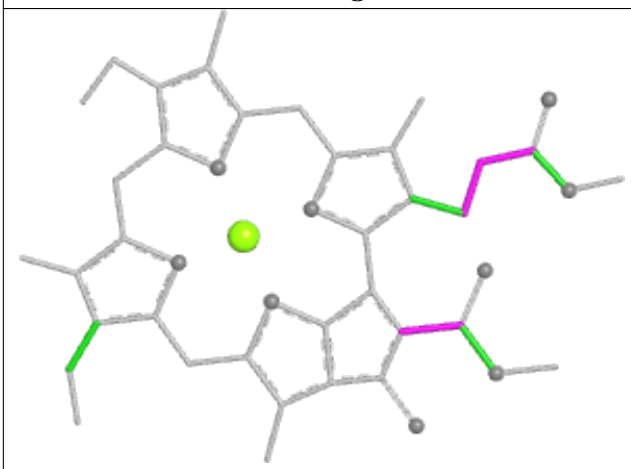	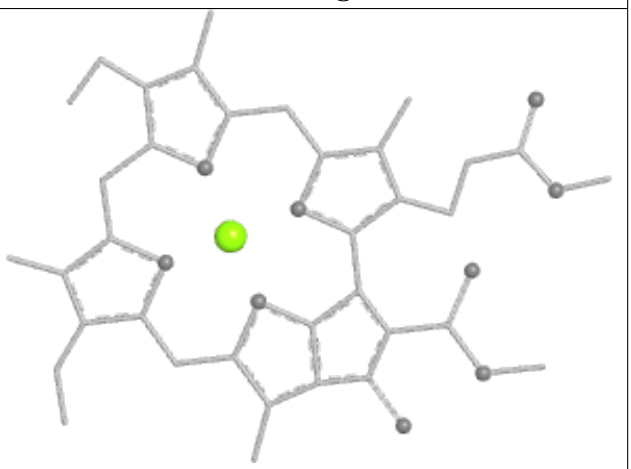
Torsions	Rings

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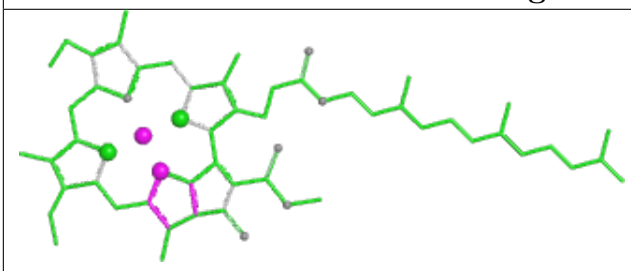
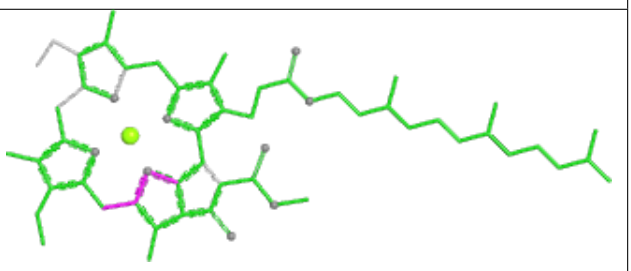
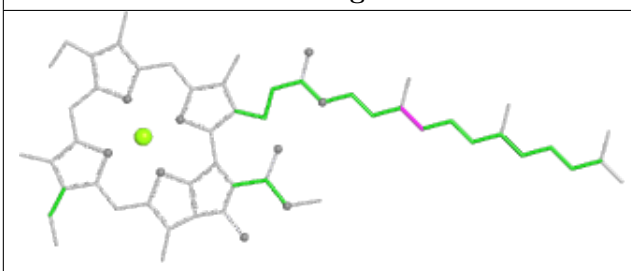
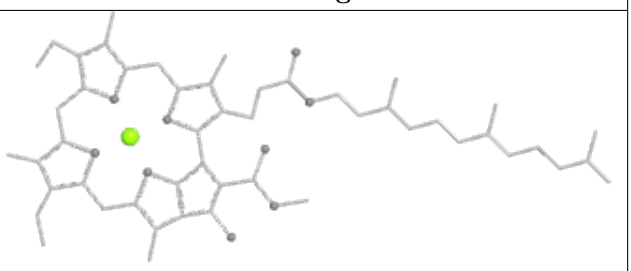
	
Bond lengths	Bond angles
	
Torsions	Rings

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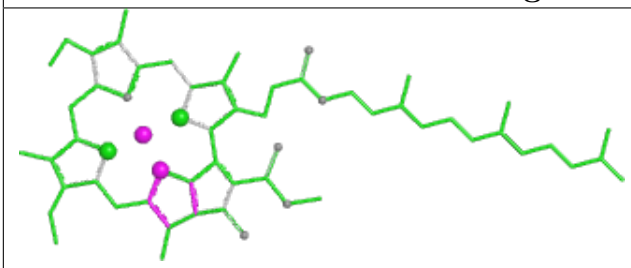	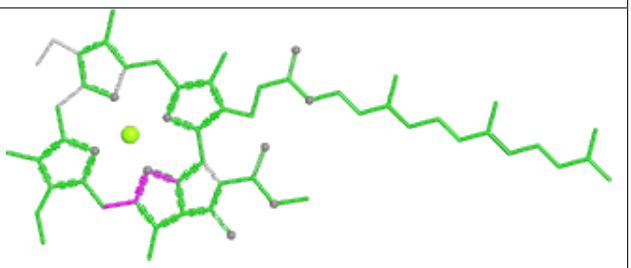
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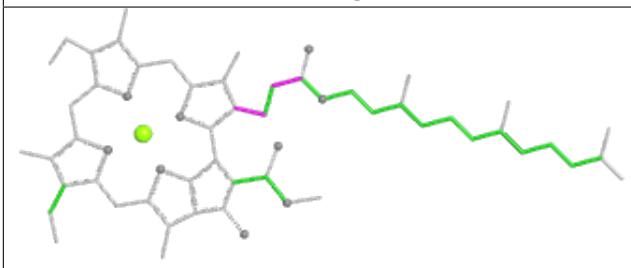	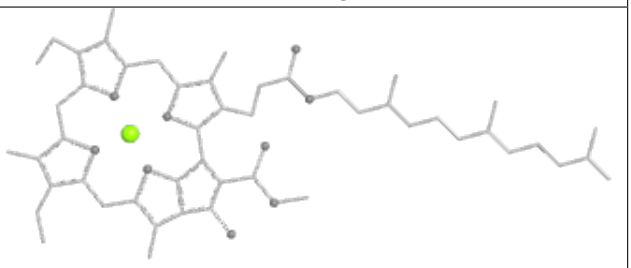
Torsions	**Rings**

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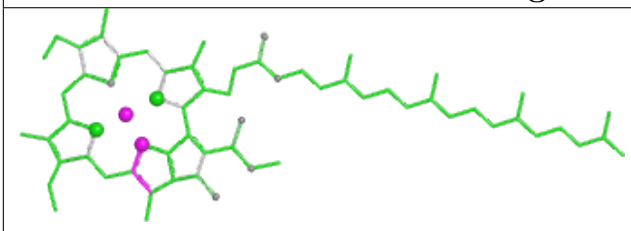
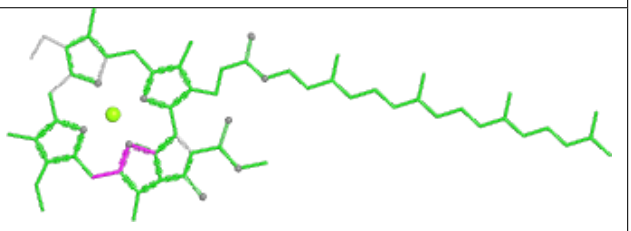
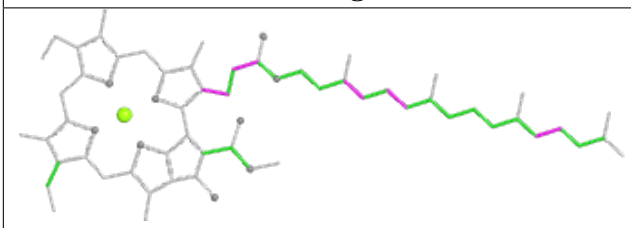
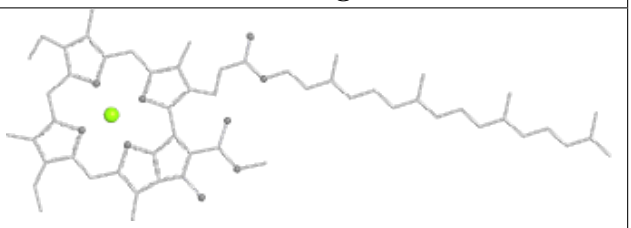
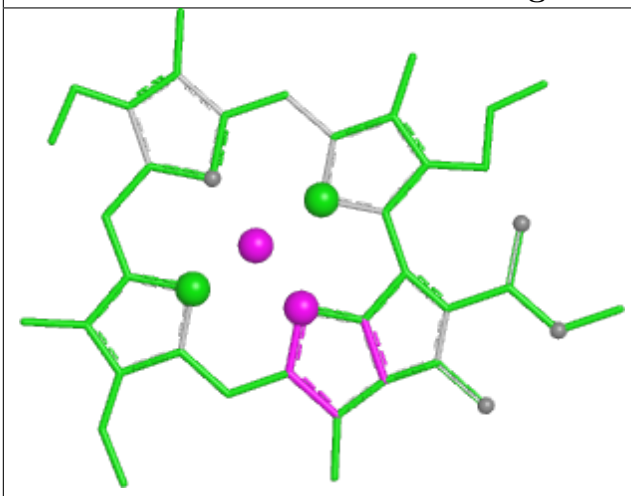
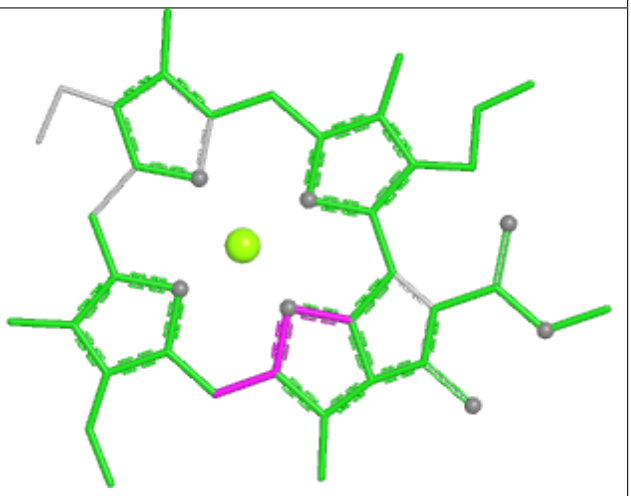
	
Bond lengths	**Bond angles**
	
Torsions	**Rings**

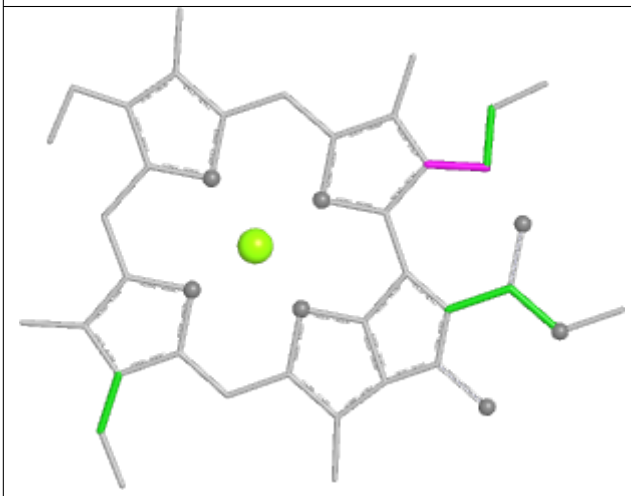
Ligand CLA 7 614



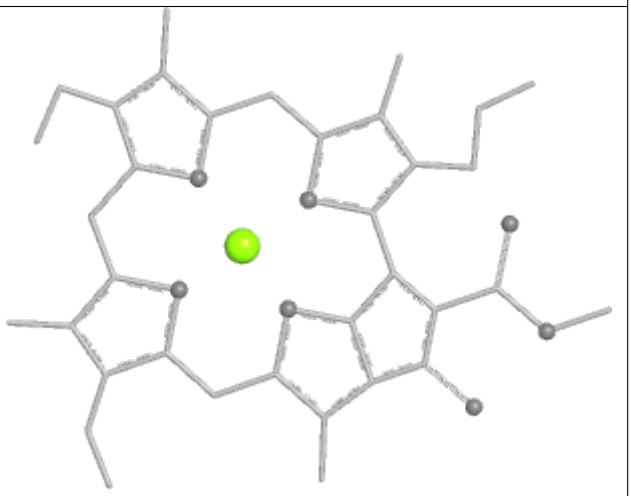
Bond lengths



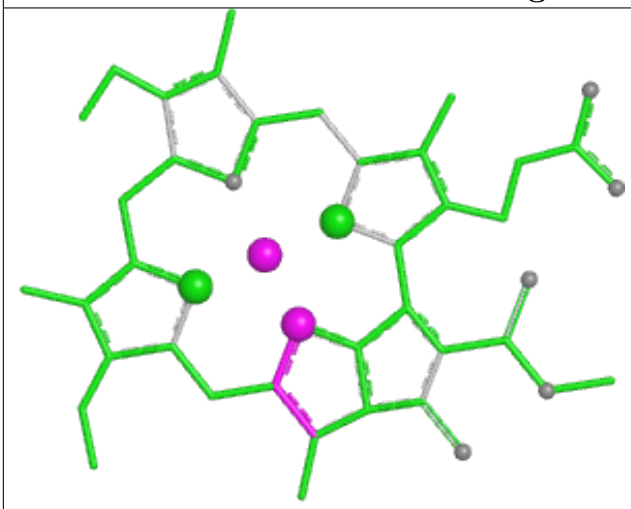
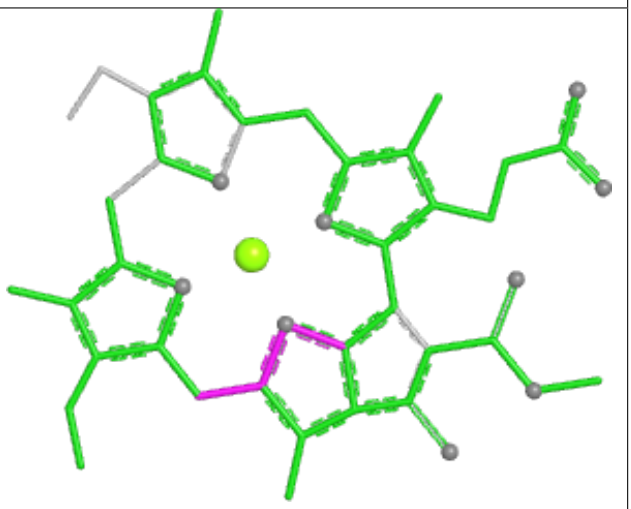
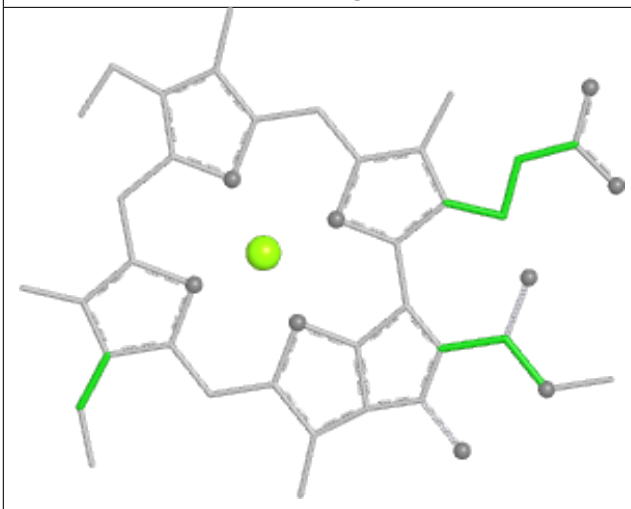
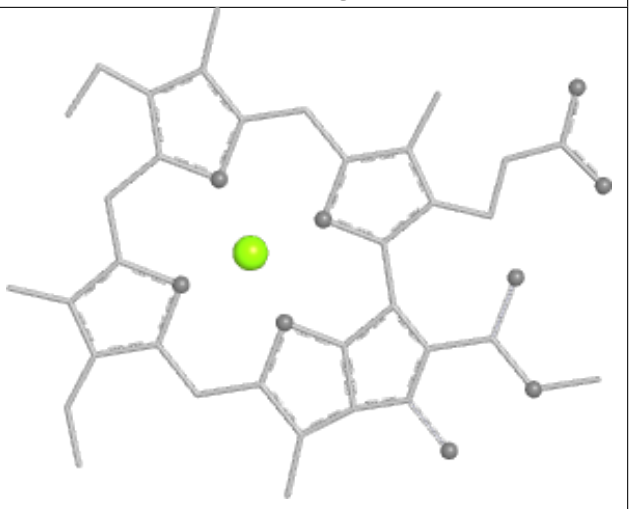
Bond angles

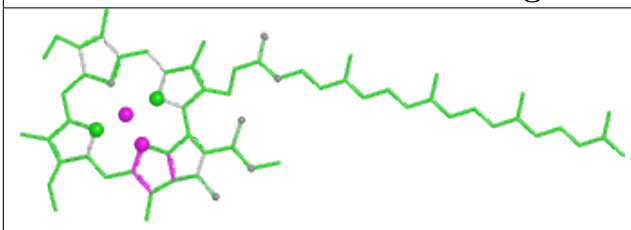
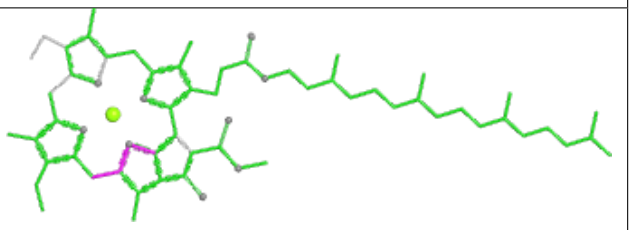
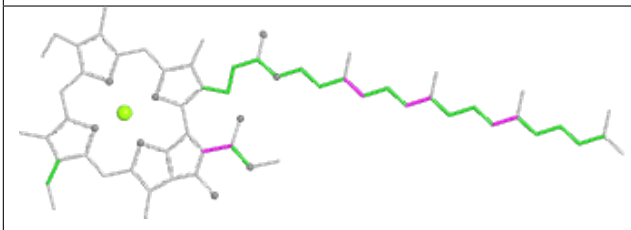
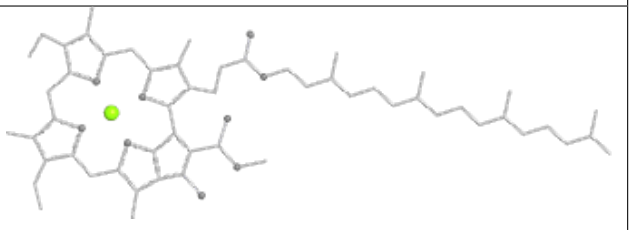


Torsions

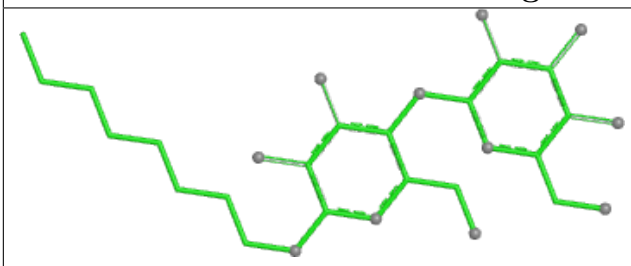


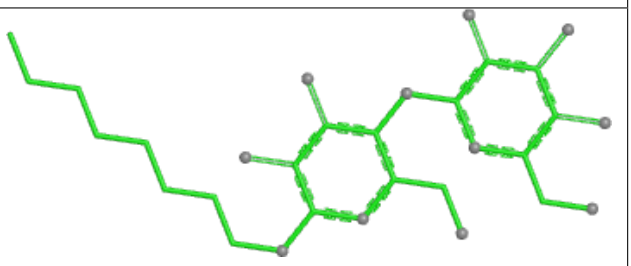
Rings

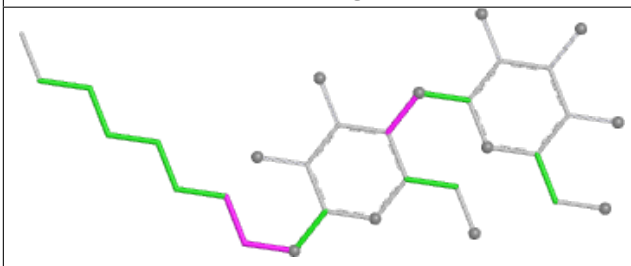
Ligand CLA 5 614	
	
Bond lengths	Bond angles
	
Torsions	Rings

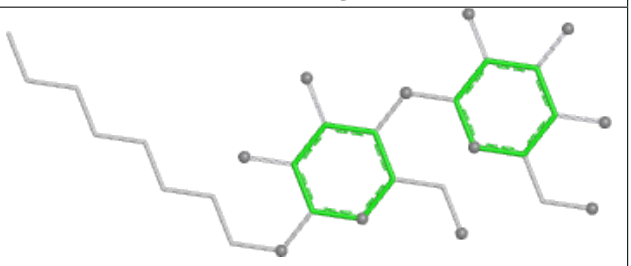
Ligand CLA A 820	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand LMU Z 622

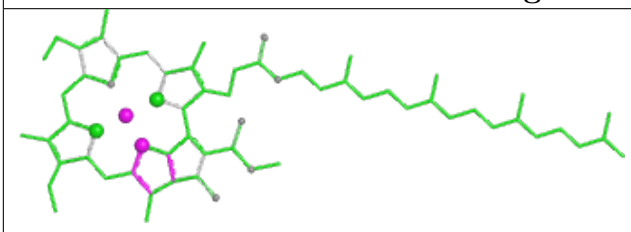

Bond lengths


Bond angles


Torsions


Rings

Ligand CLA A 804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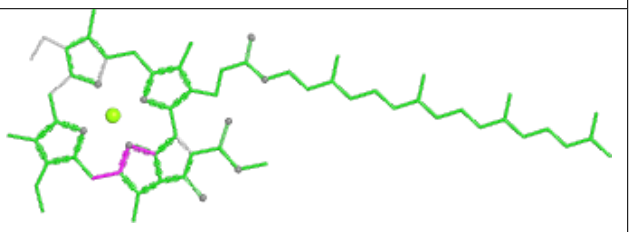
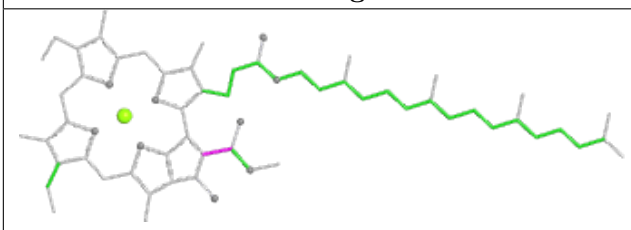

Bond angles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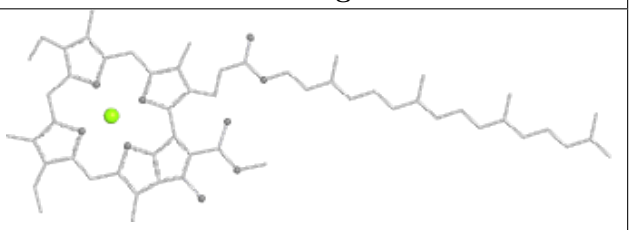
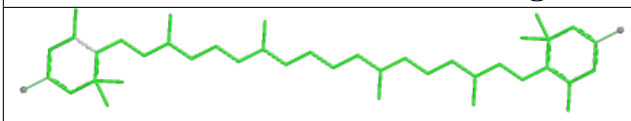

Rings

Ligand LUT 5 626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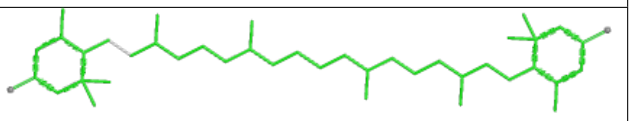
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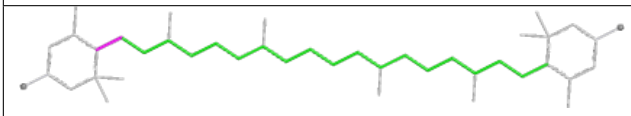
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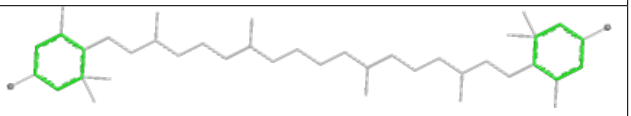
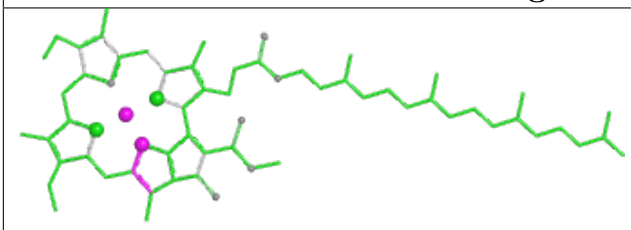
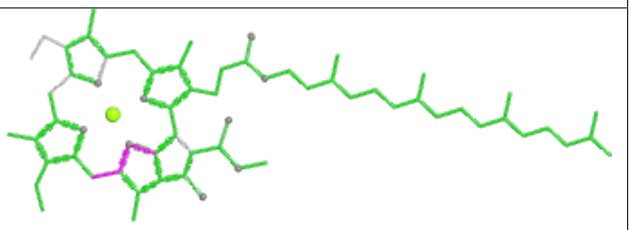
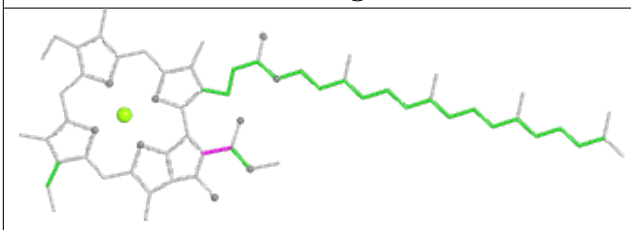
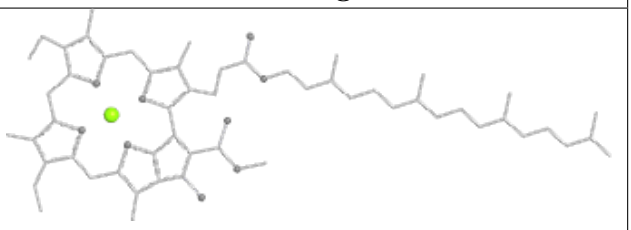

Rings

Ligand CLA 6 602	
 Bond lengths	 Bond angles
 Torsions	 Rings

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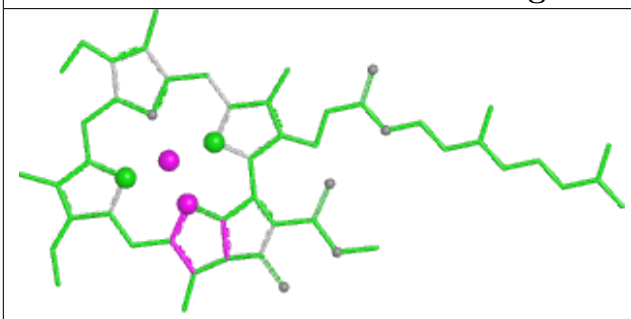
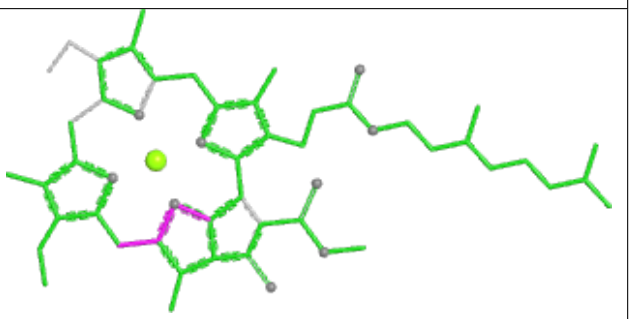
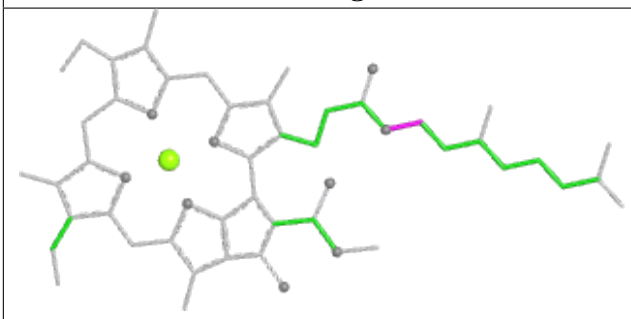
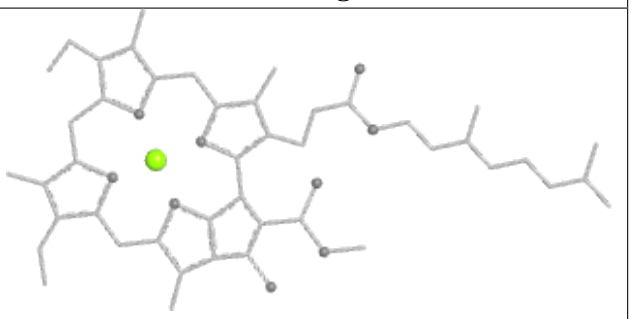
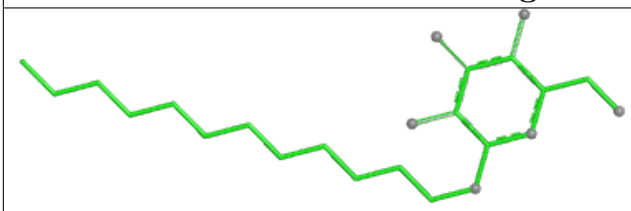
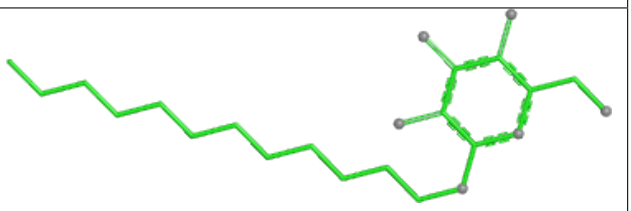
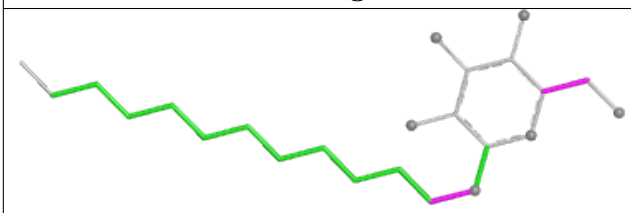
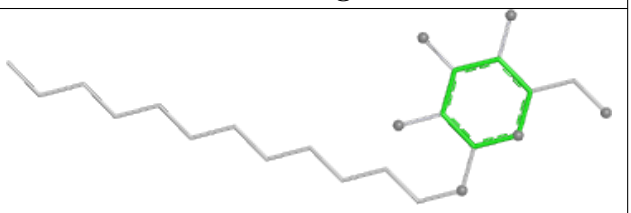
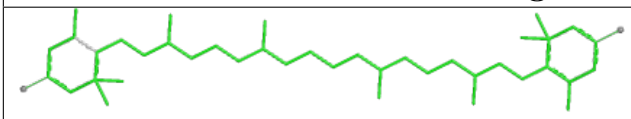
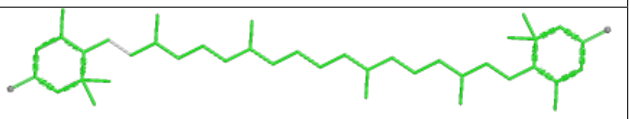
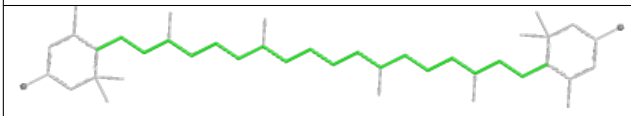
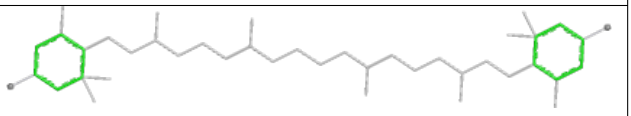
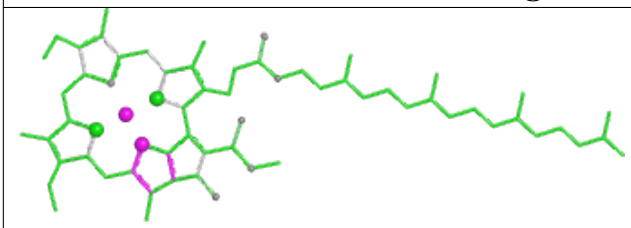
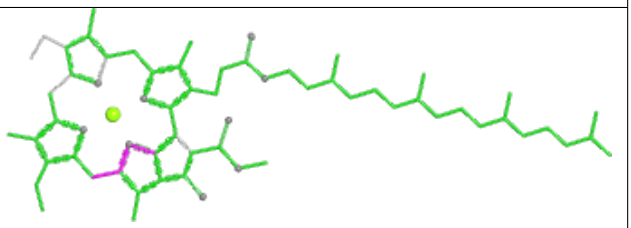
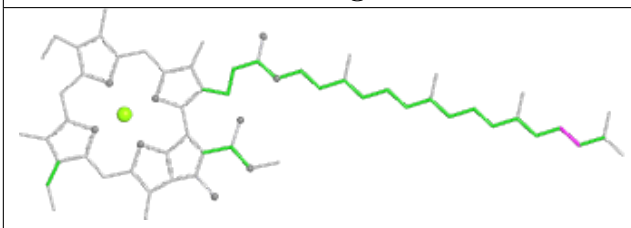
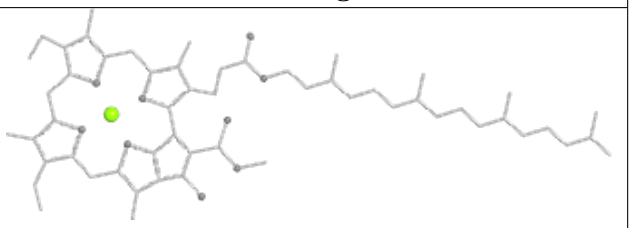
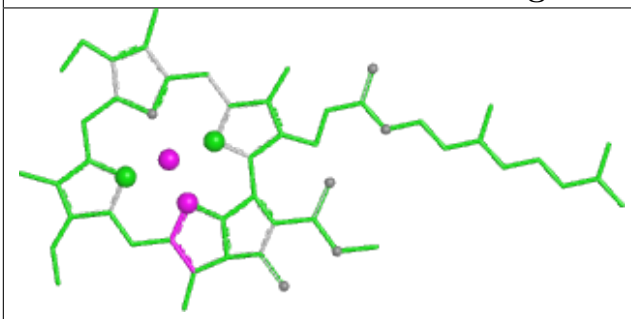
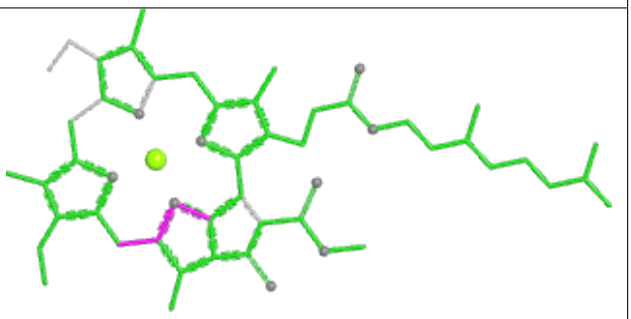
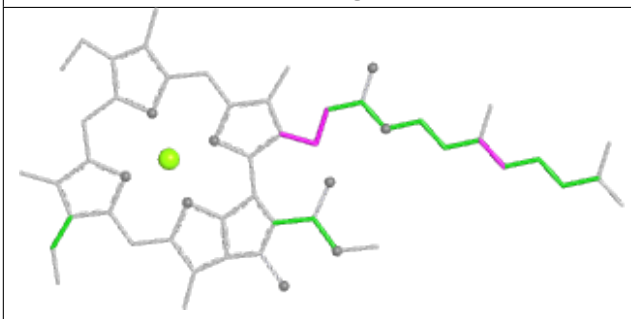
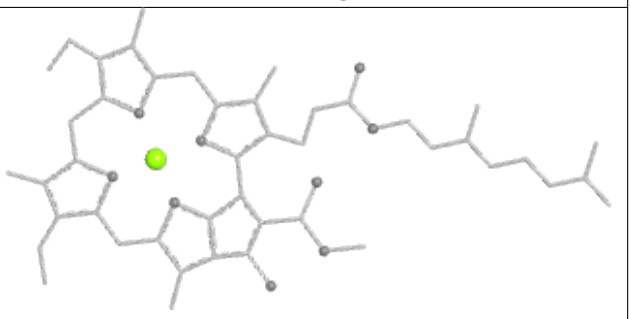
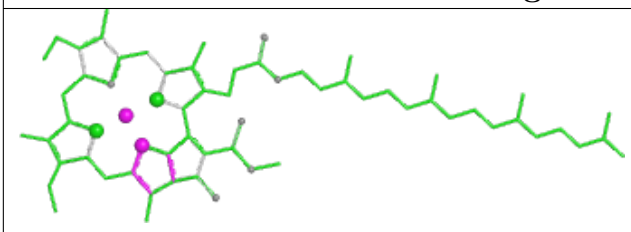
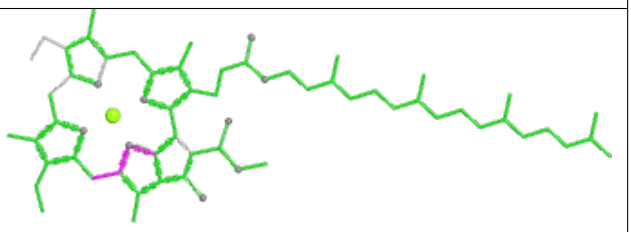
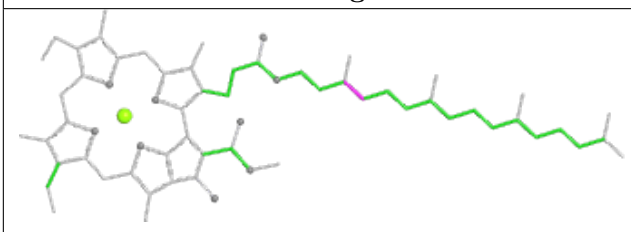
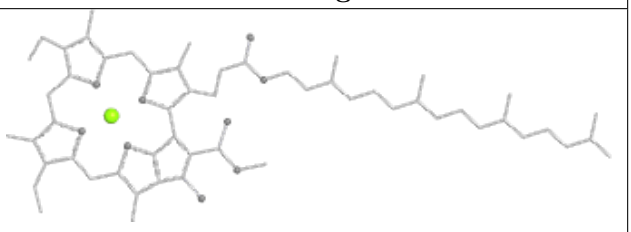
 Bond lengths	 Bond angles
 Torsions	 Rings

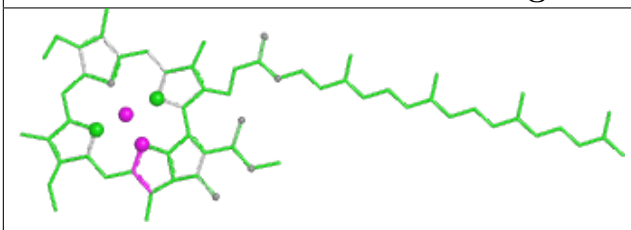
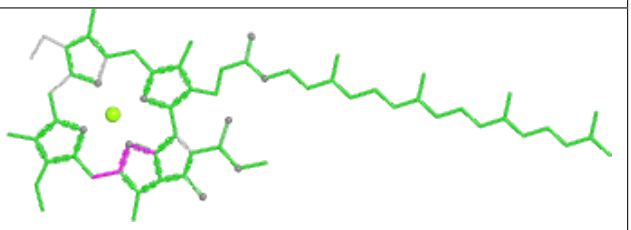
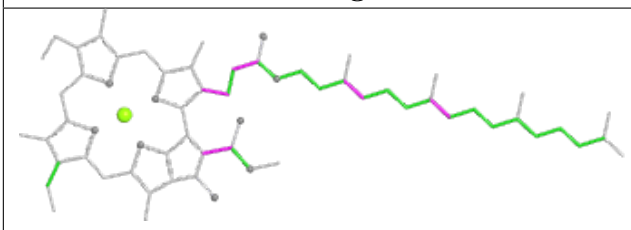
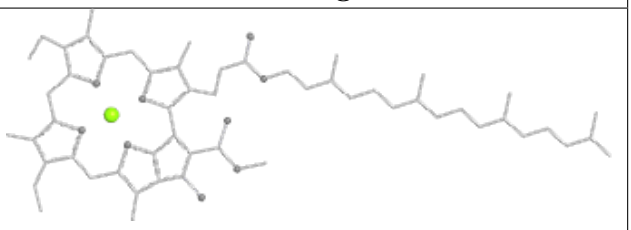
Ligand LMU A 864	
 Bond lengths	 Bond angles
 Torsions	 Rings

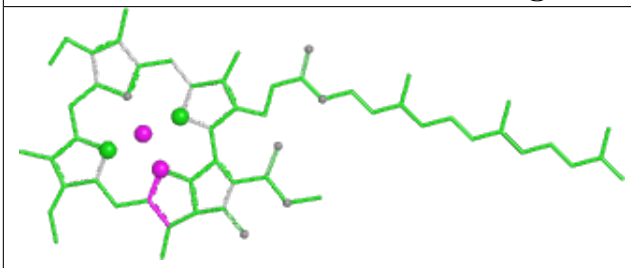
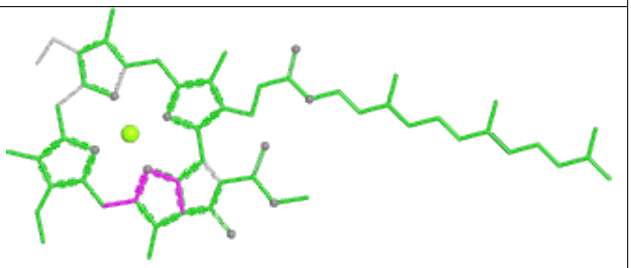
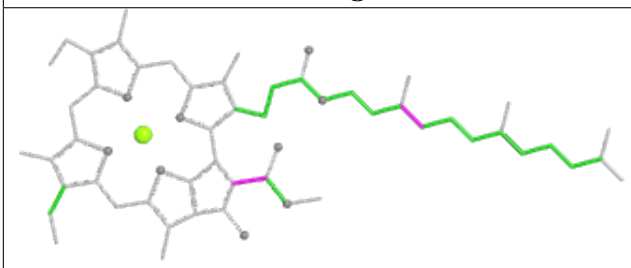
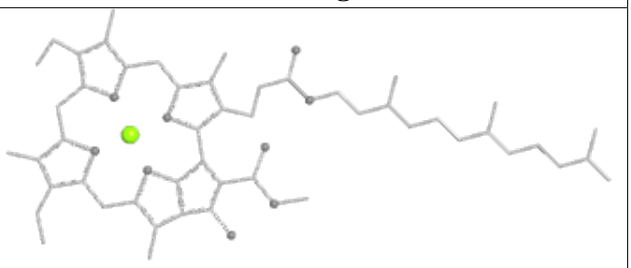
Ligand LUT 3 720	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA B 816	
 Bond lengths	 Bond angles
 Torsions	 Rings

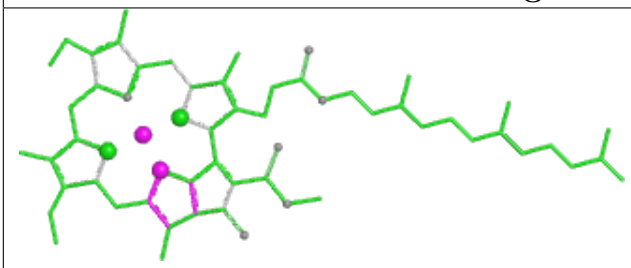
Ligand CLA J 101	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA A 828	
	
Bond lengths	Bond angles
	
Torsions	Rings

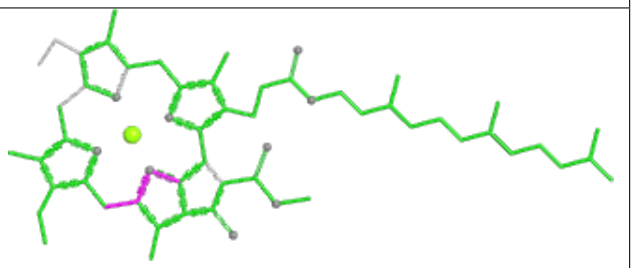
Ligand CLA 3 615	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA 9 610	
 Bond lengths	 Bond angles
 Torsions	 Rings

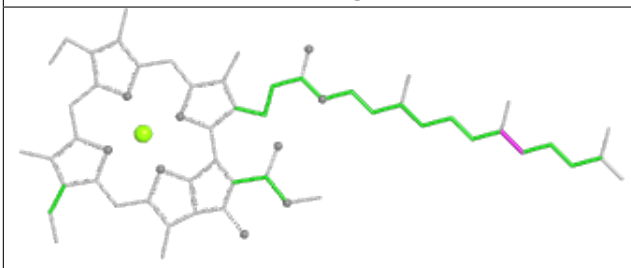
Ligand CLA B 819



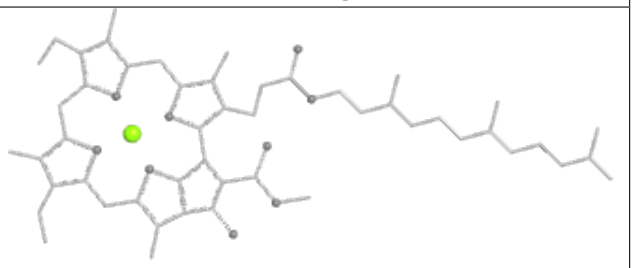
Bond lengths



Bond angles

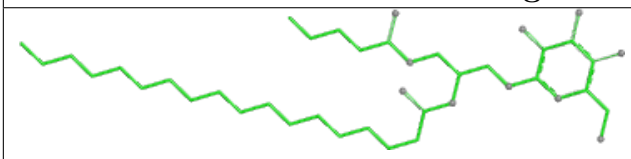


Torsions



Rings

Ligand LMG J 103



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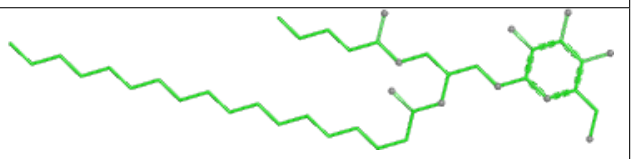

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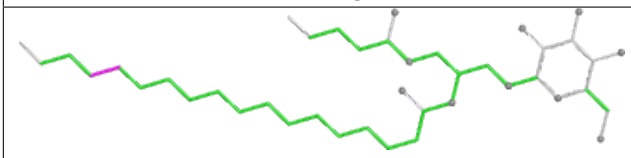

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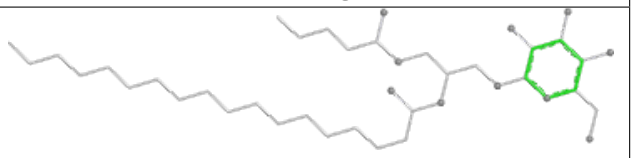
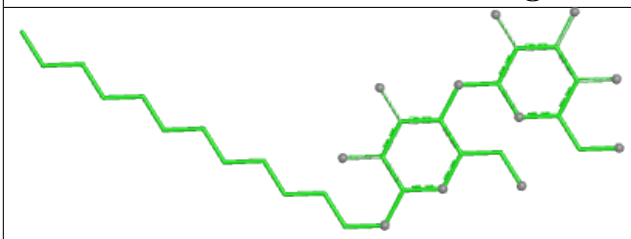


Rings

Ligand LMU 8 627



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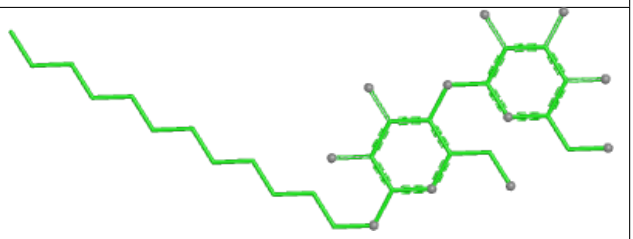
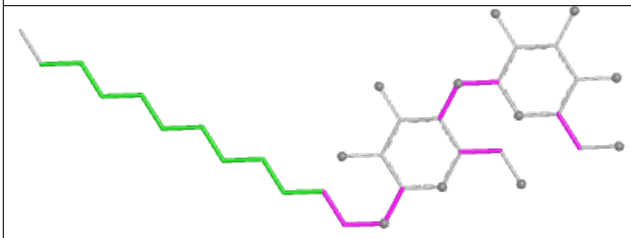


Bond angles



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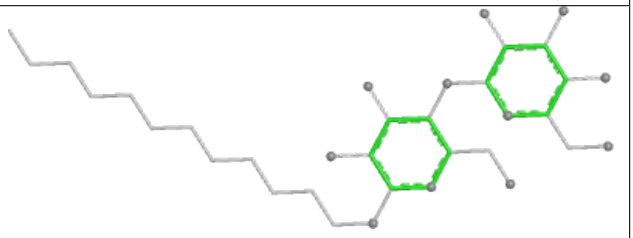
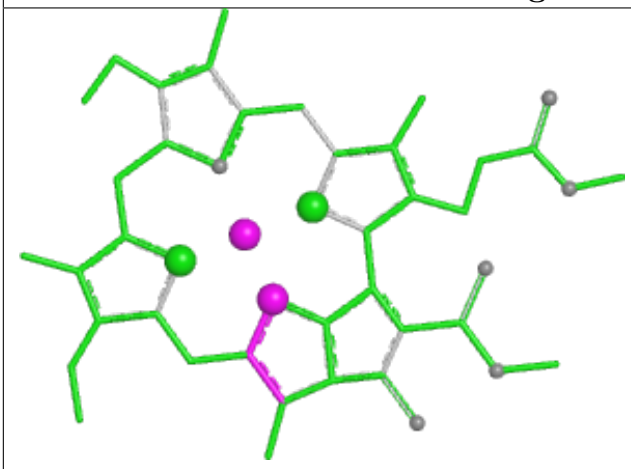
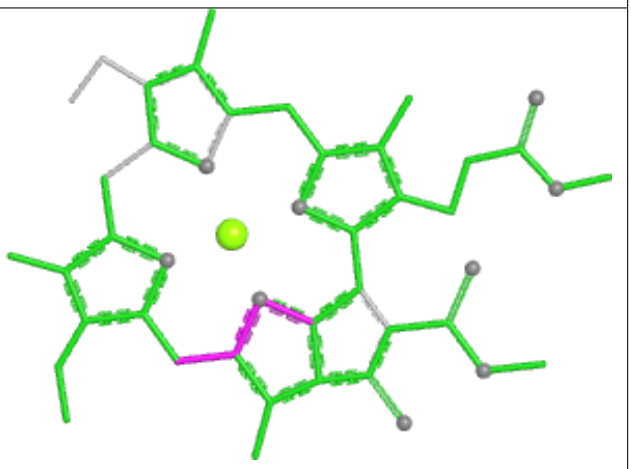
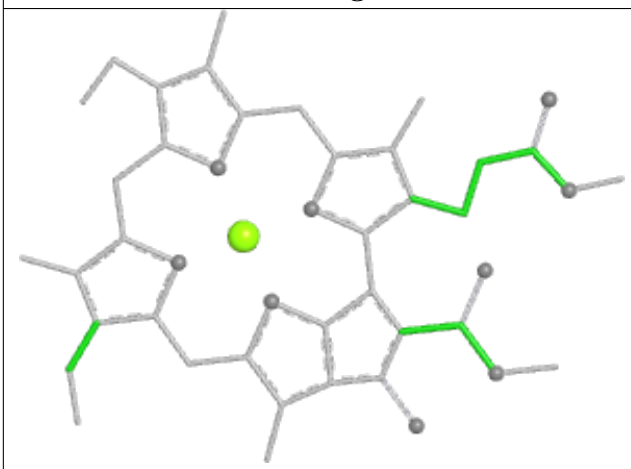
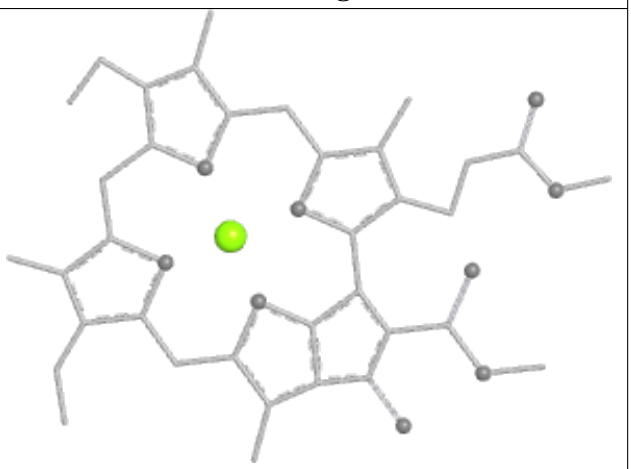
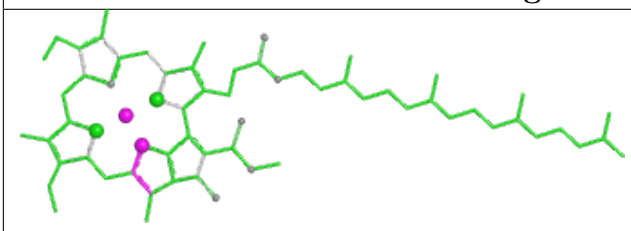
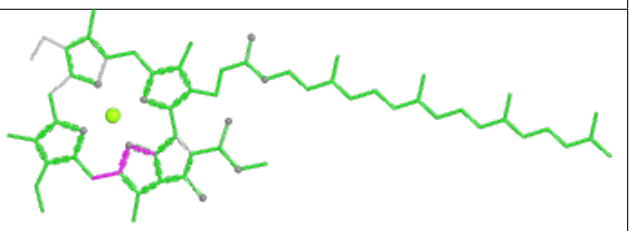
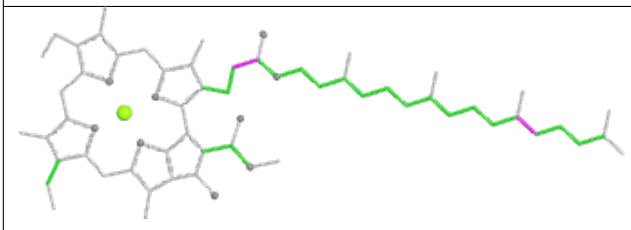
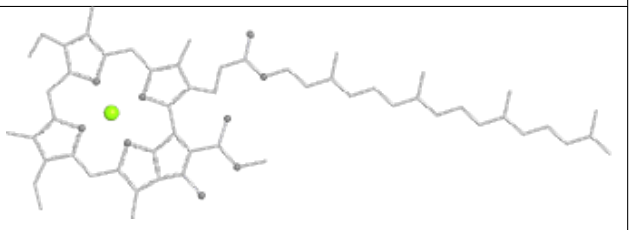
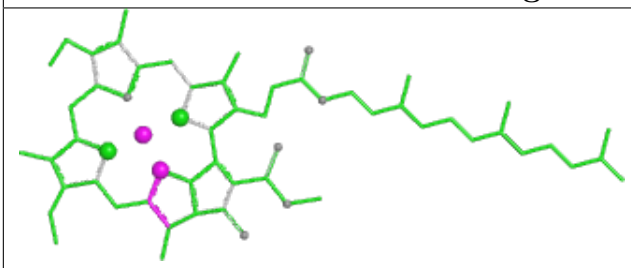
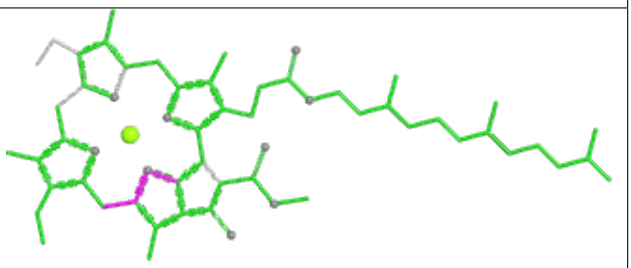
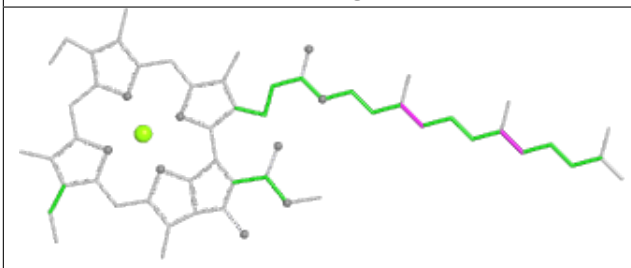
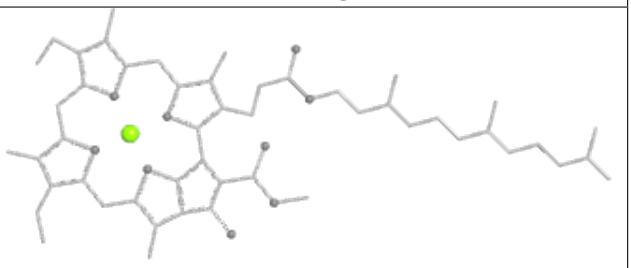
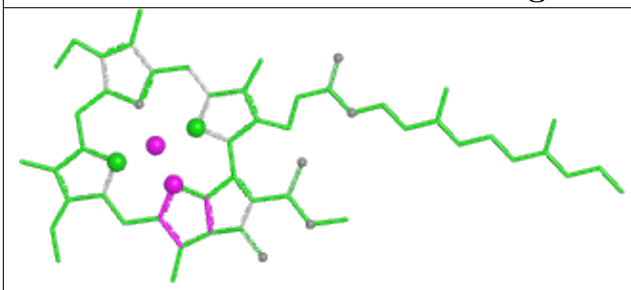
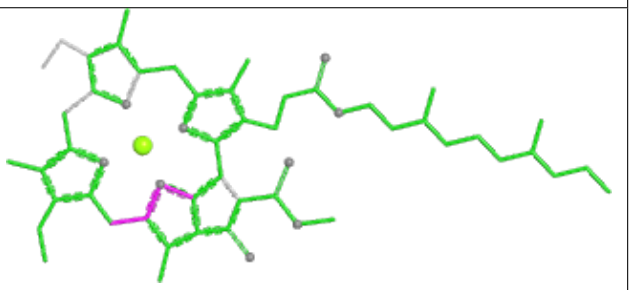
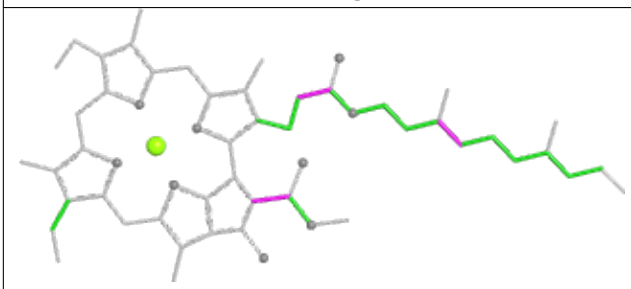
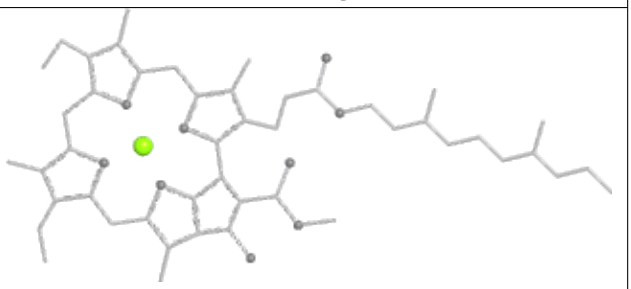


Rings

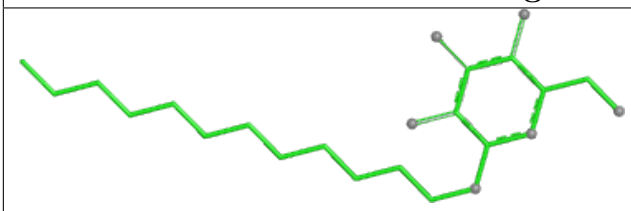
Ligand CLA 9 601	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA A 836	
	
Bond lengths	Bond angles
	
Torsions	Rings

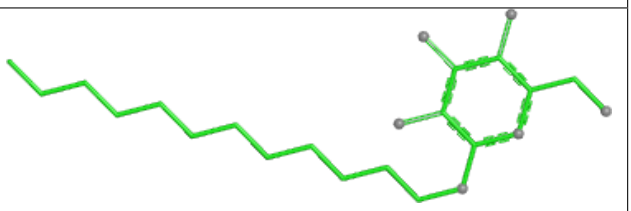
Ligand CLA K 203	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA 1 603	
 Bond lengths	 Bond angles
 Torsions	 Rings

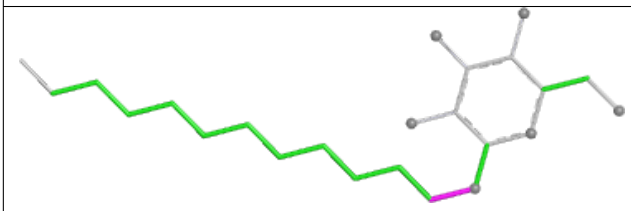
Ligand LMU 8 624



Bond lengths



Bond angles



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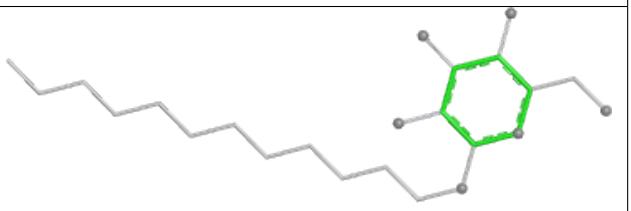
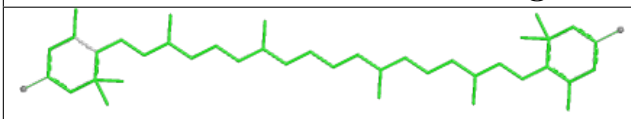
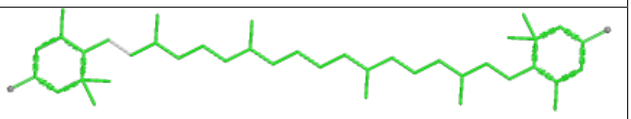


Rings

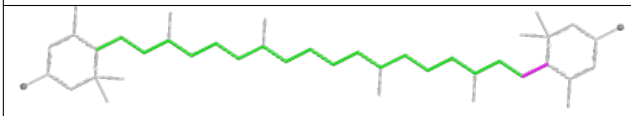
Ligand LUT 1 617



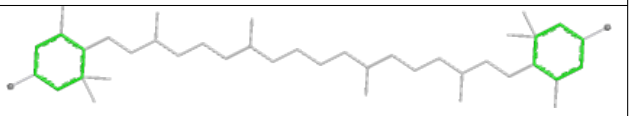
Bond lengths



Bond angles

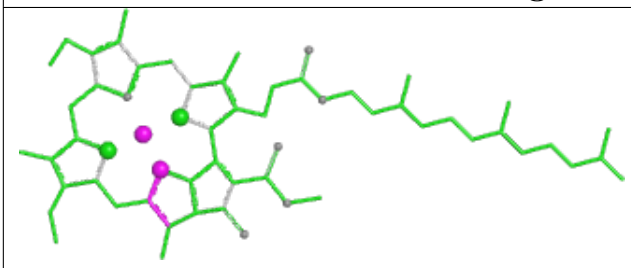


Torsions

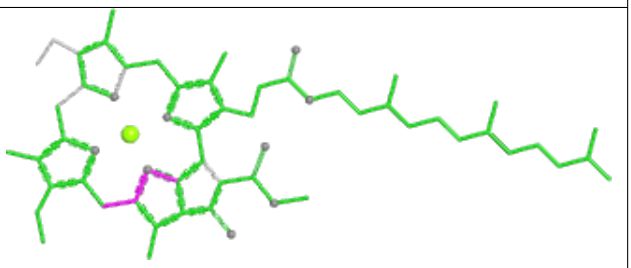


Rings

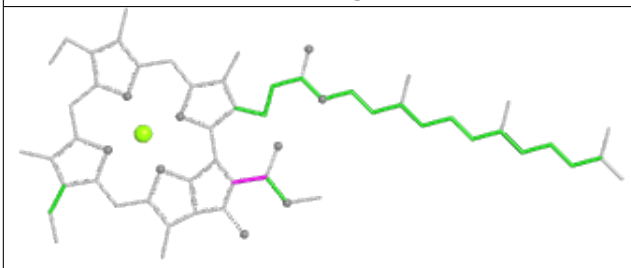
Ligand CLA 3 602



Bond lengths



Bond angles



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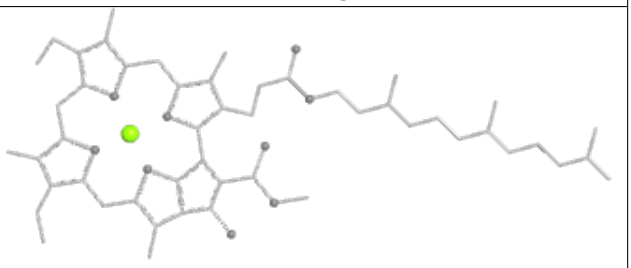
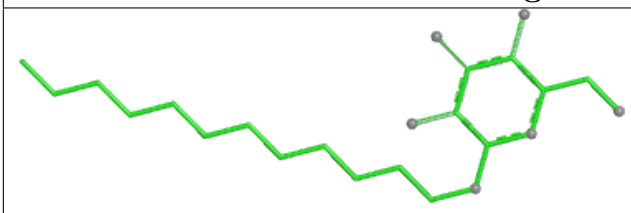


Rings

Ligand LMU 8 625



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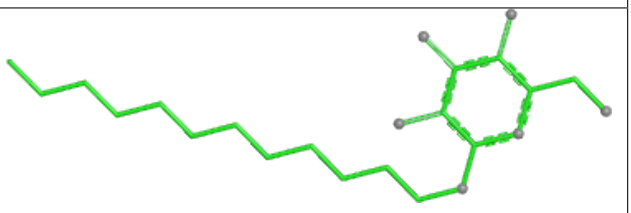

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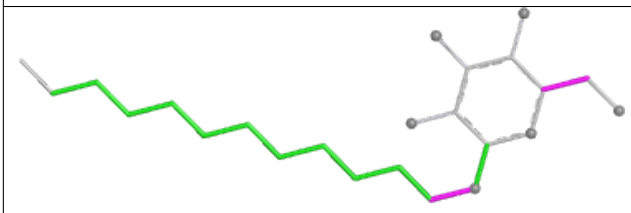

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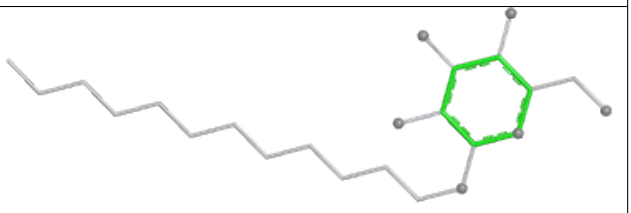
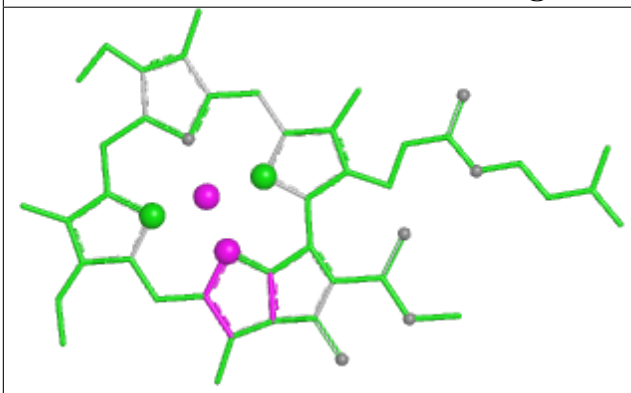


Rings

Ligand CLA 8 608



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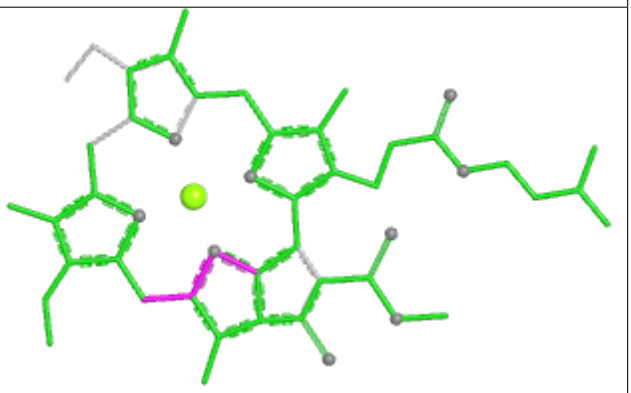
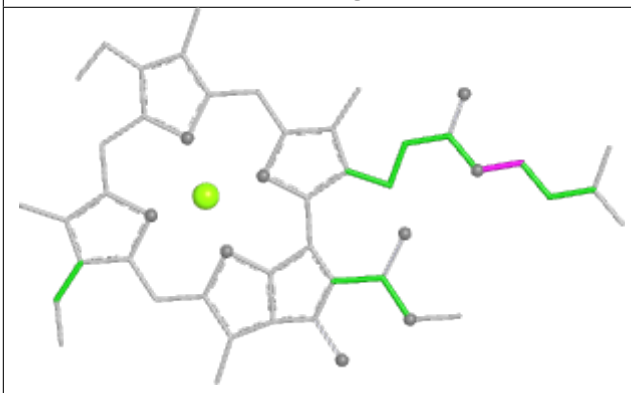


Bond angles



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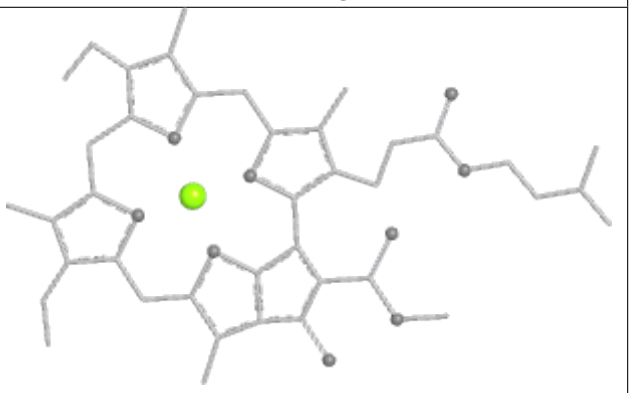
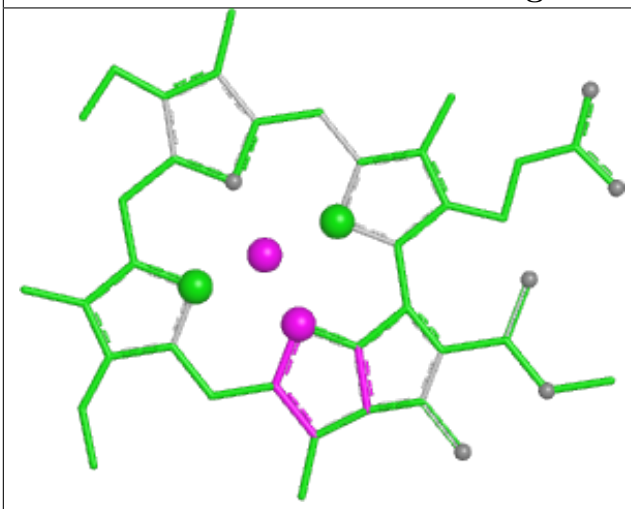
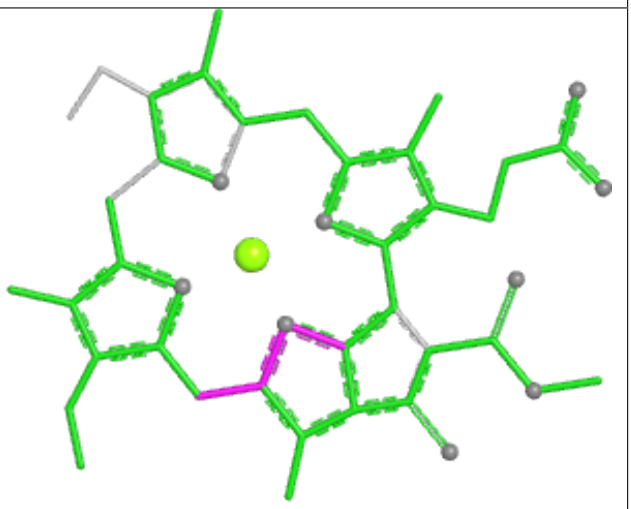


Rings

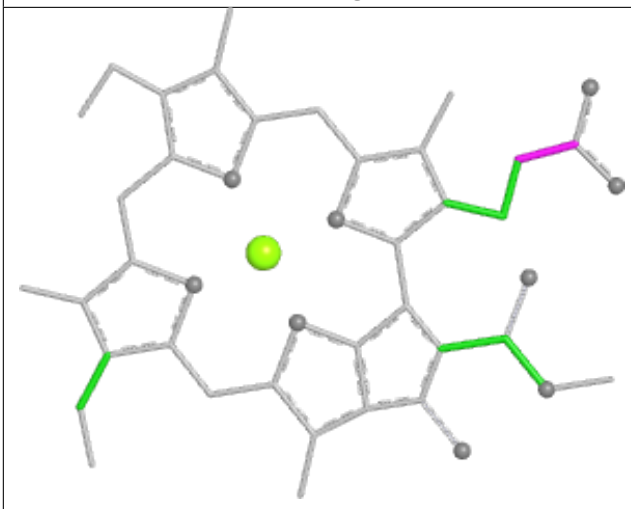
Ligand CLA F 303



Bond lengths



Bond angles



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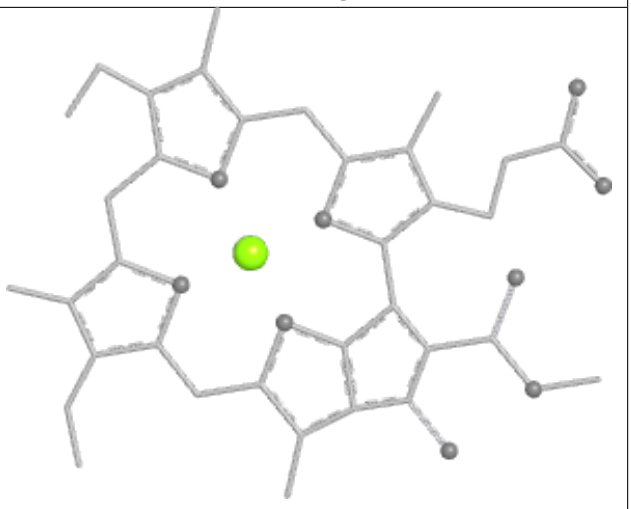
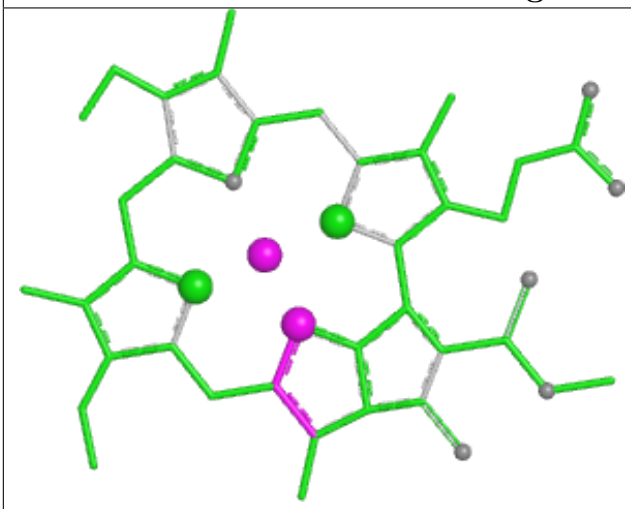
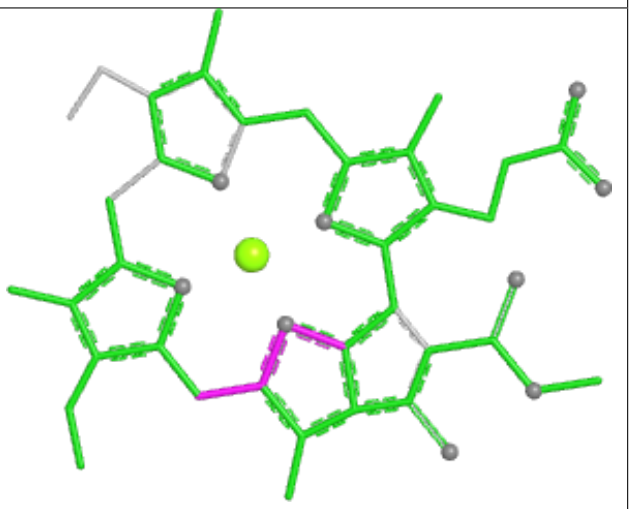
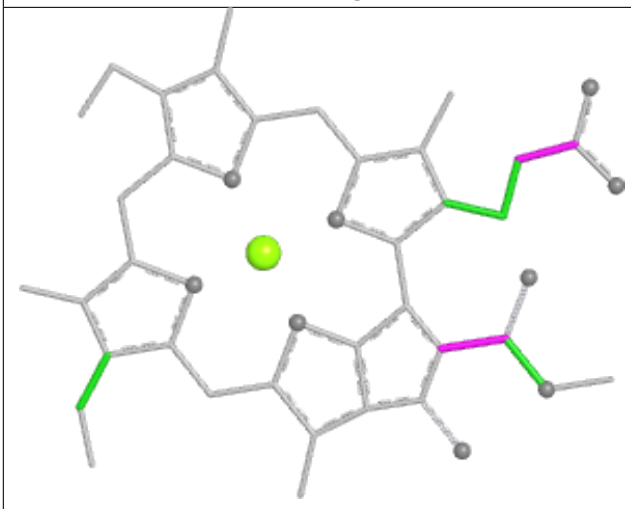
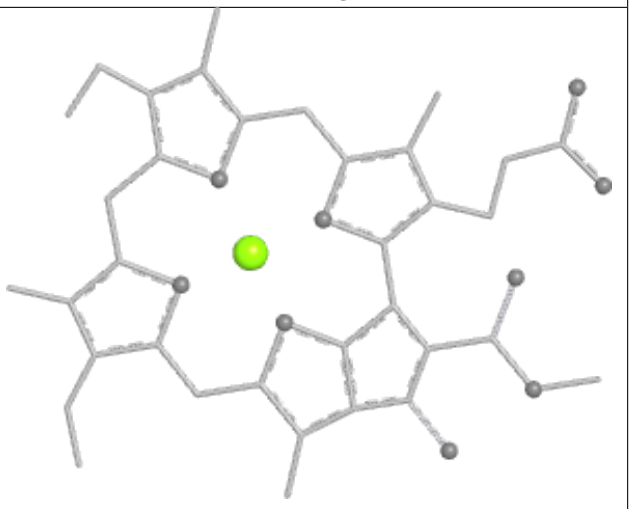


Rings

Ligand CLA Z 612	
 Bond lengths	 Bond angles
 Torsions	 Rings

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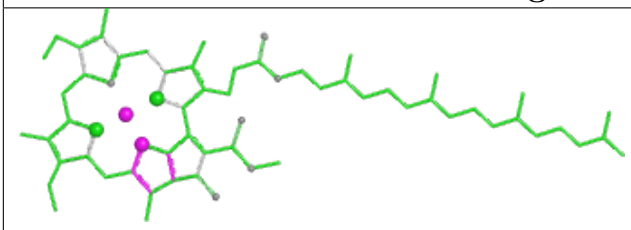
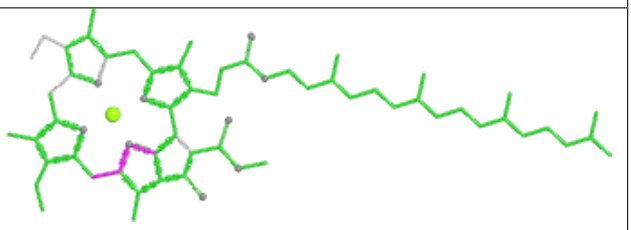
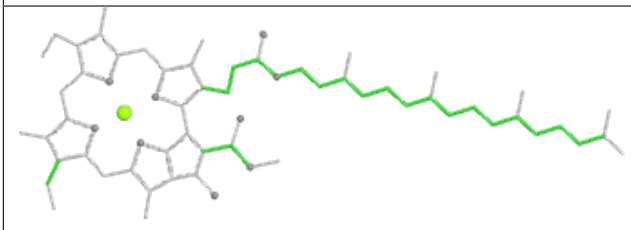
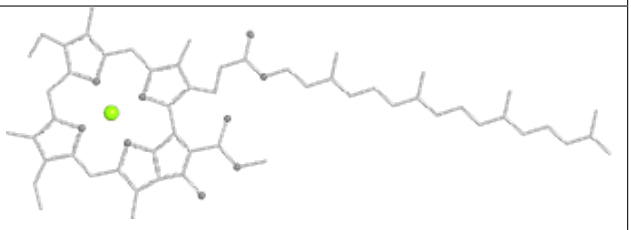
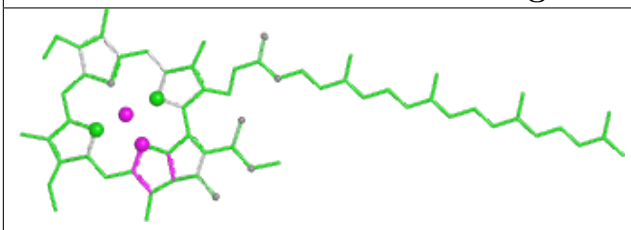
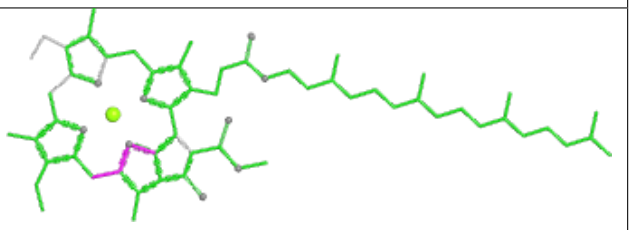
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA 6 604	
	
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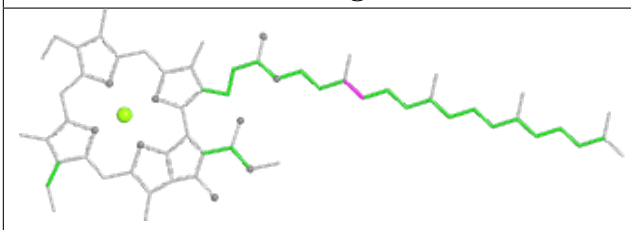
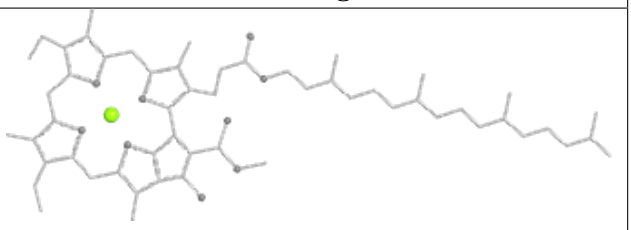
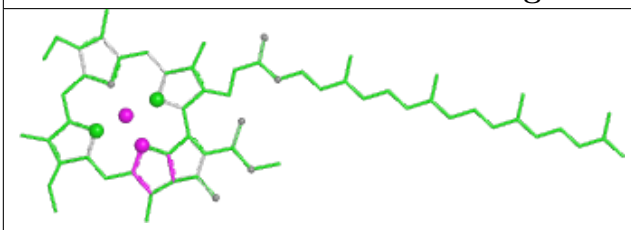
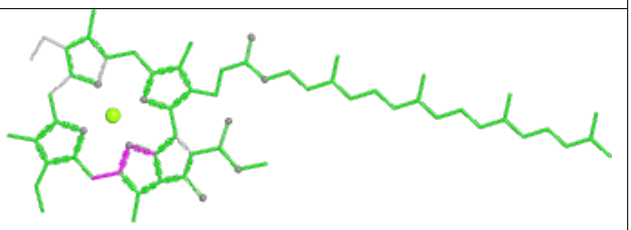
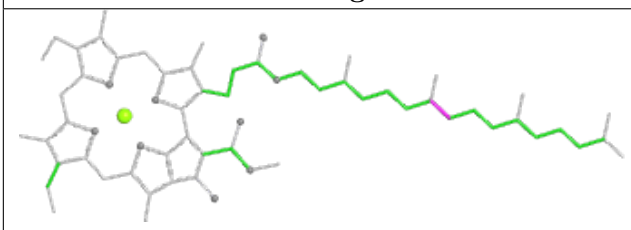
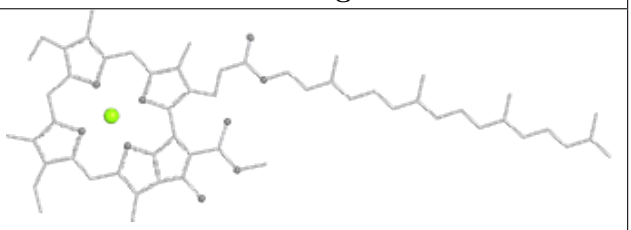
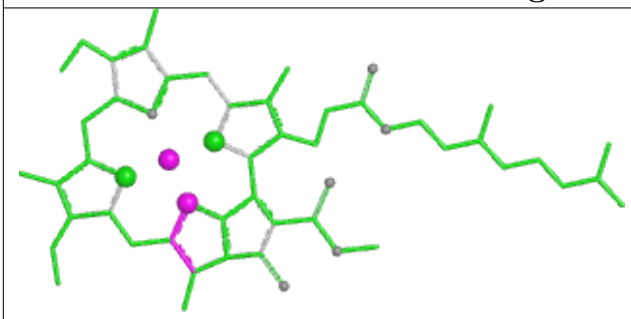
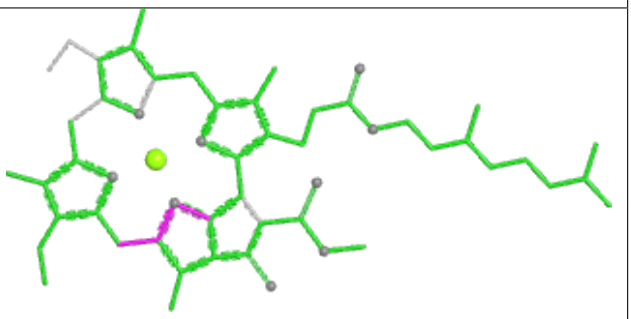
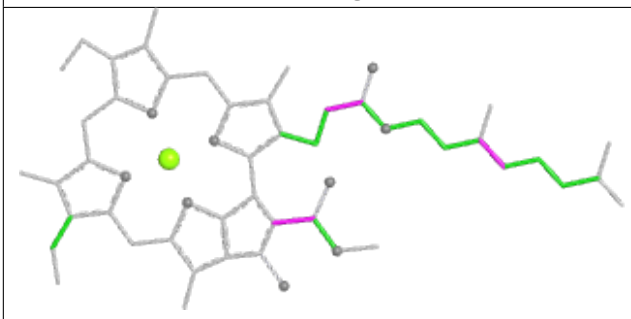
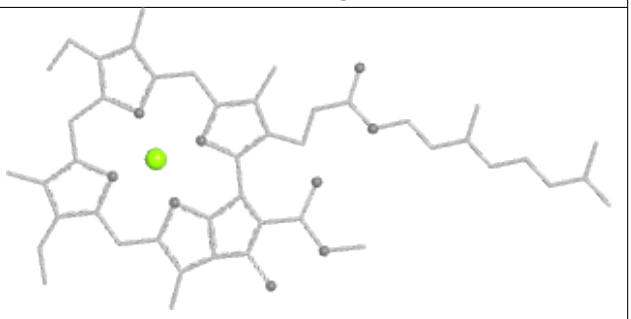
	
Torsions	Rings

Ligand CLA A 842	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA 5 604	
	
Bond lengths	Bond angles
	
Torsions	Rings

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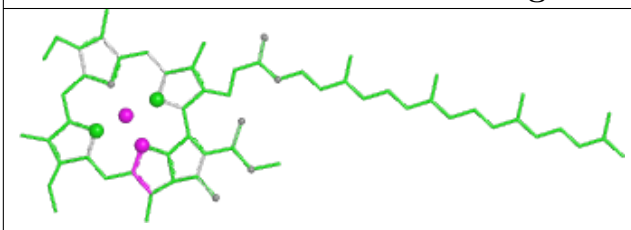
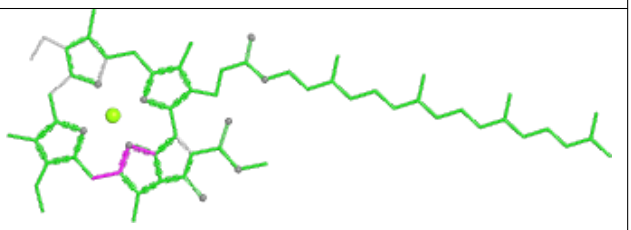
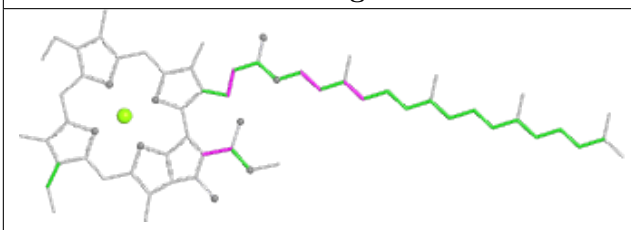
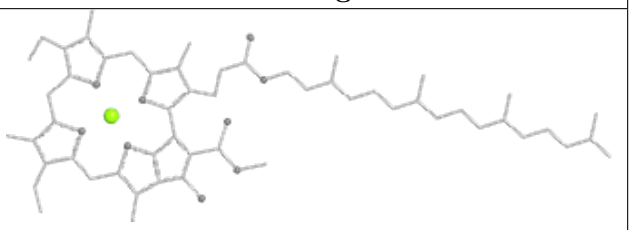
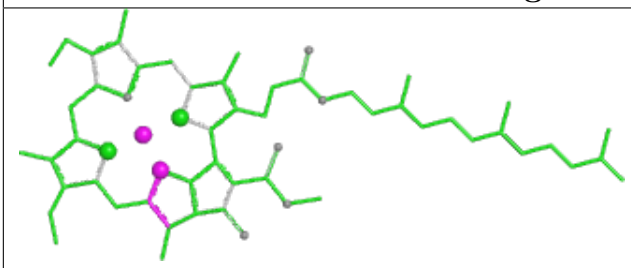
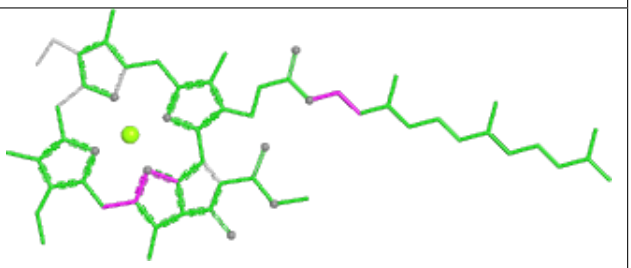
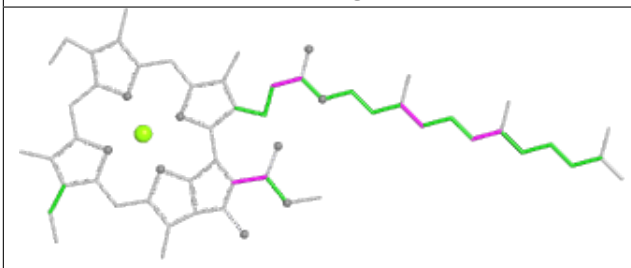
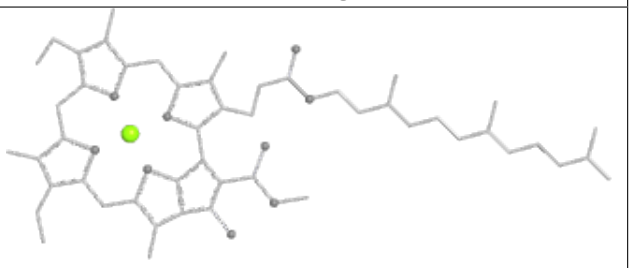
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA B 814	
	
Bond lengths	**Bond angles**
	
Torsions	**Rings**

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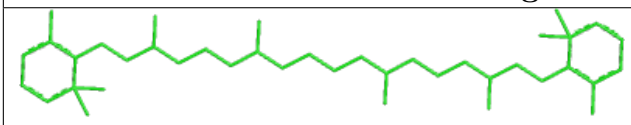
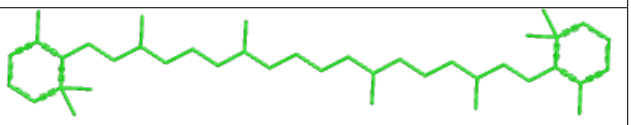
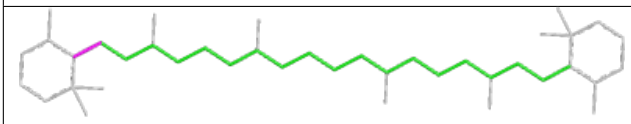
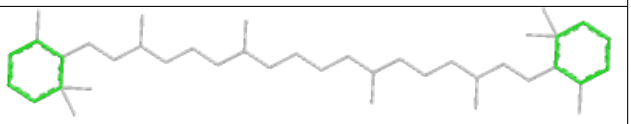
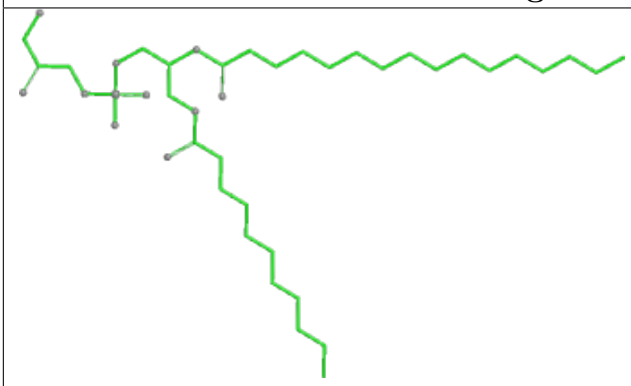
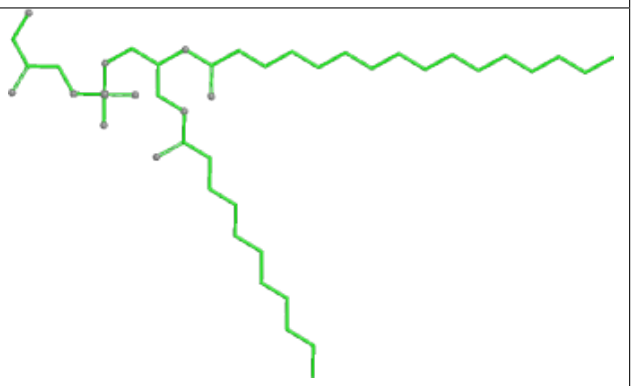
	
Bond lengths	**Bond angles**
	
Torsions	**Rings**

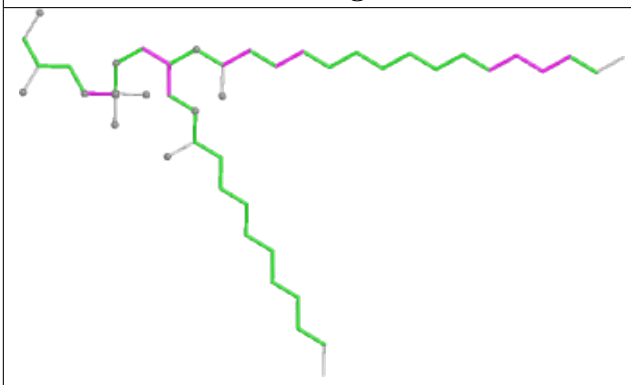
Ligand LHG 8 620



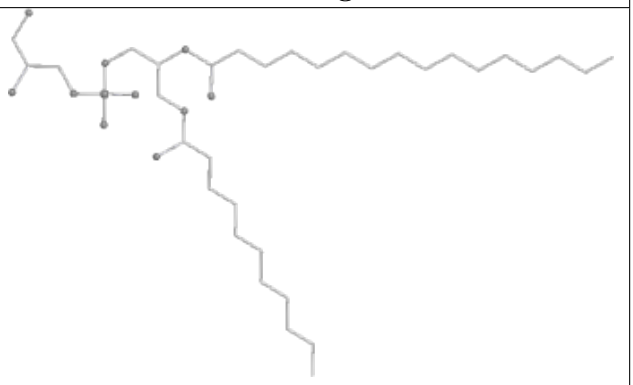
Bond lengths



Bond angles

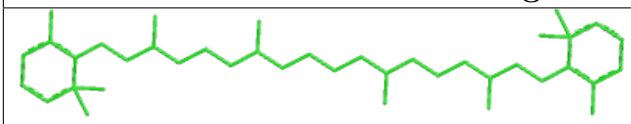


Torsions

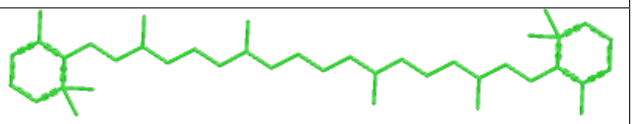


Rings

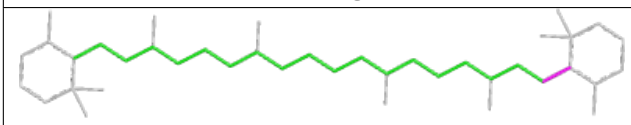
Ligand BCR B 846



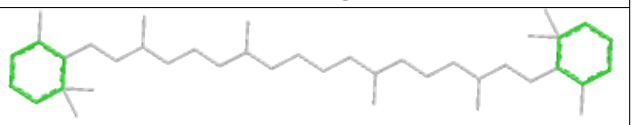
Bond lengths



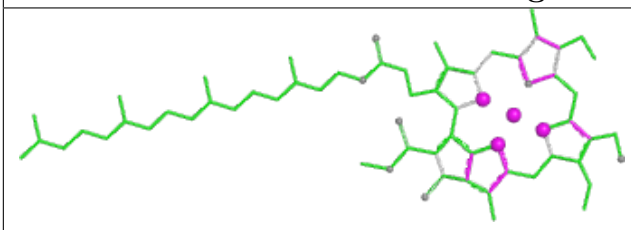
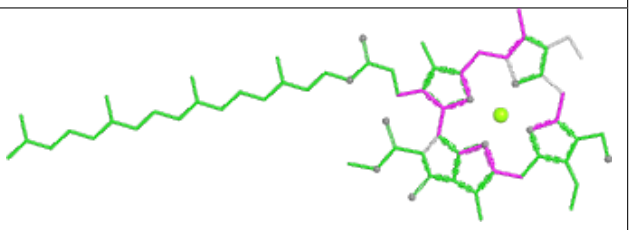
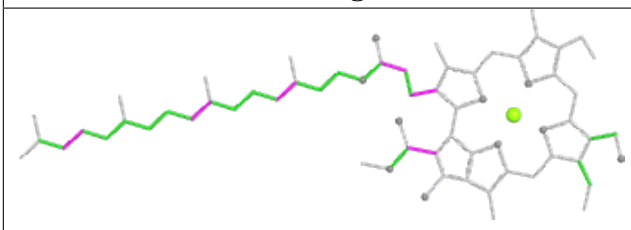
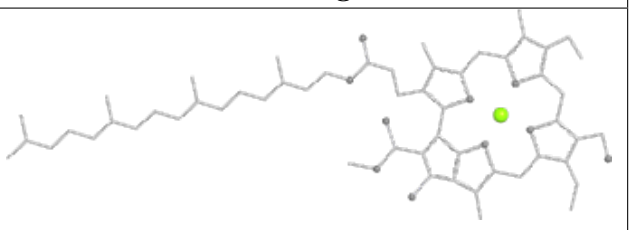
Bond angles

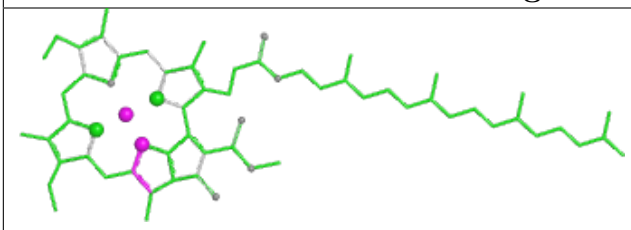
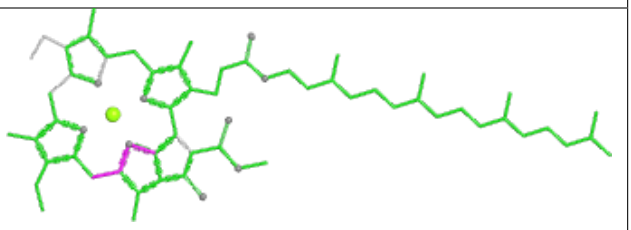
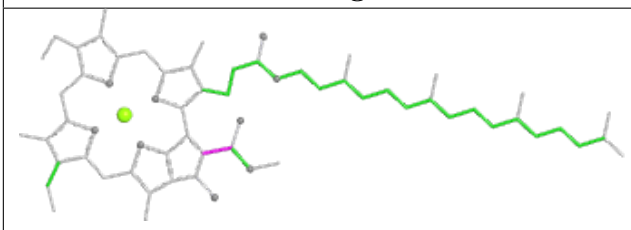
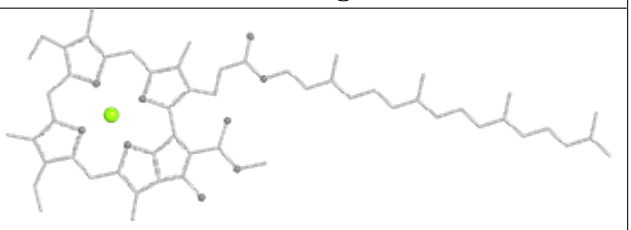


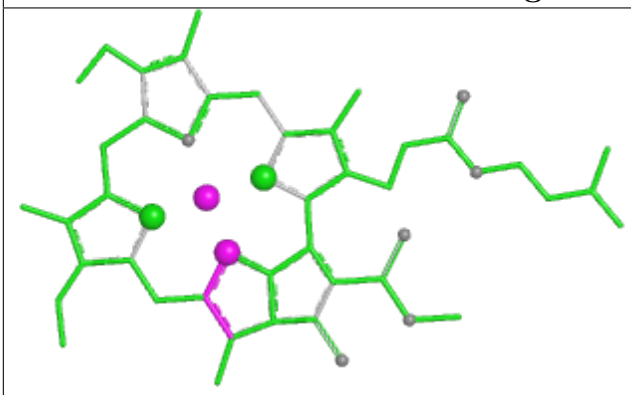
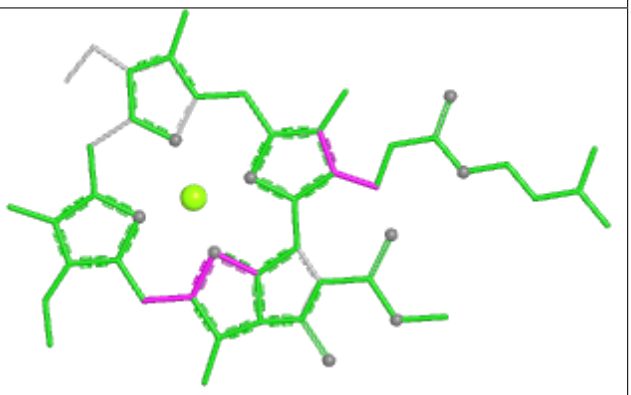
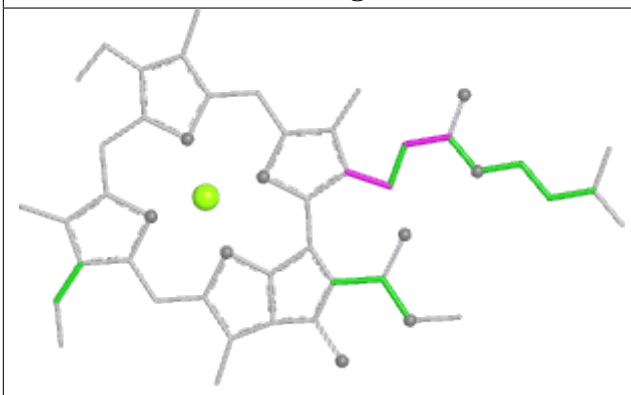
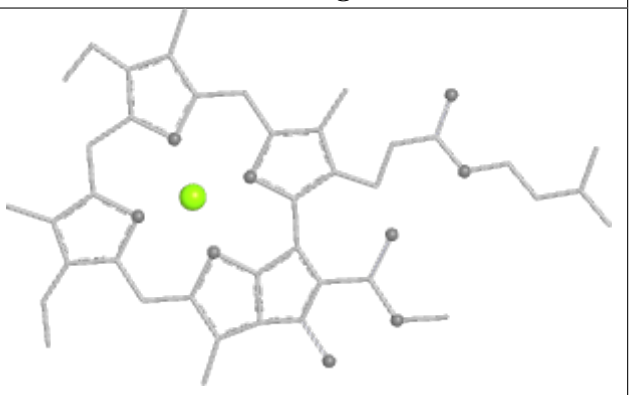
Torsions



Rings

Ligand CHL 4 601	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA A 831	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA B 838	
	
Bond lengths	Bond angles
	
Torsions	Rings

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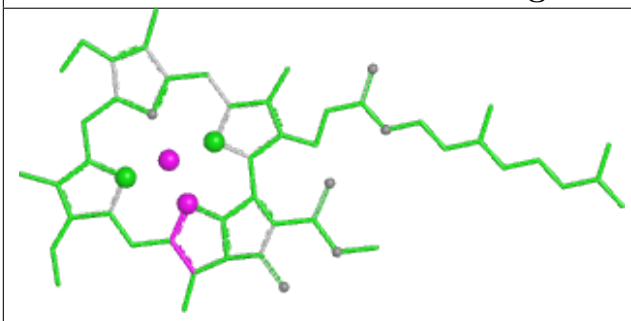
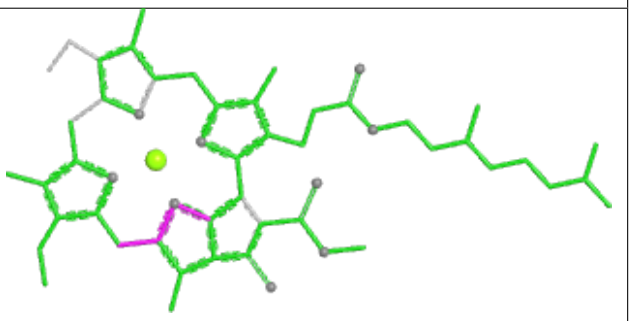
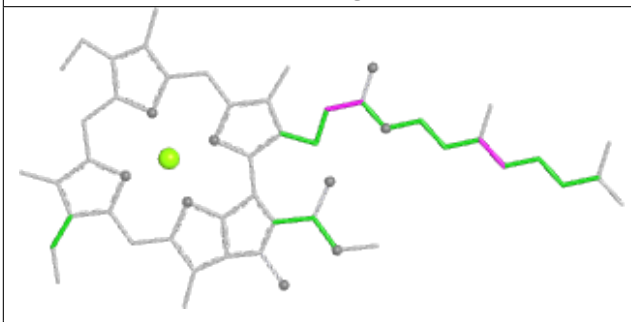
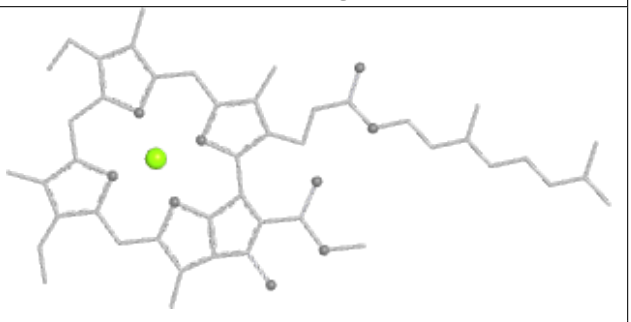
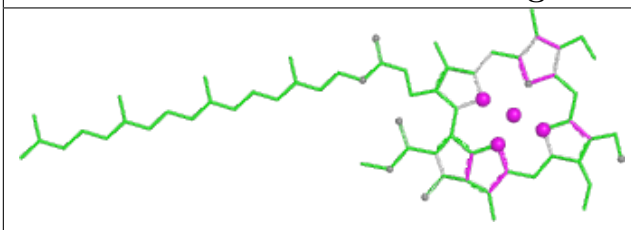
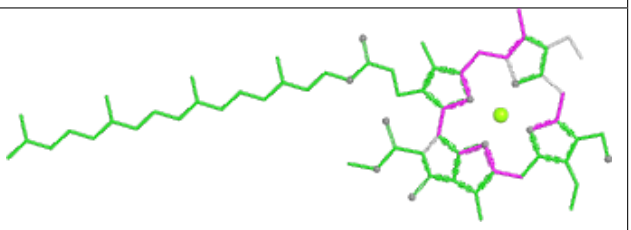
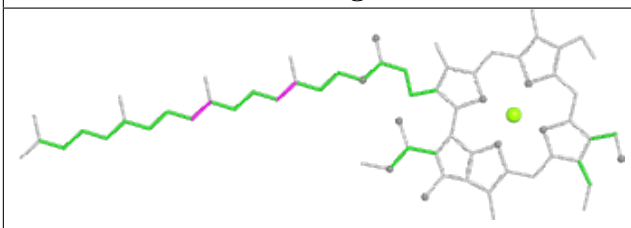
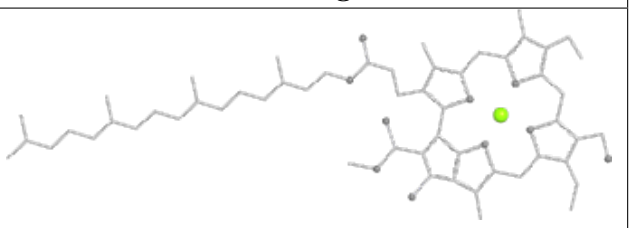
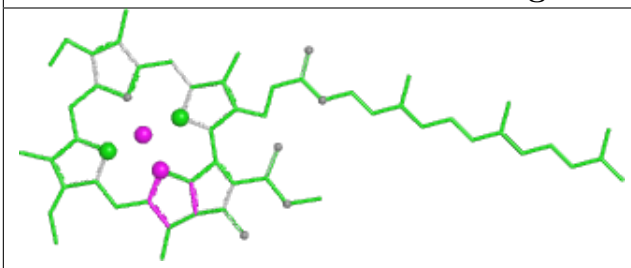
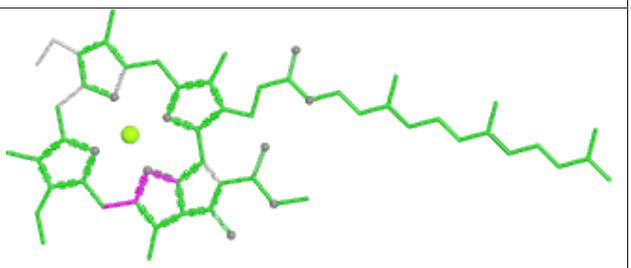
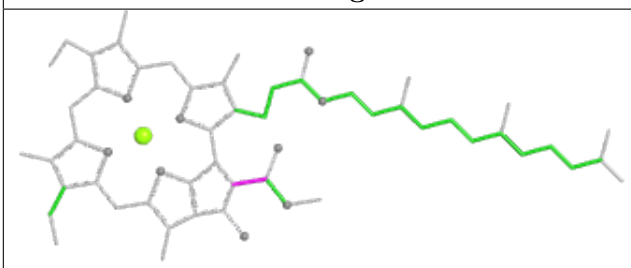
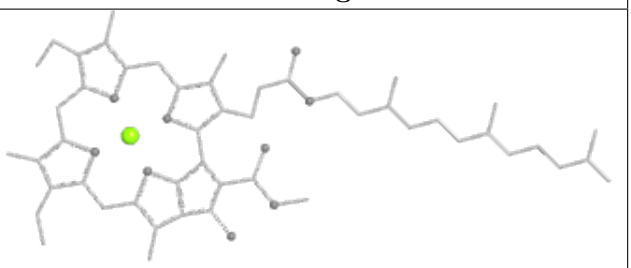
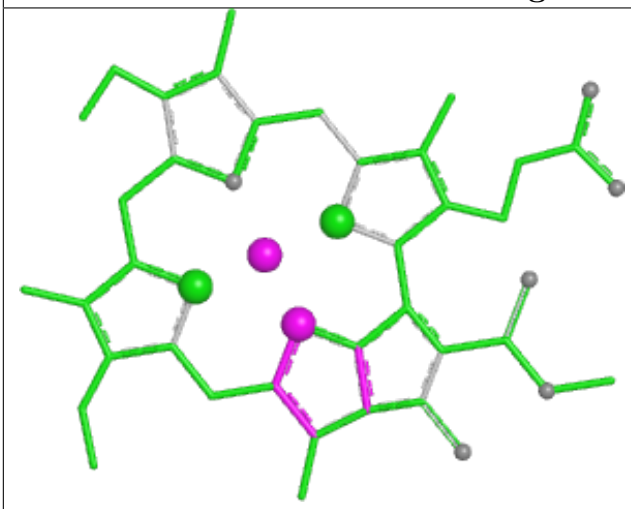
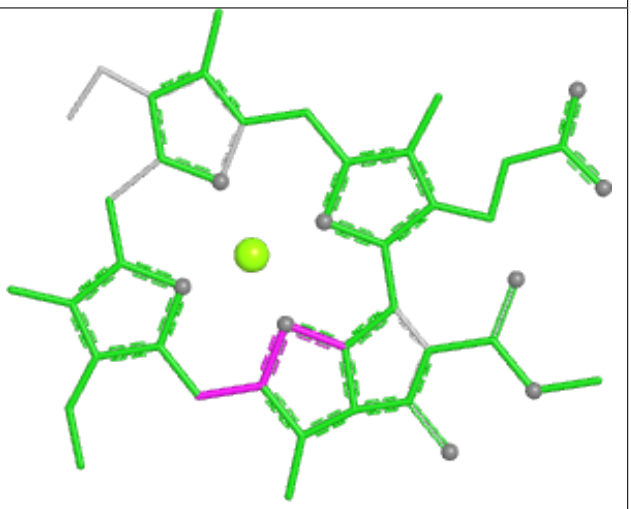
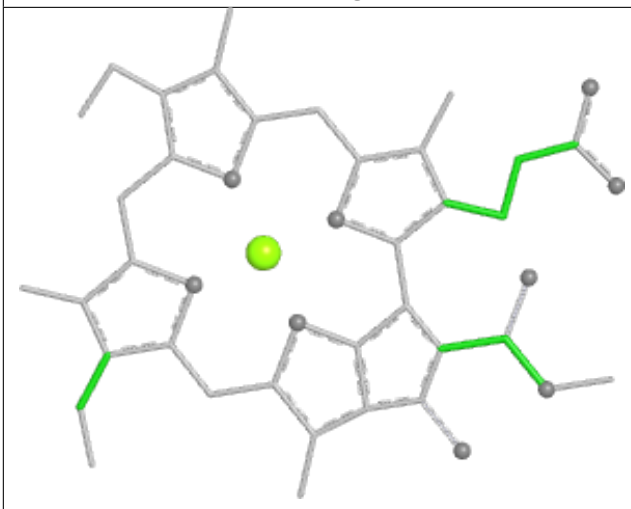
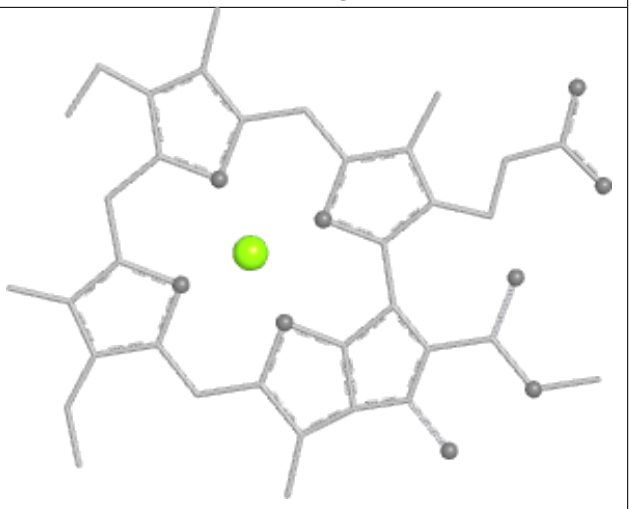
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CHL 4 606	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA 4 602	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA 6 617	
	
Bond lengths	Bond angles
	
Torsions	Rings

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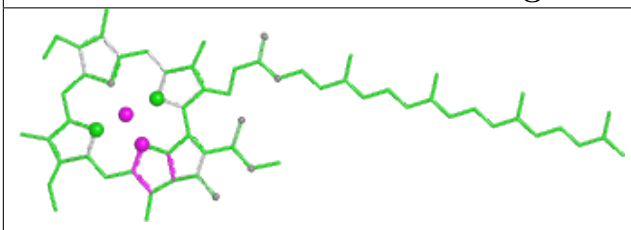
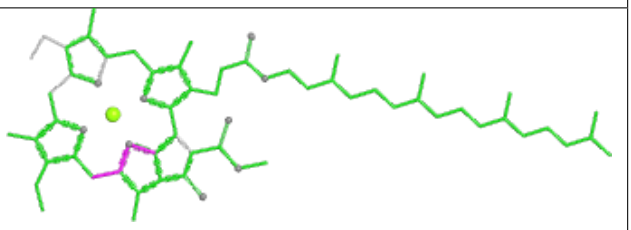
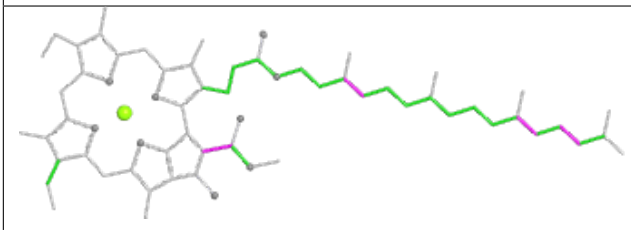
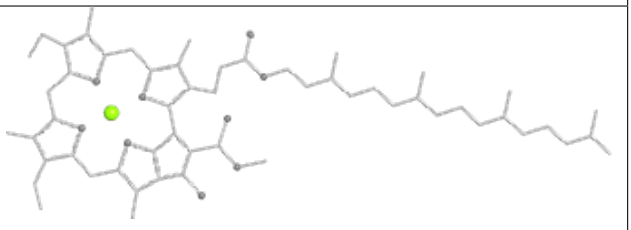
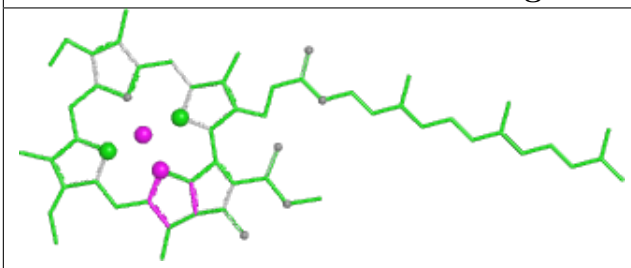
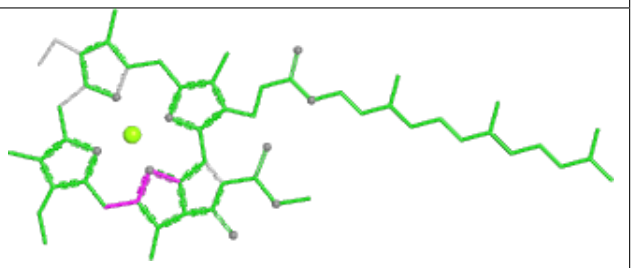
	
Bond lengths	Bond angles
	
Torsions	Rings

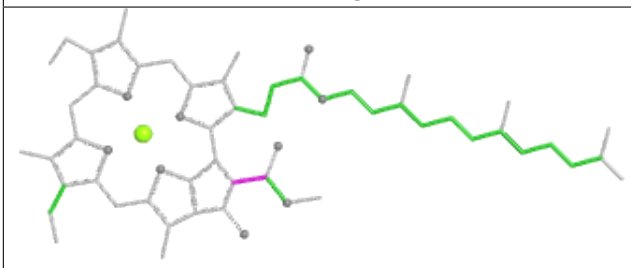
Ligand CLA B 834



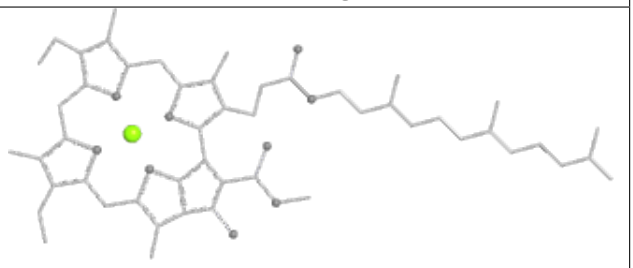
Bond lengths



Bond angles

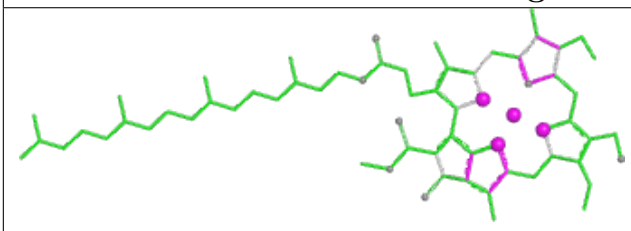


Torsions



Rings

Ligand CHL 8 607



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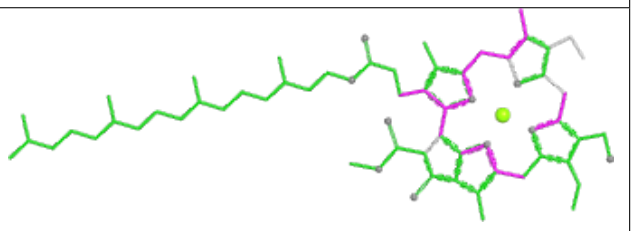
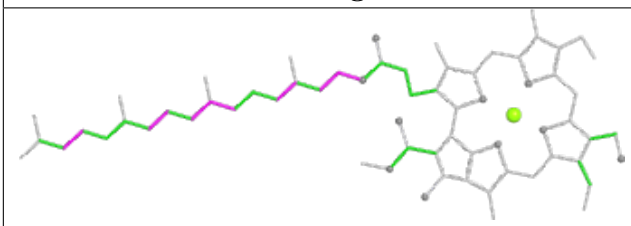


Bond angles



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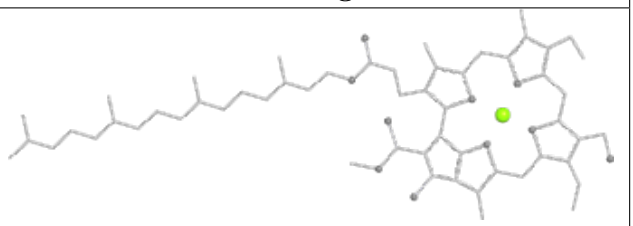
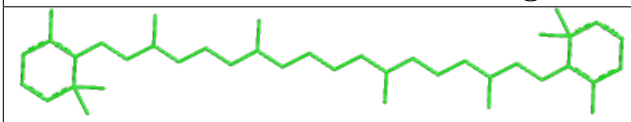


Rings

Ligand BCR A 852



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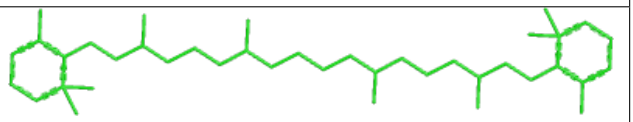
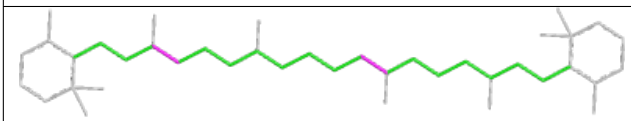


Bond angles



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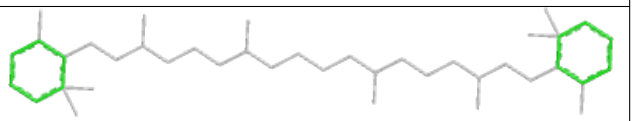
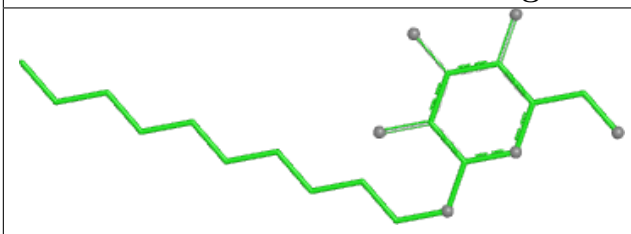


Rings

Ligand LMU Z 621



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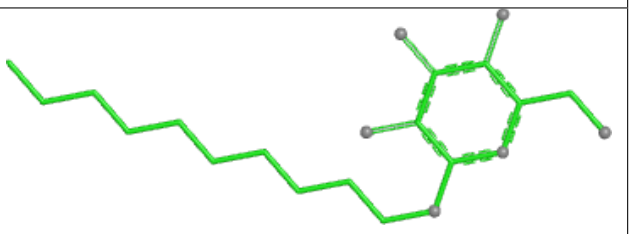
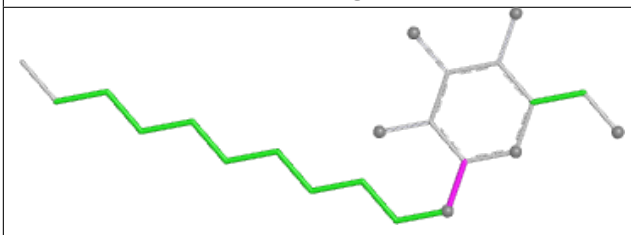


Bond angles



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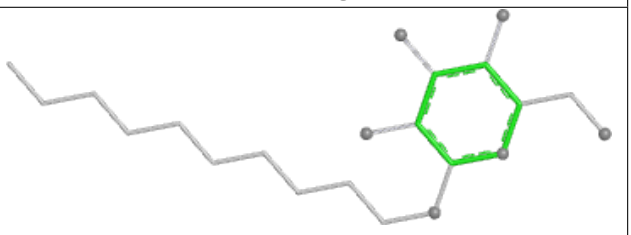
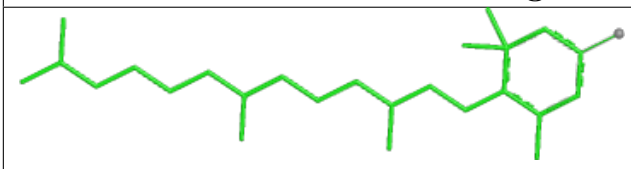
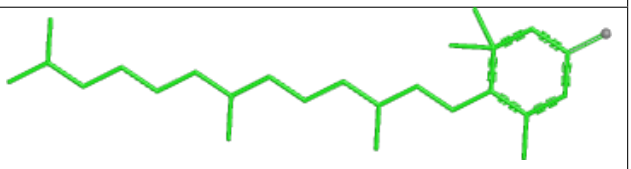


Rings

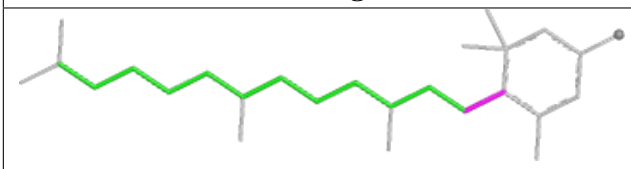
Ligand LUT Z 619



Bond lengths



Bond angles



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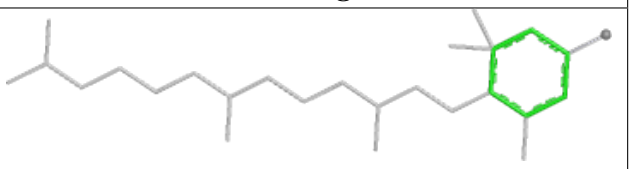
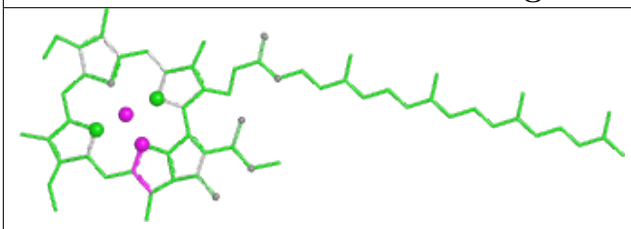
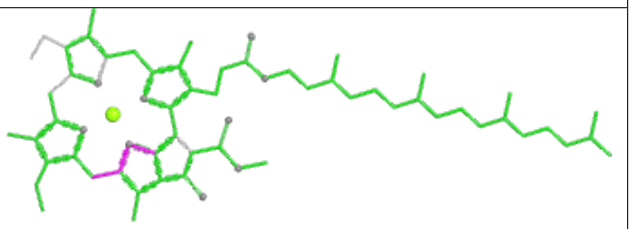


Rings

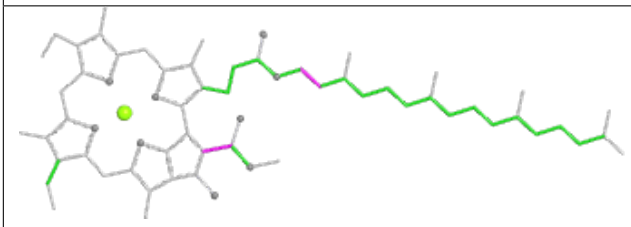
Ligand CLA B 824



Bond lengths



Bond angles



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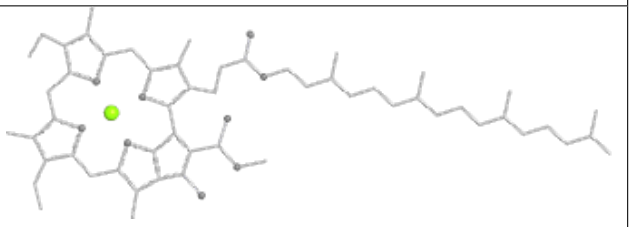
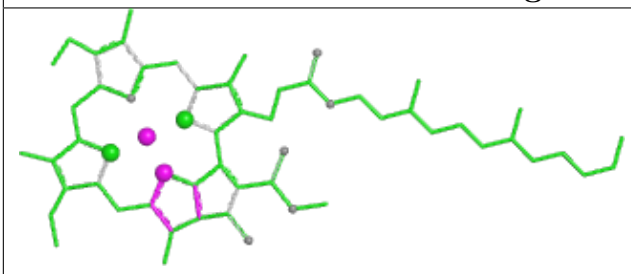
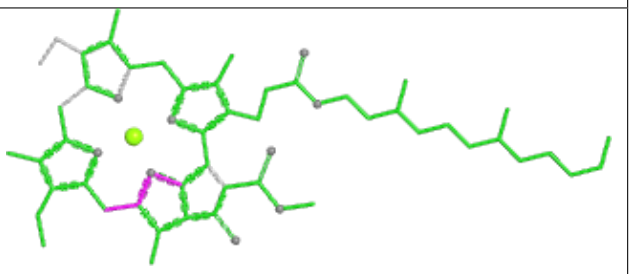
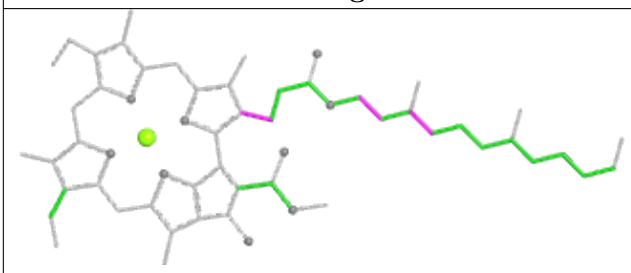
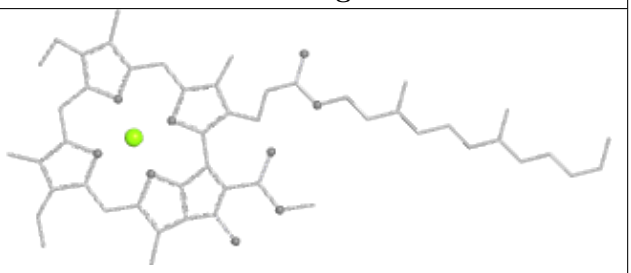
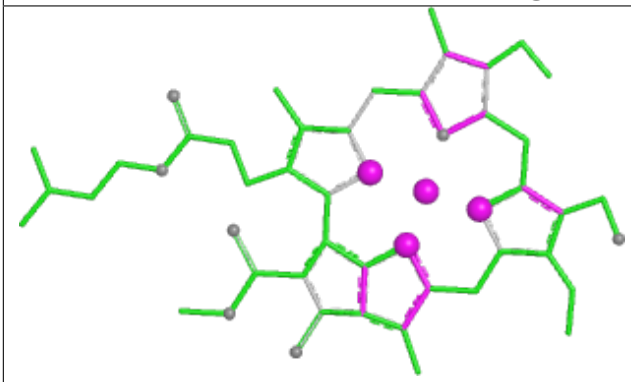
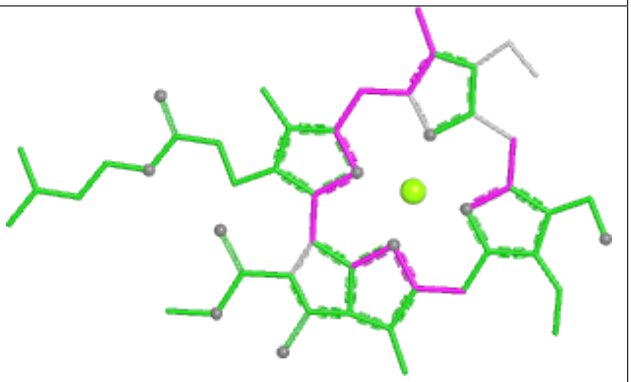
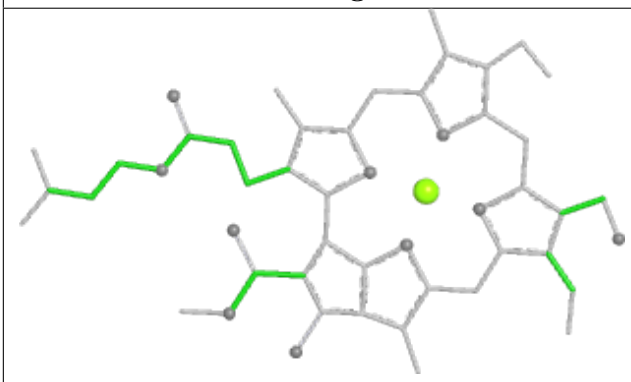
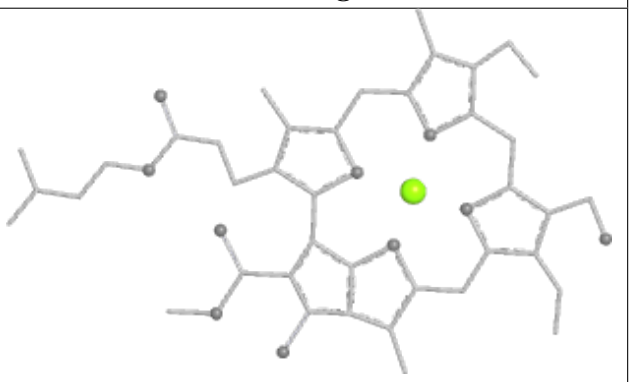
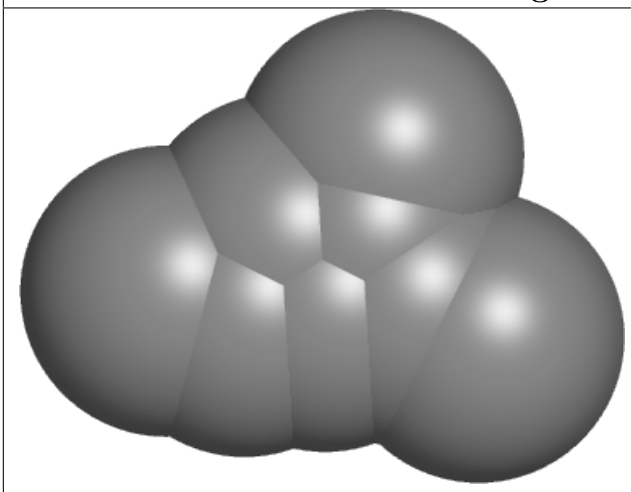
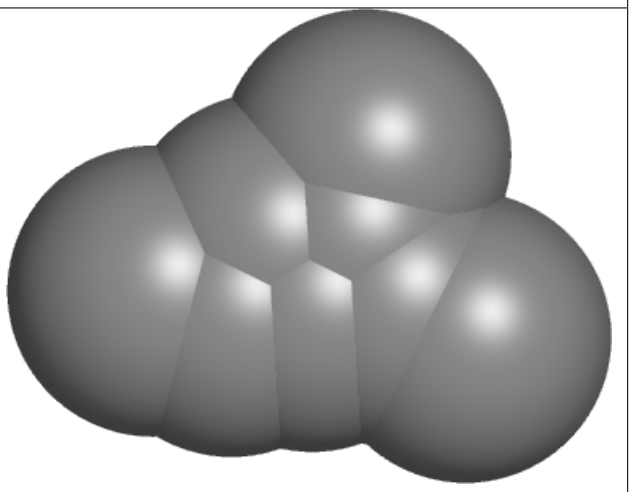
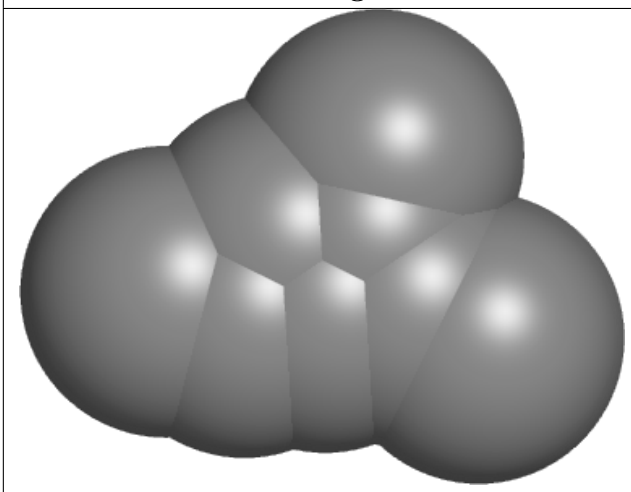
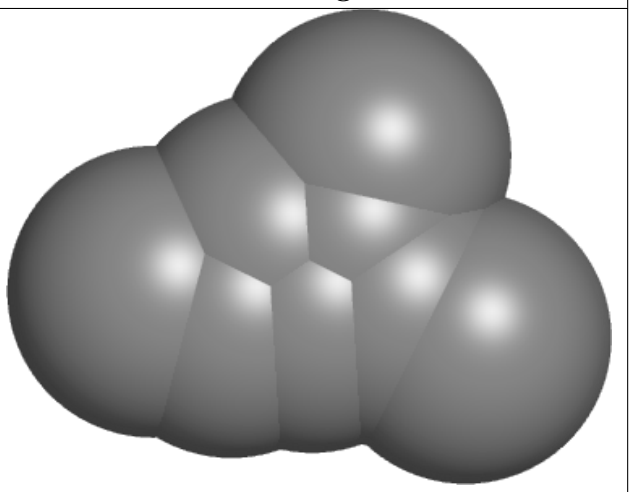


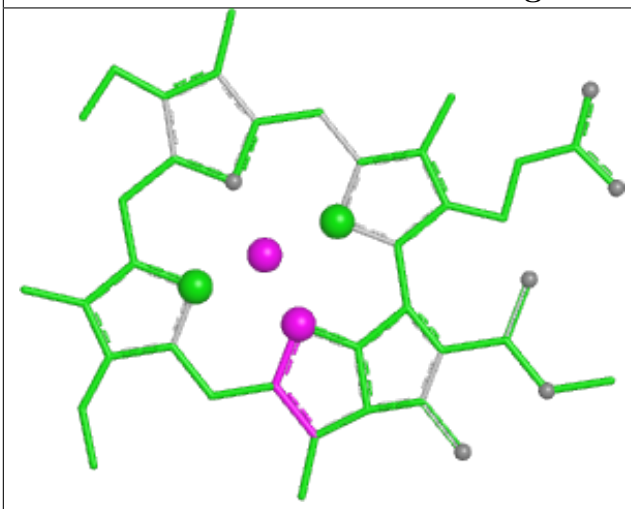
Rings

Ligand CLA B 822	
 Bond lengths	 Bond angles
 Torsions	 Rings

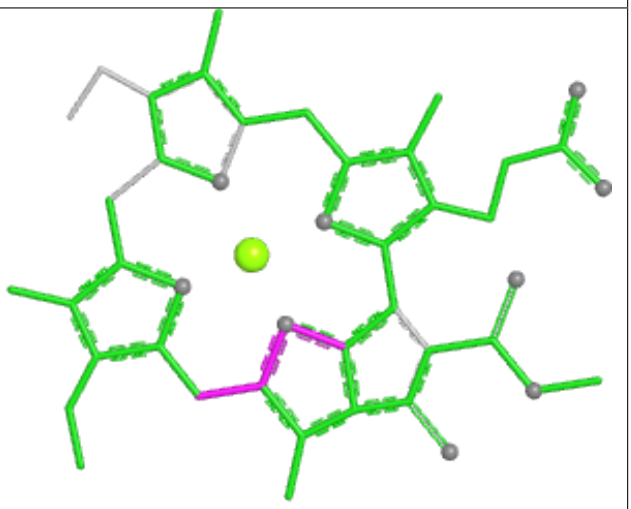
Ligand CHL 6 608	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand SF4 C 102	
	
Bond lengths	**Bond angles**
	
Torsions	**Rings**

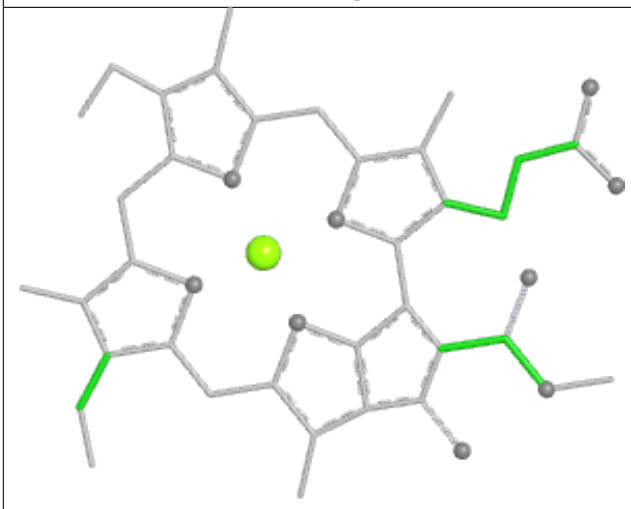
Ligand CLA B 830



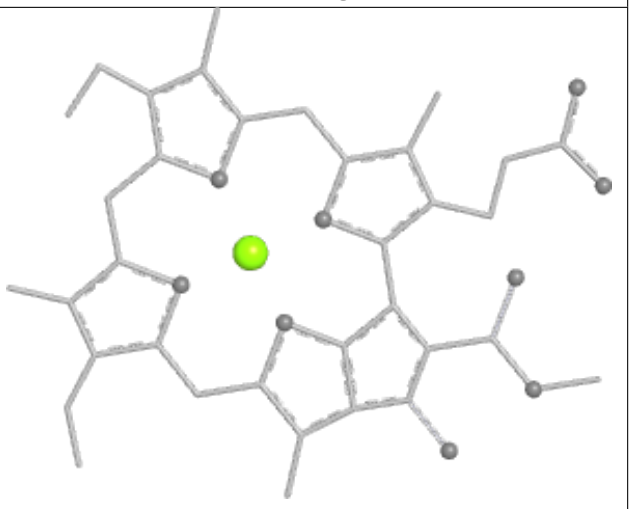
Bond lengths



Bond angles

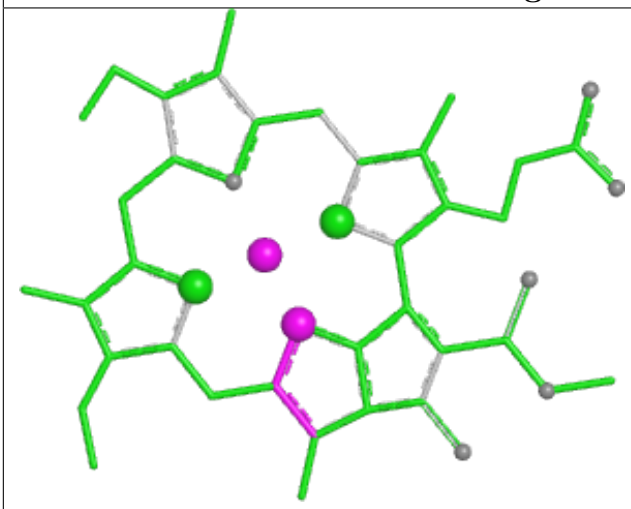


Torsions

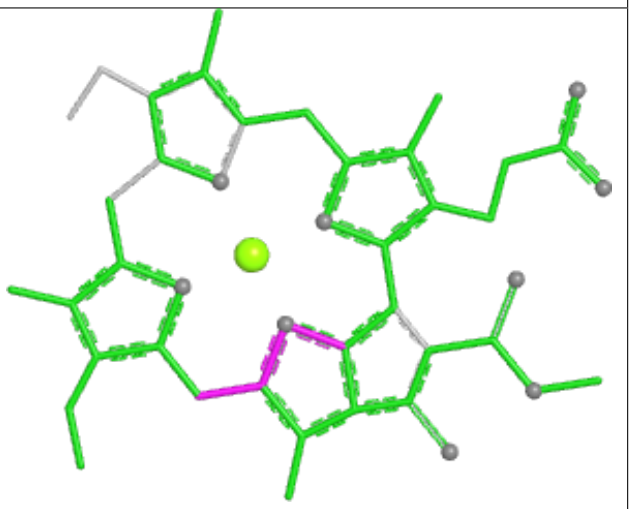


Rings

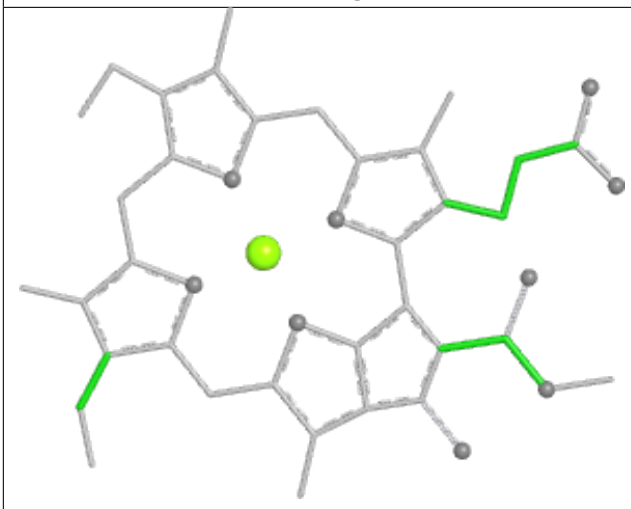
Ligand CLA B 835



Bond lengths



Bond angles



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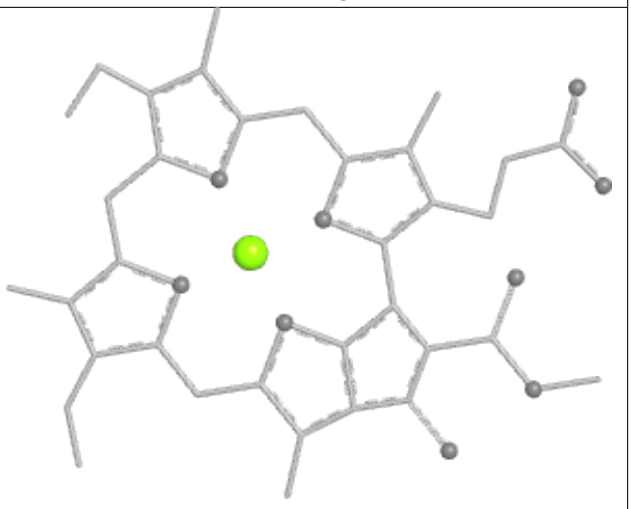
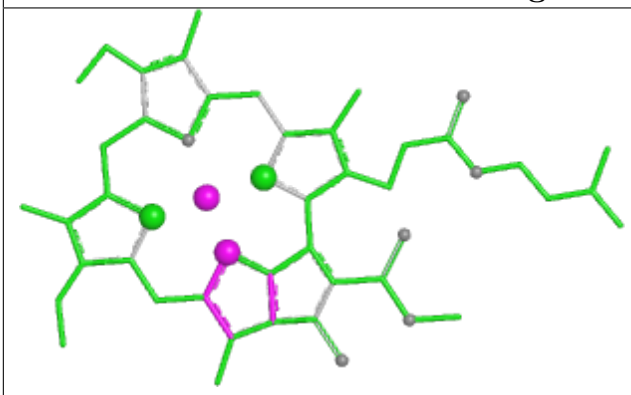
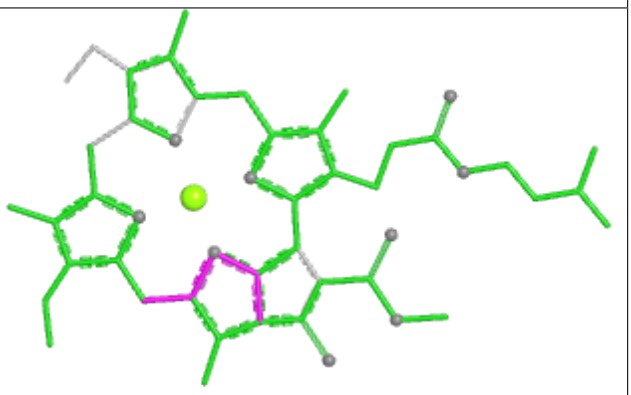
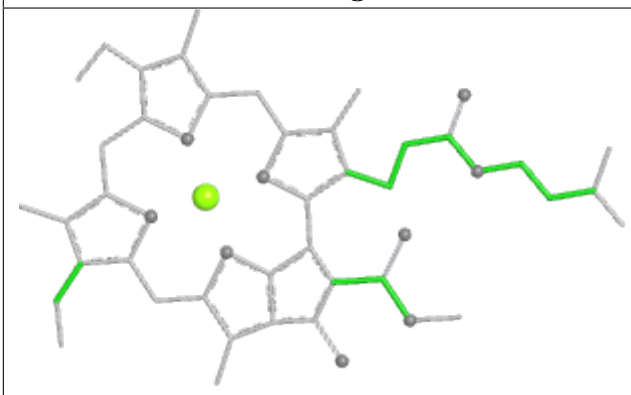
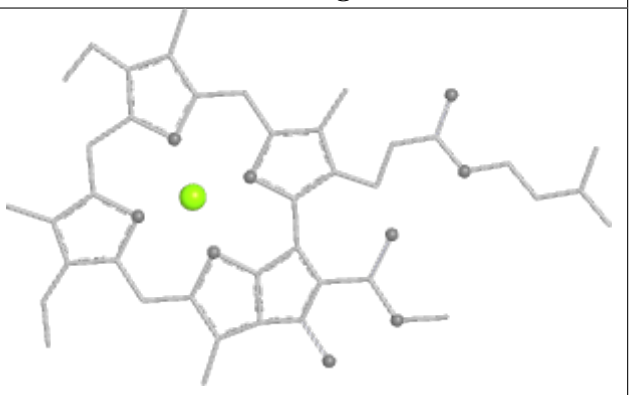
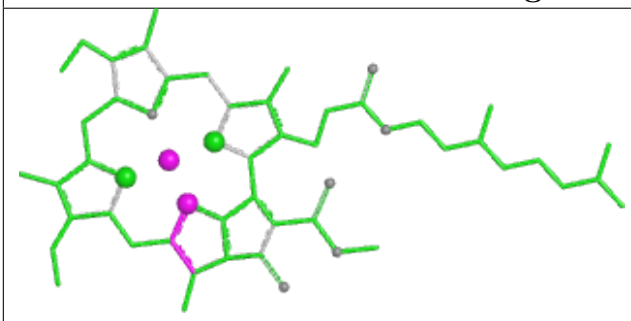
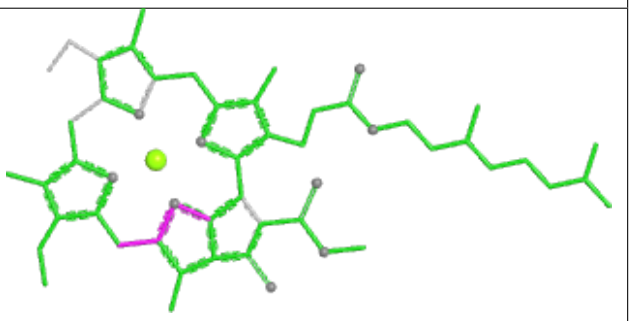
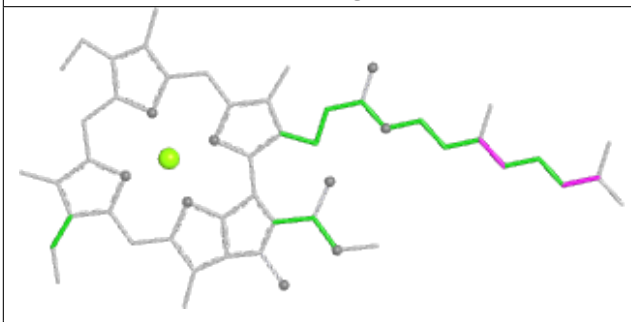
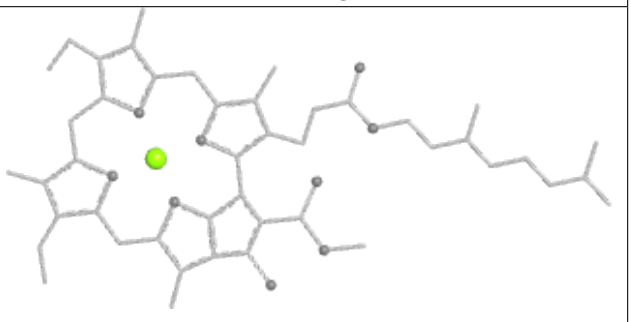
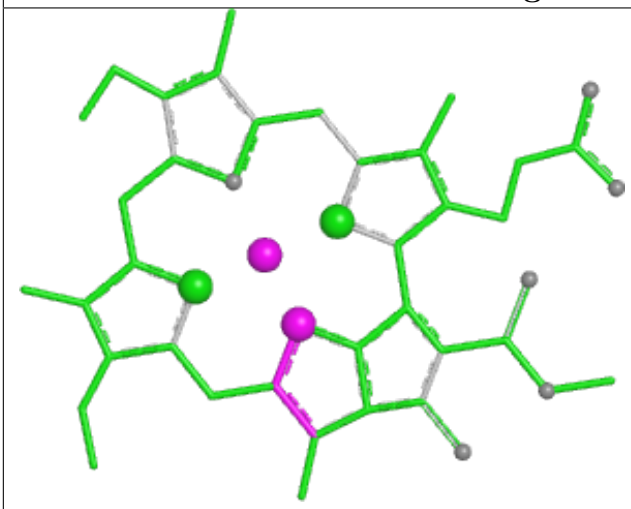


Rings

Ligand CLA 4 604	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA B 807	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA A 824



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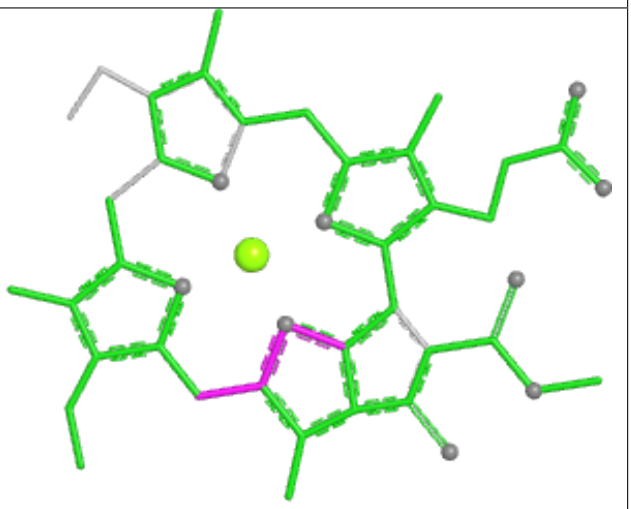
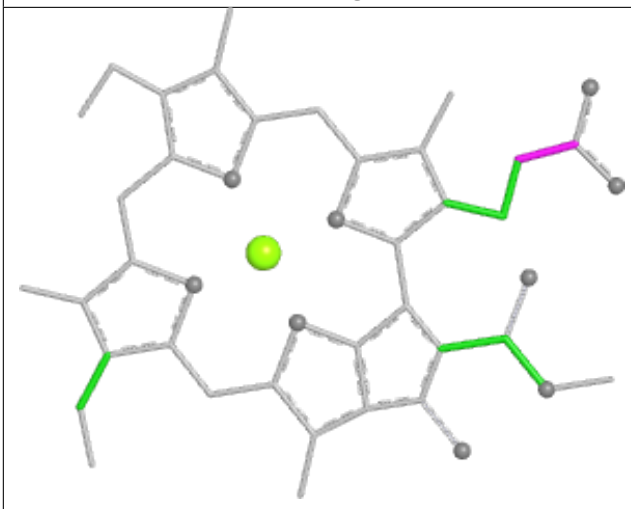
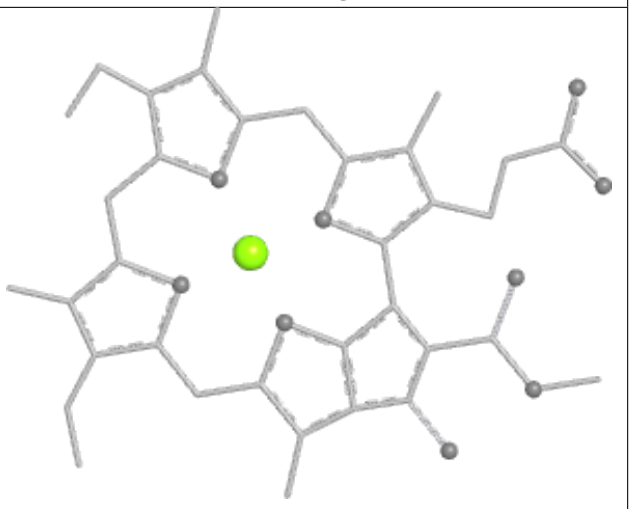


Bond angles

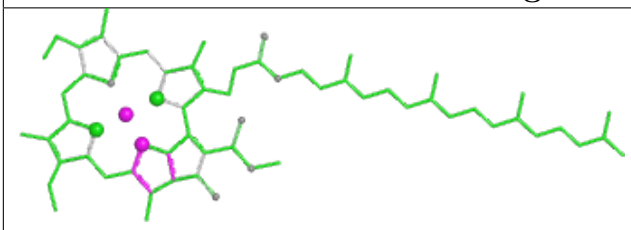


Torsions



Rings

Ligand CLA A 822



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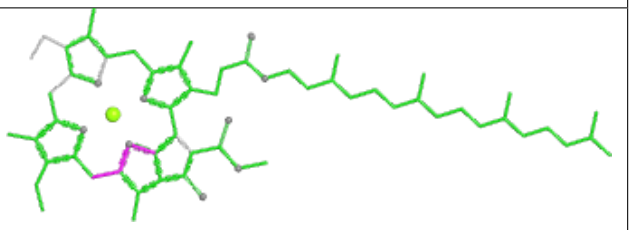

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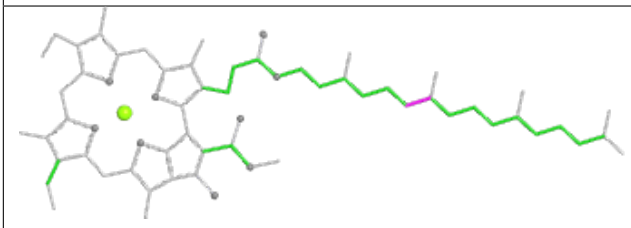

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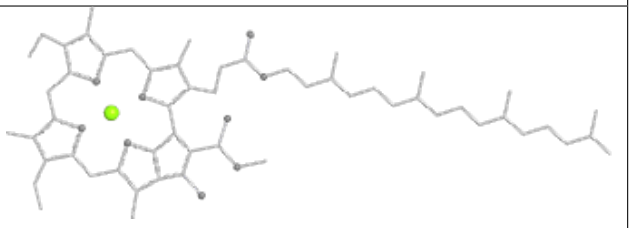
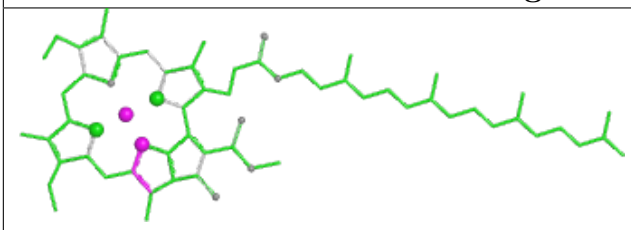
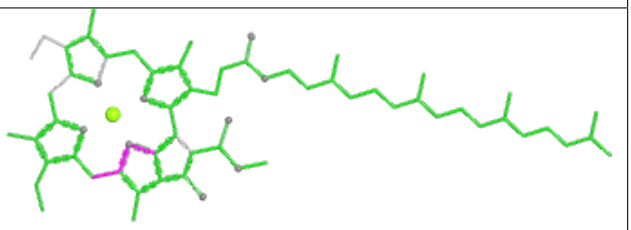


Rings

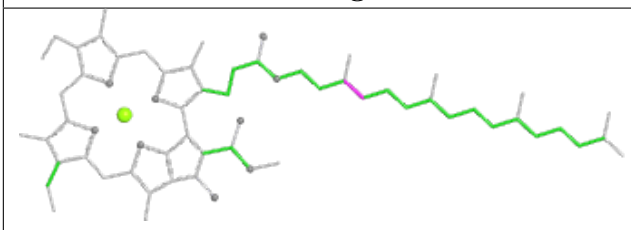
Ligand CLA B 828



Bond lengths



Bond angles



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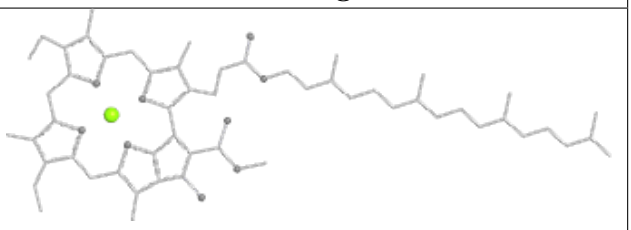
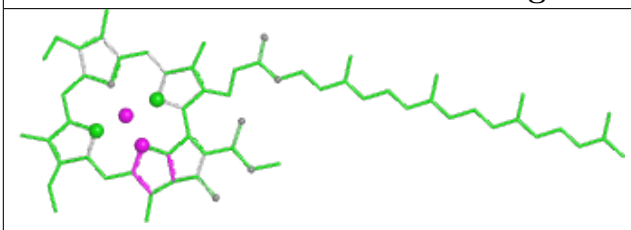
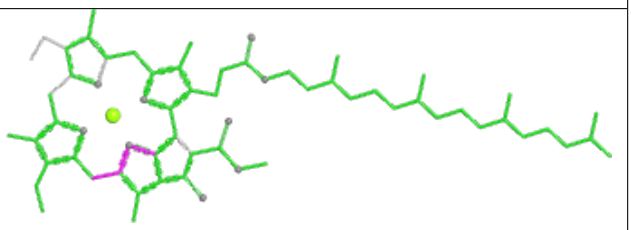


Rings

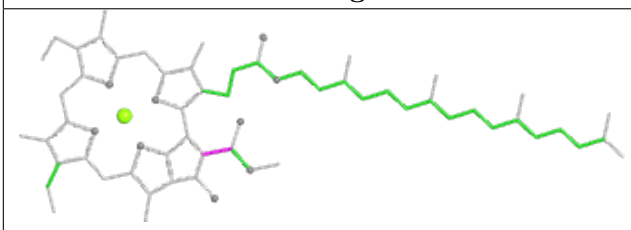
Ligand CLA 7 602



Bond lengths



Bond angles



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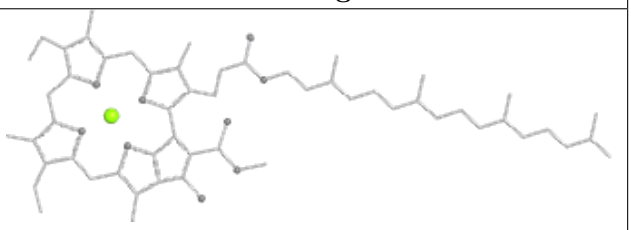
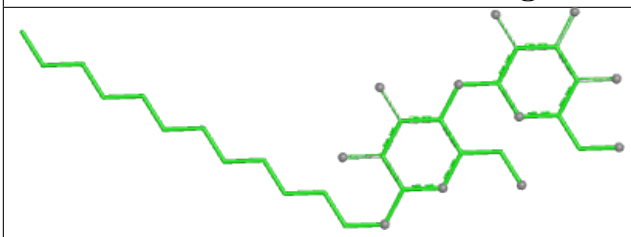


Rings

Ligand LMU A 858



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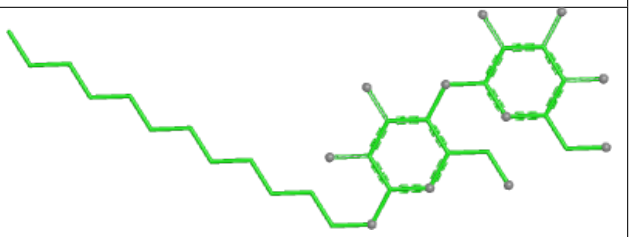

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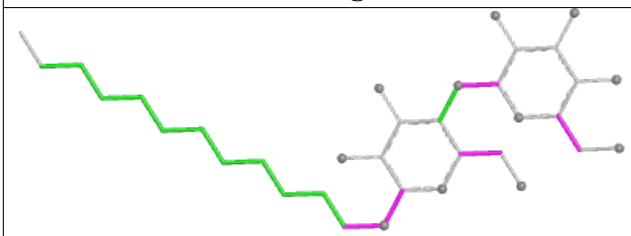

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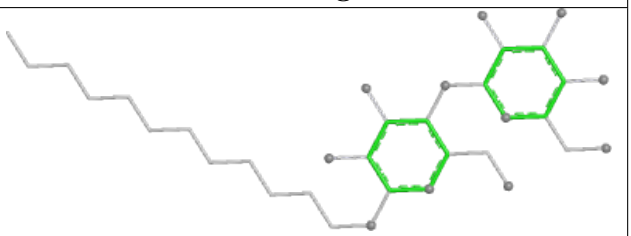
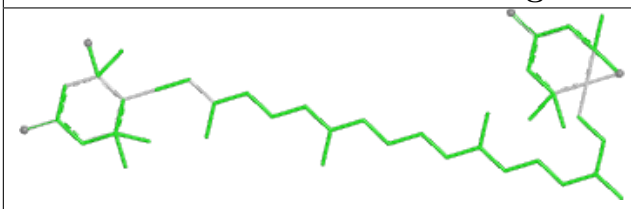
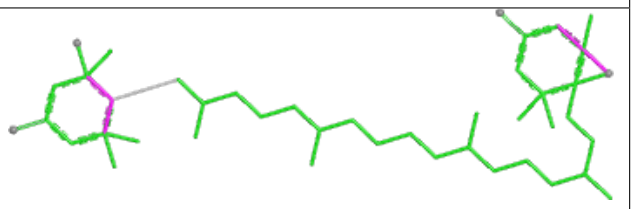
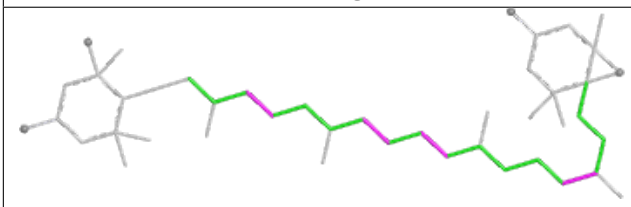
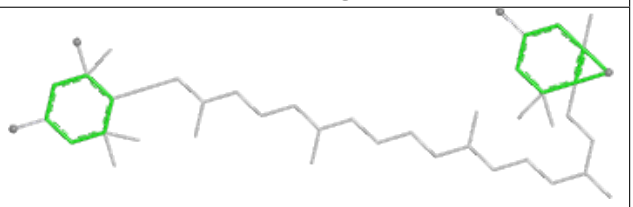
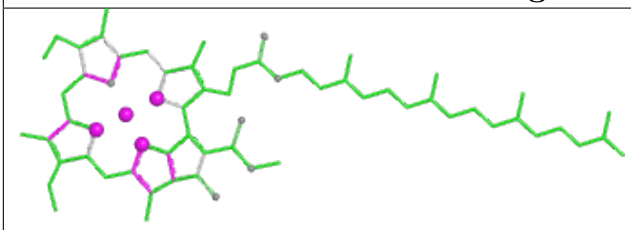
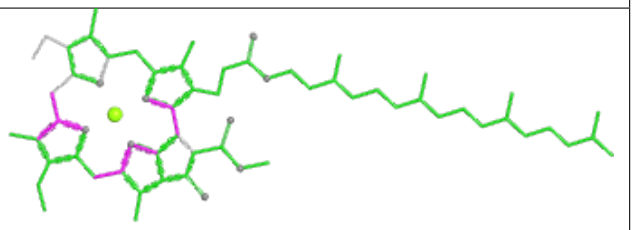
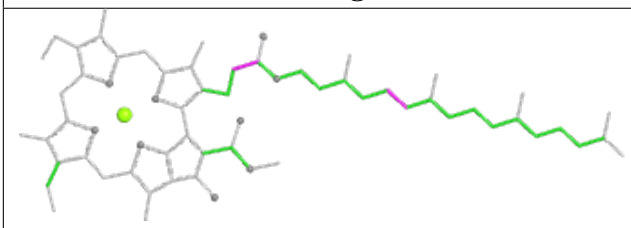
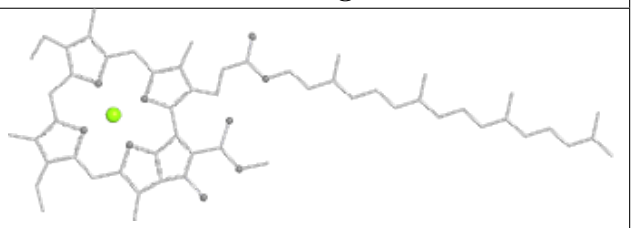
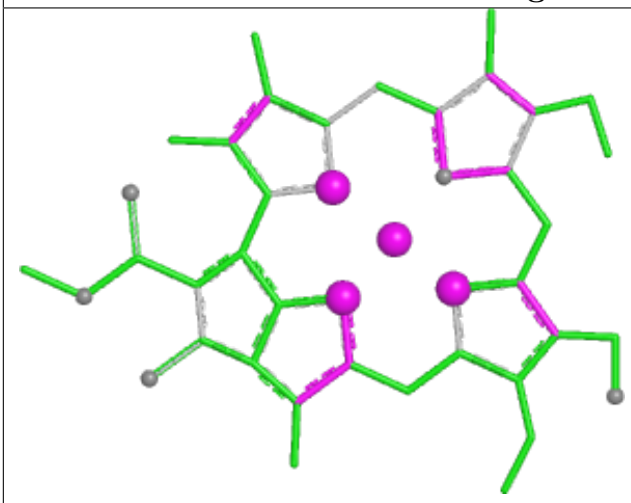


Rings

Ligand NEX 6 625	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CL0 A 801	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CHL 9 606



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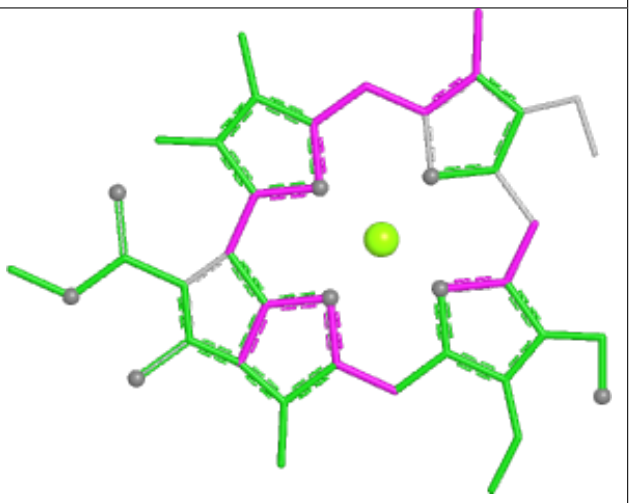
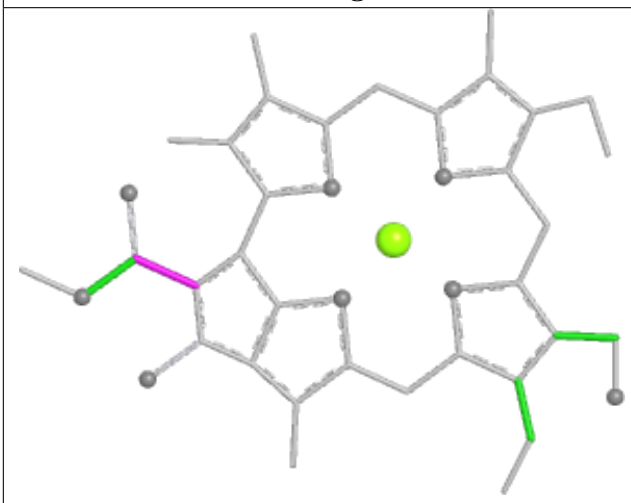
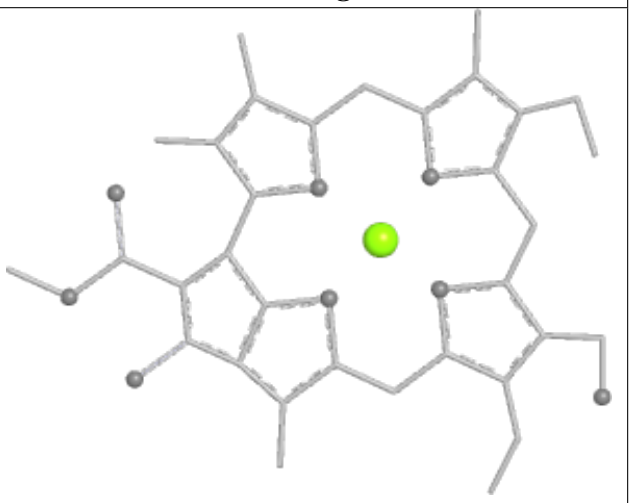


Bond angles

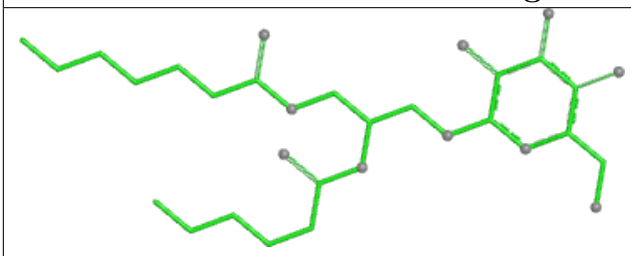


Torsions

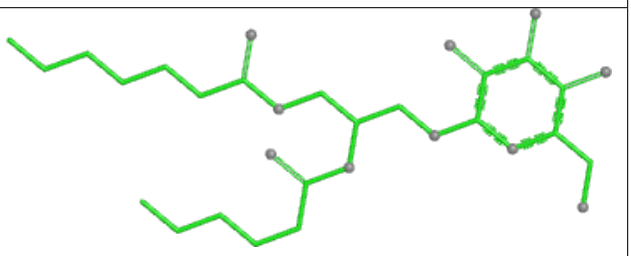


Rings

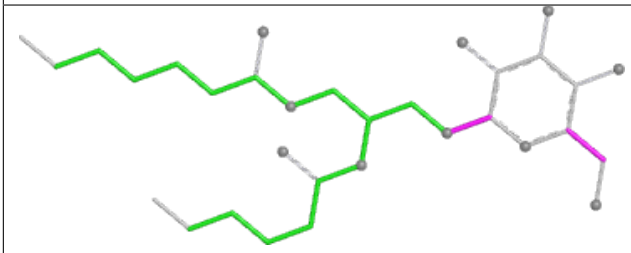
Ligand LMG 8 626



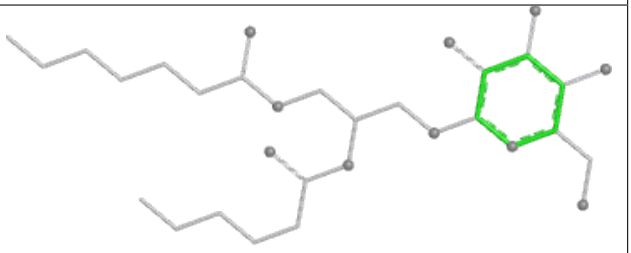
Bond lengths



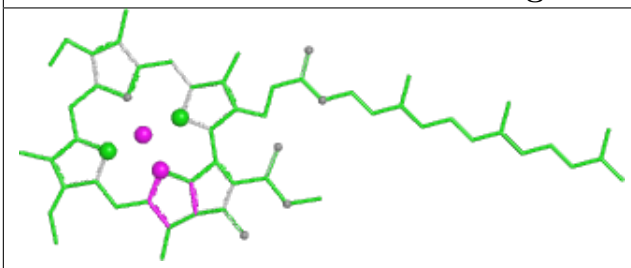
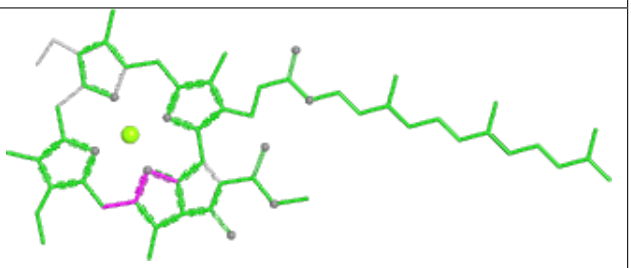
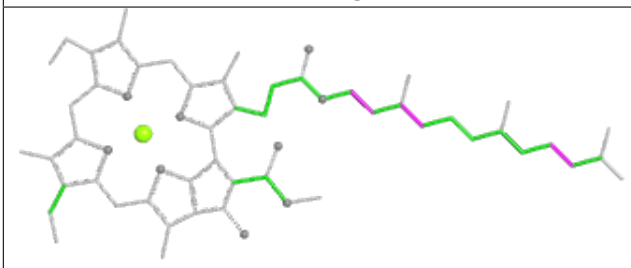
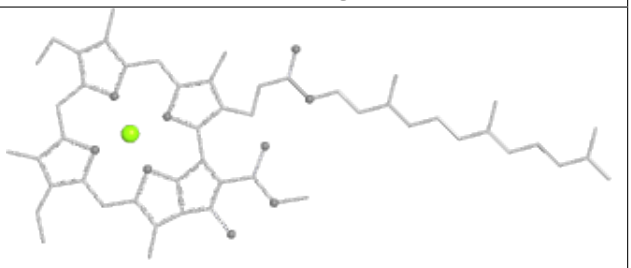
Bond angles

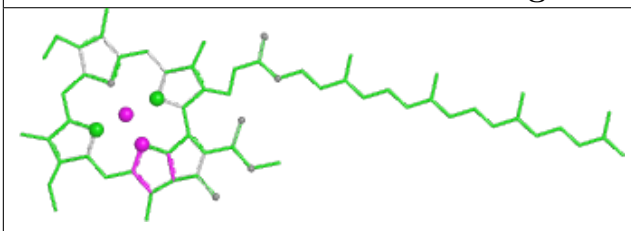
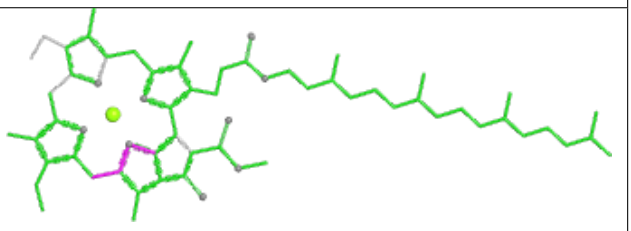


Torsions



Rings

Ligand CLA Z 611	
	
Bond lengths	**Bond angles**
	
Torsions	**Rings**

Ligand CLA 4 603	
	
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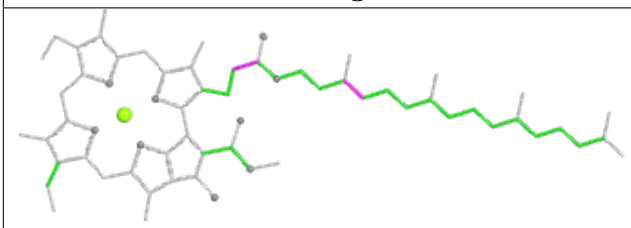
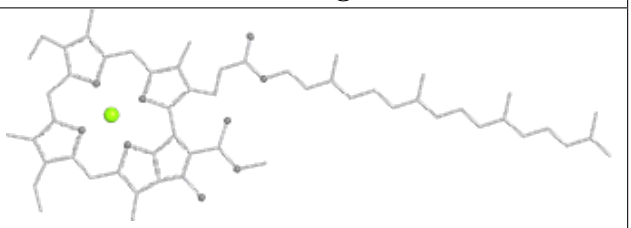
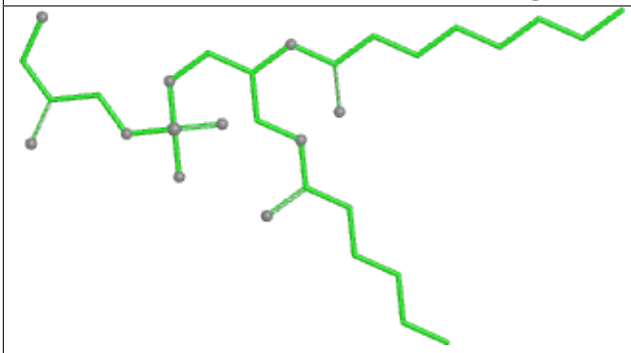
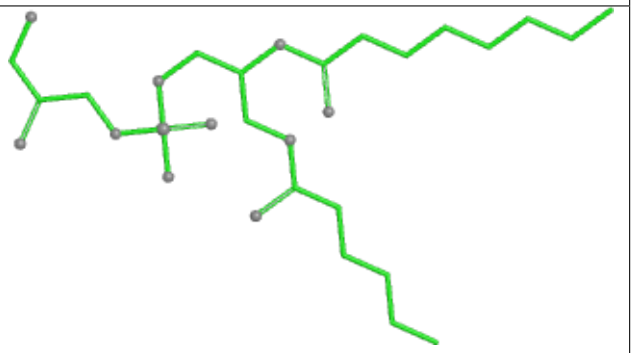
	
Torsions	**Rings**

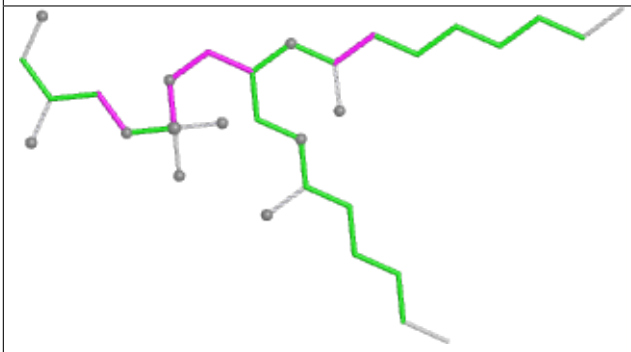
Ligand LHG 3 721



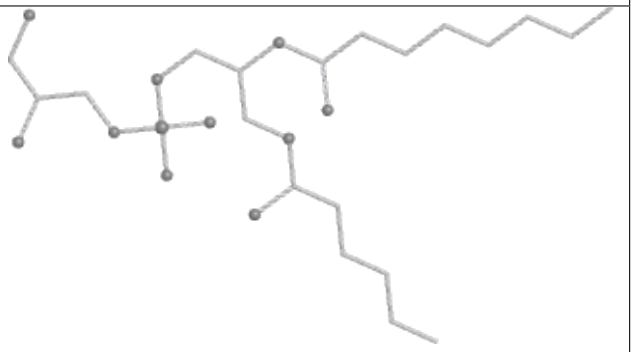
Bond lengths



Bond angles

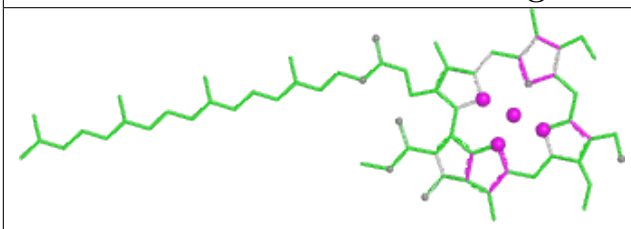


Torsions

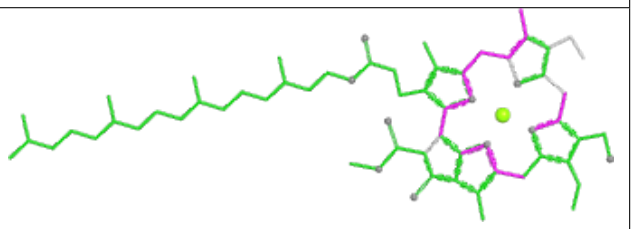


Rings

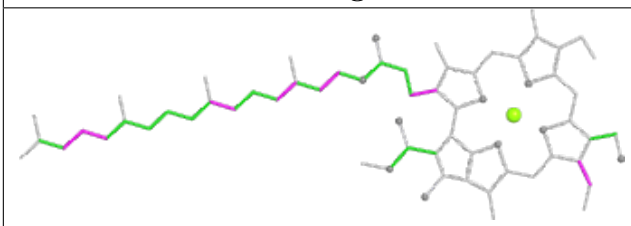
Ligand CHL 6 607



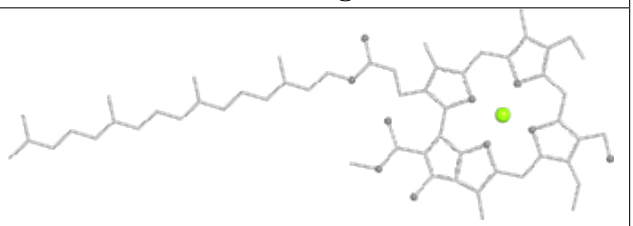
Bond lengths



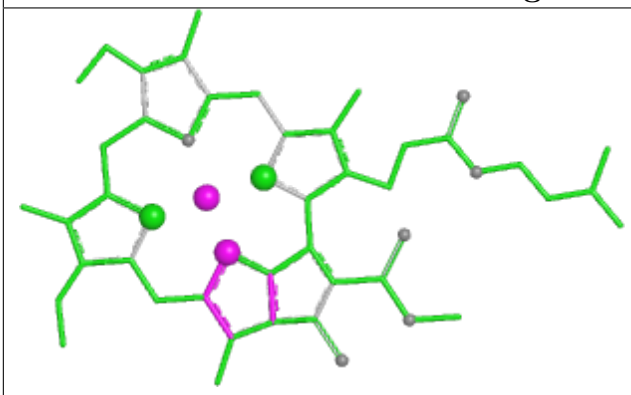
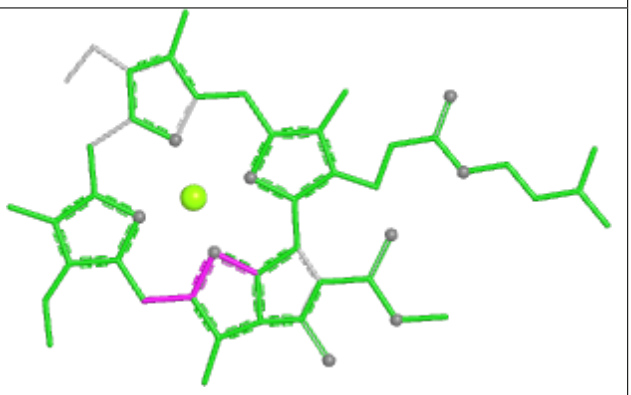
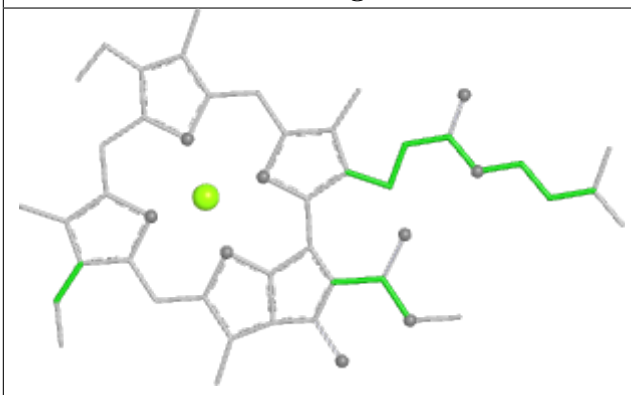
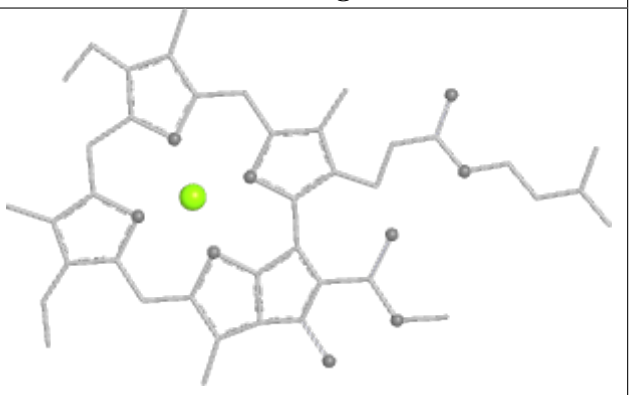
Bond angles

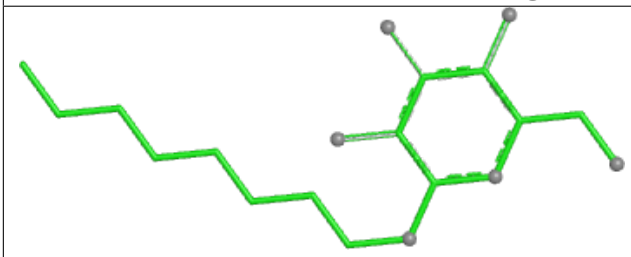
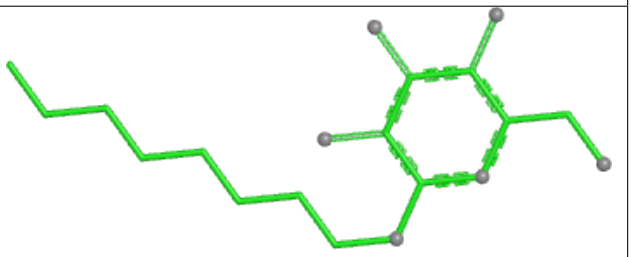
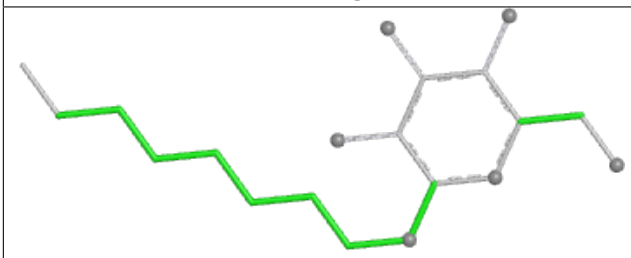
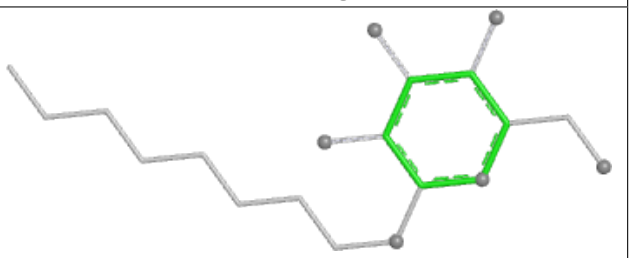


Torsions



Rings

Ligand CLA A 808	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand LMU 4 626	
 Bond lengths	 Bond angles
 Torsions	 Rings

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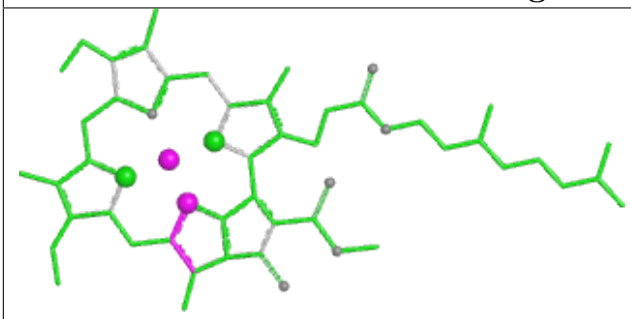
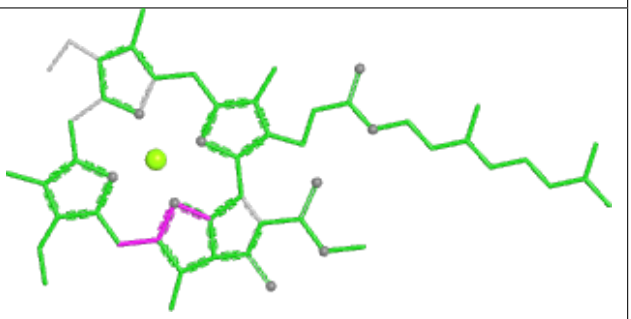
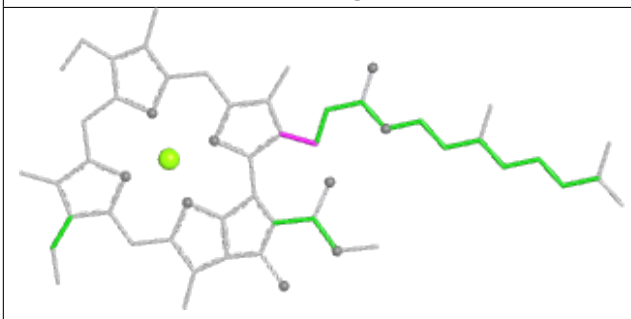
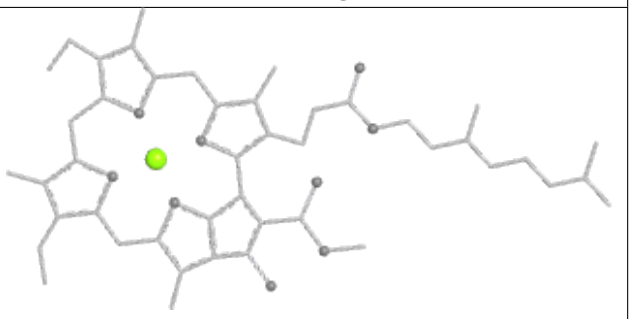
	
Bond lengths	Bond angles
	
Torsions	Rings

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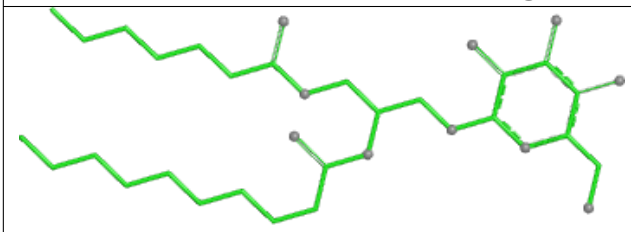
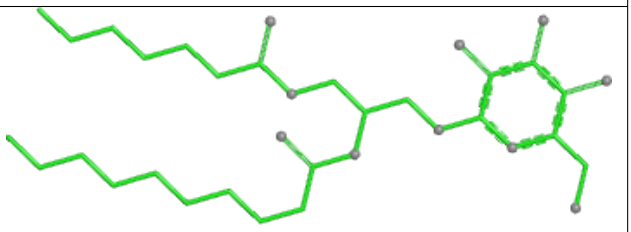
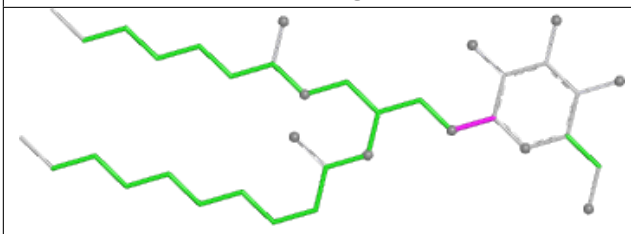
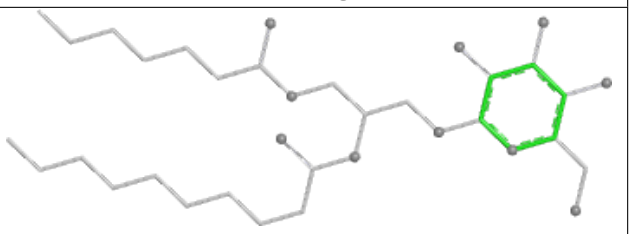
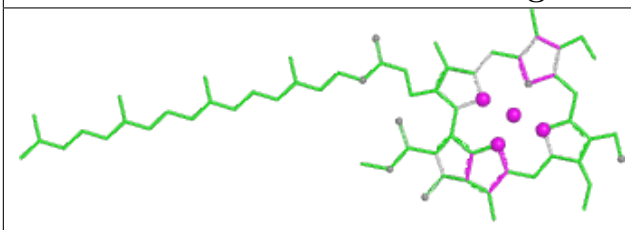
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CHL 5 607



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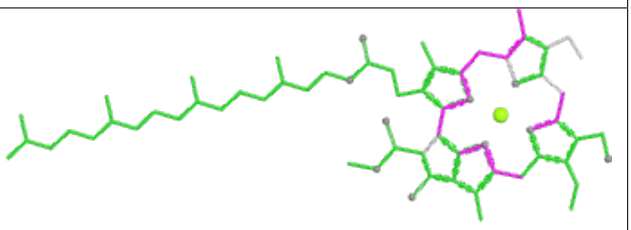
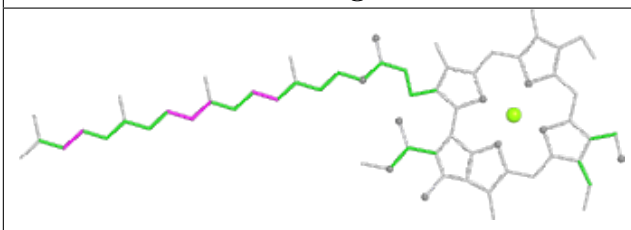


Bond angles



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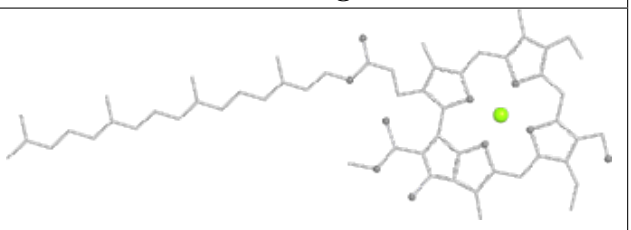
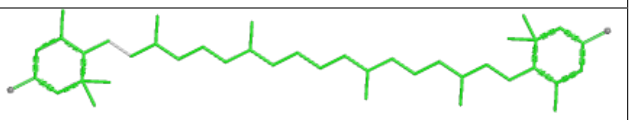


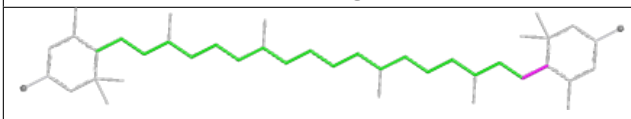
Rings

Ligand LUT 9 616

Bond lengths



Bond angles



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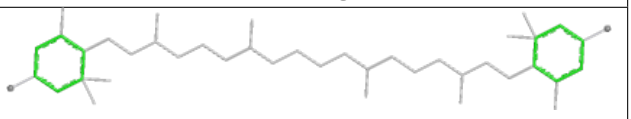
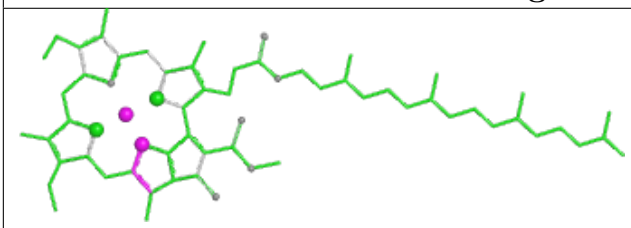


Rings

Ligand CLA 1 609



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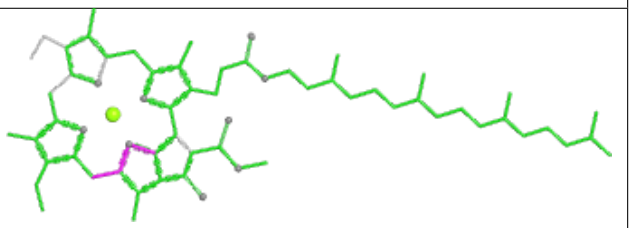
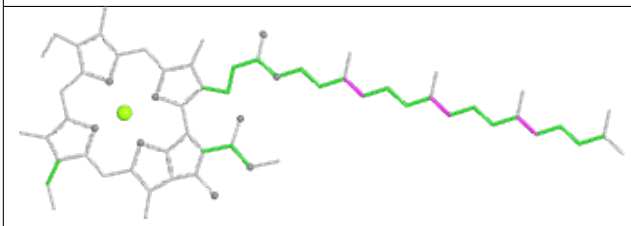


Bond angles



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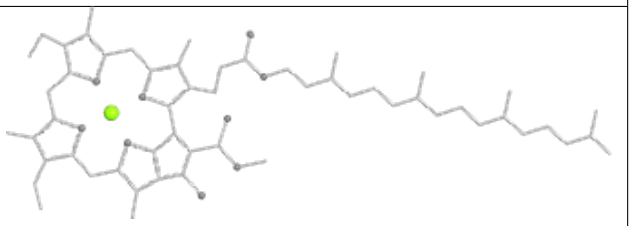
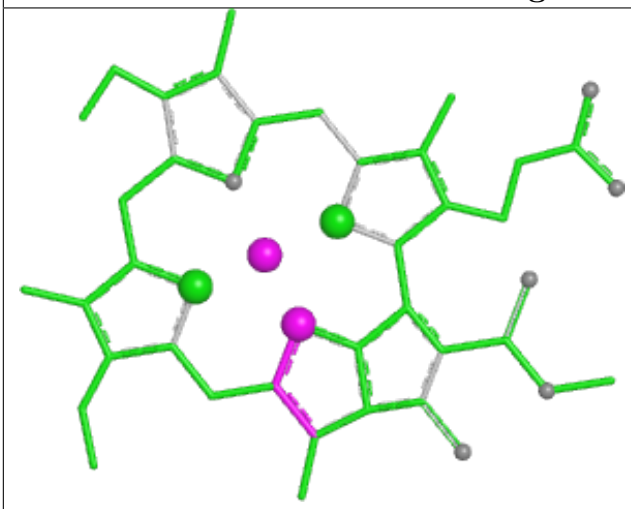
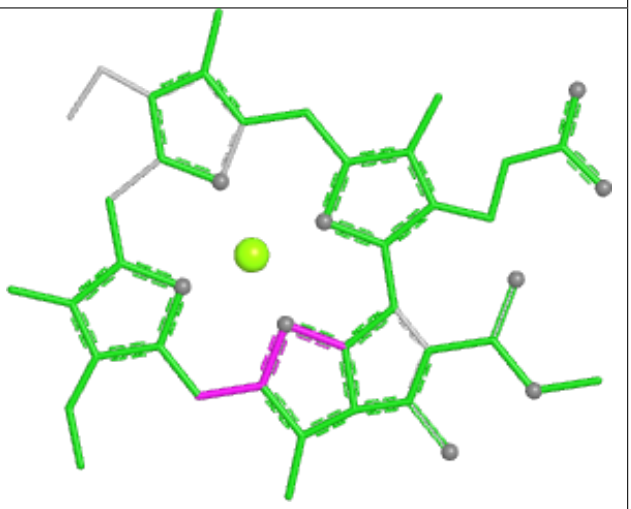
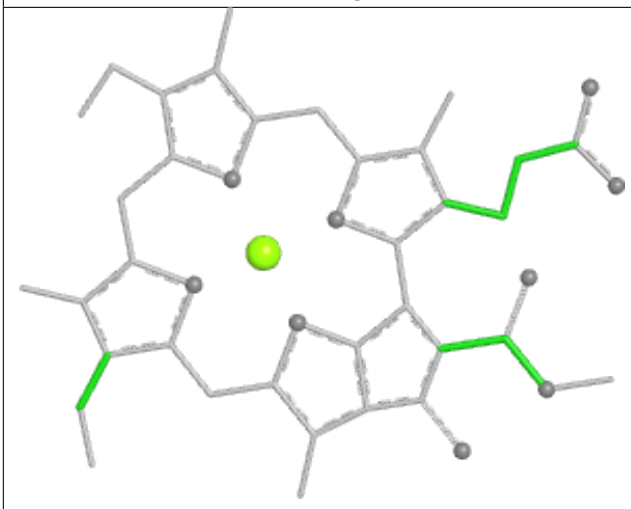
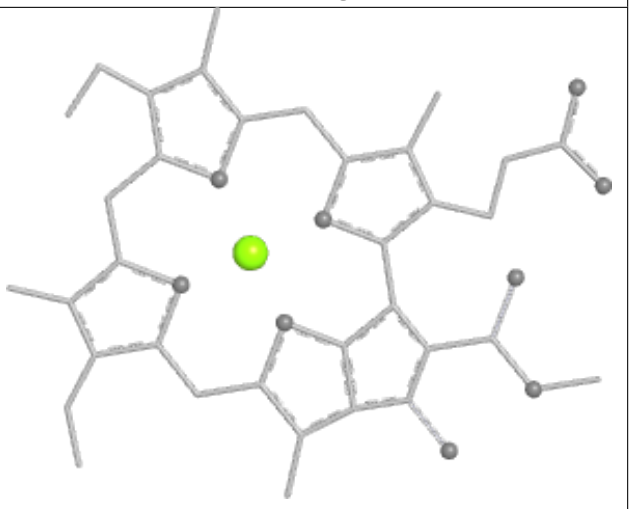


Rings

Ligand CLA 3 614	
	
Bond lengths	Bond angles
	
Torsions	Rings

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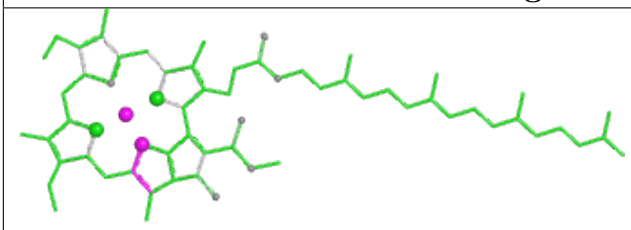
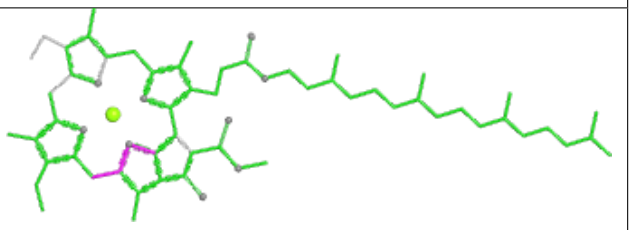
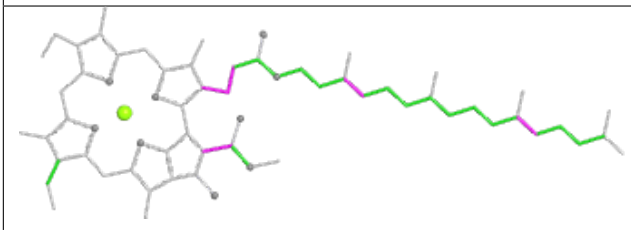
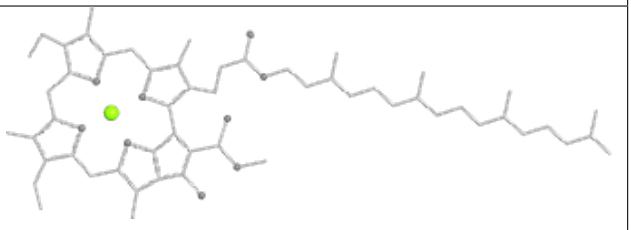
	
Bond lengths	Bond angles
	
Torsions	Rings

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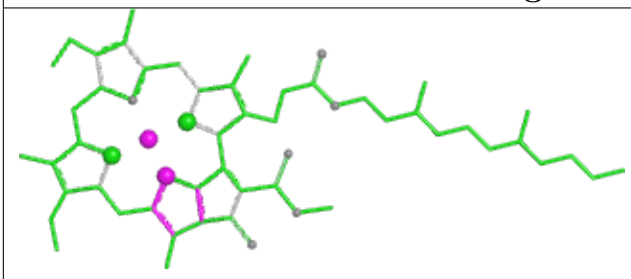
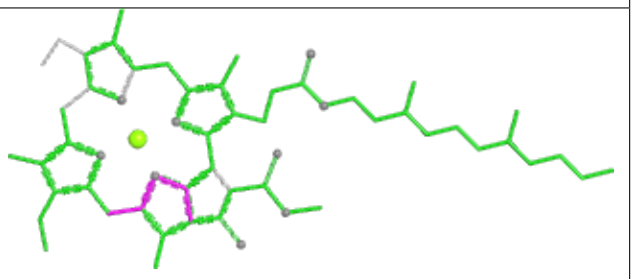


Bond lengths



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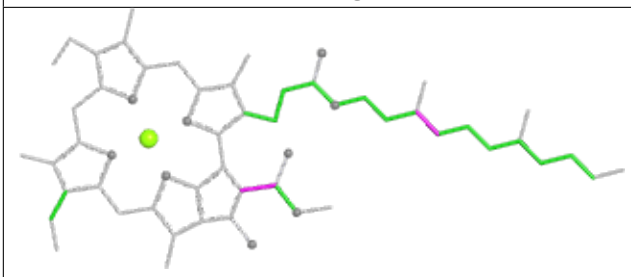
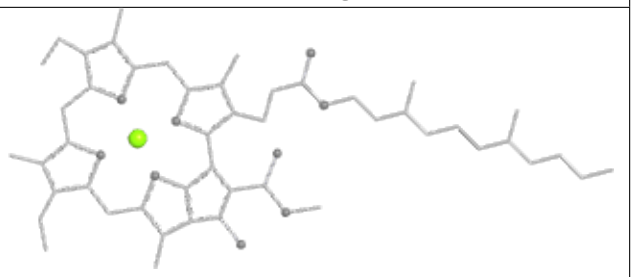
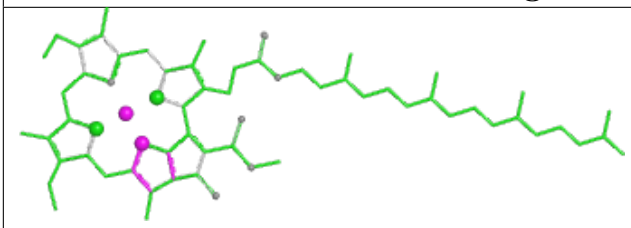


Torsions



Rings

Ligand CLA A 816



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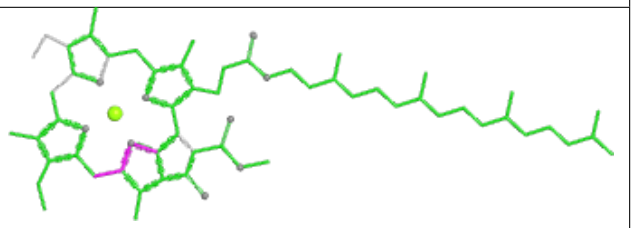

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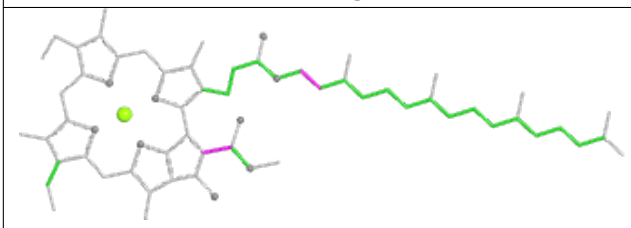

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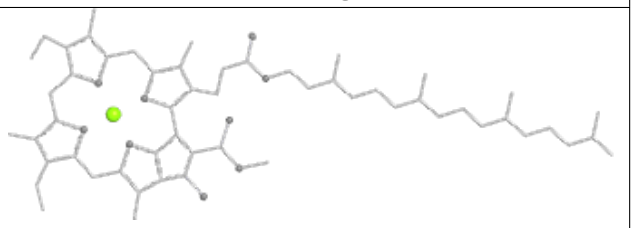
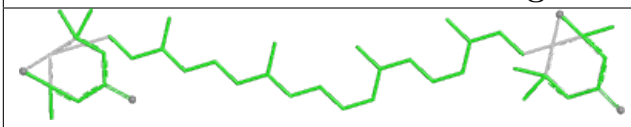


Rings

Ligand XAT 7 622



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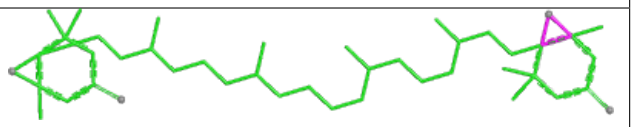
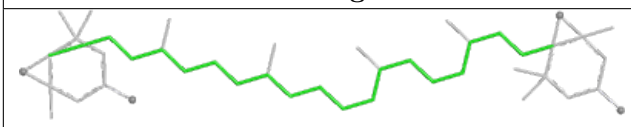


Bond angles



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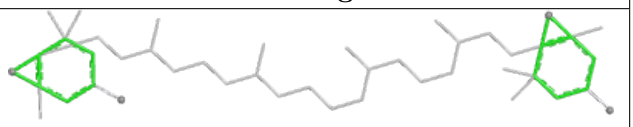
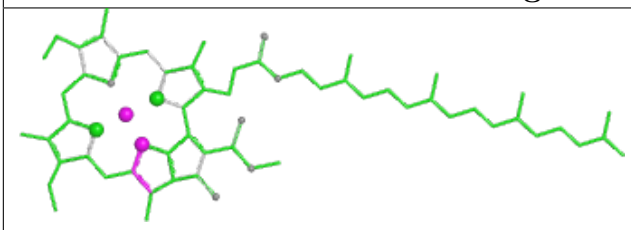
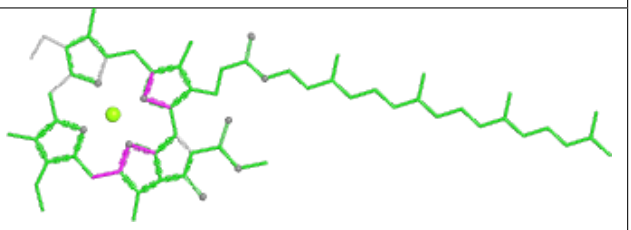
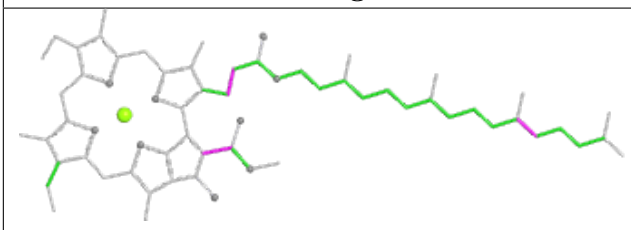
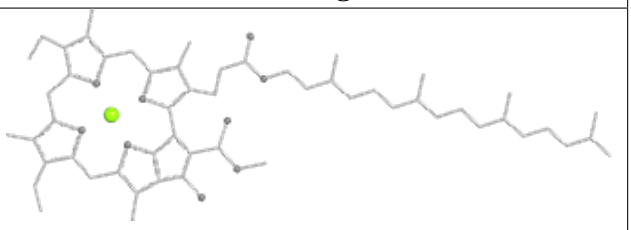


Rings

Ligand CLA A 809	
	
Bond lengths	Bond angles
	
Torsions	Rings

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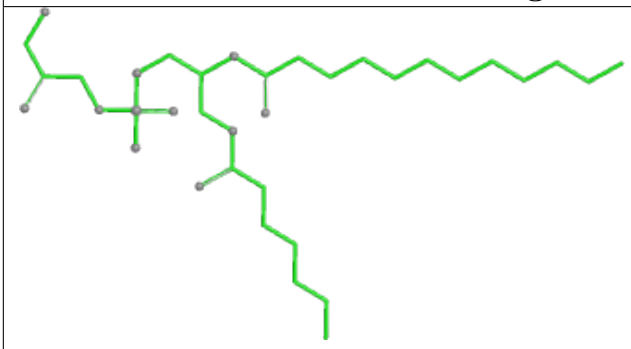
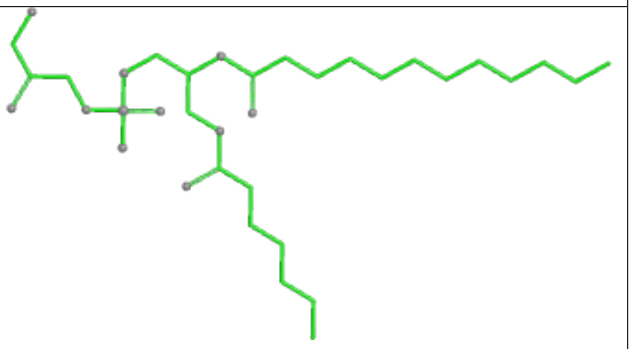
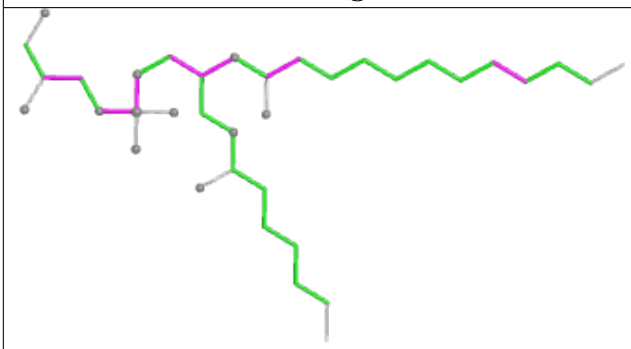
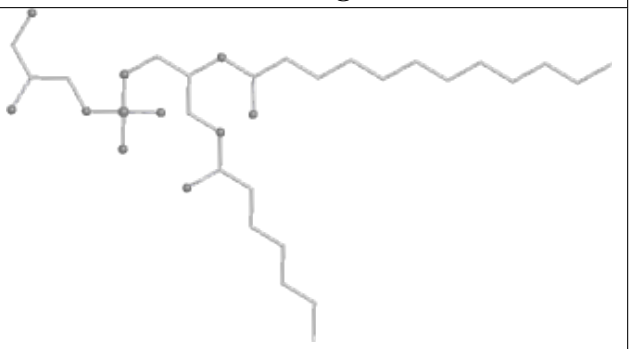
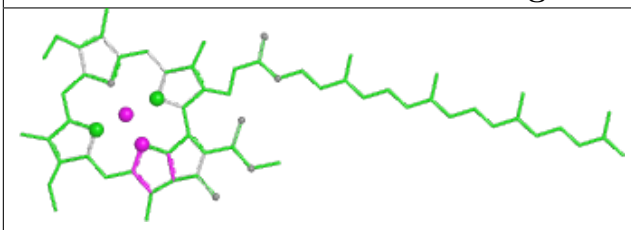
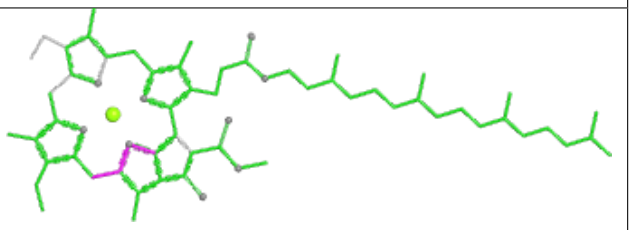
	
Bond lengths	Bond angles
	
Torsions	Rings

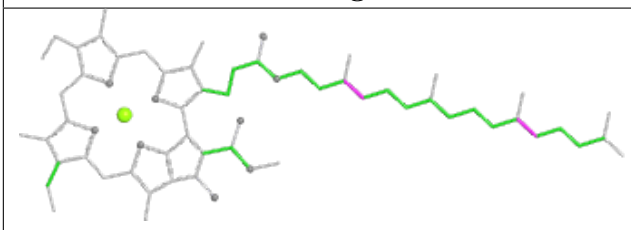
Ligand CLA 8 613



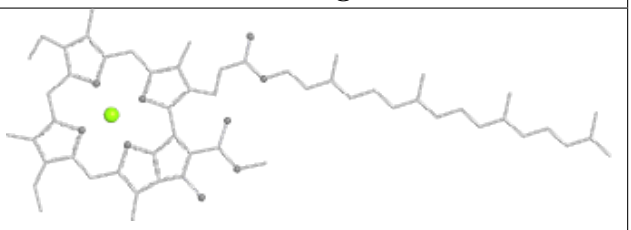
Bond lengths



Bond angles

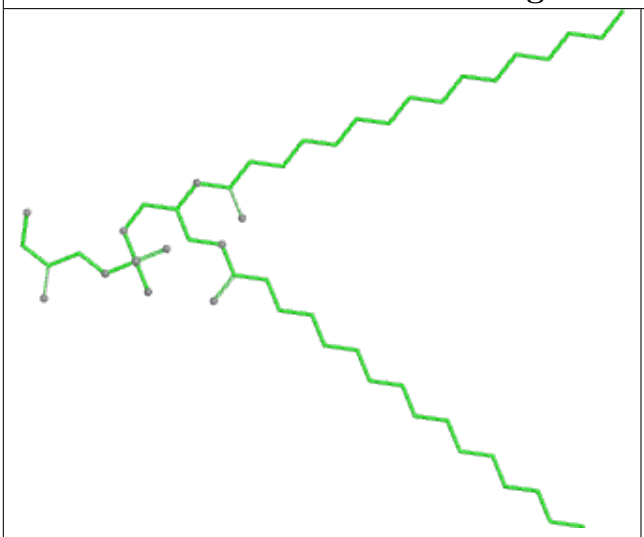


Torsions

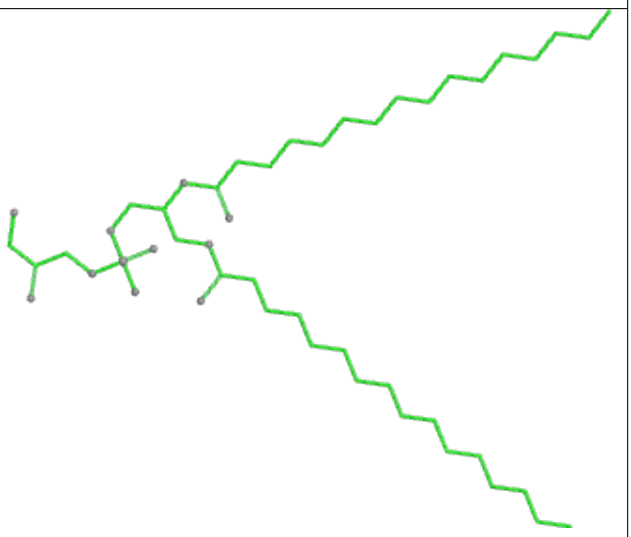


Rings

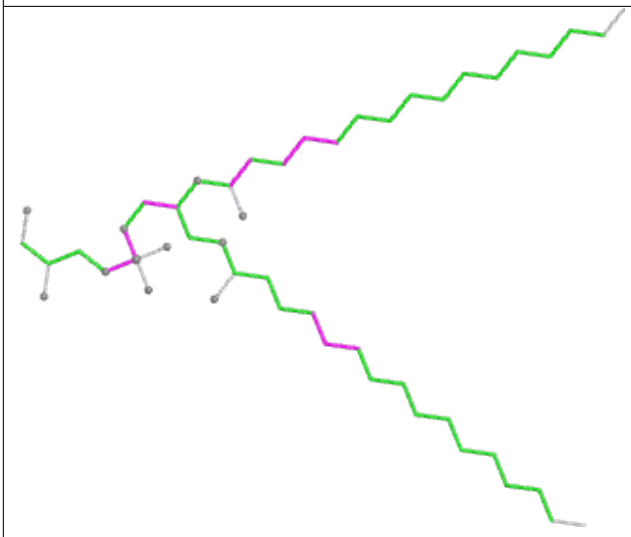
Ligand LHG 6 619



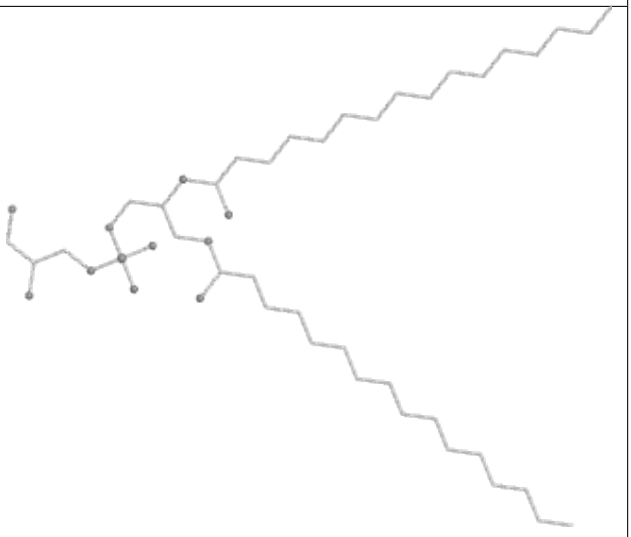
Bond lengths



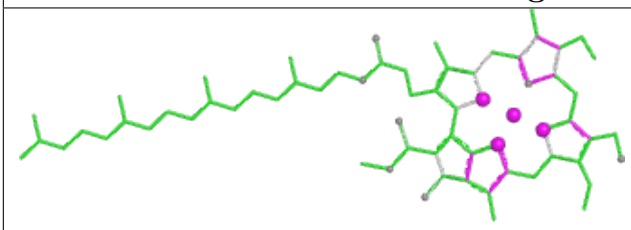
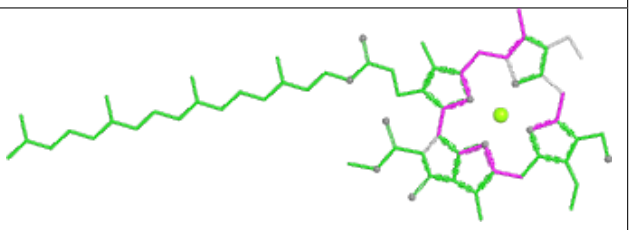
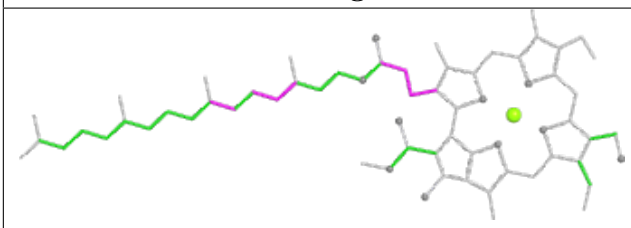
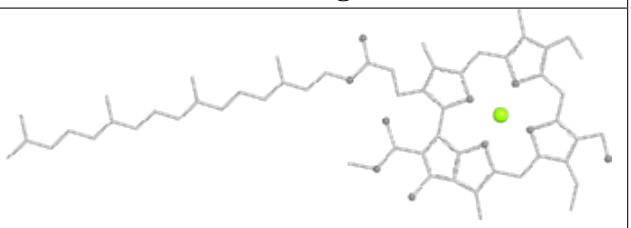
Bond angles

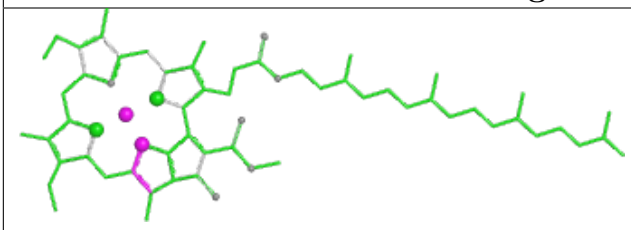
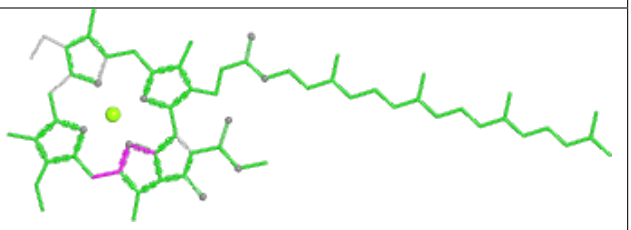
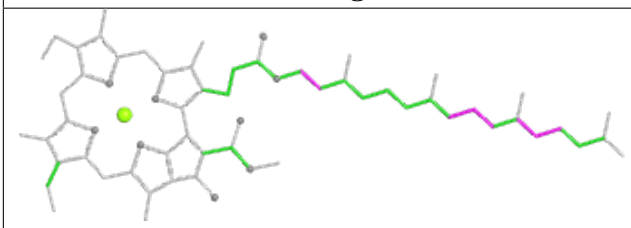
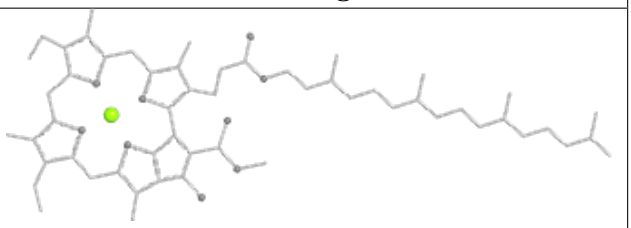


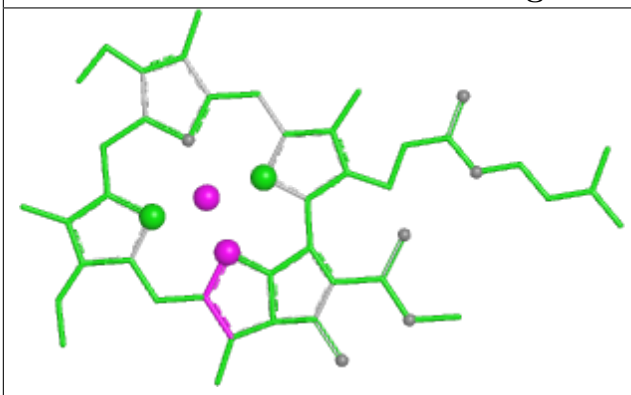
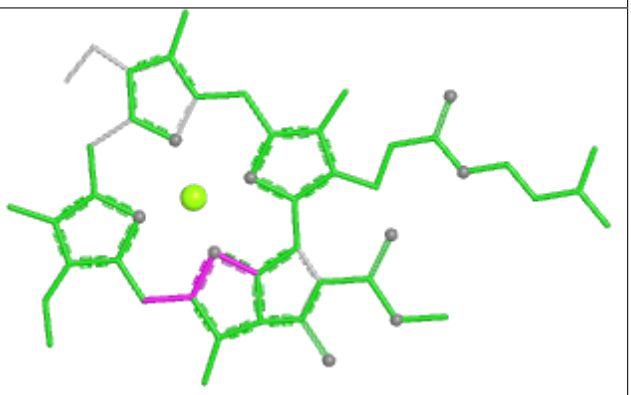
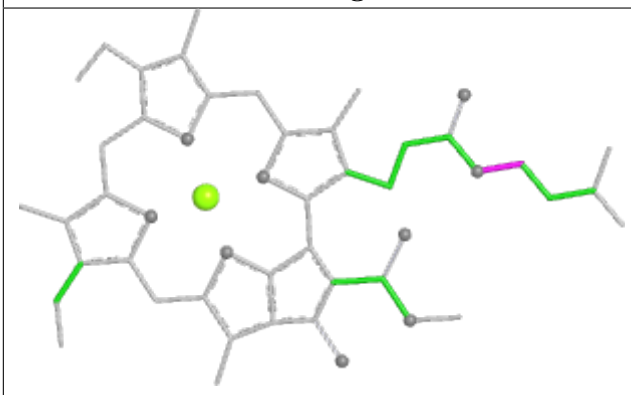
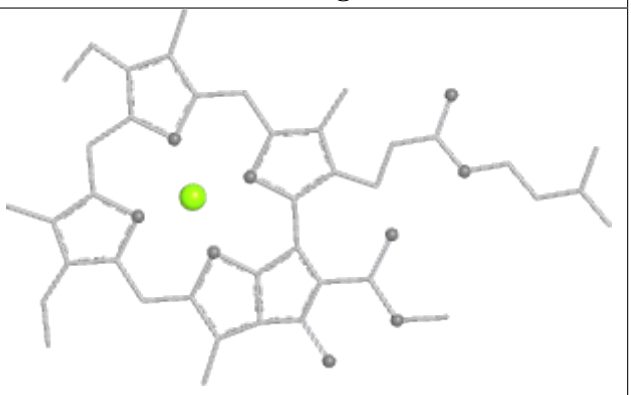
Torsions



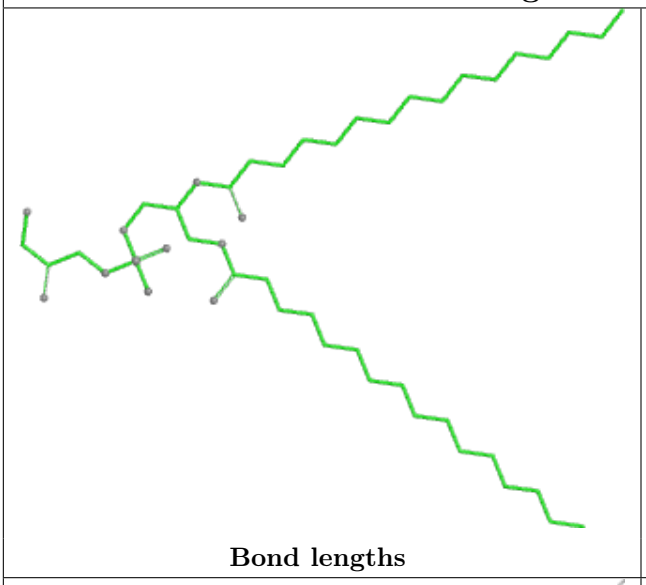
Rings

Ligand CHL 8 606	
	
Bond lengths	Bond angles
	
Torsions	Rings

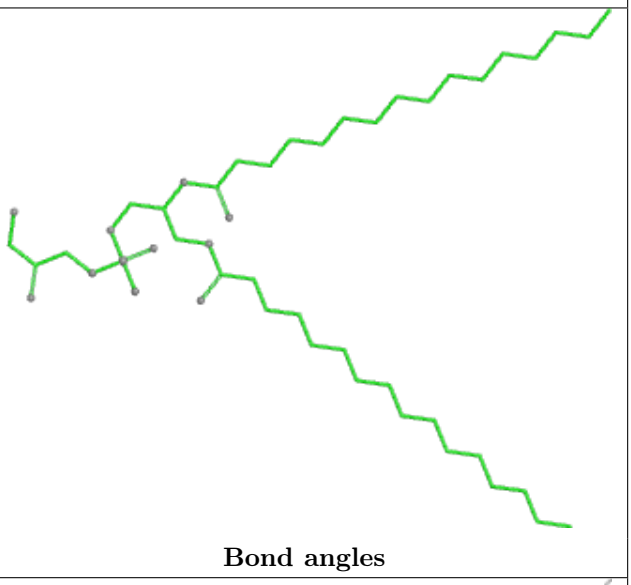
Ligand CLA 1 608	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA Z 608	
	
Bond lengths	**Bond angles**
	
Torsions	**Rings**

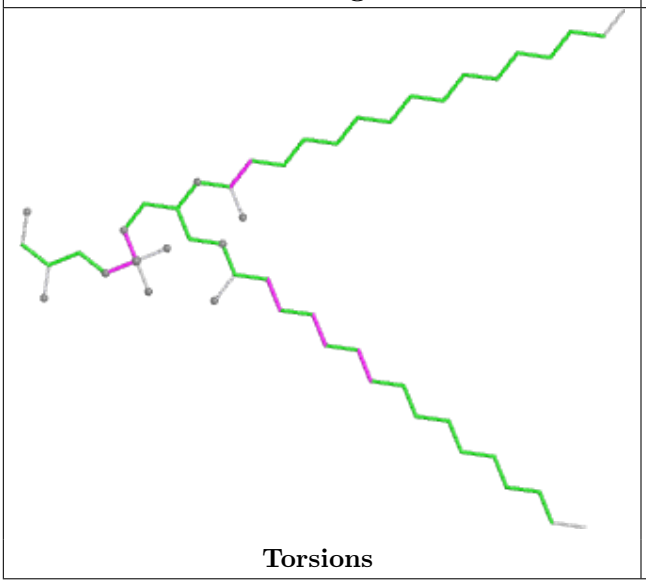
Ligand LHG A 846



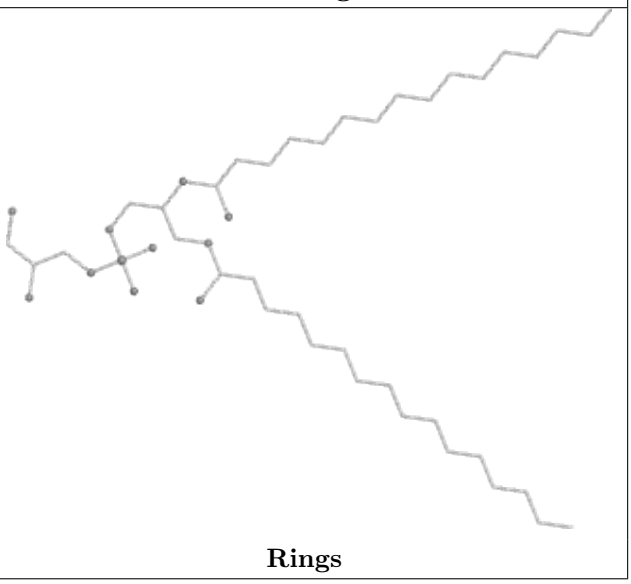
Bond lengths



Bond angles

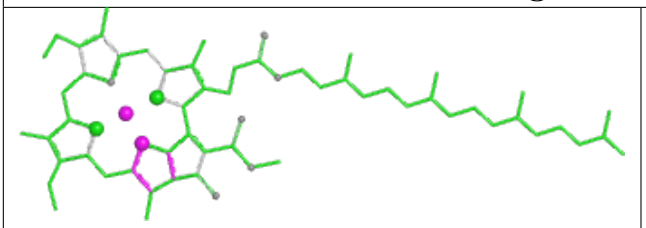


Torsions

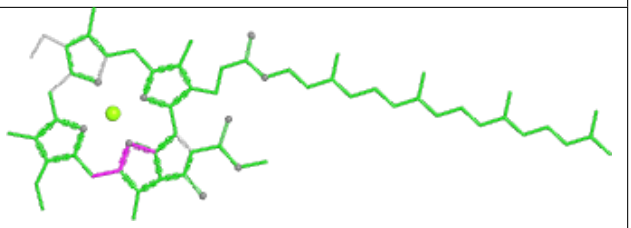


Rings

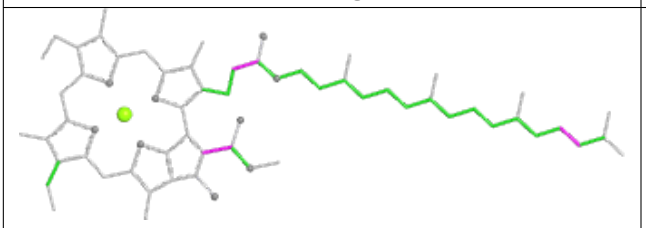
Ligand CLA 8 603



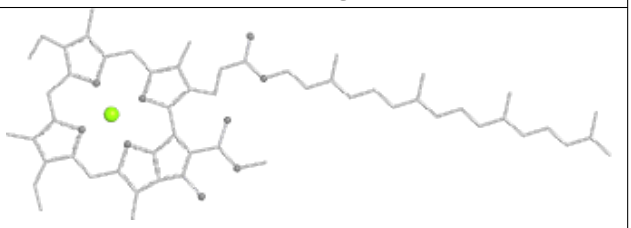
Bond lengths



Bond angles

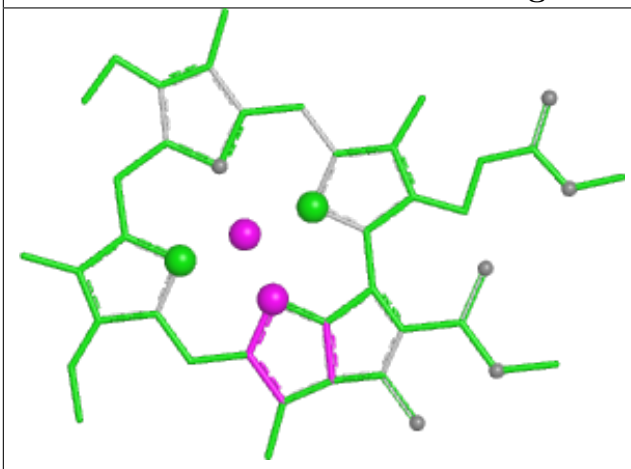


Torsions

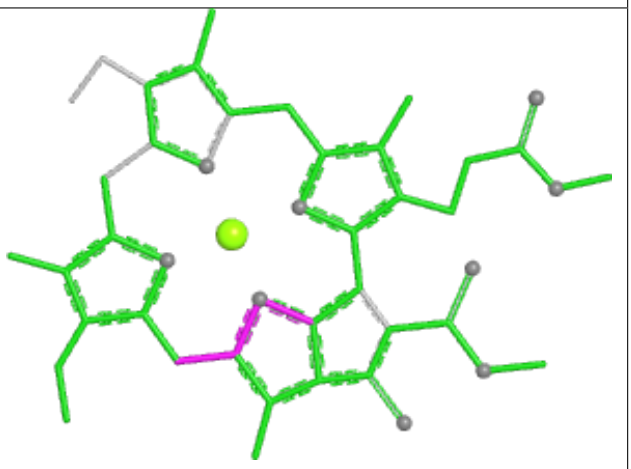


Rings

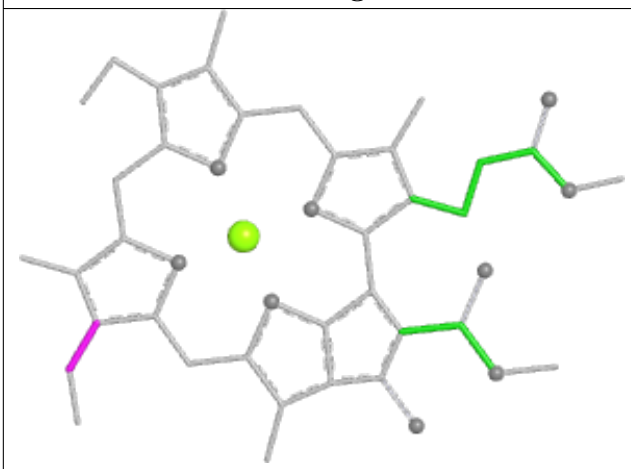
Ligand CLA 1 616



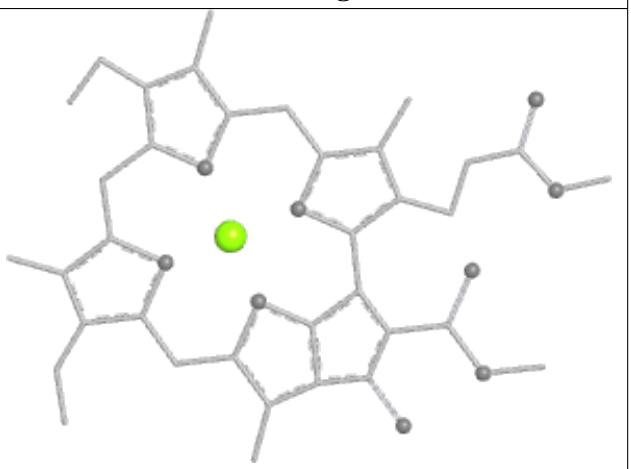
Bond lengths



Bond angles

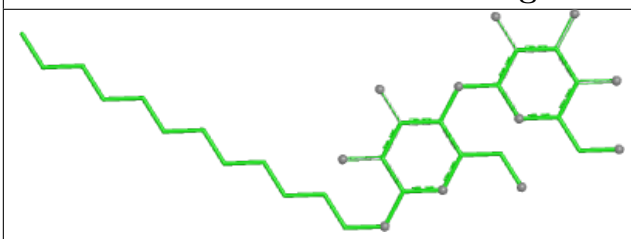


Torsions

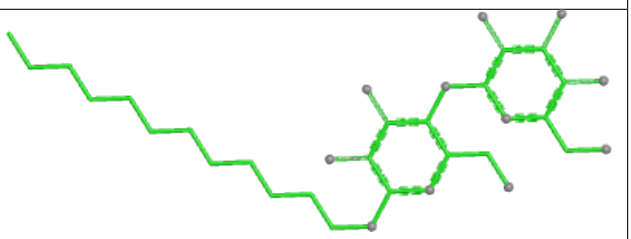


Rings

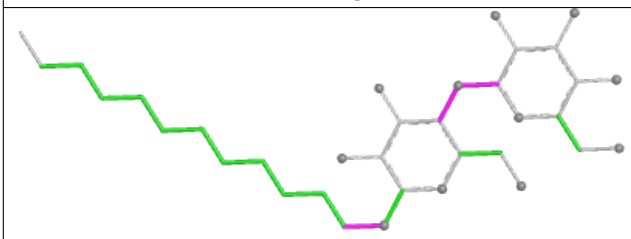
Ligand LMU A 863



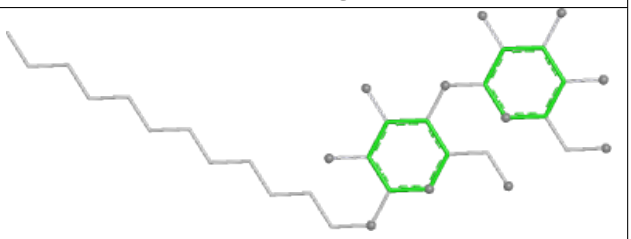
Bond lengths



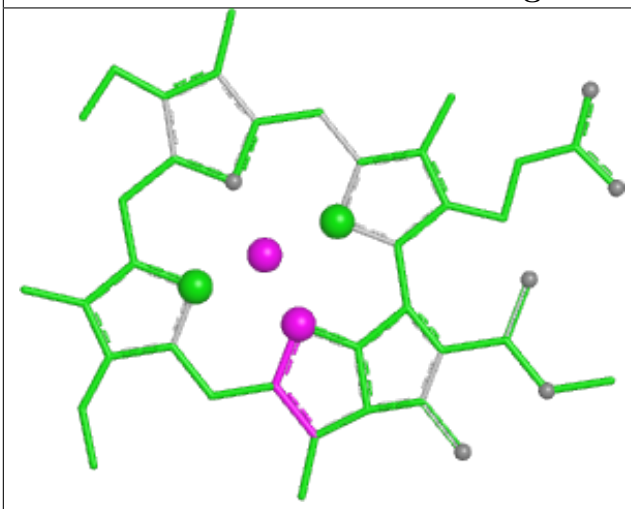
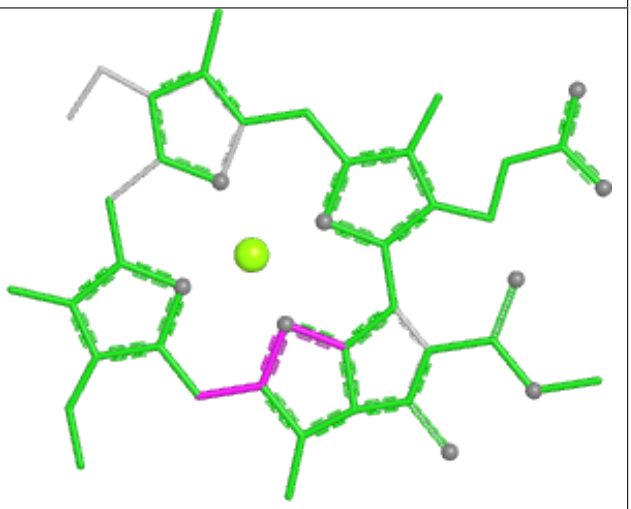
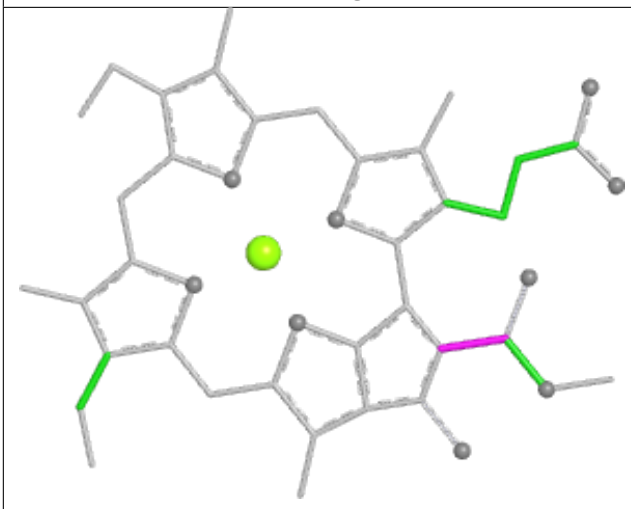
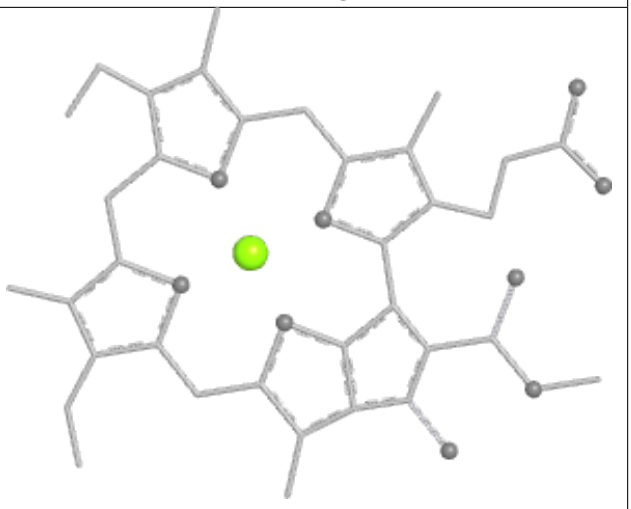
Bond angles

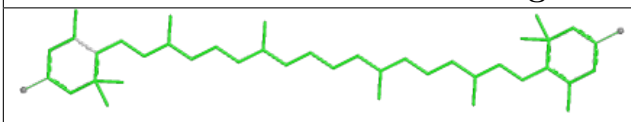
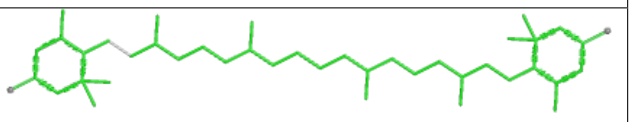
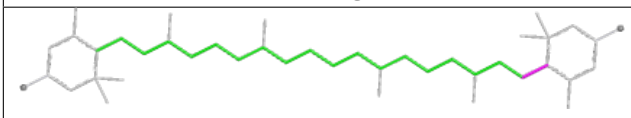
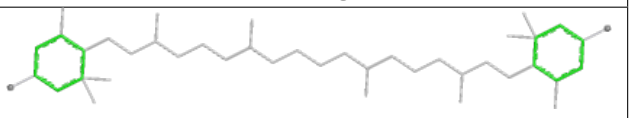


Torsions

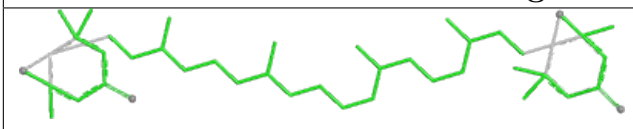


Rings

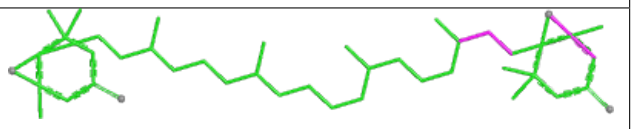
Ligand CLA A 845	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand LUT 8 617	
	
Bond lengths	Bond angles
	
Torsions	Rings

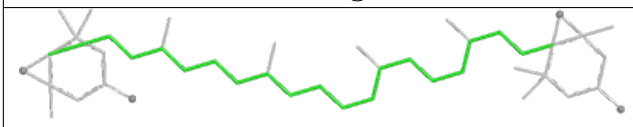
Ligand XAT 1 618



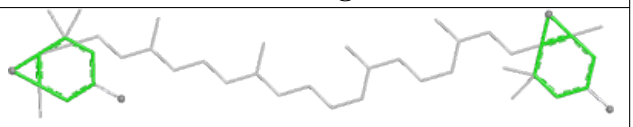
Bond lengths



Bond angles

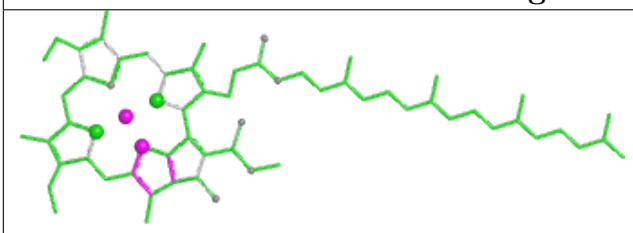


Torsions

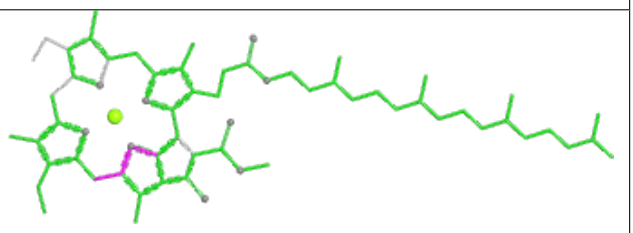


Rings

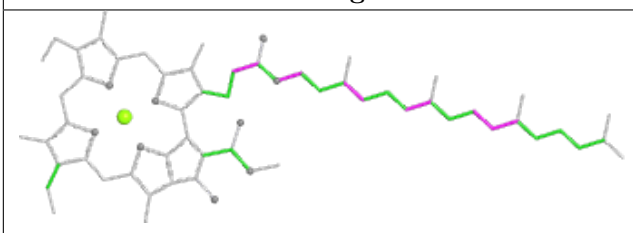
Ligand CLA 3 603



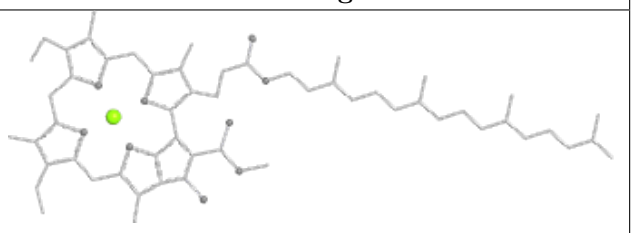
Bond lengths



Bond angles

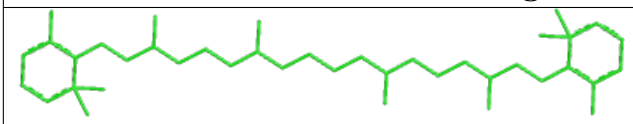


Torsions

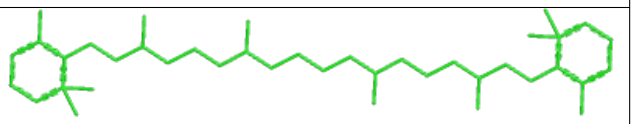


Rings

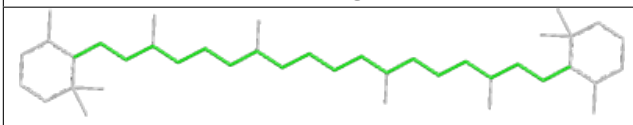
Ligand BCR A 849



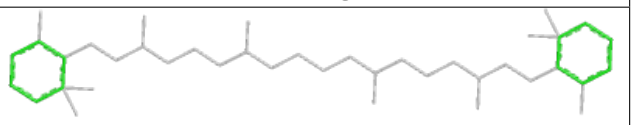
Bond lengths



Bond angles

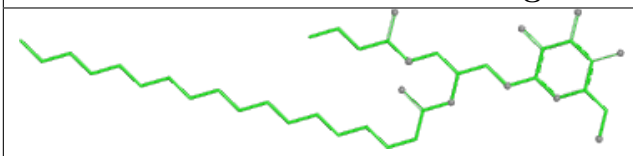


Torsions

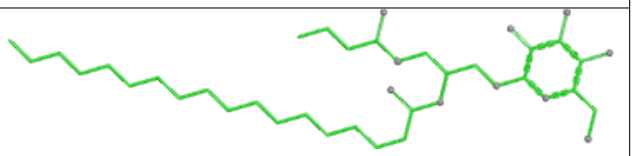


Rings

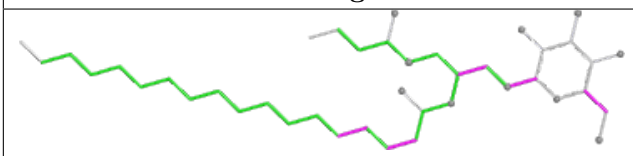
Ligand LMG 4 624



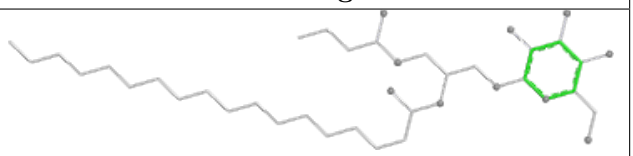
Bond lengths



Bond angles

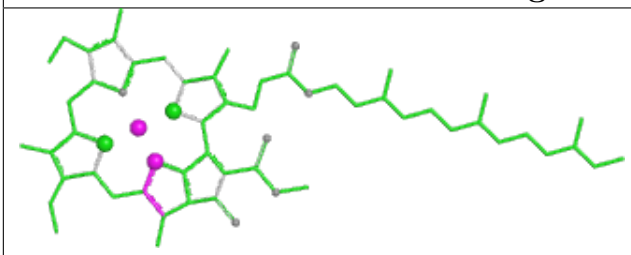


Torsions

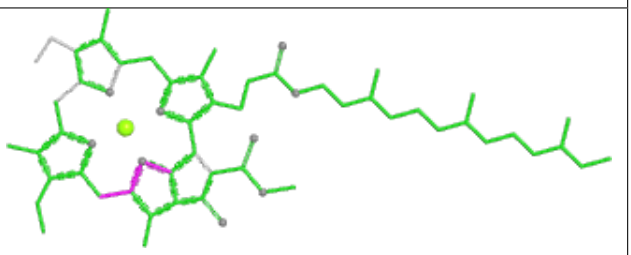


Rings

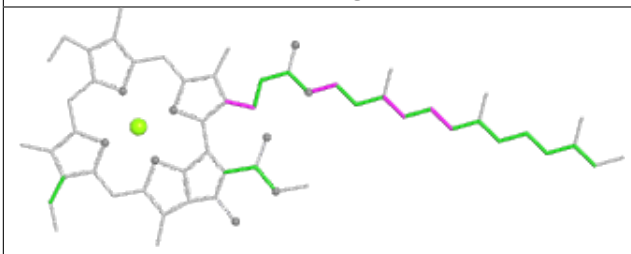
Ligand CLA 1 611



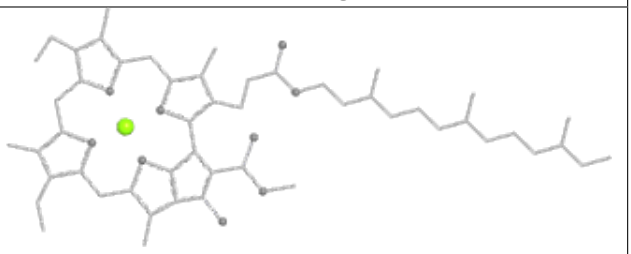
Bond lengths



Bond angles

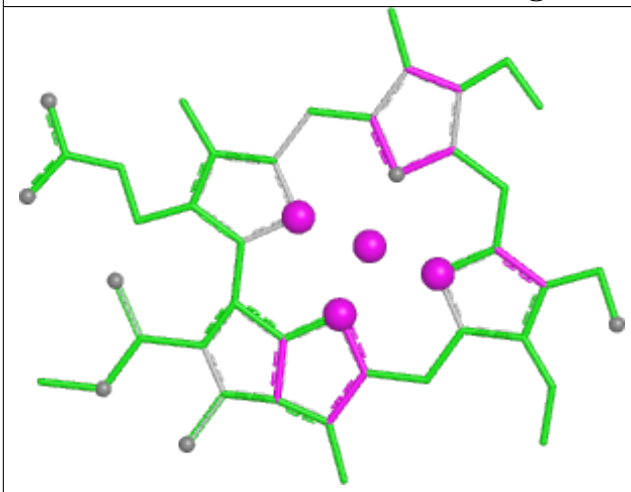


Torsions

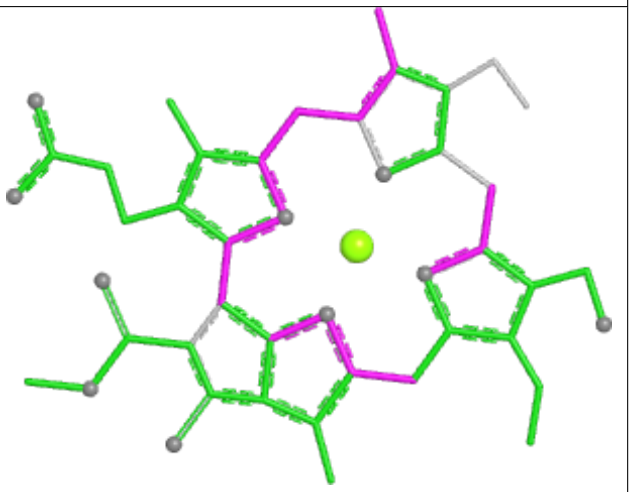


Rings

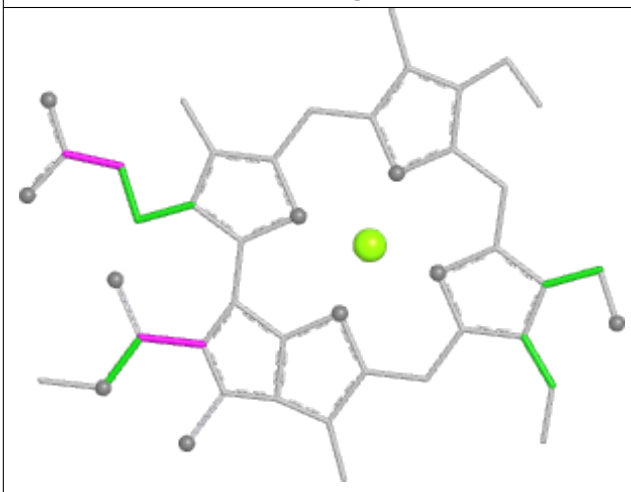
Ligand CHL 4 618



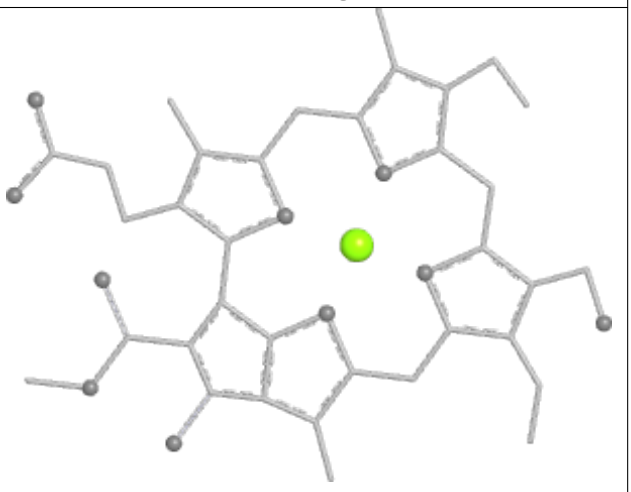
Bond lengths



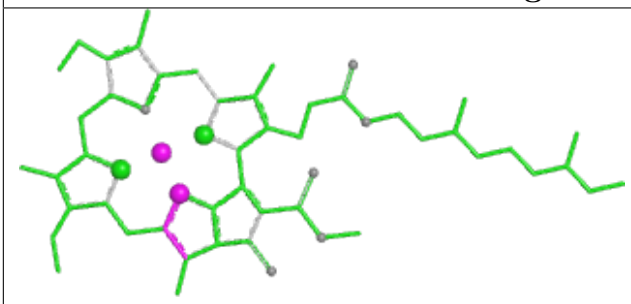
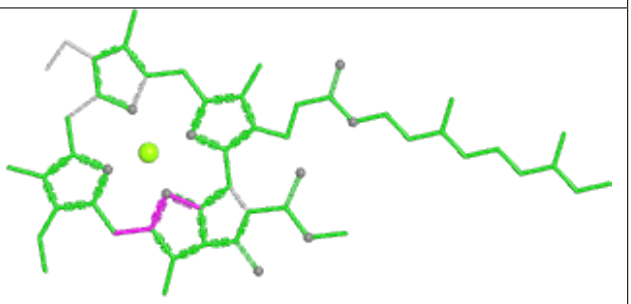
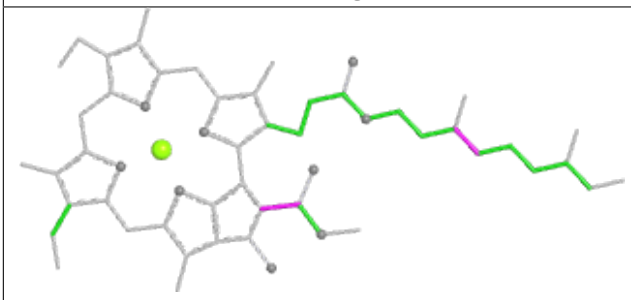
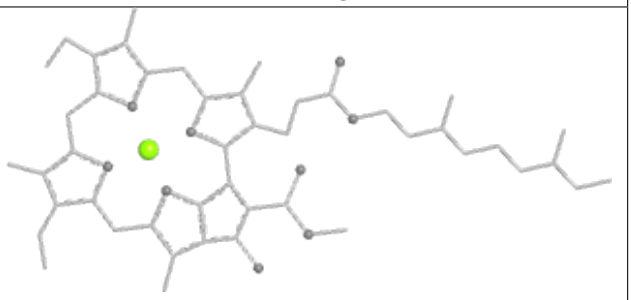
Bond angles

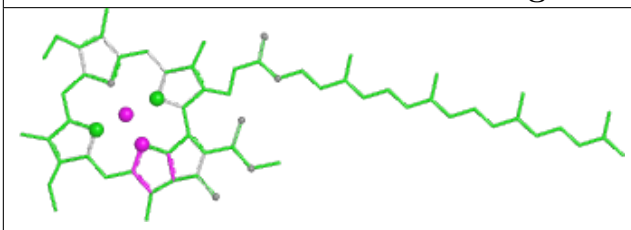
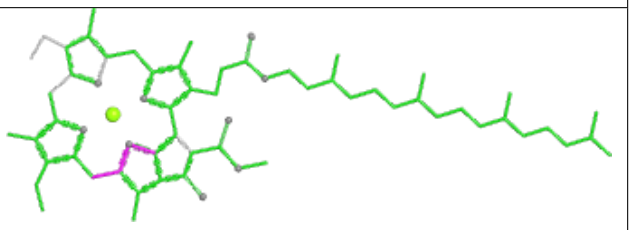
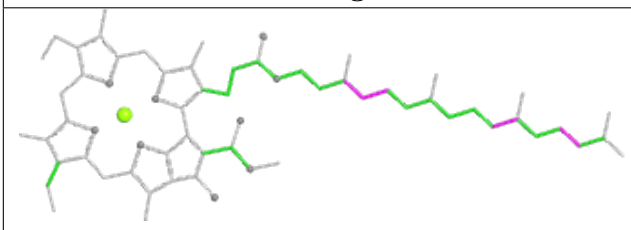
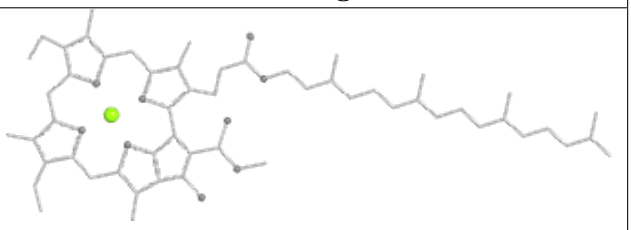


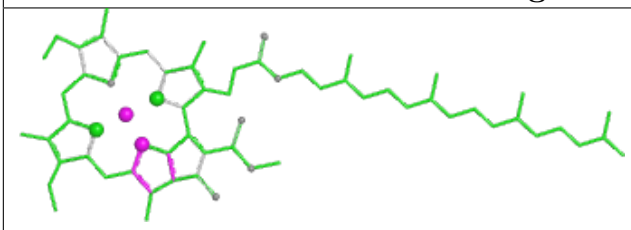
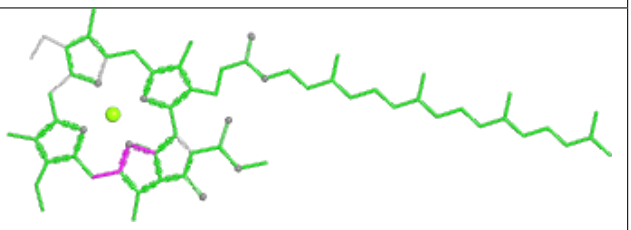
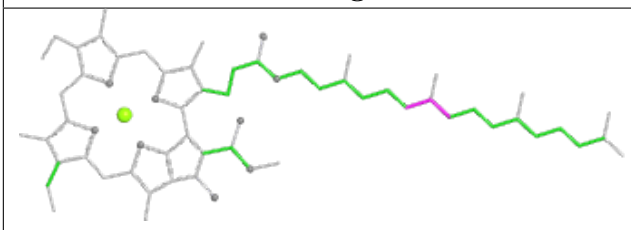
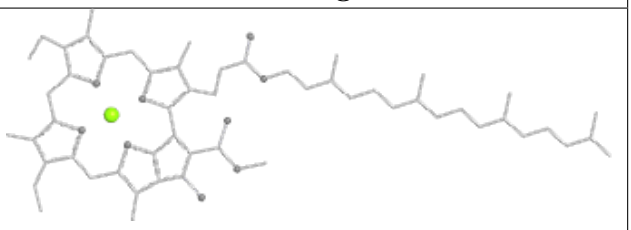
Torsions

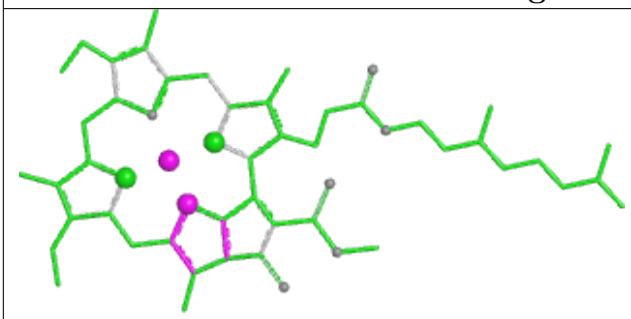
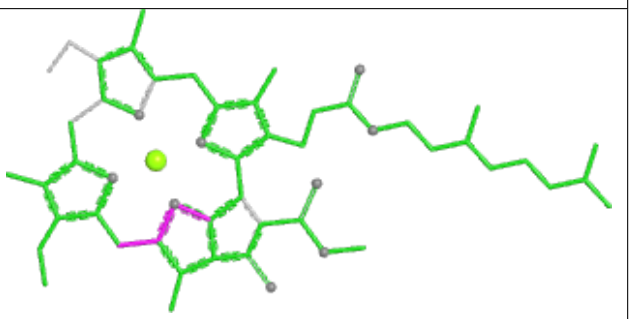
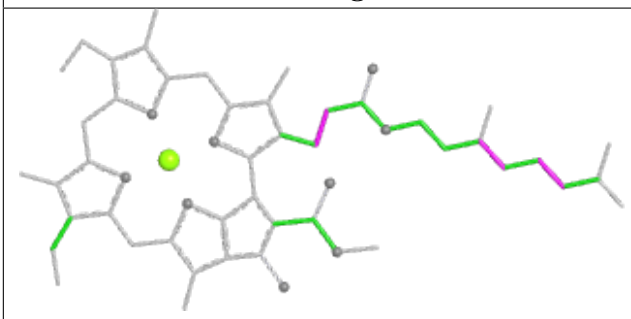
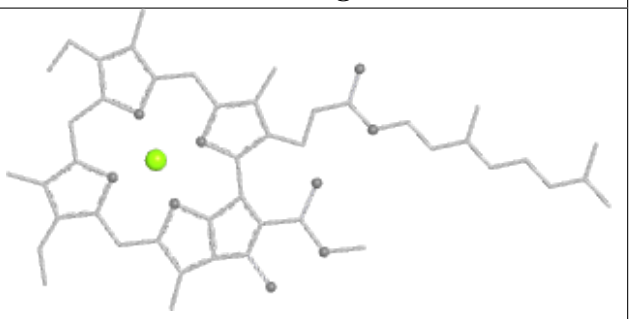


Rings

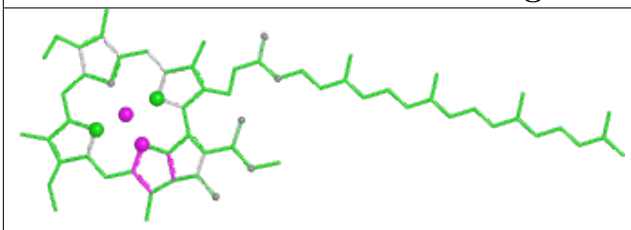
Ligand CLA B 820	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA 1 613	
	
Bond lengths	Bond angles
	
Torsions	Rings

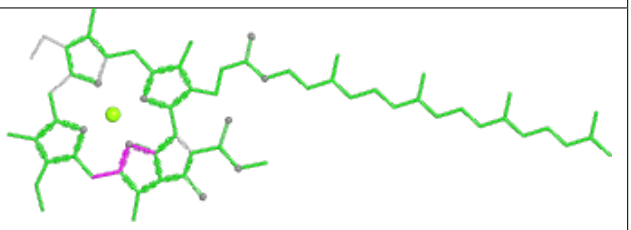
Ligand CLA 5 609	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA 3 607	
	
Bond lengths	Bond angles
	
Torsions	Rings

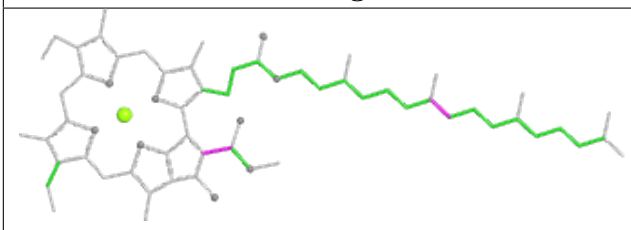
Ligand CLA B 825



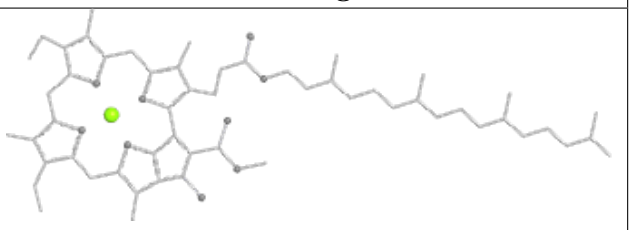
Bond lengths



Bond angles

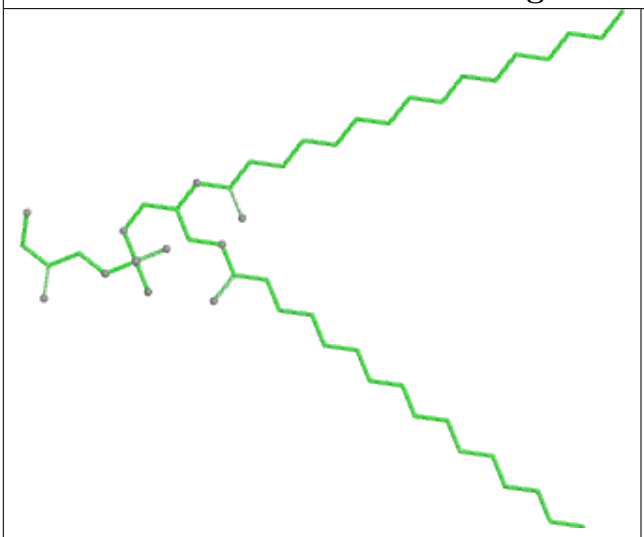


Torsions

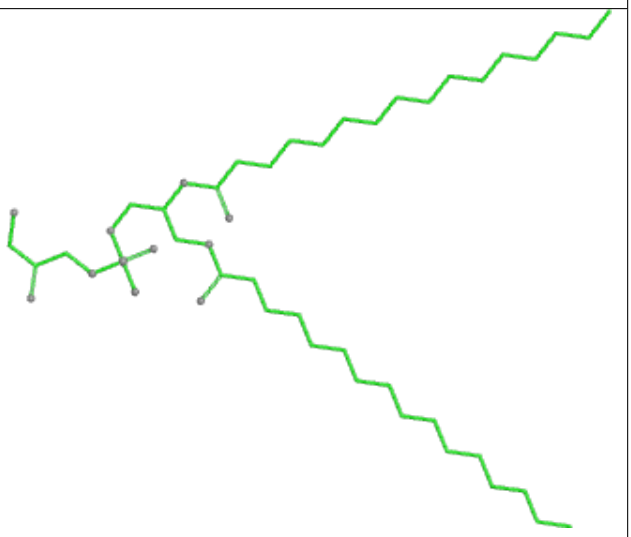


Rings

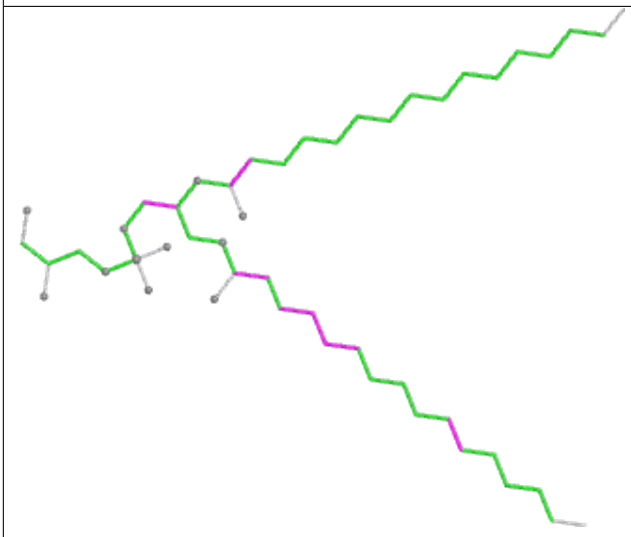
Ligand LHG 7 625



Bond lengths



Bond angles



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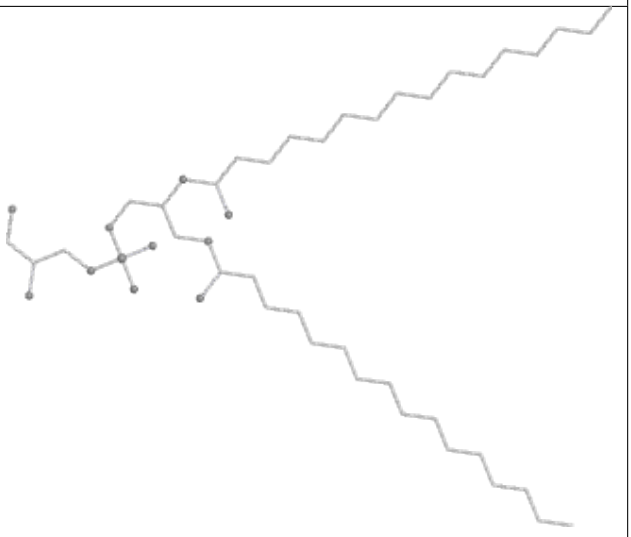
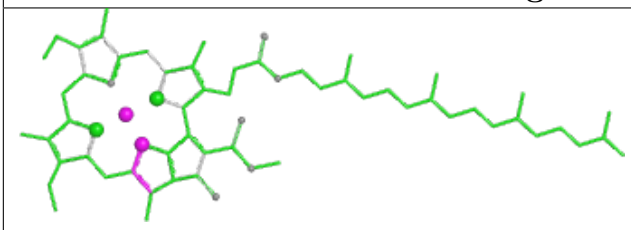
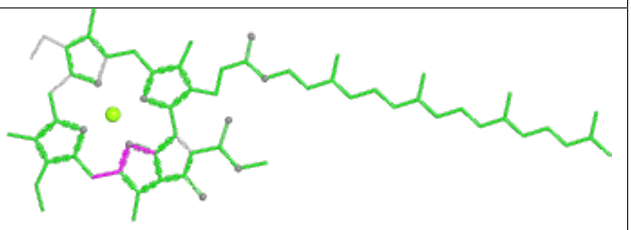
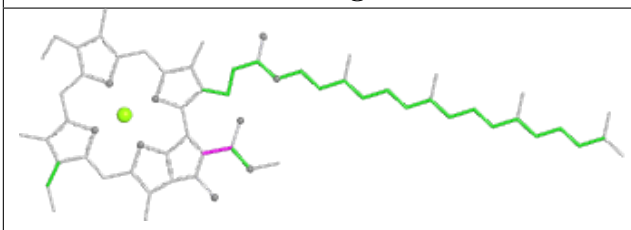
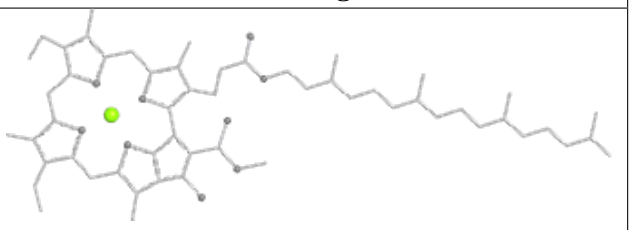


Rings

Ligand CLA Z 613	
 Bond lengths	 Bond angles
 Torsions	 Rings

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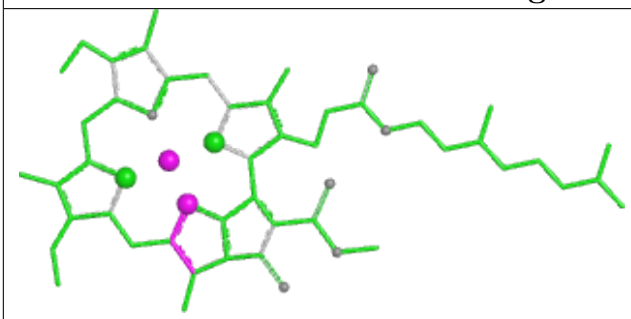
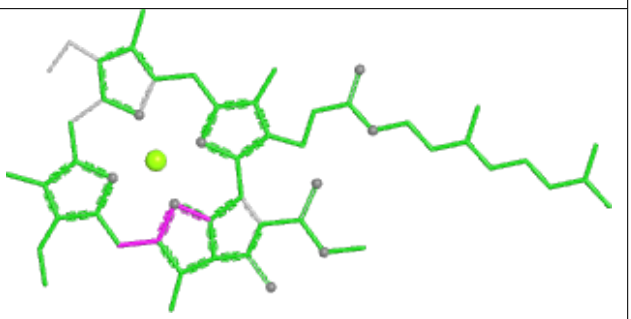
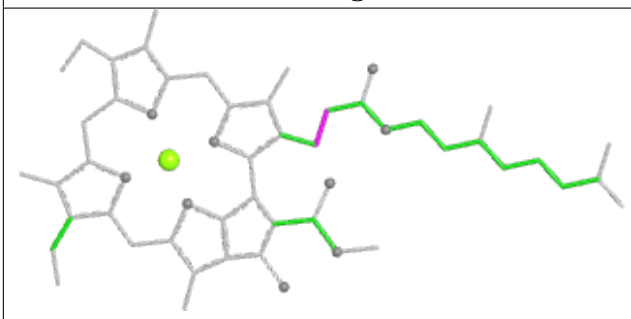
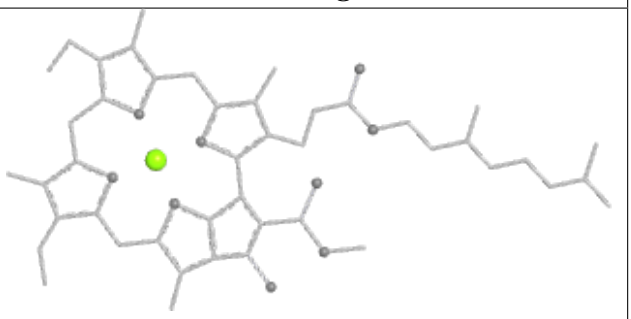
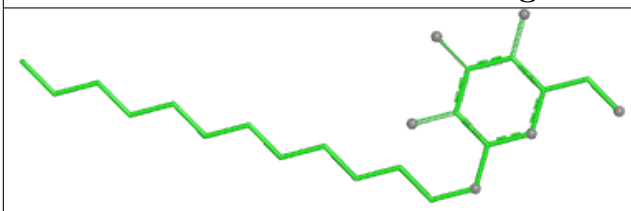
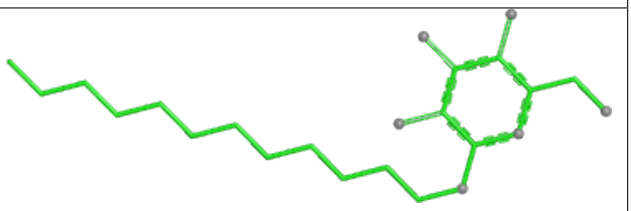
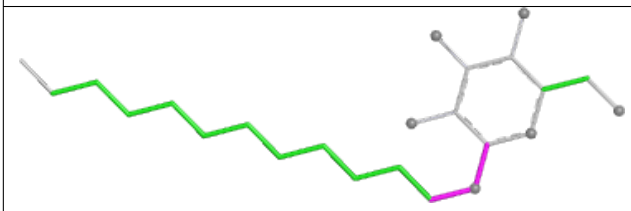
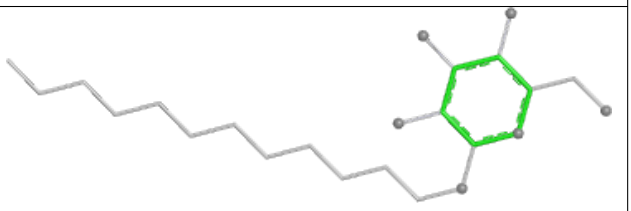
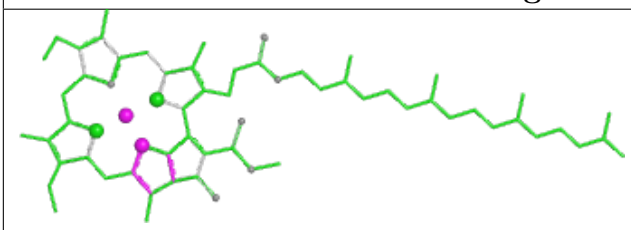
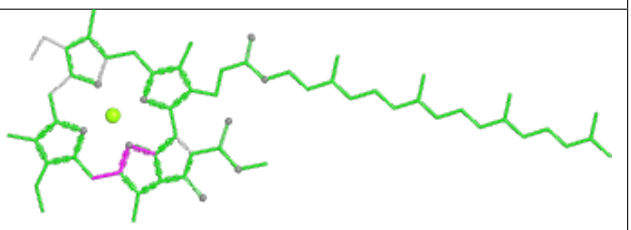
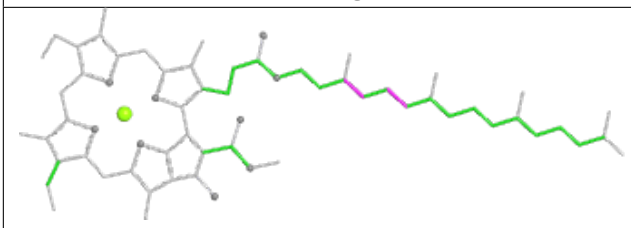
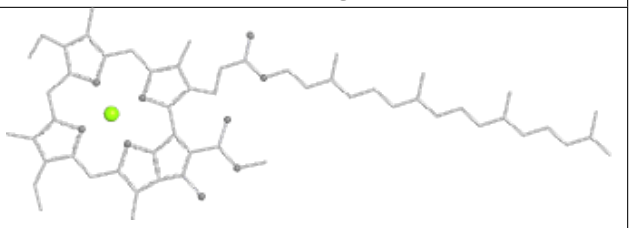
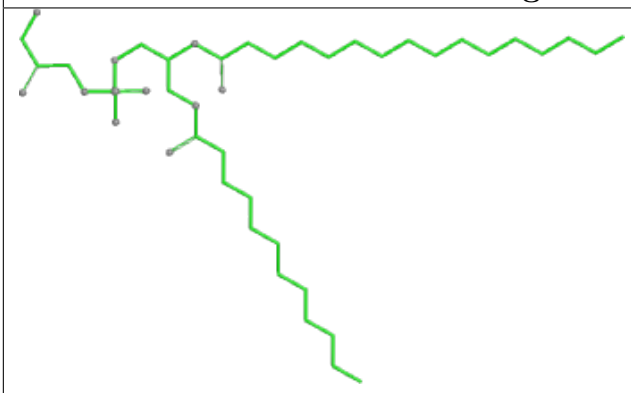
 Bond lengths	 Bond angles
 Torsions	 Rings

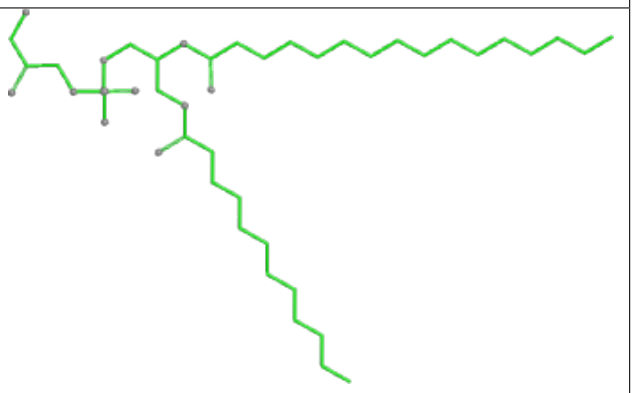
Ligand LMU K 208	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA A 839	
 Bond lengths	 Bond angles
 Torsions	 Rings

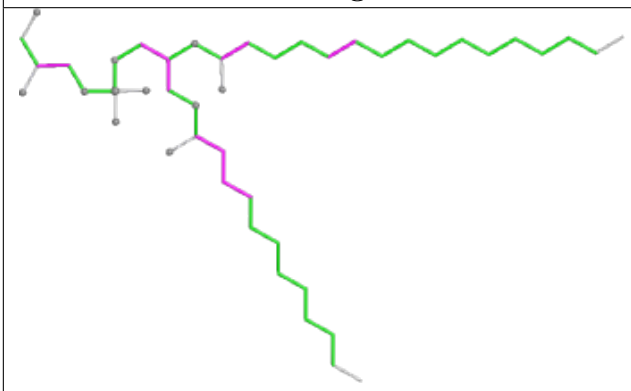
Ligand LHG B 851



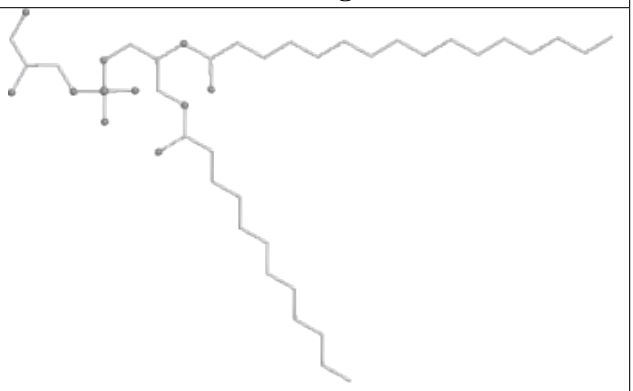
Bond lengths



Bond angles

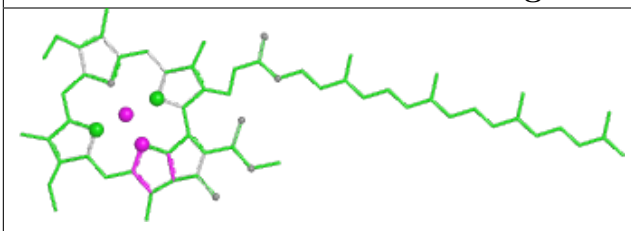


Torsions

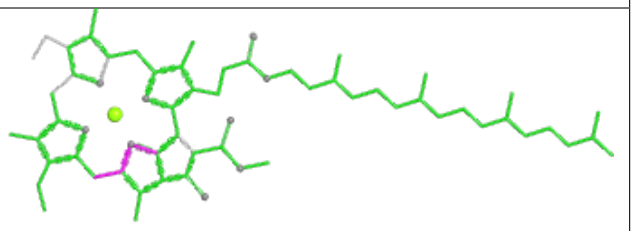


Rings

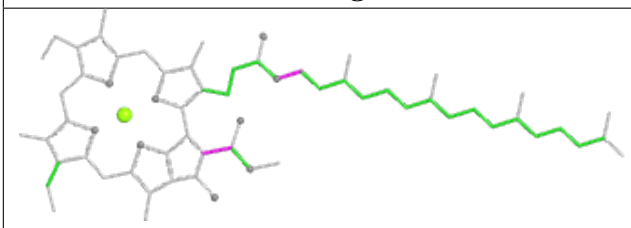
Ligand CLA B 802



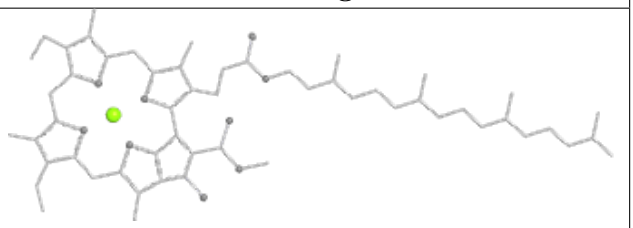
Bond lengths



Bond angles

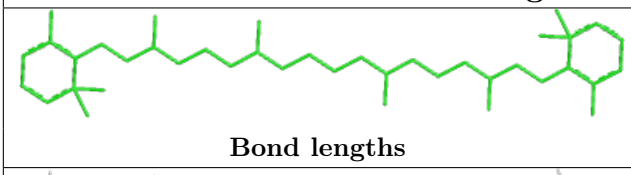


Torsions

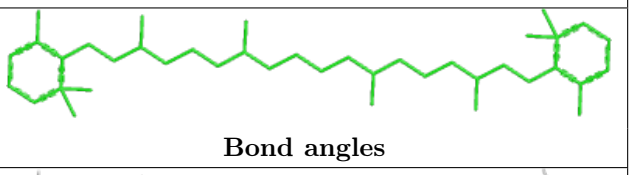


Rings

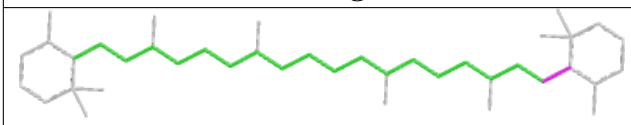
Ligand BCR J 102



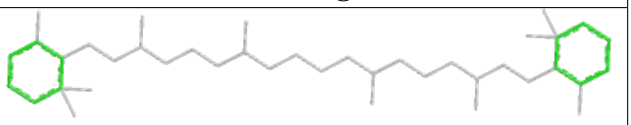
Bond lengths



Bond angles

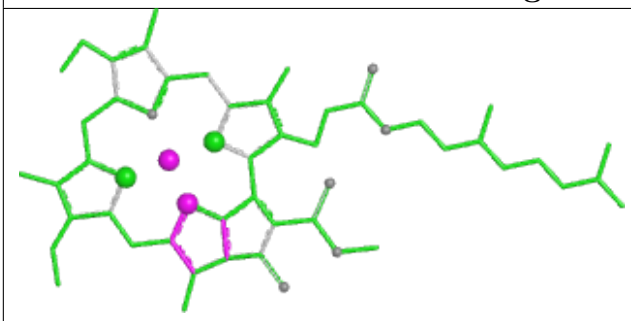


Torsions

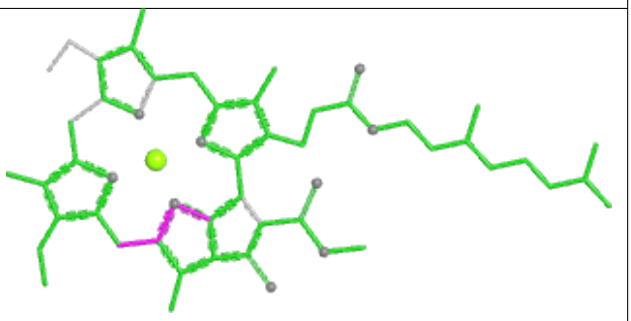


Rings

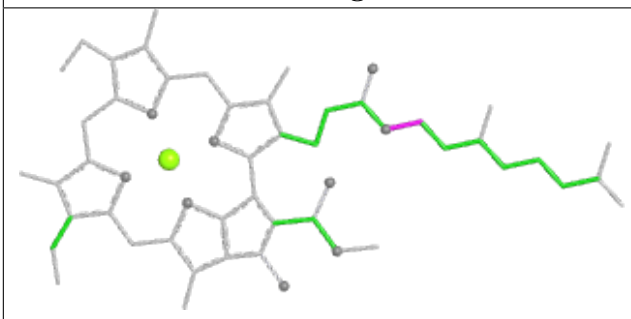
Ligand CLA A 832



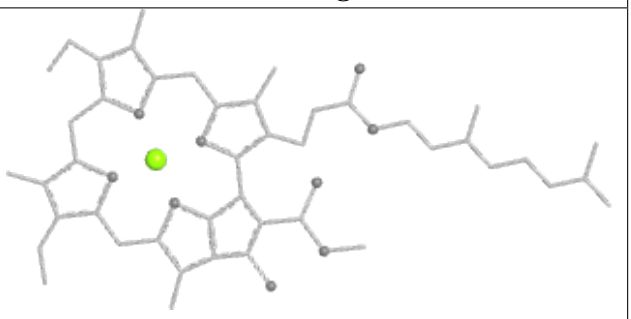
Bond lengths



Bond angles

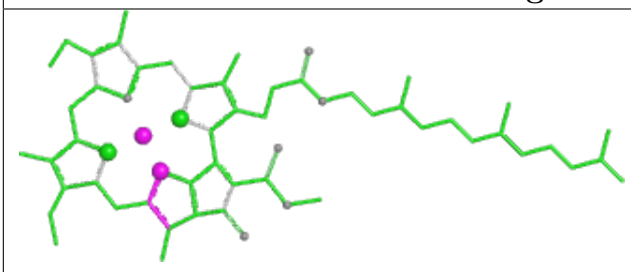


Torsions

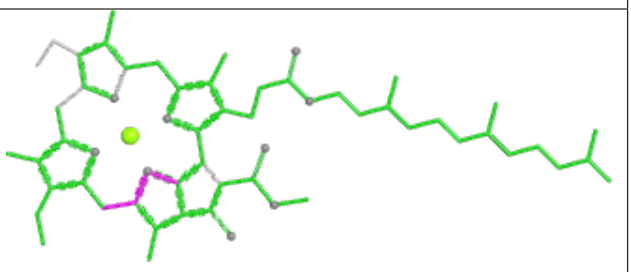


Rings

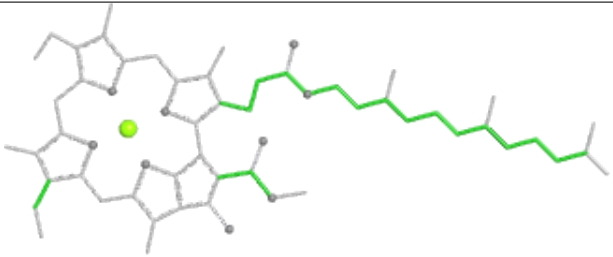
Ligand CLA Z 610



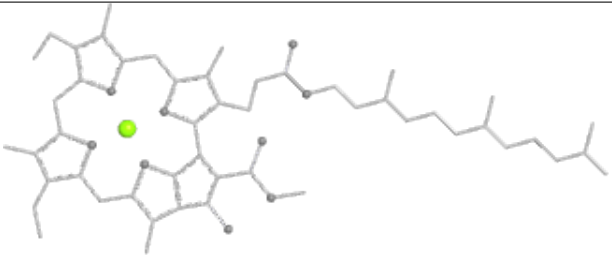
Bond lengths



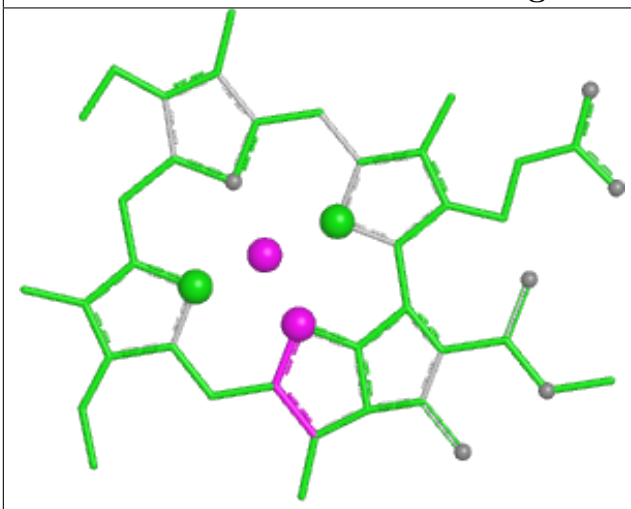
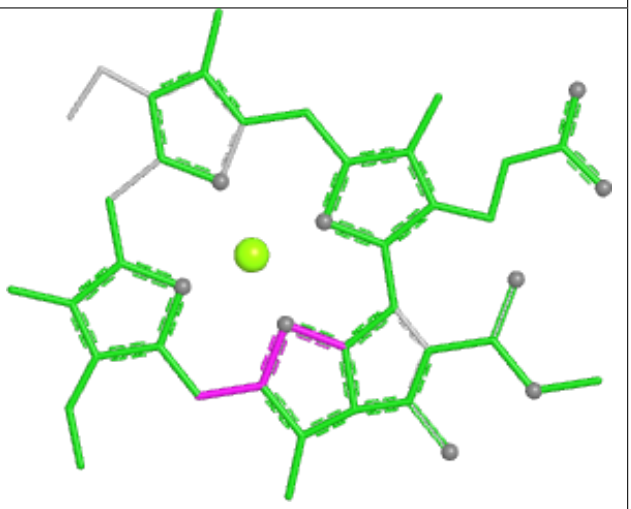
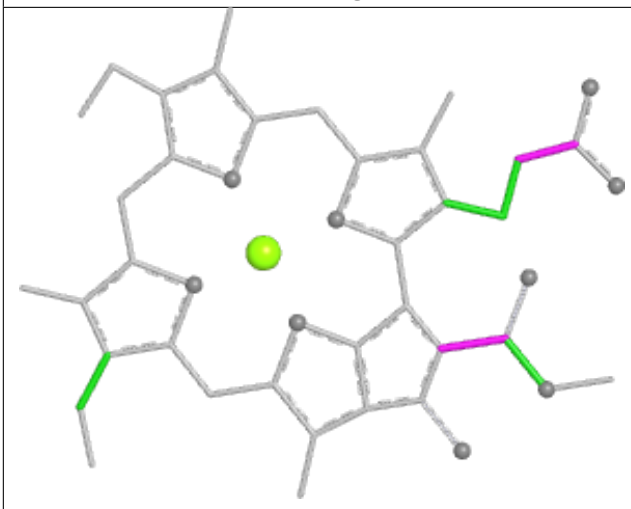
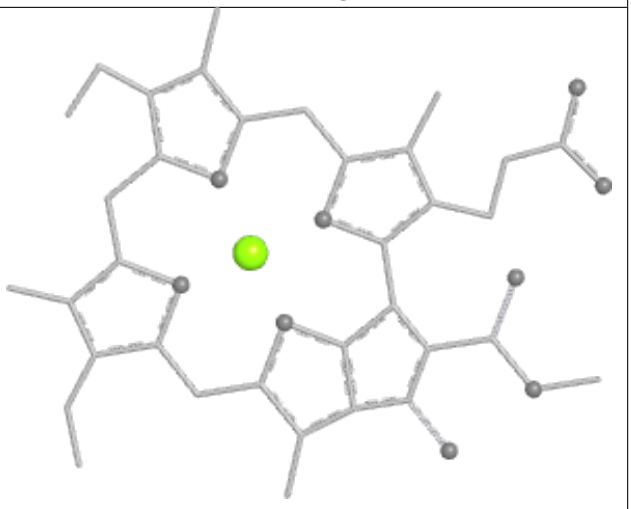
Bond angles

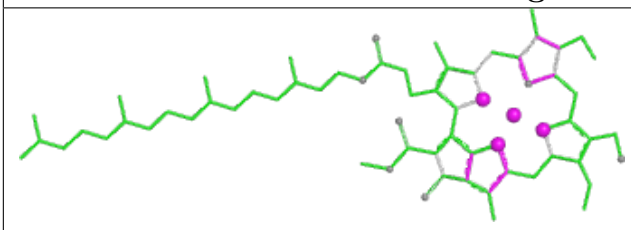
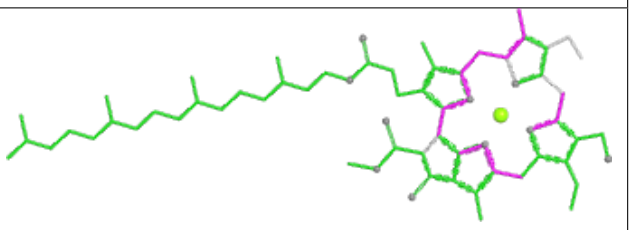
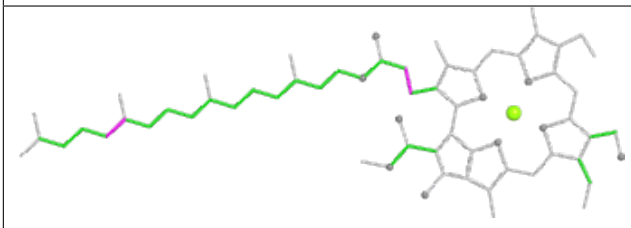
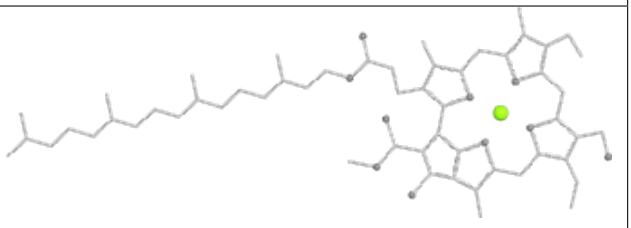


Torsions

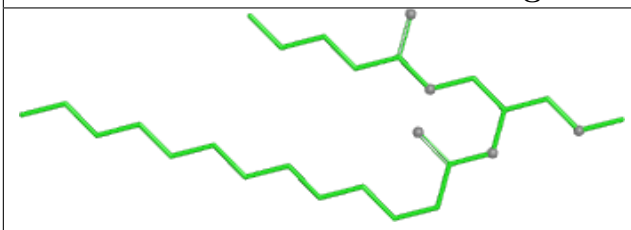


Rings

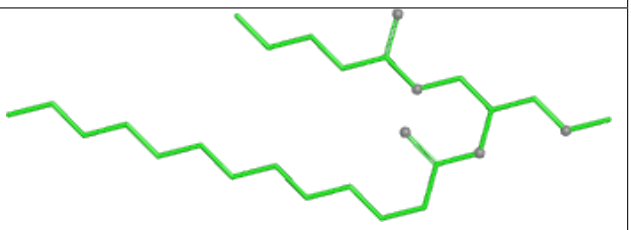
Ligand CLA 6 612	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CHL 3 608	
 Bond lengths	 Bond angles
 Torsions	 Rings

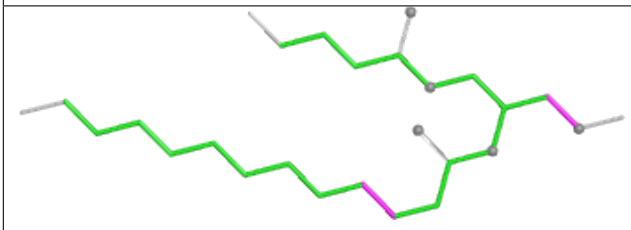
Ligand LMG 4 627



Bond lengths



Bond angles



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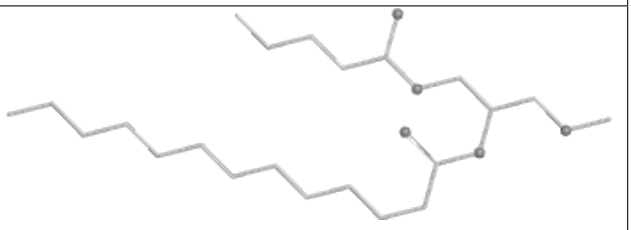
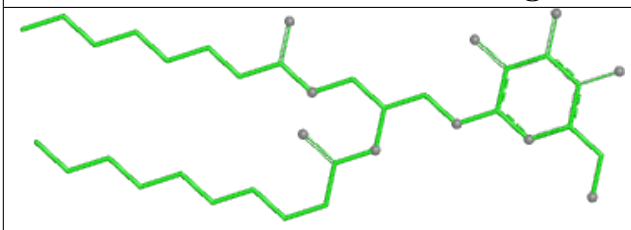
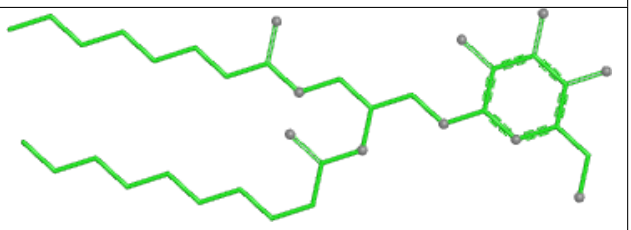


Rings

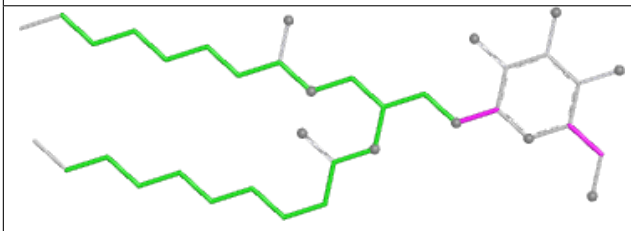
Ligand LMG 7 626



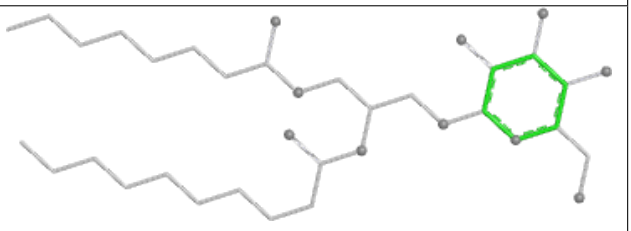
Bond lengths



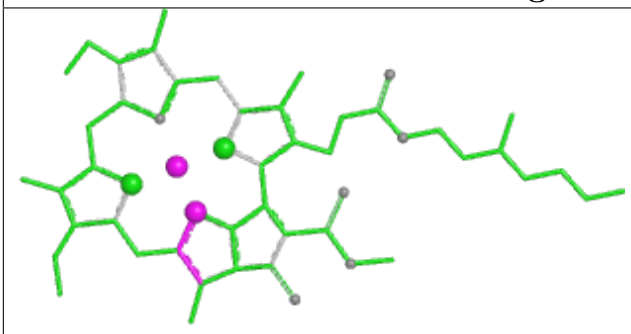
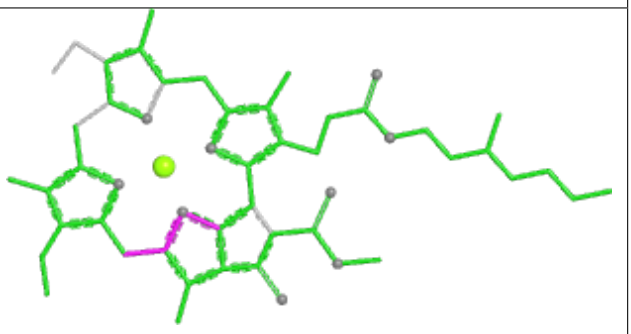
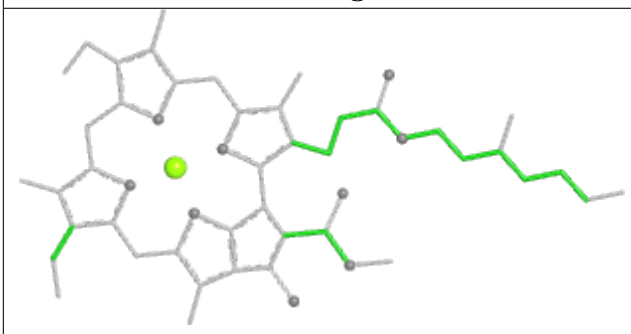
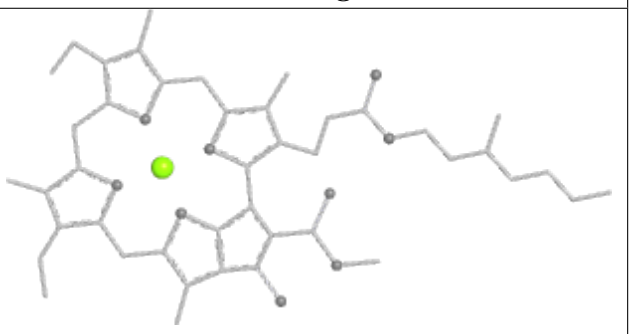
Bond angles

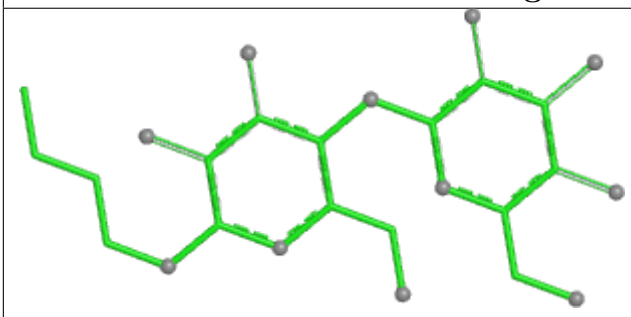
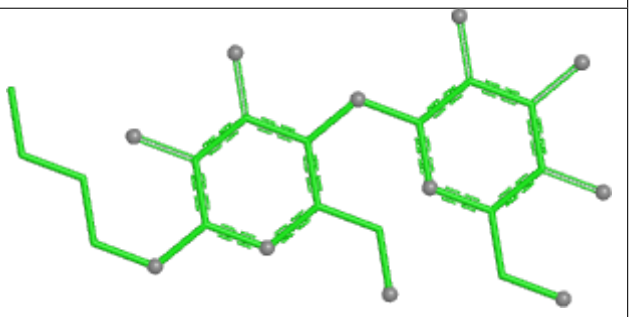
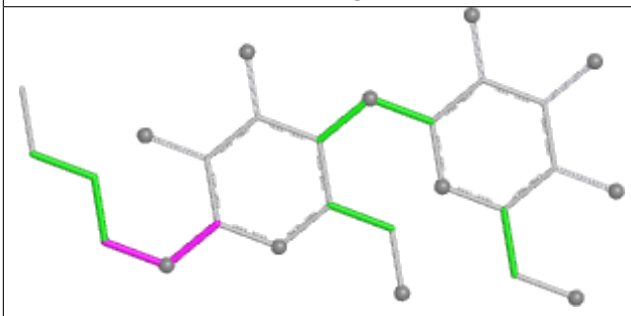
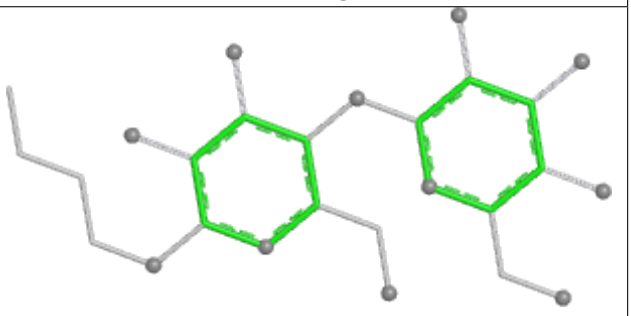


Torsions

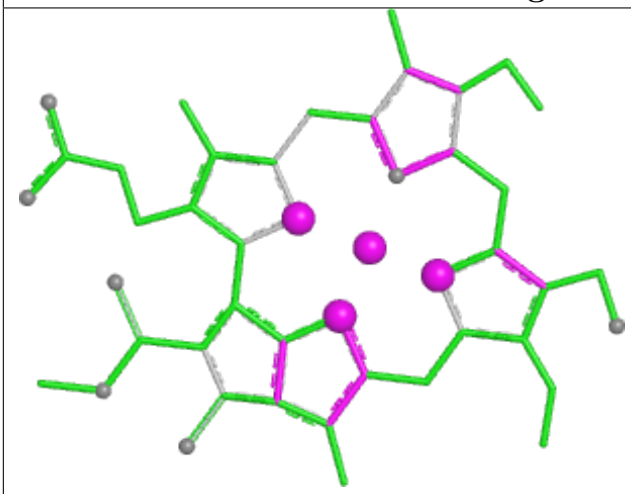


Rings

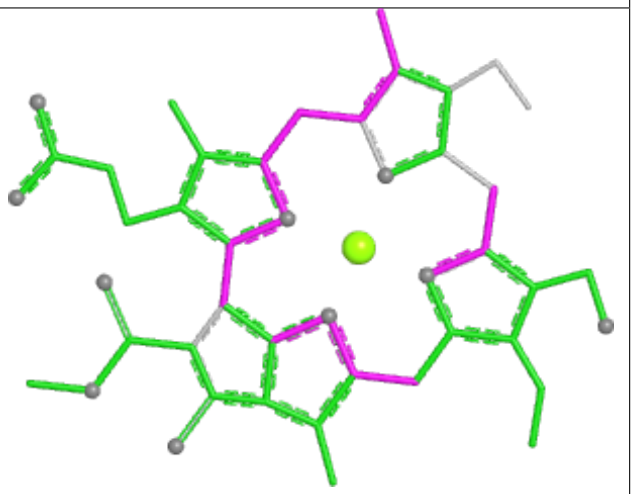
Ligand CLA 5 616	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand LMU 7 629	
	
Bond lengths	Bond angles
	
Torsions	Rings

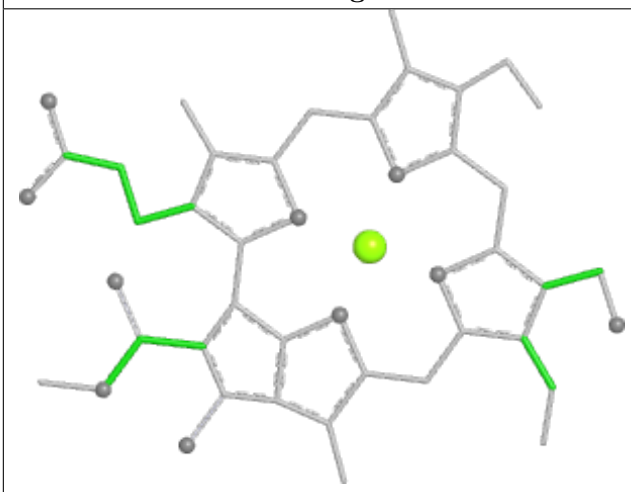
Ligand CHL 1 606



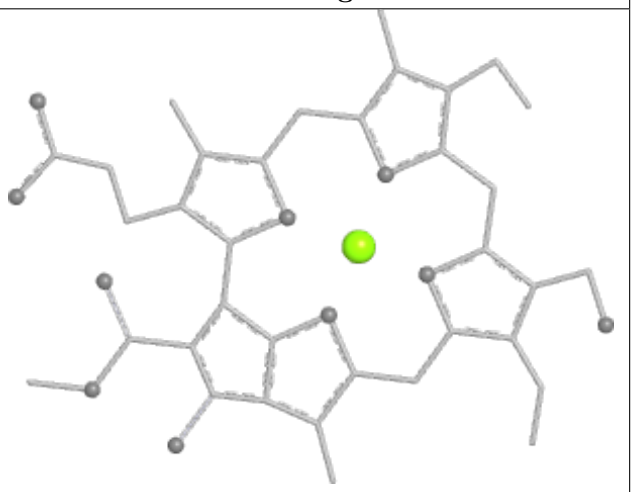
Bond lengths



Bond angles

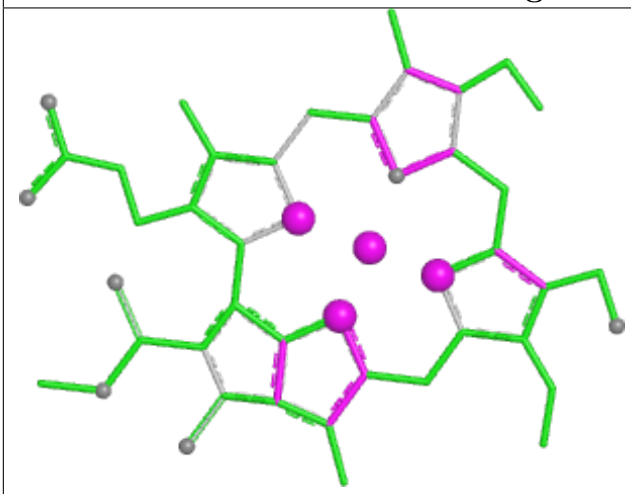


Torsions



Rings

Ligand CHL Z 606



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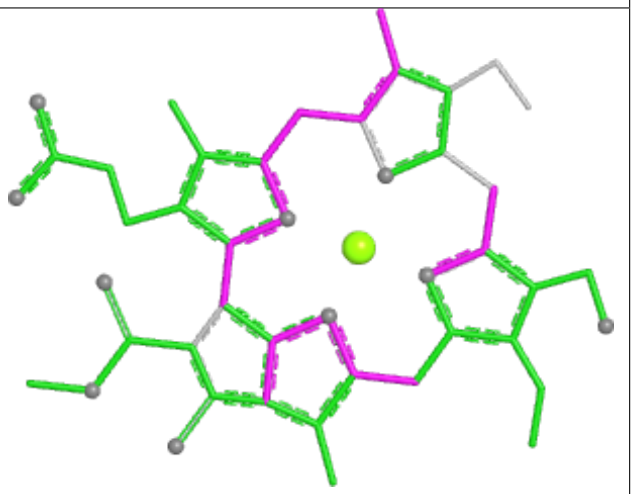
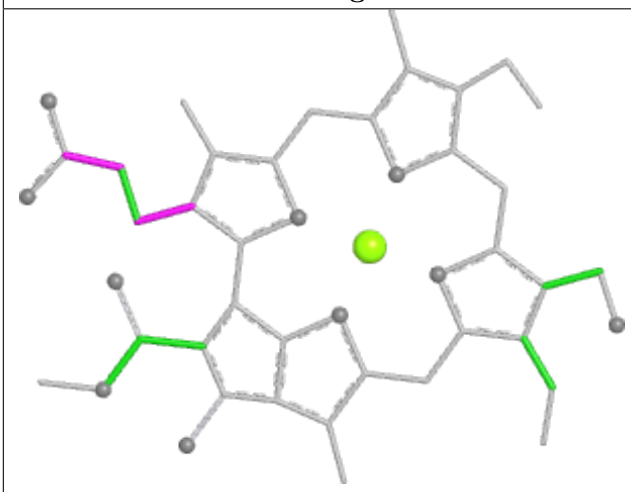


Bond angles



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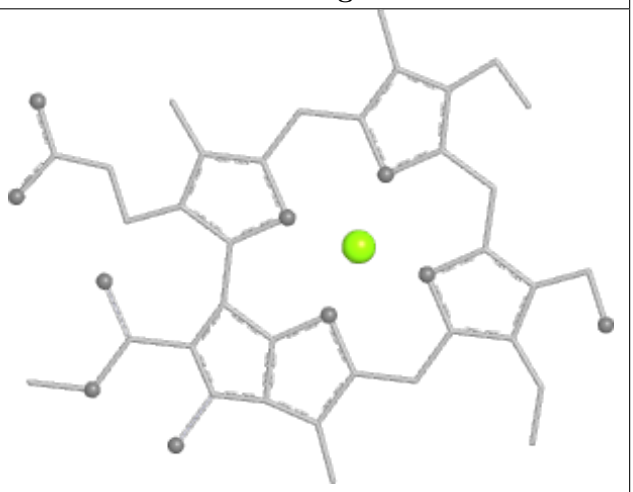
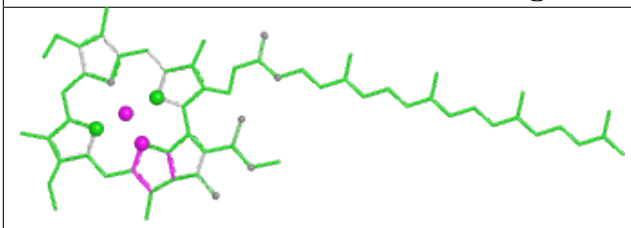
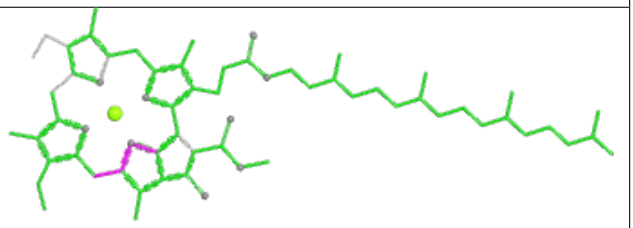


Rings

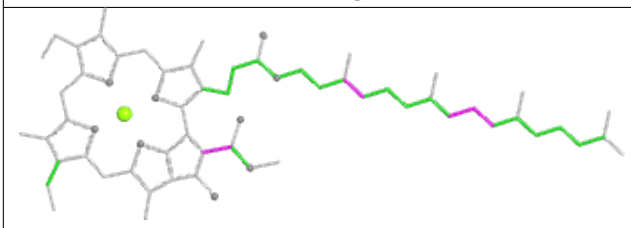
Ligand CLA 5 617



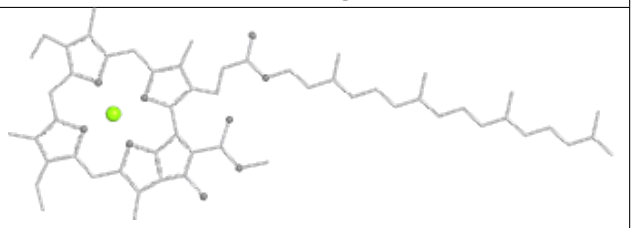
Bond lengths



Bond angles

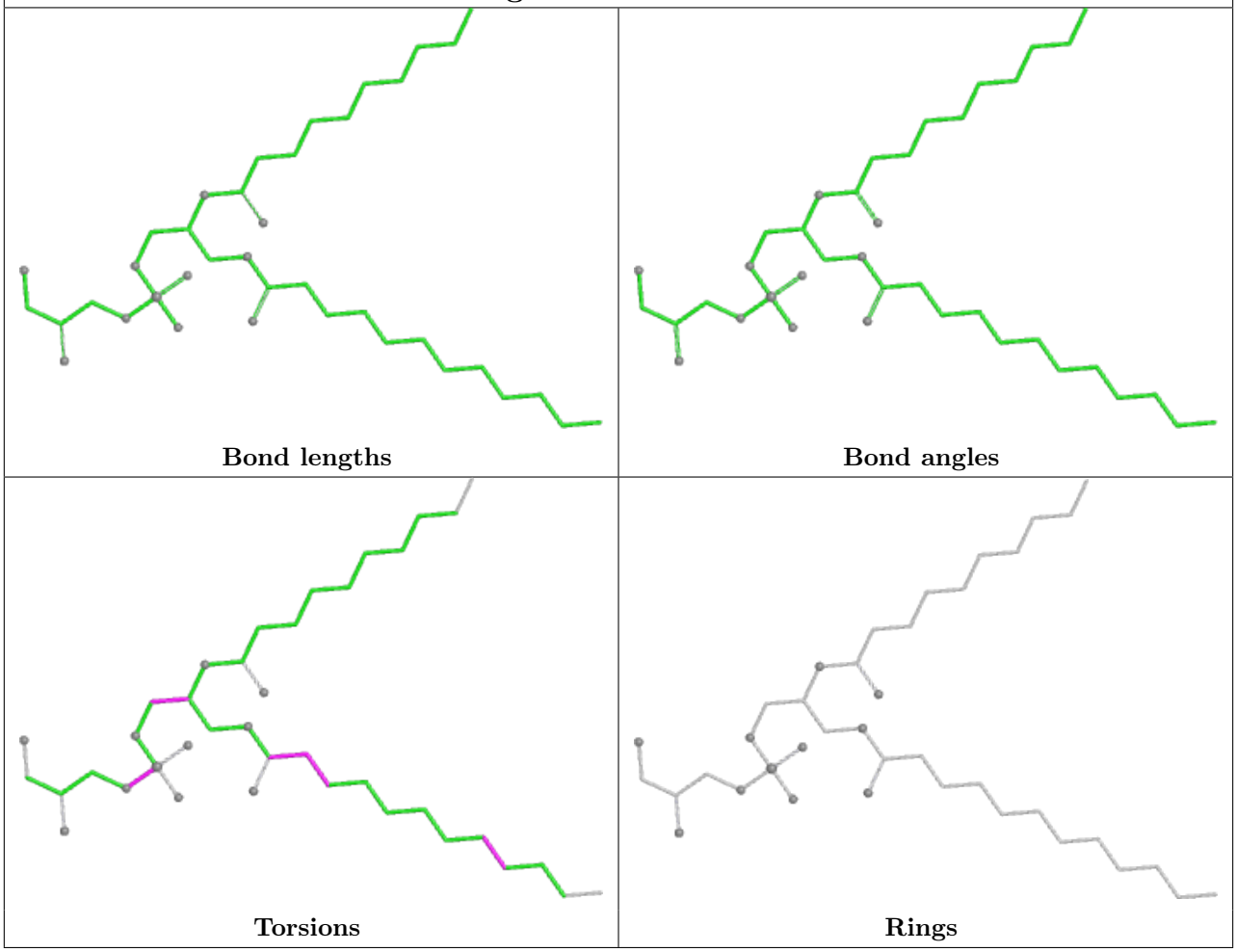


Torsions



Rings

Ligand LHG Z 620



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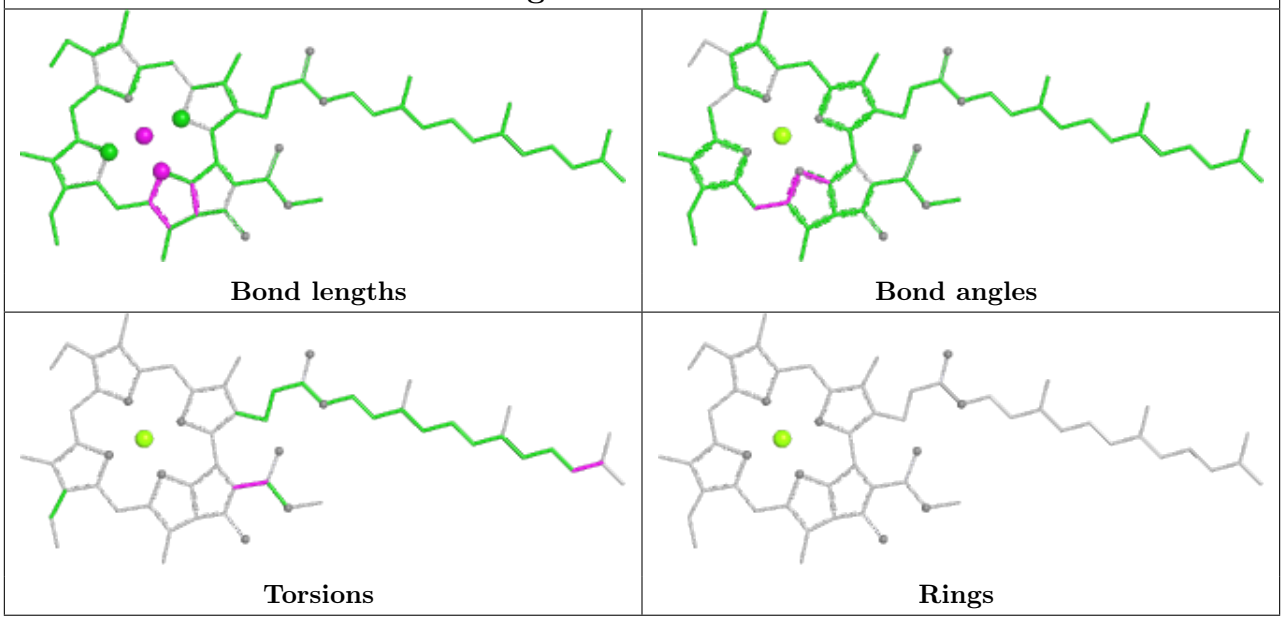

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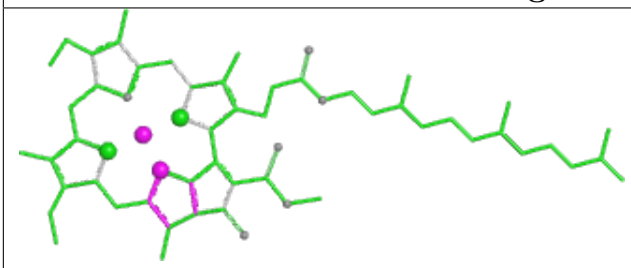
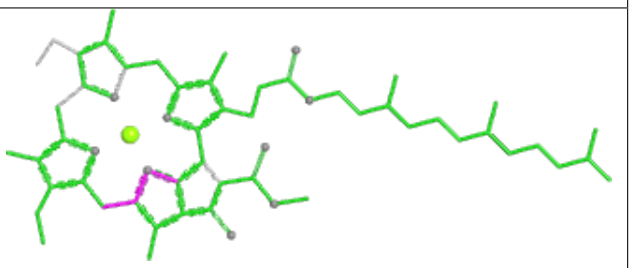
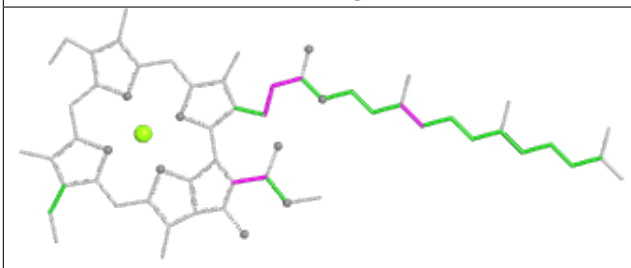
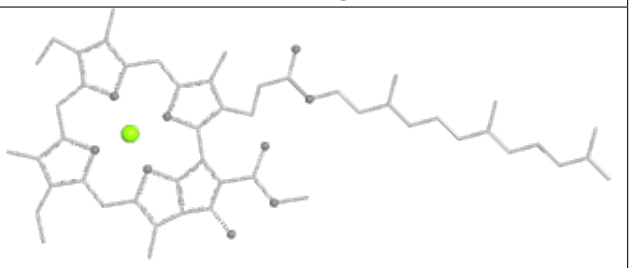
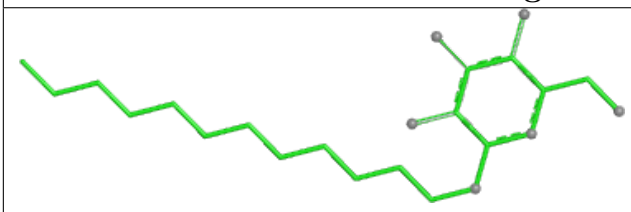
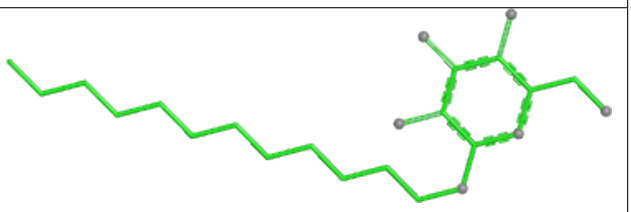
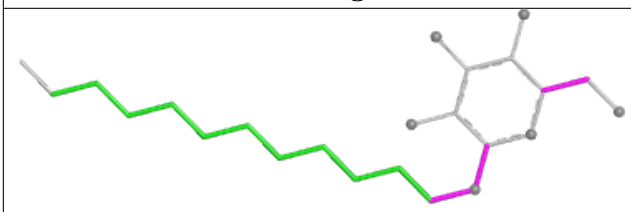
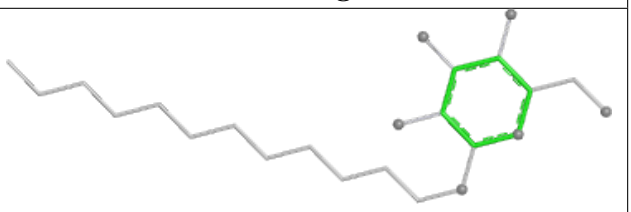
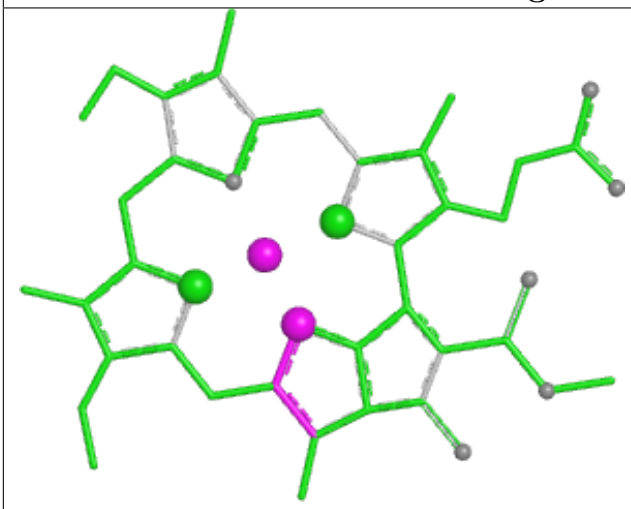
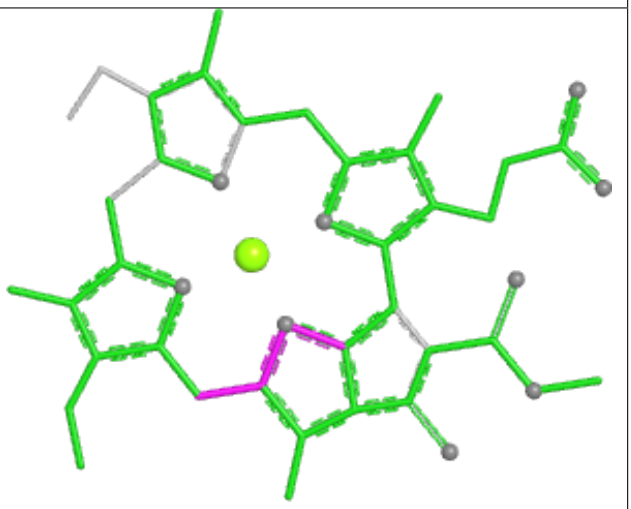
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand LMU 8 628	
 Bond lengths	 Bond angles
 Torsions	 Rings

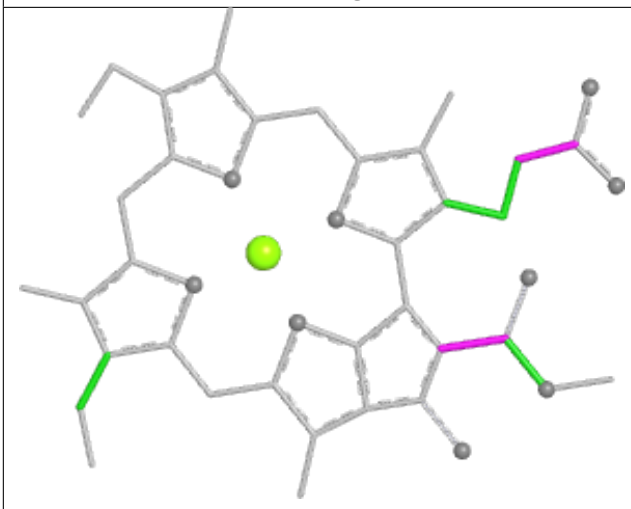
Ligand CLA 9 612



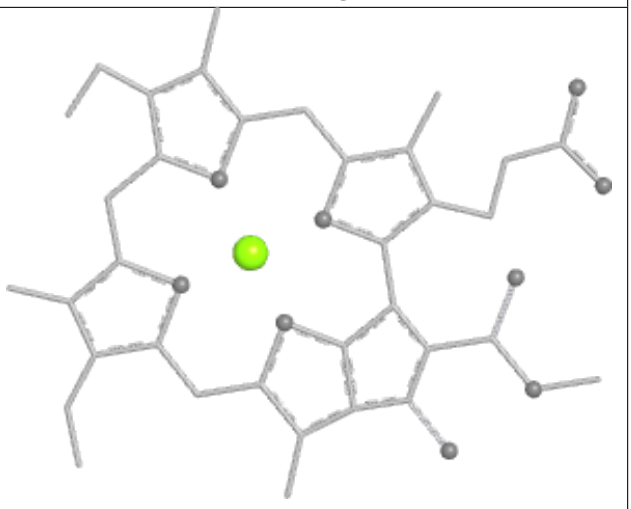
Bond lengths



Bond angles

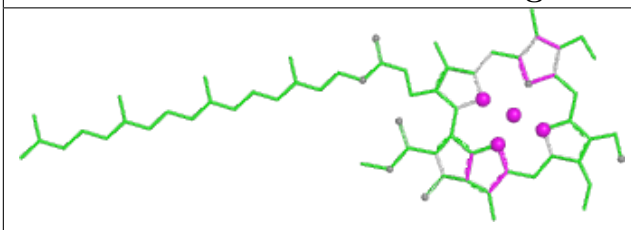


Torsions

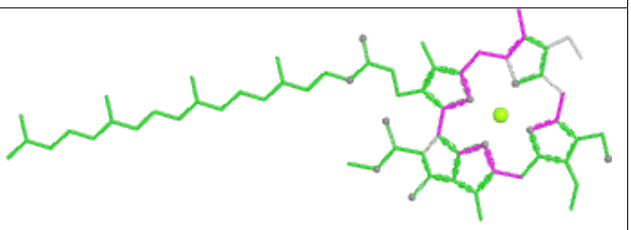


Rings

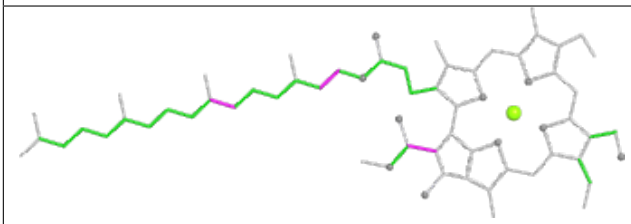
Ligand CHL Z 607



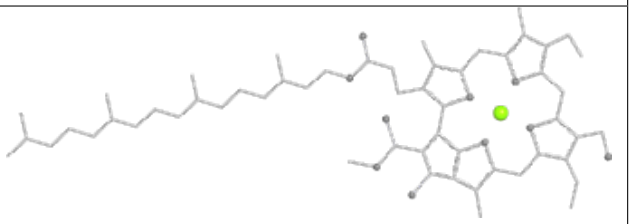
Bond lengths



Bond angles

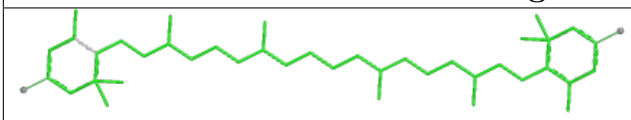


Torsions

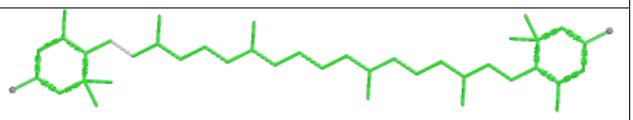


Rings

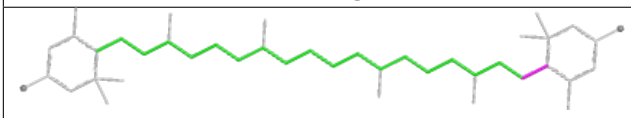
Ligand LUT 6 621



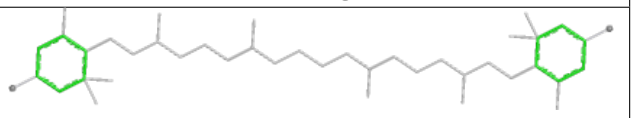
Bond lengths



Bond angles

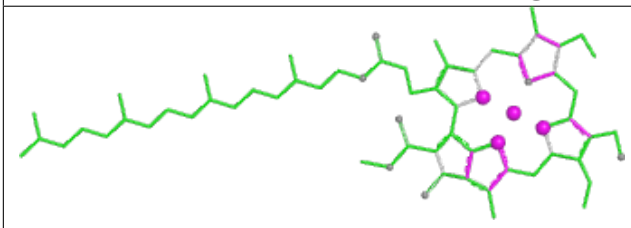


Torsions

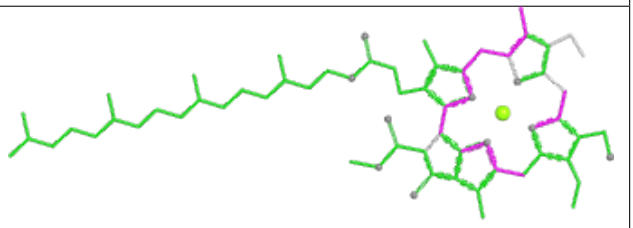


Rings

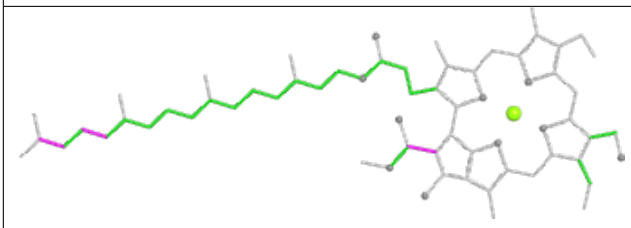
Ligand CHL 6 616



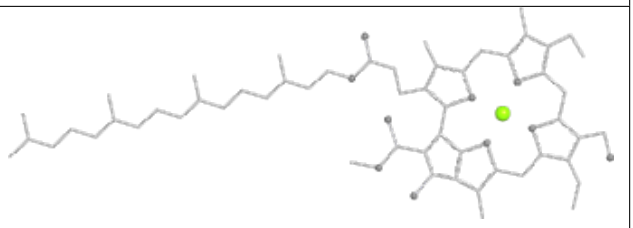
Bond lengths



Bond angles

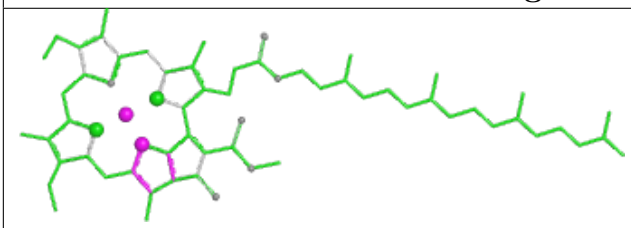


Torsions

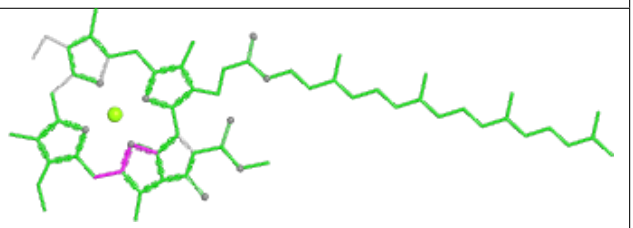


Rings

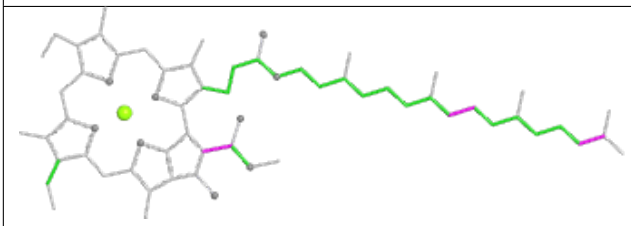
Ligand CLA B 821



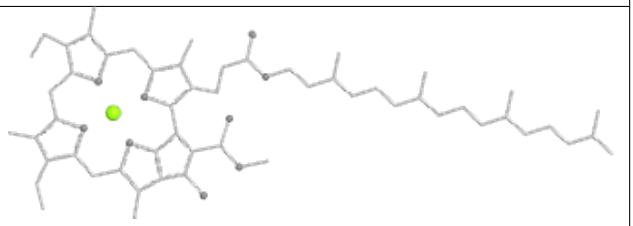
Bond lengths



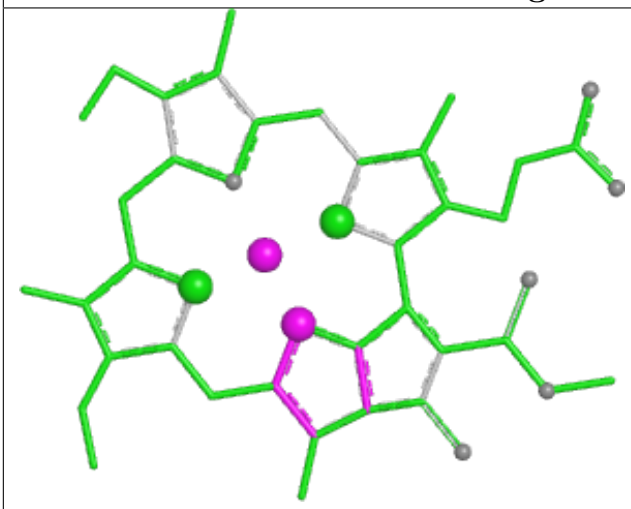
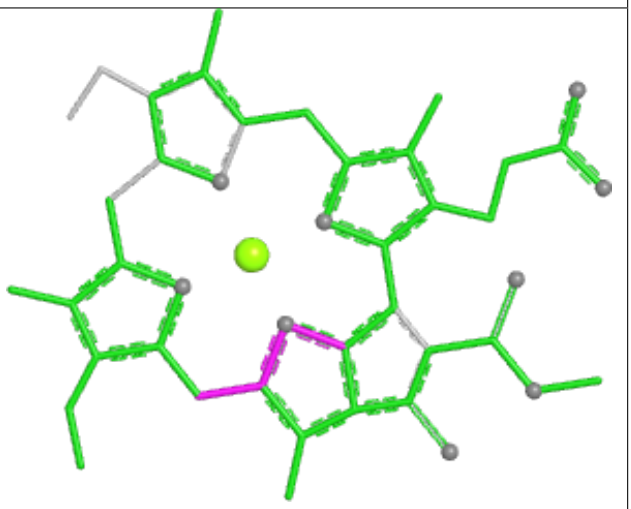
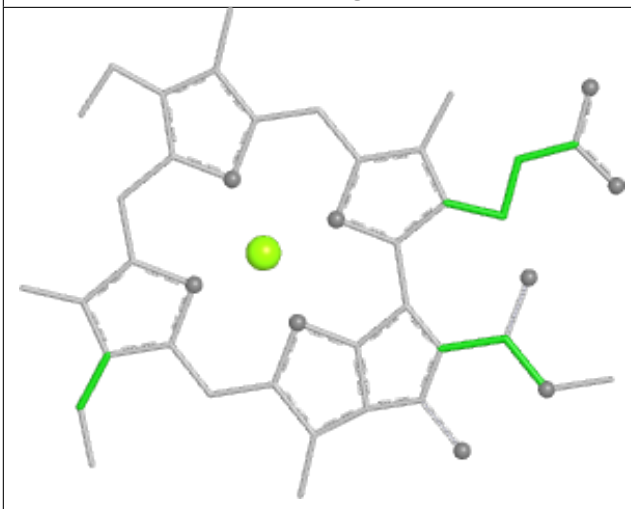
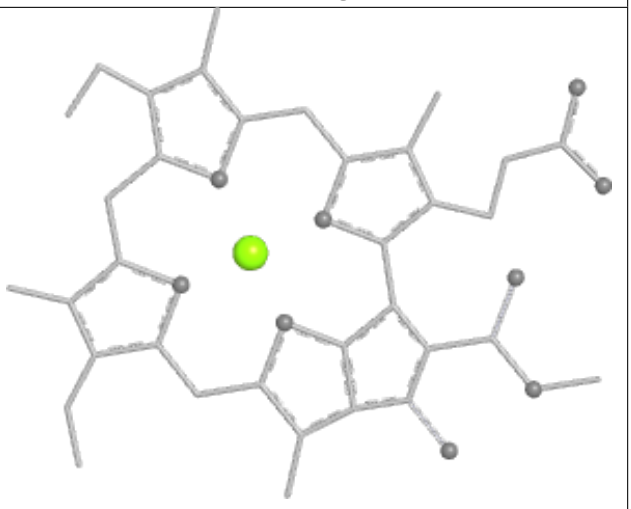
Bond angles

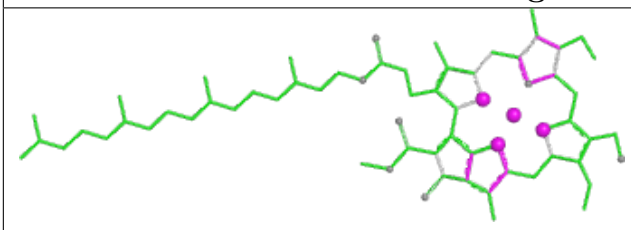
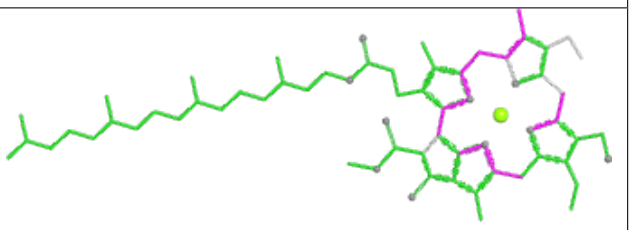
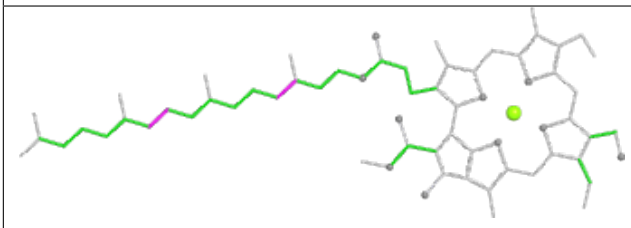
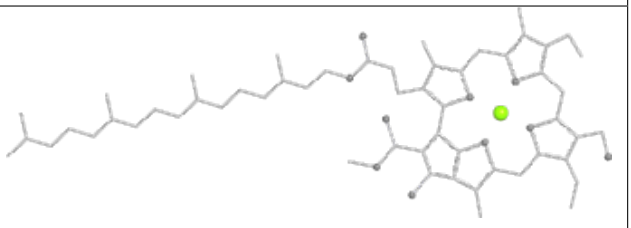


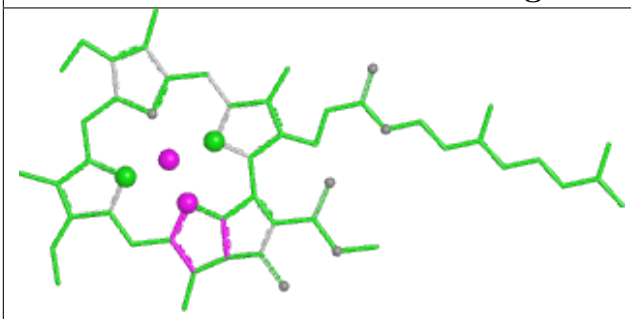
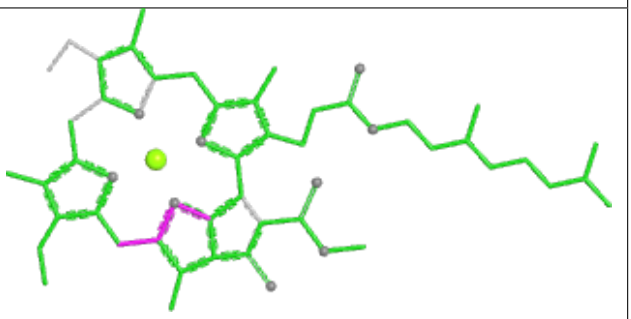
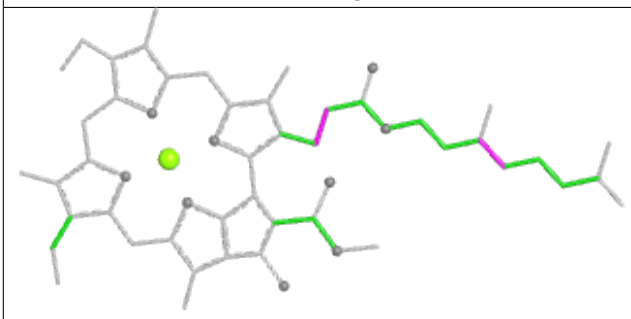
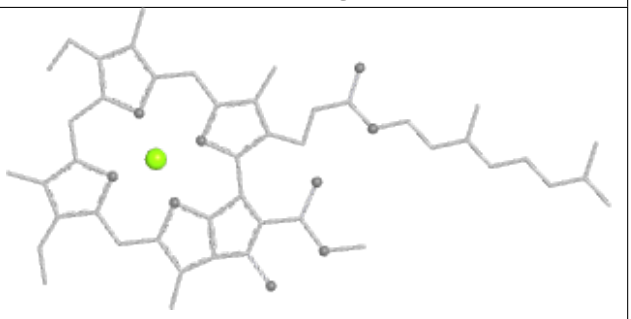
Torsions

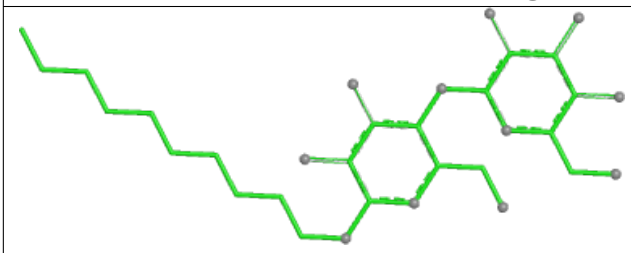
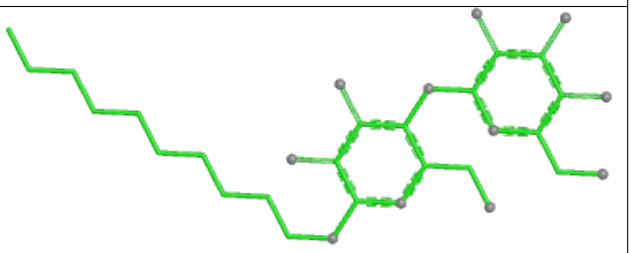
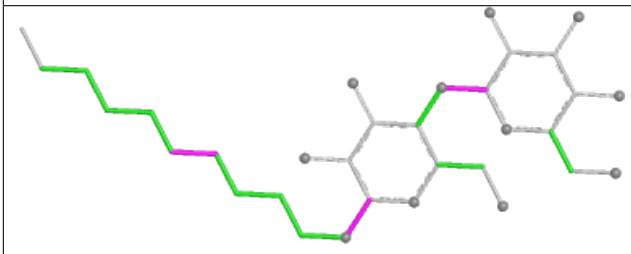
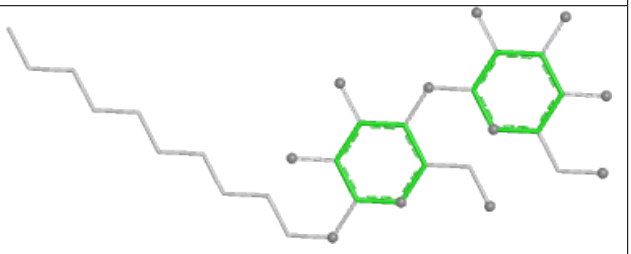


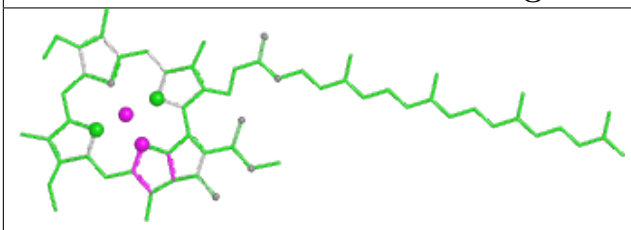
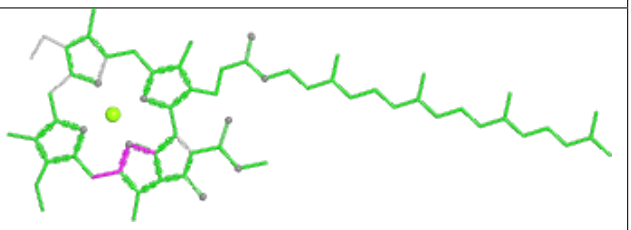
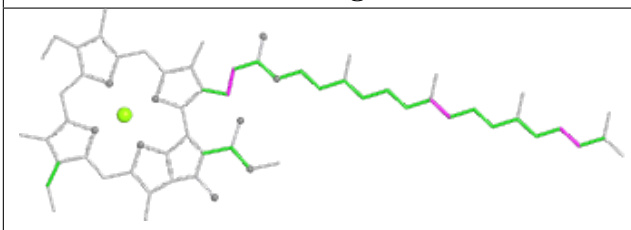
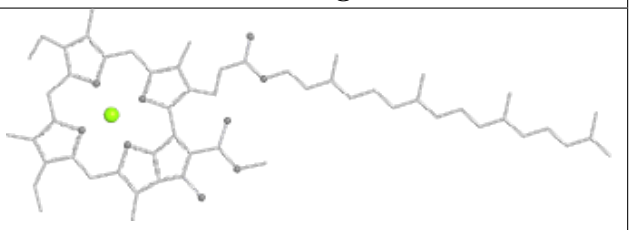
Rings

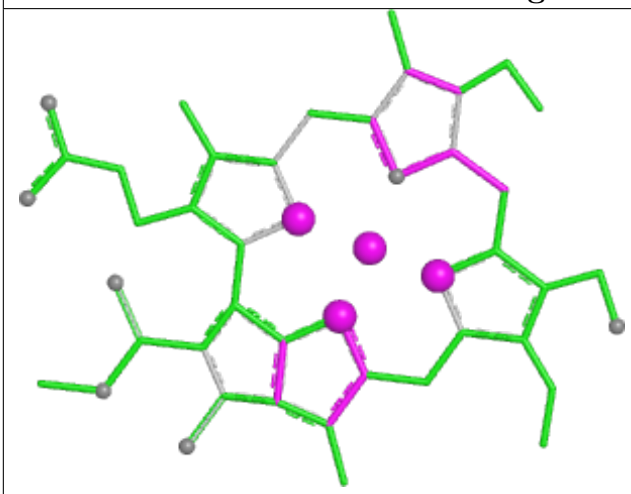
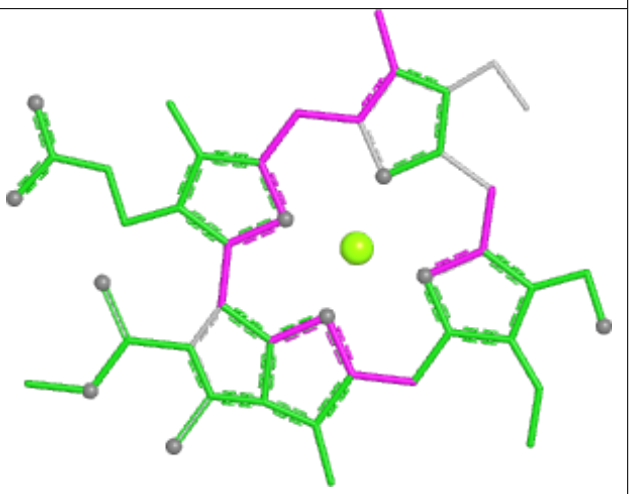
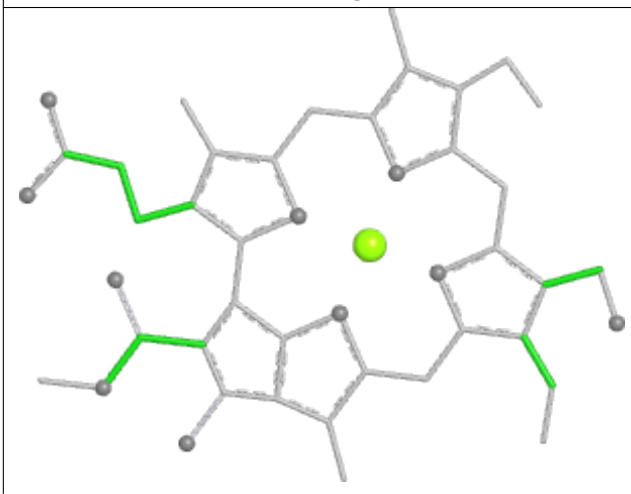
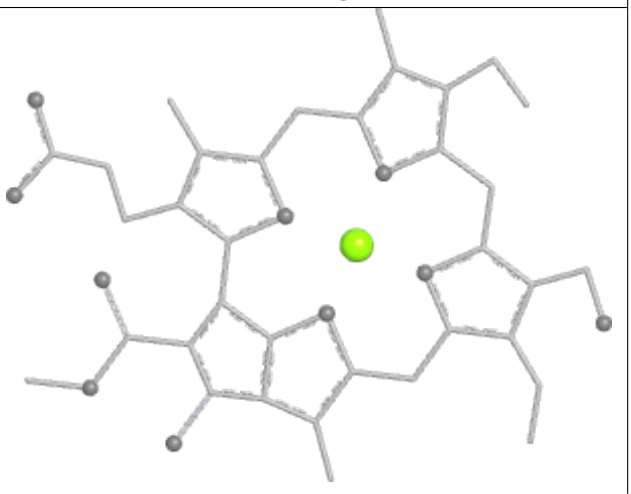
Ligand CLA 8 609	
	
Bond lengths	Bond angles
	
Torsions	Rings

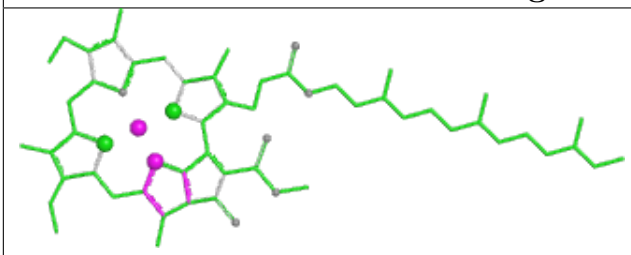
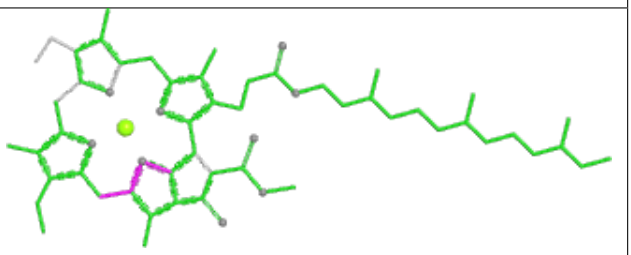
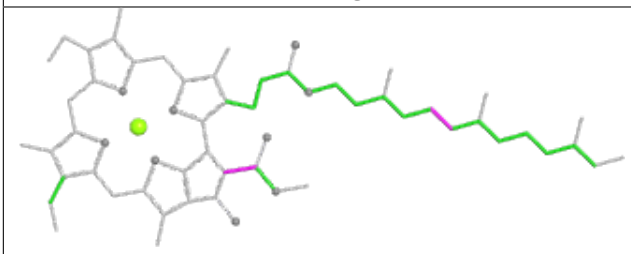
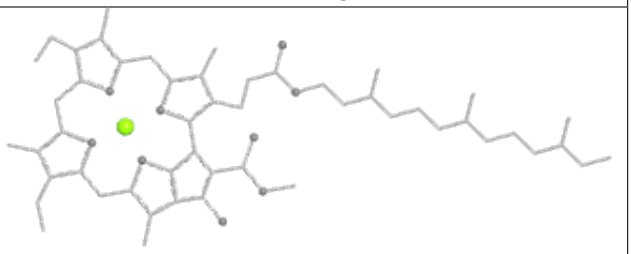
Ligand CHL 6 601	
	
Bond lengths	Bond angles
	
Torsions	Rings

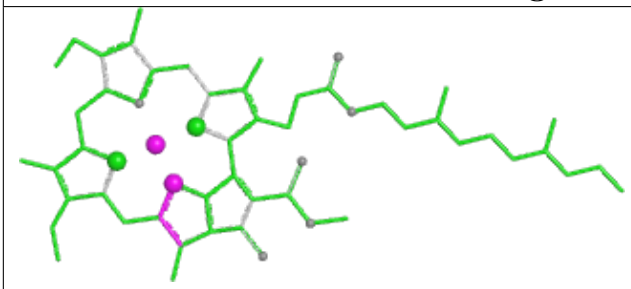
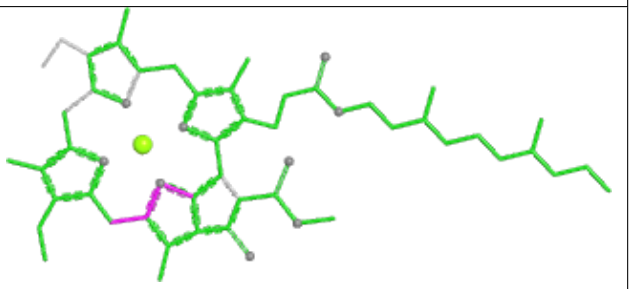
Ligand CLA B 831	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand LMU 4 625	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA B 811	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CHL 7 606	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA 3 609	
	
Bond lengths	**Bond angles**
	
Torsions	**Rings**

Ligand CLA 8 614	
	
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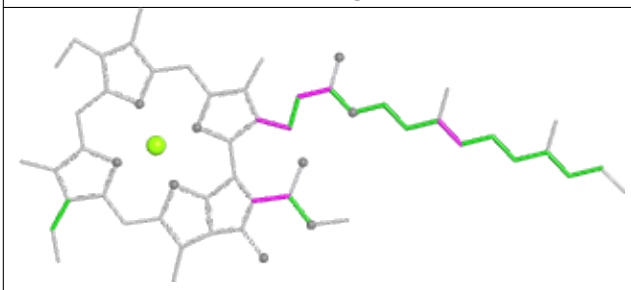
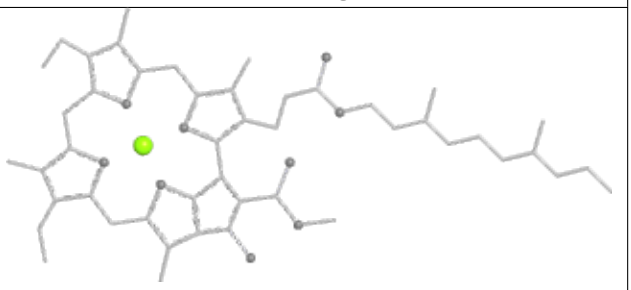
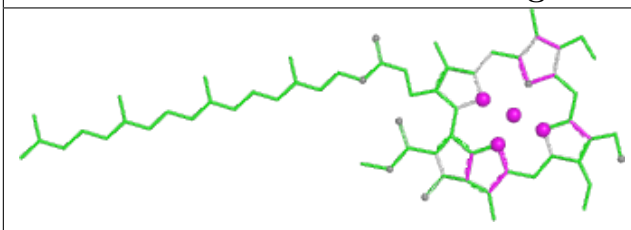
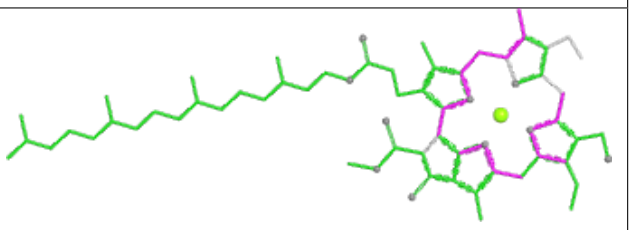
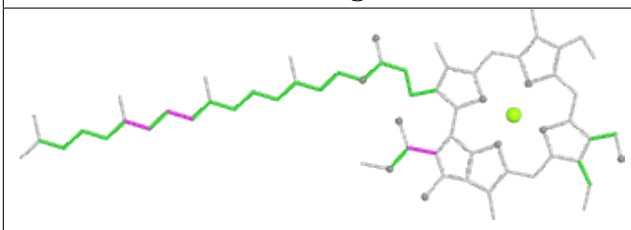
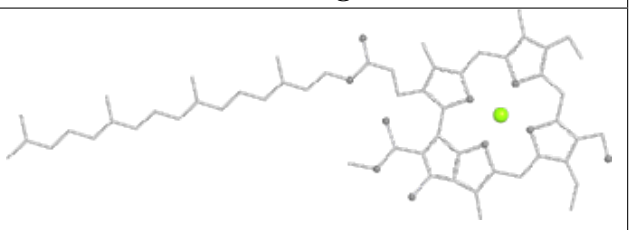
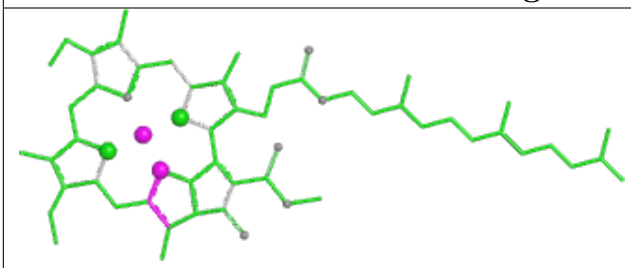
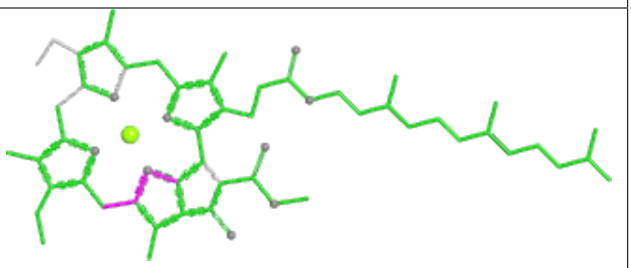
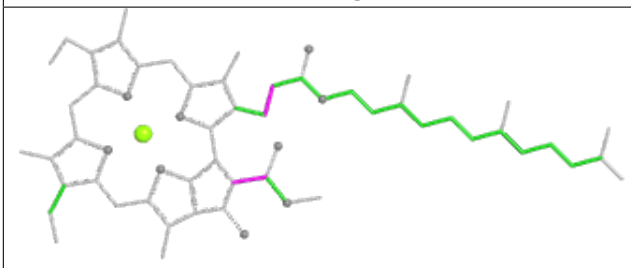
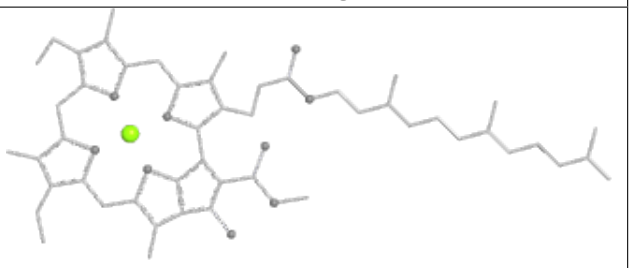
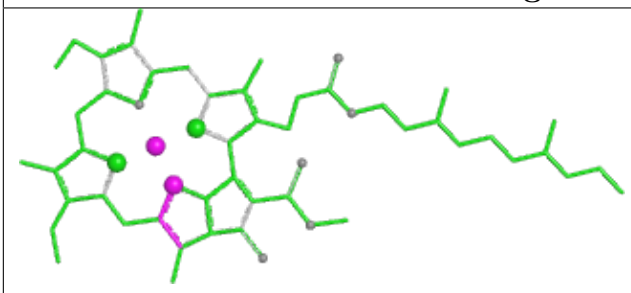
	
Torsions	**Rings**

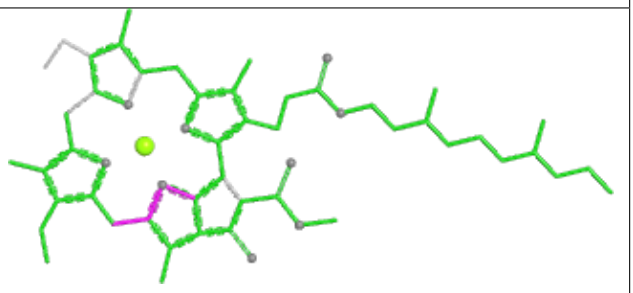
Ligand CHL 7 601	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA G 203	
 Bond lengths	 Bond angles
 Torsions	 Rings

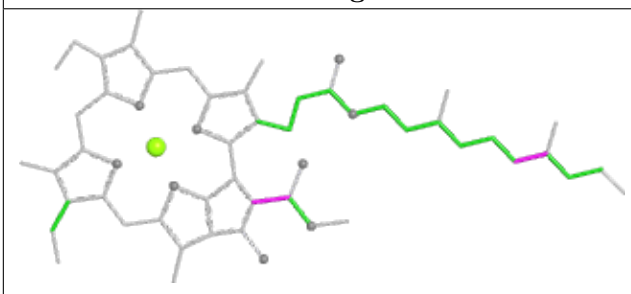
Ligand CLA A 837



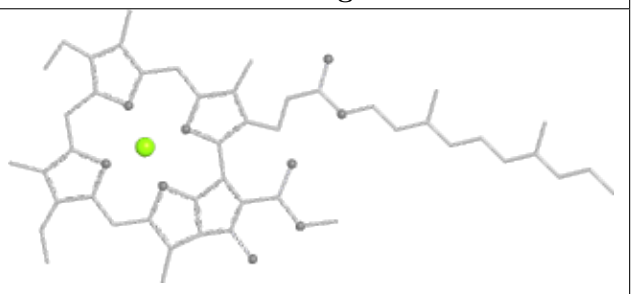
Bond lengths



Bond angles

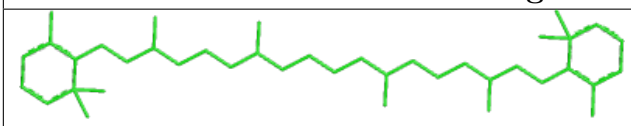


Torsions

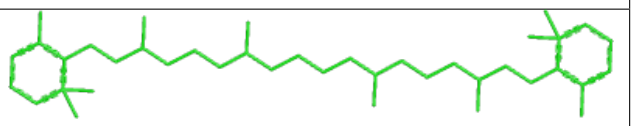


Rings

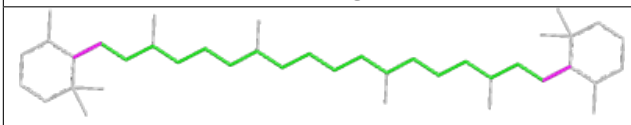
Ligand BCR 3 620



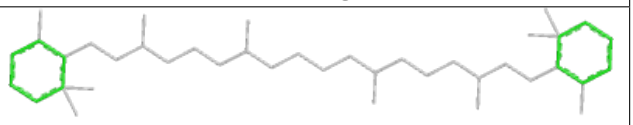
Bond lengths



Bond angles

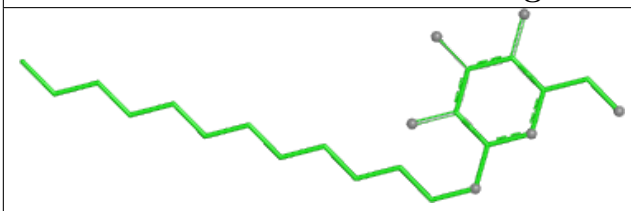


Torsions

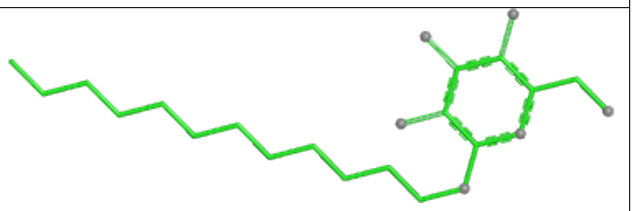


Rings

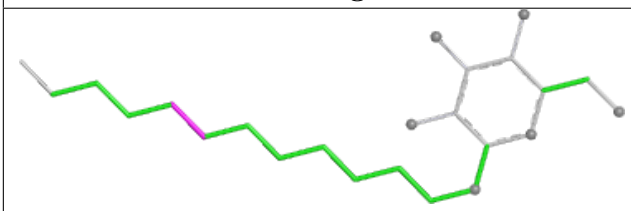
Ligand LMU 5 627



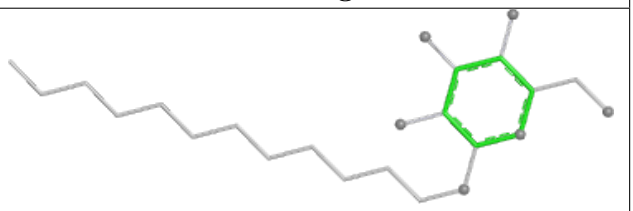
Bond lengths



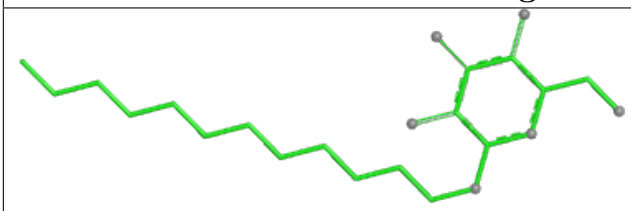
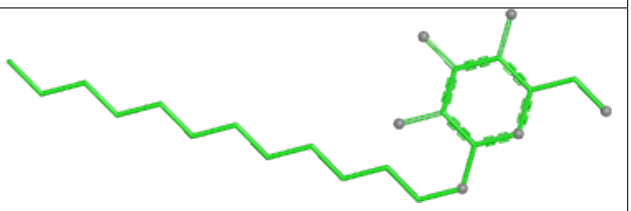
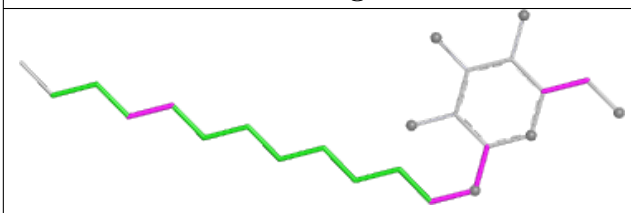
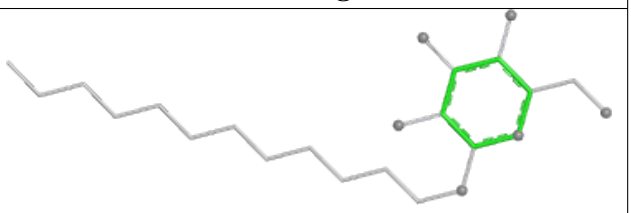
Bond angles

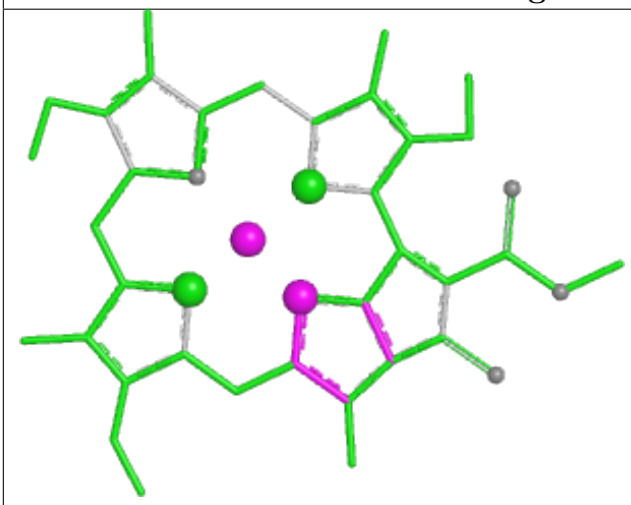
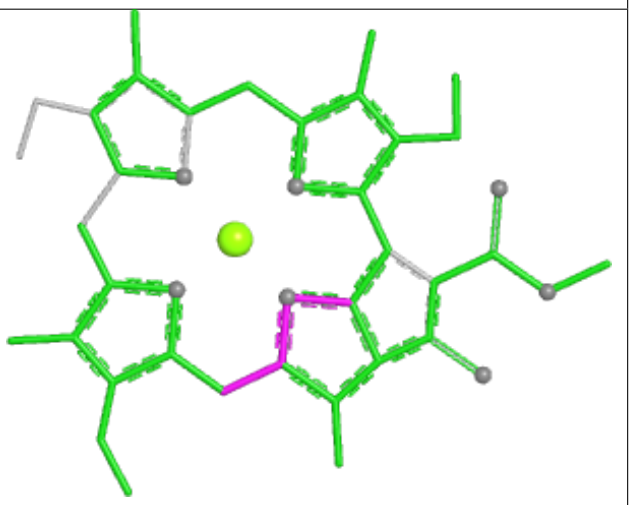
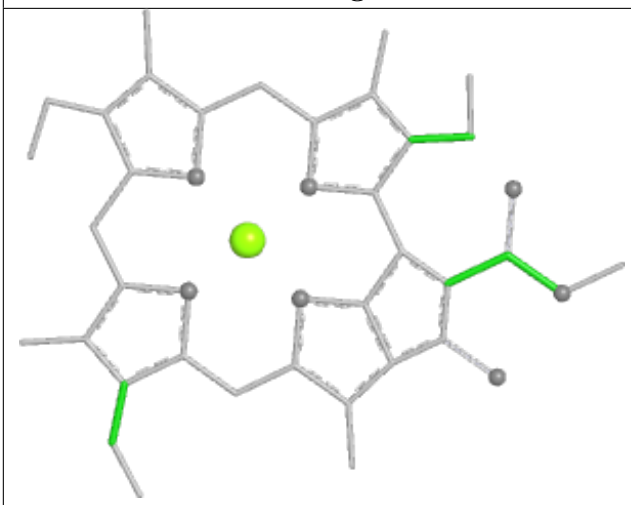
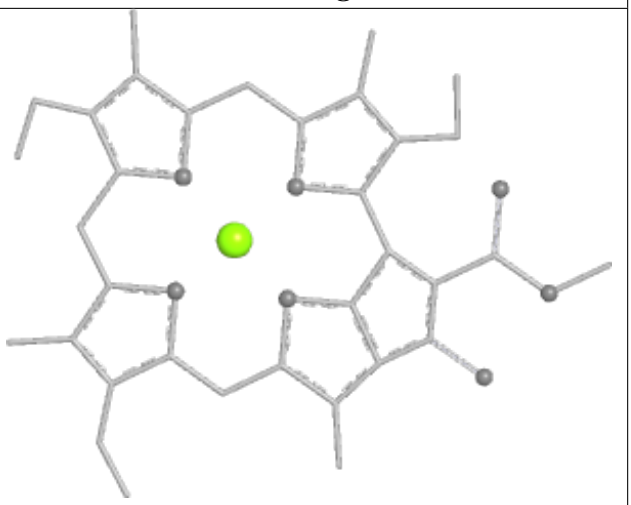


Torsions

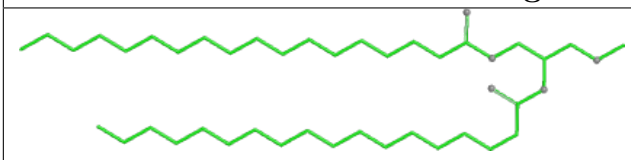


Rings

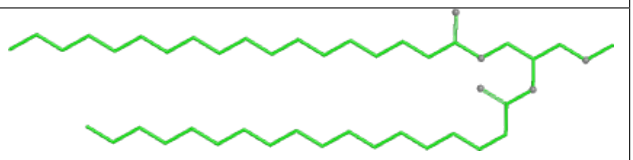
Ligand LMU G 206	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA 3 606	
 Bond lengths	 Bond angles
 Torsions	 Rings

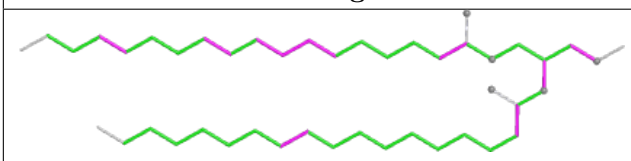
Ligand LMG 3 722



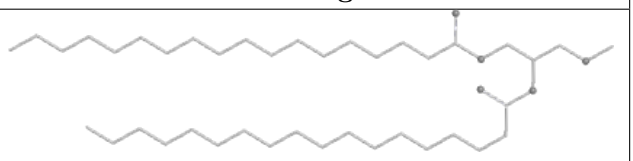
Bond lengths



Bond angles

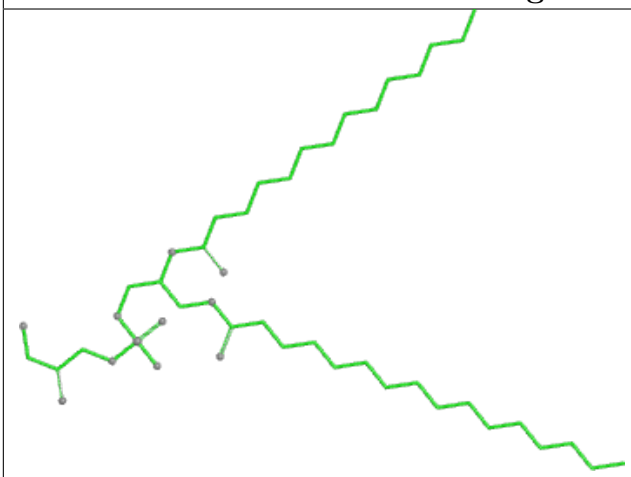


Torsions

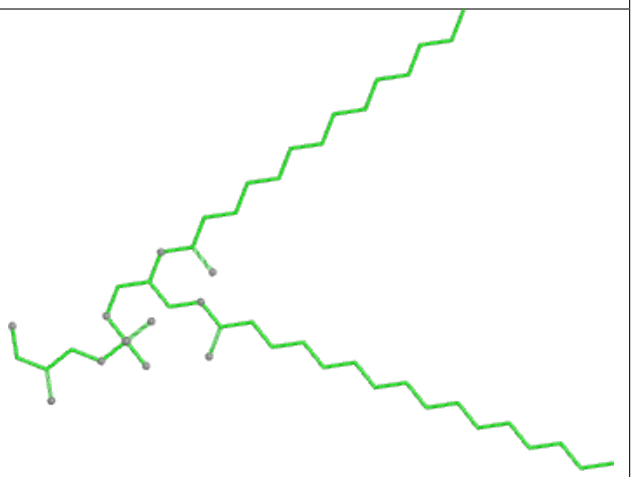


Rings

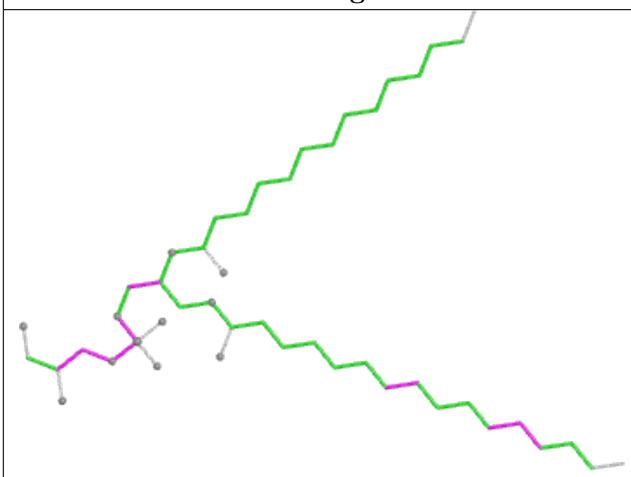
Ligand LHG 3 623



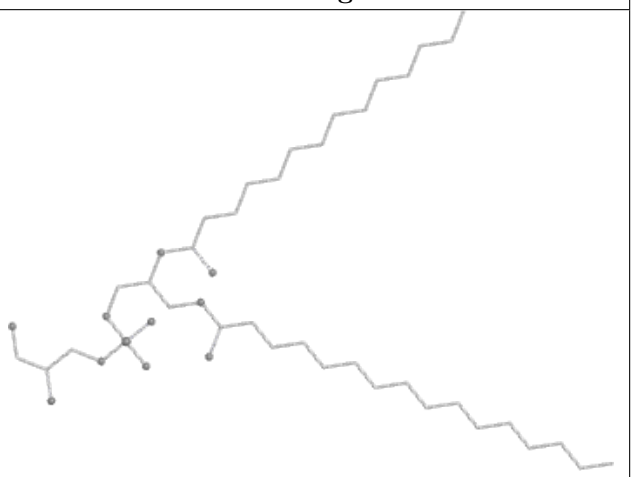
Bond lengths



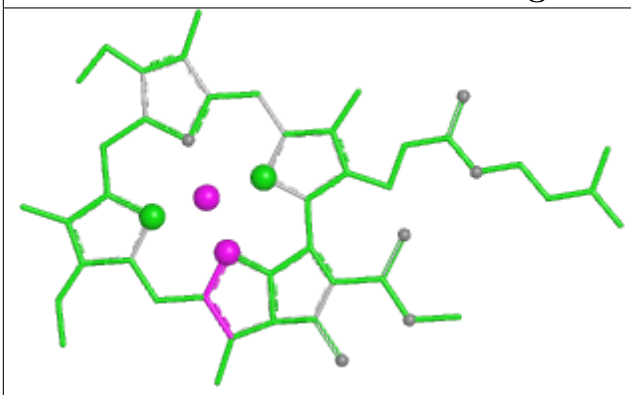
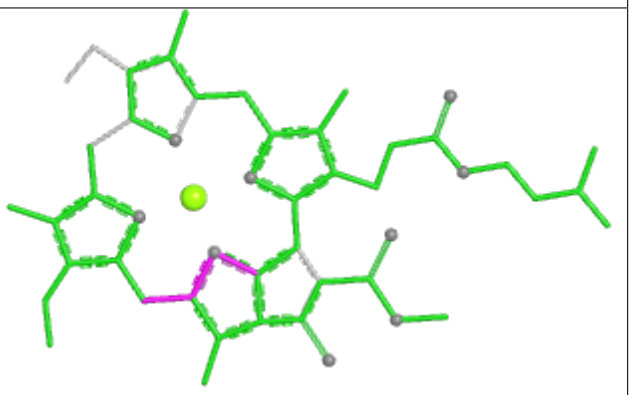
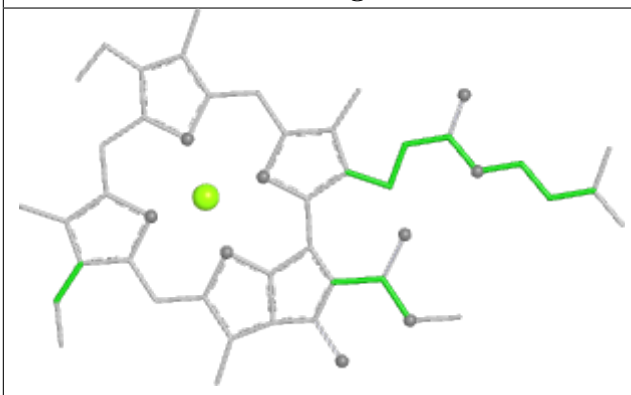
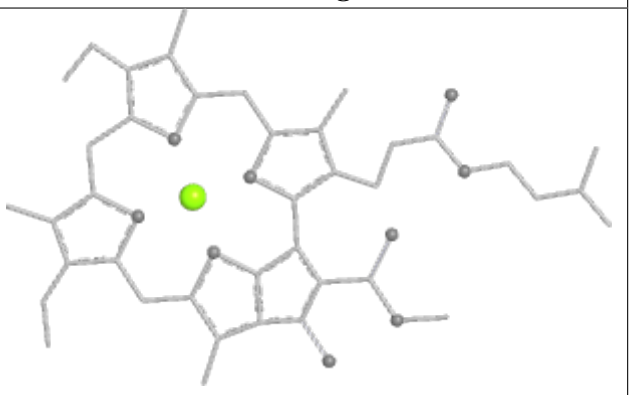
Bond angles



Torsions



Rings

Ligand CLA 1 604	
 Bond lengths	 Bond angles
 Torsions	 Rings

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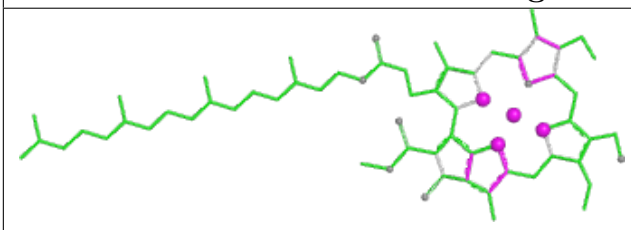
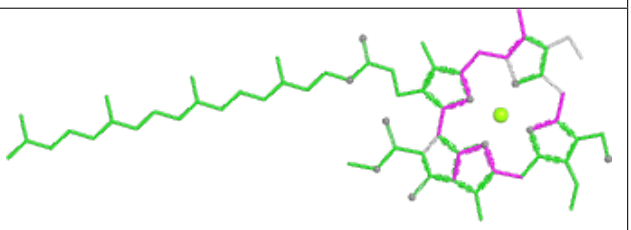
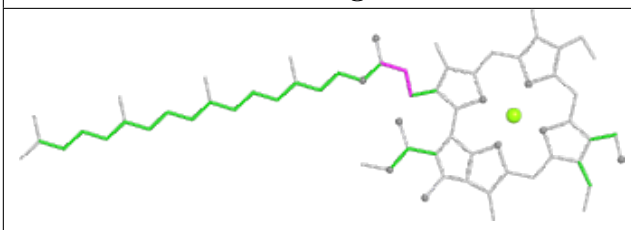
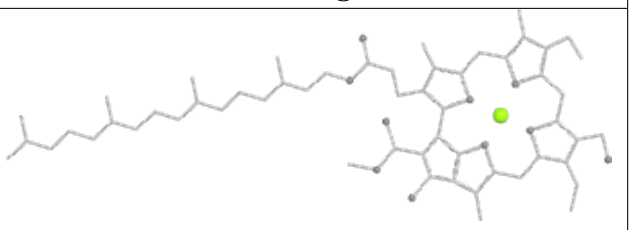
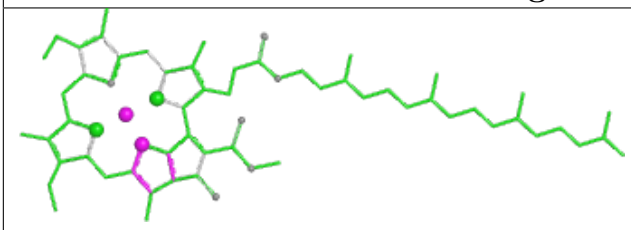
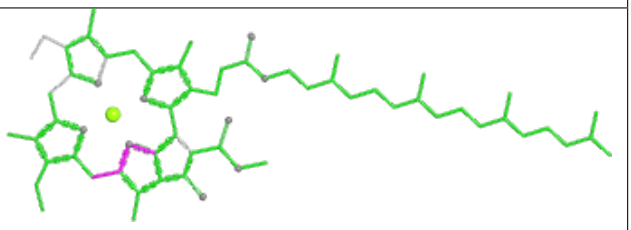
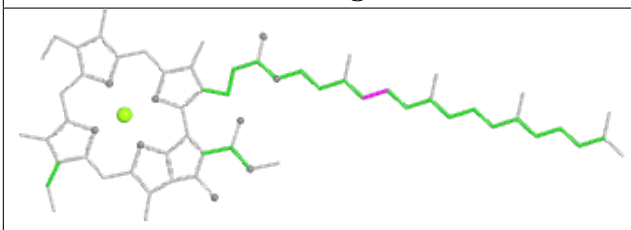
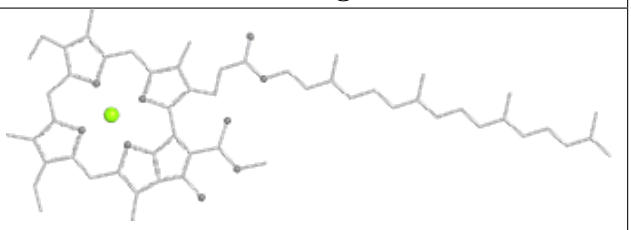
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA 3 604	
	
Bond lengths	**Bond angles**
	
Torsions	**Rings**

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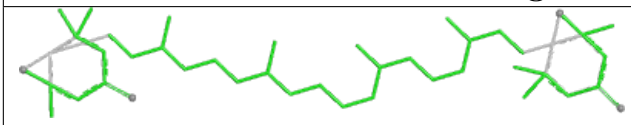
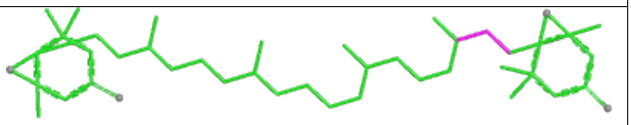
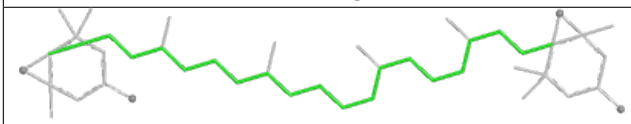
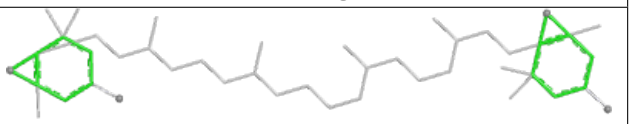
	
Bond lengths	**Bond angles**
	
Torsions	**Rings**

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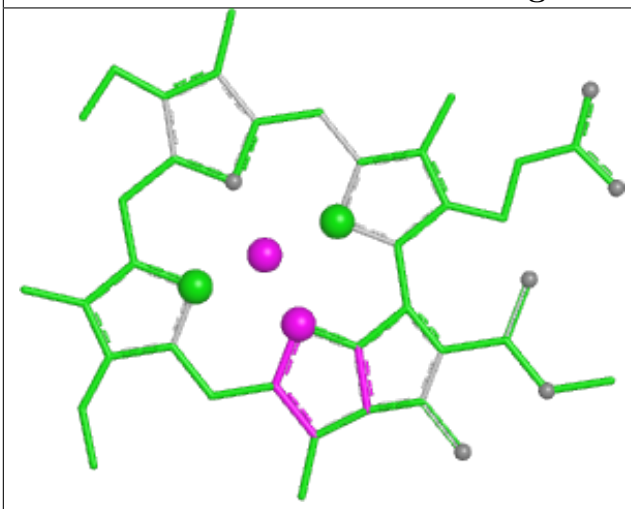
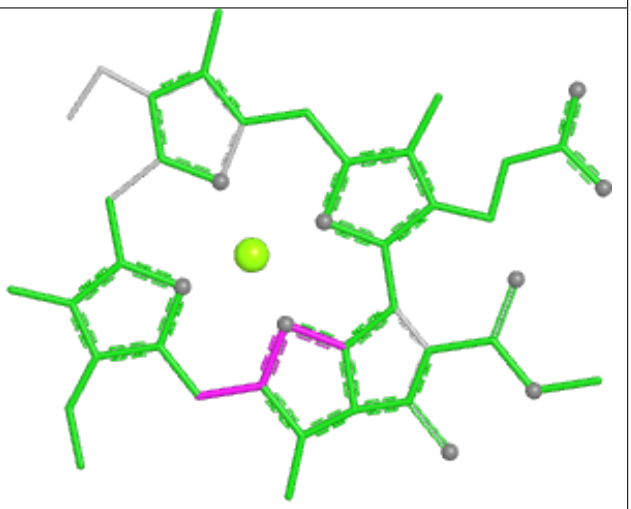
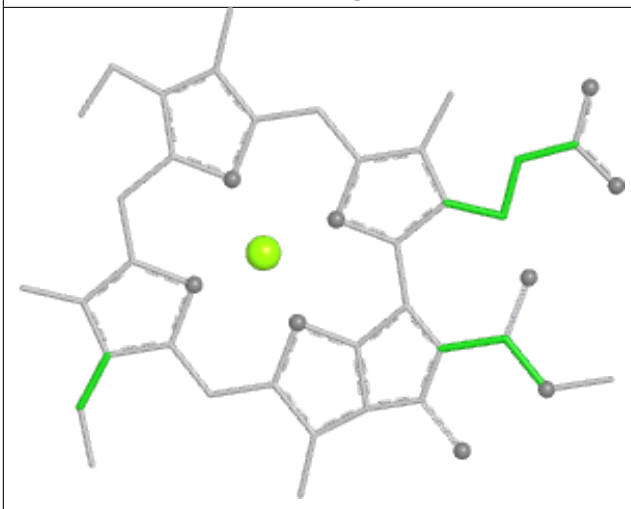
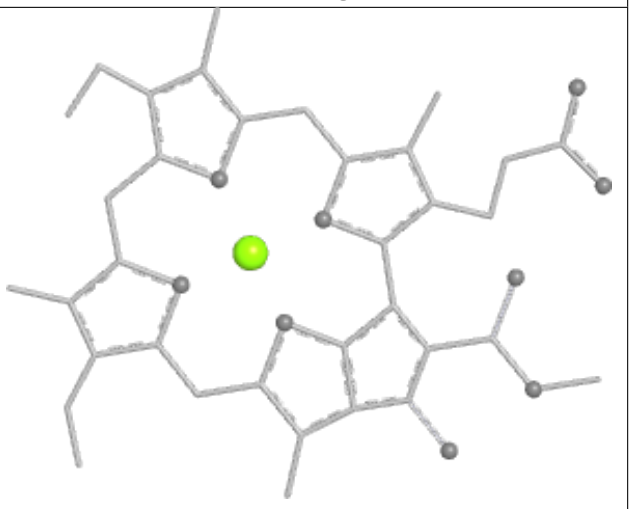
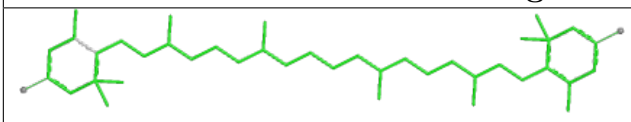
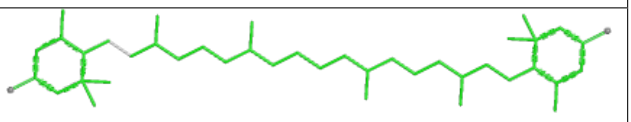
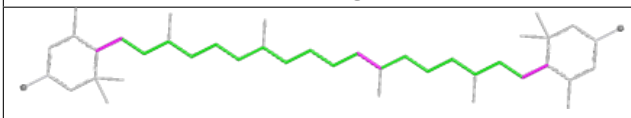
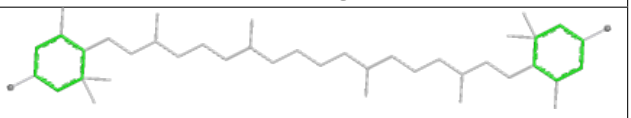
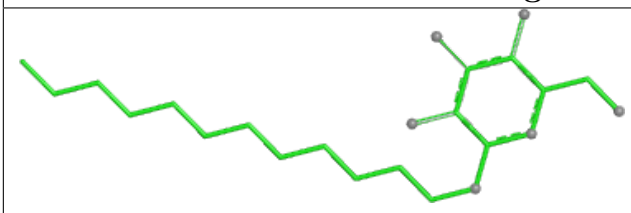
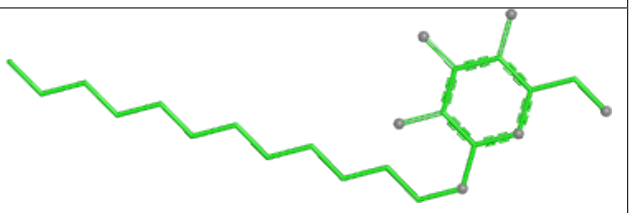
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand LUT F 305	
	
Bond lengths	Bond angles
	
Torsions	Rings

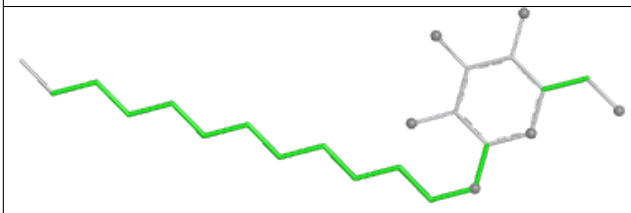
Ligand LMU 1 626



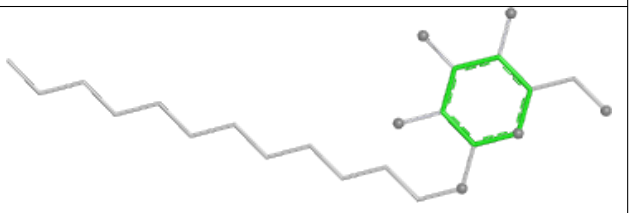
Bond lengths



Bond angles

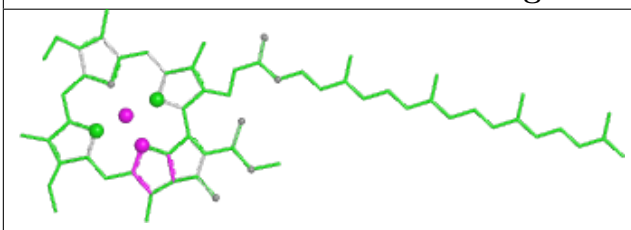


Torsions

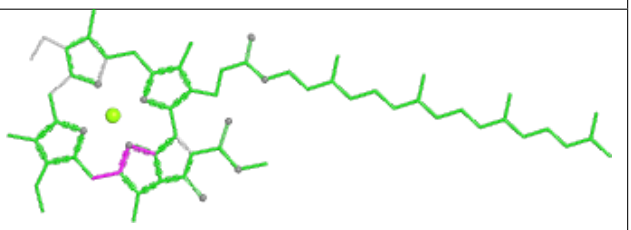


Rings

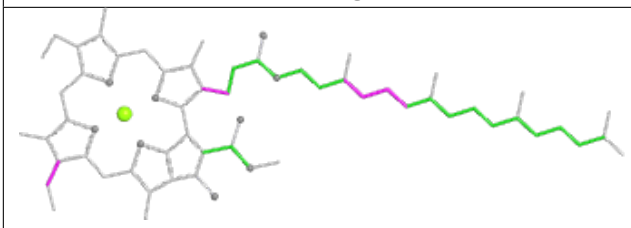
Ligand CLA A 854



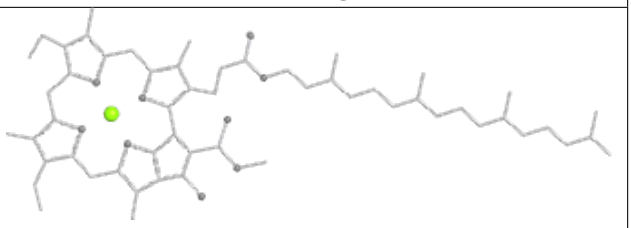
Bond lengths



Bond angles

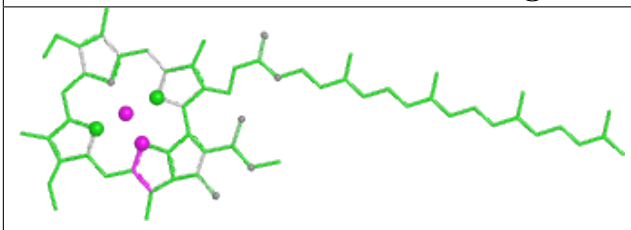


Torsions

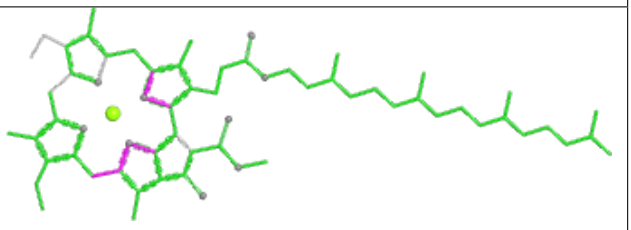


Rings

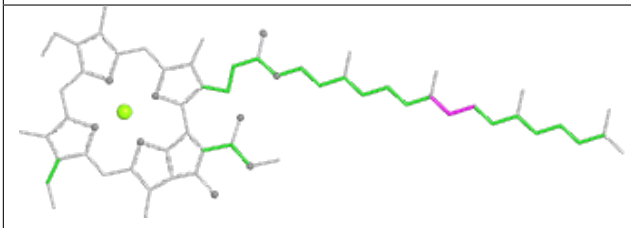
Ligand CLA A 829



Bond lengths



Bond angles



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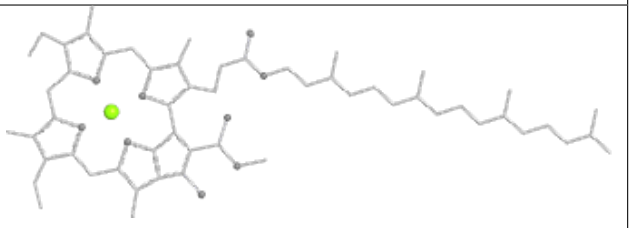
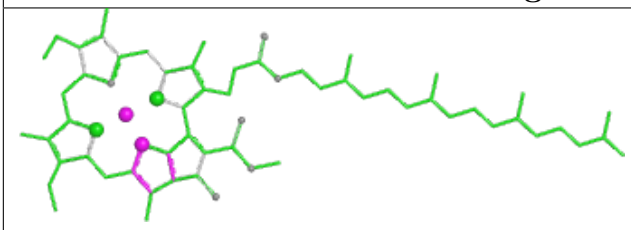
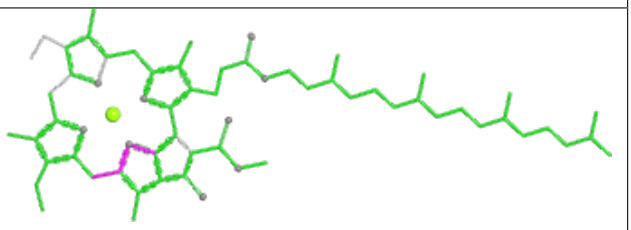
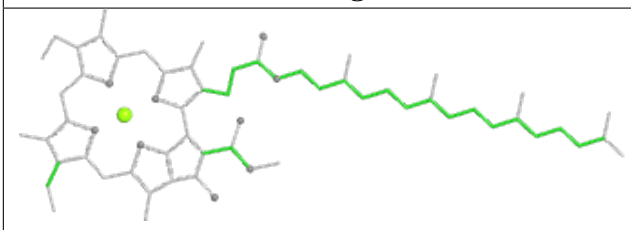
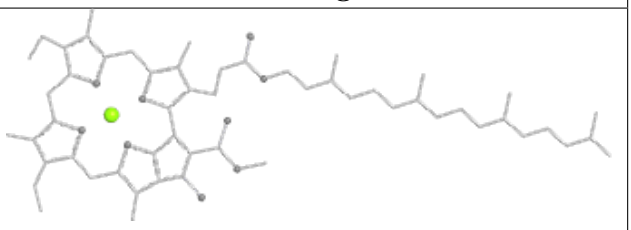
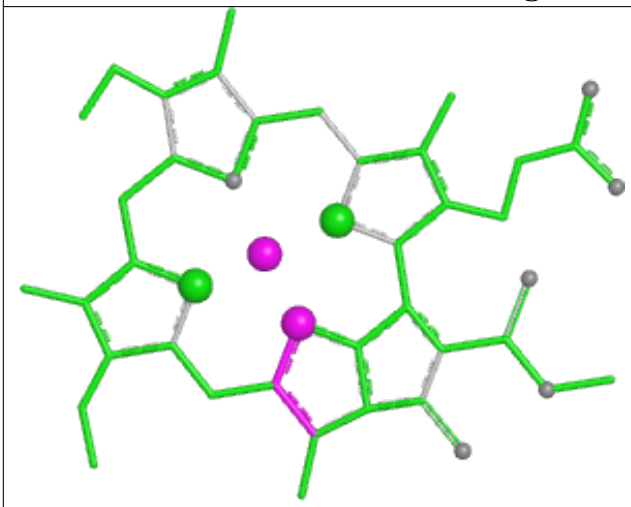
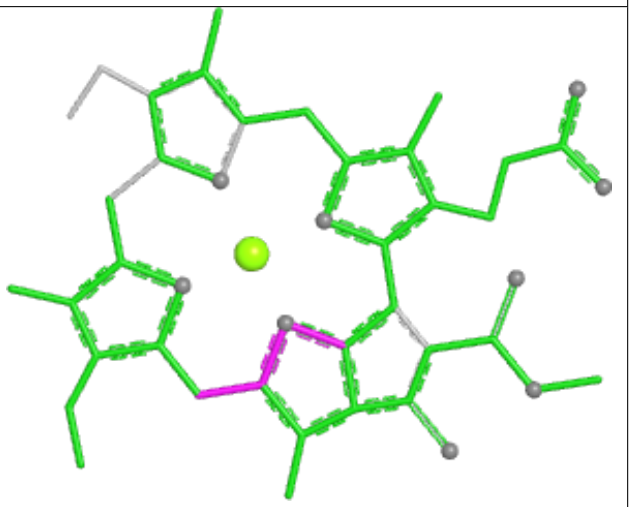
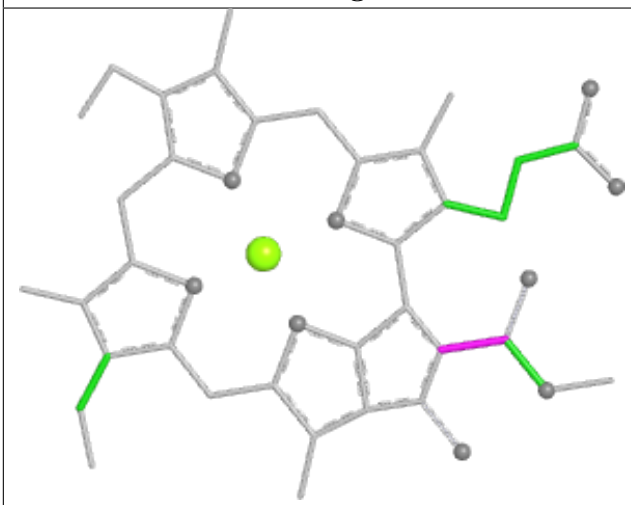
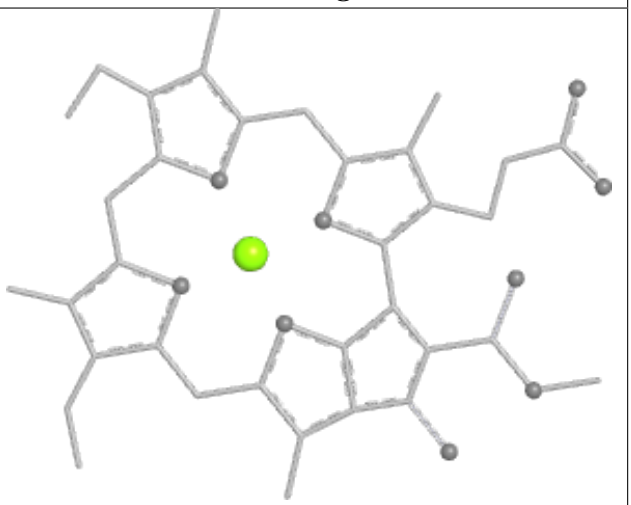
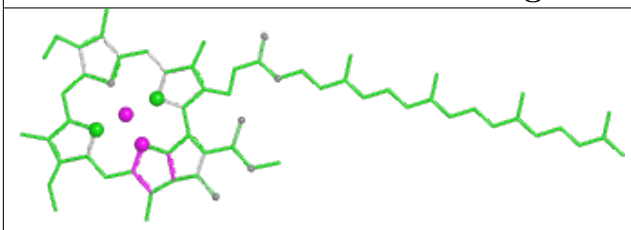


Rings

Ligand CLA B 826	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA K 201	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA B 827



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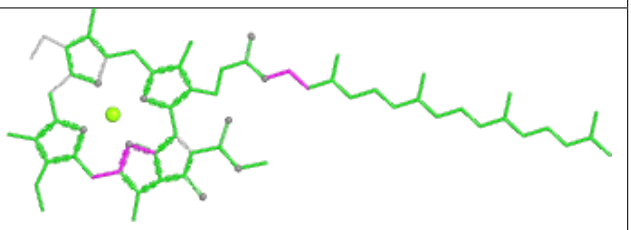
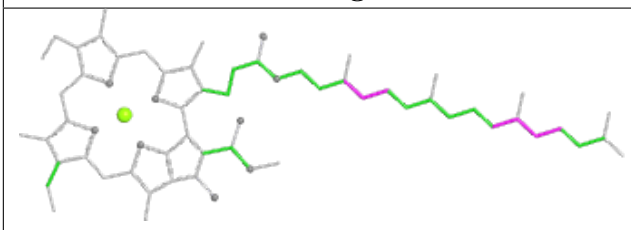


Bond angles



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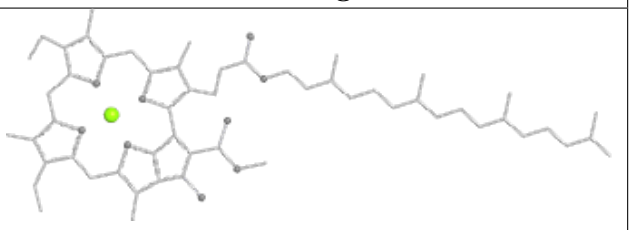
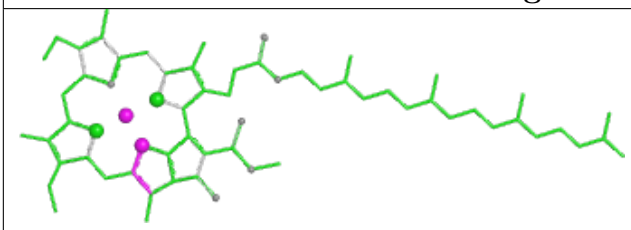


Rings

Ligand CLA A 812



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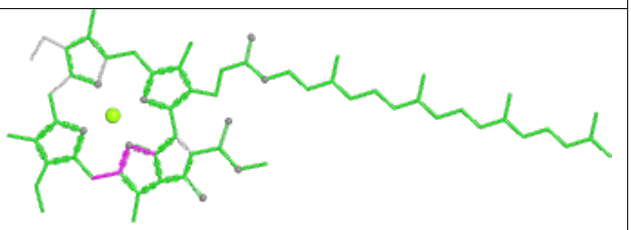
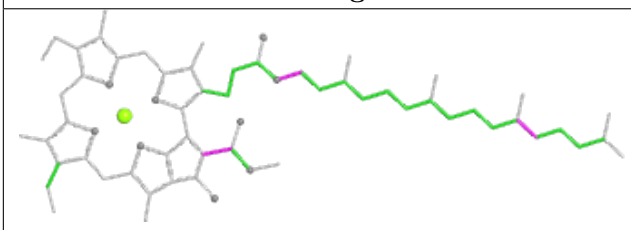


Bond angles



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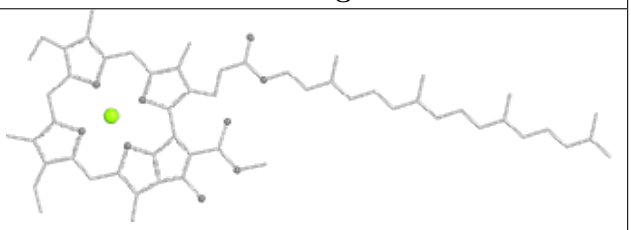
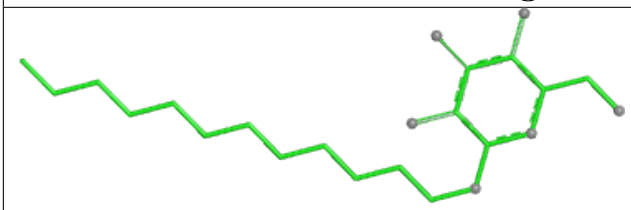


Rings

Ligand LMU A 865



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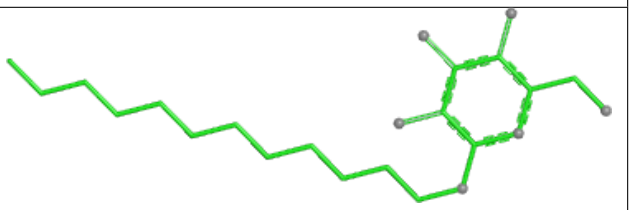

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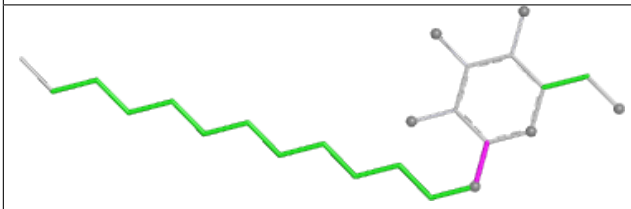

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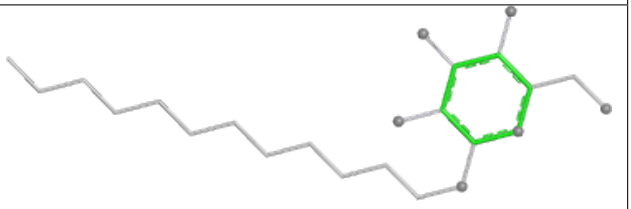
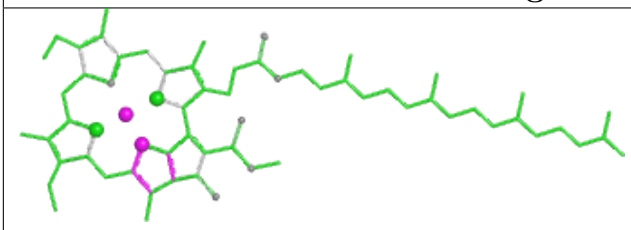
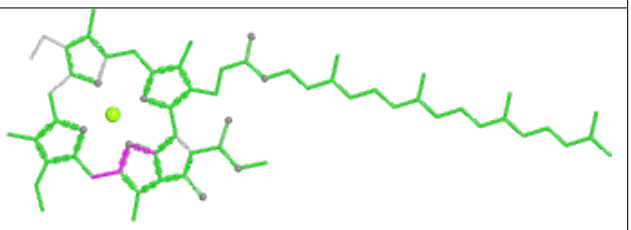
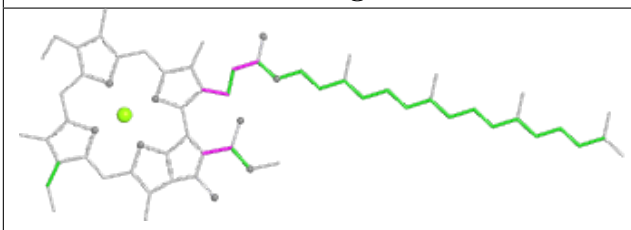
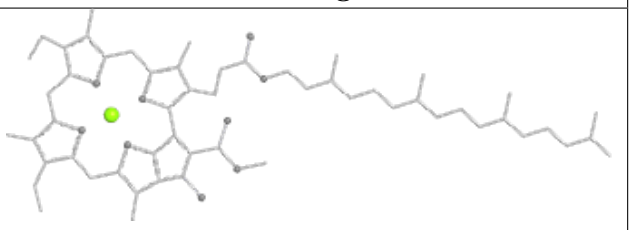


Rings

Ligand CLA Z 603	
 Bond lengths	 Bond angles
 Torsions	 Rings

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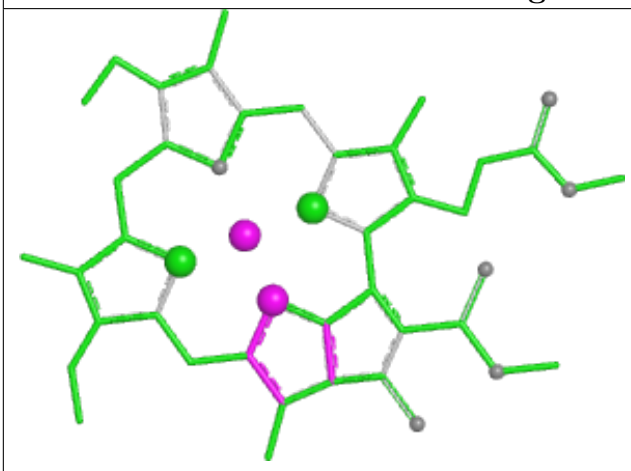
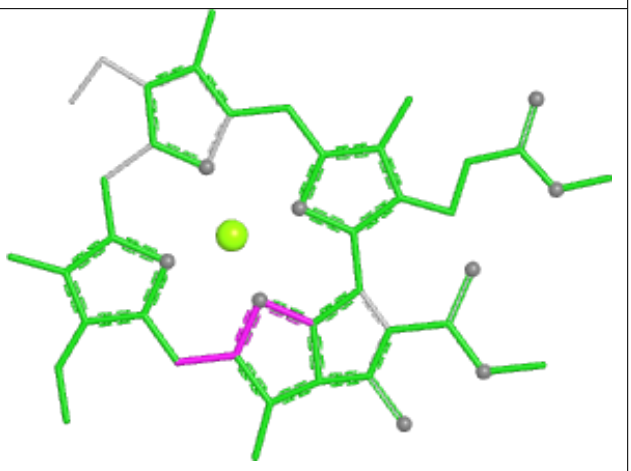
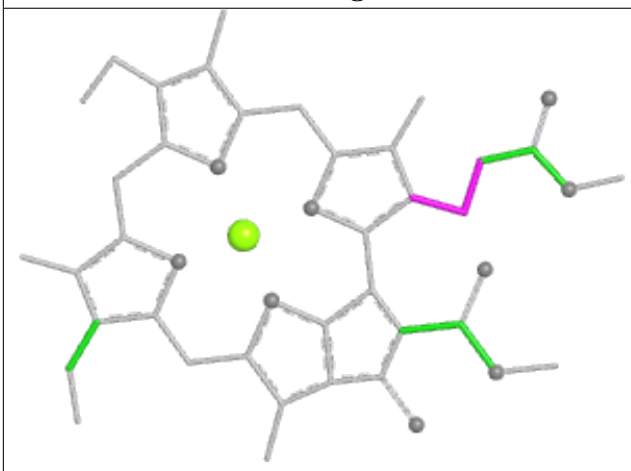
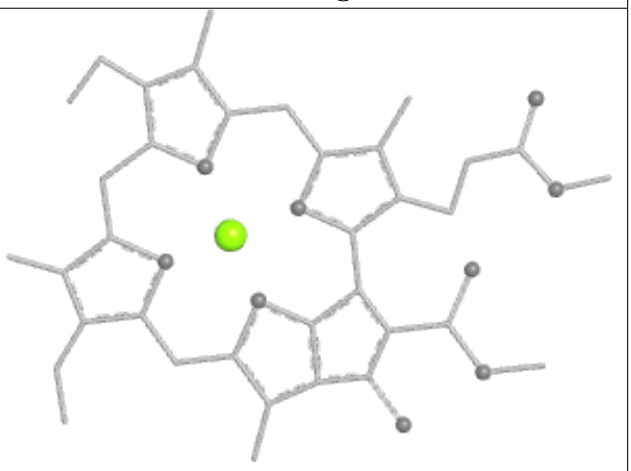
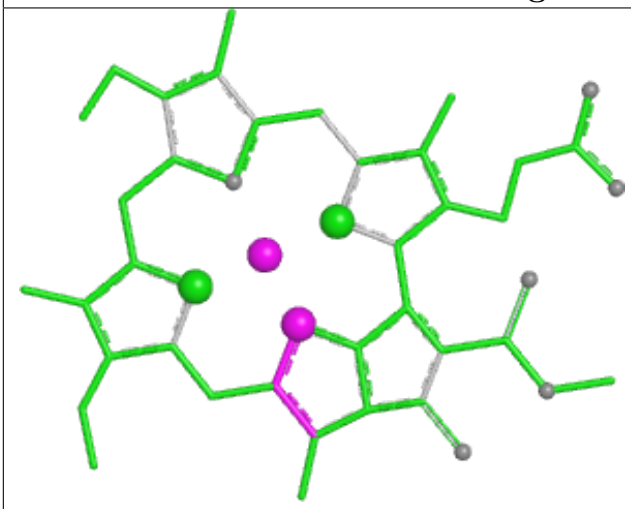
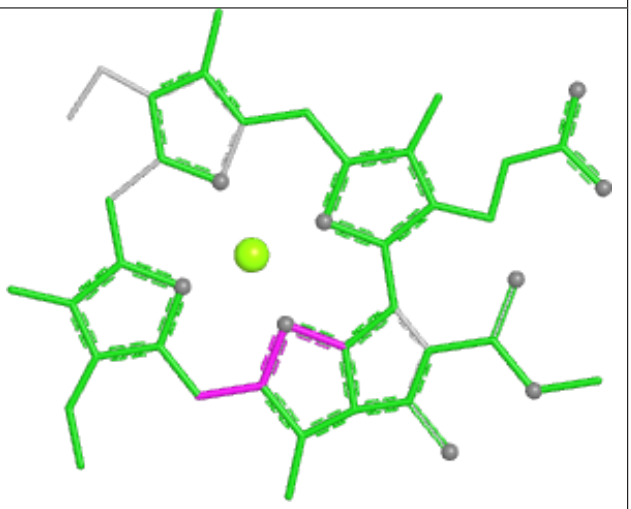
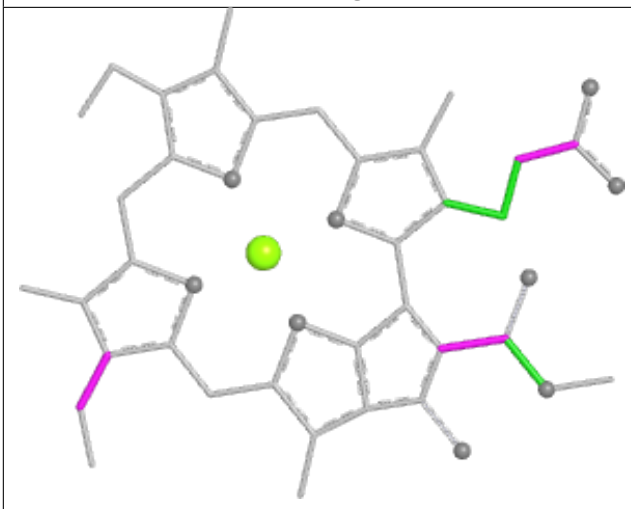
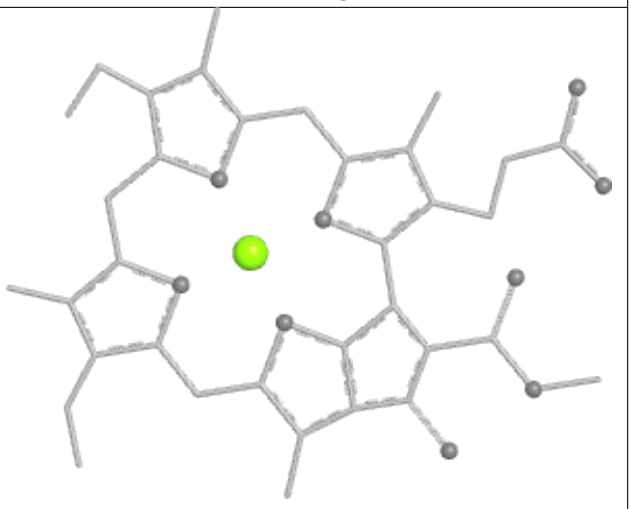
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA 5 612	
	
Bond lengths	Bond angles
	
Torsions	Rings

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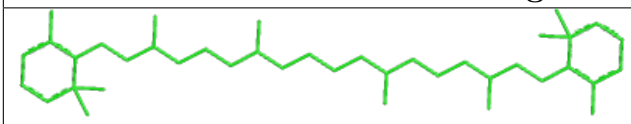
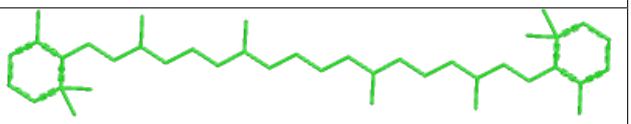
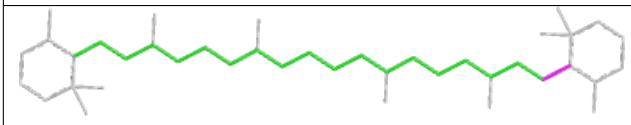
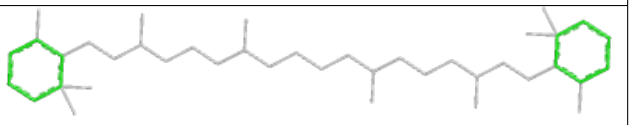
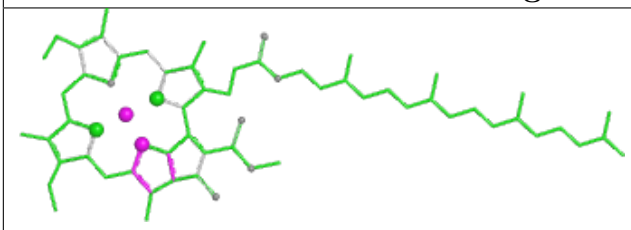
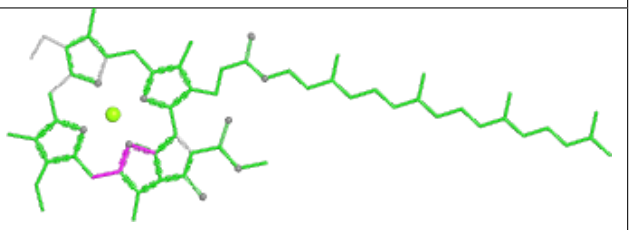
	
Bond lengths	Bond angles
	
Torsions	Rings

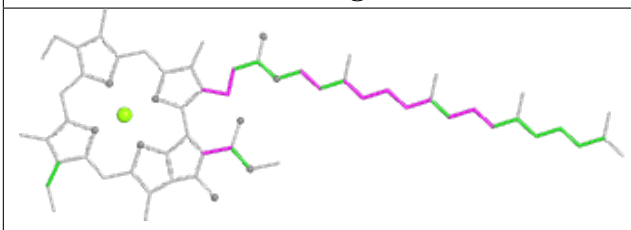
Ligand CLA A 806



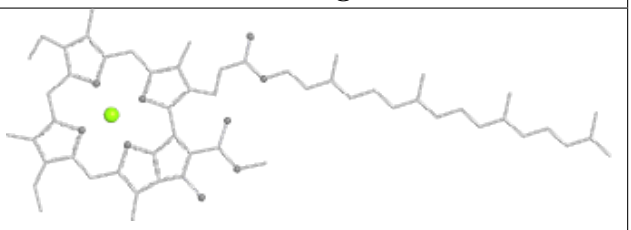
Bond lengths



Bond angles

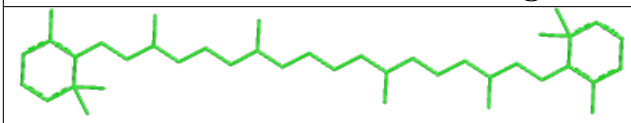


Torsions

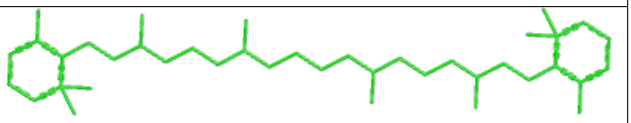


Rings

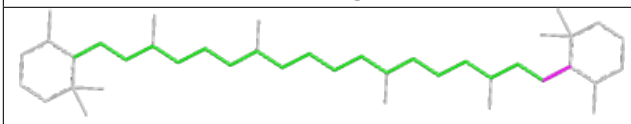
Ligand BCR B 847



Bond lengths



Bond angles



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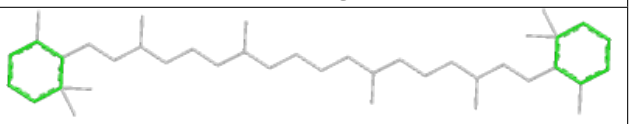
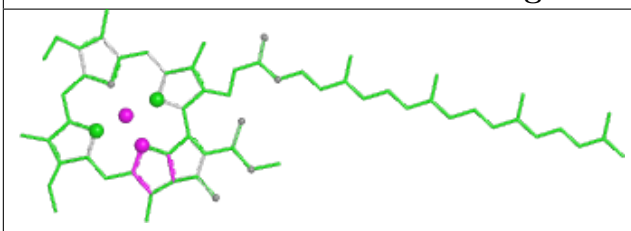
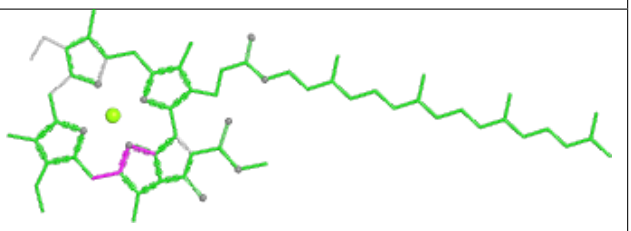


Rings

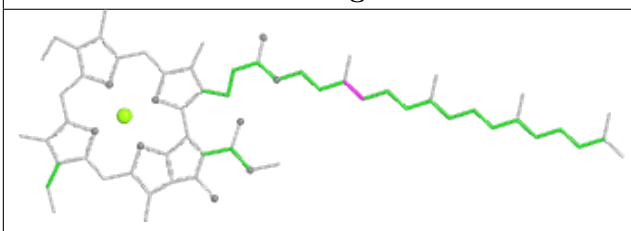
Ligand CLA B 812



Bond lengths



Bond angles



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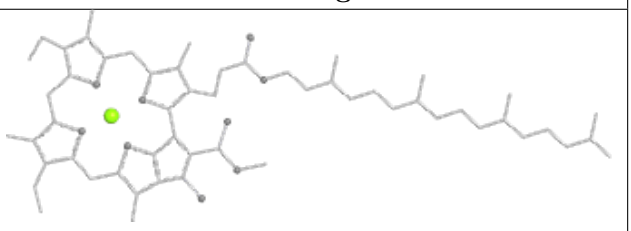
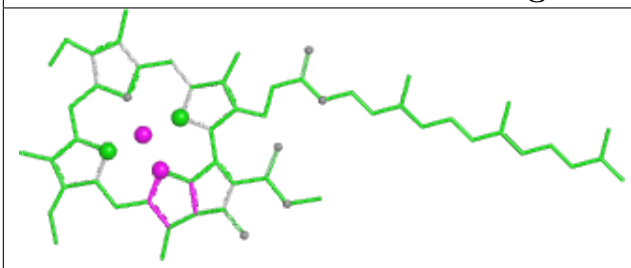
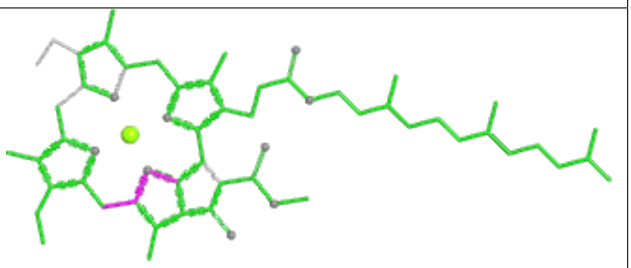
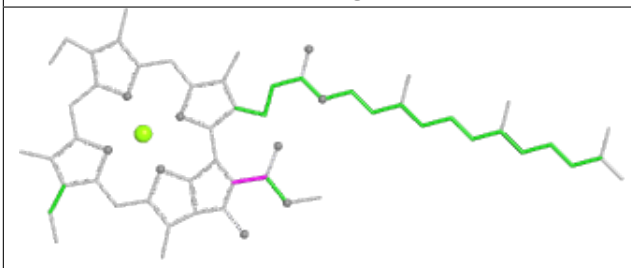
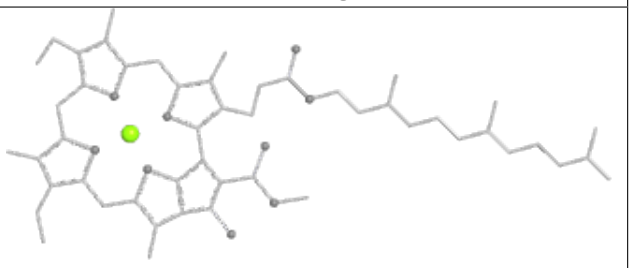
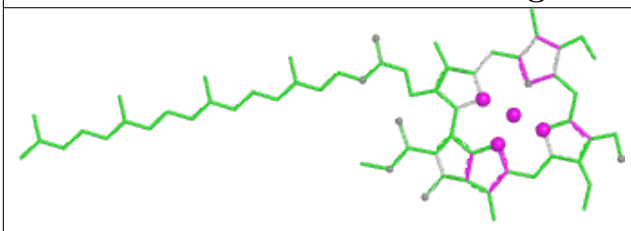
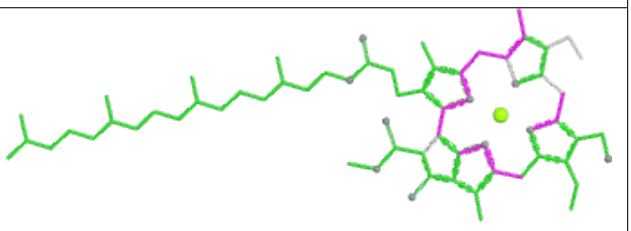
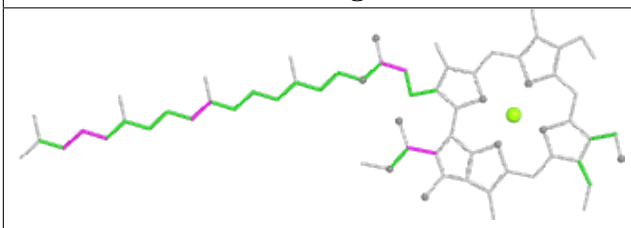
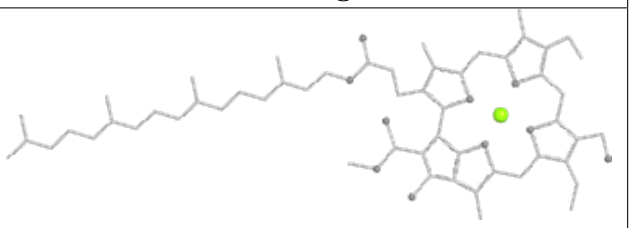
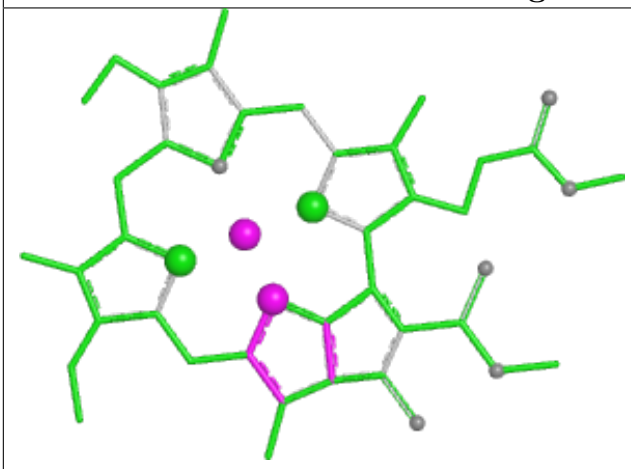


Rings

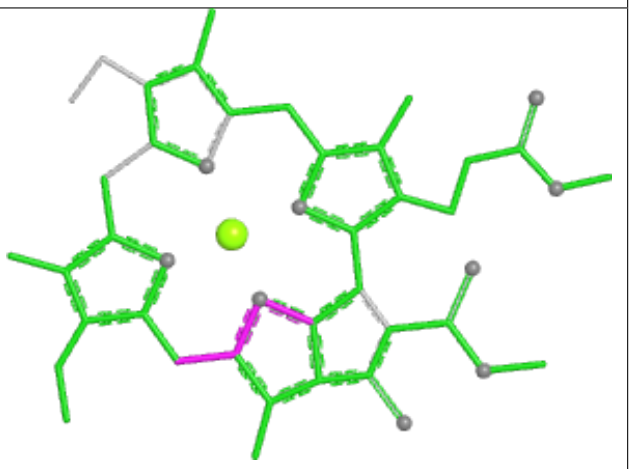
Ligand CLA 1 602	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CHL 8 601	
	
Bond lengths	Bond angles
	
Torsions	Rings

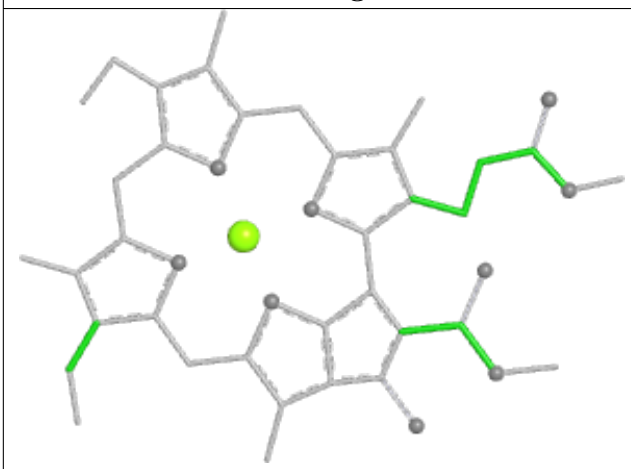
Ligand CLA 3 617



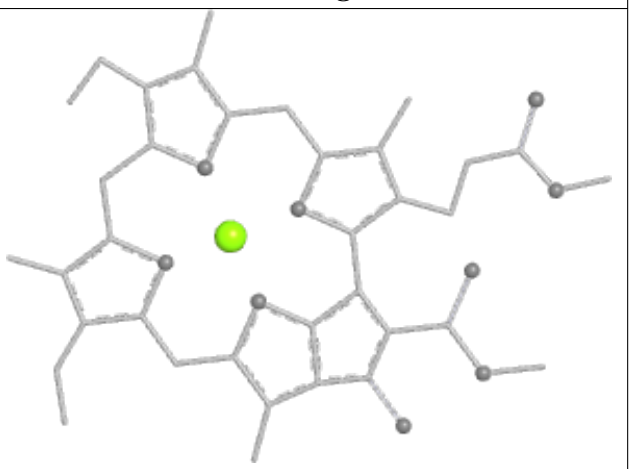
Bond lengths



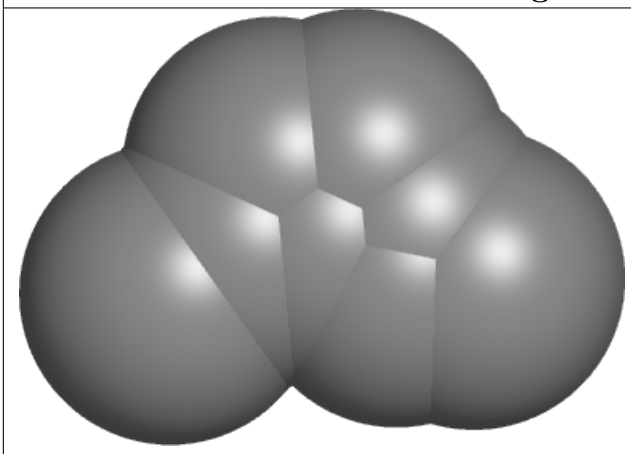
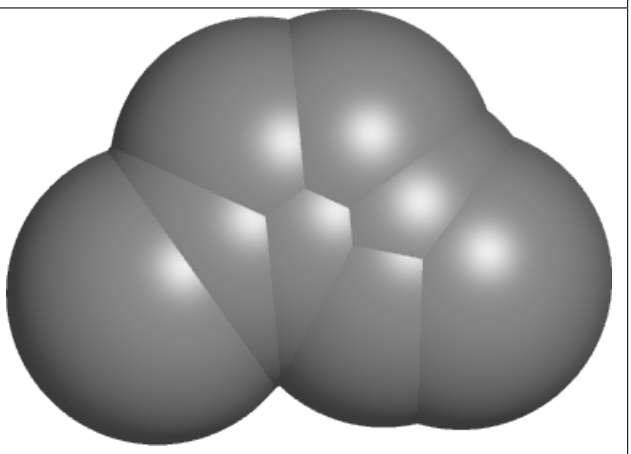
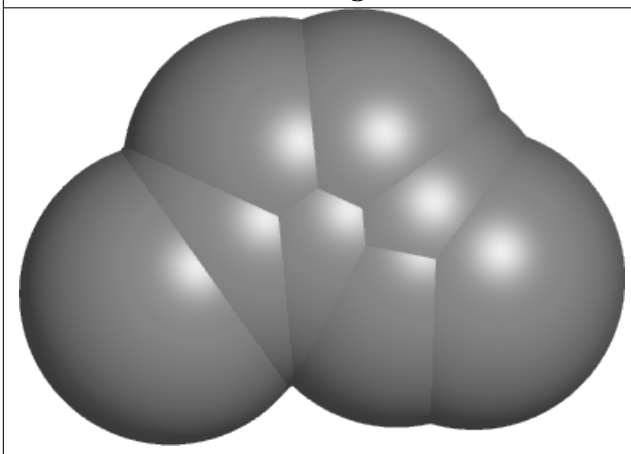
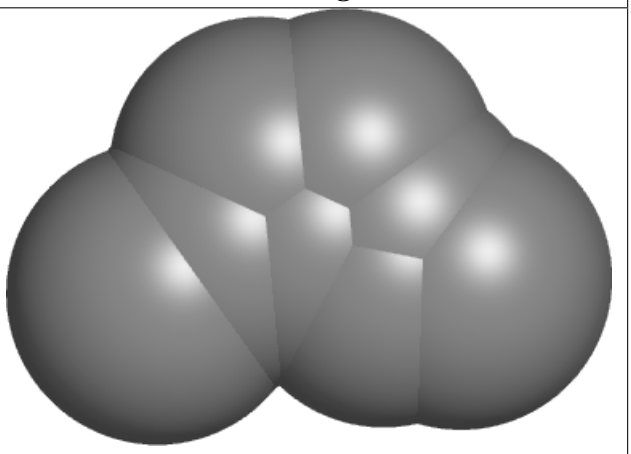
Bond angles

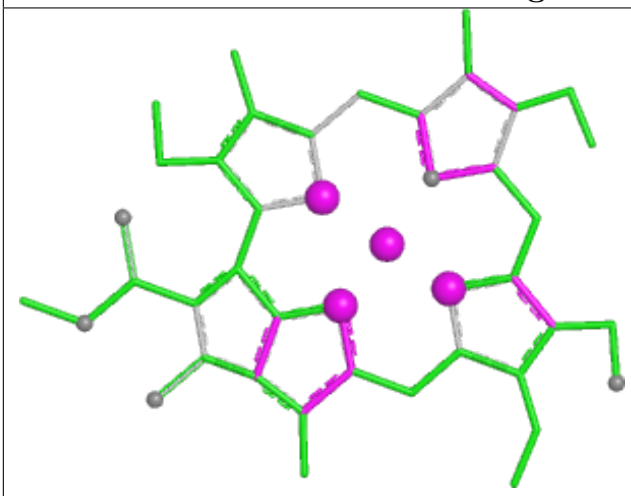
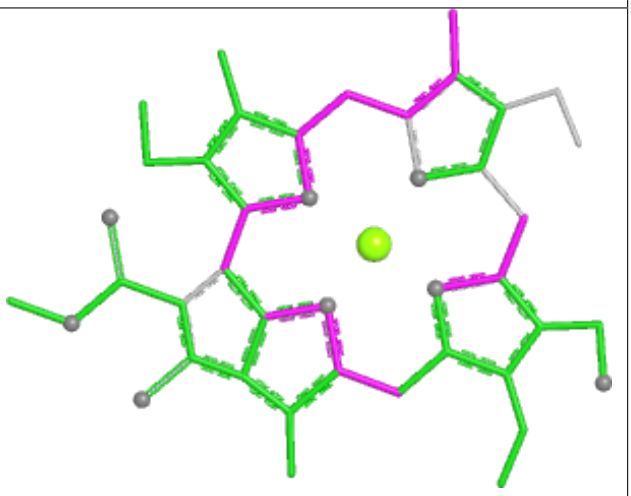
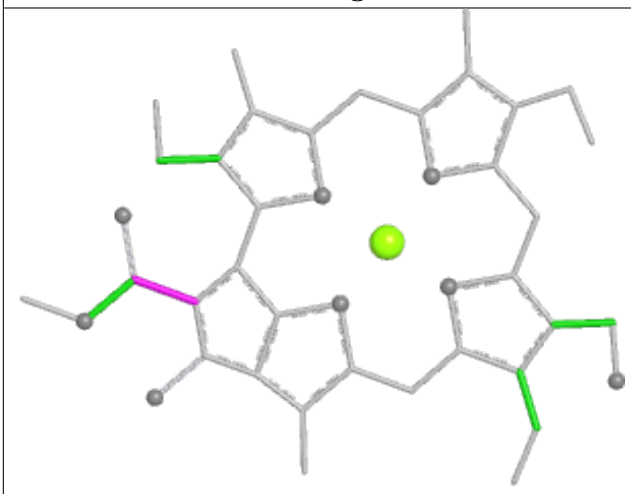
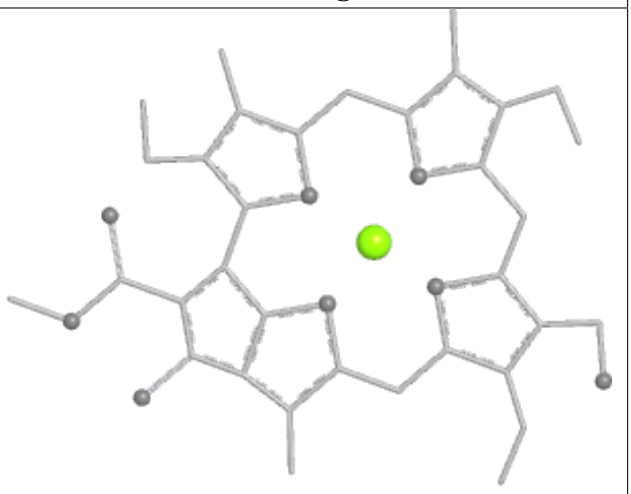


Torsions



Rings

Ligand SF4 C 101	
	
Bond lengths	**Bond angles**
	
Torsions	**Rings**

Ligand CHL 6 618	
	
Bond lengths	Bond angles
	
Torsions	Rings

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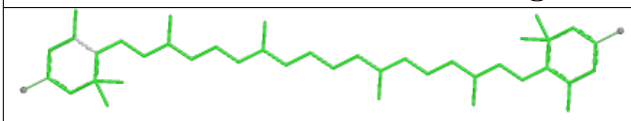
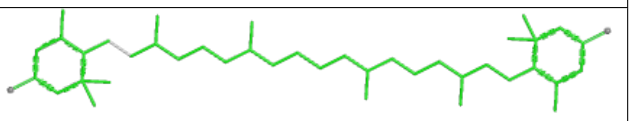
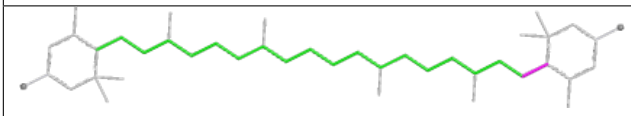
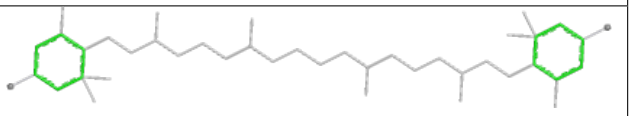
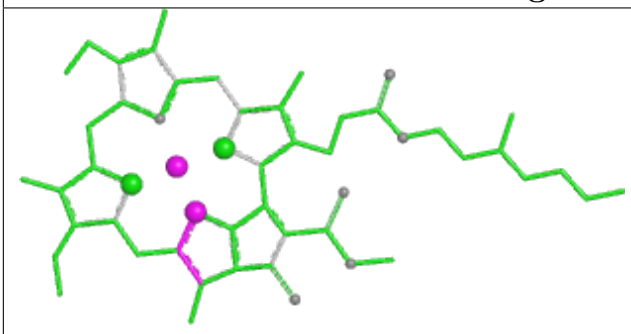
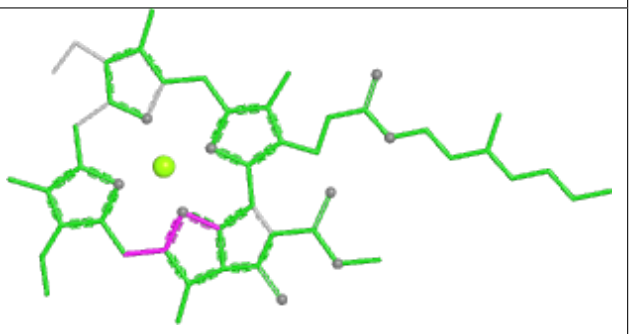
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA 7 620	
	
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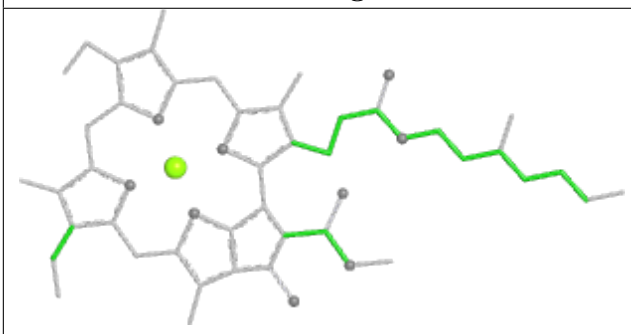
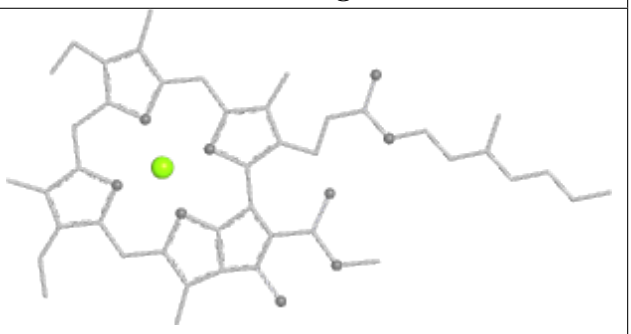
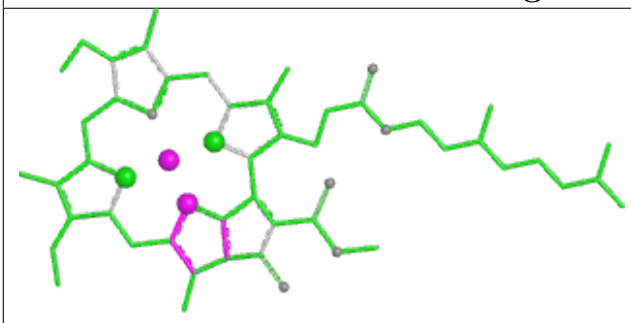
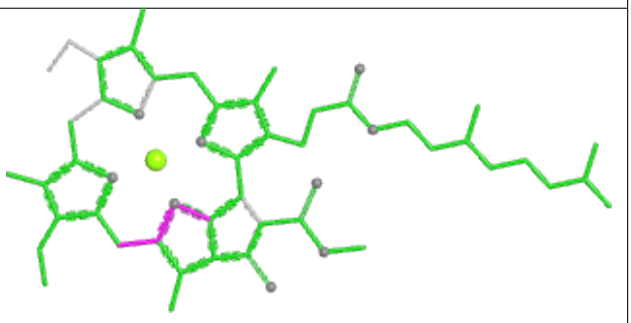
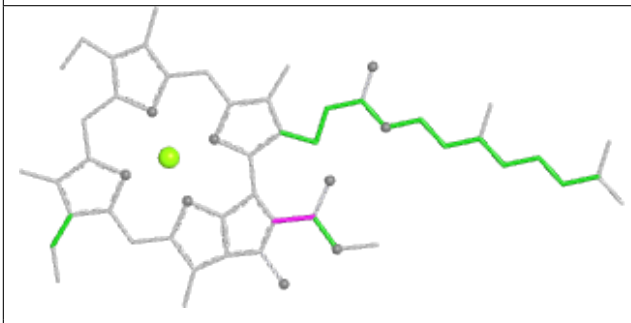
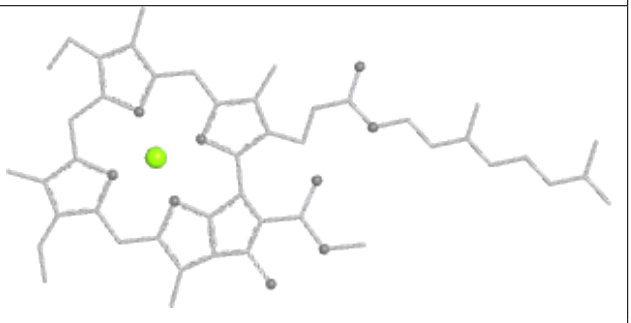
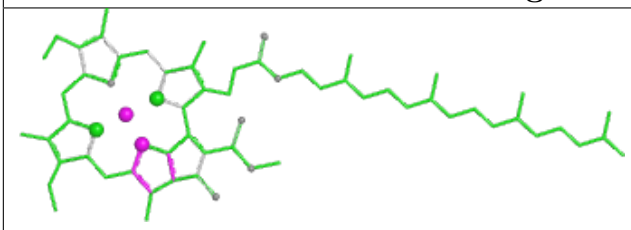
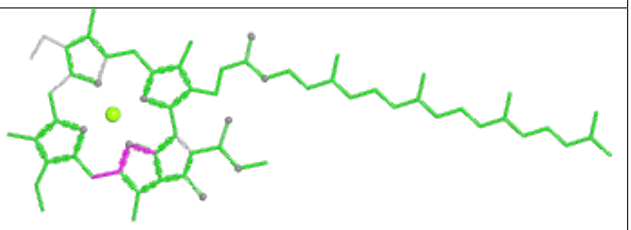
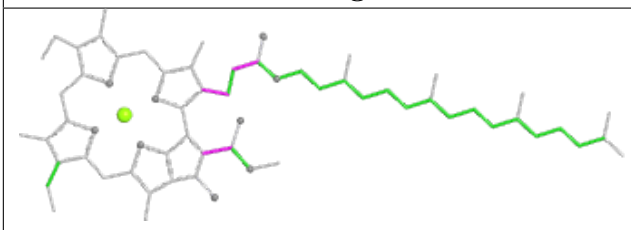
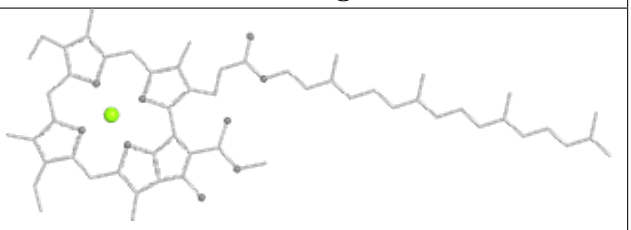
	
Torsions	Rings

Ligand CLA A 817	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA F 304	
 Bond lengths	 Bond angles
 Torsions	 Rings

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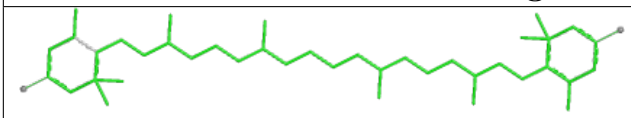
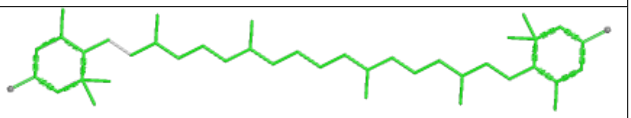
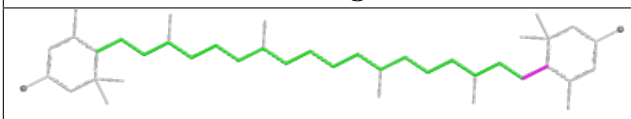
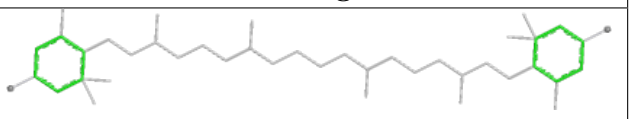
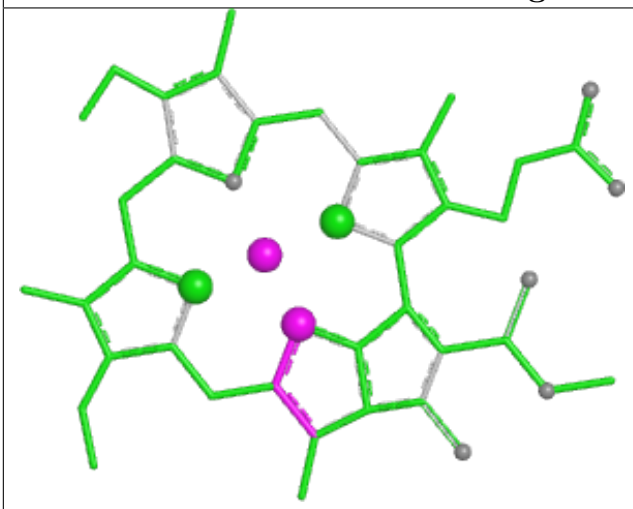
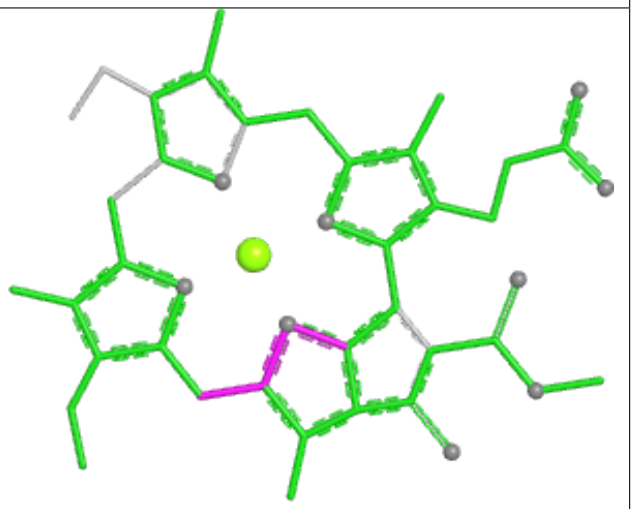
 Bond lengths	 Bond angles
 Torsions	 Rings

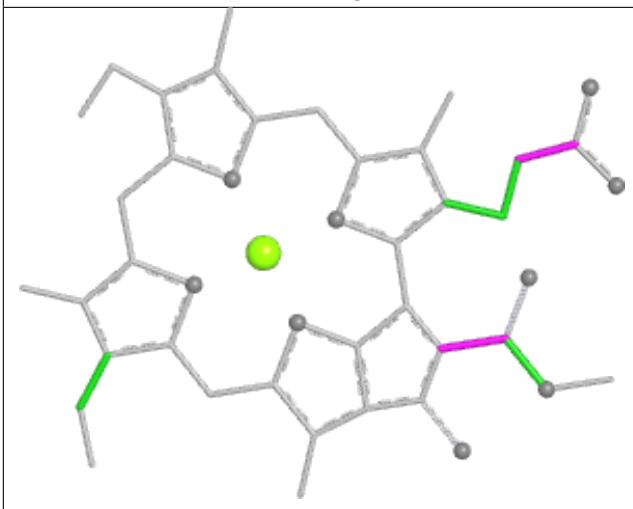
Ligand CLA 4 612



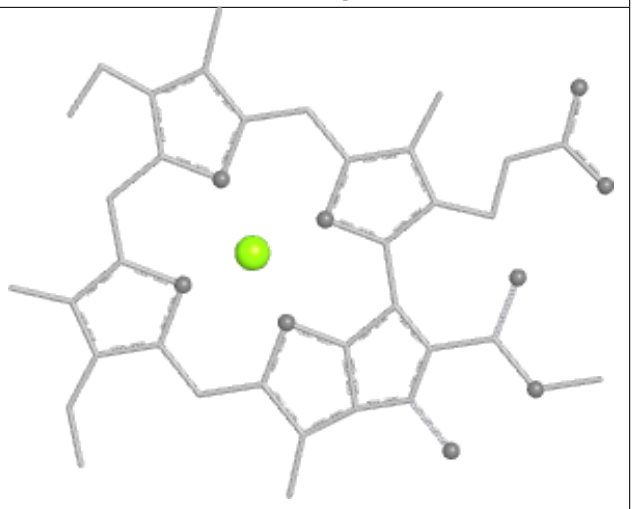
Bond lengths



Bond angles

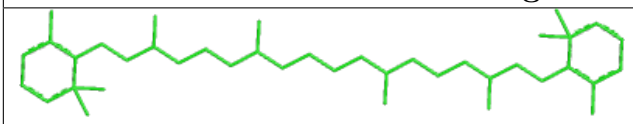


Torsions

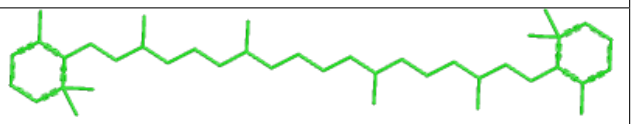


Rings

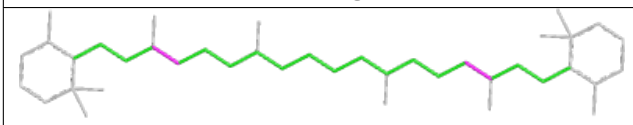
Ligand BCR B 845



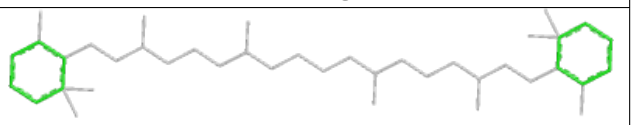
Bond lengths



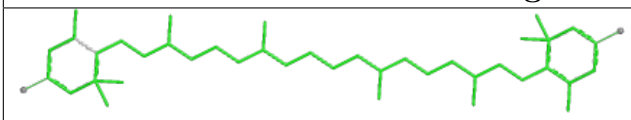
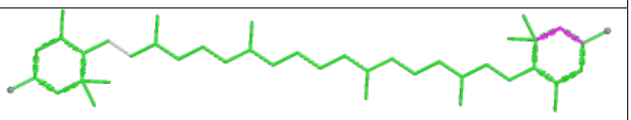
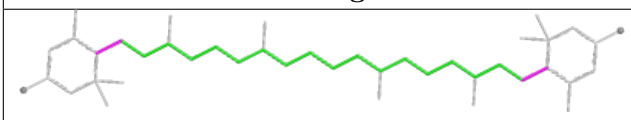
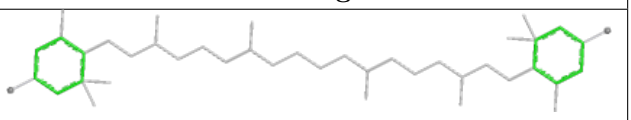
Bond angles

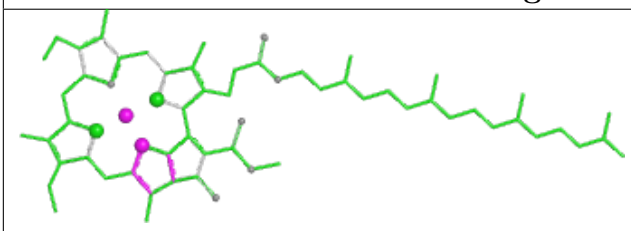
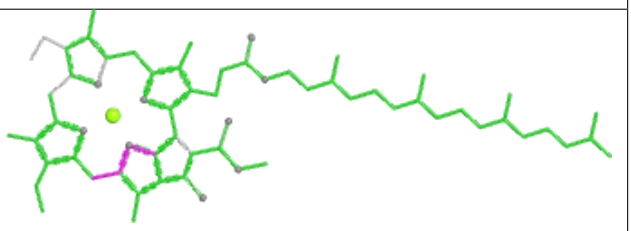
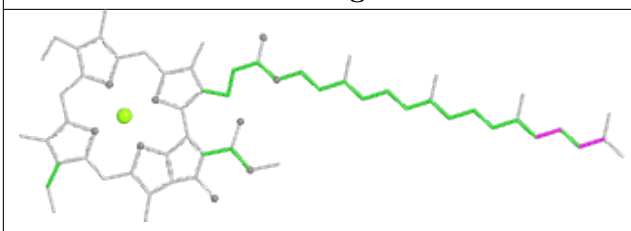
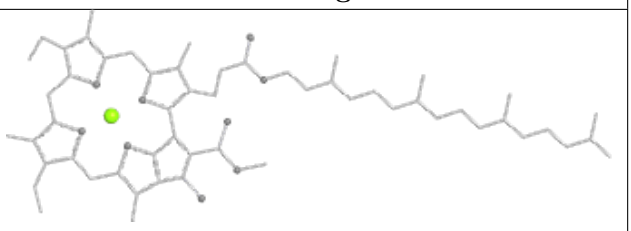


Torsions



Rings

Ligand LUT A 856	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA A 813	
 Bond lengths	 Bond angles
 Torsions	 Rings

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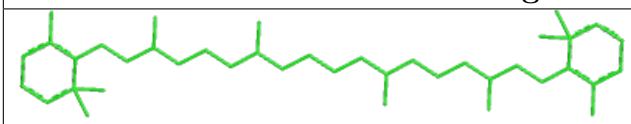
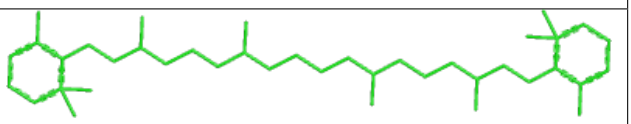
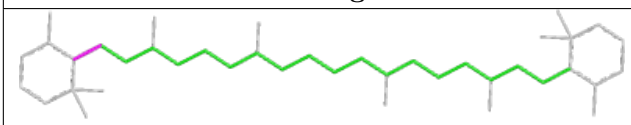
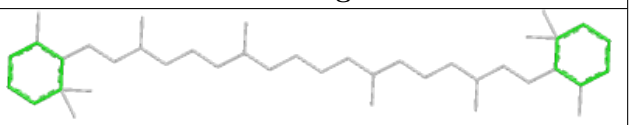
 Bond lengths	 Bond angles
 Torsions	 Rings

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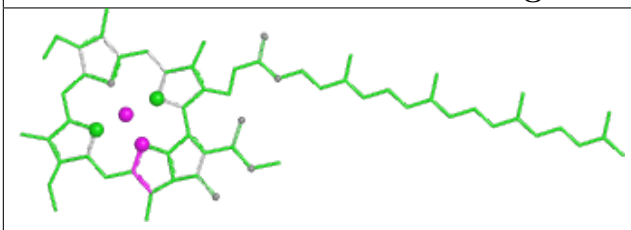
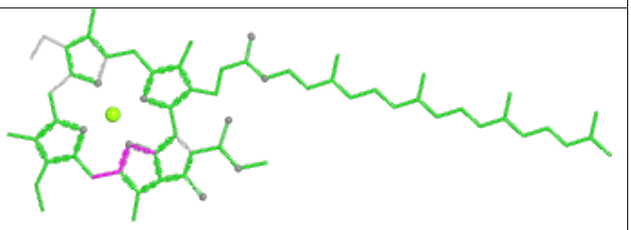
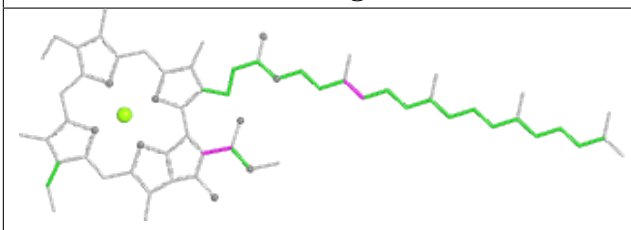
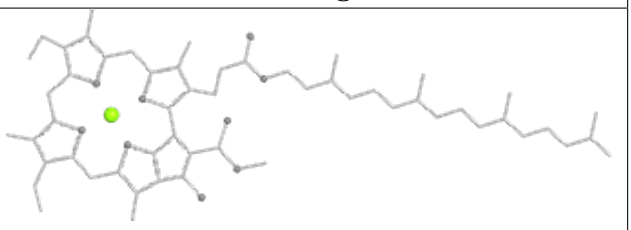
	
Bond lengths	Bond angles
	
Torsions	Rings

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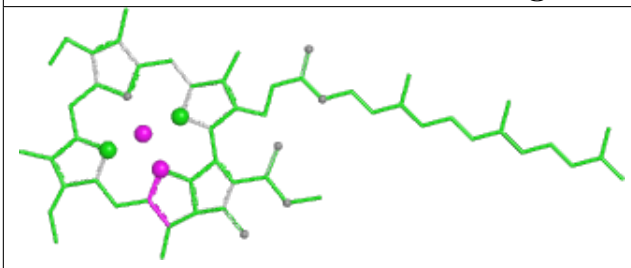
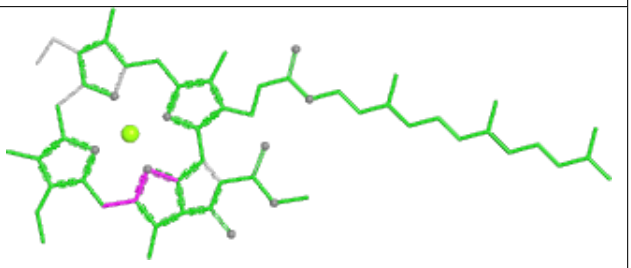
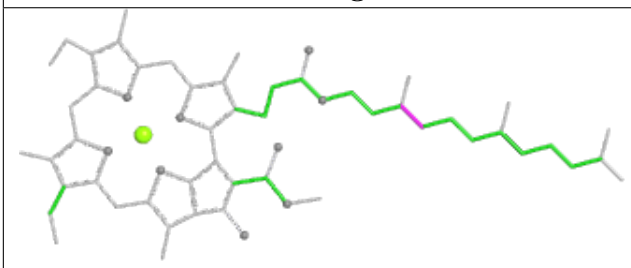
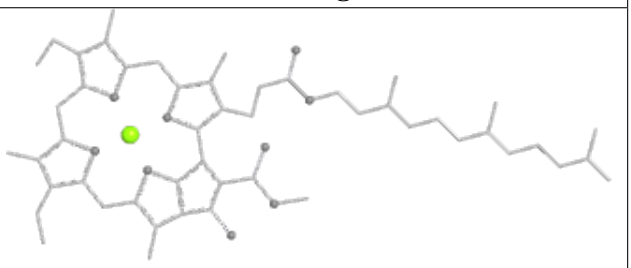
	
Bond lengths	Bond angles
	
Torsions	Rings

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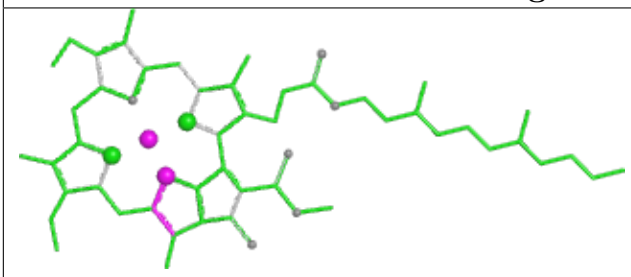
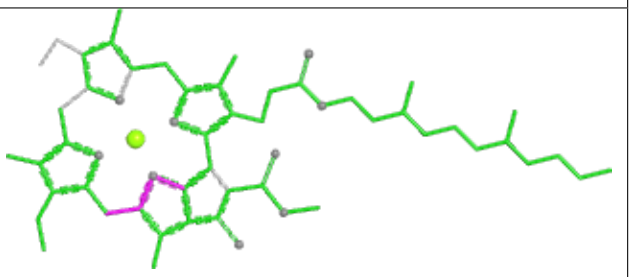
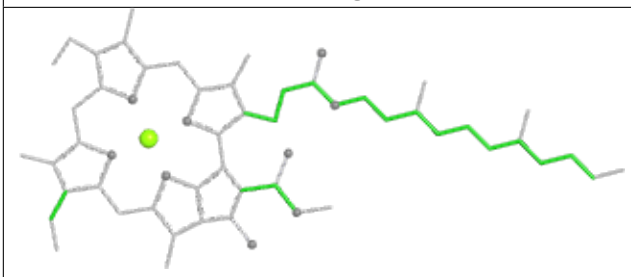
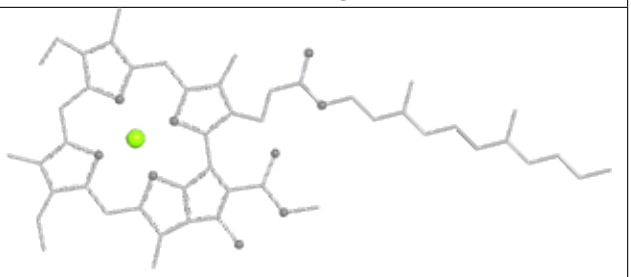
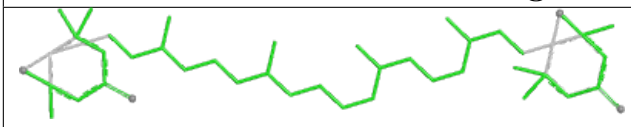
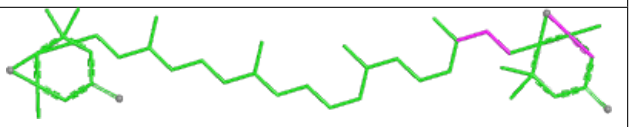
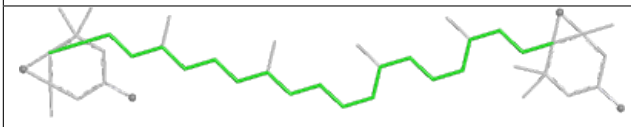
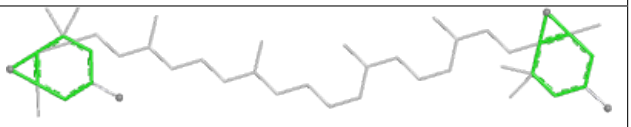
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand XAT 5 624	
 Bond lengths	 Bond angles
 Torsions	 Rings

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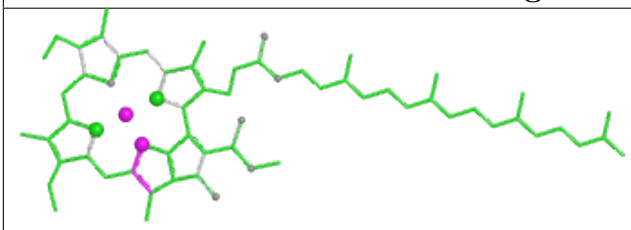
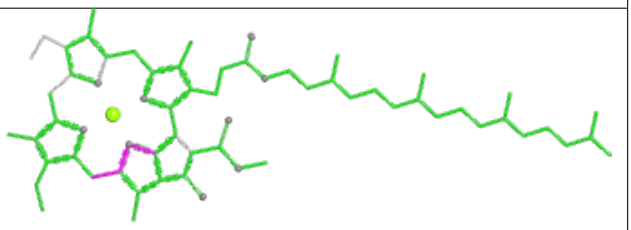
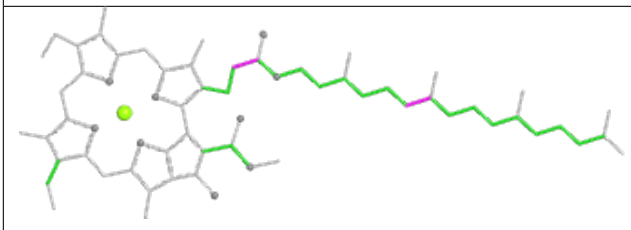
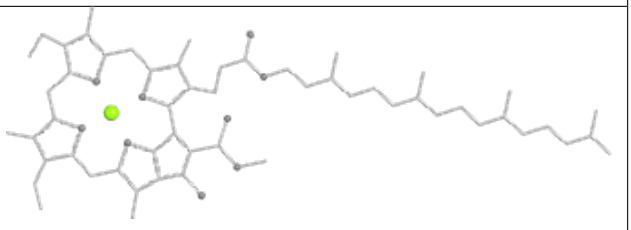
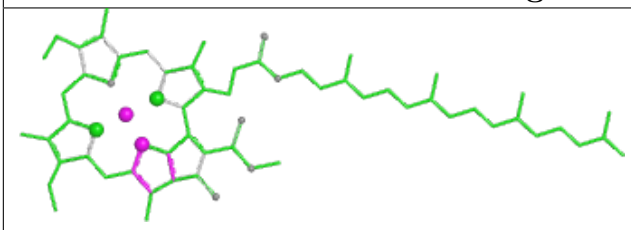
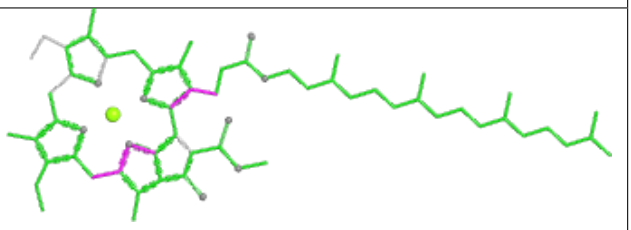
 Bond lengths	 Bond angles
 Torsions	 Rings

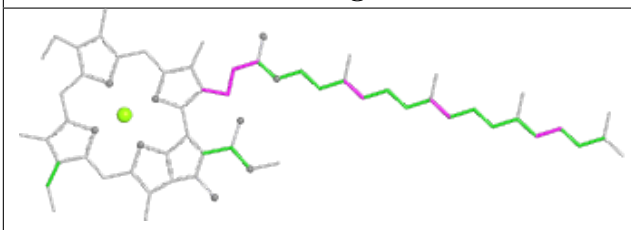
Ligand CLA Z 609



Bond lengths



Bond angles



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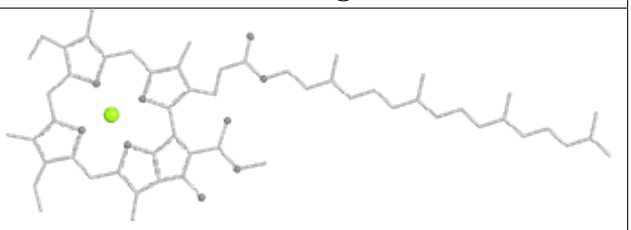
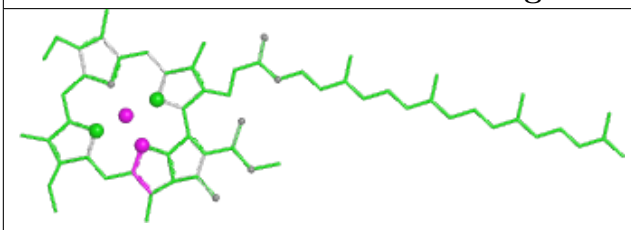
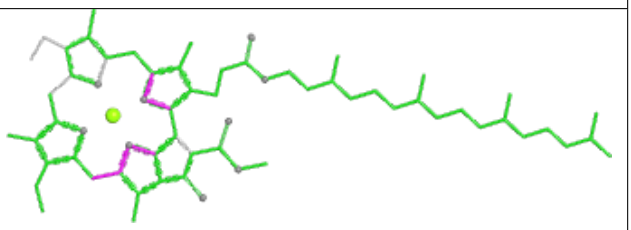


Rings

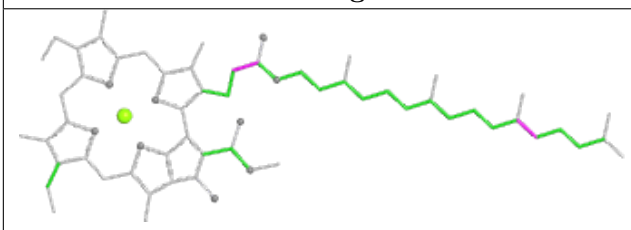
Ligand CLA B 803



Bond lengths



Bond angles



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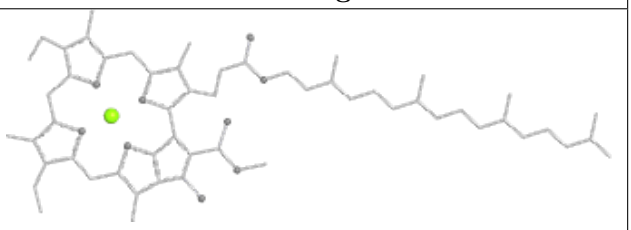
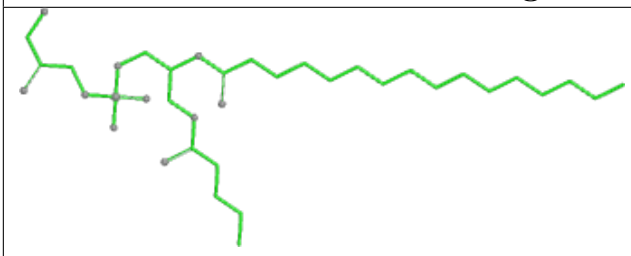


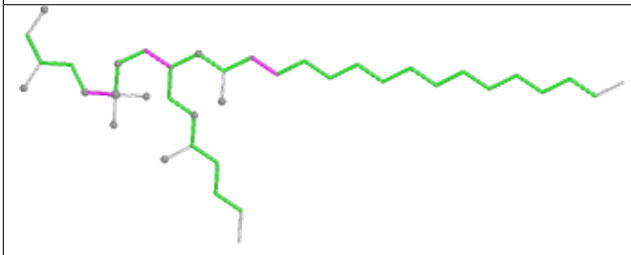
Rings

Ligand LHG A 847



Bond lengths

Bond angles



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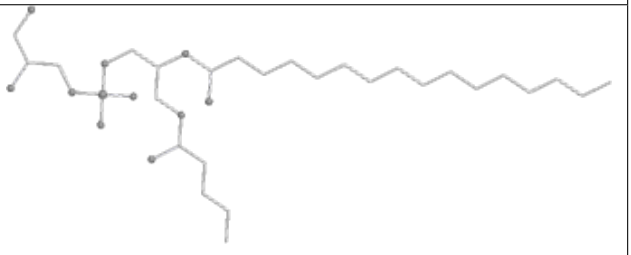
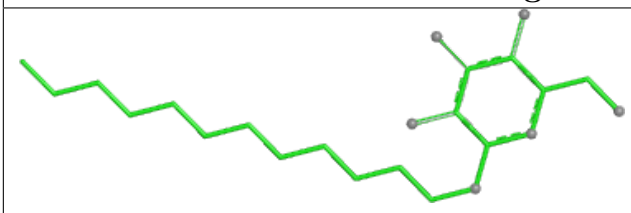
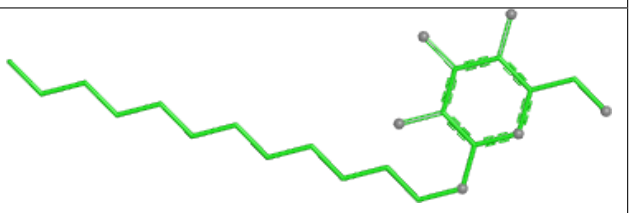


Rings

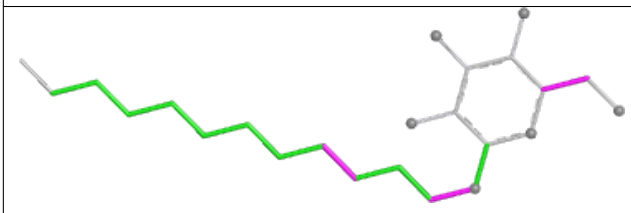
Ligand LMU 1 625



Bond lengths



Bond angles



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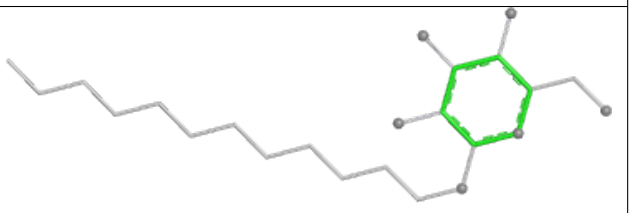
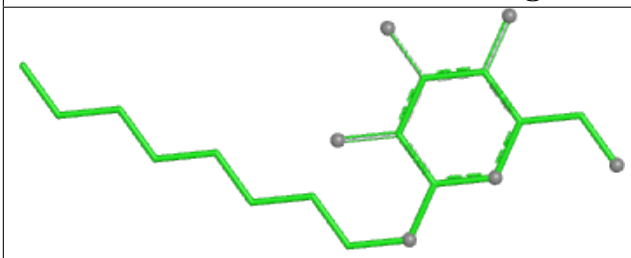
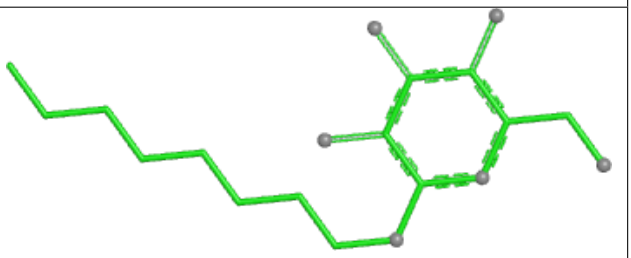


Rings

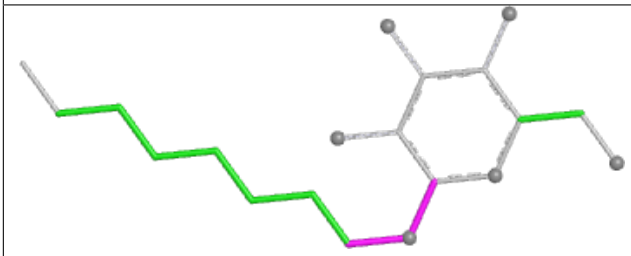
Ligand LMU 6 632



Bond lengths



Bond angles



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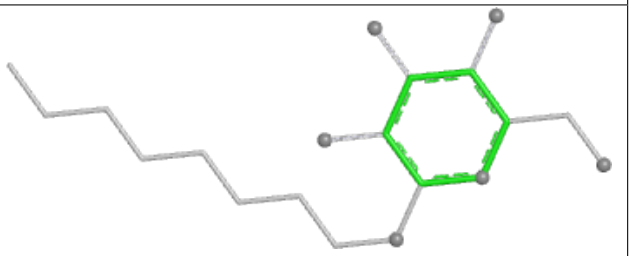
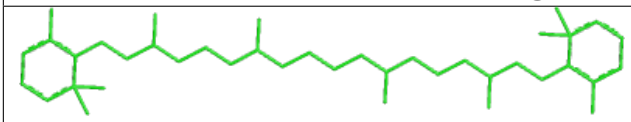


Rings

Ligand BCR I 172



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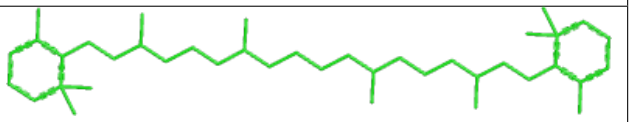

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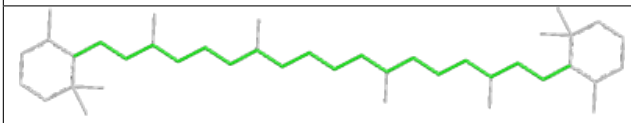

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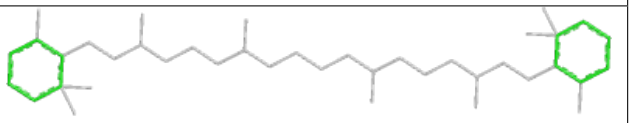
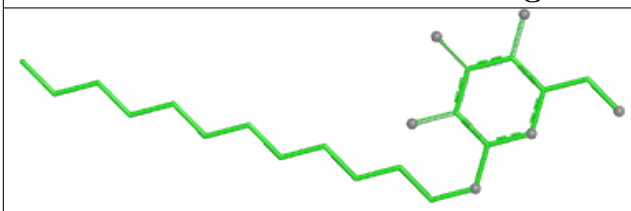
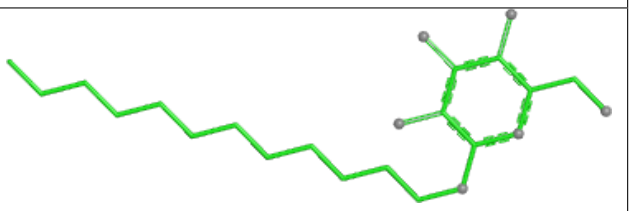
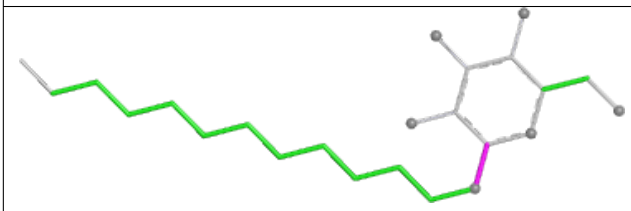
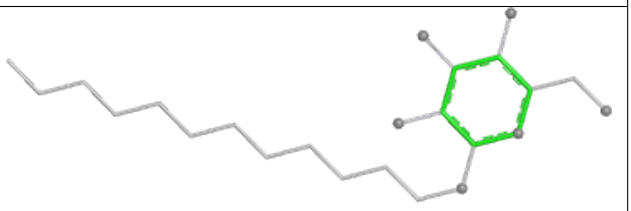


Rings

Ligand LMU 6 628	
 Bond lengths	 Bond angles
 Torsions	 Rings

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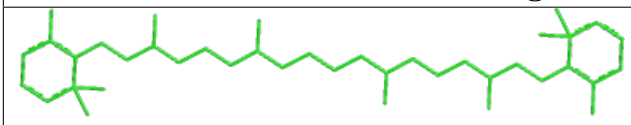
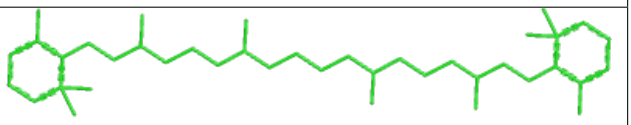
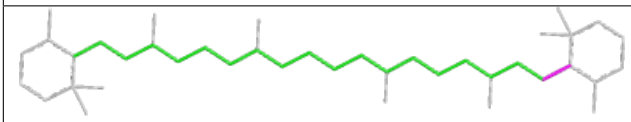
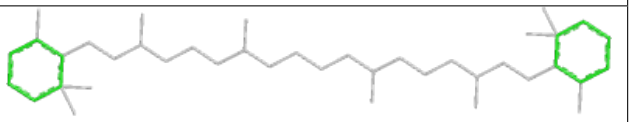
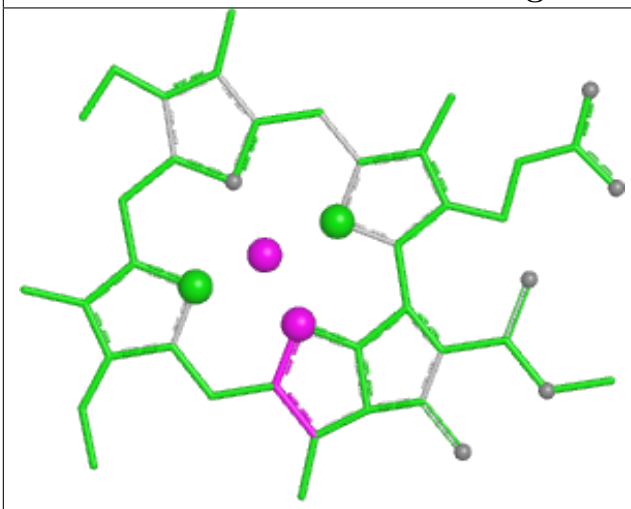
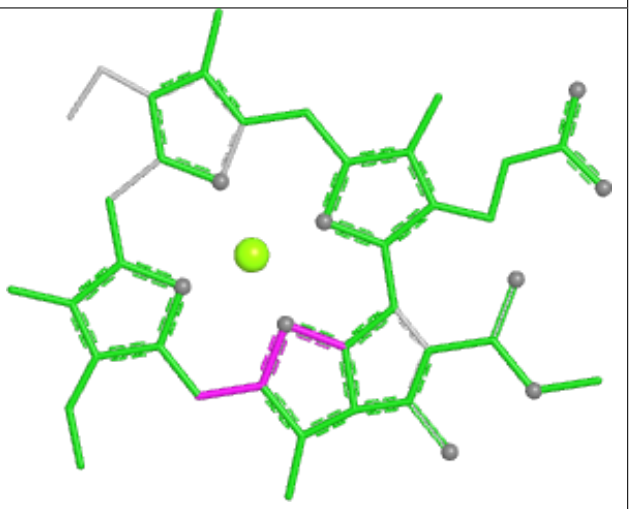
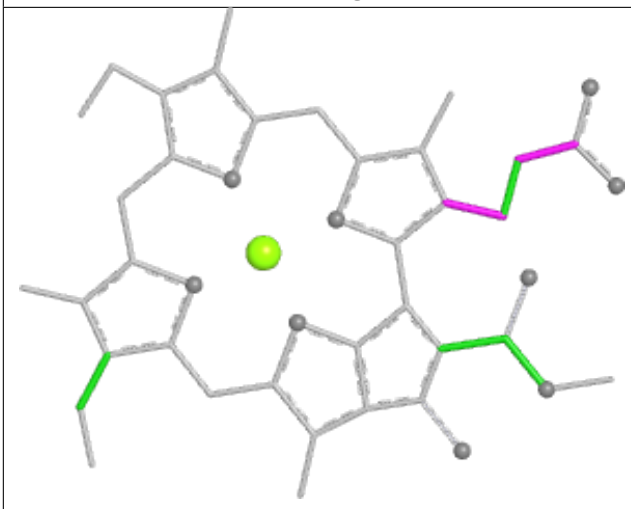
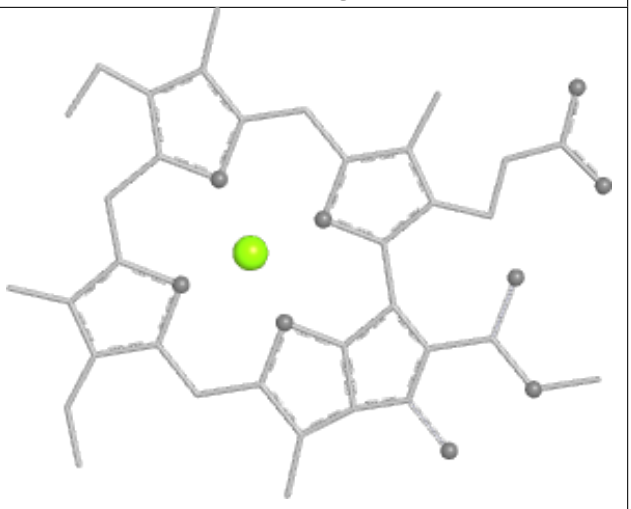
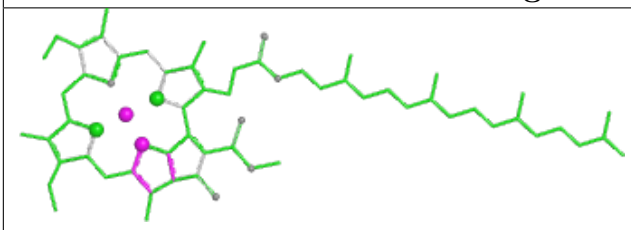
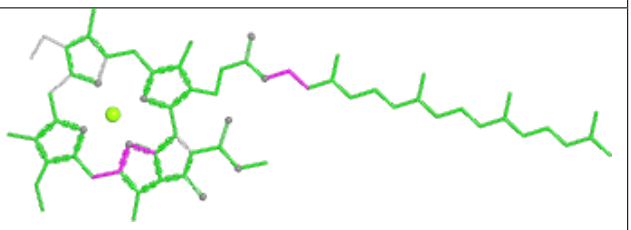
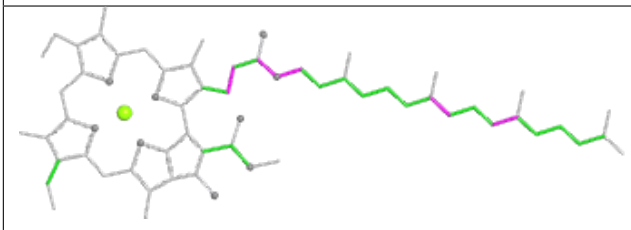
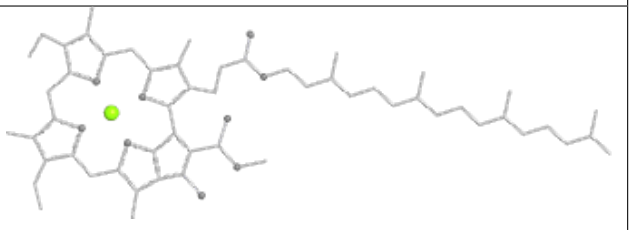
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA L 204	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA A 843	
	
Bond lengths	Bond angles
	
Torsions	Rings

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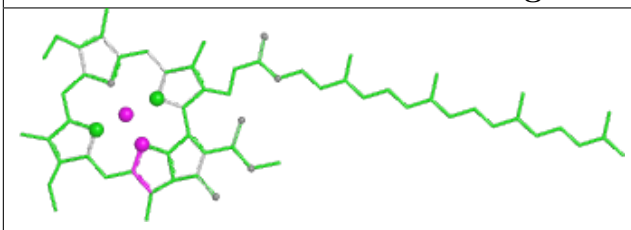
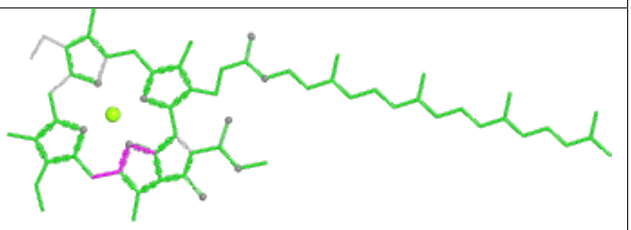
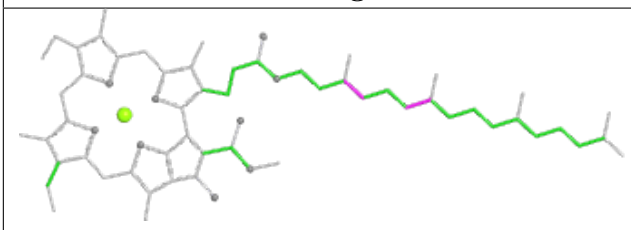
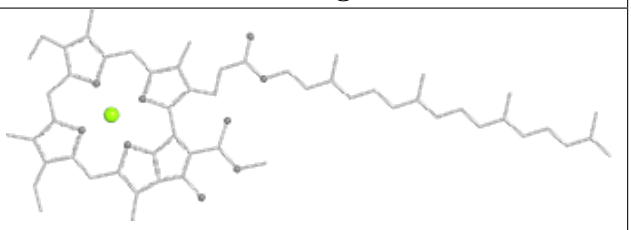
	
Bond lengths	**Bond angles**
	
Torsions	**Rings**

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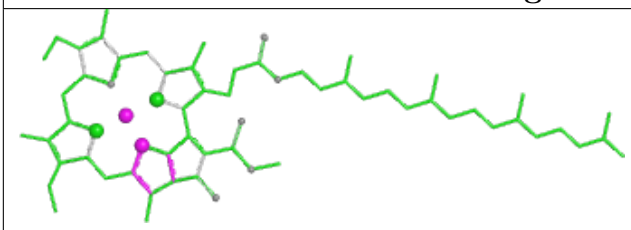
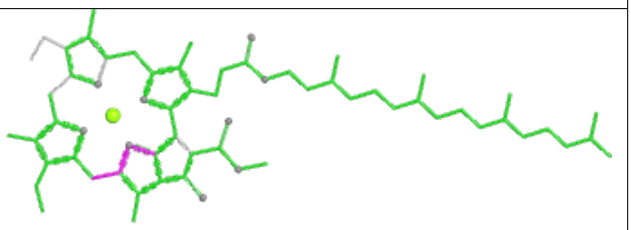
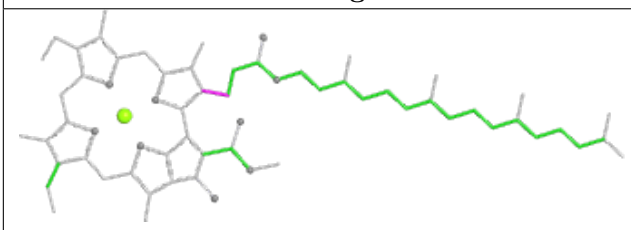
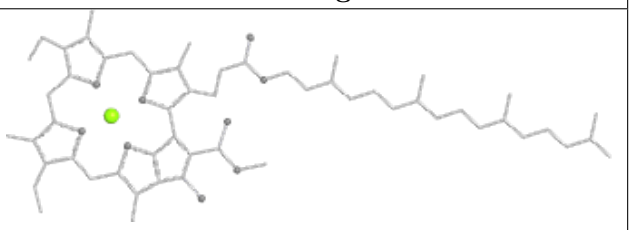
	
Bond lengths	**Bond angles**
	
Torsions	**Rings**

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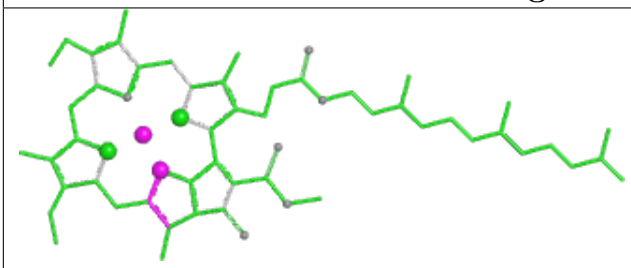
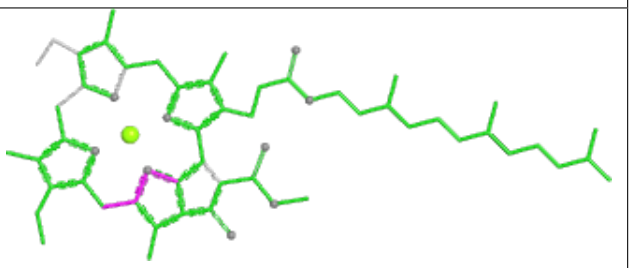
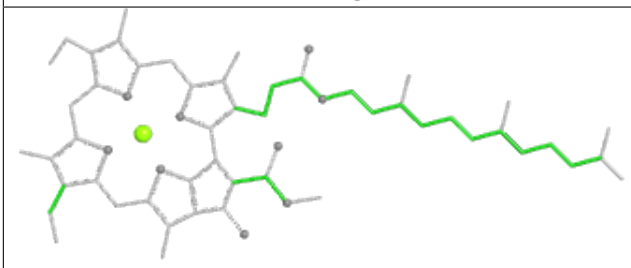
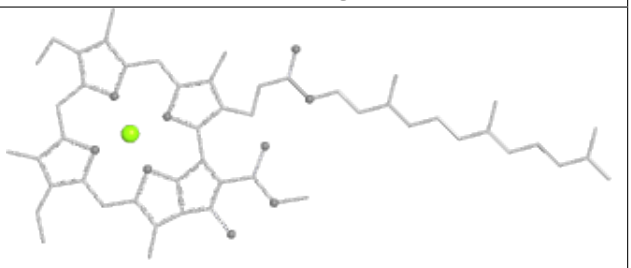
 Bond lengths	 Bond angles
 Torsions	 Rings

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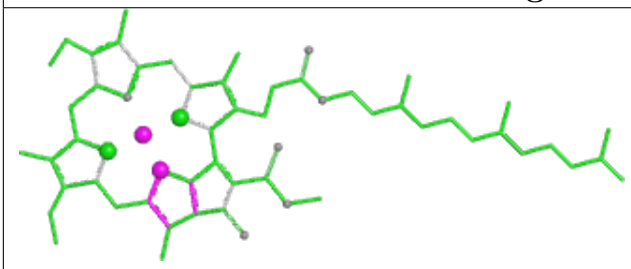
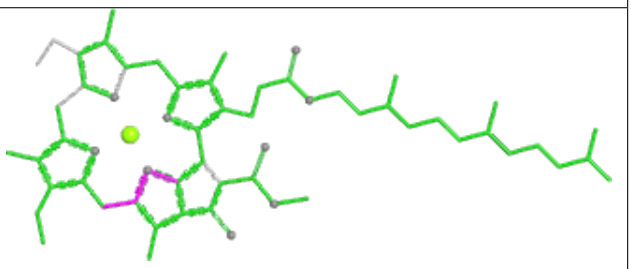
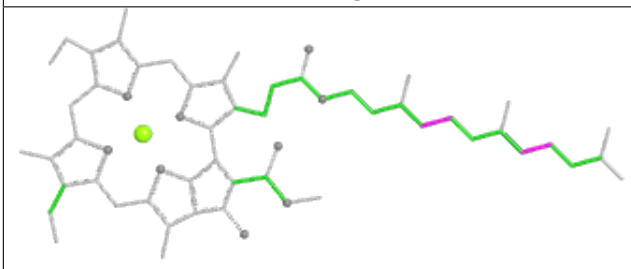
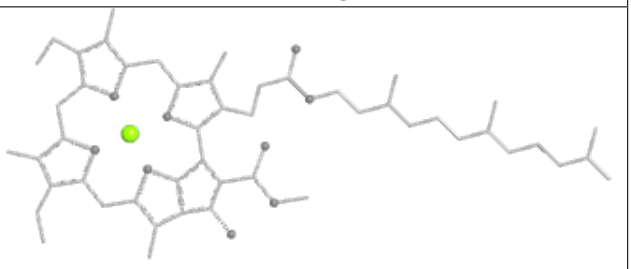
 Bond lengths	 Bond angles
 Torsions	 Rings

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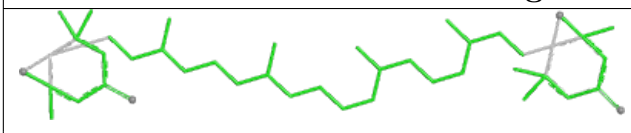
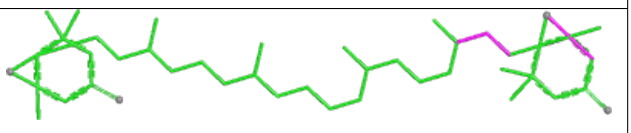
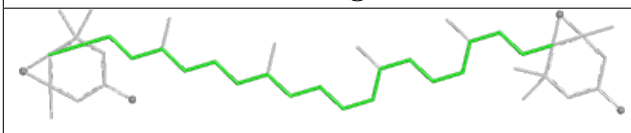
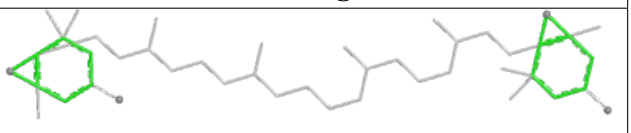
 Bond lengths	 Bond angles
 Torsions	 Rings

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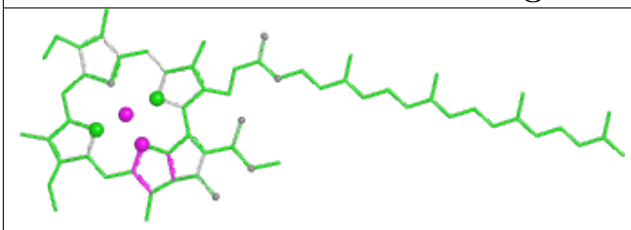
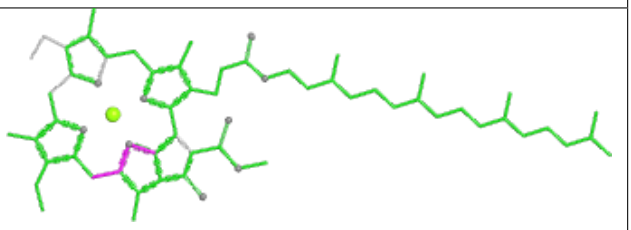
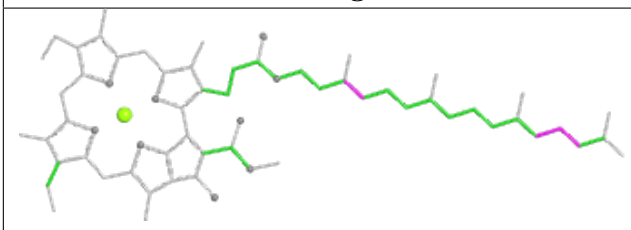
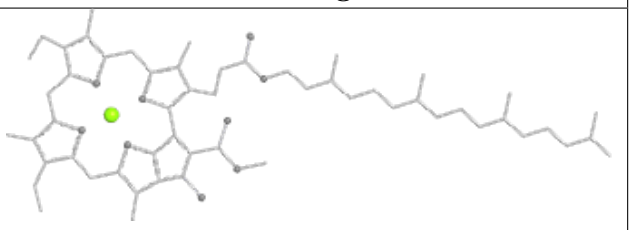
 Bond lengths	 Bond angles
 Torsions	 Rings

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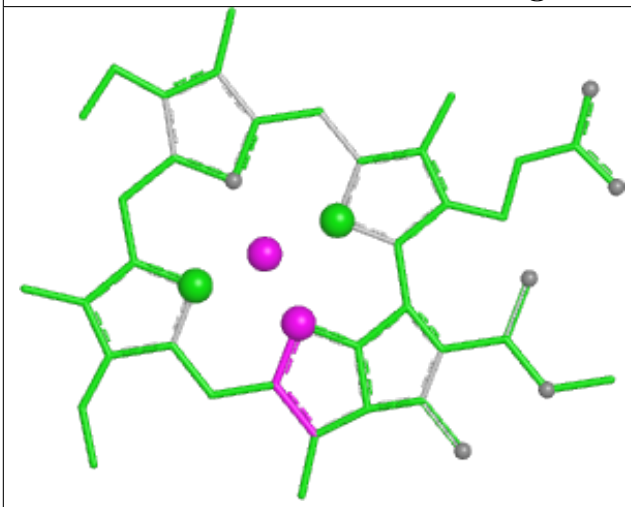
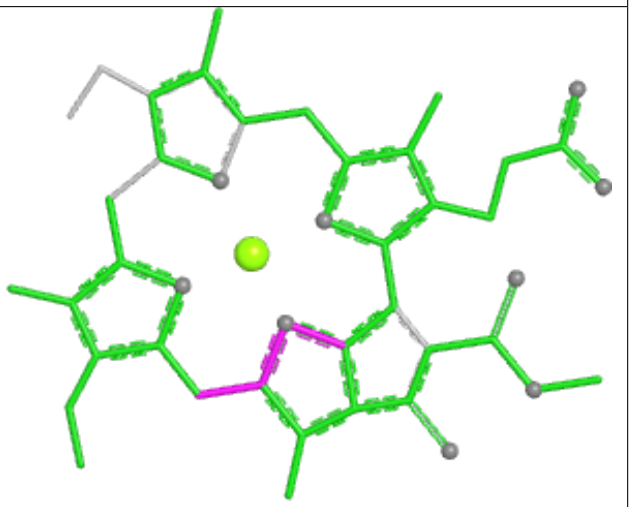
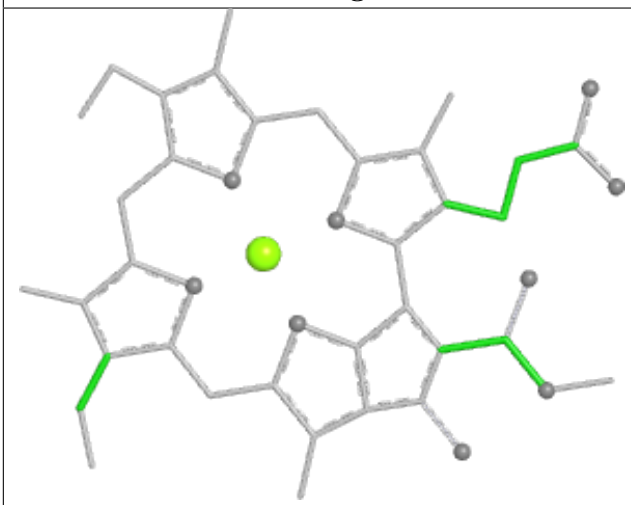
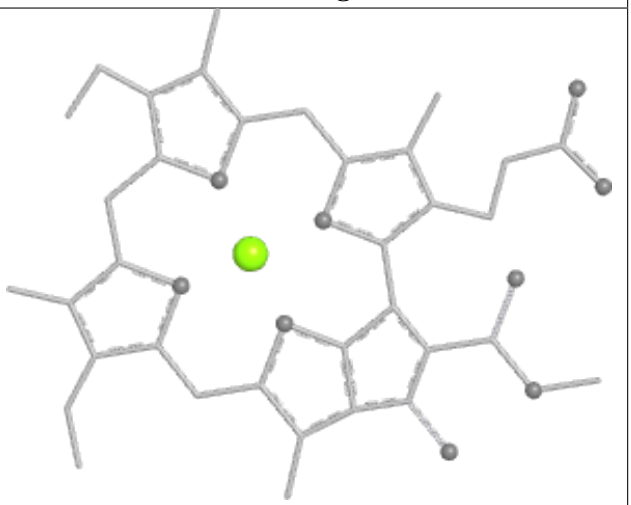
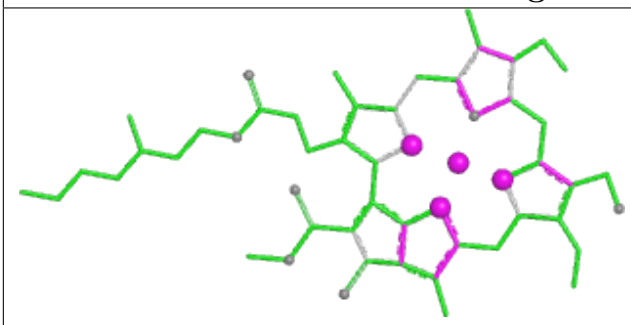
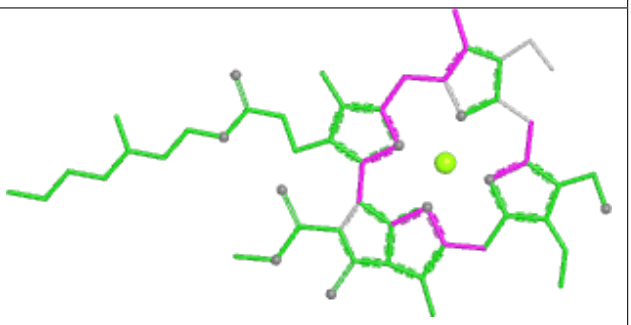
 Bond lengths	 Bond angles
 Torsions	 Rings

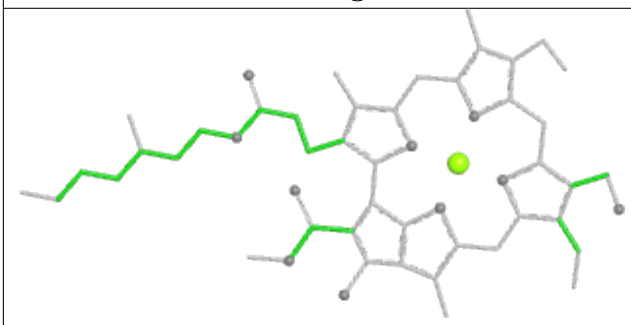
Ligand CHL 7 607



Bond lengths



Bond angles



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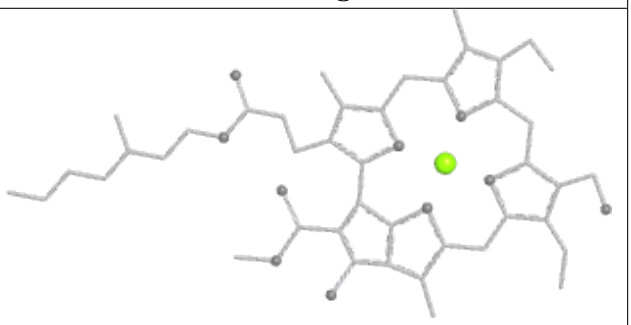
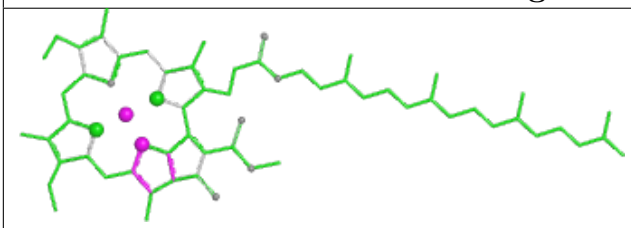


Rings

Ligand CLA 8 602



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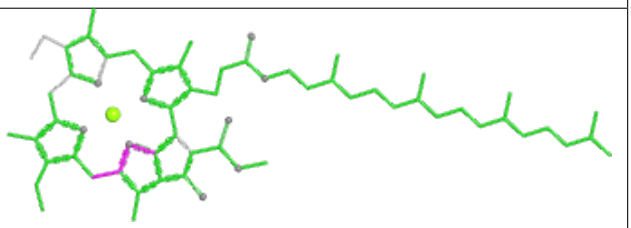
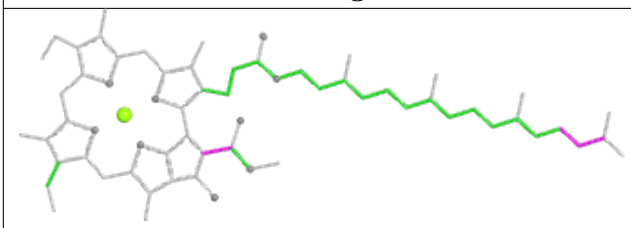


Bond angles



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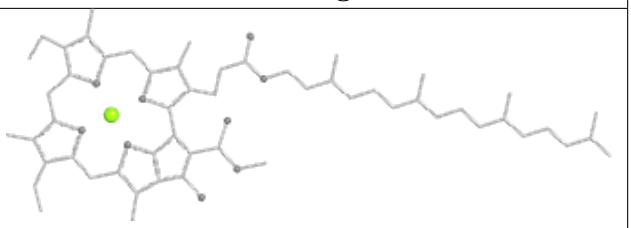
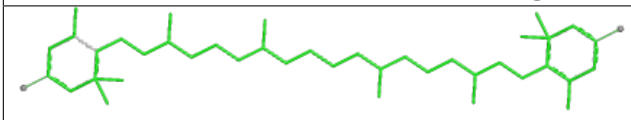
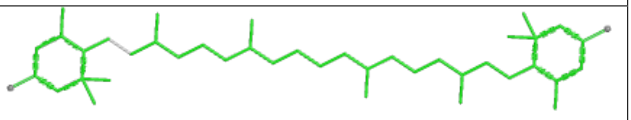


Rings

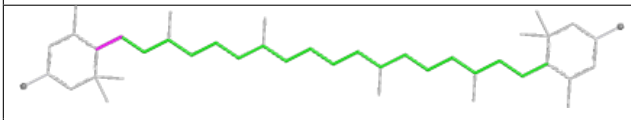
Ligand LUT 7 624



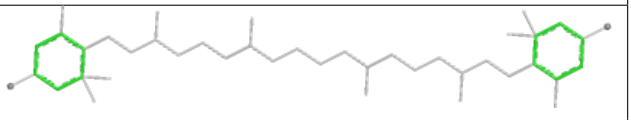
Bond lengths



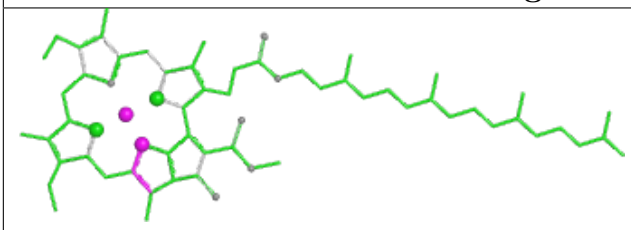
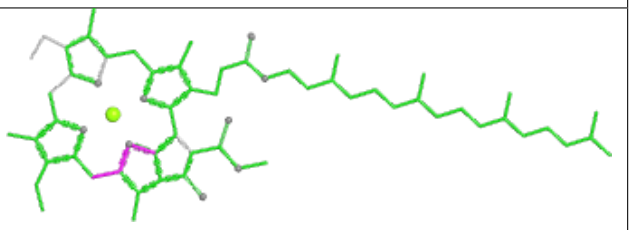
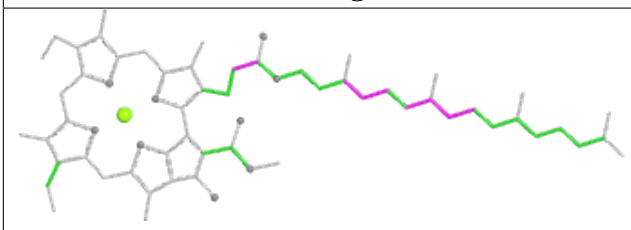
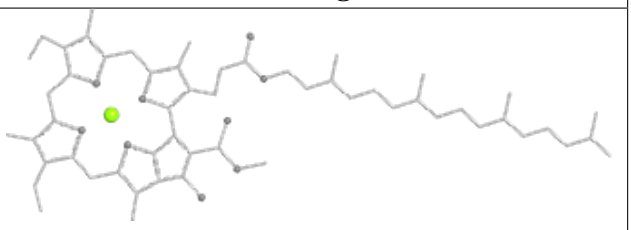
Bond angles



Torsions



Rings

Ligand CLA B 809	
 Bond lengths	 Bond angles
 Torsions	 Rings

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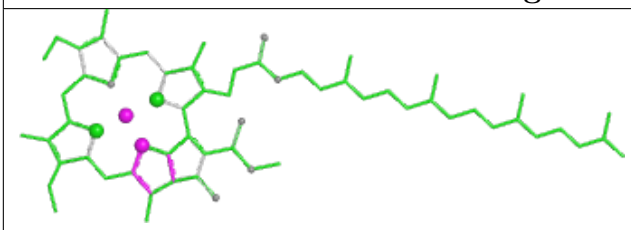
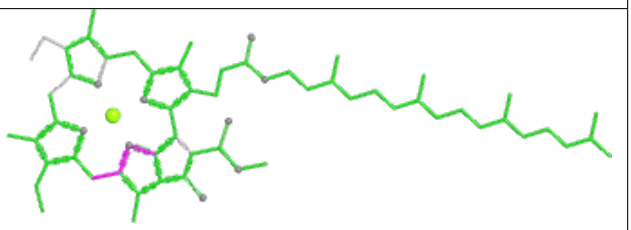
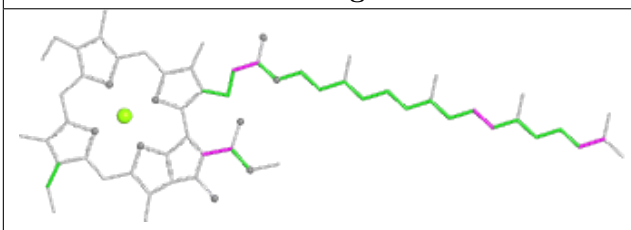
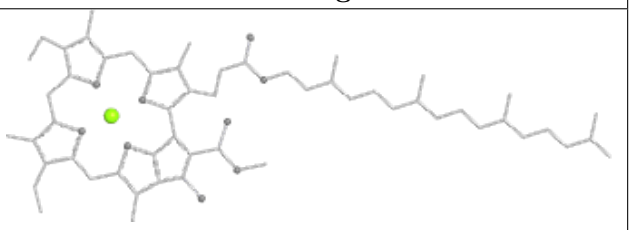
 Bond lengths	 Bond angles
 Torsions	 Rings

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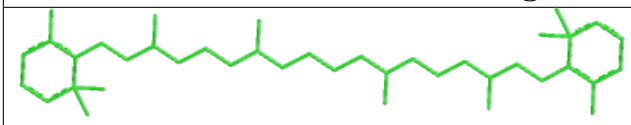
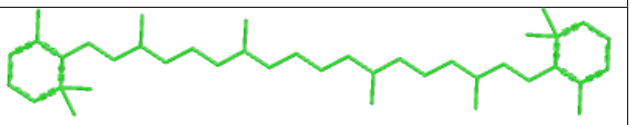
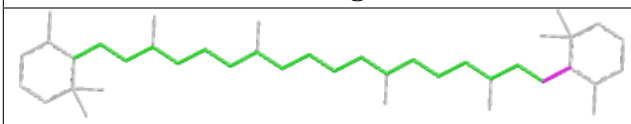
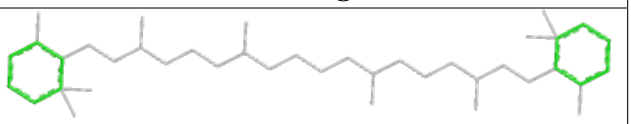
 Bond lengths	 Bond angles
 Torsions	 Rings

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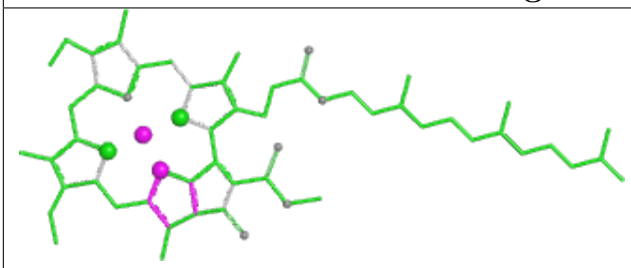
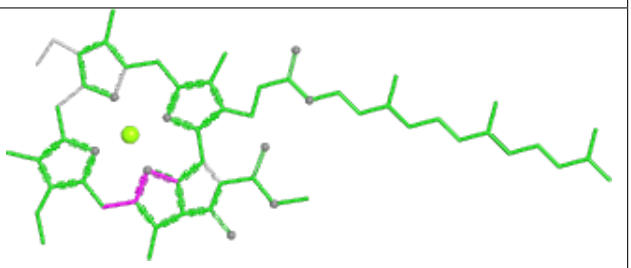
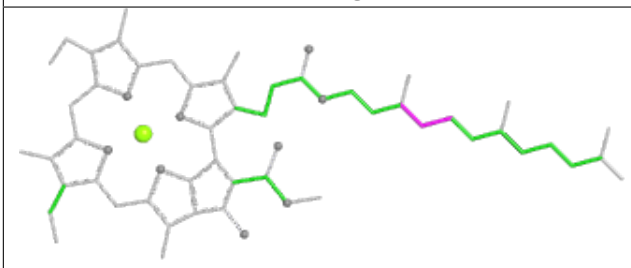
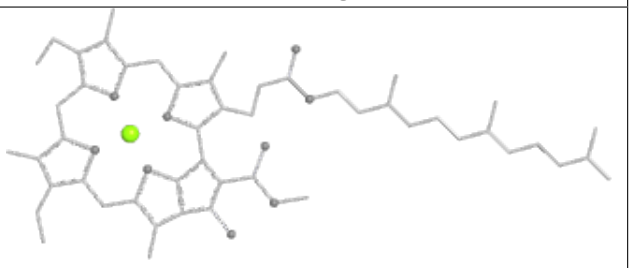
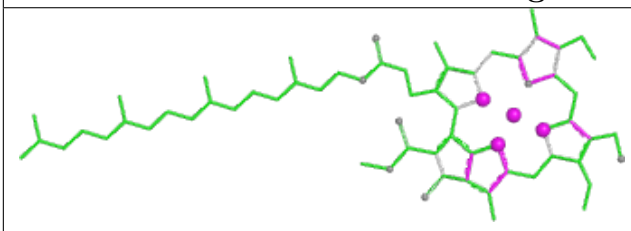
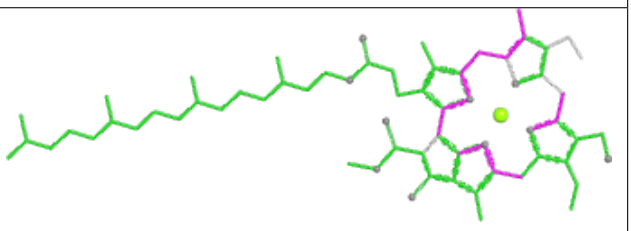
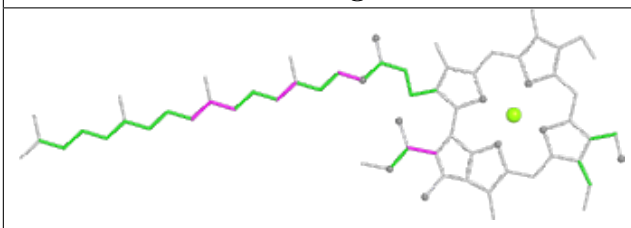
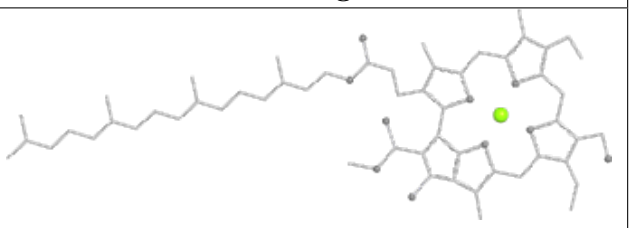
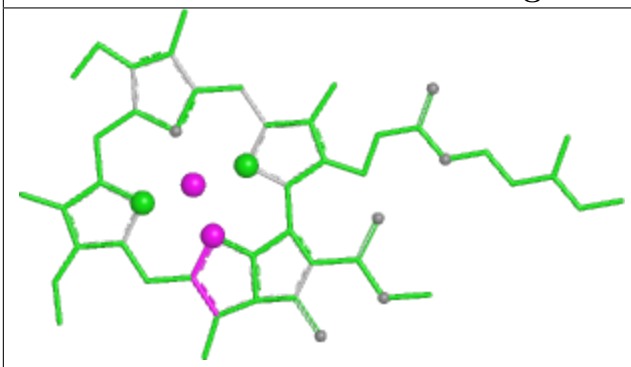
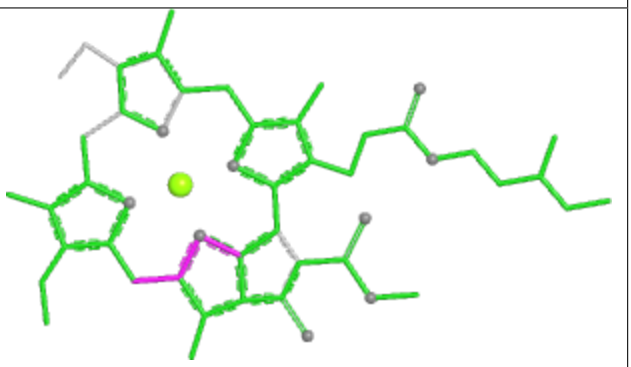
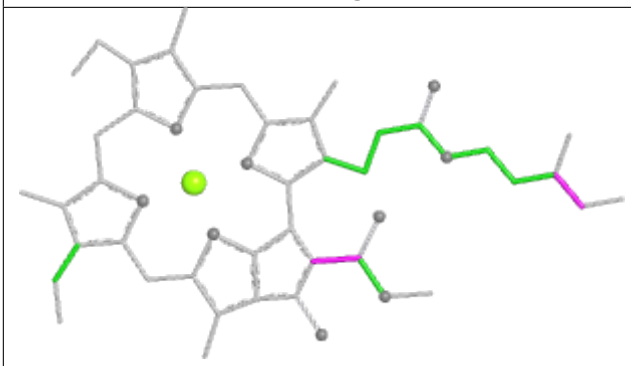
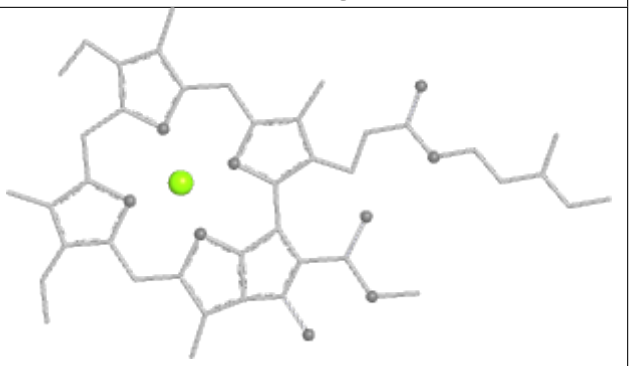
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CHL 1 601	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA A 838	
	
Bond lengths	Bond angles
	
Torsions	Rings

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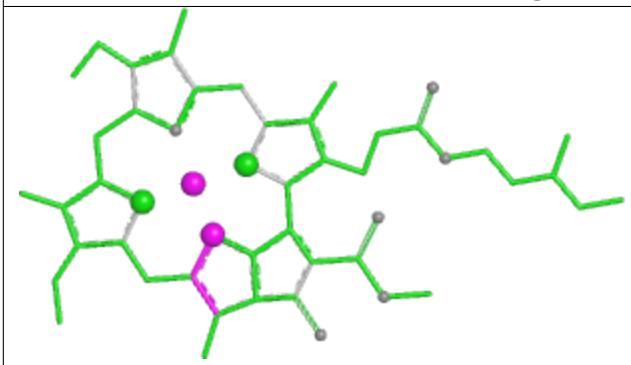
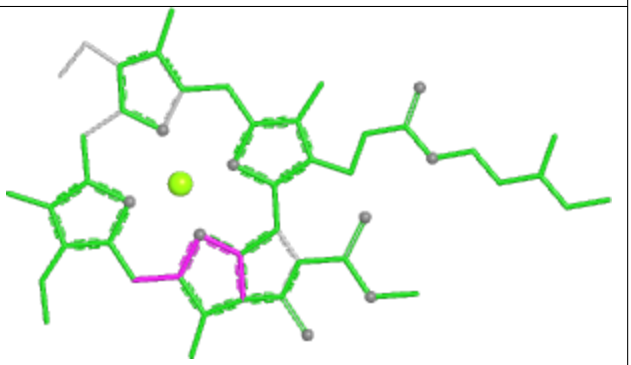
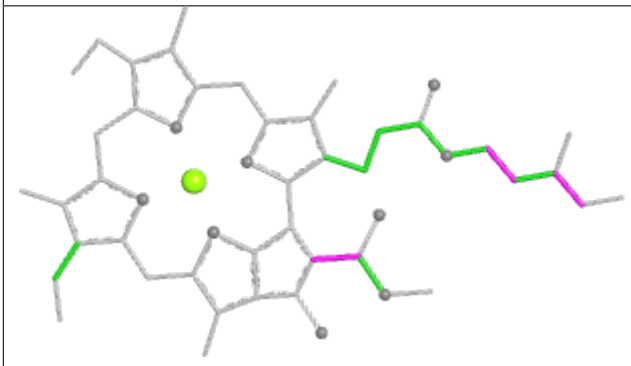
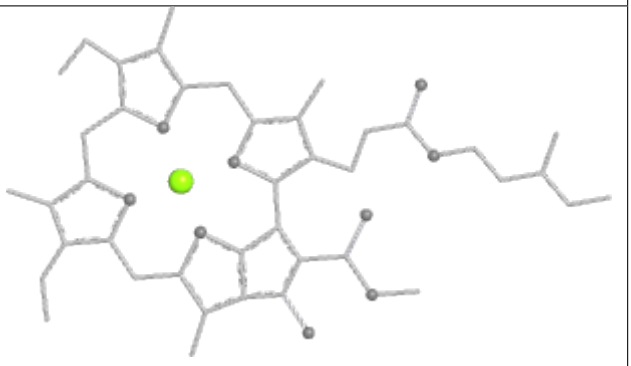
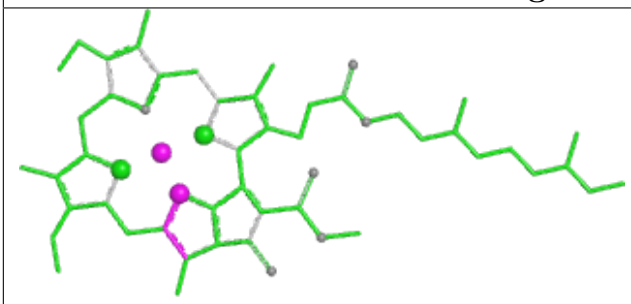
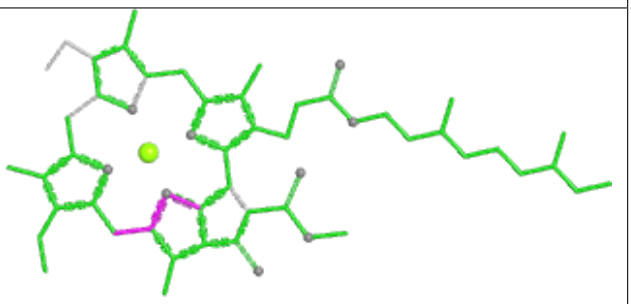
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA 5 613	
	
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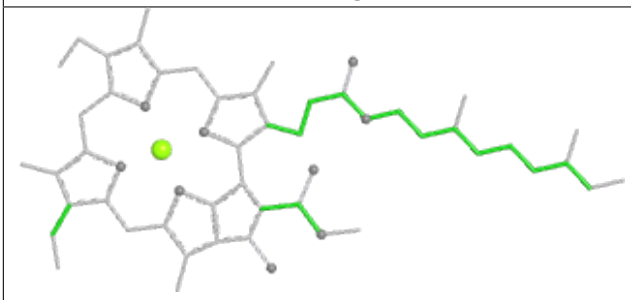
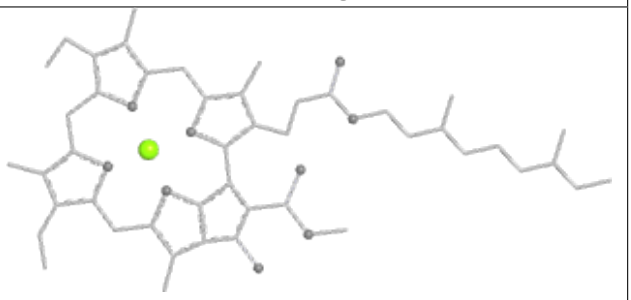
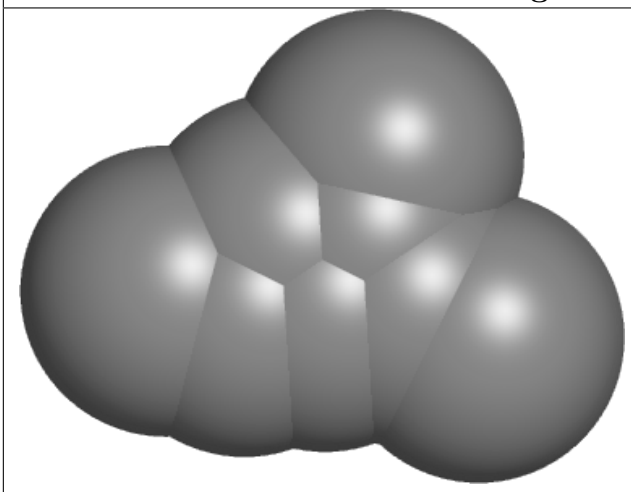
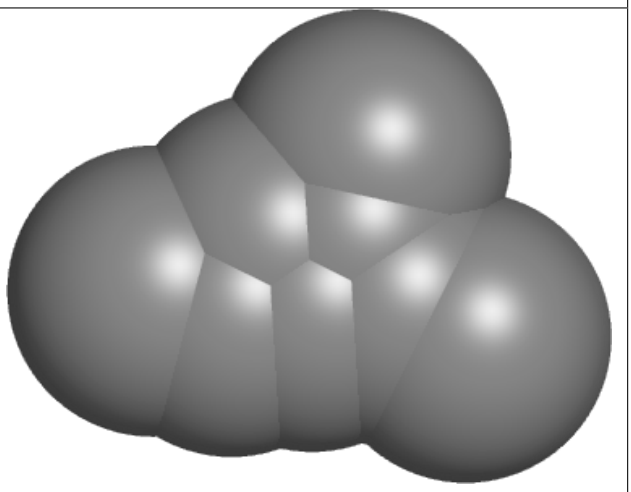
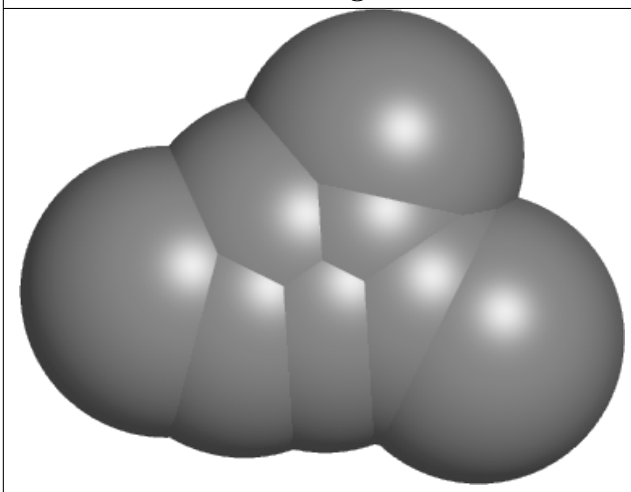
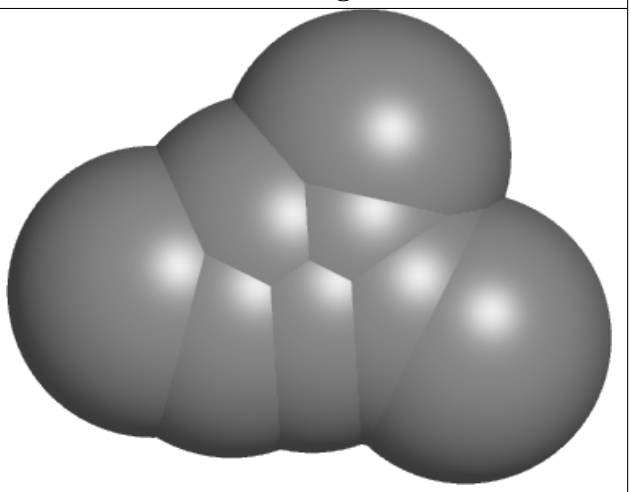
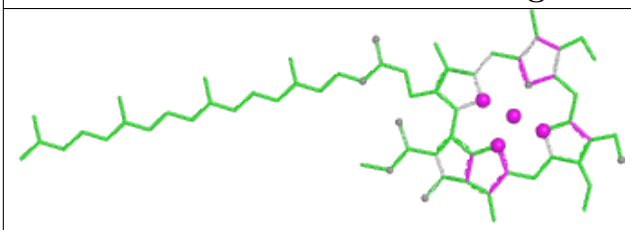
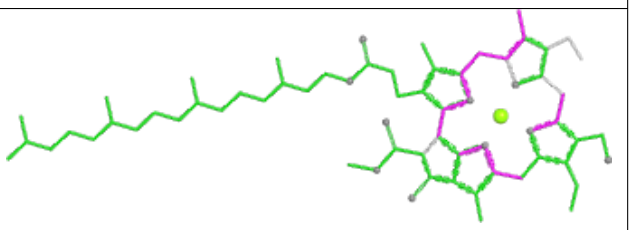
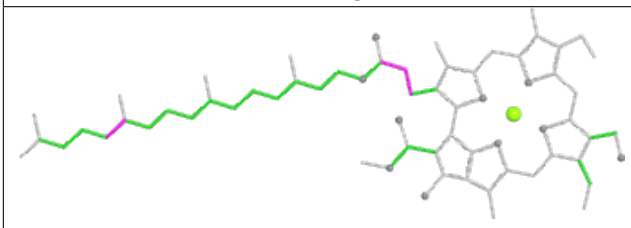
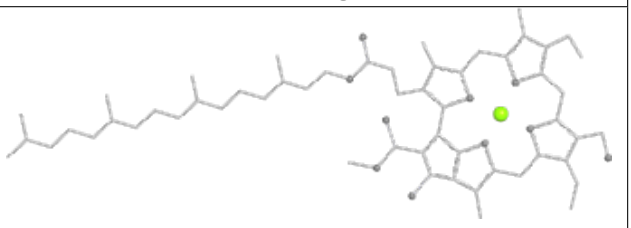
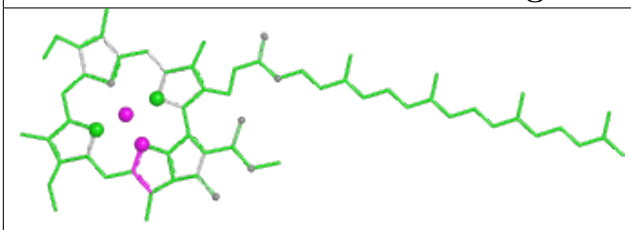
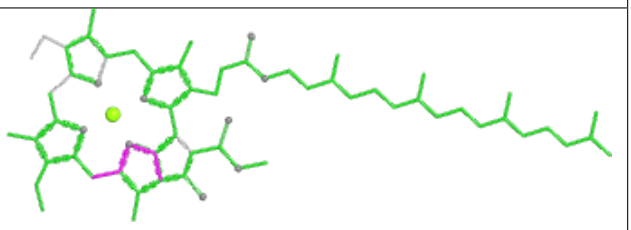
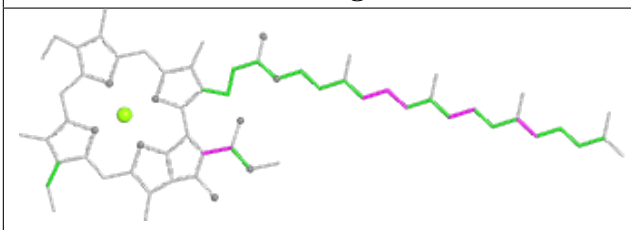
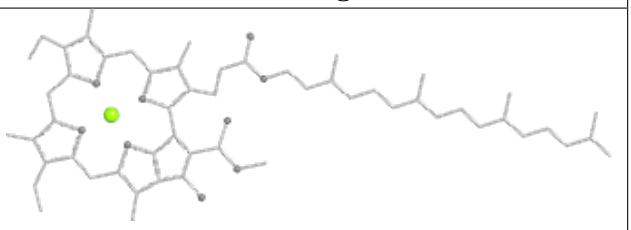
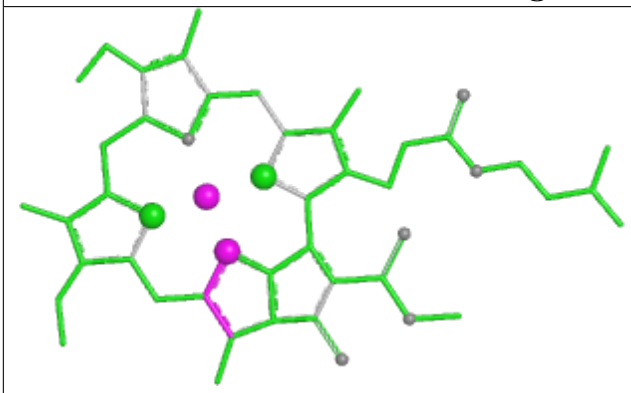
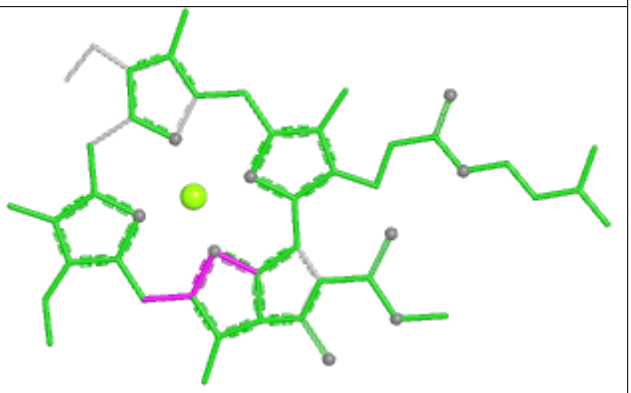
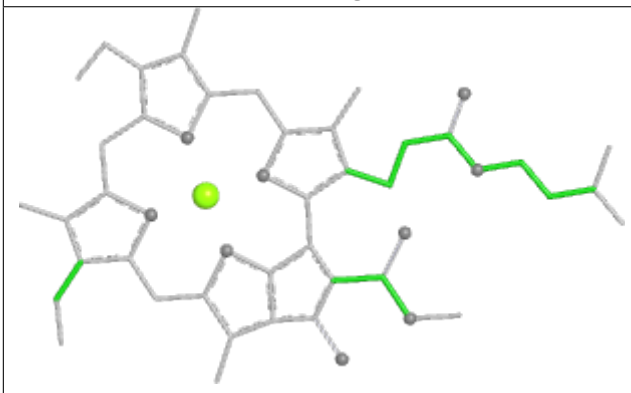
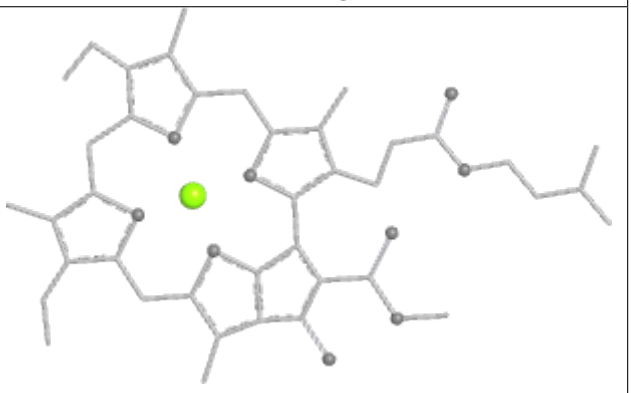
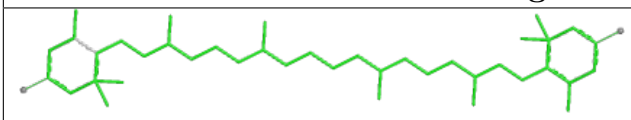
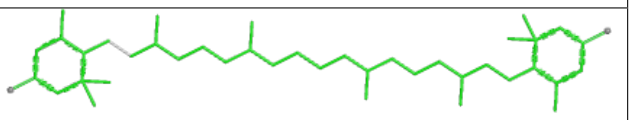
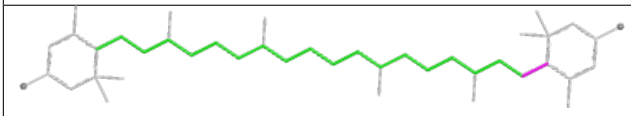
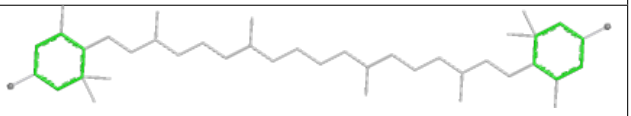
	
Torsions	**Rings**

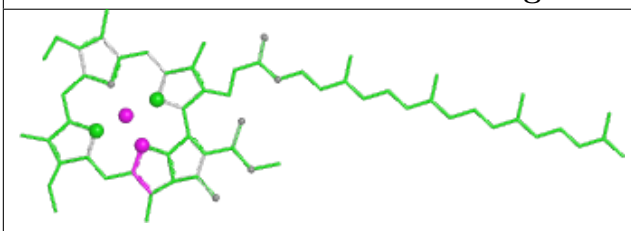
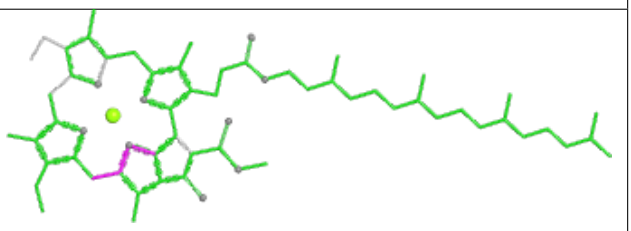
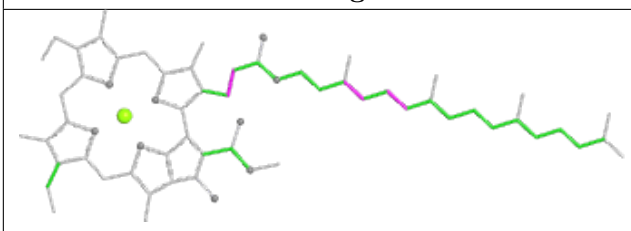
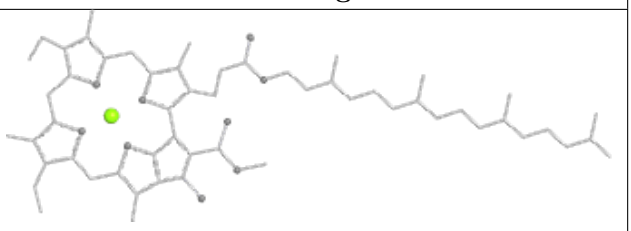
Ligand SF4 A 853	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CHL 4 608	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA L 203	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA 6 614	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand LUT 7 621	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA A 830	
 Bond lengths	 Bond angles
 Torsions	 Rings

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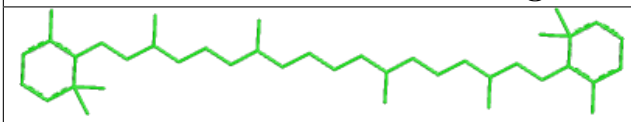
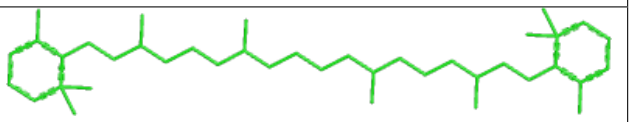
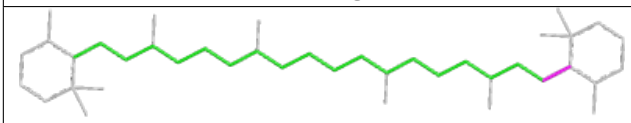
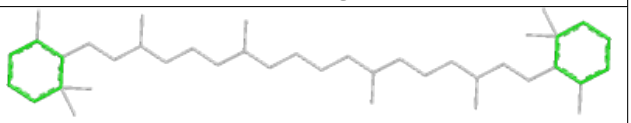
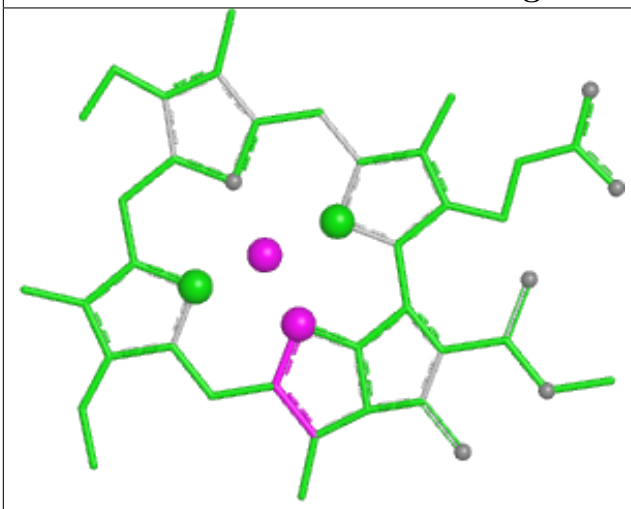
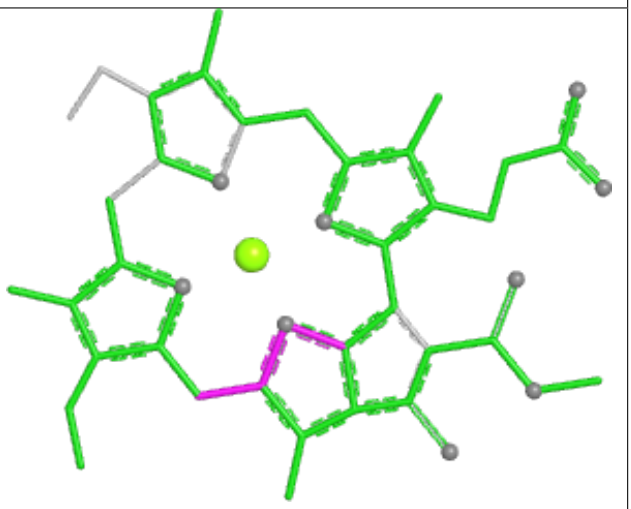
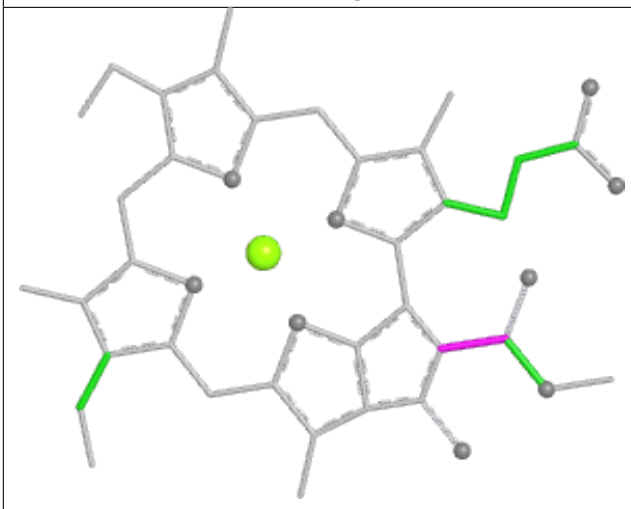
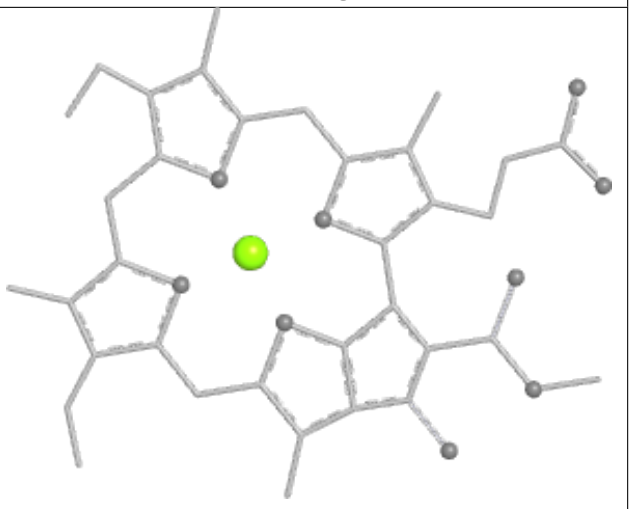
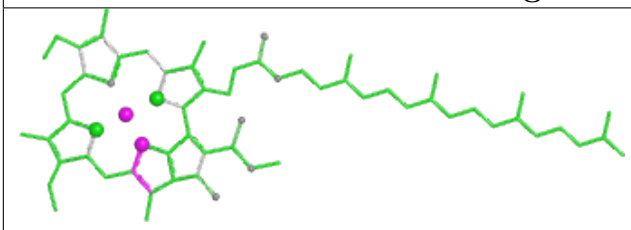
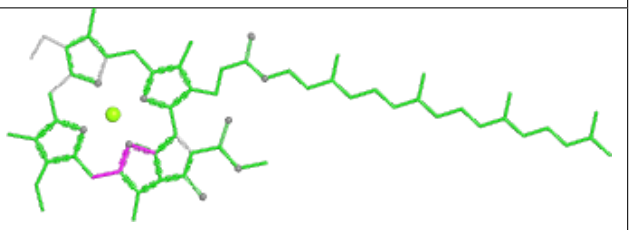
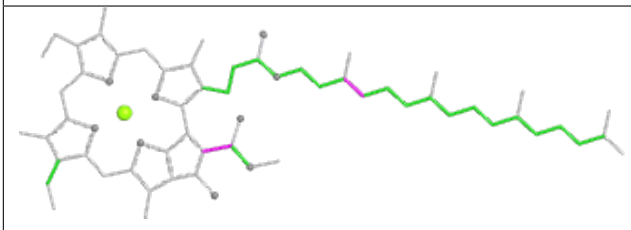
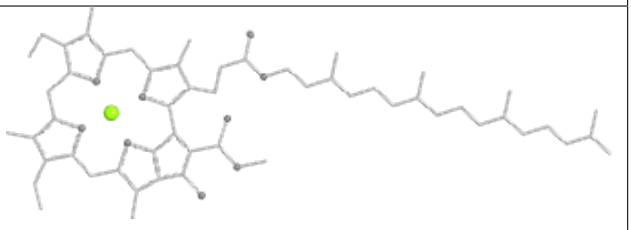
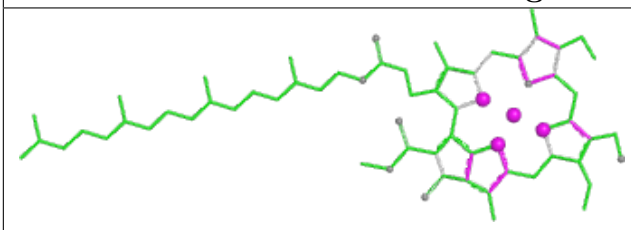
 Bond lengths	 Bond angles
 Torsions	 Rings

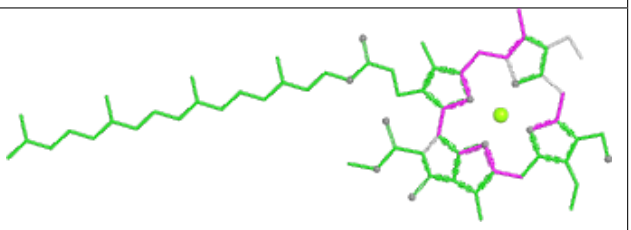
Ligand CLA K 206	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA A 835	
 Bond lengths	 Bond angles
 Torsions	 Rings

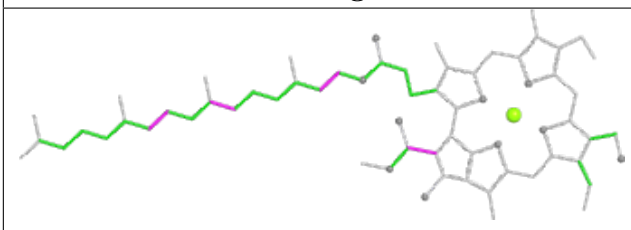
Ligand CHL Z 601



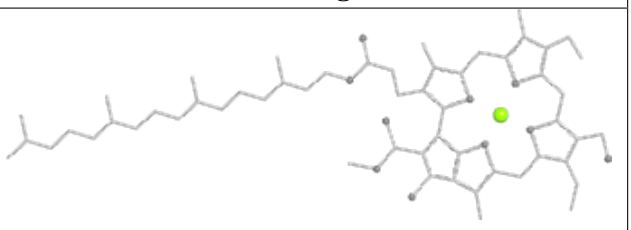
Bond lengths



Bond angles

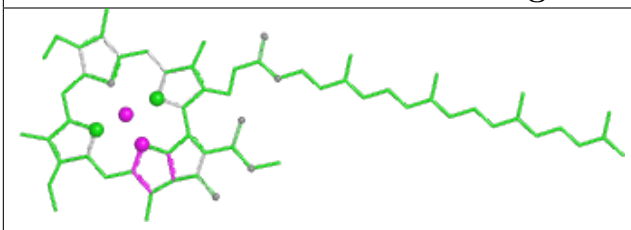


Torsions

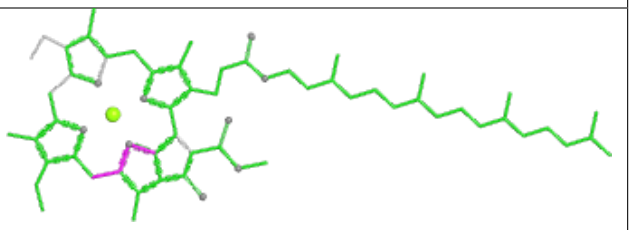


Rings

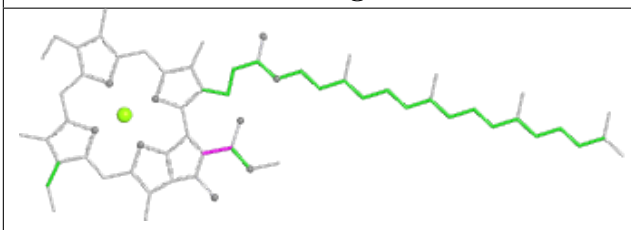
Ligand CLA 5 602



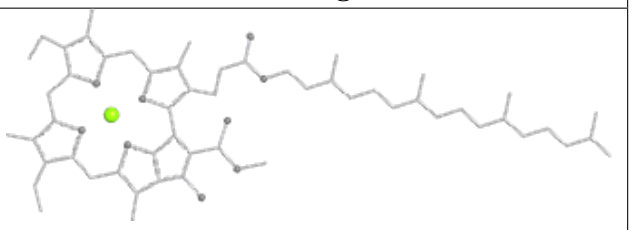
Bond lengths



Bond angles

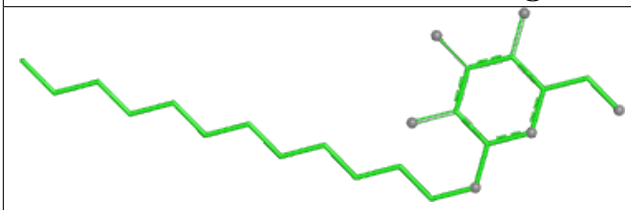


Torsions

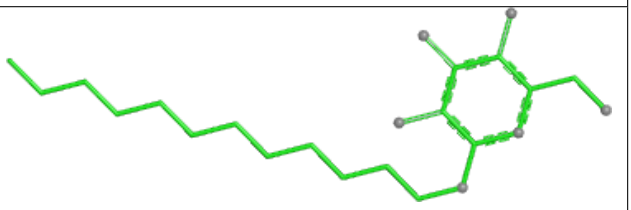


Rings

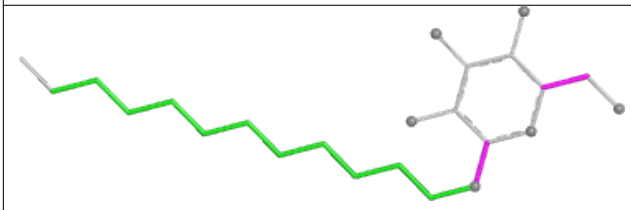
Ligand LMU 6 631



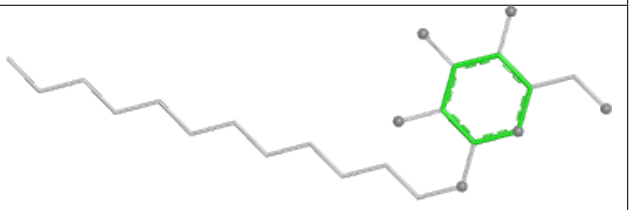
Bond lengths



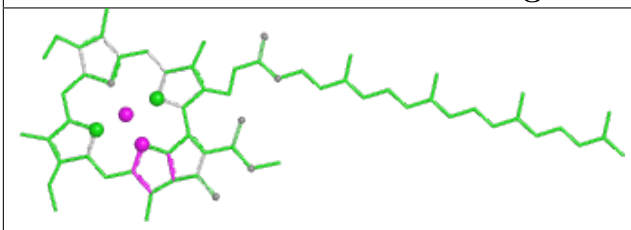
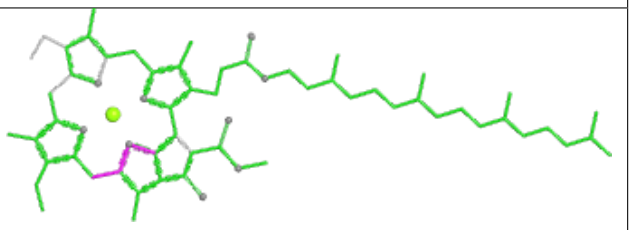
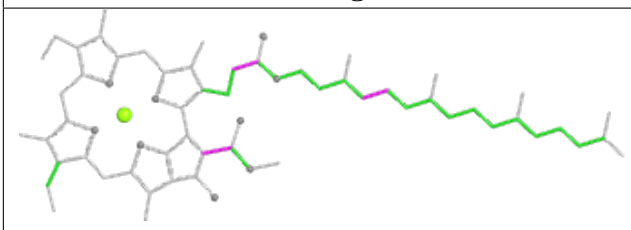
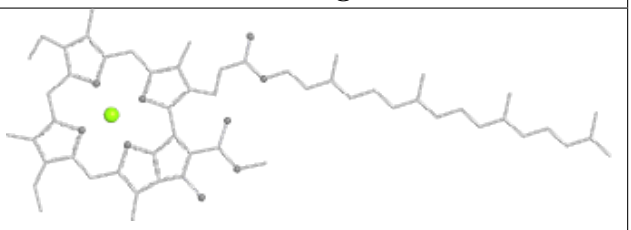
Bond angles

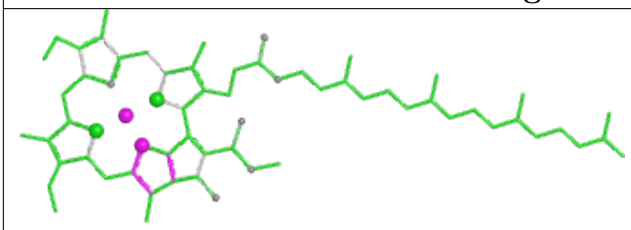
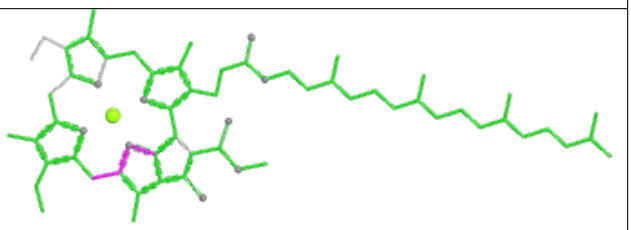
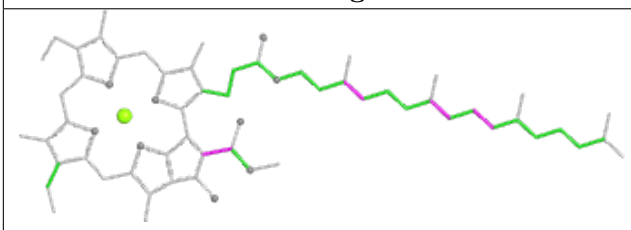
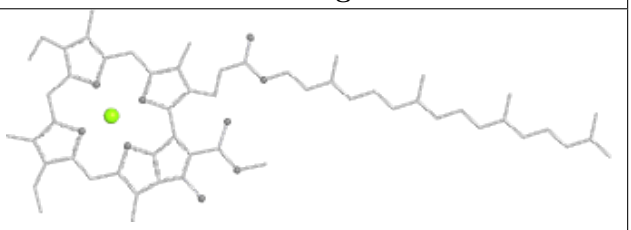


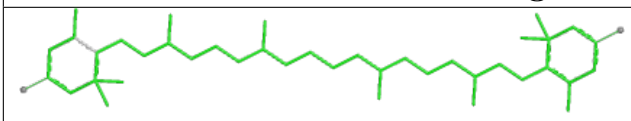
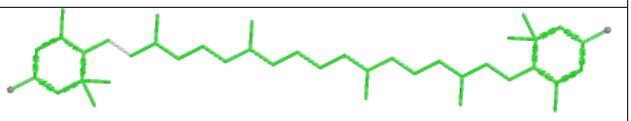
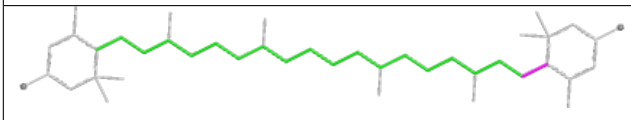
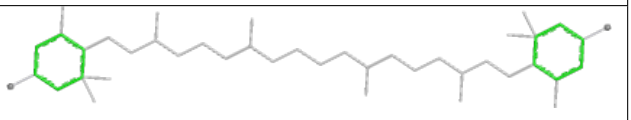
Torsions



Rings

Ligand CLA A 807	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA A 841	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand LUT 3 621	
 Bond lengths	 Bond angles
 Torsions	 Rings

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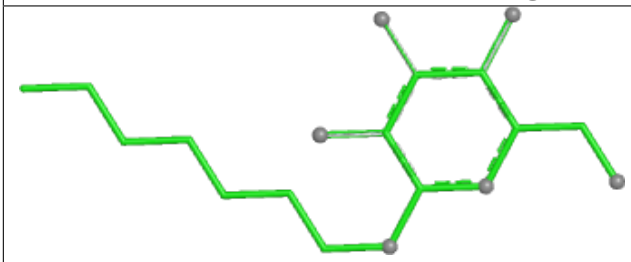
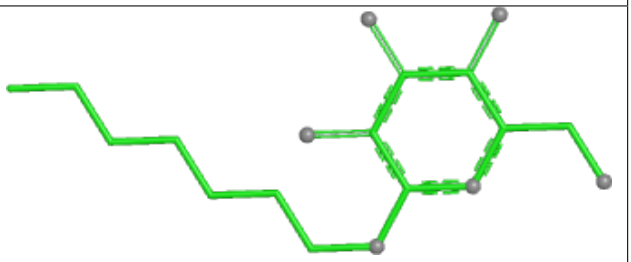
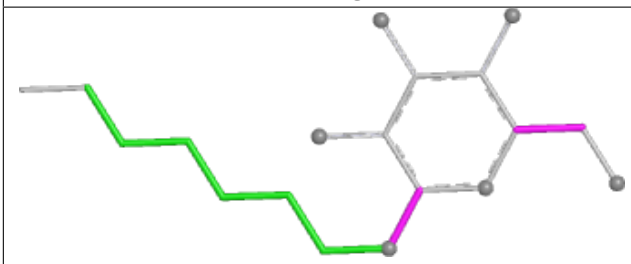
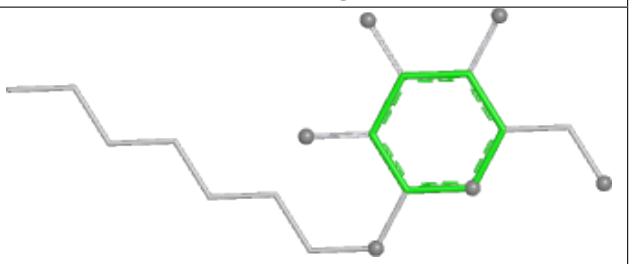
 Bond lengths	 Bond angles
 Torsions	 Rings

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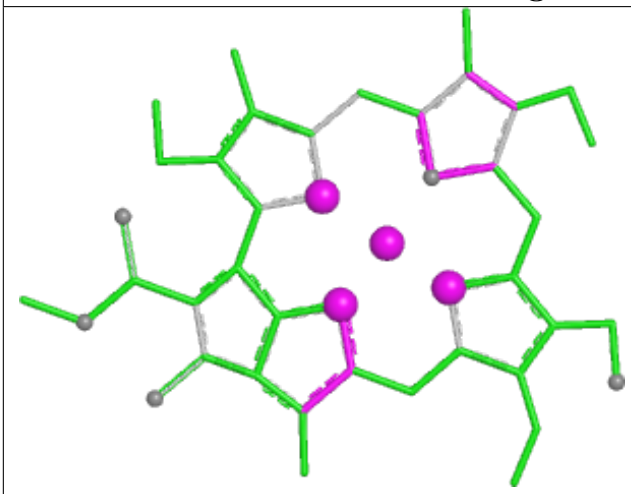
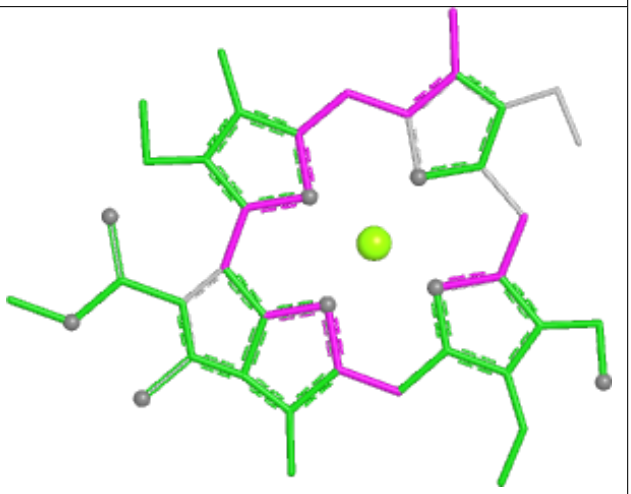
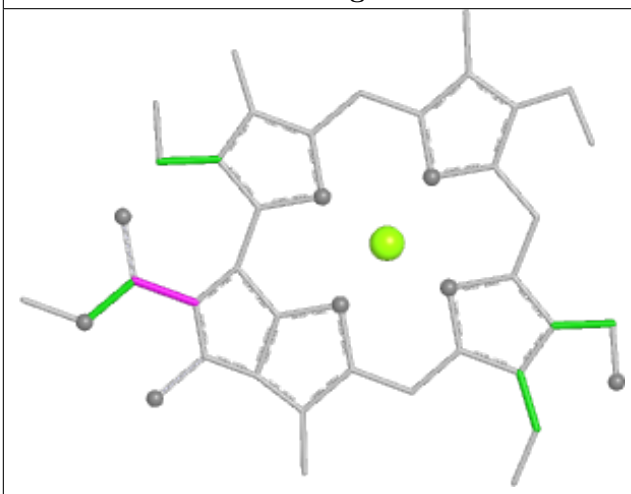
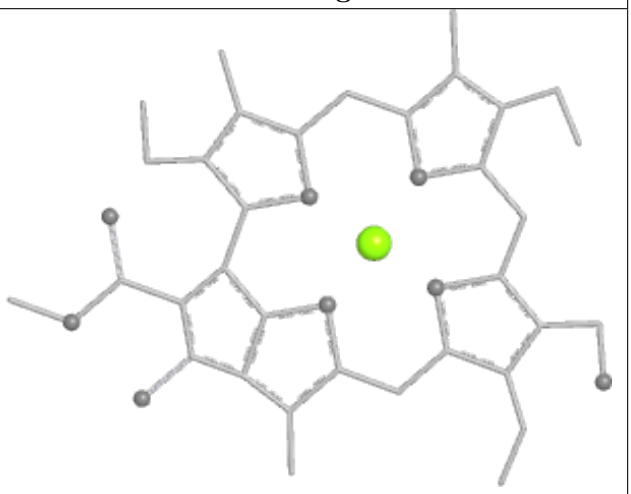
 Bond lengths	 Bond angles
 Torsions	 Rings

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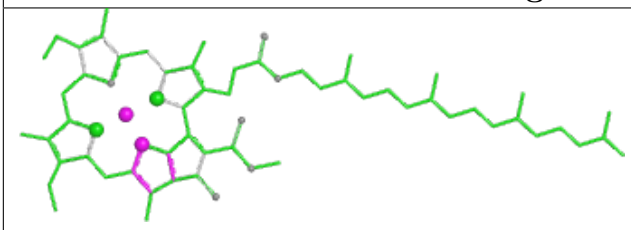
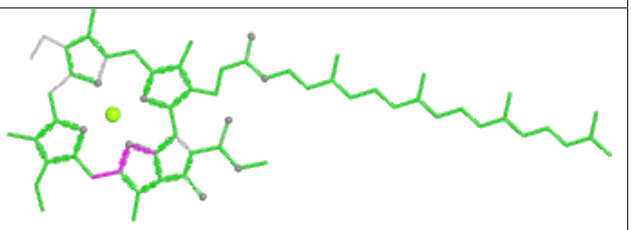
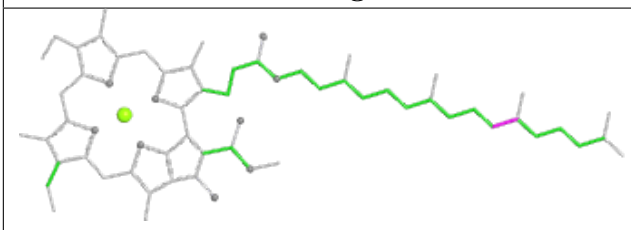
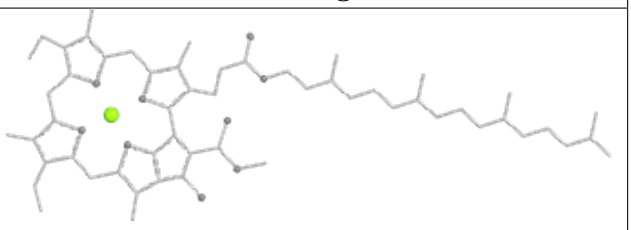
 Bond lengths	 Bond angles
 Torsions	 Rings

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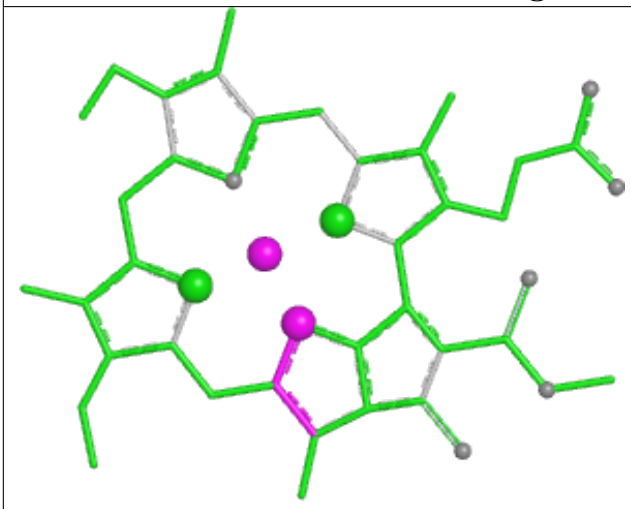
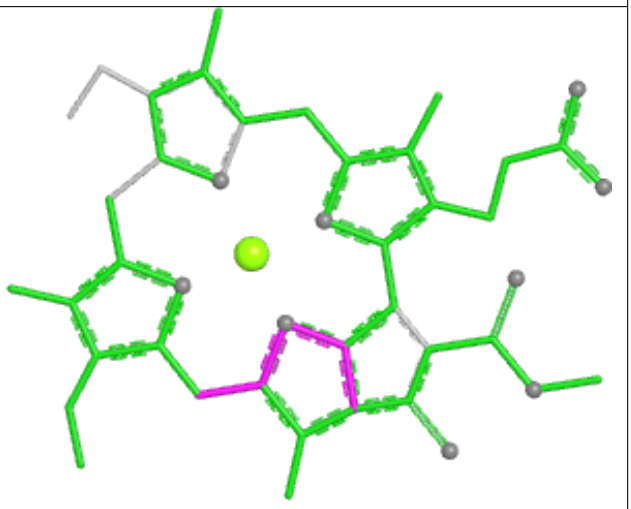
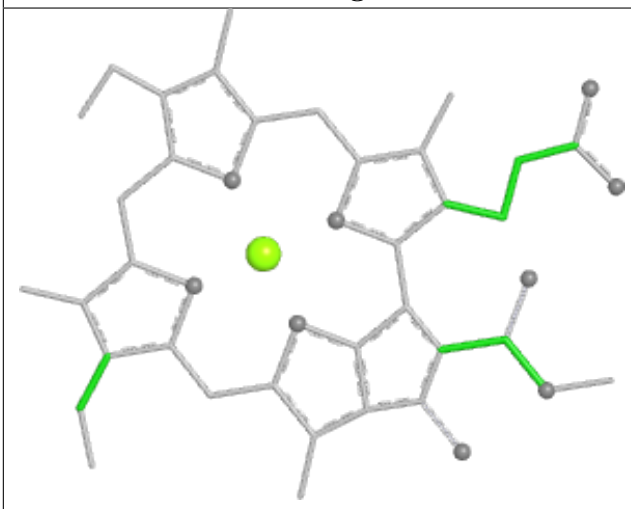
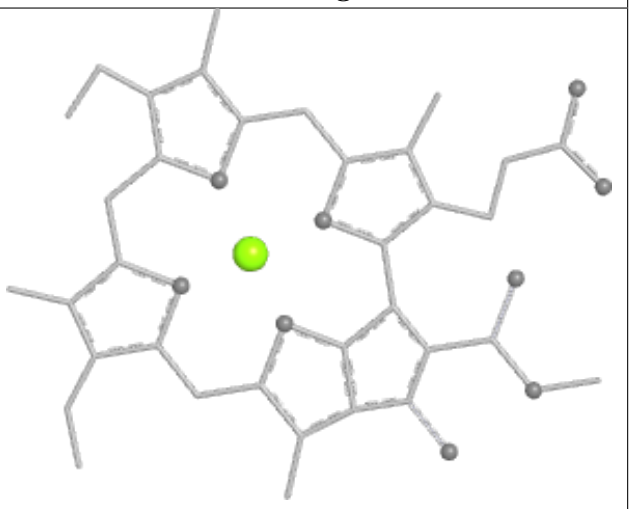
 Bond lengths	 Bond angles
 Torsions	 Rings

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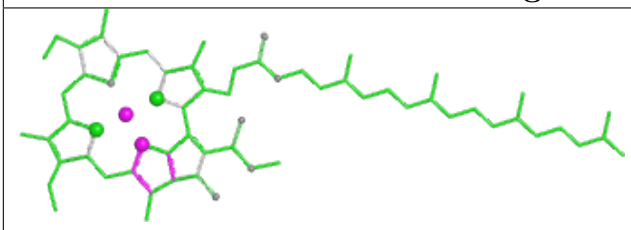
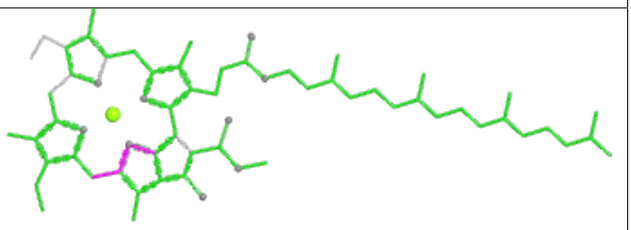
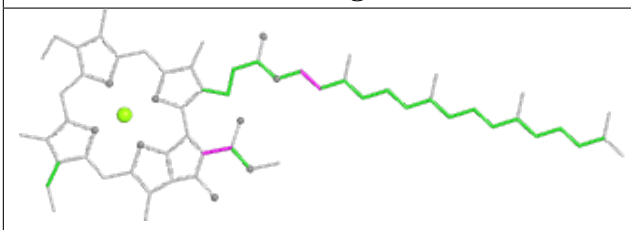
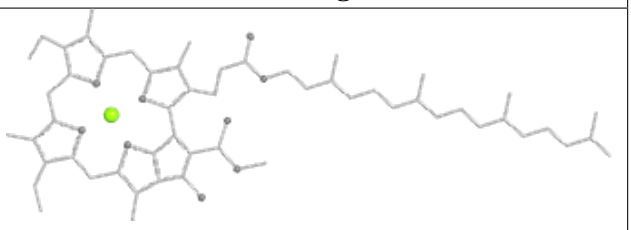
 Bond lengths	 Bond angles
 Torsions	 Rings

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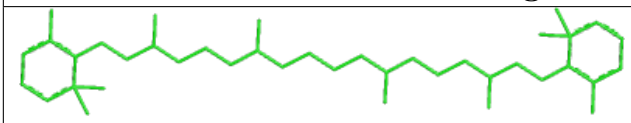
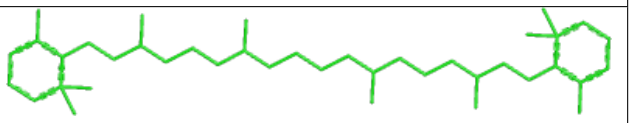
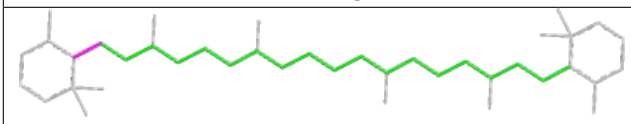
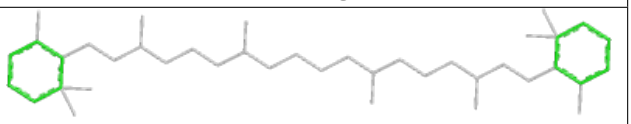
 Bond lengths	 Bond angles
 Torsions	 Rings

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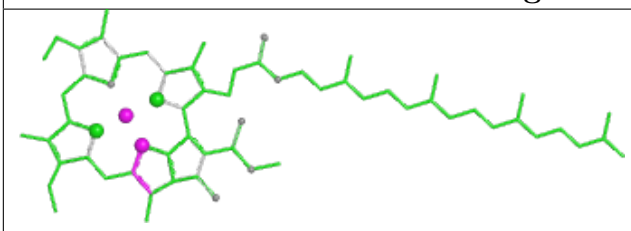
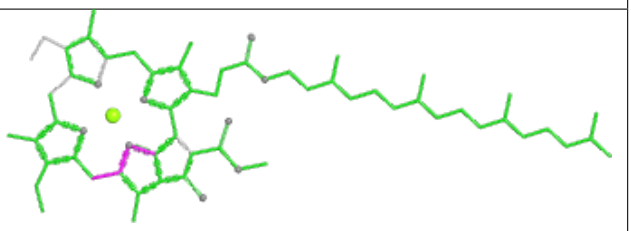
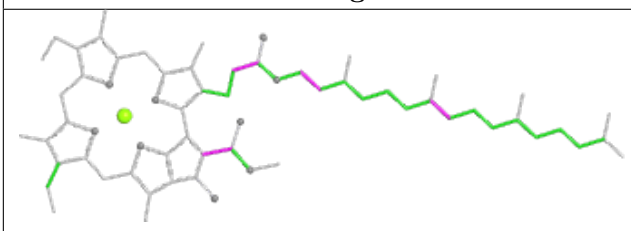
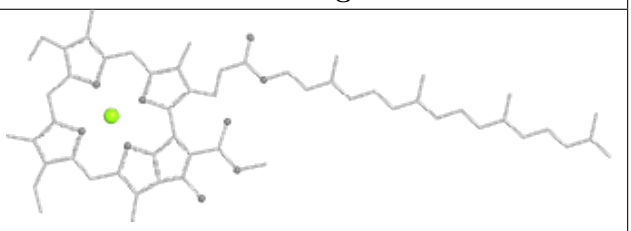
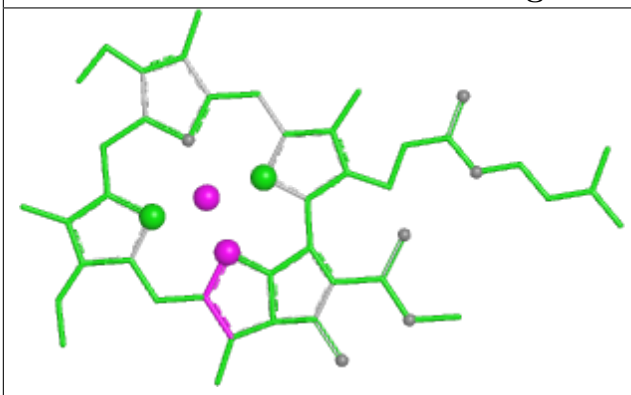
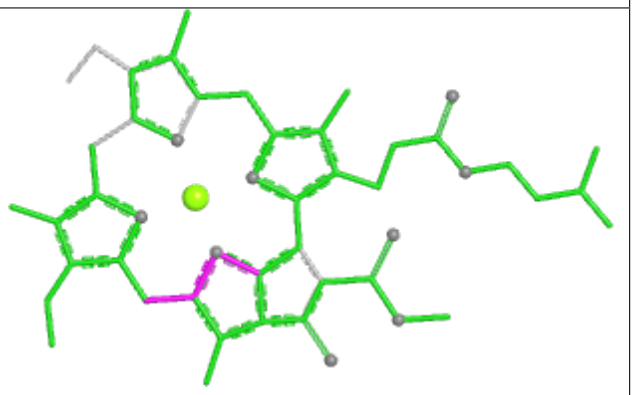
 Bond lengths	 Bond angles
 Torsions	 Rings

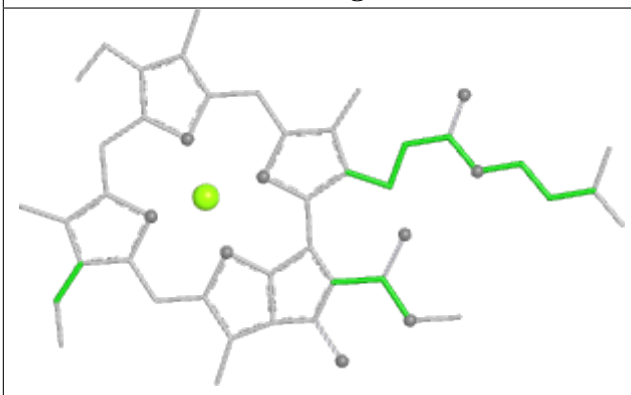
Ligand CLA Z 614



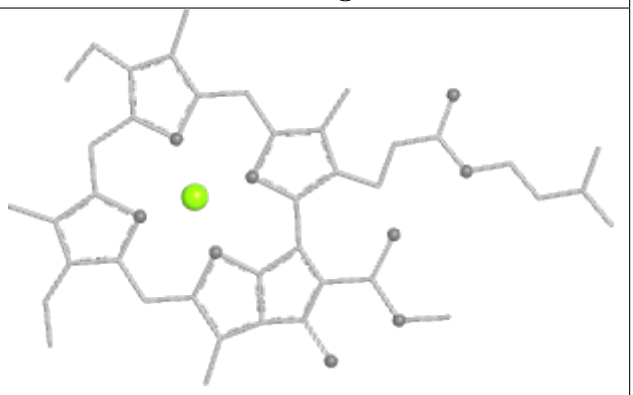
Bond lengths



Bond angles

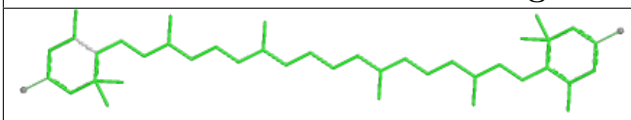


Torsions

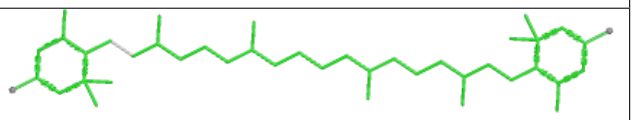


Rings

Ligand LUT 1 619



Bond lengths



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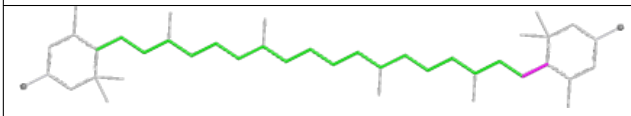

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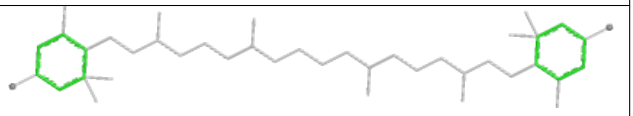
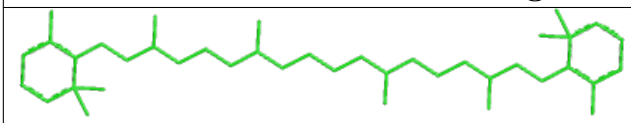
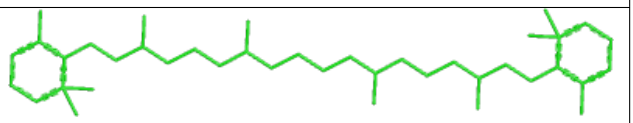


Rings

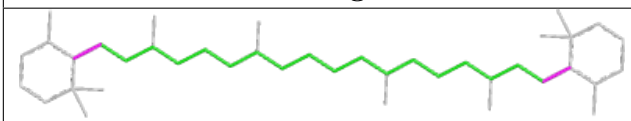
Ligand BCR 8 619



Bond lengths



Bond angles



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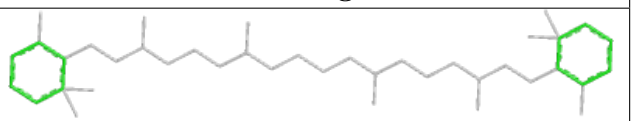
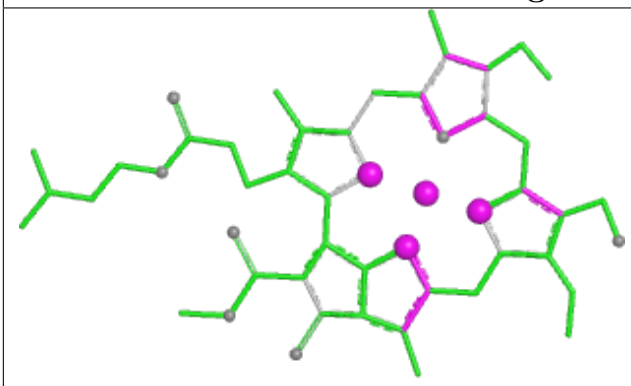
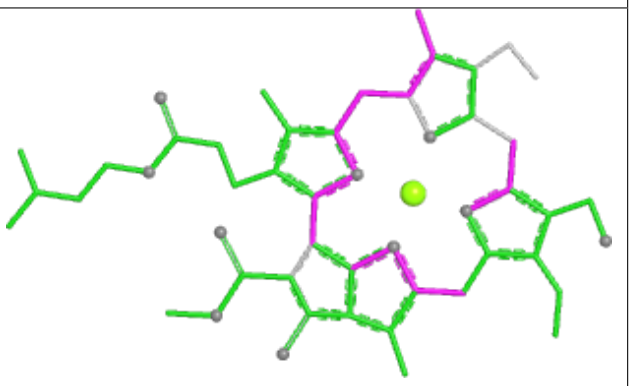


Rings

Ligand CHL 9 607	
	
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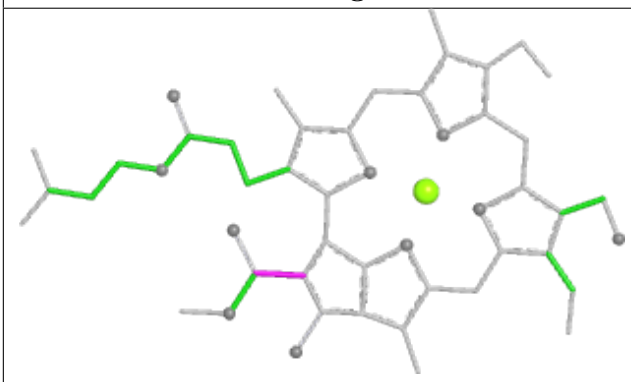	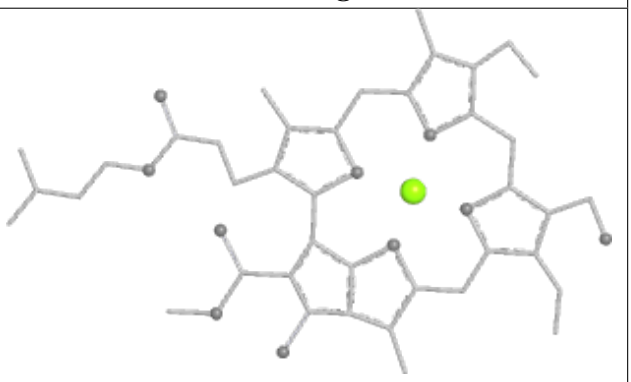
Torsions	Rings

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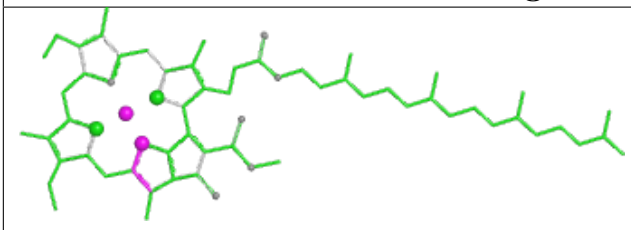
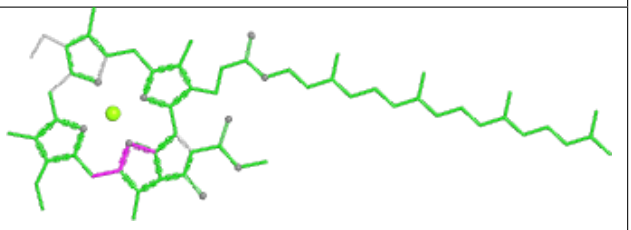
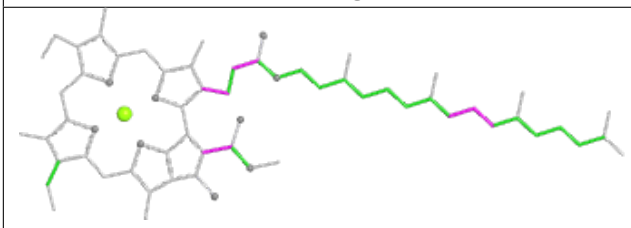
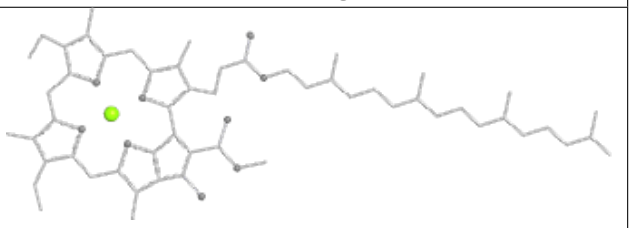
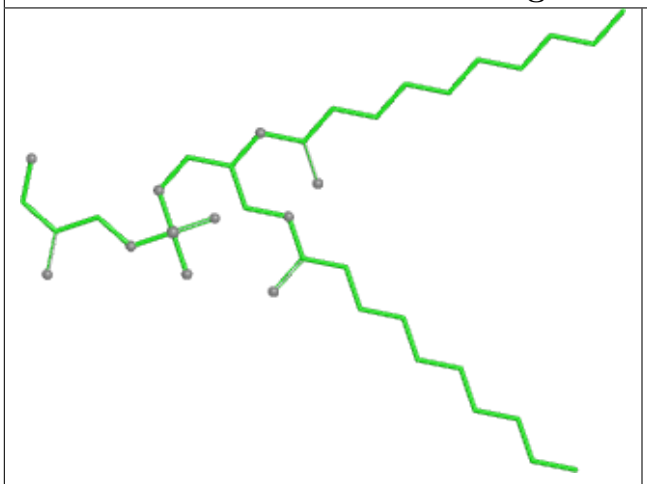
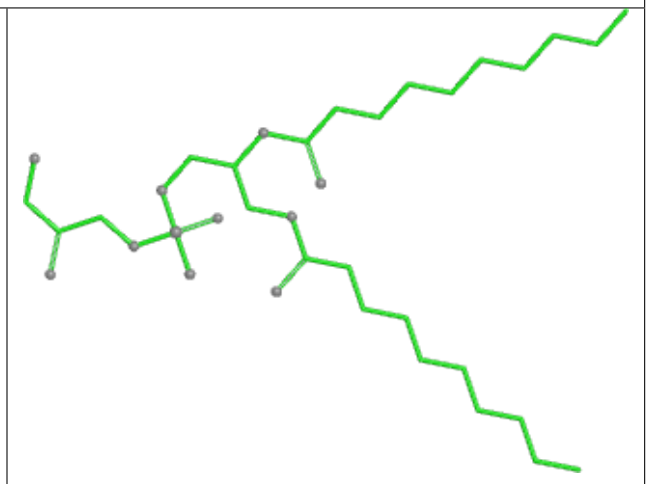
	
Bond lengths	Bond angles
	
Torsions	Rings

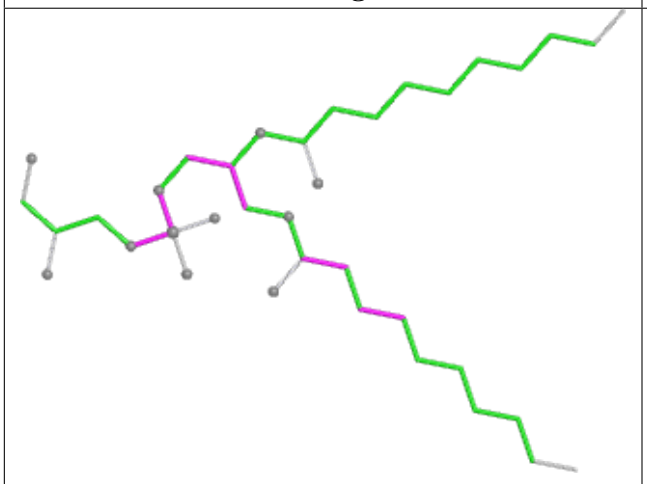
Ligand LHG 5 623



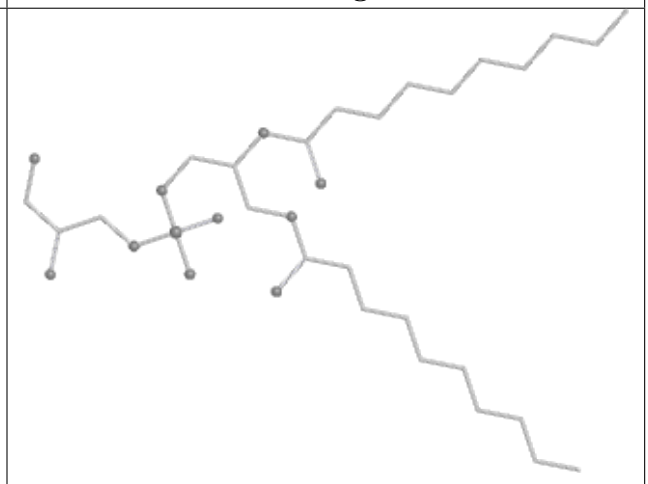
Bond lengths



Bond angles

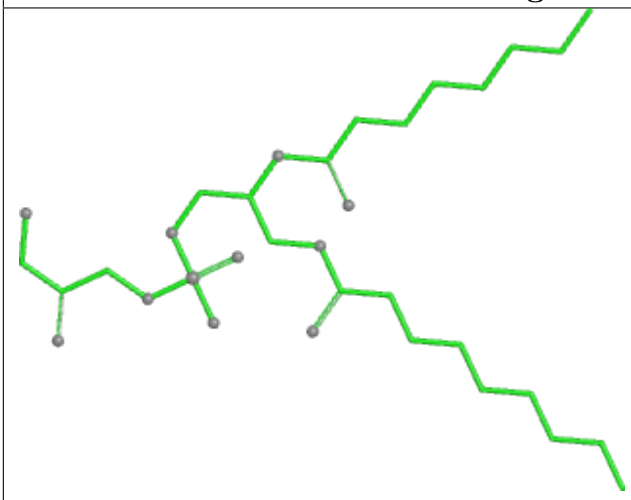


Torsions



Rings

Ligand LHG 9 622



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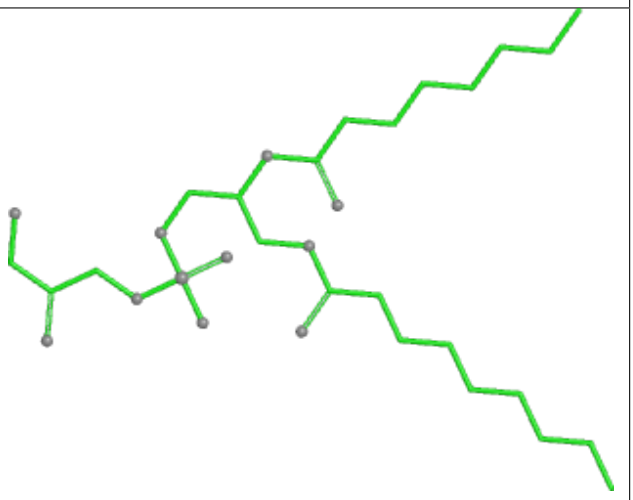
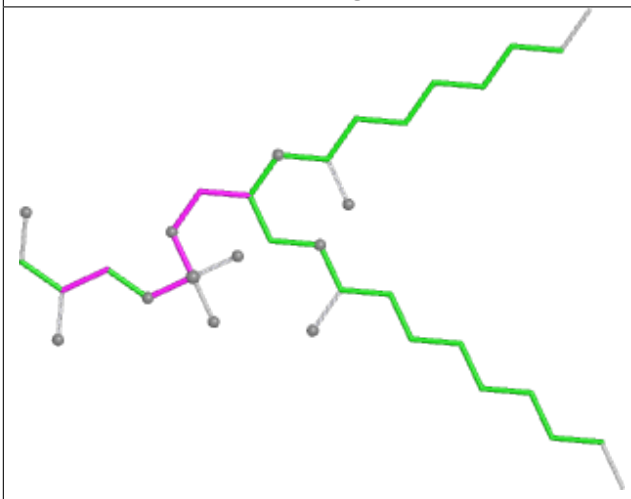
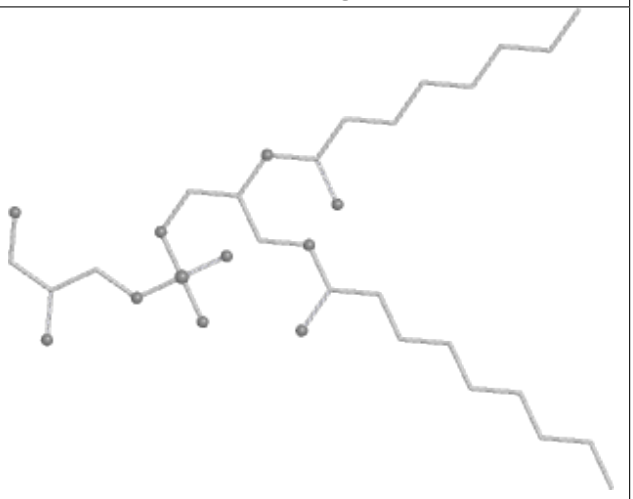


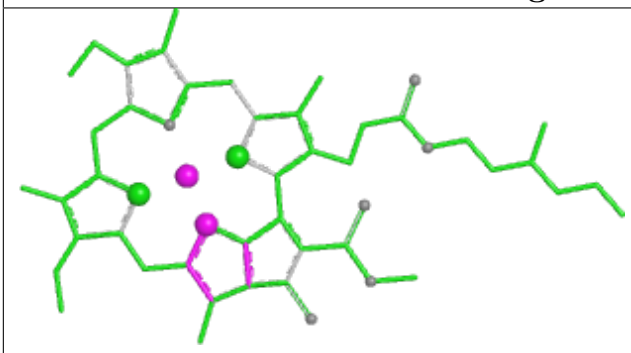
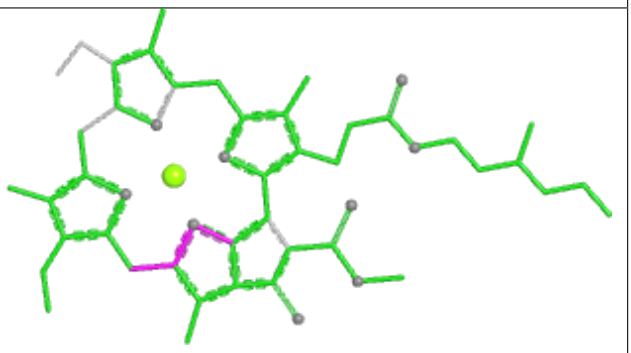
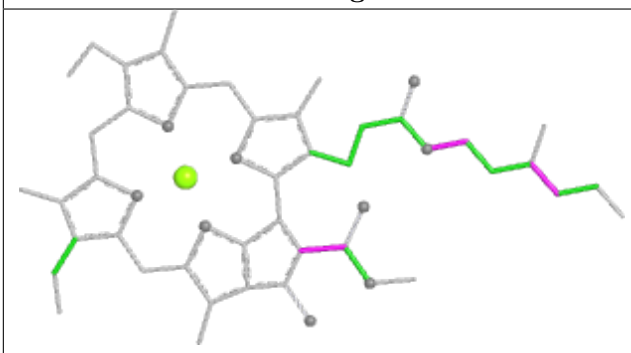
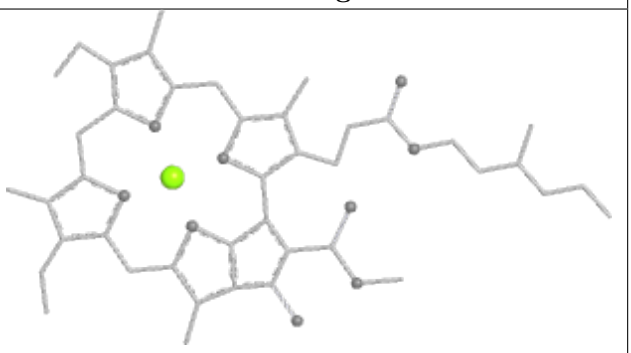
Bond angles

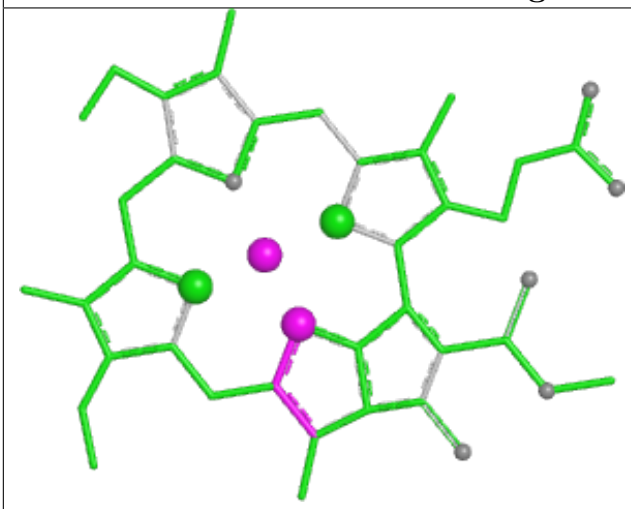
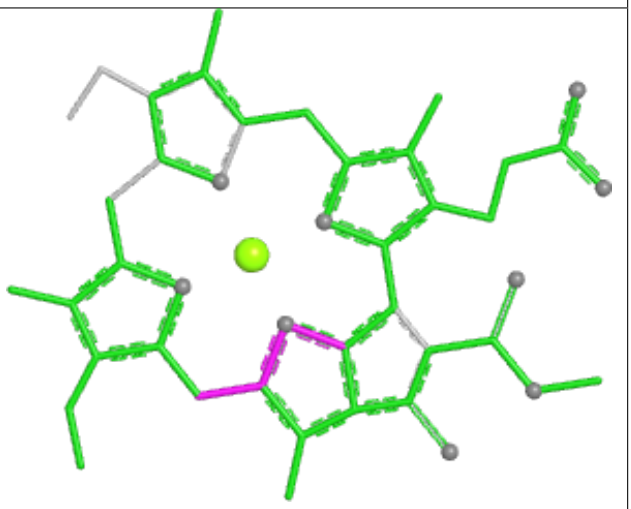
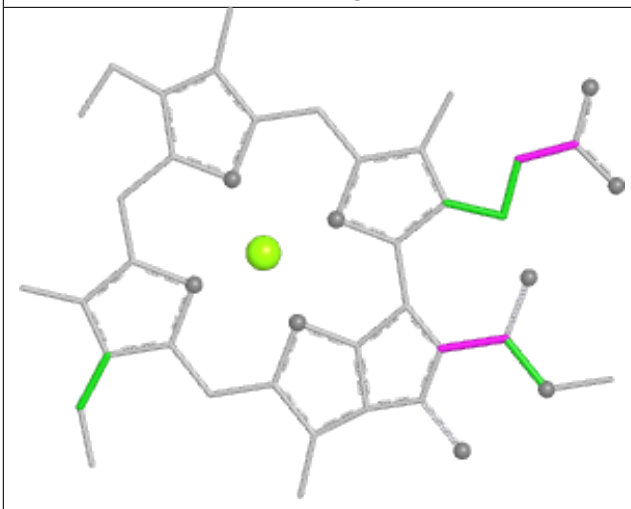
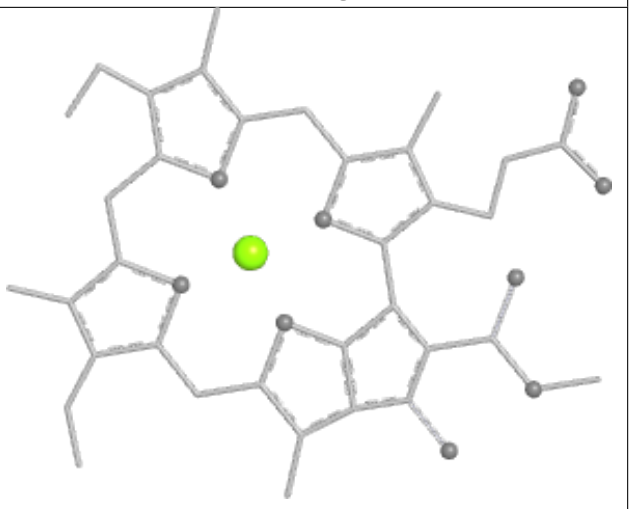


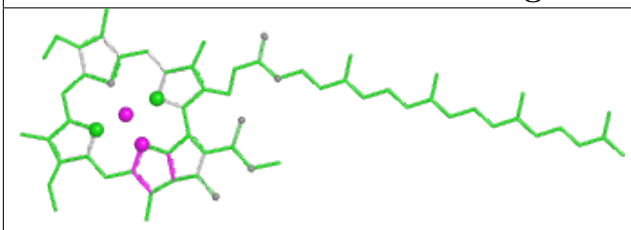
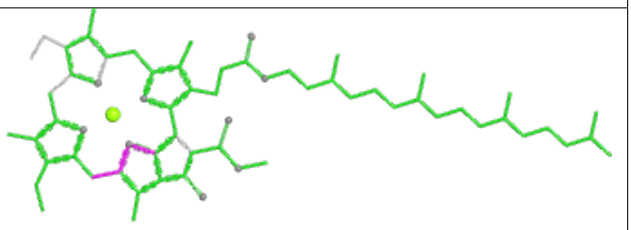
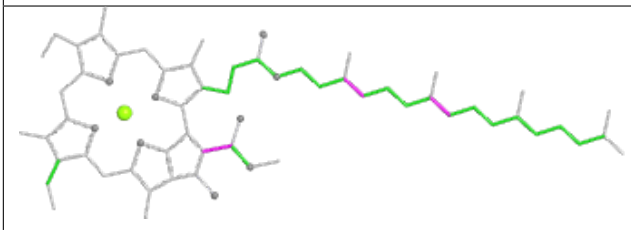
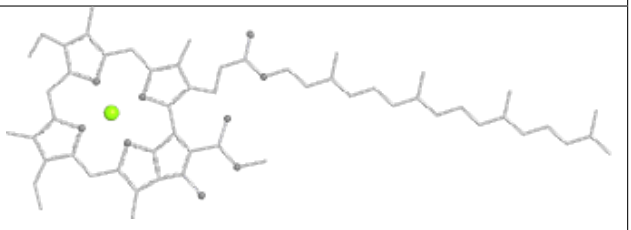
Torsions

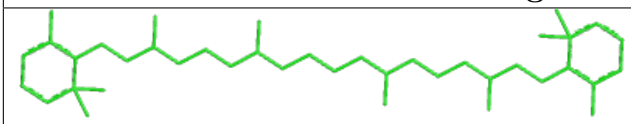
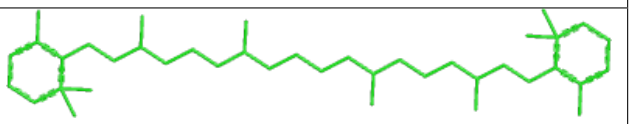
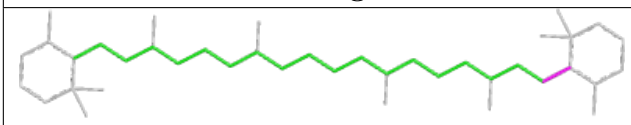
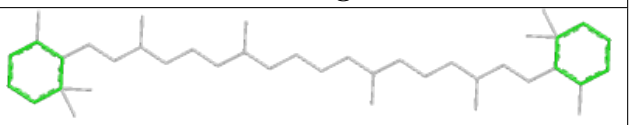


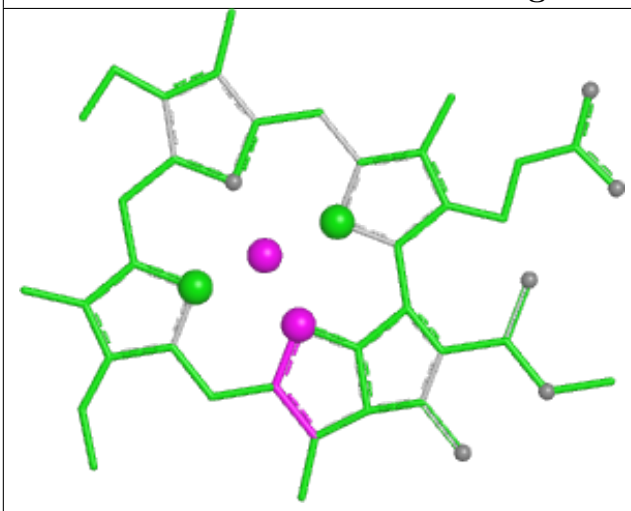
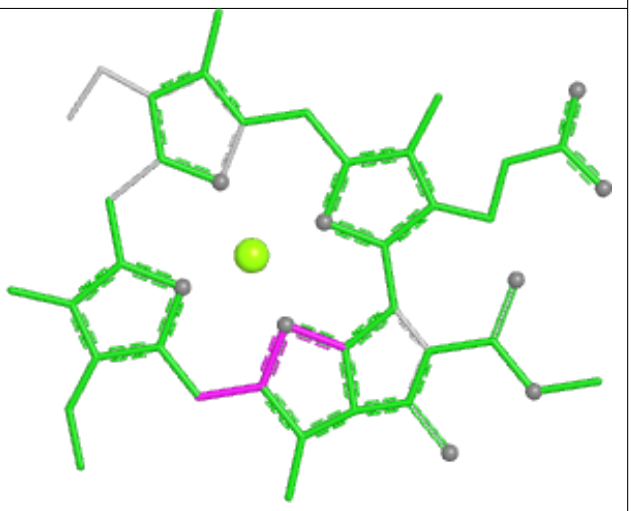
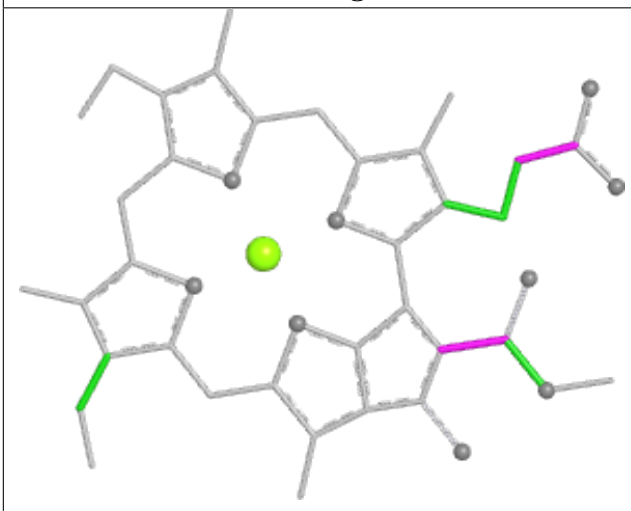
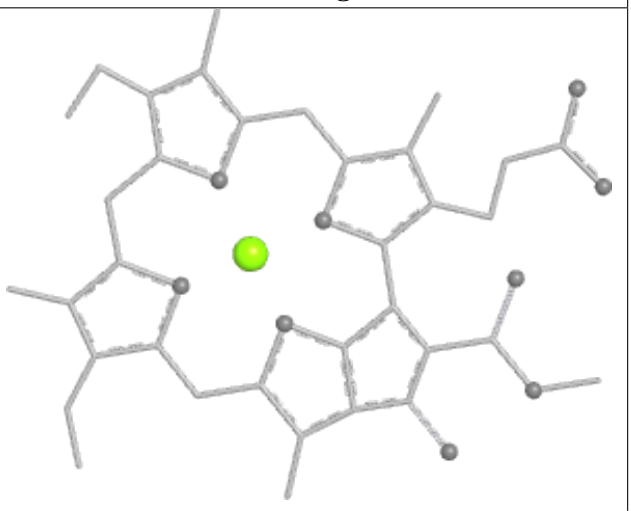
Rings

Ligand CLA 7 603	
	
Bond lengths	**Bond angles**
	
Torsions	**Rings**

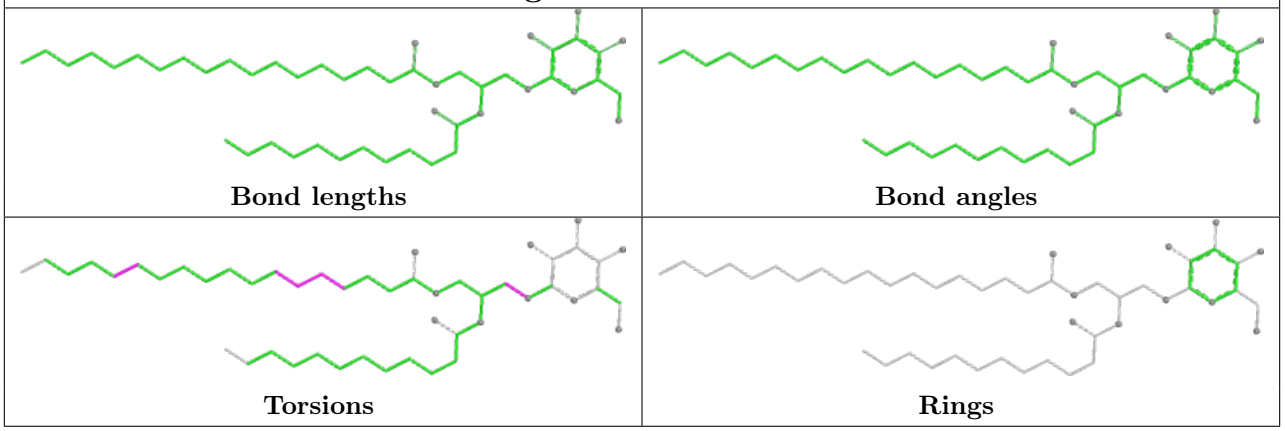
Ligand CLA 1 612	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA B 808	
	
Bond lengths	Bond angles
	
Torsions	Rings

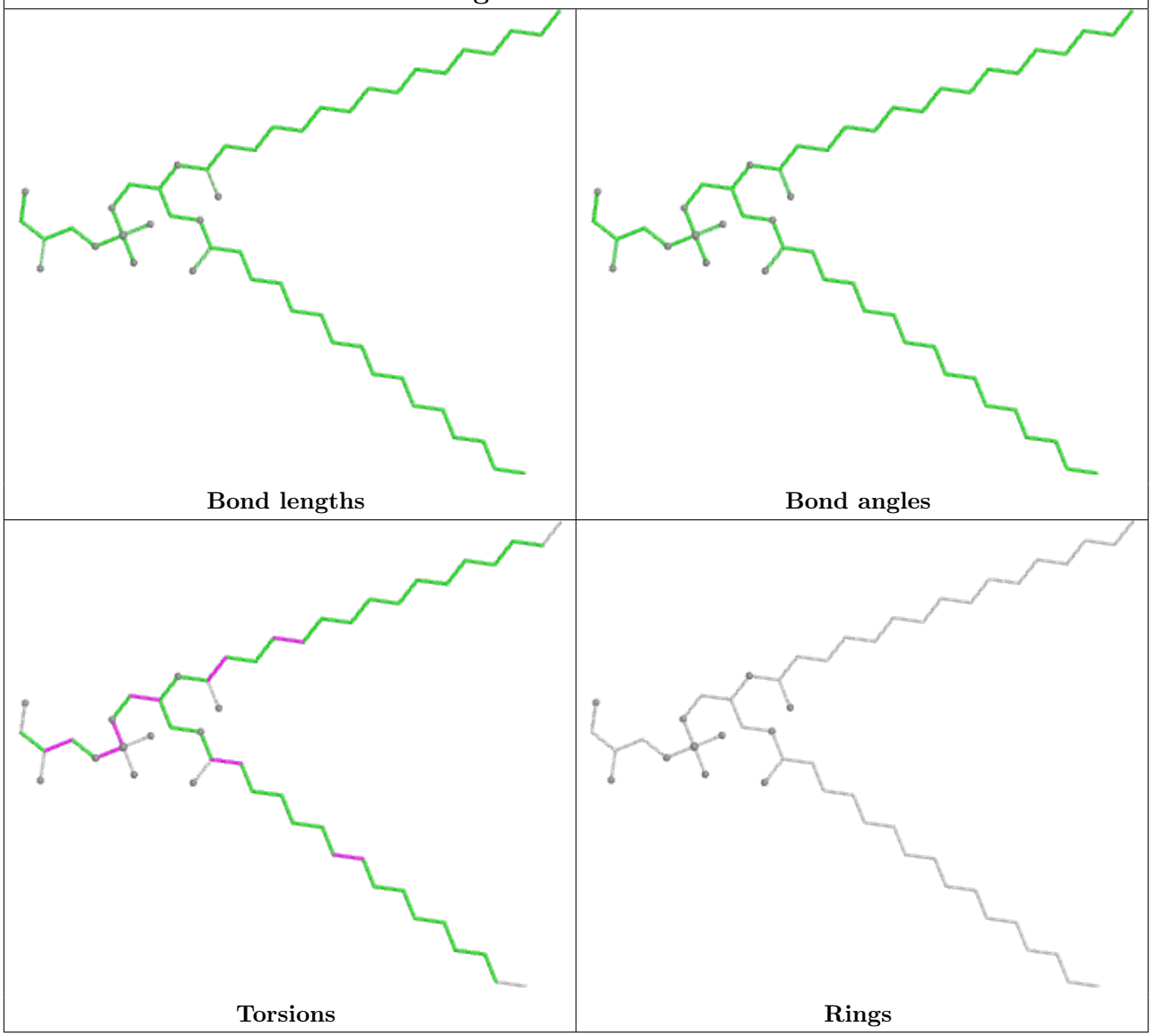
Ligand BCR 4 621	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA 9 614	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand LMG 1 628



Ligand LHG 4 622



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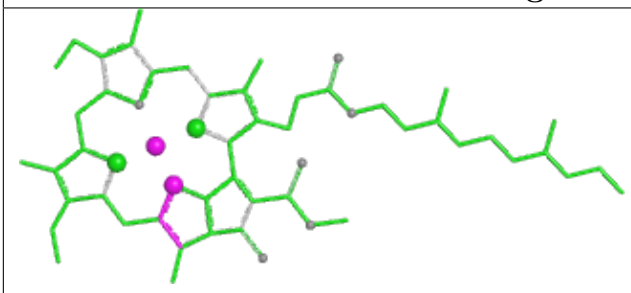
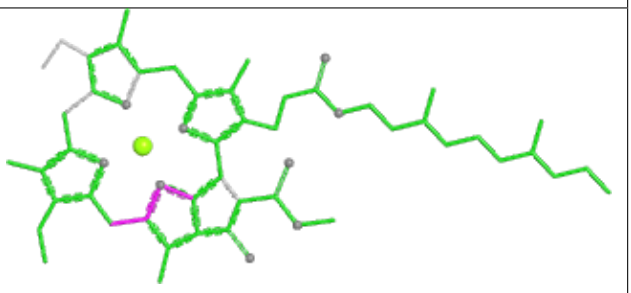
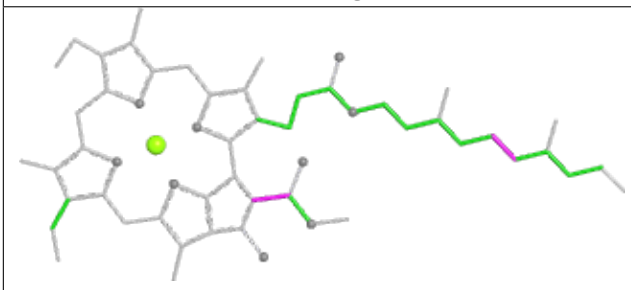
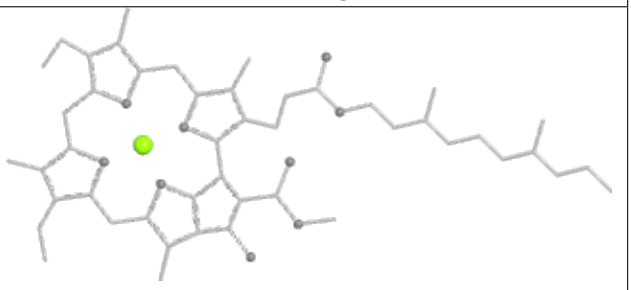
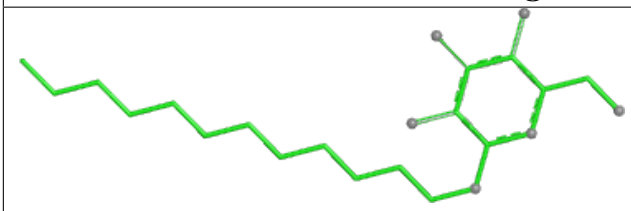
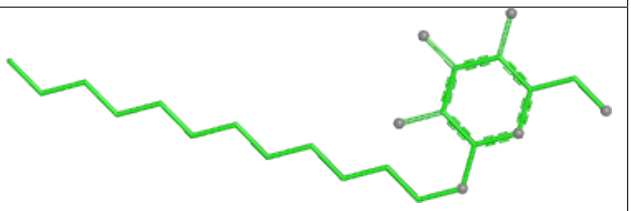
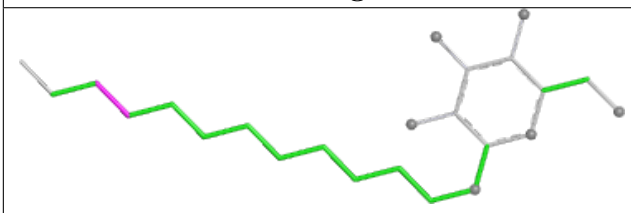
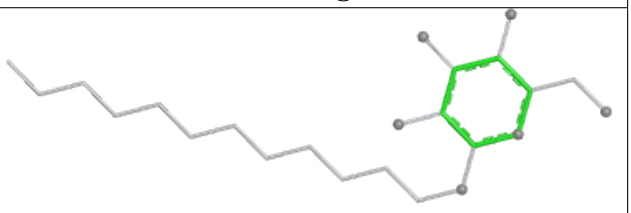
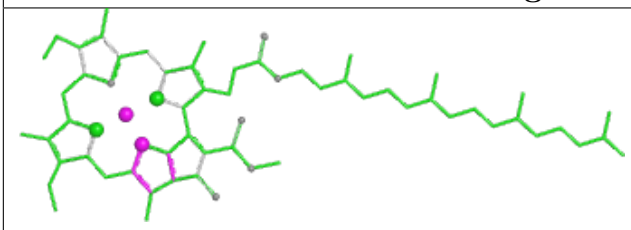
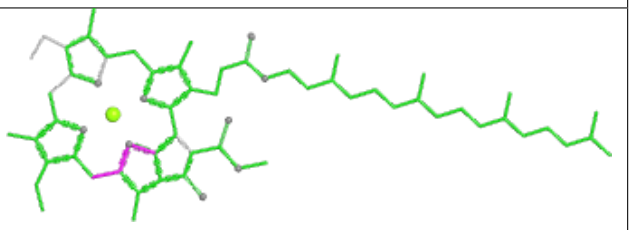
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand LMU 1 623	
 Bond lengths	 Bond angles
 Torsions	 Rings

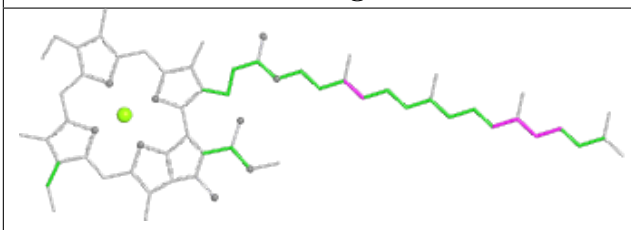
Ligand CLA B 837



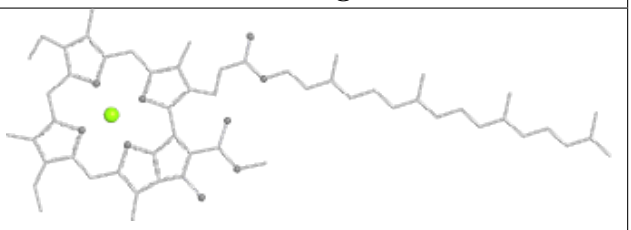
Bond lengths



Bond angles

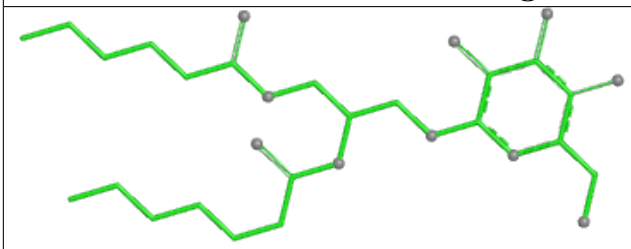


Torsions

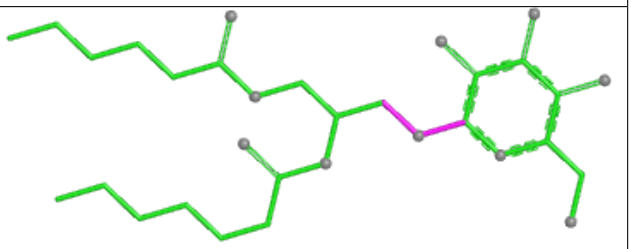


Rings

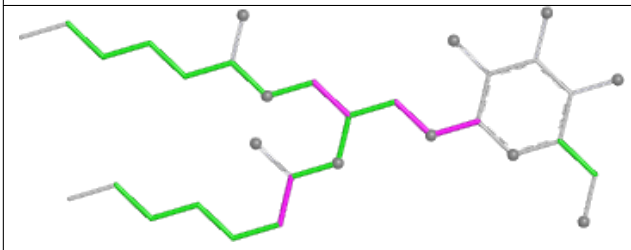
Ligand LMG A 860



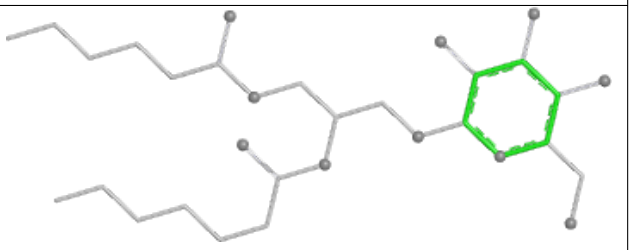
Bond lengths



Bond angles

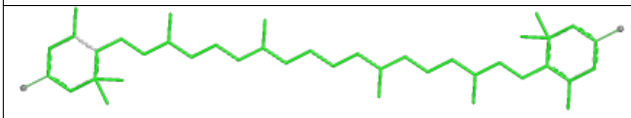


Torsions

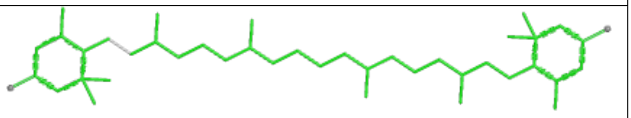


Rings

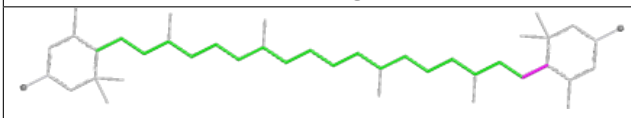
Ligand LUT 3 622



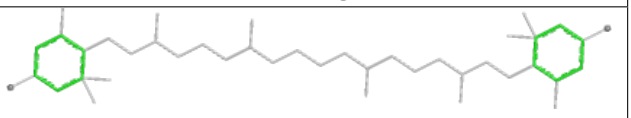
Bond lengths



Bond angles

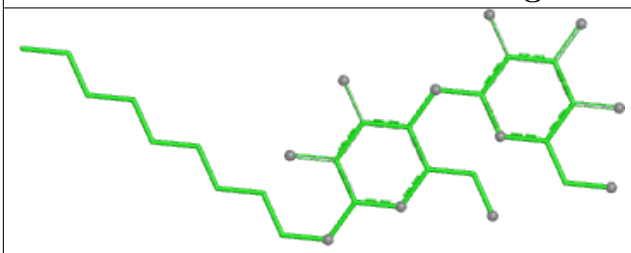


Torsions

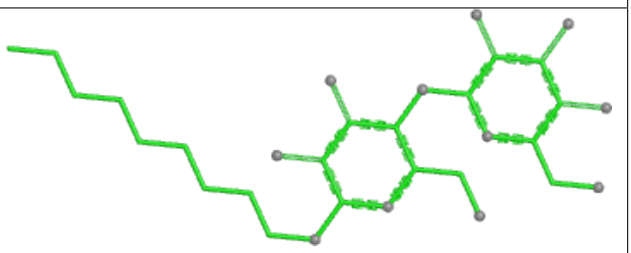


Rings

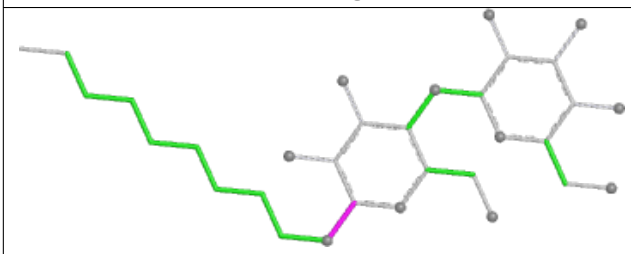
Ligand LMU 7 627



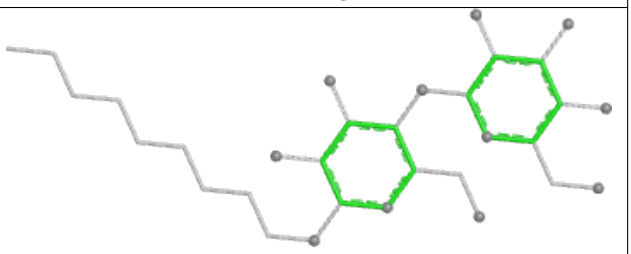
Bond lengths



Bond angles

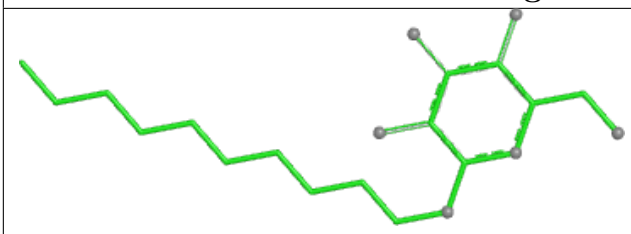


Torsions

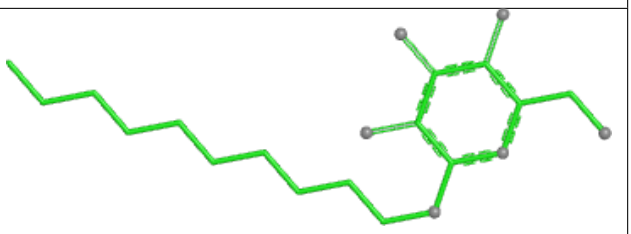


Rings

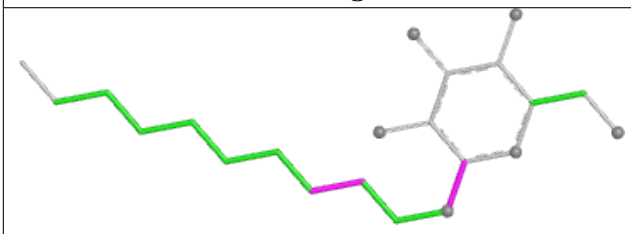
Ligand LMU 7 628



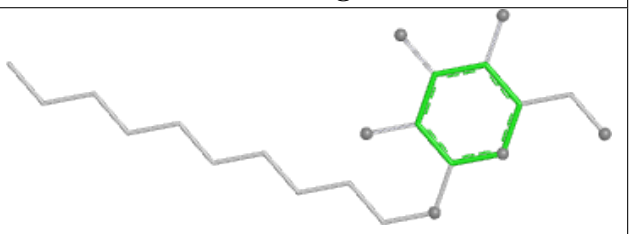
Bond lengths



Bond angles

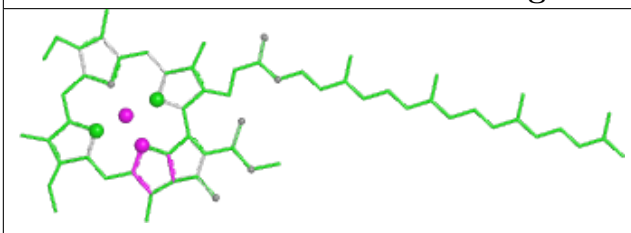


Torsions

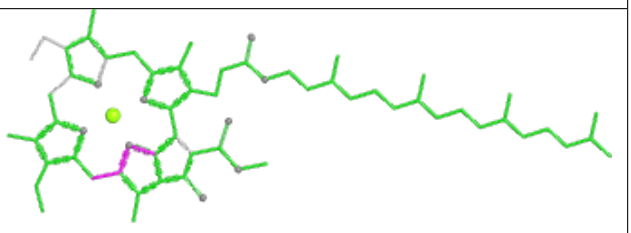


Rings

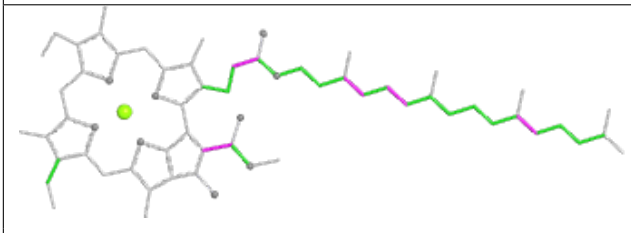
Ligand CLA 6 603



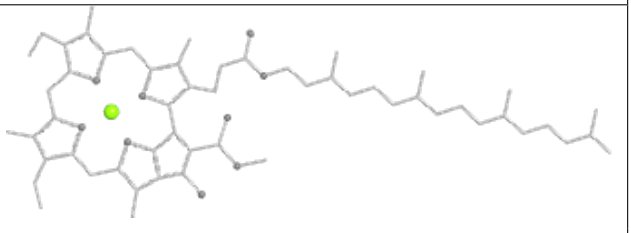
Bond lengths



Bond angles

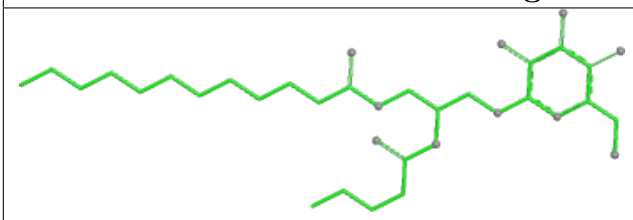


Torsions

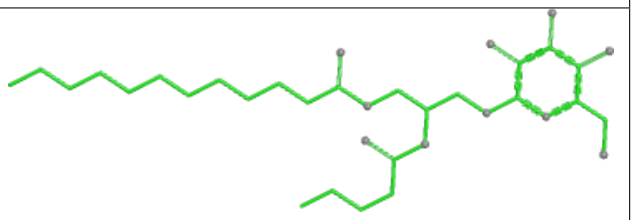


Rings

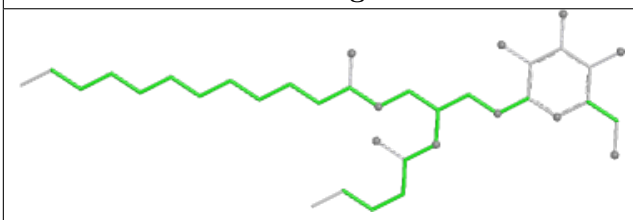
Ligand LMG 1 624



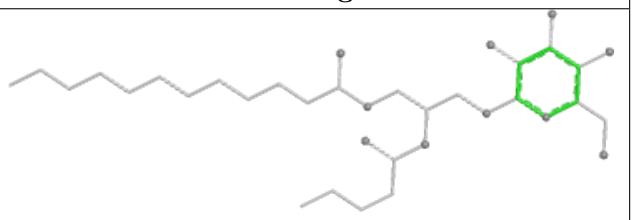
Bond lengths



Bond angles

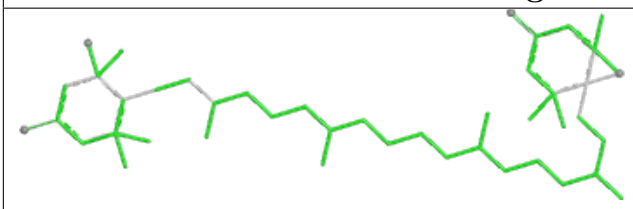


Torsions

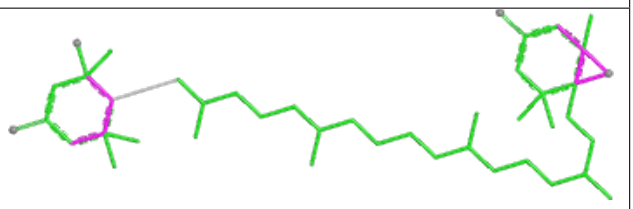


Rings

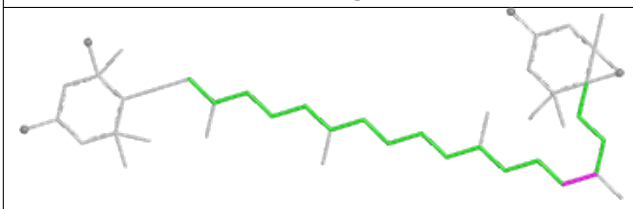
Ligand NEX 5 625



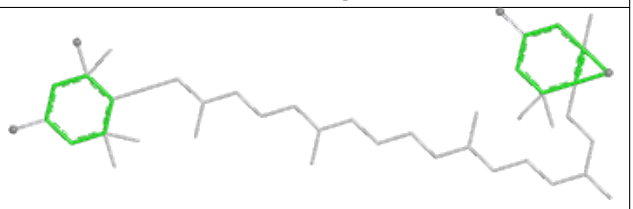
Bond lengths



Bond angles

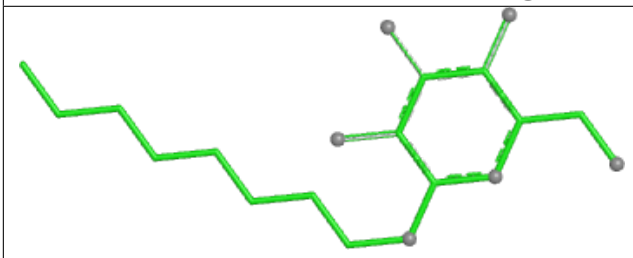


Torsions



Rings

Ligand LMU A 862



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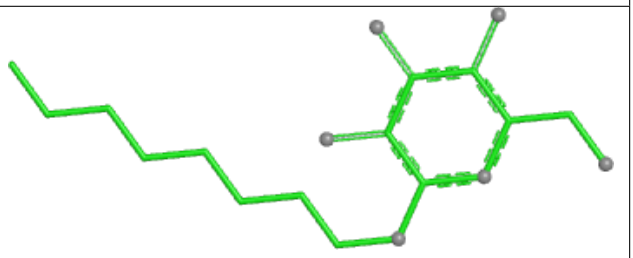
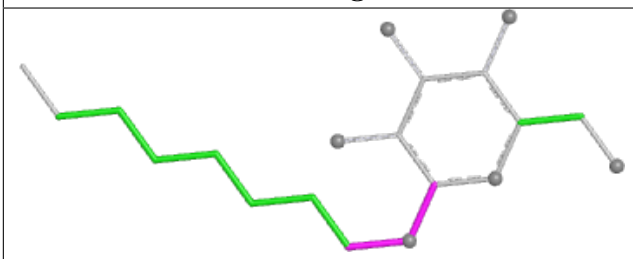


Bond angles



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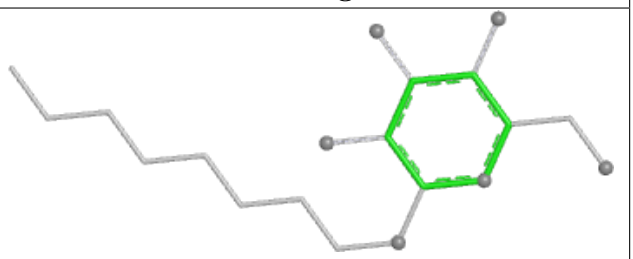
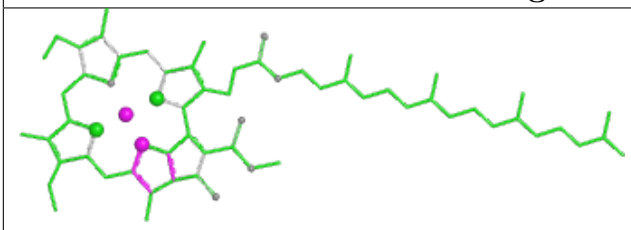


Rings

Ligand CLA 7 611



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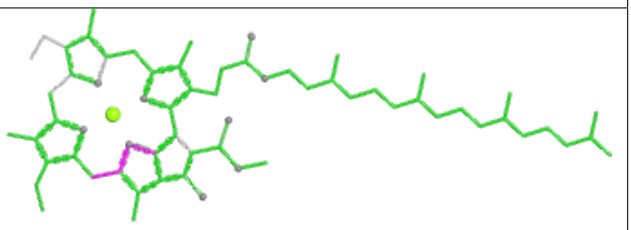
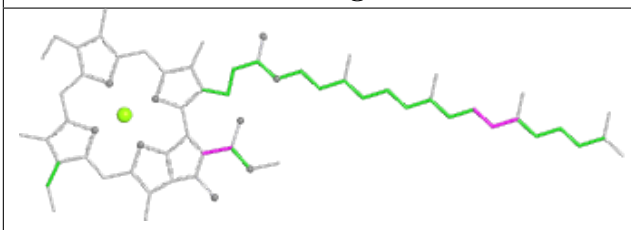


Bond angles



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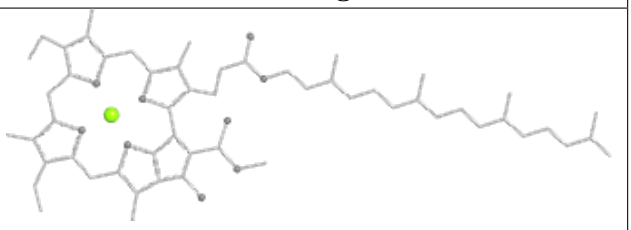
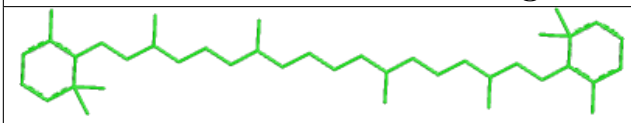
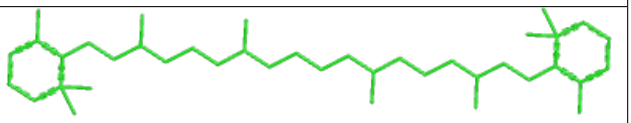


Rings

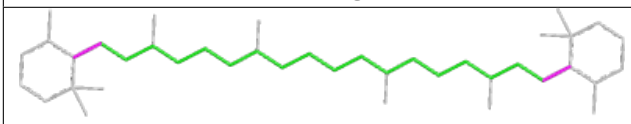
Ligand BCR K 207



Bond lengths



Bond angles



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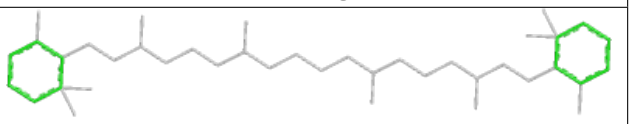
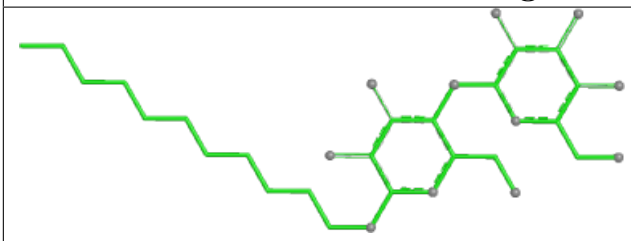
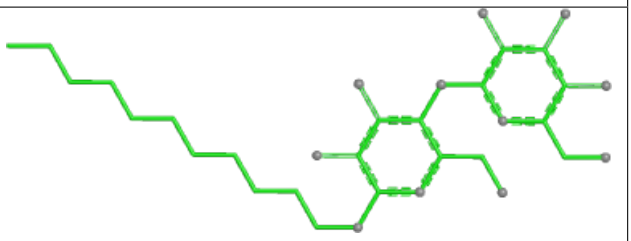


Rings

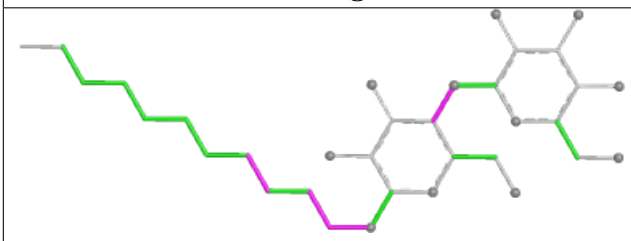
Ligand LMU A 857



Bond lengths



Bond angles



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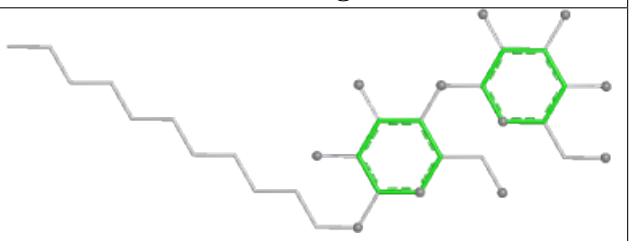
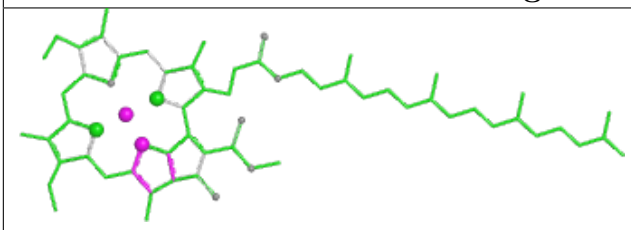
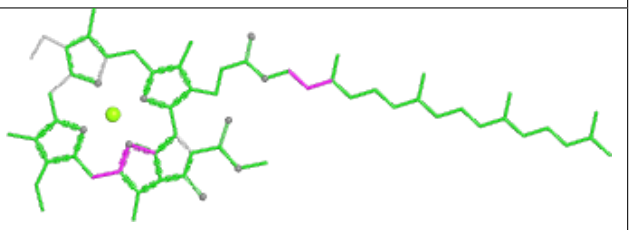
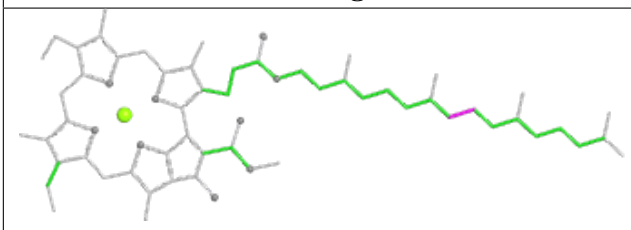
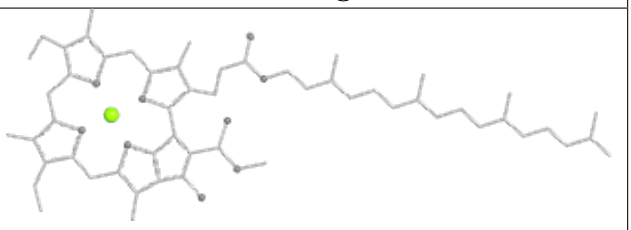
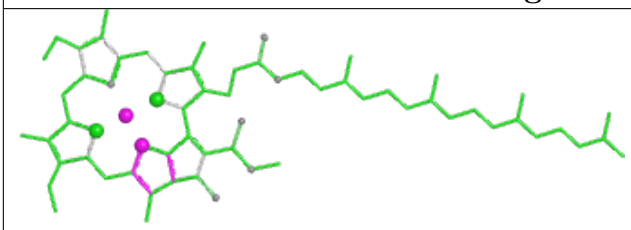
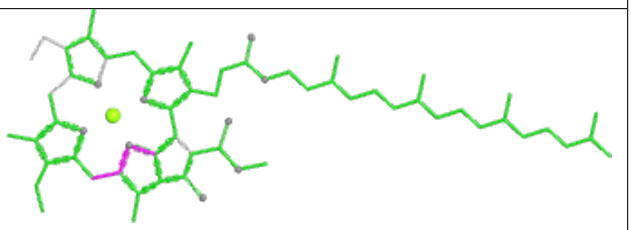
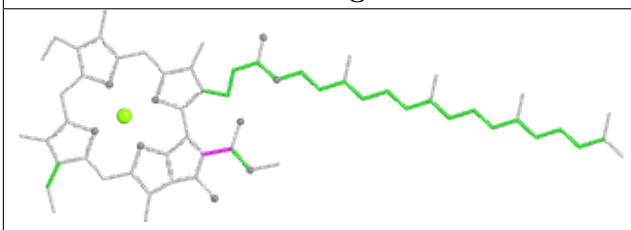
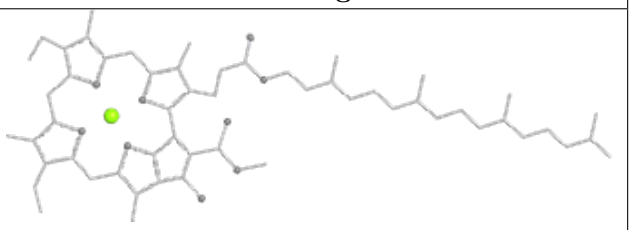
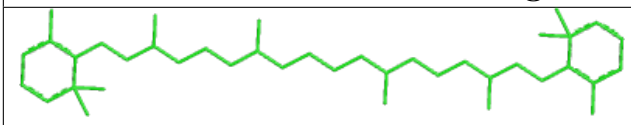
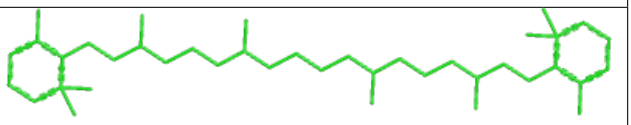
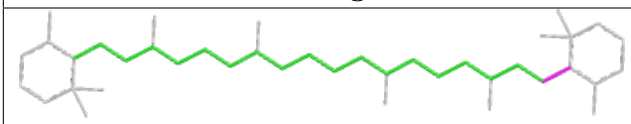
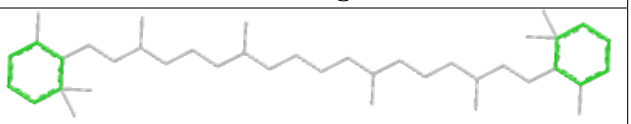
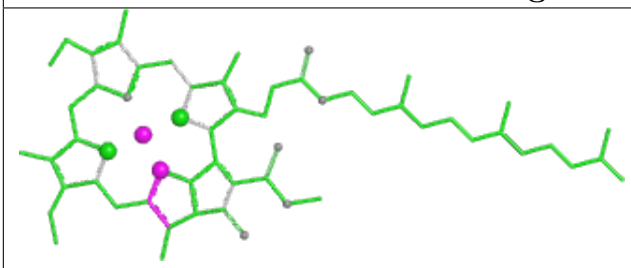
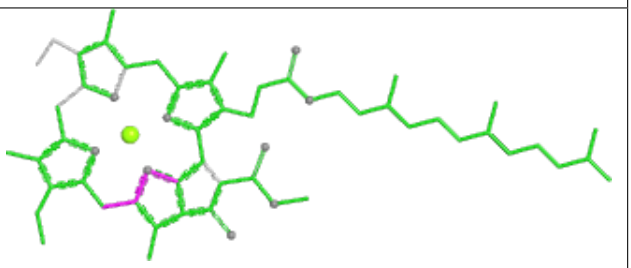
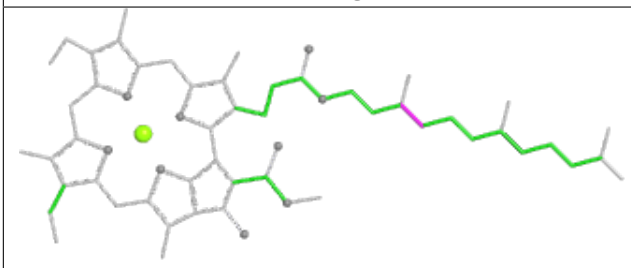
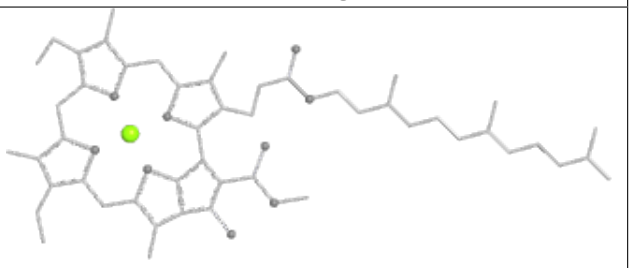


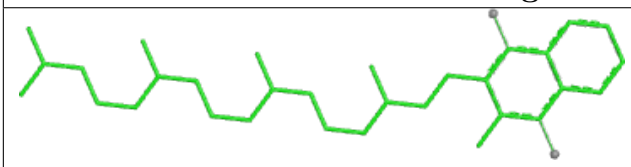
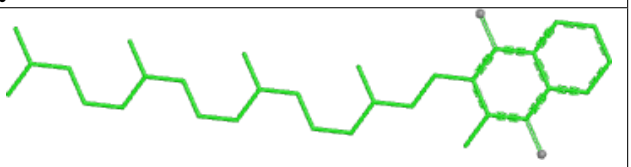
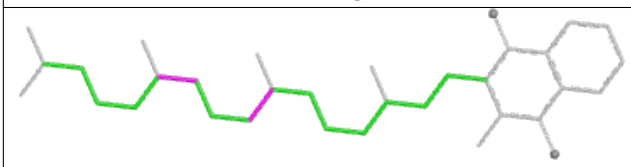
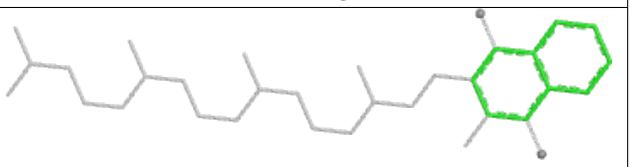
Rings

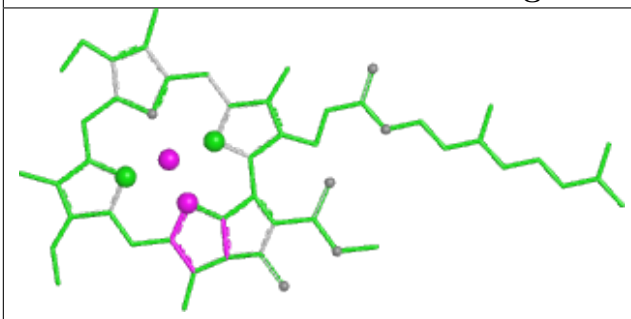
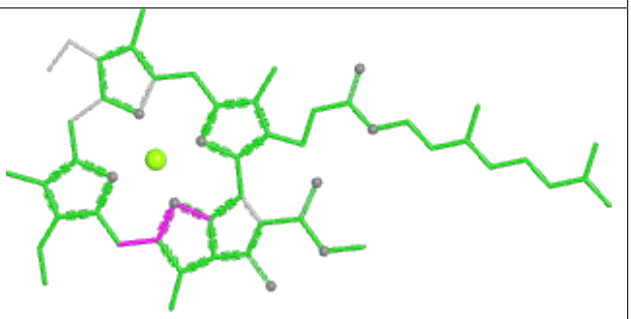
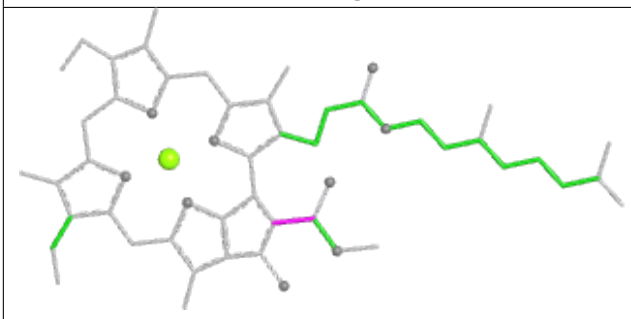
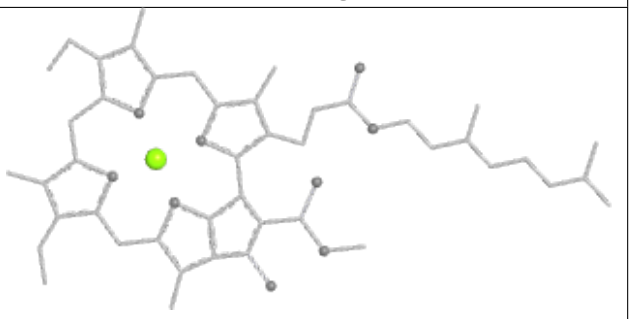
Ligand CLA A 834	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA B 810	
 Bond lengths	 Bond angles
 Torsions	 Rings

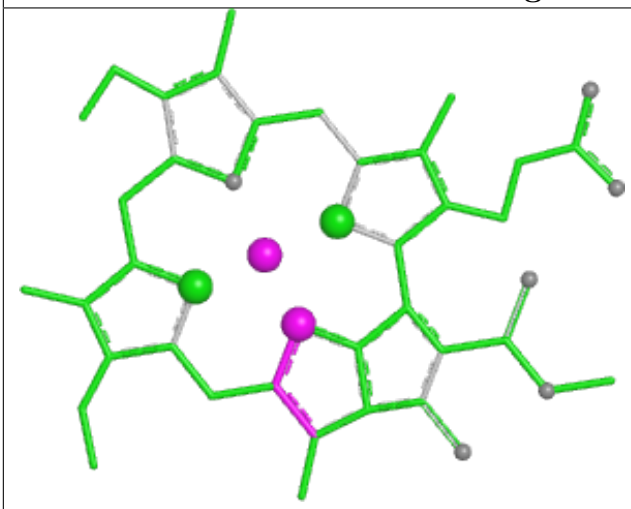
Ligand BCR L 205	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA 5 610	
	
Bond lengths	Bond angles
	
Torsions	Rings

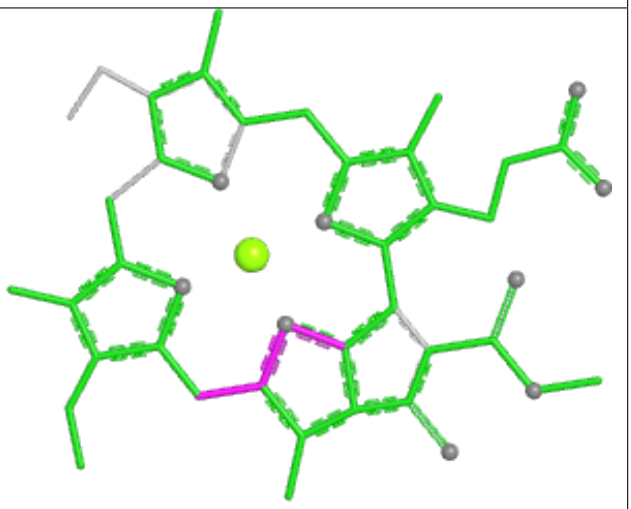
Ligand PQN A 844	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA A 825	
	
Bond lengths	**Bond angles**
	
Torsions	**Rings**

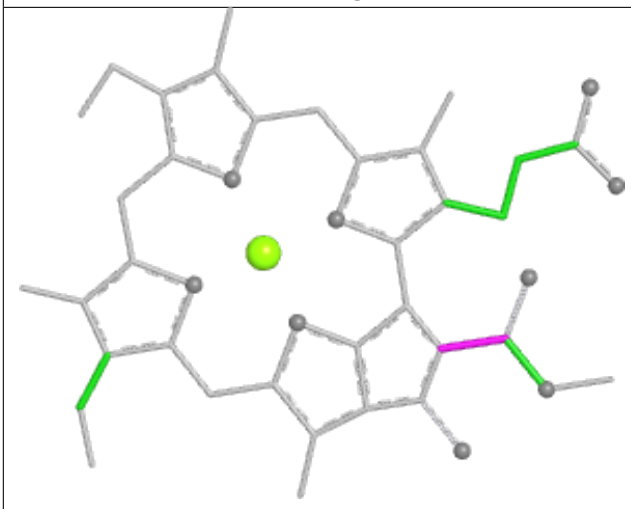
Ligand CLA B 804



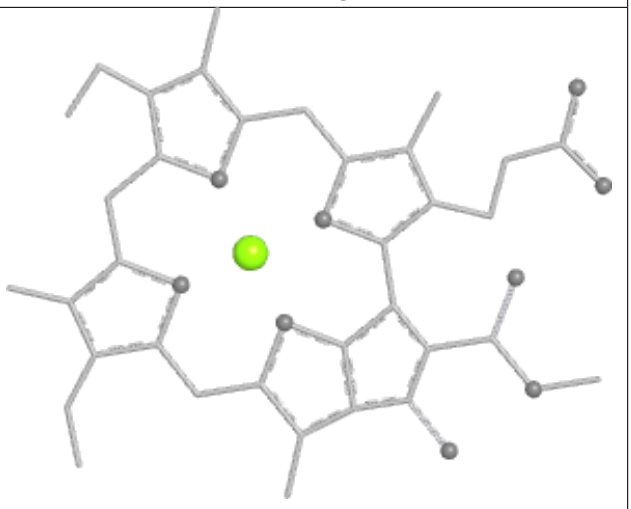
Bond lengths



Bond angles

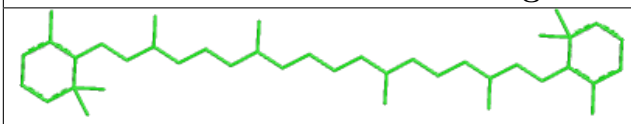


Torsions

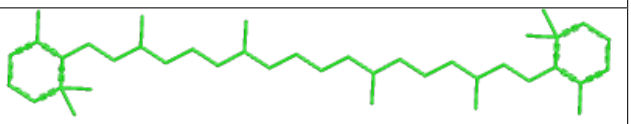


Rings

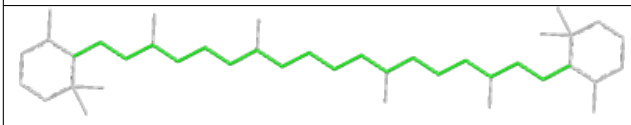
Ligand BCR B 801



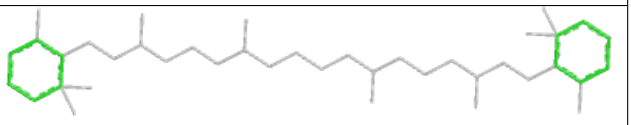
Bond lengths



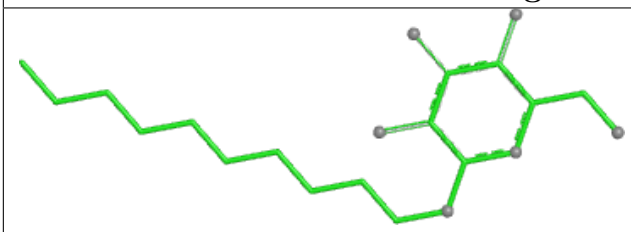
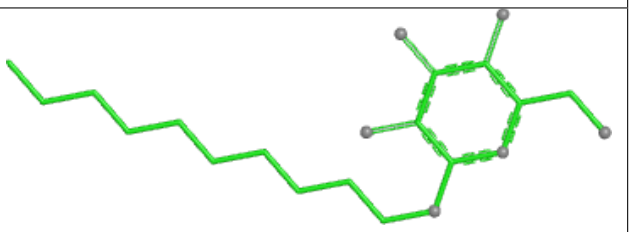
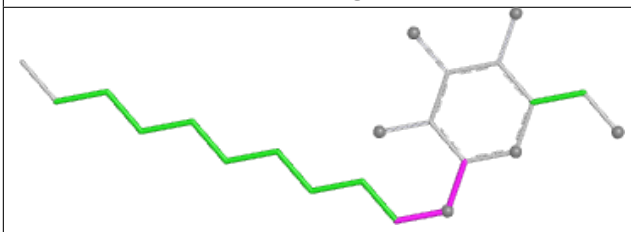
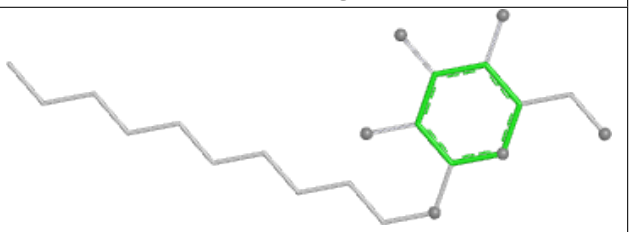
Bond angles

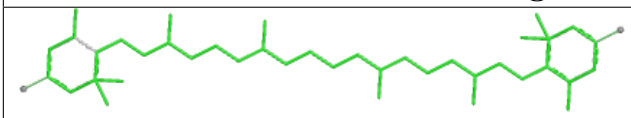
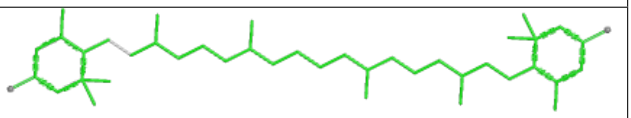
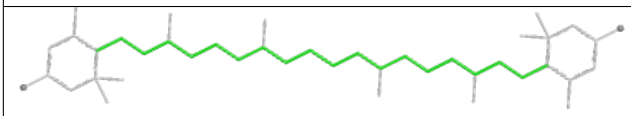
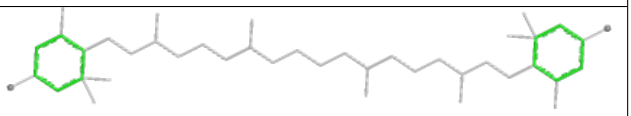


Torsions

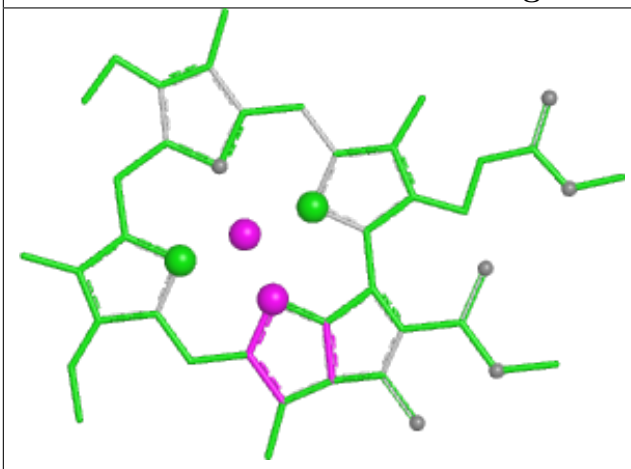


Rings

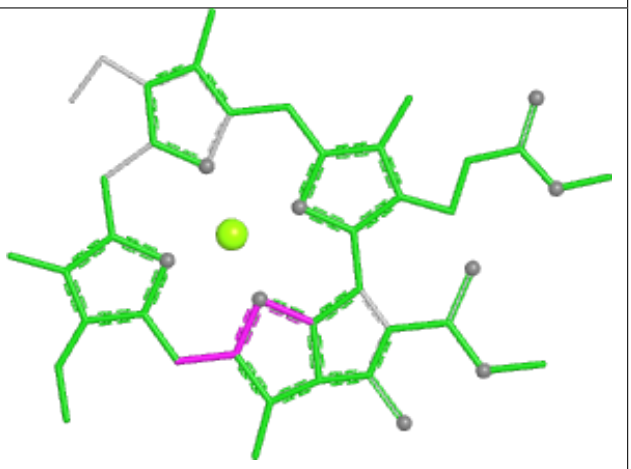
Ligand LMU 1 627	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand LUT 9 617	
 Bond lengths	 Bond angles
 Torsions	 Rings

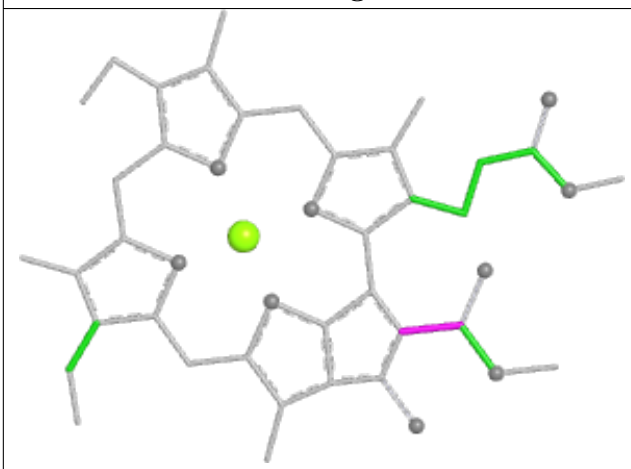
Ligand CLA K 204



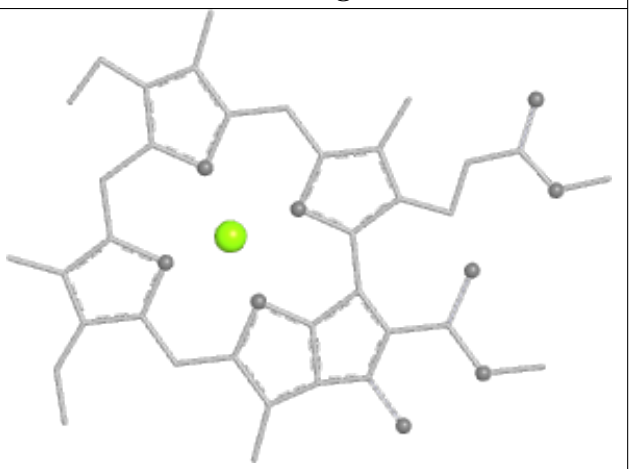
Bond lengths



Bond angles

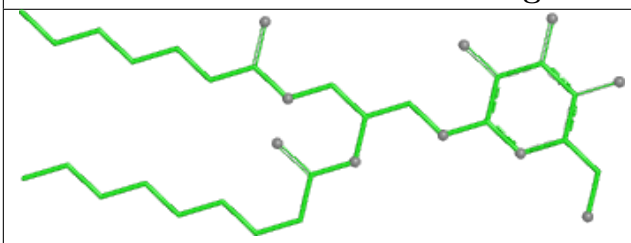


Torsions



Rings

Ligand LMG J 104



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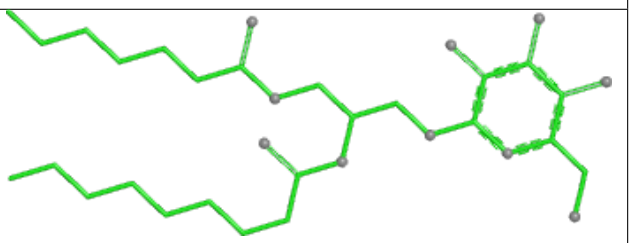

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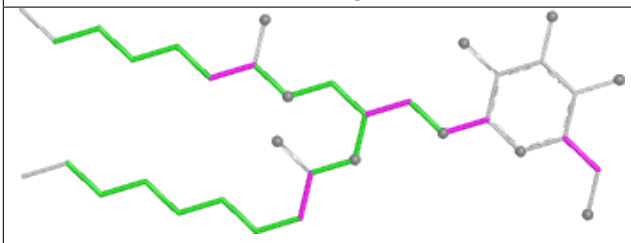

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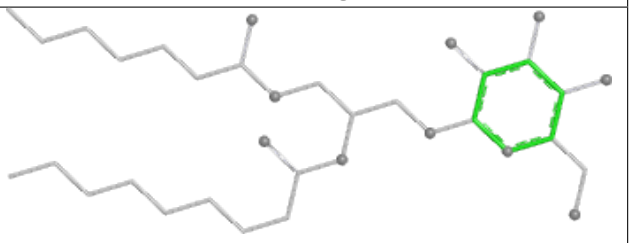
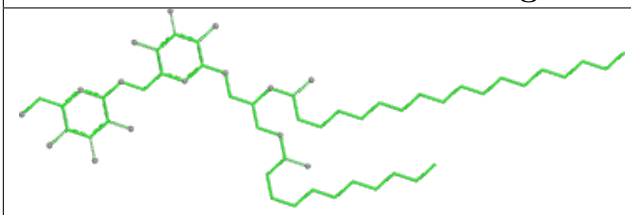
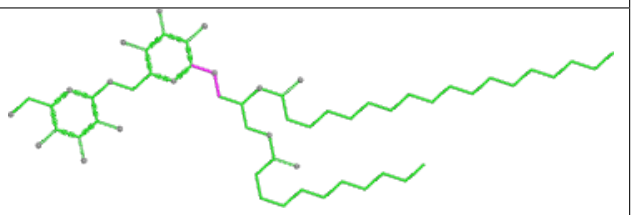


Rings

Ligand DGD B 850



Bond lengths



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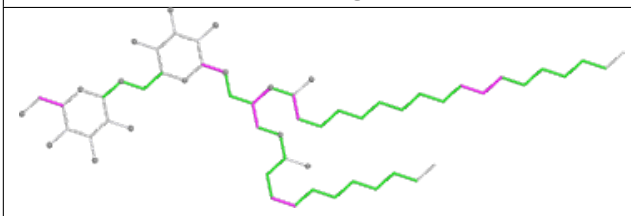

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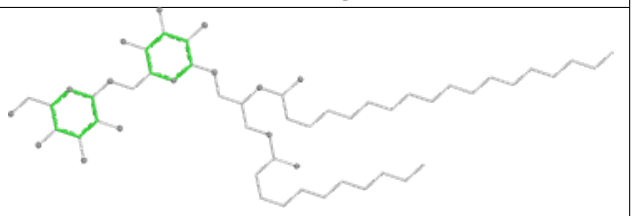
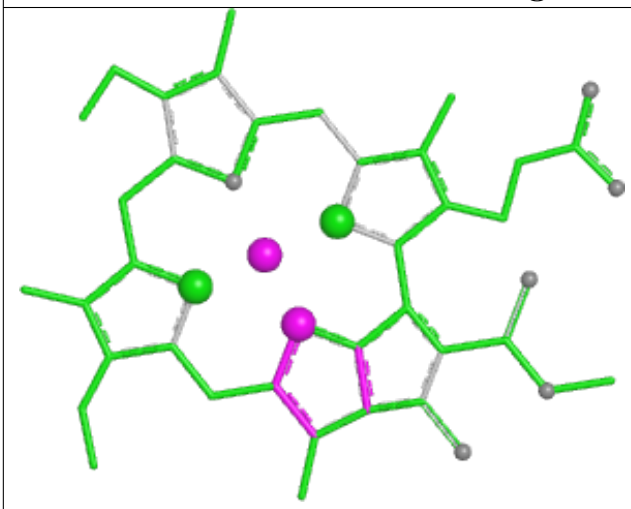


Rings

Ligand CLA 8 616



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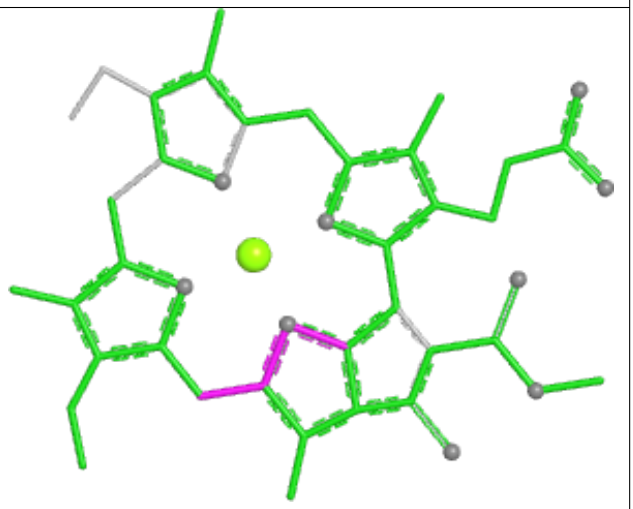

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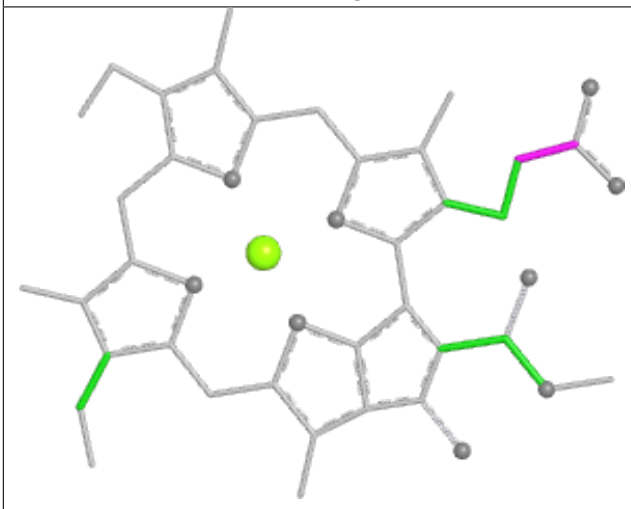

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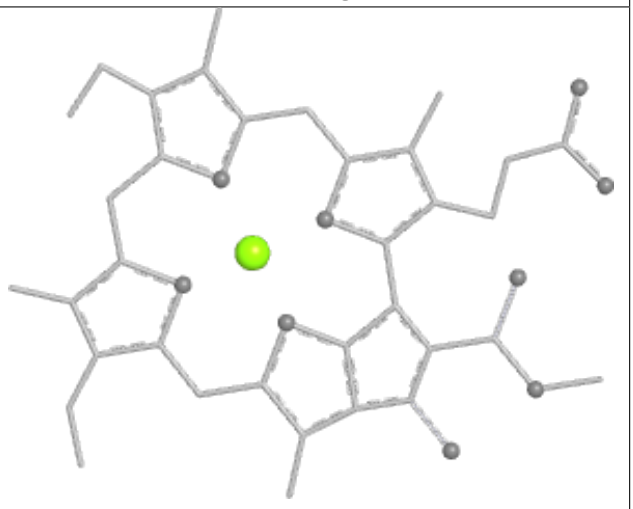
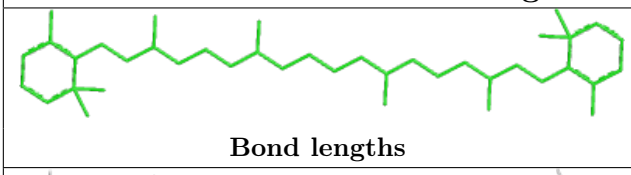


Rings

Ligand BCR A 851



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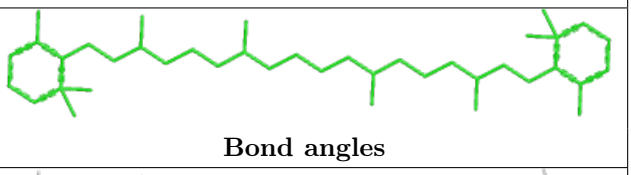

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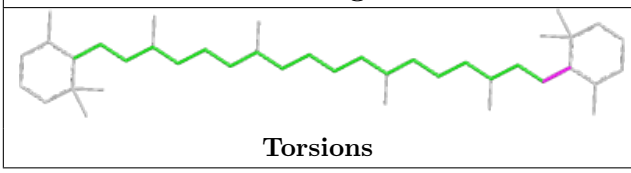

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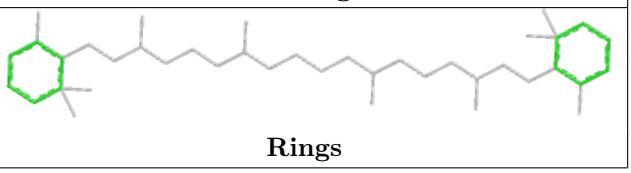
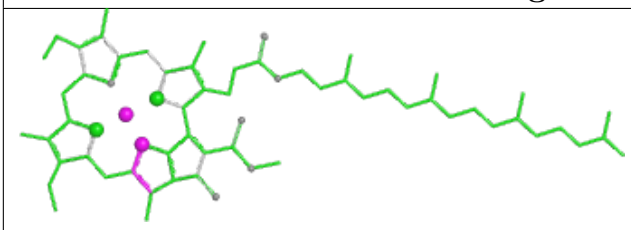


Rings

Ligand CLA 5 601



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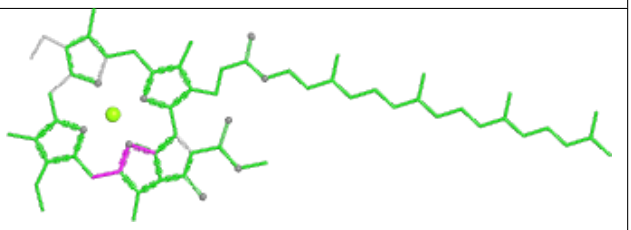

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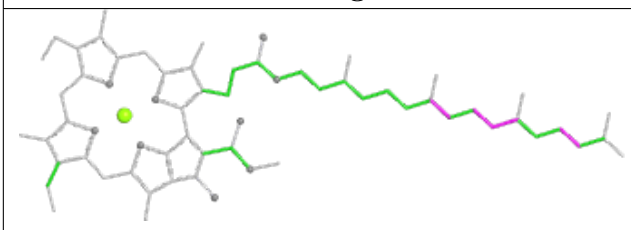

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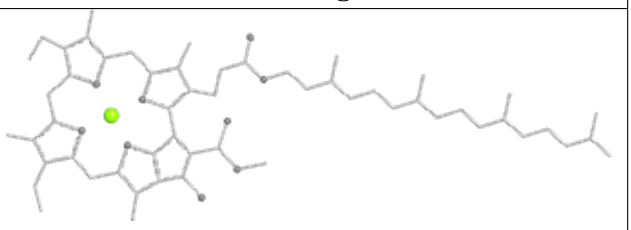
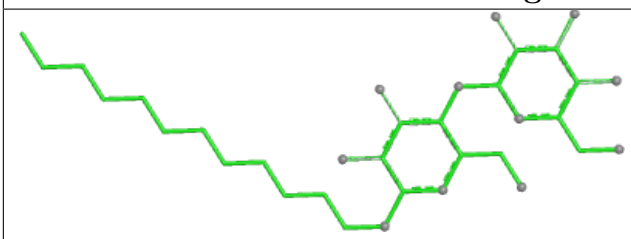
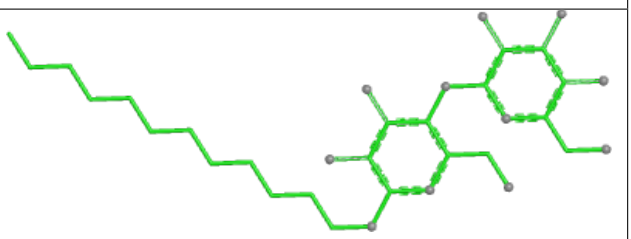


Rings

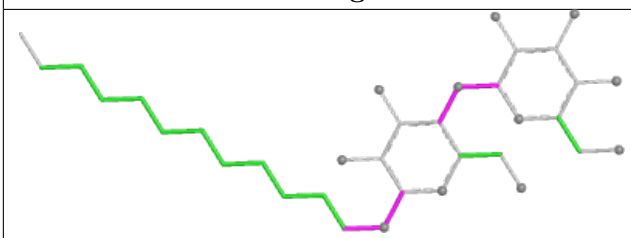
Ligand LMU 1 621



Bond lengths



Bond angles



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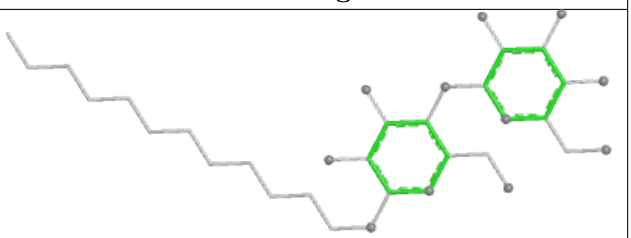
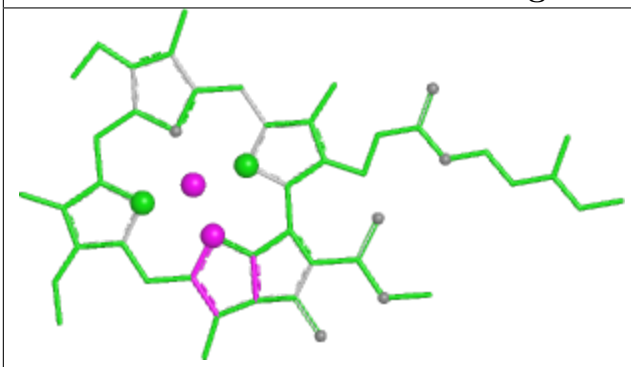
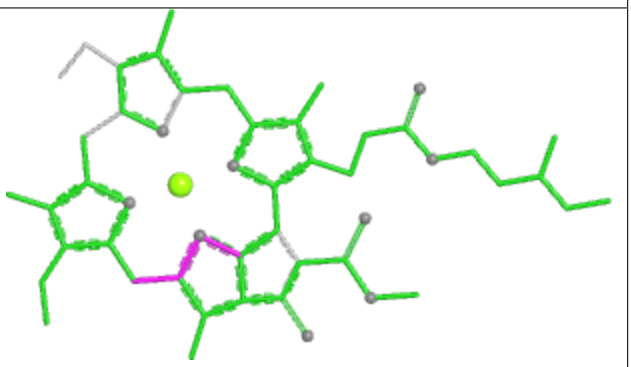
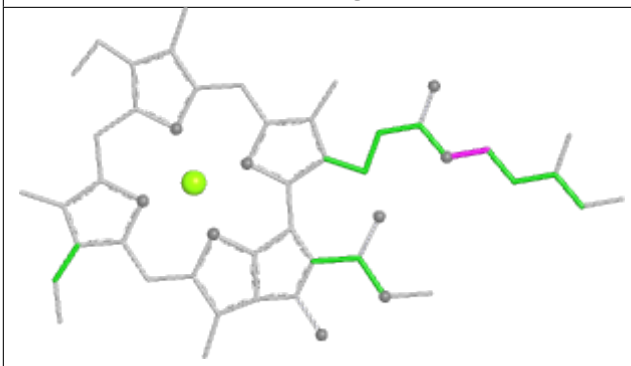
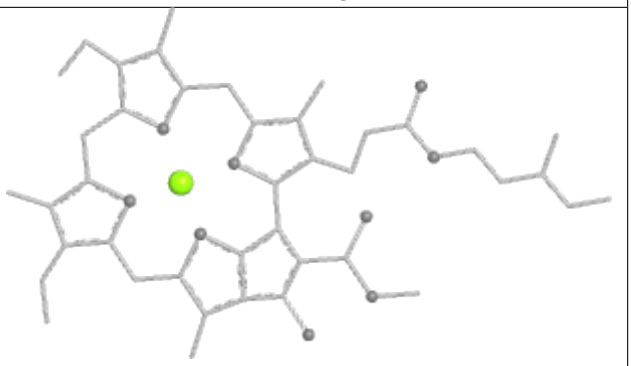
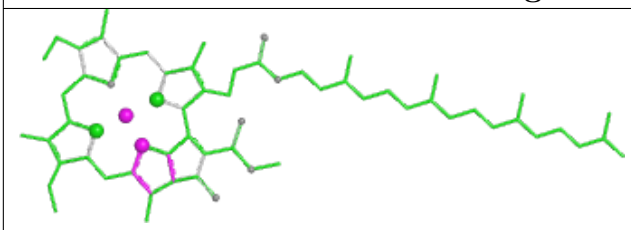
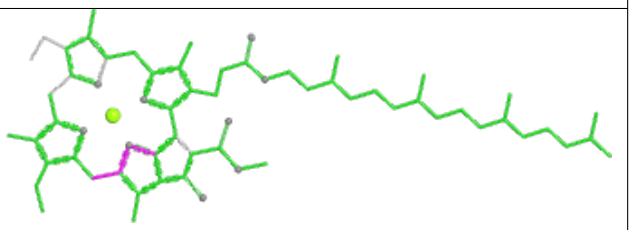
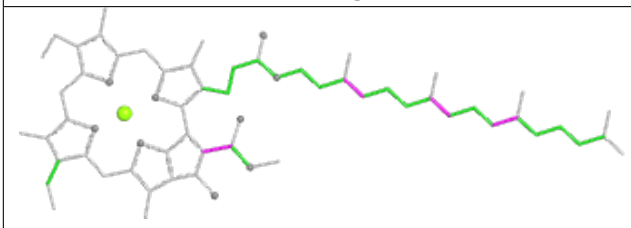
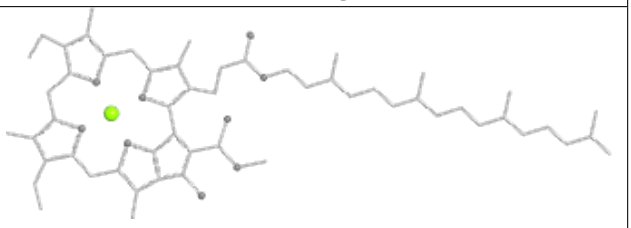
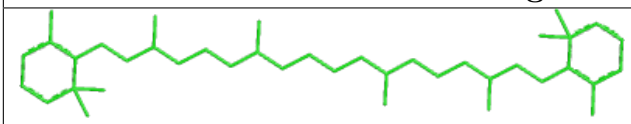
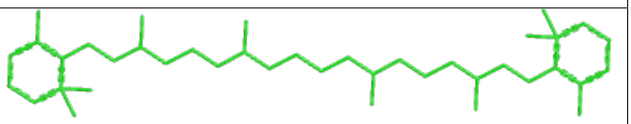
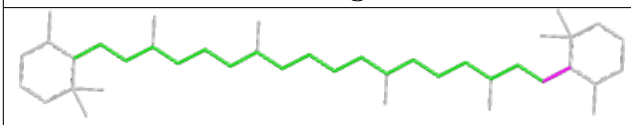
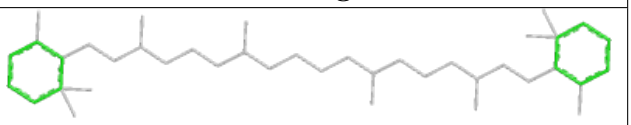
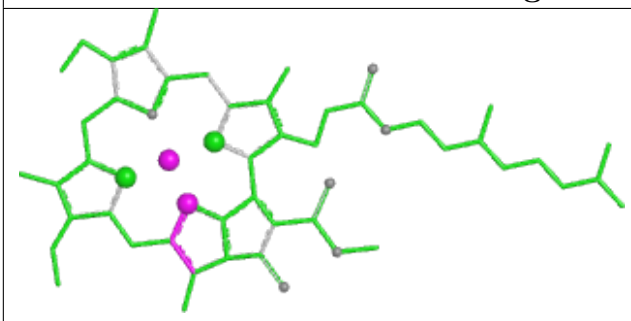
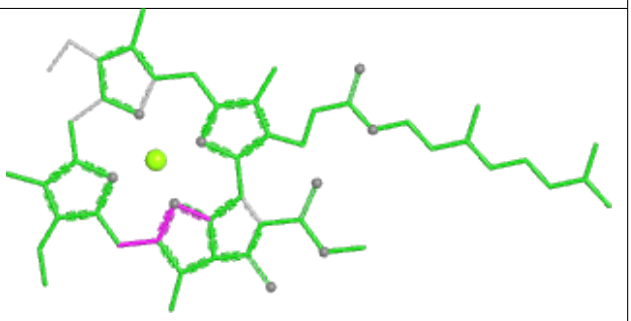
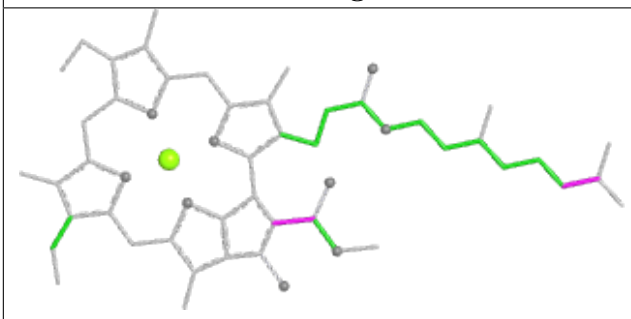
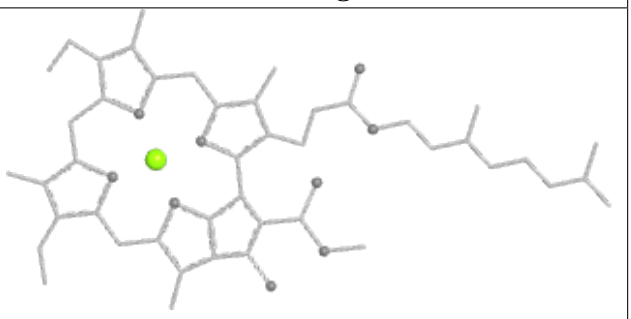


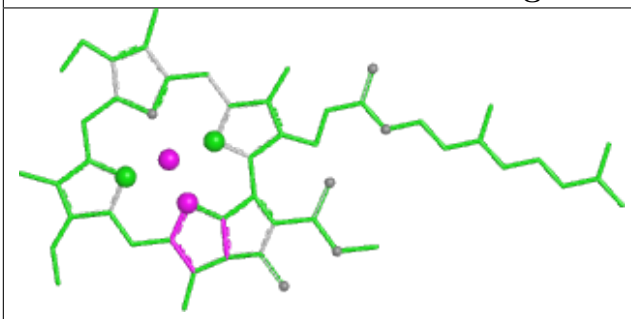
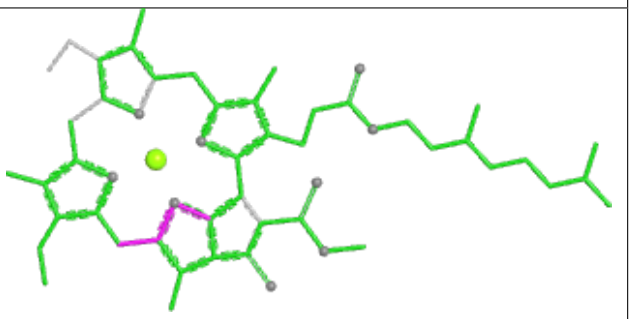
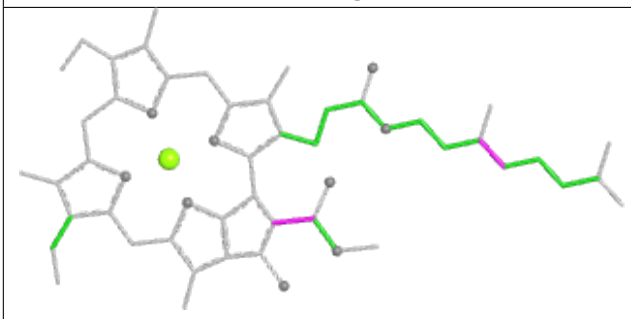
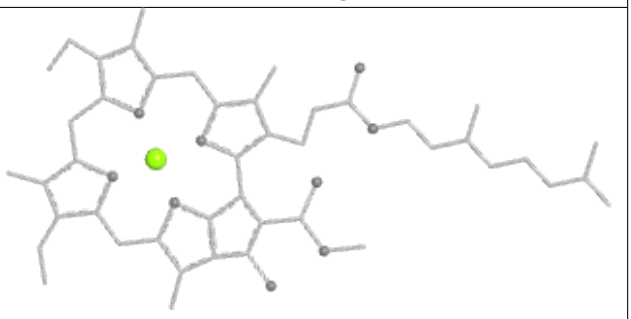
Rings

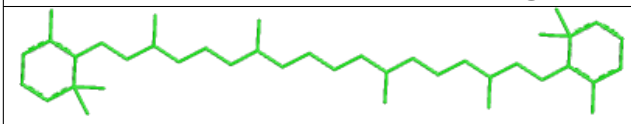
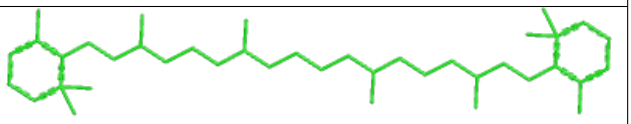
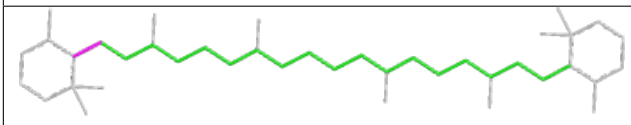
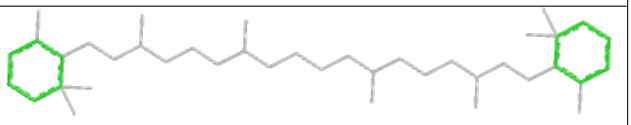
Ligand CLA 7 604	
	
Bond lengths	Bond angles
	
Torsions	Rings

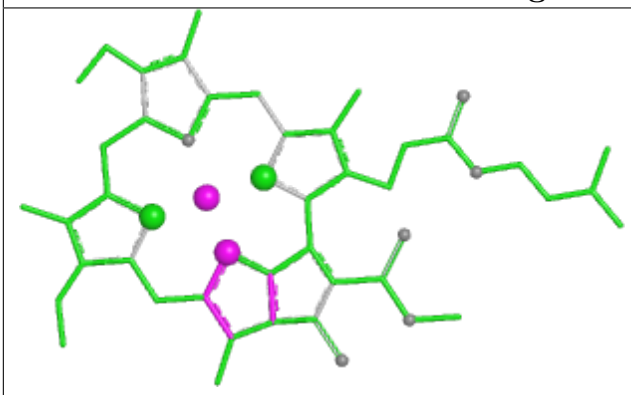
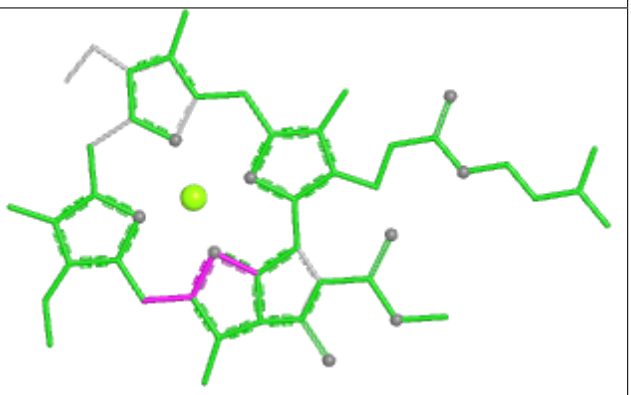
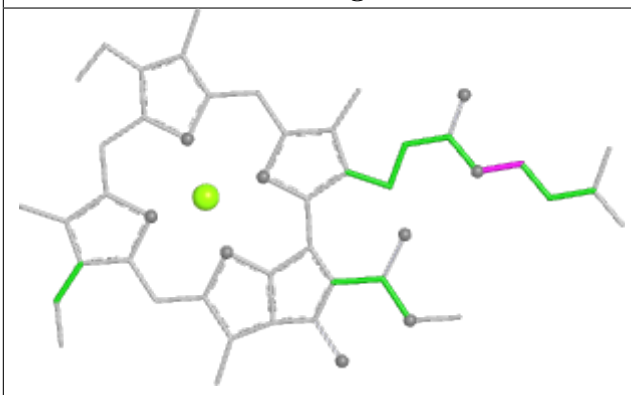
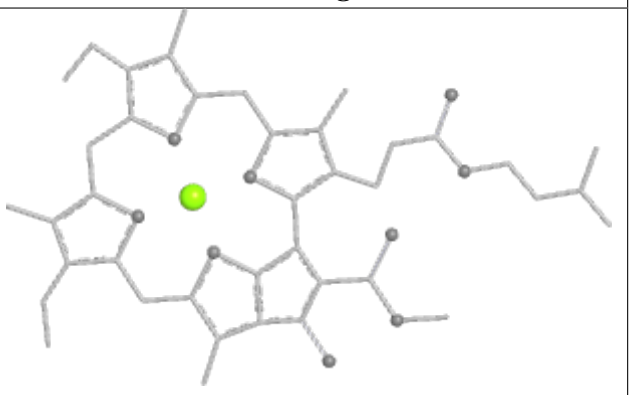
Ligand CLA B 823	
	
Bond lengths	Bond angles
	
Torsions	Rings

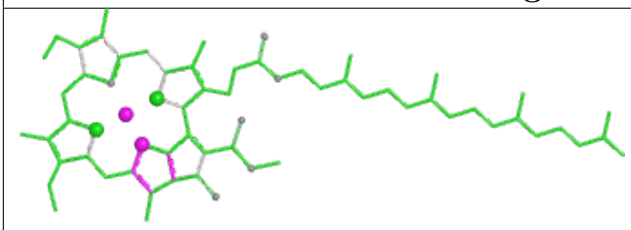
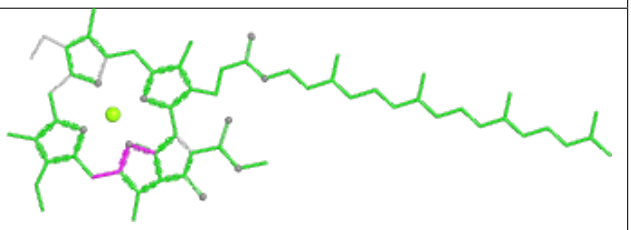
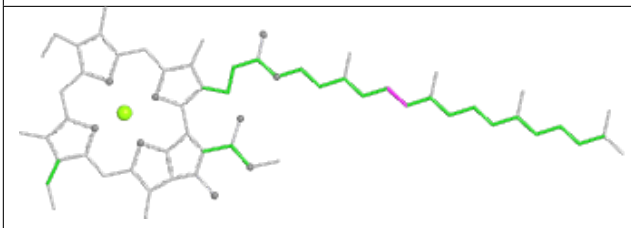
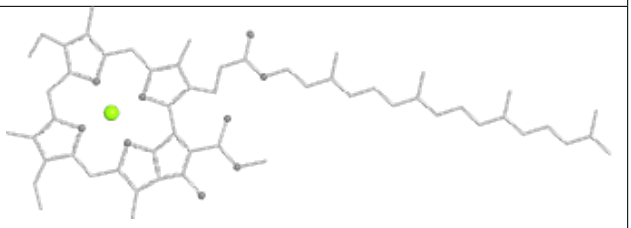
Ligand BCR 6 623	
 Bond lengths	 Bond angles
 Torsions	 Rings

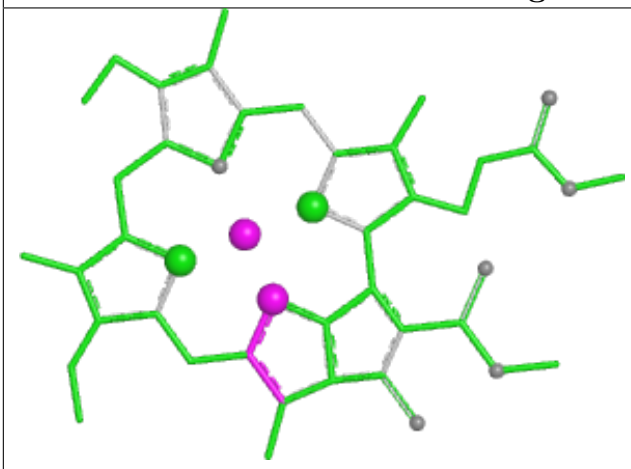
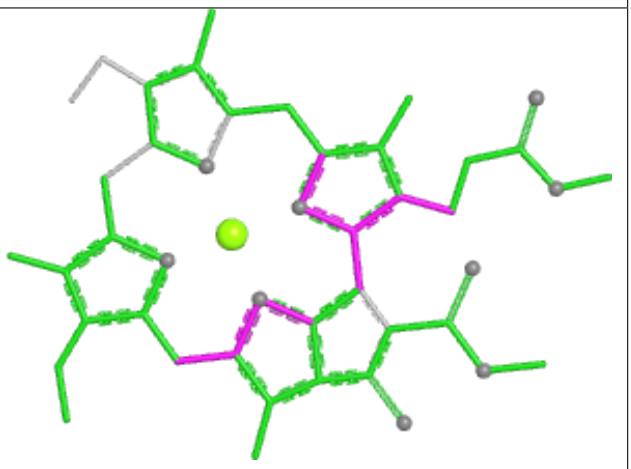
Ligand CLA A 805	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA A 821	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand BCR B 848	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA 7 608	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA A 833	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA 5 621	
	
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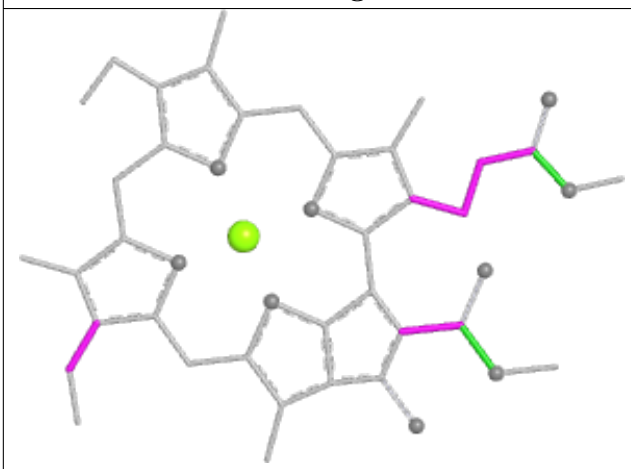
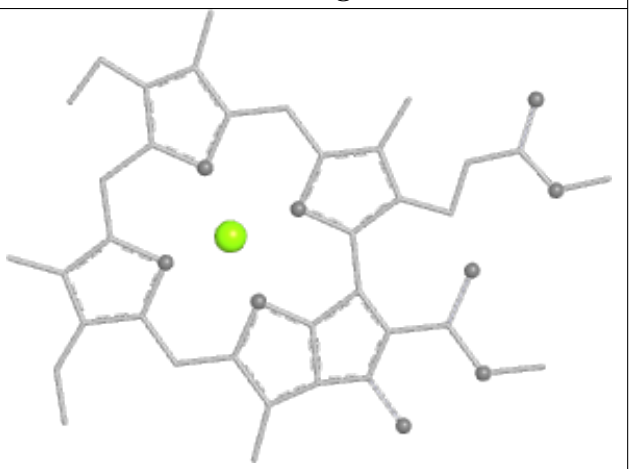
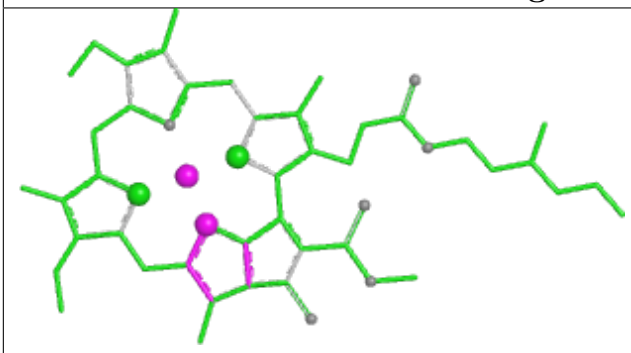
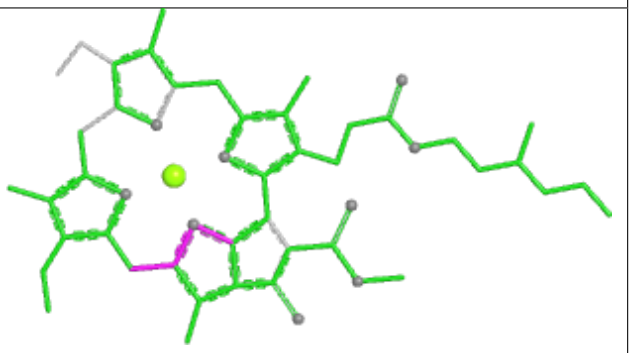
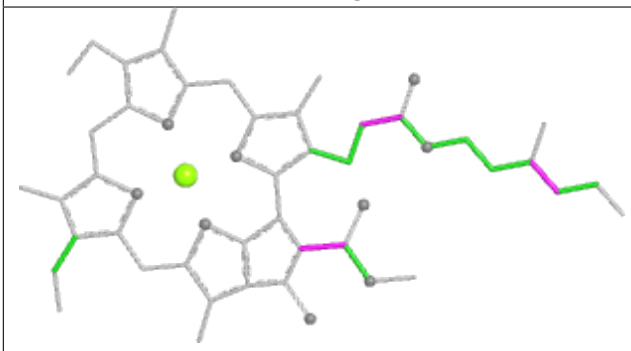
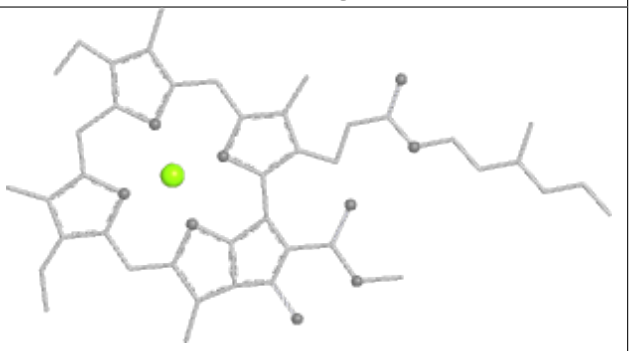
	
Torsions	**Rings**

Ligand CLA 7 612	
 Bond lengths	 Bond angles
 Torsions	 Rings

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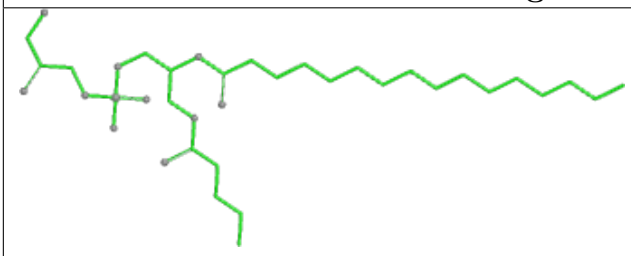
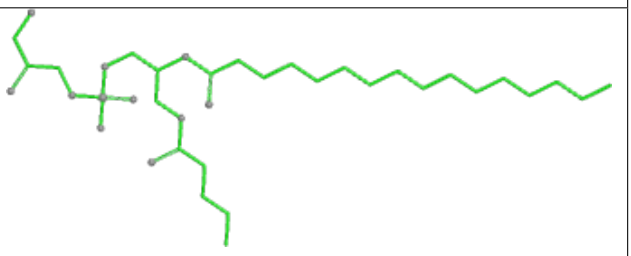
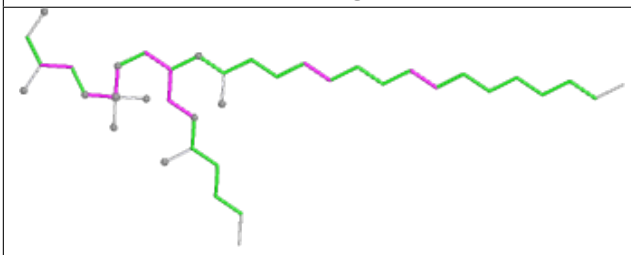
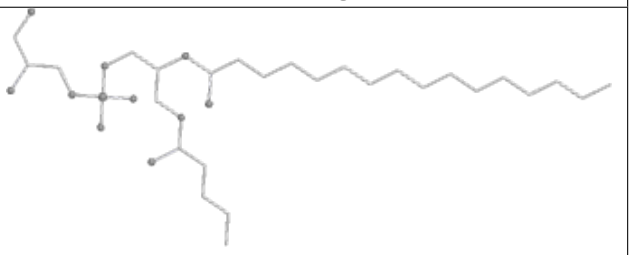
 Bond lengths	 Bond angles
 Torsions	 Rings

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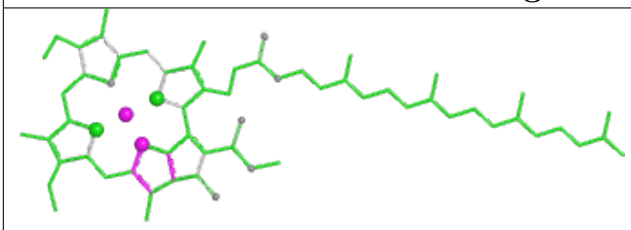
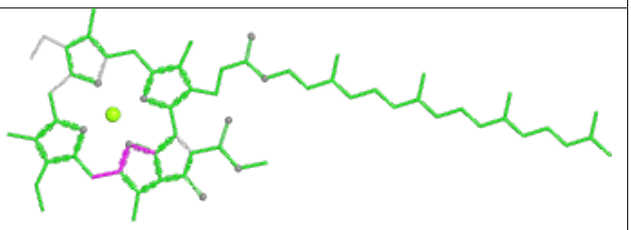
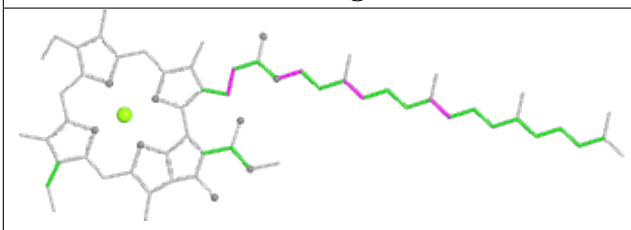
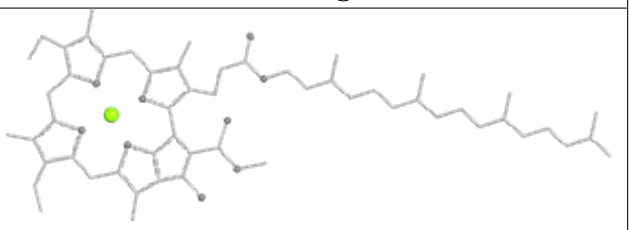
 Bond lengths	 Bond angles
 Torsions	 Rings

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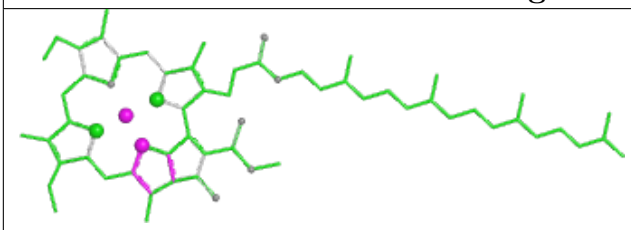
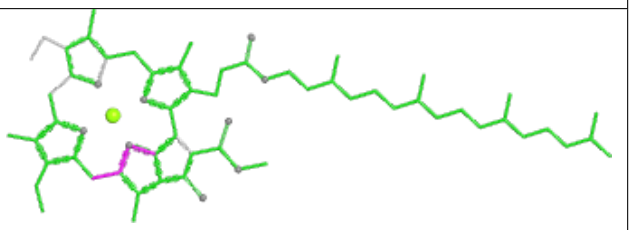
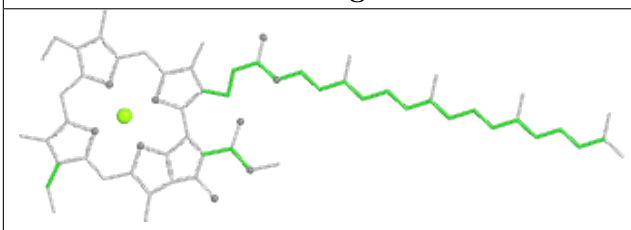
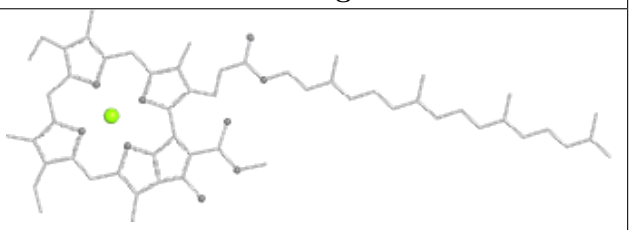
 Bond lengths	 Bond angles
 Torsions	 Rings

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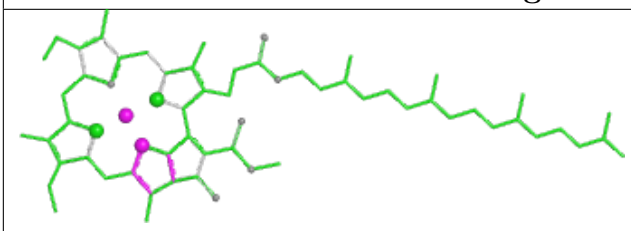
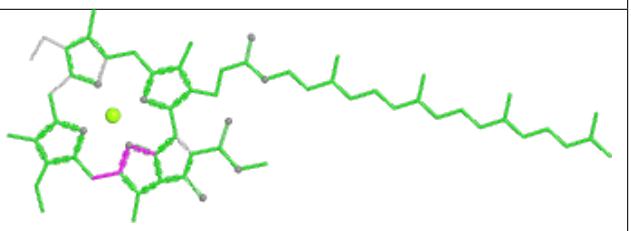
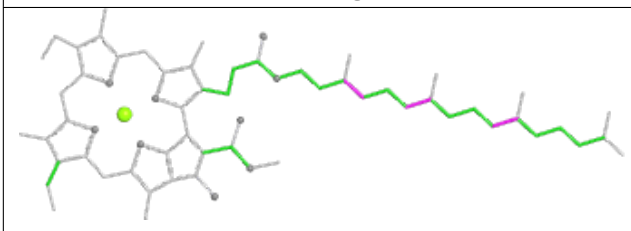
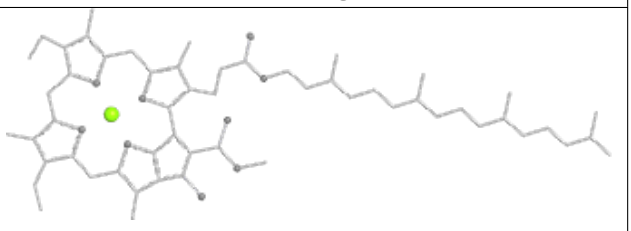
 Bond lengths	 Bond angles
 Torsions	 Rings

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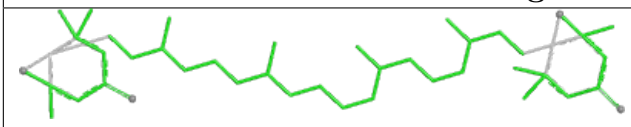
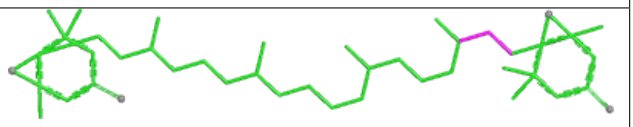
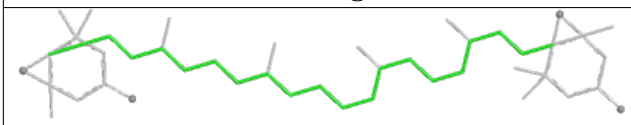
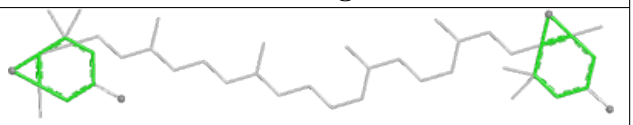
 Bond lengths	 Bond angles
 Torsions	 Rings

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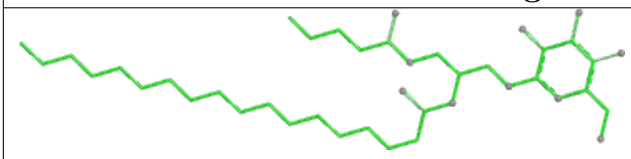
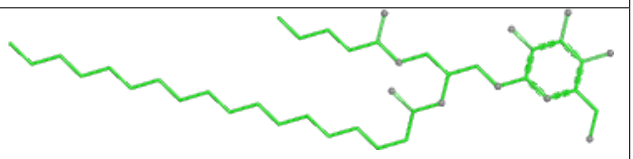
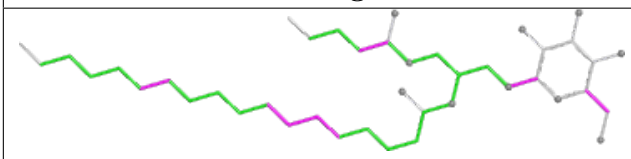
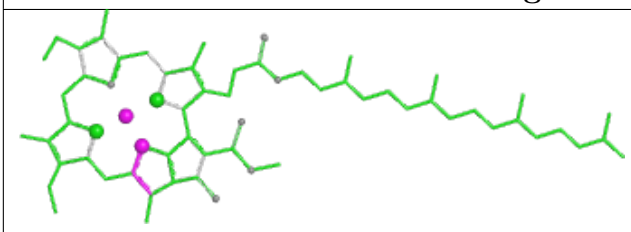
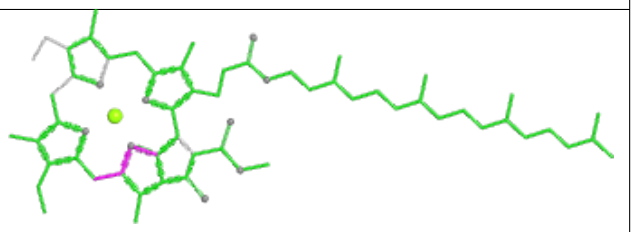
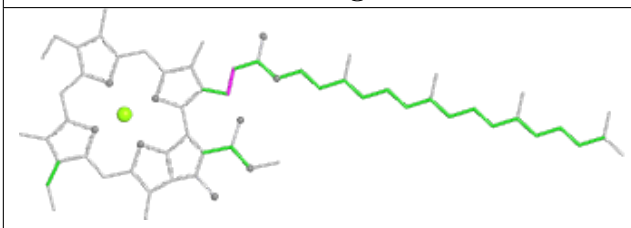
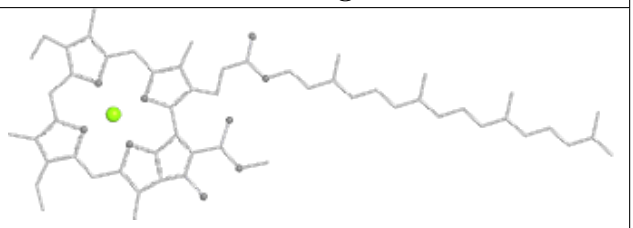
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA A 803	
 Bond lengths	 Bond angles
 Torsions	 Rings

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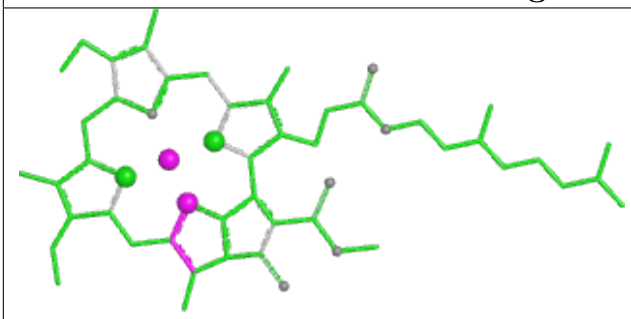
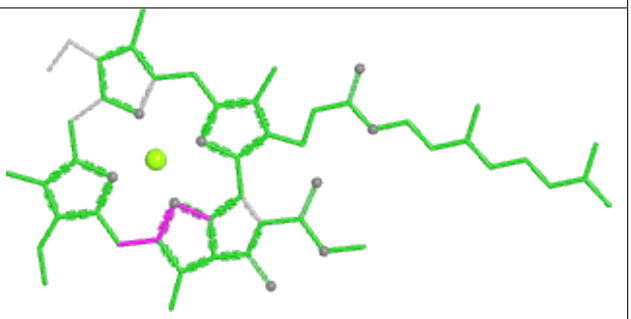
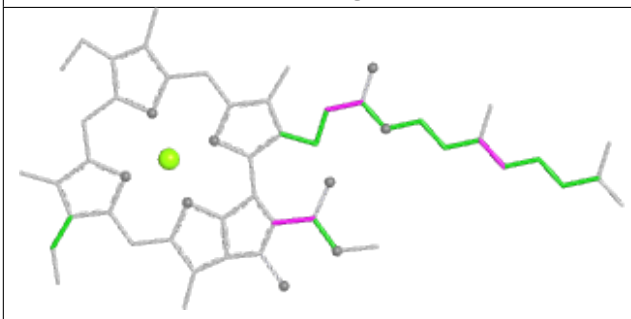
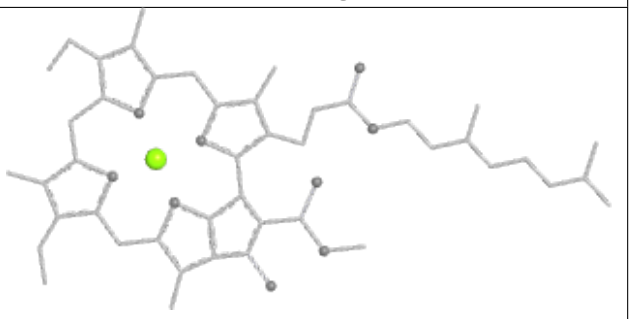
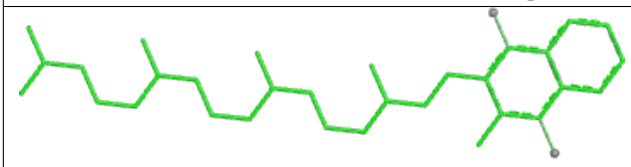
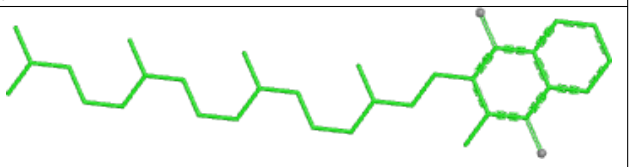
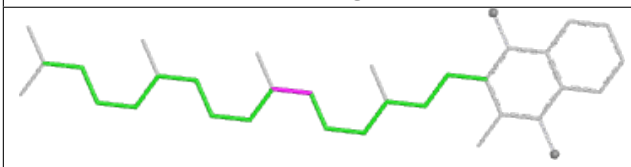
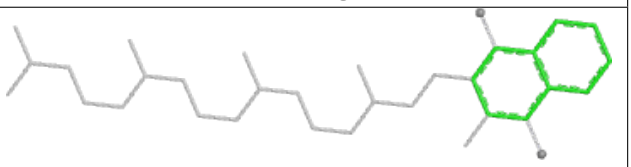
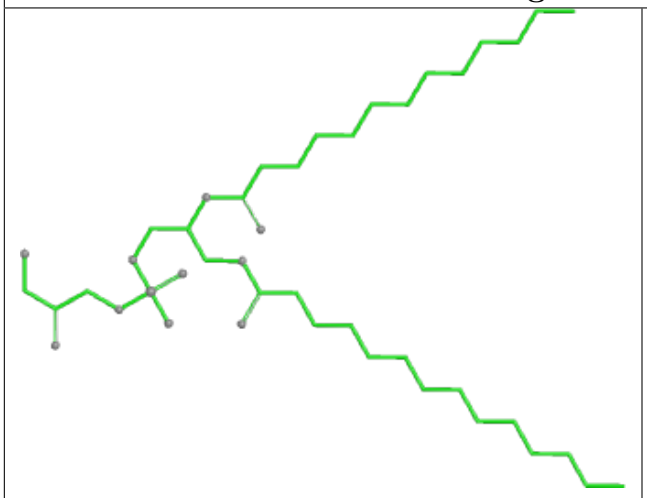
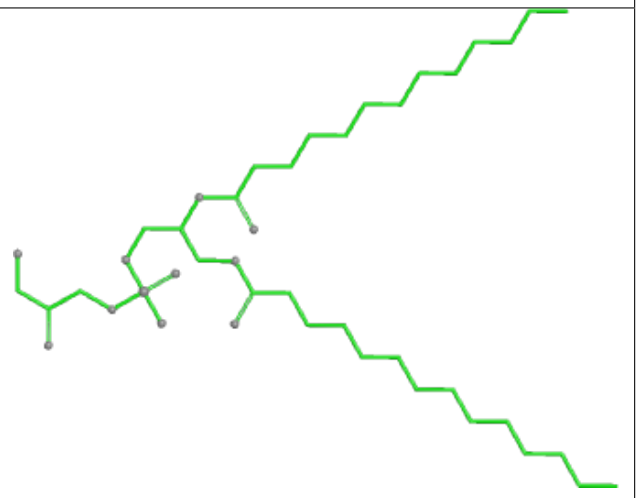
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand PQN B 842	
 Bond lengths	 Bond angles
 Torsions	 Rings

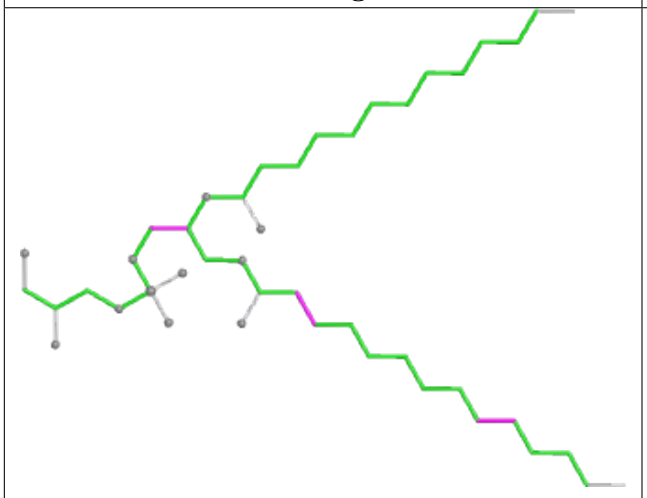
Ligand LHG 1 620



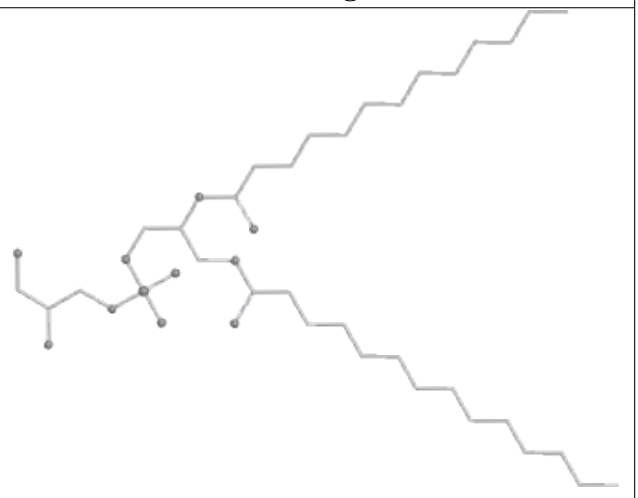
Bond lengths



Bond angles

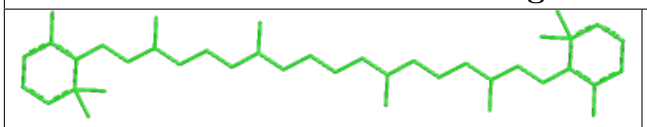


Torsions

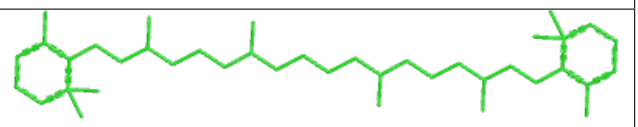


Rings

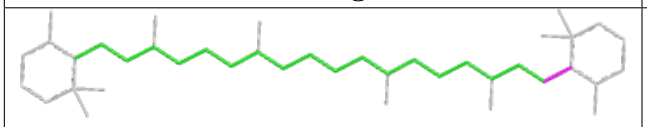
Ligand BCR 3 718



Bond lengths



Bond angles



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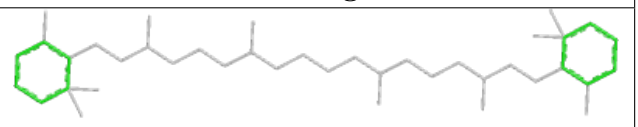
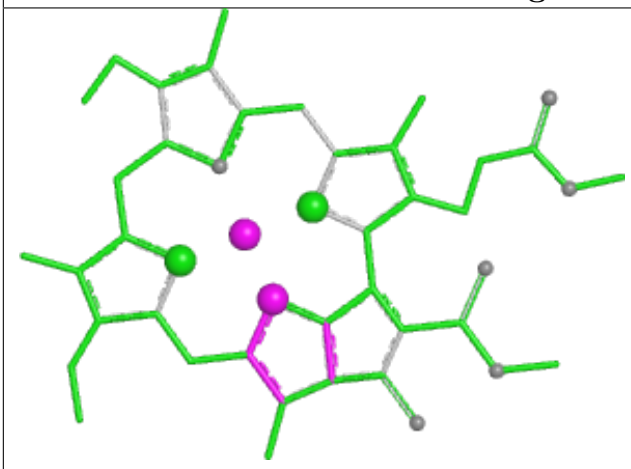
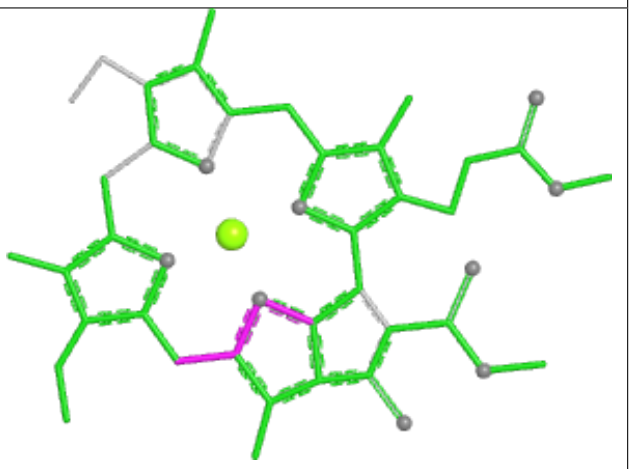


Rings

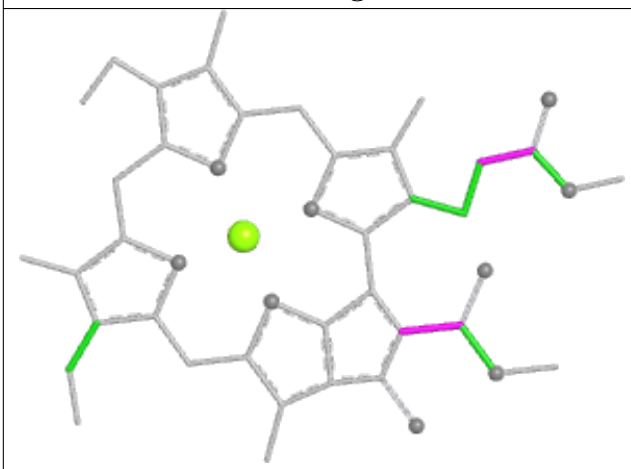
Ligand CLA 3 612



Bond lengths



Bond angles



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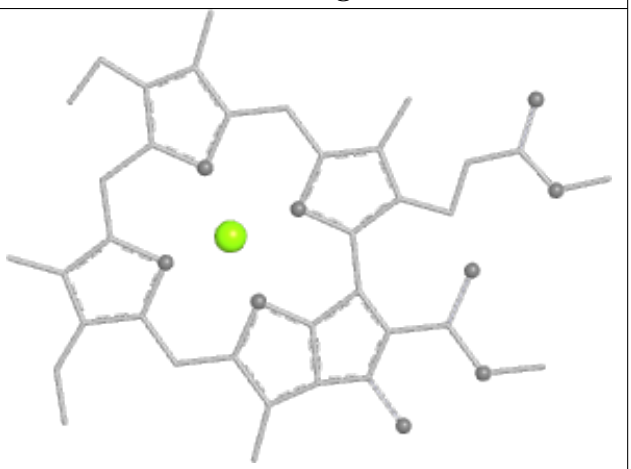
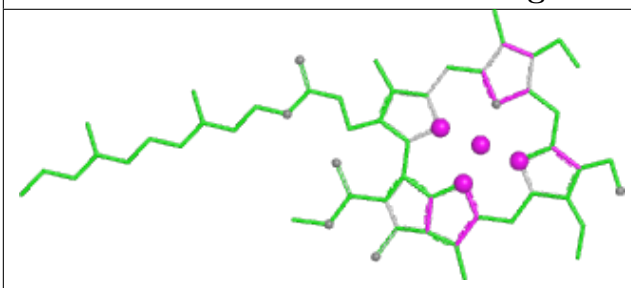
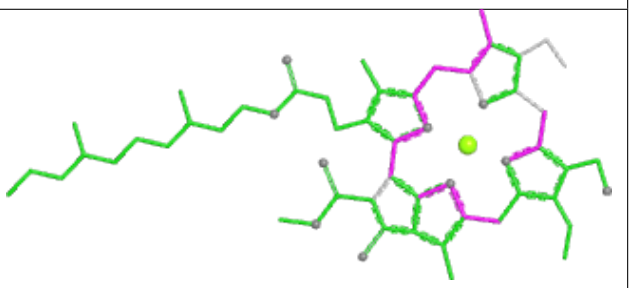


Rings

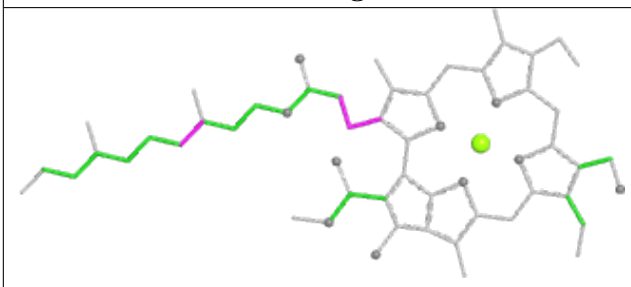
Ligand CHL 6 606



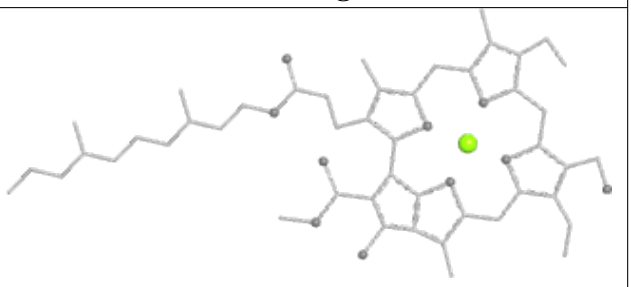
Bond lengths



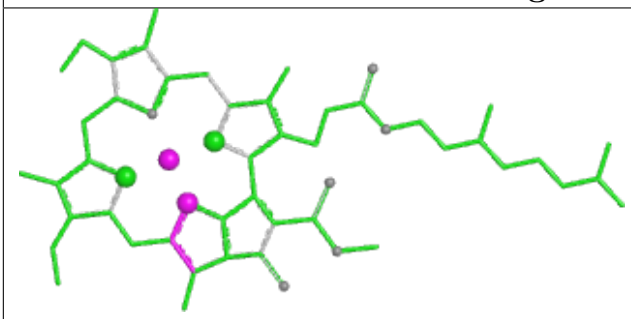
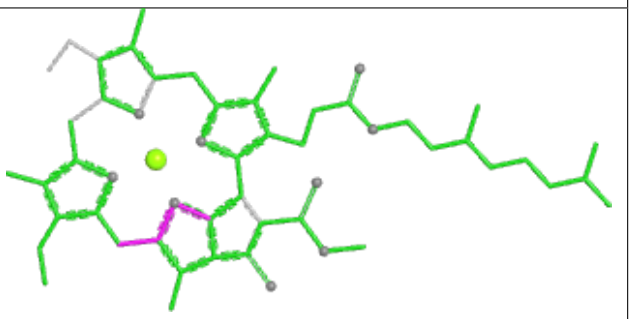
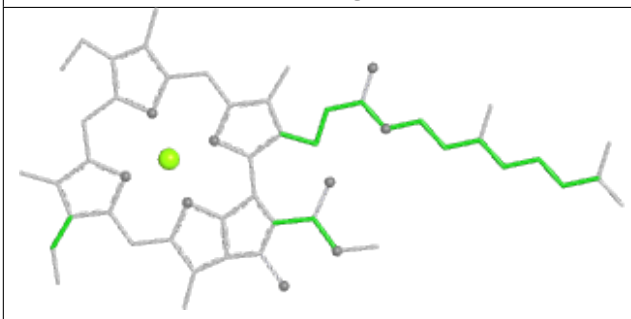
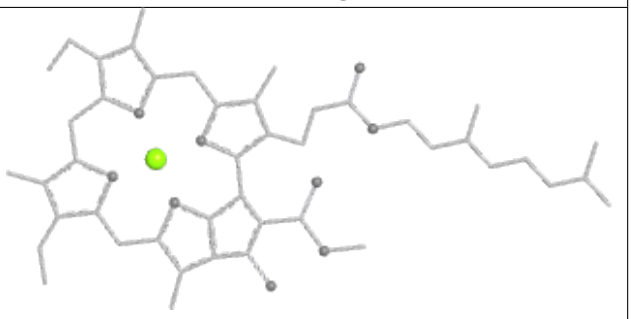
Bond angles

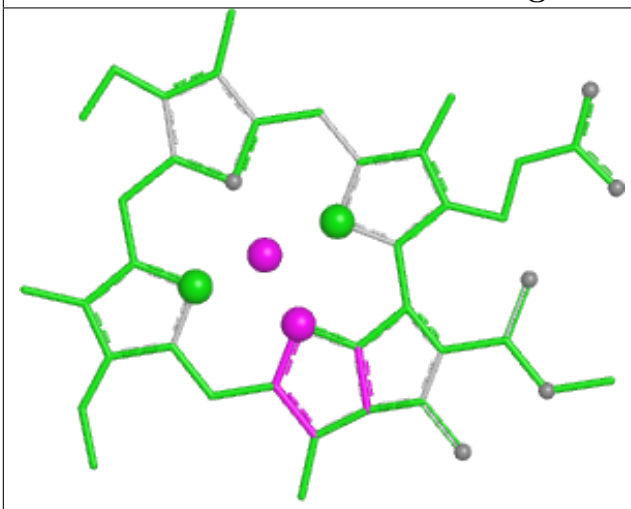
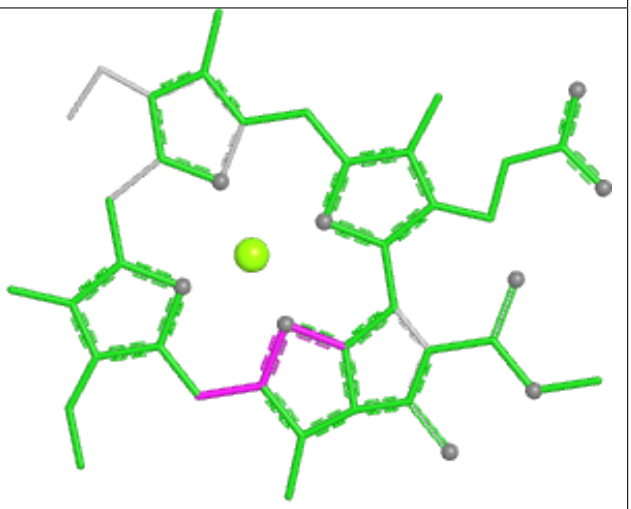
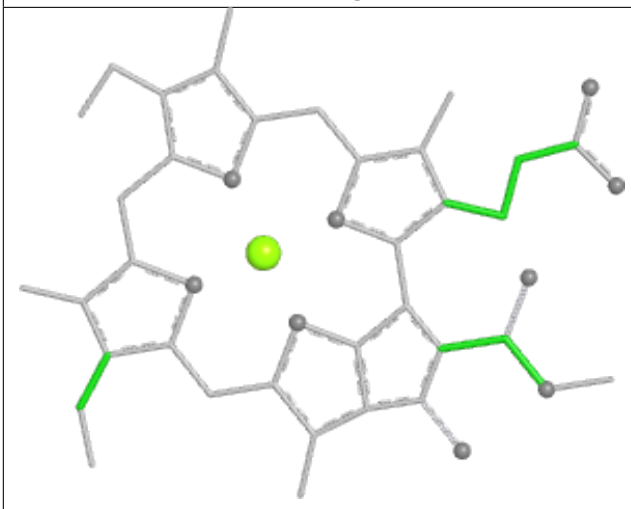
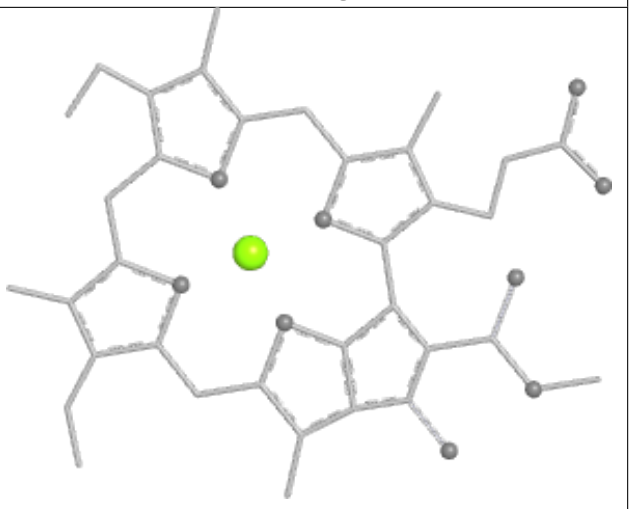


Torsions



Rings

Ligand CLA 5 611	
	
Bond lengths	**Bond angles**
	
Torsions	**Rings**

Ligand CLA 8 611	
	
Bond lengths	Bond angles
	
Torsions	Rings

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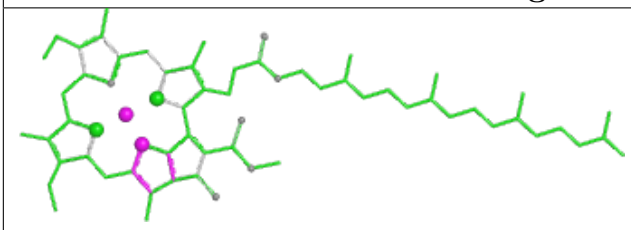
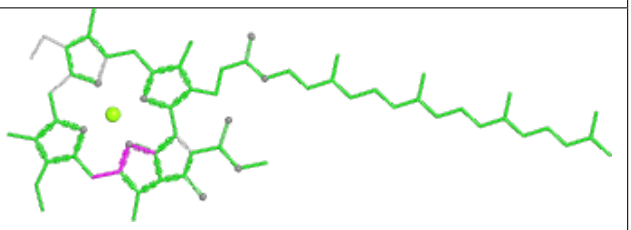
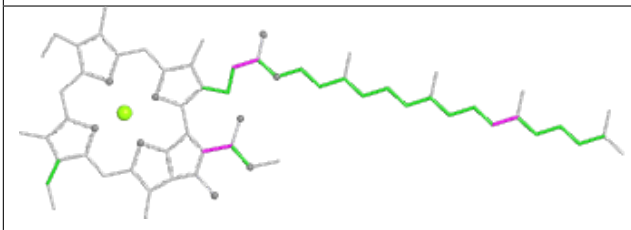
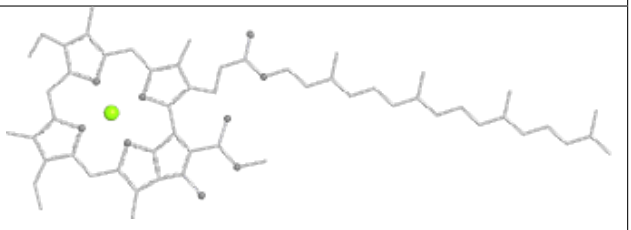
	
Bond lengths	Bond angles
	
Torsions	Rings

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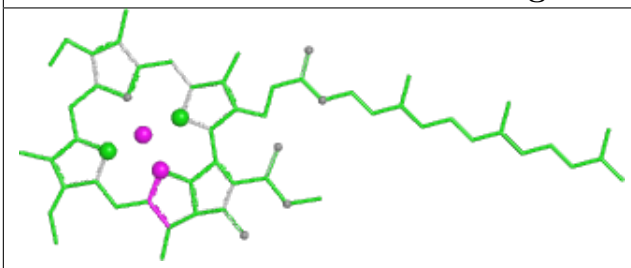
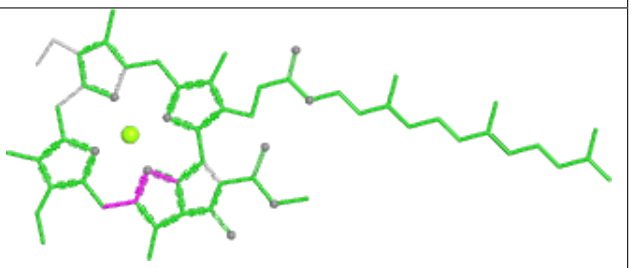
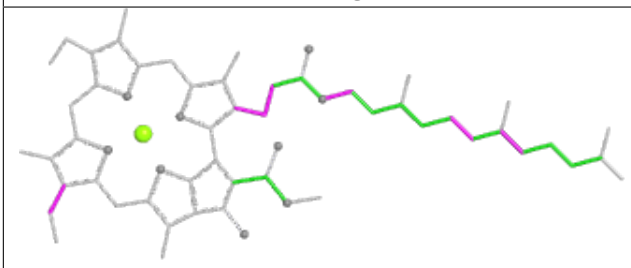
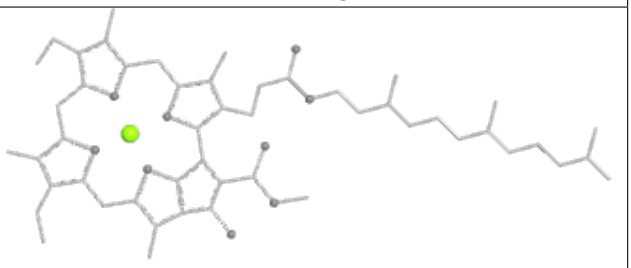
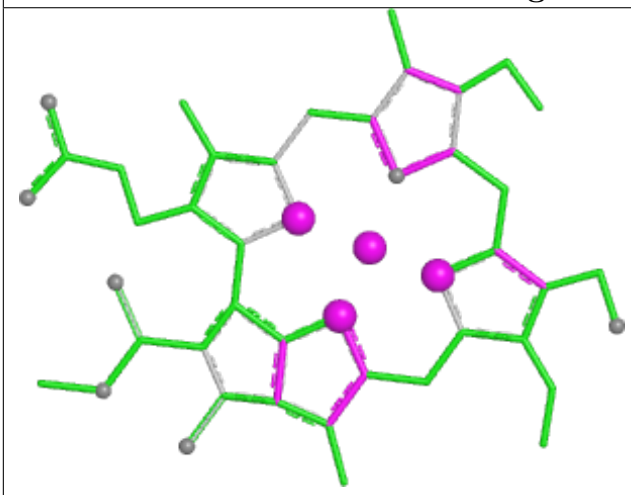
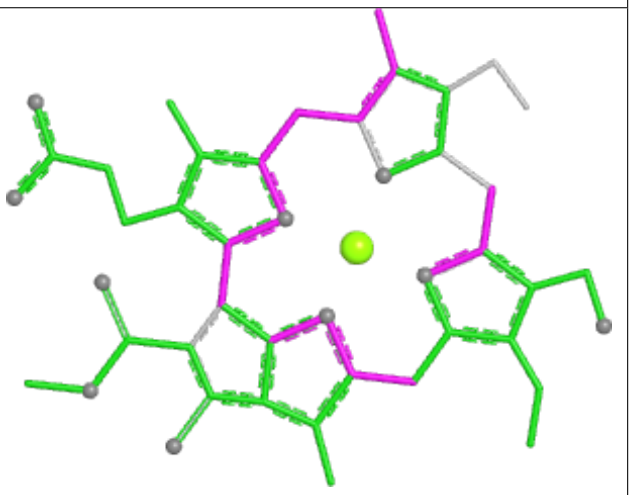
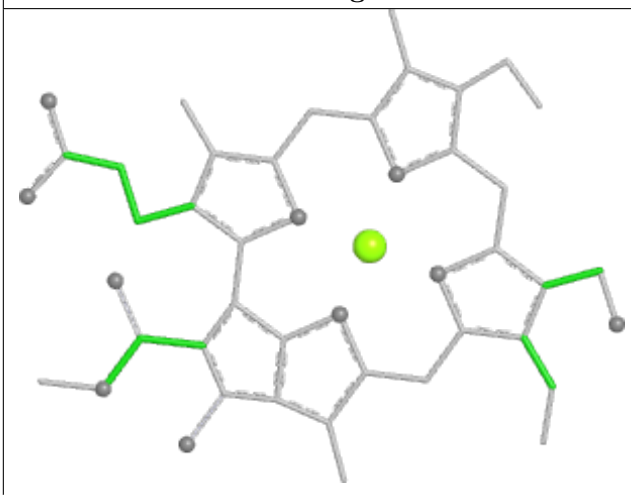
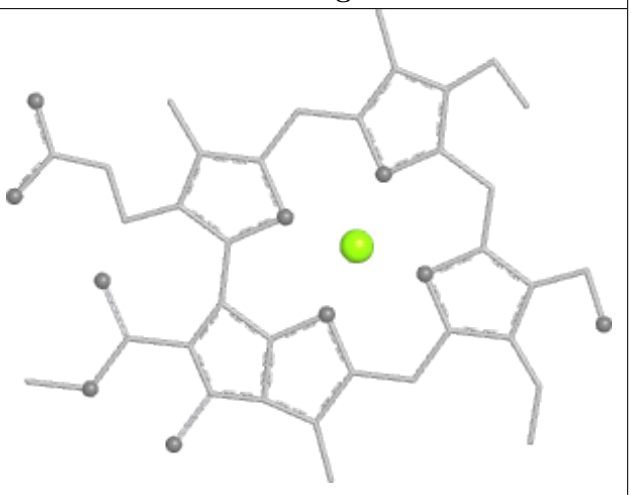
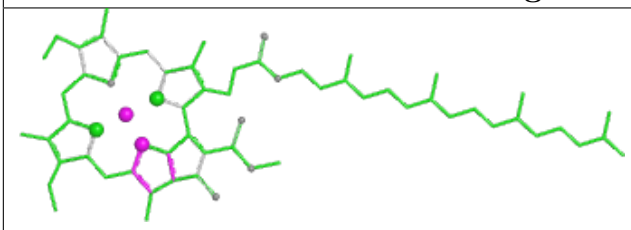
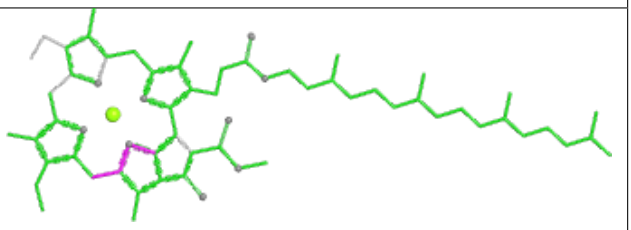
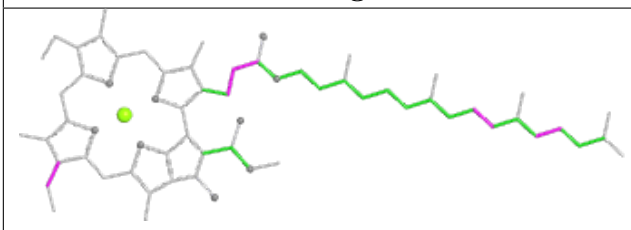
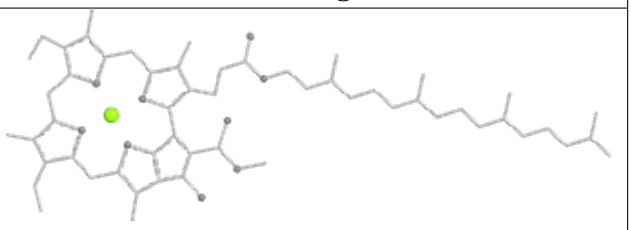
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CHL 5 606	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA B 817	
	
Bond lengths	**Bond angles**
	
Torsions	**Rings**

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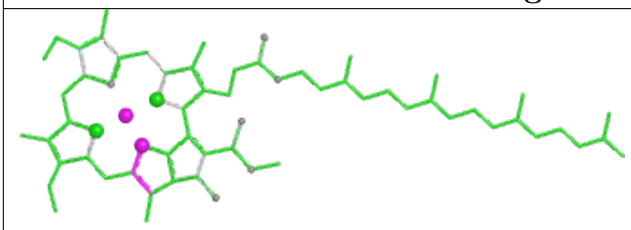
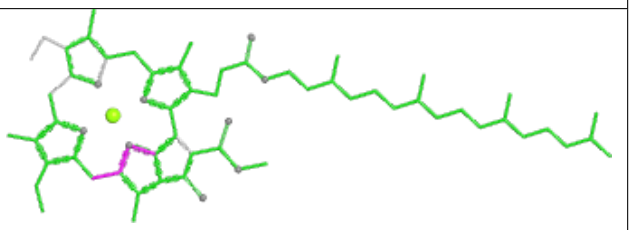
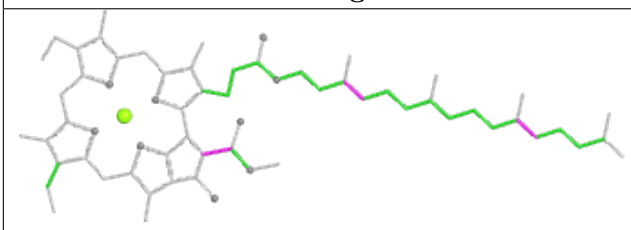
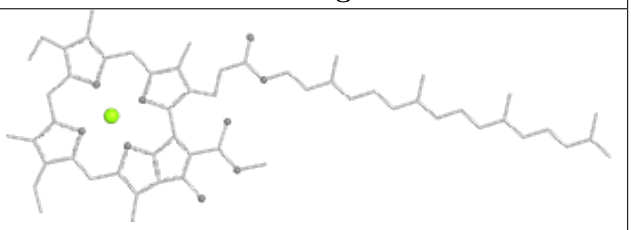
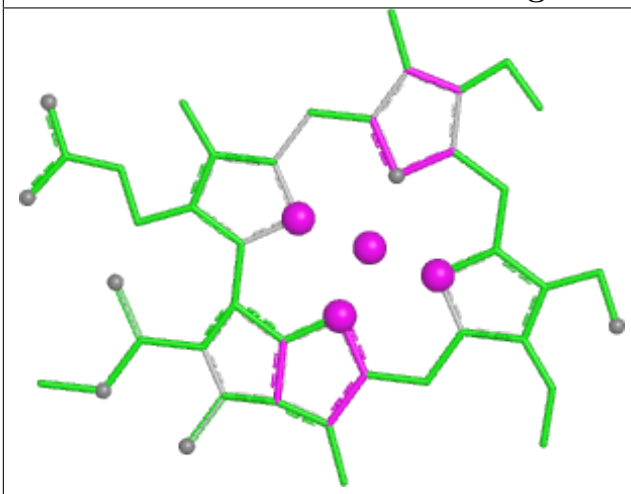
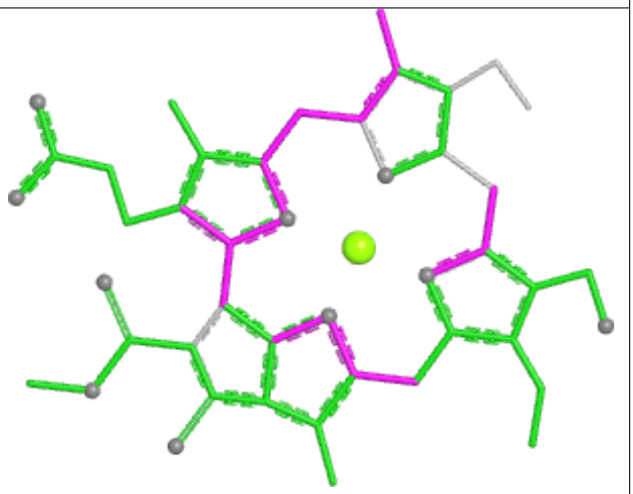
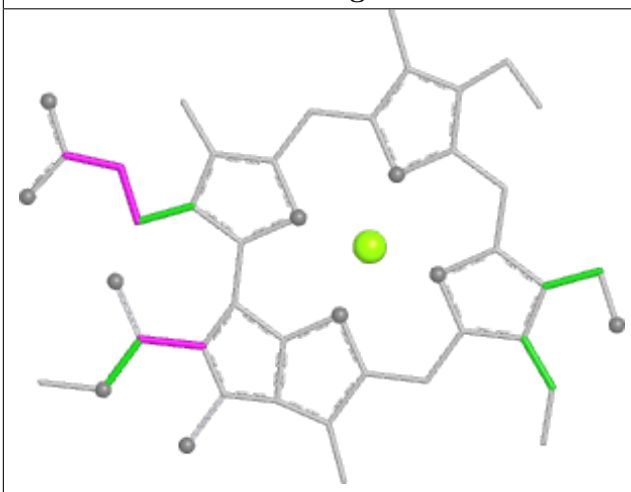
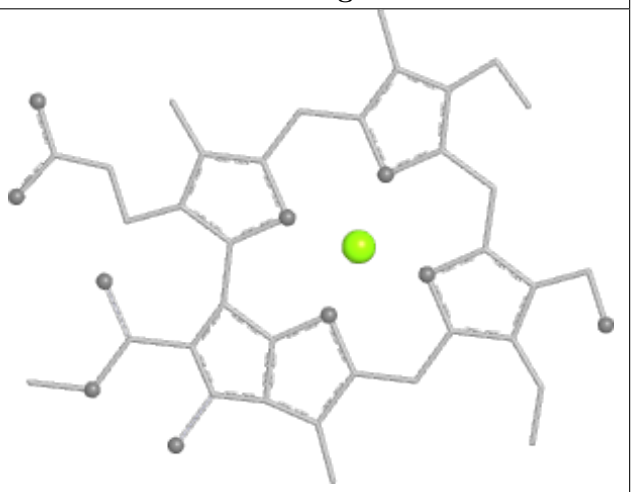
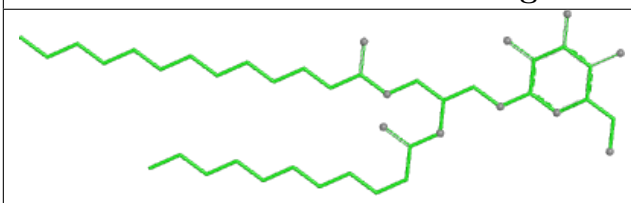
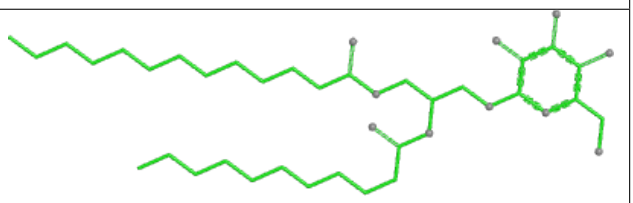
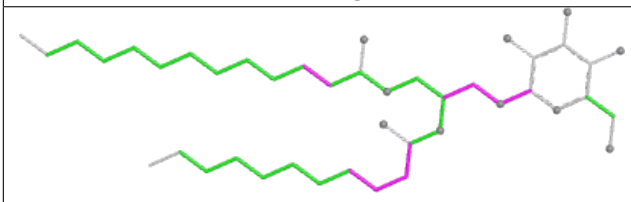
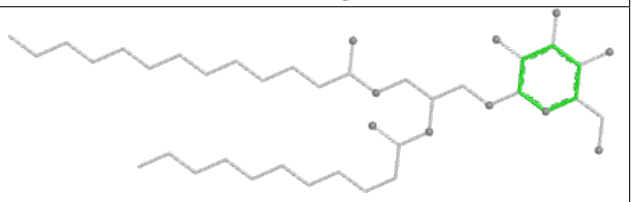
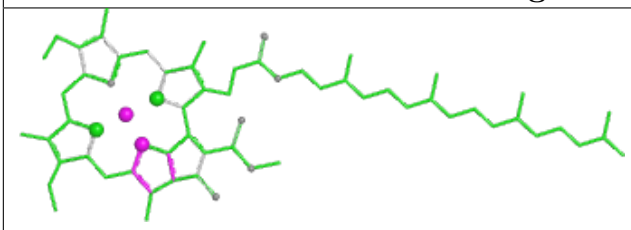
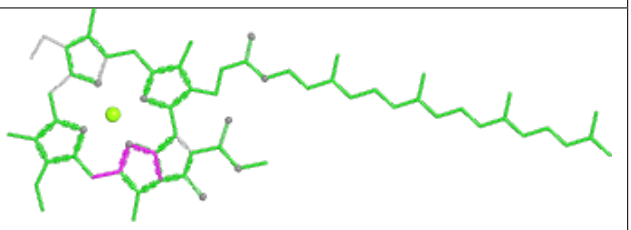
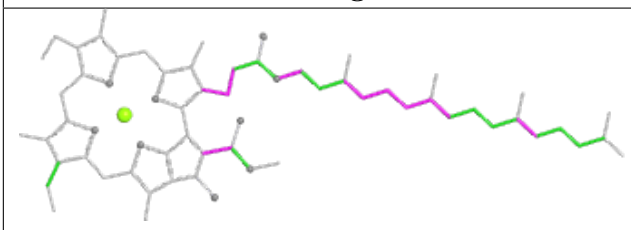
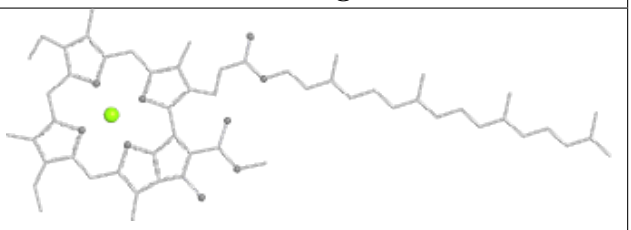
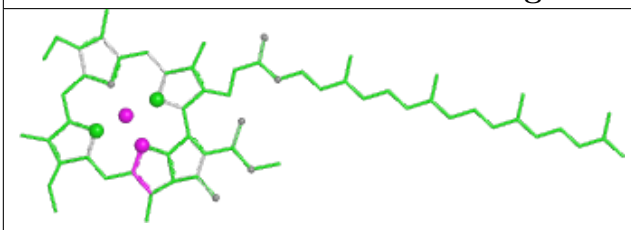
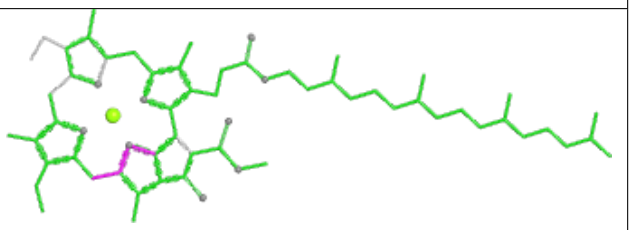
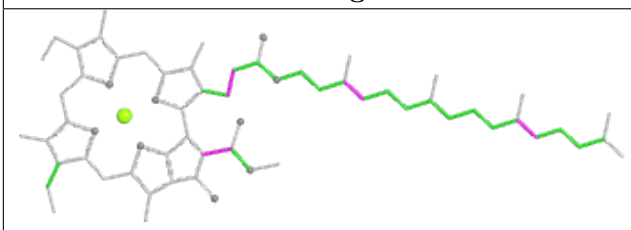
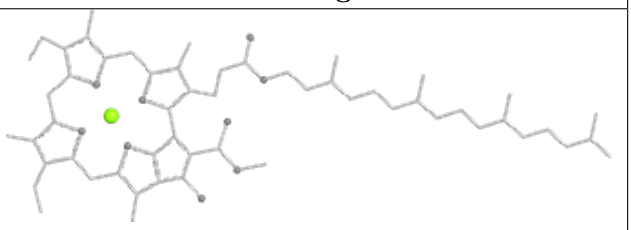
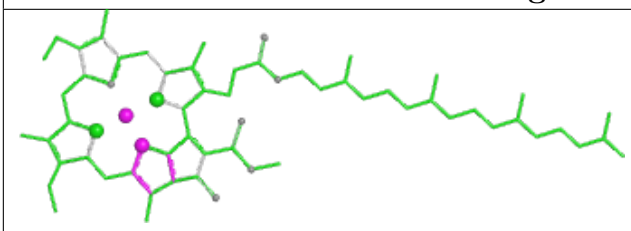
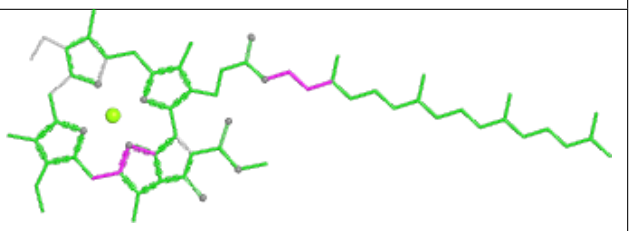
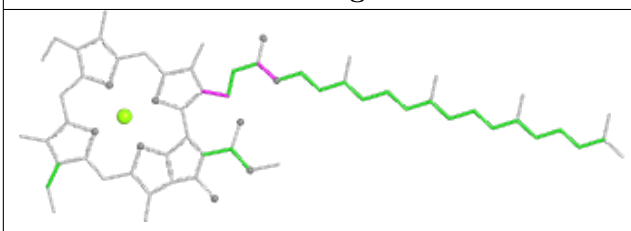
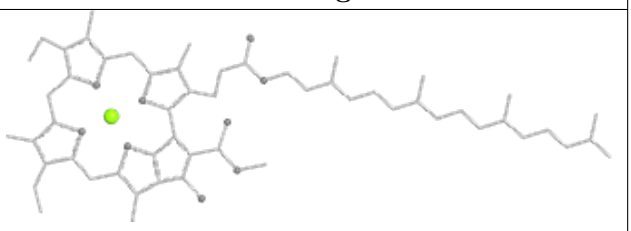
	
Bond lengths	**Bond angles**
	
Torsions	**Rings**

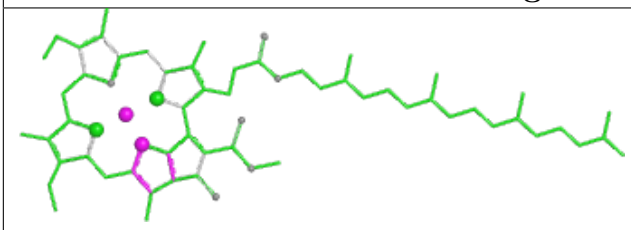
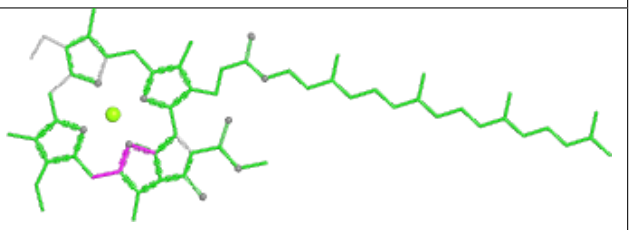
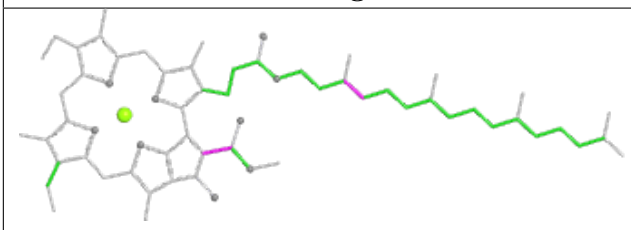
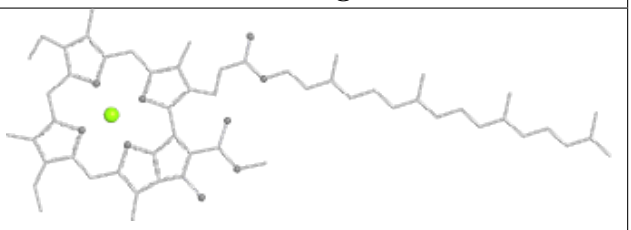
Ligand CHL 1 607	
	
Bond lengths	Bond angles
	
Torsions	Rings

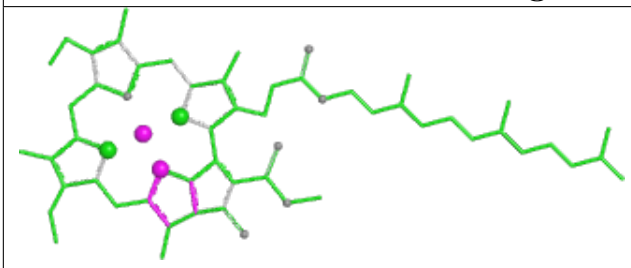
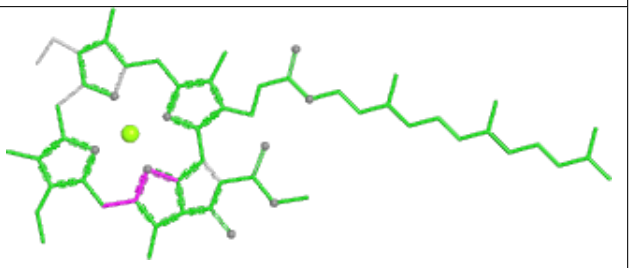
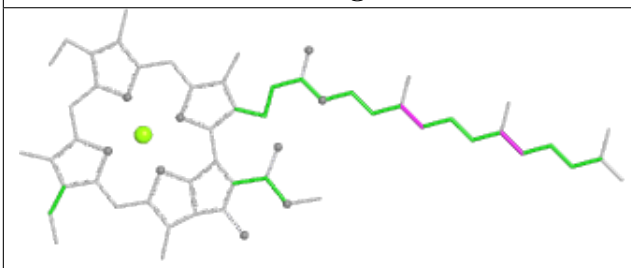
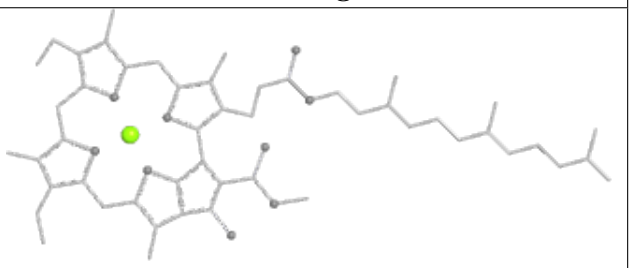
Ligand LMG B 852	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA 5 603	
 Bond lengths	 Bond angles
 Torsions	 Rings

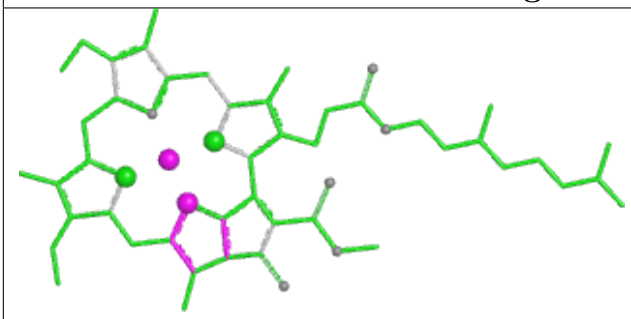
Ligand CLA B 839	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA 7 610	
 Bond lengths	 Bond angles
 Torsions	 Rings

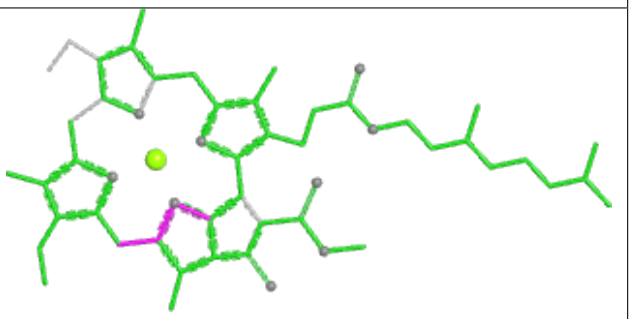
Ligand CLA A 818	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA 3 613	
 Bond lengths	 Bond angles
 Torsions	 Rings

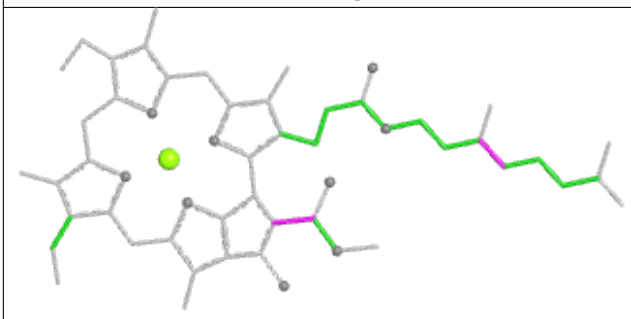
Ligand CLA A 815



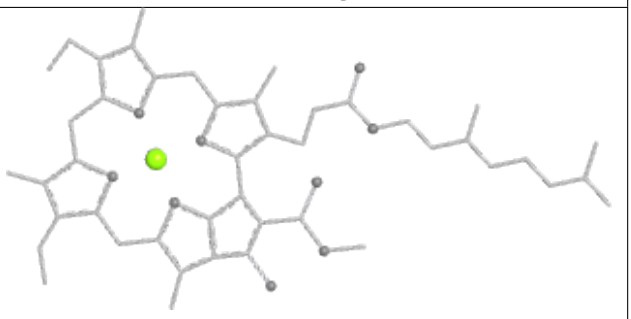
Bond lengths



Bond angles

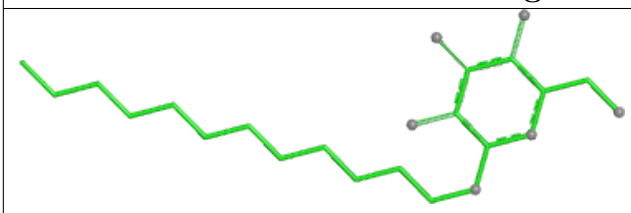


Torsions

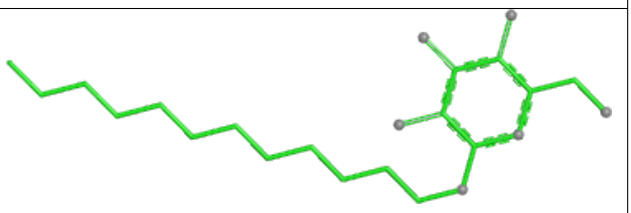


Rings

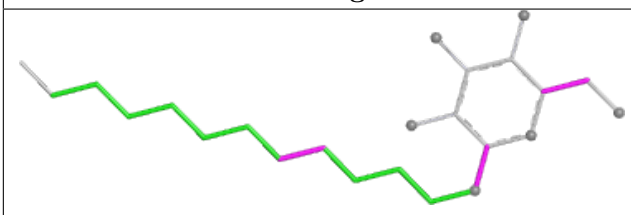
Ligand LMU 6 630



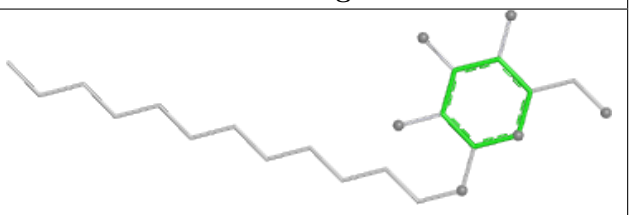
Bond lengths



Bond angles

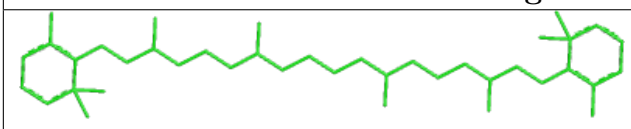


Torsions

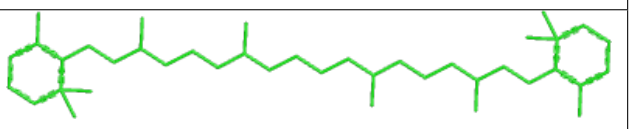


Rings

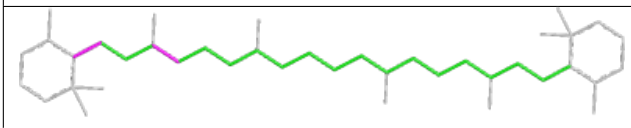
Ligand BCR L 201



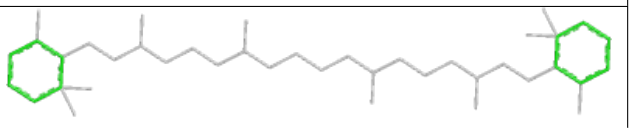
Bond lengths



Bond angles

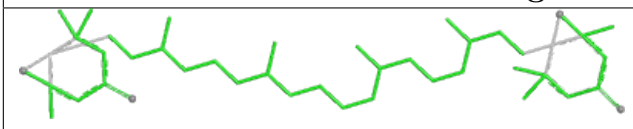


Torsions

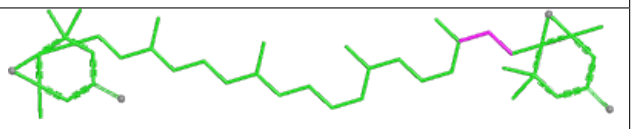


Rings

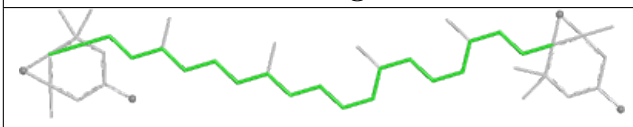
Ligand XAT 6 624



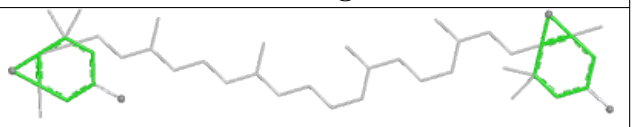
Bond lengths



Bond angles

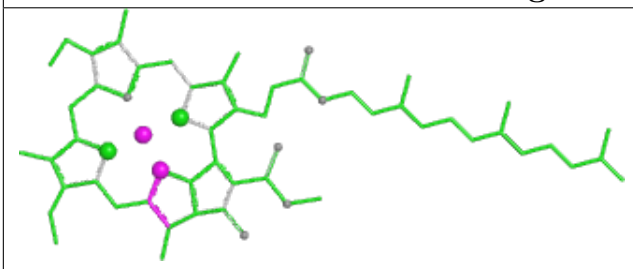


Torsions

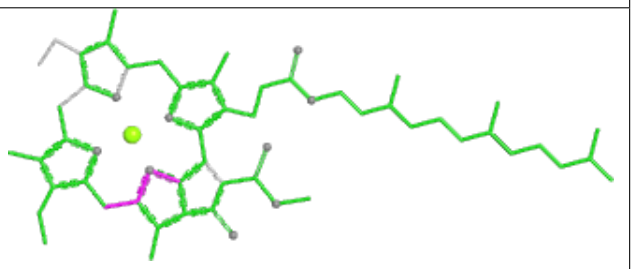


Rings

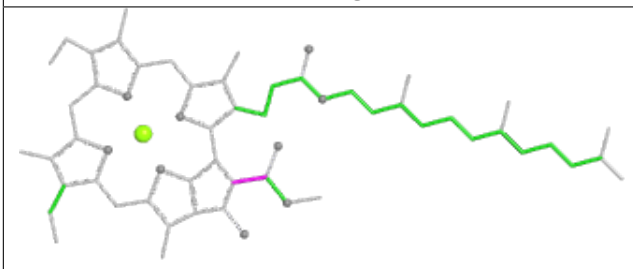
Ligand CLA 9 602



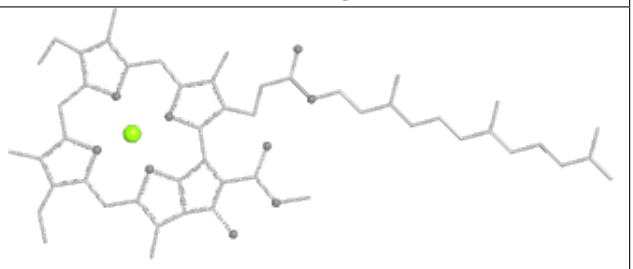
Bond lengths



Bond angles

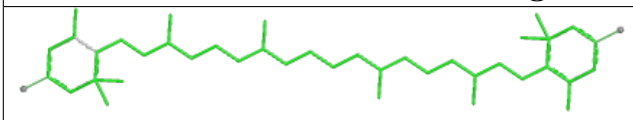


Torsions



Rings

Ligand LUT 5 620



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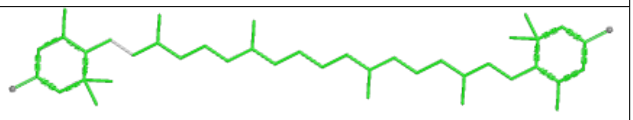

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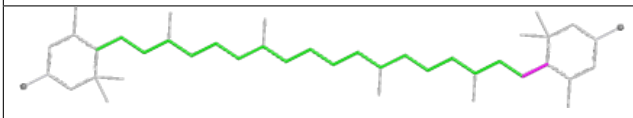

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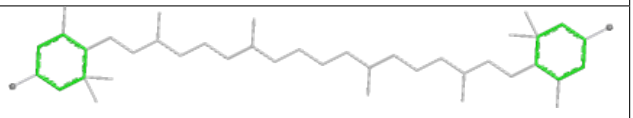
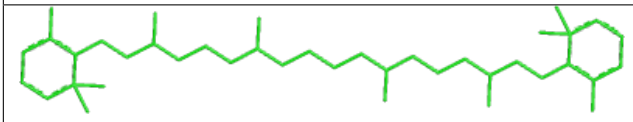
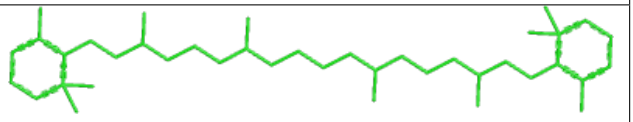


Rings

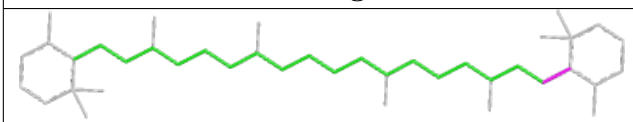
Ligand BCR A 850



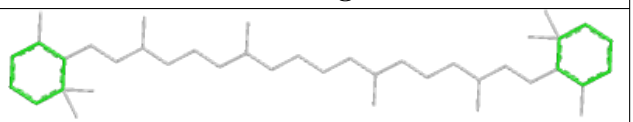
Bond lengths



Bond angles

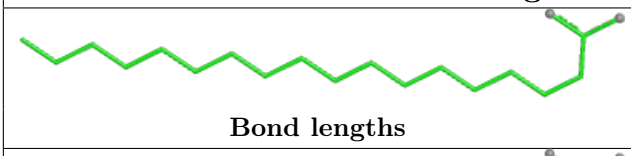


Torsions



Rings

Ligand LMG 6 633



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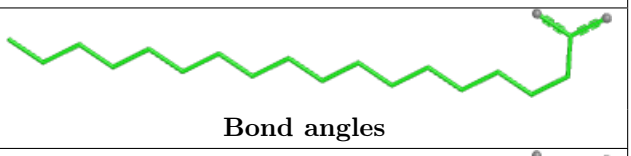

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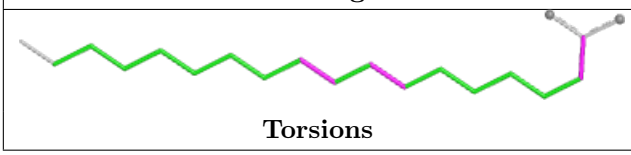

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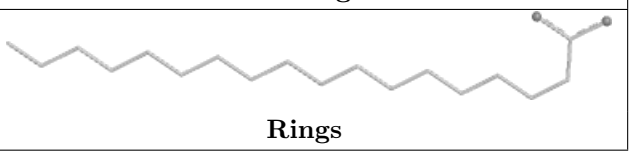
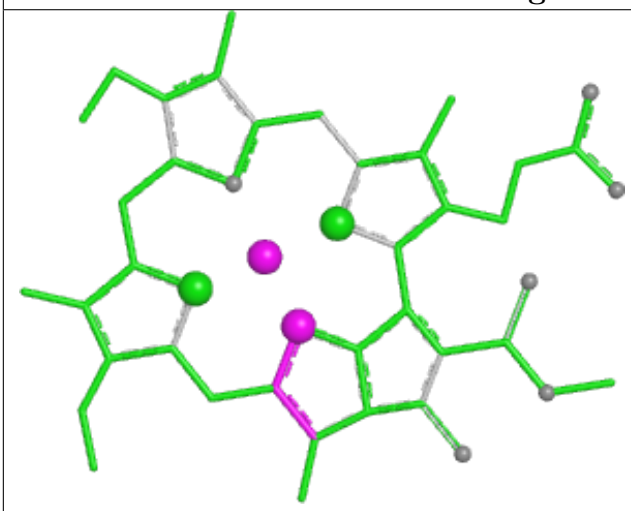


Rings

Ligand CLA 4 616



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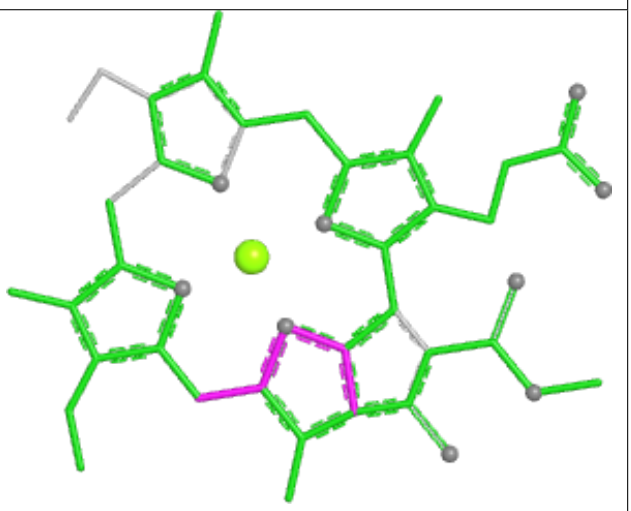
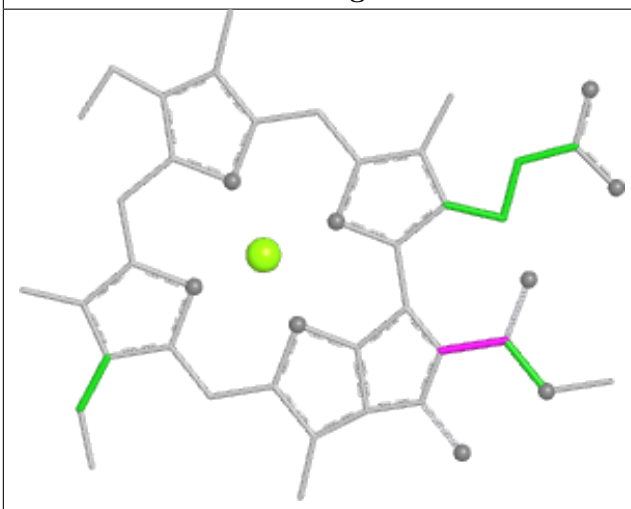


Bond angles



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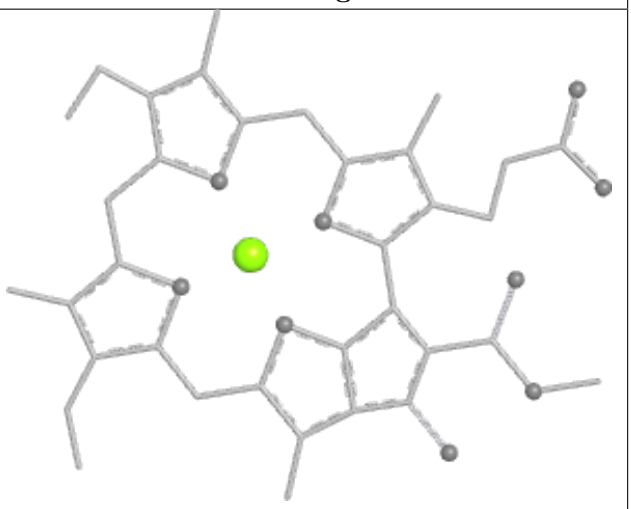
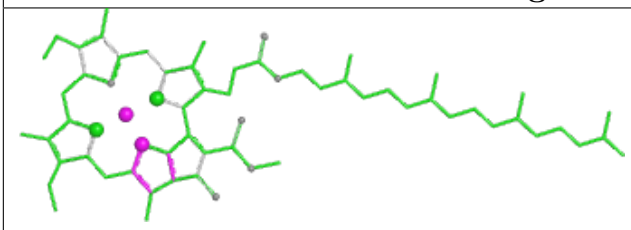
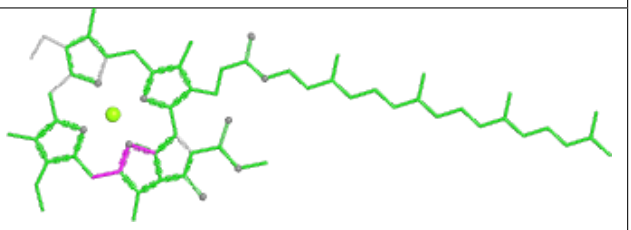


Rings

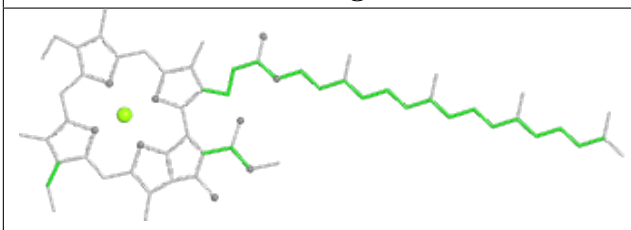
Ligand CLA 3 610



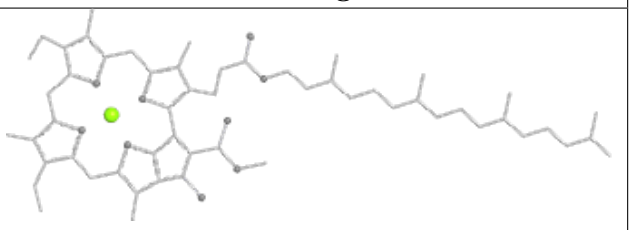
Bond lengths



Bond angles

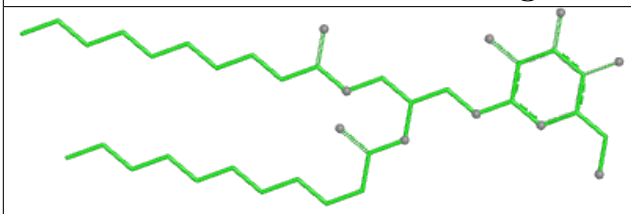


Torsions

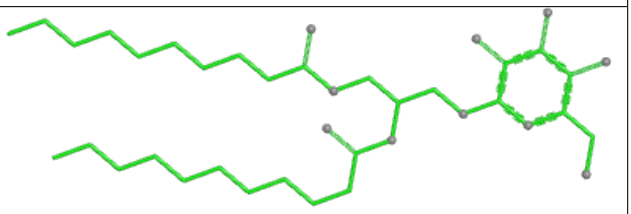


Rings

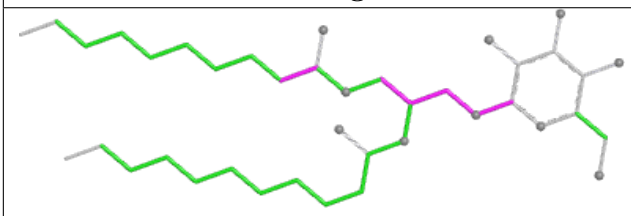
Ligand LMG A 859



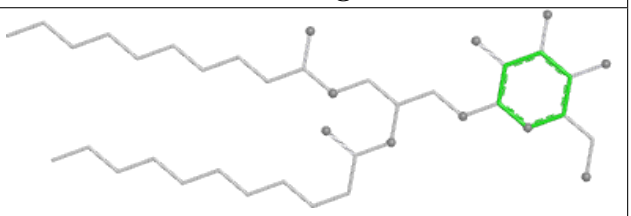
Bond lengths



Bond angles

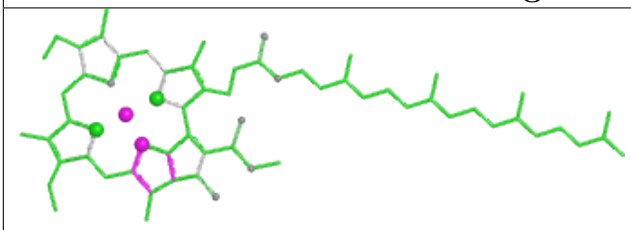


Torsions

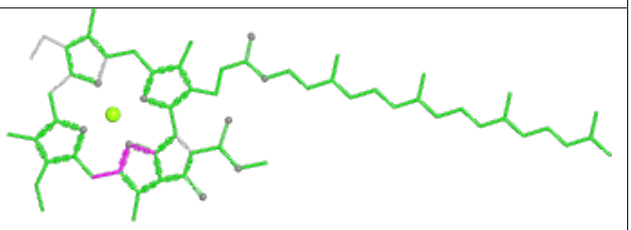


Rings

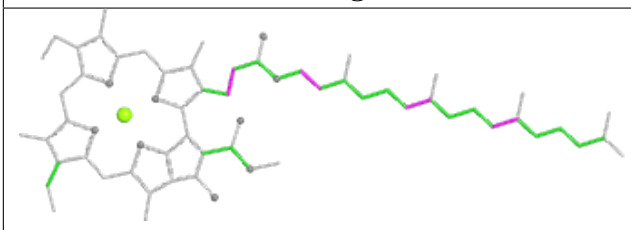
Ligand CLA A 823



Bond lengths



Bond angles



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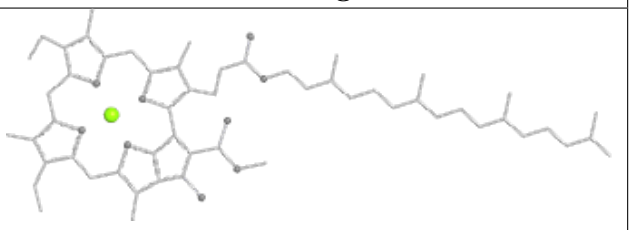
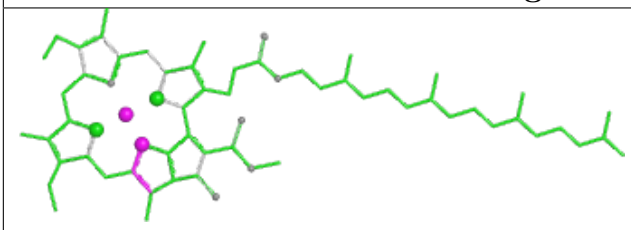
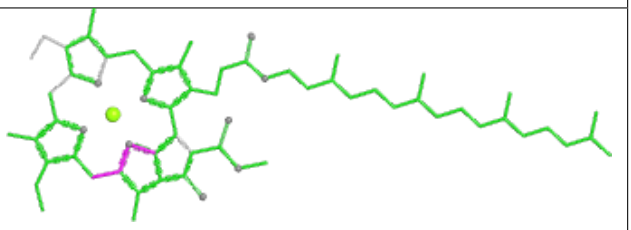
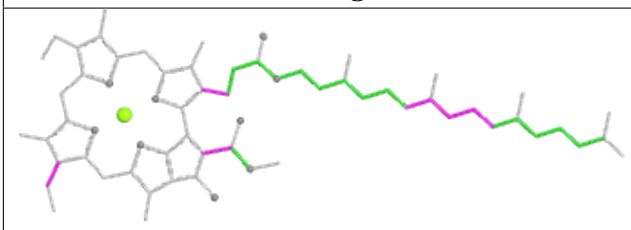
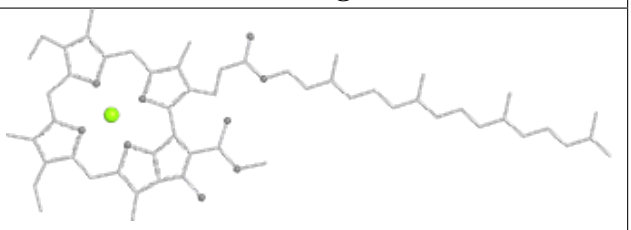
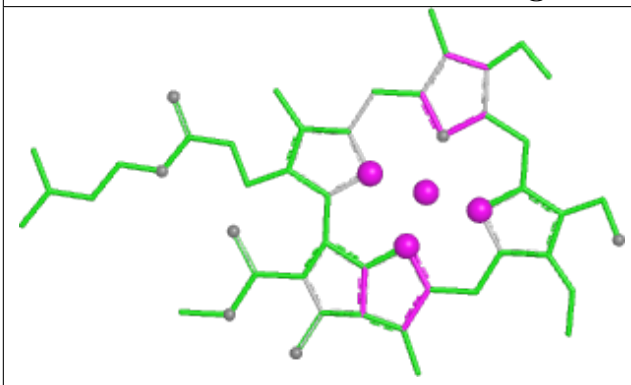
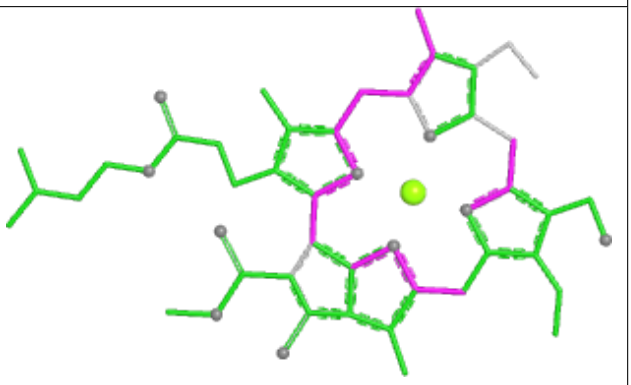
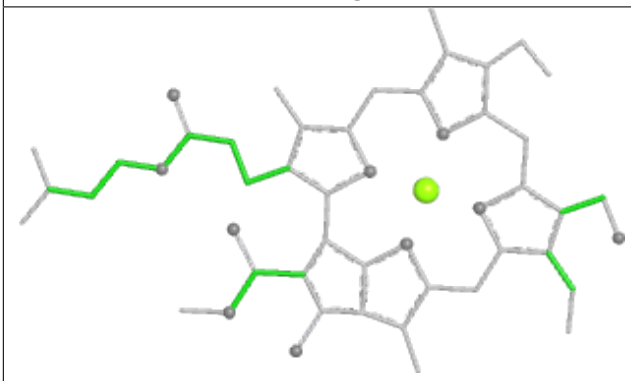
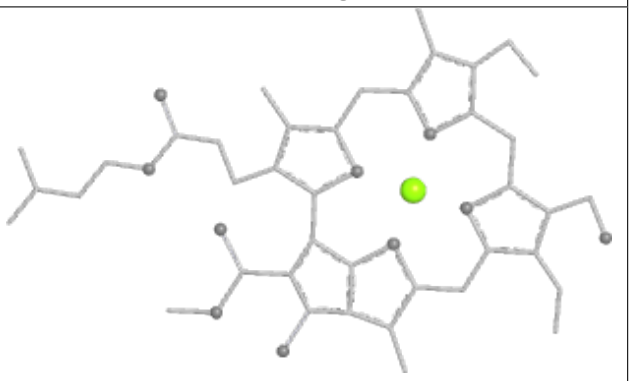
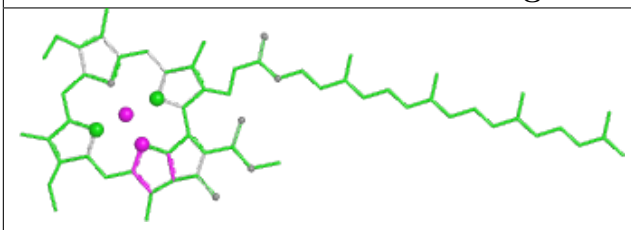


Rings

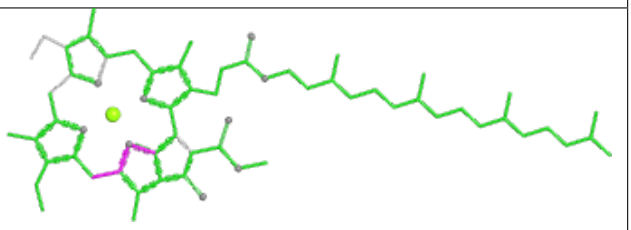
Ligand CLA B 813	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CHL 5 608	
 Bond lengths	 Bond angles
 Torsions	 Rings

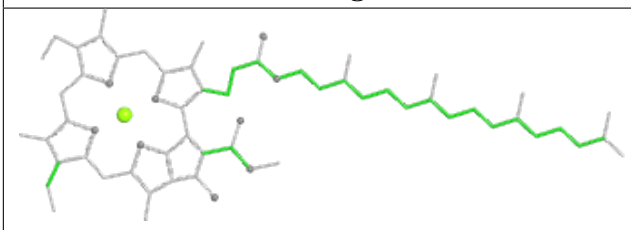
Ligand CLA A 802



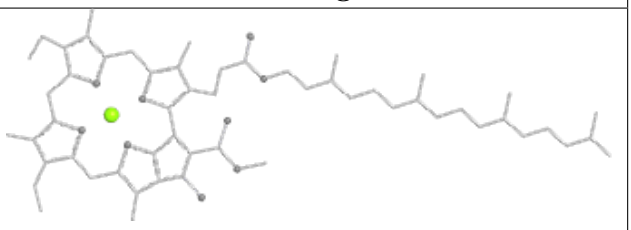
Bond lengths



Bond angles

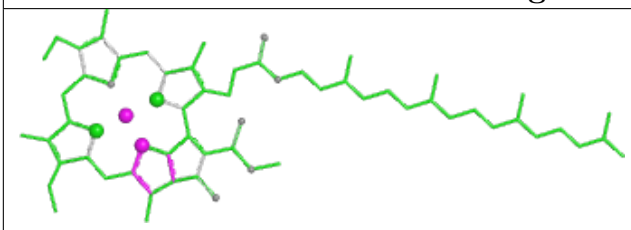


Torsions

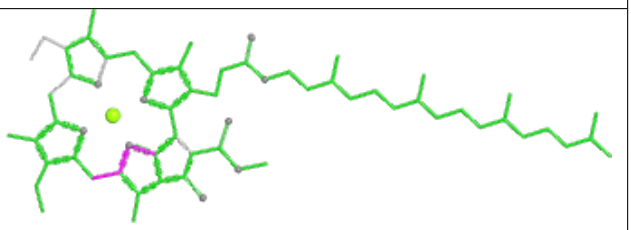


Rings

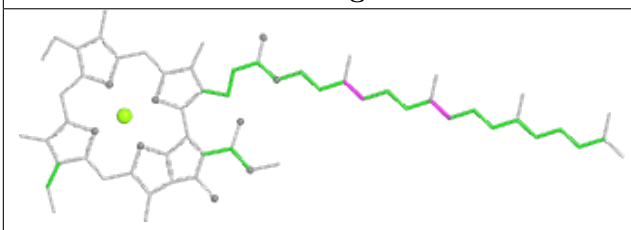
Ligand CLA 6 613



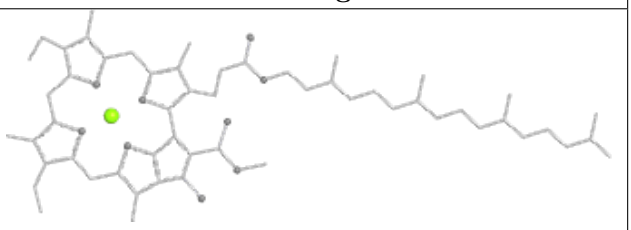
Bond lengths



Bond angles

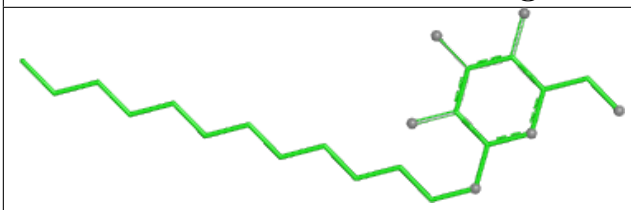


Torsions

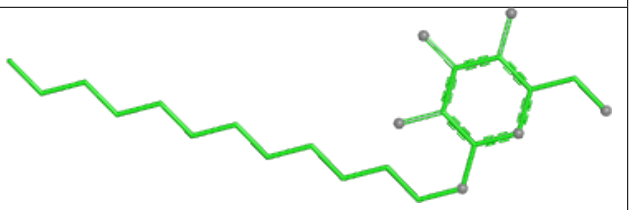


Rings

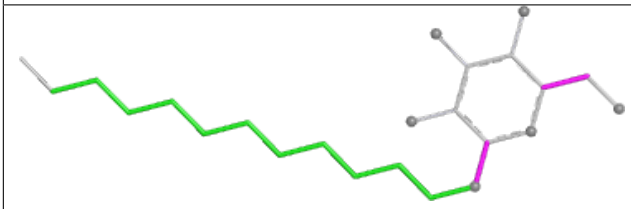
Ligand LMU A 861



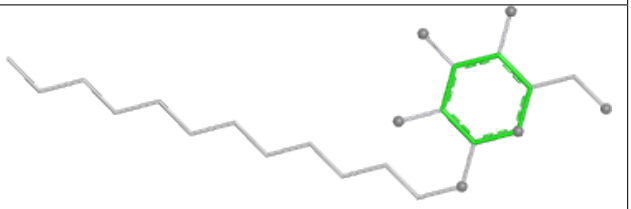
Bond lengths



Bond angles



Torsions



Rings

5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

There are no chain breaks in this entry.

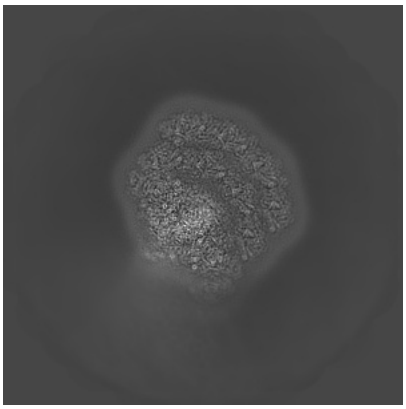
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-14870. These allow visual inspection of the internal detail of the map and identification of artifacts.

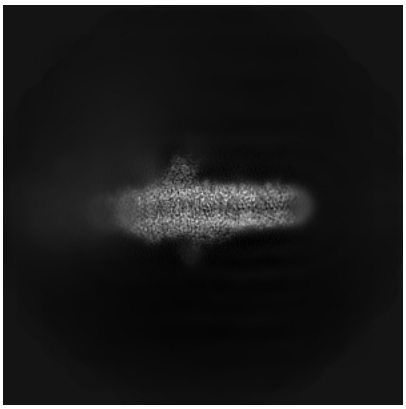
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

6.1 Orthogonal projections

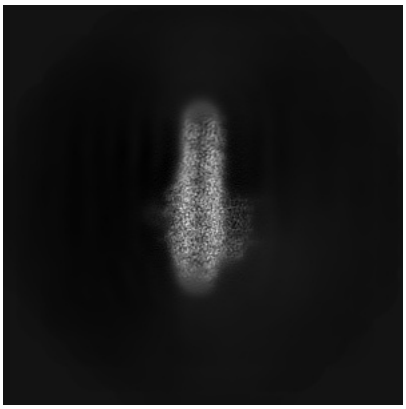
6.1.1 Primary map



X

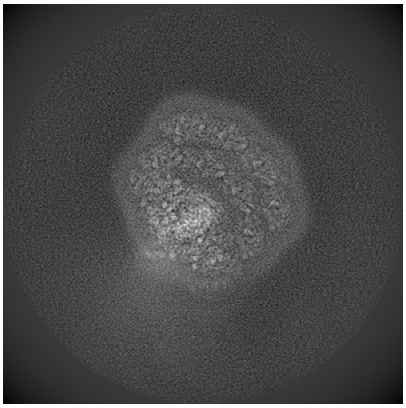


Y

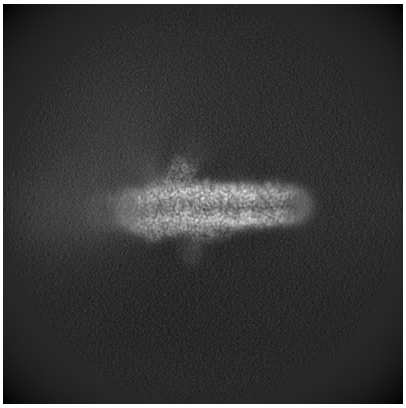


Z

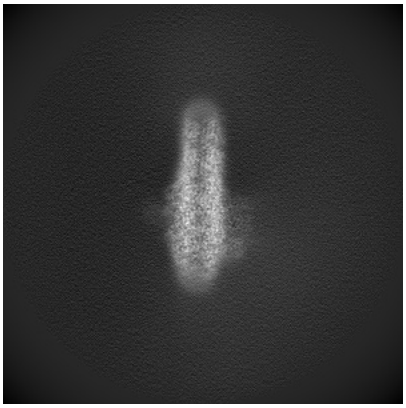
6.1.2 Raw map



X



Y

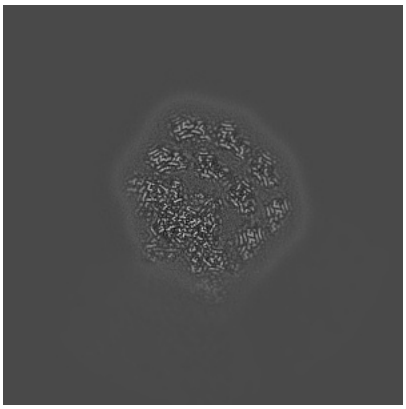


Z

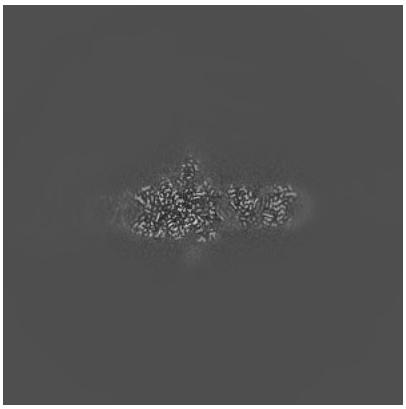
The images above show the map projected in three orthogonal directions.

6.2 Central slices (i)

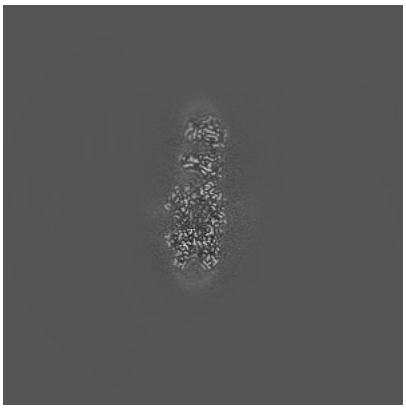
6.2.1 Primary map



X Index: 250

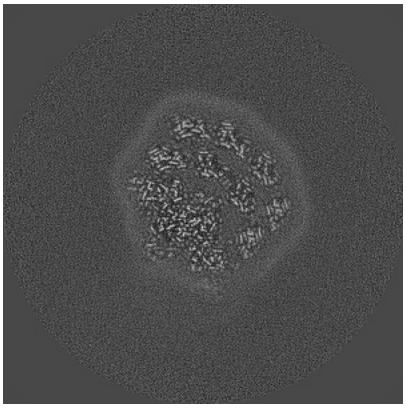


Y Index: 250

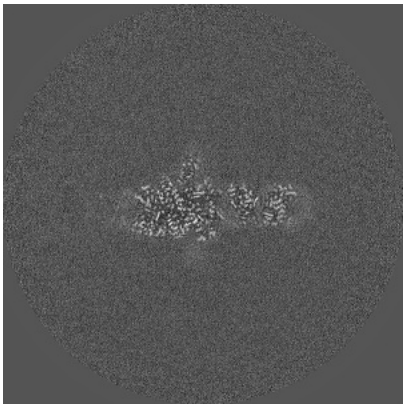


Z Index: 250

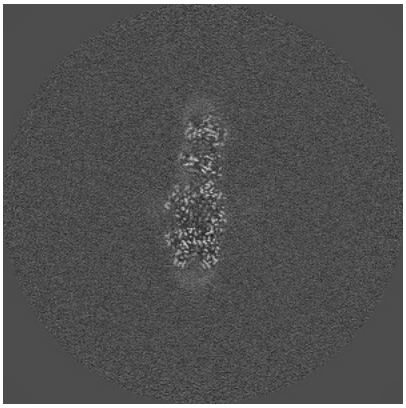
6.2.2 Raw map



X Index: 250



Y Index: 250

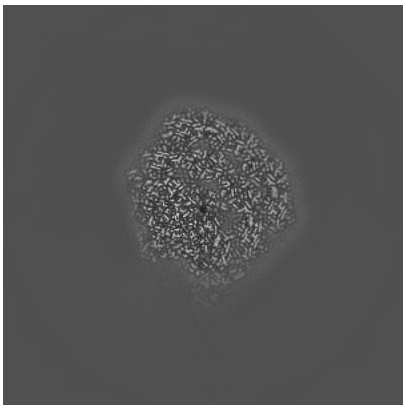


Z Index: 250

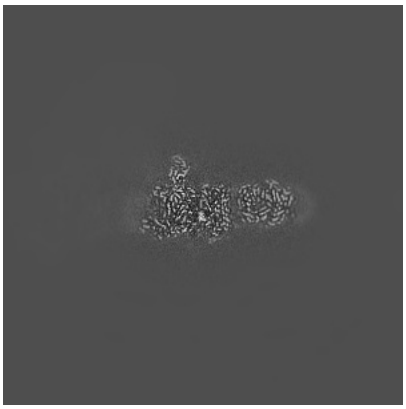
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

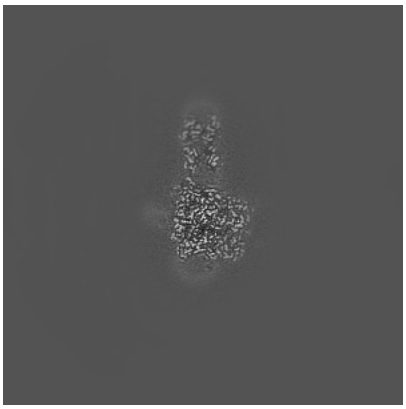
6.3.1 Primary map



X Index: 261

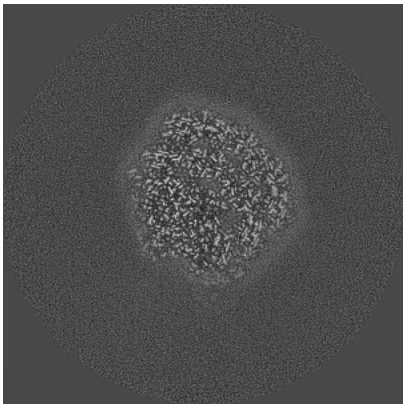


Y Index: 218

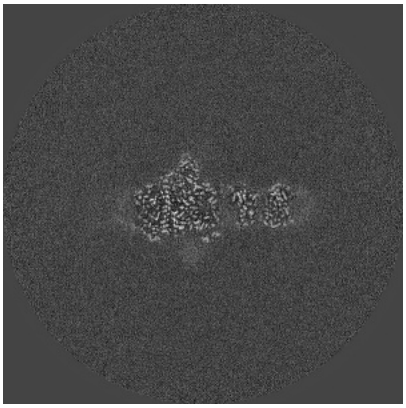


Z Index: 228

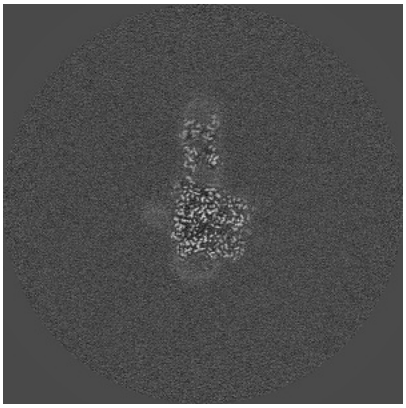
6.3.2 Raw map



X Index: 261



Y Index: 245

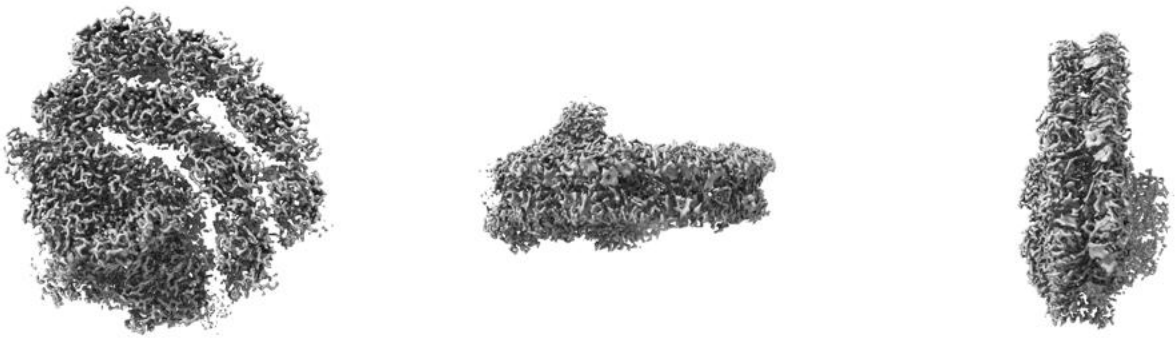


Z Index: 228

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 0.055. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

6.4.2 Raw map

X Y Z

These images show the 3D surface of the raw map. The raw map's contour level was selected so that its surface encloses the same volume as the primary map does at its recommended contour level.

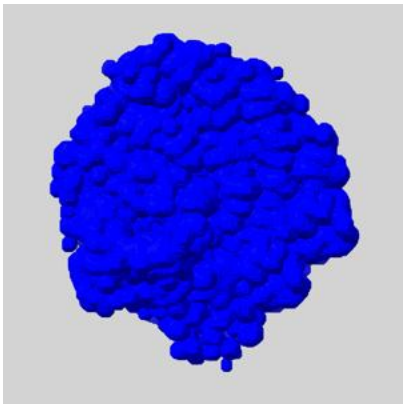
6.5 Mask visualisation (i)

This section shows the 3D surface view of the primary map at 50% transparency overlaid with the specified mask at 0% transparency

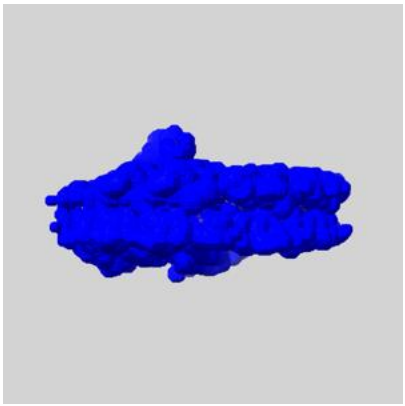
A mask typically either:

- Encompasses the whole structure
- Separates out a domain, a functional unit, a monomer or an area of interest from a larger structure

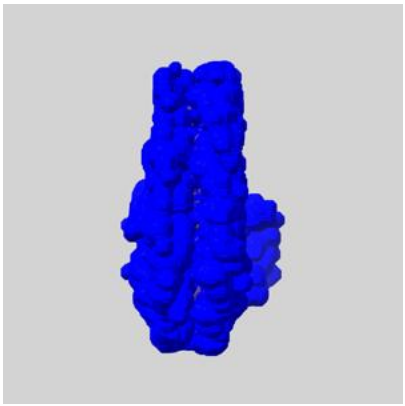
6.5.1 emd_14870_msk_1.map (i)



X



Y

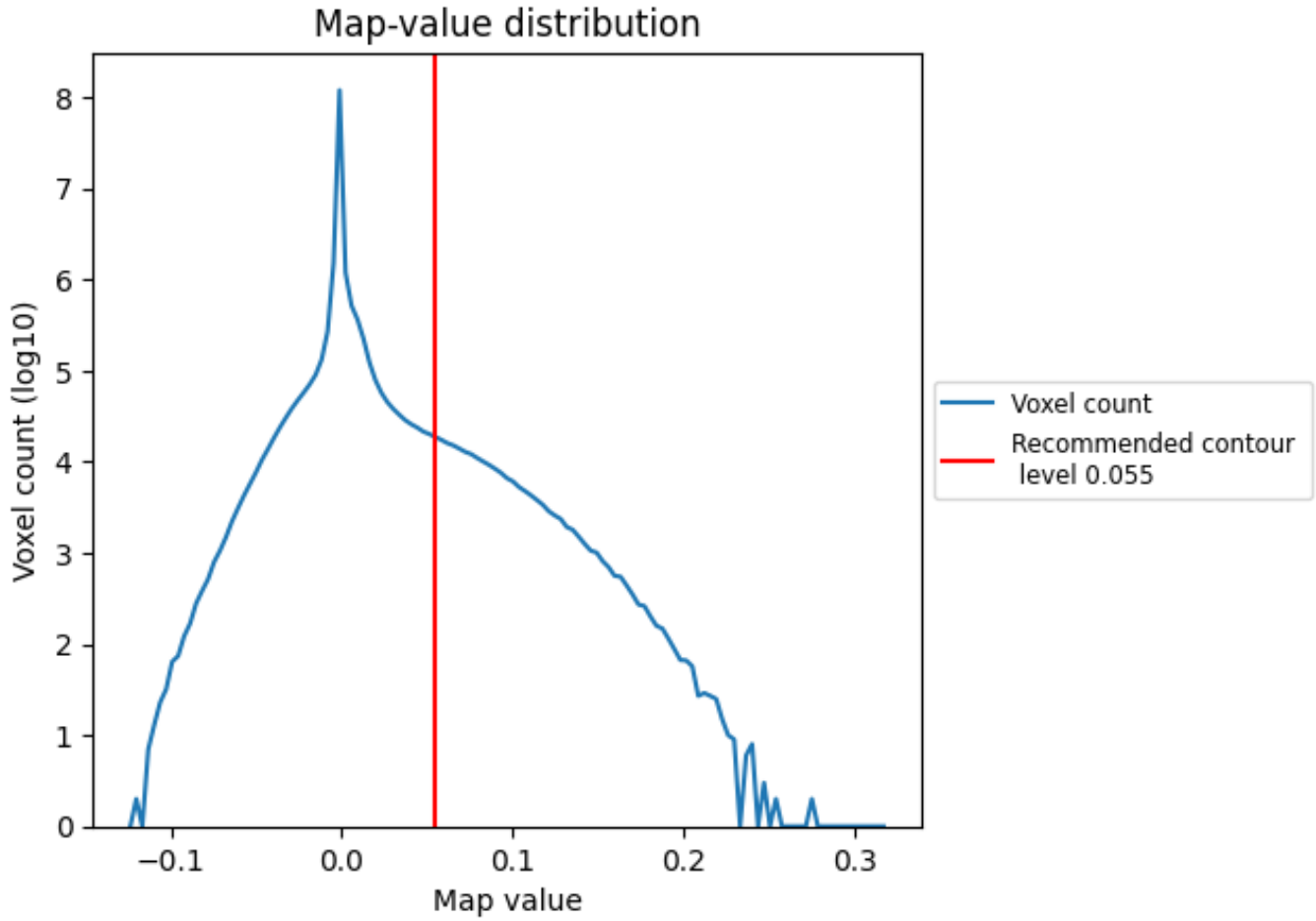


Z

7 Map analysis

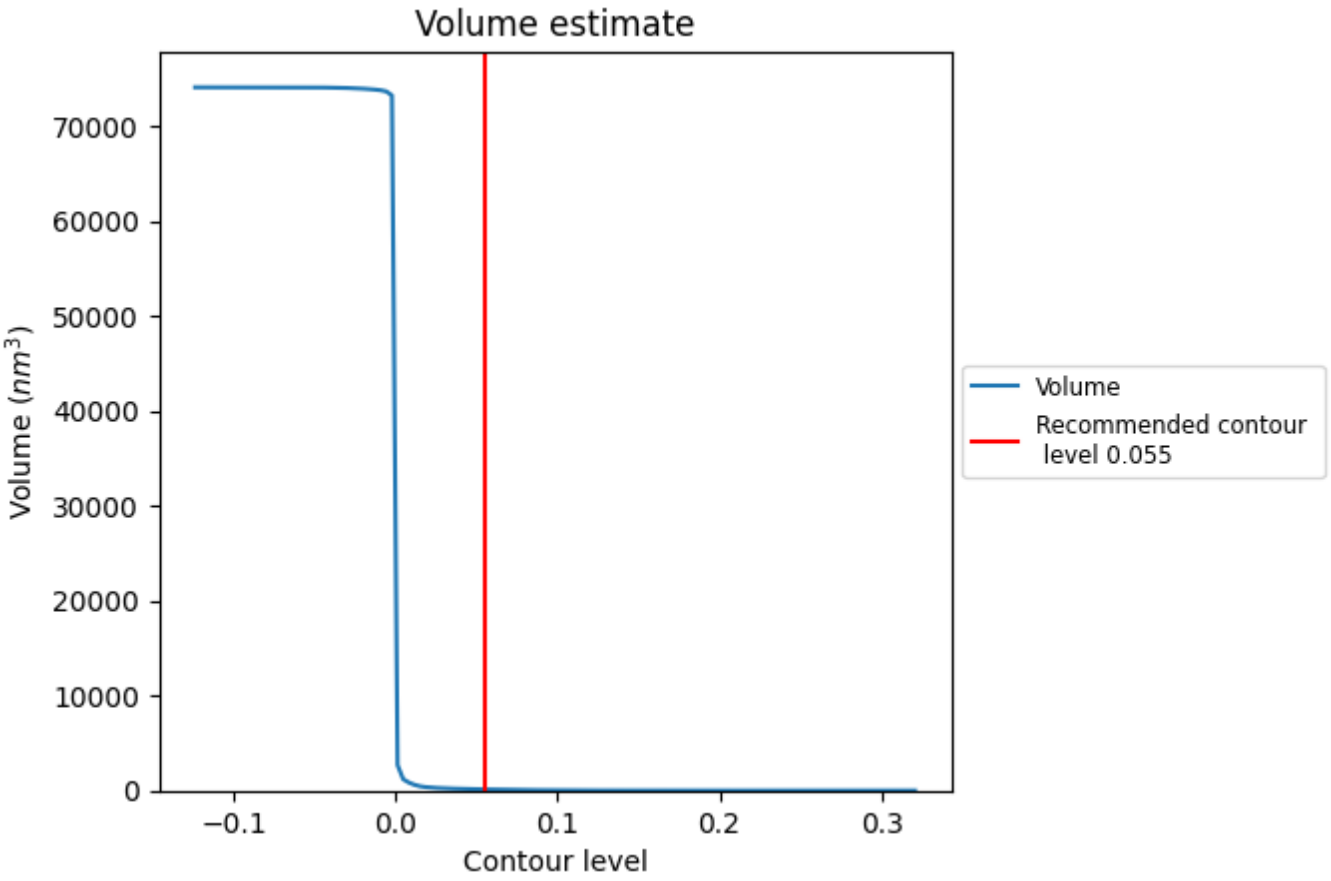
This section contains the results of statistical analysis of the map.

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.

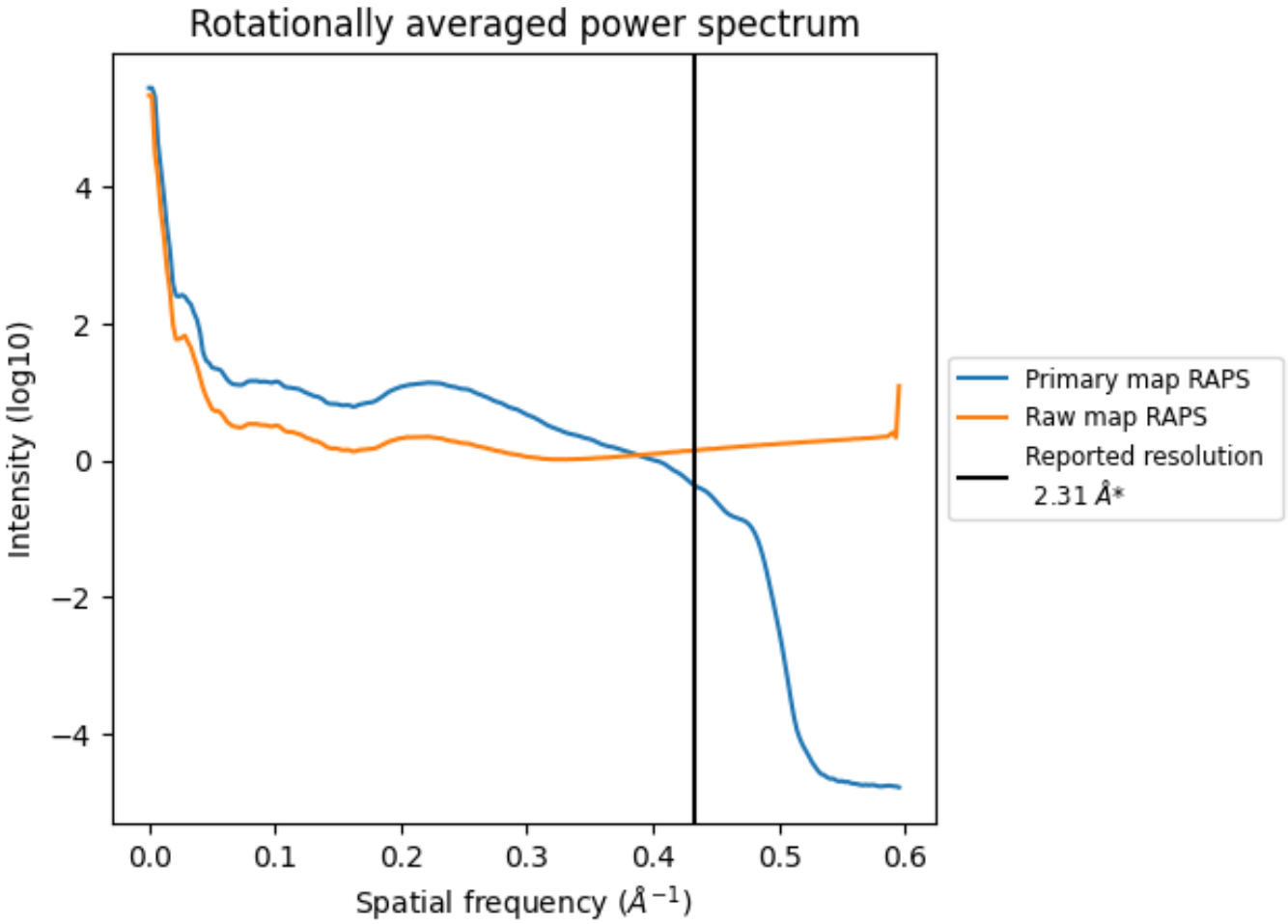
7.2 Volume estimate (i)



The volume at the recommended contour level is 123 nm^3; this corresponds to an approximate mass of 111 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)

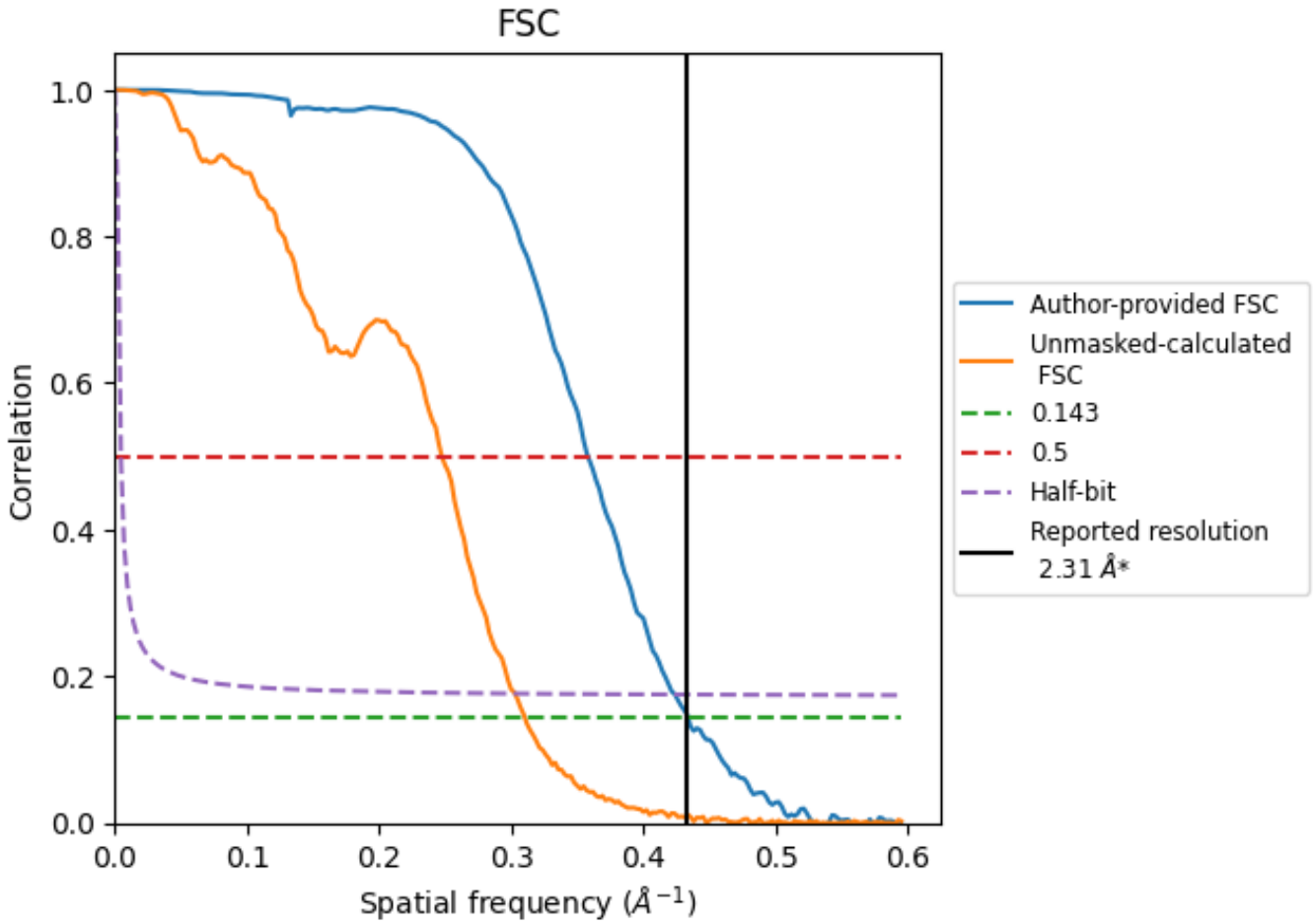


*Reported resolution corresponds to spatial frequency of 0.433 Å^{-1}

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 0.433 Å^{-1}

8.2 Resolution estimates (i)

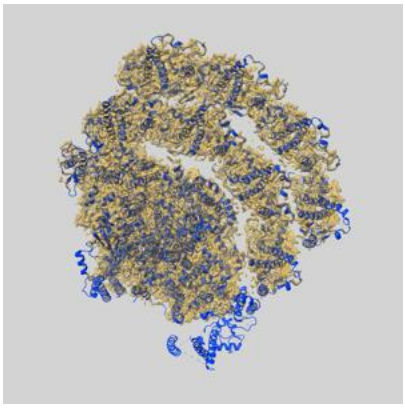
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	2.31	-	-
Author-provided FSC curve	2.30	2.79	2.36
Unmasked-calculated*	3.22	4.04	3.30

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps. The value from deposited half-maps intersecting FSC 0.143 CUT-OFF 3.22 differs from the reported value 2.31 by more than 10 %

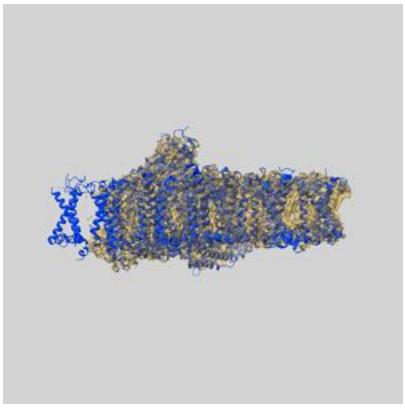
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-14870 and PDB model 7ZQC. Per-residue inclusion information can be found in section 3 on page 38.

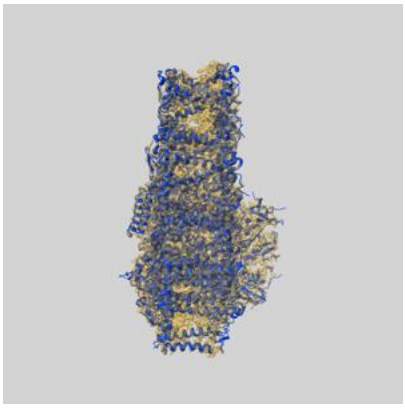
9.1 Map-model overlay



X



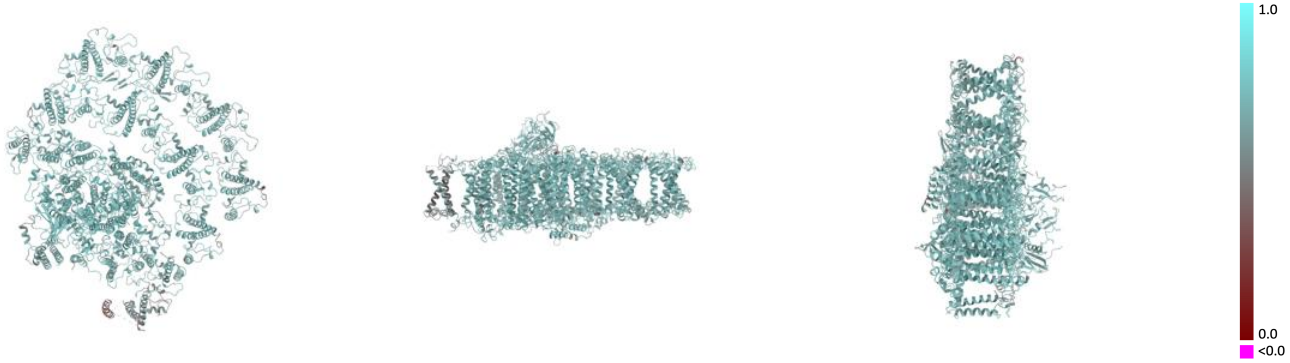
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.055 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.

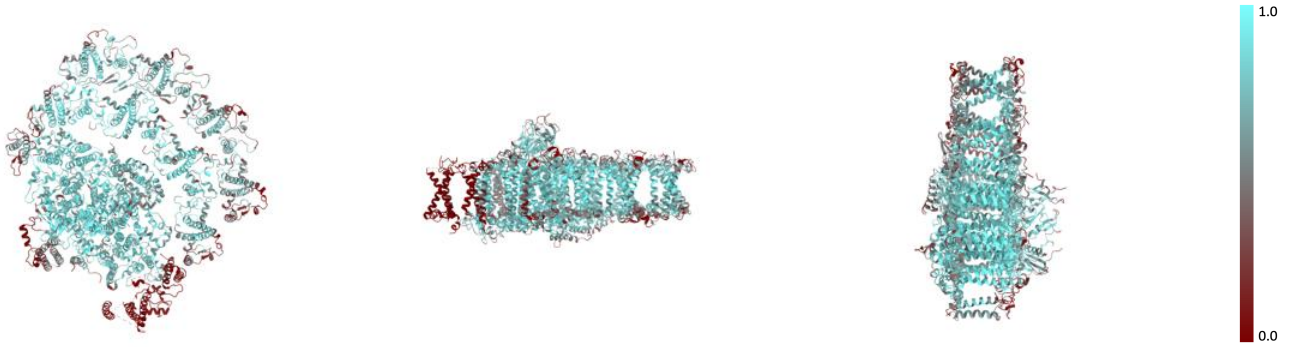
9.2 Q-score mapped to coordinate model



X Y Z

The images above show the model with each residue coloured according its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

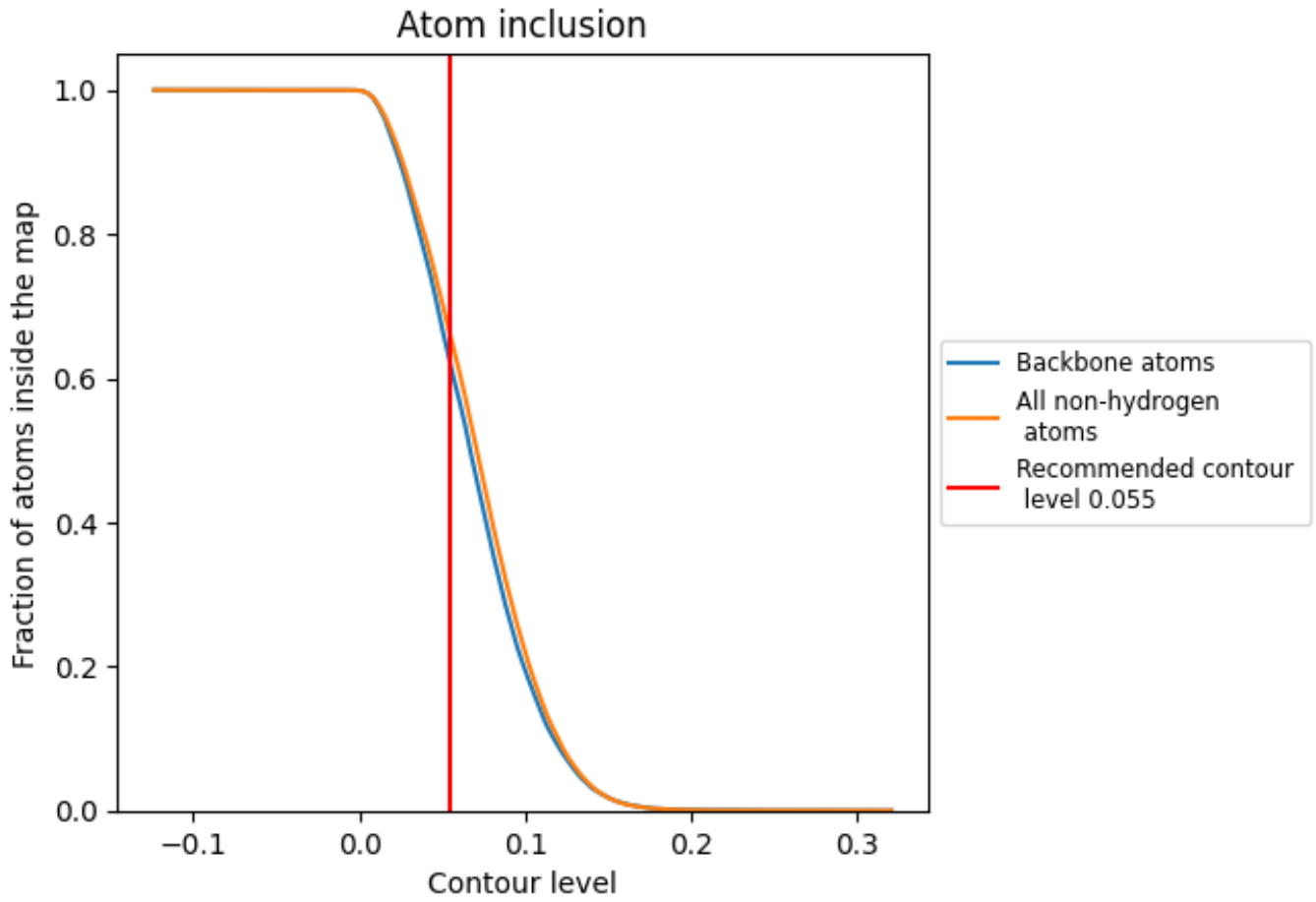
9.3 Atom inclusion mapped to coordinate model



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 (0.055).

9.4 Atom inclusion (i)



At the recommended contour level, 62% of all backbone atoms, 66% 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 (0.055) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.6590	0.6750
1	0.5428	0.6420
3	0.7144	0.6750
4	0.5265	0.6370
5	0.6366	0.6600
6	0.5819	0.6490
7	0.7420	0.6830
8	0.7166	0.6770
9	0.0000	0.5170
A	0.8502	0.7240
B	0.8195	0.7120
C	0.8723	0.7250
D	0.6634	0.6840
E	0.6288	0.6740
F	0.6908	0.6790
G	0.0321	0.6130
I	0.5047	0.6650
J	0.7093	0.6900
K	0.4266	0.6430
L	0.2821	0.6270
Z	0.4638	0.6290