wwPDB EM Validation Summary Report

Mar 10, 2022 – 02:32 pm GMT

PDB ID	:	7O0V
EMDB ID	:	EMD-12680
Title	:	Cryo-EM structure (model_2a) of the RC-dLH complex from Gemmatimonas phototrophica at 2.5 A
Authors	:	Qian, P.; Koblizek, M.
Deposited on	:	2021-03-27
Resolution	:	2.50 Å(reported)
Based on initial models	:	5Y5S, 1LGH, 6ET5

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

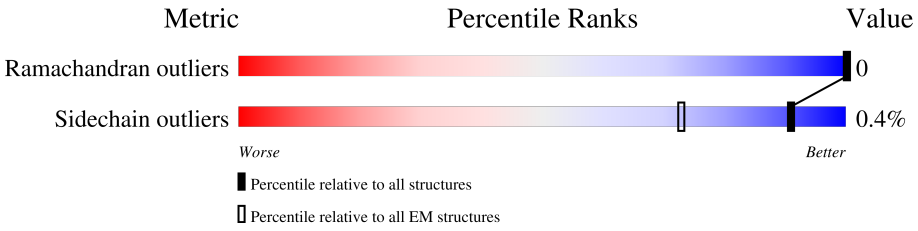
EMDB validation analysis	:	0.0.0.dev97
Mogul	:	1.8.4, CSD as541be (2020)
MolProbity	:	4.02b-467
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.27

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 2.50 Å.

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



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

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

Mol	Chain	Length	Quality of chain
1	AA	54	89% · 9%
1	AB	54	11% 89% · 9%
1	AE	54	7% 87% · 9%
1	AF	54	7% 91% 9%
1	AG	54	6% 91% 9%
1	AH	54	6% 89% · 9%
1	AI	54	91% 9%
1	AJ	54	91% 9%
1	AK	54	87% · 9%

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Mol	Chain	Length	Quality of chain
1	AL	54	7% 89% 9%
1	AM	54	91% 9%
1	AN	54	6% 89% 9%
1	AO	54	6% 89% 9%
1	AP	54	89% 9%
1	AQ	54	89% 9%
1	AR	54	6% 91% 9%
1	AS	54	89% 9%
1	AT	54	7% 89% 9%
1	AU	54	7% 89% 9%
1	AV	54	89% 9%
1	AW	54	7% 89% 9%
1	AX	54	6% 87% 9%
2	AC	54	7% 87% 11%
2	AD	54	87% 11%
3	BA	44	5% 89% 11%
3	BC	44	14% 89% 11%
3	BF	44	7% 89% 11%
3	BG	44	89% 11%
3	BH	44	89% 11%
3	BJ	44	86% 11%
3	BK	44	5% 89% 11%
3	BL	44	7% 89% 11%
3	BM	44	89% 11%
3	BN	44	7% 89% 11%

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Mol	Chain	Length	Quality of chain
3	BO	44	5% 89% 11%
3	BP	44	89% 11%
3	BU	44	89% 11%
3	BX	44	11% 89% 11%
3	ba	44	20% 86% 11%
3	bb	44	14% 89% 11%
3	bc	44	9% 89% 11%
3	bd	44	89% 11%
3	be	44	5% 89% 11%
3	bf	44	5% 89% 11%
3	bg	44	9% 89% 11%
3	bh	44	9% 89% 11%
3	bi	44	9% 89% 11%
3	bj	44	5% 89% 11%
3	bk	44	7% 89% 11%
3	bl	44	9% 89% 11%
3	bm	44	11% 89% 11%
3	bo	44	18% 86% 11%
3	bp	44	18% 89% 11%
4	BB	43	12% 93% 7%
4	BD	43	5% 93% 7%
4	BE	43	9% 93% 7%
4	BI	43	9% 93% 7%
4	BQ	43	7% 93% 7%
4	BR	43	9% 93% 7%

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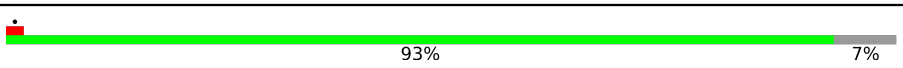
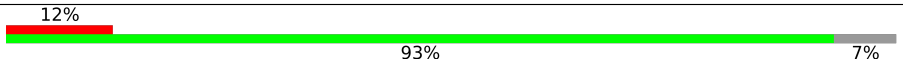
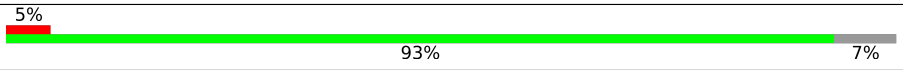
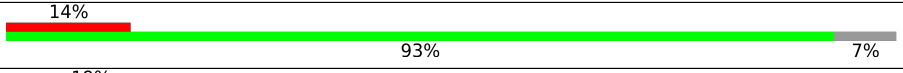
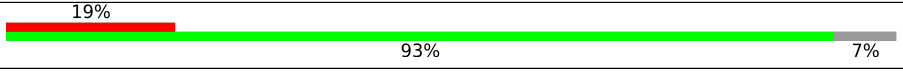
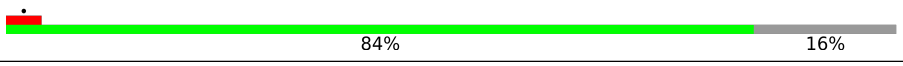
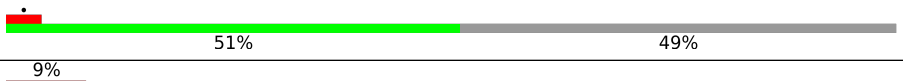
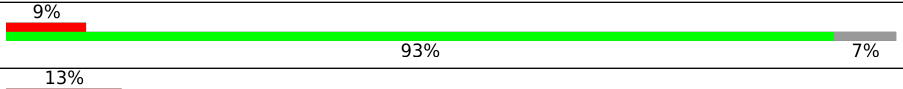
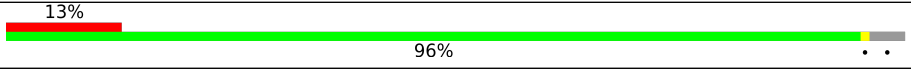
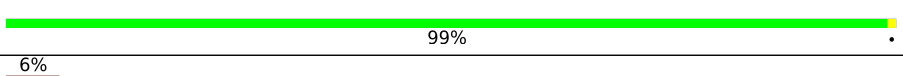
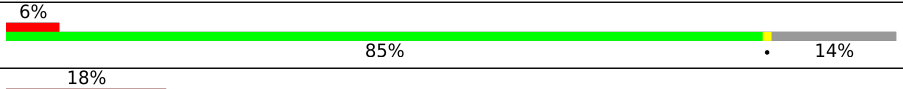
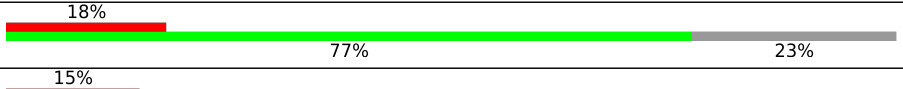
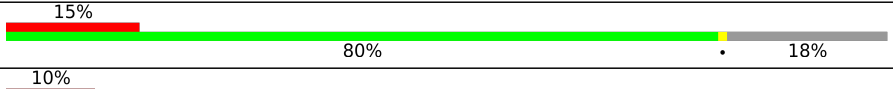
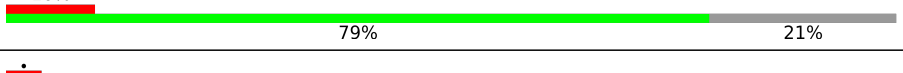
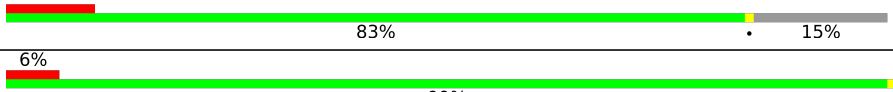
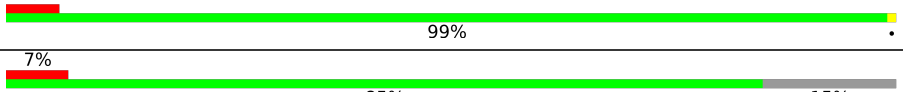
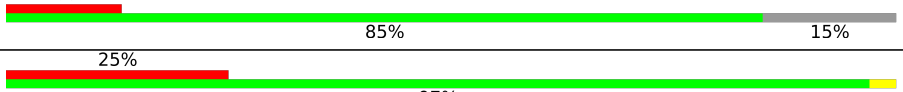
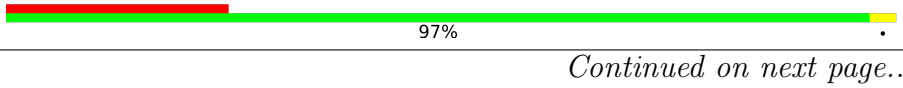
Mol	Chain	Length	Quality of chain
4	BS	43	
4	BT	43	
4	BV	43	
4	BW	43	
4	bn	43	
5	C	354	
6	C1	202	
7	H1	67	
8	H2	181	
9	L	274	
10	M	367	
11	aa	71	
12	ab	71	
12	ac	71	
12	ad	71	
12	ae	71	
12	af	71	
12	ag	71	
12	ah	71	
12	ai	71	
12	aj	71	
12	ak	71	
12	al	71	
12	am	71	
12	an	71	

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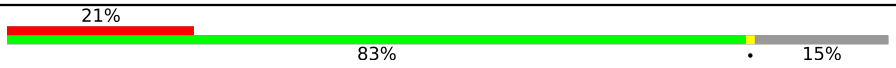
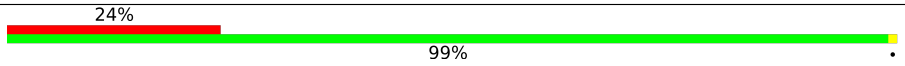
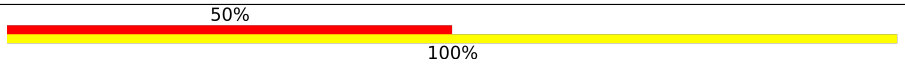
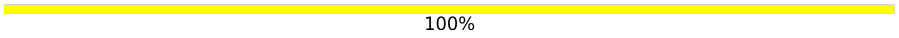
Mol	Chain	Length	Quality of chain
12	ao	71	
12	ap	71	
13	CG	2	
13	MG	2	

2 Entry composition (i)

There are 29 unique types of molecules in this entry. The entry contains 55475 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a protein called LHh-alpha.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	AA	49	Total	C	N	O	S	0	0
			391	261	65	61	4		
1	AB	49	Total	C	N	O	S	0	0
			391	261	65	61	4		
1	AE	49	Total	C	N	O	S	0	0
			391	261	65	61	4		
1	AF	49	Total	C	N	O	S	0	0
			391	261	65	61	4		
1	AG	49	Total	C	N	O	S	0	0
			391	261	65	61	4		
1	AH	49	Total	C	N	O	S	0	0
			391	261	65	61	4		
1	AI	49	Total	C	N	O	S	0	0
			391	261	65	61	4		
1	AJ	49	Total	C	N	O	S	0	0
			391	261	65	61	4		
1	AK	49	Total	C	N	O	S	0	0
			391	261	65	61	4		
1	AL	49	Total	C	N	O	S	0	0
			391	261	65	61	4		
1	AM	49	Total	C	N	O	S	0	0
			391	261	65	61	4		
1	AN	49	Total	C	N	O	S	0	0
			391	261	65	61	4		
1	AO	49	Total	C	N	O	S	0	0
			391	261	65	61	4		
1	AP	49	Total	C	N	O	S	0	0
			391	261	65	61	4		
1	AQ	49	Total	C	N	O	S	0	0
			391	261	65	61	4		
1	AR	49	Total	C	N	O	S	0	0
			391	261	65	61	4		
1	AS	49	Total	C	N	O	S	0	0
			391	261	65	61	4		

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Mol	Chain	Residues	Atoms					AltConf	Trace
1	AT	49	Total	C	N	O	S	0	0
			391	261	65	61	4		
1	AU	49	Total	C	N	O	S	0	0
			391	261	65	61	4		
1	AV	49	Total	C	N	O	S	0	0
			391	261	65	61	4		
1	AW	49	Total	C	N	O	S	0	0
			391	261	65	61	4		
1	AX	49	Total	C	N	O	S	0	0
			391	261	65	61	4		

- Molecule 2 is a protein called LHh-alpha.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	AC	48	Total	C	N	O	S	0	0
			384	256	64	60	4		
2	AD	48	Total	C	N	O	S	0	0
			384	256	64	60	4		

- Molecule 3 is a protein called Light-harvesting protein B:885 subunit beta.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	BA	39	Total	C	N	O	S	0	0
			323	213	55	53	2		
3	BC	39	Total	C	N	O	S	0	0
			323	213	55	53	2		
3	BF	39	Total	C	N	O	S	0	0
			323	213	55	53	2		
3	BG	39	Total	C	N	O	S	0	0
			323	213	55	53	2		
3	BH	39	Total	C	N	O	S	0	0
			323	213	55	53	2		
3	BJ	39	Total	C	N	O	S	0	0
			323	213	55	53	2		
3	BK	39	Total	C	N	O	S	0	0
			323	213	55	53	2		
3	BL	39	Total	C	N	O	S	0	0
			323	213	55	53	2		
3	BM	39	Total	C	N	O	S	0	0
			323	213	55	53	2		
3	BN	39	Total	C	N	O	S	0	0
			323	213	55	53	2		

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Mol	Chain	Residues	Atoms					AltConf	Trace
3	BO	39	Total	C	N	O	S	0	0
			323	213	55	53	2		
3	BP	39	Total	C	N	O	S	0	0
			323	213	55	53	2		
3	BU	39	Total	C	N	O	S	0	0
			323	213	55	53	2		
3	BX	39	Total	C	N	O	S	0	0
			323	213	55	53	2		
3	ba	39	Total	C	N	O	S	0	0
			323	213	55	53	2		
3	bb	39	Total	C	N	O	S	0	0
			323	213	55	53	2		
3	bc	39	Total	C	N	O	S	0	0
			323	213	55	53	2		
3	bd	39	Total	C	N	O	S	0	0
			323	213	55	53	2		
3	be	39	Total	C	N	O	S	0	0
			323	213	55	53	2		
3	bf	39	Total	C	N	O	S	0	0
			323	213	55	53	2		
3	bg	39	Total	C	N	O	S	0	0
			323	213	55	53	2		
3	bh	39	Total	C	N	O	S	0	0
			323	213	55	53	2		
3	bi	39	Total	C	N	O	S	0	0
			323	213	55	53	2		
3	bj	39	Total	C	N	O	S	0	0
			323	213	55	53	2		
3	bk	39	Total	C	N	O	S	0	0
			323	213	55	53	2		
3	bl	39	Total	C	N	O	S	0	0
			323	213	55	53	2		
3	bm	39	Total	C	N	O	S	0	0
			323	213	55	53	2		
3	bo	39	Total	C	N	O	S	0	0
			323	213	55	53	2		
3	bp	39	Total	C	N	O	S	0	0
			323	213	55	53	2		

- Molecule 4 is a protein called Light-harvesting protein B:885 subunit beta.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	BB	40	Total	C	N	O	S	0	0
			327	215	56	54	2		
4	BD	40	Total	C	N	O	S	0	0
			327	215	56	54	2		
4	BE	40	Total	C	N	O	S	0	0
			327	215	56	54	2		
4	BI	40	Total	C	N	O	S	0	0
			327	215	56	54	2		
4	BQ	40	Total	C	N	O	S	0	0
			327	215	56	54	2		
4	BR	40	Total	C	N	O	S	0	0
			327	215	56	54	2		
4	BS	40	Total	C	N	O	S	0	0
			327	215	56	54	2		
4	BT	40	Total	C	N	O	S	0	0
			327	215	56	54	2		
4	BV	40	Total	C	N	O	S	0	0
			327	215	56	54	2		
4	BW	40	Total	C	N	O	S	0	0
			327	215	56	54	2		
4	bn	40	Total	C	N	O	S	0	0
			327	215	56	54	2		

There are 11 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
BB	?	-	LYS	deletion	UNP A0A143BHS8
BD	?	-	LYS	deletion	UNP A0A143BHS8
BE	?	-	LYS	deletion	UNP A0A143BHS8
BI	?	-	LYS	deletion	UNP A0A143BHS8
BQ	?	-	LYS	deletion	UNP A0A143BHS8
BR	?	-	LYS	deletion	UNP A0A143BHS8
BS	?	-	LYS	deletion	UNP A0A143BHS8
BT	?	-	LYS	deletion	UNP A0A143BHS8
BV	?	-	LYS	deletion	UNP A0A143BHS8
BW	?	-	LYS	deletion	UNP A0A143BHS8
bn	?	-	LYS	deletion	UNP A0A143BHS8

- Molecule 5 is a protein called MULTIHEME_CYTC domain-containing protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
5	C	299	Total	C	N	O	S	0	0
			2325	1464	419	423	19		

- Molecule 6 is a protein called RC-S.

Mol	Chain	Residues	Atoms					AltConf	Trace
6	C1	103	Total	C	N	O	S	0	0
			806	506	151	145	4		

- Molecule 7 is a protein called PRCH domain-containing protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	H1	62	Total	C	N	O	S	0	0
			522	343	89	88	2		

- Molecule 8 is a protein called RC-Hc.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	H2	174	Total	C	N	O	S	0	0
			1354	863	229	258	4		

- Molecule 9 is a protein called Photosynthetic reaction center L subunit.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	L	273	Total	C	N	O	S	0	0
			2165	1457	351	347	10		

- Molecule 10 is a protein called RC-M.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	M	315	Total	C	N	O	S	0	0
			2536	1691	417	418	10		

- Molecule 11 is a protein called LHC domain-containing protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
11	aa	55	Total	C	N	O	S	0	0
			433	284	76	71	2		

- Molecule 12 is a protein called LHC domain-containing protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	ab	58	Total	C	N	O	S	0	0
			455	298	79	75	3		
12	ac	56	Total	C	N	O	S	0	0
			443	290	77	73	3		

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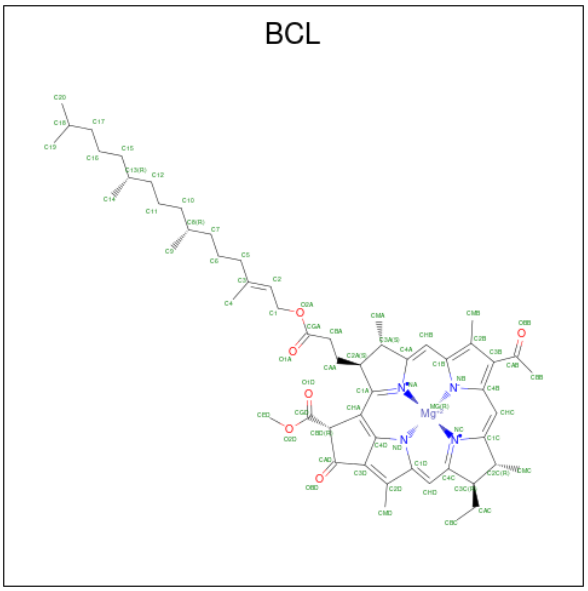
Mol	Chain	Residues	Atoms					AltConf	Trace
12	ad	60	Total	C	N	O	S	0	0
			465	304	81	77	3		
12	ae	58	Total	C	N	O	S	0	0
			455	298	79	75	3		
12	af	58	Total	C	N	O	S	0	0
			455	298	79	75	3		
12	ag	58	Total	C	N	O	S	0	0
			455	298	79	75	3		
12	ah	60	Total	C	N	O	S	0	0
			465	304	81	77	3		
12	ai	60	Total	C	N	O	S	0	0
			465	304	81	77	3		
12	aj	60	Total	C	N	O	S	0	0
			465	304	81	77	3		
12	ak	71	Total	C	N	O	S	0	0
			542	352	95	91	4		
12	al	60	Total	C	N	O	S	0	0
			465	304	81	77	3		
12	am	60	Total	C	N	O	S	0	0
			465	304	81	77	3		
12	an	71	Total	C	N	O	S	0	0
			542	352	95	91	4		
12	ao	60	Total	C	N	O	S	0	0
			465	304	81	77	3		
12	ap	71	Total	C	N	O	S	0	0
			543	352	95	92	4		

- Molecule 13 is an oligosaccharide called alpha-L-rhamnopyranose-(1-4)-alpha-D-mannopyranose.

Mol	Chain	Residues	Atoms				AltConf	Trace
13	CG	2	Total	C	O		0	0
			21	12	9			
13	MG	2	Total	C	O		0	0
			21	12	9			

- Molecule 14 is BACTERIOCHLOROPHYLL A (three-letter code: BCL) (formula: $C_{55}H_{74}MgN_4O_6$).



Mol	Chain	Residues	Atoms					AltConf
14	AA	1	Total	C	Mg	N	O	0
			132	110	2	8	12	
14	AA	1	Total	C	Mg	N	O	0
			132	110	2	8	12	
14	AB	1	Total	C	Mg	N	O	0
			132	110	2	8	12	
14	AB	1	Total	C	Mg	N	O	0
			132	110	2	8	12	
14	AC	1	Total	C	Mg	N	O	0
			198	165	3	12	18	
14	AC	1	Total	C	Mg	N	O	0
			198	165	3	12	18	
14	AC	1	Total	C	Mg	N	O	0
			198	165	3	12	18	
14	AD	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	AE	1	Total	C	Mg	N	O	0
			198	165	3	12	18	
14	AE	1	Total	C	Mg	N	O	0
			198	165	3	12	18	
14	AE	1	Total	C	Mg	N	O	0
			198	165	3	12	18	
14	AF	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	AG	1	Total	C	Mg	N	O	0
			132	110	2	8	12	
14	AG	1	Total	C	Mg	N	O	0
			132	110	2	8	12	

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Mol	Chain	Residues	Atoms					AltConf
14	AH	1	Total	C	Mg	N	O	0
			132	110	2	8	12	
14	AH	1	Total	C	Mg	N	O	0
			132	110	2	8	12	
14	AI	1	Total	C	Mg	N	O	0
			132	110	2	8	12	
14	AI	1	Total	C	Mg	N	O	0
			132	110	2	8	12	
14	AJ	1	Total	C	Mg	N	O	0
			132	110	2	8	12	
14	AJ	1	Total	C	Mg	N	O	0
			132	110	2	8	12	
14	AK	1	Total	C	Mg	N	O	0
			132	110	2	8	12	
14	AK	1	Total	C	Mg	N	O	0
			132	110	2	8	12	
14	AL	1	Total	C	Mg	N	O	0
			132	110	2	8	12	
14	AL	1	Total	C	Mg	N	O	0
			132	110	2	8	12	
14	AM	1	Total	C	Mg	N	O	0
			132	110	2	8	12	
14	AM	1	Total	C	Mg	N	O	0
			132	110	2	8	12	
14	AN	1	Total	C	Mg	N	O	0
			198	165	3	12	18	
14	AN	1	Total	C	Mg	N	O	0
			198	165	3	12	18	
14	AN	1	Total	C	Mg	N	O	0
			198	165	3	12	18	
14	AO	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	AP	1	Total	C	Mg	N	O	0
			132	110	2	8	12	
14	AP	1	Total	C	Mg	N	O	0
			132	110	2	8	12	
14	AQ	1	Total	C	Mg	N	O	0
			132	110	2	8	12	
14	AQ	1	Total	C	Mg	N	O	0
			132	110	2	8	12	
14	AR	1	Total	C	Mg	N	O	0
			132	110	2	8	12	

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Mol	Chain	Residues	Atoms					AltConf
14	AR	1	Total	C	Mg	N	O	0
			132	110	2	8	12	
14	AS	1	Total	C	Mg	N	O	0
			198	165	3	12	18	
14	AS	1	Total	C	Mg	N	O	0
			198	165	3	12	18	
14	AS	1	Total	C	Mg	N	O	0
			198	165	3	12	18	
14	AT	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	AU	1	Total	C	Mg	N	O	0
			132	110	2	8	12	
14	AU	1	Total	C	Mg	N	O	0
			132	110	2	8	12	
14	AV	1	Total	C	Mg	N	O	0
			198	165	3	12	18	
14	AV	1	Total	C	Mg	N	O	0
			198	165	3	12	18	
14	AV	1	Total	C	Mg	N	O	0
			198	165	3	12	18	
14	AW	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	AX	1	Total	C	Mg	N	O	0
			132	110	2	8	12	
14	AX	1	Total	C	Mg	N	O	0
			132	110	2	8	12	
14	BA	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	BB	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	BC	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	BD	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	BE	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	BF	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	BG	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	BH	1	Total	C	Mg	N	O	0
			66	55	1	4	6	

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Mol	Chain	Residues	Atoms					AltConf
14	BI	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	BJ	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	BK	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	BL	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	BM	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	BN	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	BO	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	BP	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	BQ	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	BR	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	BS	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	BT	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	BU	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	BV	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	BW	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	BX	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	L	1	Total	C	Mg	N	O	0
			132	110	2	8	12	
14	L	1	Total	C	Mg	N	O	0
			132	110	2	8	12	
14	M	1	Total	C	Mg	N	O	0
			132	110	2	8	12	
14	M	1	Total	C	Mg	N	O	0
			132	110	2	8	12	
14	aa	1	Total	C	Mg	N	O	0
			66	55	1	4	6	

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Mol	Chain	Residues	Atoms					AltConf
14	ab	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	ac	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	ad	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	ae	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	af	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	ag	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	ah	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	ai	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	aj	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	ak	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	al	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	am	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	an	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	ao	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	ap	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	ba	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	bb	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	bc	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	bd	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	be	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	bf	1	Total	C	Mg	N	O	0
			66	55	1	4	6	

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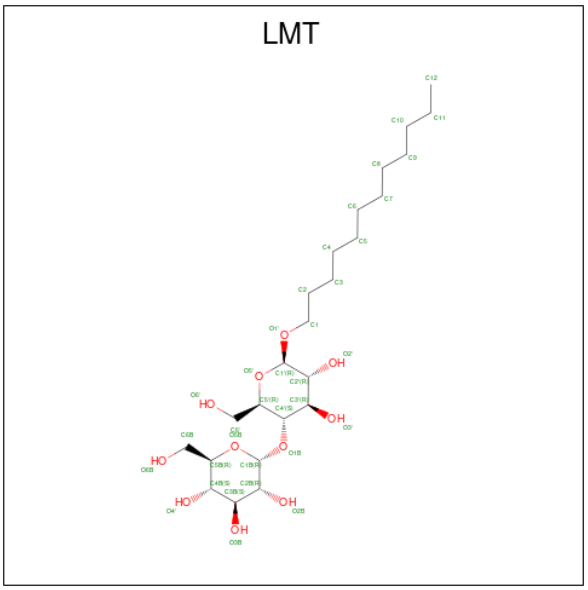
Mol	Chain	Residues	Atoms					AltConf
14	bg	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	bh	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	bi	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	bj	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	bk	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	bl	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	bm	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	bn	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	bo	1	Total	C	Mg	N	O	0
			66	55	1	4	6	
14	bp	1	Total	C	Mg	N	O	0
			66	55	1	4	6	

- Molecule 15 is DODECYL-BETA-D-MALTOSIDE (three-letter code: LMT) (formula: $C_{24}H_{46}O_{11}$).



Mol	Chain	Residues	Atoms			AltConf
15	AA	1	Total	C	O	0
			70	48	22	

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Mol	Chain	Residues	Atoms	AltConf
15	AA	1	Total C O 70 48 22	0
15	AC	1	Total C O 35 24 11	0
15	AD	1	Total C O 70 48 22	0
15	AD	1	Total C O 70 48 22	0
15	AE	1	Total C O 35 24 11	0
15	AF	1	Total C O 35 24 11	0
15	AG	1	Total C O 35 24 11	0
15	AH	1	Total C O 70 48 22	0
15	AH	1	Total C O 70 48 22	0
15	AI	1	Total C O 35 24 11	0
15	AJ	1	Total C O 70 48 22	0
15	AJ	1	Total C O 70 48 22	0
15	AL	1	Total C O 35 24 11	0
15	AN	1	Total C O 35 24 11	0
15	AP	1	Total C O 70 48 22	0
15	AP	1	Total C O 70 48 22	0
15	AQ	1	Total C O 35 24 11	0
15	AS	1	Total C O 35 24 11	0
15	AT	1	Total C O 35 24 11	0
15	AU	1	Total C O 35 24 11	0
15	AX	1	Total C O 35 24 11	0

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Mol	Chain	Residues	Atoms	AltConf
15	BA	1	Total C O 105 72 33	0
15	BA	1	Total C O 105 72 33	0
15	BA	1	Total C O 105 72 33	0
15	BB	1	Total C O 105 72 33	0
15	BB	1	Total C O 105 72 33	0
15	BB	1	Total C O 105 72 33	0
15	BC	1	Total C O 140 96 44	0
15	BC	1	Total C O 140 96 44	0
15	BC	1	Total C O 140 96 44	0
15	BC	1	Total C O 140 96 44	0
15	BD	1	Total C O 105 72 33	0
15	BD	1	Total C O 105 72 33	0
15	BD	1	Total C O 105 72 33	0
15	BE	1	Total C O 70 48 22	0
15	BE	1	Total C O 70 48 22	0
15	BF	1	Total C O 70 48 22	0
15	BF	1	Total C O 70 48 22	0
15	BG	1	Total C O 140 96 44	0
15	BG	1	Total C O 140 96 44	0
15	BG	1	Total C O 140 96 44	0
15	BG	1	Total C O 140 96 44	0

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Mol	Chain	Residues	Atoms	AltConf
15	BH	1	Total C O 105 72 33	0
15	BH	1	Total C O 105 72 33	0
15	BH	1	Total C O 105 72 33	0
15	BI	1	Total C O 140 96 44	0
15	BI	1	Total C O 140 96 44	0
15	BI	1	Total C O 140 96 44	0
15	BI	1	Total C O 140 96 44	0
15	BJ	1	Total C O 70 48 22	0
15	BJ	1	Total C O 70 48 22	0
15	BK	1	Total C O 140 96 44	0
15	BK	1	Total C O 140 96 44	0
15	BK	1	Total C O 140 96 44	0
15	BK	1	Total C O 140 96 44	0
15	BL	1	Total C O 105 72 33	0
15	BL	1	Total C O 105 72 33	0
15	BL	1	Total C O 105 72 33	0
15	BM	1	Total C O 70 48 22	0
15	BM	1	Total C O 70 48 22	0
15	BN	1	Total C O 140 96 44	0
15	BN	1	Total C O 140 96 44	0
15	BN	1	Total C O 140 96 44	0

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Mol	Chain	Residues	Atoms	AltConf
15	BN	1	Total C O 140 96 44	0
15	BO	1	Total C O 70 48 22	0
15	BO	1	Total C O 70 48 22	0
15	BP	1	Total C O 105 72 33	0
15	BP	1	Total C O 105 72 33	0
15	BP	1	Total C O 105 72 33	0
15	BQ	1	Total C O 105 72 33	0
15	BQ	1	Total C O 105 72 33	0
15	BQ	1	Total C O 105 72 33	0
15	BR	1	Total C O 105 72 33	0
15	BR	1	Total C O 105 72 33	0
15	BR	1	Total C O 105 72 33	0
15	BS	1	Total C O 140 96 44	0
15	BS	1	Total C O 140 96 44	0
15	BS	1	Total C O 140 96 44	0
15	BS	1	Total C O 140 96 44	0
15	BT	1	Total C O 105 72 33	0
15	BT	1	Total C O 105 72 33	0
15	BT	1	Total C O 105 72 33	0
15	BU	1	Total C O 70 48 22	0
15	BU	1	Total C O 70 48 22	0

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Mol	Chain	Residues	Atoms	AltConf
15	BV	1	Total C O 140 96 44	0
15	BV	1	Total C O 140 96 44	0
15	BV	1	Total C O 140 96 44	0
15	BV	1	Total C O 140 96 44	0
15	BW	1	Total C O 105 72 33	0
15	BW	1	Total C O 105 72 33	0
15	BW	1	Total C O 105 72 33	0
15	BX	1	Total C O 70 48 22	0
15	BX	1	Total C O 70 48 22	0
15	L	1	Total C O 210 144 66	0
15	L	1	Total C O 210 144 66	0
15	L	1	Total C O 210 144 66	0
15	L	1	Total C O 210 144 66	0
15	L	1	Total C O 210 144 66	0
15	L	1	Total C O 210 144 66	0
15	M	1	Total C O 35 24 11	0
15	ab	1	Total C O 35 24 11	0
15	bb	1	Total C O 35 24 11	0
15	bc	1	Total C O 35 24 11	0
15	bd	1	Total C O 35 24 11	0
15	be	1	Total C O 35 24 11	0

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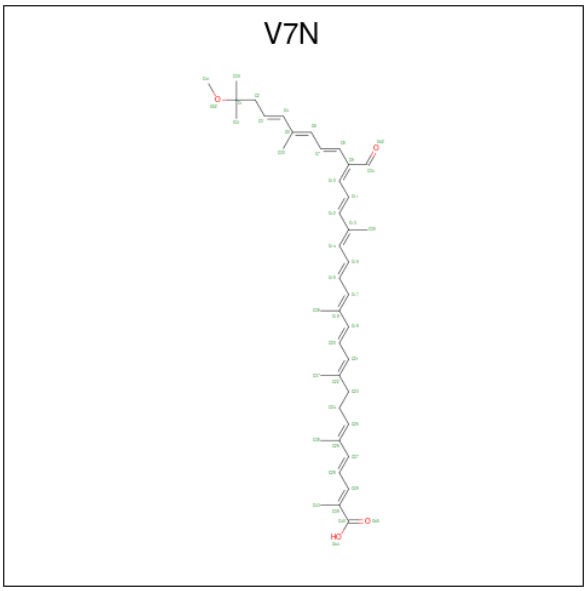
Mol	Chain	Residues	Atoms			AltConf
15	bf	1	Total	C	O	0
			35	24	11	
15	bg	1	Total	C	O	0
			35	24	11	
15	bh	1	Total	C	O	0
			70	48	22	
15	bh	1	Total	C	O	0
			70	48	22	
15	bi	1	Total	C	O	0
			35	24	11	
15	bj	1	Total	C	O	0
			35	24	11	
15	bl	1	Total	C	O	0
			70	48	22	
15	bl	1	Total	C	O	0
			70	48	22	
15	bm	1	Total	C	O	0
			70	48	22	
15	bm	1	Total	C	O	0
			70	48	22	
15	bn	1	Total	C	O	0
			70	48	22	
15	bn	1	Total	C	O	0
			70	48	22	
15	bo	1	Total	C	O	0
			70	48	22	
15	bo	1	Total	C	O	0
			70	48	22	

- Molecule 16 is (2 {E},4 {E},6 {E},10 {E},12 {E},14 {E},16 {E},18 {E},20 {E},22 {Z},24 {E},26 {E},28 {E})-23-methanoyl-31-methoxy-2,6,10,14,19,27,31-heptamethyl-dotriaconta-2,4,6,10,12,14,16,18,20,22,24,26,28-tridecaenoic acid (three-letter code: V7N) (formula: $C_{41}H_{54}O_4$).



Mol	Chain	Residues	Atoms	AltConf
16	AE	1	Total C O 45 41 4	0
16	AO	1	Total C O 45 41 4	0
16	AS	1	Total C O 45 41 4	0
16	BA	1	Total C O 45 41 4	0
16	BB	1	Total C O 45 41 4	0
16	BC	1	Total C O 45 41 4	0
16	BD	1	Total C O 45 41 4	0
16	BE	1	Total C O 45 41 4	0
16	BG	1	Total C O 45 41 4	0
16	BH	1	Total C O 45 41 4	0
16	BI	1	Total C O 45 41 4	0
16	BJ	1	Total C O 45 41 4	0
16	BK	1	Total C O 45 41 4	0
16	BL	1	Total C O 45 41 4	0

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Mol	Chain	Residues	Atoms	AltConf
16	BM	1	Total C O 45 41 4	0
16	BO	1	Total C O 45 41 4	0
16	BP	1	Total C O 45 41 4	0
16	BQ	1	Total C O 45 41 4	0
16	BR	1	Total C O 45 41 4	0
16	BS	1	Total C O 45 41 4	0
16	BU	1	Total C O 45 41 4	0
16	BV	1	Total C O 45 41 4	0
16	BW	1	Total C O 45 41 4	0
16	BX	1	Total C O 45 41 4	0
16	ba	1	Total C O 45 41 4	0
16	bb	1	Total C O 45 41 4	0
16	bc	1	Total C O 45 41 4	0
16	bd	1	Total C O 45 41 4	0
16	be	1	Total C O 45 41 4	0
16	bf	1	Total C O 45 41 4	0
16	bg	1	Total C O 45 41 4	0
16	bh	1	Total C O 45 41 4	0
16	bi	1	Total C O 45 41 4	0
16	bj	1	Total C O 45 41 4	0
16	bk	1	Total C O 45 41 4	0

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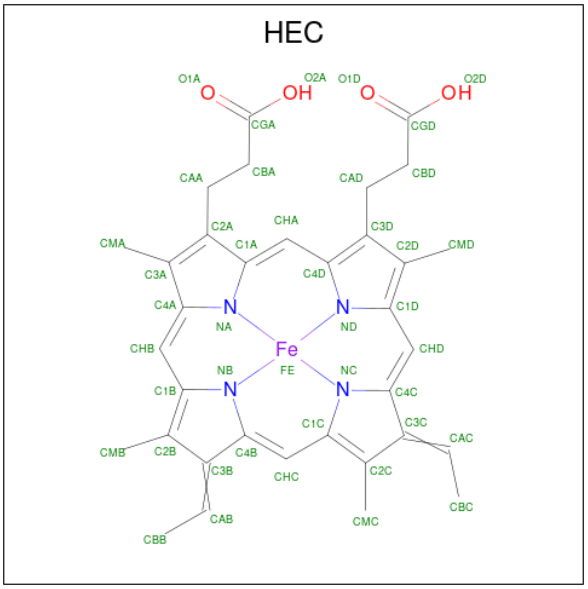
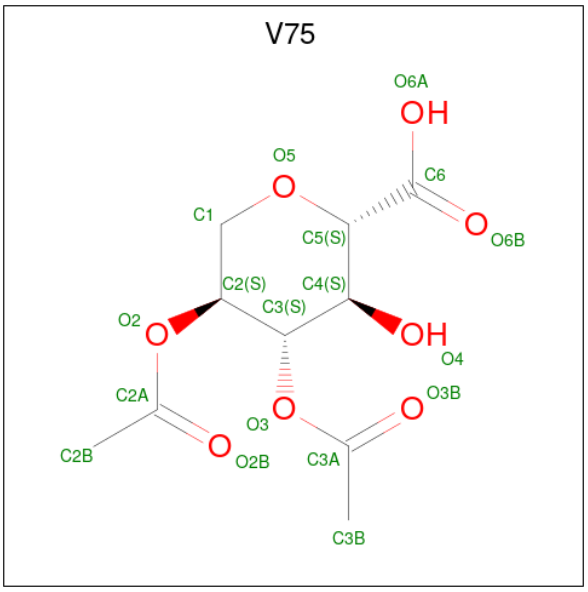
Mol	Chain	Residues	Atoms	AltConf
16	bl	1	Total C O 45 41 4	0
16	bm	1	Total C O 45 41 4	0
16	bn	1	Total C O 45 41 4	0
16	bo	1	Total C O 45 41 4	0
16	bp	1	Total C O 45 41 4	0

- Molecule 17 is HEME C (three-letter code: HEC) (formula: $C_{34}H_{34}FeN_4O_4$).



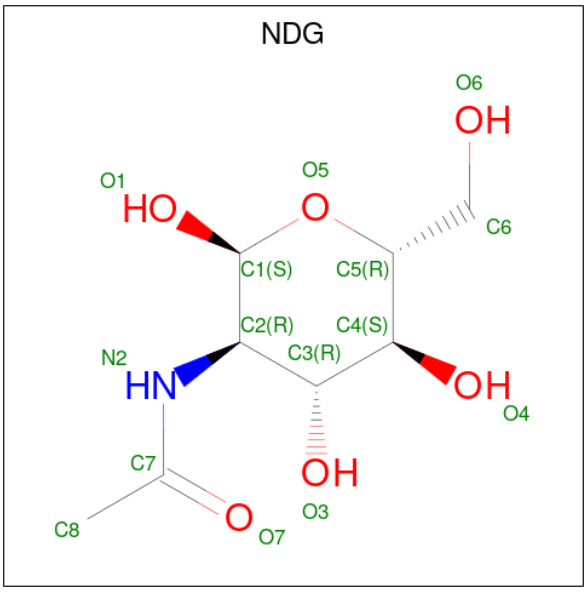
Mol	Chain	Residues	Atoms	AltConf
17	C	1	Total C Fe N O 172 136 4 16 16	0
17	C	1	Total C Fe N O 172 136 4 16 16	0
17	C	1	Total C Fe N O 172 136 4 16 16	0
17	C	1	Total C Fe N O 172 136 4 16 16	0

- Molecule 18 is (2 {S},3 {S},4 {S},5 {S})-4,5-diacetyloxy-3-oxidanyl-oxane-2-carboxylic acid (three-letter code: V75) (formula: $C_{10}H_{14}O_8$).



Mol	Chain	Residues	Atoms	AltConf
18	C	1	Total C O 18 10 8	0
18	M	1	Total C O 18 10 8	0

- Molecule 19 is 2-acetamido-2-deoxy-alpha-D-glucopyranose (three-letter code: NDG) (formula: $C_8H_{15}NO_6$).



Mol	Chain	Residues	Atoms	AltConf
19	C	1	Total C N O 14 8 1 5	0

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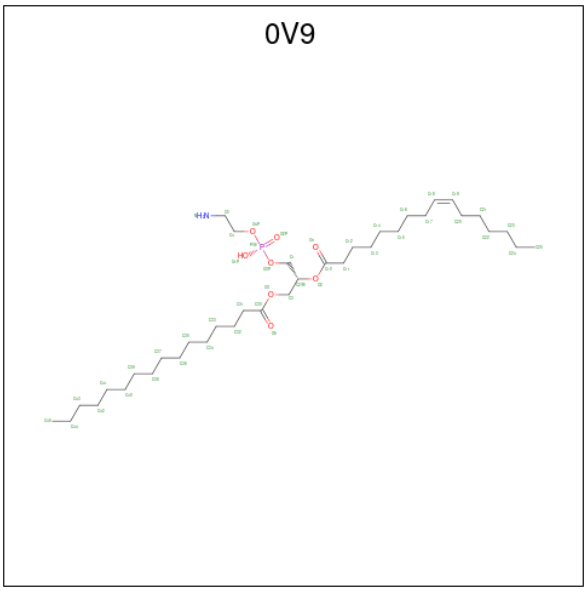
Mol	Chain	Residues	Atoms				AltConf
19	C1	1	Total	C	N	O	0
			14	8	1	5	

- Molecule 20 is (19R,22S)-25-amino-22-hydroxy-22-oxido-16-oxo-17,21,23-trioxa-22lambda 5 -phosphapentacosan-19-yl (9Z)-hexadec-9-enoate (three-letter code: 0V9) (formula: $C_{37}H_{72}NO_8P$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms					AltConf
20	C1	1	Total	C	N	O	P	0
			45	35	1	8	1	
20	H1	1	Total	C	N	O	P	0
			45	35	1	8	1	
20	aj	1	Total	C	N	O	P	0
			45	35	1	8	1	
20	ba	1	Total	C	N	O	P	0
			45	35	1	8	1	
20	bb	1	Total	C	N	O	P	0
			45	35	1	8	1	
20	bc	1	Total	C	N	O	P	0
			45	35	1	8	1	
20	be	1	Total	C	N	O	P	0
			90	70	2	16	2	
20	be	1	Total	C	N	O	P	0
			90	70	2	16	2	
20	bg	1	Total	C	N	O	P	0
			90	70	2	16	2	

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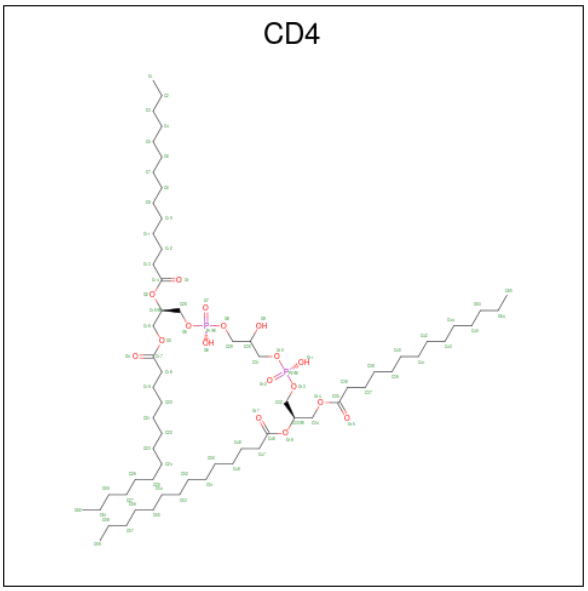
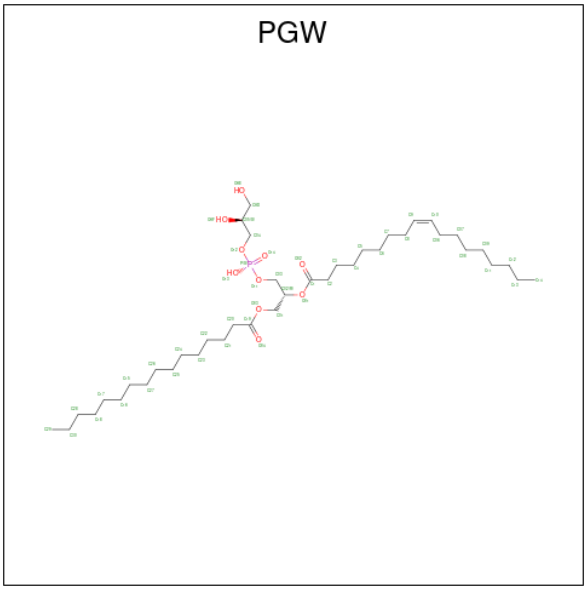
Mol	Chain	Residues	Atoms					AltConf
20	bg	1	Total	C	N	O	P	0
			90	70	2	16	2	
20	bh	1	Total	C	N	O	P	0
			45	35	1	8	1	
20	bi	1	Total	C	N	O	P	0
			45	35	1	8	1	
20	bj	1	Total	C	N	O	P	0
			45	35	1	8	1	
20	bk	1	Total	C	N	O	P	0
			90	70	2	16	2	
20	bk	1	Total	C	N	O	P	0
			90	70	2	16	2	
20	bl	1	Total	C	N	O	P	0
			45	35	1	8	1	
20	bm	1	Total	C	N	O	P	0
			45	35	1	8	1	
20	bn	1	Total	C	N	O	P	0
			45	35	1	8	1	
20	bo	1	Total	C	N	O	P	0
			45	35	1	8	1	
20	bp	1	Total	C	N	O	P	0
			45	35	1	8	1	

- Molecule 21 is (2R,5R,11R,14R)-5,8,11-trihydroxy-5,11-dioxido-17-oxo-2,14-bis(tetradecanoyloxy)-4,6,10,12,16-pentaoxa-5,11-diphosphatriacont-1-yl tetradecanoate (three-letter code: CD4) (formula: $C_{65}H_{126}O_{17}P_2$).



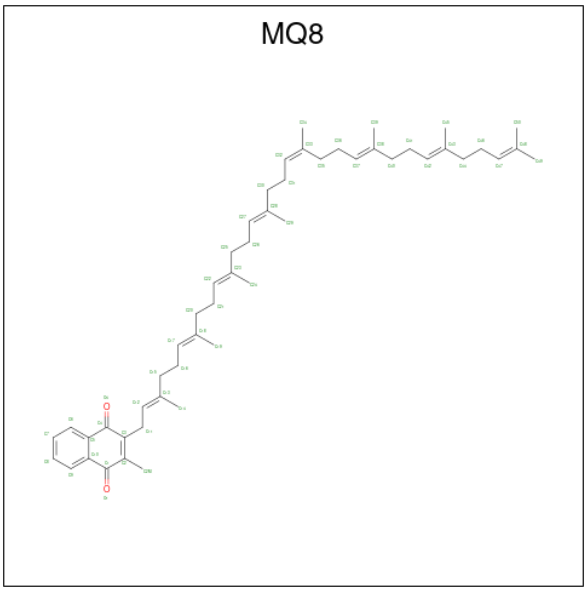
Mol	Chain	Residues	Atoms				AltConf
21	H1	1	Total 168	C 130	O 34	P 4	0
21	H1	1	Total 168	C 130	O 34	P 4	0
21	M	1	Total 84	C 65	O 17	P 2	0
21	ae	1	Total 84	C 65	O 17	P 2	0
21	af	1	Total 84	C 65	O 17	P 2	0
21	aj	1	Total 84	C 65	O 17	P 2	0

- Molecule 22 is (1R)-2-{[(S)-{[(2S)-2,3-dihydroxypropyl]oxy}(hydroxy)phosphoryl]oxy}-1-[(hexadecanoyloxy)methyl]ethyl (9Z)-octadec-9-enoate (three-letter code: PGW) (formula: $C_{40}H_{77}O_{10}P$).



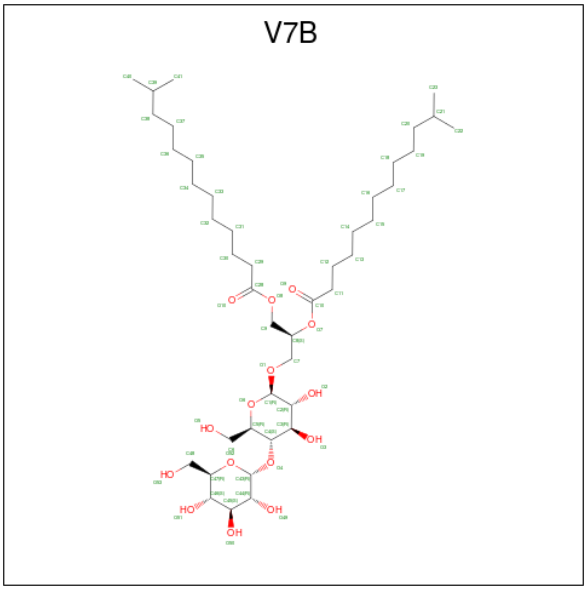
Mol	Chain	Residues	Atoms				AltConf
22	H1	1	Total 51	C 40	O 10	P 1	0

- Molecule 23 is MENAQUINONE 8 (three-letter code: MQ8) (formula: $C_{51}H_{72}O_2$).



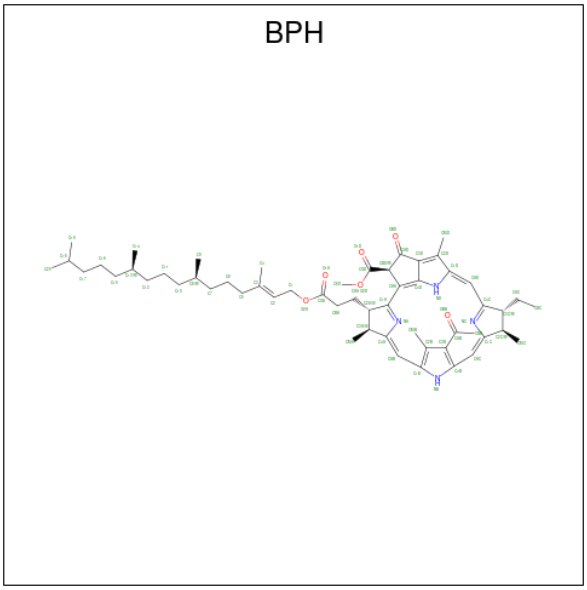
Mol	Chain	Residues	Atoms			AltConf
23	L	1	Total	C	O	0
			53	51	2	
23	M	1	Total	C	O	0
			53	51	2	
23	ao	1	Total	C	O	0
			53	51	2	

- Molecule 24 is [(2 {S})-3-[(2 {R},3 {R},4 {R},5 {S},6 {R})-6-(hydroxymethyl)-5-[(2 {R},3 {R},4 {S},5 {S},6 {R})-6-(hydroxymethyl)-3,4,5-tris(oxidanyl)oxan-2-yl]oxy-3,4-bis(oxidanyl)oxan-2-yl]oxy-2-(12-methyltridecanoyloxy)propyl] 12-methyltridecanoate (three-letter code: V7B) (formula: $C_{43}H_{80}O_{15}$).



Mol	Chain	Residues	Atoms	AltConf
24	L	1	Total C O 58 43 15	0
24	ag	1	Total C O 58 43 15	0

- Molecule 25 is BACTERIOPHEOPHYTIN A (three-letter code: BPH) (formula: $C_{55}H_{76}N_4O_6$).

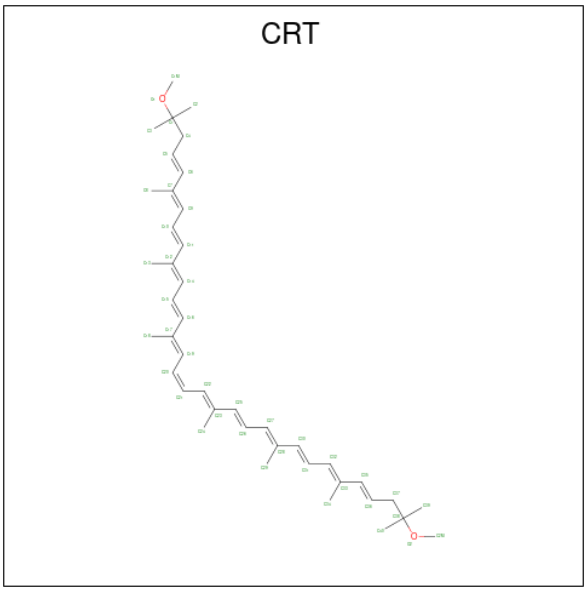


Mol	Chain	Residues	Atoms	AltConf
25	L	1	Total C N O 65 55 4 6	0
25	M	1	Total C N O 65 55 4 6	0

- Molecule 26 is FE (III) ION (three-letter code: FE) (formula: Fe).

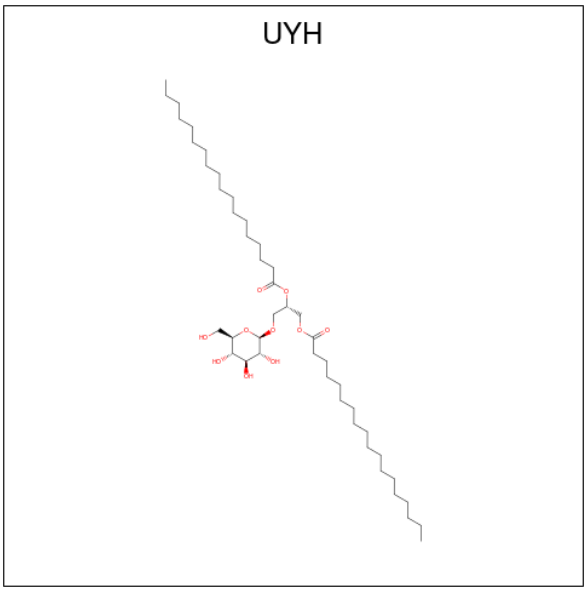
Mol	Chain	Residues	Atoms	AltConf
26	M	1	Total Fe 1 1	0

- Molecule 27 is SPIRILLOXANTHIN (three-letter code: CRT) (formula: $C_{42}H_{60}O_2$).



Mol	Chain	Residues	Atoms			AltConf
			Total	C	O	
27	M	1	44	42	2	0

- Molecule 28 is [(2 {S})-3-[(2 {R},3 {R},4 {S},5 {S},6 {R})-6-(hydroxymethyl)-3,4,5-tris(oxidanyl)oxan-2-yl]oxy-2-octadecanoyloxy-propyl] octadecanoate (three-letter code: UYH) (formula: $C_{45}H_{86}O_{10}$).



Mol	Chain	Residues	Atoms			AltConf
			Total	C	O	
28	ai	1	55	45	10	0

- Molecule 29 is water.

Mol	Chain	Residues	Atoms	AltConf
29	AA	2	Total O 2 2	0
29	AB	3	Total O 3 3	0
29	AC	3	Total O 3 3	0
29	AD	1	Total O 1 1	0
29	AE	3	Total O 3 3	0
29	AF	2	Total O 2 2	0
29	AG	5	Total O 5 5	0
29	AH	1	Total O 1 1	0
29	AI	3	Total O 3 3	0
29	AJ	5	Total O 5 5	0
29	AK	4	Total O 4 4	0
29	AL	2	Total O 2 2	0
29	AM	6	Total O 6 6	0
29	AN	4	Total O 4 4	0
29	AO	4	Total O 4 4	0
29	AP	4	Total O 4 4	0
29	AQ	4	Total O 4 4	0
29	AS	6	Total O 6 6	0
29	AT	2	Total O 2 2	0
29	AU	1	Total O 1 1	0
29	AV	6	Total O 6 6	0
29	AW	2	Total O 2 2	0

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Mol	Chain	Residues	Atoms	AltConf
29	AX	3	Total O 3 3	0
29	BB	1	Total O 1 1	0
29	BI	1	Total O 1 1	0
29	BJ	1	Total O 1 1	0
29	BO	1	Total O 1 1	0
29	BP	1	Total O 1 1	0
29	C	86	Total O 86 86	0
29	C1	42	Total O 42 42	0
29	H1	17	Total O 17 17	0
29	H2	9	Total O 9 9	0
29	L	51	Total O 51 51	0
29	M	58	Total O 58 58	0
29	aa	3	Total O 3 3	0
29	ab	3	Total O 3 3	0
29	ac	3	Total O 3 3	0
29	ad	6	Total O 6 6	0
29	ae	10	Total O 10 10	0
29	af	11	Total O 11 11	0
29	ag	7	Total O 7 7	0
29	ah	6	Total O 6 6	0
29	ai	5	Total O 5 5	0

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Mol	Chain	Residues	Atoms	AltConf
29	aj	7	Total O 7 7	0
29	ak	13	Total O 13 13	0
29	al	5	Total O 5 5	0
29	am	5	Total O 5 5	0
29	an	9	Total O 9 9	0
29	ao	5	Total O 5 5	0
29	ap	11	Total O 11 11	0
29	ba	3	Total O 3 3	0
29	bb	4	Total O 4 4	0
29	bc	2	Total O 2 2	0
29	bd	3	Total O 3 3	0
29	be	4	Total O 4 4	0
29	bf	1	Total O 1 1	0
29	bg	2	Total O 2 2	0
29	bh	2	Total O 2 2	0
29	bi	2	Total O 2 2	0
29	bj	3	Total O 3 3	0
29	bk	3	Total O 3 3	0
29	bl	3	Total O 3 3	0
29	bm	2	Total O 2 2	0
29	bn	1	Total O 1 1	0

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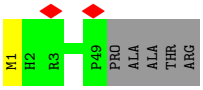
Mol	Chain	Residues	Atoms		AltConf
			Total	O	
29	bo	1	1	1	0

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.

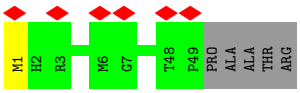
• Molecule 1: LHh-alpha

Chain AA:



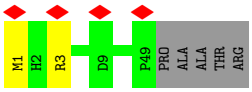
• Molecule 1: LHh-alpha

Chain AB:



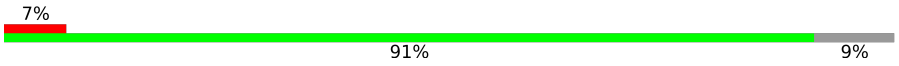
• Molecule 1: LHh-alpha

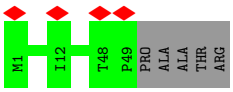
Chain AE:



• Molecule 1: LHh-alpha

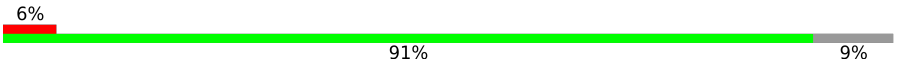
Chain AF:

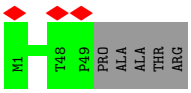




• Molecule 1: LHh-alpha

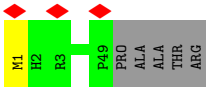
Chain AG:





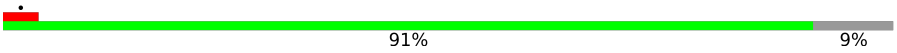
• Molecule 1: LHh-alpha

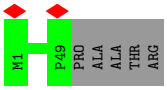
Chain AH:



• Molecule 1: LHh-alpha

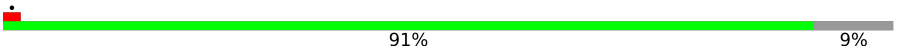
Chain AI:

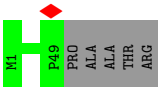




• Molecule 1: LHh-alpha

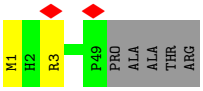
Chain AJ:





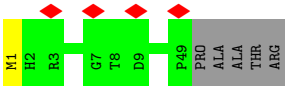
• Molecule 1: LHh-alpha

Chain AK:



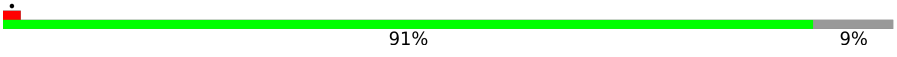
• Molecule 1: LHh-alpha

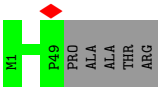
Chain AL:



• Molecule 1: LHh-alpha

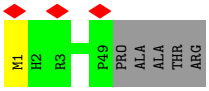
Chain AM:





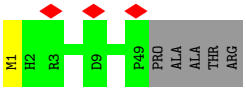
• Molecule 1: LHh-alpha

Chain AN:



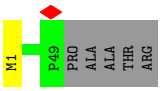
• Molecule 1: LHh-alpha

Chain AO:



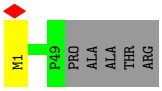
• Molecule 1: LHh-alpha

Chain AP:



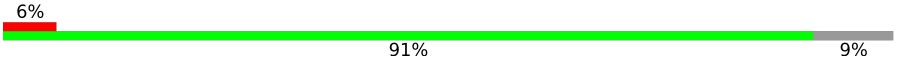
• Molecule 1: LHh-alpha

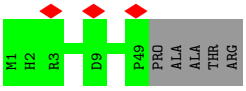
Chain AQ:



• Molecule 1: LHh-alpha

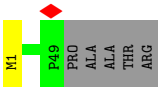
Chain AR:





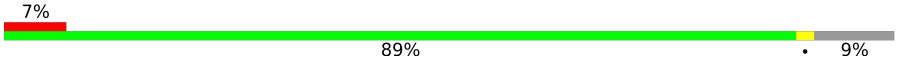
• Molecule 1: LHh-alpha

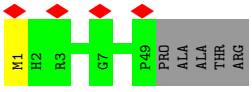
Chain AS:



• Molecule 1: LHh-alpha

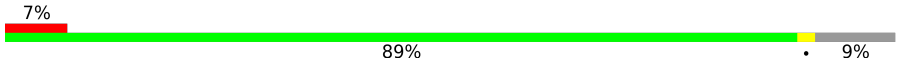
Chain AT:

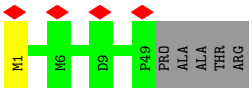




• Molecule 1: LHh-alpha

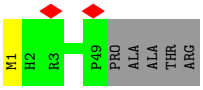
Chain AU:





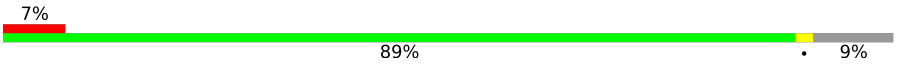
• Molecule 1: LHh-alpha

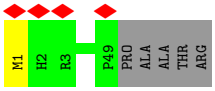
Chain AV:



• Molecule 1: LHh-alpha

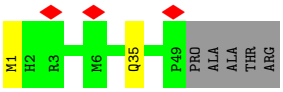
Chain AW:





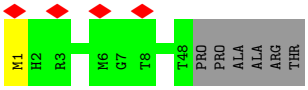
• Molecule 1: LHh-alpha

Chain AX:



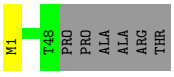
• Molecule 2: LHh-alpha

Chain AC:



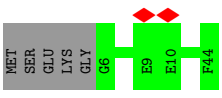
• Molecule 2: LHh-alpha

Chain AD:



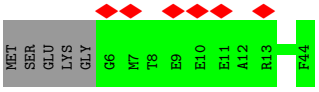
• Molecule 3: Light-harvesting protein B:885 subunit beta

Chain BA:



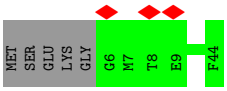
• Molecule 3: Light-harvesting protein B:885 subunit beta

Chain BC:



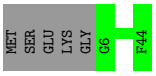
• Molecule 3: Light-harvesting protein B:885 subunit beta

Chain BF:



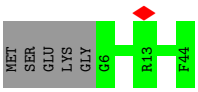
• Molecule 3: Light-harvesting protein B:885 subunit beta

Chain BG:



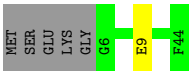
• Molecule 3: Light-harvesting protein B:885 subunit beta

Chain BH:



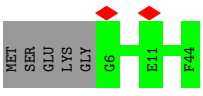
• Molecule 3: Light-harvesting protein B:885 subunit beta

Chain BJ:



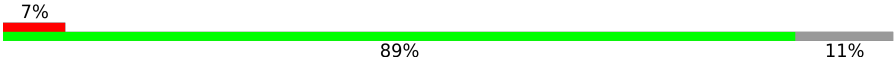
• Molecule 3: Light-harvesting protein B:885 subunit beta

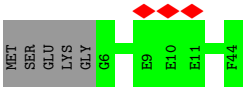
Chain BK:



• Molecule 3: Light-harvesting protein B:885 subunit beta

Chain BL:



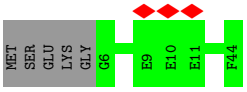


• Molecule 3: Light-harvesting protein B:885 subunit beta

Chain BM:

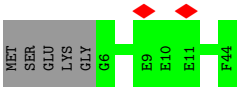
• Molecule 3: Light-harvesting protein B:885 subunit beta

Chain BN:



• Molecule 3: Light-harvesting protein B:885 subunit beta

Chain BO:

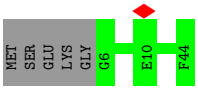


• Molecule 3: Light-harvesting protein B:885 subunit beta

Chain BP:

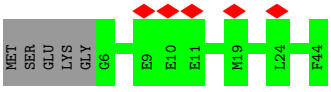
• Molecule 3: Light-harvesting protein B:885 subunit beta

Chain BU:



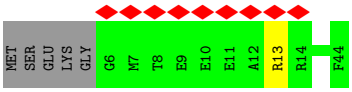
• Molecule 3: Light-harvesting protein B:885 subunit beta

Chain BX:



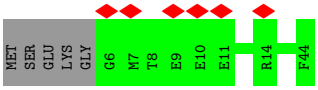
• Molecule 3: Light-harvesting protein B:885 subunit beta

Chain ba:



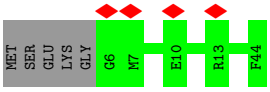
• Molecule 3: Light-harvesting protein B:885 subunit beta

Chain bb:



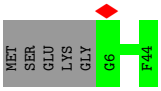
• Molecule 3: Light-harvesting protein B:885 subunit beta

Chain bc:



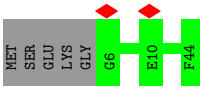
• Molecule 3: Light-harvesting protein B:885 subunit beta

Chain bd:



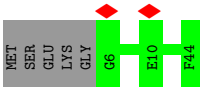
• Molecule 3: Light-harvesting protein B:885 subunit beta

Chain be:



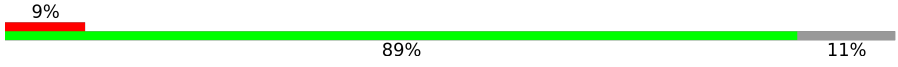
• Molecule 3: Light-harvesting protein B:885 subunit beta

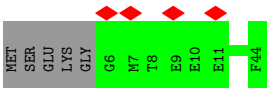
Chain bf:



• Molecule 3: Light-harvesting protein B:885 subunit beta

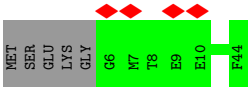
Chain bg:





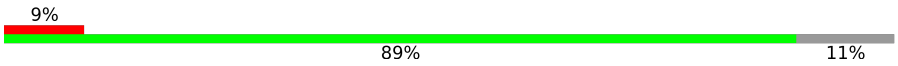
• Molecule 3: Light-harvesting protein B:885 subunit beta

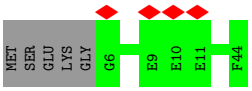
Chain bh:



• Molecule 3: Light-harvesting protein B:885 subunit beta

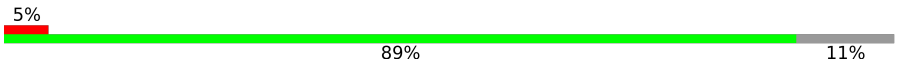
Chain bi:

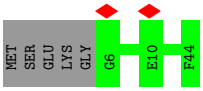




• Molecule 3: Light-harvesting protein B:885 subunit beta

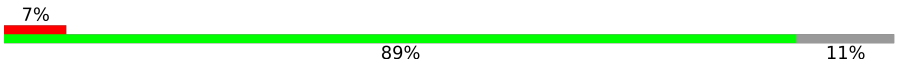
Chain bj:

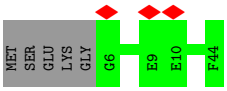




• Molecule 3: Light-harvesting protein B:885 subunit beta

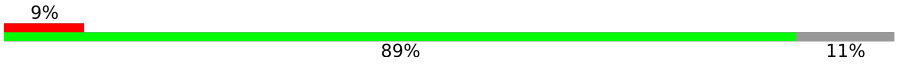
Chain bk:

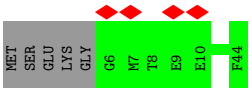




• Molecule 3: Light-harvesting protein B:885 subunit beta

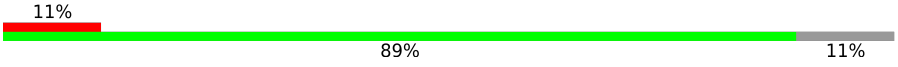
Chain bl:

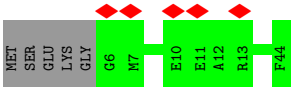




• Molecule 3: Light-harvesting protein B:885 subunit beta

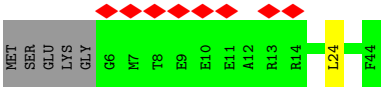
Chain bm:



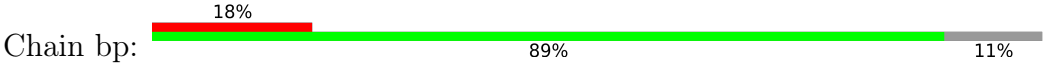


• Molecule 3: Light-harvesting protein B:885 subunit beta

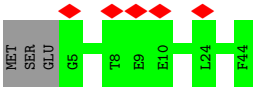
Chain bo:



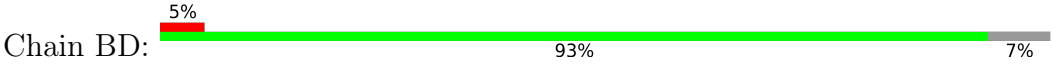
• Molecule 3: Light-harvesting protein B:885 subunit beta

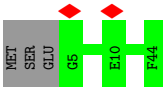


• Molecule 4: Light-harvesting protein B:885 subunit beta

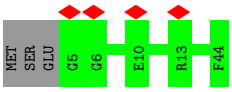


• Molecule 4: Light-harvesting protein B:885 subunit beta

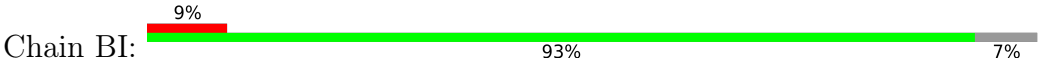


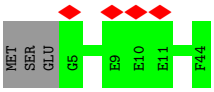


• Molecule 4: Light-harvesting protein B:885 subunit beta

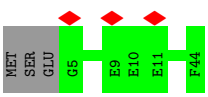


• Molecule 4: Light-harvesting protein B:885 subunit beta



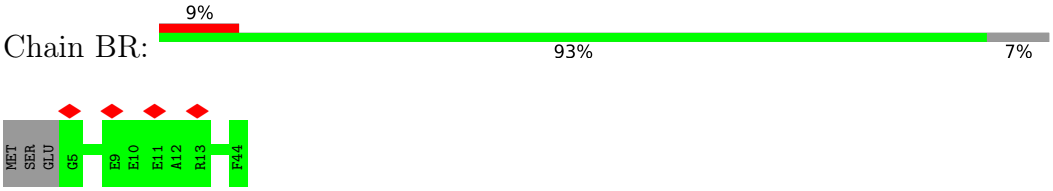


• Molecule 4: Light-harvesting protein B:885 subunit beta



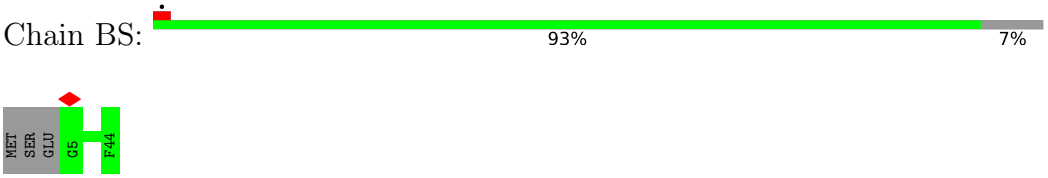
• Molecule 4: Light-harvesting protein B:885 subunit beta

Chain BR:



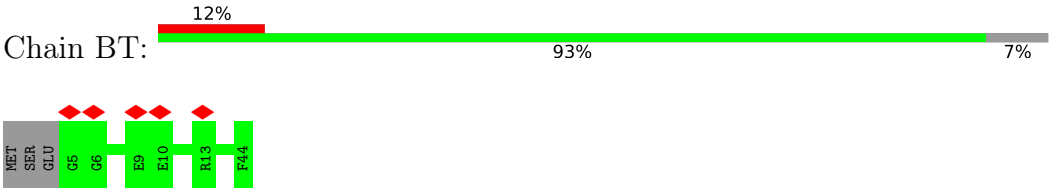
• Molecule 4: Light-harvesting protein B:885 subunit beta

Chain BS:



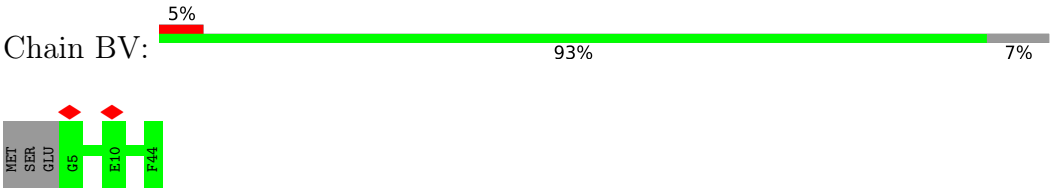
• Molecule 4: Light-harvesting protein B:885 subunit beta

Chain BT:



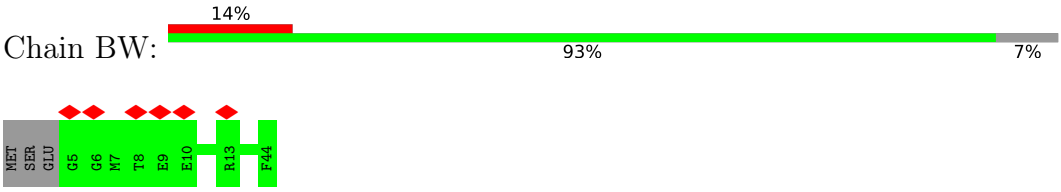
• Molecule 4: Light-harvesting protein B:885 subunit beta

Chain BV:



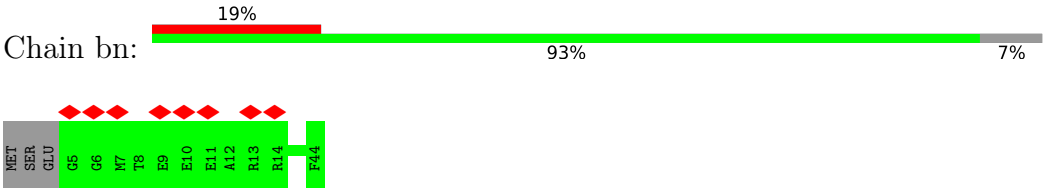
• Molecule 4: Light-harvesting protein B:885 subunit beta

Chain BW:



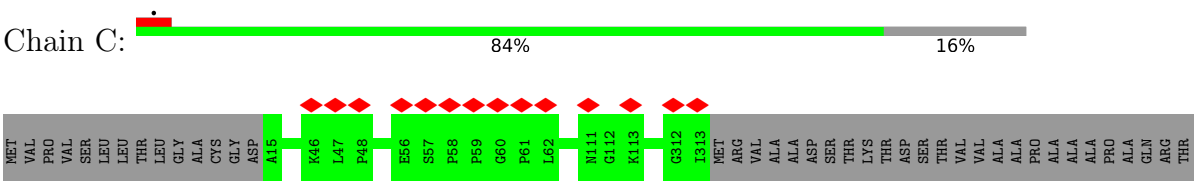
• Molecule 4: Light-harvesting protein B:885 subunit beta

Chain bn:



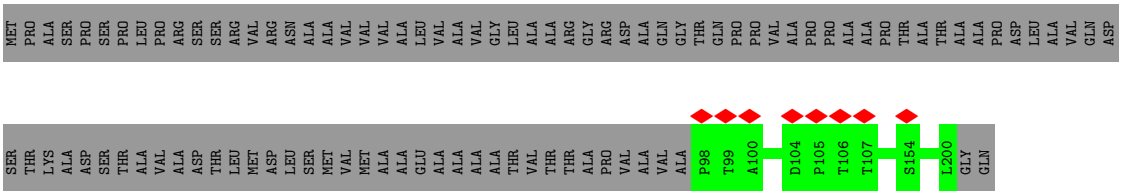
• Molecule 5: MULTIHEME_CYTC domain-containing protein

Chain C:



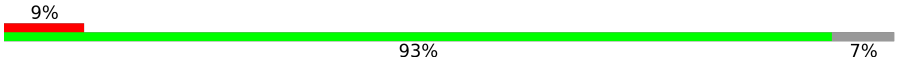
• Molecule 6: RC-S

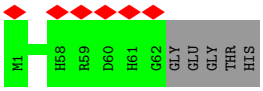
Chain C1:



• Molecule 7: PRCH domain-containing protein

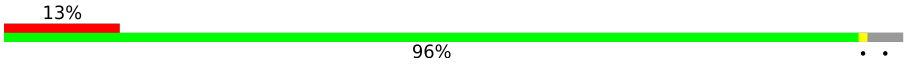
Chain H1:

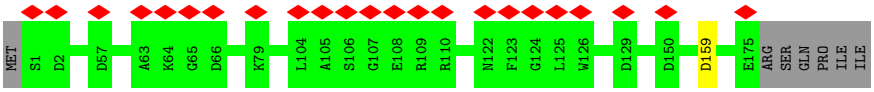




• Molecule 8: RC-Hc

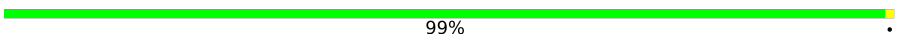
Chain H2:





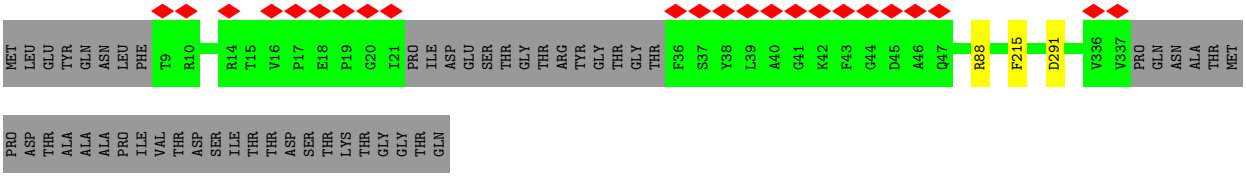
• Molecule 9: Photosynthetic reaction center L subunit

Chain L:



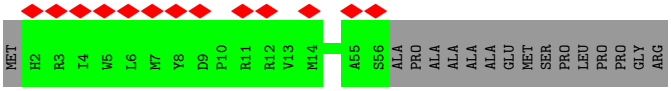
• Molecule 10: RC-M

Chain M:



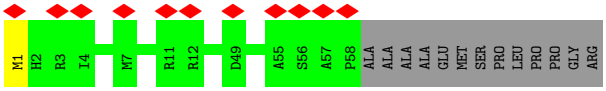
• Molecule 11: LHC domain-containing protein

Chain aa:



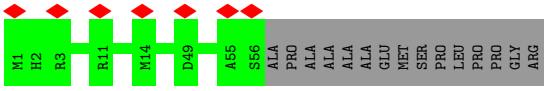
• Molecule 12: LHC domain-containing protein

Chain ab:



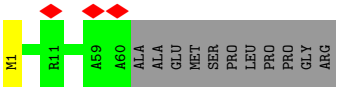
• Molecule 12: LHC domain-containing protein

Chain ac:



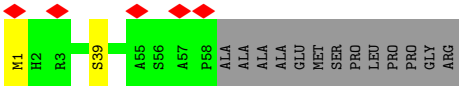
• Molecule 12: LHC domain-containing protein

Chain ad:



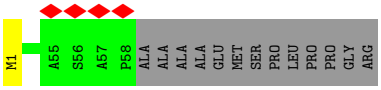
• Molecule 12: LHC domain-containing protein

Chain ae:



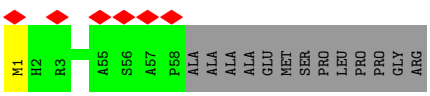
• Molecule 12: LHC domain-containing protein

Chain af:



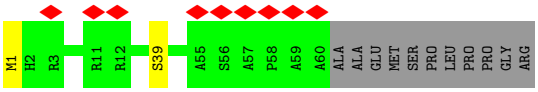
• Molecule 12: LHC domain-containing protein

Chain ag:



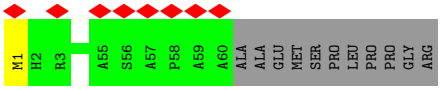
• Molecule 12: LHC domain-containing protein

Chain ah:



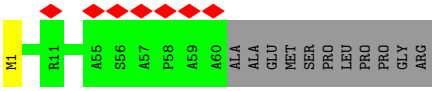
• Molecule 12: LHC domain-containing protein

Chain ai:



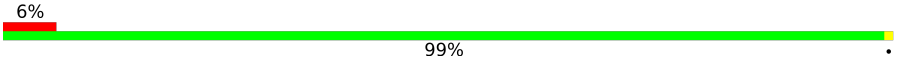
• Molecule 12: LHC domain-containing protein

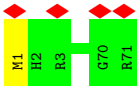
Chain aj:



• Molecule 12: LHC domain-containing protein

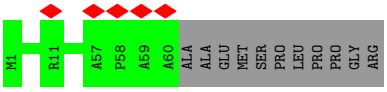
Chain ak:





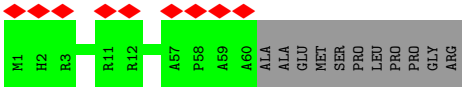
• Molecule 12: LHC domain-containing protein

Chain al:



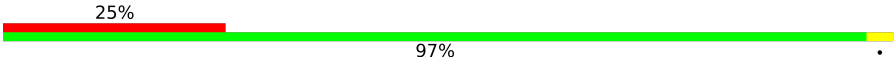
• Molecule 12: LHC domain-containing protein

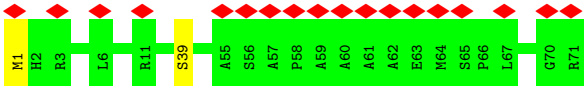
Chain am:



• Molecule 12: LHC domain-containing protein

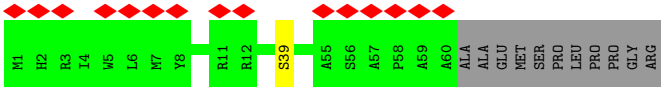
Chain an:





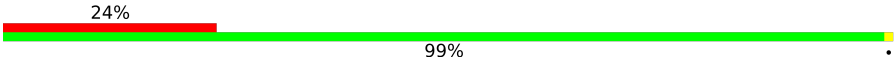
• Molecule 12: LHC domain-containing protein

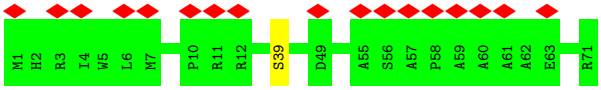
Chain ao:



• Molecule 12: LHC domain-containing protein

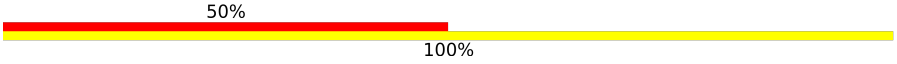
Chain ap:





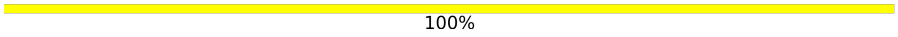
• Molecule 13: alpha-L-rhamnopyranose-(1-4)-alpha-D-mannopyranose

Chain CG:



• Molecule 13: alpha-L-rhamnopyranose-(1-4)-alpha-D-mannopyranose

Chain MG:



4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	103156	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/Å^2$)	24.8	Depositor
Minimum defocus (nm)	-800	Depositor
Maximum defocus (nm)	-2400	Depositor
Magnification	120000	Depositor
Image detector	FEI FALCON IV (4k x 4k)	Depositor
Maximum map value	0.192	Depositor
Minimum map value	-0.054	Depositor
Average map value	0.001	Depositor
Map value standard deviation	0.004	Depositor
Recommended contour level	0.0348	Depositor
Map size (Å)	399.784, 399.784, 399.784	wwPDB
Map dimensions	400, 400, 400	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	0.99946, 0.99946, 0.99946	Depositor

5 Model quality (i)

5.1 Standard geometry (i)

Bond lengths and bond angles in the following residue types are not validated in this section: NDG, LMT, V75, FE, FME, HEC, 0V9, CD4, RAM, PGW, UYH, BPH, V7N, BCL, MQ8, MAN, CRT, V7B

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	AA	0.24	0/396	0.50	0/541
1	AB	0.23	0/396	0.50	0/541
1	AE	0.24	0/396	0.49	0/541
1	AF	0.24	0/396	0.53	0/541
1	AG	0.24	0/396	0.50	0/541
1	AH	0.24	0/396	0.54	0/541
1	AI	0.24	0/396	0.50	0/541
1	AJ	0.24	0/396	0.50	0/541
1	AK	0.24	0/396	0.51	0/541
1	AL	0.24	0/396	0.51	0/541
1	AM	0.25	0/396	0.50	0/541
1	AN	0.24	0/396	0.51	0/541
1	AO	0.24	0/396	0.52	0/541
1	AP	0.24	0/396	0.52	0/541
1	AQ	0.24	0/396	0.50	0/541
1	AR	0.24	0/396	0.49	0/541
1	AS	0.25	0/396	0.53	0/541
1	AT	0.24	0/396	0.53	0/541
1	AU	0.24	0/396	0.49	0/541
1	AV	0.24	0/396	0.50	0/541
1	AW	0.25	0/396	0.49	0/541
1	AX	0.24	0/396	0.51	0/541
2	AC	0.24	0/388	0.51	0/529
2	AD	0.24	0/388	0.51	0/529
3	BA	0.24	0/336	0.47	0/456
3	BC	0.24	0/336	0.48	0/456
3	BF	0.25	0/336	0.49	0/456
3	BG	0.24	0/336	0.50	0/456
3	BH	0.24	0/336	0.48	0/456
3	BJ	0.25	0/336	0.49	0/456
3	BK	0.24	0/336	0.49	0/456

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\#\|Z\| > 5$	RMSZ	$\#\|Z\| > 5$
3	BL	0.25	0/336	0.50	0/456
3	BM	0.25	0/336	0.50	0/456
3	BN	0.25	0/336	0.51	0/456
3	BO	0.24	0/336	0.49	0/456
3	BP	0.24	0/336	0.51	0/456
3	BU	0.23	0/336	0.50	0/456
3	BX	0.24	0/336	0.49	0/456
3	ba	0.25	0/336	0.50	0/456
3	bb	0.25	0/336	0.49	0/456
3	bc	0.26	0/336	0.51	0/456
3	bd	0.25	0/336	0.48	0/456
3	be	0.27	0/336	0.51	0/456
3	bf	0.26	0/336	0.48	0/456
3	bg	0.25	0/336	0.52	0/456
3	bh	0.24	0/336	0.47	0/456
3	bi	0.24	0/336	0.49	0/456
3	bj	0.25	0/336	0.51	0/456
3	bk	0.26	0/336	0.53	0/456
3	bl	0.25	0/336	0.50	0/456
3	bm	0.26	0/336	0.51	0/456
3	bo	0.25	0/336	0.51	0/456
3	bp	0.24	0/336	0.50	0/456
4	BB	0.26	0/340	0.51	0/461
4	BD	0.24	0/340	0.49	0/461
4	BE	0.24	0/340	0.48	0/461
4	BI	0.24	0/340	0.49	0/461
4	BQ	0.24	0/340	0.51	0/461
4	BR	0.25	0/340	0.50	0/461
4	BS	0.25	0/340	0.50	0/461
4	BT	0.25	0/340	0.51	0/461
4	BV	0.24	0/340	0.47	0/461
4	BW	0.24	0/340	0.49	0/461
4	bn	0.24	0/340	0.49	0/461
5	C	0.26	0/2392	0.55	0/3263
6	C1	0.24	0/826	0.58	0/1128
7	H1	0.25	0/531	0.53	0/717
8	H2	0.25	0/1392	0.52	0/1902
9	L	0.25	0/2252	0.50	0/3081
10	M	0.26	0/2632	0.52	0/3600
11	aa	0.25	0/444	0.53	0/605
12	ab	0.25	0/457	0.52	0/624
12	ac	0.25	0/444	0.53	0/605
12	ad	0.25	0/467	0.54	0/638

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\#\|Z\| > 5$	RMSZ	$\#\|Z\| > 5$
12	ae	0.26	0/457	0.54	0/624
12	af	0.25	0/457	0.53	0/624
12	ag	0.25	0/457	0.55	0/624
12	ah	0.25	0/467	0.53	0/638
12	ai	0.26	0/467	0.53	0/638
12	aj	0.25	0/467	0.53	0/638
12	ak	0.27	0/547	0.53	0/748
12	al	0.25	0/467	0.52	0/638
12	am	0.26	0/467	0.55	0/638
12	an	0.26	0/547	0.56	0/748
12	ao	0.25	0/467	0.53	0/638
12	ap	0.24	0/548	0.52	0/748
All	All	0.25	0/40624	0.51	0/55362

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand.A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
1	AE	0	1
1	AK	0	1
10	M	0	1
All	All	0	3

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

All (3) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	AE	3	ARG	Sidechain
1	AK	3	ARG	Sidechain
10	M	88	ARG	Sidechain

5.2 Too-close contacts (i)

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

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	AA	47/54 (87%)	47 (100%)	0	0	100	100
1	AB	47/54 (87%)	47 (100%)	0	0	100	100
1	AE	47/54 (87%)	47 (100%)	0	0	100	100
1	AF	47/54 (87%)	47 (100%)	0	0	100	100
1	AG	47/54 (87%)	47 (100%)	0	0	100	100
1	AH	47/54 (87%)	47 (100%)	0	0	100	100
1	AI	47/54 (87%)	47 (100%)	0	0	100	100
1	AJ	47/54 (87%)	47 (100%)	0	0	100	100
1	AK	47/54 (87%)	47 (100%)	0	0	100	100
1	AL	47/54 (87%)	47 (100%)	0	0	100	100
1	AM	47/54 (87%)	47 (100%)	0	0	100	100
1	AN	47/54 (87%)	47 (100%)	0	0	100	100
1	AO	47/54 (87%)	46 (98%)	1 (2%)	0	100	100
1	AP	47/54 (87%)	47 (100%)	0	0	100	100
1	AQ	47/54 (87%)	47 (100%)	0	0	100	100
1	AR	47/54 (87%)	47 (100%)	0	0	100	100
1	AS	47/54 (87%)	47 (100%)	0	0	100	100
1	AT	47/54 (87%)	47 (100%)	0	0	100	100
1	AU	47/54 (87%)	47 (100%)	0	0	100	100
1	AV	47/54 (87%)	47 (100%)	0	0	100	100
1	AW	47/54 (87%)	46 (98%)	1 (2%)	0	100	100
1	AX	47/54 (87%)	46 (98%)	1 (2%)	0	100	100
2	AC	46/54 (85%)	46 (100%)	0	0	100	100
2	AD	46/54 (85%)	46 (100%)	0	0	100	100
3	BA	37/44 (84%)	37 (100%)	0	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
3	BC	37/44 (84%)	37 (100%)	0	0	100	100
3	BF	37/44 (84%)	37 (100%)	0	0	100	100
3	BG	37/44 (84%)	37 (100%)	0	0	100	100
3	BH	37/44 (84%)	37 (100%)	0	0	100	100
3	BJ	37/44 (84%)	37 (100%)	0	0	100	100
3	BK	37/44 (84%)	37 (100%)	0	0	100	100
3	BL	37/44 (84%)	37 (100%)	0	0	100	100
3	BM	37/44 (84%)	37 (100%)	0	0	100	100
3	BN	37/44 (84%)	37 (100%)	0	0	100	100
3	BO	37/44 (84%)	37 (100%)	0	0	100	100
3	BP	37/44 (84%)	37 (100%)	0	0	100	100
3	BU	37/44 (84%)	37 (100%)	0	0	100	100
3	BX	37/44 (84%)	37 (100%)	0	0	100	100
3	ba	37/44 (84%)	37 (100%)	0	0	100	100
3	bb	37/44 (84%)	37 (100%)	0	0	100	100
3	bc	37/44 (84%)	37 (100%)	0	0	100	100
3	bd	37/44 (84%)	37 (100%)	0	0	100	100
3	be	37/44 (84%)	37 (100%)	0	0	100	100
3	bf	37/44 (84%)	37 (100%)	0	0	100	100
3	bg	37/44 (84%)	37 (100%)	0	0	100	100
3	bh	37/44 (84%)	37 (100%)	0	0	100	100
3	bi	37/44 (84%)	37 (100%)	0	0	100	100
3	bj	37/44 (84%)	37 (100%)	0	0	100	100
3	bk	37/44 (84%)	36 (97%)	1 (3%)	0	100	100
3	bl	37/44 (84%)	37 (100%)	0	0	100	100
3	bm	37/44 (84%)	37 (100%)	0	0	100	100
3	bo	37/44 (84%)	37 (100%)	0	0	100	100
3	bp	37/44 (84%)	37 (100%)	0	0	100	100
4	BB	38/43 (88%)	38 (100%)	0	0	100	100
4	BD	38/43 (88%)	38 (100%)	0	0	100	100
4	BE	38/43 (88%)	38 (100%)	0	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
4	BI	38/43 (88%)	38 (100%)	0	0	100	100
4	BQ	38/43 (88%)	38 (100%)	0	0	100	100
4	BR	38/43 (88%)	38 (100%)	0	0	100	100
4	BS	38/43 (88%)	38 (100%)	0	0	100	100
4	BT	38/43 (88%)	38 (100%)	0	0	100	100
4	BV	38/43 (88%)	38 (100%)	0	0	100	100
4	BW	38/43 (88%)	38 (100%)	0	0	100	100
4	bn	38/43 (88%)	38 (100%)	0	0	100	100
5	C	297/354 (84%)	285 (96%)	12 (4%)	0	100	100
6	C1	101/202 (50%)	100 (99%)	1 (1%)	0	100	100
7	H1	60/67 (90%)	60 (100%)	0	0	100	100
8	H2	172/181 (95%)	169 (98%)	3 (2%)	0	100	100
9	L	271/274 (99%)	262 (97%)	9 (3%)	0	100	100
10	M	311/367 (85%)	298 (96%)	13 (4%)	0	100	100
11	aa	53/71 (75%)	53 (100%)	0	0	100	100
12	ab	56/71 (79%)	56 (100%)	0	0	100	100
12	ac	54/71 (76%)	53 (98%)	1 (2%)	0	100	100
12	ad	58/71 (82%)	56 (97%)	2 (3%)	0	100	100
12	ae	56/71 (79%)	55 (98%)	1 (2%)	0	100	100
12	af	56/71 (79%)	55 (98%)	1 (2%)	0	100	100
12	ag	56/71 (79%)	56 (100%)	0	0	100	100
12	ah	58/71 (82%)	57 (98%)	1 (2%)	0	100	100
12	ai	58/71 (82%)	58 (100%)	0	0	100	100
12	aj	58/71 (82%)	58 (100%)	0	0	100	100
12	ak	69/71 (97%)	67 (97%)	2 (3%)	0	100	100
12	al	58/71 (82%)	56 (97%)	2 (3%)	0	100	100
12	am	58/71 (82%)	57 (98%)	1 (2%)	0	100	100
12	an	69/71 (97%)	68 (99%)	1 (1%)	0	100	100
12	ao	58/71 (82%)	57 (98%)	1 (2%)	0	100	100
12	ap	69/71 (97%)	68 (99%)	1 (1%)	0	100	100
All	All	4773/5626 (85%)	4717 (99%)	56 (1%)	0	100	100

There are no Ramachandran outliers to report.

5.3.2 Protein sidechains

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	AA	38/41 (93%)	38 (100%)	0	100	100
1	AB	38/41 (93%)	38 (100%)	0	100	100
1	AE	38/41 (93%)	38 (100%)	0	100	100
1	AF	38/41 (93%)	38 (100%)	0	100	100
1	AG	38/41 (93%)	38 (100%)	0	100	100
1	AH	38/41 (93%)	38 (100%)	0	100	100
1	AI	38/41 (93%)	38 (100%)	0	100	100
1	AJ	38/41 (93%)	38 (100%)	0	100	100
1	AK	38/41 (93%)	38 (100%)	0	100	100
1	AL	38/41 (93%)	38 (100%)	0	100	100
1	AM	38/41 (93%)	38 (100%)	0	100	100
1	AN	38/41 (93%)	38 (100%)	0	100	100
1	AO	38/41 (93%)	38 (100%)	0	100	100
1	AP	38/41 (93%)	38 (100%)	0	100	100
1	AQ	38/41 (93%)	38 (100%)	0	100	100
1	AR	38/41 (93%)	38 (100%)	0	100	100
1	AS	38/41 (93%)	38 (100%)	0	100	100
1	AT	38/41 (93%)	38 (100%)	0	100	100
1	AU	38/41 (93%)	38 (100%)	0	100	100
1	AV	38/41 (93%)	38 (100%)	0	100	100
1	AW	38/41 (93%)	38 (100%)	0	100	100
1	AX	38/41 (93%)	37 (97%)	1 (3%)	46	72
2	AC	37/41 (90%)	37 (100%)	0	100	100
2	AD	37/41 (90%)	37 (100%)	0	100	100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
3	BA	31/35 (89%)	31 (100%)	0	100	100
3	BC	31/35 (89%)	31 (100%)	0	100	100
3	BF	31/35 (89%)	31 (100%)	0	100	100
3	BG	31/35 (89%)	31 (100%)	0	100	100
3	BH	31/35 (89%)	31 (100%)	0	100	100
3	BJ	31/35 (89%)	30 (97%)	1 (3%)	39	65
3	BK	31/35 (89%)	31 (100%)	0	100	100
3	BL	31/35 (89%)	31 (100%)	0	100	100
3	BM	31/35 (89%)	31 (100%)	0	100	100
3	BN	31/35 (89%)	31 (100%)	0	100	100
3	BO	31/35 (89%)	31 (100%)	0	100	100
3	BP	31/35 (89%)	31 (100%)	0	100	100
3	BU	31/35 (89%)	31 (100%)	0	100	100
3	BX	31/35 (89%)	31 (100%)	0	100	100
3	ba	31/35 (89%)	30 (97%)	1 (3%)	39	65
3	bb	31/35 (89%)	31 (100%)	0	100	100
3	bc	31/35 (89%)	31 (100%)	0	100	100
3	bd	31/35 (89%)	31 (100%)	0	100	100
3	be	31/35 (89%)	31 (100%)	0	100	100
3	bf	31/35 (89%)	31 (100%)	0	100	100
3	bg	31/35 (89%)	31 (100%)	0	100	100
3	bh	31/35 (89%)	31 (100%)	0	100	100
3	bi	31/35 (89%)	31 (100%)	0	100	100
3	bj	31/35 (89%)	31 (100%)	0	100	100
3	bk	31/35 (89%)	31 (100%)	0	100	100
3	bl	31/35 (89%)	31 (100%)	0	100	100
3	bm	31/35 (89%)	31 (100%)	0	100	100
3	bo	31/35 (89%)	30 (97%)	1 (3%)	39	65
3	bp	31/35 (89%)	31 (100%)	0	100	100
4	BB	31/34 (91%)	31 (100%)	0	100	100
4	BD	31/34 (91%)	31 (100%)	0	100	100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
4	BE	31/34 (91%)	31 (100%)	0	100	100
4	BI	31/34 (91%)	31 (100%)	0	100	100
4	BQ	31/34 (91%)	31 (100%)	0	100	100
4	BR	31/34 (91%)	31 (100%)	0	100	100
4	BS	31/34 (91%)	31 (100%)	0	100	100
4	BT	31/34 (91%)	31 (100%)	0	100	100
4	BV	31/34 (91%)	31 (100%)	0	100	100
4	BW	31/34 (91%)	31 (100%)	0	100	100
4	bn	31/34 (91%)	31 (100%)	0	100	100
5	C	245/285 (86%)	245 (100%)	0	100	100
6	C1	88/156 (56%)	88 (100%)	0	100	100
7	H1	50/53 (94%)	50 (100%)	0	100	100
8	H2	144/151 (95%)	143 (99%)	1 (1%)	84	94
9	L	215/216 (100%)	212 (99%)	3 (1%)	67	86
10	M	256/299 (86%)	254 (99%)	2 (1%)	81	93
11	aa	45/55 (82%)	45 (100%)	0	100	100
12	ab	46/54 (85%)	46 (100%)	0	100	100
12	ac	45/54 (83%)	45 (100%)	0	100	100
12	ad	46/54 (85%)	46 (100%)	0	100	100
12	ae	46/54 (85%)	45 (98%)	1 (2%)	52	77
12	af	46/54 (85%)	46 (100%)	0	100	100
12	ag	46/54 (85%)	46 (100%)	0	100	100
12	ah	46/54 (85%)	45 (98%)	1 (2%)	52	77
12	ai	46/54 (85%)	46 (100%)	0	100	100
12	aj	46/54 (85%)	46 (100%)	0	100	100
12	ak	54/54 (100%)	54 (100%)	0	100	100
12	al	46/54 (85%)	46 (100%)	0	100	100
12	am	46/54 (85%)	46 (100%)	0	100	100
12	an	54/54 (100%)	53 (98%)	1 (2%)	57	80
12	ao	46/54 (85%)	45 (98%)	1 (2%)	52	77
12	ap	54/54 (100%)	53 (98%)	1 (2%)	57	80

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
All	All	3906/4398 (89%)	3891 (100%)	15 (0%)	91 97

5 of 15 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
10	M	291	ASP
3	ba	13	ARG
12	ae	39	SER
3	bo	24	LEU
12	ao	39	SER

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

Mol	Chain	Res	Type
9	L	104	GLN
9	L	144	HIS
9	L	166	HIS
9	L	268	ASN

5.3.3 RNA

There are no RNA molecules in this entry.

5.4 Non-standard residues in protein, DNA, RNA chains

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

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
1	FME	AS	1	1	8,9,10	0.93	0	7,9,11	1.13	1 (14%)
1	FME	AU	1	1	8,9,10	0.92	0	7,9,11	0.99	1 (14%)
7	FME	H1	1	7	8,9,10	0.92	0	7,9,11	0.89	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
1	FME	AG	1	1	8,9,10	0.92	0	7,9,11	1.01	0
1	FME	AR	1	1	8,9,10	0.93	0	7,9,11	0.93	0
12	FME	ao	1	12	8,9,10	0.92	0	7,9,11	1.01	0
12	FME	ae	1	12	8,9,10	0.93	0	7,9,11	1.17	1 (14%)
12	FME	an	1	12	8,9,10	0.94	0	7,9,11	1.17	1 (14%)
1	FME	AF	1	1	8,9,10	0.95	0	7,9,11	0.91	0
12	FME	ab	1	12	8,9,10	0.90	0	7,9,11	1.17	1 (14%)
12	FME	al	1	12	8,9,10	0.93	0	7,9,11	1.01	0
1	FME	AW	1	1	8,9,10	0.91	0	7,9,11	1.09	1 (14%)
1	FME	AA	1	1	8,9,10	0.94	0	7,9,11	0.98	1 (14%)
1	FME	AI	1	1	8,9,10	0.95	0	7,9,11	0.93	0
12	FME	aj	1	12	8,9,10	0.93	0	7,9,11	1.06	1 (14%)
12	FME	ad	1	12	8,9,10	0.90	0	7,9,11	1.09	1 (14%)
12	FME	ag	1	12	8,9,10	0.92	0	7,9,11	1.04	1 (14%)
2	FME	AC	1	2	8,9,10	0.94	0	7,9,11	1.07	1 (14%)
1	FME	AE	1	1	8,9,10	0.90	0	7,9,11	1.03	1 (14%)
1	FME	AL	1	1	8,9,10	0.92	0	7,9,11	1.19	1 (14%)
1	FME	AX	1	1	8,9,10	0.91	0	7,9,11	1.27	1 (14%)
1	FME	AO	1	1	8,9,10	0.92	0	7,9,11	1.01	1 (14%)
12	FME	af	1	12	8,9,10	0.93	0	7,9,11	1.08	1 (14%)
1	FME	AK	1	1	8,9,10	0.91	0	7,9,11	1.05	1 (14%)
12	FME	ah	1	12	8,9,10	0.93	0	7,9,11	1.09	1 (14%)
1	FME	AN	1	1	8,9,10	0.94	0	7,9,11	1.05	1 (14%)
2	FME	AD	1	2	8,9,10	0.94	0	7,9,11	1.03	1 (14%)
12	FME	ak	1	12	8,9,10	0.95	0	7,9,11	1.09	1 (14%)
1	FME	AJ	1	1	8,9,10	0.97	0	7,9,11	0.76	0
1	FME	AM	1	1	8,9,10	0.94	0	7,9,11	0.97	0
1	FME	AV	1	1	8,9,10	0.93	0	7,9,11	1.02	1 (14%)
1	FME	AH	1	1	8,9,10	0.93	0	7,9,11	1.06	1 (14%)
1	FME	AB	1	1	8,9,10	0.93	0	7,9,11	1.01	1 (14%)
12	FME	ac	1	12	8,9,10	0.91	0	7,9,11	0.90	0
12	FME	am	1	12	8,9,10	0.91	0	7,9,11	0.96	0
1	FME	AP	1	1	8,9,10	0.92	0	7,9,11	1.01	1 (14%)
12	FME	ai	1	12	8,9,10	0.93	0	7,9,11	0.98	1 (14%)
12	FME	ap	1	12	8,9,10	0.95	0	7,9,11	0.93	0
1	FME	AQ	1	1	8,9,10	0.92	0	7,9,11	1.14	1 (14%)
1	FME	AT	1	1	8,9,10	0.92	0	7,9,11	0.98	1 (14%)

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
1	FME	AS	1	1	-	0/7/9/11	-
1	FME	AU	1	1	-	1/7/9/11	-
7	FME	H1	1	7	-	0/7/9/11	-
1	FME	AG	1	1	-	0/7/9/11	-
1	FME	AR	1	1	-	0/7/9/11	-
12	FME	ao	1	12	-	1/7/9/11	-
12	FME	ae	1	12	-	1/7/9/11	-
12	FME	an	1	12	-	1/7/9/11	-
1	FME	AF	1	1	-	1/7/9/11	-
12	FME	ab	1	12	-	1/7/9/11	-
12	FME	al	1	12	-	2/7/9/11	-
1	FME	AW	1	1	-	0/7/9/11	-
1	FME	AA	1	1	-	1/7/9/11	-
1	FME	AI	1	1	-	1/7/9/11	-
12	FME	aj	1	12	-	1/7/9/11	-
12	FME	ad	1	12	-	0/7/9/11	-
12	FME	ag	1	12	-	0/7/9/11	-
2	FME	AC	1	2	-	0/7/9/11	-
1	FME	AE	1	1	-	1/7/9/11	-
1	FME	AL	1	1	-	1/7/9/11	-
1	FME	AX	1	1	-	1/7/9/11	-
1	FME	AO	1	1	-	0/7/9/11	-
12	FME	af	1	12	-	2/7/9/11	-
1	FME	AK	1	1	-	0/7/9/11	-
12	FME	ah	1	12	-	0/7/9/11	-
1	FME	AN	1	1	-	1/7/9/11	-
2	FME	AD	1	2	-	0/7/9/11	-
12	FME	ak	1	12	-	2/7/9/11	-
1	FME	AJ	1	1	-	1/7/9/11	-
1	FME	AM	1	1	-	1/7/9/11	-
1	FME	AV	1	1	-	0/7/9/11	-
1	FME	AH	1	1	-	0/7/9/11	-
1	FME	AB	1	1	-	1/7/9/11	-
12	FME	ac	1	12	-	1/7/9/11	-
12	FME	am	1	12	-	2/7/9/11	-
1	FME	AP	1	1	-	1/7/9/11	-
12	FME	ai	1	12	-	0/7/9/11	-
12	FME	ap	1	12	-	1/7/9/11	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
1	FME	AQ	1	1	-	0/7/9/11	-
1	FME	AT	1	1	-	0/7/9/11	-

There are no bond length outliers.

The worst 5 of 28 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AX	1	FME	C-CA-N	2.67	114.55	109.73
12	ab	1	FME	C-CA-N	2.61	114.44	109.73
1	AL	1	FME	C-CA-N	2.50	114.23	109.73
1	AQ	1	FME	C-CA-N	2.40	114.06	109.73
12	an	1	FME	C-CA-N	2.40	114.06	109.73

There are no chirality outliers.

5 of 27 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
12	ab	1	FME	O-C-CA-CB
12	ac	1	FME	O-C-CA-CB
12	af	1	FME	O-C-CA-CB
12	ak	1	FME	O-C-CA-CB
12	am	1	FME	CB-CA-N-CN

There are no ring outliers.

No monomer is involved in short contacts.

5.5 Carbohydrates (i)

4 monosaccharides 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	$\#\|Z\| > 2$
13	MAN	CG	1	5,18,13	11,11,12	0.82	1 (9%)	15,15,17	1.02	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
13	RAM	CG	2	13	10,10,11	1.71	2 (20%)	14,14,16	0.98	0
13	MAN	MG	1	18,13,10	11,11,12	0.72	0	15,15,17	1.06	1 (6%)
13	RAM	MG	2	13	10,10,11	1.50	2 (20%)	14,14,16	1.35	3 (21%)

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
13	MAN	CG	1	5,18,13	-	1/2/19/22	0/1/1/1
13	RAM	CG	2	13	-	-	0/1/1/1
13	MAN	MG	1	18,13,10	-	0/2/19/22	0/1/1/1
13	RAM	MG	2	13	-	-	0/1/1/1

All (5) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
13	CG	2	RAM	O5-C1	4.19	1.50	1.43
13	MG	2	RAM	O5-C1	3.45	1.49	1.43
13	CG	2	RAM	C2-C3	-2.28	1.49	1.52
13	CG	1	MAN	O5-C1	-2.16	1.40	1.43
13	MG	2	RAM	C2-C3	-2.09	1.49	1.52

All (4) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
13	MG	2	RAM	C1-C2-C3	2.71	113.00	109.67
13	MG	2	RAM	C6-C5-C4	-2.59	108.29	113.07
13	MG	1	MAN	C1-O5-C5	2.30	115.31	112.19
13	MG	2	RAM	C1-O5-C5	-2.21	107.77	112.78

There are no chirality outliers.

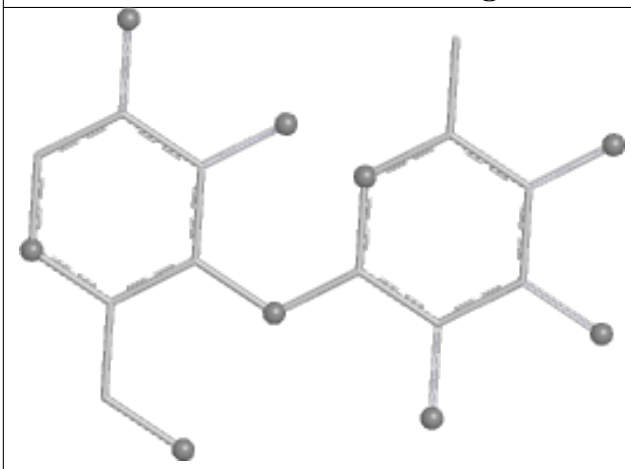
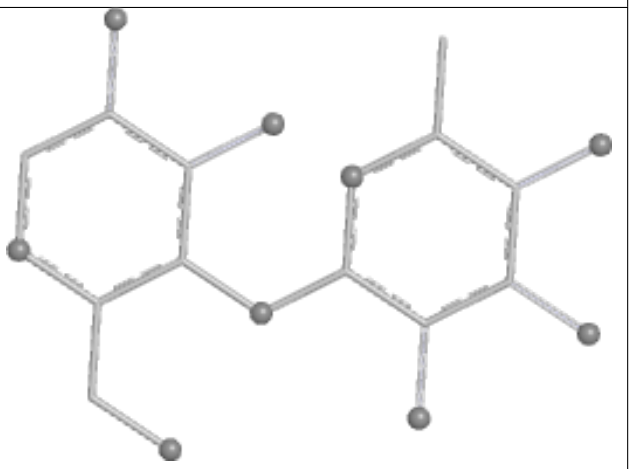
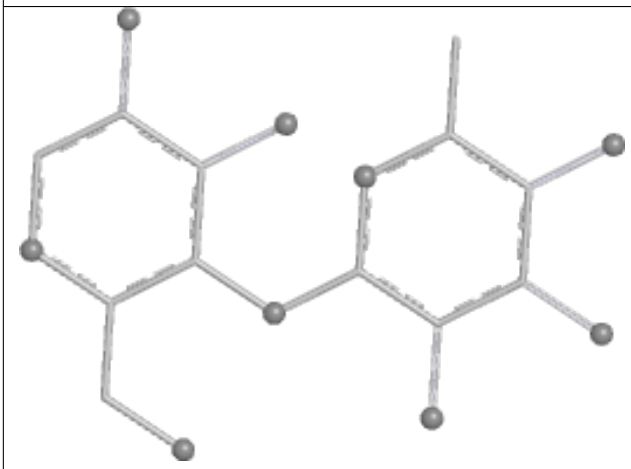
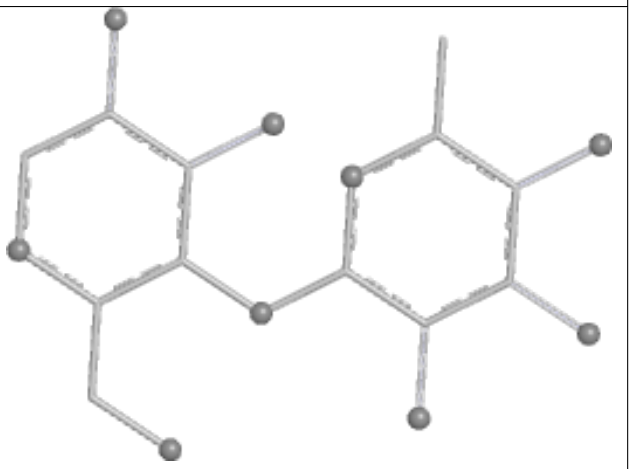
All (1) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
13	CG	1	MAN	O5-C5-C6-O6

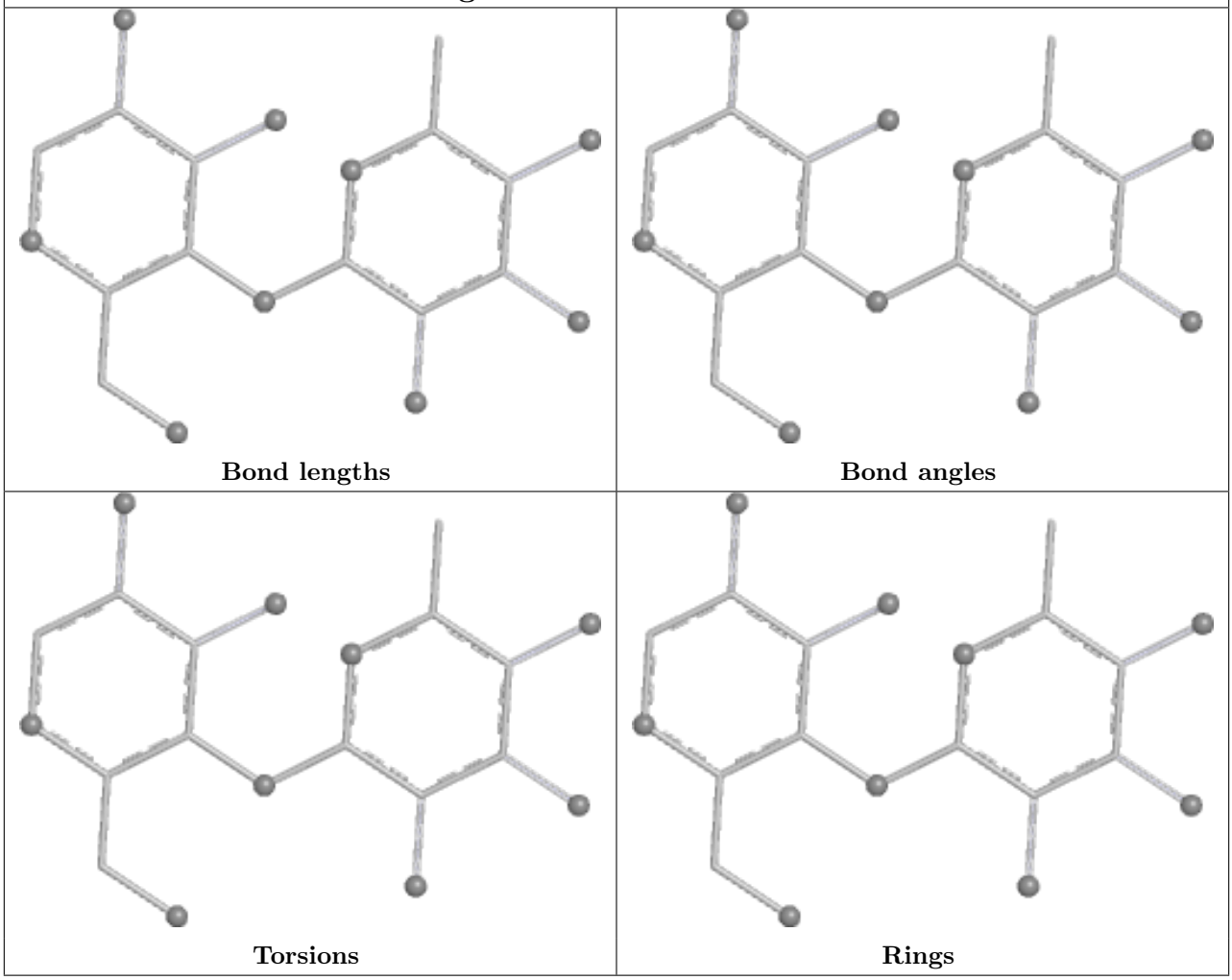
There are no ring outliers.

No monomer is involved in short contacts.

The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for oligosaccharide.

Oligosaccharide Chain CG	
	
Bond lengths	**Bond angles**
	
Torsions	**Rings**

Oligosaccharide Chain MG



Bond lengths | Bond angles

Torsions | Rings

5.6 Ligand geometry

Of 313 ligands modelled in this entry, 1 is monoatomic - leaving 312 for Mogul analysis.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
15	LMT	bi	102	-	36,36,36	1.08	4 (11%)	47,47,47	0.90	0
28	UYH	ai	102	-	55,55,55	2.08	14 (25%)	63,63,63	0.99	2 (3%)
14	BCL	bp	102	-	58,74,74	1.25	3 (5%)	69,115,115	1.41	11 (15%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
15	LMT	BG	1006	-	36,36,36	1.08	5 (13%)	47,47,47	0.86	1 (2%)
14	BCL	BW	1003	-	58,74,74	1.22	3 (5%)	69,115,115	1.40	12 (17%)
14	BCL	BT	103	-	58,74,74	1.22	3 (5%)	69,115,115	1.43	12 (17%)
14	BCL	L	1002	-	58,74,74	1.20	3 (5%)	69,115,115	1.24	10 (14%)
14	BCL	ba	103	-	58,74,74	1.24	3 (5%)	69,115,115	1.32	10 (14%)
15	LMT	BE	103	-	36,36,36	1.08	5 (13%)	47,47,47	0.89	1 (2%)
15	LMT	bf	102	-	36,36,36	1.10	5 (13%)	47,47,47	0.82	0
18	V75	C	405	13,19	15,18,18	1.81	5 (33%)	19,25,25	1.67	3 (15%)
14	BCL	AT	101	-	58,74,74	1.23	4 (6%)	69,115,115	1.35	9 (13%)
15	LMT	AA	1003	-	36,36,36	1.10	5 (13%)	47,47,47	1.03	2 (4%)
24	V7B	L	1006	-	59,59,59	0.89	3 (5%)	75,75,75	1.04	5 (6%)
14	BCL	BM	1002	-	58,74,74	1.22	3 (5%)	69,115,115	1.32	11 (15%)
14	BCL	AK	101	29	58,74,74	1.27	4 (6%)	69,115,115	1.41	12 (17%)
14	BCL	bf	103	-	58,74,74	1.26	3 (5%)	69,115,115	1.36	12 (17%)
19	NDG	C1	1002	18	14,14,15	0.63	0	17,19,21	0.95	1 (5%)
15	LMT	BS	1004	-	36,36,36	1.07	5 (13%)	47,47,47	0.91	2 (4%)
14	BCL	AN	104	-	58,74,74	1.27	4 (6%)	69,115,115	1.39	11 (15%)
14	BCL	M	405	-	58,74,74	1.20	3 (5%)	69,115,115	1.39	10 (14%)
15	LMT	BD	102	-	36,36,36	1.08	5 (13%)	47,47,47	0.90	2 (4%)
14	BCL	AH	101	-	58,74,74	1.26	4 (6%)	69,115,115	1.44	13 (18%)
14	BCL	ai	101	-	58,74,74	1.22	3 (5%)	69,115,115	1.52	11 (15%)
15	LMT	AP	101	-	36,36,36	1.08	5 (13%)	47,47,47	1.09	4 (8%)
14	BCL	ak	1001	-	58,74,74	1.23	3 (5%)	69,115,115	1.36	9 (13%)
15	LMT	M	403	-	36,36,36	1.10	5 (13%)	47,47,47	0.88	2 (4%)
14	BCL	AU	102	-	58,74,74	1.23	4 (6%)	69,115,115	1.35	9 (13%)
14	BCL	al	1001	-	58,74,74	1.24	4 (6%)	69,115,115	1.42	10 (14%)
14	BCL	BP	1005	-	58,74,74	1.21	3 (5%)	69,115,115	1.32	11 (15%)
15	LMT	BA	102	-	36,36,36	1.07	4 (11%)	47,47,47	0.93	1 (2%)
17	HEC	C	401	5	26,50,50	2.12	3 (11%)	18,82,82	2.12	5 (27%)
16	V7N	BL	1001	-	40,44,44	2.08	9 (22%)	40,54,54	1.55	9 (22%)
15	LMT	bg	103	-	36,36,36	1.06	4 (11%)	47,47,47	0.91	2 (4%)
15	LMT	AH	104	-	36,36,36	1.08	5 (13%)	47,47,47	1.08	3 (6%)
21	CD4	af	102	-	83,83,83	0.47	0	89,95,95	1.13	6 (6%)
15	LMT	BK	1005	-	36,36,36	1.09	5 (13%)	47,47,47	0.98	2 (4%)
15	LMT	L	1005	-	36,36,36	1.05	5 (13%)	47,47,47	0.89	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
15	LMT	BC	105	-	36,36,36	1.09	4 (11%)	47,47,47	0.91	1 (2%)
14	BCL	AJ	101	-	58,74,74	1.23	4 (6%)	69,115,115	1.36	9 (13%)
15	LMT	BE	102	-	36,36,36	1.10	5 (13%)	47,47,47	0.97	3 (6%)
14	BCL	BS	1003	-	58,74,74	1.22	3 (5%)	69,115,115	1.44	12 (17%)
15	LMT	L	1003	-	36,36,36	1.11	5 (13%)	47,47,47	0.80	0
15	LMT	bn	105	-	36,36,36	1.11	5 (13%)	47,47,47	0.98	2 (4%)
14	BCL	BH	1005	-	58,74,74	1.21	3 (5%)	69,115,115	1.40	11 (15%)
15	LMT	BQ	1004	-	36,36,36	1.10	5 (13%)	47,47,47	0.87	1 (2%)
14	BCL	AQ	101	29	58,74,74	1.27	4 (6%)	69,115,115	1.72	16 (23%)
14	BCL	an	1001	-	58,74,74	1.24	3 (5%)	69,115,115	1.31	10 (14%)
14	BCL	BJ	1002	-	58,74,74	1.20	3 (5%)	69,115,115	1.36	10 (14%)
15	LMT	bc	104	-	36,36,36	1.11	4 (11%)	47,47,47	0.96	3 (6%)
14	BCL	AJ	102	29	58,74,74	1.26	4 (6%)	69,115,115	1.43	14 (20%)
15	LMT	BK	1004	-	36,36,36	1.08	4 (11%)	47,47,47	0.94	2 (4%)
15	LMT	BM	1004	-	36,36,36	1.08	4 (11%)	47,47,47	0.87	2 (4%)
25	BPH	L	1009	-	64,70,70	0.85	3 (4%)	76,101,101	1.05	6 (7%)
15	LMT	BN	105	-	36,36,36	1.07	5 (13%)	47,47,47	0.89	1 (2%)
15	LMT	bb	102	-	36,36,36	1.10	5 (13%)	47,47,47	1.11	4 (8%)
16	V7N	BD	101	-	40,44,44	2.08	9 (22%)	40,54,54	1.46	7 (17%)
14	BCL	AE	1004	-	58,74,74	1.30	5 (8%)	69,115,115	1.38	12 (17%)
14	BCL	AG	101	29	58,74,74	1.23	4 (6%)	69,115,115	1.60	14 (20%)
15	LMT	BM	1003	-	36,36,36	1.08	5 (13%)	47,47,47	0.85	0
15	LMT	BW	1004	-	36,36,36	1.08	5 (13%)	47,47,47	0.89	1 (2%)
21	CD4	M	402	-	83,83,83	0.48	0	89,95,95	1.07	5 (5%)
25	BPH	M	406	-	64,70,70	0.86	3 (4%)	76,101,101	1.08	6 (7%)
14	BCL	BI	1003	-	58,74,74	1.48	6 (10%)	69,115,115	1.87	14 (20%)
15	LMT	BH	1003	-	36,36,36	1.09	5 (13%)	47,47,47	0.95	2 (4%)
14	BCL	bm	104	-	58,74,74	1.21	3 (5%)	69,115,115	1.40	14 (20%)
15	LMT	BP	1004	-	36,36,36	1.07	5 (13%)	47,47,47	0.94	2 (4%)
20	0V9	bb	103	-	44,44,46	0.75	1 (2%)	47,49,51	0.82	1 (2%)
20	0V9	bj	104	-	44,44,46	0.75	1 (2%)	47,49,51	0.91	3 (6%)
14	BCL	AK	102	-	58,74,74	1.23	4 (6%)	69,115,115	1.35	9 (13%)
17	HEC	C	402	5	26,50,50	2.15	3 (11%)	18,82,82	2.22	6 (33%)
23	MQ8	L	1001	-	54,54,54	0.60	0	66,69,69	0.87	1 (1%)
15	LMT	BV	1003	-	36,36,36	1.08	5 (13%)	47,47,47	0.85	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
20	0V9	bn	104	-	44,44,46	0.76	1 (2%)	47,49,51	0.88	2 (4%)
15	LMT	BW	1002	-	36,36,36	1.09	5 (13%)	47,47,47	0.90	1 (2%)
14	BCL	bi	104	-	58,74,74	1.23	3 (5%)	69,115,115	1.34	11 (15%)
15	LMT	AL	102	-	36,36,36	1.09	4 (11%)	47,47,47	0.83	0
16	V7N	BU	1001	-	40,44,44	2.19	9 (22%)	40,54,54	1.65	5 (12%)
16	V7N	bi	101	-	40,44,44	2.13	11 (27%)	40,54,54	1.57	11 (27%)
14	BCL	BB	103	-	58,74,74	1.21	3 (5%)	69,115,115	1.40	10 (14%)
20	0V9	bk	104	-	44,44,46	0.74	1 (2%)	47,49,51	0.86	1 (2%)
15	LMT	L	1007	-	36,36,36	1.10	5 (13%)	47,47,47	0.83	1 (2%)
15	LMT	BO	1003	-	36,36,36	1.10	4 (11%)	47,47,47	0.83	0
15	LMT	BC	106	-	36,36,36	1.08	4 (11%)	47,47,47	0.81	1 (2%)
14	BCL	bb	104	-	58,74,74	1.22	3 (5%)	69,115,115	1.31	10 (14%)
14	BCL	AO	1002	-	58,74,74	1.22	3 (5%)	69,115,115	1.31	9 (13%)
15	LMT	AD	101	-	36,36,36	1.07	5 (13%)	47,47,47	1.00	3 (6%)
15	LMT	BB	102	-	36,36,36	1.09	4 (11%)	47,47,47	0.93	2 (4%)
14	BCL	AC	101	-	58,74,74	1.30	4 (6%)	69,115,115	1.42	13 (18%)
15	LMT	BP	1002	-	36,36,36	1.09	5 (13%)	47,47,47	0.88	0
20	0V9	aj	101	-	44,44,46	0.76	1 (2%)	47,49,51	0.82	1 (2%)
14	BCL	AP	103	29	58,74,74	1.26	5 (8%)	69,115,115	1.37	10 (14%)
15	LMT	BL	1004	-	36,36,36	1.07	4 (11%)	47,47,47	0.93	3 (6%)
16	V7N	BW	1001	-	40,44,44	2.10	9 (22%)	40,54,54	1.46	8 (20%)
15	LMT	BT	101	-	36,36,36	1.09	5 (13%)	47,47,47	0.86	2 (4%)
14	BCL	BE	104	-	58,74,74	1.23	3 (5%)	69,115,115	1.44	13 (18%)
15	LMT	BH	1004	-	36,36,36	1.11	5 (13%)	47,47,47	0.88	0
14	BCL	AM	102	29	58,74,74	1.26	5 (8%)	69,115,115	1.44	12 (17%)
23	MQ8	M	407	-	54,54,54	0.64	0	66,69,69	0.93	4 (6%)
16	V7N	bj	101	-	40,44,44	2.10	9 (22%)	40,54,54	1.59	9 (22%)
14	BCL	AV	102	-	58,74,74	1.23	3 (5%)	69,115,115	1.32	9 (13%)
14	BCL	am	1001	-	58,74,74	1.32	5 (8%)	69,115,115	1.82	12 (17%)
15	LMT	BT	104	-	36,36,36	1.12	5 (13%)	47,47,47	0.85	0
15	LMT	bm	105	-	36,36,36	1.08	4 (11%)	47,47,47	0.87	2 (4%)
16	V7N	BC	101	-	40,44,44	2.14	11 (27%)	40,54,54	1.45	8 (20%)
14	BCL	L	1010	-	58,74,74	1.24	3 (5%)	69,115,115	1.30	10 (14%)
14	BCL	AB	1002	29	58,74,74	1.20	4 (6%)	69,115,115	1.45	10 (14%)
16	V7N	BR	1001	-	40,44,44	2.12	10 (25%)	40,54,54	1.63	9 (22%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
23	MQ8	ao	101	-	54,54,54	0.60	0	66,69,69	1.03	2 (3%)
15	LMT	BX	1003	-	36,36,36	1.06	5 (13%)	47,47,47	0.95	2 (4%)
15	LMT	BW	1005	-	36,36,36	1.13	5 (13%)	47,47,47	0.99	1 (2%)
14	BCL	ag	1001	-	58,74,74	1.25	3 (5%)	69,115,115	1.35	9 (13%)
14	BCL	AW	101	-	58,74,74	1.22	3 (5%)	69,115,115	1.35	9 (13%)
14	BCL	AB	1001	-	58,74,74	1.24	4 (6%)	69,115,115	1.45	11 (15%)
14	BCL	AI	102	-	58,74,74	1.20	4 (6%)	69,115,115	1.38	9 (13%)
15	LMT	BI	1005	-	36,36,36	1.09	5 (13%)	47,47,47	0.82	0
14	BCL	ab	102	-	58,74,74	1.27	3 (5%)	69,115,115	1.34	10 (14%)
14	BCL	bg	105	-	58,74,74	1.22	3 (5%)	69,115,115	1.29	11 (15%)
14	BCL	ac	1001	-	58,74,74	1.22	3 (5%)	69,115,115	1.39	9 (13%)
15	LMT	AF	1002	-	36,36,36	1.10	4 (11%)	47,47,47	0.85	0
14	BCL	AL	103	-	58,74,74	1.23	4 (6%)	69,115,115	1.36	9 (13%)
20	0V9	bh	103	-	44,44,46	0.76	1 (2%)	47,49,51	0.95	3 (6%)
15	LMT	AP	104	-	36,36,36	1.08	5 (13%)	47,47,47	0.94	1 (2%)
15	LMT	AN	103	-	36,36,36	1.10	5 (13%)	47,47,47	0.94	2 (4%)
16	V7N	bk	101	-	40,44,44	2.12	10 (25%)	40,54,54	1.46	7 (17%)
15	LMT	BN	102	-	36,36,36	1.08	5 (13%)	47,47,47	0.99	2 (4%)
22	PGW	H1	103	-	50,50,50	0.46	0	53,56,56	1.01	3 (5%)
21	CD4	aj	102	-	83,83,83	0.50	0	89,95,95	1.21	8 (8%)
14	BCL	AS	104	29	58,74,74	1.30	5 (8%)	69,115,115	1.51	11 (15%)
15	LMT	L	1011	-	36,36,36	1.08	5 (13%)	47,47,47	0.93	2 (4%)
16	V7N	BH	1001	-	40,44,44	2.10	10 (25%)	40,54,54	1.63	10 (25%)
15	LMT	BC	102	-	36,36,36	1.09	5 (13%)	47,47,47	0.87	1 (2%)
15	LMT	BV	1002	-	36,36,36	1.10	5 (13%)	47,47,47	0.88	2 (4%)
15	LMT	BI	1006	-	36,36,36	1.07	4 (11%)	47,47,47	1.05	2 (4%)
21	CD4	H1	102	-	83,83,83	0.46	0	89,95,95	1.01	5 (5%)
14	BCL	af	101	-	58,74,74	1.25	3 (5%)	69,115,115	1.34	10 (14%)
16	V7N	BO	1001	-	40,44,44	2.14	9 (22%)	40,54,54	1.60	10 (25%)
20	0V9	be	102	-	44,44,46	0.75	1 (2%)	47,49,51	0.91	2 (4%)
14	BCL	AC	102	-	58,74,74	1.24	4 (6%)	69,115,115	1.33	9 (13%)
15	LMT	BV	1006	-	36,36,36	1.08	5 (13%)	47,47,47	0.82	0
15	LMT	BU	1002	-	36,36,36	1.08	4 (11%)	47,47,47	0.92	1 (2%)
15	LMT	bl	101	-	36,36,36	1.08	5 (13%)	47,47,47	1.02	3 (6%)
16	V7N	BI	1001	-	40,44,44	2.10	9 (22%)	40,54,54	1.44	8 (20%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
16	V7N	BX	1001	-	40,44,44	2.08	9 (22%)	40,54,54	1.59	8 (20%)
14	BCL	bo	103	-	58,74,74	1.23	3 (5%)	69,115,115	1.33	11 (15%)
15	LMT	BH	1002	-	36,36,36	1.10	5 (13%)	47,47,47	0.94	2 (4%)
15	LMT	BS	1005	-	36,36,36	1.09	5 (13%)	47,47,47	0.96	3 (6%)
14	BCL	BQ	1003	-	58,74,74	1.22	3 (5%)	69,115,115	1.34	10 (14%)
14	BCL	AE	1001	-	58,74,74	1.23	4 (6%)	69,115,115	1.35	9 (13%)
15	LMT	BF	103	-	36,36,36	1.08	5 (13%)	47,47,47	0.94	1 (2%)
15	LMT	AI	101	-	36,36,36	1.08	4 (11%)	47,47,47	1.12	3 (6%)
15	LMT	bh	101	-	36,36,36	1.10	5 (13%)	47,47,47	0.92	1 (2%)
14	BCL	AX	103	-	58,74,74	1.24	4 (6%)	69,115,115	1.38	9 (13%)
14	BCL	AI	103	-	58,74,74	1.26	5 (8%)	69,115,115	1.52	13 (18%)
16	V7N	ba	101	-	40,44,44	2.16	9 (22%)	40,54,54	1.83	12 (30%)
14	BCL	bc	102	-	58,74,74	1.29	3 (5%)	69,115,115	1.45	13 (18%)
15	LMT	BS	1006	-	36,36,36	1.06	5 (13%)	47,47,47	0.91	2 (4%)
15	LMT	AJ	103	-	36,36,36	1.09	4 (11%)	47,47,47	1.20	5 (10%)
15	LMT	AU	101	-	36,36,36	1.08	5 (13%)	47,47,47	0.84	0
15	LMT	BG	1002	-	36,36,36	1.06	5 (13%)	47,47,47	1.11	5 (10%)
15	LMT	AT	102	-	36,36,36	1.11	5 (13%)	47,47,47	1.20	3 (6%)
15	LMT	be	104	-	36,36,36	1.09	5 (13%)	47,47,47	0.94	2 (4%)
14	BCL	BD	105	-	58,74,74	1.22	3 (5%)	69,115,115	1.34	10 (14%)
15	LMT	L	1008	-	36,36,36	1.08	4 (11%)	47,47,47	0.94	2 (4%)
15	LMT	BL	1005	-	36,36,36	1.09	5 (13%)	47,47,47	0.94	1 (2%)
14	BCL	AH	103	-	58,74,74	1.22	3 (5%)	69,115,115	1.40	9 (13%)
14	BCL	AA	1001	-	58,74,74	1.25	4 (6%)	69,115,115	1.38	9 (13%)
16	V7N	BE	101	-	40,44,44	2.12	10 (25%)	40,54,54	1.47	8 (20%)
14	BCL	AV	103	29	58,74,74	1.29	4 (6%)	69,115,115	1.38	10 (14%)
15	LMT	BS	1002	-	36,36,36	1.08	4 (11%)	47,47,47	0.91	2 (4%)
14	BCL	aj	103	-	58,74,74	1.24	3 (5%)	69,115,115	1.34	9 (13%)
15	LMT	BI	1004	-	36,36,36	1.09	5 (13%)	47,47,47	0.91	2 (4%)
20	0V9	bl	103	-	44,44,46	0.75	1 (2%)	47,49,51	0.90	3 (6%)
16	V7N	bl	102	-	40,44,44	2.11	10 (25%)	40,54,54	1.53	9 (22%)
14	BCL	aa	1001	-	58,74,74	1.28	4 (6%)	69,115,115	1.37	10 (14%)
16	V7N	bc	101	-	40,44,44	2.11	10 (25%)	40,54,54	1.50	8 (20%)
14	BCL	AL	101	-	58,74,74	1.30	4 (6%)	69,115,115	1.74	14 (20%)
14	BCL	bl	104	-	58,74,74	1.24	3 (5%)	69,115,115	1.32	11 (15%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
20	0V9	be	103	-	44,44,46	0.75	1 (2%)	47,49,51	0.87	2 (4%)
15	LMT	BD	104	-	36,36,36	1.10	5 (13%)	47,47,47	0.87	1 (2%)
16	V7N	bf	101	-	40,44,44	2.13	11 (27%)	40,54,54	1.52	7 (17%)
16	V7N	bb	101	-	40,44,44	2.13	10 (25%)	40,54,54	1.62	7 (17%)
14	BCL	bn	103	-	58,74,74	1.24	3 (5%)	69,115,115	1.32	10 (14%)
15	LMT	BD	103	-	36,36,36	1.07	5 (13%)	47,47,47	1.06	2 (4%)
15	LMT	BJ	1003	-	36,36,36	1.09	5 (13%)	47,47,47	0.88	1 (2%)
20	0V9	bm	102	-	44,44,46	0.74	1 (2%)	47,49,51	0.83	1 (2%)
14	BCL	BR	1004	-	58,74,74	1.22	3 (5%)	69,115,115	1.34	10 (14%)
20	0V9	bg	102	-	44,44,46	0.76	1 (2%)	47,49,51	1.08	3 (6%)
16	V7N	AS	105	-	40,44,44	2.10	9 (22%)	40,54,54	1.70	6 (15%)
15	LMT	BQ	1005	-	36,36,36	1.09	4 (11%)	47,47,47	0.87	1 (2%)
15	LMT	BX	1004	-	36,36,36	1.08	5 (13%)	47,47,47	0.90	2 (4%)
15	LMT	BB	105	-	36,36,36	1.08	5 (13%)	47,47,47	0.92	1 (2%)
24	V7B	ag	1002	-	59,59,59	0.88	4 (6%)	75,75,75	1.03	4 (5%)
20	0V9	bg	104	-	44,44,46	0.74	1 (2%)	47,49,51	0.86	3 (6%)
14	BCL	AD	102	-	58,74,74	1.23	3 (5%)	69,115,115	1.38	10 (14%)
14	BCL	bk	102	-	58,74,74	1.25	3 (5%)	69,115,115	1.35	10 (14%)
14	BCL	BA	103	-	58,74,74	1.22	3 (5%)	69,115,115	1.59	11 (15%)
20	0V9	ba	102	-	44,44,46	0.75	1 (2%)	47,49,51	0.79	1 (2%)
20	0V9	bk	103	-	44,44,46	0.77	1 (2%)	47,49,51	0.76	2 (4%)
14	BCL	AA	1002	29	58,74,74	1.25	4 (6%)	69,115,115	1.41	13 (18%)
14	BCL	bd	102	-	58,74,74	1.26	3 (5%)	69,115,115	1.31	11 (15%)
14	BCL	BK	1006	-	58,74,74	1.21	3 (5%)	69,115,115	1.35	10 (14%)
16	V7N	bn	102	-	40,44,44	2.18	11 (27%)	40,54,54	1.52	7 (17%)
16	V7N	bd	101	-	40,44,44	2.14	11 (27%)	40,54,54	1.47	8 (20%)
14	BCL	be	105	-	58,74,74	1.25	3 (5%)	69,115,115	1.31	9 (13%)
20	0V9	H1	101	-	44,44,46	0.76	1 (2%)	47,49,51	0.79	3 (6%)
16	V7N	BM	1001	-	40,44,44	2.07	9 (22%)	40,54,54	1.65	9 (22%)
15	LMT	L	1004	-	36,36,36	1.08	4 (11%)	47,47,47	0.97	1 (2%)
20	0V9	bc	103	-	44,44,46	0.74	1 (2%)	47,49,51	0.94	3 (6%)
14	BCL	AP	102	-	58,74,74	1.23	3 (5%)	69,115,115	1.41	10 (14%)
14	BCL	ao	102	-	58,74,74	1.26	3 (5%)	69,115,115	1.38	11 (15%)
14	BCL	BN	103	-	58,74,74	1.40	5 (8%)	69,115,115	1.78	13 (18%)
16	V7N	BB	101	-	40,44,44	2.08	9 (22%)	40,54,54	1.56	9 (22%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
15	LMT	BR	1003	-	36,36,36	1.08	5 (13%)	47,47,47	0.98	2 (4%)
16	V7N	be	101	-	40,44,44	2.09	10 (25%)	40,54,54	1.64	7 (17%)
16	V7N	bg	101	-	40,44,44	2.12	11 (27%)	40,54,54	1.64	7 (17%)
14	BCL	BC	104	-	58,74,74	1.22	3 (5%)	69,115,115	1.45	12 (17%)
15	LMT	BQ	1002	-	36,36,36	1.10	4 (11%)	47,47,47	0.86	2 (4%)
14	BCL	AM	101	-	58,74,74	1.23	3 (5%)	69,115,115	1.35	9 (13%)
20	0V9	bo	104	-	44,44,46	0.74	1 (2%)	47,49,51	0.90	2 (4%)
15	LMT	bo	101	-	36,36,36	1.11	5 (13%)	47,47,47	0.88	1 (2%)
15	LMT	BL	1002	-	36,36,36	1.07	5 (13%)	47,47,47	1.00	2 (4%)
14	BCL	AV	101	29	58,74,74	1.24	3 (5%)	69,115,115	1.39	11 (15%)
15	LMT	AJ	104	-	36,36,36	1.08	5 (13%)	47,47,47	0.95	3 (6%)
16	V7N	AE	1005	-	40,44,44	2.11	10 (25%)	40,54,54	1.61	7 (17%)
16	V7N	BQ	1001	-	40,44,44	2.11	9 (22%)	40,54,54	1.45	8 (20%)
15	LMT	AE	1002	-	36,36,36	1.08	4 (11%)	47,47,47	1.03	4 (8%)
15	LMT	bd	103	-	36,36,36	1.11	5 (13%)	47,47,47	0.87	2 (4%)
15	LMT	BU	1003	-	36,36,36	1.09	5 (13%)	47,47,47	0.81	1 (2%)
21	CD4	H1	104	-	83,83,83	0.49	0	89,95,95	1.05	4 (4%)
14	BCL	AN	101	-	58,74,74	1.27	5 (8%)	69,115,115	1.34	10 (14%)
15	LMT	AC	104	-	36,36,36	1.09	5 (13%)	47,47,47	0.96	2 (4%)
14	BCL	AR	102	-	58,74,74	1.27	5 (8%)	69,115,115	1.50	15 (21%)
15	LMT	BC	103	-	36,36,36	1.08	5 (13%)	47,47,47	0.85	1 (2%)
14	BCL	ap	1001	-	58,74,74	1.25	4 (6%)	69,115,115	1.40	12 (17%)
16	V7N	bp	101	-	40,44,44	2.16	11 (27%)	40,54,54	1.49	8 (20%)
14	BCL	BO	1004	-	58,74,74	1.22	3 (5%)	69,115,115	1.43	12 (17%)
16	V7N	bo	102	-	40,44,44	2.17	11 (27%)	40,54,54	1.42	8 (20%)
14	BCL	BL	1003	-	58,74,74	1.20	3 (5%)	69,115,115	1.40	11 (15%)
14	BCL	AE	1003	29	58,74,74	1.25	4 (6%)	69,115,115	1.36	11 (15%)
15	LMT	BG	1005	-	36,36,36	1.07	4 (11%)	47,47,47	0.85	0
17	HEC	C	404	5	26,50,50	2.15	3 (11%)	18,82,82	2.07	5 (27%)
15	LMT	AA	1004	-	36,36,36	1.10	5 (13%)	47,47,47	0.93	2 (4%)
14	BCL	AN	102	-	58,74,74	1.22	3 (5%)	69,115,115	1.34	9 (13%)
15	LMT	AH	102	-	36,36,36	1.11	5 (13%)	47,47,47	0.99	3 (6%)
14	BCL	AR	101	-	58,74,74	1.23	3 (5%)	69,115,115	1.36	9 (13%)
15	LMT	AQ	103	-	36,36,36	1.09	5 (13%)	47,47,47	1.02	3 (6%)
16	V7N	AO	1001	-	40,44,44	2.07	10 (25%)	40,54,54	1.66	9 (22%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
14	BCL	ah	1001	-	58,74,74	1.28	4 (6%)	69,115,115	1.39	11 (15%)
14	BCL	BF	102	-	58,74,74	1.21	3 (5%)	69,115,115	2.05	13 (18%)
15	LMT	AD	103	-	36,36,36	1.09	5 (13%)	47,47,47	0.97	2 (4%)
20	0V9	bi	103	-	44,44,46	0.74	1 (2%)	47,49,51	0.86	2 (4%)
20	0V9	bp	103	-	44,44,46	0.74	1 (2%)	47,49,51	0.91	3 (6%)
15	LMT	BP	1003	-	36,36,36	1.06	4 (11%)	47,47,47	0.87	1 (2%)
15	LMT	BK	1003	-	36,36,36	1.08	4 (11%)	47,47,47	1.10	4 (8%)
15	LMT	bm	103	-	36,36,36	1.06	4 (11%)	47,47,47	0.95	3 (6%)
15	LMT	bh	104	-	36,36,36	1.09	5 (13%)	47,47,47	0.93	2 (4%)
27	CRT	M	404	-	41,43,43	0.56	0	50,54,54	0.91	3 (6%)
14	BCL	BV	1005	-	58,74,74	1.20	3 (5%)	69,115,115	1.33	10 (14%)
18	V75	M	409	13,19	15,18,18	1.87	6 (40%)	19,25,25	1.66	2 (10%)
15	LMT	AG	103	-	36,36,36	1.09	5 (13%)	47,47,47	0.86	1 (2%)
15	LMT	AX	101	-	36,36,36	1.06	4 (11%)	47,47,47	0.96	3 (6%)
17	HEC	C	403	5	26,50,50	2.12	3 (11%)	18,82,82	2.18	5 (27%)
15	LMT	BT	102	-	36,36,36	1.05	5 (13%)	47,47,47	1.01	3 (6%)
15	LMT	bl	105	-	36,36,36	1.10	5 (13%)	47,47,47	0.84	2 (4%)
15	LMT	AS	101	-	36,36,36	1.09	5 (13%)	47,47,47	0.95	2 (4%)
15	LMT	bj	102	-	36,36,36	1.11	5 (13%)	47,47,47	0.92	2 (4%)
20	0V9	C1	1001	-	44,44,46	0.74	1 (2%)	47,49,51	0.81	2 (4%)
14	BCL	AQ	102	-	58,74,74	1.23	4 (6%)	69,115,115	1.35	9 (13%)
14	BCL	M	408	-	58,74,74	1.22	3 (5%)	69,115,115	1.35	11 (15%)
15	LMT	BA	105	-	36,36,36	1.09	5 (13%)	47,47,47	0.86	1 (2%)
15	LMT	BG	1003	-	36,36,36	1.08	5 (13%)	47,47,47	0.92	1 (2%)
15	LMT	BK	1002	-	36,36,36	1.10	5 (13%)	47,47,47	1.00	3 (6%)
16	V7N	BV	1001	-	40,44,44	2.09	9 (22%)	40,54,54	1.50	8 (20%)
16	V7N	bm	101	-	40,44,44	2.16	9 (22%)	40,54,54	1.52	8 (20%)
15	LMT	bn	101	-	36,36,36	1.10	5 (13%)	47,47,47	0.78	0
15	LMT	BN	104	-	36,36,36	1.09	5 (13%)	47,47,47	0.82	0
21	CD4	ae	101	-	83,83,83	0.47	0	89,95,95	1.06	3 (3%)
16	V7N	BJ	1001	-	40,44,44	2.06	9 (22%)	40,54,54	1.53	9 (22%)
15	LMT	BR	1005	-	36,36,36	1.06	4 (11%)	47,47,47	0.86	0
16	V7N	bh	102	-	40,44,44	2.11	10 (25%)	40,54,54	1.53	7 (17%)
14	BCL	AG	102	-	58,74,74	1.23	3 (5%)	69,115,115	1.36	9 (13%)
14	BCL	ad	1001	-	58,74,74	1.27	3 (5%)	69,115,115	1.36	9 (13%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
15	LMT	BN	101	-	36,36,36	1.08	5 (13%)	47,47,47	0.89	1 (2%)
14	BCL	AU	103	-	58,74,74	1.22	5 (8%)	69,115,115	1.46	12 (17%)
15	LMT	ab	101	-	36,36,36	1.10	5 (13%)	47,47,47	0.90	1 (2%)
14	BCL	BU	1004	-	58,74,74	1.21	3 (5%)	69,115,115	1.35	11 (15%)
14	BCL	BG	1004	-	58,74,74	1.22	3 (5%)	69,115,115	1.29	10 (14%)
14	BCL	AS	102	29	58,74,74	1.24	4 (6%)	69,115,115	1.36	11 (15%)
15	LMT	BJ	1004	-	36,36,36	1.09	5 (13%)	47,47,47	0.84	1 (2%)
16	V7N	BK	1001	-	40,44,44	2.11	10 (25%)	40,54,54	1.49	8 (20%)
19	NDG	C	406	18	14,14,15	0.66	0	17,19,21	0.90	1 (5%)
16	V7N	BS	1001	-	40,44,44	2.10	9 (22%)	40,54,54	1.49	8 (20%)
14	BCL	bj	103	-	58,74,74	1.25	3 (5%)	69,115,115	1.35	11 (15%)
14	BCL	bh	105	-	58,74,74	1.24	3 (5%)	69,115,115	1.40	11 (15%)
15	LMT	BB	104	-	36,36,36	1.09	5 (13%)	47,47,47	0.88	1 (2%)
15	LMT	BI	1002	-	36,36,36	1.08	5 (13%)	47,47,47	0.96	2 (4%)
15	LMT	BA	104	-	36,36,36	1.08	5 (13%)	47,47,47	0.90	2 (4%)
14	BCL	BX	1002	-	58,74,74	1.22	3 (5%)	69,115,115	1.46	13 (18%)
16	V7N	BG	1001	-	40,44,44	2.06	10 (25%)	40,54,54	1.56	9 (22%)
14	BCL	AF	1001	-	58,74,74	1.23	4 (6%)	69,115,115	1.37	9 (13%)
14	BCL	AC	103	29	58,74,74	1.25	4 (6%)	69,115,115	1.33	11 (15%)
14	BCL	ae	102	-	58,74,74	1.24	4 (6%)	69,115,115	1.39	10 (14%)
15	LMT	BV	1004	-	36,36,36	1.08	5 (13%)	47,47,47	0.94	1 (2%)
14	BCL	AX	102	-	58,74,74	1.26	5 (8%)	69,115,115	1.46	14 (20%)
15	LMT	BR	1002	-	36,36,36	1.08	5 (13%)	47,47,47	0.95	3 (6%)
16	V7N	BA	101	-	40,44,44	2.11	9 (22%)	40,54,54	1.41	7 (17%)
15	LMT	BO	1002	-	36,36,36	1.06	4 (11%)	47,47,47	0.90	1 (2%)
15	LMT	bo	105	-	36,36,36	1.12	5 (13%)	47,47,47	1.01	3 (6%)
14	BCL	AS	103	-	58,74,74	1.22	3 (5%)	69,115,115	1.36	9 (13%)
16	V7N	BP	1001	-	40,44,44	2.10	9 (22%)	40,54,54	1.47	8 (20%)
15	LMT	BF	101	-	36,36,36	1.09	5 (13%)	47,47,47	0.90	2 (4%)

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
15	LMT	bi	102	-	-	3/21/61/61	0/2/2/2
28	UYH	ai	102	-	-	7/50/70/70	0/1/1/1
14	BCL	bp	102	-	-	11/37/137/137	-
15	LMT	BG	1006	-	-	1/21/61/61	0/2/2/2
14	BCL	BW	1003	-	-	8/37/137/137	-
14	BCL	BT	103	-	-	6/37/137/137	-
14	BCL	L	1002	-	-	1/37/137/137	-
14	BCL	ba	103	-	-	2/37/137/137	-
15	LMT	BE	103	-	-	5/21/61/61	0/2/2/2
15	LMT	bf	102	-	-	4/21/61/61	0/2/2/2
18	V75	C	405	13,19	-	0/8/29/29	0/1/1/1
14	BCL	AT	101	-	-	0/37/137/137	-
15	LMT	AA	1003	-	-	9/21/61/61	0/2/2/2
24	V7B	L	1006	-	-	9/48/88/88	0/2/2/2
14	BCL	BM	1002	-	-	14/37/137/137	-
14	BCL	AK	101	29	-	11/37/137/137	-
14	BCL	bf	103	-	-	8/37/137/137	-
19	NDG	C1	1002	18	-	0/6/23/26	0/1/1/1
15	LMT	BS	1004	-	-	6/21/61/61	0/2/2/2
14	BCL	AN	104	-	-	9/37/137/137	-
14	BCL	M	405	-	-	2/37/137/137	-
15	LMT	BD	102	-	-	6/21/61/61	0/2/2/2
14	BCL	AH	101	-	-	7/37/137/137	-
14	BCL	ai	101	-	-	11/37/137/137	-
15	LMT	AP	101	-	-	5/21/61/61	0/2/2/2
14	BCL	ak	1001	-	-	6/37/137/137	-
15	LMT	M	403	-	-	5/21/61/61	0/2/2/2
14	BCL	AU	102	-	-	2/37/137/137	-
14	BCL	al	1001	-	-	7/37/137/137	-
14	BCL	BP	1005	-	-	6/37/137/137	-
15	LMT	BA	102	-	-	4/21/61/61	0/2/2/2
17	HEC	C	401	5	-	0/6/54/54	-
16	V7N	BL	1001	-	-	5/49/53/53	-
15	LMT	bg	103	-	-	4/21/61/61	0/2/2/2
15	LMT	AH	104	-	-	6/21/61/61	0/2/2/2
21	CD4	af	102	-	-	22/94/94/94	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
15	LMT	BK	1005	-	-	4/21/61/61	0/2/2/2
15	LMT	L	1005	-	-	1/21/61/61	0/2/2/2
15	LMT	BC	105	-	-	4/21/61/61	0/2/2/2
14	BCL	AJ	101	-	-	0/37/137/137	-
15	LMT	BE	102	-	-	3/21/61/61	0/2/2/2
14	BCL	BS	1003	-	-	6/37/137/137	-
15	LMT	L	1003	-	-	8/21/61/61	0/2/2/2
15	LMT	bn	105	-	-	5/21/61/61	0/2/2/2
14	BCL	BH	1005	-	-	10/37/137/137	-
15	LMT	BQ	1004	-	-	7/21/61/61	0/2/2/2
14	BCL	AQ	101	29	-	10/37/137/137	-
14	BCL	an	1001	-	-	9/37/137/137	-
14	BCL	BJ	1002	-	-	9/37/137/137	-
15	LMT	bc	104	-	-	7/21/61/61	0/2/2/2
14	BCL	AJ	102	29	-	11/37/137/137	-
15	LMT	BK	1004	-	-	5/21/61/61	0/2/2/2
15	LMT	BM	1004	-	-	1/21/61/61	0/2/2/2
25	BPH	L	1009	-	-	5/54/105/105	0/5/6/6
15	LMT	BN	105	-	-	3/21/61/61	0/2/2/2
15	LMT	bb	102	-	-	9/21/61/61	0/2/2/2
16	V7N	BD	101	-	-	3/49/53/53	-
14	BCL	AE	1004	-	-	7/37/137/137	-
14	BCL	AG	101	29	-	12/37/137/137	-
15	LMT	BM	1003	-	-	8/21/61/61	0/2/2/2
15	LMT	BW	1004	-	-	4/21/61/61	0/2/2/2
21	CD4	M	402	-	-	22/94/94/94	-
25	BPH	M	406	-	-	8/54/105/105	0/5/6/6
14	BCL	BI	1003	-	-	12/37/137/137	-
15	LMT	BH	1003	-	-	7/21/61/61	0/2/2/2
14	BCL	bm	104	-	-	8/37/137/137	-
15	LMT	BP	1004	-	-	2/21/61/61	0/2/2/2
20	0V9	bb	103	-	-	12/48/48/50	-
20	0V9	bj	104	-	-	13/48/48/50	-
14	BCL	AK	102	-	-	1/37/137/137	-
17	HEC	C	402	5	-	0/6/54/54	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
23	MQ8	L	1001	-	-	8/47/67/67	0/2/2/2
15	LMT	BV	1003	-	-	3/21/61/61	0/2/2/2
20	0V9	bn	104	-	-	10/48/48/50	-
15	LMT	BW	1002	-	-	3/21/61/61	0/2/2/2
14	BCL	bi	104	-	-	6/37/137/137	-
15	LMT	AL	102	-	-	1/21/61/61	0/2/2/2
16	V7N	BU	1001	-	-	8/49/53/53	-
16	V7N	bi	101	-	-	8/49/53/53	-
14	BCL	BB	103	-	-	10/37/137/137	-
20	0V9	bk	104	-	-	13/48/48/50	-
15	LMT	L	1007	-	-	2/21/61/61	0/2/2/2
15	LMT	BO	1003	-	-	1/21/61/61	0/2/2/2
15	LMT	BC	106	-	-	3/21/61/61	0/2/2/2
14	BCL	bb	104	-	-	7/37/137/137	-
14	BCL	AO	1002	-	-	1/37/137/137	-
15	LMT	AD	101	-	-	8/21/61/61	0/2/2/2
15	LMT	BB	102	-	-	2/21/61/61	0/2/2/2
14	BCL	AC	101	-	-	10/37/137/137	-
15	LMT	BP	1002	-	-	5/21/61/61	0/2/2/2
20	0V9	aj	101	-	-	15/48/48/50	-
14	BCL	AP	103	29	-	6/37/137/137	-
15	LMT	BL	1004	-	-	7/21/61/61	0/2/2/2
16	V7N	BW	1001	-	-	3/49/53/53	-
15	LMT	BT	101	-	-	4/21/61/61	0/2/2/2
14	BCL	BE	104	-	-	7/37/137/137	-
15	LMT	BH	1004	-	-	3/21/61/61	0/2/2/2
14	BCL	AM	102	29	-	8/37/137/137	-
23	MQ8	M	407	-	-	6/47/67/67	0/2/2/2
16	V7N	bj	101	-	-	7/49/53/53	-
14	BCL	AV	102	-	-	3/37/137/137	-
14	BCL	am	1001	-	-	4/37/137/137	-
15	LMT	BT	104	-	-	6/21/61/61	0/2/2/2
15	LMT	bm	105	-	-	10/21/61/61	0/2/2/2
16	V7N	BC	101	-	-	3/49/53/53	-
14	BCL	L	1010	-	-	4/37/137/137	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
14	BCL	AB	1002	29	-	7/37/137/137	-
16	V7N	BR	1001	-	-	6/49/53/53	-
23	MQ8	ao	101	-	-	11/47/67/67	0/2/2/2
15	LMT	BX	1003	-	-	7/21/61/61	0/2/2/2
15	LMT	BW	1005	-	-	1/21/61/61	0/2/2/2
14	BCL	ag	1001	-	-	7/37/137/137	-
14	BCL	AW	101	-	-	1/37/137/137	-
14	BCL	AB	1001	-	-	4/37/137/137	-
14	BCL	AI	102	-	-	8/37/137/137	-
15	LMT	BI	1005	-	-	1/21/61/61	0/2/2/2
14	BCL	ab	102	-	-	6/37/137/137	-
14	BCL	bg	105	-	-	5/37/137/137	-
14	BCL	ac	1001	-	-	4/37/137/137	-
15	LMT	AF	1002	-	-	7/21/61/61	0/2/2/2
14	BCL	AL	103	-	-	4/37/137/137	-
20	0V9	bh	103	-	-	11/48/48/50	-
15	LMT	AP	104	-	-	3/21/61/61	0/2/2/2
15	LMT	AN	103	-	-	2/21/61/61	0/2/2/2
16	V7N	bk	101	-	-	3/49/53/53	-
15	LMT	BN	102	-	-	3/21/61/61	0/2/2/2
22	PGW	H1	103	-	-	15/55/55/55	-
21	CD4	aj	102	-	-	26/94/94/94	-
14	BCL	AS	104	29	-	8/37/137/137	-
15	LMT	L	1011	-	-	3/21/61/61	0/2/2/2
16	V7N	BH	1001	-	-	5/49/53/53	-
15	LMT	BC	102	-	-	5/21/61/61	0/2/2/2
15	LMT	BV	1002	-	-	1/21/61/61	0/2/2/2
15	LMT	BI	1006	-	-	4/21/61/61	0/2/2/2
21	CD4	H1	102	-	-	22/94/94/94	-
14	BCL	af	101	-	-	3/37/137/137	-
16	V7N	BO	1001	-	-	6/49/53/53	-
20	0V9	be	102	-	-	12/48/48/50	-
14	BCL	AC	102	-	-	5/37/137/137	-
15	LMT	BV	1006	-	-	2/21/61/61	0/2/2/2
15	LMT	BU	1002	-	-	8/21/61/61	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
15	LMT	bl	101	-	-	8/21/61/61	0/2/2/2
16	V7N	BI	1001	-	-	5/49/53/53	-
16	V7N	BX	1001	-	-	5/49/53/53	-
14	BCL	bo	103	-	-	4/37/137/137	-
15	LMT	BH	1002	-	-	4/21/61/61	0/2/2/2
15	LMT	BS	1005	-	-	4/21/61/61	0/2/2/2
14	BCL	BQ	1003	-	-	9/37/137/137	-
14	BCL	AE	1001	-	-	1/37/137/137	-
15	LMT	BF	103	-	-	4/21/61/61	0/2/2/2
15	LMT	AI	101	-	-	4/21/61/61	0/2/2/2
15	LMT	bh	101	-	-	6/21/61/61	0/2/2/2
14	BCL	AX	103	-	-	5/37/137/137	-
14	BCL	AI	103	-	-	11/37/137/137	-
16	V7N	ba	101	-	-	7/49/53/53	-
14	BCL	bc	102	-	-	10/37/137/137	-
15	LMT	BS	1006	-	-	3/21/61/61	0/2/2/2
15	LMT	AJ	103	-	-	9/21/61/61	0/2/2/2
15	LMT	AU	101	-	-	6/21/61/61	0/2/2/2
15	LMT	BG	1002	-	-	7/21/61/61	0/2/2/2
15	LMT	AT	102	-	-	3/21/61/61	0/2/2/2
15	LMT	be	104	-	-	10/21/61/61	0/2/2/2
14	BCL	BD	105	-	-	5/37/137/137	-
15	LMT	L	1008	-	-	6/21/61/61	0/2/2/2
15	LMT	BL	1005	-	-	2/21/61/61	0/2/2/2
14	BCL	AH	103	-	-	5/37/137/137	-
14	BCL	AA	1001	-	-	5/37/137/137	-
16	V7N	BE	101	-	-	3/49/53/53	-
14	BCL	AV	103	29	-	11/37/137/137	-
15	LMT	BS	1002	-	-	3/21/61/61	0/2/2/2
14	BCL	aj	103	-	-	9/37/137/137	-
15	LMT	BI	1004	-	-	3/21/61/61	0/2/2/2
20	0V9	bl	103	-	-	16/48/48/50	-
16	V7N	bl	102	-	-	4/49/53/53	-
14	BCL	aa	1001	-	-	7/37/137/137	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
16	V7N	bc	101	-	-	4/49/53/53	-
14	BCL	AL	101	-	-	11/37/137/137	-
14	BCL	bl	104	-	-	12/37/137/137	-
20	0V9	be	103	-	-	12/48/48/50	-
15	LMT	BD	104	-	-	3/21/61/61	0/2/2/2
16	V7N	bf	101	-	-	5/49/53/53	-
16	V7N	bb	101	-	-	11/49/53/53	-
14	BCL	bn	103	-	-	7/37/137/137	-
15	LMT	BD	103	-	-	7/21/61/61	0/2/2/2
15	LMT	BJ	1003	-	-	3/21/61/61	0/2/2/2
20	0V9	bm	102	-	-	10/48/48/50	-
14	BCL	BR	1004	-	-	3/37/137/137	-
20	0V9	bg	102	-	-	17/48/48/50	-
16	V7N	AS	105	-	-	5/49/53/53	-
15	LMT	BQ	1005	-	-	1/21/61/61	0/2/2/2
15	LMT	BX	1004	-	-	5/21/61/61	0/2/2/2
15	LMT	BB	105	-	-	5/21/61/61	0/2/2/2
24	V7B	ag	1002	-	-	11/48/88/88	0/2/2/2
20	0V9	bg	104	-	-	9/48/48/50	-
14	BCL	AD	102	-	-	1/37/137/137	-
14	BCL	bk	102	-	-	9/37/137/137	-
14	BCL	BA	103	-	-	9/37/137/137	-
20	0V9	ba	102	-	-	9/48/48/50	-
20	0V9	bk	103	-	-	10/48/48/50	-
14	BCL	AA	1002	29	-	6/37/137/137	-
14	BCL	bd	102	-	-	4/37/137/137	-
14	BCL	BK	1006	-	-	8/37/137/137	-
16	V7N	bn	102	-	-	3/49/53/53	-
16	V7N	bd	101	-	-	3/49/53/53	-
14	BCL	be	105	-	-	8/37/137/137	-
20	0V9	H1	101	-	-	9/48/48/50	-
16	V7N	BM	1001	-	-	6/49/53/53	-
15	LMT	L	1004	-	-	5/21/61/61	0/2/2/2
20	0V9	bc	103	-	-	11/48/48/50	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
14	BCL	AP	102	-	-	4/37/137/137	-
14	BCL	ao	102	-	-	6/37/137/137	-
14	BCL	BN	103	-	-	11/37/137/137	-
16	V7N	BB	101	-	-	5/49/53/53	-
15	LMT	BR	1003	-	-	7/21/61/61	0/2/2/2
16	V7N	be	101	-	-	5/49/53/53	-
16	V7N	bg	101	-	-	6/49/53/53	-
14	BCL	BC	104	-	-	9/37/137/137	-
15	LMT	BQ	1002	-	-	3/21/61/61	0/2/2/2
14	BCL	AM	101	-	-	4/37/137/137	-
20	0V9	bo	104	-	-	9/48/48/50	-
15	LMT	bo	101	-	-	0/21/61/61	0/2/2/2
15	LMT	BL	1002	-	-	6/21/61/61	0/2/2/2
14	BCL	AV	101	29	-	4/37/137/137	-
15	LMT	AJ	104	-	-	7/21/61/61	0/2/2/2
16	V7N	AE	1005	-	-	4/49/53/53	-
16	V7N	BQ	1001	-	-	5/49/53/53	-
15	LMT	AE	1002	-	-	4/21/61/61	0/2/2/2
15	LMT	bd	103	-	-	5/21/61/61	0/2/2/2
15	LMT	BU	1003	-	-	2/21/61/61	0/2/2/2
21	CD4	H1	104	-	-	19/94/94/94	-
14	BCL	AN	101	-	-	5/37/137/137	-
15	LMT	AC	104	-	-	4/21/61/61	0/2/2/2
14	BCL	AR	102	-	-	10/37/137/137	-
15	LMT	BC	103	-	-	3/21/61/61	0/2/2/2
14	BCL	ap	1001	-	-	7/37/137/137	-
16	V7N	bp	101	-	-	4/49/53/53	-
14	BCL	BO	1004	-	-	8/37/137/137	-
16	V7N	bo	102	-	-	4/49/53/53	-
14	BCL	BL	1003	-	-	3/37/137/137	-
14	BCL	AE	1003	29	-	12/37/137/137	-
15	LMT	BG	1005	-	-	3/21/61/61	0/2/2/2
17	HEC	C	404	5	-	0/6/54/54	-
15	LMT	AA	1004	-	-	3/21/61/61	0/2/2/2
14	BCL	AN	102	-	-	1/37/137/137	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
15	LMT	AH	102	-	-	3/21/61/61	0/2/2/2
14	BCL	AR	101	-	-	3/37/137/137	-
15	LMT	AQ	103	-	-	7/21/61/61	0/2/2/2
16	V7N	AO	1001	-	-	6/49/53/53	-
14	BCL	ah	1001	-	-	2/37/137/137	-
14	BCL	BF	102	-	-	9/37/137/137	-
15	LMT	AD	103	-	-	3/21/61/61	0/2/2/2
20	0V9	bi	103	-	-	10/48/48/50	-
20	0V9	bp	103	-	-	13/48/48/50	-
15	LMT	BP	1003	-	-	3/21/61/61	0/2/2/2
15	LMT	BK	1003	-	-	8/21/61/61	0/2/2/2
15	LMT	bm	103	-	-	8/21/61/61	0/2/2/2
15	LMT	bh	104	-	-	5/21/61/61	0/2/2/2
27	CRT	M	404	-	-	4/51/51/51	-
14	BCL	BV	1005	-	-	10/37/137/137	-
18	V75	M	409	13,19	-	0/8/29/29	0/1/1/1
15	LMT	AG	103	-	-	10/21/61/61	0/2/2/2
15	LMT	AX	101	-	-	10/21/61/61	0/2/2/2
17	HEC	C	403	5	-	0/6/54/54	-
15	LMT	BT	102	-	-	6/21/61/61	0/2/2/2
15	LMT	bl	105	-	-	2/21/61/61	0/2/2/2
15	LMT	AS	101	-	-	8/21/61/61	0/2/2/2
15	LMT	bj	102	-	-	6/21/61/61	0/2/2/2
20	0V9	C1	1001	-	-	13/48/48/50	-
14	BCL	AQ	102	-	-	0/37/137/137	-
14	BCL	M	408	-	-	1/37/137/137	-
15	LMT	BA	105	-	-	6/21/61/61	0/2/2/2
15	LMT	BG	1003	-	-	2/21/61/61	0/2/2/2
15	LMT	BK	1002	-	-	3/21/61/61	0/2/2/2
16	V7N	BV	1001	-	-	3/49/53/53	-
16	V7N	bm	101	-	-	8/49/53/53	-
15	LMT	bn	101	-	-	9/21/61/61	0/2/2/2
15	LMT	BN	104	-	-	5/21/61/61	0/2/2/2
21	CD4	ae	101	-	-	28/94/94/94	-
16	V7N	BJ	1001	-	-	4/49/53/53	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
15	LMT	BR	1005	-	-	6/21/61/61	0/2/2/2
16	V7N	bh	102	-	-	5/49/53/53	-
14	BCL	AG	102	-	-	5/37/137/137	-
14	BCL	ad	1001	-	-	8/37/137/137	-
15	LMT	BN	101	-	-	7/21/61/61	0/2/2/2
14	BCL	AU	103	-	-	5/37/137/137	-
15	LMT	ab	101	-	-	3/21/61/61	0/2/2/2
14	BCL	BU	1004	-	-	9/37/137/137	-
14	BCL	BG	1004	-	-	6/37/137/137	-
14	BCL	AS	102	29	-	9/37/137/137	-
15	LMT	BJ	1004	-	-	1/21/61/61	0/2/2/2
16	V7N	BK	1001	-	-	3/49/53/53	-
19	NDG	C	406	18	-	0/6/23/26	0/1/1/1
16	V7N	BS	1001	-	-	4/49/53/53	-
14	BCL	bj	103	-	-	7/37/137/137	-
14	BCL	bh	105	-	-	6/37/137/137	-
15	LMT	BB	104	-	-	6/21/61/61	0/2/2/2
15	LMT	BI	1002	-	-	2/21/61/61	0/2/2/2
15	LMT	BA	104	-	-	7/21/61/61	0/2/2/2
14	BCL	BX	1002	-	-	9/37/137/137	-
16	V7N	BG	1001	-	-	5/49/53/53	-
14	BCL	AF	1001	-	-	4/37/137/137	-
14	BCL	AC	103	29	-	4/37/137/137	-
14	BCL	ae	102	-	-	10/37/137/137	-
15	LMT	BV	1004	-	-	4/21/61/61	0/2/2/2
14	BCL	AX	102	-	-	11/37/137/137	-
15	LMT	BR	1002	-	-	4/21/61/61	0/2/2/2
16	V7N	BA	101	-	-	3/49/53/53	-
15	LMT	BO	1002	-	-	3/21/61/61	0/2/2/2
15	LMT	bo	105	-	-	5/21/61/61	0/2/2/2
14	BCL	AS	103	-	-	2/37/137/137	-
16	V7N	BP	1001	-	-	2/49/53/53	-
15	LMT	BF	101	-	-	2/21/61/61	0/2/2/2

The worst 5 of 1409 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
16	bn	102	V7N	C28-C27	7.04	1.52	1.34
16	BI	1001	V7N	C28-C27	7.03	1.52	1.34
16	BC	101	V7N	C28-C27	7.02	1.52	1.34
16	BK	1001	V7N	C28-C27	7.00	1.52	1.34
16	BP	1001	V7N	C28-C27	7.00	1.52	1.34

The worst 5 of 1826 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
14	BF	102	BCL	C1-C2-C3	12.31	147.32	126.04
14	BI	1003	BCL	C1-O2A-CGA	9.20	140.59	116.44
14	am	1001	BCL	C1-C2-C3	9.06	141.72	126.04
14	BN	103	BCL	C1-O2A-CGA	8.58	138.95	116.44
14	AL	101	BCL	C1-O2A-CGA	7.38	135.80	116.44

There are no chirality outliers.

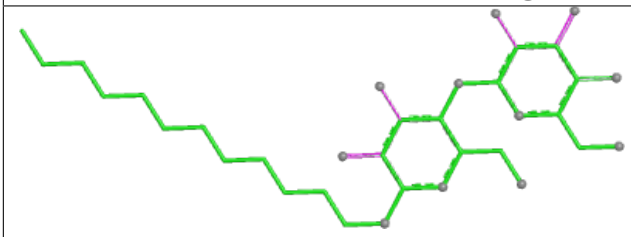
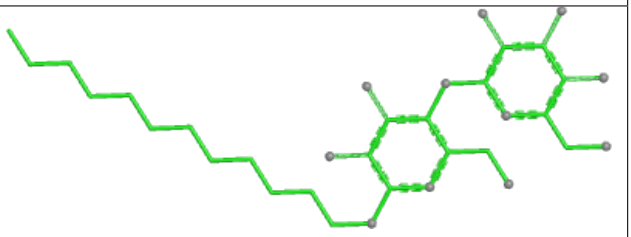
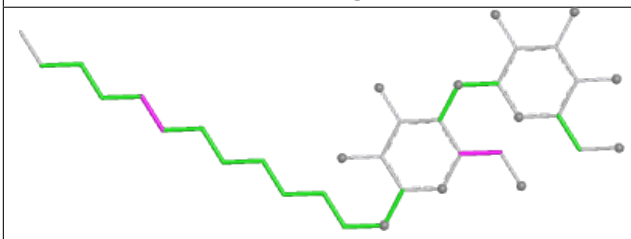
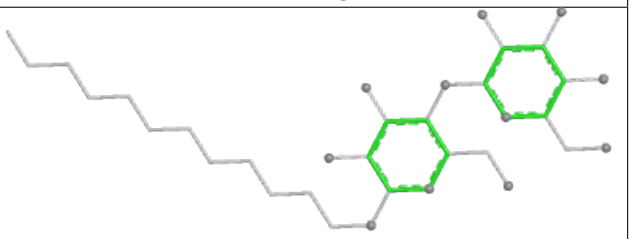
5 of 1902 torsion outliers are listed below:

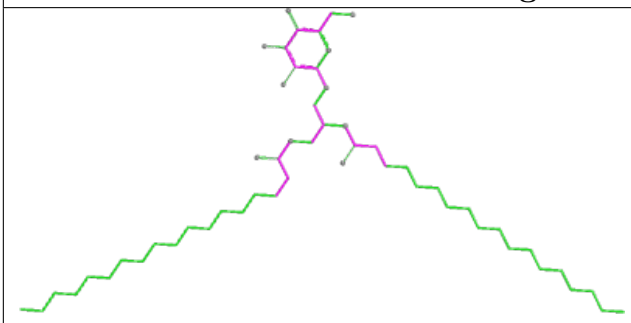
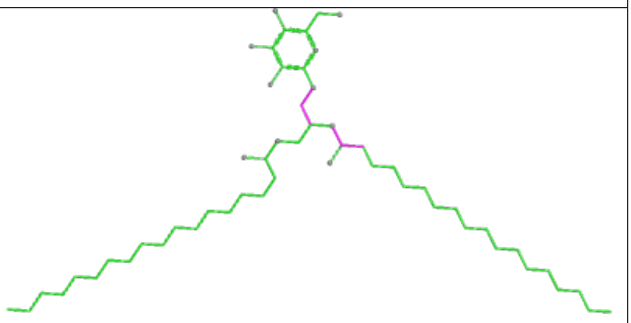
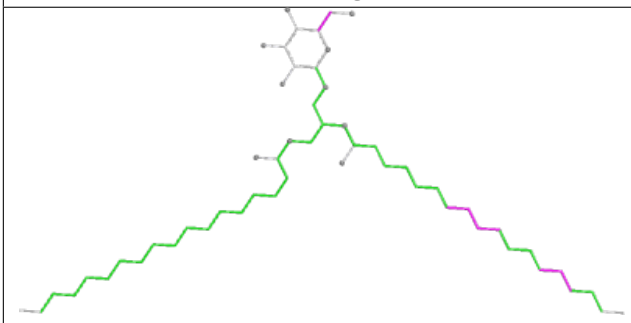
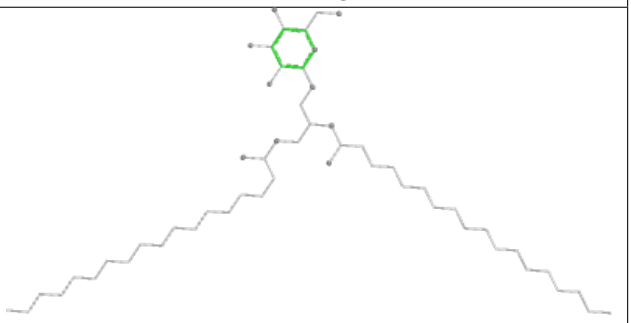
Mol	Chain	Res	Type	Atoms
14	AA	1002	BCL	CHA-CBD-CGD-O1D
14	AA	1002	BCL	CHA-CBD-CGD-O2D
14	AB	1002	BCL	C1A-C2A-CAA-CBA
14	AB	1002	BCL	C3A-C2A-CAA-CBA
14	AB	1002	BCL	CHA-CBD-CGD-O1D

There are no ring outliers.

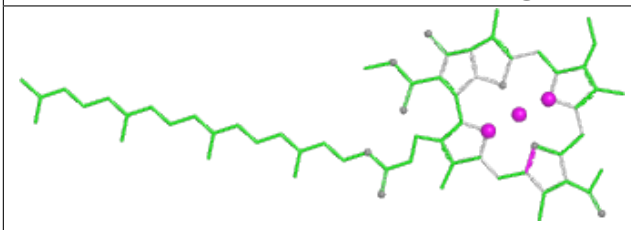
No monomer is involved in short contacts.

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

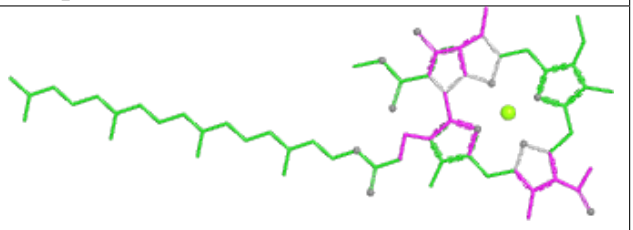
Ligand LMT bi 102	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand UYH ai 102	
 Bond lengths	 Bond angles
 Torsions	 Rings

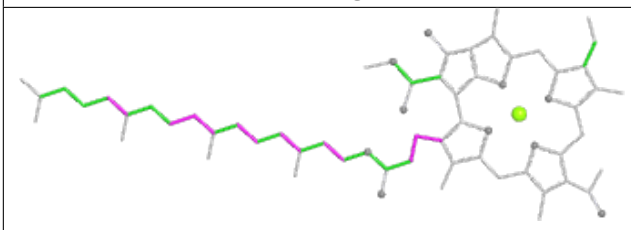
Ligand BCL bp 102



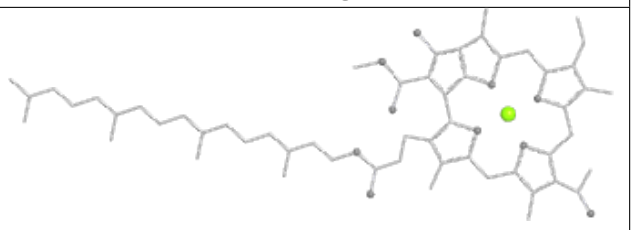
Bond lengths



Bond angles

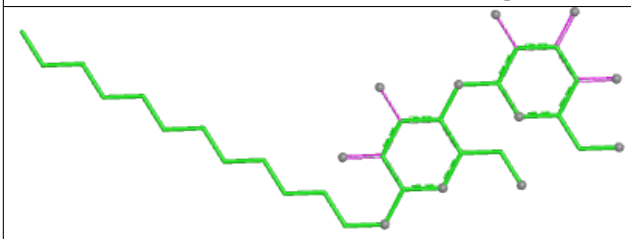


Torsions

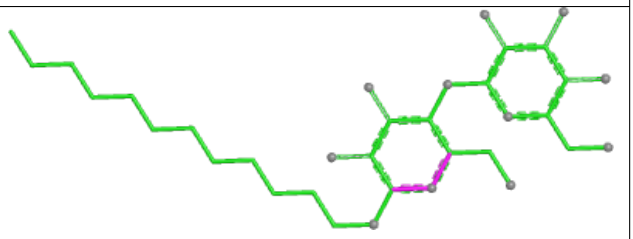


Rings

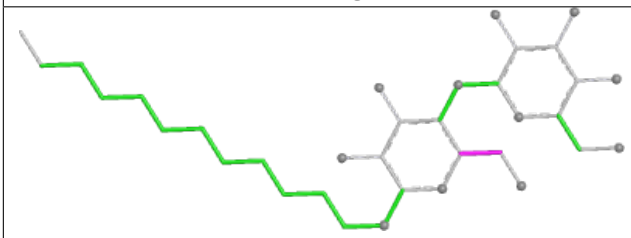
Ligand LMT BG 1006



Bond lengths



Bond angles



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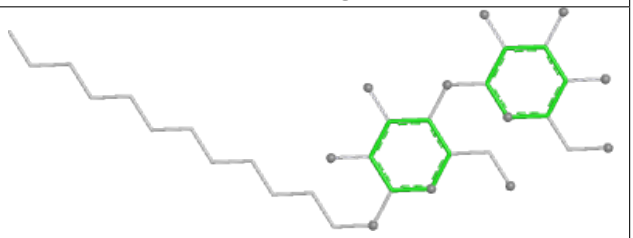
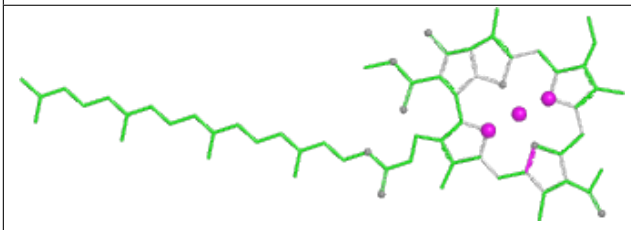
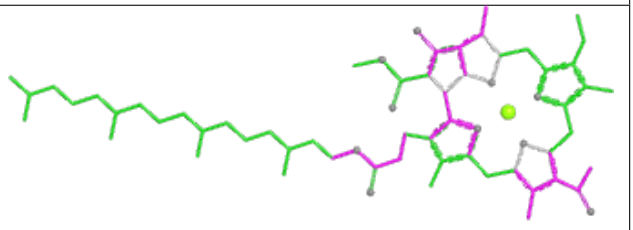


Rings

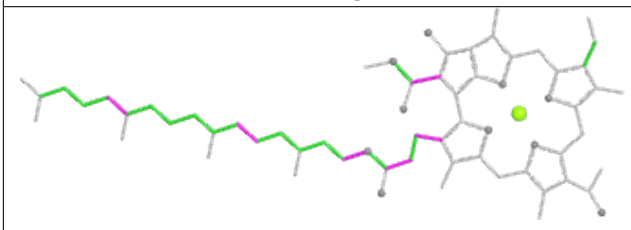
Ligand BCL BW 1003



Bond lengths



Bond angles



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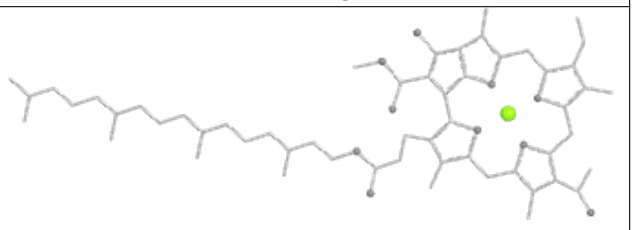
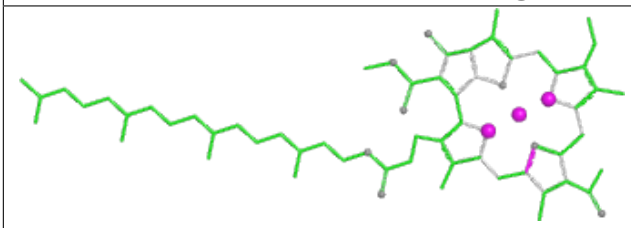


Rings

Ligand BCL BT 103



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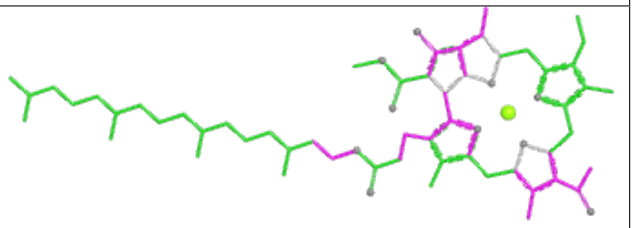

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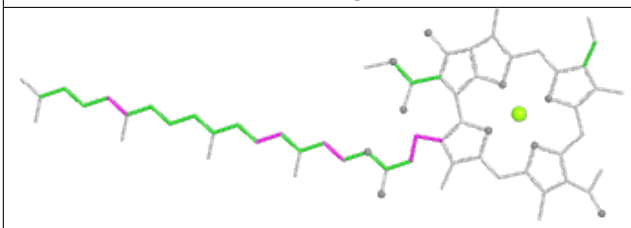

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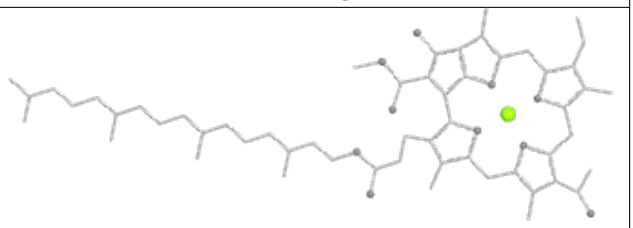
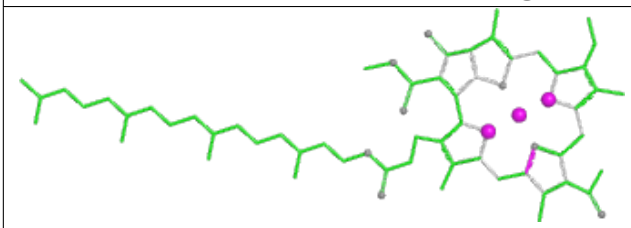
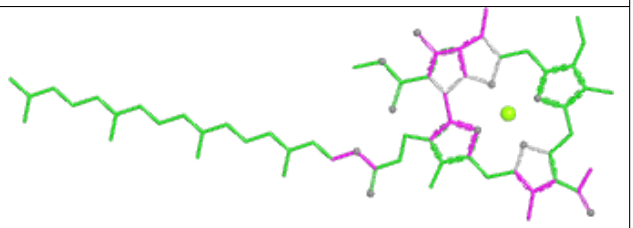


Rings

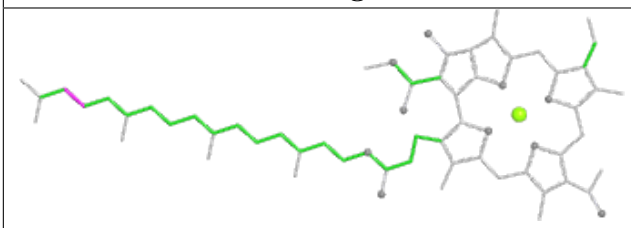
Ligand BCL L 1002



Bond lengths



Bond angles



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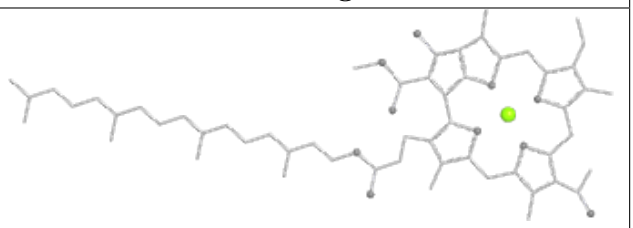
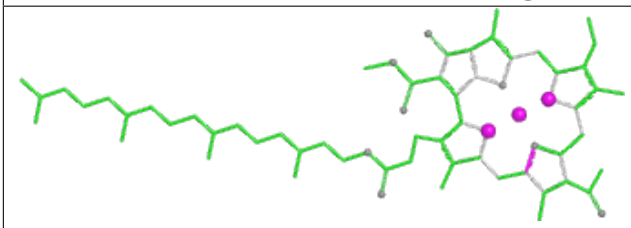


Rings

Ligand BCL ba 103



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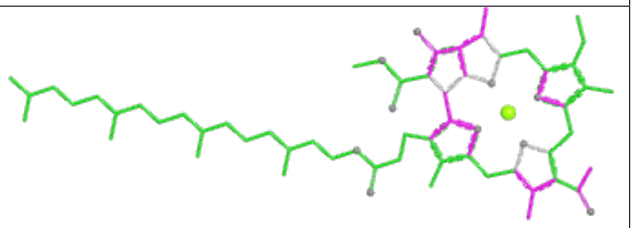
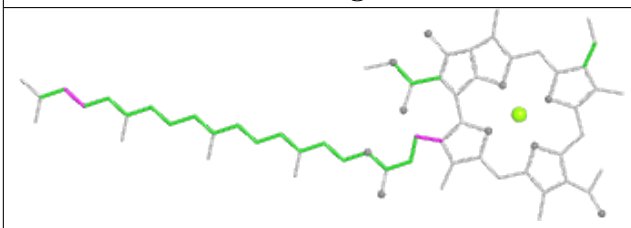


Bond angles



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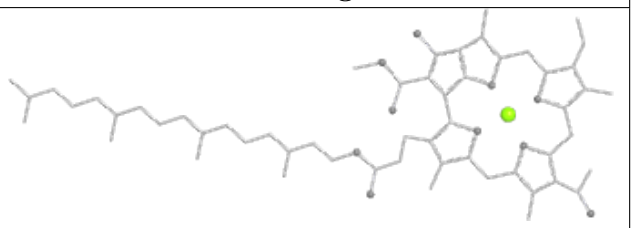
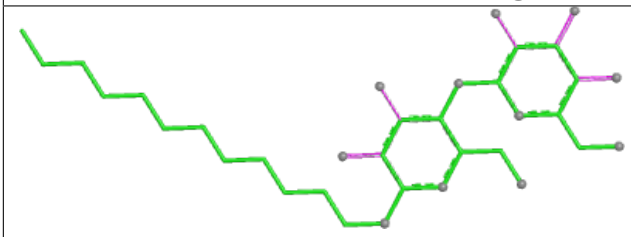
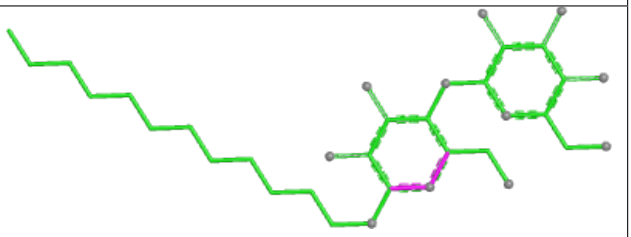
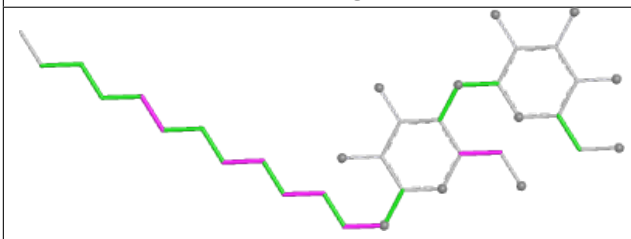
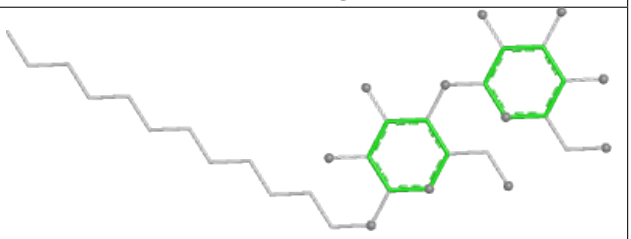
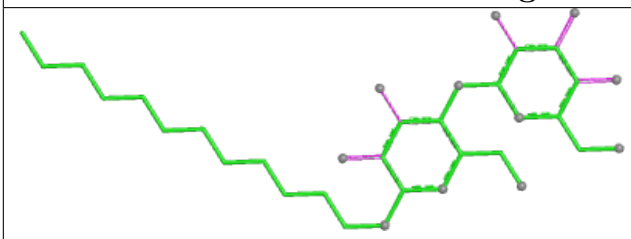
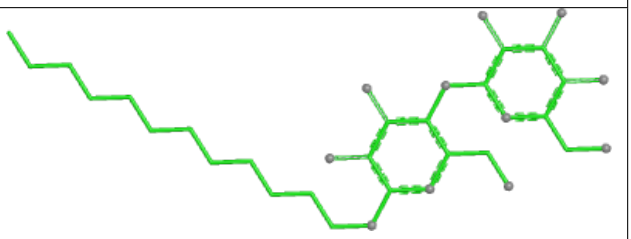
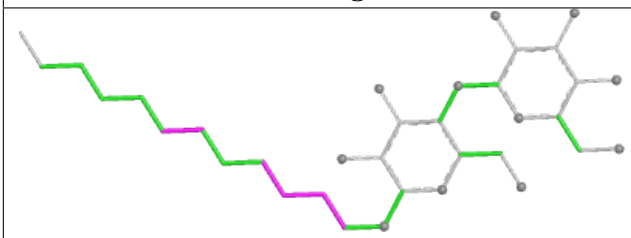
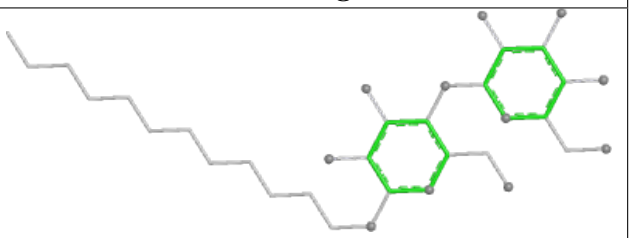
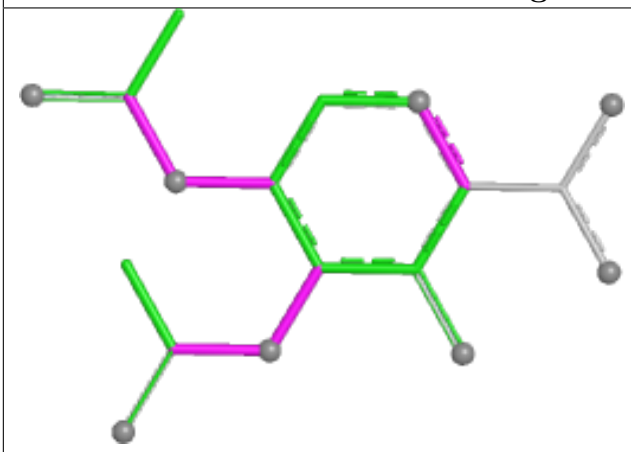


Rings

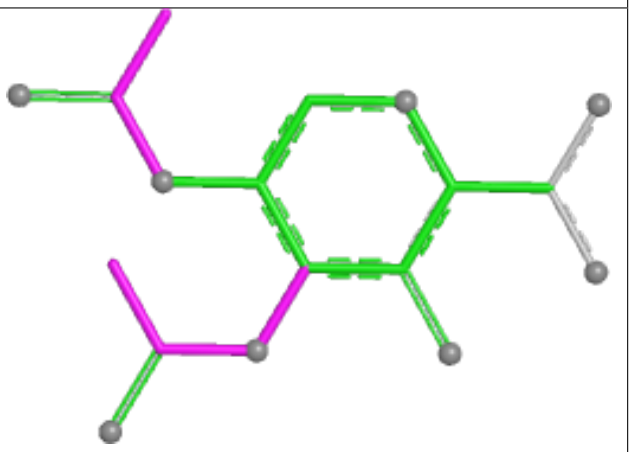
Ligand LMT BE 103	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand LMT bf 102	
 Bond lengths	 Bond angles
 Torsions	 Rings

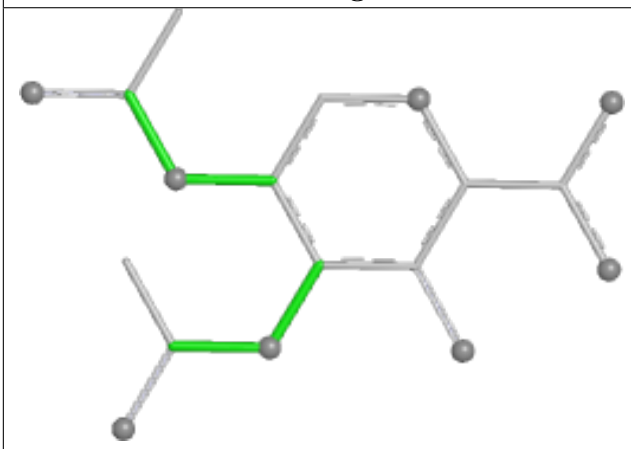
Ligand V75 C 405



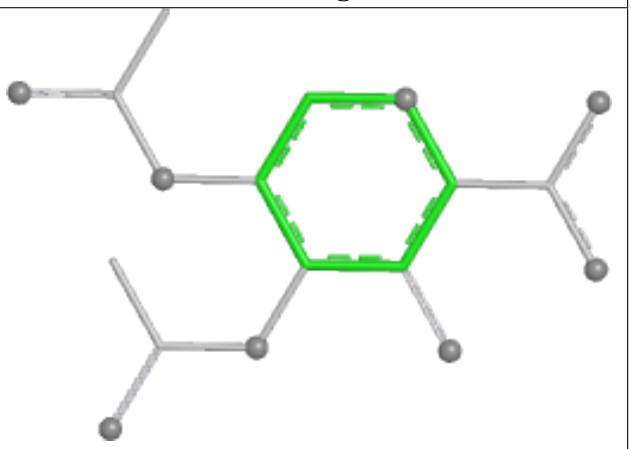
Bond lengths



Bond angles

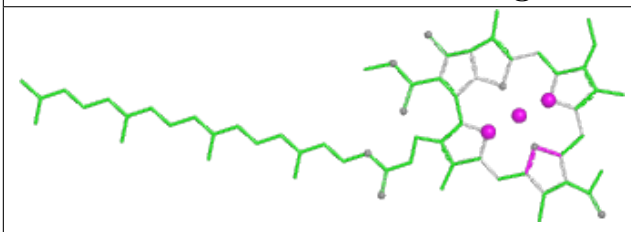


Torsions

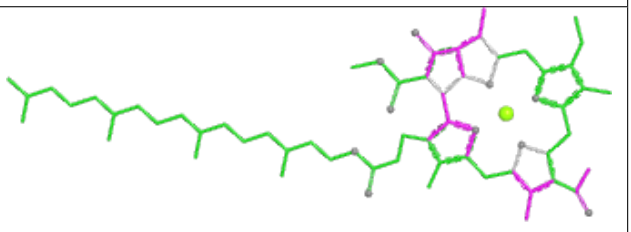


Rings

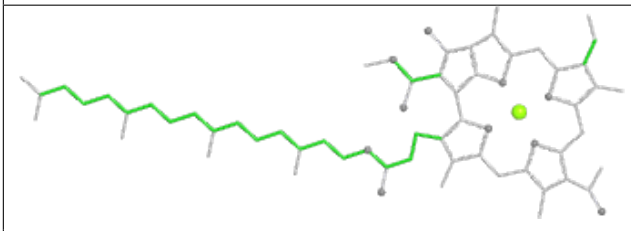
Ligand BCL AT 101



Bond lengths



Bond angles



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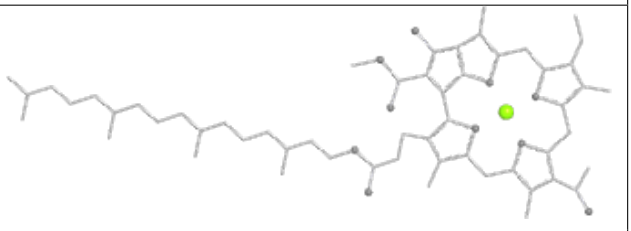
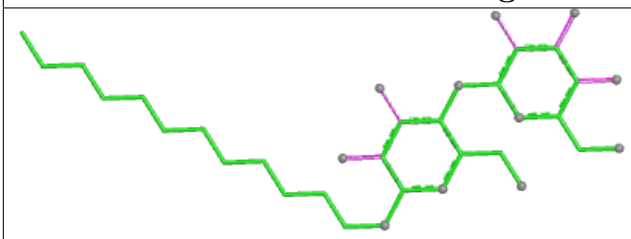
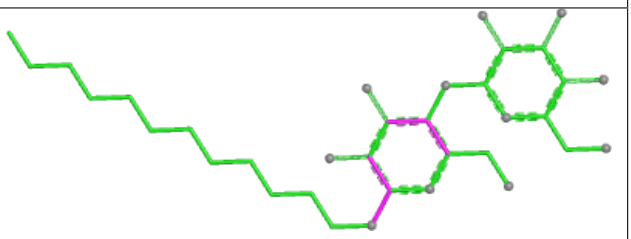
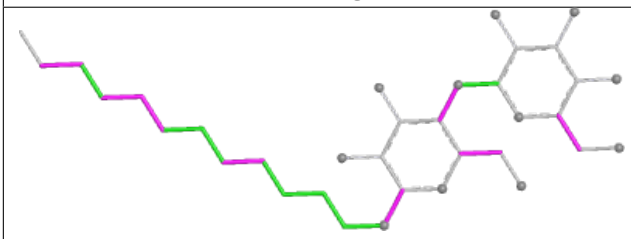
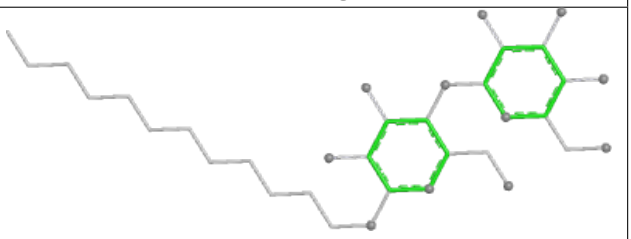
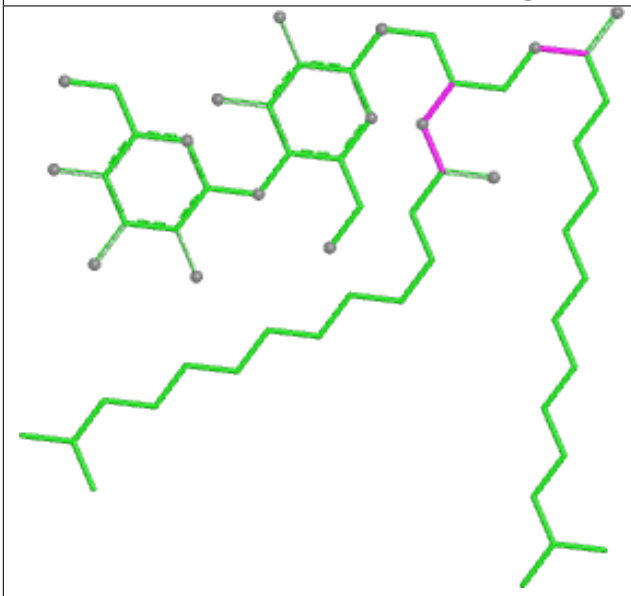


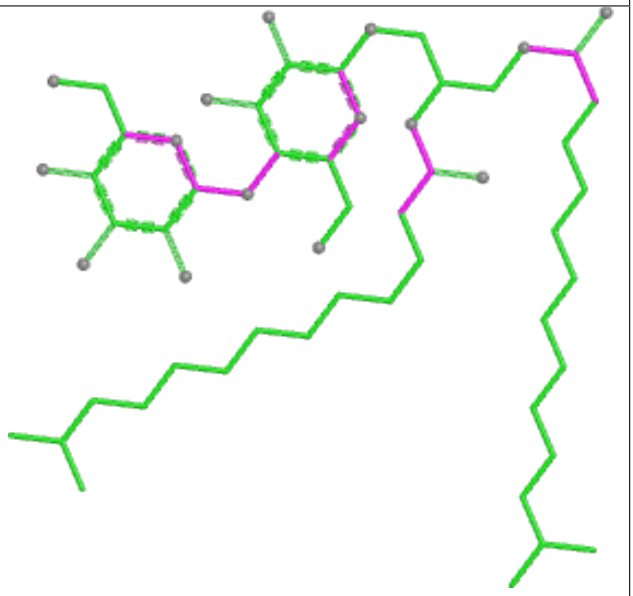
Rings

Ligand LMT AA 1003	
 Bond lengths	 Bond angles
 Torsions	 Rings

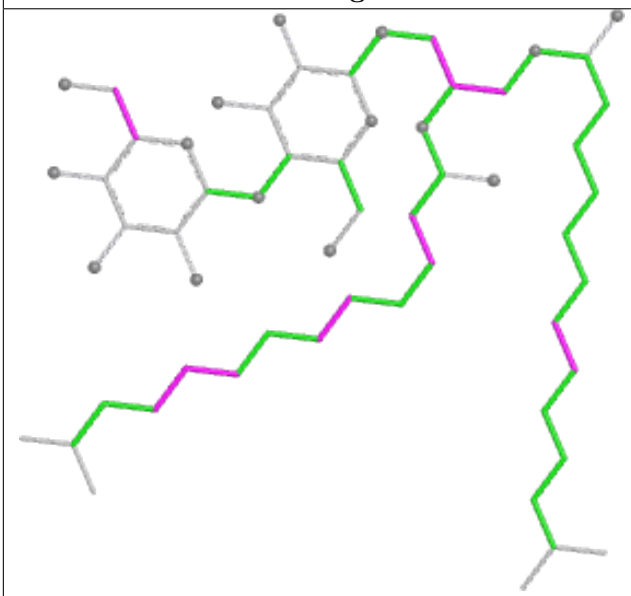
Ligand V7B L 1006



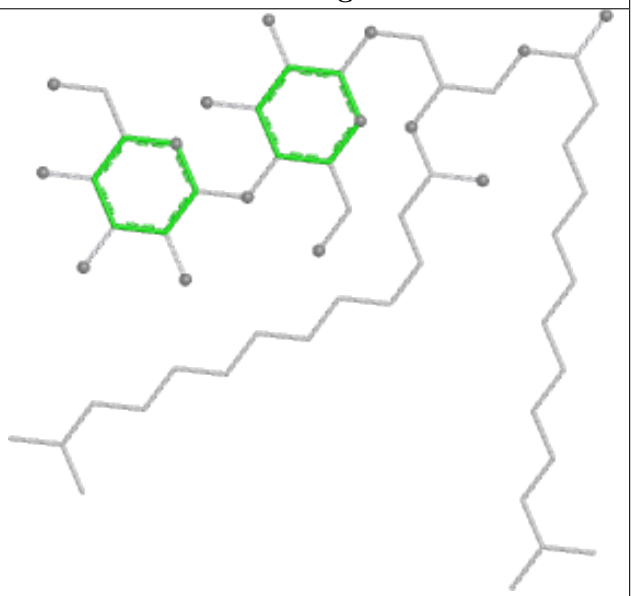
Bond lengths



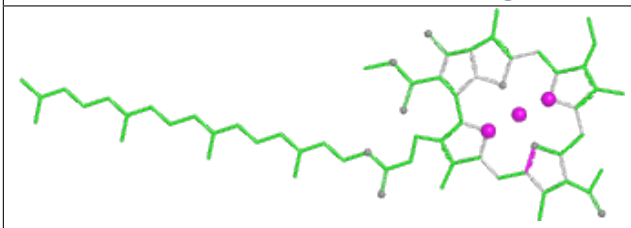
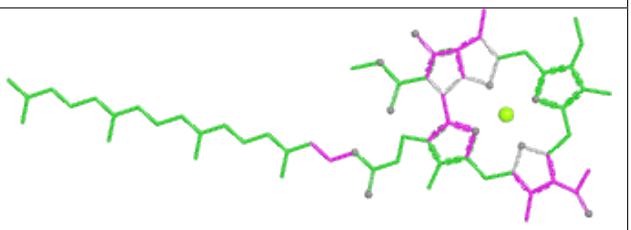
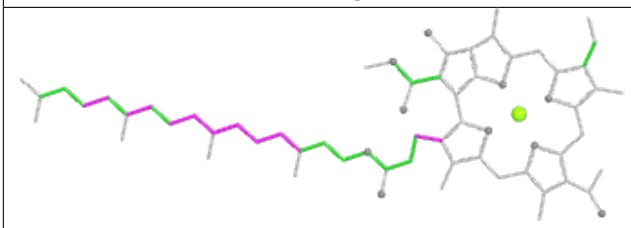
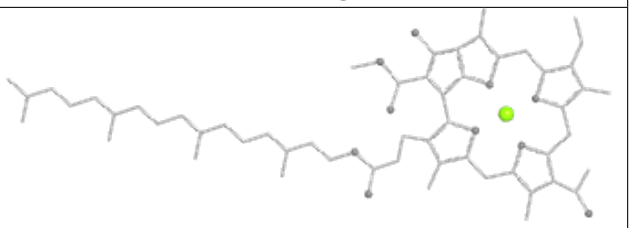
Bond angles

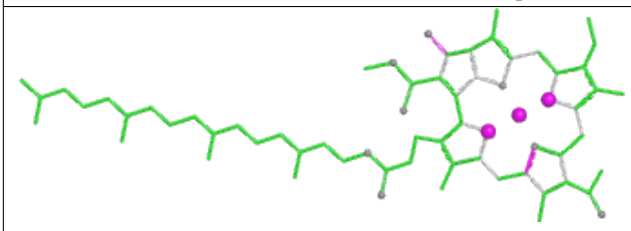
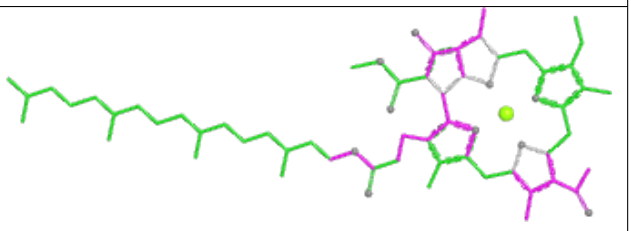
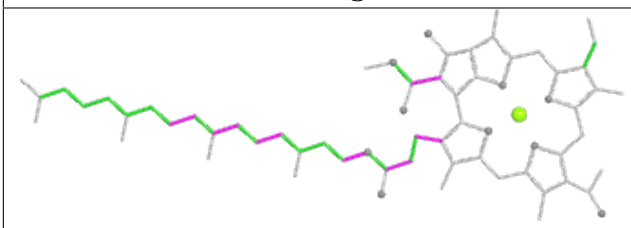
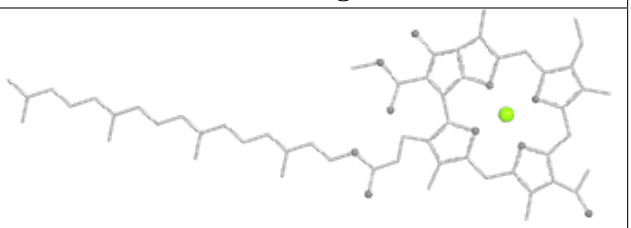


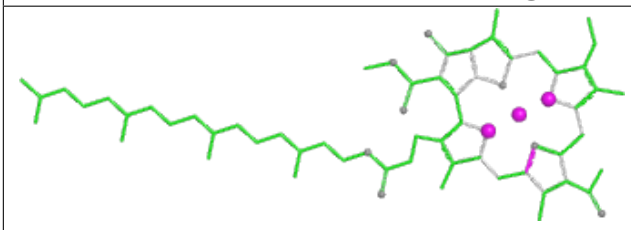
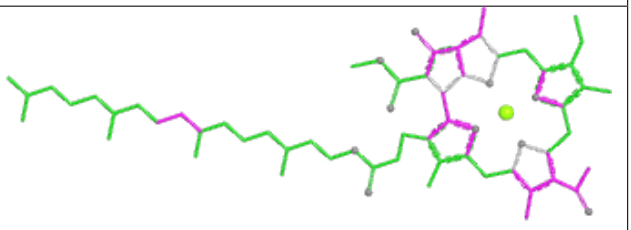
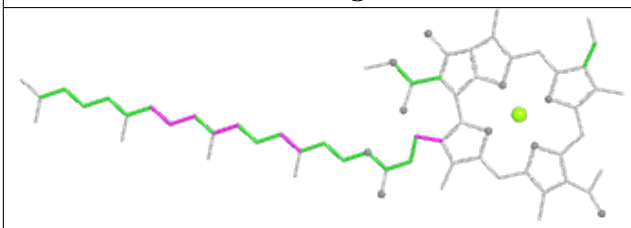
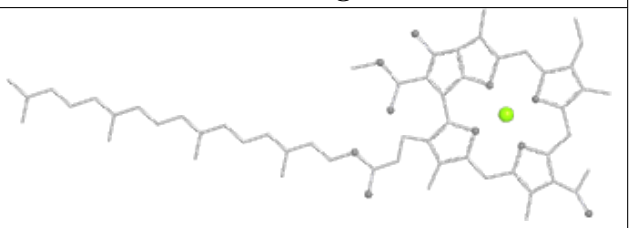
Torsions



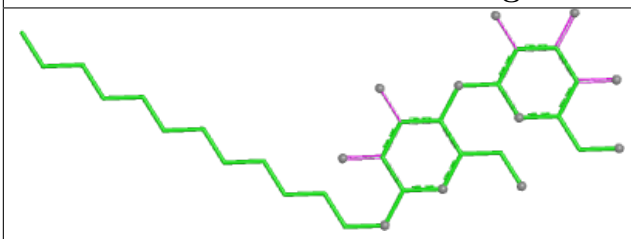
Rings

Ligand BCL BM 1002	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand BCL AK 101	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand BCL bf 103	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand LMT BS 1004



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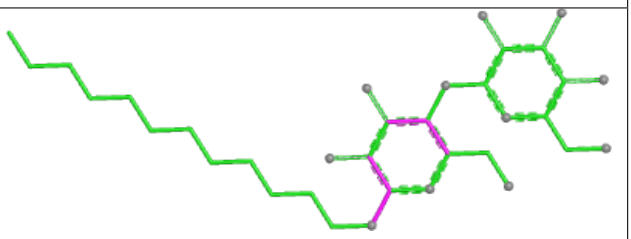
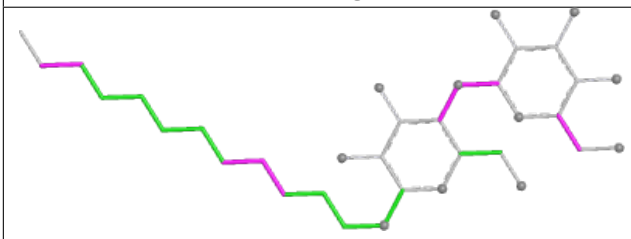


Bond angles



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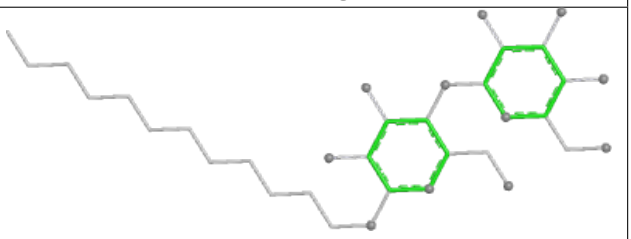
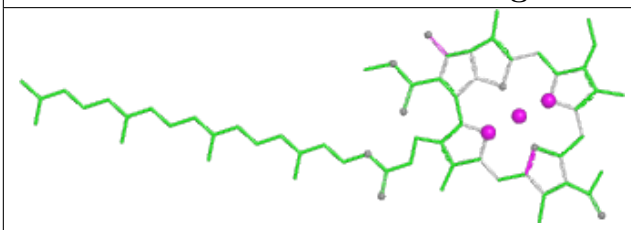


Rings

Ligand BCL AN 104



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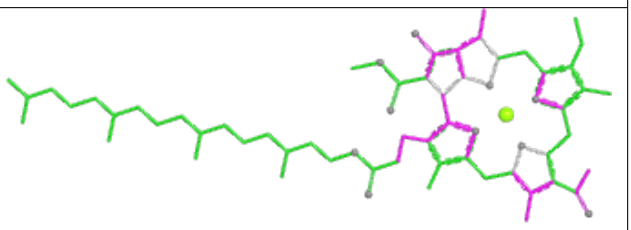
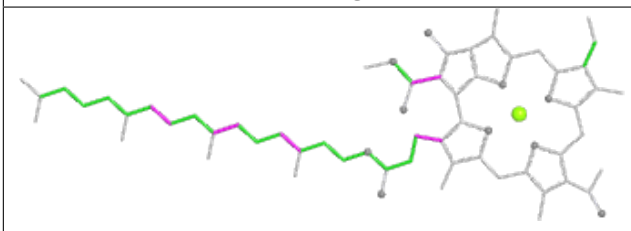


Bond angles



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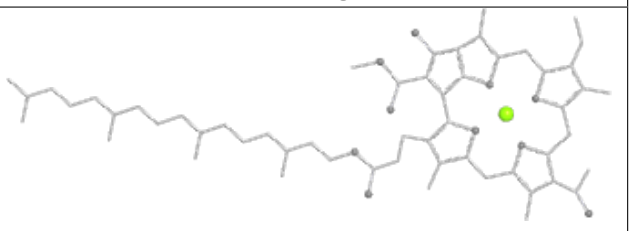
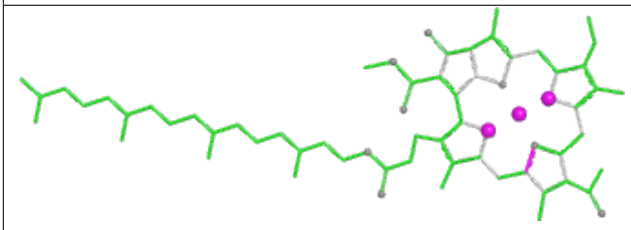


Rings

Ligand BCL M 405



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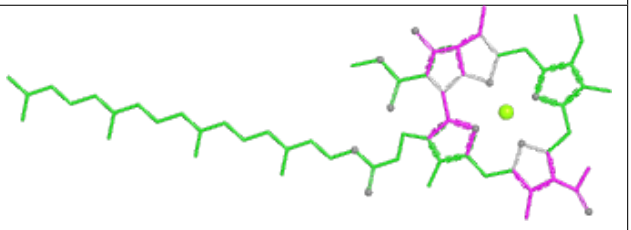

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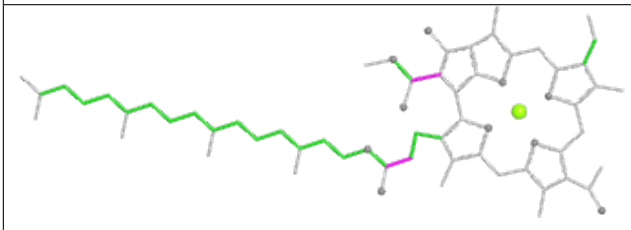

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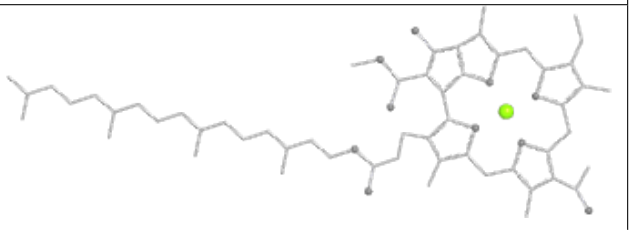
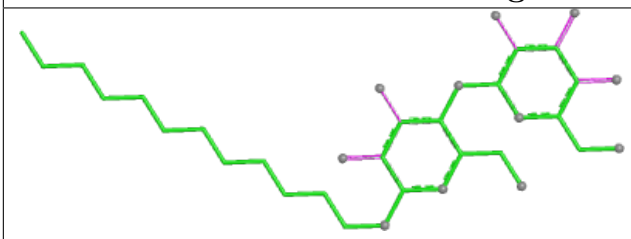


Rings

Ligand LMT BD 102



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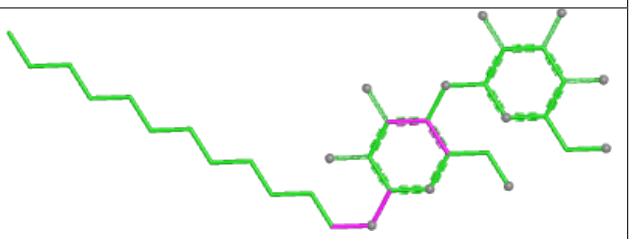
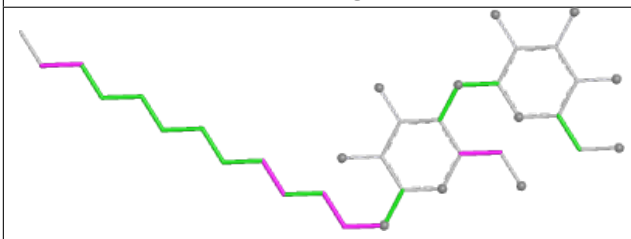


Bond angles



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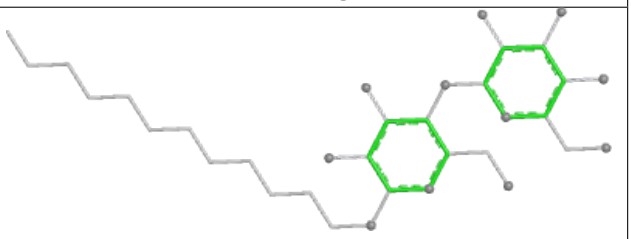
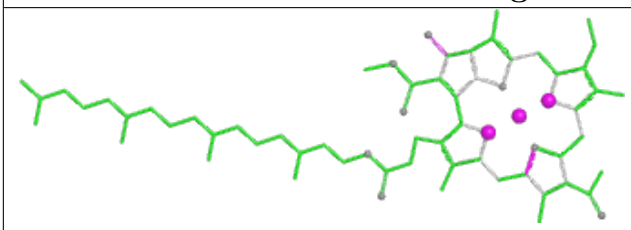


Rings

Ligand BCL AH 101



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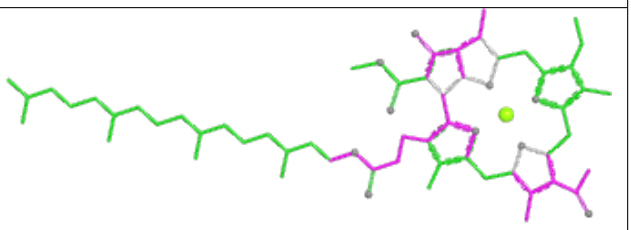

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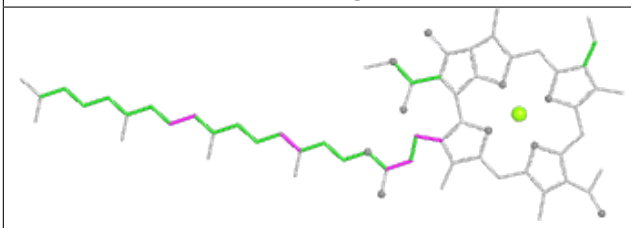

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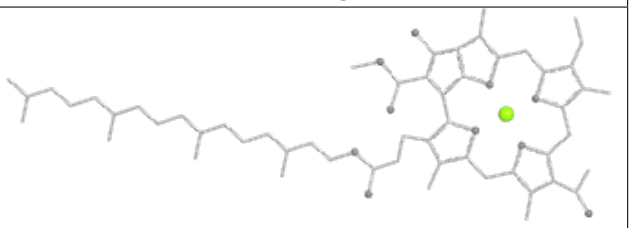
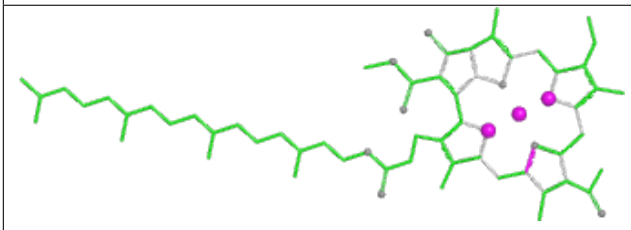


Rings

Ligand BCL ai 101



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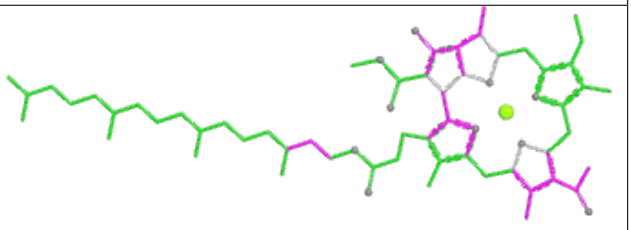

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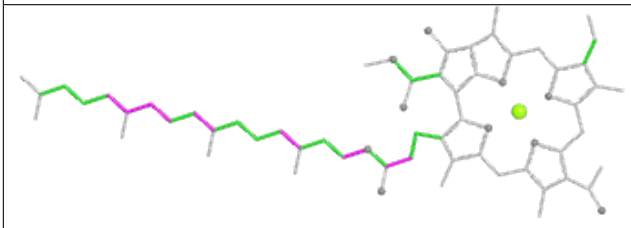

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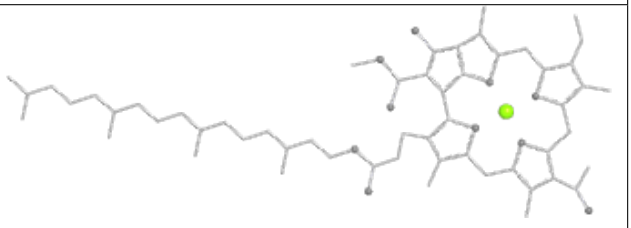
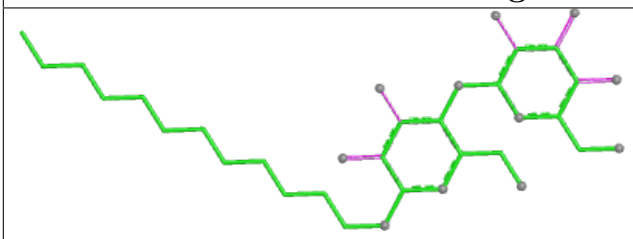


Rings

Ligand LMT AP 101



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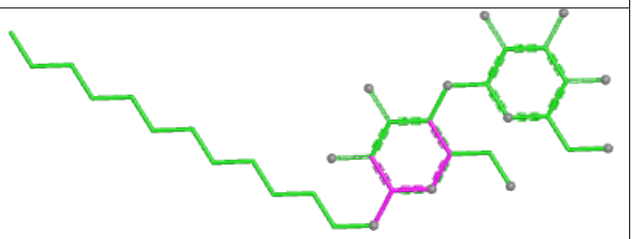

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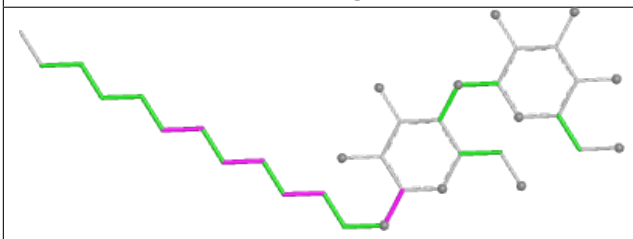

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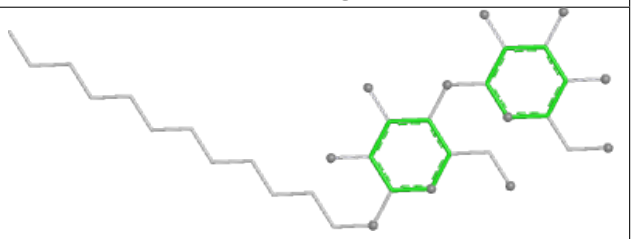
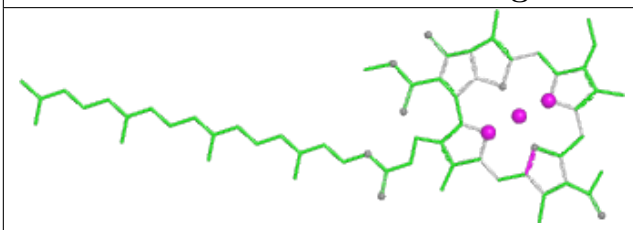


Rings

Ligand BCL ak 1001



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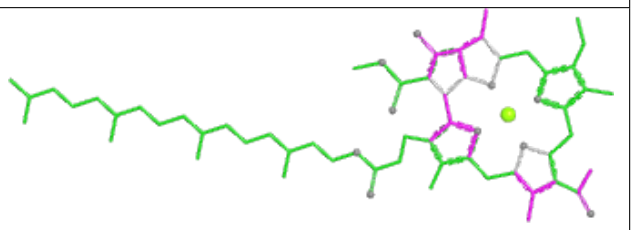
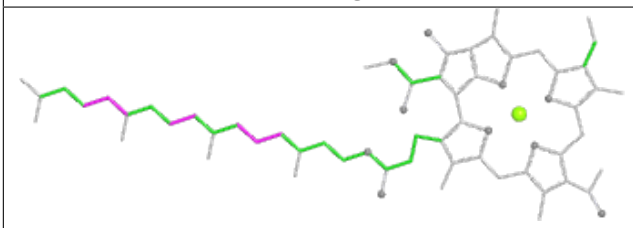
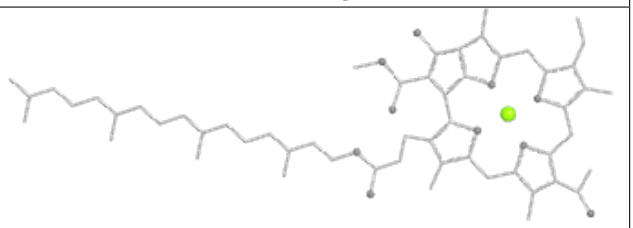


Bond angles

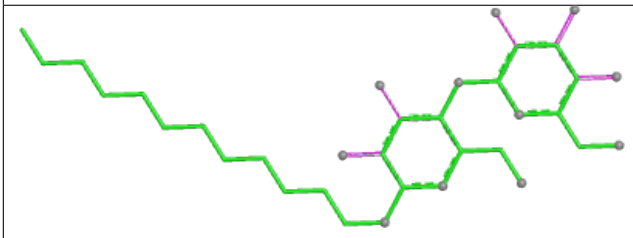


Torsions



Rings

Ligand LMT M 403



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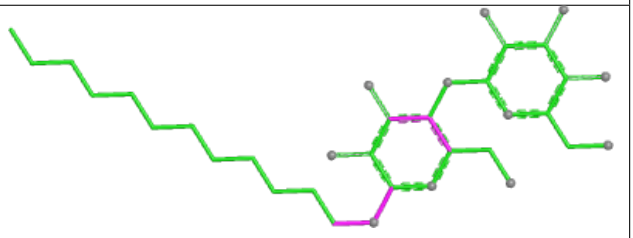
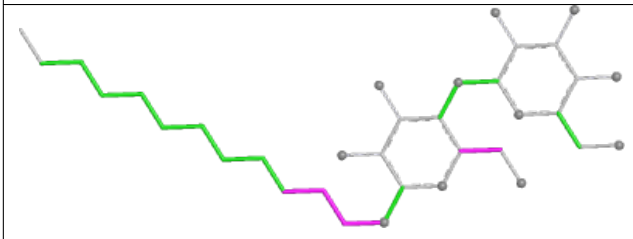


Bond angles



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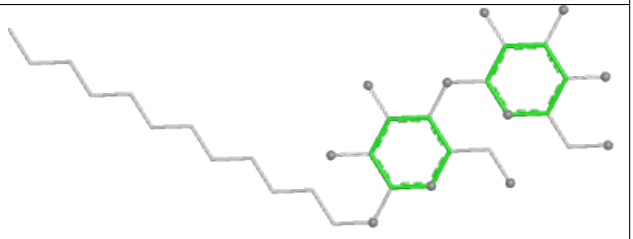
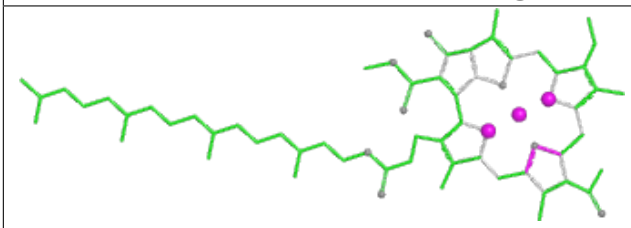
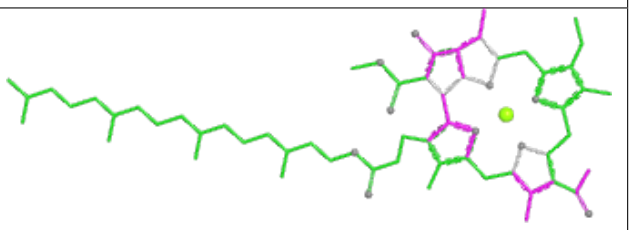
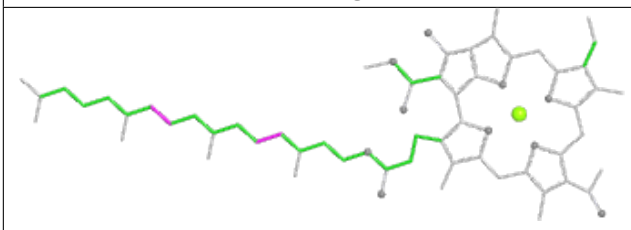
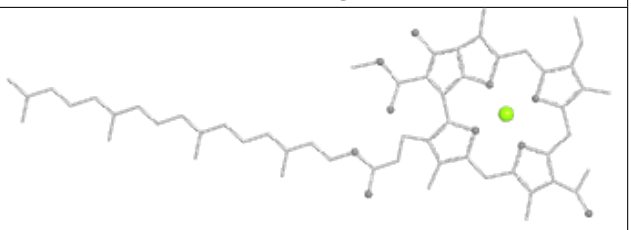
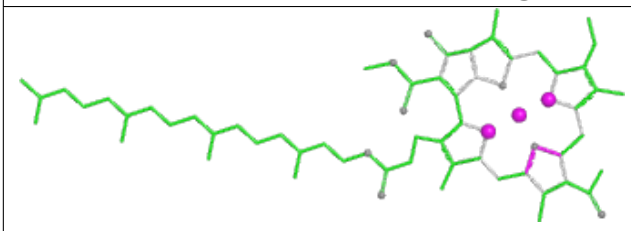
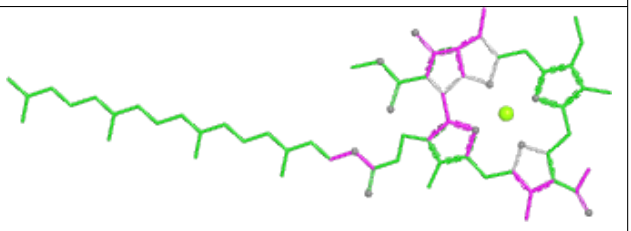
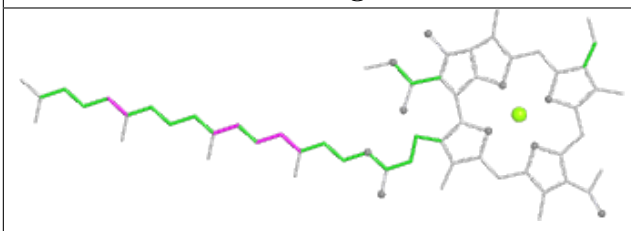
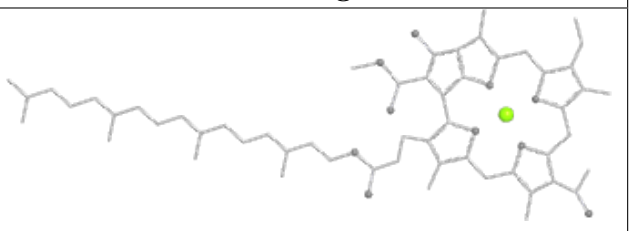
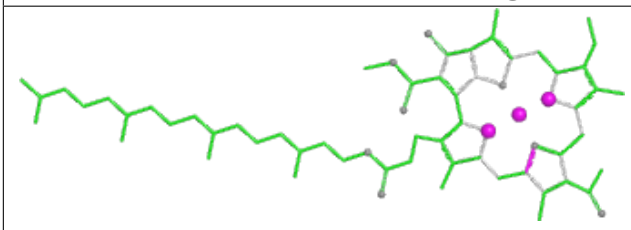
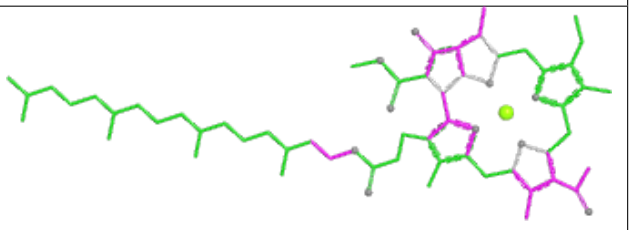
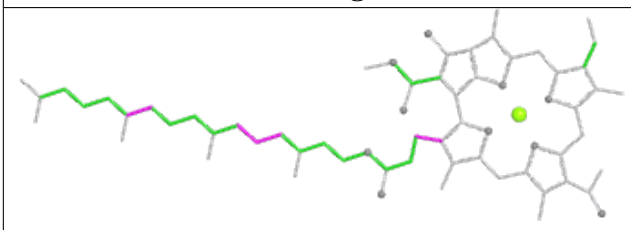
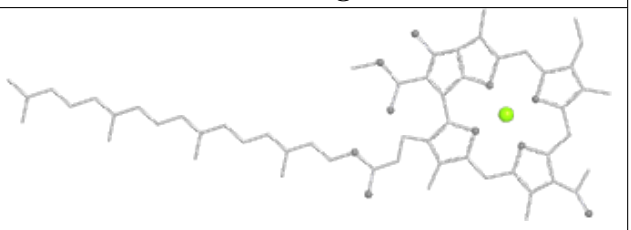


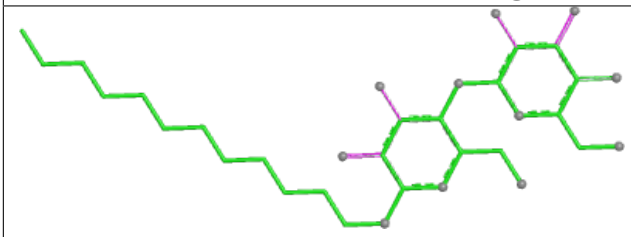
Rings

Ligand BCL AU 102	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand BCL al 1001	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand BCL BP 1005	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand LMT BA 102



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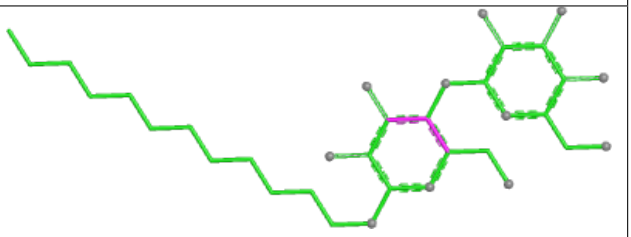
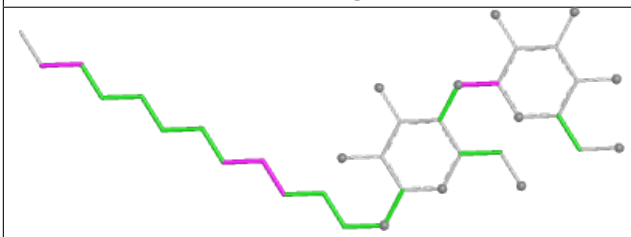


Bond angles



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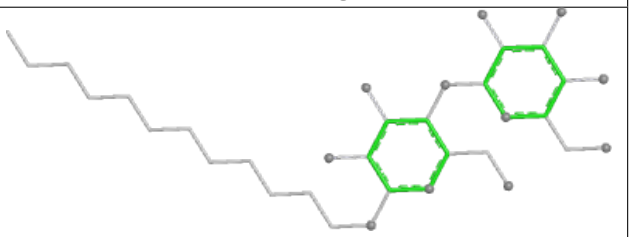
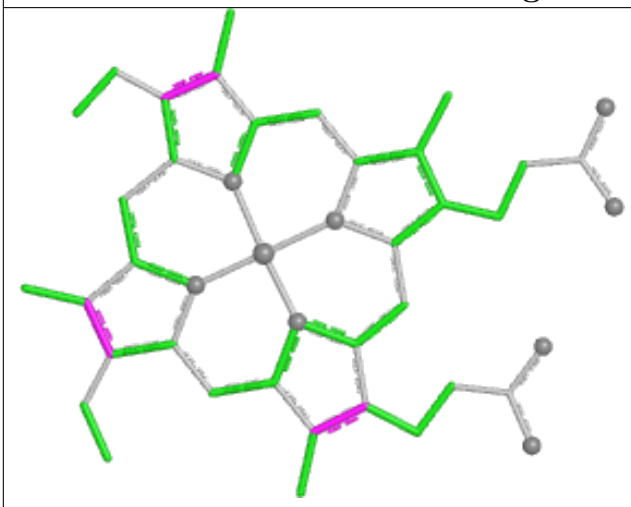


Rings

Ligand HEC C 401



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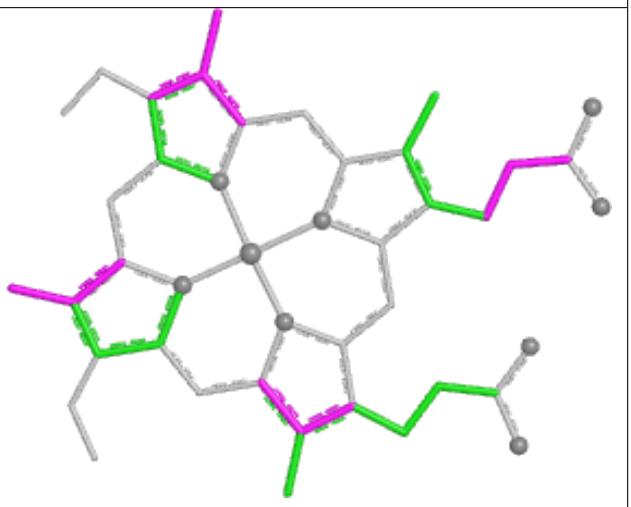

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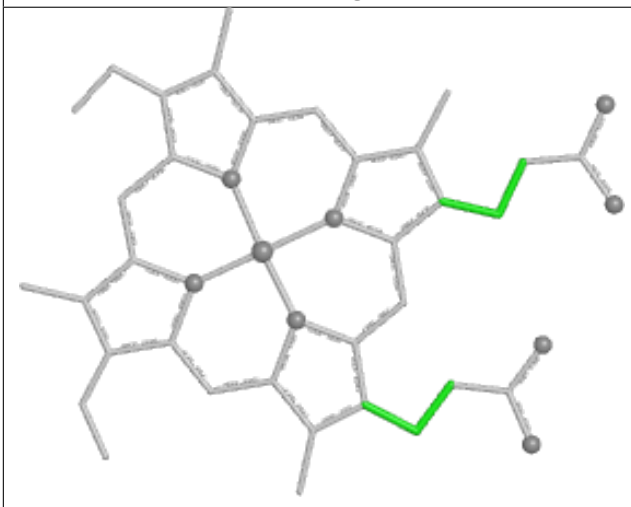

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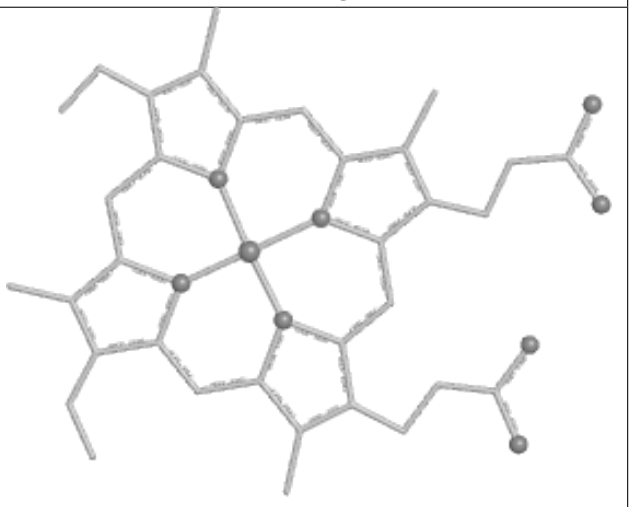

Rings

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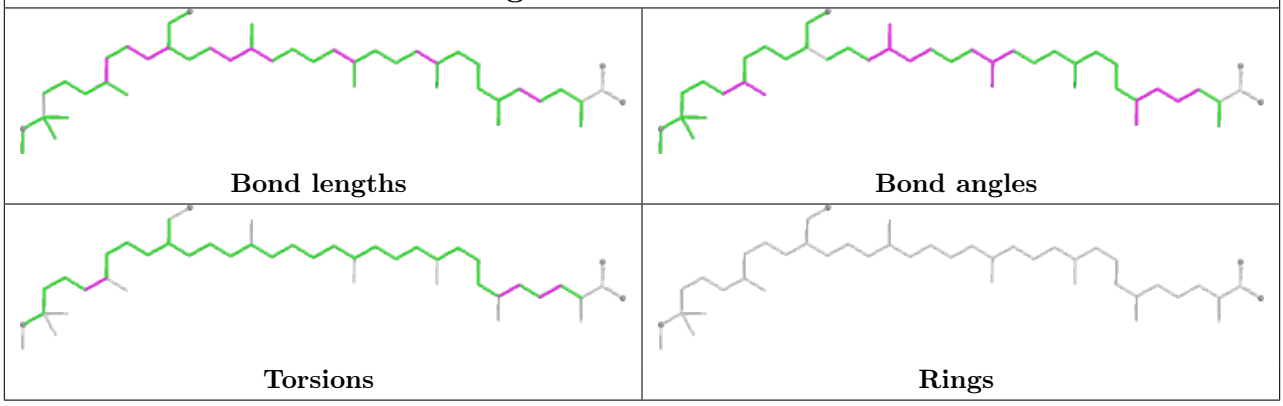

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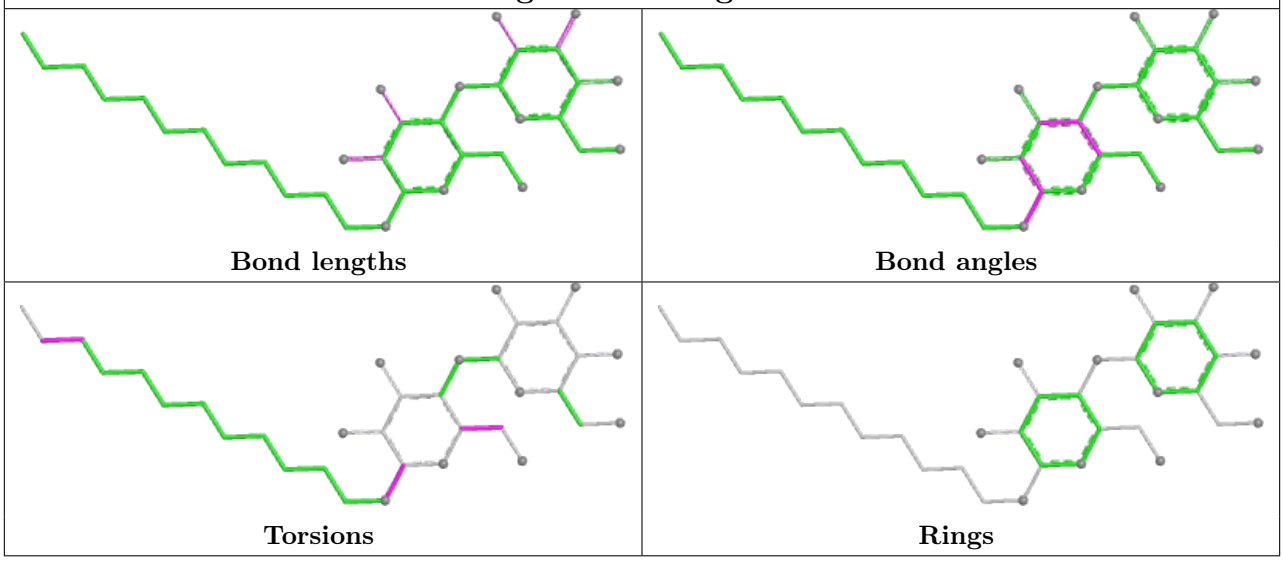

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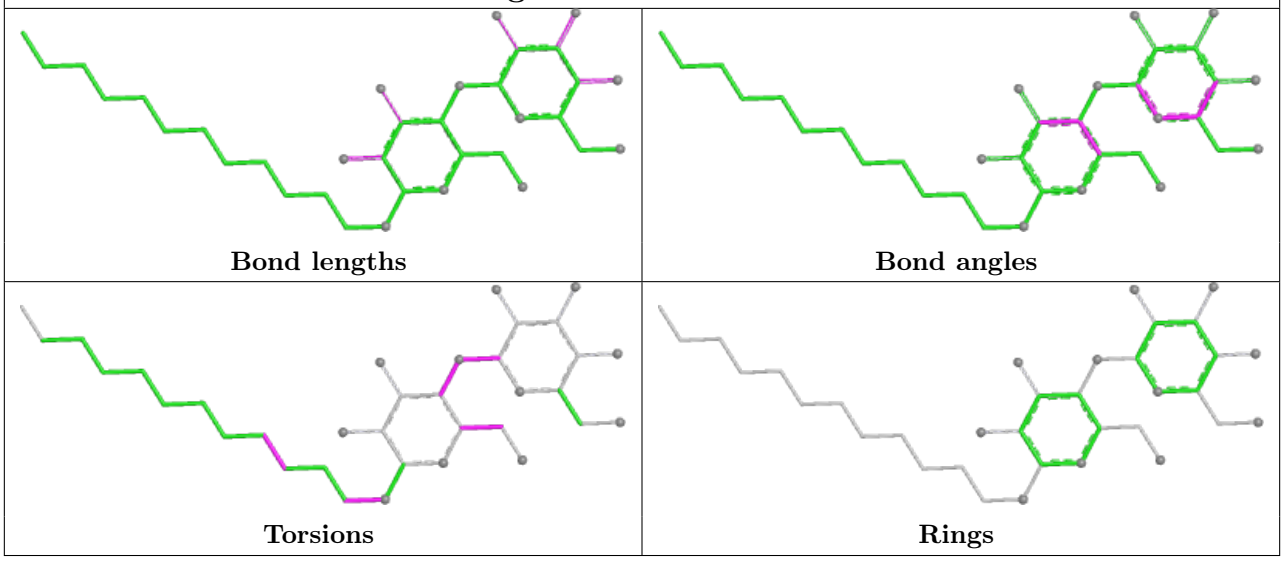
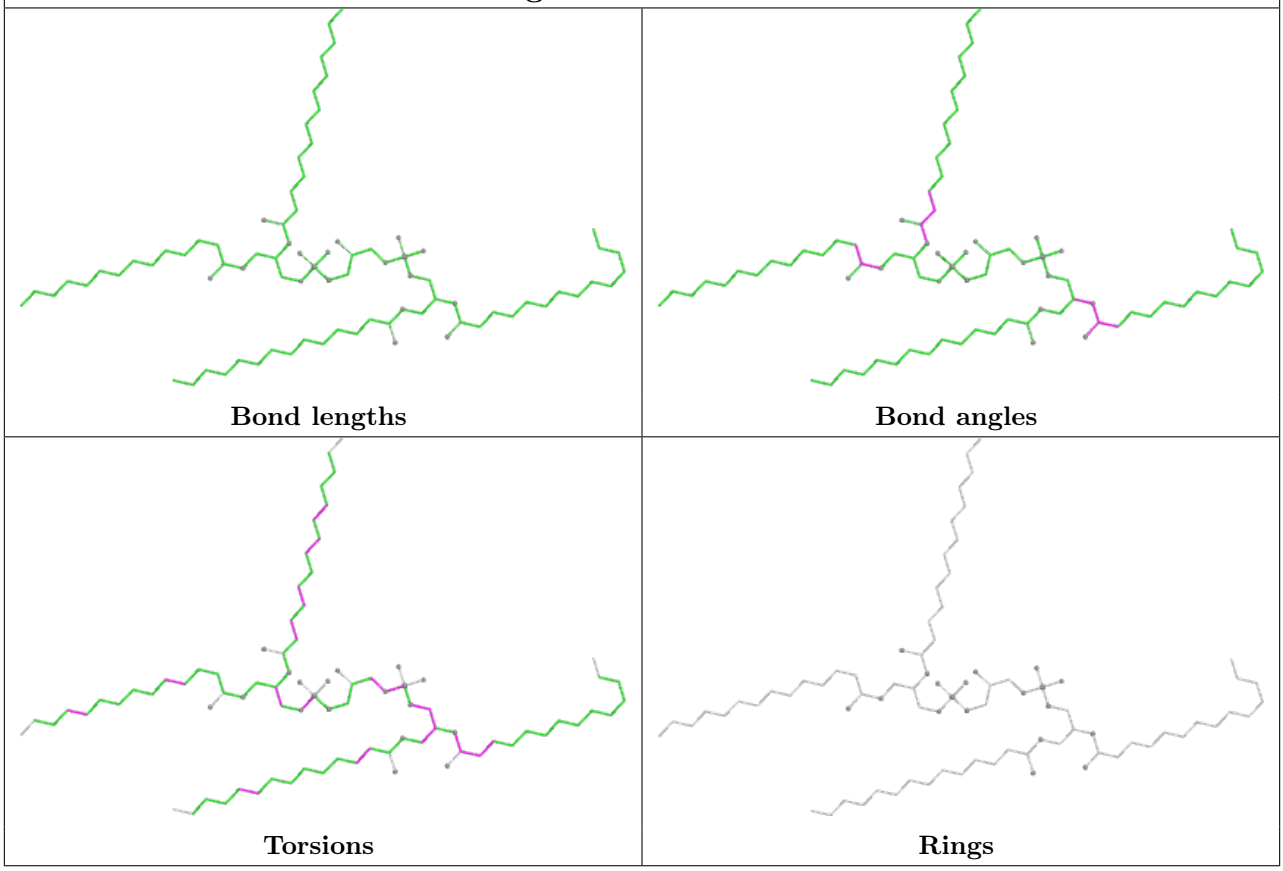


Ligand CD4 af 102



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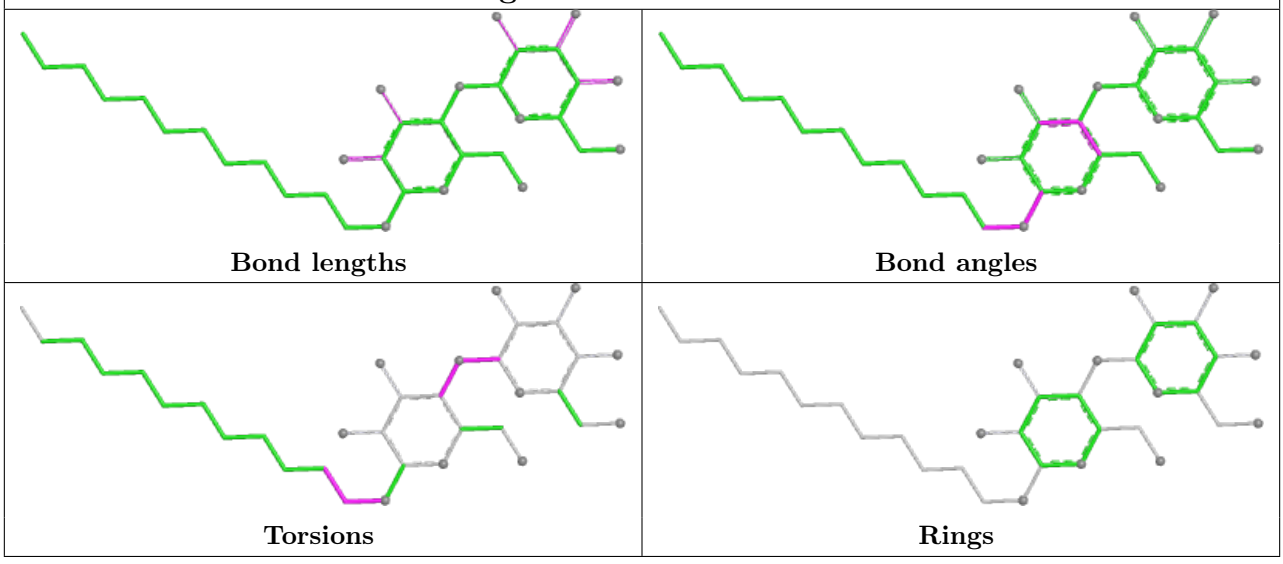
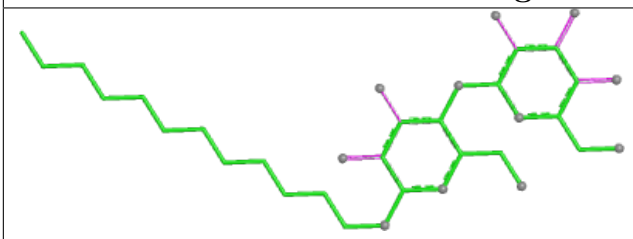


Ligand LMT L 1005



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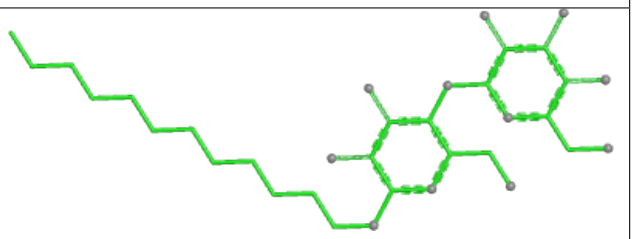
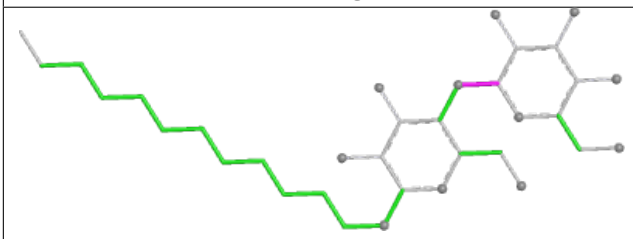
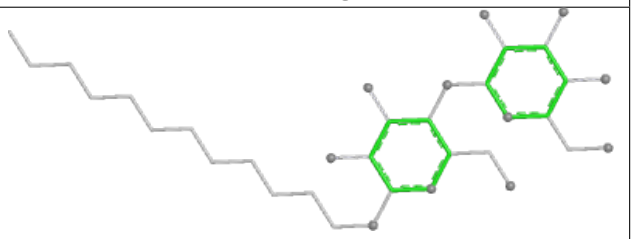


Bond angles

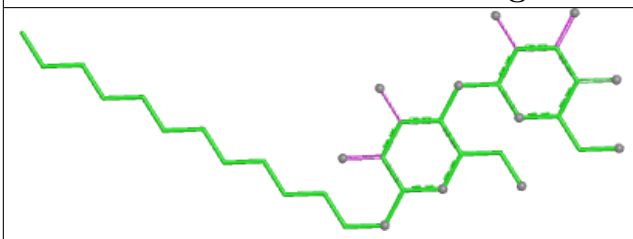


Torsions



Rings

Ligand LMT BC 105



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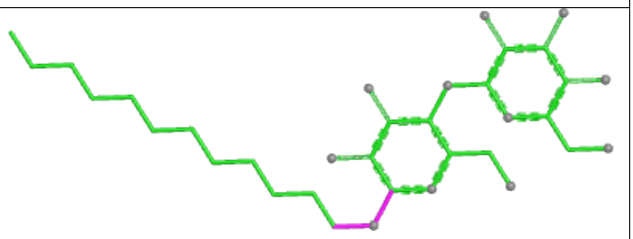
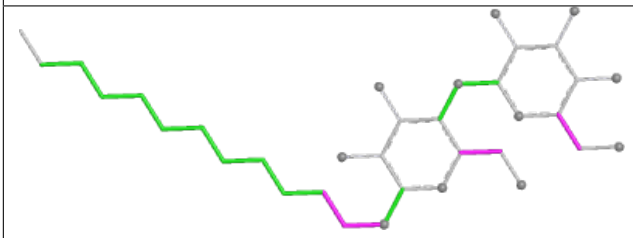


Bond angles



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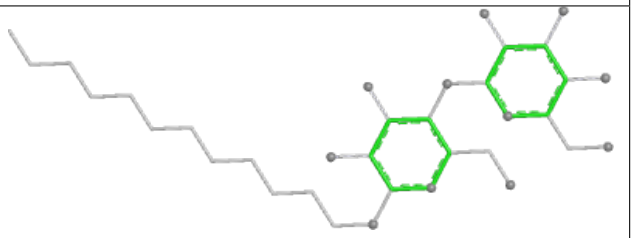
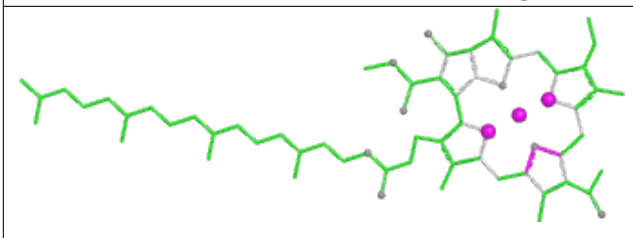


Rings

Ligand BCL AJ 101



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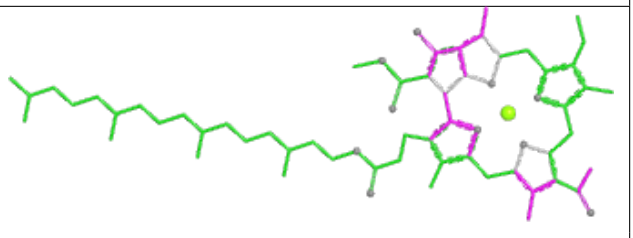

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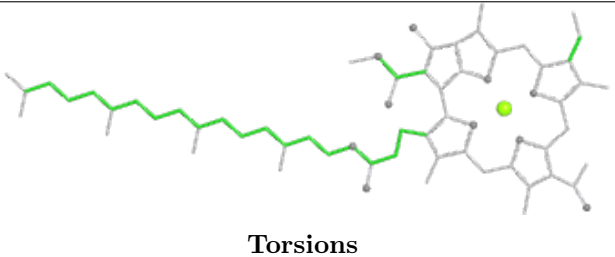

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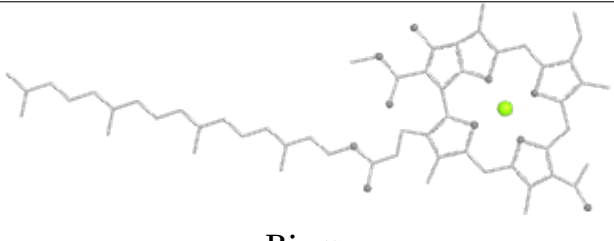
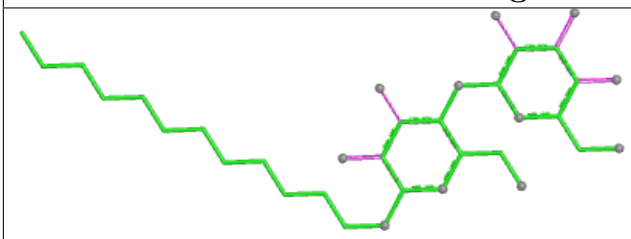


Rings

Ligand LMT BE 102



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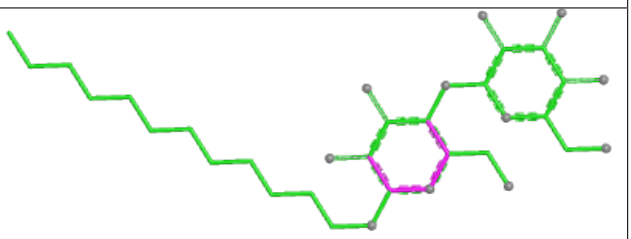

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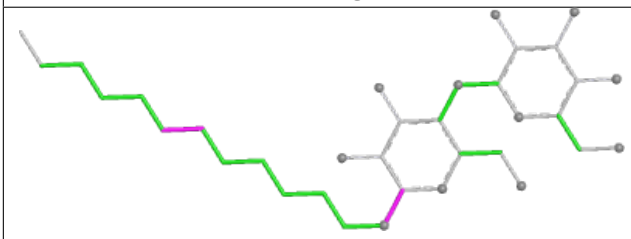

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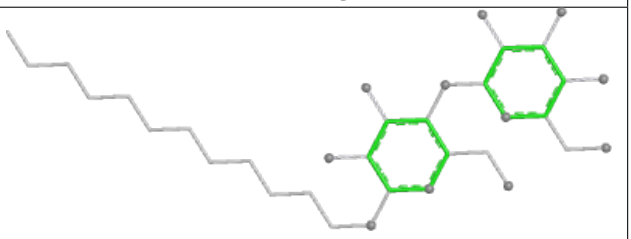
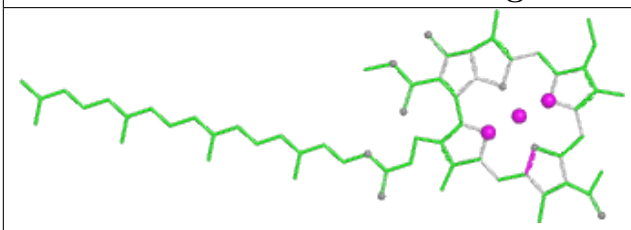


Rings

Ligand BCL BS 1003



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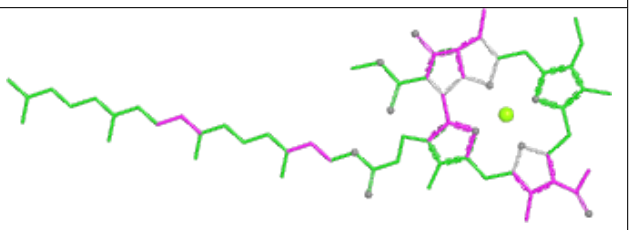

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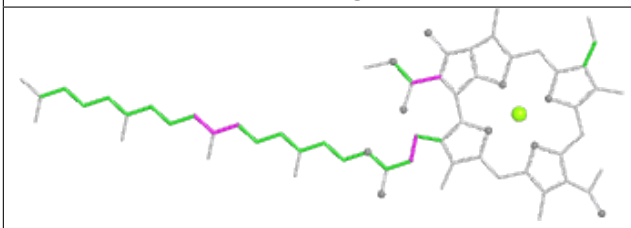

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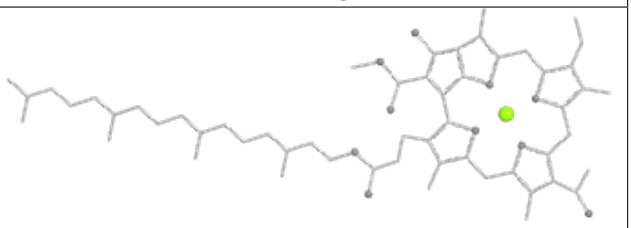
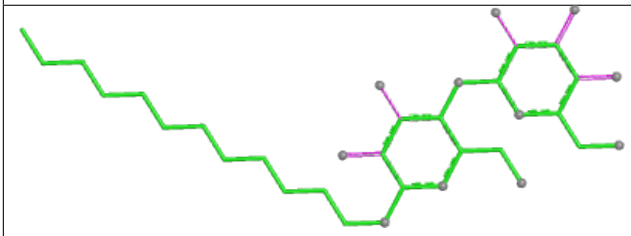


Rings

Ligand LMT L 1003



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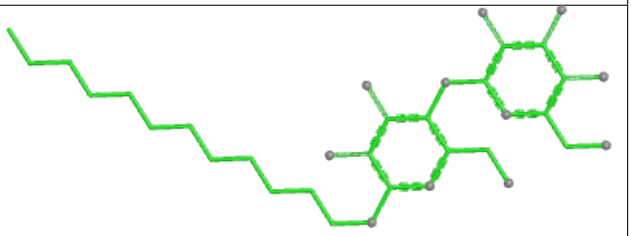

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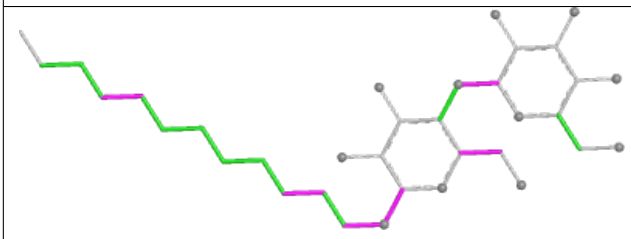

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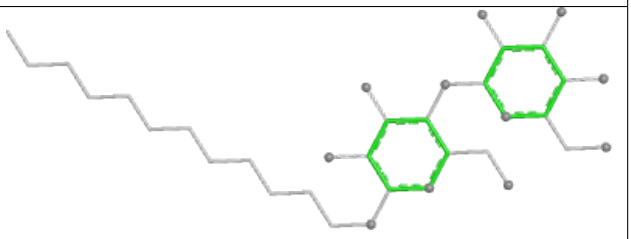
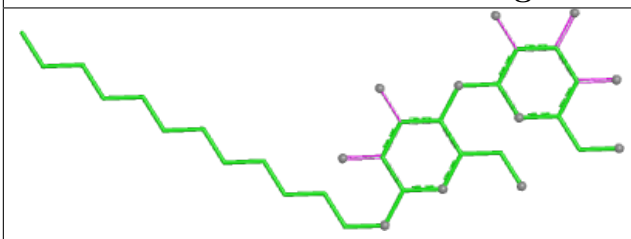


Rings

Ligand LMT bn 105



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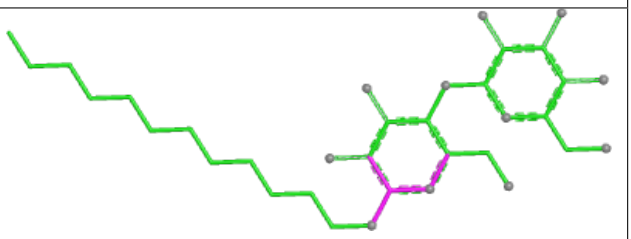
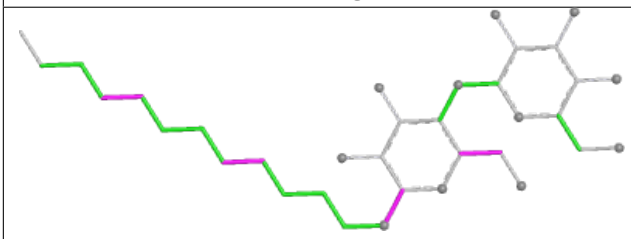


Bond angles



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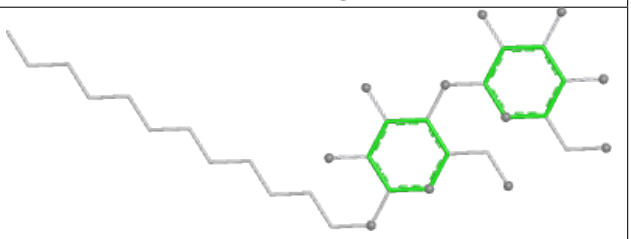
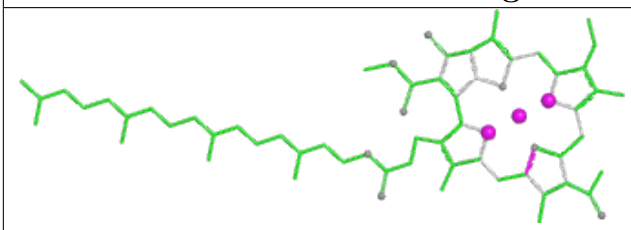


Rings

Ligand BCL BH 1005



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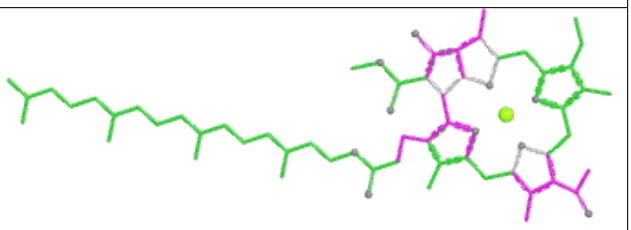
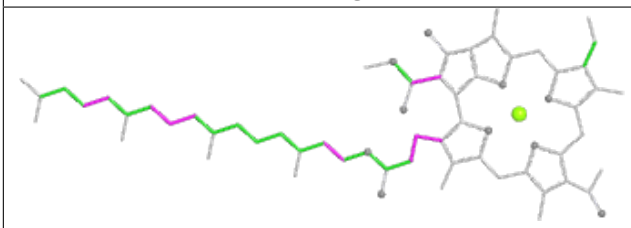


Bond angles



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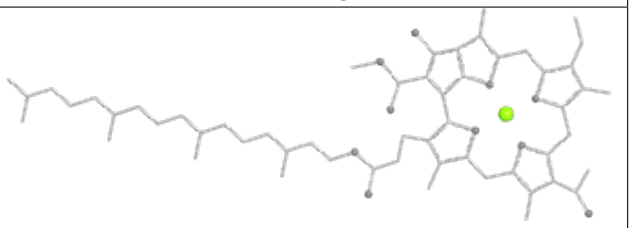
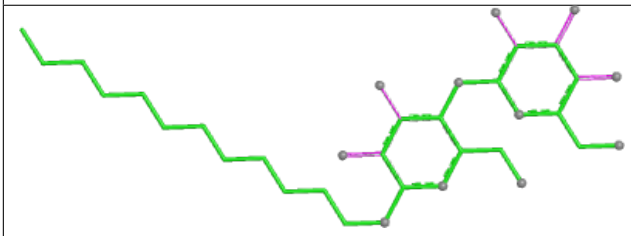
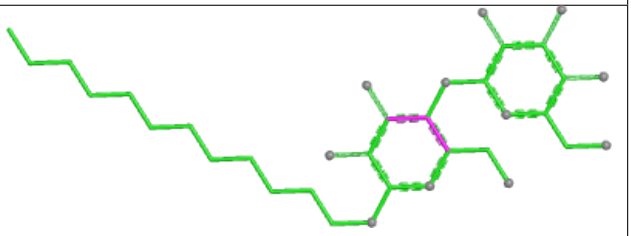


Rings

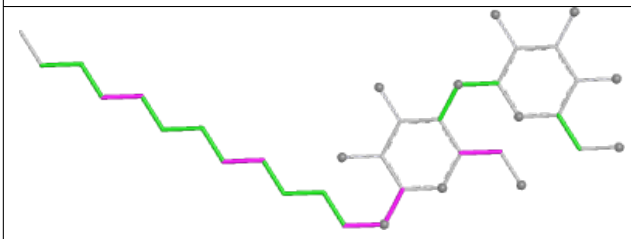
Ligand LMT BQ 1004



Bond lengths



Bond angles



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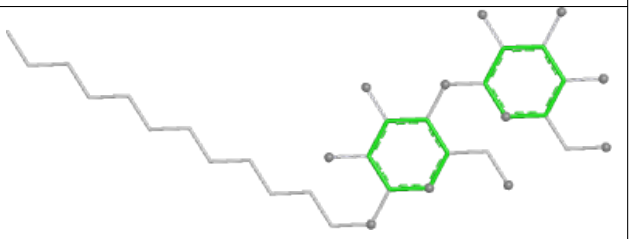
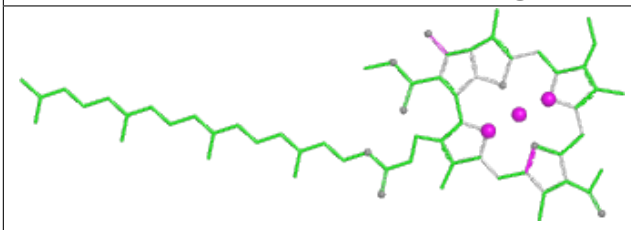
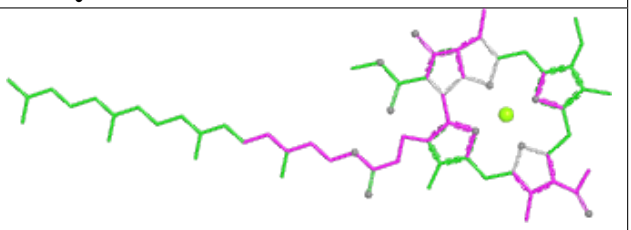
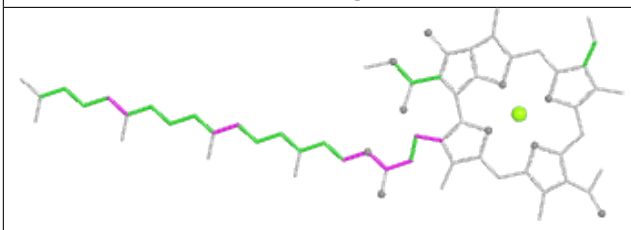
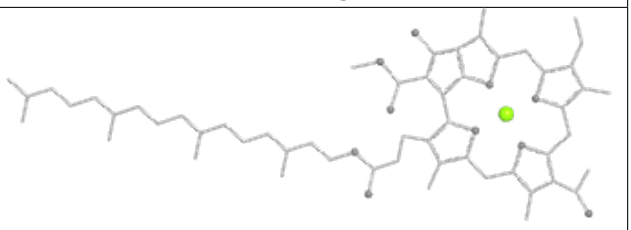
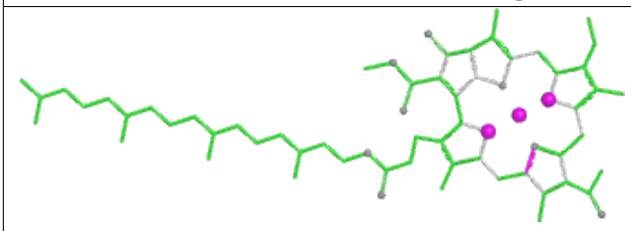
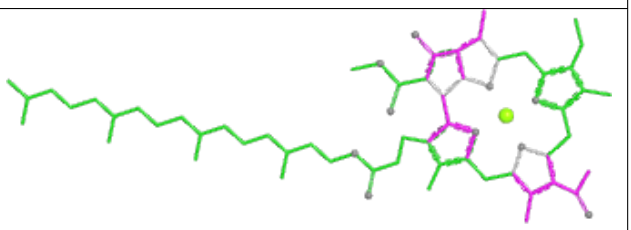
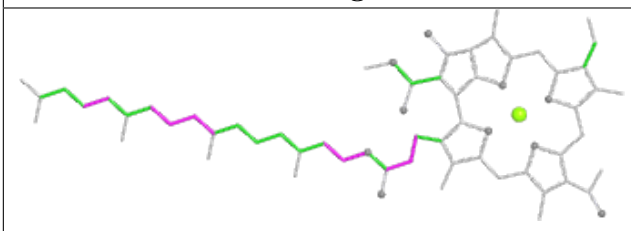
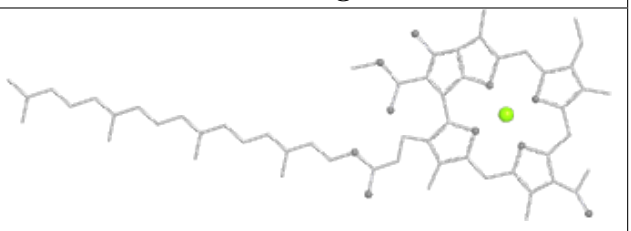
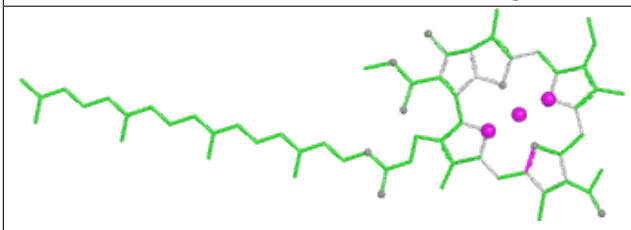
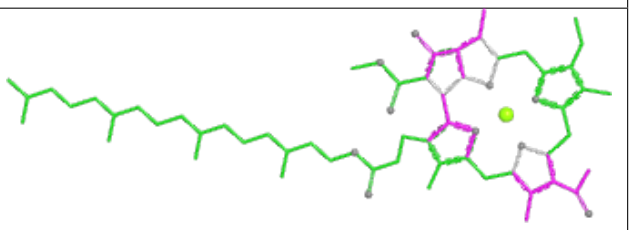
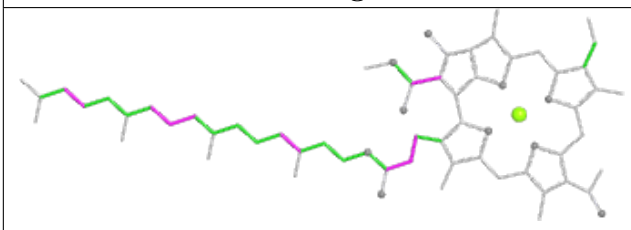
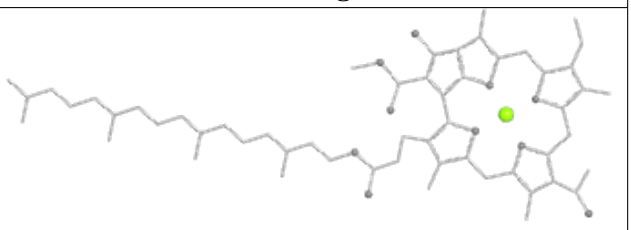


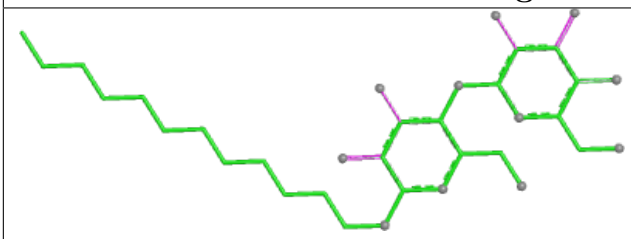
Rings

Ligand BCL AQ 101	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand BCL an 1001	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand BCL BJ 1002	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand LMT bc 104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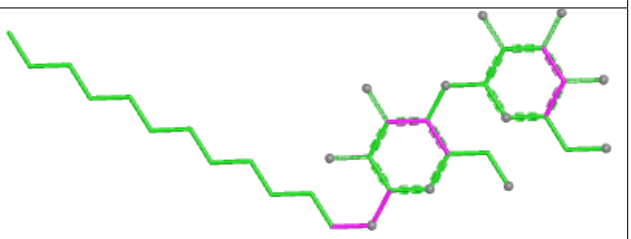
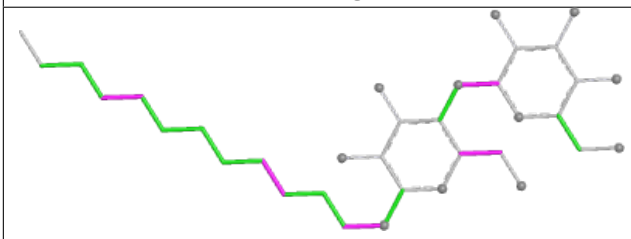

Bond angles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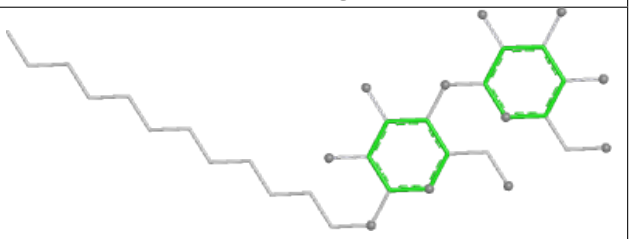
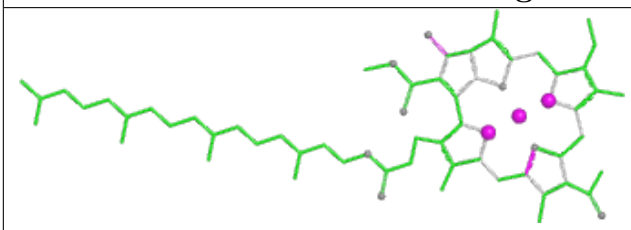

Rings

Ligand BCL AJ 102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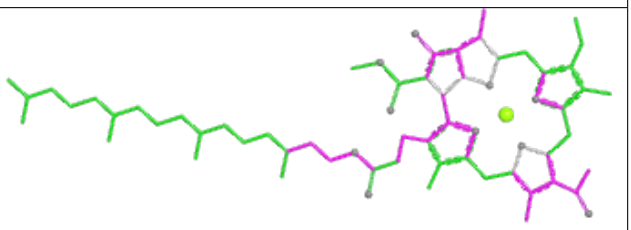
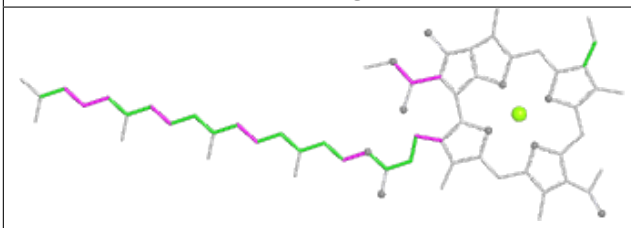

Bond angles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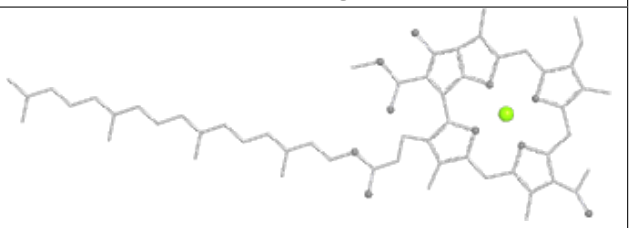
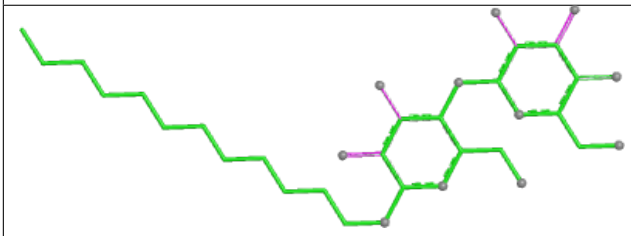

Rings

Ligand LMT BK 1004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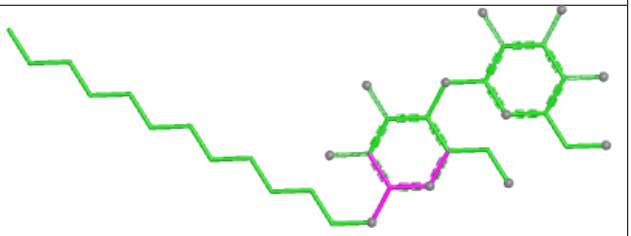
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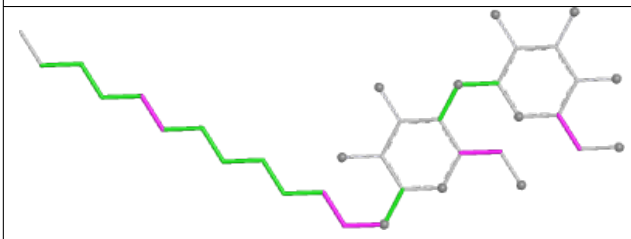
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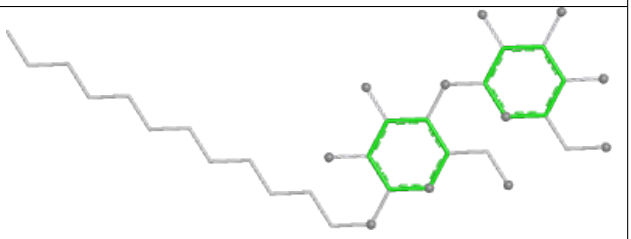
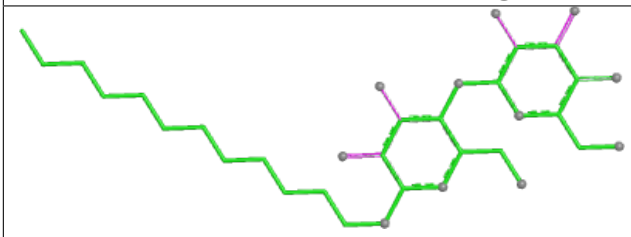

Rings

Ligand LMT BM 1004



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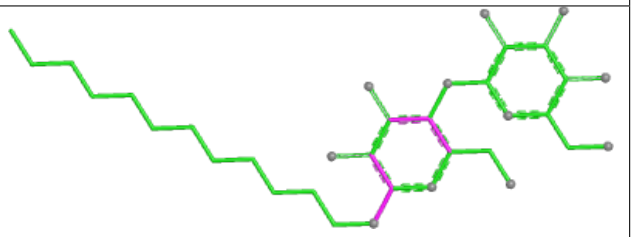

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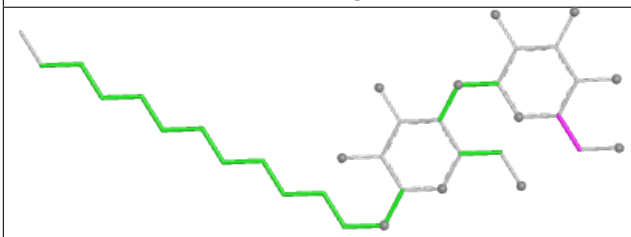

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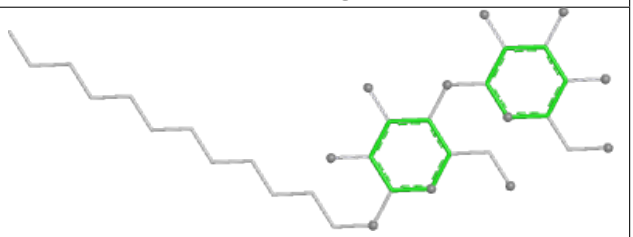
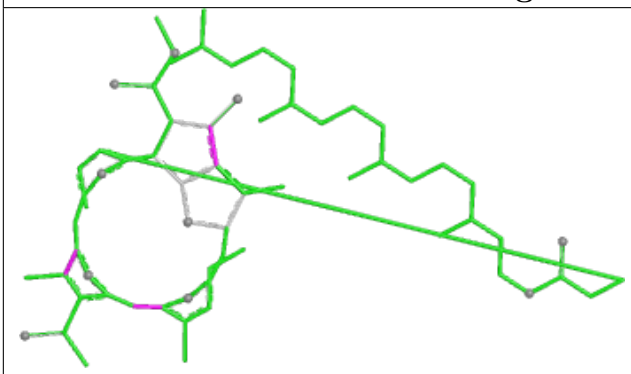


Rings

Ligand BPH L 1009



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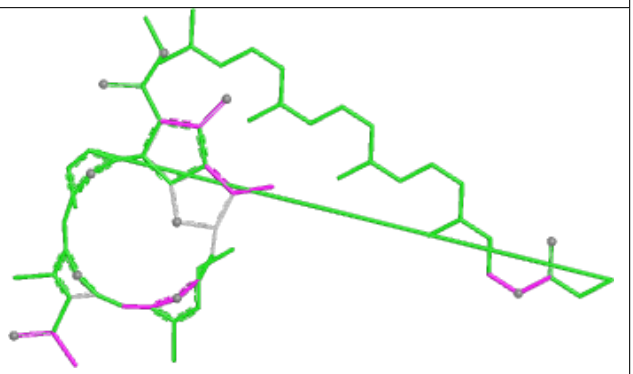
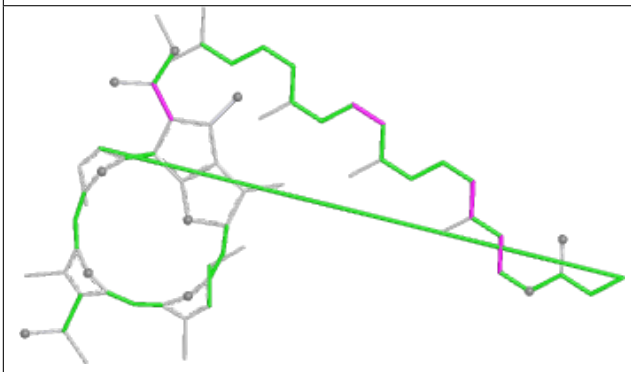


Bond angles



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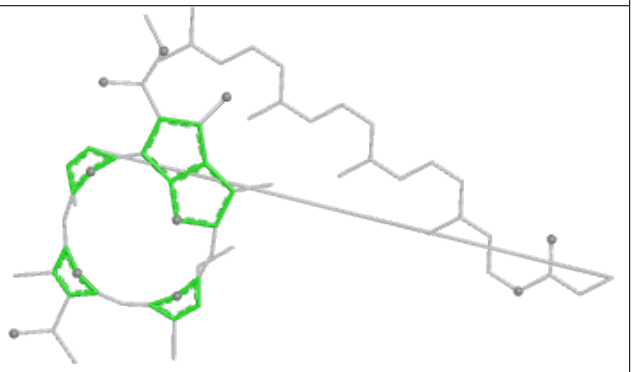
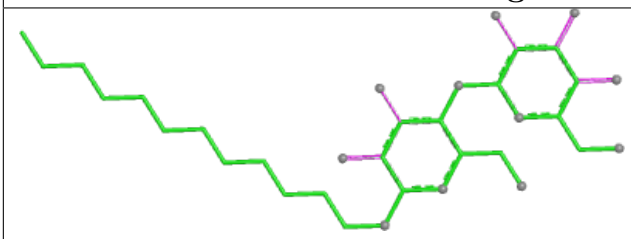


Rings

Ligand LMT BN 105



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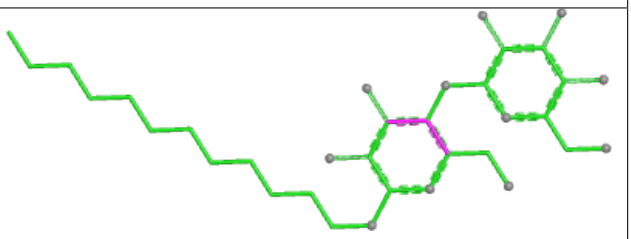

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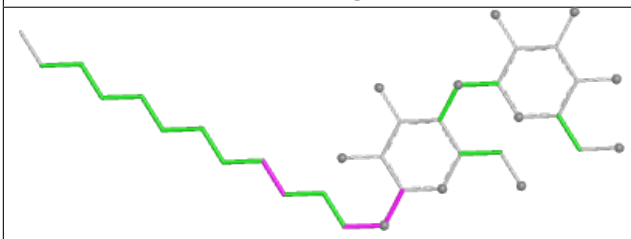

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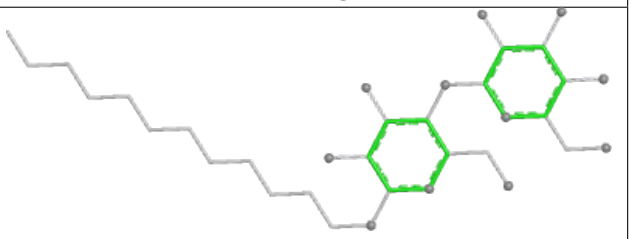
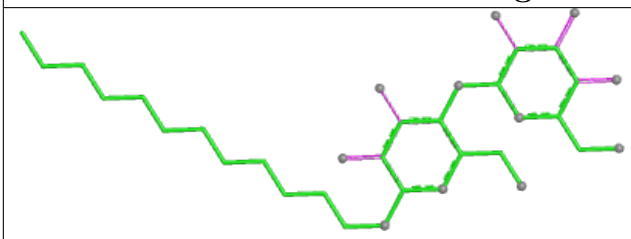


Rings

Ligand LMT bb 102



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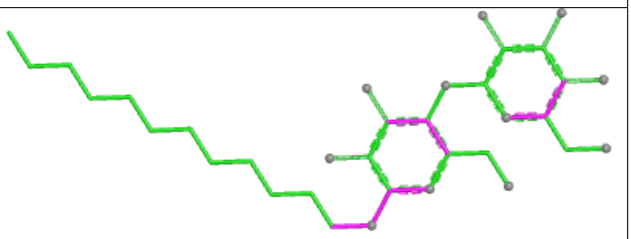
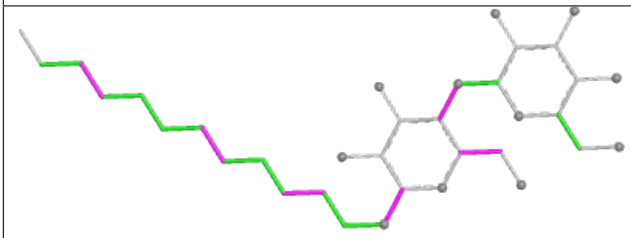


Bond angles



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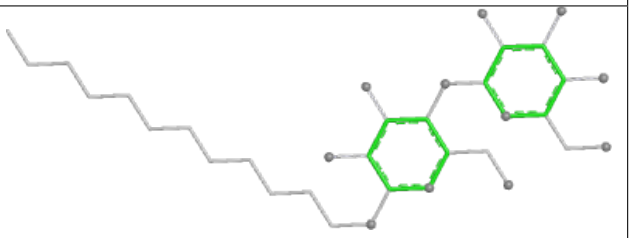
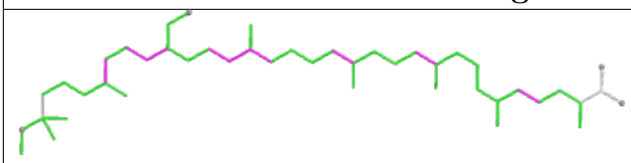


Rings

Ligand V7N BD 101



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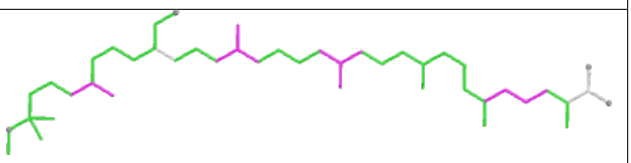

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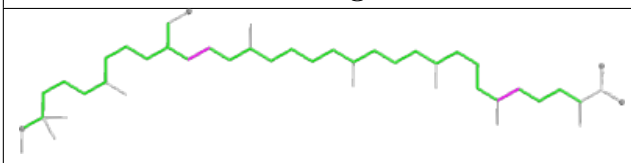
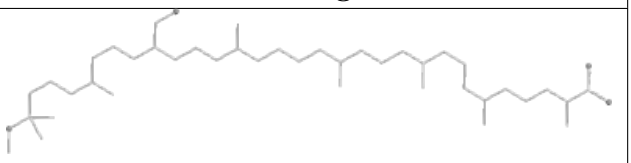
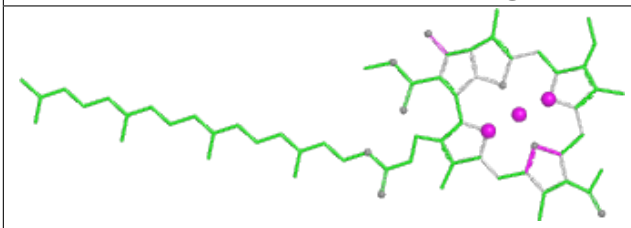


Torsions



Rings

Ligand BCL AE 1004



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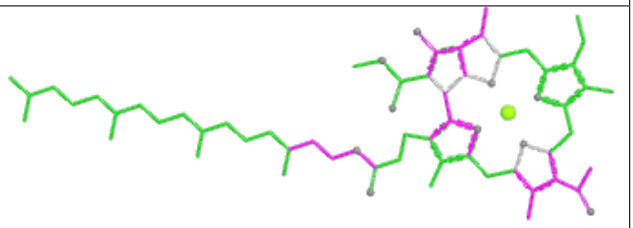
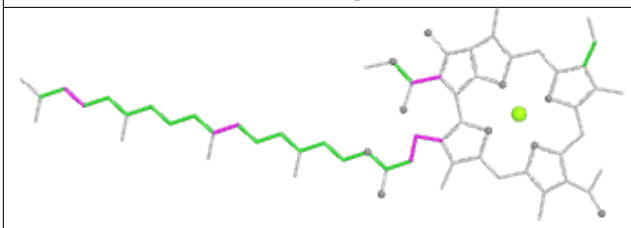


Bond angles



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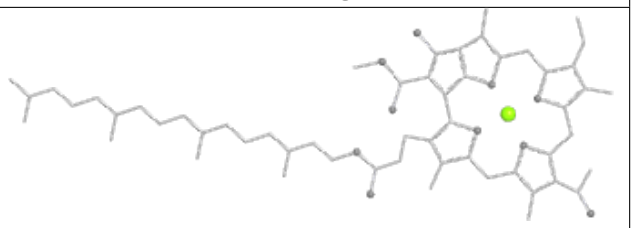
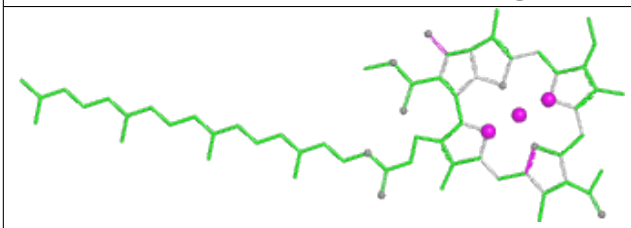


Rings

Ligand BCL AG 101



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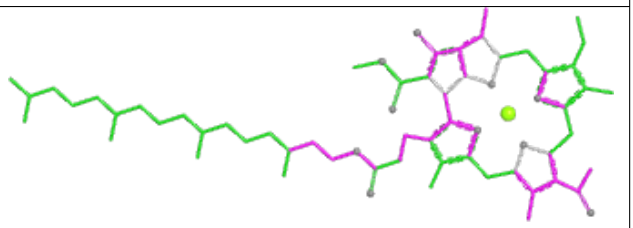
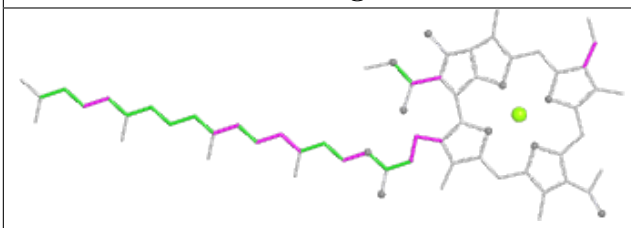


Bond angles



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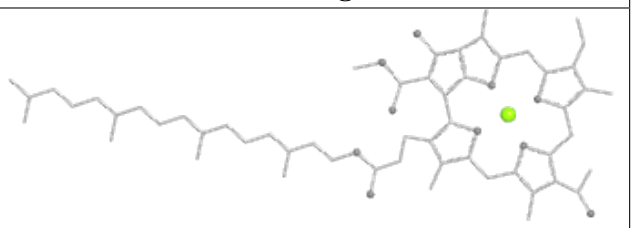
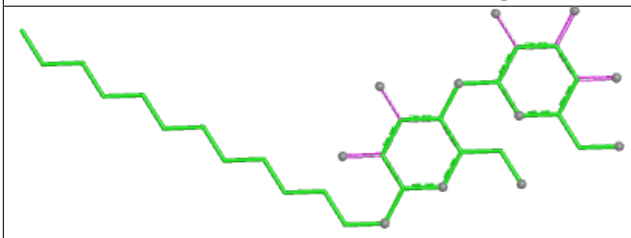


Rings

Ligand LMT BM 1003



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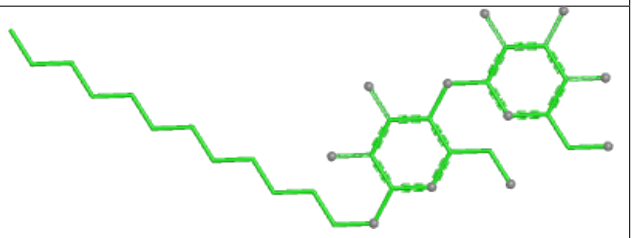
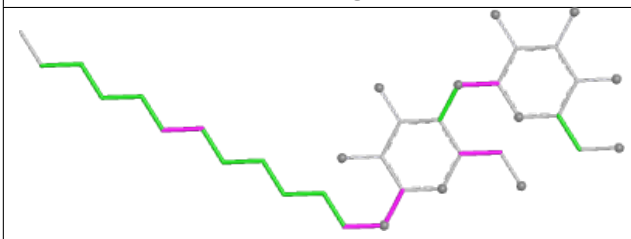


Bond angles



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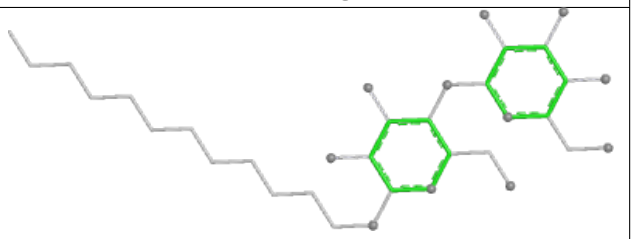
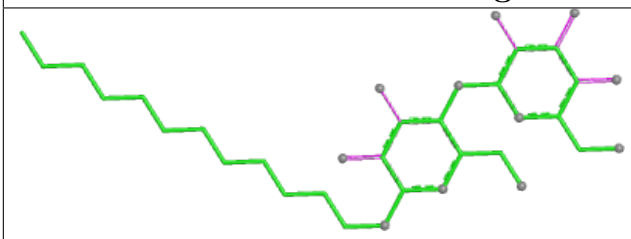
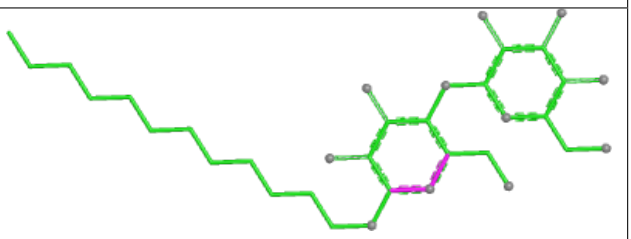


Rings

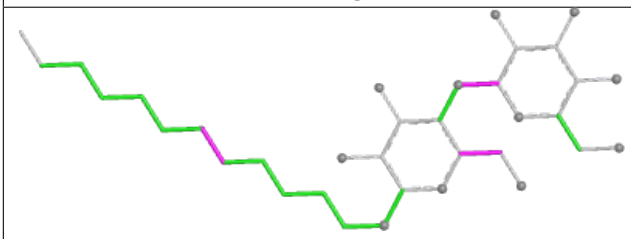
Ligand LMT BW 1004



Bond lengths



Bond angles



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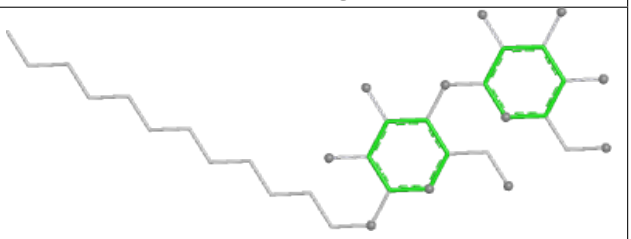
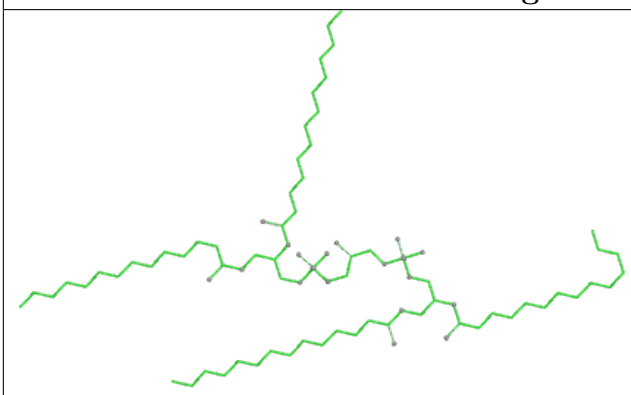
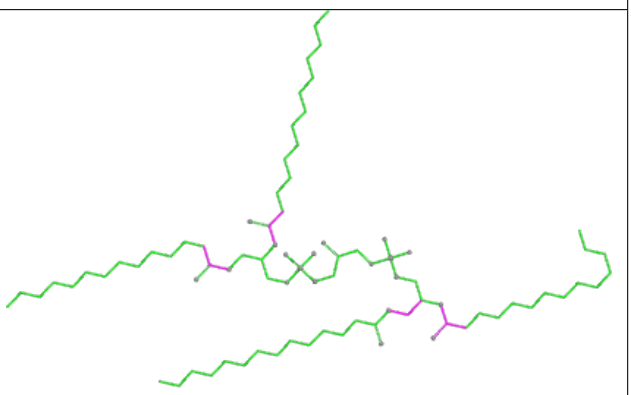


Rings

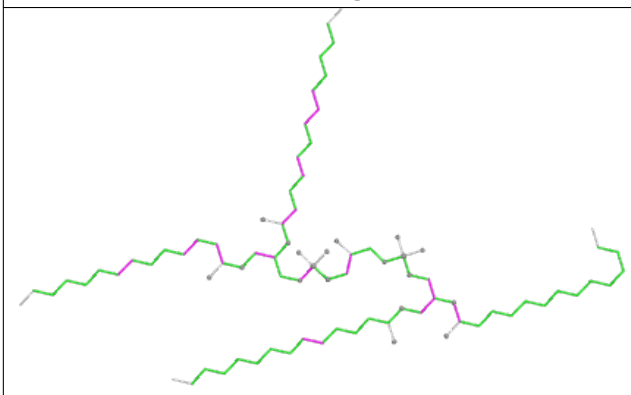
Ligand CD4 M 402



Bond lengths



Bond angles



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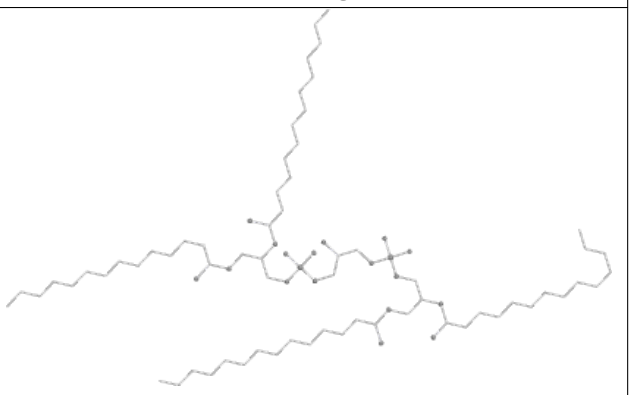
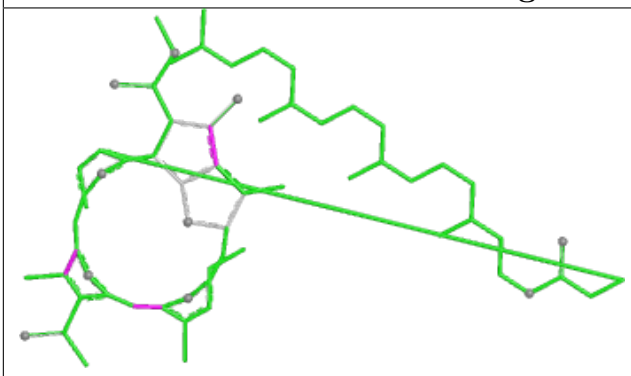
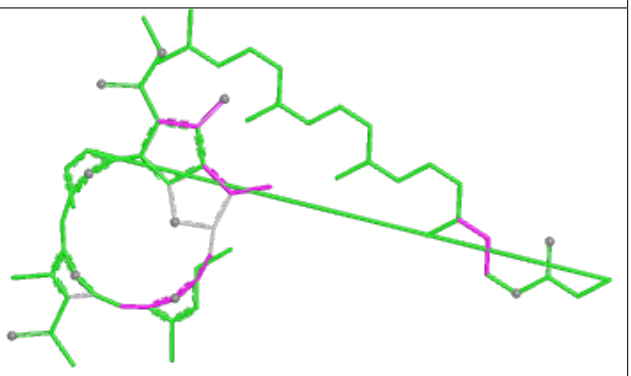


Rings

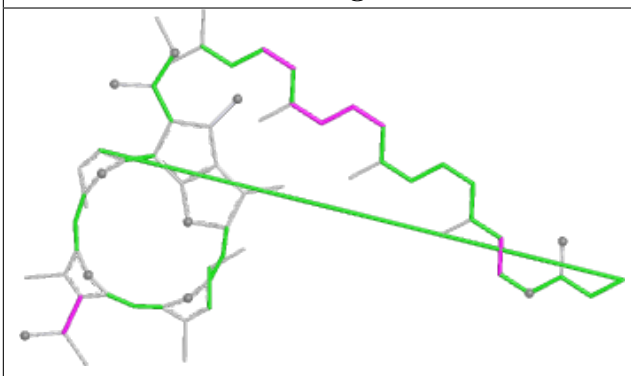
Ligand BPH M 406



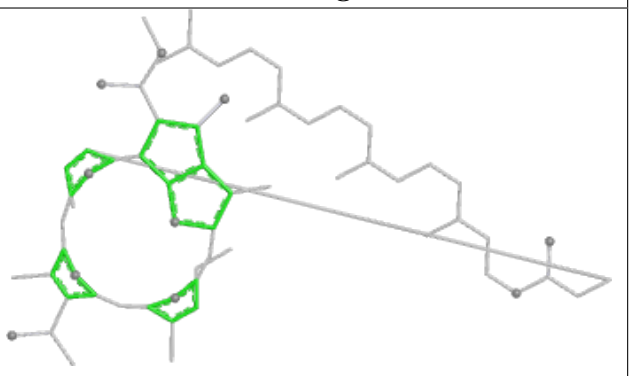
Bond lengths



Bond angles

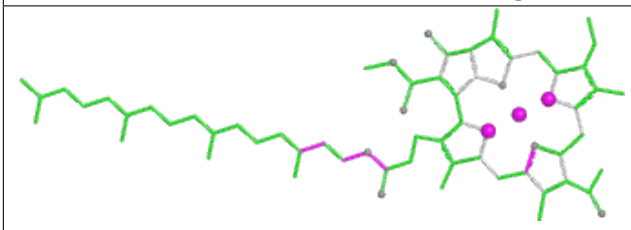


Torsions

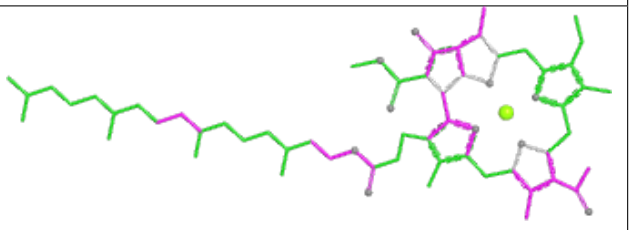


Rings

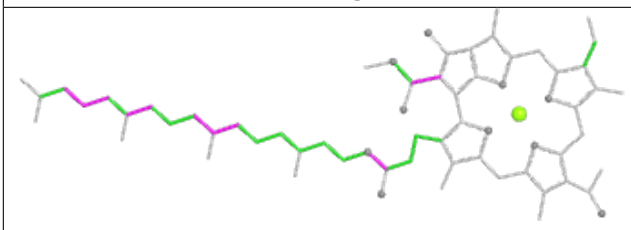
Ligand BCL BI 1003



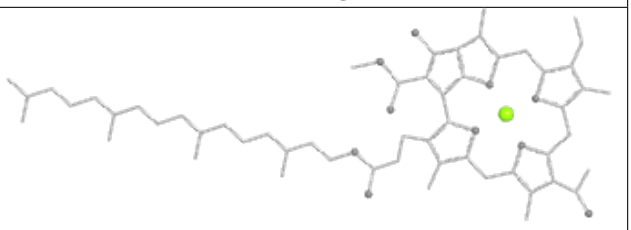
Bond lengths



Bond angles

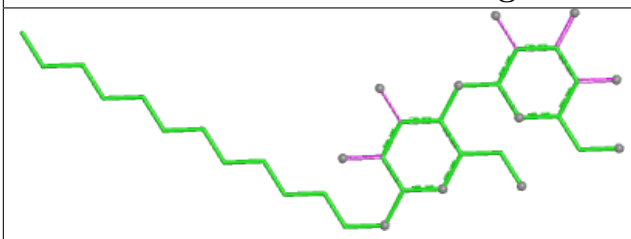


Torsions

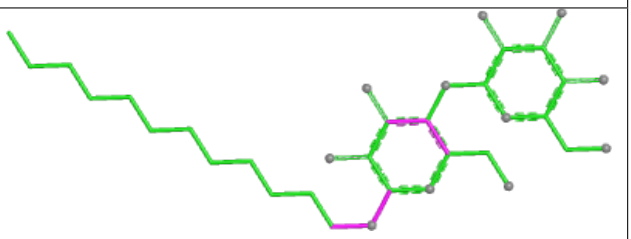


Rings

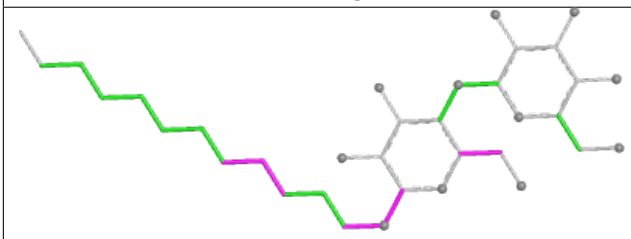
Ligand LMT BH 1003



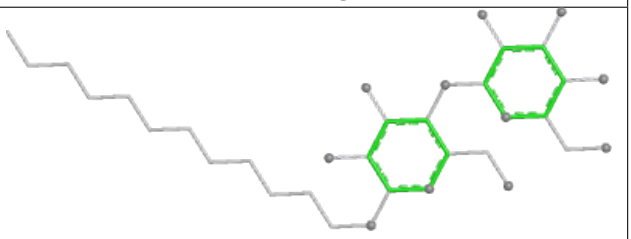
Bond lengths



Bond angles

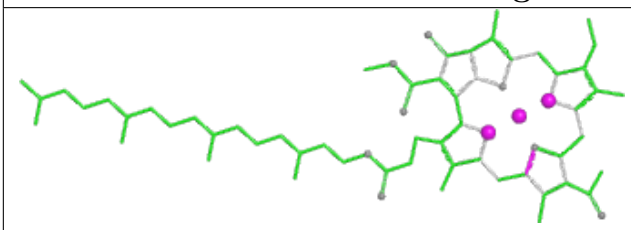


Torsions

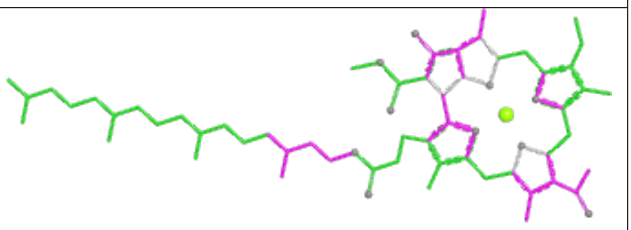


Rings

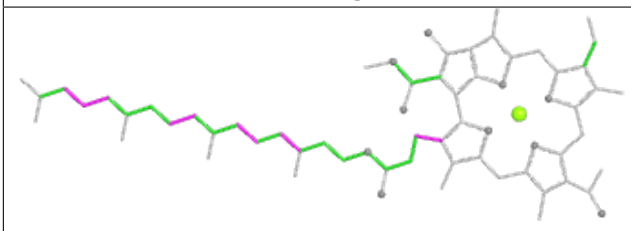
Ligand BCL bm 104



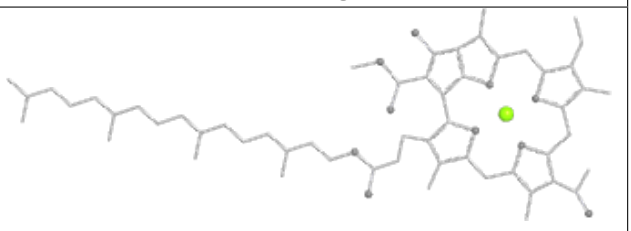
Bond lengths



Bond angles

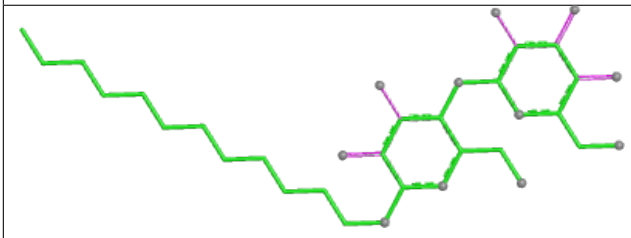


Torsions

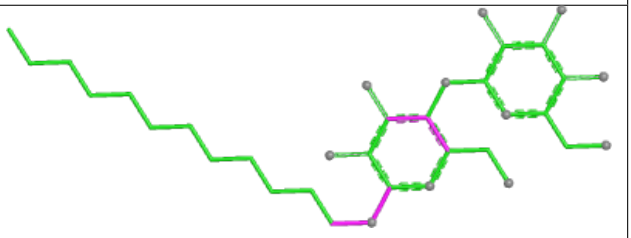


Rings

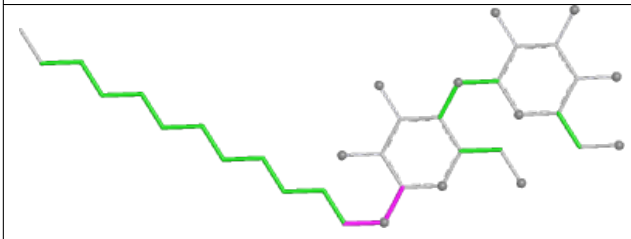
Ligand LMT BP 1004



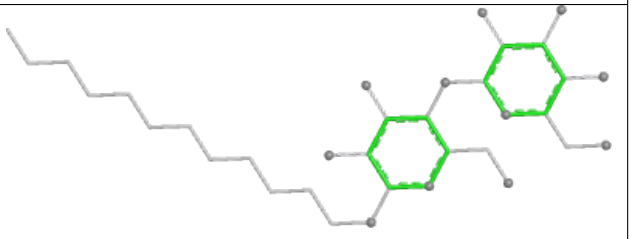
Bond lengths



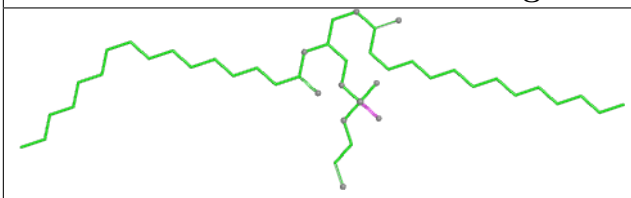
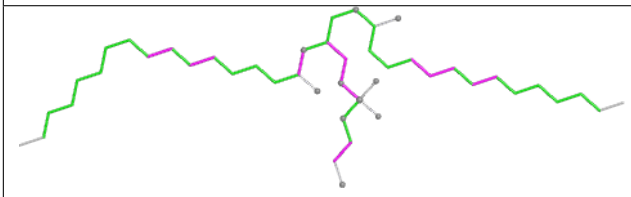
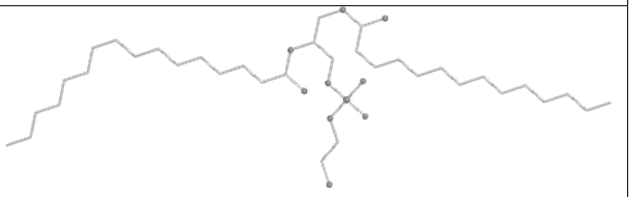
Bond angles

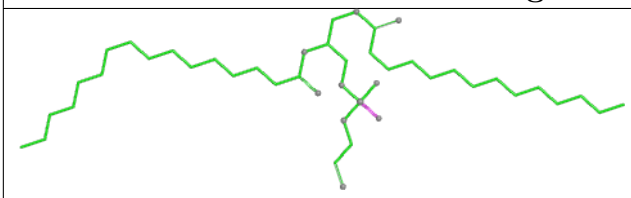
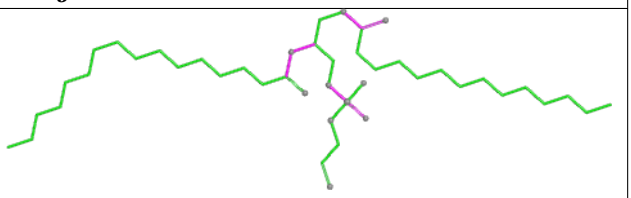
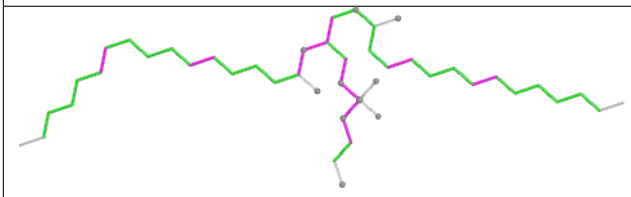
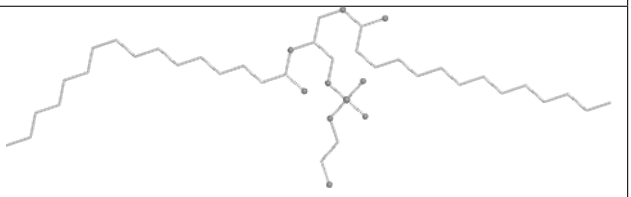


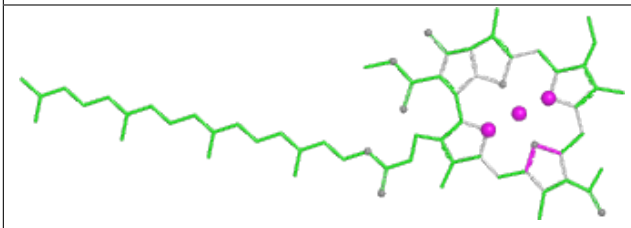
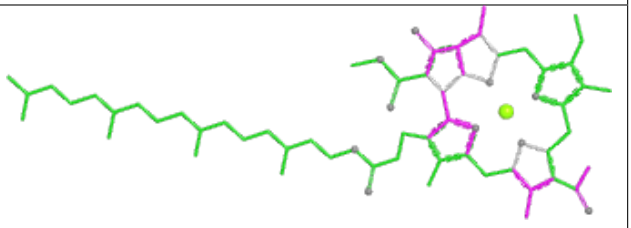
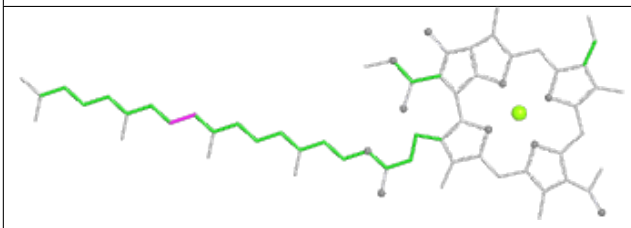
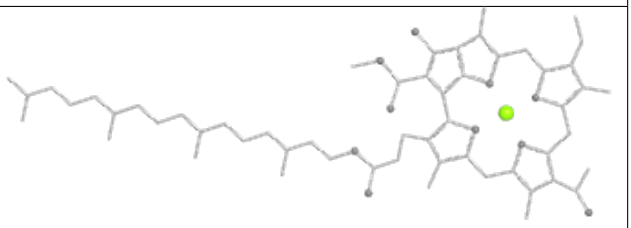
Torsions



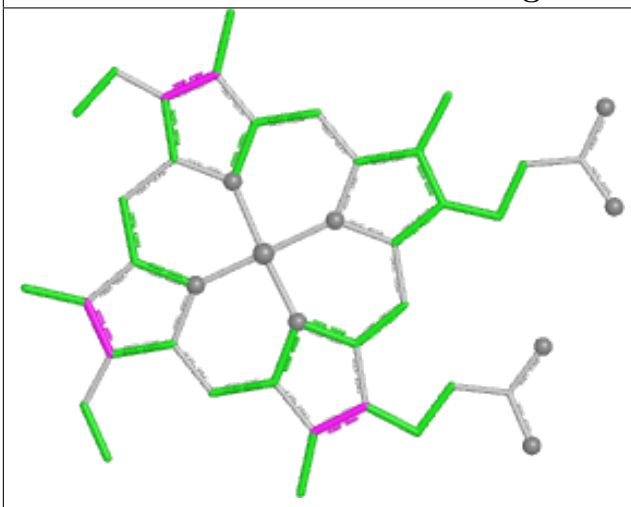
Rings

Ligand 0V9 bb 103	
 Bond lengths	 Bond angles
 Torsions	 Rings

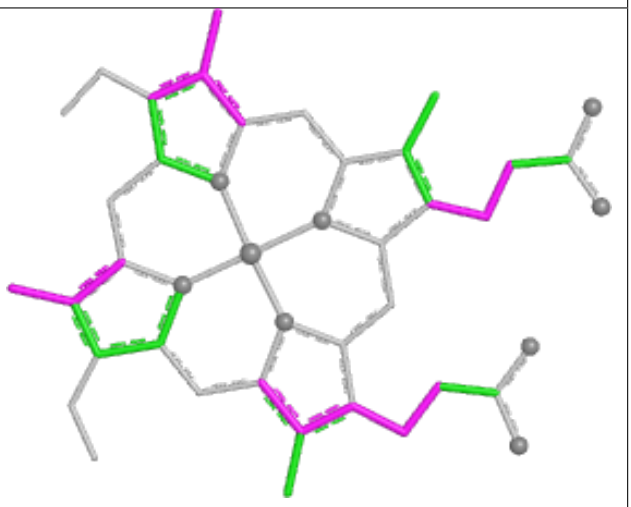
Ligand 0V9 bj 104	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand BCL AK 102	
 Bond lengths	 Bond angles
 Torsions	 Rings

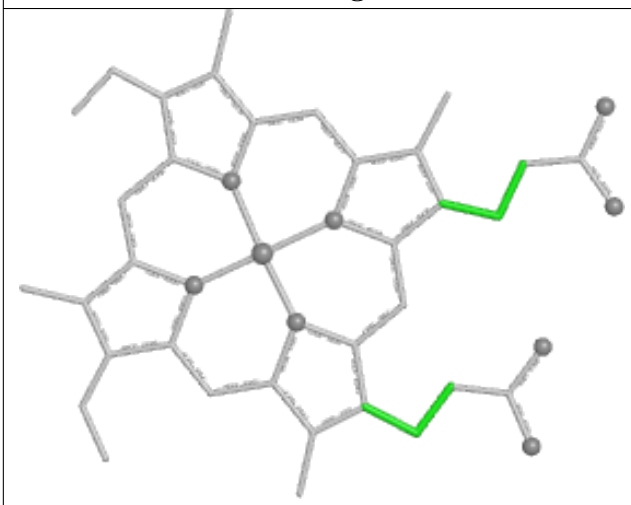
Ligand HEC C 402



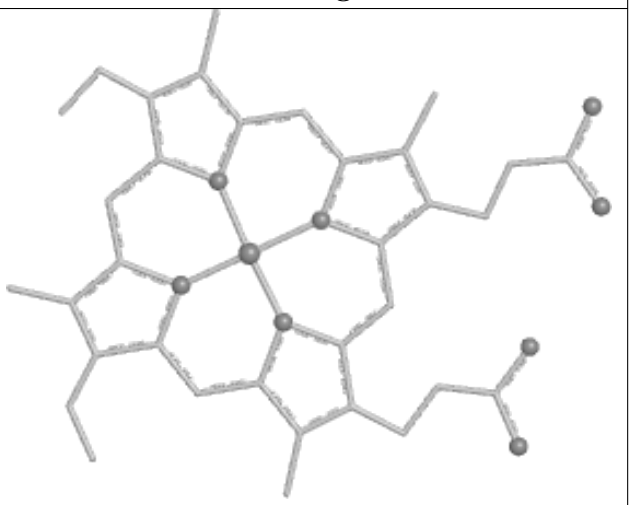
Bond lengths



Bond angles

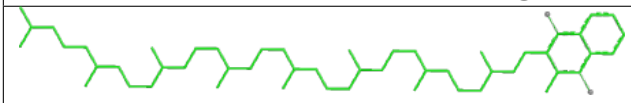


Torsions

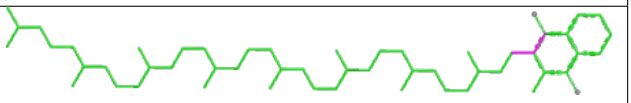


Rings

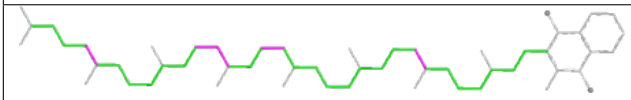
Ligand MQ8 L 1001



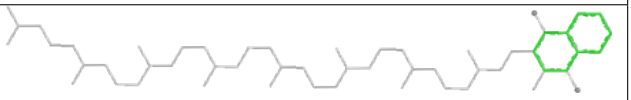
Bond lengths



Bond angles

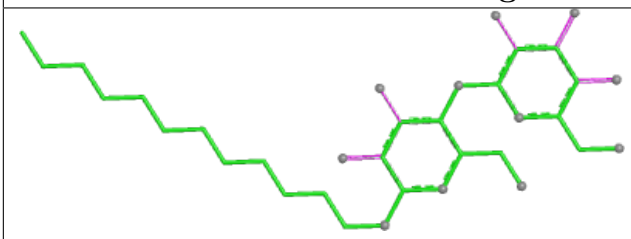


Torsions

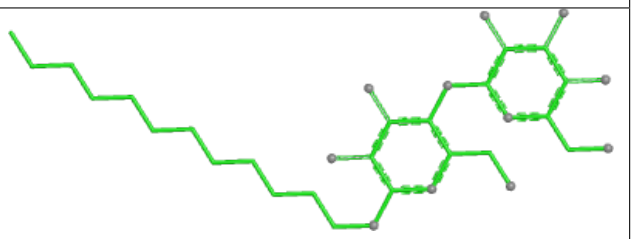


Rings

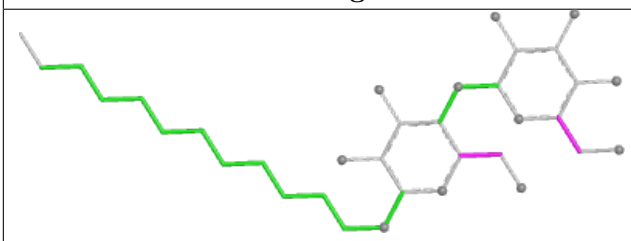
Ligand LMT BV 1003



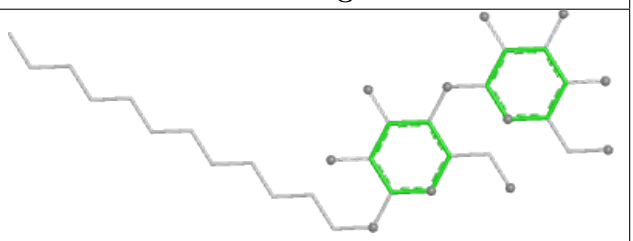
Bond lengths



Bond angles

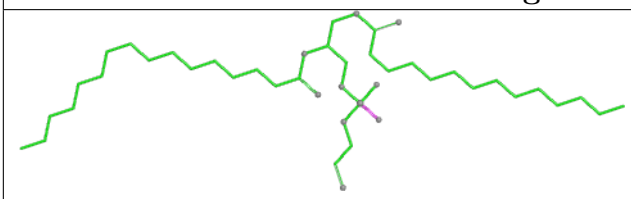


Torsions

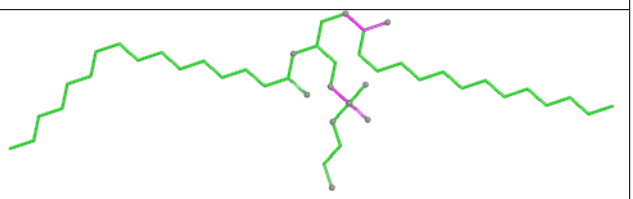


Rings

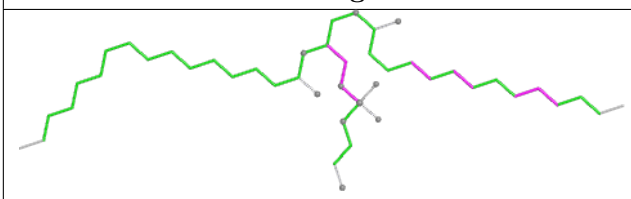
Ligand 0V9 bn 104



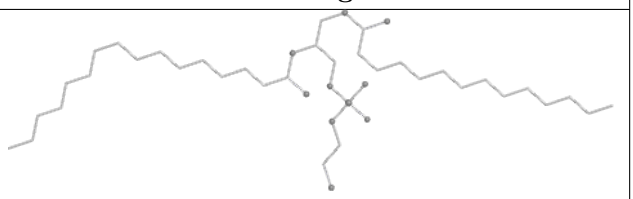
Bond lengths



Bond angles

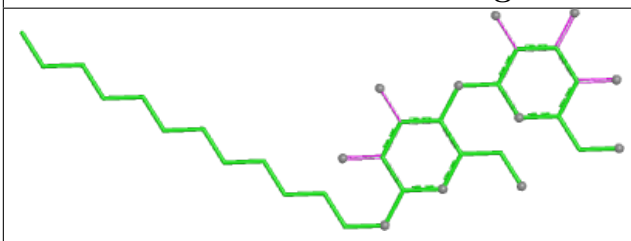


Torsions

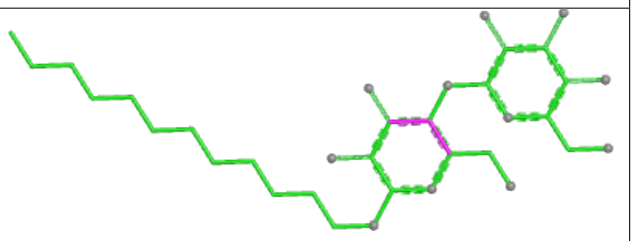


Rings

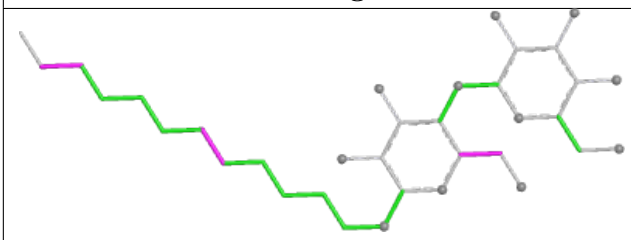
Ligand LMT BW 1002



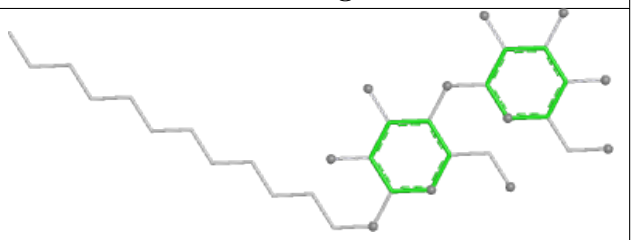
Bond lengths



Bond angles

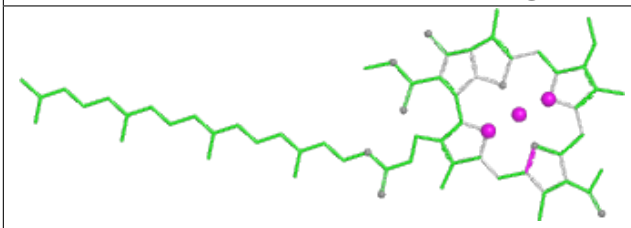


Torsions

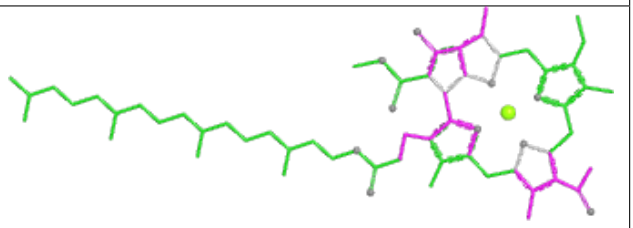


Rings

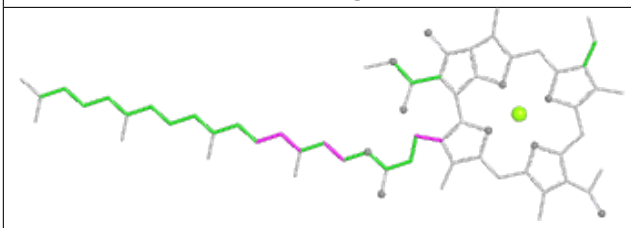
Ligand BCL bi 104



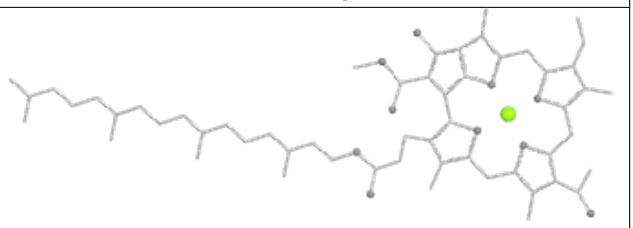
Bond lengths



Bond angles

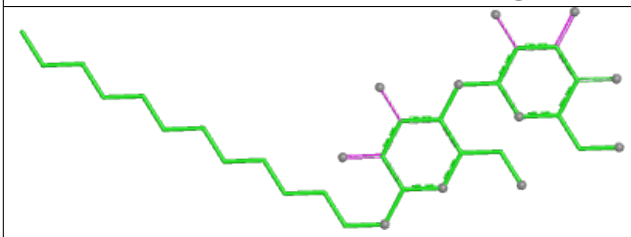


Torsions

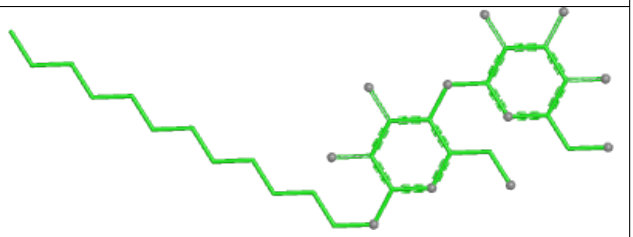


Rings

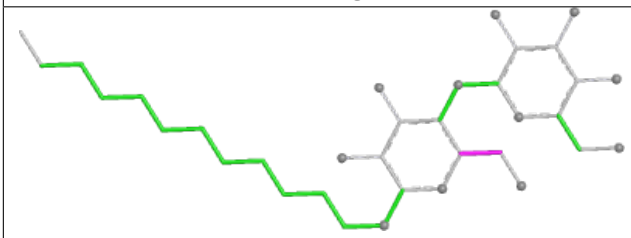
Ligand LMT AL 102



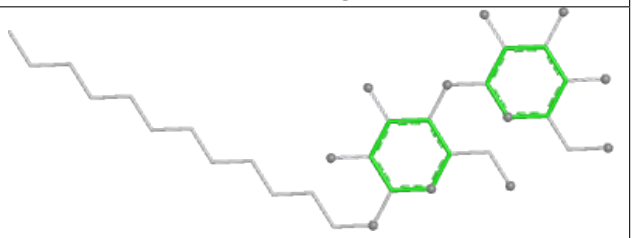
Bond lengths



Bond angles

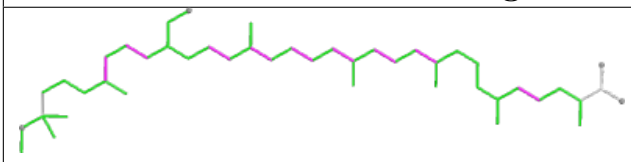


Torsions

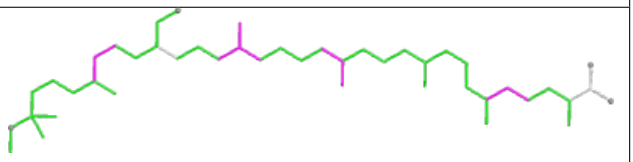


Rings

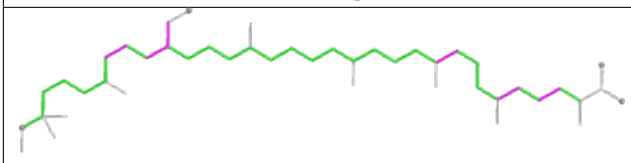
Ligand V7N BU 1001



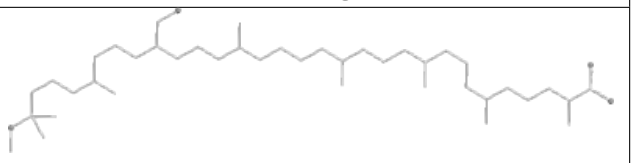
Bond lengths



Bond angles

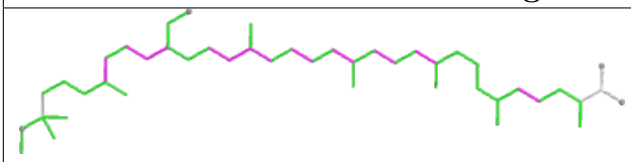


Torsions

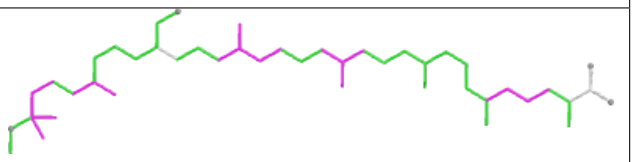


Rings

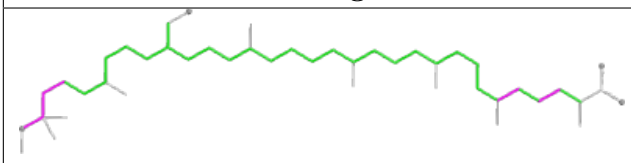
Ligand V7N bi 101



Bond lengths



Bond angles



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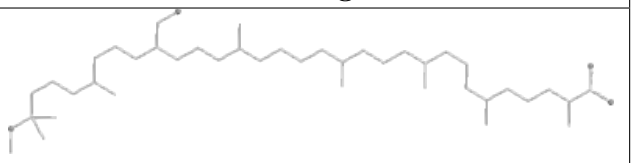
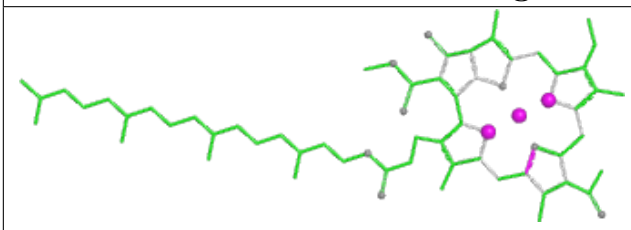
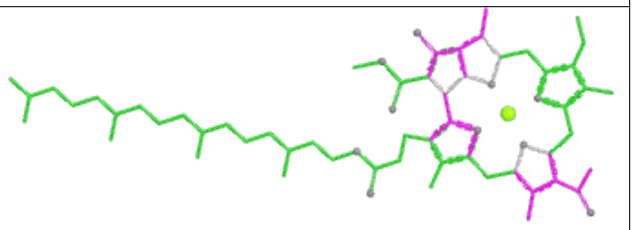


Rings

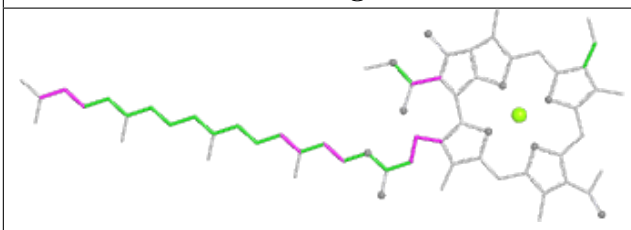
Ligand BCL BB 103



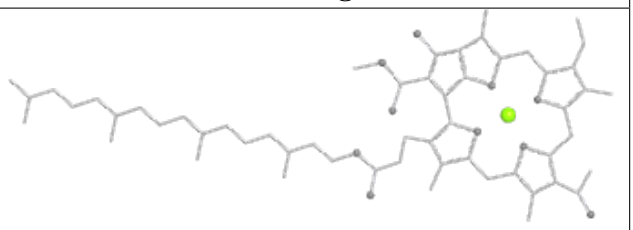
Bond lengths



Bond angles

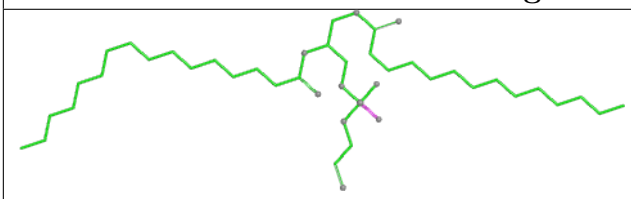


Torsions

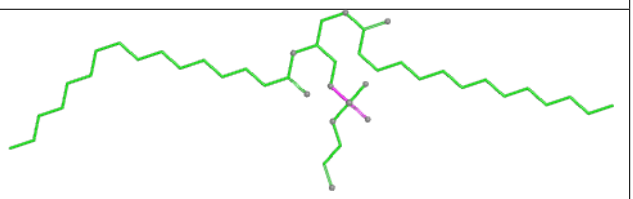


Rings

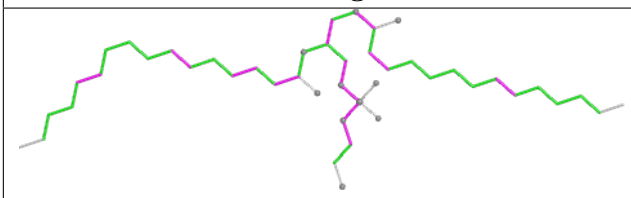
Ligand 0V9 bk 104



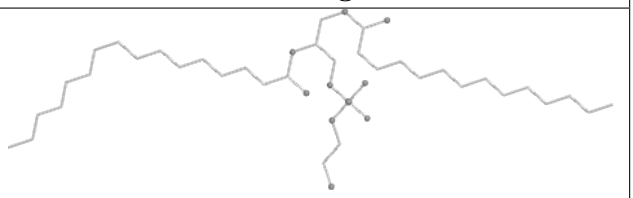
Bond lengths



Bond angles

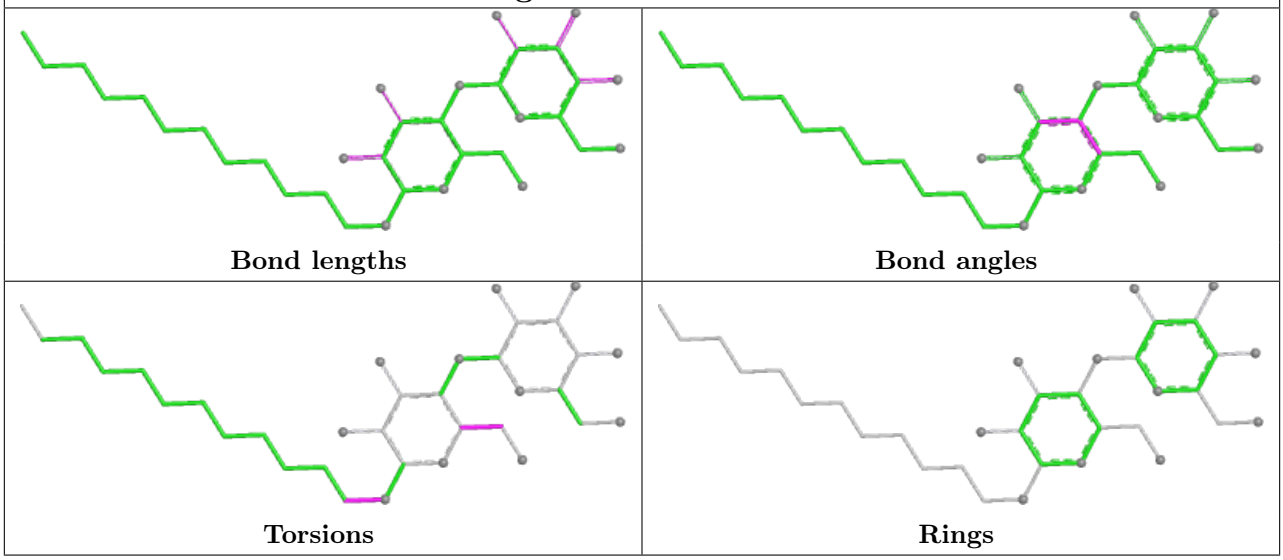


Torsions

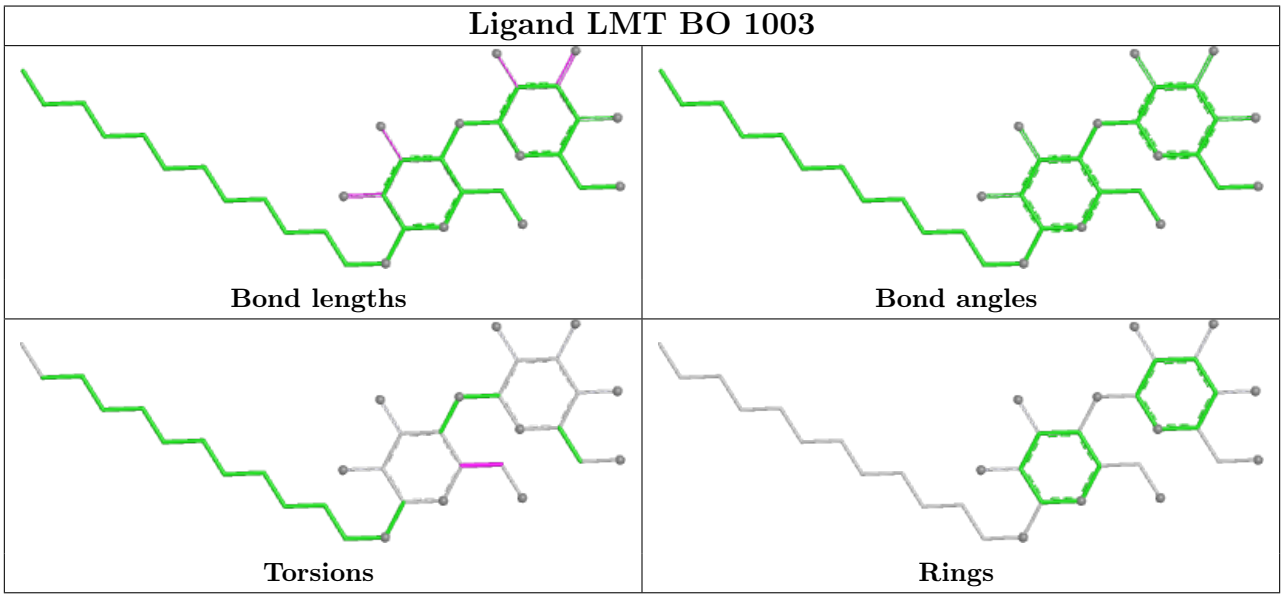


Rings

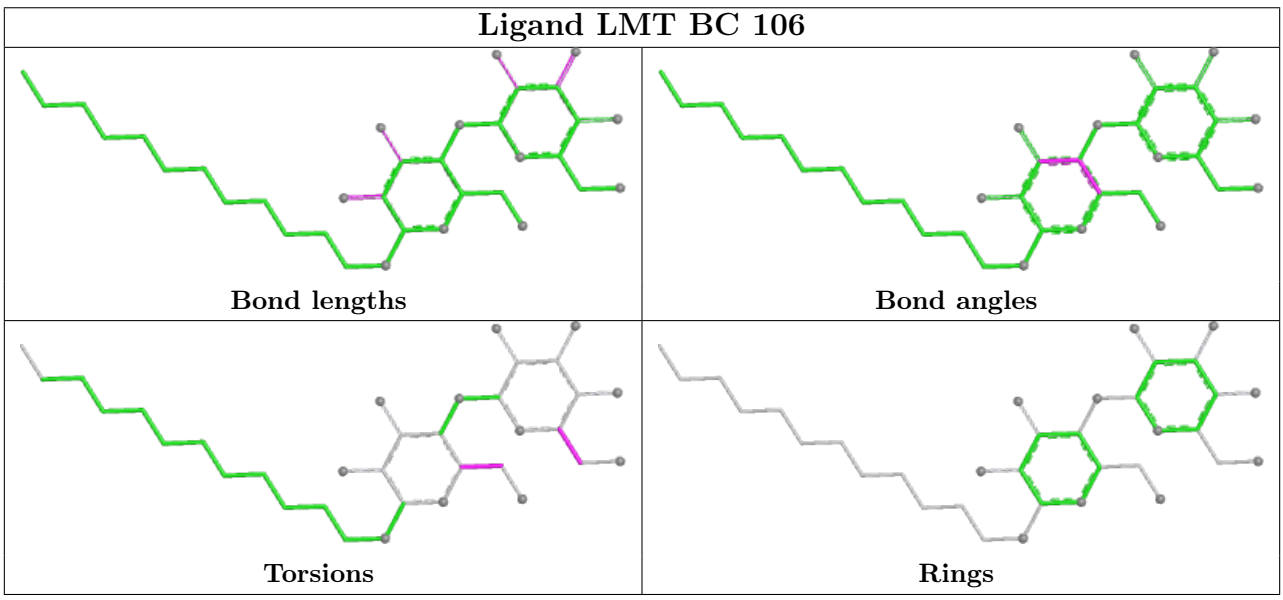
Ligand LMT L 1007



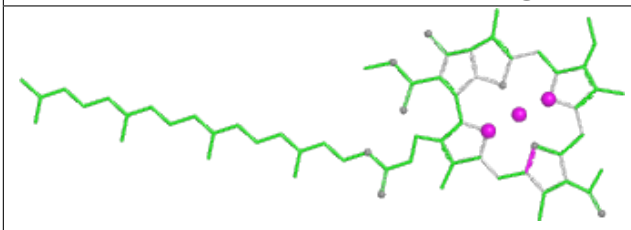
Ligand LMT BO 1003



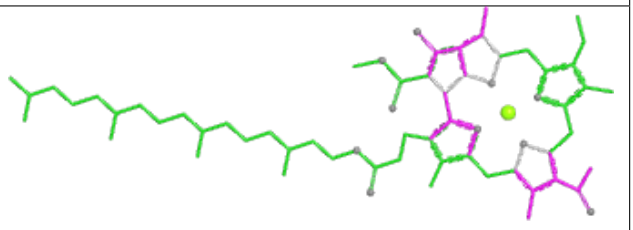
Ligand LMT BC 106



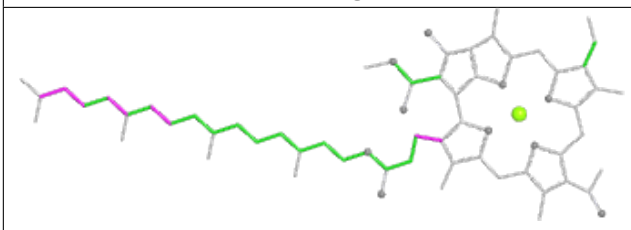
Ligand BCL bb 104



Bond lengths



Bond angles



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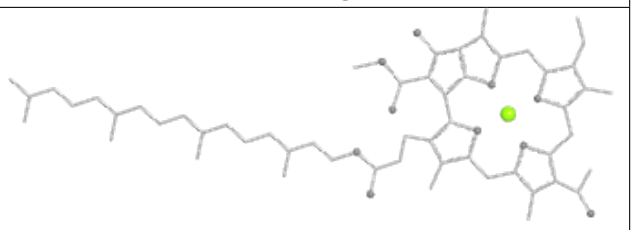
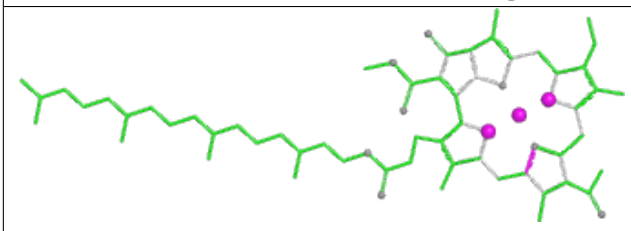
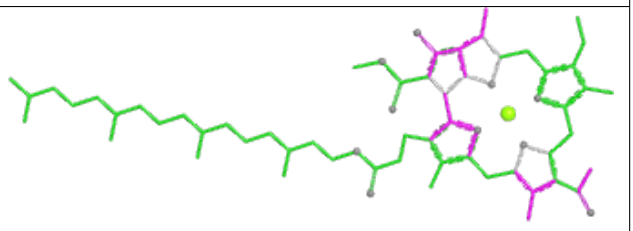


Rings

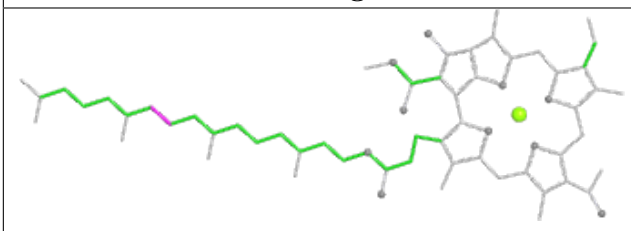
Ligand BCL AO 1002



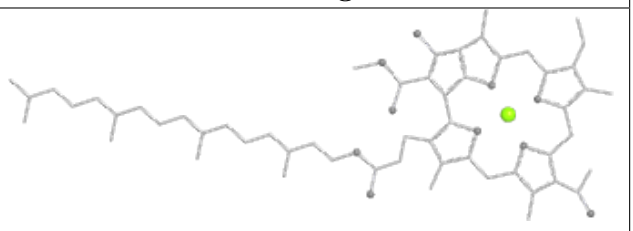
Bond lengths



Bond angles

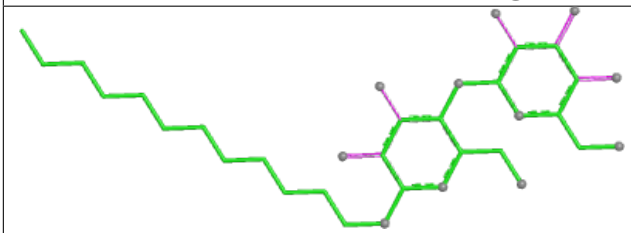


Torsions

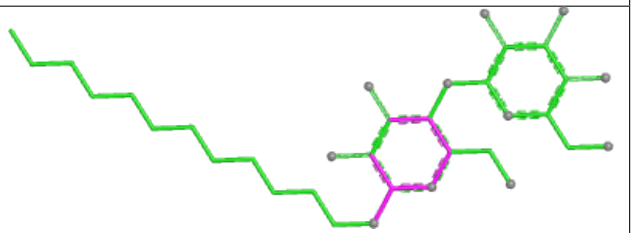


Rings

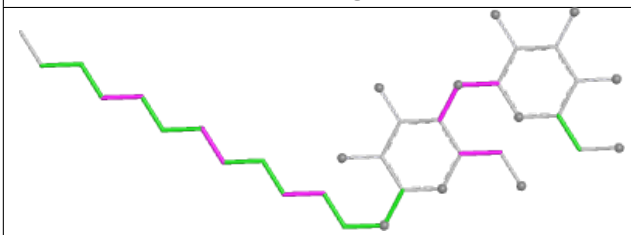
Ligand LMT AD 101



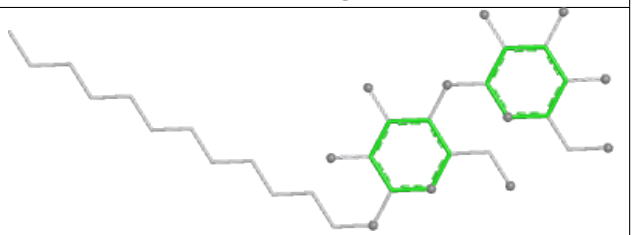
Bond lengths



Bond angles

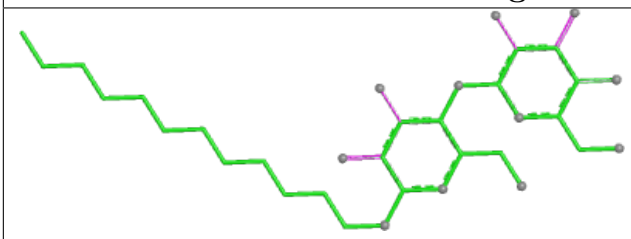


Torsions

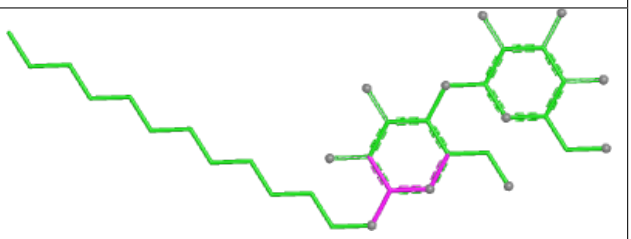


Rings

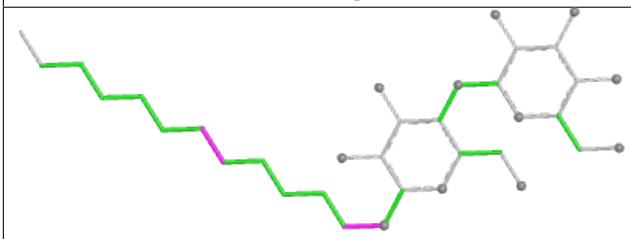
Ligand LMT BB 102



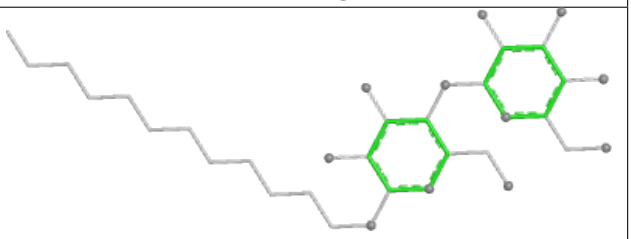
Bond lengths



Bond angles

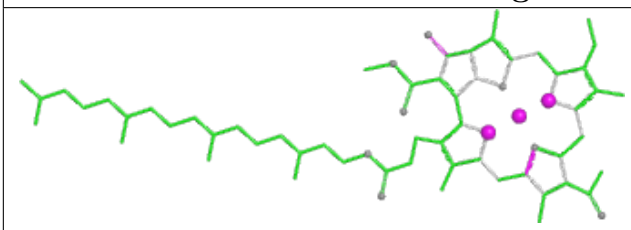


Torsions

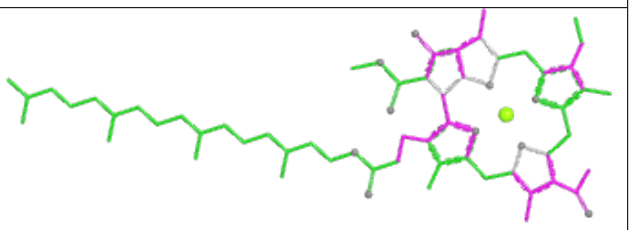


Rings

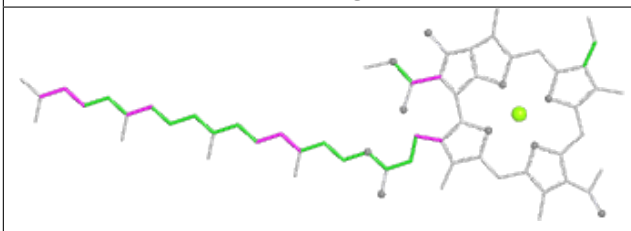
Ligand BCL AC 101



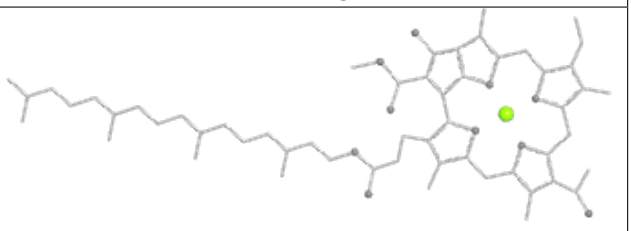
Bond lengths



Bond angles

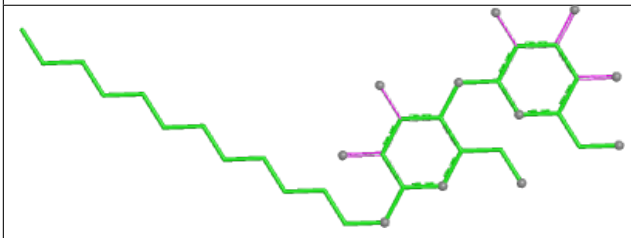


Torsions

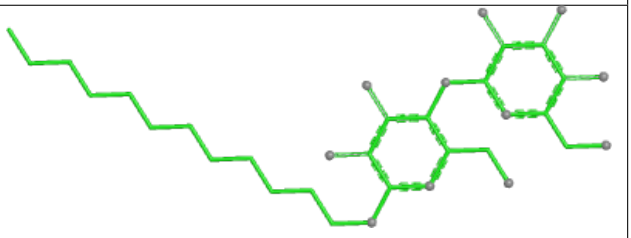


Rings

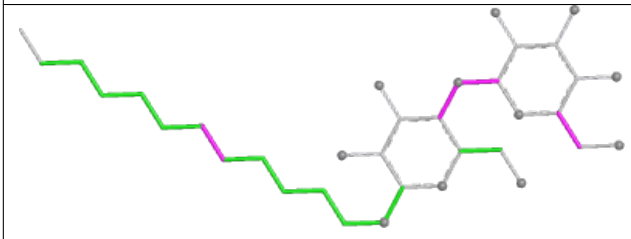
Ligand LMT BP 1002



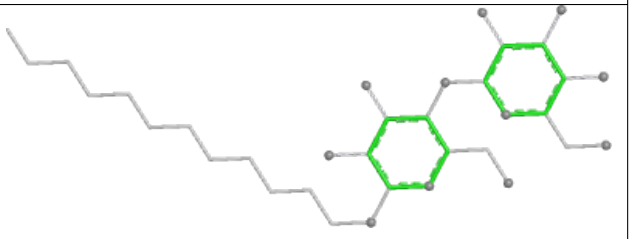
Bond lengths



Bond angles

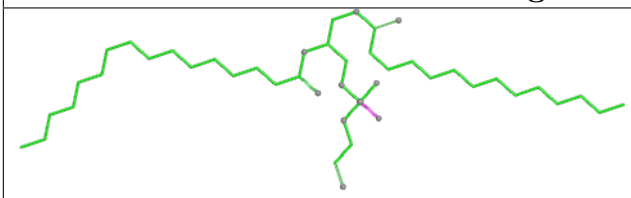


Torsions

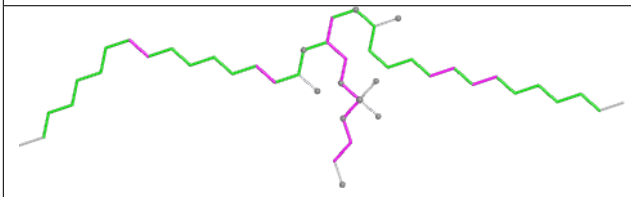


Rings

Ligand 0V9 aj 101


Bond lengths


Bond angles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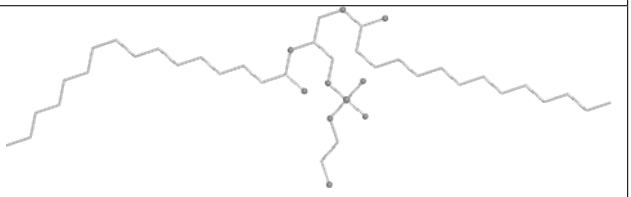
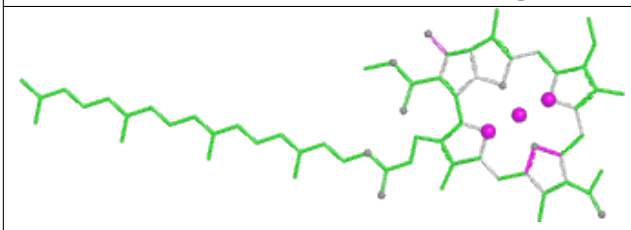
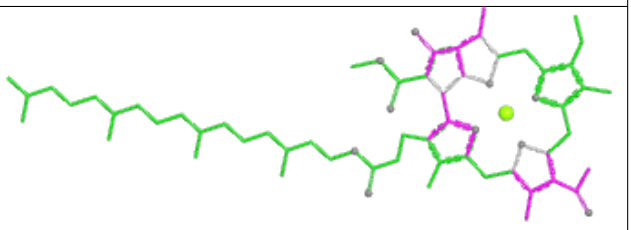
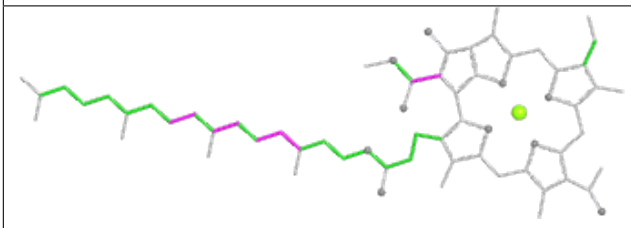
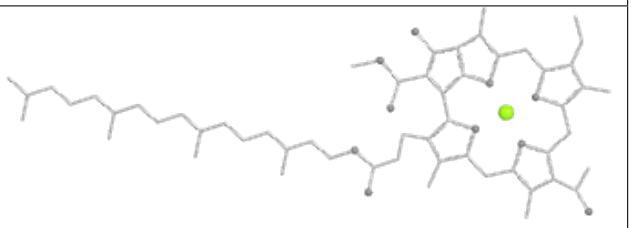

Rings

Ligand BCL AP 103

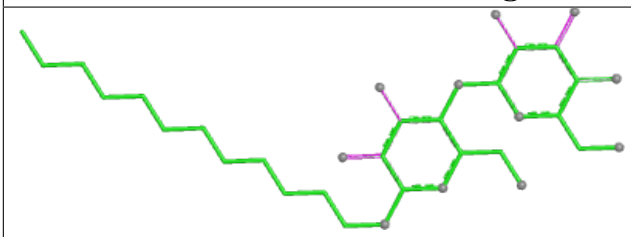

Bond lengths

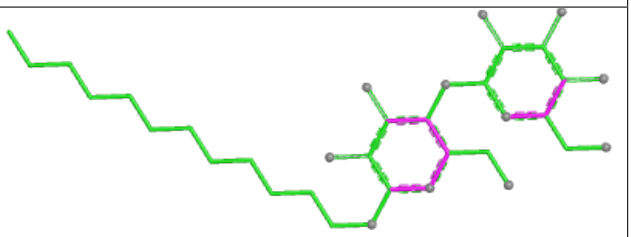

Bond angles

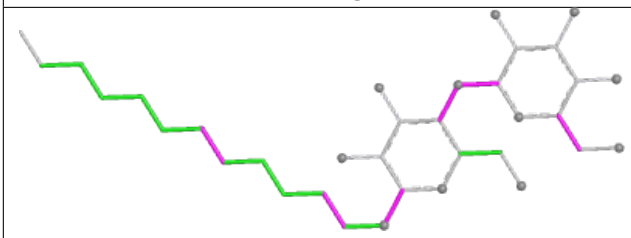

Torsions

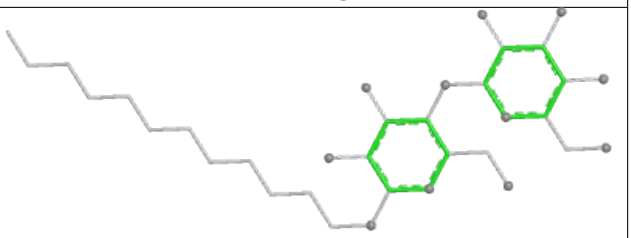

Rings

Ligand LMT BL 1004

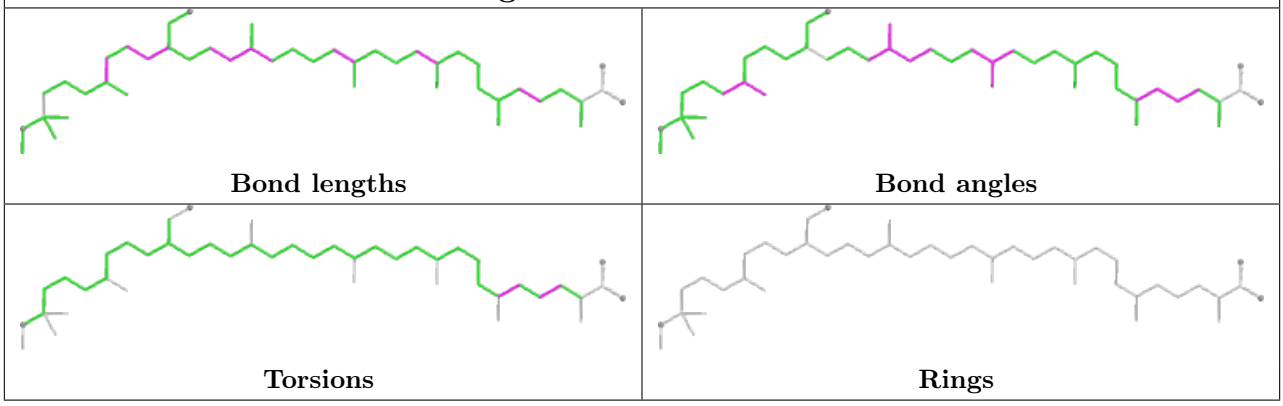

Bond lengths


Bond angles

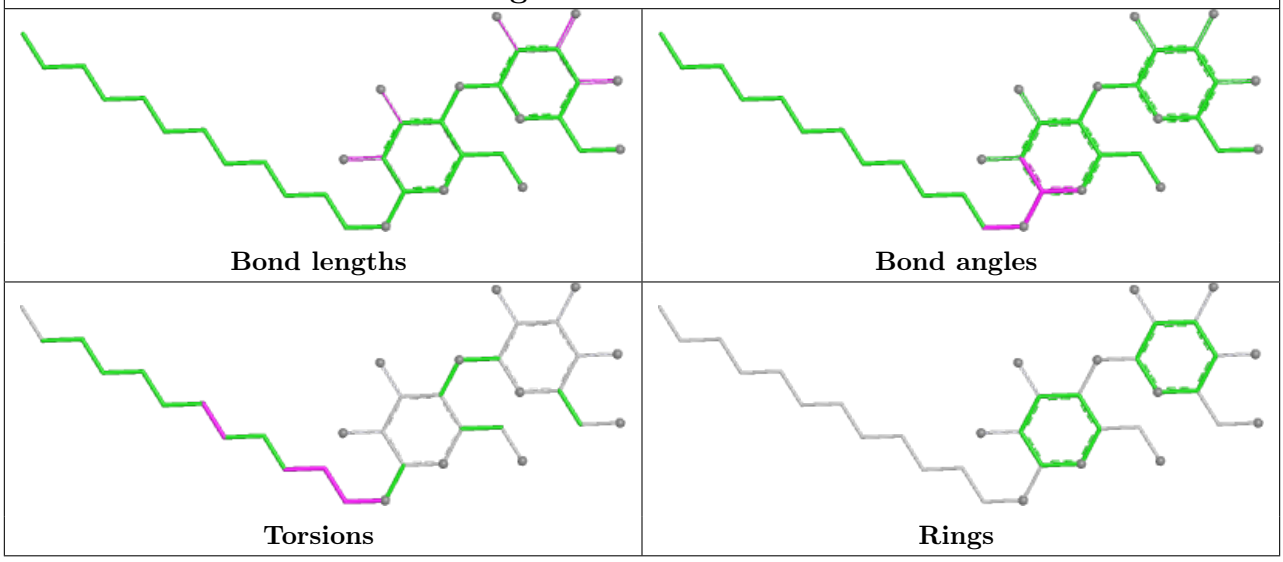

Torsions


Rings

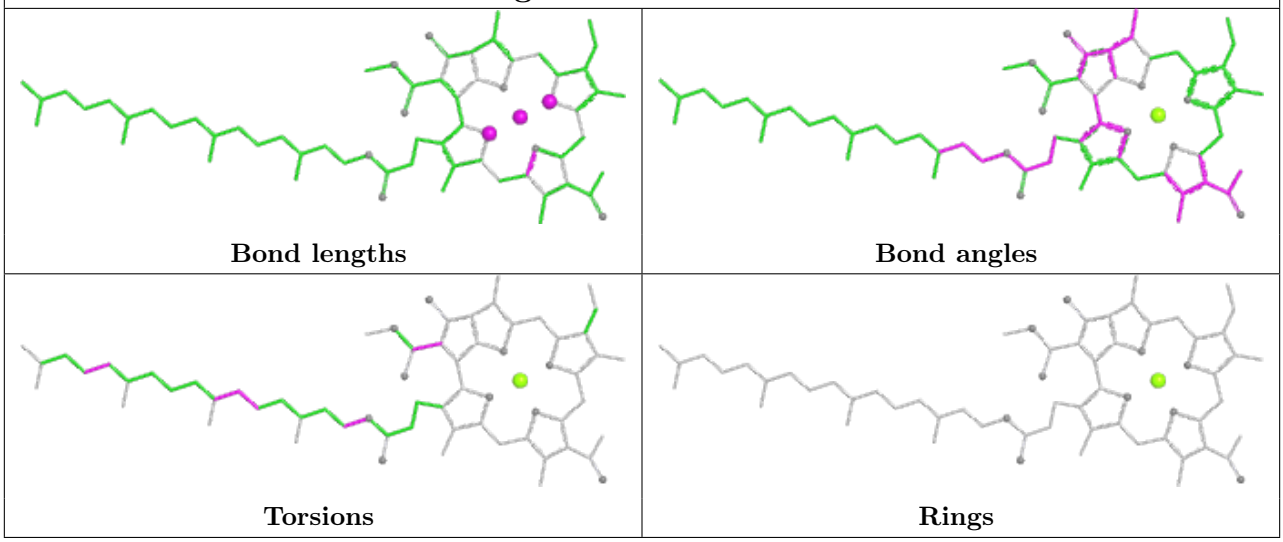
Ligand V7N BW 1001



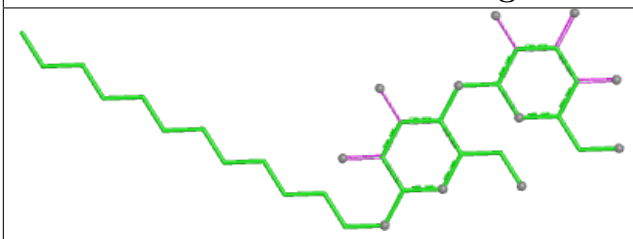
Ligand LMT BT 101



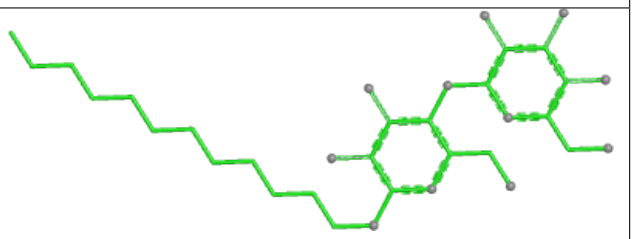
Ligand BCL BE 104



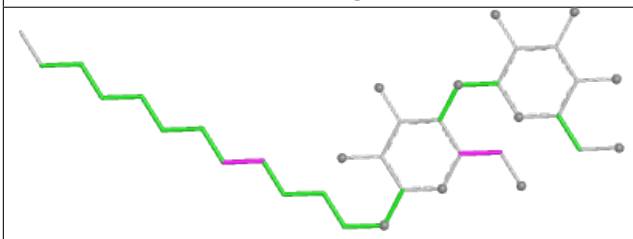
Ligand LMT BH 1004



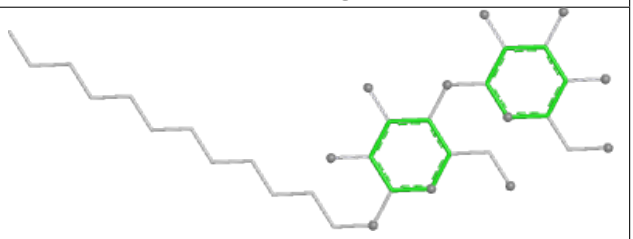
Bond lengths



Bond angles

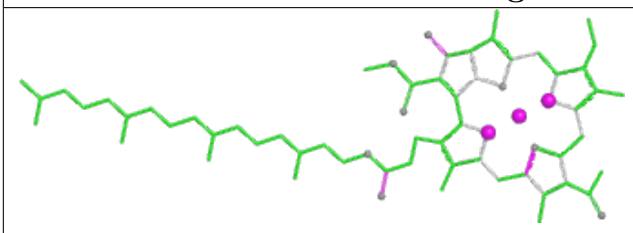


Torsions

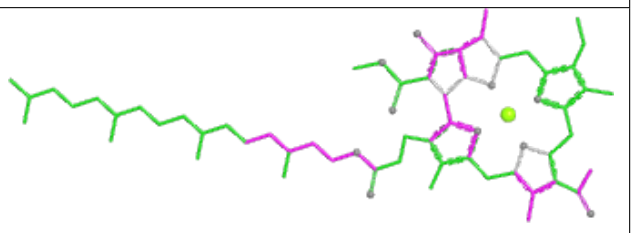


Rings

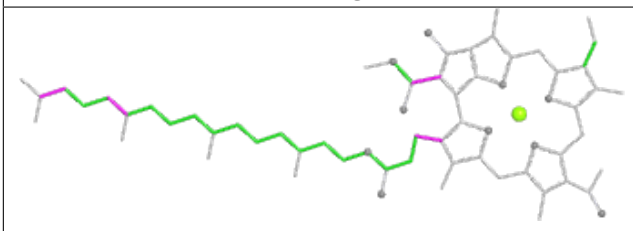
Ligand BCL AM 102



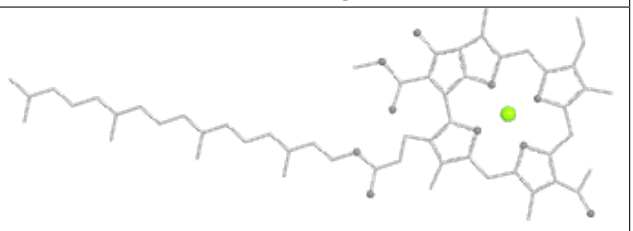
Bond lengths



Bond angles

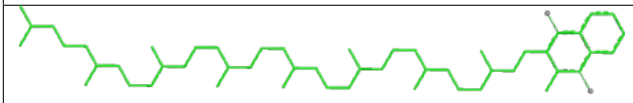


Torsions



Rings

Ligand MQ8 M 407



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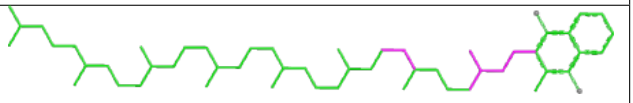
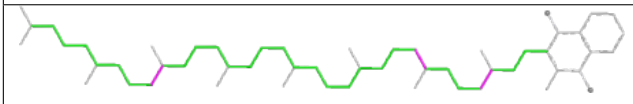


Bond angles



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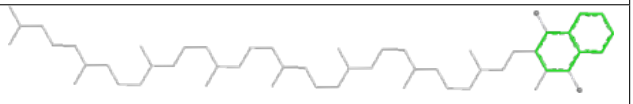
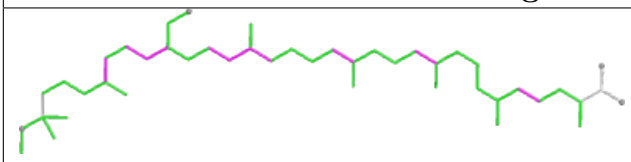
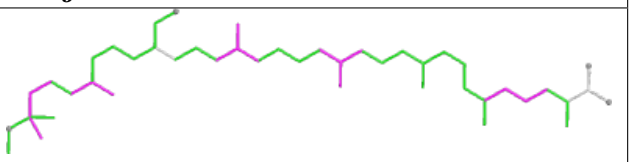
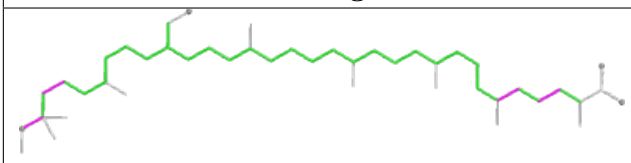
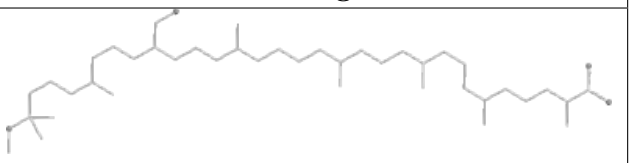
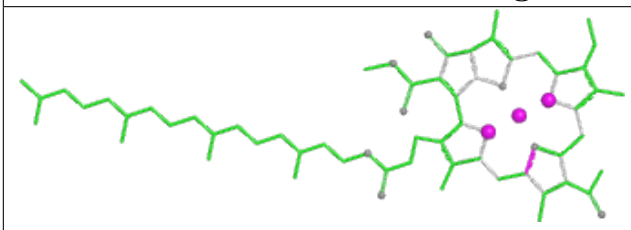
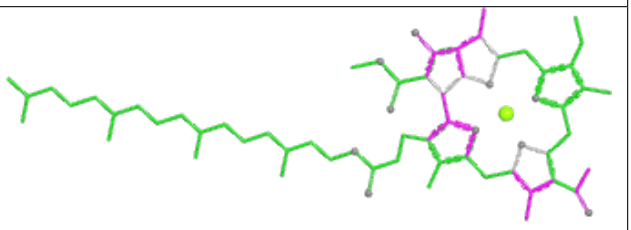
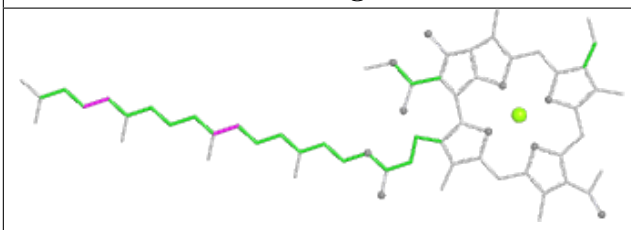
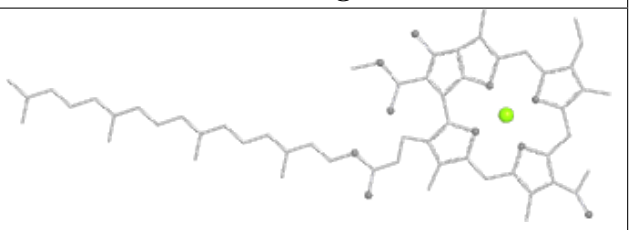
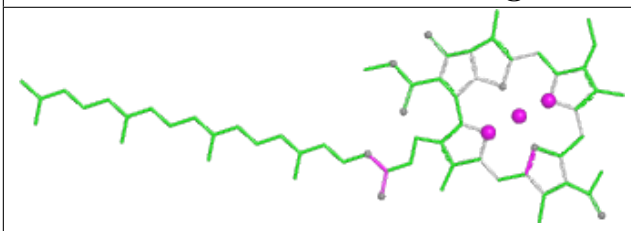
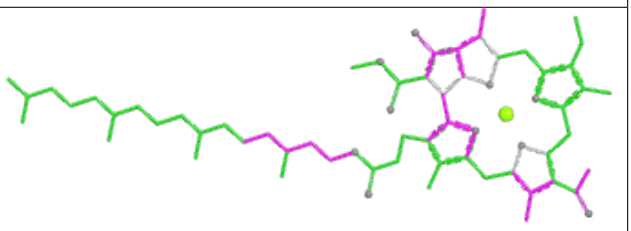
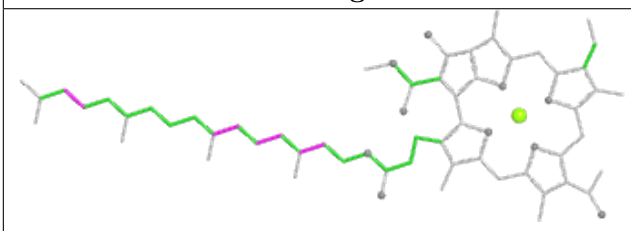
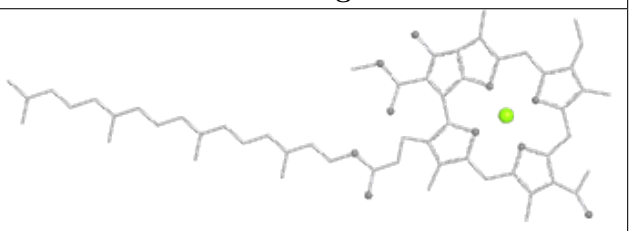


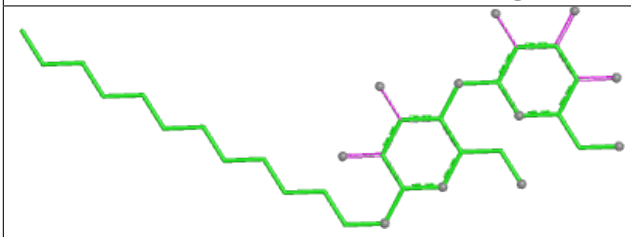
Rings

Ligand V7N bj 101	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand BCL AV 102	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand BCL am 1001	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand LMT BT 104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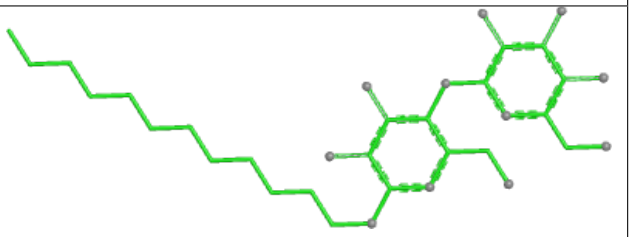
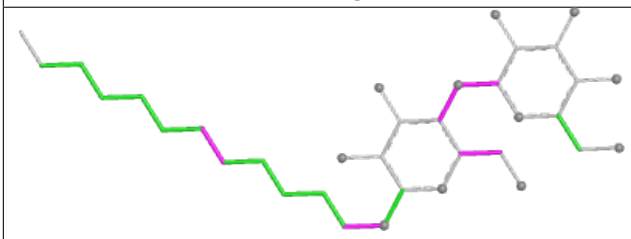

Bond angles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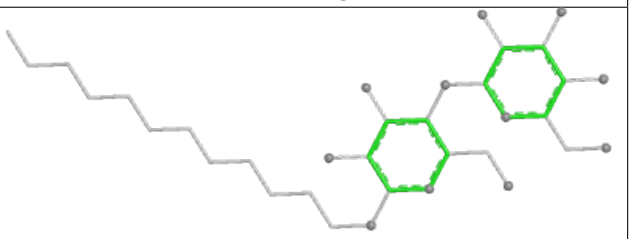
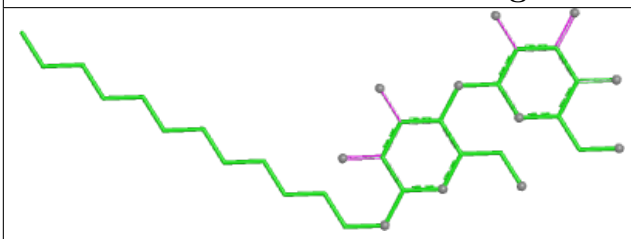

Rings

Ligand LMT bm 105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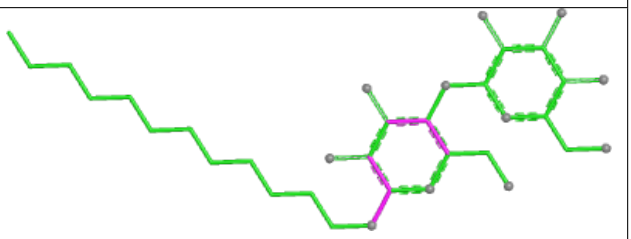
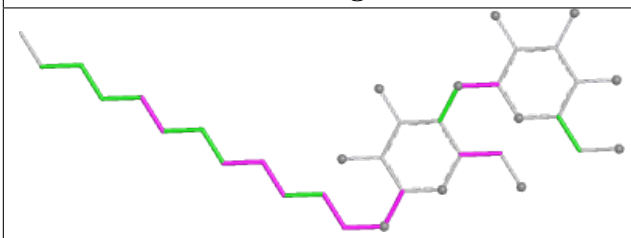

Bond angles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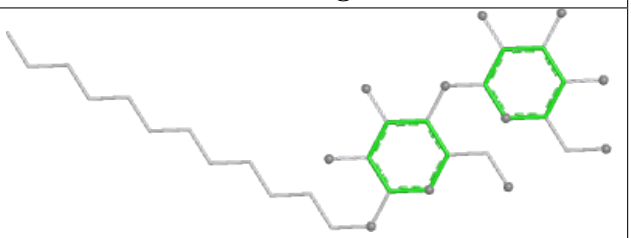
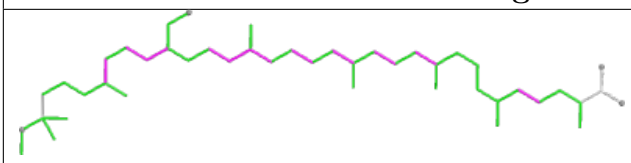

Rings

Ligand V7N BC 101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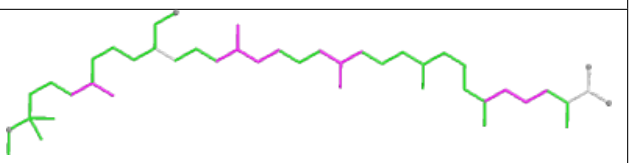
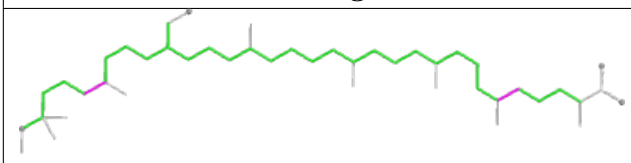

Bond angles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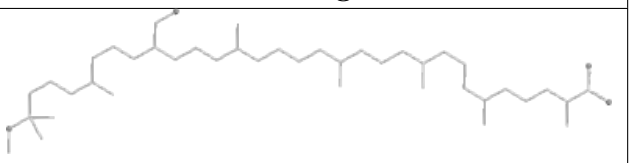
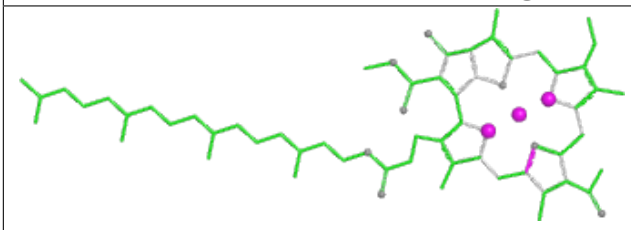
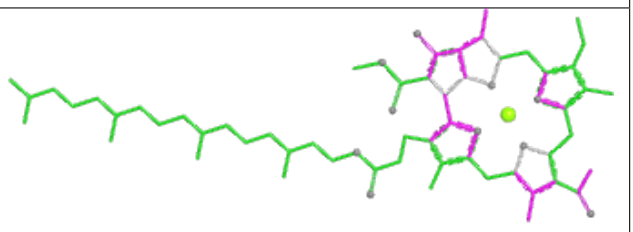

Rings

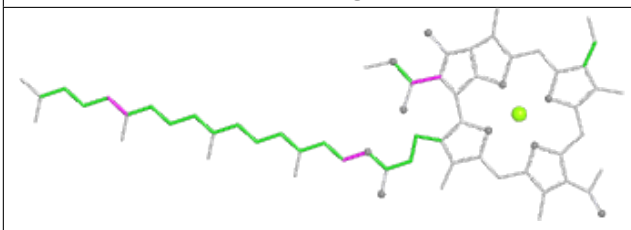
Ligand BCL L 1010



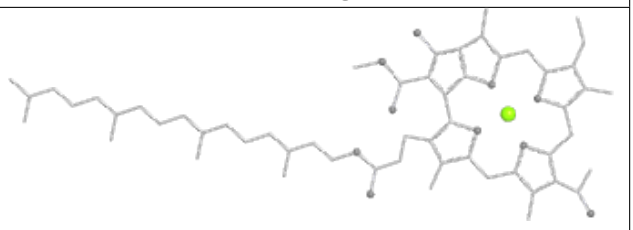
Bond lengths



Bond angles

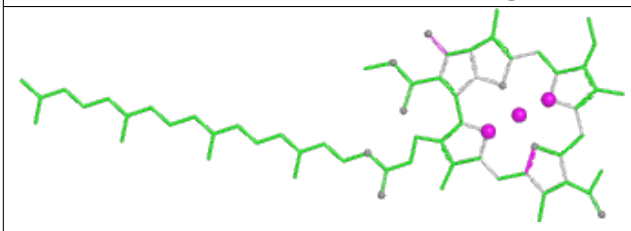


Torsions

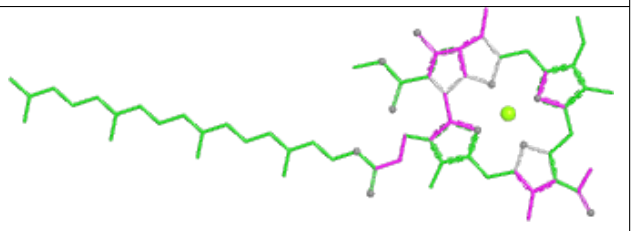


Rings

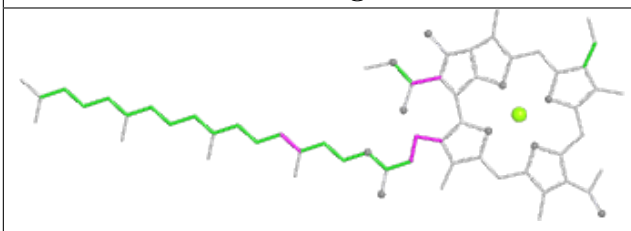
Ligand BCL AB 1002



Bond lengths



Bond angles



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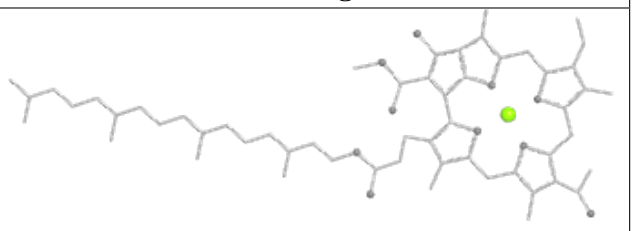
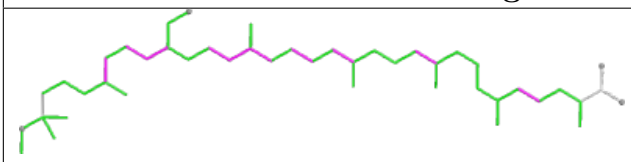


Rings

Ligand V7N BR 1001



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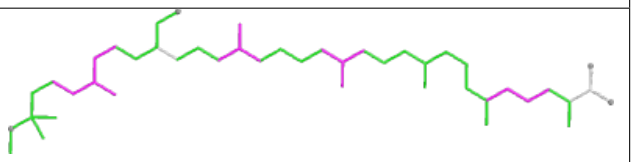
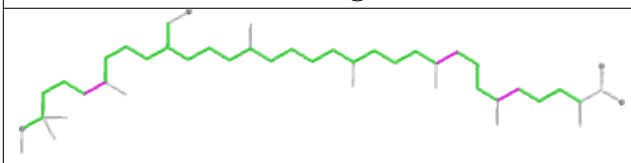


Bond angles



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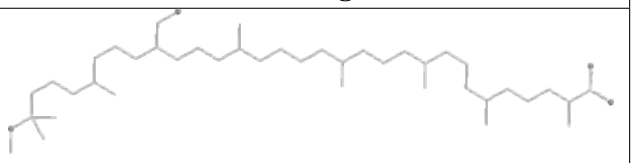
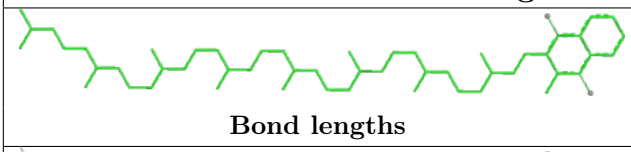


Rings

Ligand MQ8 ao 101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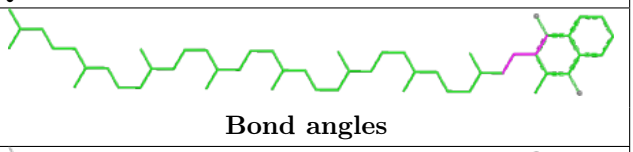
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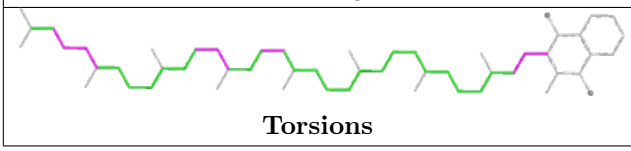
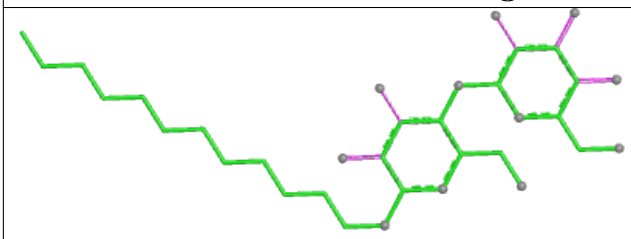

Torsions


Rings

Ligand LMT BX 1003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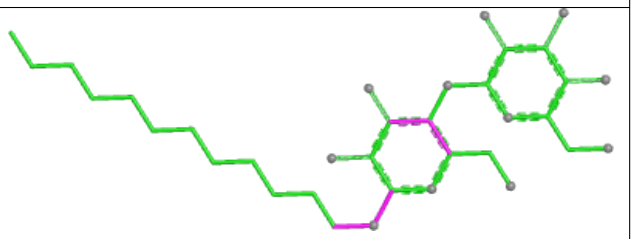
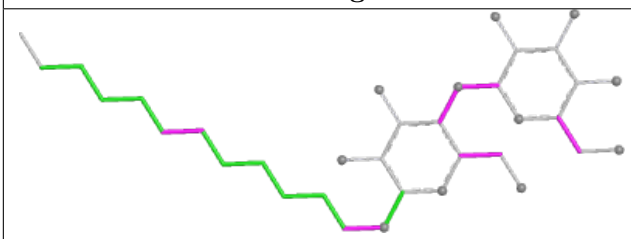

Bond angles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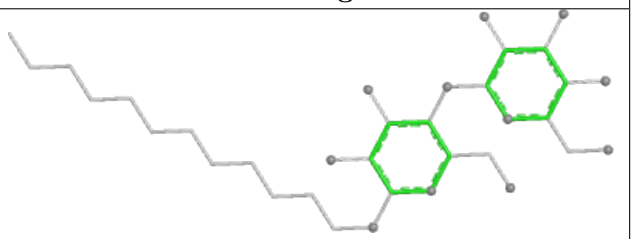
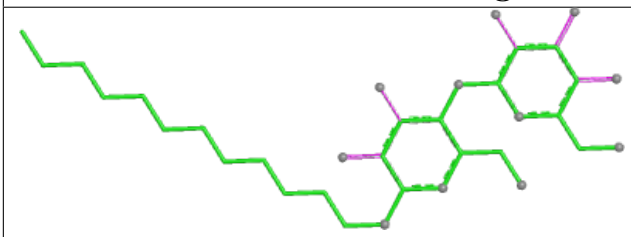

Rings

Ligand LMT BW 1005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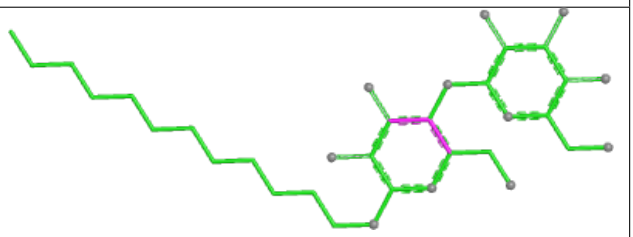
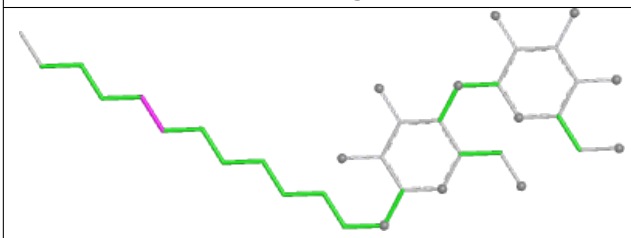

Bond angles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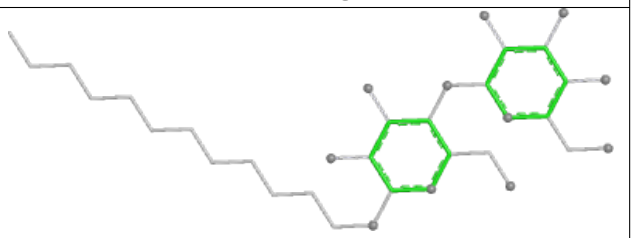
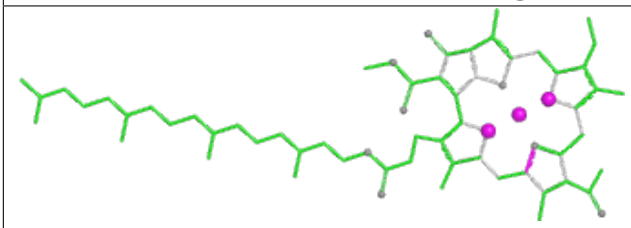
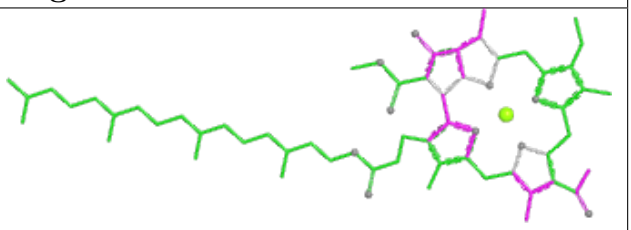
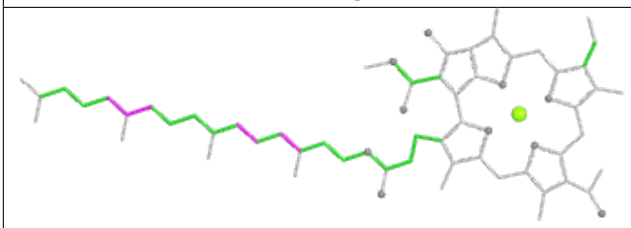
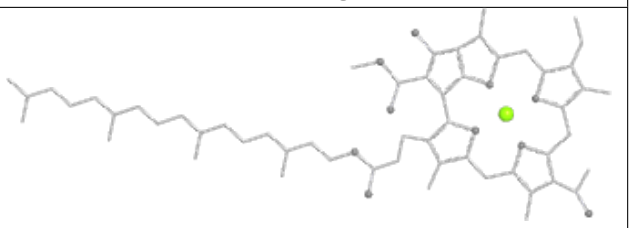
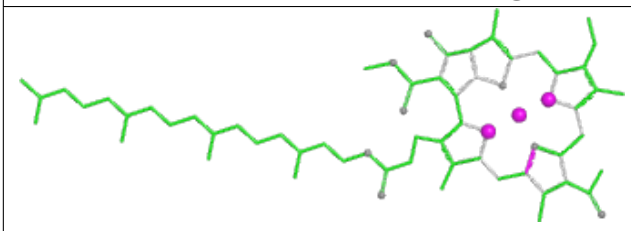
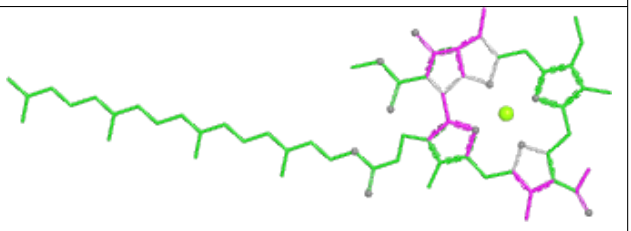
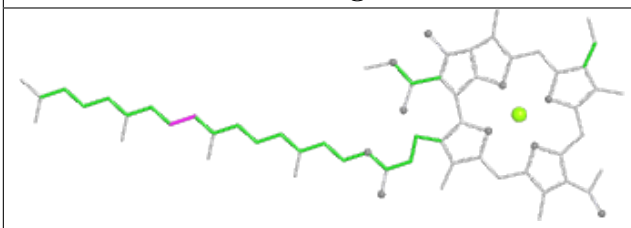
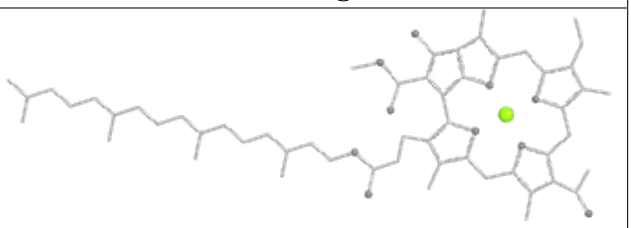

Rings

Ligand BCL ag 1001	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand BCL AW 101	
 Bond lengths	 Bond angles
 Torsions	 Rings

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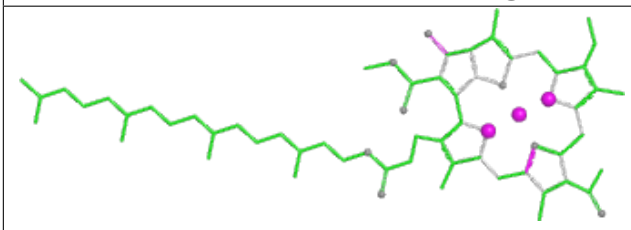
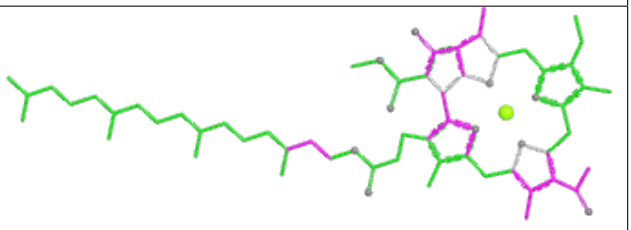
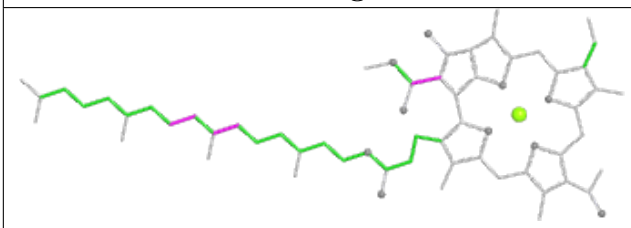
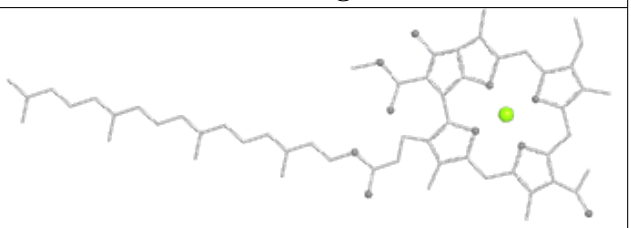
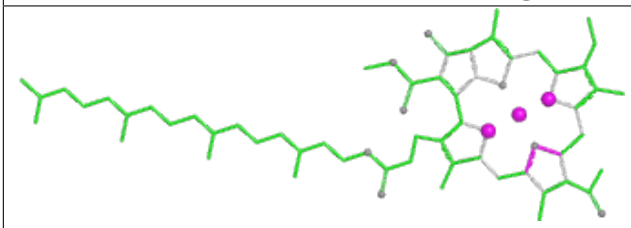
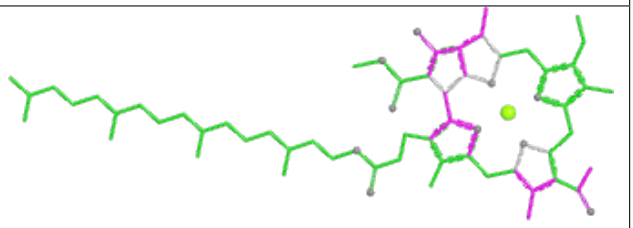
 Bond lengths	 Bond angles
 Torsions	 Rings

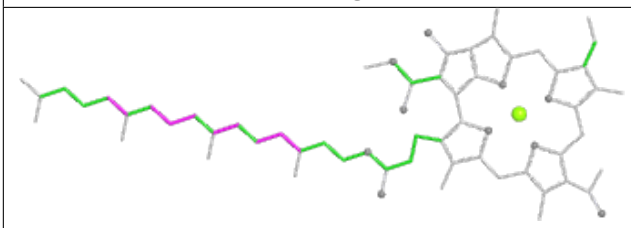
Ligand BCL AI 102



Bond lengths



Bond angles



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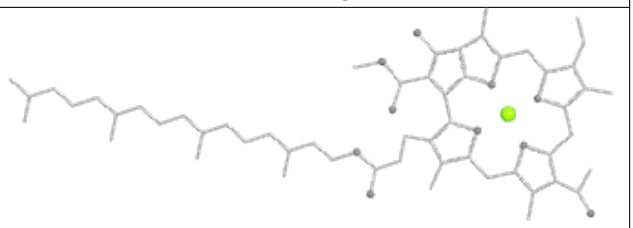
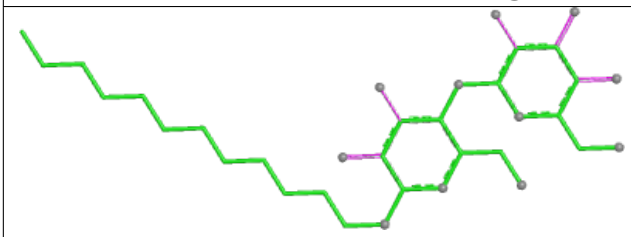


Rings

Ligand LMT BI 1005



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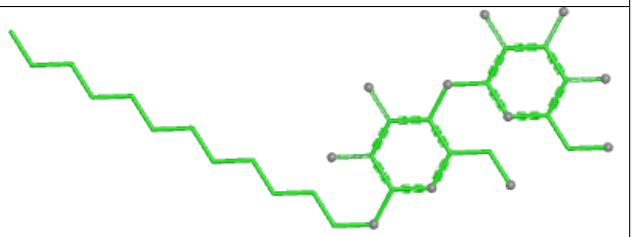

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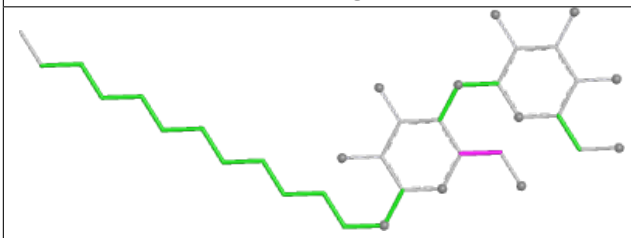

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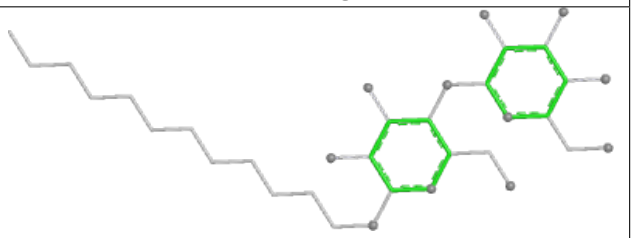
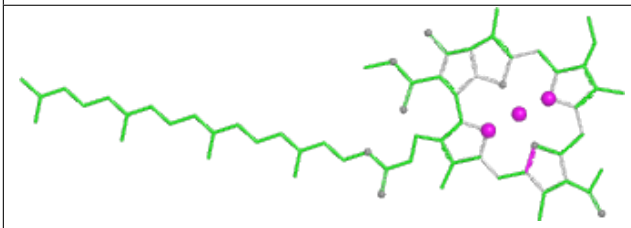


Rings

Ligand BCL ab 102



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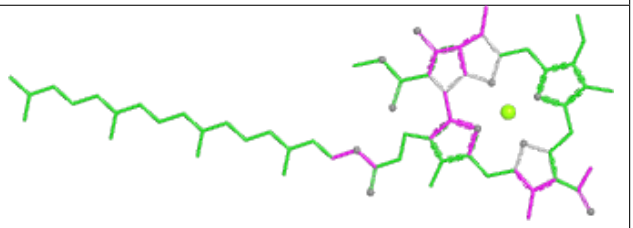

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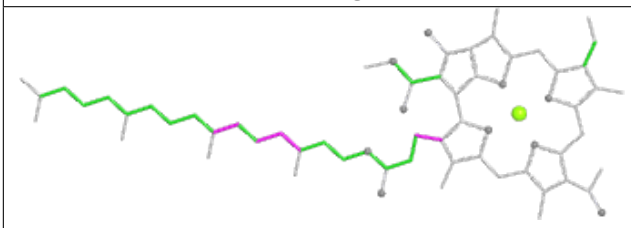

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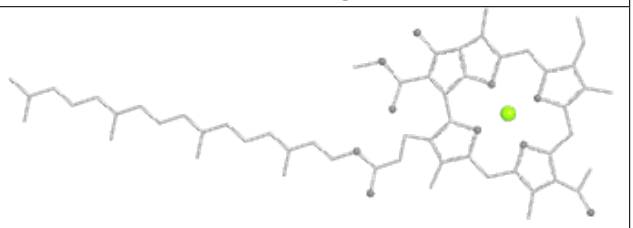

Rings

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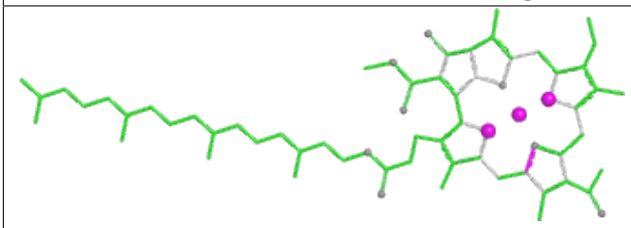

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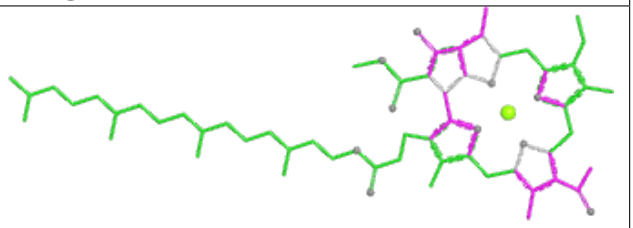

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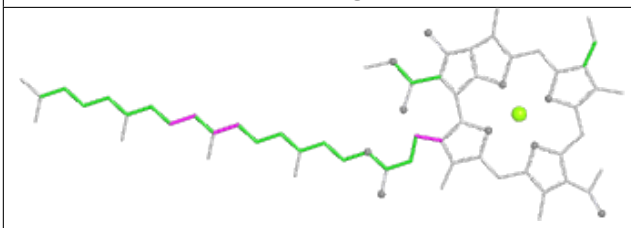

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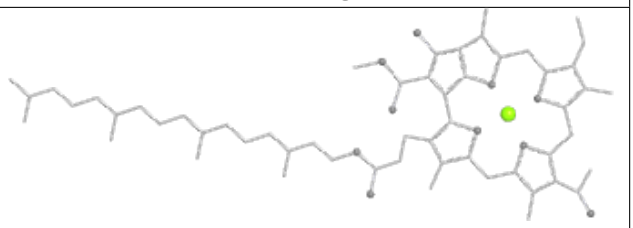
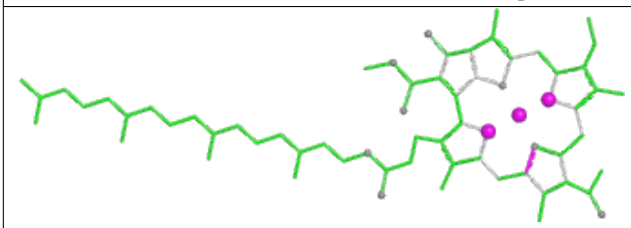


Rings

Ligand BCL ac 1001



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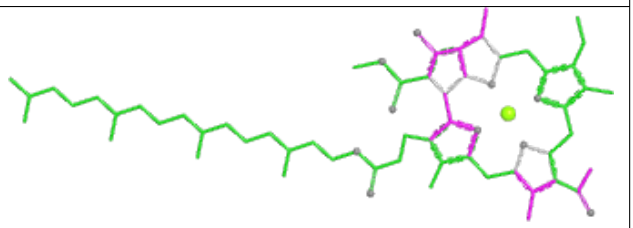

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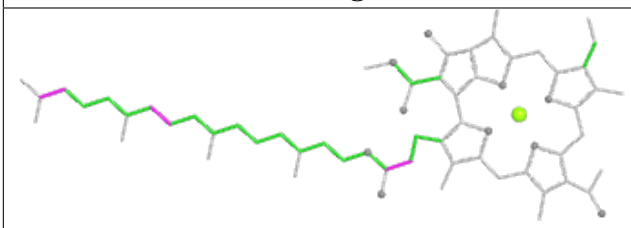

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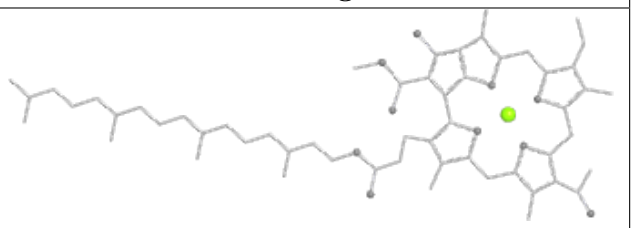
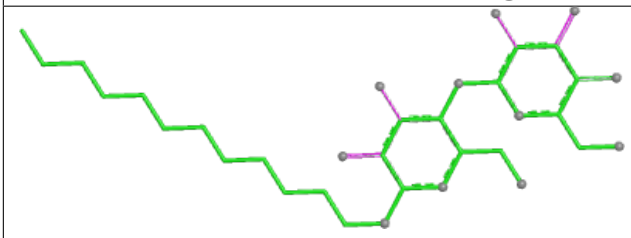


Rings

Ligand LMT AF 1002



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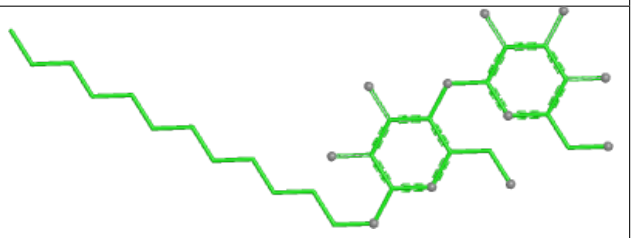

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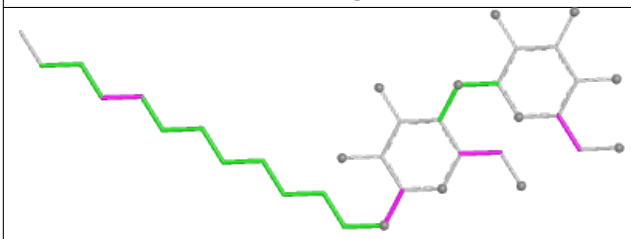

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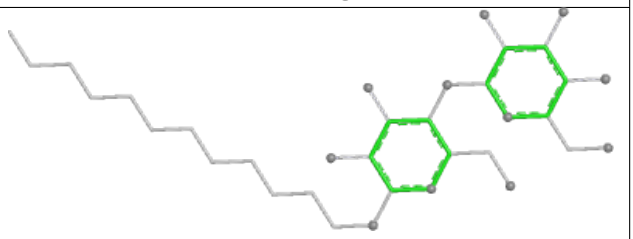
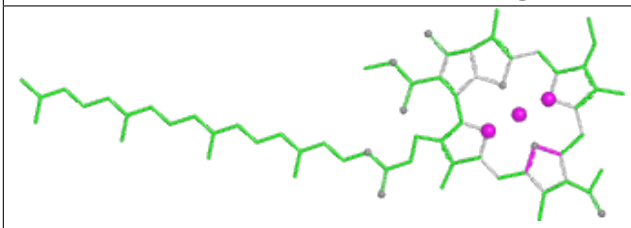


Rings

Ligand BCL AL 103



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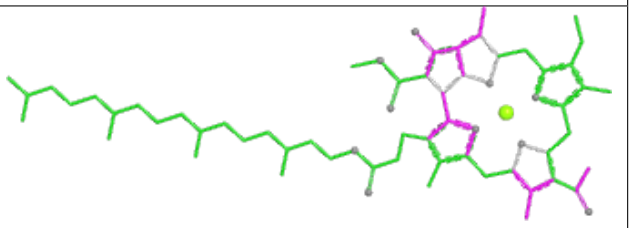

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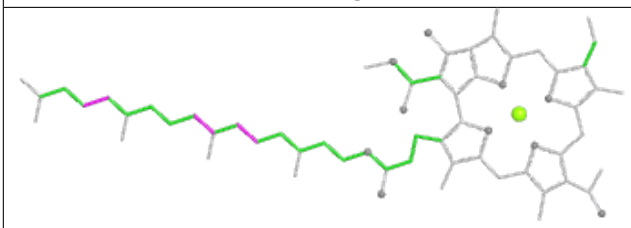

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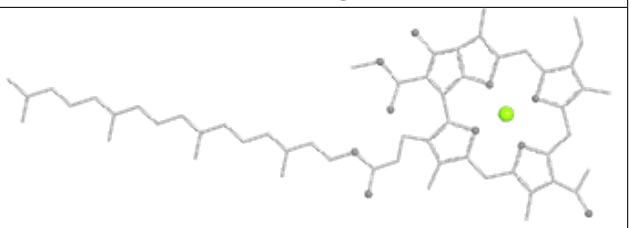
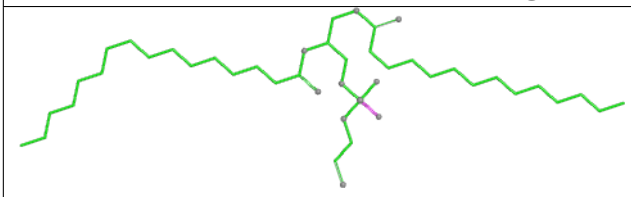


Rings

Ligand 0V9 bh 103



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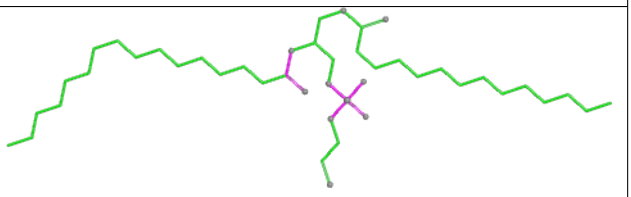

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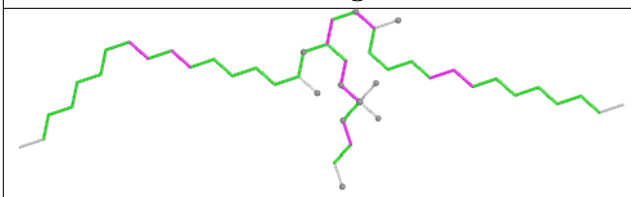

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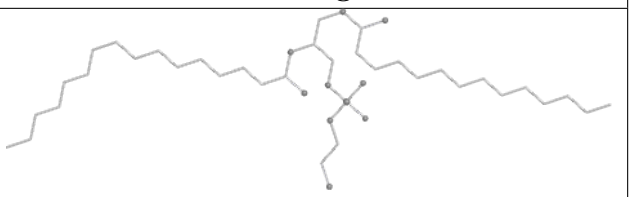
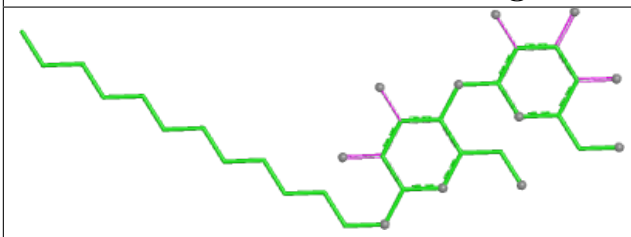


Rings

Ligand LMT AP 104



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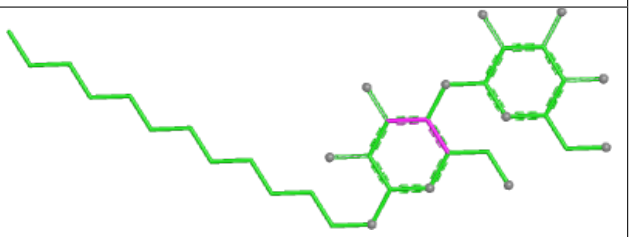

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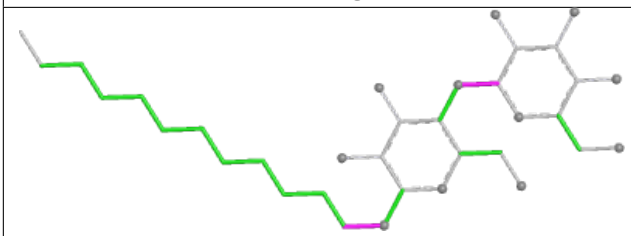

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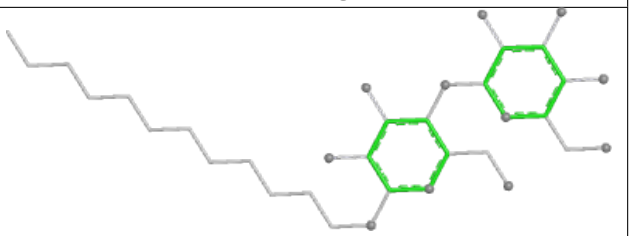
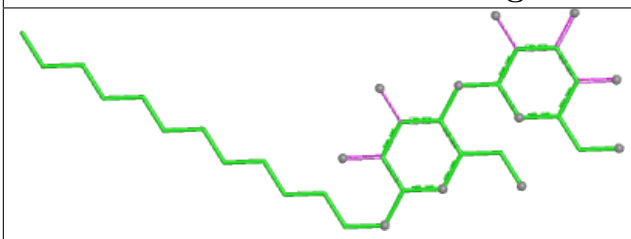


Rings

Ligand LMT AN 103



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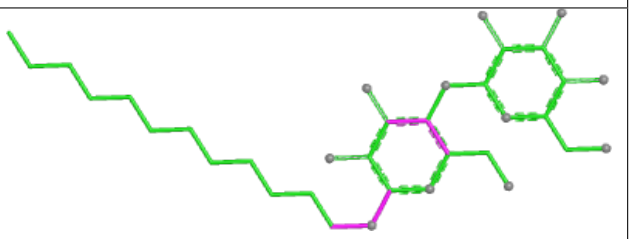

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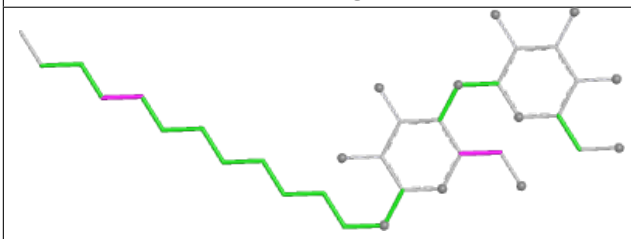

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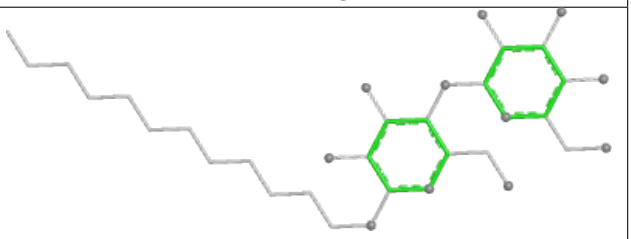
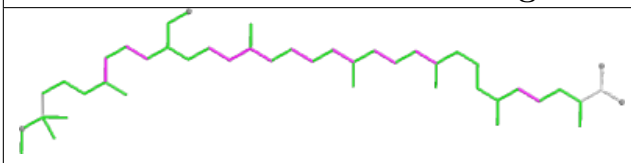


Rings

Ligand V7N bk 101



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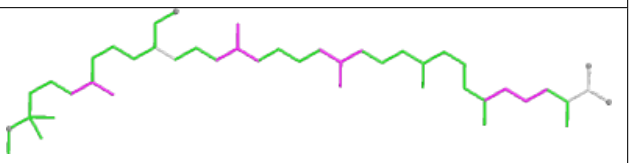
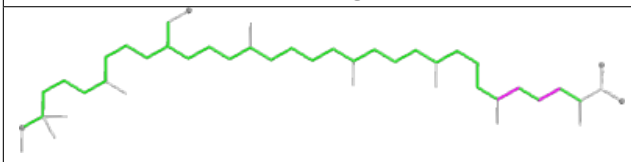


Bond angles



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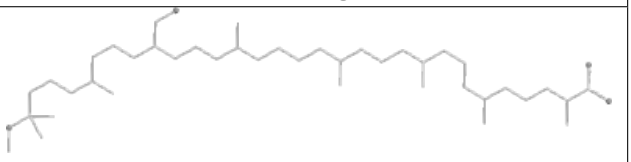
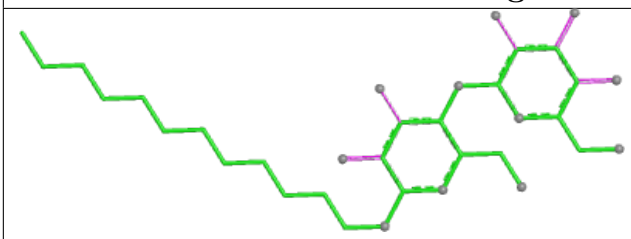


Rings

Ligand LMT BN 102



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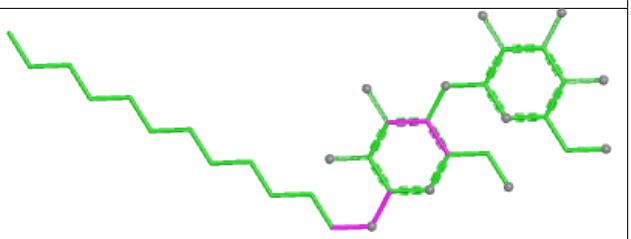
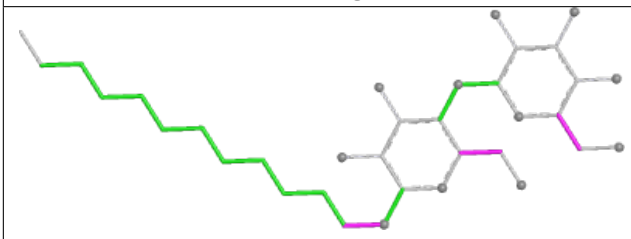


Bond angles



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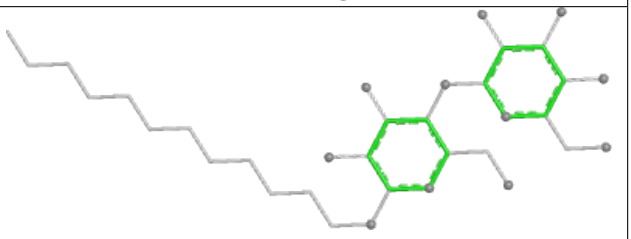
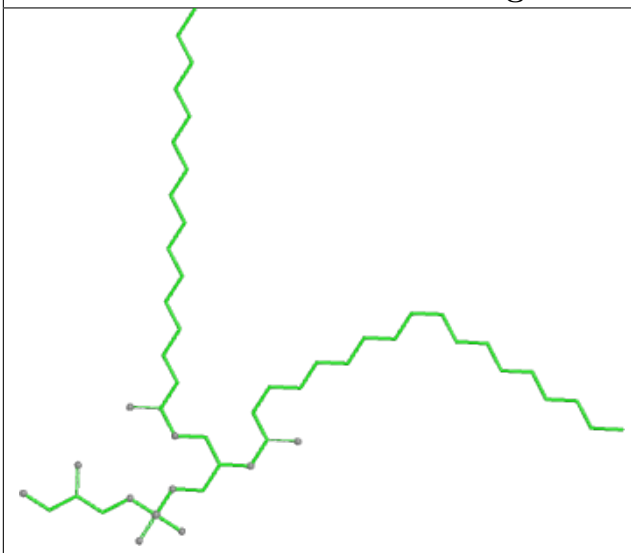
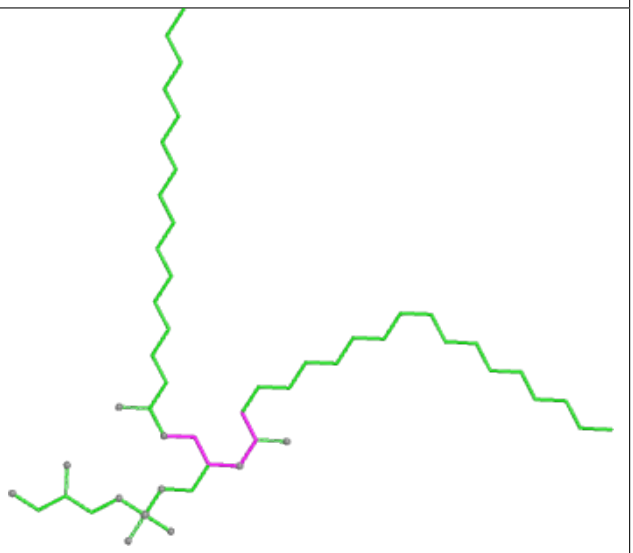


Rings

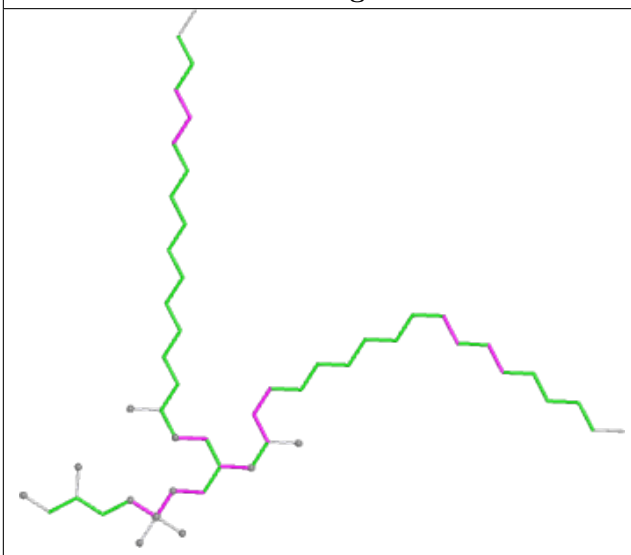
Ligand PGW H1 103



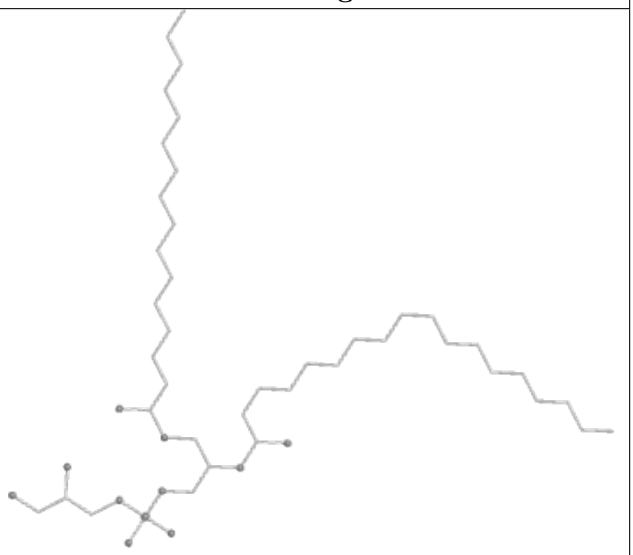
Bond lengths



Bond angles

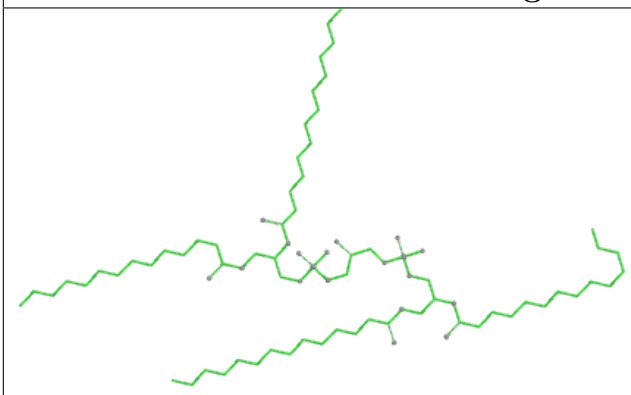


Torsions

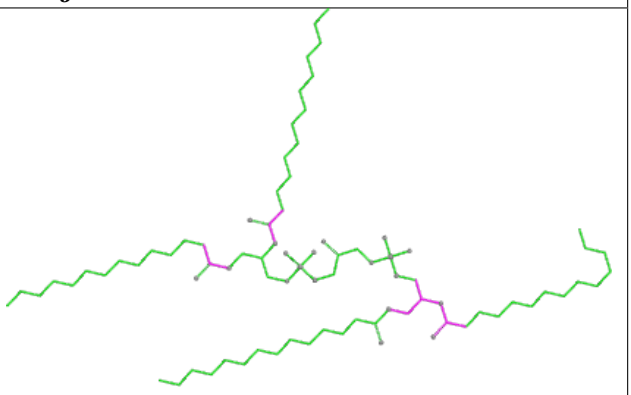


Rings

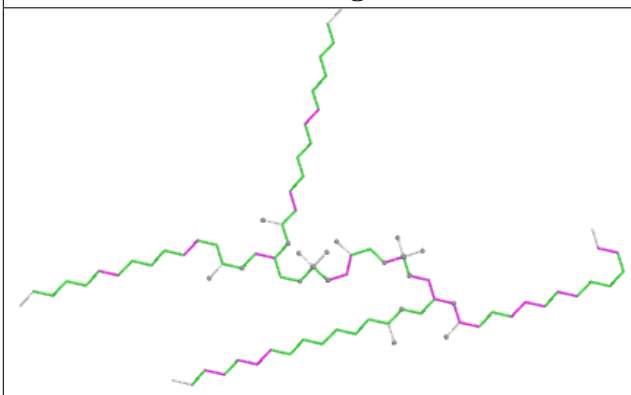
Ligand CD4 aj 102



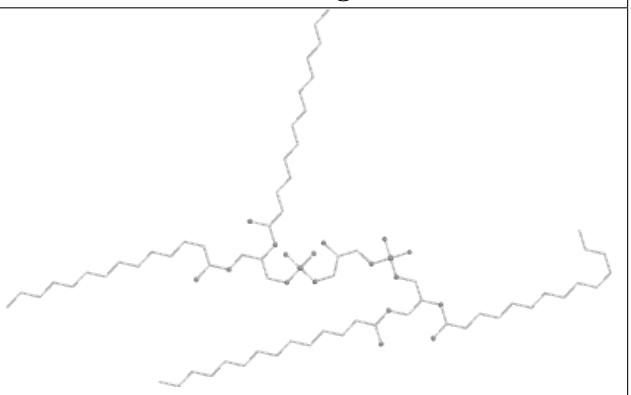
Bond lengths



Bond angles

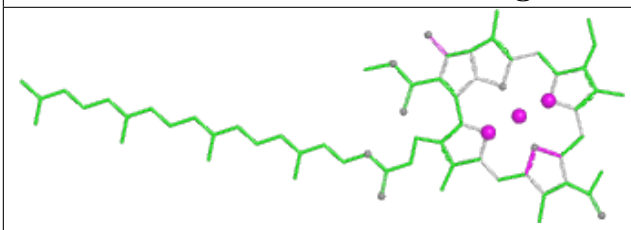


Torsions



Rings

Ligand BCL AS 104



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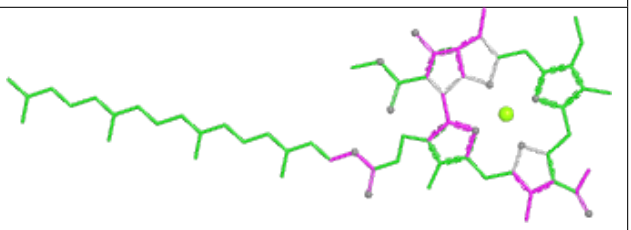
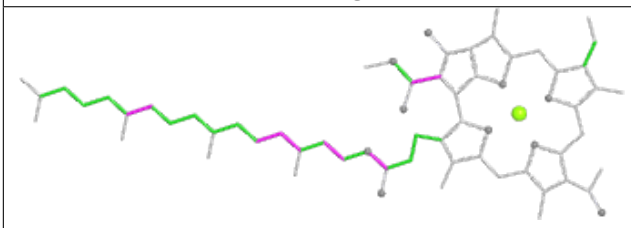
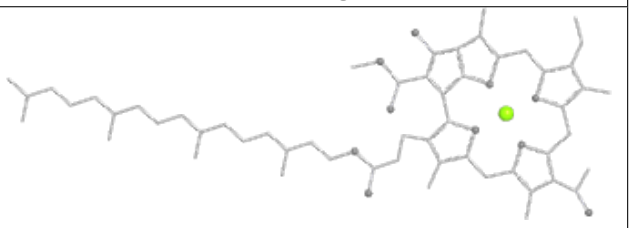


Bond angles

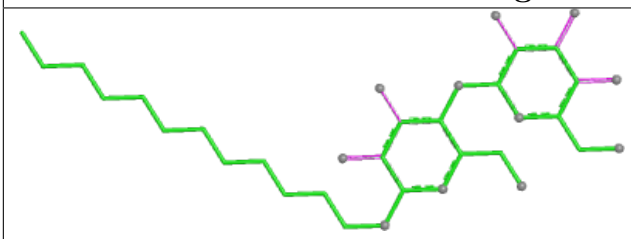


Torsions



Rings

Ligand LMT L 1011



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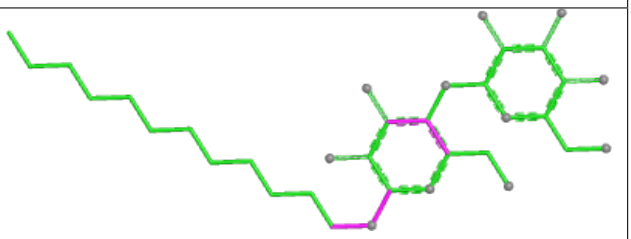
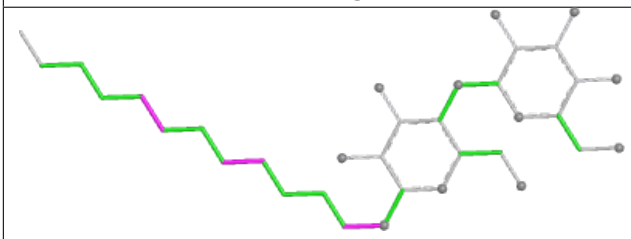
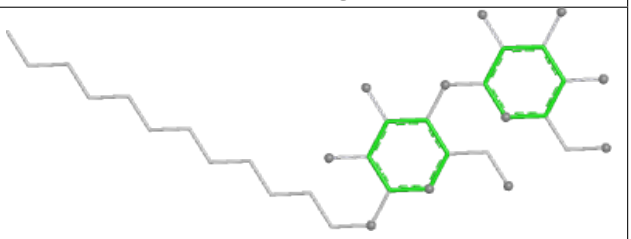


Bond angles

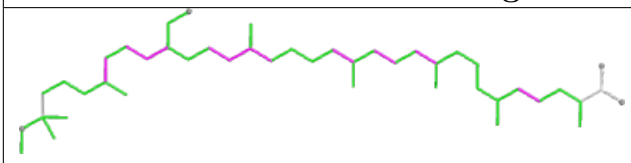


Torsions



Rings

Ligand V7N BH 1001



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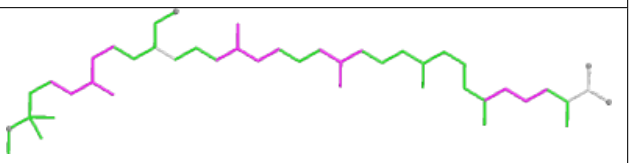
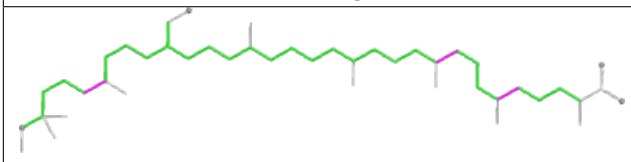


Bond angles



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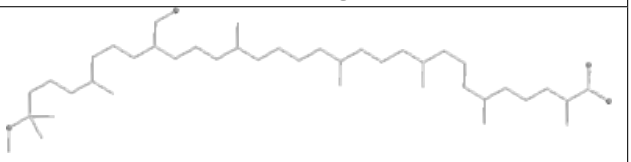
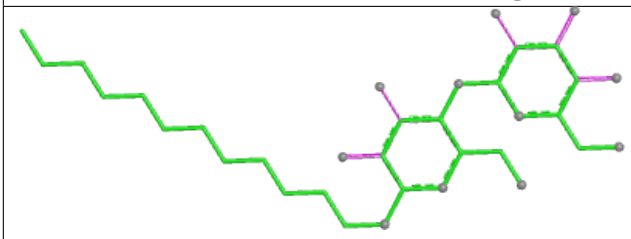


Rings

Ligand LMT BC 102



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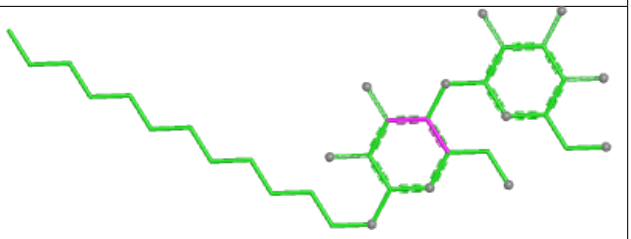
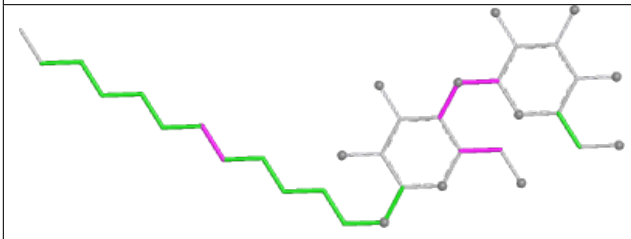


Bond angles



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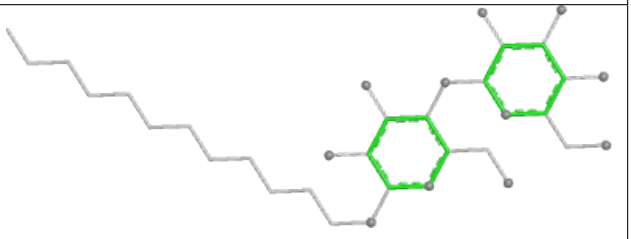
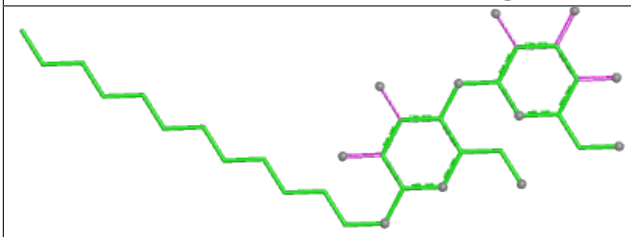


Rings

Ligand LMT BV 1002



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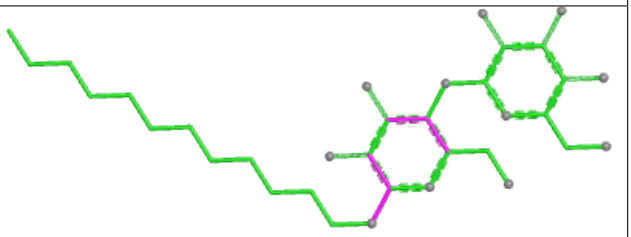
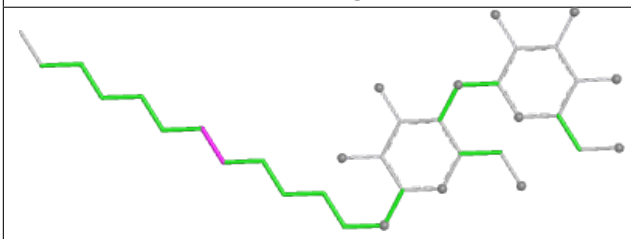


Bond angles



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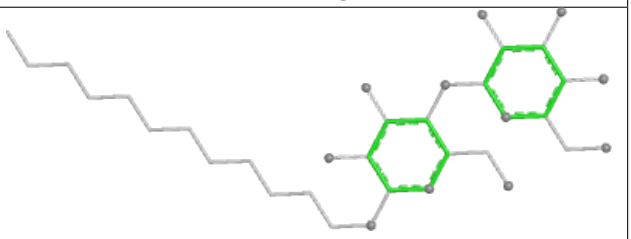
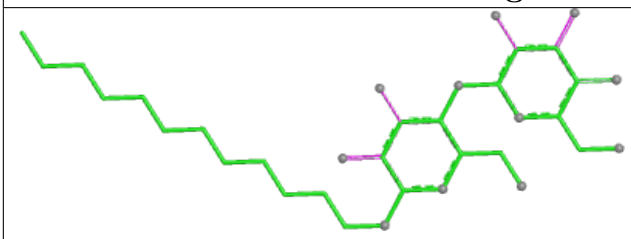


Rings

Ligand LMT BI 1006



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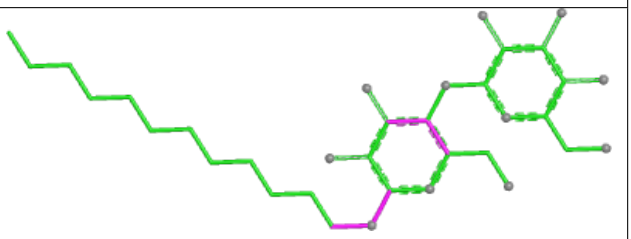
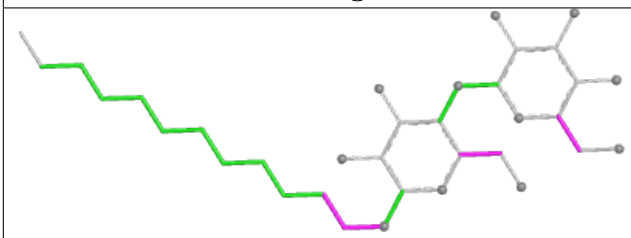


Bond angles



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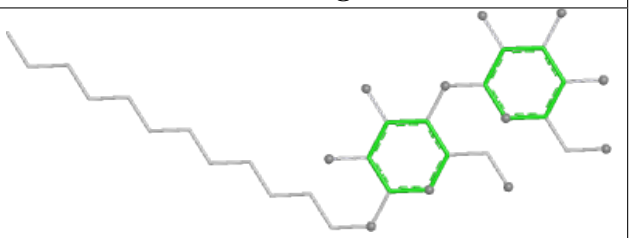
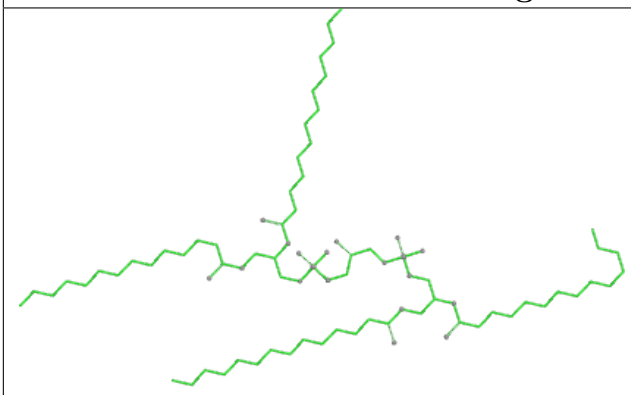


Rings

Ligand CD4 H1 102



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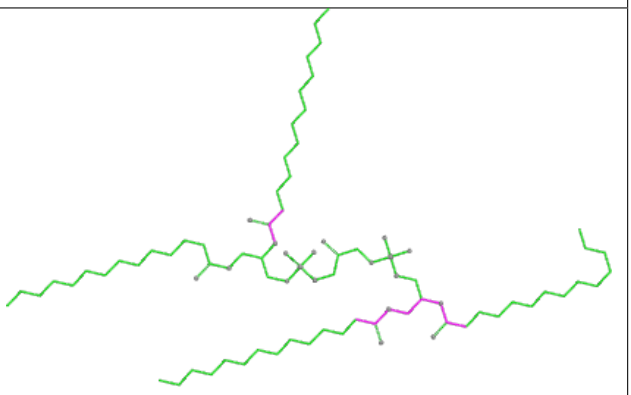
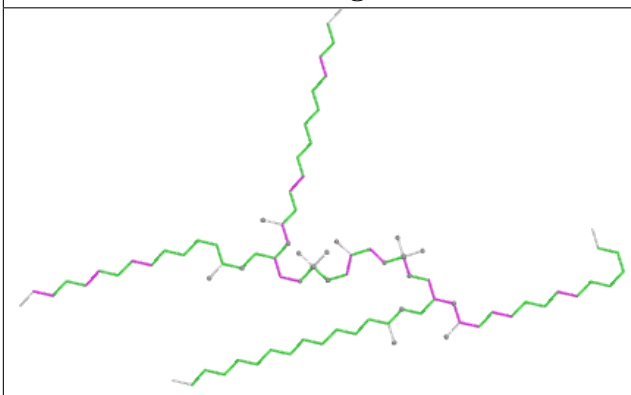
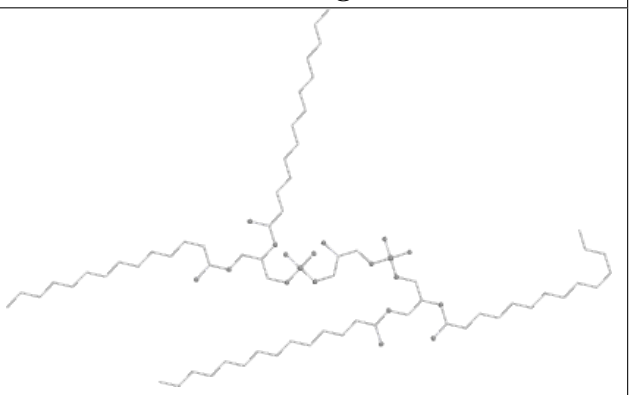


Bond angles

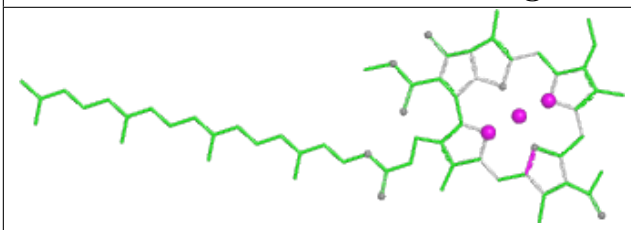


Torsions

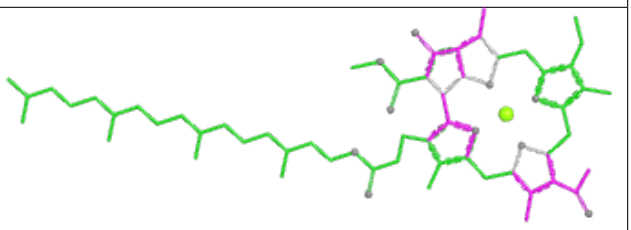


Rings

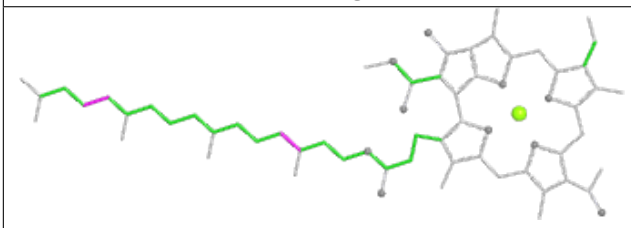
Ligand BCL af 101



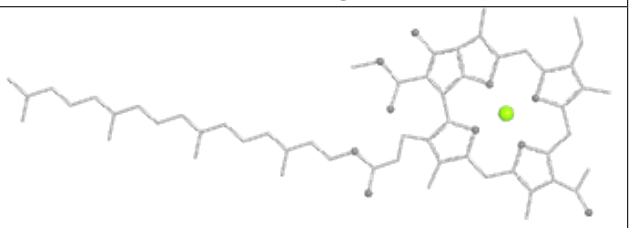
Bond lengths



Bond angles

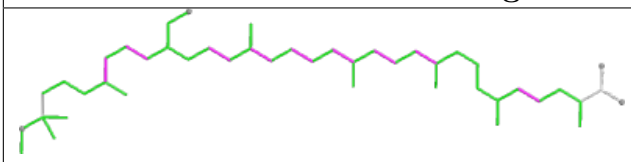


Torsions



Rings

Ligand V7N BO 1001



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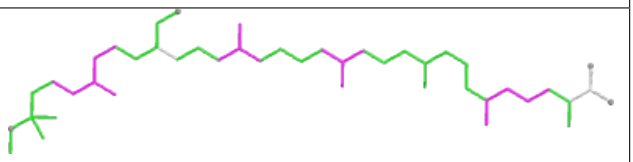
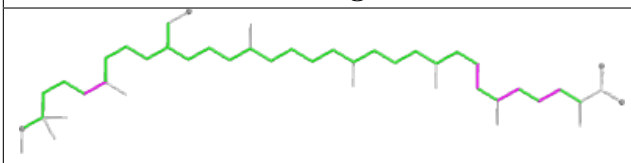


Bond angles



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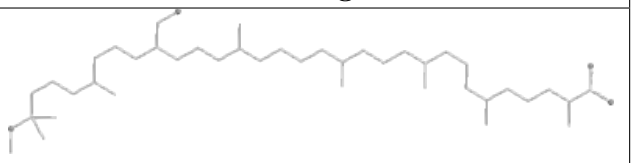
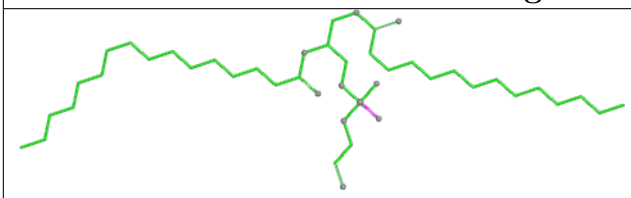
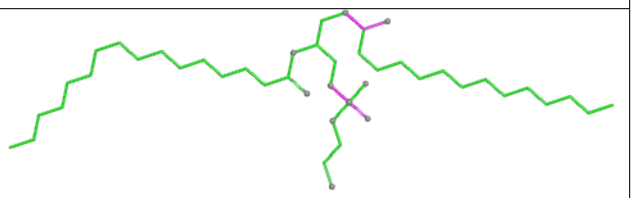


Rings

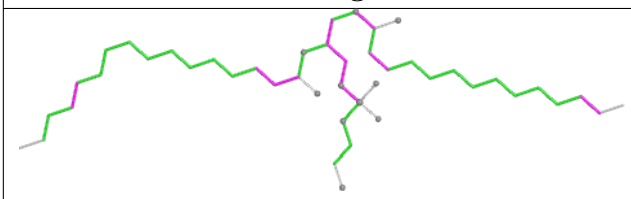
Ligand 0V9 be 102



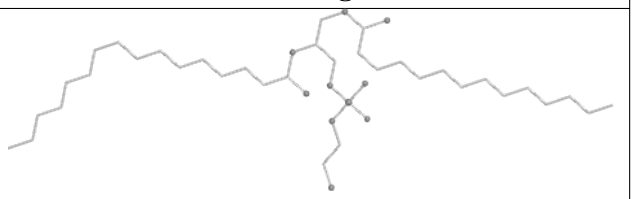
Bond lengths



Bond angles

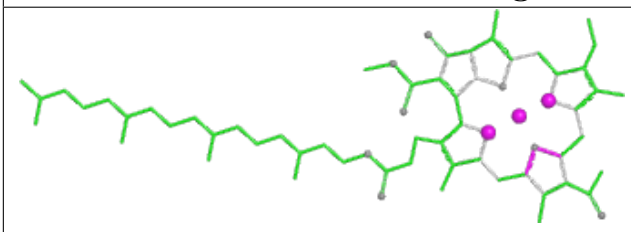


Torsions



Rings

Ligand BCL AC 102



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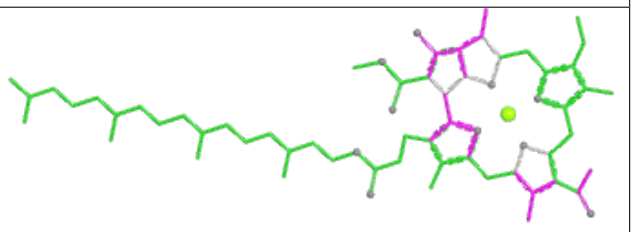
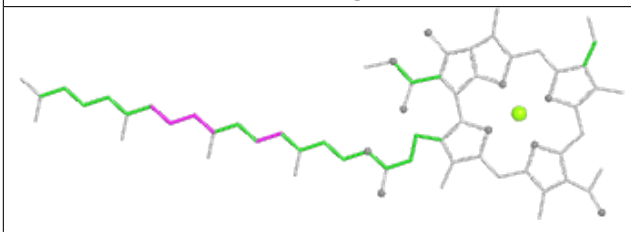
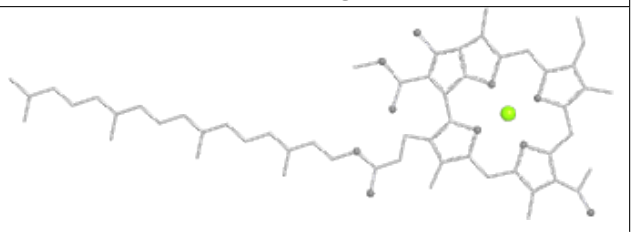


Bond angles

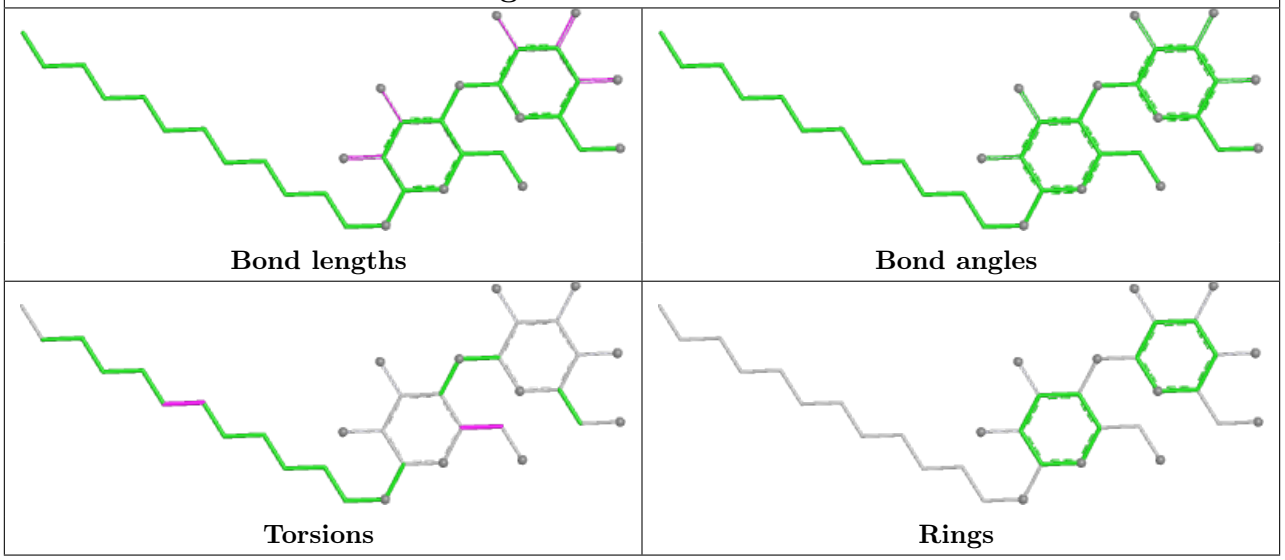


Torsions

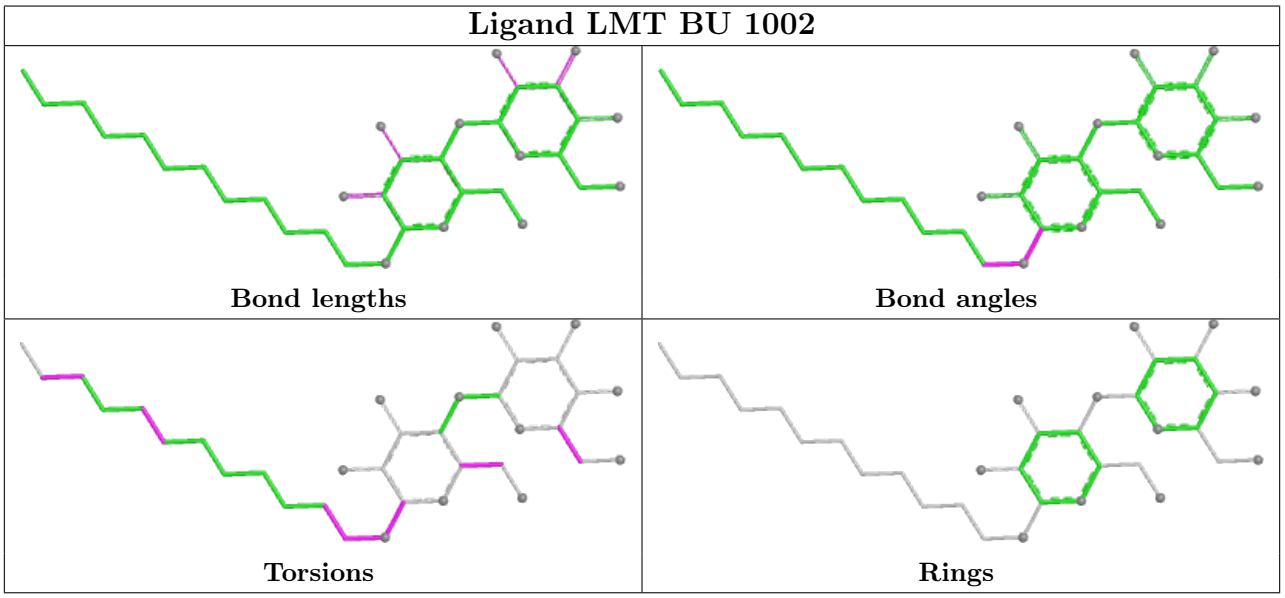


Rings

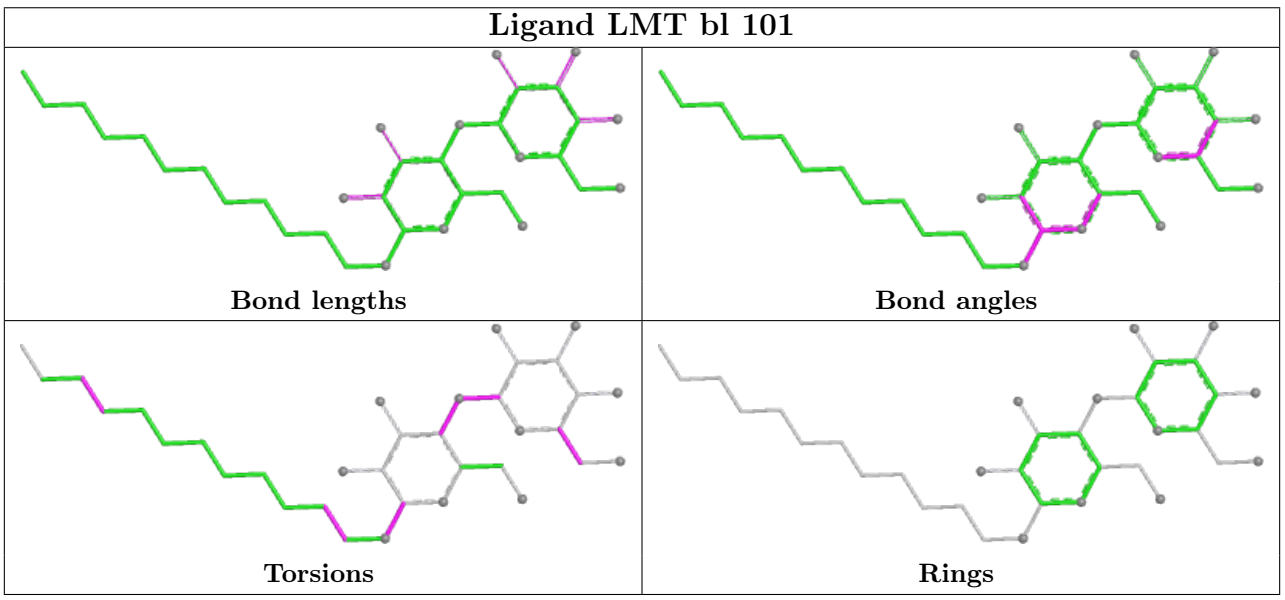
Ligand LMT BV 1006



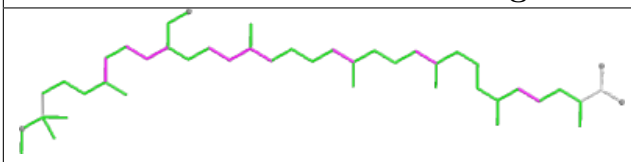
Ligand LMT BU 1002



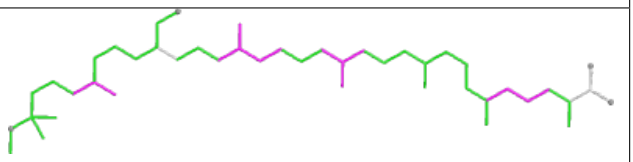
Ligand LMT bl 101



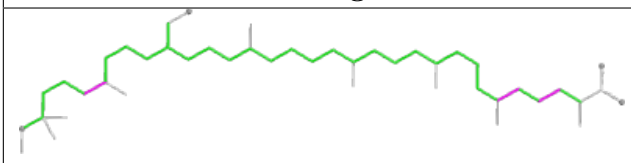
Ligand V7N BI 1001



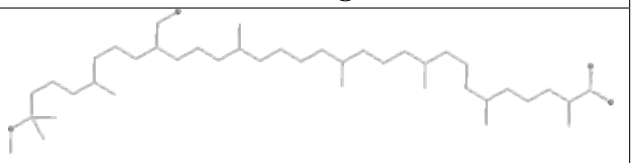
Bond lengths



Bond angles

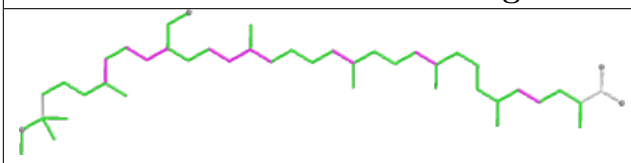


Torsions

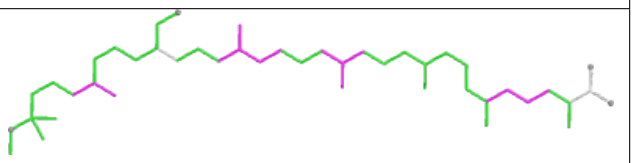


Rings

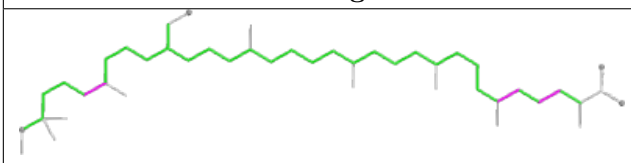
Ligand V7N BX 1001



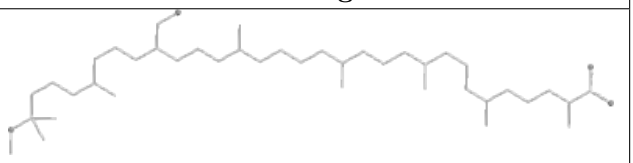
Bond lengths



Bond angles

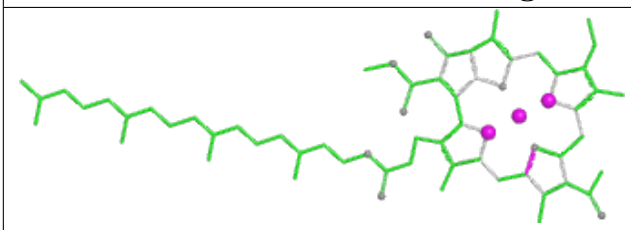


Torsions

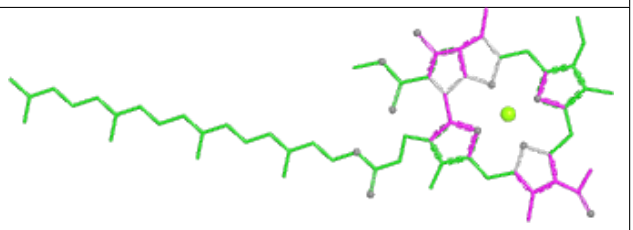


Rings

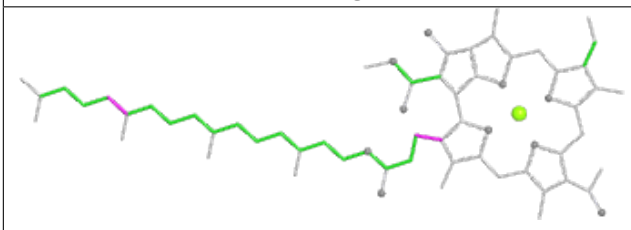
Ligand BCL bo 103



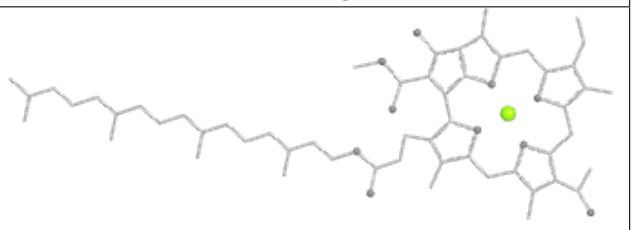
Bond lengths



Bond angles

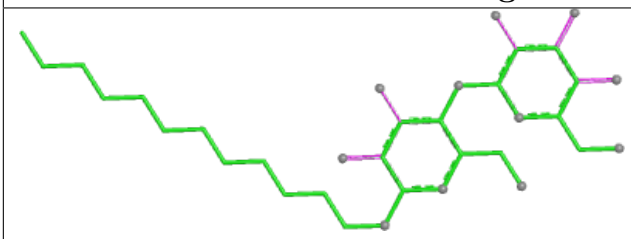


Torsions

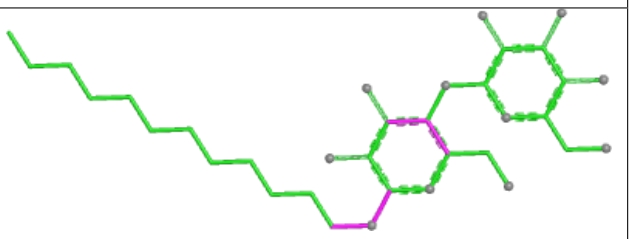


Rings

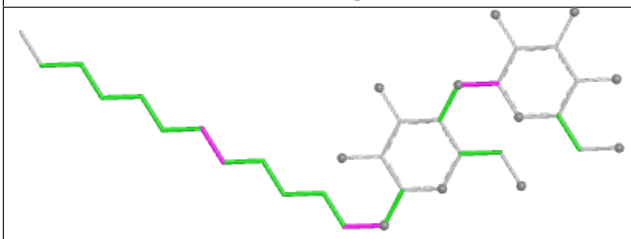
Ligand LMT BH 1002



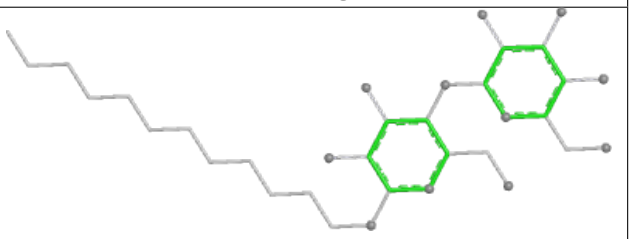
Bond lengths



Bond angles

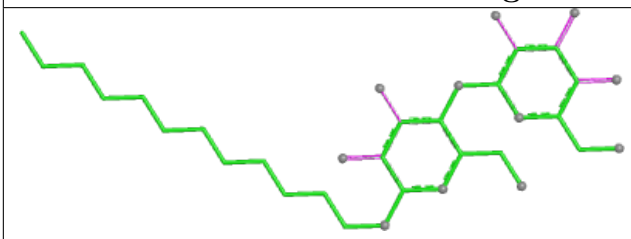


Torsions

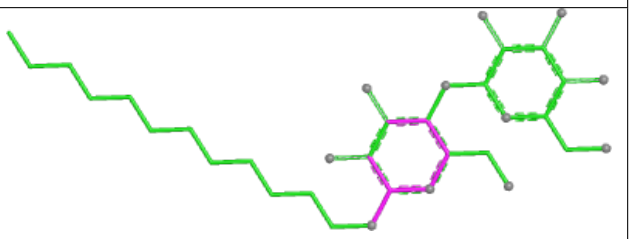


Rings

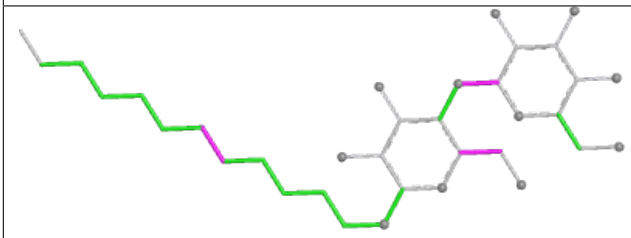
Ligand LMT BS 1005



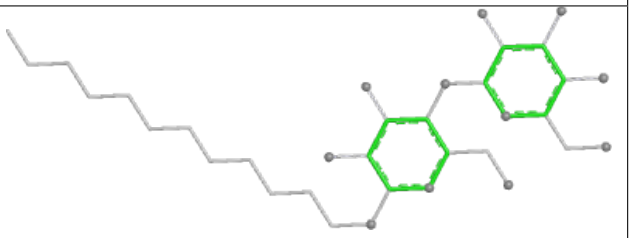
Bond lengths



Bond angles

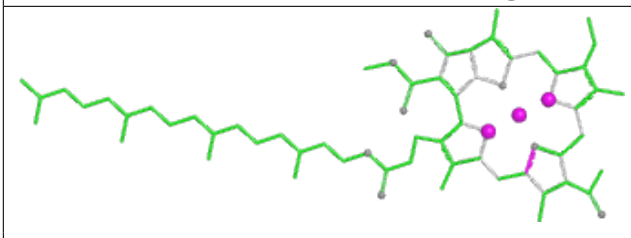


Torsions

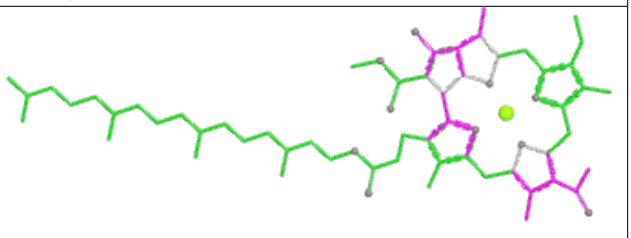


Rings

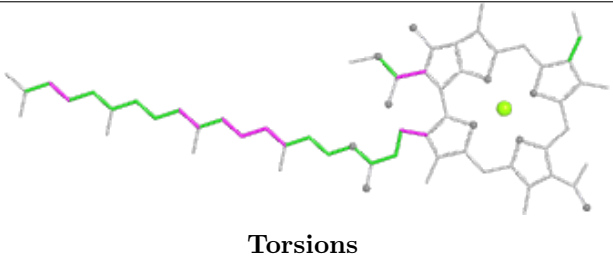
Ligand BCL BQ 1003



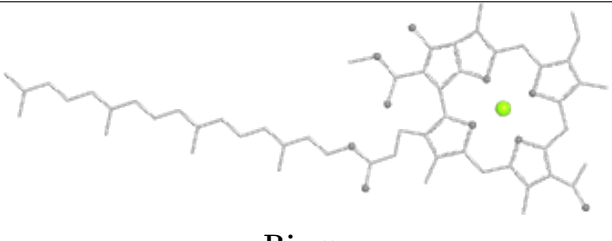
Bond lengths



Bond angles

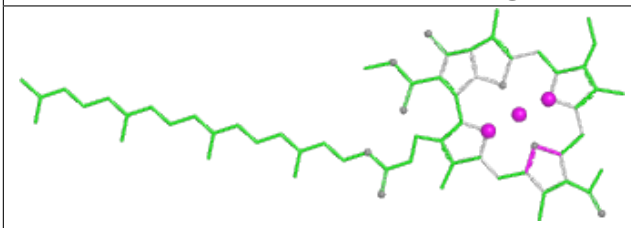


Torsions

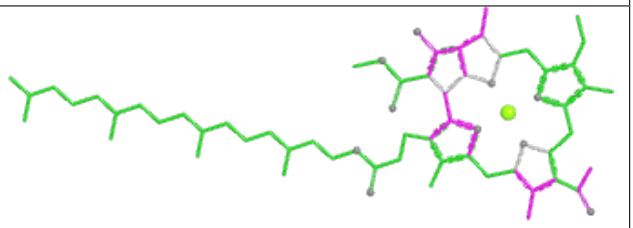


Rings

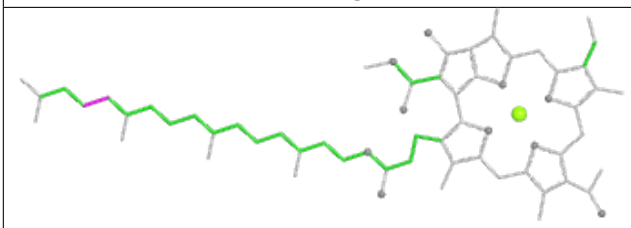
Ligand BCL AE 1001



Bond lengths



Bond angles



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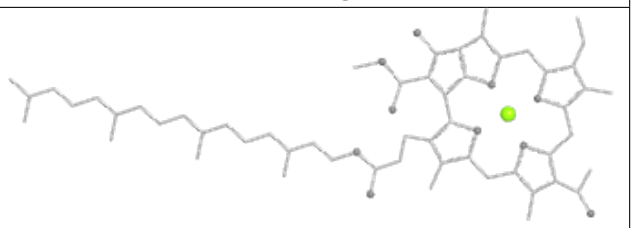
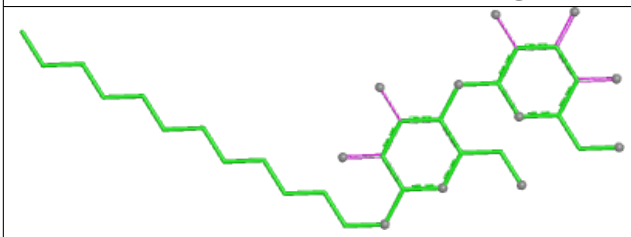
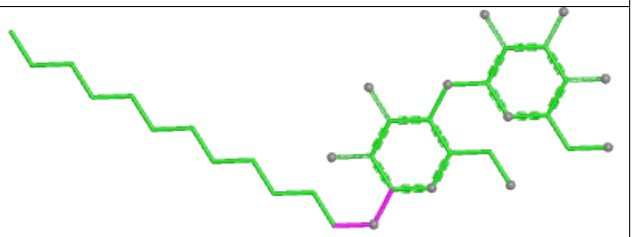


Rings

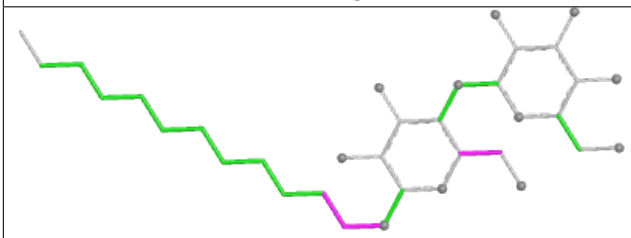
Ligand LMT BF 103



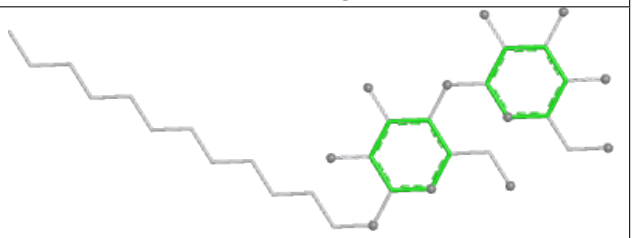
Bond lengths



Bond angles

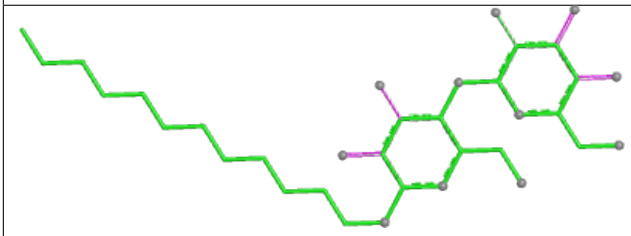


Torsions

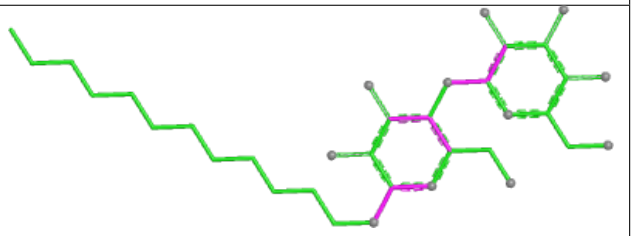


Rings

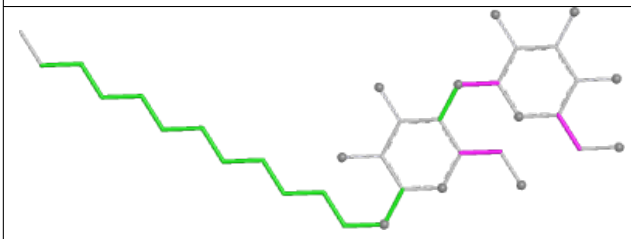
Ligand LMT AI 101



Bond lengths



Bond angles



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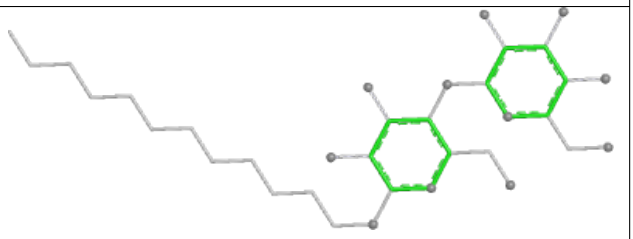
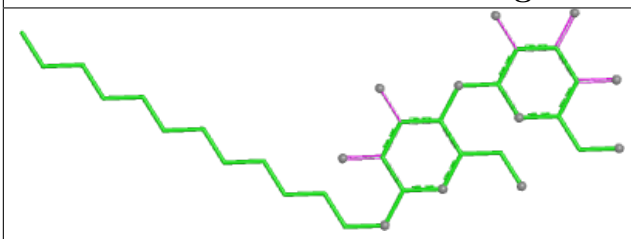
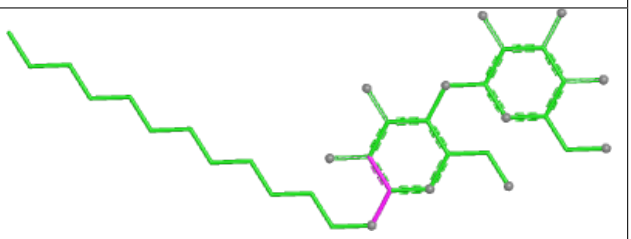


Rings

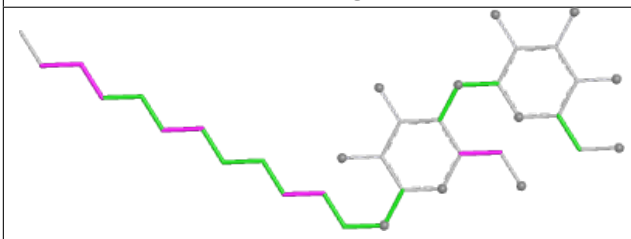
Ligand LMT bh 101



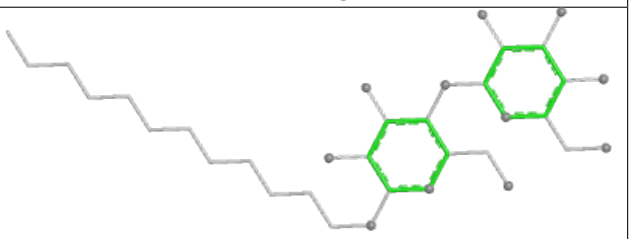
Bond lengths



Bond angles

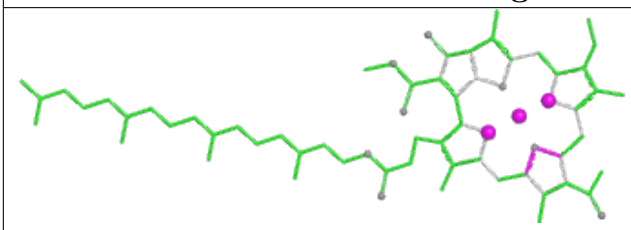


Torsions

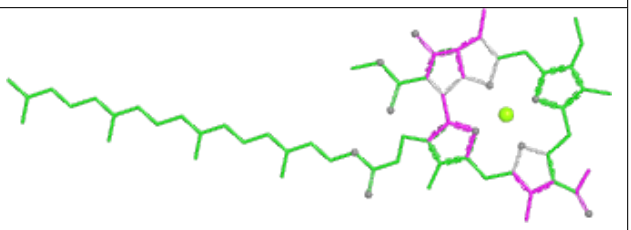


Rings

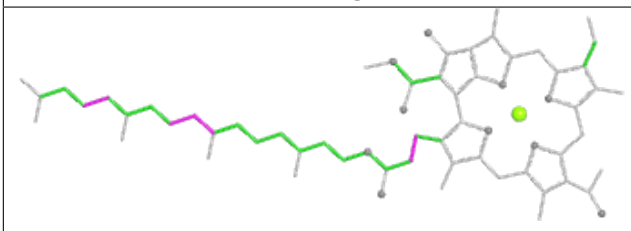
Ligand BCL AX 103



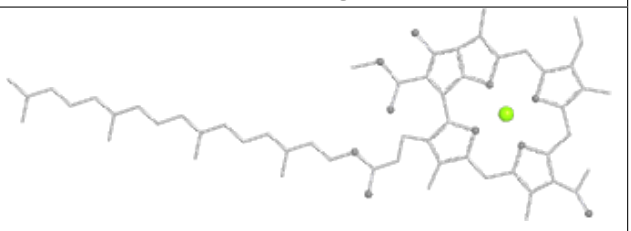
Bond lengths



Bond angles

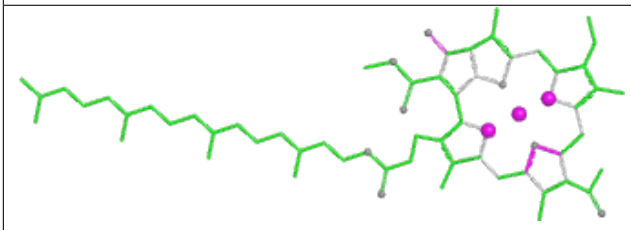


Torsions

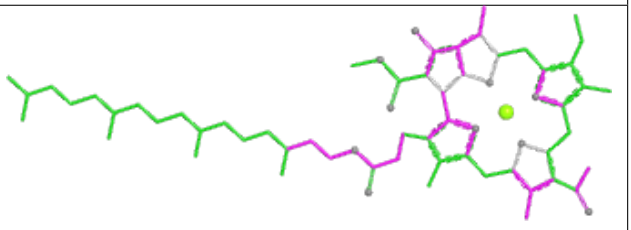


Rings

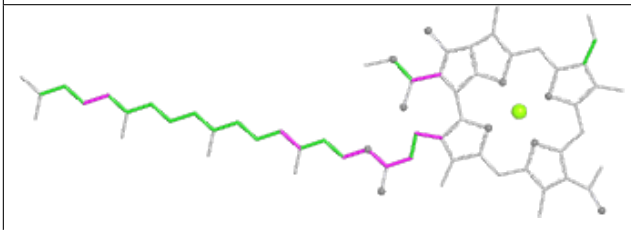
Ligand BCL AI 103



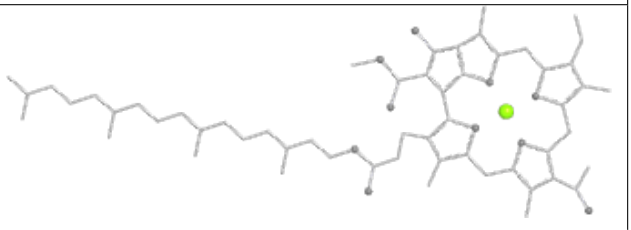
Bond lengths



Bond angles

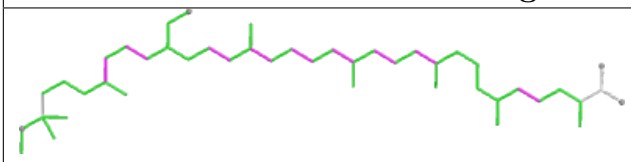


Torsions

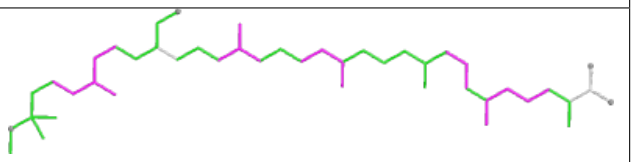


Rings

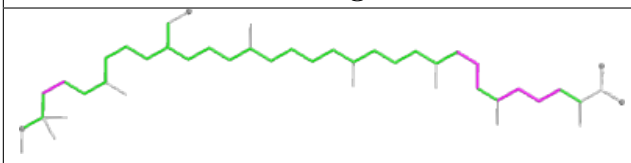
Ligand V7N ba 101



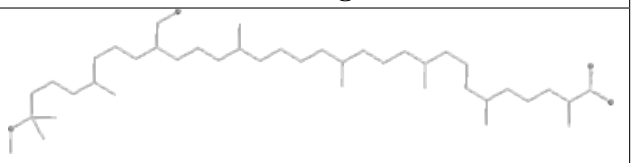
Bond lengths



Bond angles

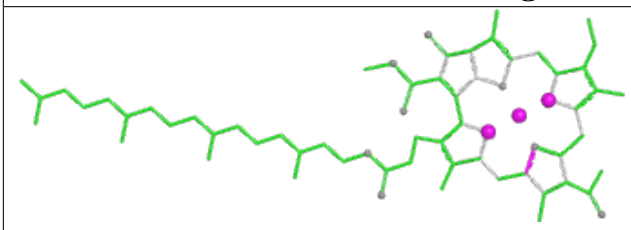


Torsions

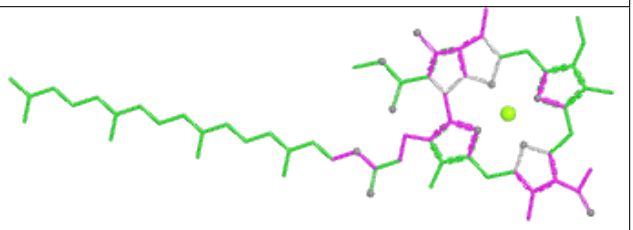


Rings

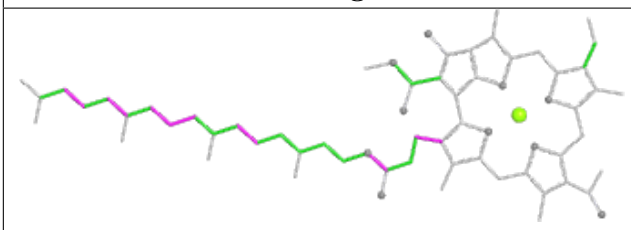
Ligand BCL bc 102



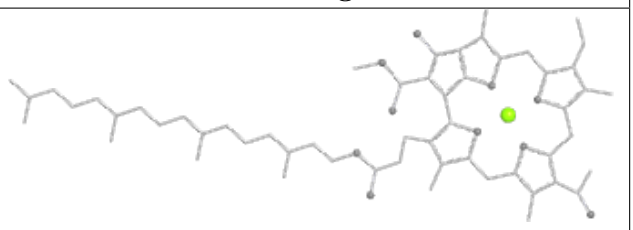
Bond lengths



Bond angles

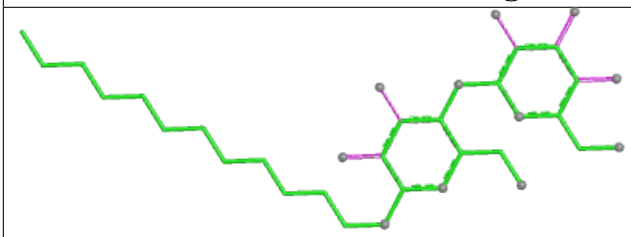


Torsions

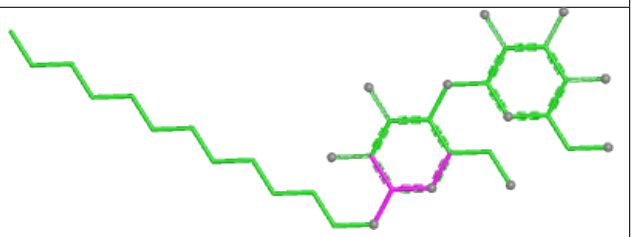


Rings

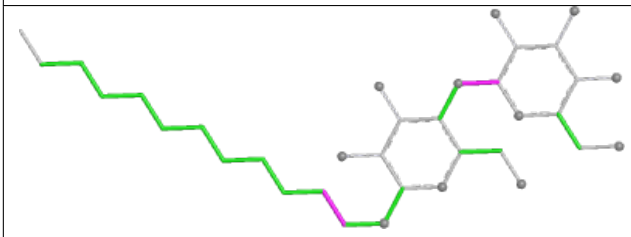
Ligand LMT BS 1006



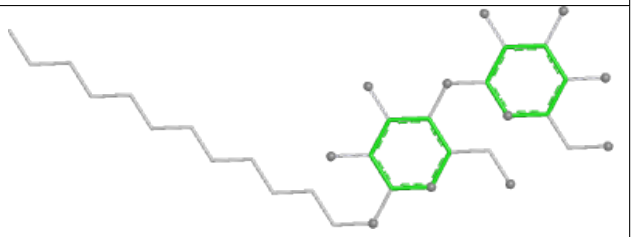
Bond lengths



Bond angles

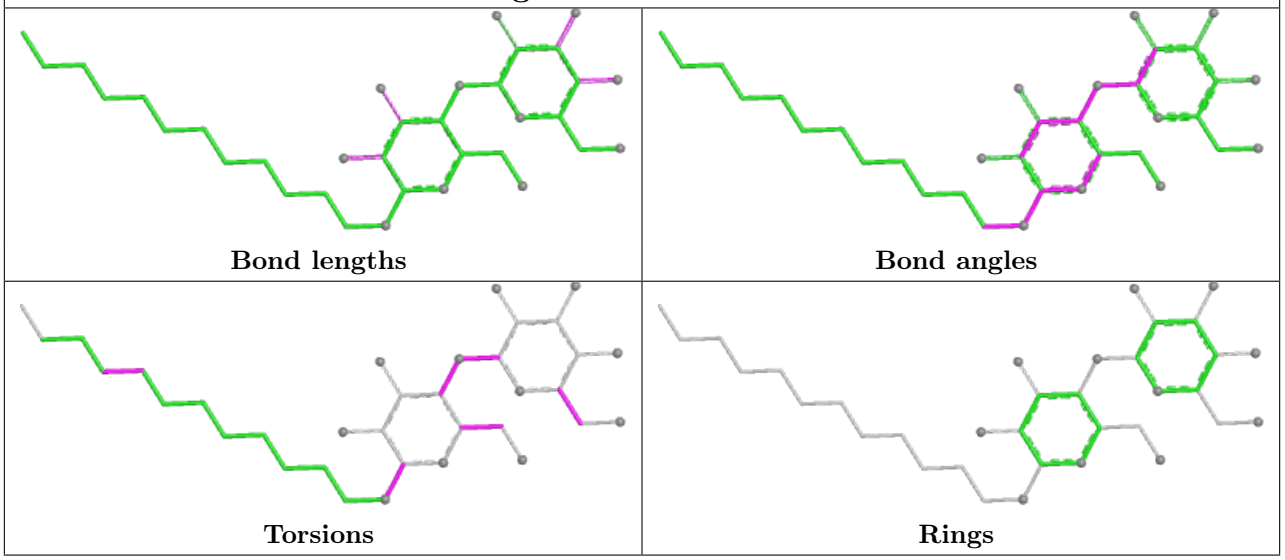


Torsions

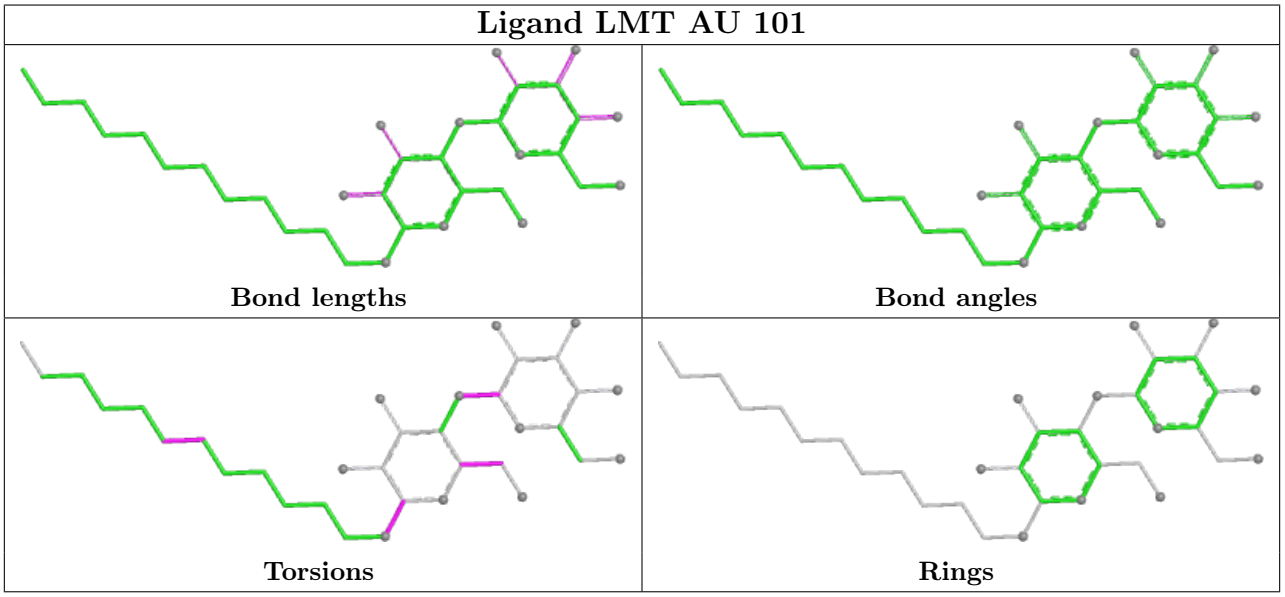


Rings

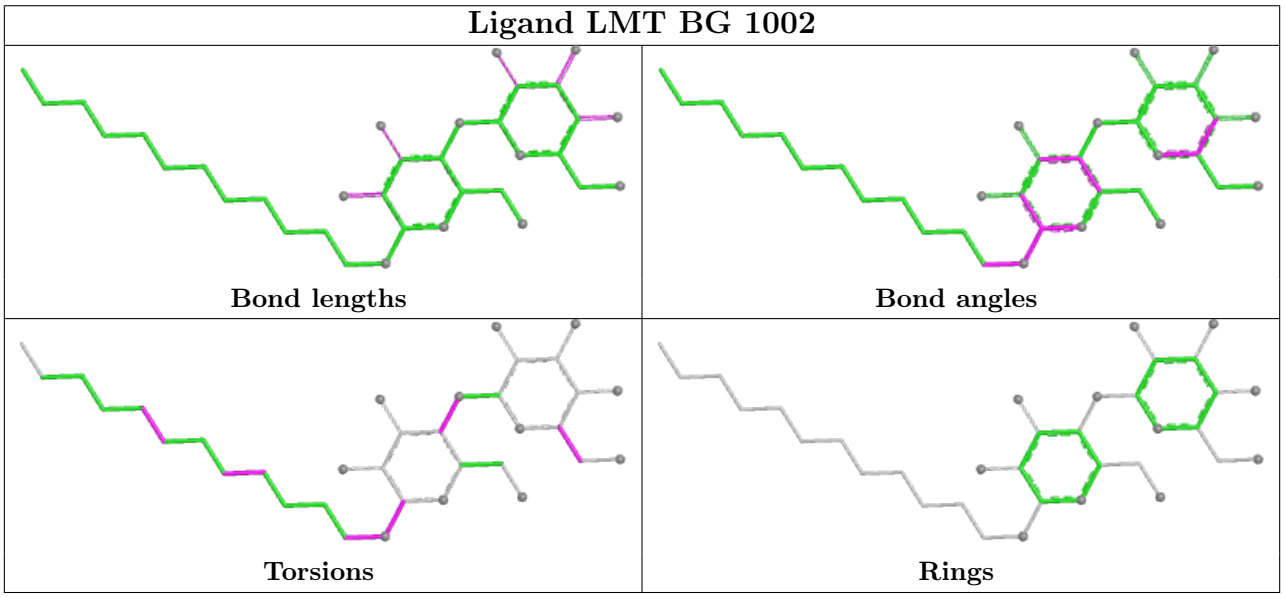
Ligand LMT AJ 103



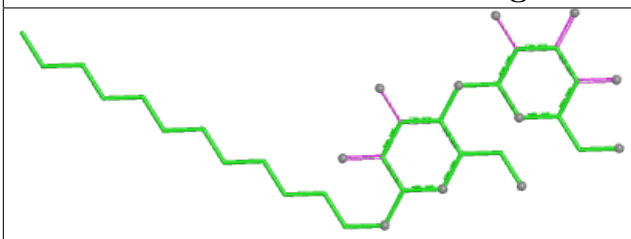
Ligand LMT AU 101

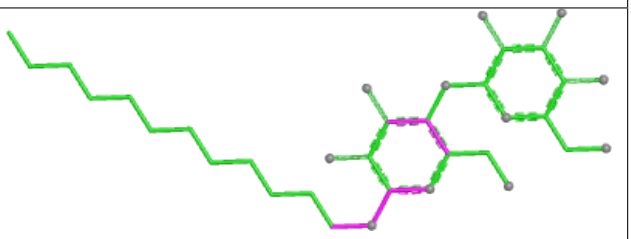


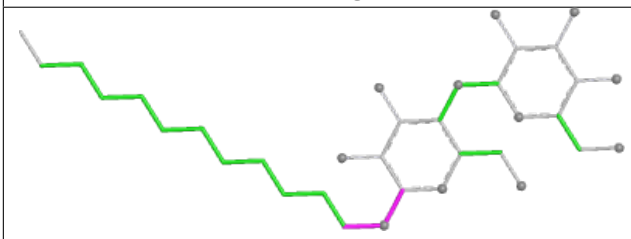
Ligand LMT BG 1002

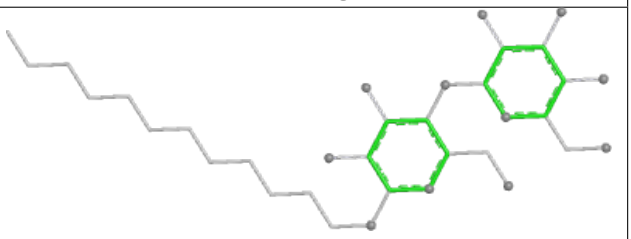


Ligand LMT AT 102

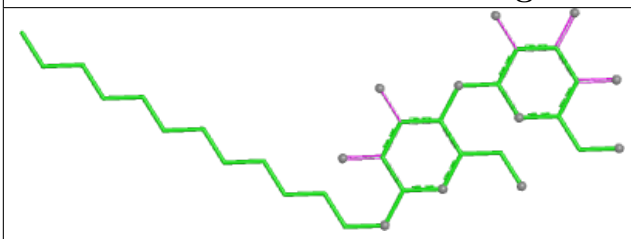

Bond lengths

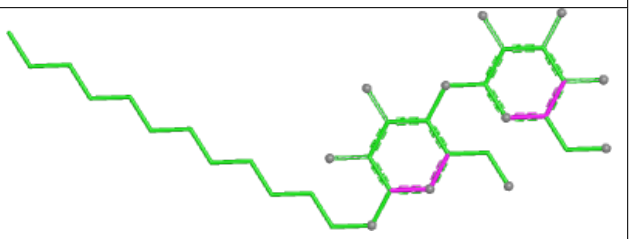

Bond angles


Torsions


Rings

Ligand LMT be 104


Bond lengths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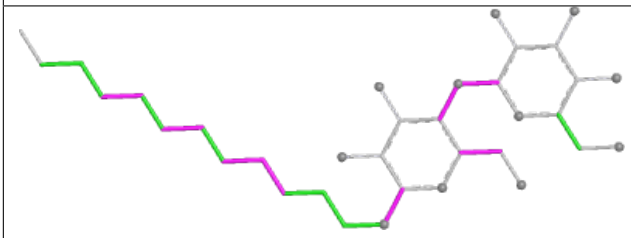
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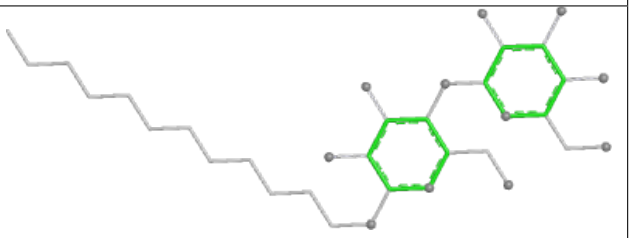
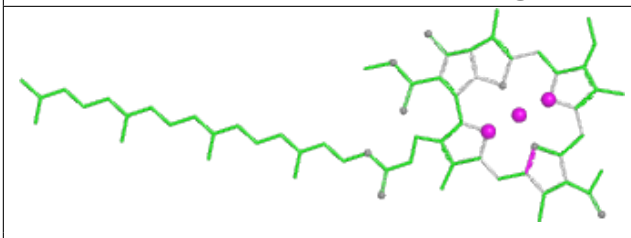
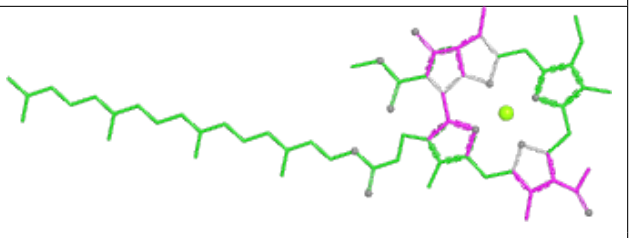
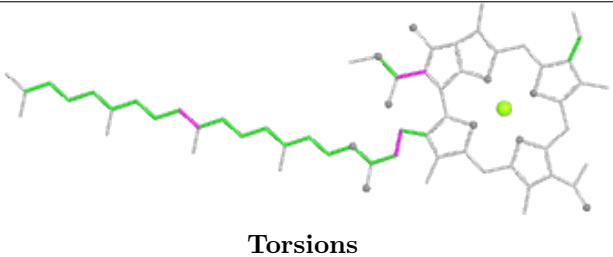

Rings

Ligand BCL BD 105


Bond lengths


Bond angles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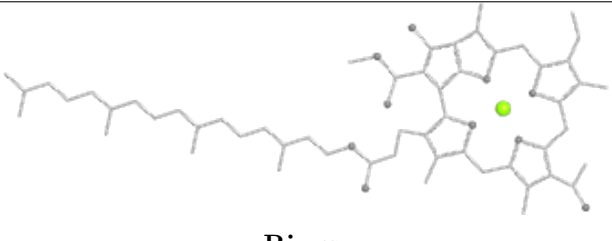
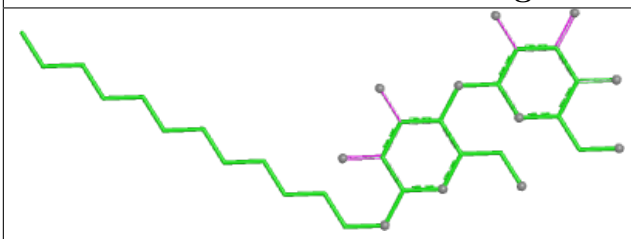

Rings

Ligand LMT L 1008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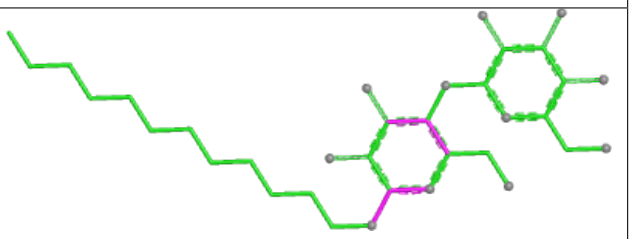
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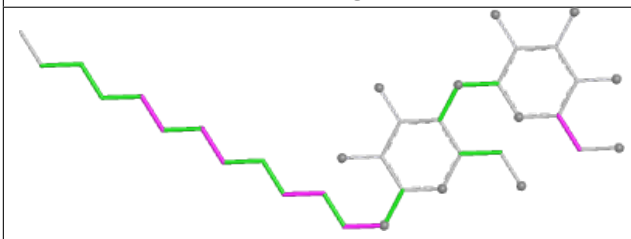
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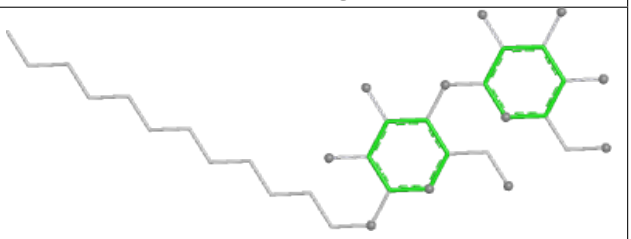
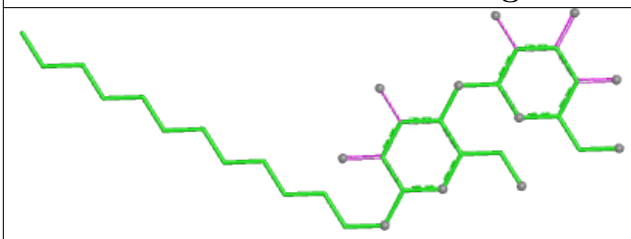
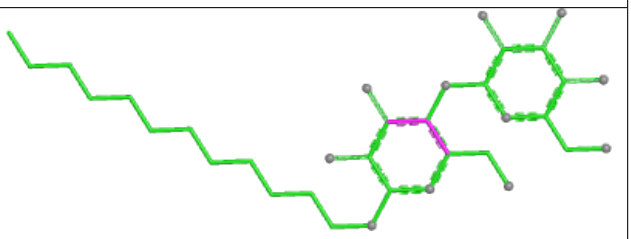
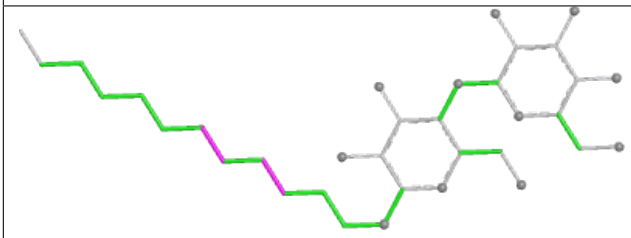

Rings

Ligand LMT BL 1005


Bond lengths


Bond angles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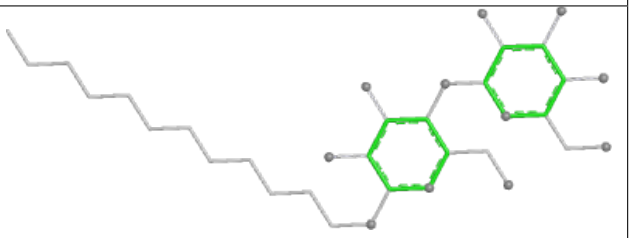
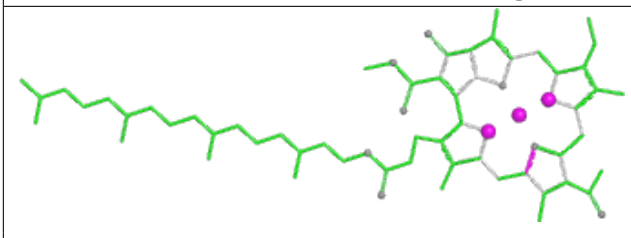

Rings

Ligand BCL AH 103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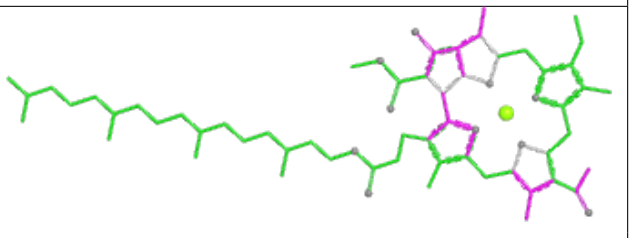
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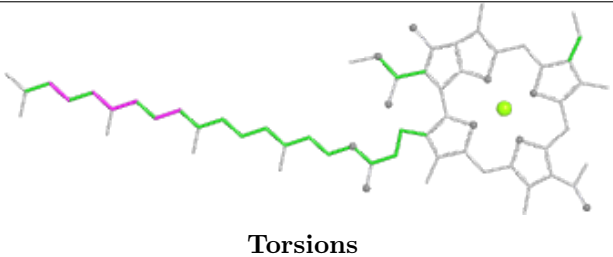
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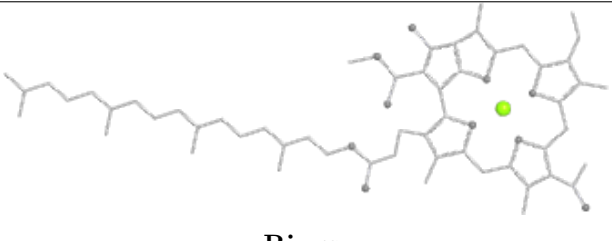
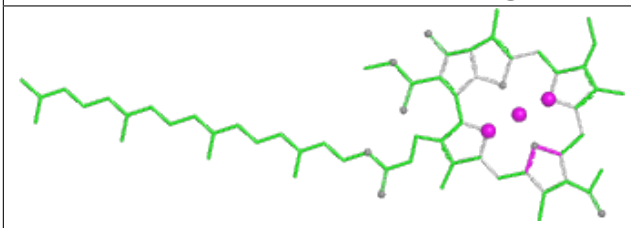
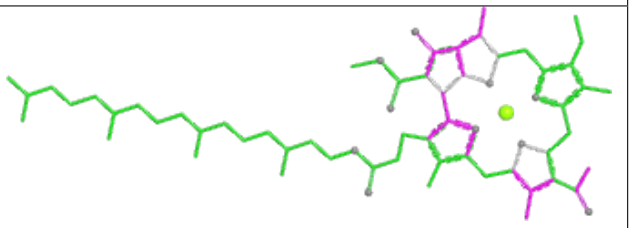

Rings

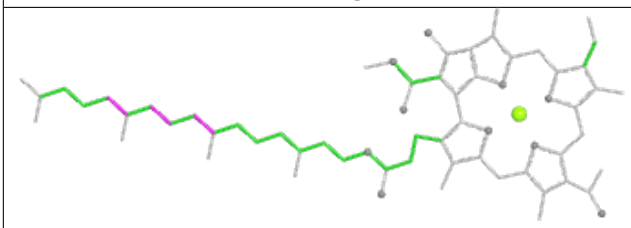
Ligand BCL AA 1001



Bond lengths



Bond angles



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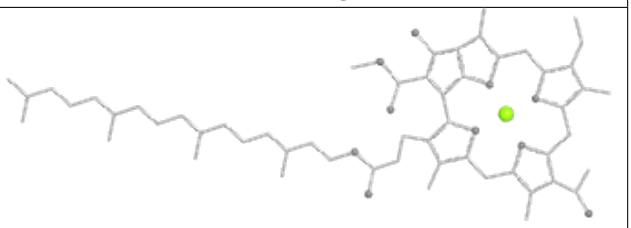
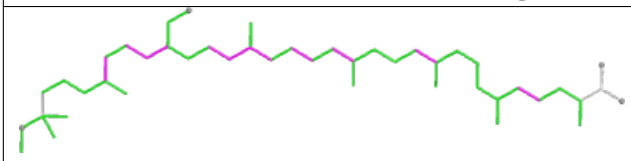
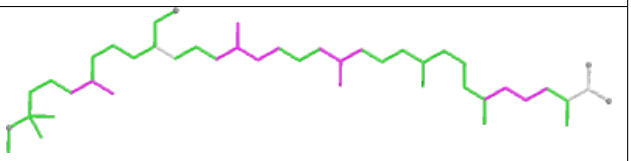


Rings

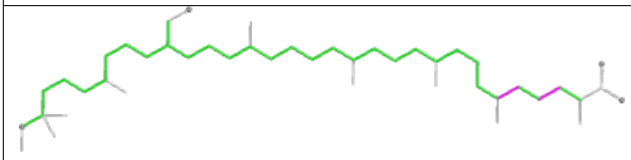
Ligand V7N BE 101



Bond lengths



Bond angles



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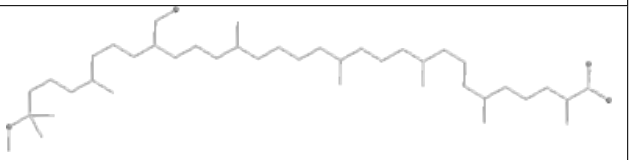
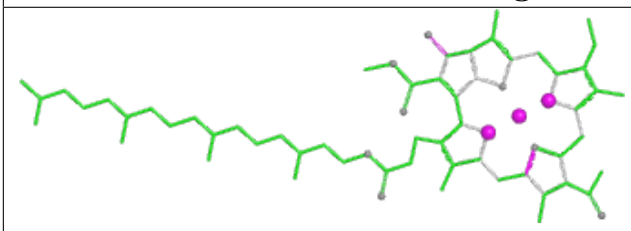


Rings

Ligand BCL AV 103



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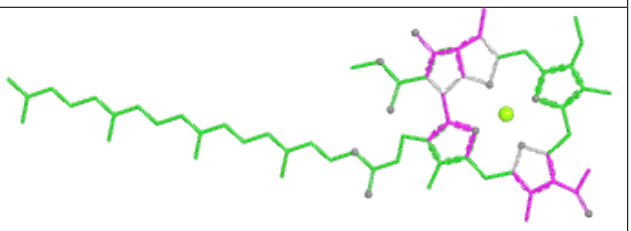
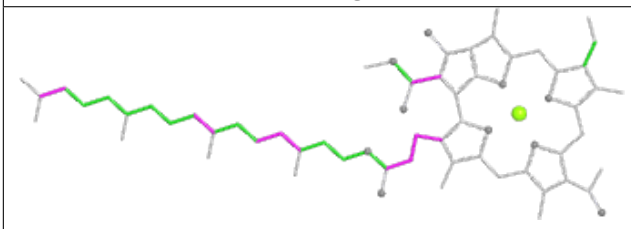


Bond angles



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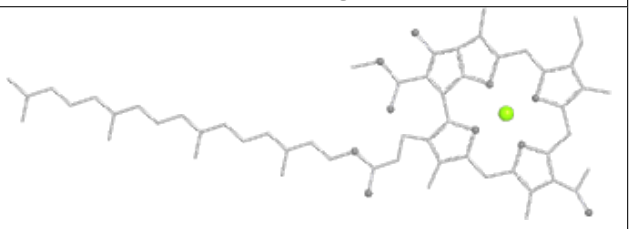
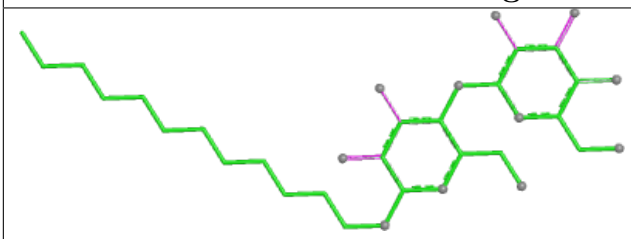
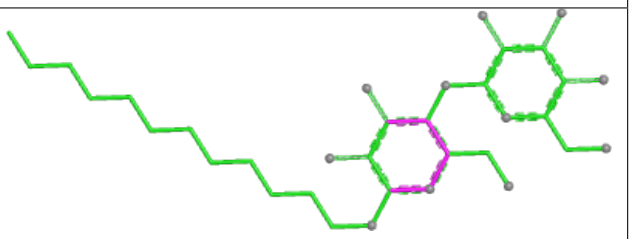


Rings

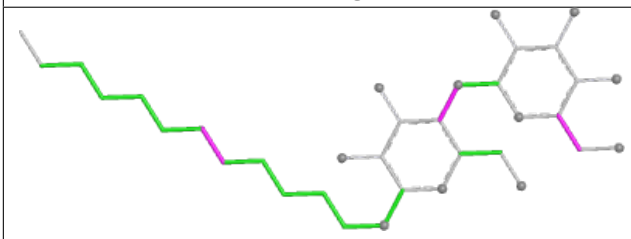
Ligand LMT BS 1002



Bond lengths



Bond angles



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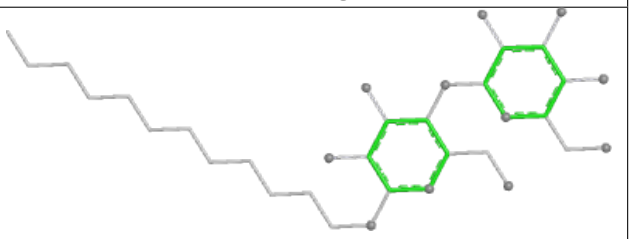
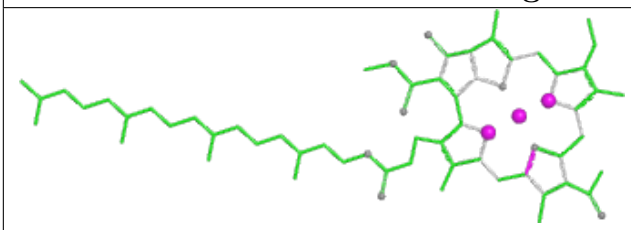
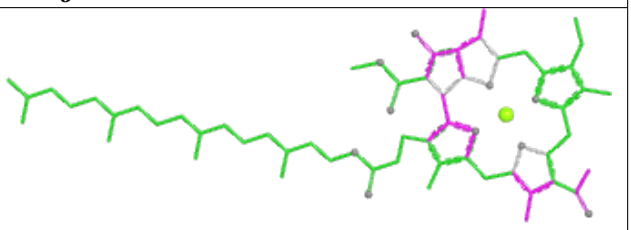


Rings

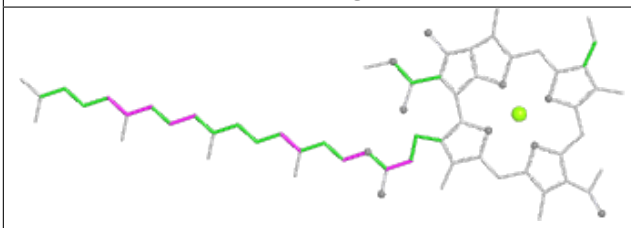
Ligand BCL aj 103



Bond lengths



Bond angles



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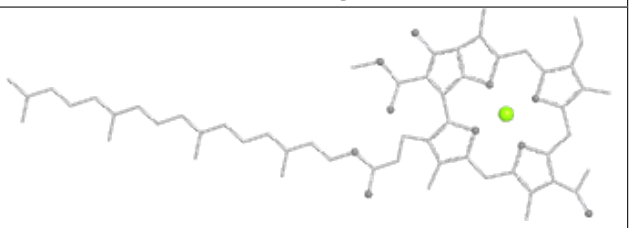
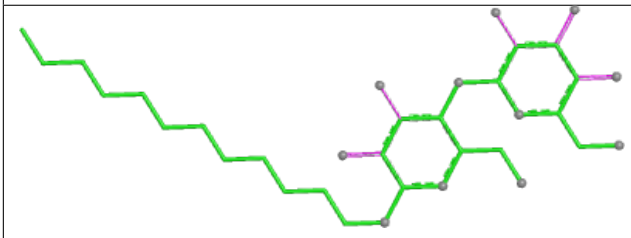
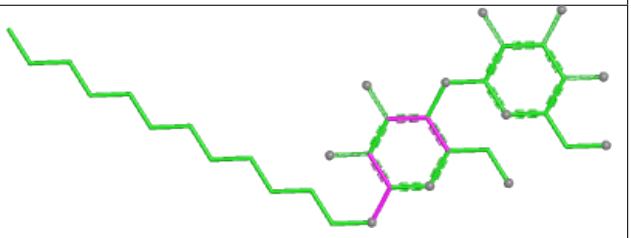


Rings

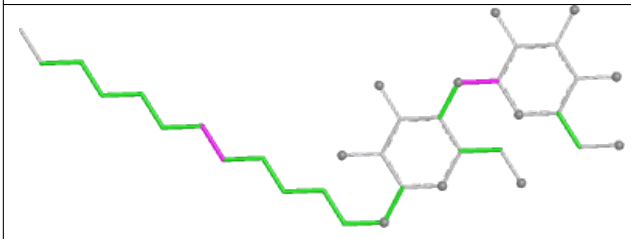
Ligand LMT BI 1004



Bond lengths



Bond angles



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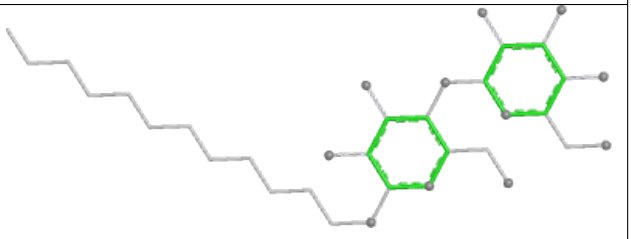
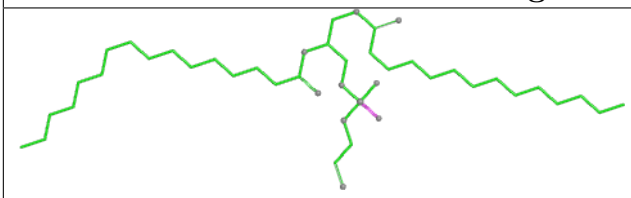
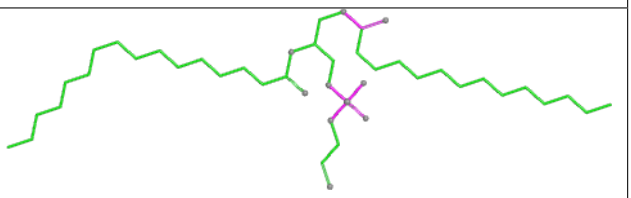
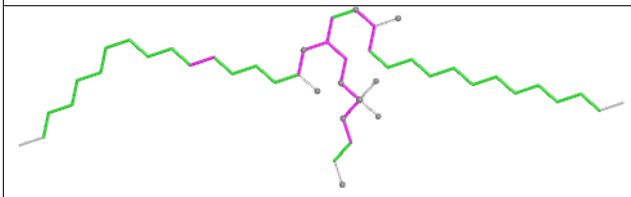
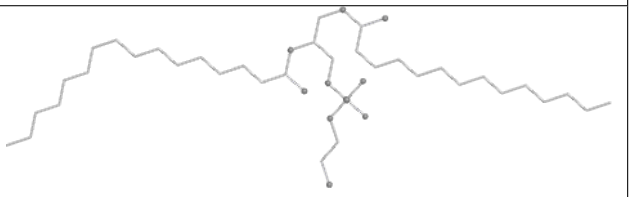
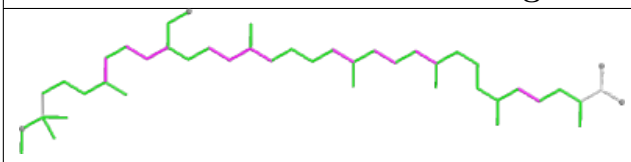
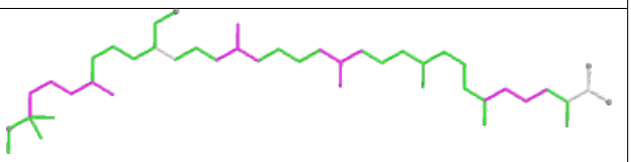
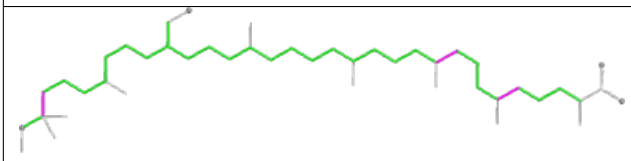
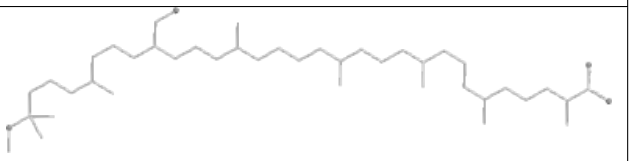
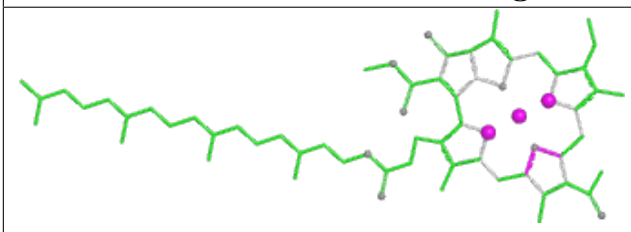
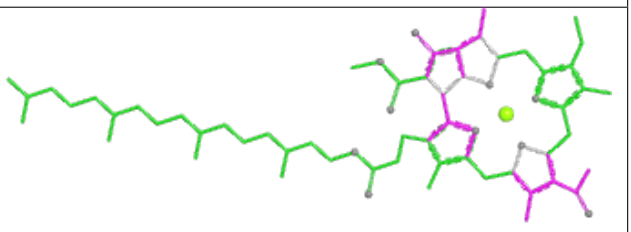
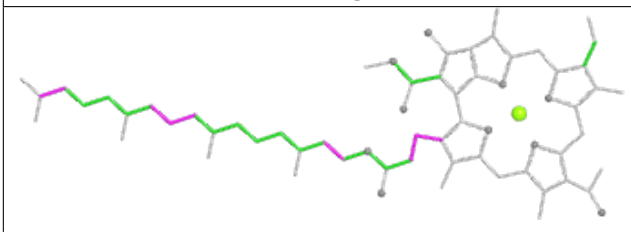
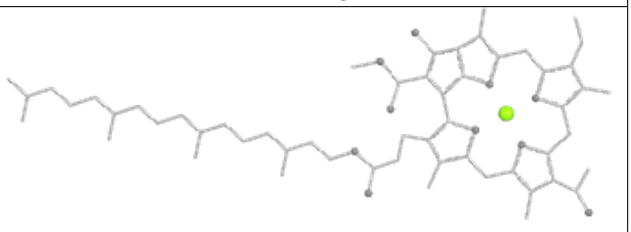


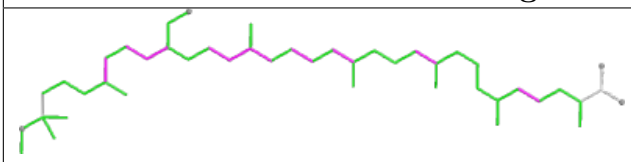
Rings

Ligand 0V9 bl 103	
 Bond lengths	 Bond angles
 Torsions	 Rings

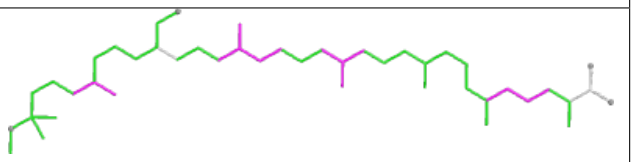
Ligand V7N bl 102	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand BCL aa 1001	
 Bond lengths	 Bond angles
 Torsions	 Rings

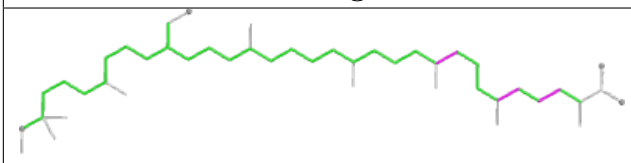
Ligand V7N bc 101



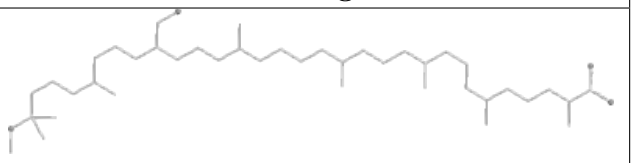
Bond lengths



Bond angles

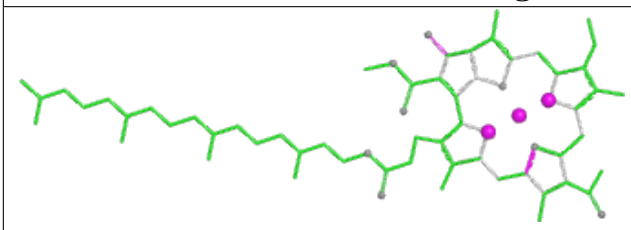


Torsions

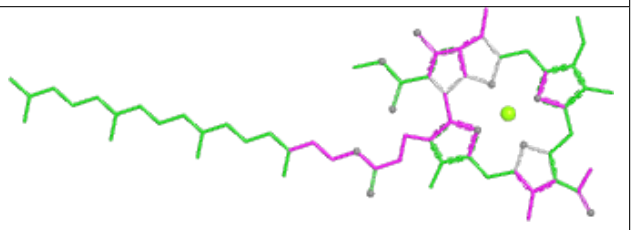


Rings

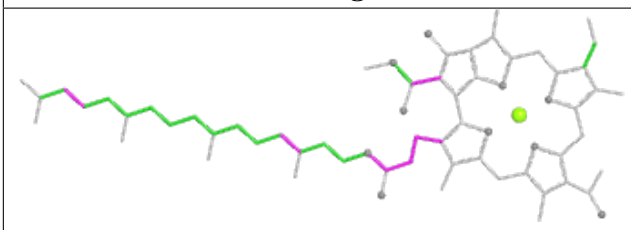
Ligand BCL AL 101



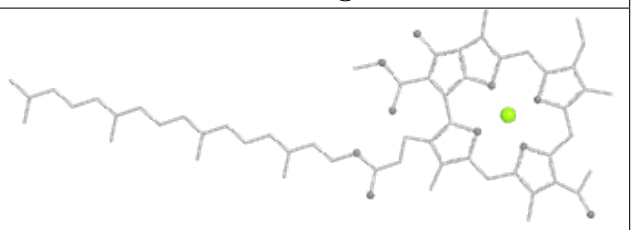
Bond lengths



Bond angles

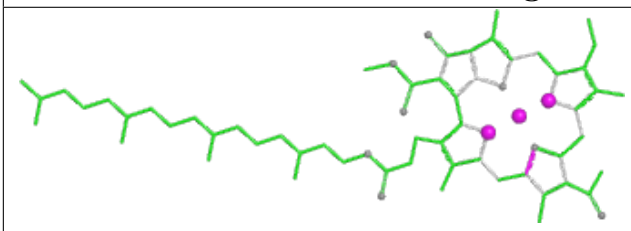


Torsions

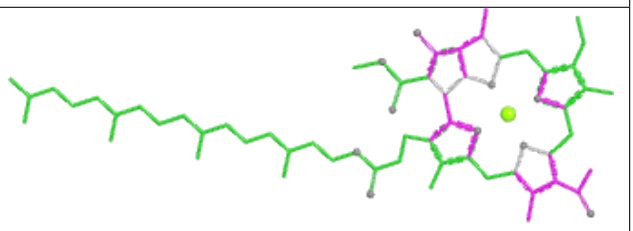


Rings

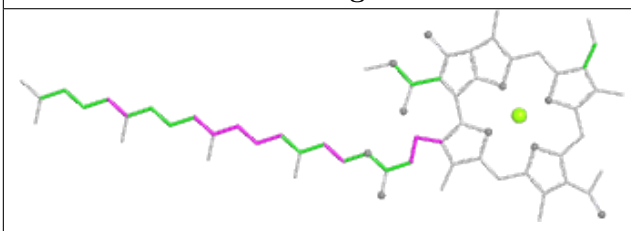
Ligand BCL bl 104



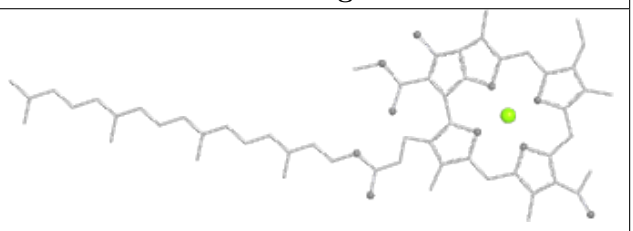
Bond lengths



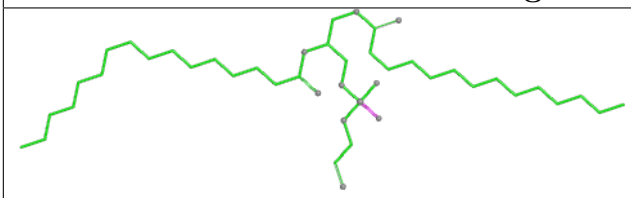
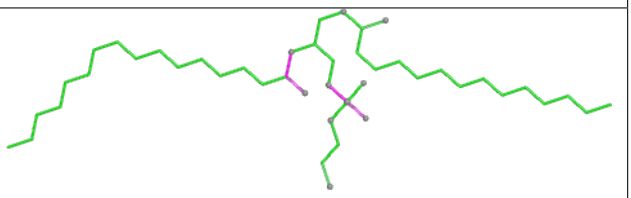
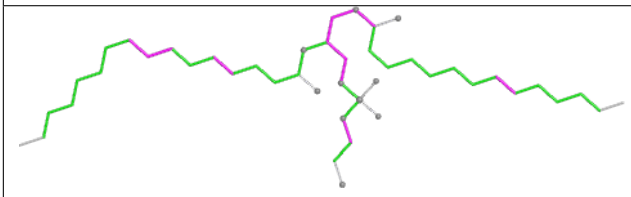
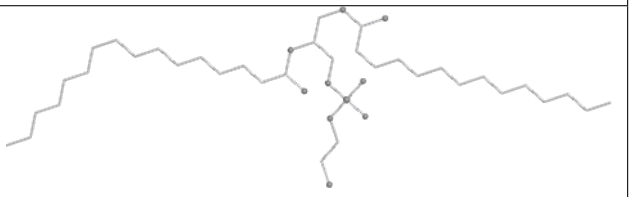
Bond angles

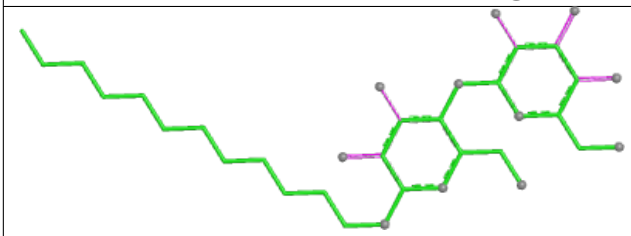
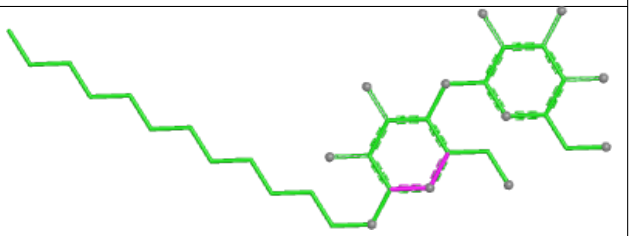
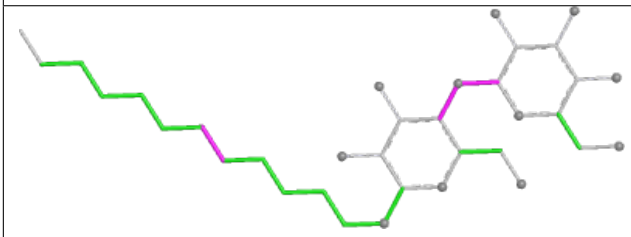
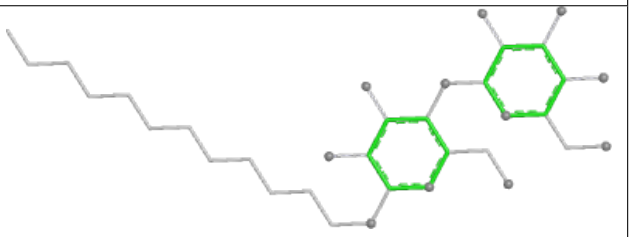


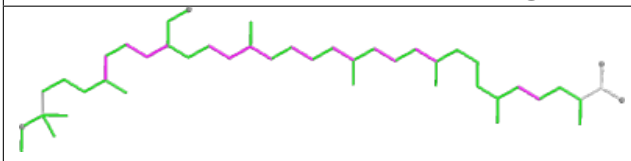
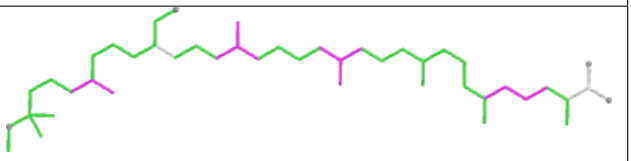
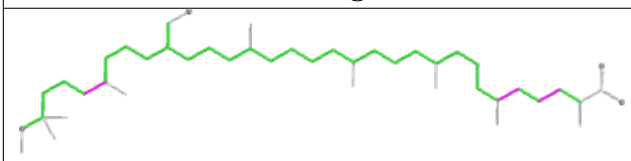
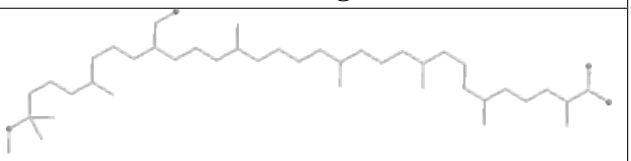
Torsions



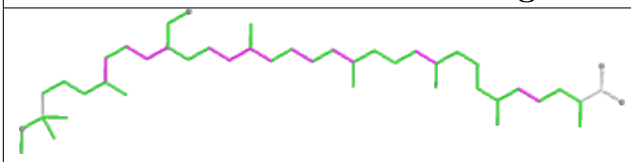
Rings

Ligand 0V9 be 103	
 Bond lengths	 Bond angles
 Torsions	 Rings

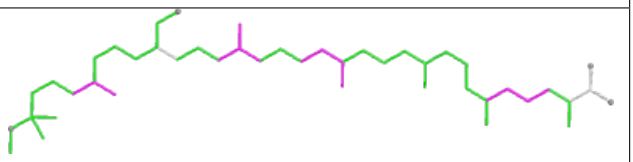
Ligand LMT BD 104	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand V7N bf 101	
 Bond lengths	 Bond angles
 Torsions	 Rings

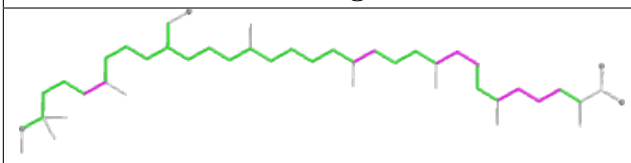
Ligand V7N bb 101



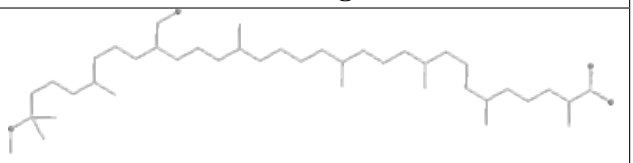
Bond lengths



Bond angles

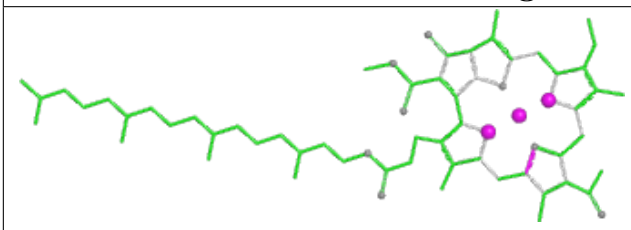


Torsions

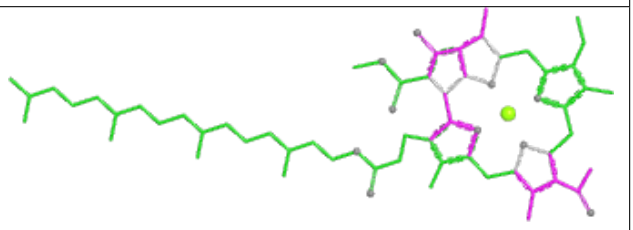


Rings

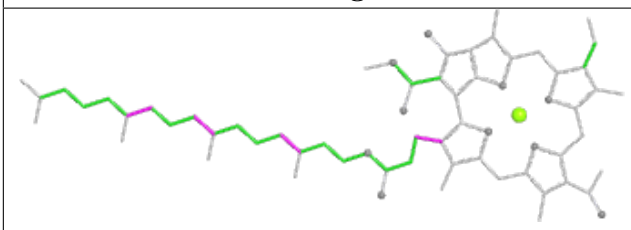
Ligand BCL bn 103



Bond lengths



Bond angles



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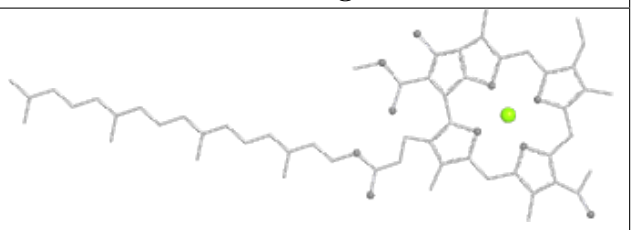
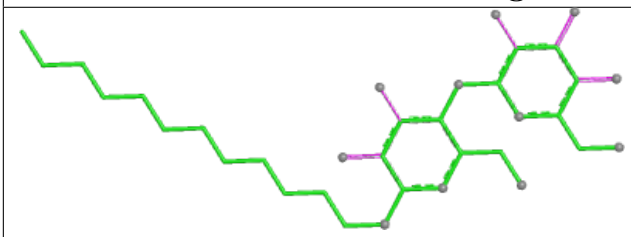
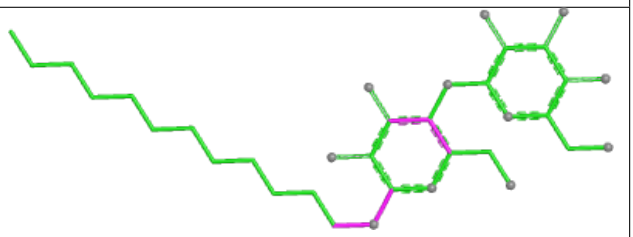


Rings

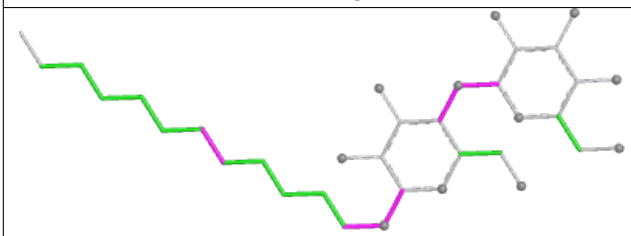
Ligand LMT BD 103



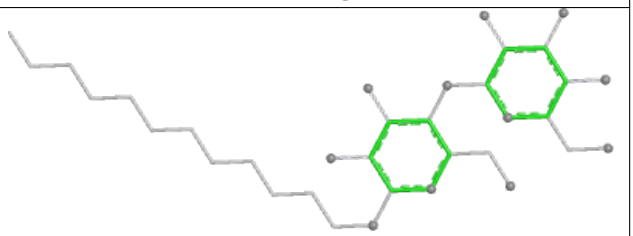
Bond lengths



Bond angles

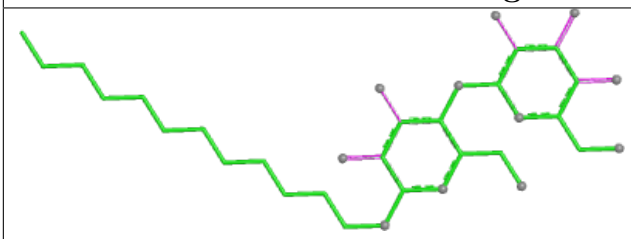


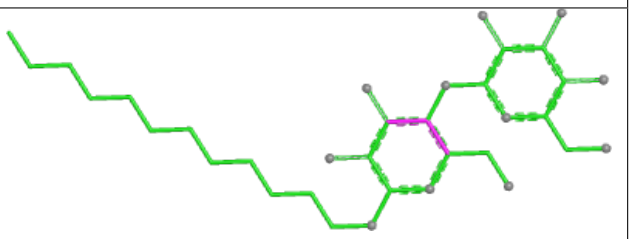
Torsions

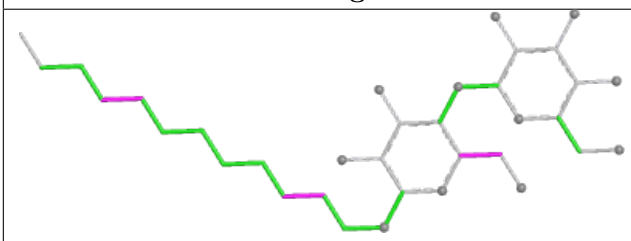


Rings

Ligand LMT BJ 1003


Bond lengths


Bond angles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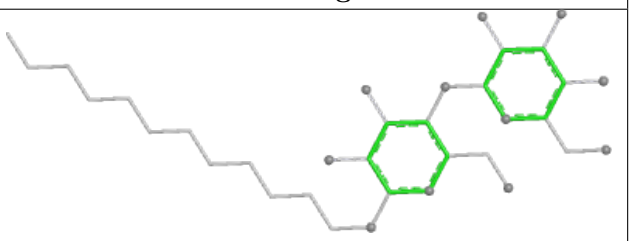
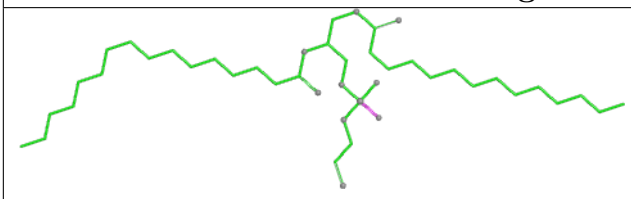
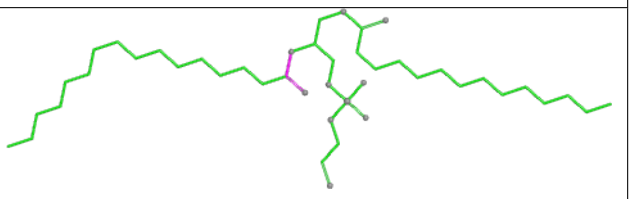
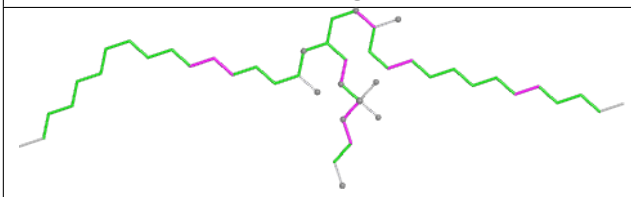
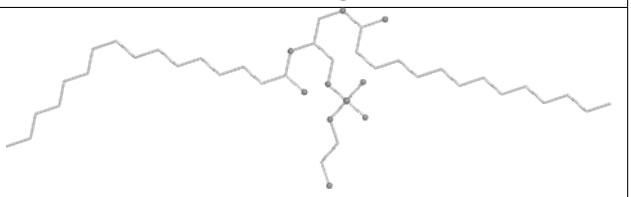

Rings

Ligand 0V9 bm 102

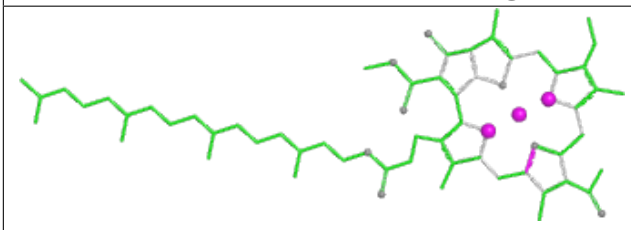

Bond lengths

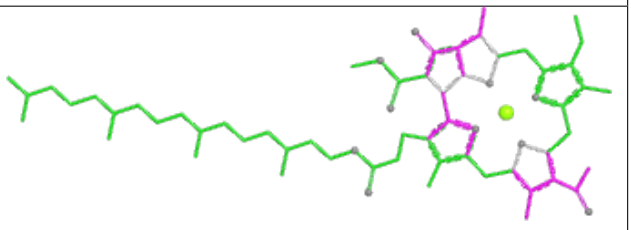

Bond angles

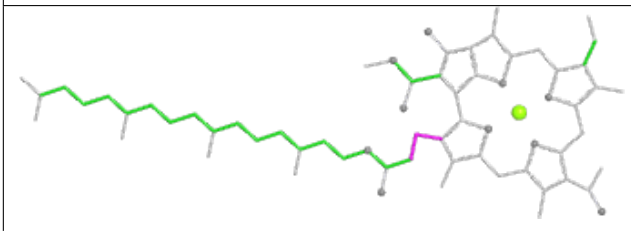

Torsions


Rings

Ligand BCL BR 1004


Bond lengths


Bond angles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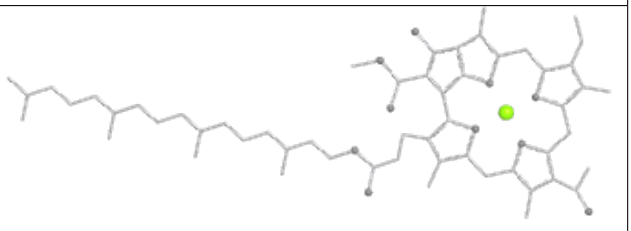
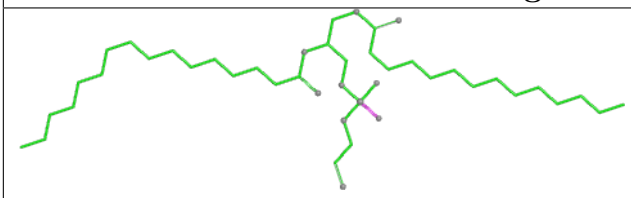
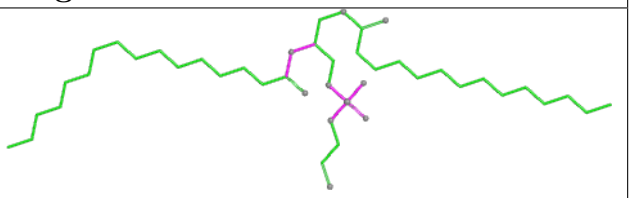
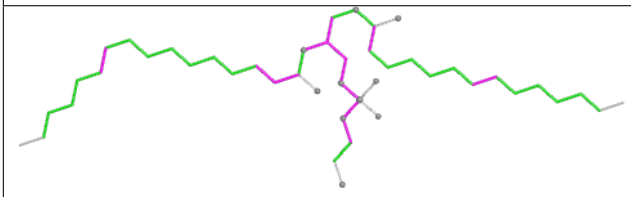
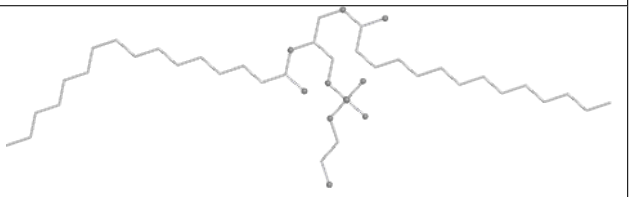
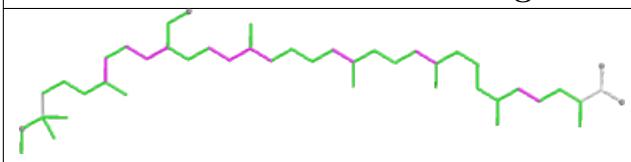
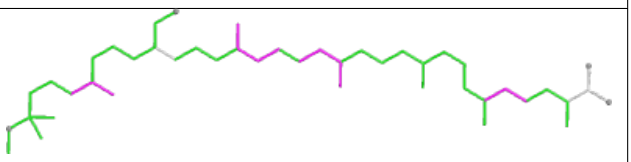
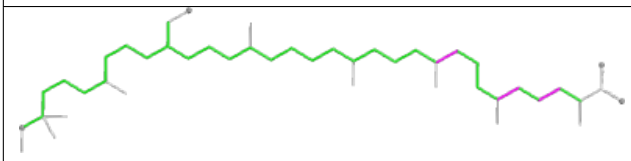
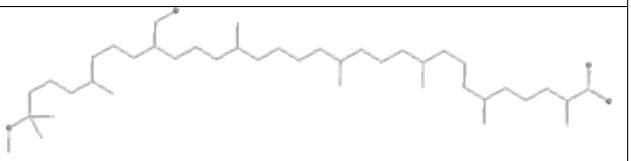
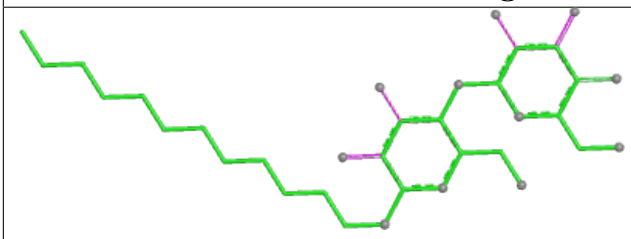
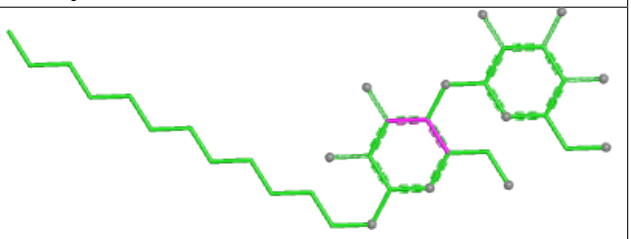
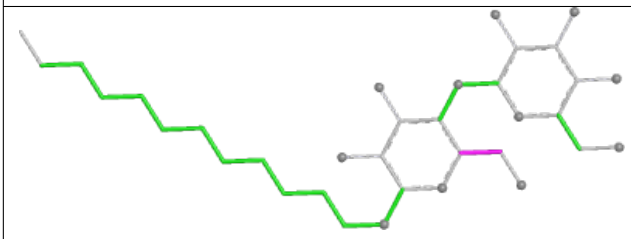
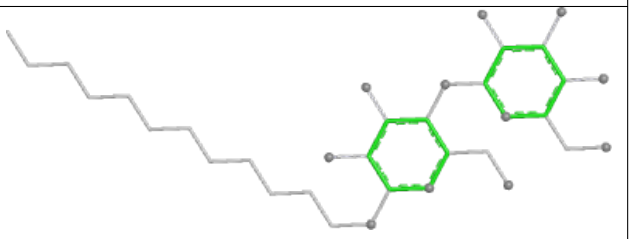
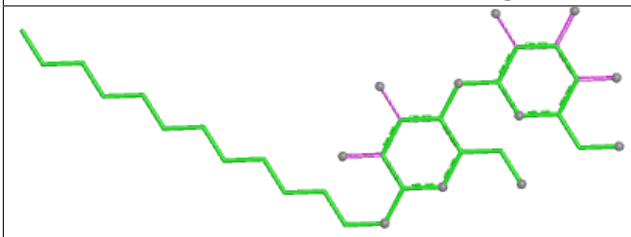
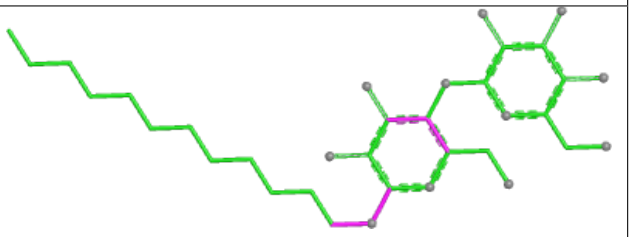
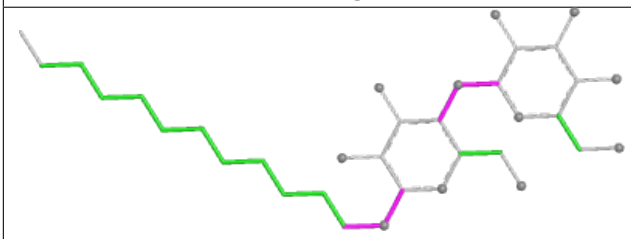
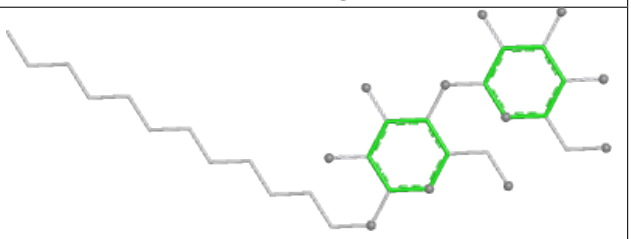

Rings

Ligand 0V9 bg 102	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand V7N AS 105	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand LMT BQ 1005	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand LMT BX 1004	
 Bond lengths	 Bond angles
 Torsions	 Rings

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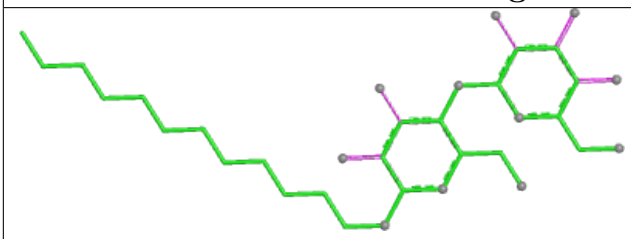
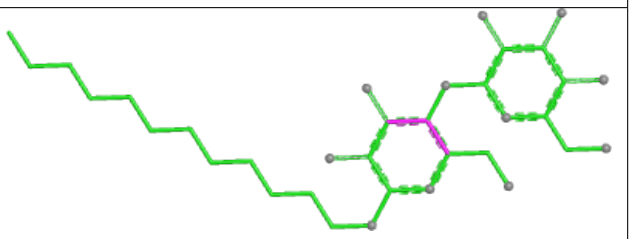
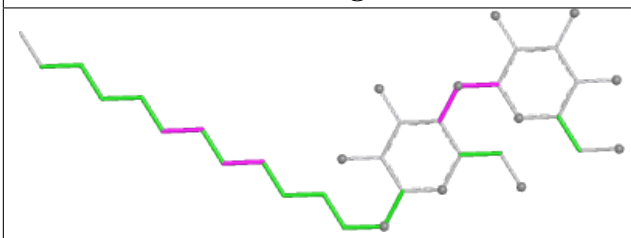
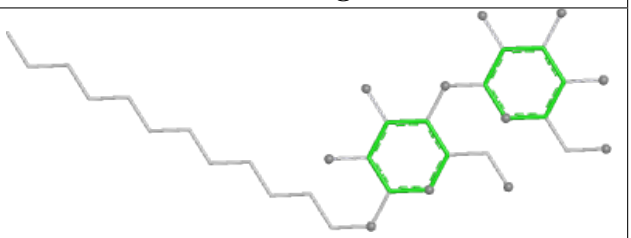
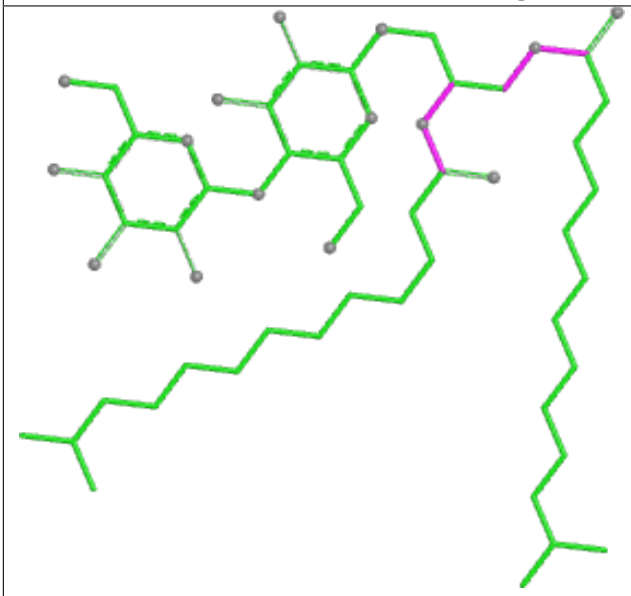
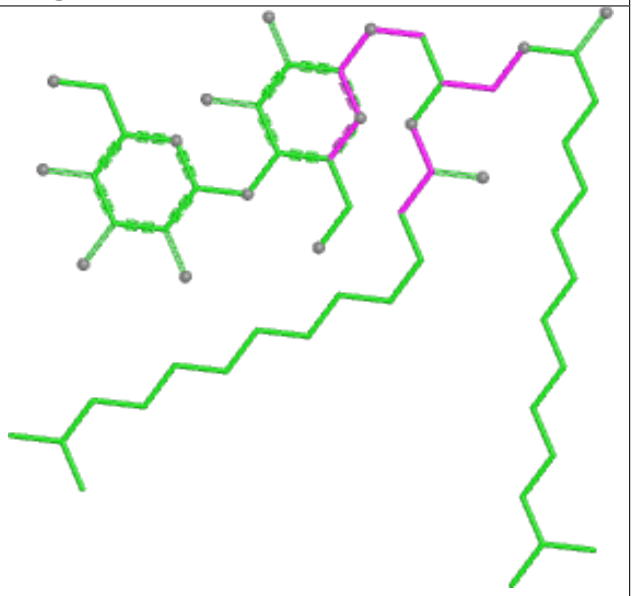
 Bond lengths	 Bond angles
 Torsions	 Rings

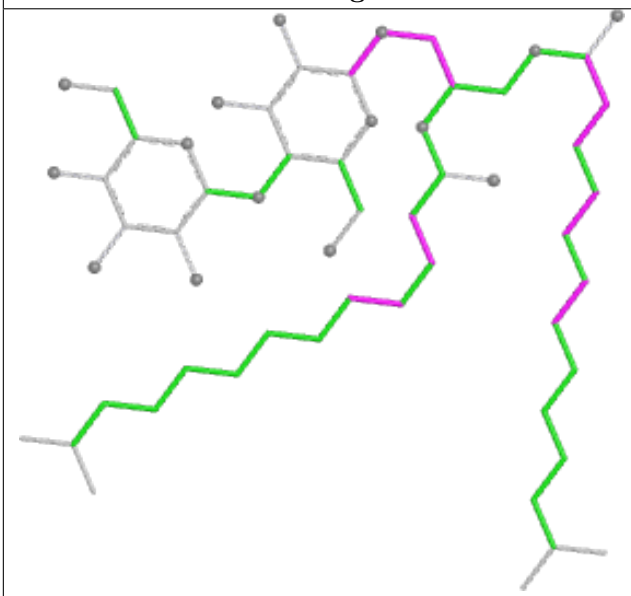
Ligand V7B ag 1002



Bond lengths



Bond angles



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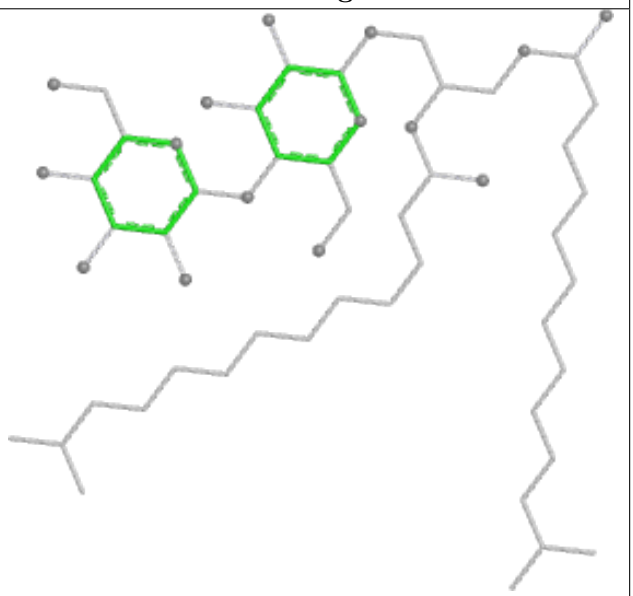

Rings

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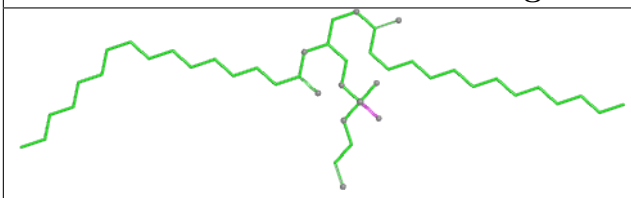
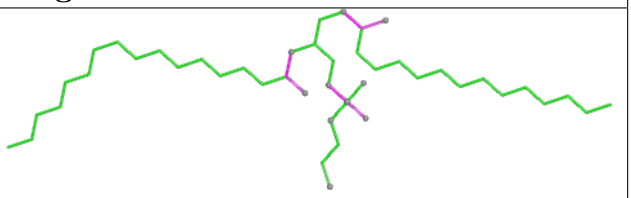
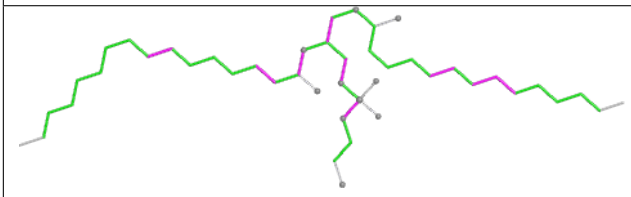
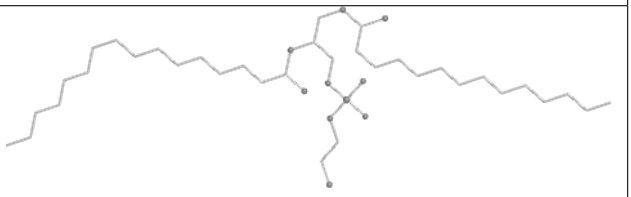
 Bond lengths	 Bond angles
 Torsions	 Rings

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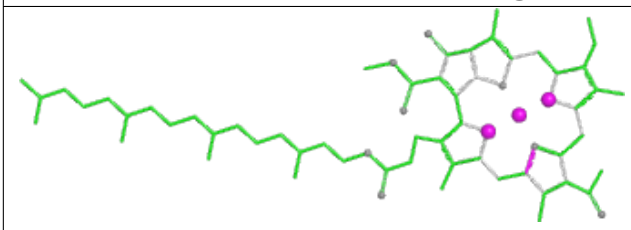
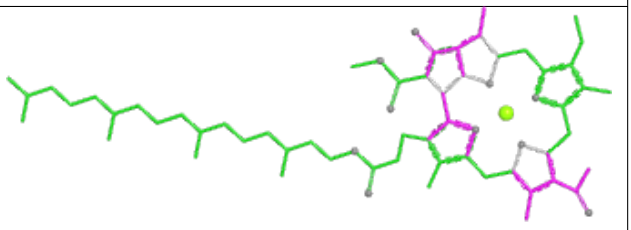
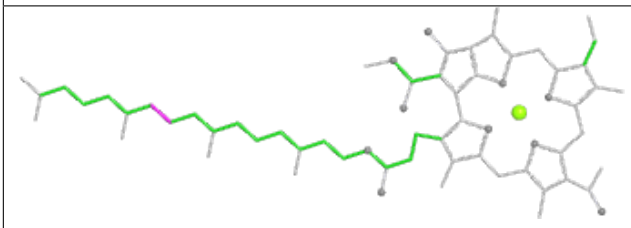
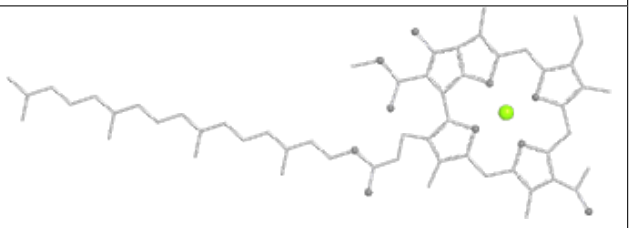
 Bond lengths	 Bond angles
 Torsions	 Rings

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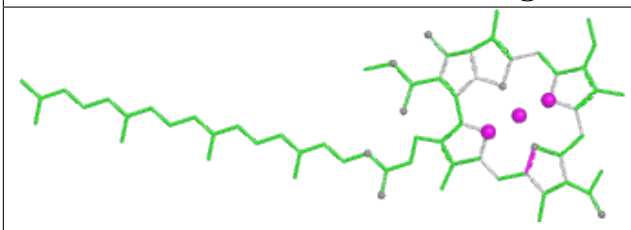
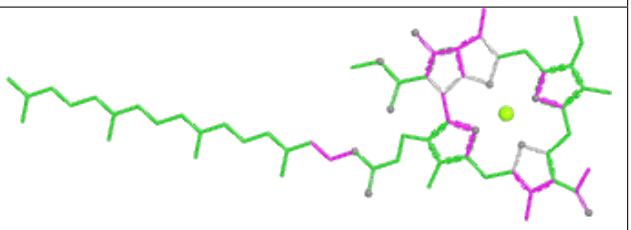
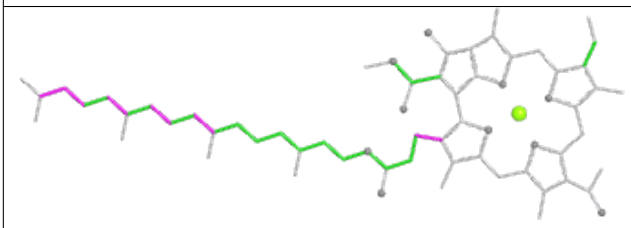
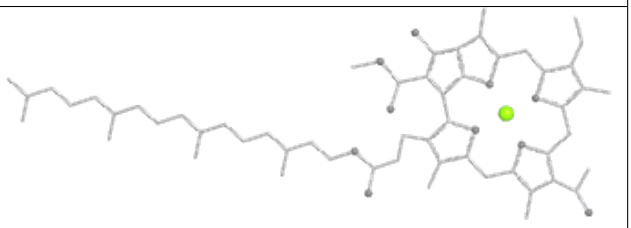
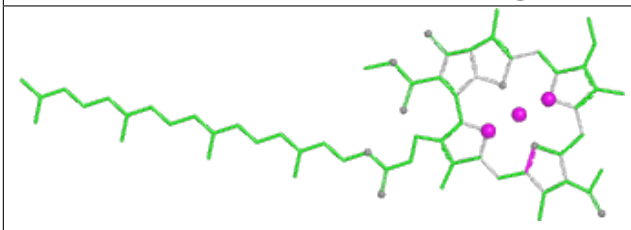
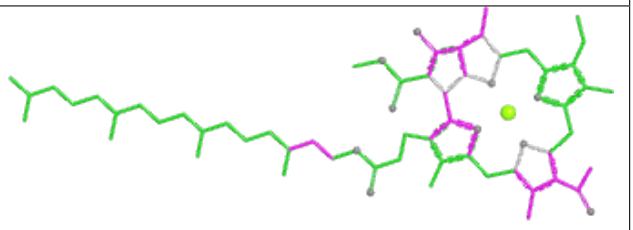
 Bond lengths	 Bond angles
 Torsions	 Rings

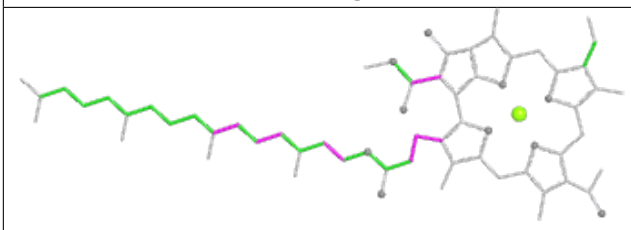
Ligand BCL BA 103



Bond lengths



Bond angles



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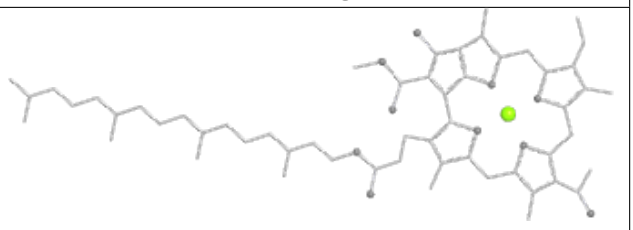
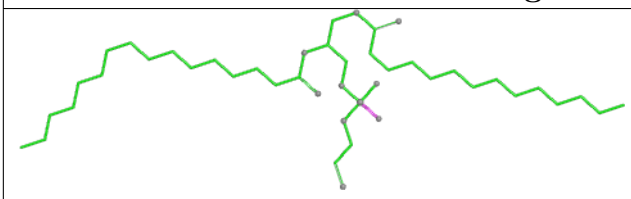


Rings

Ligand 0V9 ba 102



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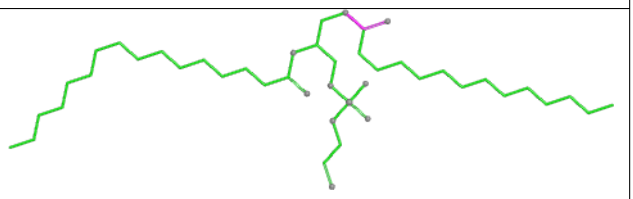
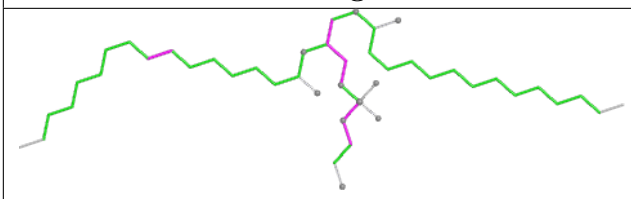


Bond angles



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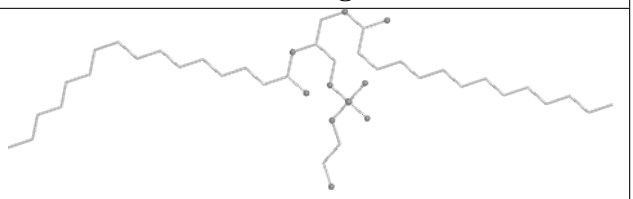
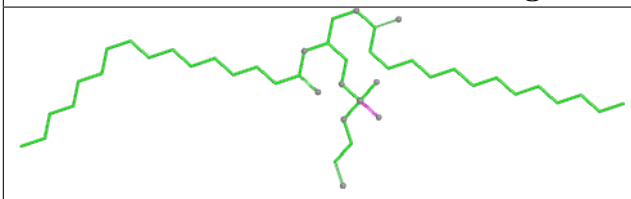


Rings

Ligand 0V9 bk 103



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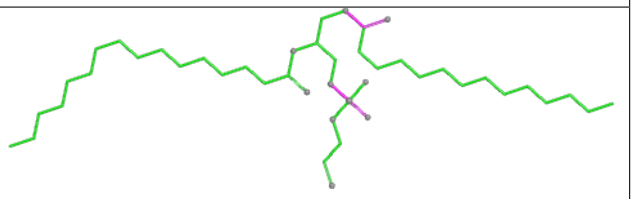
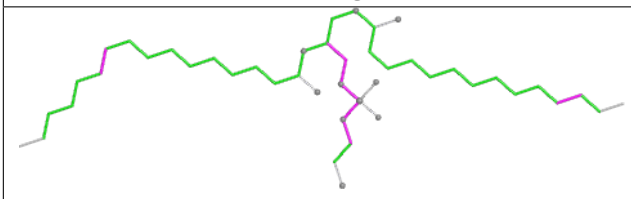


Bond angles



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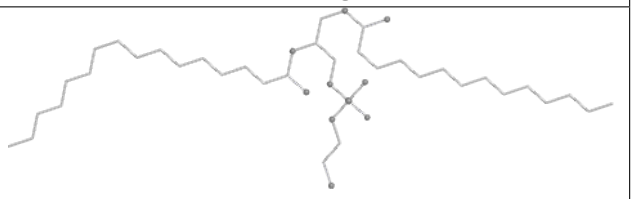

Rings

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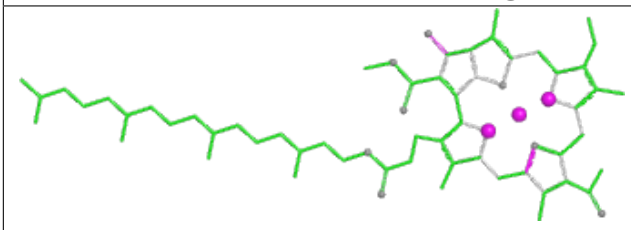
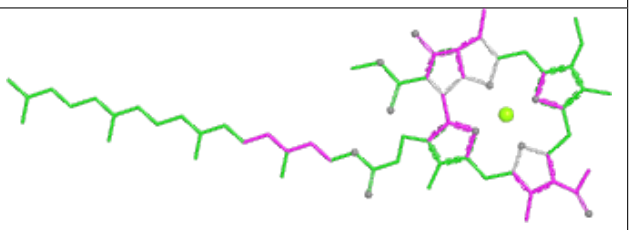
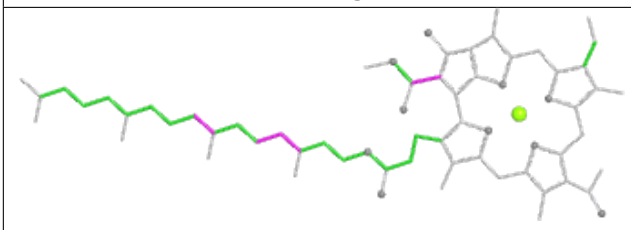
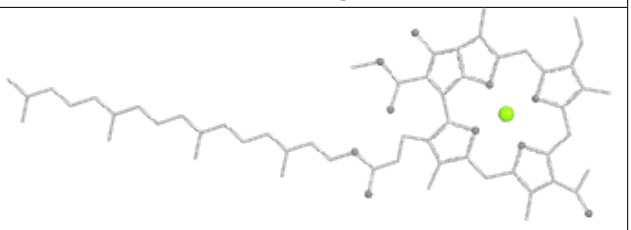
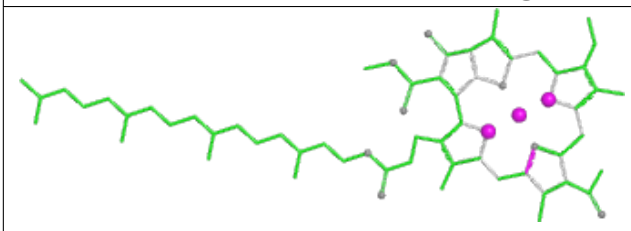
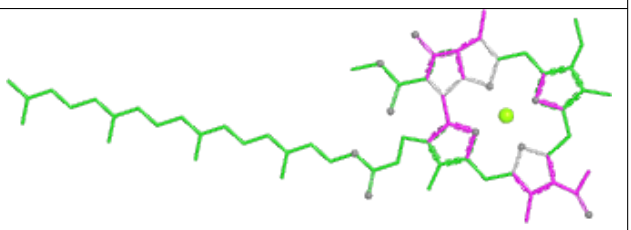
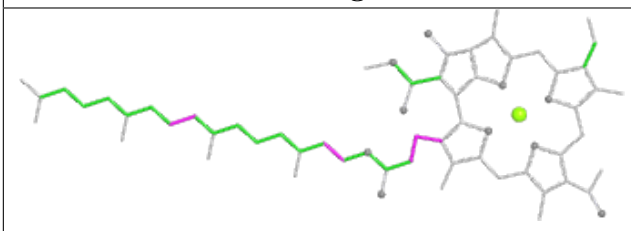
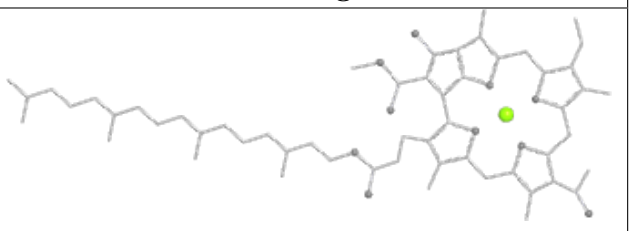
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand BCL bd 102	
 Bond lengths	 Bond angles
 Torsions	 Rings

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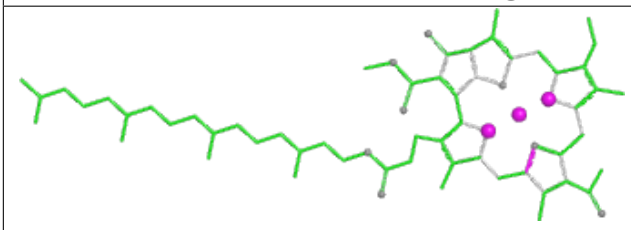
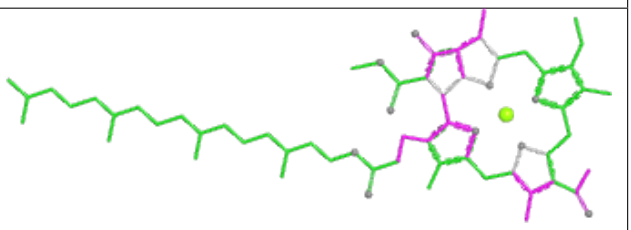
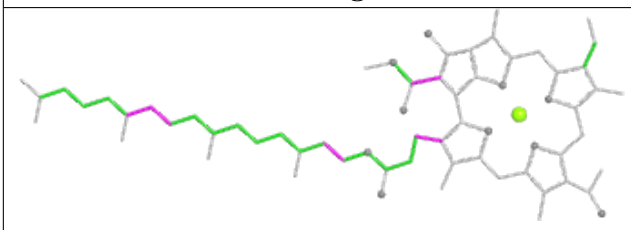
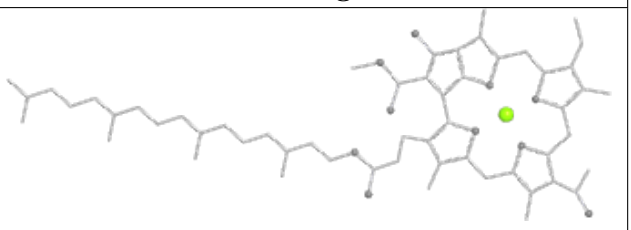
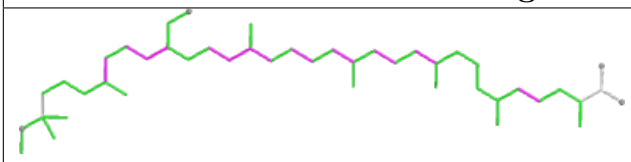
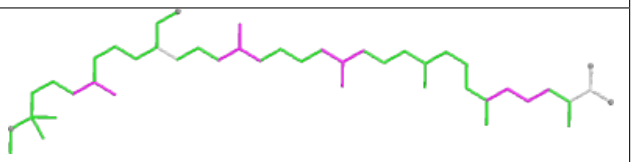
 Bond lengths	 Bond angles
 Torsions	 Rings

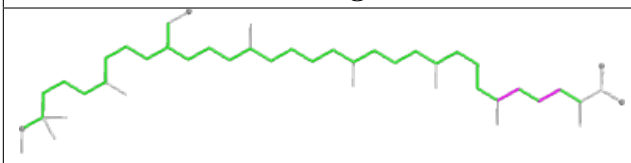
Ligand V7N bn 102



Bond lengths



Bond angles



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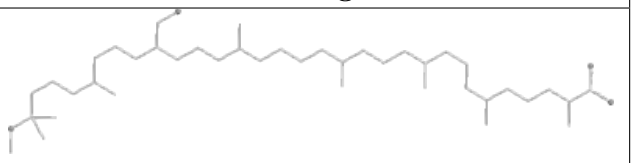
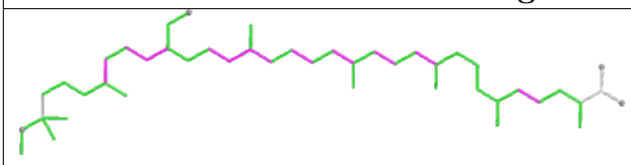
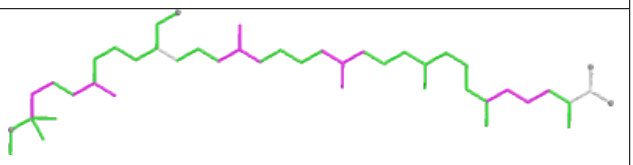


Rings

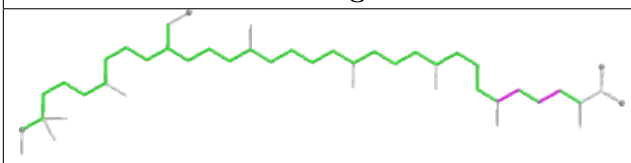
Ligand V7N bd 101



Bond lengths



Bond angles



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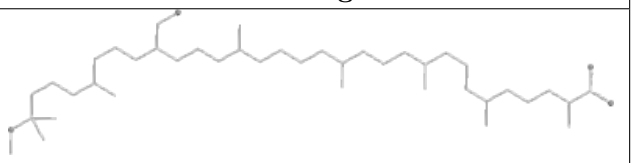
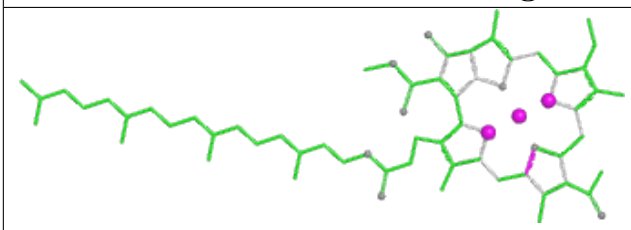
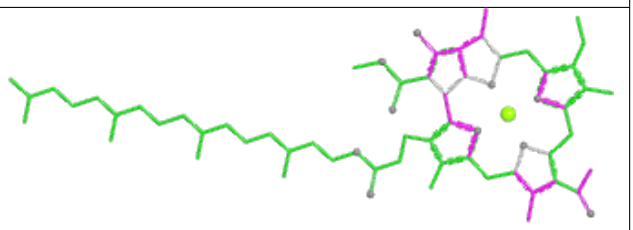


Rings

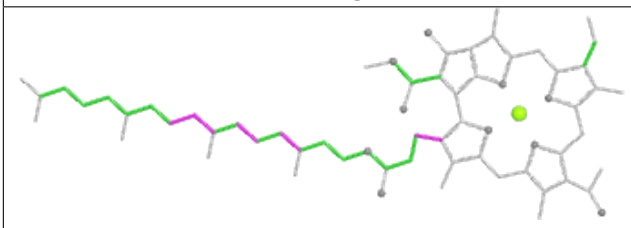
Ligand BCL be 105



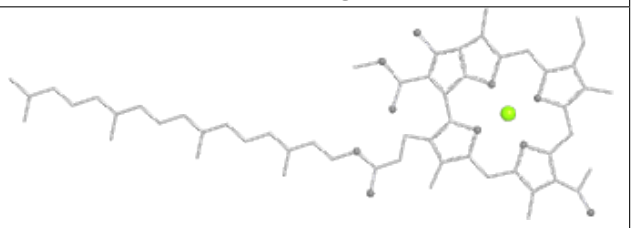
Bond lengths



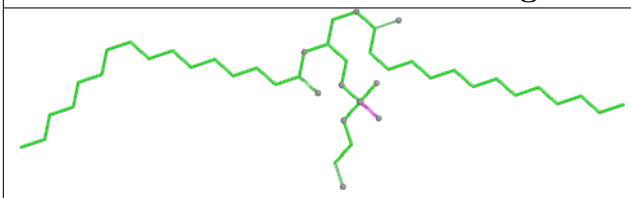
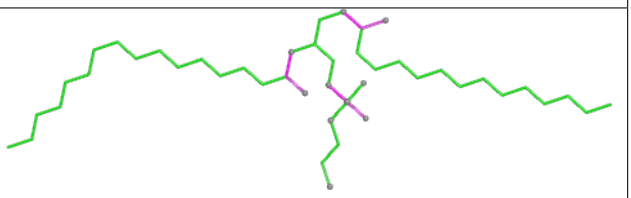
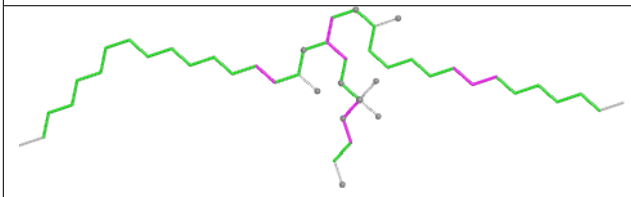
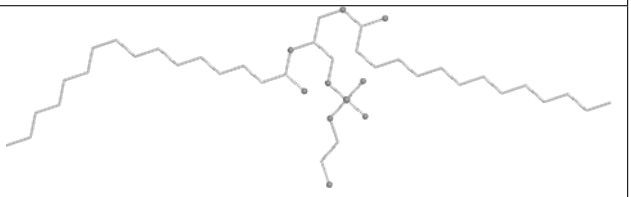
Bond angles



Torsions



Rings

Ligand 0V9 H1 101	
 Bond lengths	 Bond angles
 Torsions	 Rings

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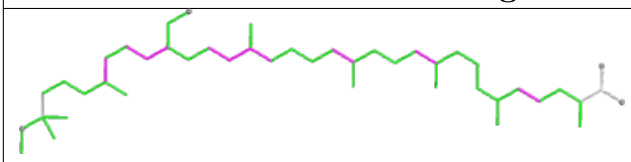
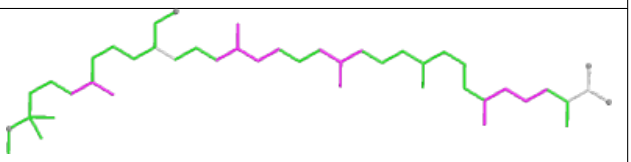
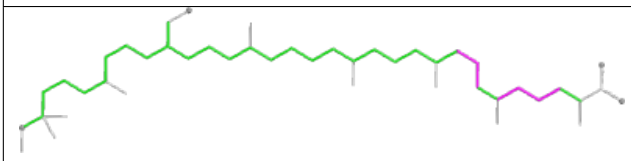
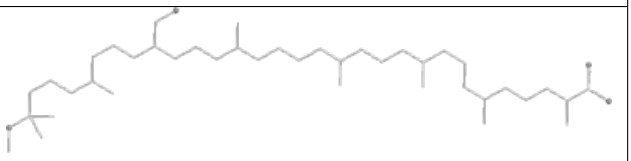
 Bond lengths	 Bond angles
 Torsions	 Rings

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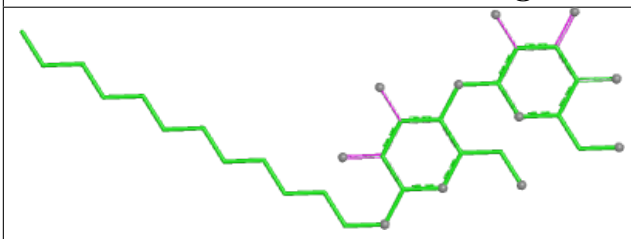
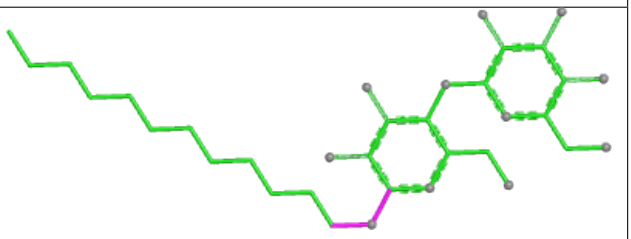
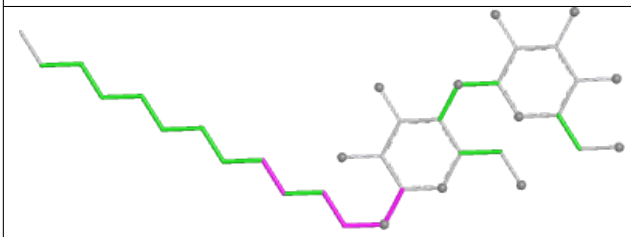
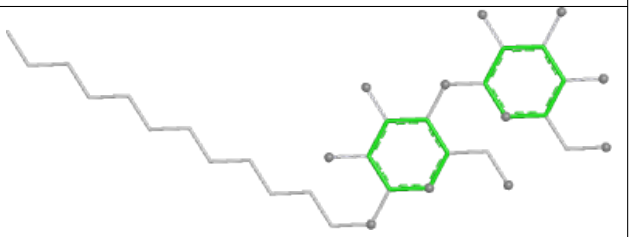
 Bond lengths	 Bond angles
 Torsions	 Rings

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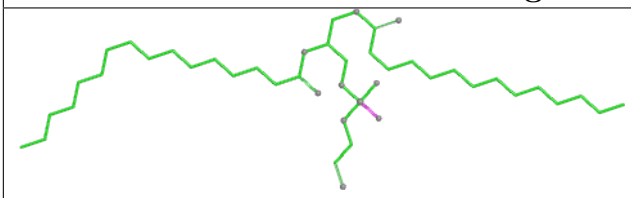
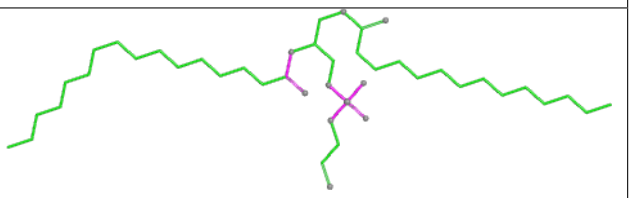
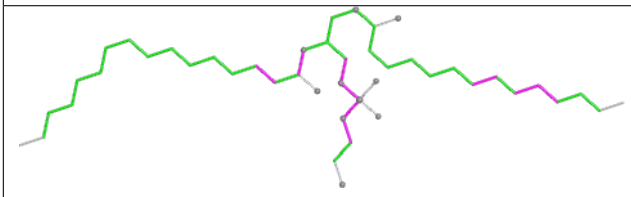
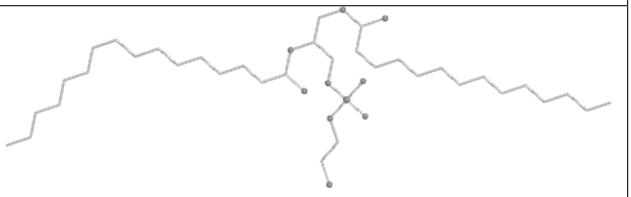
 Bond lengths	 Bond angles
 Torsions	 Rings

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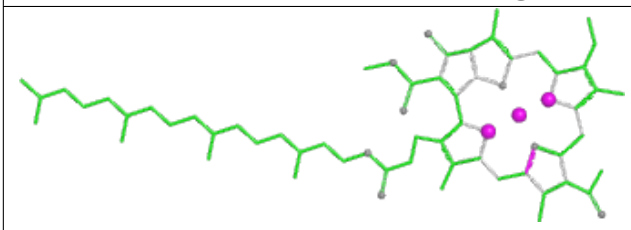
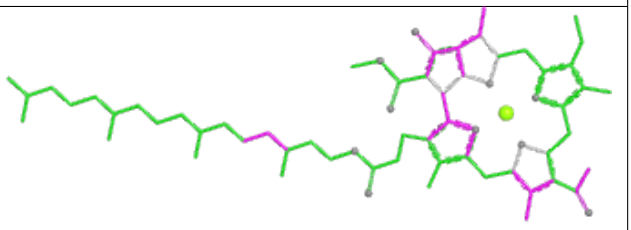
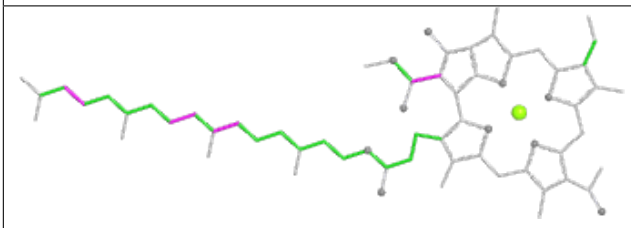
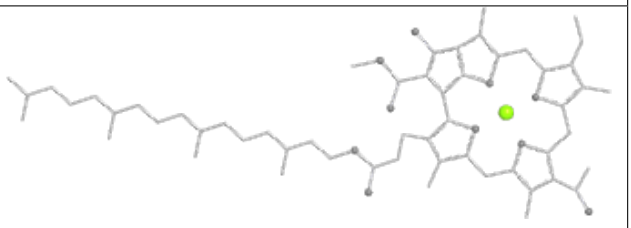
 Bond lengths	 Bond angles
 Torsions	 Rings

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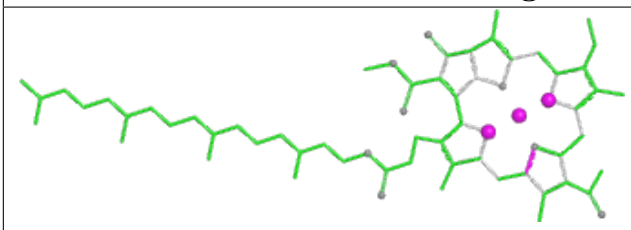
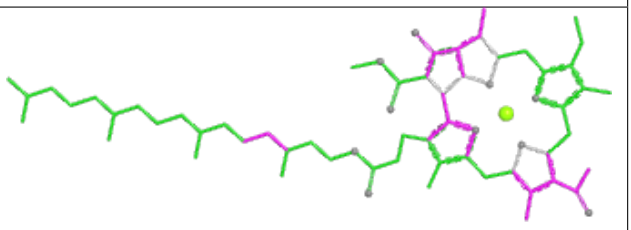
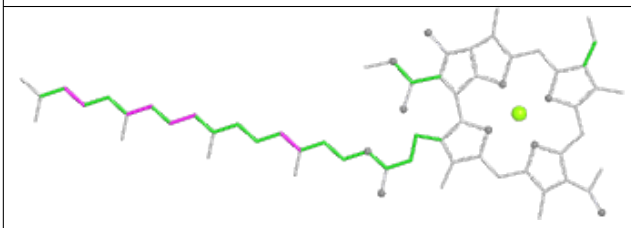
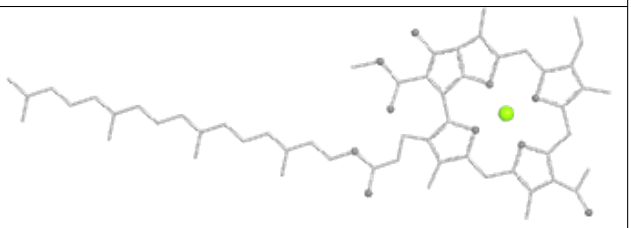
 Bond lengths	 Bond angles
 Torsions	 Rings

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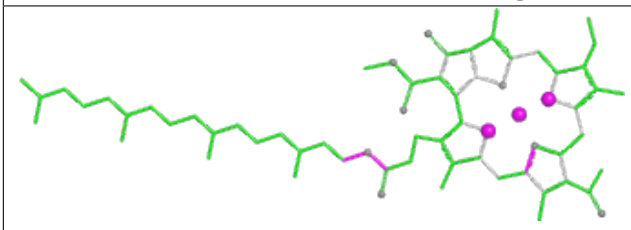
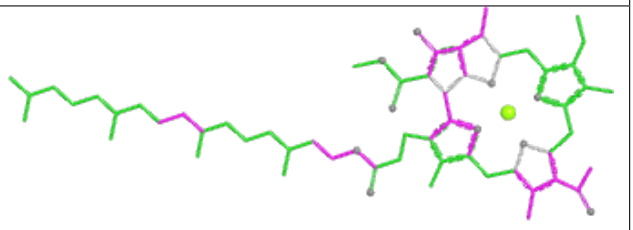
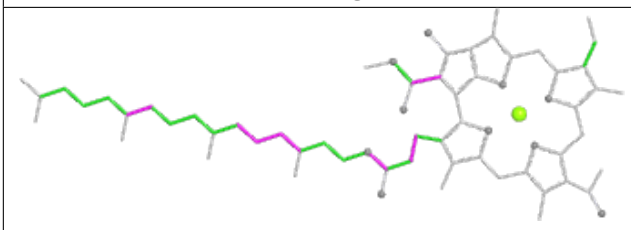


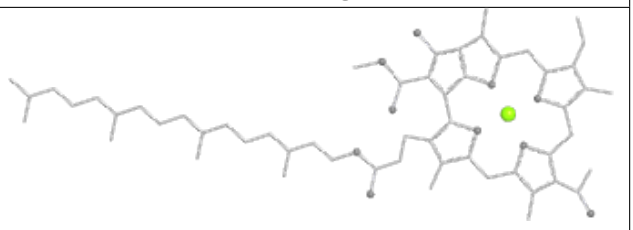
Bond lengths



Bond angles

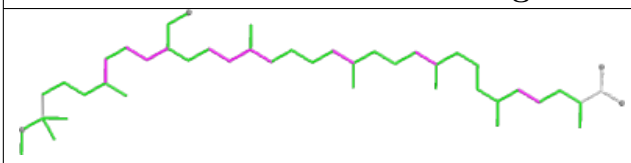


Torsions



Rings

Ligand V7N BB 101



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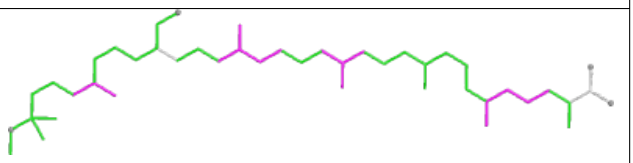
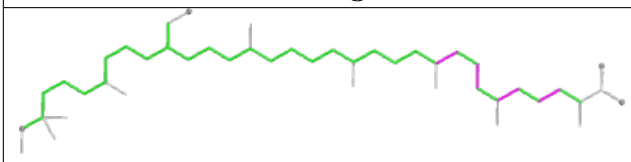


Bond angles



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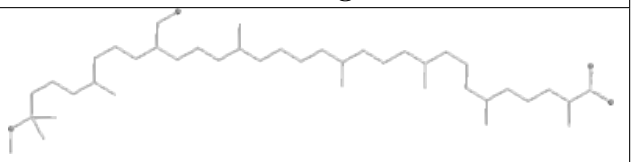
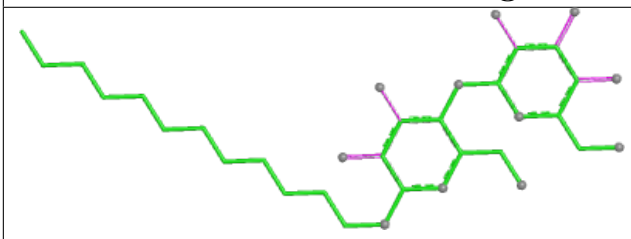
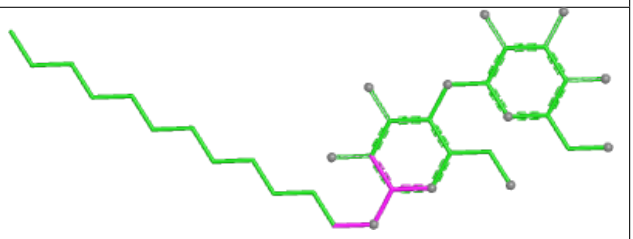


Rings

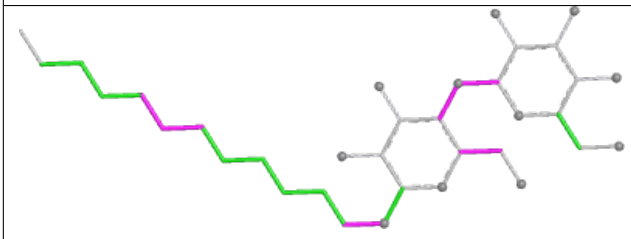
Ligand LMT BR 1003



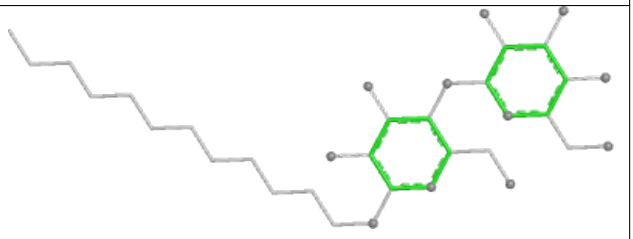
Bond lengths



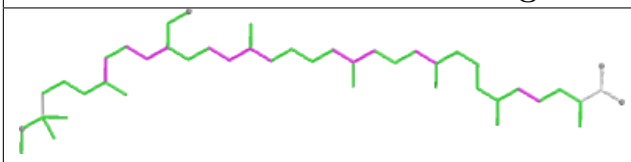
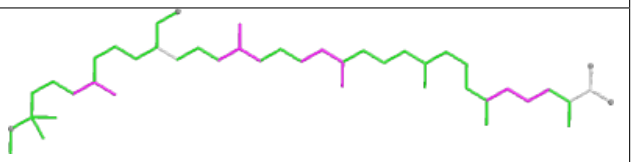
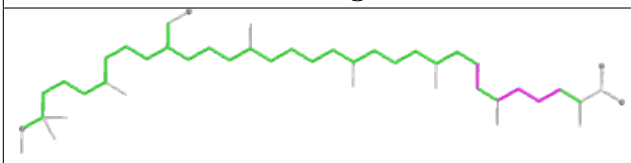
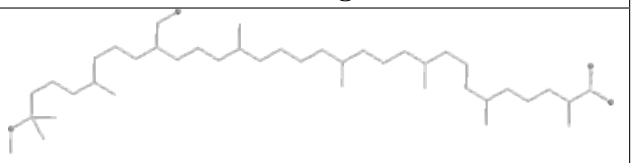
Bond angles

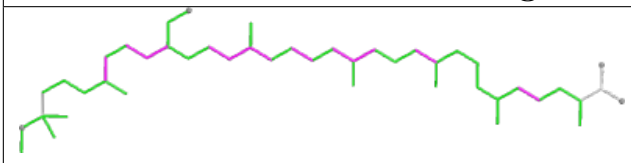
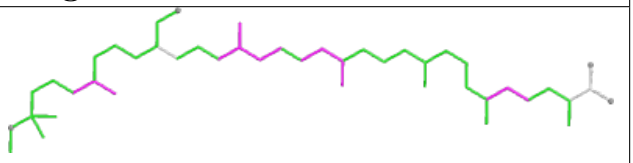
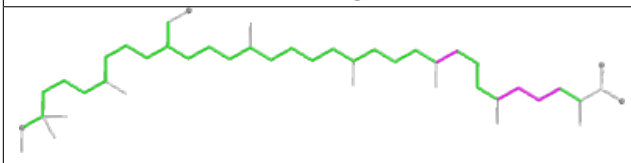
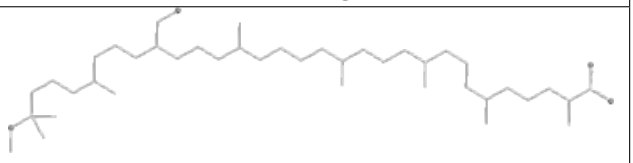


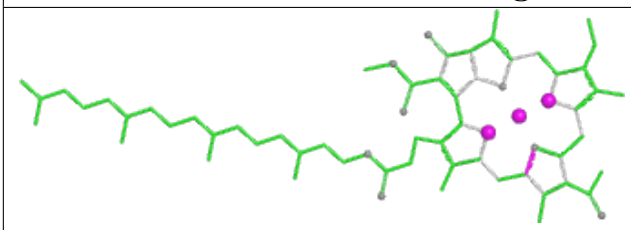
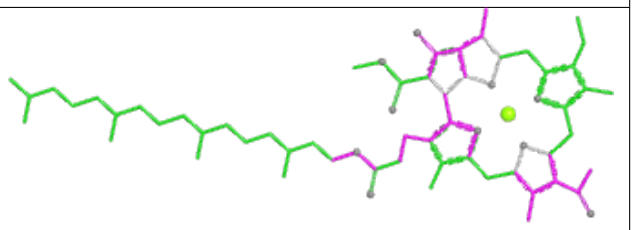
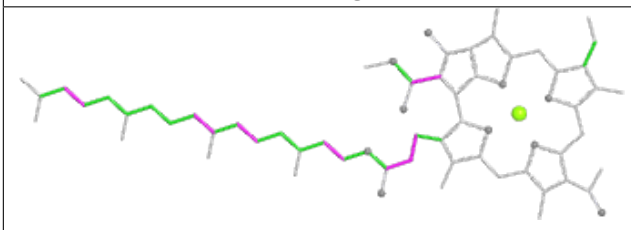
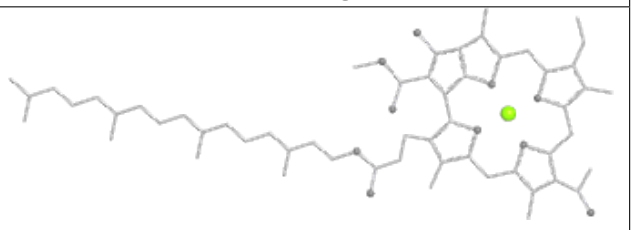
Torsions



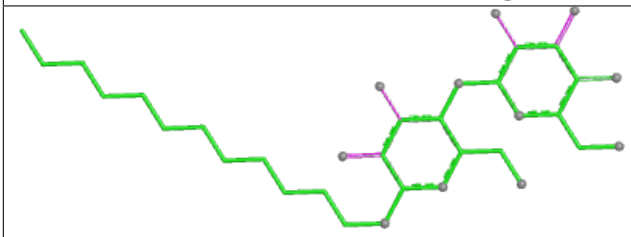
Rings

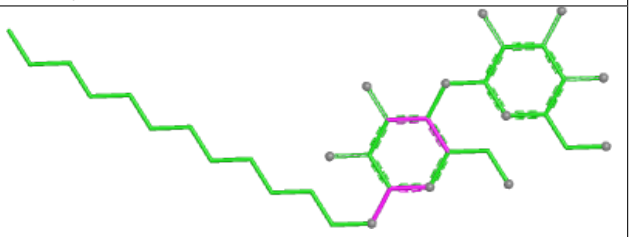
Ligand V7N be 101	
 Bond lengths	 Bond angles
 Torsions	 Rings

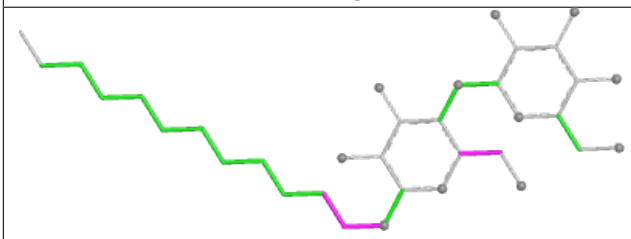
Ligand V7N bg 101	
 Bond lengths	 Bond angles
 Torsions	 Rings

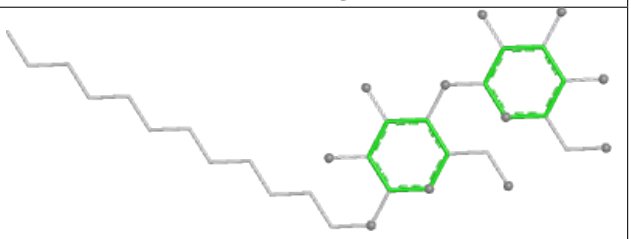
Ligand BCL BC 104	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand LMT BQ 1002

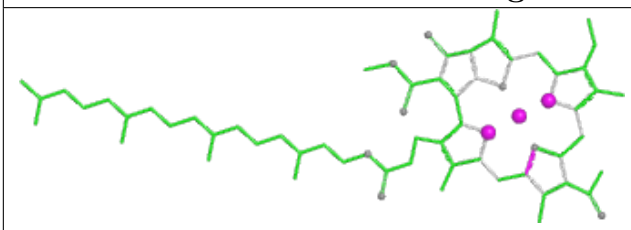

Bond lengths


Bond angles


Torsions


Rings

Ligand BCL AM 101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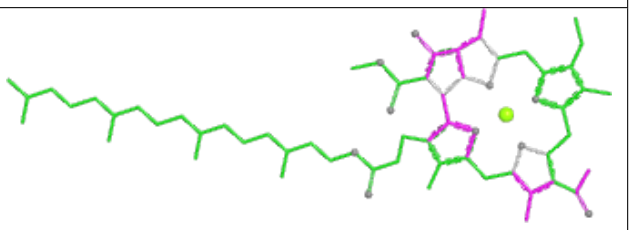
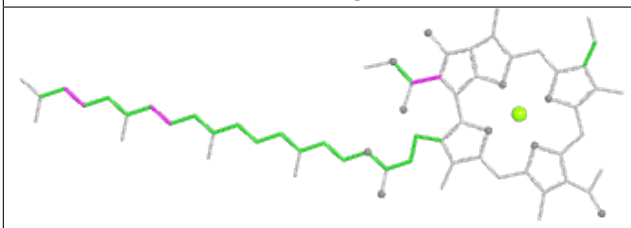

Bond angles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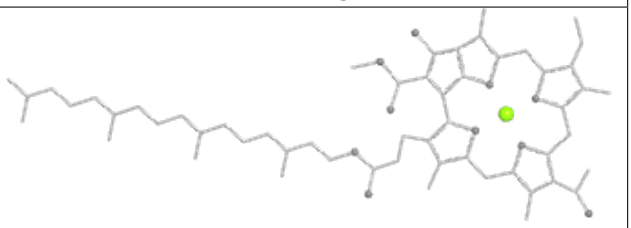
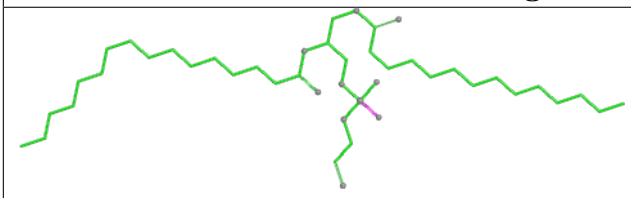
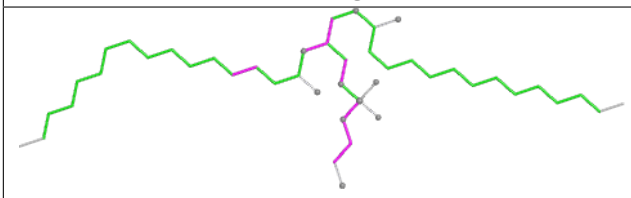
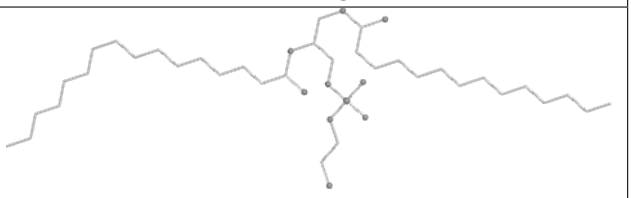

Rings

Ligand 0V9 bo 104

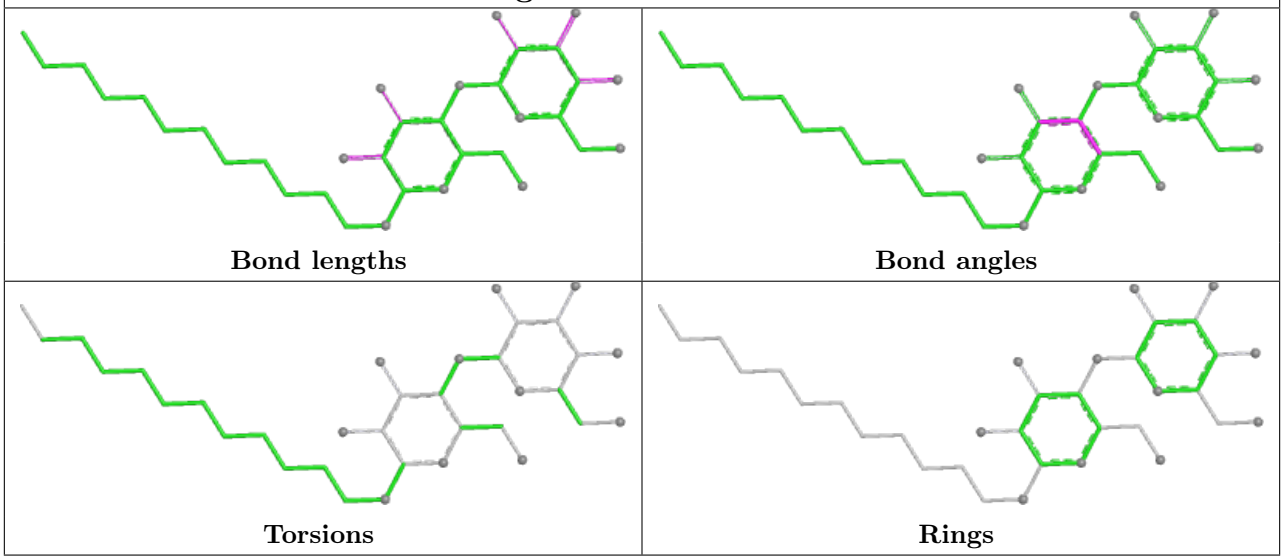

Bond lengths


Bond angles

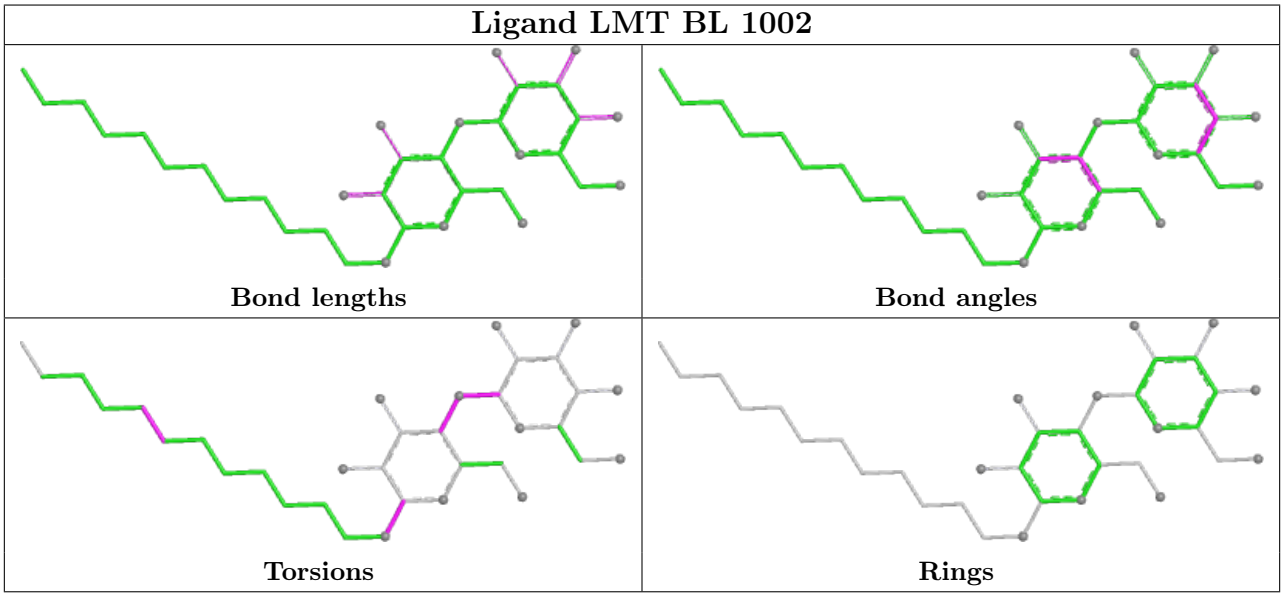

Torsions


Rings

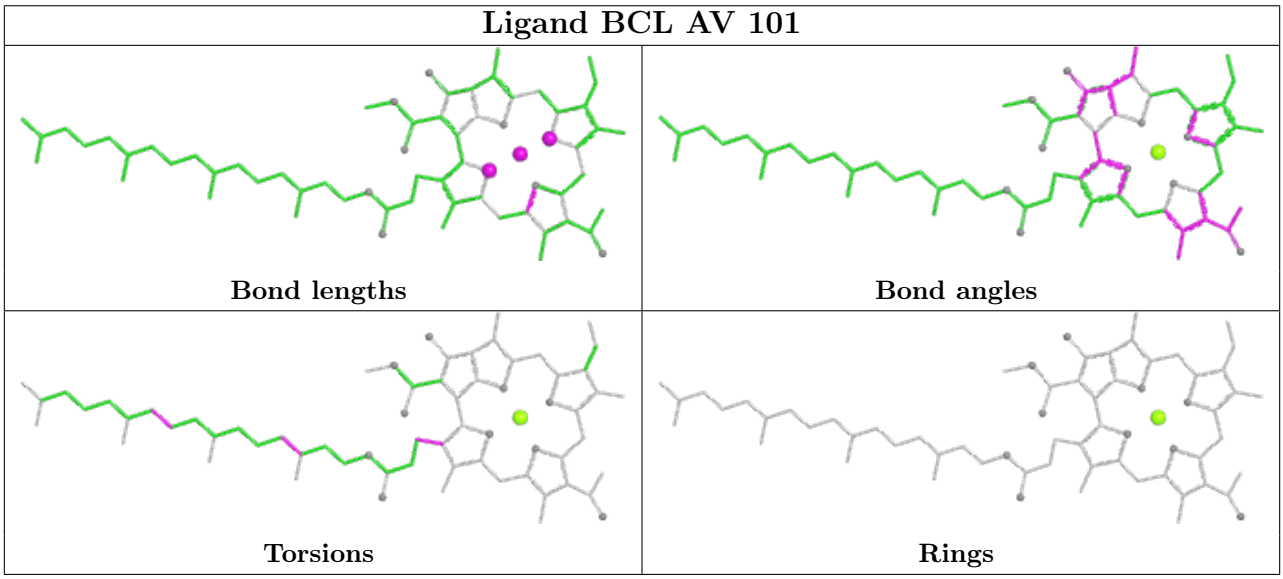
Ligand LMT bo 101



Ligand LMT BL 1002



Ligand BCL AV 101



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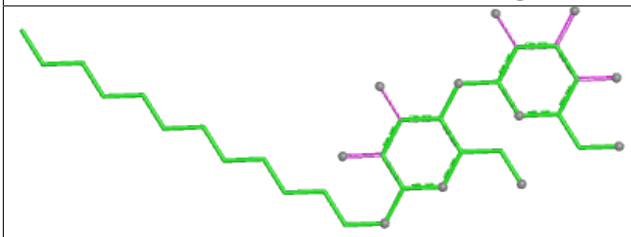
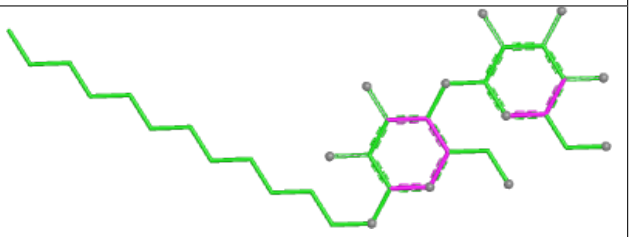
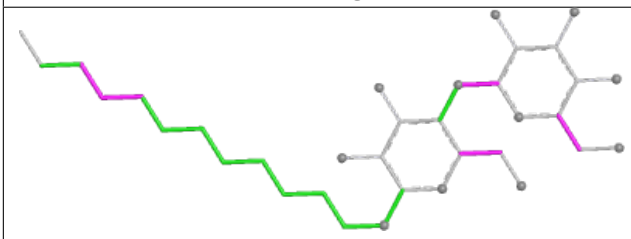
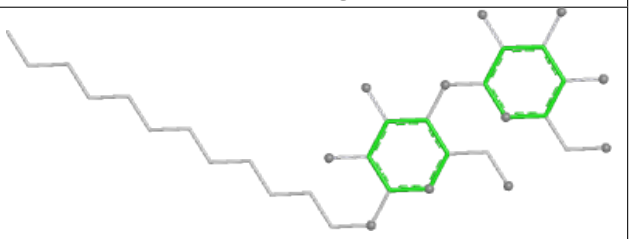
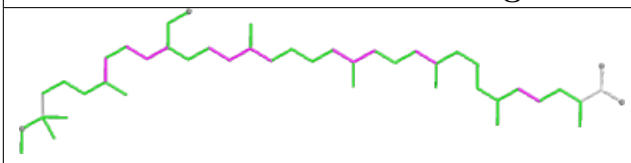
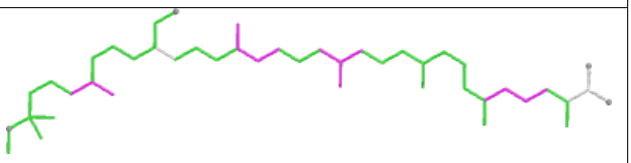
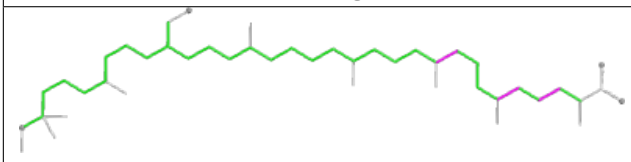
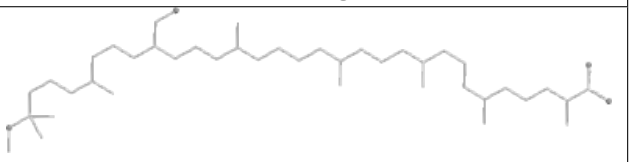
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand V7N AE 1005	
 Bond lengths	 Bond angles
 Torsions	 Rings

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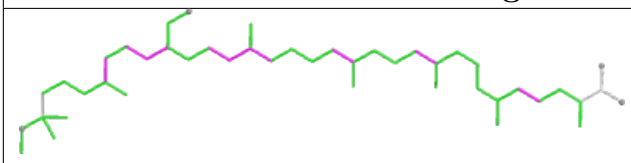
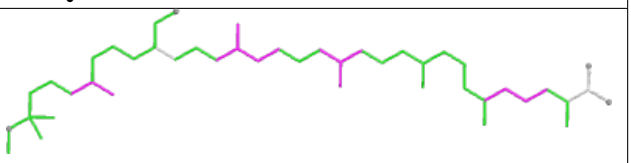
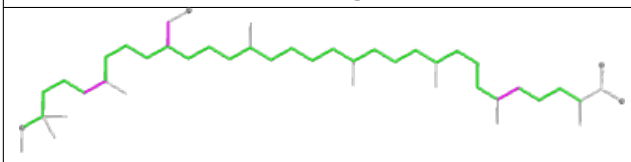
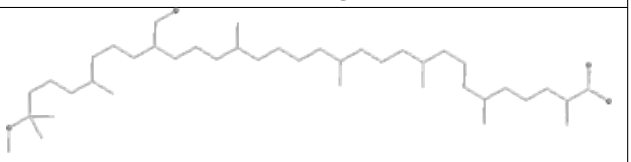
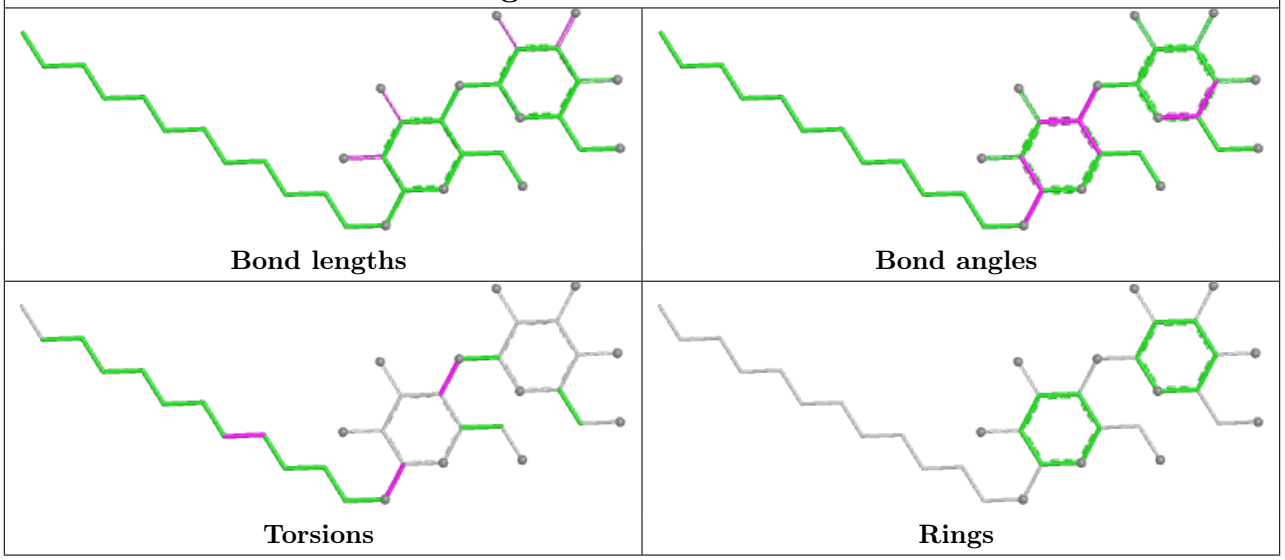
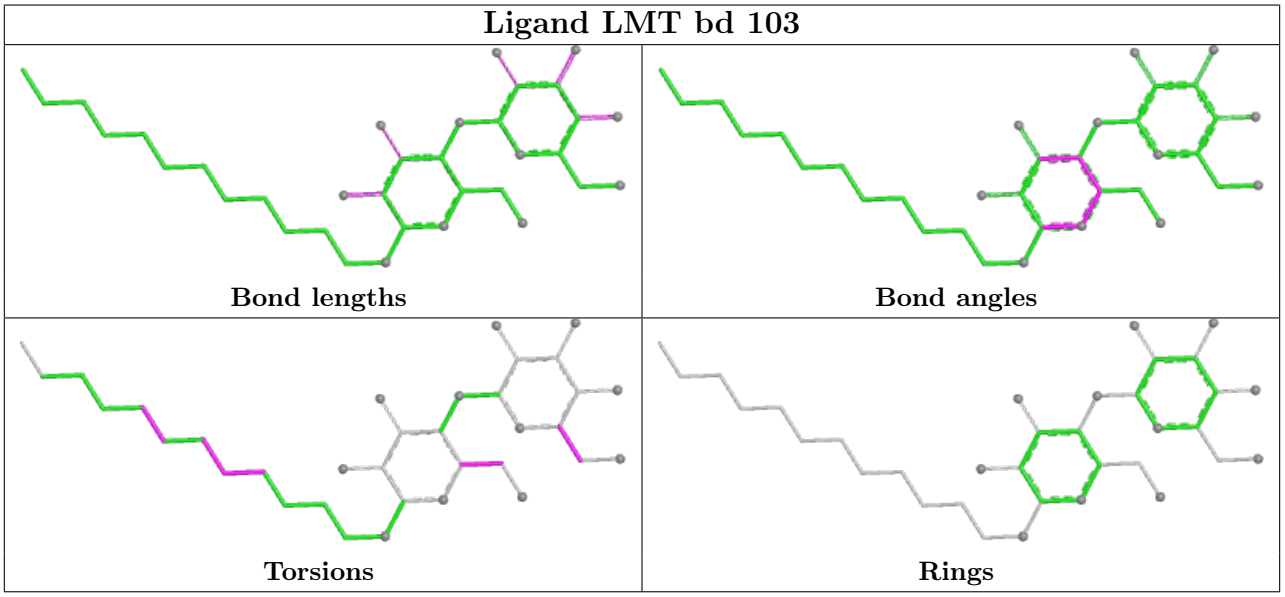
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand LMT AE 1002



Ligand LMT bd 103



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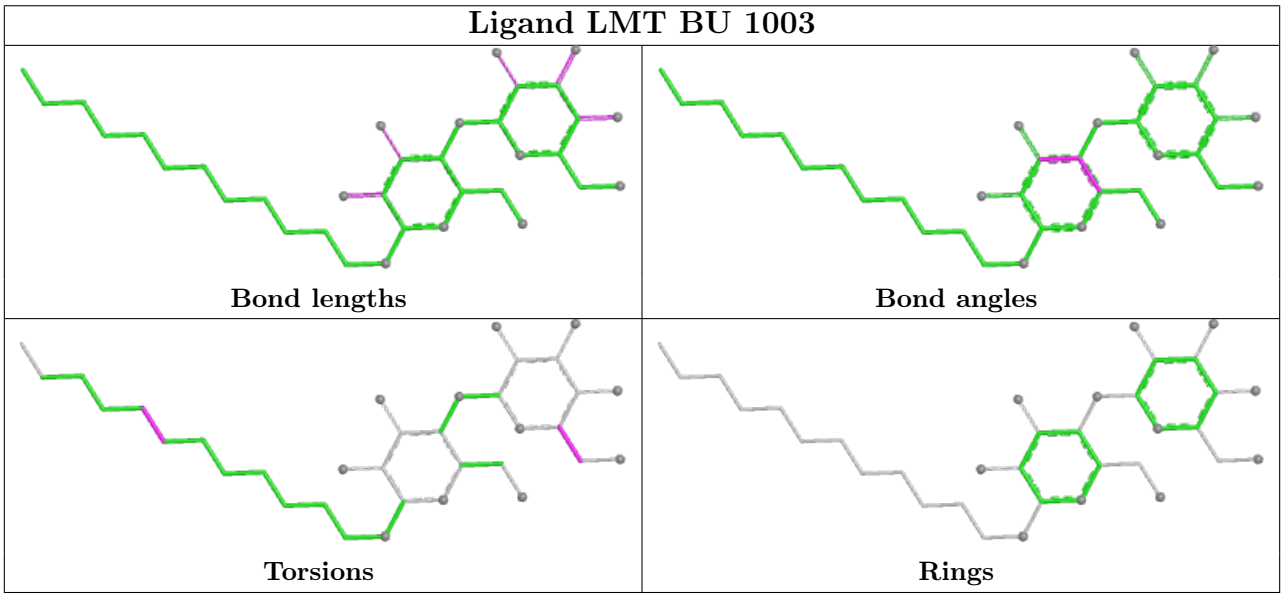

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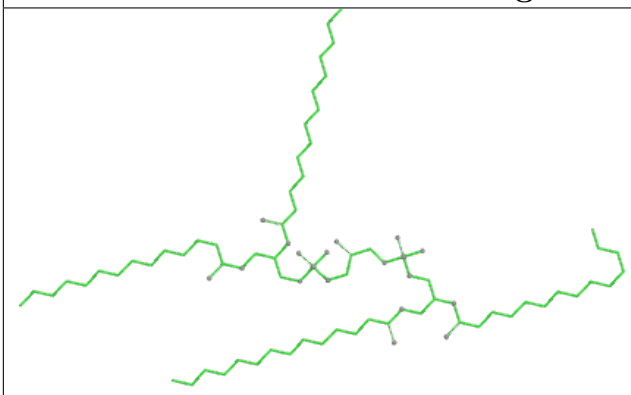
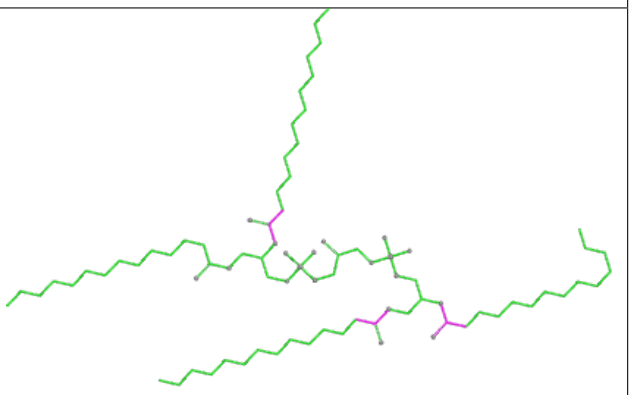
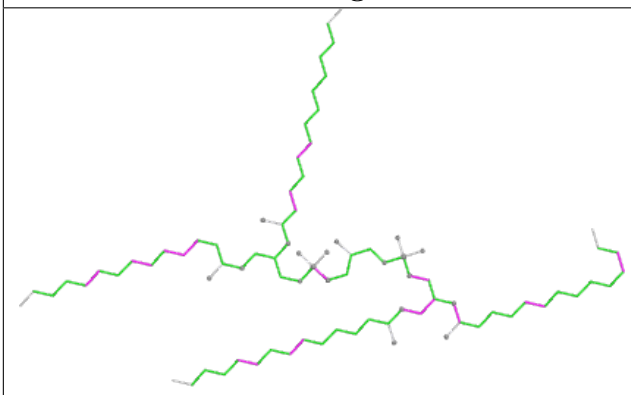
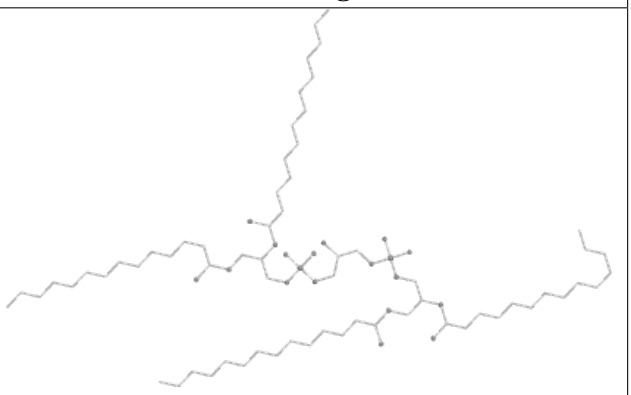
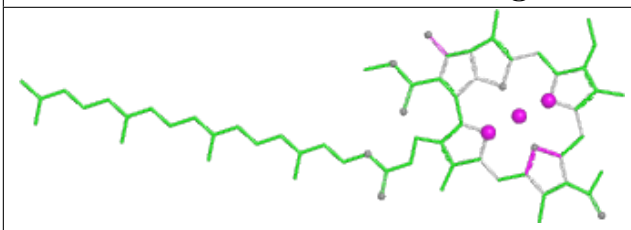
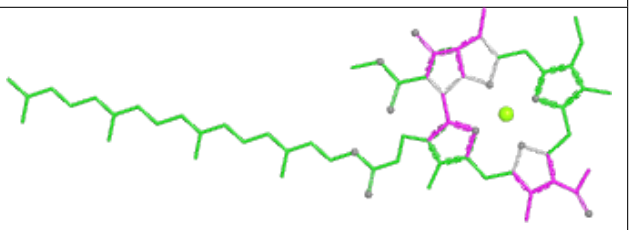
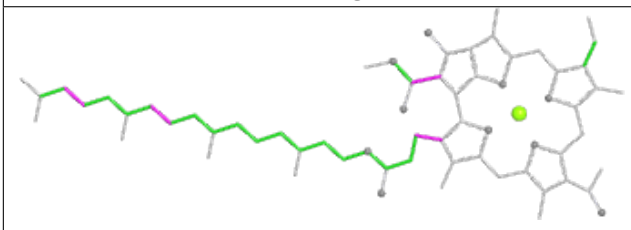
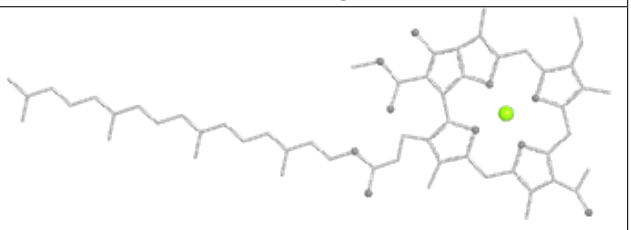
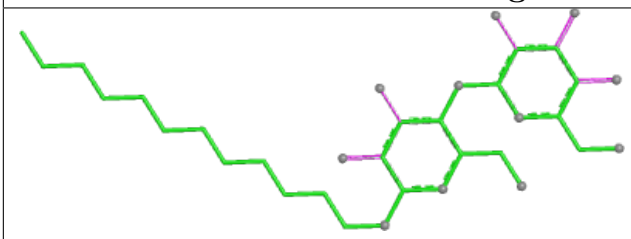
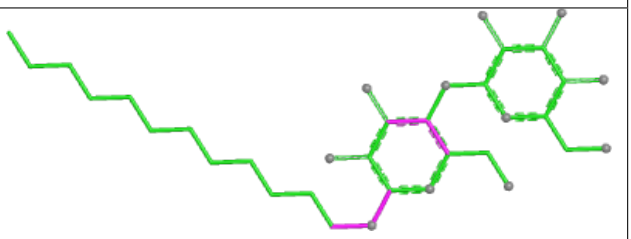
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand BCL AN 101	
 Bond lengths	 Bond angles
 Torsions	 Rings

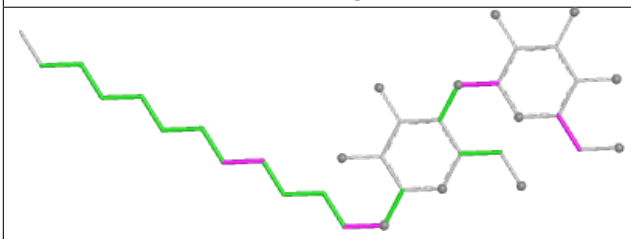
Ligand LMT AC 104



Bond lengths



Bond angles



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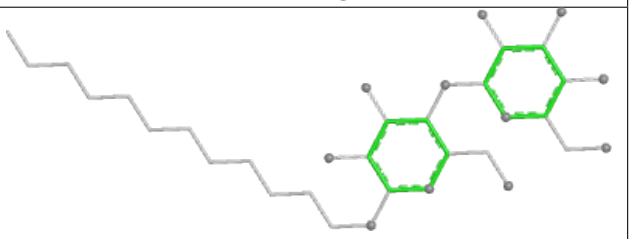
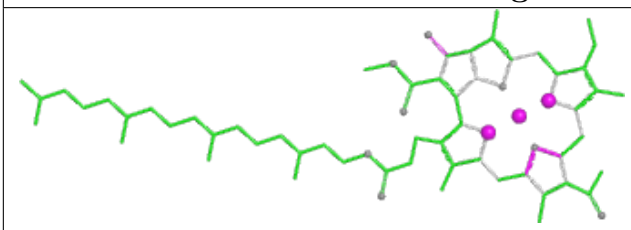


Rings

Ligand BCL AR 102



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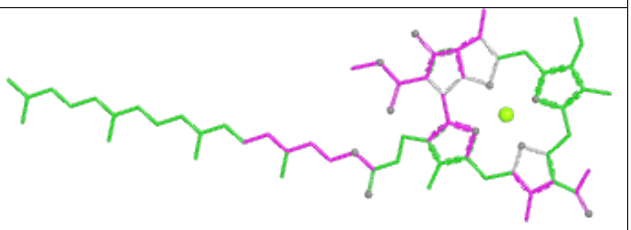
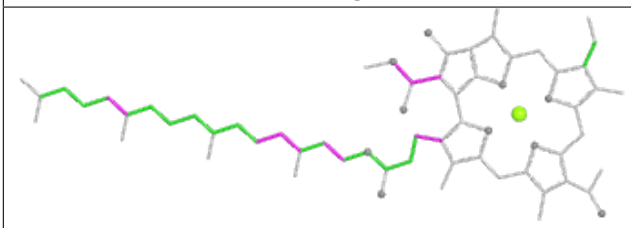


Bond angles



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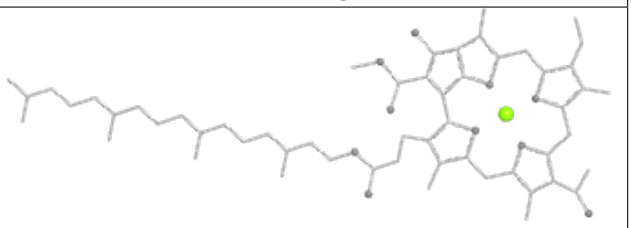
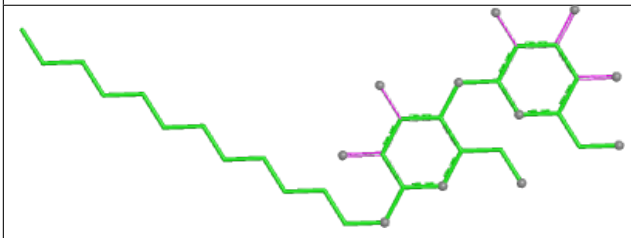
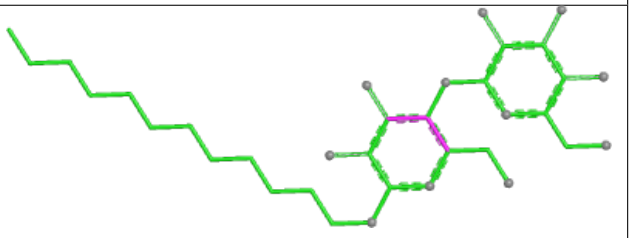


Rings

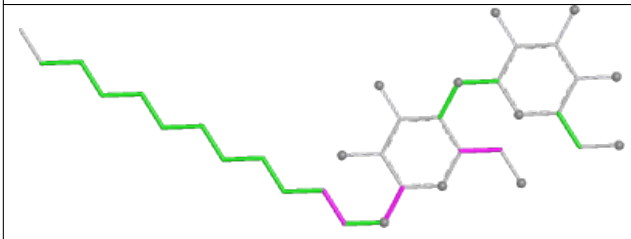
Ligand LMT BC 103



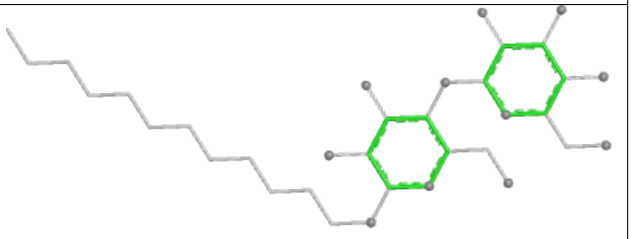
Bond lengths



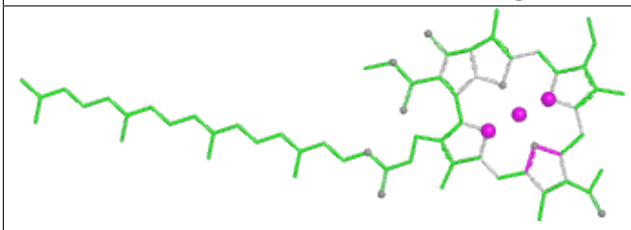
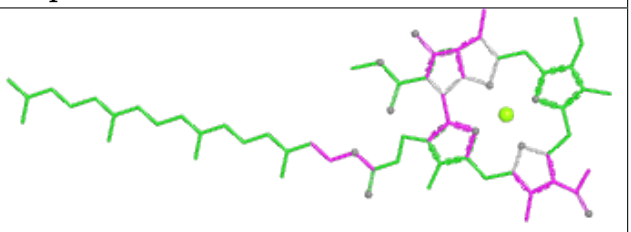
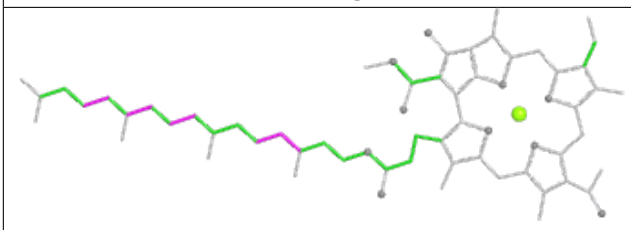
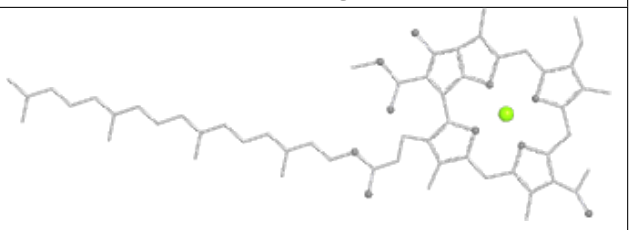
Bond angles

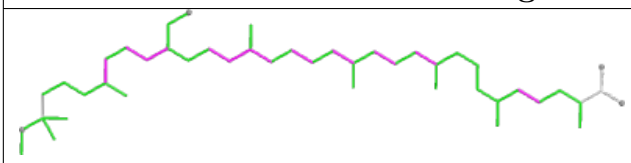
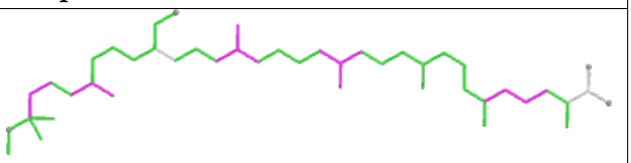
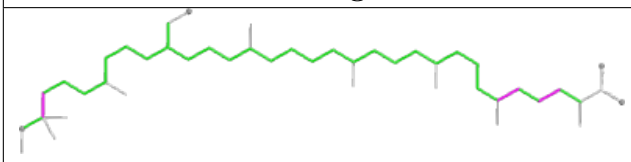
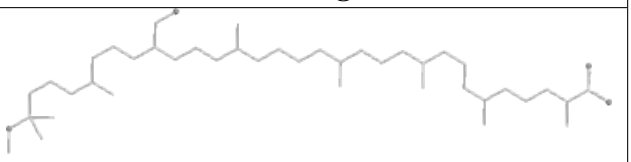


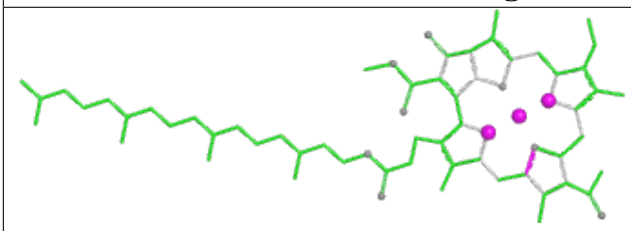
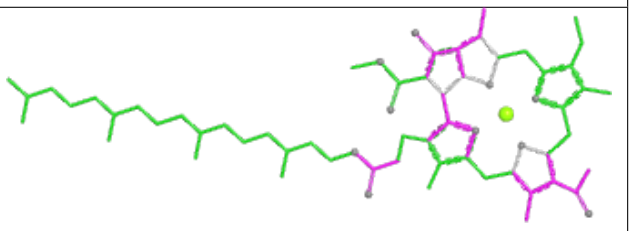
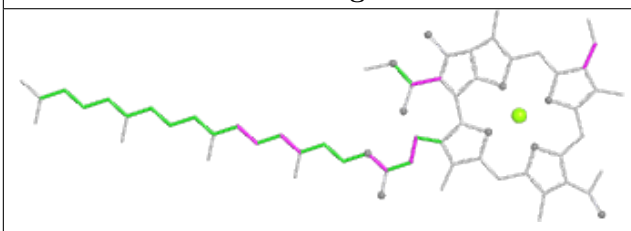
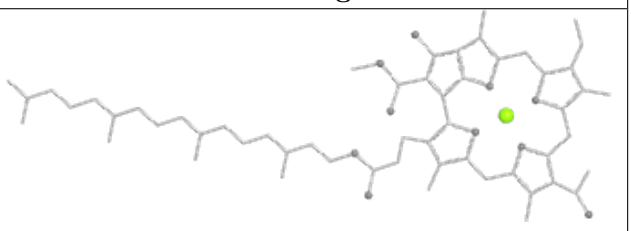
Torsions



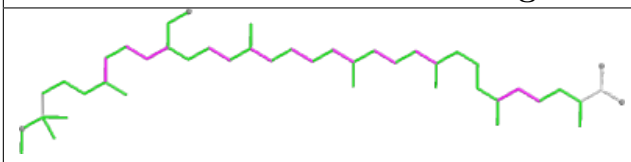
Rings

Ligand BCL ap 1001	
 Bond lengths	 Bond angles
 Torsions	 Rings

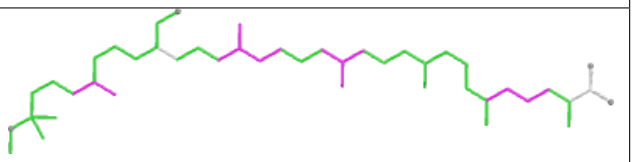
Ligand V7N bp 101	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand BCL BO 1004	
 Bond lengths	 Bond angles
 Torsions	 Rings

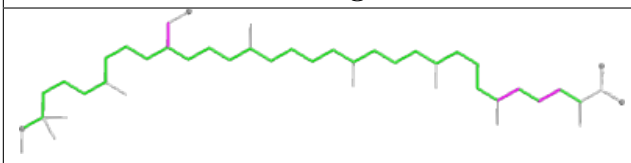
Ligand V7N bo 102



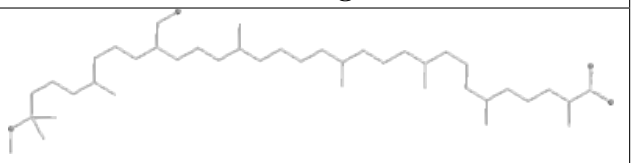
Bond lengths



Bond angles

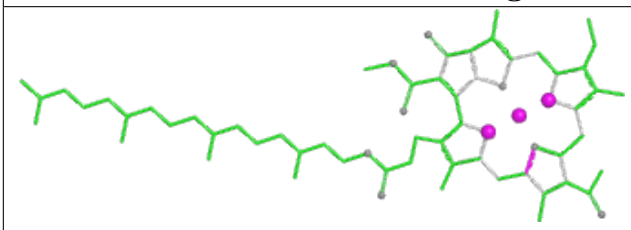


Torsions

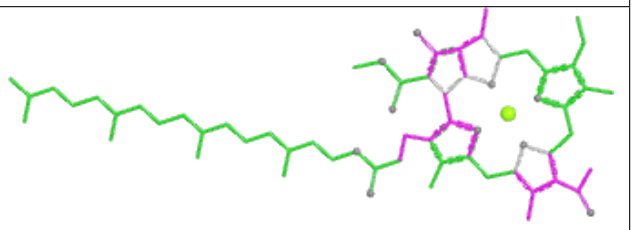


Rings

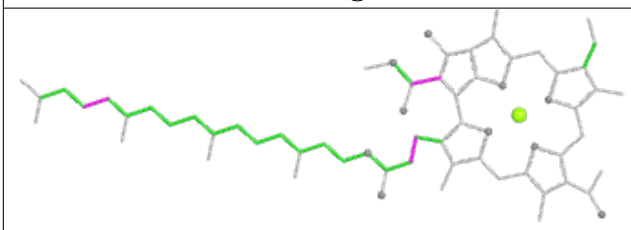
Ligand BCL BL 1003



Bond lengths



Bond angles



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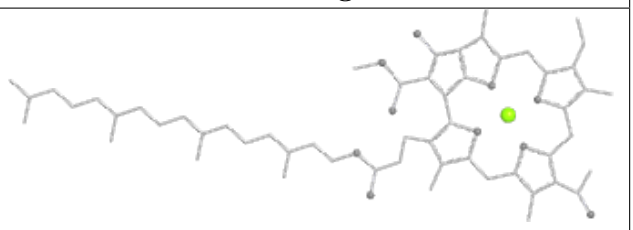
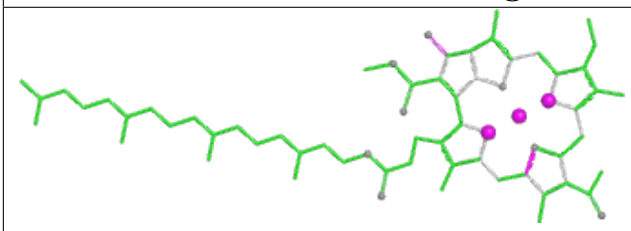
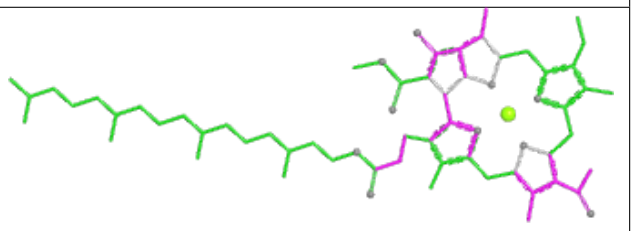


Rings

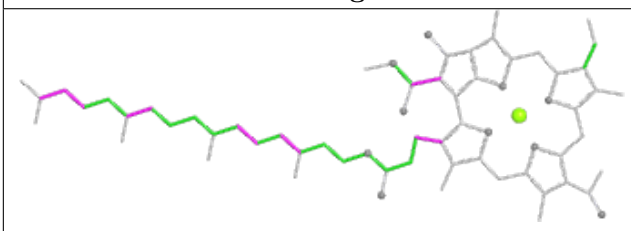
Ligand BCL AE 1003



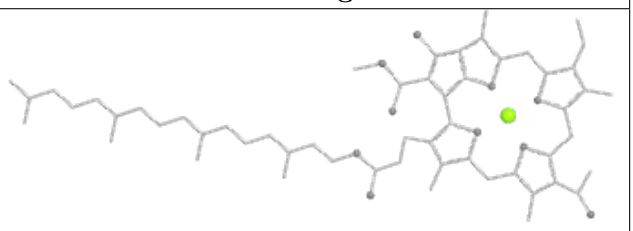
Bond lengths



Bond angles

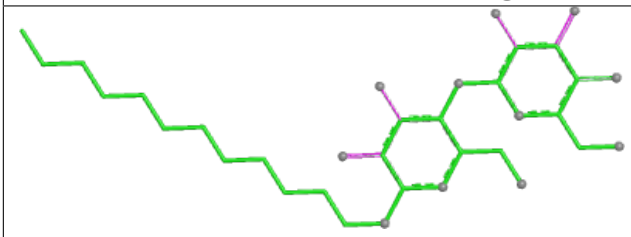


Torsions

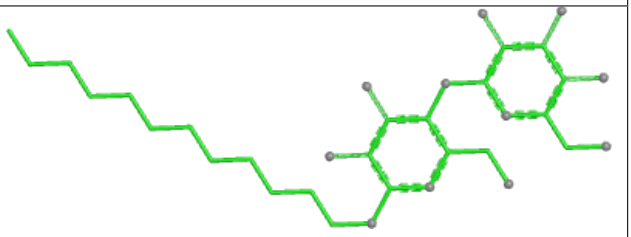


Rings

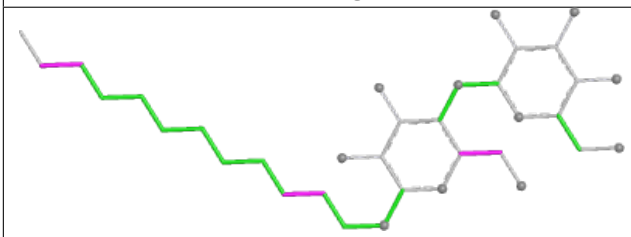
Ligand LMT BG 1005



Bond lengths



Bond angles



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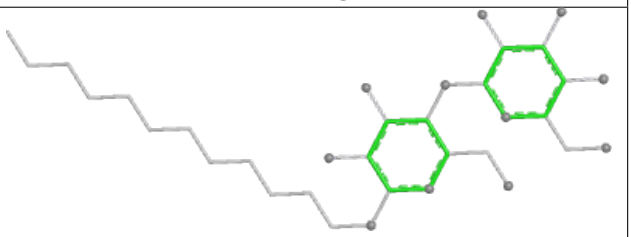
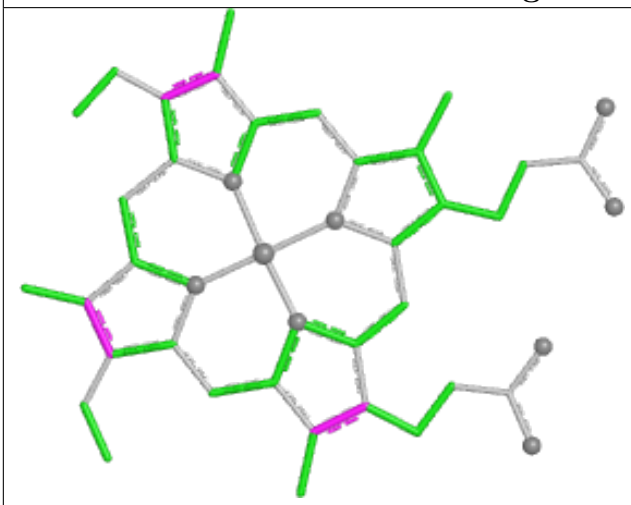


Rings

Ligand HEC C 404



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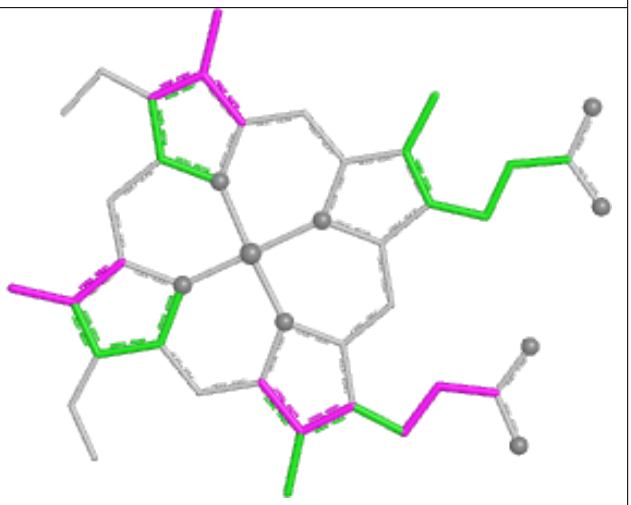
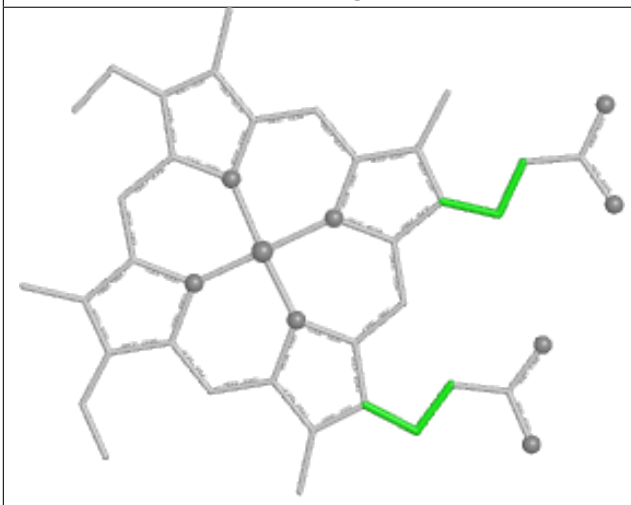
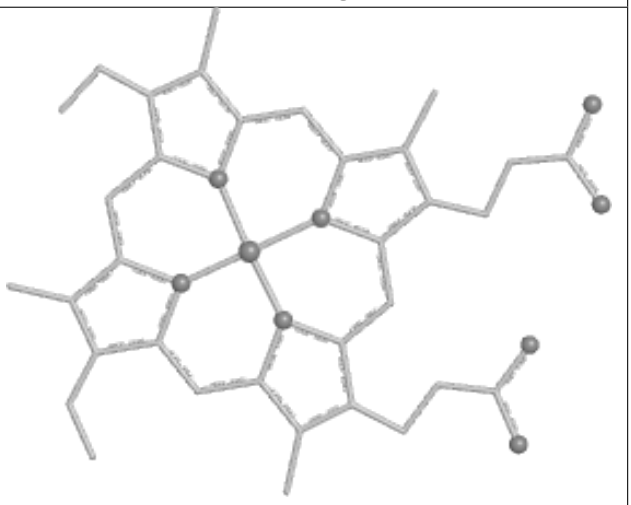


Bond angles

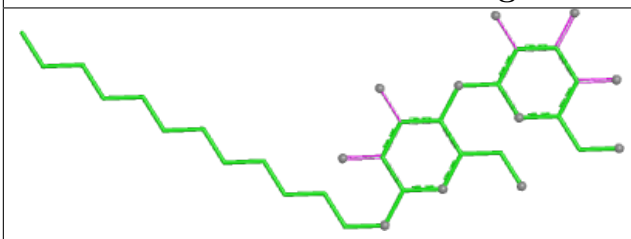


Torsions

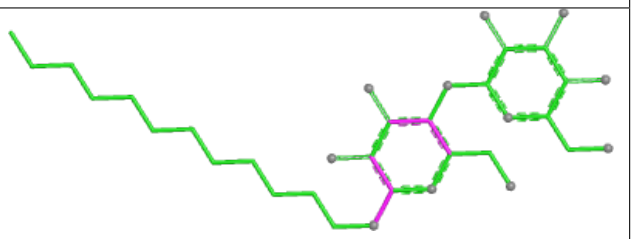


Rings

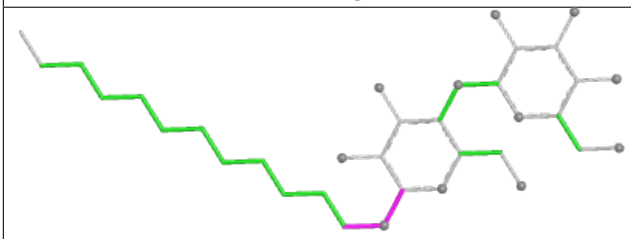
Ligand LMT AA 1004



Bond lengths



Bond angles



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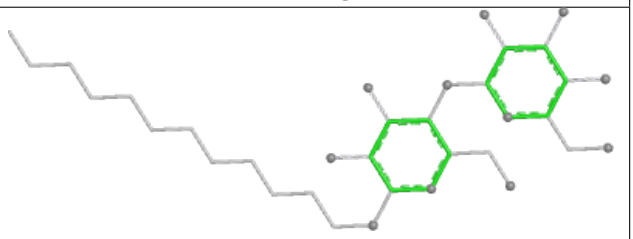
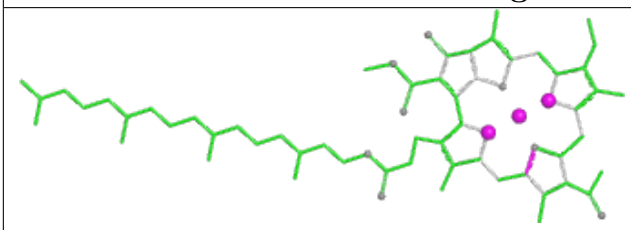


Rings

Ligand BCL AN 102



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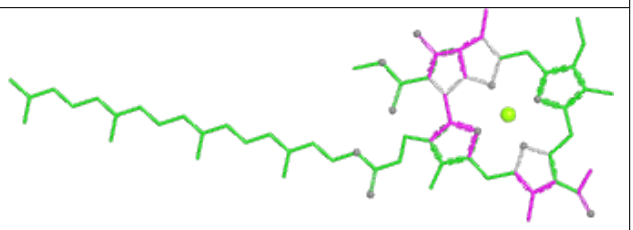

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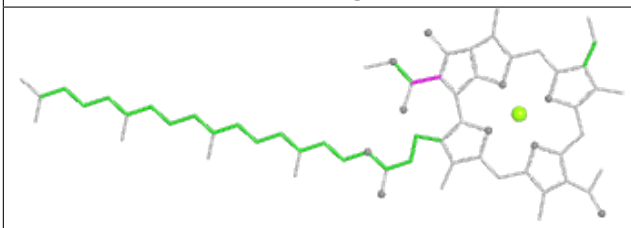

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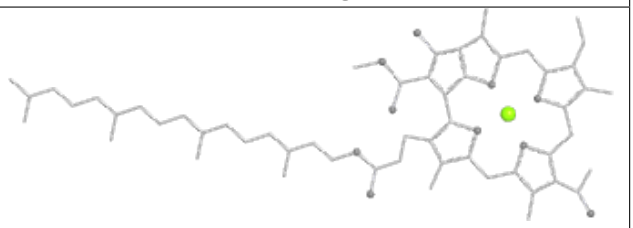
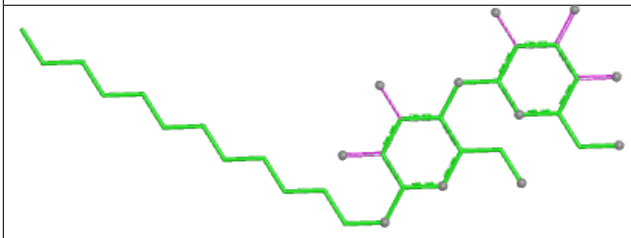


Rings

Ligand LMT AH 102



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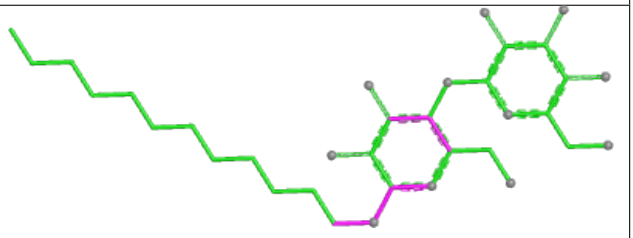
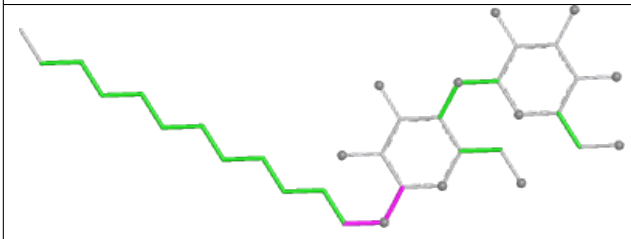


Bond angles



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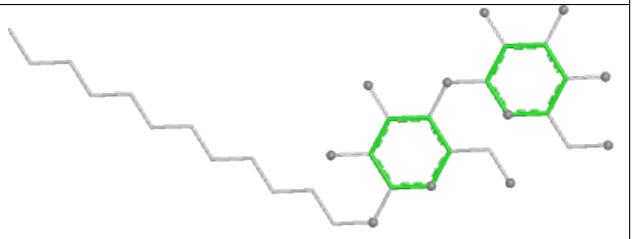
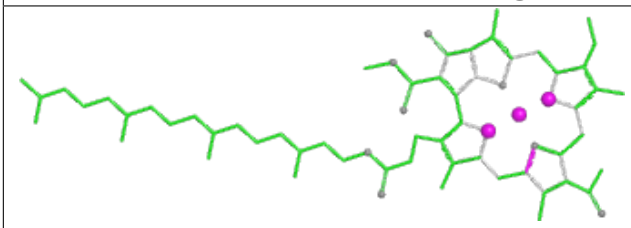


Rings

Ligand BCL AR 101



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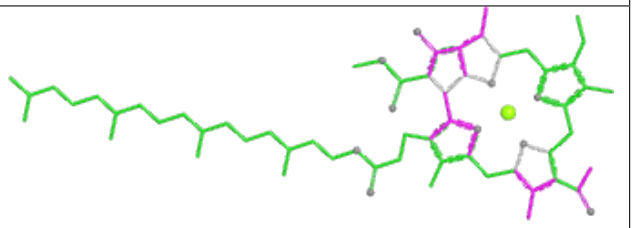
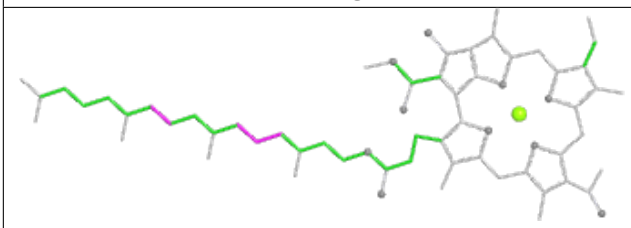


Bond angles



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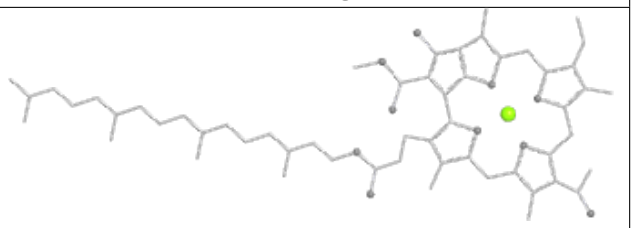
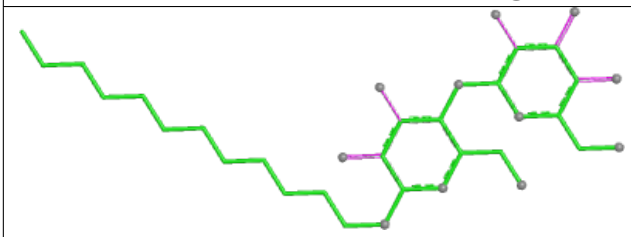


Rings

Ligand LMT AQ 103



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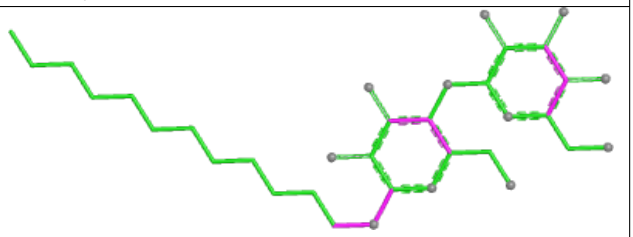
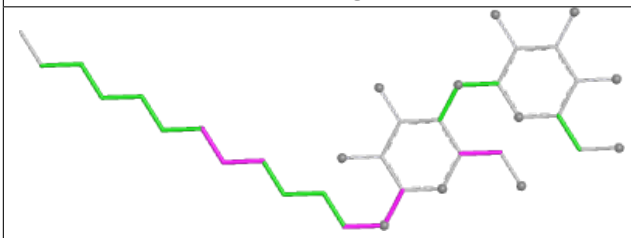


Bond angles



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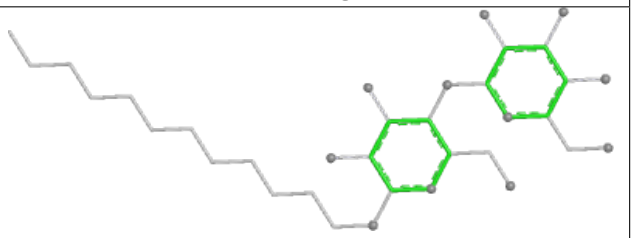
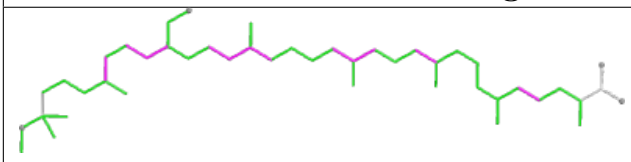
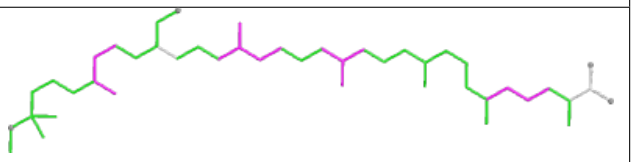


Rings

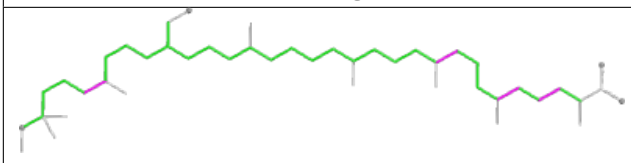
Ligand V7N AO 1001



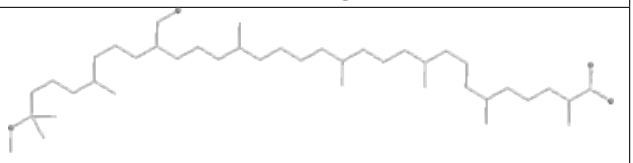
Bond lengths



Bond angles

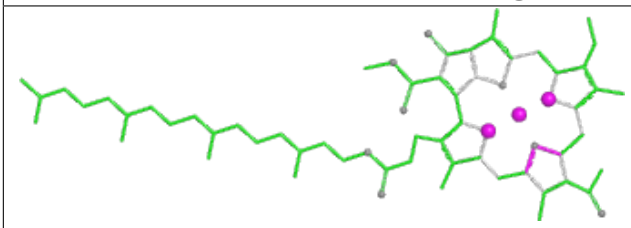


Torsions

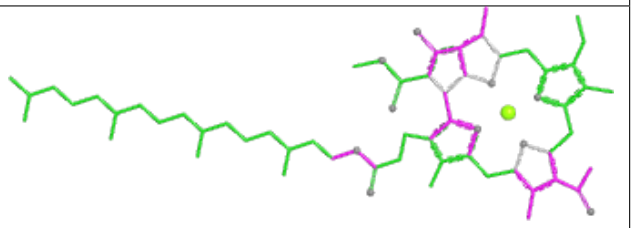


Rings

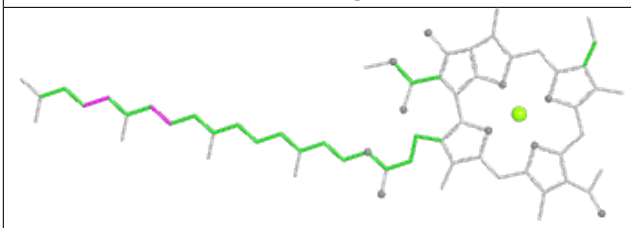
Ligand BCL ah 1001



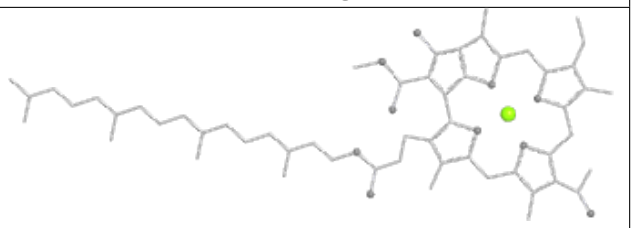
Bond lengths



Bond angles

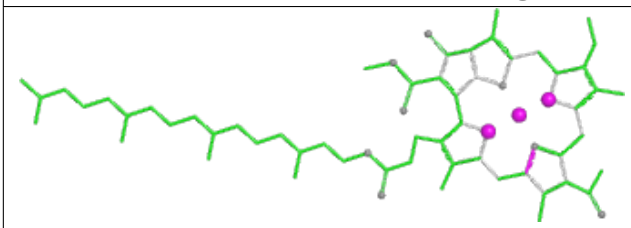


Torsions



Rings

Ligand BCL BF 102



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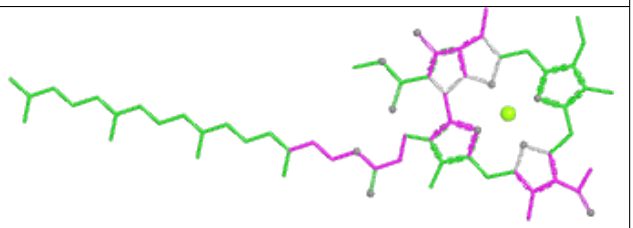
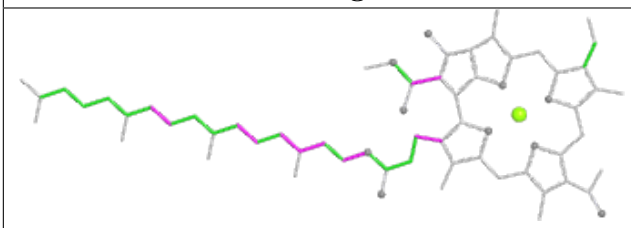


Bond angles



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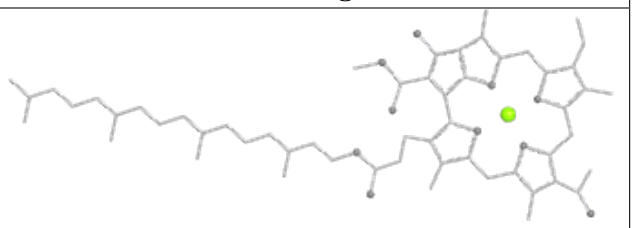
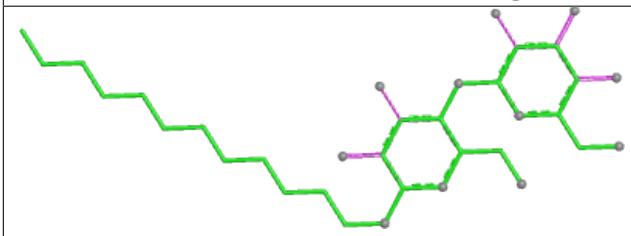
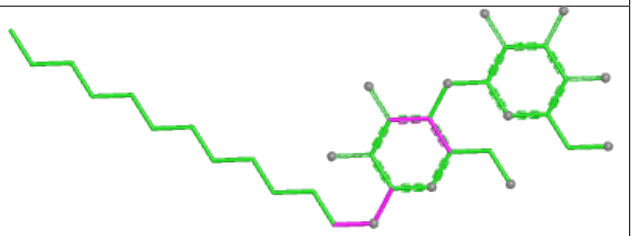


Rings

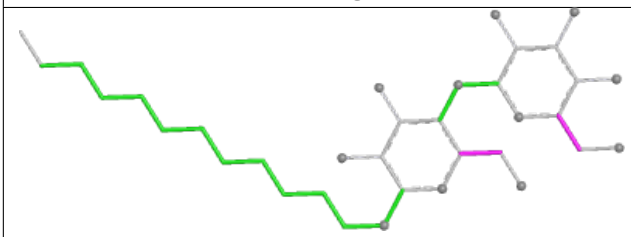
Ligand LMT AD 103



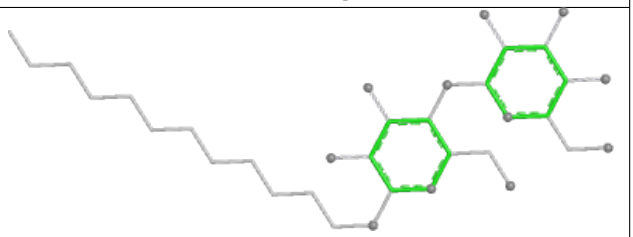
Bond lengths



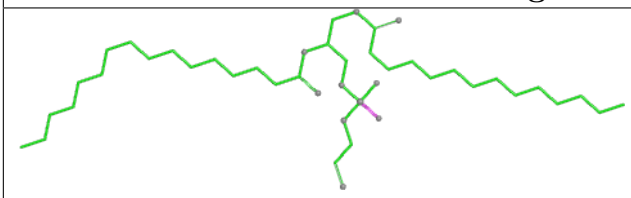
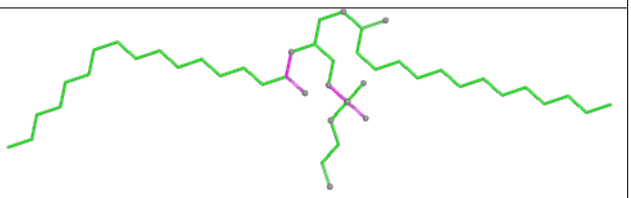
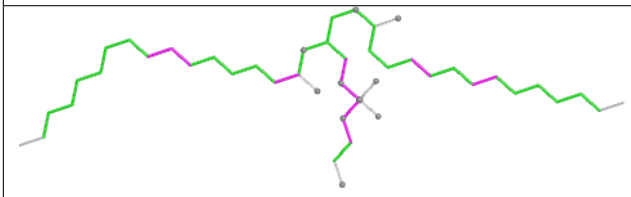
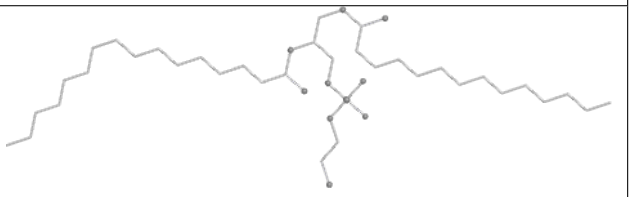
Bond angles

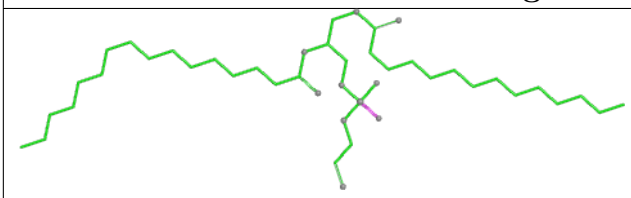
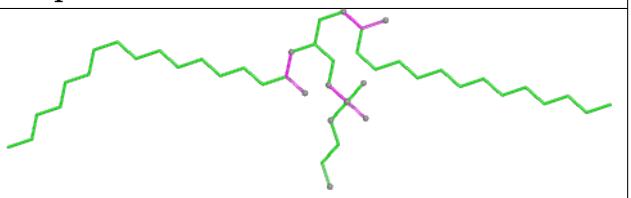
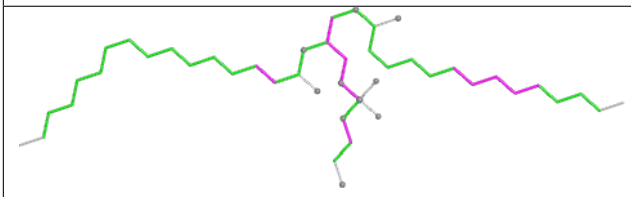
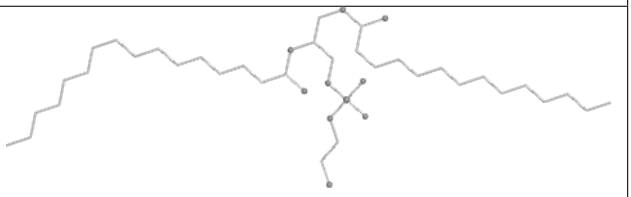


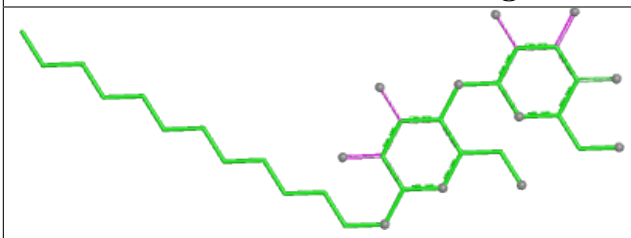
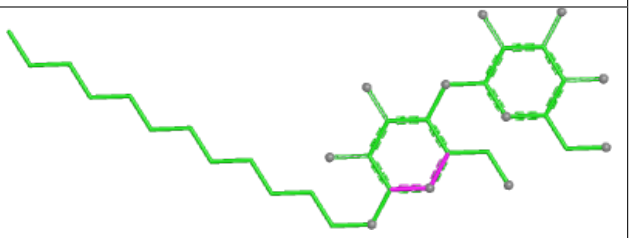
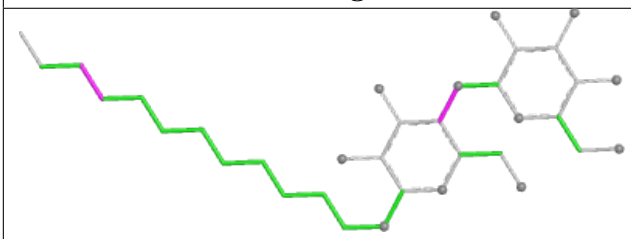
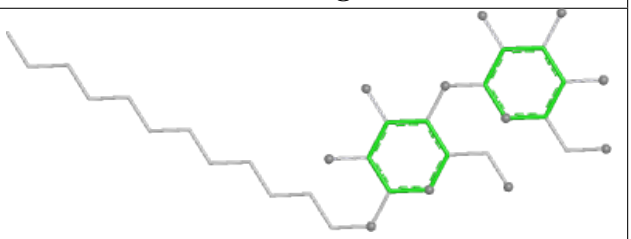
Torsions



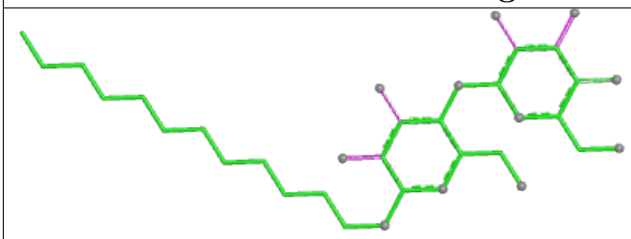
Rings

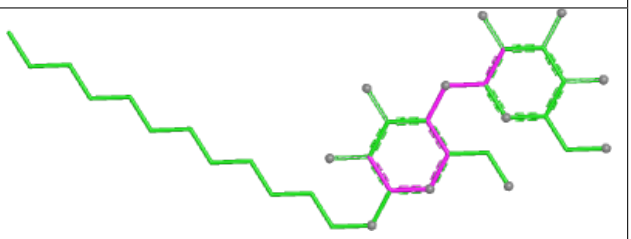
Ligand 0V9 bi 103	
 Bond lengths	 Bond angles
 Torsions	 Rings

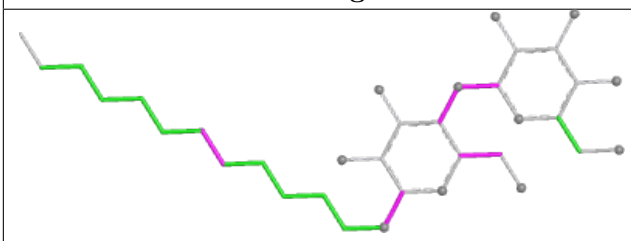
Ligand 0V9 bp 103	
 Bond lengths	 Bond angles
 Torsions	 Rings

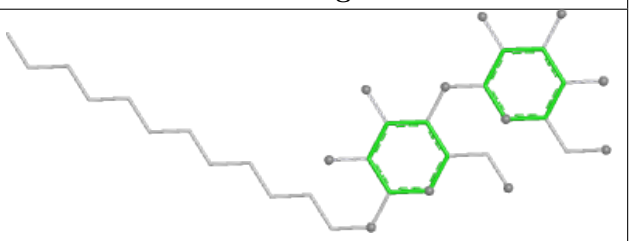
Ligand LMT BP 1003	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand LMT BK 1003

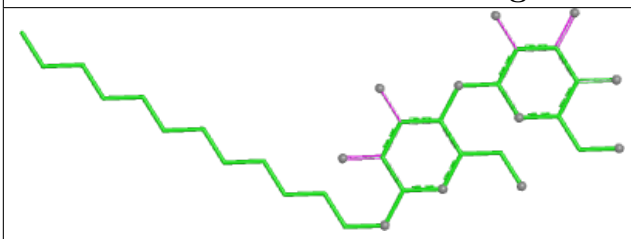

Bond lengths


Bond angles


Torsions


Rings

Ligand LMT bm 103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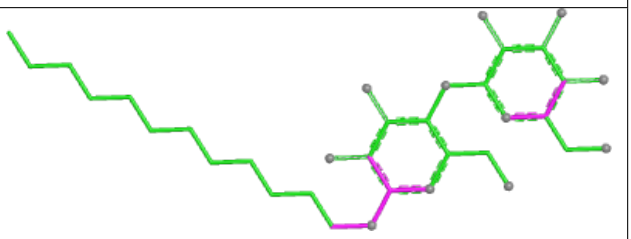
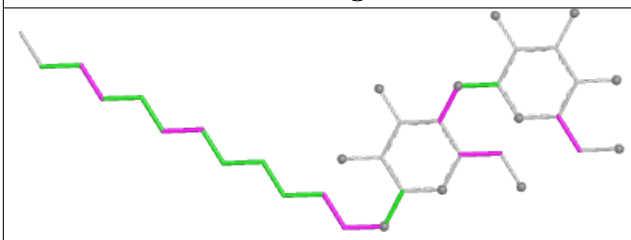

Bond angles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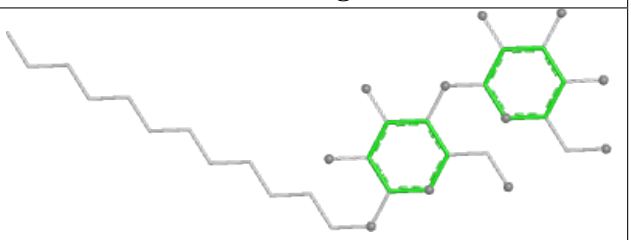
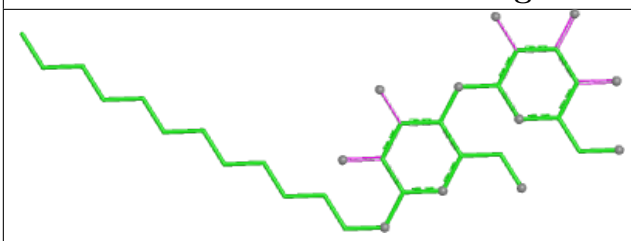

Rings

Ligand LMT bh 104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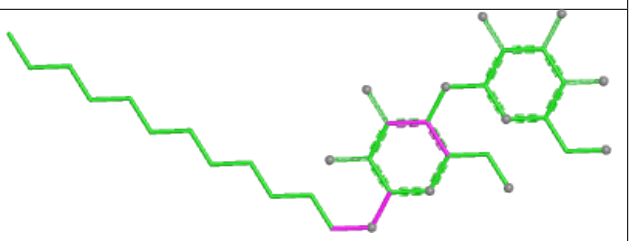
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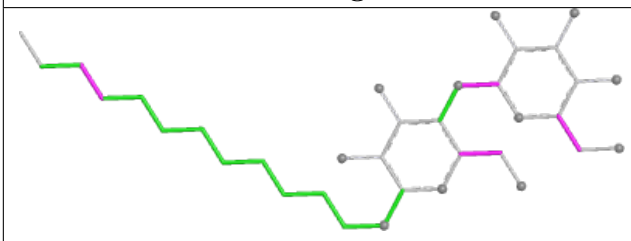
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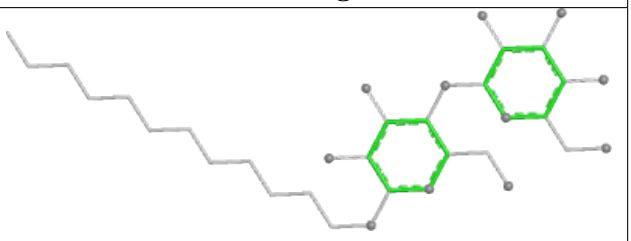
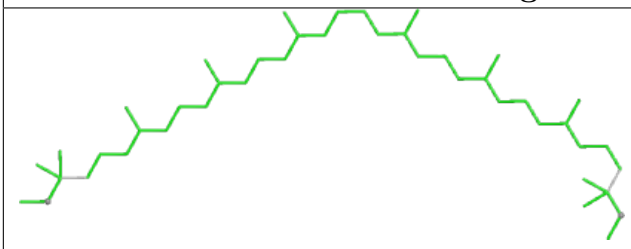
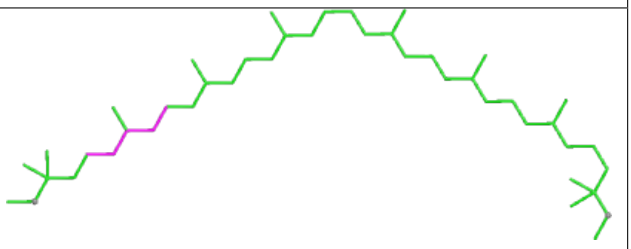
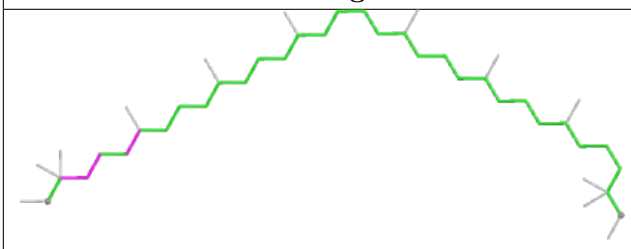
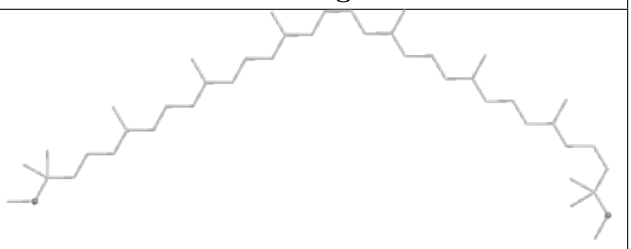
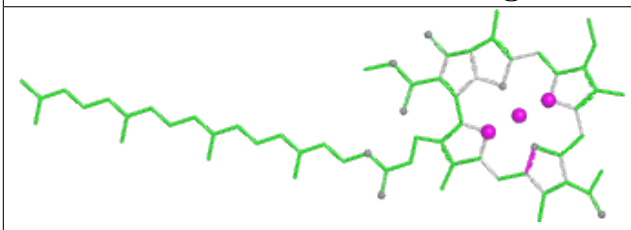
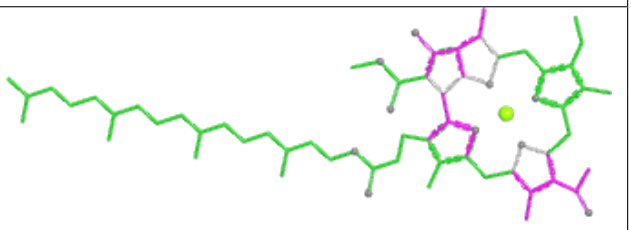
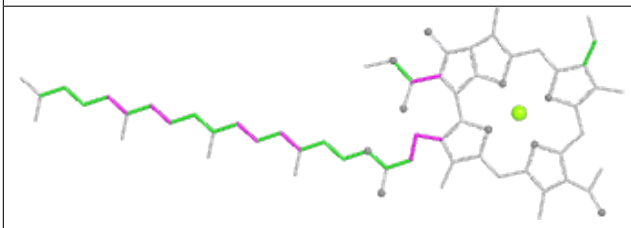
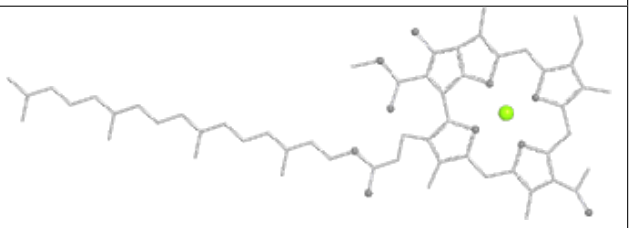
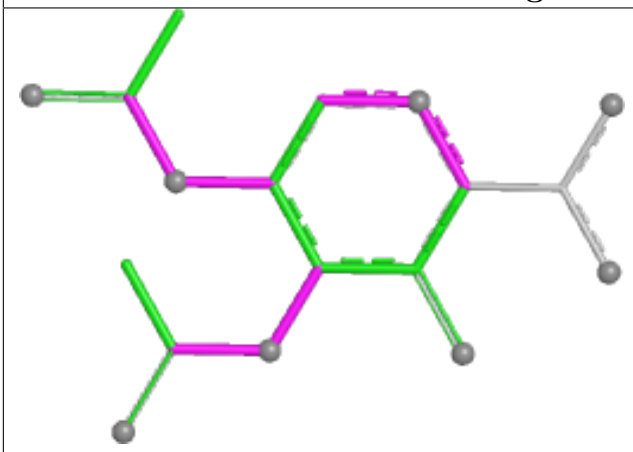

Rings

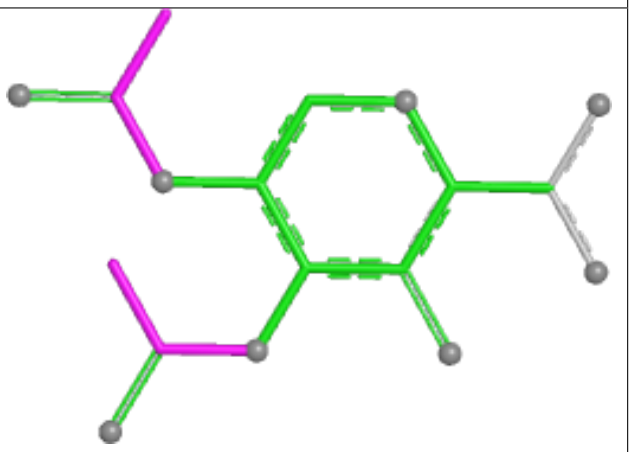
Ligand CRT M 404	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand BCL BV 1005	
 Bond lengths	 Bond angles
 Torsions	 Rings

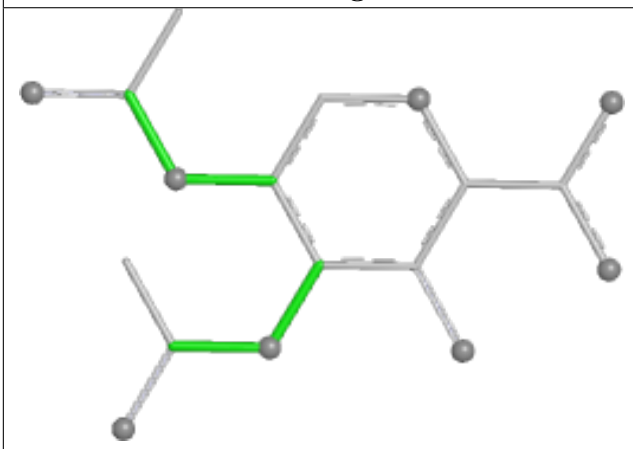
Ligand V75 M 409



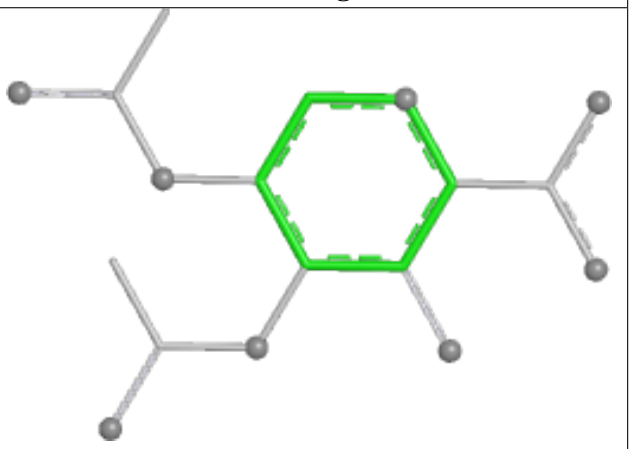
Bond lengths



Bond angles

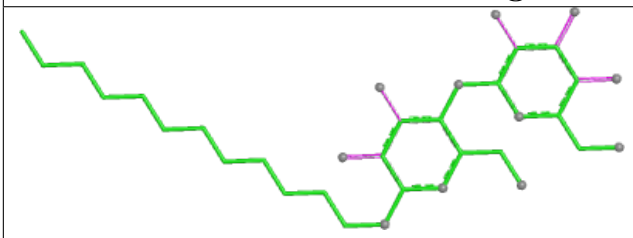


Torsions



Rings

Ligand LMT AG 103



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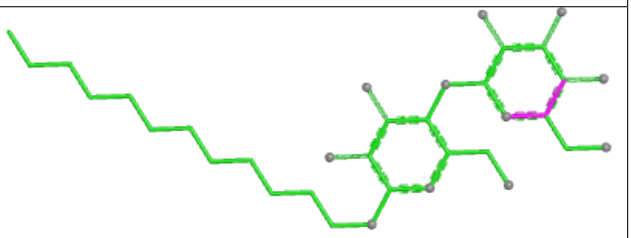
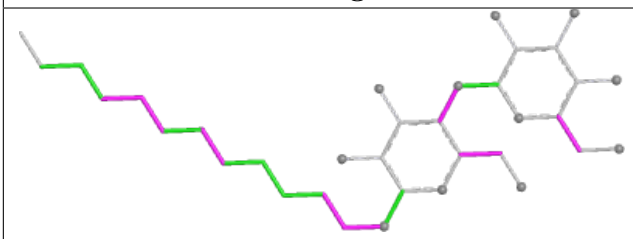


Bond angles



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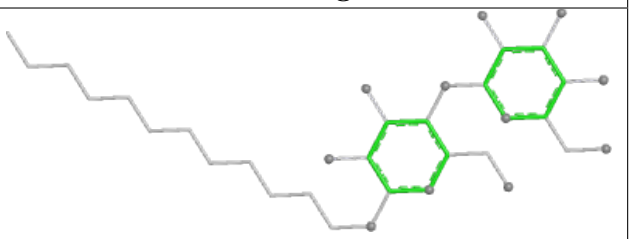
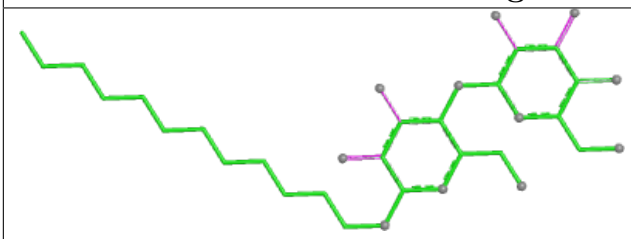


Rings

Ligand LMT AX 101



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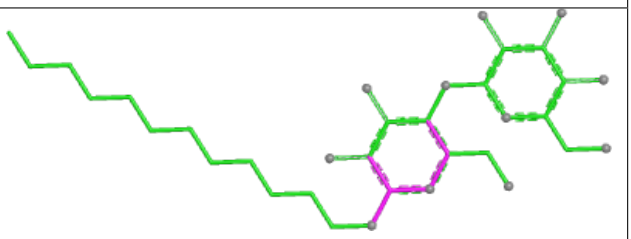

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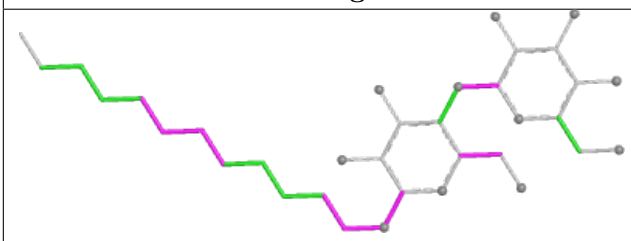

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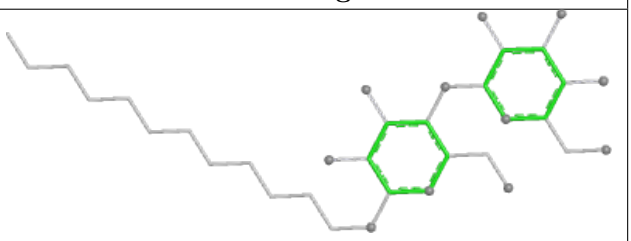
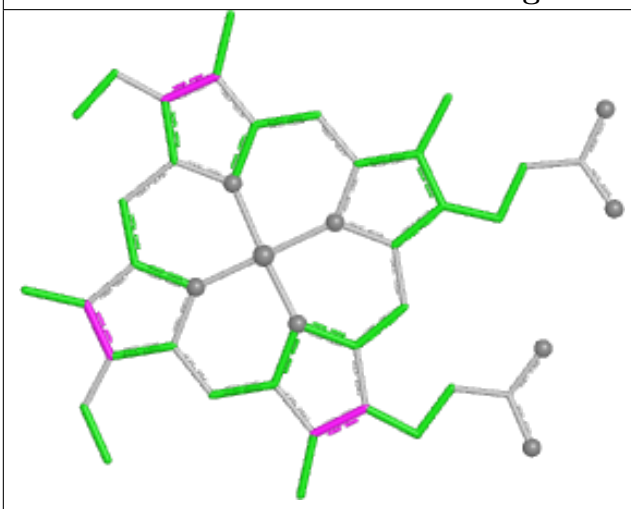


Rings

Ligand HEC C 403



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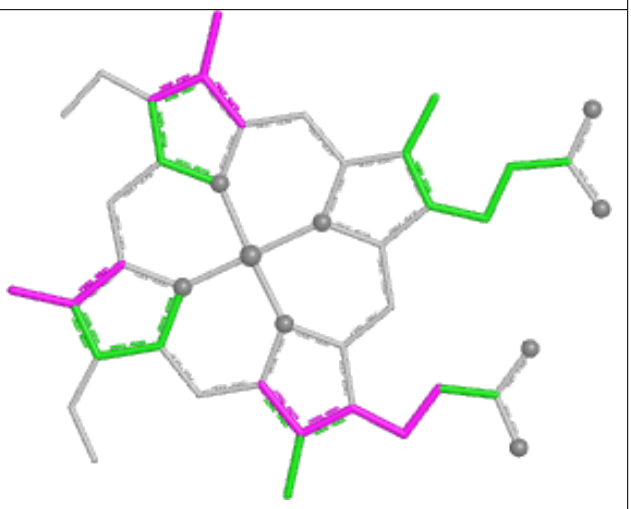
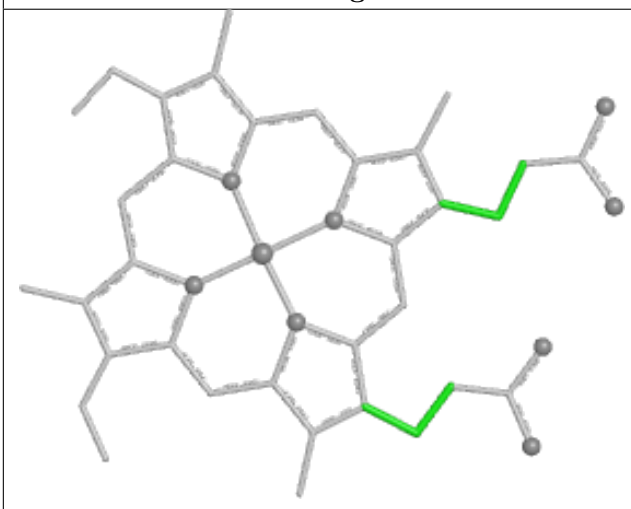
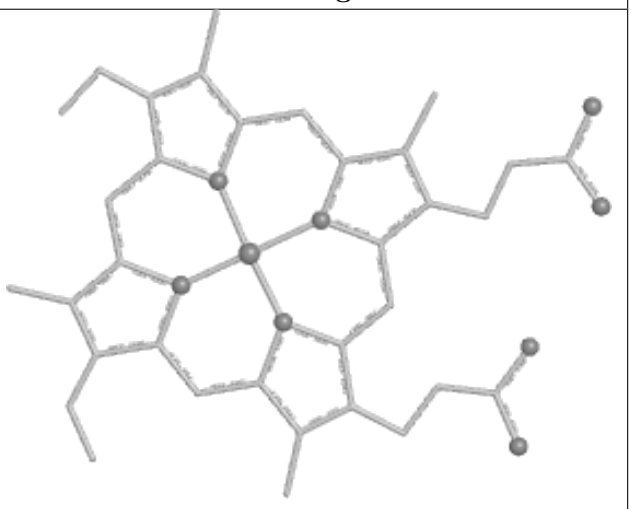


Bond angles

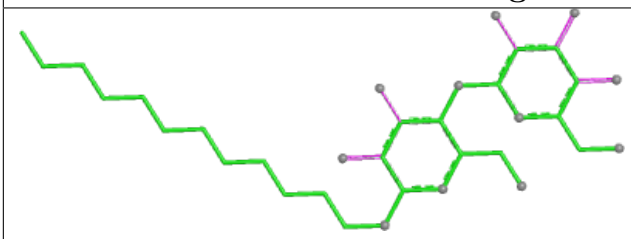


Torsions



Rings

Ligand LMT BT 102



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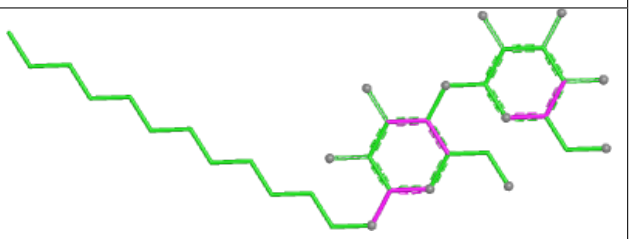
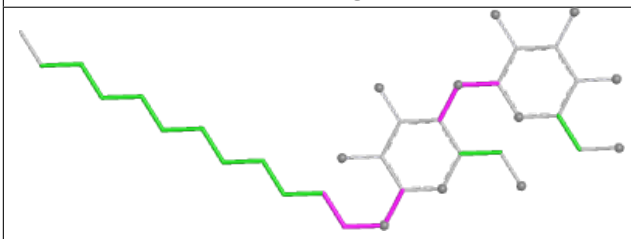


Bond angles



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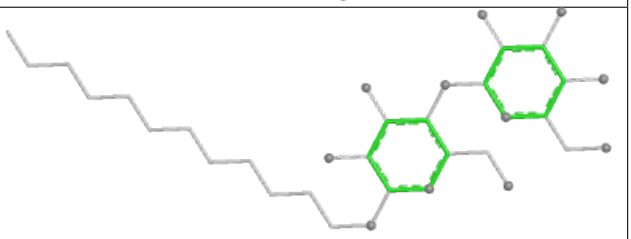
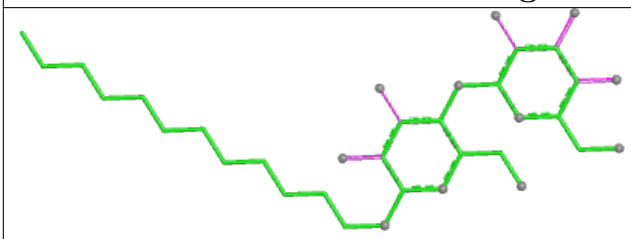
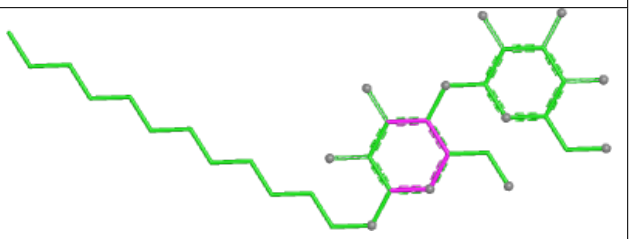


Rings

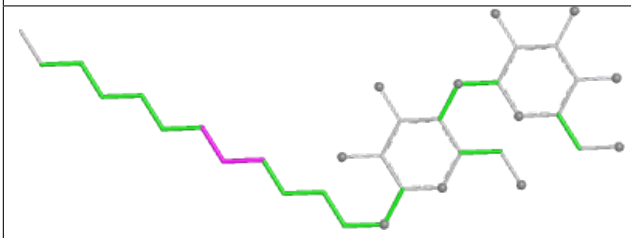
Ligand LMT bl 105



Bond lengths



Bond angles



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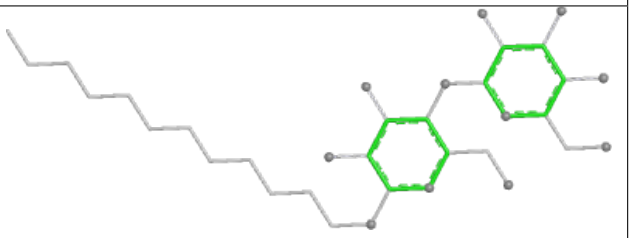
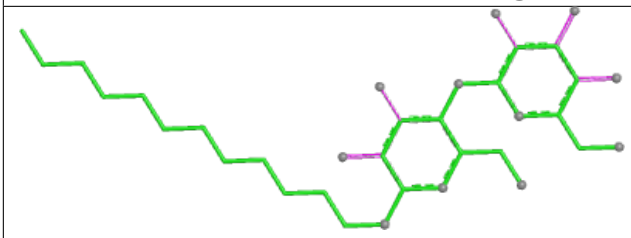
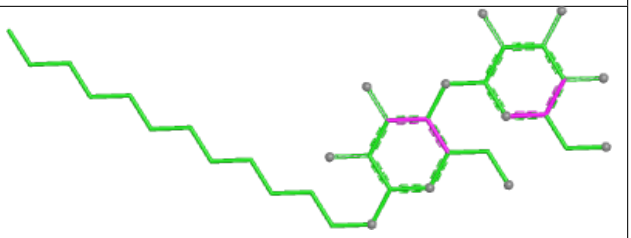


Rings

Ligand LMT AS 101



Bond lengths



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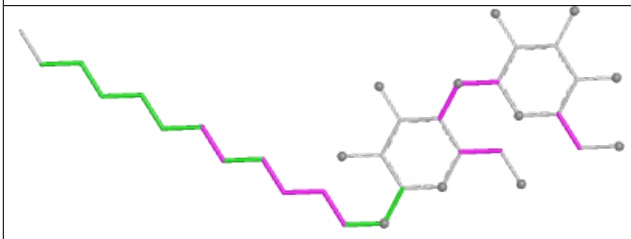

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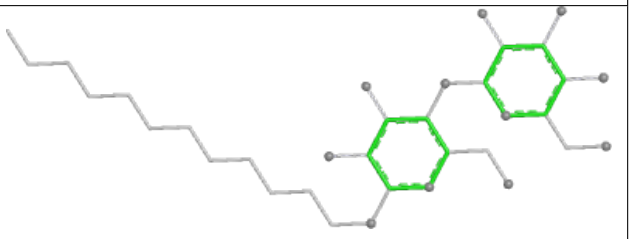
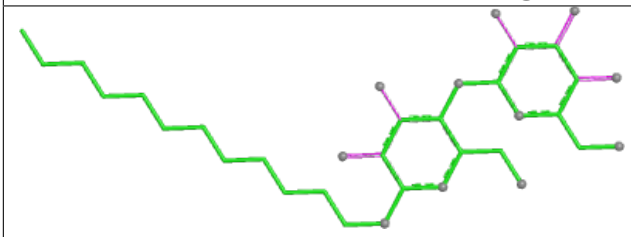


Rings

Ligand LMT bj 102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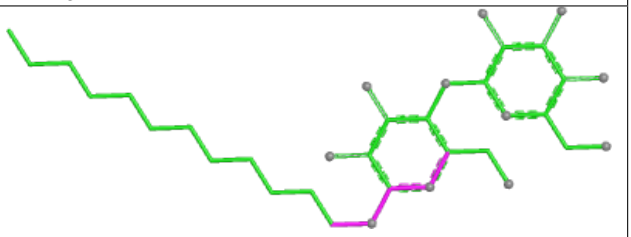
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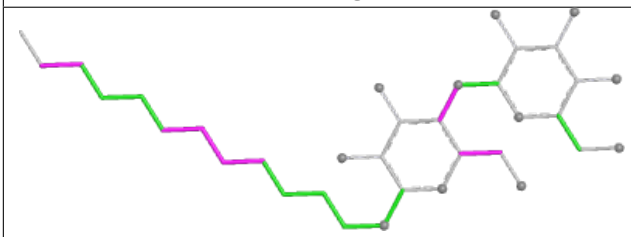
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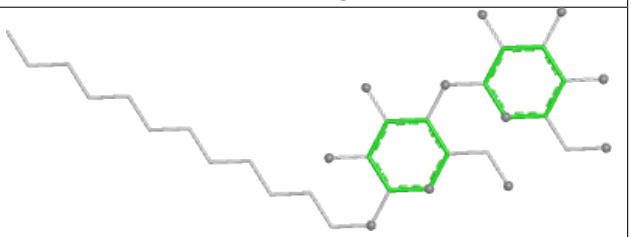
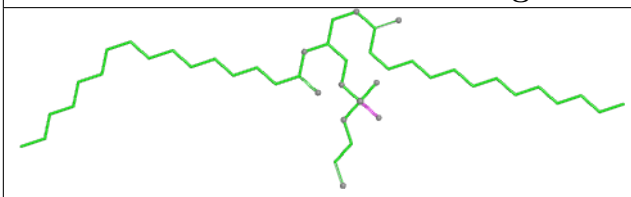

Rings

Ligand 0V9 C1 1001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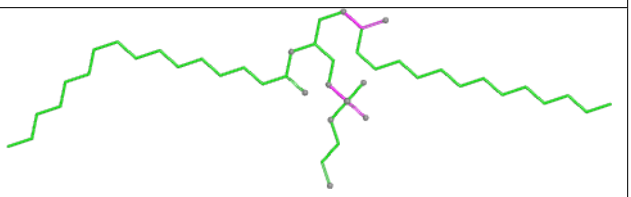
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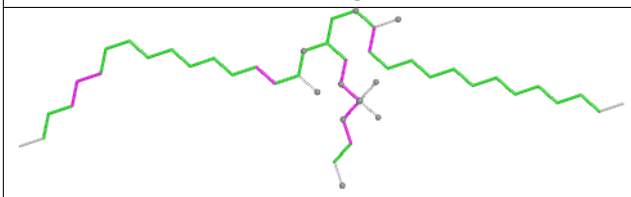
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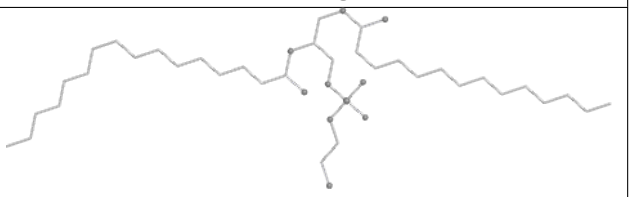
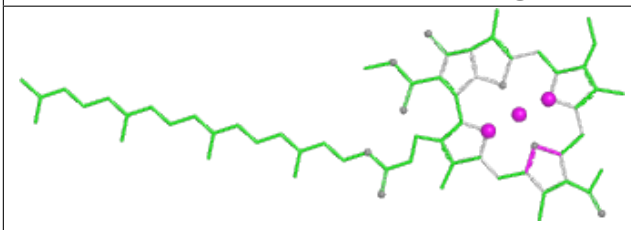
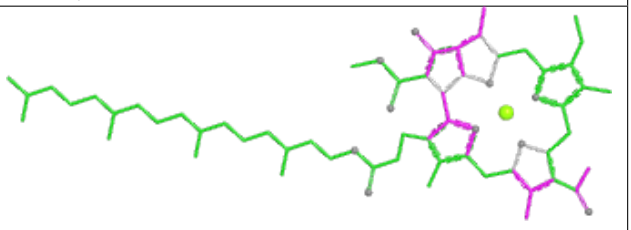
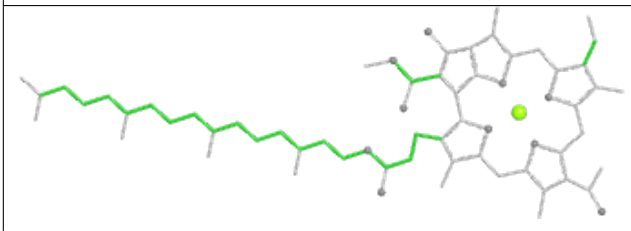
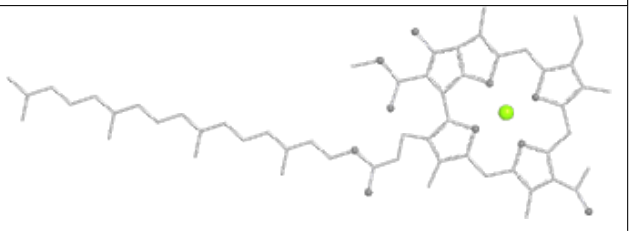

Rings

Ligand BCL AQ 102

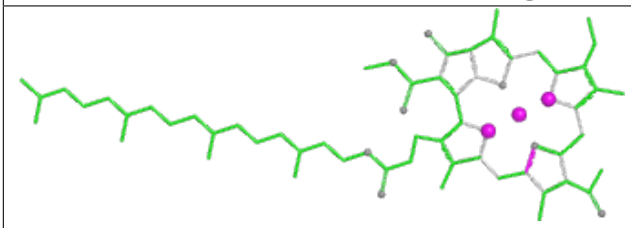

Bond lengths


Bond angles

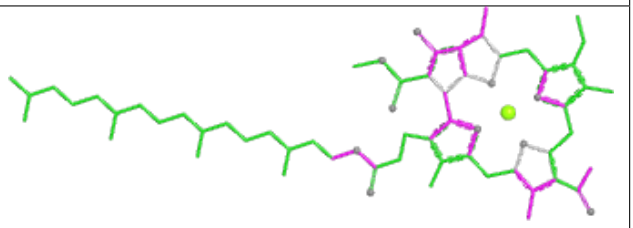

Torsions


Rings

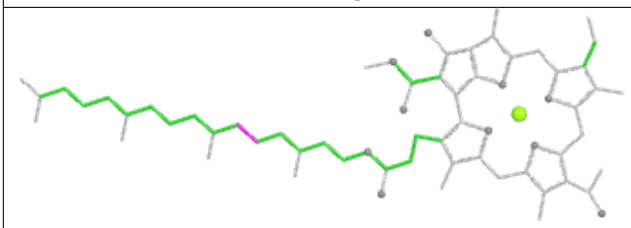
Ligand BCL M 408



Bond lengths



Bond angles



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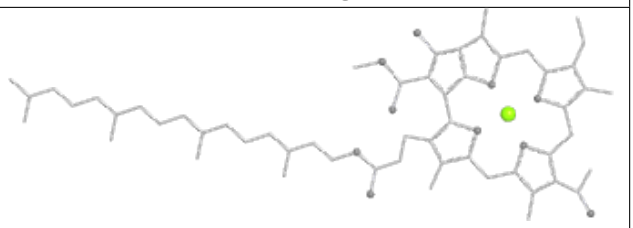
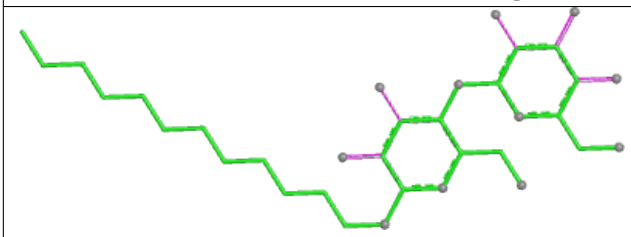


Rings

Ligand LMT BA 105



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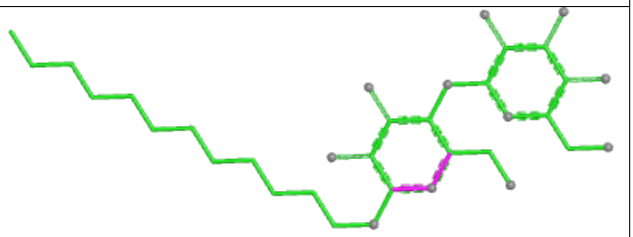
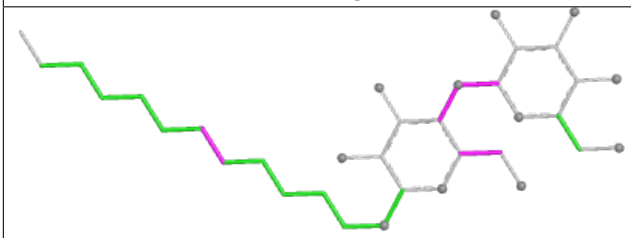


Bond angles



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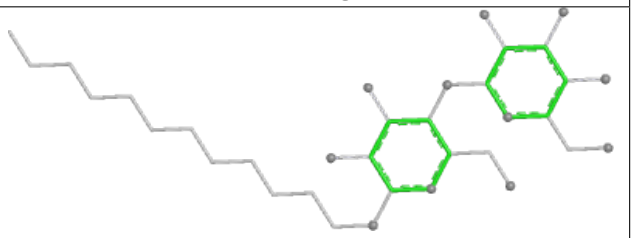
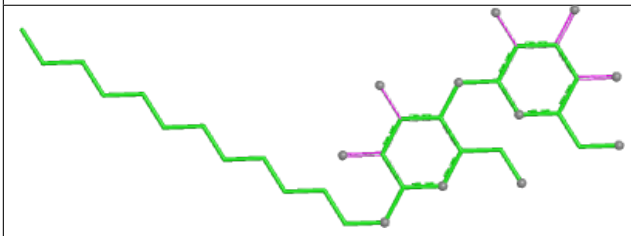
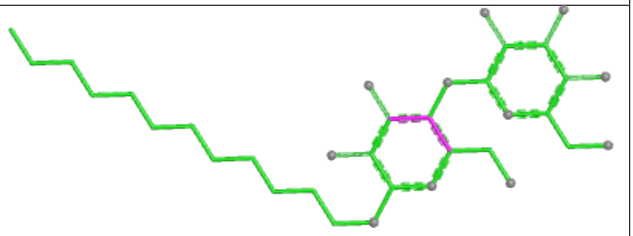


Rings

Ligand LMT BG 1003



Bond lengths



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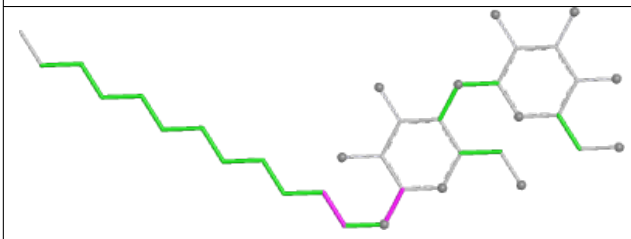
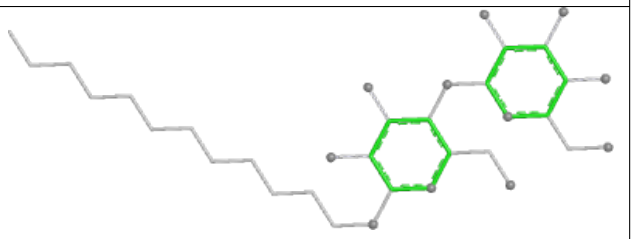
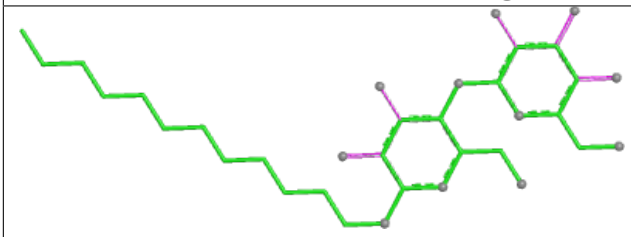


Torsions

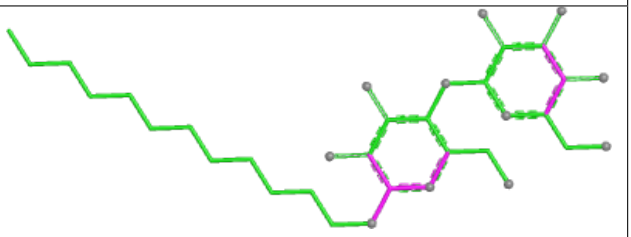


Rings

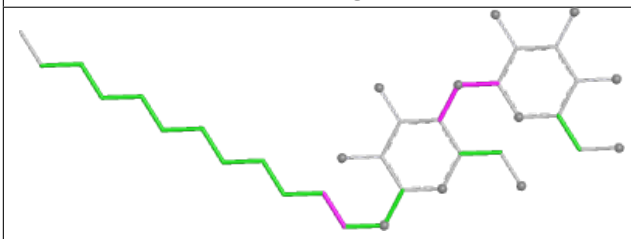
Ligand LMT BK 1002



Bond lengths



Bond angles



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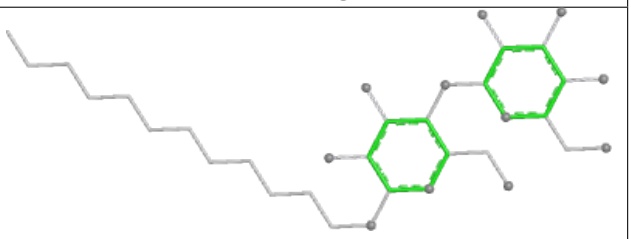
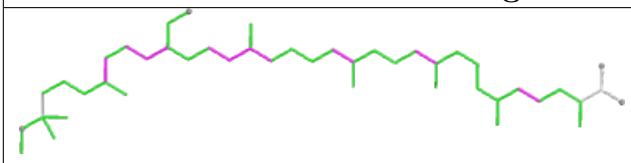


Rings

Ligand V7N BV 1001



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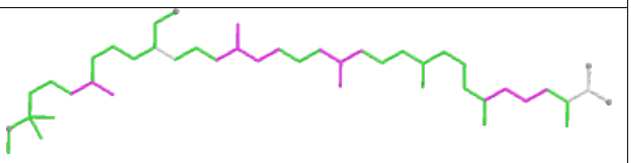
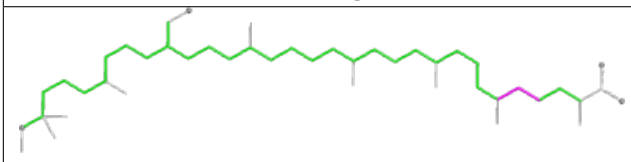


Bond angles



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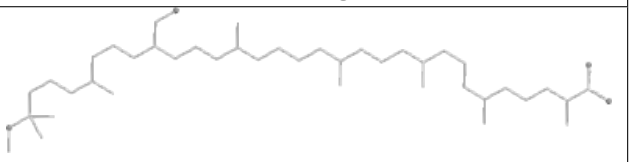
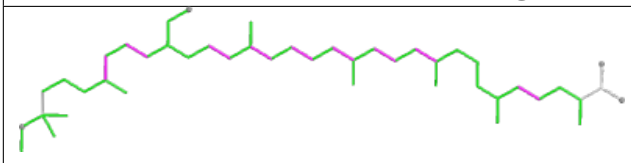
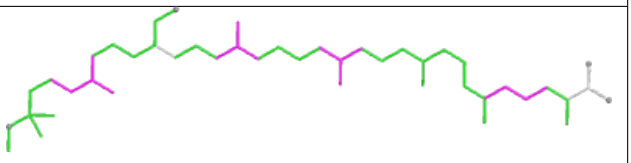


Rings

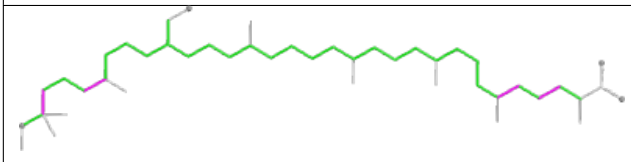
Ligand V7N bm 101



Bond lengths



Bond angles



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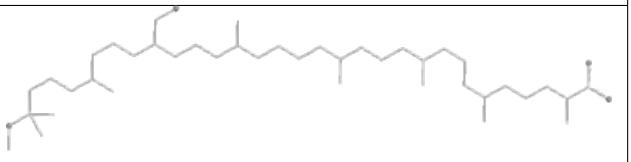
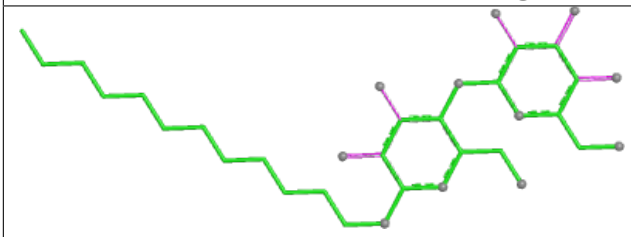
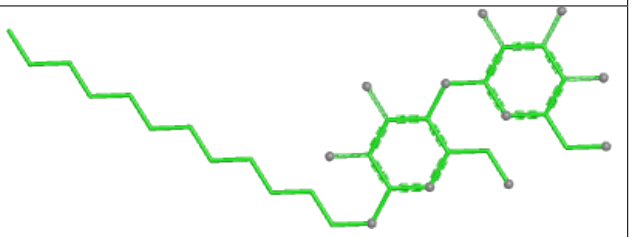
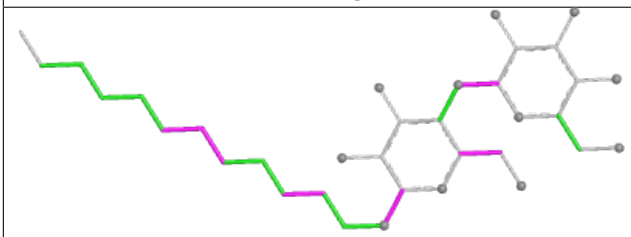
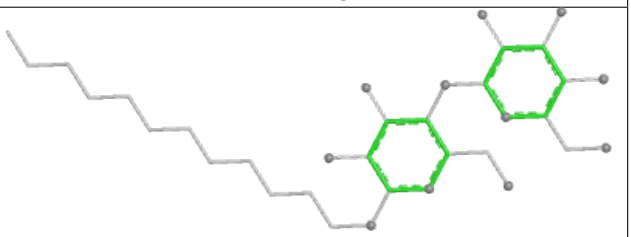
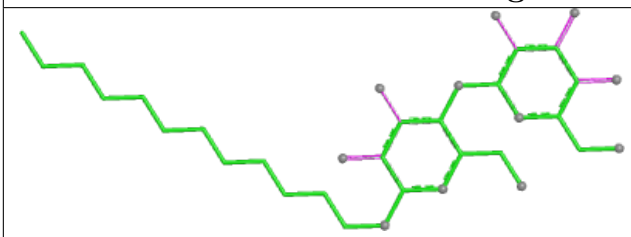
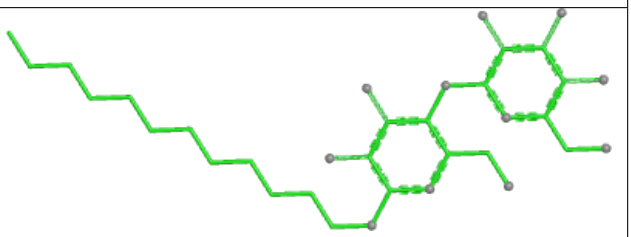
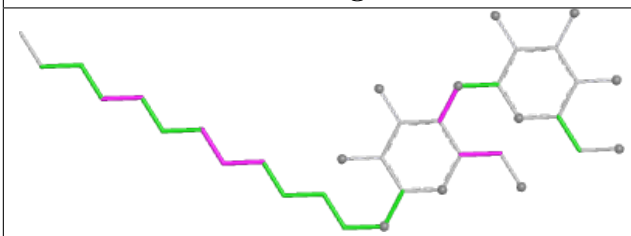
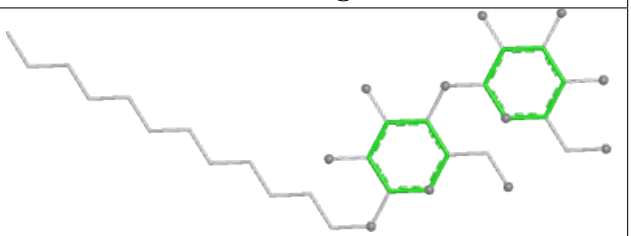
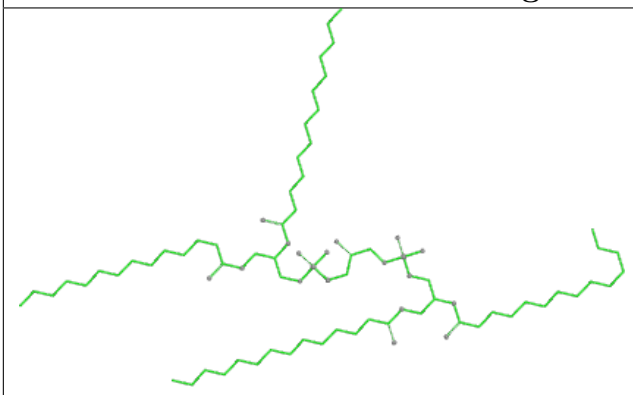


Rings

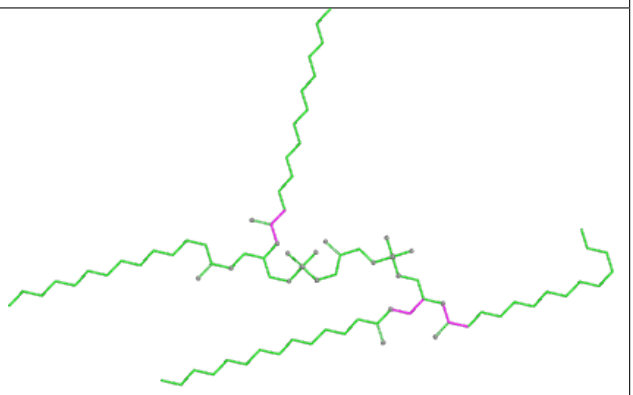
Ligand LMT bn 101	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand LMT BN 104	
 Bond lengths	 Bond angles
 Torsions	 Rings

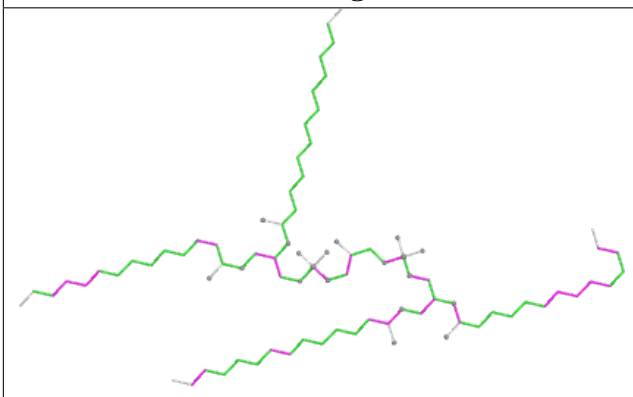
Ligand CD4 ae 101



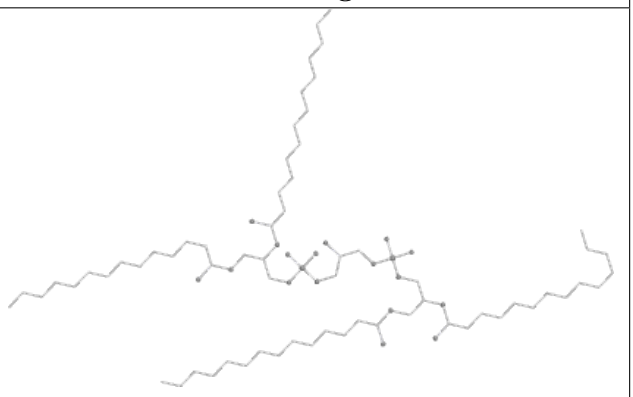
Bond lengths



Bond angles

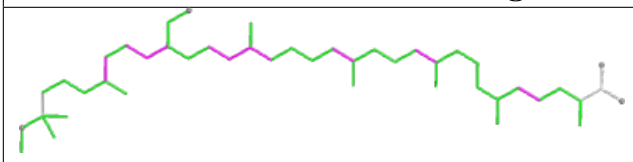


Torsions

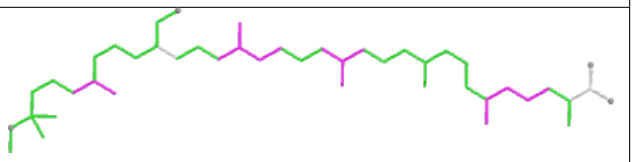


Rings

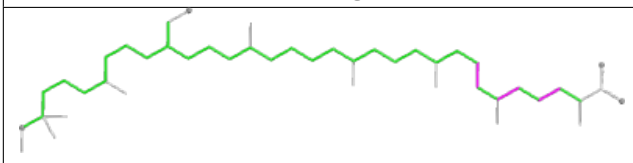
Ligand V7N BJ 1001



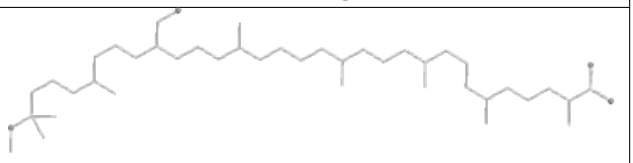
Bond lengths



Bond angles

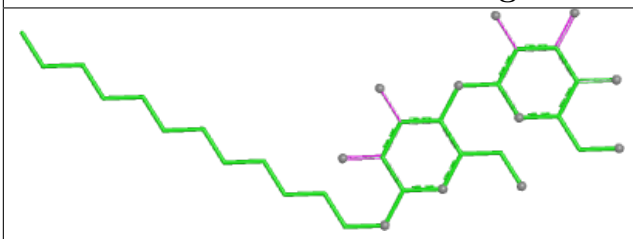


Torsions

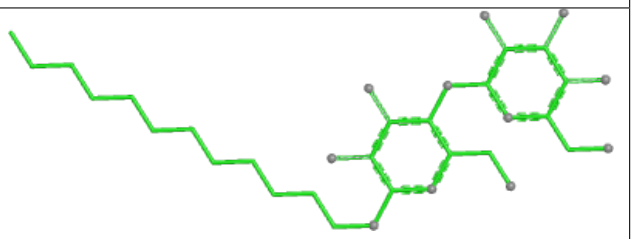


Rings

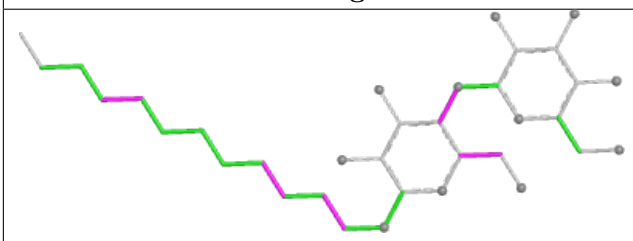
Ligand LMT BR 1005



Bond lengths



Bond angles



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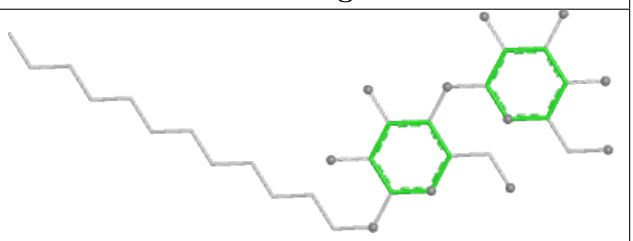
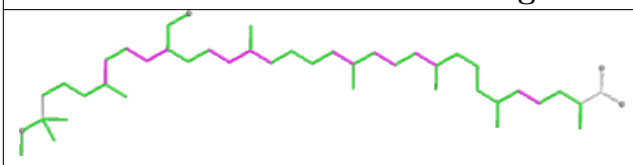


Rings

Ligand V7N bh 102



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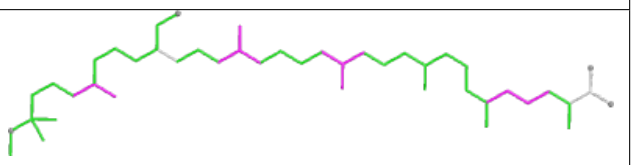
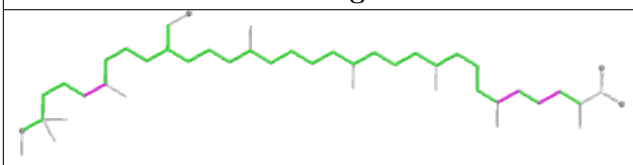
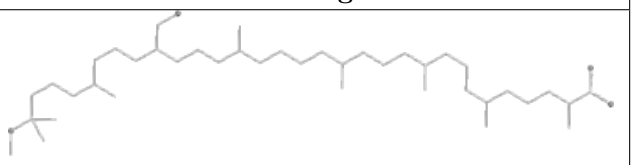


Bond angles

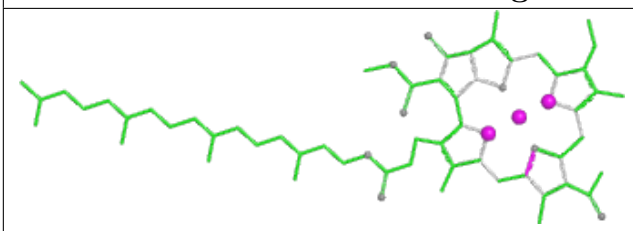


Torsions

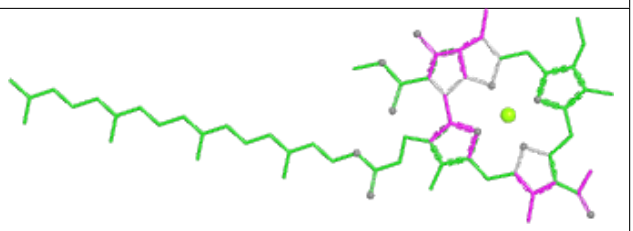


Rings

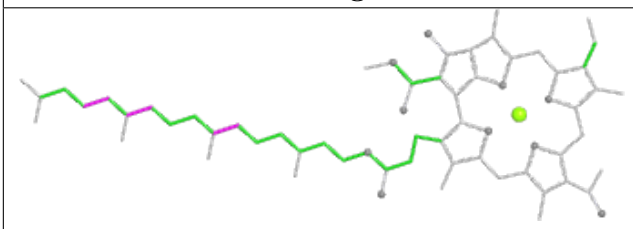
Ligand BCL AG 102



Bond lengths



Bond angles



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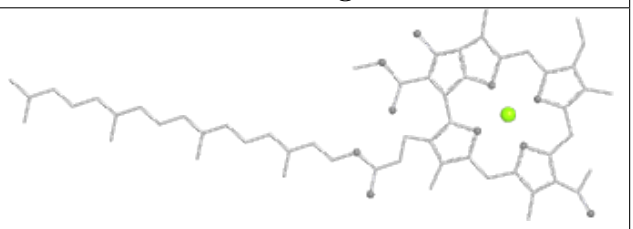
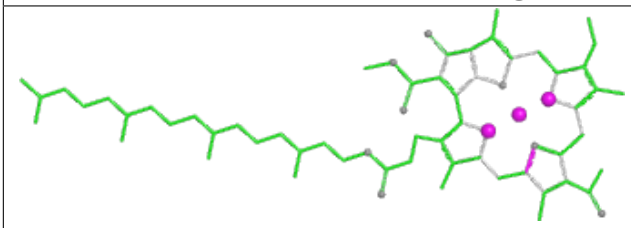
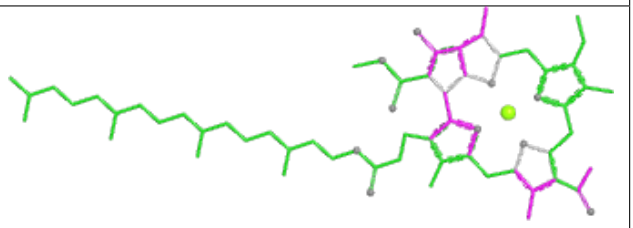


Rings

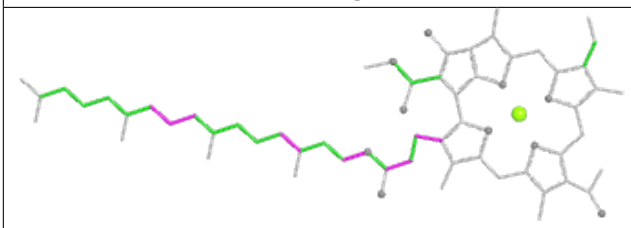
Ligand BCL ad 1001



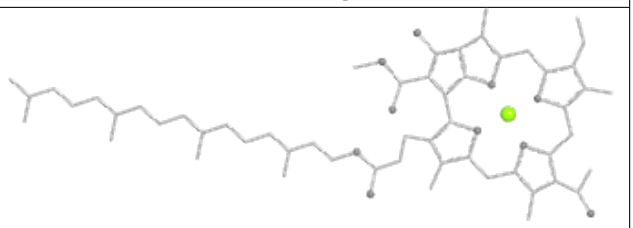
Bond lengths



Bond angles

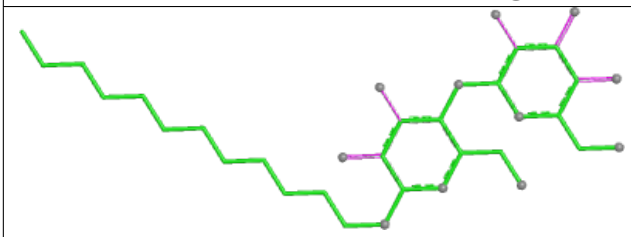


Torsions

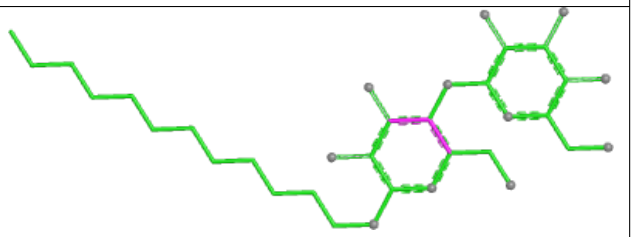


Rings

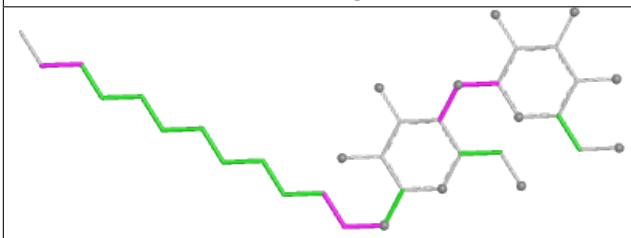
Ligand LMT BN 101



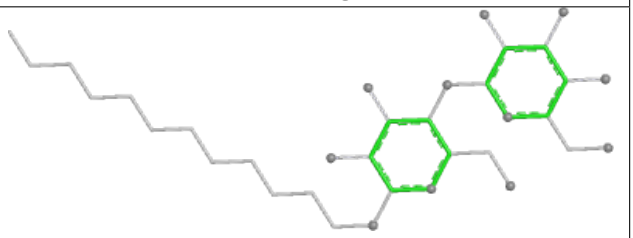
Bond lengths



Bond angles

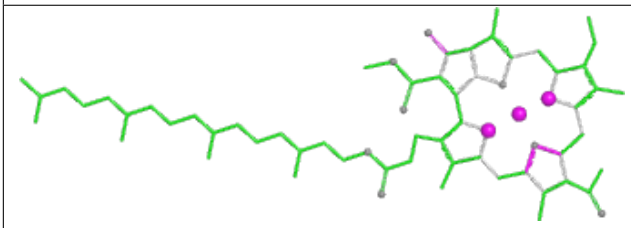


Torsions

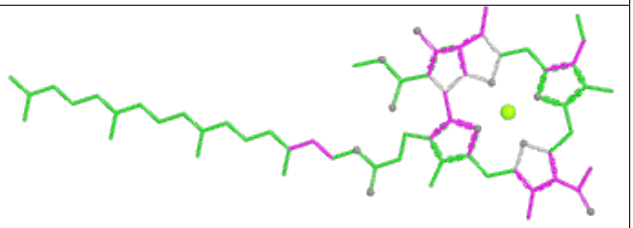


Rings

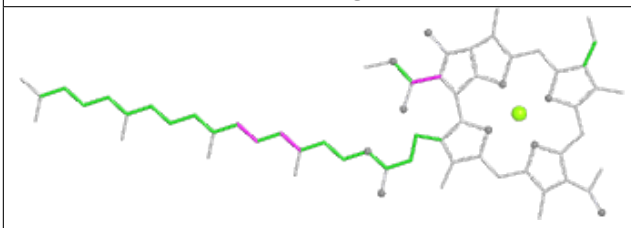
Ligand BCL AU 103



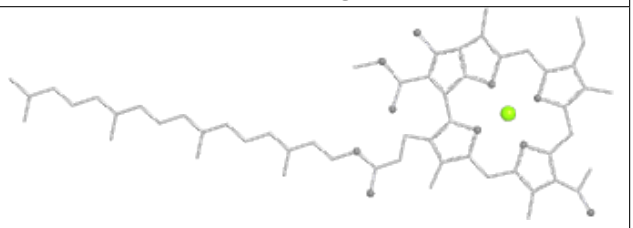
Bond lengths



Bond angles

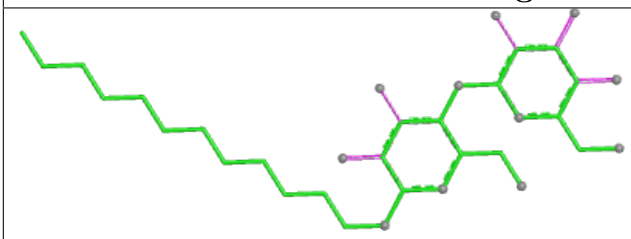


Torsions

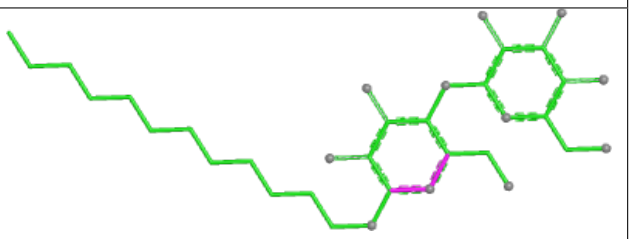


Rings

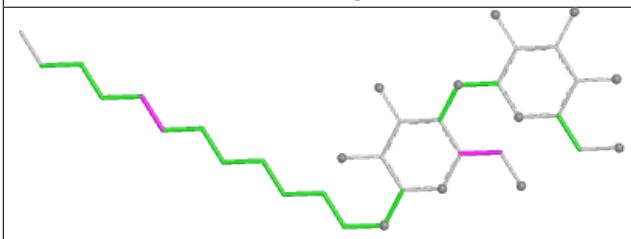
Ligand LMT ab 101



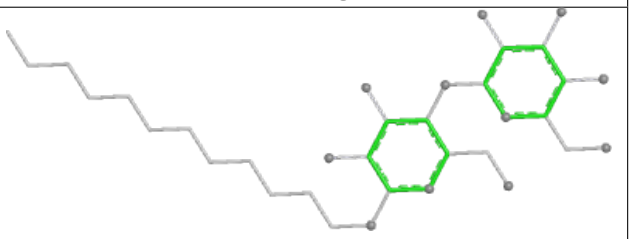
Bond lengths



Bond angles

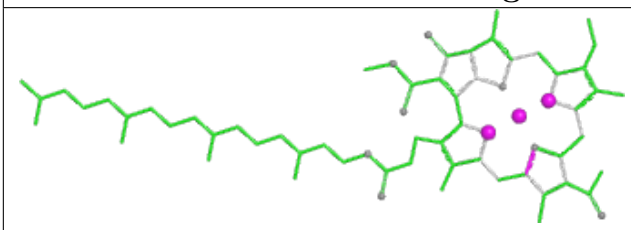


Torsions

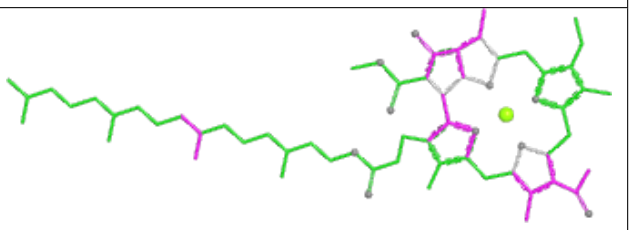


Rings

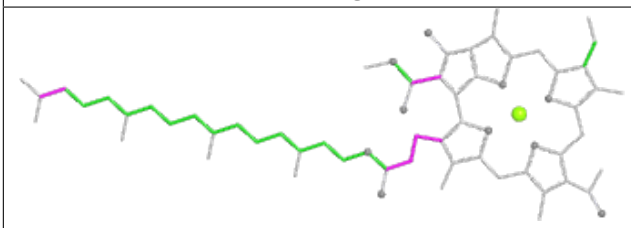
Ligand BCL BU 1004



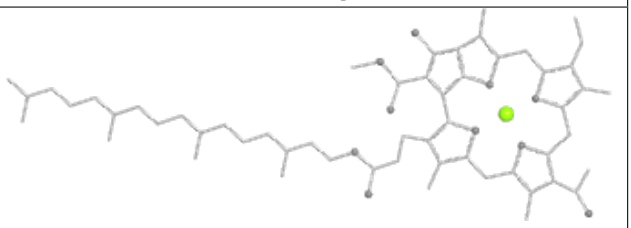
Bond lengths



Bond angles

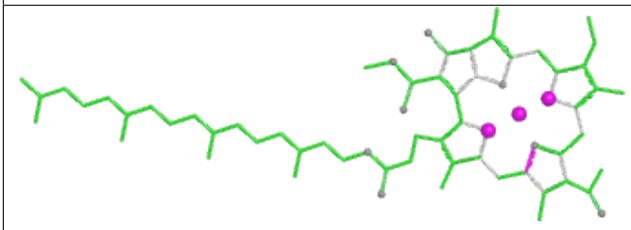


Torsions

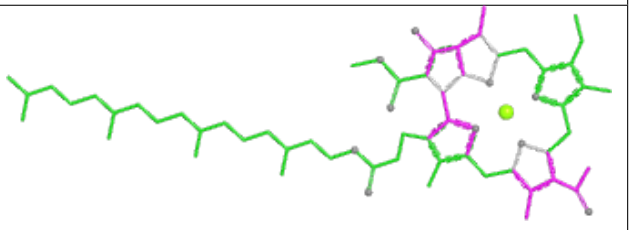


Rings

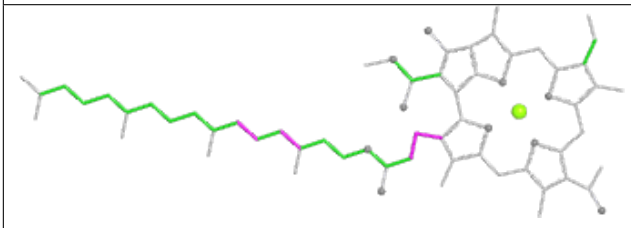
Ligand BCL BG 1004



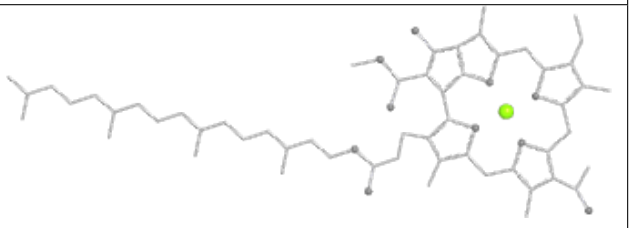
Bond lengths



Bond angles

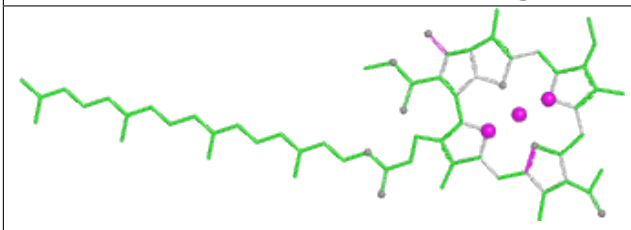


Torsions

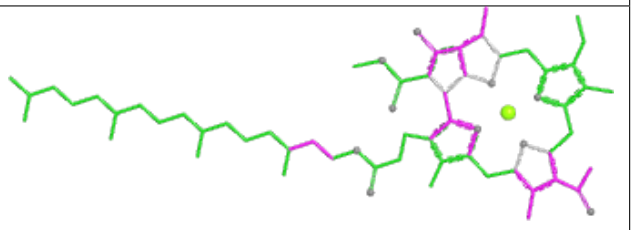


Rings

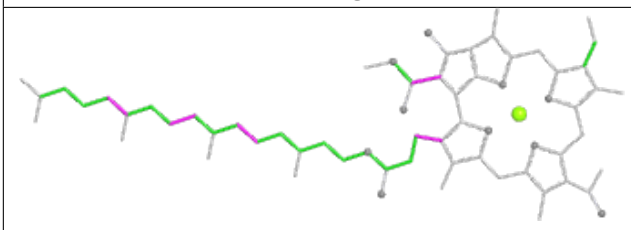
Ligand BCL AS 102



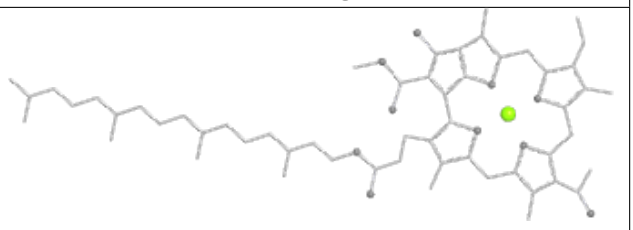
Bond lengths



Bond angles

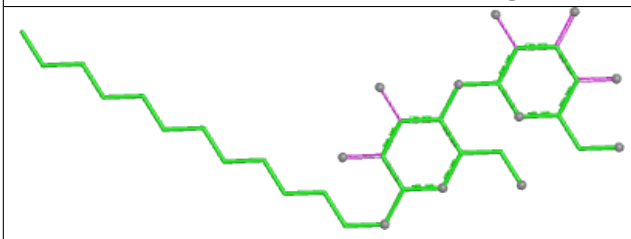


Torsions

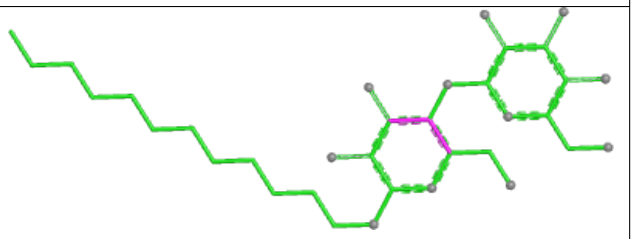


Rings

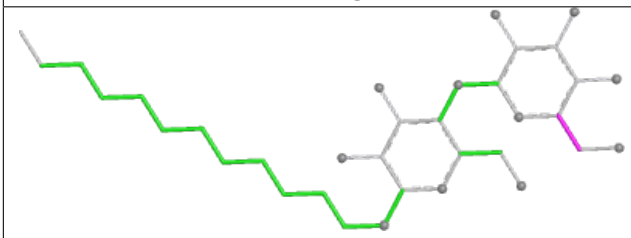
Ligand LMT BJ 1004



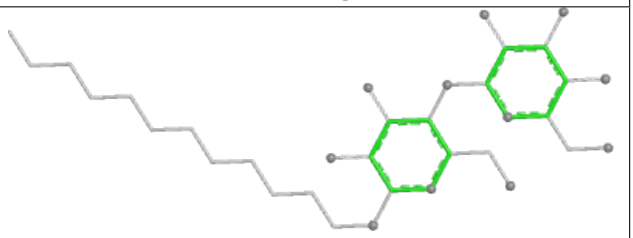
Bond lengths



Bond angles

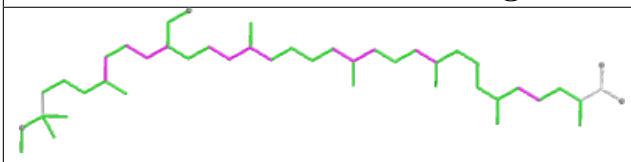


Torsions

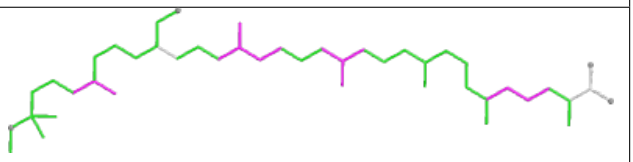


Rings

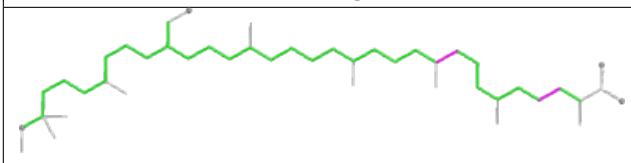
Ligand V7N BK 1001



Bond lengths



Bond angles



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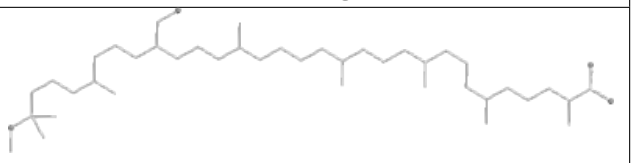
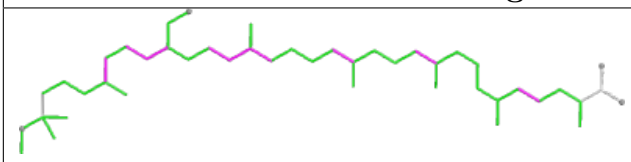
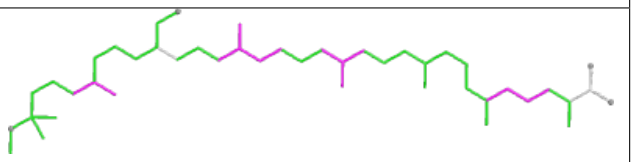


Rings

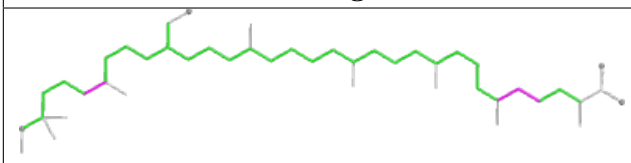
Ligand V7N BS 1001



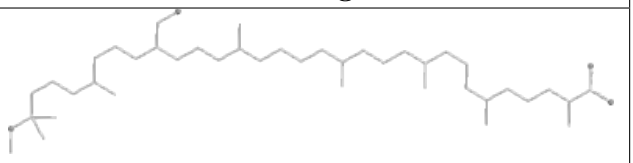
Bond lengths



Bond angles

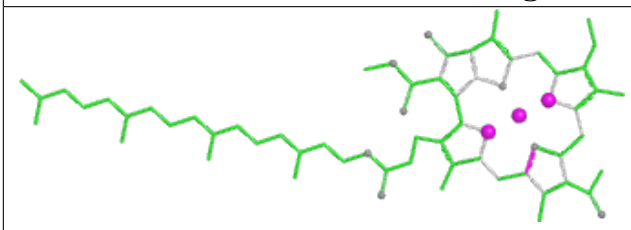


Torsions

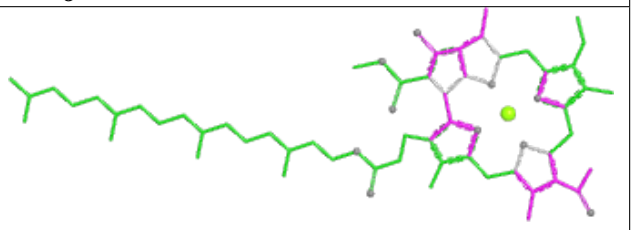


Rings

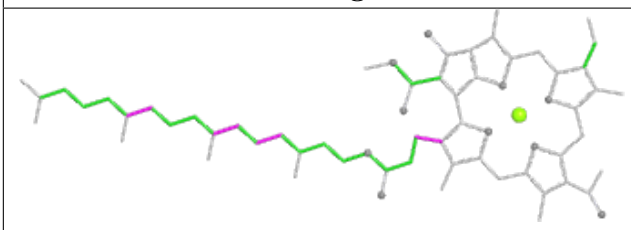
Ligand BCL bj 103



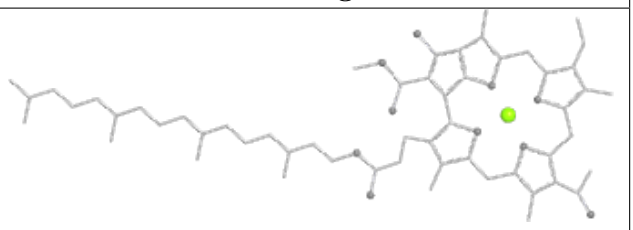
Bond lengths



Bond angles

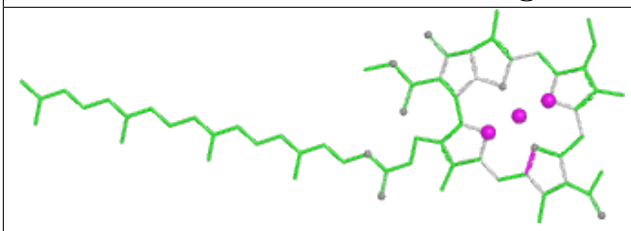


Torsions



Rings

Ligand BCL bh 105



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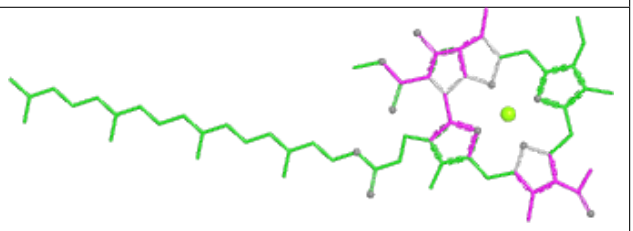
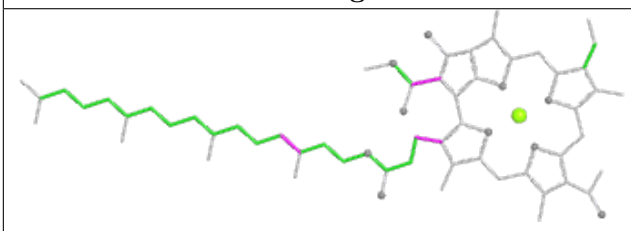
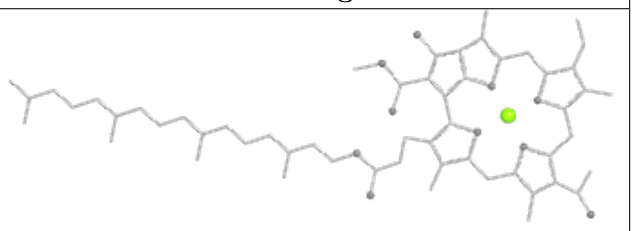


Bond angles

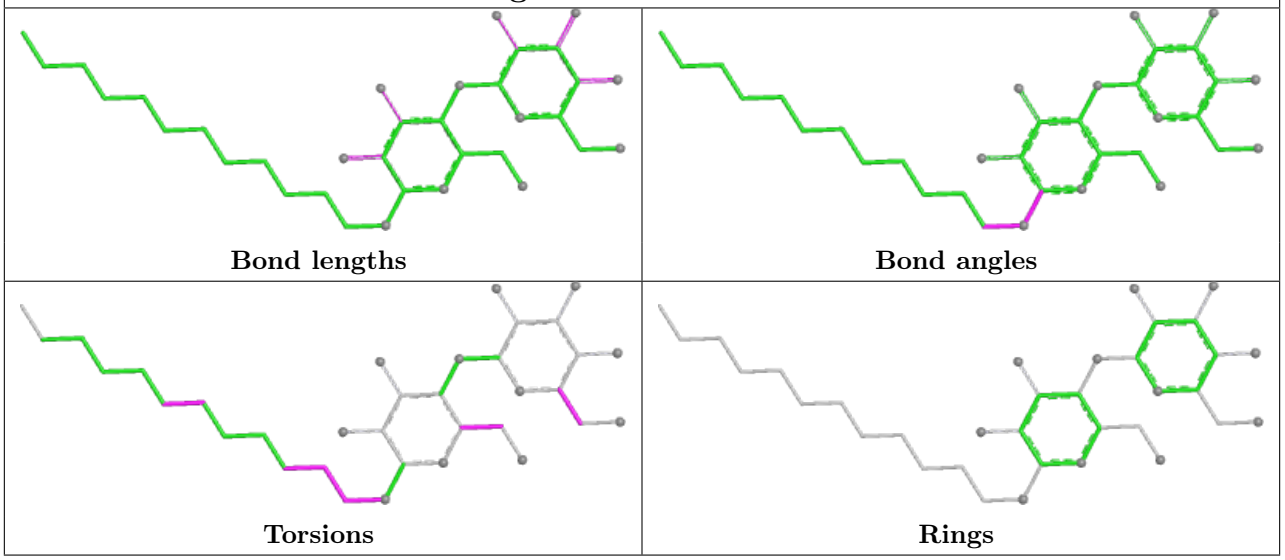


Torsions

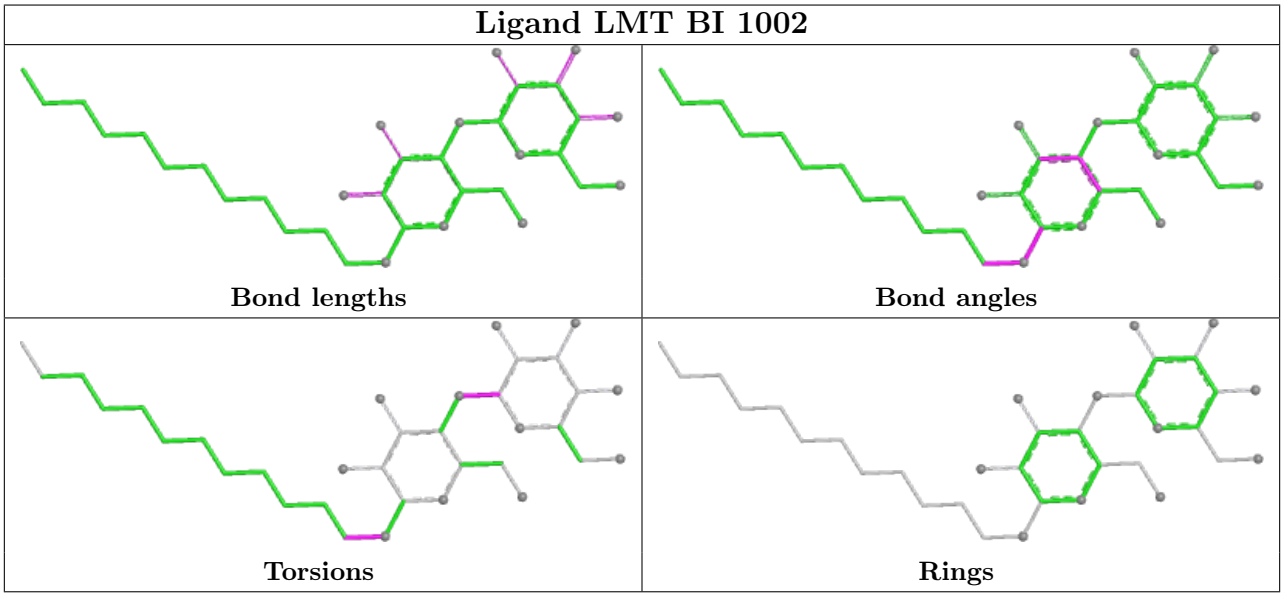


Rings

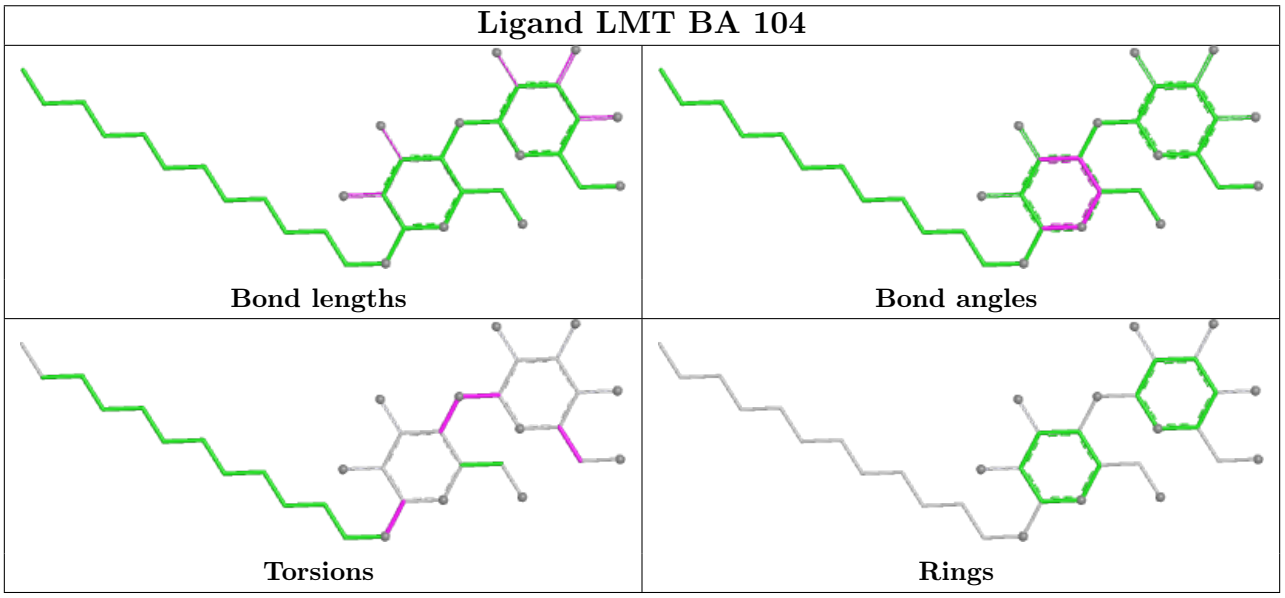
Ligand LMT BB 104



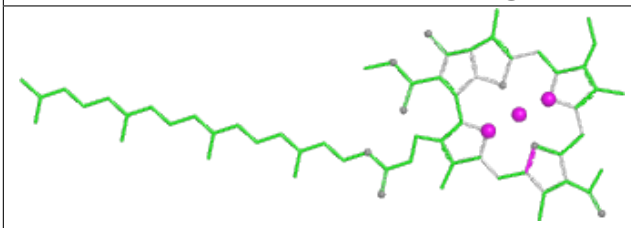
Ligand LMT BI 1002



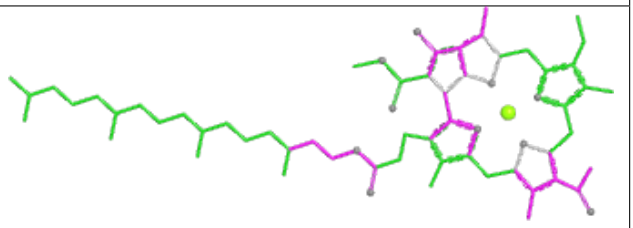
Ligand LMT BA 104



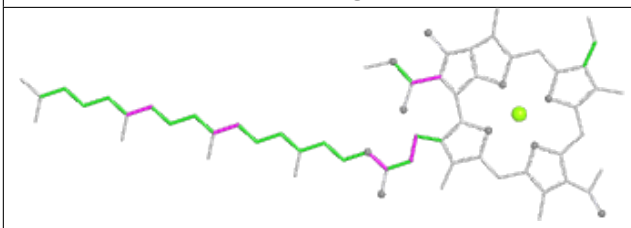
Ligand BCL BX 1002



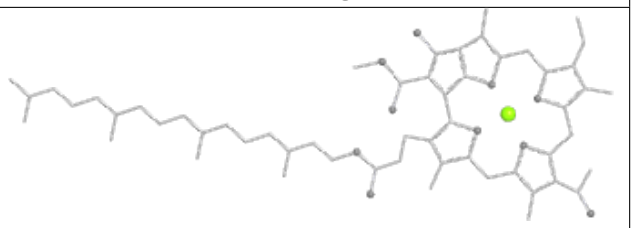
Bond lengths



Bond angles

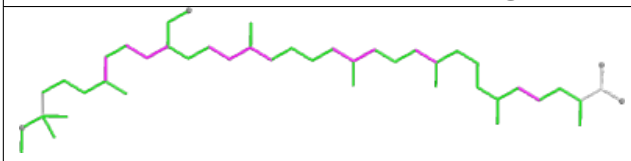


Torsions

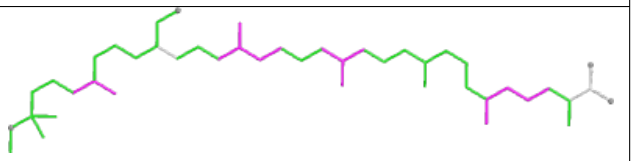


Rings

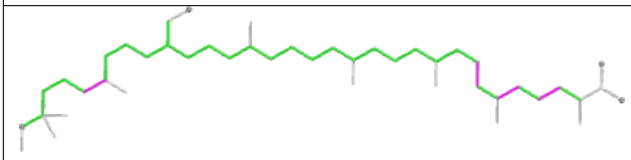
Ligand V7N BG 1001



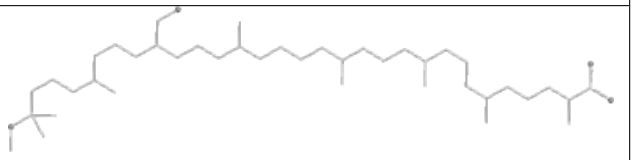
Bond lengths



Bond angles

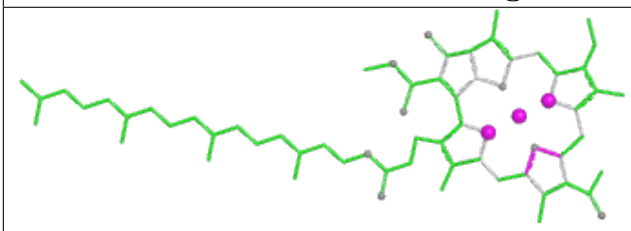


Torsions

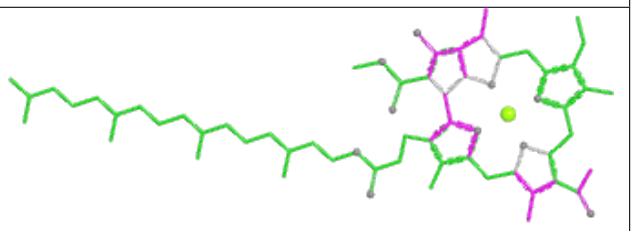


Rings

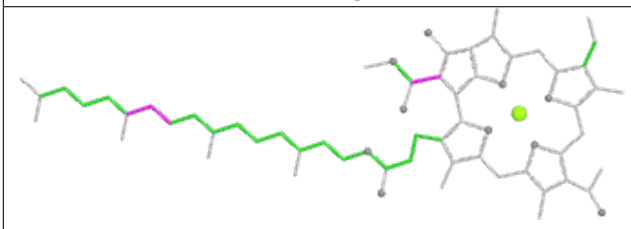
Ligand BCL AF 1001



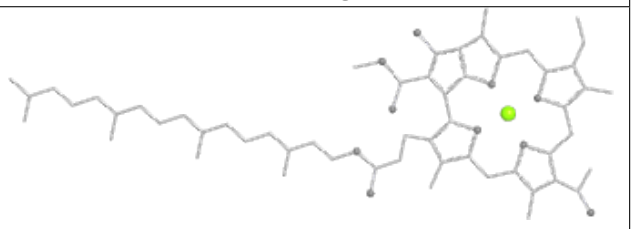
Bond lengths



Bond angles

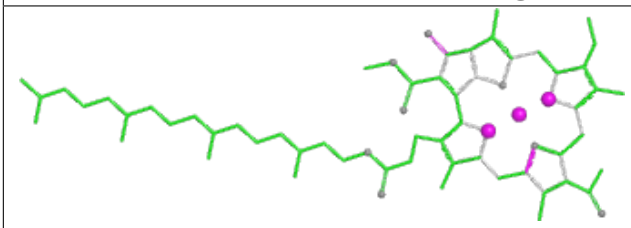


Torsions

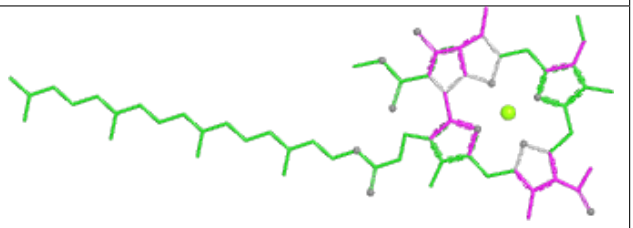


Rings

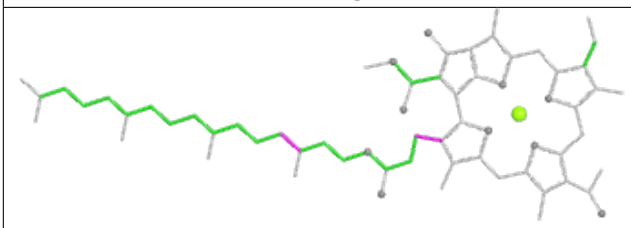
Ligand BCL AC 103



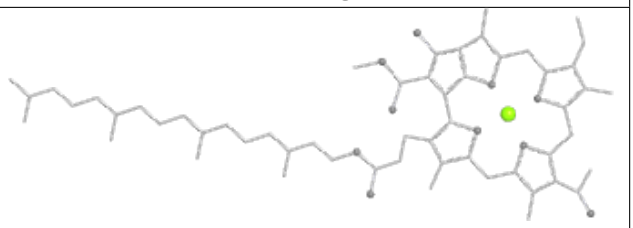
Bond lengths



Bond angles

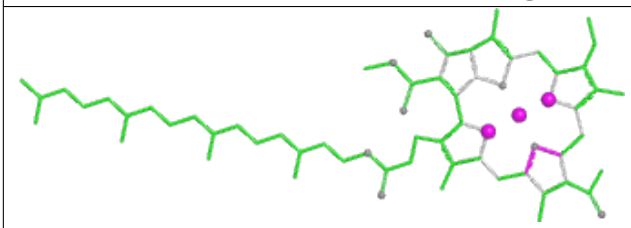


Torsions

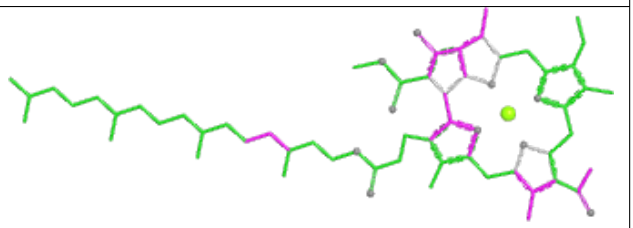


Rings

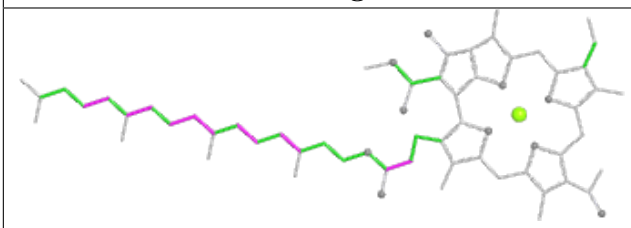
Ligand BCL ae 102



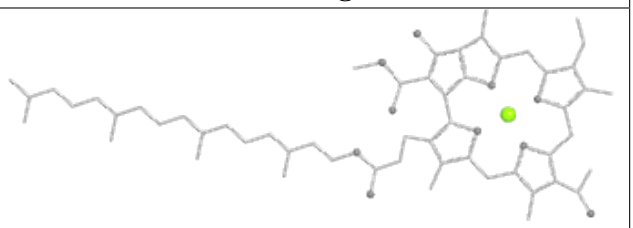
Bond lengths



Bond angles

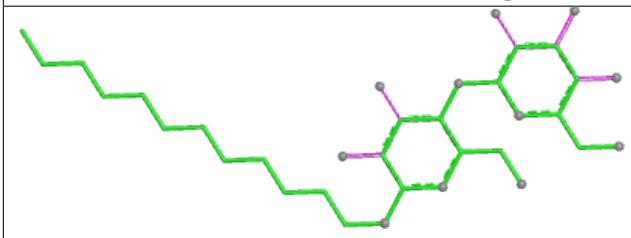


Torsions

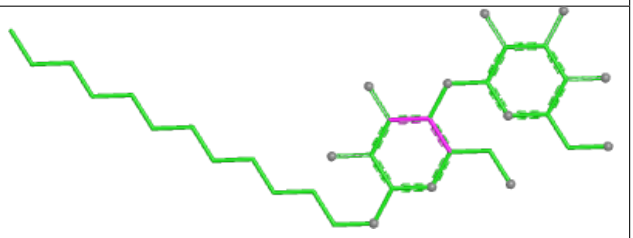


Rings

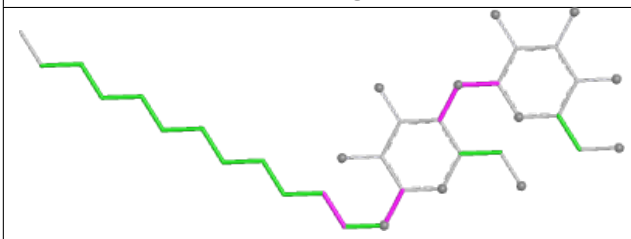
Ligand LMT BV 1004



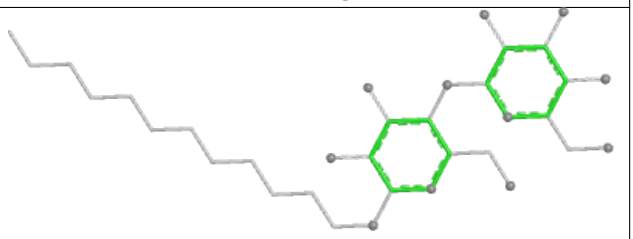
Bond lengths



Bond angles

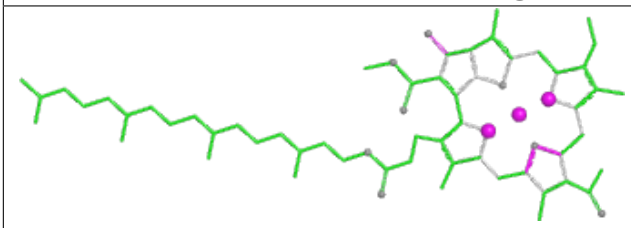


Torsions

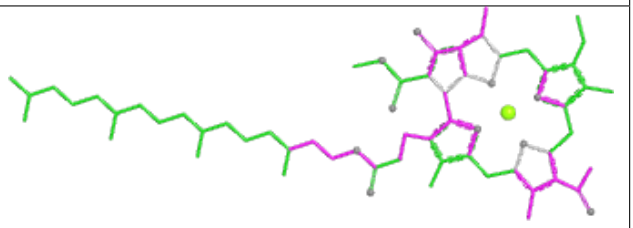


Rings

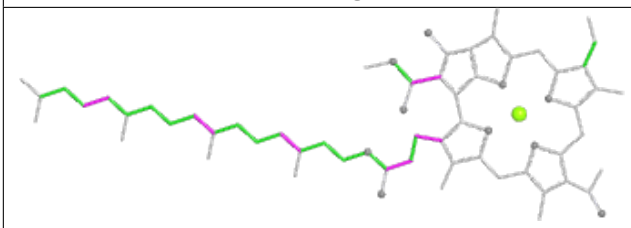
Ligand BCL AX 102



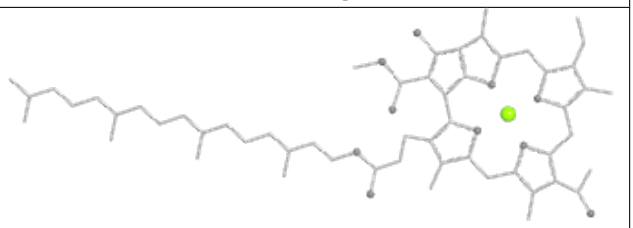
Bond lengths



Bond angles

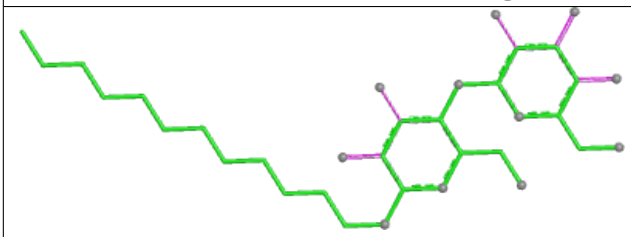


Torsions

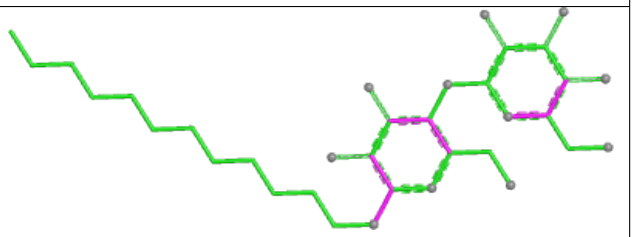


Rings

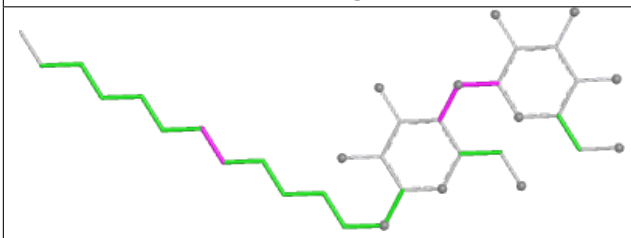
Ligand LMT BR 1002



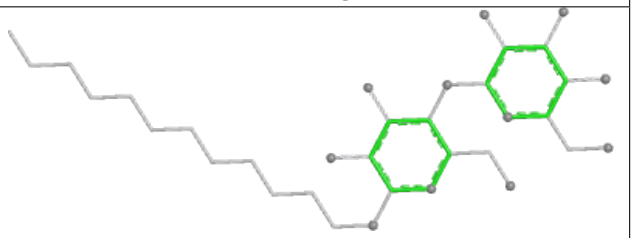
Bond lengths



Bond angles

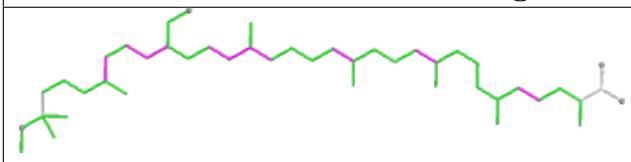


Torsions

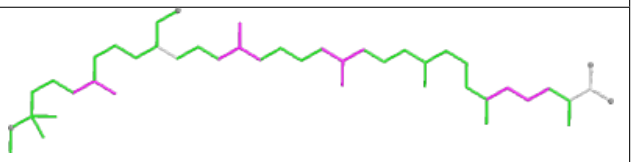


Rings

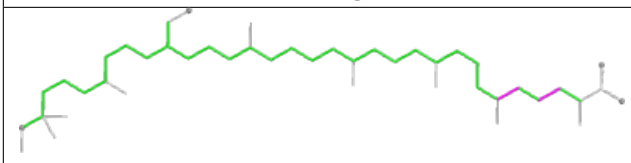
Ligand V7N BA 101



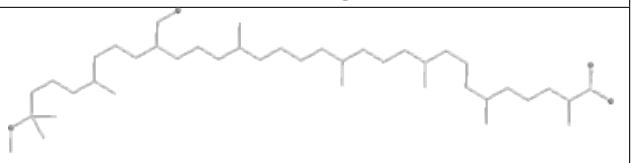
Bond lengths



Bond angles

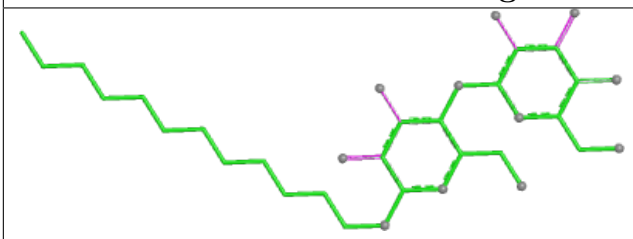


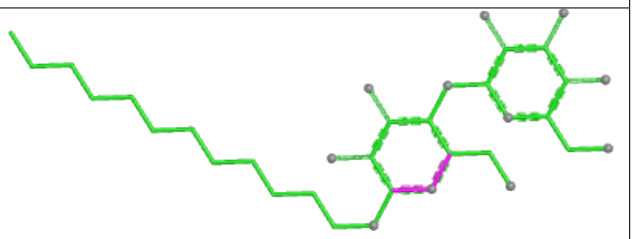
Torsions

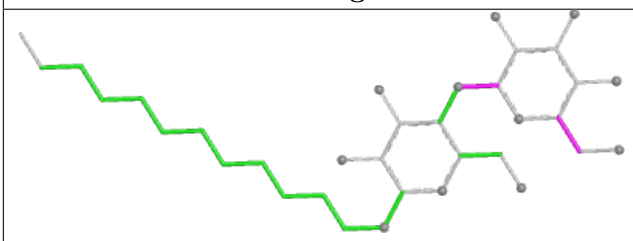


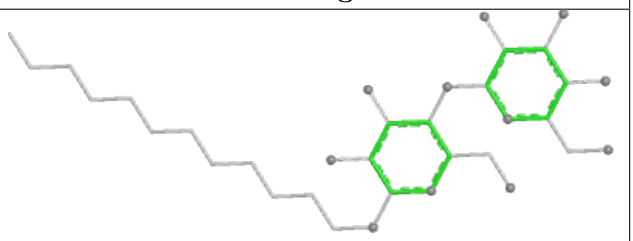
Rings

Ligand LMT BO 1002

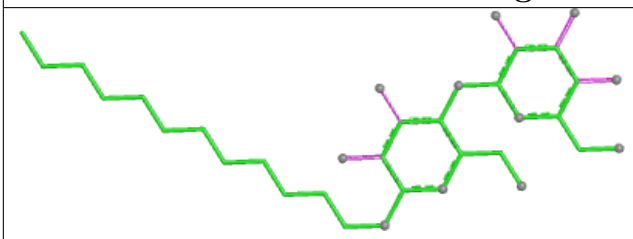

Bond lengths

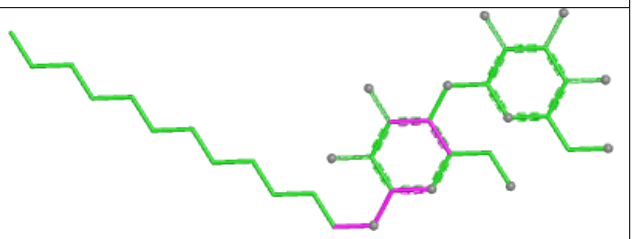

Bond angles

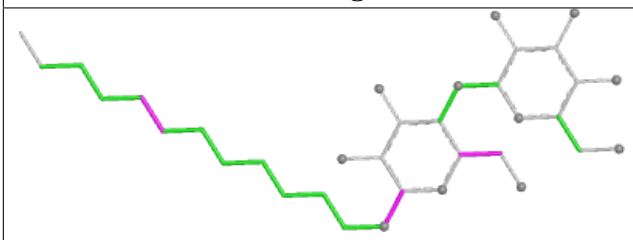

Torsions

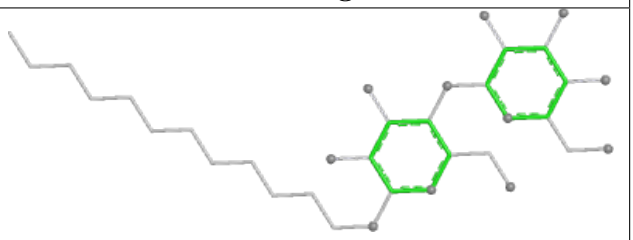

Rings

Ligand LMT bo 105

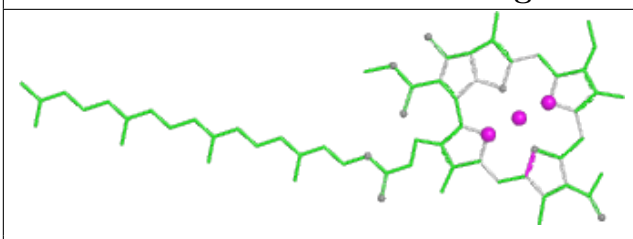

Bond lengths

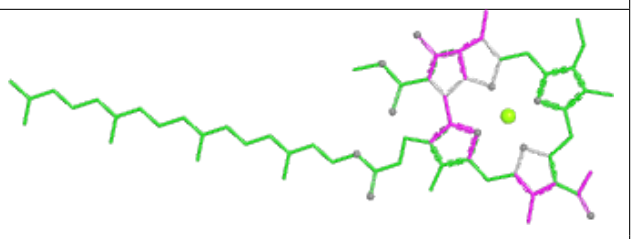

Bond angles

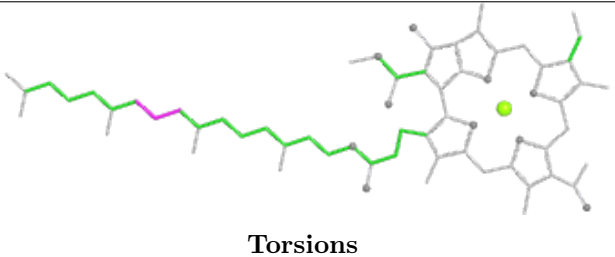

Torsions

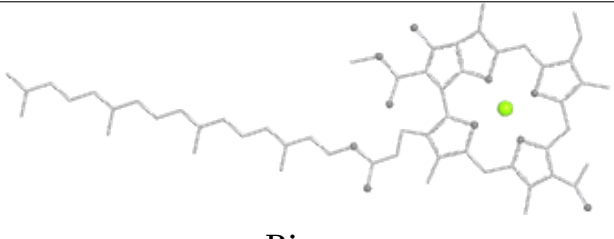

Rings

Ligand BCL AS 103

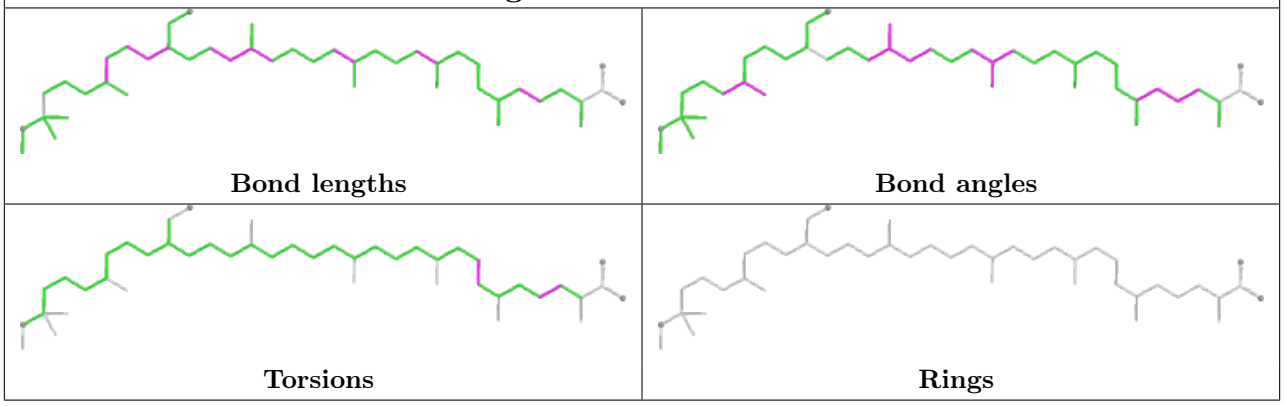

Bond lengths


Bond angles

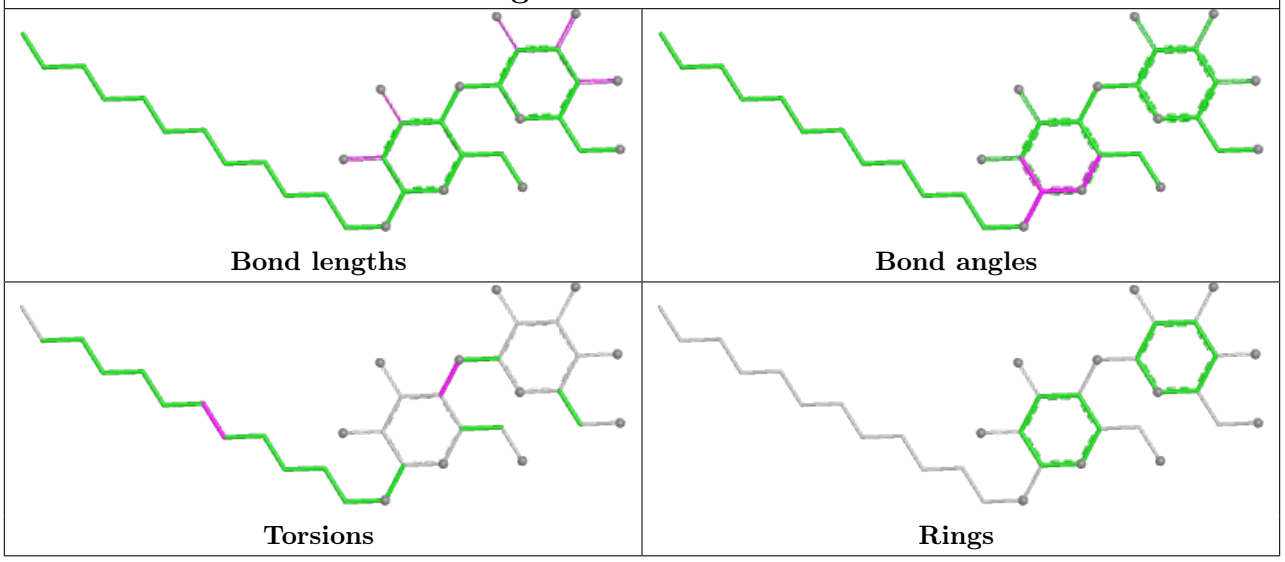

Torsions


Rings

Ligand V7N BP 1001



Ligand LMT BF 101



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.

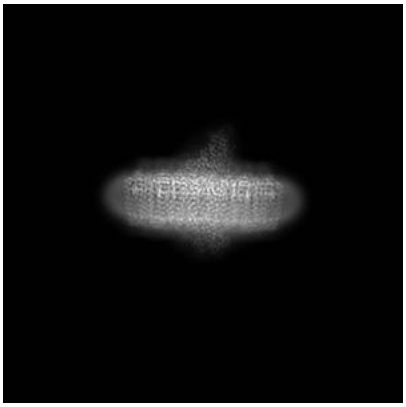
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-12680. These allow visual inspection of the internal detail of the map and identification of artifacts.

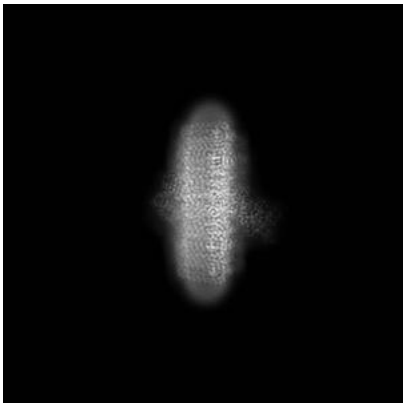
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections

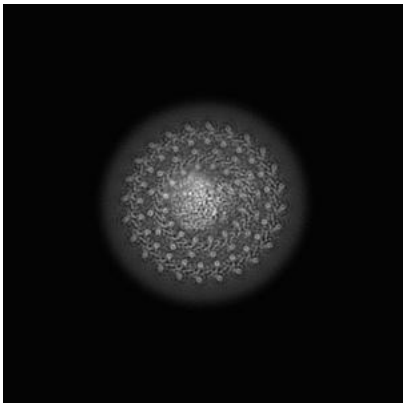
6.1.1 Primary map



X



Y

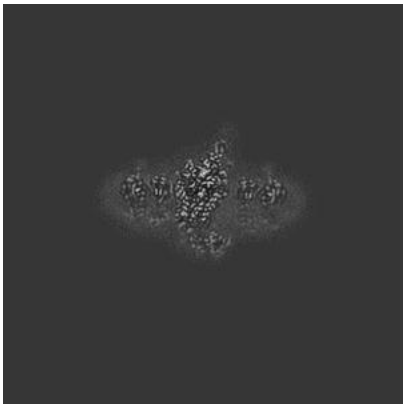


Z

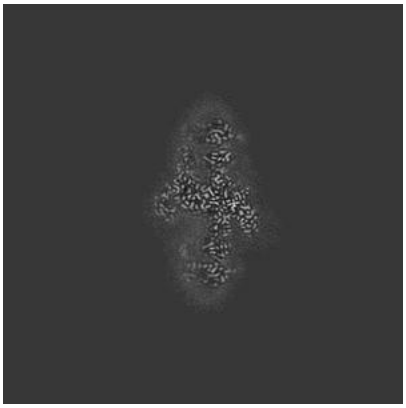
The images above show the map projected in three orthogonal directions.

6.2 Central slices

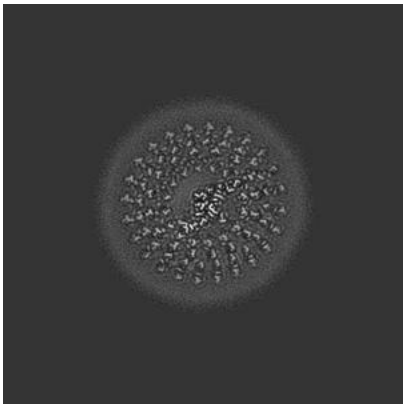
6.2.1 Primary map



X Index: 200



Y Index: 200

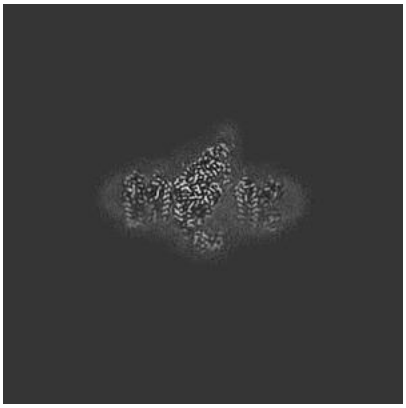


Z Index: 200

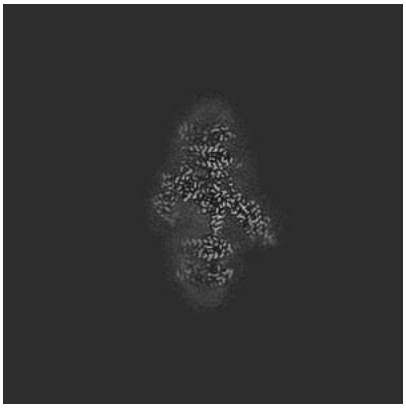
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

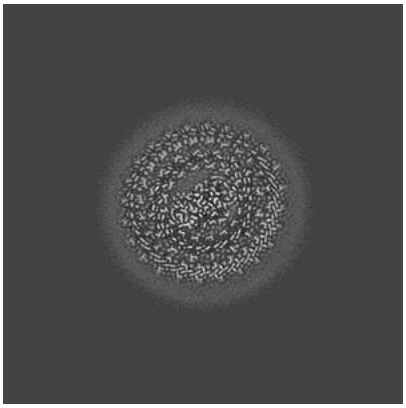
6.3.1 Primary map



X Index: 193



Y Index: 209

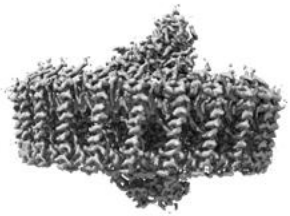


Z Index: 214

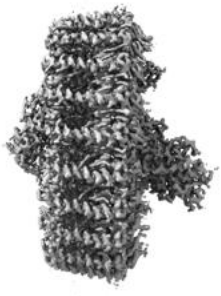
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal surface views (i)

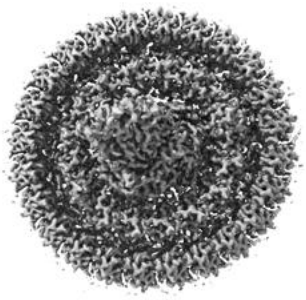
6.4.1 Primary map



X



Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.0348. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

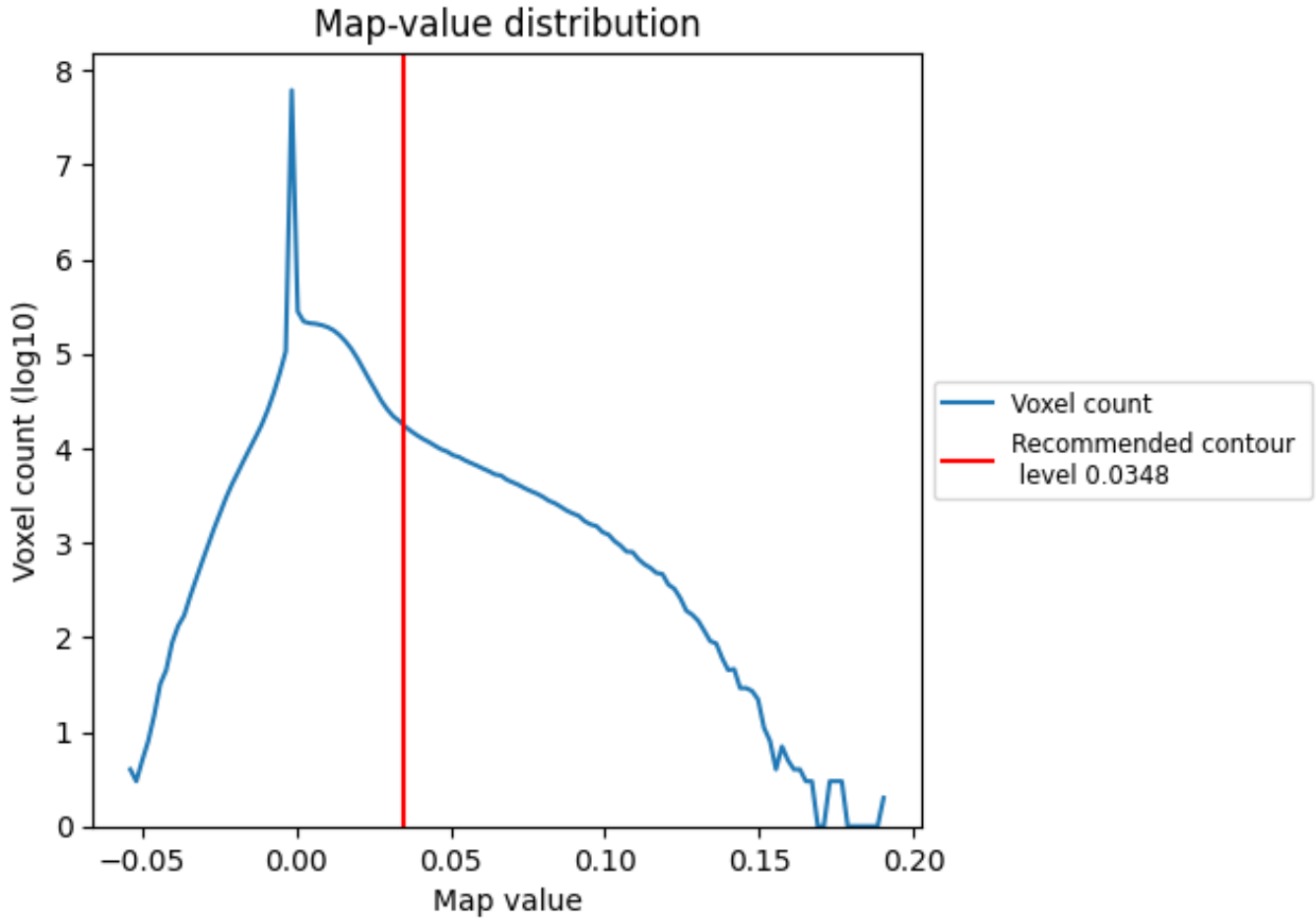
6.5 Mask visualisation (i)

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

7 Map analysis

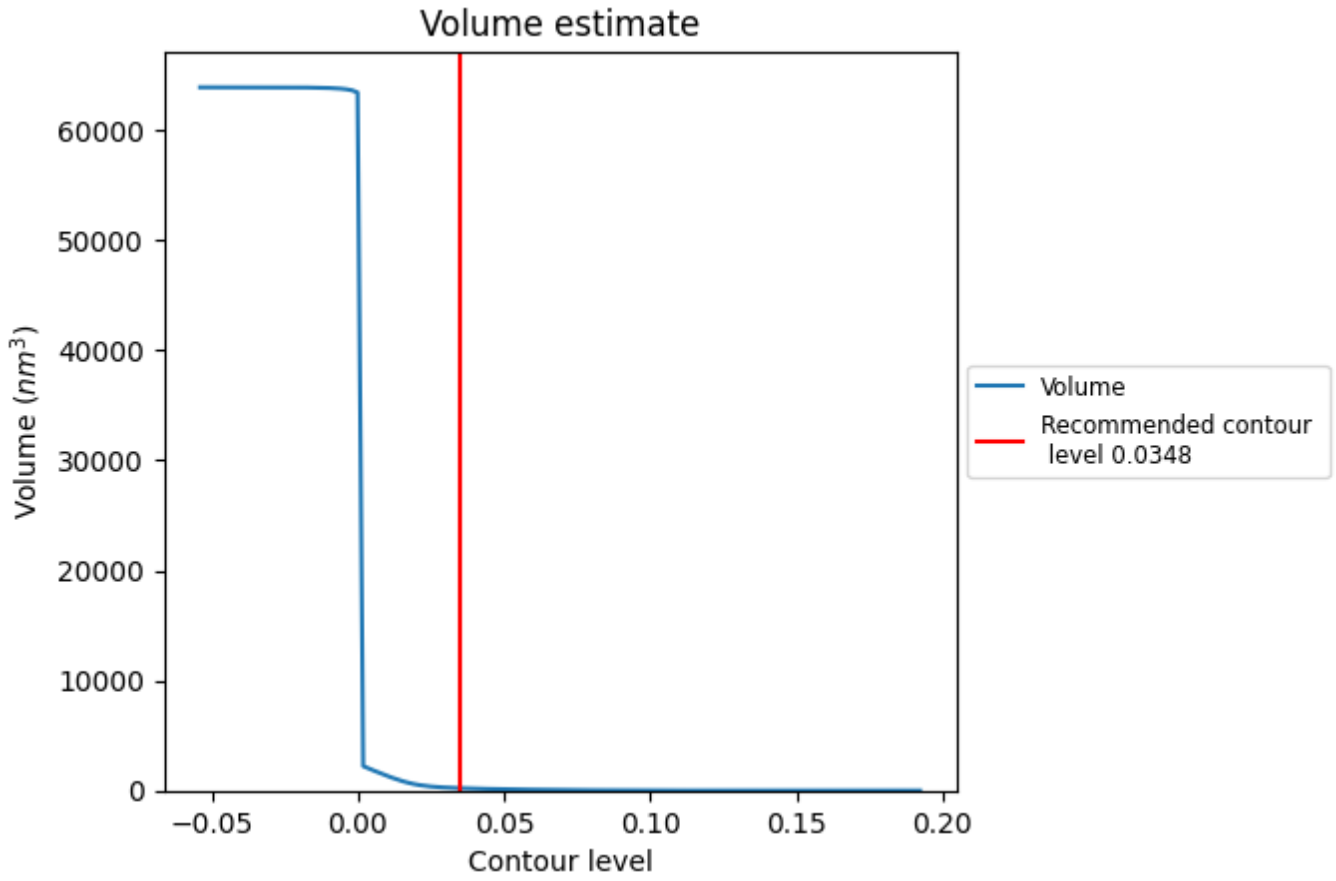
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution



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

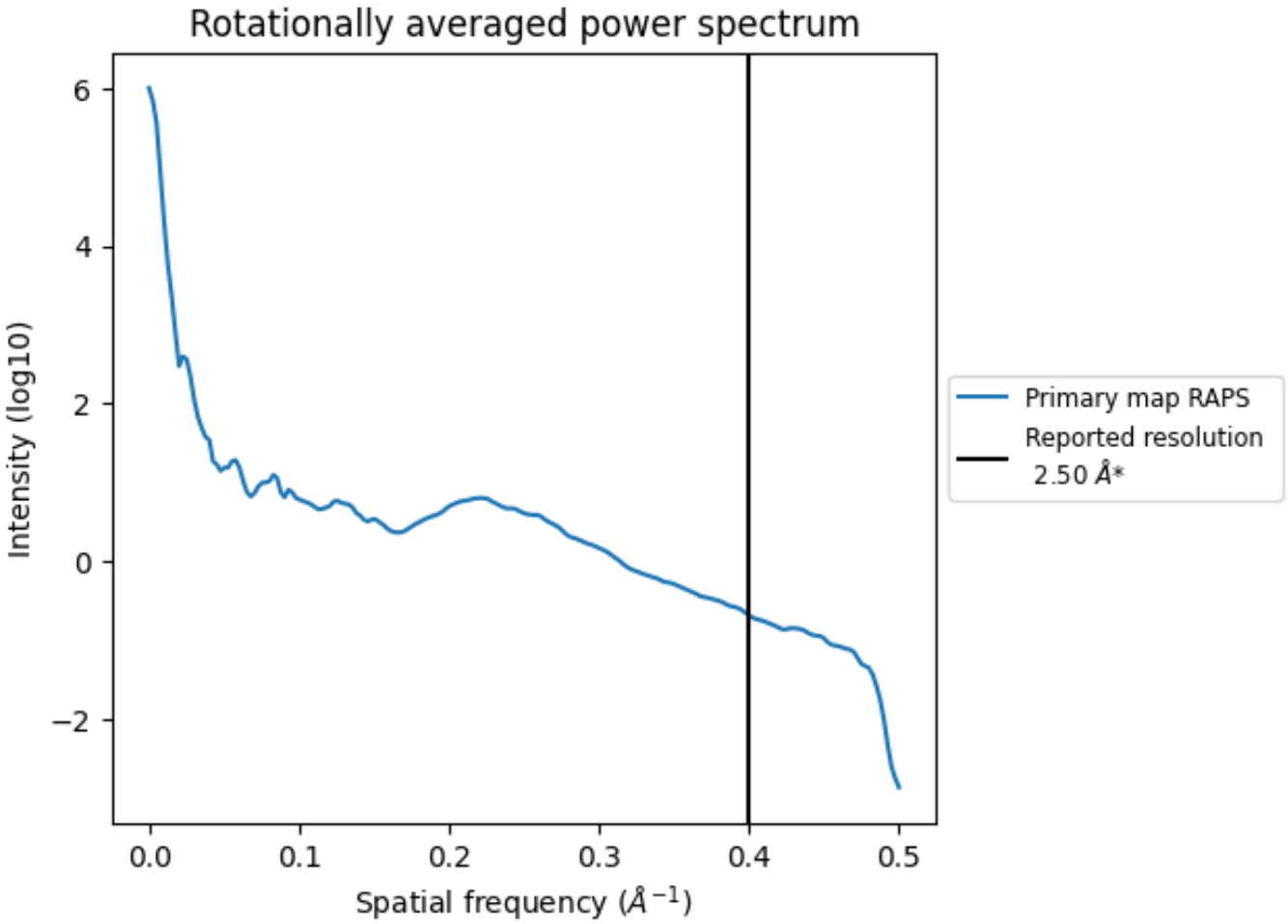
7.2 Volume estimate (i)



The volume at the recommended contour level is 219 nm^3; this corresponds to an approximate mass of 198 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)

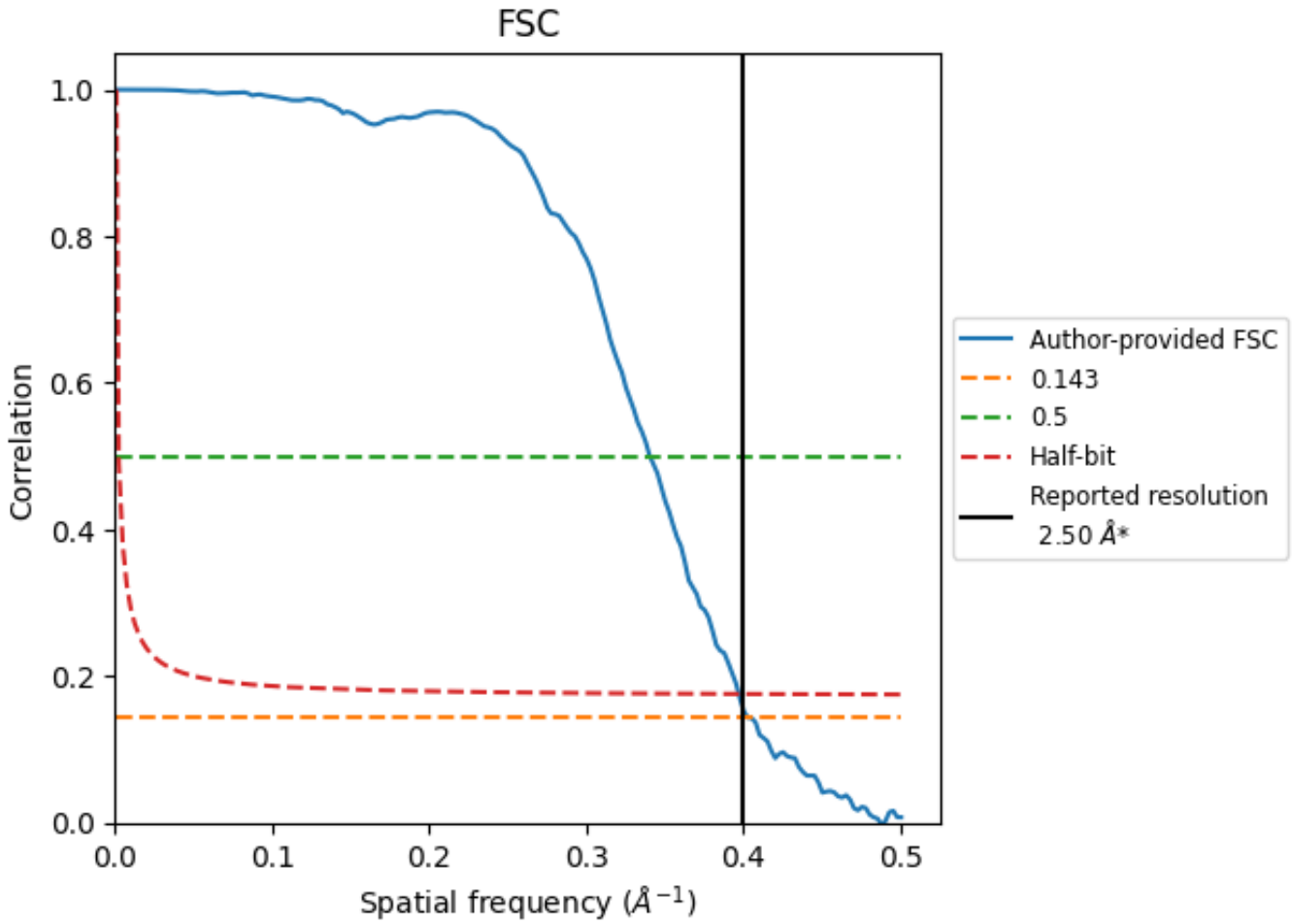


*Reported resolution corresponds to spatial frequency of 0.400 Å^{-1}

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 0.400 Å^{-1}

8.2 Resolution estimates (i)

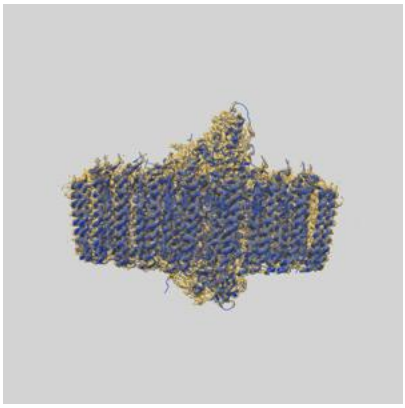
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	2.50	-	-
Author-provided FSC curve	2.48	2.94	2.52
Unmasked-calculated*	-	-	-

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

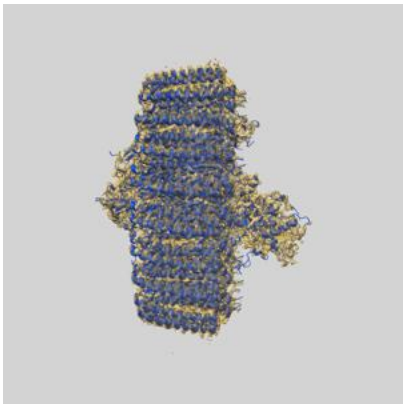
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-12680 and PDB model 7O0V. Per-residue inclusion information can be found in section 3 on page 39.

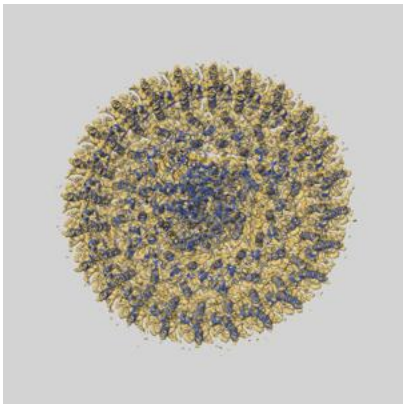
9.1 Map-model overlay



X



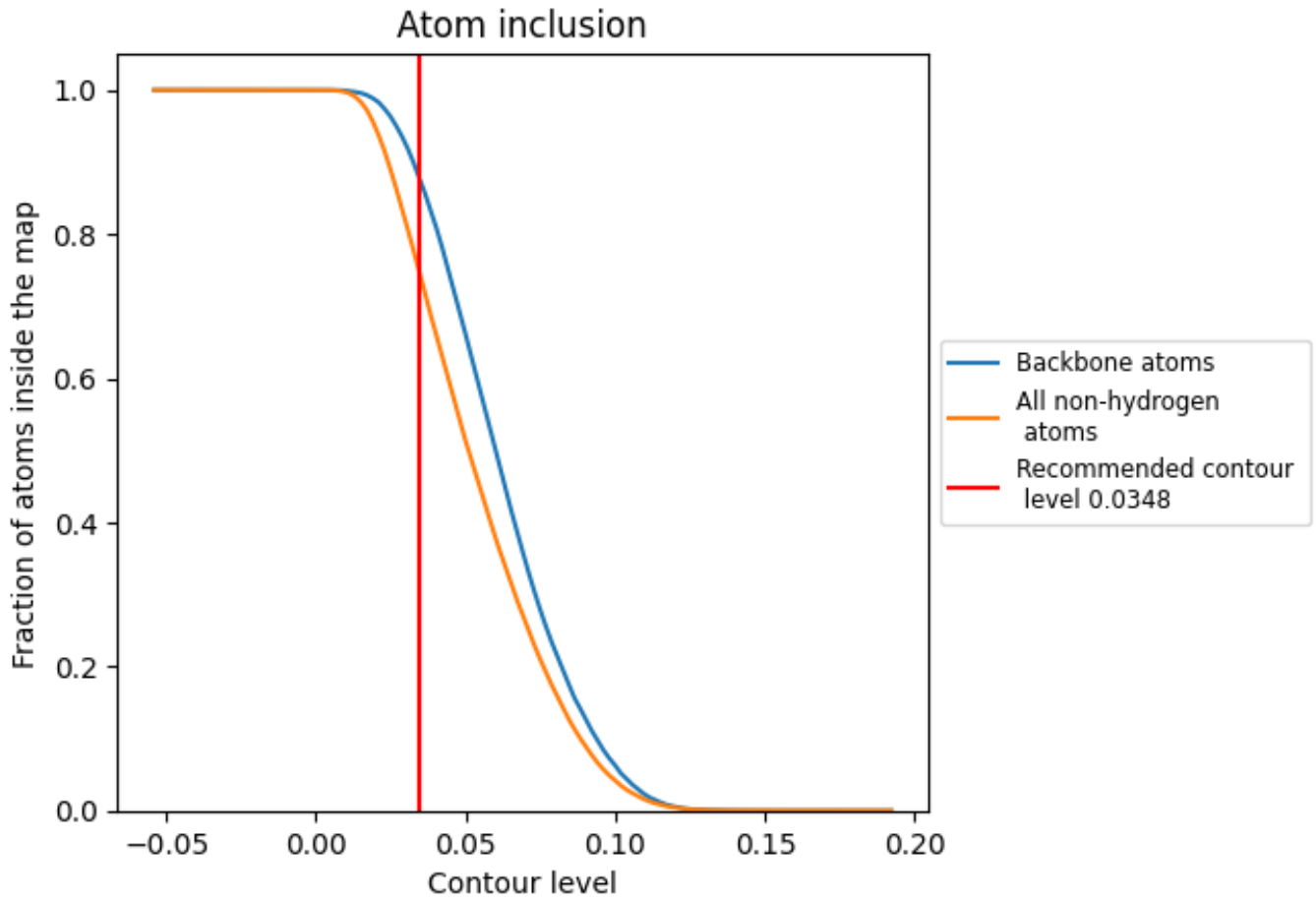
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.0348 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 Atom inclusion (i)



At the recommended contour level, 88% of all backbone atoms, 74% of all non-hydrogen atoms, are inside the map.