



wwPDB X-ray Structure Validation Summary Report ⓘ

Aug 5, 2026 – 04:07 PM JST

PDB ID : 6JLK / pdb_00006jlk
Title : XFEL structure of cyanobacterial photosystem II (1F state, dataset1)
Authors : Suga, M.; Shen, J.R.
Deposited on : 2019-03-06
Resolution : 2.15 Å(reported)

This is a wwPDB X-ray Structure 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/XrayValidationReportHelp>

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

<http://www.wwpdb.org/validation/2017/FAQs#types>.

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

MolProbity : 4-5-2 with Phenix2.0
Mogul : 1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix) : 2.0
EDS : 3.0
Buster-report : wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
CCP4 : 9.0.015 (Gargrove)
Density-Fitness : 1.0.12
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.50

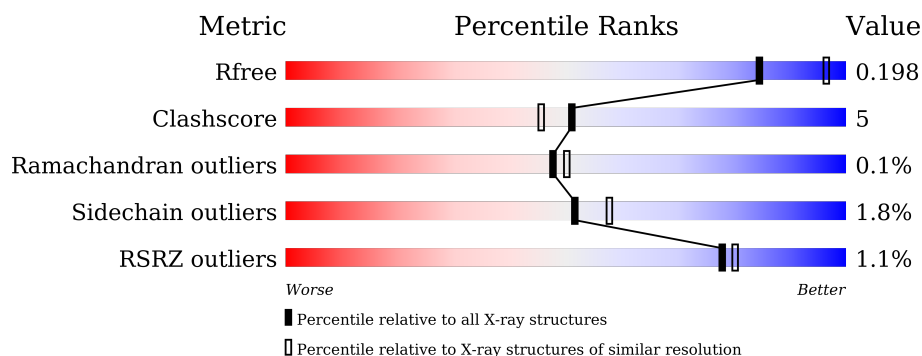
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 2.15 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.



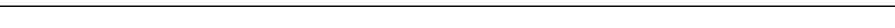
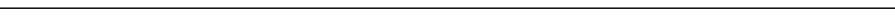
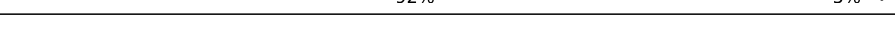
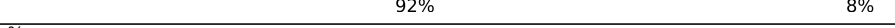
Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	180053	2057 (2.16-2.16)
Clashscore	190562	2159 (2.16-2.16)
Ramachandran outliers	187476	2134 (2.16-2.16)
Sidechain outliers	187428	2133 (2.16-2.16)
RSRZ outliers	180081	2059 (2.16-2.16)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments of the lower 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 $\leq 5\%$. The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	A	344	90% 7% .
1	a	344	% 88% 8% ..
2	B	505	91% 9% .
2	b	505	% 90% 10% .
3	C	455	89% 10% .
3	c	455	91% 8% .

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Mol	Chain	Length	Quality of chain
4	D	342	
4	d	342	
5	E	84	
5	e	84	
6	F	44	
6	f	44	
7	H	65	
7	h	65	
8	I	38	
8	i	38	
9	J	39	
9	j	39	
10	K	37	
10	k	37	
11	L	37	
11	l	37	
12	M	36	
12	m	36	
13	O	244	
13	o	244	
14	T	32	
14	t	32	
15	U	104	
15	u	104	
16	V	137	

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Mol	Chain	Length	Quality of chain
16	v	137	
17	Y	30	
17	y	30	
18	X	40	
18	x	40	
19	Z	62	
19	z	62	
20	R	34	

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

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
40	HEC	V	205	X	-	-	-
40	HEC	v	205	X	-	-	-

2 Entry composition

There are 41 unique types of molecules in this entry. The entry contains 55631 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	334	Total	C	N	O	S	0	53	0
			3019	1966	498	537	18			
1	a	334	Total	C	N	O	S	0	55	0
			3027	1973	498	538	18			

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	279	PRO	ARG	See sequence details	UNP P51765
a	279	PRO	ARG	See sequence details	UNP P51765

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	B	504	Total	C	N	O	S	0	10	0
			4021	2639	667	702	13			
2	b	503	Total	C	N	O	S	0	12	0
			4022	2644	664	701	13			

- Molecule 3 is a protein called Photosystem II CP43 reaction center protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	C	451	Total	C	N	O	S	0	7	0
			3518	2300	587	618	13			
3	c	455	Total	C	N	O	S	0	13	0
			3598	2356	599	629	14			

There are 8 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
C	19	ASN	-	See sequence details	UNP D0VWR7
C	20	SER	-	See sequence details	UNP D0VWR7

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Chain	Residue	Modelled	Actual	Comment	Reference
C	21	ILE	-	See sequence details	UNP D0VWR7
C	22	PHE	-	See sequence details	UNP D0VWR7
c	19	ASN	-	See sequence details	UNP D0VWR7
c	20	SER	-	See sequence details	UNP D0VWR7
c	21	ILE	-	See sequence details	UNP D0VWR7
c	22	PHE	-	See sequence details	UNP D0VWR7

- Molecule 4 is a protein called Photosystem II D2 protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	D	341	Total	C	N	O	S	0	16	0
			2849	1884	469	483	13			
4	d	341	Total	C	N	O	S	0	16	0
			2849	1884	469	483	13			

- Molecule 5 is a protein called Cytochrome b559 subunit alpha.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
5	E	81	Total	C	N	O	0	2	0
			668	436	107	125			
5	e	81	Total	C	N	O	0	2	0
			670	439	107	124			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	F	34	Total	C	N	O	S	0	0	0
			275	187	45	42	1			
6	f	32	Total	C	N	O	S	0	0	0
			257	175	43	38	1			

- Molecule 7 is a protein called Photosystem II reaction center protein H.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	H	65	Total	C	N	O	S	0	1	0
			519	346	85	86	2			
7	h	65	Total	C	N	O	S	0	0	0
			511	341	82	86	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	I	38	Total	C	N	O	S	0	0	0
			314	211	48	54	1			
8	i	38	Total	C	N	O	S	0	0	0
			314	211	48	54	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	J	38	Total	C	N	O	S	0	0	0
			272	182	42	47	1			
9	j	39	Total	C	N	O	S	0	0	0
			280	187	43	48	2			

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
10	K	37	Total	C	N	O	0	0	0
			293	204	43	46			
10	k	37	Total	C	N	O	0	0	0
			293	204	43	46			

There are 4 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
K	33	LEU	PHE	See sequence details	UNP P19054
K	39	TRP	VAL	See sequence details	UNP P19054
k	33	LEU	PHE	See sequence details	UNP P19054
k	39	TRP	VAL	See sequence details	UNP P19054

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	L	37	Total	C	N	O	S	0	1	0
			309	207	48	53	1			
11	l	37	Total	C	N	O	S	0	1	0
			309	207	48	53	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	M	34	Total	C	N	O	S	0	1	0
			274	184	40	49	1			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	m	34	Total	C	N	O	S	0	0	0
			269	179	40	49	1			

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
M	8	LEU	PHE	See sequence details	UNP P12312
m	8	LEU	PHE	See sequence details	UNP P12312

- Molecule 13 is a protein called Photosystem II manganese-stabilizing polypeptide.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	O	243	Total	C	N	O	S	0	8	0
			1903	1191	315	392	5			
13	o	243	Total	C	N	O	S	0	5	0
			1891	1183	315	388	5			

- Molecule 14 is a protein called Photosystem II reaction center protein T.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	T	30	Total	C	N	O	S	0	1	0
			264	185	36	41	2			
14	t	30	Total	C	N	O	S	0	1	0
			264	185	36	41	2			

- Molecule 15 is a protein called Photosystem II 12 kDa extrinsic protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	U	97	Total	C	N	O		0	0	0
			774	491	129	154				
15	u	97	Total	C	N	O		0	0	0
			774	491	129	154				

- Molecule 16 is a protein called Cytochrome c-550.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	V	137	Total	C	N	O	S	0	2	0
			1085	689	181	211	4			
16	v	137	Total	C	N	O	S	0	1	0
			1077	684	178	211	4			

- Molecule 17 is a protein called Photosystem II reaction center protein Ycf12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	Y	29	Total	C	N	O	S	0	0	0
			215	142	37	33	3			
17	y	29	Total	C	N	O	S	0	0	0
			215	142	37	33	3			

- Molecule 18 is a protein called Photosystem II reaction center protein X.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
18	X	39	Total	C	N	O	S	0	0	0
			287	191	46	50				
18	x	38	Total	C	N	O	S	0	0	0
			281	188	45	48				

- Molecule 19 is a protein called Photosystem II reaction center protein Z.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	Z	62	Total	C	N	O	S	0	0	0
			479	328	72	77	2			
19	z	62	Total	C	N	O	S	0	0	0
			479	328	72	77	2			

- Molecule 20 is a protein called Photosystem II protein Y.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	R	30	Total	C	N	O	S	98	0	0
			239	163	41	35				

- Molecule 21 is FE (II) ION (CCD ID: FE2) (formula: Fe).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
21	A	1	Total	Fe	0	1
			2	2		
21	a	1	Total	Fe	0	1
			2	2		

- Molecule 22 is CHLORIDE ION (CCD ID: CL) (formula: Cl).

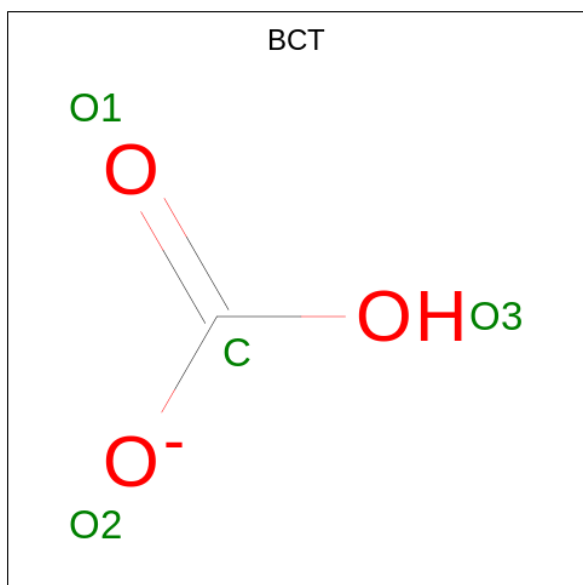
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
22	A	2	Total	Cl	0	2
			4	4		
22	U	1	Total	Cl	0	0
			1	1		

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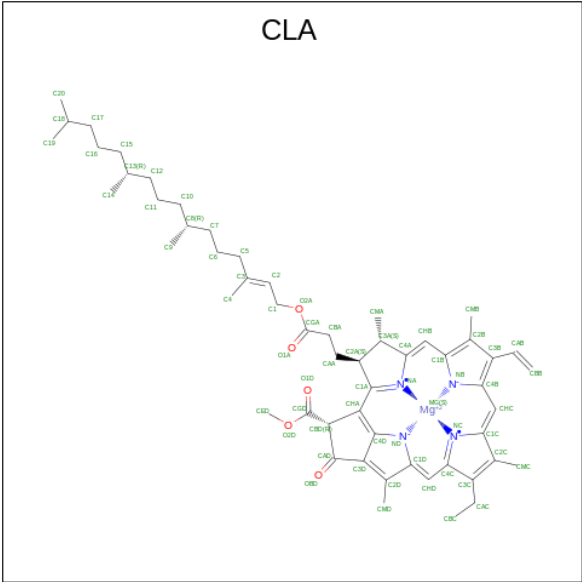
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
22	a	2	Total	Cl	0	2
			4	4		
22	v	1	Total	Cl	0	0
			1	1		

- Molecule 23 is BICARBONATE ION (CCD ID: BCT) (formula: CHO_3^-).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
23	A	1	Total	C	O	0	1
			8	2	6		
23	a	1	Total	C	O	0	1
			8	2	6		

- Molecule 24 is CHLOROPHYLL A (CCD ID: CLA) (formula: $\text{C}_{55}\text{H}_{72}\text{MgN}_4\text{O}_5$).



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
24	A	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	A	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	A	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	A	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		

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

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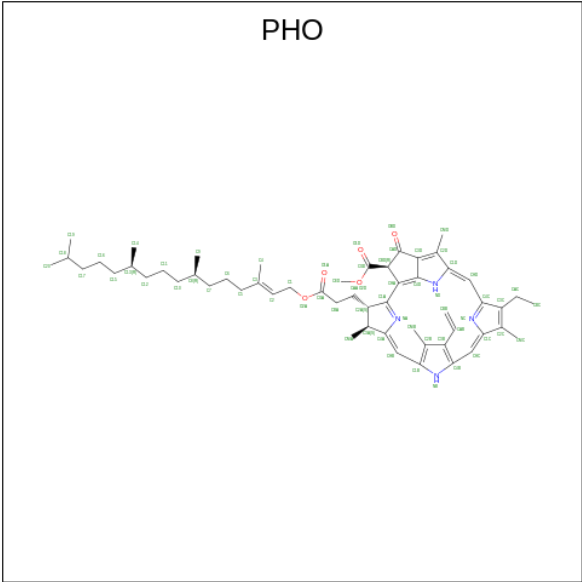
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
24	a	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	a	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	a	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0	0

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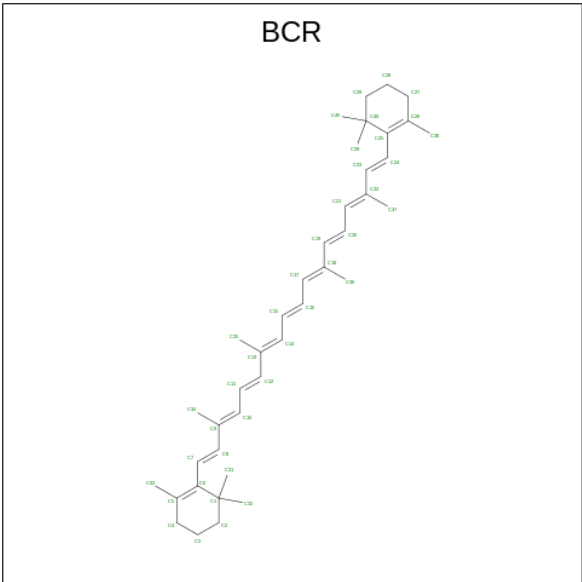
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	d	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	d	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	d	1	Total 65	C 55	Mg 1	N 4	O 5	0	0

- Molecule 25 is PHEOPHYTIN A (CCD ID: PHO) (formula: $C_{55}H_{74}N_4O_5$).



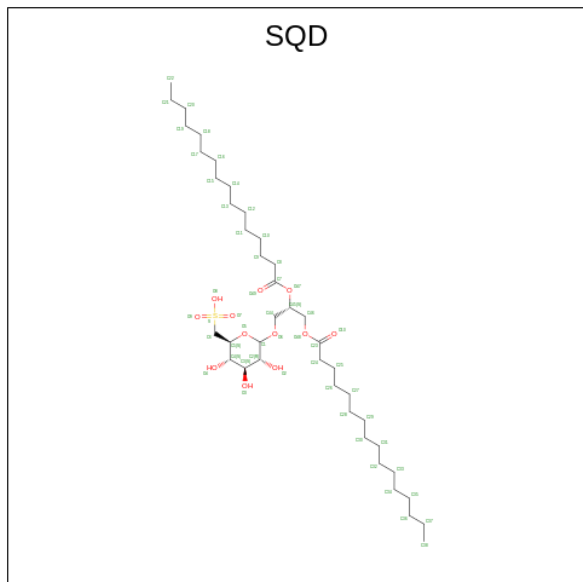
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
25	A	1	Total	C	N	O	0	0
			64	55	4	5		
25	A	1	Total	C	N	O	0	1
			128	110	8	10		
25	a	1	Total	C	N	O	0	0
			64	55	4	5		
25	a	1	Total	C	N	O	0	1
			128	110	8	10		

- Molecule 26 is BETA-CAROTENE (CCD ID: BCR) (formula: C₄₀H₅₆).



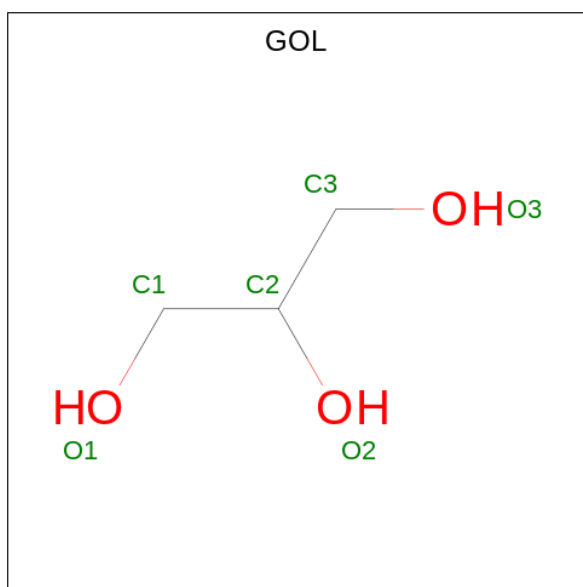
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
26	A	1	Total C 40 40	0	0
26	B	1	Total C 40 40	0	0
26	B	1	Total C 40 40	0	0
26	B	1	Total C 40 40	0	0
26	C	1	Total C 40 40	0	0
26	C	1	Total C 40 40	0	0
26	D	1	Total C 40 40	0	0
26	H	1	Total C 40 40	0	0
26	K	1	Total C 40 40	0	0
26	T	1	Total C 40 40	0	0
26	Y	1	Total C 40 40	0	0
26	a	1	Total C 40 40	0	0
26	b	1	Total C 40 40	0	0
26	b	1	Total C 40 40	0	0
26	b	1	Total C 40 40	0	0
26	c	1	Total C 40 40	0	0
26	c	1	Total C 40 40	0	0
26	d	1	Total C 40 40	0	0
26	h	1	Total C 40 40	0	0
26	k	1	Total C 40 40	0	0
26	t	1	Total C 40 40	0	0
26	y	1	Total C 40 40	0	0

- Molecule 27 is 1,2-DI-O-ACYL-3-O-[6-DEOXY-6-SULFO-ALPHA-D-GLUCOPYRANOSYL]-SN-GLYCEROL (CCD ID: SQD) (formula: $C_{41}H_{78}O_{12}S$).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
27	A	1	Total	C	O	S	0	0
			54	41	12	1		
27	A	1	Total	C	O	S	0	0
			54	41	12	1		
27	B	1	Total	C	O	S	0	0
			54	41	12	1		
27	F	1	Total	C	O	S	0	0
			43	30	12	1		
27	L	1	Total	C	O	S	0	0
			54	41	12	1		
27	a	1	Total	C	O	S	0	0
			54	41	12	1		
27	a	1	Total	C	O	S	0	0
			54	41	12	1		
27	f	1	Total	C	O	S	0	0
			43	30	12	1		

- Molecule 28 is GLYCEROL (CCD ID: GOL) (formula: $C_3H_8O_3$).



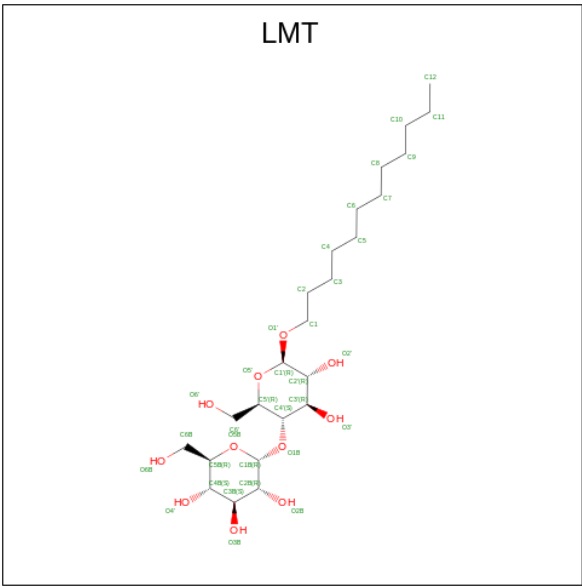
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
28	A	1	Total	C	O	0	0
			6	3	3		
28	A	1	Total	C	O	0	0
			6	3	3		
28	A	1	Total	C	O	0	0
			6	3	3		
28	A	1	Total	C	O	0	0
			6	3	3		
28	B	1	Total	C	O	0	0
			6	3	3		
28	B	1	Total	C	O	0	0
			6	3	3		
28	B	1	Total	C	O	0	0
			6	3	3		
28	B	1	Total	C	O	0	0
			6	3	3		
28	B	1	Total	C	O	0	0
			6	3	3		
28	B	1	Total	C	O	0	0
			6	3	3		
28	C	1	Total	C	O	0	0
			6	3	3		
28	C	1	Total	C	O	0	0
			6	3	3		
28	O	1	Total	C	O	0	0
			6	3	3		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
28	T	1	Total	C	O	0	0
			6	3	3		
28	T	1	Total	C	O	0	0
			6	3	3		
28	V	1	Total	C	O	0	0
			6	3	3		
28	V	1	Total	C	O	0	0
			6	3	3		
28	V	1	Total	C	O	0	0
			6	3	3		
28	V	1	Total	C	O	0	0
			6	3	3		
28	a	1	Total	C	O	0	0
			6	3	3		
28	a	1	Total	C	O	0	0
			6	3	3		
28	a	1	Total	C	O	0	0
			6	3	3		
28	b	1	Total	C	O	0	0
			6	3	3		
28	b	1	Total	C	O	0	0
			6	3	3		
28	b	1	Total	C	O	0	0
			6	3	3		
28	b	1	Total	C	O	0	0
			6	3	3		
28	b	1	Total	C	O	0	0
			6	3	3		
28	c	1	Total	C	O	0	0
			6	3	3		
28	c	1	Total	C	O	0	0
			6	3	3		
28	o	1	Total	C	O	0	0
			6	3	3		
28	t	1	Total	C	O	0	0
			6	3	3		
28	v	1	Total	C	O	0	0
			6	3	3		
28	v	1	Total	C	O	0	0
			6	3	3		
28	v	1	Total	C	O	0	0
			6	3	3		

- Molecule 29 is DODECYL-BETA-D-MALTOSE (CCD ID: LMT) (formula: C₂₄H₄₆O₁₁).



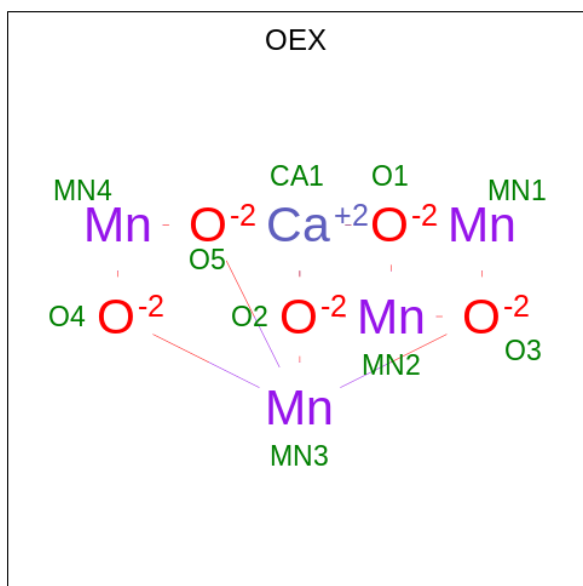
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
29	A	1	Total	C	O	0	0
			35	24	11		
29	B	1	Total	C	O	0	0
			25	19	6		
29	C	1	Total	C	O	0	0
			35	24	11		
29	D	1	Total	C	O	0	0
			35	24	11		
29	F	1	Total	C	O	0	0
			35	24	11		
29	M	1	Total	C	O	0	0
			35	24	11		
29	M	1	Total	C	O	0	0
			35	24	11		
29	T	1	Total	C	O	0	0
			25	19	6		
29	a	1	Total	C	O	0	0
			35	24	11		
29	a	1	Total	C	O	0	0
			35	24	11		
29	b	1	Total	C	O	0	0
			25	19	6		
29	f	1	Total	C	O	0	0
			35	24	11		
29	m	1	Total	C	O	0	0
			35	24	11		

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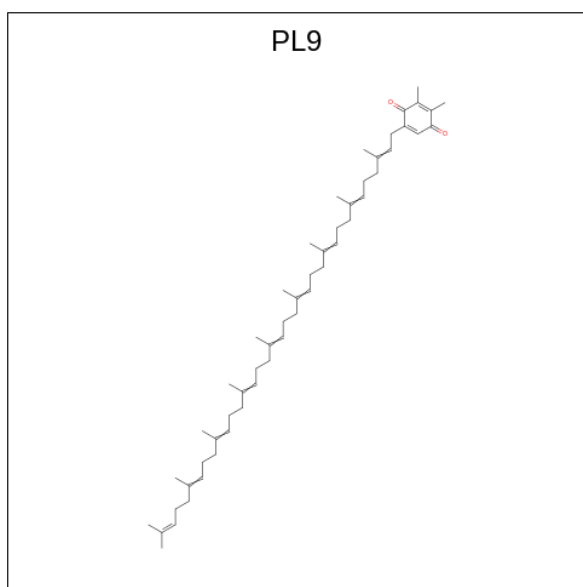
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
29	m	1	Total	C	O	0	0
			35	24	11		

- Molecule 30 is CA-MN4-O5 CLUSTER (CCD ID: OEX) (formula: CaMn_4O_5).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
30	A	1	Total	Ca	Mn	O	0	1
			20	2	8	10		
30	a	1	Total	Ca	Mn	O	0	1
			20	2	8	10		

- Molecule 31 is 2,3-DIMETHYL-5-(3,7,11,15,19,23,27,31,35-NONAMETHYL-2,6,10,14,18,22,26,30,34-HEXATRIACONTANONAENYL-2,5-CYCLOHEXADIENE-1,4-DIONE-2,3-DIMETHYL-5-SOLANESYL-1,4-BENZOQUINONE (CCD ID: PL9) (formula: $\text{C}_{53}\text{H}_{80}\text{O}_2$).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
31	A	1	Total	C	O	0	1
			110	106	4		
31	D	1	Total	C	O	0	1
			110	106	4		
31	a	1	Total	C	O	0	1
			110	106	4		
31	d	1	Total	C	O	0	1
			110	106	4		

- Molecule 32 is UNKNOWN LIGAND (CCD ID: UNL) (formula:).

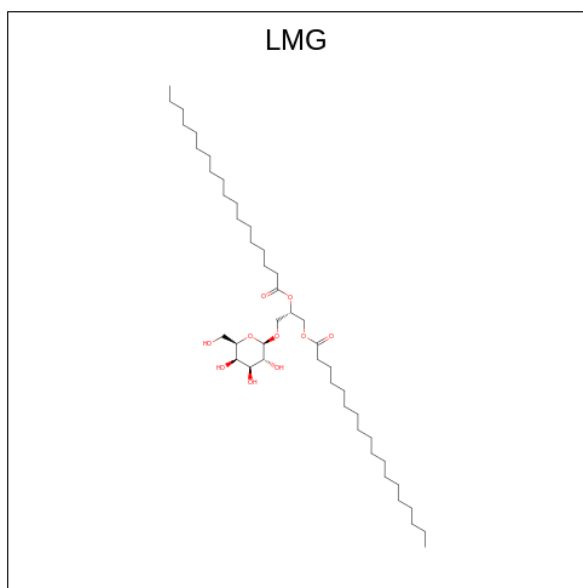
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
32	A	1	Total	C	O	0	0
			28	23	5		
32	B	1	Total	C	O	0	0
			33	28	5		
32	C	1	Total	C	O	0	0
			34	29	5		
32	D	2	Total	C	O	0	0
			57	51	6		
32	I	1	Total	C	O	0	0
			40	35	5		
32	J	1	Total	C		0	0
			10	10			
32	M	1	Total	C		0	0
			10	10			
32	X	1	Total	C	O	0	0
			18	16	2		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
32	a	1	Total	C	O	0	0
			30	25	5		
32	b	1	Total	C	O	0	0
			33	28	5		
32	c	1	Total	C	O	0	0
			32	27	5		
32	d	3	Total	C	O	0	0
			71	63	8		
32	i	1	Total	C	O	0	0
			40	35	5		
32	j	1	Total	C		0	0
			10	10			
32	m	1	Total	C		0	0
			10	10			

- Molecule 33 is 1,2-DISTEAROYL-MONOGALACTOSYL-DIGLYCERIDE (CCD ID: LMG) (formula: $C_{45}H_{86}O_{10}$).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
33	A	1	Total	C	O	0	0
			51	41	10		
33	B	1	Total	C	O	0	0
			51	41	10		
33	C	1	Total	C	O	0	0
			51	41	10		
33	C	1	Total	C	O	0	0
			51	41	10		

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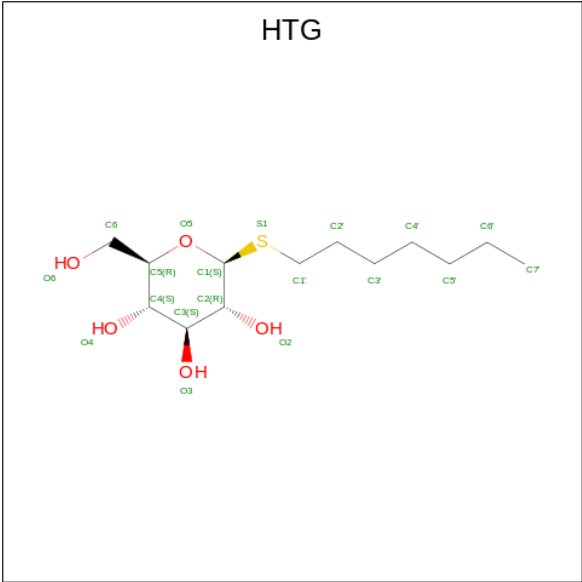
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
33	D	1	Total	C	O	0	0
			51	41	10		
33	Z	1	Total	C	O	0	0
			37	27	10		
33	b	1	Total	C	O	0	0
			51	41	10		
33	c	1	Total	C	O	0	0
			51	41	10		
33	c	1	Total	C	O	0	0
			51	41	10		
33	c	1	Total	C	O	0	0
			51	41	10		
33	d	1	Total	C	O	0	0
			51	41	10		
33	z	1	Total	C	O	0	0
			39	29	10		

- Molecule 34 is CALCIUM ION (CCD ID: CA) (formula: Ca).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
34	B	1	Total	Ca	0	0
			1	1		
34	C	1	Total	Ca	0	0
			1	1		
34	F	1	Total	Ca	0	0
			1	1		
34	O	1	Total	Ca	0	0
			1	1		
34	b	1	Total	Ca	0	0
			1	1		
34	c	2	Total	Ca	0	0
			2	2		
34	f	1	Total	Ca	0	0
			1	1		
34	o	1	Total	Ca	0	0
			1	1		

- Molecule 35 is heptyl 1-thio-beta-D-glucopyranoside (CCD ID: HTG) (formula: C₁₃H₂₆O₅S).



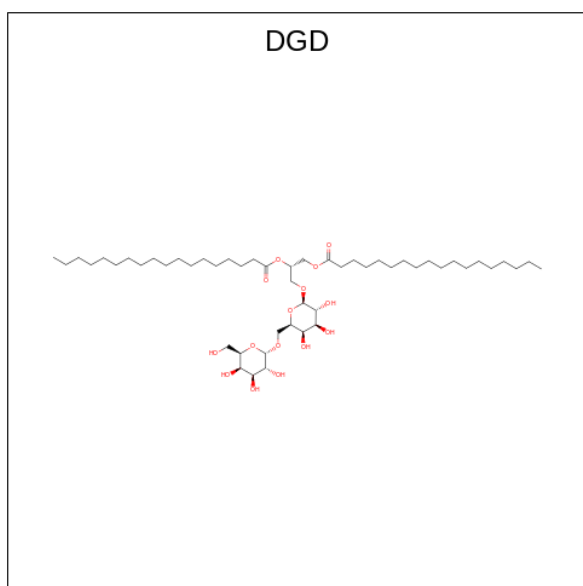
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
35	B	1	Total	C	O	S	0	0
			19	13	5	1		
35	B	1	Total	C	O	S	0	0
			19	13	5	1		
35	B	1	Total	C	O	S	0	0
			19	13	5	1		
35	B	1	Total	C	O	S	0	0
			19	13	5	1		
35	B	1	Total	C	O	S	0	0
			19	13	5	1		
35	C	1	Total	C	O	S	0	0
			19	13	5	1		
35	C	1	Total	C	O	S	0	0
			19	13	5	1		
35	D	1	Total	C	O	S	0	0
			16	10	5	1		
35	V	1	Total	C	O	S	0	0
			19	13	5	1		
35	b	1	Total	C	O	S	0	0
			19	13	5	1		
35	b	1	Total	C	O	S	0	0
			19	13	5	1		
35	b	1	Total	C	O	S	0	0
			19	13	5	1		
35	b	1	Total	C	O	S	0	0
			19	13	5	1		
35	b	1	Total	C	O	S	0	0
			19	13	5	1		

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
35	c	1	Total	C	O	S	0	0
			19	13	5	1		
35	c	1	Total	C	O	S	0	0
			19	13	5	1		
35	d	1	Total	C	O	S	0	0
			16	10	5	1		

- Molecule 36 is DIGALACTOSYL DIACYL GLYCEROL (DGDG) (CCD ID: DGD) (formula: $C_{51}H_{96}O_{15}$).



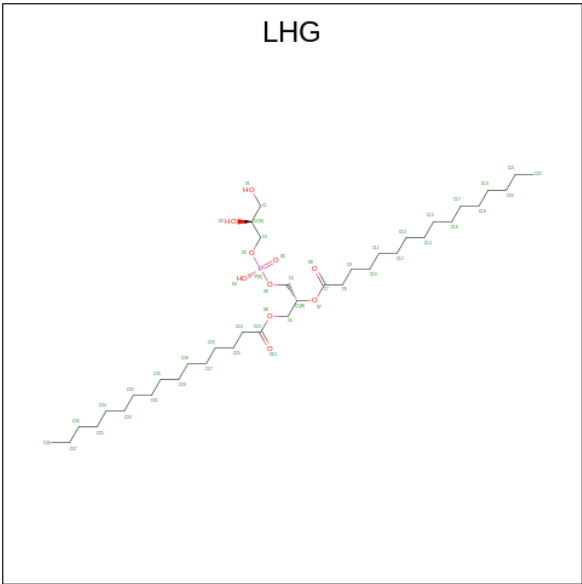
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
36	C	1	Total	C	O		0	0
			62	47	15			
36	C	1	Total	C	O		0	0
			62	47	15			
36	C	1	Total	C	O		0	0
			62	47	15			
36	D	1	Total	C	O		0	0
			52	42	10			
36	H	1	Total	C	O		0	0
			62	47	15			
36	c	1	Total	C	O		0	0
			62	47	15			
36	c	1	Total	C	O		0	0
			62	47	15			
36	c	1	Total	C	O		0	0
			62	47	15			

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
36	e	1	Total	C	O	0	0
			62	47	15		
36	h	1	Total	C	O	0	0
			62	47	15		

- Molecule 37 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (CCD ID: LHG) (formula: C₃₈H₇₅O₁₀P).



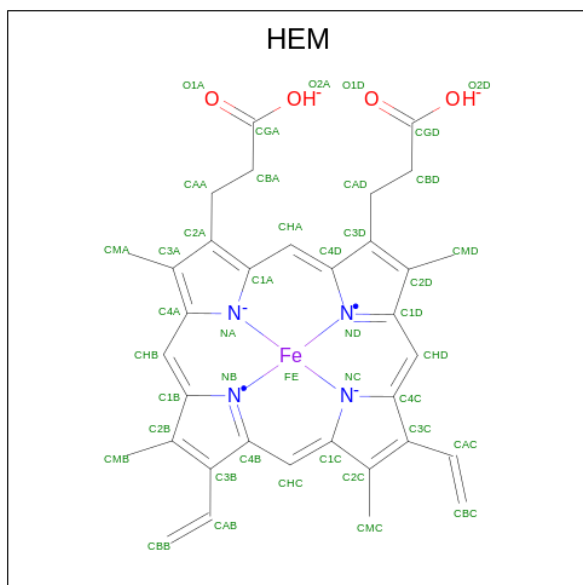
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
37	D	1	Total	C	O	P	0	0
			49	38	10	1		
37	D	1	Total	C	O	P	0	0
			49	38	10	1		
37	D	1	Total	C	O	P	0	0
			49	38	10	1		
37	E	1	Total	C	O	P	0	0
			42	31	10	1		
37	L	1	Total	C	O	P	0	0
			49	38	10	1		
37	b	1	Total	C	O	P	0	0
			49	38	10	1		
37	d	1	Total	C	O	P	0	0
			49	38	10	1		
37	d	1	Total	C	O	P	0	0
			49	38	10	1		
37	d	1	Total	C	O	P	0	0
			49	38	10	1		

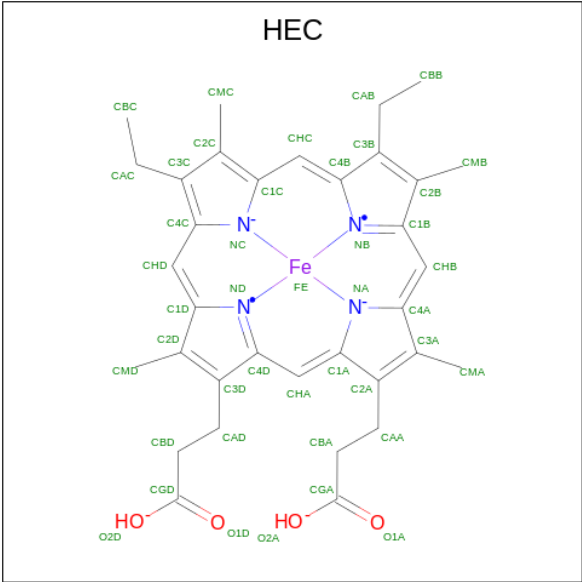
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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
37	e	1	Total	C	O	P	0	0
			42	31	10	1		

- Molecule 38 is PROTOPORPHYRIN IX CONTAINING FE (CCD ID: HEM) (formula: $C_{34}H_{32}FeN_4O_4$).





Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
40	V	1	Total 43	C 34	Fe 1	N 4	O 4	0	0
40	v	1	Total 43	C 34	Fe 1	N 4	O 4	0	0

- Molecule 41 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
41	A	166	Total	O	0	15
			179	179		
41	B	289	Total	O	0	4
			293	293		
41	C	229	Total	O	0	6
			233	233		
41	D	146	Total	O	0	5
			151	151		
41	E	32	Total	O	0	1
			33	33		
41	F	8	Total	O	0	0
			8	8		
41	H	44	Total	O	0	0
			44	44		
41	I	5	Total	O	0	0
			5	5		
41	J	12	Total	O	0	0
			12	12		
41	K	8	Total	O	0	0
			8	8		

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
41	L	18	Total 19	O 19	0	1
41	M	19	Total 19	O 19	0	0
41	O	175	Total 177	O 177	0	2
41	T	16	Total 17	O 17	0	1
41	U	82	Total 82	O 82	0	0
41	V	113	Total 115	O 115	0	2
41	Y	5	Total 5	O 5	0	0
41	X	8	Total 8	O 8	0	0
41	Z	1	Total 1	O 1	0	0
41	a	155	Total 167	O 167	0	14
41	b	259	Total 262	O 262	0	3
41	c	202	Total 207	O 207	0	7
41	d	134	Total 137	O 137	0	3
41	e	16	Total 16	O 16	0	0
41	f	7	Total 7	O 7	0	0
41	h	42	Total 42	O 42	0	0
41	i	5	Total 5	O 5	0	0
41	j	7	Total 7	O 7	0	0
41	k	7	Total 7	O 7	0	0
41	l	9	Total 9	O 9	0	0
41	m	16	Total 16	O 16	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
41	o	157	Total 157	O 157	0	0
41	t	11	Total 11	O 11	0	0
41	u	93	Total 93	O 93	0	0
41	v	81	Total 82	O 82	0	1
41	y	2	Total 2	O 2	0	0
41	x	6	Total 6	O 6	0	0

3 Residue-property plots

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 electron 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 dot above a residue indicates a poor fit to the electron density ($RSRZ > 2$). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

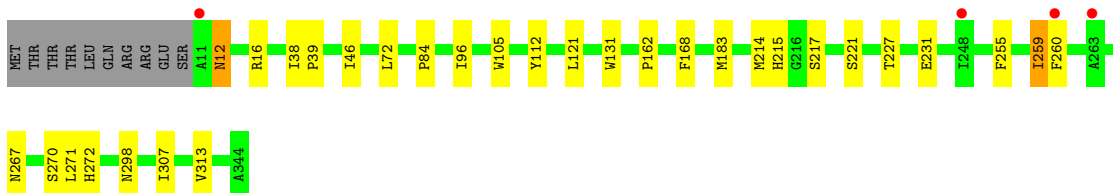
- Molecule 1: Photosystem II protein D1

Chain A: 



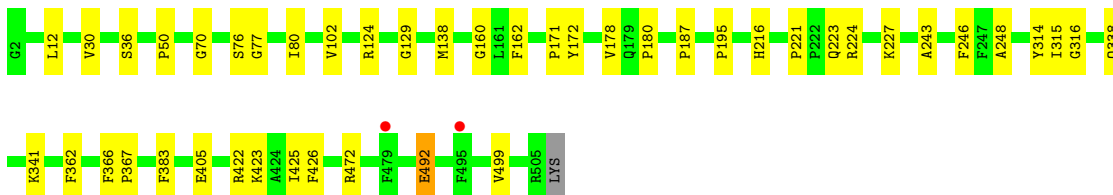
- Molecule 1: Photosystem II protein D1

Chain a: 



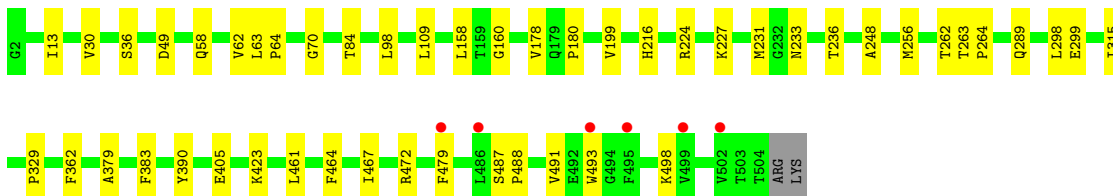
- Molecule 2: Photosystem II CP47 reaction center protein

Chain B: 

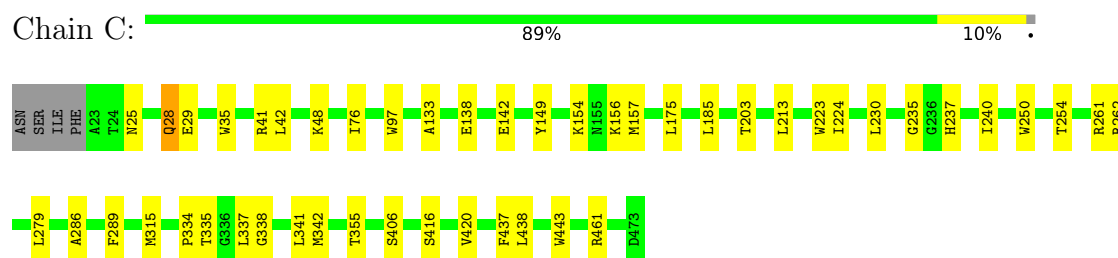


- Molecule 2: Photosystem II CP47 reaction center protein

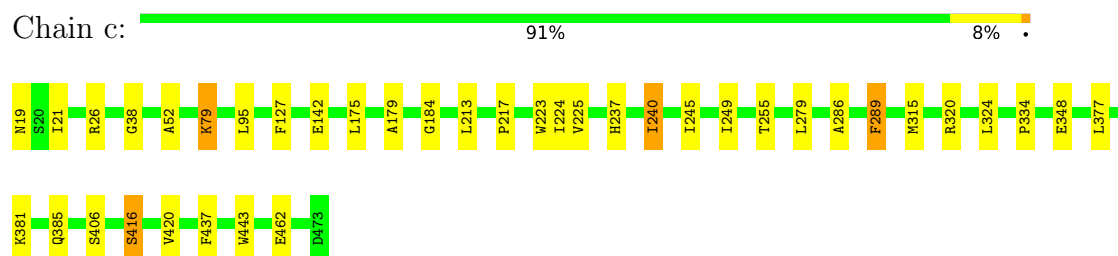
Chain b: 



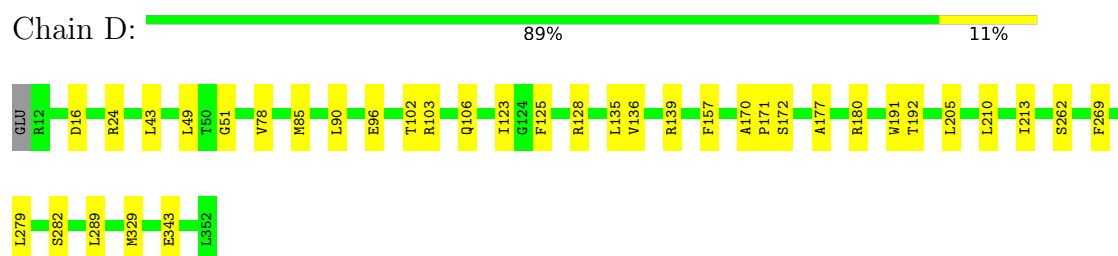
- Molecule 3: Photosystem II CP43 reaction center protein



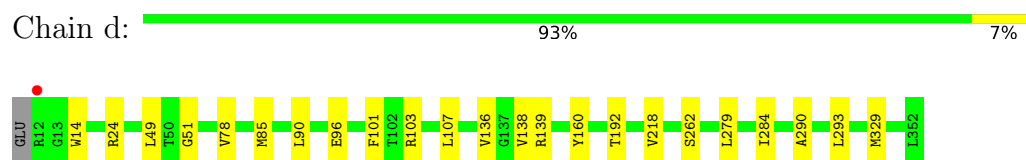
- Molecule 3: Photosystem II CP43 reaction center protein



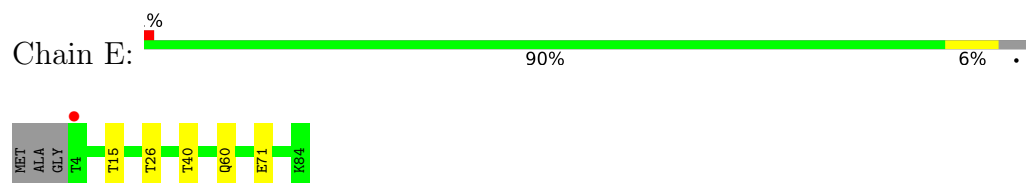
- Molecule 4: Photosystem II D2 protein



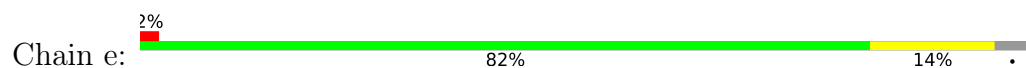
- Molecule 4: Photosystem II D2 protein



- Molecule 5: Cytochrome b559 subunit alpha

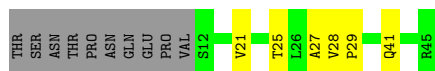


- Molecule 5: Cytochrome b559 subunit alpha

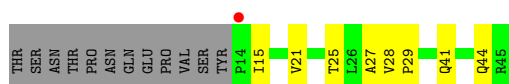




- Molecule 6: Cytochrome b559 subunit beta



- Molecule 6: Cytochrome b559 subunit beta



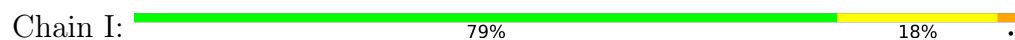
- Molecule 7: Photosystem II reaction center protein H



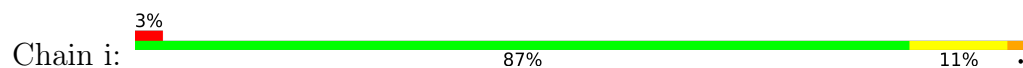
- Molecule 7: Photosystem II reaction center protein H



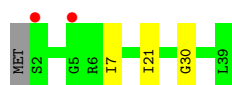
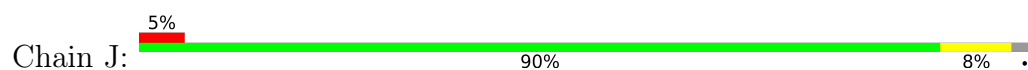
- Molecule 8: Photosystem II reaction center protein I



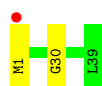
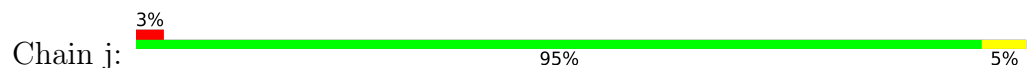
- Molecule 8: Photosystem II reaction center protein I



- Molecule 9: Photosystem II reaction center protein J



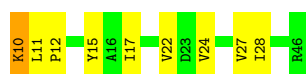
- Molecule 9: Photosystem II reaction center protein J



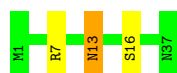
- Molecule 10: Photosystem II reaction center protein K



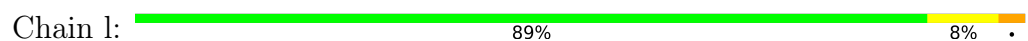
- Molecule 10: Photosystem II reaction center protein K



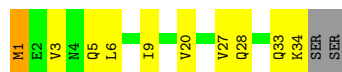
- Molecule 11: Photosystem II reaction center protein L



- Molecule 11: Photosystem II reaction center protein L



- Molecule 12: Photosystem II reaction center protein M



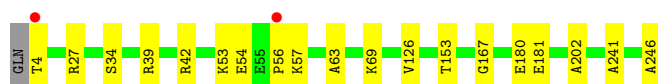
- Molecule 12: Photosystem II reaction center protein M

Chain m:  72% 19% 6%



- Molecule 13: Photosystem II manganese-stabilizing polypeptide

Chain O:  92% 8%



- Molecule 13: Photosystem II manganese-stabilizing polypeptide

Chain o:  89% 9%



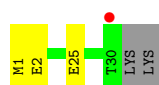
- Molecule 14: Photosystem II reaction center protein T

Chain T:  75% 16% 6%



- Molecule 14: Photosystem II reaction center protein T

Chain t:  84% 9% 6%



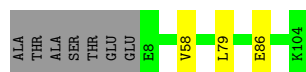
- Molecule 15: Photosystem II 12 kDa extrinsic protein

Chain U:  87% 7% 7%

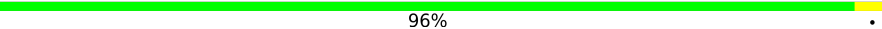


- Molecule 15: Photosystem II 12 kDa extrinsic protein

Chain u:  90% 7%



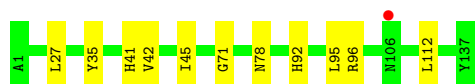
- Molecule 16: Cytochrome c-550

Chain V:  96% .



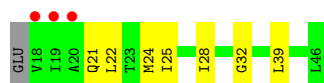
- Molecule 16: Cytochrome c-550

Chain v:  92% 8%



- Molecule 17: Photosystem II reaction center protein Ycf12

Chain Y:  73% 23% .



- Molecule 17: Photosystem II reaction center protein Ycf12

Chain y:  70% 23% . .



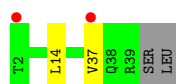
- Molecule 18: Photosystem II reaction center protein X

Chain X:  88% 10% .



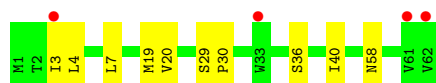
- Molecule 18: Photosystem II reaction center protein X

Chain x:  90% 5% 5%

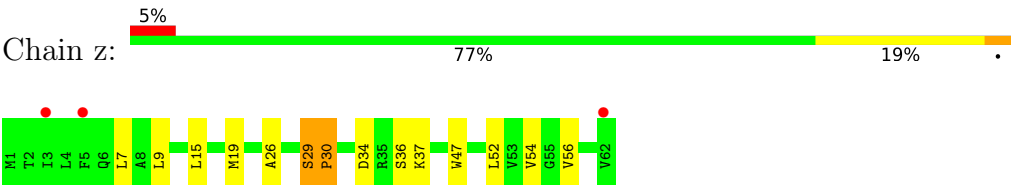


- Molecule 19: Photosystem II reaction center protein Z

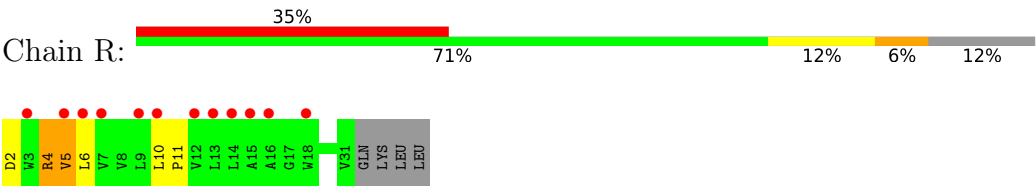
Chain Z:  84% 16%



● Molecule 19: Photosystem II reaction center protein Z



● Molecule 20: Photosystem II protein Y



4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	121.97Å 228.72Å 286.98Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	19.98 – 2.15 19.98 – 2.15	Depositor EDS
% Data completeness (in resolution range)	100.0 (19.98-2.15) 99.8 (19.98-2.15)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.44 (at 2.00Å)	Xtriage
Refinement program	PHENIX 1.9_1692	Depositor
R, R_{free}	0.149 , 0.193 0.156 , 0.198	Depositor DCC
R_{free} test set	26831 reflections (5.00%)	wwPDB-VP
Wilson B-factor (Å ²)	35.3	Xtriage
Anisotropy	0.629	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.37 , 77.0	EDS
L-test for twinning ²	$\langle L \rangle = 0.48$, $\langle L^2 \rangle = 0.31$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.97	EDS
Total number of atoms	55631	wwPDB-VP
Average B, all atoms (Å ²)	54.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 2.00% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

²Theoretical values of $\langle |L| \rangle$, $\langle L^2 \rangle$ for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

5 Model quality ⓘ

5.1 Standard geometry ⓘ

Bond lengths and bond angles in the following residue types are not validated in this section: UNL, BCR, HEC, GOL, MG, CL, FME, OEX, PHO, DGD, LMG, CLA, LHG, LMT, SQD, BCT, FE2, HTG, HEM, CA, PL9

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

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# $ Z > 5$	RMSZ	# $ Z > 5$
1	A	0.55	0/3121	0.82	0/4250
1	a	0.56	0/3135	0.79	0/4269
2	B	0.55	0/4191	0.81	1/5709 (0.0%)
2	b	0.53	0/4198	0.81	1/5720 (0.0%)
3	C	0.50	0/3643	0.80	4/4958 (0.1%)
3	c	0.48	0/3731	0.79	2/5076 (0.0%)
4	D	0.60	0/2952	0.80	3/4021 (0.1%)
4	d	0.56	0/2952	0.77	1/4021 (0.0%)
5	E	0.46	0/693	0.78	0/944
5	e	0.44	0/695	0.80	0/948
6	F	0.57	0/284	0.79	0/387
6	f	0.54	0/265	0.77	0/360
7	H	0.44	0/535	0.87	0/728
7	h	0.43	0/524	0.76	0/713
8	I	0.43	0/311	0.74	0/419
8	i	0.47	0/311	0.81	0/419
9	J	0.46	0/278	0.76	0/376
9	j	0.44	0/286	0.76	0/386
10	K	0.47	0/303	0.79	0/416
10	k	0.53	0/303	0.86	0/416
11	L	0.58	0/319	0.69	0/433
11	l	0.50	0/319	0.74	0/433
12	M	0.60	0/270	0.84	0/368
12	m	0.57	0/262	0.84	0/357
13	O	0.46	0/1958	0.78	0/2654
13	o	0.44	0/1937	0.79	0/2625
14	T	0.57	0/266	0.72	0/362
14	t	0.57	0/266	0.74	0/362
15	U	0.49	0/785	0.74	0/1064
15	u	0.47	0/785	0.70	0/1064
16	V	0.51	0/1109	0.75	0/1502

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
16	v	0.46	0/1098	0.80	2/1488 (0.1%)
17	Y	0.49	0/216	0.85	0/289
17	y	0.42	0/216	0.75	0/289
18	X	0.41	0/290	0.79	0/392
18	x	0.41	0/284	0.75	0/384
19	Z	0.38	0/490	0.76	0/669
19	z	0.34	0/490	0.80	0/669
20	R	0.35	0/245	0.67	0/338
All	All	0.51	0/44316	0.79	14/60278 (0.0%)

There are no bond length outliers.

The worst 5 of 14 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	C	76	ILE	CA-C-N	6.94	127.52	119.47
3	C	76	ILE	C-N-CA	6.94	127.52	119.47
4	D	170	ALA	CA-C-N	-6.39	113.37	119.76
4	D	170	ALA	C-N-CA	-6.39	113.37	119.76
3	C	133	ALA	CA-C-N	-5.38	116.12	122.36

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts ⓘ

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	3019	0	2872	19	0
1	a	3027	0	2888	28	0
2	B	4021	0	3898	38	0
2	b	4022	0	3908	36	0
3	C	3518	0	3439	30	0
3	c	3598	0	3529	26	0
4	D	2849	0	2741	27	0
4	d	2849	0	2741	18	0
5	E	668	0	658	4	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
5	e	670	0	664	10	0
6	F	275	0	282	4	0
6	f	257	0	269	4	0
7	H	519	0	545	9	0
7	h	511	0	532	8	0
8	I	314	0	328	5	0
8	i	314	0	328	3	0
9	J	272	0	279	3	0
9	j	280	0	291	1	0
10	K	293	0	305	7	0
10	k	293	0	305	6	0
11	L	309	0	327	4	0
11	l	309	0	327	5	0
12	M	274	0	299	8	0
12	m	269	0	288	8	0
13	O	1903	0	1886	10	0
13	o	1891	0	1870	16	0
14	T	264	0	267	4	0
14	t	264	0	267	2	0
15	U	774	0	773	3	1
15	u	774	0	773	1	0
16	V	1085	0	1095	4	0
16	v	1077	0	1082	8	0
17	Y	215	0	246	5	0
17	y	215	0	246	5	0
18	X	287	0	317	3	0
18	x	281	0	312	2	0
19	Z	479	0	516	5	0
19	z	479	0	516	8	0
20	R	239	0	262	4	0
21	A	2	0	0	0	0
21	a	2	0	0	0	0
22	A	4	0	0	0	0
22	U	1	0	0	1	0
22	a	4	0	0	0	0
22	v	1	0	0	1	0
23	A	8	0	0	0	0
23	a	8	0	0	0	0
24	A	260	0	288	11	0
24	B	1040	0	1152	36	0
24	C	845	0	936	30	0
24	D	130	0	144	4	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
24	a	195	0	216	9	0
24	b	1040	0	1152	28	0
24	c	845	0	936	35	0
24	d	195	0	216	9	0
25	A	192	0	222	6	0
25	a	192	0	222	3	0
26	A	40	0	56	1	0
26	B	120	0	168	11	0
26	C	80	0	112	11	0
26	D	40	0	56	1	0
26	H	40	0	56	3	0
26	K	40	0	56	0	0
26	T	40	0	56	5	0
26	Y	40	0	56	4	0
26	a	40	0	56	1	0
26	b	120	0	168	10	0
26	c	80	0	112	5	0
26	d	40	0	56	3	0
26	h	40	0	56	4	0
26	k	40	0	56	1	0
26	t	40	0	56	5	0
26	y	40	0	56	2	0
27	A	108	0	156	7	0
27	B	54	0	78	3	0
27	F	43	0	53	2	0
27	L	54	0	78	3	0
27	a	108	0	156	3	0
27	f	43	0	53	1	1
28	A	24	0	32	1	0
28	B	42	0	56	1	0
28	C	12	0	16	0	0
28	O	6	0	8	0	0
28	T	12	0	16	3	0
28	V	24	0	32	0	0
28	a	18	0	23	2	0
28	b	30	0	40	0	0
28	c	12	0	16	2	0
28	o	6	0	8	0	0
28	t	6	0	8	1	0
28	v	18	0	24	1	0
29	A	35	0	46	2	0
29	B	25	0	35	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
29	C	35	0	46	1	0
29	D	35	0	46	1	0
29	F	35	0	46	0	0
29	M	70	0	92	4	0
29	T	25	0	35	0	0
29	a	70	0	92	2	0
29	b	25	0	35	3	0
29	f	35	0	46	1	0
29	m	70	0	92	3	0
30	A	20	0	0	0	0
30	a	20	0	0	0	0
31	A	110	0	160	9	0
31	D	110	0	160	1	0
31	a	110	0	160	14	0
31	d	110	0	160	0	0
32	A	28	0	0	0	0
32	B	33	0	0	0	0
32	C	34	0	0	0	0
32	D	57	0	0	0	0
32	I	40	0	0	0	0
32	J	10	0	0	0	0
32	M	10	0	0	0	0
32	X	18	0	0	0	0
32	a	30	0	0	0	0
32	b	33	0	0	0	0
32	c	32	0	0	0	0
32	d	71	0	0	0	0
32	i	40	0	0	0	0
32	j	10	0	0	0	0
32	m	10	0	0	0	0
33	A	51	0	72	4	0
33	B	51	0	72	1	0
33	C	102	0	144	7	0
33	D	51	0	72	1	0
33	Z	37	0	44	1	0
33	b	51	0	72	3	0
33	c	153	0	216	7	0
33	d	51	0	72	2	0
33	z	39	0	48	5	0
34	B	1	0	0	0	0
34	C	1	0	0	0	0
34	F	1	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
34	O	1	0	0	0	0
34	b	1	0	0	0	0
34	c	2	0	0	0	0
34	f	1	0	0	0	0
34	o	1	0	0	0	0
35	B	95	0	130	1	0
35	C	38	0	52	0	0
35	D	16	0	17	2	0
35	V	19	0	26	1	0
35	b	95	0	130	1	0
35	c	38	0	52	1	0
35	d	16	0	17	3	0
36	C	186	0	246	4	0
36	D	52	0	71	2	0
36	H	62	0	82	0	0
36	c	186	0	246	2	0
36	e	62	0	82	7	0
36	h	62	0	82	0	0
37	D	147	0	222	11	0
37	E	42	0	57	2	0
37	L	49	0	74	0	0
37	b	49	0	74	3	0
37	d	147	0	222	9	0
37	e	42	0	57	4	0
38	F	43	0	30	2	0
38	e	43	0	30	5	0
39	J	1	0	0	0	0
39	j	1	0	0	0	0
40	V	43	0	30	0	0
40	v	43	0	30	0	0
41	A	179	0	0	1	0
41	B	293	0	0	2	0
41	C	233	0	0	3	0
41	D	151	0	0	1	0
41	E	33	0	0	0	0
41	F	8	0	0	0	0
41	H	44	0	0	0	0
41	I	5	0	0	1	0
41	J	12	0	0	0	0
41	K	8	0	0	1	0
41	L	19	0	0	0	0
41	M	19	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
41	O	177	0	0	2	0
41	T	17	0	0	1	0
41	U	82	0	0	2	0
41	V	115	0	0	1	0
41	X	8	0	0	0	0
41	Y	5	0	0	0	0
41	Z	1	0	0	0	0
41	a	167	0	0	2	0
41	b	262	0	0	4	0
41	c	207	0	0	1	0
41	d	137	0	0	2	0
41	e	16	0	0	0	0
41	f	7	0	0	0	0
41	h	42	0	0	0	0
41	i	5	0	0	0	0
41	j	7	0	0	0	0
41	k	7	0	0	0	0
41	l	9	0	0	1	0
41	m	16	0	0	0	0
41	o	157	0	0	2	0
41	t	11	0	0	0	0
41	u	93	0	0	0	0
41	v	82	0	0	1	0
41	x	6	0	0	0	0
41	y	2	0	0	0	0
All	All	55631	0	54162	559	1

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 5.

The worst 5 of 559 close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:214[B]:MET:HG2	31:A:419[B]:PL9:H102	1.48	0.93
1:A:214[A]:MET:HG2	31:A:419[A]:PL9:H102	1.50	0.93
24:B:616:CLA:H71	24:B:617:CLA:H192	1.52	0.92
24:c:518:CLA:HHC	24:c:518:CLA:HBB1	1.56	0.87
24:c:506:CLA:H202	24:c:512:CLA:HBB1	1.61	0.82

All (1) symmetry-related close contacts are listed below. The label for Atom-2 includes the symmetry operator and encoded unit-cell translations to be applied.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:U:69:GLU:OE1	27:f:101:SQD:O3[2_554]	2.16	0.04

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 X-ray entries followed by that with respect to entries of similar resolution.

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	384/344 (112%)	375 (98%)	8 (2%)	1 (0%)	36	34
1	a	386/344 (112%)	377 (98%)	8 (2%)	1 (0%)	36	34
2	B	512/505 (101%)	509 (99%)	3 (1%)	0	100	100
2	b	513/505 (102%)	504 (98%)	9 (2%)	0	100	100
3	C	456/455 (100%)	448 (98%)	6 (1%)	2 (0%)	30	26
3	c	466/455 (102%)	454 (97%)	10 (2%)	2 (0%)	30	26
4	D	355/342 (104%)	346 (98%)	9 (2%)	0	100	100
4	d	355/342 (104%)	346 (98%)	9 (2%)	0	100	100
5	E	81/84 (96%)	81 (100%)	0	0	100	100
5	e	81/84 (96%)	78 (96%)	3 (4%)	0	100	100
6	F	32/44 (73%)	31 (97%)	1 (3%)	0	100	100
6	f	30/44 (68%)	30 (100%)	0	0	100	100
7	H	64/65 (98%)	59 (92%)	5 (8%)	0	100	100
7	h	63/65 (97%)	59 (94%)	4 (6%)	0	100	100
8	I	36/38 (95%)	34 (94%)	2 (6%)	0	100	100
8	i	36/38 (95%)	33 (92%)	3 (8%)	0	100	100
9	J	36/39 (92%)	35 (97%)	1 (3%)	0	100	100
9	j	37/39 (95%)	36 (97%)	1 (3%)	0	100	100
10	K	35/37 (95%)	35 (100%)	0	0	100	100
10	k	35/37 (95%)	35 (100%)	0	0	100	100
11	L	36/37 (97%)	36 (100%)	0	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
11	l	36/37 (97%)	36 (100%)	0	0	100	100
12	M	33/36 (92%)	33 (100%)	0	0	100	100
12	m	32/36 (89%)	32 (100%)	0	0	100	100
13	O	249/244 (102%)	244 (98%)	5 (2%)	0	100	100
13	o	246/244 (101%)	240 (98%)	6 (2%)	0	100	100
14	T	29/32 (91%)	29 (100%)	0	0	100	100
14	t	29/32 (91%)	29 (100%)	0	0	100	100
15	U	95/104 (91%)	93 (98%)	2 (2%)	0	100	100
15	u	95/104 (91%)	92 (97%)	3 (3%)	0	100	100
16	V	136/137 (99%)	132 (97%)	4 (3%)	0	100	100
16	v	135/137 (98%)	130 (96%)	5 (4%)	0	100	100
17	Y	27/30 (90%)	27 (100%)	0	0	100	100
17	y	27/30 (90%)	25 (93%)	2 (7%)	0	100	100
18	X	37/40 (92%)	37 (100%)	0	0	100	100
18	x	36/40 (90%)	36 (100%)	0	0	100	100
19	Z	60/62 (97%)	58 (97%)	2 (3%)	0	100	100
19	z	60/62 (97%)	58 (97%)	1 (2%)	1 (2%)	7	2
20	R	28/34 (82%)	28 (100%)	0	0	100	100
All	All	5419/5384 (101%)	5300 (98%)	112 (2%)	7 (0%)	48	50

5 of 7 Ramachandran outliers are listed below:

Mol	Chain	Res	Type
3	C	416[A]	SER
3	C	416[B]	SER
3	c	416[A]	SER
3	c	416[B]	SER
1	a	259	ILE

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 X-ray entries followed by that with respect to entries of similar resolution.

The Analysed column shows the number of residues for which the sidechain conformation was

analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	312/279 (112%)	312 (100%)	0	100	100
1	a	314/279 (112%)	313 (100%)	1 (0%)	86	91
2	B	412/403 (102%)	409 (99%)	3 (1%)	76	82
2	b	413/403 (102%)	407 (98%)	6 (2%)	57	64
3	C	357/356 (100%)	351 (98%)	6 (2%)	53	60
3	c	367/356 (103%)	355 (97%)	12 (3%)	33	34
4	D	290/277 (105%)	287 (99%)	3 (1%)	68	75
4	d	290/277 (105%)	287 (99%)	3 (1%)	68	75
5	E	74/73 (101%)	73 (99%)	1 (1%)	59	66
5	e	74/73 (101%)	72 (97%)	2 (3%)	39	41
6	F	28/38 (74%)	28 (100%)	0	100	100
6	f	26/38 (68%)	24 (92%)	2 (8%)	12	7
7	H	55/54 (102%)	54 (98%)	1 (2%)	51	58
7	h	54/54 (100%)	54 (100%)	0	100	100
8	I	34/34 (100%)	33 (97%)	1 (3%)	37	39
8	i	34/34 (100%)	33 (97%)	1 (3%)	37	39
9	J	26/27 (96%)	26 (100%)	0	100	100
9	j	27/27 (100%)	26 (96%)	1 (4%)	30	30
10	K	30/30 (100%)	29 (97%)	1 (3%)	33	34
10	k	30/30 (100%)	28 (93%)	2 (7%)	15	10
11	L	36/35 (103%)	35 (97%)	1 (3%)	38	40
11	l	36/35 (103%)	35 (97%)	1 (3%)	38	40
12	M	31/32 (97%)	29 (94%)	2 (6%)	15	11
12	m	30/32 (94%)	29 (97%)	1 (3%)	33	34
13	O	214/207 (103%)	209 (98%)	5 (2%)	44	49
13	o	211/207 (102%)	203 (96%)	8 (4%)	29	29
14	T	27/28 (96%)	25 (93%)	2 (7%)	13	8
14	t	27/28 (96%)	25 (93%)	2 (7%)	13	8
15	U	84/89 (94%)	82 (98%)	2 (2%)	43	47
15	u	84/89 (94%)	83 (99%)	1 (1%)	63	70
16	V	119/117 (102%)	119 (100%)	0	100	100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
16	v	118/117 (101%)	117 (99%)	1 (1%)	73	79
17	Y	22/23 (96%)	21 (96%)	1 (4%)	24	22
17	y	22/23 (96%)	19 (86%)	3 (14%)	3	1
18	X	32/33 (97%)	32 (100%)	0	100	100
18	x	31/33 (94%)	31 (100%)	0	100	100
19	Z	52/52 (100%)	49 (94%)	3 (6%)	18	14
19	z	52/52 (100%)	49 (94%)	3 (6%)	18	14
20	R	25/29 (86%)	23 (92%)	2 (8%)	11	7
All	All	4500/4403 (102%)	4416 (98%)	84 (2%)	51	56

5 of 84 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
5	e	71	GLU
13	o	69	LYS
6	f	44	GLN
12	m	33	GLN
14	t	25[B]	GLU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 39 such sidechains are listed below:

Mol	Chain	Res	Type
4	d	301	GLN
13	o	155	ASN
4	d	332	GLN
11	l	8	GLN
15	u	81	HIS

5.3.3 RNA ⓘ

There are no RNA molecules in this entry.

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

6 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	$\# Z > 2$
12	FME	M	1	12	8,9,10	0.68	0	7,9,11	1.31	1 (14%)
8	FME	i	1	8	8,9,10	0.66	0	7,9,11	1.28	1 (14%)
14	FME	t	1	14	8,9,10	0.80	0	7,9,11	2.19	4 (57%)
14	FME	T	1	14	8,9,10	0.68	0	7,9,11	1.31	1 (14%)
12	FME	m	1	12	8,9,10	0.64	0	7,9,11	1.52	3 (42%)
8	FME	I	1	8	8,9,10	0.62	0	7,9,11	1.09	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
12	FME	M	1	12	-	1/7/9/11	-
8	FME	i	1	8	-	0/7/9/11	-
14	FME	t	1	14	-	1/7/9/11	-
14	FME	T	1	14	-	1/7/9/11	-
12	FME	m	1	12	-	1/7/9/11	-
8	FME	I	1	8	-	2/7/9/11	-

There are no bond length outliers.

The worst 5 of 11 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	t	1	FME	CA-N-CN	-3.45	117.52	122.82
14	t	1	FME	C-CA-N	2.48	114.20	109.73
14	t	1	FME	O-C-CA	-2.44	118.37	124.78
14	T	1	FME	O-C-CA	-2.44	118.38	124.78
12	m	1	FME	CA-N-CN	-2.29	119.30	122.82

There are no chirality outliers.

5 of 6 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
8	I	1	FME	O1-CN-N-CA
14	T	1	FME	O1-CN-N-CA
12	m	1	FME	CB-CA-N-CN
8	I	1	FME	CB-CA-N-CN
12	M	1	FME	CB-CA-N-CN

There are no ring outliers.

1 monomer is involved in 1 short contact:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
12	M	1	FME	1	0

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 267 ligands modelled in this entry, 25 are monoatomic and 18 are unknown - leaving 224 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
24	CLA	c	518	3	69,73,73	2.08	19 (27%)	83,113,113	2.85	30 (36%)
26	BCR	b	628	-	41,41,41	1.08	1 (2%)	56,56,56	1.24	6 (10%)
28	GOL	b	603	-	5,5,5	0.33	0	5,5,5	0.12	0
27	SQD	F	103	-	42,43,54	1.16	3 (7%)	51,54,65	1.59	11 (21%)
24	CLA	c	511	3	69,73,73	2.02	20 (28%)	83,113,113	2.75	31 (37%)
24	CLA	b	621	2	69,73,73	2.04	20 (28%)	83,113,113	2.77	32 (38%)
26	BCR	k	101	-	41,41,41	1.04	1 (2%)	56,56,56	1.41	8 (14%)
26	BCR	B	618	-	41,41,41	1.05	1 (2%)	56,56,56	1.31	6 (10%)
36	DGD	c	522	-	63,63,67	0.90	2 (3%)	77,77,81	1.01	4 (5%)
37	LHG	L	101	-	48,48,48	0.90	2 (4%)	51,54,54	1.05	5 (9%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
28	GOL	B	630	-	5,5,5	0.40	0	5,5,5	0.25	0
24	CLA	C	512	3	69,73,73	2.02	19 (27%)	83,113,113	2.86	30 (36%)
24	CLA	c	515	3	69,73,73	2.04	20 (28%)	83,113,113	2.74	31 (37%)
29	LMT	f	102	-	36,36,36	0.47	0	47,47,47	0.91	1 (2%)
31	PL9	D	405[A]	-	55,55,55	0.65	1 (1%)	68,69,69	1.74	20 (29%)
26	BCR	C	514	-	41,41,41	1.04	1 (2%)	56,56,56	1.50	9 (16%)
26	BCR	B	620	-	41,41,41	1.06	1 (2%)	56,56,56	1.43	6 (10%)
33	LMG	z	101	-	39,39,55	1.08	2 (5%)	47,47,63	1.10	3 (6%)
30	OEX	A	418[A]	3,1,41	0,14,14	-	-	-	-	-
25	PHO	a	418[A]	-	58,69,69	2.76	14 (24%)	56,99,99	2.93	13 (23%)
24	CLA	b	616	41	69,73,73	1.99	18 (26%)	83,113,113	2.85	28 (33%)
24	CLA	C	504	41	69,73,73	2.06	20 (28%)	83,113,113	2.83	28 (33%)
24	CLA	b	611	2	69,73,73	2.03	20 (28%)	83,113,113	2.92	29 (34%)
33	LMG	c	501	-	51,51,55	0.89	2 (3%)	59,59,63	1.17	4 (6%)
37	LHG	b	634	-	48,48,48	0.92	2 (4%)	51,54,54	1.01	4 (7%)
24	CLA	B	612	2	69,73,73	2.00	19 (27%)	83,113,113	2.84	30 (36%)
24	CLA	c	509	41	69,73,73	2.03	20 (28%)	83,113,113	2.89	31 (37%)
28	GOL	B	631	-	5,5,5	0.40	0	5,5,5	0.28	0
28	GOL	O	301	-	5,5,5	0.35	0	5,5,5	0.39	0
37	LHG	e	102	-	41,41,48	1.02	2 (4%)	44,47,54	0.95	2 (4%)
23	BCT	A	404[A]	21	2,3,3	0.57	0	2,3,3	1.28	0
36	DGD	e	101	-	63,63,67	0.92	2 (3%)	77,77,81	1.18	7 (9%)
25	PHO	a	411	-	58,69,69	2.79	14 (24%)	56,99,99	2.75	17 (30%)
31	PL9	d	405[B]	-	55,55,55	0.65	2 (3%)	68,69,69	1.55	13 (19%)
29	LMT	M	103	-	36,36,36	0.53	1 (2%)	47,47,47	0.96	3 (6%)
24	CLA	B	614	2	69,73,73	2.03	19 (27%)	83,113,113	2.72	34 (40%)
37	LHG	E	101	-	41,41,48	1.03	2 (4%)	44,47,54	1.08	4 (9%)
25	PHO	A	409[B]	-	58,69,69	2.77	15 (25%)	56,99,99	2.86	14 (25%)
26	BCR	y	101	-	41,41,41	1.02	1 (2%)	56,56,56	1.48	7 (12%)
24	CLA	B	604	2	69,73,73	2.06	20 (28%)	83,113,113	2.83	31 (37%)
27	SQD	L	102	-	53,54,54	1.03	3 (5%)	62,65,65	1.56	10 (16%)
35	HTG	D	412	-	16,16,19	1.13	2 (12%)	20,21,24	1.50	1 (5%)
29	LMT	B	635	-	25,25,36	0.52	0	30,30,47	0.83	1 (3%)
29	LMT	m	103	-	36,36,36	0.47	0	47,47,47	0.99	3 (6%)
24	CLA	b	623	2	69,73,73	2.02	20 (28%)	83,113,113	2.83	32 (38%)
33	LMG	D	413	39	51,51,55	0.87	2 (3%)	59,59,63	1.00	5 (8%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
28	GOL	v	201	-	5,5,5	0.32	0	5,5,5	0.24	0
36	DGD	c	520	-	63,63,67	0.84	2 (3%)	77,77,81	1.10	5 (6%)
26	BCR	D	404	-	41,41,41	1.04	1 (2%)	56,56,56	1.68	9 (16%)
35	HTG	B	624	-	19,19,19	0.78	1 (5%)	23,24,24	1.64	3 (13%)
24	CLA	b	610	41	69,73,73	2.07	20 (28%)	83,113,113	2.82	28 (33%)
35	HTG	B	623	-	19,19,19	1.03	1 (5%)	23,24,24	1.18	1 (4%)
24	CLA	c	507	3	69,73,73	2.06	21 (30%)	83,113,113	2.71	27 (32%)
24	CLA	B	605	2	69,73,73	1.98	20 (28%)	83,113,113	2.75	32 (38%)
40	HEC	V	205	16	50,50,50	1.69	9 (18%)	68,82,82	1.74	16 (23%)
29	LMT	D	401	-	36,36,36	0.43	0	47,47,47	1.04	1 (2%)
28	GOL	B	629	-	5,5,5	0.33	0	5,5,5	0.36	0
28	GOL	T	101	-	5,5,5	0.45	0	5,5,5	0.13	0
31	PL9	A	419[A]	-	55,55,55	0.65	2 (3%)	68,69,69	1.77	22 (32%)
36	DGD	h	102	-	63,63,67	0.89	3 (4%)	77,77,81	0.97	4 (5%)
26	BCR	H	101	-	41,41,41	1.06	1 (2%)	56,56,56	1.46	8 (14%)
26	BCR	A	411	-	41,41,41	0.99	1 (2%)	56,56,56	1.14	6 (10%)
29	LMT	A	417	-	36,36,36	0.59	1 (2%)	47,47,47	1.25	4 (8%)
28	GOL	c	503	-	5,5,5	0.39	0	5,5,5	0.61	0
29	LMT	M	101	-	36,36,36	0.40	0	47,47,47	0.90	0
30	OEX	a	416[A]	3,1,41	0,14,14	-	-	-	-	-
35	HTG	B	632	-	19,19,19	1.06	2 (10%)	23,24,24	1.40	3 (13%)
26	BCR	T	103	-	41,41,41	1.07	1 (2%)	56,56,56	1.54	12 (21%)
35	HTG	b	608	-	19,19,19	1.06	2 (10%)	23,24,24	1.28	3 (13%)
28	GOL	B	628	-	5,5,5	0.34	0	5,5,5	0.54	0
24	CLA	d	403	4	69,73,73	2.04	21 (30%)	83,113,113	2.87	30 (36%)
23	BCT	a	417[A]	21	2,3,3	0.64	0	2,3,3	0.78	0
28	GOL	A	413	-	5,5,5	0.29	0	5,5,5	0.40	0
28	GOL	C	524	-	5,5,5	0.36	0	5,5,5	0.76	0
29	LMT	a	419	-	36,36,36	0.45	0	47,47,47	0.77	0
28	GOL	v	203	-	5,5,5	0.39	0	5,5,5	0.23	0
24	CLA	b	613	2	69,73,73	2.01	19 (27%)	83,113,113	2.71	28 (33%)
24	CLA	c	512	41	69,73,73	1.98	20 (28%)	83,113,113	2.83	28 (33%)
24	CLA	b	612	2	69,73,73	2.05	20 (28%)	83,113,113	2.83	31 (37%)
24	CLA	B	615	2	69,73,73	2.04	19 (27%)	83,113,113	2.84	29 (34%)
28	GOL	V	202	-	5,5,5	0.39	0	5,5,5	0.37	0
24	CLA	a	409	1	69,73,73	2.03	20 (28%)	83,113,113	2.79	30 (36%)
24	CLA	C	503	3	69,73,73	2.07	18 (26%)	83,113,113	2.75	27 (32%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
24	CLA	c	506	3	69,73,73	2.01	20 (28%)	83,113,113	2.77	28 (33%)
26	BCR	b	627	-	41,41,41	1.00	1 (2%)	56,56,56	1.25	4 (7%)
24	CLA	a	410	41	69,73,73	2.00	20 (28%)	83,113,113	2.90	32 (38%)
24	CLA	d	402	4	69,73,73	2.01	19 (27%)	83,113,113	2.80	31 (37%)
28	GOL	T	102	-	5,5,5	0.40	0	5,5,5	0.26	0
28	GOL	t	102	-	5,5,5	0.48	0	5,5,5	0.11	0
35	HTG	d	411	-	16,16,19	1.14	2 (12%)	20,21,24	1.72	2 (10%)
25	PHO	A	408	-	58,69,69	2.74	13 (22%)	56,99,99	2.73	12 (21%)
27	SQD	B	621	-	53,54,54	1.02	3 (5%)	62,65,65	1.48	9 (14%)
27	SQD	a	414	-	53,54,54	0.96	3 (5%)	62,65,65	1.63	13 (20%)
24	CLA	b	624	2	69,73,73	2.01	20 (28%)	83,113,113	2.79	29 (34%)
35	HTG	C	523	-	19,19,19	1.00	1 (5%)	23,24,24	1.78	4 (17%)
24	CLA	A	410	1	69,73,73	2.06	20 (28%)	83,113,113	2.78	34 (40%)
24	CLA	c	514	3	69,73,73	2.09	20 (28%)	83,113,113	2.76	29 (34%)
26	BCR	t	101	-	41,41,41	1.00	1 (2%)	56,56,56	1.62	15 (26%)
28	GOL	V	204	-	5,5,5	0.35	0	5,5,5	0.32	0
26	BCR	a	413	-	41,41,41	1.03	1 (2%)	56,56,56	1.14	6 (10%)
24	CLA	C	505	3	69,73,73	2.01	20 (28%)	83,113,113	2.71	28 (33%)
31	PL9	a	415[B]	-	55,55,55	0.62	2 (3%)	68,69,69	1.91	20 (29%)
33	LMG	C	520	-	51,51,55	0.95	2 (3%)	59,59,63	1.12	4 (6%)
24	CLA	B	613	2	69,73,73	1.98	19 (27%)	83,113,113	2.93	31 (37%)
24	CLA	A	406	41	69,73,73	1.97	21 (30%)	83,113,113	2.91	34 (40%)
29	LMT	F	101	-	36,36,36	0.47	0	47,47,47	0.93	1 (2%)
24	CLA	B	602	41	69,73,73	2.07	20 (28%)	83,113,113	2.85	27 (32%)
37	LHG	d	408	-	48,48,48	0.93	2 (4%)	51,54,54	1.02	2 (3%)
24	CLA	c	516	3	69,73,73	2.01	19 (27%)	83,113,113	2.75	30 (36%)
36	DGD	H	102	-	63,63,67	0.90	3 (4%)	77,77,81	1.01	8 (10%)
33	LMG	C	519	-	51,51,55	0.95	2 (3%)	59,59,63	0.99	4 (6%)
24	CLA	C	510	3	69,73,73	2.07	20 (28%)	83,113,113	2.71	30 (36%)
36	DGD	C	516	-	63,63,67	0.86	2 (3%)	77,77,81	1.16	8 (10%)
36	DGD	D	406	-	52,52,67	1.02	3 (5%)	60,60,81	1.18	5 (8%)
33	LMG	Z	101	-	37,37,55	0.96	2 (5%)	45,45,63	1.39	6 (13%)
35	HTG	c	526	-	19,19,19	1.02	2 (10%)	23,24,24	1.47	2 (8%)
28	GOL	v	202	-	5,5,5	0.34	0	5,5,5	0.25	0
24	CLA	C	506	3	69,73,73	2.06	20 (28%)	83,113,113	2.66	30 (36%)
28	GOL	B	627	-	5,5,5	0.33	0	5,5,5	0.47	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
24	CLA	b	620	2	69,73,73	2.00	19 (27%)	83,113,113	2.81	30 (36%)
24	CLA	b	619	41	69,73,73	2.04	22 (31%)	83,113,113	2.82	30 (36%)
26	BCR	b	626	-	41,41,41	1.02	1 (2%)	56,56,56	1.43	6 (10%)
36	DGD	C	518	-	63,63,67	0.87	2 (3%)	77,77,81	0.90	4 (5%)
29	LMT	b	630	-	25,25,36	0.51	0	30,30,47	0.67	0
33	LMG	c	524	-	51,51,55	0.96	2 (3%)	59,59,63	1.24	7 (11%)
35	HTG	c	525	-	19,19,19	1.05	2 (10%)	23,24,24	1.55	2 (8%)
24	CLA	C	513	3	69,73,73	2.07	20 (28%)	83,113,113	2.79	30 (36%)
31	PL9	D	405[B]	-	55,55,55	0.63	2 (3%)	68,69,69	1.65	20 (29%)
24	CLA	b	614	2	69,73,73	2.01	19 (27%)	83,113,113	2.95	29 (34%)
28	GOL	b	605	-	5,5,5	0.36	0	5,5,5	0.30	0
30	OEX	A	418[B]	3,1,41	0,14,14	-	-	-	-	-
25	PHO	a	418[B]	-	58,69,69	2.76	14 (24%)	56,99,99	2.91	15 (26%)
31	PL9	d	405[A]	-	55,55,55	0.70	2 (3%)	68,69,69	1.54	16 (23%)
24	CLA	C	507	41	69,73,73	2.04	20 (28%)	83,113,113	2.71	30 (36%)
24	CLA	c	513	3	69,73,73	2.07	20 (28%)	83,113,113	2.74	29 (34%)
37	LHG	D	408	-	48,48,48	0.93	2 (4%)	51,54,54	0.86	3 (5%)
24	CLA	C	509	3	69,73,73	2.12	20 (28%)	83,113,113	2.79	28 (33%)
24	CLA	c	510	3	69,73,73	2.02	20 (28%)	83,113,113	2.71	28 (33%)
24	CLA	A	405	1	69,73,73	2.03	20 (28%)	83,113,113	2.74	29 (34%)
28	GOL	b	602	-	5,5,5	0.43	0	5,5,5	0.48	0
25	PHO	A	409[A]	-	58,69,69	2.80	15 (25%)	56,99,99	2.79	13 (23%)
24	CLA	b	618	2	69,73,73	2.02	19 (27%)	83,113,113	2.80	30 (36%)
28	GOL	b	606	-	5,5,5	0.36	0	5,5,5	0.28	0
35	HTG	V	206	-	19,19,19	1.02	2 (10%)	23,24,24	1.32	3 (13%)
35	HTG	B	633	-	19,19,19	1.01	2 (10%)	23,24,24	1.44	1 (4%)
24	CLA	C	502	3	69,73,73	2.02	20 (28%)	83,113,113	2.76	29 (34%)
23	BCT	A	404[B]	21	2,3,3	0.63	0	2,3,3	1.10	0
27	SQD	A	412	-	53,54,54	0.97	3 (5%)	62,65,65	1.53	11 (17%)
37	LHG	D	409	-	48,48,48	0.97	2 (4%)	51,54,54	1.03	3 (5%)
33	LMG	c	523	-	51,51,55	0.90	2 (3%)	59,59,63	1.12	4 (6%)
35	HTG	b	631	-	19,19,19	0.81	1 (5%)	23,24,24	1.41	2 (8%)
26	BCR	B	619	-	41,41,41	1.03	1 (2%)	56,56,56	1.44	9 (16%)
27	SQD	f	101	-	42,43,54	1.19	3 (7%)	51,54,65	1.46	9 (17%)
29	LMT	C	521	-	36,36,36	0.48	0	47,47,47	1.21	3 (6%)
24	CLA	D	402	4	69,73,73	1.99	20 (28%)	83,113,113	2.89	31 (37%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
24	CLA	B	617	2	69,73,73	2.03	20 (28%)	83,113,113	2.80	29 (34%)
24	CLA	C	501	3	69,73,73	2.04	19 (27%)	83,113,113	2.83	30 (36%)
38	HEM	F	102	6,5	50,50,50	1.56	6 (12%)	66,82,82	1.86	16 (24%)
26	BCR	K	101	-	41,41,41	1.02	1 (2%)	56,56,56	1.45	9 (16%)
28	GOL	V	203	-	5,5,5	0.38	0	5,5,5	0.29	0
24	CLA	b	622	2	69,73,73	2.04	20 (28%)	83,113,113	2.68	29 (34%)
24	CLA	D	403	4	69,73,73	2.05	20 (28%)	83,113,113	2.81	29 (34%)
40	HEC	v	205	16	50,50,50	1.67	9 (18%)	68,82,82	1.82	20 (29%)
24	CLA	c	517	3	69,73,73	2.07	20 (28%)	83,113,113	2.93	32 (38%)
28	GOL	A	414	-	5,5,5	0.44	0	5,5,5	0.48	0
37	LHG	D	407	-	48,48,48	0.84	2 (4%)	51,54,54	1.14	5 (9%)
24	CLA	B	603	2	69,73,73	2.06	20 (28%)	83,113,113	2.86	31 (37%)
24	CLA	b	615	2	69,73,73	1.99	19 (27%)	83,113,113	2.88	28 (33%)
28	GOL	o	301	-	5,5,5	0.38	0	5,5,5	0.22	0
33	LMG	A	421	-	51,51,55	0.93	2 (3%)	59,59,63	1.10	4 (6%)
28	GOL	C	525	-	5,5,5	0.34	0	5,5,5	0.48	0
24	CLA	B	607	2	69,73,73	2.01	20 (28%)	83,113,113	2.93	32 (38%)
33	LMG	B	622	-	51,51,55	0.92	2 (3%)	59,59,63	1.07	5 (8%)
35	HTG	b	601	-	19,19,19	0.97	1 (5%)	23,24,24	1.09	2 (8%)
27	SQD	a	405	-	53,54,54	1.06	3 (5%)	62,65,65	1.20	5 (8%)
31	PL9	A	419[B]	-	55,55,55	0.62	1 (1%)	68,69,69	1.76	21 (30%)
24	CLA	A	407	41	69,73,73	2.06	20 (28%)	83,113,113	2.89	32 (38%)
26	BCR	C	515	-	41,41,41	1.00	1 (2%)	56,56,56	1.48	10 (17%)
28	GOL	a	401	-	5,5,5	0.44	0	5,5,5	0.48	0
35	HTG	C	522	-	19,19,19	1.03	2 (10%)	23,24,24	1.59	2 (8%)
38	HEM	e	103	6,5	50,50,50	1.53	8 (16%)	66,82,82	1.76	15 (22%)
24	CLA	C	508	3	69,73,73	2.09	20 (28%)	83,113,113	2.80	25 (30%)
24	CLA	B	610	2	69,73,73	2.03	19 (27%)	83,113,113	2.76	29 (34%)
26	BCR	c	528	-	41,41,41	1.03	1 (2%)	56,56,56	1.48	7 (12%)
36	DGD	C	517	-	63,63,67	0.87	2 (3%)	77,77,81	1.05	6 (7%)
29	LMT	m	102	-	36,36,36	0.47	0	47,47,47	0.83	0
28	GOL	A	422	34	5,5,5	0.35	0	5,5,5	0.22	0
37	LHG	d	406	-	48,48,48	0.90	3 (6%)	51,54,54	1.04	4 (7%)
24	CLA	B	609	2	69,73,73	2.03	19 (27%)	83,113,113	2.80	31 (37%)
35	HTG	b	632	-	19,19,19	1.13	2 (10%)	23,24,24	1.75	3 (13%)
30	OEX	a	416[B]	3,1,41	0,14,14	-	-	-	-	-

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
24	CLA	B	608	41	69,73,73	1.93	20 (28%)	83,113,113	2.79	33 (39%)
27	SQD	A	416	-	53,54,54	1.04	3 (5%)	62,65,65	1.14	4 (6%)
24	CLA	b	617	2	69,73,73	2.08	20 (28%)	83,113,113	2.69	30 (36%)
28	GOL	a	420	34	5,5,5	0.33	0	5,5,5	0.41	0
35	HTG	b	607	-	19,19,19	1.00	2 (10%)	23,24,24	1.22	1 (4%)
23	BCT	a	417[B]	21	2,3,3	0.66	0	2,3,3	0.85	0
28	GOL	A	415	-	5,5,5	0.41	0	5,5,5	0.22	0
28	GOL	V	201	-	5,5,5	0.39	0	5,5,5	0.32	0
24	CLA	d	401	41	69,73,73	2.05	19 (27%)	83,113,113	2.81	34 (40%)
26	BCR	h	101	-	41,41,41	1.05	1 (2%)	56,56,56	1.44	8 (14%)
37	LHG	d	407	-	48,48,48	0.88	2 (4%)	51,54,54	0.99	4 (7%)
33	LMG	d	413	39	51,51,55	0.92	2 (3%)	59,59,63	0.94	3 (5%)
24	CLA	C	511	3	69,73,73	2.06	20 (28%)	83,113,113	2.73	31 (37%)
26	BCR	d	404	-	41,41,41	1.10	1 (2%)	56,56,56	1.69	13 (23%)
28	GOL	B	636	-	5,5,5	0.40	0	5,5,5	0.46	0
28	GOL	B	626	-	5,5,5	0.43	0	5,5,5	0.36	0
31	PL9	a	415[A]	-	55,55,55	0.63	2 (3%)	68,69,69	1.91	20 (29%)
36	DGD	c	521	-	63,63,67	0.88	2 (3%)	77,77,81	0.94	5 (6%)
26	BCR	Y	101	-	41,41,41	1.02	1 (2%)	56,56,56	1.60	10 (17%)
35	HTG	B	625	-	19,19,19	1.06	2 (10%)	23,24,24	1.85	4 (17%)
28	GOL	b	604	-	5,5,5	0.38	0	5,5,5	0.24	0
33	LMG	b	629	-	51,51,55	0.90	2 (3%)	59,59,63	1.07	5 (8%)
24	CLA	B	606	2	69,73,73	2.04	19 (27%)	83,113,113	2.91	28 (33%)
24	CLA	c	508	3	69,73,73	2.06	19 (27%)	83,113,113	2.85	27 (32%)
24	CLA	B	616	2	69,73,73	1.99	18 (26%)	83,113,113	2.84	28 (33%)
28	GOL	a	402	-	5,5,5	0.38	0	5,5,5	0.26	0
24	CLA	a	412	1	69,73,73	2.03	19 (27%)	83,113,113	2.85	31 (37%)
29	LMT	a	404	-	36,36,36	0.46	0	47,47,47	1.08	3 (6%)
28	GOL	c	502	-	5,5,5	0.27	0	5,5,5	0.47	0
24	CLA	b	625	2	69,73,73	2.01	19 (27%)	83,113,113	2.84	32 (38%)
26	BCR	c	519	-	41,41,41	1.02	1 (2%)	56,56,56	1.44	7 (12%)
29	LMT	T	104	-	25,25,36	0.50	0	30,30,47	0.96	1 (3%)
24	CLA	B	611	41	69,73,73	2.10	21 (30%)	83,113,113	2.82	33 (39%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns.

'-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
24	CLA	c	518	3	-	5/39/115/115	-
26	BCR	b	628	-	-	0/29/63/63	0/2/2/2
28	GOL	b	603	-	-	0/4/4/4	-
27	SQD	F	103	-	-	15/38/58/69	0/1/1/1
24	CLA	c	511	3	-	10/39/115/115	-
24	CLA	b	621	2	-	3/39/115/115	-
26	BCR	k	101	-	-	1/29/63/63	0/2/2/2
26	BCR	B	618	-	-	2/29/63/63	0/2/2/2
36	DGD	c	522	-	-	14/51/91/95	0/2/2/2
37	LHG	L	101	-	-	14/53/53/53	-
28	GOL	B	630	-	-	4/4/4/4	-
24	CLA	C	512	3	-	12/39/115/115	-
24	CLA	c	515	3	-	9/39/115/115	-
29	LMT	f	102	-	-	10/21/61/61	0/2/2/2
31	PL9	D	405[A]	-	-	7/53/73/73	0/1/1/1
26	BCR	C	514	-	-	2/29/63/63	0/2/2/2
26	BCR	B	620	-	-	0/29/63/63	0/2/2/2
33	LMG	z	101	-	-	14/34/54/70	0/1/1/1
25	PHO	a	418[A]	-	-	0/37/103/103	0/5/6/6
24	CLA	b	616	41	-	3/39/115/115	-
24	CLA	C	504	41	-	6/39/115/115	-
24	CLA	b	611	2	-	5/39/115/115	-
33	LMG	c	501	-	-	15/46/66/70	0/1/1/1
37	LHG	b	634	-	-	16/53/53/53	-
24	CLA	B	612	2	-	4/39/115/115	-
24	CLA	c	509	41	-	4/39/115/115	-
28	GOL	B	631	-	-	0/4/4/4	-
28	GOL	O	301	-	-	2/4/4/4	-
37	LHG	e	102	-	-	17/46/46/53	-
36	DGD	e	101	-	-	27/51/91/95	0/2/2/2
25	PHO	a	411	-	-	5/37/103/103	0/5/6/6
31	PL9	d	405[B]	-	-	8/53/73/73	0/1/1/1
29	LMT	M	103	-	-	9/21/61/61	0/2/2/2
24	CLA	B	614	2	-	5/39/115/115	-
37	LHG	E	101	-	-	25/46/46/53	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
25	PHO	A	409[B]	-	-	0/37/103/103	0/5/6/6
26	BCR	y	101	-	-	2/29/63/63	0/2/2/2
24	CLA	B	604	2	-	4/39/115/115	-
27	SQD	L	102	-	-	23/49/69/69	0/1/1/1
35	HTG	D	412	-	-	0/7/27/30	0/1/1/1
29	LMT	B	635	-	-	7/17/37/61	0/1/1/2
29	LMT	m	103	-	-	8/21/61/61	0/2/2/2
24	CLA	b	623	2	-	22/39/115/115	-
33	LMG	D	413	39	-	9/46/66/70	0/1/1/1
28	GOL	v	201	-	-	2/4/4/4	-
36	DGD	c	520	-	-	13/51/91/95	0/2/2/2
40	HEC	V	205	16	1/1/3/7	4/14/54/54	-
26	BCR	D	404	-	-	8/29/63/63	0/2/2/2
24	CLA	b	610	41	-	19/39/115/115	-
35	HTG	B	623	-	-	3/10/30/30	0/1/1/1
24	CLA	c	507	3	-	9/39/115/115	-
24	CLA	B	605	2	-	4/39/115/115	-
35	HTG	B	624	-	-	5/10/30/30	0/1/1/1
29	LMT	D	401	-	-	9/21/61/61	0/2/2/2
28	GOL	B	629	-	-	2/4/4/4	-
28	GOL	T	101	-	-	0/4/4/4	-
31	PL9	A	419[A]	-	-	14/53/73/73	0/1/1/1
36	DGD	h	102	-	-	12/51/91/95	0/2/2/2
26	BCR	H	101	-	-	1/29/63/63	0/2/2/2
26	BCR	A	411	-	-	0/29/63/63	0/2/2/2
29	LMT	A	417	-	-	5/21/61/61	0/2/2/2
28	GOL	c	503	-	-	1/4/4/4	-
29	LMT	M	101	-	-	4/21/61/61	0/2/2/2
35	HTG	B	632	-	-	3/10/30/30	0/1/1/1
26	BCR	T	103	-	-	1/29/63/63	0/2/2/2
35	HTG	b	608	-	-	0/10/30/30	0/1/1/1
28	GOL	B	628	-	-	2/4/4/4	-
24	CLA	d	403	4	-	4/39/115/115	-
29	LMT	a	419	-	-	4/21/61/61	0/2/2/2
28	GOL	A	413	-	-	0/4/4/4	-
28	GOL	C	524	-	-	2/4/4/4	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
28	GOL	v	203	-	-	2/4/4/4	-
24	CLA	b	613	2	-	5/39/115/115	-
24	CLA	c	512	41	-	7/39/115/115	-
24	CLA	b	612	2	-	4/39/115/115	-
24	CLA	B	615	2	-	14/39/115/115	-
28	GOL	V	202	-	-	2/4/4/4	-
24	CLA	a	409	1	-	4/39/115/115	-
24	CLA	C	503	3	-	2/39/115/115	-
24	CLA	c	506	3	-	4/39/115/115	-
26	BCR	b	627	-	-	1/29/63/63	0/2/2/2
24	CLA	a	410	41	-	9/39/115/115	-
24	CLA	d	402	4	-	4/39/115/115	-
28	GOL	T	102	-	-	2/4/4/4	-
28	GOL	t	102	-	-	0/4/4/4	-
35	HTG	d	411	-	-	1/7/27/30	0/1/1/1
25	PHO	A	408	-	-	3/37/103/103	0/5/6/6
27	SQD	B	621	-	-	20/49/69/69	0/1/1/1
27	SQD	a	414	-	-	15/49/69/69	0/1/1/1
24	CLA	b	624	2	-	3/39/115/115	-
35	HTG	C	523	-	-	2/10/30/30	0/1/1/1
24	CLA	A	410	1	-	10/39/115/115	-
24	CLA	c	514	3	-	13/39/115/115	-
26	BCR	t	101	-	-	1/29/63/63	0/2/2/2
28	GOL	V	204	-	-	0/4/4/4	-
26	BCR	a	413	-	-	0/29/63/63	0/2/2/2
24	CLA	C	505	3	-	7/39/115/115	-
31	PL9	a	415[B]	-	-	14/53/73/73	0/1/1/1
33	LMG	C	520	-	-	10/46/66/70	0/1/1/1
24	CLA	B	613	2	-	3/39/115/115	-
24	CLA	A	406	41	-	4/39/115/115	-
29	LMT	F	101	-	-	5/21/61/61	0/2/2/2
24	CLA	B	602	41	-	15/39/115/115	-
37	LHG	d	408	-	-	10/53/53/53	-
24	CLA	c	516	3	-	5/39/115/115	-
36	DGD	H	102	-	-	11/51/91/95	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
33	LMG	C	519	-	-	10/46/66/70	0/1/1/1
24	CLA	C	510	3	-	9/39/115/115	-
36	DGD	C	516	-	-	12/51/91/95	0/2/2/2
36	DGD	D	406	-	-	22/47/67/95	0/1/1/2
33	LMG	Z	101	-	-	14/31/51/70	0/1/1/1
35	HTG	c	526	-	-	0/10/30/30	0/1/1/1
28	GOL	v	202	-	-	2/4/4/4	-
24	CLA	C	506	3	-	7/39/115/115	-
28	GOL	B	627	-	-	2/4/4/4	-
24	CLA	b	620	2	-	3/39/115/115	-
24	CLA	b	619	41	-	8/39/115/115	-
26	BCR	b	626	-	-	2/29/63/63	0/2/2/2
36	DGD	C	518	-	-	10/51/91/95	0/2/2/2
29	LMT	b	630	-	-	4/17/37/61	0/1/1/2
33	LMG	c	524	-	-	4/46/66/70	0/1/1/1
35	HTG	c	525	-	-	3/10/30/30	0/1/1/1
24	CLA	C	513	3	-	7/39/115/115	-
31	PL9	D	405[B]	-	-	8/53/73/73	0/1/1/1
24	CLA	b	614	2	-	4/39/115/115	-
28	GOL	b	605	-	-	2/4/4/4	-
25	PHO	a	418[B]	-	-	1/37/103/103	0/5/6/6
31	PL9	d	405[A]	-	-	5/53/73/73	0/1/1/1
24	CLA	C	507	41	-	8/39/115/115	-
24	CLA	c	513	3	-	5/39/115/115	-
37	LHG	D	408	-	-	8/53/53/53	-
24	CLA	C	509	3	-	11/39/115/115	-
24	CLA	c	510	3	-	3/39/115/115	-
24	CLA	A	405	1	-	4/39/115/115	-
28	GOL	b	602	-	-	0/4/4/4	-
25	PHO	A	409[A]	-	-	0/37/103/103	0/5/6/6
24	CLA	b	618	2	-	6/39/115/115	-
28	GOL	b	606	-	-	2/4/4/4	-
35	HTG	V	206	-	-	4/10/30/30	0/1/1/1
35	HTG	B	633	-	-	0/10/30/30	0/1/1/1
24	CLA	C	502	3	-	7/39/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
27	SQD	A	412	-	-	11/49/69/69	0/1/1/1
37	LHG	D	409	-	-	10/53/53/53	-
33	LMG	c	523	-	-	13/46/66/70	0/1/1/1
35	HTG	b	631	-	-	2/10/30/30	0/1/1/1
26	BCR	B	619	-	-	0/29/63/63	0/2/2/2
27	SQD	f	101	-	-	12/38/58/69	0/1/1/1
29	LMT	C	521	-	-	9/21/61/61	0/2/2/2
24	CLA	D	402	4	-	0/39/115/115	-
24	CLA	B	617	2	-	6/39/115/115	-
24	CLA	C	501	3	-	6/39/115/115	-
38	HEM	F	102	6,5	-	8/14/54/54	-
26	BCR	K	101	-	-	2/29/63/63	0/2/2/2
28	GOL	V	203	-	-	1/4/4/4	-
24	CLA	b	622	2	-	3/39/115/115	-
24	CLA	D	403	4	-	5/39/115/115	-
40	HEC	v	205	16	1/1/3/7	4/14/54/54	-
24	CLA	c	517	3	-	12/39/115/115	-
28	GOL	A	414	-	-	2/4/4/4	-
37	LHG	D	407	-	-	10/53/53/53	-
24	CLA	B	603	2	-	4/39/115/115	-
24	CLA	b	615	2	-	10/39/115/115	-
28	GOL	o	301	-	-	4/4/4/4	-
33	LMG	A	421	-	-	18/46/66/70	0/1/1/1
28	GOL	C	525	-	-	0/4/4/4	-
24	CLA	B	607	2	-	4/39/115/115	-
33	LMG	B	622	-	-	6/46/66/70	0/1/1/1
35	HTG	b	601	-	-	3/10/30/30	0/1/1/1
27	SQD	a	405	-	-	15/49/69/69	0/1/1/1
31	PL9	A	419[B]	-	-	10/53/73/73	0/1/1/1
24	CLA	A	407	41	-	3/39/115/115	-
26	BCR	C	515	-	-	2/29/63/63	0/2/2/2
28	GOL	a	401	-	-	2/4/4/4	-
35	HTG	C	522	-	-	0/10/30/30	0/1/1/1
38	HEM	e	103	6,5	-	10/14/54/54	-
24	CLA	C	508	3	-	4/39/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
24	CLA	B	610	2	-	4/39/115/115	-
26	BCR	c	528	-	-	0/29/63/63	0/2/2/2
36	DGD	C	517	-	-	16/51/91/95	0/2/2/2
29	LMT	m	102	-	-	8/21/61/61	0/2/2/2
28	GOL	A	422	34	-	2/4/4/4	-
37	LHG	d	406	-	-	11/53/53/53	-
24	CLA	B	609	2	-	1/39/115/115	-
35	HTG	b	632	-	-	6/10/30/30	0/1/1/1
24	CLA	B	608	41	-	6/39/115/115	-
27	SQD	A	416	-	-	16/49/69/69	0/1/1/1
24	CLA	b	617	2	-	2/39/115/115	-
28	GOL	a	420	34	-	3/4/4/4	-
35	HTG	b	607	-	-	1/10/30/30	0/1/1/1
28	GOL	A	415	-	-	2/4/4/4	-
28	GOL	V	201	-	-	2/4/4/4	-
24	CLA	d	401	41	-	6/39/115/115	-
26	BCR	h	101	-	-	1/29/63/63	0/2/2/2
37	LHG	d	407	-	-	7/53/53/53	-
33	LMG	d	413	39	-	11/46/66/70	0/1/1/1
24	CLA	C	511	3	-	3/39/115/115	-
26	BCR	d	404	-	-	6/29/63/63	0/2/2/2
28	GOL	B	636	-	-	0/4/4/4	-
28	GOL	B	626	-	-	2/4/4/4	-
31	PL9	a	415[A]	-	-	18/53/73/73	0/1/1/1
36	DGD	c	521	-	-	16/51/91/95	0/2/2/2
26	BCR	Y	101	-	-	3/29/63/63	0/2/2/2
35	HTG	B	625	-	-	4/10/30/30	0/1/1/1
28	GOL	b	604	-	-	2/4/4/4	-
33	LMG	b	629	-	-	11/46/66/70	0/1/1/1
24	CLA	B	606	2	-	4/39/115/115	-
24	CLA	c	508	3	-	2/39/115/115	-
24	CLA	B	616	2	-	13/39/115/115	-
28	GOL	a	402	-	-	2/4/4/4	-
24	CLA	a	412	1	-	11/39/115/115	-
29	LMT	a	404	-	-	9/21/61/61	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
28	GOL	c	502	-	-	0/4/4/4	-
24	CLA	b	625	2	-	8/39/115/115	-
26	BCR	c	519	-	-	2/29/63/63	0/2/2/2
29	LMT	T	104	-	-	7/17/37/61	0/1/1/2
24	CLA	B	611	41	-	4/39/115/115	-

The worst 5 of 1655 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	a	418[A]	PHO	C1B-C2B	9.17	1.49	1.39
25	A	408	PHO	C1D-C2D	9.13	1.49	1.39
25	A	408	PHO	C1B-C2B	9.07	1.49	1.39
25	a	411	PHO	C1D-C2D	8.98	1.49	1.39
25	A	409[A]	PHO	C1D-C2D	8.97	1.49	1.39

The worst 5 of 2859 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	A	409[B]	PHO	C2D-C1D-ND	11.62	117.55	109.53
25	A	409[A]	PHO	C2D-C1D-ND	11.51	117.47	109.53
25	A	408	PHO	C2D-C1D-ND	11.39	117.39	109.53
25	a	418[A]	PHO	C2D-C1D-ND	11.24	117.29	109.53
25	a	418[B]	PHO	C2D-C1D-ND	11.17	117.24	109.53

All (2) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
40	V	205	HEC	NA
40	v	205	HEC	NA

5 of 1331 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
24	A	406	CLA	CHA-CBD-CGD-O1D
24	A	406	CLA	CHA-CBD-CGD-O2D
24	B	602	CLA	CHA-CBD-CGD-O1D
24	B	602	CLA	CHA-CBD-CGD-O2D
24	B	602	CLA	CAD-CBD-CGD-O1D

There are no ring outliers.

159 monomers are involved in 345 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
24	c	518	CLA	5	0
26	b	628	BCR	3	0
27	F	103	SQD	2	0
24	c	511	CLA	2	0
24	b	621	CLA	2	0
26	k	101	BCR	1	0
26	B	618	BCR	3	0
28	B	630	GOL	1	0
24	C	512	CLA	4	0
24	c	515	CLA	2	0
29	f	102	LMT	1	0
26	C	514	BCR	6	0
26	B	620	BCR	5	0
33	z	101	LMG	5	0
25	a	418[A]	PHO	2	0
33	c	501	LMG	2	0
37	b	634	LHG	3	0
24	B	612	CLA	1	0
24	c	509	CLA	1	0
37	e	102	LHG	4	0
36	e	101	DGD	7	0
29	M	103	LMT	1	0
24	B	614	CLA	3	0
37	E	101	LHG	2	0
25	A	409[B]	PHO	2	0
26	y	101	BCR	2	0
24	B	604	CLA	2	0
27	L	102	SQD	3	0
35	D	412	HTG	2	0
29	m	103	LMT	2	0
24	b	623	CLA	1	0
33	D	413	LMG	1	0
28	v	201	GOL	1	0
36	c	520	DGD	1	0
26	D	404	BCR	1	0
24	b	610	CLA	2	0
35	B	623	HTG	1	0
24	c	507	CLA	4	0
29	D	401	LMT	1	0
28	T	101	GOL	1	0
31	A	419[A]	PL9	5	0
26	H	101	BCR	3	0
26	A	411	BCR	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
29	A	417	LMT	2	0
28	c	503	GOL	2	0
29	M	101	LMT	3	0
26	T	103	BCR	5	0
24	d	403	CLA	2	0
29	a	419	LMT	1	0
24	b	613	CLA	2	0
24	c	512	CLA	3	0
24	b	612	CLA	2	0
24	B	615	CLA	4	0
24	a	409	CLA	4	0
24	C	503	CLA	3	0
24	c	506	CLA	3	0
26	b	627	BCR	3	0
24	a	410	CLA	3	0
24	d	402	CLA	3	0
28	T	102	GOL	2	0
28	t	102	GOL	1	0
35	d	411	HTG	3	0
25	A	408	PHO	1	0
27	B	621	SQD	3	0
27	a	414	SQD	2	0
24	b	624	CLA	5	0
24	A	410	CLA	4	0
24	c	514	CLA	3	0
26	t	101	BCR	5	0
26	a	413	BCR	1	0
24	C	505	CLA	5	0
31	a	415[B]	PL9	7	0
33	C	520	LMG	3	0
24	B	613	CLA	1	0
24	A	406	CLA	3	0
24	B	602	CLA	2	0
37	d	408	LHG	6	0
24	c	516	CLA	2	0
33	C	519	LMG	4	0
24	C	510	CLA	3	0
36	C	516	DGD	1	0
36	D	406	DGD	2	0
33	Z	101	LMG	1	0
24	C	506	CLA	2	0
24	b	620	CLA	3	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
24	b	619	CLA	4	0
26	b	626	BCR	4	0
36	C	518	DGD	1	0
29	b	630	LMT	3	0
33	c	524	LMG	2	0
35	c	525	HTG	1	0
24	C	513	CLA	6	0
31	D	405[B]	PL9	1	0
24	b	614	CLA	6	0
25	a	418[B]	PHO	1	0
24	C	507	CLA	3	0
24	c	513	CLA	6	0
37	D	408	LHG	1	0
24	C	509	CLA	3	0
24	c	510	CLA	7	0
24	A	405	CLA	4	0
25	A	409[A]	PHO	3	0
24	b	618	CLA	1	0
35	V	206	HTG	1	0
24	C	502	CLA	3	0
27	A	412	SQD	6	0
37	D	409	LHG	9	0
33	c	523	LMG	3	0
26	B	619	BCR	3	0
27	f	101	SQD	1	1
29	C	521	LMT	1	0
24	D	402	CLA	3	0
24	B	617	CLA	6	0
24	C	501	CLA	1	0
38	F	102	HEM	2	0
24	b	622	CLA	3	0
24	D	403	CLA	1	0
24	c	517	CLA	2	0
28	A	414	GOL	1	0
37	D	407	LHG	1	0
24	B	603	CLA	2	0
33	A	421	LMG	4	0
24	B	607	CLA	4	0
33	B	622	LMG	1	0
35	b	601	HTG	1	0
27	a	405	SQD	1	0
31	A	419[B]	PL9	4	0

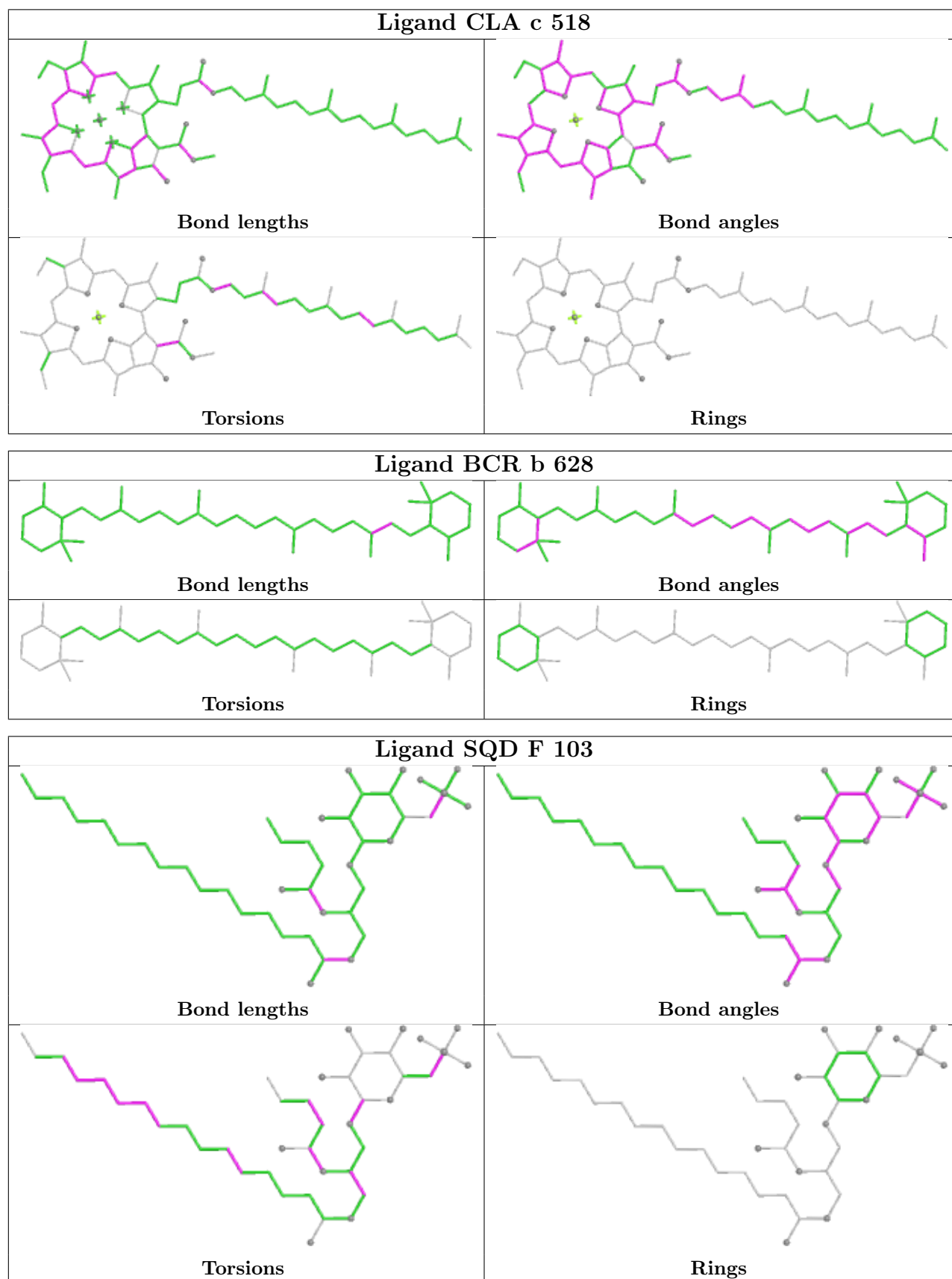
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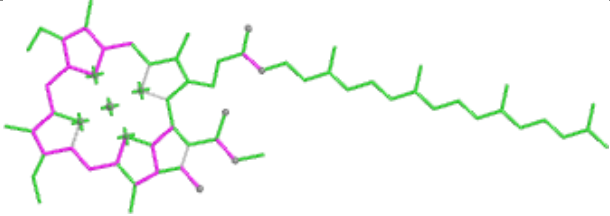
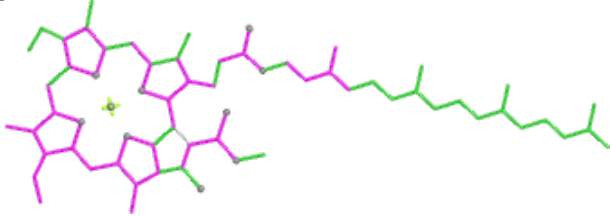
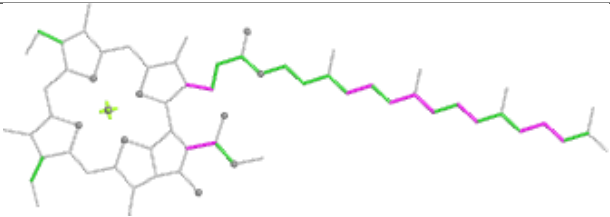
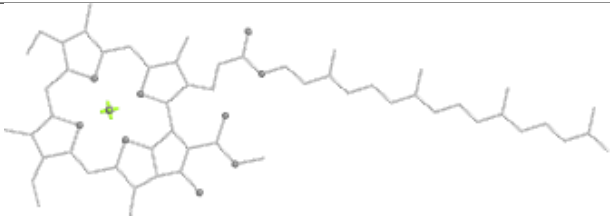
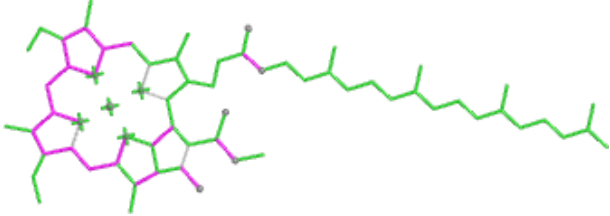
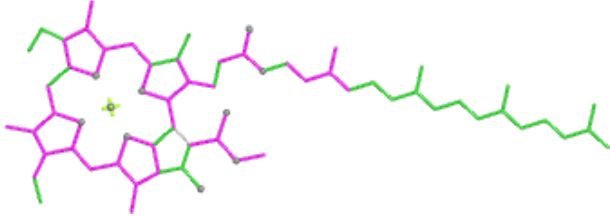
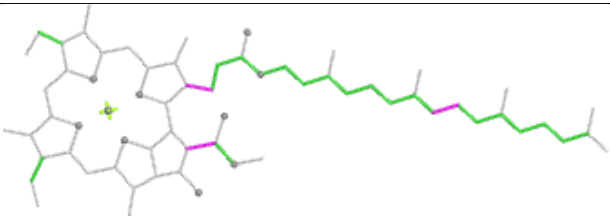
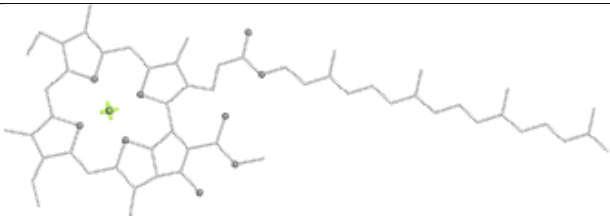
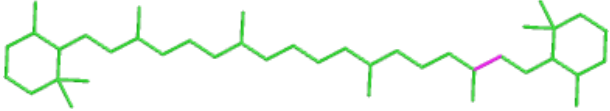
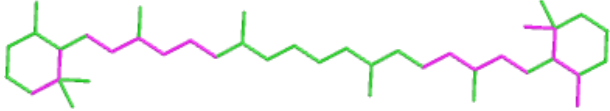
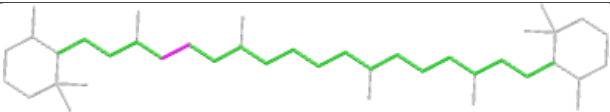
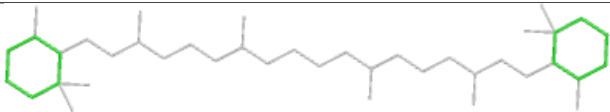
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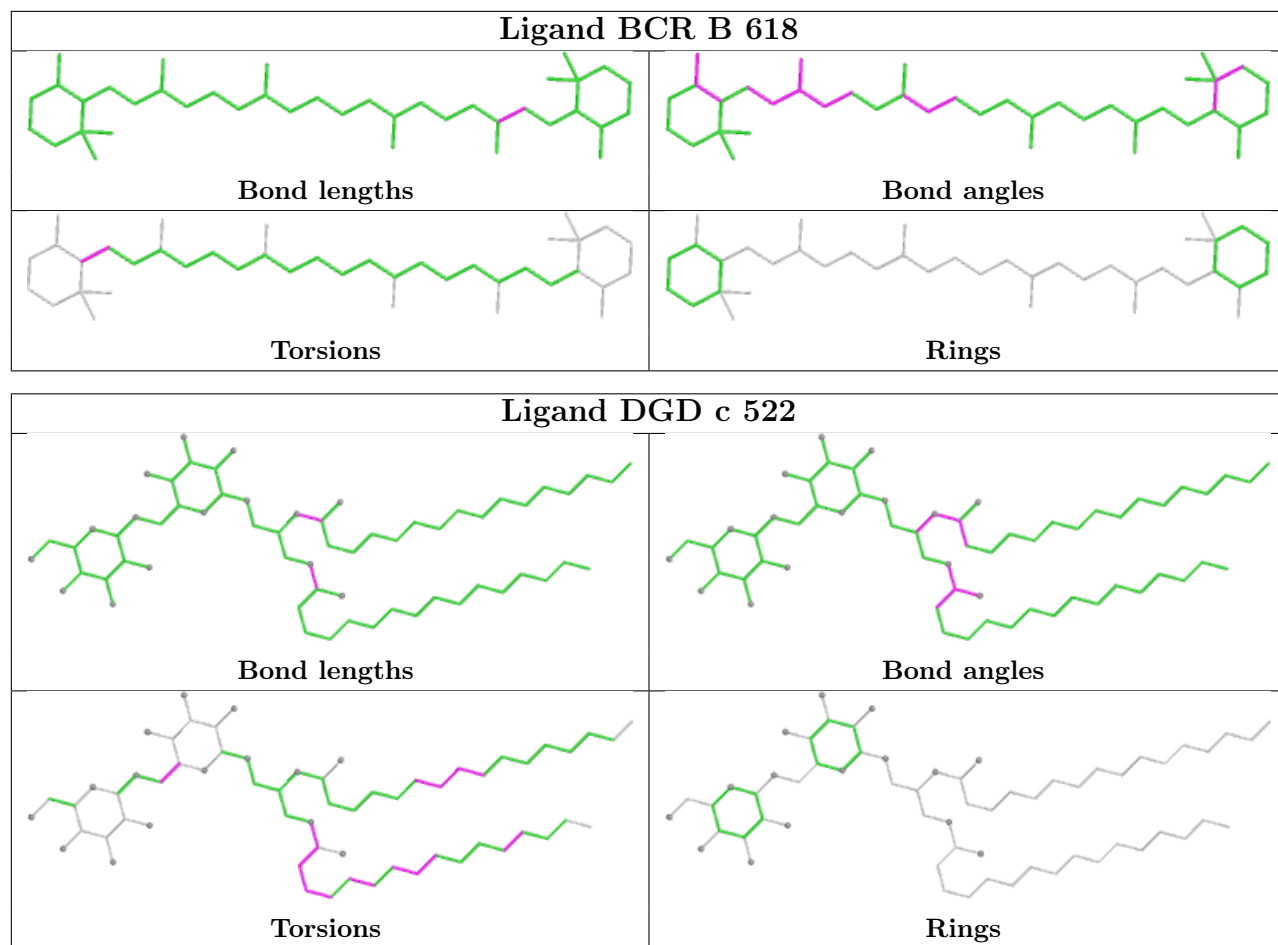
Mol	Chain	Res	Type	Clashes	Symm-Clashes
24	A	407	CLA	1	0
26	C	515	BCR	5	0
38	e	103	HEM	5	0
24	C	508	CLA	3	0
24	B	610	CLA	3	0
26	c	528	BCR	2	0
36	C	517	DGD	2	0
29	m	102	LMT	1	0
37	d	406	LHG	2	0
24	B	609	CLA	1	0
24	B	608	CLA	1	0
27	A	416	SQD	1	0
28	a	420	GOL	1	0
24	d	401	CLA	4	0
26	h	101	BCR	4	0
37	d	407	LHG	1	0
33	d	413	LMG	2	0
24	C	511	CLA	2	0
26	d	404	BCR	3	0
31	a	415[A]	PL9	7	0
36	c	521	DGD	1	0
26	Y	101	BCR	4	0
33	b	629	LMG	3	0
24	B	606	CLA	2	0
24	c	508	CLA	2	0
24	B	616	CLA	6	0
28	a	402	GOL	1	0
24	a	412	CLA	2	0
29	a	404	LMT	1	0
24	b	625	CLA	2	0
26	c	519	BCR	3	0
24	B	611	CLA	1	0

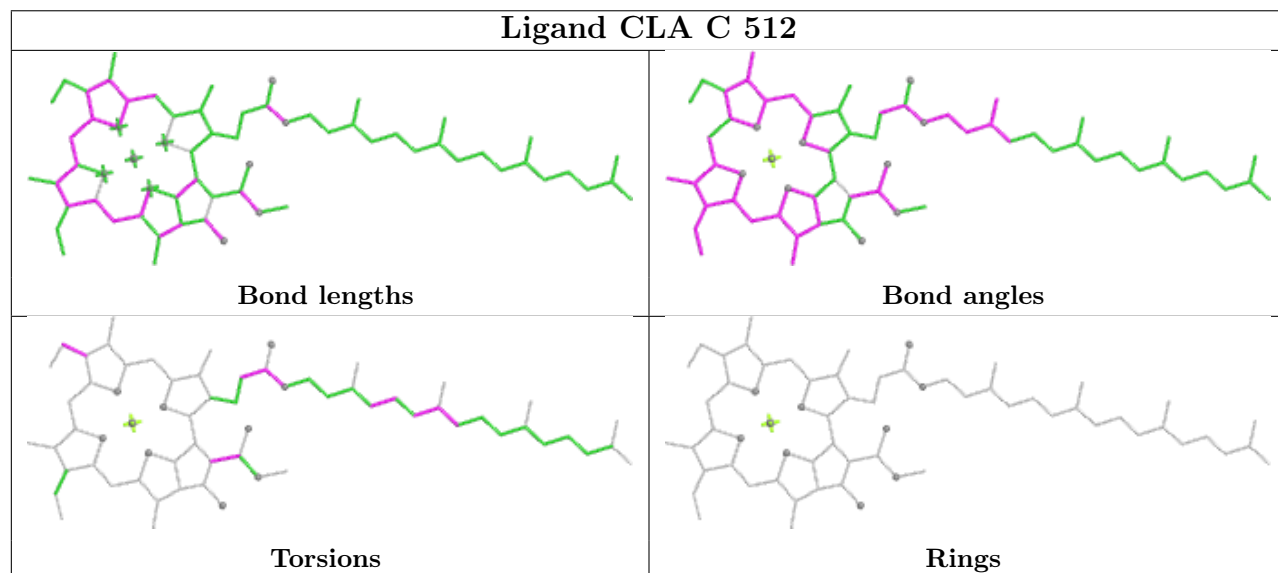
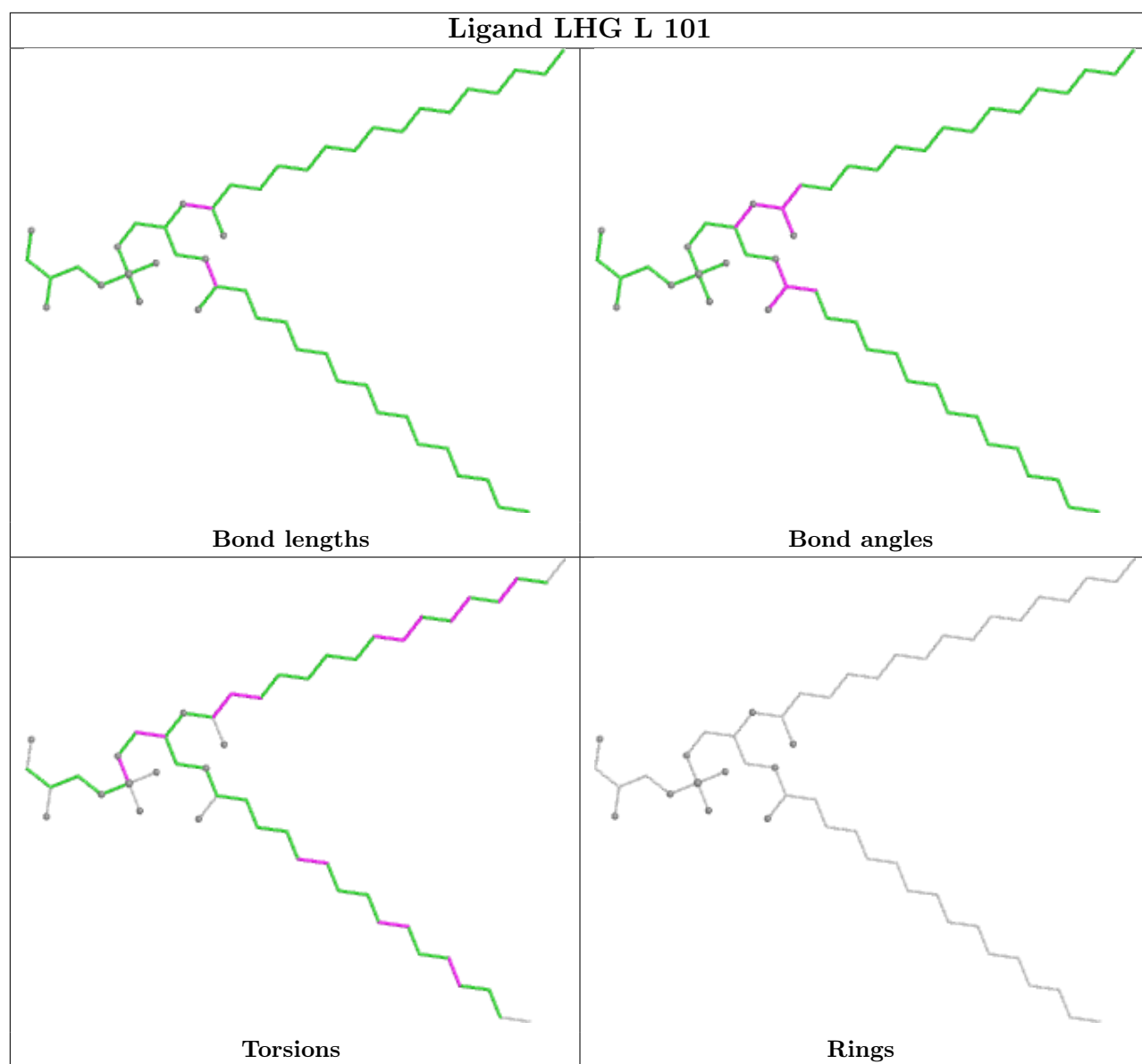
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less than 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.

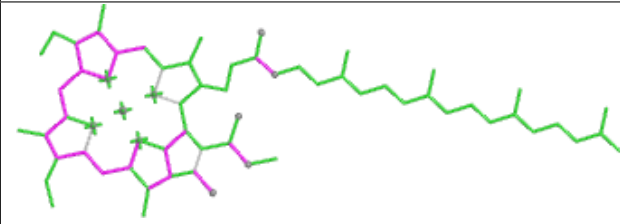
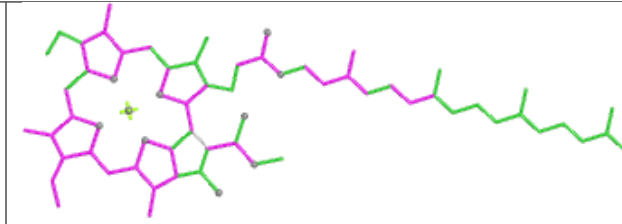
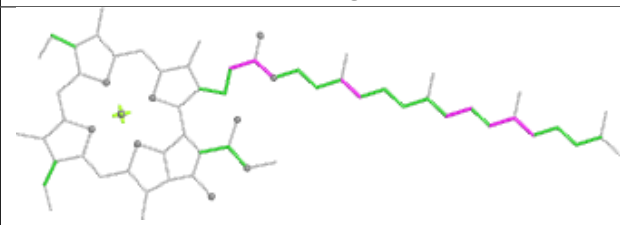
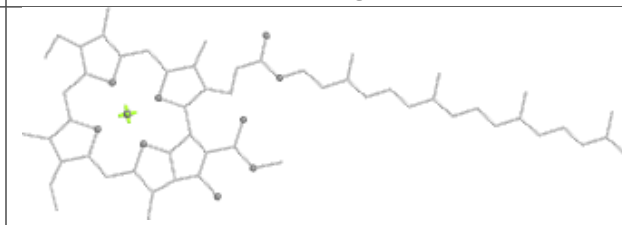
The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.

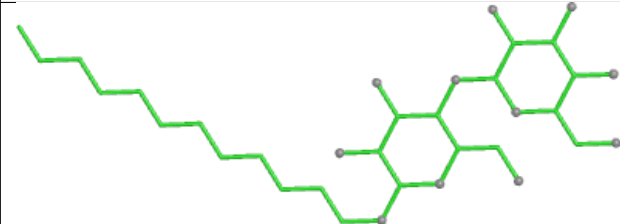
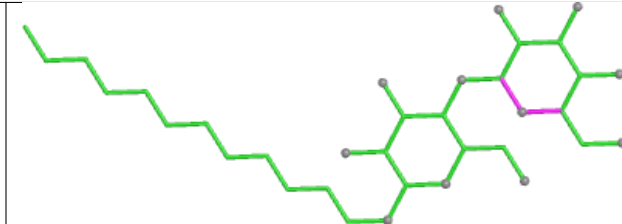
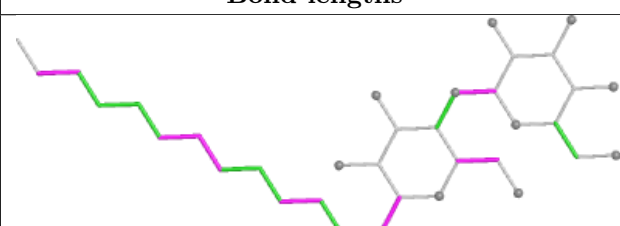
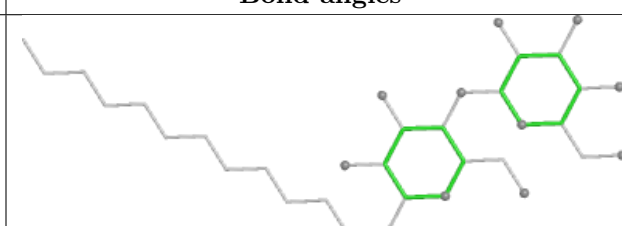


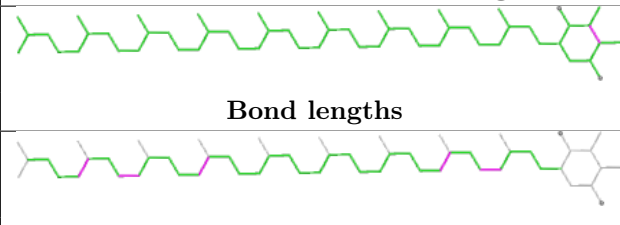
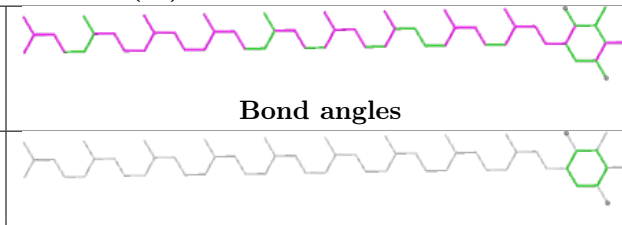
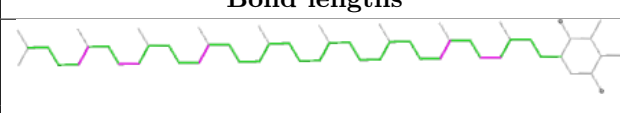
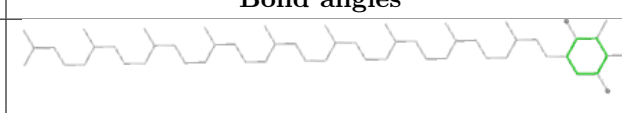
Ligand CLA c 511	
 Bond lengths	 Bond angles
 Torsions	 Rings
Ligand CLA b 621	
 Bond lengths	 Bond angles
 Torsions	 Rings
Ligand BCR k 101	
 Bond lengths	 Bond angles
 Torsions	 Rings

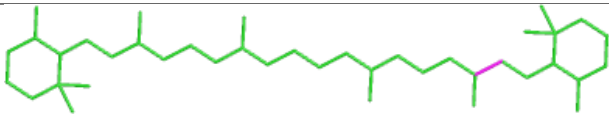
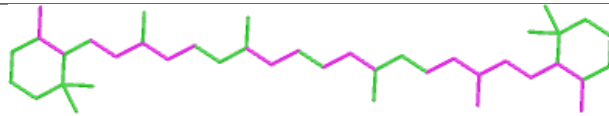
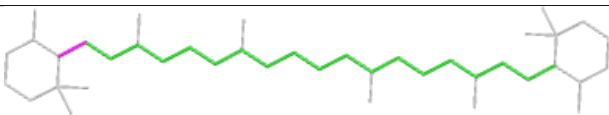
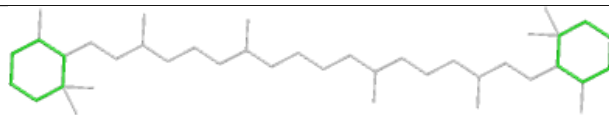


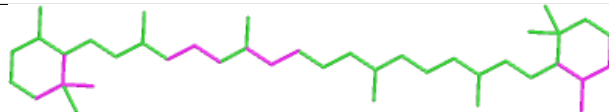
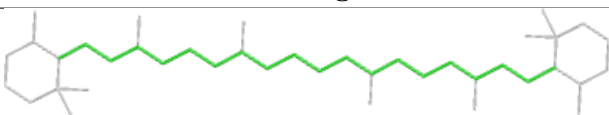
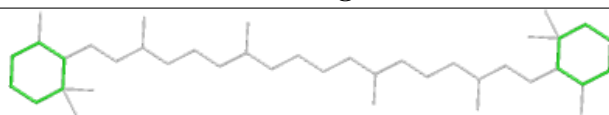


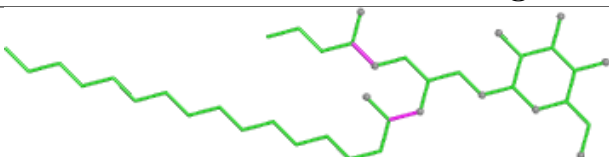
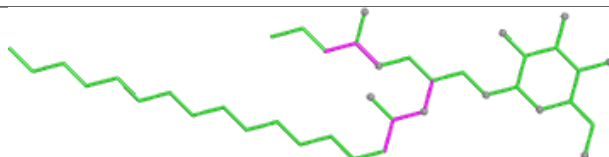
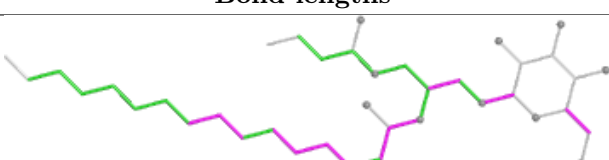
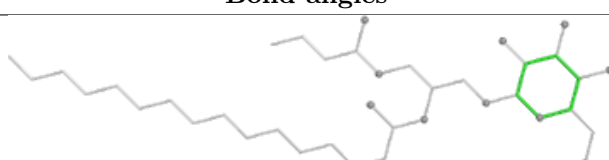
Ligand CLA c 515	
	
Bond lengths	Bond angles
	
Torsions	Rings

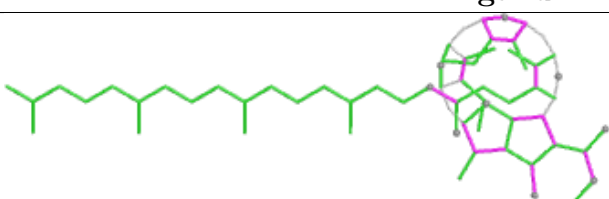
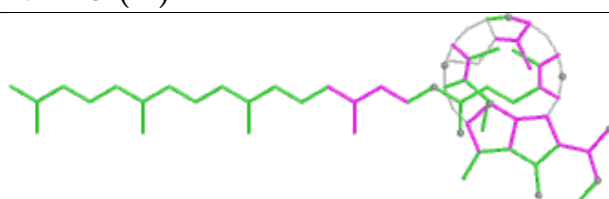
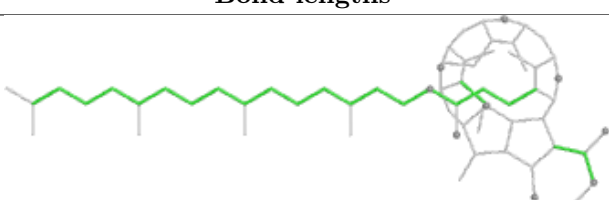
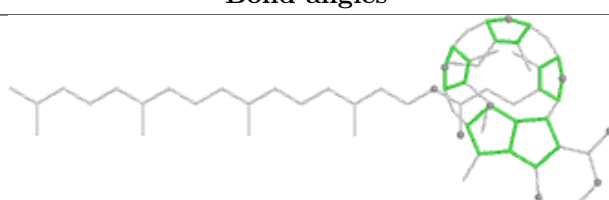
Ligand LMT f 102	
	
Bond lengths	Bond angles
	
Torsions	Rings

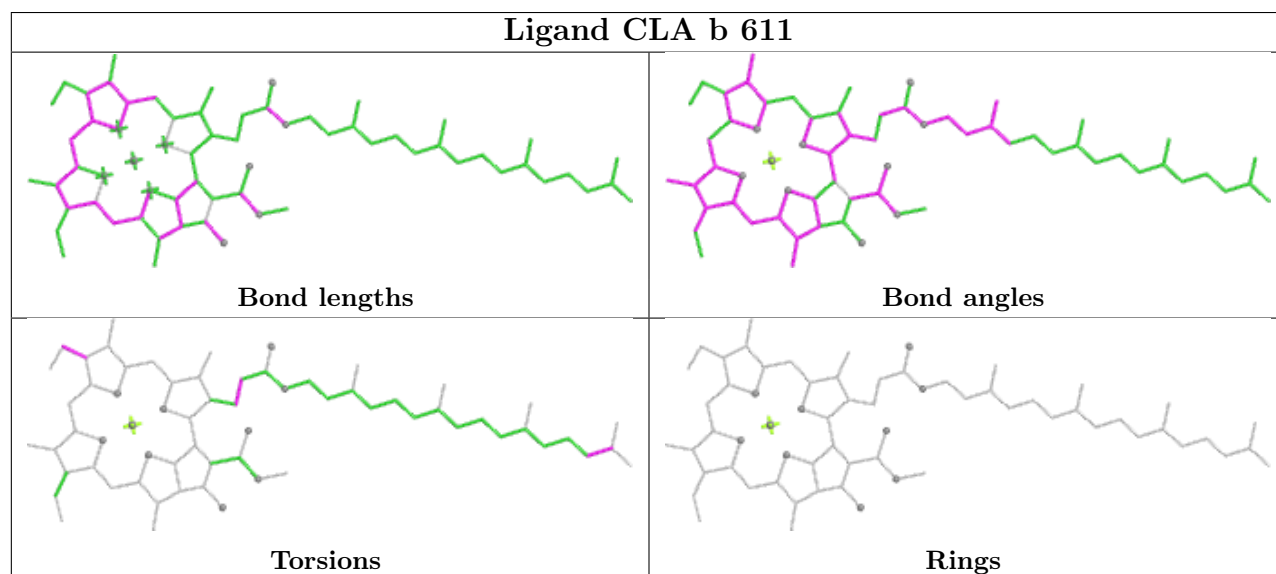
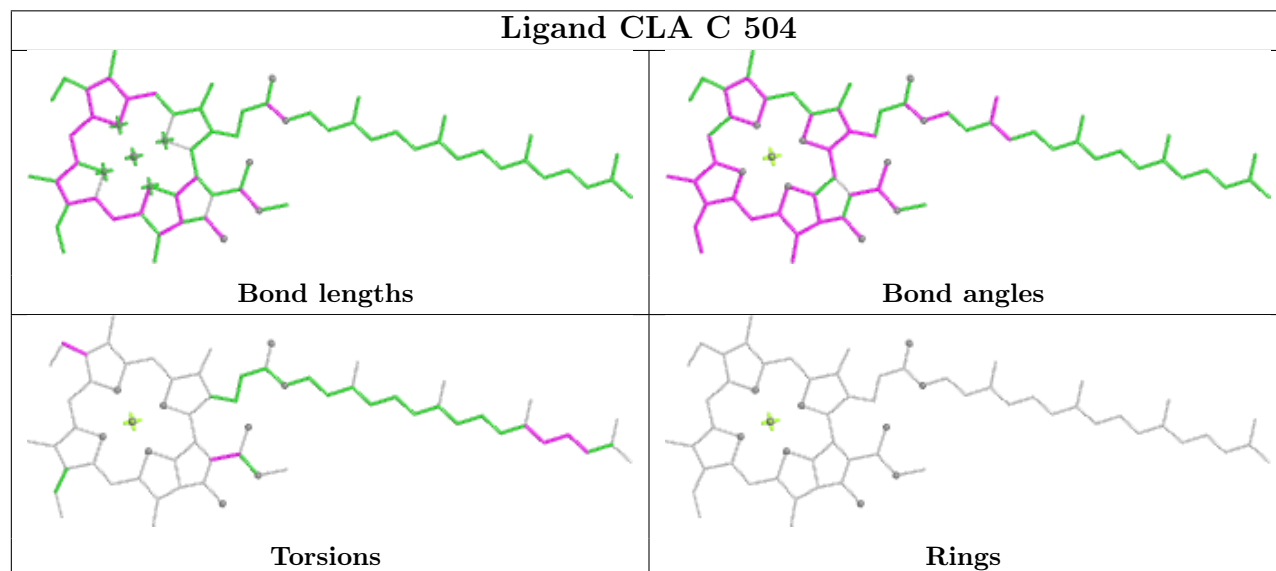
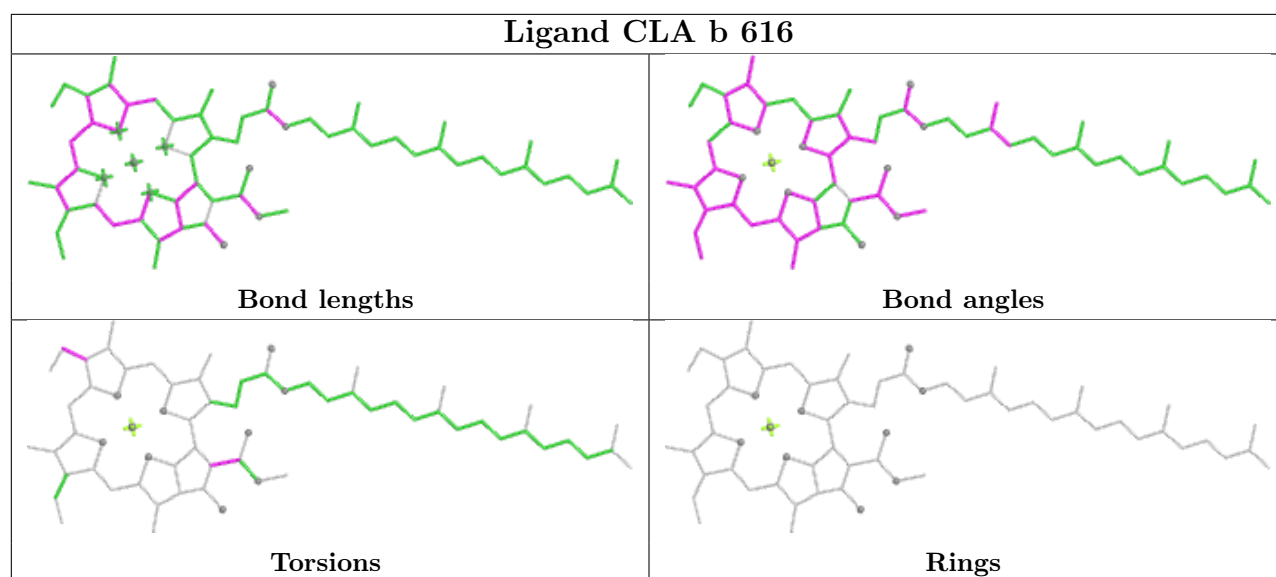
Ligand PL9 D 405 (A)	
	
Bond lengths	Bond angles
	
Torsions	Rings

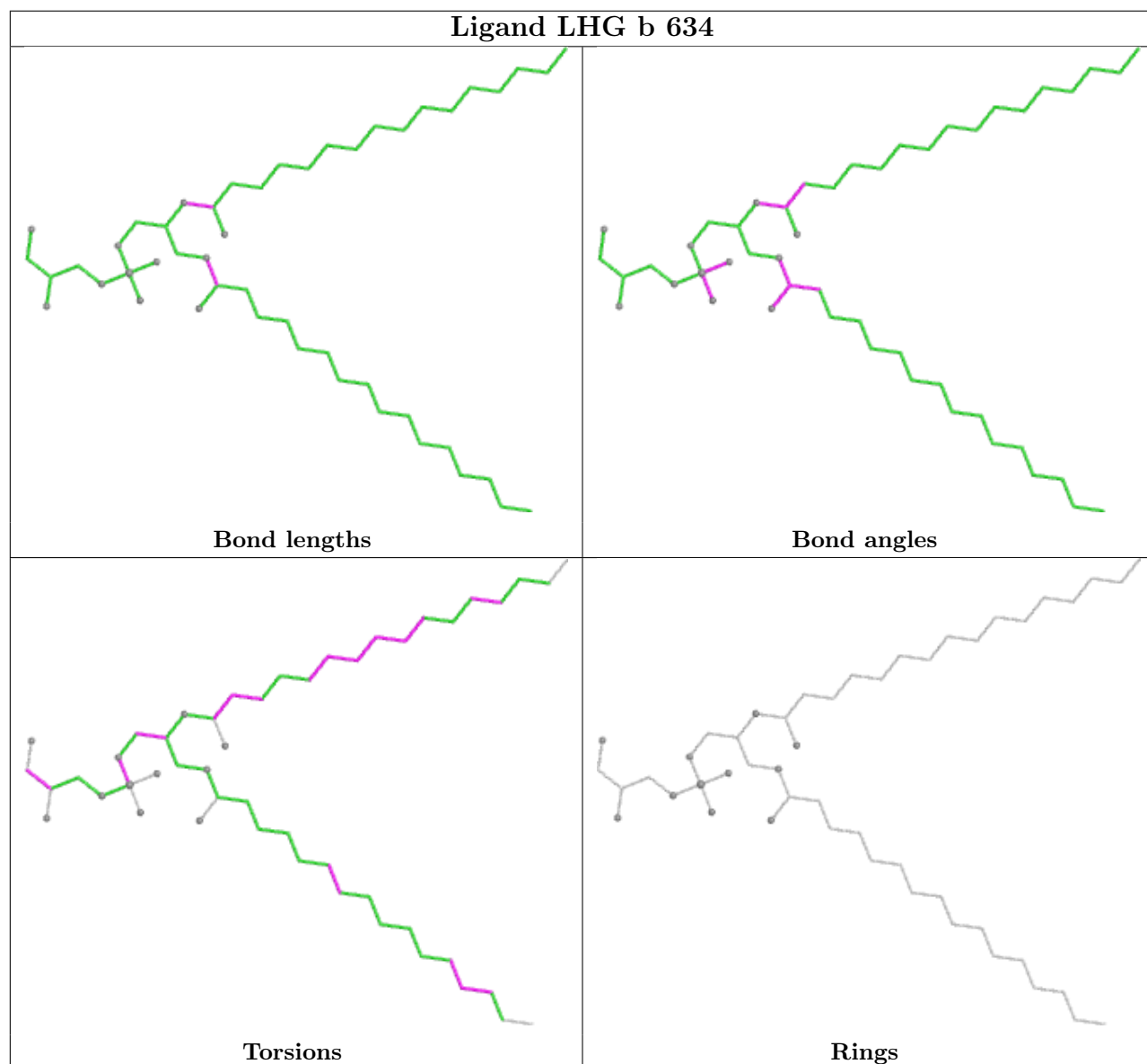
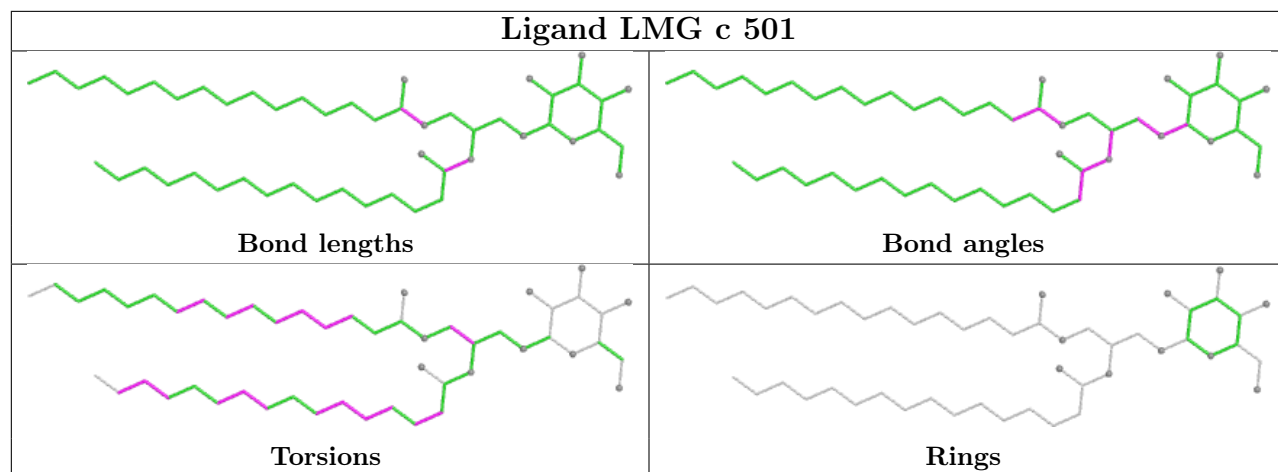
Ligand BCR C 514	
	
Bond lengths	Bond angles
	
Torsions	Rings

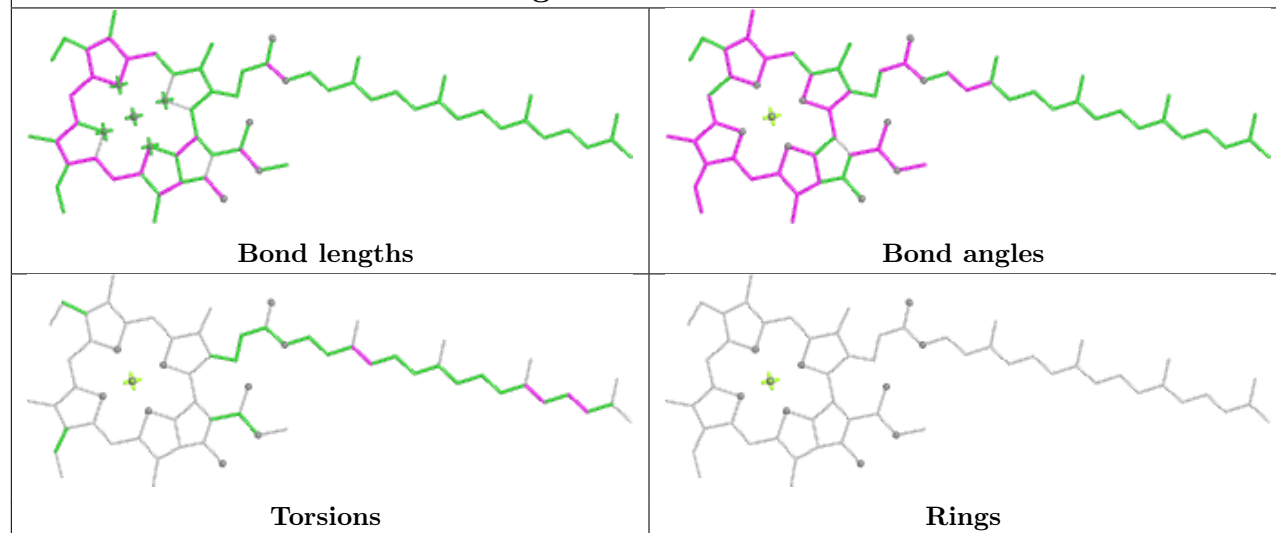
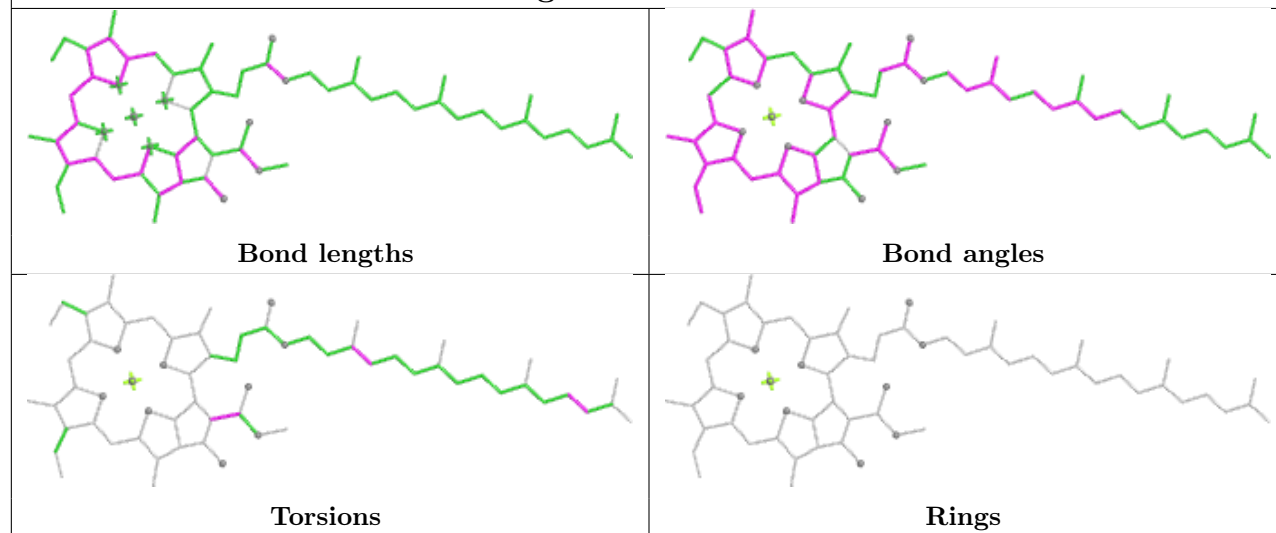
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Bond lengths	Bond angles
	
Torsions	Rings

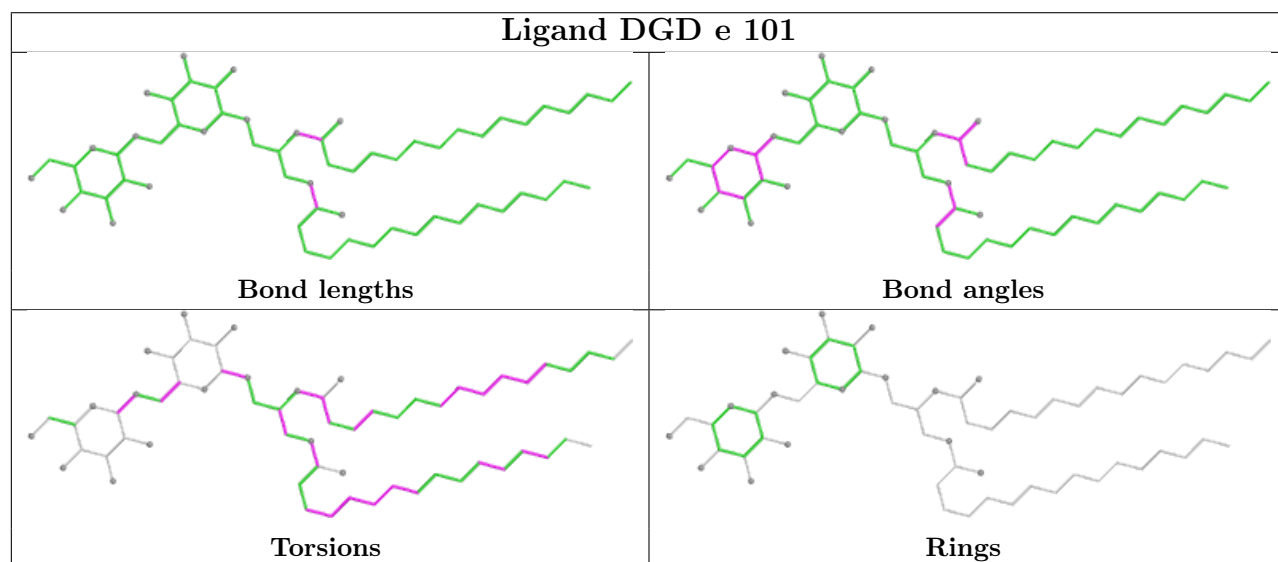
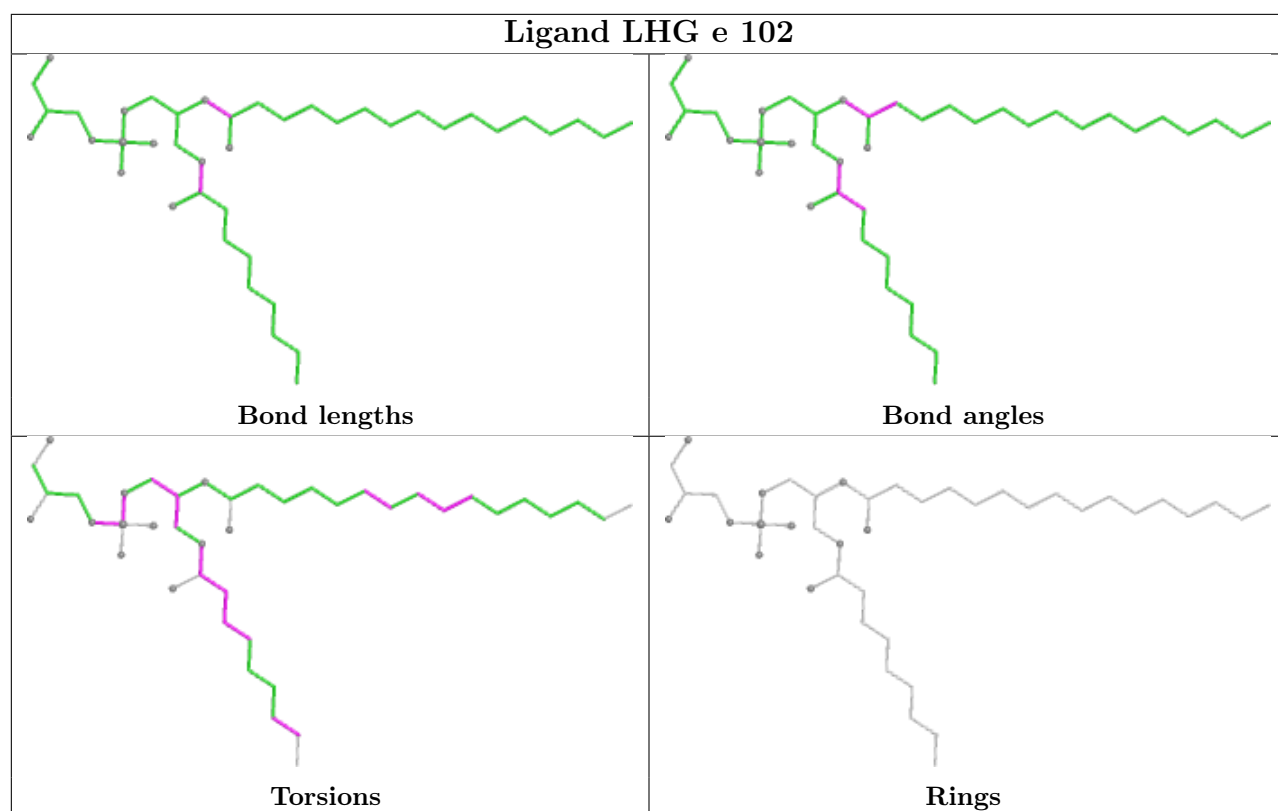
Ligand LMG z 101	
	
Bond lengths	Bond angles
	
Torsions	Rings

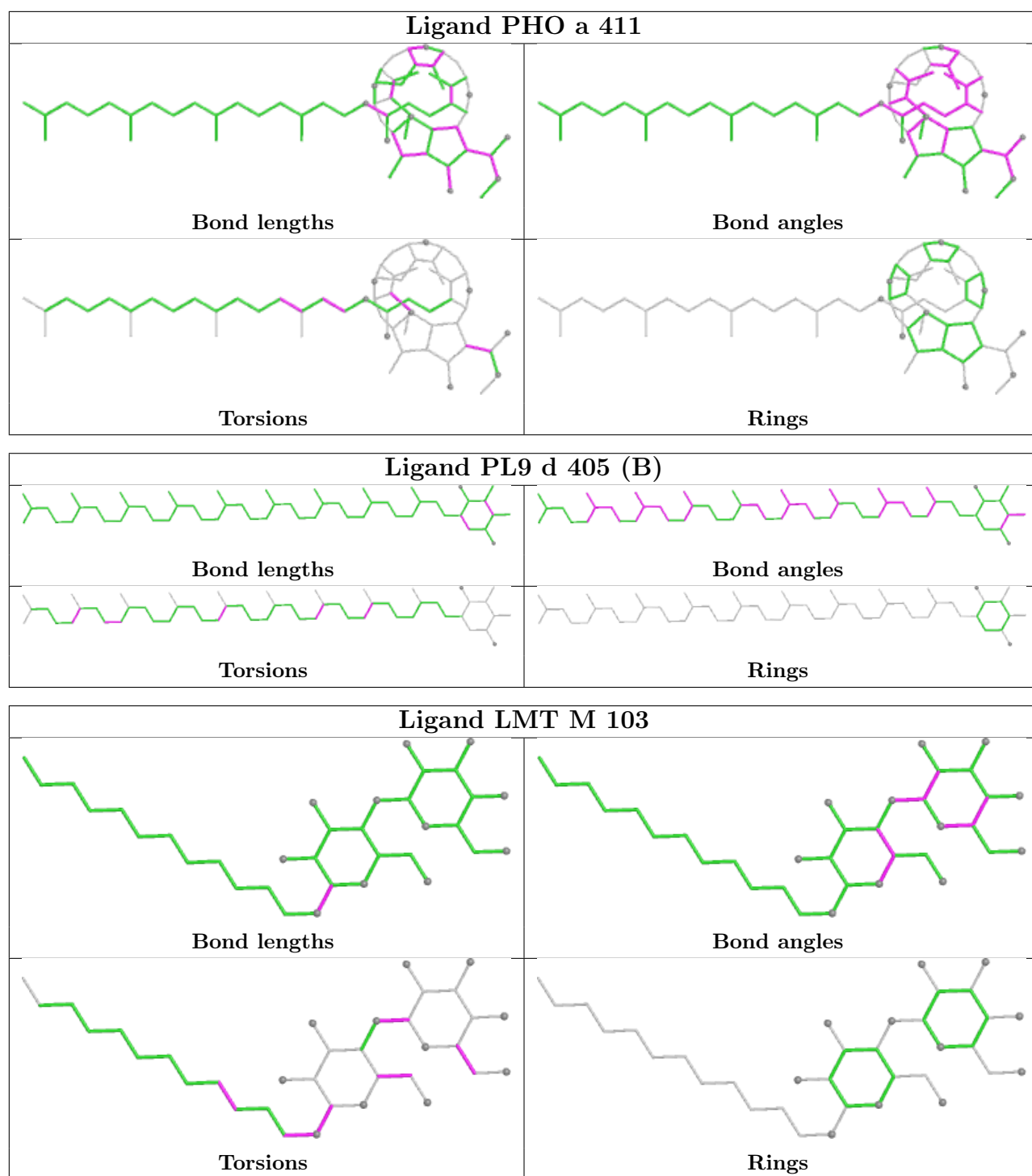
Ligand PHO a 418 (A)	
	
Bond lengths	Bond angles
	
Torsions	Rings

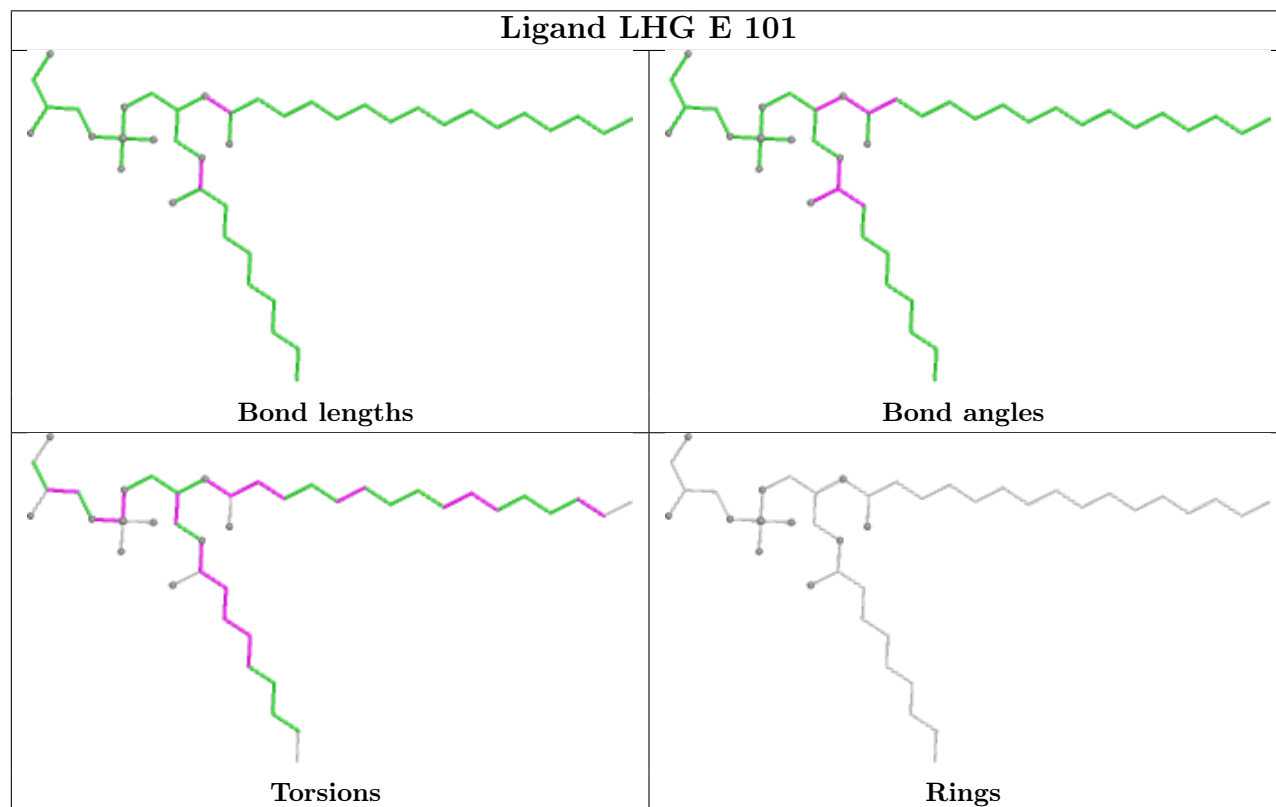
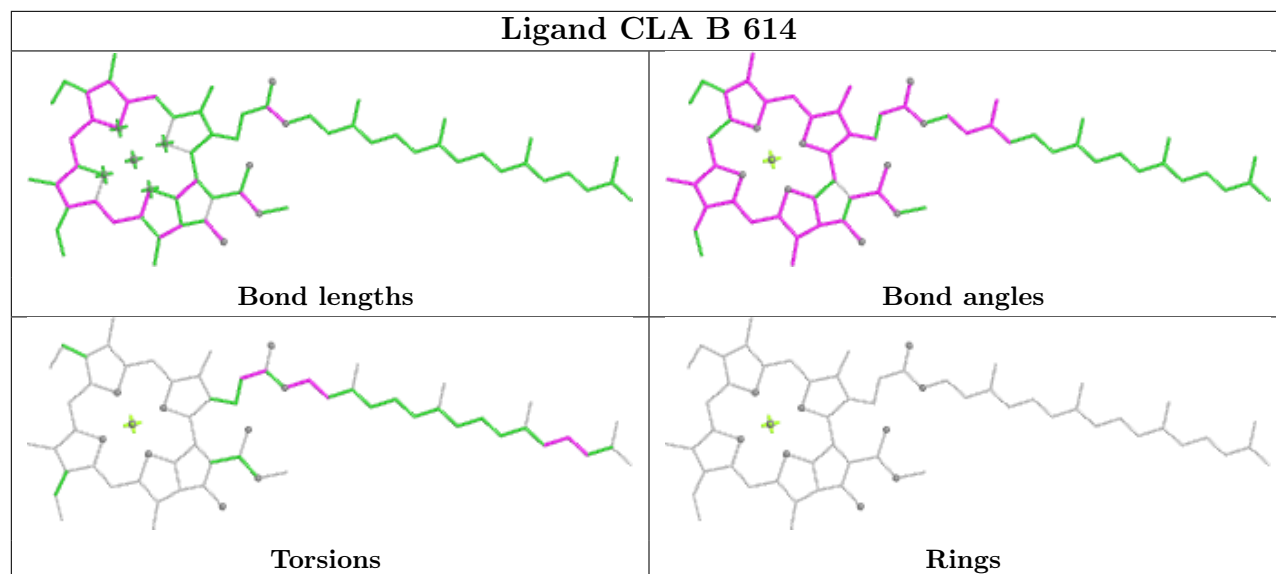


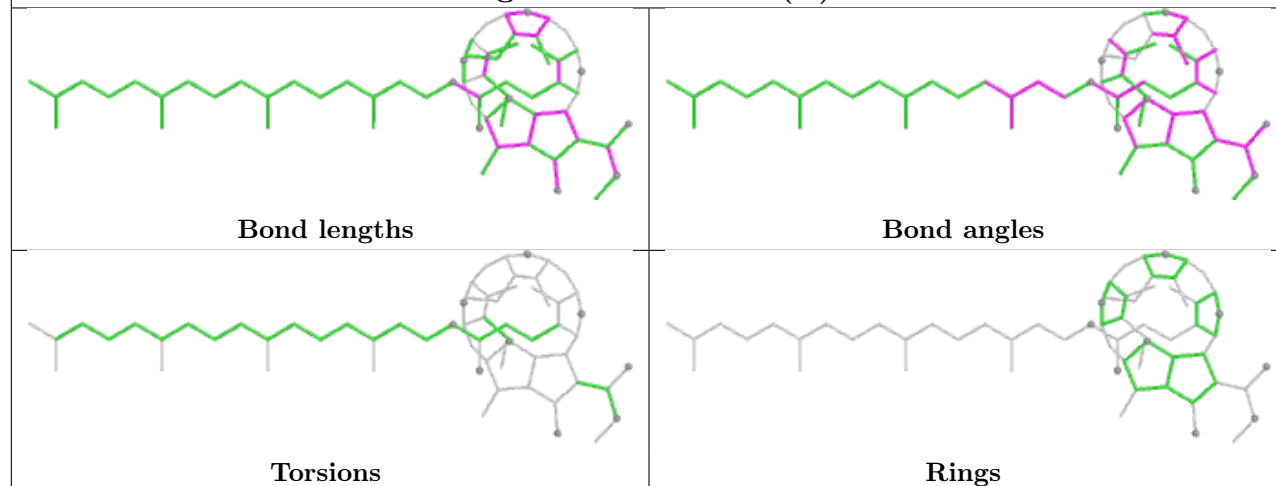
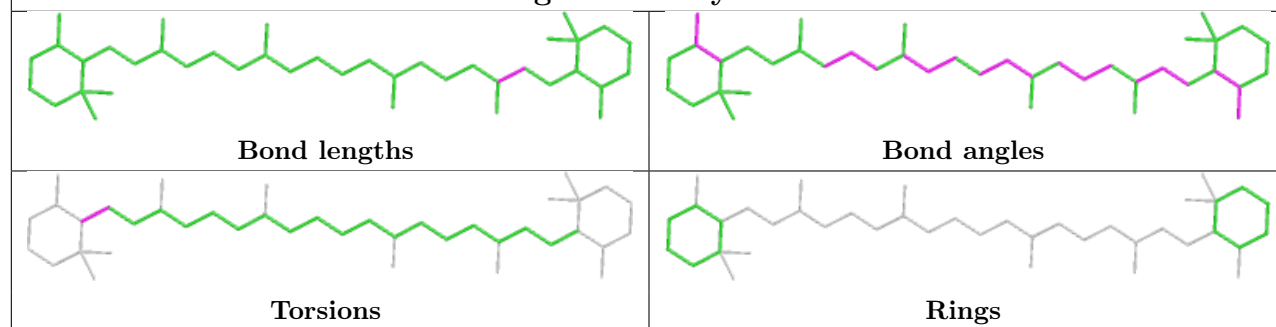
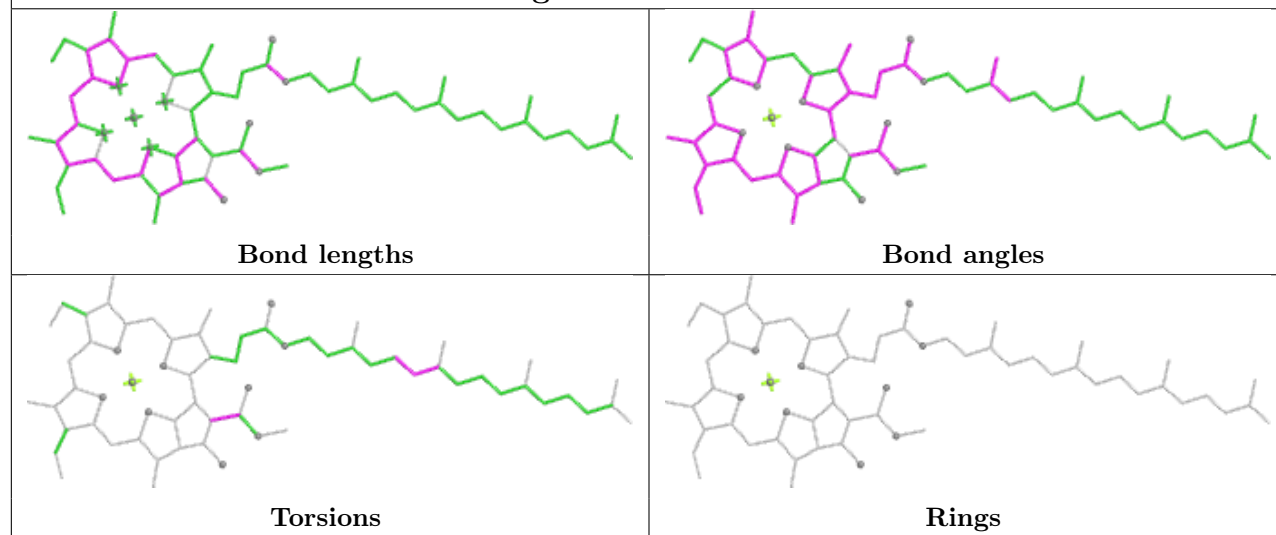


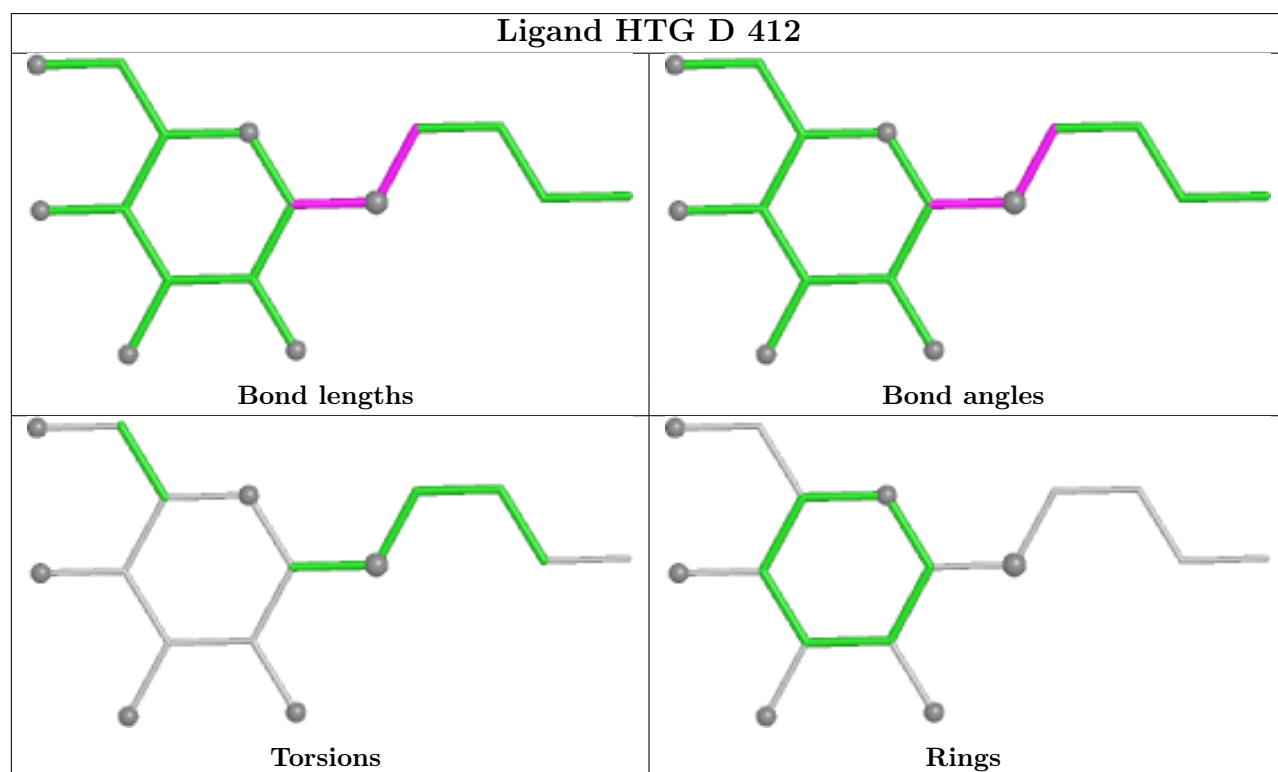
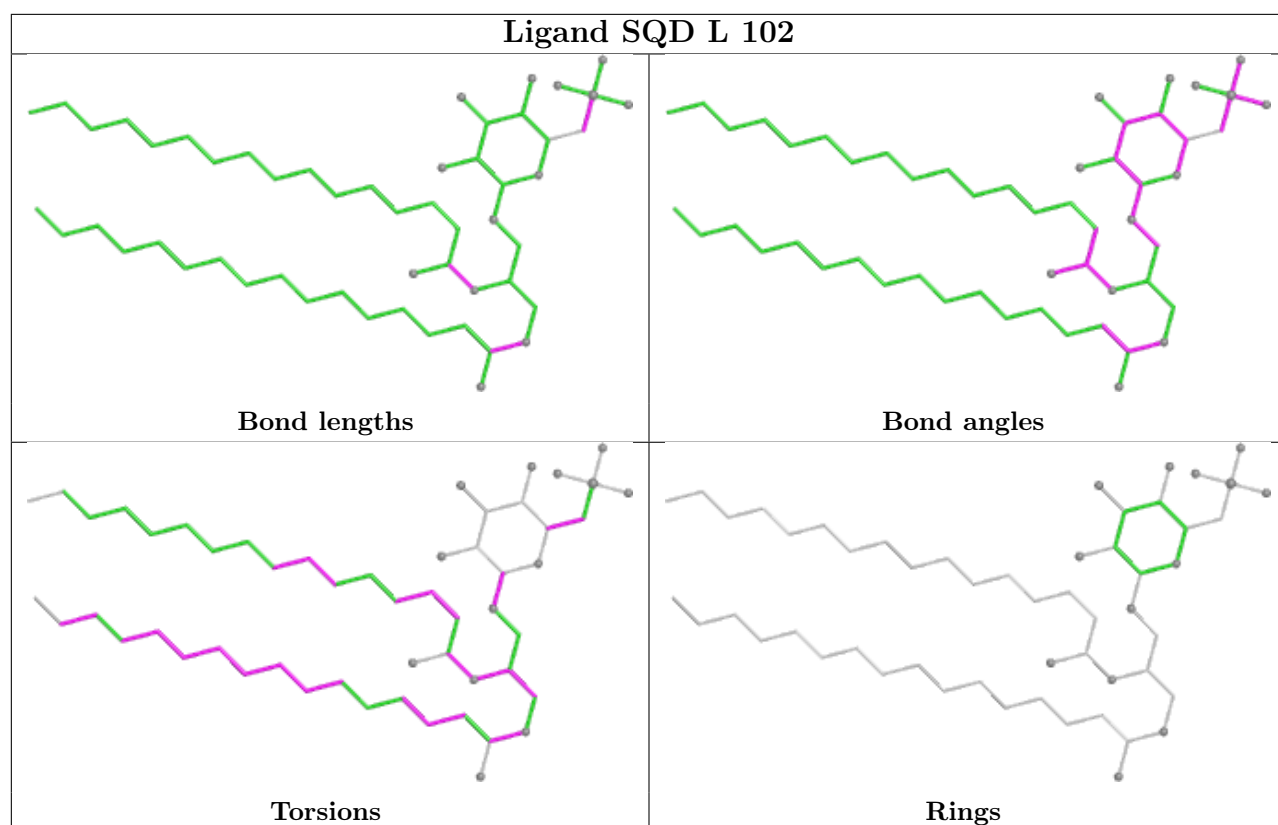
Ligand CLA B 612**Ligand CLA c 509**

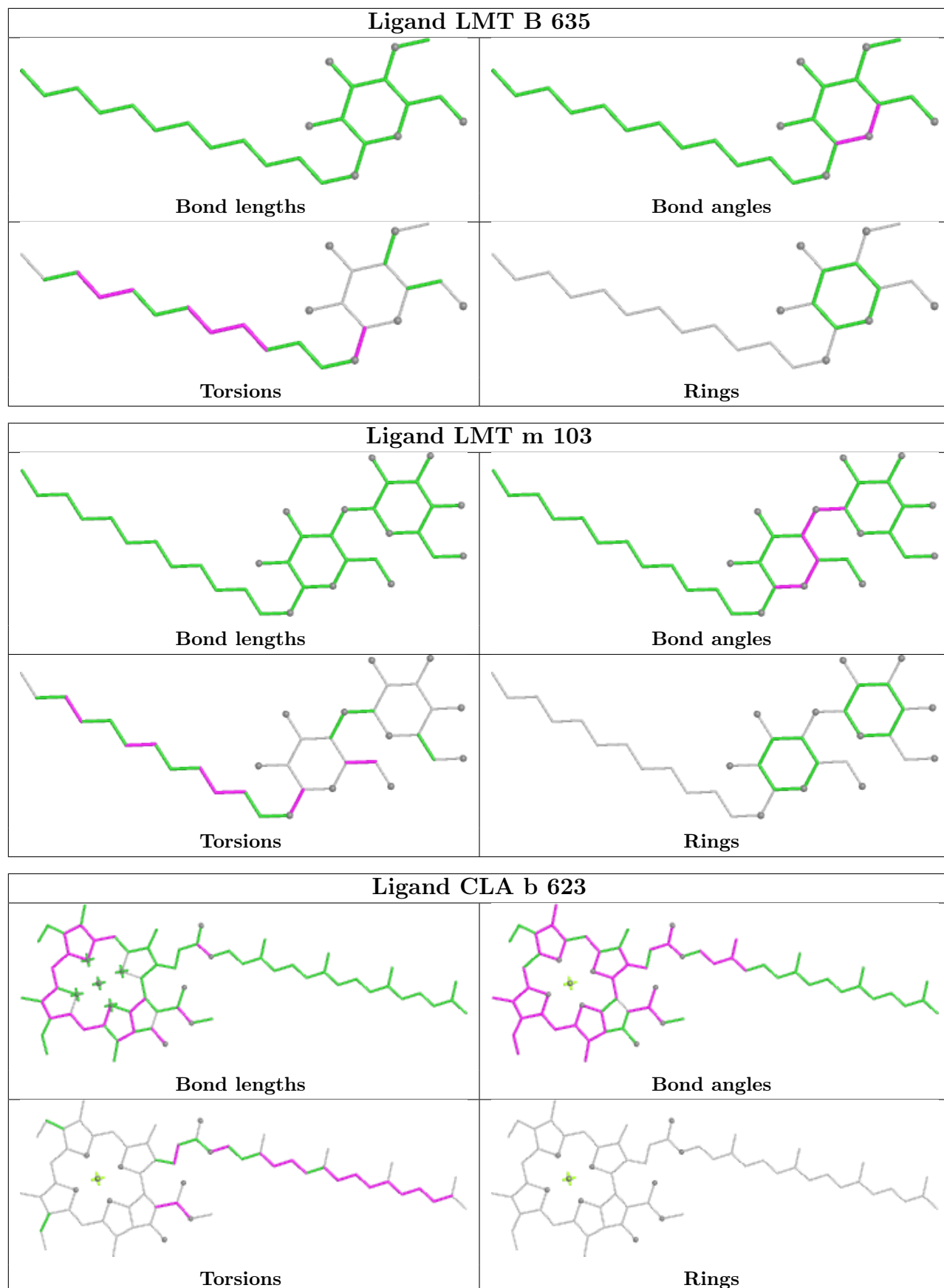


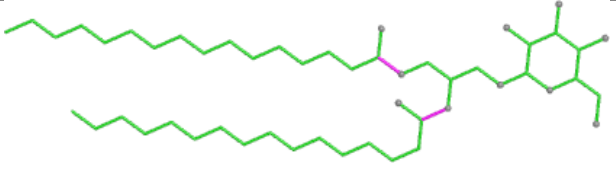
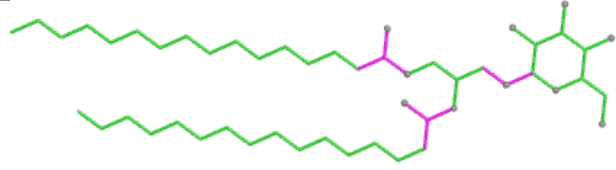
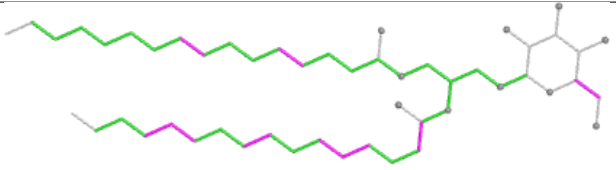
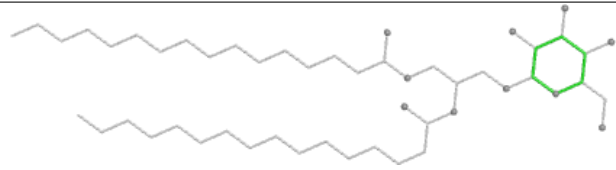


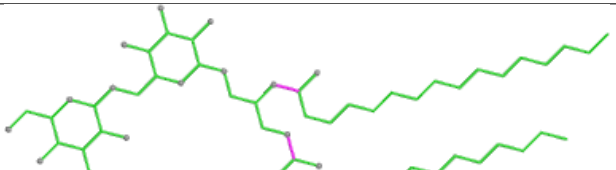
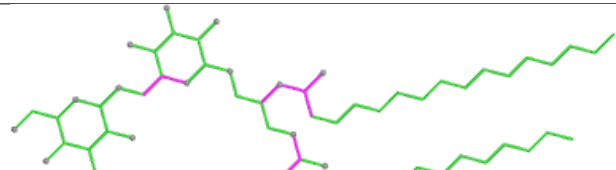
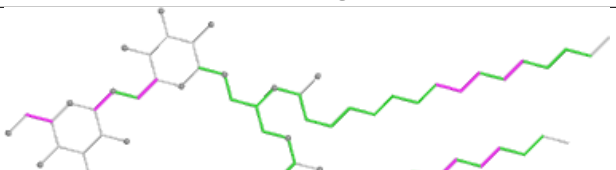
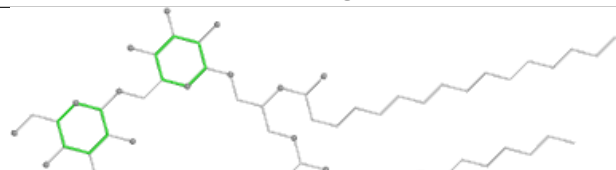


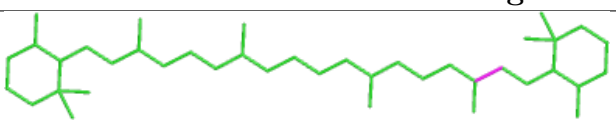
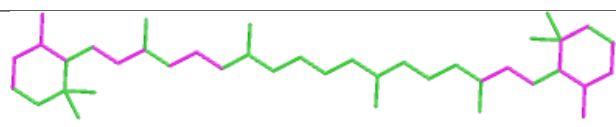
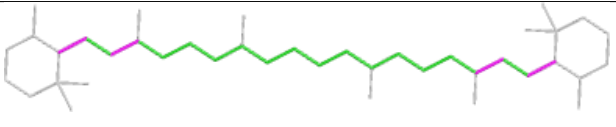
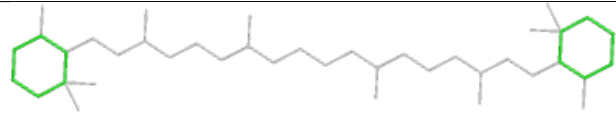
Ligand PHO A 409 (B)**Ligand BCR y 101****Ligand CLA B 604**

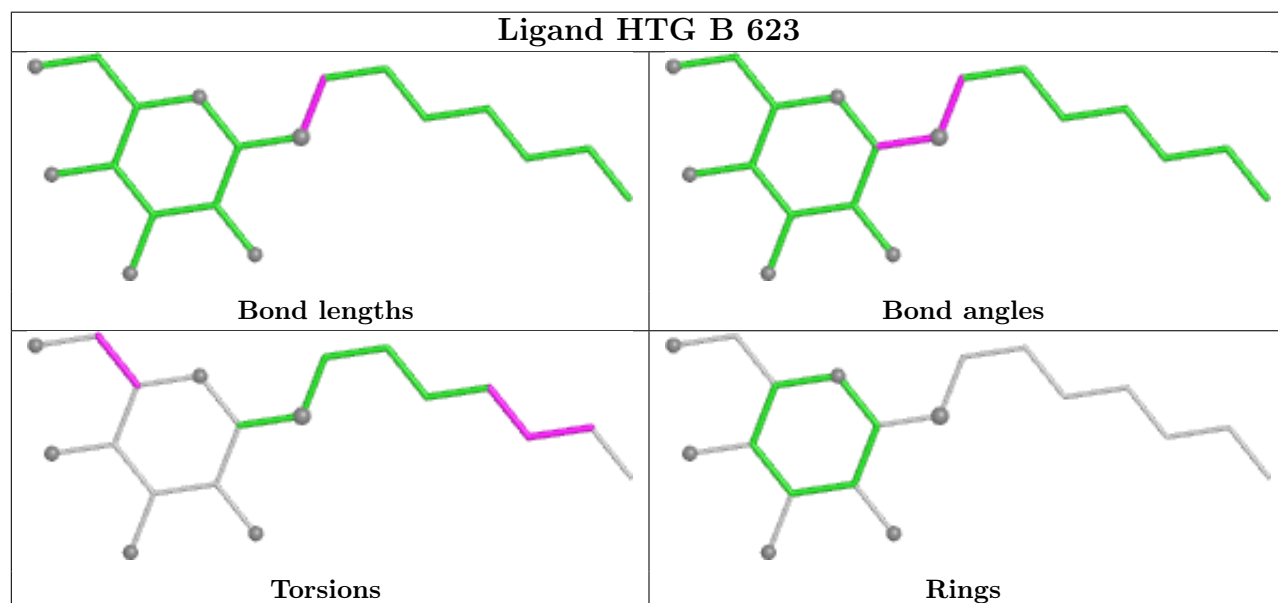
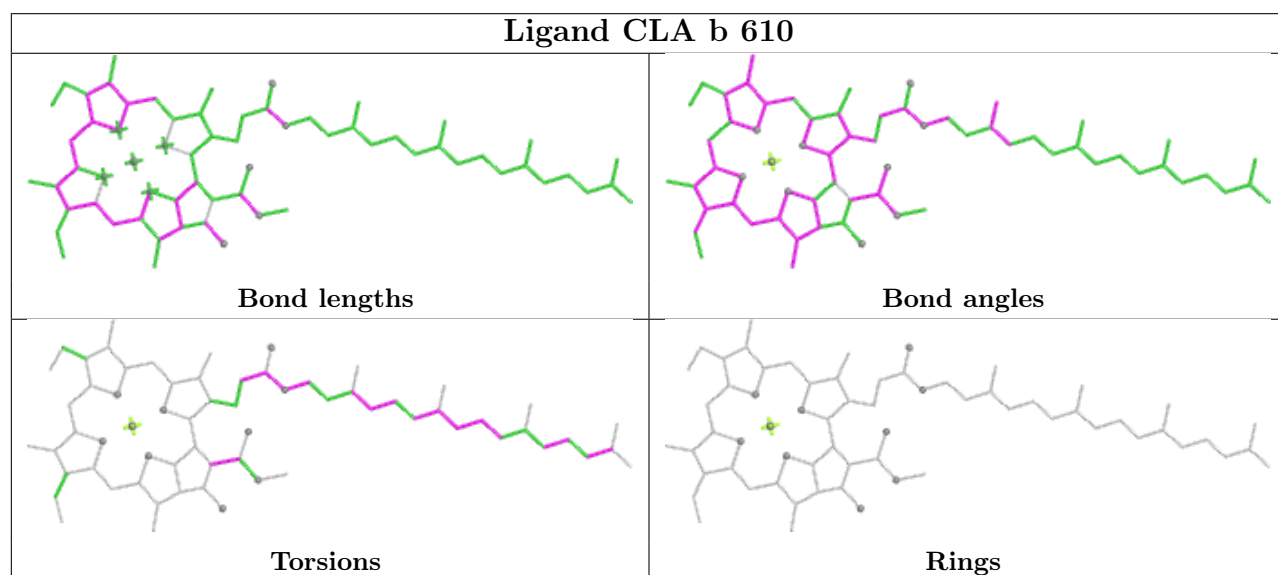
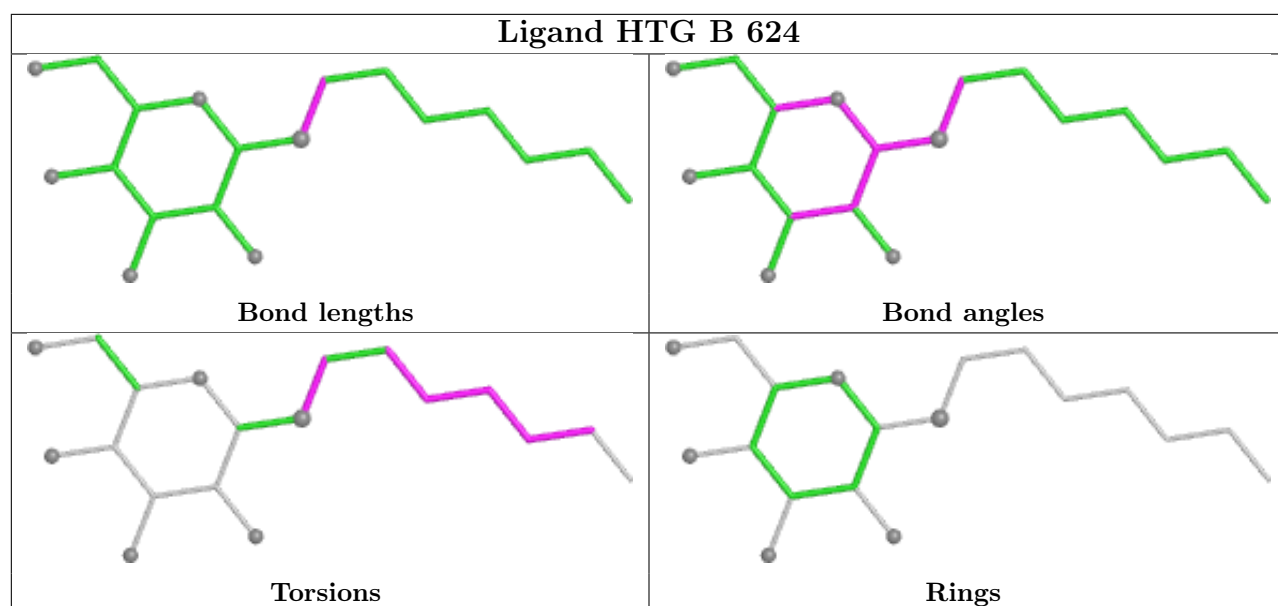


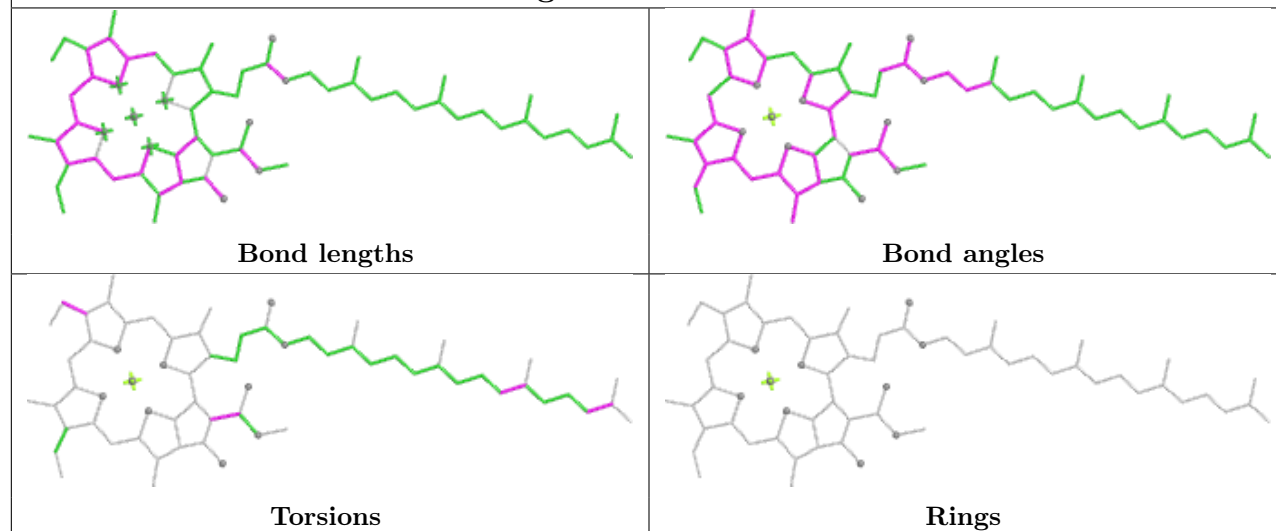
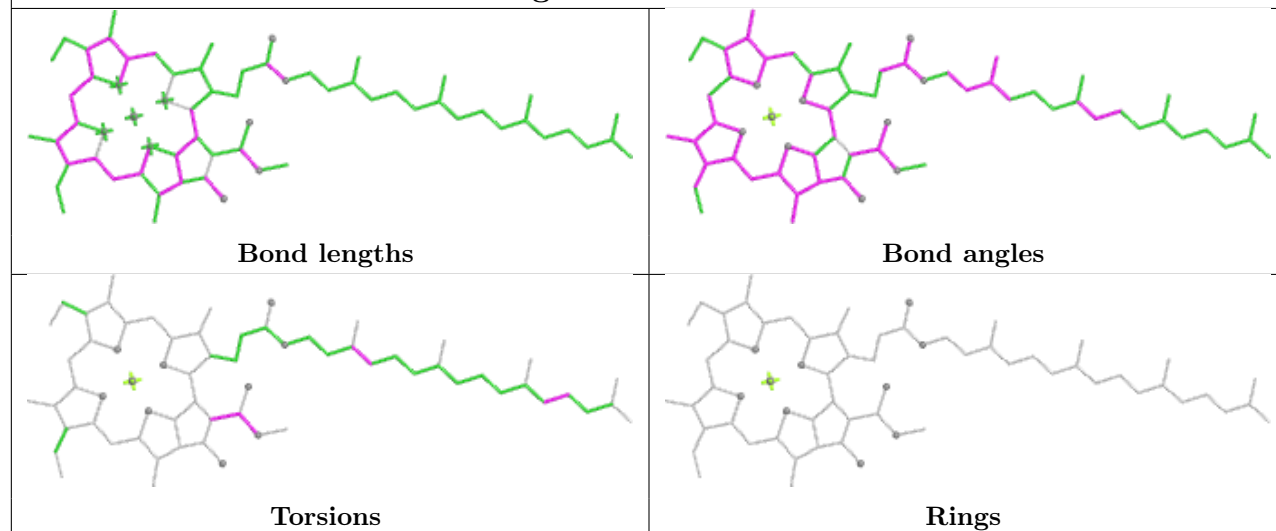


Ligand LMG D 413	
	
Bond lengths	Bond angles
	
Torsions	Rings

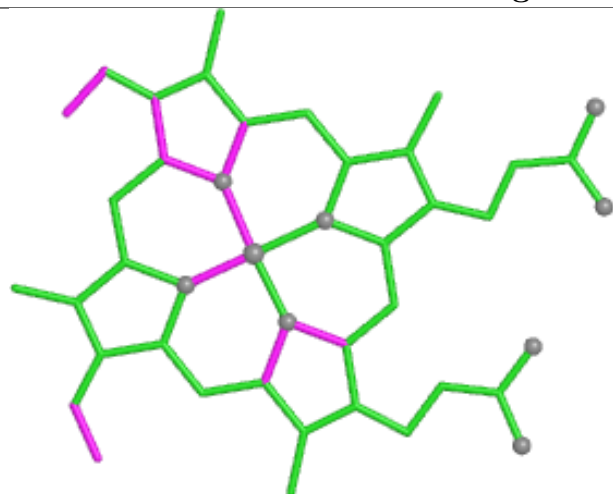
Ligand DGD c 520	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand BCR D 404	
	
Bond lengths	Bond angles
	
Torsions	Rings

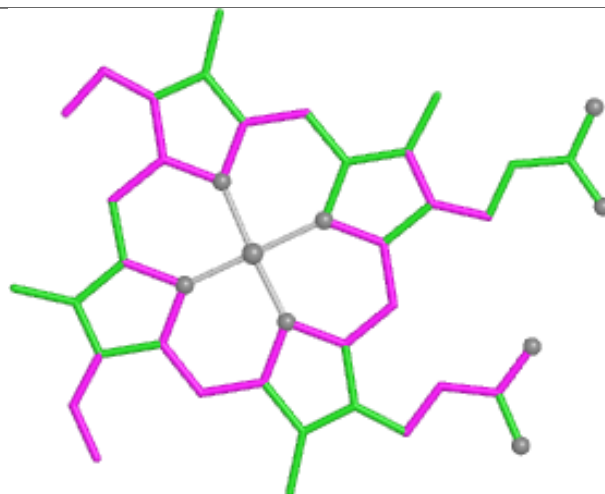


Ligand CLA c 507**Ligand CLA B 605**

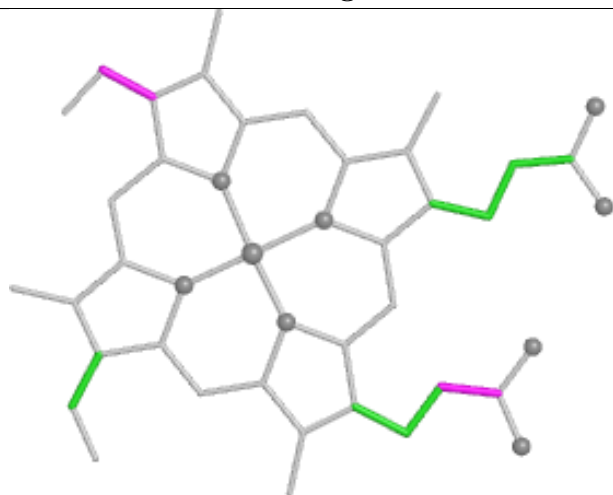
Ligand HEC V 205



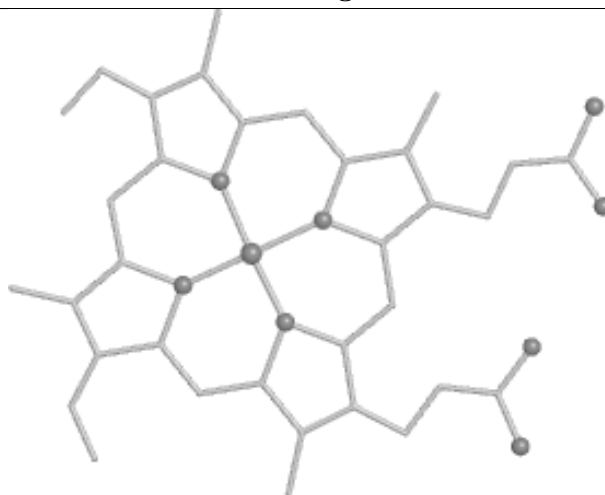
Bond lengths



Bond angles

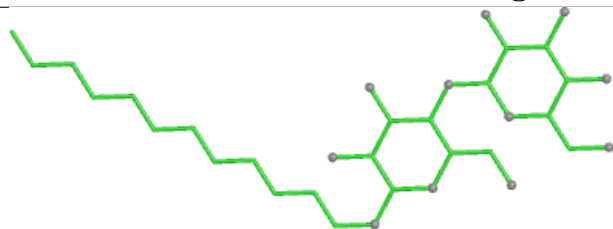


Torsions

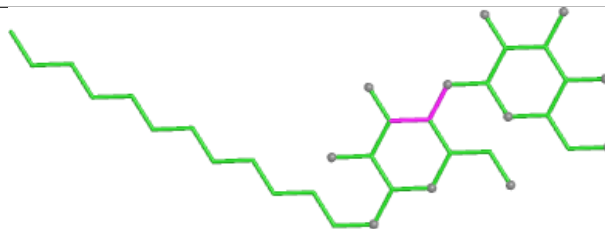


Rings

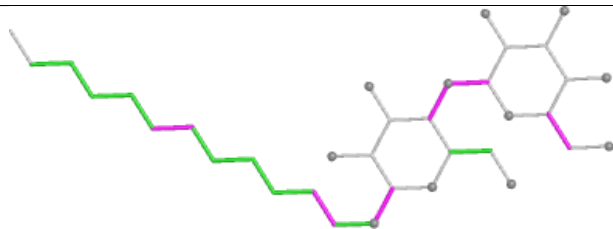
Ligand LMT D 401



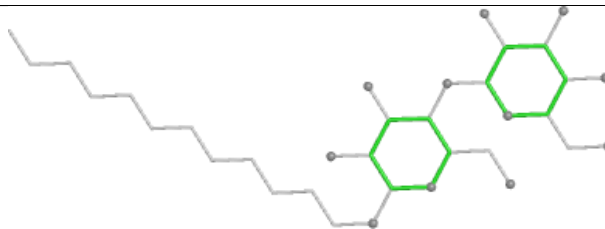
Bond lengths



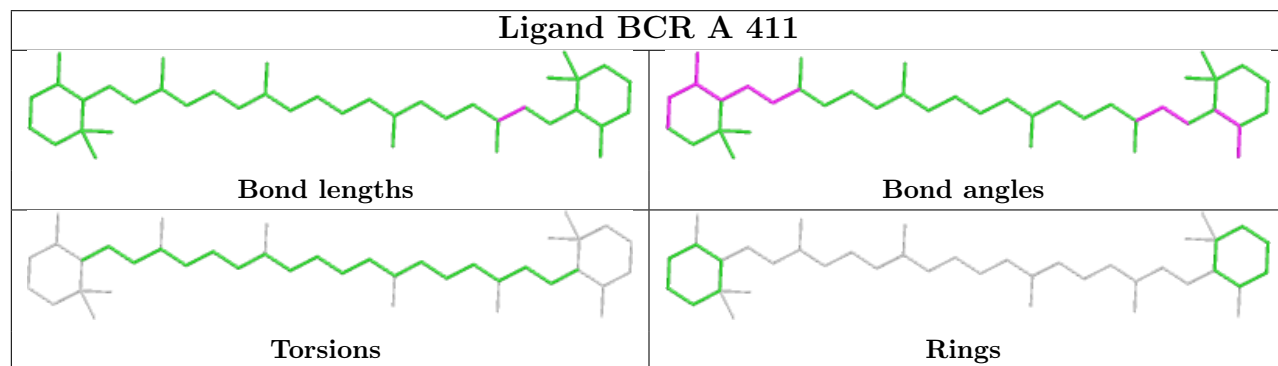
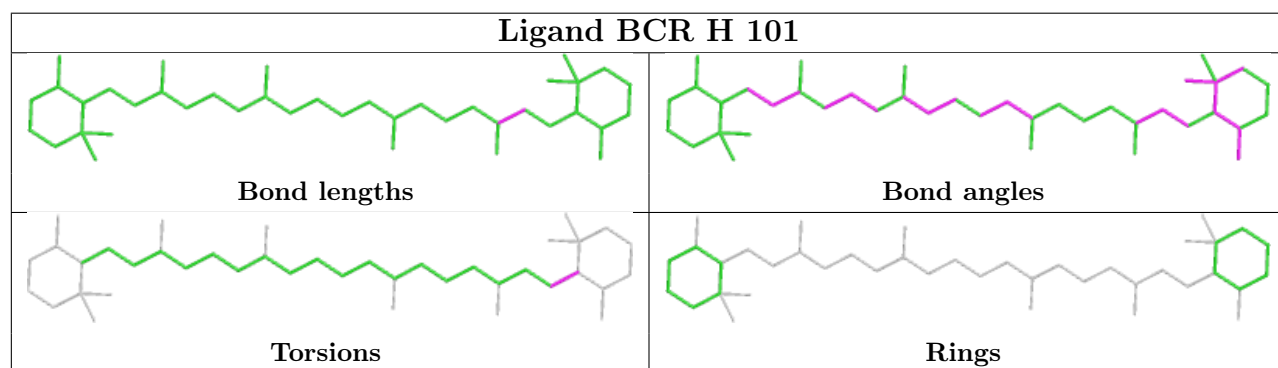
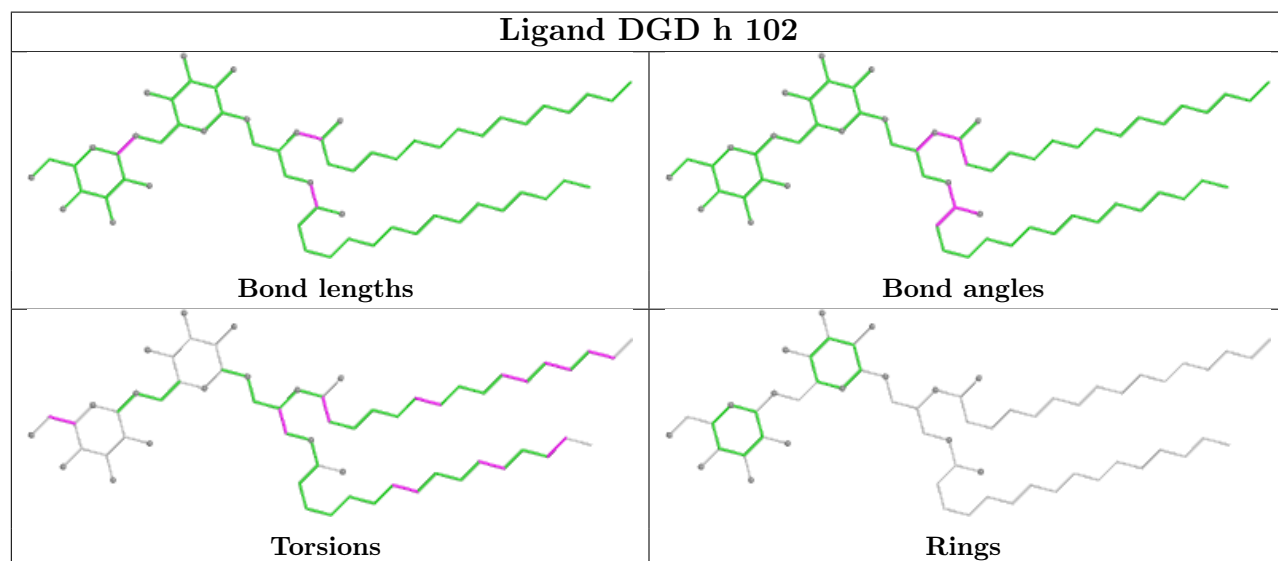
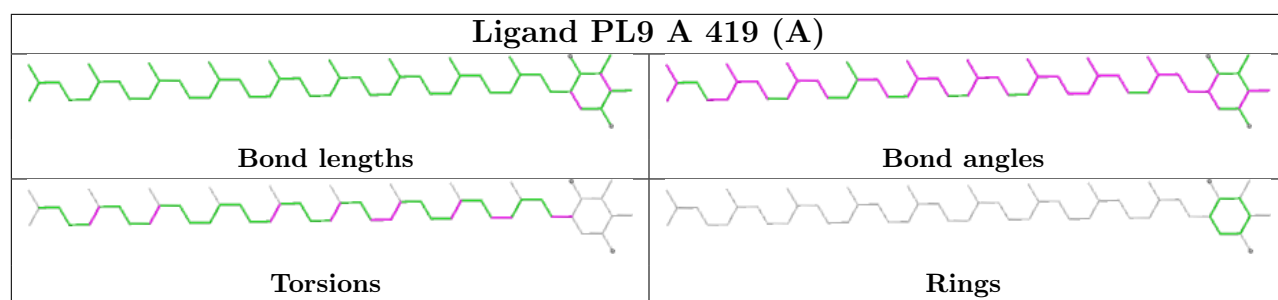
Bond angles

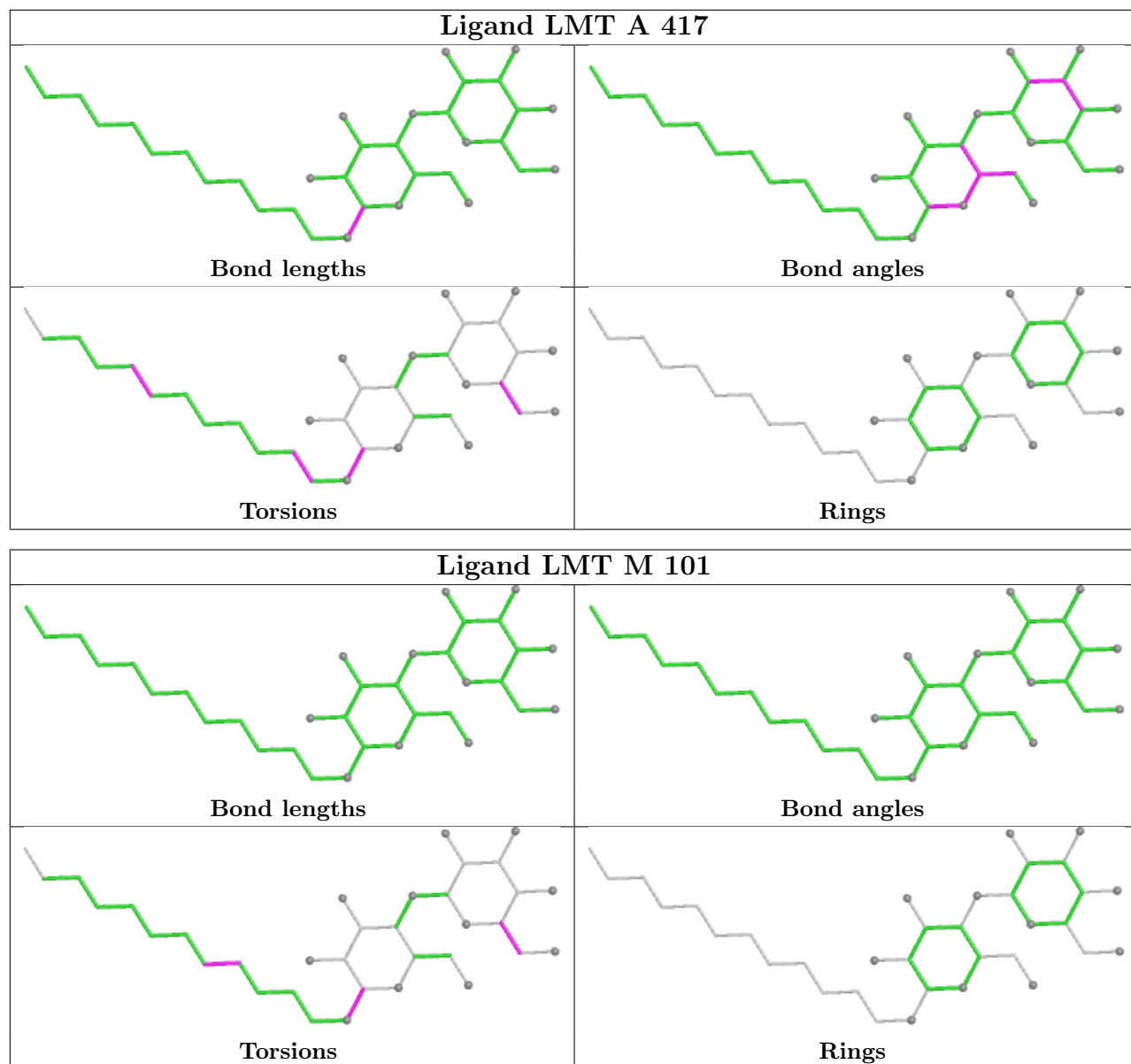


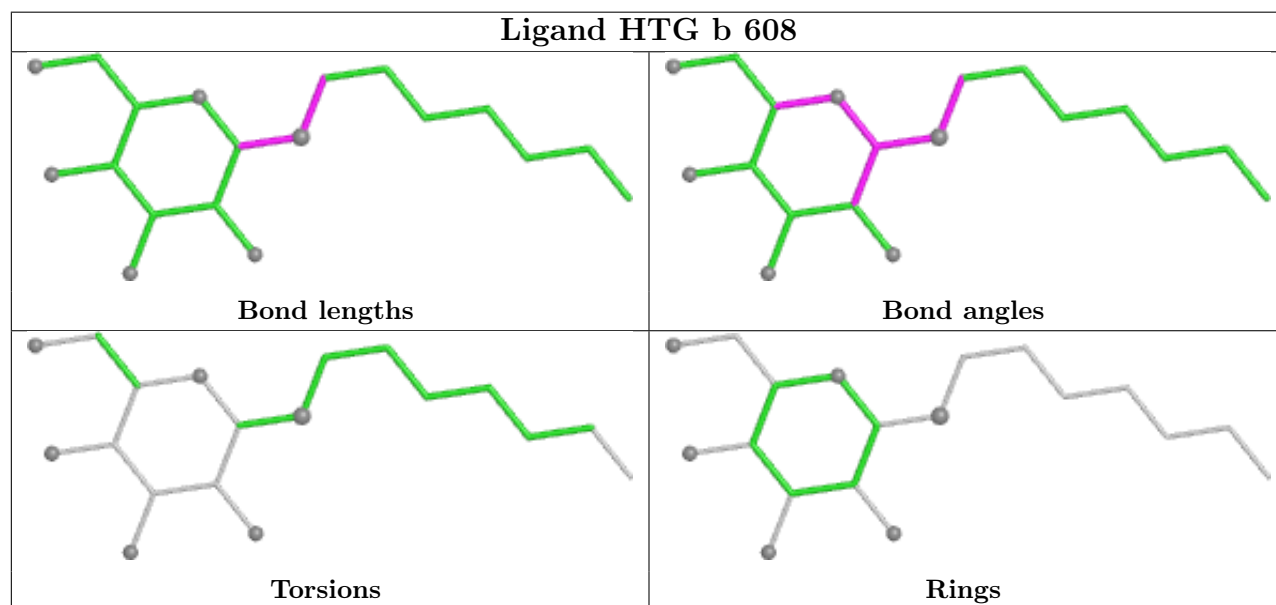
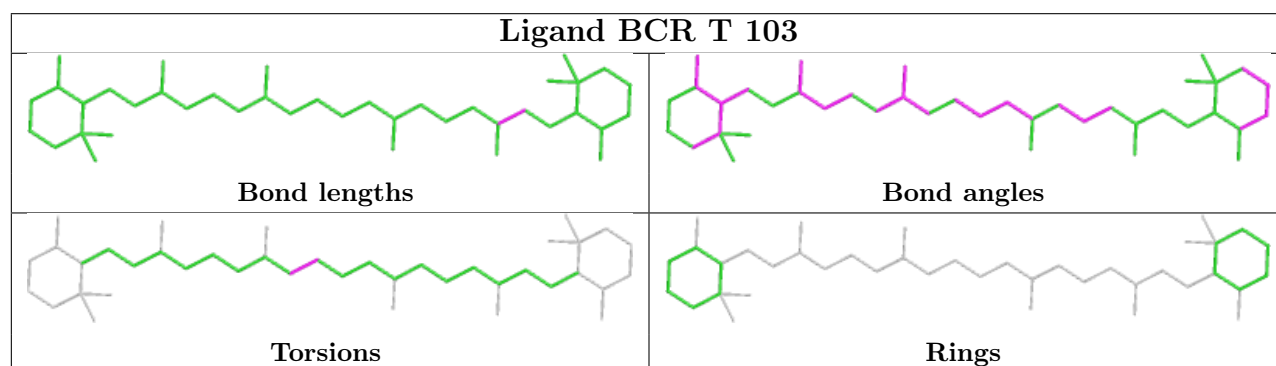
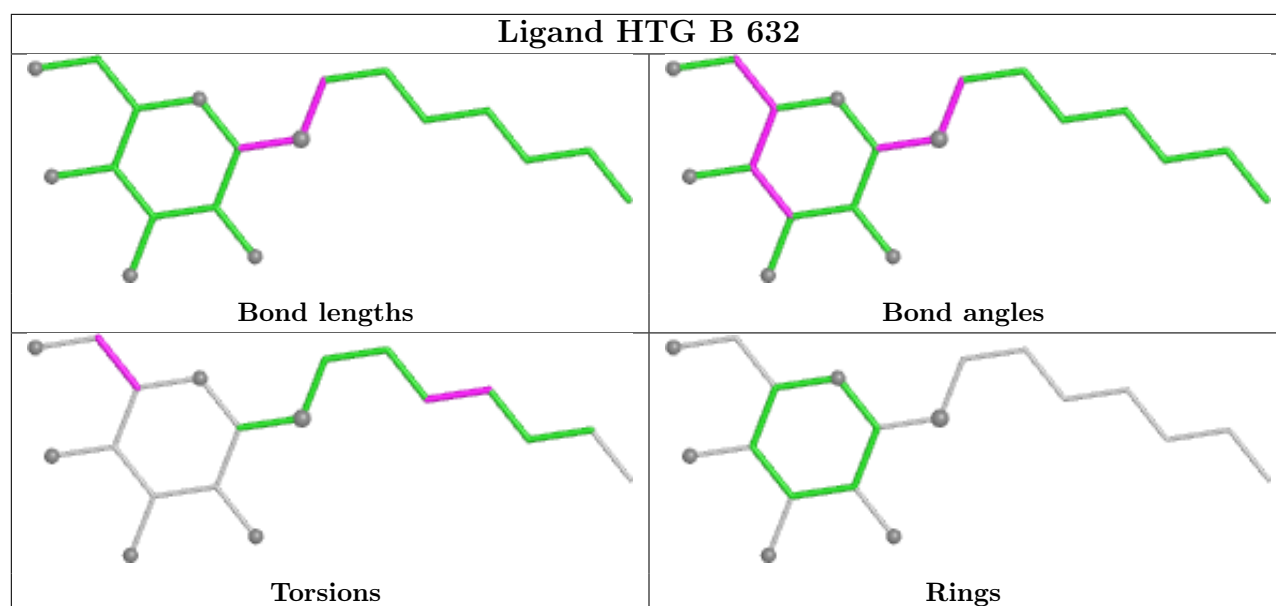
Torsions



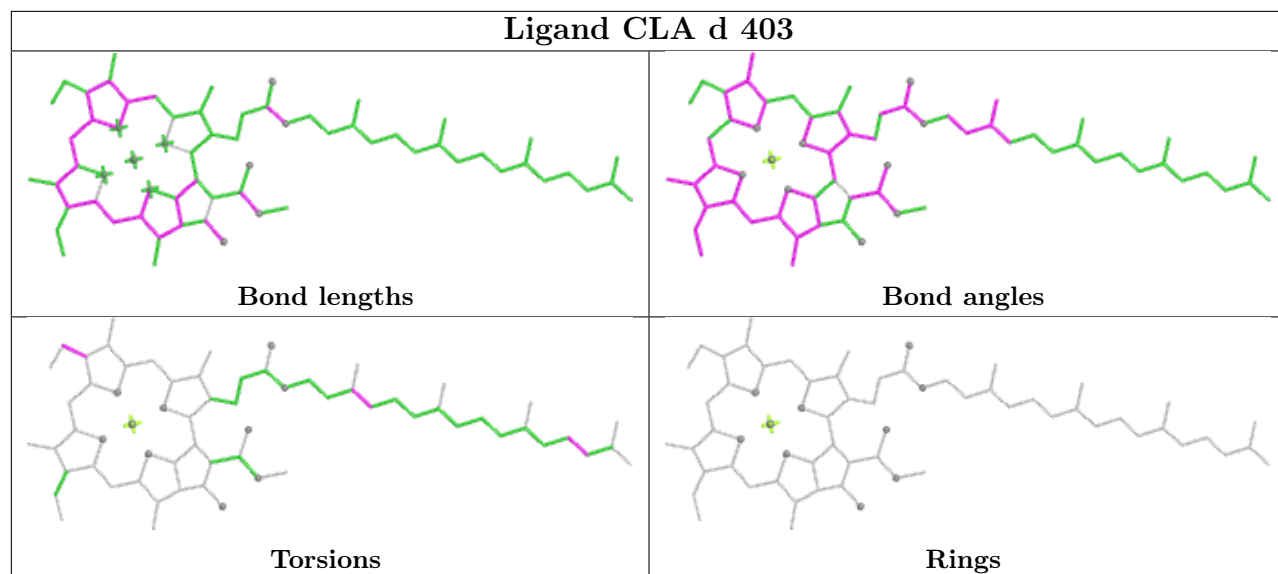
Rings



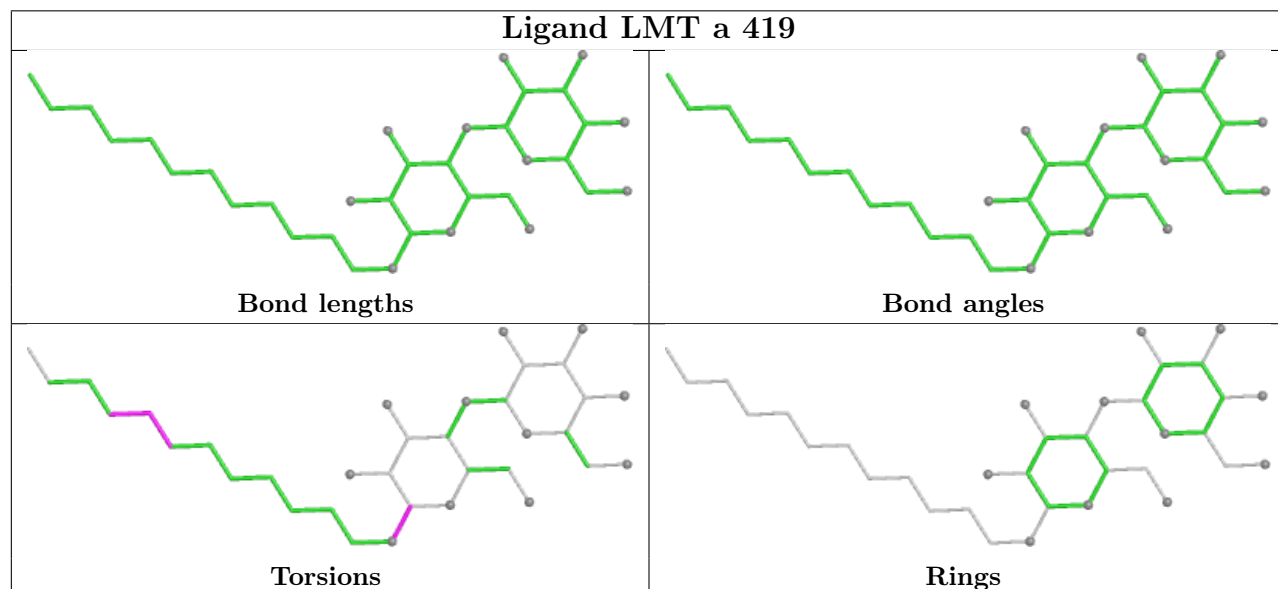




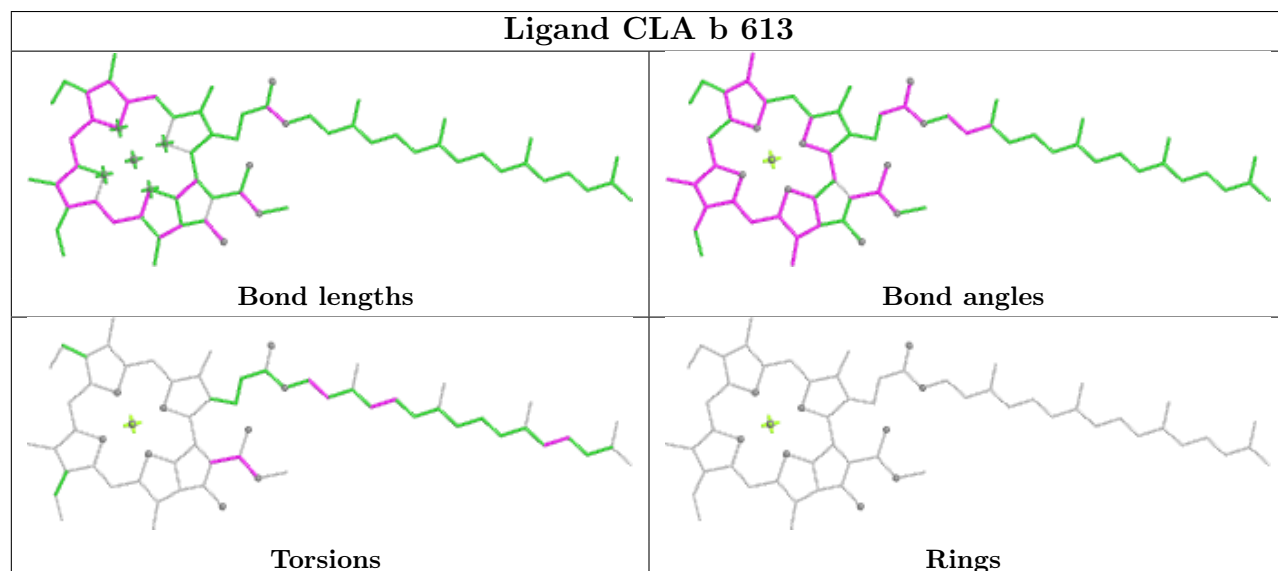
Ligand CLA d 403

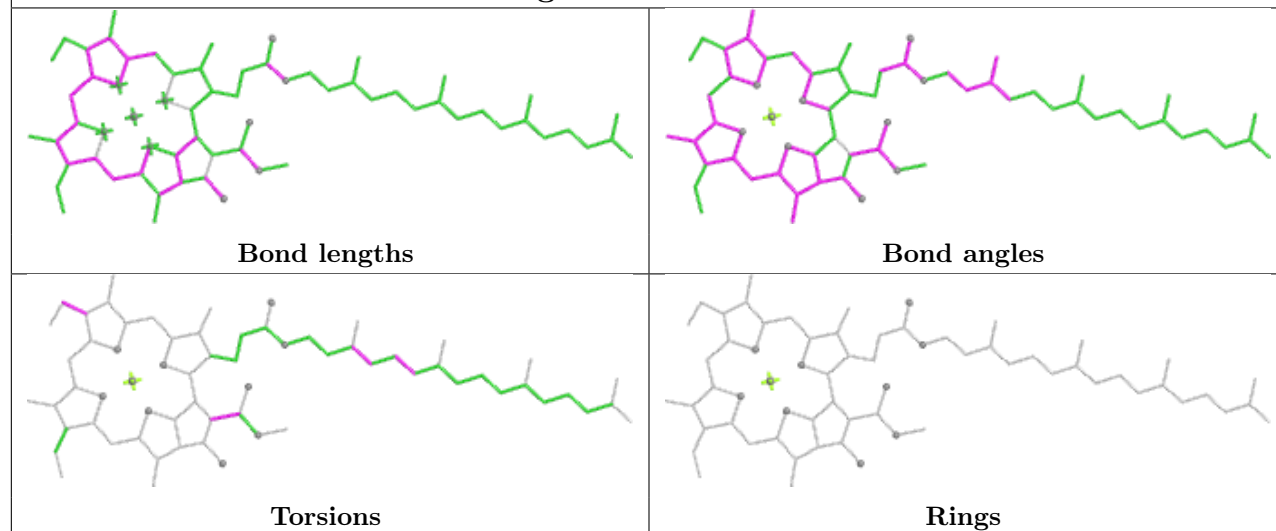
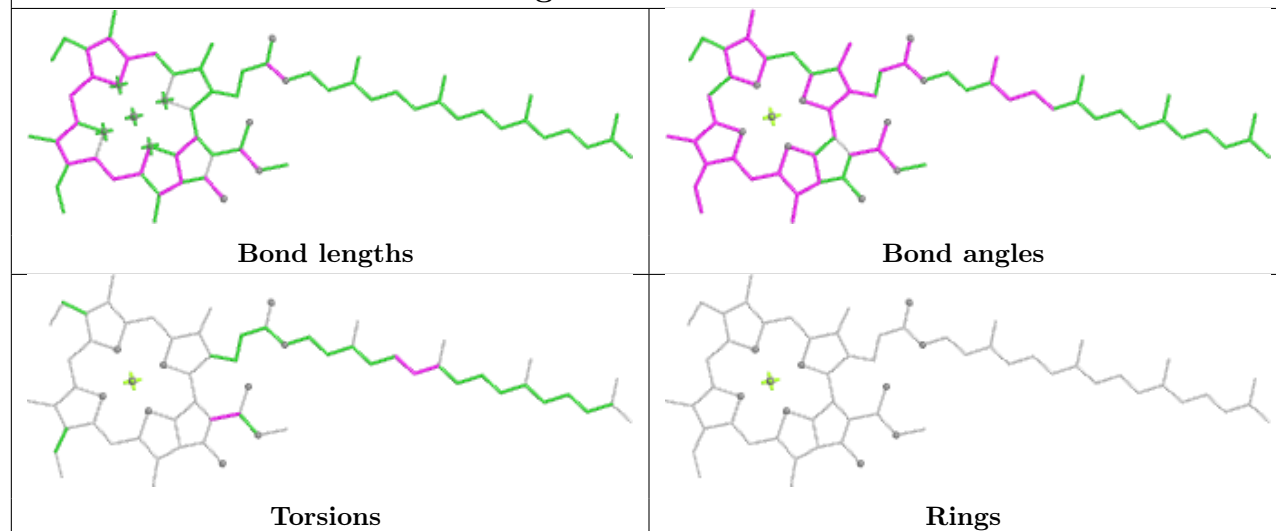
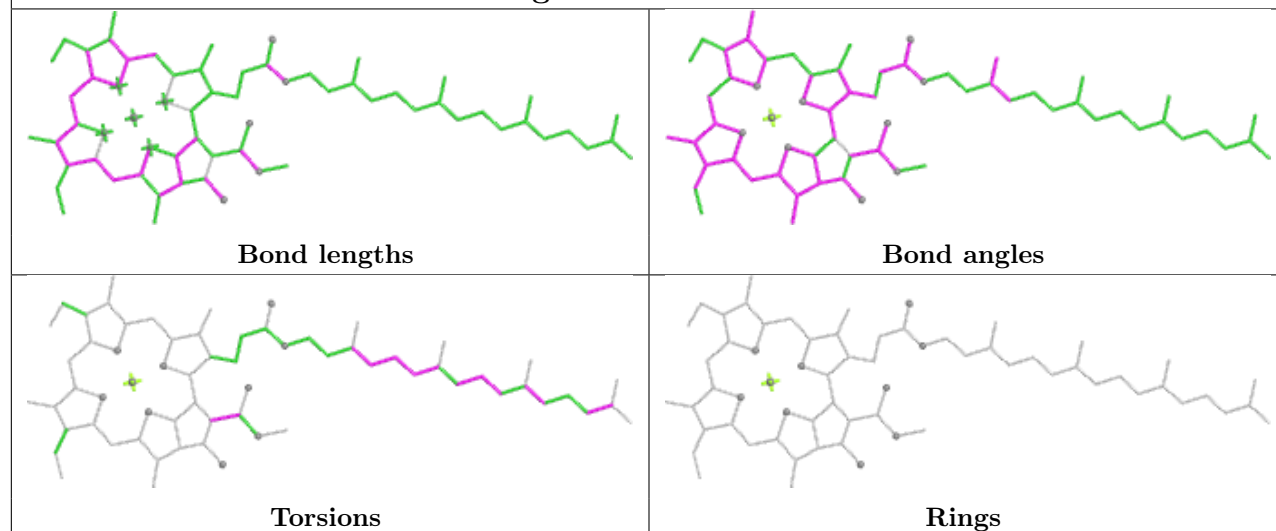


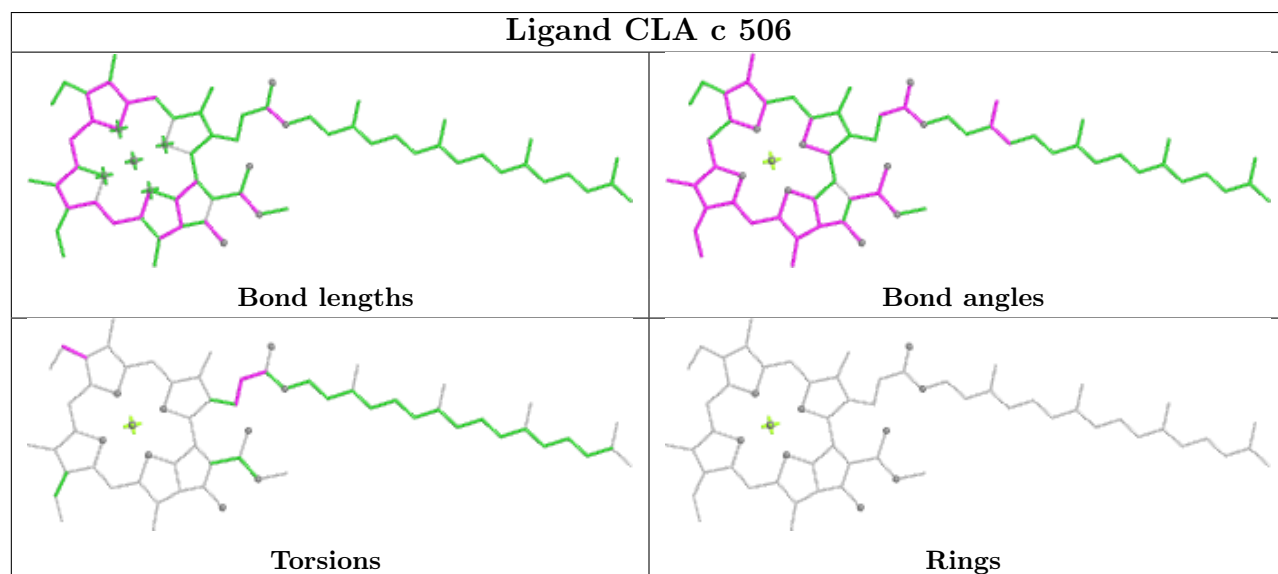
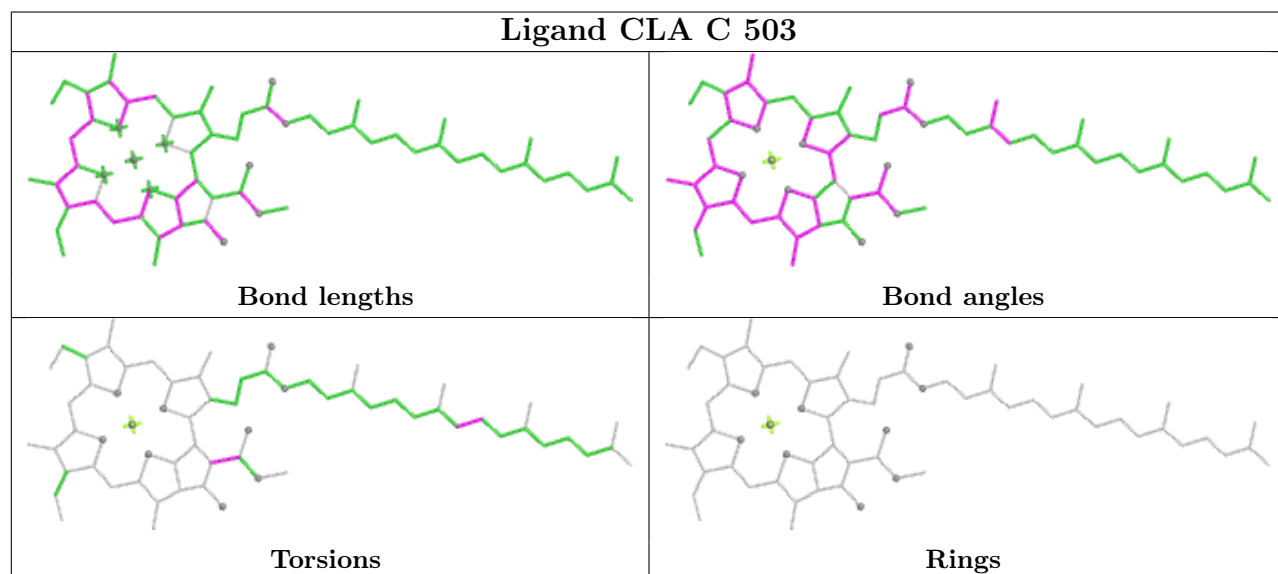
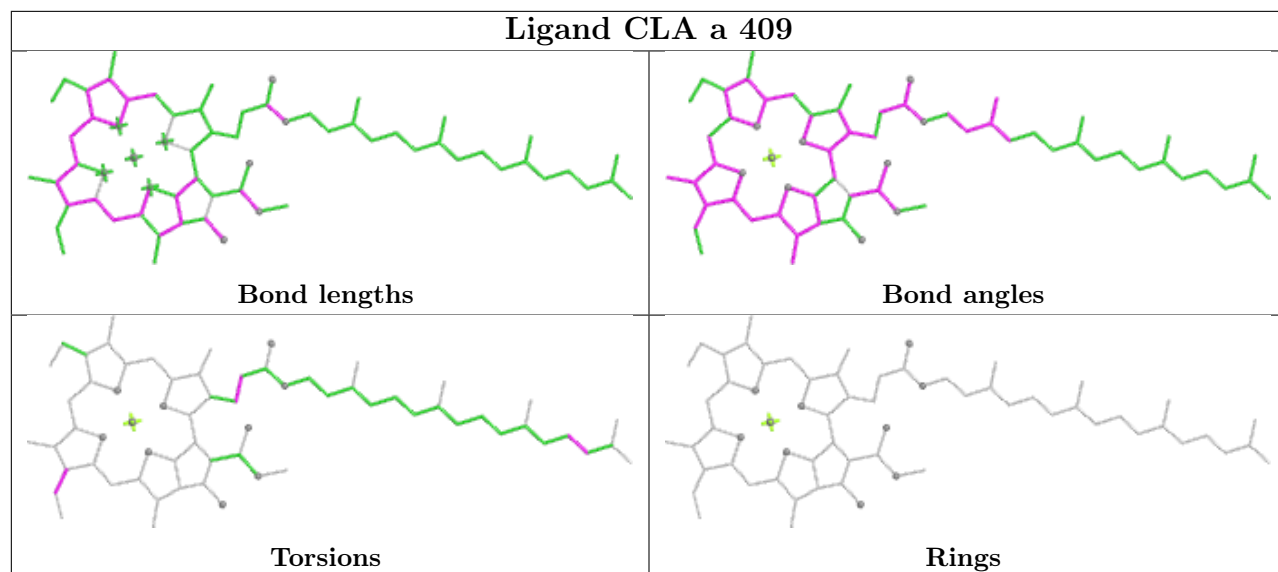
Ligand LMT a 419

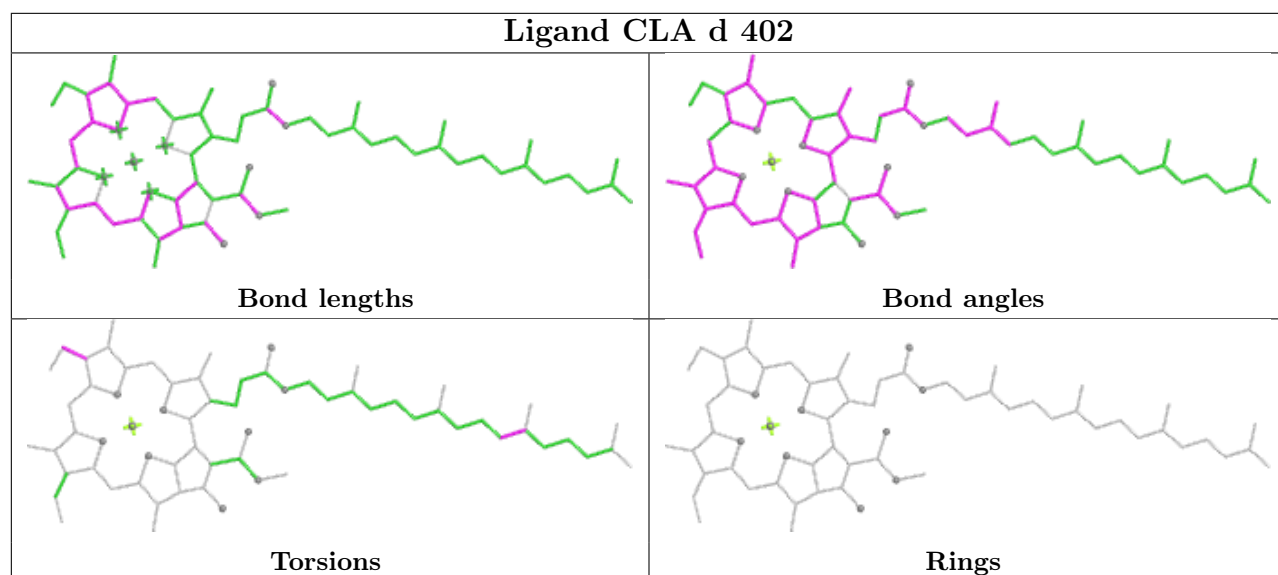
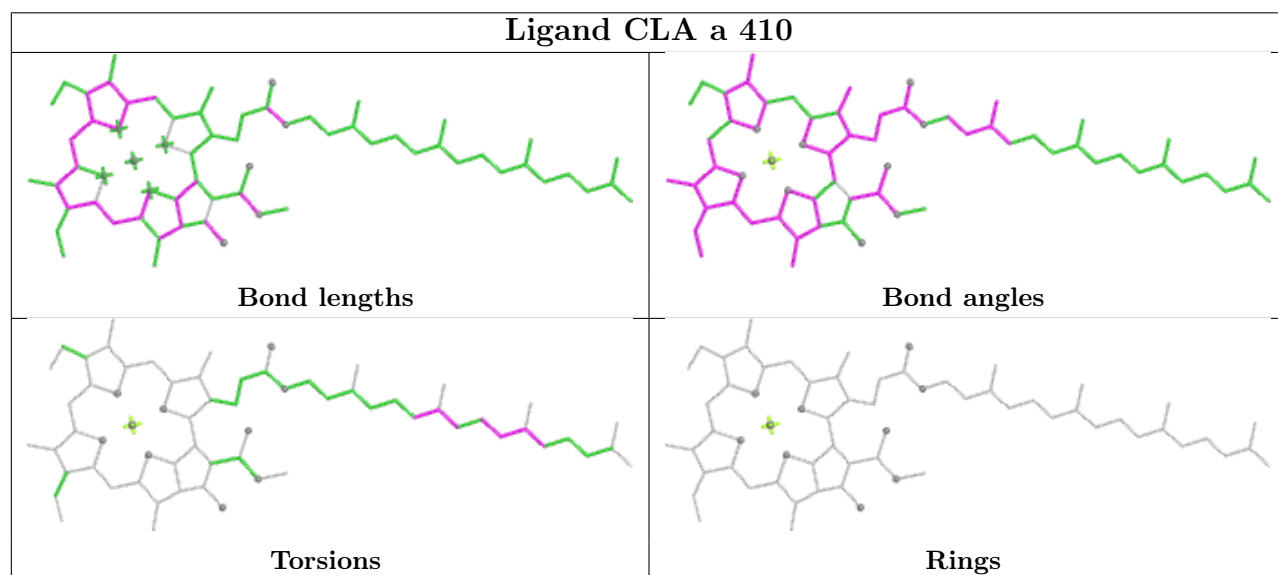
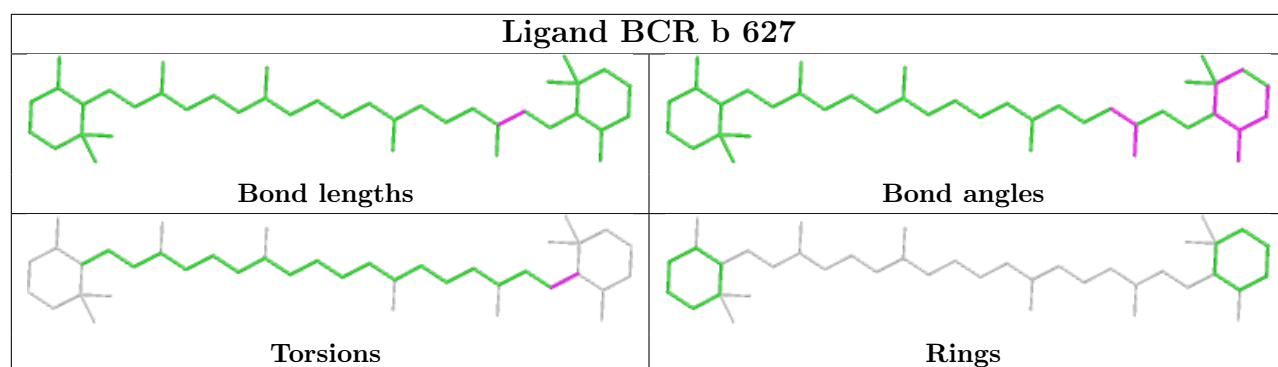


Ligand CLA b 613

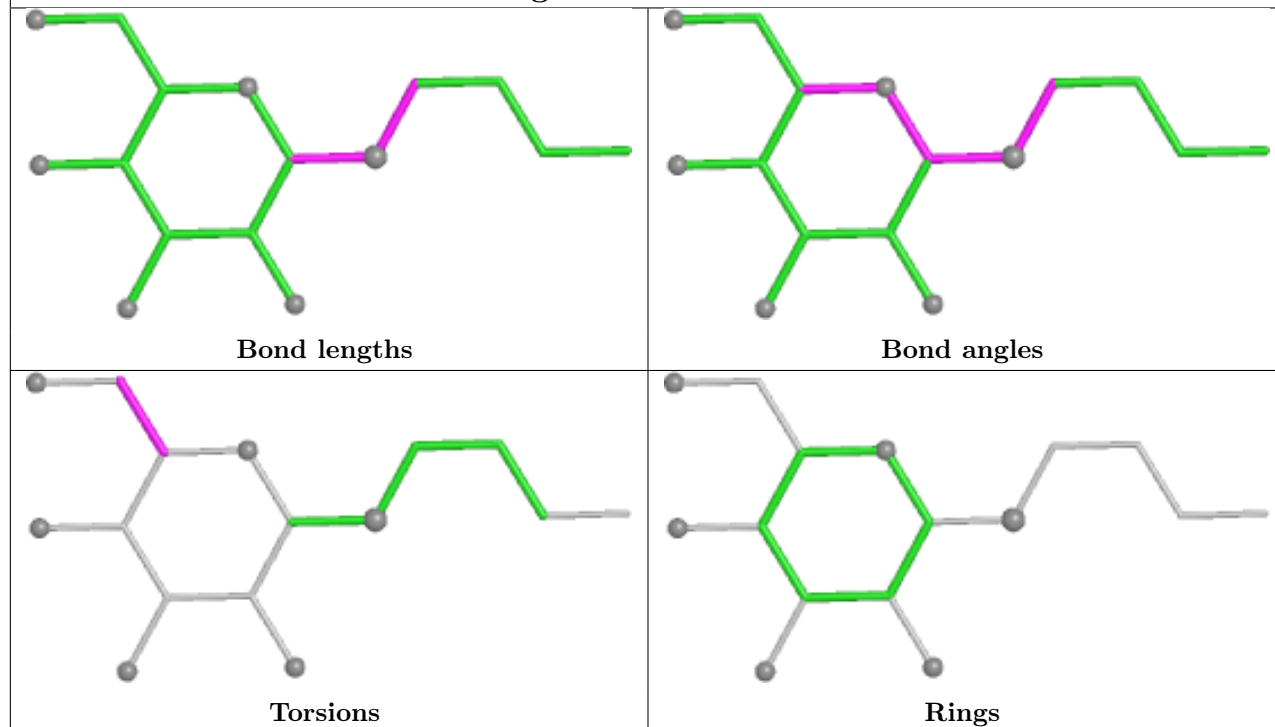


Ligand CLA c 512**Ligand CLA b 612****Ligand CLA B 615**

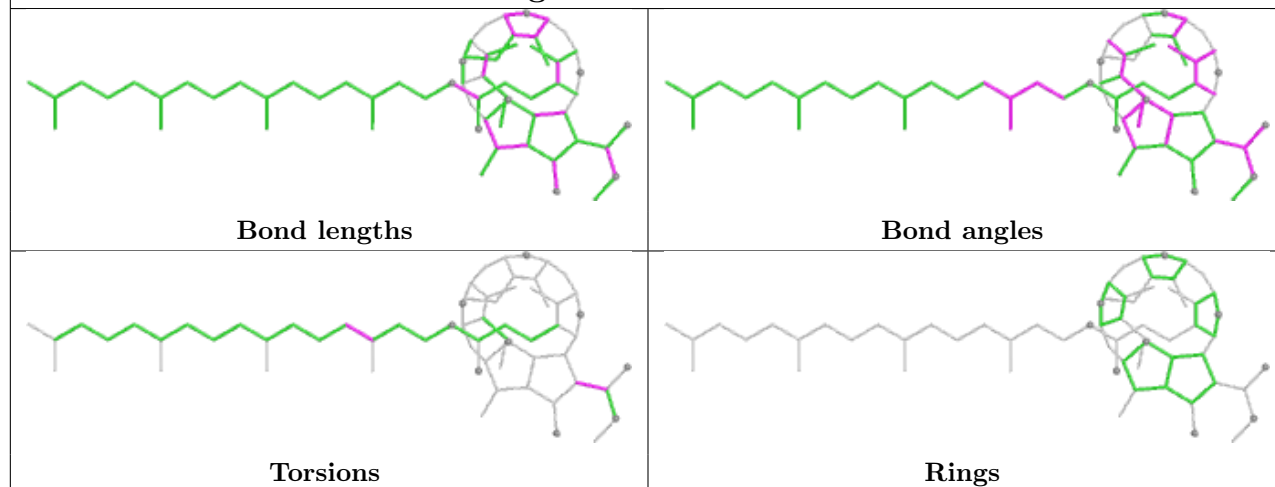


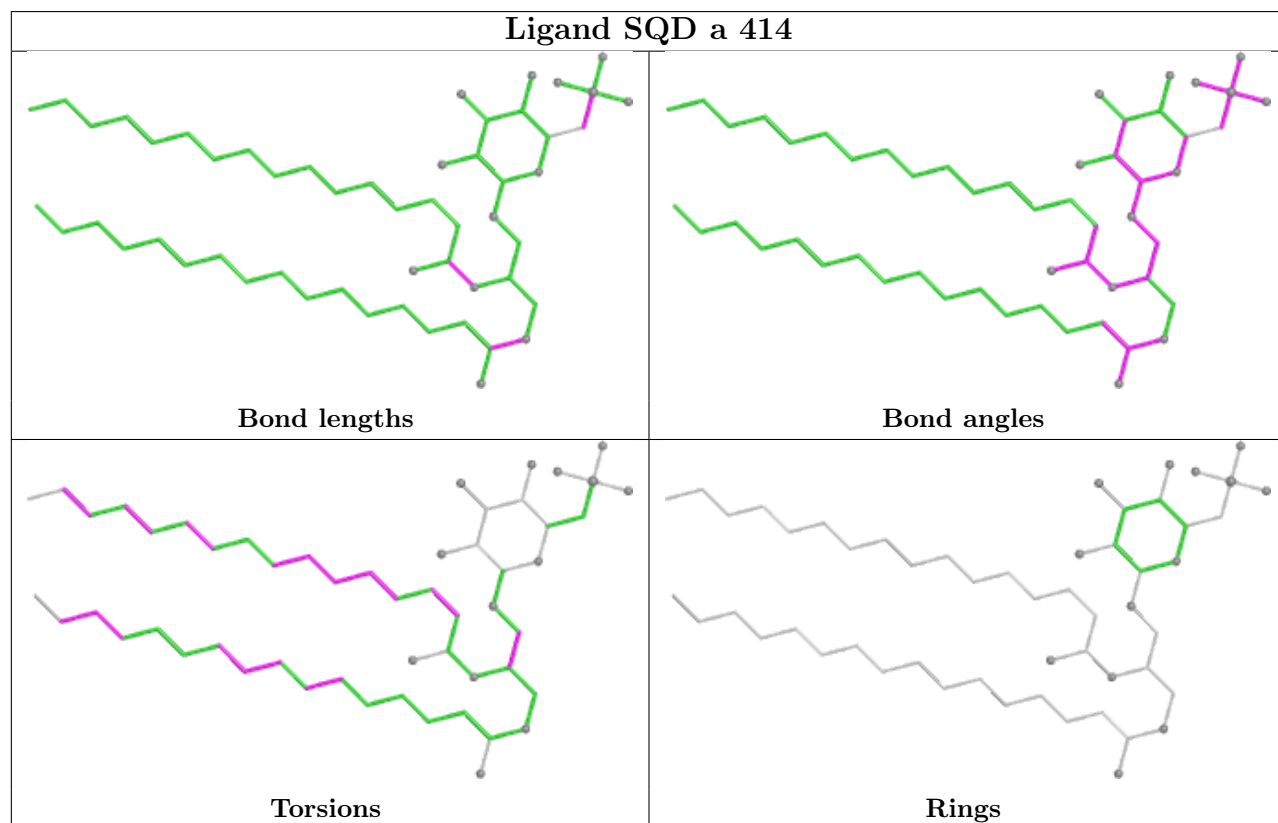
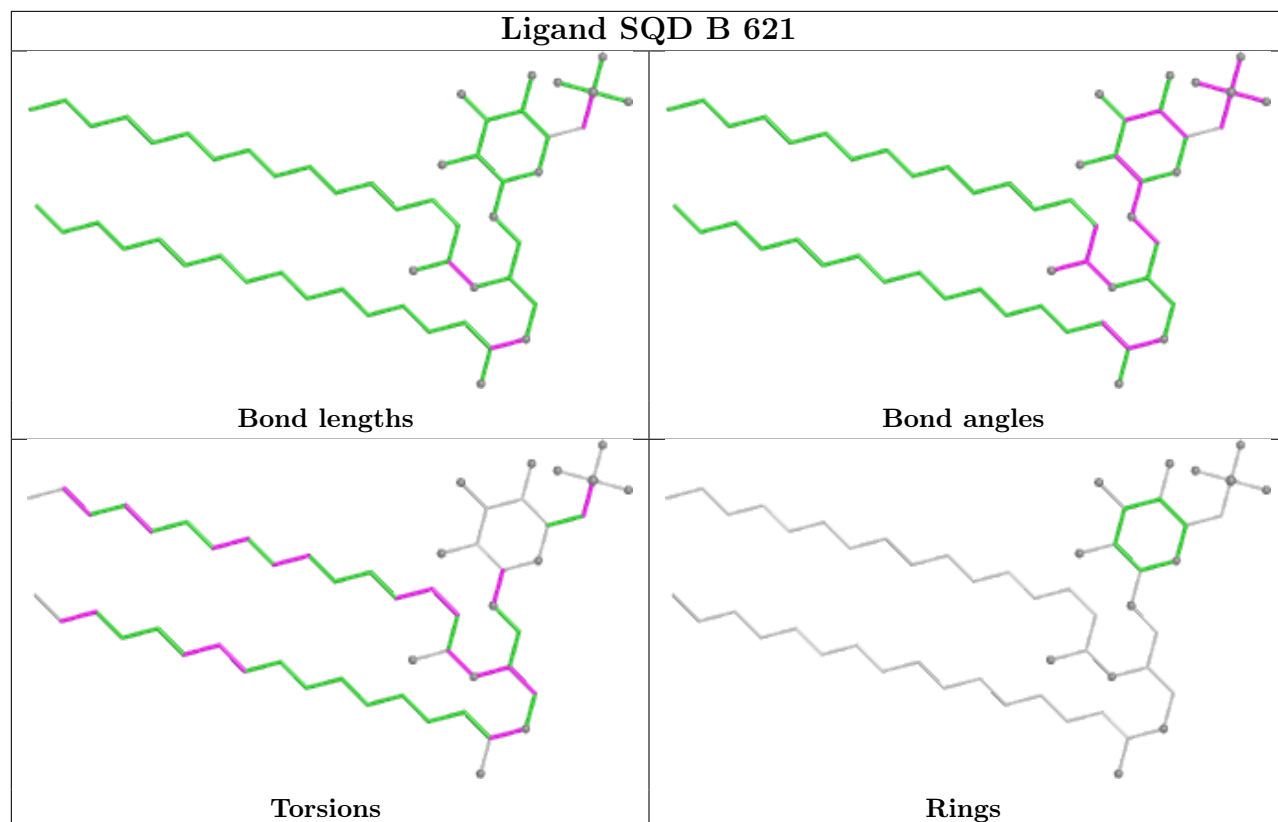


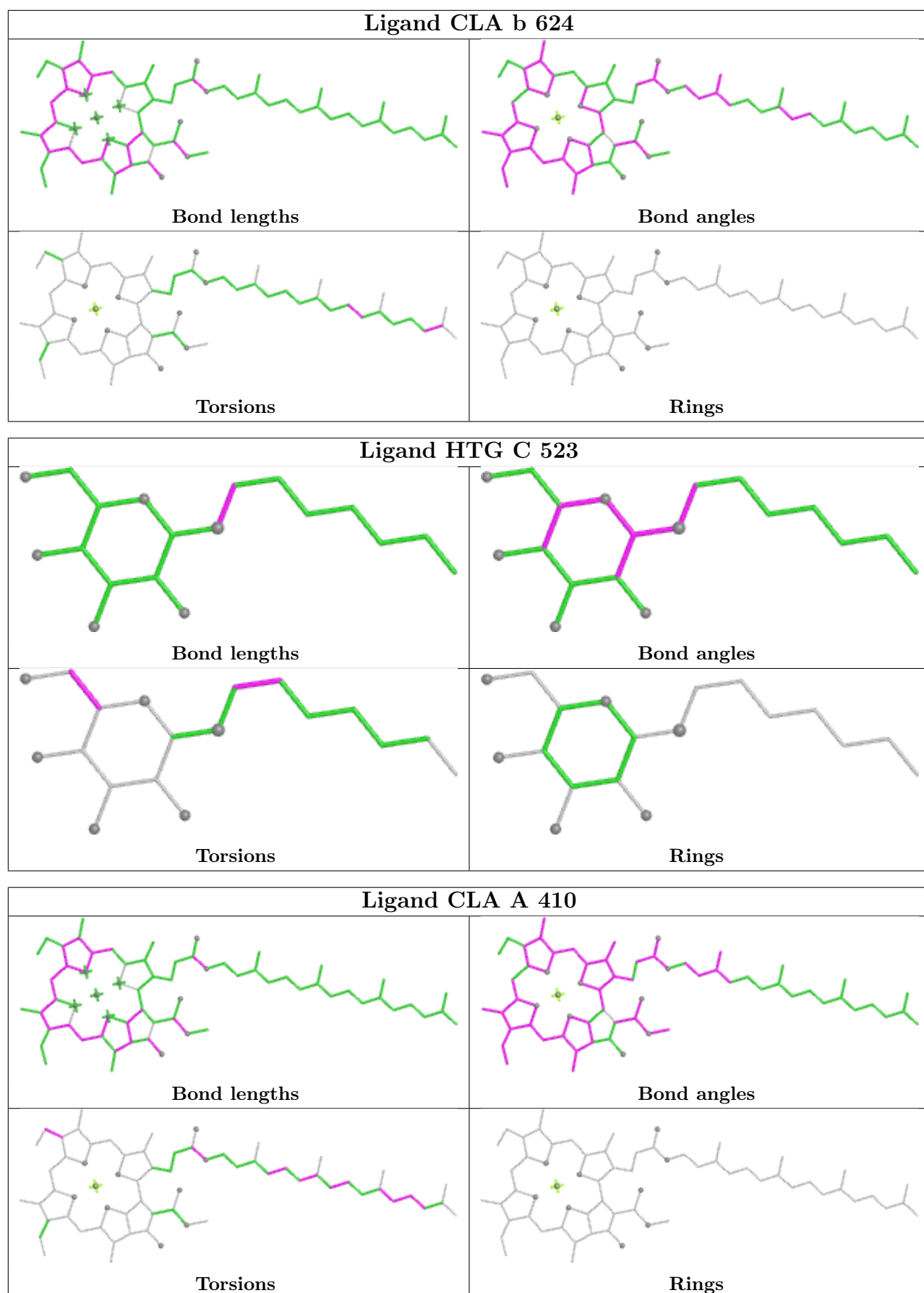
Ligand HTG d 411

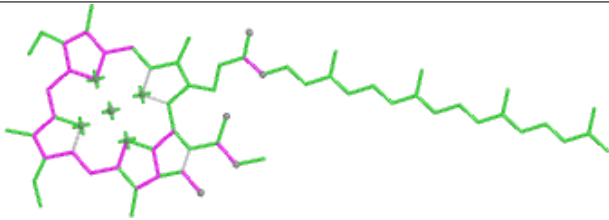
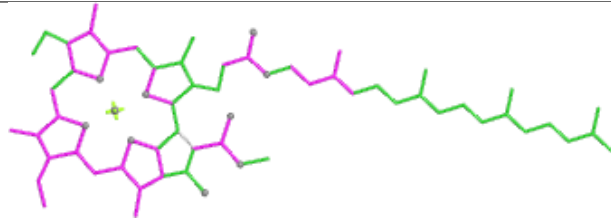
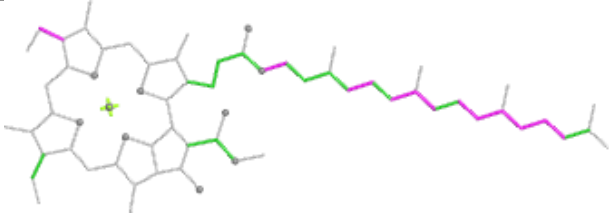
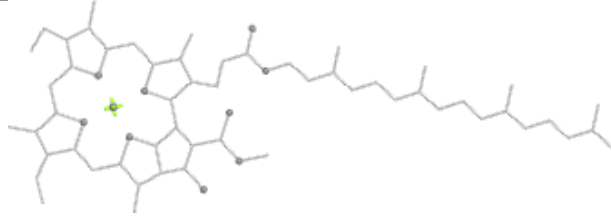


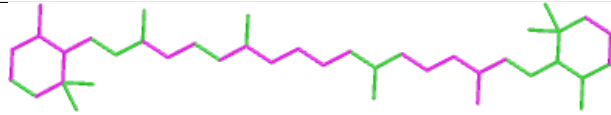
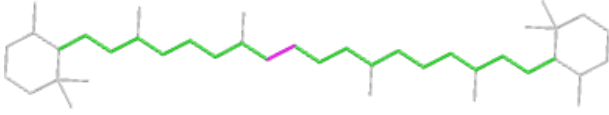
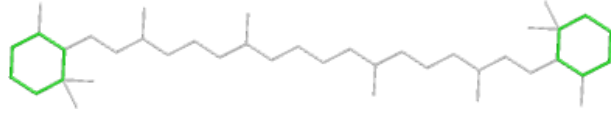
Ligand PHO A 408

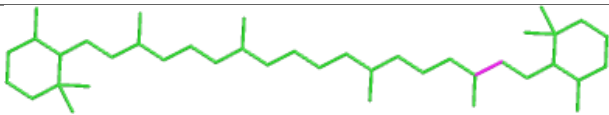
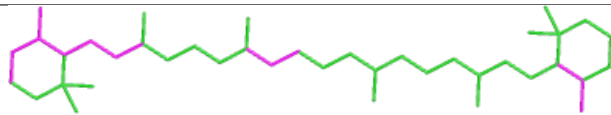
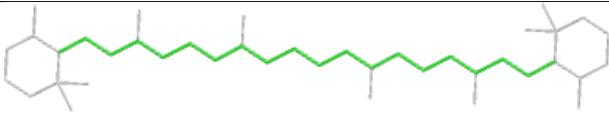
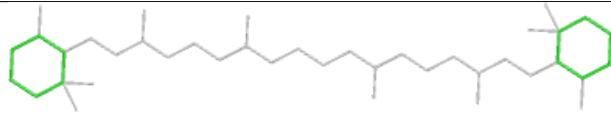


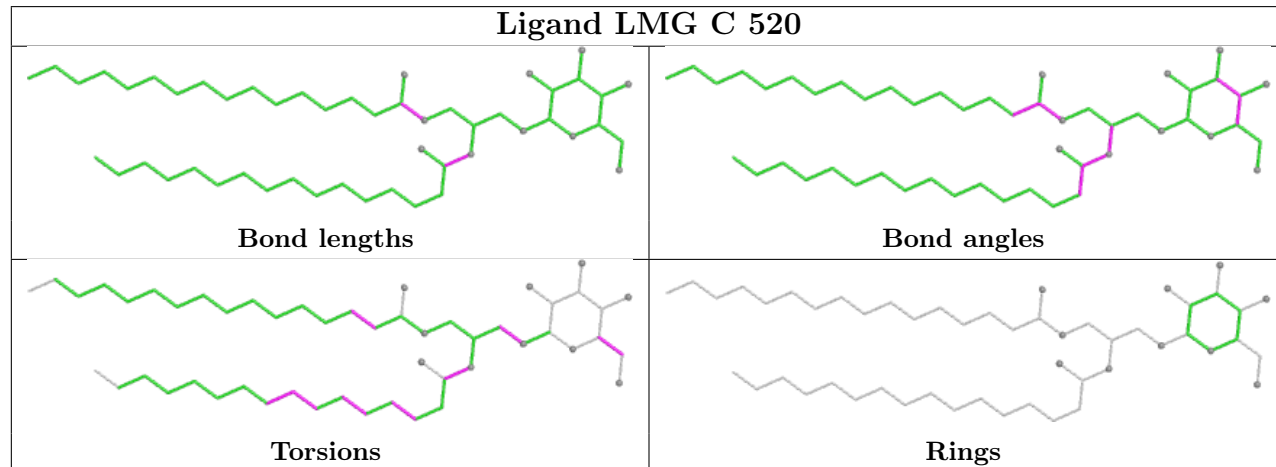
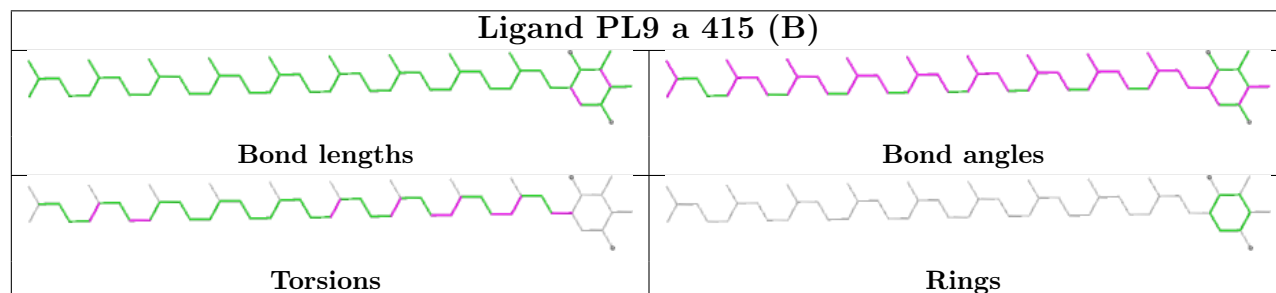
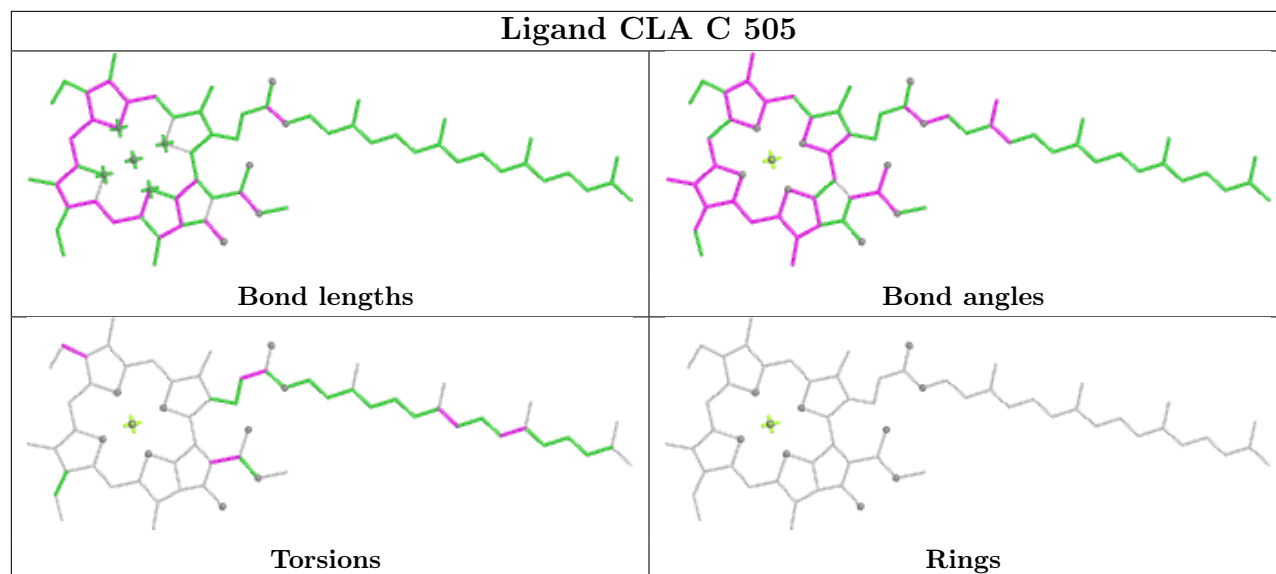


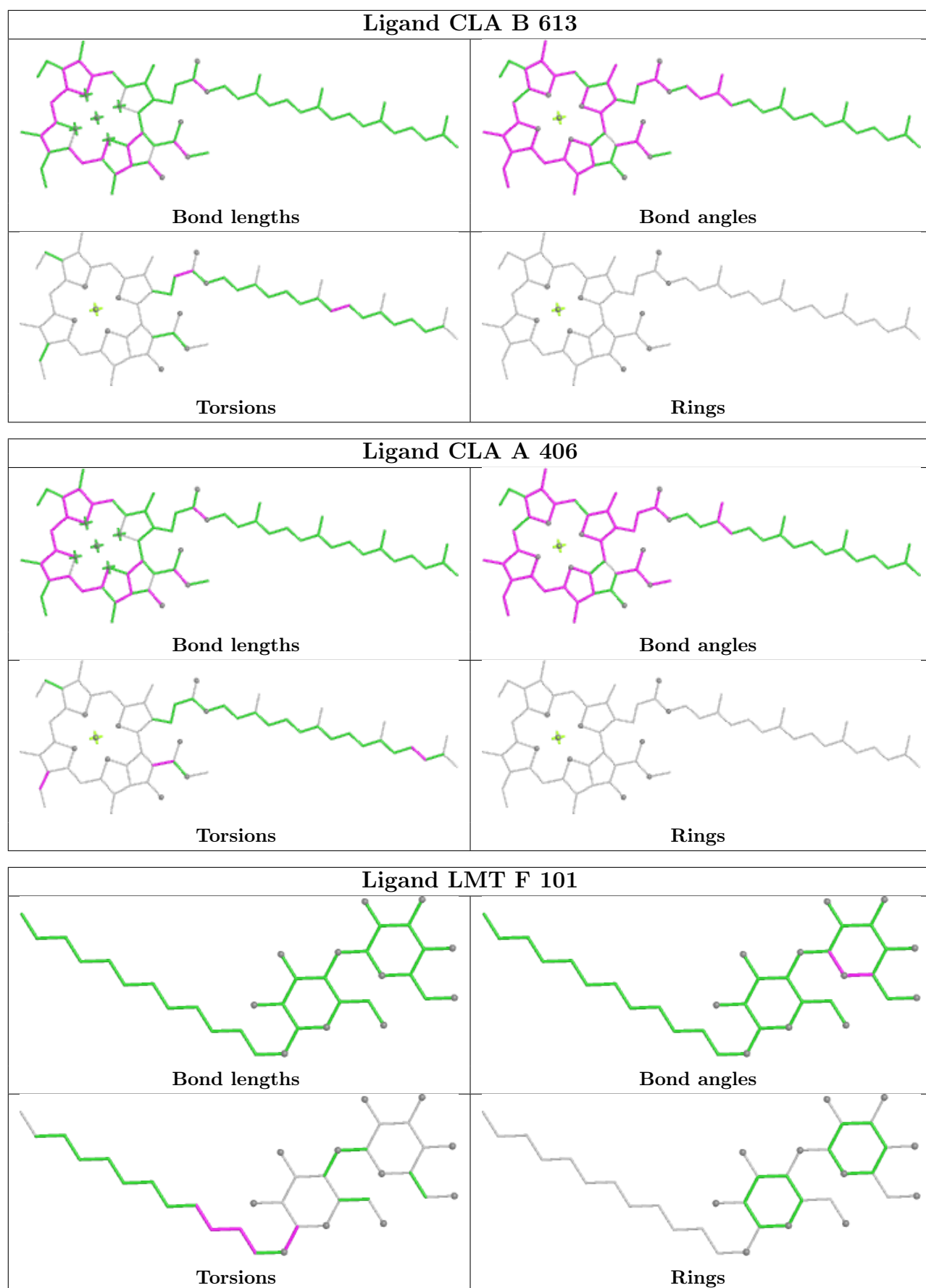


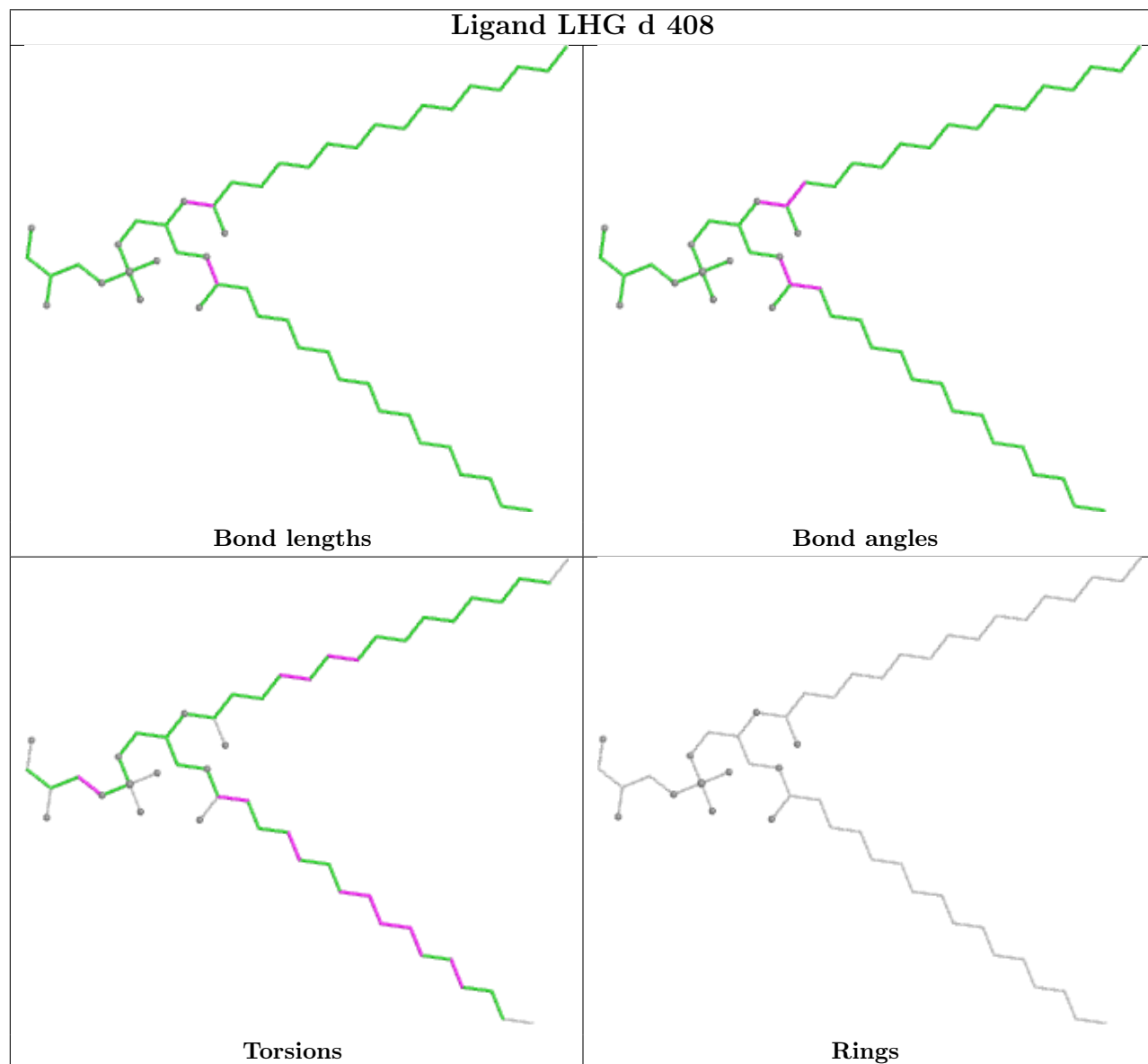
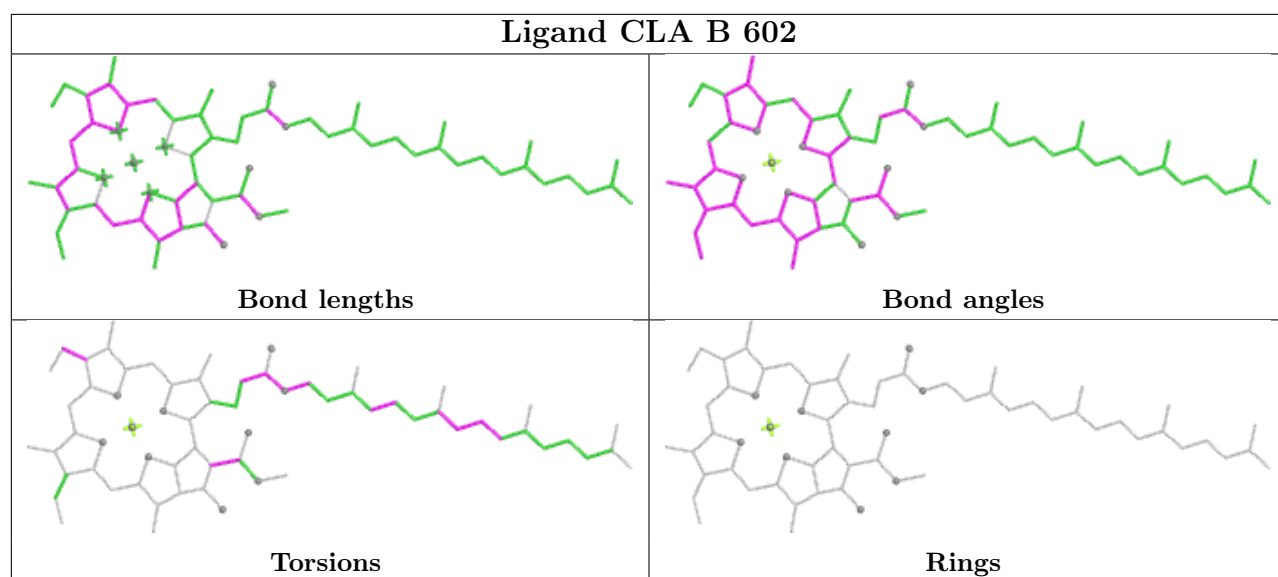
Ligand CLA c 514	
	
Bond lengths	Bond angles
	
Torsions	Rings

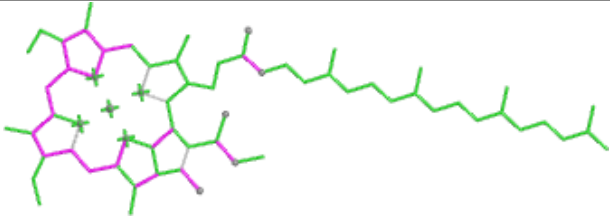
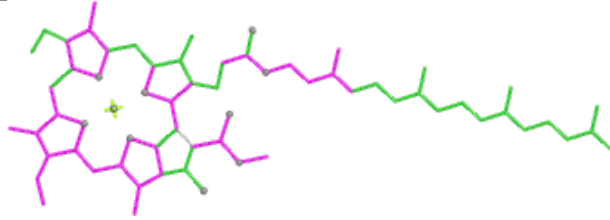
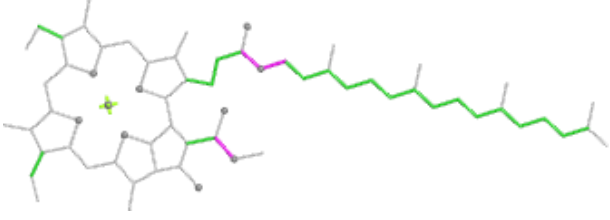
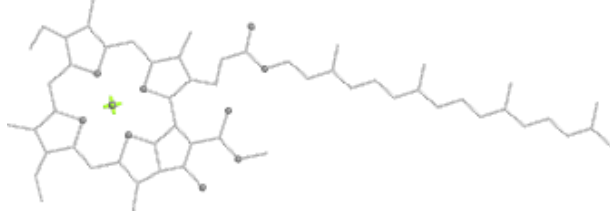
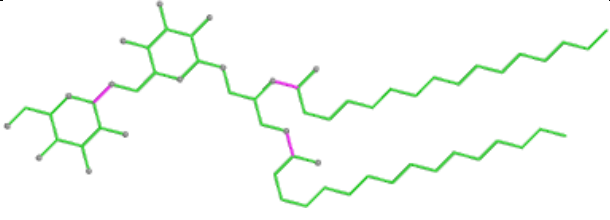
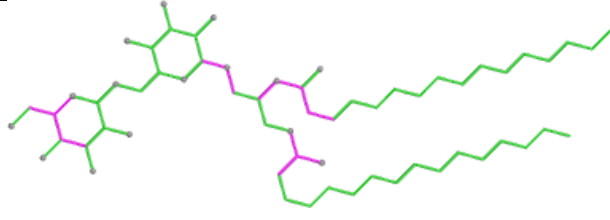
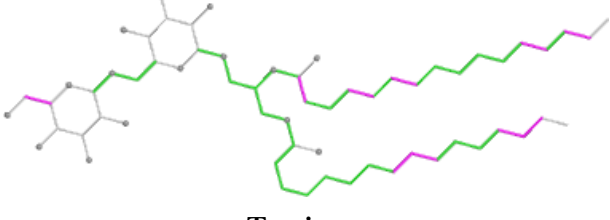
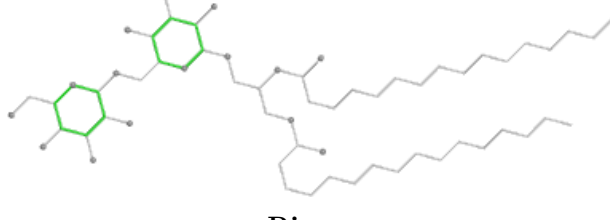
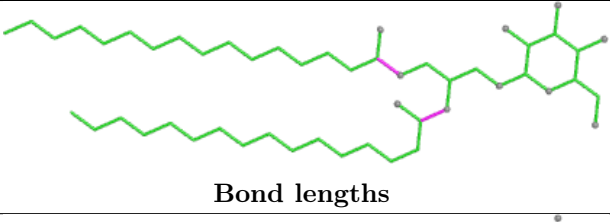
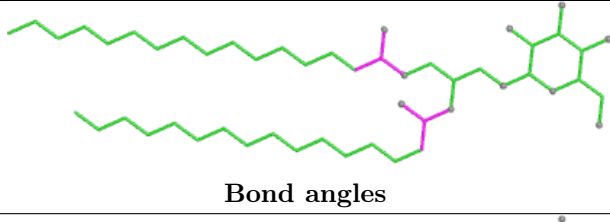
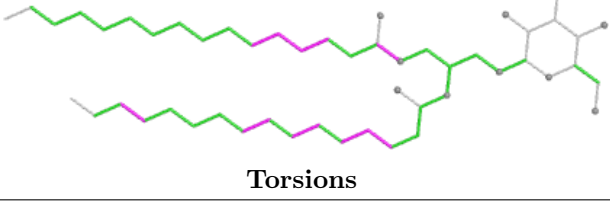
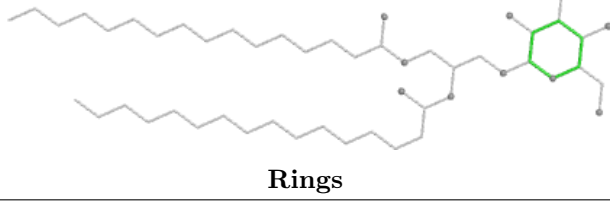
Ligand BCR t 101	
	
Bond lengths	Bond angles
	
Torsions	Rings

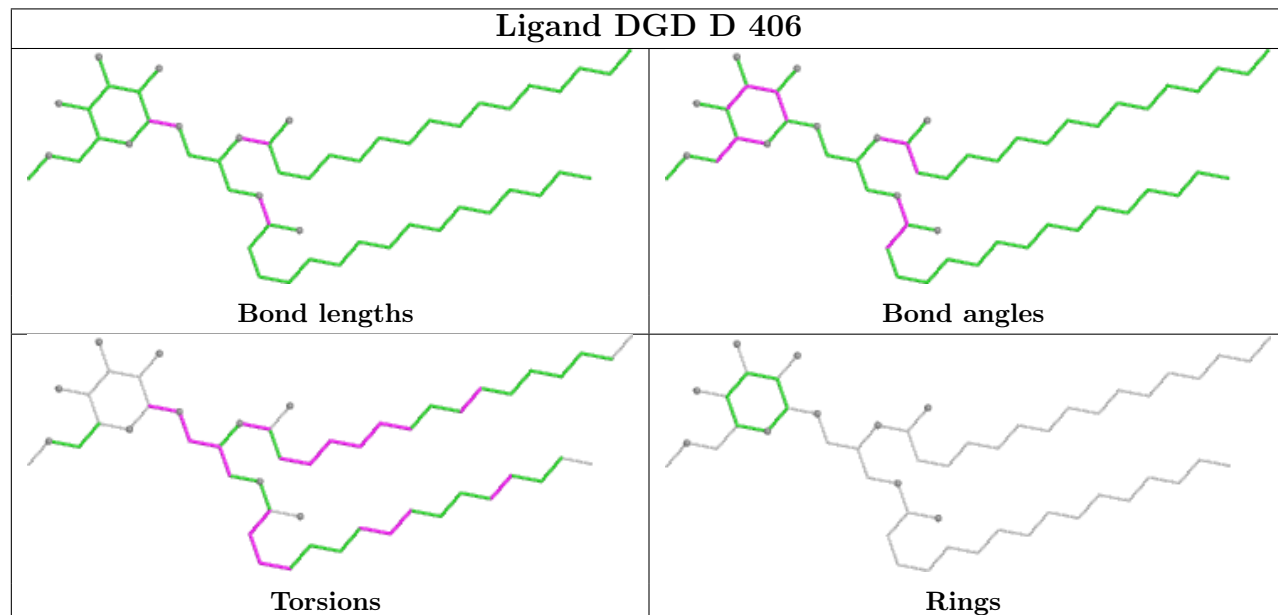
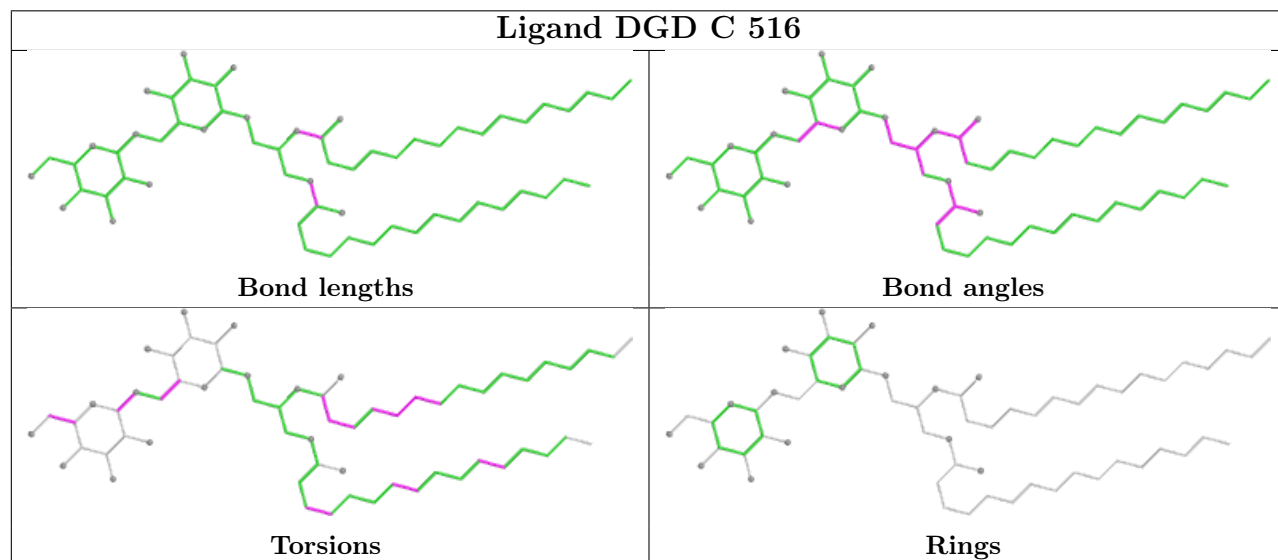
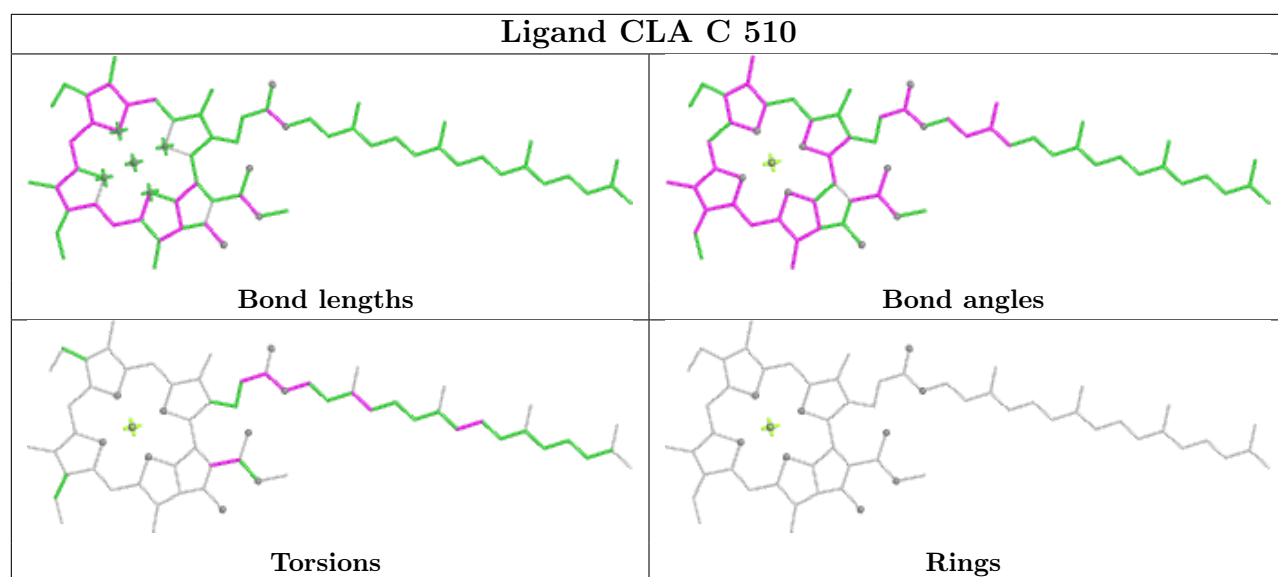
Ligand BCR a 413	
	
Bond lengths	Bond angles
	
Torsions	Rings

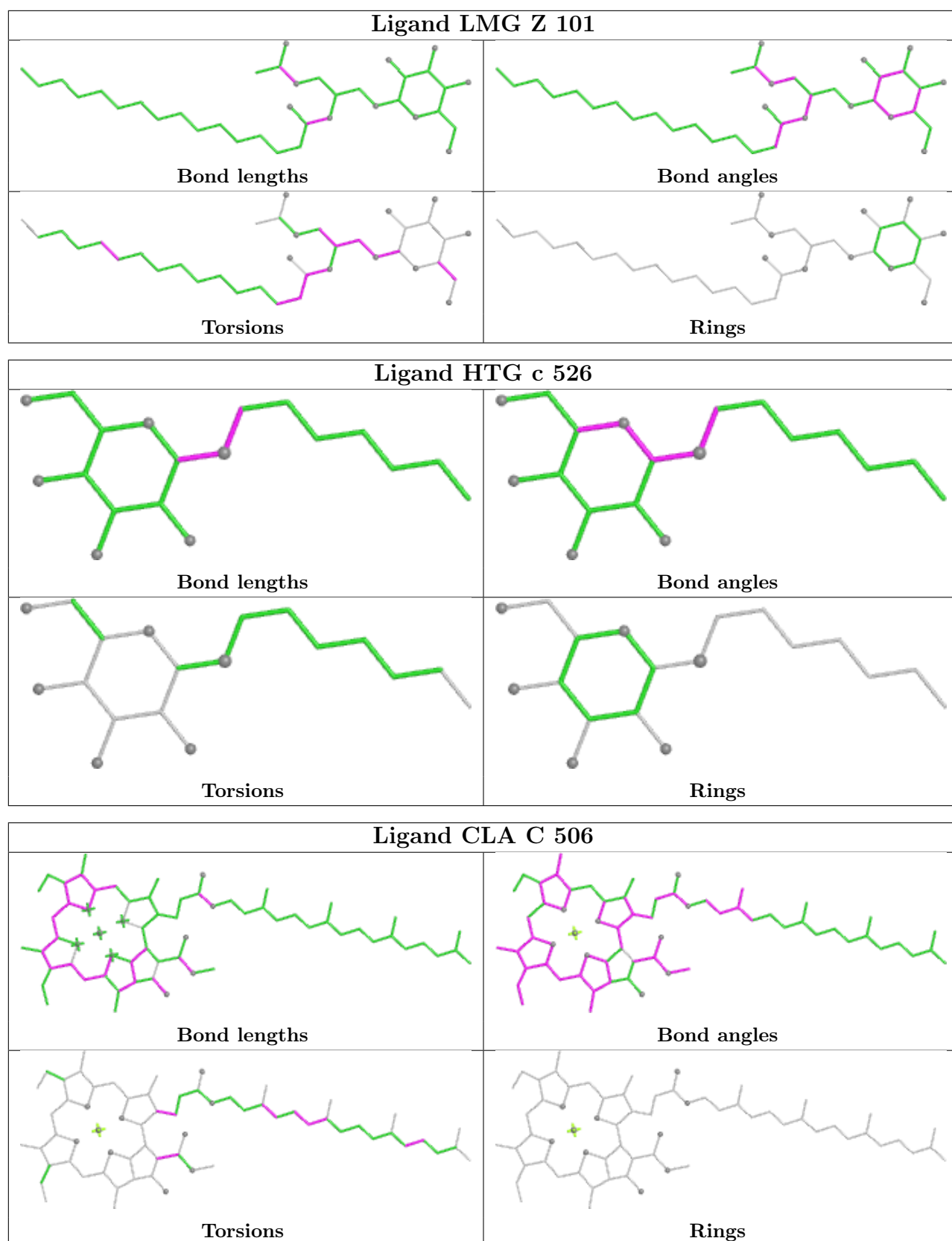


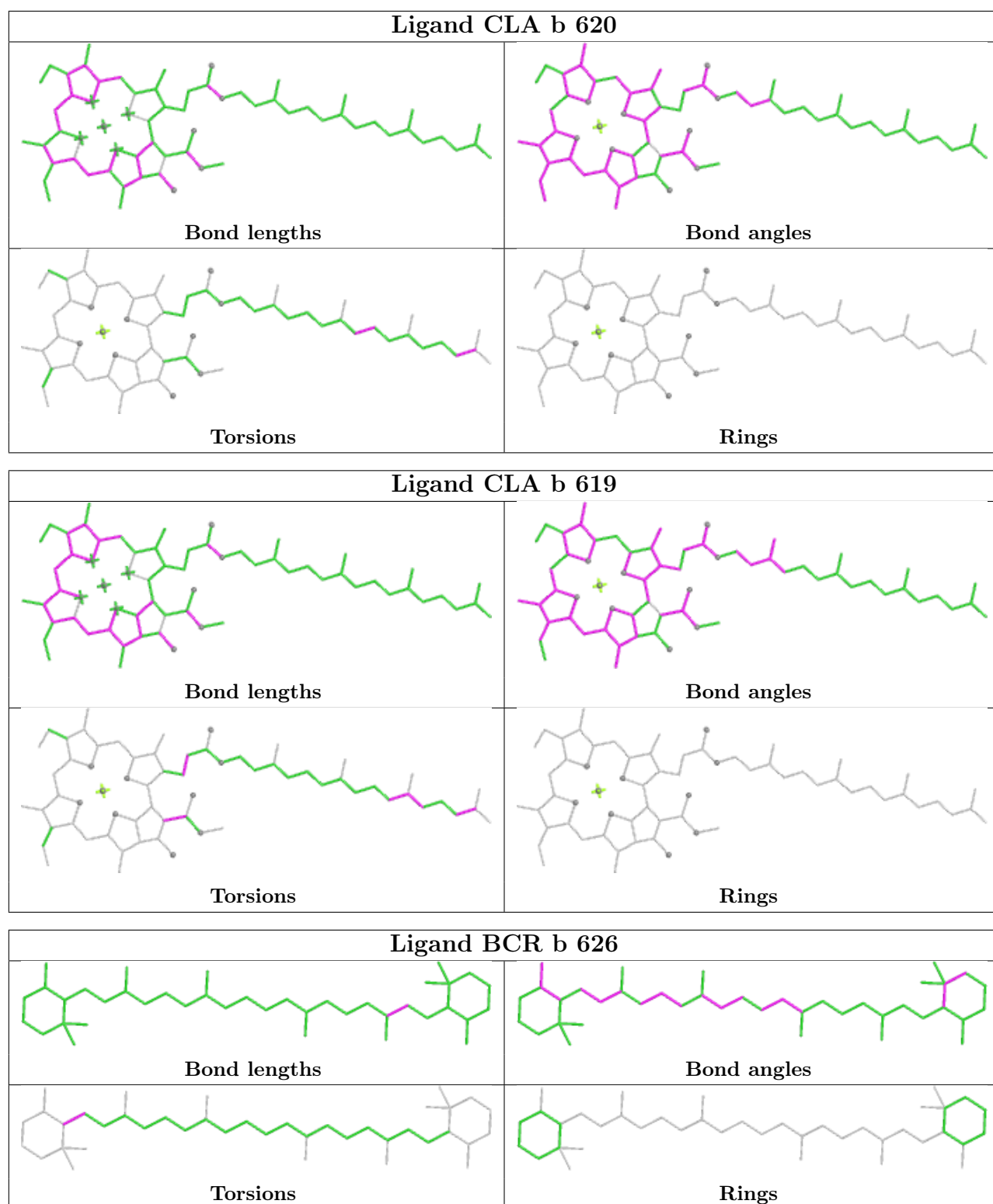


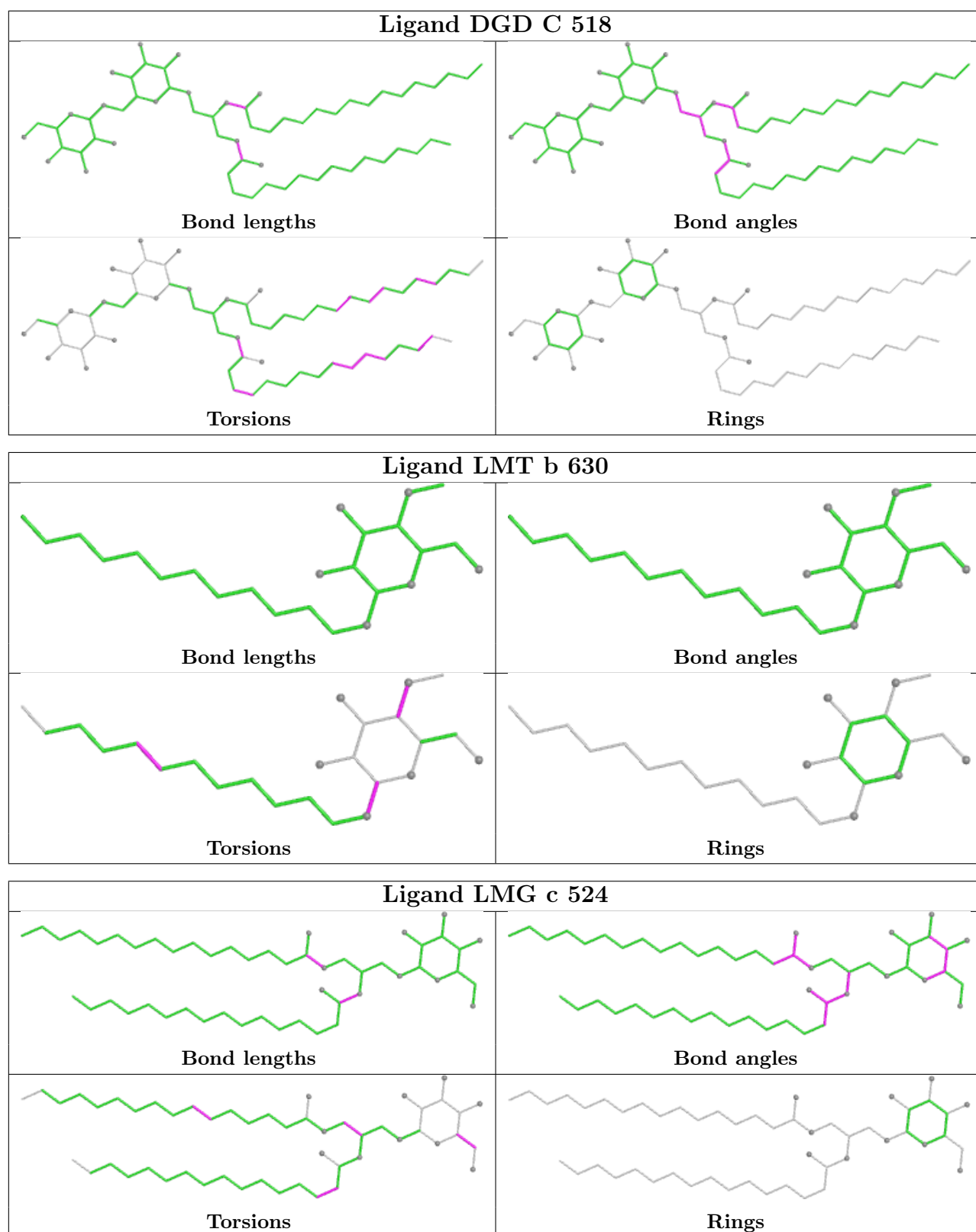


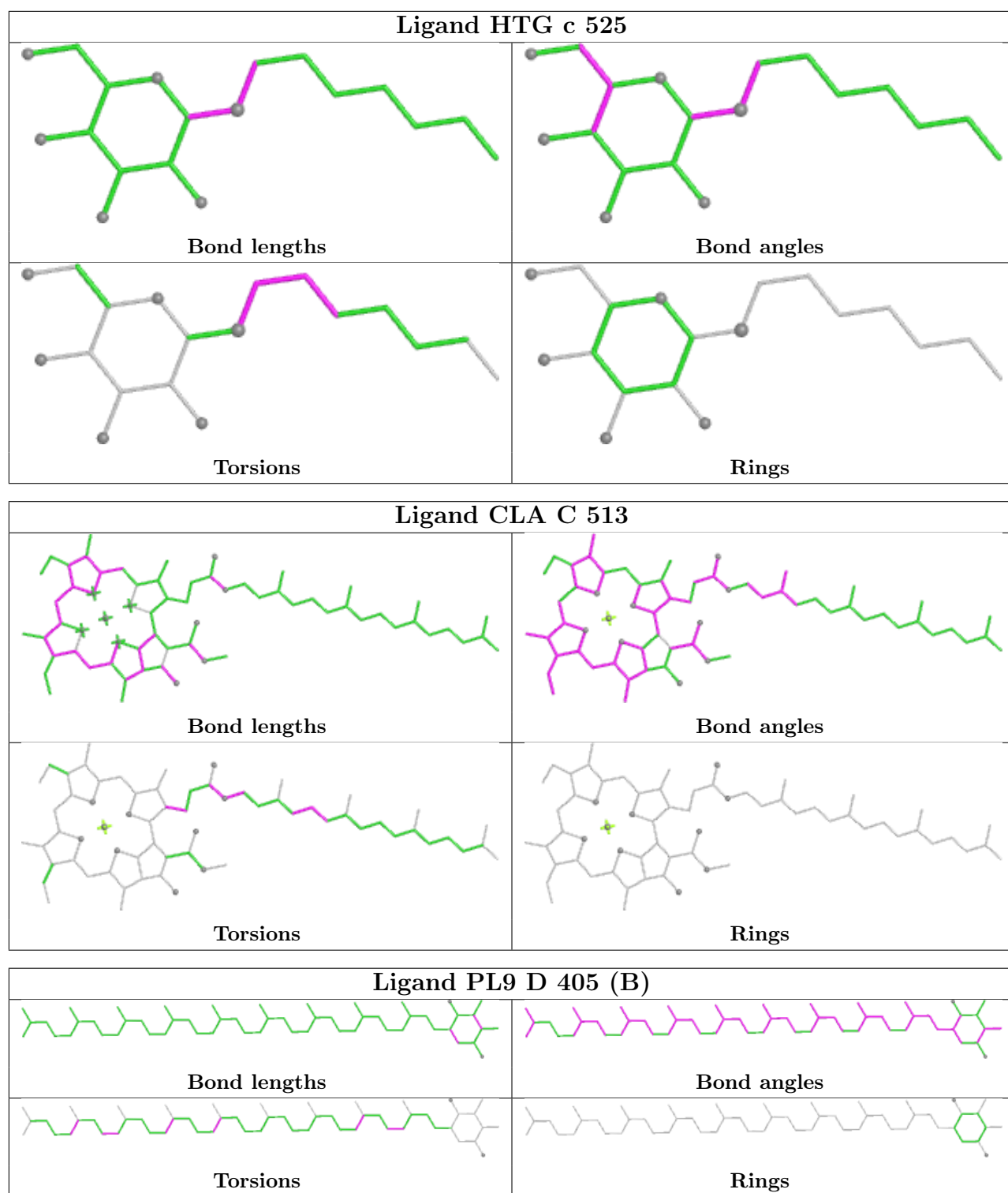
Ligand CLA c 516	
 Bond lengths	 Bond angles
 Torsions	 Rings
Ligand DGD H 102	
 Bond lengths	 Bond angles
 Torsions	 Rings
Ligand LMG C 519	
 Bond lengths	 Bond angles
 Torsions	 Rings

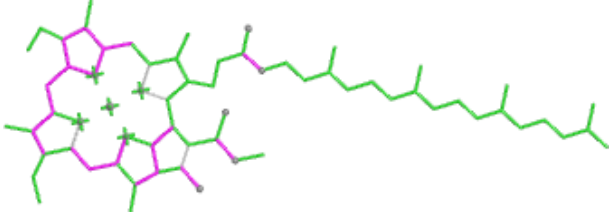
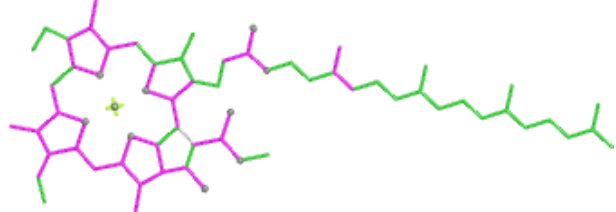
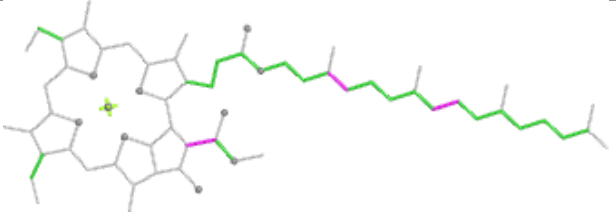
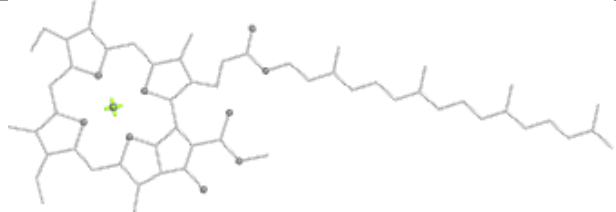
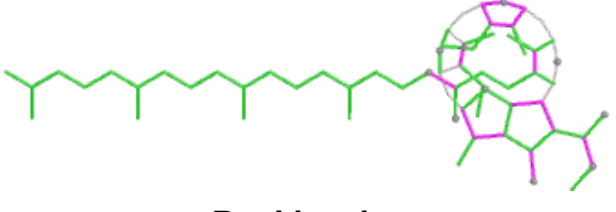
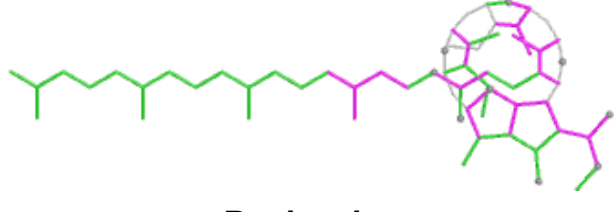
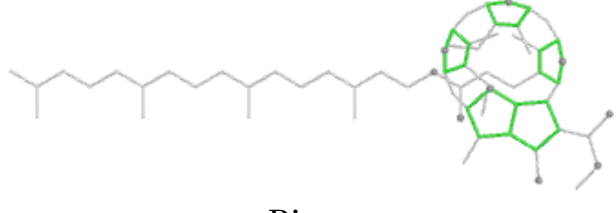
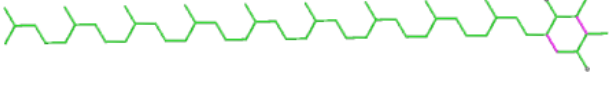
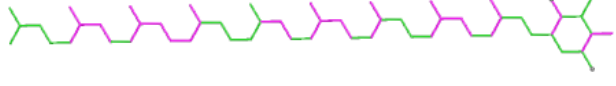
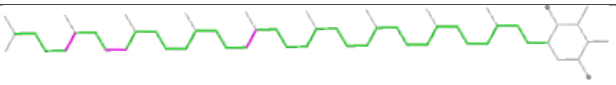
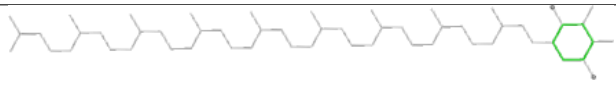


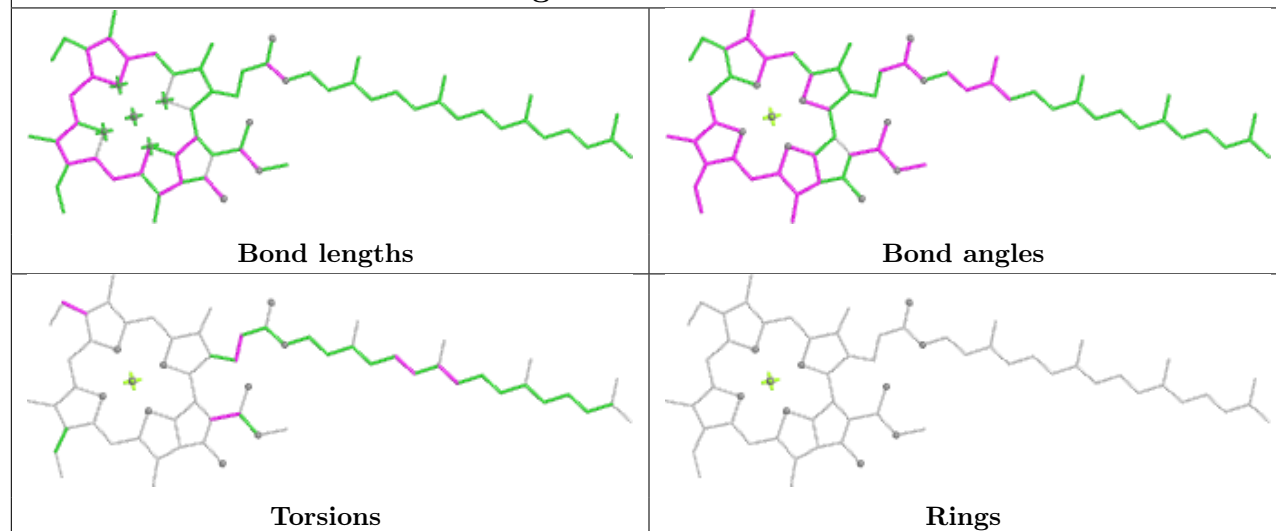
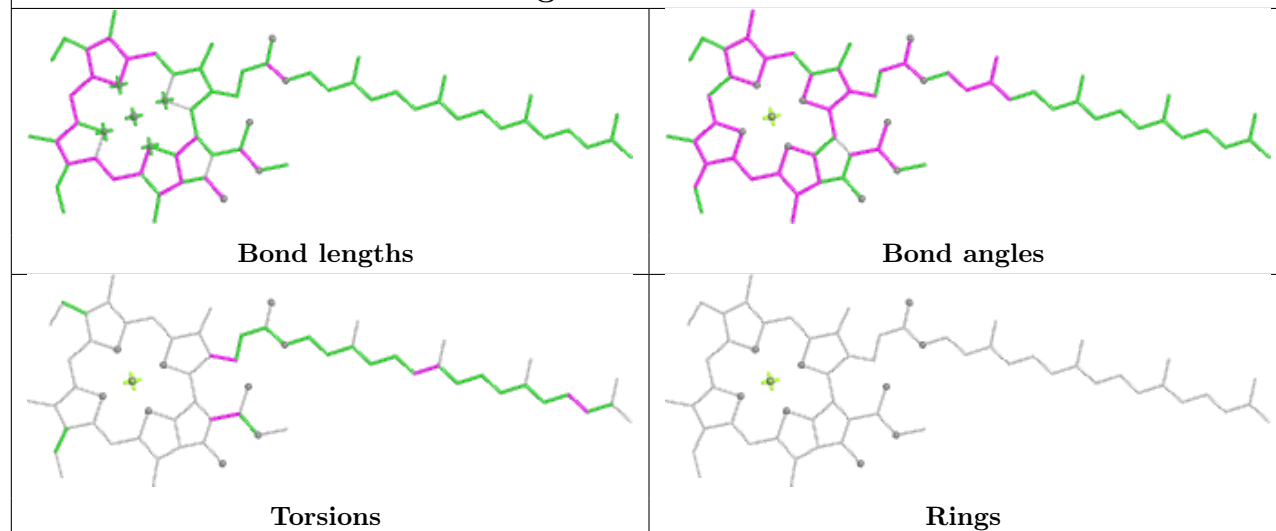


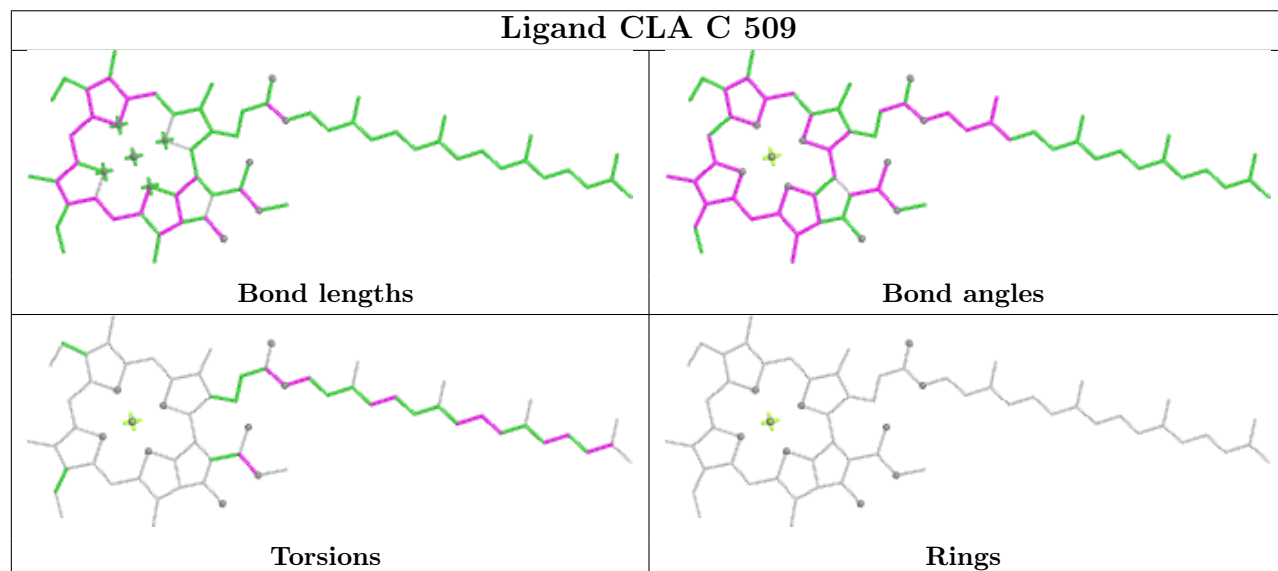
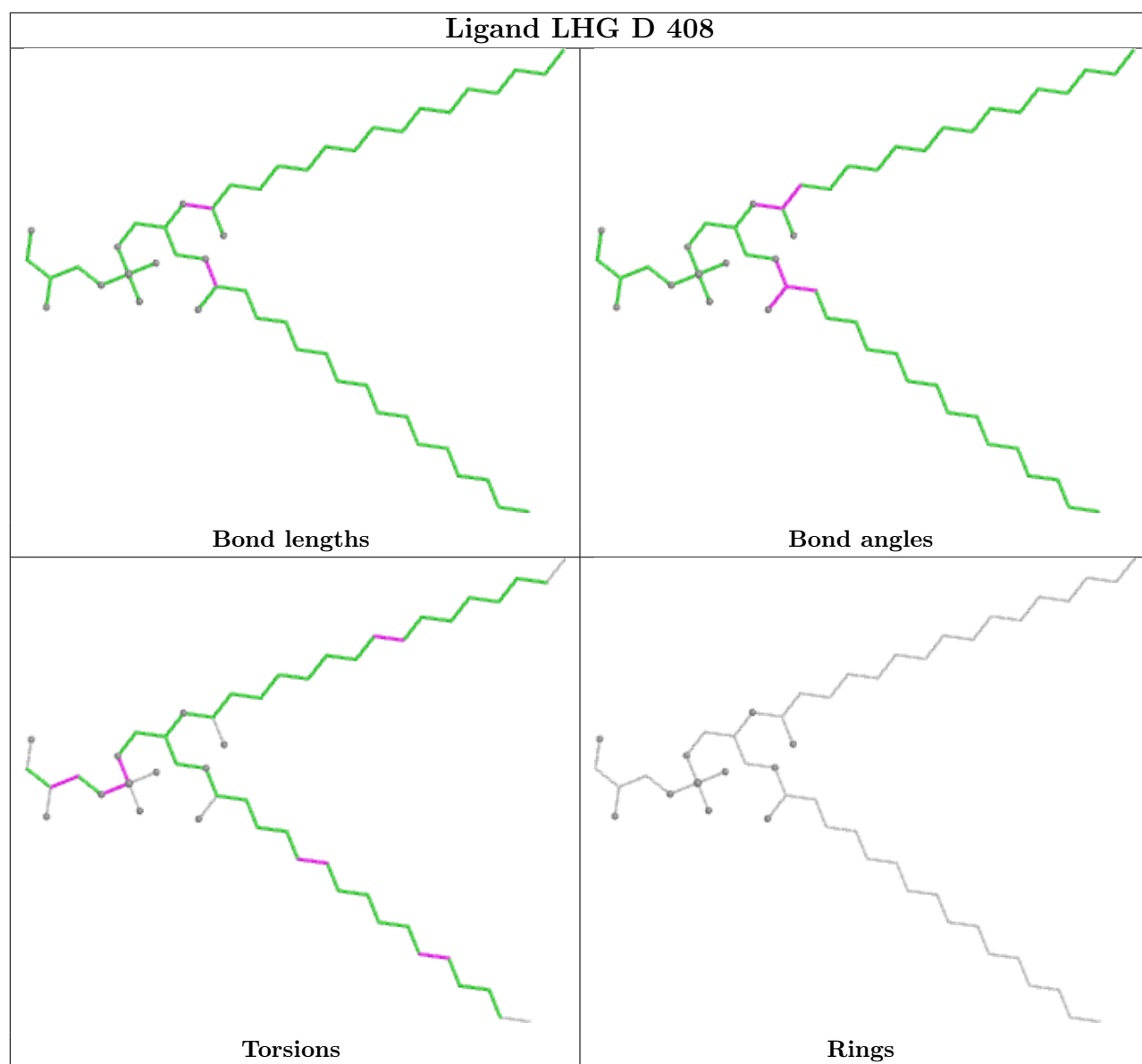


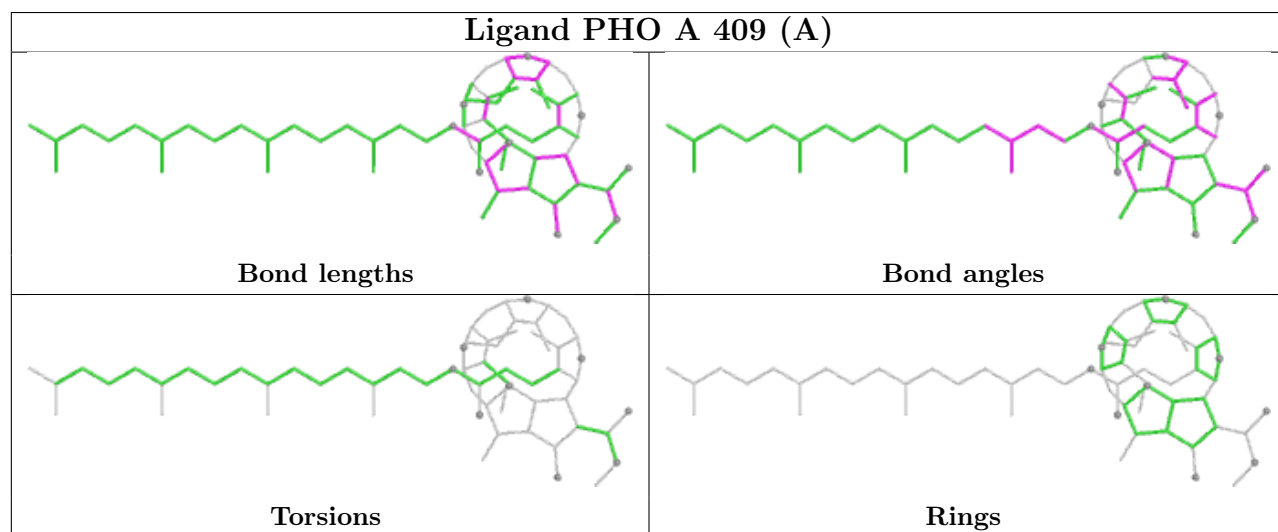
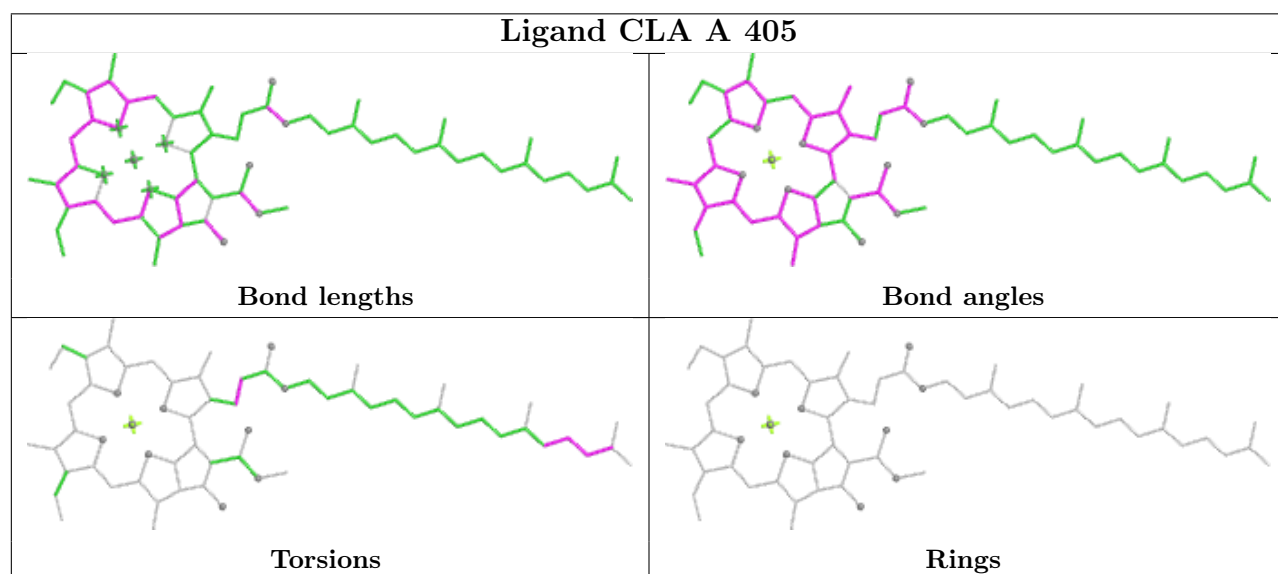
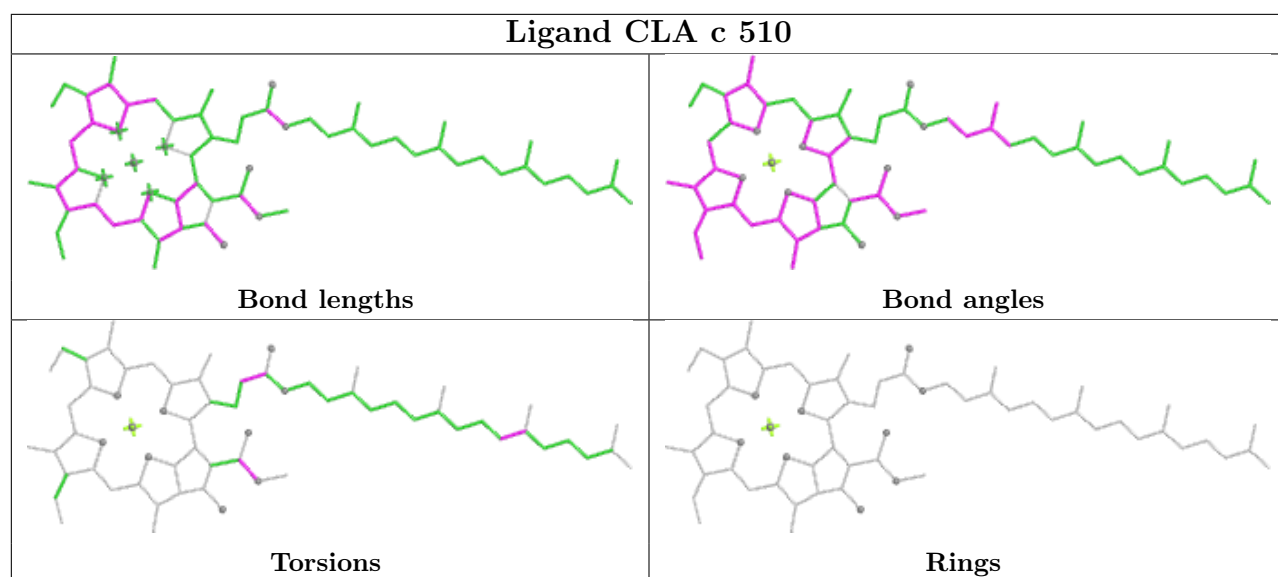




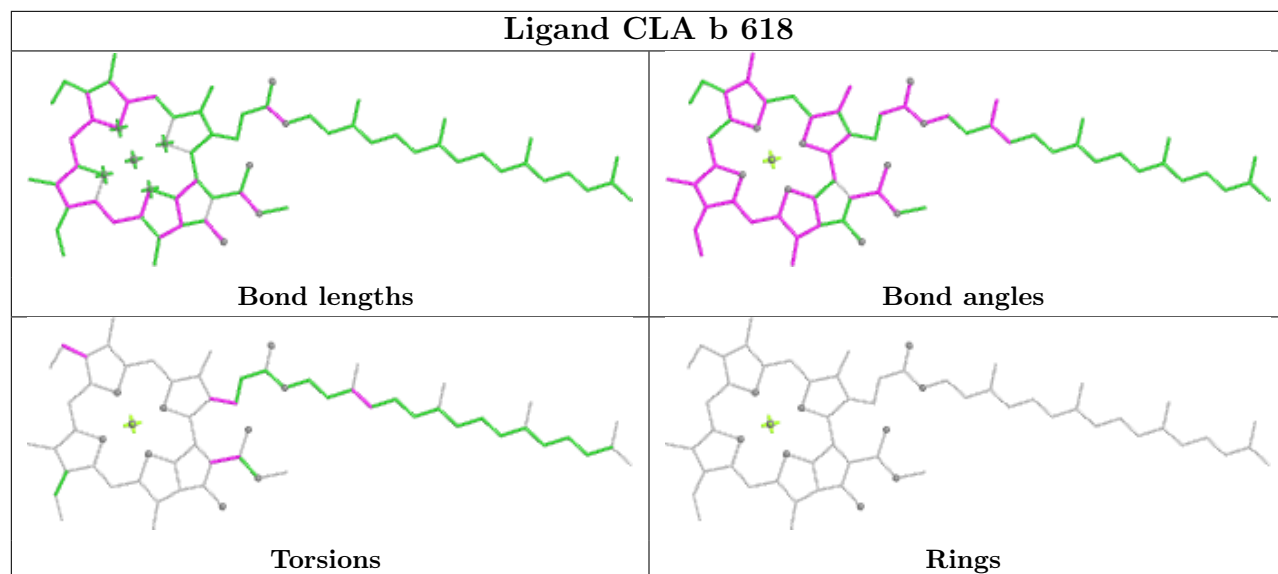
Ligand CLA b 614	
 Bond lengths	 Bond angles
 Torsions	 Rings
Ligand PHO a 418 (B)	
 Bond lengths	 Bond angles
 Torsions	 Rings
Ligand PL9 d 405 (A)	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA C 507**Ligand CLA c 513**

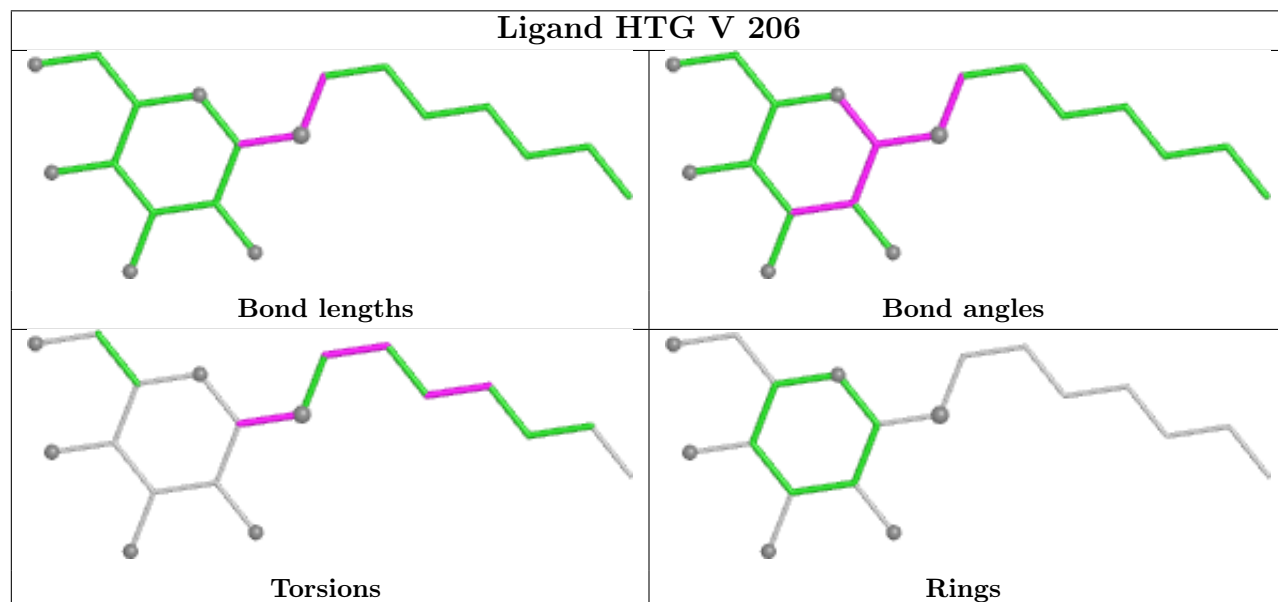




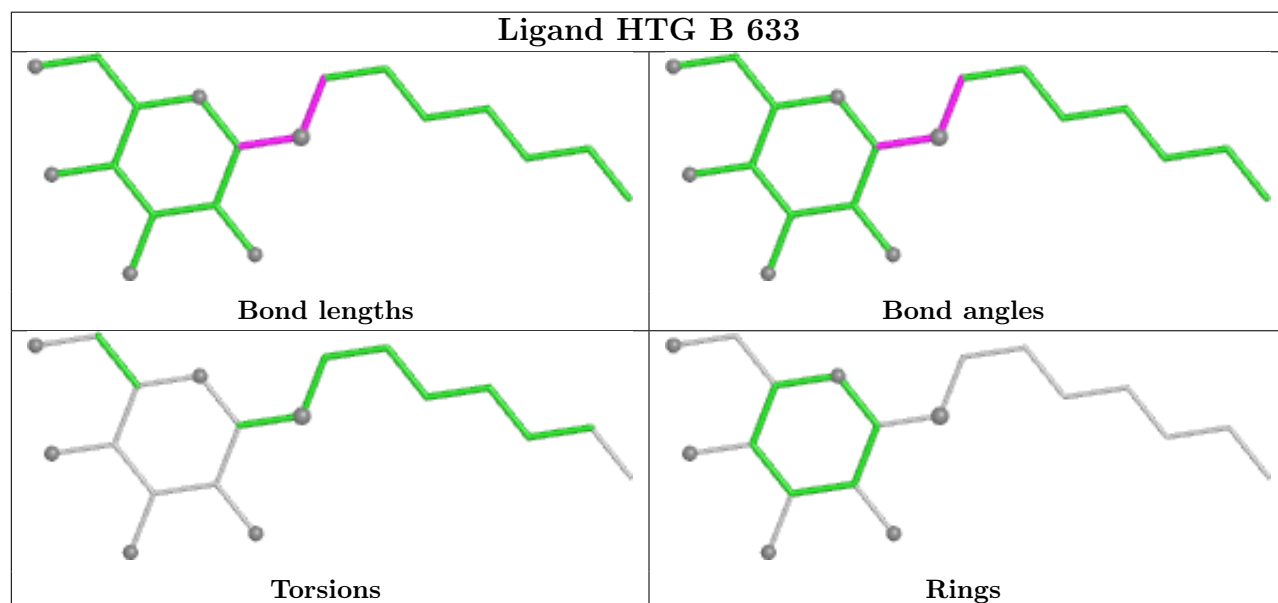
Ligand CLA b 618

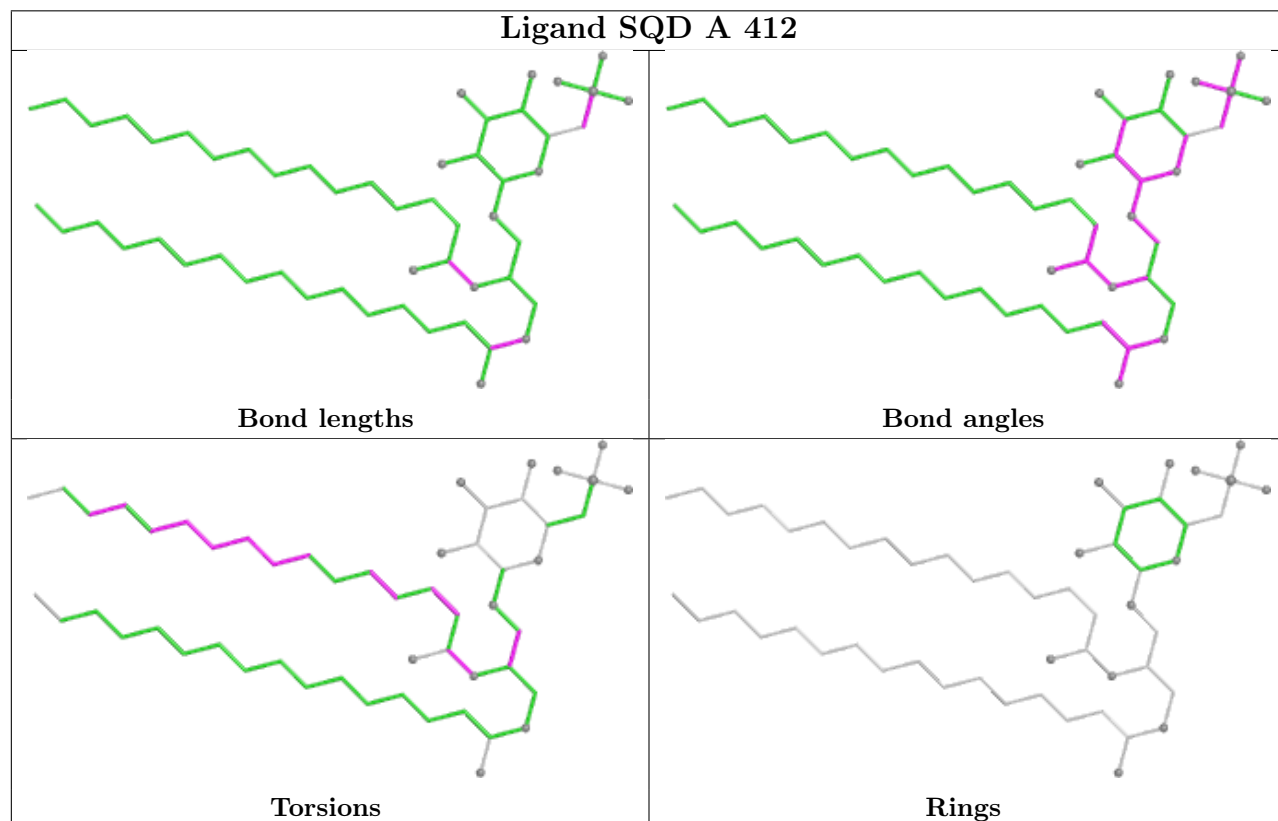
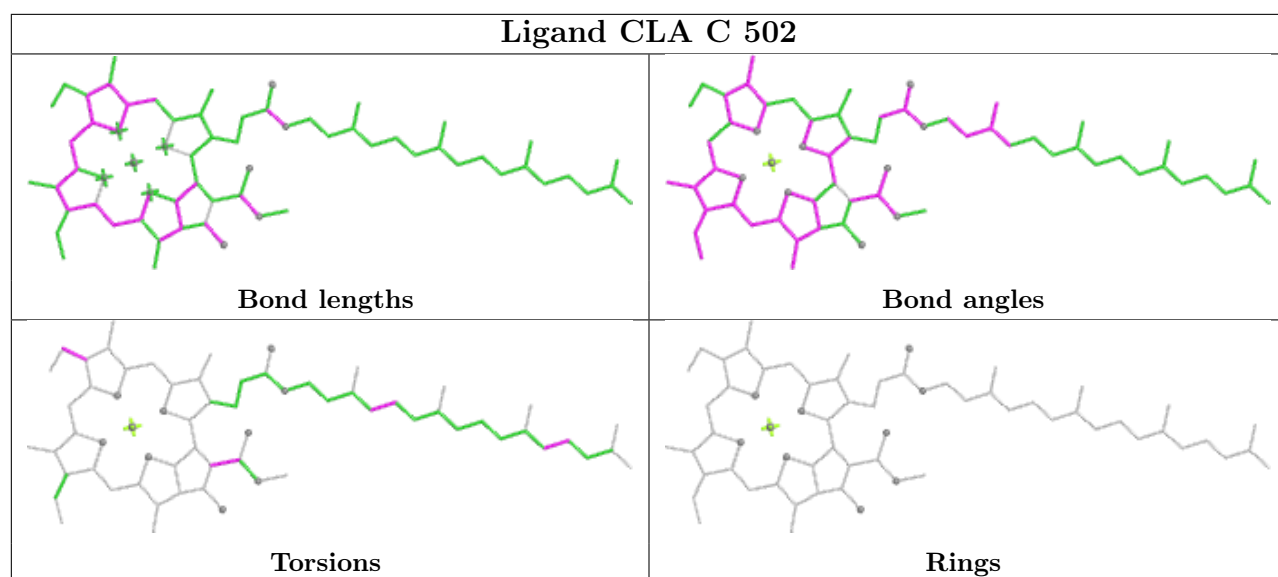


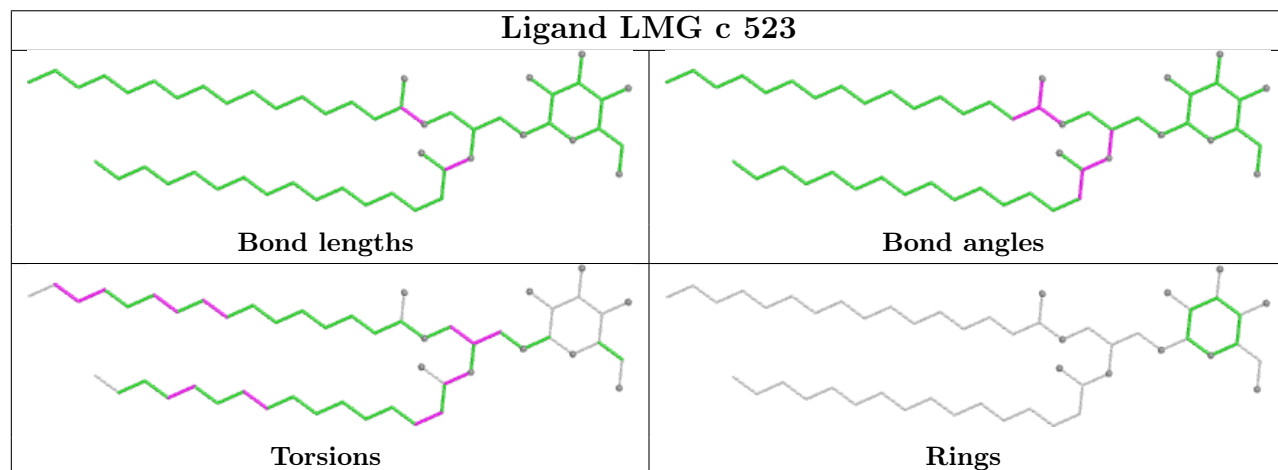
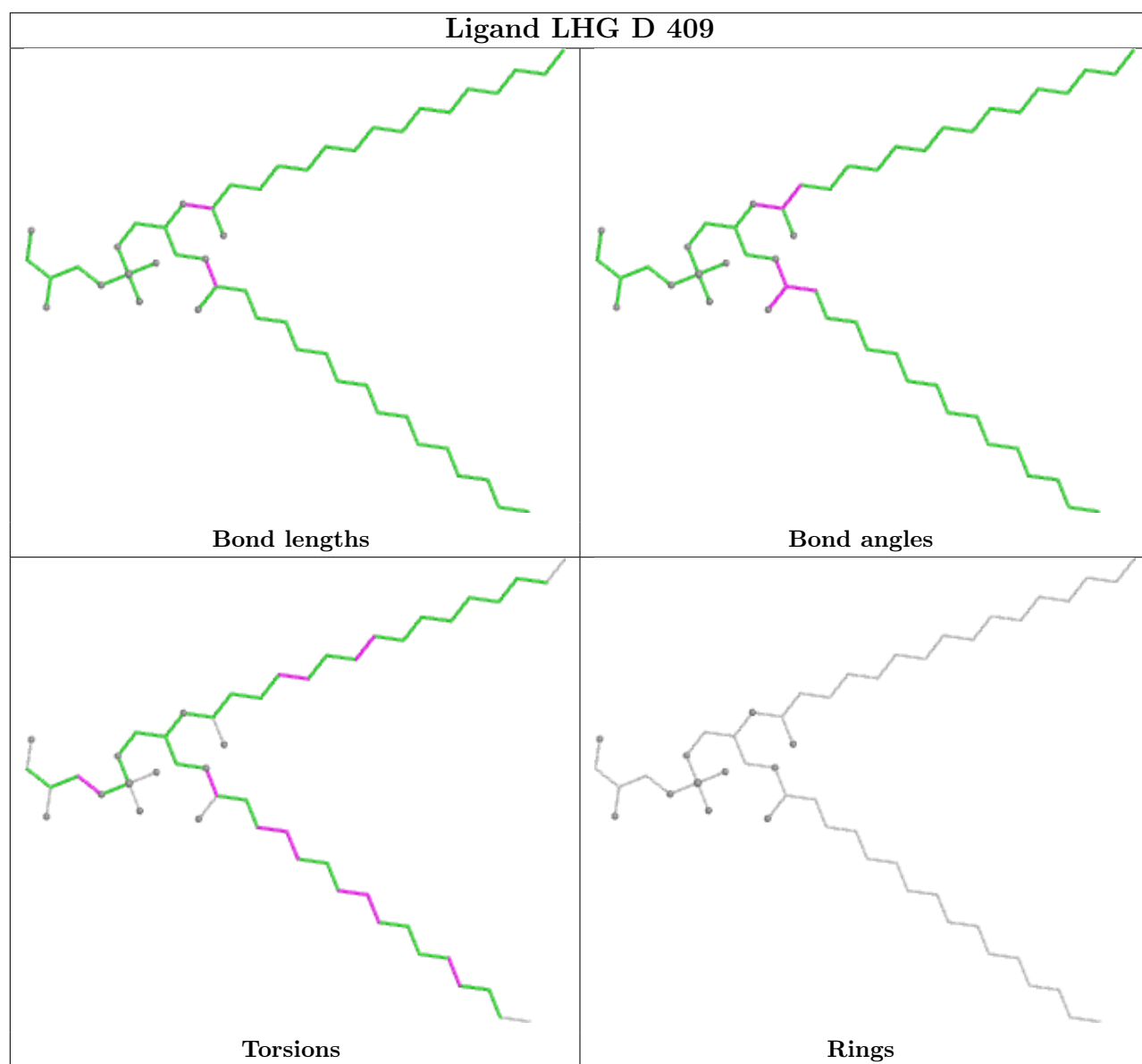
Ligand HTG V 206

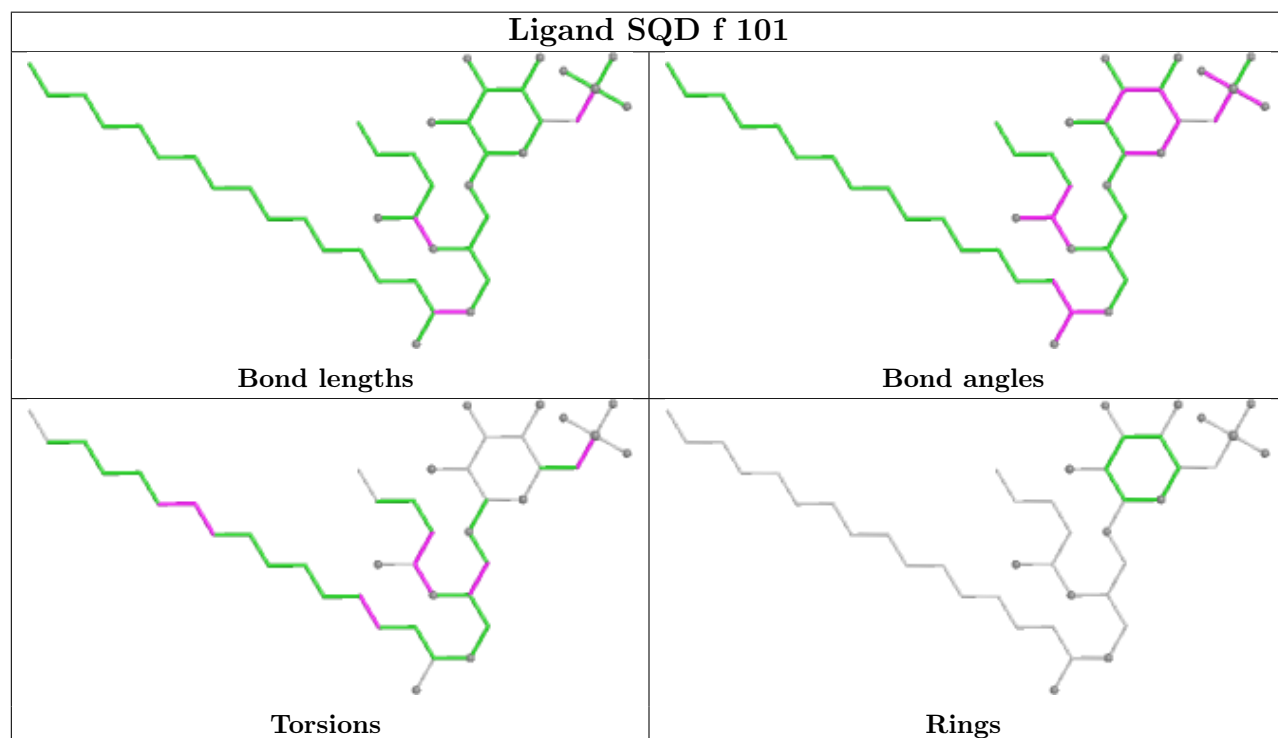
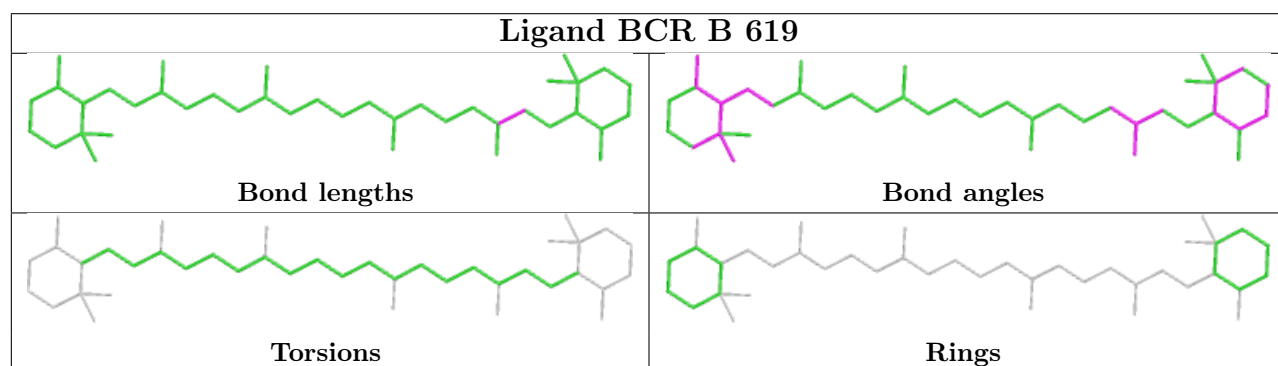
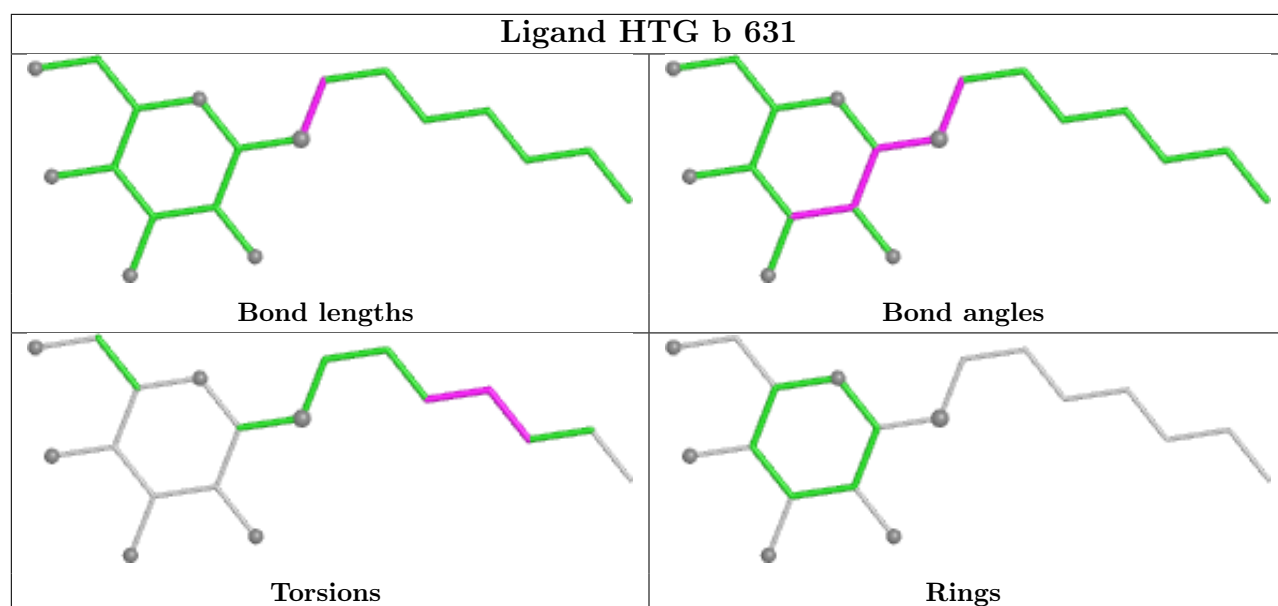


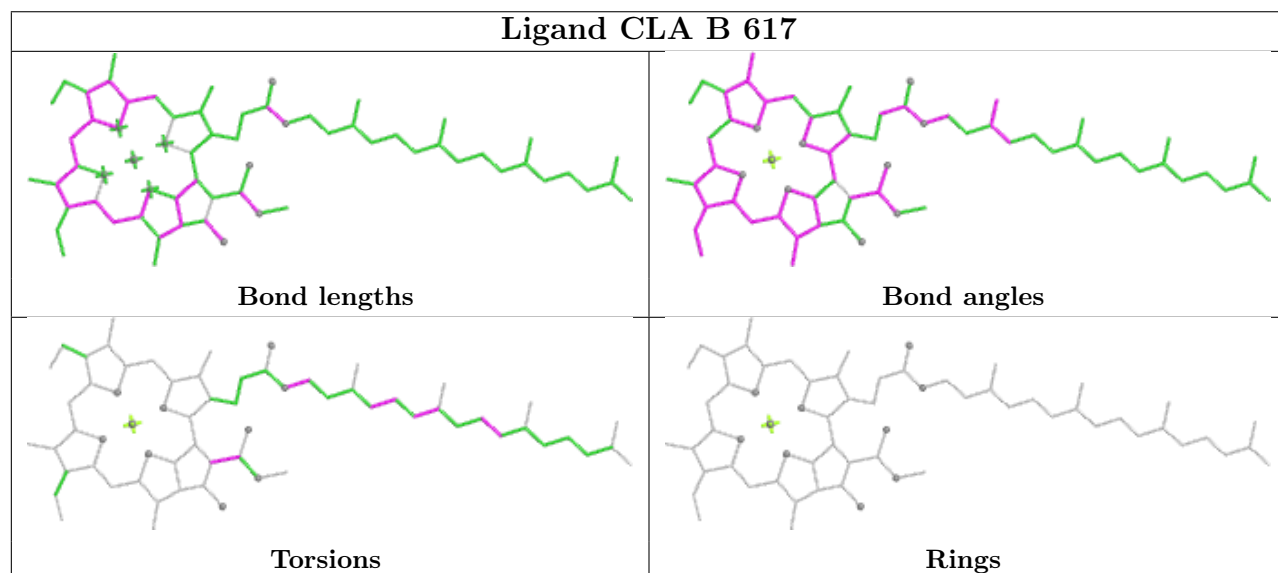
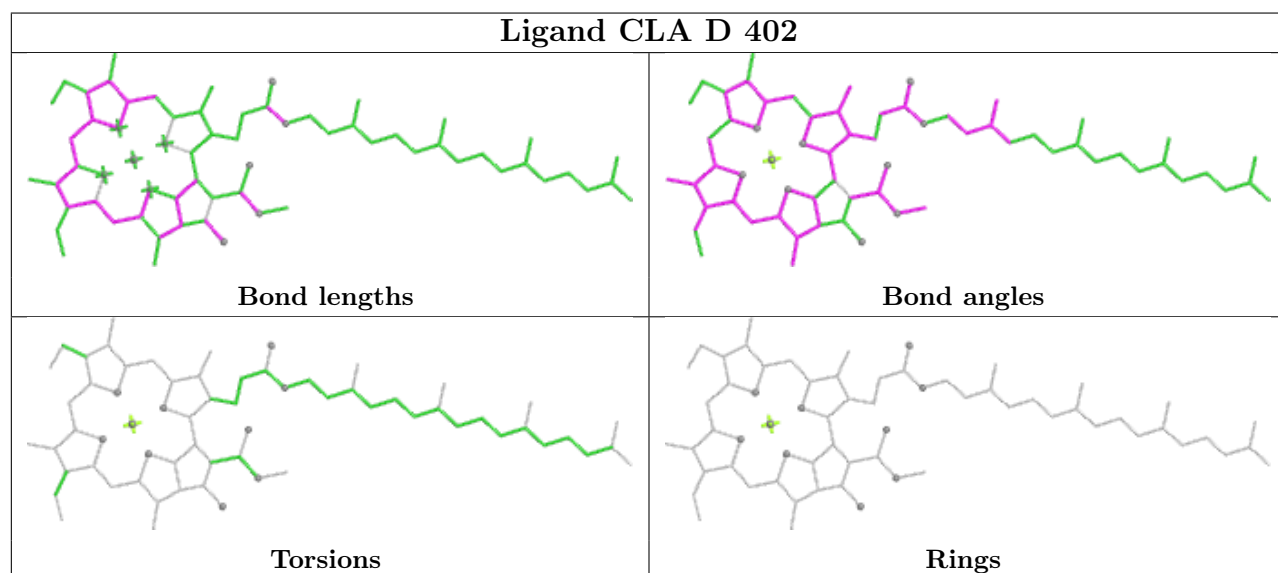
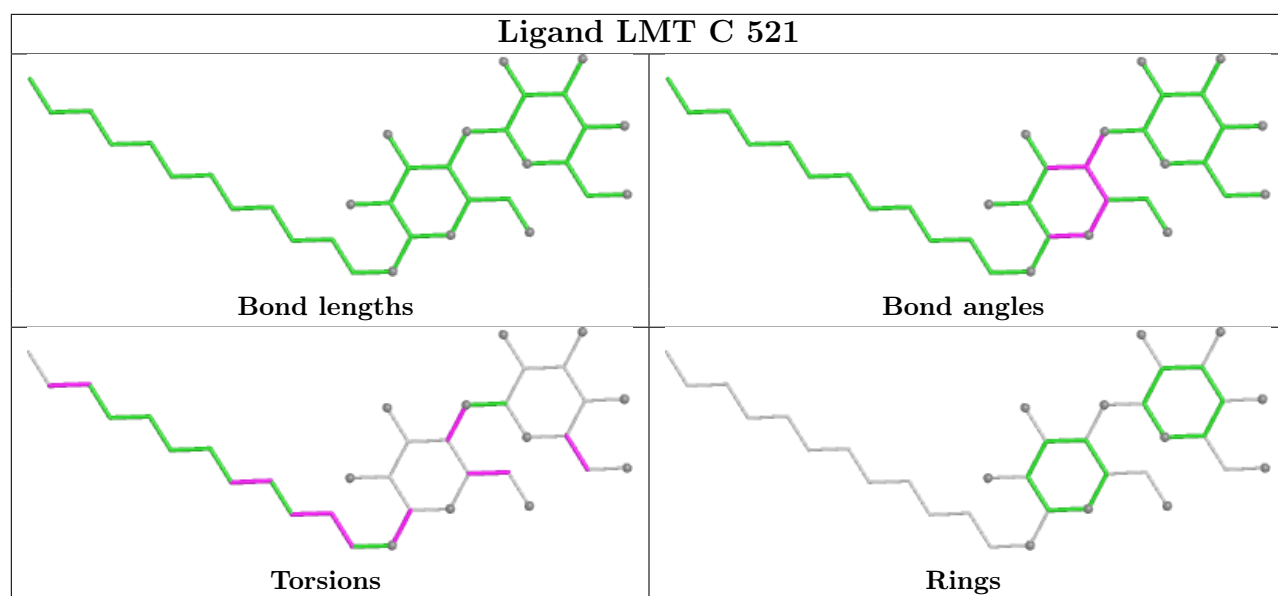
Ligand HTG B 633



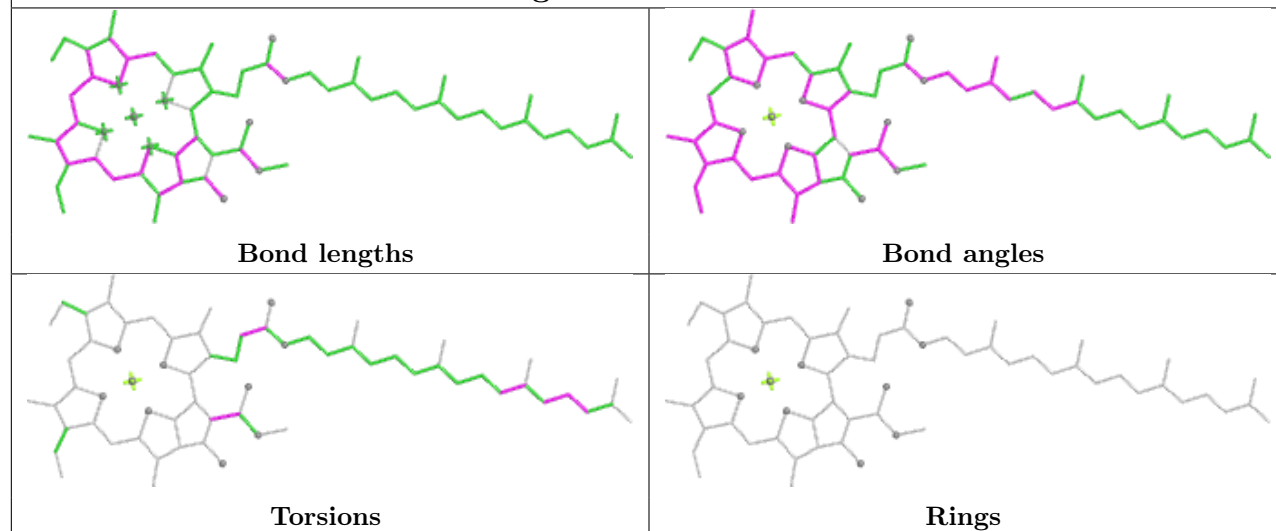




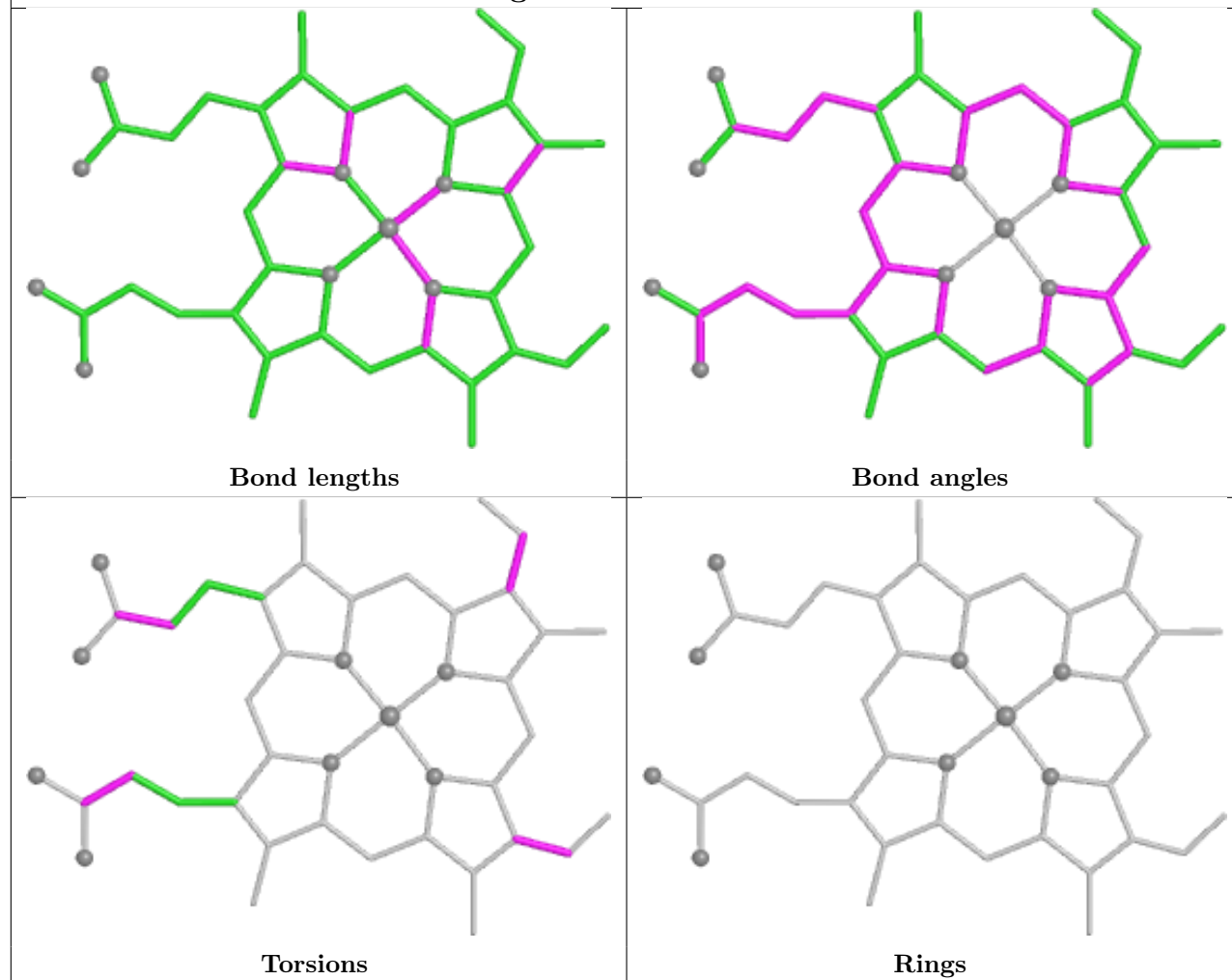


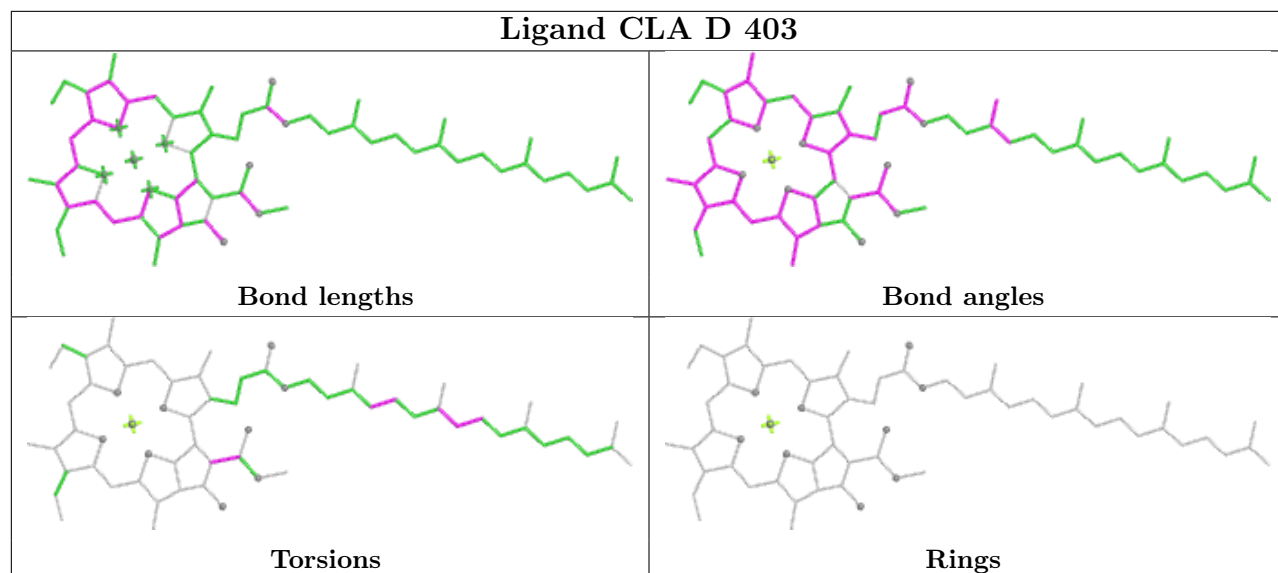
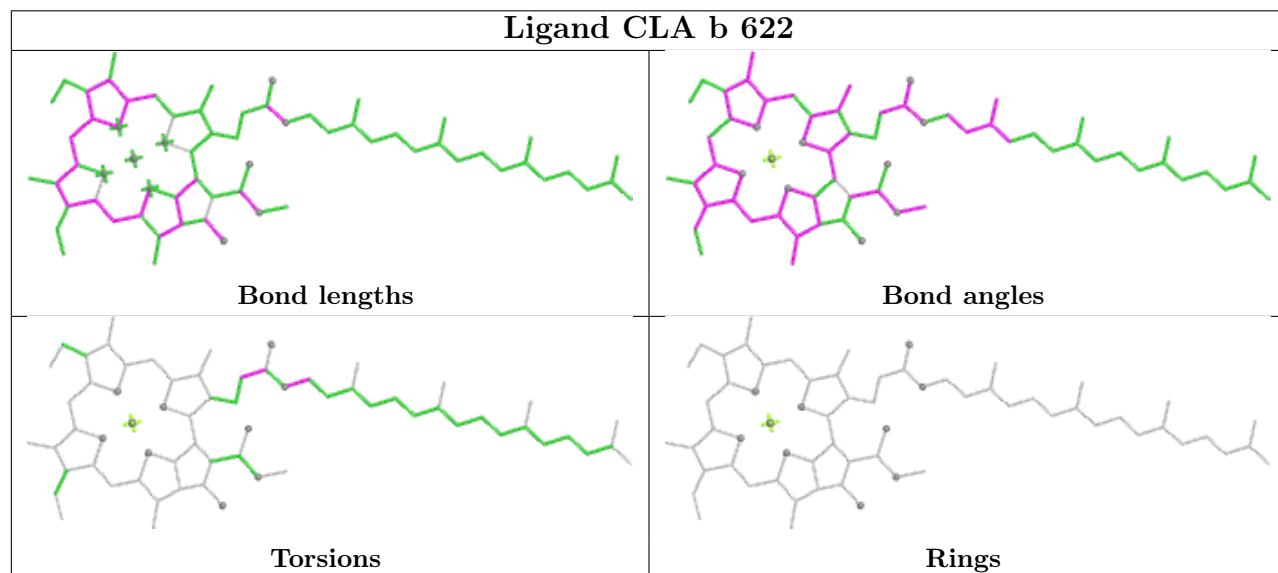
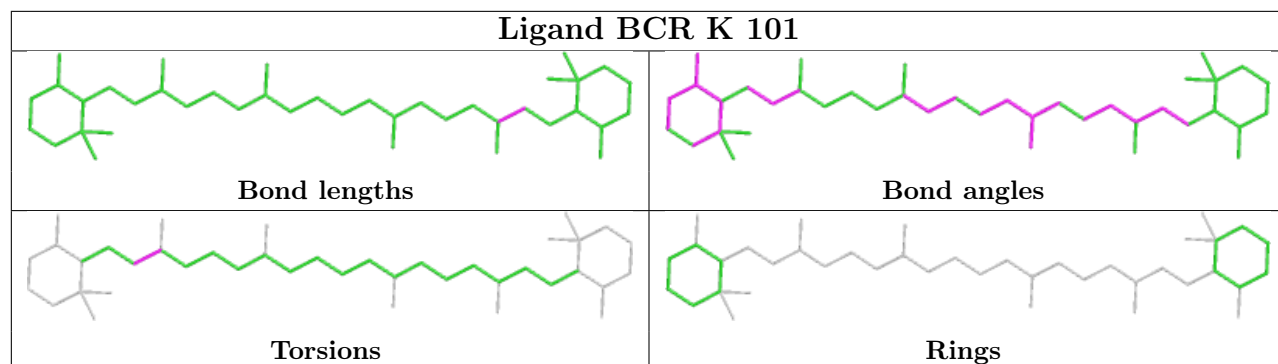


Ligand CLA C 501

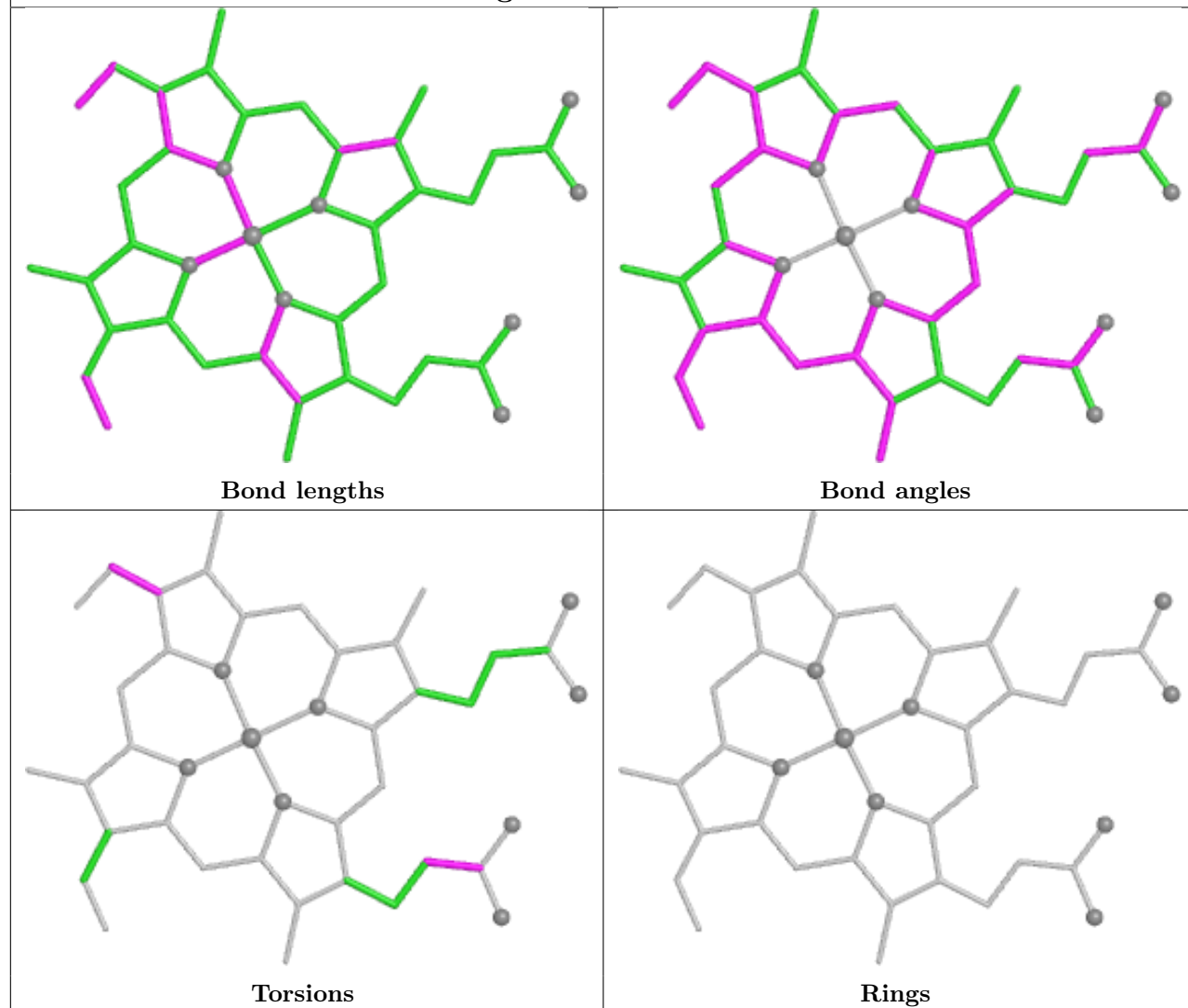


Ligand HEM F 102

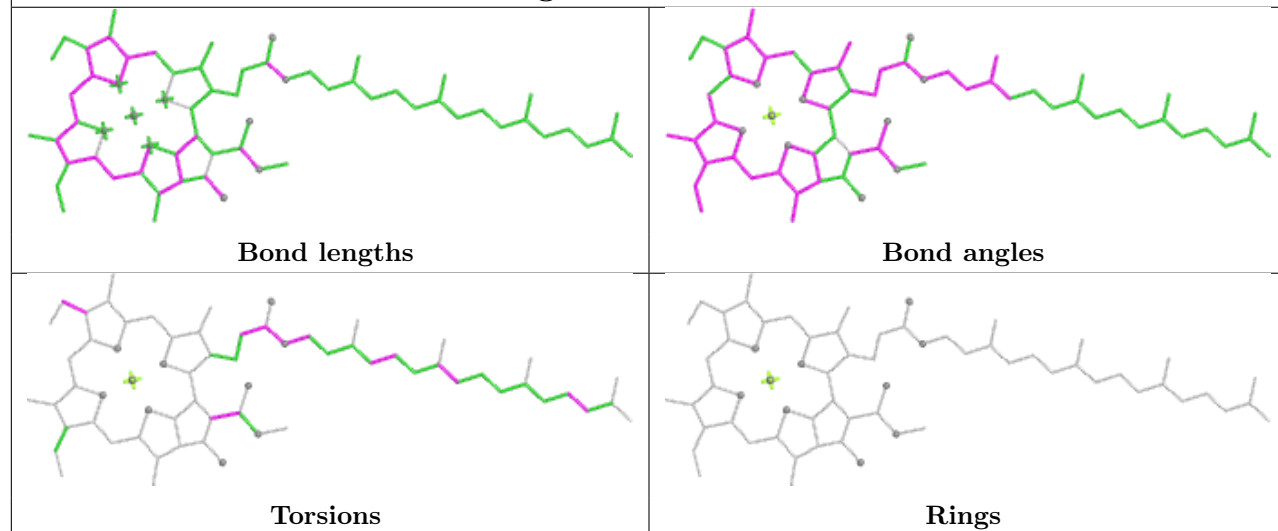


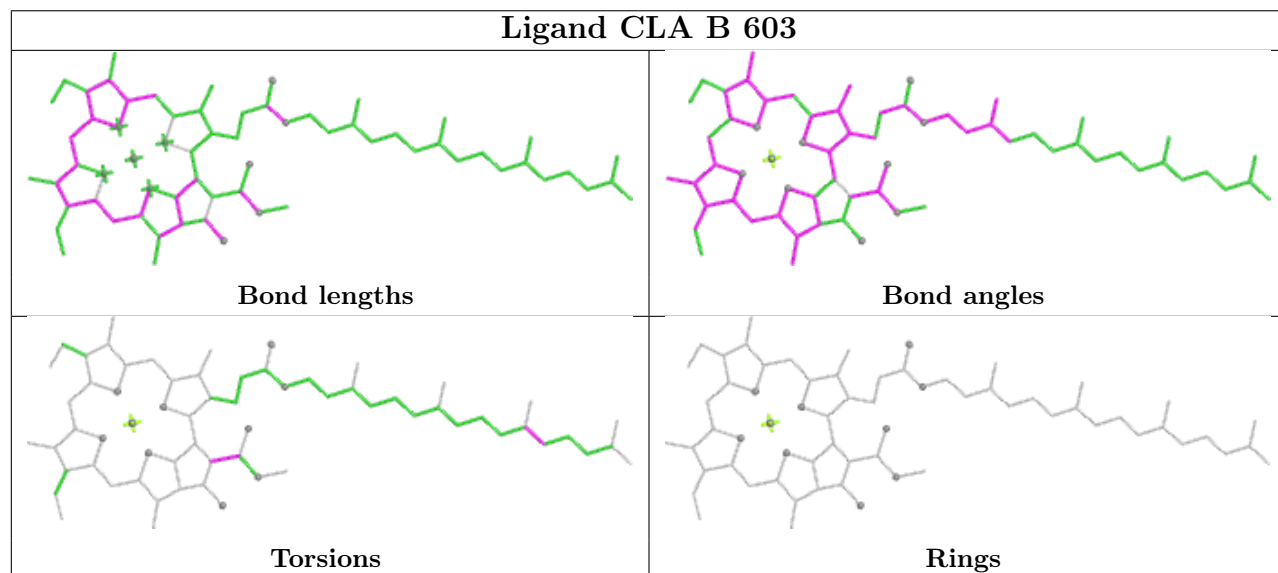
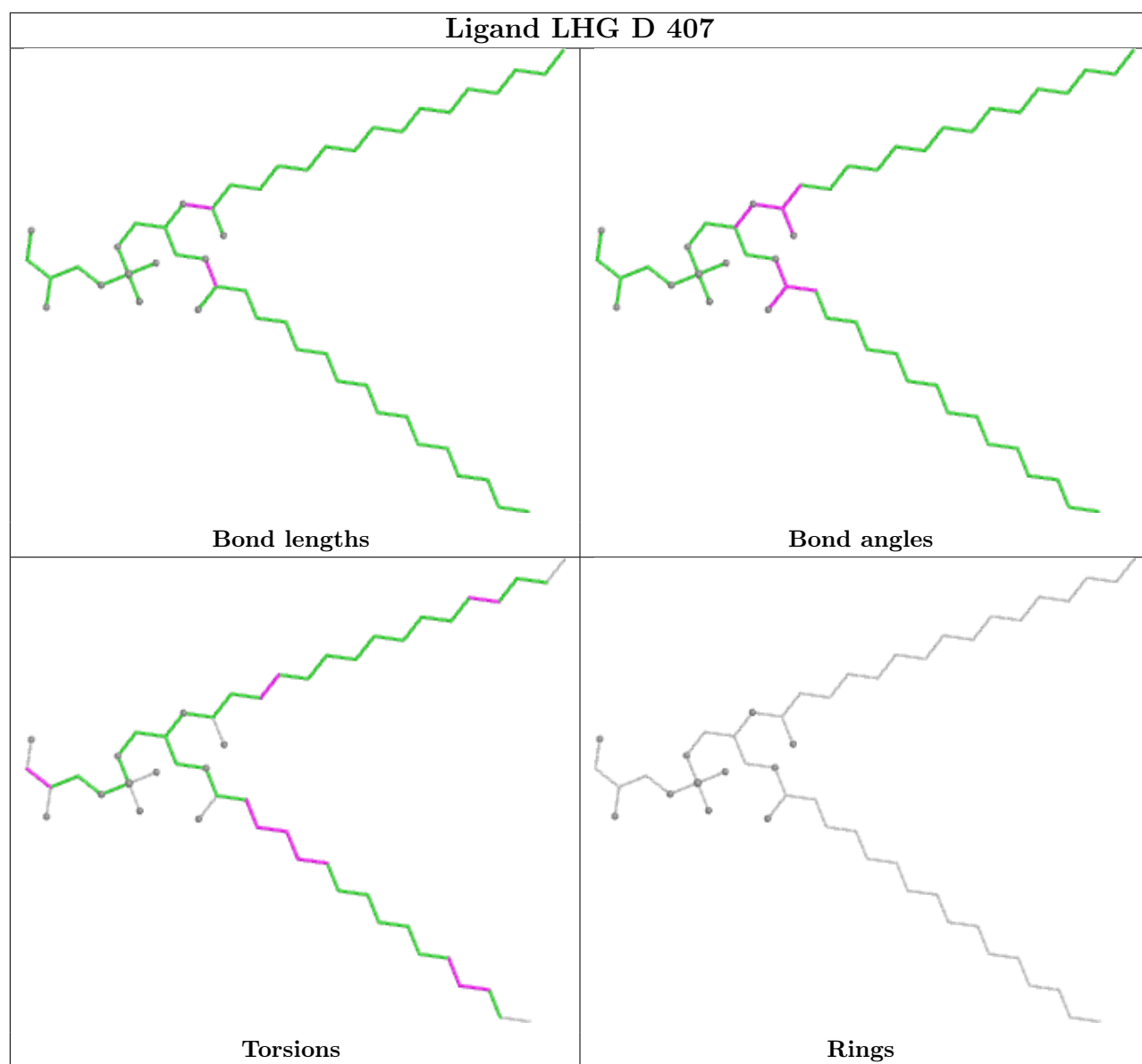


Ligand HEC v 205

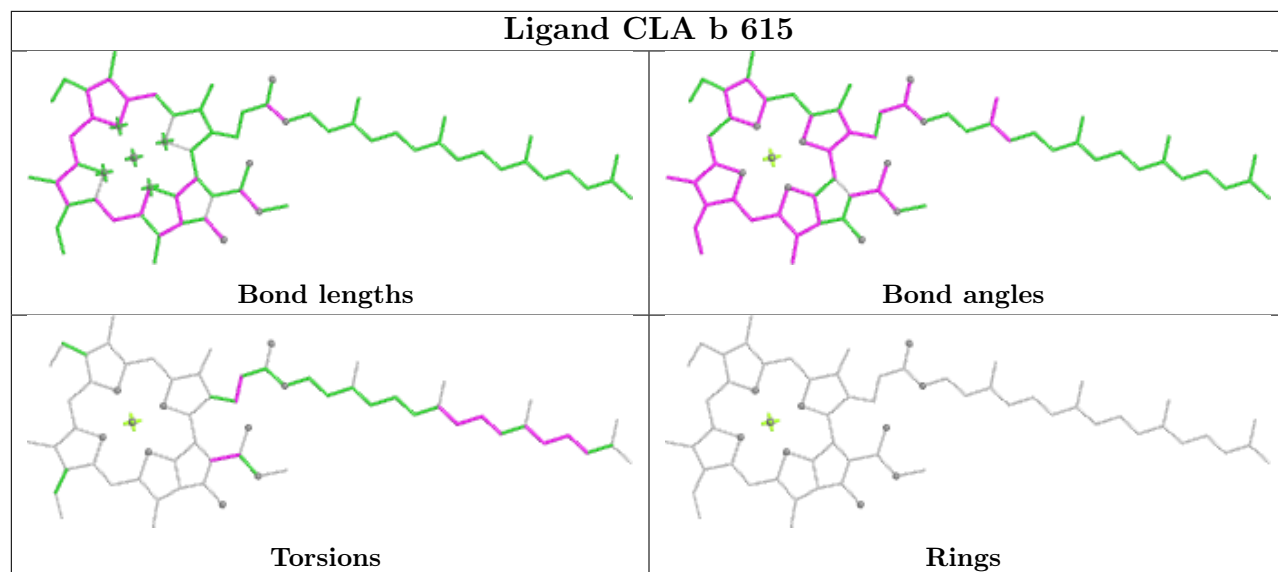


Ligand CLA c 517

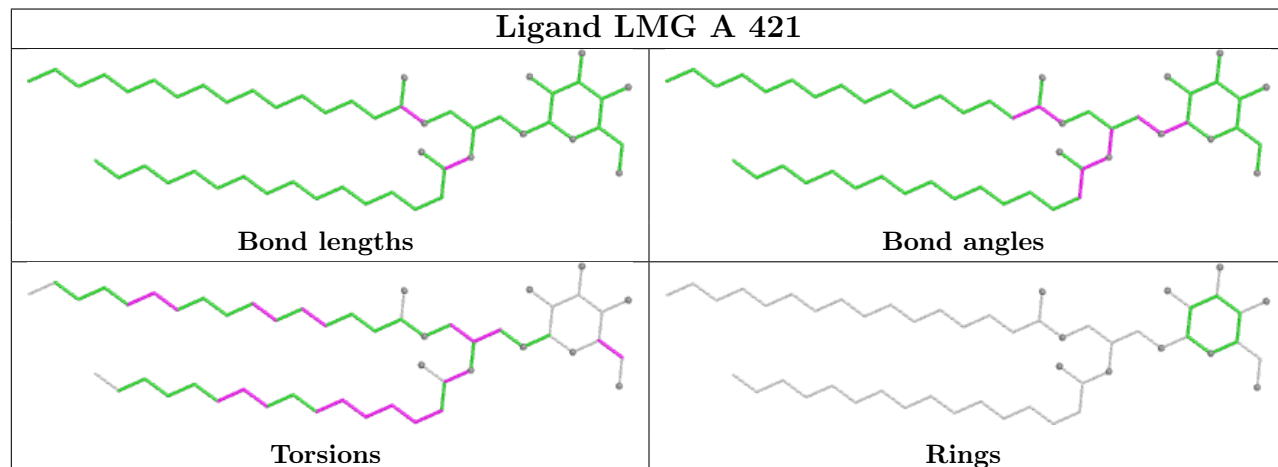




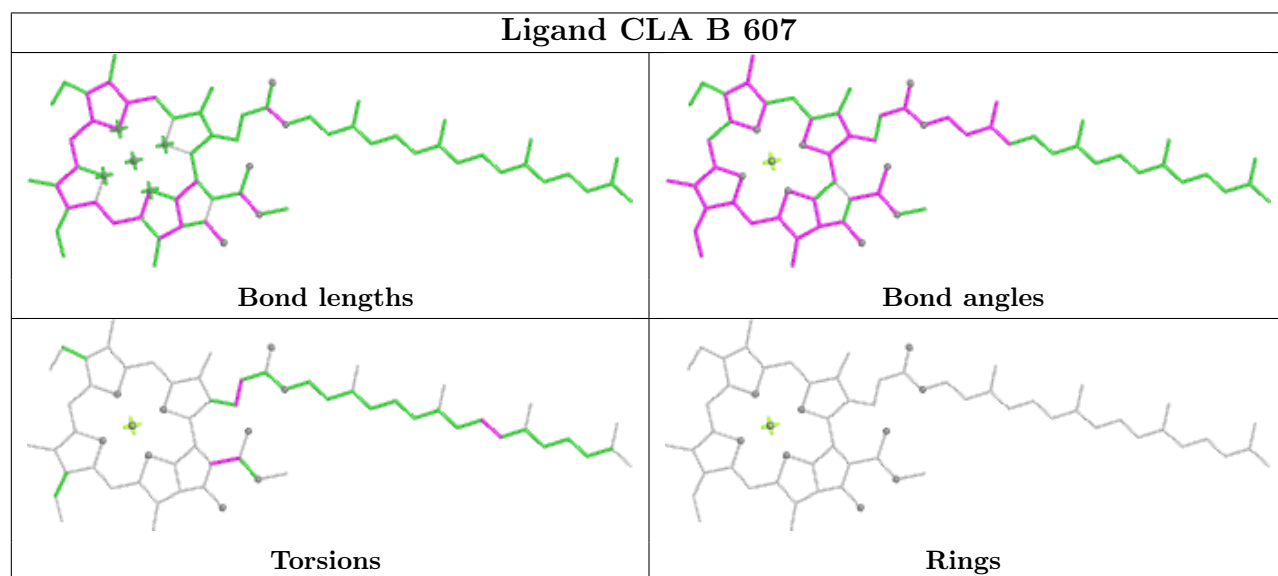
Ligand CLA b 615

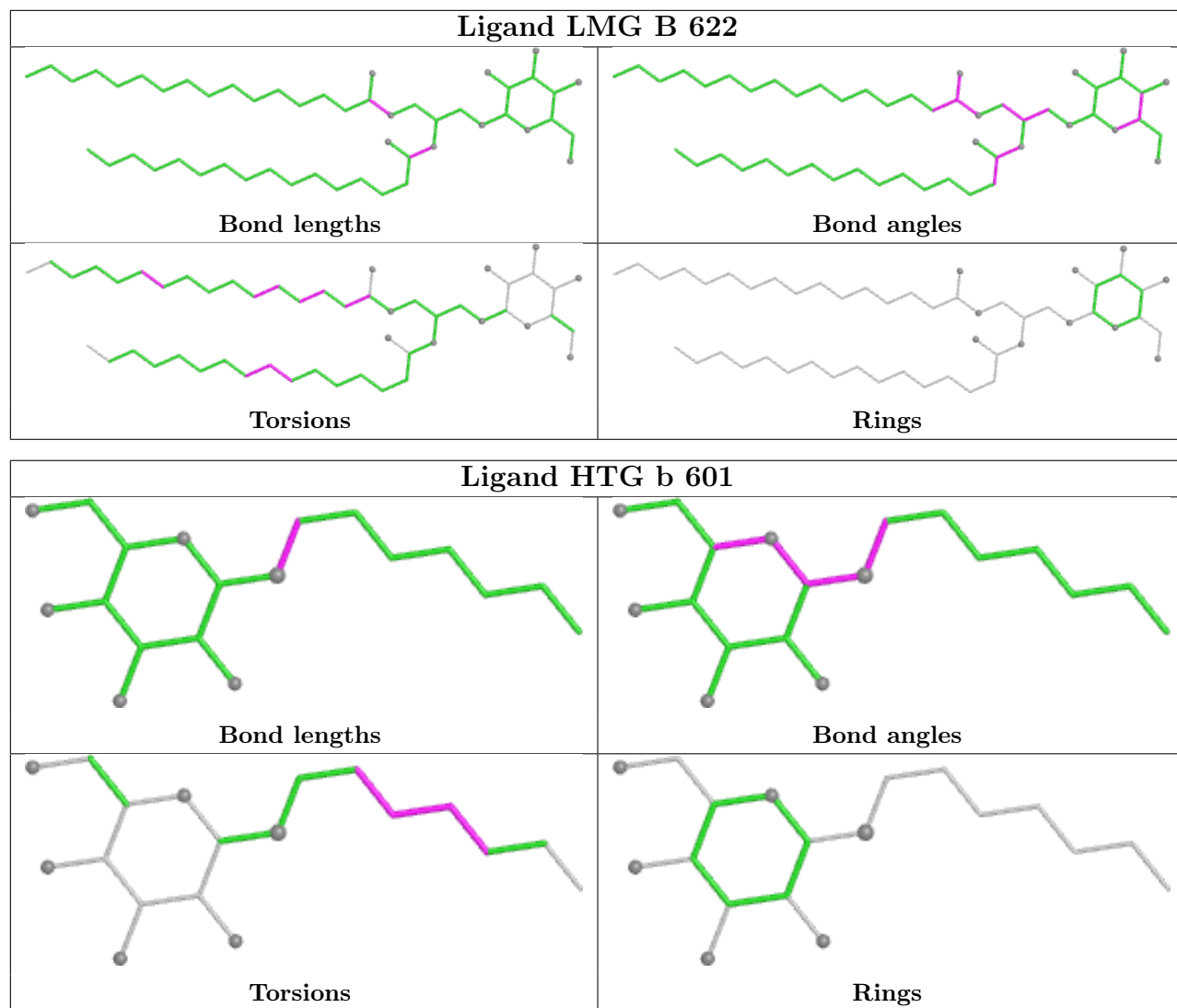


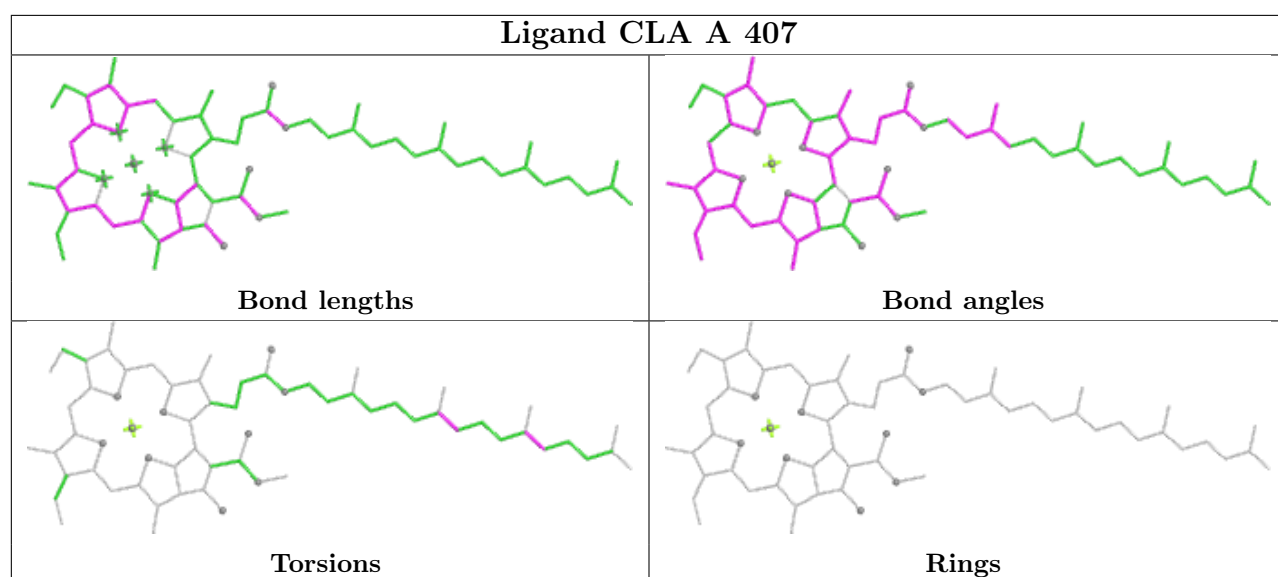
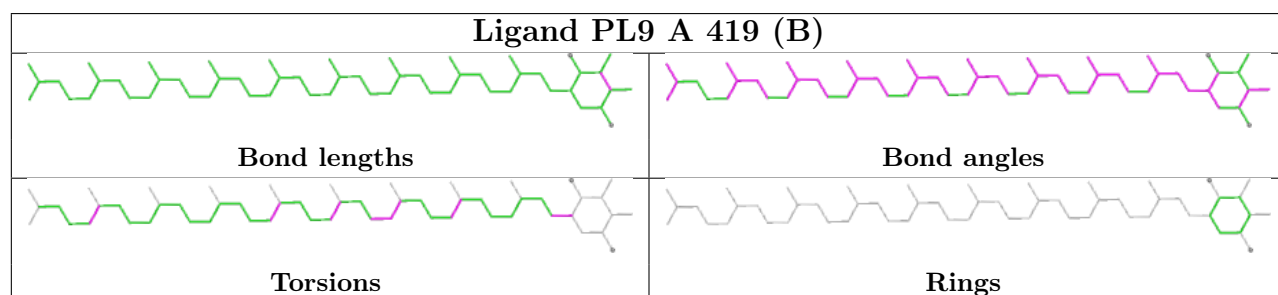
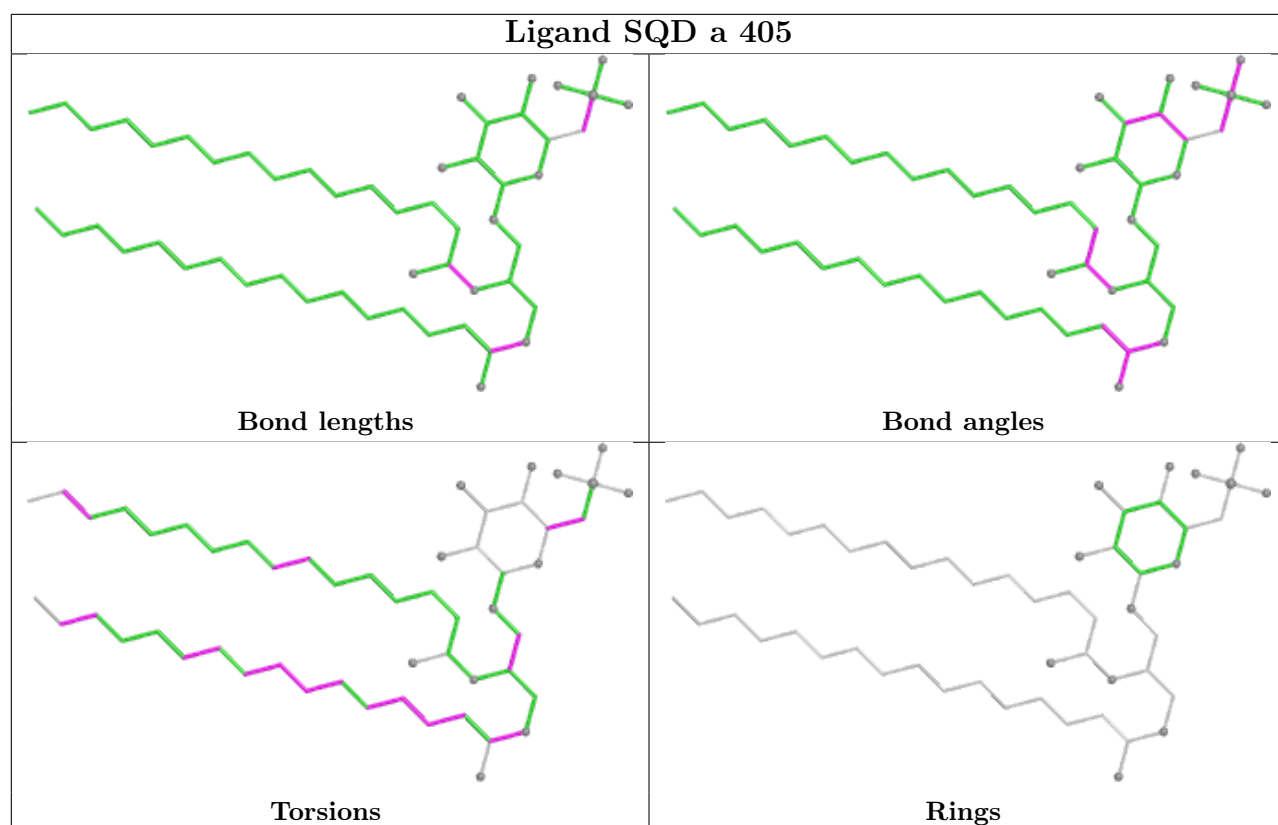
Ligand LMG A 421

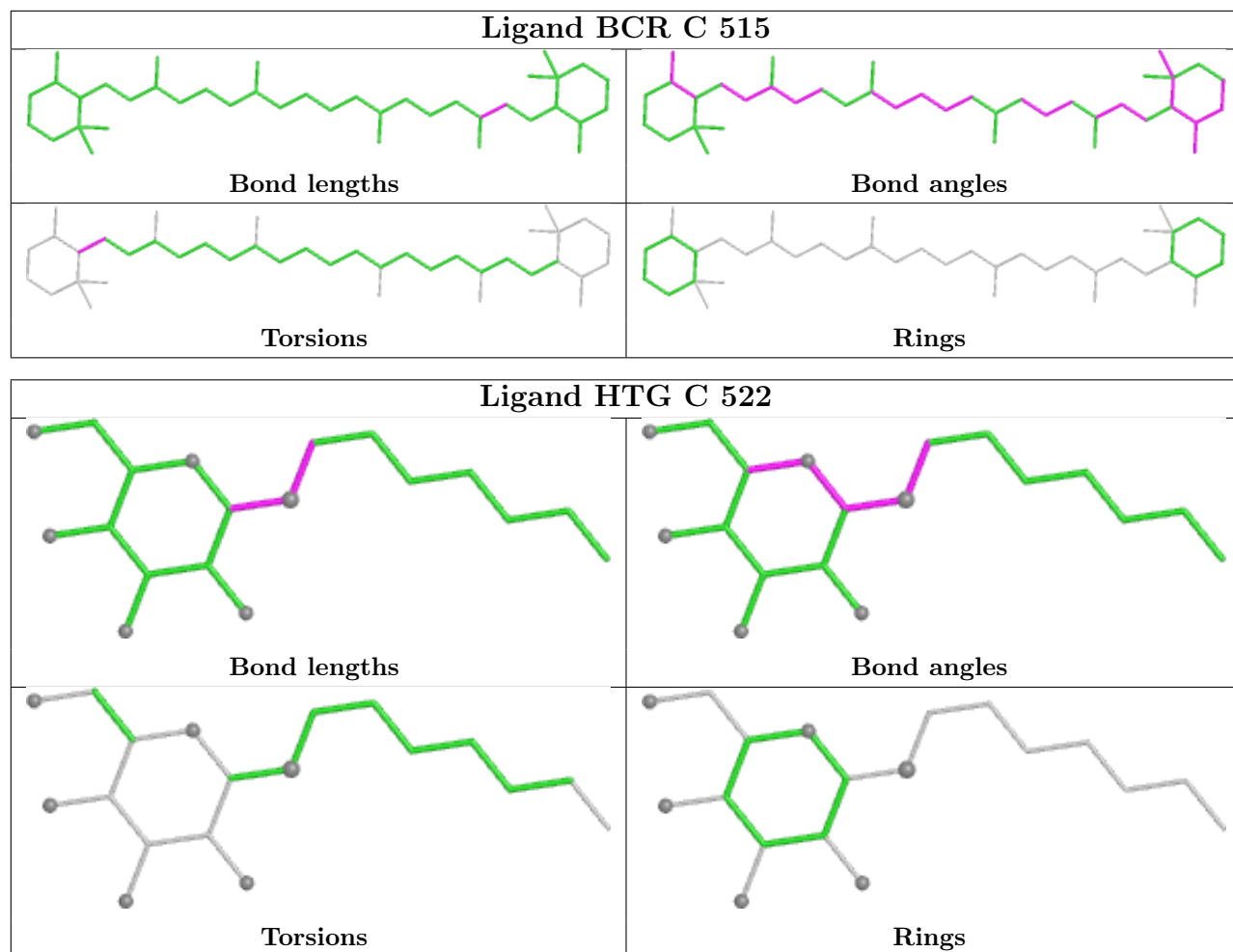


Ligand CLA B 607

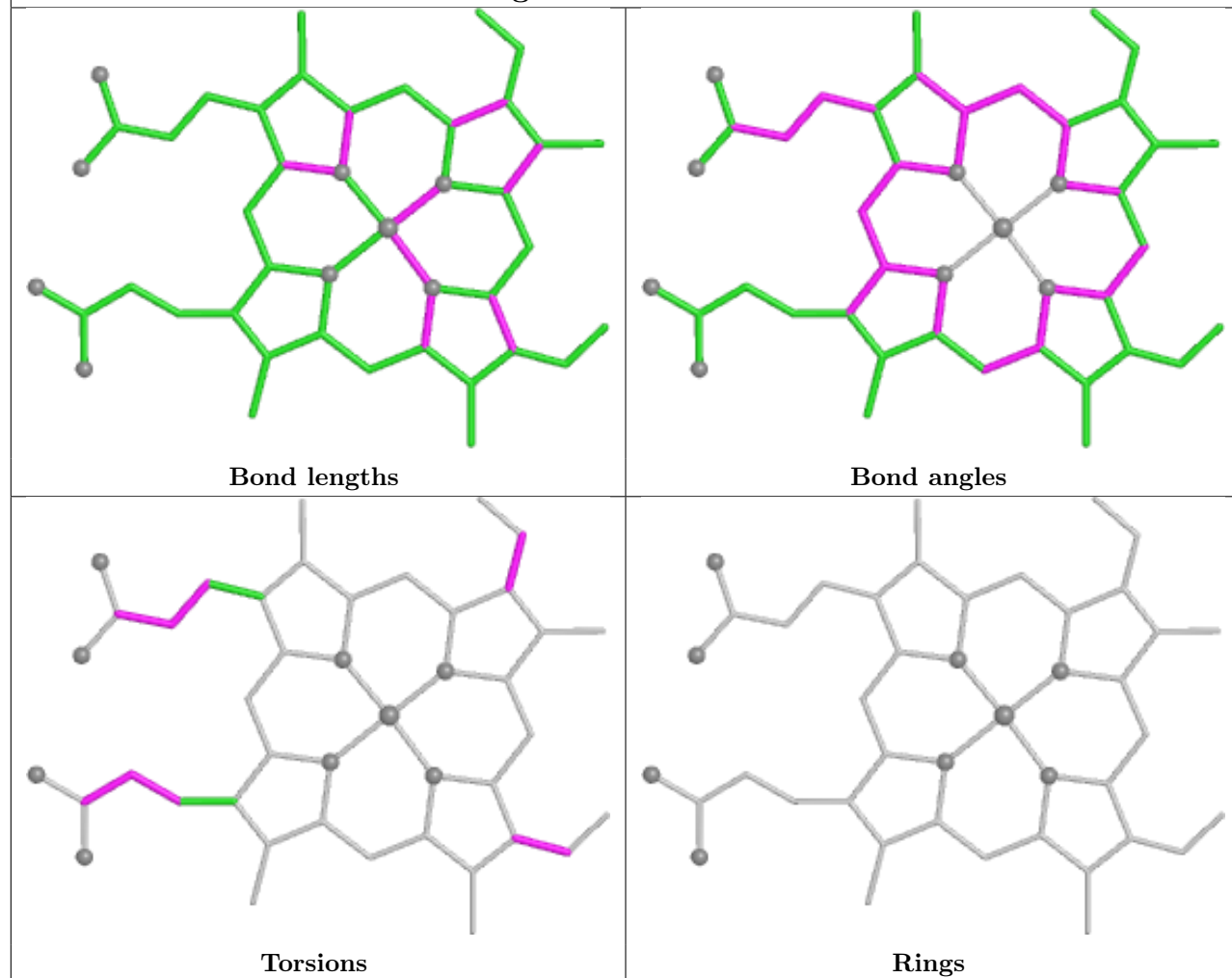




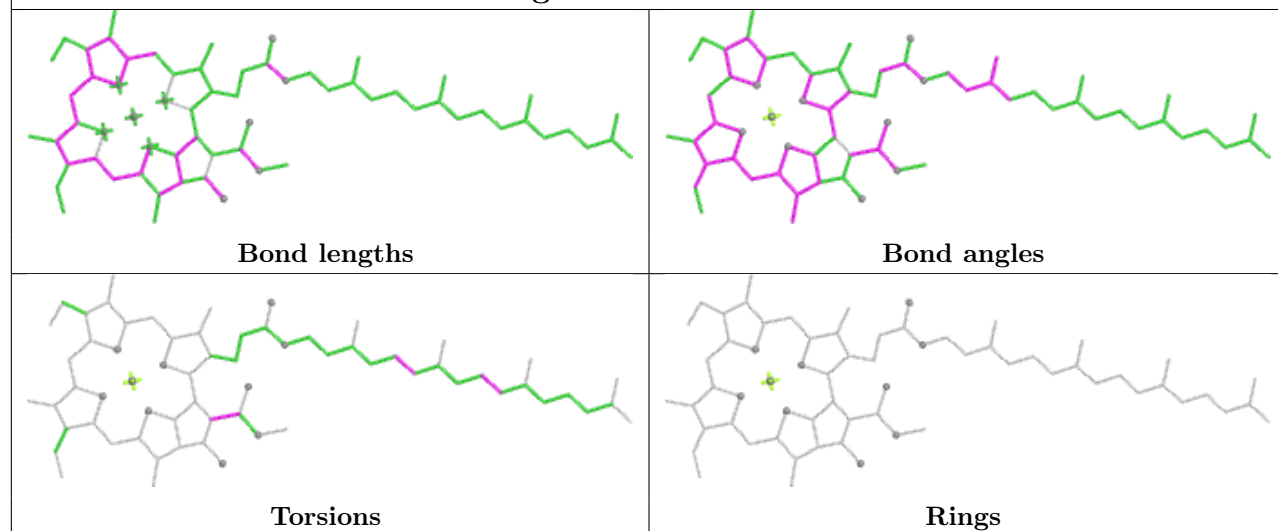


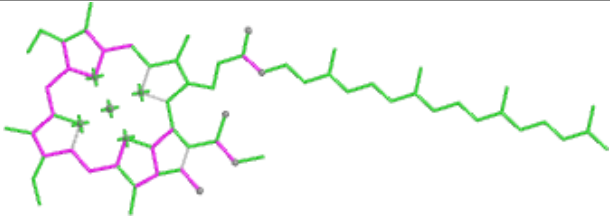
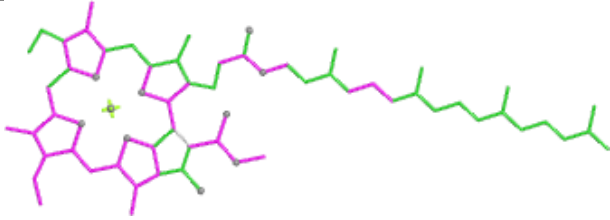
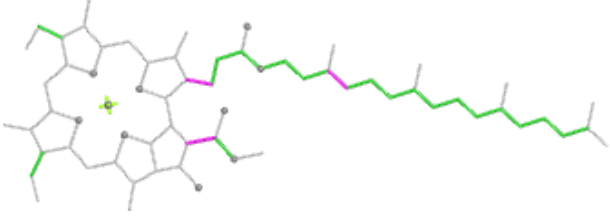
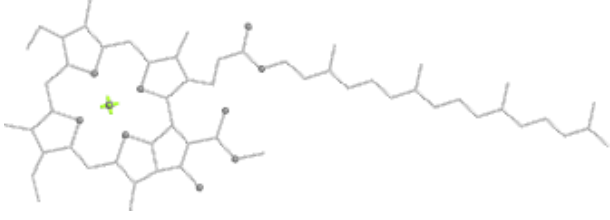
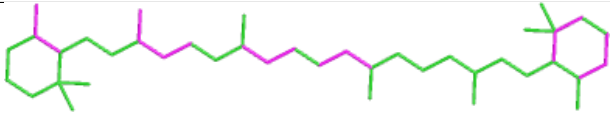
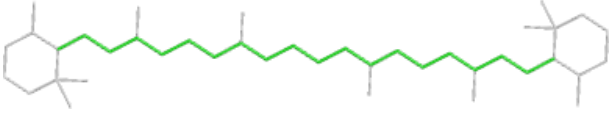
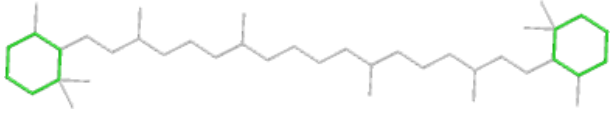
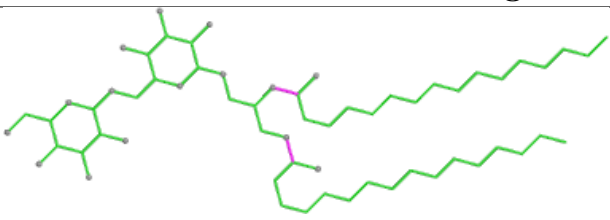
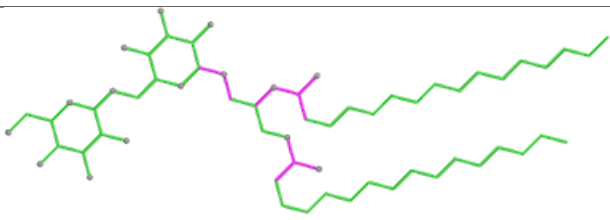
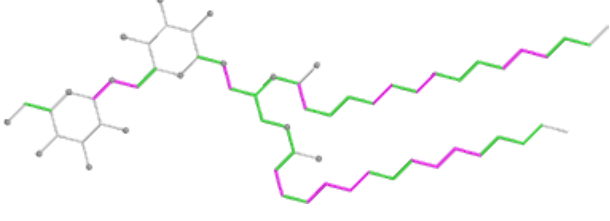
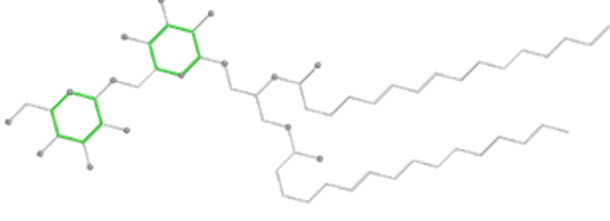


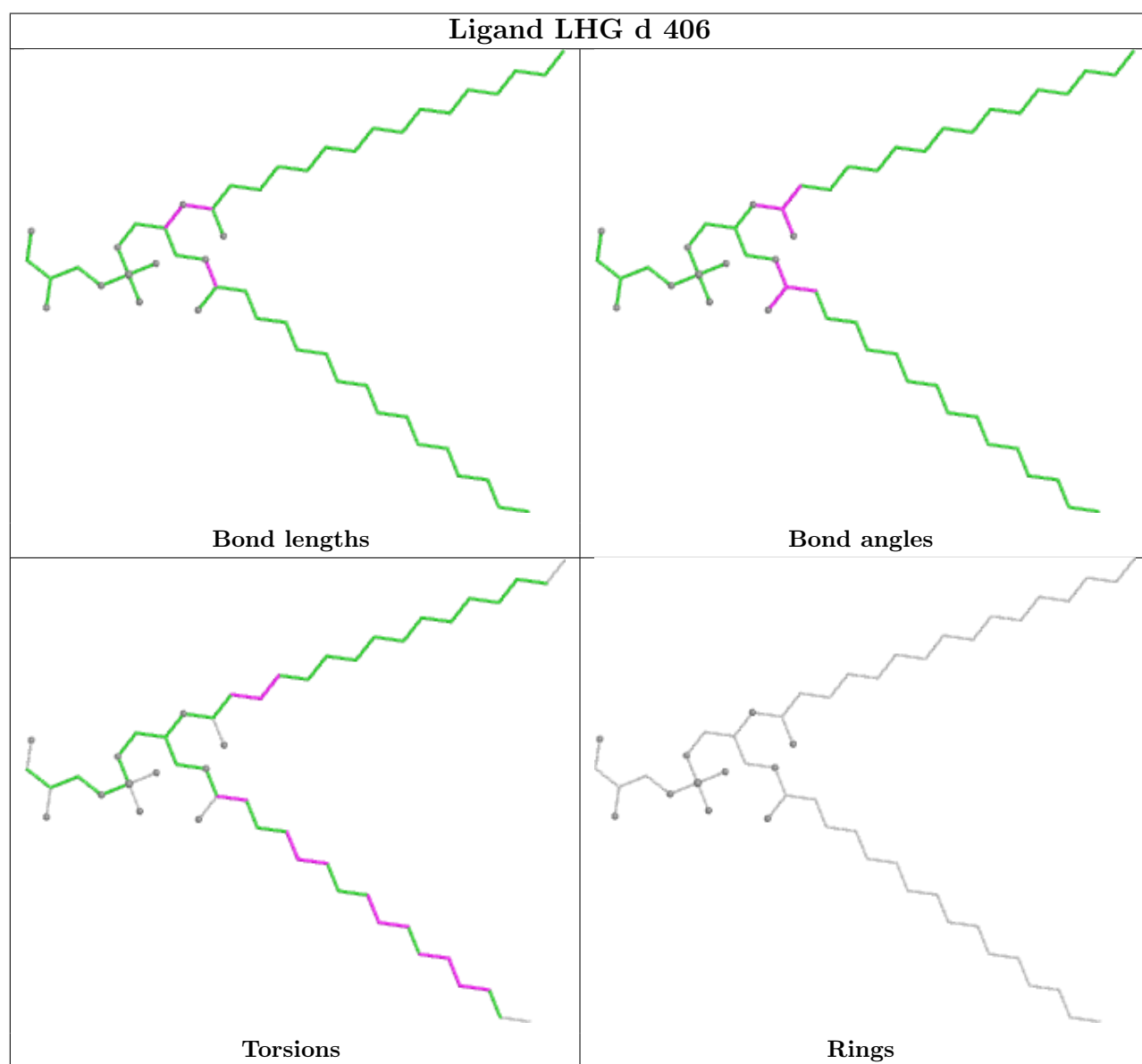
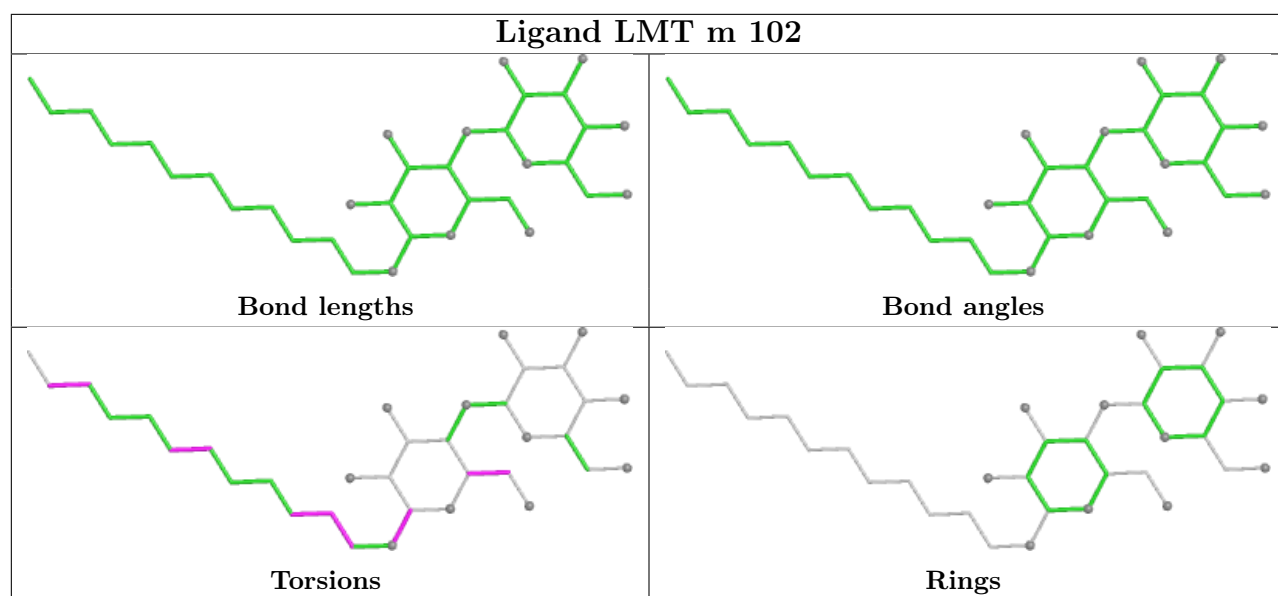
Ligand HEM e 103



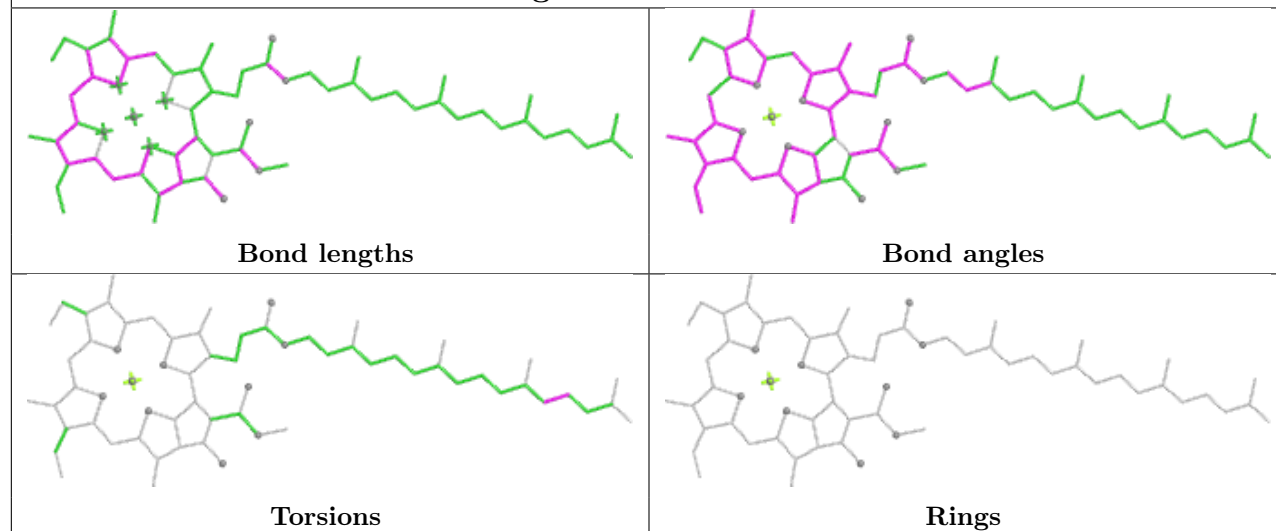
Ligand CLA C 508



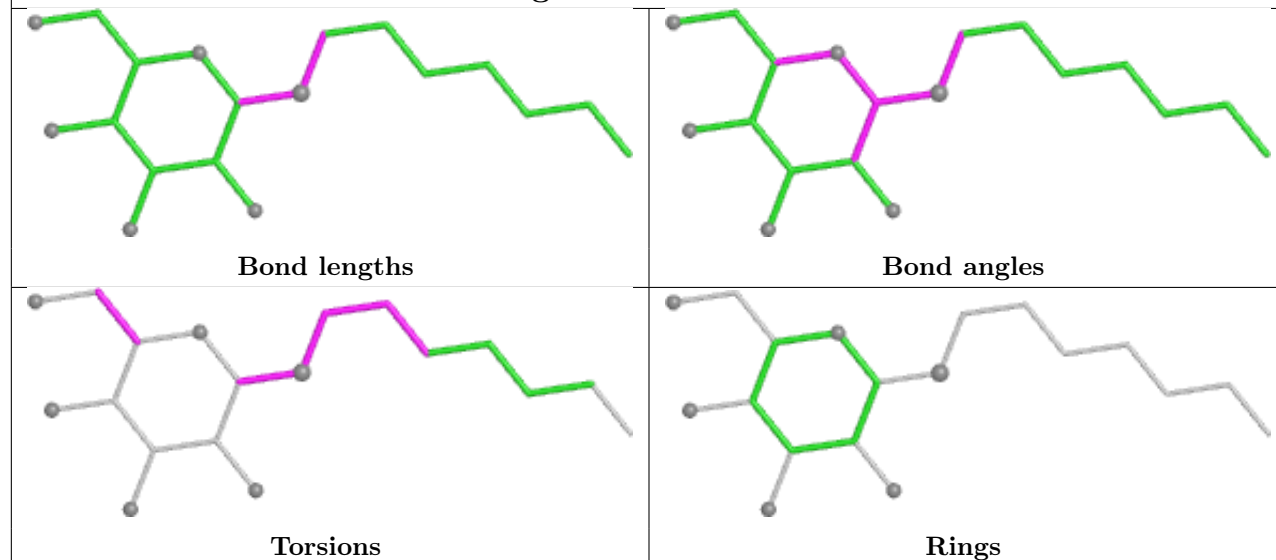
Ligand CLA B 610	
 Bond lengths	 Bond angles
 Torsions	 Rings
Ligand BCR c 528	
 Bond lengths	 Bond angles
 Torsions	 Rings
Ligand DGD C 517	
 Bond lengths	 Bond angles
 Torsions	 Rings



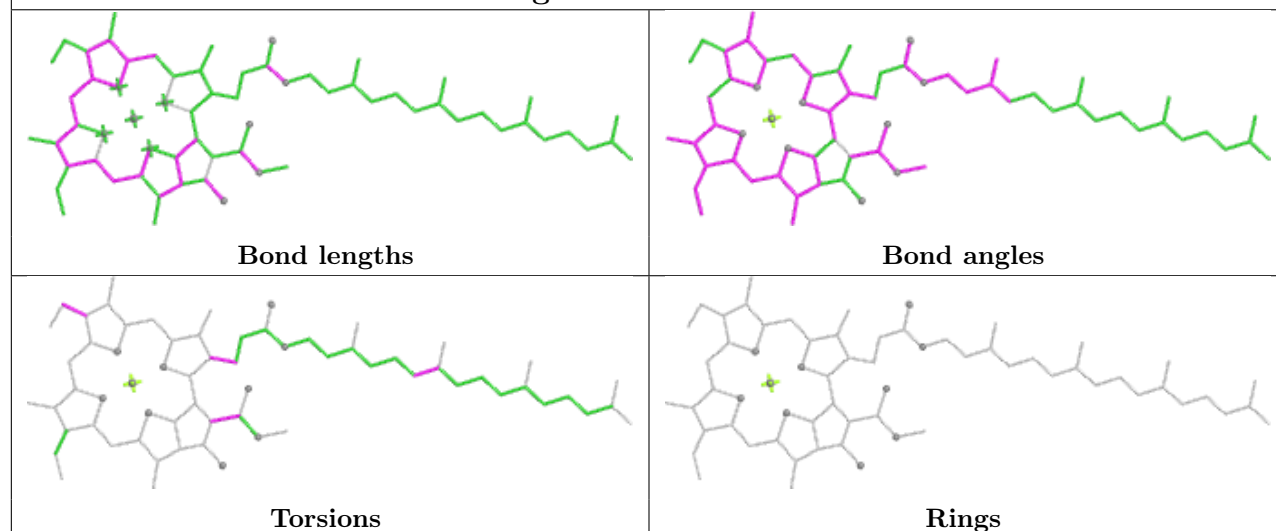
Ligand CLA B 609

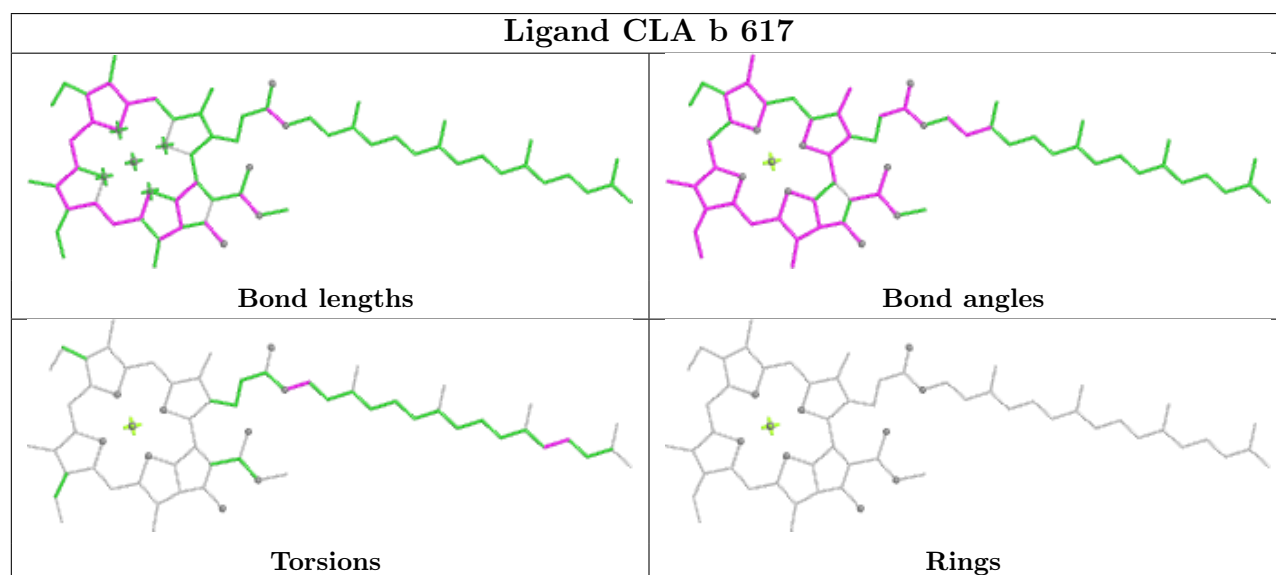
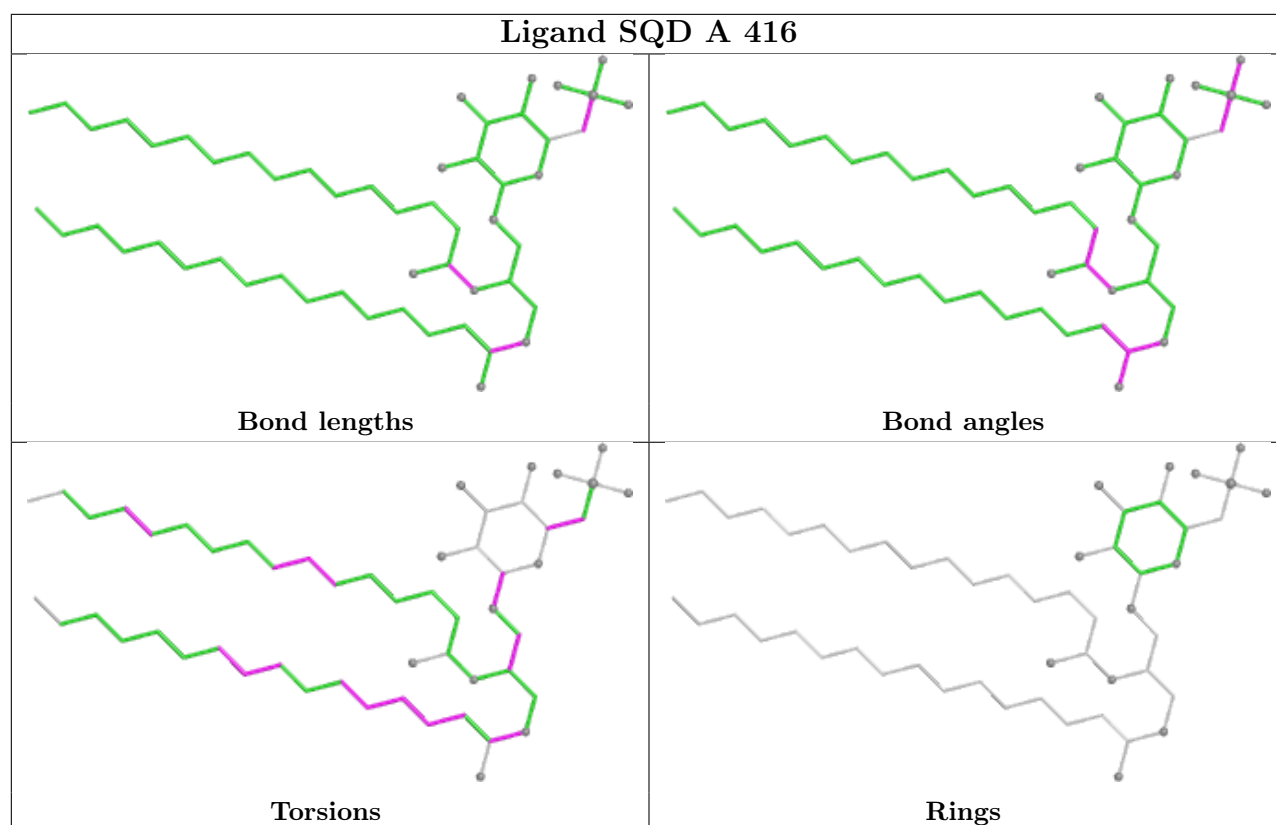


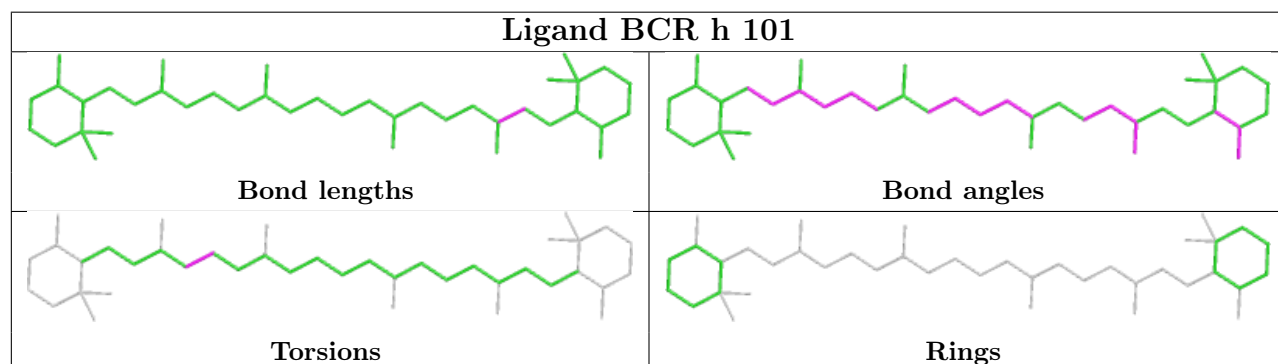
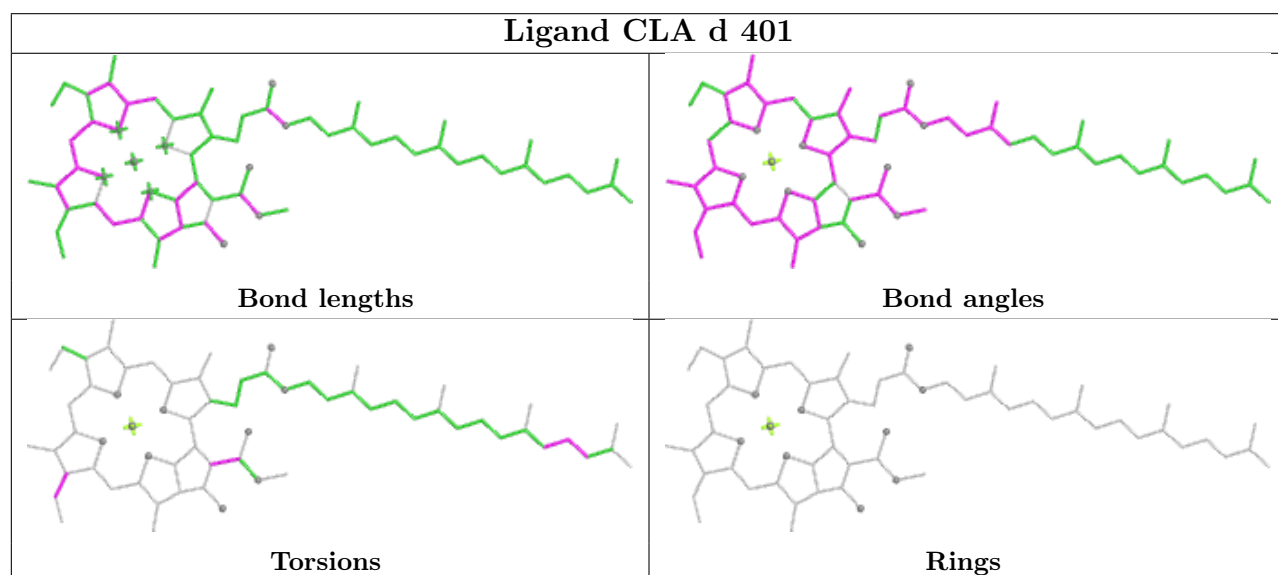
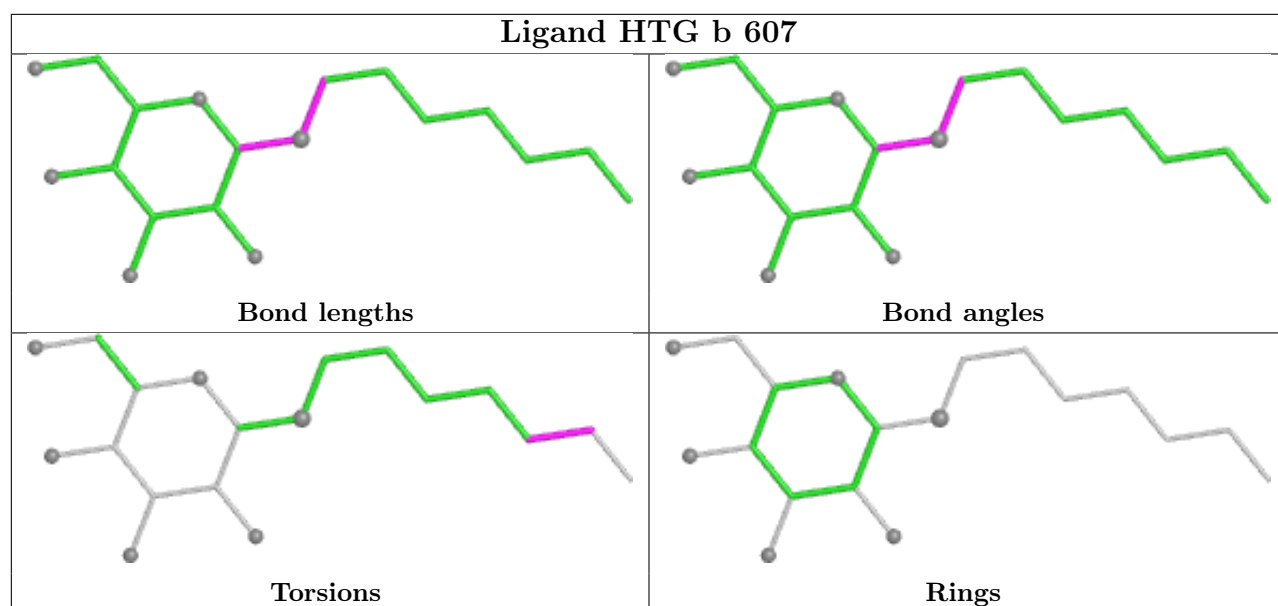
Ligand HTG b 632



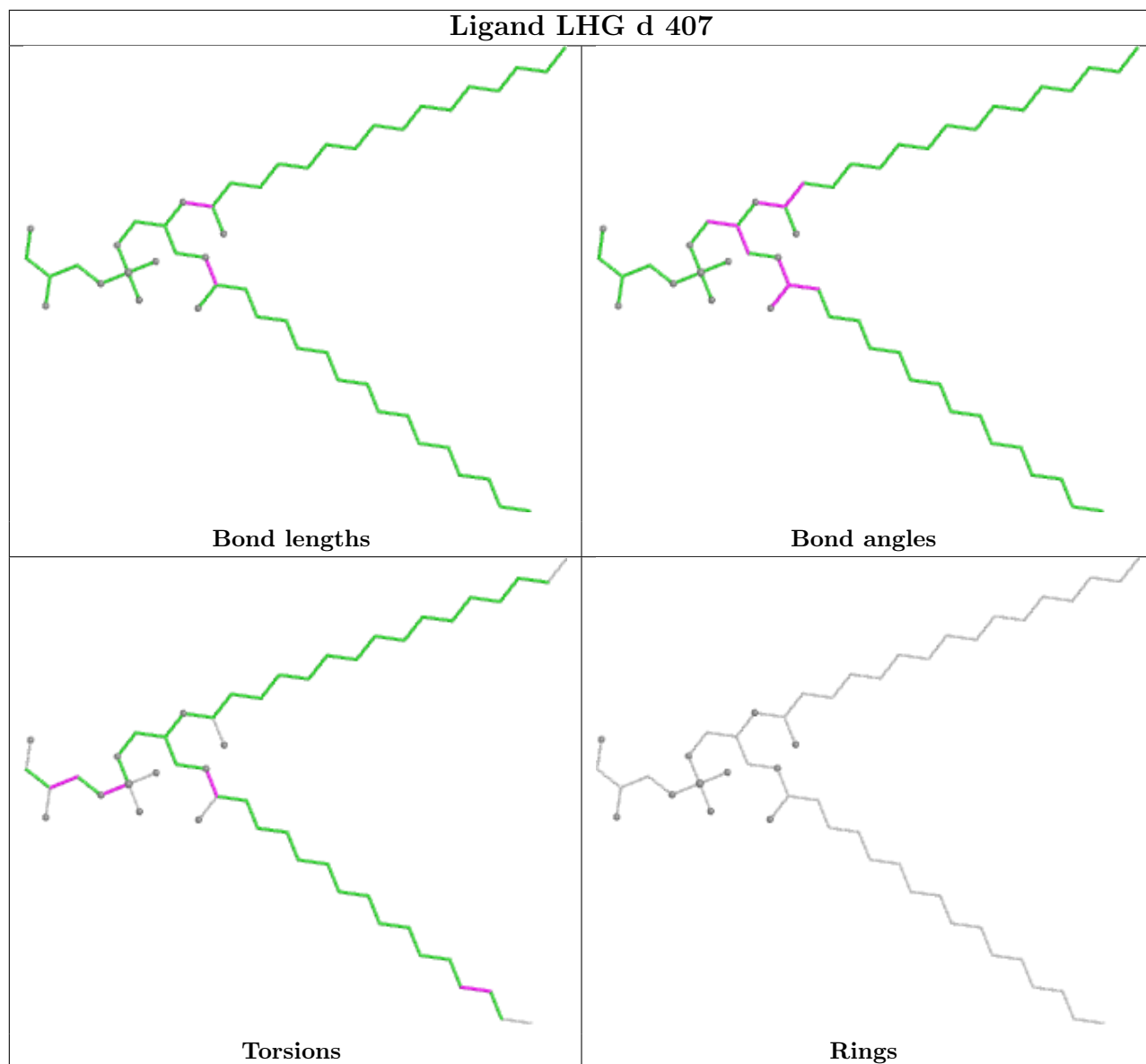
Ligand CLA B 608



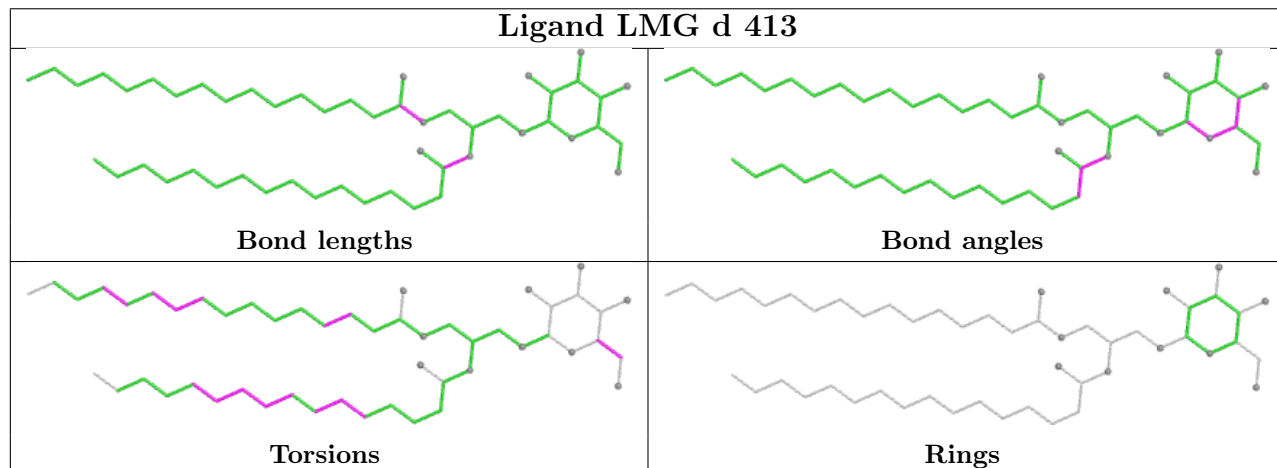


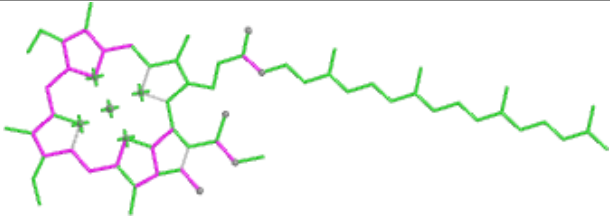
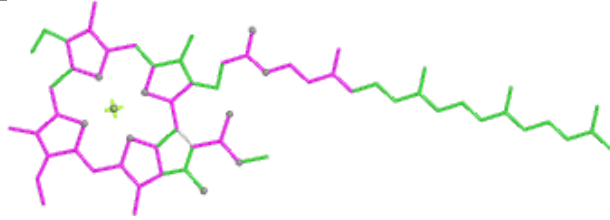
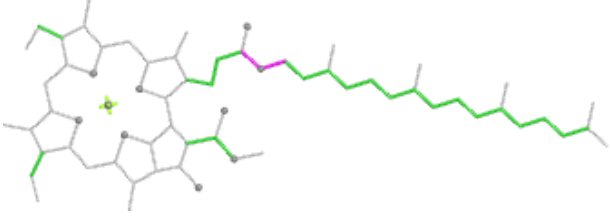
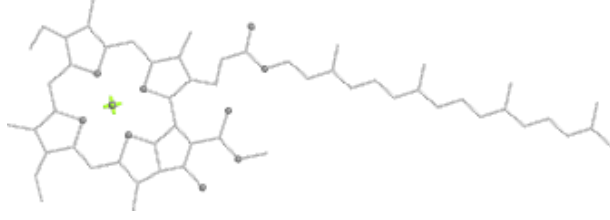
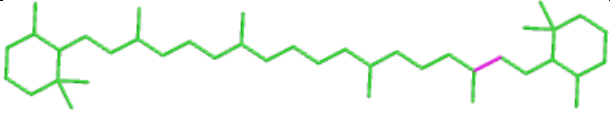
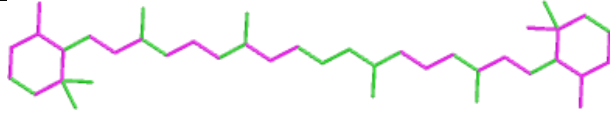
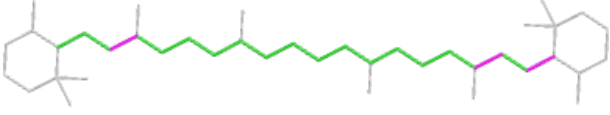
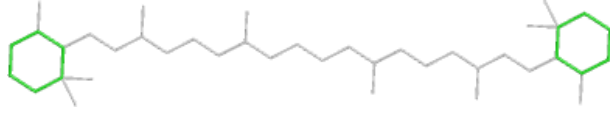
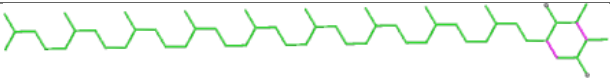
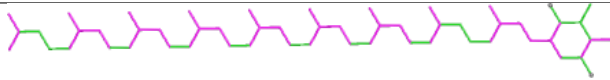
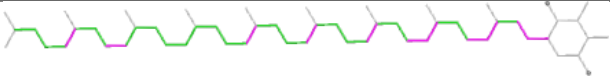
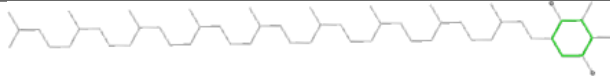


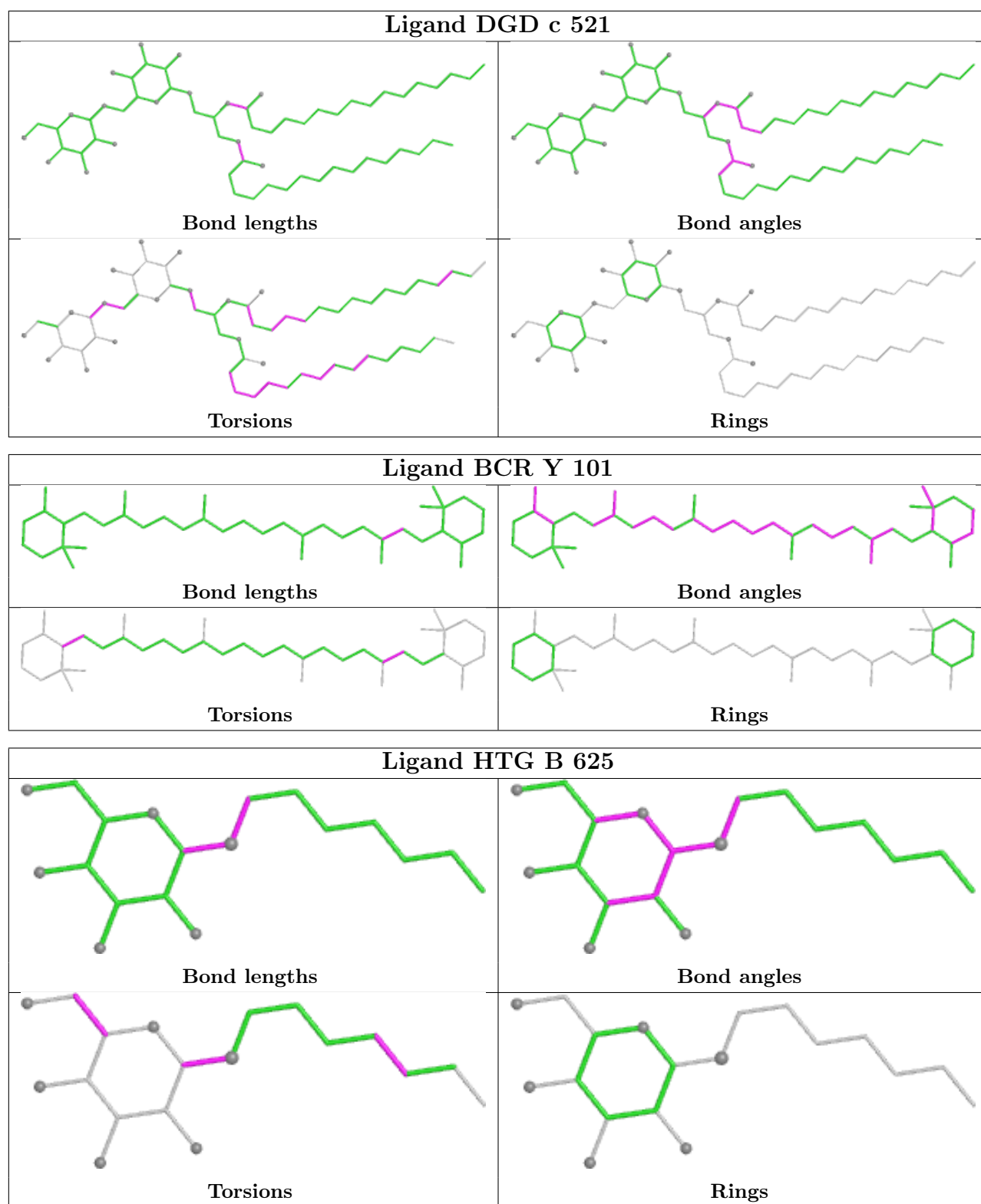
Ligand LHG d 407

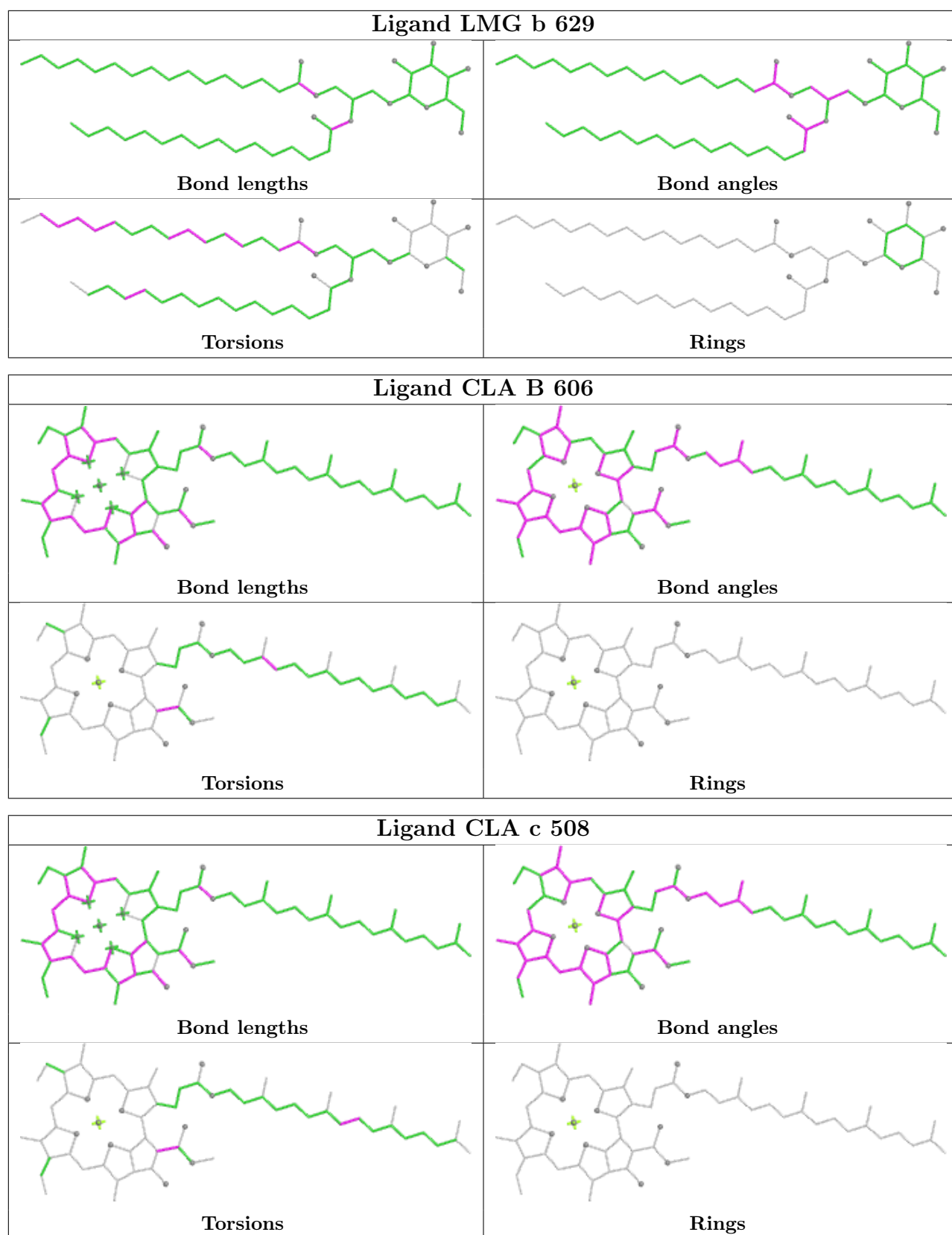


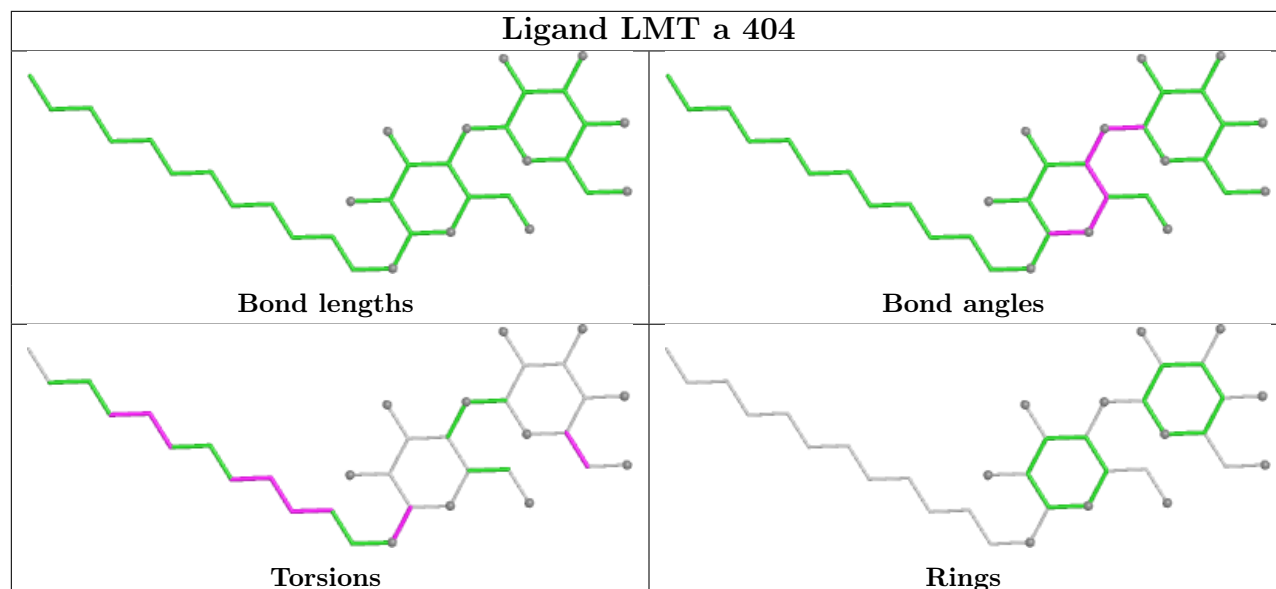
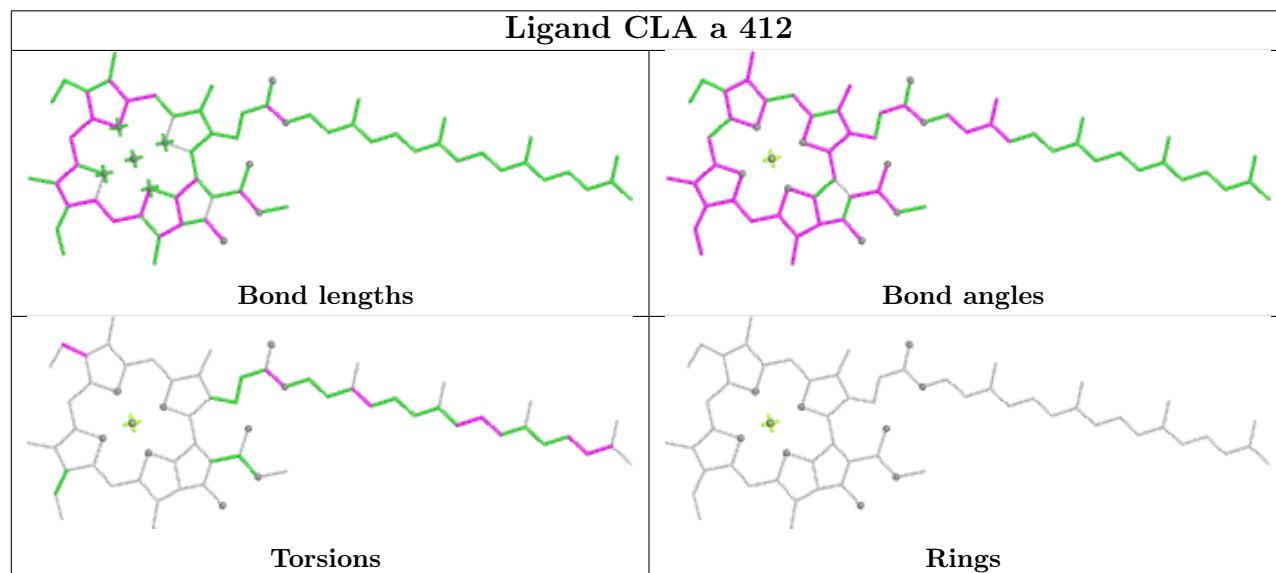
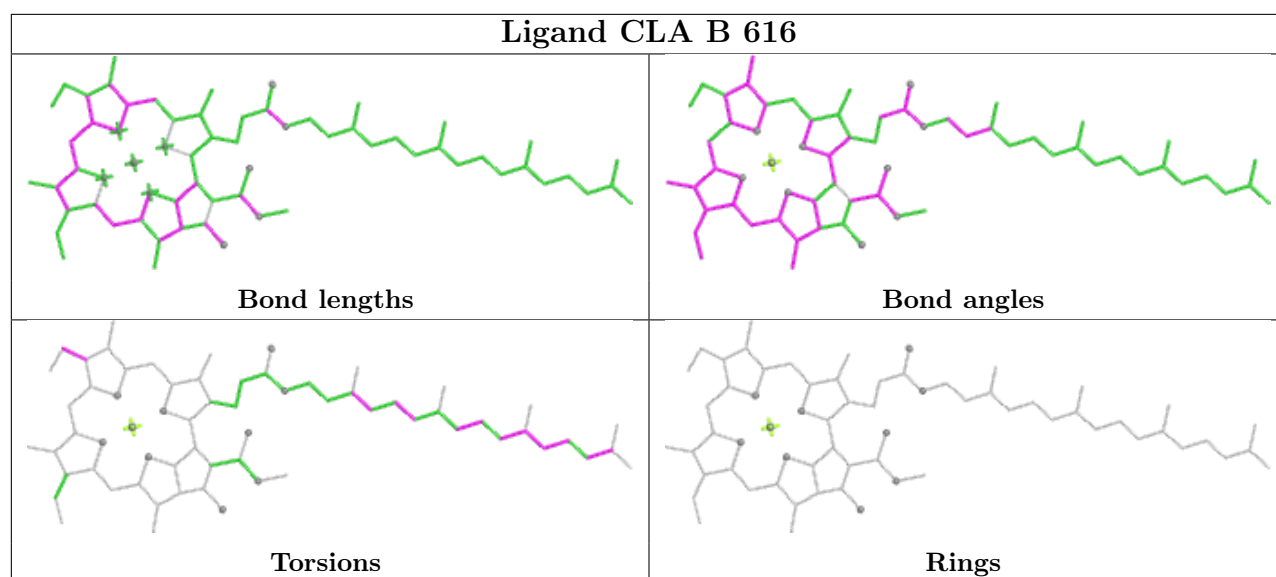
Ligand LMG d 413

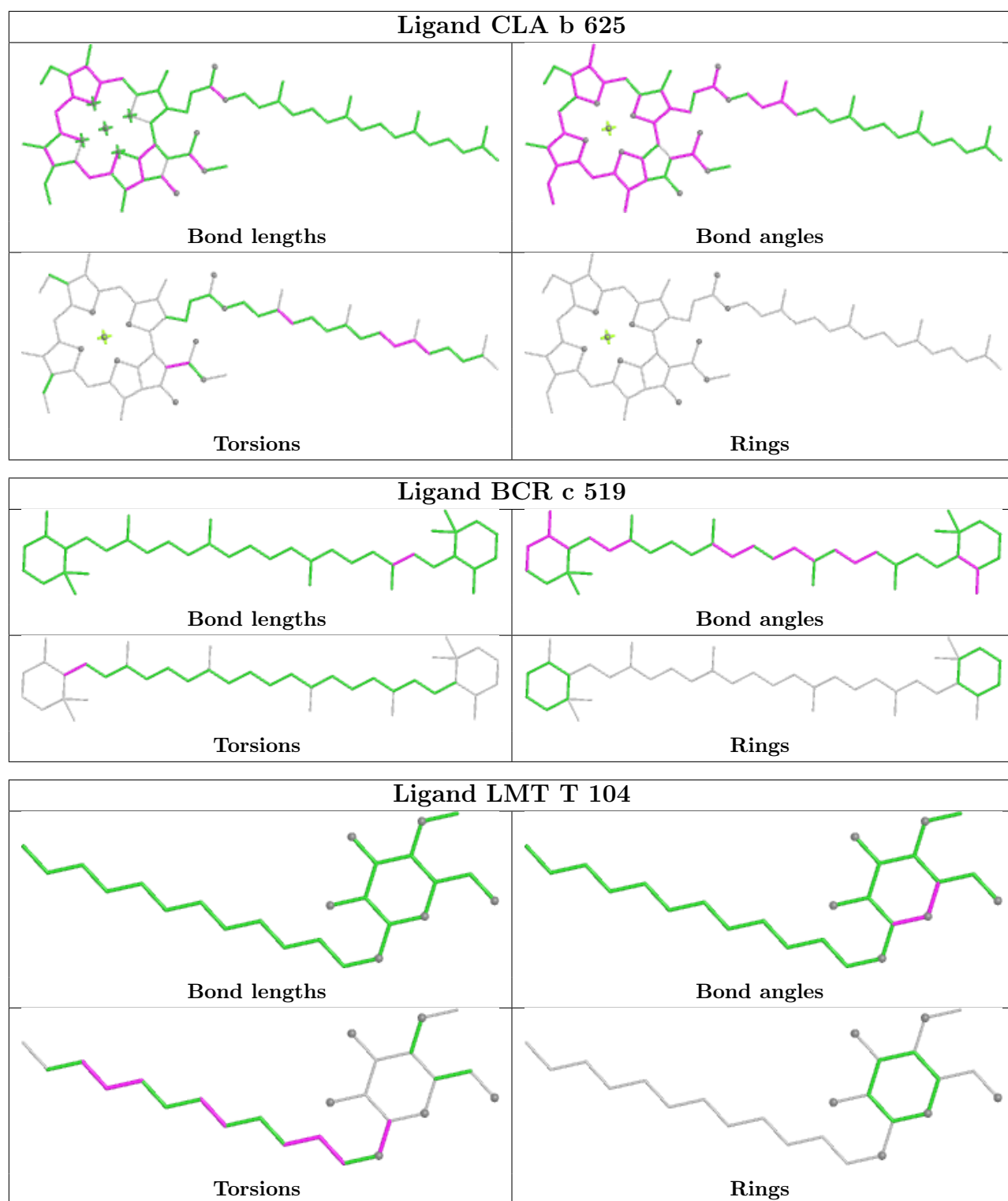


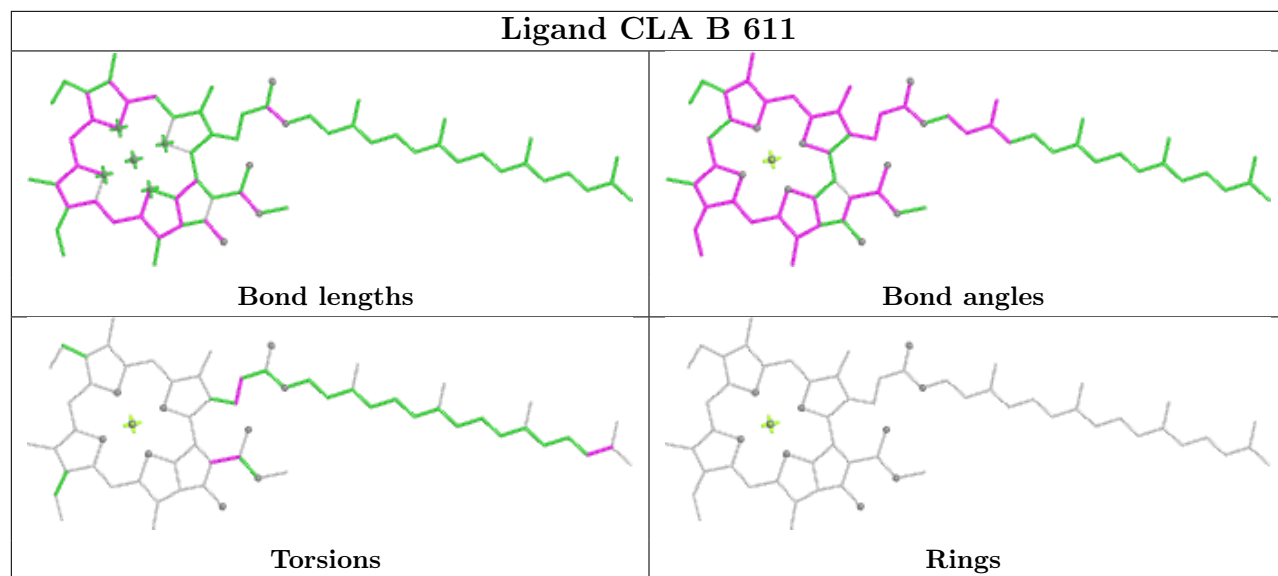
Ligand CLA C 511	
 Bond lengths	 Bond angles
 Torsions	 Rings
Ligand BCR d 404	
 Bond lengths	 Bond angles
 Torsions	 Rings
Ligand PL9 a 415 (A)	
 Bond lengths	 Bond angles
 Torsions	 Rings











5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

6 Fit of model and data ⓘ

6.1 Protein, DNA and RNA chains ⓘ

In the following table, the column labelled ‘#RSRZ> 2’ contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95th percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled ‘Q< 0.9’ lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	A	334/344 (97%)	-0.70	0 100 100	16, 37, 62, 117	53 (15%)
1	a	334/344 (97%)	-0.66	4 (1%) 76 79	17, 38, 70, 152	55 (16%)
2	B	504/505 (99%)	-0.63	2 (0%) 88 90	23, 43, 77, 123	10 (1%)
2	b	503/505 (99%)	-0.54	6 (1%) 76 79	26, 43, 78, 180	12 (2%)
3	C	451/455 (99%)	-0.52	0 100 100	17, 51, 70, 116	7 (1%)
3	c	455/455 (100%)	-0.52	0 100 100	19, 53, 70, 115	13 (2%)
4	D	341/342 (99%)	-0.74	0 100 100	18, 39, 61, 131	16 (4%)
4	d	341/342 (99%)	-0.72	1 (0%) 90 91	19, 41, 60, 122	16 (4%)
5	E	81/84 (96%)	-0.09	1 (1%) 76 79	32, 63, 94, 130	2 (2%)
5	e	81/84 (96%)	-0.00	2 (2%) 58 62	36, 64, 115, 176	2 (2%)
6	F	34/44 (77%)	-0.18	0 100 100	46, 56, 90, 105	0
6	f	32/44 (72%)	-0.15	1 (3%) 51 55	47, 57, 116, 141	0
7	H	65/65 (100%)	-0.31	2 (3%) 51 55	35, 52, 72, 150	1 (1%)
7	h	65/65 (100%)	-0.39	2 (3%) 51 55	42, 55, 75, 163	0
8	I	37/38 (97%)	-0.26	0 100 100	43, 54, 108, 151	0
8	i	37/38 (97%)	-0.23	1 (2%) 56 60	42, 52, 98, 131	0
9	J	38/39 (97%)	0.09	2 (5%) 32 36	46, 61, 135, 169	0
9	j	39/39 (100%)	-0.05	1 (2%) 57 61	47, 61, 131, 171	0
10	K	37/37 (100%)	-0.29	0 100 100	51, 61, 77, 101	0
10	k	37/37 (100%)	-0.32	0 100 100	52, 61, 77, 102	0
11	L	37/37 (100%)	-0.72	0 100 100	18, 35, 100, 120	1 (2%)
11	l	37/37 (100%)	-0.65	0 100 100	22, 35, 99, 120	1 (2%)
12	M	33/36 (91%)	-0.72	0 100 100	22, 37, 63, 113	1 (3%)
12	m	33/36 (91%)	-0.67	0 100 100	32, 38, 68, 114	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	O	243/244 (99%)	-0.57	2 (0%) 82 84	24, 48, 91, 137	8 (3%)
13	o	243/244 (99%)	-0.48	2 (0%) 82 84	27, 50, 104, 170	5 (2%)
14	T	29/32 (90%)	-0.74	1 (3%) 48 52	31, 37, 64, 133	1 (3%)
14	t	29/32 (90%)	-0.67	1 (3%) 48 52	29, 37, 64, 133	1 (3%)
15	U	97/104 (93%)	-0.65	0 100 100	37, 48, 77, 116	0
15	u	97/104 (93%)	-0.64	0 100 100	39, 49, 71, 116	0
16	V	137/137 (100%)	-0.54	0 100 100	20, 49, 78, 116	2 (1%)
16	v	137/137 (100%)	-0.54	1 (0%) 84 85	21, 55, 84, 118	1 (0%)
17	Y	29/30 (96%)	0.76	3 (10%) 12 13	66, 80, 141, 149	0
17	y	29/30 (96%)	0.42	3 (10%) 12 13	66, 81, 142, 149	0
18	X	39/40 (97%)	0.09	1 (2%) 57 61	51, 61, 115, 136	0
18	x	38/40 (95%)	0.19	2 (5%) 32 36	53, 62, 116, 137	0
19	Z	62/62 (100%)	0.28	4 (6%) 25 28	66, 78, 125, 165	0
19	z	62/62 (100%)	0.44	3 (4%) 35 40	68, 80, 126, 166	0
20	R	18/34 (52%)	2.74	12 (66%) 0 0	106, 137, 176, 178	0
All	All	5275/5384 (97%)	-0.50	60 (1%) 78 80	16, 47, 90, 180	208 (3%)

The worst 5 of 60 RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
20	R	15	ALA	5.2
20	R	3	TRP	4.3
19	z	3	ILE	4.0
2	b	499	VAL	3.9
20	R	13	LEU	3.9

6.2 Non-standard residues in protein, DNA, RNA chains ⓘ

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
14	FME	T	1	10/11	0.96	0.06	35,38,64,74	0
12	FME	m	1	10/11	0.96	0.08	34,43,98,115	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
8	FME	I	1	10/11	0.97	0.07	37,45,52,53	0
8	FME	i	1	10/11	0.97	0.06	41,51,56,58	0
12	FME	M	1	10/11	0.97	0.07	31,47,81,85	0
14	FME	t	1	10/11	0.97	0.05	28,38,44,87	0

6.3 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

6.4 Ligands [i](#)

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
36	DGD	e	101	62/66	0.69	0.16	70,118,175,181	0
36	DGD	D	406	52/66	0.70	0.15	65,108,147,157	0
37	LHG	e	102	42/49	0.70	0.13	69,134,167,172	0
29	LMT	F	101	35/35	0.73	0.15	86,125,152,156	0
34	CA	b	609	1/1	0.75	0.12	134,134,134,134	0
29	LMT	b	630	25/35	0.75	0.14	72,92,147,149	0
29	LMT	C	521	35/35	0.76	0.14	90,123,152,162	0
32	UNL	M	102	10/-	0.76	0.12	47,64,75,75	0
29	LMT	a	419	35/35	0.77	0.14	87,111,130,134	0
32	UNL	a	403	30/-	0.77	0.14	69,91,126,131	0
27	SQD	f	101	43/54	0.77	0.14	86,120,144,145	0
32	UNL	m	101	10/-	0.78	0.15	49,60,85,88	0
35	HTG	D	412	16/19	0.79	0.14	75,142,157,157	0
32	UNL	j	101	10/-	0.79	0.14	70,82,96,99	0
28	GOL	V	201	6/6	0.79	0.14	64,77,86,93	0
29	LMT	f	102	35/35	0.79	0.13	72,121,149,154	0
29	LMT	M	103	35/35	0.80	0.14	41,102,141,150	0
32	UNL	A	420	28/-	0.80	0.14	61,86,104,106	0
35	HTG	c	526	19/19	0.80	0.12	66,105,123,137	0
32	UNL	C	527	34/-	0.81	0.13	73,108,129,134	0
32	UNL	I	101	40/-	0.81	0.14	41,84,142,153	0
29	LMT	A	417	35/35	0.82	0.12	40,80,108,129	0
35	HTG	V	206	19/19	0.82	0.12	66,94,116,209	0
32	UNL	J	101	10/-	0.82	0.13	47,72,89,101	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
33	LMG	C	520	51/55	0.82	0.12	56,109,125,129	0
32	UNL	i	101	40/-	0.82	0.13	48,78,138,141	0
37	LHG	E	101	42/49	0.82	0.12	67,101,123,128	0
35	HTG	B	625	19/19	0.82	0.11	70,112,141,147	0
35	HTG	b	608	19/19	0.83	0.12	56,108,148,148	0
29	LMT	D	401	35/35	0.83	0.12	67,118,146,155	0
32	UNL	D	411	40/-	0.83	0.12	52,79,130,139	0
35	HTG	d	411	16/19	0.84	0.11	65,109,124,127	0
28	GOL	c	503	6/6	0.84	0.17	76,80,97,101	0
32	UNL	b	633	33/-	0.84	0.14	50,94,155,158	0
32	UNL	c	527	32/-	0.84	0.13	67,100,136,144	0
35	HTG	B	633	19/19	0.84	0.11	56,109,139,175	0
33	LMG	z	101	39/55	0.85	0.13	67,115,138,158	0
34	CA	B	601	1/1	0.85	0.08	130,130,130,130	0
31	PL9	A	419[A]	55/55	0.85	0.14	68,94,108,110	55
31	PL9	A	419[B]	55/55	0.85	0.14	69,94,108,111	55
31	PL9	a	415[A]	55/55	0.85	0.15	75,104,117,119	55
31	PL9	a	415[B]	55/55	0.85	0.15	73,103,117,120	55
29	LMT	a	404	35/35	0.85	0.12	47,82,112,131	0
32	UNL	d	410	36/-	0.85	0.11	51,76,129,142	0
32	UNL	B	634	33/-	0.85	0.14	56,87,134,138	0
27	SQD	B	621	54/54	0.85	0.12	51,88,147,155	0
28	GOL	O	301	6/6	0.85	0.10	64,79,82,85	0
27	SQD	F	103	43/54	0.85	0.11	76,102,119,129	0
33	LMG	Z	101	37/55	0.85	0.14	54,111,132,135	0
33	LMG	c	524	51/55	0.85	0.11	49,106,129,132	0
35	HTG	C	523	19/19	0.86	0.10	79,91,124,126	0
27	SQD	a	405	54/54	0.86	0.10	47,77,116,122	0
35	HTG	b	632	19/19	0.86	0.11	66,118,148,149	0
28	GOL	C	524	6/6	0.87	0.12	59,63,76,80	0
27	SQD	A	416	54/54	0.87	0.11	52,73,111,128	0
35	HTG	B	624	19/19	0.87	0.12	48,64,89,93	0
29	LMT	B	635	25/35	0.87	0.12	40,80,134,138	0
28	GOL	T	102	6/6	0.87	0.13	94,108,113,115	0
27	SQD	L	102	54/54	0.87	0.10	50,77,123,141	0
29	LMT	m	103	35/35	0.87	0.11	40,96,125,132	0
28	GOL	a	402	6/6	0.87	0.12	70,93,94,94	0
34	CA	f	103	1/1	0.88	0.07	106,106,106,106	0
28	GOL	v	201	6/6	0.89	0.12	68,88,90,92	0
29	LMT	T	104	25/35	0.89	0.12	37,79,133,138	0
35	HTG	C	522	19/19	0.89	0.09	72,85,101,107	0
35	HTG	b	631	19/19	0.89	0.12	56,71,84,96	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
28	GOL	T	101	6/6	0.89	0.14	58,74,93,97	0
35	HTG	c	525	19/19	0.89	0.09	87,92,102,120	0
28	GOL	A	415	6/6	0.90	0.11	52,75,79,82	0
33	LMG	c	523	51/55	0.90	0.10	48,86,111,115	0
28	GOL	B	630	6/6	0.90	0.12	48,59,72,76	0
22	CL	U	201	1/1	0.90	0.11	92,92,92,92	0
28	GOL	t	102	6/6	0.90	0.14	51,80,90,96	0
33	LMG	A	421	51/55	0.90	0.09	57,82,106,115	0
33	LMG	C	519	51/55	0.90	0.10	49,83,108,117	0
29	LMT	m	102	35/35	0.90	0.09	42,81,100,107	0
33	LMG	c	501	51/55	0.91	0.10	57,79,98,99	0
28	GOL	B	626	6/6	0.91	0.10	44,54,59,80	0
28	GOL	b	606	6/6	0.91	0.10	64,79,86,86	0
29	LMT	M	101	35/35	0.91	0.09	41,80,99,100	0
38	HEM	F	102	43/43	0.91	0.09	44,66,89,137	0
28	GOL	v	202	6/6	0.92	0.10	70,79,96,112	0
23	BCT	a	417[A]	4/4	0.92	0.08	59,60,62,70	4
32	UNL	X	101	18/-	0.92	0.10	54,73,97,100	0
28	GOL	B	636	6/6	0.92	0.08	48,56,62,62	0
28	GOL	b	605	6/6	0.92	0.14	70,80,101,103	0
23	BCT	a	417[B]	4/4	0.92	0.08	50,59,61,66	4
24	CLA	c	518	65/65	0.92	0.09	56,80,99,108	0
32	UNL	d	412	18/-	0.92	0.10	60,72,112,113	0
27	SQD	A	412	54/54	0.92	0.09	45,78,95,98	0
28	GOL	B	628	6/6	0.92	0.10	54,73,79,84	0
24	CLA	C	506	65/65	0.93	0.08	46,62,105,114	0
28	GOL	A	414	6/6	0.93	0.12	49,59,62,64	0
24	CLA	C	513	65/65	0.93	0.08	52,66,102,109	0
28	GOL	A	422	6/6	0.93	0.07	68,73,74,82	0
24	CLA	b	610	65/65	0.93	0.09	44,68,104,134	0
35	HTG	B	632	19/19	0.93	0.08	45,72,101,109	0
24	CLA	B	602	65/65	0.93	0.09	41,62,95,124	0
32	UNL	d	409	17/-	0.93	0.10	47,69,97,101	0
37	LHG	D	409	49/49	0.93	0.10	39,55,116,129	0
28	GOL	a	420	6/6	0.93	0.09	78,80,91,92	0
26	BCR	C	514	40/40	0.93	0.08	49,67,81,84	0
26	BCR	y	101	40/40	0.93	0.08	43,63,72,80	0
33	LMG	B	622	51/55	0.94	0.07	33,50,74,90	0
26	BCR	t	101	40/40	0.94	0.06	34,47,64,65	0
28	GOL	A	413	6/6	0.94	0.09	45,49,54,58	0
33	LMG	D	413	51/55	0.94	0.09	38,60,105,128	0
24	CLA	C	504	65/65	0.94	0.07	34,47,81,94	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
33	LMG	b	629	51/55	0.94	0.08	42,51,72,94	0
24	CLA	b	615	65/65	0.94	0.07	32,44,88,106	0
23	BCT	A	404[B]	4/4	0.94	0.08	47,48,62,72	4
23	BCT	A	404[A]	4/4	0.94	0.08	47,55,60,72	4
33	LMG	d	413	51/55	0.94	0.08	45,58,100,110	0
28	GOL	B	627	6/6	0.94	0.11	52,62,79,94	0
36	DGD	C	517	62/66	0.94	0.07	42,54,96,112	0
26	BCR	D	404	40/40	0.94	0.07	41,50,92,105	0
26	BCR	c	528	40/40	0.94	0.08	60,73,83,85	0
37	LHG	D	407	49/49	0.94	0.08	31,49,62,73	0
28	GOL	o	301	6/6	0.94	0.09	65,78,89,107	0
32	UNL	D	410	17/-	0.94	0.08	40,70,83,89	0
26	BCR	d	404	40/40	0.94	0.07	40,52,79,83	0
27	SQD	a	414	54/54	0.94	0.09	57,80,103,109	0
34	CA	F	104	1/1	0.95	0.04	84,84,84,84	0
26	BCR	h	101	40/40	0.95	0.06	38,55,66,68	0
28	GOL	B	631	6/6	0.95	0.10	43,76,84,87	0
26	BCR	k	101	40/40	0.95	0.07	44,59,73,75	0
24	CLA	b	623	65/65	0.95	0.07	26,40,88,115	0
24	CLA	b	625	65/65	0.95	0.08	35,52,101,109	0
24	CLA	c	508	65/65	0.95	0.07	41,52,62,86	0
24	CLA	c	511	65/65	0.95	0.07	43,63,91,107	0
24	CLA	c	512	65/65	0.95	0.07	42,54,67,72	0
24	CLA	c	517	65/65	0.95	0.06	49,63,82,86	0
24	CLA	C	512	65/65	0.95	0.07	48,64,81,92	0
28	GOL	b	602	6/6	0.95	0.09	56,58,65,89	0
26	BCR	A	411	40/40	0.95	0.06	28,39,46,48	0
24	CLA	B	615	65/65	0.95	0.07	26,40,90,99	0
24	CLA	C	505	65/65	0.95	0.07	38,47,68,78	0
26	BCR	H	101	40/40	0.95	0.06	35,51,65,67	0
31	PL9	d	405[A]	55/55	0.95	0.06	27,37,46,57	55
36	DGD	C	516	62/66	0.95	0.07	33,47,88,96	0
31	PL9	d	405[B]	55/55	0.95	0.06	24,38,46,57	55
26	BCR	K	101	40/40	0.95	0.07	43,57,65,68	0
36	DGD	H	102	62/66	0.95	0.07	35,48,66,78	0
36	DGD	c	521	62/66	0.95	0.07	41,52,105,128	0
36	DGD	c	522	62/66	0.95	0.07	38,52,87,96	0
26	BCR	T	103	40/40	0.95	0.06	31,46,61,62	0
26	BCR	Y	101	40/40	0.95	0.06	47,60,71,80	0
28	GOL	v	203	6/6	0.95	0.10	48,49,57,59	0
26	BCR	b	627	40/40	0.95	0.06	31,42,60,67	0
37	LHG	d	408	49/49	0.95	0.09	34,53,104,109	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
24	CLA	B	617	65/65	0.95	0.09	36,49,116,118	0
24	CLA	b	618	65/65	0.95	0.06	37,49,58,71	0
24	CLA	c	510	65/65	0.96	0.06	36,48,67,78	0
24	CLA	C	508	65/65	0.96	0.06	36,48,114,125	0
24	CLA	C	509	65/65	0.96	0.07	43,55,74,81	0
24	CLA	c	513	65/65	0.96	0.07	35,48,113,129	0
24	CLA	c	515	65/65	0.96	0.06	39,52,65,71	0
24	CLA	c	516	65/65	0.96	0.07	43,55,75,88	0
24	CLA	C	510	65/65	0.96	0.06	39,51,62,71	0
24	CLA	C	511	65/65	0.96	0.07	41,58,69,83	0
24	CLA	d	403	65/65	0.96	0.07	41,51,103,111	0
25	PHO	a	418[A]	64/64	0.96	0.05	28,41,47,50	64
25	PHO	a	418[B]	64/64	0.96	0.05	28,41,48,51	64
28	GOL	B	629	6/6	0.96	0.09	50,52,55,60	0
24	CLA	A	410	65/65	0.96	0.07	30,45,122,130	0
31	PL9	D	405[A]	55/55	0.96	0.05	26,37,44,57	55
31	PL9	D	405[B]	55/55	0.96	0.05	28,36,45,62	55
26	BCR	B	619	40/40	0.96	0.05	27,40,56,63	0
26	BCR	B	620	40/40	0.96	0.06	35,46,58,60	0
24	CLA	A	407	65/65	0.96	0.06	28,39,101,116	0
26	BCR	C	515	40/40	0.96	0.06	39,54,63,65	0
24	CLA	D	403	65/65	0.96	0.07	38,51,101,119	0
24	CLA	a	412	65/65	0.96	0.08	31,46,114,124	0
35	HTG	b	601	19/19	0.96	0.07	40,47,70,71	0
35	HTG	b	607	19/19	0.96	0.06	47,71,80,81	0
24	CLA	C	501	65/65	0.96	0.06	38,50,73,81	0
28	GOL	V	202	6/6	0.96	0.07	39,47,52,62	0
28	GOL	V	203	6/6	0.96	0.08	54,59,59,63	0
28	GOL	V	204	6/6	0.96	0.08	72,78,80,89	0
24	CLA	C	503	65/65	0.96	0.06	40,50,61,64	0
24	CLA	b	616	65/65	0.96	0.05	24,35,44,54	0
24	CLA	B	607	65/65	0.96	0.07	32,44,93,103	0
28	GOL	b	604	6/6	0.96	0.07	58,63,68,86	0
36	DGD	C	518	62/66	0.96	0.06	35,51,74,87	0
26	BCR	c	519	40/40	0.96	0.06	39,54,66,70	0
24	CLA	b	619	65/65	0.96	0.06	36,45,53,62	0
36	DGD	c	520	62/66	0.96	0.07	36,48,94,107	0
24	CLA	b	620	65/65	0.96	0.06	29,39,49,55	0
24	CLA	b	622	65/65	0.96	0.06	27,39,56,62	0
24	CLA	B	611	65/65	0.96	0.06	36,46,54,69	0
36	DGD	h	102	62/66	0.96	0.06	39,50,67,79	0
24	CLA	b	624	65/65	0.96	0.05	33,46,62,70	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
24	CLA	B	614	65/65	0.96	0.06	27,36,66,74	0
24	CLA	c	506	65/65	0.96	0.06	41,55,65,70	0
37	LHG	d	406	49/49	0.96	0.07	37,51,59,74	0
24	CLA	c	507	65/65	0.96	0.06	40,51,66,73	0
24	CLA	C	507	65/65	0.96	0.07	41,56,68,70	0
24	CLA	c	509	65/65	0.96	0.06	38,53,74,79	0
25	PHO	a	411	64/64	0.97	0.04	28,36,41,47	0
24	CLA	B	613	65/65	0.97	0.05	27,37,46,54	0
24	CLA	A	406	65/65	0.97	0.04	25,32,42,51	0
24	CLA	b	621	65/65	0.97	0.05	28,40,49,52	0
24	CLA	B	603	65/65	0.97	0.05	35,43,50,53	0
24	CLA	B	616	65/65	0.97	0.06	34,45,65,77	0
24	CLA	B	604	65/65	0.97	0.05	34,43,49,63	0
22	CL	v	204	1/1	0.97	0.07	95,95,95,95	0
24	CLA	C	502	65/65	0.97	0.05	36,46,61,78	0
24	CLA	a	409	65/65	0.97	0.05	27,35,49,58	0
24	CLA	a	410	65/65	0.97	0.06	31,41,105,114	0
24	CLA	B	608	65/65	0.97	0.05	24,35,47,52	0
24	CLA	B	609	65/65	0.97	0.05	35,43,56,60	0
26	BCR	a	413	40/40	0.97	0.04	28,39,48,56	0
26	BCR	b	626	40/40	0.97	0.04	32,41,47,49	0
24	CLA	b	611	65/65	0.97	0.06	32,46,52,57	0
26	BCR	b	628	40/40	0.97	0.05	35,50,62,66	0
24	CLA	b	612	65/65	0.97	0.05	33,44,54,59	0
24	CLA	b	613	65/65	0.97	0.05	27,38,73,79	0
24	CLA	c	514	65/65	0.97	0.07	43,54,74,85	0
24	CLA	b	614	65/65	0.97	0.06	28,39,52,55	0
24	CLA	B	610	65/65	0.97	0.05	34,46,55,64	0
28	GOL	a	401	6/6	0.97	0.08	49,63,68,76	0
24	CLA	A	405	65/65	0.97	0.05	25,33,45,67	0
24	CLA	b	617	65/65	0.97	0.05	32,45,53,60	0
24	CLA	d	401	65/65	0.97	0.04	26,33,43,52	0
37	LHG	D	408	49/49	0.97	0.06	33,43,61,89	0
28	GOL	b	603	6/6	0.97	0.06	45,63,75,80	0
24	CLA	B	612	65/65	0.97	0.05	26,38,50,57	0
37	LHG	L	101	49/49	0.97	0.06	33,45,56,59	0
37	LHG	b	634	49/49	0.97	0.06	36,45,58,64	0
25	PHO	A	408	64/64	0.97	0.05	28,34,40,40	0
25	PHO	A	409[A]	64/64	0.97	0.05	33,40,47,49	64
35	HTG	B	623	19/19	0.97	0.07	40,56,72,76	0
25	PHO	A	409[B]	64/64	0.97	0.05	27,40,48,49	64
38	HEM	e	103	43/43	0.97	0.10	55,81,121,150	0

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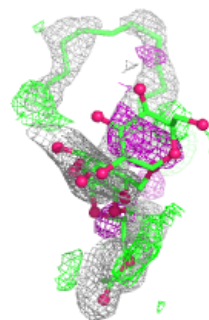
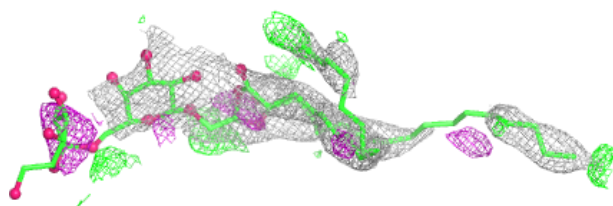
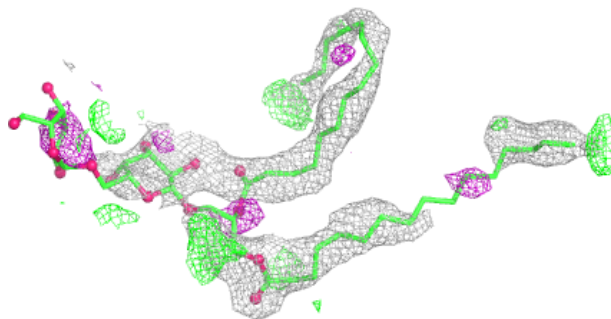
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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
22	CL	A	403[B]	1/1	0.98	0.08	35,35,35,35	1
26	BCR	B	618	40/40	0.98	0.04	27,39,46,48	0
22	CL	A	403[A]	1/1	0.98	0.08	33,33,33,33	1
24	CLA	B	605	65/65	0.98	0.05	27,36,71,75	0
24	CLA	B	606	65/65	0.98	0.05	29,39,54,58	0
37	LHG	d	407	49/49	0.98	0.06	32,42,57,88	0
24	CLA	d	402	65/65	0.98	0.05	26,36,60,71	0
24	CLA	D	402	65/65	0.98	0.05	24,34,55,61	0
28	GOL	c	502	6/6	0.98	0.05	38,44,46,48	0
28	GOL	C	525	6/6	0.98	0.04	32,42,44,45	0
39	MG	j	102	1/1	0.98	0.09	57,57,57,57	0
30	OEX	A	418[A]	10/10	0.99	0.03	30,36,43,56	10
34	CA	C	526	1/1	0.99	0.07	70,70,70,70	0
30	OEX	A	418[B]	10/10	0.99	0.03	33,37,39,39	10
22	CL	a	407[A]	1/1	0.99	0.05	36,36,36,36	1
34	CA	c	504	1/1	0.99	0.07	67,67,67,67	0
34	CA	c	505	1/1	0.99	0.03	75,75,75,75	0
22	CL	a	407[B]	1/1	0.99	0.05	37,37,37,37	1
39	MG	J	102	1/1	0.99	0.03	52,52,52,52	0
34	CA	o	302	1/1	0.99	0.03	90,90,90,90	0
40	HEC	V	205	43/43	0.99	0.05	34,40,51,56	0
40	HEC	v	205	43/43	0.99	0.05	41,52,56,60	0
22	CL	a	408[B]	1/1	1.00	0.01	40,40,40,40	1
22	CL	A	402[B]	1/1	1.00	0.01	32,32,32,32	1
21	FE2	A	401[A]	1/1	1.00	0.01	47,47,47,47	1
30	OEX	a	416[A]	10/10	1.00	0.02	34,37,40,52	10
30	OEX	a	416[B]	10/10	1.00	0.02	32,38,43,46	10
21	FE2	A	401[B]	1/1	1.00	0.01	50,50,50,50	1
34	CA	O	302	1/1	1.00	0.03	81,81,81,81	0
21	FE2	a	406[A]	1/1	1.00	0.02	48,48,48,48	1
21	FE2	a	406[B]	1/1	1.00	0.02	48,48,48,48	1
22	CL	A	402[A]	1/1	1.00	0.01	32,32,32,32	1
22	CL	a	408[A]	1/1	1.00	0.01	40,40,40,40	1

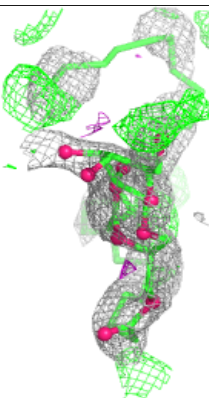
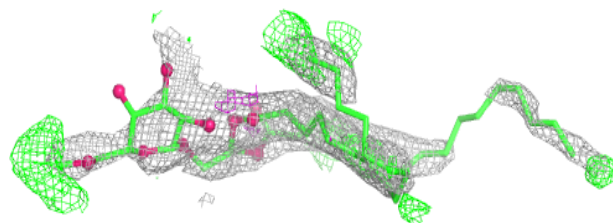
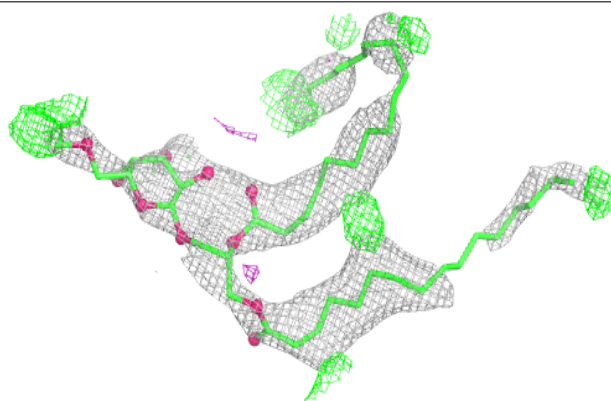
The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation to approximate a three-dimensional view.

Electron density around DGD e 101:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

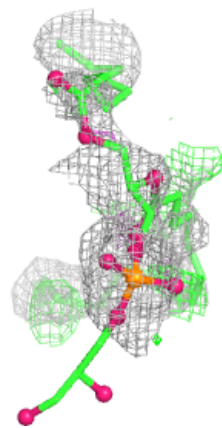
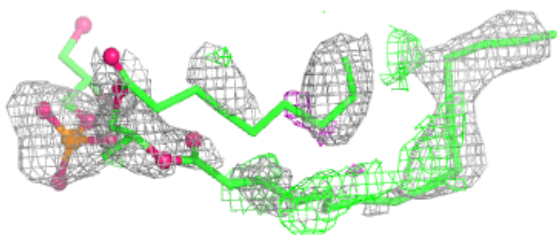
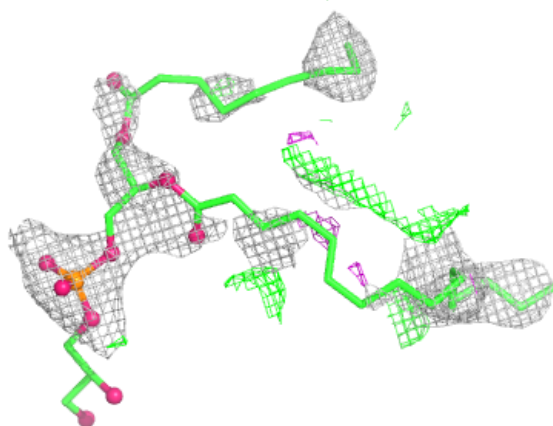
**Electron density around DGD D 406:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



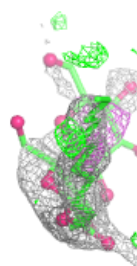
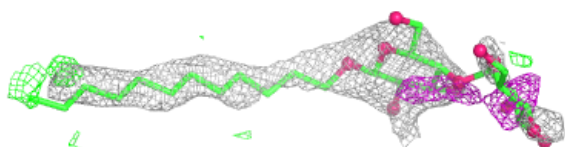
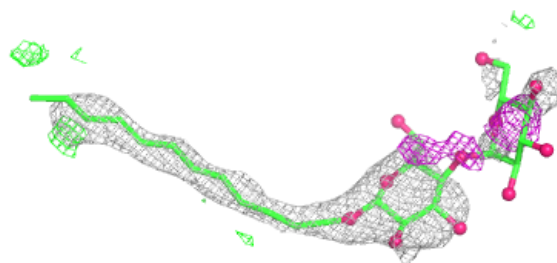
Electron density around LHG e 102:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

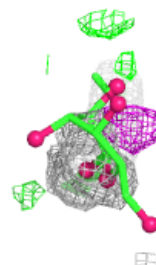
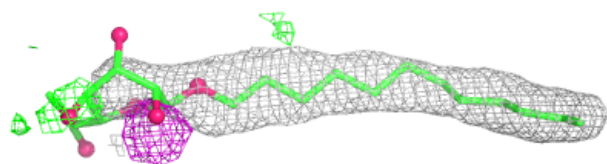
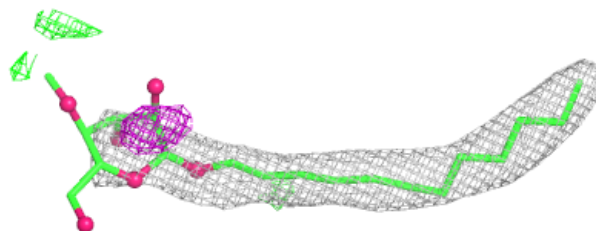


Electron density around LMT F 101:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

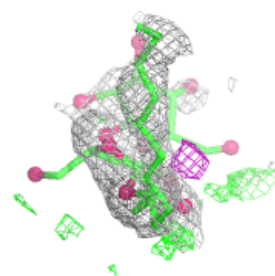
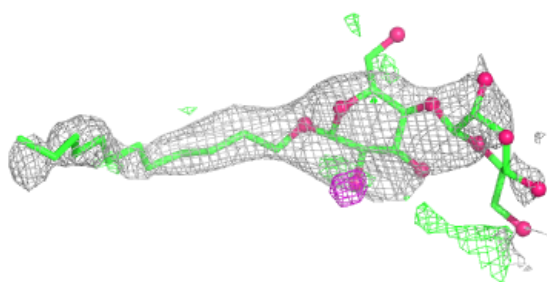
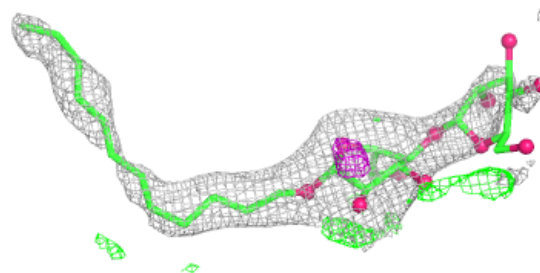
**Electron density around LMT b 630:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

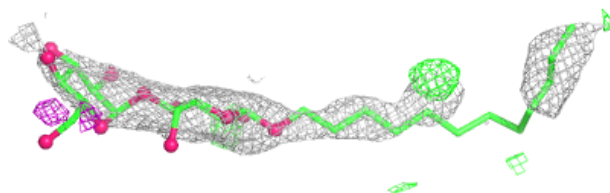
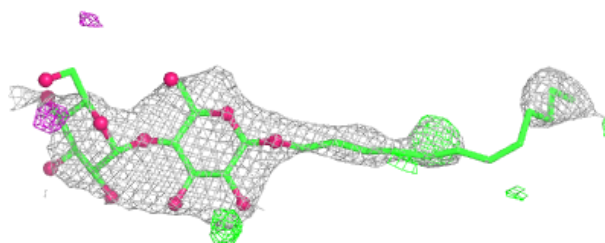


Electron density around LMT C 521:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

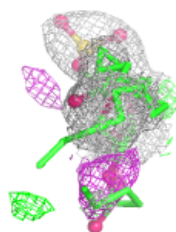
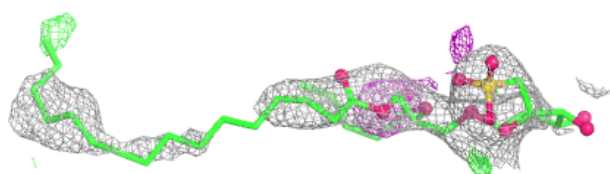
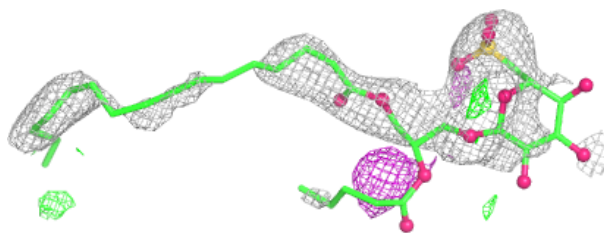
**Electron density around LMT a 419:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

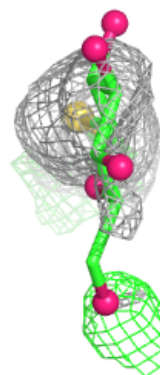
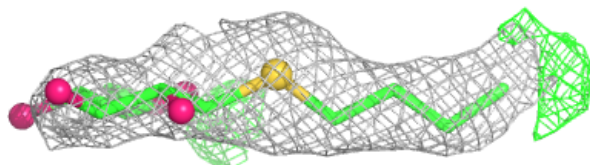
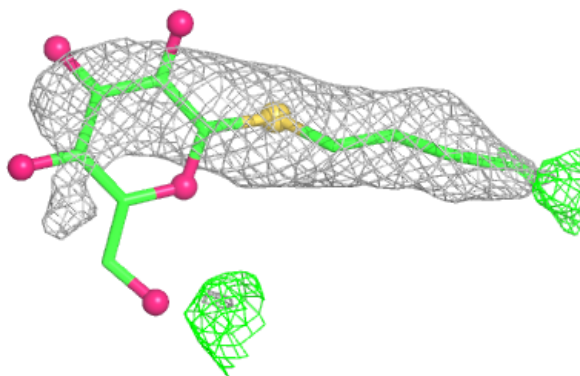


Electron density around SQD f 101:

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 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

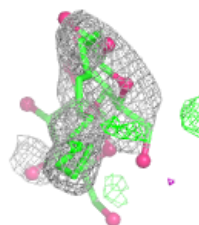
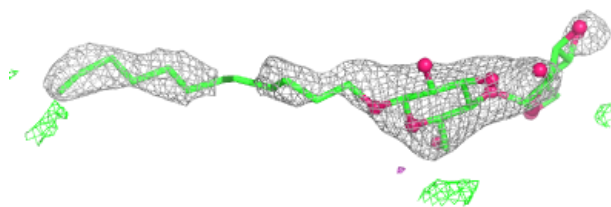
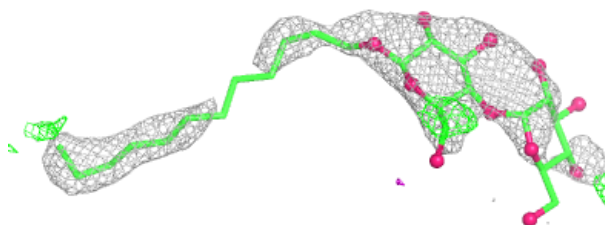
**Electron density around HTG D 412:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

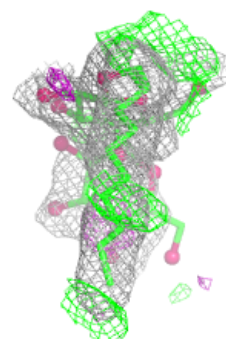
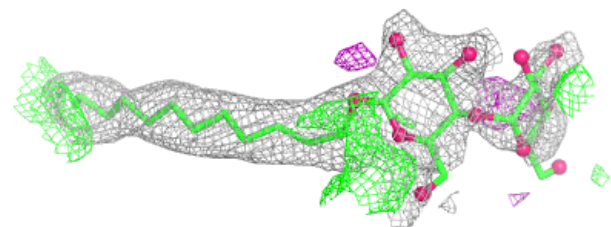
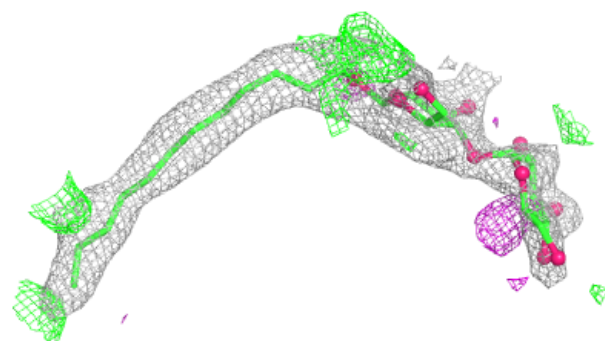


Electron density around LMT f 102:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

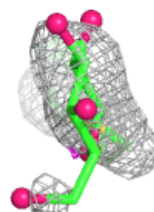
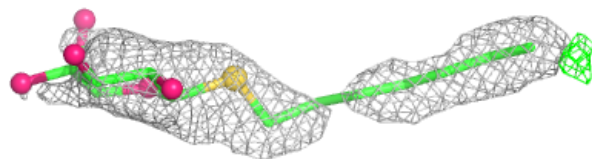
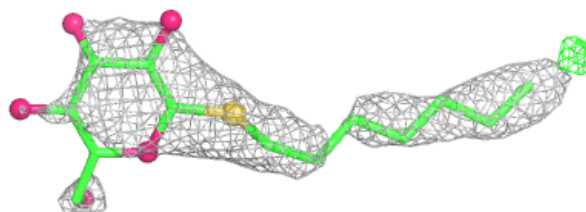
**Electron density around LMT M 103:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

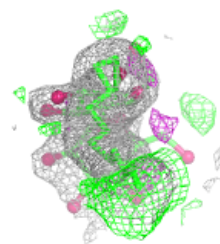
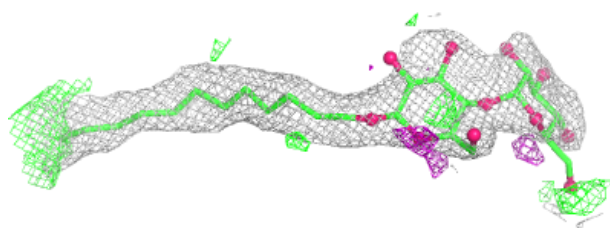
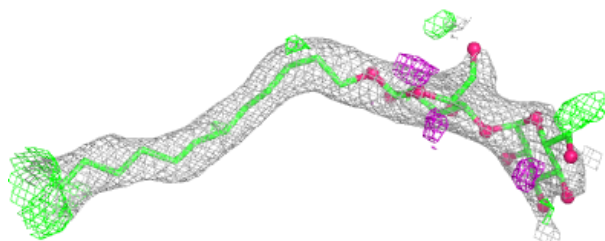


Electron density around HTG c 526:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

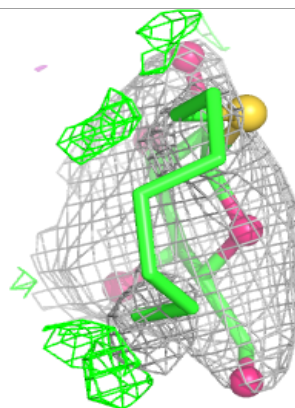
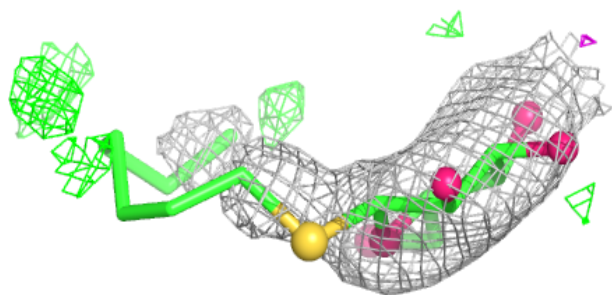
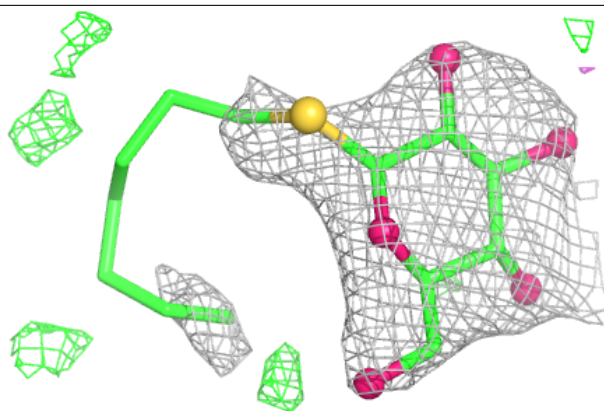
**Electron density around LMT A 417:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

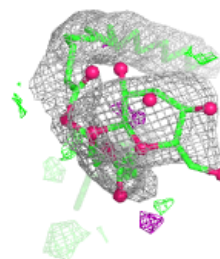
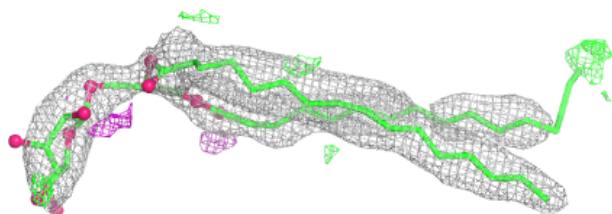
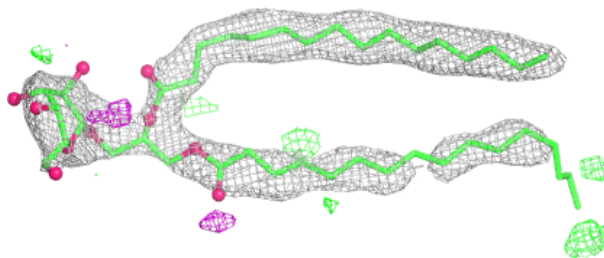


Electron density around HTG V 206:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

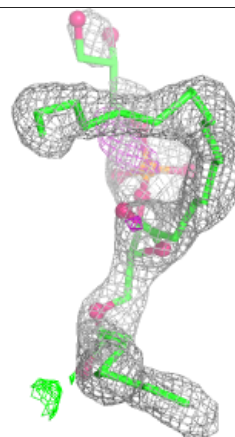
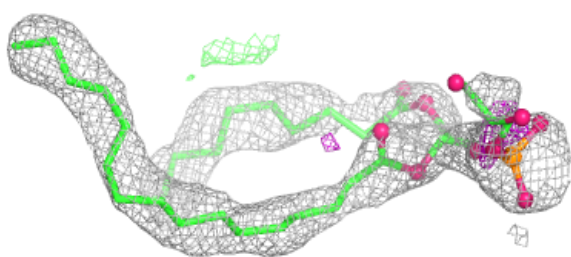
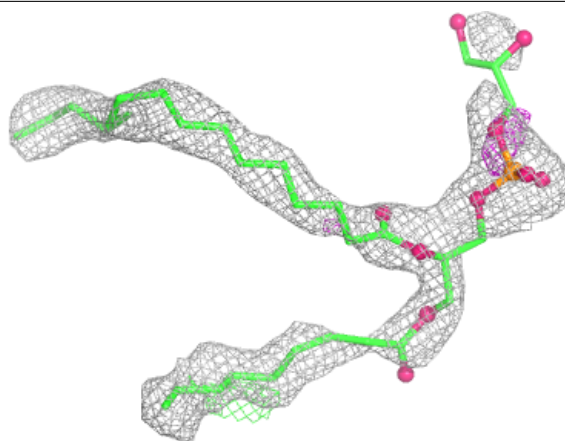
**Electron density around LMG C 520:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



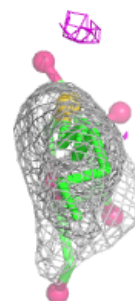
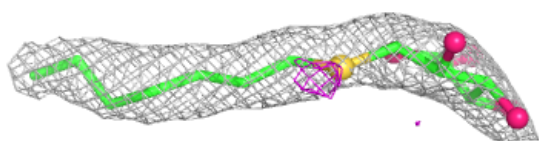
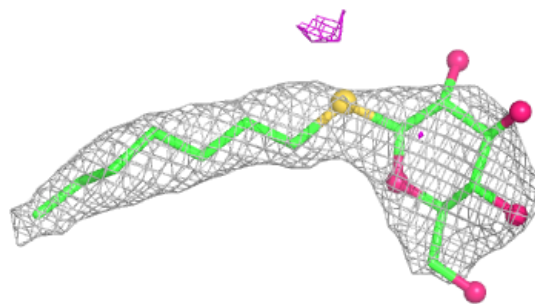
Electron density around LHG E 101:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

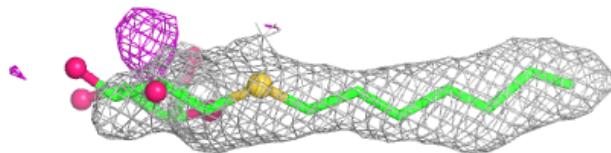
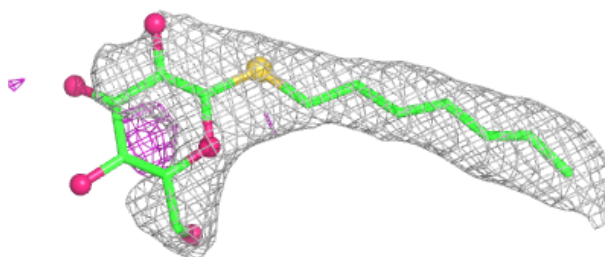


Electron density around HTG B 625:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

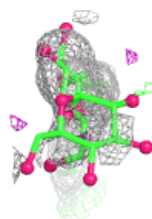
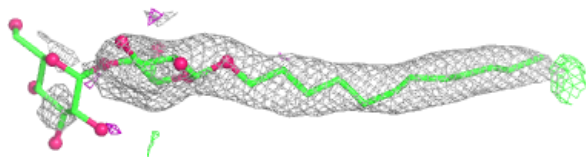
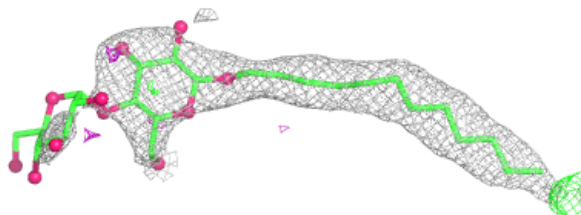
**Electron density around HTG b 608:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

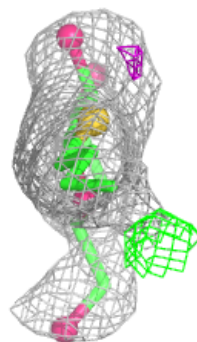
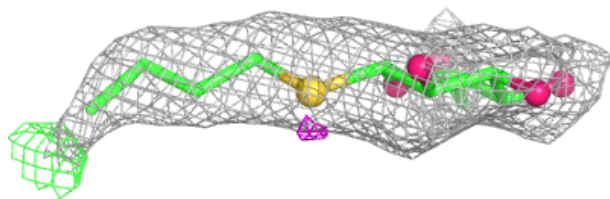
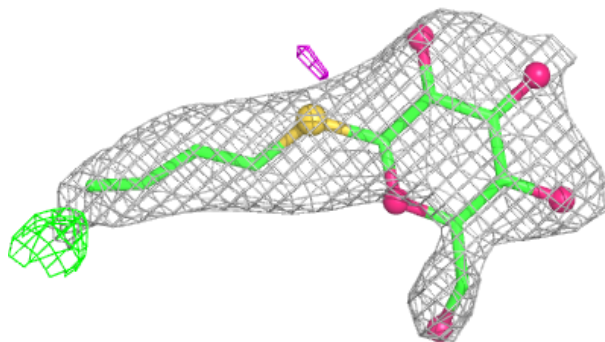


Electron density around LMT D 401:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

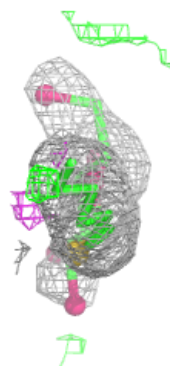
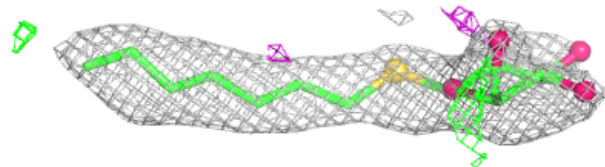
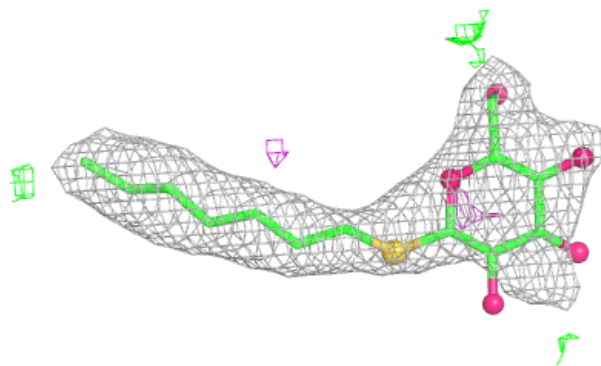
**Electron density around HTG d 411:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

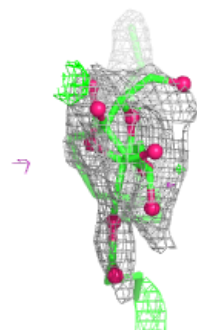
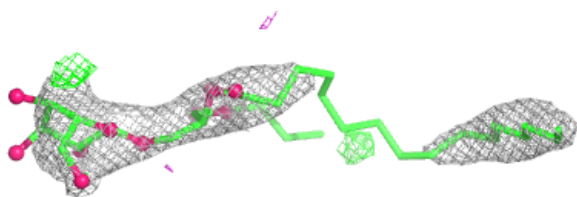


Electron density around HTG B 633:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

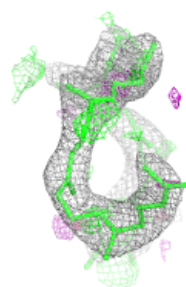
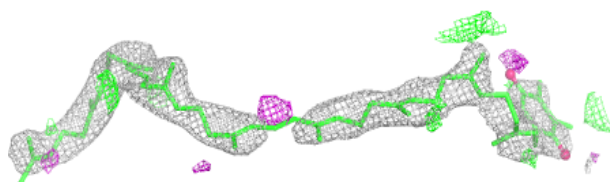
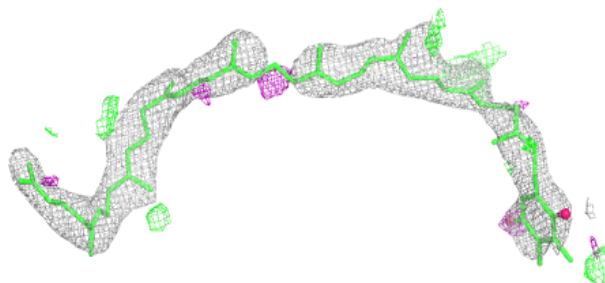
**Electron density around LMG z 101:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

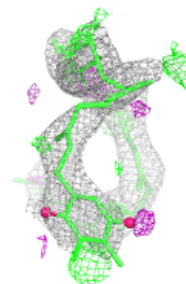
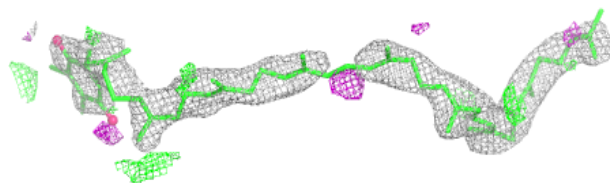
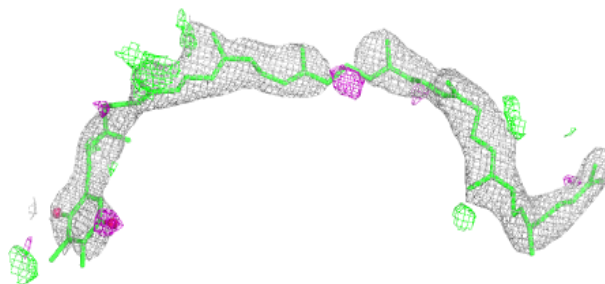


Electron density around PL9 A 419 (A):

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

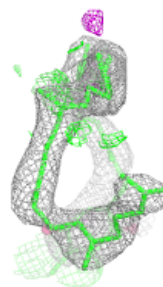
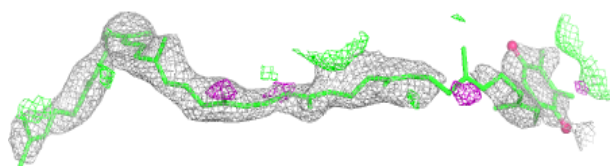
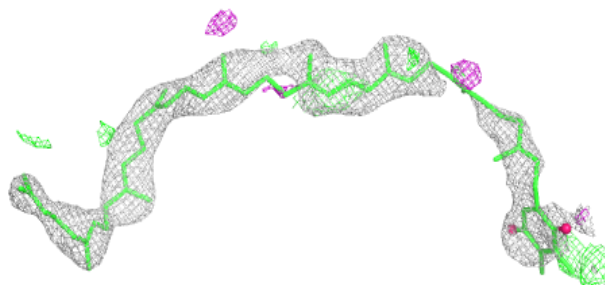
**Electron density around PL9 A 419 (B):**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

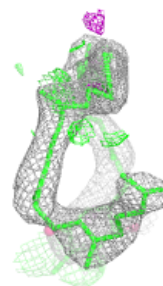
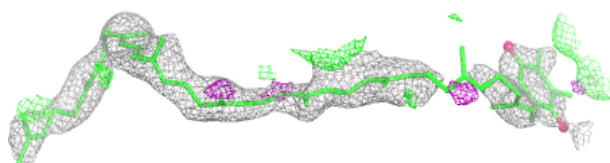
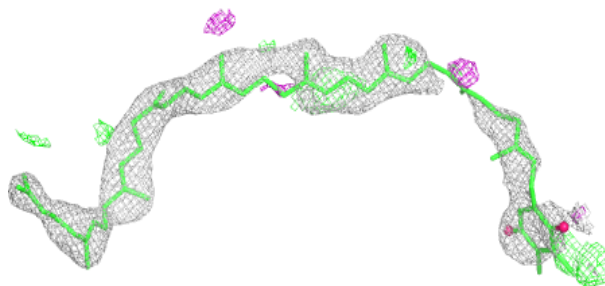


Electron density around PL9 a 415 (A):

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

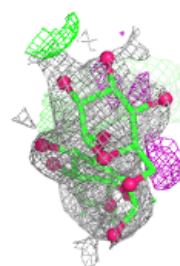
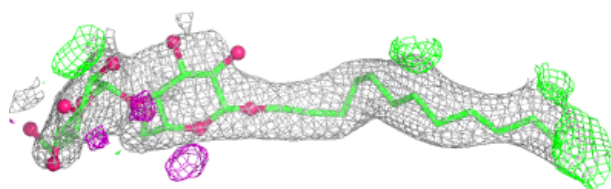
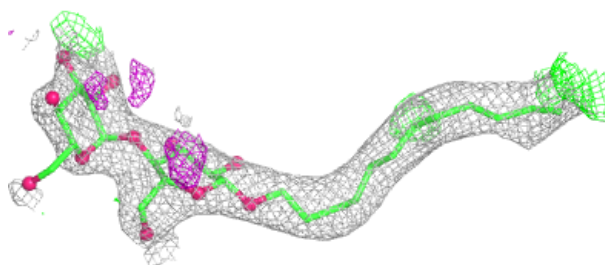
**Electron density around PL9 a 415 (B):**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

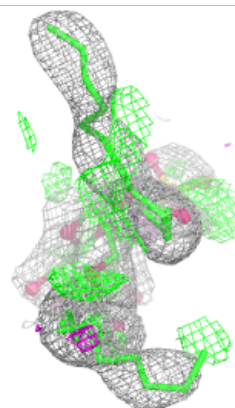
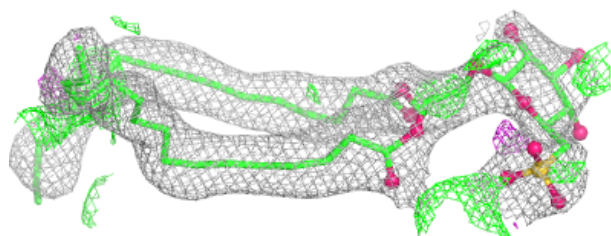
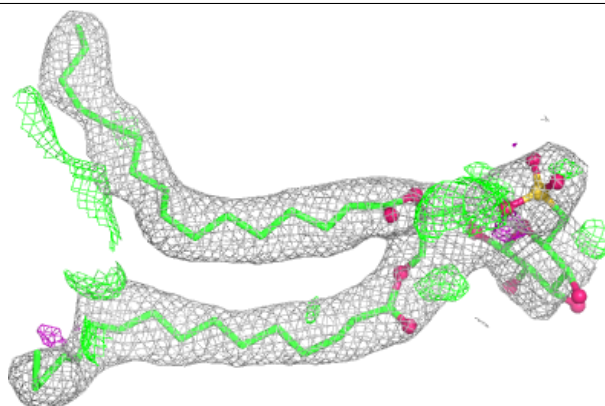


Electron density around LMT a 404:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

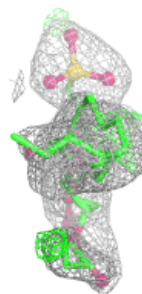
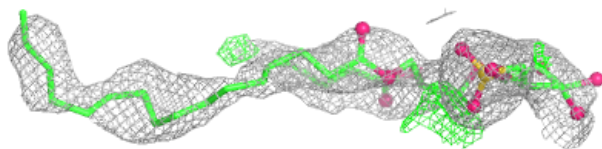
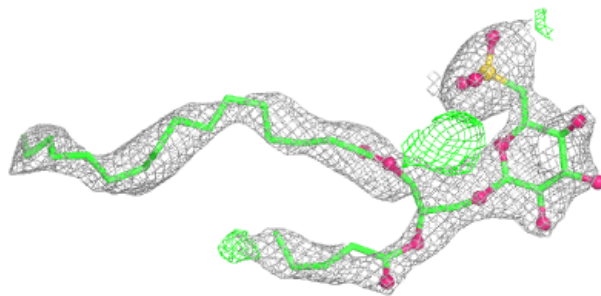
**Electron density around SQD B 621:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

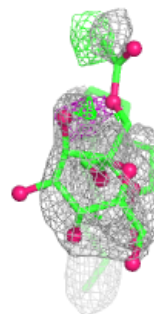
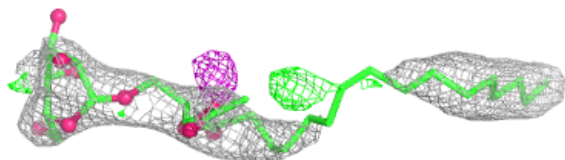
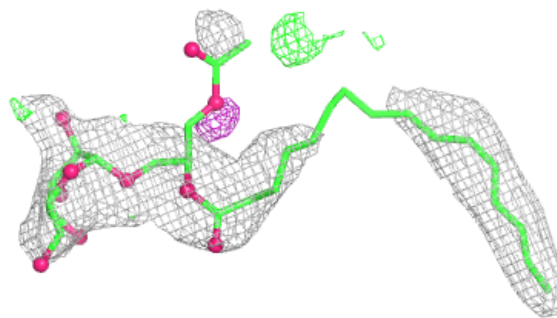


Electron density around SQD F 103:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

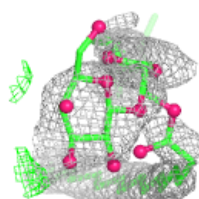
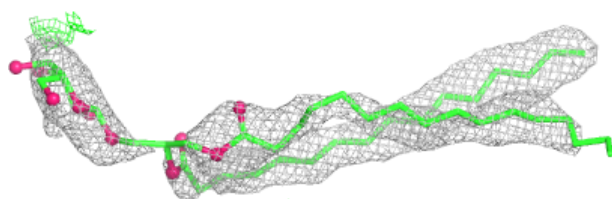
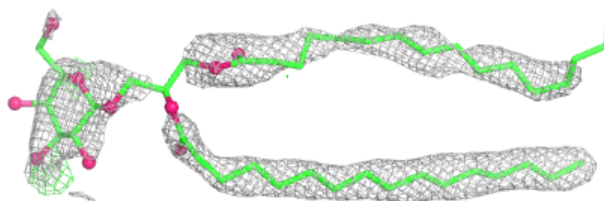
**Electron density around LMG Z 101:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

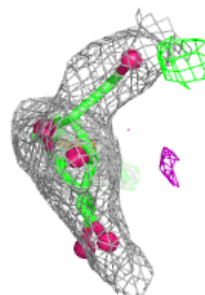
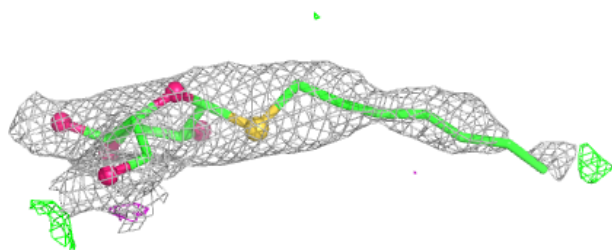
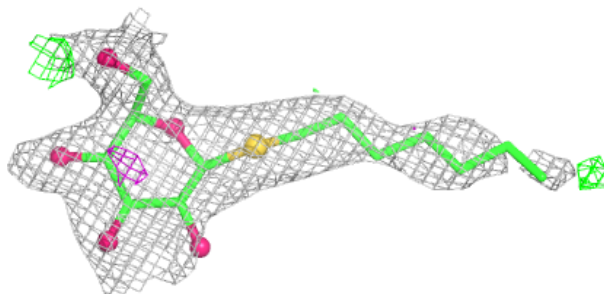


Electron density around LMG c 524:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

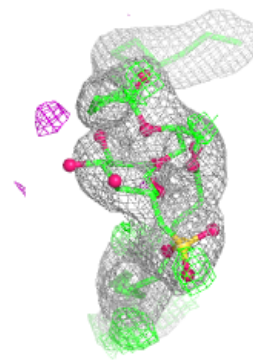
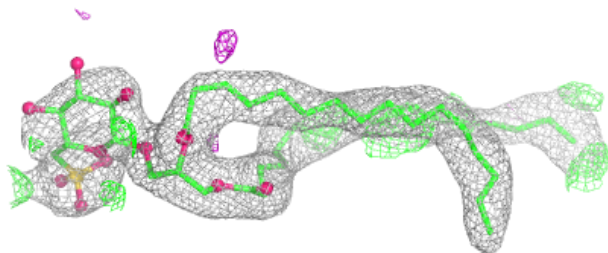
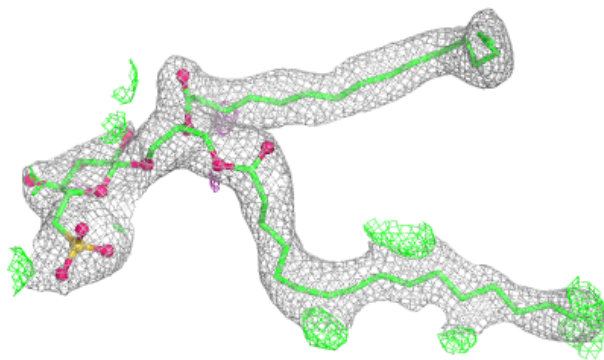
**Electron density around HTG C 523:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

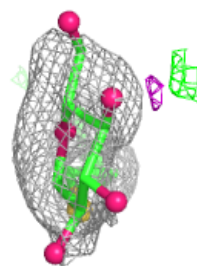
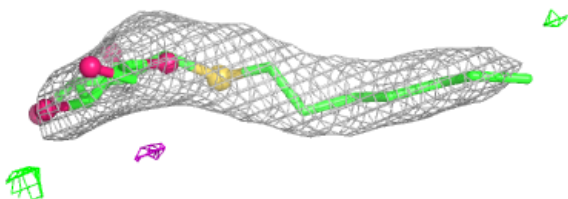
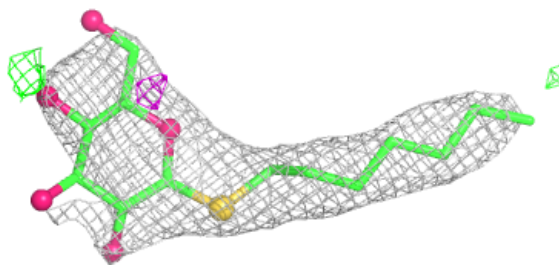


Electron density around SQD a 405:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

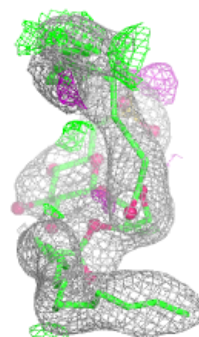
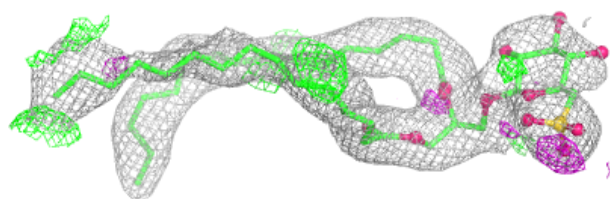
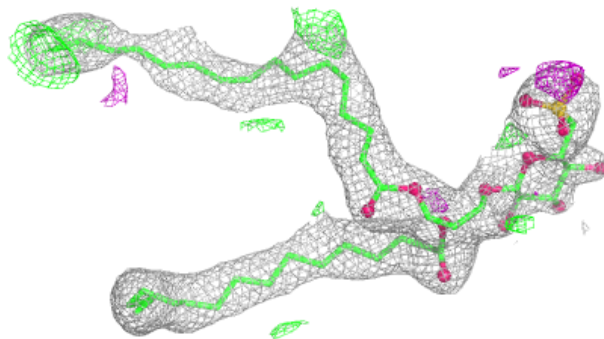
**Electron density around HTG b 632:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

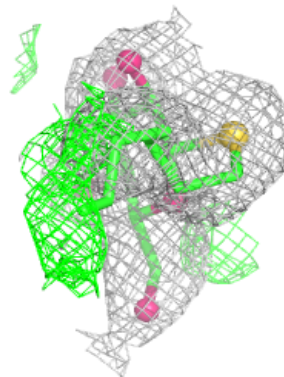
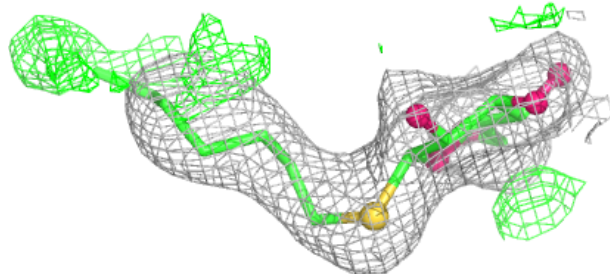
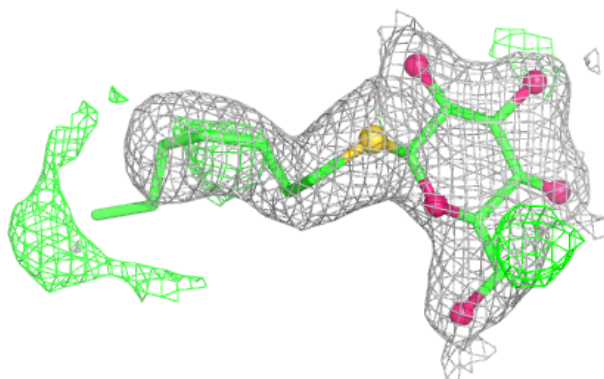


Electron density around SQD A 416:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

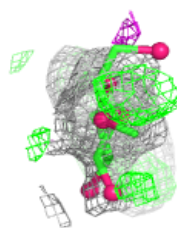
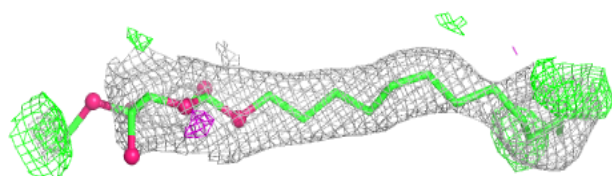
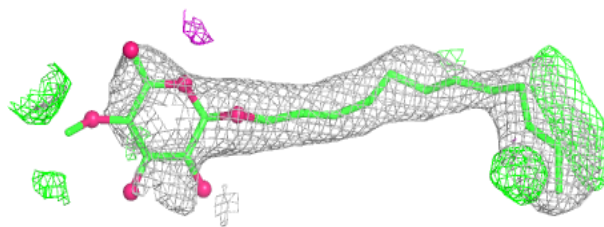
**Electron density around HTG B 624:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

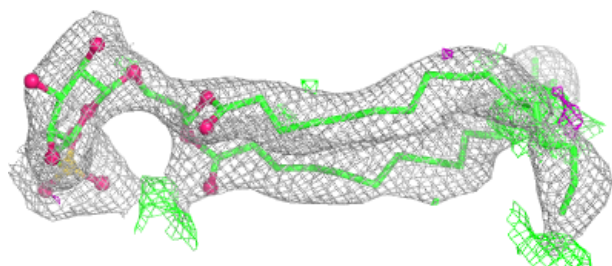
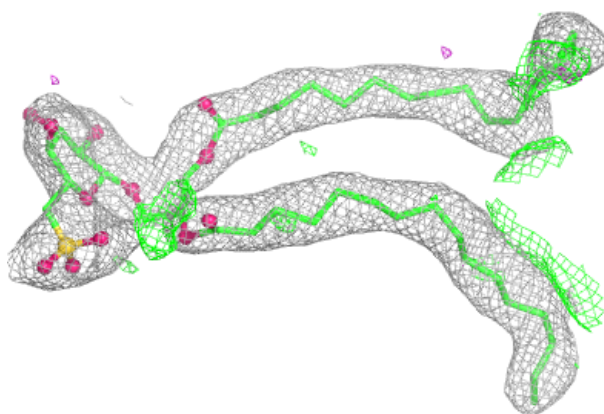


Electron density around LMT B 635:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

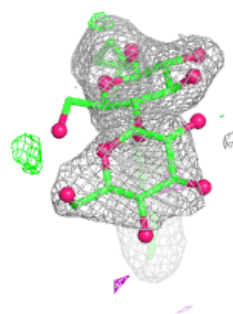
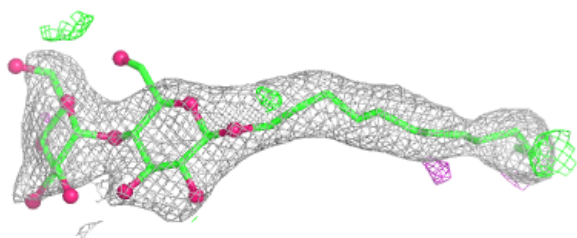
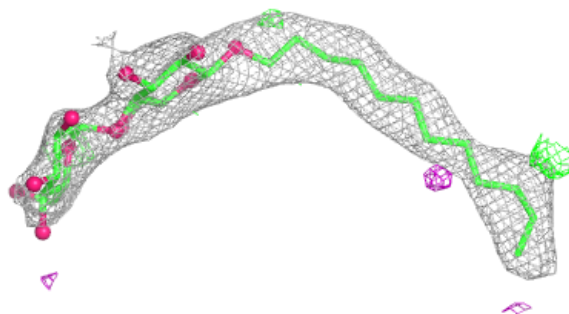
**Electron density around SQD L 102:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

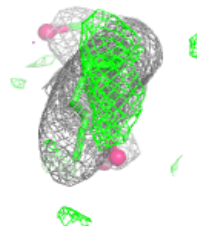
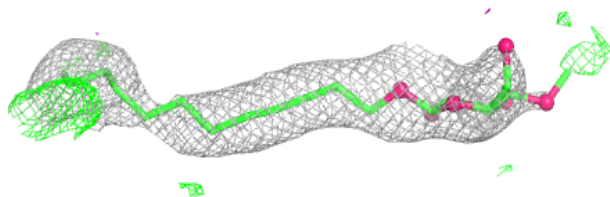
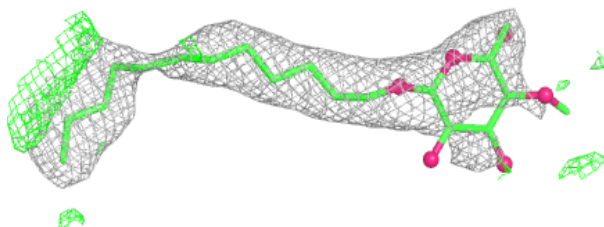


Electron density around LMT m 103:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

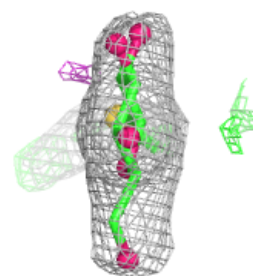
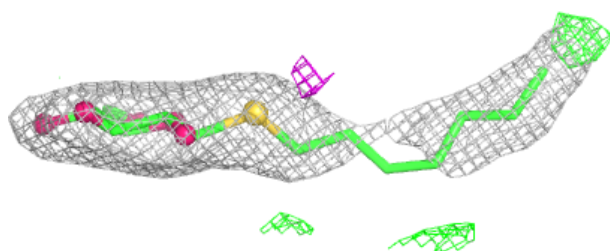
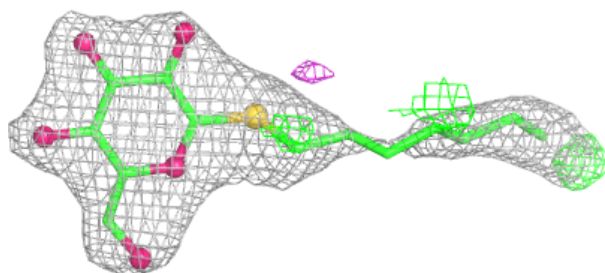
**Electron density around LMT T 104:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

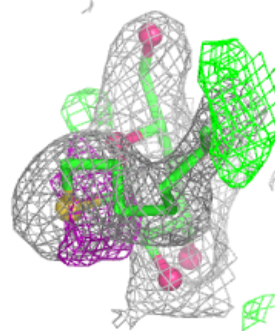
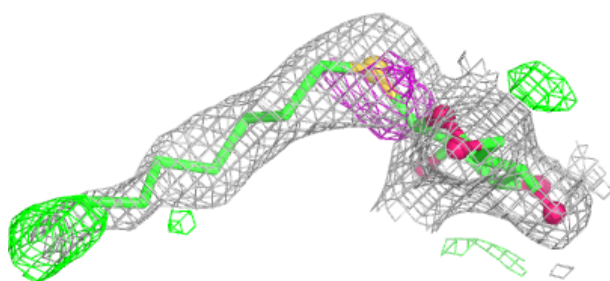
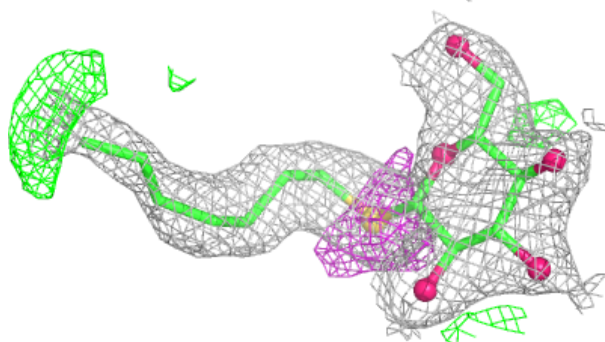


Electron density around HTG C 522:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

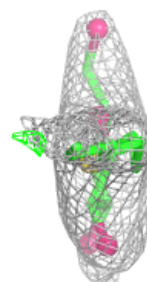
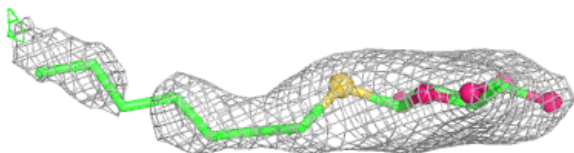
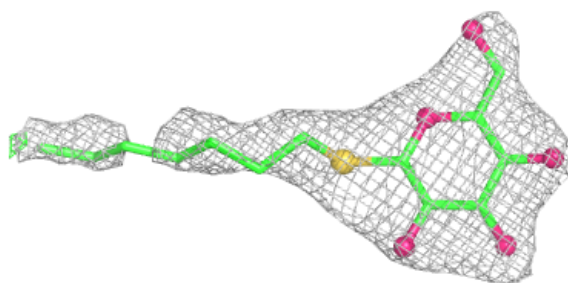
**Electron density around HTG b 631:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



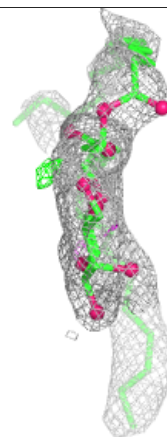
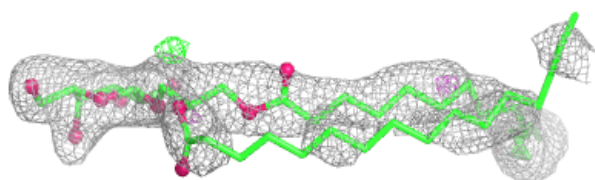
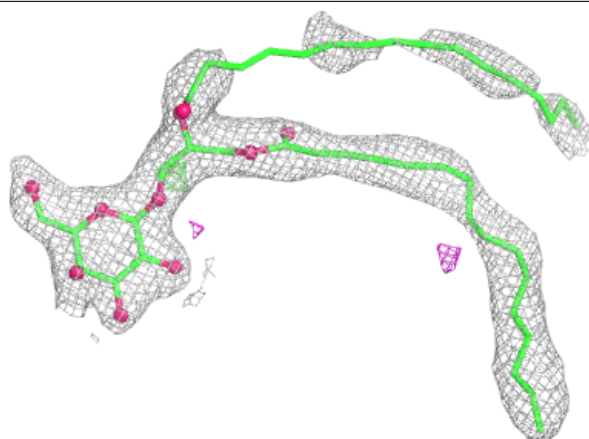
Electron density around HTG c 525:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

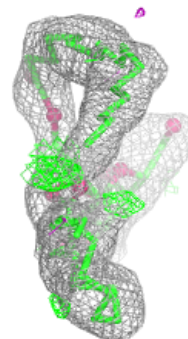
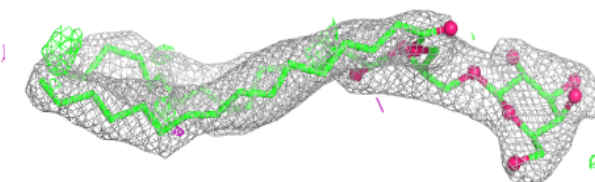
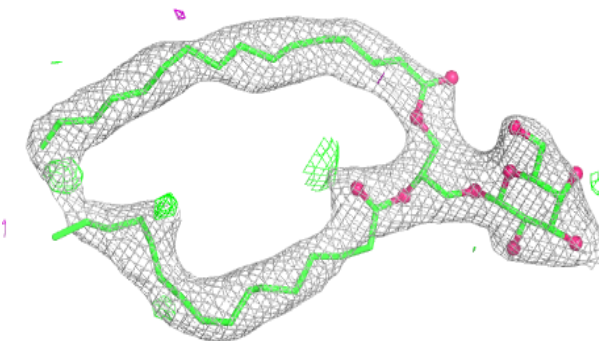


Electron density around LMG c 523:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

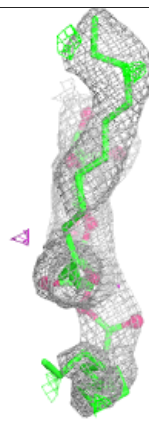
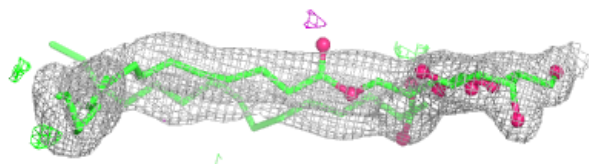
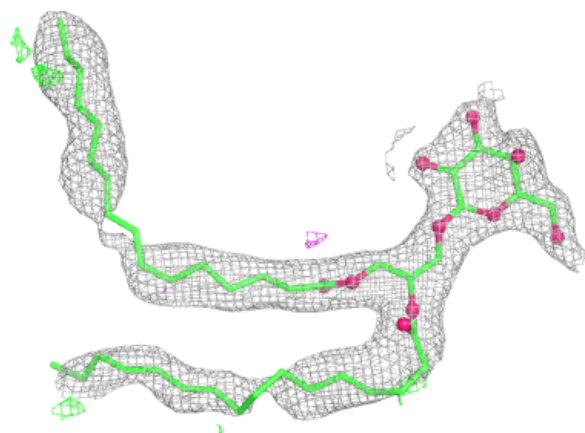
**Electron density around LMG A 421:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

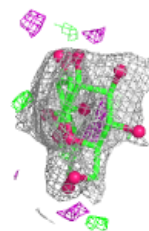
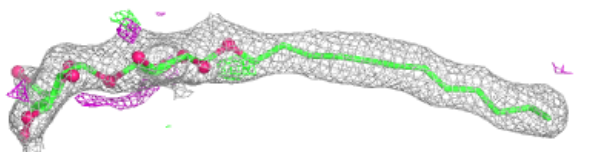
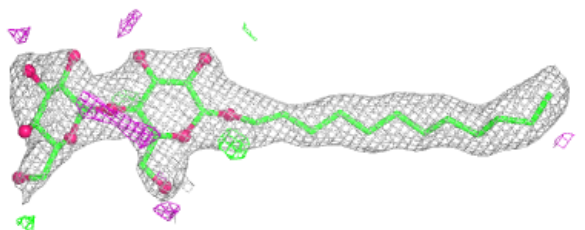


Electron density around LMG C 519:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

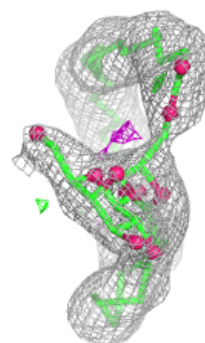
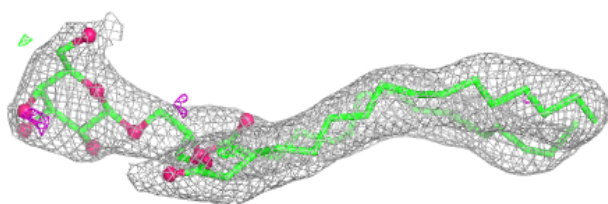
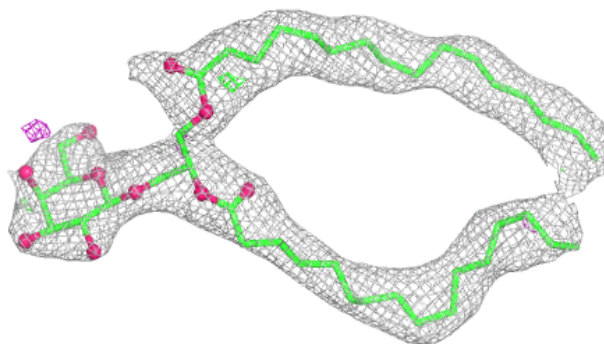
**Electron density around LMT m 102:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

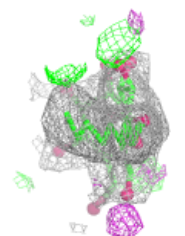
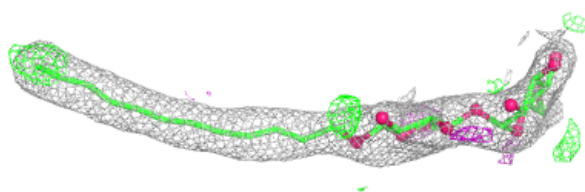
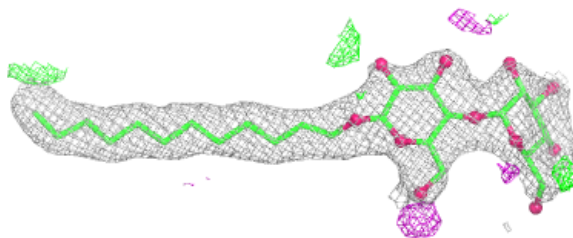


Electron density around LMG c 501:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

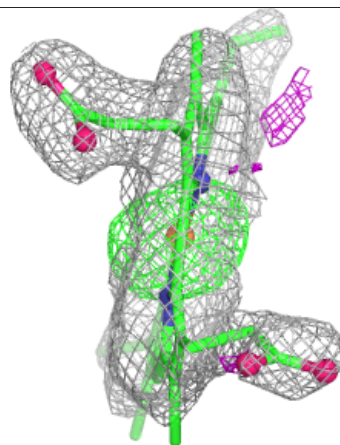
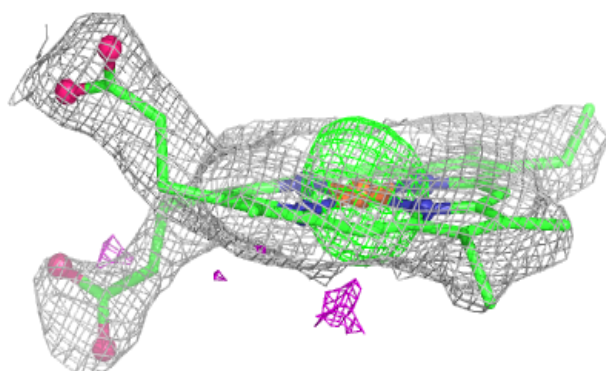
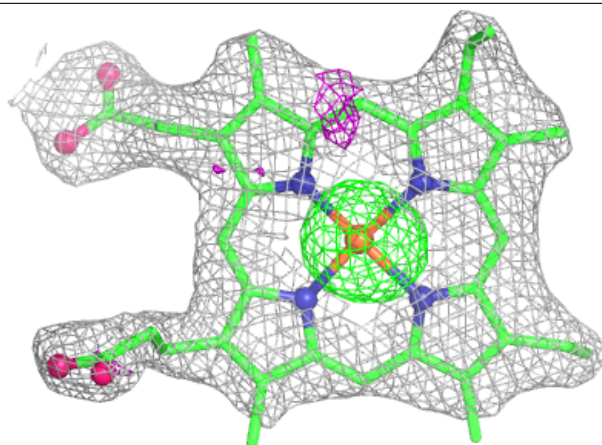
**Electron density around LMT M 101:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

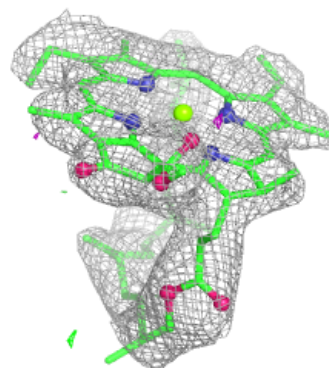
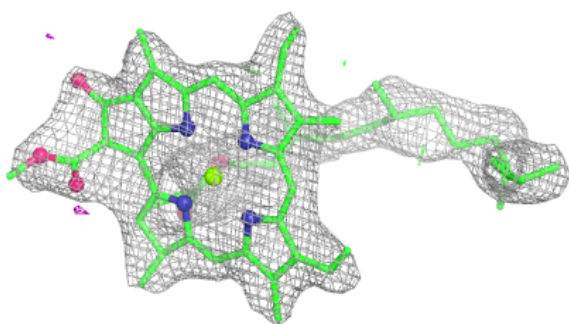
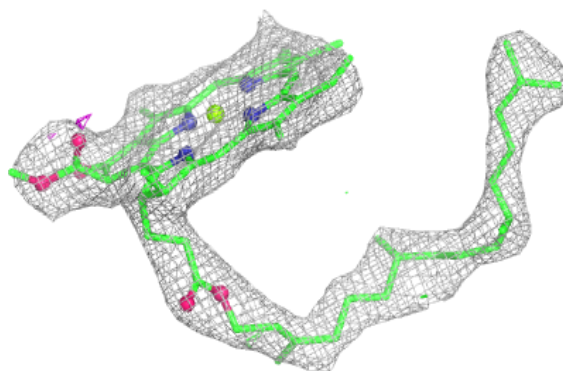


Electron density around HEM F 102:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

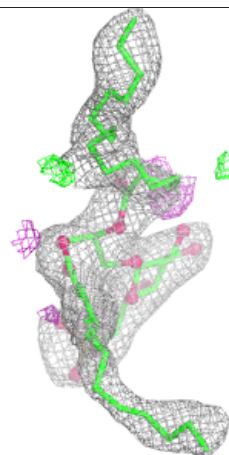
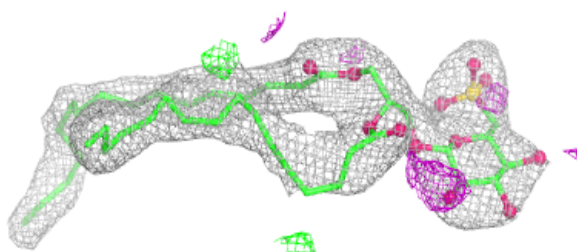
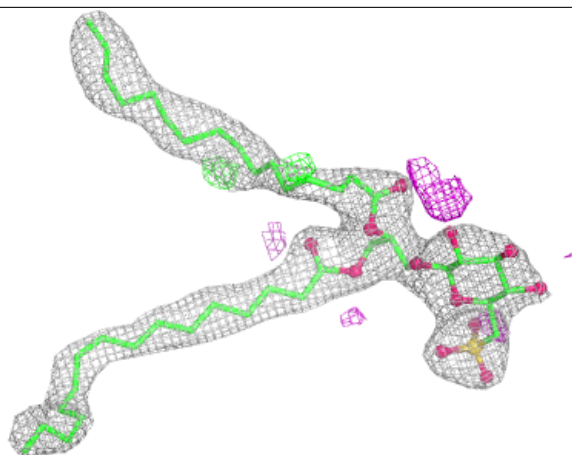
**Electron density around CLA c 518:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



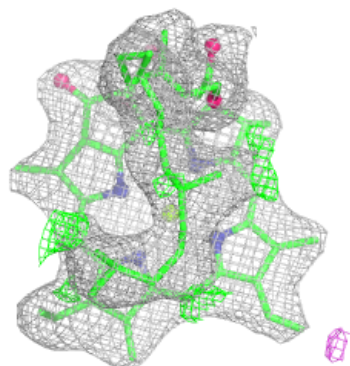
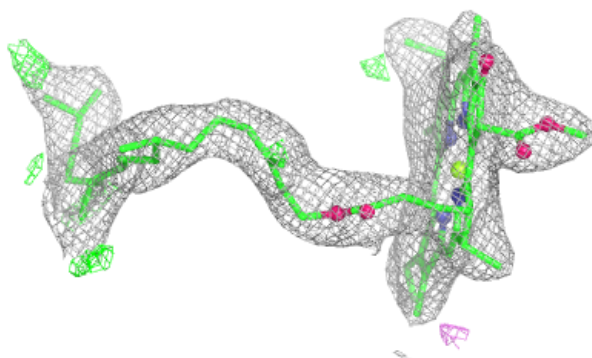
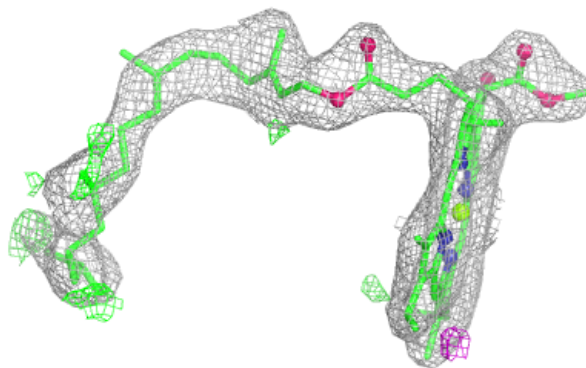
Electron density around SQD A 412:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

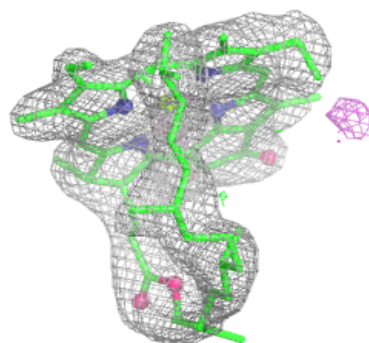
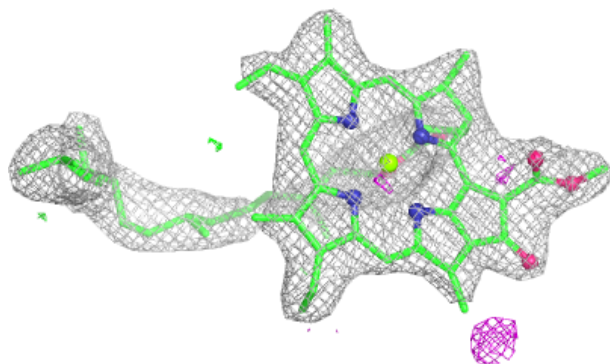
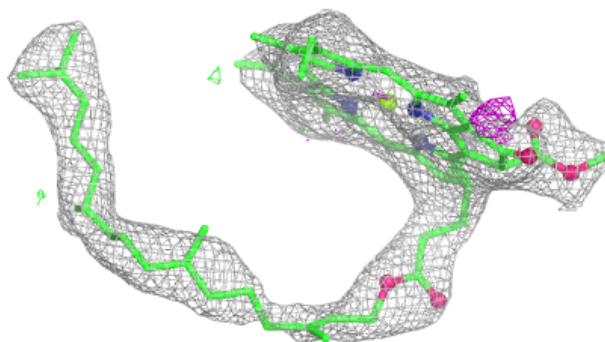


Electron density around CLA C 506:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

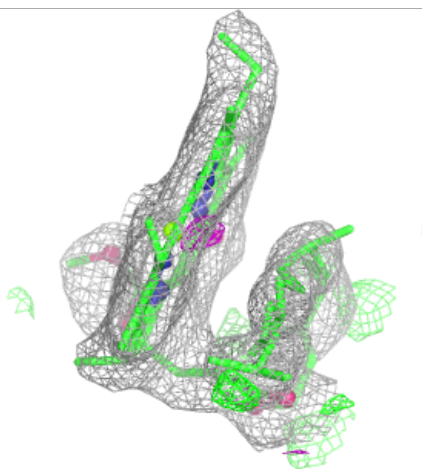
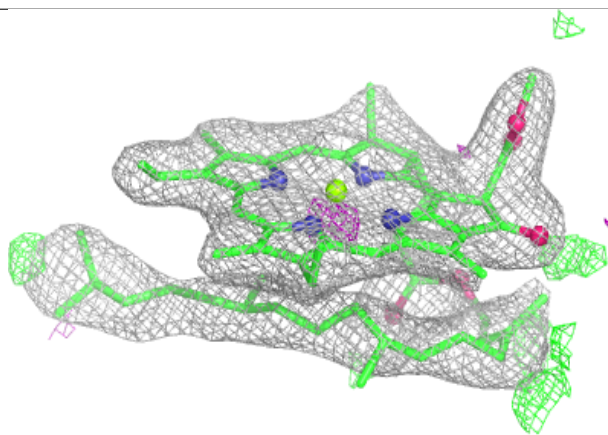
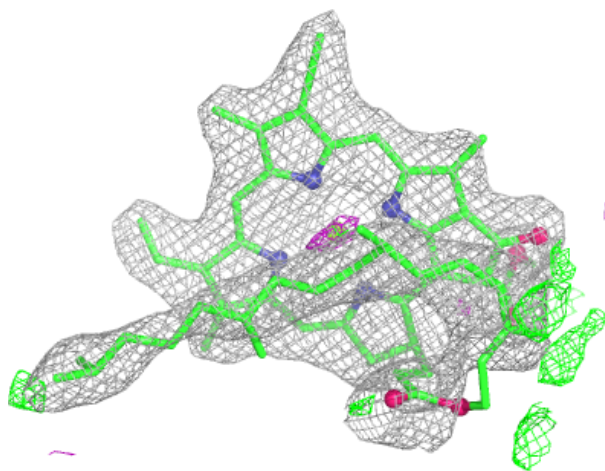
**Electron density around CLA C 513:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



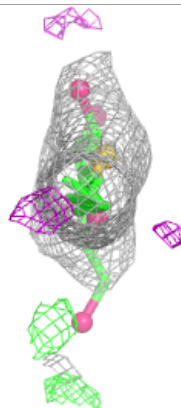
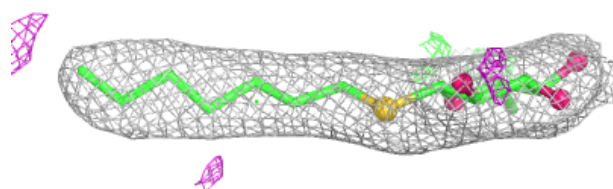
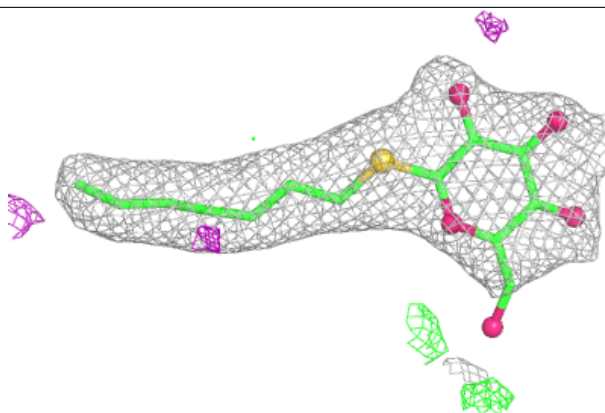
Electron density around CLA b 610:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

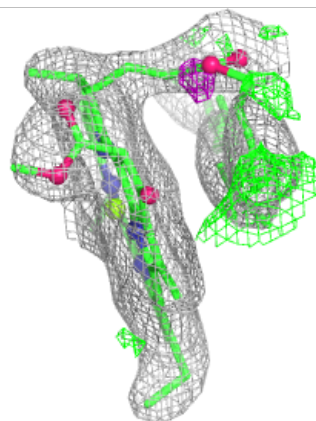
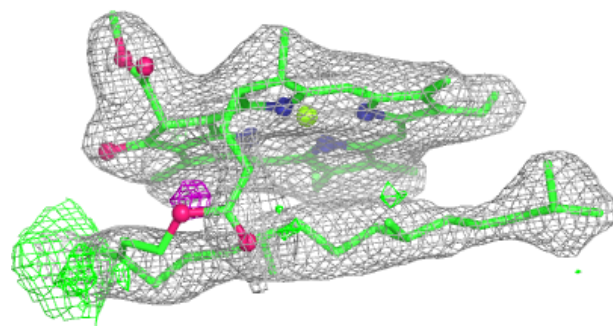
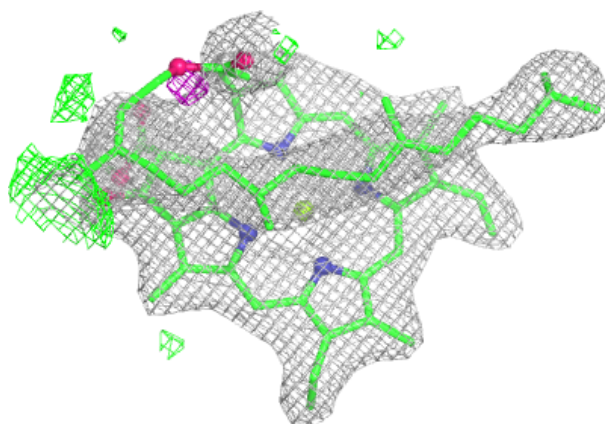


Electron density around HTG B 632:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

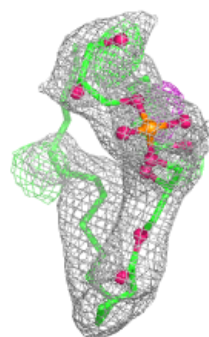
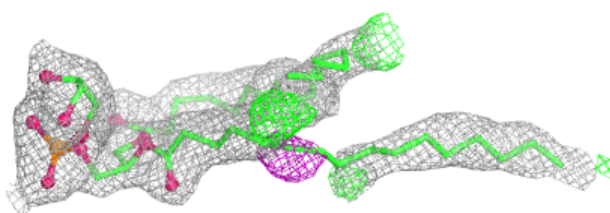
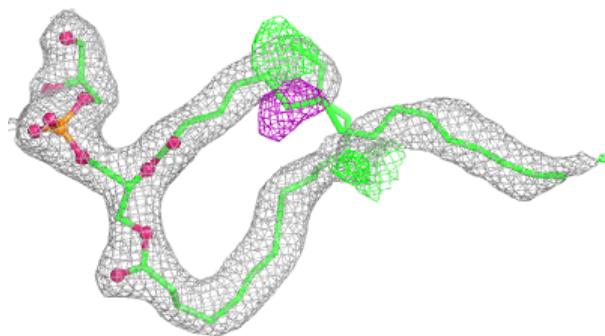
**Electron density around CLA B 602:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

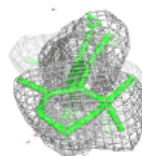
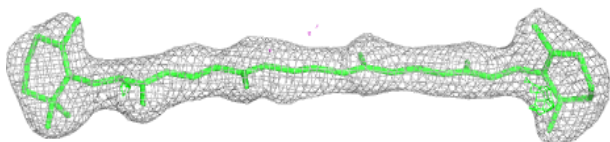
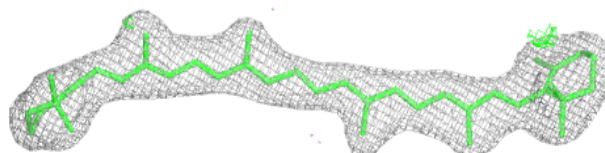


Electron density around LHG D 409:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

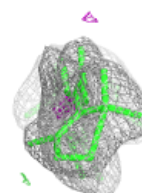
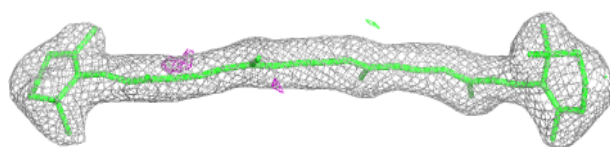
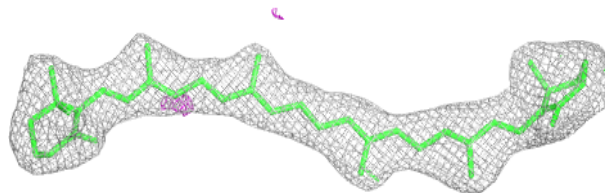
**Electron density around BCR C 514:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

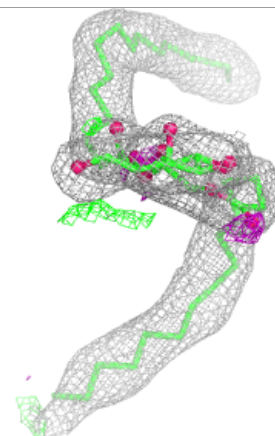
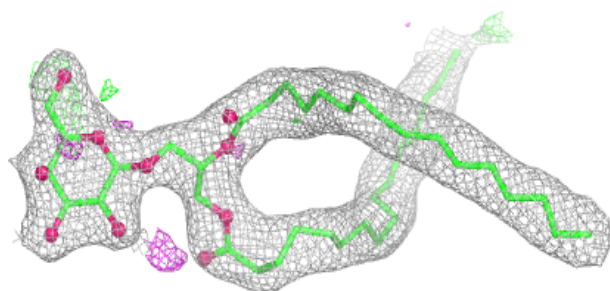
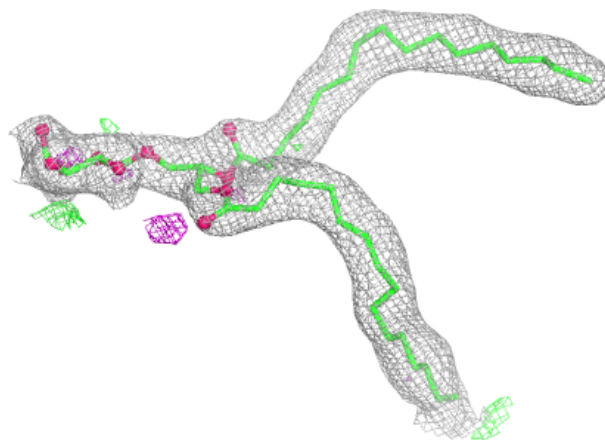


Electron density around BCR y 101:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

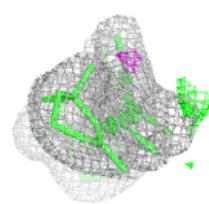
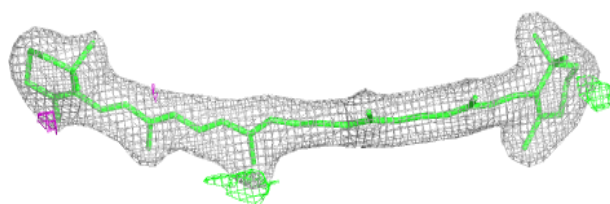
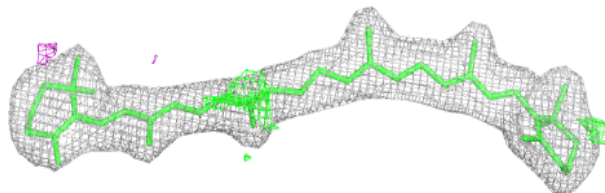
**Electron density around LMG B 622:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

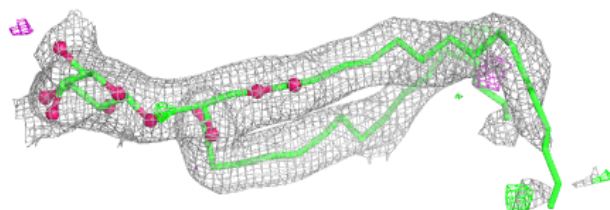
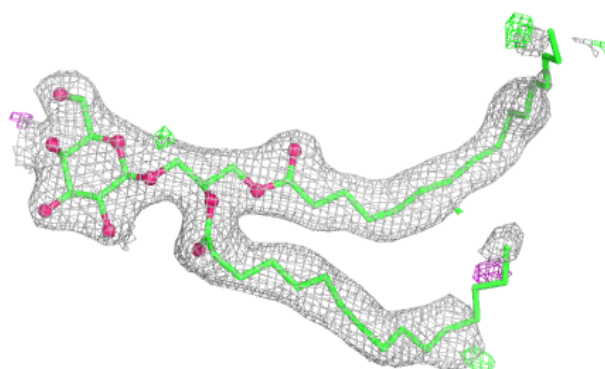


Electron density around BCR t 101:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

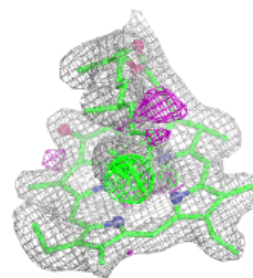
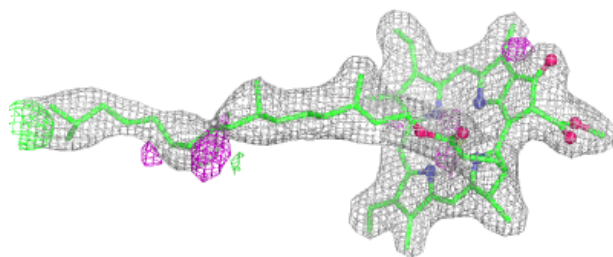
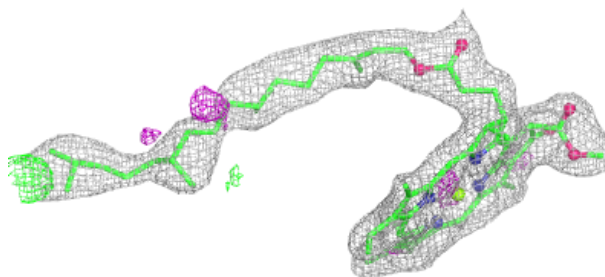
**Electron density around LMG D 413:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

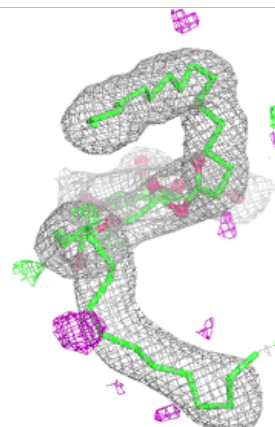
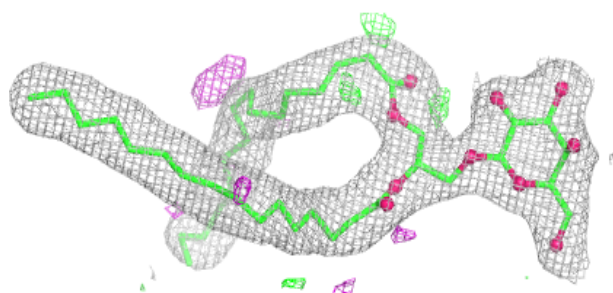
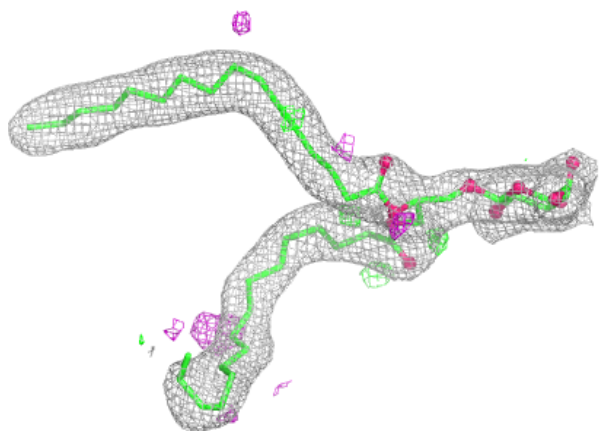


Electron density around CLA C 504:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

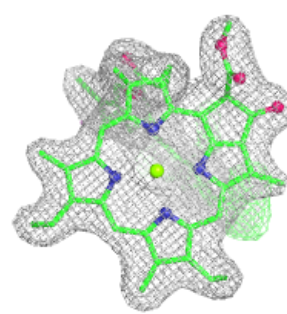
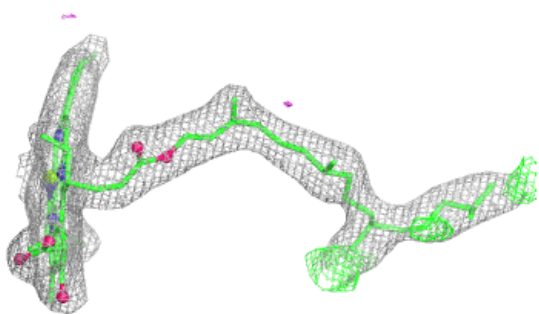
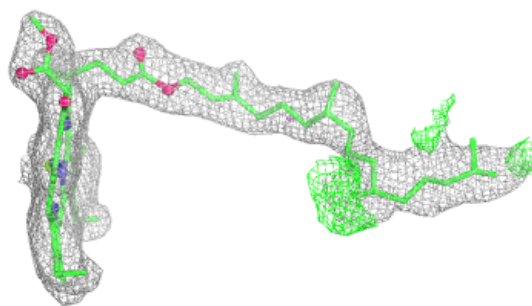
**Electron density around LMG b 629:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

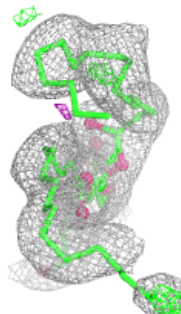
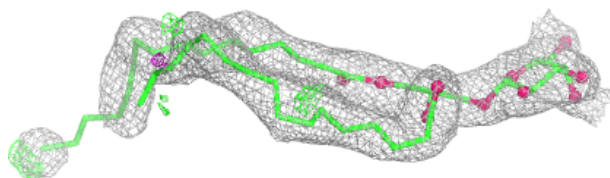
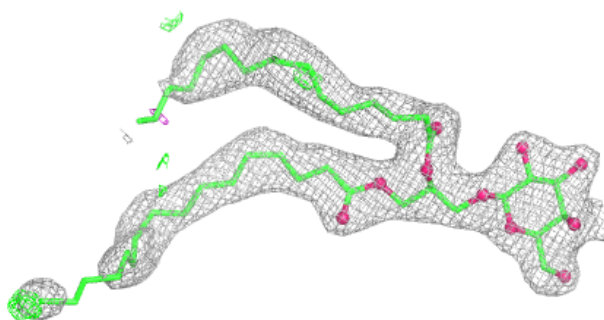


Electron density around CLA b 615:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

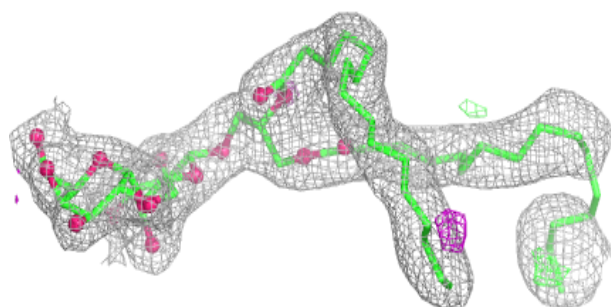
**Electron density around LMG d 413:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

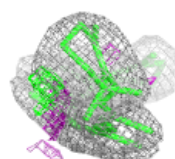
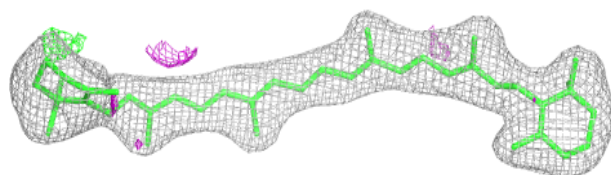
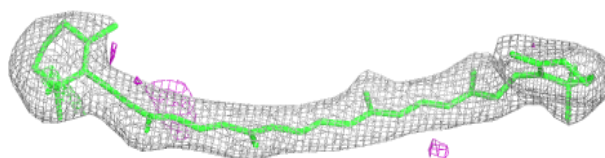


Electron density around DGD C 517:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

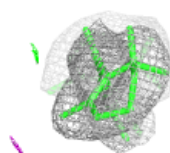
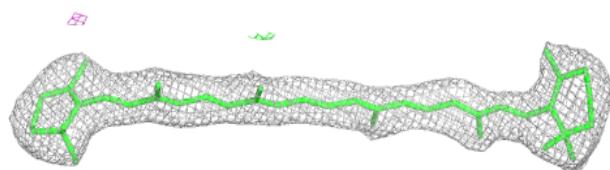
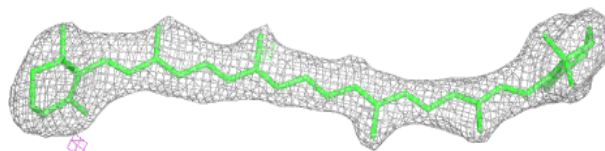
**Electron density around BCR D 404:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

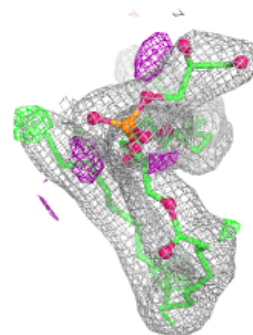
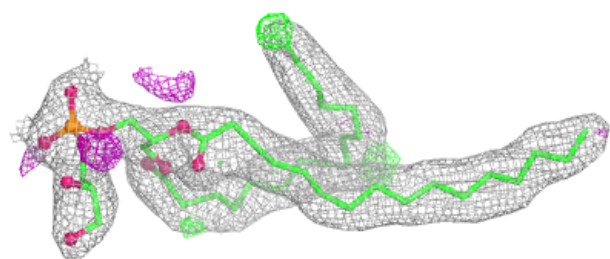
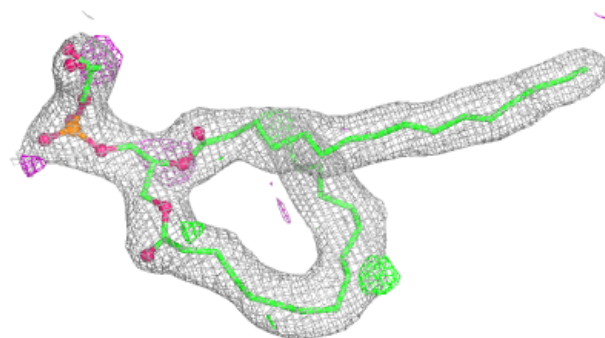


Electron density around BCR c 528:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

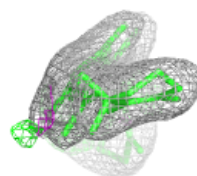
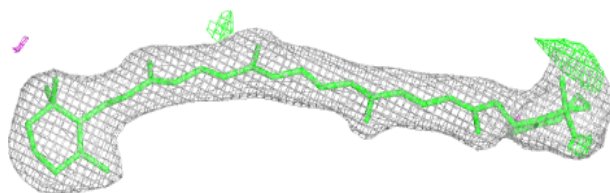
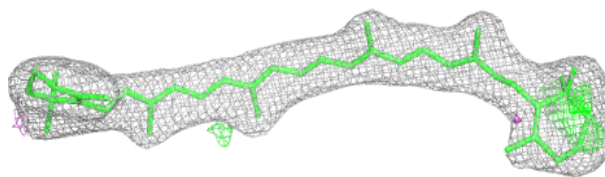
**Electron density around LHG D 407:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



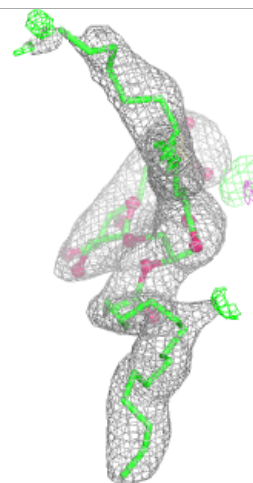
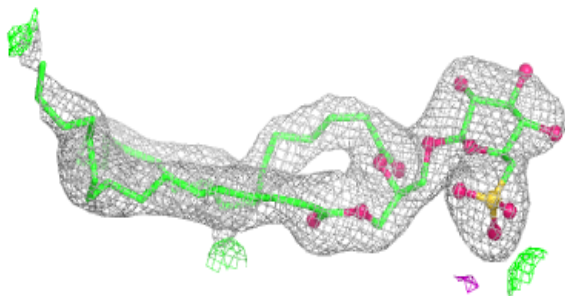
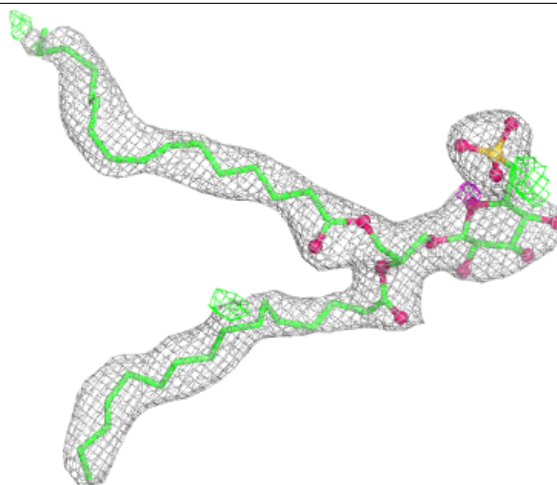
Electron density around BCR d 404:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



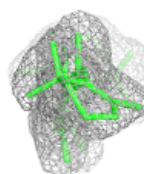
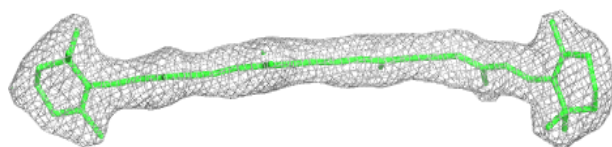
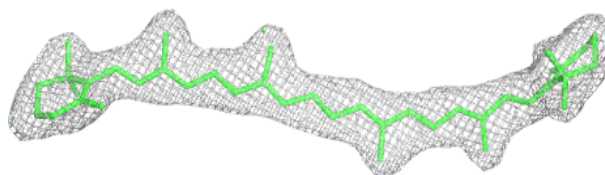
Electron density around SQD a 414:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

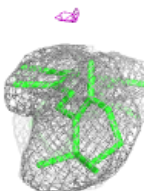
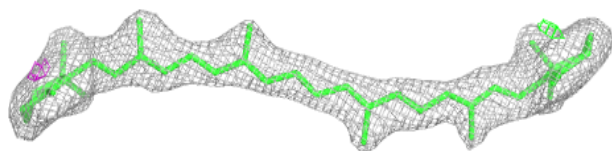
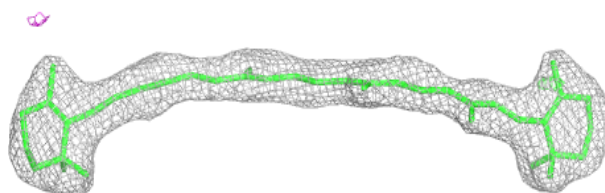


Electron density around BCR h 101:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

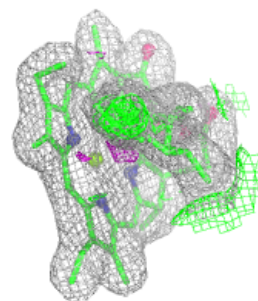
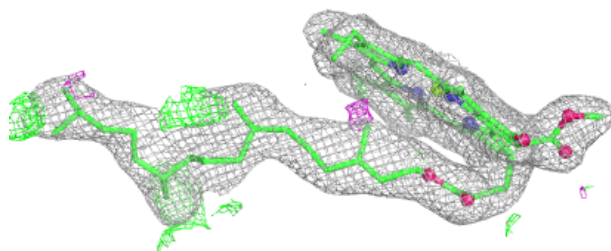
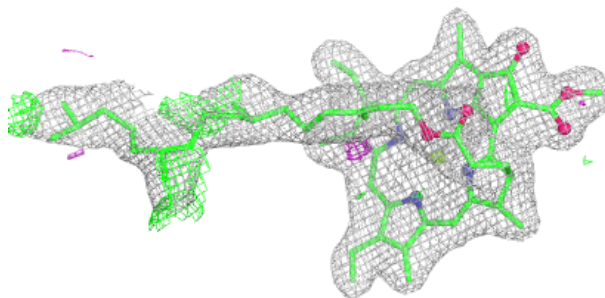
**Electron density around BCR k 101:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



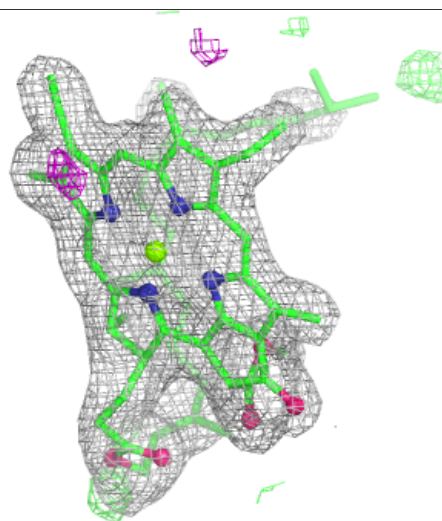
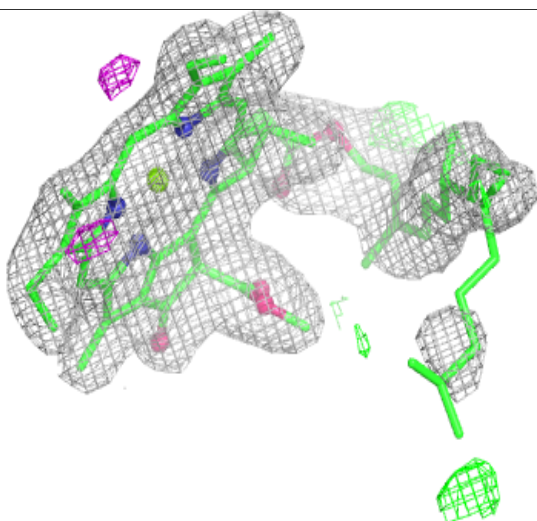
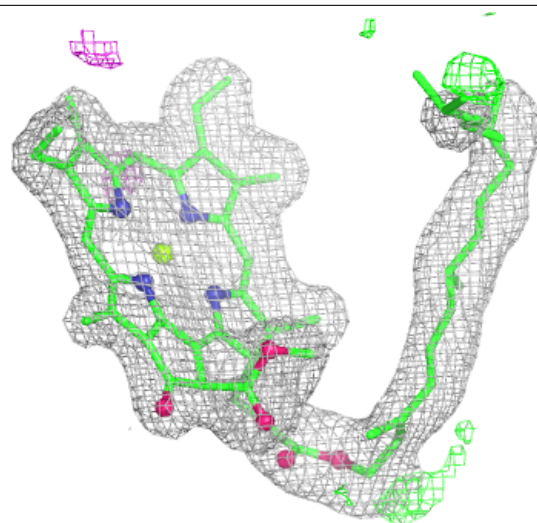
Electron density around CLA b 623:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



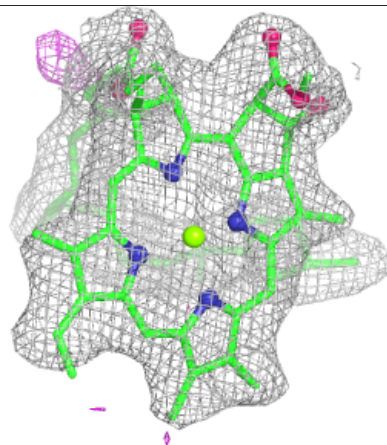
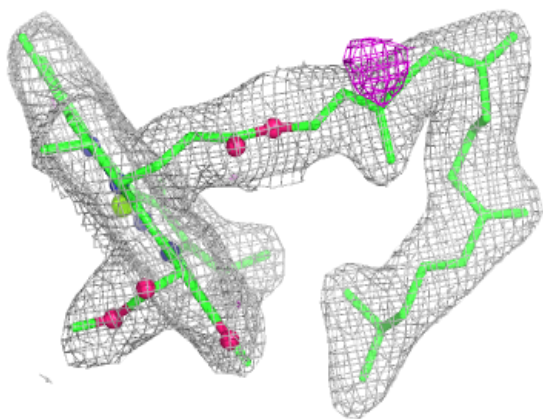
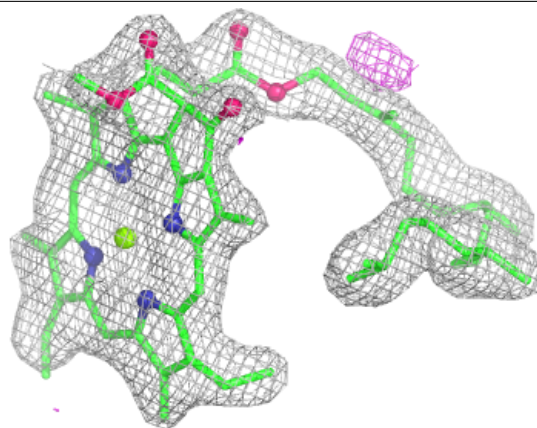
Electron density around CLA b 625:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



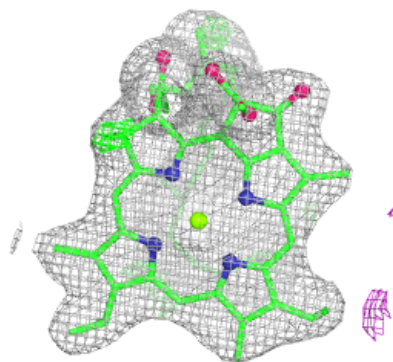
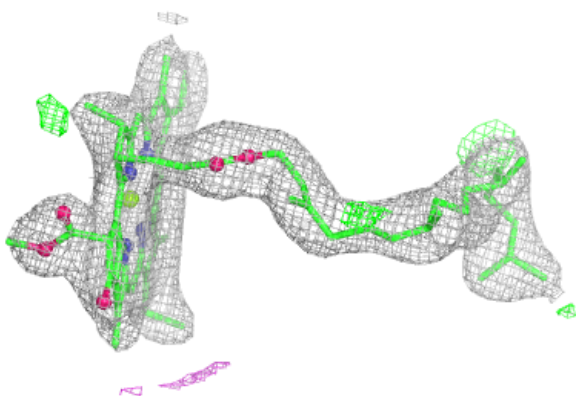
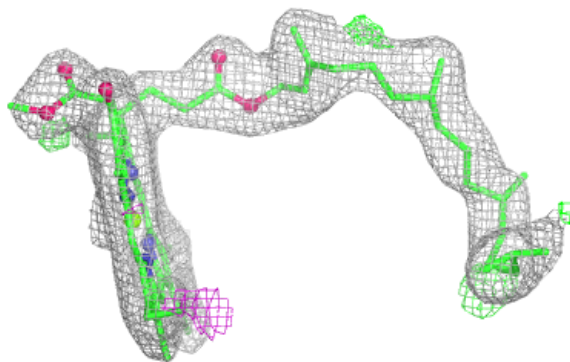
Electron density around CLA c 508:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



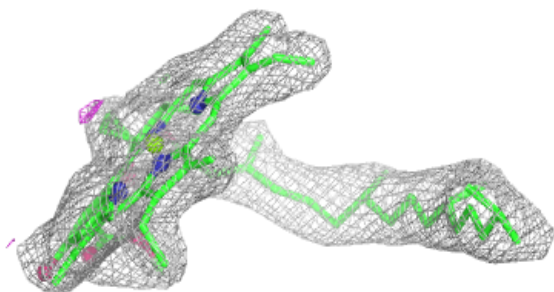
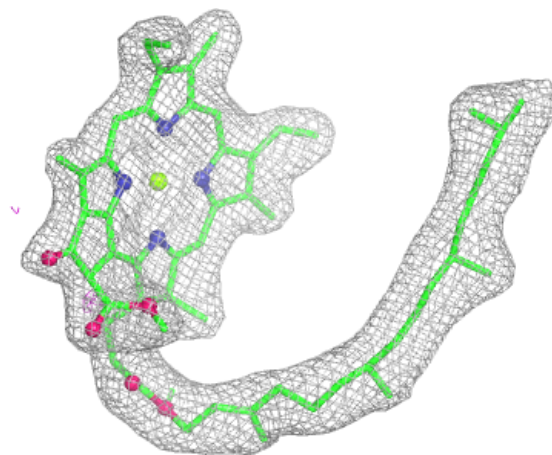
Electron density around CLA c 511:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



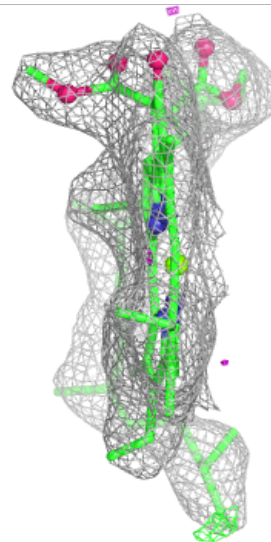
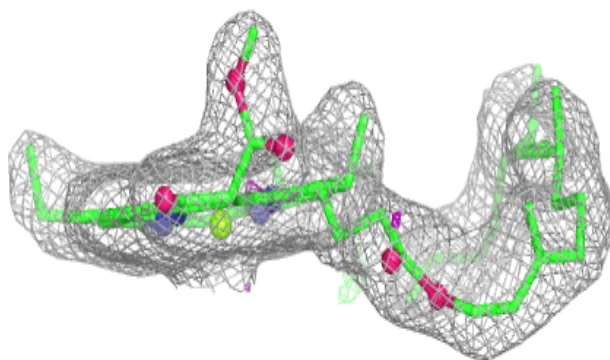
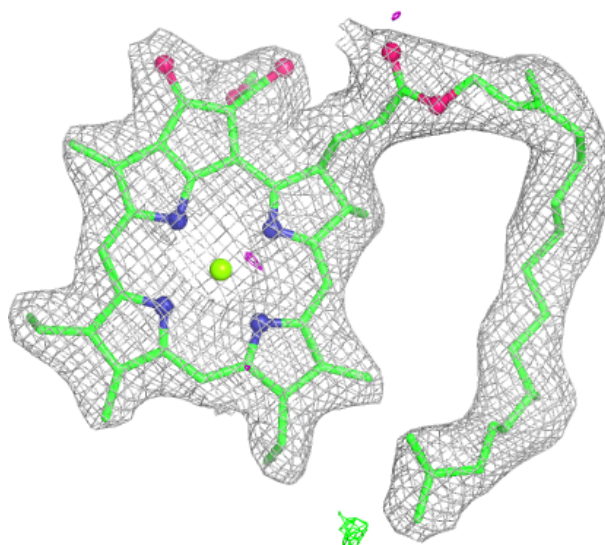
Electron density around CLA c 512:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



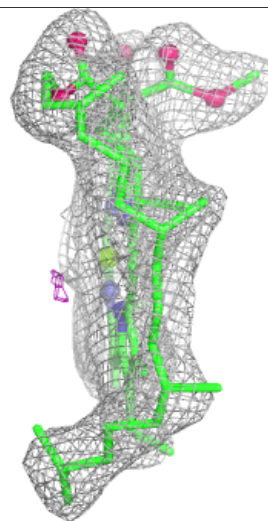
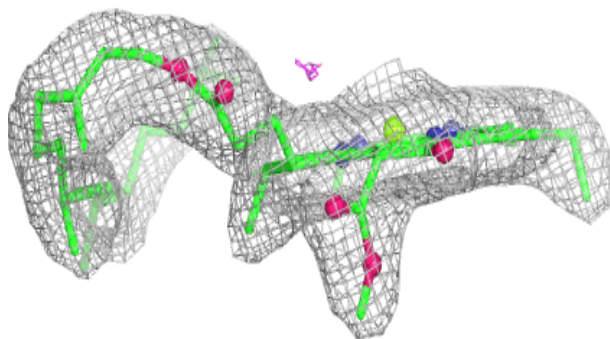
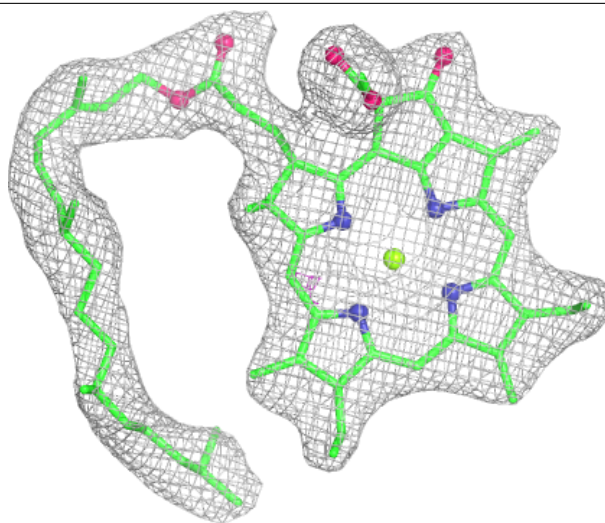
Electron density around CLA c 517:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



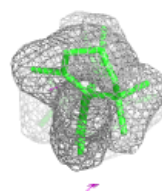
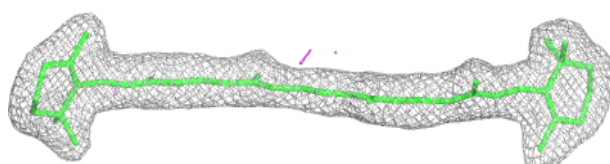
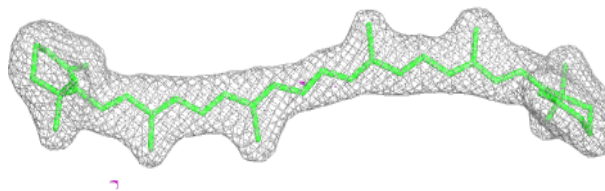
Electron density around CLA C 512:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

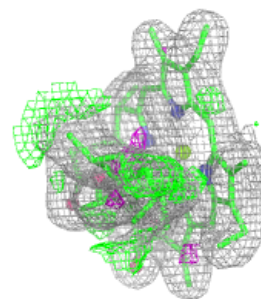
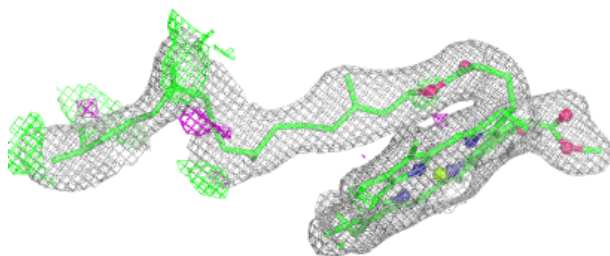
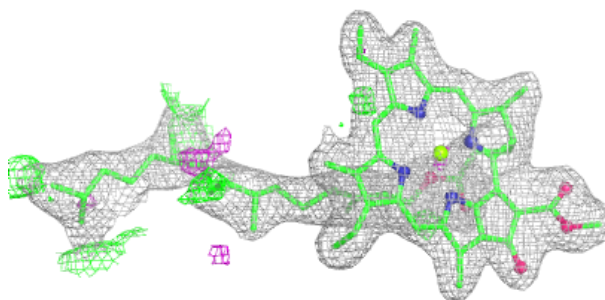


Electron density around BCR A 411:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

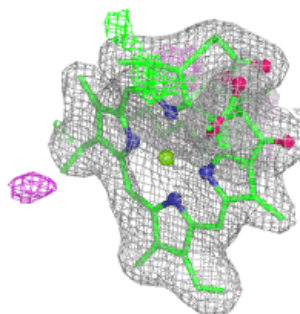
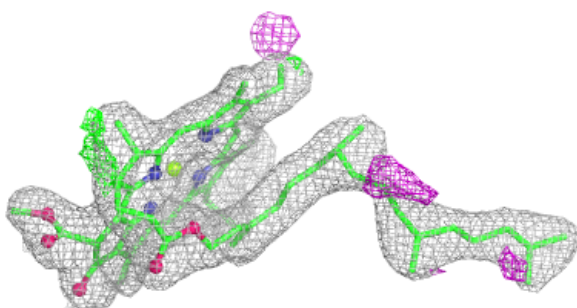
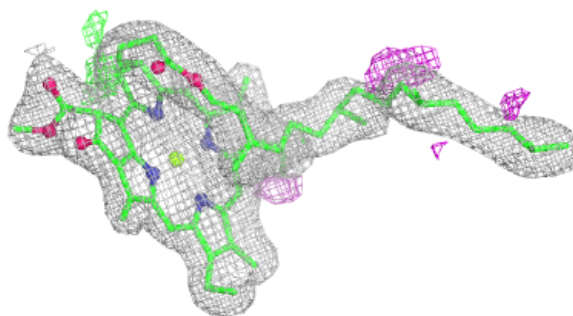
**Electron density around CLA B 615:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

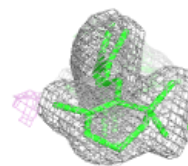
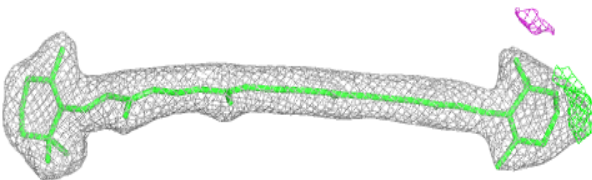
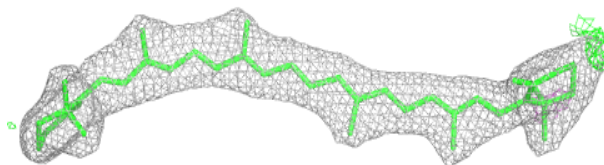


Electron density around CLA C 505:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

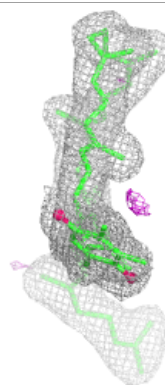
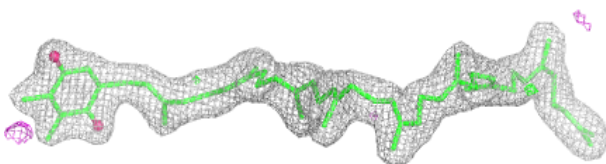
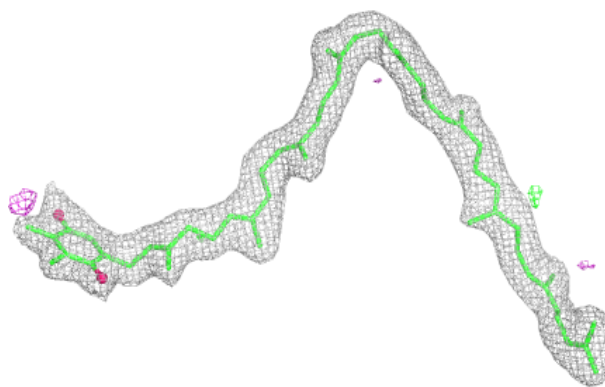
**Electron density around BCR H 101:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

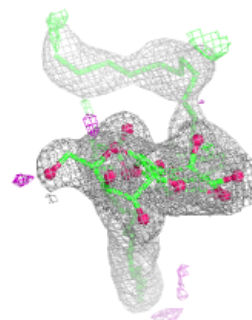
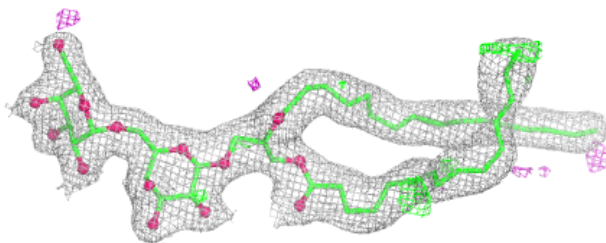
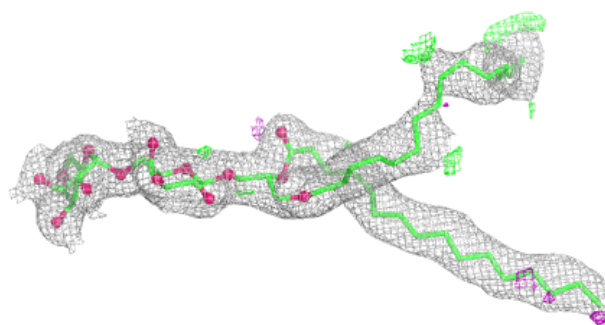


Electron density around PL9 d 405 (A):

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

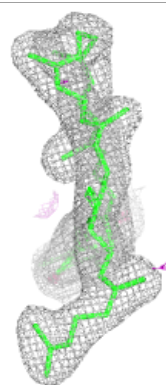
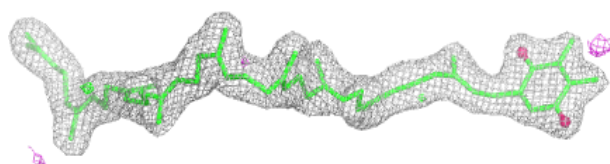
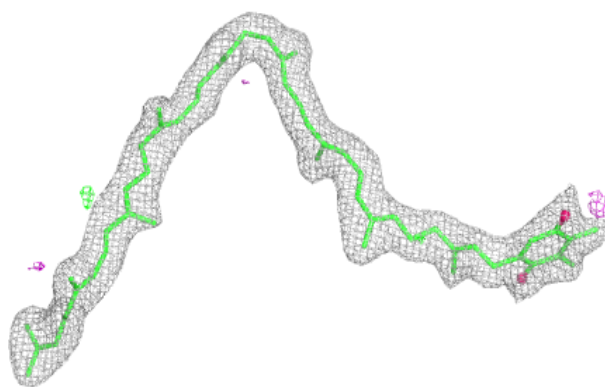
**Electron density around DGD C 516:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

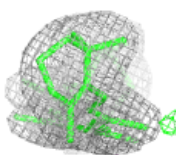
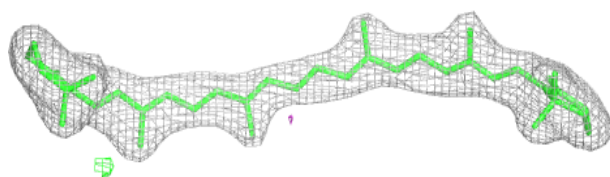
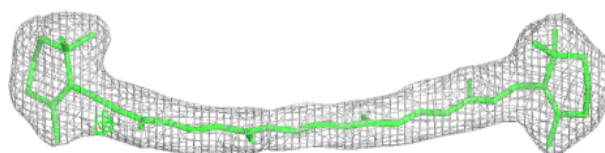


Electron density around PL9 d 405 (B):

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

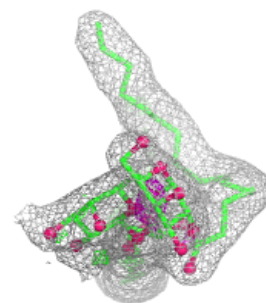
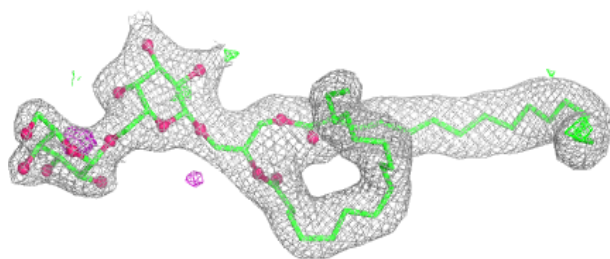
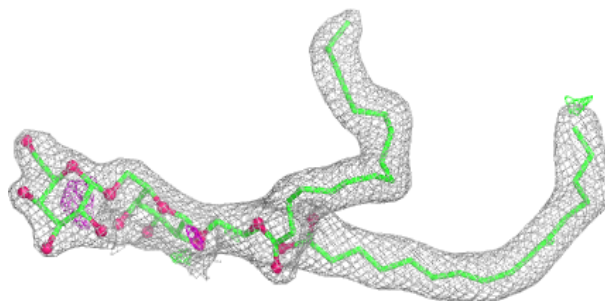
**Electron density around BCR K 101:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

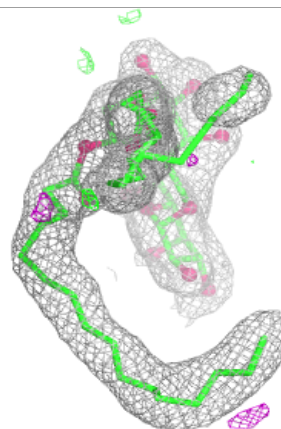
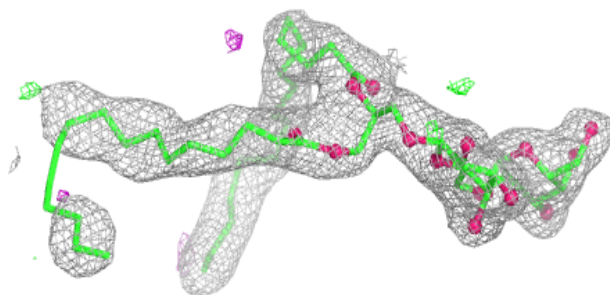
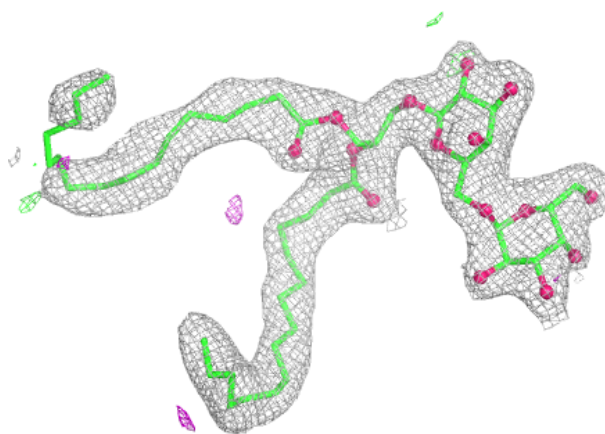


Electron density around DGD H 102:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

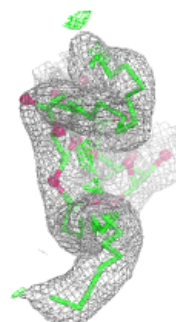
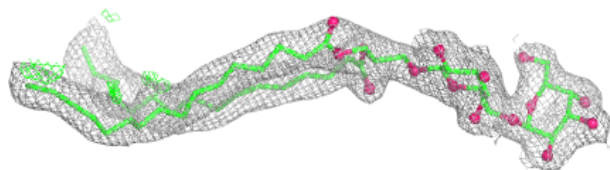
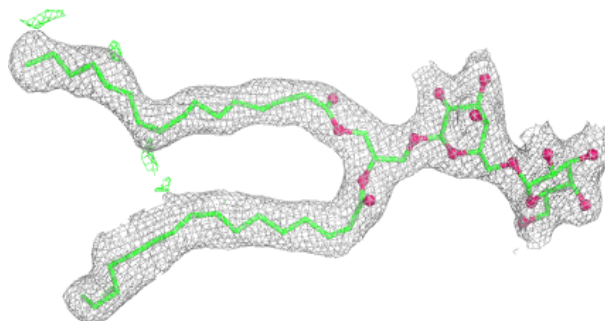
**Electron density around DGD c 521:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

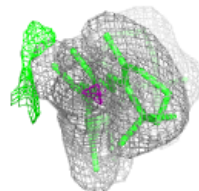
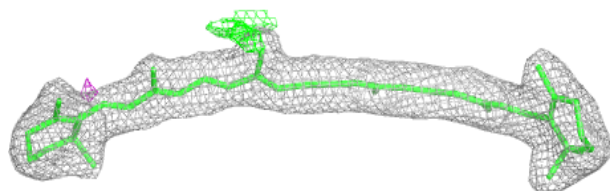
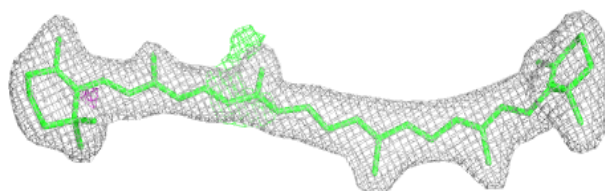


Electron density around DGD c 522:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

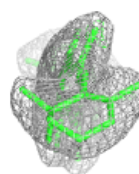
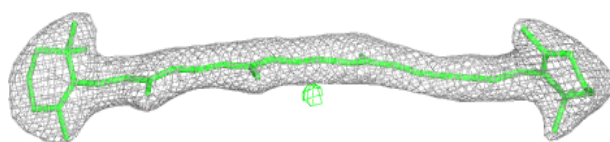
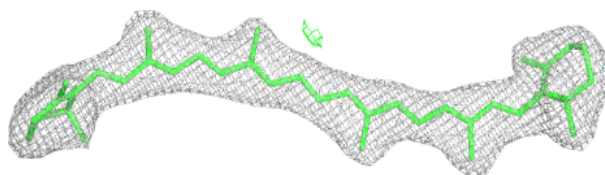
**Electron density around BCR T 103:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

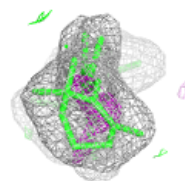
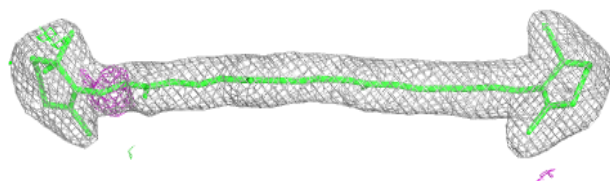
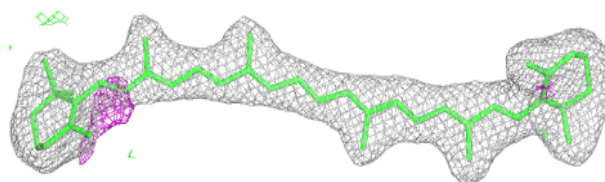


Electron density around BCR Y 101:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

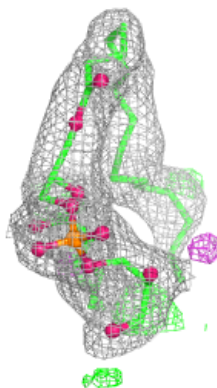
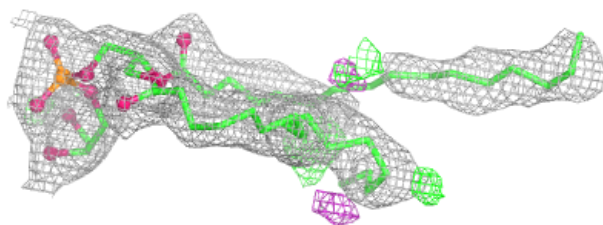
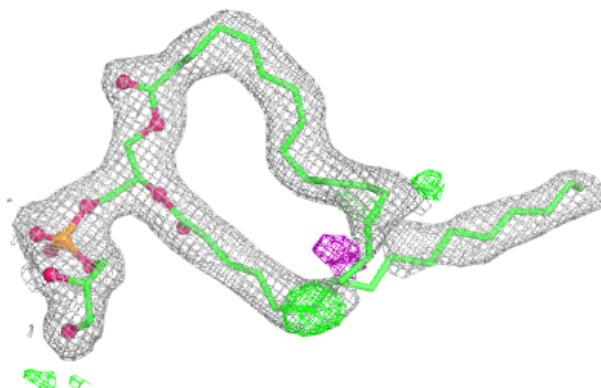
**Electron density around BCR b 627:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



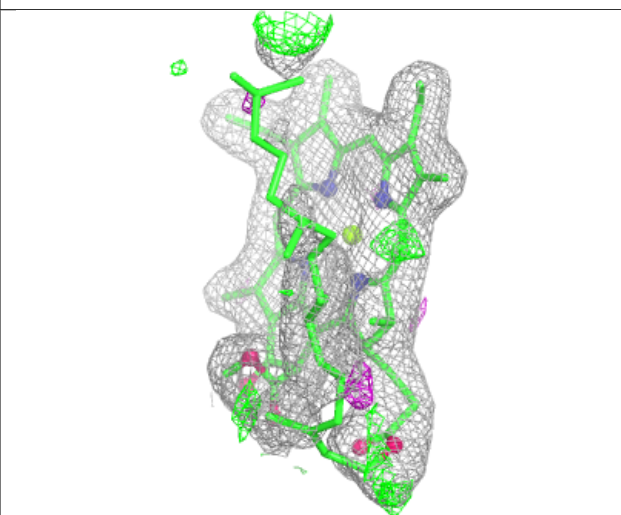
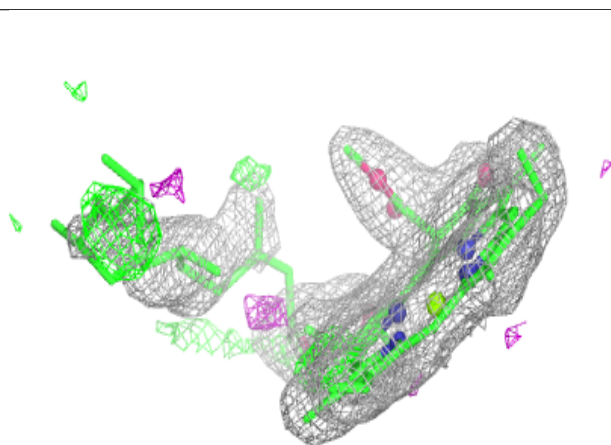
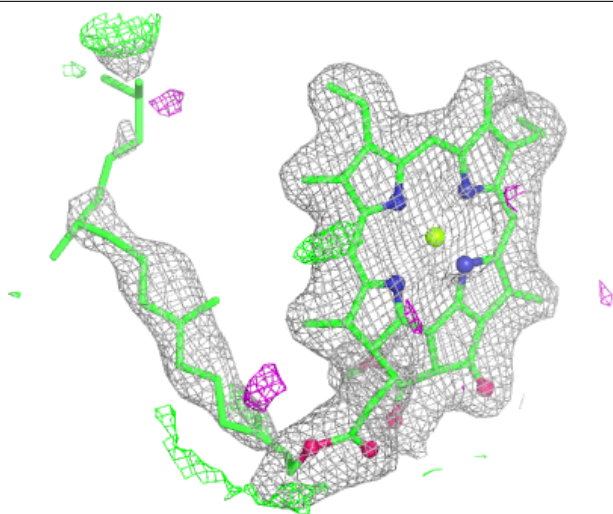
Electron density around LHG d 408:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



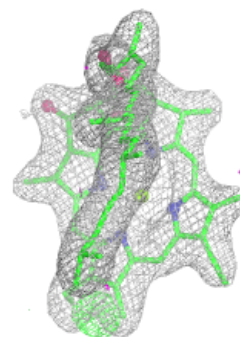
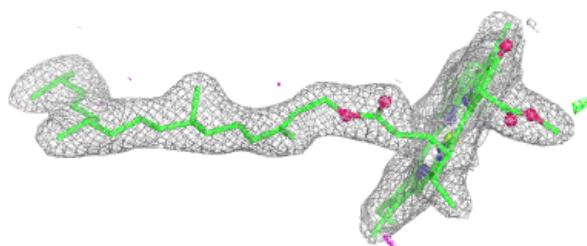
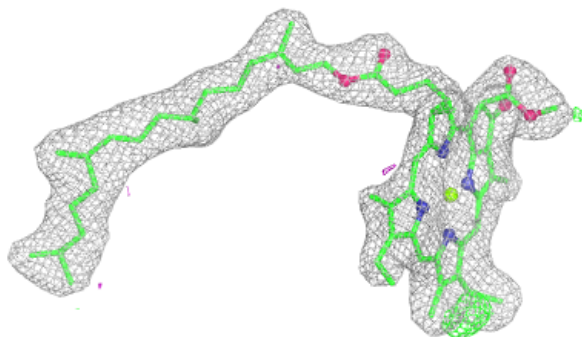
Electron density around CLA B 617:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

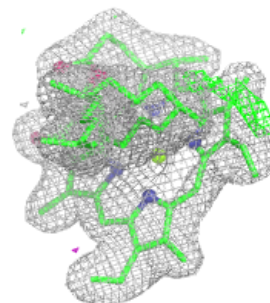
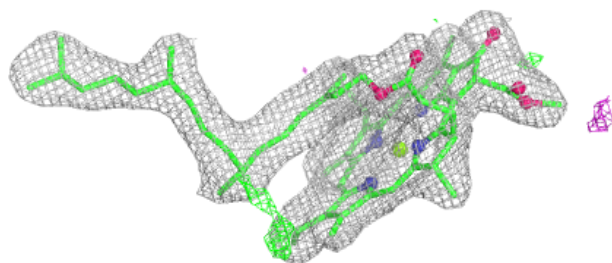
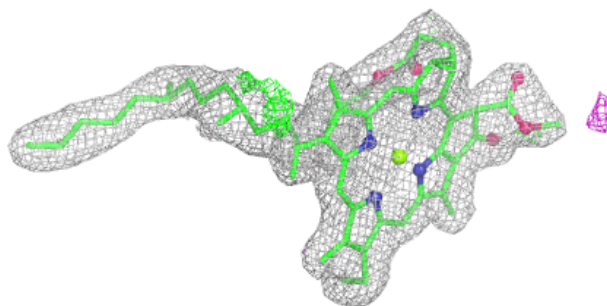


Electron density around CLA b 618:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

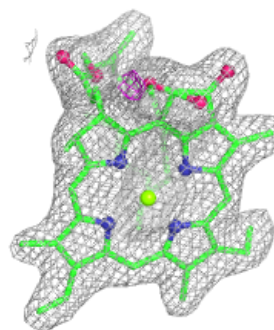
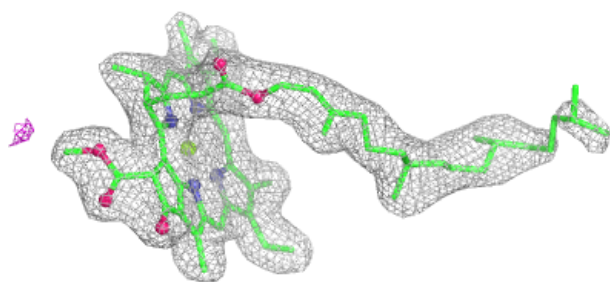
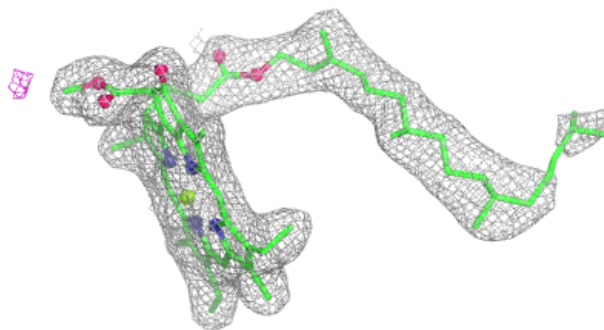
**Electron density around CLA c 510:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



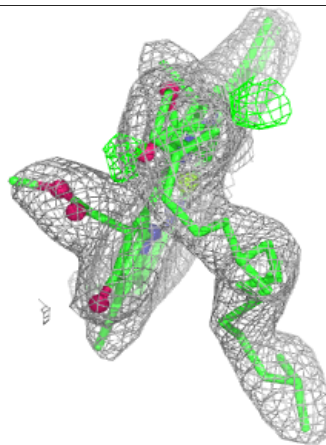
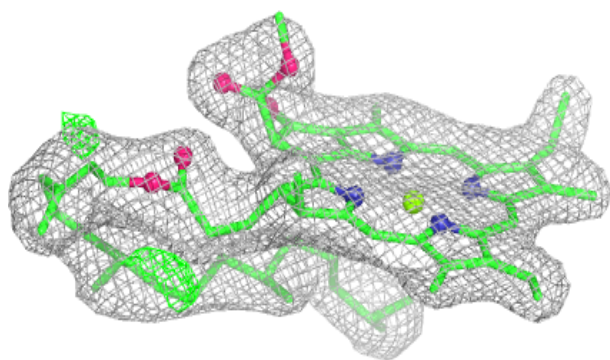
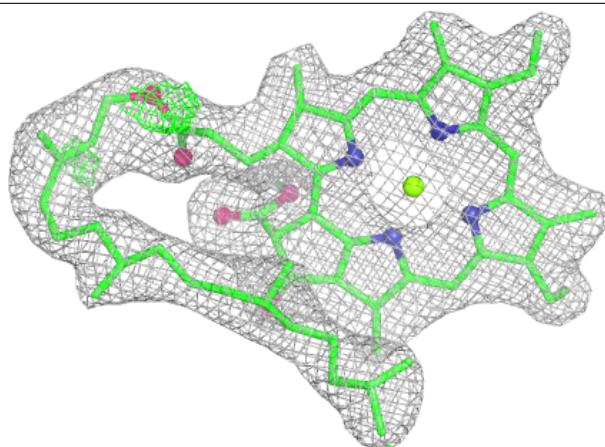
Electron density around CLA C 508:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



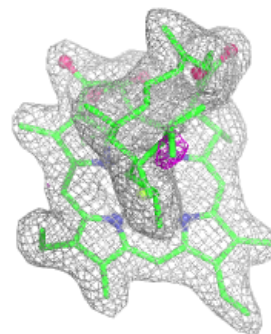
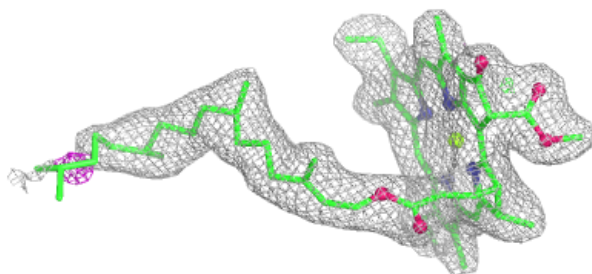
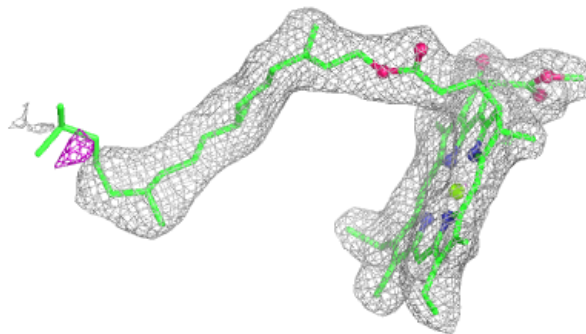
Electron density around CLA C 509:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



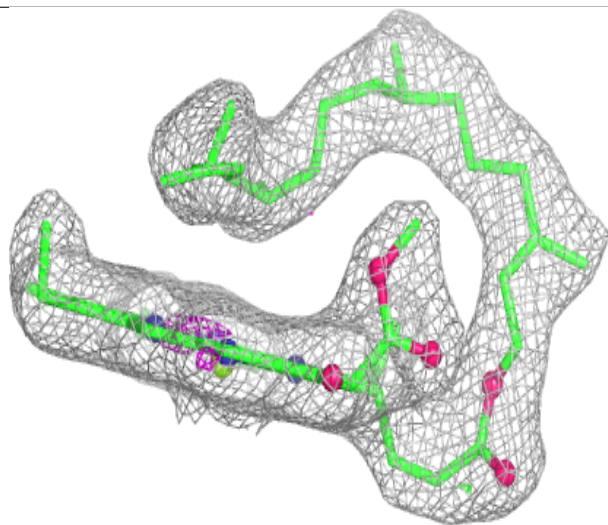
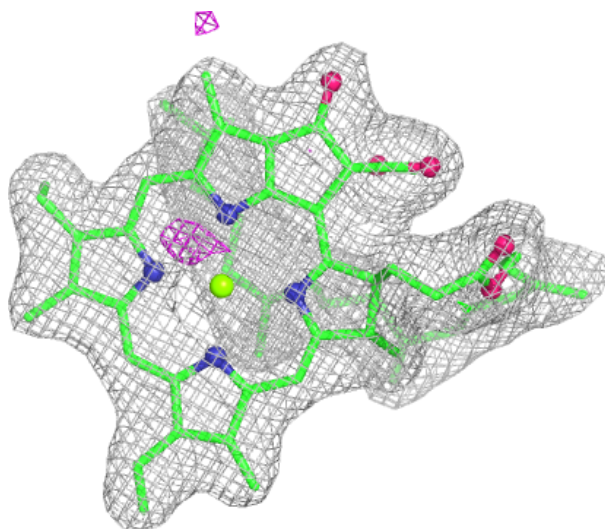
Electron density around CLA c 513:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



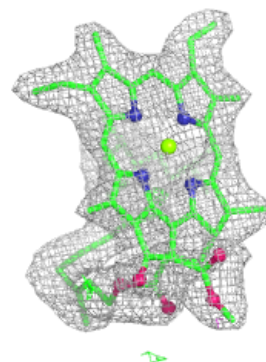
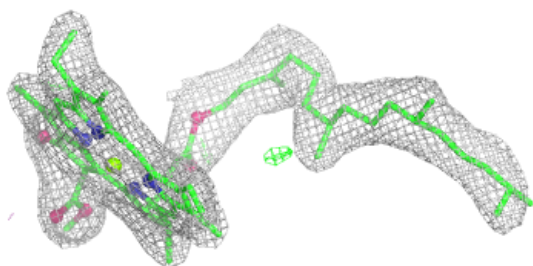
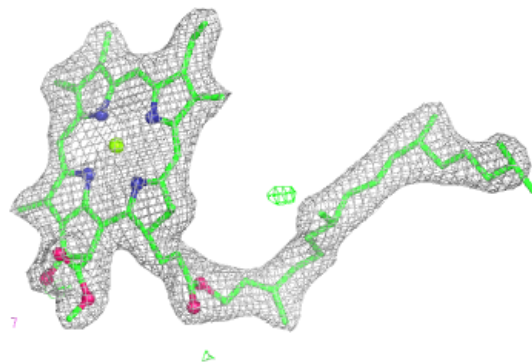
Electron density around CLA c 515:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



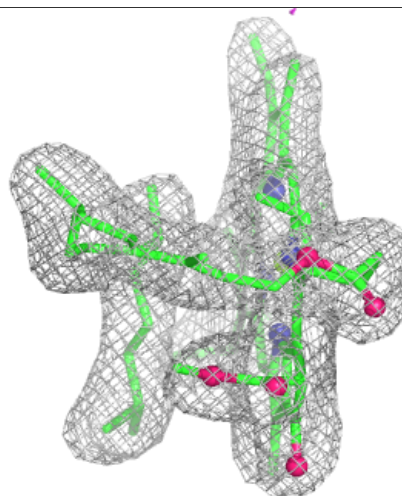
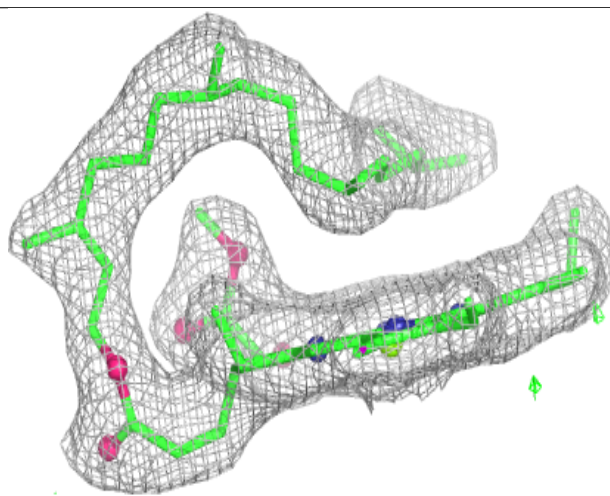
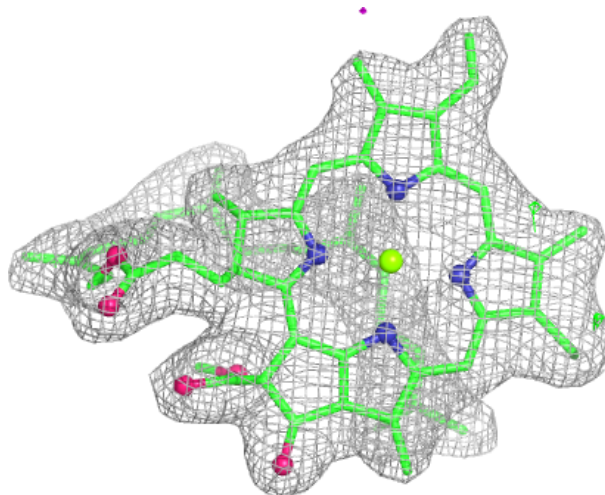
Electron density around CLA c 516:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



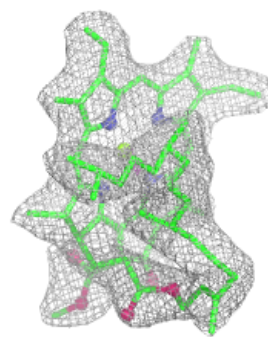
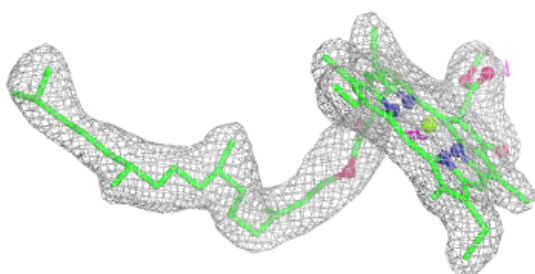
Electron density around CLA C 510:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

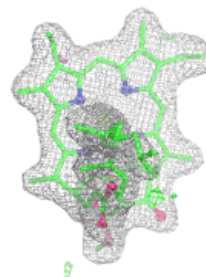
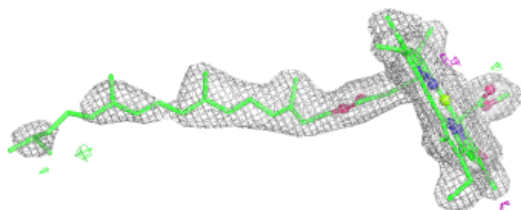
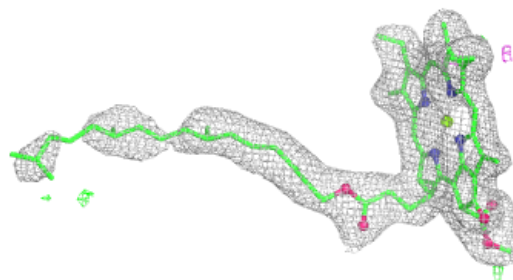


Electron density around CLA C 511:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

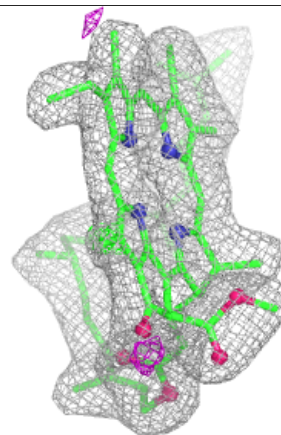
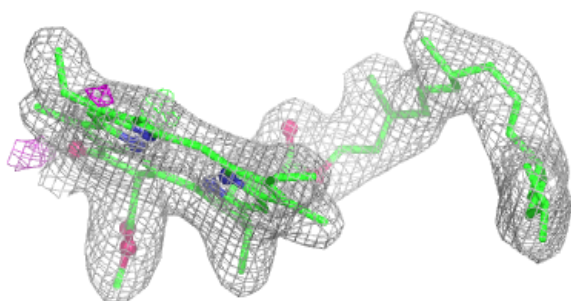
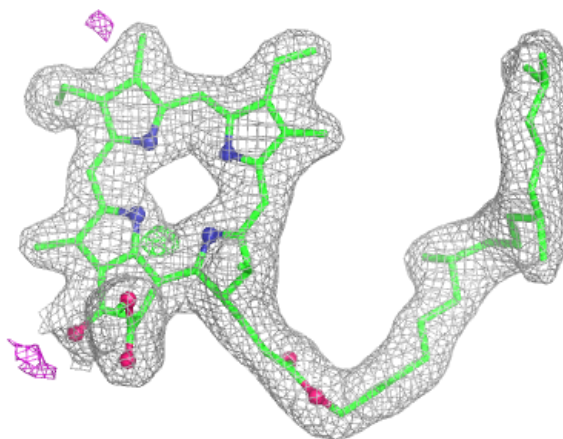
**Electron density around CLA d 403:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



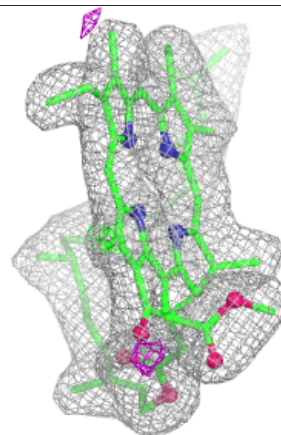
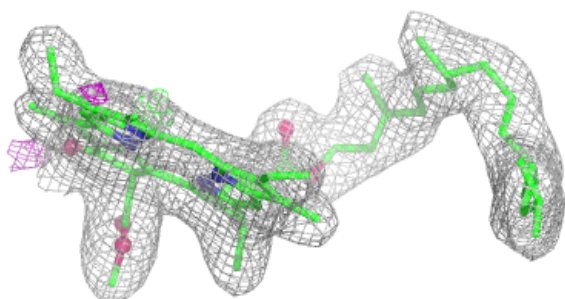
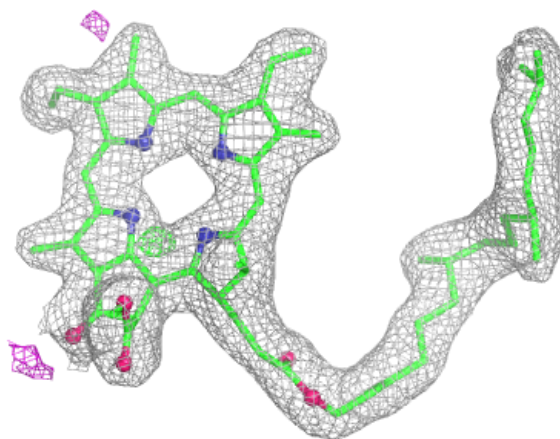
Electron density around PHO a 418 (A):

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



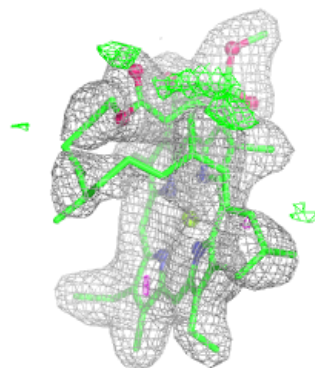
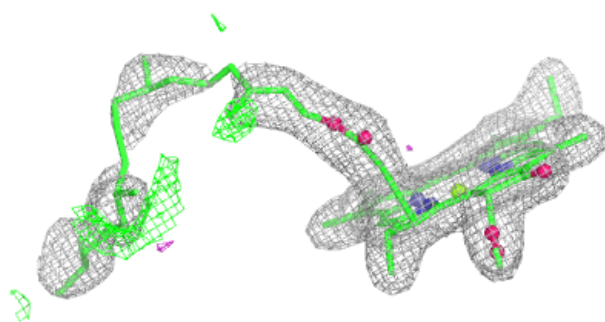
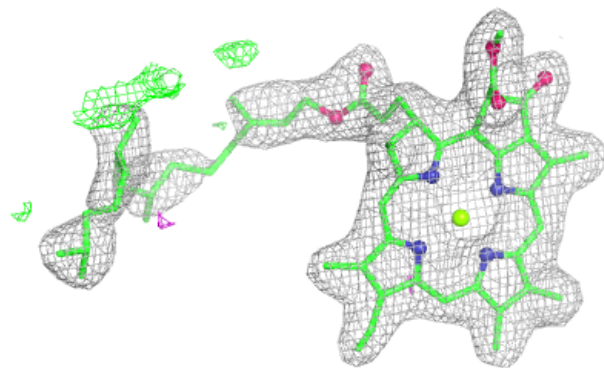
Electron density around PHO a 418 (B):

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

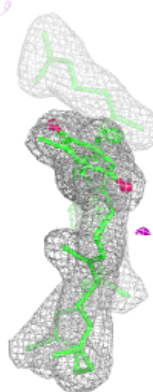
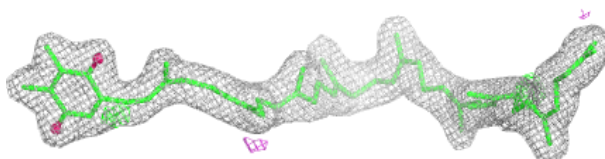
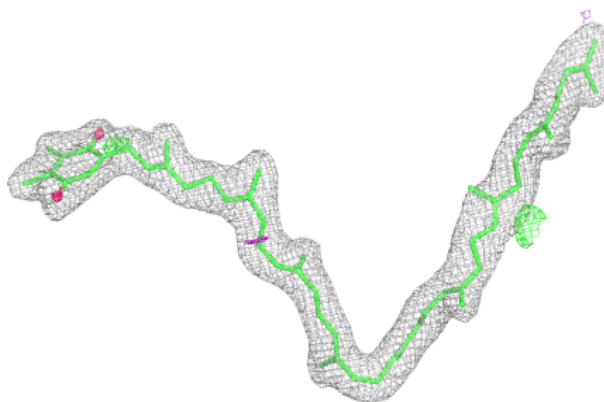


Electron density around CLA A 410:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

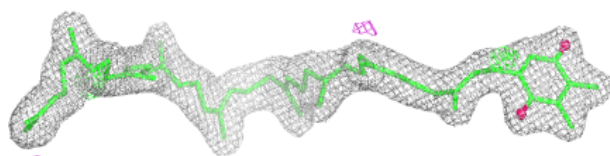
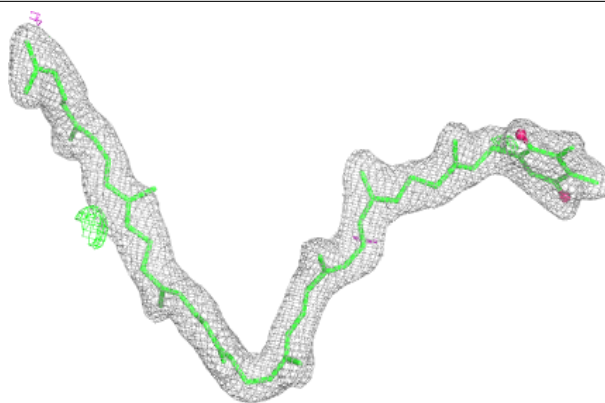
**Electron density around PL9 D 405 (A):**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

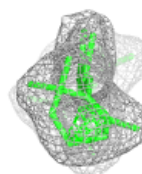
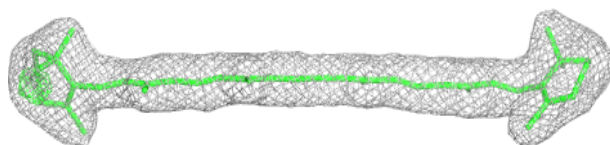
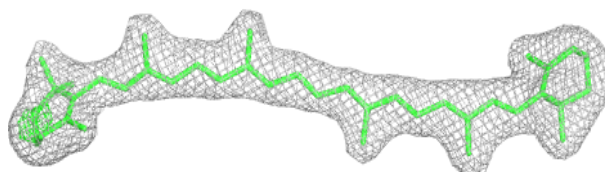


Electron density around PL9 D 405 (B):

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

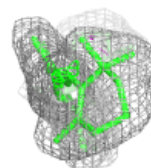
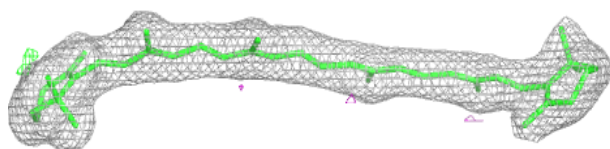
**Electron density around BCR B 619:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

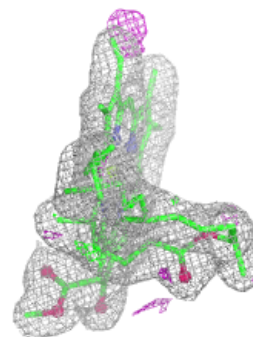
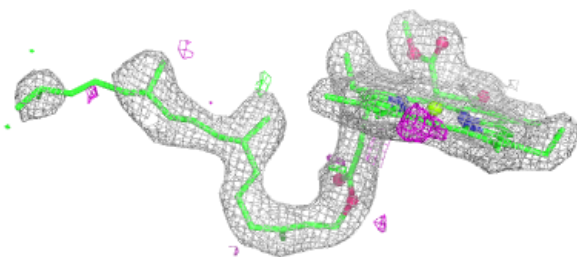
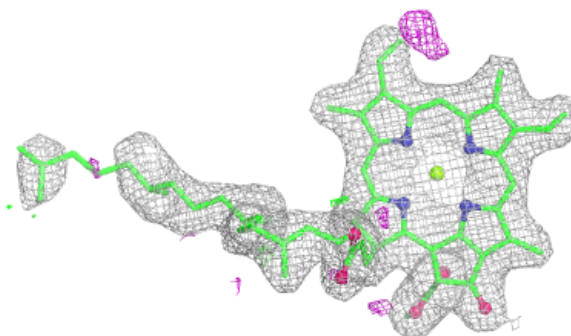


Electron density around BCR B 620:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

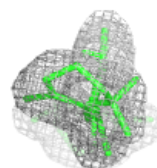
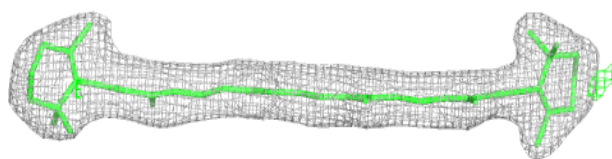
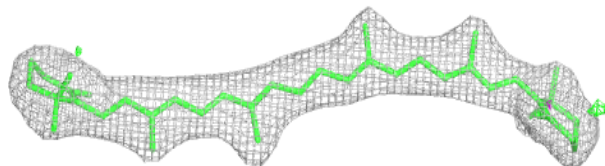
**Electron density around CLA A 407:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

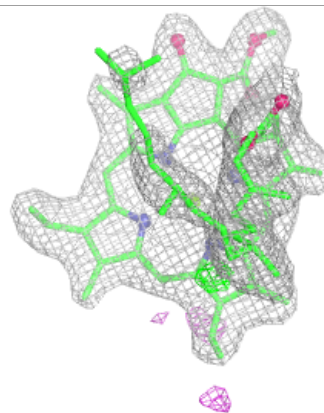
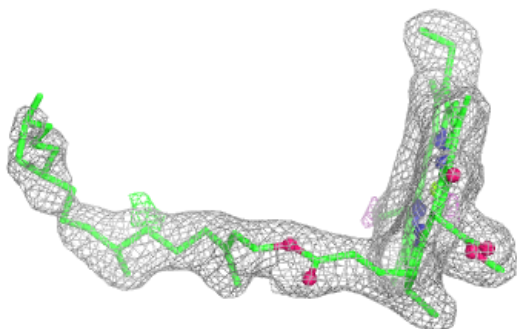
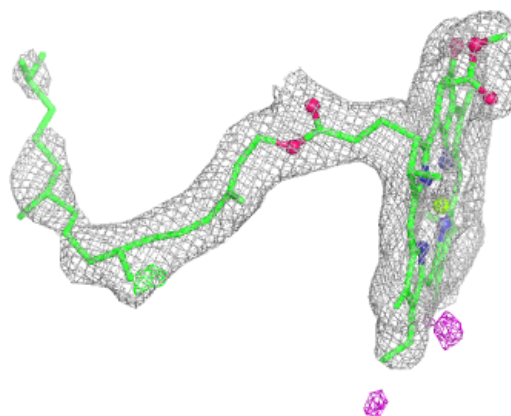


Electron density around BCR C 515:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

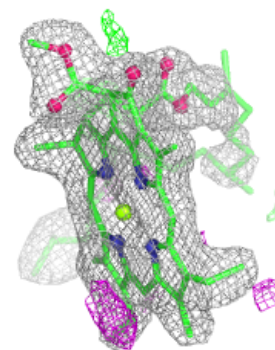
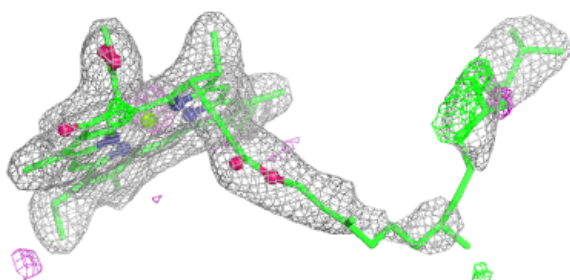
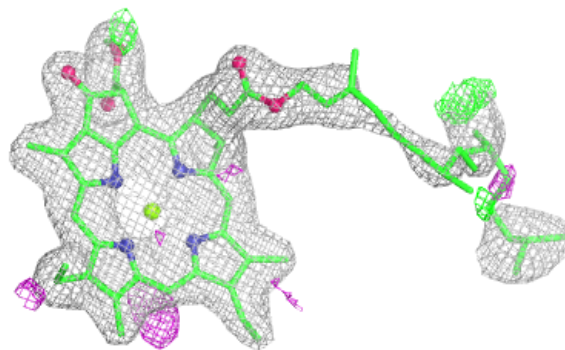
**Electron density around CLA D 403:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

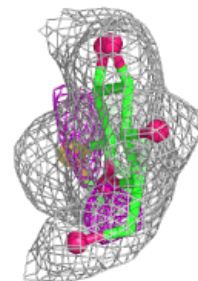
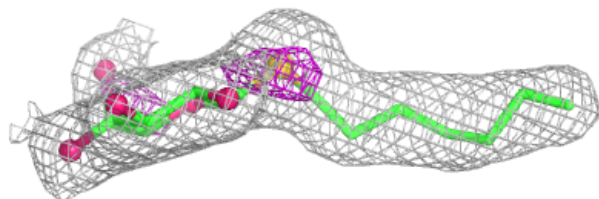
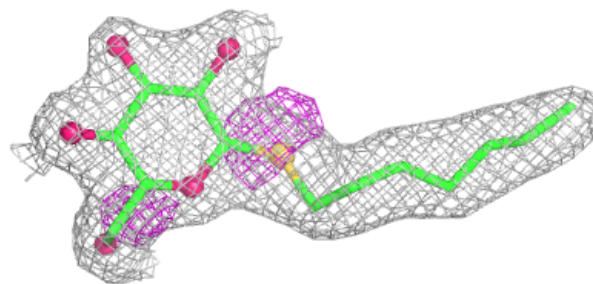


Electron density around CLA a 412:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

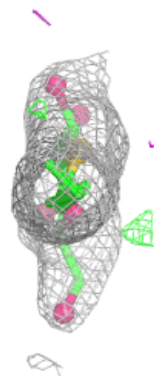
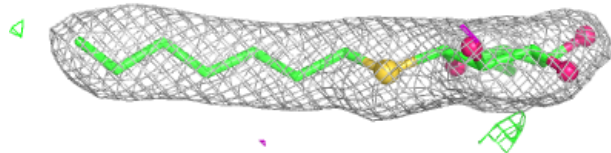
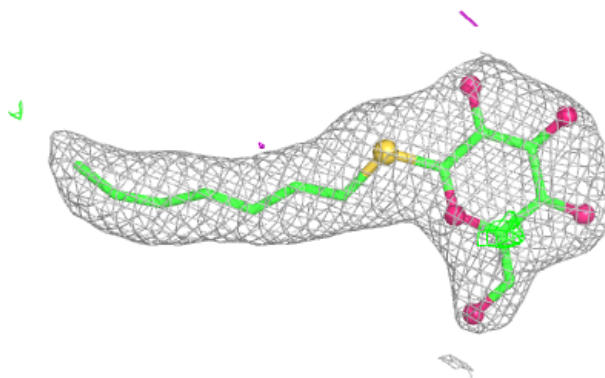
**Electron density around HTG b 601:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

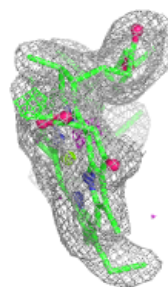
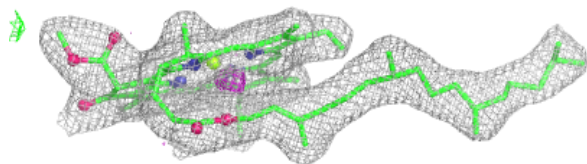
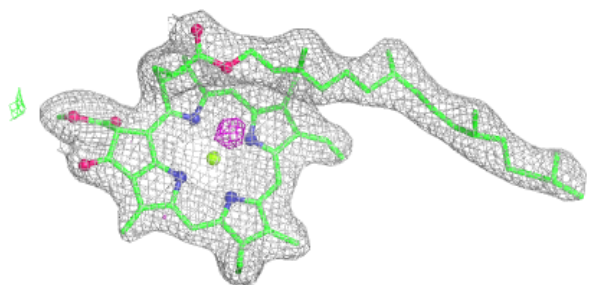


Electron density around HTG b 607:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

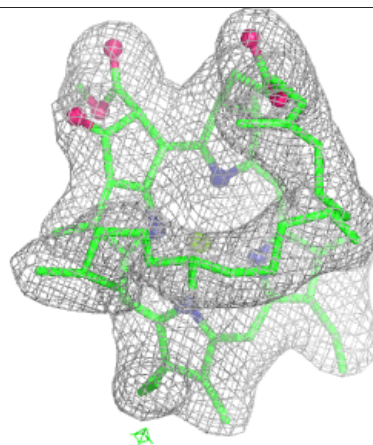
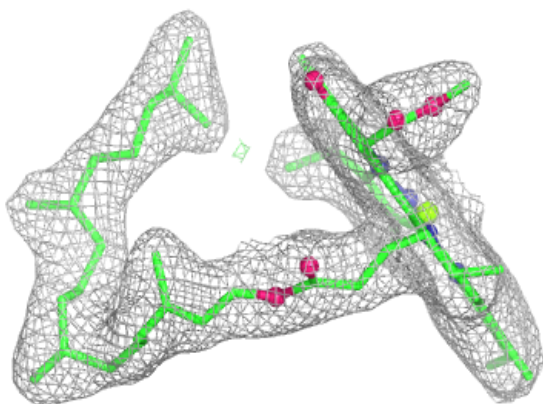
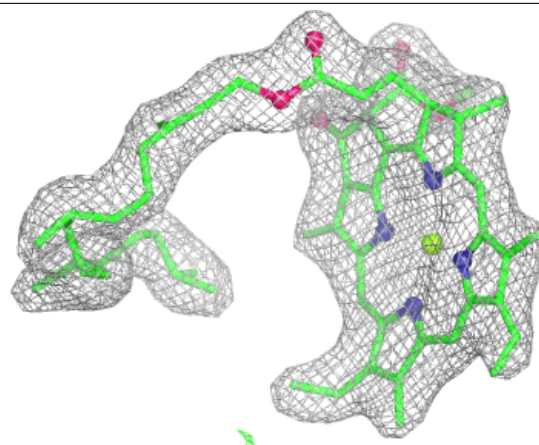
**Electron density around CLA C 501:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



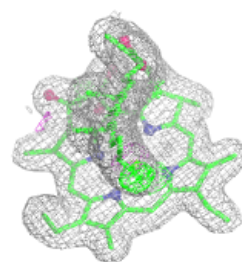
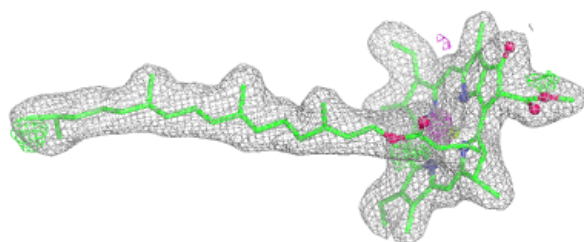
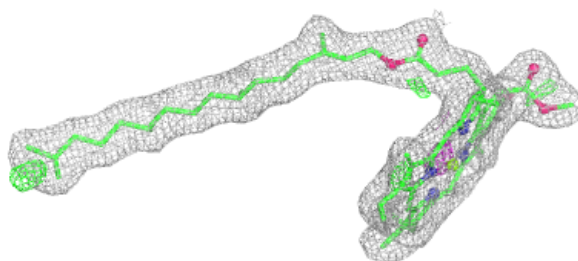
Electron density around CLA C 503:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

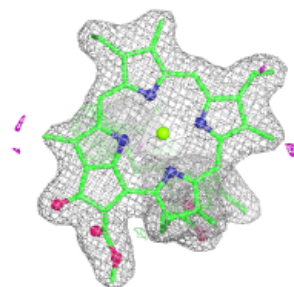
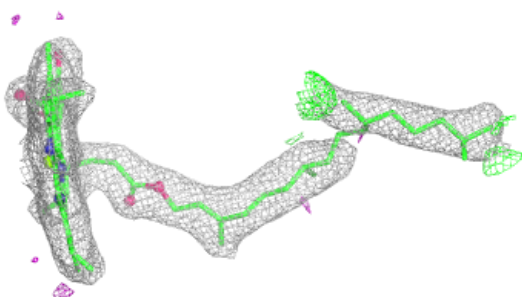
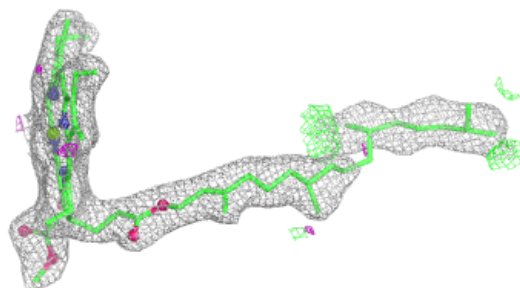


Electron density around CLA b 616:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

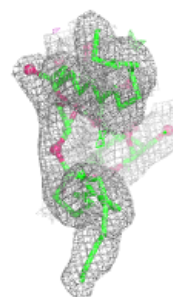
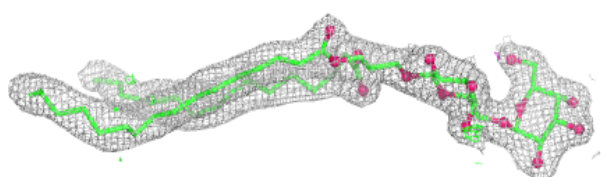
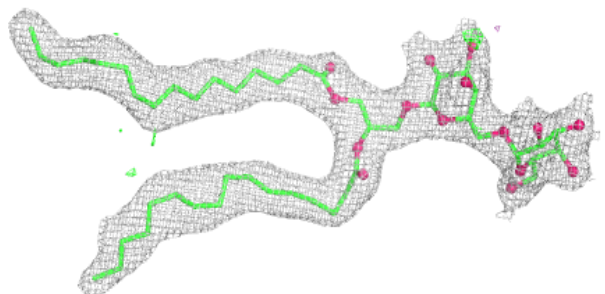
**Electron density around CLA B 607:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

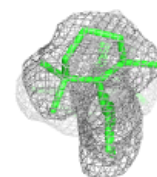
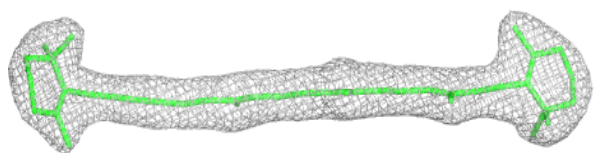
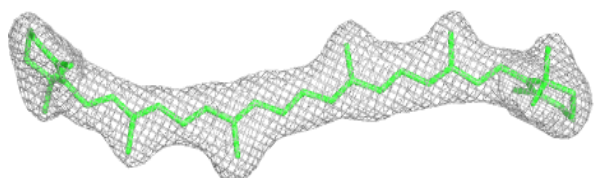


Electron density around DGD C 518:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

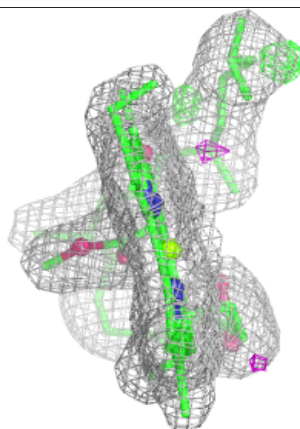
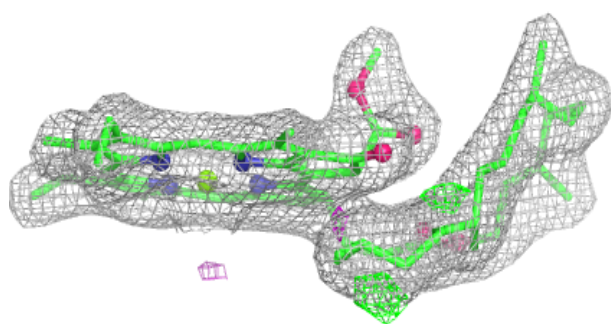
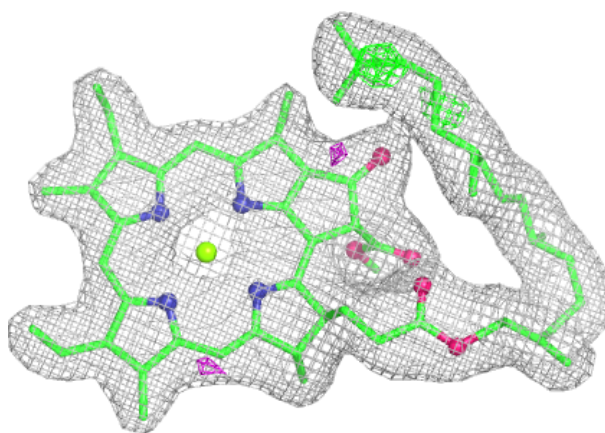
**Electron density around BCR c 519:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

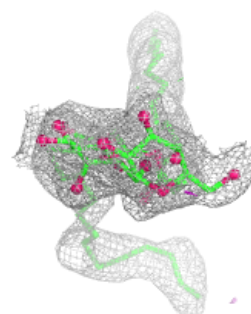
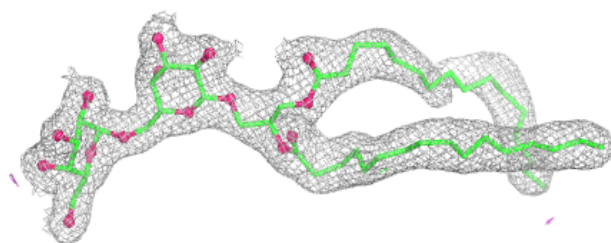
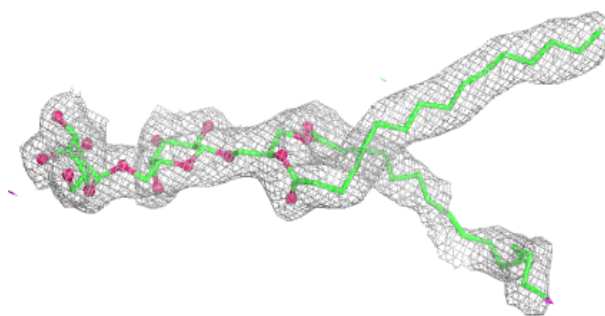


Electron density around CLA b 619:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

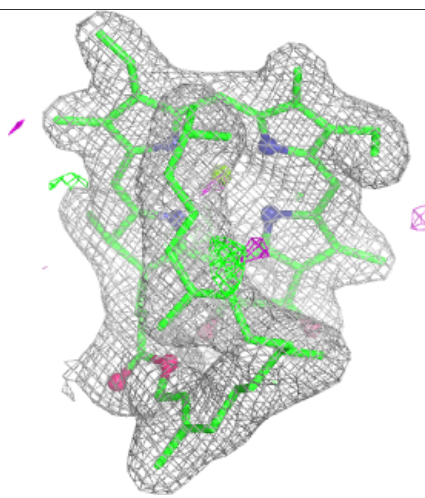
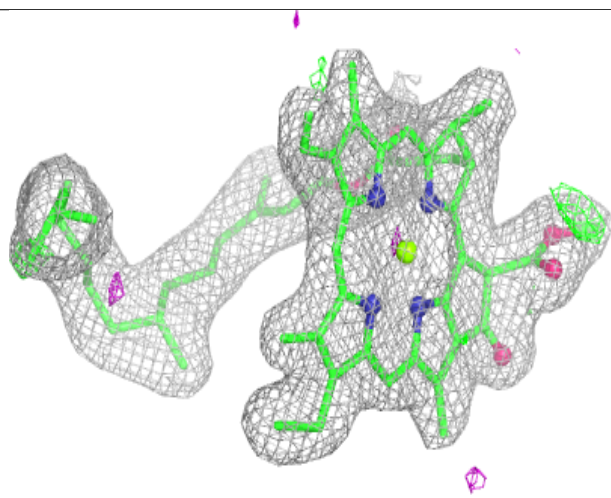
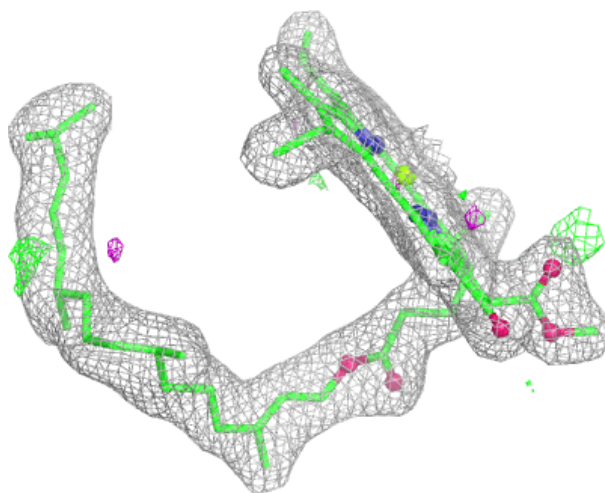
**Electron density around DGD c 520:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



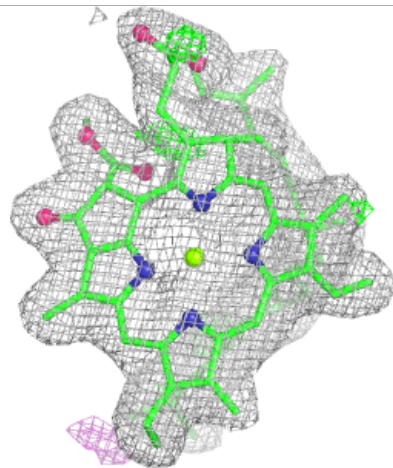
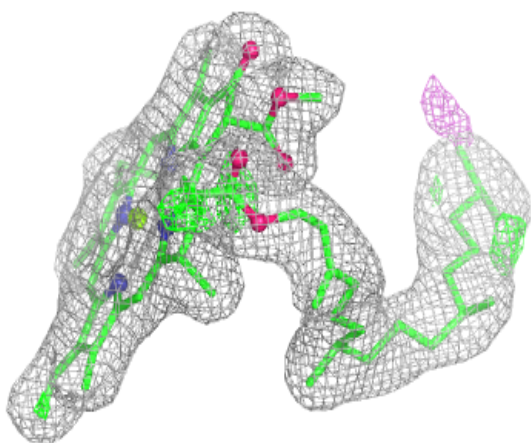
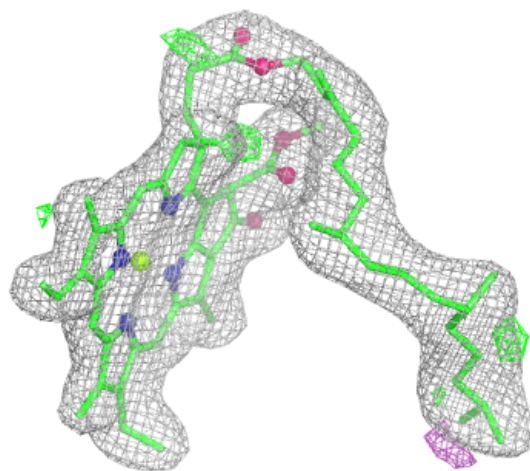
Electron density around CLA b 620:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



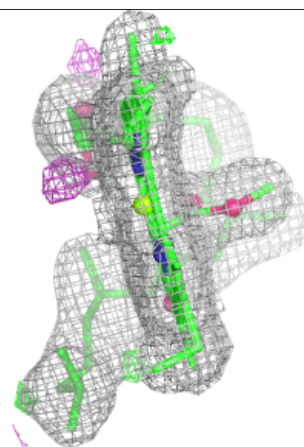
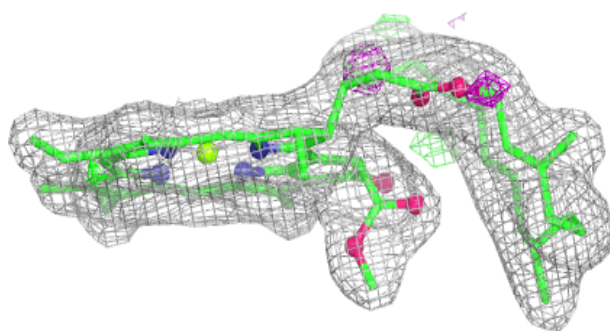
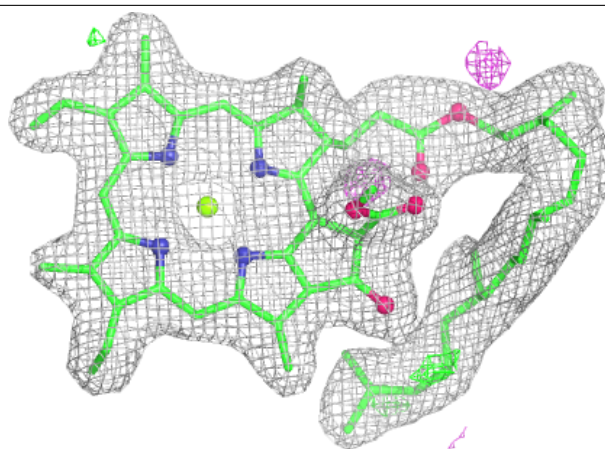
Electron density around CLA b 622:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

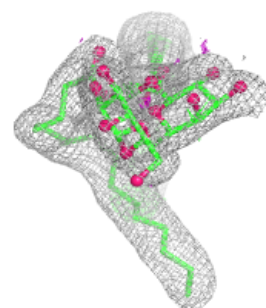
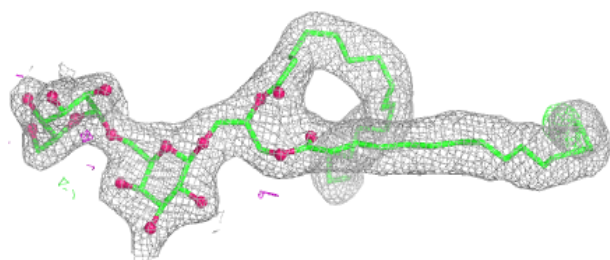
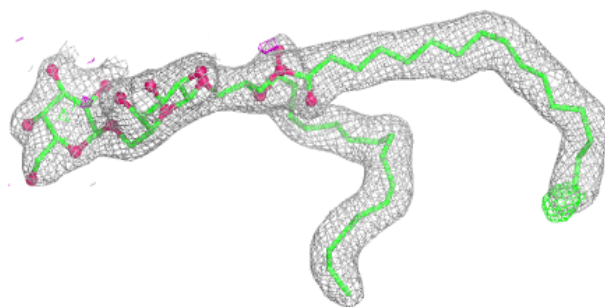


Electron density around CLA B 611:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

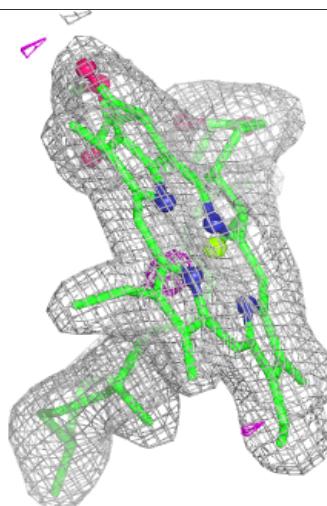
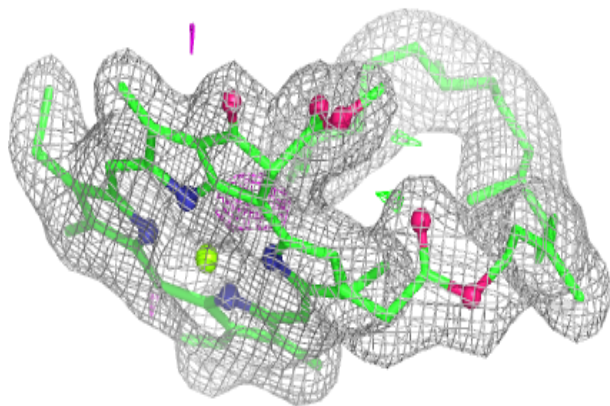
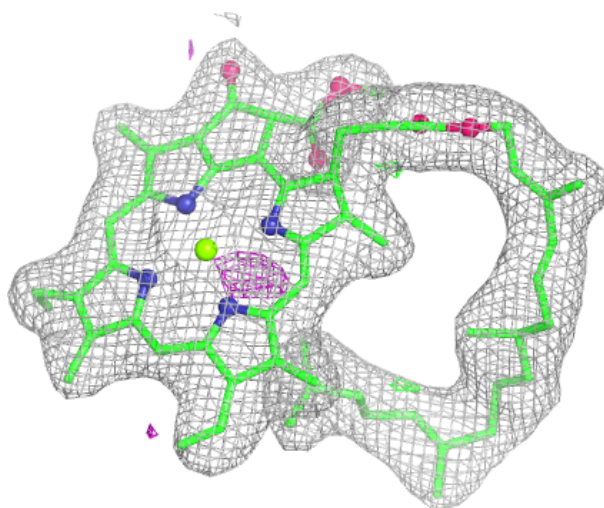
**Electron density around DGD h 102:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



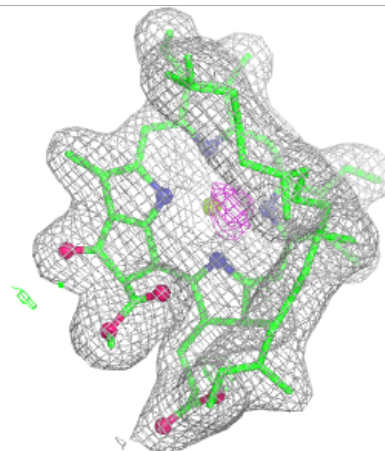
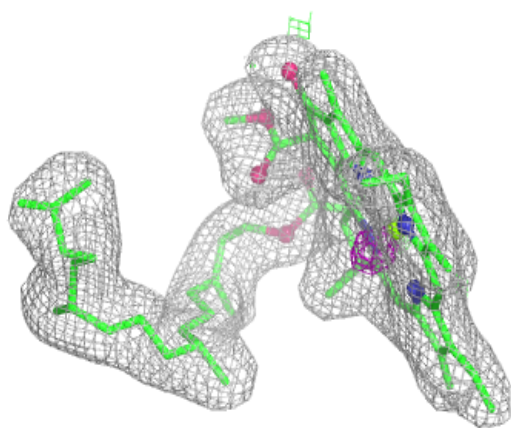
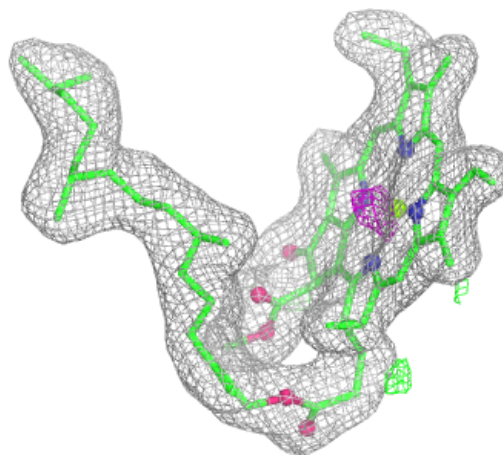
Electron density around CLA b 624:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



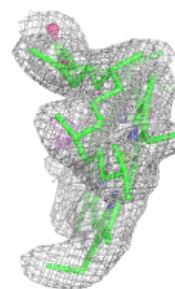
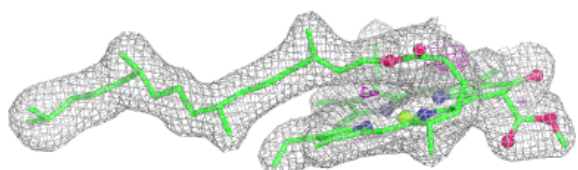
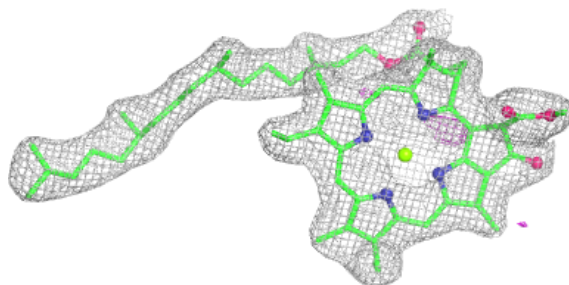
Electron density around CLA B 614:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

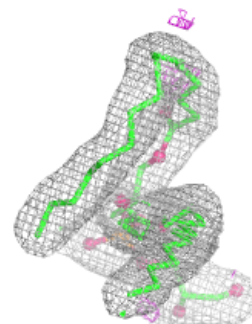
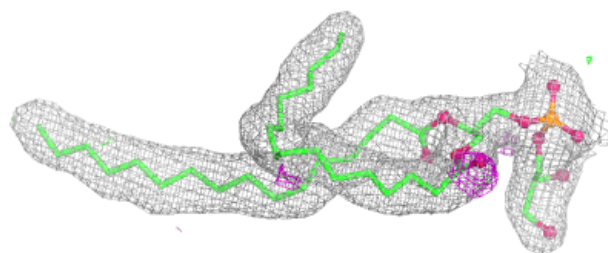
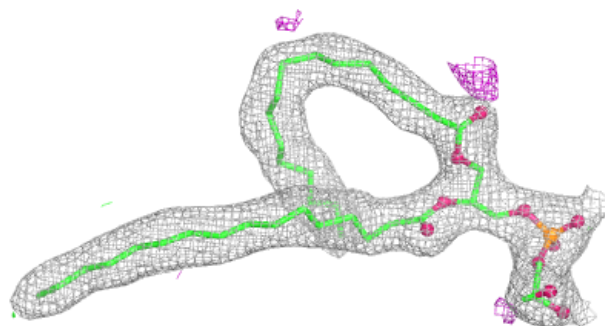


Electron density around CLA c 506:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

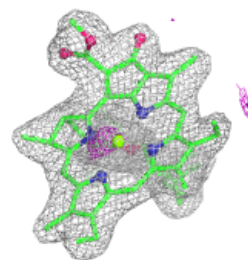
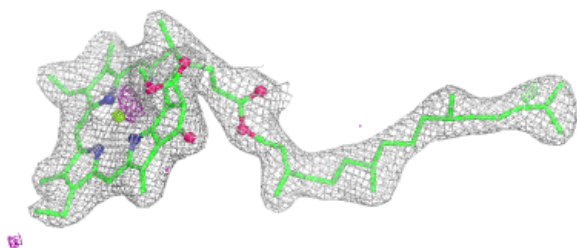
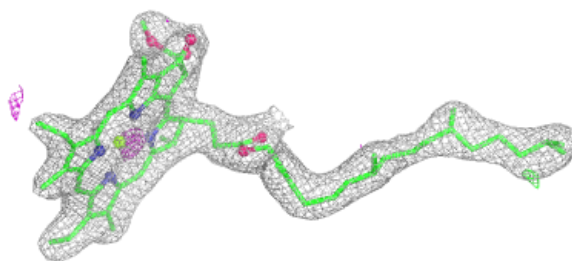
**Electron density around LHG d 406:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



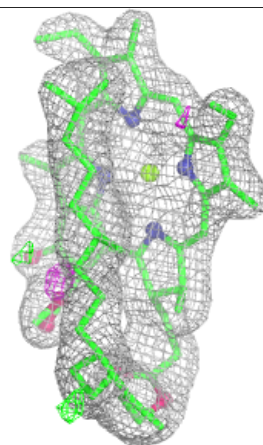
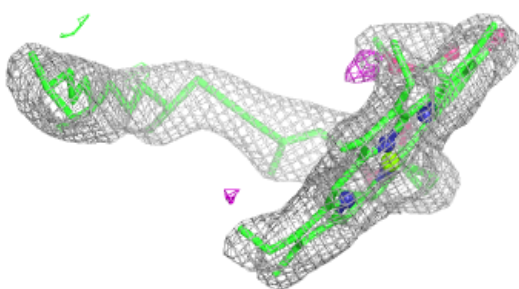
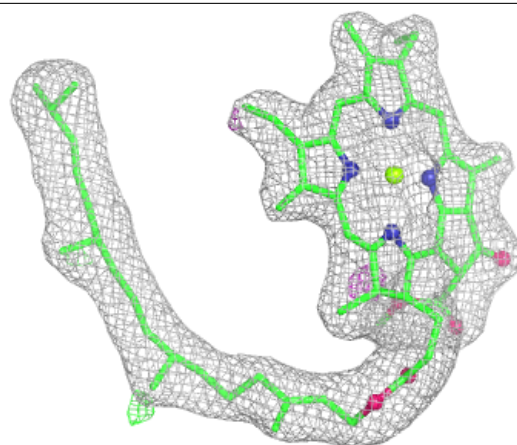
Electron density around CLA c 507:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

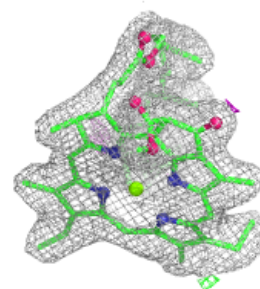
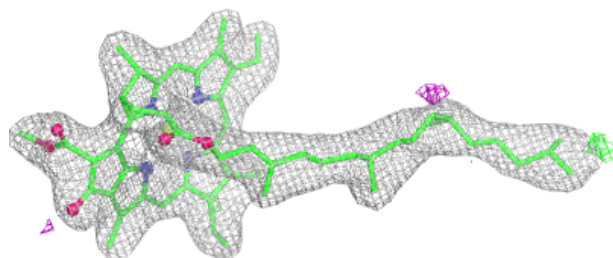
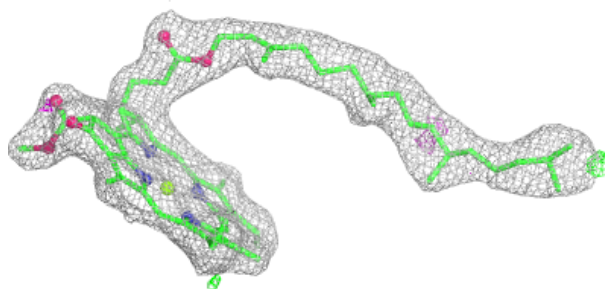


Electron density around CLA C 507:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

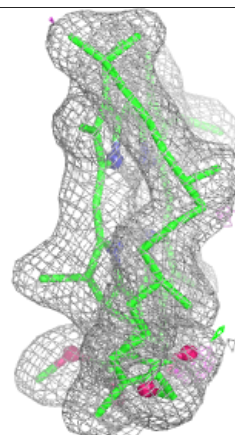
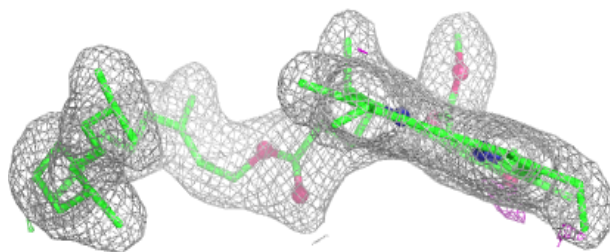
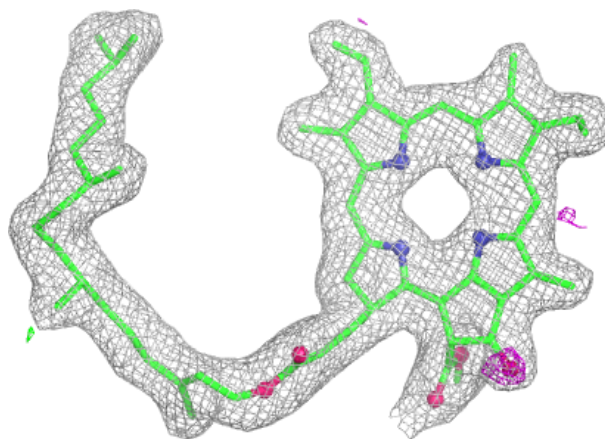
**Electron density around CLA c 509:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

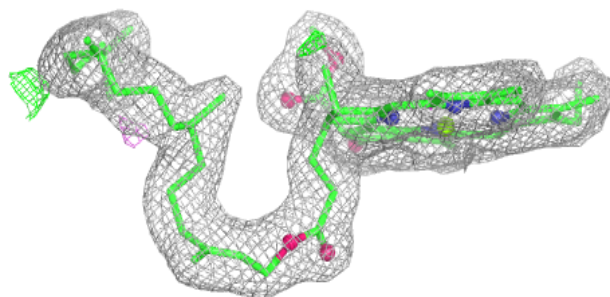
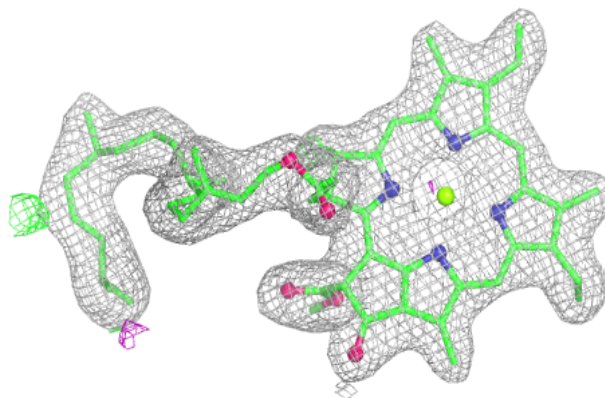


Electron density around PHO a 411:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

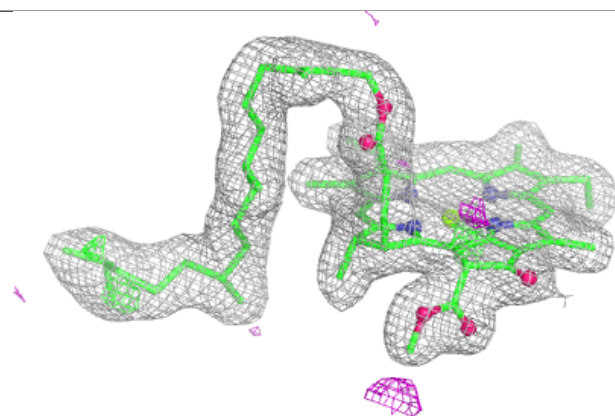
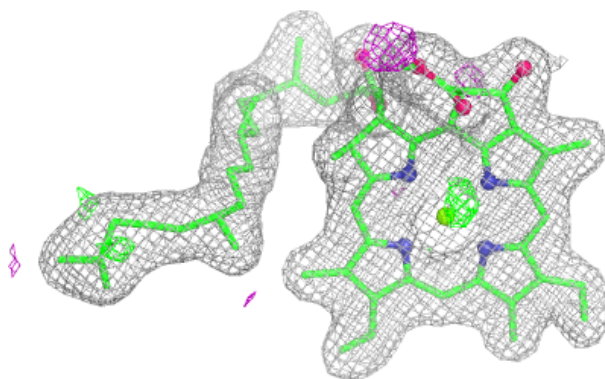
**Electron density around CLA B 613:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

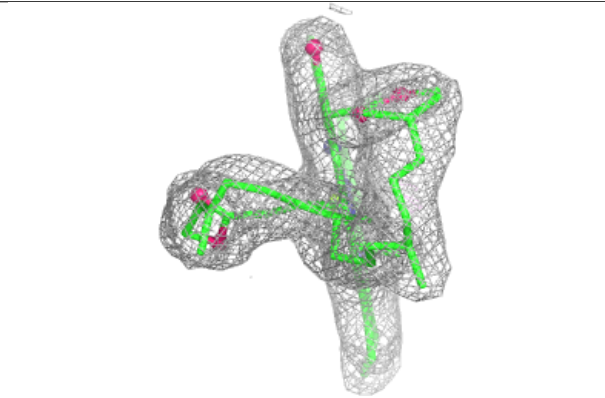
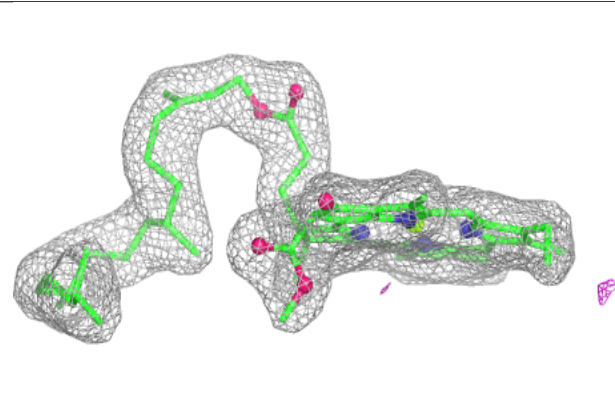
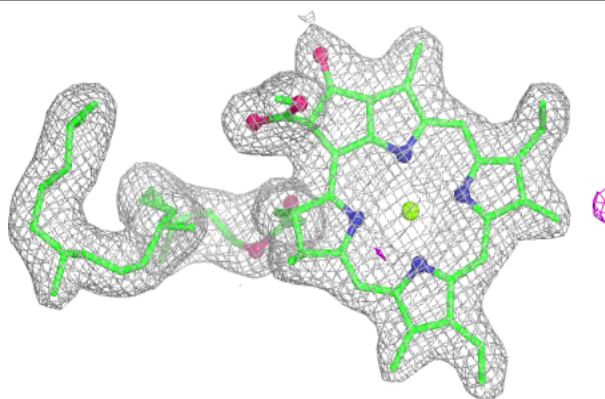


Electron density around CLA A 406:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

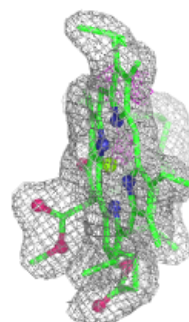
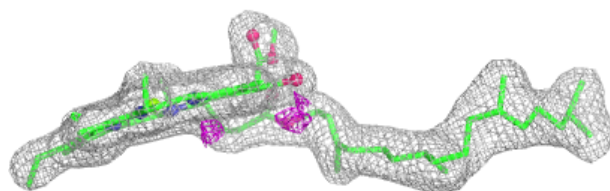
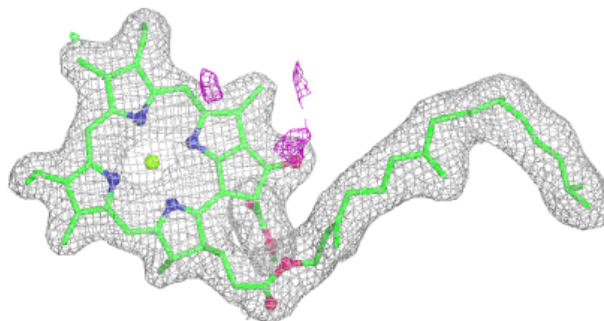
**Electron density around CLA b 621:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



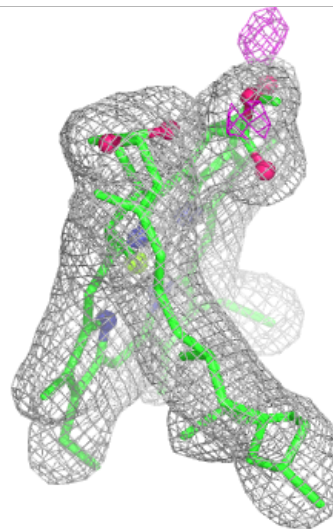
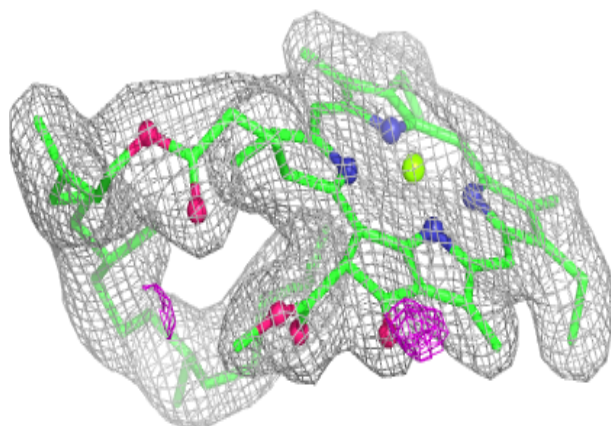
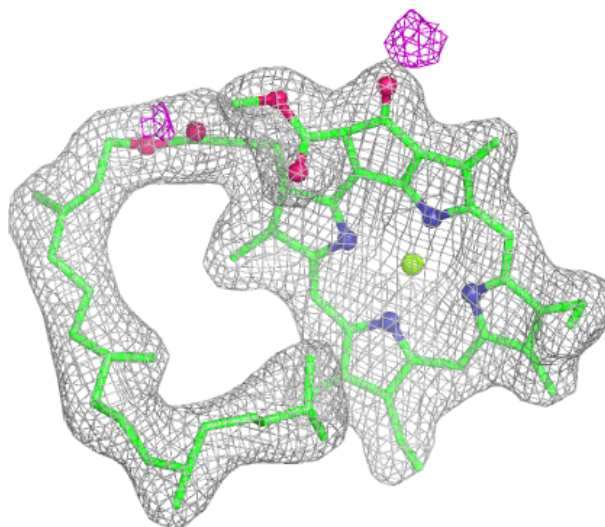
Electron density around CLA B 603:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



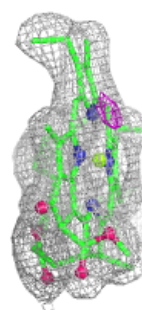
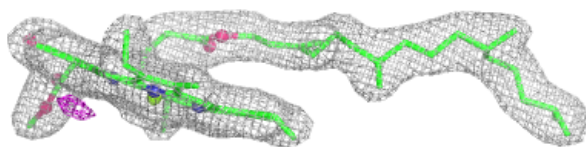
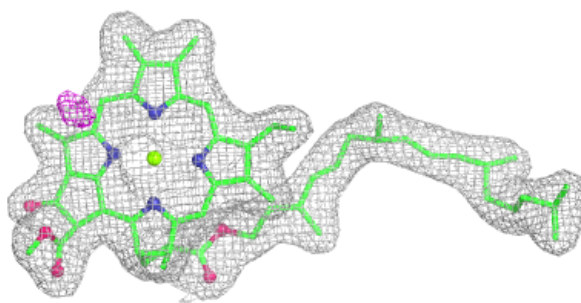
Electron density around CLA B 616:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

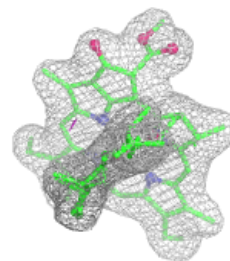
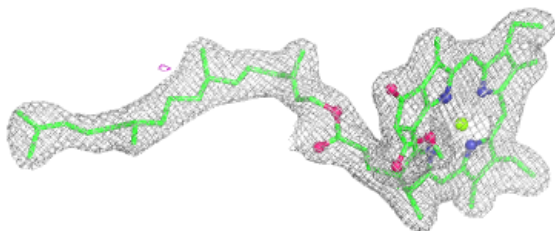
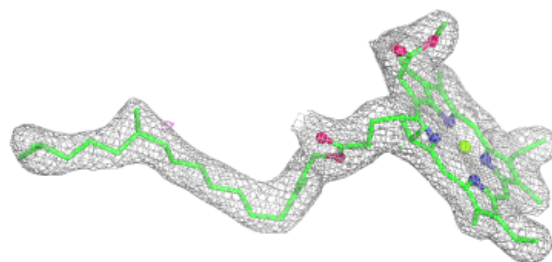


Electron density around CLA B 604:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

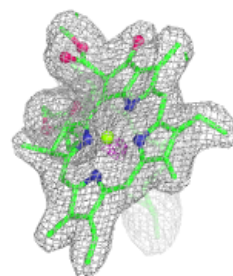
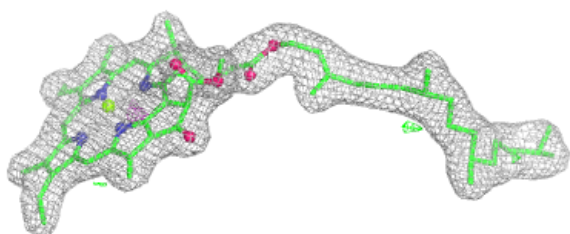
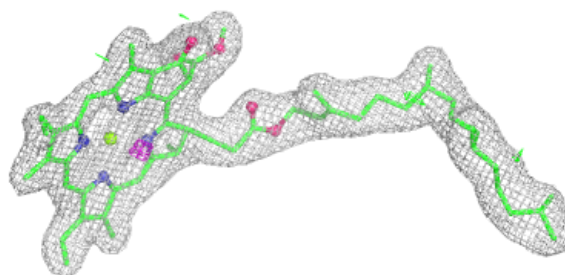
**Electron density around CLA C 502:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

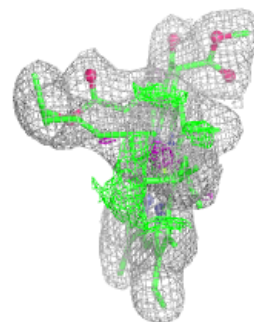
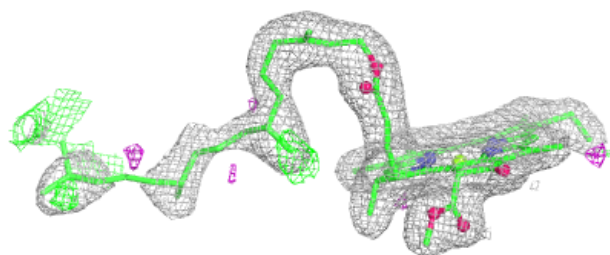
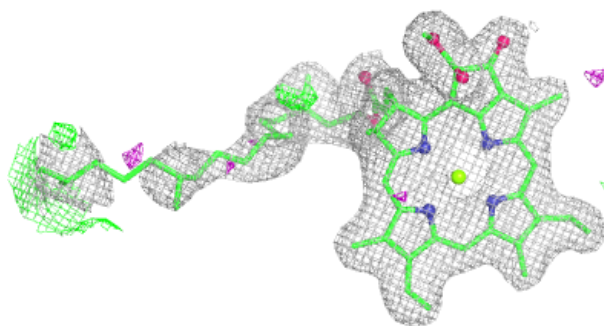


Electron density around CLA a 409:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

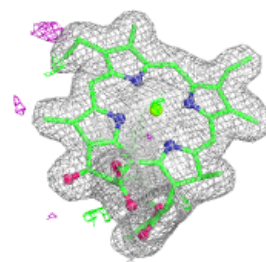
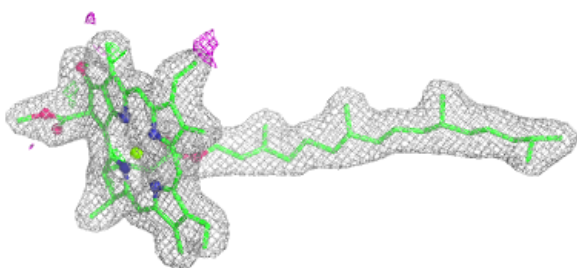
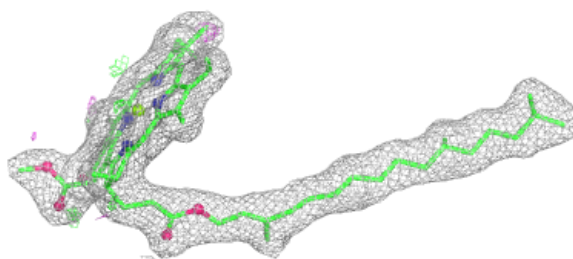
**Electron density around CLA a 410:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

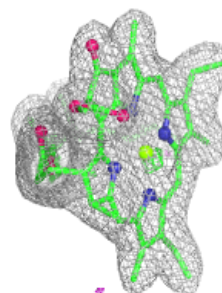
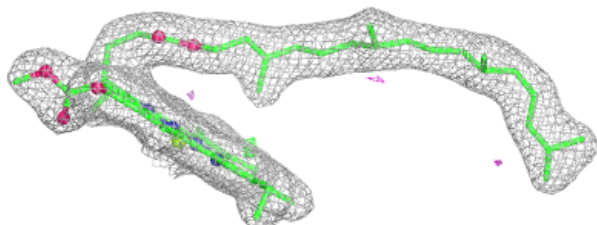
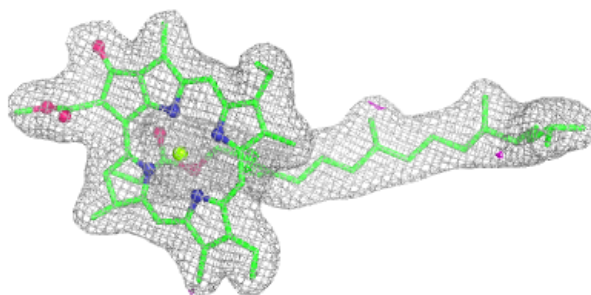


Electron density around CLA B 608:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

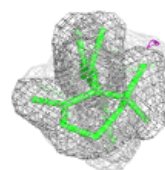
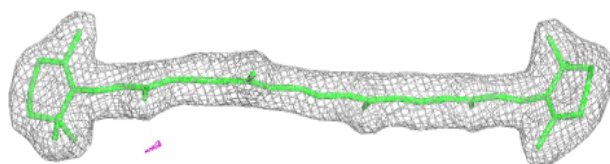
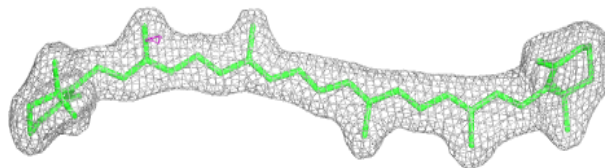
**Electron density around CLA B 609:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

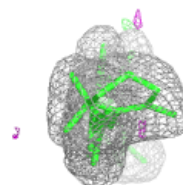
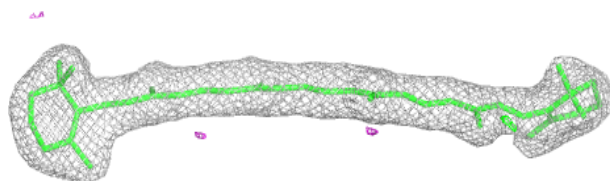
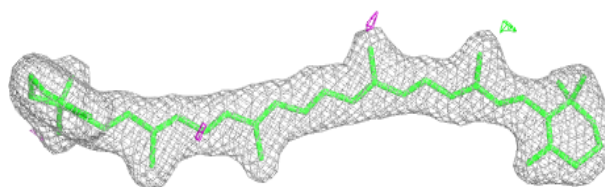


Electron density around BCR a 413:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

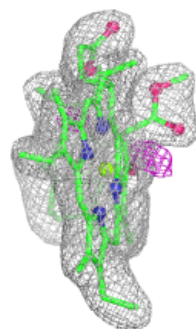
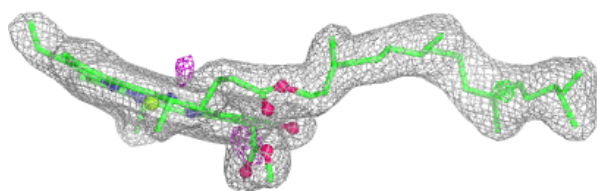
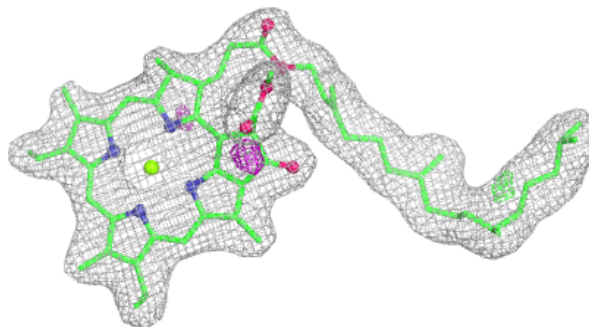
**Electron density around BCR b 626:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

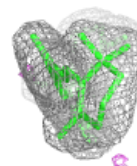
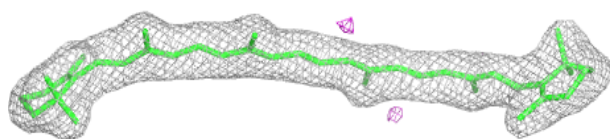
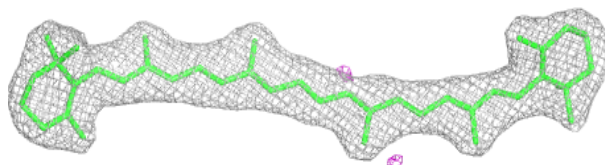


Electron density around CLA b 611:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

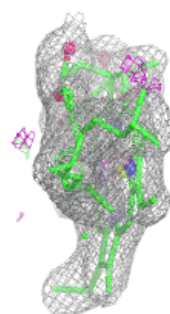
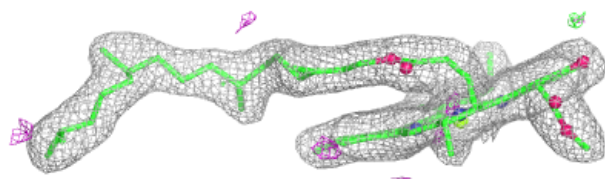
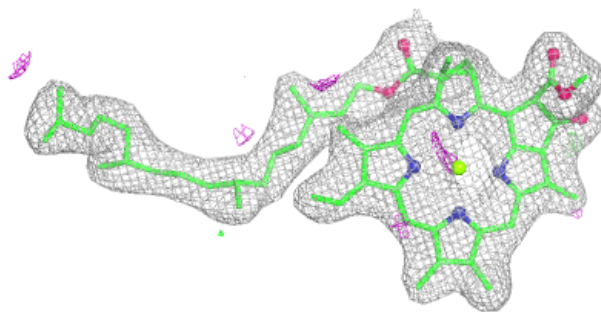
**Electron density around BCR b 628:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

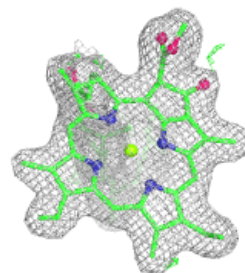
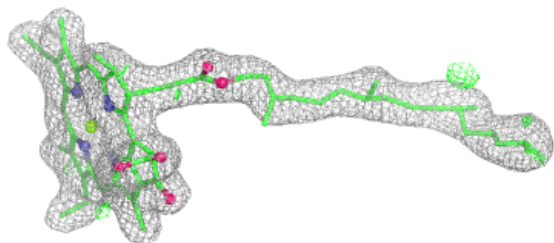
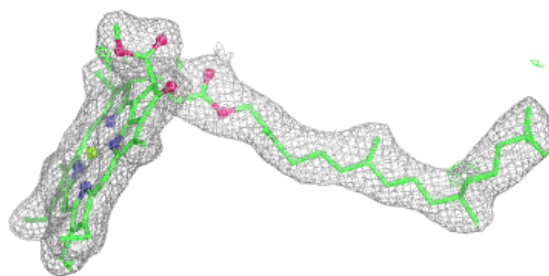


Electron density around CLA b 612:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

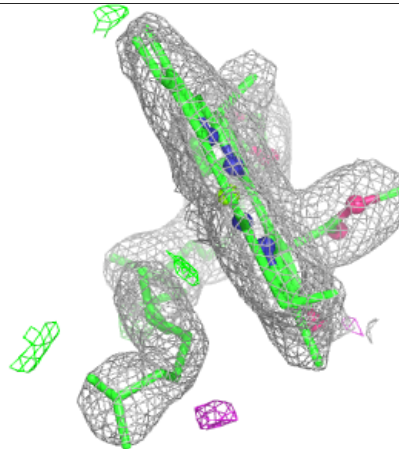
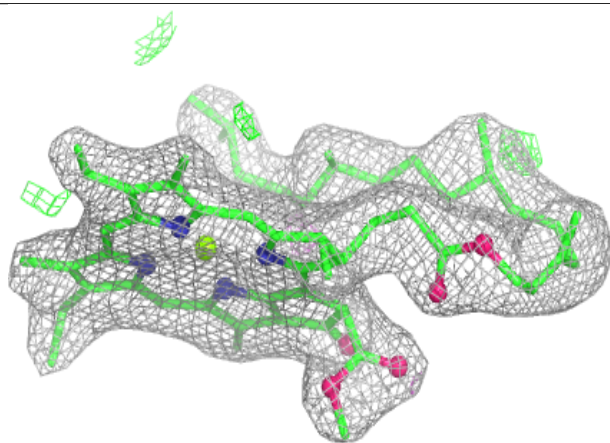
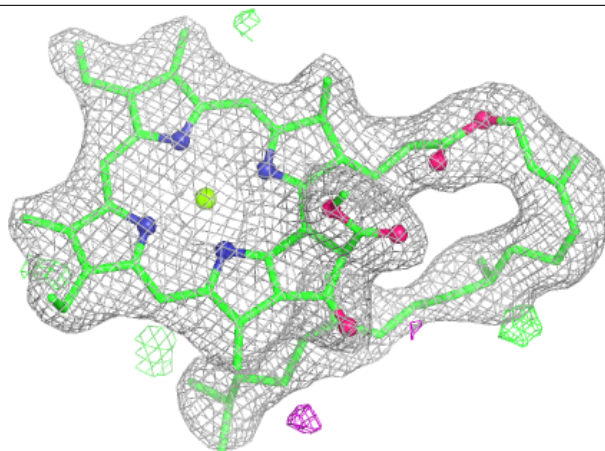
**Electron density around CLA b 613:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



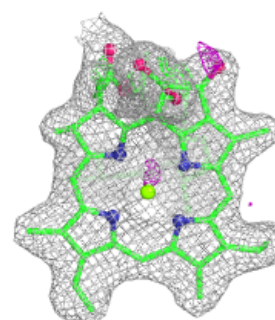
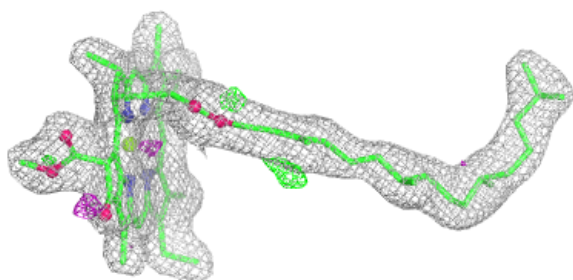
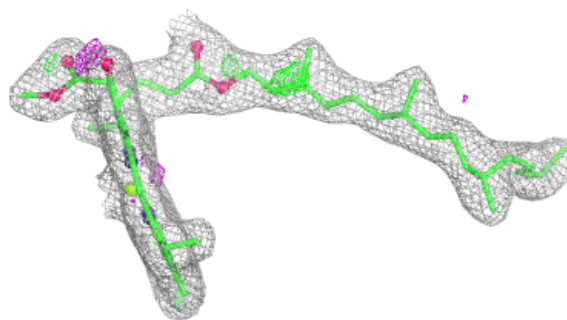
Electron density around CLA c 514:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

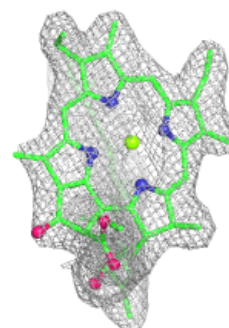
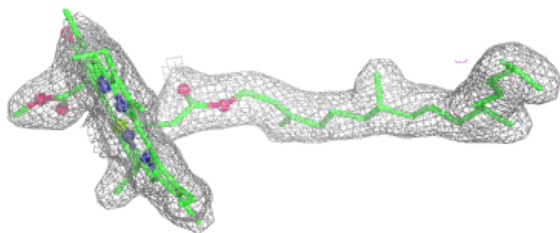
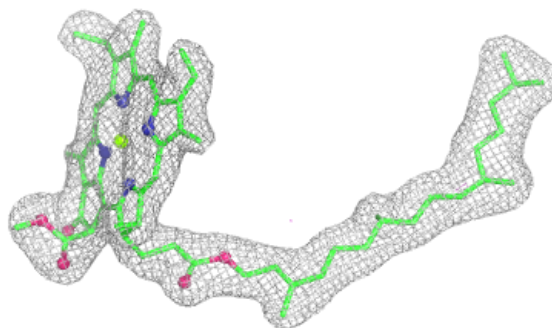


Electron density around CLA b 614:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

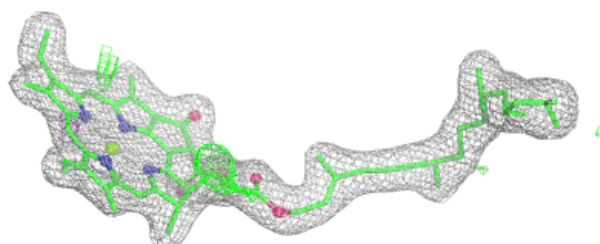
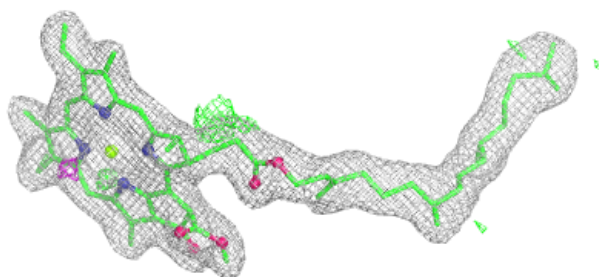
**Electron density around CLA B 610:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

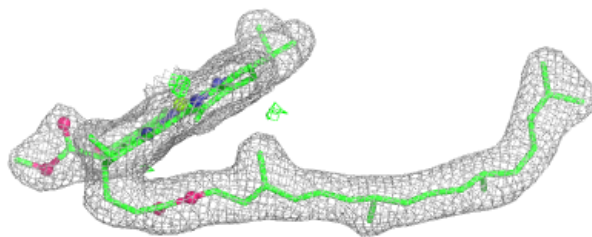
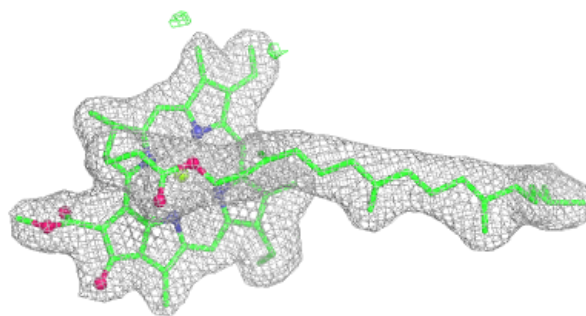


Electron density around CLA A 405:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

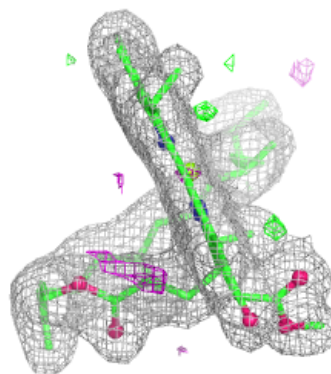
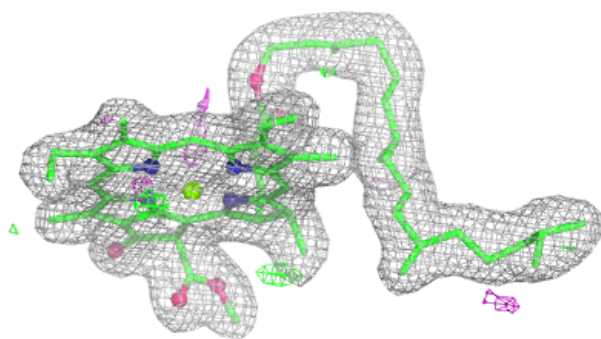
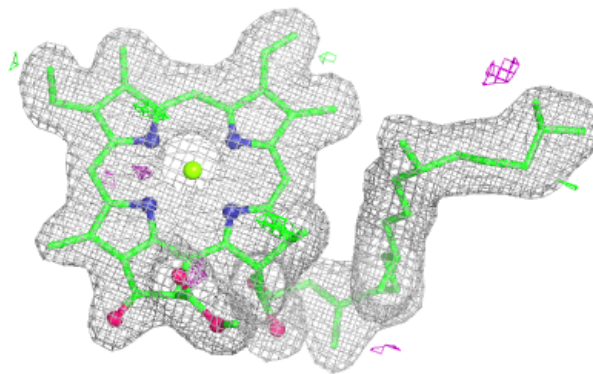
**Electron density around CLA b 617:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



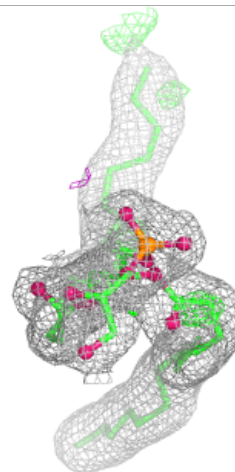
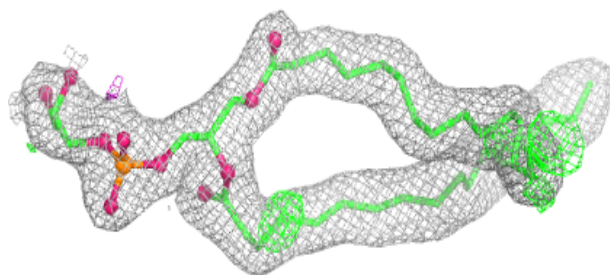
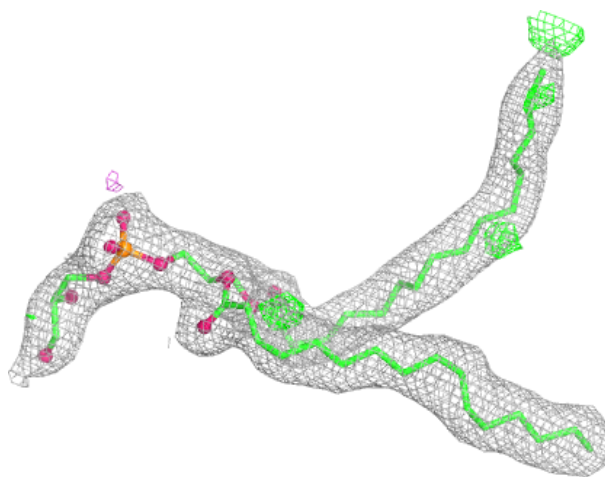
Electron density around CLA d 401:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



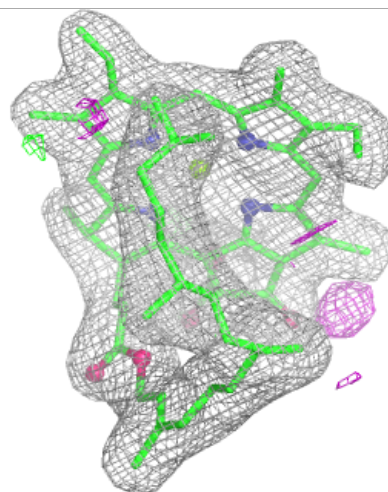
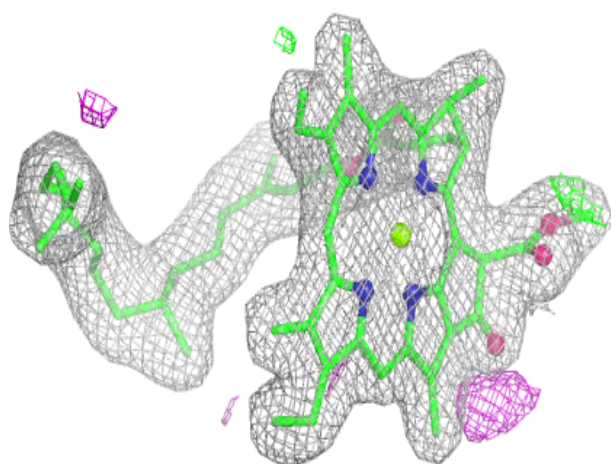
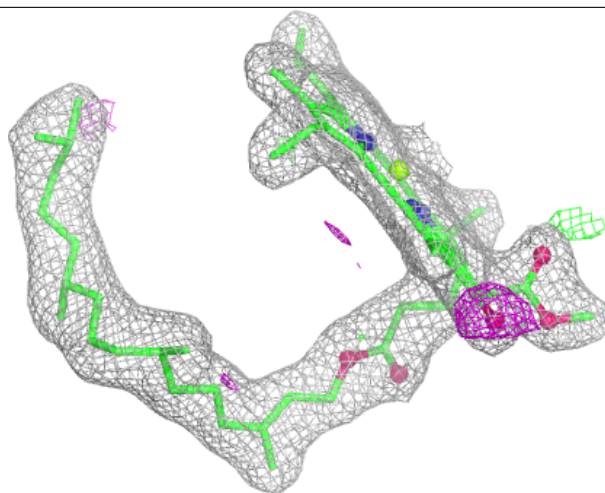
Electron density around LHG D 408:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



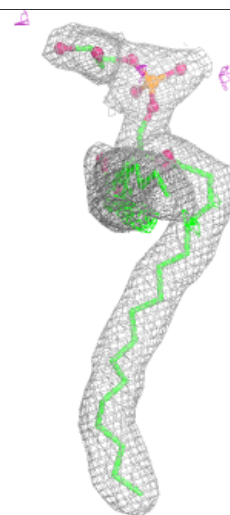
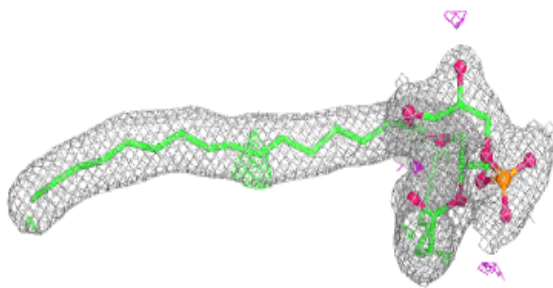
Electron density around CLA B 612:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



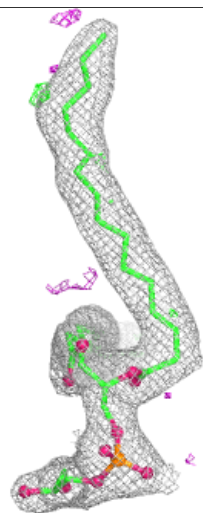
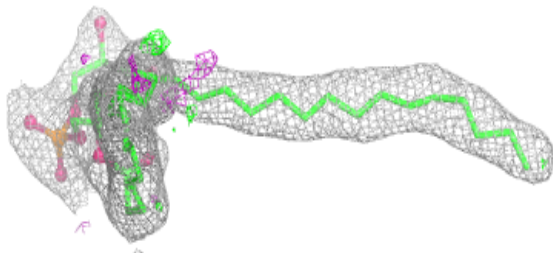
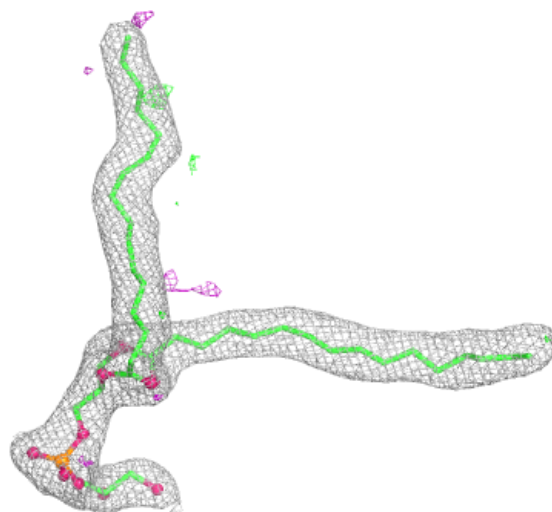
Electron density around LHG L 101:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



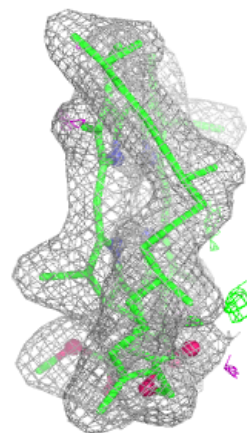
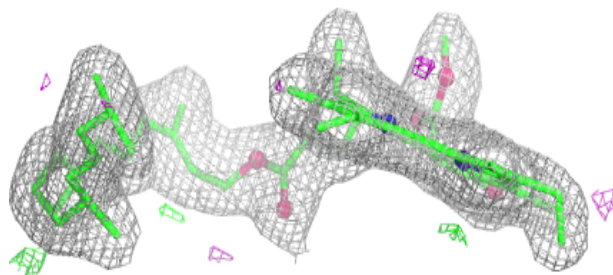
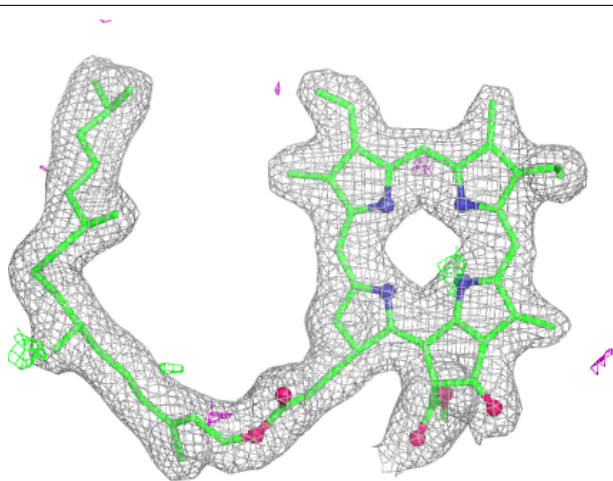
Electron density around LHG b 634:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



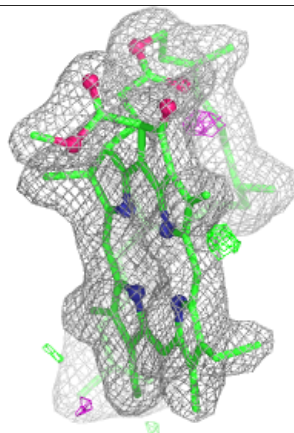
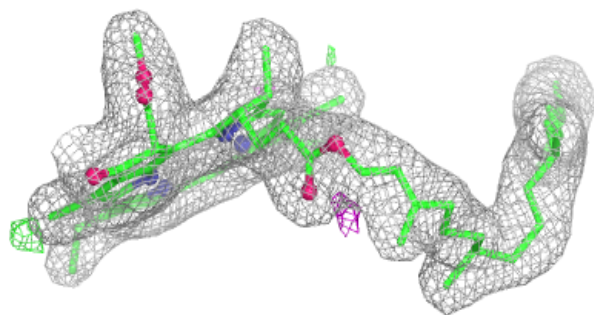
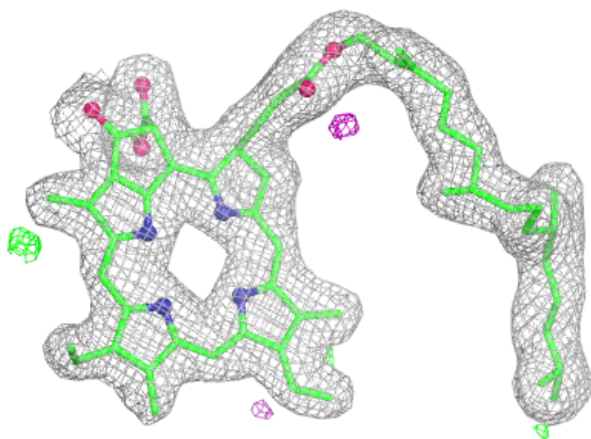
Electron density around PHO A 408:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

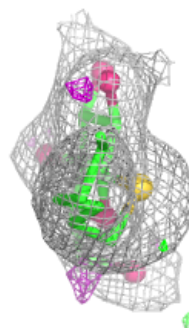
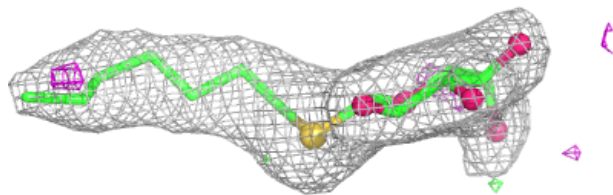
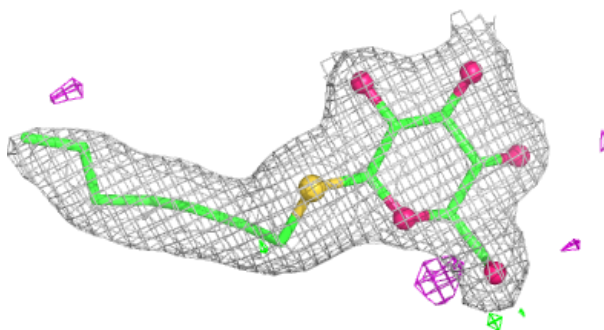


Electron density around PHO A 409 (A):

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

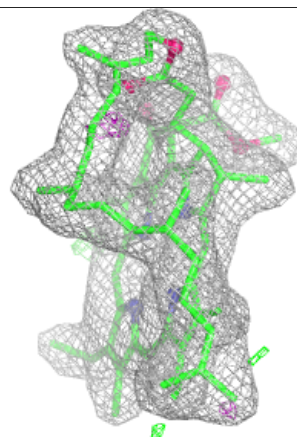
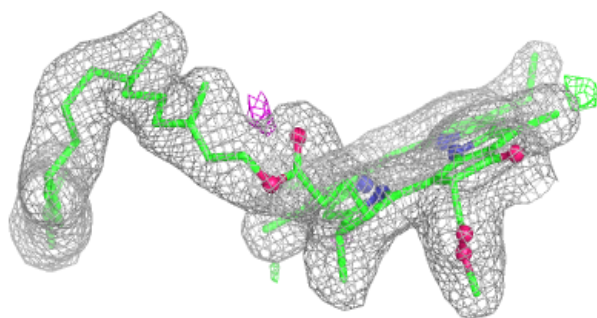
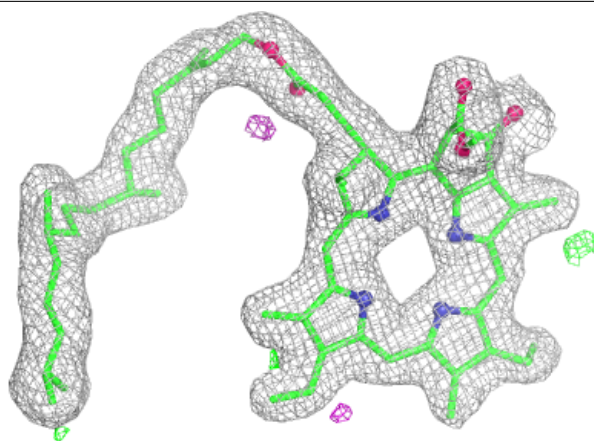
**Electron density around HTG B 623:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



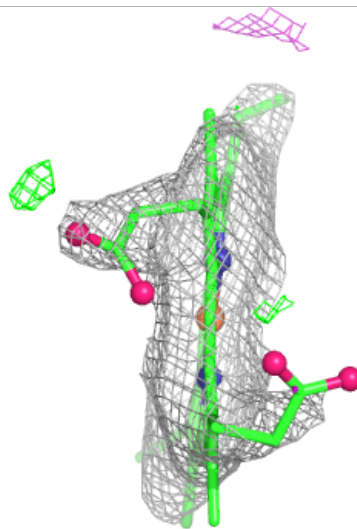
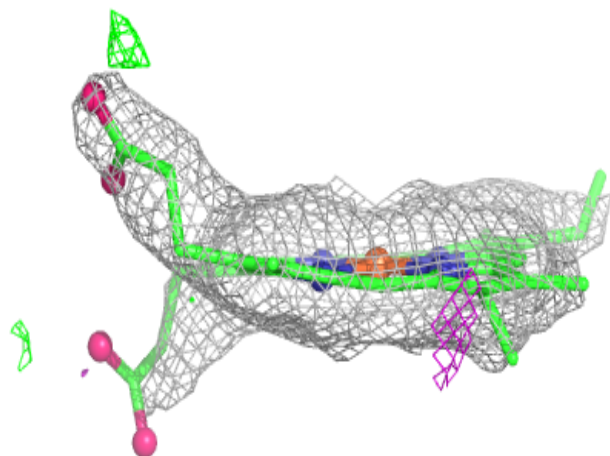
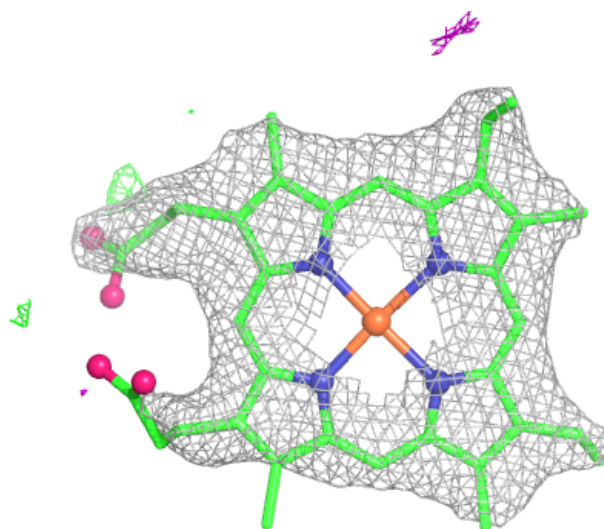
Electron density around PHO A 409 (B):

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



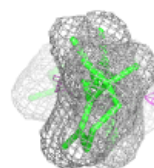
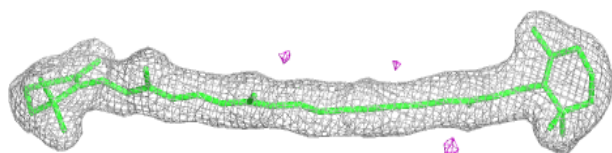
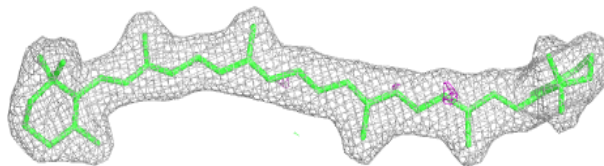
Electron density around HEM e 103:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

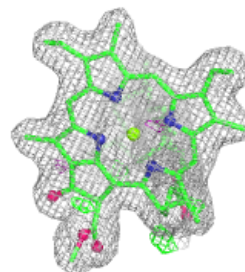
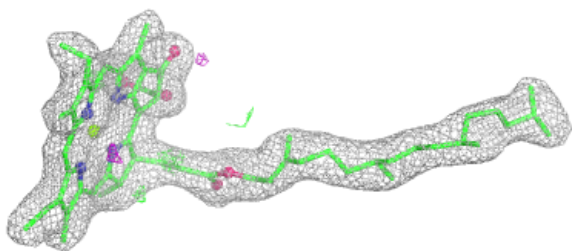
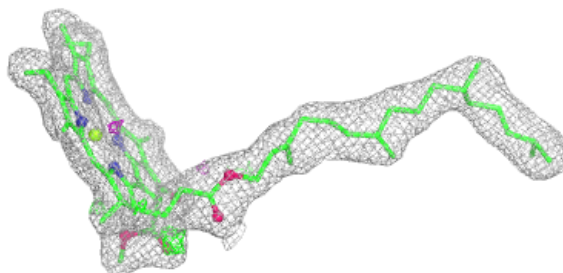


Electron density around BCR B 618:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

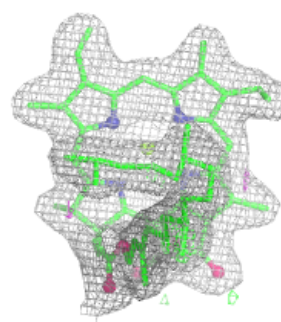
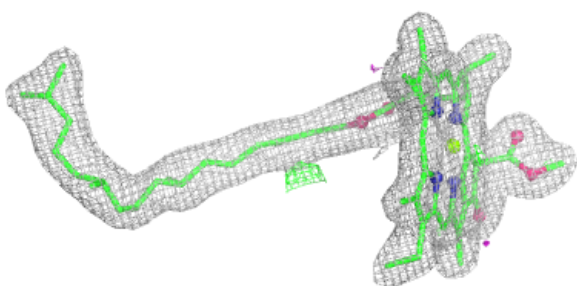
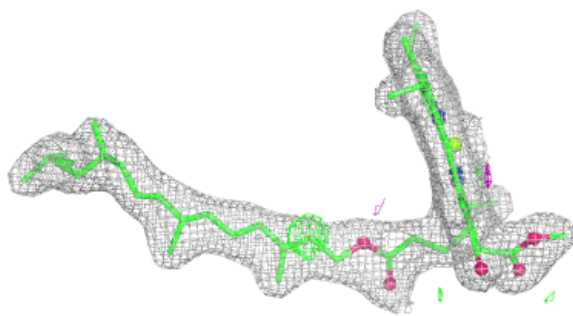
**Electron density around CLA B 605:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



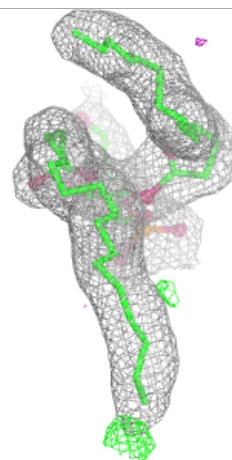
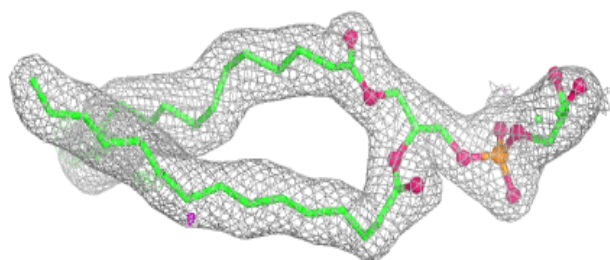
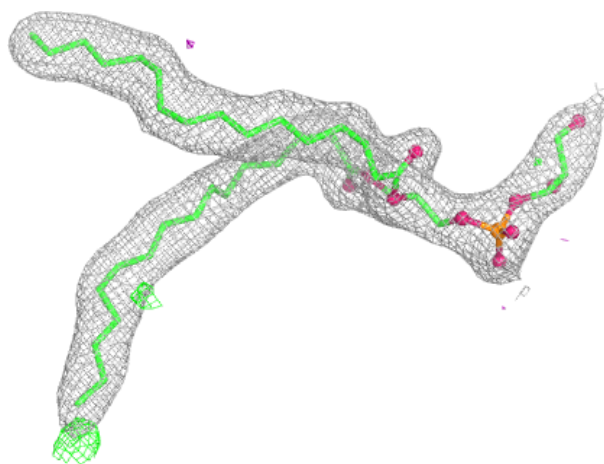
Electron density around CLA B 606:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



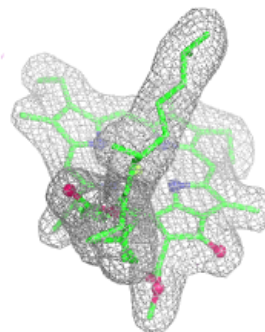
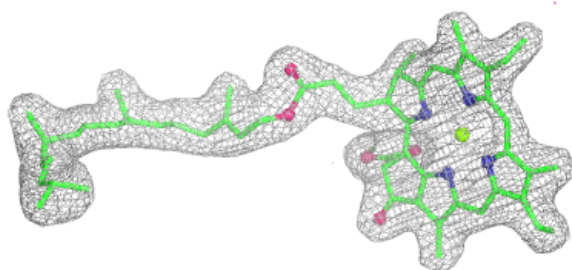
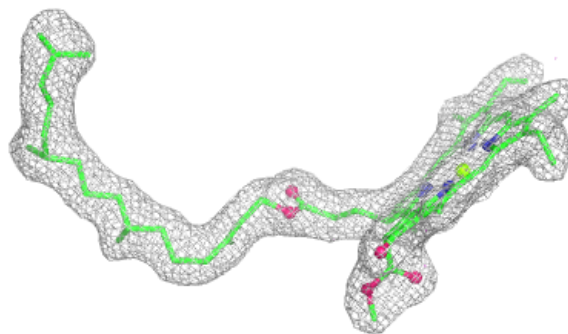
Electron density around LHG d 407:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

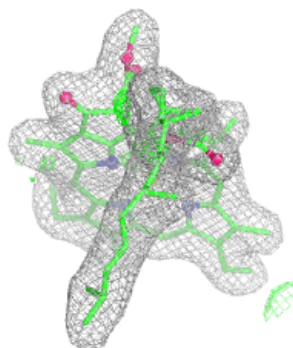
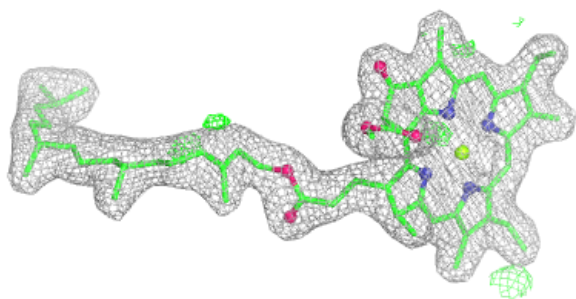
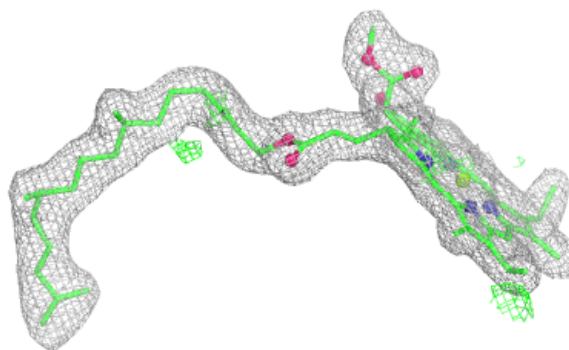


Electron density around CLA d 402:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

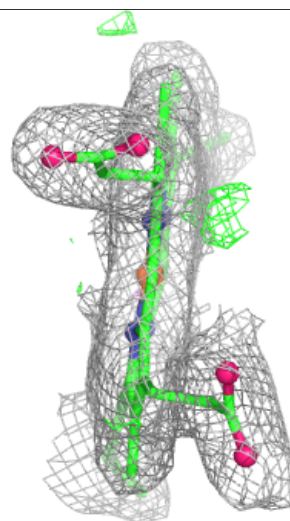
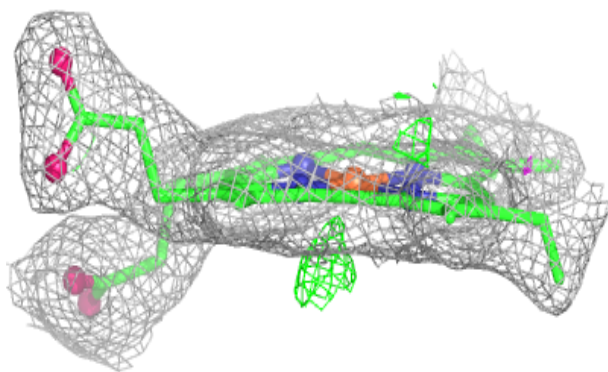
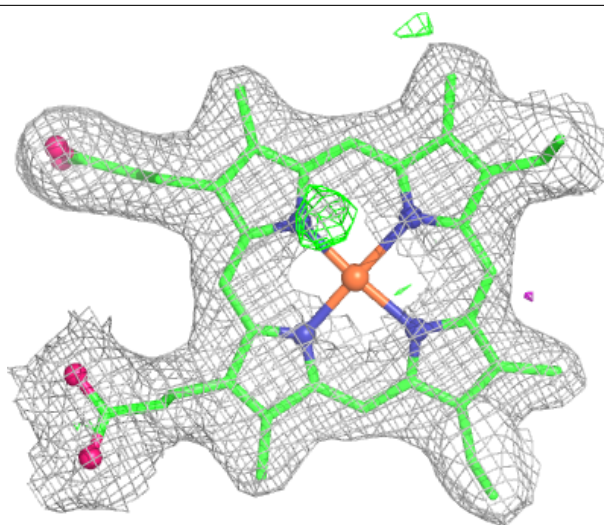
**Electron density around CLA D 402:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



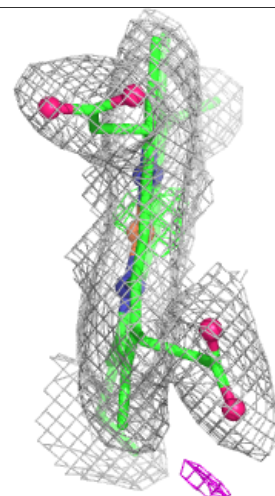
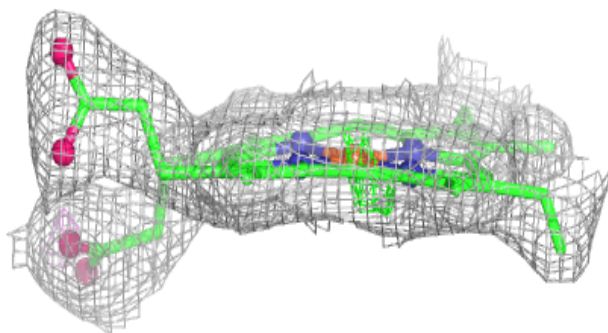
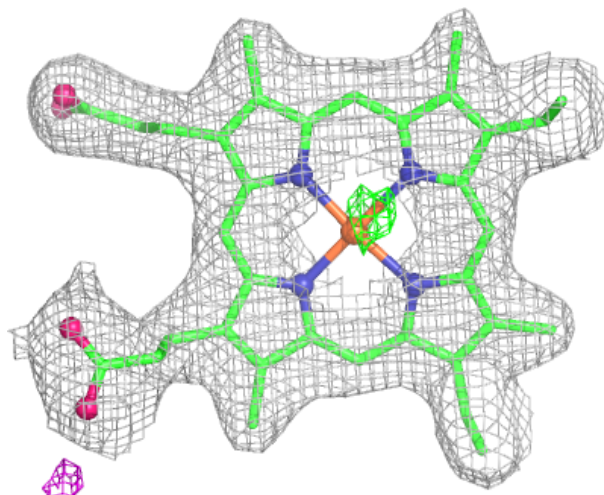
Electron density around HEC V 205:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



Electron density around HEC v 205:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



6.5 Other polymers ⓘ

There are no such residues in this entry.