



wwPDB X-ray Structure Validation Summary Report ⓘ

Aug 17, 2026 – 02:26 PM EDT

PDB ID : 9Z36 / pdb_00009z36
Title : RT XFEL structure of dark-stable state of Photosystem II (0F, S1 rich) at 2.16 Angstrom obtained from anomalous data at 7 keV
Authors : Bhowmick, A.; Kern, J.; Yano, J.; Yachandra, V.K.; Minnetian, N.; Zhang, M.
Deposited on : 2025-11-05
Resolution : 2.16 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	:	2022.3.0, CSD as543be (2022)
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

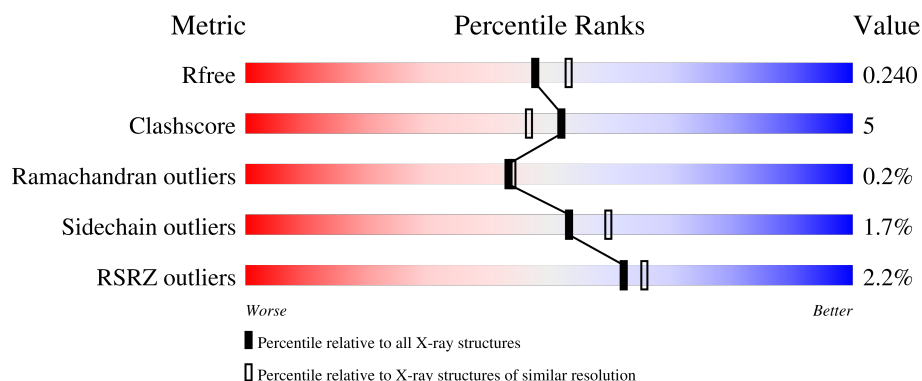
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 2.16 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.



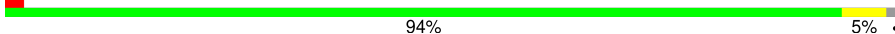
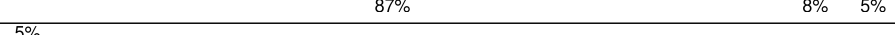
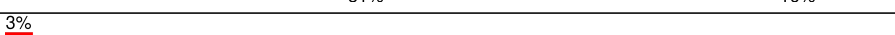
Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	180053	2057 (2.16-2.16)
Clashscore	190562	2159 (2.16-2.16)
Ramachandran outliers	187476	2134 (2.16-2.16)
Sidechain outliers	187428	2133 (2.16-2.16)
RSRZ outliers	180081	2059 (2.16-2.16)

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	91% 6% .
1	a	344	89% 8% .
2	B	510	88% 11% .
2	b	510	92% 7% .

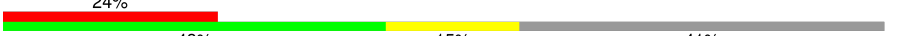
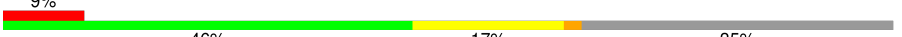
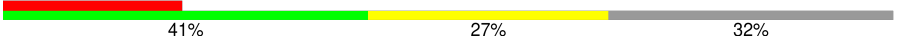
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Mol	Chain	Length	Quality of chain
3	C	461	
3	c	461	
4	D	352	
4	d	352	
5	E	84	
5	e	84	
6	F	45	
6	f	45	
7	H	66	
7	h	66	
8	I	38	
8	i	38	
9	J	40	
9	j	40	
10	K	46	
10	k	46	
11	L	37	
11	l	37	
12	M	36	
12	m	36	
13	O	272	
13	o	272	
14	T	32	
14	t	32	
15	U	134	

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Mol	Chain	Length	Quality of chain
15	u	134	
16	V	163	
16	v	163	
17	Y	46	
17	y	46	
18	X	41	
18	x	41	
19	Z	62	
19	z	62	
20	R	41	
20	r	41	

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
35	HEC	V	201	X	-	-	-
35	HEC	v	201	X	-	-	-

2 Entry composition

There are 36 unique types of molecules in this entry. The entry contains 52923 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 1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	334	Total	C	N	O	S	0	0	0
			2622	1717	431	459	15			
1	a	334	Total	C	N	O	S	0	0	0
			2619	1714	431	459	15			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	B	505	Total	C	N	O	S	0	5	0
			4016	2637	670	696	13			
2	b	505	Total	C	N	O	S	0	1	0
			3984	2614	665	692	13			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	C	442	Total	C	N	O	S	0	1	0
			3426	2249	571	593	13			
3	c	451	Total	C	N	O	S	0	2	0
			3500	2290	587	610	13			

- 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	0	0
			2717	1800	444	461	12			
4	d	341	Total	C	N	O	S	0	1	0
			2723	1804	444	463	12			

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
5	E	82	Total	C	N	O	0	1	0
			666	436	107	123			
5	e	82	Total	C	N	O	0	0	0
			664	434	108	122			

- 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	34	Total	C	N	O	S	0	0	0
			275	187	45	42	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	0	0
			505	335	82	85	3			
7	h	63	Total	C	N	O	S	0	0	0
			493	327	80	83	3			

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
H	41	CYS	PHE	conflict	UNP Q8DJ43
h	41	CYS	PHE	conflict	UNP Q8DJ43

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	I	36	Total	C	N	O	S	0	0	0
			296	200	46	49	1			
8	i	36	Total	C	N	O	S	0	0	0
			296	200	46	49	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	J	36	Total	C	N	O	S	0	0	0
			257	174	40	42	1			
9	j	36	Total	C	N	O	S	0	0	0
			257	174	40	42	1			

- 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			

- 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	0	0
			304	202	48	53	1			
11	l	36	Total	C	N	O		0	0	0
			296	197	47	52				

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	M	33	Total	C	N	O	S	0	0	0
			256	171	37	47	1			
12	m	32	Total	C	N	O	S	0	0	0
			251	168	36	46	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	O	244	Total	C	N	O	S	0	1	0
			1870	1168	313	385	4			
13	o	244	Total	C	N	O	S	0	0	0
			1874	1170	317	383	4			

- 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	0	0
			258	181	36	39	2			
14	t	30	Total	C	N	O	S	0	0	0
			256	180	36	38	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	0	0
			1064	675	177	208	4			
16	v	137	Total	C	N	O	S	0	0	0
			1064	675	177	208	4			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	Y	27	Total	C	N	O	S	0	0	0
			196	128	35	30	3			
17	y	30	Total	C	N	O	S	0	0	0
			218	144	35	36	3			

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
18	X	38	Total	C	N	O	0	0	0
			281	188	45	48			
18	x	39	Total	C	N	O	0	0	0
			286	191	46	49			

- 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
			477	326	72	77	2			

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

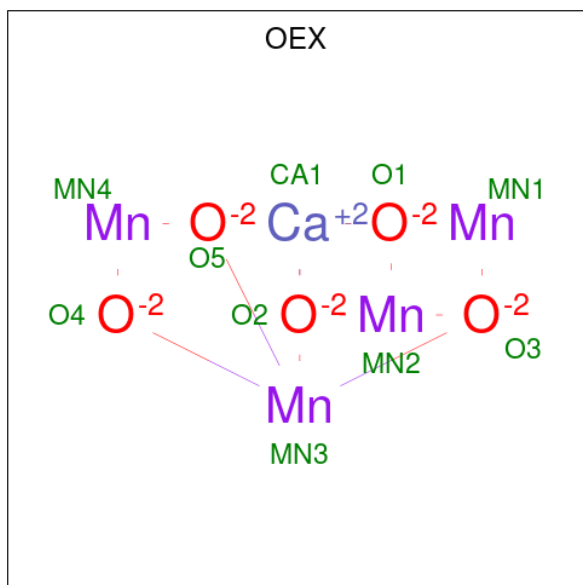
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
20	R	28	Total	C	N	O	0	0	0
			221	151	38	32			

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
20	r	28	Total	C	N	O	0	0	0
			221	151	38	32			

- Molecule 21 is CA-MN4-O5 CLUSTER (CCD ID: OEX) (formula: CaMn_4O_5) (labeled as "Ligand of Interest" by depositor).



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

- Molecule 22 is FE (II) ION (CCD ID: FE2) (formula: Fe).

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

- Molecule 23 is CHLORIDE ION (CCD ID: CL) (formula: Cl).

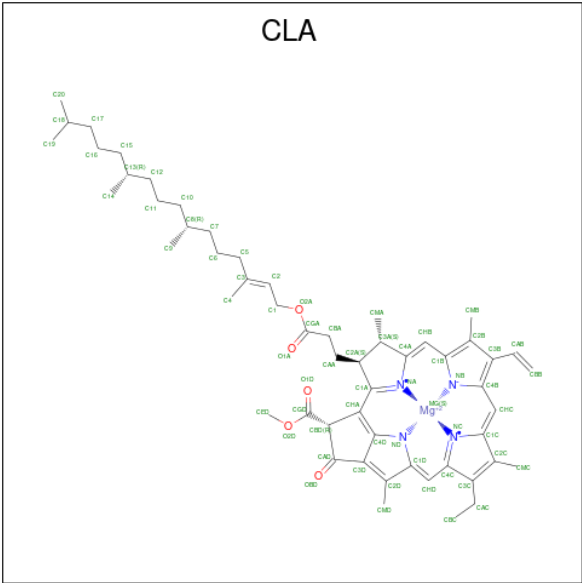
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
23	A	2	Total	Cl	0	0
			2	2		

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
23	a	2	Total	Cl	0	0
			2	2		

- Molecule 24 is CHLOROPHYLL A (CCD ID: CLA) (formula: C₅₅H₇₂MgN₄O₅).



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
			54	44	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	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 60	C 50	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 59	C 49	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

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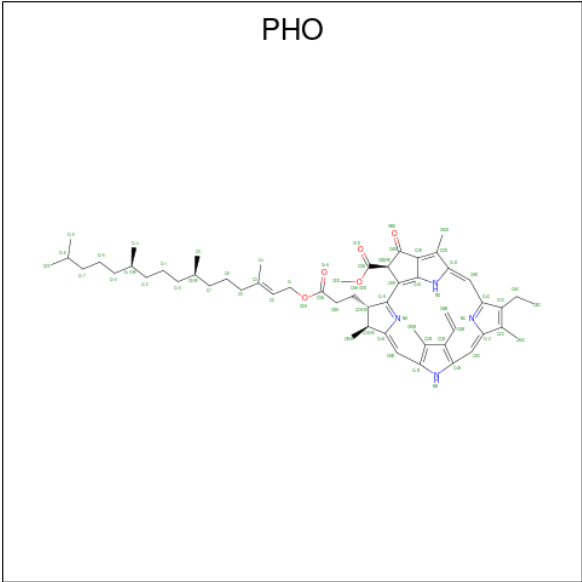
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24	D	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	D	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	D	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	a	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	a	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	a	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	b	1	Total 65	C 55	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

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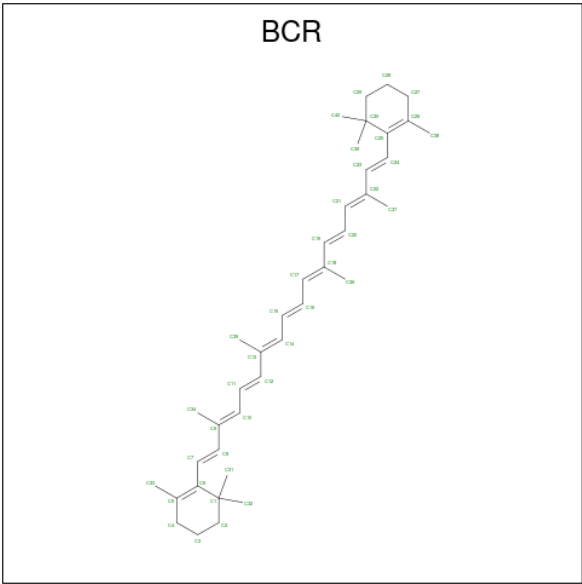
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
24	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	b	1	Total	C	Mg	N	O	0	0
			60	50	1	4	5		
24	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	c	1	Total	C	Mg	N	O	0	0
			60	50	1	4	5		
24	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	c	1	Total	C	Mg	N	O	0	0
			64	54	1	4	5		
24	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	d	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	d	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
24	d	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		

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



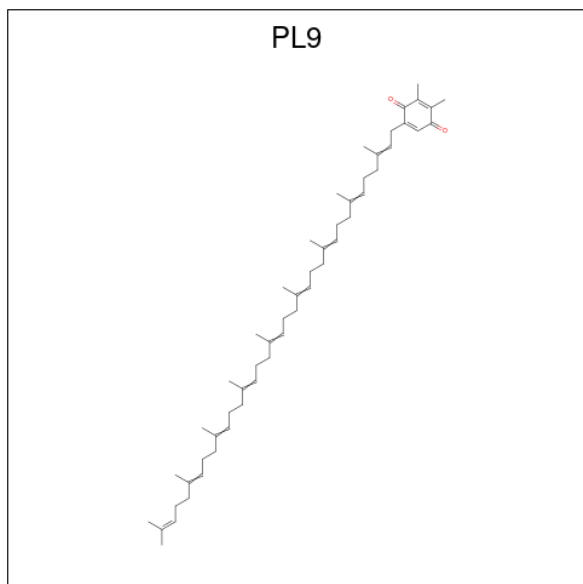
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
25	A	1	Total	C	N	O	0	0
			64	55	4	5		
25	D	1	Total	C	N	O	0	0
			64	55	4	5		
25	a	1	Total	C	N	O	0	0
			64	55	4	5		
25	a	1	Total	C	N	O	0	0
			64	55	4	5		

- Molecule 26 is BETA-CAROTENE (CCD ID: BCR) (formula: $C_{40}H_{56}$).



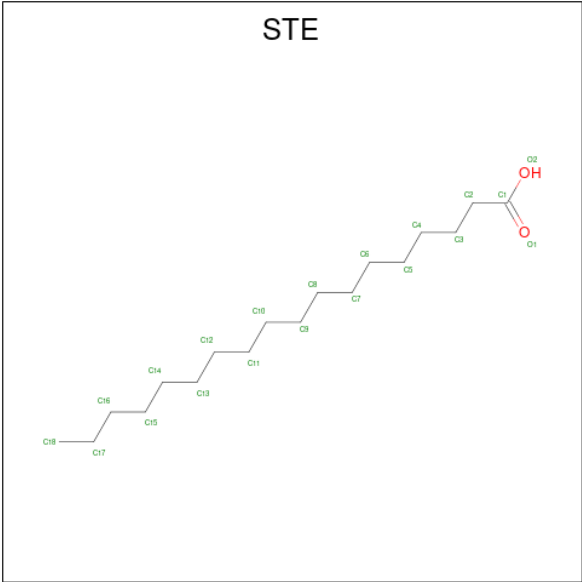
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
26	A	1	Total C 40 40	0	0
26	B	1	Total C 40 40	0	0
26	B	1	Total C 40 40	0	0
26	B	1	Total C 40 40	0	0
26	C	1	Total C 40 40	0	0
26	C	1	Total C 40 40	0	0
26	D	1	Total C 40 40	0	0
26	H	1	Total C 40 40	0	0
26	J	1	Total C 40 40	0	0
26	K	1	Total C 40 40	0	0
26	T	1	Total C 40 40	0	0
26	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	c	1	Total C 40 40	0	0
26	d	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	x	1	Total C 40 40	0	0

- Molecule 27 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: $C_{53}H_{80}O_2$).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
27	A	1	Total	C	O	0	0
			55	53	2		
27	D	1	Total	C	O	0	0
			55	53	2		
27	a	1	Total	C	O	0	0
			55	53	2		
27	d	1	Total	C	O	0	0
			55	53	2		

- Molecule 28 is STEARIC ACID (CCD ID: STE) (formula: $C_{18}H_{36}O_2$).



Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
28	A	1	Total	C	0	0
			9	9		
28	A	1	Total	C	0	0
			8	8		
28	A	1	Total	C	0	0
			17	17		
28	A	1	Total	C	0	0
			11	11		
28	B	1	Total	C	0	0
			17	15		
				O	0	0
				2		
28	B	1	Total	C	0	0
			14	12		
				O	0	0
				2		
28	B	1	Total	C	0	0
			18	16		
				O	0	0
				2		
28	B	1	Total	C	0	0
			12	10		
				O	0	0
				2		
28	B	1	Total	C	0	0
			15	15		
28	C	1	Total	C	0	0
			14	12		
				O	0	0
				2		
28	C	1	Total	C	0	0
			5	5		
28	C	1	Total	C	0	0
			7	7		
28	C	1	Total	C	0	0
			10	10		
28	C	1	Total	C	0	0
			12	10		
				O	0	0
				2		

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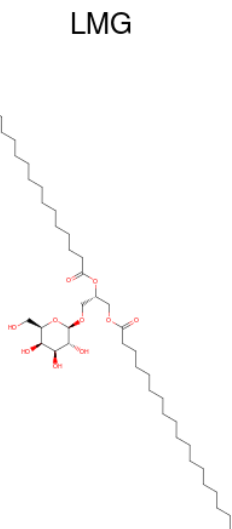
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
28	C	1	Total C 16 16	0	0
28	C	1	Total C 14 14	0	0
28	C	1	Total C 14 14	0	0
28	E	1	Total C O 12 10 2	0	0
28	E	1	Total C 12 12	0	0
28	E	1	Total C O 20 18 2	0	0
28	H	1	Total C 18 18	0	0
28	H	1	Total C 9 9	0	0
28	I	1	Total C O 17 15 2	0	0
28	I	1	Total C O 15 13 2	0	0
28	J	1	Total C O 12 10 2	0	0
28	M	1	Total C O 15 13 2	0	0
28	M	1	Total C 10 10	0	0
28	T	1	Total C 16 16	0	0
28	X	1	Total C O 20 18 2	0	0
28	Z	1	Total C 17 17	0	0
28	a	1	Total C O 12 10 2	0	0
28	b	1	Total C O 20 18 2	0	0
28	b	1	Total C O 16 14 2	0	0
28	b	1	Total C 15 15	0	0
28	b	1	Total C 10 10	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
28	d	1	Total C O 20 18 2	0	0
28	d	1	Total C O 20 18 2	0	0
28	d	1	Total C O 20 18 2	0	0
28	d	1	Total C O 14 12 2	0	0
28	e	1	Total C 9 9	0	0
28	e	1	Total C 9 9	0	0
28	e	1	Total C O 13 11 2	0	0
28	f	1	Total C 8 8	0	0
28	f	1	Total C 16 16	0	0
28	h	1	Total C 10 10	0	0
28	h	1	Total C 11 11	0	0
28	i	1	Total C O 12 10 2	0	0
28	i	1	Total C 6 6	0	0
28	j	1	Total C O 12 10 2	0	0
28	l	1	Total C 18 18	0	0
28	m	1	Total C O 12 10 2	0	0
28	t	1	Total C 10 10	0	0
28	z	1	Total C 13 13	0	0
28	z	1	Total C 18 18	0	0
28	z	1	Total C 9 9	0	0

- Molecule 29 is 1,2-DISTEAROYL-MONOGALACTOSYL-DIGLYCERIDE (CCD ID: LMG) (formula: C₄₅H₈₆O₁₀).

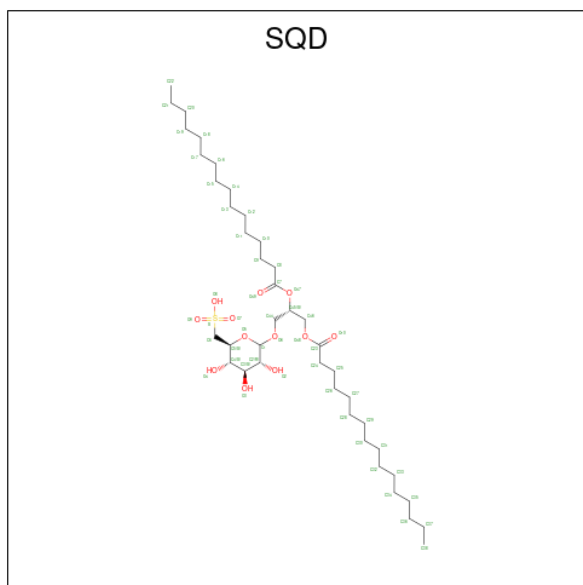


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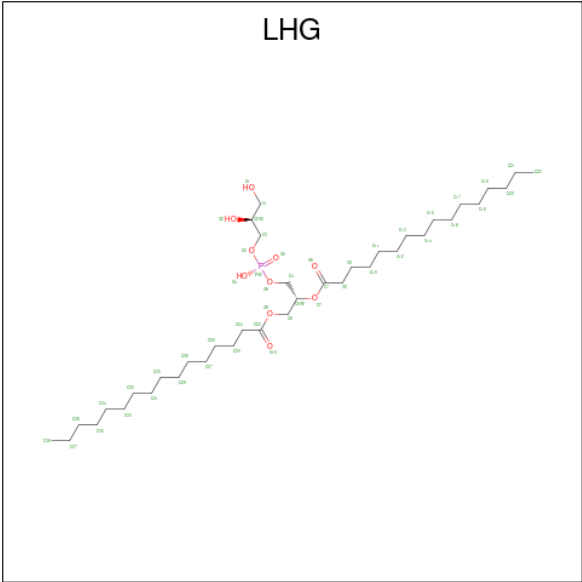
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
29	m	1	Total	C	O	0	0
			51	41	10		

- Molecule 30 is 1,2-DI-O-ACYL-3-O-[6-DEOXY-6-SULFO-ALPHA-D-GLUCOPYRANOSYL]-SN-GLYCEROL (CCD ID: SQD) (formula: C₄₁H₇₈O₁₂S).



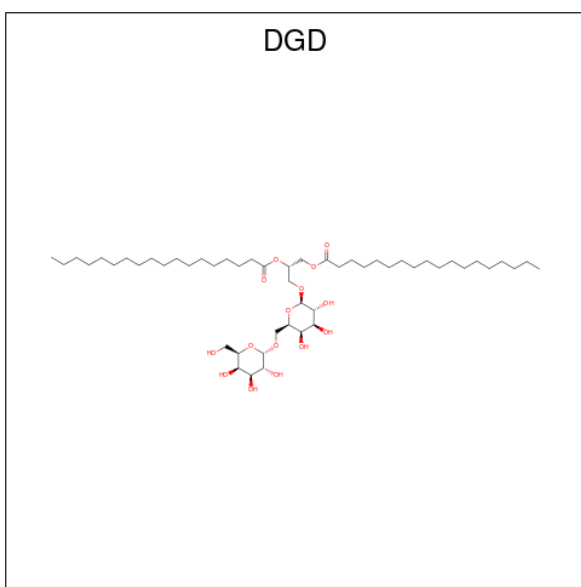
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
30	A	1	Total	C	O	S	0	0
			52	39	12	1		
30	A	1	Total	C	O	S	0	0
			43	30	12	1		
30	B	1	Total	C	O	S	0	0
			54	41	12	1		
30	D	1	Total	C	O	S	0	0
			36	25	10	1		
30	a	1	Total	C	O	S	0	0
			54	41	12	1		
30	a	1	Total	C	O	S	0	0
			54	41	12	1		
30	b	1	Total	C	O	S	0	0
			49	36	12	1		
30	f	1	Total	C	O	S	0	0
			41	28	12	1		

- Molecule 31 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (CCD ID: LHG) (formula: C₃₈H₇₅O₁₀P).



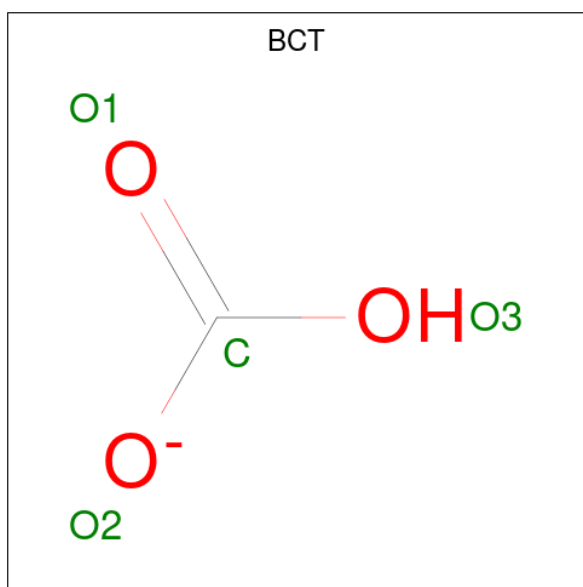
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
31	A	1	Total	C	O	P	0	0
			49	38	10	1		
31	B	1	Total	C	O	P	0	0
			49	38	10	1		
31	D	1	Total	C	O	P	0	0
			49	38	10	1		
31	D	1	Total	C	O	P	0	0
			47	36	10	1		
31	L	1	Total	C	O	P	0	0
			49	38	10	1		
31	a	1	Total	C	O	P	0	0
			49	38	10	1		
31	d	1	Total	C	O	P	0	0
			49	38	10	1		
31	d	1	Total	C	O	P	0	0
			39	28	10	1		
31	e	1	Total	C	O	P	0	0
			42	31	10	1		
31	l	1	Total	C	O	P	0	0
			49	38	10	1		

- Molecule 32 is DIGALACTOSYL DIACYL GLYCEROL (DGDG) (CCD ID: DGD) (formula: C₅₁H₉₆O₁₅).



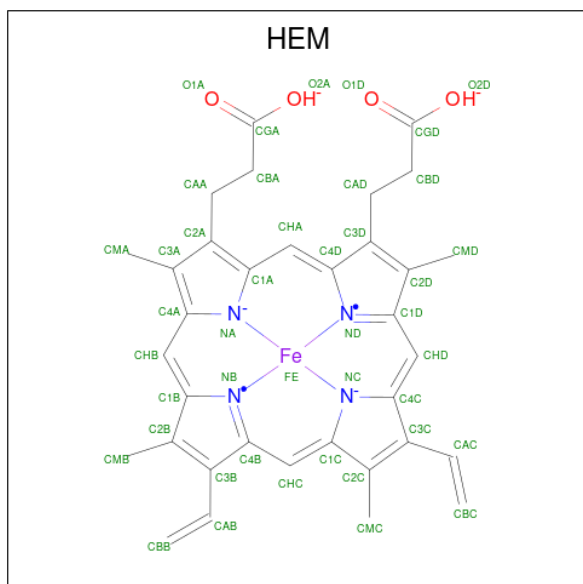
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
32	A	1	Total	C	O	0	0
			66	51	15		
32	C	1	Total	C	O	0	0
			62	47	15		
32	C	1	Total	C	O	0	0
			62	47	15		
32	C	1	Total	C	O	0	0
			62	47	15		
32	H	1	Total	C	O	0	0
			62	47	15		
32	c	1	Total	C	O	0	0
			62	47	15		
32	c	1	Total	C	O	0	0
			62	47	15		
32	c	1	Total	C	O	0	0
			62	47	15		
32	h	1	Total	C	O	0	0
			62	47	15		

- Molecule 33 is BICARBONATE ION (CCD ID: BCT) (formula: CHO_3).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
33	D	1	Total	C	O	0	0
			4	1	3		
33	d	1	Total	C	O	0	0
			4	1	3		

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



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

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

- # HEC
-

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

- | Mol | Chain | Residues | Atoms | ZeroOcc | AltConf |
|-----|-------|----------|--------------------|---------|---------|
| 36 | A | 165 | Total O
165 165 | 0 | 0 |
| 36 | B | 266 | Total O
266 266 | 0 | 0 |
| 36 | C | 223 | Total O
223 223 | 0 | 0 |
| 36 | D | 137 | Total O
137 137 | 0 | 0 |
| 36 | E | 39 | Total O
39 39 | 0 | 0 |
| 36 | F | 9 | Total O
9 9 | 0 | 0 |



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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
36	H	33	Total O 33 33	0	0
36	I	20	Total O 20 20	0	0
36	J	19	Total O 19 19	0	0
36	K	7	Total O 7 7	0	0
36	L	8	Total O 8 8	0	0
36	M	13	Total O 13 13	0	0
36	O	124	Total O 124 124	0	0
36	T	10	Total O 10 10	0	0
36	U	46	Total O 46 46	0	0
36	V	87	Total O 87 87	0	0
36	Y	3	Total O 3 3	0	0
36	X	18	Total O 18 18	0	0
36	Z	5	Total O 5 5	0	0
36	a	137	Total O 137 137	0	0
36	b	247	Total O 247 247	0	0
36	c	181	Total O 181 181	0	0
36	d	145	Total O 145 145	0	0
36	e	22	Total O 22 22	0	0
36	f	11	Total O 11 11	0	0
36	h	24	Total O 24 24	0	0
36	i	11	Total O 11 11	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
36	j	8	Total 8	O 8	0	0
36	k	4	Total 4	O 4	0	0
36	l	20	Total 20	O 20	0	0
36	m	18	Total 18	O 18	0	0
36	o	137	Total 137	O 137	0	0
36	t	8	Total 8	O 8	0	0
36	u	74	Total 74	O 74	0	0
36	v	75	Total 75	O 75	0	0
36	y	3	Total 3	O 3	0	0
36	x	14	Total 14	O 14	0	0
36	z	8	Total 8	O 8	0	0
36	r	6	Total 6	O 6	0	0

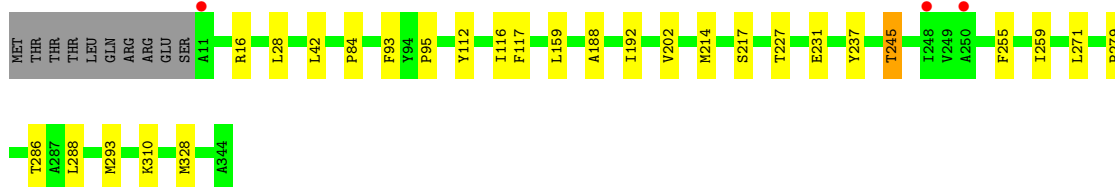
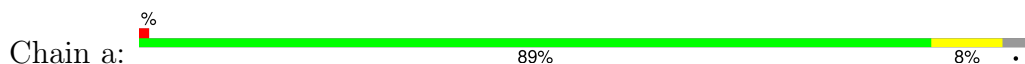
3 Residue-property plots [i](#)

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and 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.

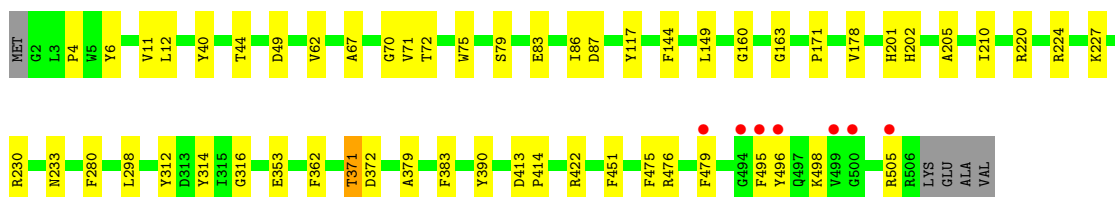
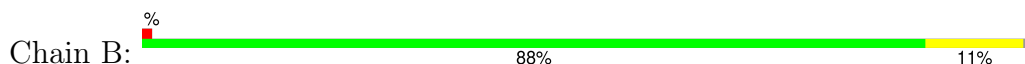
- Molecule 1: Photosystem II protein D1 1



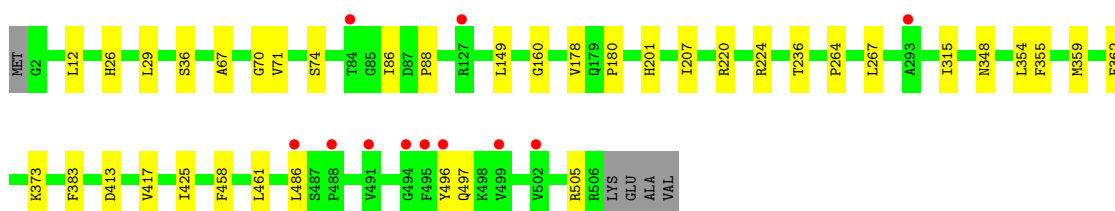
- Molecule 1: Photosystem II protein D1 1



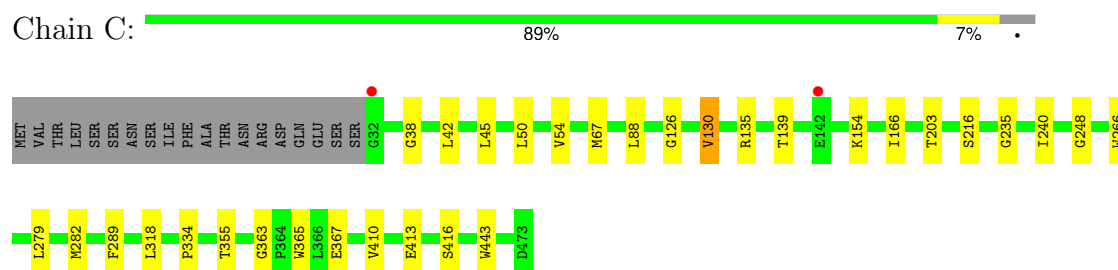
- Molecule 2: Photosystem II CP47 reaction center protein



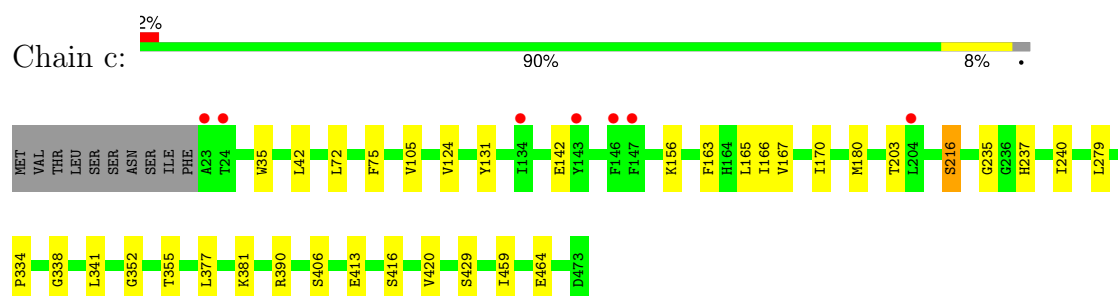
- Molecule 2: Photosystem II CP47 reaction center protein



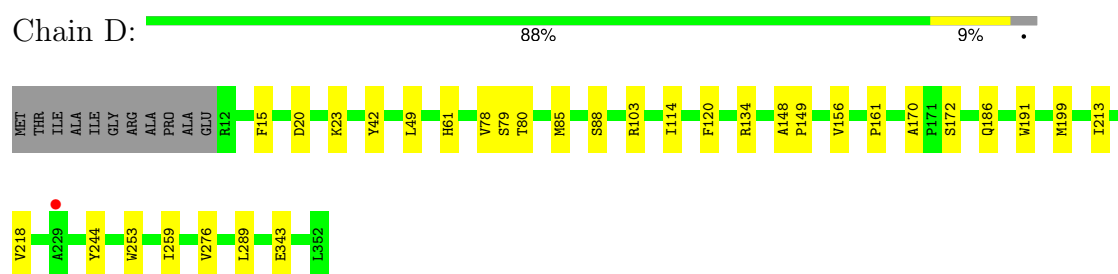
- Molecule 3: Photosystem II CP43 reaction center protein



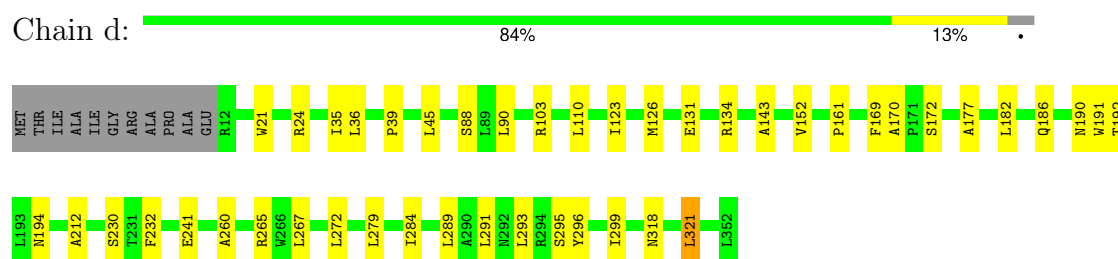
- Molecule 3: Photosystem II CP43 reaction center protein



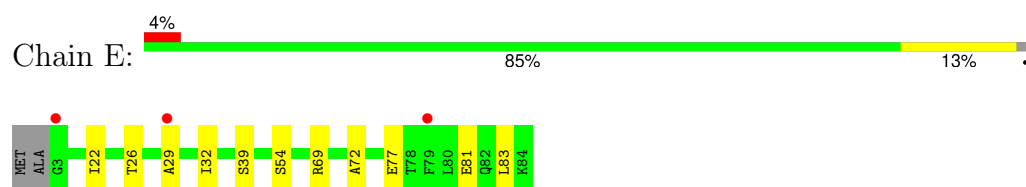
- Molecule 4: Photosystem II D2 protein



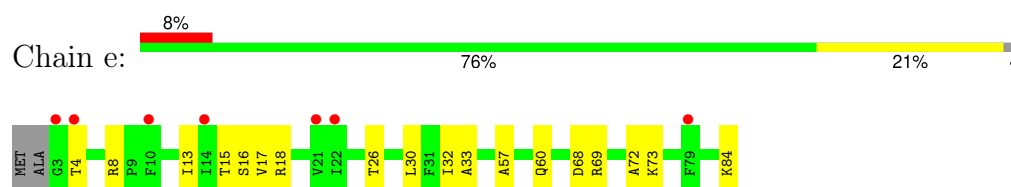
- Molecule 4: Photosystem II D2 protein



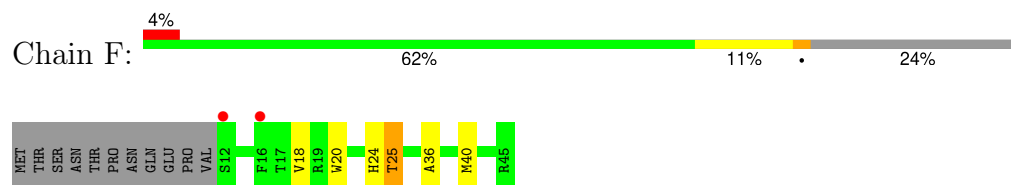
- Molecule 5: Cytochrome b559 subunit alpha



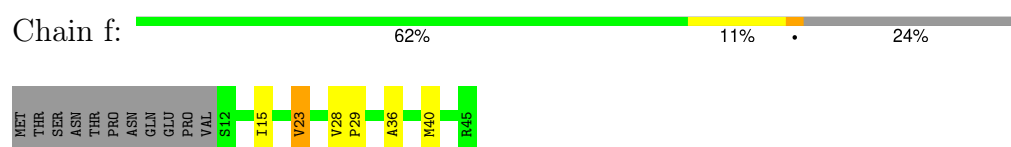
- Molecule 5: Cytochrome b559 subunit alpha



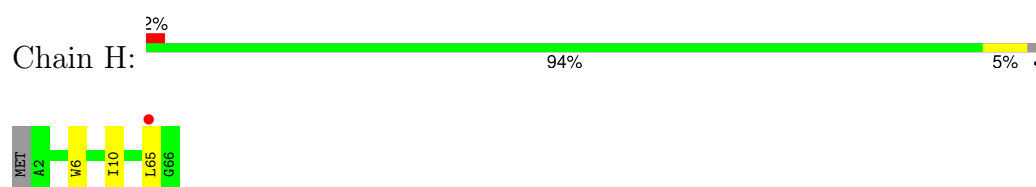
- Molecule 6: Cytochrome b559 subunit beta



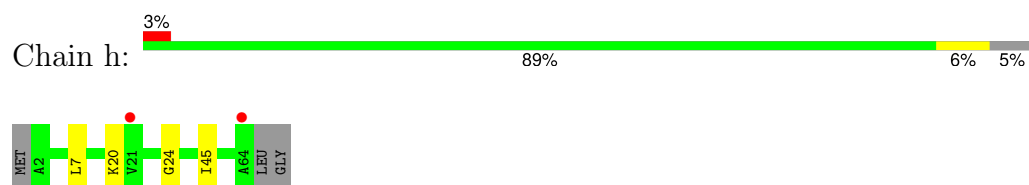
- Molecule 6: Cytochrome b559 subunit beta



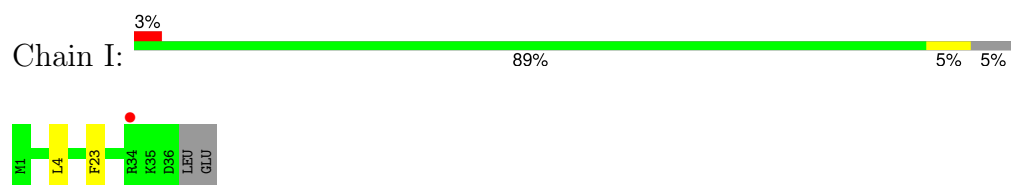
- Molecule 7: Photosystem II reaction center protein H



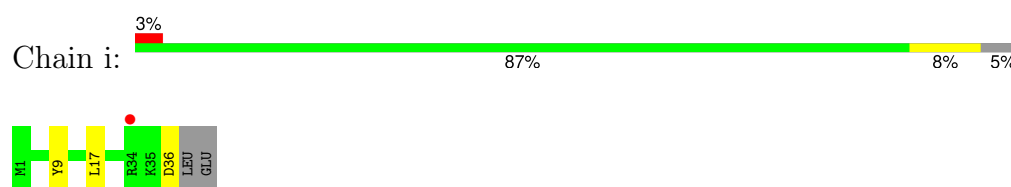
- Molecule 7: Photosystem II reaction center protein H



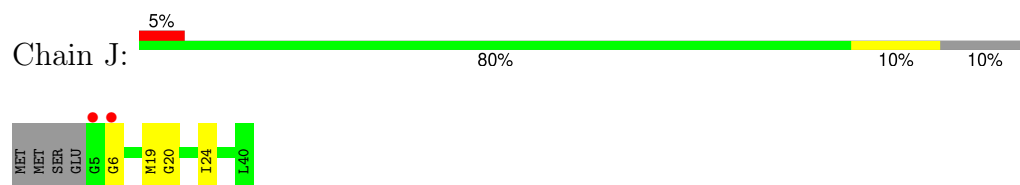
- Molecule 8: Photosystem II reaction center protein I



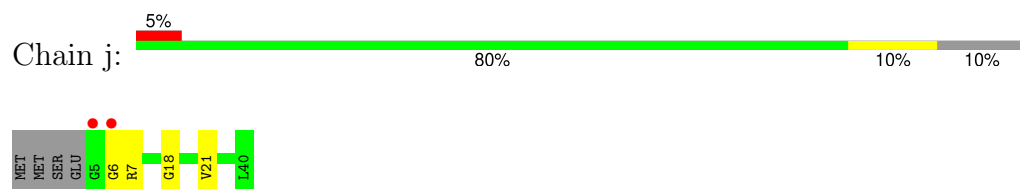
- Molecule 8: Photosystem II reaction center protein I



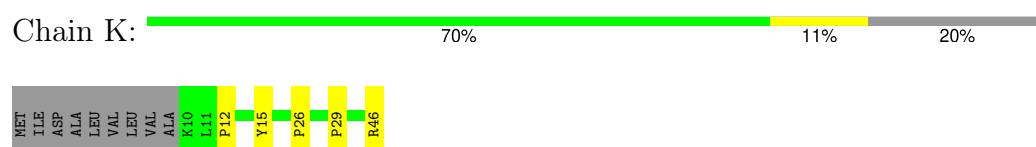
- Molecule 9: Photosystem II reaction center protein J



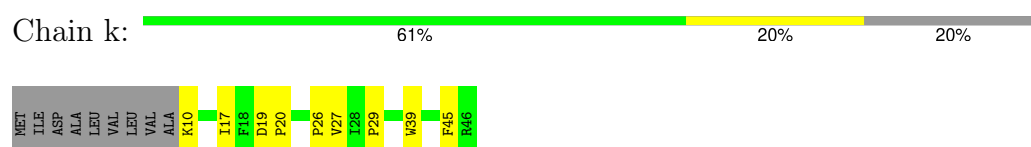
- Molecule 9: Photosystem II reaction center protein J



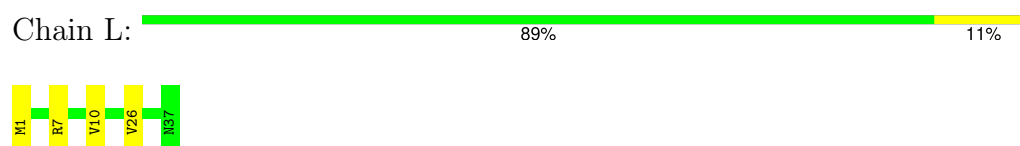
- Molecule 10: Photosystem II reaction center protein K



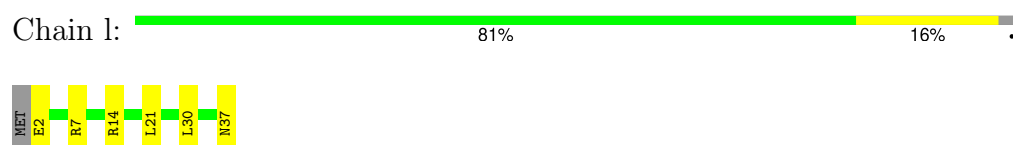
- Molecule 10: Photosystem II reaction center protein K



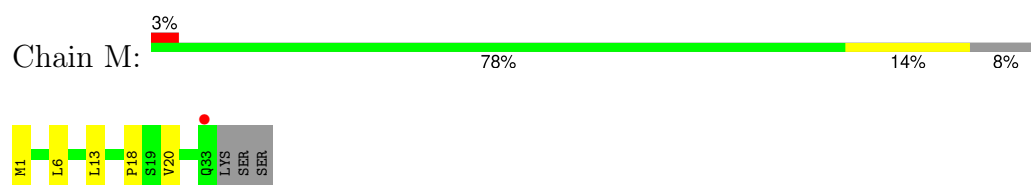
- Molecule 11: Photosystem II reaction center protein L



- Molecule 11: Photosystem II reaction center protein L

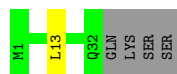


- Molecule 12: Photosystem II reaction center protein M



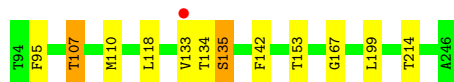
- Molecule 12: Photosystem II reaction center protein M

Chain m:  86% • 11%



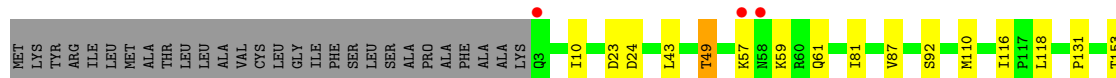
- Molecule 13: Photosystem II manganese-stabilizing polypeptide

Chain O:  80% 9% • 10%



- Molecule 13: Photosystem II manganese-stabilizing polypeptide

Chain o:  82% 7% 10%



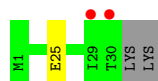
- Molecule 14: Photosystem II reaction center protein T

Chain T:  81% 6% 6% 6%



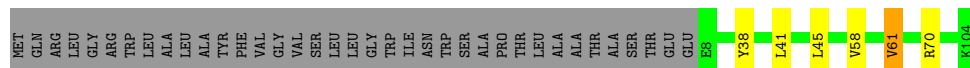
- Molecule 14: Photosystem II reaction center protein T

Chain t:  91% • 6%



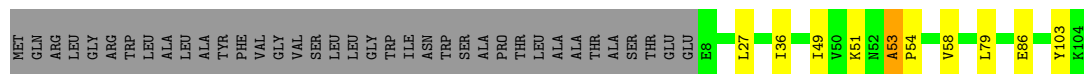
- Molecule 15: Photosystem II 12 kDa extrinsic protein

Chain U:  68% 28%



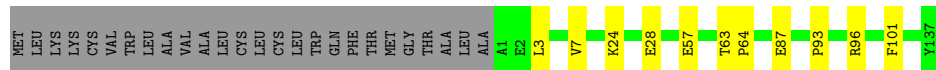
- Molecule 15: Photosystem II 12 kDa extrinsic protein

Chain u:  65% 7% 28%



- Molecule 16: Cytochrome c-550

Chain V:  77% 7% 16%



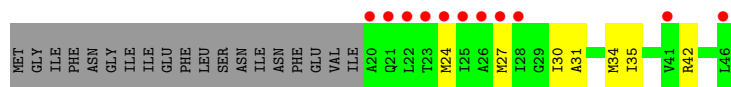
- Molecule 16: Cytochrome c-550

Chain v:  75% 9% 16%



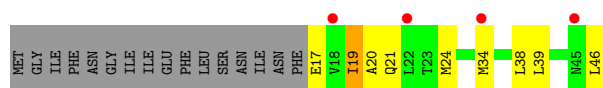
- Molecule 17: Photosystem II reaction center protein Ycf12

Chain Y:  24% 43% 15% 41%



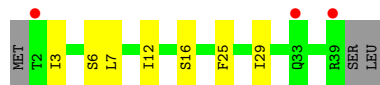
- Molecule 17: Photosystem II reaction center protein Ycf12

Chain y:  9% 46% 17% 35%



- Molecule 18: Photosystem II reaction center X protein

Chain X:  7% 76% 17% 7%

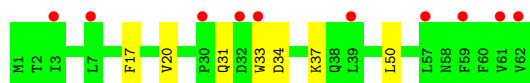
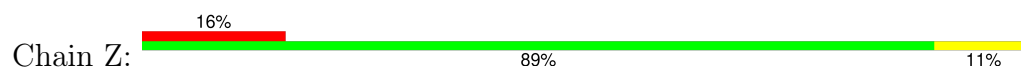


- Molecule 18: Photosystem II reaction center X protein

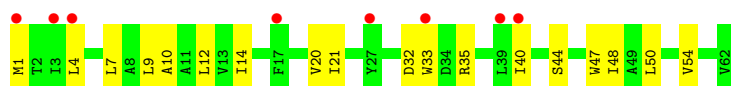
Chain x:  5% 83% 12% 5%



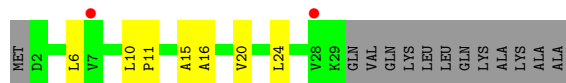
- Molecule 19: Photosystem II reaction center protein Z



- Molecule 19: Photosystem II reaction center protein Z



- Molecule 20: Photosystem II protein Y



- 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	117.57Å 222.87Å 309.49Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	37.99 – 2.16 37.99 – 2.16	Depositor EDS
% Data completeness (in resolution range)	98.3 (37.99-2.16) 82.8 (37.99-2.16)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	0.40 (at 2.16Å)	Xtriage
Refinement program	PHENIX 2.0_5848	Depositor
R, R_{free}	0.198 , 0.240 0.198 , 0.240	Depositor DCC
R_{free} test set	3841 reflections (0.61%)	wwPDB-VP
Wilson B-factor (Å ²)	26.7	Xtriage
Anisotropy	0.242	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.29 , 72.4	EDS
L-test for twinning ²	$\langle L \rangle = 0.48$, $\langle L^2 \rangle = 0.30$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.94	EDS
Total number of atoms	52923	wwPDB-VP
Average B, all atoms (Å ²)	43.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 2.63% 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: FME, STE, PL9, CL, BCT, DGD, HEM, SQD, PHO, OEX, FE2, CLA, LHG, LMG, BCR, HEC

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	0.36	0/2707	0.53	0/3692
1	a	0.34	0/2704	0.53	0/3688
2	B	0.32	0/4166	0.48	0/5675
2	b	0.31	0/4127	0.47	0/5623
3	C	0.32	0/3539	0.48	0/4819
3	c	0.30	0/3619	0.47	0/4926
4	D	0.35	0/2812	0.53	0/3832
4	d	0.33	0/2821	0.50	0/3844
5	E	0.25	0/688	0.42	0/940
5	e	0.25	0/683	0.42	0/932
6	F	0.27	0/284	0.40	0/387
6	f	0.24	0/284	0.47	0/387
7	H	0.28	0/517	0.43	0/705
7	h	0.28	0/505	0.47	0/689
8	I	0.32	0/293	0.49	0/396
8	i	0.29	0/293	0.42	0/396
9	J	0.29	0/263	0.51	0/356
9	j	0.27	0/263	0.42	0/356
10	K	0.28	0/303	0.46	0/416
10	k	0.25	0/303	0.46	0/416
11	L	0.35	0/311	0.46	0/422
11	l	0.33	0/303	0.46	0/412
12	M	0.31	0/249	0.54	0/341
12	m	0.33	0/244	0.52	0/334
13	O	0.31	0/1904	0.51	0/2585
13	o	0.31	0/1905	0.48	0/2583
14	T	0.34	0/257	0.55	0/349
14	t	0.29	0/255	0.44	0/346
15	U	0.30	0/785	0.47	0/1064
15	u	0.31	0/785	0.48	0/1064
16	V	0.32	0/1085	0.55	0/1473
16	v	0.27	0/1085	0.44	0/1473

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
17	Y	0.27	0/197	0.48	0/264
17	y	0.18	0/219	0.31	0/294
18	X	0.27	0/284	0.42	0/384
18	x	0.24	0/289	0.37	0/391
19	Z	0.20	0/490	0.41	0/669
19	z	0.20	0/488	0.34	0/666
20	R	0.21	0/227	0.37	0/313
20	r	0.21	0/227	0.36	0/313
All	All	0.31	0/42763	0.48	0/58215

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

Mol	Chain	#Chirality outliers	#Planarity outliers
16	V	0	1

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

All (1) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
16	V	63	THR	Peptide

5.2 Too-close contacts [i](#)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	2622	0	2519	15	0
1	a	2619	0	2510	20	0
2	B	4016	0	3883	39	0
2	b	3984	0	3842	26	0
3	C	3426	0	3353	19	0
3	c	3500	0	3426	25	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
4	D	2717	0	2621	24	0
4	d	2723	0	2627	33	0
5	E	666	0	651	11	0
5	e	664	0	648	16	0
6	F	275	0	282	5	0
6	f	275	0	282	4	0
7	H	505	0	528	2	0
7	h	493	0	514	3	0
8	I	296	0	311	1	0
8	i	296	0	311	3	0
9	J	257	0	268	2	0
9	j	257	0	268	7	0
10	K	293	0	305	2	0
10	k	293	0	305	4	0
11	L	304	0	316	3	0
11	l	296	0	304	5	0
12	M	256	0	269	4	0
12	m	251	0	267	0	0
13	O	1870	0	1830	15	0
13	o	1874	0	1846	12	0
14	T	258	0	261	3	0
14	t	256	0	256	1	0
15	U	774	0	773	4	0
15	u	774	0	773	8	0
16	V	1064	0	1073	4	0
16	v	1064	0	1073	10	0
17	Y	196	0	217	7	0
17	y	218	0	241	6	0
18	X	281	0	312	5	0
18	x	286	0	314	4	0
19	Z	479	0	516	7	0
19	z	477	0	509	14	0
20	R	221	0	238	5	0
20	r	221	0	238	6	0
21	A	10	0	0	0	0
21	a	10	0	0	0	0
22	A	1	0	0	0	0
22	a	1	0	0	0	0
23	A	2	0	0	0	0
23	a	2	0	0	0	0
24	A	184	0	192	8	0
24	B	1035	0	1139	24	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
24	C	839	0	922	15	0
24	D	195	0	216	5	0
24	a	195	0	216	7	0
24	b	1035	0	1139	32	0
24	c	839	0	919	26	0
24	d	195	0	216	5	0
25	A	64	0	74	1	0
25	D	64	0	74	0	0
25	a	128	0	148	2	0
26	A	40	0	56	2	0
26	B	120	0	168	7	0
26	C	80	0	112	5	0
26	D	40	0	56	3	0
26	H	40	0	56	3	0
26	J	40	0	56	4	0
26	K	40	0	56	0	0
26	T	40	0	56	2	0
26	a	40	0	56	1	0
26	b	120	0	168	2	0
26	c	120	0	168	2	0
26	d	40	0	56	1	0
26	k	40	0	56	0	0
26	t	40	0	56	7	0
26	x	40	0	56	3	0
27	A	55	0	80	9	0
27	D	55	0	80	1	0
27	a	55	0	80	8	0
27	d	55	0	80	1	0
28	A	45	0	83	3	0
28	B	76	0	116	4	0
28	C	92	0	153	3	0
28	E	44	0	74	2	0
28	H	27	0	52	2	0
28	I	32	0	48	2	0
28	J	12	0	16	0	0
28	M	25	0	38	1	0
28	T	16	0	31	2	0
28	X	20	0	35	3	0
28	Z	17	0	33	0	0
28	a	12	0	16	0	0
28	b	61	0	104	0	0
28	d	74	0	125	9	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
28	e	31	0	52	1	0
28	f	24	0	46	0	0
28	h	21	0	40	2	0
28	i	18	0	24	1	0
28	j	12	0	16	1	0
28	l	18	0	35	1	0
28	m	12	0	16	0	0
28	t	10	0	16	0	0
28	z	40	0	71	2	0
29	A	48	0	66	1	0
29	B	100	0	146	7	0
29	C	84	0	106	1	0
29	D	101	0	142	12	0
29	M	51	0	72	4	0
29	a	49	0	68	2	0
29	b	55	0	86	1	0
29	c	124	0	172	3	0
29	d	44	0	58	0	0
29	m	51	0	72	1	0
30	A	95	0	124	3	0
30	B	54	0	78	3	0
30	D	36	0	46	1	0
30	a	108	0	156	5	0
30	b	49	0	65	2	0
30	f	41	0	49	1	0
31	A	49	0	74	2	0
31	B	49	0	74	4	0
31	D	96	0	141	5	0
31	L	49	0	74	3	0
31	a	49	0	74	3	0
31	d	88	0	125	0	0
31	e	42	0	57	1	0
31	l	49	0	74	2	0
32	A	66	0	96	3	0
32	C	186	0	246	4	0
32	H	62	0	82	2	0
32	c	186	0	246	3	0
32	h	62	0	82	3	0
33	D	4	0	1	0	0
33	d	4	0	1	0	0
34	F	43	0	30	2	0
34	e	43	0	30	3	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
35	V	43	0	30	0	0
35	v	43	0	30	0	0
36	A	165	0	0	6	0
36	B	266	0	0	5	0
36	C	223	0	0	2	0
36	D	137	0	0	3	0
36	E	39	0	0	2	0
36	F	9	0	0	0	0
36	H	33	0	0	0	0
36	I	20	0	0	0	0
36	J	19	0	0	2	0
36	K	7	0	0	1	0
36	L	8	0	0	0	0
36	M	13	0	0	1	0
36	O	124	0	0	4	0
36	T	10	0	0	0	0
36	U	46	0	0	0	0
36	V	87	0	0	1	0
36	X	18	0	0	0	0
36	Y	3	0	0	2	0
36	Z	5	0	0	0	0
36	a	137	0	0	4	0
36	b	247	0	0	6	0
36	c	181	0	0	4	0
36	d	145	0	0	3	0
36	e	22	0	0	0	0
36	f	11	0	0	0	0
36	h	24	0	0	0	0
36	i	11	0	0	0	0
36	j	8	0	0	0	0
36	k	4	0	0	0	0
36	l	20	0	0	1	0
36	m	18	0	0	0	0
36	o	137	0	0	2	0
36	r	6	0	0	0	0
36	t	8	0	0	0	0
36	u	74	0	0	1	0
36	v	75	0	0	0	0
36	x	14	0	0	1	0
36	y	3	0	0	0	0
36	z	8	0	0	0	0
All	All	52923	0	52200	522	0

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

The worst 5 of 522 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)
4:D:103:ARG:HH21	5:E:77:GLU:HG3	1.40	0.87
31:D:412:LHG:H142	31:D:412:LHG:H341	1.61	0.83
24:A:606:CLA:H193	27:A:610:PL9:H23	1.64	0.78
24:b:604:CLA:H42	24:b:605:CLA:H2	1.66	0.78
34:e:102:HEM:HHD	34:e:102:HEM:HBC2	1.67	0.76

There are no symmetry-related clashes.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all 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	332/344 (96%)	328 (99%)	4 (1%)	0	100	100
1	a	332/344 (96%)	326 (98%)	5 (2%)	1 (0%)	36	34
2	B	508/510 (100%)	501 (99%)	7 (1%)	0	100	100
2	b	504/510 (99%)	497 (99%)	7 (1%)	0	100	100
3	C	441/461 (96%)	430 (98%)	10 (2%)	1 (0%)	43	44
3	c	451/461 (98%)	441 (98%)	9 (2%)	1 (0%)	43	44
4	D	339/352 (96%)	327 (96%)	11 (3%)	1 (0%)	36	34
4	d	340/352 (97%)	333 (98%)	7 (2%)	0	100	100
5	E	81/84 (96%)	80 (99%)	1 (1%)	0	100	100
5	e	80/84 (95%)	80 (100%)	0	0	100	100
6	F	32/45 (71%)	32 (100%)	0	0	100	100
6	f	32/45 (71%)	32 (100%)	0	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
7	H	63/66 (96%)	59 (94%)	4 (6%)	0	100	100
7	h	61/66 (92%)	58 (95%)	3 (5%)	0	100	100
8	I	34/38 (90%)	32 (94%)	2 (6%)	0	100	100
8	i	34/38 (90%)	32 (94%)	2 (6%)	0	100	100
9	J	34/40 (85%)	31 (91%)	2 (6%)	1 (3%)	3	1
9	j	34/40 (85%)	32 (94%)	2 (6%)	0	100	100
10	K	35/46 (76%)	35 (100%)	0	0	100	100
10	k	35/46 (76%)	35 (100%)	0	0	100	100
11	L	35/37 (95%)	35 (100%)	0	0	100	100
11	l	34/37 (92%)	34 (100%)	0	0	100	100
12	M	31/36 (86%)	31 (100%)	0	0	100	100
12	m	30/36 (83%)	30 (100%)	0	0	100	100
13	O	243/272 (89%)	233 (96%)	8 (3%)	2 (1%)	16	10
13	o	242/272 (89%)	235 (97%)	7 (3%)	0	100	100
14	T	28/32 (88%)	28 (100%)	0	0	100	100
14	t	28/32 (88%)	27 (96%)	1 (4%)	0	100	100
15	U	95/134 (71%)	92 (97%)	3 (3%)	0	100	100
15	u	95/134 (71%)	91 (96%)	3 (3%)	1 (1%)	11	7
16	V	135/163 (83%)	130 (96%)	4 (3%)	1 (1%)	18	13
16	v	135/163 (83%)	132 (98%)	3 (2%)	0	100	100
17	Y	25/46 (54%)	22 (88%)	3 (12%)	0	100	100
17	y	28/46 (61%)	27 (96%)	1 (4%)	0	100	100
18	X	36/41 (88%)	34 (94%)	2 (6%)	0	100	100
18	x	37/41 (90%)	36 (97%)	1 (3%)	0	100	100
19	Z	60/62 (97%)	58 (97%)	2 (3%)	0	100	100
19	z	60/62 (97%)	55 (92%)	5 (8%)	0	100	100
20	R	26/41 (63%)	26 (100%)	0	0	100	100
20	r	26/41 (63%)	25 (96%)	1 (4%)	0	100	100
All	All	5231/5700 (92%)	5102 (98%)	120 (2%)	9 (0%)	43	44

5 of 9 Ramachandran outliers are listed below:

Mol	Chain	Res	Type
3	C	416	SER
16	V	64	PRO
3	c	416	SER
15	u	53	ALA
9	J	6	GLY

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	270/280 (96%)	268 (99%)	2 (1%)	76	82
1	a	269/280 (96%)	263 (98%)	6 (2%)	45	51
2	B	408/407 (100%)	404 (99%)	4 (1%)	68	75
2	b	403/407 (99%)	399 (99%)	4 (1%)	68	75
3	C	345/362 (95%)	341 (99%)	4 (1%)	63	70
3	c	354/362 (98%)	347 (98%)	7 (2%)	48	54
4	D	276/283 (98%)	275 (100%)	1 (0%)	84	89
4	d	277/283 (98%)	273 (99%)	4 (1%)	59	66
5	E	72/73 (99%)	70 (97%)	2 (3%)	38	40
5	e	71/73 (97%)	70 (99%)	1 (1%)	59	66
6	F	28/39 (72%)	27 (96%)	1 (4%)	31	31
6	f	28/39 (72%)	27 (96%)	1 (4%)	31	31
7	H	54/55 (98%)	54 (100%)	0	100	100
7	h	53/55 (96%)	52 (98%)	1 (2%)	50	56
8	I	32/34 (94%)	31 (97%)	1 (3%)	35	37
8	i	32/34 (94%)	31 (97%)	1 (3%)	35	37
9	J	24/28 (86%)	24 (100%)	0	100	100
9	j	24/28 (86%)	24 (100%)	0	100	100
10	K	30/37 (81%)	29 (97%)	1 (3%)	33	34
10	k	30/37 (81%)	26 (87%)	4 (13%)	4	1

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
11	L	35/35 (100%)	34 (97%)	1 (3%)	37	39
11	l	34/35 (97%)	32 (94%)	2 (6%)	18	13
12	M	28/32 (88%)	27 (96%)	1 (4%)	31	31
12	m	28/32 (88%)	27 (96%)	1 (4%)	31	31
13	O	206/228 (90%)	200 (97%)	6 (3%)	37	39
13	o	207/228 (91%)	204 (99%)	3 (1%)	59	66
14	T	26/28 (93%)	25 (96%)	1 (4%)	29	29
14	t	25/28 (89%)	25 (100%)	0	100	100
15	U	84/112 (75%)	82 (98%)	2 (2%)	43	47
15	u	84/112 (75%)	84 (100%)	0	100	100
16	V	117/138 (85%)	114 (97%)	3 (3%)	40	43
16	v	117/138 (85%)	115 (98%)	2 (2%)	53	60
17	Y	19/37 (51%)	19 (100%)	0	100	100
17	y	22/37 (60%)	21 (96%)	1 (4%)	24	22
18	X	31/34 (91%)	31 (100%)	0	100	100
18	x	31/34 (91%)	30 (97%)	1 (3%)	34	36
19	Z	52/52 (100%)	52 (100%)	0	100	100
19	z	51/52 (98%)	50 (98%)	1 (2%)	48	54
20	R	22/33 (67%)	21 (96%)	1 (4%)	24	22
20	r	22/33 (67%)	19 (86%)	3 (14%)	3	1
All	All	4321/4654 (93%)	4247 (98%)	74 (2%)	53	60

5 of 74 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
10	k	17	ILE
20	r	10	LEU
10	k	27	VAL
13	o	118	LEU
14	T	29	ILE

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

Mol	Chain	Res	Type
3	c	415	ASN
13	o	155	ASN
4	d	61	HIS
11	l	8	GLN
17	y	45	ASN

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	$\# Z > 2$
14	FME	T	1	14	8,9,10	0.32	0	8,9,11	1.70	2 (25%)
8	FME	i	1	8	8,9,10	0.47	0	8,9,11	0.66	0
14	FME	t	1	14	8,9,10	0.49	0	8,9,11	0.92	0
12	FME	M	1	12	8,9,10	0.50	0	8,9,11	1.11	1 (12%)
8	FME	I	1	8	8,9,10	0.49	0	8,9,11	1.00	0
12	FME	m	1	12	8,9,10	0.45	0	8,9,11	0.64	0

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
14	FME	T	1	14	-	2/7/9/11	-
8	FME	i	1	8	-	1/7/9/11	-
14	FME	t	1	14	-	4/7/9/11	-
12	FME	M	1	12	-	0/7/9/11	-
8	FME	I	1	8	-	2/7/9/11	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
12	FME	m	1	12	-	0/7/9/11	-

There are no bond length outliers.

All (3) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	T	1	FME	CA-N-CN	3.71	128.52	122.82
12	M	1	FME	CA-N-CN	-2.59	118.84	122.82
14	T	1	FME	CG-CB-CA	2.07	119.21	112.87

There are no chirality outliers.

5 of 9 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
14	t	1	FME	O-C-CA-CB
14	t	1	FME	N-CA-CB-CG
14	t	1	FME	CB-CG-SD-CE
14	t	1	FME	C-CA-CB-CG
8	I	1	FME	CA-CB-CG-SD

There are no ring outliers.

1 monomer is involved in 1 short contact:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
14	T	1	FME	1	0

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 211 ligands modelled in this entry, 6 are monoatomic - leaving 205 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	507	36	69,73,73	1.40	8 (11%)	82,113,113	1.34	6 (7%)
24	CLA	b	607	36	69,73,73	1.11	8 (11%)	82,113,113	1.22	8 (9%)
26	BCR	J	101	-	41,41,41	0.38	0	56,56,56	0.99	2 (3%)
32	DGD	A	616	-	67,67,67	0.49	0	81,81,81	1.04	6 (7%)
28	STE	z	703	-	8,8,19	0.40	0	7,7,19	0.58	0
24	CLA	b	603	2	69,73,73	1.14	9 (13%)	82,113,113	1.28	6 (7%)
29	LMG	D	409	-	51,51,55	0.45	0	59,59,63	0.68	2 (3%)
24	CLA	B	602	2	69,73,73	1.24	8 (11%)	82,113,113	1.41	9 (10%)
28	STE	e	105	-	12,12,19	0.68	0	12,12,19	1.33	2 (16%)
24	CLA	b	613	2	69,73,73	1.24	9 (13%)	82,113,113	1.31	10 (12%)
24	CLA	b	605	2	69,73,73	1.18	6 (8%)	82,113,113	1.52	9 (10%)
24	CLA	c	513	3	69,73,73	1.29	10 (14%)	82,113,113	1.17	7 (8%)
28	STE	j	101	-	11,11,19	0.78	0	11,11,19	1.05	0
24	CLA	c	511	3	69,73,73	1.40	7 (10%)	82,113,113	1.44	5 (6%)
28	STE	J	102	-	11,11,19	0.75	0	11,11,19	1.10	0
26	BCR	H	101	-	41,41,41	0.44	0	56,56,56	0.94	4 (7%)
24	CLA	c	509	3	69,73,73	1.25	7 (10%)	82,113,113	1.32	7 (8%)
26	BCR	C	514	-	41,41,41	0.33	0	56,56,56	0.77	0
28	STE	C	519	-	6,6,19	0.43	0	5,5,19	0.52	0
28	STE	z	702	-	17,17,19	0.42	0	16,16,19	0.67	0
24	CLA	B	610	36	69,73,73	1.39	11 (15%)	82,113,113	1.39	11 (13%)
24	CLA	b	611	2	69,73,73	1.33	7 (10%)	82,113,113	1.33	9 (10%)
28	STE	I	102	-	14,14,19	0.69	0	14,14,19	1.16	1 (7%)
28	STE	X	101	-	19,19,19	0.59	0	19,19,19	1.16	2 (10%)
24	CLA	b	609	2	69,73,73	1.31	8 (11%)	82,113,113	1.27	9 (10%)
26	BCR	C	515	-	41,41,41	0.33	0	56,56,56	0.72	0
28	STE	d	413	-	13,13,19	0.74	0	13,13,19	1.07	0
28	STE	A	611	-	8,8,19	0.39	0	7,7,19	0.68	0
26	BCR	B	617	-	41,41,41	0.41	0	56,56,56	0.75	1 (1%)
28	STE	e	101	-	8,8,19	0.38	0	7,7,19	0.68	0
32	DGD	H	102	-	63,63,67	0.54	0	77,77,81	0.97	4 (5%)
24	CLA	B	613	2	69,73,73	1.27	7 (10%)	82,113,113	1.37	5 (6%)
24	CLA	C	505	3	69,73,73	1.43	7 (10%)	82,113,113	1.43	6 (7%)
24	CLA	C	508	3	69,73,73	1.31	8 (11%)	82,113,113	1.43	8 (9%)
28	STE	C	527	-	13,13,19	0.34	0	12,12,19	0.86	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
29	LMG	a	615	-	49,49,55	0.48	0	57,57,63	0.96	3 (5%)
28	STE	i	102	-	5,5,19	0.41	0	4,4,19	0.46	0
28	STE	f	103	-	15,15,19	0.36	0	14,14,19	0.78	0
26	BCR	b	617	-	41,41,41	0.38	0	56,56,56	0.72	0
26	BCR	B	619	-	41,41,41	0.41	0	56,56,56	0.93	3 (5%)
29	LMG	C	517	-	35,35,55	0.50	0	43,43,63	1.43	6 (13%)
24	CLA	D	403	36	69,73,73	1.42	8 (11%)	82,113,113	1.35	8 (9%)
24	CLA	B	615	2	69,73,73	1.42	8 (11%)	82,113,113	1.37	5 (6%)
32	DGD	h	101	-	63,63,67	0.56	0	77,77,81	0.94	7 (9%)
28	STE	A	618	-	16,16,19	0.42	0	15,15,19	0.64	0
34	HEM	F	101	5,6	50,50,50	1.46	8 (16%)	67,82,82	1.23	3 (4%)
24	CLA	B	606	2	69,73,73	1.30	8 (11%)	82,113,113	1.35	7 (8%)
24	CLA	C	507	36	69,73,73	1.28	7 (10%)	82,113,113	1.48	8 (9%)
28	STE	e	104	-	8,8,19	0.38	0	7,7,19	0.72	0
32	DGD	c	518	-	63,63,67	0.62	0	77,77,81	0.89	3 (3%)
24	CLA	B	614	2	69,73,73	1.24	7 (10%)	82,113,113	1.46	8 (9%)
31	LHG	d	409	-	38,38,48	0.59	0	41,44,54	0.68	0
21	OEX	a	601	36,1,3	0,14,14	-	-	-	-	-
24	CLA	b	608	2	69,73,73	1.17	7 (10%)	82,113,113	1.34	10 (12%)
24	CLA	C	504	36	63,67,73	1.32	8 (12%)	74,105,113	1.29	7 (9%)
25	PHO	a	608	-	58,69,69	2.15	8 (13%)	55,99,99	1.76	13 (23%)
24	CLA	b	615	2	69,73,73	1.38	9 (13%)	82,113,113	1.40	5 (6%)
31	LHG	e	103	-	41,41,48	0.57	0	44,47,54	0.58	0
34	HEM	e	102	5,6	50,50,50	1.58	8 (16%)	67,82,82	1.35	9 (13%)
31	LHG	D	412	-	46,46,48	0.54	0	49,52,54	0.64	1 (2%)
24	CLA	C	502	3	69,73,73	1.45	9 (13%)	82,113,113	1.22	4 (4%)
28	STE	B	621	-	16,16,19	0.65	0	16,16,19	1.16	0
28	STE	B	624	-	13,13,19	0.67	0	13,13,19	1.26	2 (15%)
28	STE	C	528	-	13,13,19	0.31	0	12,12,19	0.83	0
21	OEX	A	601	36,1,3	0,14,14	-	-	-	-	-
29	LMG	B	620	-	45,45,55	0.59	0	53,53,63	1.23	6 (11%)
28	STE	b	621	-	19,19,19	0.62	0	19,19,19	1.13	0
26	BCR	K	101	-	41,41,41	0.38	0	56,56,56	0.85	0
24	CLA	b	604	2	69,73,73	1.36	6 (8%)	82,113,113	1.58	11 (13%)
28	STE	M	102	-	14,14,19	0.62	0	14,14,19	1.25	1 (7%)
24	CLA	A	608	1	58,62,73	1.17	5 (8%)	68,99,113	1.36	10 (14%)
28	STE	t	102	-	9,9,19	0.39	0	8,8,19	0.69	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
24	CLA	b	614	2	69,73,73	1.26	8 (11%)	82,113,113	1.38	9 (10%)
24	CLA	C	512	3	69,73,73	1.32	10 (14%)	82,113,113	1.32	7 (8%)
27	PL9	d	406	-	55,55,55	1.10	4 (7%)	68,69,69	1.54	15 (22%)
28	STE	H	104	-	8,8,19	0.37	0	7,7,19	0.71	0
24	CLA	C	510	3	69,73,73	1.40	10 (14%)	82,113,113	1.34	5 (6%)
31	LHG	D	411	-	48,48,48	0.55	0	51,54,54	0.67	1 (1%)
28	STE	C	525	-	11,11,19	0.83	0	11,11,19	1.21	1 (9%)
28	STE	d	412	-	19,19,19	0.64	0	19,19,19	0.90	0
24	CLA	a	609	1	69,73,73	1.16	7 (10%)	82,113,113	1.23	9 (10%)
24	CLA	b	606	2	69,73,73	1.50	9 (13%)	82,113,113	1.43	7 (8%)
30	SQD	a	613	-	52,54,54	1.50	7 (13%)	62,65,65	1.70	13 (20%)
28	STE	C	526	-	15,15,19	0.32	0	14,14,19	0.84	0
28	STE	l	102	-	17,17,19	0.31	0	16,16,19	0.91	0
24	CLA	b	601	36	69,73,73	1.25	8 (11%)	82,113,113	1.32	8 (9%)
27	PL9	A	610	-	55,55,55	0.81	2 (3%)	68,69,69	1.61	10 (14%)
28	STE	E	102	-	11,11,19	0.35	0	10,10,19	0.77	0
28	STE	C	516	-	13,13,19	0.78	0	13,13,19	1.11	1 (7%)
28	STE	b	625	-	9,9,19	0.36	0	8,8,19	0.67	0
28	STE	d	410	-	19,19,19	0.60	0	19,19,19	1.10	1 (5%)
29	LMG	A	612	-	48,48,55	0.47	0	56,56,63	0.77	0
28	STE	C	518	-	4,4,19	0.41	0	3,3,19	0.41	0
29	LMG	C	524	-	48,48,55	0.47	0	56,56,63	0.67	0
31	LHG	a	612	-	48,48,48	0.58	0	51,54,54	0.55	0
35	HEC	V	201	16	50,50,50	1.75	6 (12%)	68,82,82	1.48	7 (10%)
28	STE	H	103	-	17,17,19	0.41	0	16,16,19	0.75	0
24	CLA	c	501	3	69,73,73	1.16	7 (10%)	82,113,113	1.33	6 (7%)
24	CLA	b	610	36	69,73,73	1.33	8 (11%)	82,113,113	1.23	9 (10%)
24	CLA	B	609	2	69,73,73	1.33	6 (8%)	82,113,113	1.29	6 (7%)
26	BCR	a	610	-	41,41,41	0.38	0	56,56,56	0.75	1 (1%)
28	STE	E	101	-	11,11,19	0.74	0	11,11,19	1.16	1 (9%)
28	STE	a	616	-	11,11,19	0.76	0	11,11,19	1.10	0
24	CLA	d	404	4	69,73,73	1.28	11 (15%)	82,113,113	1.20	9 (10%)
26	BCR	c	515	-	41,41,41	0.37	0	56,56,56	0.81	1 (1%)
27	PL9	a	611	-	55,55,55	0.67	0	68,69,69	1.61	10 (14%)
24	CLA	c	505	3	69,73,73	1.22	9 (13%)	82,113,113	1.36	10 (12%)
28	STE	h	103	-	10,10,19	0.34	0	9,9,19	0.71	0
30	SQD	D	410	-	34,36,54	1.50	4 (11%)	42,45,65	1.91	9 (21%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
28	STE	Z	101	-	16,16,19	0.40	0	15,15,19	0.70	0
28	STE	E	103	-	19,19,19	0.62	0	19,19,19	1.15	2 (10%)
29	LMG	B	625	-	55,55,55	0.49	0	63,63,63	1.25	4 (6%)
30	SQD	a	614	-	52,54,54	1.59	8 (15%)	62,65,65	1.70	11 (17%)
28	STE	d	407	-	19,19,19	0.67	0	19,19,19	0.92	1 (5%)
24	CLA	A	605	1	69,73,73	1.44	9 (13%)	82,113,113	1.35	8 (9%)
24	CLA	B	604	2	69,73,73	1.36	7 (10%)	82,113,113	1.39	7 (8%)
24	CLA	c	506	3	69,73,73	1.23	8 (11%)	82,113,113	1.17	7 (8%)
25	PHO	a	607	-	58,69,69	2.03	11 (18%)	55,99,99	1.60	11 (20%)
24	CLA	c	512	3	69,73,73	1.31	8 (11%)	82,113,113	1.34	6 (7%)
28	STE	m	102	-	11,11,19	0.68	0	11,11,19	1.38	2 (18%)
24	CLA	c	510	3	69,73,73	1.30	9 (13%)	82,113,113	1.28	6 (7%)
30	SQD	A	613	-	50,52,54	1.57	7 (14%)	60,63,65	1.98	12 (20%)
29	LMG	D	408	-	50,50,55	0.42	0	58,58,63	1.18	7 (12%)
28	STE	A	617	-	7,7,19	0.34	0	6,6,19	0.70	0
24	CLA	c	504	36	64,68,73	1.24	8 (12%)	76,107,113	1.37	10 (13%)
24	CLA	C	513	3	69,73,73	1.48	10 (14%)	82,113,113	1.33	10 (12%)
24	CLA	B	608	2	69,73,73	1.20	6 (8%)	82,113,113	1.19	7 (8%)
24	CLA	A	606	36	69,73,73	1.36	8 (11%)	82,113,113	1.31	10 (12%)
24	CLA	C	501	3	69,73,73	1.43	8 (11%)	82,113,113	1.32	6 (7%)
28	STE	B	627	-	11,11,19	0.73	0	11,11,19	1.11	1 (9%)
28	STE	i	101	-	11,11,19	0.75	0	11,11,19	1.18	1 (9%)
29	LMG	c	516	-	29,29,55	0.40	0	31,31,63	0.63	1 (3%)
32	DGD	C	522	-	63,63,67	0.60	0	77,77,81	0.81	1 (1%)
28	STE	z	701	-	12,12,19	0.36	0	11,11,19	0.73	0
28	STE	b	624	-	14,14,19	0.32	0	13,13,19	0.89	0
30	SQD	b	620	-	47,49,54	1.61	8 (17%)	57,60,65	1.92	13 (22%)
26	BCR	c	514	-	41,41,41	0.33	0	56,56,56	0.50	0
31	LHG	B	622	-	48,48,48	0.60	1 (2%)	51,54,54	0.92	2 (3%)
26	BCR	k	101	-	41,41,41	0.38	0	56,56,56	0.83	0
24	CLA	B	612	2	69,73,73	1.17	8 (11%)	82,113,113	1.57	11 (13%)
28	STE	f	102	-	7,7,19	0.38	0	6,6,19	0.66	0
32	DGD	C	521	-	63,63,67	0.58	0	77,77,81	0.89	2 (2%)
24	CLA	b	612	2	69,73,73	1.29	8 (11%)	82,113,113	1.42	12 (14%)
33	BCT	d	401	22	3,3,3	0.81	0	2,3,3	2.02	1 (50%)
28	STE	I	101	-	16,16,19	0.72	0	16,16,19	1.02	1 (6%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
24	CLA	c	503	3	69,73,73	1.39	9 (13%)	82,113,113	1.39	8 (9%)
28	STE	b	623	-	15,15,19	0.74	0	15,15,19	1.14	2 (13%)
24	CLA	D	404	4	69,73,73	1.24	8 (11%)	82,113,113	1.26	9 (10%)
24	CLA	C	503	3	69,73,73	1.40	8 (11%)	82,113,113	1.59	11 (13%)
25	PHO	A	607	-	58,69,69	2.03	9 (15%)	55,99,99	1.84	10 (18%)
28	STE	B	628	-	14,14,19	0.40	0	13,13,19	0.78	0
28	STE	h	102	-	9,9,19	0.38	0	8,8,19	0.66	0
26	BCR	T	101	-	41,41,41	0.52	0	56,56,56	1.00	2 (3%)
27	PL9	D	407	-	55,55,55	0.98	2 (3%)	68,69,69	1.47	14 (20%)
30	SQD	A	615	-	41,43,54	1.79	9 (21%)	51,54,65	1.57	8 (15%)
31	LHG	L	101	-	48,48,48	0.49	0	51,54,54	0.72	1 (1%)
29	LMG	c	522	-	48,48,55	0.49	0	56,56,63	0.84	3 (5%)
24	CLA	C	509	3	69,73,73	1.17	6 (8%)	82,113,113	1.31	8 (9%)
24	CLA	D	405	4	69,73,73	1.20	9 (13%)	82,113,113	1.26	7 (8%)
29	LMG	c	521	-	46,46,55	0.51	0	54,54,63	0.65	0
35	HEC	v	201	16	50,50,50	1.77	9 (18%)	68,82,82	1.39	9 (13%)
28	STE	B	626	-	17,17,19	0.58	0	17,17,19	1.26	2 (11%)
28	STE	M	103	-	9,9,19	0.39	0	8,8,19	0.75	0
30	SQD	B	623	-	52,54,54	1.56	8 (15%)	62,65,65	1.81	14 (22%)
24	CLA	a	605	1	69,73,73	1.48	11 (15%)	82,113,113	1.36	7 (8%)
24	CLA	d	402	36	69,73,73	1.42	7 (10%)	82,113,113	1.35	7 (8%)
32	DGD	c	519	-	63,63,67	0.60	0	77,77,81	0.87	5 (6%)
32	DGD	c	520	-	63,63,67	0.56	0	77,77,81	0.79	2 (2%)
26	BCR	B	618	-	41,41,41	0.40	0	56,56,56	0.84	1 (1%)
28	STE	T	102	-	15,15,19	0.41	0	14,14,19	0.74	0
24	CLA	B	603	2	69,73,73	1.23	5 (7%)	82,113,113	1.16	5 (6%)
31	LHG	d	408	-	48,48,48	0.50	0	51,54,54	0.72	1 (1%)
28	STE	C	520	-	9,9,19	0.39	0	8,8,19	0.67	0
24	CLA	a	606	36	69,73,73	1.17	5 (7%)	82,113,113	1.32	6 (7%)
31	LHG	A	614	-	48,48,48	0.55	0	51,54,54	0.49	0
24	CLA	d	403	4	69,73,73	1.35	10 (14%)	82,113,113	1.34	6 (7%)
26	BCR	d	405	-	41,41,41	0.43	0	56,56,56	1.03	2 (3%)
24	CLA	C	506	3	69,73,73	1.21	8 (11%)	82,113,113	1.31	7 (8%)
24	CLA	b	602	2	69,73,73	1.36	8 (11%)	82,113,113	1.43	7 (8%)
28	STE	A	619	-	10,10,19	0.39	0	9,9,19	0.67	0
29	LMG	d	411	-	44,44,55	0.52	0	52,52,63	0.69	2 (3%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
26	BCR	x	101	-	41,41,41	0.40	0	56,56,56	0.79	1 (1%)
33	BCT	D	401	22	3,3,3	0.83	0	2,3,3	1.58	1 (50%)
26	BCR	b	618	-	41,41,41	0.46	0	56,56,56	1.00	4 (7%)
26	BCR	b	619	-	41,41,41	0.39	0	56,56,56	0.67	1 (1%)
26	BCR	c	517	-	41,41,41	0.40	0	56,56,56	0.84	1 (1%)
29	LMG	m	101	-	51,51,55	0.49	0	59,59,63	0.98	3 (5%)
24	CLA	C	511	3	69,73,73	1.36	9 (13%)	82,113,113	1.33	6 (7%)
24	CLA	B	616	2	64,68,73	1.36	10 (15%)	76,107,113	1.50	11 (14%)
29	LMG	M	101	-	51,51,55	0.47	0	59,59,63	0.80	1 (1%)
24	CLA	B	601	36	69,73,73	1.39	7 (10%)	82,113,113	1.40	7 (8%)
24	CLA	B	607	36	69,73,73	1.24	5 (7%)	82,113,113	1.30	8 (9%)
30	SQD	f	101	-	39,41,54	1.67	7 (17%)	49,52,65	1.84	10 (20%)
24	CLA	c	502	3	69,73,73	1.25	8 (11%)	82,113,113	1.39	8 (9%)
31	LHG	l	101	-	48,48,48	0.50	0	51,54,54	0.52	0
29	LMG	b	622	-	55,55,55	0.47	0	63,63,63	1.00	4 (6%)
24	CLA	c	508	3	68,72,73	1.26	9 (13%)	80,111,113	1.36	10 (12%)
26	BCR	D	406	-	41,41,41	0.42	0	56,56,56	0.93	1 (1%)
26	BCR	A	609	-	41,41,41	0.46	0	56,56,56	0.84	1 (1%)
24	CLA	b	616	2	64,68,73	1.33	7 (10%)	76,107,113	1.51	10 (13%)
24	CLA	B	605	2	69,73,73	1.15	5 (7%)	82,113,113	1.24	6 (7%)
26	BCR	t	101	-	41,41,41	0.49	0	56,56,56	1.11	4 (7%)
32	DGD	C	523	-	63,63,67	0.60	0	77,77,81	0.86	2 (2%)
25	PHO	D	402	-	58,69,69	2.05	13 (22%)	55,99,99	1.56	8 (14%)
24	CLA	B	611	2	69,73,73	1.22	9 (13%)	82,113,113	1.46	9 (10%)

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	507	36	-	13/39/115/115	-
24	CLA	b	607	36	-	16/39/115/115	-
26	BCR	J	101	-	-	4/29/63/63	0/2/2/2
32	DGD	A	616	-	-	18/55/95/95	0/2/2/2
28	STE	z	703	-	-	4/6/6/17	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
24	CLA	b	603	2	-	8/39/115/115	-
29	LMG	D	409	-	-	10/46/66/70	0/1/1/1
24	CLA	B	602	2	-	5/39/115/115	-
28	STE	e	105	-	-	2/10/10/17	-
24	CLA	b	613	2	-	8/39/115/115	-
24	CLA	b	605	2	-	13/39/115/115	-
24	CLA	c	513	3	-	12/39/115/115	-
28	STE	j	101	-	-	3/9/9/17	-
24	CLA	c	511	3	-	4/39/115/115	-
28	STE	J	102	-	-	7/9/9/17	-
26	BCR	H	101	-	-	3/29/63/63	0/2/2/2
24	CLA	c	509	3	-	14/39/115/115	-
26	BCR	C	514	-	-	5/29/63/63	0/2/2/2
28	STE	C	519	-	-	3/4/4/17	-
28	STE	z	702	-	-	7/15/15/17	-
24	CLA	B	610	36	-	10/39/115/115	-
24	CLA	b	611	2	-	6/39/115/115	-
28	STE	I	102	-	-	6/12/12/17	-
28	STE	X	101	-	-	9/17/17/17	-
24	CLA	b	609	2	-	4/39/115/115	-
26	BCR	C	515	-	-	1/29/63/63	0/2/2/2
28	STE	d	413	-	-	4/11/11/17	-
28	STE	A	611	-	-	5/6/6/17	-
26	BCR	B	617	-	-	3/29/63/63	0/2/2/2
28	STE	e	101	-	-	2/6/6/17	-
32	DGD	H	102	-	-	15/51/91/95	0/2/2/2
24	CLA	B	613	2	-	16/39/115/115	-
24	CLA	C	505	3	-	9/39/115/115	-
24	CLA	C	508	3	-	5/39/115/115	-
28	STE	C	527	-	-	9/11/11/17	-
29	LMG	a	615	-	-	18/44/64/70	0/1/1/1
28	STE	i	102	-	-	2/3/3/17	-
28	STE	f	103	-	-	5/13/13/17	-
26	BCR	b	617	-	-	2/29/63/63	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
26	BCR	B	619	-	-	0/29/63/63	0/2/2/2
29	LMG	C	517	-	-	11/30/50/70	0/1/1/1
24	CLA	D	403	36	-	3/39/115/115	-
24	CLA	B	615	2	-	14/39/115/115	-
32	DGD	h	101	-	-	12/51/91/95	0/2/2/2
28	STE	A	618	-	-	11/14/14/17	-
34	HEM	F	101	5,6	-	2/14/54/54	-
24	CLA	B	606	2	-	12/39/115/115	-
24	CLA	C	507	36	-	12/39/115/115	-
28	STE	e	104	-	-	3/6/6/17	-
32	DGD	c	518	-	-	21/51/91/95	0/2/2/2
24	CLA	B	614	2	-	13/39/115/115	-
31	LHG	d	409	-	-	15/43/43/53	-
24	CLA	b	608	2	-	2/39/115/115	-
24	CLA	C	504	36	-	3/32/108/115	-
25	PHO	a	608	-	-	1/37/103/103	0/5/6/6
24	CLA	b	615	2	-	6/39/115/115	-
31	LHG	e	103	-	-	21/46/46/53	-
34	HEM	e	102	5,6	-	4/14/54/54	-
31	LHG	D	412	-	-	12/51/51/53	-
24	CLA	C	502	3	-	12/39/115/115	-
28	STE	B	621	-	-	9/14/14/17	-
28	STE	B	624	-	-	2/11/11/17	-
28	STE	C	528	-	-	7/11/11/17	-
29	LMG	B	620	-	-	13/40/60/70	0/1/1/1
28	STE	b	621	-	-	11/17/17/17	-
26	BCR	K	101	-	-	4/29/63/63	0/2/2/2
24	CLA	b	604	2	-	9/39/115/115	-
28	STE	M	102	-	-	10/12/12/17	-
24	CLA	A	608	1	-	3/26/102/115	-
28	STE	t	102	-	-	2/7/7/17	-
24	CLA	b	614	2	-	17/39/115/115	-
24	CLA	C	512	3	-	14/39/115/115	-
27	PL9	d	406	-	-	13/53/73/73	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
28	STE	H	104	-	-	4/6/6/17	-
24	CLA	C	510	3	-	7/39/115/115	-
31	LHG	D	411	-	-	19/53/53/53	-
28	STE	C	525	-	-	3/9/9/17	-
28	STE	d	412	-	-	10/17/17/17	-
24	CLA	a	609	1	-	14/39/115/115	-
24	CLA	b	606	2	-	6/39/115/115	-
30	SQD	a	613	-	-	20/49/69/69	0/1/1/1
28	STE	C	526	-	-	8/13/13/17	-
28	STE	l	102	-	-	4/15/15/17	-
24	CLA	b	601	36	-	19/39/115/115	-
27	PL9	A	610	-	-	18/53/73/73	0/1/1/1
28	STE	E	102	-	-	5/9/9/17	-
28	STE	C	516	-	-	8/11/11/17	-
28	STE	b	625	-	-	6/7/7/17	-
28	STE	d	410	-	-	7/17/17/17	-
29	LMG	A	612	-	-	19/43/63/70	0/1/1/1
28	STE	C	518	-	-	0/2/2/17	-
29	LMG	C	524	-	-	21/43/63/70	0/1/1/1
31	LHG	a	612	-	-	18/53/53/53	-
35	HEC	V	201	16	1/1/3/7	5/14/54/54	-
28	STE	H	103	-	-	7/15/15/17	-
24	CLA	c	501	3	-	4/39/115/115	-
24	CLA	b	610	36	-	5/39/115/115	-
24	CLA	B	609	2	-	5/39/115/115	-
26	BCR	a	610	-	-	0/29/63/63	0/2/2/2
28	STE	E	101	-	-	4/9/9/17	-
28	STE	a	616	-	-	3/9/9/17	-
24	CLA	d	404	4	-	10/39/115/115	-
26	BCR	c	515	-	-	2/29/63/63	0/2/2/2
27	PL9	a	611	-	-	26/53/73/73	0/1/1/1
24	CLA	c	505	3	-	10/39/115/115	-
28	STE	h	103	-	-	7/8/8/17	-
30	SQD	D	410	-	-	16/28/48/69	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
28	STE	Z	101	-	-	8/14/14/17	-
28	STE	E	103	-	-	6/17/17/17	-
29	LMG	B	625	-	-	26/50/70/70	0/1/1/1
30	SQD	a	614	-	-	24/49/69/69	0/1/1/1
28	STE	d	407	-	-	10/17/17/17	-
24	CLA	A	605	1	-	11/39/115/115	-
24	CLA	B	604	2	-	10/39/115/115	-
24	CLA	c	506	3	-	17/39/115/115	-
25	PHO	a	607	-	-	6/37/103/103	0/5/6/6
24	CLA	c	512	3	-	17/39/115/115	-
28	STE	m	102	-	-	3/9/9/17	-
24	CLA	c	510	3	-	6/39/115/115	-
30	SQD	A	613	-	-	19/47/67/69	0/1/1/1
29	LMG	D	408	-	-	19/45/65/70	0/1/1/1
28	STE	A	617	-	-	4/5/5/17	-
24	CLA	c	504	36	-	5/33/109/115	-
24	CLA	C	513	3	-	14/39/115/115	-
24	CLA	B	608	2	-	10/39/115/115	-
24	CLA	A	606	36	-	9/39/115/115	-
24	CLA	C	501	3	-	4/39/115/115	-
28	STE	B	627	-	-	6/9/9/17	-
28	STE	i	101	-	-	6/9/9/17	-
29	LMG	c	516	-	-	8/31/31/70	-
32	DGD	C	522	-	-	19/51/91/95	0/2/2/2
28	STE	z	701	-	-	6/10/10/17	-
28	STE	b	624	-	-	9/12/12/17	-
30	SQD	b	620	-	-	19/44/64/69	0/1/1/1
26	BCR	c	514	-	-	0/29/63/63	0/2/2/2
31	LHG	B	622	-	-	18/53/53/53	-
26	BCR	k	101	-	-	5/29/63/63	0/2/2/2
24	CLA	B	612	2	-	10/39/115/115	-
28	STE	f	102	-	-	4/5/5/17	-
32	DGD	C	521	-	-	24/51/91/95	0/2/2/2
24	CLA	b	612	2	-	3/39/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
28	STE	I	101	-	-	8/14/14/17	-
24	CLA	c	503	3	-	8/39/115/115	-
28	STE	b	623	-	-	6/13/13/17	-
24	CLA	D	404	4	-	7/39/115/115	-
24	CLA	C	503	3	-	3/39/115/115	-
25	PHO	A	607	-	-	1/37/103/103	0/5/6/6
28	STE	B	628	-	-	7/12/12/17	-
28	STE	h	102	-	-	4/7/7/17	-
26	BCR	T	101	-	-	9/29/63/63	0/2/2/2
27	PL9	D	407	-	-	6/53/73/73	0/1/1/1
30	SQD	A	615	-	-	13/38/58/69	0/1/1/1
31	LHG	L	101	-	-	18/53/53/53	-
29	LMG	c	522	-	-	19/43/63/70	0/1/1/1
24	CLA	C	509	3	-	9/39/115/115	-
35	HEC	v	201	16	1/1/3/7	6/14/54/54	-
24	CLA	D	405	4	-	4/39/115/115	-
29	LMG	c	521	-	-	15/41/61/70	0/1/1/1
28	STE	B	626	-	-	8/15/15/17	-
28	STE	M	103	-	-	1/7/7/17	-
30	SQD	B	623	-	-	20/49/69/69	0/1/1/1
24	CLA	a	605	1	-	5/39/115/115	-
24	CLA	d	402	36	-	5/39/115/115	-
32	DGD	c	519	-	-	12/51/91/95	0/2/2/2
32	DGD	c	520	-	-	16/51/91/95	0/2/2/2
26	BCR	B	618	-	-	0/29/63/63	0/2/2/2
28	STE	T	102	-	-	7/13/13/17	-
24	CLA	B	603	2	-	7/39/115/115	-
31	LHG	d	408	-	-	20/53/53/53	-
28	STE	C	520	-	-	5/7/7/17	-
24	CLA	a	606	36	-	11/39/115/115	-
31	LHG	A	614	-	-	20/53/53/53	-
24	CLA	d	403	4	-	8/39/115/115	-
26	BCR	d	405	-	-	4/29/63/63	0/2/2/2
24	CLA	C	506	3	-	8/39/115/115	-
24	CLA	b	602	2	-	6/39/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
28	STE	A	619	-	-	4/8/8/17	-
29	LMG	d	411	-	-	8/39/59/70	0/1/1/1
26	BCR	x	101	-	-	1/29/63/63	0/2/2/2
26	BCR	b	618	-	-	0/29/63/63	0/2/2/2
26	BCR	b	619	-	-	0/29/63/63	0/2/2/2
26	BCR	c	517	-	-	3/29/63/63	0/2/2/2
29	LMG	m	101	-	-	21/46/66/70	0/1/1/1
24	CLA	C	511	3	-	8/39/115/115	-
24	CLA	B	616	2	-	13/33/109/115	-
29	LMG	M	101	-	-	21/46/66/70	0/1/1/1
24	CLA	B	601	36	-	27/39/115/115	-
24	CLA	B	607	36	-	7/39/115/115	-
30	SQD	f	101	-	-	16/36/56/69	0/1/1/1
24	CLA	c	502	3	-	11/39/115/115	-
31	LHG	l	101	-	-	17/53/53/53	-
29	LMG	b	622	-	-	23/50/70/70	0/1/1/1
24	CLA	c	508	3	-	6/38/114/115	-
26	BCR	D	406	-	-	0/29/63/63	0/2/2/2
26	BCR	A	609	-	-	3/29/63/63	0/2/2/2
24	CLA	b	616	2	-	9/33/109/115	-
24	CLA	B	605	2	-	10/39/115/115	-
26	BCR	t	101	-	-	11/29/63/63	0/2/2/2
32	DGD	C	523	-	-	15/51/91/95	0/2/2/2
25	PHO	D	402	-	-	1/37/103/103	0/5/6/6
24	CLA	B	611	2	-	9/39/115/115	-

The worst 5 of 694 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	a	608	PHO	C3B-C4B	9.29	1.50	1.41
25	a	608	PHO	C1B-C2B	9.21	1.49	1.39
25	A	607	PHO	C3B-C4B	8.53	1.50	1.41
25	D	402	PHO	C3B-C4B	8.51	1.50	1.41
25	A	607	PHO	C1B-C2B	8.26	1.48	1.39

The worst 5 of 891 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	b	604	CLA	C4A-NA-C1A	9.08	110.82	106.68
24	C	507	CLA	C4A-NA-C1A	8.57	110.59	106.68
24	c	511	CLA	C4A-NA-C1A	8.57	110.59	106.68
24	C	503	CLA	C4A-NA-C1A	8.47	110.54	106.68
24	b	615	CLA	C4A-NA-C1A	8.25	110.44	106.68

All (2) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
35	V	201	HEC	NA
35	v	201	HEC	NA

5 of 1829 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
24	A	606	CLA	C4B-C3B-CAB-CBB
24	C	503	CLA	C11-C10-C8-C9
24	C	504	CLA	C4-C3-C5-C6
24	C	507	CLA	CHA-CBD-CGD-O2D
24	C	509	CLA	C11-C10-C8-C9

There are no ring outliers.

144 monomers are involved in 265 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
24	c	507	CLA	4	0
24	b	607	CLA	1	0
26	J	101	BCR	4	0
32	A	616	DGD	3	0
28	z	703	STE	1	0
29	D	409	LMG	3	0
24	B	602	CLA	1	0
24	b	613	CLA	4	0
24	b	605	CLA	2	0
24	c	513	CLA	2	0
28	j	101	STE	1	0
24	c	511	CLA	4	0
26	H	101	BCR	3	0
24	c	509	CLA	1	0
26	C	514	BCR	1	0
28	C	519	STE	1	0
28	z	702	STE	1	0
24	B	610	CLA	2	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
24	b	611	CLA	1	0
28	I	102	STE	2	0
28	X	101	STE	3	0
24	b	609	CLA	1	0
26	C	515	BCR	4	0
26	B	617	BCR	2	0
32	H	102	DGD	2	0
24	B	613	CLA	2	0
24	C	505	CLA	2	0
24	C	508	CLA	2	0
28	C	527	STE	1	0
29	a	615	LMG	2	0
26	B	619	BCR	2	0
24	D	403	CLA	3	0
24	B	615	CLA	1	0
32	h	101	DGD	3	0
28	A	618	STE	1	0
34	F	101	HEM	2	0
24	B	606	CLA	2	0
24	C	507	CLA	1	0
28	e	104	STE	1	0
32	c	518	DGD	1	0
24	B	614	CLA	3	0
24	C	504	CLA	1	0
25	a	608	PHO	2	0
24	b	615	CLA	5	0
31	e	103	LHG	1	0
34	e	102	HEM	3	0
31	D	412	LHG	4	0
24	C	502	CLA	1	0
29	B	620	LMG	4	0
24	b	604	CLA	3	0
28	M	102	STE	1	0
24	A	608	CLA	1	0
24	b	614	CLA	3	0
24	C	512	CLA	1	0
27	d	406	PL9	1	0
31	D	411	LHG	1	0
28	d	412	STE	1	0
24	a	609	CLA	4	0
24	b	606	CLA	2	0
30	a	613	SQD	2	0

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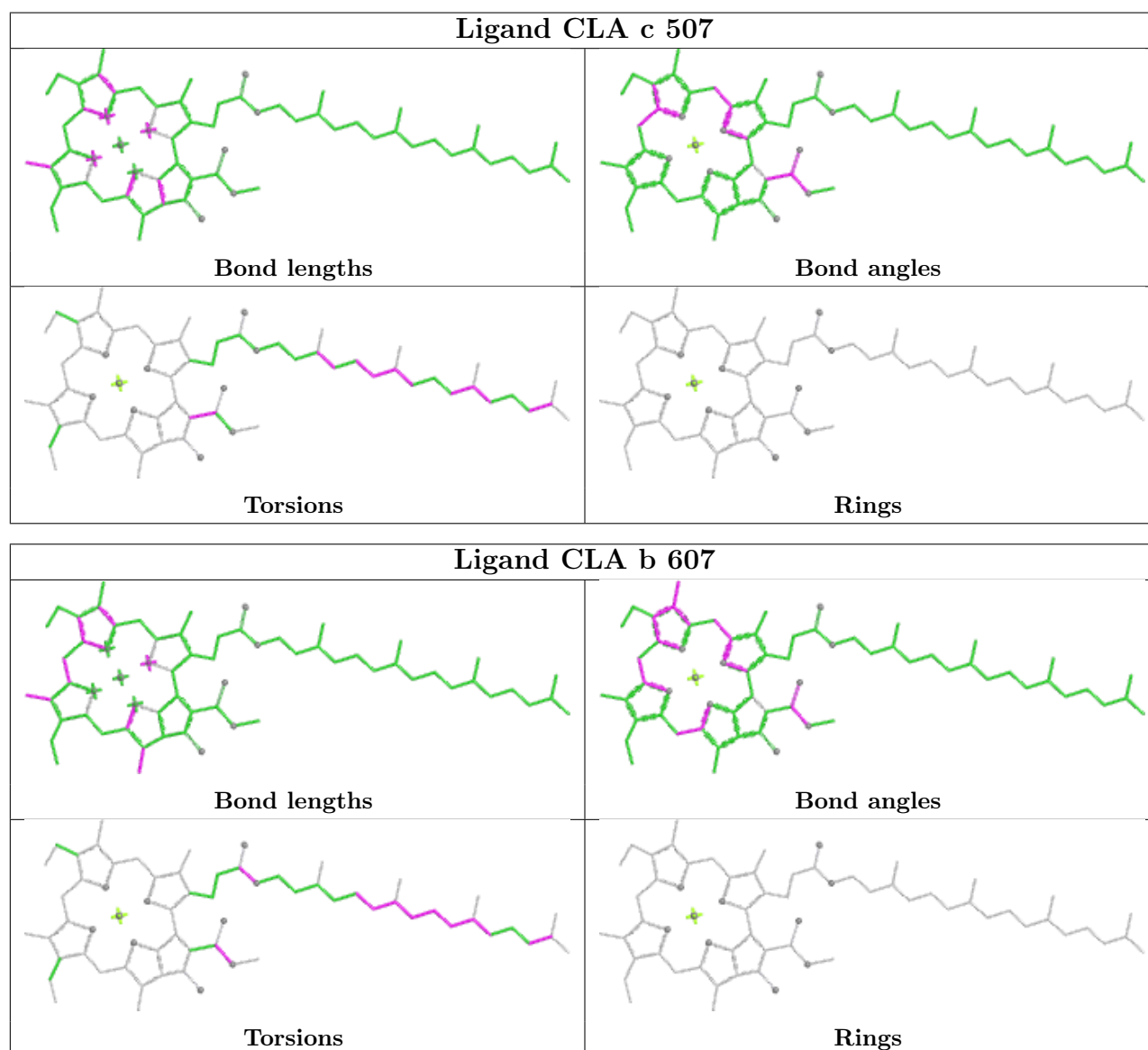
Mol	Chain	Res	Type	Clashes	Symm-Clashes
28	C	526	STE	1	0
28	l	102	STE	1	0
24	b	601	CLA	3	0
27	A	610	PL9	9	0
28	d	410	STE	4	0
29	A	612	LMG	1	0
29	C	524	LMG	1	0
31	a	612	LHG	3	0
28	H	103	STE	2	0
24	c	501	CLA	3	0
24	b	610	CLA	1	0
24	B	609	CLA	2	0
26	a	610	BCR	1	0
24	d	404	CLA	1	0
27	a	611	PL9	8	0
28	h	103	STE	2	0
30	D	410	SQD	1	0
28	E	103	STE	2	0
29	B	625	LMG	3	0
30	a	614	SQD	3	0
28	d	407	STE	5	0
24	A	605	CLA	3	0
24	B	604	CLA	3	0
24	c	506	CLA	2	0
24	c	512	CLA	5	0
24	c	510	CLA	2	0
30	A	613	SQD	2	0
29	D	408	LMG	9	0
24	c	504	CLA	1	0
24	C	513	CLA	2	0
24	B	608	CLA	3	0
24	A	606	CLA	4	0
28	i	101	STE	1	0
32	C	522	DGD	3	0
30	b	620	SQD	2	0
26	c	514	BCR	1	0
31	B	622	LHG	4	0
24	B	612	CLA	3	0
24	b	612	CLA	3	0
24	c	503	CLA	3	0
24	D	404	CLA	1	0
24	C	503	CLA	1	0

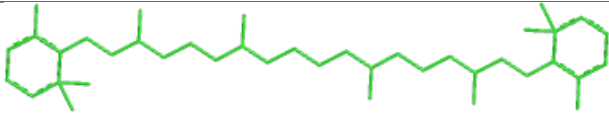
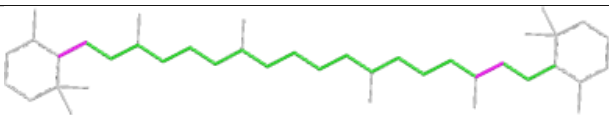
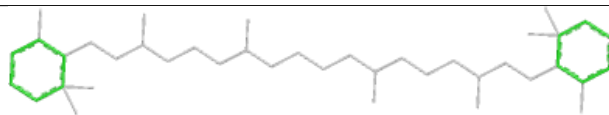
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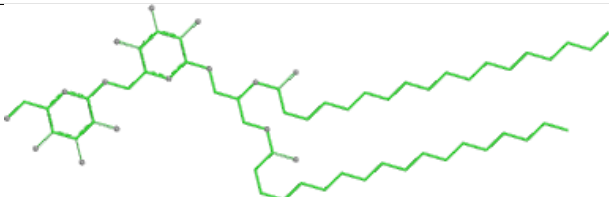
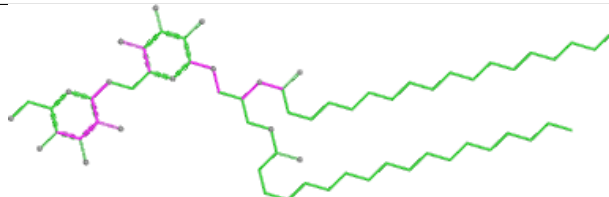
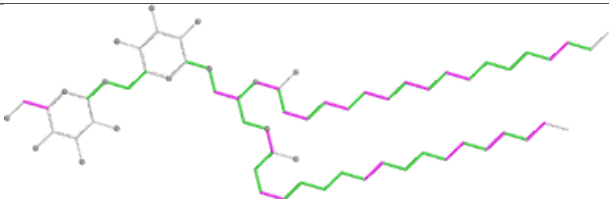
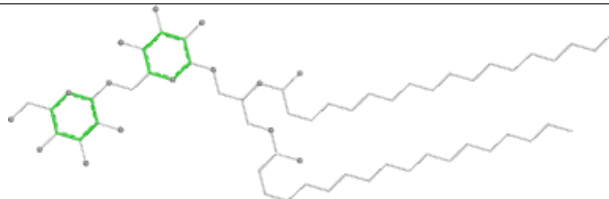
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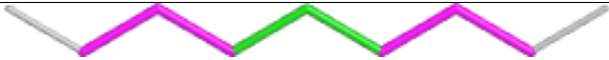
Mol	Chain	Res	Type	Clashes	Symm-Clashes
25	A	607	PHO	1	0
28	B	628	STE	2	0
26	T	101	BCR	2	0
27	D	407	PL9	1	0
30	A	615	SQD	1	0
31	L	101	LHG	3	0
29	c	522	LMG	3	0
24	C	509	CLA	1	0
24	D	405	CLA	1	0
28	B	626	STE	2	0
30	B	623	SQD	3	0
24	d	402	CLA	1	0
32	c	519	DGD	2	0
26	B	618	BCR	3	0
28	T	102	STE	2	0
24	B	603	CLA	1	0
24	a	606	CLA	3	0
31	A	614	LHG	2	0
24	d	403	CLA	3	0
26	d	405	BCR	1	0
24	C	506	CLA	1	0
24	b	602	CLA	4	0
28	A	619	STE	3	0
26	x	101	BCR	3	0
26	b	618	BCR	2	0
26	c	517	BCR	1	0
29	m	101	LMG	1	0
24	C	511	CLA	3	0
24	B	616	CLA	1	0
29	M	101	LMG	4	0
30	f	101	SQD	1	0
24	c	502	CLA	1	0
31	l	101	LHG	2	0
29	b	622	LMG	1	0
24	c	508	CLA	3	0
26	D	406	BCR	3	0
26	A	609	BCR	2	0
24	b	616	CLA	4	0
24	B	605	CLA	4	0
26	t	101	BCR	7	0
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24	B	611	CLA	1	0

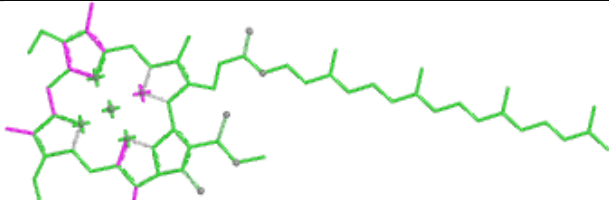
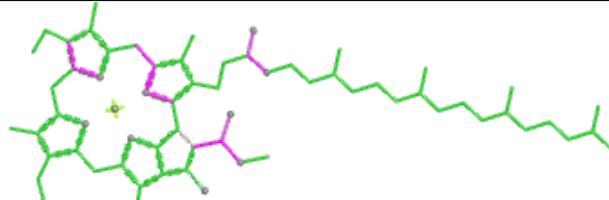
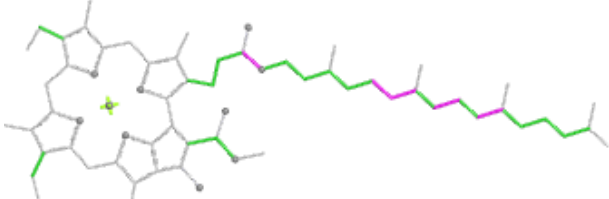
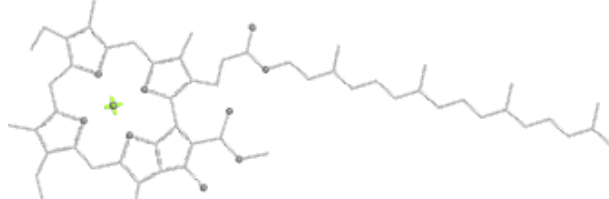
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included.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

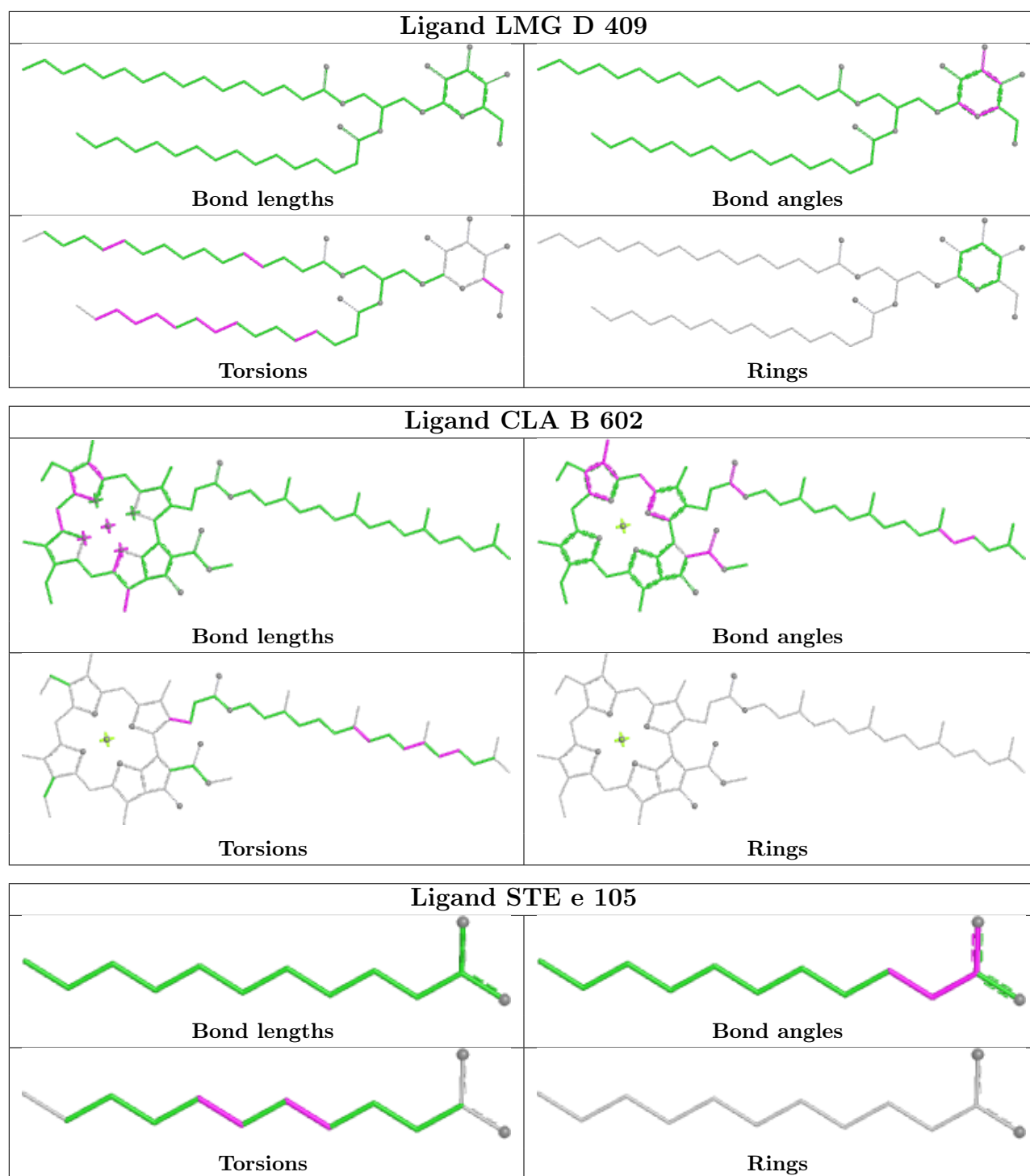


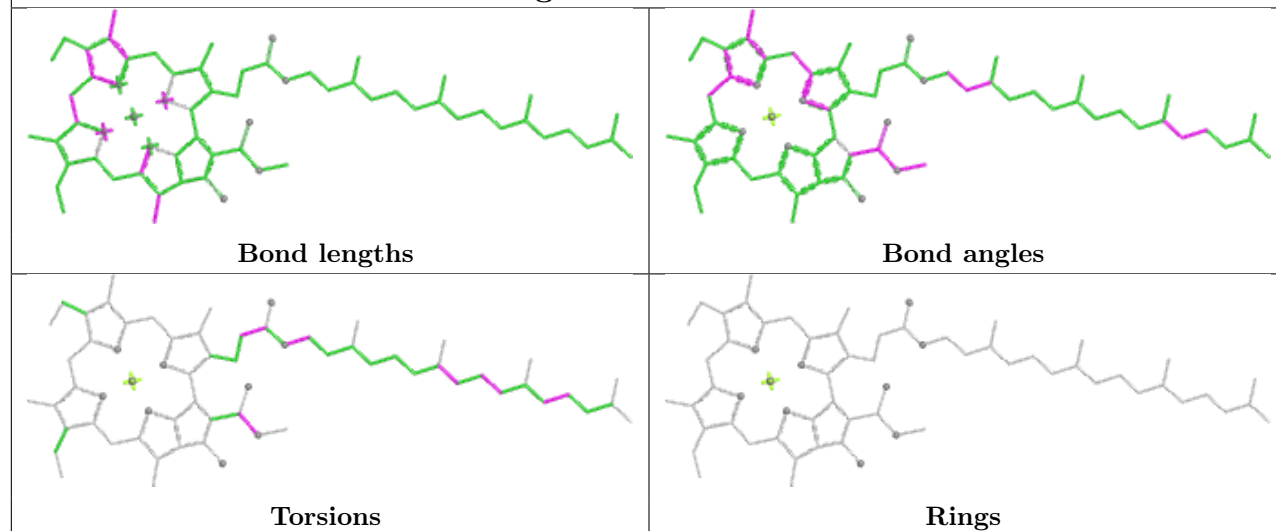
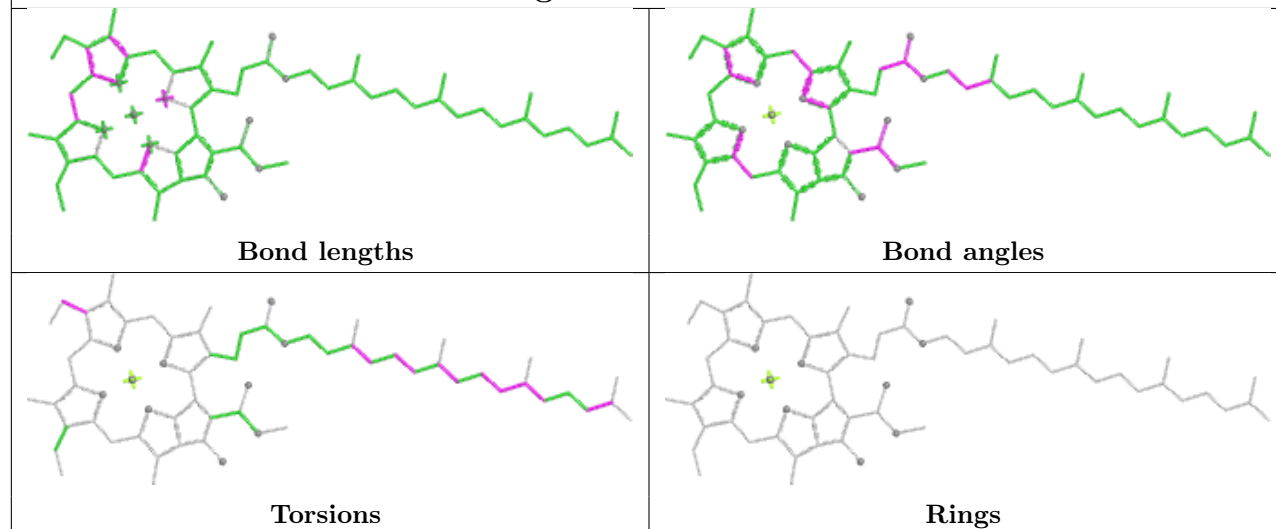
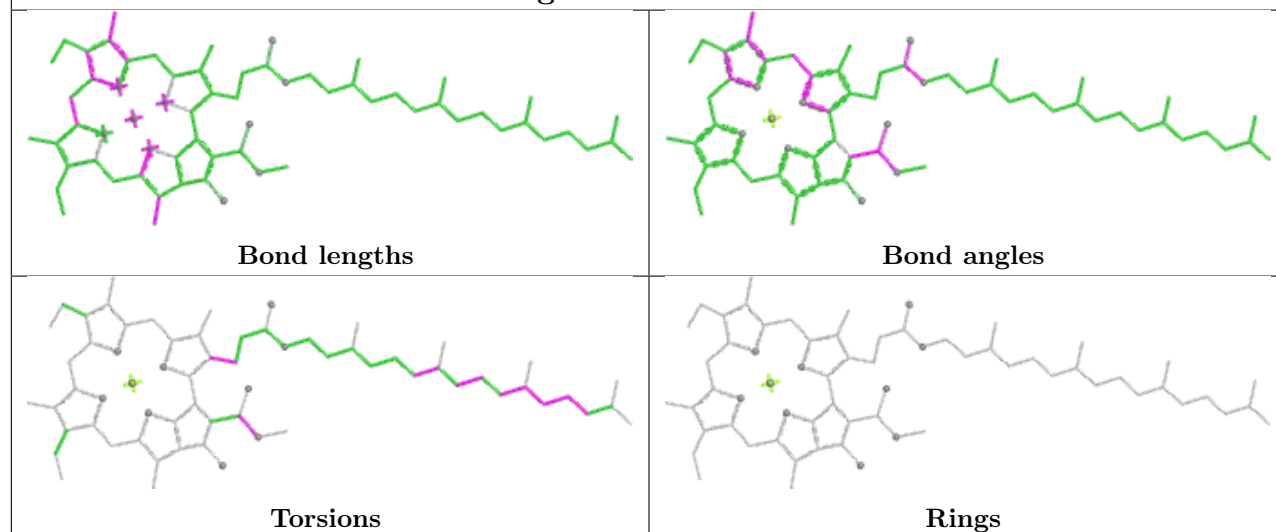
Ligand BCR J 101	
	
Bond lengths	Bond angles
	
Torsions	Rings

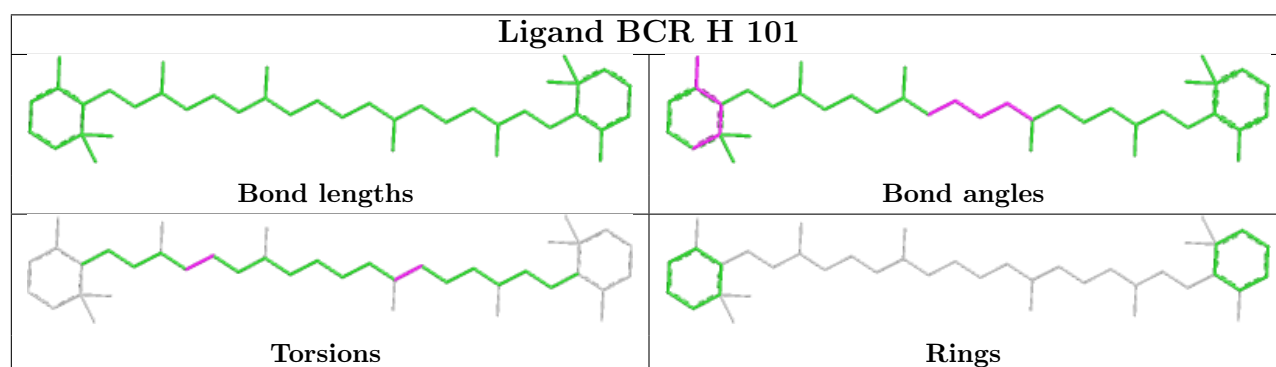
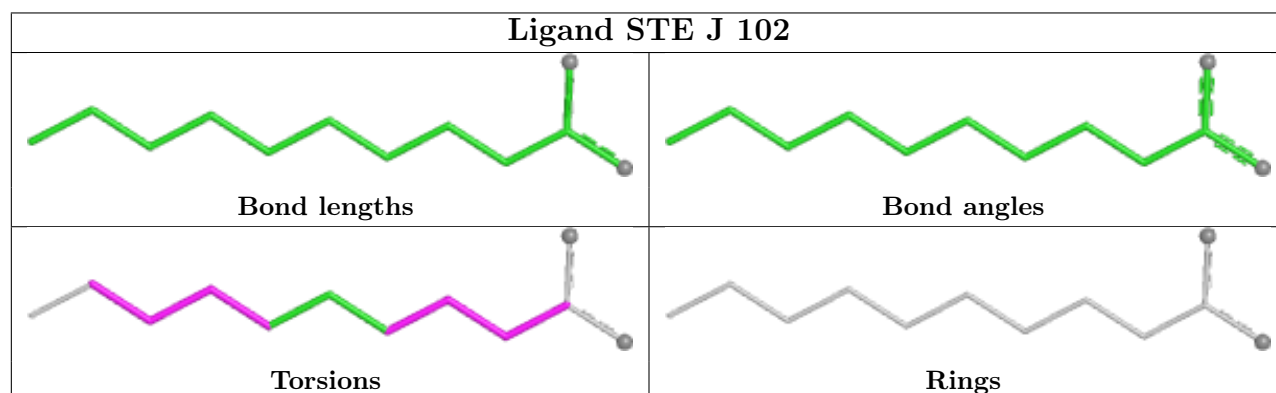
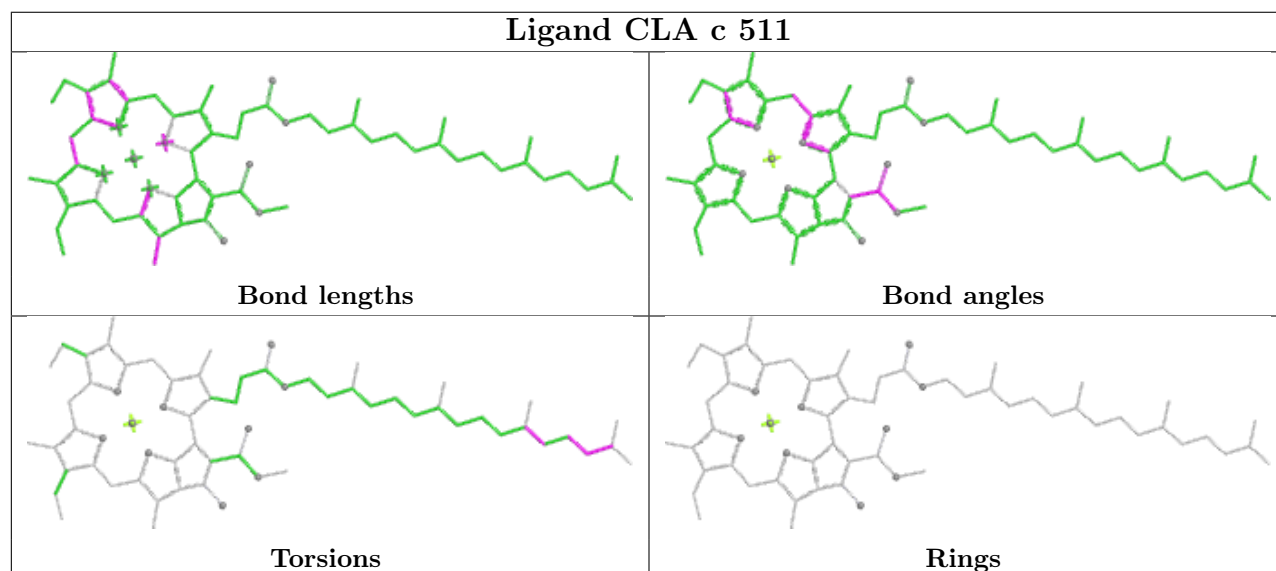
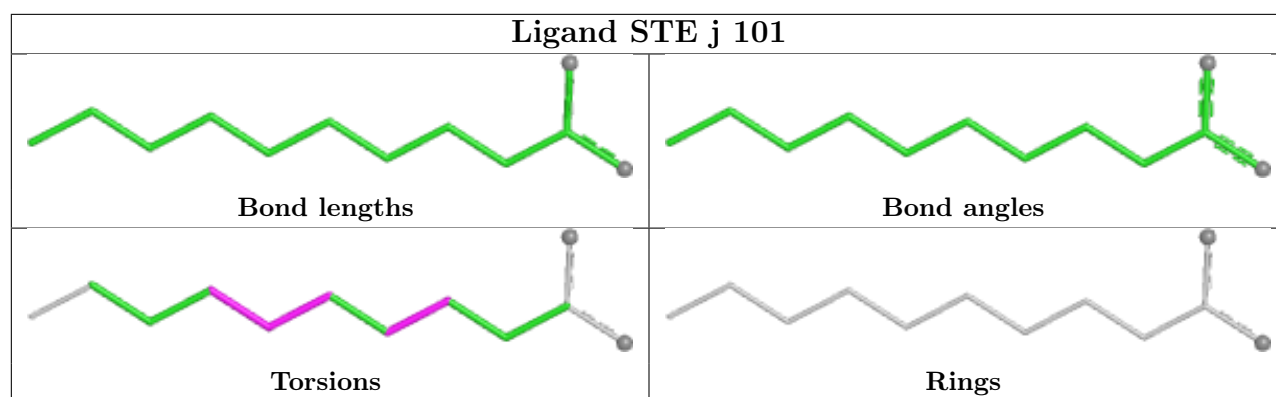
Ligand DGD A 616	
	
Bond lengths	Bond angles
	
Torsions	Rings

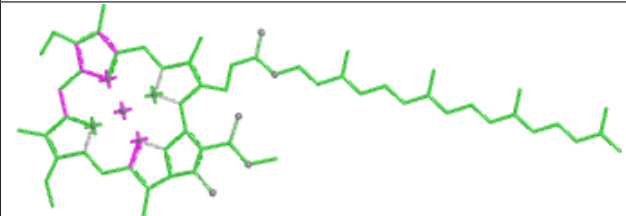
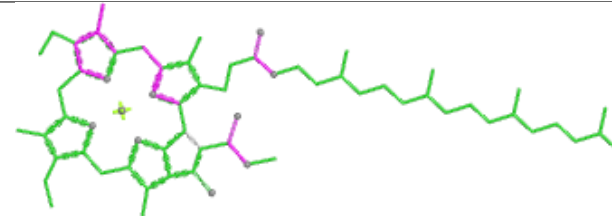
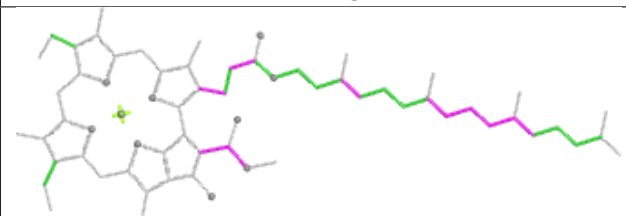
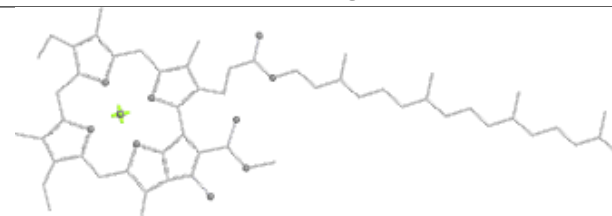
Ligand STE z 703	
	
Bond lengths	Bond angles
	
Torsions	Rings

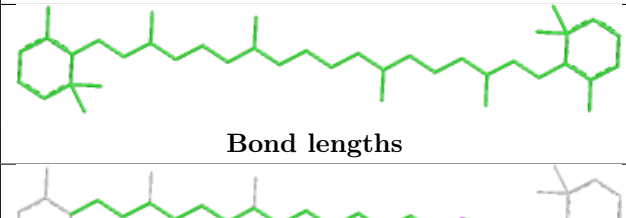
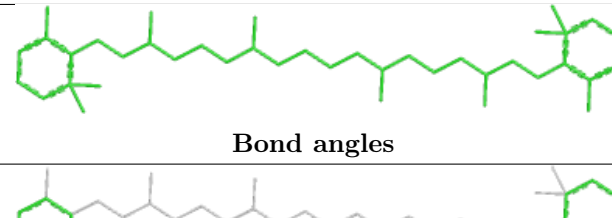
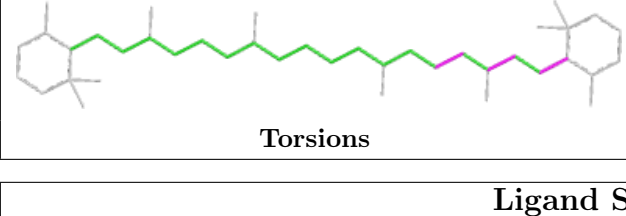
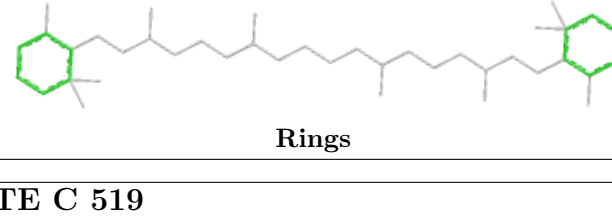
Ligand CLA b 603	
	
Bond lengths	Bond angles
	
Torsions	Rings

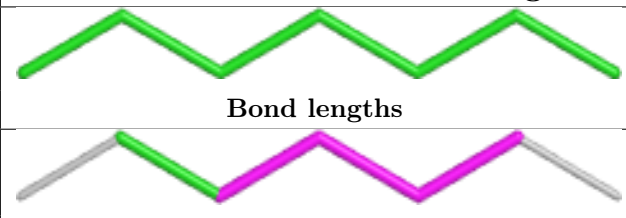
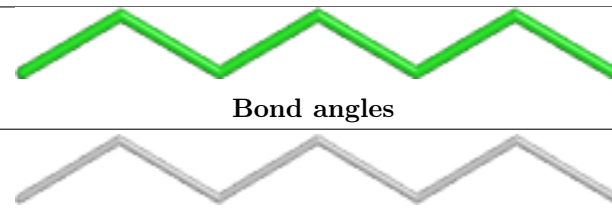
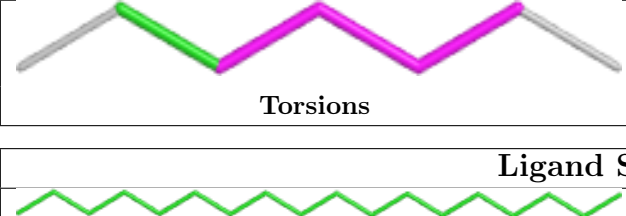
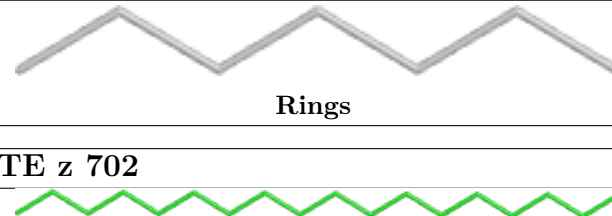


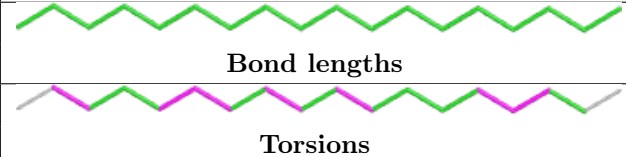
Ligand CLA b 613**Ligand CLA b 605****Ligand CLA c 513**

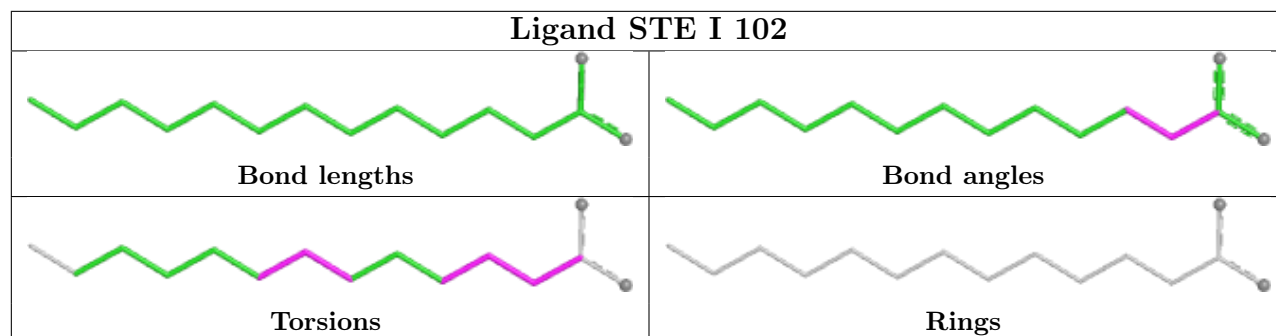
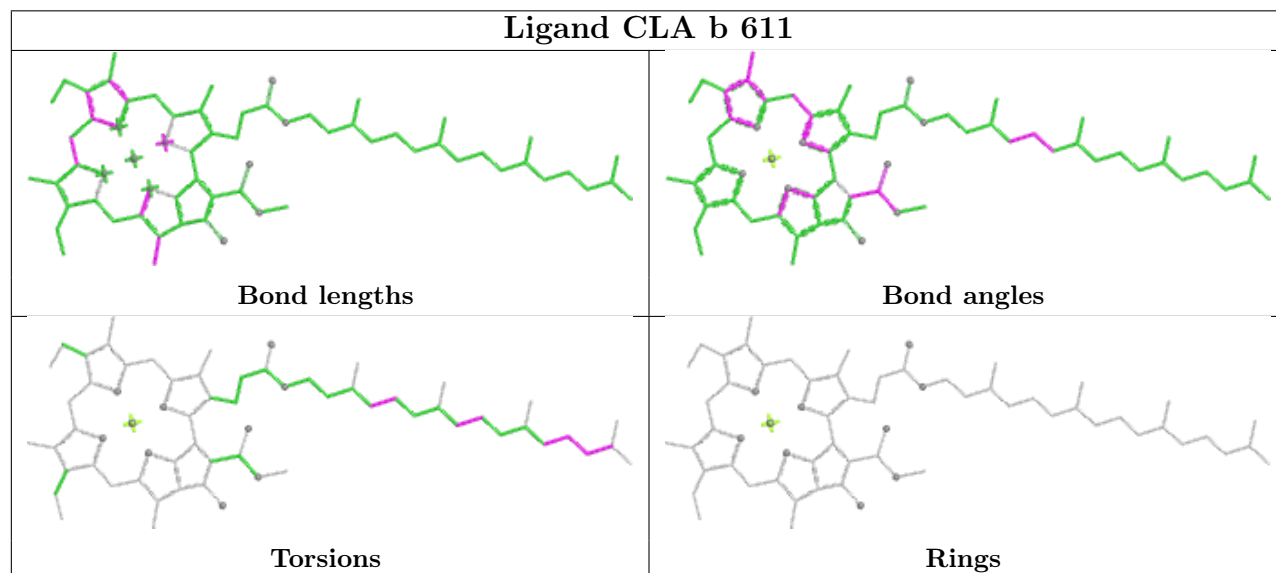
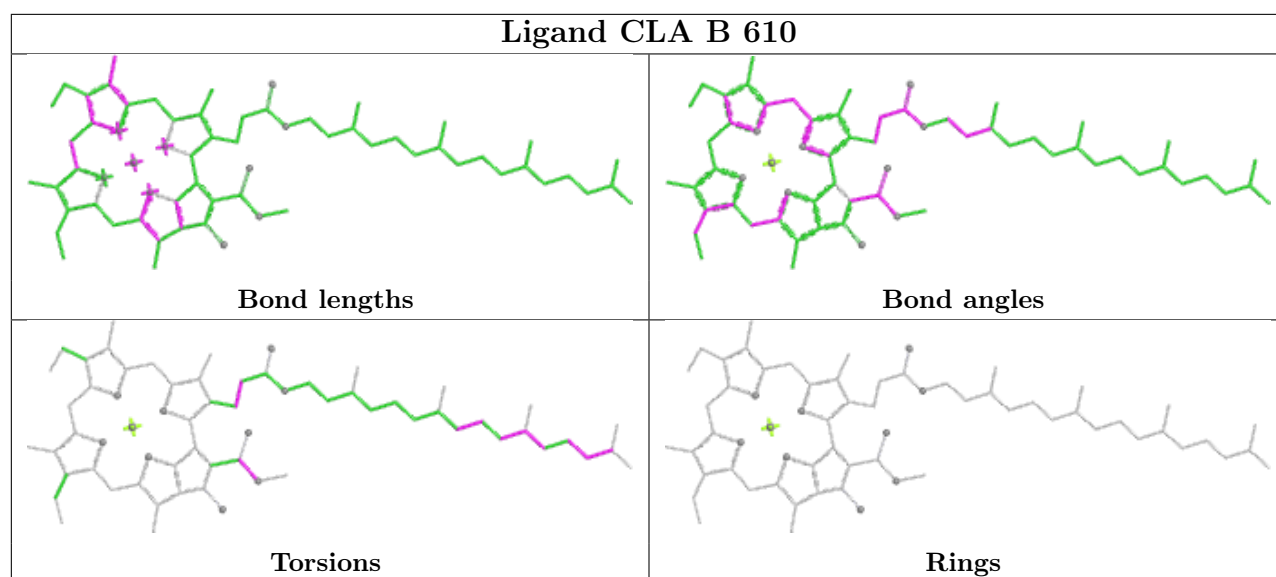


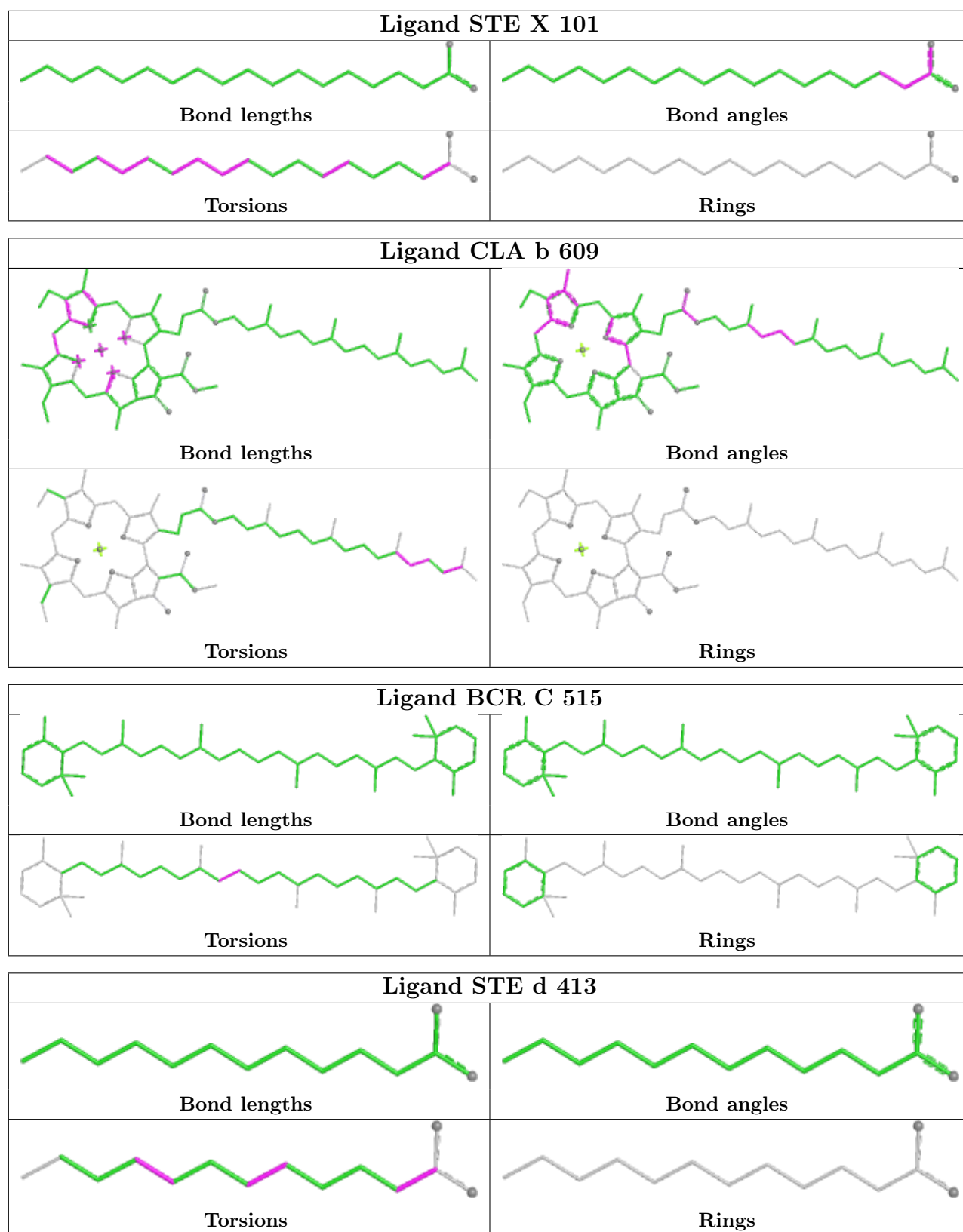
Ligand CLA c 509	
	
Bond lengths	Bond angles
	
Torsions	Rings

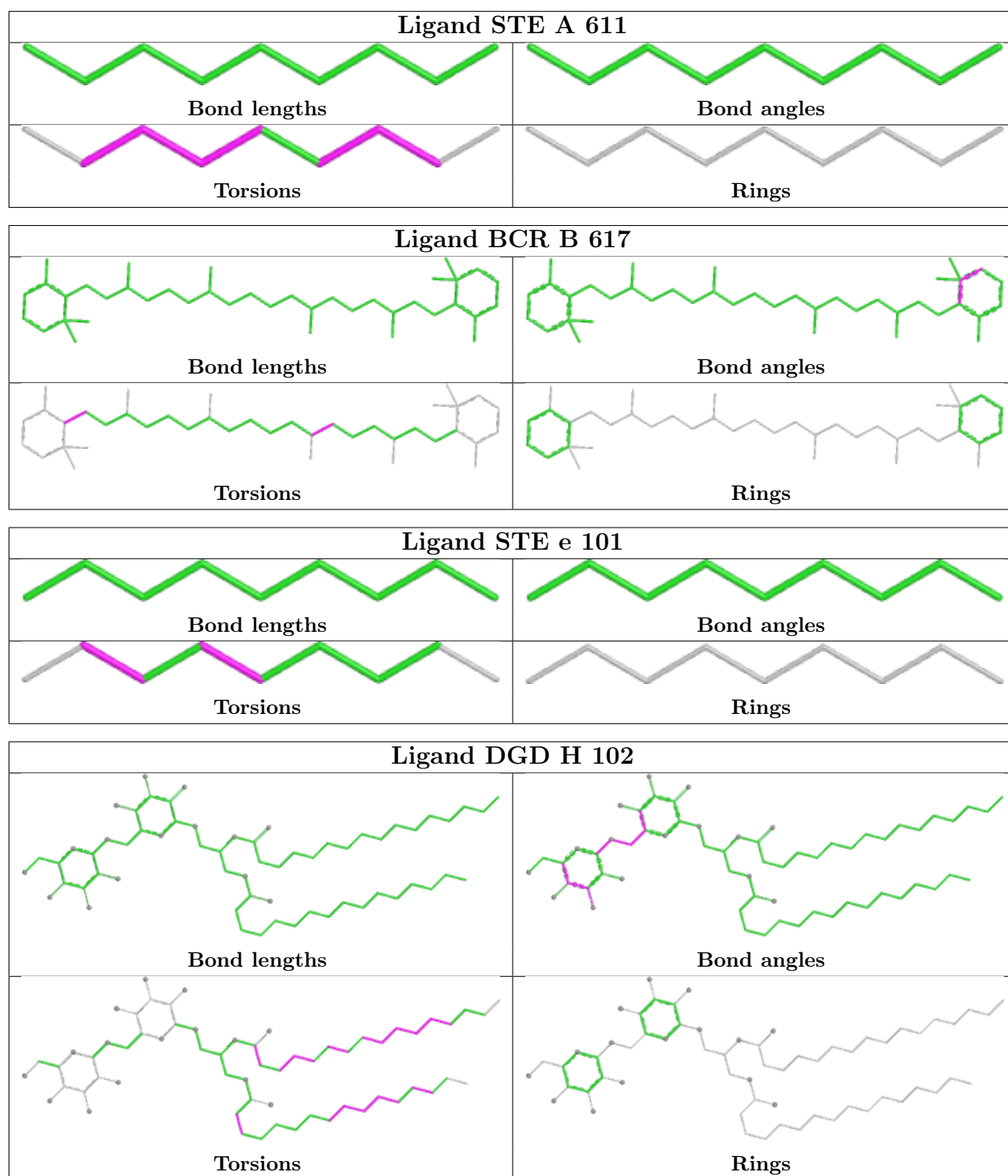
Ligand BCR C 514	
	
Bond lengths	Bond angles
	
Torsions	Rings

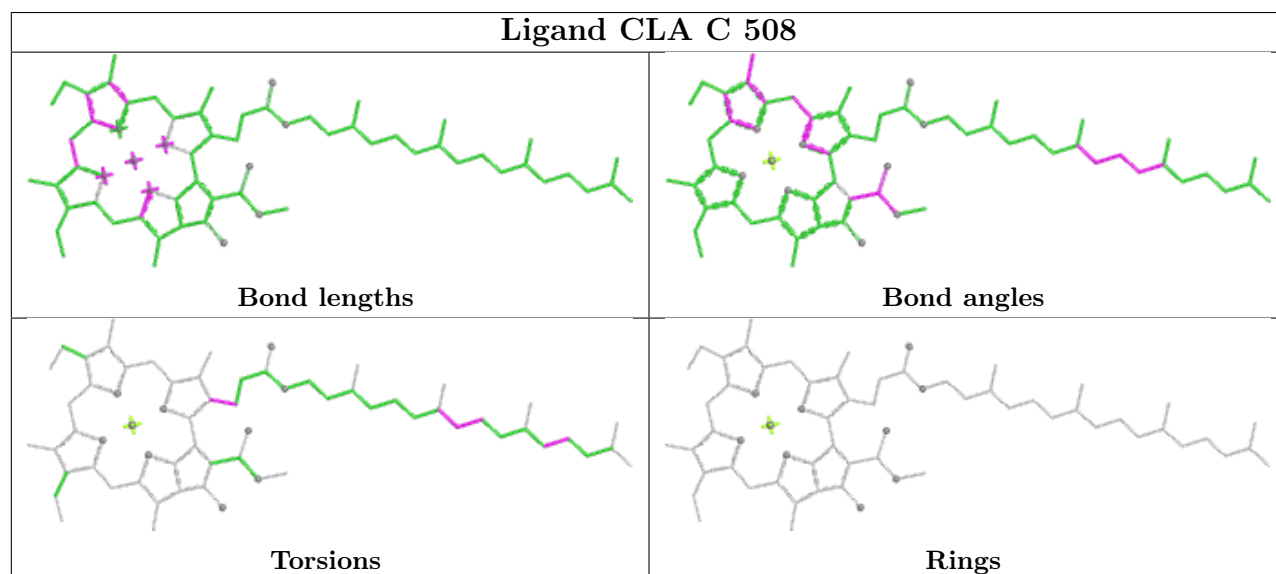
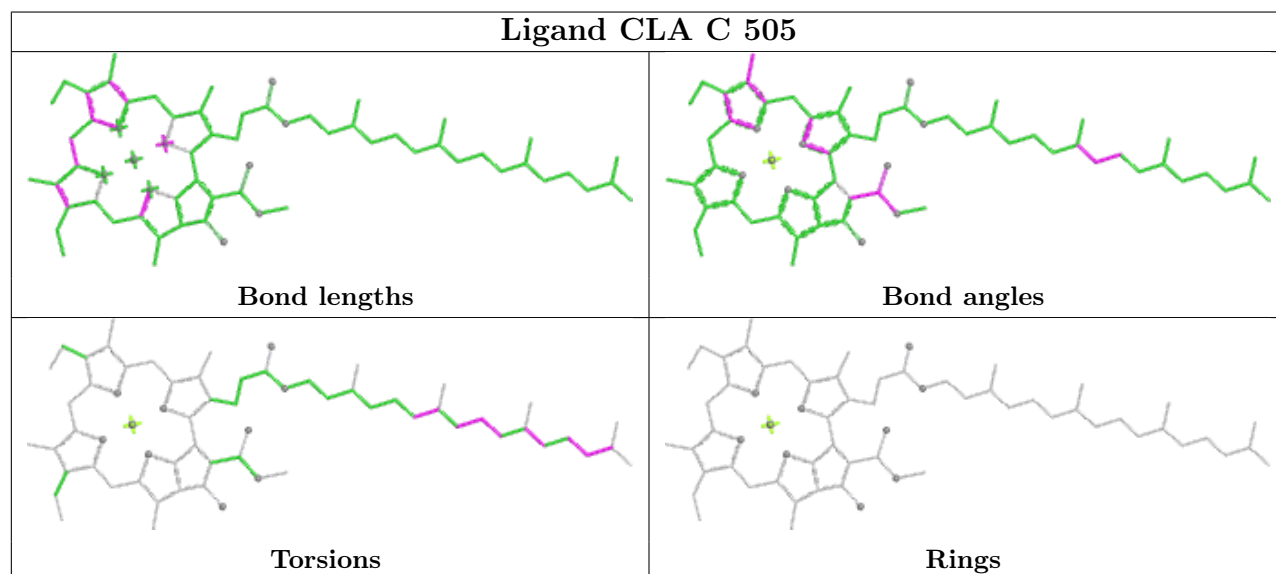
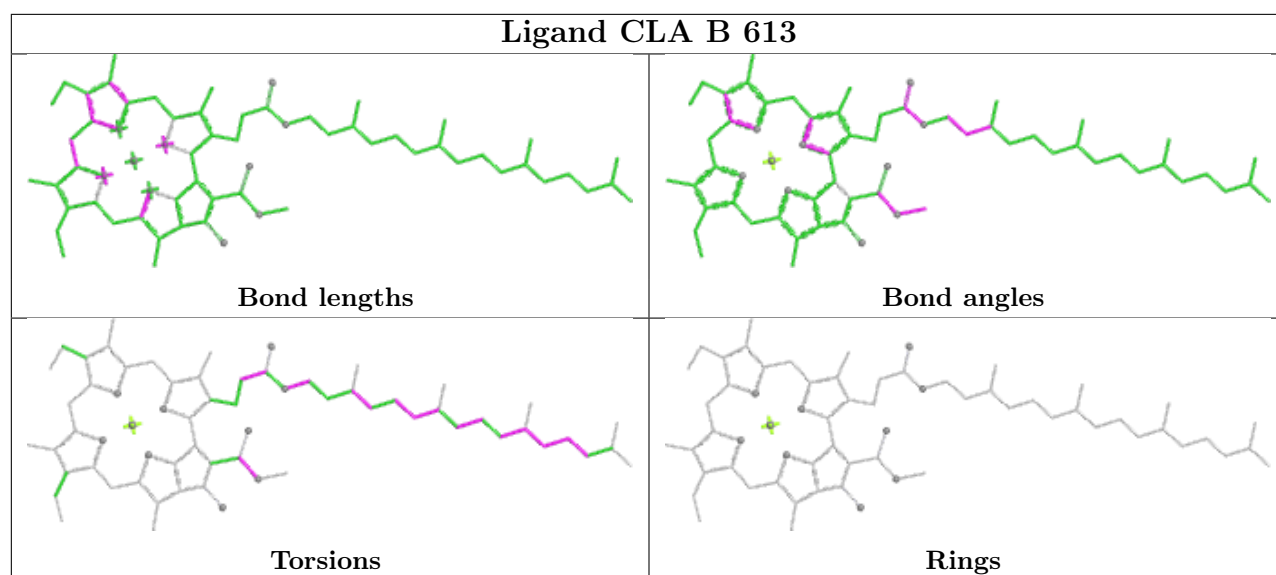
Ligand STE C 519	
	
Bond lengths	Bond angles
	
Torsions	Rings

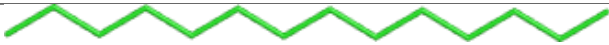
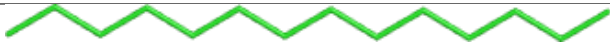
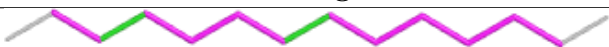
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Bond lengths	Bond angles
	
Torsions	Rings

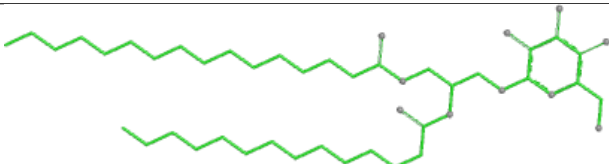
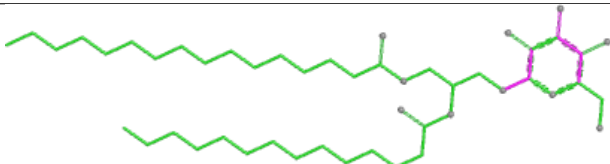
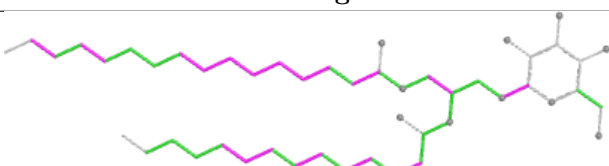
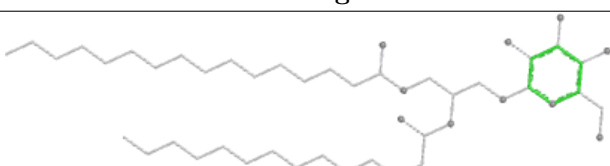


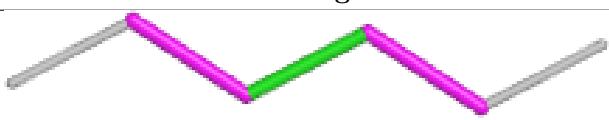


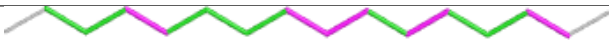


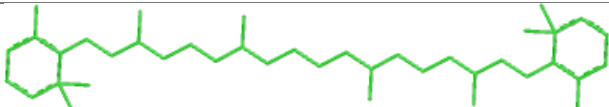
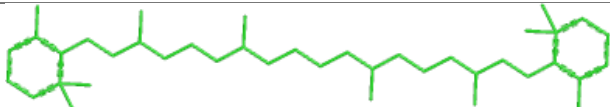
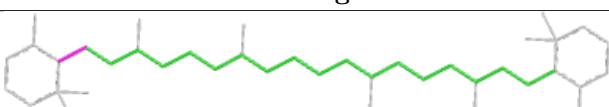
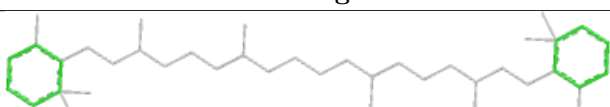


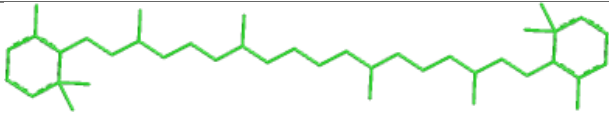
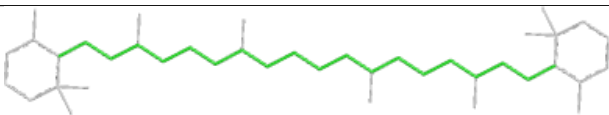
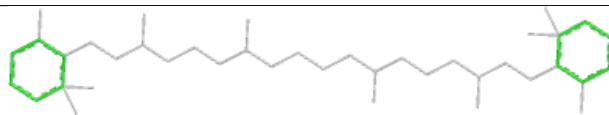
Ligand STE C 527	
 Bond lengths	 Bond angles
 Torsions	 Rings

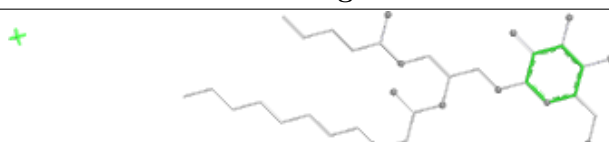
Ligand LMG a 615	
 Bond lengths	 Bond angles
 Torsions	 Rings

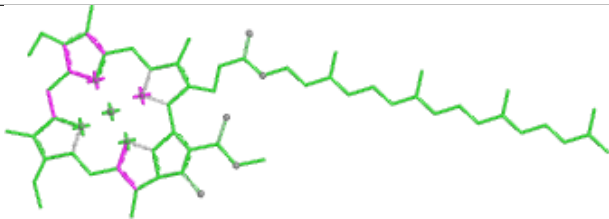
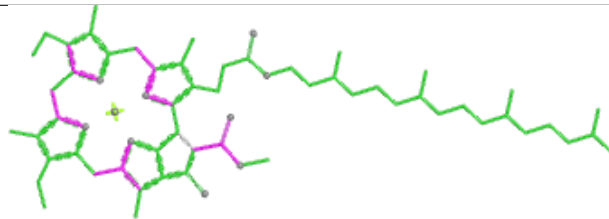
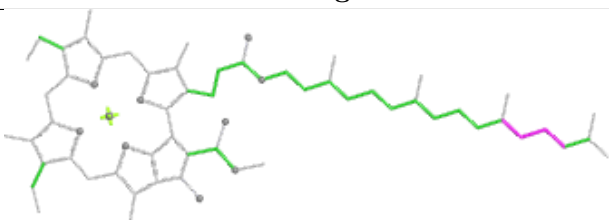
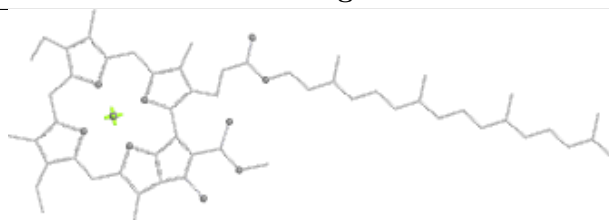
Ligand STE i 102	
 Bond lengths	 Bond angles
 Torsions	 Rings

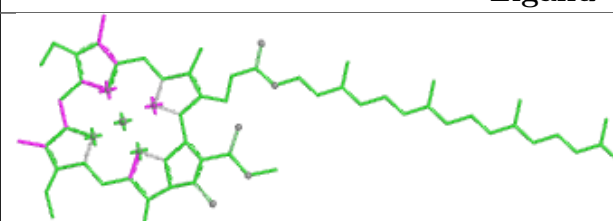
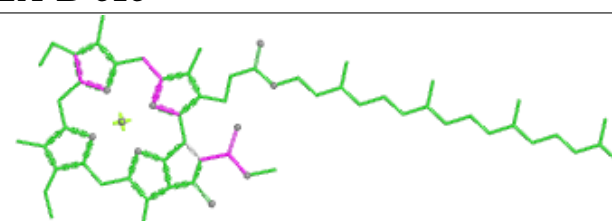
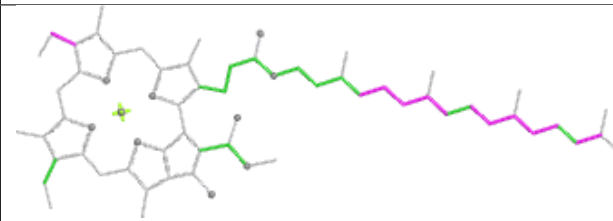
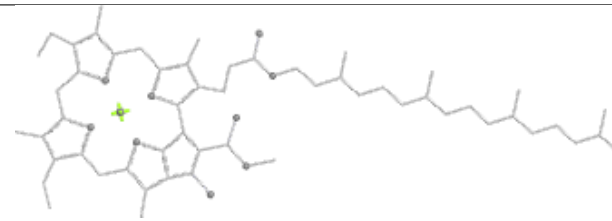
Ligand STE f 103	
 Bond lengths	 Bond angles
 Torsions	 Rings

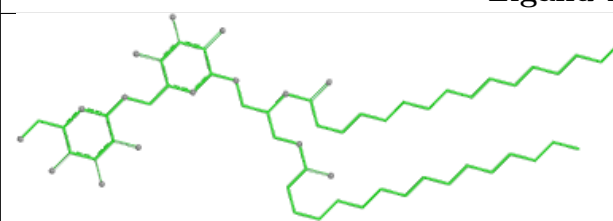
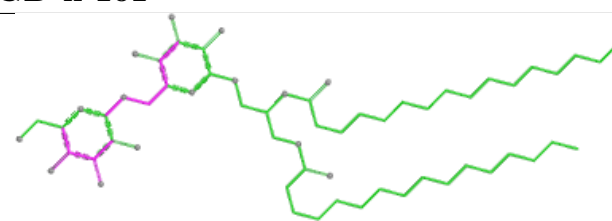
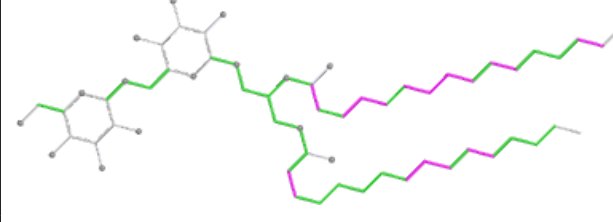
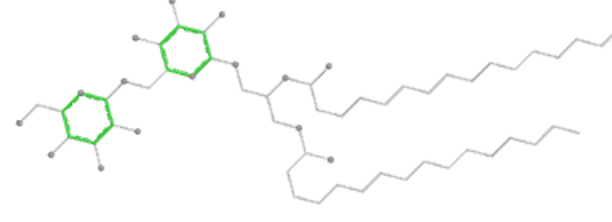
Ligand BCR b 617	
 Bond lengths	 Bond angles
 Torsions	 Rings

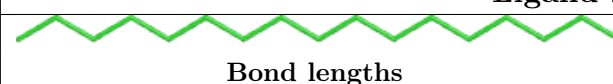
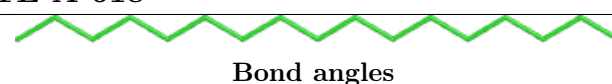
Ligand BCR B 619	
	
Bond lengths	Bond angles
	
Torsions	Rings

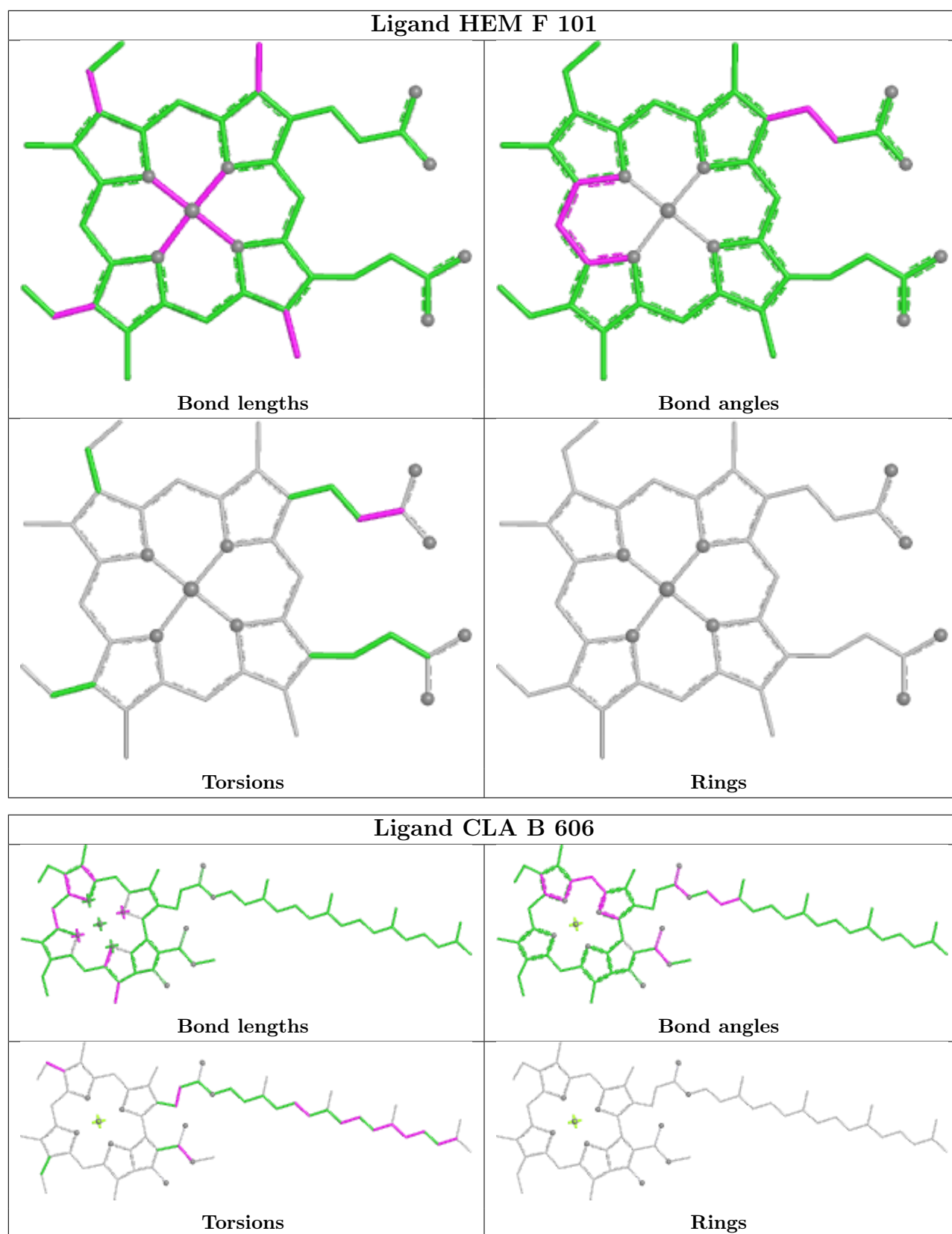
Ligand LMG C 517	
	
Bond lengths	Bond angles
	
Torsions	Rings

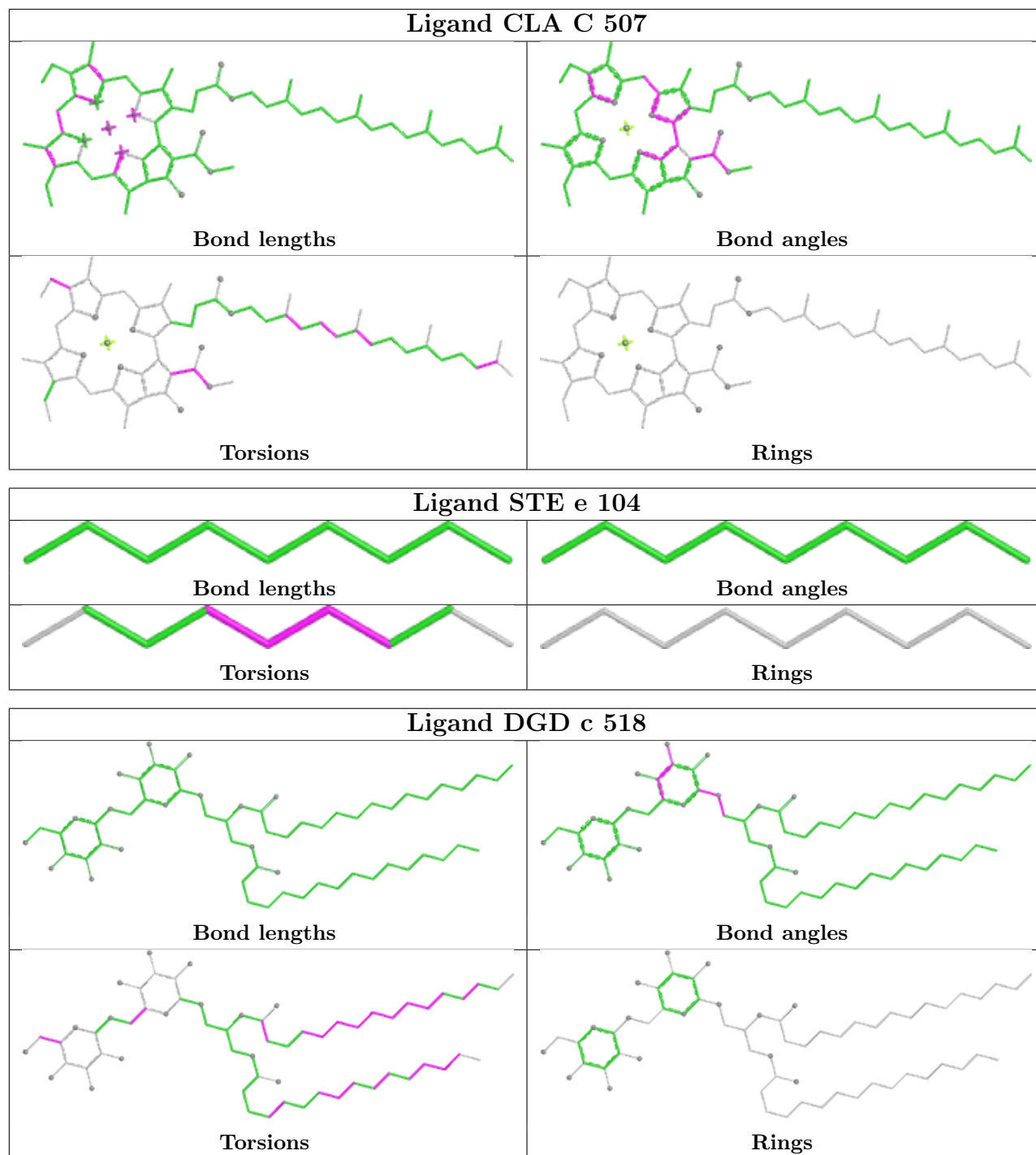
Ligand CLA D 403	
	
Bond lengths	Bond angles
	
Torsions	Rings

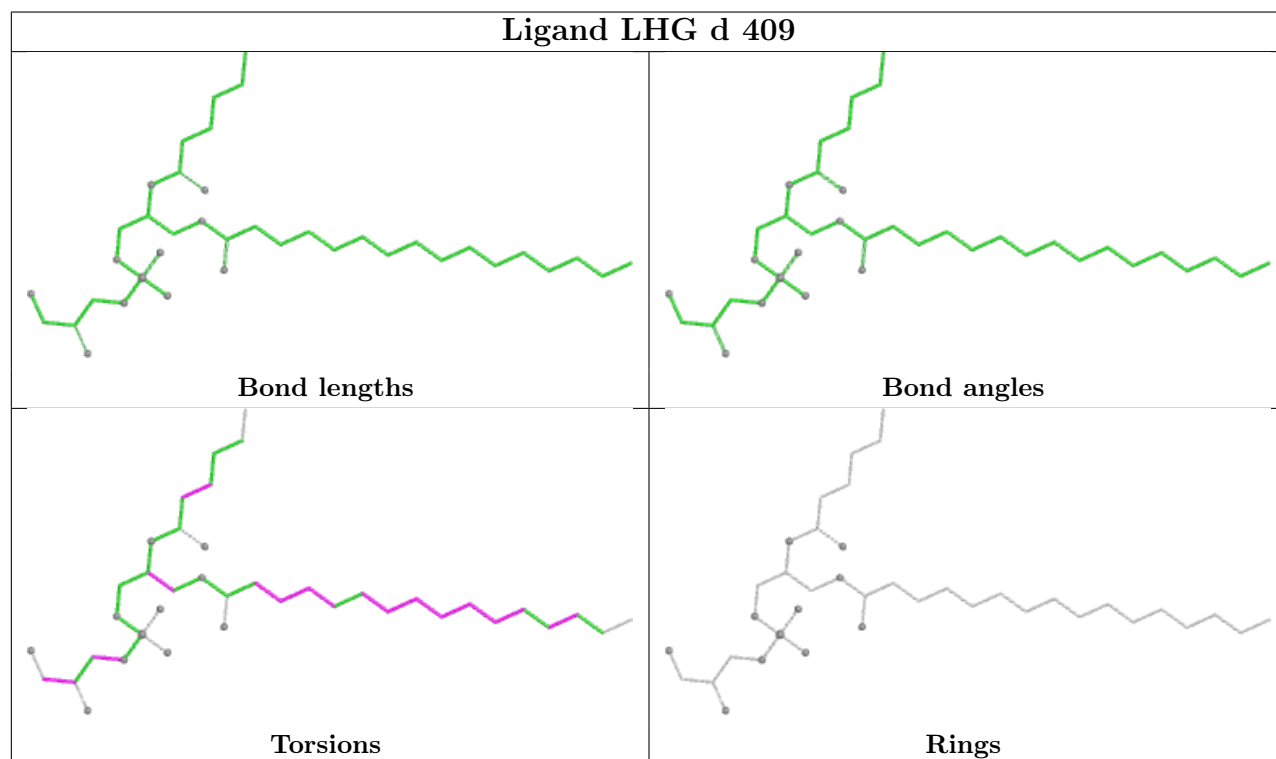
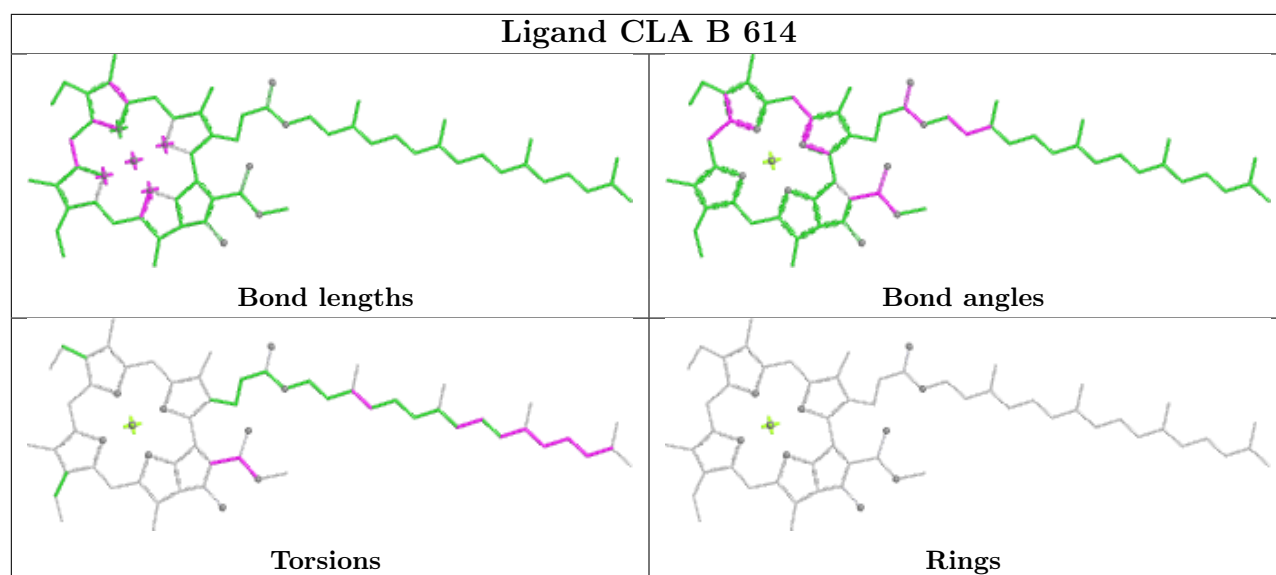
Ligand CLA B 615	
	
Bond lengths	Bond angles
	
Torsions	Rings

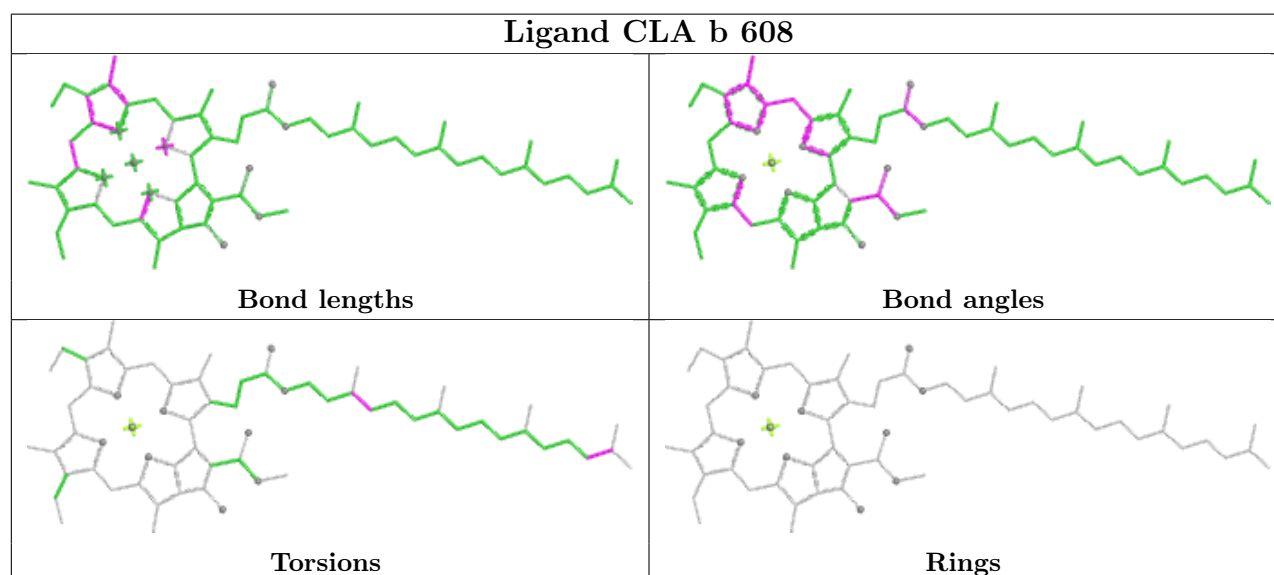
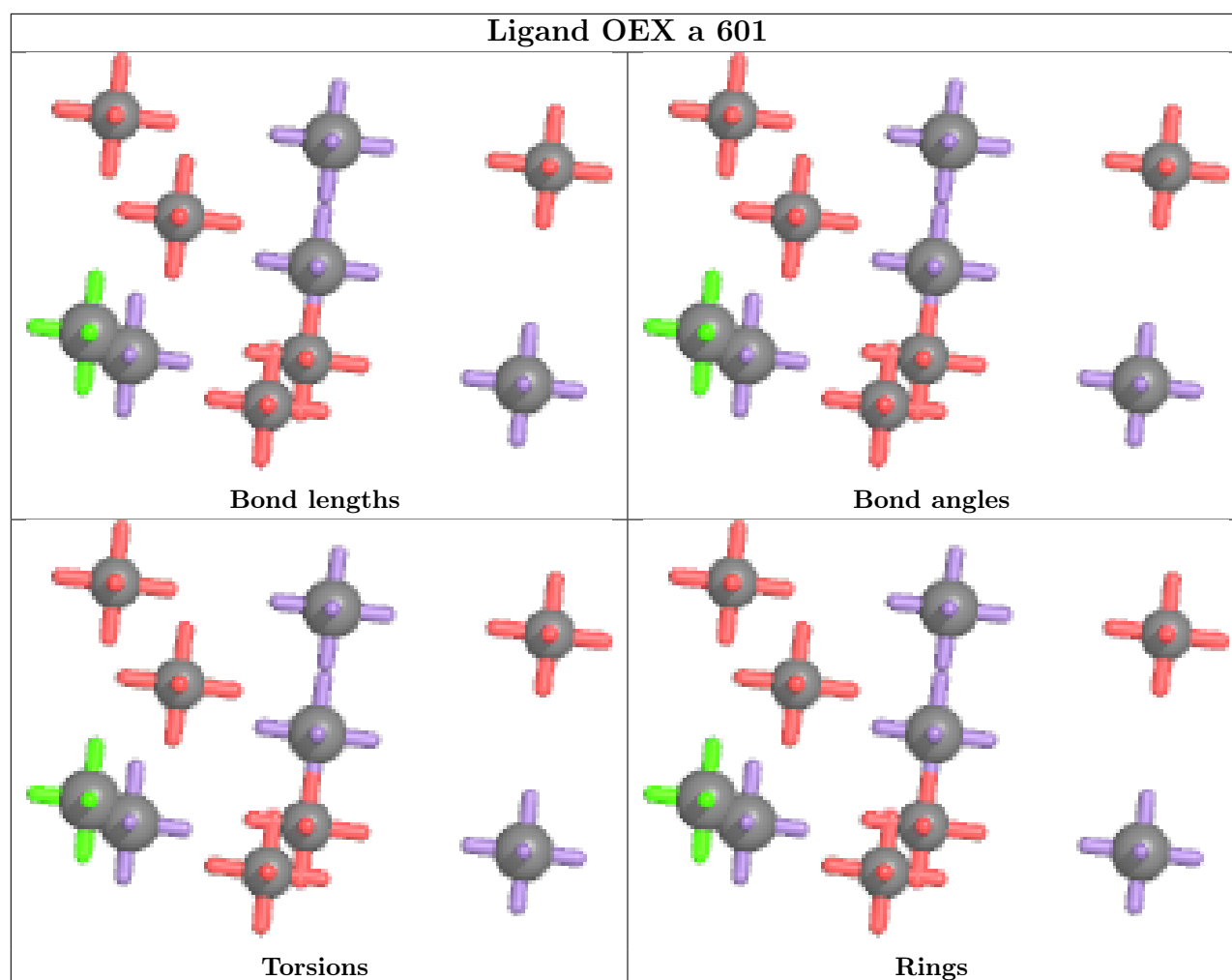
Ligand DGD h 101	
	
Bond lengths	Bond angles
	
Torsions	Rings

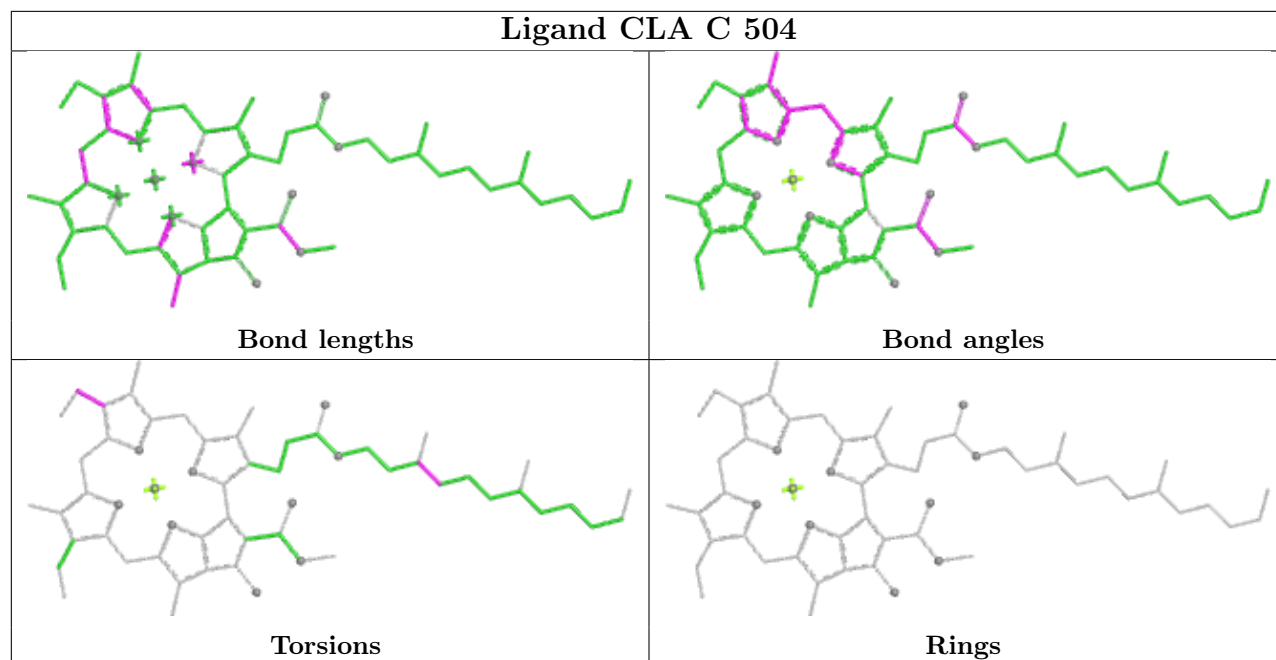
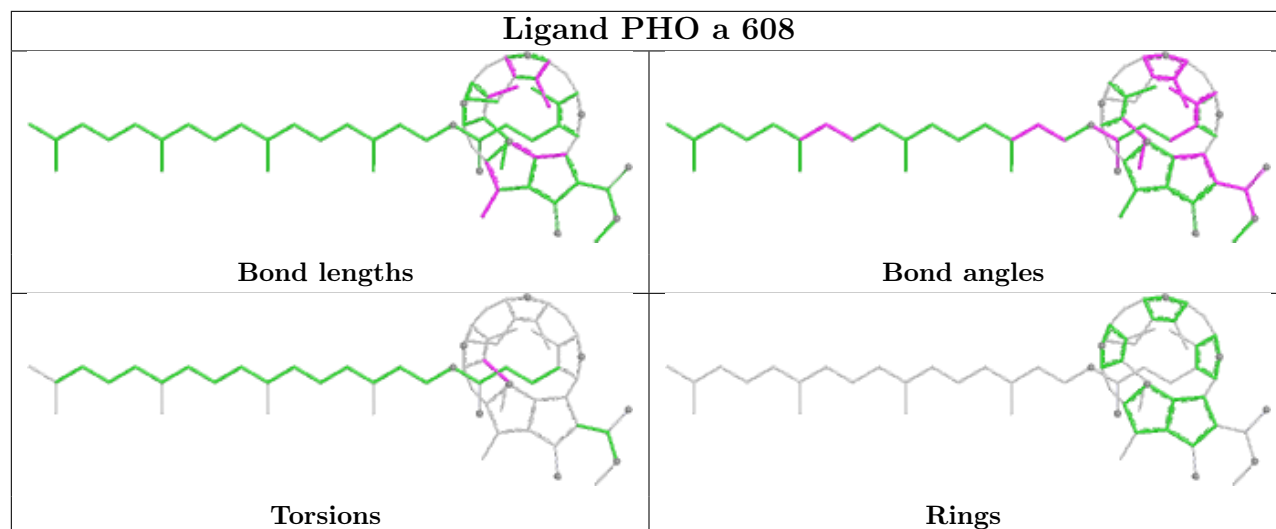
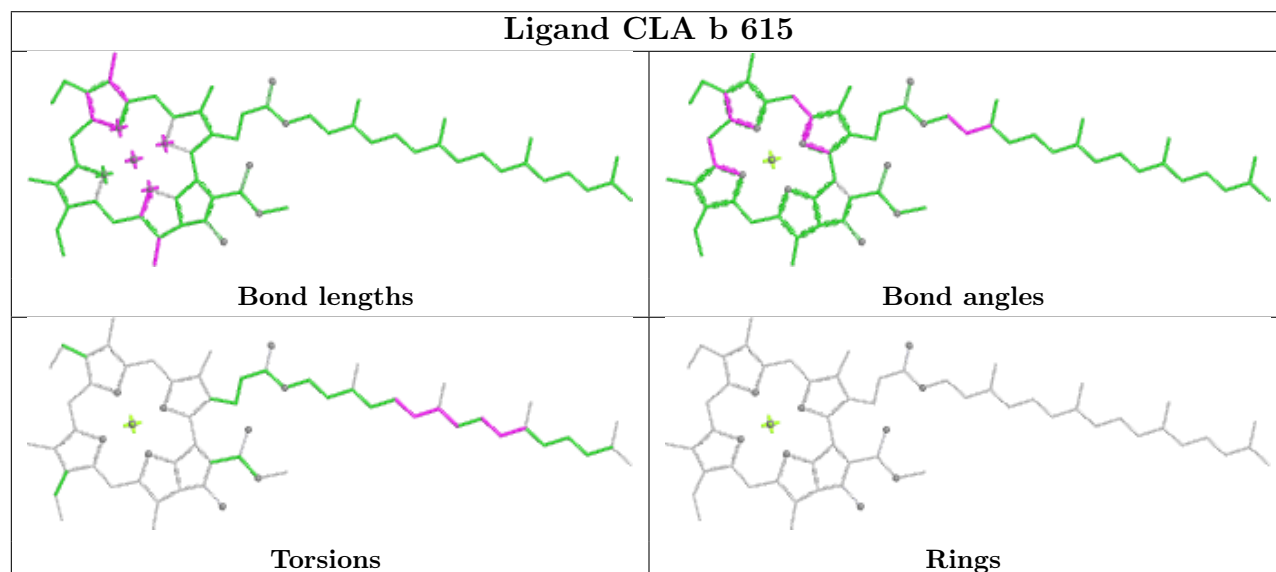
Ligand STE A 618	
	
Bond lengths	Bond angles
	
Torsions	Rings

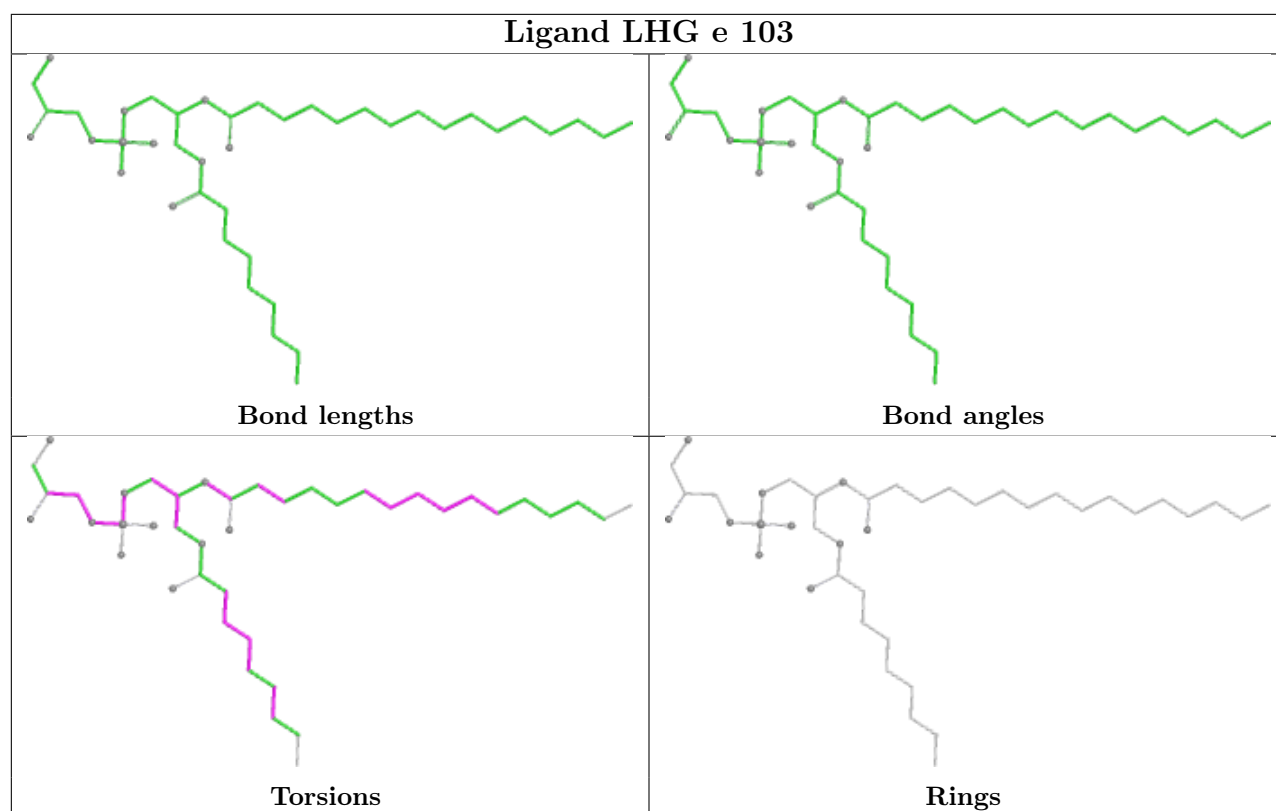


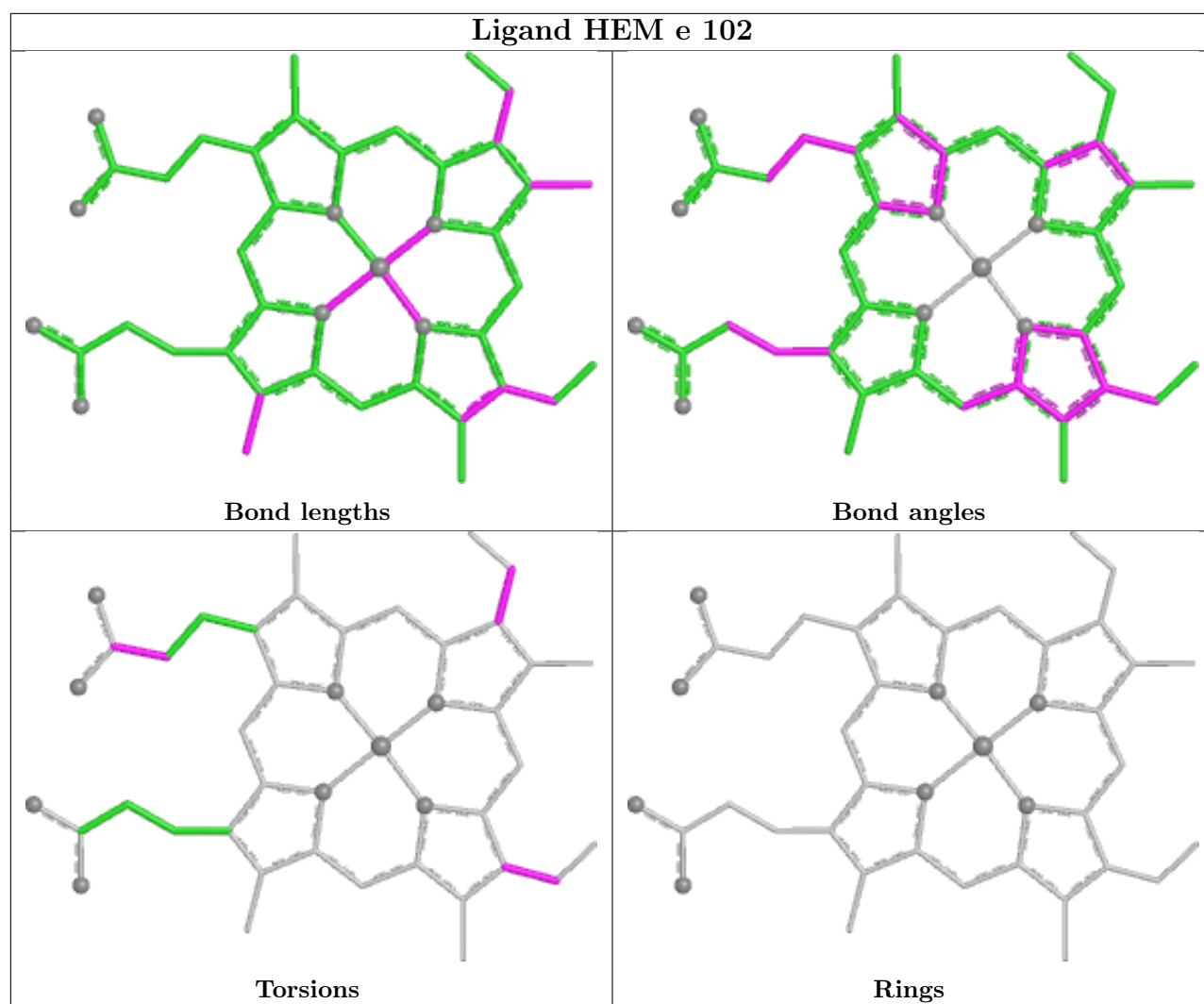


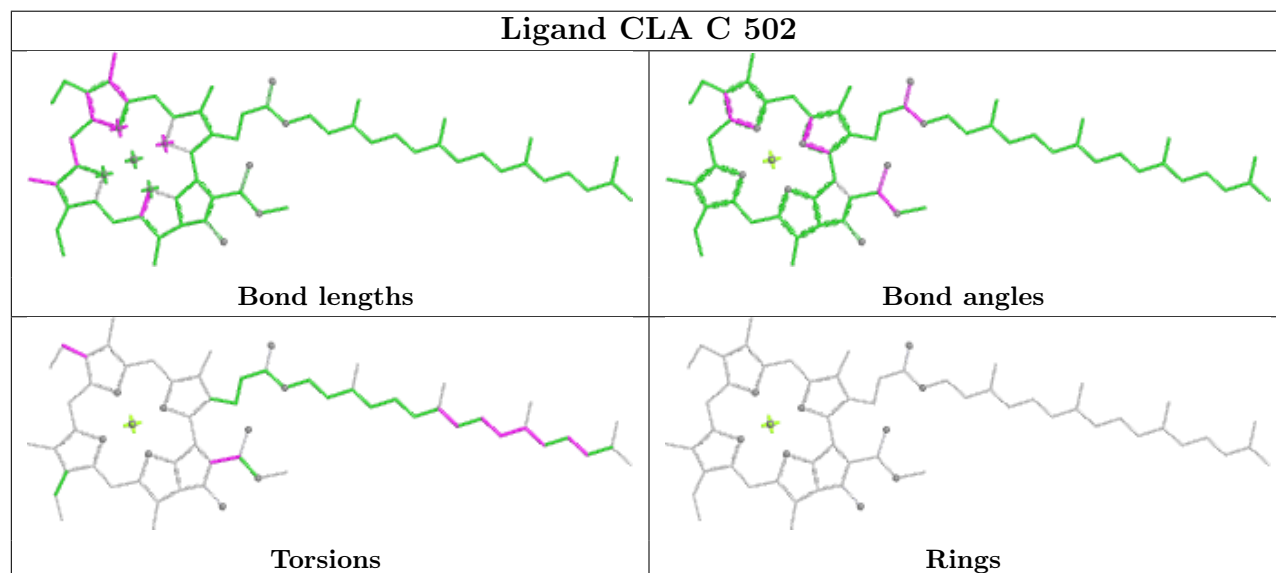
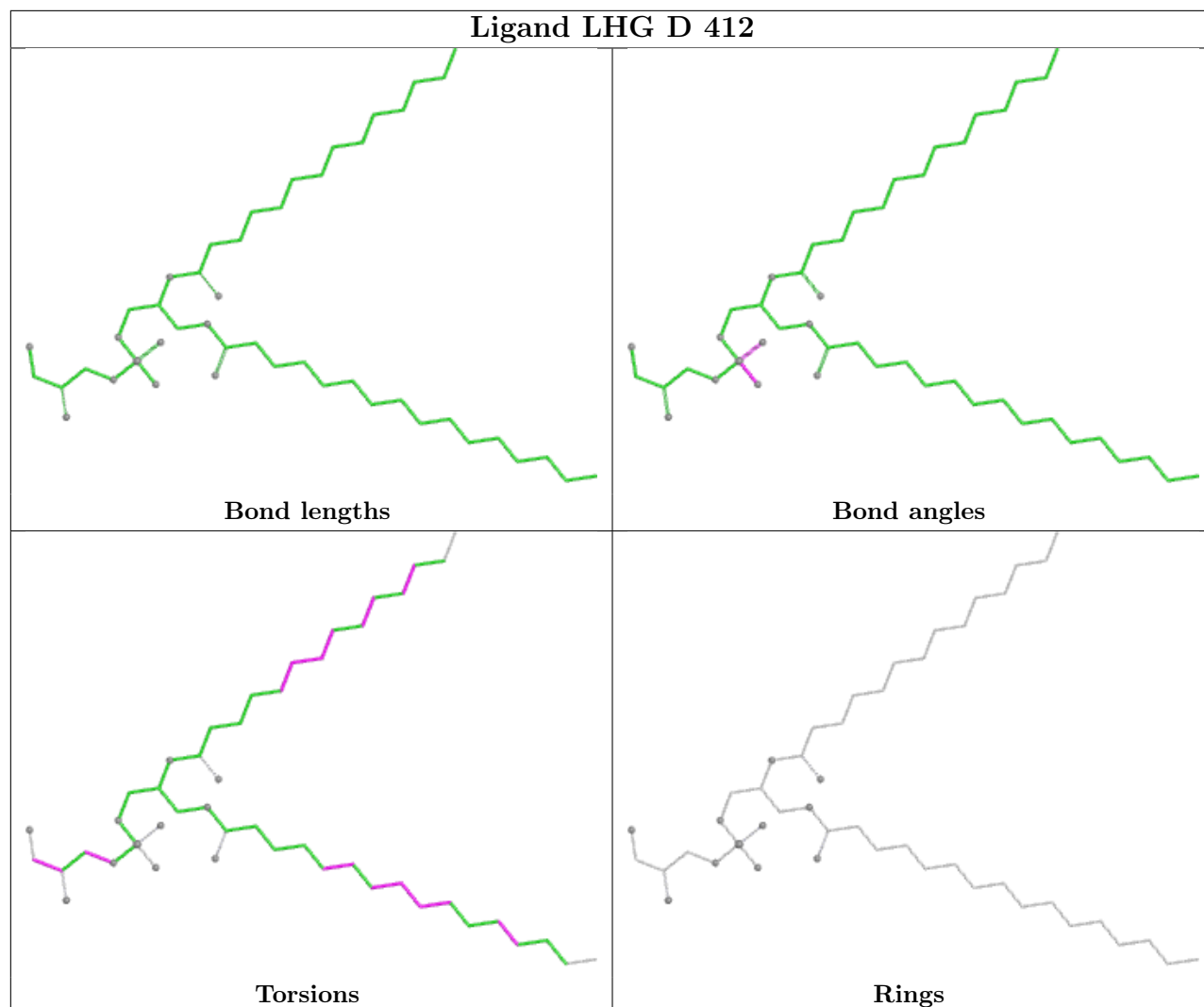


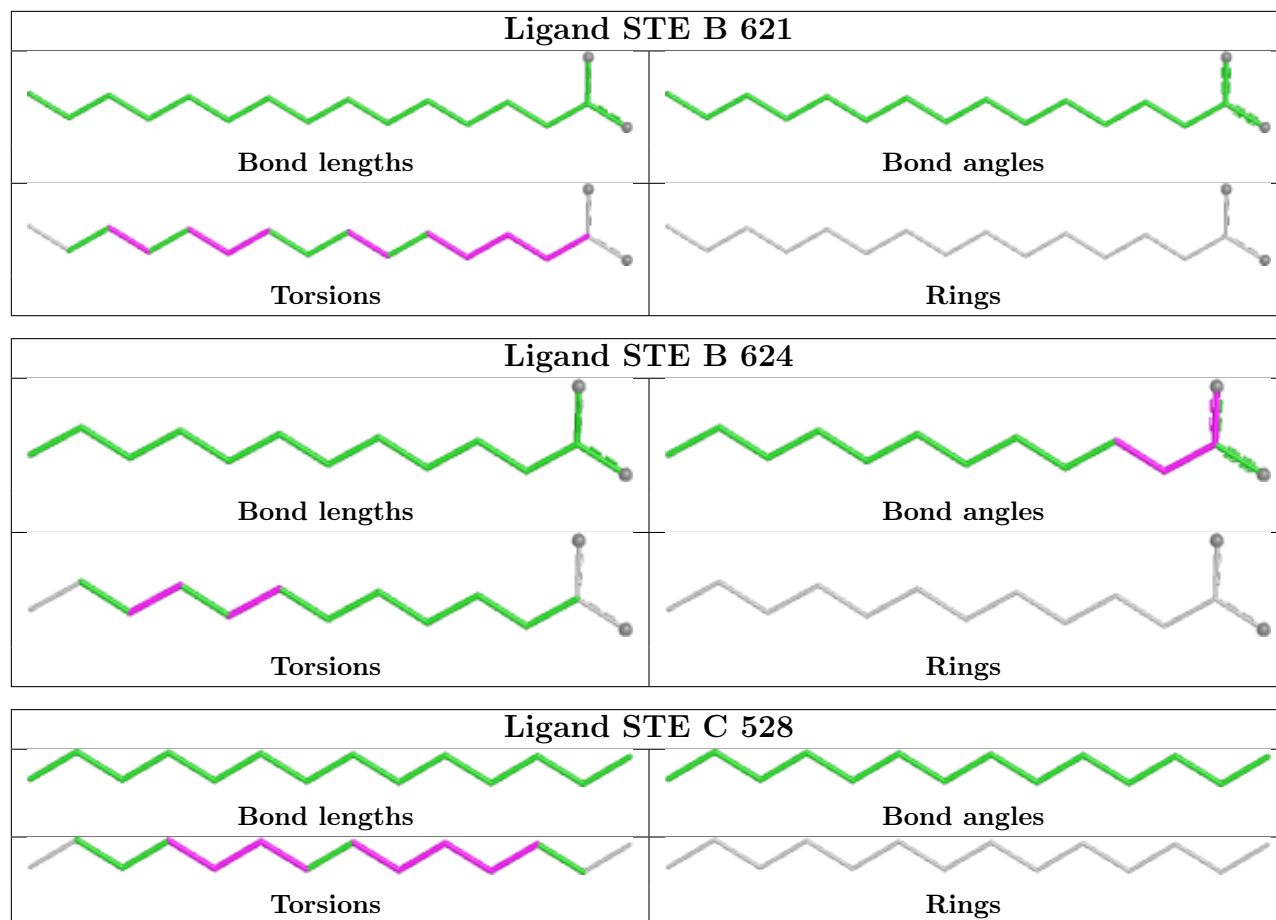


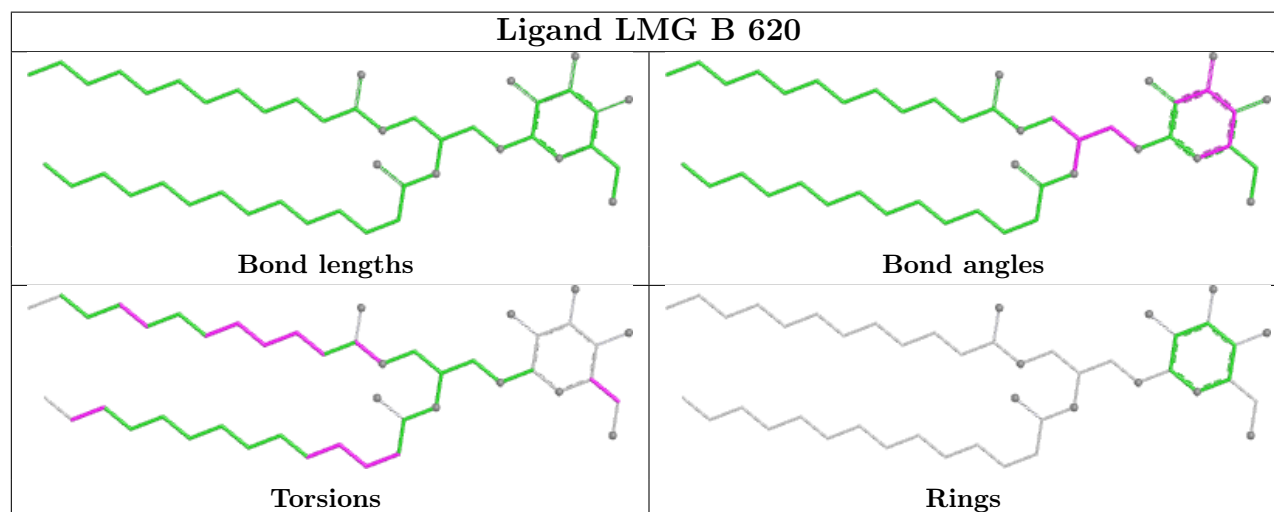
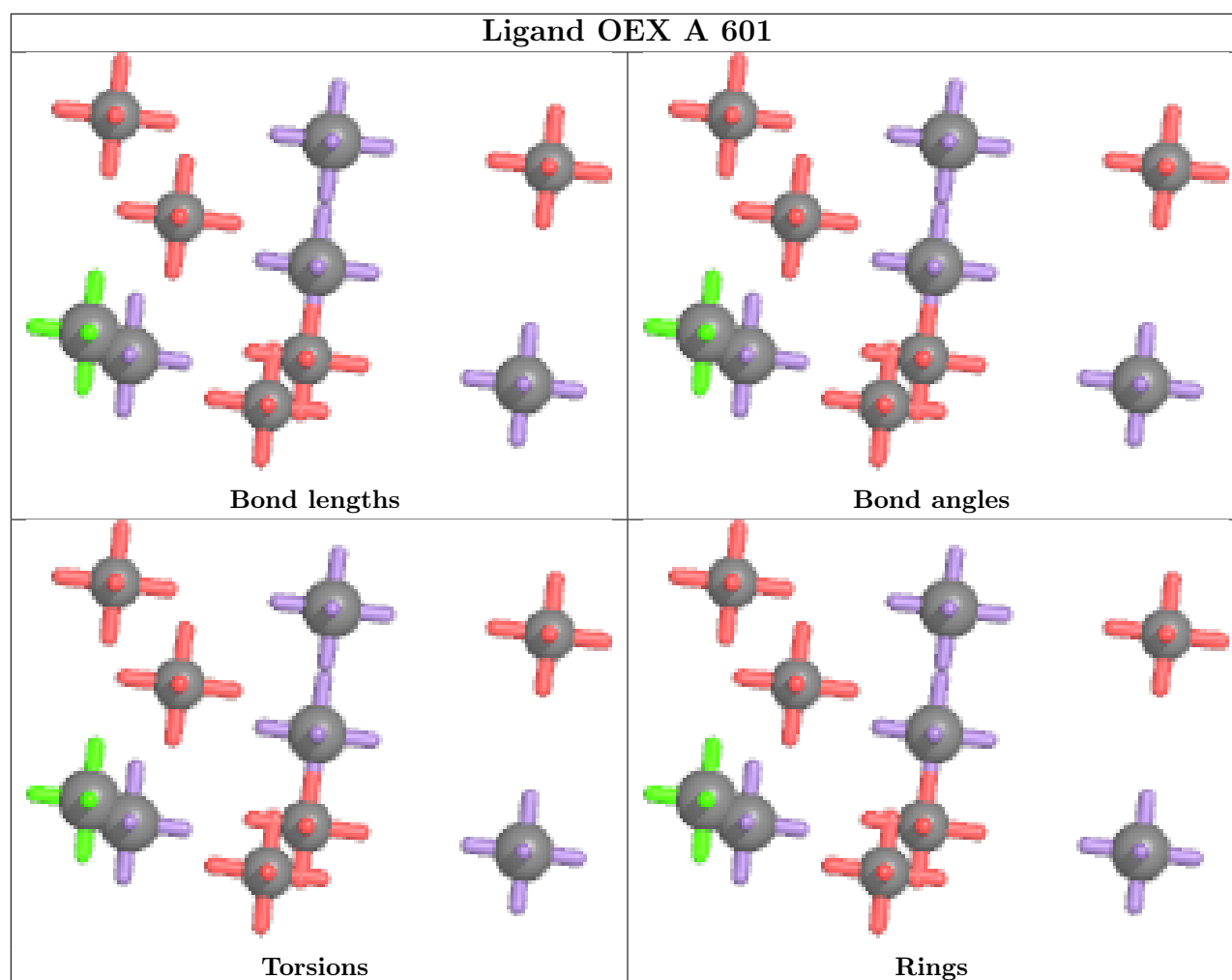
Ligand CLA C 504**Ligand PHO a 608****Ligand CLA b 615**

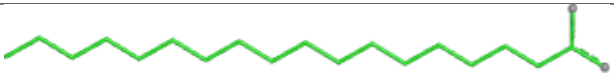
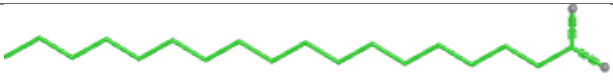


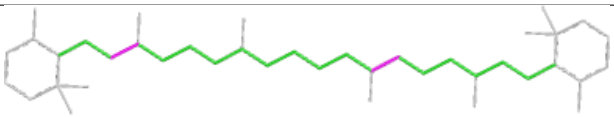
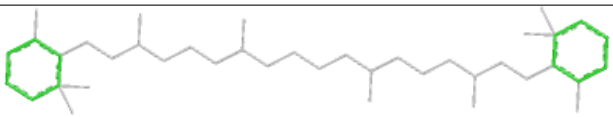


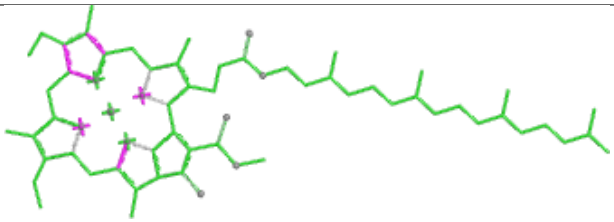
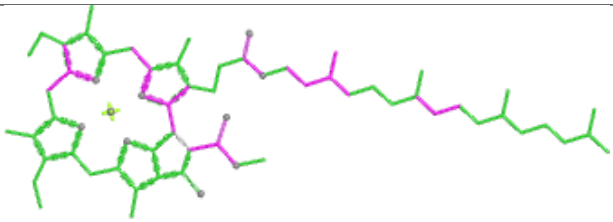
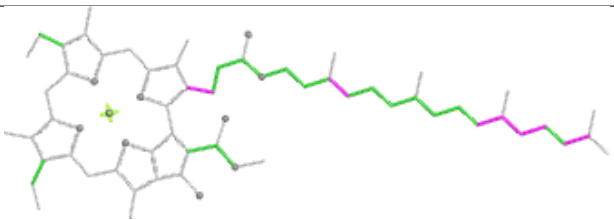
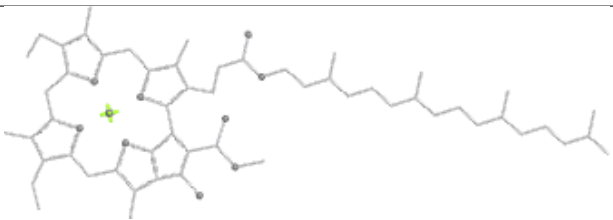


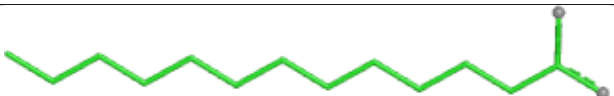
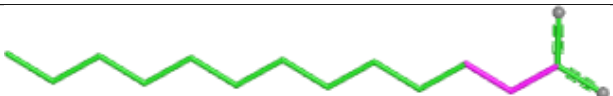
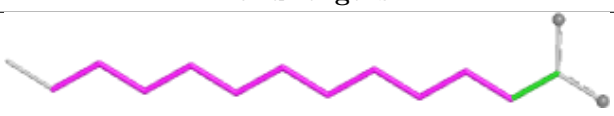
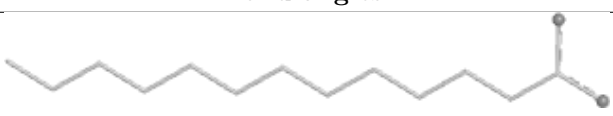


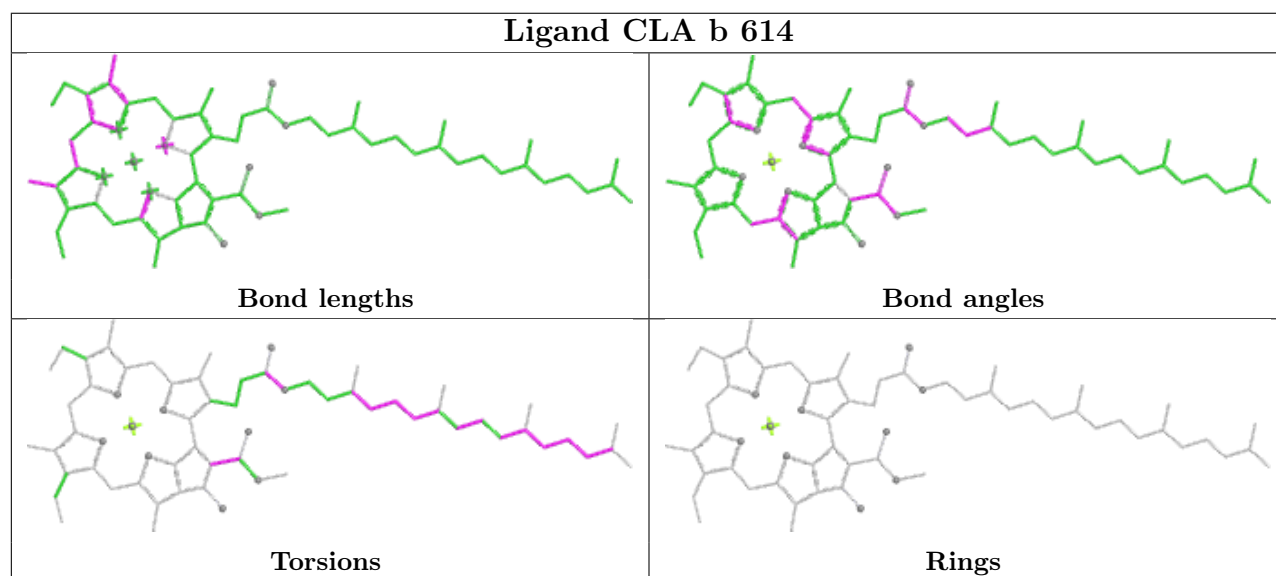
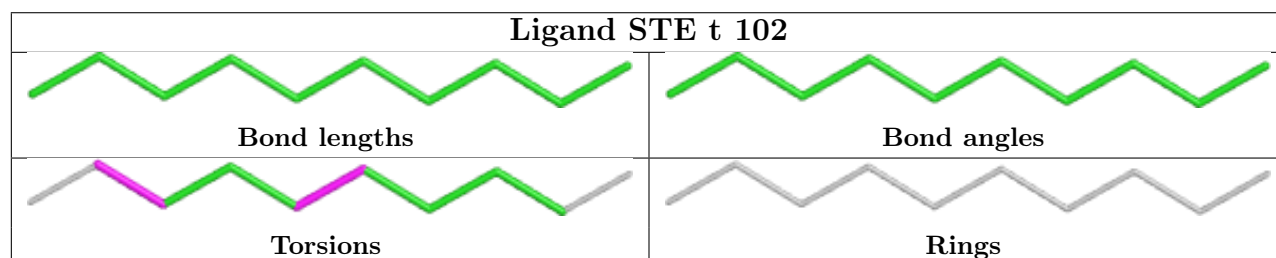
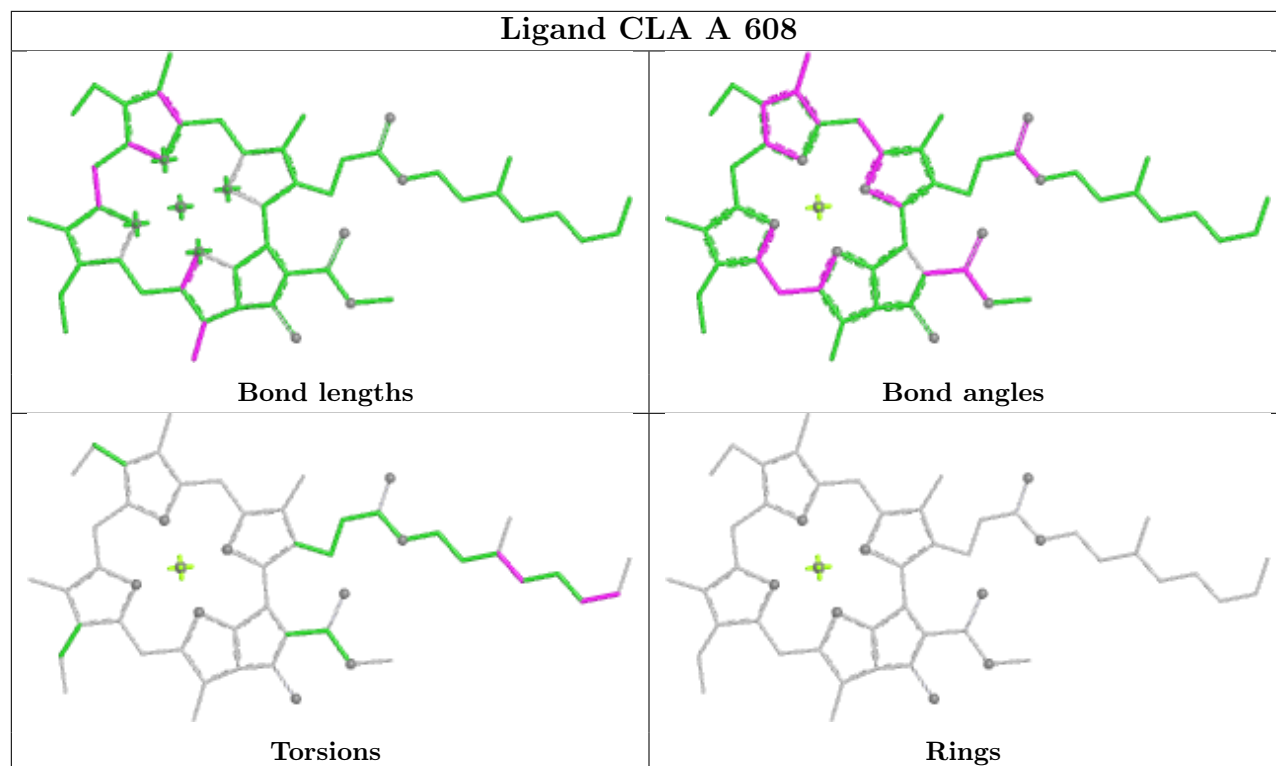


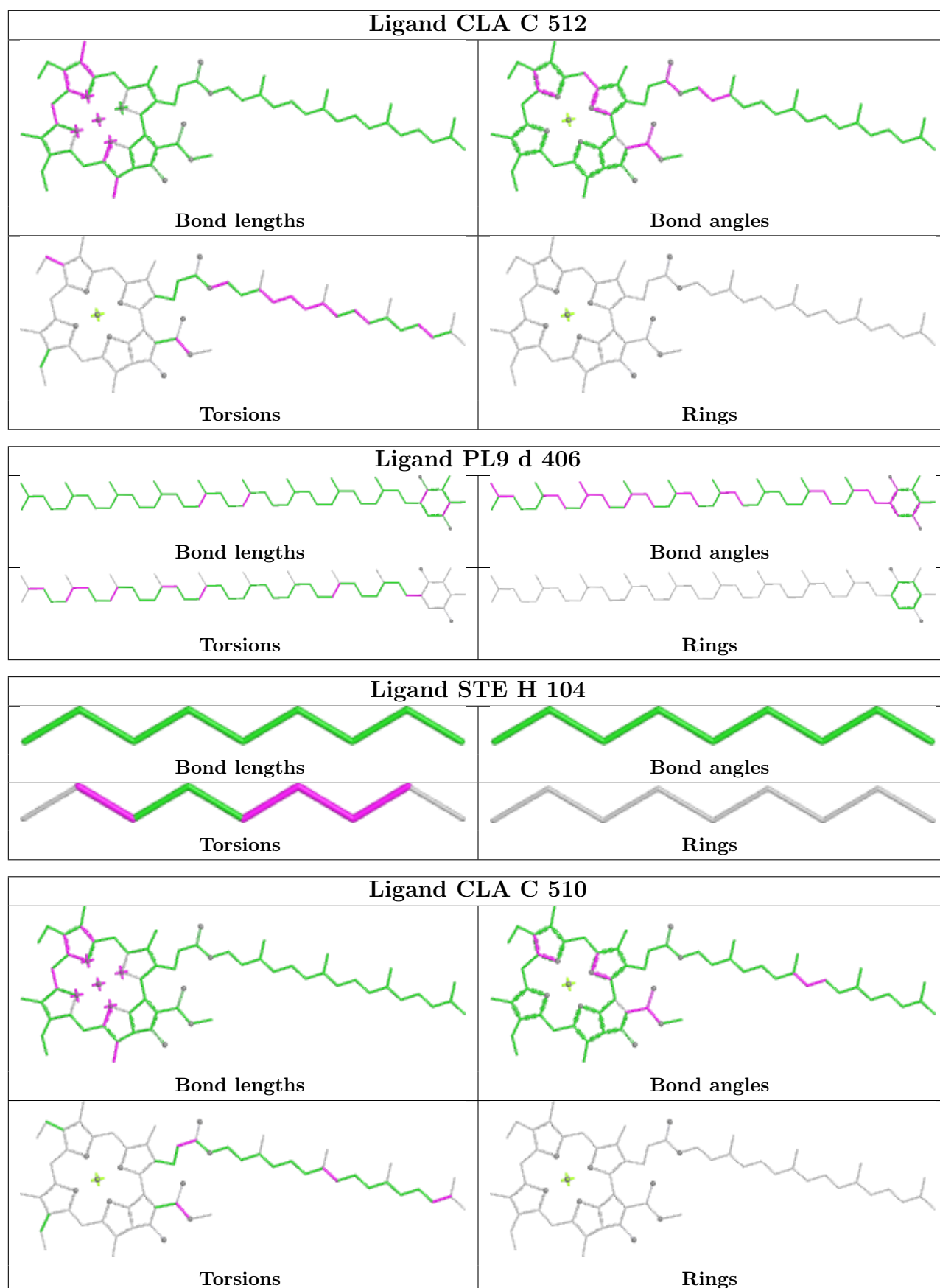
Ligand STE b 621	
 Bond lengths	 Bond angles
 Torsions	 Rings

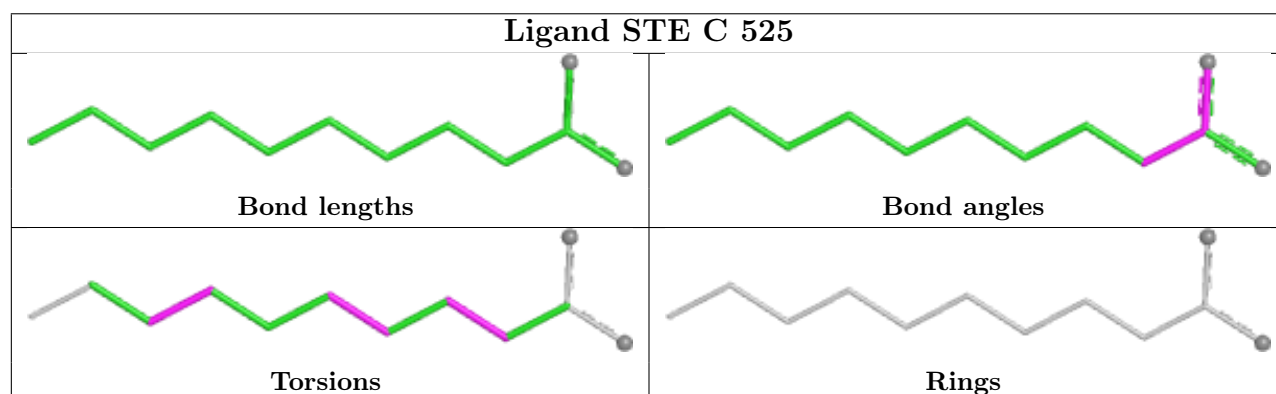
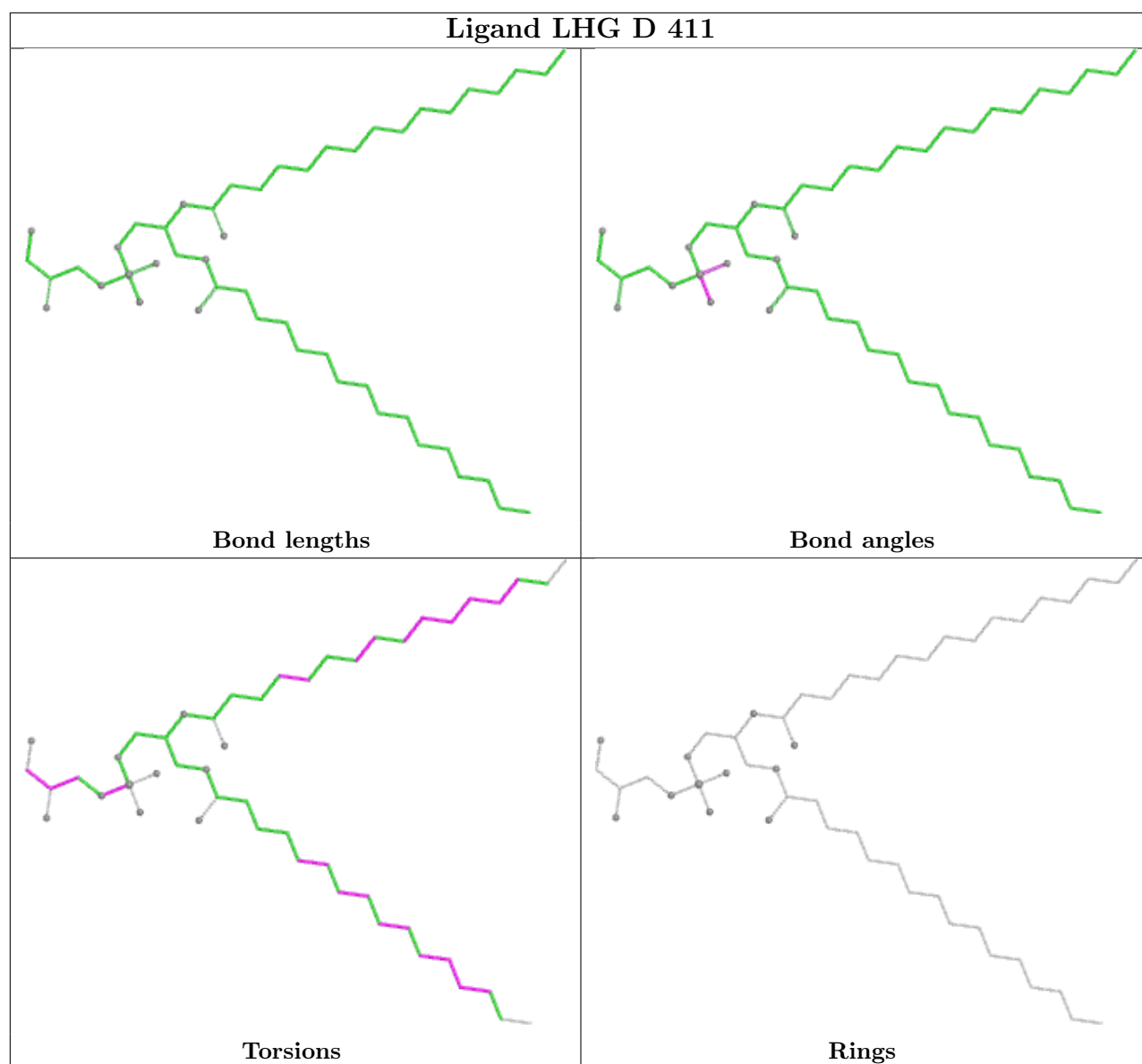
Ligand BCR K 101	
 Bond lengths	 Bond angles
 Torsions	 Rings

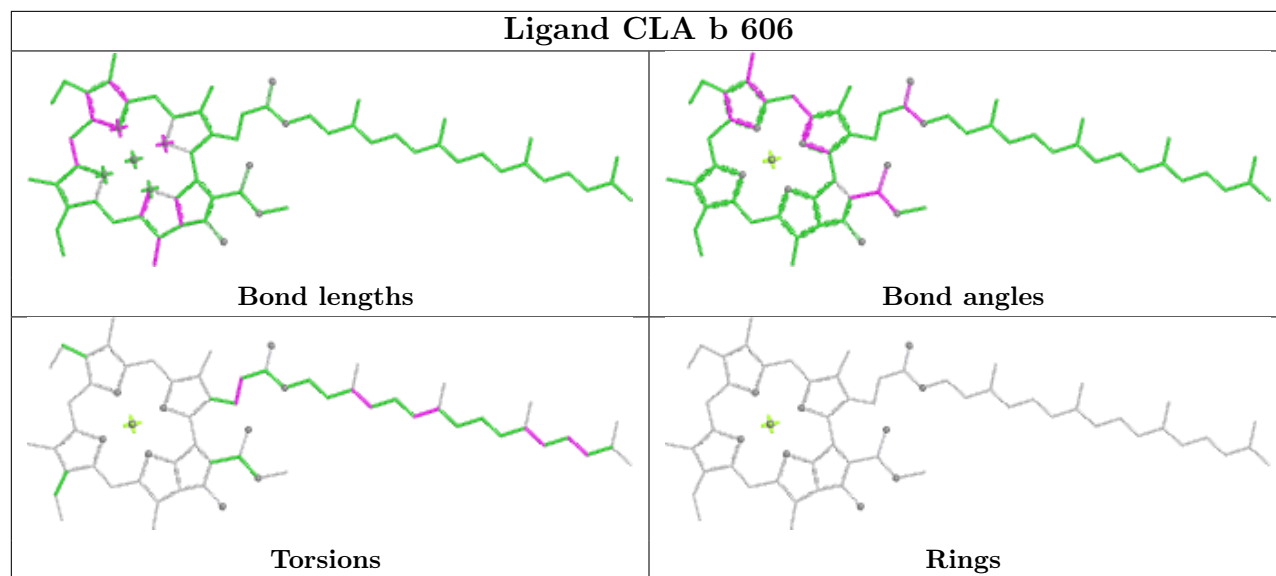
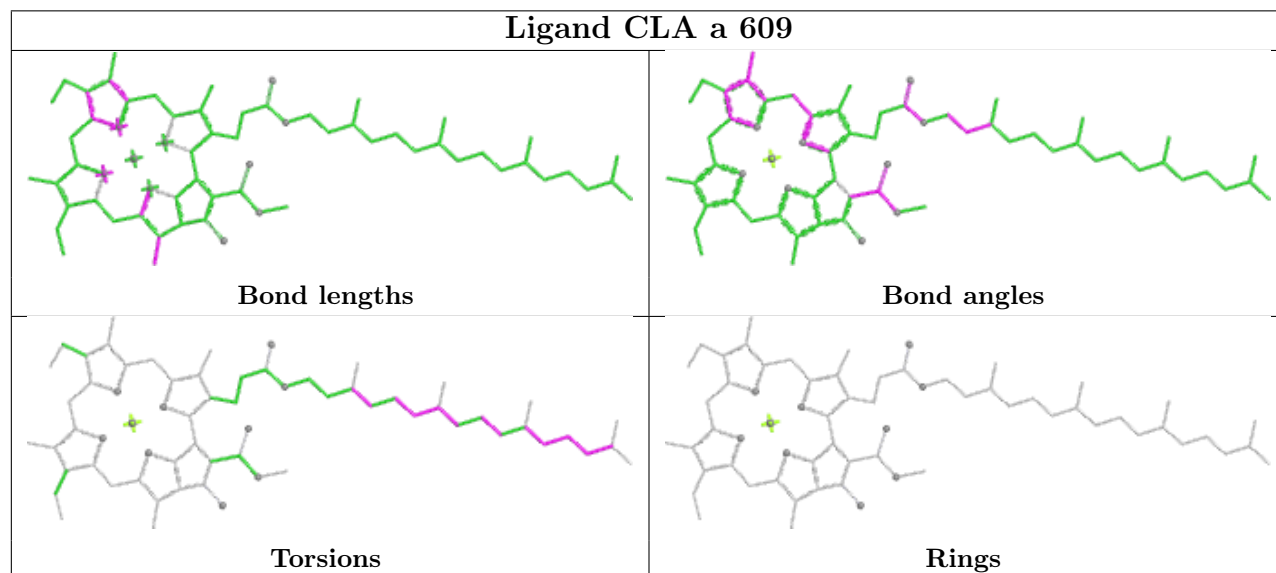
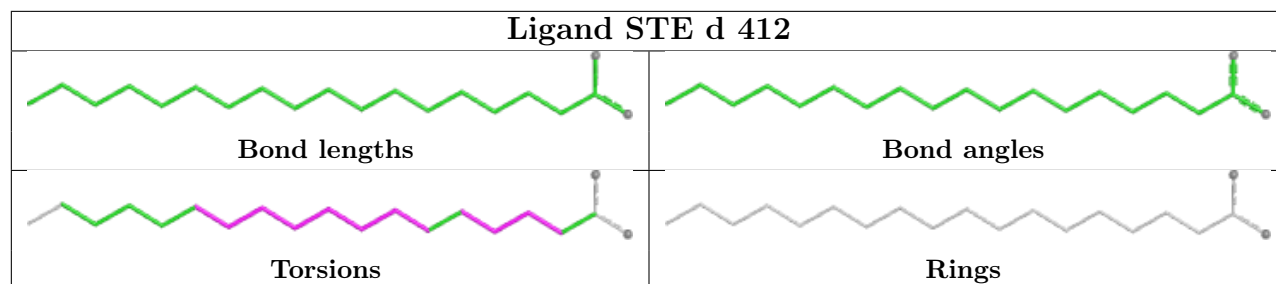
Ligand CLA b 604	
 Bond lengths	 Bond angles
 Torsions	 Rings

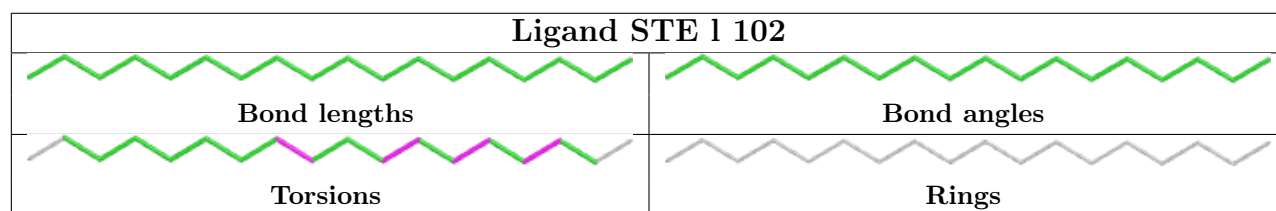
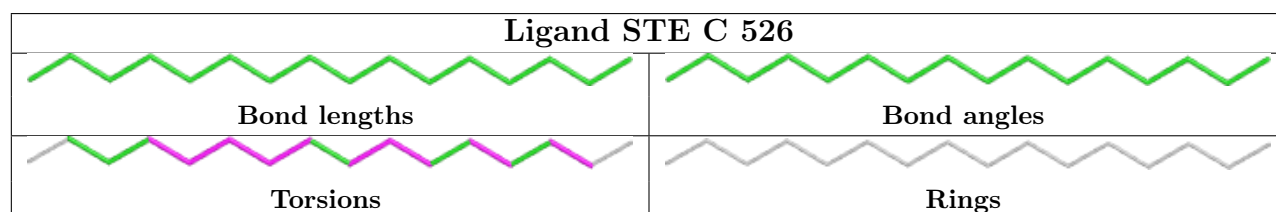
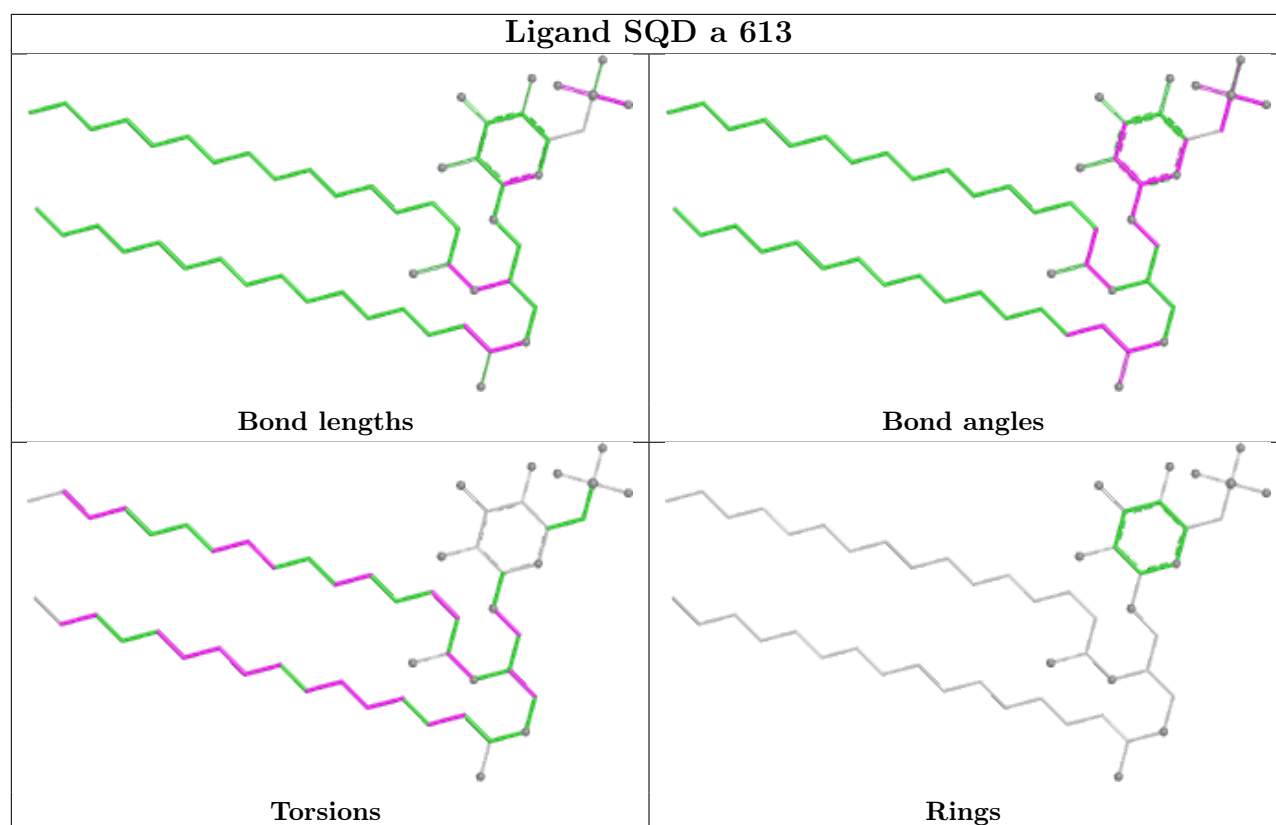
Ligand STE M 102	
 Bond lengths	 Bond angles
 Torsions	 Rings

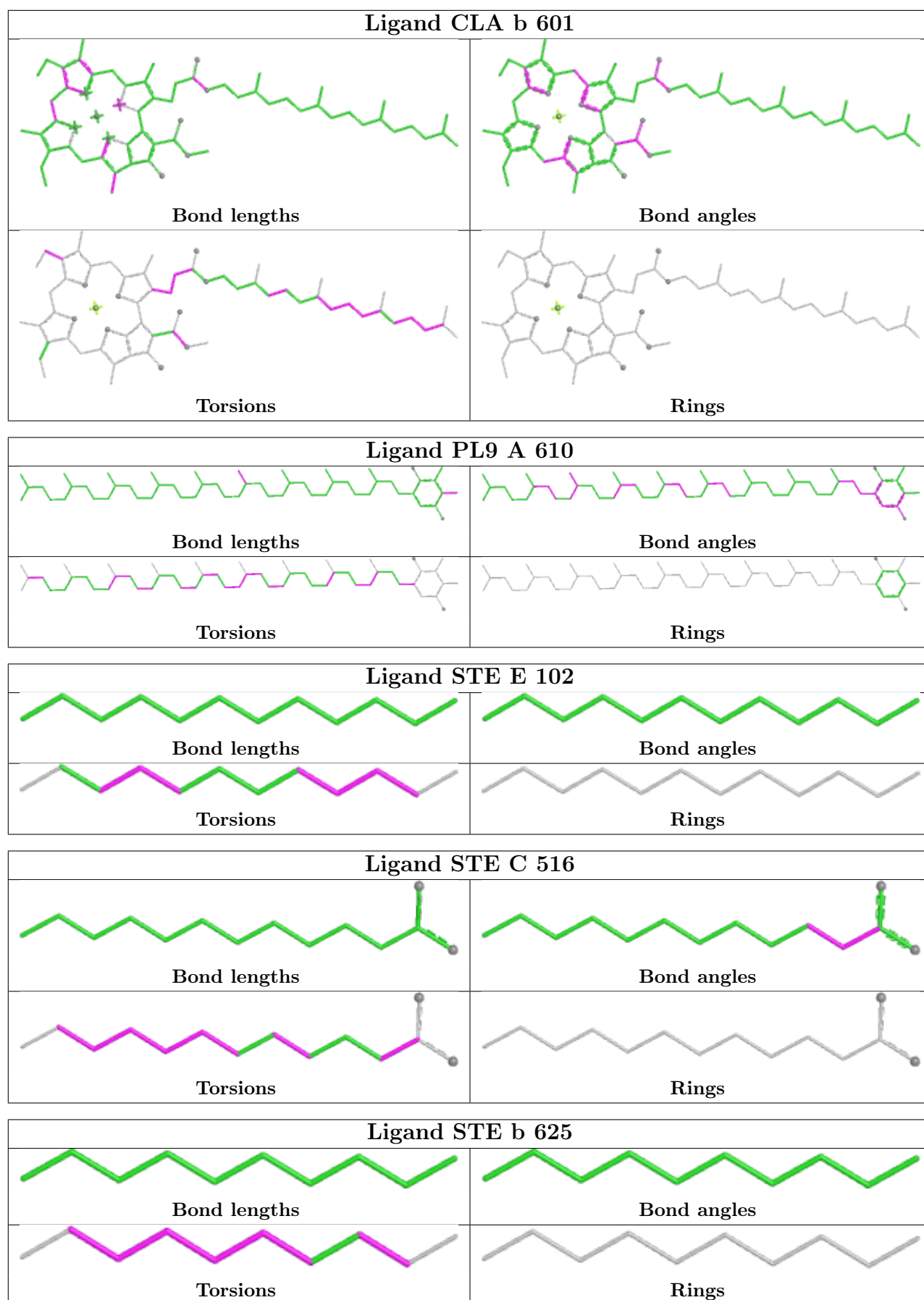


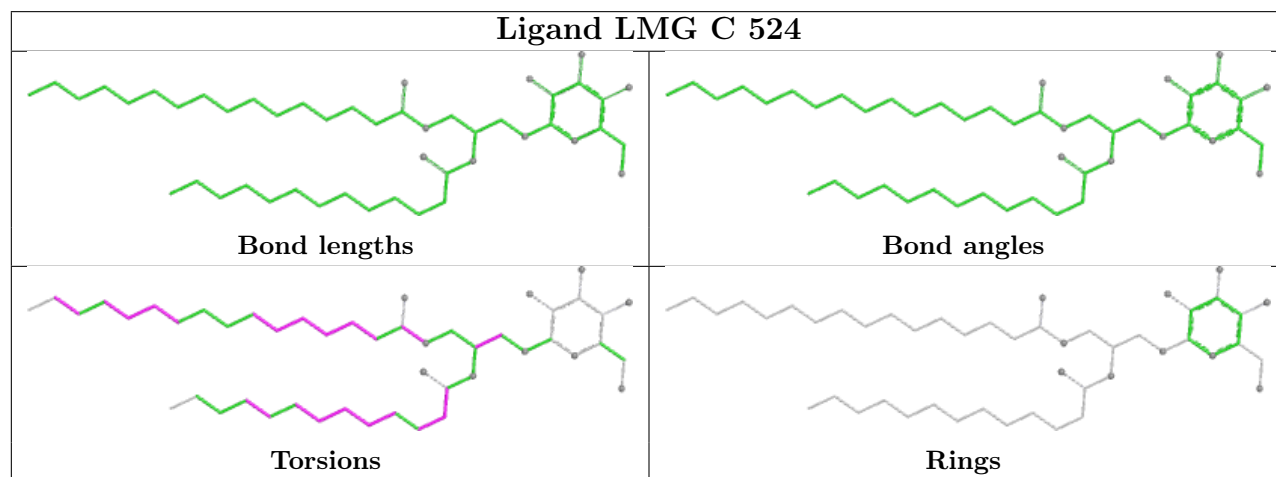
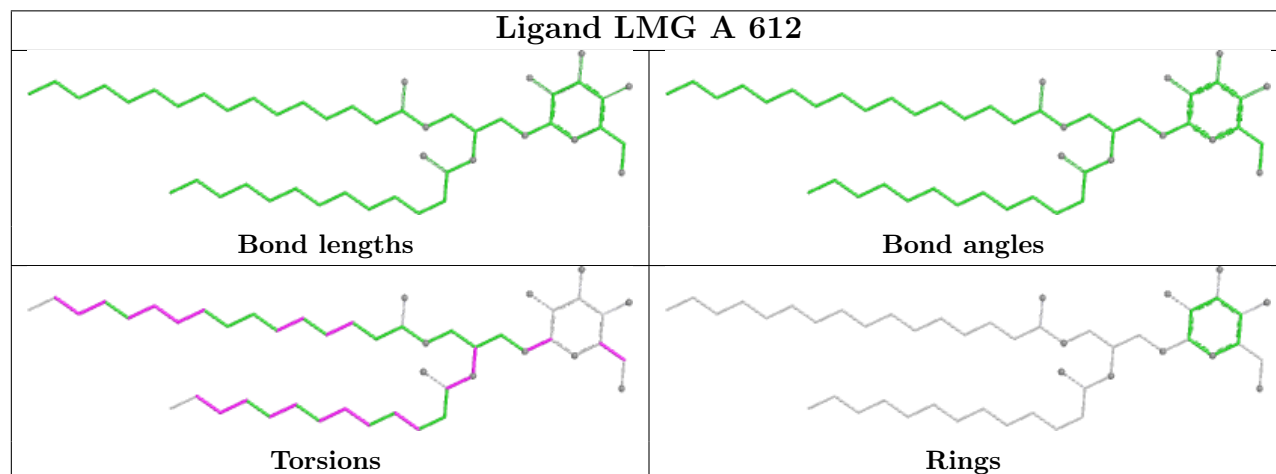
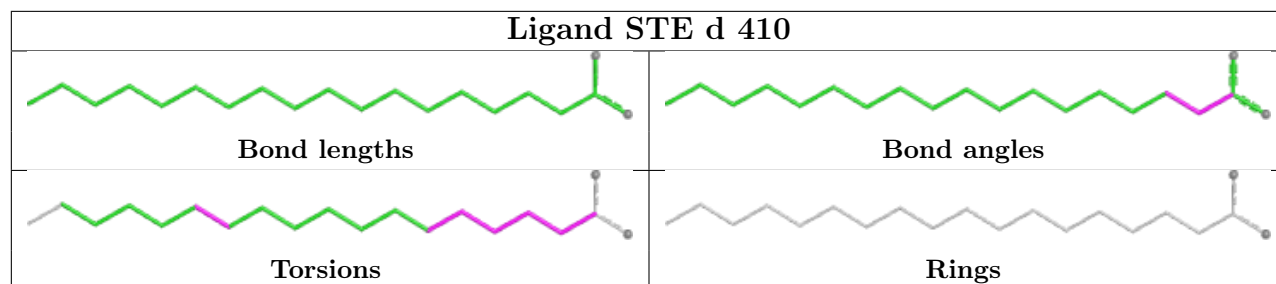


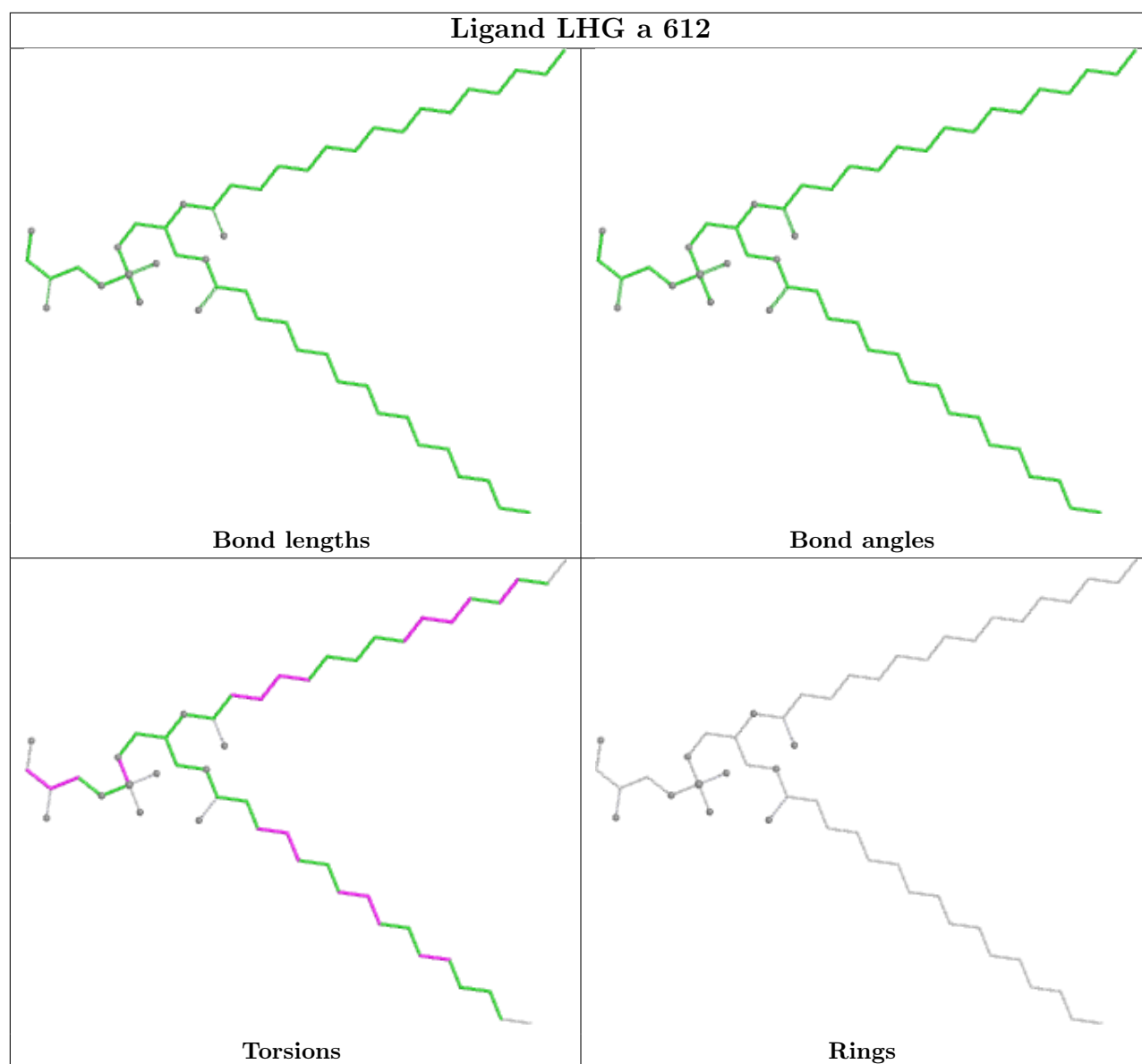


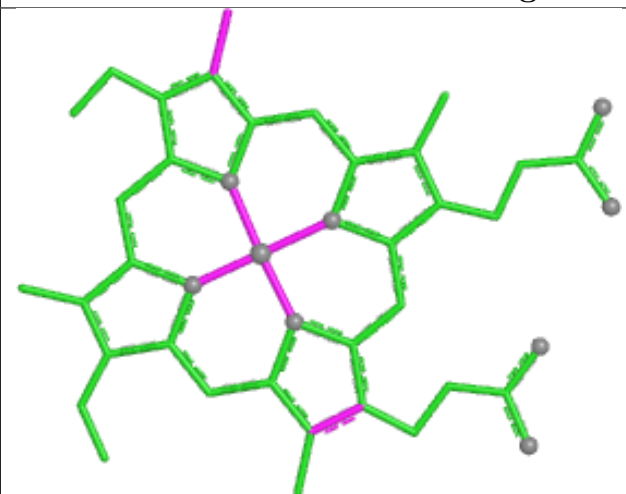
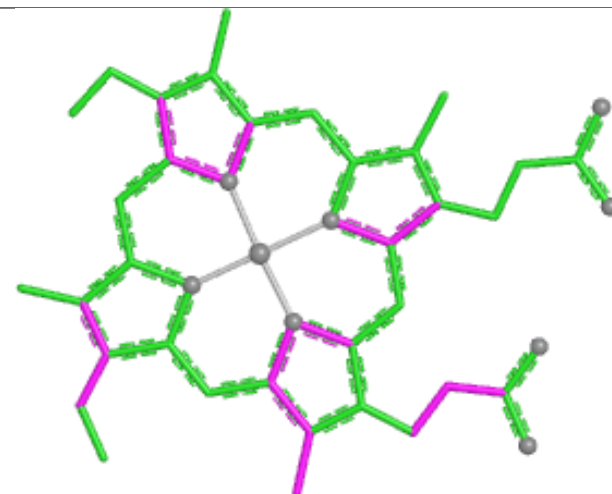
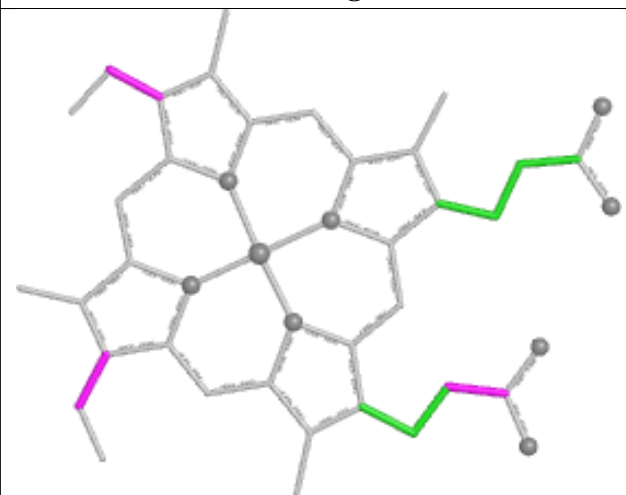
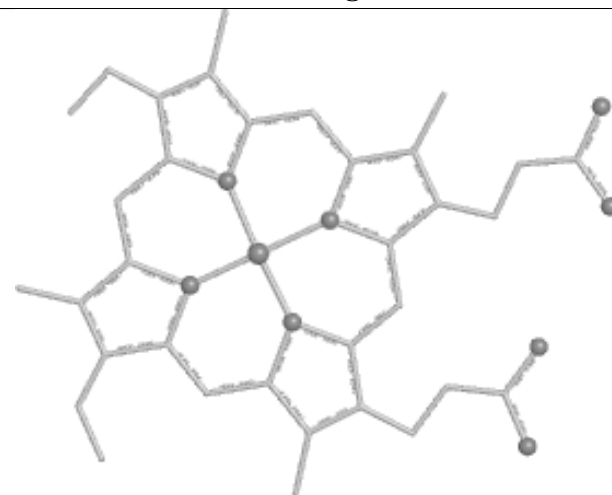




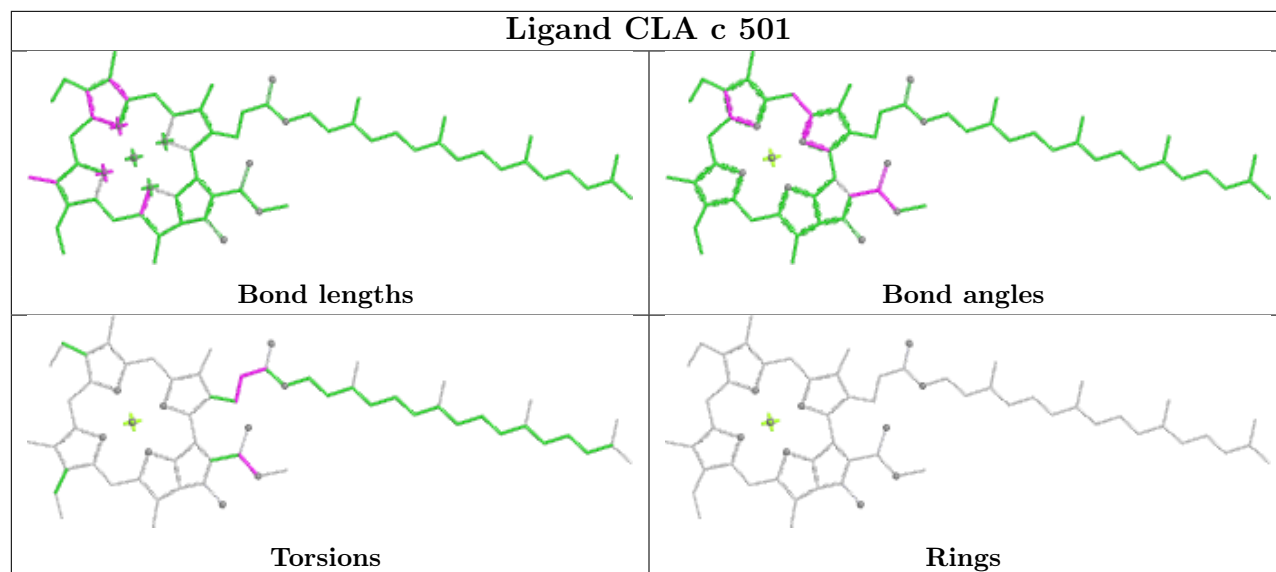
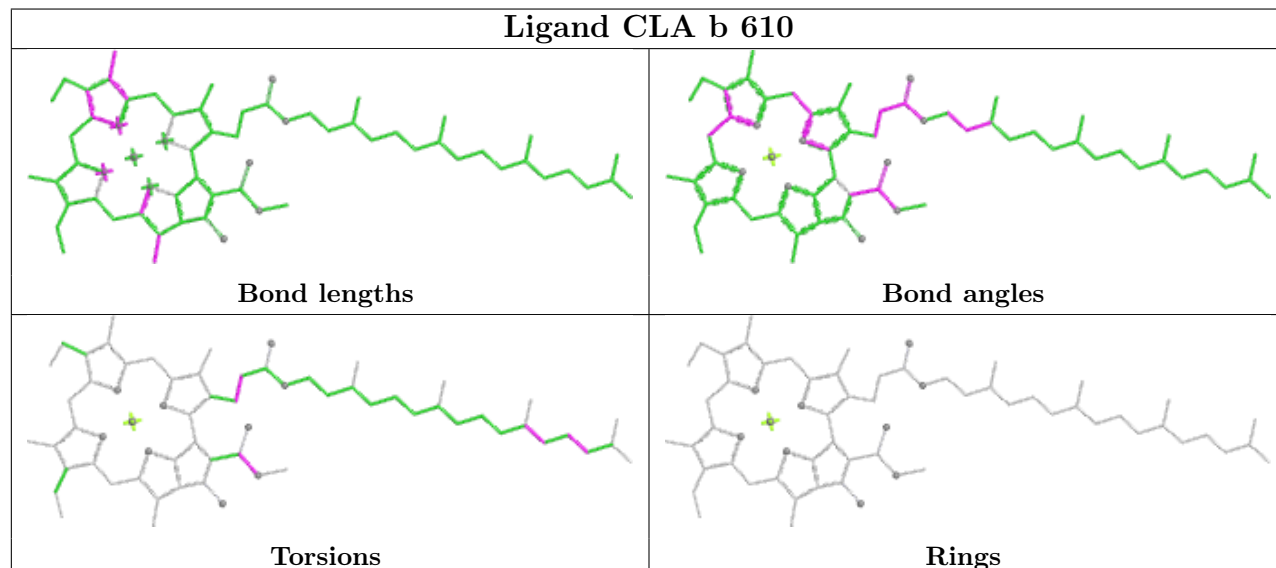
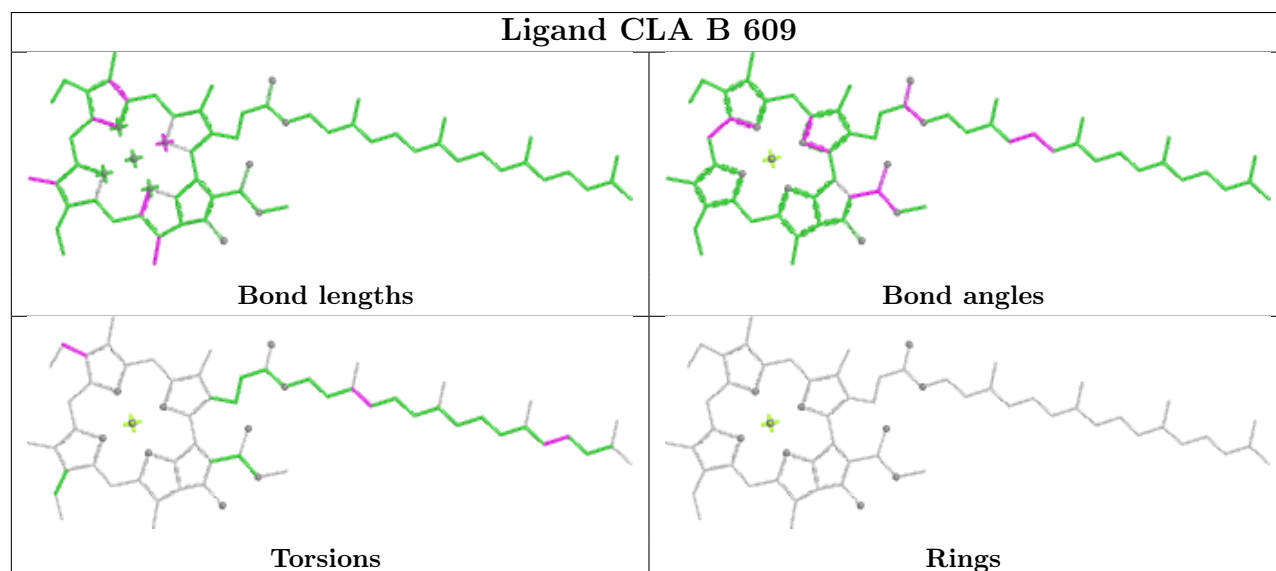


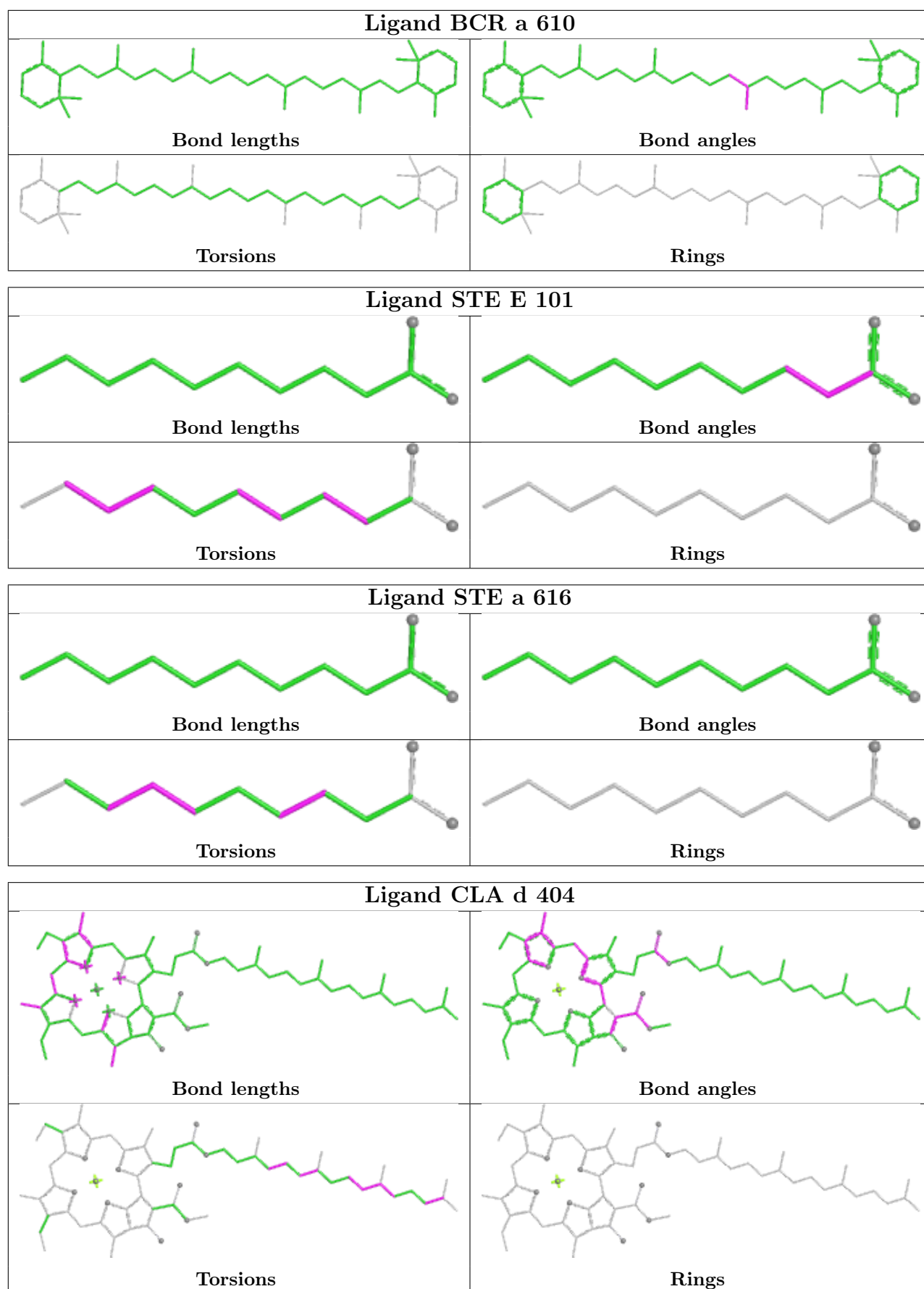


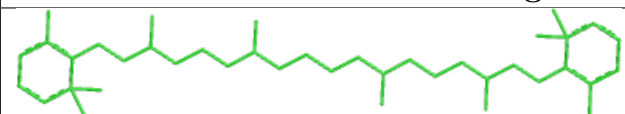
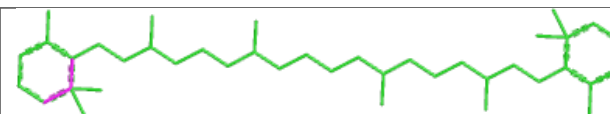
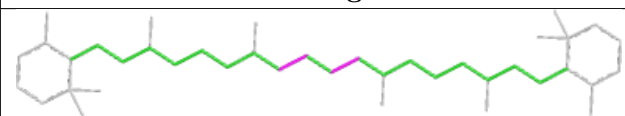
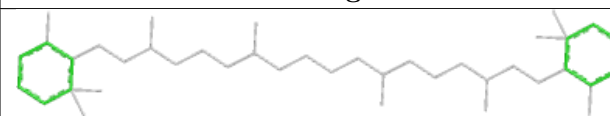


Ligand HEC V 201	
	
Bond lengths	Bond angles
	
Torsions	Rings

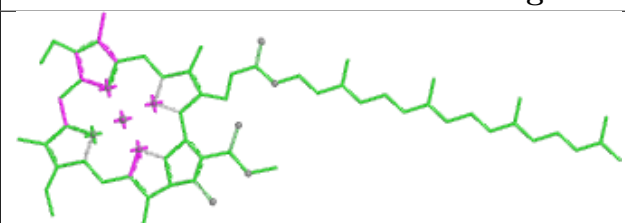
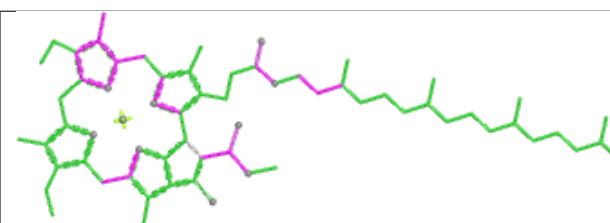
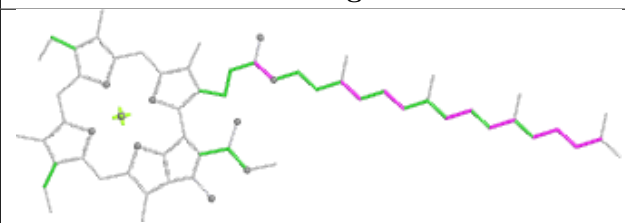
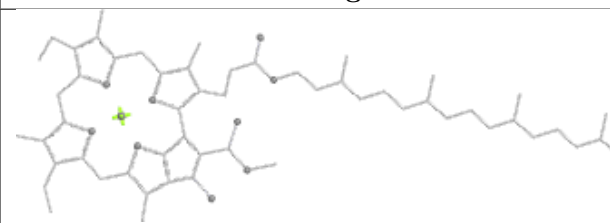
Ligand STE H 103	
	
Bond lengths	Bond angles
	
Torsions	Rings

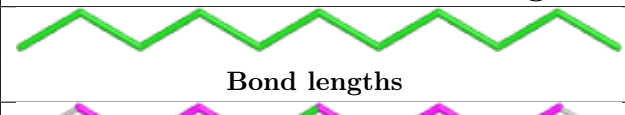
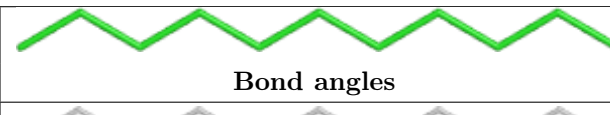
Ligand CLA c 501**Ligand CLA b 610****Ligand CLA B 609**

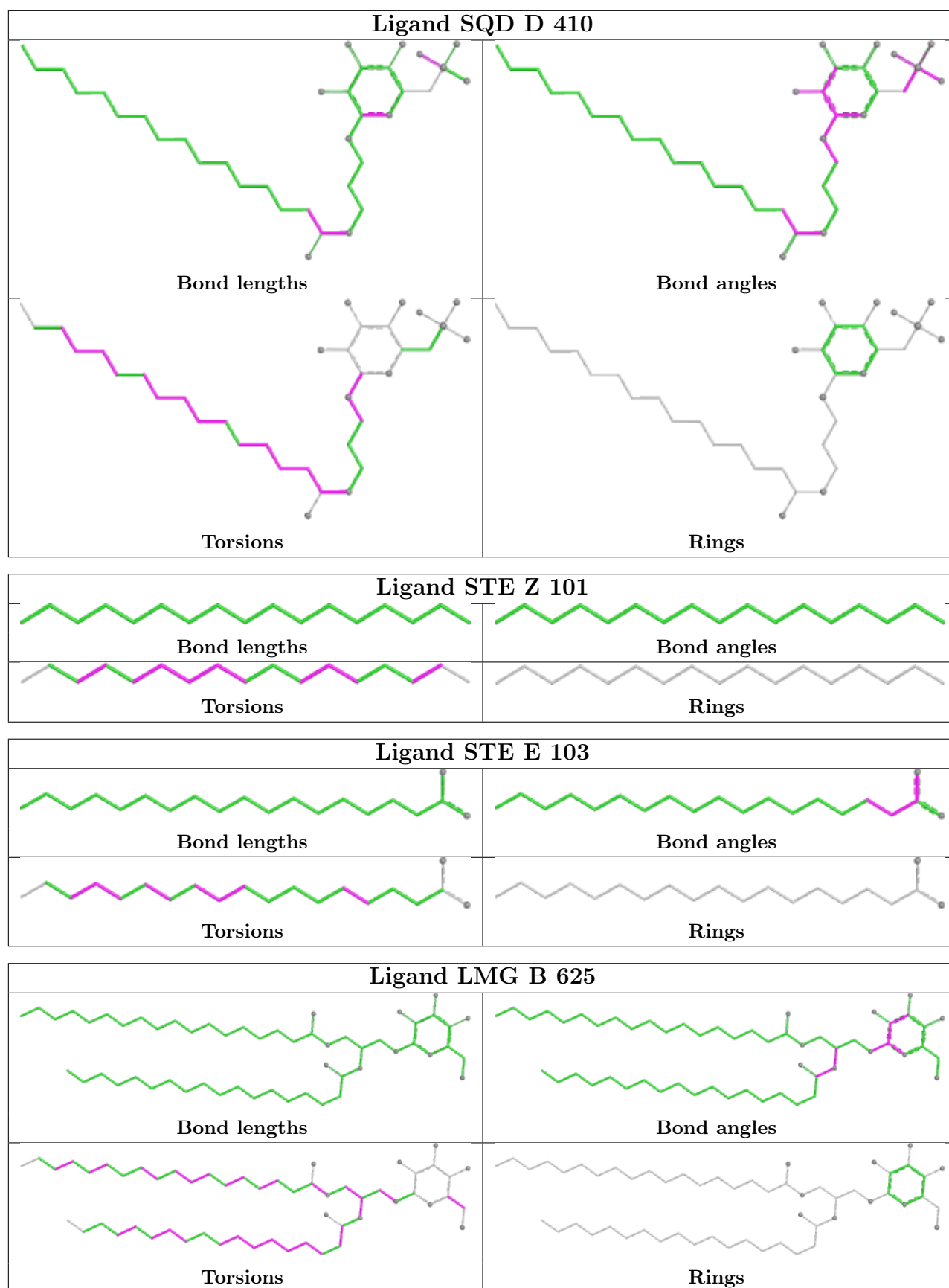


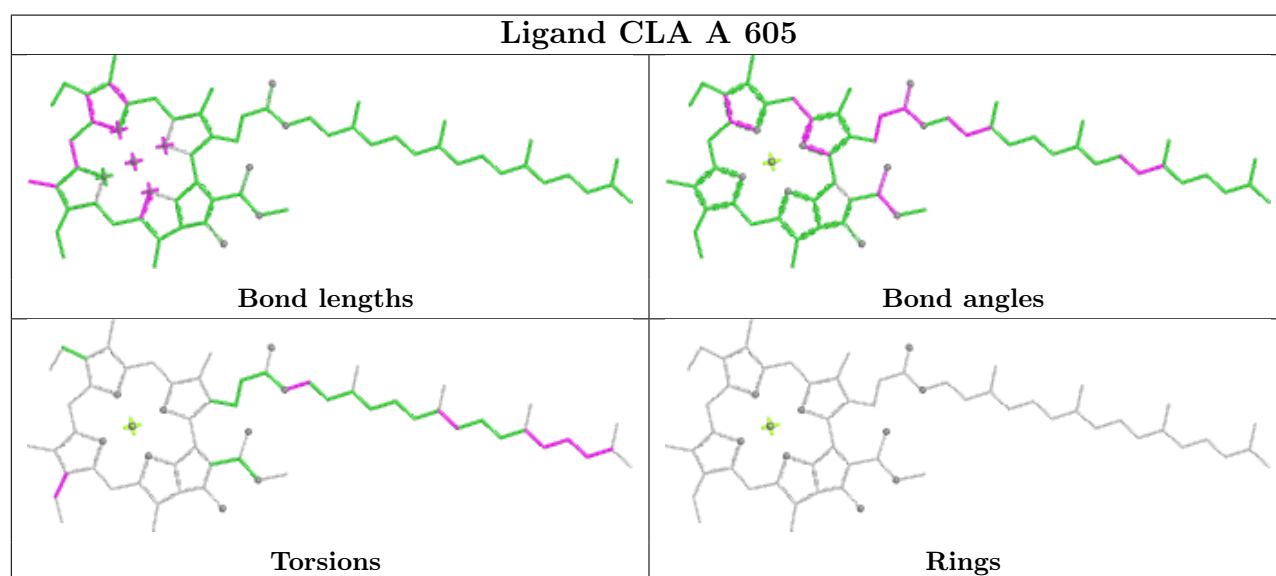
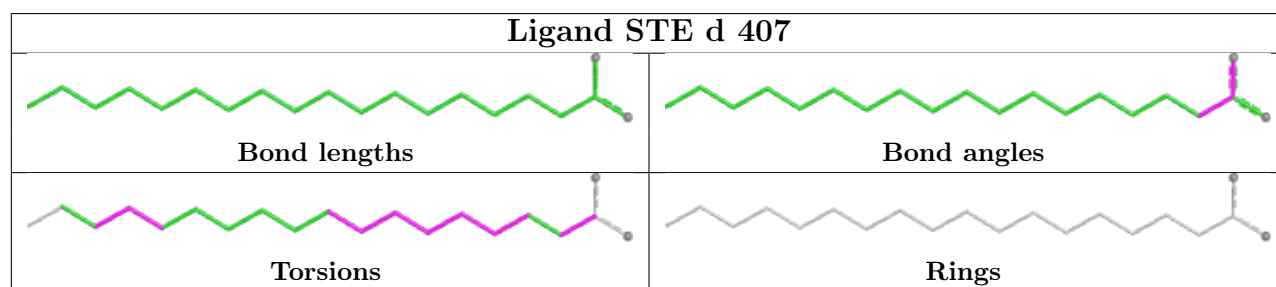
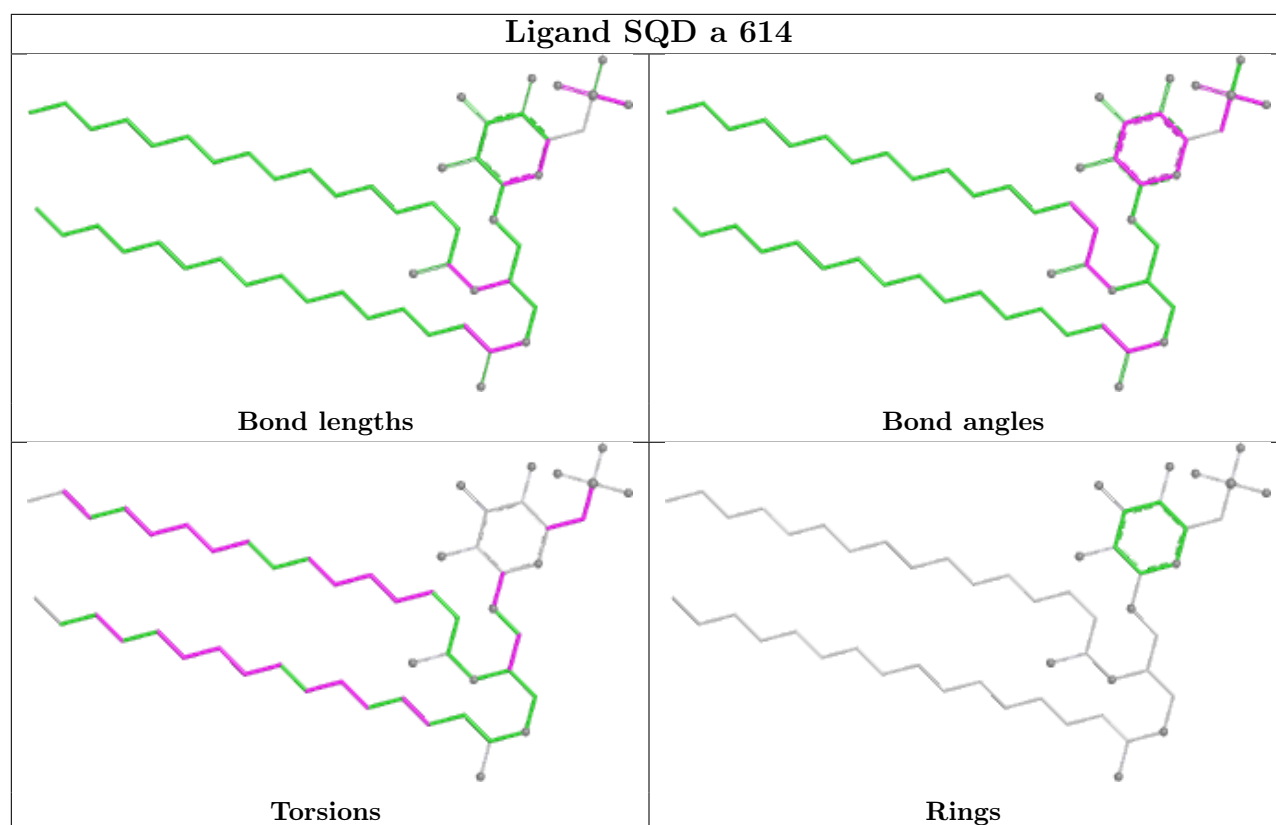
Ligand BCR c 515	
	
Bond lengths	Bond angles
	
Torsions	Rings

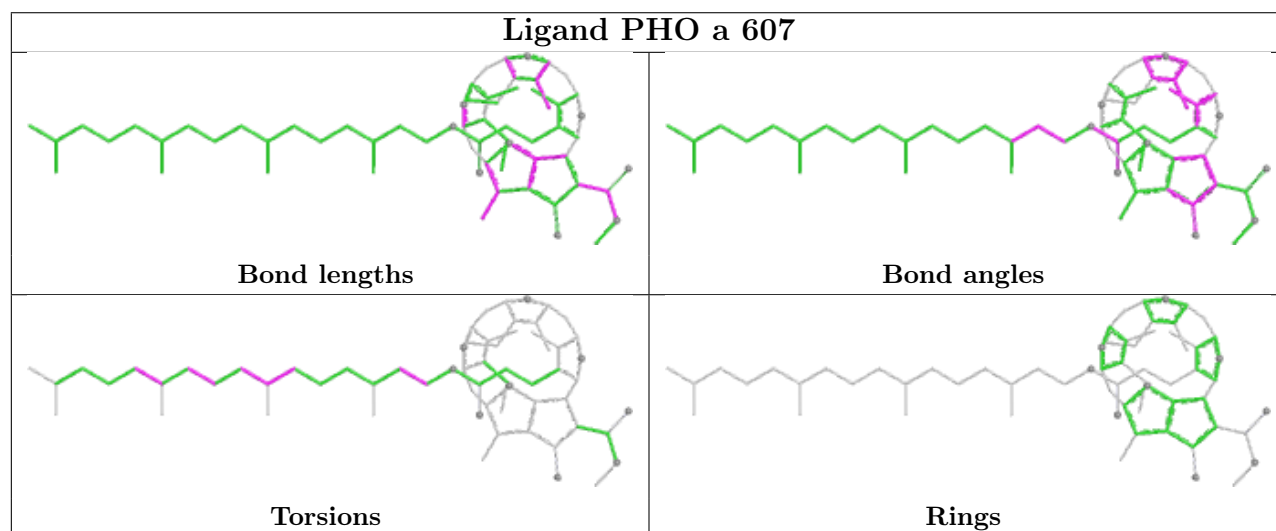
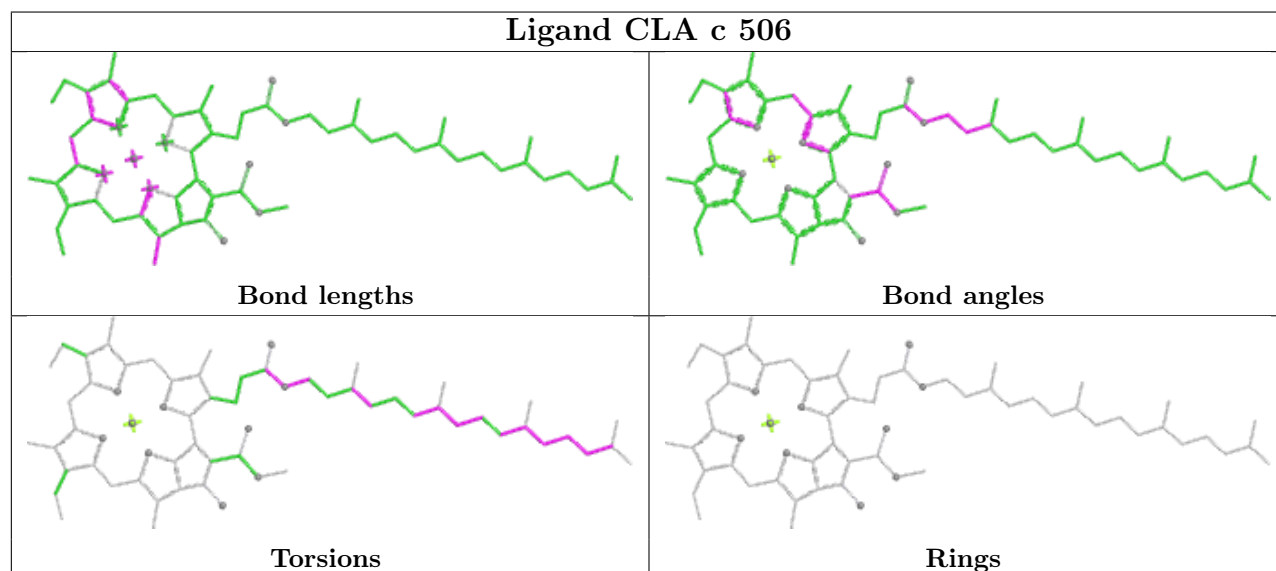
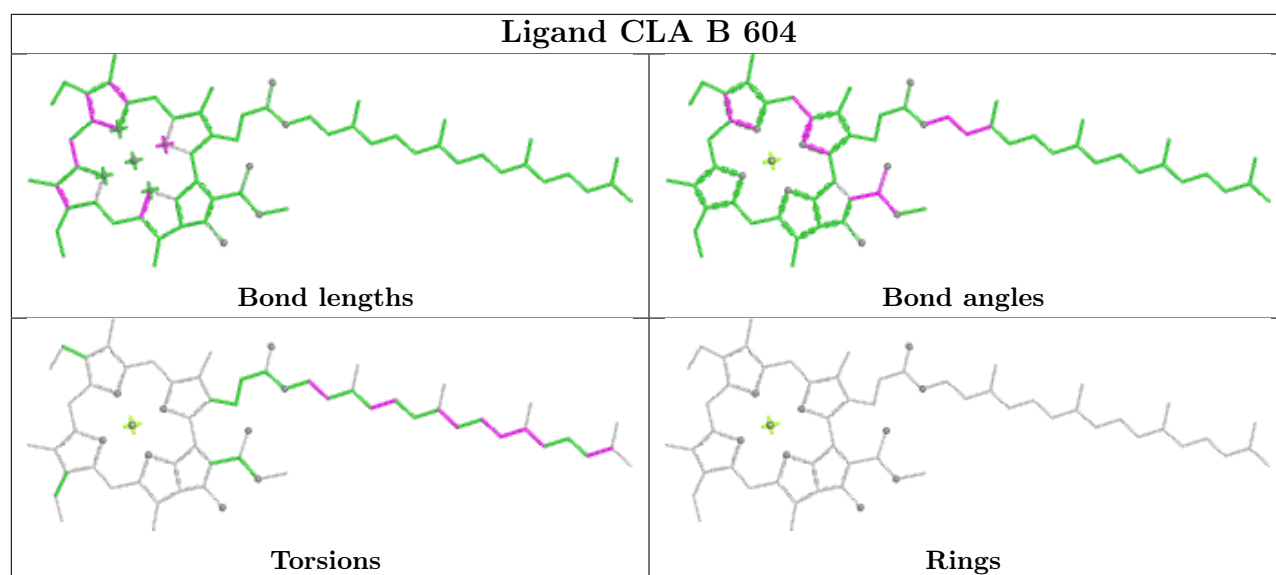
Ligand PL9 a 611	
	
Bond lengths	Bond angles
	
Torsions	Rings

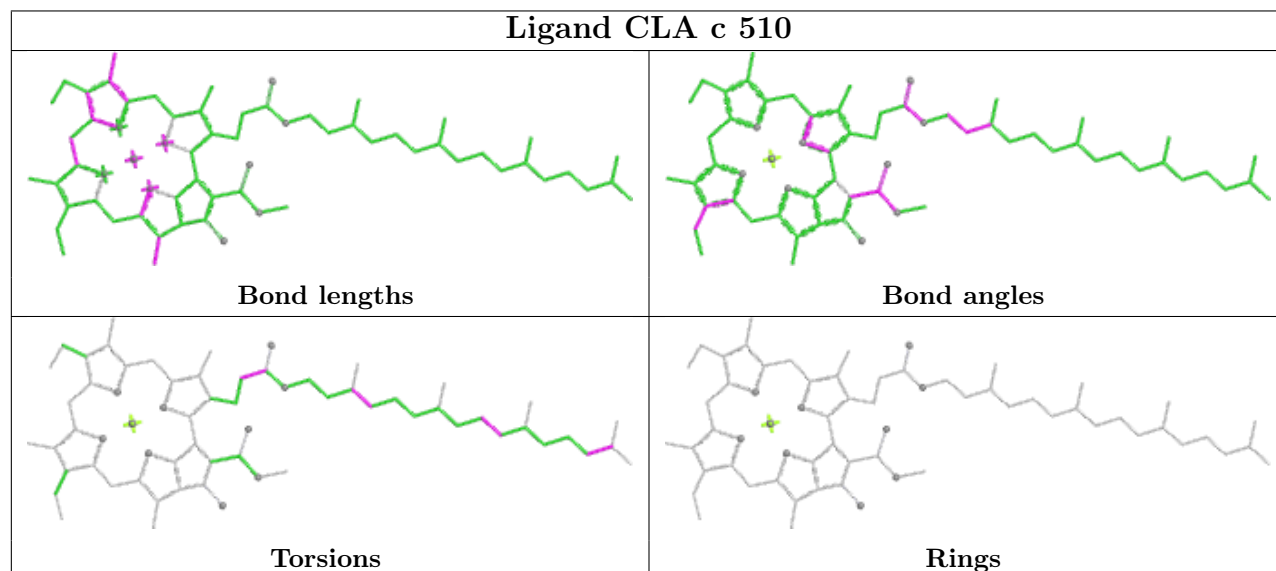
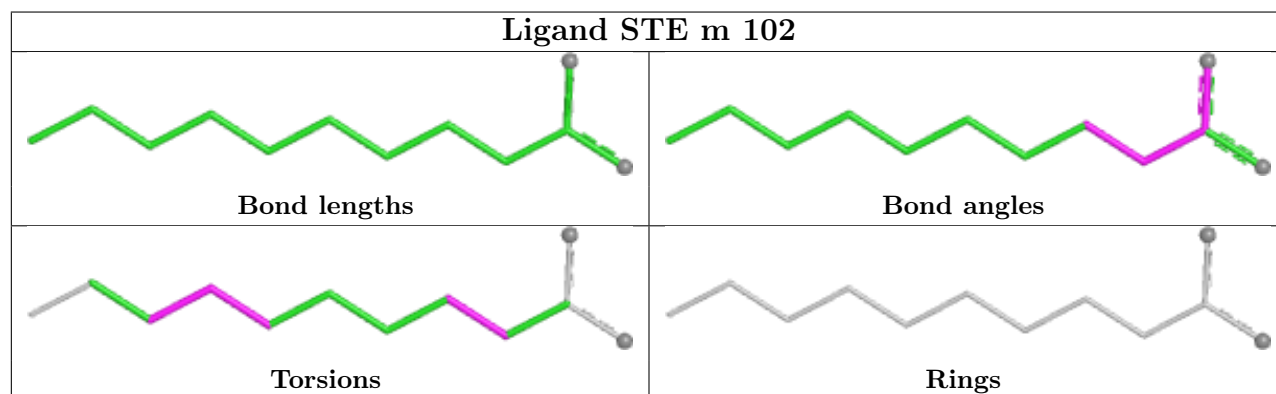
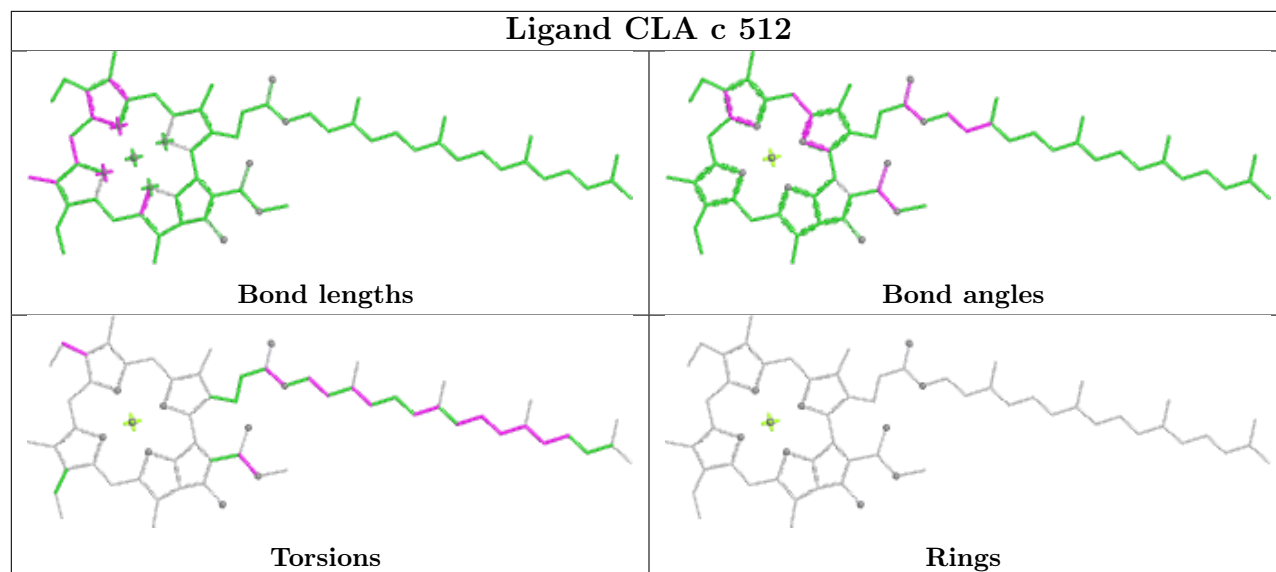
Ligand CLA c 505	
	
Bond lengths	Bond angles
	
Torsions	Rings

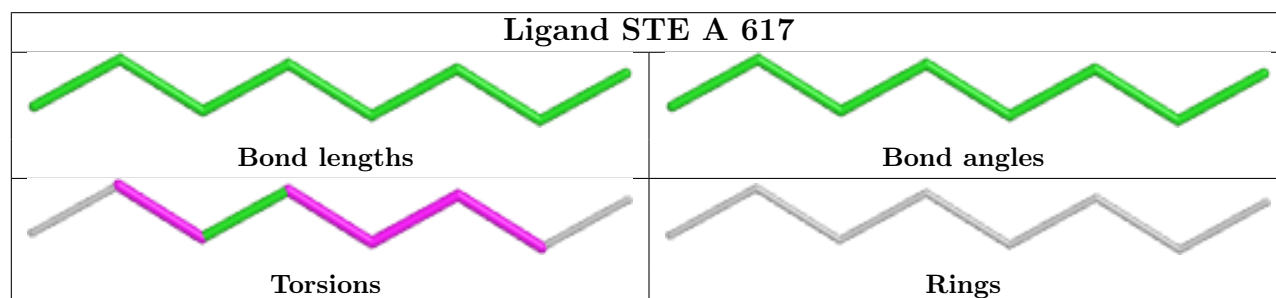
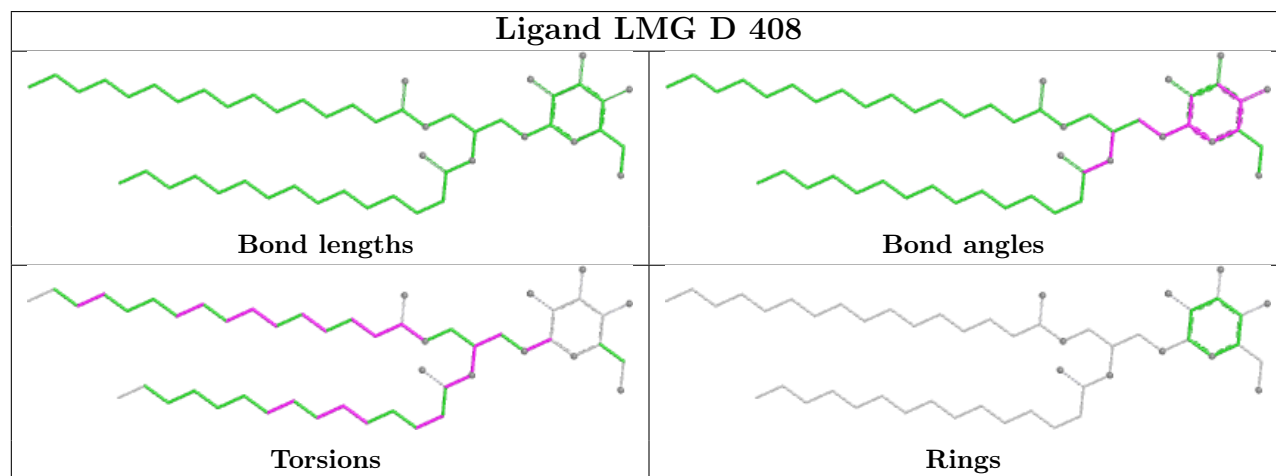
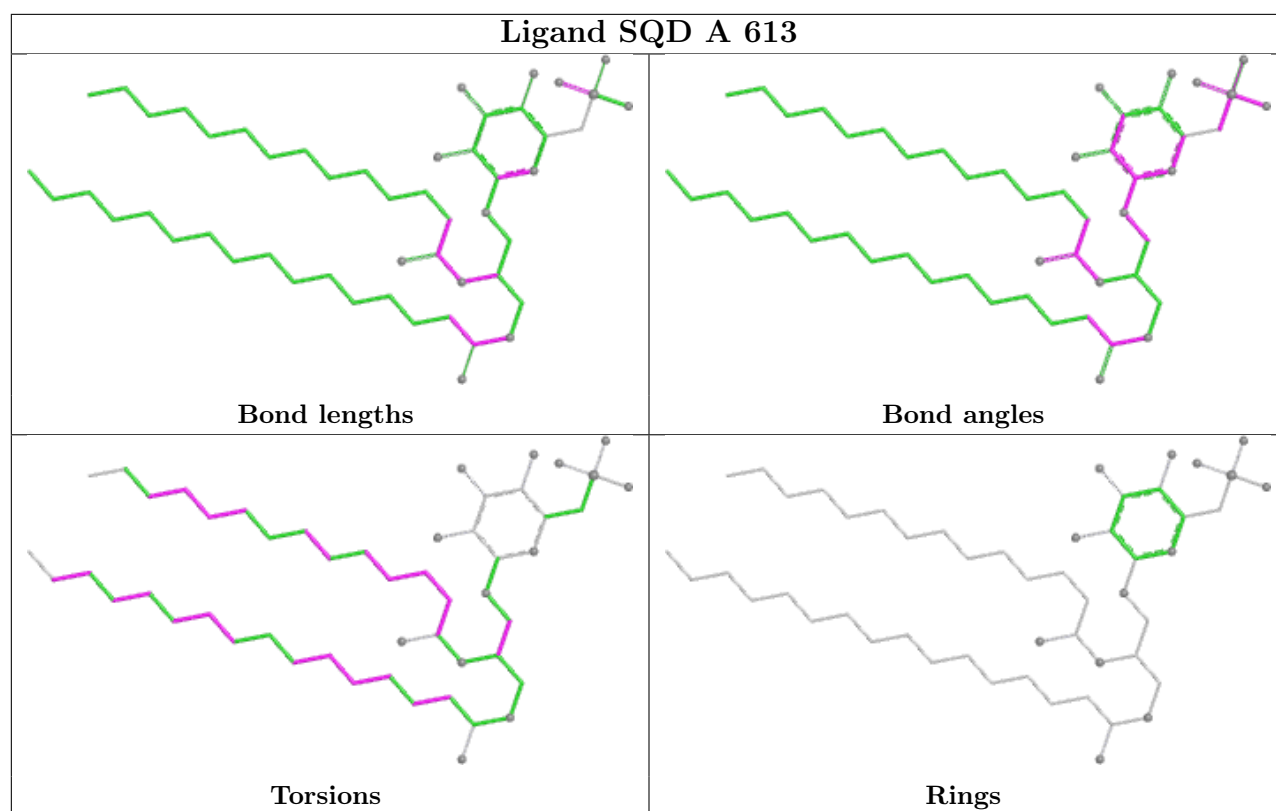
Ligand STE h 103	
	
Bond lengths	Bond angles
	
Torsions	Rings

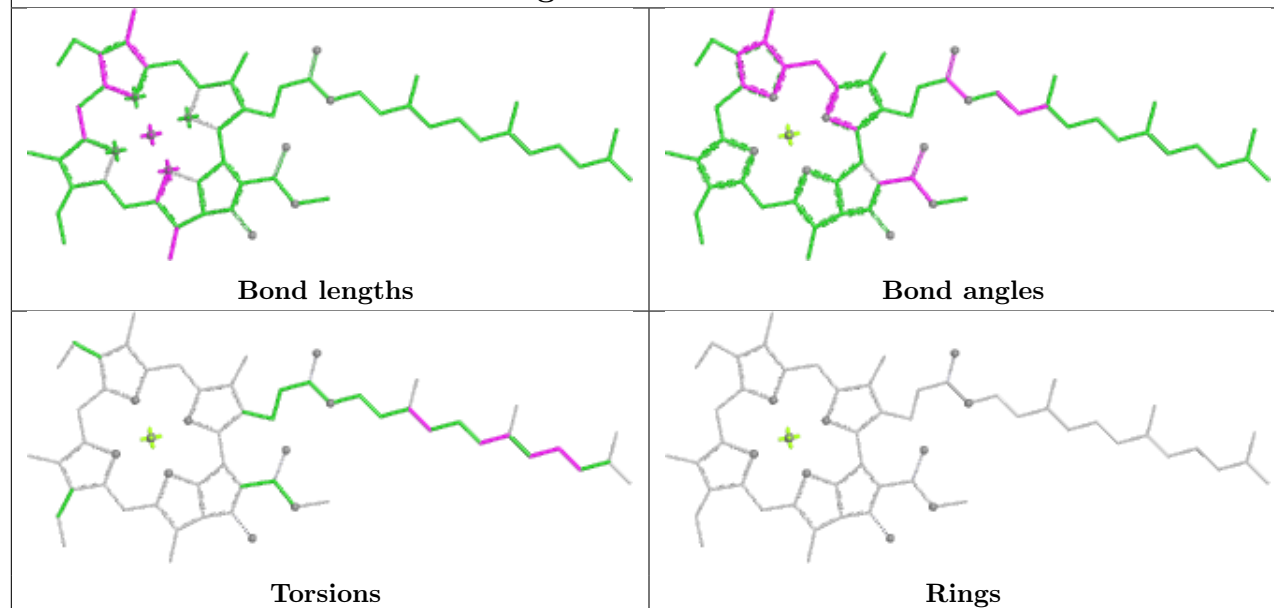
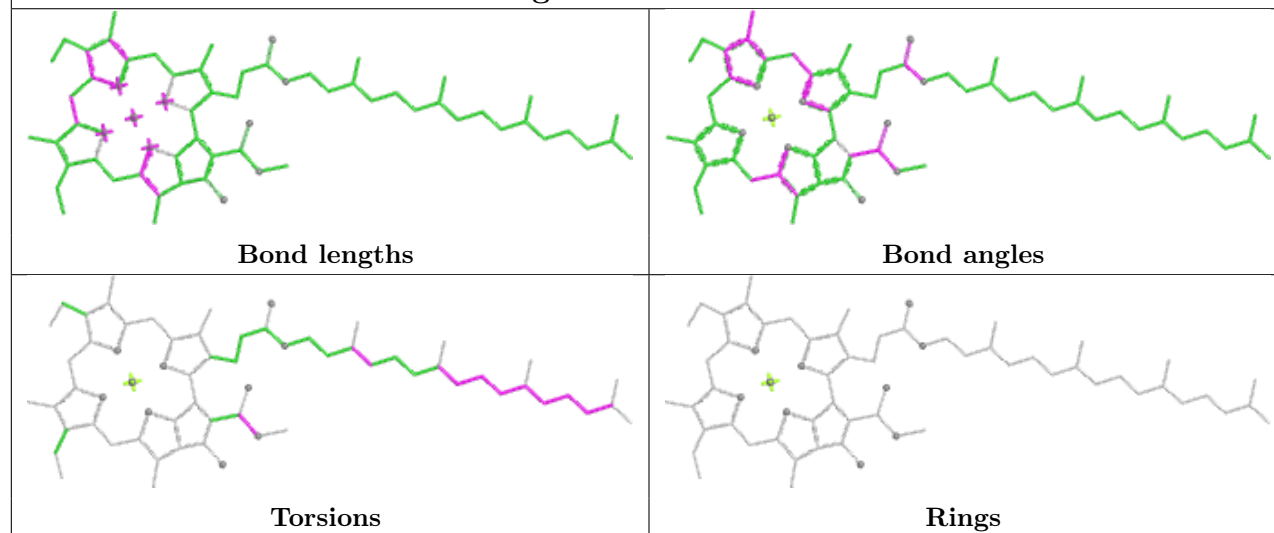


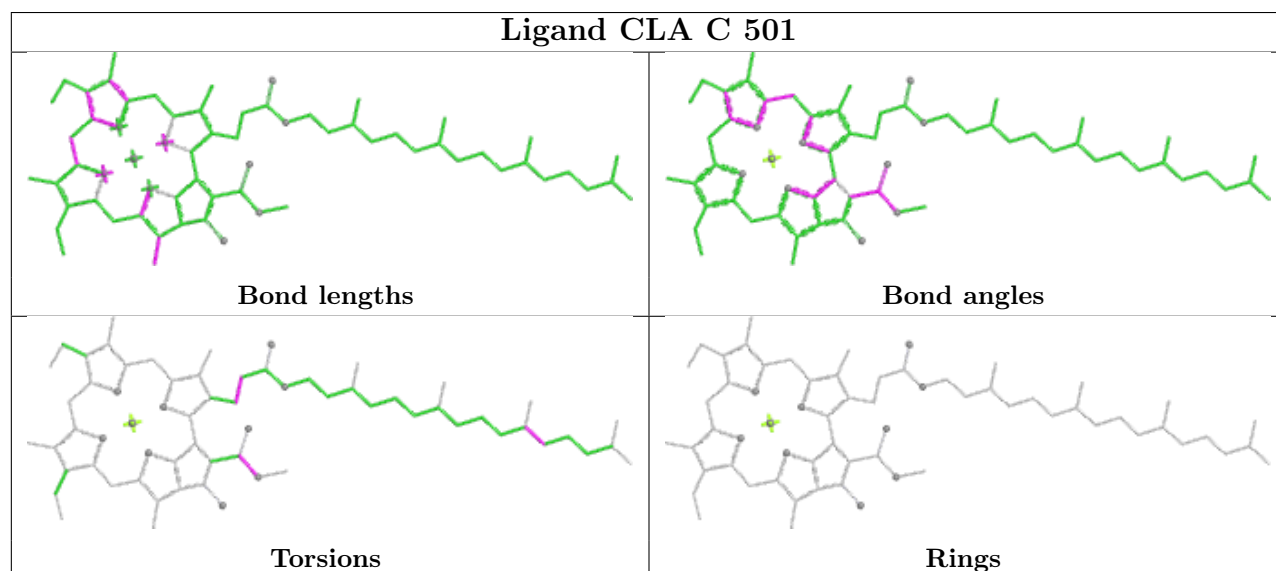
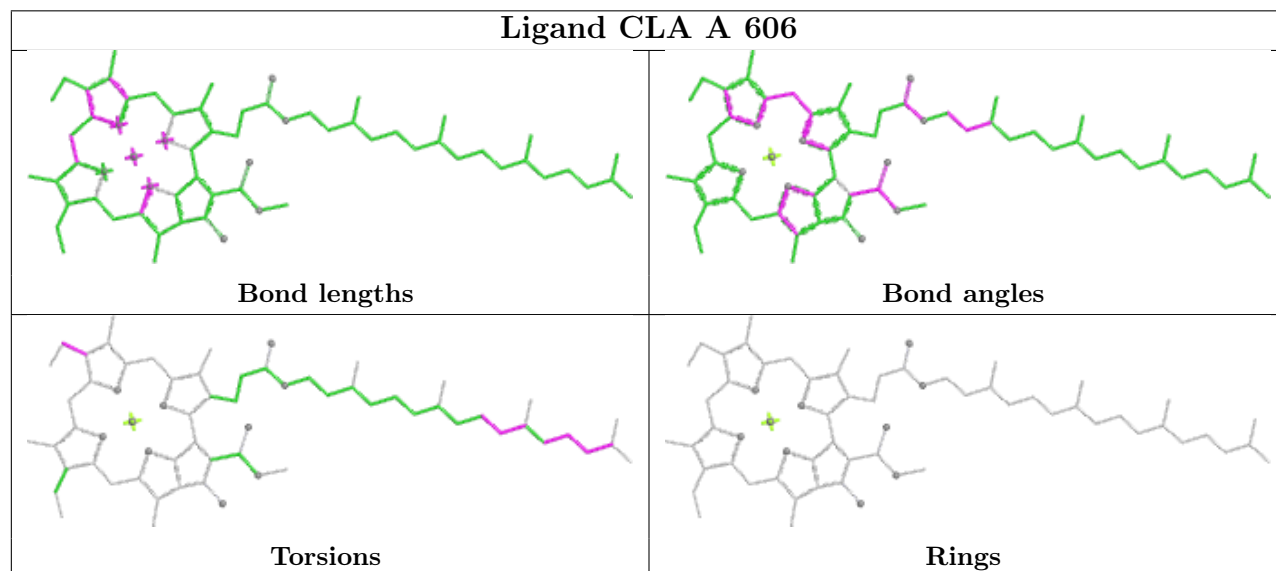
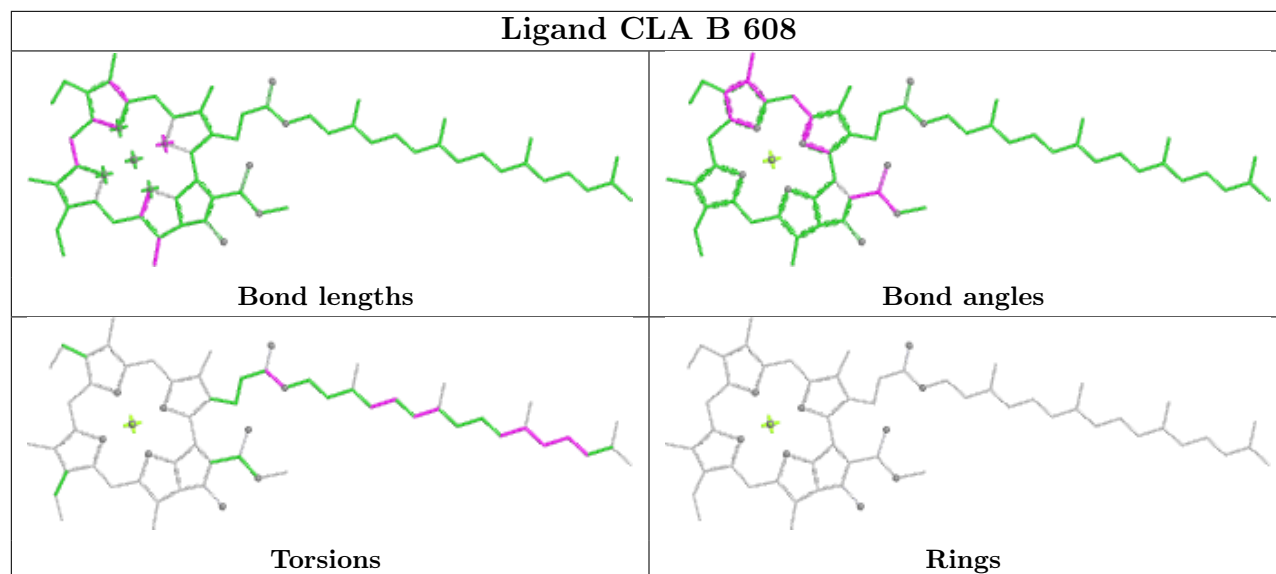


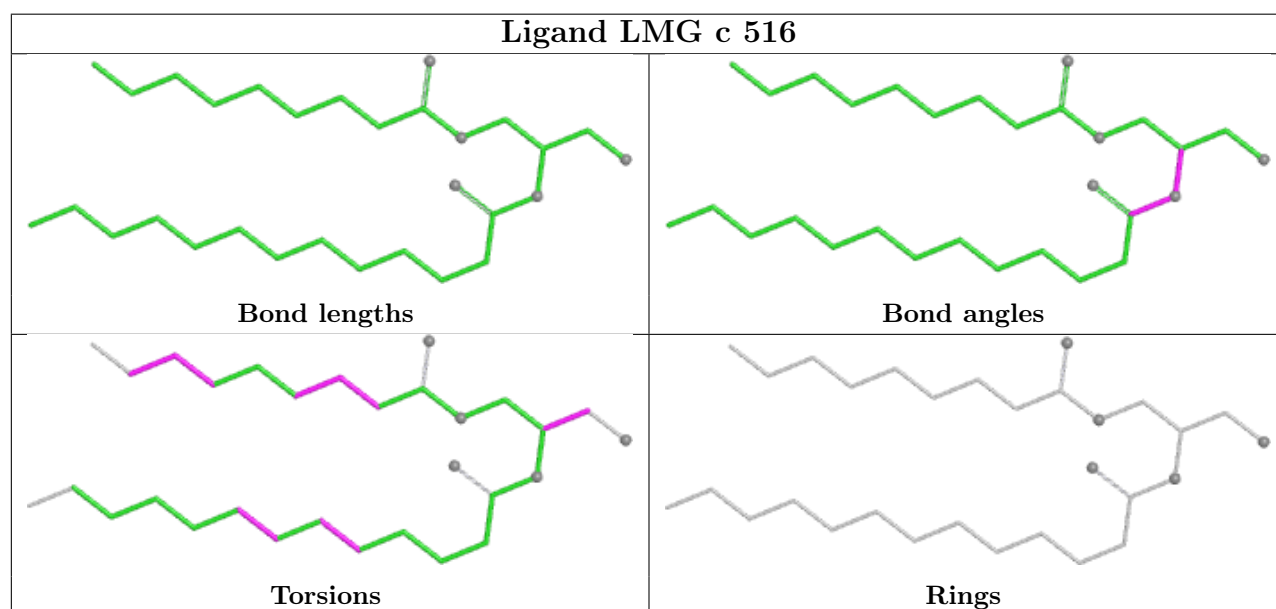
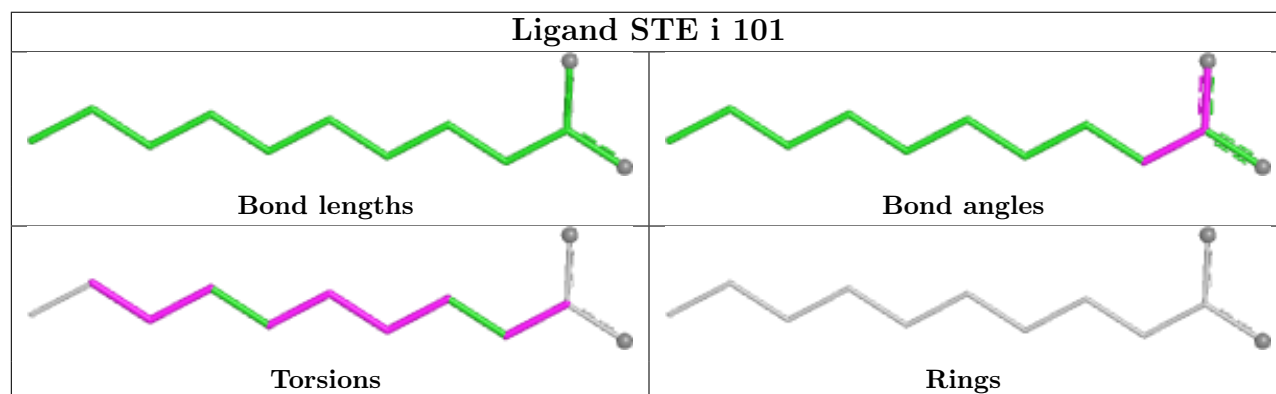
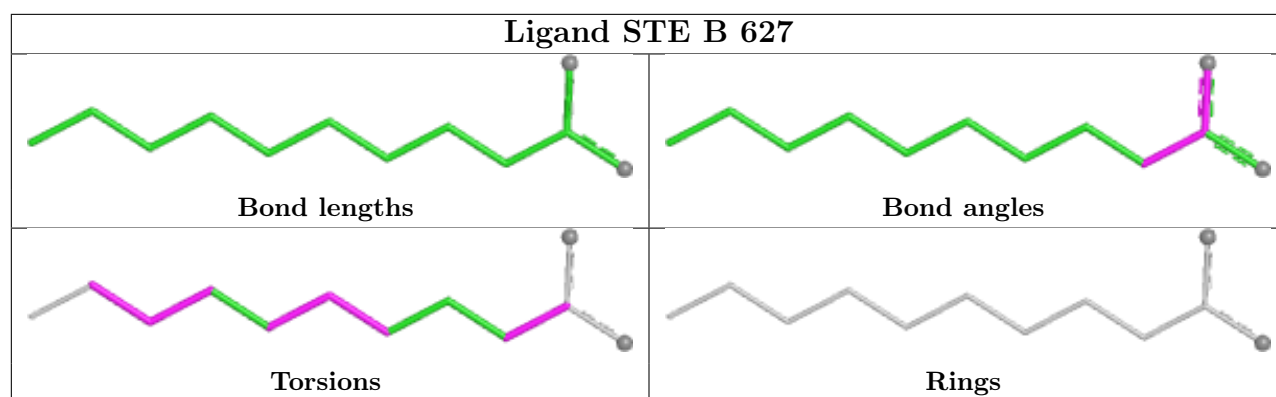


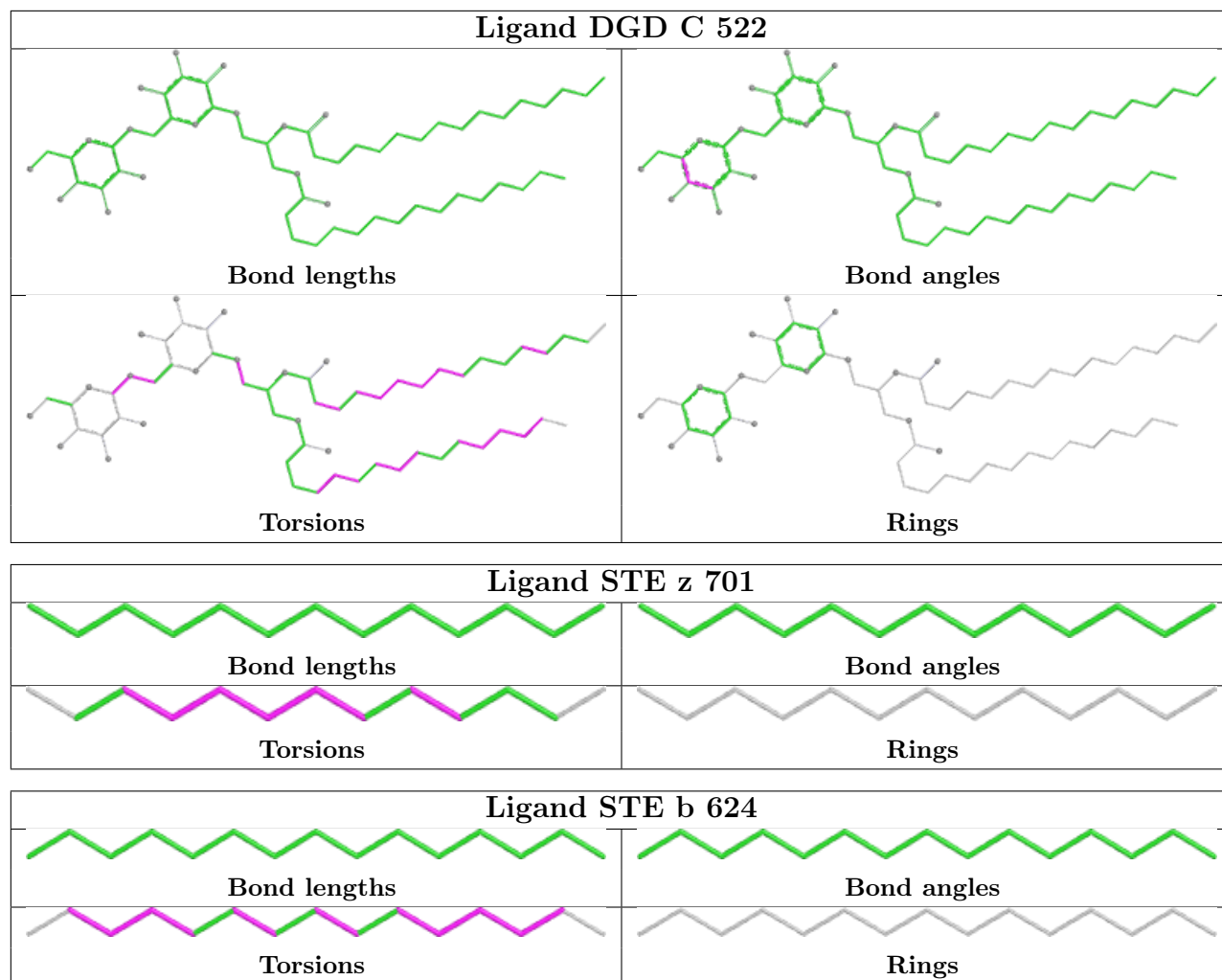


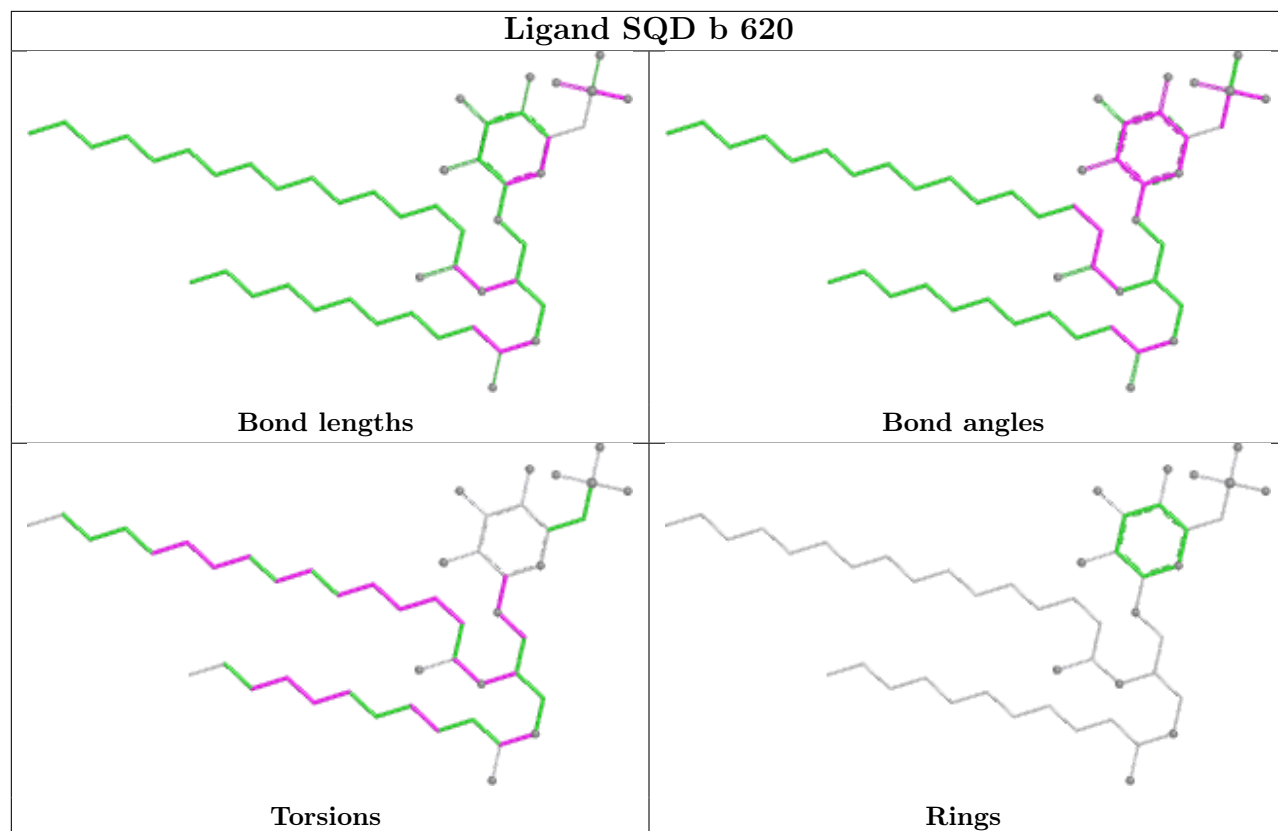


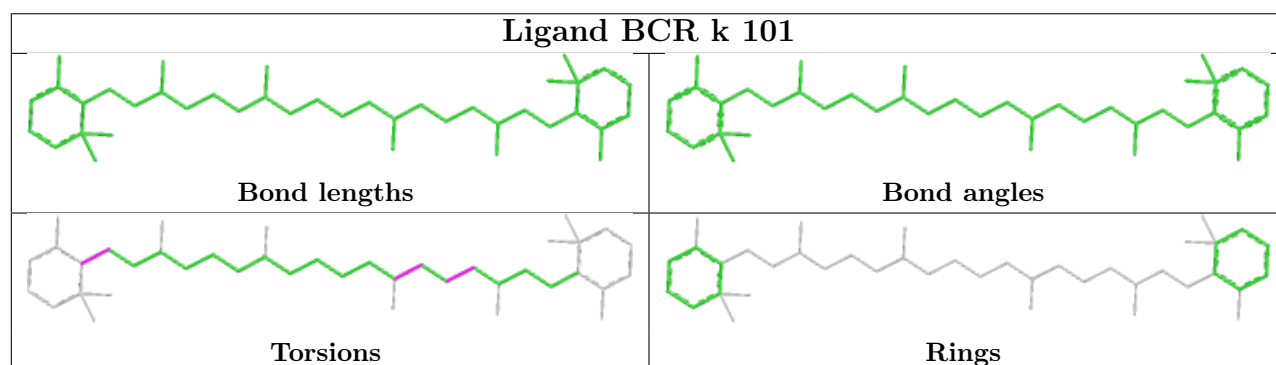
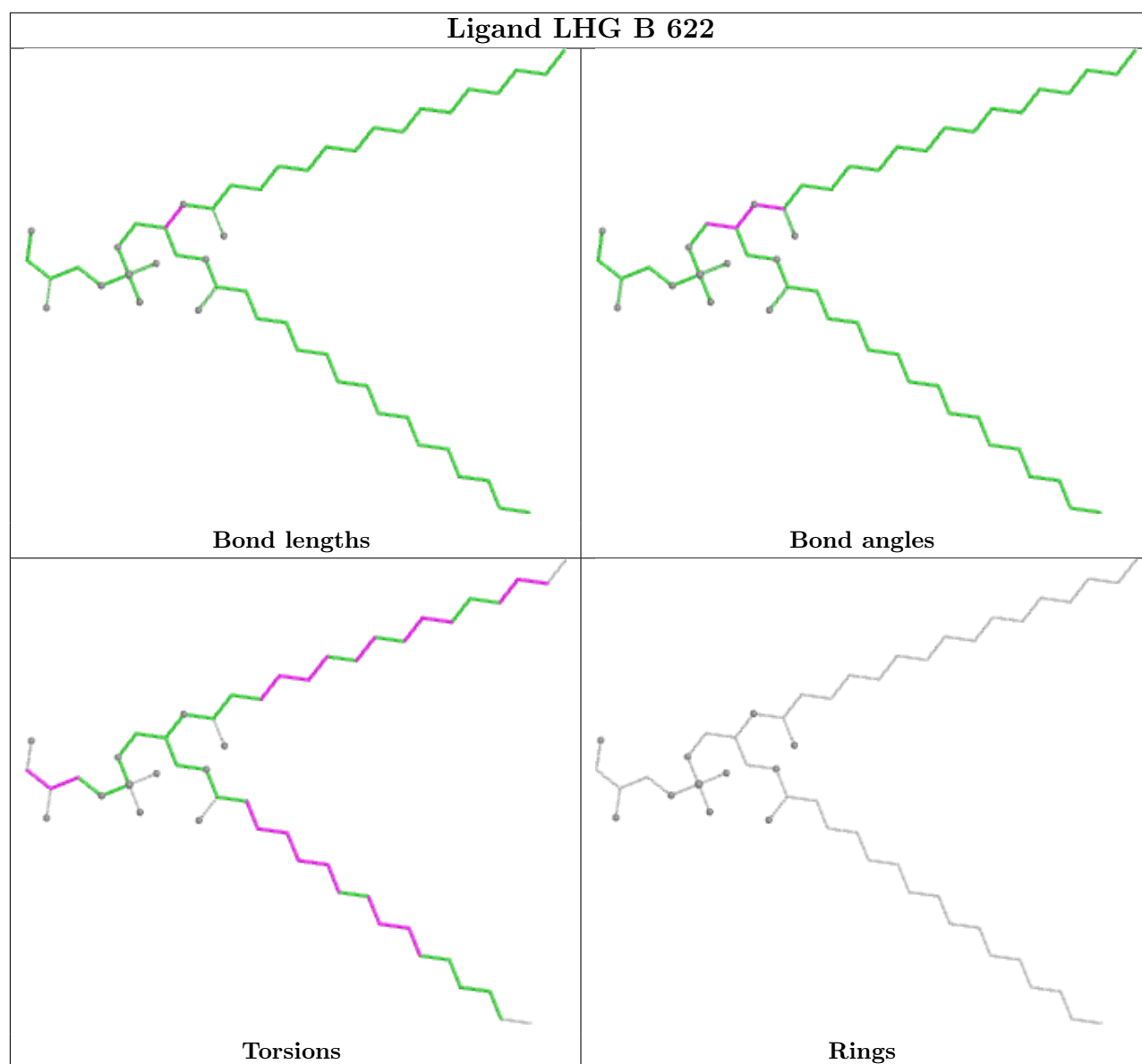
Ligand CLA c 504**Ligand CLA C 513**

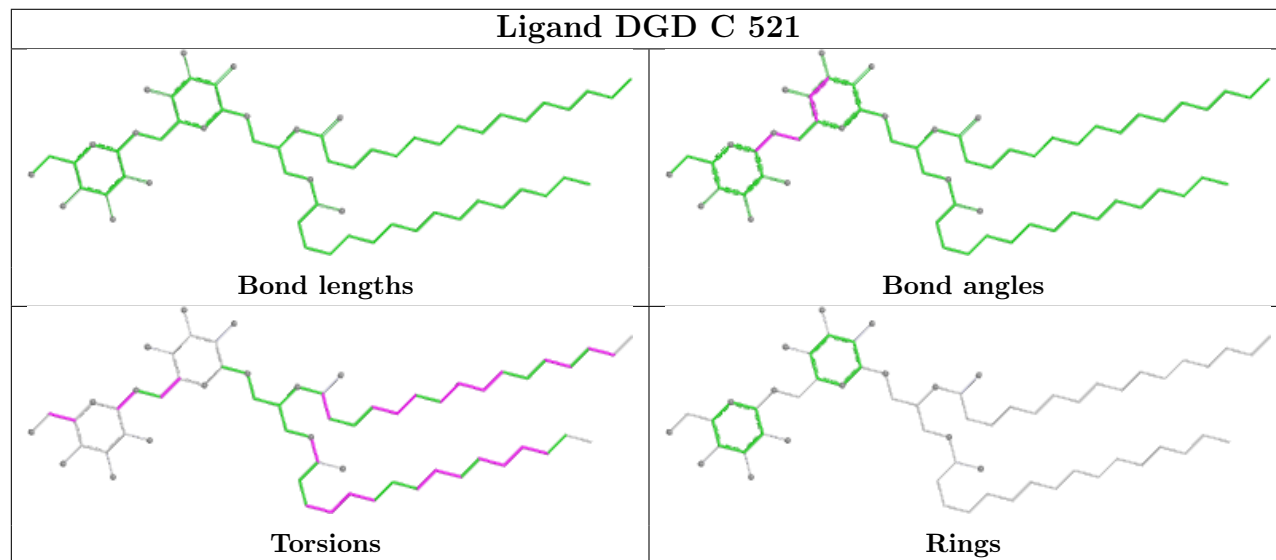
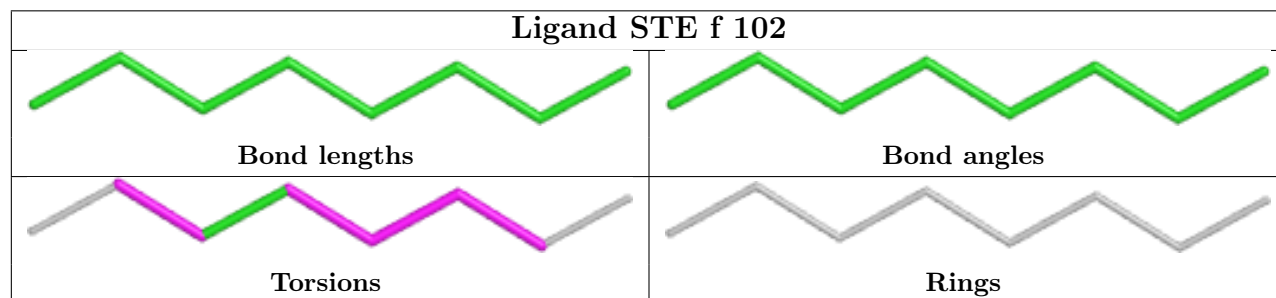
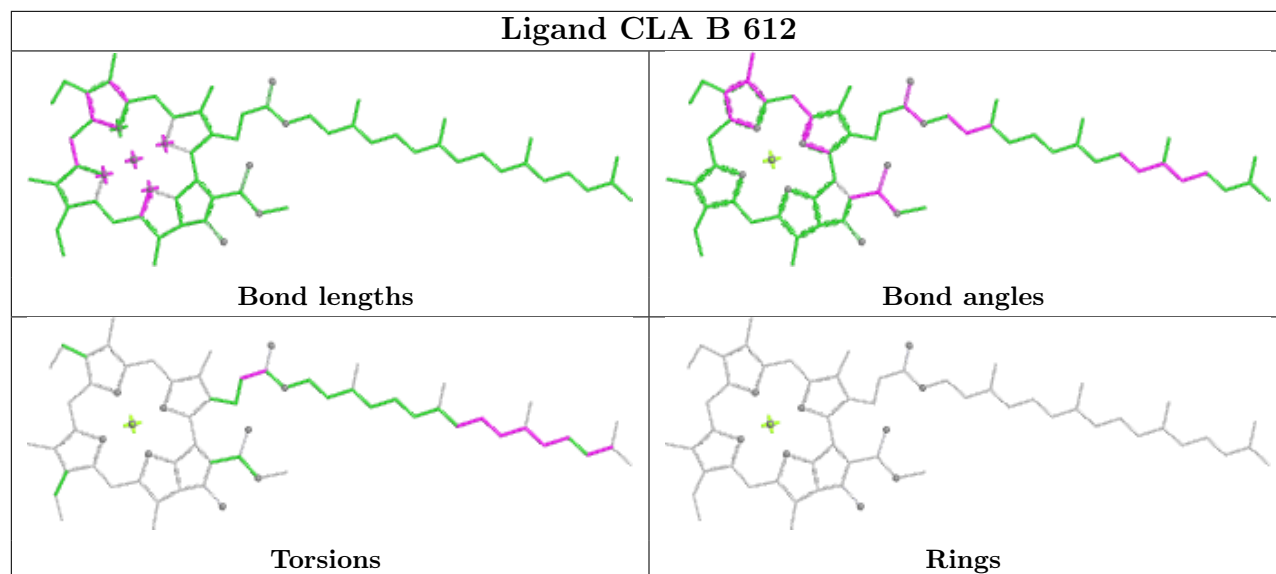




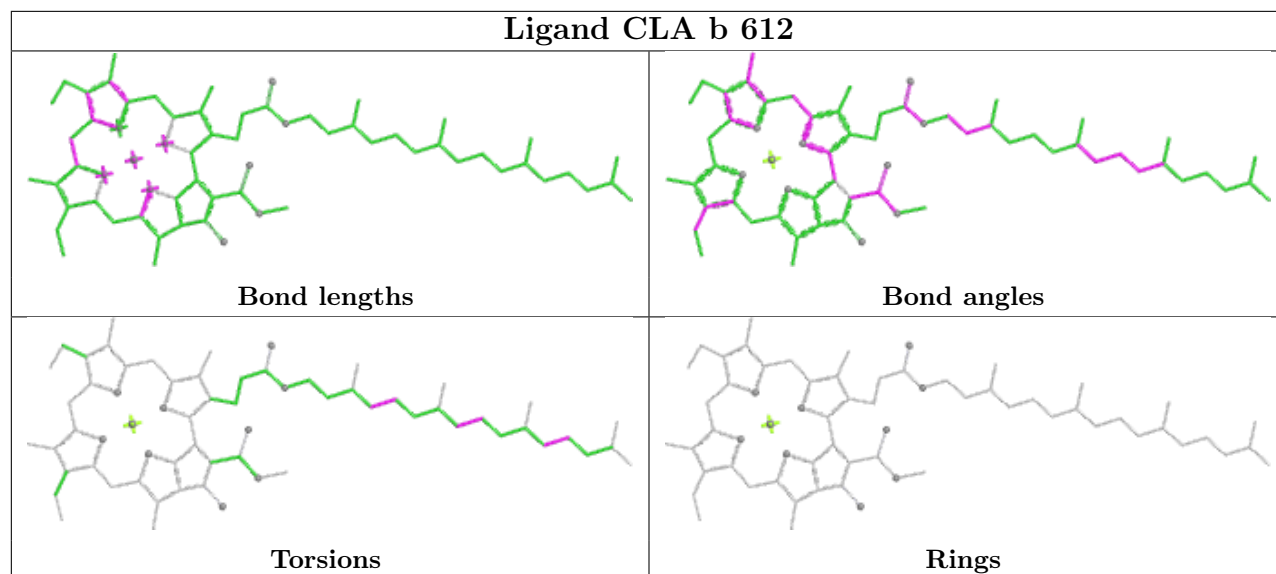




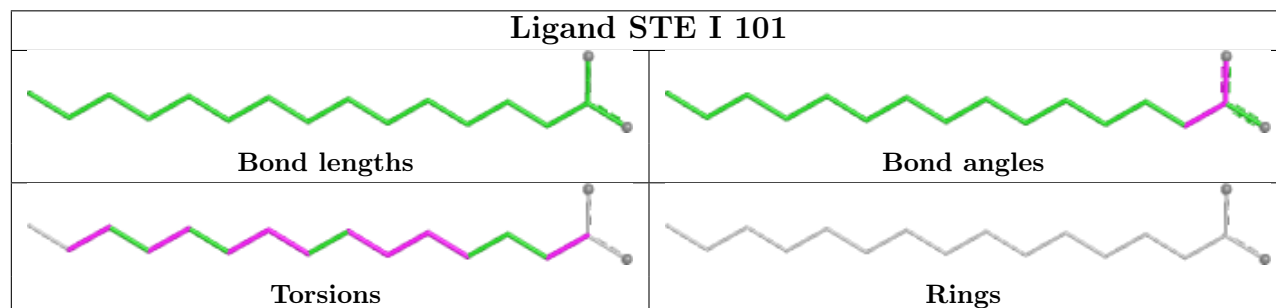




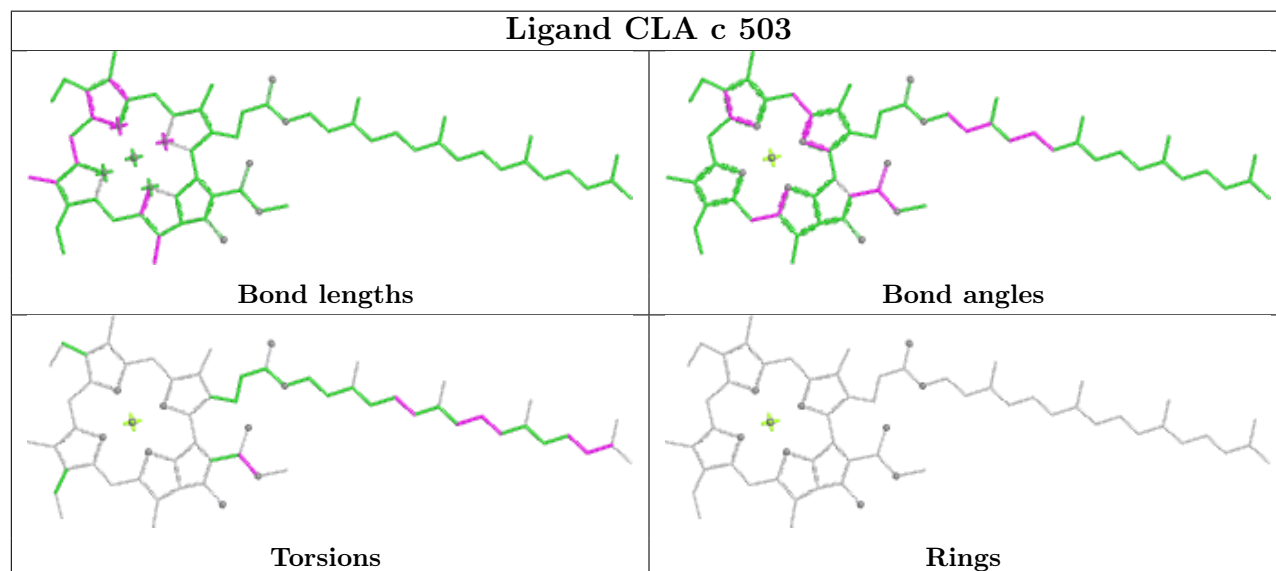
Ligand CLA b 612

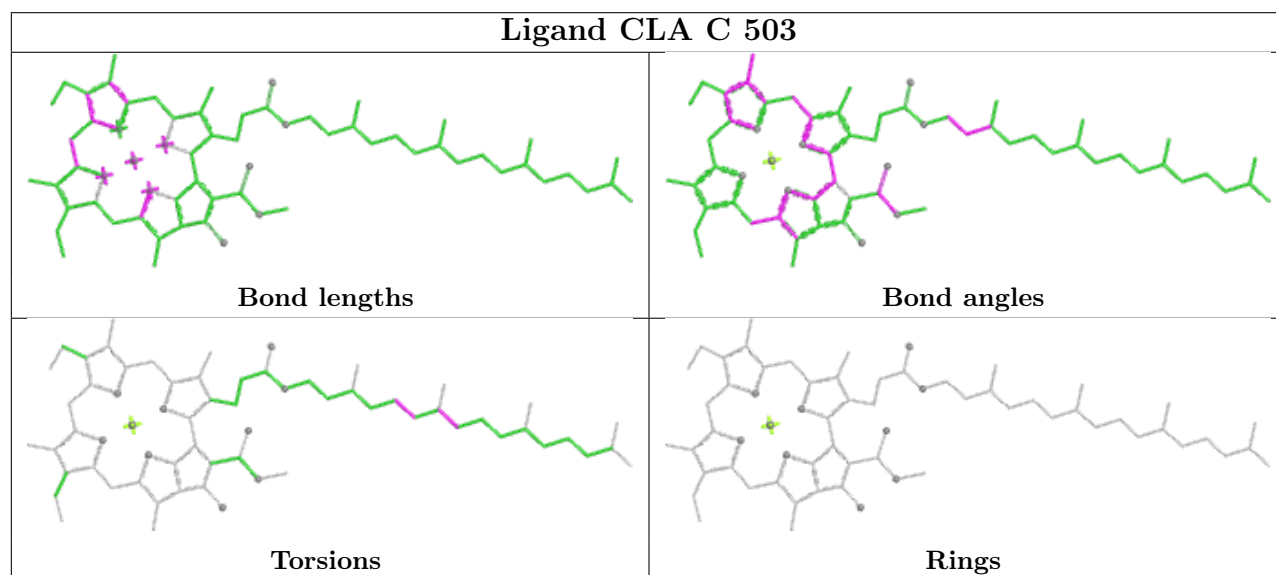
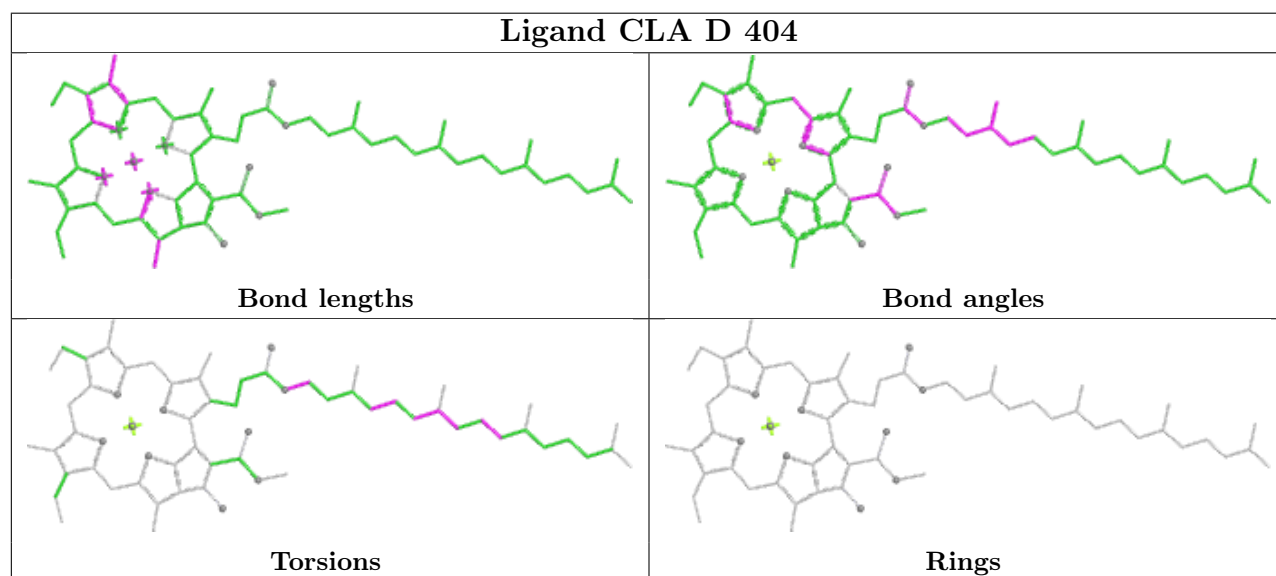
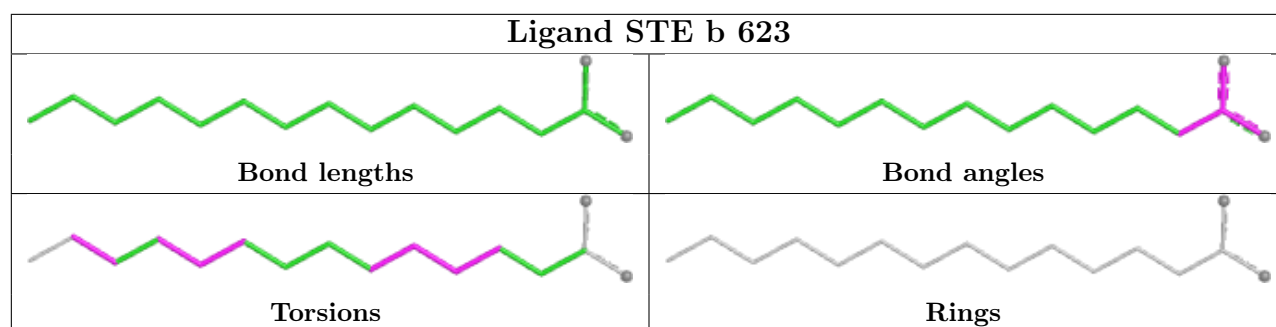


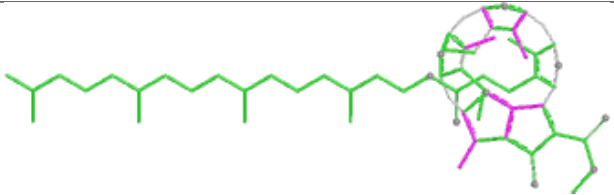
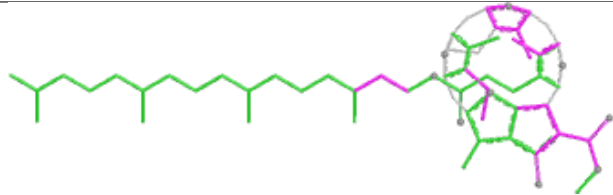
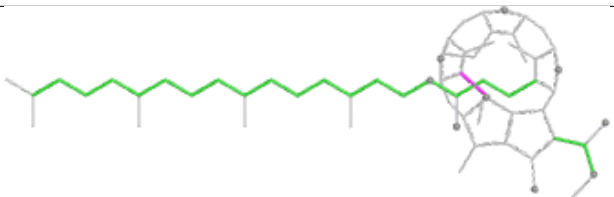
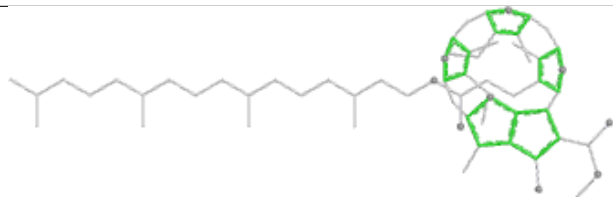
Ligand STE I 101



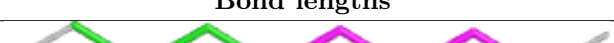
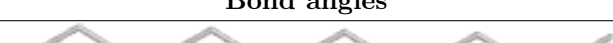
Ligand CLA c 503

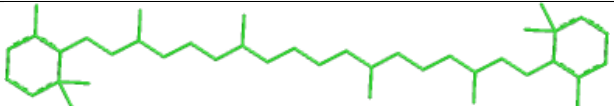
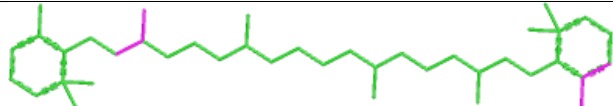
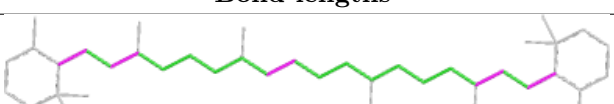
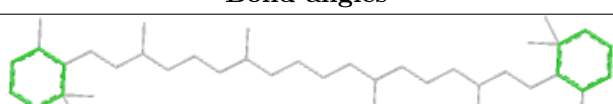


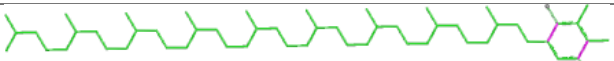
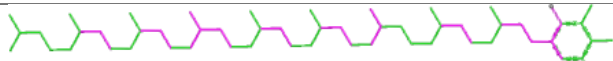
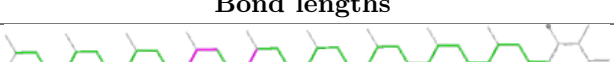
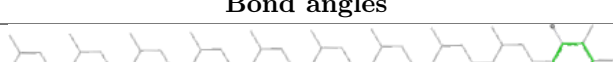


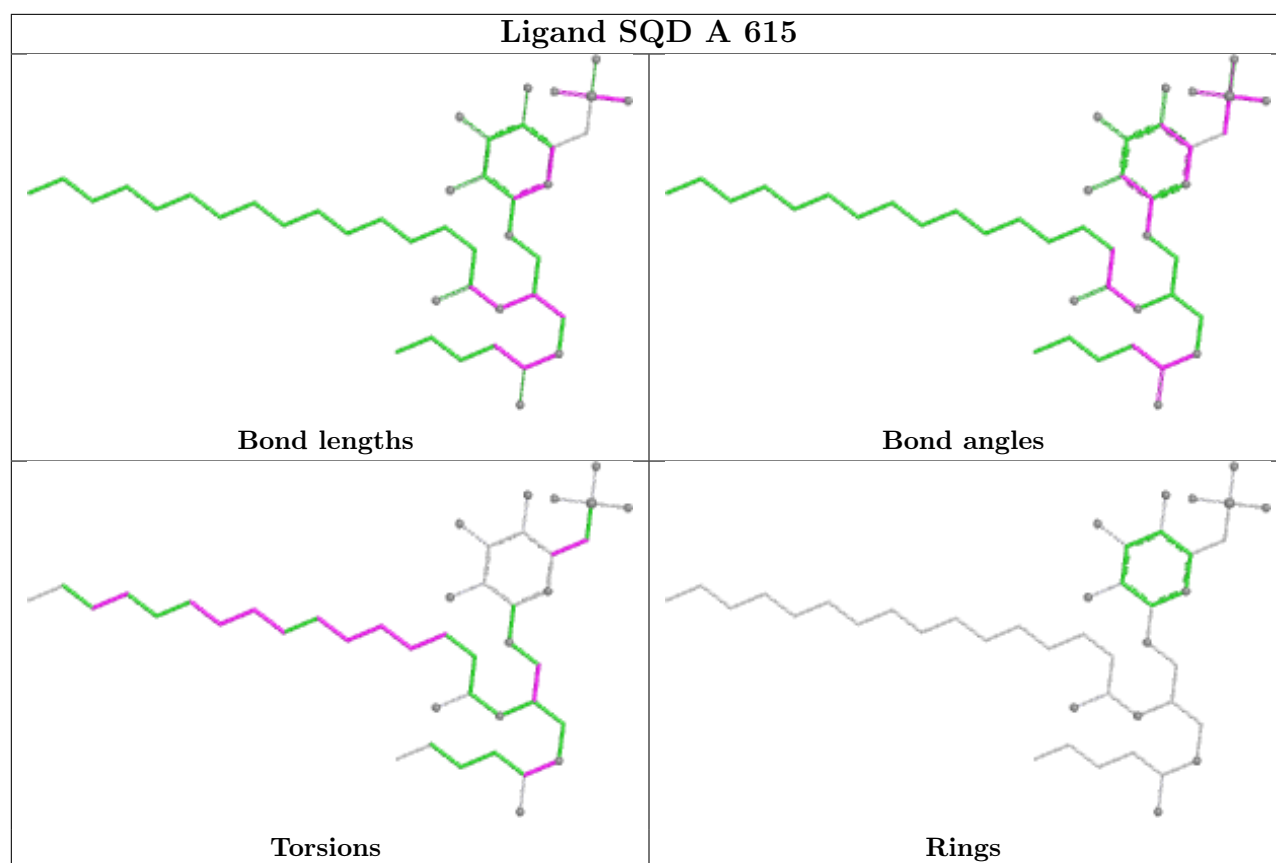
Ligand PHO A 607	
	
Bond lengths	Bond angles
	
Torsions	Rings

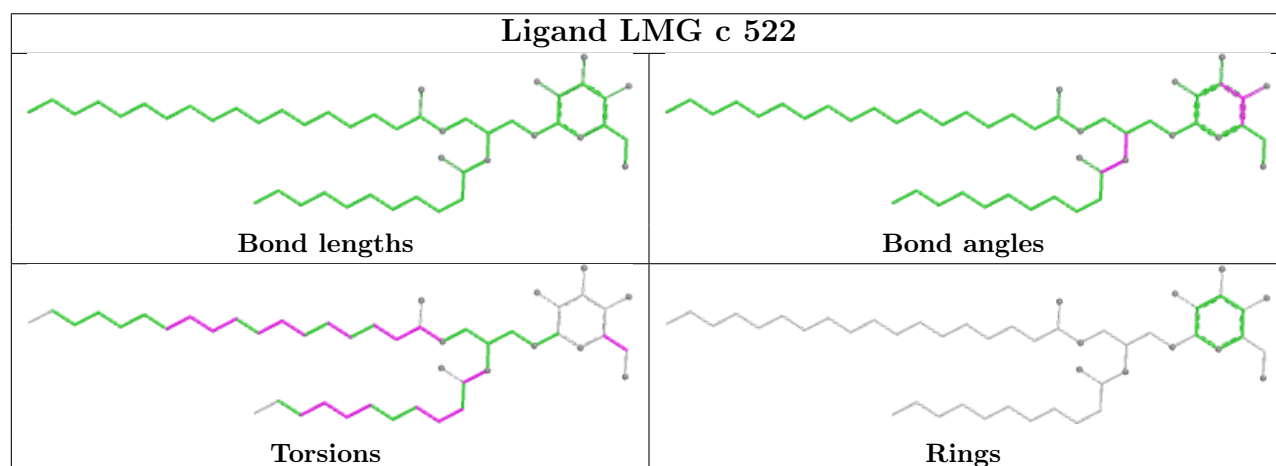
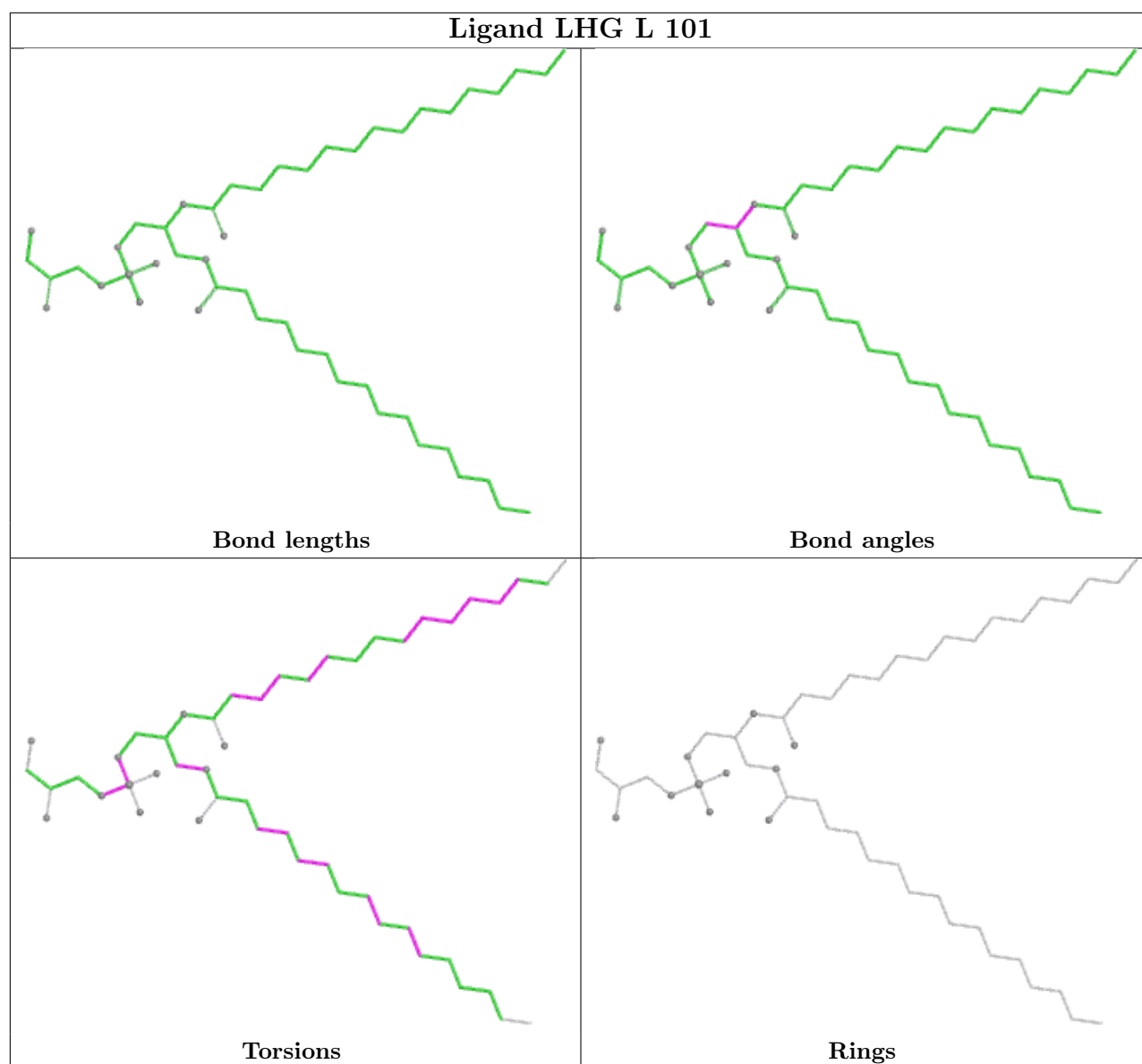
Ligand STE B 628	
	
Bond lengths	Bond angles
	
Torsions	Rings

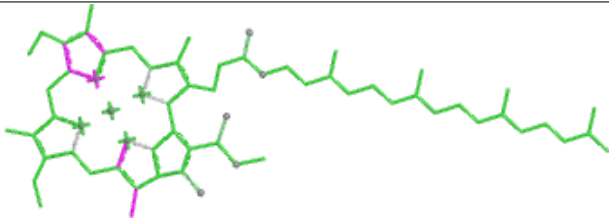
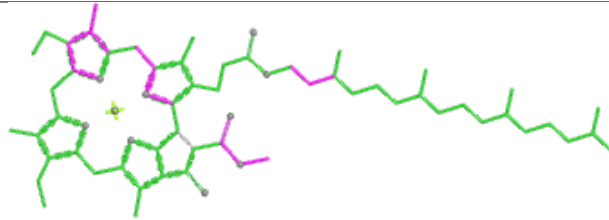
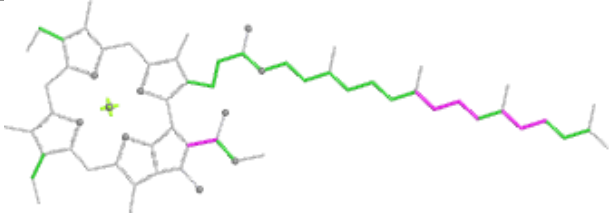
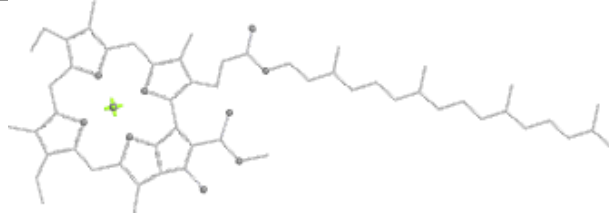
Ligand STE h 102	
	
Bond lengths	Bond angles
	
Torsions	Rings

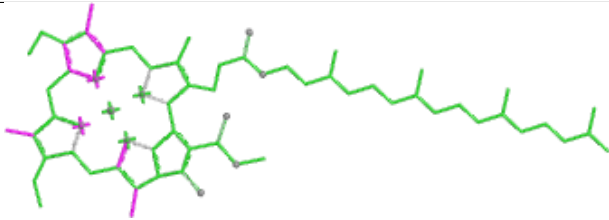
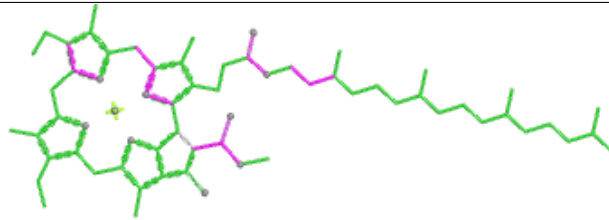
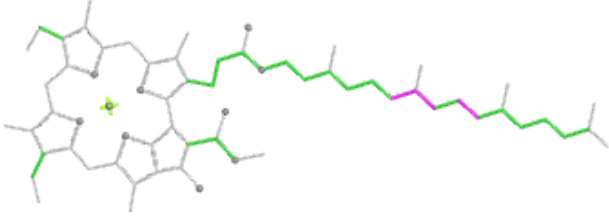
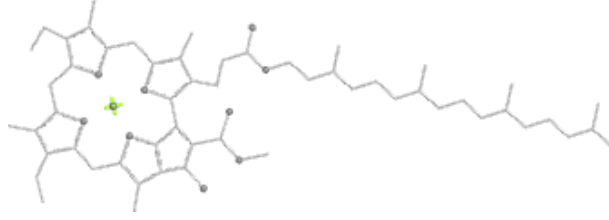
Ligand BCR T 101	
	
Bond lengths	Bond angles
	
Torsions	Rings

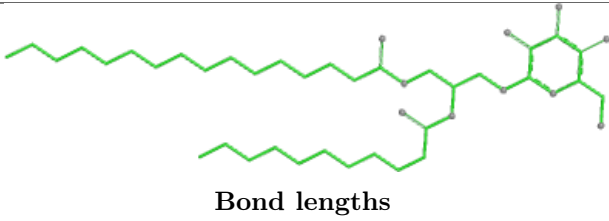
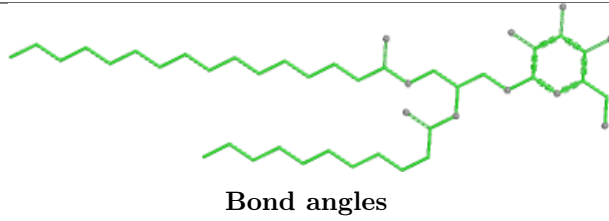
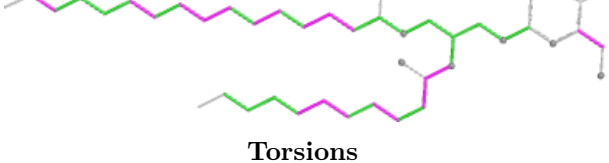
Ligand PL9 D 407	
	
Bond lengths	Bond angles
	
Torsions	Rings

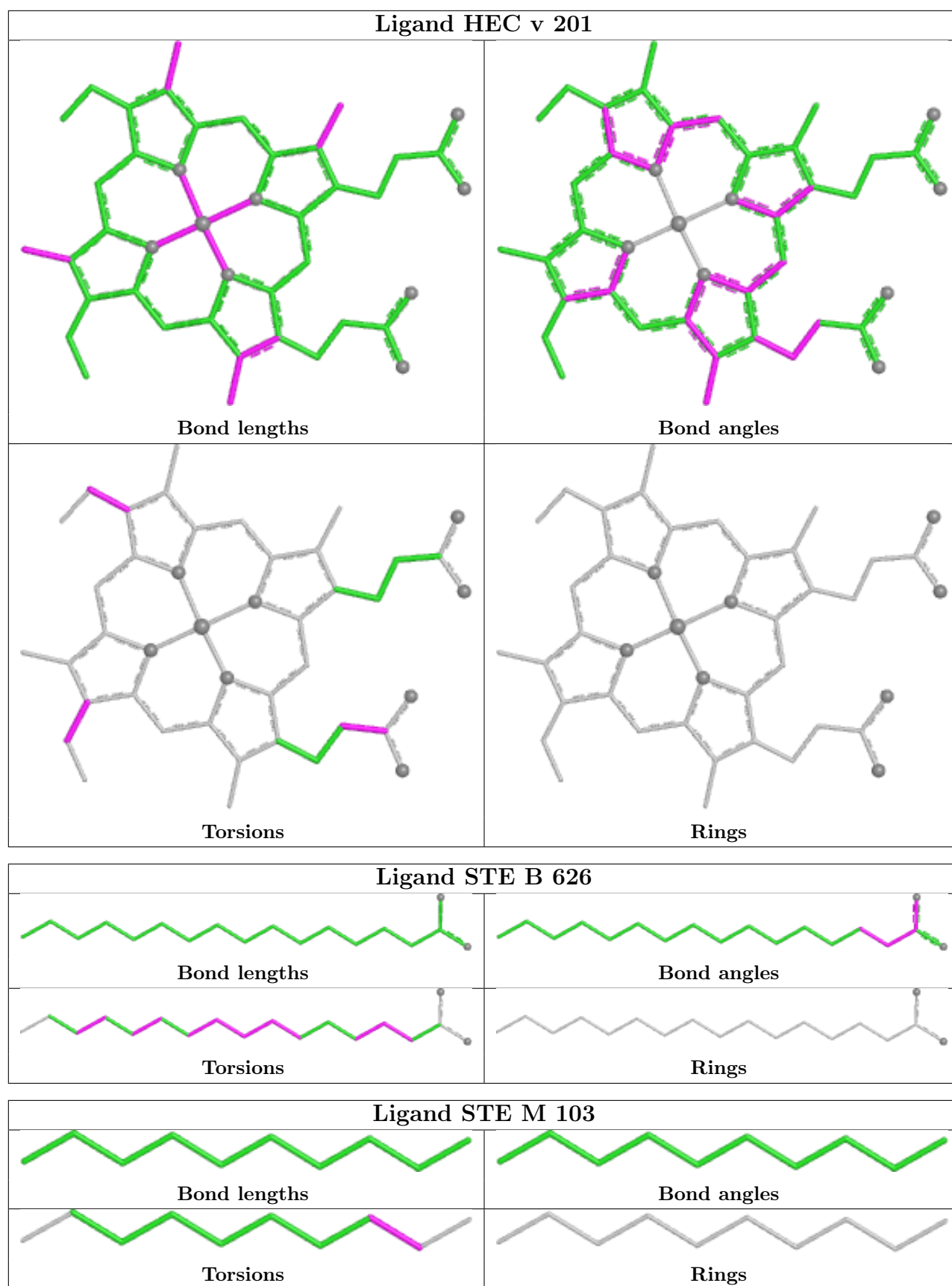


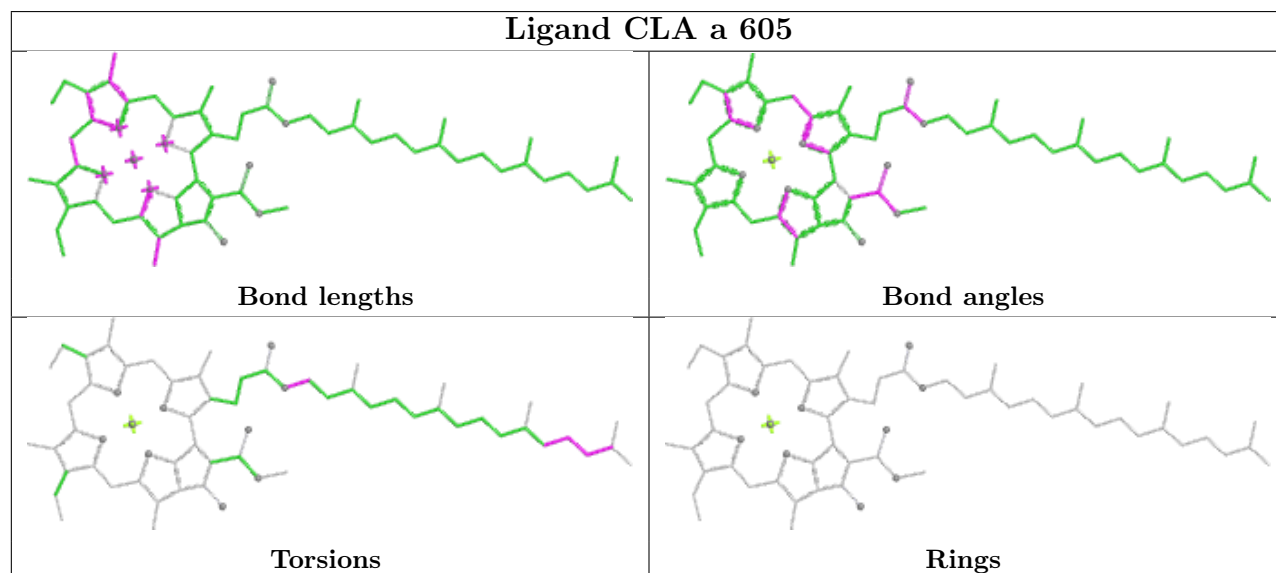
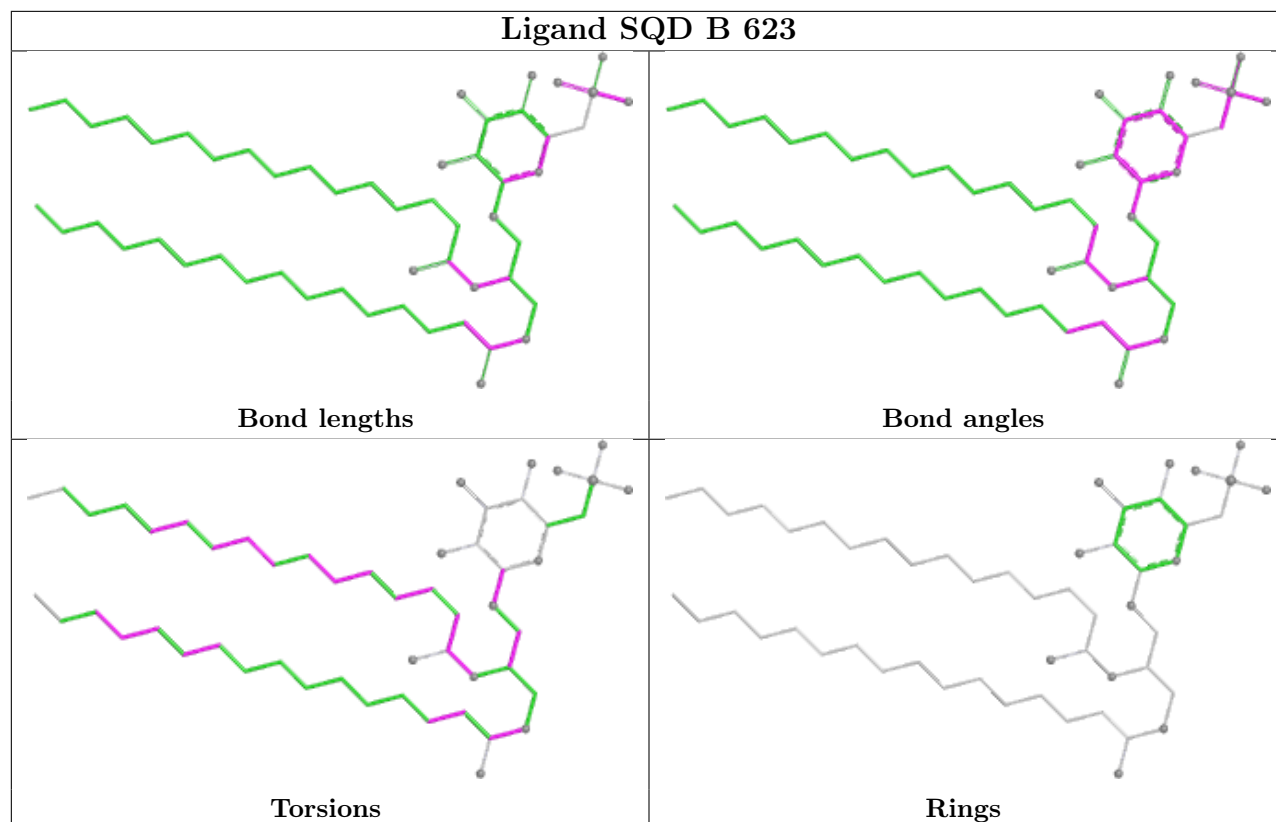


Ligand CLA C 509	
	
Bond lengths	Bond angles
	
Torsions	Rings

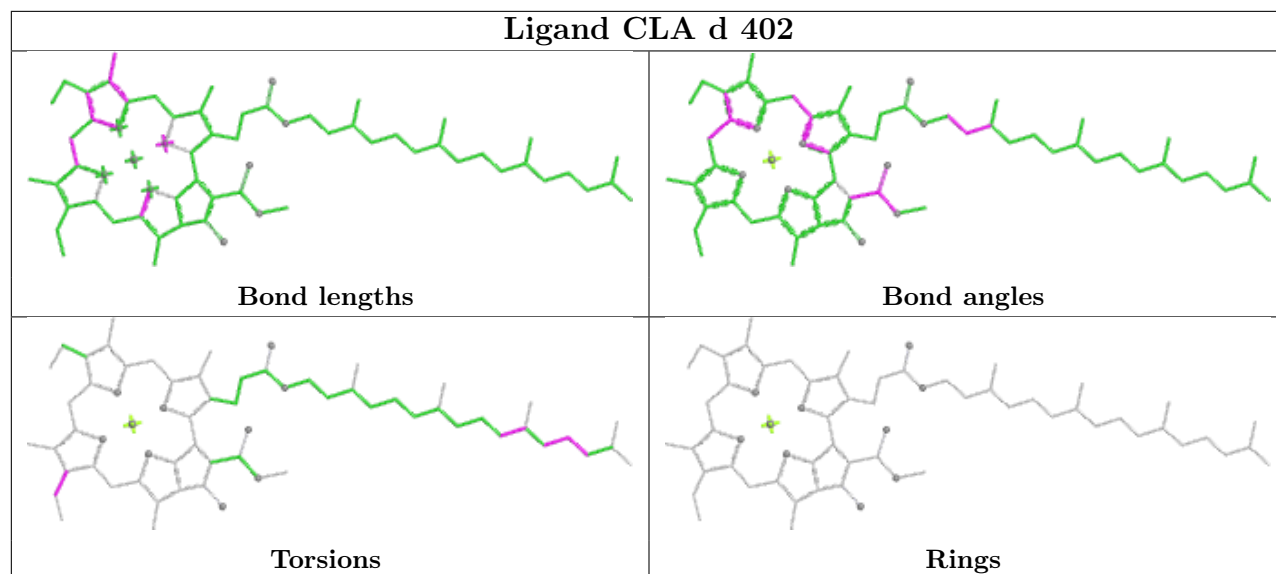
Ligand CLA D 405	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand LMG c 521	
	
Bond lengths	Bond angles
	
Torsions	Rings

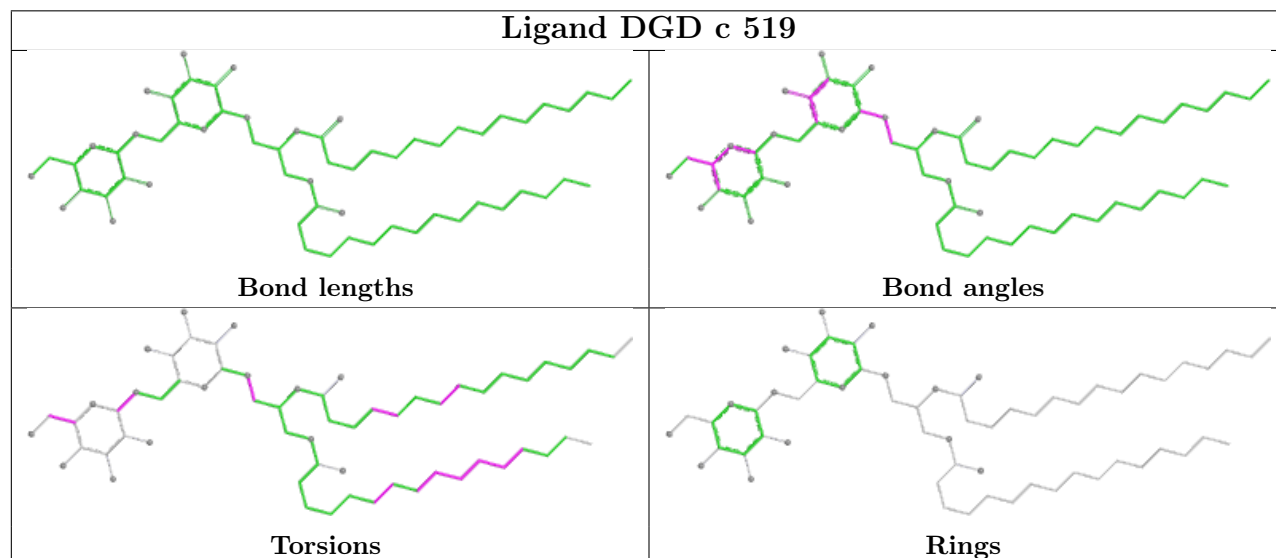




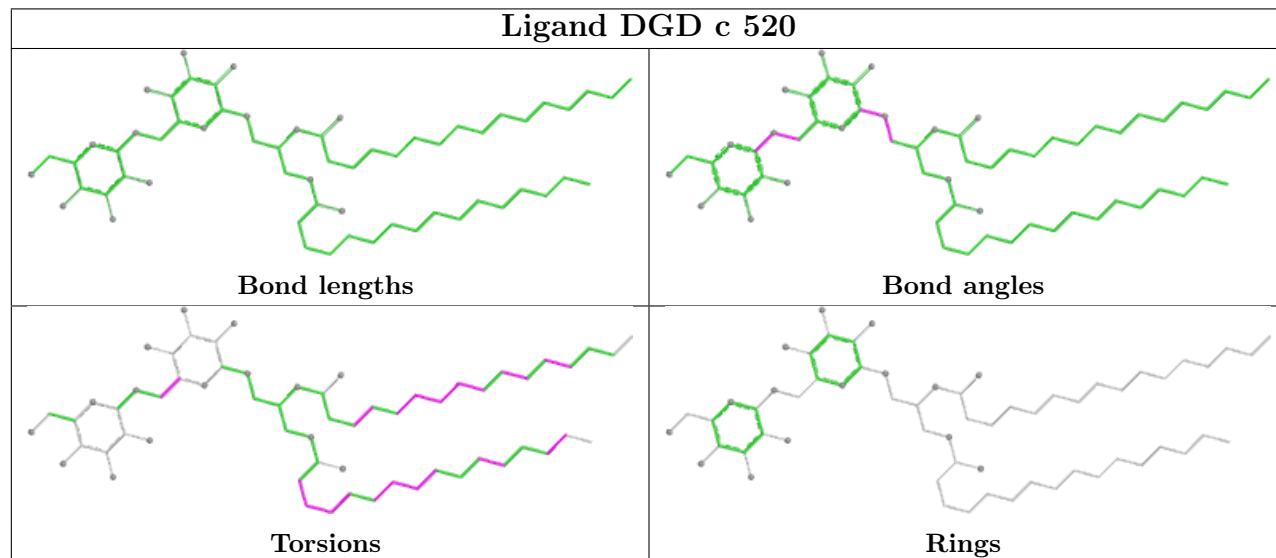
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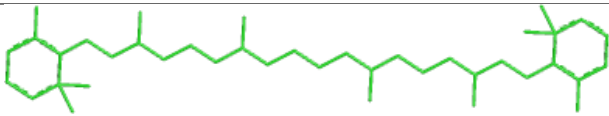
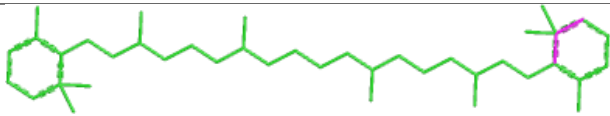
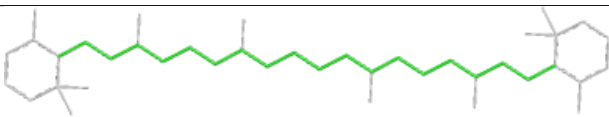
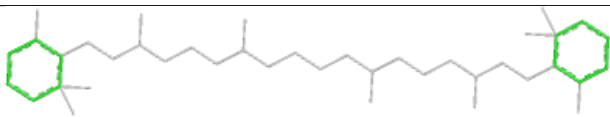


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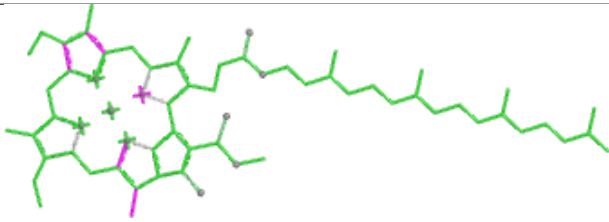
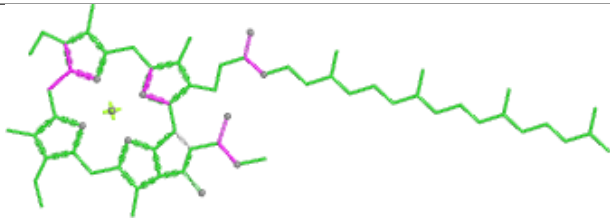
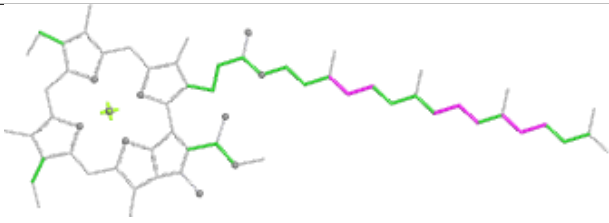
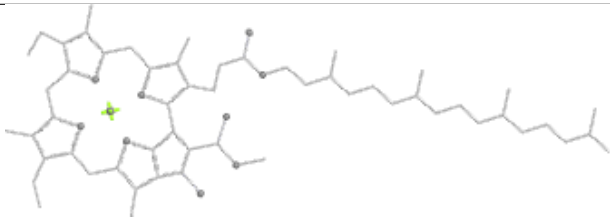


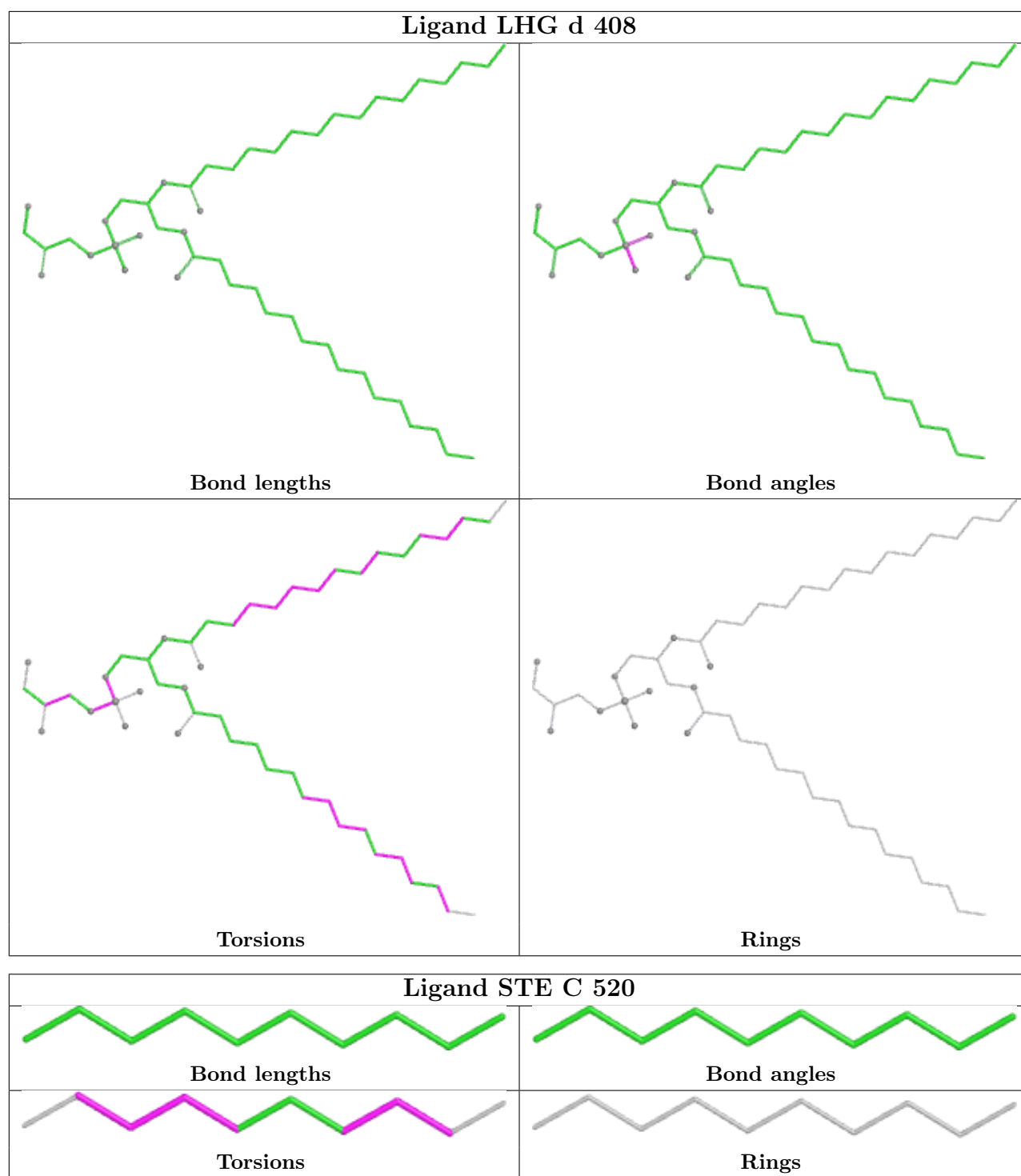
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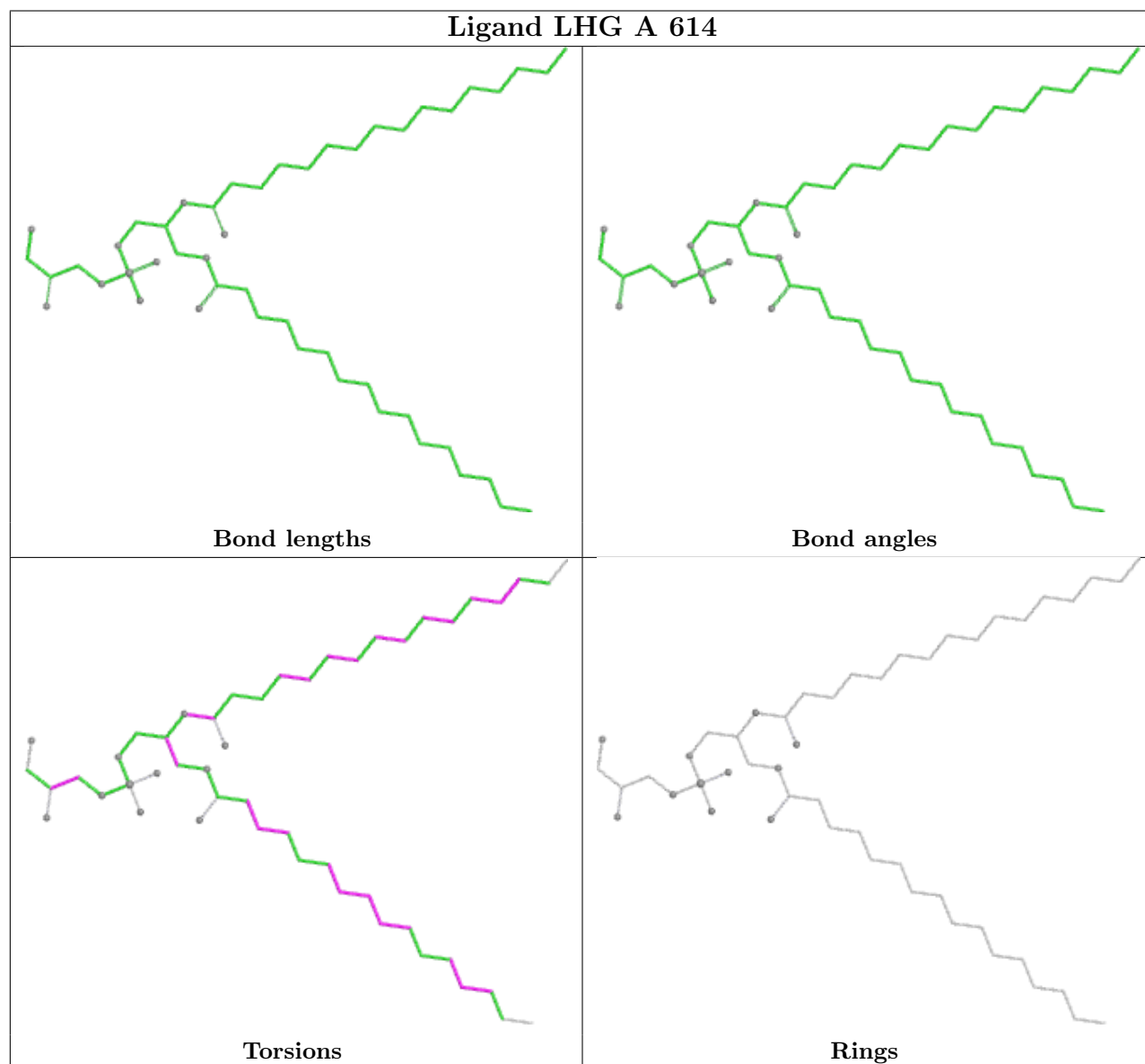
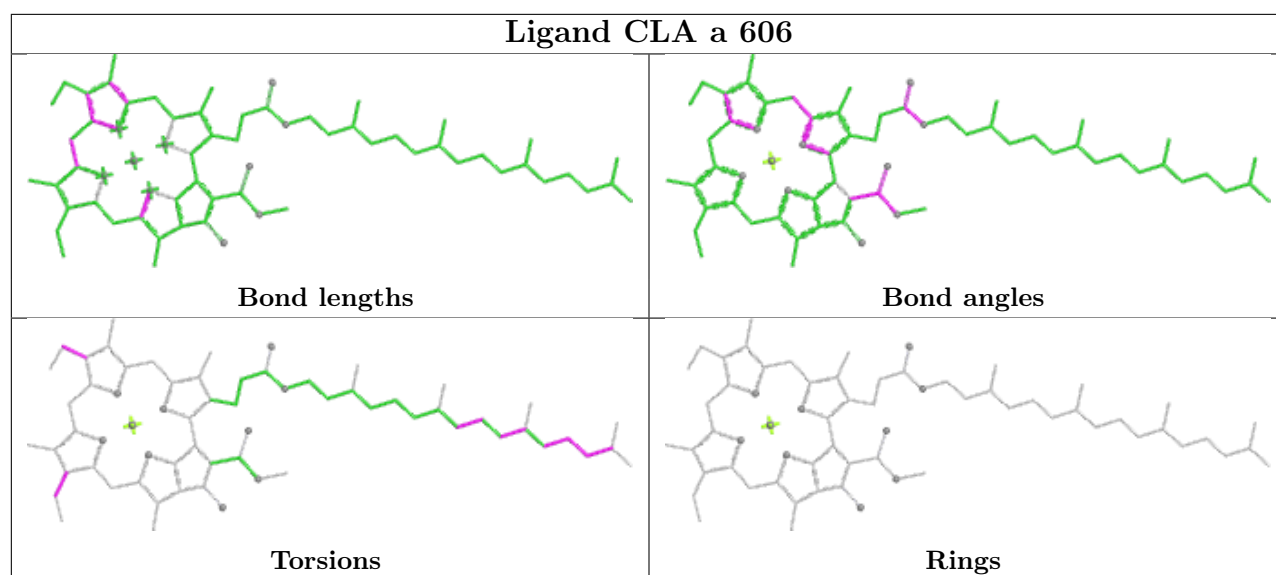


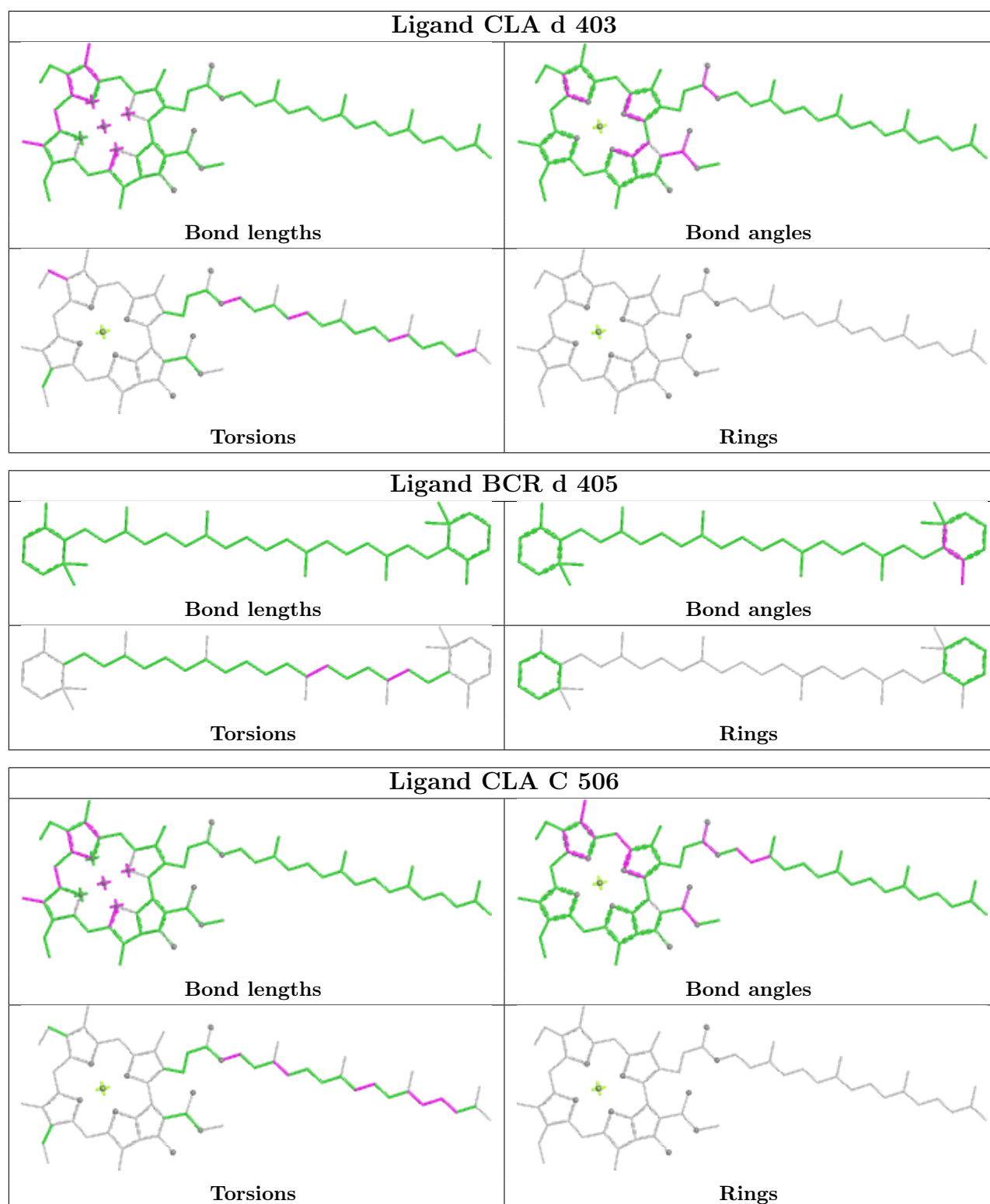
Ligand BCR B 618	
 Bond lengths	 Bond angles
 Torsions	 Rings

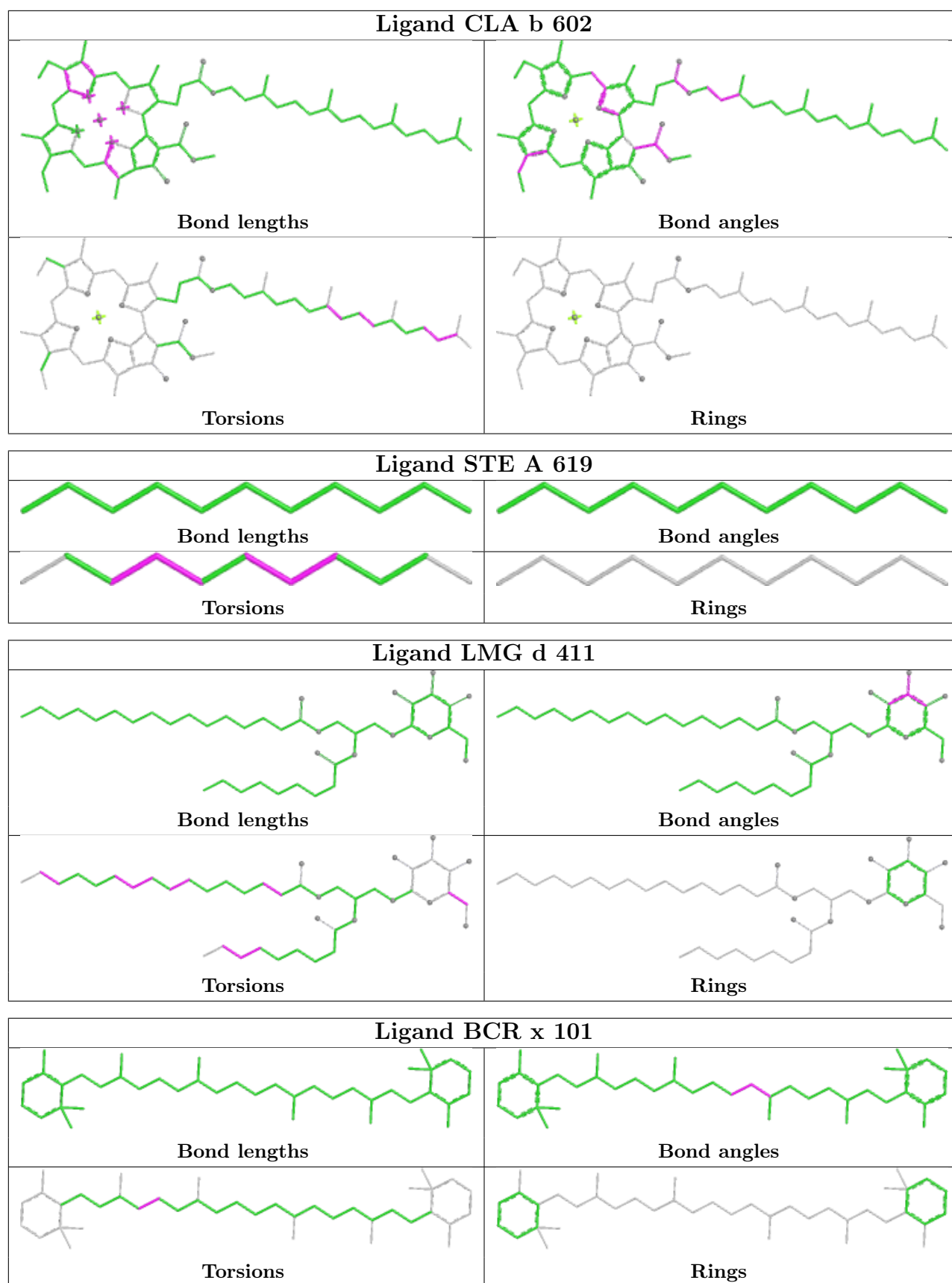
Ligand STE T 102	
 Bond lengths	 Bond angles
 Torsions	 Rings

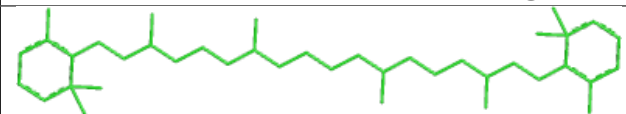
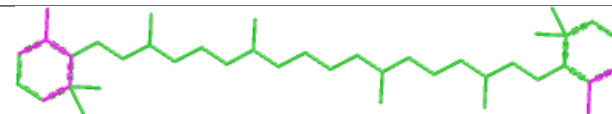
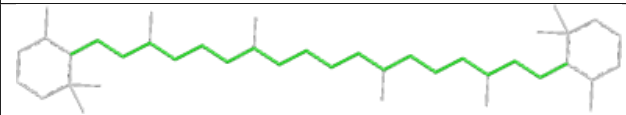
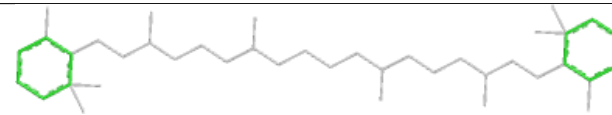
Ligand CLA B 603	
 Bond lengths	 Bond angles
 Torsions	 Rings

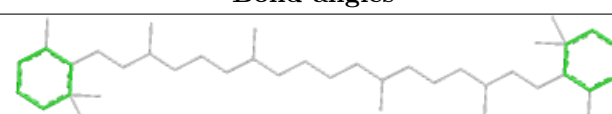


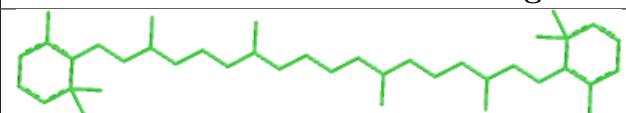
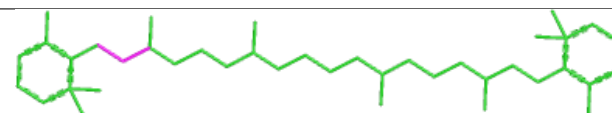
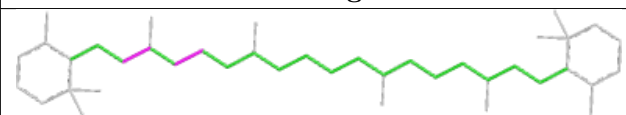
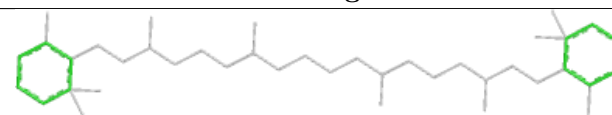


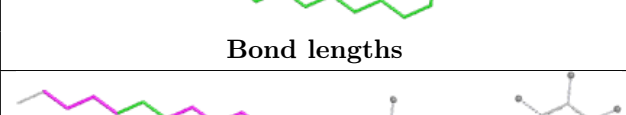
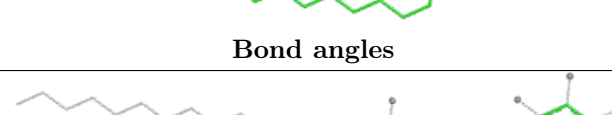


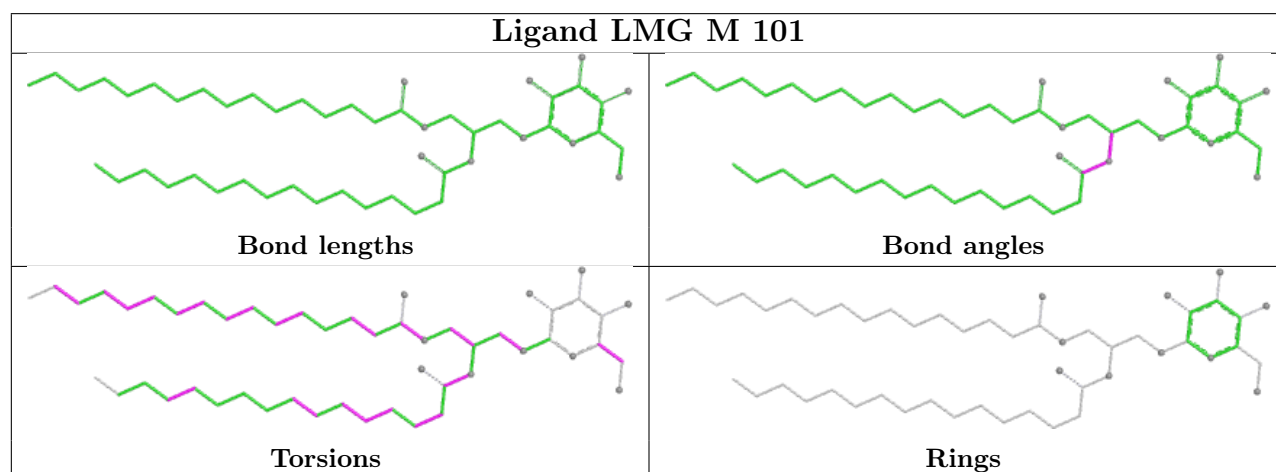
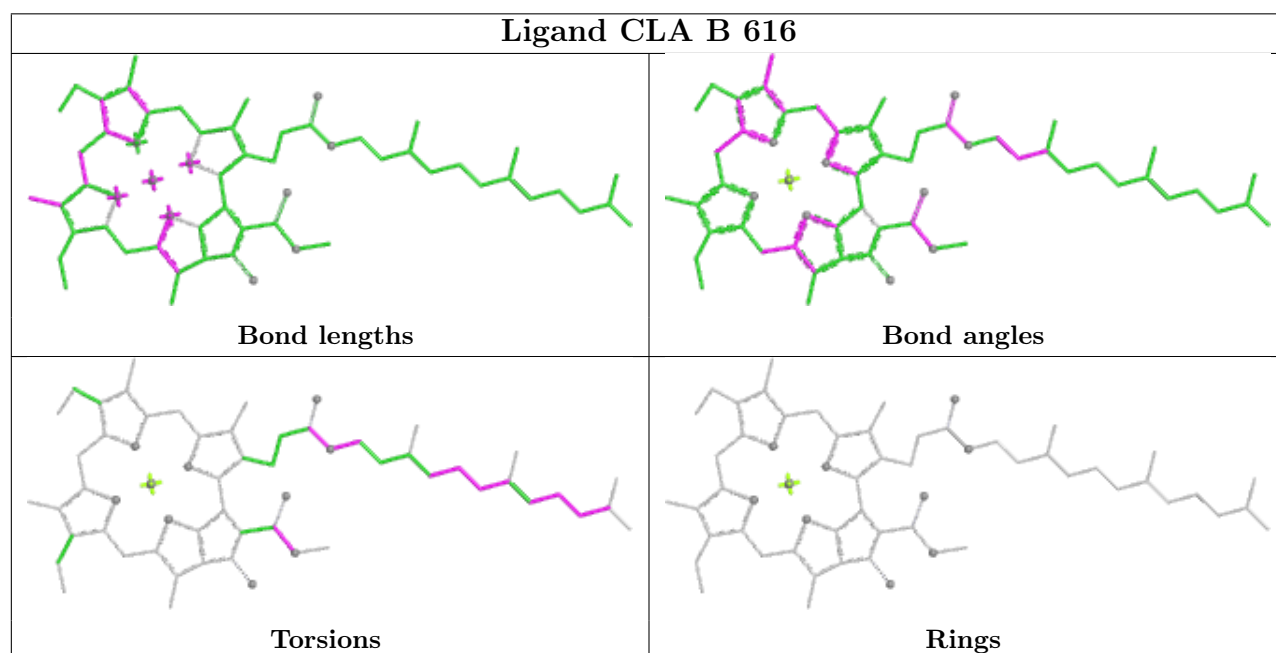
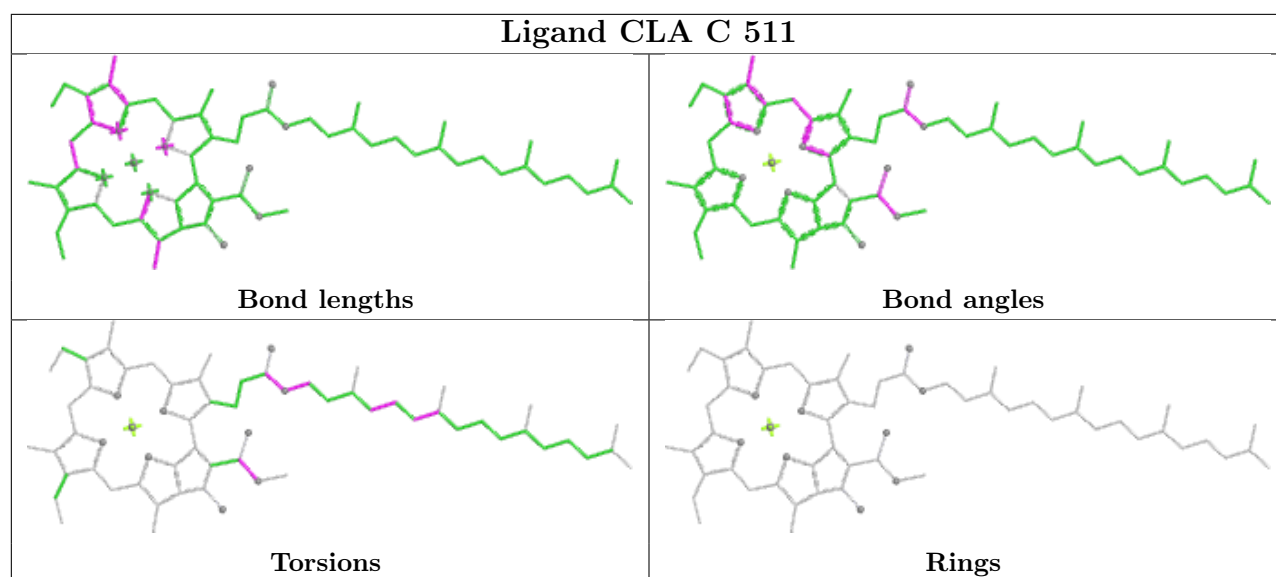


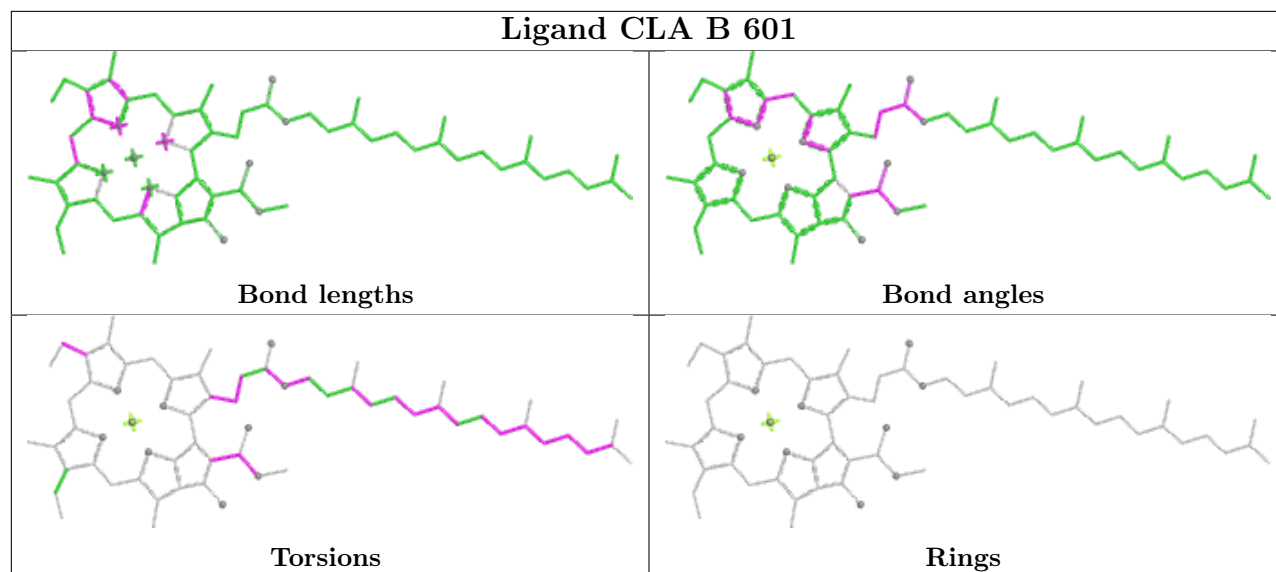
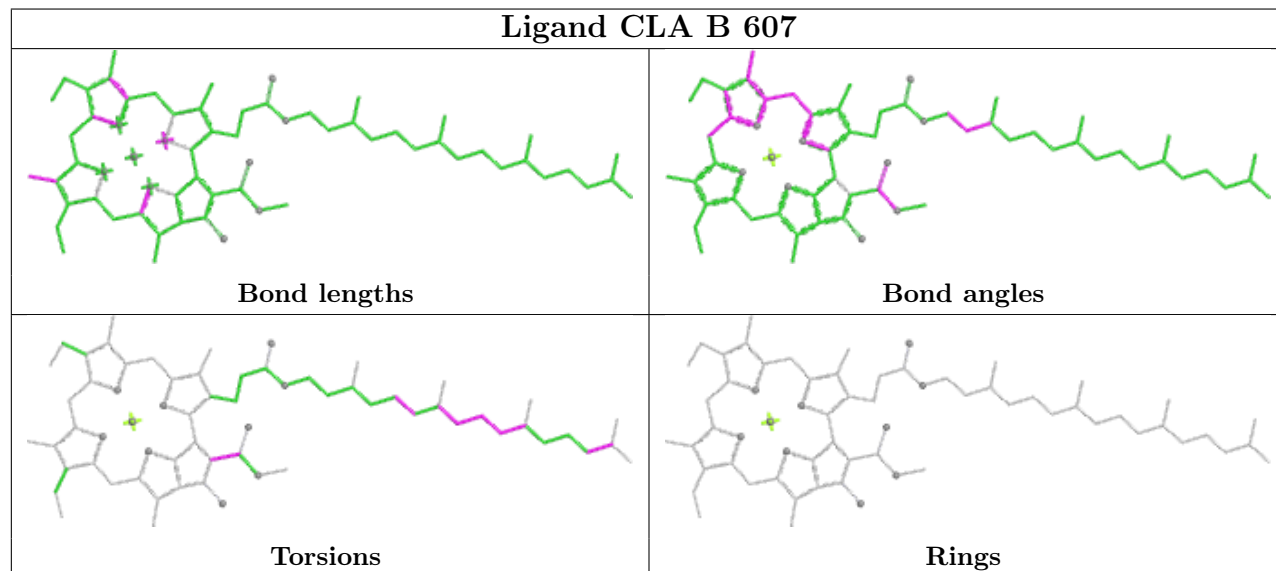
Ligand BCR b 618	
	
Bond lengths	Bond angles
	
Torsions	Rings

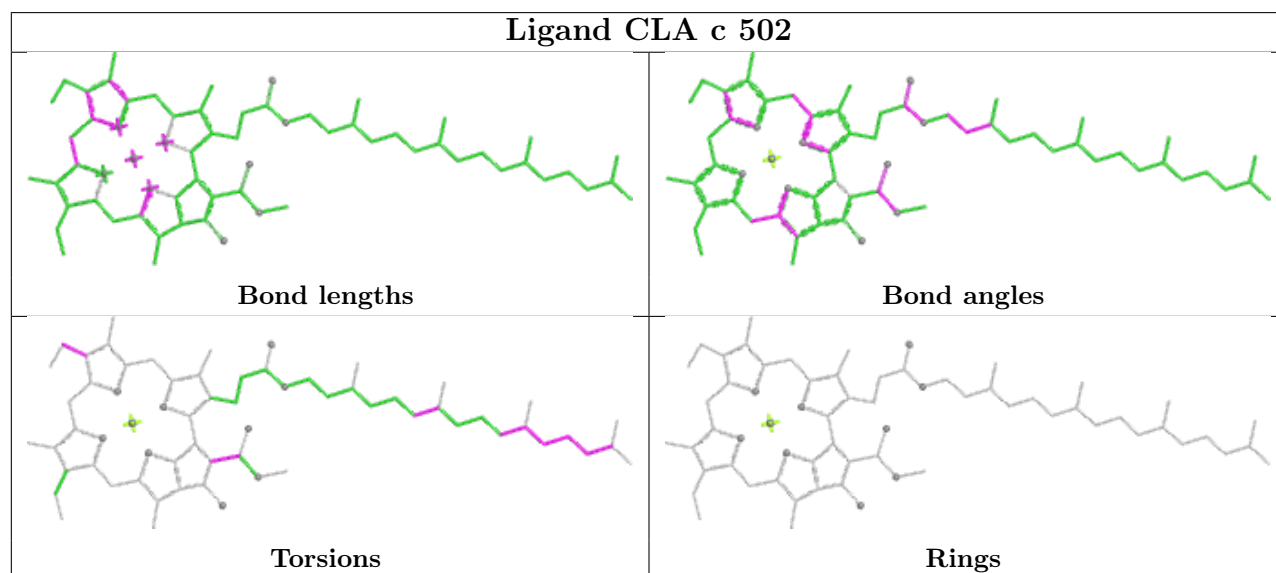
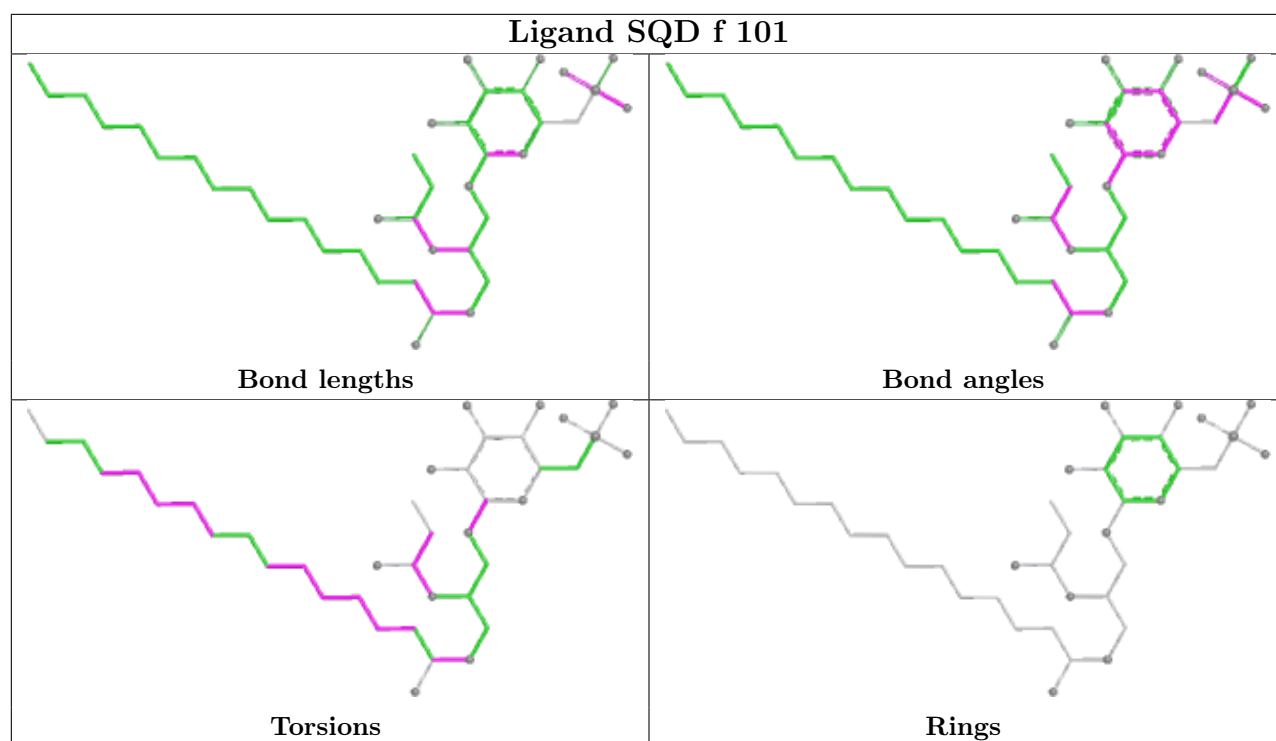
Ligand BCR b 619	
	
Bond lengths	Bond angles
	
Torsions	Rings

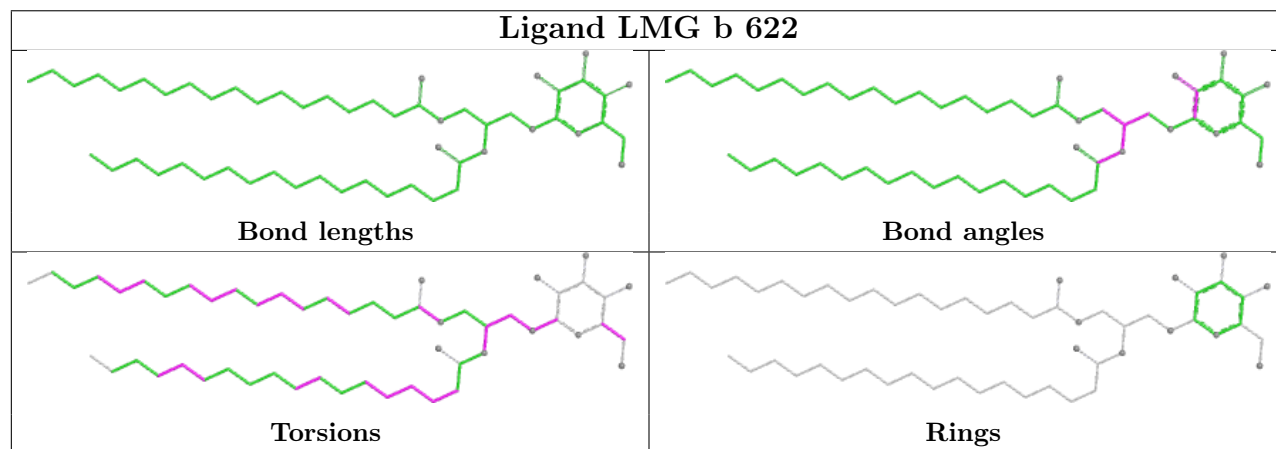
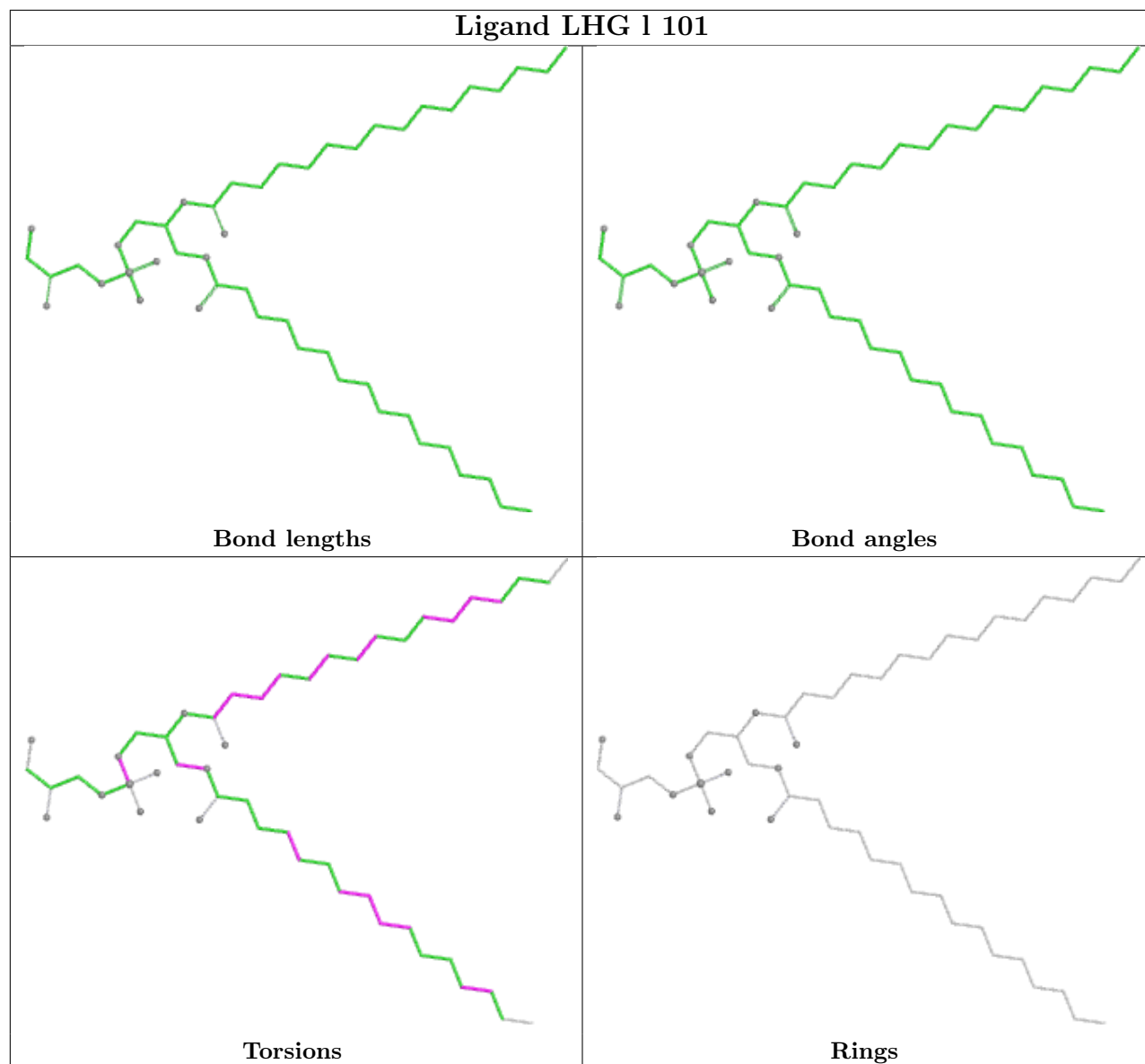
Ligand BCR c 517	
	
Bond lengths	Bond angles
	
Torsions	Rings

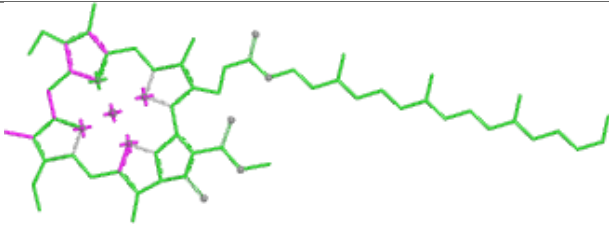
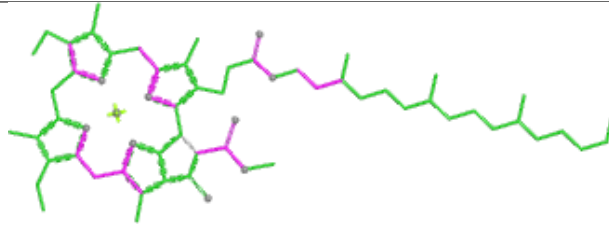
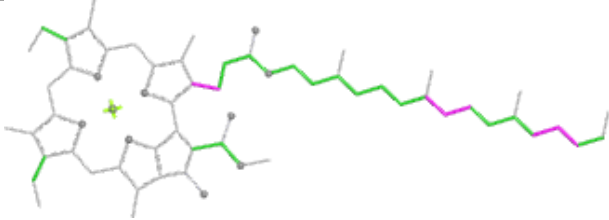
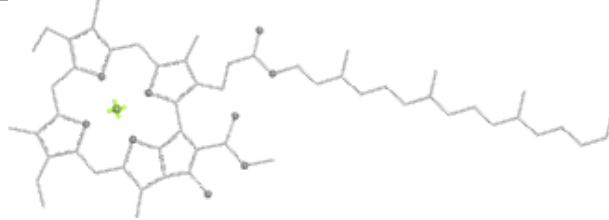
Ligand LMG m 101	
	
Bond lengths	Bond angles
	
Torsions	Rings

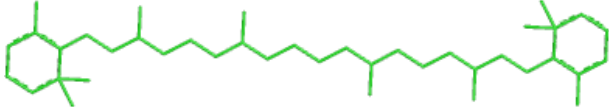
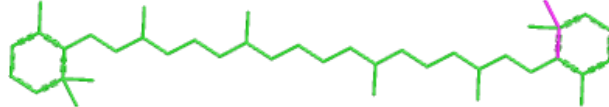
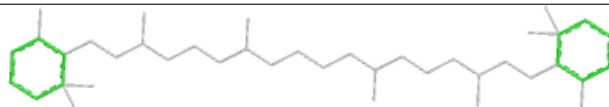


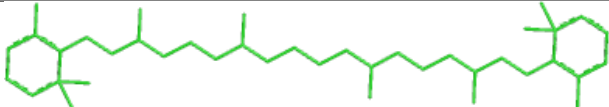
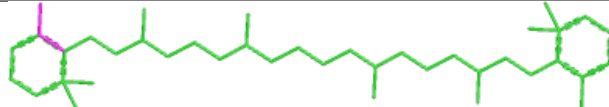
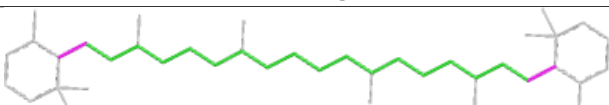
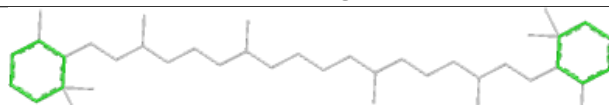
Ligand CLA B 601**Ligand CLA B 607**

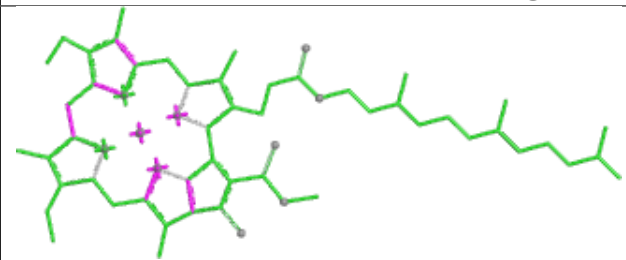
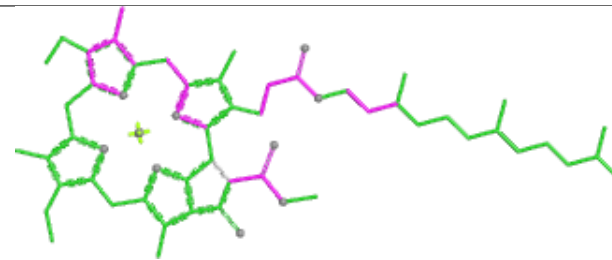
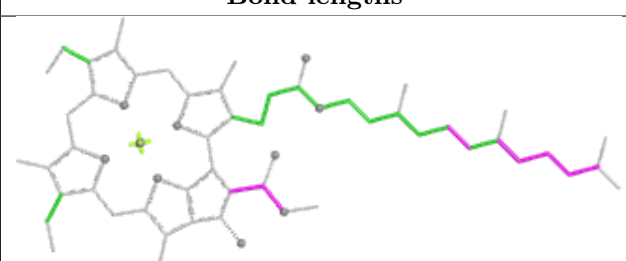
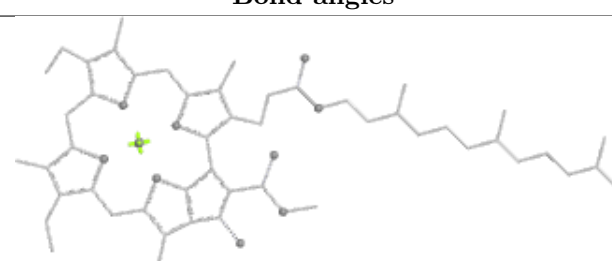


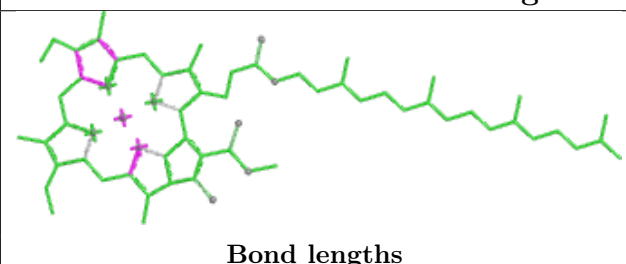
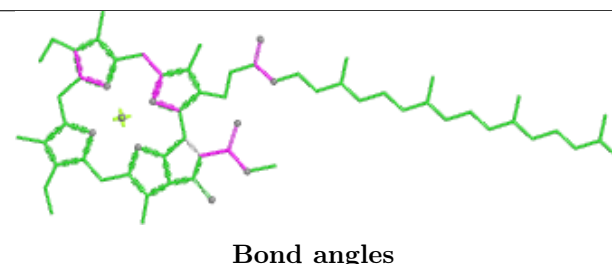
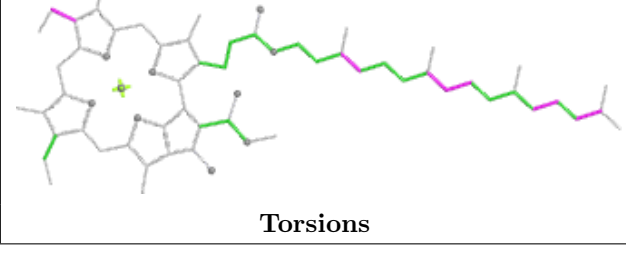
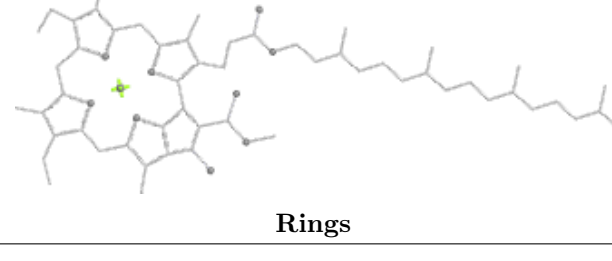


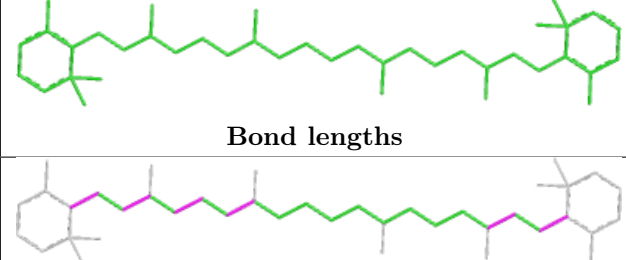
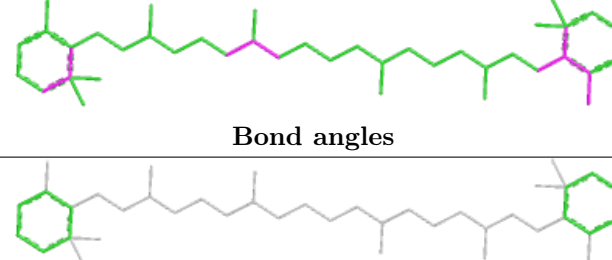
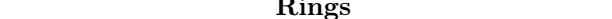
Ligand CLA c 508	
	
Bond lengths	Bond angles
	
Torsions	Rings

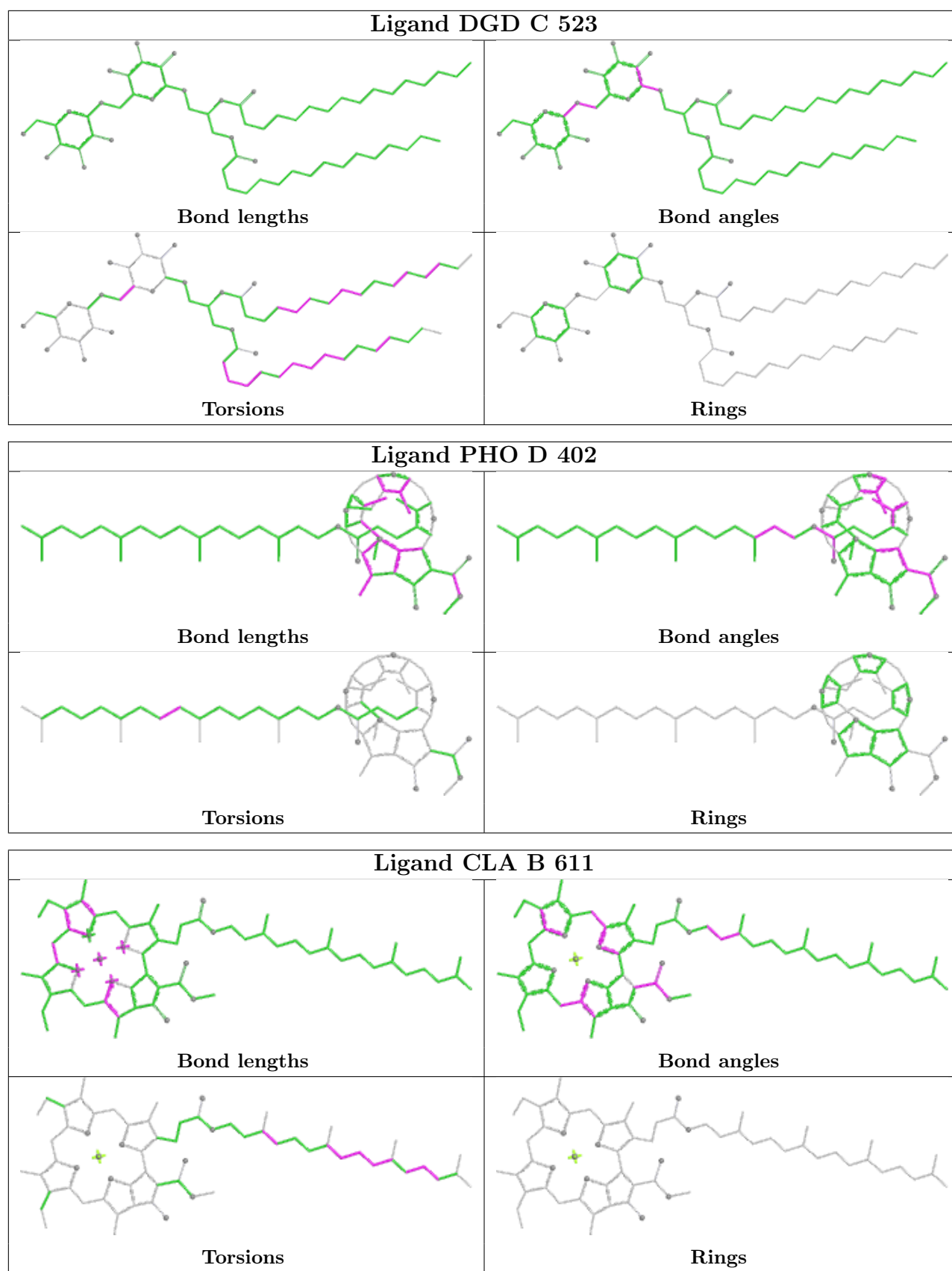
Ligand BCR D 406	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand BCR A 609	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA b 616	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA B 605	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand BCR t 101	
	
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%)	-0.20	2 (0%) 85 87	24, 30, 50, 79	0
1	a	334/344 (97%)	-0.08	3 (0%) 81 83	25, 32, 59, 78	0
2	B	505/510 (99%)	-0.07	7 (1%) 73 77	19, 33, 62, 89	5 (0%)
2	b	505/510 (99%)	0.07	11 (2%) 62 66	25, 37, 69, 110	1 (0%)
3	C	442/461 (95%)	0.04	2 (0%) 87 89	17, 38, 53, 76	1 (0%)
3	c	451/461 (97%)	0.16	7 (1%) 70 74	21, 41, 60, 96	2 (0%)
4	D	341/352 (96%)	-0.24	1 (0%) 90 91	25, 32, 49, 77	0
4	d	341/352 (96%)	-0.05	0 100 100	25, 36, 58, 79	1 (0%)
5	E	82/84 (97%)	0.68	3 (3%) 45 49	35, 53, 70, 84	1 (1%)
5	e	82/84 (97%)	0.82	7 (8%) 16 18	39, 60, 79, 85	0
6	F	34/45 (75%)	0.47	2 (5%) 28 32	37, 47, 60, 89	0
6	f	34/45 (75%)	0.60	0 100 100	44, 56, 75, 90	0
7	H	65/66 (98%)	0.26	1 (1%) 72 76	35, 42, 59, 77	0
7	h	63/66 (95%)	0.55	2 (3%) 50 54	41, 50, 61, 66	0
8	I	35/38 (92%)	0.10	1 (2%) 53 57	34, 39, 62, 76	0
8	i	35/38 (92%)	0.31	1 (2%) 53 57	33, 40, 70, 98	0
9	J	36/40 (90%)	0.59	2 (5%) 30 34	38, 55, 79, 89	0
9	j	36/40 (90%)	0.68	2 (5%) 30 34	40, 56, 86, 92	0
10	K	37/46 (80%)	0.68	0 100 100	46, 54, 69, 77	0
10	k	37/46 (80%)	0.67	0 100 100	50, 56, 75, 80	0
11	L	37/37 (100%)	-0.19	0 100 100	28, 30, 56, 67	0
11	l	36/37 (97%)	-0.28	0 100 100	28, 31, 61, 74	0
12	M	32/36 (88%)	0.07	1 (3%) 51 55	28, 33, 54, 74	0
12	m	31/36 (86%)	-0.16	0 100 100	30, 34, 51, 62	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	O	244/272 (89%)	0.11	6 (2%) 58 62	28, 41, 78, 119	1 (0%)
13	o	244/272 (89%)	0.15	3 (1%) 76 79	28, 41, 77, 126	0
14	T	29/32 (90%)	-0.05	2 (6%) 23 26	29, 33, 56, 71	0
14	t	29/32 (90%)	-0.03	2 (6%) 23 26	28, 33, 65, 79	0
15	U	97/134 (72%)	0.08	0 100 100	32, 42, 66, 93	0
15	u	97/134 (72%)	0.05	0 100 100	31, 40, 57, 86	0
16	V	137/163 (84%)	-0.01	0 100 100	31, 40, 55, 75	0
16	v	137/163 (84%)	0.33	1 (0%) 84 85	35, 47, 67, 85	0
17	Y	27/46 (58%)	1.80	11 (40%) 0 1	52, 75, 111, 119	0
17	y	30/46 (65%)	1.32	4 (13%) 7 8	63, 77, 96, 101	0
18	X	38/41 (92%)	0.63	3 (7%) 18 20	42, 54, 70, 78	0
18	x	39/41 (95%)	0.75	2 (5%) 33 37	47, 59, 83, 101	0
19	Z	62/62 (100%)	1.25	10 (16%) 4 5	56, 70, 110, 117	0
19	z	62/62 (100%)	1.39	8 (12%) 7 8	61, 72, 118, 127	0
20	R	28/41 (68%)	1.23	2 (7%) 22 25	63, 71, 88, 91	0
20	r	28/41 (68%)	1.63	8 (28%) 1 1	68, 84, 104, 121	0
All	All	5293/5700 (92%)	0.13	117 (2%) 62 66	17, 39, 73, 127	12 (0%)

The worst 5 of 117 RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
17	Y	20	ALA	3.9
19	Z	33	TRP	3.9
19	z	33	TRP	3.9
20	r	29	LYS	3.8
20	r	28	VAL	3.7

6.2 Non-standard residues in protein, DNA, RNA chains [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(Å ²)	Q<0.9
14	FME	t	1	10/11	0.90	0.10	32,37,48,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
12	FME	M	1	10/11	0.92	0.10	37,44,55,61	0
14	FME	T	1	10/11	0.93	0.10	31,39,51,68	0
8	FME	i	1	10/11	0.96	0.09	39,44,53,56	0
12	FME	m	1	10/11	0.96	0.08	30,45,65,65	0
8	FME	I	1	10/11	0.96	0.07	39,43,49,50	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
28	STE	i	101	12/20	0.58	0.18	66,83,93,94	0
28	STE	i	102	6/20	0.61	0.22	62,67,71,75	0
28	STE	H	103	18/20	0.65	0.23	56,73,76,80	0
28	STE	I	101	17/20	0.65	0.18	59,66,72,75	0
28	STE	e	105	13/20	0.66	0.21	75,83,89,91	0
28	STE	C	518	5/20	0.67	0.22	49,61,63,64	0
28	STE	f	103	16/20	0.67	0.21	63,75,84,87	0
28	STE	A	611	9/20	0.69	0.17	51,60,67,68	0
27	PL9	a	611	55/55	0.70	0.22	47,67,79,82	0
31	LHG	e	103	42/49	0.70	0.19	57,82,93,99	0
28	STE	h	103	11/20	0.71	0.23	60,63,64,69	0
28	STE	z	702	18/20	0.71	0.22	58,76,79,83	0
28	STE	C	520	10/20	0.71	0.21	59,67,73,83	0
28	STE	E	102	12/20	0.72	0.21	64,79,97,99	0
28	STE	d	413	14/20	0.72	0.18	55,61,85,91	0
29	LMG	D	408	50/55	0.72	0.19	41,66,92,97	0
28	STE	A	619	11/20	0.72	0.18	52,61,73,79	0
28	STE	B	627	12/20	0.73	0.17	44,57,66,68	0
27	PL9	A	610	55/55	0.73	0.22	43,65,86,89	0
29	LMG	c	516	30/55	0.73	0.18	49,73,96,97	0
31	LHG	A	614	49/49	0.73	0.18	49,78,100,112	0
28	STE	a	616	12/20	0.73	0.16	56,65,75,78	0
29	LMG	C	517	36/55	0.74	0.17	48,61,71,78	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
28	STE	C	516	14/20	0.74	0.20	51,63,69,69	0
28	STE	C	528	14/20	0.74	0.18	53,59,76,78	0
28	STE	C	519	7/20	0.74	0.20	53,56,61,67	0
28	STE	h	102	10/20	0.74	0.20	65,71,83,83	0
29	LMG	c	522	48/55	0.75	0.19	57,69,80,83	0
28	STE	A	618	17/20	0.75	0.16	51,61,67,69	0
28	STE	e	104	9/20	0.75	0.19	53,65,73,74	0
28	STE	f	102	8/20	0.76	0.22	58,61,66,75	0
29	LMG	B	625	55/55	0.77	0.15	39,56,70,78	0
28	STE	e	101	9/20	0.77	0.24	68,78,88,88	0
28	STE	E	103	20/20	0.77	0.17	47,66,73,76	0
29	LMG	b	622	55/55	0.77	0.20	50,66,79,83	0
32	DGD	A	616	66/66	0.77	0.16	46,57,73,80	0
28	STE	B	628	15/20	0.78	0.19	45,58,61,69	0
28	STE	C	527	14/20	0.79	0.17	56,66,80,84	0
28	STE	d	410	20/20	0.79	0.16	50,63,80,83	0
29	LMG	B	620	45/55	0.80	0.16	34,58,76,83	0
28	STE	T	102	16/20	0.80	0.18	32,49,67,72	0
28	STE	t	102	10/20	0.80	0.16	46,52,56,57	0
28	STE	z	701	13/20	0.80	0.20	63,69,75,79	0
28	STE	b	623	16/20	0.80	0.20	52,59,76,82	0
28	STE	B	626	18/20	0.81	0.15	44,52,82,87	0
28	STE	I	102	15/20	0.81	0.17	46,51,64,67	0
28	STE	J	102	12/20	0.81	0.17	46,55,63,65	0
28	STE	C	525	12/20	0.82	0.17	38,44,51,52	0
24	CLA	b	601	65/65	0.82	0.13	50,65,82,90	0
30	SQD	A	615	43/54	0.83	0.12	40,53,81,87	0
30	SQD	a	614	54/54	0.83	0.14	38,59,83,88	0
28	STE	E	101	12/20	0.83	0.15	59,68,79,79	0
28	STE	Z	101	17/20	0.83	0.19	55,72,85,86	0
28	STE	b	624	15/20	0.83	0.17	46,54,73,75	0
29	LMG	c	521	46/55	0.84	0.14	49,66,75,80	0
29	LMG	C	524	48/55	0.85	0.16	44,68,83,85	0
28	STE	d	412	20/20	0.85	0.14	41,54,67,68	0
29	LMG	a	615	49/55	0.85	0.14	40,55,68,74	0
28	STE	m	102	12/20	0.85	0.14	43,46,69,76	0
28	STE	H	104	9/20	0.86	0.14	47,56,71,74	0
29	LMG	A	612	48/55	0.86	0.13	42,55,67,71	0
28	STE	X	101	20/20	0.86	0.13	37,50,67,75	0
28	STE	b	625	10/20	0.86	0.14	47,54,69,69	0
28	STE	j	101	12/20	0.86	0.14	51,60,67,68	0
24	CLA	B	601	65/65	0.86	0.13	42,54,79,86	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
28	STE	M	103	10/20	0.86	0.17	39,50,53,60	0
29	LMG	M	101	51/55	0.86	0.12	31,48,63,67	0
28	STE	b	621	20/20	0.86	0.14	40,53,62,62	0
26	BCR	J	101	40/40	0.87	0.13	41,53,59,65	0
28	STE	B	621	17/20	0.87	0.15	38,49,64,64	0
30	SQD	b	620	49/54	0.87	0.11	39,56,68,75	0
28	STE	C	526	16/20	0.87	0.14	42,50,56,62	0
28	STE	z	703	9/20	0.87	0.21	54,67,71,71	0
29	LMG	m	101	51/55	0.87	0.12	39,50,62,65	0
28	STE	d	407	20/20	0.88	0.13	39,52,75,78	0
28	STE	M	102	15/20	0.88	0.11	37,43,53,66	0
30	SQD	f	101	41/54	0.88	0.14	53,76,85,91	0
24	CLA	C	513	65/65	0.88	0.12	48,59,78,80	0
30	SQD	B	623	54/54	0.88	0.11	36,56,70,72	0
30	SQD	a	613	54/54	0.88	0.14	44,61,74,80	0
26	BCR	x	101	40/40	0.89	0.11	38,54,61,65	0
26	BCR	C	514	40/40	0.89	0.13	47,54,62,64	0
28	STE	B	624	14/20	0.89	0.10	34,44,56,60	0
24	CLA	c	513	65/65	0.89	0.13	50,60,83,85	0
26	BCR	d	405	40/40	0.89	0.13	34,48,80,88	0
26	BCR	k	101	40/40	0.89	0.13	46,58,64,69	0
30	SQD	D	410	36/54	0.89	0.14	47,68,80,83	0
28	STE	A	617	8/20	0.90	0.14	44,48,52,53	0
24	CLA	c	512	65/65	0.90	0.12	47,54,75,84	0
32	DGD	C	522	62/66	0.90	0.12	36,48,87,99	0
26	BCR	D	406	40/40	0.91	0.12	36,44,75,77	0
26	BCR	H	101	40/40	0.91	0.10	31,47,55,59	0
26	BCR	B	618	40/40	0.91	0.09	27,36,44,49	0
26	BCR	b	619	40/40	0.91	0.10	33,43,56,60	0
26	BCR	c	514	40/40	0.91	0.12	50,58,66,68	0
28	STE	l	102	18/20	0.91	0.12	36,42,64,65	0
24	CLA	C	511	65/65	0.91	0.11	38,48,60,64	0
32	DGD	H	102	62/66	0.91	0.10	33,40,51,55	0
32	DGD	c	519	62/66	0.91	0.11	39,50,77,80	0
32	DGD	h	101	62/66	0.91	0.11	37,44,53,53	0
26	BCR	b	618	40/40	0.92	0.09	26,38,45,46	0
26	BCR	B	619	40/40	0.92	0.09	29,39,50,52	0
24	CLA	c	511	65/65	0.92	0.11	43,53,62,66	0
26	BCR	c	517	40/40	0.92	0.12	46,53,62,67	0
24	CLA	C	503	65/65	0.92	0.09	35,43,47,52	0
31	LHG	a	612	49/49	0.92	0.12	36,47,59,63	0
29	LMG	d	411	44/55	0.92	0.11	40,49,71,75	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
24	CLA	C	512	65/65	0.92	0.11	43,50,78,84	0
30	SQD	A	613	52/54	0.92	0.11	32,53,80,84	0
26	BCR	t	101	40/40	0.92	0.08	26,34,42,44	0
29	LMG	D	409	51/55	0.92	0.12	32,47,72,81	0
24	CLA	c	503	65/65	0.92	0.10	34,44,48,54	0
26	BCR	A	609	40/40	0.93	0.08	26,34,40,41	0
26	BCR	c	515	40/40	0.93	0.10	31,44,52,54	0
26	BCR	B	617	40/40	0.93	0.09	26,38,43,44	0
24	CLA	b	606	65/65	0.93	0.09	29,36,62,69	0
24	CLA	C	508	65/65	0.93	0.11	33,39,87,95	0
24	CLA	c	504	60/65	0.93	0.10	31,44,74,77	0
26	BCR	C	515	40/40	0.93	0.10	30,39,48,51	0
24	CLA	C	510	65/65	0.93	0.09	35,41,53,62	0
24	CLA	a	605	65/65	0.93	0.08	25,30,37,47	0
27	PL9	d	406	55/55	0.93	0.09	25,33,39,45	0
31	LHG	d	409	39/49	0.93	0.11	34,43,64,70	0
24	CLA	C	502	65/65	0.93	0.09	33,38,53,56	0
26	BCR	K	101	40/40	0.93	0.11	42,49,57,64	0
26	BCR	T	101	40/40	0.93	0.09	29,38,48,50	0
26	BCR	b	617	40/40	0.93	0.08	30,38,43,48	0
25	PHO	A	607	64/64	0.93	0.08	28,33,37,42	0
32	DGD	c	520	62/66	0.93	0.11	33,47,69,83	0
25	PHO	a	608	64/64	0.93	0.08	32,38,44,51	0
33	BCT	D	401	4/4	0.93	0.09	33,34,37,38	0
33	BCT	d	401	4/4	0.93	0.08	36,38,46,49	0
24	CLA	b	616	60/65	0.94	0.10	28,38,78,85	0
24	CLA	c	502	65/65	0.94	0.08	33,41,50,56	0
24	CLA	B	616	60/65	0.94	0.09	25,34,72,79	0
24	CLA	C	504	59/65	0.94	0.09	32,42,73,80	0
24	CLA	c	505	65/65	0.94	0.09	31,39,54,60	0
24	CLA	c	506	65/65	0.94	0.10	35,44,75,81	0
24	CLA	c	507	65/65	0.94	0.08	31,41,50,53	0
24	CLA	c	508	64/65	0.94	0.10	34,41,80,94	0
24	CLA	c	509	65/65	0.94	0.10	35,43,59,60	0
24	CLA	c	510	65/65	0.94	0.09	37,44,54,57	0
24	CLA	C	506	65/65	0.94	0.10	33,42,75,79	0
31	LHG	B	622	49/49	0.94	0.11	29,40,56,60	0
31	LHG	D	412	47/49	0.94	0.12	32,40,75,77	0
24	CLA	C	501	65/65	0.94	0.08	26,33,43,47	0
24	CLA	a	609	65/65	0.94	0.10	22,29,71,77	0
24	CLA	d	404	65/65	0.94	0.10	33,39,74,79	0
24	CLA	C	509	65/65	0.94	0.09	31,40,57,61	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
32	DGD	C	521	62/66	0.94	0.10	26,36,69,73	0
24	CLA	b	605	65/65	0.94	0.08	25,34,43,48	0
32	DGD	C	523	62/66	0.94	0.10	33,41,70,89	0
24	CLA	B	606	65/65	0.94	0.09	24,34,58,65	0
27	PL9	D	407	55/55	0.94	0.08	22,31,38,41	0
24	CLA	b	609	65/65	0.94	0.08	32,41,54,63	0
24	CLA	b	610	65/65	0.94	0.09	29,35,43,46	0
24	CLA	b	614	65/65	0.94	0.09	26,34,63,71	0
24	CLA	b	615	65/65	0.94	0.08	30,37,51,54	0
34	HEM	e	102	43/43	0.94	0.11	49,59,69,77	0
24	CLA	B	610	65/65	0.95	0.08	23,30,39,41	0
24	CLA	b	602	65/65	0.95	0.09	32,37,54,57	0
24	CLA	b	603	65/65	0.95	0.09	27,32,55,62	0
24	CLA	b	604	65/65	0.95	0.09	24,31,59,71	0
24	CLA	B	612	65/65	0.95	0.07	22,29,40,44	0
26	BCR	a	610	40/40	0.95	0.07	25,32,43,43	0
24	CLA	B	615	65/65	0.95	0.08	27,34,48,54	0
24	CLA	b	608	65/65	0.95	0.08	31,39,50,53	0
24	CLA	C	505	65/65	0.95	0.08	26,36,56,68	0
31	LHG	L	101	49/49	0.95	0.08	31,37,46,63	0
24	CLA	B	604	65/65	0.95	0.08	22,30,56,59	0
31	LHG	d	408	49/49	0.95	0.08	30,37,45,52	0
24	CLA	d	402	65/65	0.95	0.07	22,29,41,53	0
24	CLA	d	403	65/65	0.95	0.08	24,30,46,57	0
31	LHG	l	101	49/49	0.95	0.09	34,40,48,54	0
24	CLA	b	611	65/65	0.95	0.07	26,32,43,46	0
24	CLA	b	612	65/65	0.95	0.08	25,31,39,43	0
25	PHO	D	402	64/64	0.95	0.07	22,28,33,35	0
25	PHO	a	607	64/64	0.95	0.07	25,29,35,41	0
24	CLA	D	403	65/65	0.95	0.07	22,28,36,49	0
32	DGD	c	518	62/66	0.95	0.09	27,37,63,69	0
24	CLA	D	404	65/65	0.95	0.07	21,27,49,53	0
24	CLA	D	405	65/65	0.95	0.09	30,35,104,124	0
24	CLA	c	501	65/65	0.95	0.08	32,38,47,50	0
24	CLA	C	507	65/65	0.95	0.08	28,38,48,54	0
24	CLA	a	606	65/65	0.95	0.10	28,36,83,87	0
24	CLA	B	609	65/65	0.95	0.07	29,37,48,53	0
24	CLA	B	607	65/65	0.96	0.07	21,29,50,58	0
24	CLA	B	608	65/65	0.96	0.07	26,30,46,50	0
24	CLA	b	607	65/65	0.96	0.09	25,32,56,61	0
24	CLA	A	605	65/65	0.96	0.07	19,27,39,47	0
24	CLA	B	602	65/65	0.96	0.07	26,33,48,55	0

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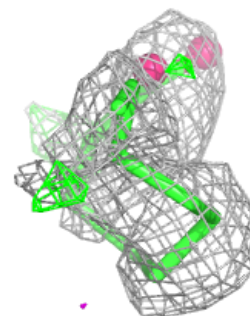
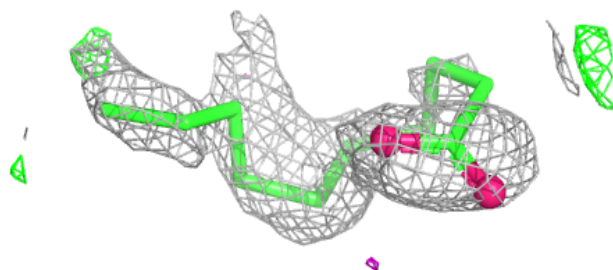
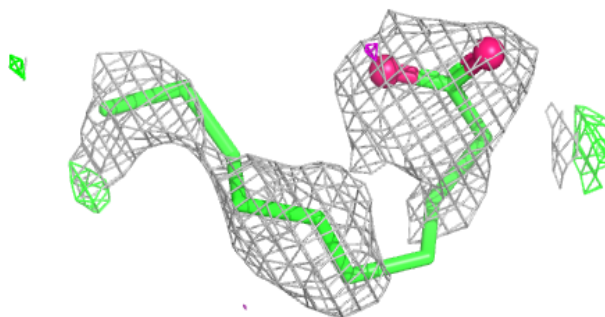
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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
24	CLA	B	611	65/65	0.96	0.07	23,27,41,47	0
24	CLA	B	603	65/65	0.96	0.08	24,29,53,58	0
24	CLA	B	613	65/65	0.96	0.07	23,28,57,64	0
31	LHG	D	411	49/49	0.96	0.08	28,35,44,47	0
24	CLA	b	613	65/65	0.96	0.08	23,30,64,74	0
24	CLA	B	614	65/65	0.96	0.09	23,32,62,71	0
24	CLA	A	606	65/65	0.96	0.09	25,31,88,93	0
24	CLA	B	605	65/65	0.96	0.06	24,29,41,44	0
34	HEM	F	101	43/43	0.96	0.09	43,49,58,64	0
24	CLA	A	608	54/65	0.96	0.07	23,28,55,62	0
35	HEC	V	201	43/43	0.97	0.06	27,32,39,41	0
35	HEC	v	201	43/43	0.97	0.07	28,35,44,47	0
23	CL	a	604	1/1	0.98	0.08	32,32,32,32	0
22	FE2	a	602	1/1	0.98	0.03	43,43,43,43	0
23	CL	a	603	1/1	0.99	0.05	31,31,31,31	0
21	OEX	a	601	10/10	0.99	0.03	23,30,34,35	0
22	FE2	A	602	1/1	0.99	0.06	38,38,38,38	0
21	OEX	A	601	10/10	0.99	0.04	25,30,33,35	0
23	CL	A	603	1/1	0.99	0.03	29,29,29,29	0
23	CL	A	604	1/1	1.00	0.06	29,29,29,29	0

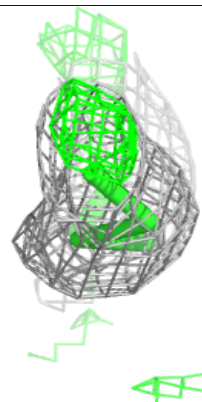
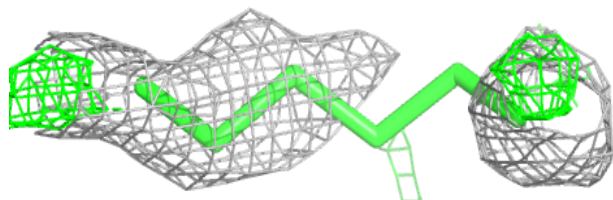
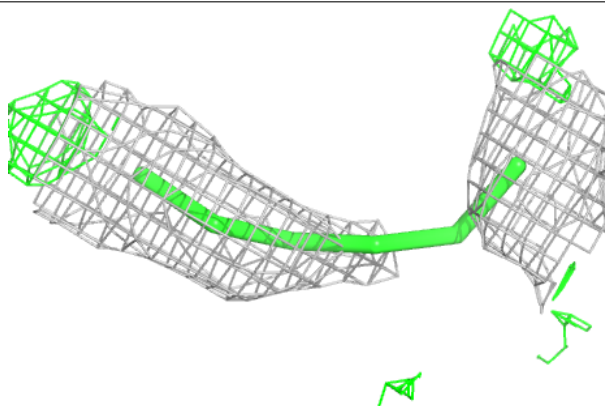
The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation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

Electron density around STE i 101:

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

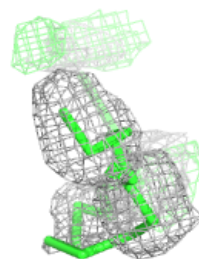
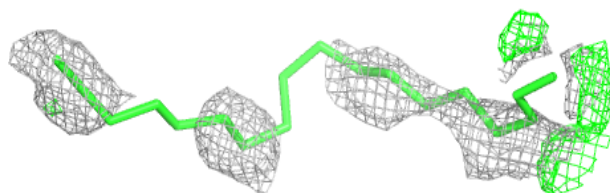
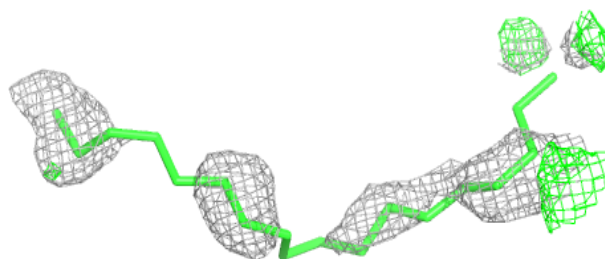
**Electron density around STE i 102:**

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

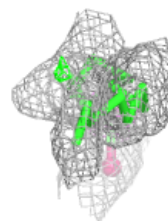
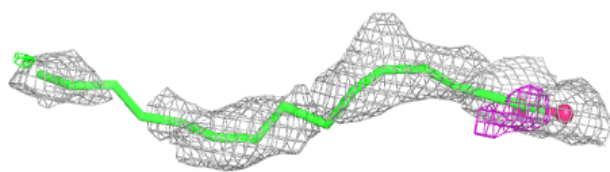
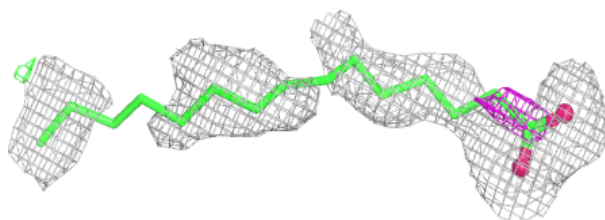


Electron density around STE H 103:

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

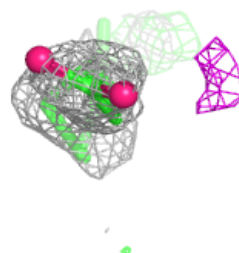
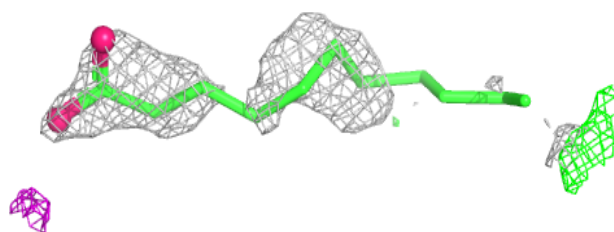
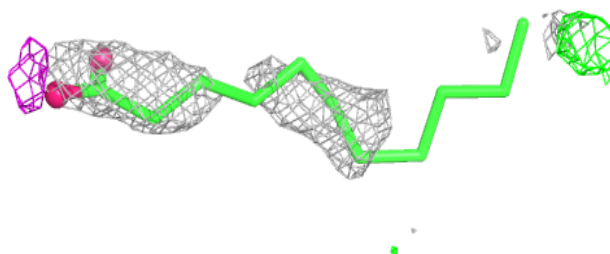
**Electron density around STE I 101:**

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

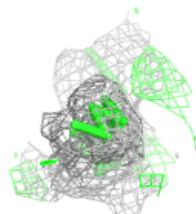
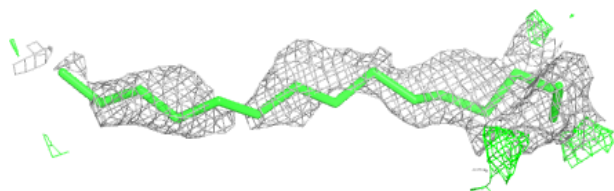
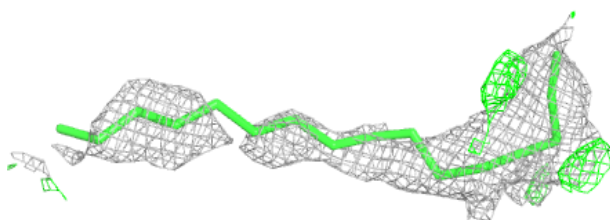


Electron density around STE e 105:

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

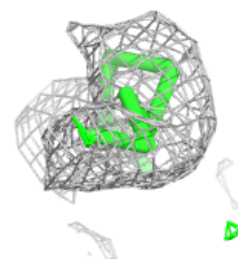
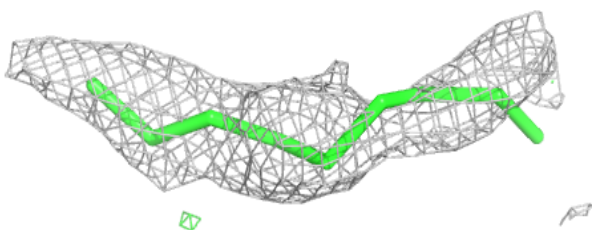
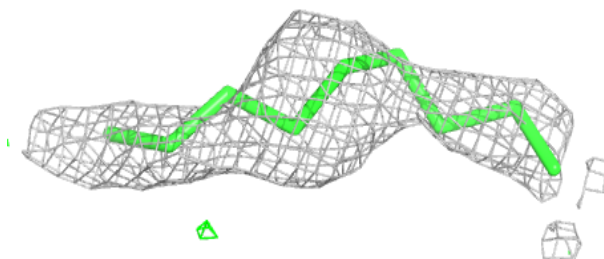
**Electron density around STE f 103:**

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

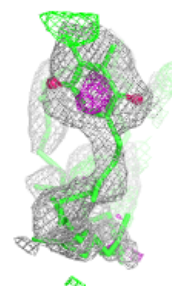
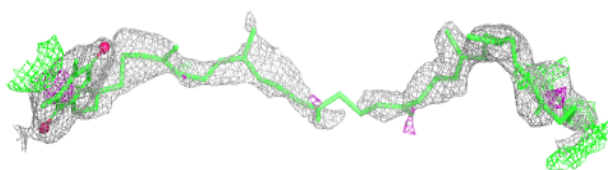
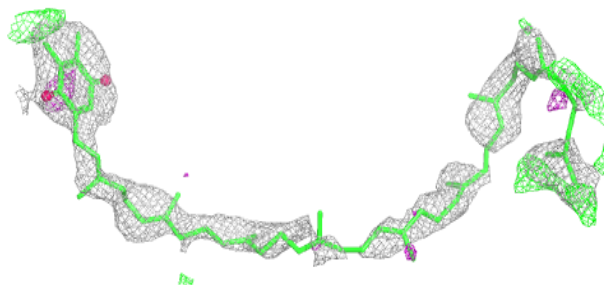


Electron density around STE A 611:

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

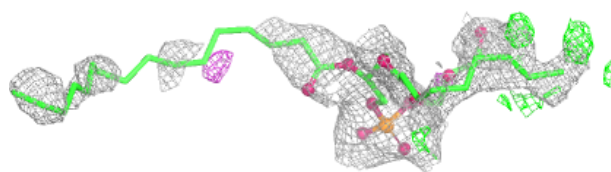
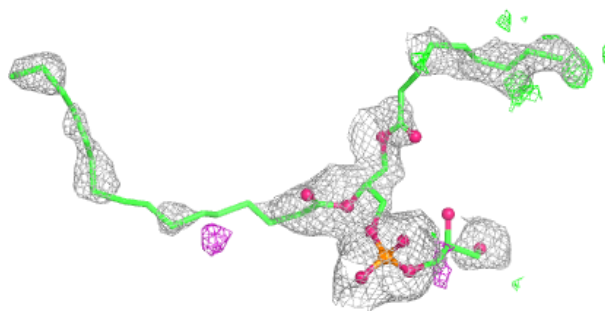
**Electron density around PL9 a 611:**

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

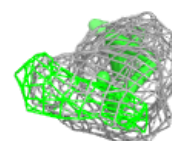
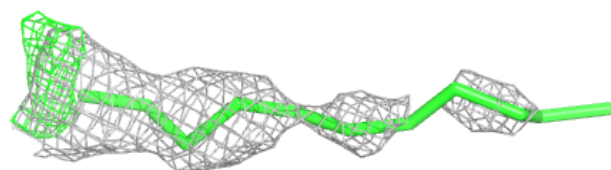
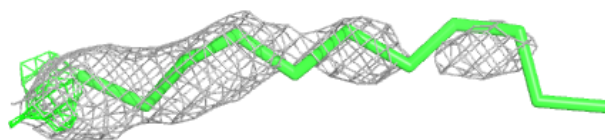


Electron density around LHG e 103:

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

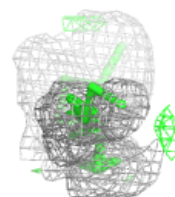
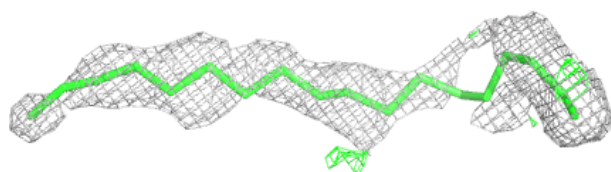
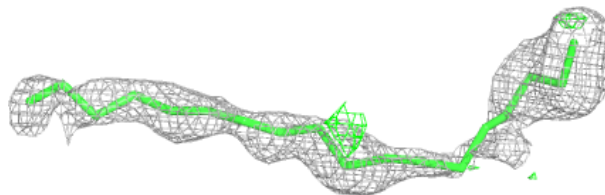
**Electron density around STE h 103:**

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



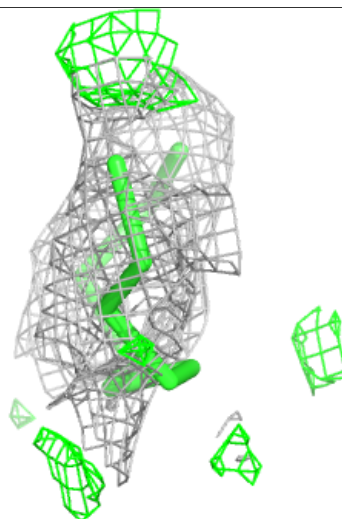
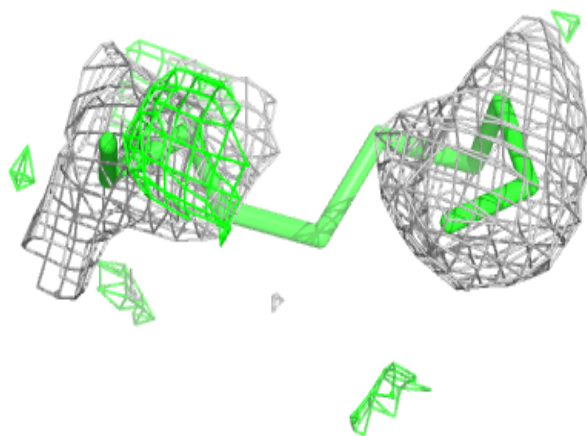
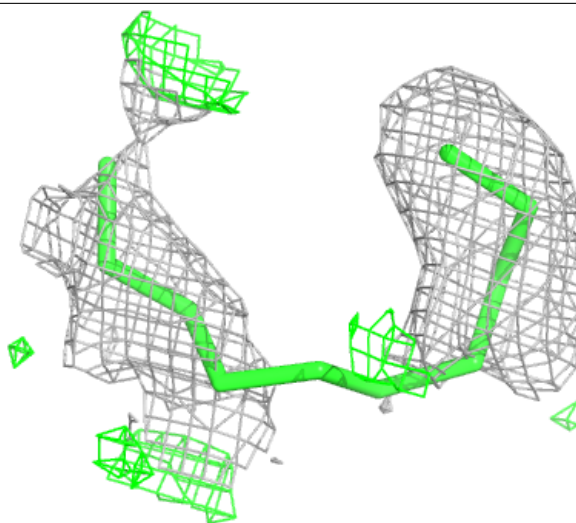
Electron density around STE z 702:

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



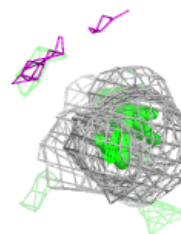
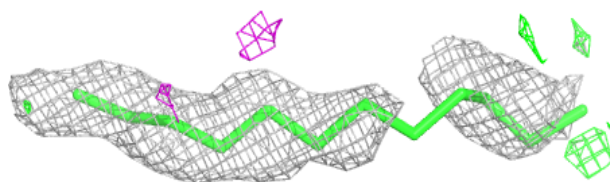
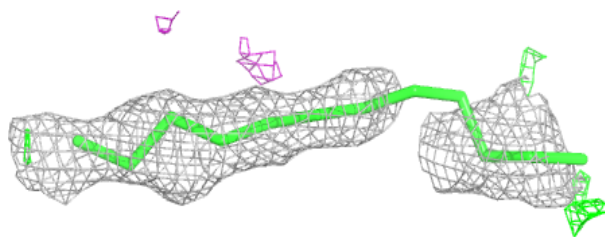
Electron density around STE C 520:

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

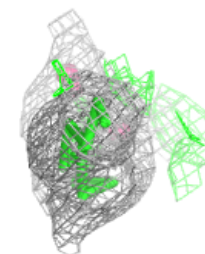
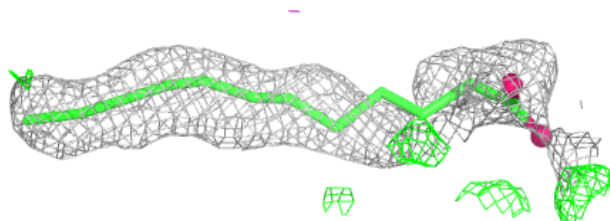
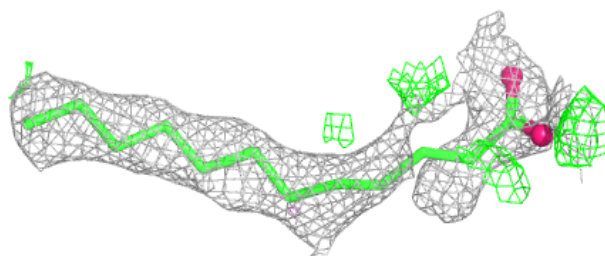


Electron density around STE E 102:

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and green (positive)

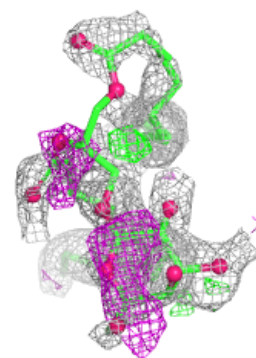
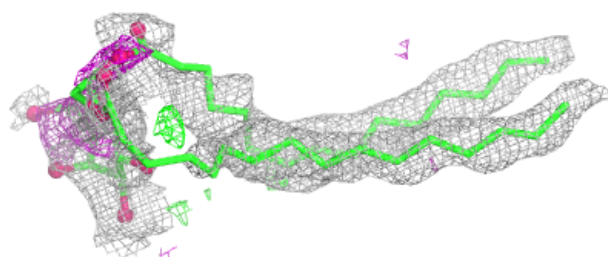
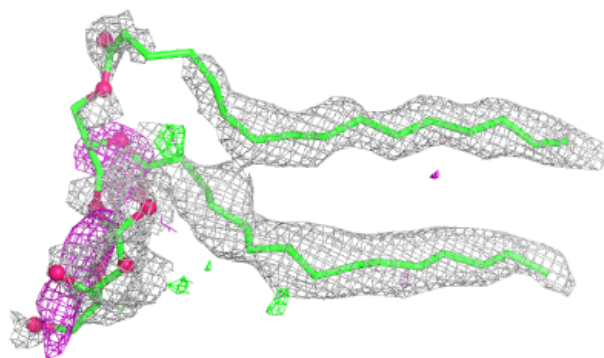
**Electron density around STE d 413:**

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

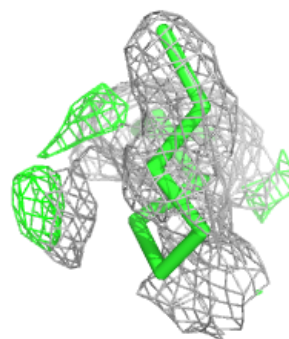
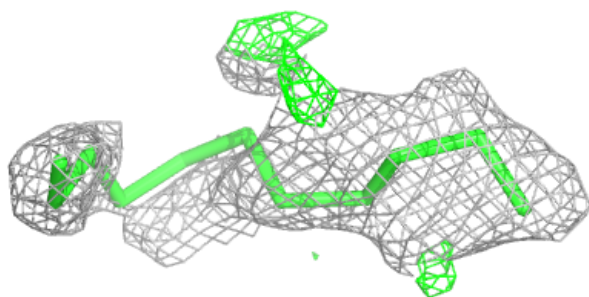
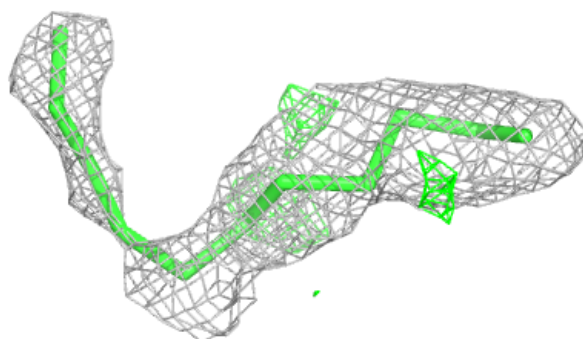


Electron density around LMG D 408:

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

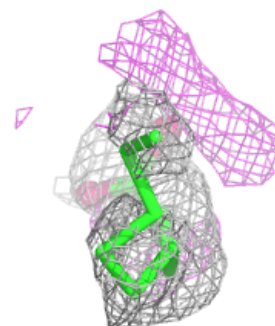
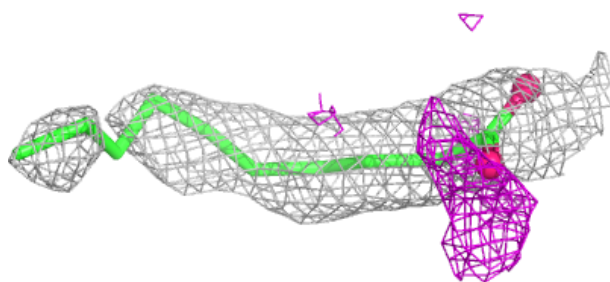
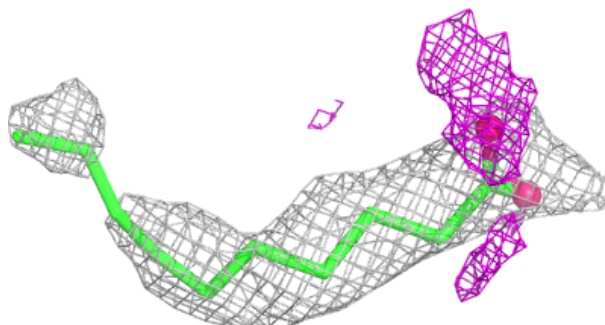
**Electron density around STE A 619:**

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

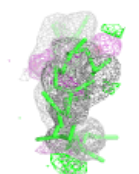
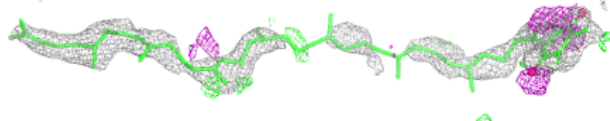
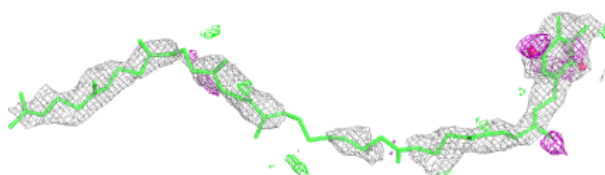


Electron density around STE B 627:

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

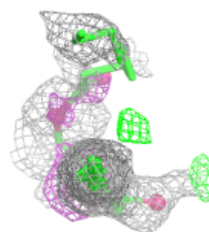
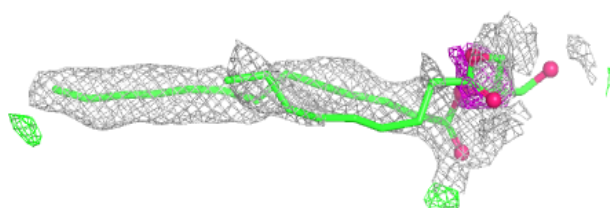
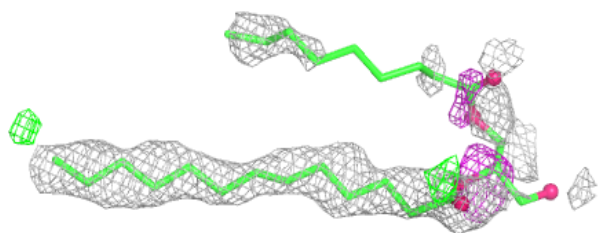
**Electron density around PL9 A 610:**

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

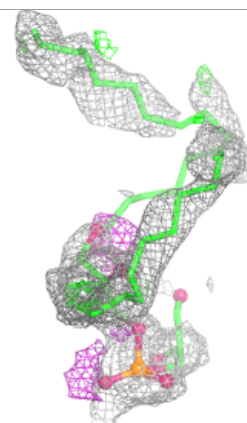
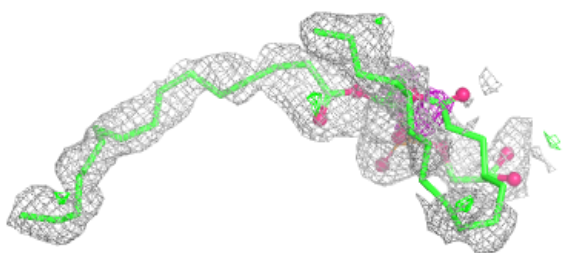
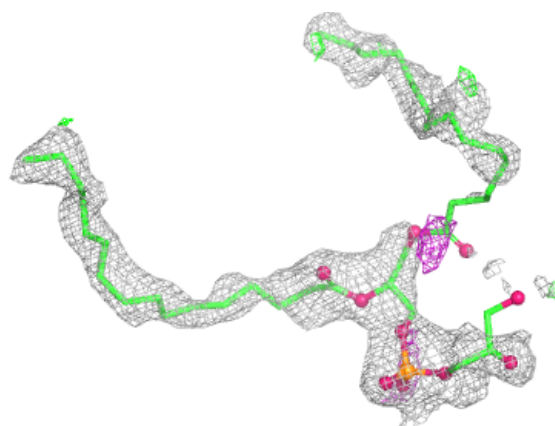


Electron density around LMG c 516:

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

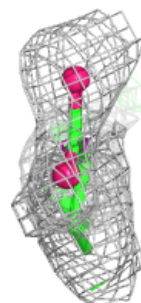
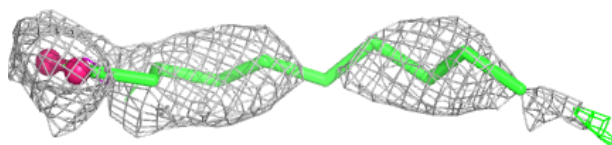
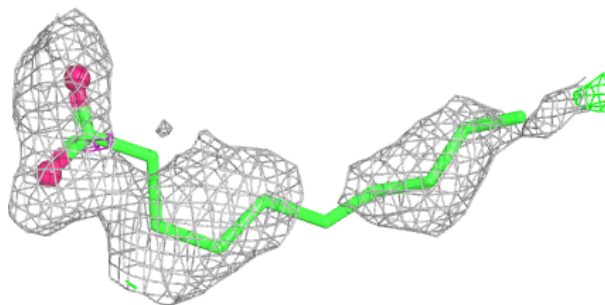
**Electron density around LHG A 614:**

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

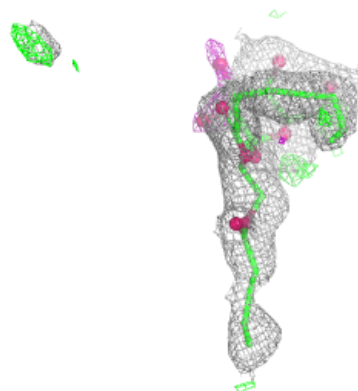
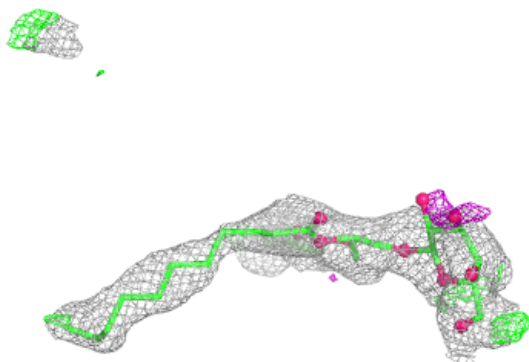
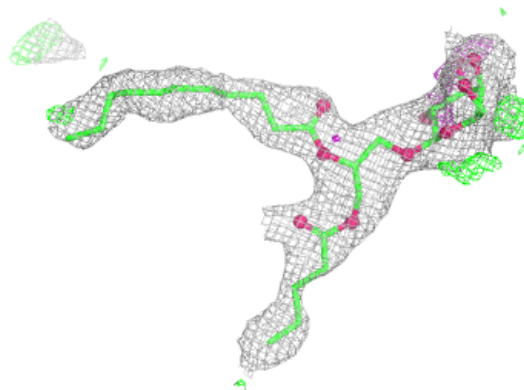


Electron density around STE a 616:

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

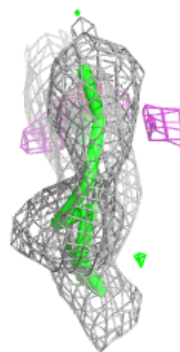
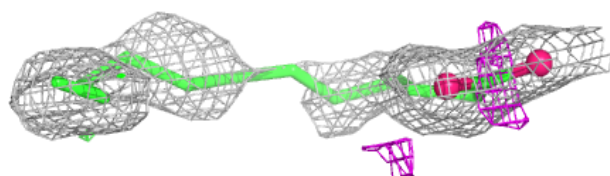
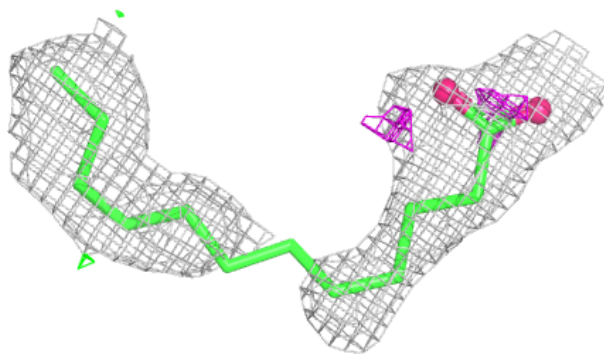
**Electron density around LMG C 517:**

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

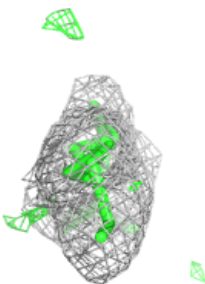
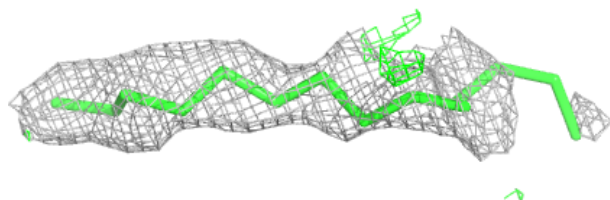
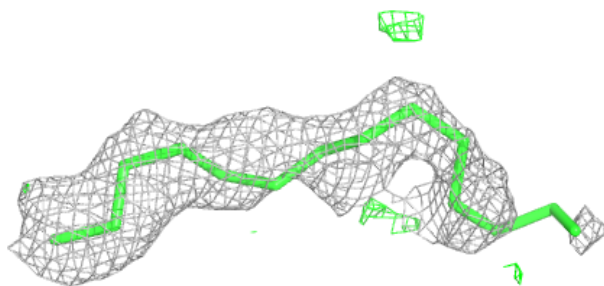


Electron density around STE C 516:

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

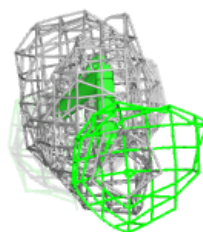
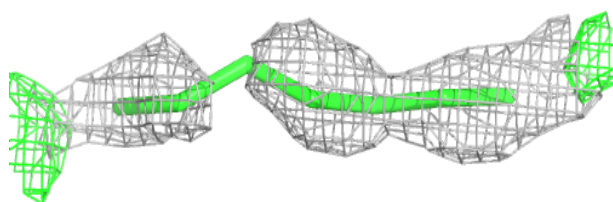
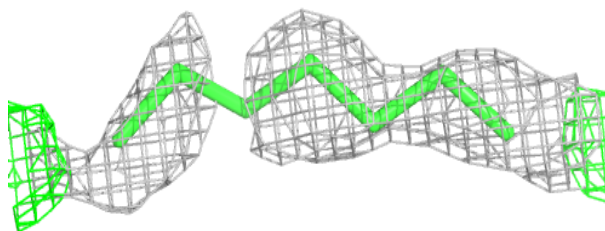
**Electron density around STE C 528:**

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

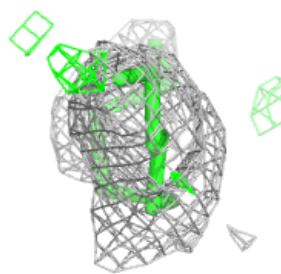
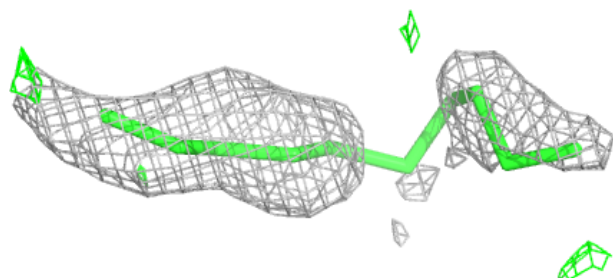
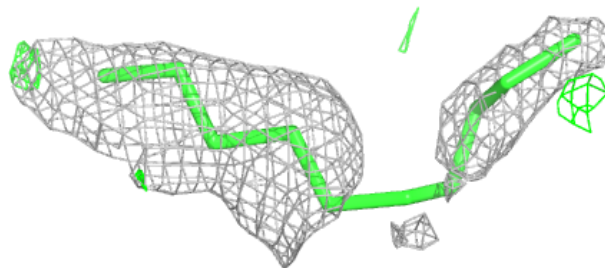


Electron density around STE C 519:

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

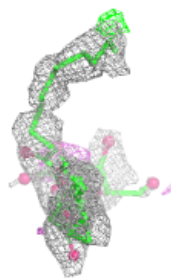
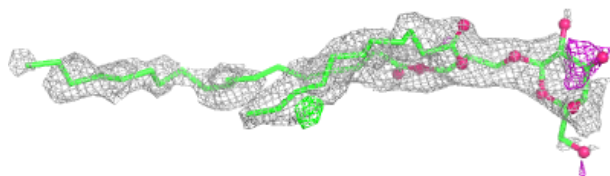
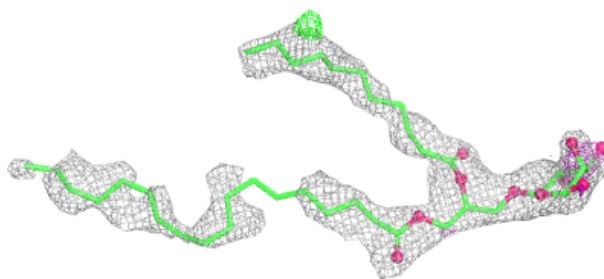
**Electron density around STE h 102:**

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

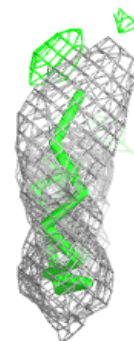
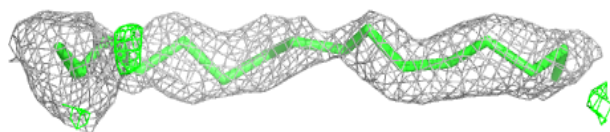
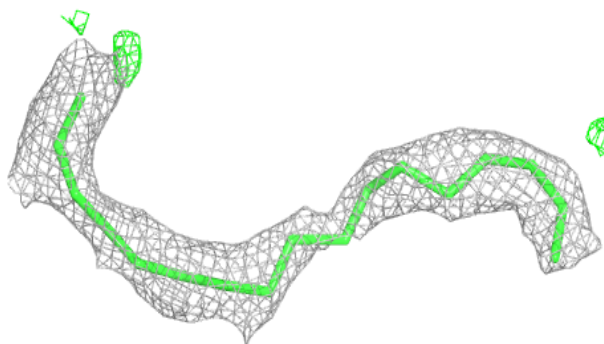


Electron density around LMG c 522:

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

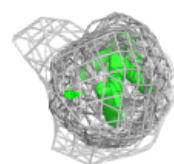
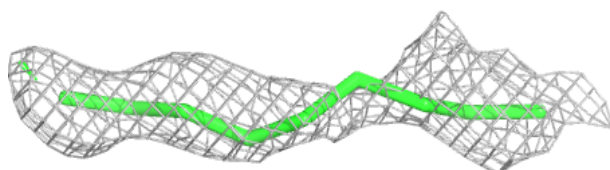
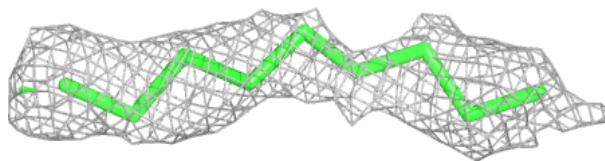
**Electron density around STE A 618:**

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

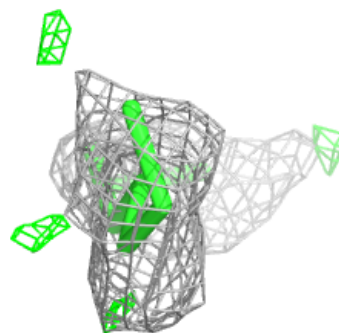
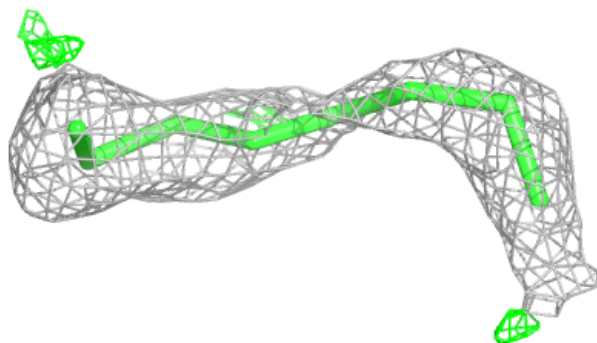
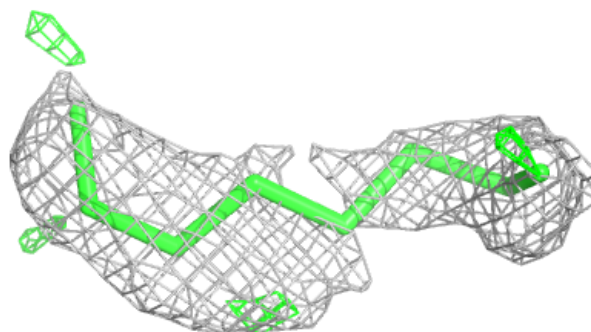


Electron density around STE e 104:

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

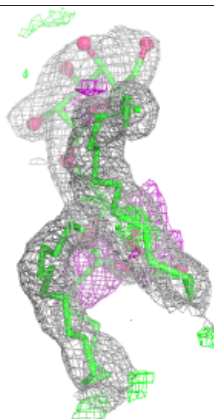
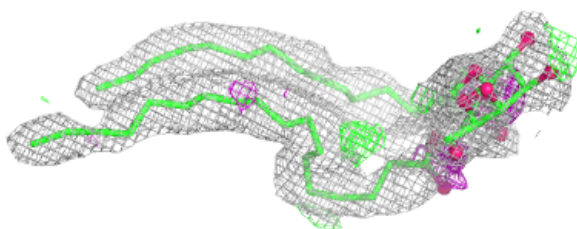
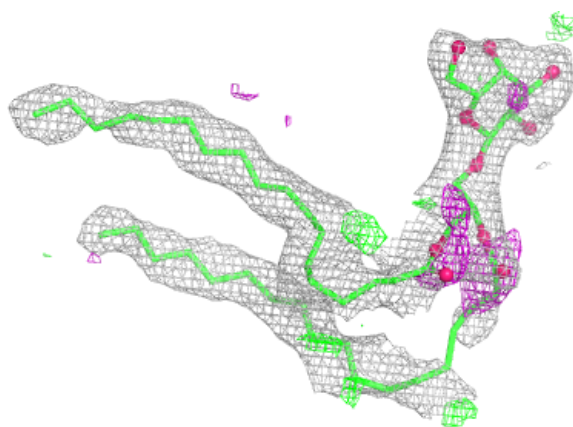
**Electron density around STE f 102:**

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

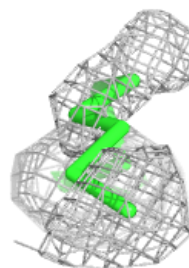
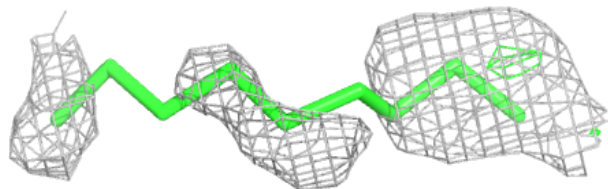
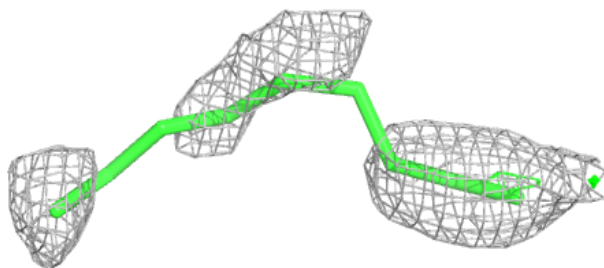


Electron density around LMG B 625:

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

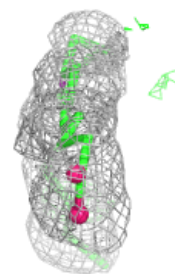
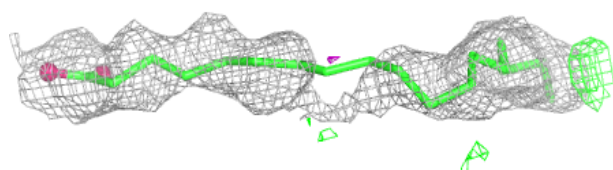
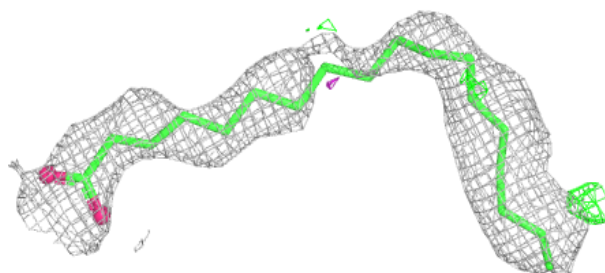
**Electron density around STE e 101:**

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

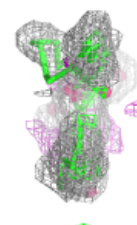
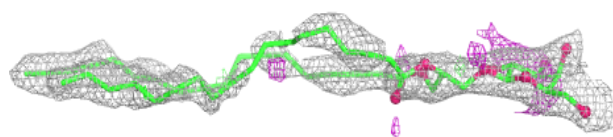
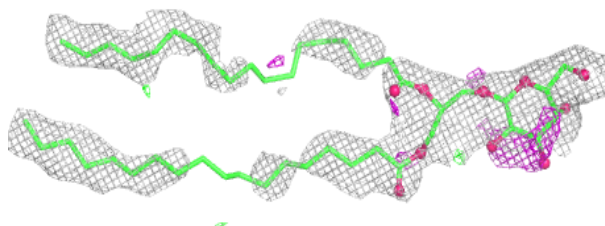


Electron density around STE E 103:

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

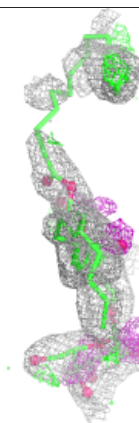
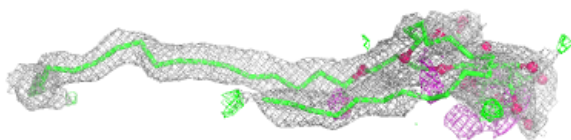
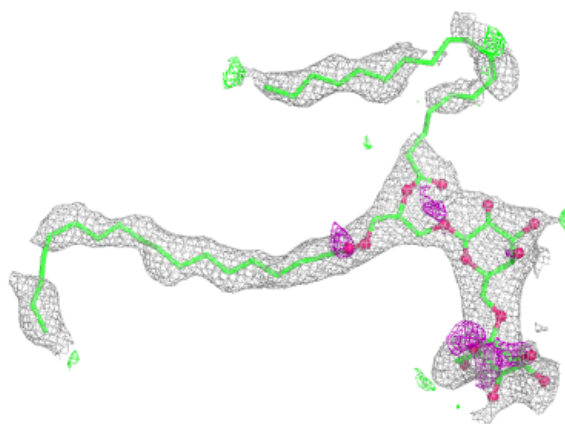
**Electron density around LMG b 622:**

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

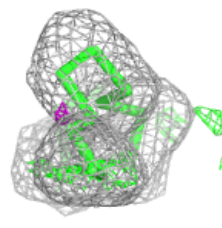
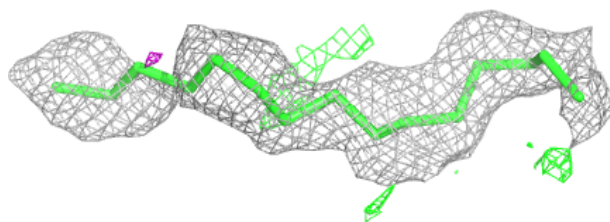
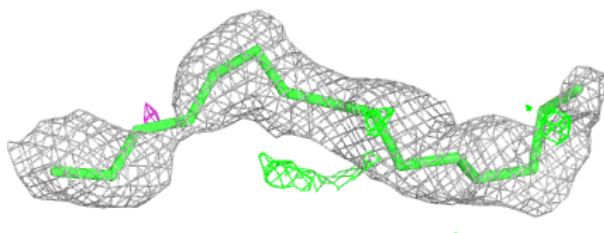


Electron density around DGD A 616:

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

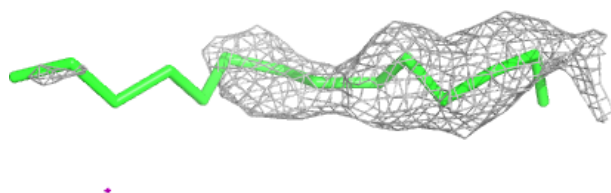
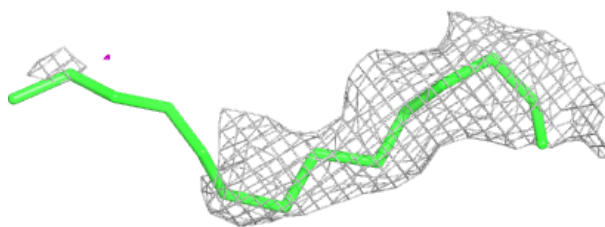
**Electron density around STE B 628:**

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

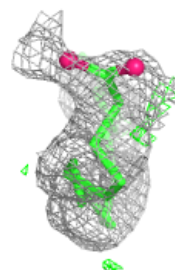
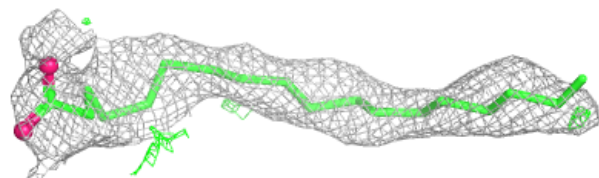
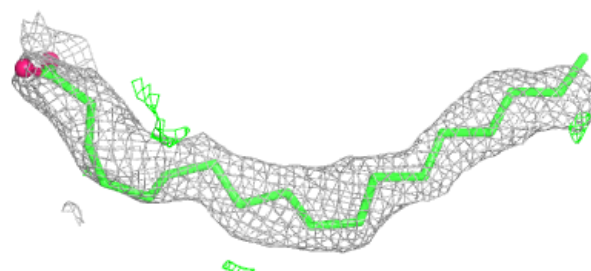


Electron density around STE C 527:

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

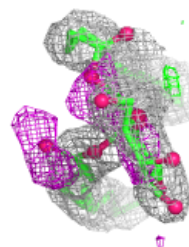
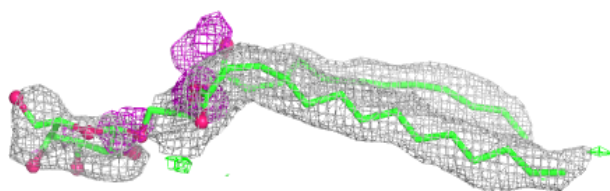
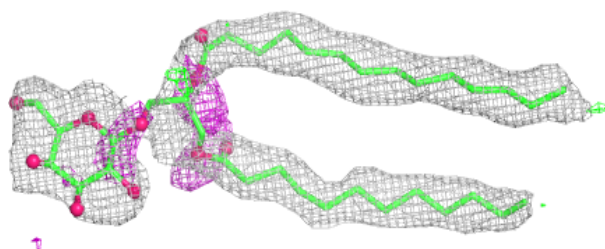
**Electron density around STE d 410:**

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

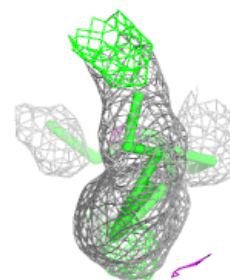
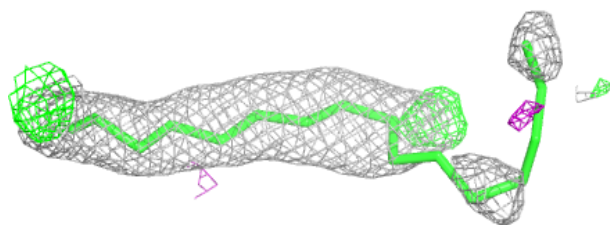
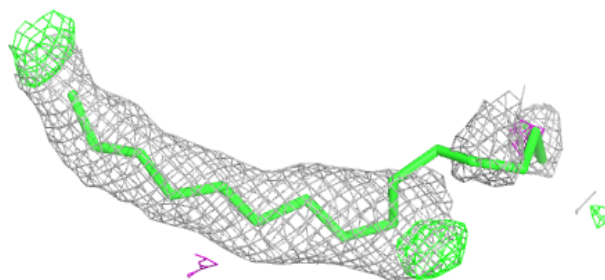


Electron density around LMG B 620:

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

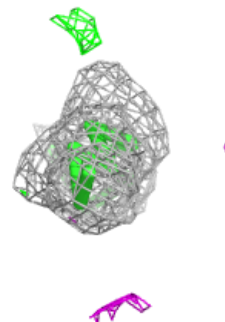
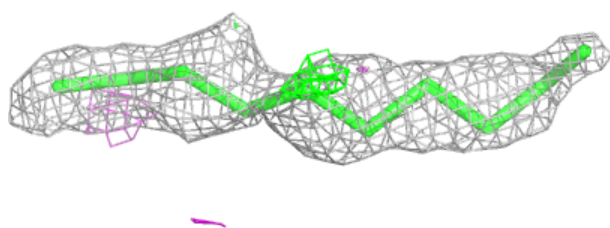
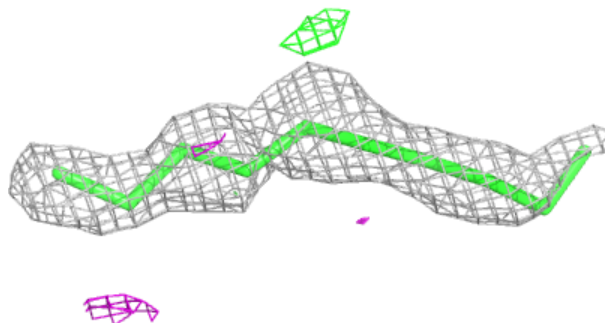
**Electron density around STE T 102:**

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

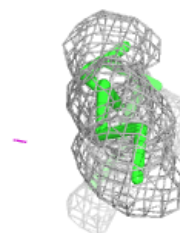
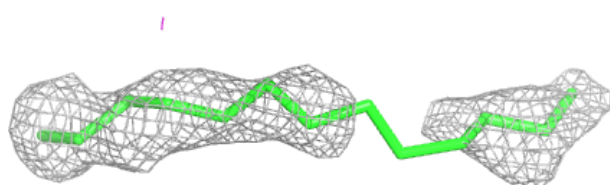
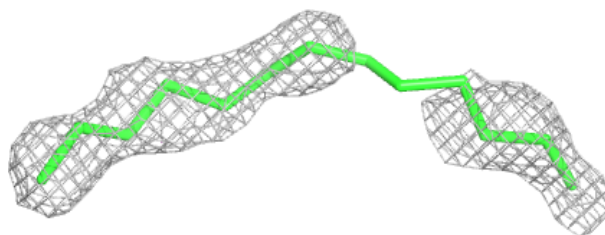


Electron density around STE t 102:

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

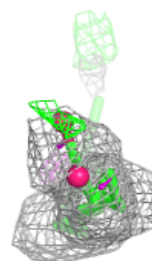
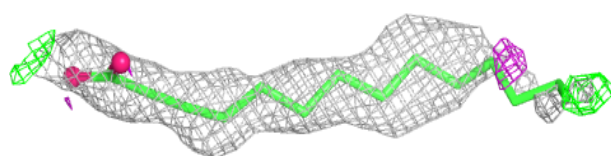
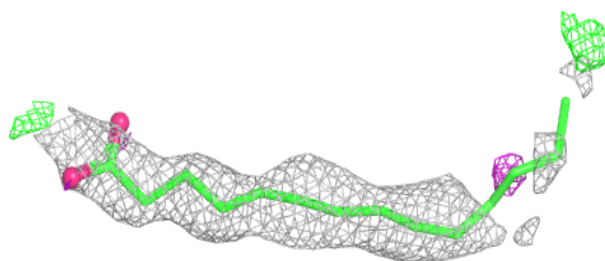
**Electron density around STE z 701:**

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

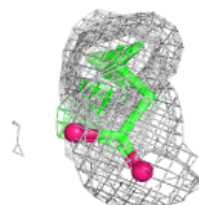
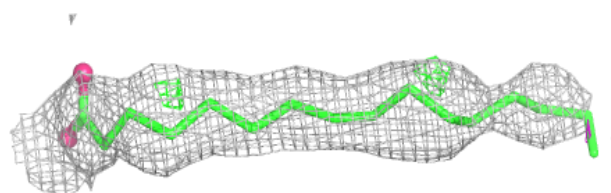
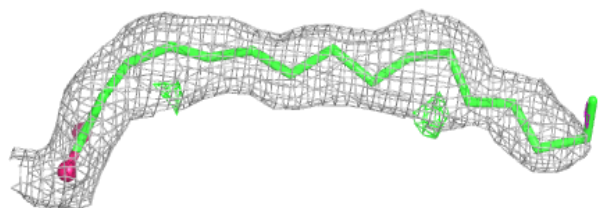


Electron density around STE b 623:

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

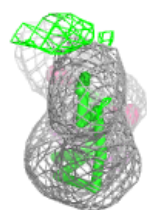
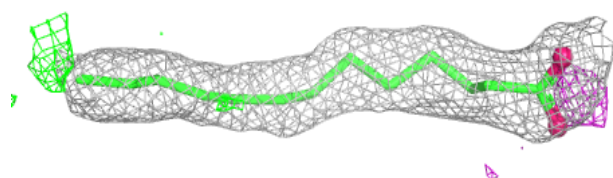
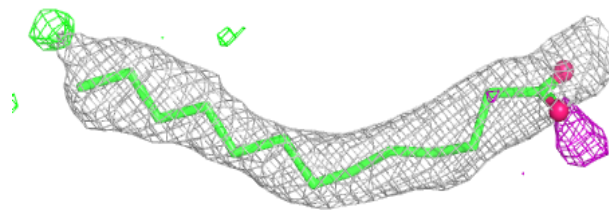
**Electron density around STE B 626:**

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

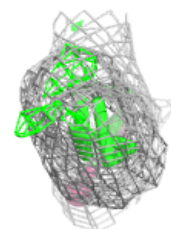
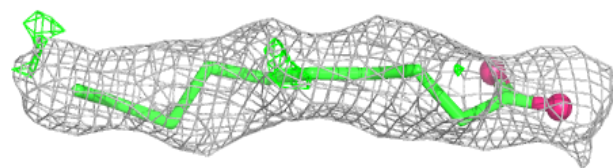
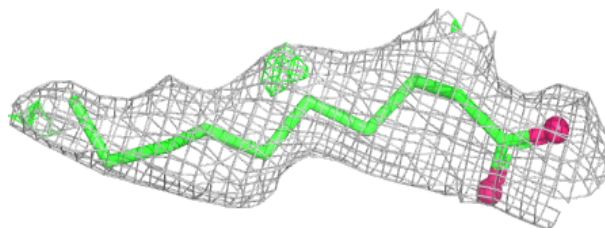


Electron density around STE I 102:

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

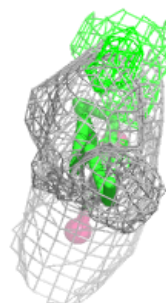
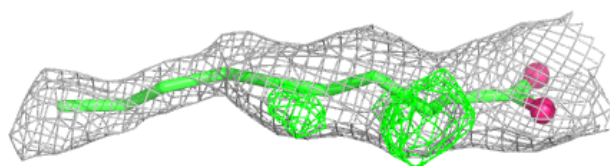
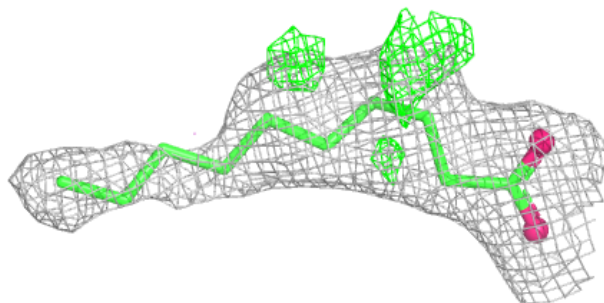
**Electron density around STE J 102:**

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

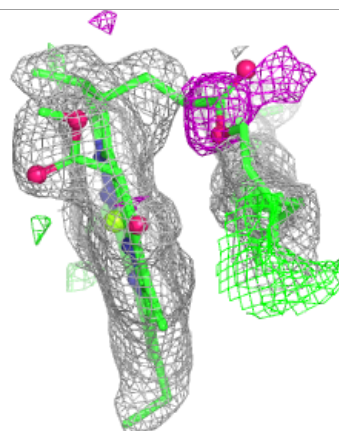
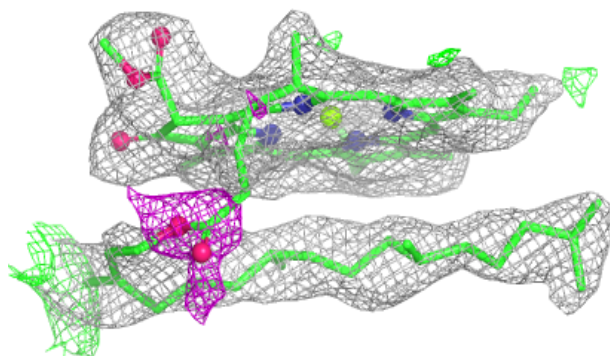
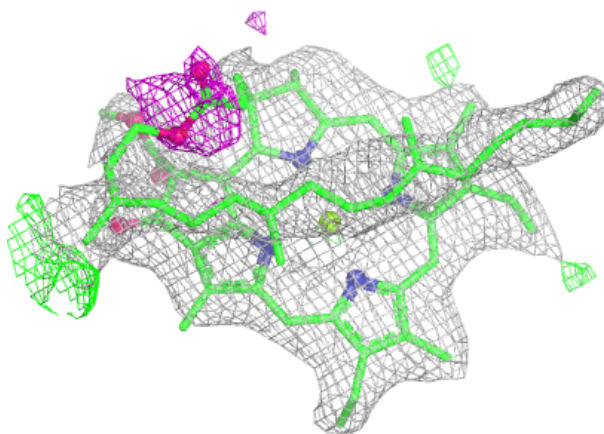


Electron density around STE C 525:

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

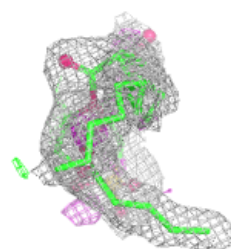
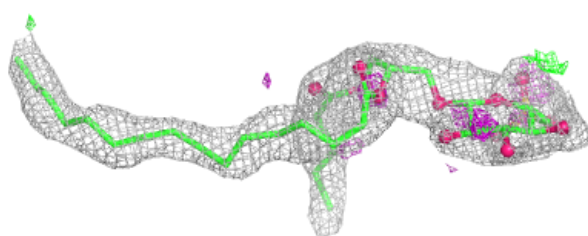
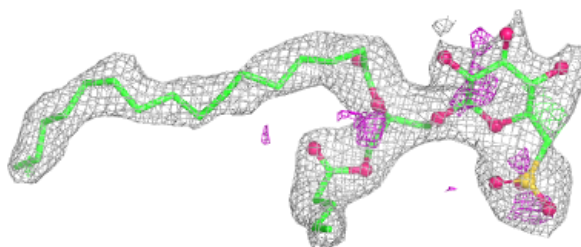
**Electron density around CLA b 601:**

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

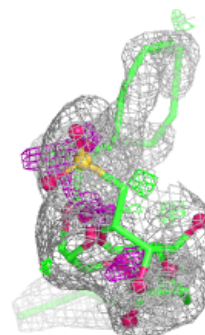
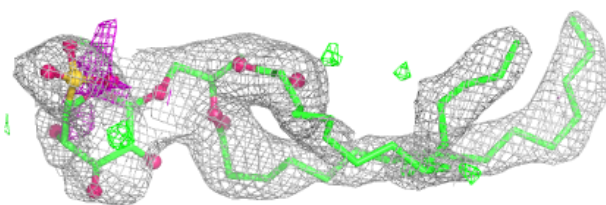
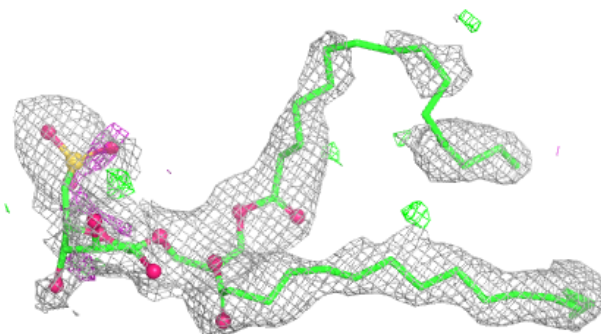


Electron density around SQD A 615:

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

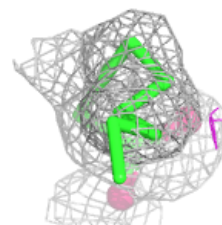
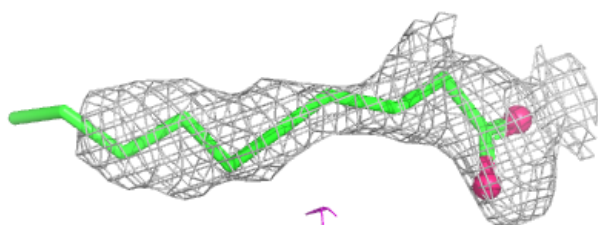
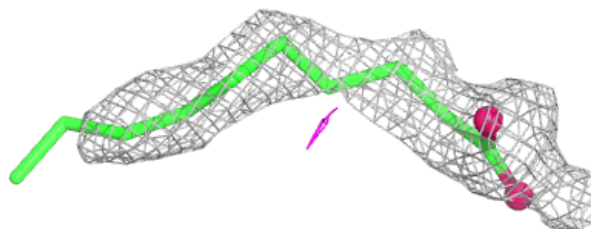
**Electron density around SQD a 614:**

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

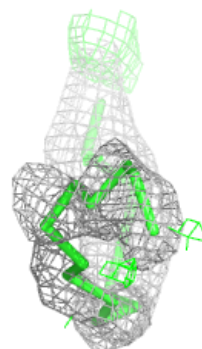
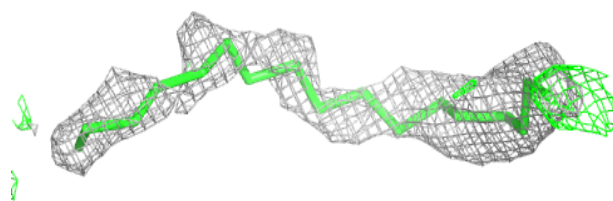
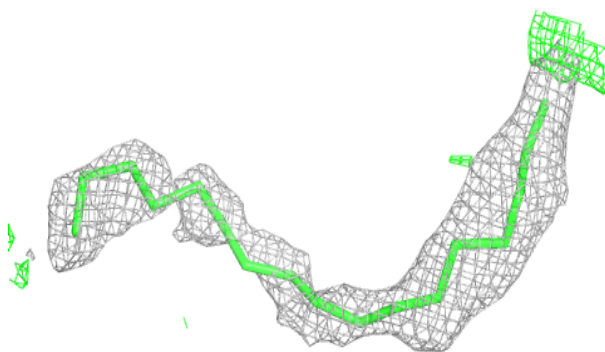


Electron density around STE E 101:

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

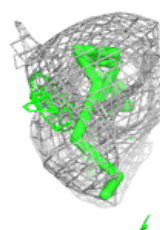
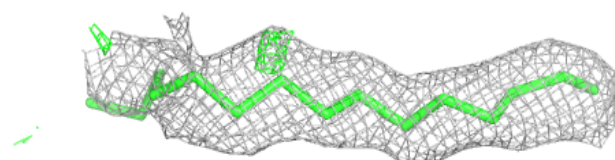
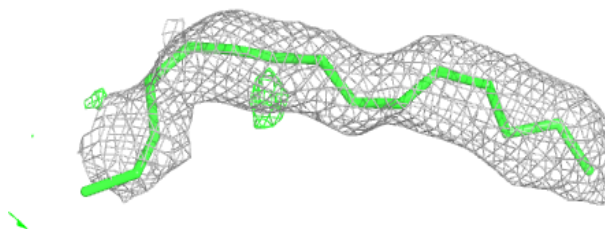
**Electron density around STE Z 101:**

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

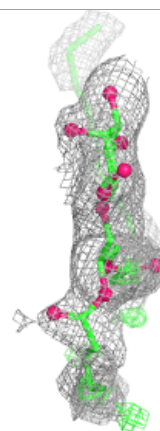
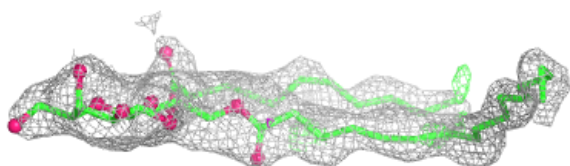
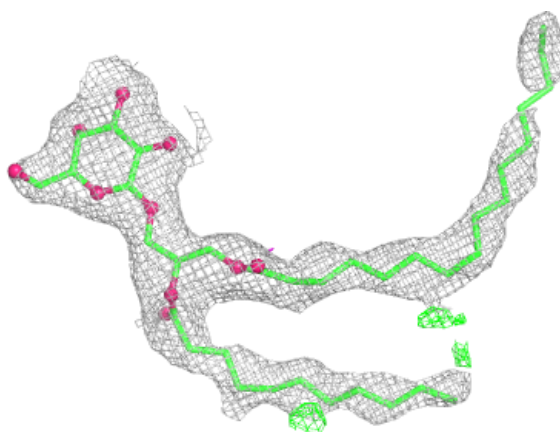


Electron density around STE b 624:

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

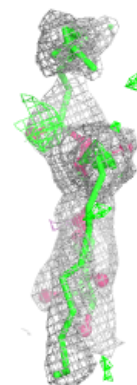
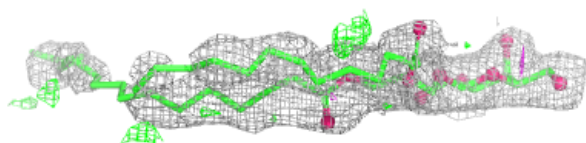
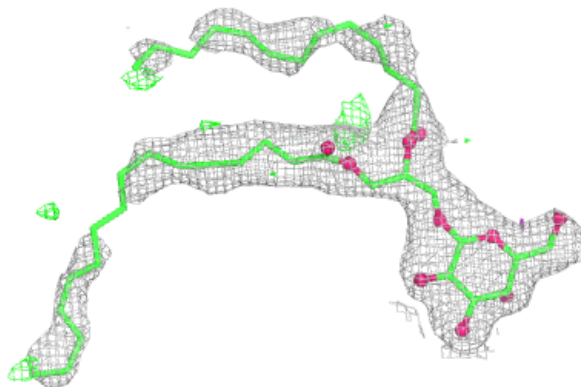
**Electron density around LMG c 521:**

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

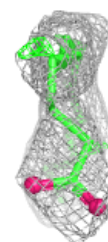
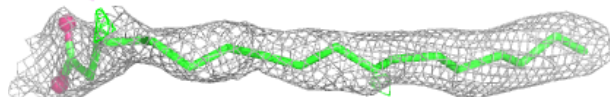
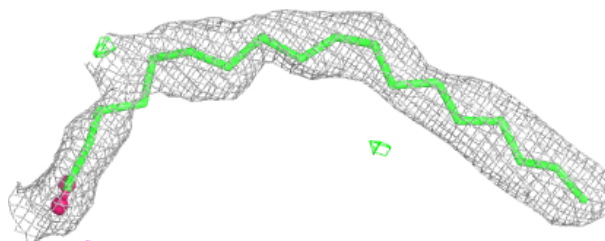


Electron density around LMG C 524:

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

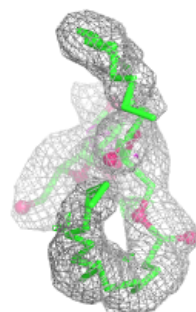
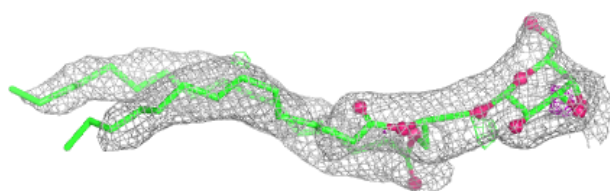
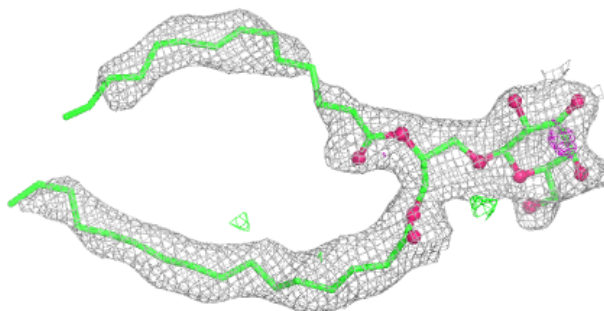
**Electron density around STE d 412:**

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

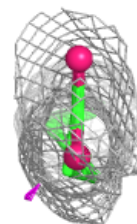
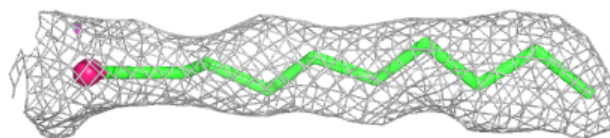
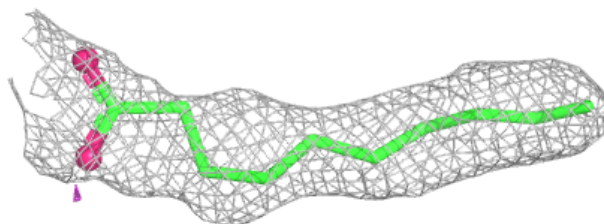


Electron density around LMG a 615:

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

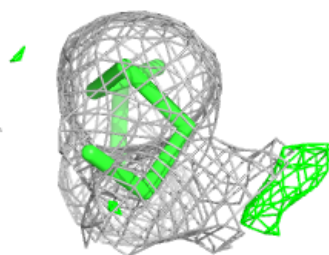
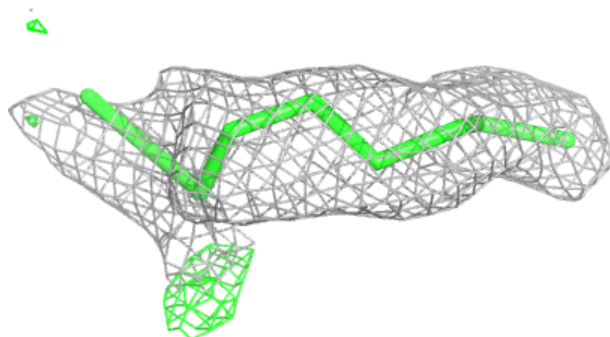
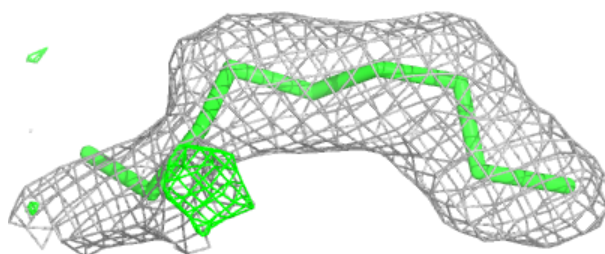
**Electron density around STE m 102:**

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

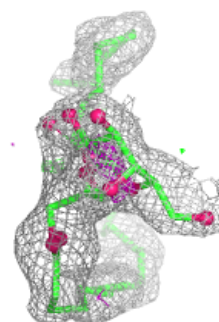
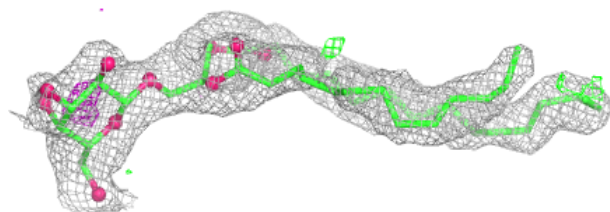
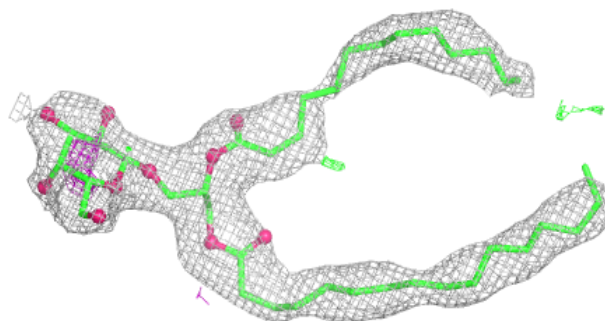


Electron density around STE H 104:

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

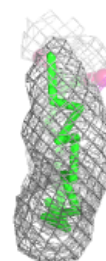
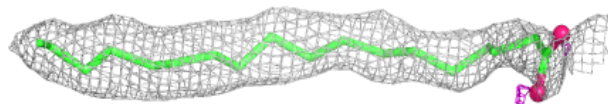
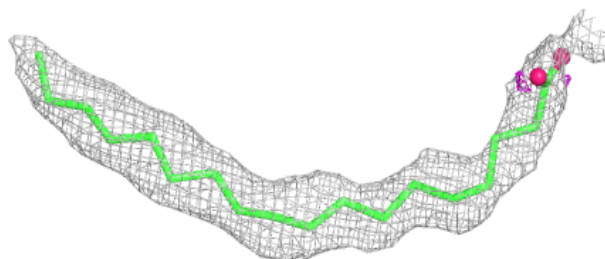
**Electron density around LMG A 612:**

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

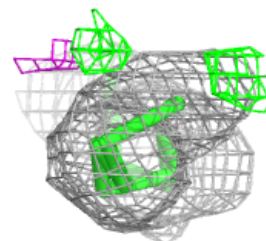
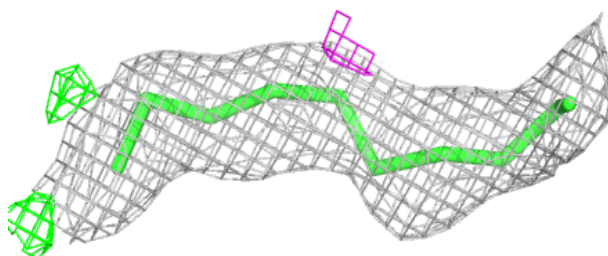
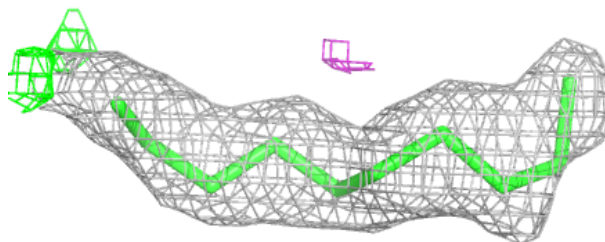


Electron density around STE X 101:

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

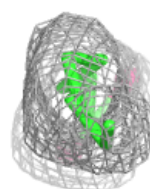
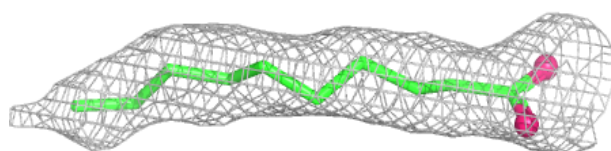
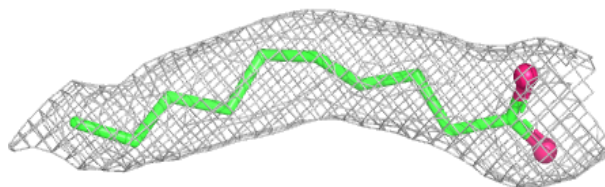
**Electron density around STE b 625:**

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

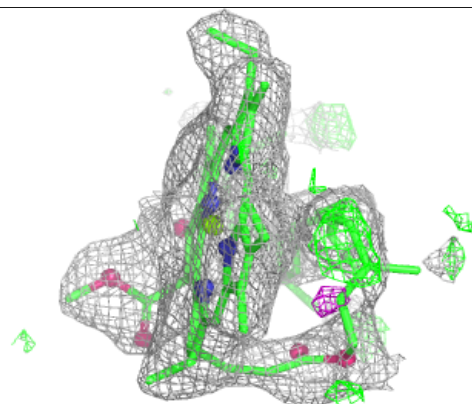
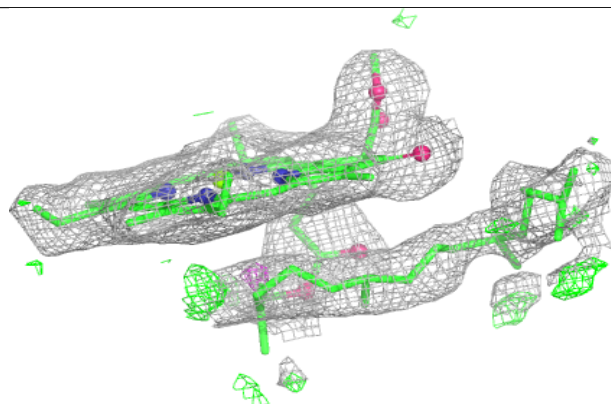
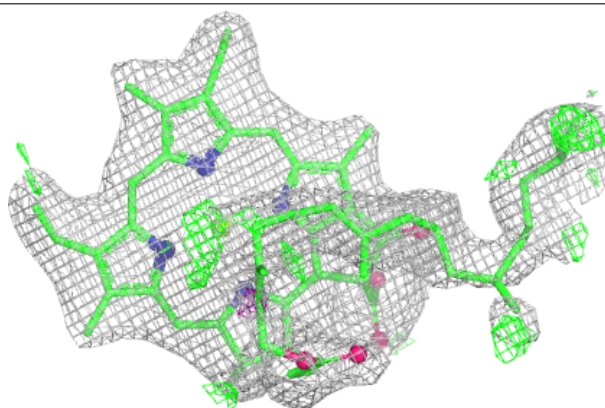


Electron density around STE j 101:

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

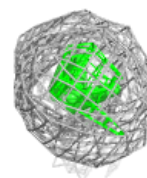
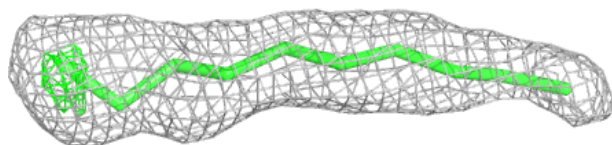
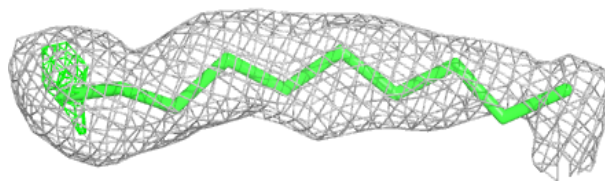
**Electron density around CLA B 601:**

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

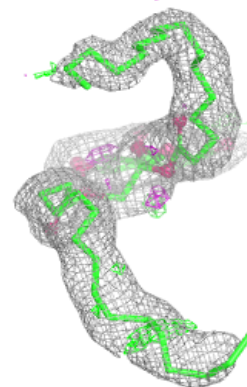
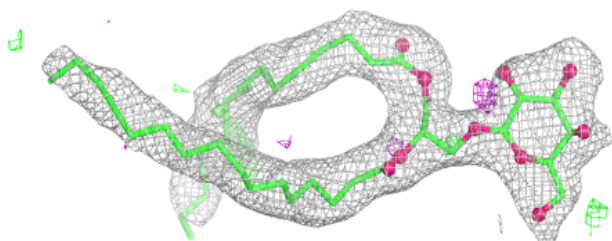
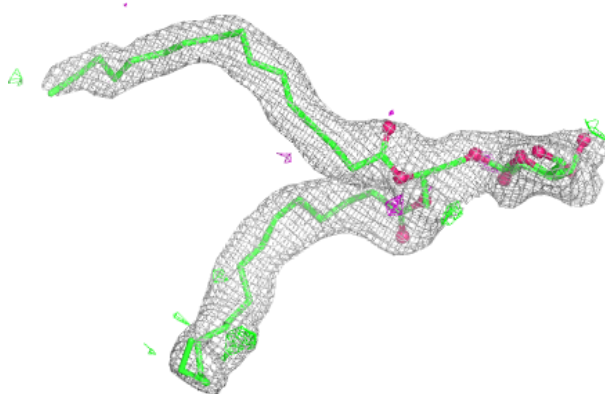


Electron density around STE M 103:

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

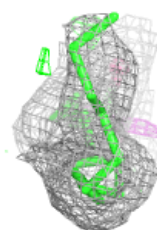
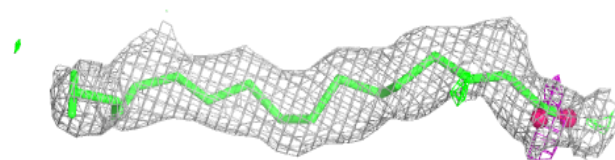
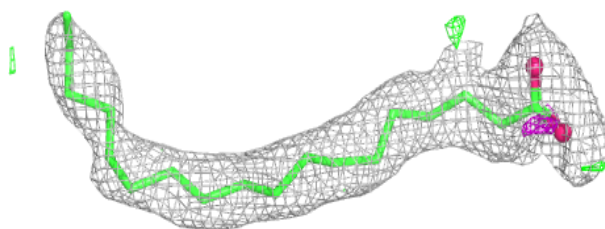
**Electron density around LMG M 101:**

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

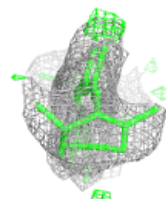
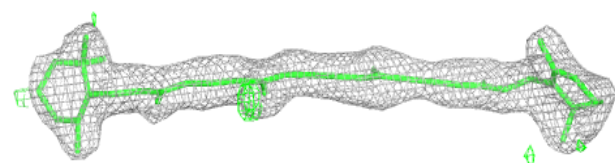
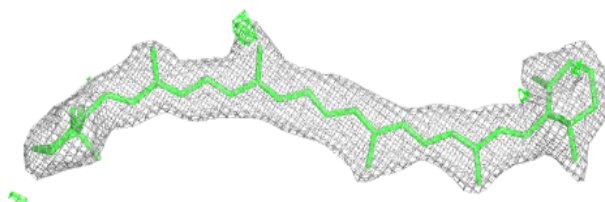


Electron density around STE b 621:

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

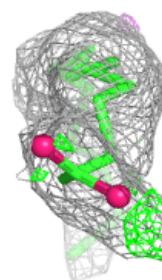
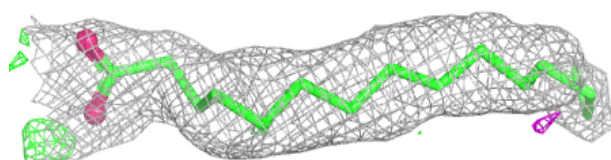
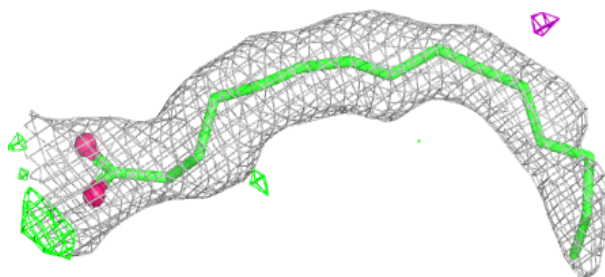
**Electron density around BCR J 101:**

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

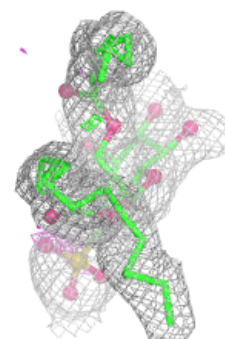
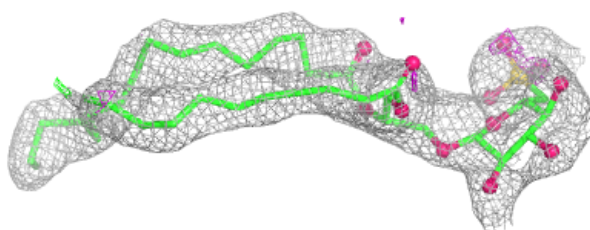
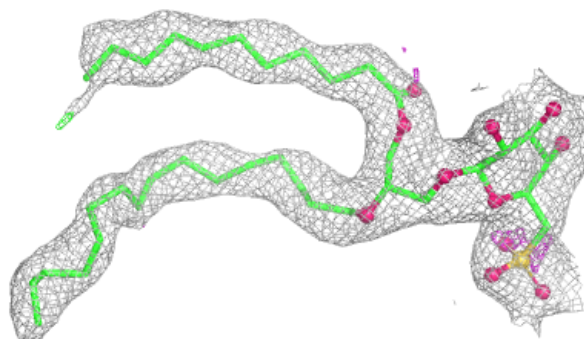


Electron density around STE B 621:

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

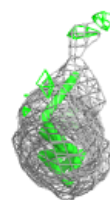
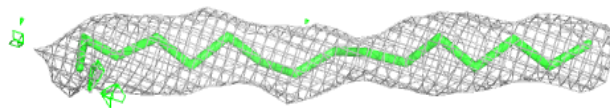
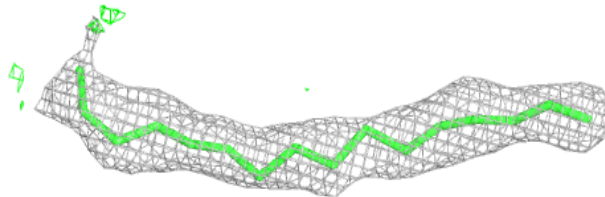
**Electron density around SQD b 620:**

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

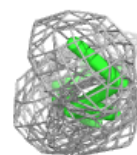
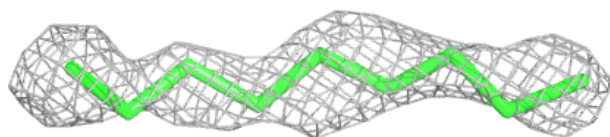
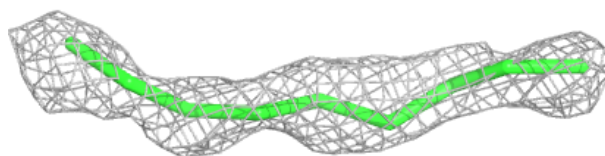


Electron density around STE C 526:

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

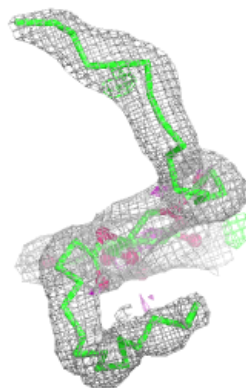
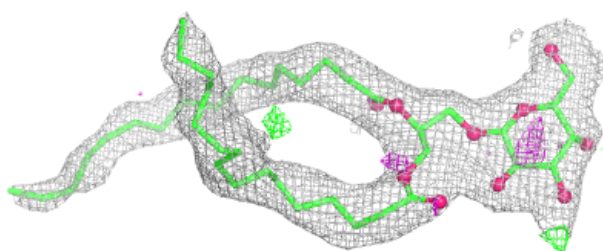
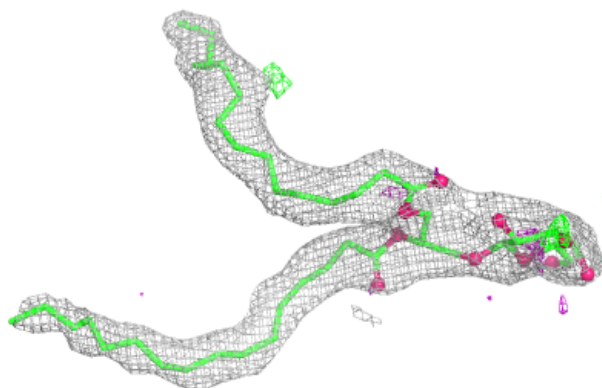
**Electron density around STE z 703:**

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

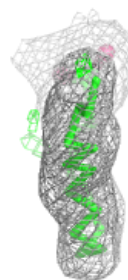
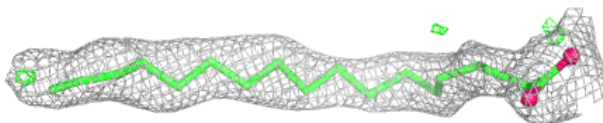
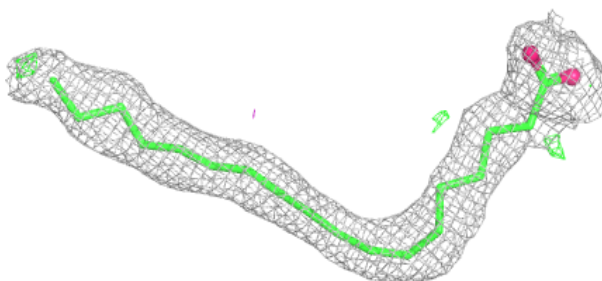


Electron density around LMG m 101:

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

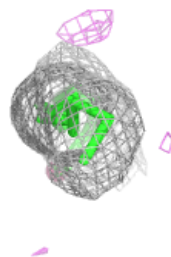
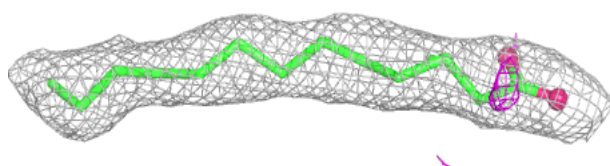
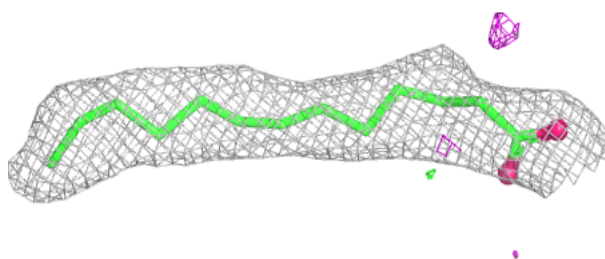
**Electron density around STE d 407:**

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

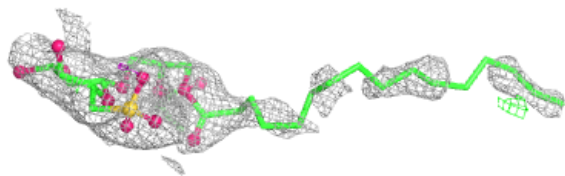
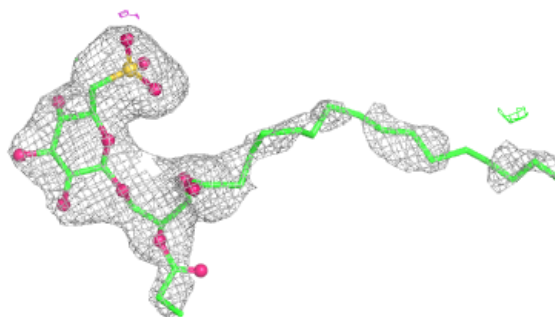


Electron density around STE M 102:

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

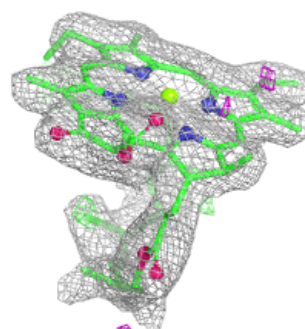
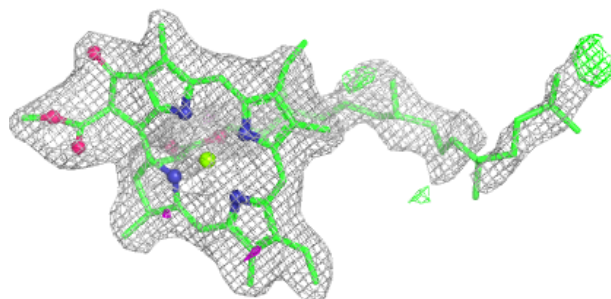
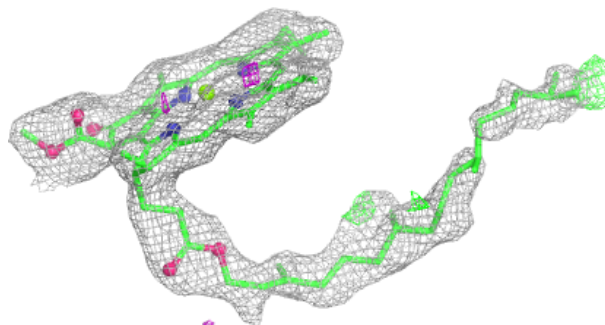
**Electron density around SQD f 101:**

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

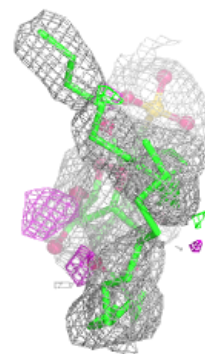
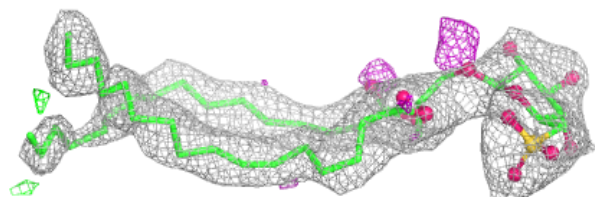
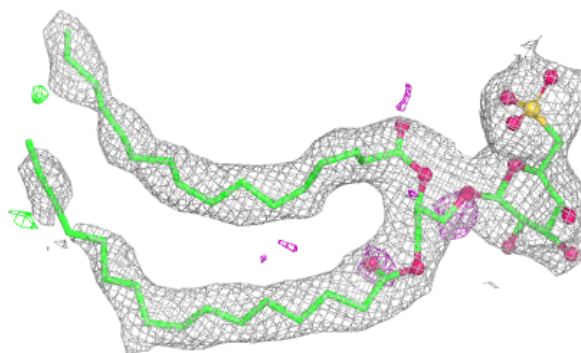


Electron density around CLA C 513:

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

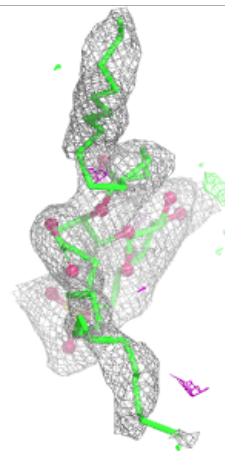
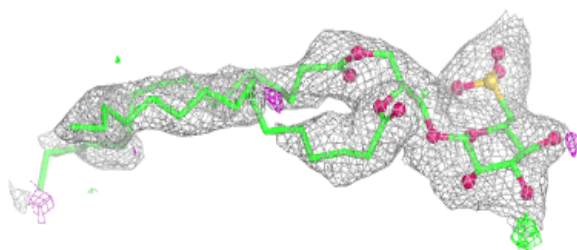
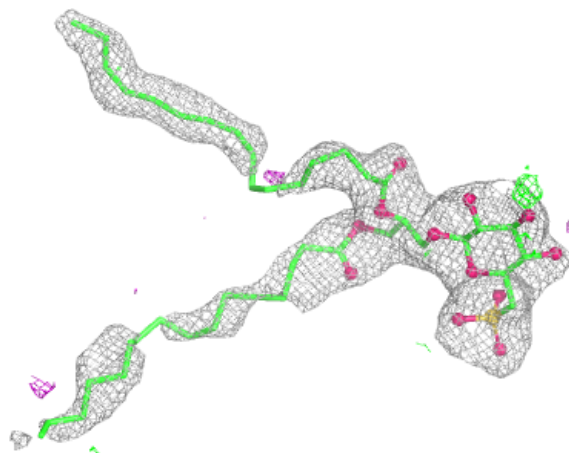
**Electron density around SQD B 623:**

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



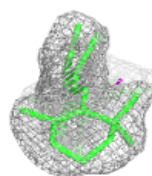
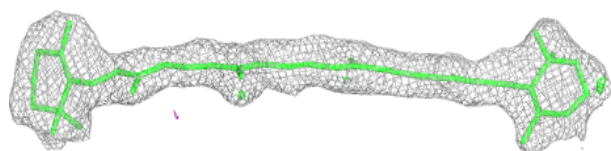
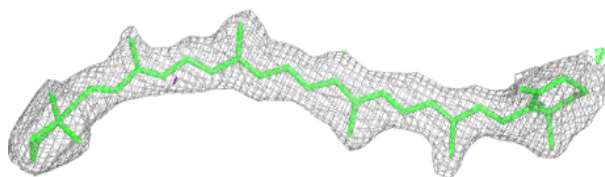
Electron density around SQD a 613:

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

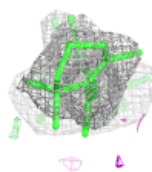
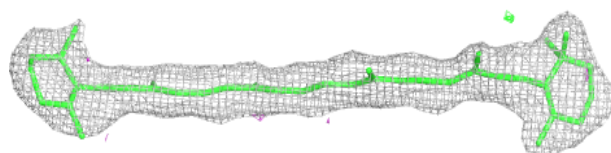
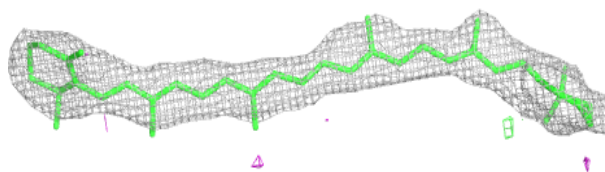


Electron density around BCR x 101:

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

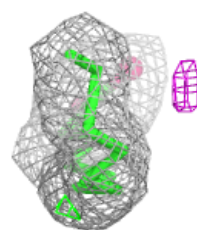
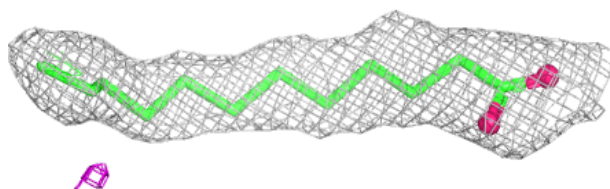
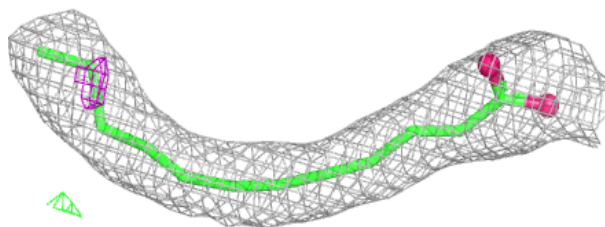
**Electron density around BCR C 514:**

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

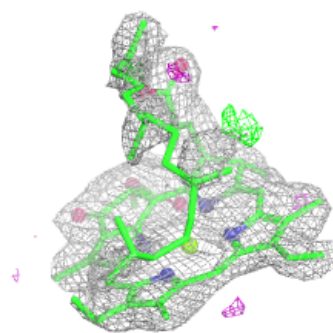
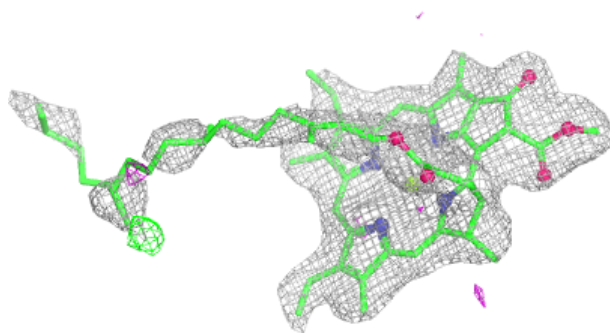
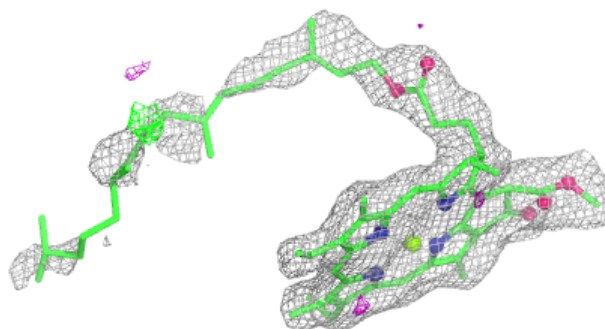


Electron density around STE B 624:

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

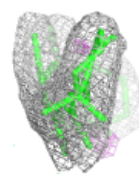
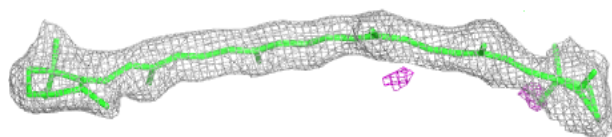
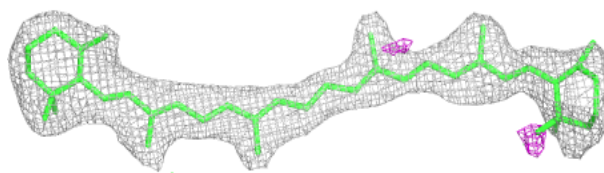
**Electron density around CLA c 513:**

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

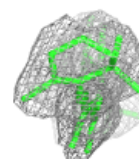
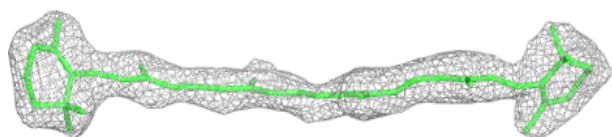
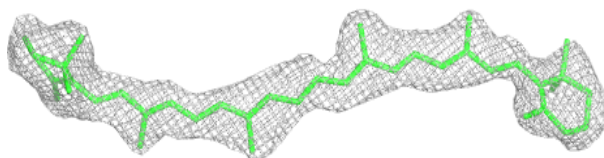


Electron density around BCR d 405:

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

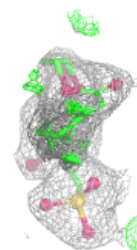
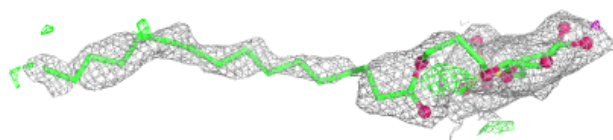
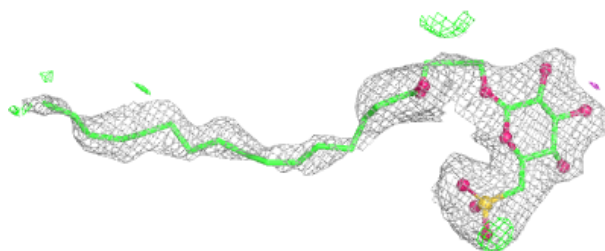
**Electron density around BCR k 101:**

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

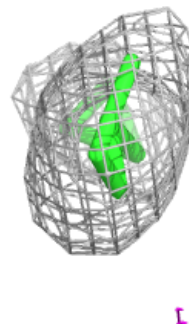
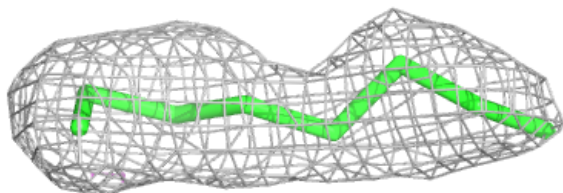
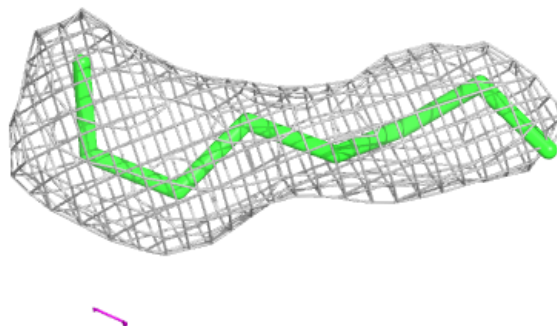


Electron density around SQD D 410:

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

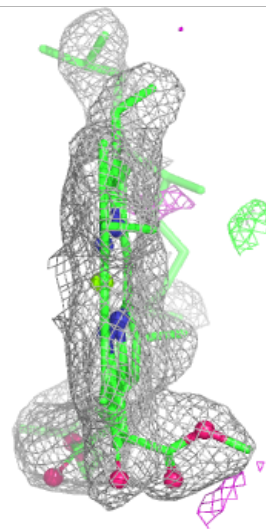
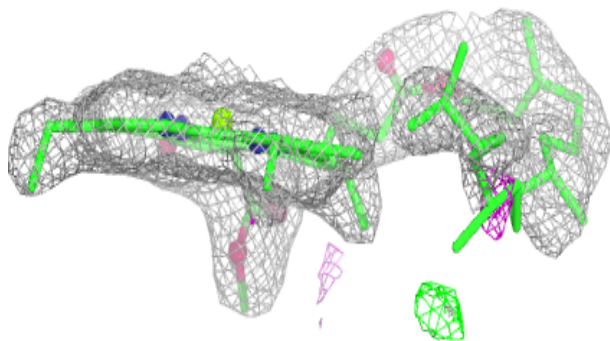
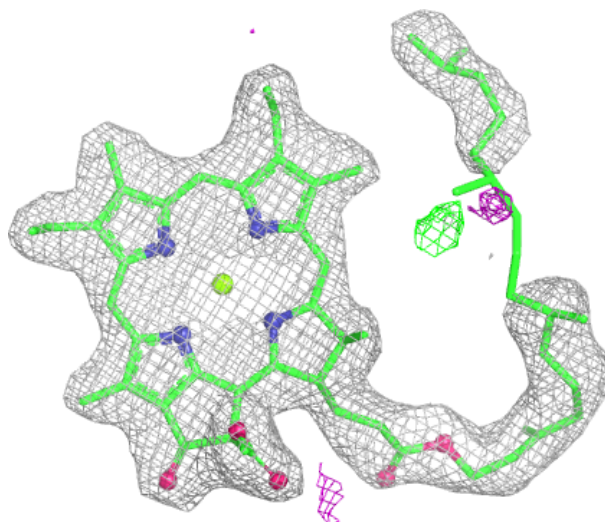
**Electron density around STE A 617:**

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



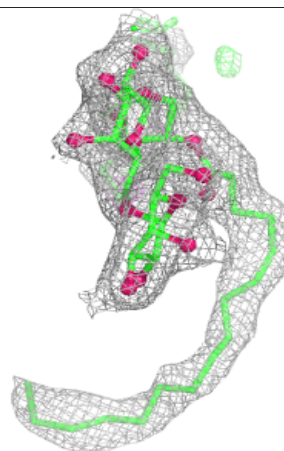
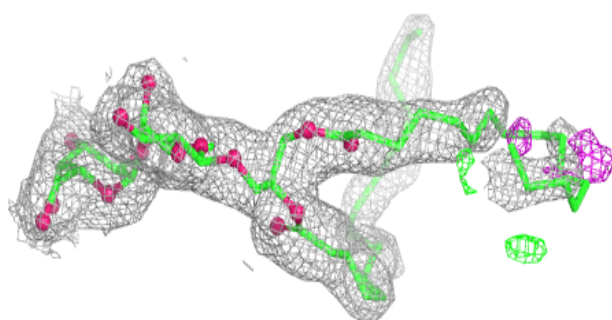
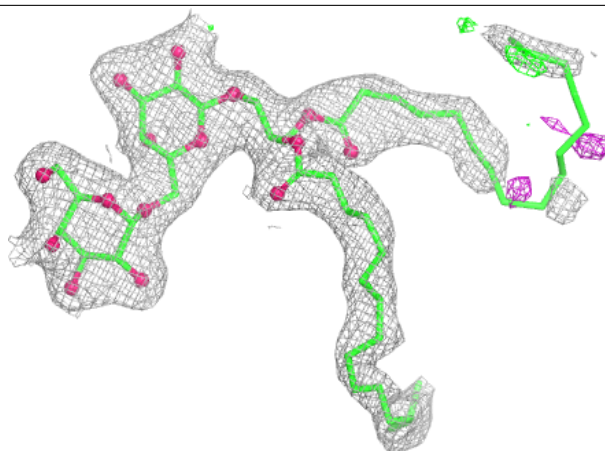
Electron density around CLA c 512:

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

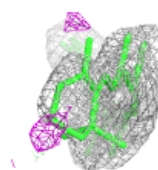
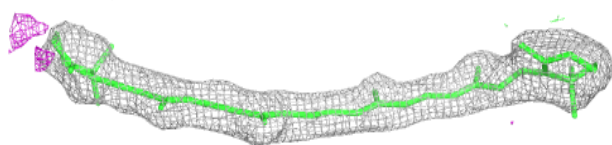
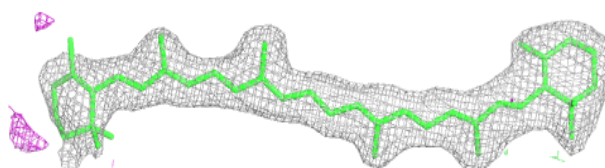


Electron density around DGD C 522:

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

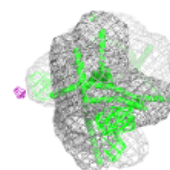
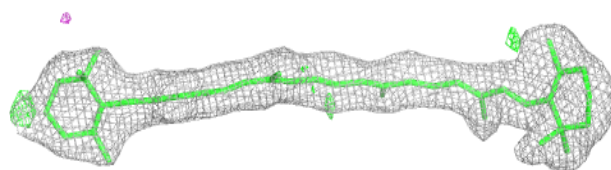
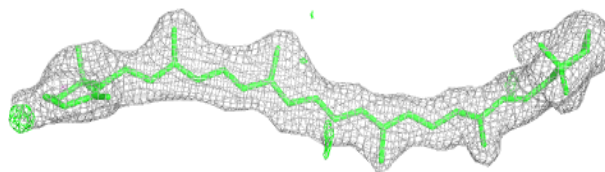
**Electron density around BCR D 406:**

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

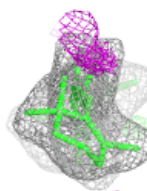
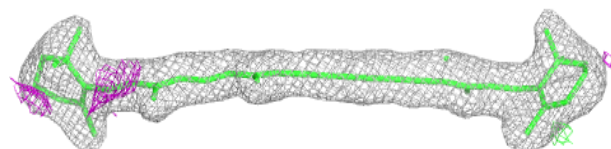
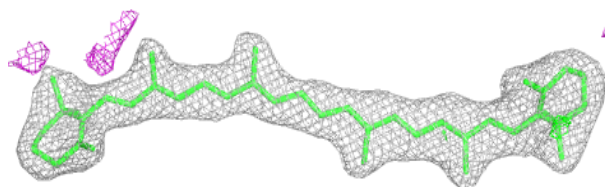


Electron density around BCR H 101:

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

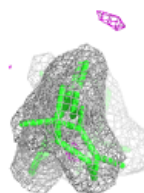
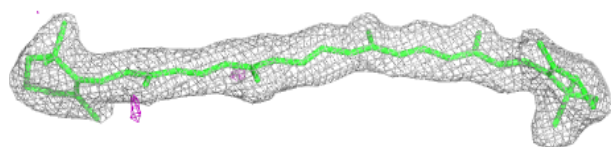
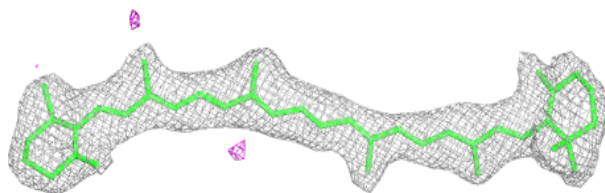
**Electron density around BCR B 618:**

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

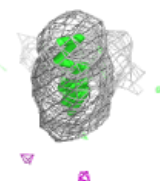
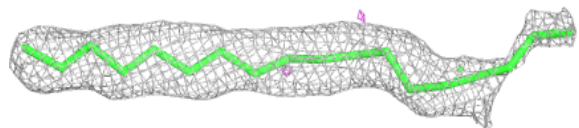
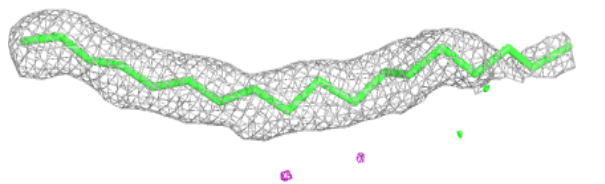


Electron density around BCR b 619:

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

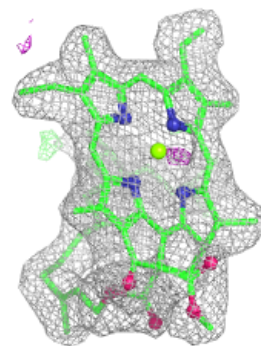
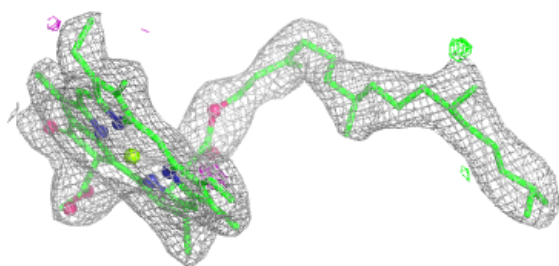
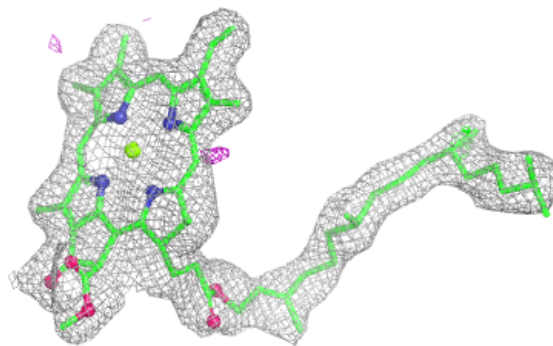
**Electron density around STE l 102:**

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

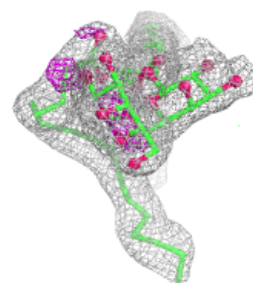
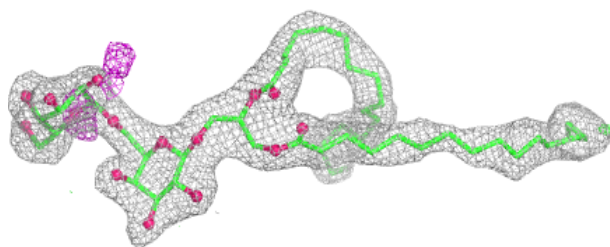
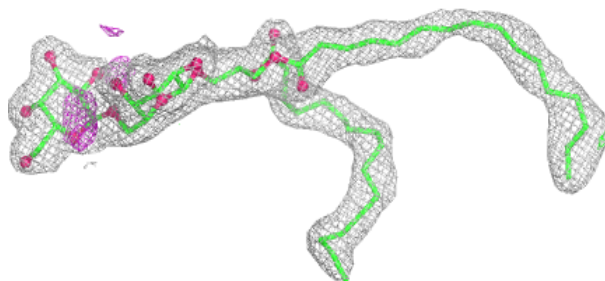


Electron density around CLA C 511:

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

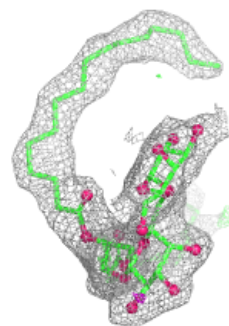
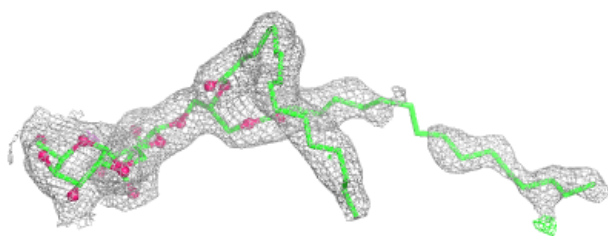
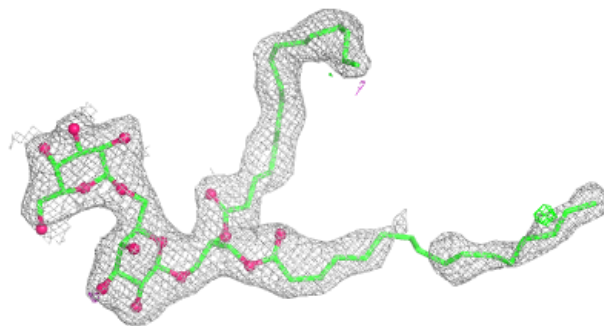
**Electron density around DGD H 102:**

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

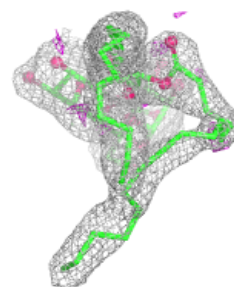
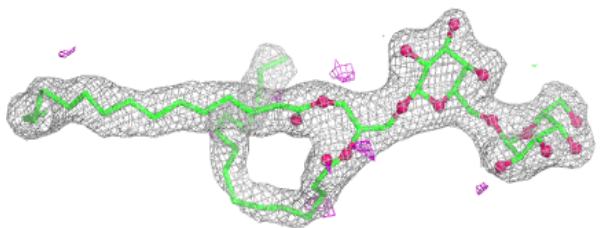
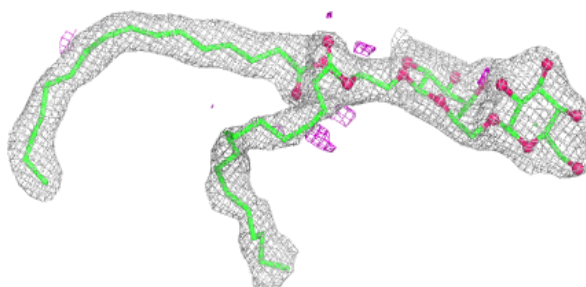


Electron density around DGD c 519:

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

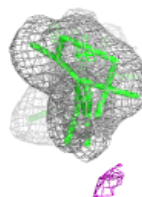
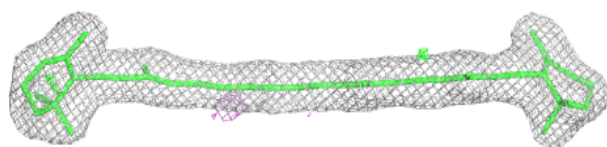
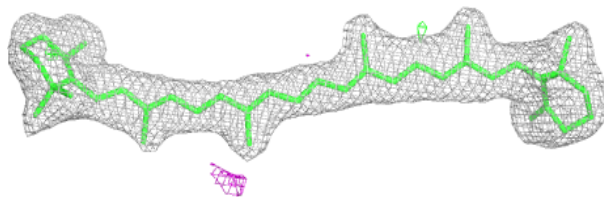
**Electron density around DGD h 101:**

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

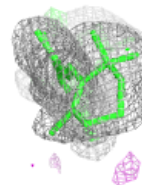
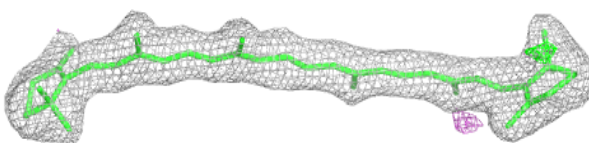
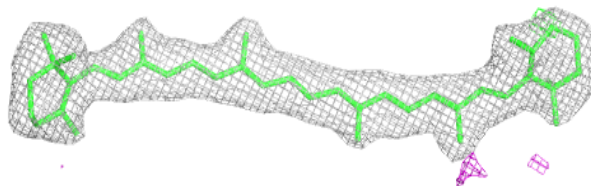


Electron density around BCR b 618:

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

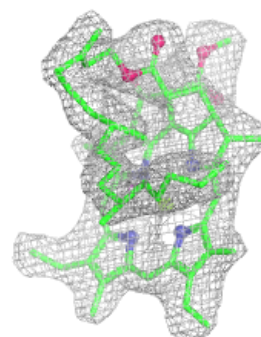
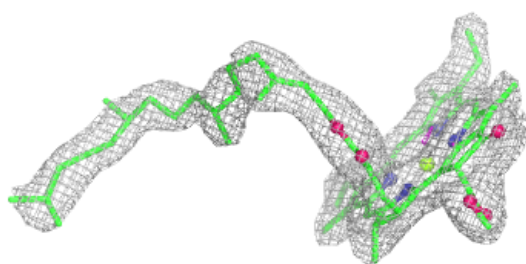
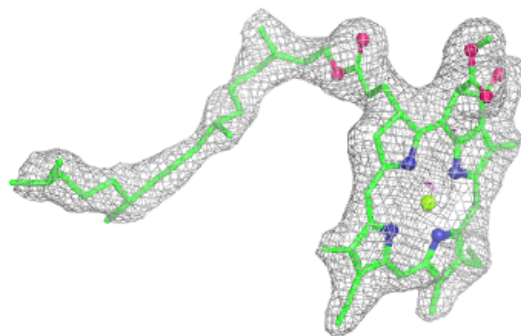
**Electron density around BCR B 619:**

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

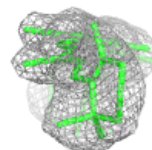
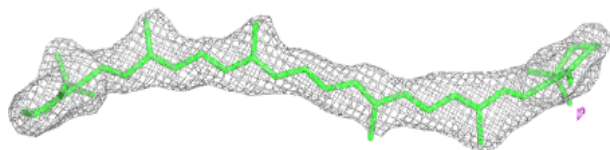
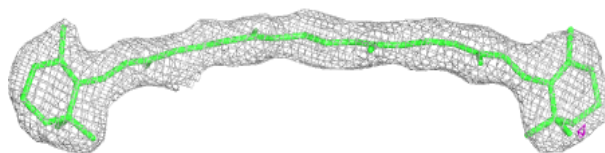


Electron density around CLA c 511:

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

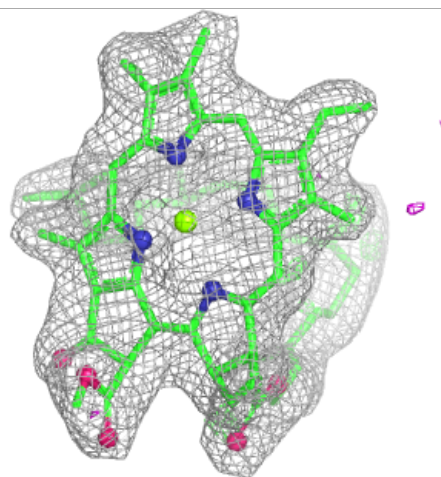
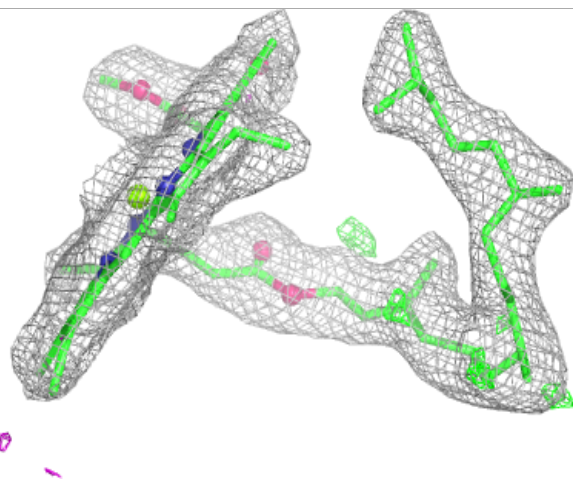
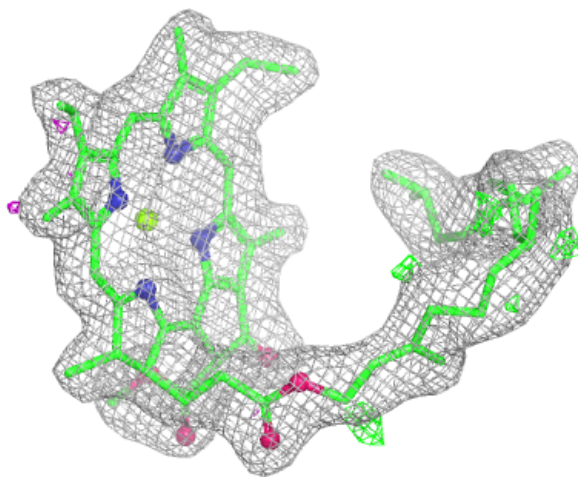
**Electron density around BCR c 517:**

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



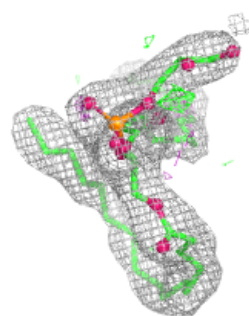
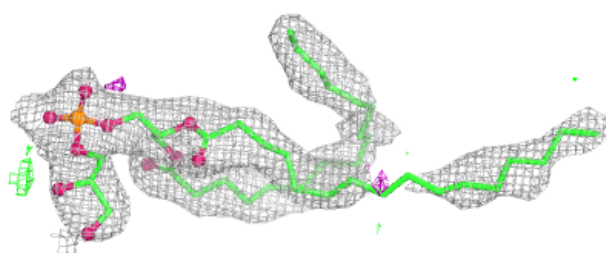
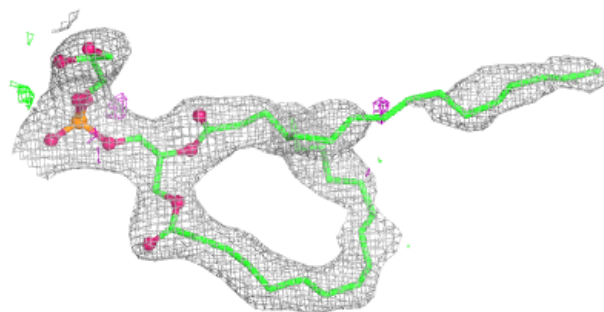
Electron density around CLA C 503:

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

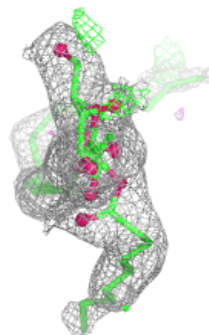
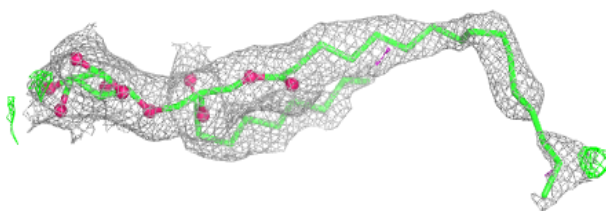
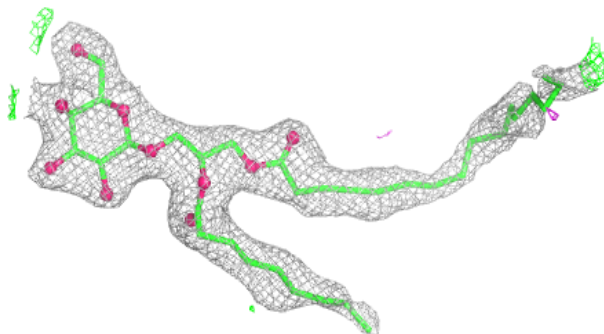


Electron density around LHG a 612:

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

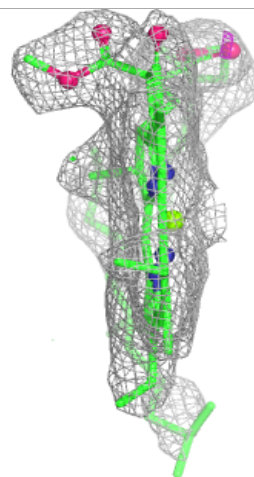
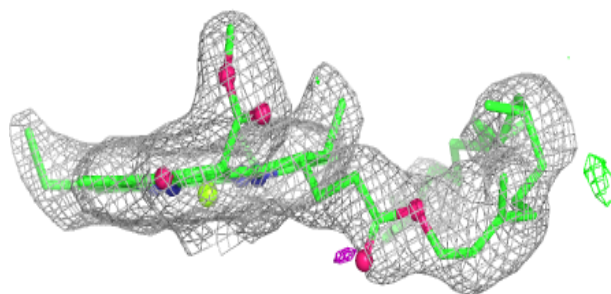
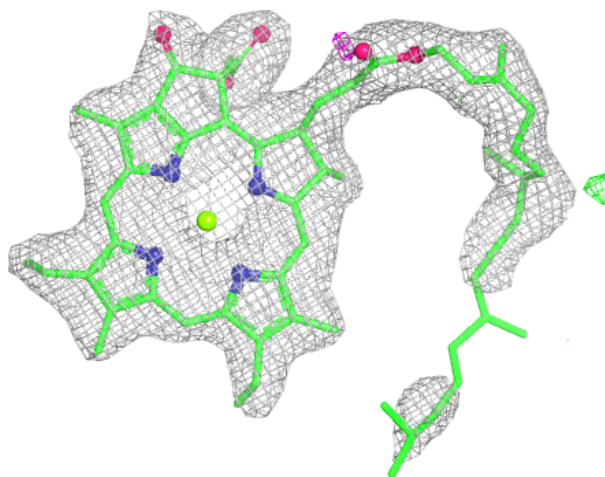
**Electron density around LMG d 411:**

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



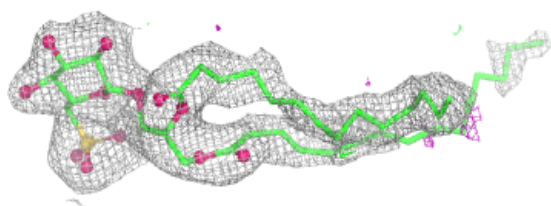
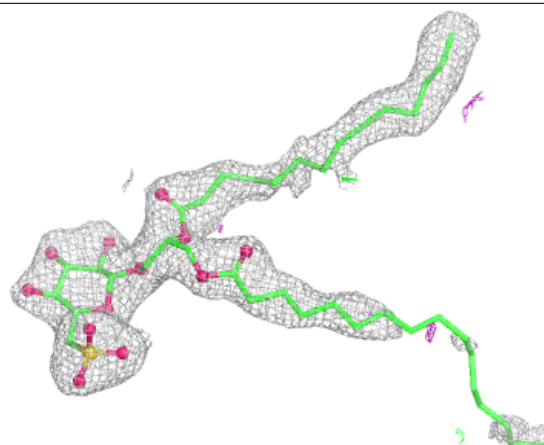
Electron density around CLA C 512:

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

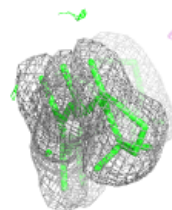
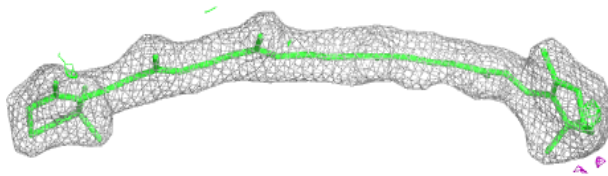
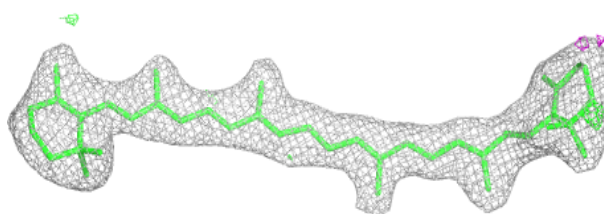


Electron density around SQD A 613:

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

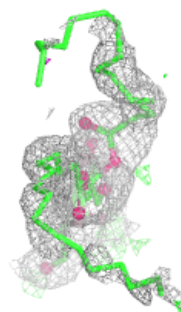
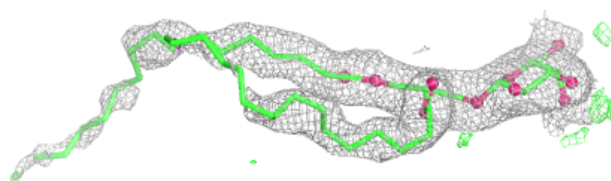
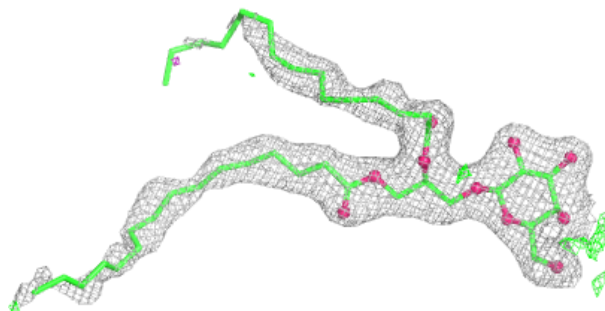
**Electron density around BCR t 101:**

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



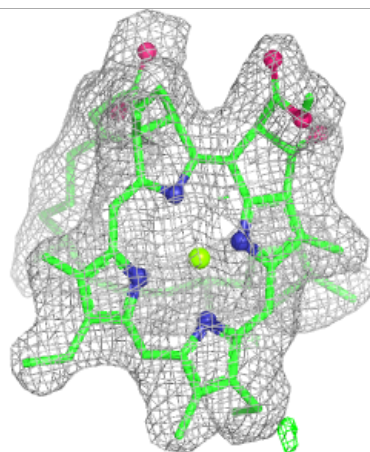
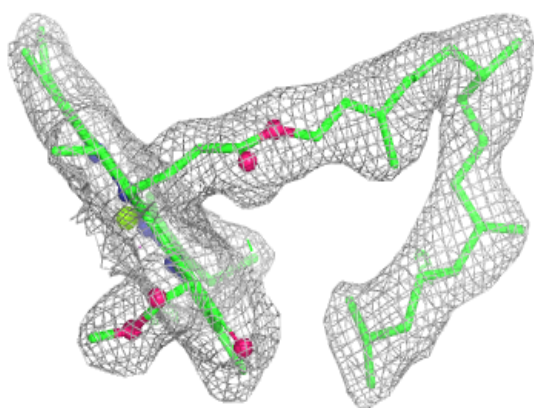
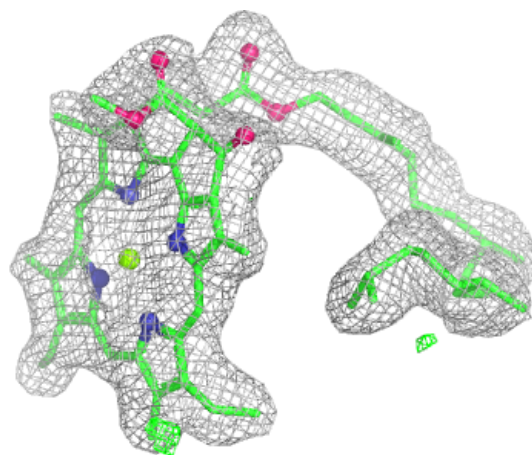
Electron density around LMG D 409:

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



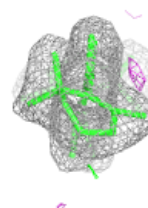
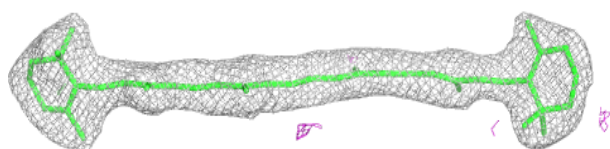
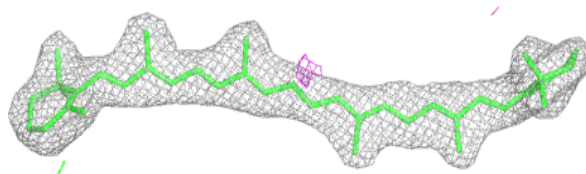
Electron density around CLA c 503:

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

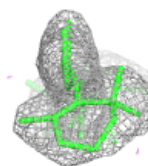
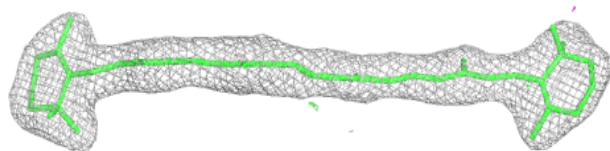
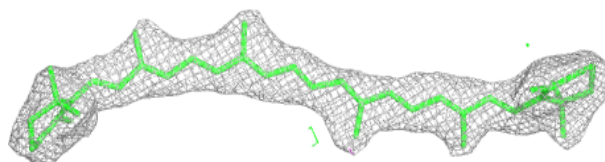


Electron density around BCR A 609:

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

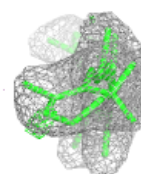
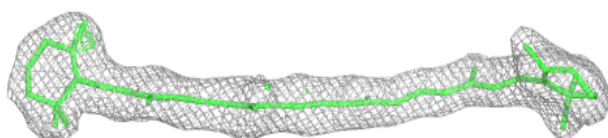
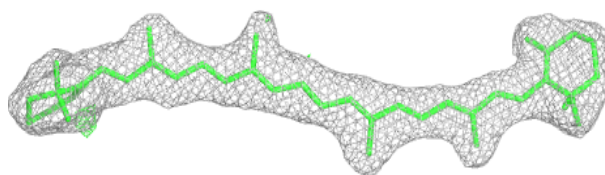
**Electron density around BCR c 515:**

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

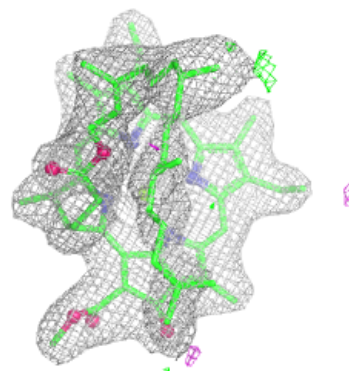
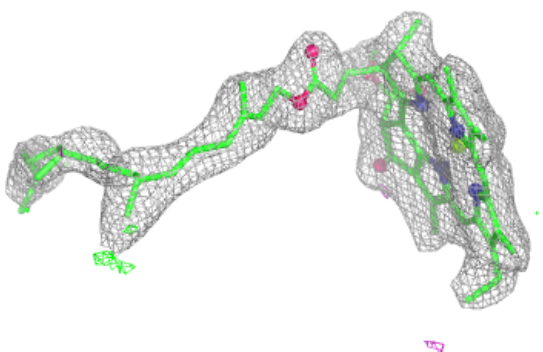
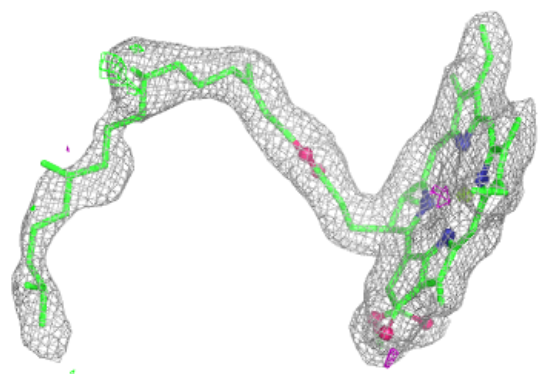


Electron density around BCR B 617:

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

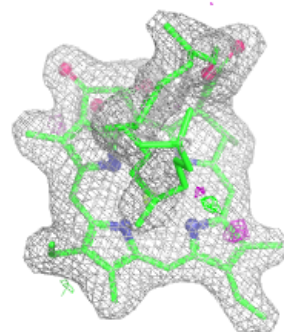
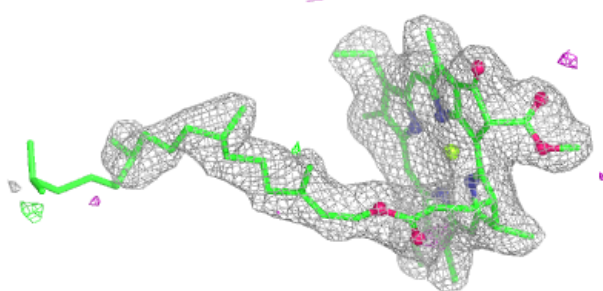
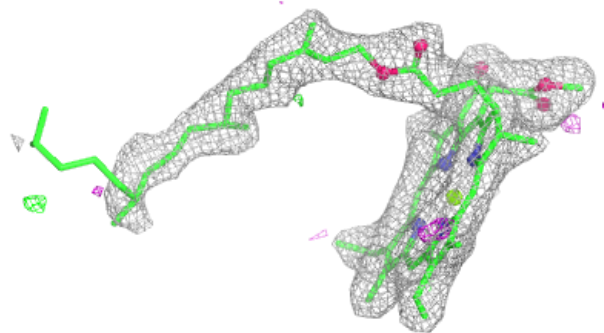
**Electron density around CLA b 606:**

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

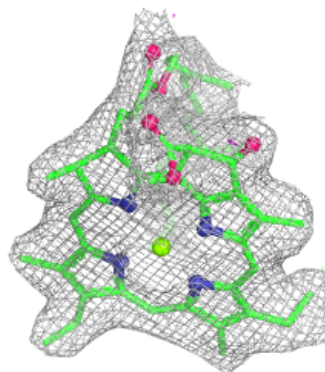
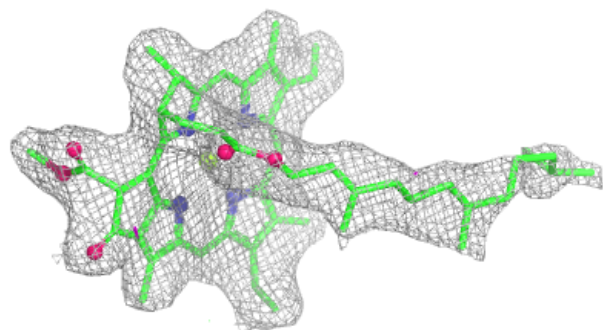
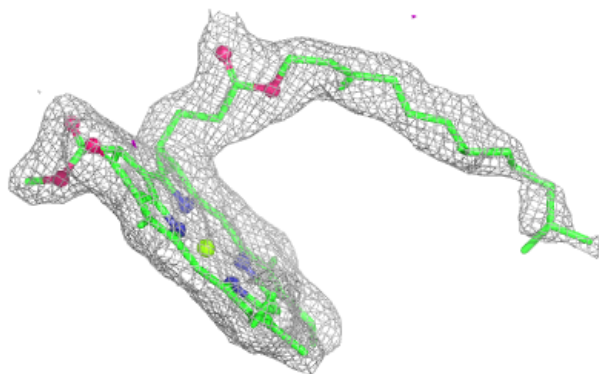


Electron density around CLA C 508:

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

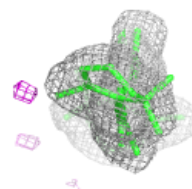
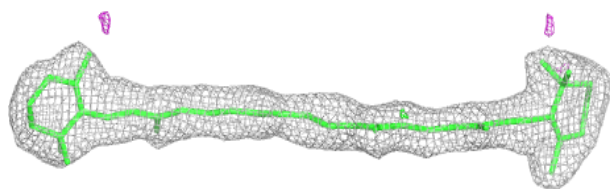
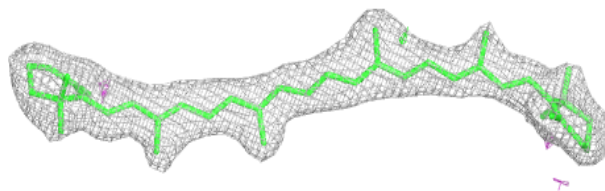
**Electron density around CLA c 504:**

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



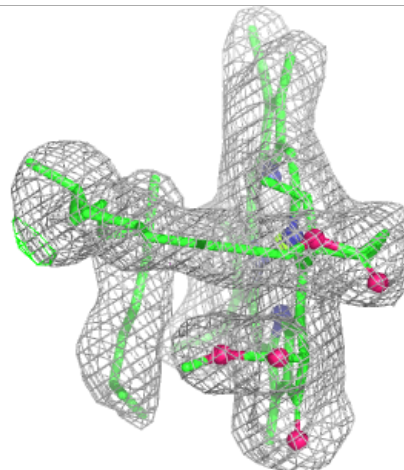
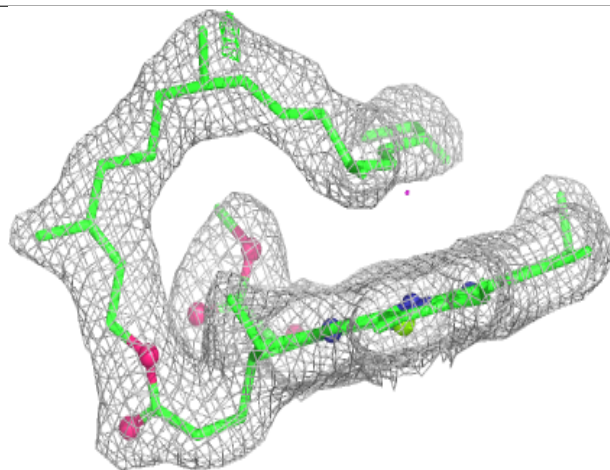
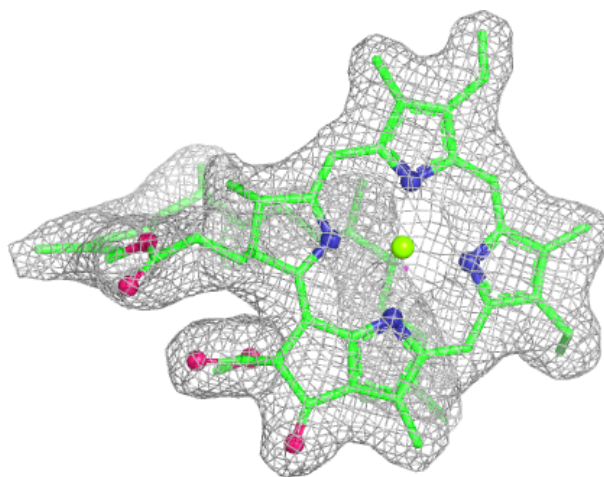
Electron density around BCR C 515:

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



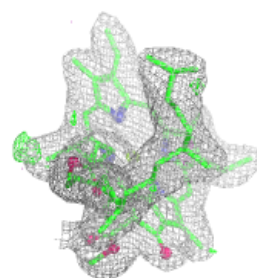
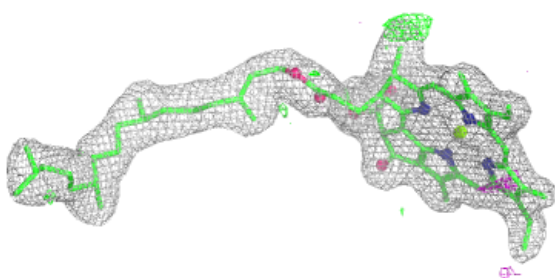
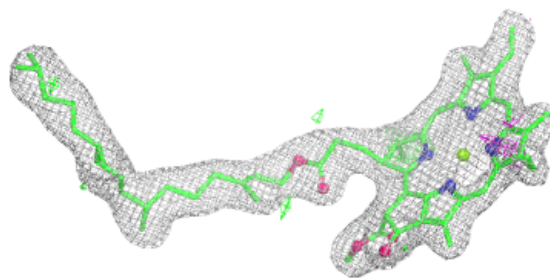
Electron density around CLA C 510:

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

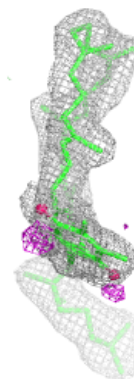
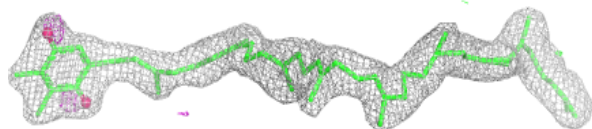
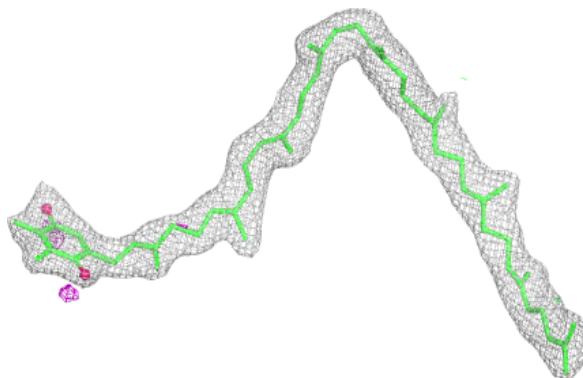


Electron density around CLA a 605:

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

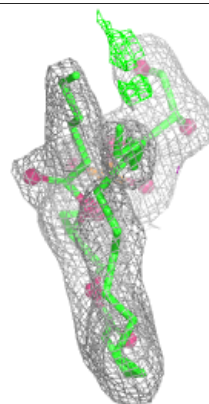
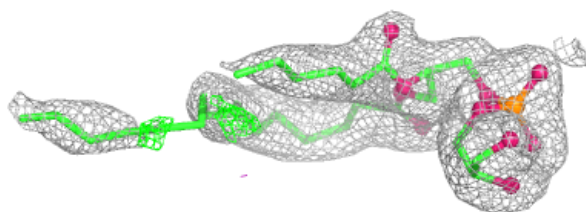
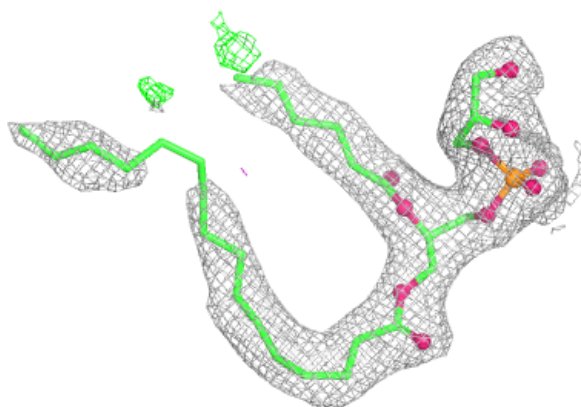
**Electron density around PL9 d 406:**

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

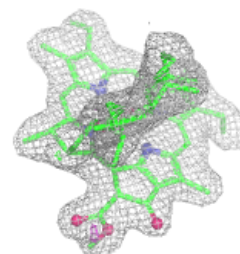
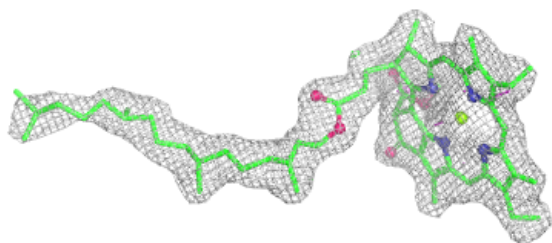
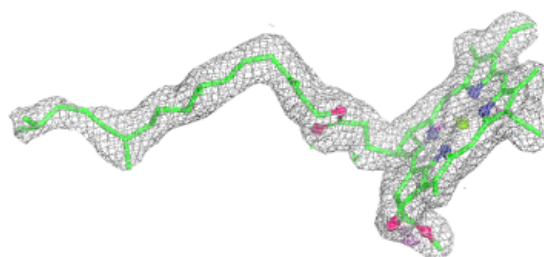


Electron density around LHG d 409:

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

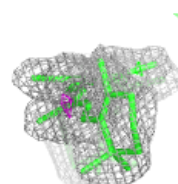
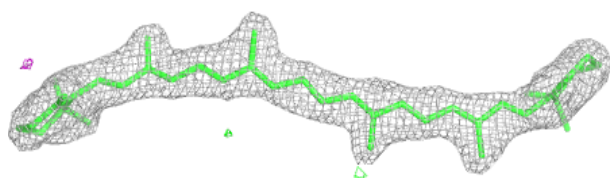
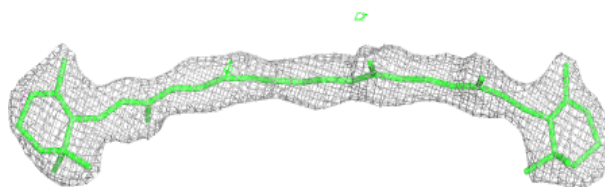
**Electron density around CLA C 502:**

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

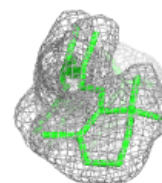
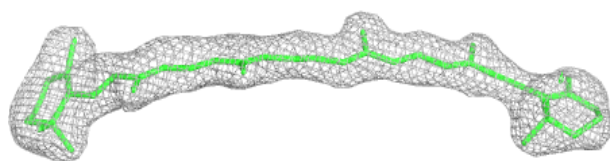
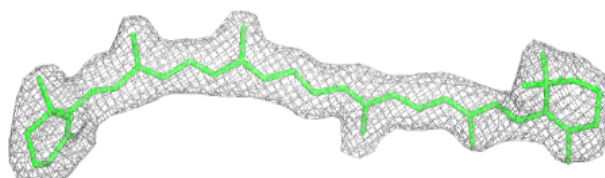


Electron density around BCR K 101:

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

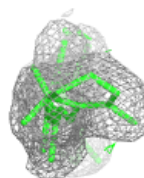
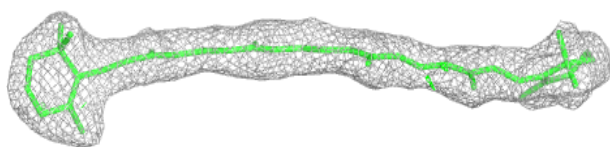
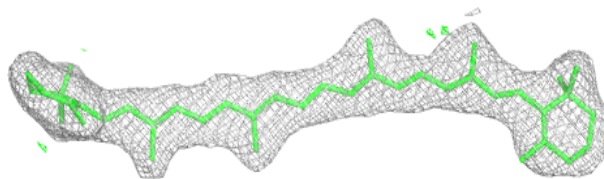
**Electron density around BCR T 101:**

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



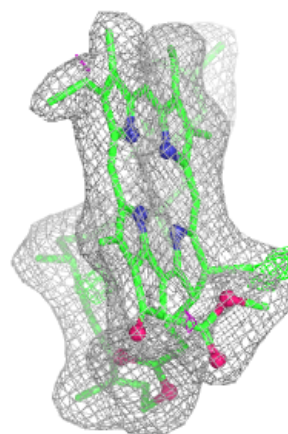
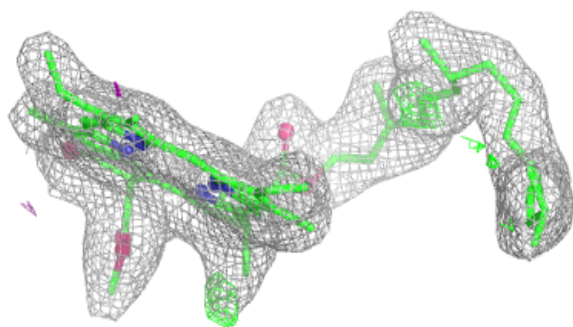
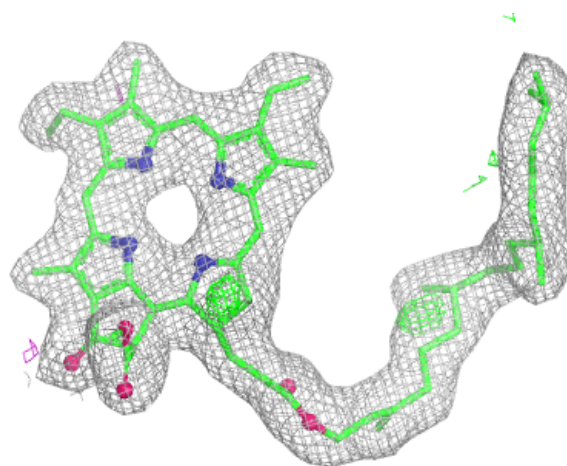
Electron density around BCR b 617:

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



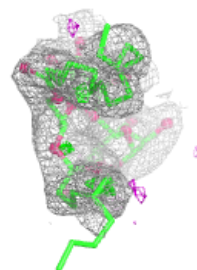
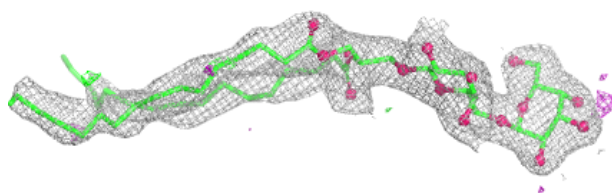
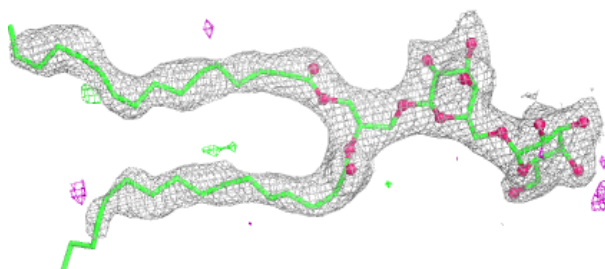
Electron density around PHO A 607:

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

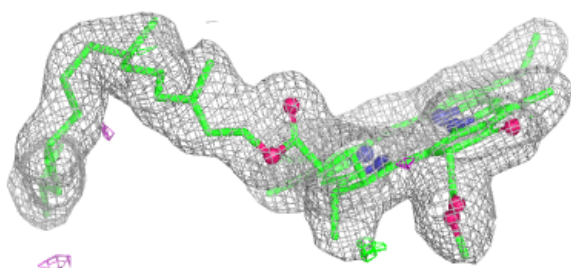
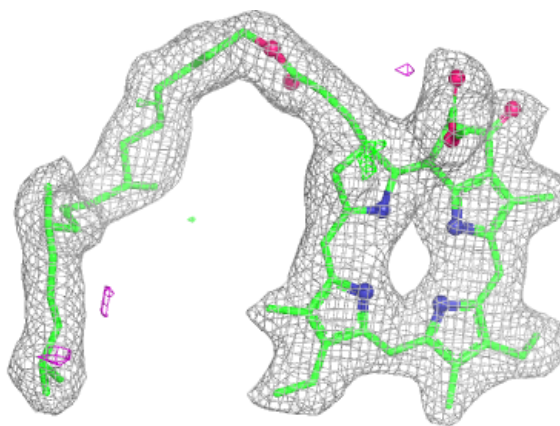


Electron density around DGD c 520:

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

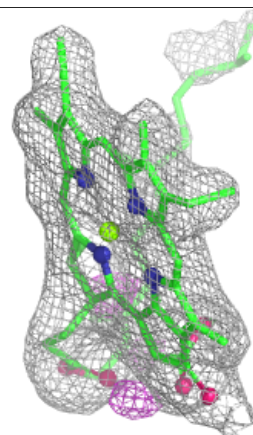
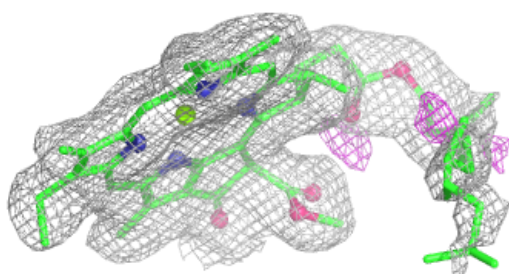
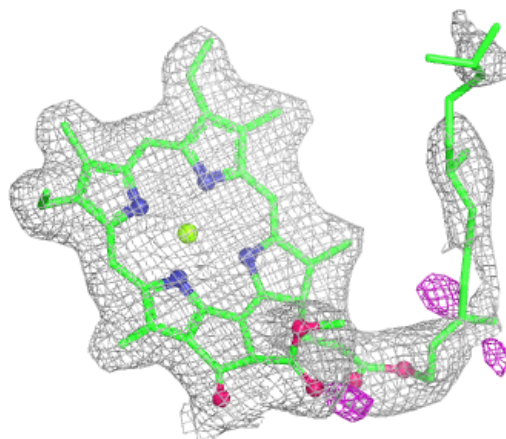
**Electron density around PHO a 608:**

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



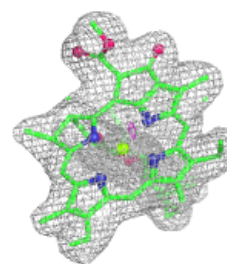
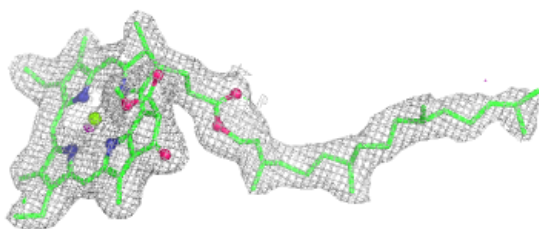
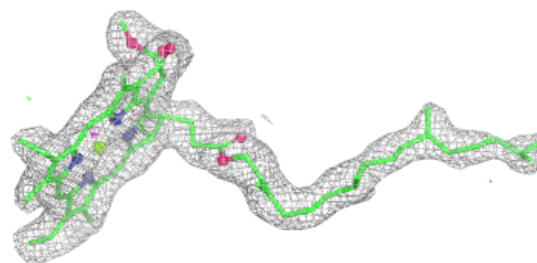
Electron density around CLA b 616:

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



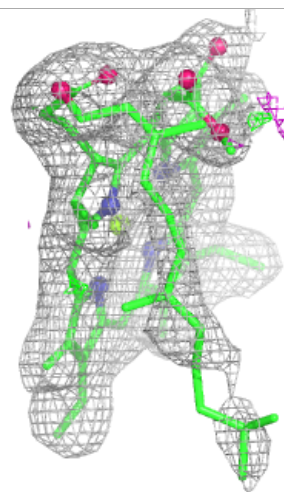
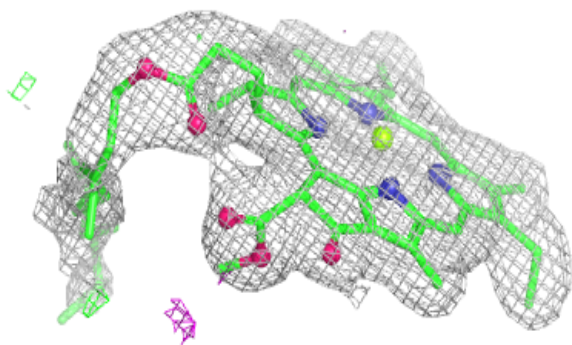
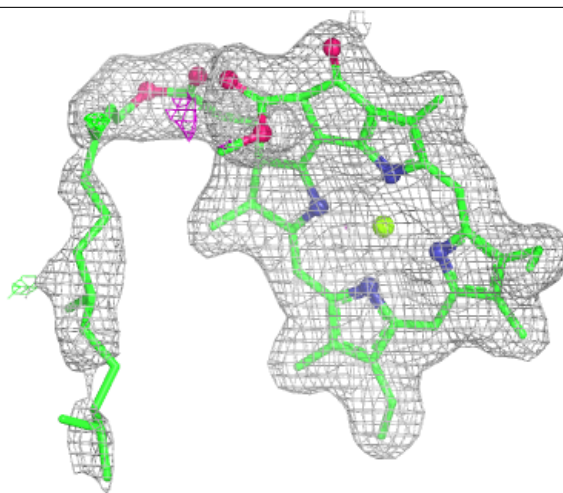
Electron density around CLA c 502:

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



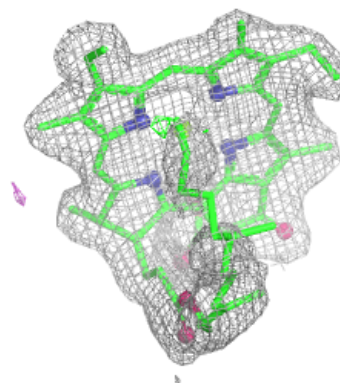
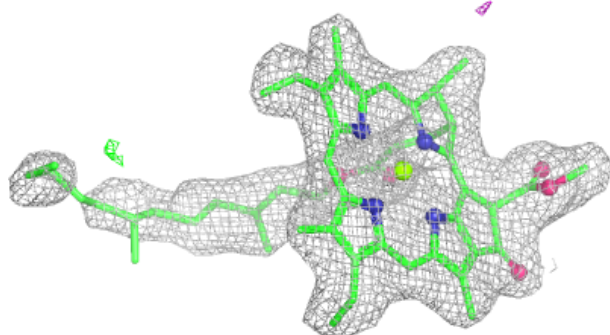
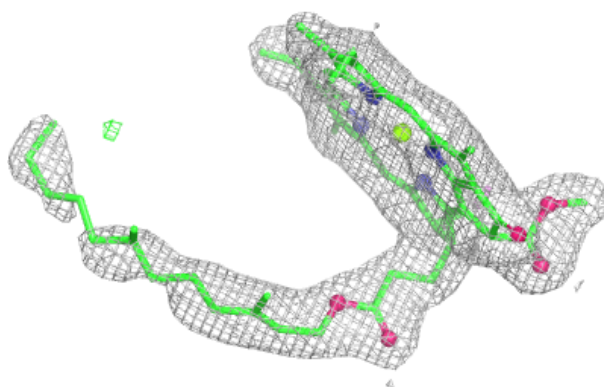
Electron density around CLA B 616:

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

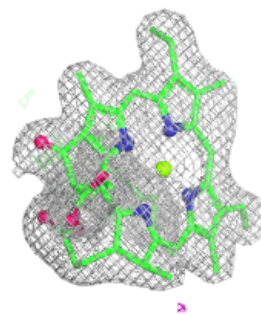
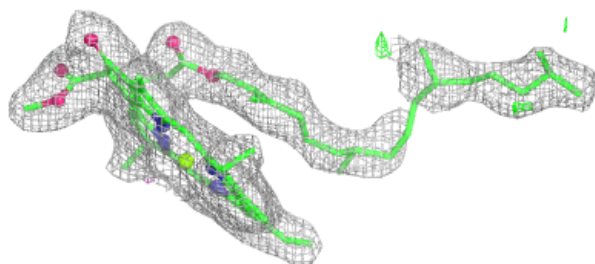
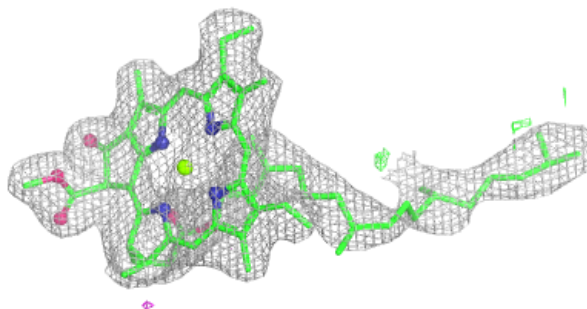


Electron density around CLA C 504:

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

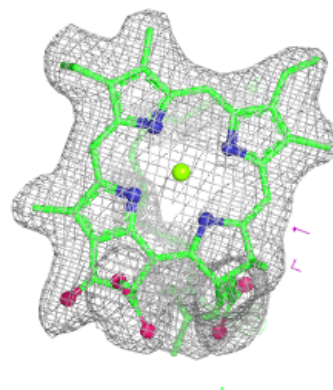
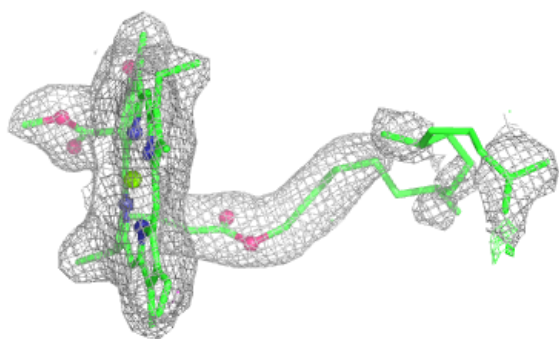
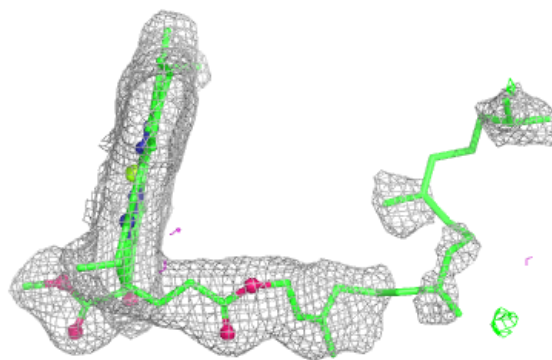
**Electron density around CLA c 505:**

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



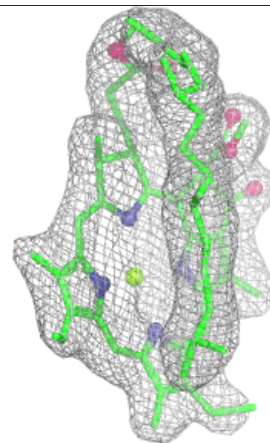
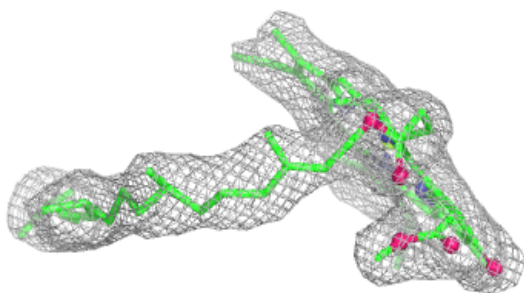
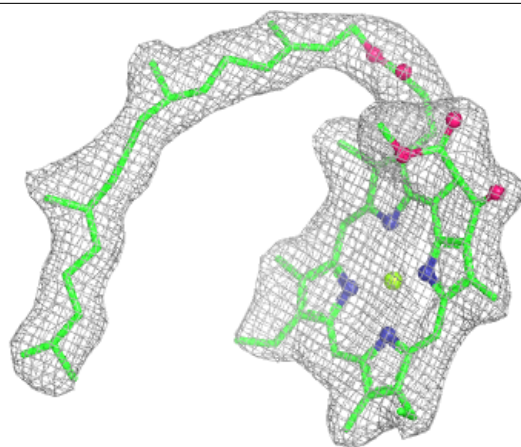
Electron density around CLA c 506:

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



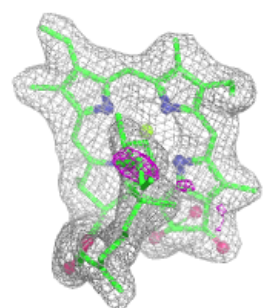
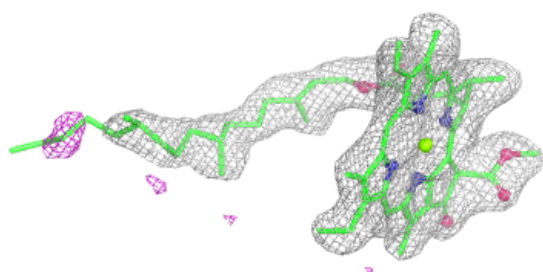
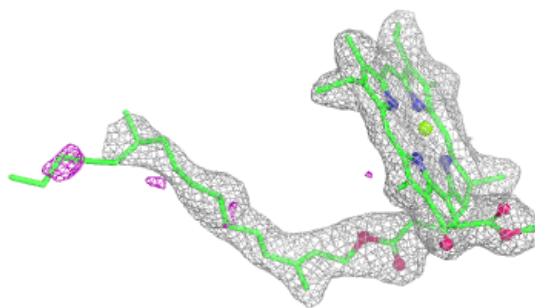
Electron density around CLA c 507:

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



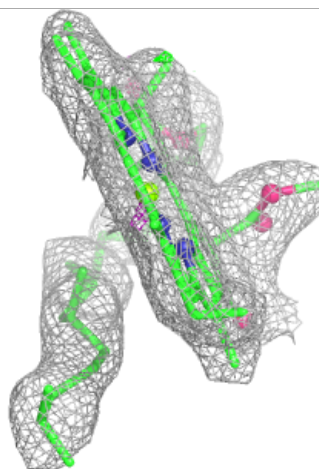
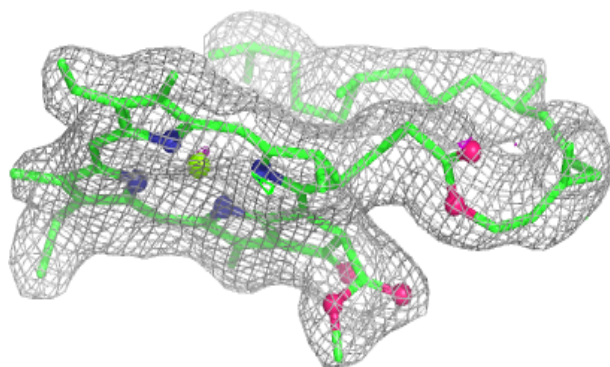
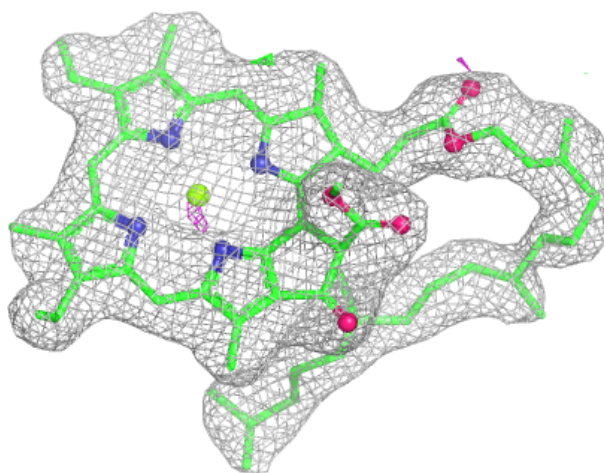
Electron density around CLA c 508:

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



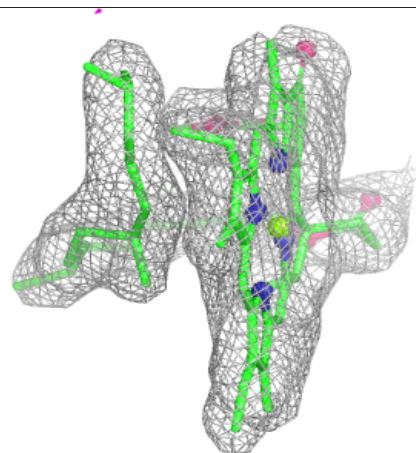
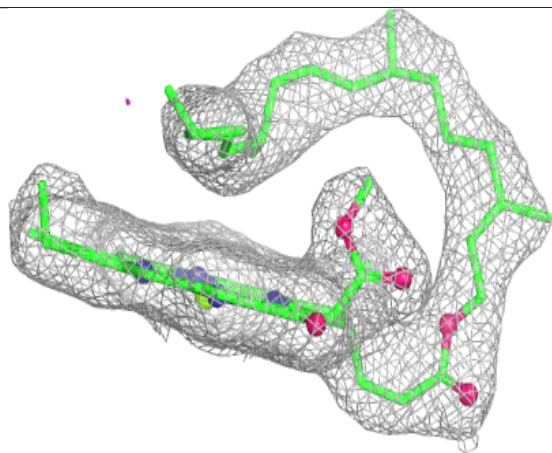
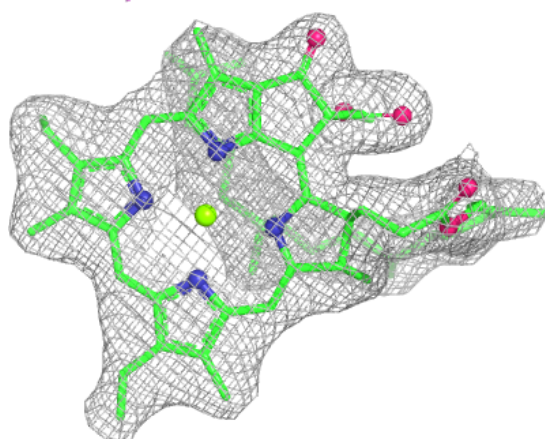
Electron density around CLA c 509:

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



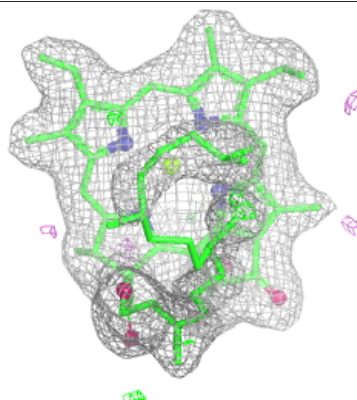
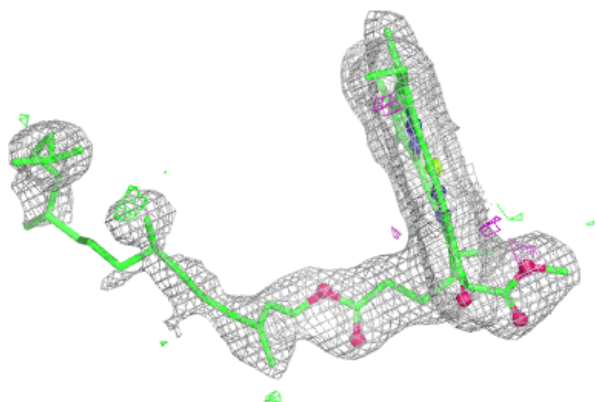
Electron density around CLA c 510:

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

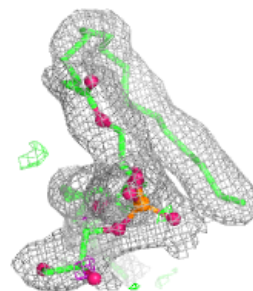
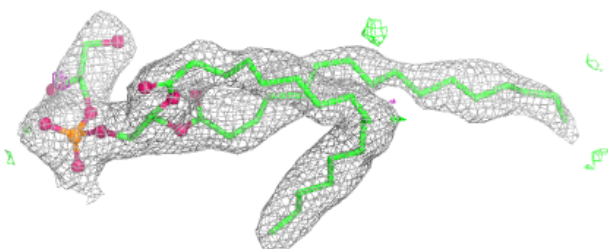
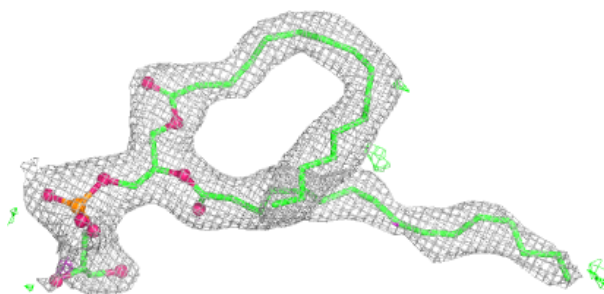


Electron density around CLA C 506:

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

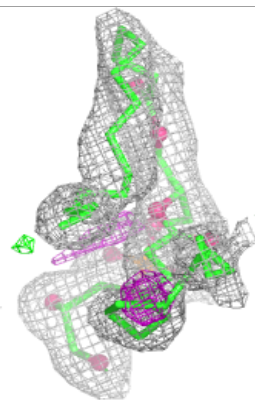
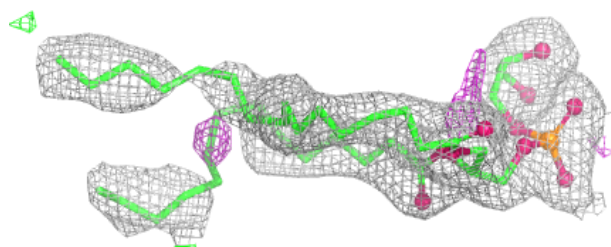
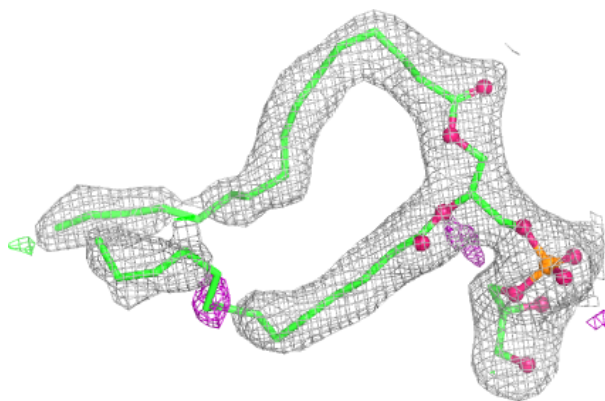
**Electron density around LHG B 622:**

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

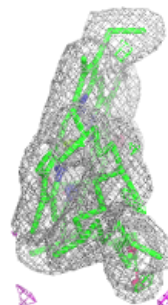
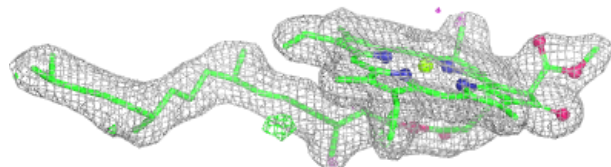
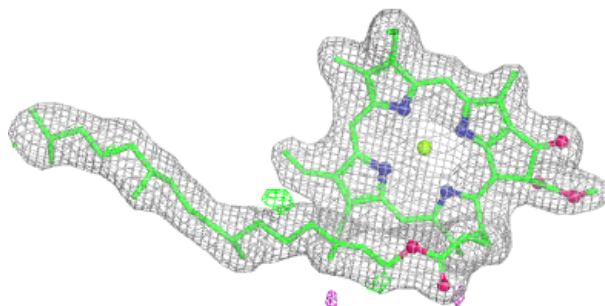


Electron density around LHG D 412:

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

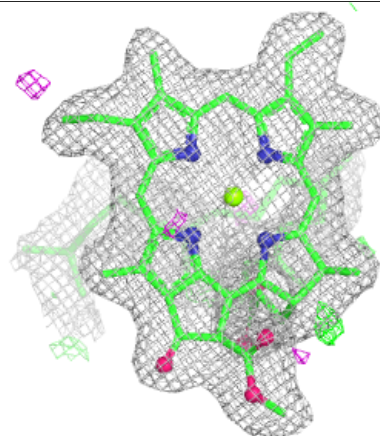
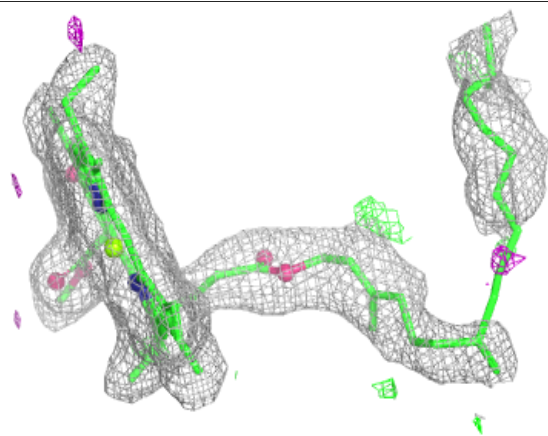
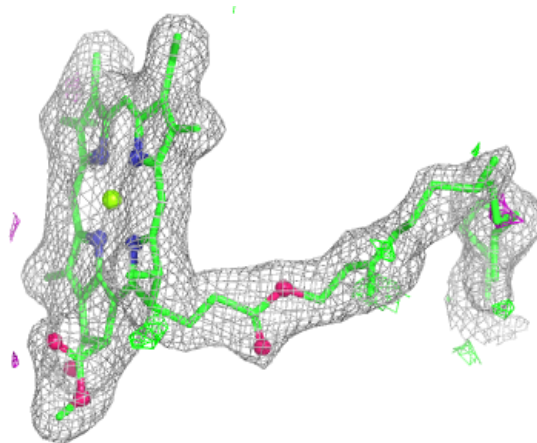
**Electron density around CLA C 501:**

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



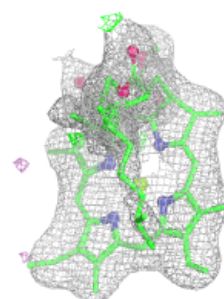
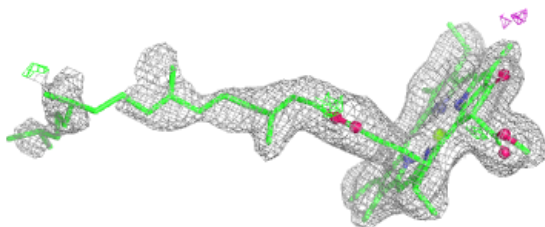
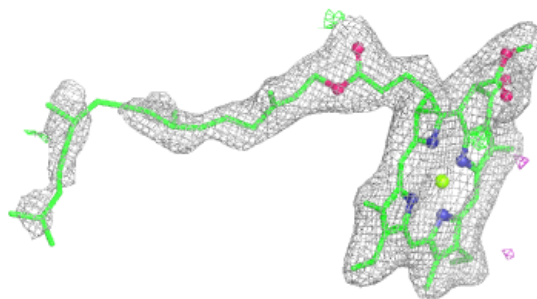
Electron density around CLA a 609:

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



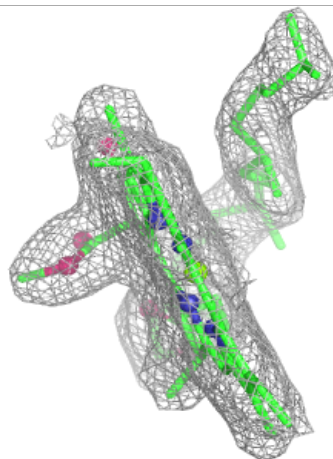
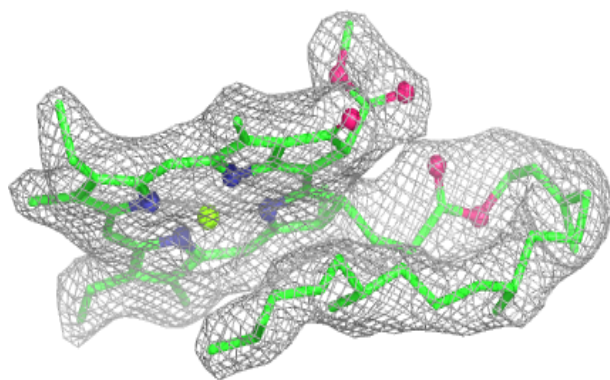
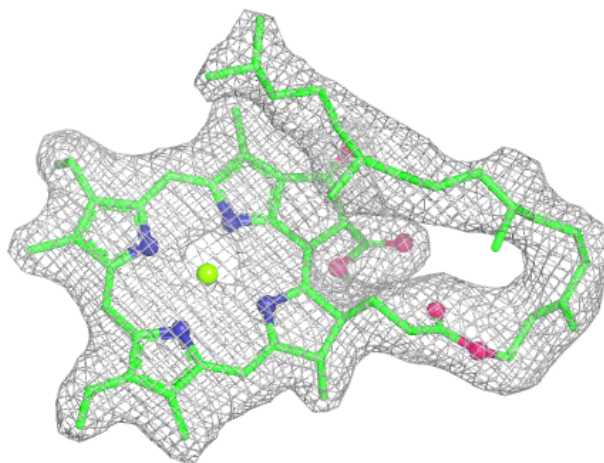
Electron density around CLA d 404:

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



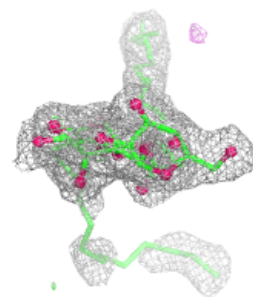
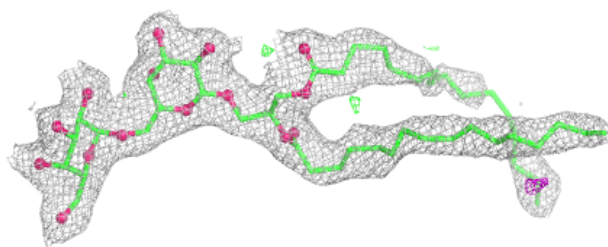
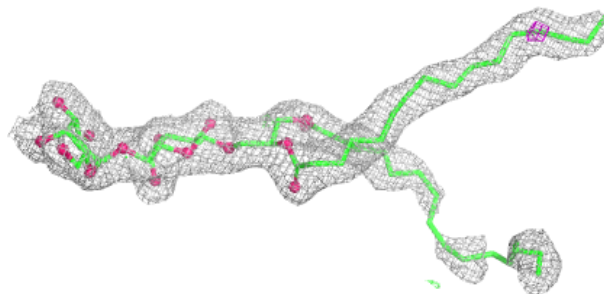
Electron density around CLA C 509:

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

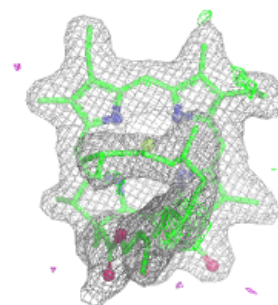
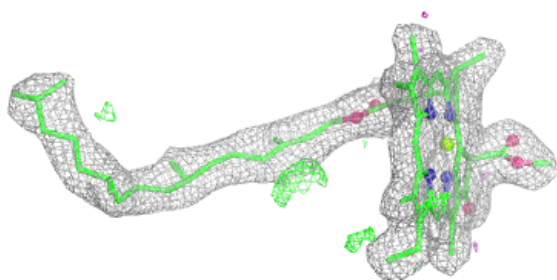
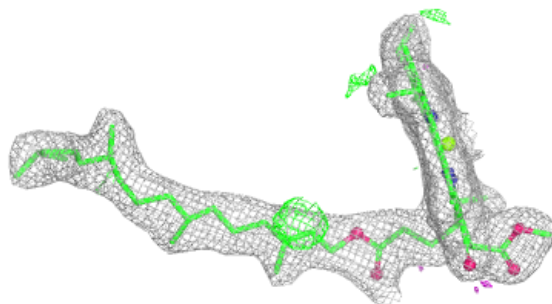


Electron density around DGD C 521:

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

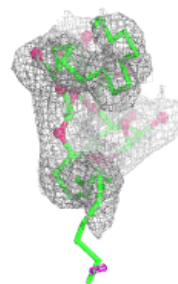
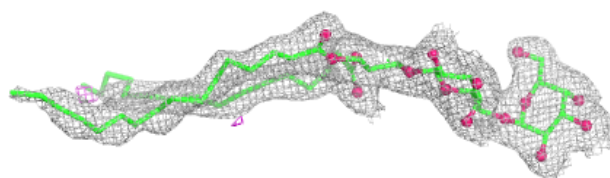
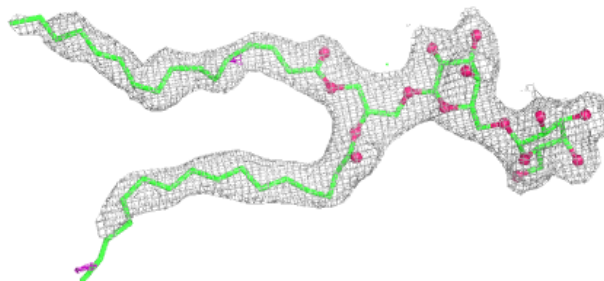
**Electron density around CLA b 605:**

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

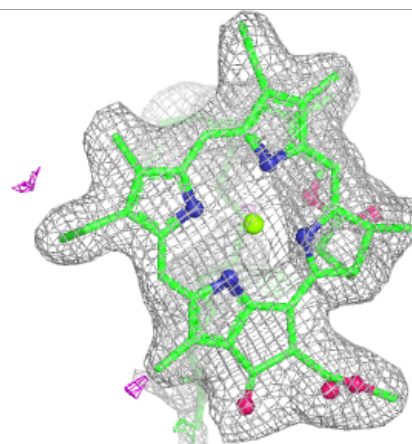
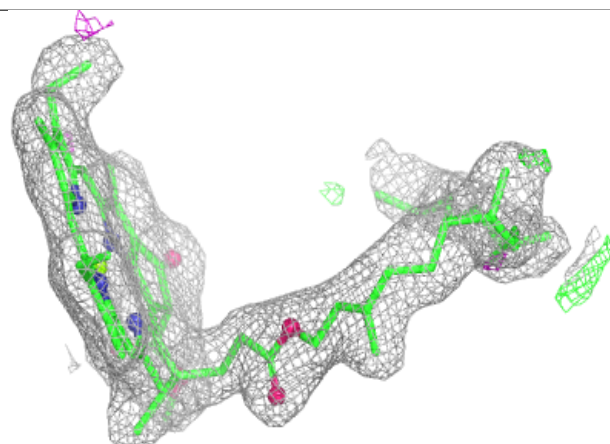
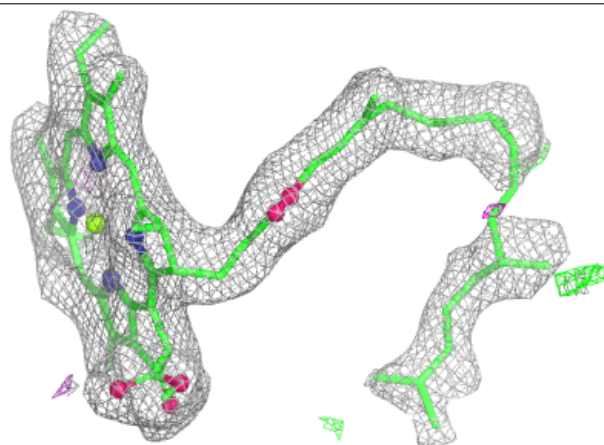


Electron density around DGD C 523:

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

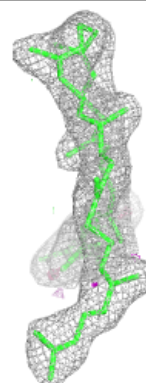
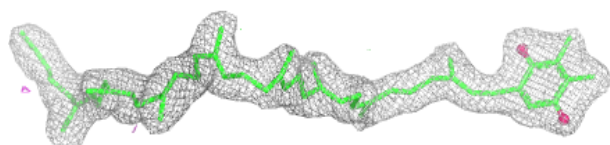
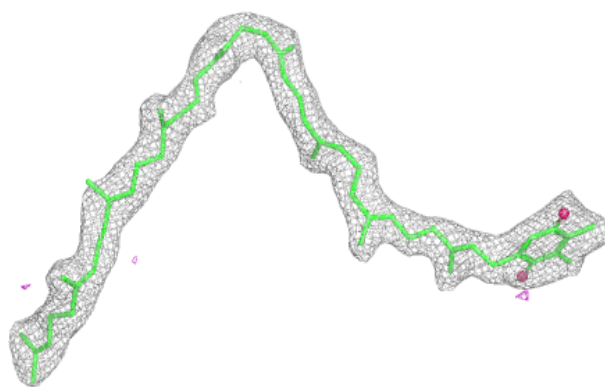
**Electron density around CLA B 606:**

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

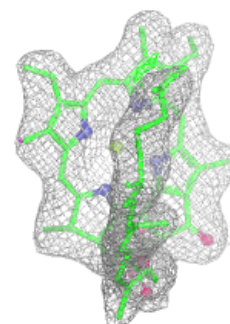
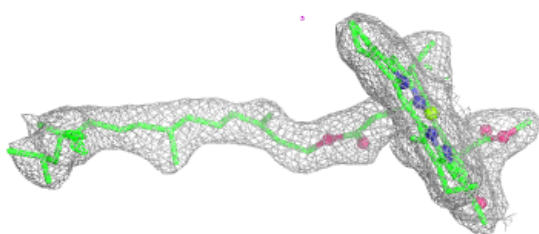
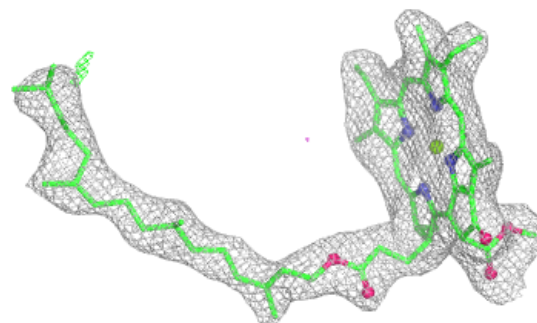


Electron density around PL9 D 407:

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

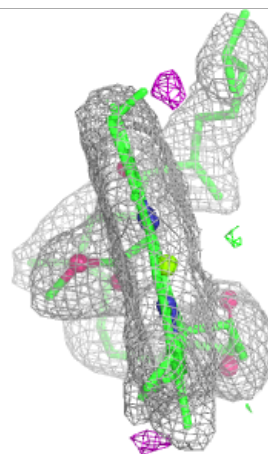
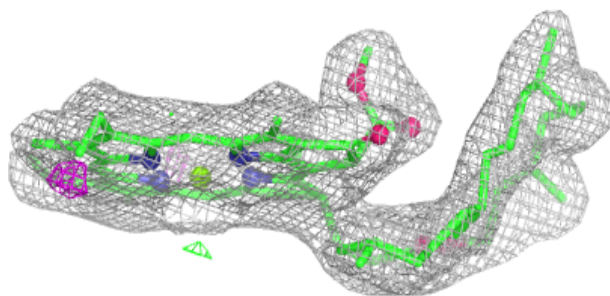
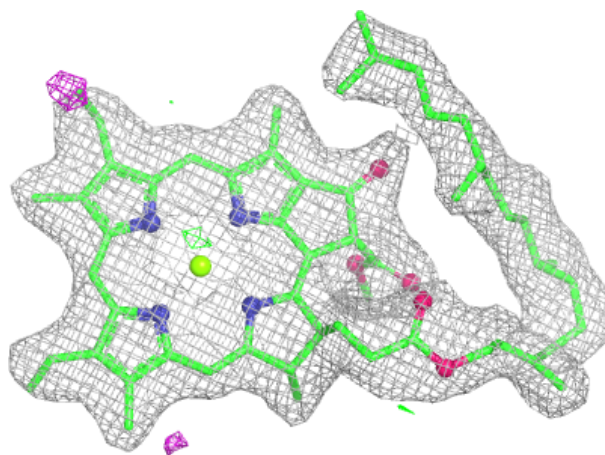
**Electron density around CLA b 609:**

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



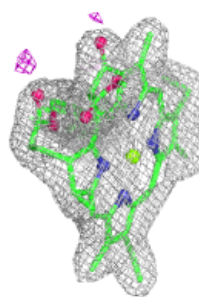
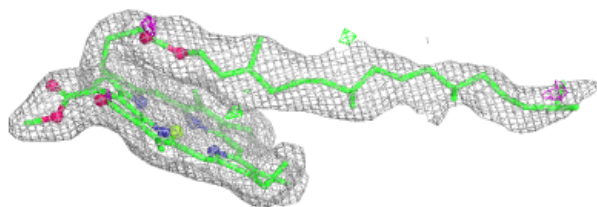
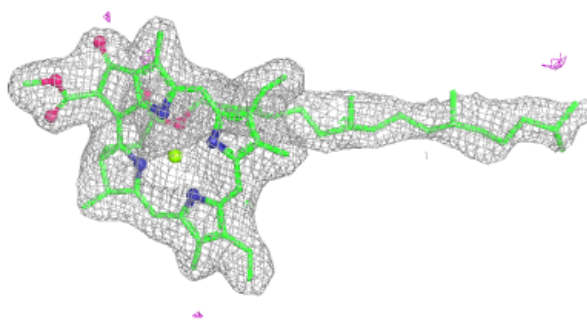
Electron density around CLA b 610:

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



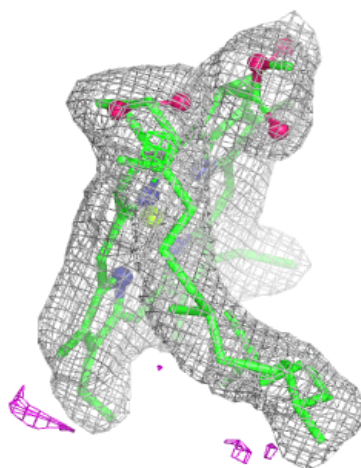
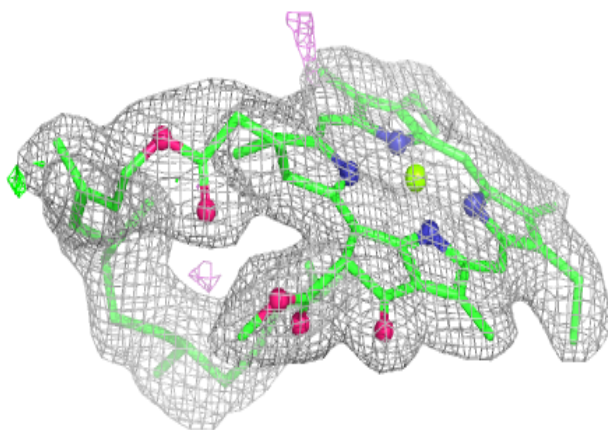
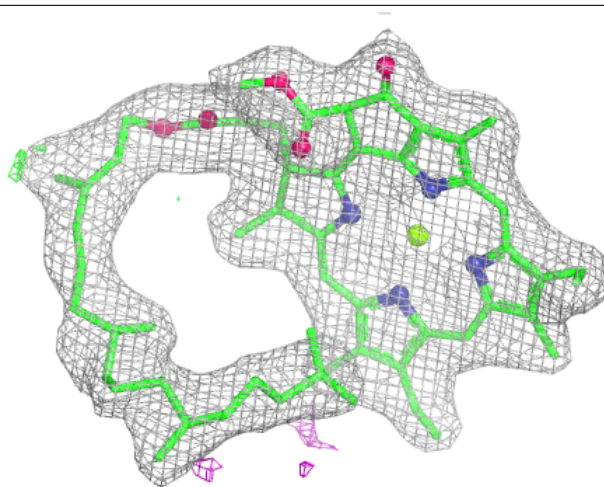
Electron density around CLA b 614:

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



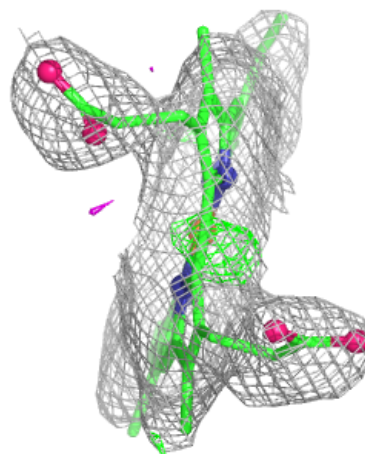
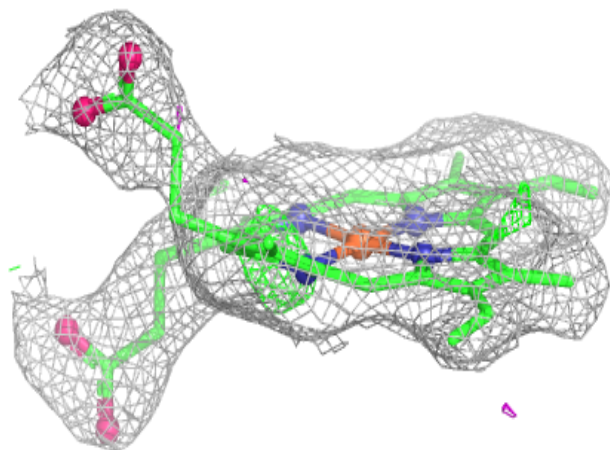
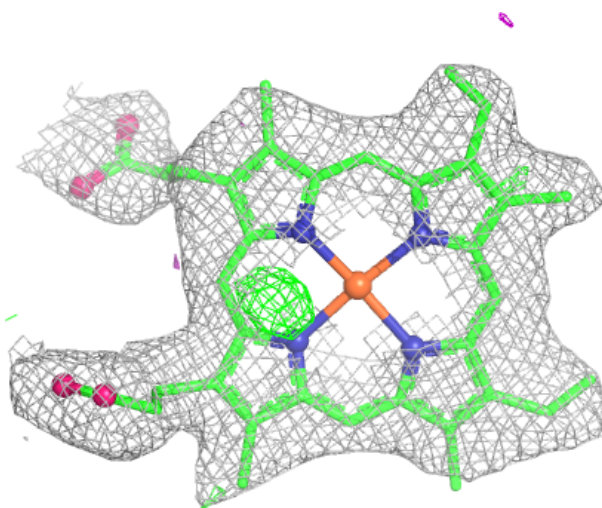
Electron density around CLA b 615:

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



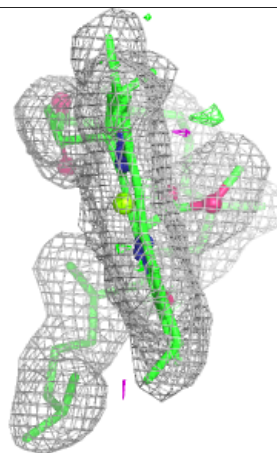
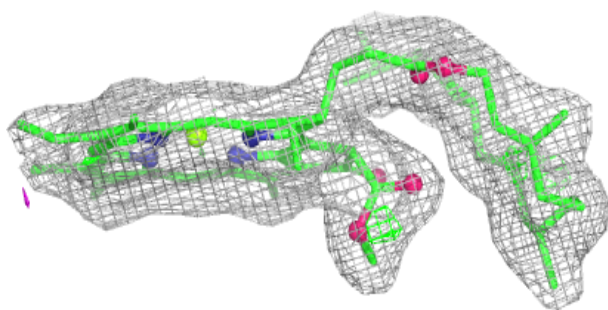
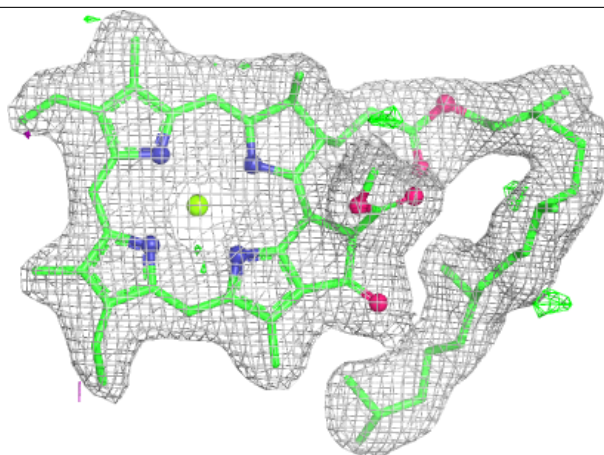
Electron density around HEM e 102:

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

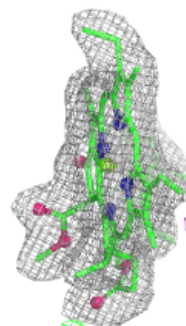
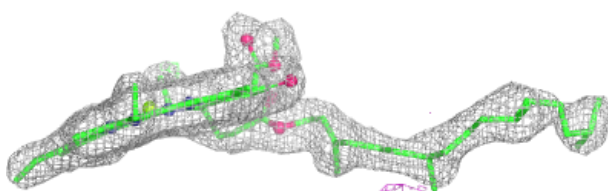
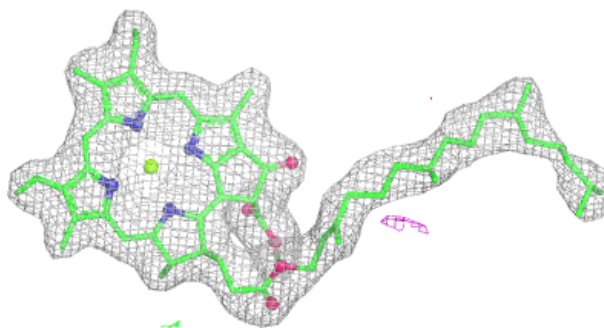


Electron density around CLA B 610:

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

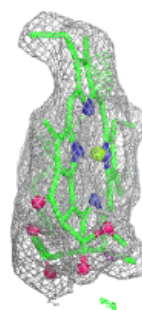
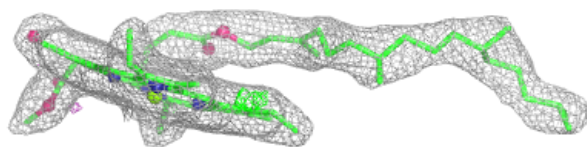
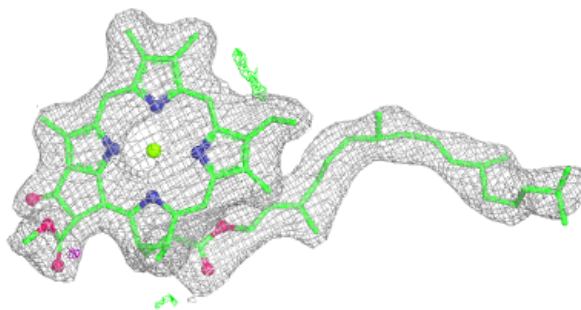
**Electron density around CLA b 602:**

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

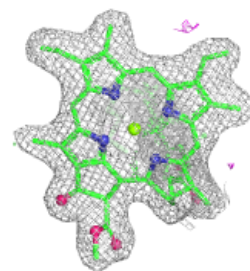
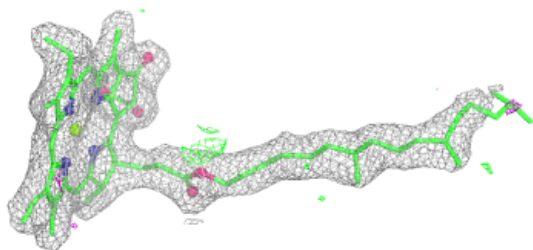
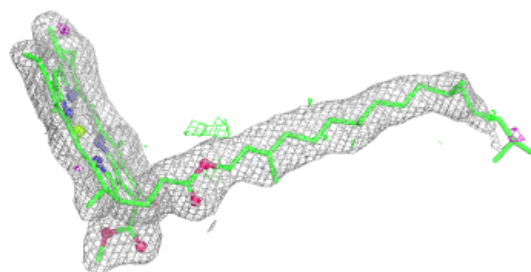


Electron density around CLA b 603:

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

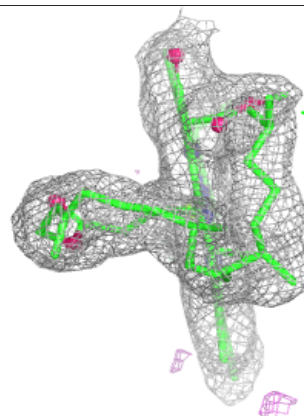
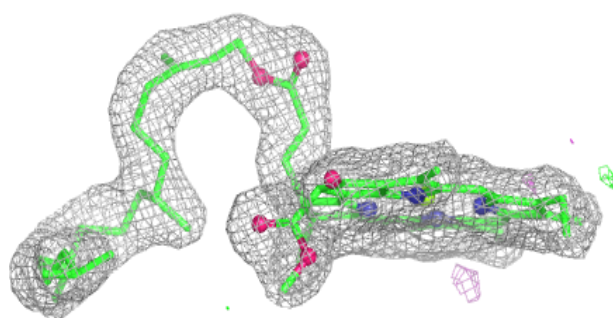
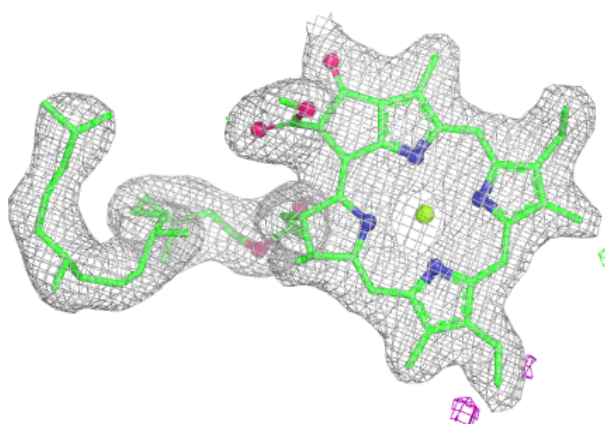
**Electron density around CLA b 604:**

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

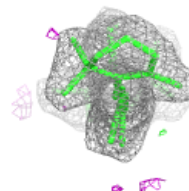
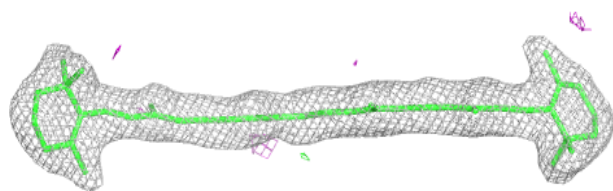
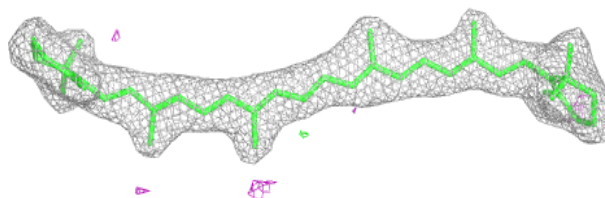


Electron density around CLA B 612:

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

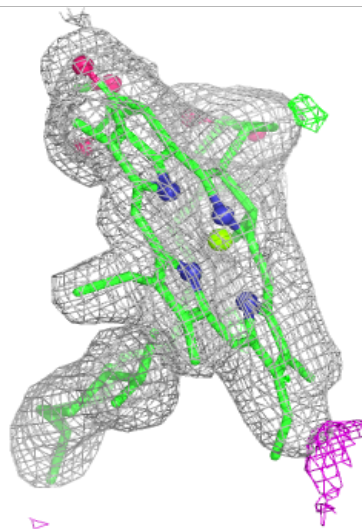
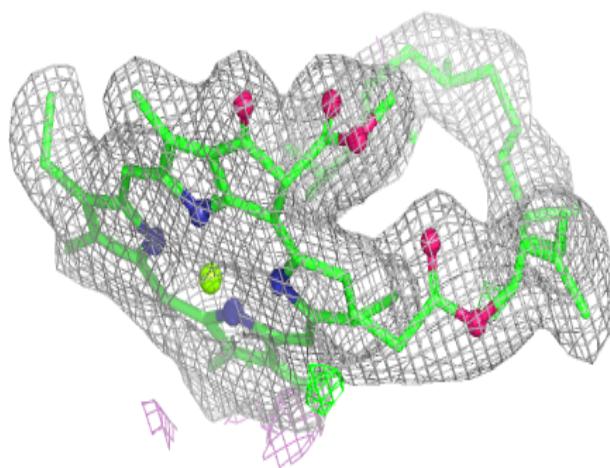
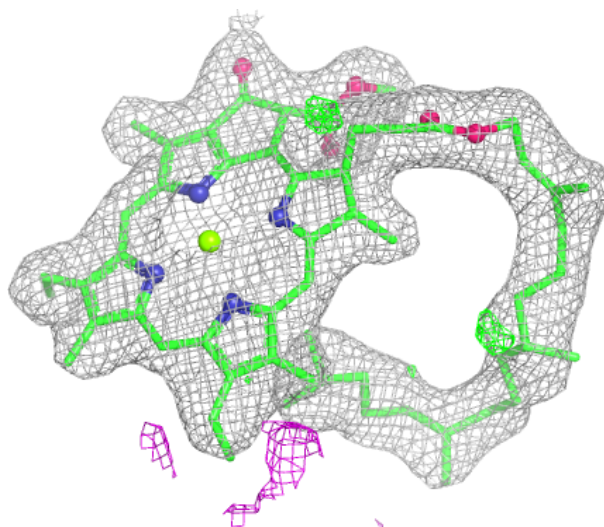
**Electron density around BCR a 610:**

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



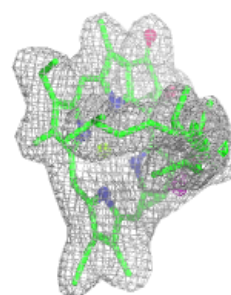
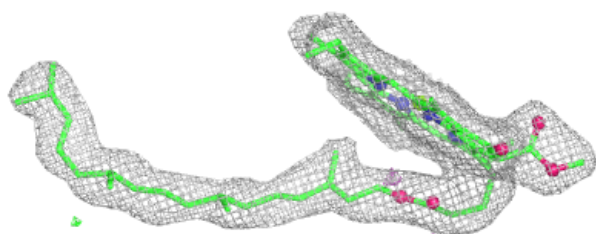
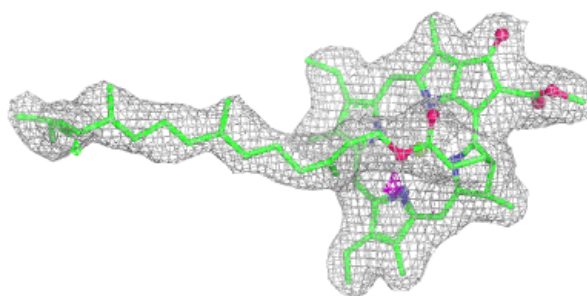
Electron density around CLA B 615:

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

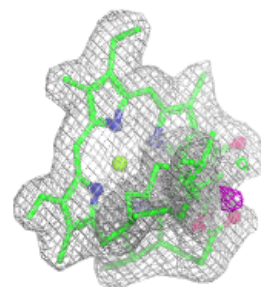
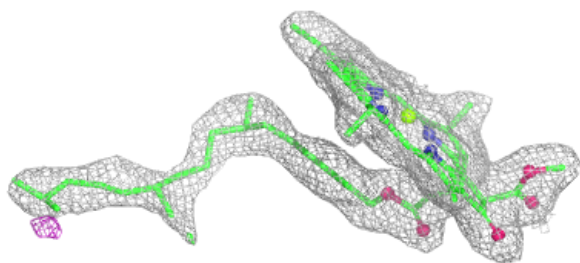
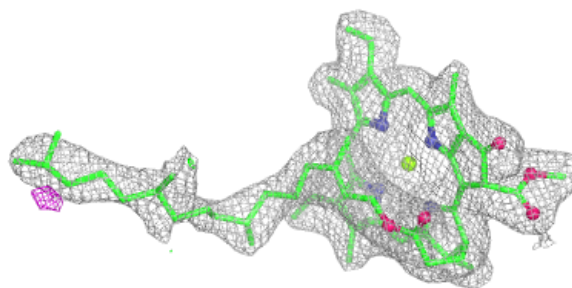


Electron density around CLA b 608:

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

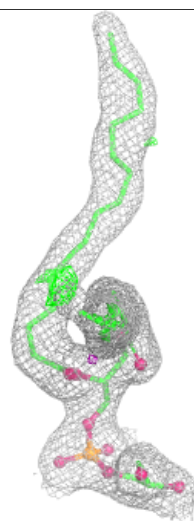
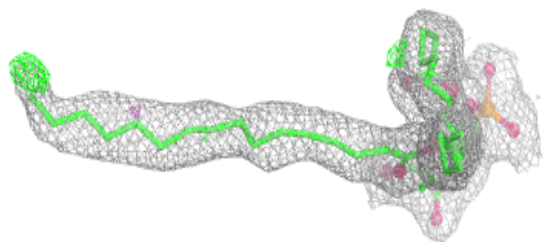
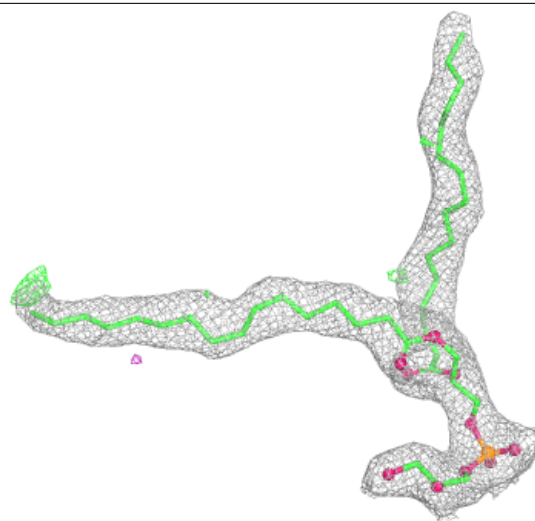
**Electron density around CLA C 505:**

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



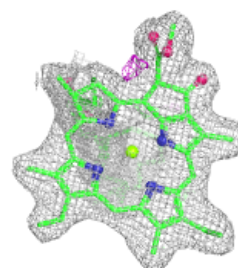
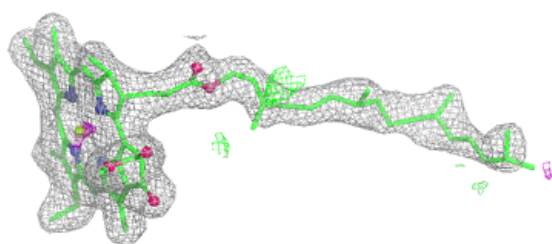
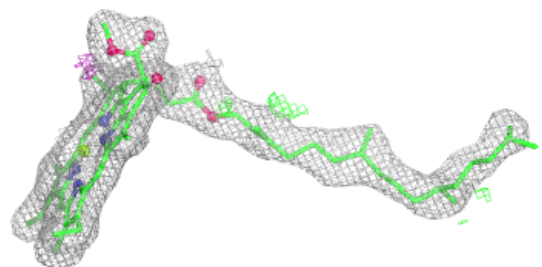
Electron density around LHG L 101:

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

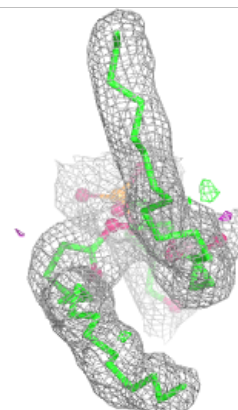
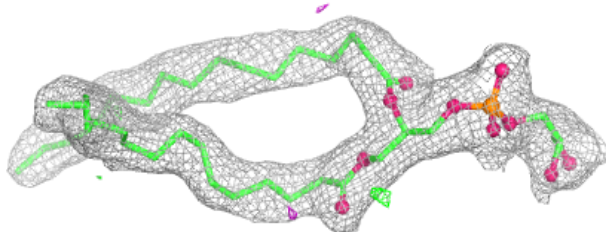
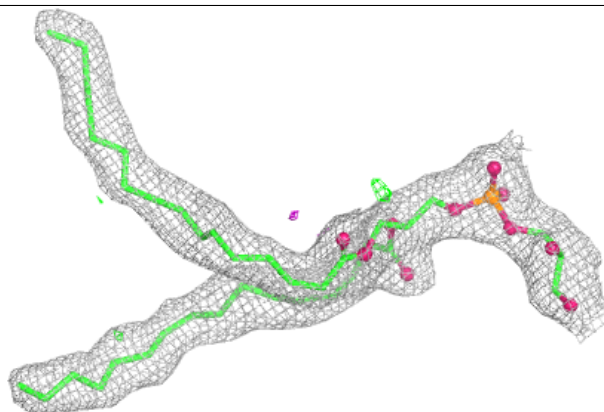


Electron density around CLA B 604:

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

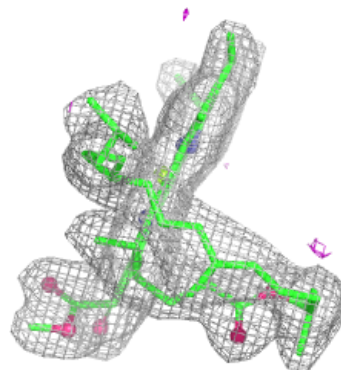
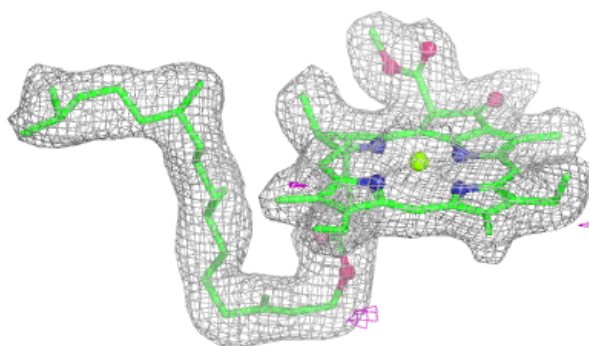
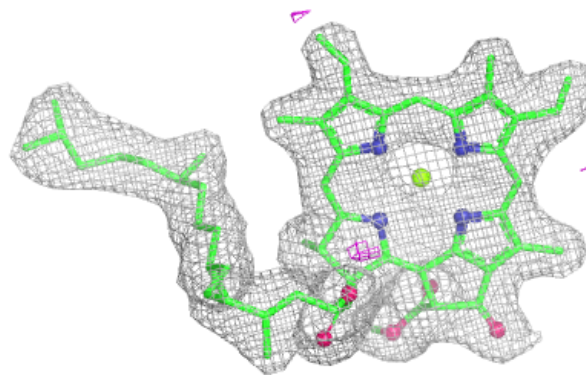
**Electron density around LHG d 408:**

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

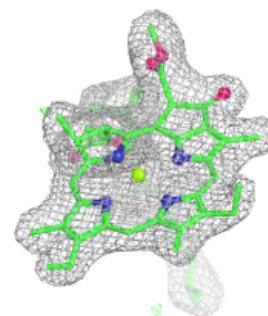
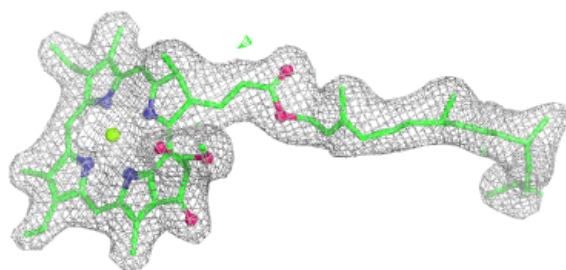
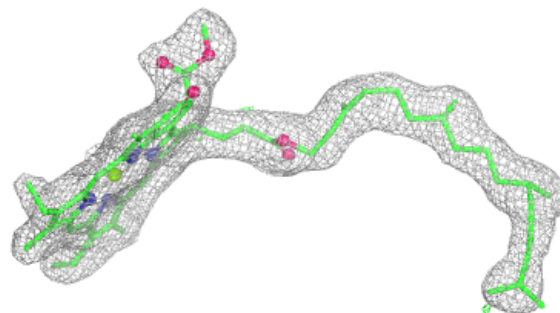


Electron density around CLA d 402:

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

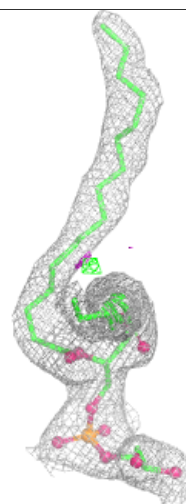
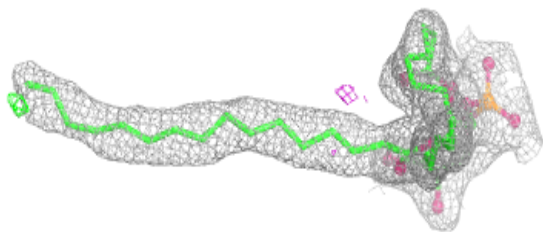
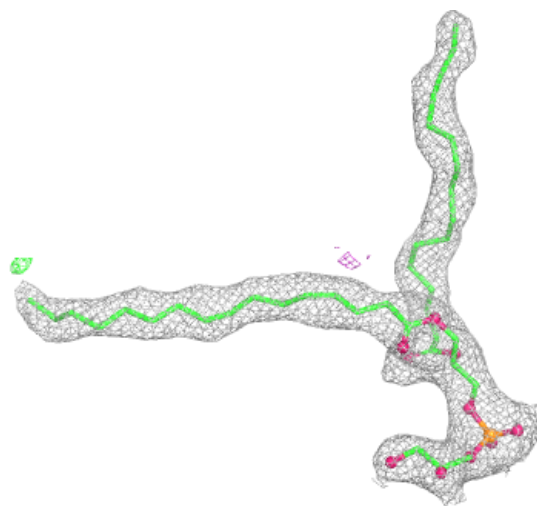
**Electron density around CLA d 403:**

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



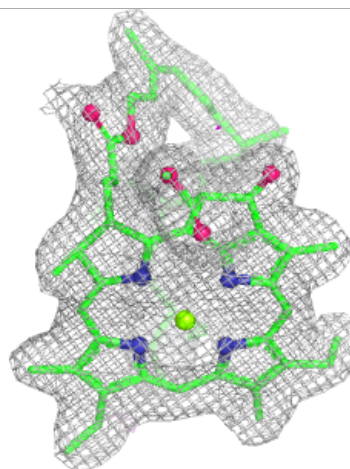
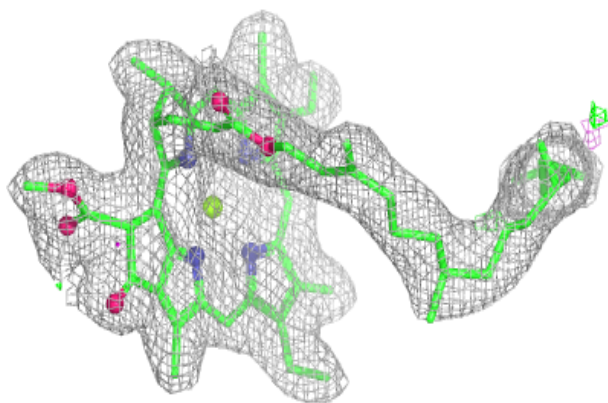
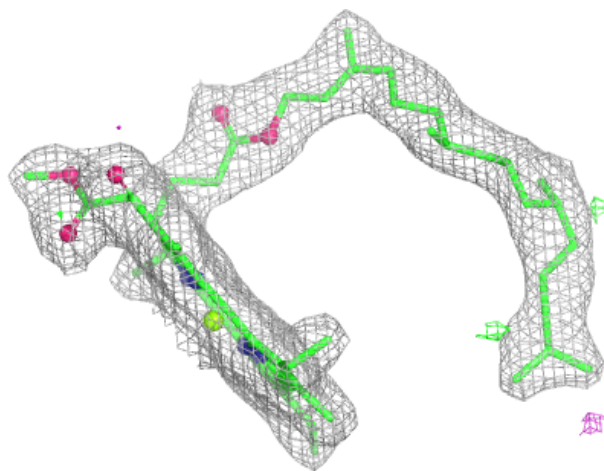
Electron density around LHG 1 101:

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



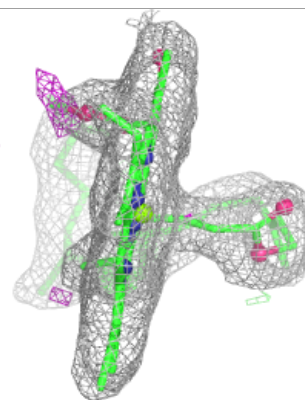
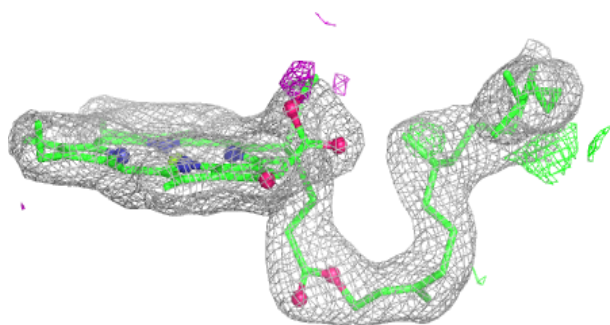
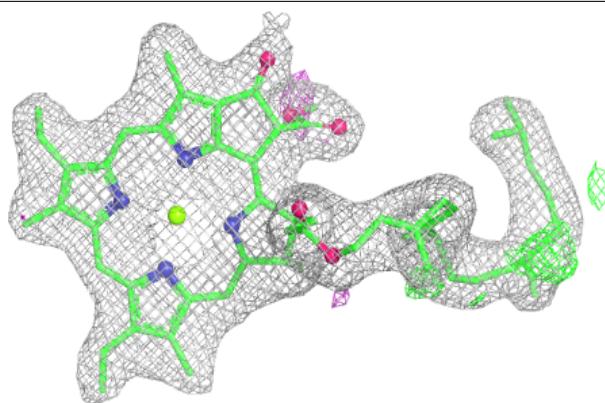
Electron density around CLA b 611:

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

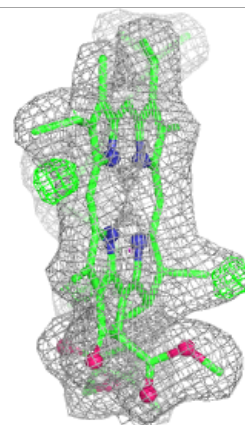
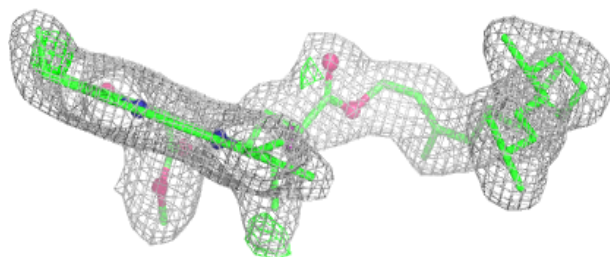
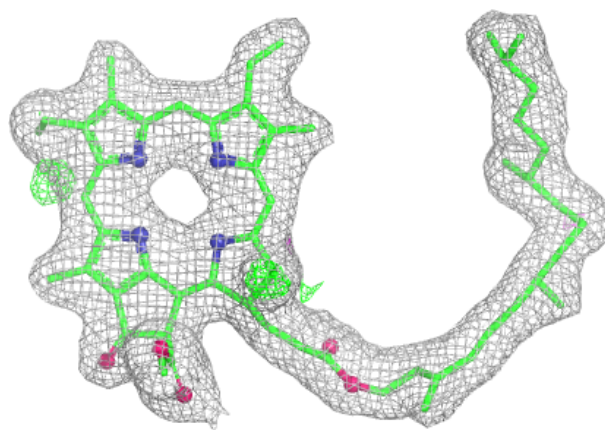


Electron density around CLA b 612:

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

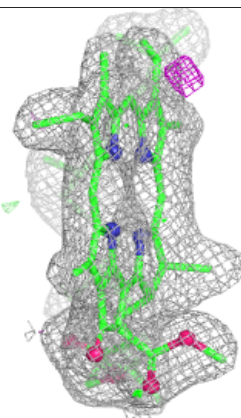
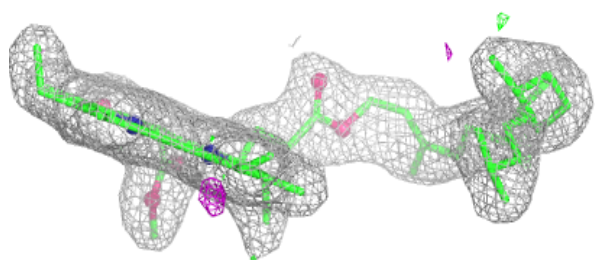
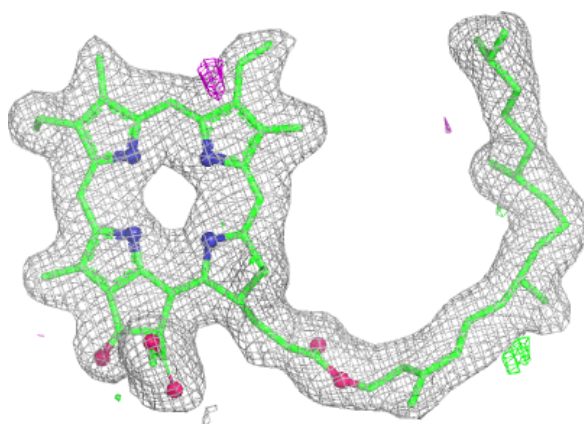
**Electron density around PHO D 402:**

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

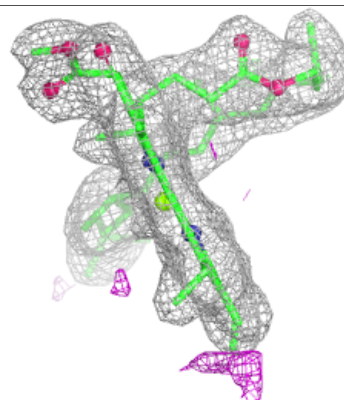
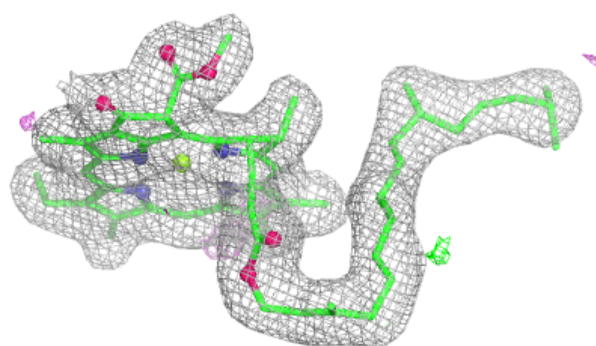
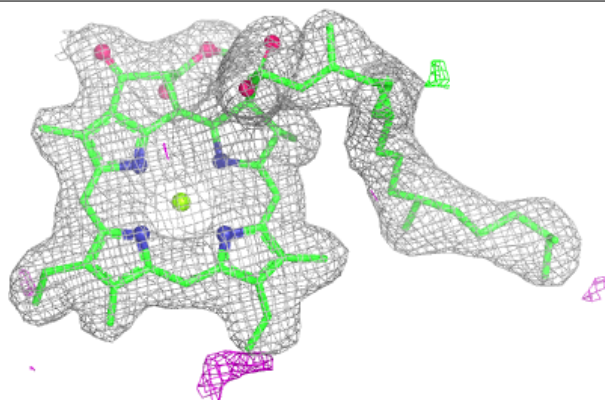


Electron density around PHO a 607:

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

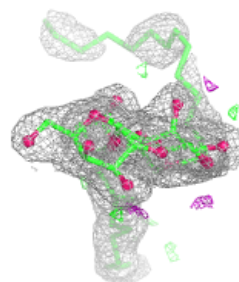
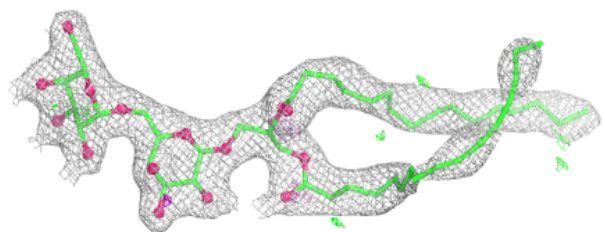
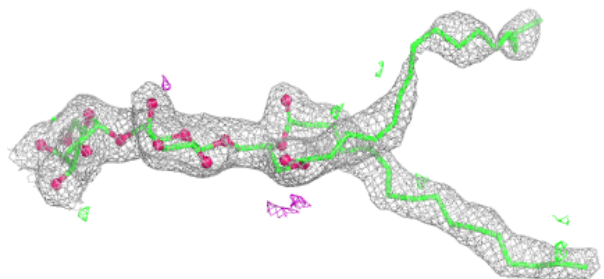
**Electron density around CLA D 403:**

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

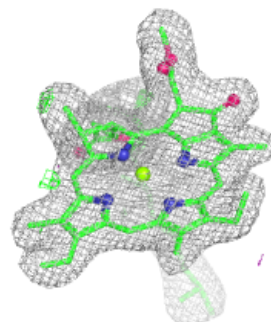
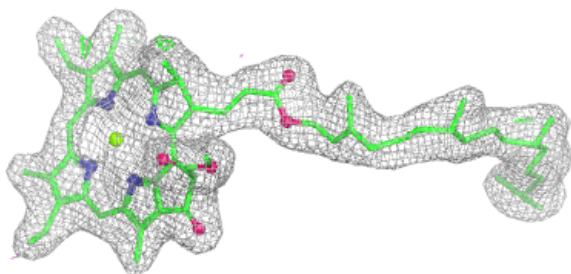
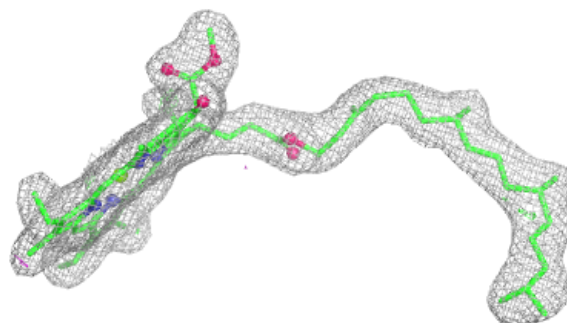


Electron density around DGD c 518:

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

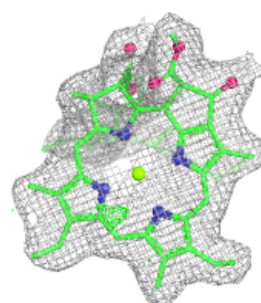
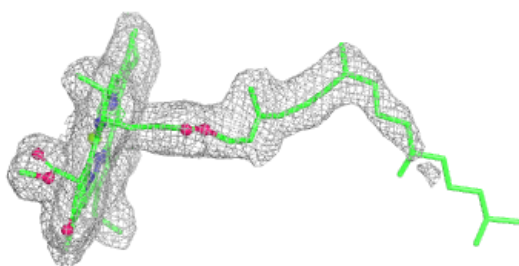
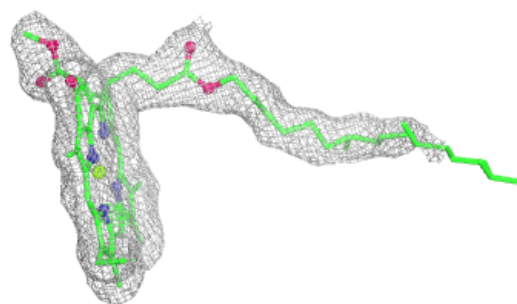
**Electron density around CLA D 404:**

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

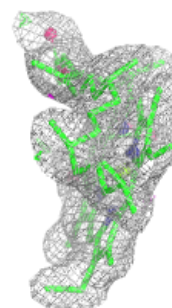
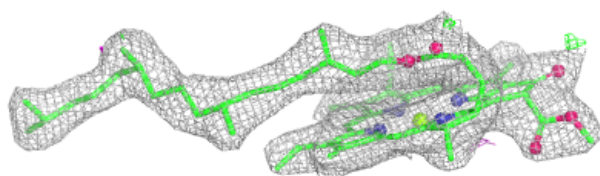
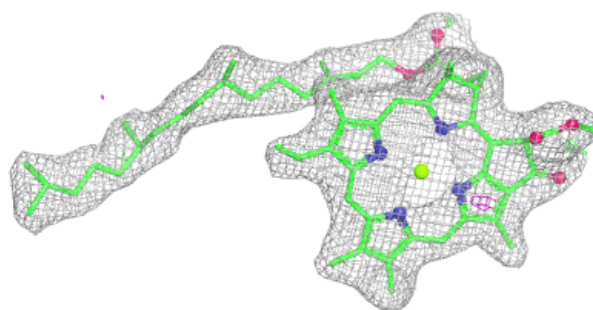


Electron density around CLA D 405:

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

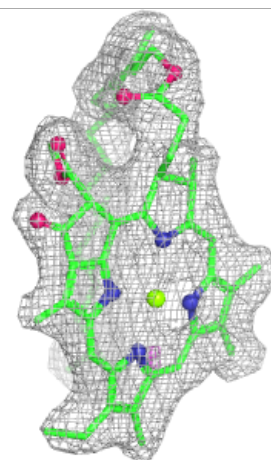
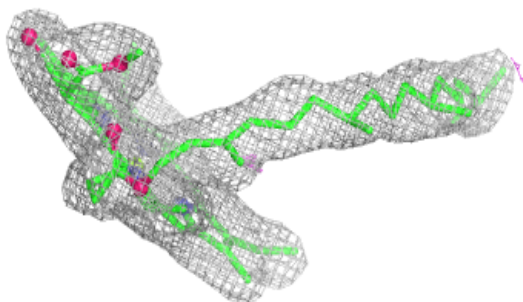
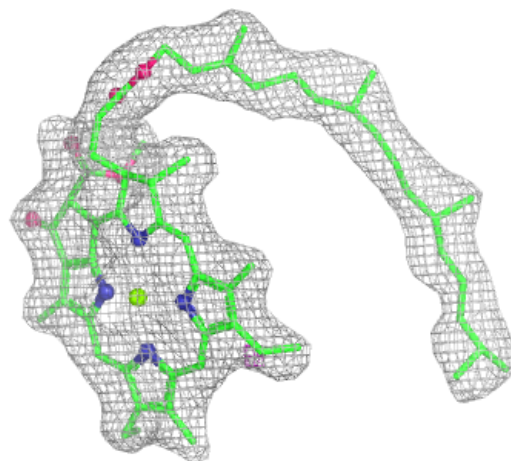
**Electron density around CLA c 501:**

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



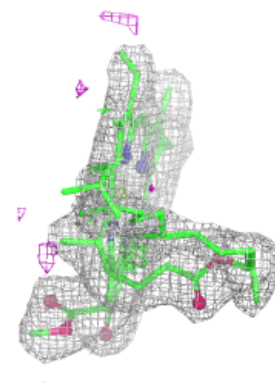
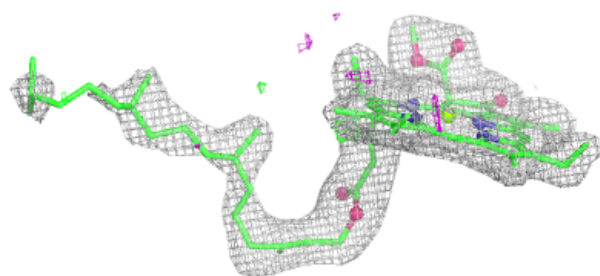
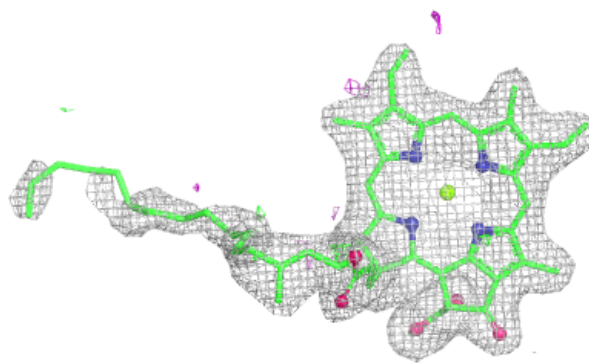
Electron density around CLA C 507:

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

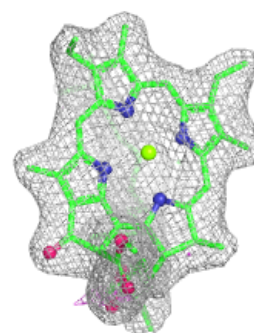
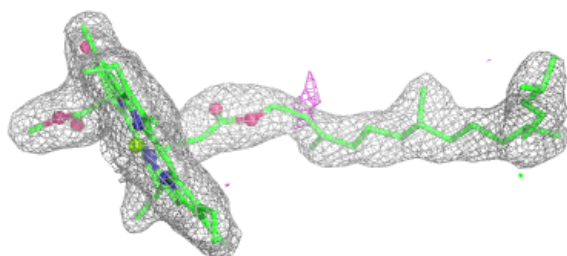
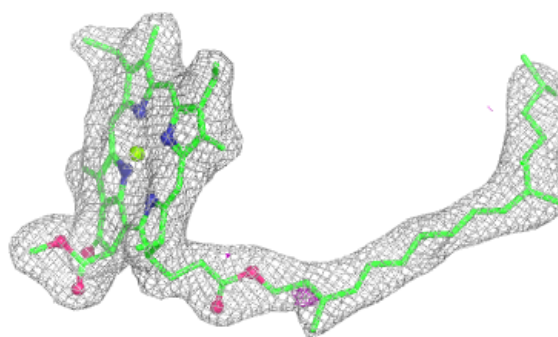


Electron density around CLA a 606:

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

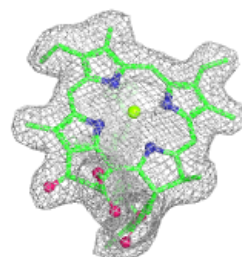
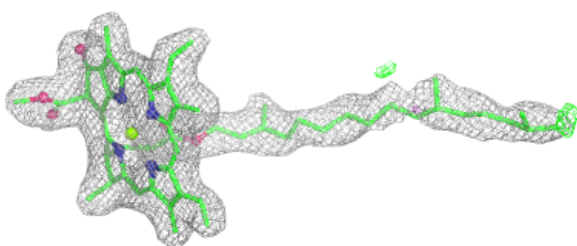
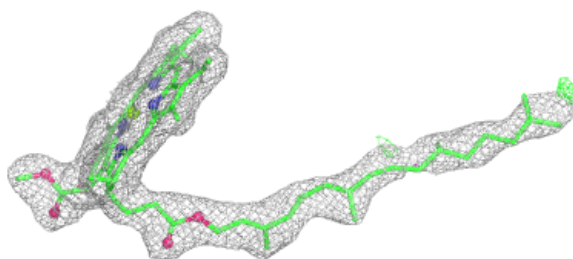
**Electron density around CLA B 609:**

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

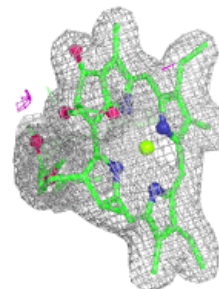
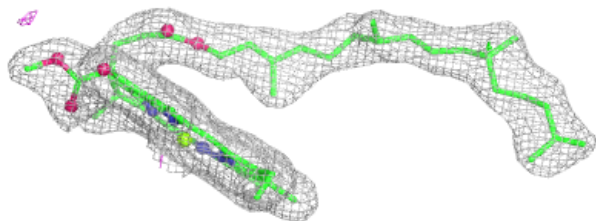
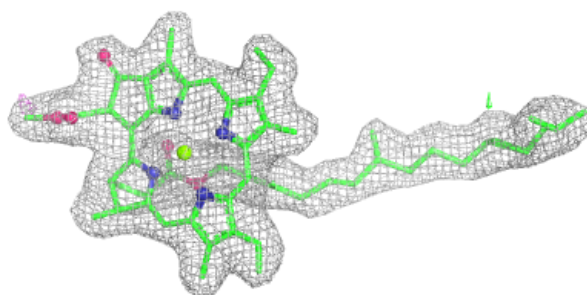


Electron density around CLA B 607:

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

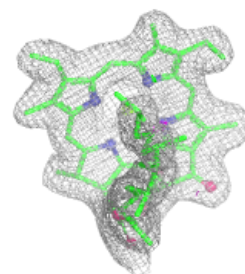
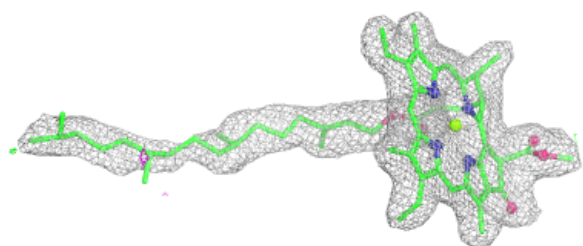
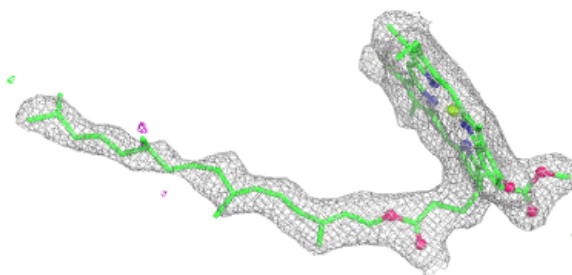
**Electron density around CLA B 608:**

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

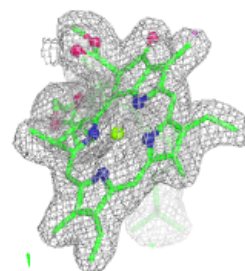
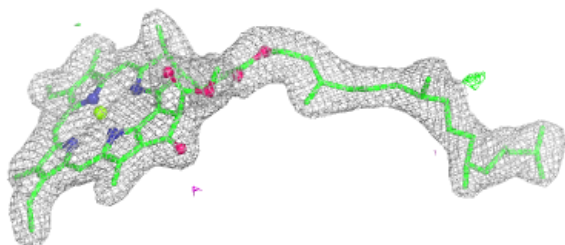
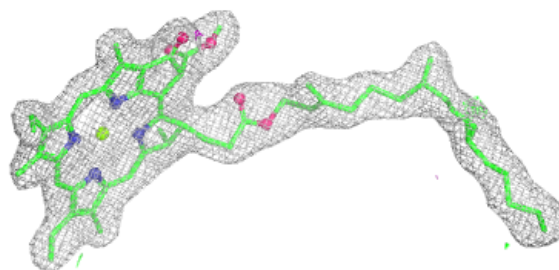


Electron density around CLA b 607:

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

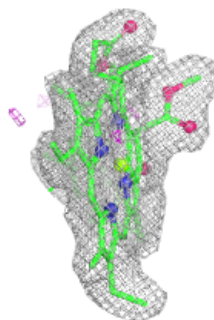
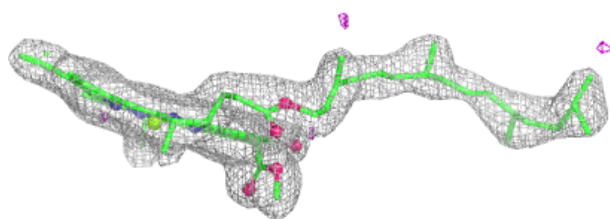
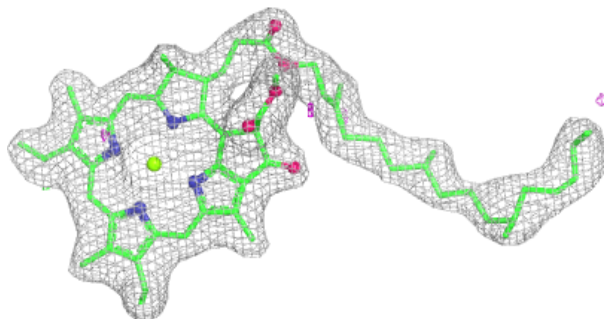
**Electron density around CLA A 605:**

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



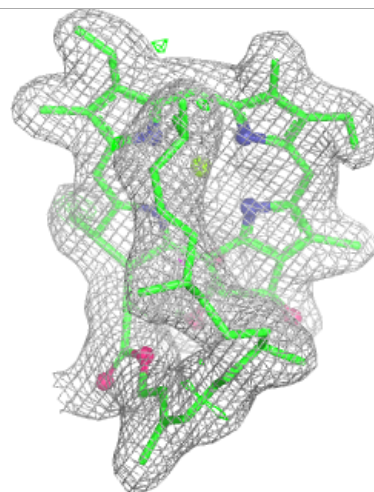
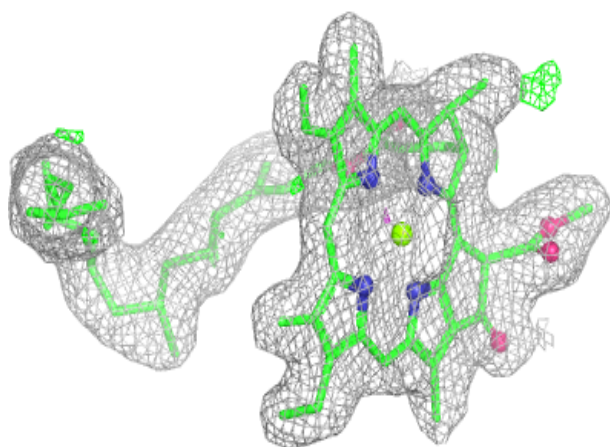
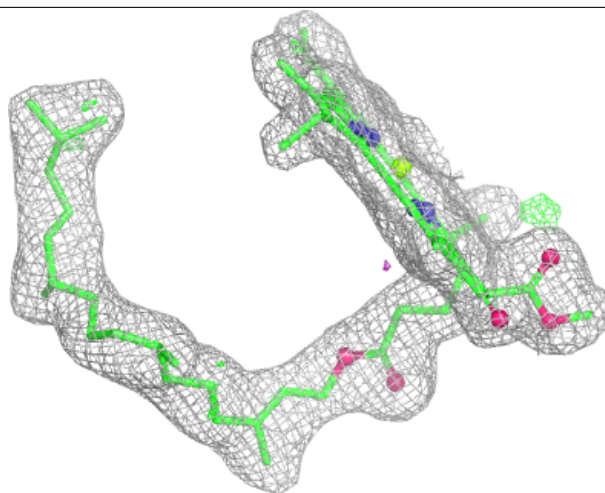
Electron density around CLA B 602:

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



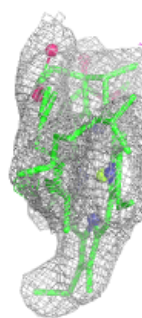
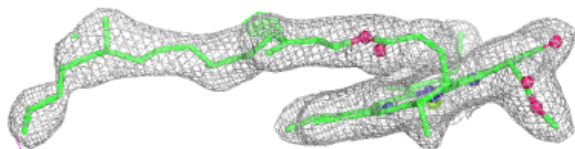
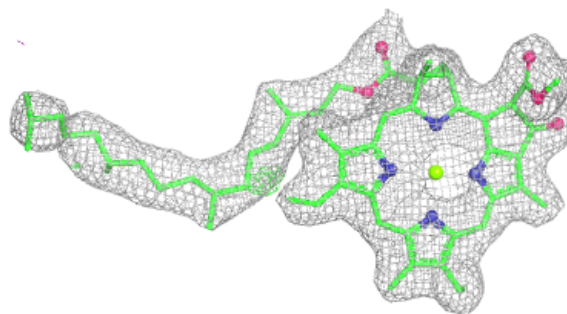
Electron density around CLA B 611:

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



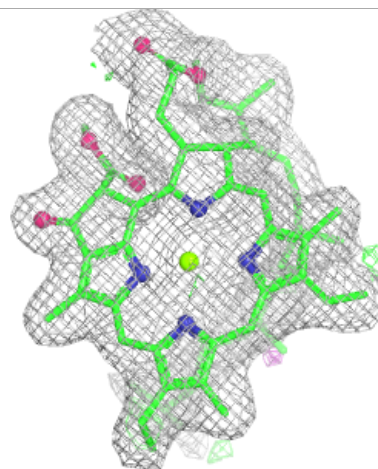
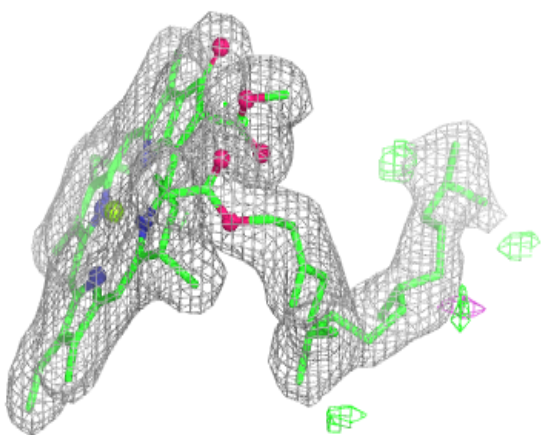
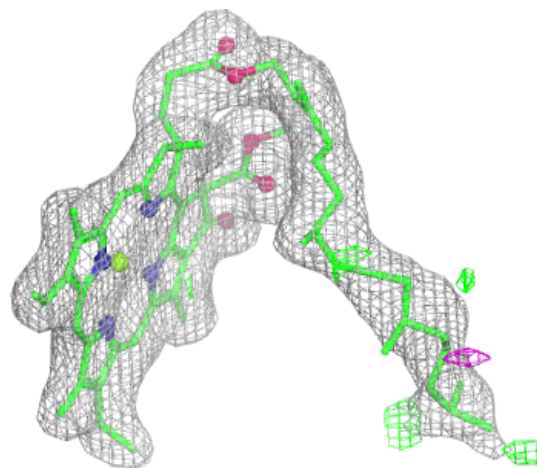
Electron density around CLA B 603:

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



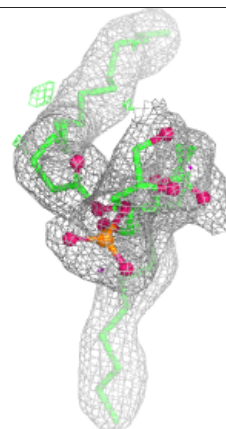
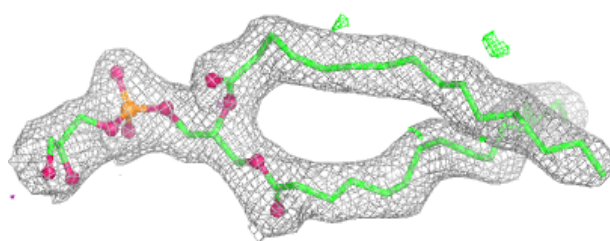
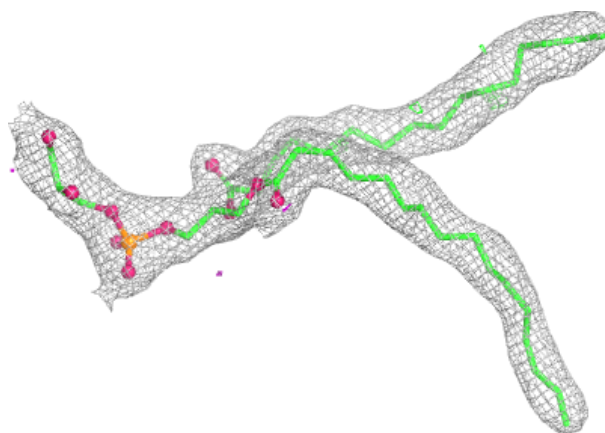
Electron density around CLA B 613:

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



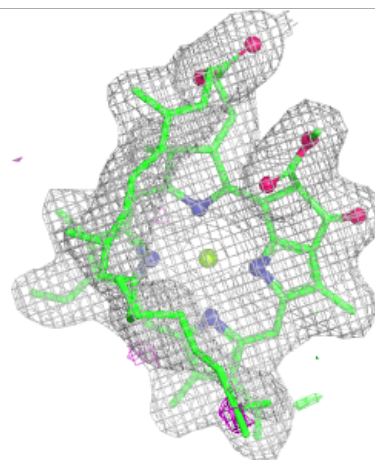
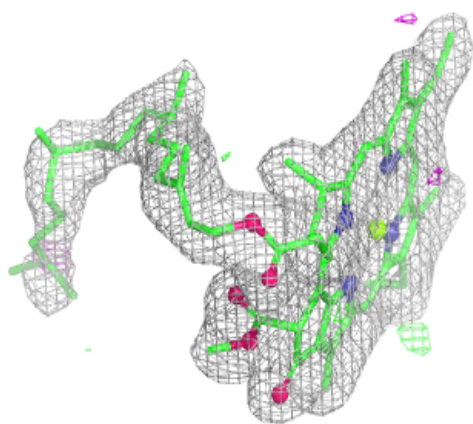
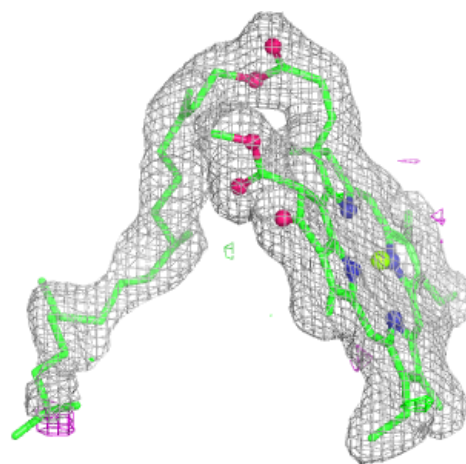
Electron density around LHG D 411:

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



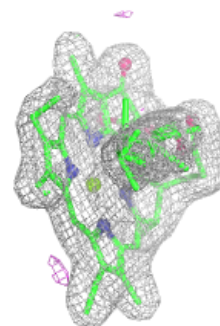
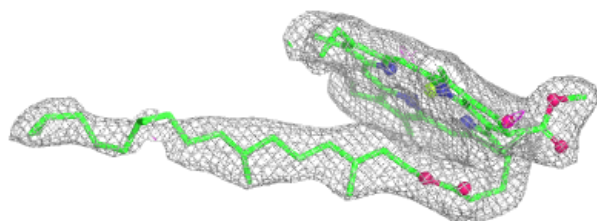
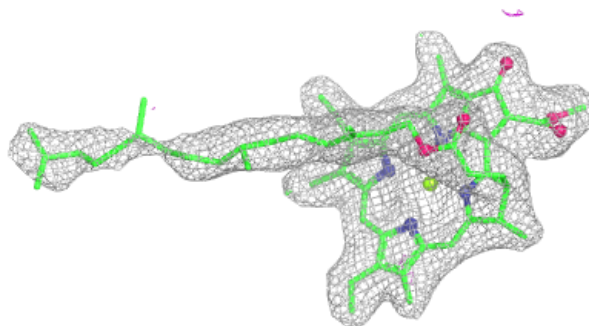
Electron density around CLA b 613:

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

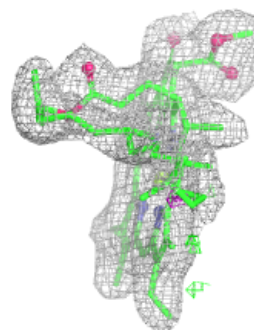
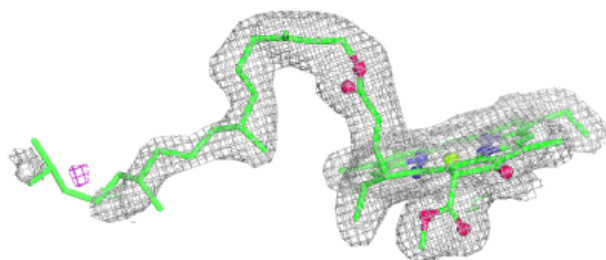
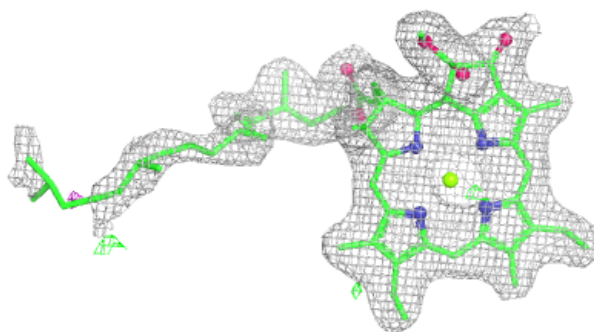


Electron density around CLA B 614:

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

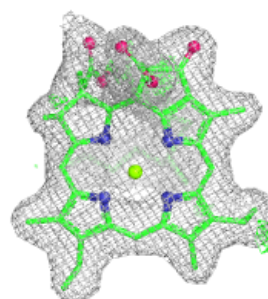
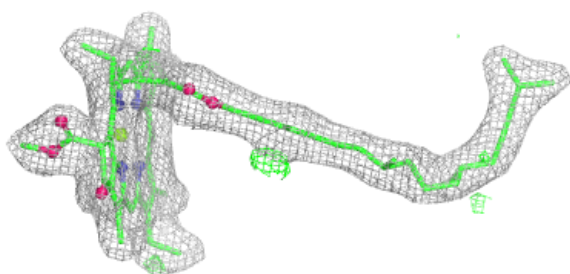
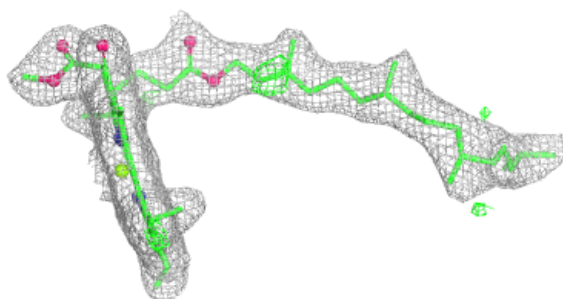
**Electron density around CLA A 606:**

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



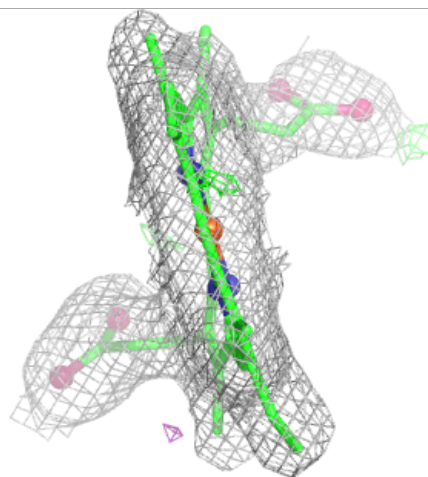
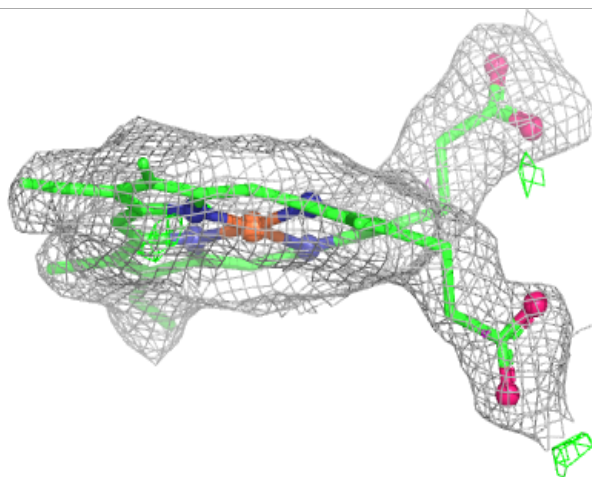
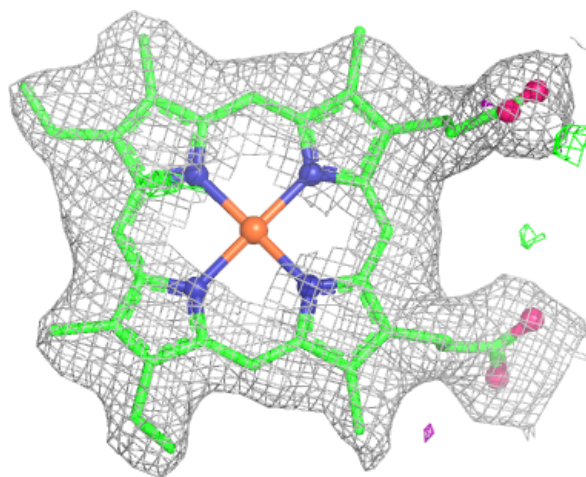
Electron density around CLA B 605:

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



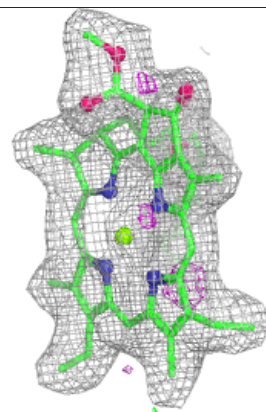
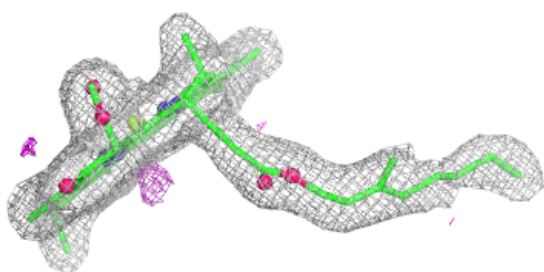
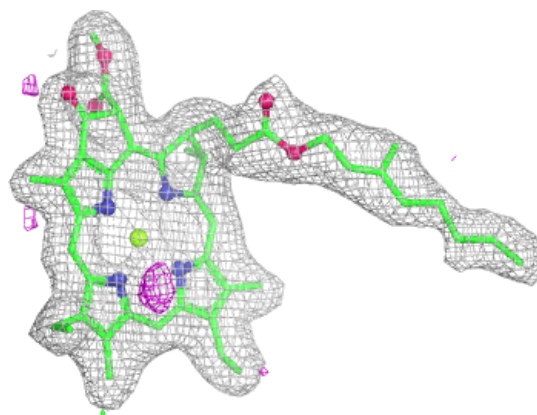
Electron density around HEM F 101:

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



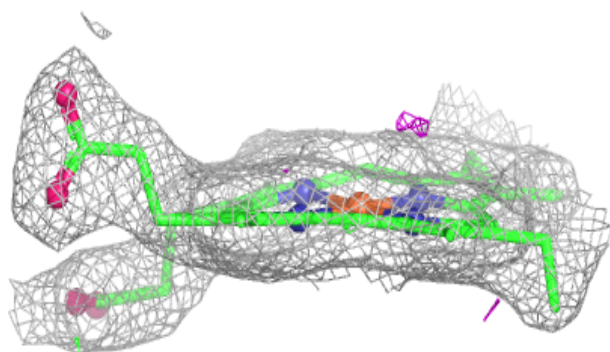
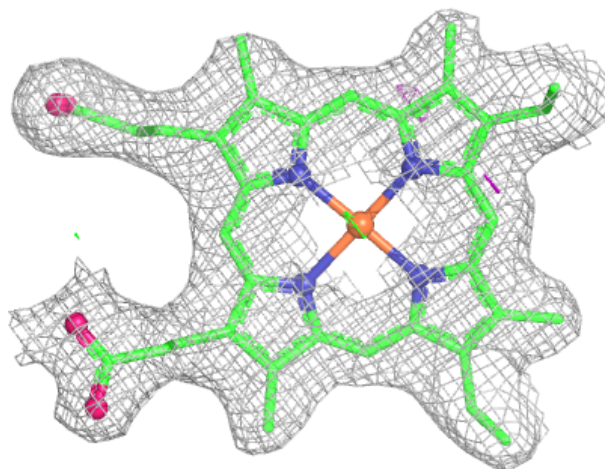
Electron density around CLA A 608:

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



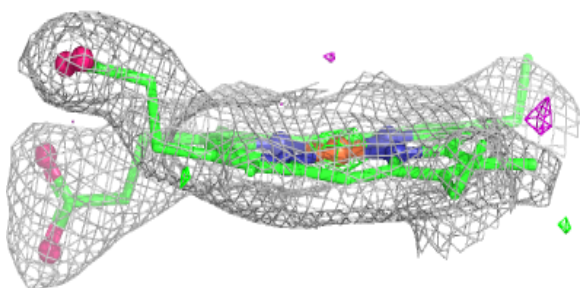
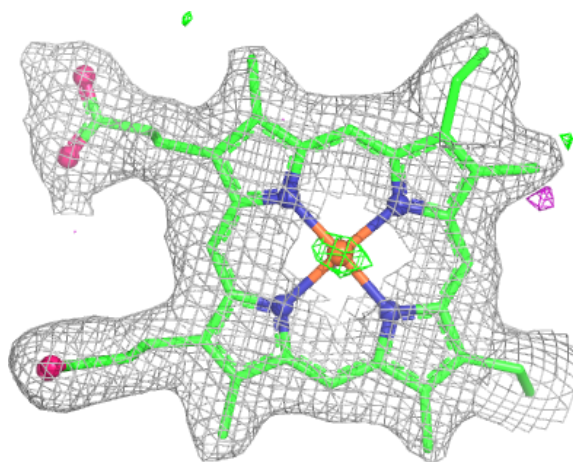
Electron density around HEC V 201:

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



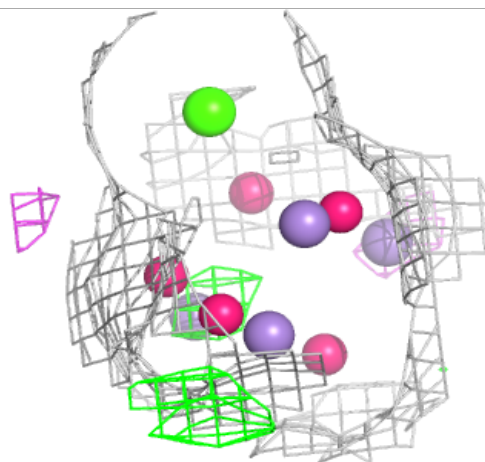
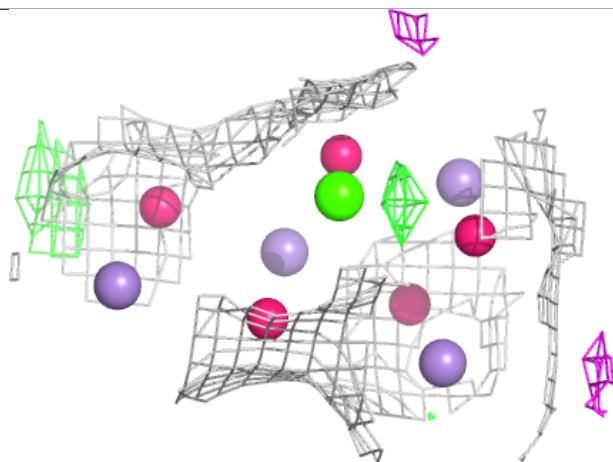
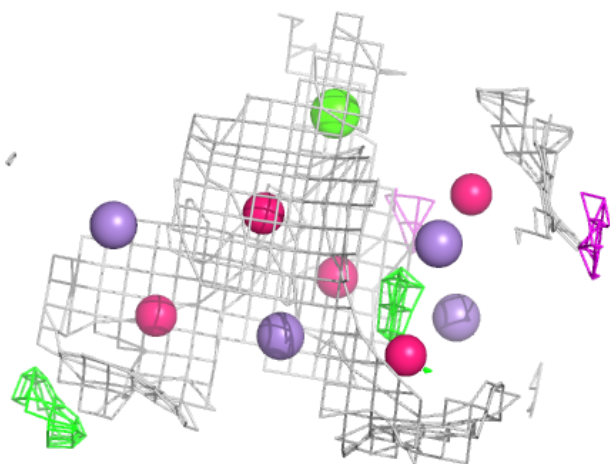
Electron density around HEC v 201:

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



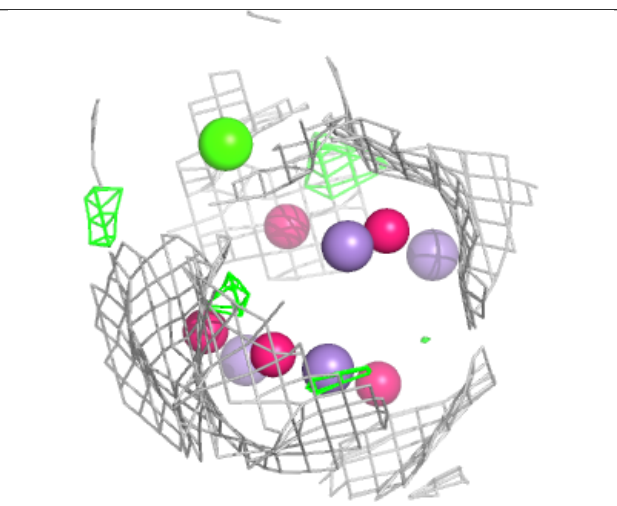
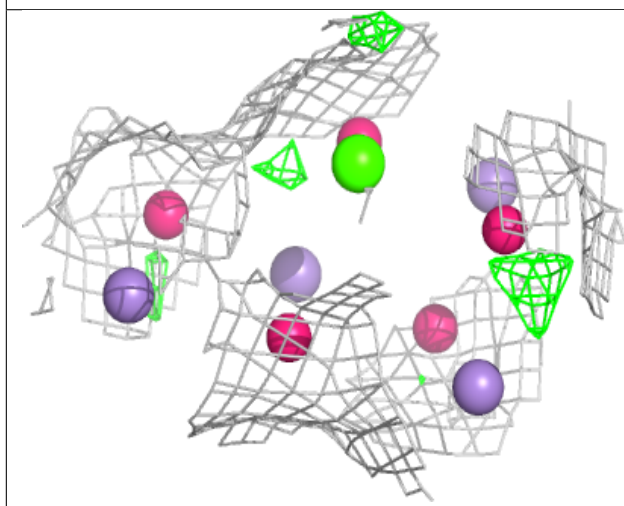
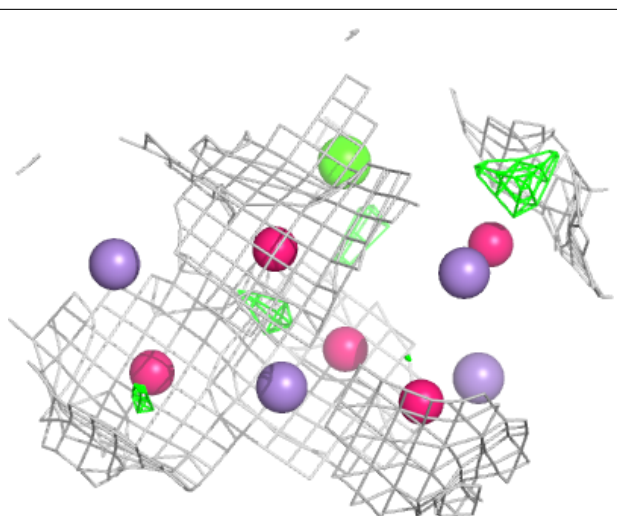
Electron density around OEX a 601:

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



Electron density around OEX A 601:

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



6.5 Other polymers [i](#)

There are no such residues in this entry.