



wwPDB X-ray Structure Validation Summary Report ⓘ

Aug 17, 2026 – 01:53 PM EDT

PDB ID : 9Z35 / pdb_00009z35
Title : RT XFEL structure of two-flash state of Photosystem II (2F, S3 rich) at 1.93 Angstrom obtained from anomalous data at 9.5 keV
Authors : Bhowmick, A.; Kern, J.; Yano, J.; Yachandra, V.K.; Minnetian, N.M.; Zhang, M.
Deposited on : 2025-11-05
Resolution : 1.93 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:

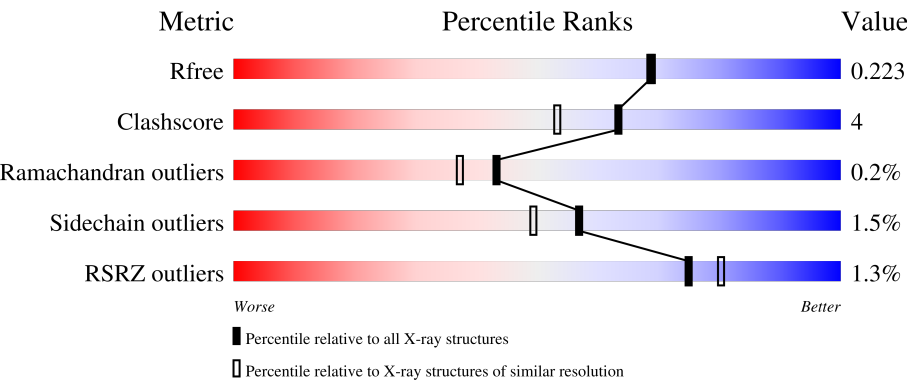
MolProbity	:	4-5-2 with Phenix2.0
Mogul	:	2022.3.0, CSD as543be (2022)
Xtriage (Phenix)	:	2.0
EDS	:	3.0
Buster-report	:	wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics	:	20250101.v01 (using entries in the PDB archive January 1st 2025)
CCP4	:	9.0.015 (Gargrove)
Density-Fitness	:	1.0.12
Ideal 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 i

The following experimental techniques were used to determine the structure:
X-RAY DIFFRACTION

The reported resolution of this entry is 1.93 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.



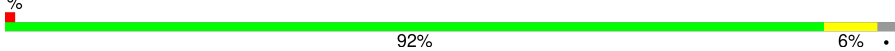
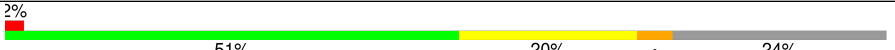
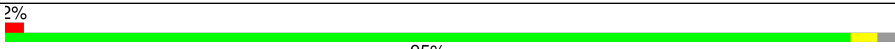
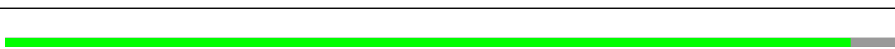
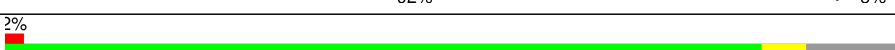
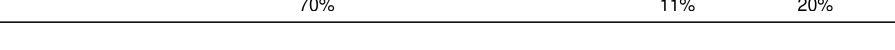
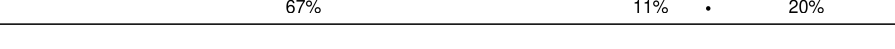
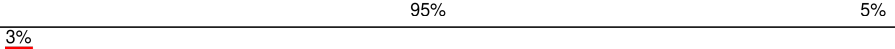
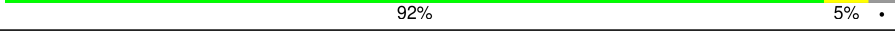
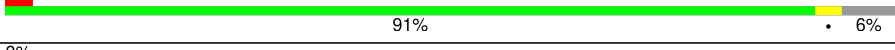
Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R _{free}	180053	1452 (1.94-1.94)
Clashscore	190562	1494 (1.94-1.94)
Ramachandran outliers	187476	1479 (1.94-1.94)
Sidechain outliers	187428	1479 (1.94-1.94)
RSRZ outliers	180081	1453 (1.94-1.94)

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	92%6%.
1	a	344	90%6%..
2	B	510	% 92%7%.
2	b	510	% 91%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
36	HEC	V	201	X	-	-	-
36	HEC	v	201	X	-	-	-

2 Entry composition

There are 37 unique types of molecules in this entry. The entry contains 54713 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	69	0
			3152	2055	520	558	19			
1	a	334	Total	C	N	O	S	0	69	0
			3149	2052	520	558	19			

- 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	11	0
			3509	2302	586	607	14			
3	c	451	Total	C	N	O	S	0	12	0
			3583	2343	602	624	14			

- 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	10	0
			2805	1859	456	478	12			
4	d	341	Total	C	N	O	S	0	11	0
			2811	1863	456	480	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.

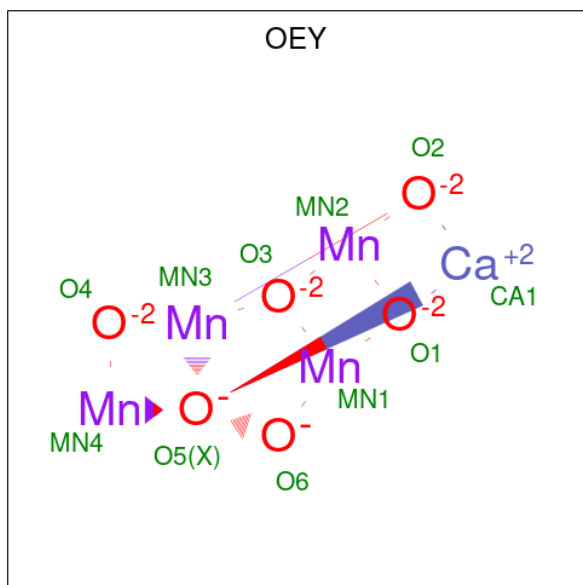
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
20	R	28	Total	C	N	O	0	0	0
			221	151	38	32			

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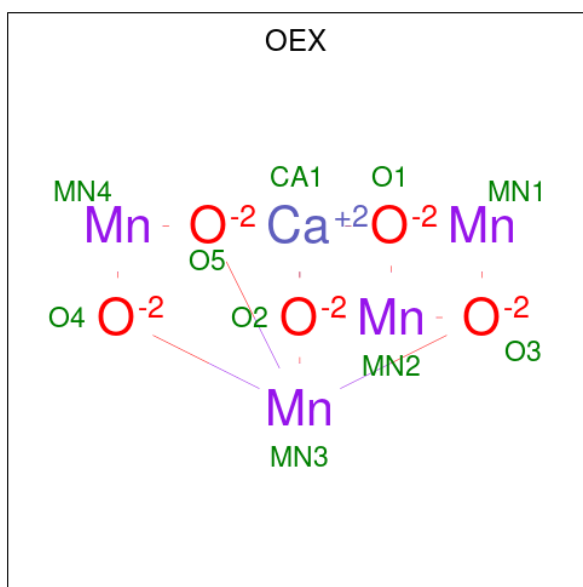
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
20	r	28	Total	C	N	O	0	0	0
			221	151	38	32			

- Molecule 21 is CA-MN4-O6 CLUSTER (CCD ID: OEY) (formula: CaMn_4O_6) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
21	A	1	Total	Ca	Mn	O	0	1
			11	1	4	6		
21	a	1	Total	Ca	Mn	O	0	1
			11	1	4	6		

- Molecule 22 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
22	A	1	Total	Ca	Mn	O	0	1
			10	1	4	5		
22	a	1	Total	Ca	Mn	O	0	1
			10	1	4	5		

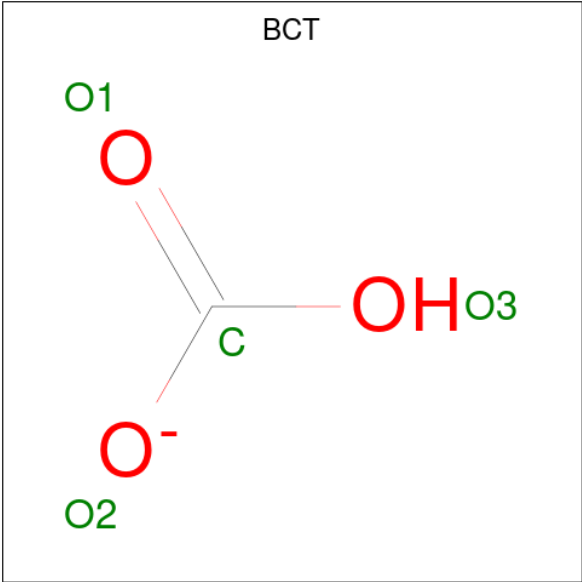
- Molecule 23 is FE (II) ION (CCD ID: FE2) (formula: Fe).

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

- Molecule 24 is CHLORIDE ION (CCD ID: CL) (formula: Cl).

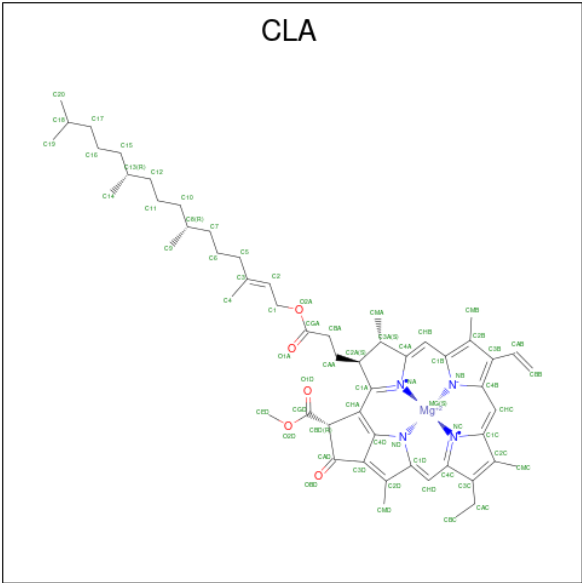
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
24	A	2	Total	Cl	0	0
			2	2		
24	a	2	Total	Cl	0	0
			2	2		

- Molecule 25 is BICARBONATE ION (CCD ID: BCT) (formula: CHO₃).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
25	A	1	Total	C	O		0	0
			4	1	3			
25	a	1	Total	C	O		0	0
			4	1	3			

- Molecule 26 is CHLOROPHYLL A (CCD ID: CLA) (formula: $C_{55}H_{72}MgN_4O_5$).



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

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
26	A	1	Total	C	Mg	N	O	0	0
			54	44	1	4	5		
26	A	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	B	1	Total	C	Mg	N	O	0	0
			60	50	1	4	5		
26	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
26	C	1	Total	C	Mg	N	O	0	0
			59	49	1	4	5		
26	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	D	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	D	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	a	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	a	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	a	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	a	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		

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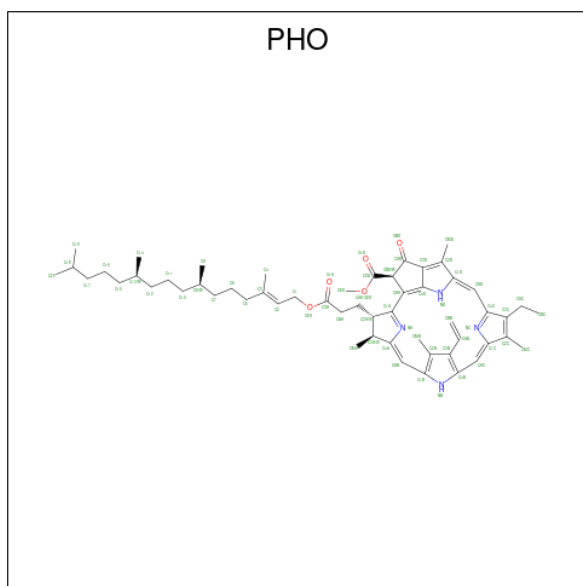
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
26	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
26	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
26	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
26	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
26	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
26	b	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
26	b	1	Total 65	C 55	Mg 1	N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

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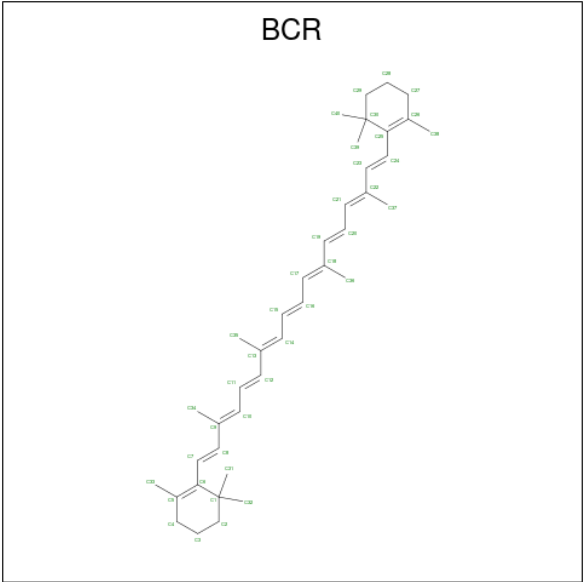
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
26	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	d	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
26	d	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		

- Molecule 27 is PHEOPHYTIN A (CCD ID: PHO) (formula: $C_{55}H_{74}N_4O_5$).



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

- Molecule 28 is BETA-CAROTENE (CCD ID: BCR) (formula: $C_{40}H_{56}$).



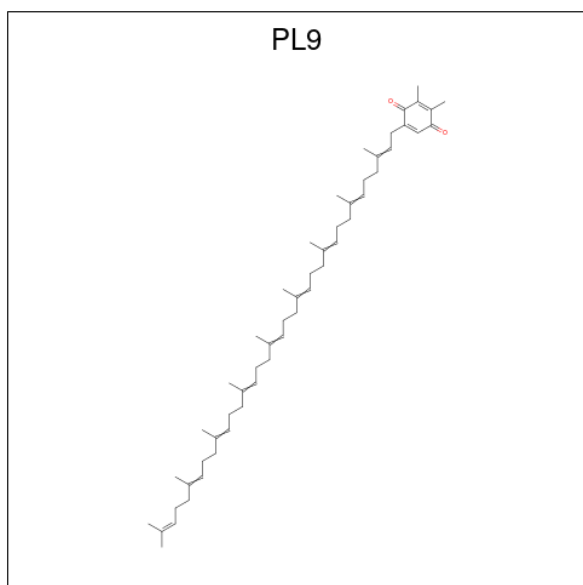
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
28	A	1	Total C 40 40	0	0
28	B	1	Total C 40 40	0	0
28	B	1	Total C 40 40	0	0
28	B	1	Total C 40 40	0	0
28	C	1	Total C 40 40	0	0
28	C	1	Total C 40 40	0	0
28	C	1	Total C 40 40	0	0
28	D	1	Total C 40 40	0	0
28	H	1	Total C 40 40	0	0
28	K	1	Total C 40 40	0	0
28	T	1	Total C 40 40	0	0
28	a	1	Total C 40 40	0	0
28	b	1	Total C 40 40	0	0
28	b	1	Total C 40 40	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
28	b	1	Total C 40 40	0	0
28	c	1	Total C 40 40	0	0
28	c	1	Total C 40 40	0	0
28	d	1	Total C 40 40	0	0
28	k	1	Total C 40 40	0	0
28	k	1	Total C 40 40	0	0
28	t	1	Total C 40 40	0	0
28	x	1	Total C 40 40	0	0

- Molecule 29 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: C₅₃H₈₀O₂).



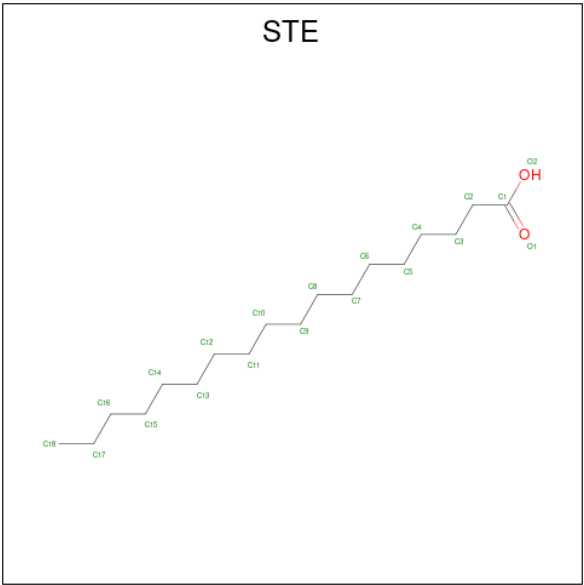
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
29	A	1	Total C O 55 53 2	0	0
29	D	1	Total C O 55 53 2	0	0

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

- Molecule 30 is STEARIC ACID (CCD ID: STE) (formula: C₁₈H₃₆O₂).



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

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
30	C	1	Total C 7 7	0	0
30	C	1	Total C 10 10	0	0
30	C	1	Total C O 12 10 2	0	0
30	C	1	Total C 16 16	0	0
30	C	1	Total C 14 14	0	0
30	D	1	Total C O 20 18 2	0	0
30	D	1	Total C 9 9	0	0
30	E	1	Total C O 12 10 2	0	0
30	E	1	Total C 12 12	0	0
30	E	1	Total C O 20 18 2	0	0
30	H	1	Total C 18 18	0	0
30	I	1	Total C O 17 15 2	0	0
30	I	1	Total C O 15 13 2	0	0
30	J	1	Total C O 12 10 2	0	0
30	K	1	Total C 14 14	0	0
30	M	1	Total C O 15 13 2	0	0
30	M	1	Total C 10 10	0	0
30	T	1	Total C 16 16	0	0
30	T	1	Total C 15 15	0	0
30	Z	1	Total C 17 17	0	0
30	a	1	Total C O 12 10 2	0	0

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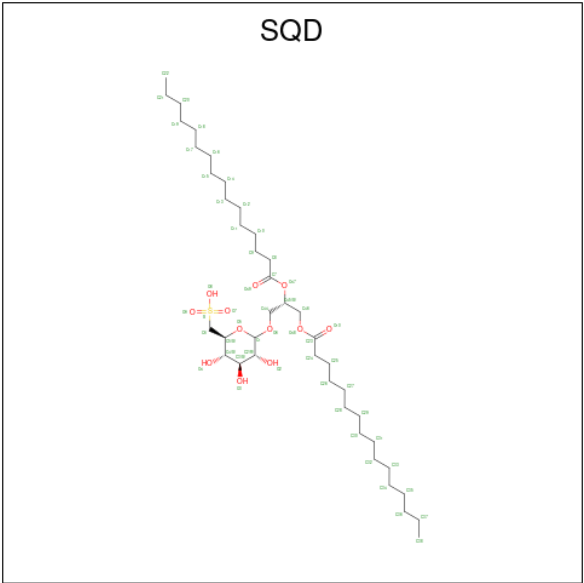
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
30	a	1	Total C 15 15	0	0
30	b	1	Total C O 20 18 2	0	0
30	b	1	Total C O 16 14 2	0	0
30	b	1	Total C 10 10	0	0
30	b	1	Total C 11 11	0	0
30	c	1	Total C 13 13	0	0
30	c	1	Total C 18 18	0	0
30	d	1	Total C O 20 18 2	0	0
30	d	1	Total C O 20 18 2	0	0
30	d	1	Total C O 20 18 2	0	0
30	e	1	Total C 9 9	0	0
30	e	1	Total C 9 9	0	0
30	e	1	Total C O 13 11 2	0	0
30	f	1	Total C 8 8	0	0
30	h	1	Total C 10 10	0	0
30	i	1	Total C O 12 10 2	0	0
30	i	1	Total C 6 6	0	0
30	j	1	Total C O 12 10 2	0	0
30	j	1	Total C 16 16	0	0
30	k	1	Total C O 14 12 2	0	0
30	m	1	Total C O 12 10 2	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
30	m	1	Total C 18 18	0	0
30	t	1	Total C O 14 12 2	0	0
30	t	1	Total C 10 10	0	0
30	z	1	Total C 9 9	0	0

- Molecule 31 is 1,2-DI-O-ACYL-3-O-[6-DEOXY-6-SULFO-ALPHA-D-GLUCOPYRANOSYL]-SN-GLYCEROL (CCD ID: SQD) (formula: C₄₁H₇₈O₁₂S).



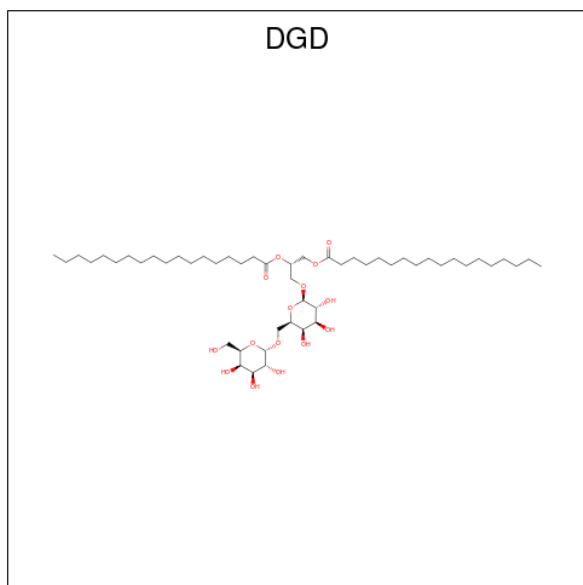
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
31	A	1	Total C O S 52 39 12 1	0	0
31	A	1	Total C O S 43 30 12 1	0	0
31	B	1	Total C O S 54 41 12 1	0	0
31	F	1	Total C O S 36 25 10 1	0	0
31	a	1	Total C O S 54 41 12 1	0	0
31	a	1	Total C O S 54 41 12 1	0	0
31	b	1	Total C O S 49 36 12 1	0	0

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
31	f	1	Total	C	O	S	0	0
			41	28	12	1		

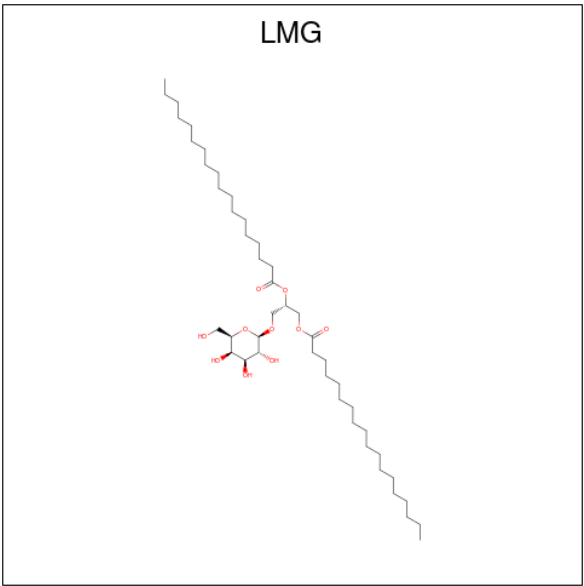
- Molecule 32 is DIGALACTOSYL DIACYL GLYCEROL (DGDG) (CCD ID: DGD) (formula: $C_{51}H_{96}O_{15}$).



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 1,2-DISTEAROYL-MONOGALACTOSYL-DIGLYCERIDE (CCD ID:

LMG) (formula: C₄₅H₈₆O₁₀).



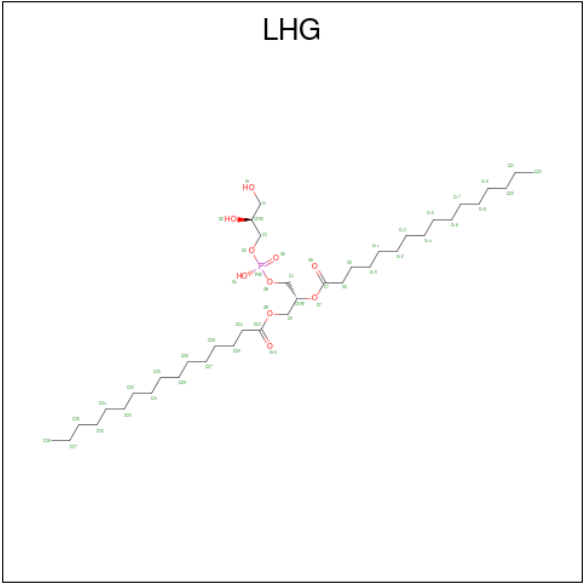
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
33	B	1	Total	C	O	0	0
			45	35	10		
33	C	1	Total	C	O	0	0
			36	26	10		
33	C	1	Total	C	O	0	0
			48	38	10		
33	C	1	Total	C	O	0	0
			48	38	10		
33	D	1	Total	C	O	0	0
			50	40	10		
33	D	1	Total	C	O	0	0
			51	41	10		
33	M	1	Total	C	O	0	0
			51	41	10		
33	a	1	Total	C	O	0	0
			55	45	10		
33	a	1	Total	C	O	0	0
			49	39	10		
33	b	1	Total	C	O	0	0
			55	45	10		
33	c	1	Total	C	O	0	0
			30	25	5		
33	c	1	Total	C	O	0	0
			46	36	10		
33	c	1	Total	C	O	0	0
			48	38	10		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
33	d	1	Total	C	O	0	0
			44	34	10		
33	m	1	Total	C	O	0	0
			51	41	10		

- Molecule 34 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (CCD ID: LHG) (formula: C₃₈H₇₅O₁₀P).



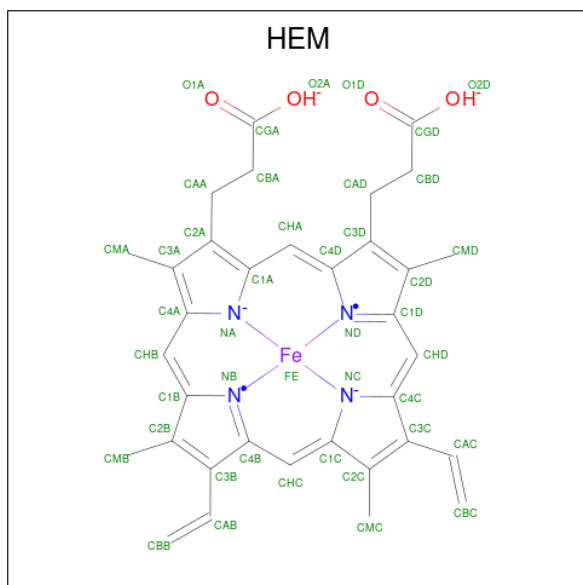
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
34	B	1	Total	C	O	P	0	0
			49	38	10	1		
34	D	1	Total	C	O	P	0	0
			49	38	10	1		
34	D	1	Total	C	O	P	0	0
			47	36	10	1		
34	D	1	Total	C	O	P	0	0
			49	38	10	1		
34	E	1	Total	C	O	P	0	0
			49	38	10	1		
34	a	1	Total	C	O	P	0	0
			42	31	10	1		
34	d	1	Total	C	O	P	0	0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

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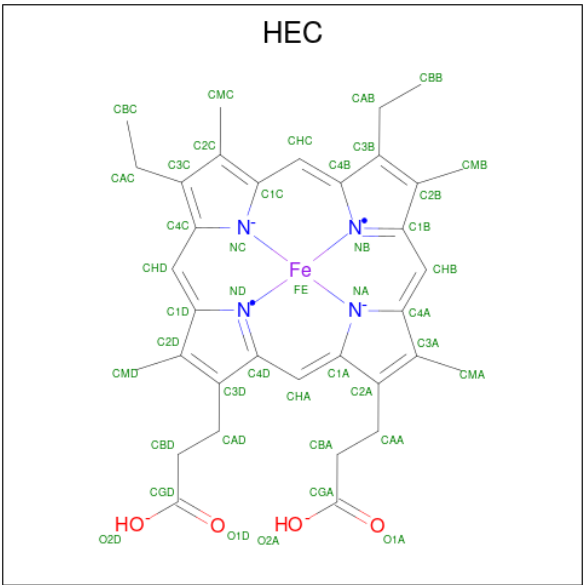
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
34	1	1	Total	C	O	P	0	0
			49	38	10	1		

- Molecule 35 is PROTOPORPHYRIN IX CONTAINING FE (CCD ID: HEM) (formula: $C_{34}H_{32}FeN_4O_4$).



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

- Molecule 36 is HEME C (CCD ID: HEC) (formula: $\text{C}_{34}\text{H}_{36}\text{FeN}_4\text{O}_4$).



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

- Molecule 37 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
37	A	180	Total	O	0	4
			184	184		
37	B	318	Total	O	0	0
			318	318		
37	C	253	Total	O	0	0
			253	253		
37	D	156	Total	O	0	0
			156	156		
37	E	43	Total	O	0	0
			43	43		
37	F	17	Total	O	0	0
			17	17		
37	H	40	Total	O	0	0
			40	40		
37	I	17	Total	O	0	0
			17	17		
37	J	12	Total	O	0	0
			12	12		
37	K	5	Total	O	0	0
			5	5		

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
37	L	10	Total 10	O 10	0	0
37	M	14	Total 14	O 14	0	0
37	O	146	Total 146	O 146	0	0
37	T	14	Total 14	O 14	0	0
37	U	69	Total 69	O 69	0	0
37	V	97	Total 97	O 97	0	0
37	Y	9	Total 9	O 9	0	0
37	X	14	Total 14	O 14	0	0
37	Z	8	Total 8	O 8	0	0
37	R	1	Total 1	O 1	0	0
37	a	150	Total 154	O 154	0	4
37	b	280	Total 280	O 280	0	0
37	c	224	Total 224	O 224	0	0
37	d	177	Total 177	O 177	0	0
37	e	27	Total 27	O 27	0	0
37	f	10	Total 10	O 10	0	0
37	h	31	Total 31	O 31	0	0
37	i	13	Total 13	O 13	0	0
37	j	10	Total 10	O 10	0	0
37	k	10	Total 10	O 10	0	0
37	l	16	Total 16	O 16	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
37	m	14	Total 14	O 14	0	0
37	o	163	Total 163	O 163	0	0
37	t	13	Total 13	O 13	0	0
37	u	86	Total 86	O 86	0	0
37	v	71	Total 71	O 71	0	0
37	y	6	Total 6	O 6	0	0
37	x	9	Total 9	O 9	0	0
37	z	8	Total 8	O 8	0	0
37	r	2	Total 2	O 2	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.

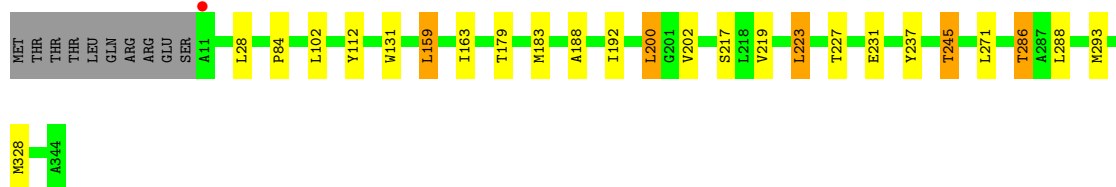
- Molecule 1: Photosystem II protein D1 1

Chain A: 

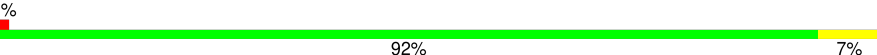


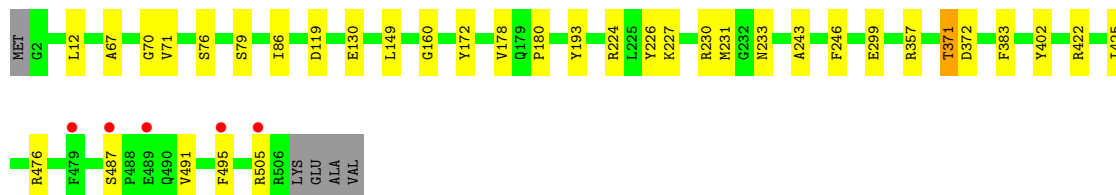
- Molecule 1: Photosystem II protein D1 1

Chain a: 

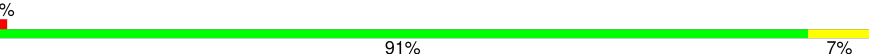


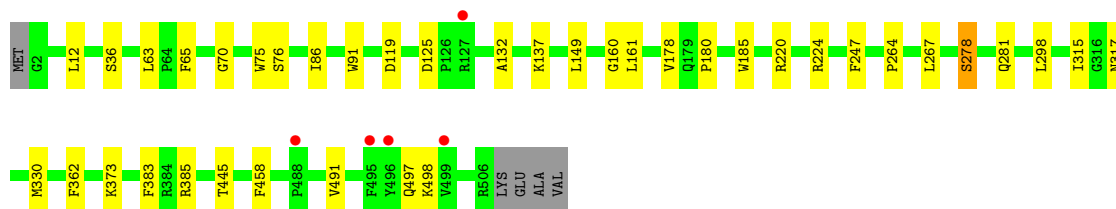
- Molecule 2: Photosystem II CP47 reaction center protein

Chain B: 

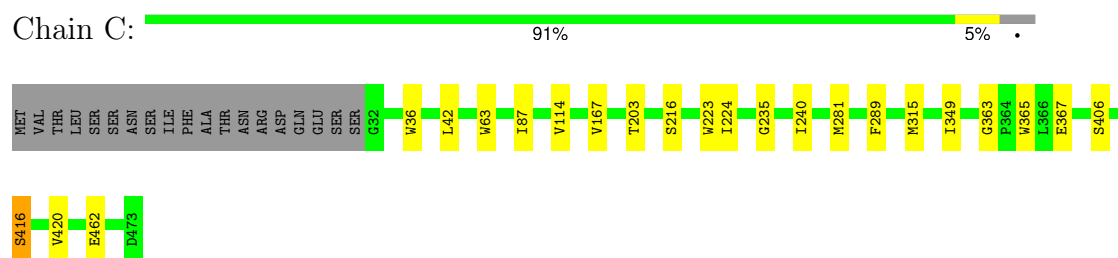


- Molecule 2: Photosystem II CP47 reaction center protein

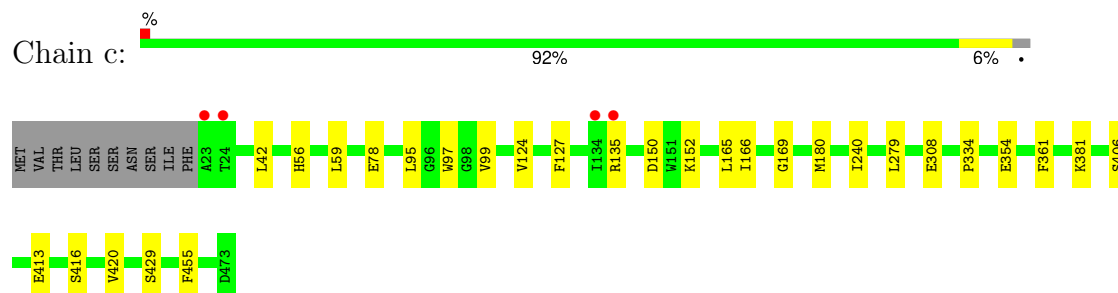
Chain b: 



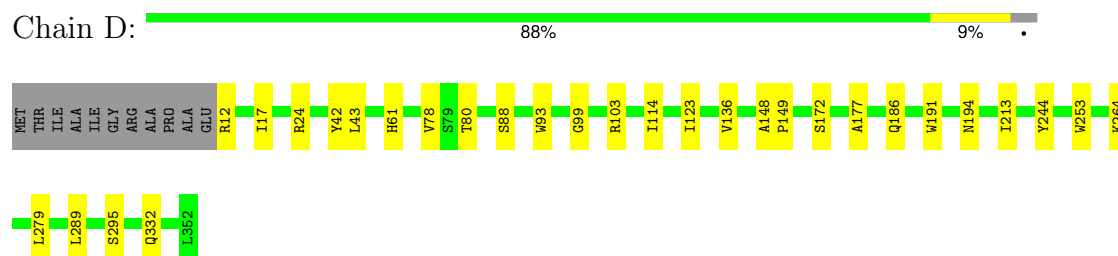
- Molecule 3: Photosystem II CP43 reaction center protein



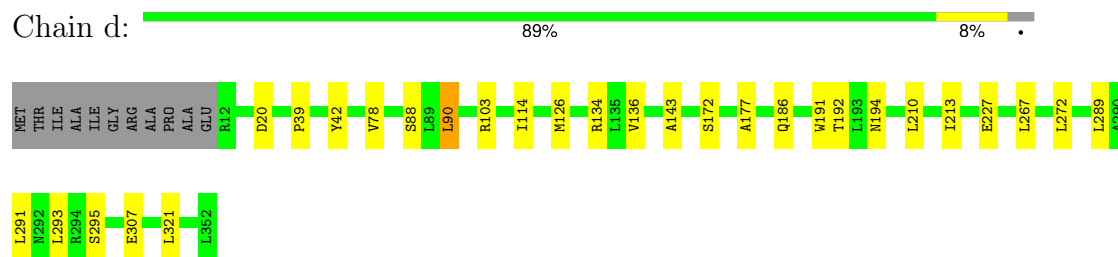
- Molecule 3: Photosystem II CP43 reaction center protein



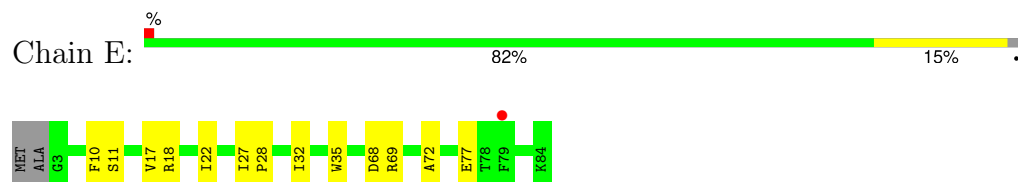
- Molecule 4: Photosystem II D2 protein



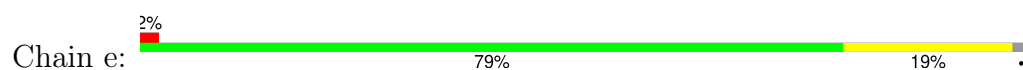
- Molecule 4: Photosystem II D2 protein



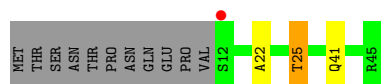
- Molecule 5: Cytochrome b559 subunit alpha



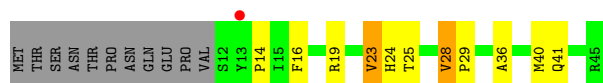
- Molecule 5: Cytochrome b559 subunit alpha



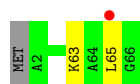
- Molecule 6: Cytochrome b559 subunit beta



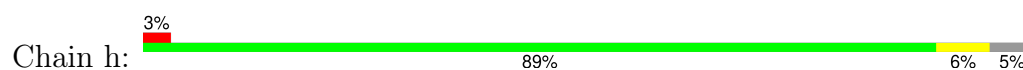
- Molecule 6: Cytochrome b559 subunit beta



- Molecule 7: Photosystem II reaction center protein H



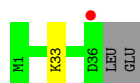
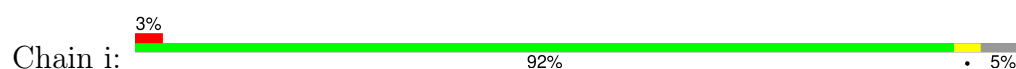
- Molecule 7: Photosystem II reaction center protein H



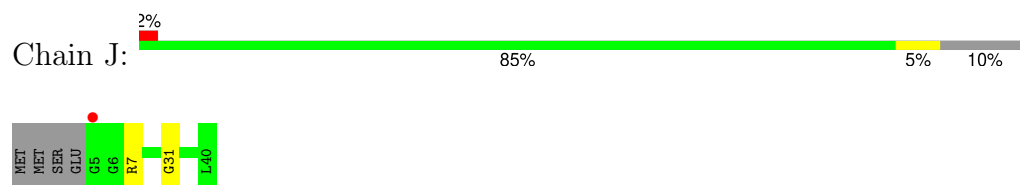
- Molecule 8: Photosystem II reaction center protein I



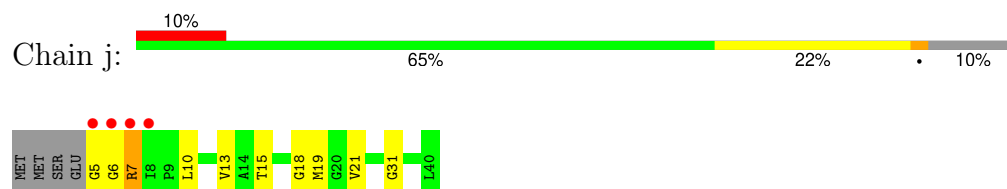
- Molecule 8: Photosystem II reaction center protein I



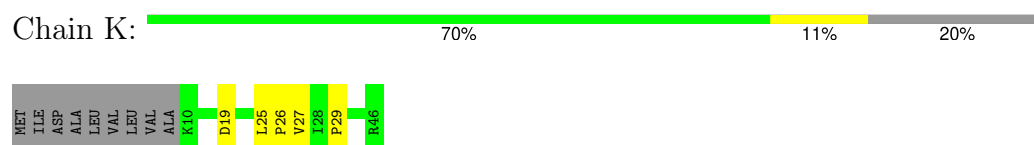
- Molecule 9: Photosystem II reaction center protein J



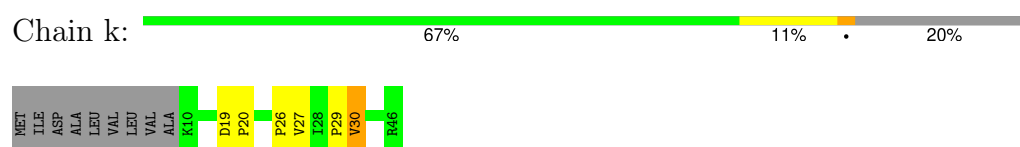
- Molecule 9: Photosystem II reaction center protein J



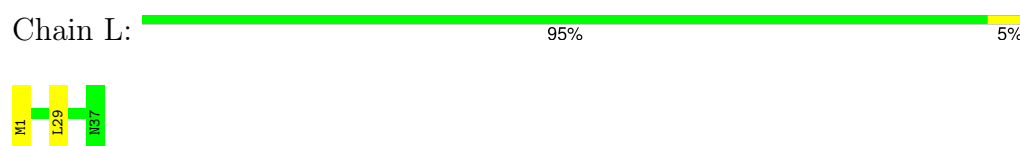
- Molecule 10: Photosystem II reaction center protein K



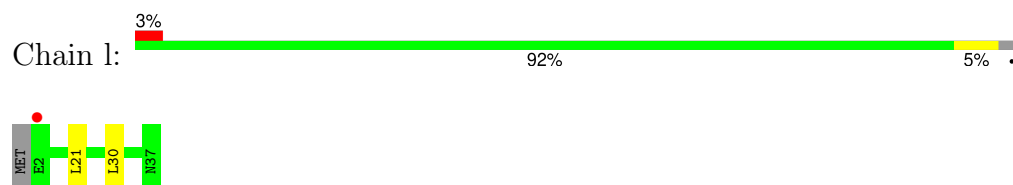
- Molecule 10: Photosystem II reaction center protein K



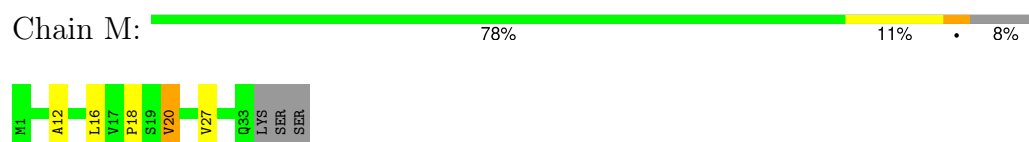
- Molecule 11: Photosystem II reaction center protein L



- Molecule 11: Photosystem II reaction center protein L



- Molecule 12: Photosystem II reaction center protein M



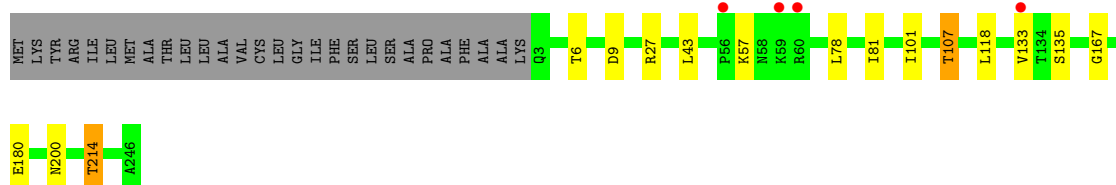
- Molecule 12: Photosystem II reaction center protein M

Chain m:  75% 14% 11%



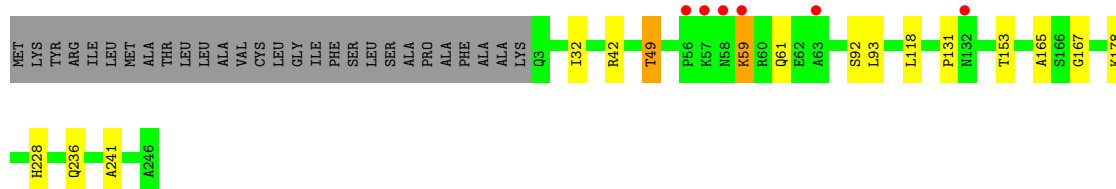
- Molecule 13: Photosystem II manganese-stabilizing polypeptide

Chain O:  84% 5% 10%



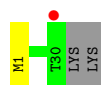
- Molecule 13: Photosystem II manganese-stabilizing polypeptide

Chain o:  84% 5% 10%



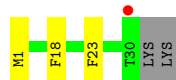
- Molecule 14: Photosystem II reaction center protein T

Chain T:  91% 3% 6%



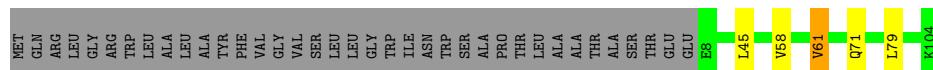
- Molecule 14: Photosystem II reaction center protein T

Chain t:  84% 9% 6%

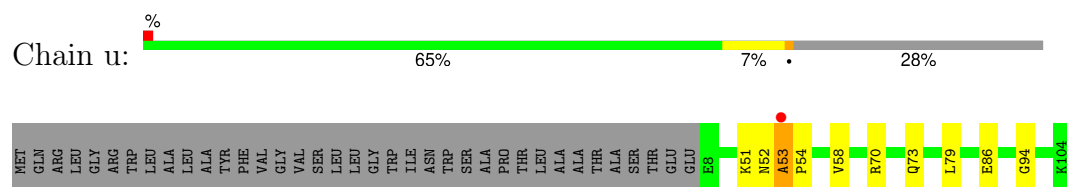


- Molecule 15: Photosystem II 12 kDa extrinsic protein

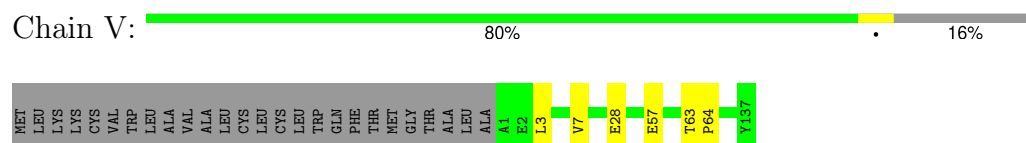
Chain U:  69% 28%



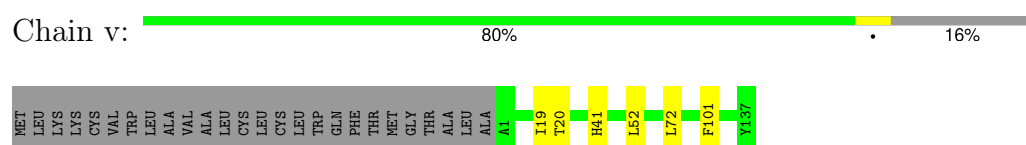
- Molecule 15: Photosystem II 12 kDa extrinsic protein



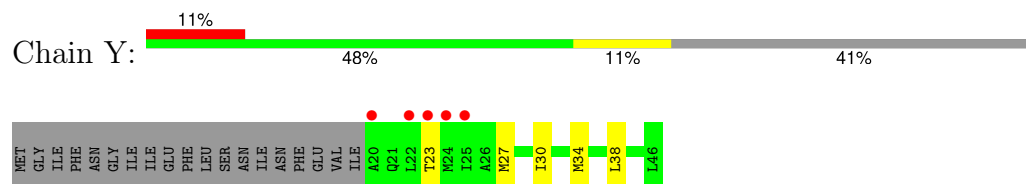
- Molecule 16: Cytochrome c-550



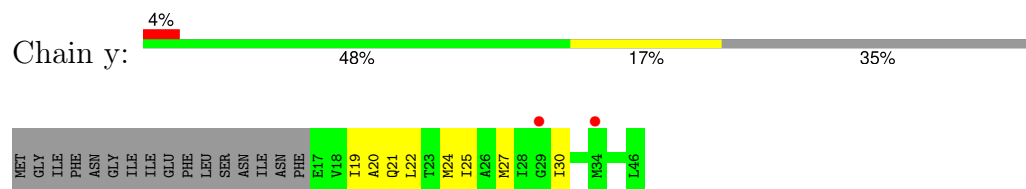
- Molecule 16: Cytochrome c-550



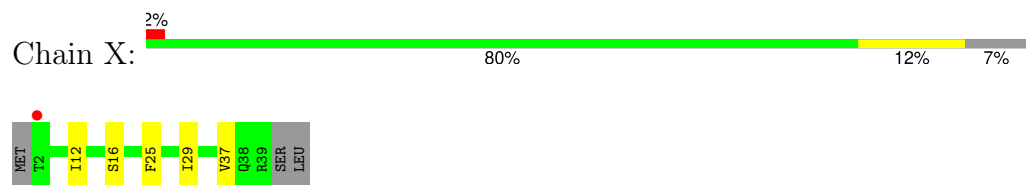
- Molecule 17: Photosystem II reaction center protein Ycf12



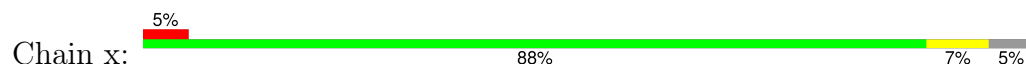
- Molecule 17: Photosystem II reaction center protein Ycf12



- Molecule 18: Photosystem II reaction center X protein



- Molecule 18: Photosystem II reaction center X protein

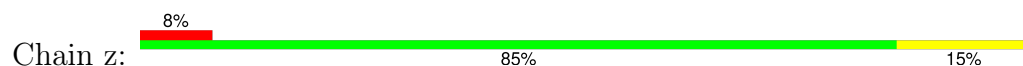




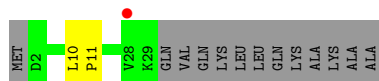
- Molecule 19: Photosystem II reaction center protein Z



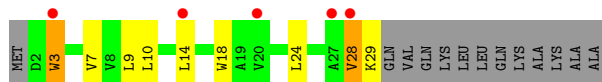
- Molecule 19: Photosystem II reaction center protein Z



- 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	117.53Å 222.82Å 308.93Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	33.83 – 1.93 33.83 – 1.93	Depositor EDS
% Data completeness (in resolution range)	97.4 (33.83-1.93) 82.7 (33.83-1.93)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	0.28 (at 1.94Å)	Xtriage
Refinement program	PHENIX 2.0_5848	Depositor
R, R_{free}	0.189 , 0.223 0.189 , 0.223	Depositor DCC
R_{free} test set	5354 reflections (0.85%)	wwPDB-VP
Wilson B-factor (Å ²)	24.1	Xtriage
Anisotropy	0.241	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.29 , 56.3	EDS
L-test for twinning ²	$\langle L \rangle = 0.48$, $\langle L^2 \rangle = 0.31$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o, F_c correlation	0.96	EDS
Total number of atoms	54713	wwPDB-VP
Average B, all atoms (Å ²)	39.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 2.42% 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 [i](#)

5.1 Standard geometry [i](#)

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

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	0.31	0/3252	0.46	0/4430
1	a	0.30	0/3249	0.46	0/4426
2	B	0.31	0/4166	0.46	0/5675
2	b	0.29	0/4127	0.45	0/5623
3	C	0.29	0/3625	0.44	0/4935
3	c	0.28	0/3705	0.43	0/5042
4	D	0.32	0/2902	0.48	0/3951
4	d	0.30	0/2911	0.46	0/3963
5	E	0.25	0/688	0.44	0/940
5	e	0.23	0/683	0.42	0/932
6	F	0.27	0/284	0.44	0/387
6	f	0.24	0/284	0.46	0/387
7	H	0.30	0/517	0.47	0/705
7	h	0.25	0/505	0.43	0/689
8	I	0.27	0/293	0.44	0/396
8	i	0.26	0/293	0.36	0/396
9	J	0.24	0/263	0.38	0/356
9	j	0.23	0/263	0.40	0/356
10	K	0.25	0/303	0.44	0/416
10	k	0.23	0/303	0.37	0/416
11	L	0.32	0/311	0.43	0/422
11	l	0.31	0/303	0.42	0/412
12	M	0.30	0/249	0.51	0/341
12	m	0.30	0/244	0.46	0/334
13	O	0.29	0/1904	0.49	0/2585
13	o	0.29	0/1905	0.48	0/2583
14	T	0.30	0/257	0.48	0/349
14	t	0.28	0/255	0.38	0/346
15	U	0.25	0/785	0.43	0/1064
15	u	0.27	0/785	0.47	0/1064
16	V	0.28	0/1085	0.47	0/1473

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
16	v	0.25	0/1085	0.41	0/1473
17	Y	0.18	0/197	0.34	0/264
17	y	0.20	0/219	0.35	0/294
18	X	0.25	0/284	0.36	0/384
18	x	0.20	0/289	0.32	0/391
19	Z	0.18	0/490	0.41	0/669
19	z	0.18	0/488	0.33	0/666
20	R	0.17	0/227	0.33	0/313
20	r	0.20	0/227	0.37	0/313
All	All	0.29	0/44205	0.45	0/60161

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

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	3152	0	3015	13	0
1	a	3149	0	3006	20	0
2	B	4016	0	3883	27	0
2	b	3984	0	3842	32	0
3	C	3509	0	3426	16	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
3	c	3583	0	3499	17	0
4	D	2805	0	2702	21	0
4	d	2811	0	2708	20	0
5	E	666	0	651	13	0
5	e	664	0	648	14	0
6	F	275	0	282	3	0
6	f	275	0	282	9	0
7	H	505	0	528	3	0
7	h	493	0	514	3	0
8	I	296	0	311	0	0
8	i	296	0	311	1	0
9	J	257	0	268	1	0
9	j	257	0	268	11	0
10	K	293	0	305	3	0
10	k	293	0	305	3	0
11	L	304	0	316	2	0
11	l	296	0	304	0	0
12	M	256	0	269	4	0
12	m	251	0	267	3	0
13	O	1870	0	1830	10	0
13	o	1874	0	1846	11	0
14	T	258	0	261	1	0
14	t	256	0	256	3	0
15	U	774	0	773	3	0
15	u	774	0	773	7	0
16	V	1064	0	1073	2	0
16	v	1064	0	1073	4	0
17	Y	196	0	217	3	0
17	y	218	0	241	5	0
18	X	281	0	312	4	0
18	x	286	0	314	2	0
19	Z	479	0	516	4	0
19	z	477	0	509	8	0
20	R	221	0	238	1	0
20	r	221	0	238	5	0
21	A	11	0	0	1	0
21	a	11	0	0	0	0
22	A	10	0	0	0	0
22	a	10	0	0	0	0
23	A	1	0	0	0	0
23	a	1	0	0	0	0
24	A	2	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
24	a	2	0	0	0	0
25	A	4	0	1	0	0
25	a	4	0	1	0	0
26	A	249	0	264	13	0
26	B	1035	0	1139	28	0
26	C	839	0	922	15	0
26	D	130	0	144	3	0
26	a	260	0	288	6	0
26	b	1035	0	1139	22	0
26	c	839	0	919	15	0
26	d	130	0	144	4	0
27	A	64	0	74	0	0
27	D	64	0	74	2	0
27	a	64	0	74	0	0
27	d	64	0	74	0	0
28	A	40	0	56	0	0
28	B	120	0	168	2	0
28	C	120	0	168	5	0
28	D	40	0	56	1	0
28	H	40	0	56	2	0
28	K	40	0	56	0	0
28	T	40	0	56	3	0
28	a	40	0	56	1	0
28	b	120	0	168	4	0
28	c	80	0	112	1	0
28	d	40	0	56	1	0
28	k	80	0	112	2	0
28	t	40	0	56	3	0
28	x	40	0	56	3	0
29	A	55	0	80	6	0
29	D	55	0	80	1	0
29	a	55	0	80	3	0
29	d	55	0	80	1	0
30	A	45	0	83	3	0
30	B	47	0	70	3	0
30	C	78	0	126	4	0
30	D	29	0	52	4	0
30	E	44	0	74	5	0
30	H	18	0	35	4	0
30	I	32	0	48	1	0
30	J	12	0	16	0	0
30	K	14	0	27	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
30	M	25	0	38	0	0
30	T	31	0	60	4	0
30	Z	17	0	33	2	0
30	a	27	0	42	2	0
30	b	57	0	96	2	0
30	c	31	0	57	0	0
30	d	60	0	105	3	0
30	e	31	0	52	1	0
30	f	8	0	15	0	0
30	h	10	0	19	1	0
30	i	18	0	24	1	0
30	j	28	0	47	1	0
30	k	14	0	20	2	0
30	m	30	0	51	1	0
30	t	24	0	36	0	0
30	z	9	0	14	2	0
31	A	95	0	124	0	0
31	B	54	0	78	4	0
31	F	36	0	46	0	0
31	a	108	0	156	4	0
31	b	49	0	65	0	0
31	f	41	0	49	2	0
32	A	66	0	96	2	0
32	C	186	0	246	3	0
32	H	62	0	82	2	0
32	c	186	0	246	3	0
32	h	62	0	82	1	0
33	B	45	0	60	5	0
33	C	132	0	172	3	0
33	D	101	0	142	6	0
33	M	51	0	72	2	0
33	a	104	0	154	6	0
33	b	55	0	86	1	0
33	c	124	0	172	5	0
33	d	44	0	58	0	0
33	m	51	0	72	3	0
34	B	49	0	74	2	0
34	D	145	0	215	7	0
34	E	49	0	74	1	0
34	a	42	0	57	2	0
34	d	137	0	199	1	0
34	l	49	0	74	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
35	F	43	0	30	1	0
35	e	43	0	30	2	0
36	V	43	0	30	0	0
36	v	43	0	30	1	0
37	A	184	0	0	3	0
37	B	318	0	0	8	0
37	C	253	0	0	4	0
37	D	156	0	0	0	0
37	E	43	0	0	1	0
37	F	17	0	0	1	0
37	H	40	0	0	1	0
37	I	17	0	0	0	0
37	J	12	0	0	1	0
37	K	5	0	0	1	0
37	L	10	0	0	0	0
37	M	14	0	0	0	0
37	O	146	0	0	0	0
37	R	1	0	0	0	0
37	T	14	0	0	0	0
37	U	69	0	0	0	0
37	V	97	0	0	1	0
37	X	14	0	0	0	0
37	Y	9	0	0	0	0
37	Z	8	0	0	1	0
37	a	154	0	0	3	0
37	b	280	0	0	9	0
37	c	224	0	0	3	0
37	d	177	0	0	2	0
37	e	27	0	0	0	0
37	f	10	0	0	1	0
37	h	31	0	0	1	0
37	i	13	0	0	0	0
37	j	10	0	0	0	0
37	k	10	0	0	0	0
37	l	16	0	0	1	0
37	m	14	0	0	0	0
37	o	163	0	0	1	0
37	r	2	0	0	0	0
37	t	13	0	0	0	0
37	u	86	0	0	2	0
37	v	71	0	0	1	0
37	x	9	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
37	y	6	0	0	1	0
37	z	8	0	0	0	0
All	All	54713	0	53500	426	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 4.

The worst 5 of 426 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)
29:A:612:PL9:H361	6:F:25:THR:HG21	1.57	0.86
2:B:495:PHE:HD2	2:B:505:ARG:HH12	1.20	0.85
30:b:625:STE:H181	30:d:410:STE:H32	1.60	0.84
35:F:101:HEM:HBC2	35:F:101:HEM:HHD	1.68	0.76
1:a:237:TYR:HB2	1:a:245:THR:HG21	1.69	0.74

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	400/344 (116%)	395 (99%)	4 (1%)	1 (0%)	36	30
1	a	400/344 (116%)	394 (98%)	6 (2%)	0	100	100
2	B	508/510 (100%)	501 (99%)	7 (1%)	0	100	100
2	b	504/510 (99%)	495 (98%)	8 (2%)	1 (0%)	43	37
3	C	451/461 (98%)	444 (98%)	6 (1%)	1 (0%)	43	37
3	c	461/461 (100%)	451 (98%)	9 (2%)	1 (0%)	43	37
4	D	348/352 (99%)	338 (97%)	10 (3%)	0	100	100
4	d	349/352 (99%)	341 (98%)	8 (2%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
5	E	81/84 (96%)	81 (100%)	0	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
7	H	63/66 (96%)	60 (95%)	3 (5%)	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%)	33 (97%)	0	1 (3%)	3	0
9	j	34/40 (85%)	33 (97%)	1 (3%)	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%)	9 (4%)	1 (0%)	30	22
13	o	242/272 (89%)	233 (96%)	9 (4%)	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	4
16	V	135/163 (83%)	132 (98%)	2 (2%)	1 (1%)	18	9
16	v	135/163 (83%)	133 (98%)	2 (2%)	0	100	100
17	Y	25/46 (54%)	24 (96%)	1 (4%)	0	100	100
17	y	28/46 (61%)	27 (96%)	1 (4%)	0	100	100
18	X	36/41 (88%)	35 (97%)	1 (3%)	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%)	57 (95%)	2 (3%)	1 (2%)	7	1
20	R	26/41 (63%)	26 (100%)	0	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
20	r	26/41 (63%)	25 (96%)	0	1 (4%)	2 0
All	All	5405/5700 (95%)	5289 (98%)	106 (2%)	10 (0%)	43 37

5 of 10 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
13	O	57	LYS

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	326/280 (116%)	323 (99%)	3 (1%)	70 67
1	a	325/280 (116%)	317 (98%)	8 (2%)	42 29
2	B	408/407 (100%)	404 (99%)	4 (1%)	68 64
2	b	403/407 (99%)	399 (99%)	4 (1%)	68 64
3	C	353/362 (98%)	350 (99%)	3 (1%)	73 71
3	c	362/362 (100%)	352 (97%)	10 (3%)	38 25
4	D	285/283 (101%)	284 (100%)	1 (0%)	84 84
4	d	286/283 (101%)	280 (98%)	6 (2%)	47 37
5	E	72/73 (99%)	70 (97%)	2 (3%)	38 25
5	e	71/73 (97%)	71 (100%)	0	100 100
6	F	28/39 (72%)	27 (96%)	1 (4%)	31 17
6	f	28/39 (72%)	26 (93%)	2 (7%)	13 3
7	H	54/55 (98%)	54 (100%)	0	100 100
7	h	53/55 (96%)	52 (98%)	1 (2%)	50 40
8	I	32/34 (94%)	32 (100%)	0	100 100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
8	i	32/34 (94%)	32 (100%)	0	100	100
9	J	24/28 (86%)	24 (100%)	0	100	100
9	j	24/28 (86%)	23 (96%)	1 (4%)	26	13
10	K	30/37 (81%)	29 (97%)	1 (3%)	33	20
10	k	30/37 (81%)	28 (93%)	2 (7%)	15	4
11	L	35/35 (100%)	35 (100%)	0	100	100
11	l	34/35 (97%)	32 (94%)	2 (6%)	18	6
12	M	28/32 (88%)	27 (96%)	1 (4%)	31	17
12	m	28/32 (88%)	27 (96%)	1 (4%)	31	17
13	O	206/228 (90%)	202 (98%)	4 (2%)	50	40
13	o	207/228 (91%)	204 (99%)	3 (1%)	59	52
14	T	26/28 (93%)	26 (100%)	0	100	100
14	t	25/28 (89%)	25 (100%)	0	100	100
15	U	84/112 (75%)	83 (99%)	1 (1%)	63	57
15	u	84/112 (75%)	84 (100%)	0	100	100
16	V	117/138 (85%)	115 (98%)	2 (2%)	53	44
16	v	117/138 (85%)	116 (99%)	1 (1%)	70	67
17	Y	19/37 (51%)	19 (100%)	0	100	100
17	y	22/37 (60%)	21 (96%)	1 (4%)	24	11
18	X	31/34 (91%)	31 (100%)	0	100	100
18	x	31/34 (91%)	30 (97%)	1 (3%)	34	20
19	Z	52/52 (100%)	52 (100%)	0	100	100
19	z	51/52 (98%)	51 (100%)	0	100	100
20	R	22/33 (67%)	22 (100%)	0	100	100
20	r	22/33 (67%)	18 (82%)	4 (18%)	2	0
All	All	4467/4654 (96%)	4397 (98%)	70 (2%)	57	46

5 of 70 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
11	l	21	LEU
12	m	13	LEU
18	x	2	THR

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Mol	Chain	Res	Type
1	a	159[A]	LEU
1	a	28	LEU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 47 such sidechains are listed below:

Mol	Chain	Res	Type
3	c	322	GLN
7	h	59	ASN
3	c	378	ASN
4	d	236	ASN
12	m	32	GLN

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	0.48	0	8,9,11	0.77	0
14	FME	T	1	14	8,9,10	0.48	0	8,9,11	0.99	0
12	FME	m	1	12	8,9,10	0.41	0	8,9,11	0.59	0
8	FME	I	1	8	8,9,10	0.45	0	8,9,11	0.80	0
8	FME	i	1	8	8,9,10	0.51	0	8,9,11	0.68	0
12	FME	M	1	12	8,9,10	0.43	0	8,9,11	0.59	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	-	3/7/9/11	-
14	FME	T	1	14	-	3/7/9/11	-
12	FME	m	1	12	-	1/7/9/11	-
8	FME	I	1	8	-	1/7/9/11	-
8	FME	i	1	8	-	0/7/9/11	-
12	FME	M	1	12	-	2/7/9/11	-

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

5 of 10 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
12	M	1	FME	O-C-CA-CB
14	T	1	FME	N-CA-CB-CG
14	t	1	FME	N-CA-CB-CG
14	T	1	FME	CB-CG-SD-CE
14	t	1	FME	CB-CG-SD-CE

There are no ring outliers.

2 monomers are involved in 2 short contacts:

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

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 213 ligands modelled in this entry, 6 are monoatomic - leaving 207 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	$\# Z > 2$
32	DGD	c	519	-	63,63,67	0.54	0	77,77,81	0.88	3 (3%)
33	LMG	d	411	-	44,44,55	0.54	0	52,52,63	0.68	0
30	STE	e	103	-	8,8,19	0.36	0	7,7,19	0.70	0
26	CLA	c	503	3	69,73,73	1.39	8 (11%)	82,113,113	1.44	8 (9%)
21	OEY	A	601[B]	3,37,1	0,16,16	-	-	-	-	-
28	BCR	B	619	-	41,41,41	0.39	0	56,56,56	0.79	0
30	STE	B	624	-	17,17,19	0.63	0	17,17,19	1.16	0
26	CLA	b	601	37	69,73,73	1.20	6 (8%)	82,113,113	1.38	5 (6%)
30	STE	C	528	-	15,15,19	0.34	0	14,14,19	0.82	0
28	BCR	A	611	-	41,41,41	0.39	0	56,56,56	0.58	0
26	CLA	c	509	3	69,73,73	1.23	7 (10%)	82,113,113	1.34	7 (8%)
30	STE	A	620	-	10,10,19	0.37	0	9,9,19	0.75	0
29	PL9	D	405	-	55,55,55	0.99	2 (3%)	68,69,69	1.48	14 (20%)
28	BCR	C	521	-	41,41,41	0.36	0	56,56,56	0.89	1 (1%)
31	SQD	A	616	-	41,43,54	1.78	8 (19%)	51,54,65	1.59	8 (15%)
32	DGD	C	525	-	63,63,67	0.59	0	77,77,81	0.79	2 (2%)
26	CLA	b	606	2	69,73,73	1.48	7 (10%)	82,113,113	1.41	7 (8%)
30	STE	A	618	-	7,7,19	0.31	0	6,6,19	0.79	0
34	LHG	B	622	-	48,48,48	0.50	0	51,54,54	0.71	0
33	LMG	c	523	-	48,48,55	0.51	0	56,56,63	0.92	2 (3%)
29	PL9	d	405	-	55,55,55	1.03	2 (3%)	68,69,69	1.62	12 (17%)
28	BCR	B	617	-	41,41,41	0.42	0	56,56,56	0.80	2 (3%)
26	CLA	A	608	37	69,73,73	1.20	6 (8%)	82,113,113	1.21	6 (7%)
26	CLA	c	504	37	64,68,73	1.28	7 (10%)	76,107,113	1.33	9 (11%)
32	DGD	c	520	-	63,63,67	0.55	0	77,77,81	0.77	1 (1%)
35	HEM	F	101	6,5	50,50,50	1.45	4 (8%)	67,82,82	1.20	5 (7%)
26	CLA	b	602	2	69,73,73	1.25	7 (10%)	82,113,113	1.39	12 (14%)
35	HEM	e	102	6,5	50,50,50	1.53	8 (16%)	67,82,82	1.43	8 (11%)
36	HEC	v	201	16	50,50,50	1.69	4 (8%)	68,82,82	1.28	6 (8%)
31	SQD	a	614	-	52,54,54	1.55	7 (13%)	62,65,65	1.95	9 (14%)
25	BCT	A	606	23	3,3,3	0.76	0	2,3,3	2.19	1 (50%)
29	PL9	A	612	-	55,55,55	0.77	1 (1%)	68,69,69	1.49	12 (17%)
26	CLA	C	506	3	69,73,73	1.27	8 (11%)	82,113,113	1.25	7 (8%)
26	CLA	B	615	2	69,73,73	1.42	7 (10%)	82,113,113	1.46	5 (6%)
33	LMG	a	617	-	55,55,55	0.49	0	63,63,63	1.07	6 (9%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
30	STE	M	102	-	14,14,19	0.68	0	14,14,19	1.19	1 (7%)
34	LHG	D	408	-	48,48,48	0.58	0	51,54,54	0.59	1 (1%)
33	LMG	C	522	-	48,48,55	0.46	0	56,56,63	0.65	0
28	BCR	d	404	-	41,41,41	0.38	0	56,56,56	1.07	3 (5%)
26	CLA	b	608	2	69,73,73	1.18	6 (8%)	82,113,113	1.41	10 (12%)
32	DGD	C	523	-	63,63,67	0.57	0	77,77,81	0.86	2 (2%)
26	CLA	B	604	2	69,73,73	1.51	7 (10%)	82,113,113	1.47	8 (9%)
33	LMG	M	101	-	51,51,55	0.51	0	59,59,63	0.90	2 (3%)
33	LMG	m	101	-	51,51,55	0.49	0	59,59,63	0.79	2 (3%)
26	CLA	B	606	2	69,73,73	1.39	7 (10%)	82,113,113	1.45	6 (7%)
34	LHG	l	101	-	48,48,48	0.48	0	51,54,54	0.63	0
33	LMG	B	620	-	45,45,55	0.46	0	53,53,63	0.89	5 (9%)
28	BCR	c	515	-	41,41,41	0.38	0	56,56,56	0.76	1 (1%)
30	STE	T	102	-	15,15,19	0.38	0	14,14,19	0.79	0
26	CLA	B	605	2	69,73,73	1.20	7 (10%)	82,113,113	1.29	8 (9%)
30	STE	b	625	-	10,10,19	0.32	0	9,9,19	0.82	0
26	CLA	b	611	2	69,73,73	1.21	8 (11%)	82,113,113	1.37	6 (7%)
26	CLA	c	512	3	69,73,73	1.16	7 (10%)	82,113,113	1.36	5 (6%)
30	STE	I	101	-	16,16,19	0.64	0	16,16,19	1.04	0
22	OEX	a	602[A]	3,37,1	0,14,14	-	-	-		
34	LHG	d	408	-	48,48,48	0.52	0	51,54,54	0.75	2 (3%)
26	CLA	D	403	4	69,73,73	1.22	8 (11%)	82,113,113	1.30	8 (9%)
30	STE	a	619	-	11,11,19	0.76	0	11,11,19	0.98	0
26	CLA	A	614	37	69,73,73	1.27	7 (10%)	82,113,113	1.29	5 (6%)
30	STE	C	520	-	9,9,19	0.36	0	8,8,19	0.75	0
30	STE	H	103	-	17,17,19	0.39	0	16,16,19	0.76	0
26	CLA	c	507	37	69,73,73	1.25	6 (8%)	82,113,113	1.34	7 (8%)
30	STE	e	101	-	8,8,19	0.39	0	7,7,19	0.64	0
30	STE	C	529	-	13,13,19	0.37	0	12,12,19	0.77	0
30	STE	e	104	-	12,12,19	0.64	0	12,12,19	1.37	2 (16%)
34	LHG	E	101	-	48,48,48	0.56	0	51,54,54	0.52	0
30	STE	B	621	-	16,16,19	0.62	0	16,16,19	1.26	0
26	CLA	a	607	1	69,73,73	1.25	10 (14%)	82,113,113	1.34	8 (9%)
31	SQD	a	616	-	52,54,54	1.62	8 (15%)	62,65,65	1.55	10 (16%)
30	STE	C	527	-	11,11,19	0.74	0	11,11,19	1.50	2 (18%)
30	STE	c	517	-	17,17,19	0.34	0	16,16,19	0.81	0
26	CLA	b	603	2	69,73,73	1.23	7 (10%)	82,113,113	1.34	8 (9%)
28	BCR	c	514	-	41,41,41	0.31	0	56,56,56	0.59	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
33	LMG	C	517	-	35,35,55	0.52	0	43,43,63	1.41	6 (13%)
26	CLA	C	502	3	69,73,73	1.25	7 (10%)	82,113,113	1.32	6 (7%)
26	CLA	d	402	4	69,73,73	1.17	8 (11%)	82,113,113	1.31	9 (10%)
28	BCR	K	101	-	41,41,41	0.40	0	56,56,56	0.88	0
26	CLA	a	608	37	69,73,73	1.24	7 (10%)	82,113,113	1.27	9 (10%)
26	CLA	a	613	37	69,73,73	1.19	7 (10%)	82,113,113	1.30	10 (12%)
30	STE	E	102	-	11,11,19	0.74	0	11,11,19	1.15	1 (9%)
30	STE	b	623	-	15,15,19	0.60	0	15,15,19	1.28	2 (13%)
30	STE	c	516	-	12,12,19	0.34	0	11,11,19	0.78	0
26	CLA	C	512	3	69,73,73	1.30	9 (13%)	82,113,113	1.26	7 (8%)
26	CLA	b	613	2	69,73,73	1.18	7 (10%)	82,113,113	1.33	9 (10%)
30	STE	C	516	-	13,13,19	0.76	0	13,13,19	0.98	0
25	BCT	a	606	23	3,3,3	0.81	0	2,3,3	2.00	1 (50%)
31	SQD	F	102	-	34,36,54	1.43	4 (11%)	42,45,65	1.42	8 (19%)
26	CLA	a	610	1	69,73,73	1.26	6 (8%)	82,113,113	1.29	7 (8%)
33	LMG	b	622	-	55,55,55	0.47	0	63,63,63	1.13	5 (7%)
30	STE	i	101	-	11,11,19	0.74	0	11,11,19	1.14	0
26	CLA	c	501	3	69,73,73	1.13	6 (8%)	82,113,113	1.39	6 (7%)
26	CLA	B	611	2	69,73,73	1.14	5 (7%)	82,113,113	1.40	6 (7%)
30	STE	C	519	-	6,6,19	0.35	0	5,5,19	0.71	0
26	CLA	D	402	4	69,73,73	1.11	5 (7%)	82,113,113	1.30	8 (9%)
26	CLA	b	615	2	69,73,73	1.37	8 (11%)	82,113,113	1.31	8 (9%)
26	CLA	C	507	37	69,73,73	1.20	7 (10%)	82,113,113	1.37	8 (9%)
31	SQD	f	101	-	39,41,54	1.63	7 (17%)	49,52,65	1.91	10 (20%)
34	LHG	d	409	-	38,38,48	0.56	0	41,44,54	0.55	0
30	STE	A	619	-	16,16,19	0.34	0	15,15,19	0.79	0
30	STE	B	625	-	11,11,19	0.74	0	11,11,19	1.11	0
30	STE	J	101	-	11,11,19	0.68	0	11,11,19	1.17	0
26	CLA	b	609	2	69,73,73	1.28	8 (11%)	82,113,113	1.39	11 (13%)
28	BCR	b	619	-	41,41,41	0.40	0	56,56,56	0.89	1 (1%)
26	CLA	c	502	3	69,73,73	1.19	7 (10%)	82,113,113	1.29	6 (7%)
30	STE	b	624	-	9,9,19	0.34	0	8,8,19	0.76	0
31	SQD	A	615	-	50,52,54	1.56	5 (10%)	60,63,65	1.90	12 (20%)
32	DGD	h	101	-	63,63,67	0.55	0	77,77,81	0.98	6 (7%)
26	CLA	A	607	1	69,73,73	1.34	8 (11%)	82,113,113	1.24	6 (7%)
27	PHO	d	401	-	58,69,69	2.18	9 (15%)	55,99,99	1.81	11 (20%)
28	BCR	D	404	-	41,41,41	0.41	0	56,56,56	1.02	2 (3%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
27	PHO	a	609	-	58,69,69	2.08	10 (17%)	55,99,99	1.63	7 (12%)
34	LHG	D	409	-	46,46,48	0.57	0	49,52,54	0.54	0
26	CLA	B	612	2	69,73,73	1.13	7 (10%)	82,113,113	1.39	8 (9%)
26	CLA	C	508	3	69,73,73	1.38	9 (13%)	82,113,113	1.36	7 (8%)
26	CLA	B	613	2	69,73,73	1.25	8 (11%)	82,113,113	1.46	6 (7%)
26	CLA	C	511	3	69,73,73	1.28	7 (10%)	82,113,113	1.39	5 (6%)
30	STE	h	102	-	9,9,19	0.36	0	8,8,19	0.72	0
31	SQD	b	620	-	47,49,54	1.62	8 (17%)	57,60,65	1.74	10 (17%)
36	HEC	V	201	16	50,50,50	1.69	6 (12%)	68,82,82	1.40	9 (13%)
26	CLA	B	610	37	69,73,73	1.20	7 (10%)	82,113,113	1.39	8 (9%)
32	DGD	C	524	-	63,63,67	0.55	0	77,77,81	0.75	1 (1%)
26	CLA	d	403	4	69,73,73	1.38	8 (11%)	82,113,113	1.18	9 (10%)
26	CLA	b	614	2	69,73,73	1.27	6 (8%)	82,113,113	1.35	6 (7%)
30	STE	t	102	-	13,13,19	0.60	0	13,13,19	1.32	2 (15%)
28	BCR	T	101	-	41,41,41	0.49	0	56,56,56	0.93	1 (1%)
28	BCR	k	101	-	41,41,41	0.42	0	56,56,56	1.01	3 (5%)
30	STE	C	518	-	4,4,19	0.37	0	3,3,19	0.47	0
26	CLA	c	510	3	69,73,73	1.34	8 (11%)	82,113,113	1.24	6 (7%)
30	STE	m	103	-	17,17,19	0.35	0	16,16,19	0.82	0
26	CLA	C	510	3	69,73,73	1.24	8 (11%)	82,113,113	1.27	7 (8%)
33	LMG	c	518	-	29,29,55	0.42	0	31,31,63	0.59	0
26	CLA	B	614	2	69,73,73	1.33	8 (11%)	82,113,113	1.34	9 (10%)
30	STE	D	411	-	19,19,19	0.59	0	19,19,19	1.21	2 (10%)
30	STE	j	101	-	11,11,19	0.78	0	11,11,19	1.18	1 (9%)
26	CLA	C	513	3	69,73,73	1.28	7 (10%)	82,113,113	1.28	8 (9%)
26	CLA	b	607	37	69,73,73	1.20	6 (8%)	82,113,113	1.26	9 (10%)
26	CLA	C	505	3	69,73,73	1.20	7 (10%)	82,113,113	1.36	12 (14%)
26	CLA	B	601	37	69,73,73	1.32	7 (10%)	82,113,113	1.32	6 (7%)
30	STE	d	410	-	19,19,19	0.57	0	19,19,19	1.00	0
26	CLA	c	506	3	69,73,73	1.26	9 (13%)	82,113,113	1.18	5 (6%)
26	CLA	C	501	3	69,73,73	1.43	8 (11%)	82,113,113	1.36	6 (7%)
28	BCR	C	514	-	41,41,41	0.32	0	56,56,56	0.64	0
26	CLA	B	616	2	64,68,73	1.43	10 (15%)	76,107,113	1.34	6 (7%)
34	LHG	D	410	-	48,48,48	0.56	0	51,54,54	0.69	0
26	CLA	c	511	3	69,73,73	1.54	6 (8%)	82,113,113	1.39	7 (8%)
28	BCR	b	618	-	41,41,41	0.46	0	56,56,56	0.94	3 (5%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
30	STE	D	412	-	8,8,19	0.33	0	7,7,19	0.77	0
26	CLA	B	603	2	69,73,73	1.28	6 (8%)	82,113,113	1.37	8 (9%)
33	LMG	a	618	-	49,49,55	0.51	0	57,57,63	0.82	2 (3%)
26	CLA	b	610	37	69,73,73	1.22	6 (8%)	82,113,113	1.30	9 (10%)
27	PHO	A	609	-	58,69,69	1.94	9 (15%)	55,99,99	1.69	9 (16%)
32	DGD	c	521	-	63,63,67	0.53	0	77,77,81	0.68	2 (2%)
30	STE	b	621	-	19,19,19	0.56	0	19,19,19	1.11	0
32	DGD	A	617	-	67,67,67	0.53	0	81,81,81	1.00	6 (7%)
30	STE	d	412	-	19,19,19	0.61	0	19,19,19	1.04	0
30	STE	f	102	-	7,7,19	0.36	0	6,6,19	0.67	0
30	STE	T	103	-	14,14,19	0.31	0	13,13,19	0.95	0
26	CLA	B	608	2	69,73,73	1.20	8 (11%)	82,113,113	1.36	8 (9%)
30	STE	E	104	-	19,19,19	0.59	0	19,19,19	1.14	1 (5%)
28	BCR	B	618	-	41,41,41	0.43	0	56,56,56	0.68	1 (1%)
33	LMG	c	522	-	46,46,55	0.52	0	54,54,63	0.68	0
26	CLA	A	610	1	58,62,73	1.11	3 (5%)	68,99,113	1.39	9 (13%)
26	CLA	c	513	3	69,73,73	1.18	7 (10%)	82,113,113	1.22	7 (8%)
34	LHG	d	407	-	48,48,48	0.54	0	51,54,54	0.61	1 (1%)
26	CLA	b	605	2	69,73,73	1.30	7 (10%)	82,113,113	1.36	9 (10%)
26	CLA	c	505	3	69,73,73	1.19	8 (11%)	82,113,113	1.29	8 (9%)
28	BCR	a	611	-	41,41,41	0.47	0	56,56,56	0.75	1 (1%)
26	CLA	C	503	3	69,73,73	1.53	9 (13%)	82,113,113	1.56	12 (14%)
30	STE	I	102	-	14,14,19	0.70	0	14,14,19	1.10	0
30	STE	d	406	-	19,19,19	0.61	0	19,19,19	1.01	0
30	STE	j	102	-	15,15,19	0.37	0	14,14,19	0.76	0
30	STE	z	101	-	8,8,19	0.38	0	7,7,19	0.61	0
32	DGD	H	102	-	63,63,67	0.54	0	77,77,81	0.93	3 (3%)
28	BCR	C	515	-	41,41,41	0.33	0	56,56,56	0.64	0
30	STE	k	103	-	13,13,19	0.69	0	13,13,19	1.14	0
30	STE	E	103	-	11,11,19	0.33	0	10,10,19	0.77	0
22	OEX	A	602[A]	3,37,1	0,14,14	-	-	-	-	-
26	CLA	B	609	2	69,73,73	1.30	4 (5%)	82,113,113	1.29	7 (8%)
21	OXY	a	601[B]	3,37,1	0,16,16	-	-	-	-	-
27	PHO	D	401	-	58,69,69	2.05	9 (15%)	55,99,99	1.70	10 (18%)
30	STE	t	103	-	9,9,19	0.41	0	8,8,19	0.67	0
31	SQD	B	623	-	52,54,54	1.57	9 (17%)	62,65,65	1.67	12 (19%)
26	CLA	B	602	2	69,73,73	1.19	6 (8%)	82,113,113	1.26	8 (9%)
28	BCR	b	617	-	41,41,41	0.42	0	56,56,56	0.75	1 (1%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
30	STE	a	620	-	14,14,19	0.34	0	13,13,19	0.82	0
33	LMG	D	407	-	51,51,55	0.49	0	59,59,63	0.73	1 (1%)
28	BCR	H	101	-	41,41,41	0.40	0	56,56,56	0.96	3 (5%)
28	BCR	k	102	-	41,41,41	0.39	0	56,56,56	0.87	1 (1%)
26	CLA	C	504	37	63,67,73	1.31	8 (12%)	74,105,113	1.27	5 (6%)
30	STE	m	102	-	11,11,19	0.68	0	11,11,19	1.36	2 (18%)
28	BCR	t	101	-	41,41,41	0.48	0	56,56,56	1.05	5 (8%)
33	LMG	C	526	-	48,48,55	0.50	0	56,56,63	0.65	0
30	STE	M	103	-	9,9,19	0.31	0	8,8,19	0.88	0
33	LMG	D	406	-	50,50,55	0.48	0	58,58,63	1.15	5 (8%)
26	CLA	b	612	2	69,73,73	1.13	7 (10%)	82,113,113	1.29	9 (10%)
30	STE	A	613	-	8,8,19	0.34	0	7,7,19	0.71	0
26	CLA	b	604	2	69,73,73	1.21	8 (11%)	82,113,113	1.55	11 (13%)
26	CLA	c	508	3	68,72,73	1.24	8 (11%)	80,111,113	1.24	7 (8%)
29	PL9	a	612	-	55,55,55	0.78	1 (1%)	68,69,69	1.56	11 (16%)
26	CLA	C	509	3	69,73,73	1.18	7 (10%)	82,113,113	1.25	7 (8%)
26	CLA	b	616	2	64,68,73	1.26	7 (10%)	76,107,113	1.49	10 (13%)
28	BCR	x	101	-	41,41,41	0.43	0	56,56,56	0.87	2 (3%)
34	LHG	a	615	-	41,41,48	0.57	0	44,47,54	0.58	0
26	CLA	B	607	37	69,73,73	1.11	6 (8%)	82,113,113	1.26	6 (7%)
30	STE	K	102	-	13,13,19	0.34	0	12,12,19	0.75	0
30	STE	i	102	-	5,5,19	0.37	0	4,4,19	0.53	0
30	STE	Z	101	-	16,16,19	0.36	0	15,15,19	0.73	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
32	DGD	c	519	-	-	17/51/91/95	0/2/2/2
33	LMG	d	411	-	-	11/39/59/70	0/1/1/1
30	STE	e	103	-	-	5/6/6/17	-
26	CLA	c	503	3	-	8/39/115/115	-
28	BCR	B	619	-	-	0/29/63/63	0/2/2/2
30	STE	B	624	-	-	11/15/15/17	-
26	CLA	b	601	37	-	10/39/115/115	-
30	STE	C	528	-	-	5/13/13/17	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
28	BCR	A	611	-	-	0/29/63/63	0/2/2/2
26	CLA	c	509	3	-	10/39/115/115	-
30	STE	A	620	-	-	5/8/8/17	-
29	PL9	D	405	-	-	6/53/73/73	0/1/1/1
28	BCR	C	521	-	-	5/29/63/63	0/2/2/2
31	SQD	A	616	-	-	18/38/58/69	0/1/1/1
32	DGD	C	525	-	-	13/51/91/95	0/2/2/2
26	CLA	b	606	2	-	9/39/115/115	-
30	STE	A	618	-	-	3/5/5/17	-
34	LHG	B	622	-	-	19/53/53/53	-
33	LMG	c	523	-	-	14/43/63/70	0/1/1/1
29	PL9	d	405	-	-	9/53/73/73	0/1/1/1
36	HEC	v	201	16	1/1/3/7	4/14/54/54	-
26	CLA	A	608	37	-	6/39/115/115	-
26	CLA	c	504	37	-	5/33/109/115	-
28	BCR	B	617	-	-	4/29/63/63	0/2/2/2
32	DGD	c	520	-	-	18/51/91/95	0/2/2/2
26	CLA	b	602	2	-	4/39/115/115	-
35	HEM	F	101	6,5	-	3/14/54/54	-
35	HEM	e	102	6,5	-	3/14/54/54	-
31	SQD	a	614	-	-	26/49/69/69	0/1/1/1
34	LHG	D	408	-	-	14/53/53/53	-
29	PL9	A	612	-	-	21/53/73/73	0/1/1/1
26	CLA	C	506	3	-	8/39/115/115	-
26	CLA	B	615	2	-	14/39/115/115	-
33	LMG	a	617	-	-	24/50/70/70	0/1/1/1
30	STE	M	102	-	-	8/12/12/17	-
33	LMG	C	522	-	-	19/43/63/70	0/1/1/1
28	BCR	d	404	-	-	2/29/63/63	0/2/2/2
26	CLA	b	608	2	-	4/39/115/115	-
32	DGD	C	523	-	-	20/51/91/95	0/2/2/2
26	CLA	B	604	2	-	10/39/115/115	-
33	LMG	M	101	-	-	22/46/66/70	0/1/1/1
33	LMG	m	101	-	-	17/46/66/70	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
26	CLA	B	606	2	-	9/39/115/115	-
34	LHG	l	101	-	-	13/53/53/53	-
33	LMG	B	620	-	-	23/40/60/70	0/1/1/1
28	BCR	c	515	-	-	0/29/63/63	0/2/2/2
30	STE	T	102	-	-	10/13/13/17	-
26	CLA	B	605	2	-	9/39/115/115	-
30	STE	b	625	-	-	3/8/8/17	-
26	CLA	b	611	2	-	5/39/115/115	-
26	CLA	c	512	3	-	15/39/115/115	-
30	STE	I	101	-	-	7/14/14/17	-
34	LHG	d	408	-	-	15/53/53/53	-
26	CLA	D	403	4	-	8/39/115/115	-
30	STE	a	619	-	-	4/9/9/17	-
26	CLA	A	614	37	-	5/39/115/115	-
30	STE	C	520	-	-	5/7/7/17	-
30	STE	H	103	-	-	9/15/15/17	-
26	CLA	c	507	37	-	13/39/115/115	-
30	STE	e	101	-	-	2/6/6/17	-
30	STE	C	529	-	-	5/11/11/17	-
30	STE	e	104	-	-	6/10/10/17	-
34	LHG	E	101	-	-	21/53/53/53	-
30	STE	B	621	-	-	7/14/14/17	-
26	CLA	a	607	1	-	5/39/115/115	-
31	SQD	a	616	-	-	18/49/69/69	0/1/1/1
30	STE	C	527	-	-	2/9/9/17	-
30	STE	c	517	-	-	11/15/15/17	-
26	CLA	b	603	2	-	14/39/115/115	-
28	BCR	c	514	-	-	0/29/63/63	0/2/2/2
33	LMG	C	517	-	-	12/30/50/70	0/1/1/1
26	CLA	C	502	3	-	6/39/115/115	-
26	CLA	d	402	4	-	5/39/115/115	-
28	BCR	K	101	-	-	4/29/63/63	0/2/2/2
26	CLA	a	608	37	-	3/39/115/115	-
26	CLA	a	613	37	-	4/39/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
30	STE	E	102	-	-	2/9/9/17	-
30	STE	b	623	-	-	5/13/13/17	-
30	STE	c	516	-	-	5/10/10/17	-
26	CLA	C	512	3	-	11/39/115/115	-
26	CLA	b	613	2	-	4/39/115/115	-
30	STE	C	516	-	-	6/11/11/17	-
31	SQD	F	102	-	-	17/28/48/69	0/1/1/1
33	LMG	b	622	-	-	23/50/70/70	0/1/1/1
26	CLA	a	610	1	-	10/39/115/115	-
30	STE	i	101	-	-	6/9/9/17	-
26	CLA	c	501	3	-	4/39/115/115	-
26	CLA	B	611	2	-	4/39/115/115	-
30	STE	C	519	-	-	2/4/4/17	-
26	CLA	D	402	4	-	4/39/115/115	-
26	CLA	b	615	2	-	2/39/115/115	-
26	CLA	C	507	37	-	10/39/115/115	-
31	SQD	f	101	-	-	17/36/56/69	0/1/1/1
34	LHG	d	409	-	-	9/43/43/53	-
30	STE	A	619	-	-	10/14/14/17	-
30	STE	B	625	-	-	3/9/9/17	-
30	STE	J	101	-	-	5/9/9/17	-
26	CLA	b	609	2	-	1/39/115/115	-
28	BCR	b	619	-	-	0/29/63/63	0/2/2/2
26	CLA	c	502	3	-	3/39/115/115	-
30	STE	b	624	-	-	5/7/7/17	-
31	SQD	A	615	-	-	18/47/67/69	0/1/1/1
32	DGD	h	101	-	-	10/51/91/95	0/2/2/2
26	CLA	A	607	1	-	6/39/115/115	-
27	PHO	d	401	-	-	4/37/103/103	0/5/6/6
28	BCR	D	404	-	-	2/29/63/63	0/2/2/2
27	PHO	a	609	-	-	1/37/103/103	0/5/6/6
34	LHG	D	409	-	-	11/51/51/53	-
26	CLA	B	612	2	-	12/39/115/115	-
26	CLA	C	508	3	-	6/39/115/115	-
36	HEC	V	201	16	1/1/3/7	5/14/54/54	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
26	CLA	B	613	2	-	12/39/115/115	-
26	CLA	C	511	3	-	5/39/115/115	-
30	STE	h	102	-	-	4/7/7/17	-
31	SQD	b	620	-	-	19/44/64/69	0/1/1/1
26	CLA	B	610	37	-	2/39/115/115	-
32	DGD	C	524	-	-	20/51/91/95	0/2/2/2
26	CLA	d	403	4	-	10/39/115/115	-
26	CLA	b	614	2	-	12/39/115/115	-
30	STE	t	102	-	-	2/11/11/17	-
28	BCR	T	101	-	-	7/29/63/63	0/2/2/2
28	BCR	k	101	-	-	8/29/63/63	0/2/2/2
30	STE	C	518	-	-	0/2/2/17	-
26	CLA	c	510	3	-	3/39/115/115	-
30	STE	m	103	-	-	6/15/15/17	-
26	CLA	C	510	3	-	3/39/115/115	-
33	LMG	c	518	-	-	8/31/31/70	-
26	CLA	B	614	2	-	14/39/115/115	-
30	STE	D	411	-	-	4/17/17/17	-
30	STE	j	101	-	-	5/9/9/17	-
26	CLA	C	513	3	-	12/39/115/115	-
26	CLA	b	607	37	-	10/39/115/115	-
26	CLA	C	505	3	-	8/39/115/115	-
26	CLA	B	601	37	-	23/39/115/115	-
30	STE	d	410	-	-	8/17/17/17	-
26	CLA	c	506	3	-	11/39/115/115	-
26	CLA	C	501	3	-	6/39/115/115	-
28	BCR	C	514	-	-	1/29/63/63	0/2/2/2
26	CLA	B	616	2	-	8/33/109/115	-
34	LHG	D	410	-	-	18/53/53/53	-
26	CLA	c	511	3	-	6/39/115/115	-
28	BCR	b	618	-	-	0/29/63/63	0/2/2/2
30	STE	D	412	-	-	3/6/6/17	-
26	CLA	B	603	2	-	5/39/115/115	-
33	LMG	a	618	-	-	21/44/64/70	0/1/1/1
26	CLA	b	610	37	-	7/39/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
27	PHO	A	609	-	-	1/37/103/103	0/5/6/6
32	DGD	c	521	-	-	19/51/91/95	0/2/2/2
30	STE	b	621	-	-	7/17/17/17	-
32	DGD	A	617	-	-	20/55/95/95	0/2/2/2
30	STE	d	412	-	-	9/17/17/17	-
30	STE	f	102	-	-	2/5/5/17	-
30	STE	T	103	-	-	8/12/12/17	-
26	CLA	B	608	2	-	5/39/115/115	-
30	STE	E	104	-	-	14/17/17/17	-
28	BCR	B	618	-	-	0/29/63/63	0/2/2/2
33	LMG	c	522	-	-	15/41/61/70	0/1/1/1
26	CLA	A	610	1	-	2/26/102/115	-
26	CLA	c	513	3	-	13/39/115/115	-
34	LHG	d	407	-	-	20/53/53/53	-
26	CLA	b	605	2	-	4/39/115/115	-
26	CLA	c	505	3	-	11/39/115/115	-
28	BCR	a	611	-	-	1/29/63/63	0/2/2/2
26	CLA	C	503	3	-	3/39/115/115	-
30	STE	I	102	-	-	7/12/12/17	-
30	STE	d	406	-	-	8/17/17/17	-
30	STE	j	102	-	-	9/13/13/17	-
30	STE	z	101	-	-	3/6/6/17	-
32	DGD	H	102	-	-	20/51/91/95	0/2/2/2
28	BCR	C	515	-	-	0/29/63/63	0/2/2/2
30	STE	k	103	-	-	7/11/11/17	-
30	STE	E	103	-	-	3/9/9/17	-
26	CLA	B	609	2	-	2/39/115/115	-
27	PHO	D	401	-	-	1/37/103/103	0/5/6/6
30	STE	t	103	-	-	3/7/7/17	-
31	SQD	B	623	-	-	24/49/69/69	0/1/1/1
26	CLA	B	602	2	-	6/39/115/115	-
28	BCR	b	617	-	-	2/29/63/63	0/2/2/2
30	STE	a	620	-	-	8/12/12/17	-
33	LMG	D	407	-	-	17/46/66/70	0/1/1/1
28	BCR	H	101	-	-	1/29/63/63	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
28	BCR	k	102	-	-	2/29/63/63	0/2/2/2
26	CLA	C	504	37	-	9/32/108/115	-
30	STE	m	102	-	-	4/9/9/17	-
28	BCR	t	101	-	-	6/29/63/63	0/2/2/2
33	LMG	C	526	-	-	8/43/63/70	0/1/1/1
30	STE	M	103	-	-	4/7/7/17	-
33	LMG	D	406	-	-	21/45/65/70	0/1/1/1
26	CLA	b	612	2	-	1/39/115/115	-
30	STE	A	613	-	-	4/6/6/17	-
26	CLA	b	604	2	-	8/39/115/115	-
26	CLA	c	508	3	-	8/38/114/115	-
29	PL9	a	612	-	-	12/53/73/73	0/1/1/1
26	CLA	C	509	3	-	12/39/115/115	-
26	CLA	b	616	2	-	1/33/109/115	-
28	BCR	x	101	-	-	1/29/63/63	0/2/2/2
34	LHG	a	615	-	-	22/46/46/53	-
26	CLA	B	607	37	-	7/39/115/115	-
30	STE	K	102	-	-	6/11/11/17	-
30	STE	i	102	-	-	3/3/3/17	-
30	STE	Z	101	-	-	9/14/14/17	-

The worst 5 of 620 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	d	401	PHO	C3B-C4B	9.56	1.51	1.41
27	d	401	PHO	C1B-C2B	9.44	1.49	1.39
27	a	609	PHO	C1B-C2B	8.88	1.49	1.39
27	D	401	PHO	C3B-C4B	8.69	1.50	1.41
26	c	511	CLA	MG-NA	8.68	2.26	2.06

The worst 5 of 839 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	B	615	CLA	C4A-NA-C1A	9.44	110.98	106.68
26	C	511	CLA	C4A-NA-C1A	8.30	110.47	106.68
26	C	503	CLA	C4A-NA-C1A	8.27	110.45	106.68
26	b	606	CLA	C4A-NA-C1A	8.24	110.44	106.68
26	B	606	CLA	C4A-NA-C1A	8.01	110.33	106.68

All (2) chirality outliers are listed below:

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

5 of 1669 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
26	B	601	CLA	C1A-C2A-CAA-CBA
26	B	601	CLA	CBA-CGA-O2A-C1
26	B	601	CLA	O1A-CGA-O2A-C1
26	B	614	CLA	CAD-CBD-CGD-O1D
26	B	614	CLA	CAD-CBD-CGD-O2D

There are no ring outliers.

141 monomers are involved in 230 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
32	c	519	DGD	1	0
26	c	503	CLA	2	0
21	A	601[B]	OEY	1	0
28	B	619	BCR	1	0
30	B	624	STE	3	0
26	b	601	CLA	3	0
30	C	528	STE	2	0
26	c	509	CLA	1	0
30	A	620	STE	2	0
29	D	405	PL9	1	0
28	C	521	BCR	2	0
32	C	525	DGD	1	0
26	b	606	CLA	1	0
34	B	622	LHG	2	0
33	c	523	LMG	3	0
29	d	405	PL9	1	0
26	A	608	CLA	4	0
32	c	520	DGD	1	0
35	F	101	HEM	1	0
26	b	602	CLA	3	0
35	e	102	HEM	2	0
36	v	201	HEC	1	0
31	a	614	SQD	3	0
29	A	612	PL9	6	0
26	C	506	CLA	2	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
26	B	615	CLA	2	0
33	a	617	LMG	5	0
34	D	408	LHG	1	0
33	C	522	LMG	2	0
28	d	404	BCR	1	0
26	b	608	CLA	1	0
26	B	604	CLA	3	0
33	M	101	LMG	2	0
33	m	101	LMG	3	0
33	B	620	LMG	5	0
30	T	102	STE	3	0
26	B	605	CLA	3	0
30	b	625	STE	1	0
26	c	512	CLA	1	0
30	a	619	STE	1	0
26	A	614	CLA	3	0
30	H	103	STE	4	0
26	c	507	CLA	1	0
30	C	529	STE	1	0
30	e	104	STE	1	0
34	E	101	LHG	1	0
26	a	607	CLA	3	0
31	a	616	SQD	1	0
26	b	603	CLA	2	0
28	c	514	BCR	1	0
26	C	502	CLA	1	0
26	d	402	CLA	2	0
26	a	608	CLA	1	0
26	a	613	CLA	1	0
26	C	512	CLA	2	0
26	b	613	CLA	1	0
30	C	516	STE	1	0
26	a	610	CLA	1	0
33	b	622	LMG	1	0
30	i	101	STE	1	0
26	c	501	CLA	3	0
26	B	611	CLA	1	0
26	D	402	CLA	3	0
26	b	615	CLA	2	0
26	C	507	CLA	1	0
31	f	101	SQD	2	0
30	A	619	STE	3	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
26	b	609	CLA	2	0
28	b	619	BCR	1	0
32	h	101	DGD	1	0
26	A	607	CLA	6	0
28	D	404	BCR	1	0
34	D	409	LHG	2	0
26	B	612	CLA	2	0
26	C	508	CLA	4	0
26	B	613	CLA	4	0
26	C	511	CLA	1	0
30	h	102	STE	1	0
26	B	610	CLA	3	0
32	C	524	DGD	2	0
26	d	403	CLA	2	0
28	T	101	BCR	3	0
28	k	101	BCR	1	0
26	c	510	CLA	3	0
30	m	103	STE	1	0
33	c	518	LMG	2	0
26	B	614	CLA	7	0
30	D	411	STE	4	0
26	C	513	CLA	1	0
26	C	505	CLA	2	0
26	B	601	CLA	2	0
30	d	410	STE	2	0
26	c	506	CLA	1	0
28	C	514	BCR	1	0
26	B	616	CLA	2	0
34	D	410	LHG	4	0
26	c	511	CLA	4	0
28	b	618	BCR	2	0
26	B	603	CLA	1	0
33	a	618	LMG	1	0
26	b	610	CLA	2	0
32	c	521	DGD	1	0
30	b	621	STE	1	0
32	A	617	DGD	2	0
30	T	103	STE	1	0
30	E	104	STE	3	0
28	B	618	BCR	1	0
26	A	610	CLA	1	0
34	d	407	LHG	1	0

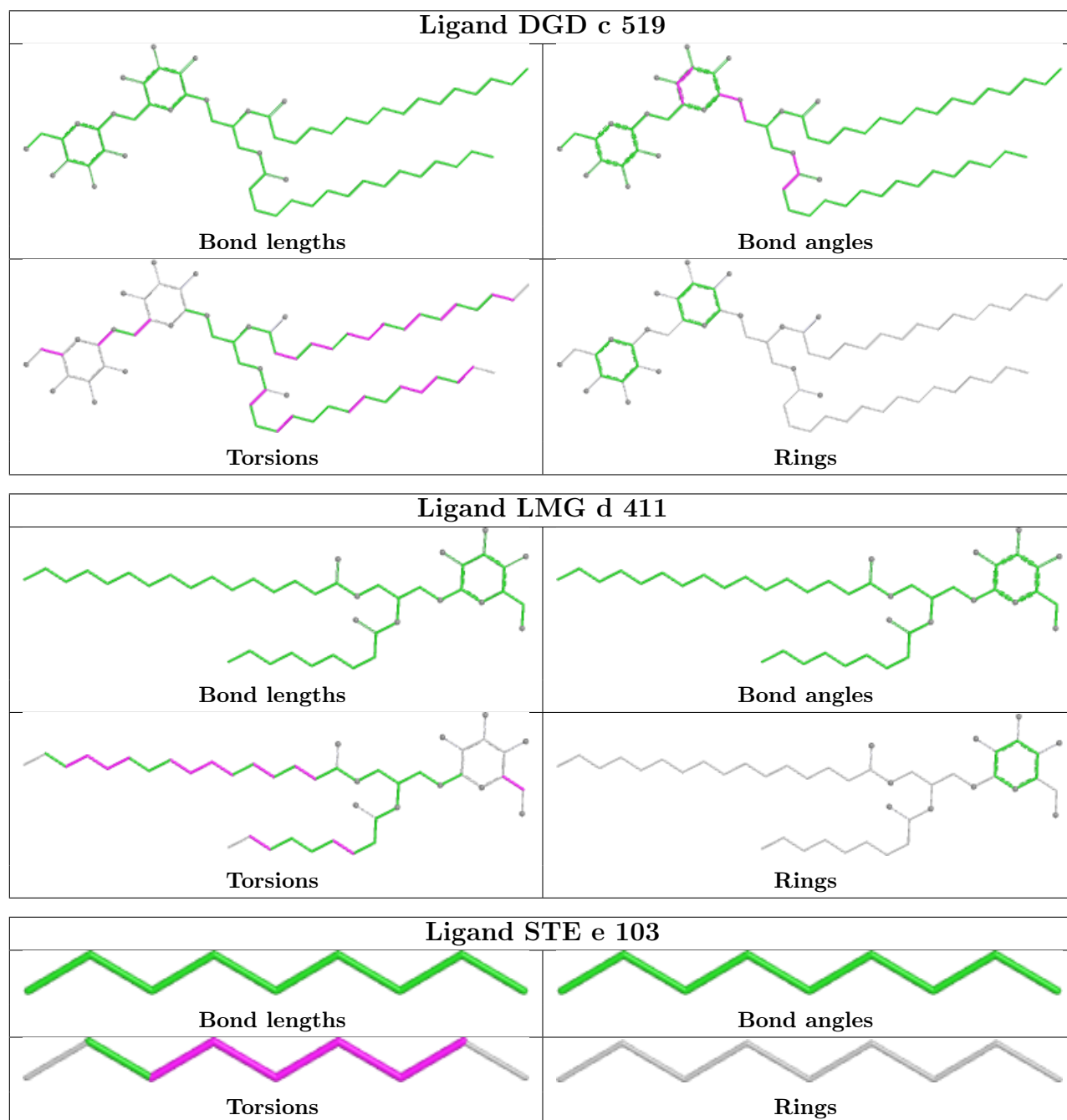
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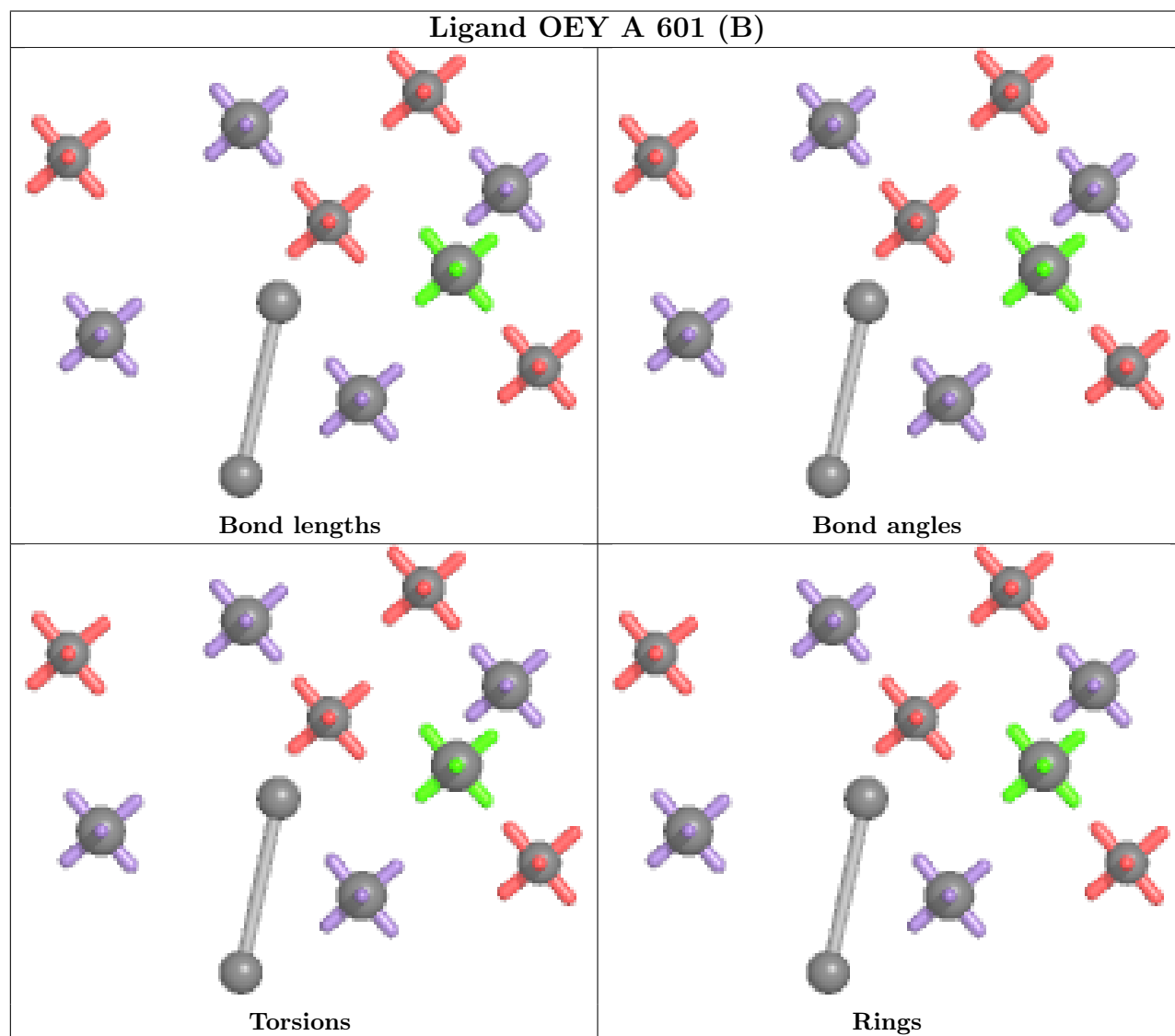
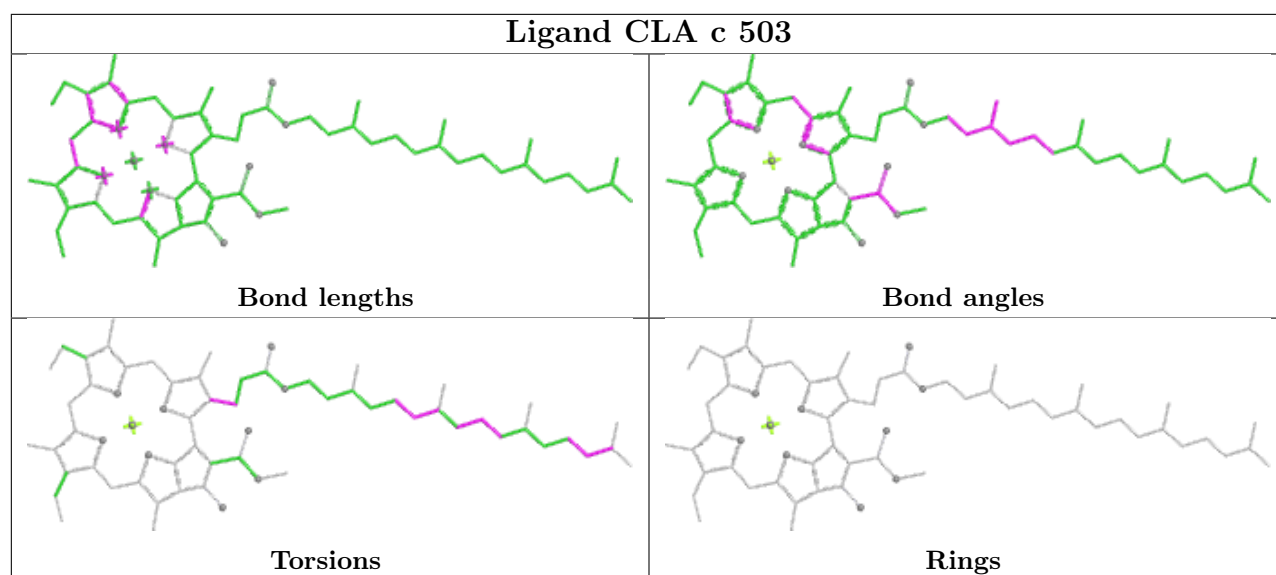
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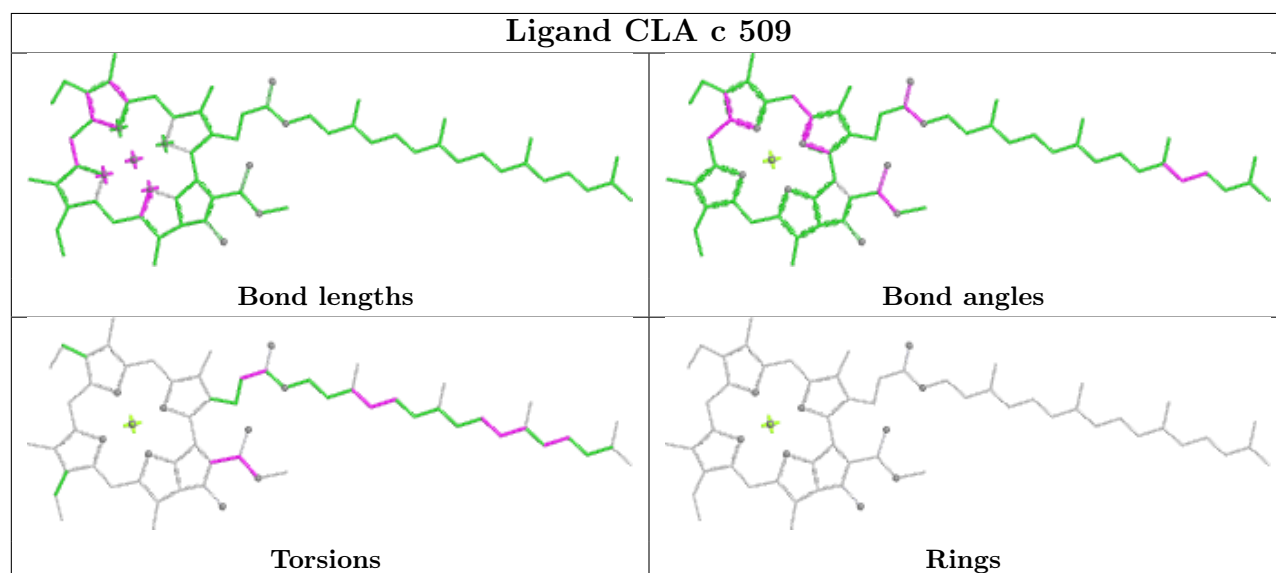
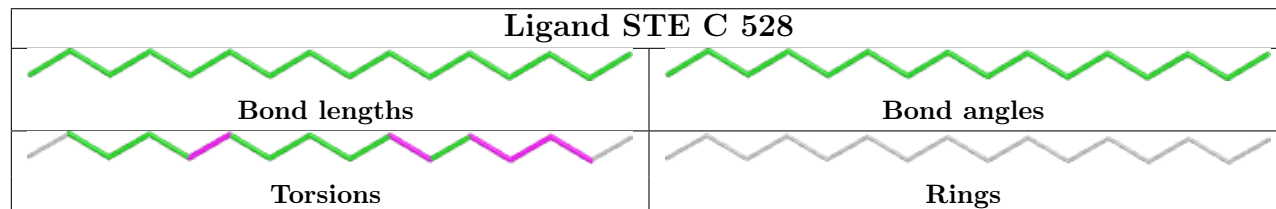
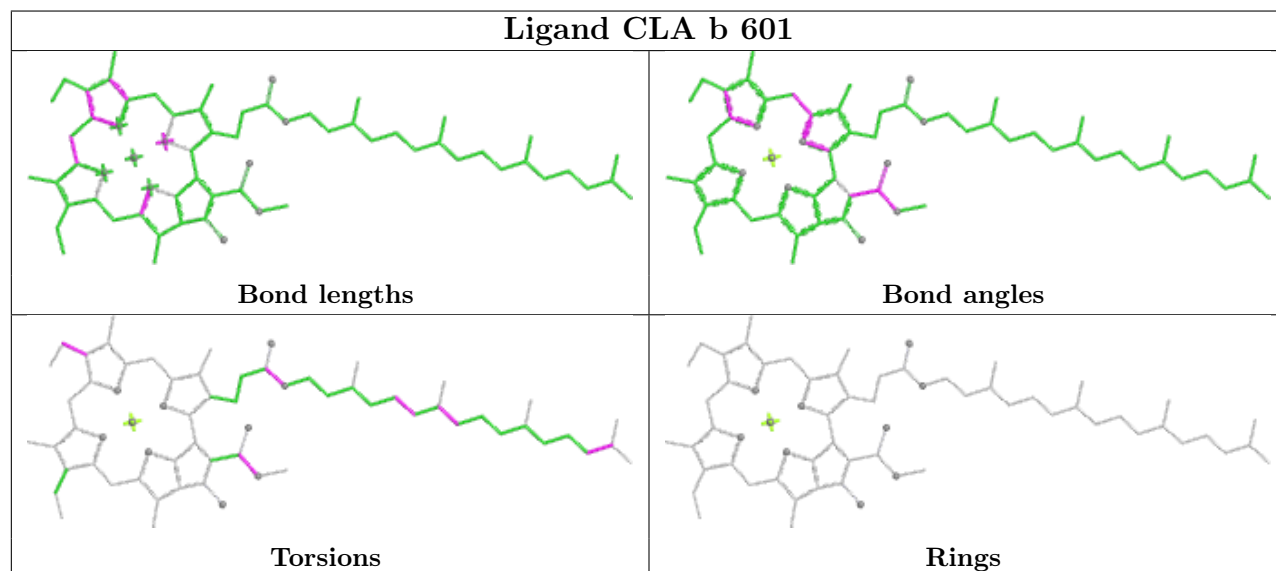
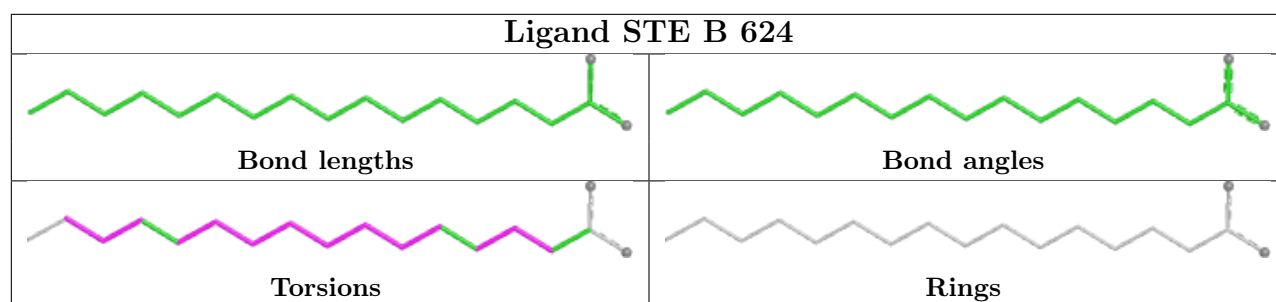
Mol	Chain	Res	Type	Clashes	Symm-Clashes
26	c	505	CLA	1	0
28	a	611	BCR	1	0
30	I	102	STE	1	0
30	d	406	STE	1	0
30	j	102	STE	1	0
30	z	101	STE	2	0
32	H	102	DGD	2	0
28	C	515	BCR	2	0
30	k	103	STE	2	0
30	E	103	STE	2	0
26	B	609	CLA	2	0
27	D	401	PHO	2	0
31	B	623	SQD	4	0
26	B	602	CLA	1	0
28	b	617	BCR	1	0
30	a	620	STE	1	0
33	D	407	LMG	2	0
28	H	101	BCR	2	0
28	k	102	BCR	1	0
26	C	504	CLA	1	0
28	t	101	BCR	3	0
33	C	526	LMG	1	0
33	D	406	LMG	4	0
26	b	612	CLA	2	0
26	b	604	CLA	3	0
26	c	508	CLA	1	0
29	a	612	PL9	3	0
26	C	509	CLA	1	0
26	b	616	CLA	3	0
28	x	101	BCR	3	0
34	a	615	LHG	2	0
30	Z	101	STE	2	0

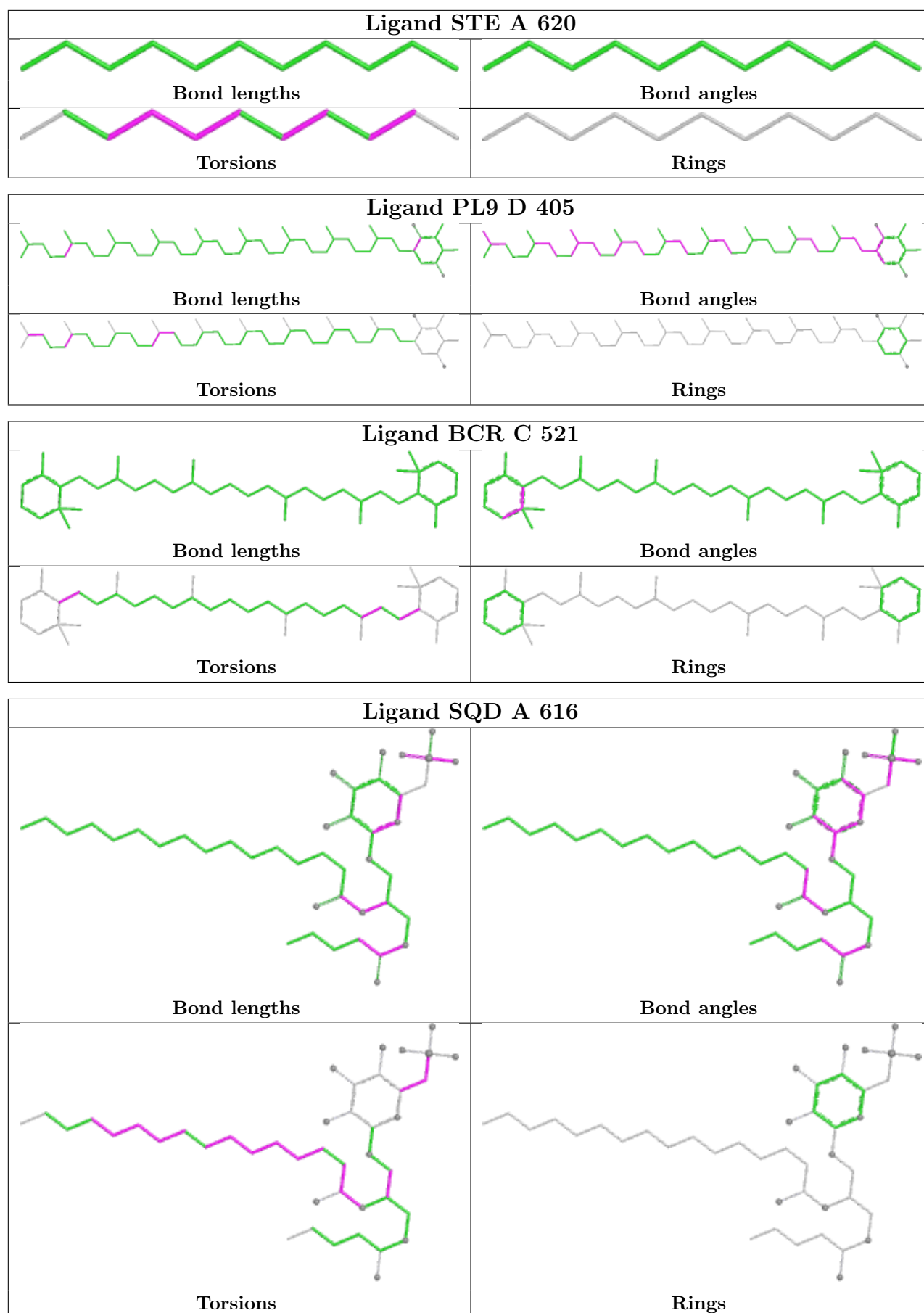
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included.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

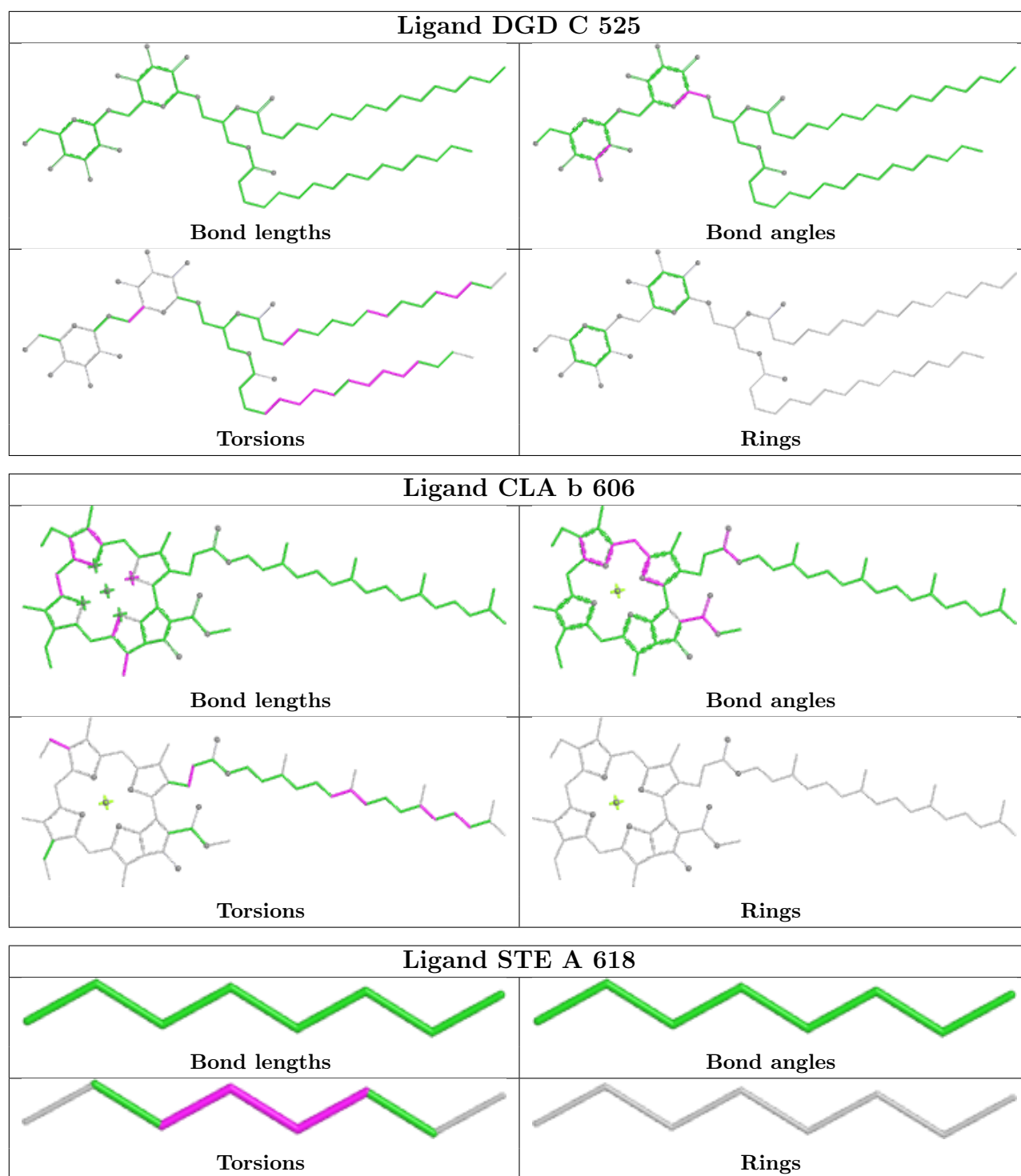
The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.

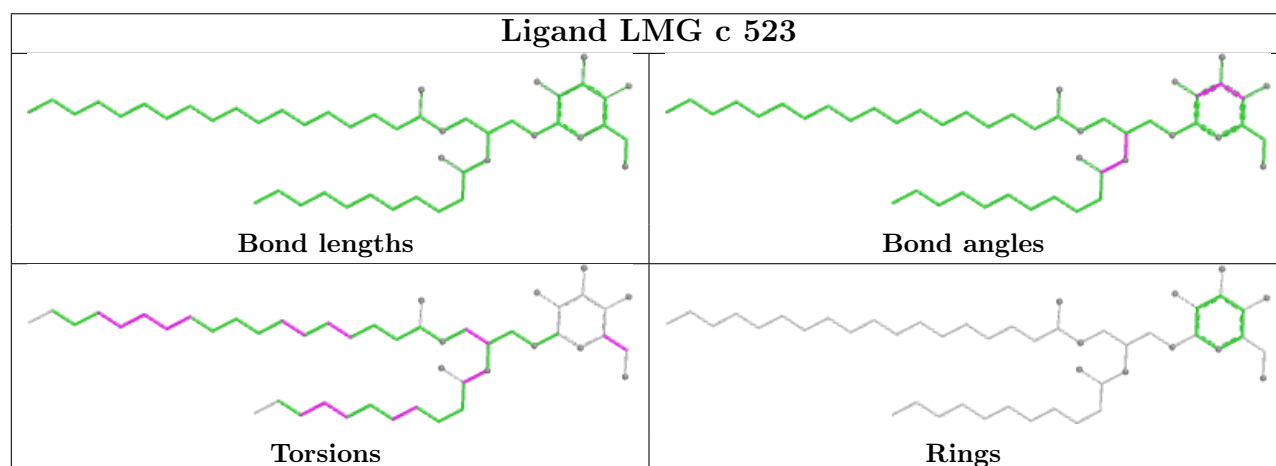
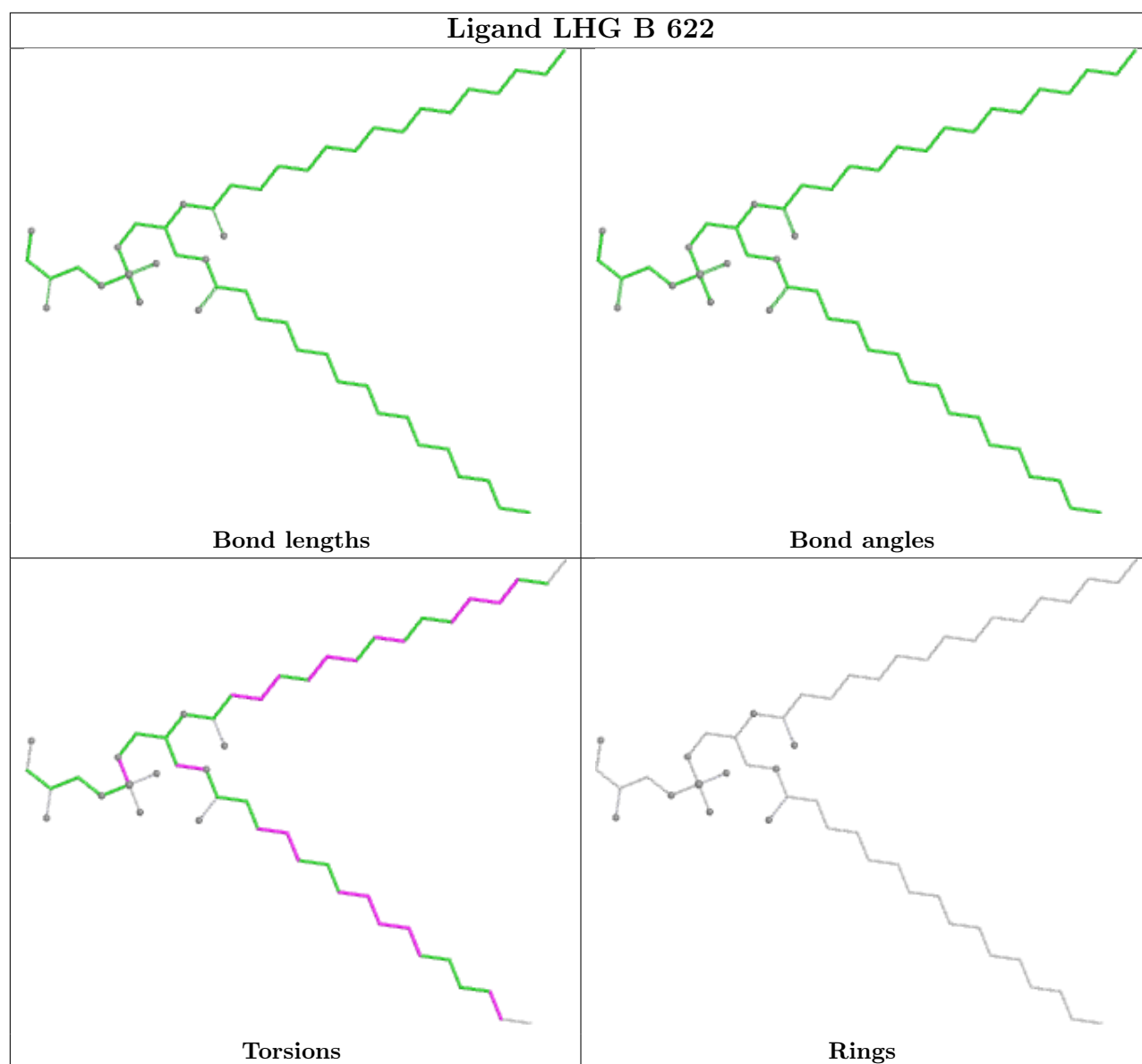


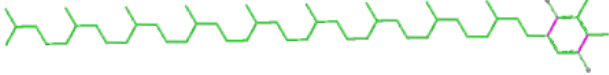
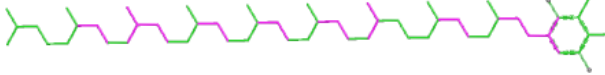
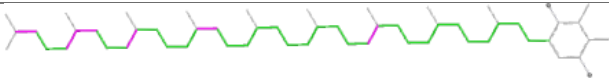
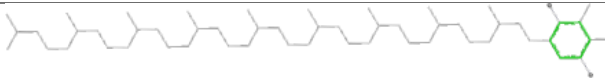


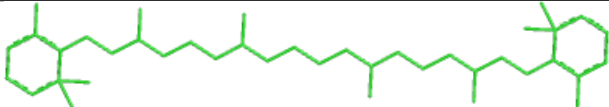
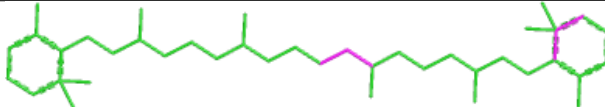
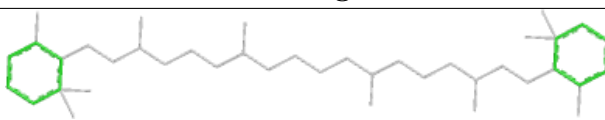


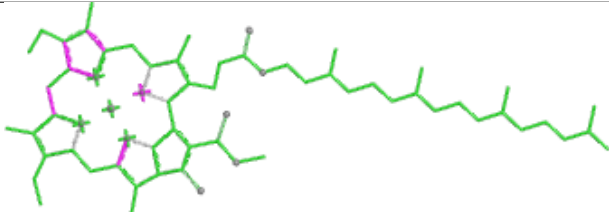
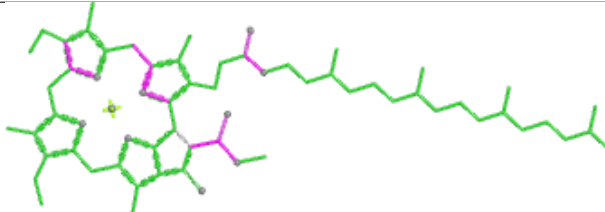
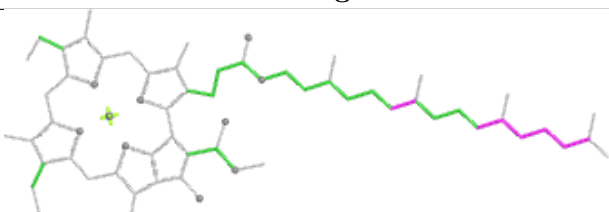
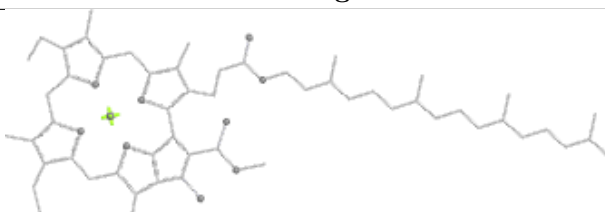


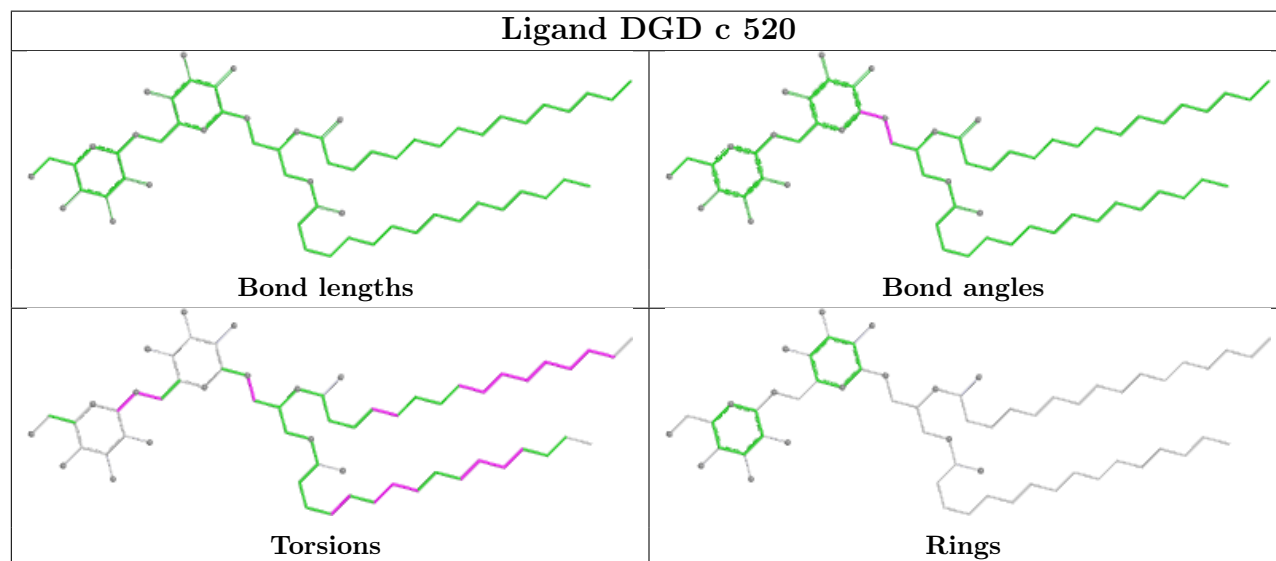
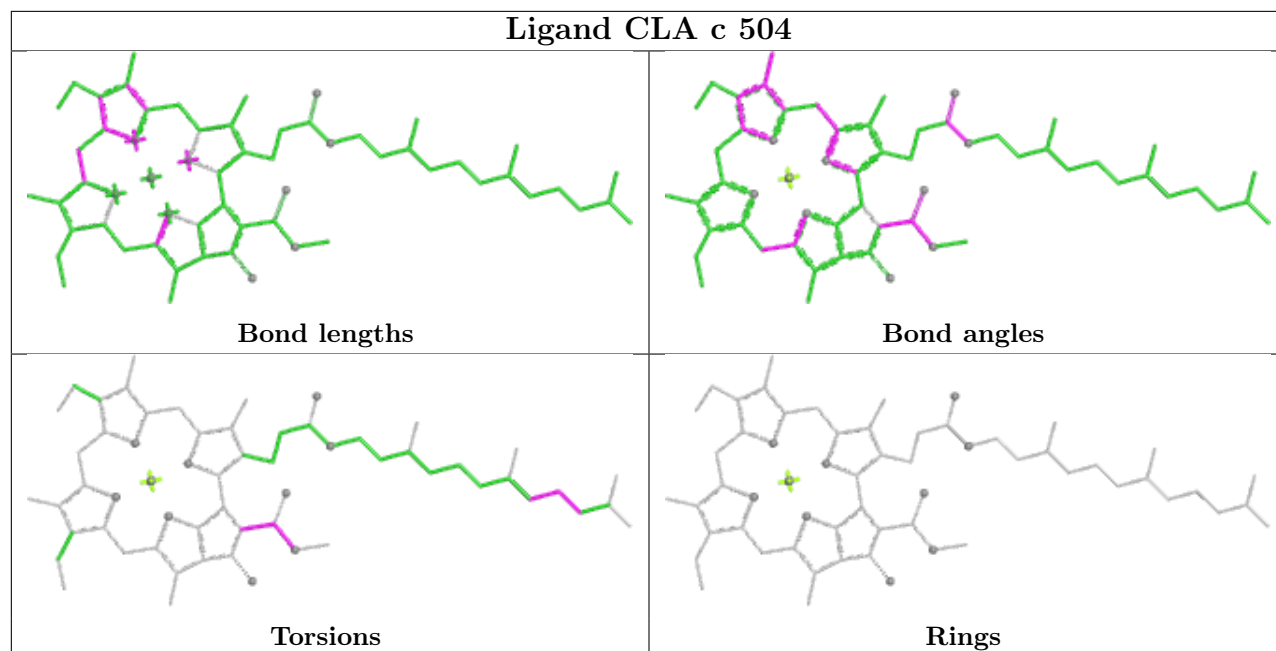


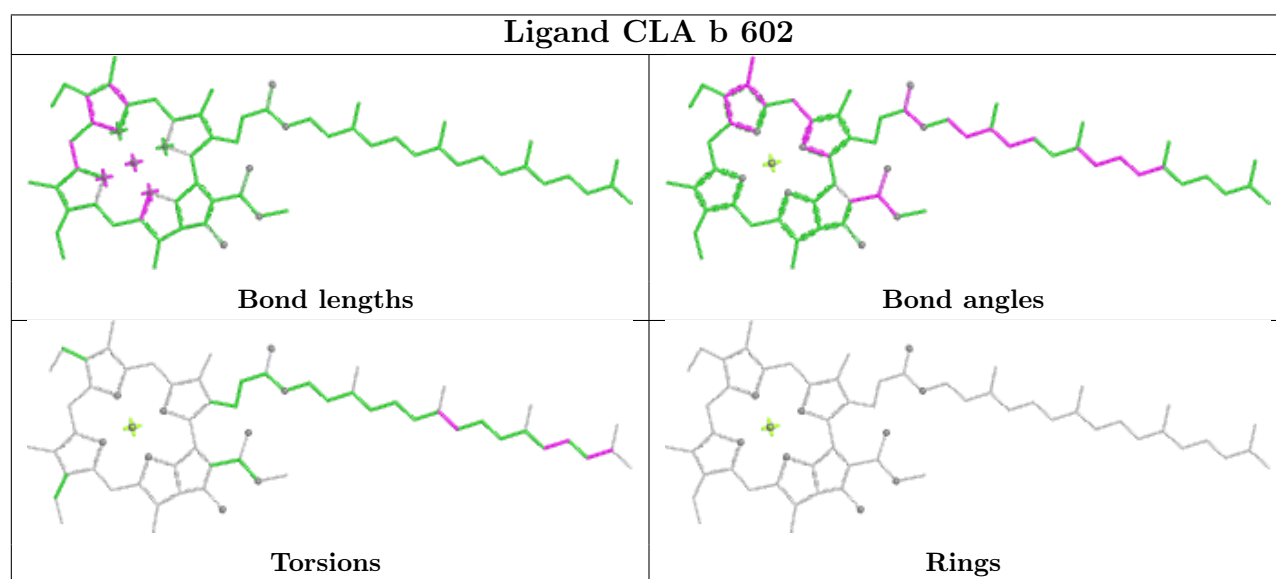
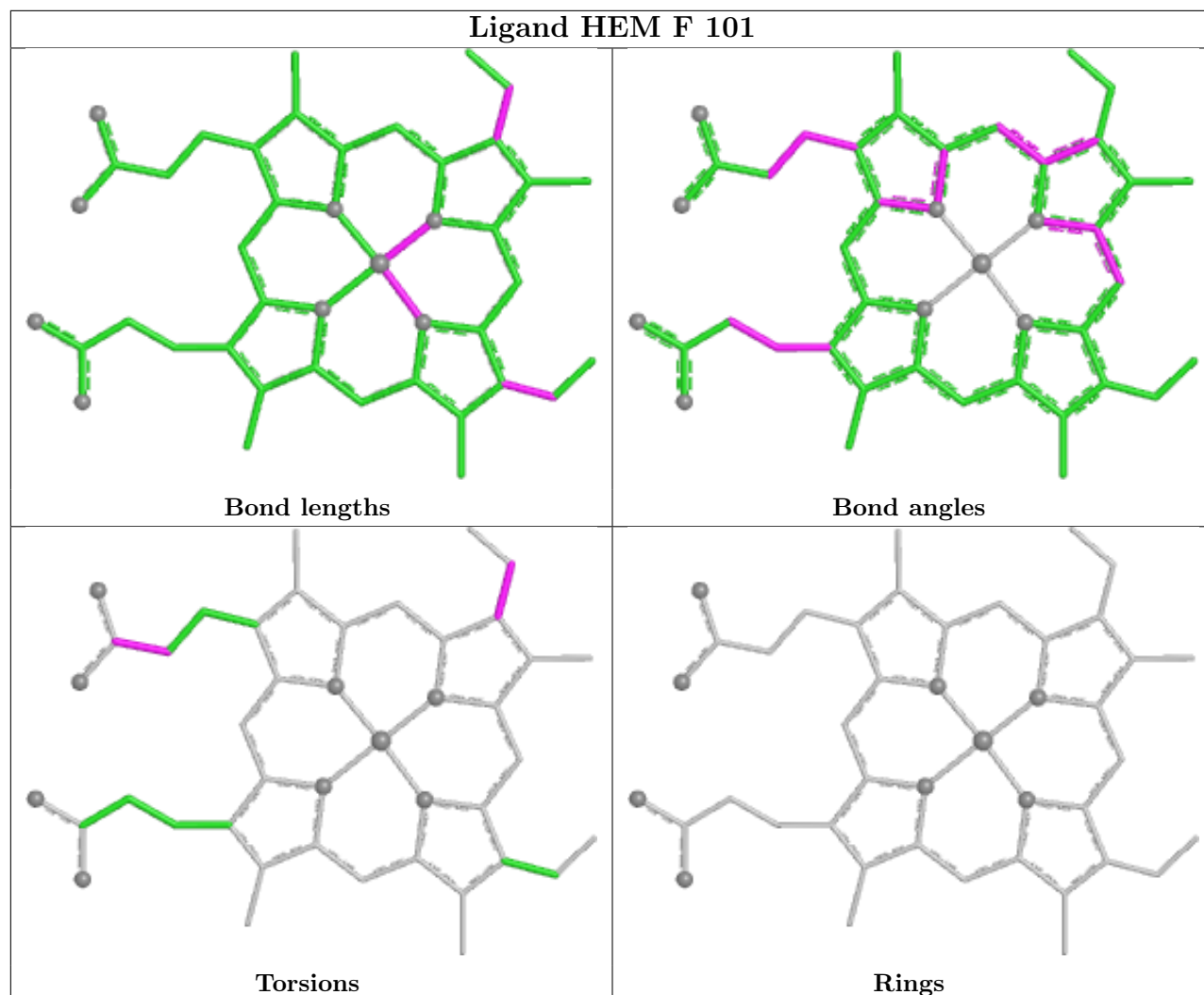


Ligand PL9 d 405	
 Bond lengths	 Bond angles
 Torsions	 Rings

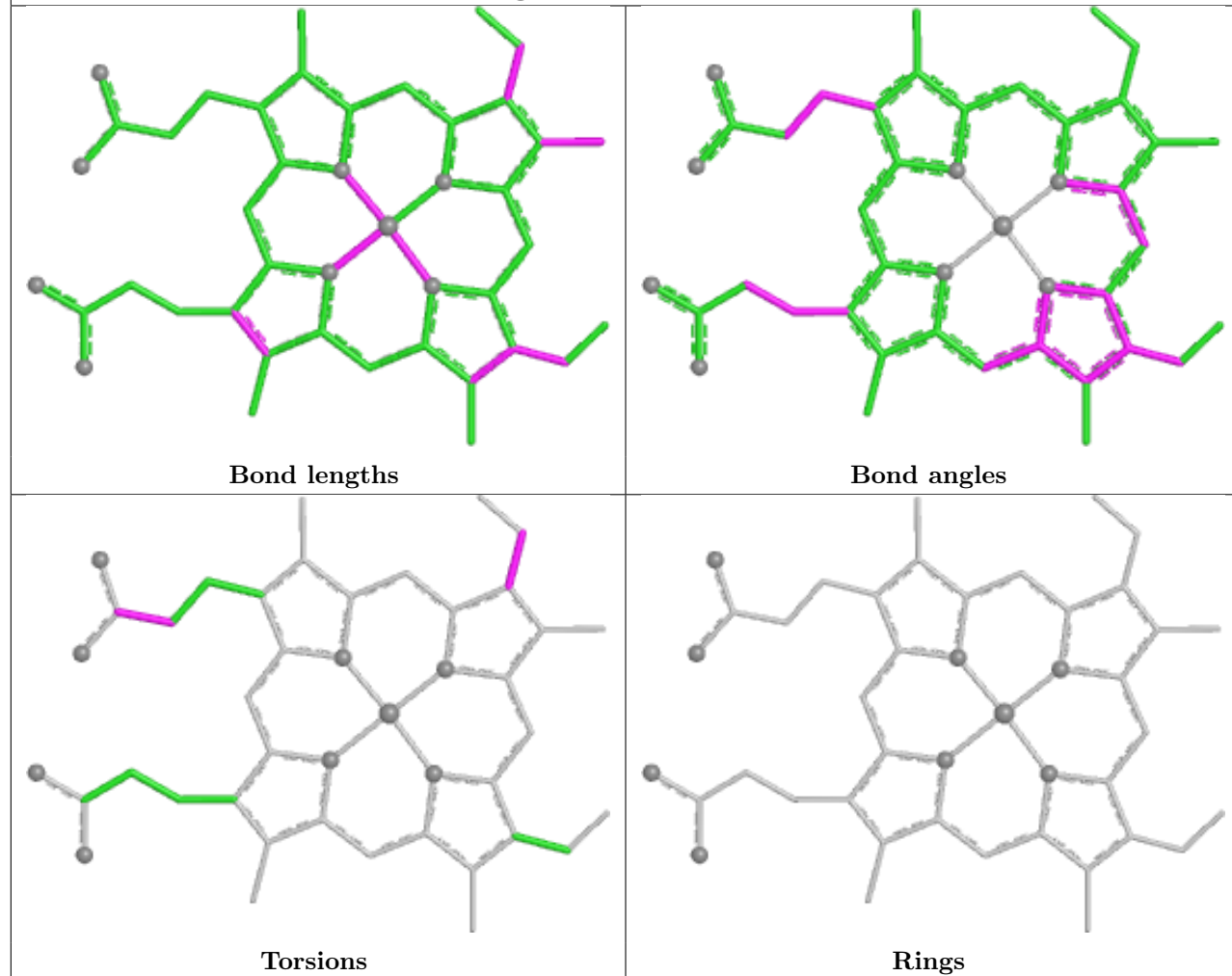
Ligand BCR B 617	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA A 608	
 Bond lengths	 Bond angles
 Torsions	 Rings

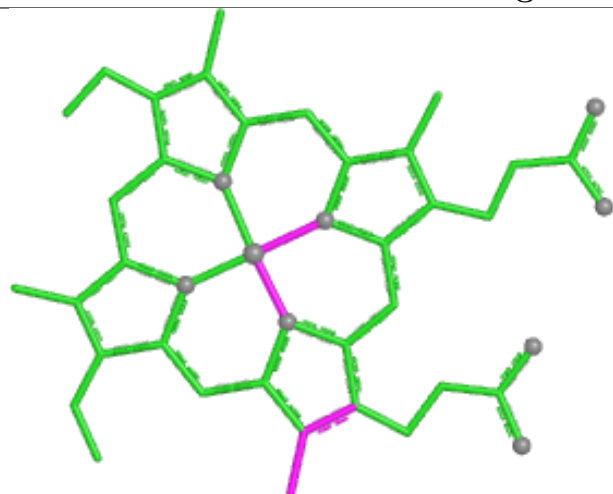




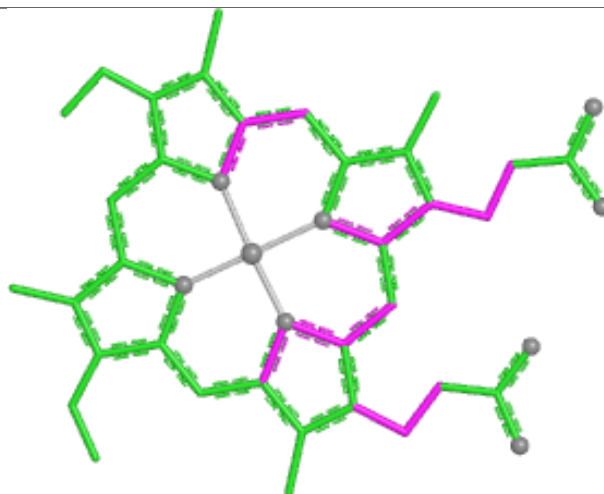
Ligand HEM e 102



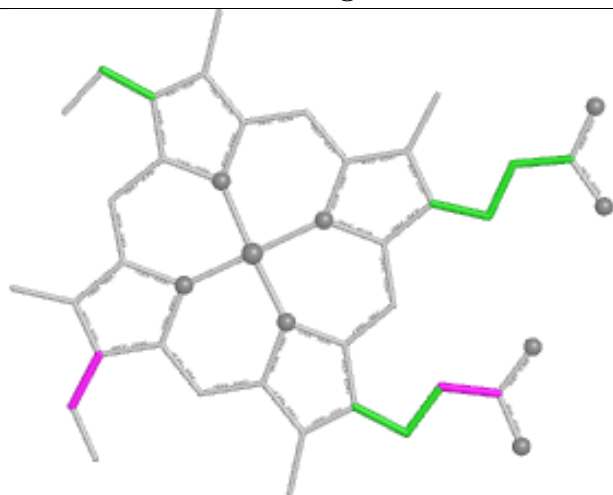
Ligand HEC v 201



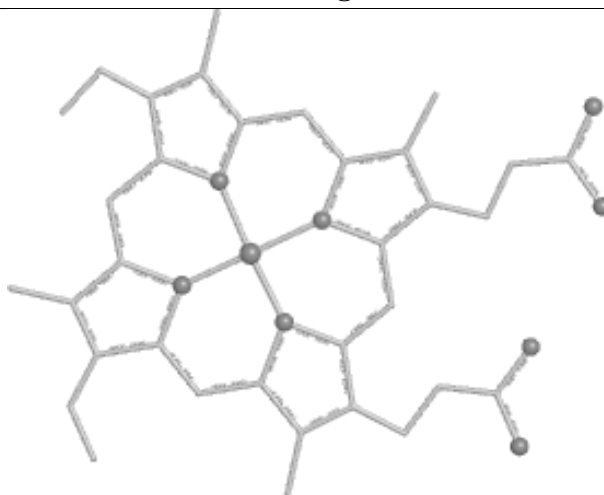
Bond lengths



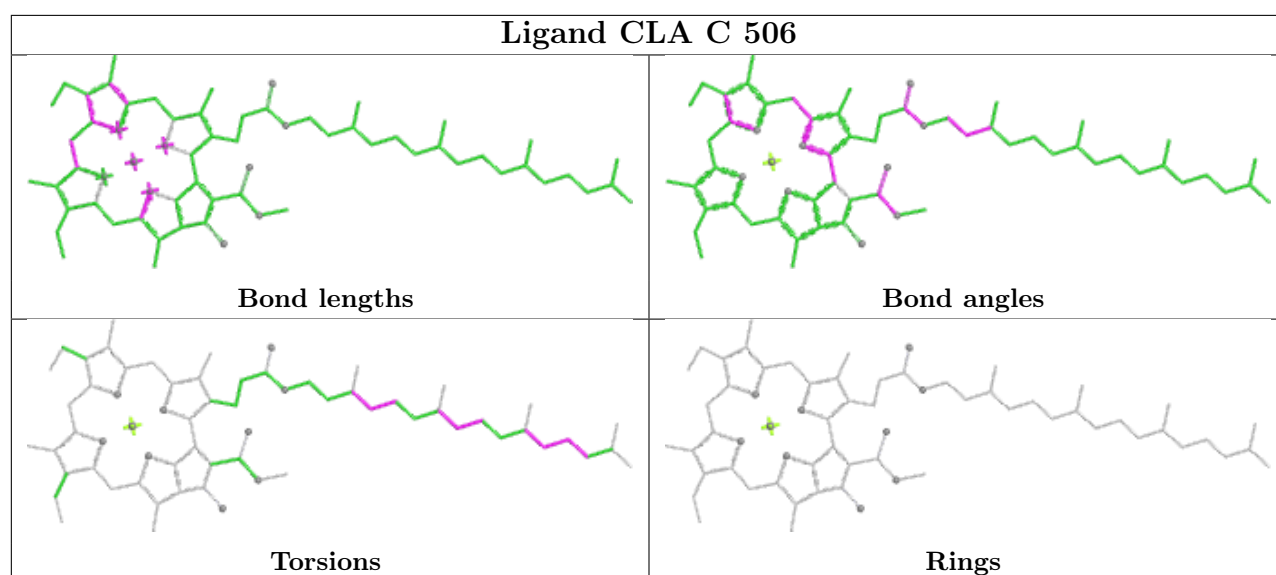
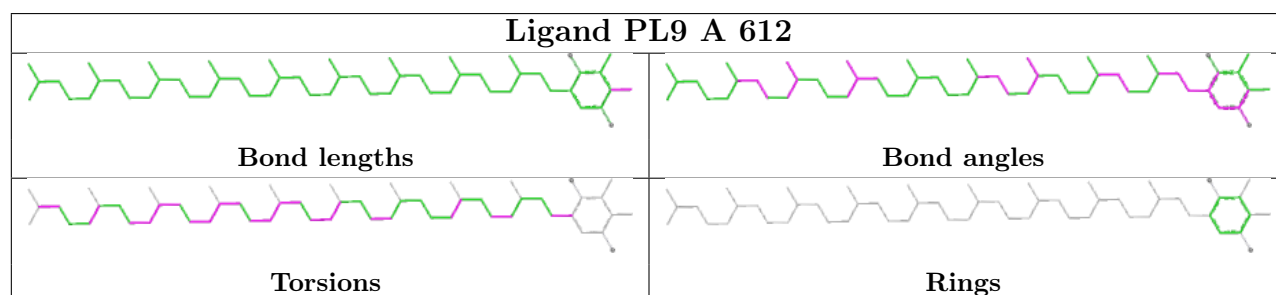
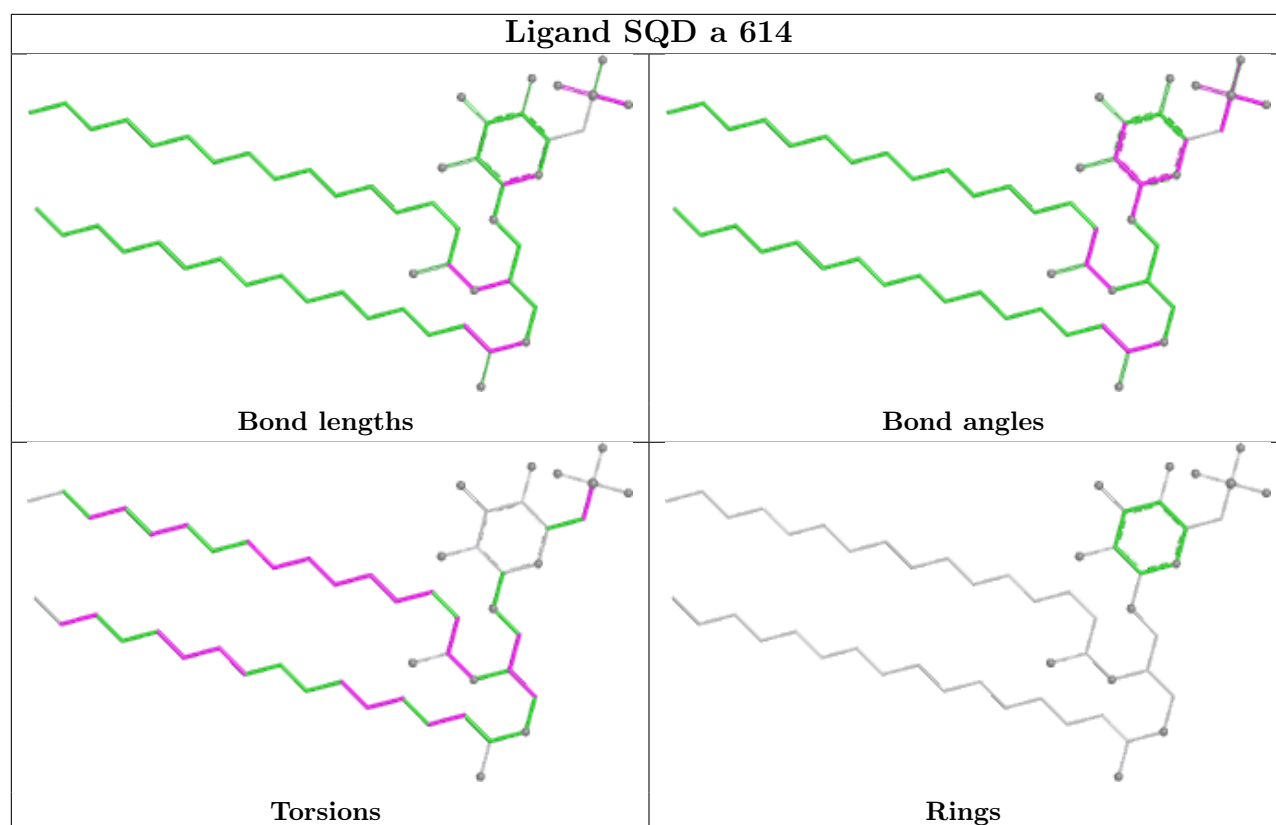
Bond angles

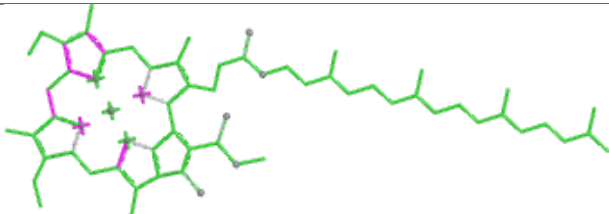
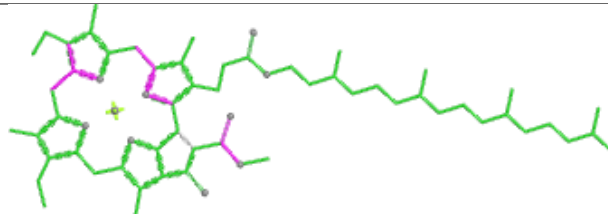
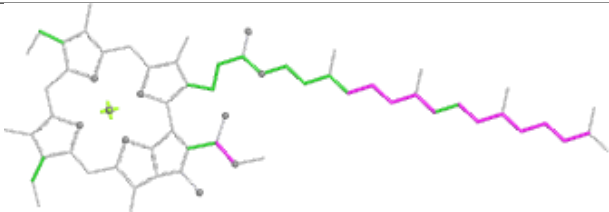
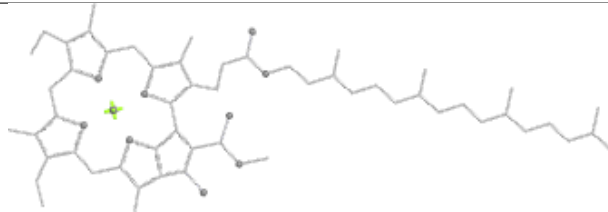


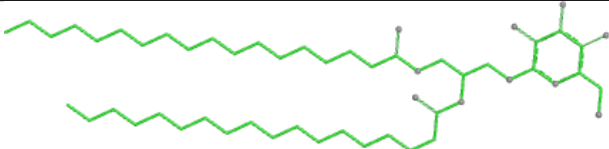
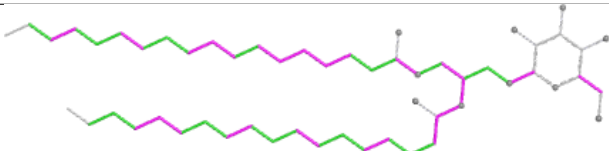
Torsions

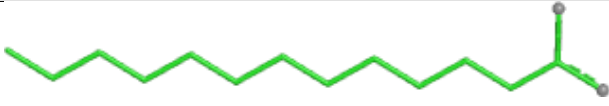
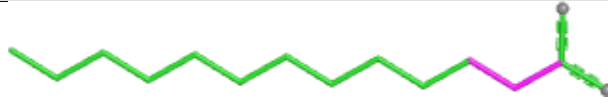
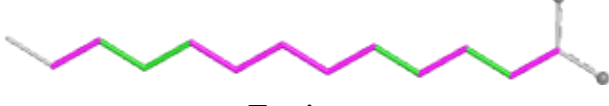
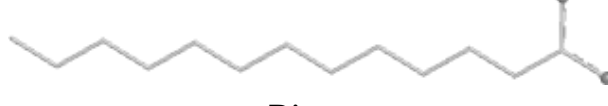


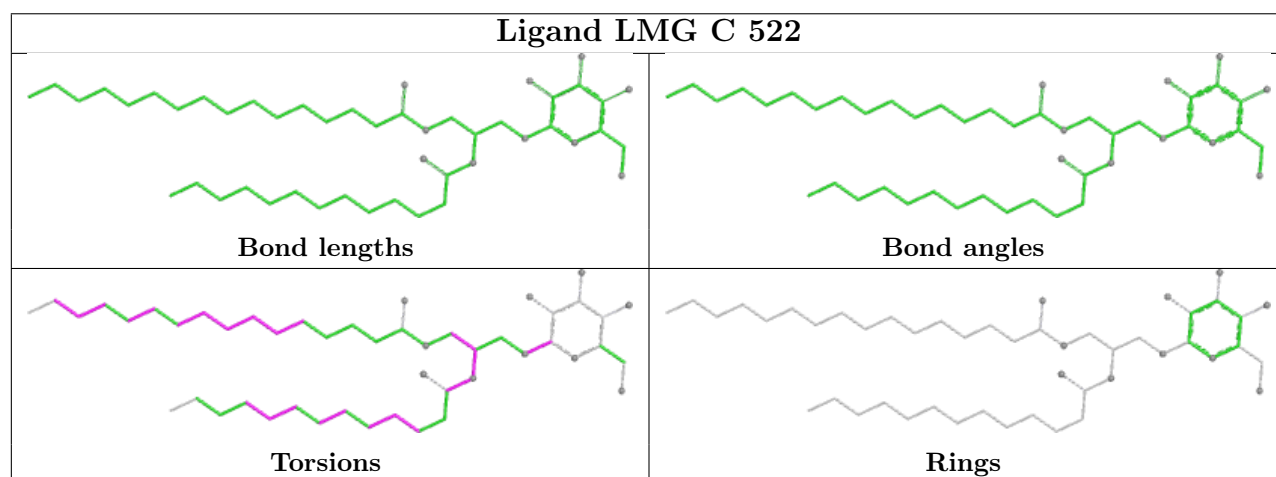
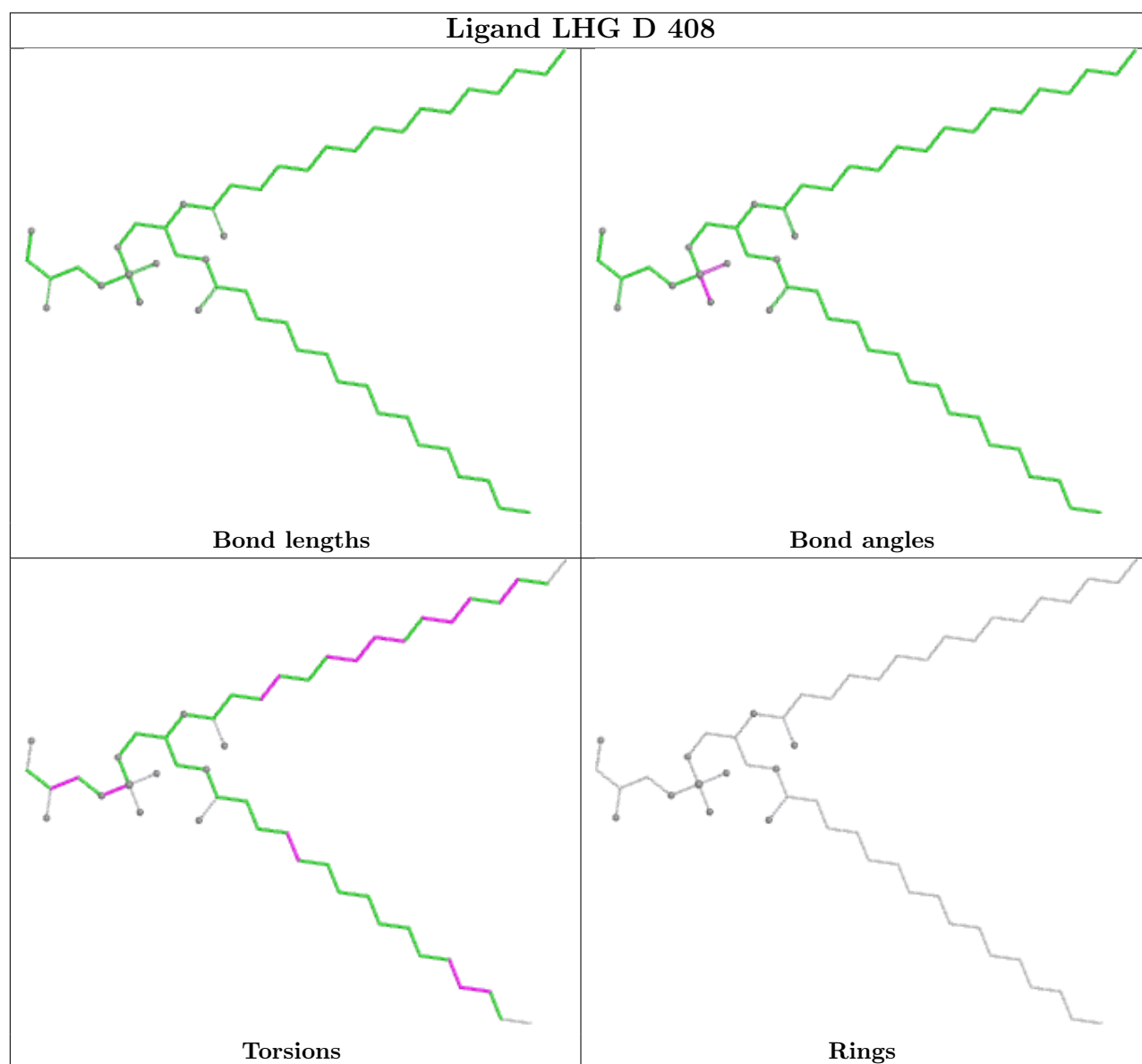
Rings

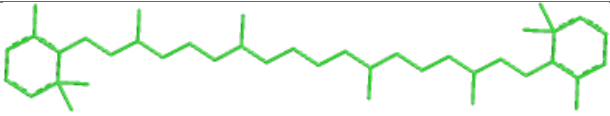
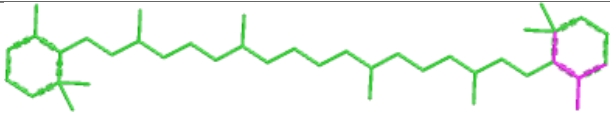
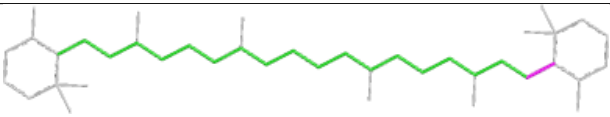
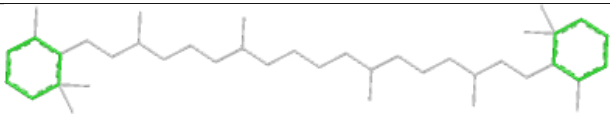
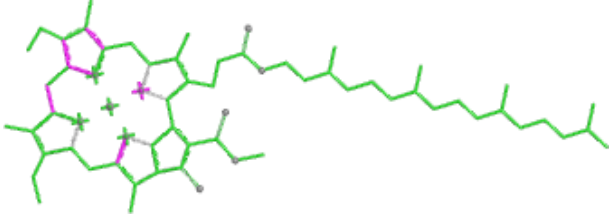
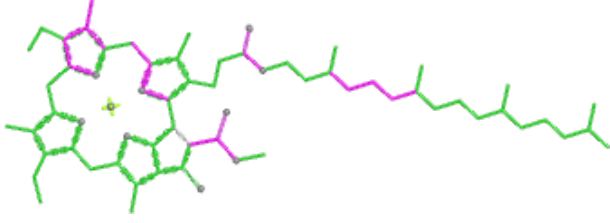
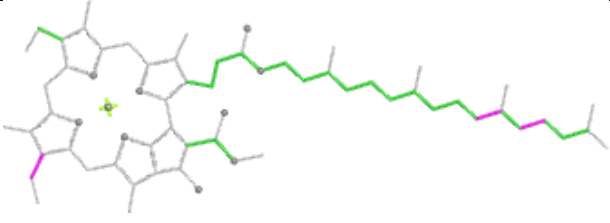
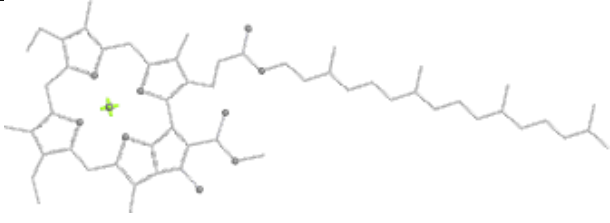
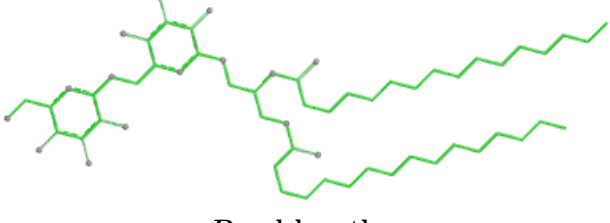
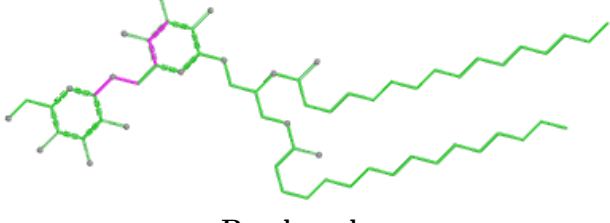
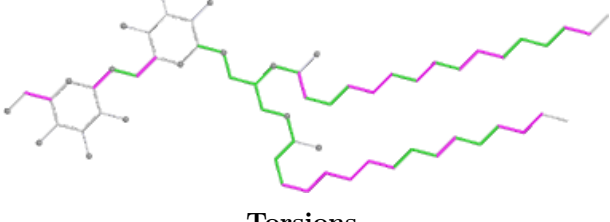
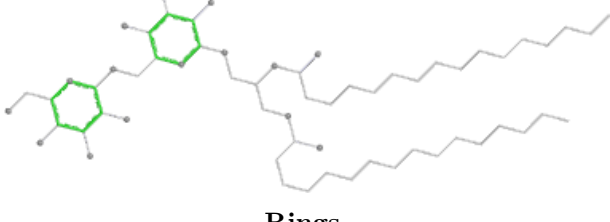


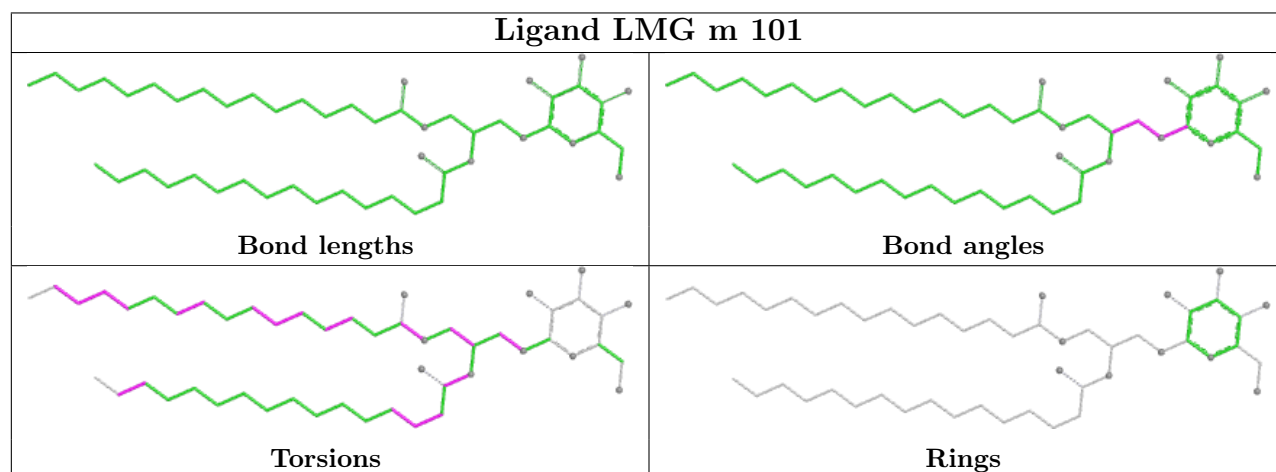
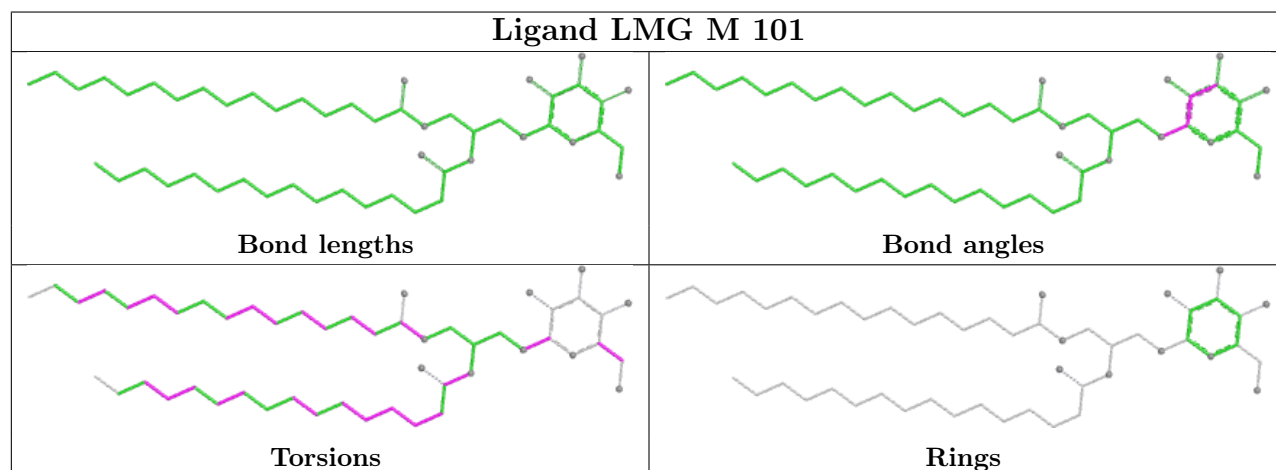
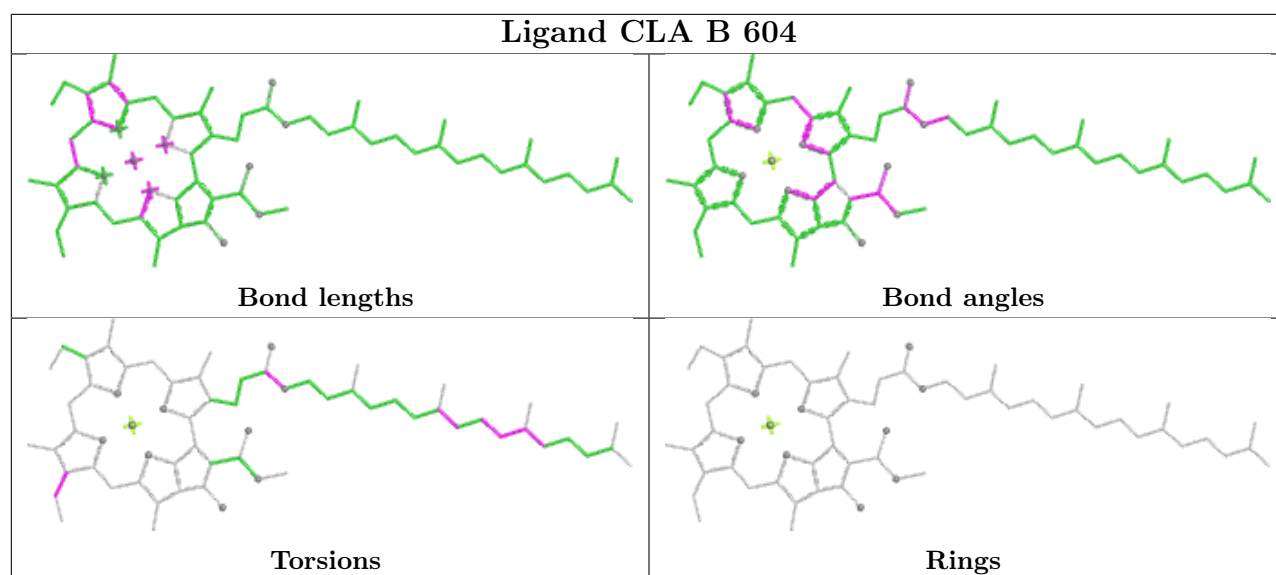
Ligand CLA B 615	
	
Bond lengths	Bond angles
	
Torsions	Rings

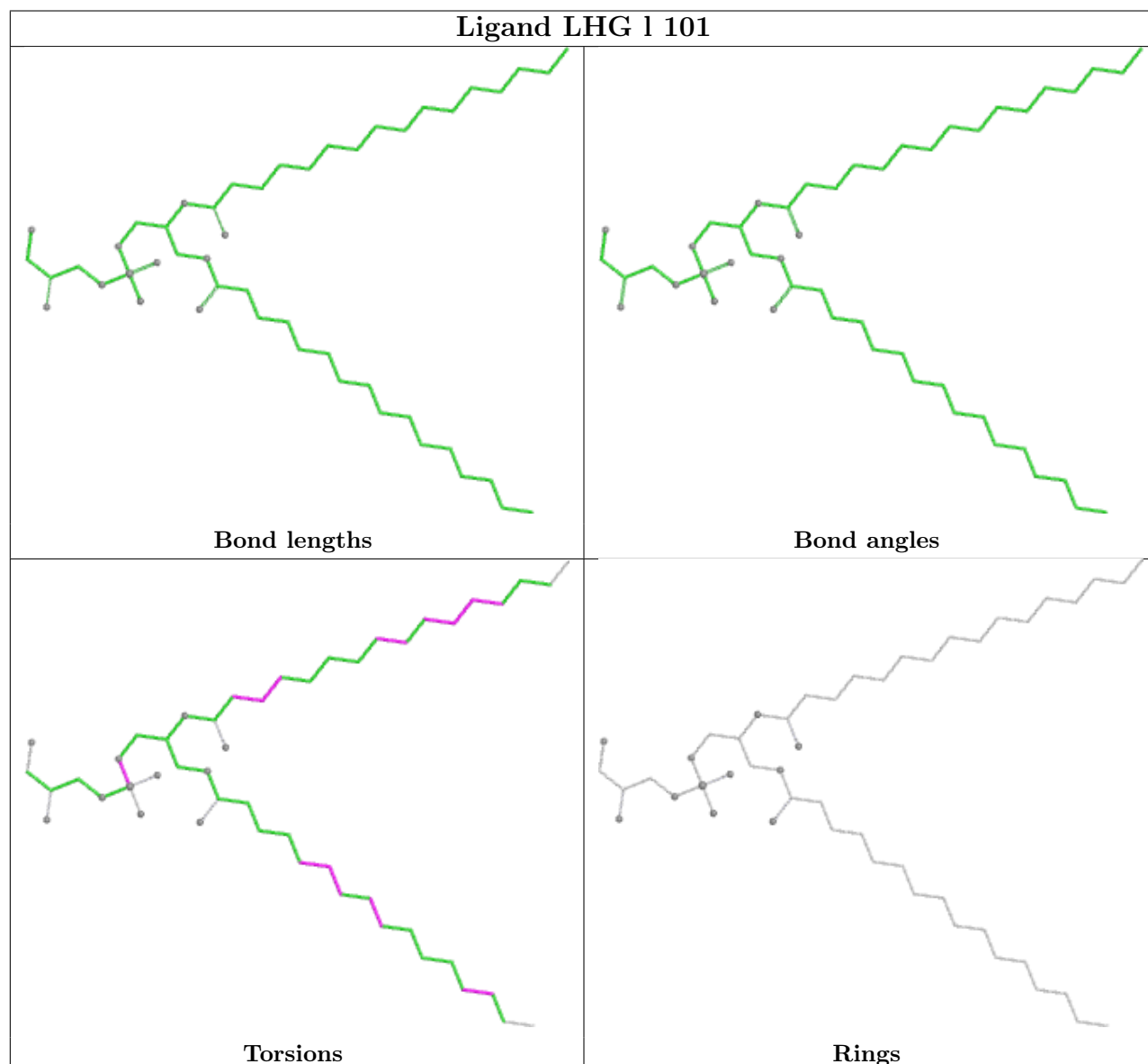
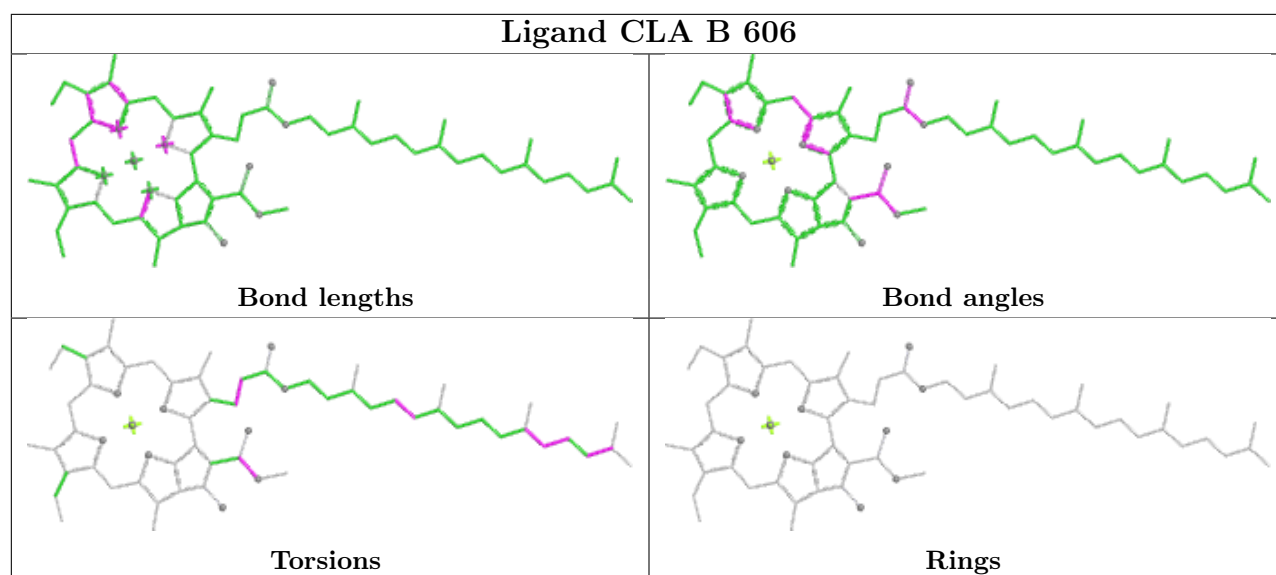
Ligand LMG a 617	
	
Bond lengths	Bond angles
	
Torsions	Rings

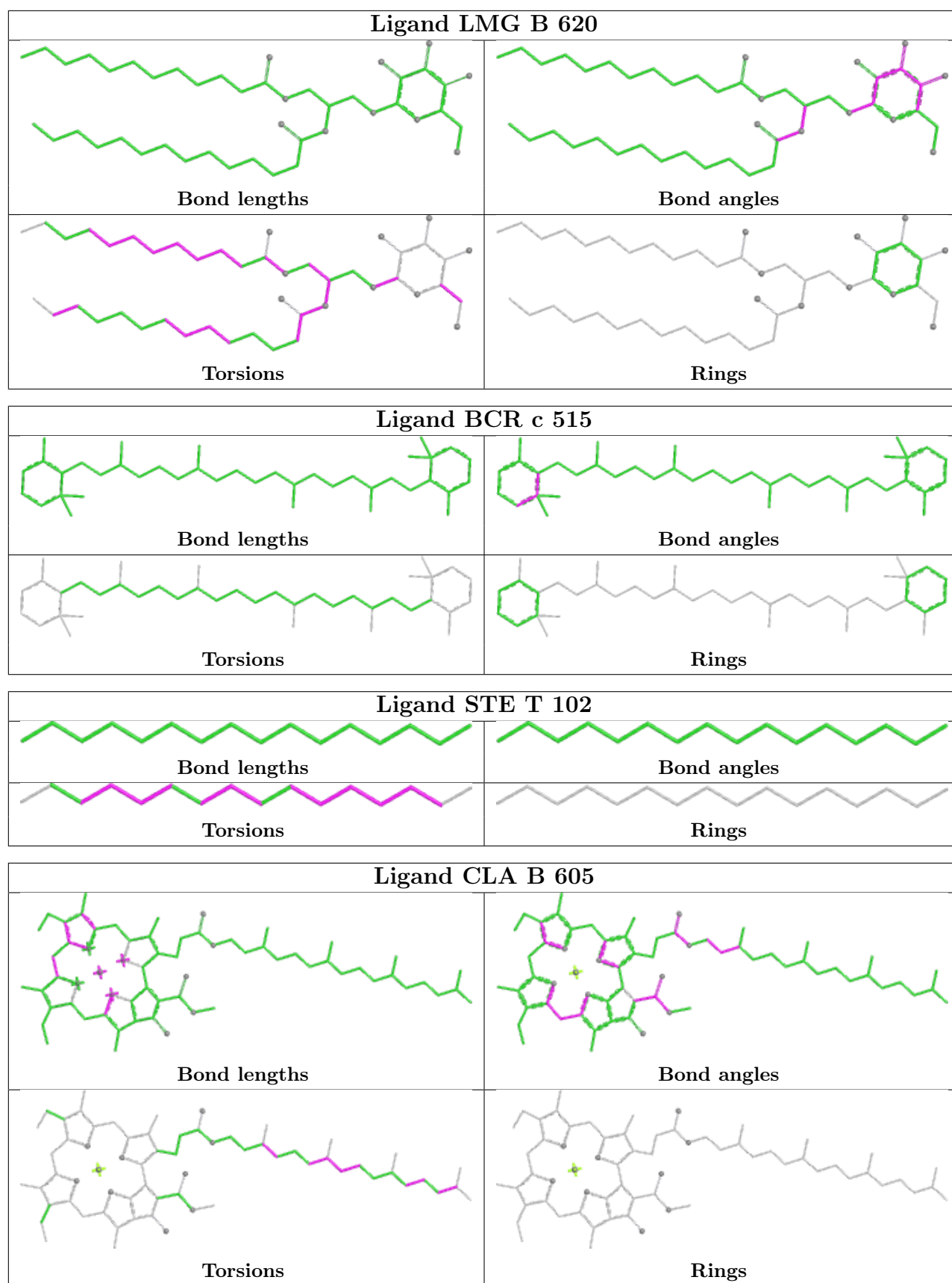
Ligand STE M 102	
	
Bond lengths	Bond angles
	
Torsions	Rings

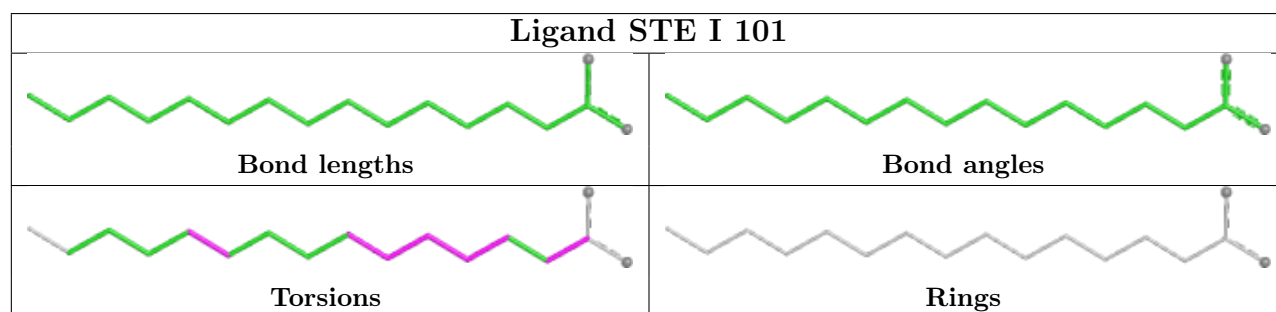
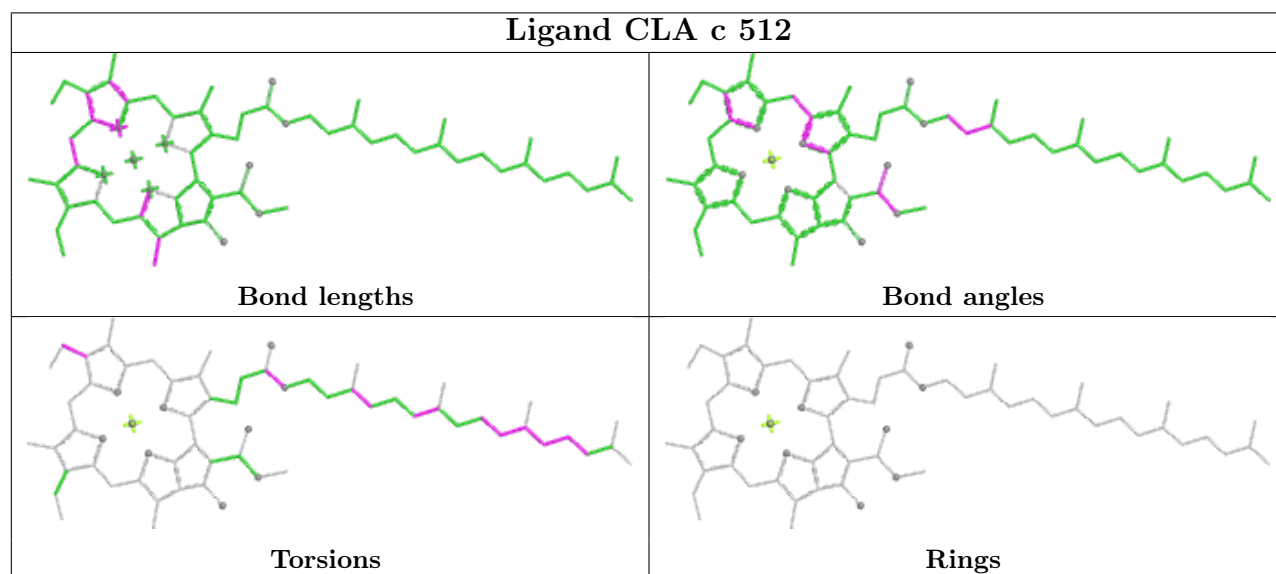
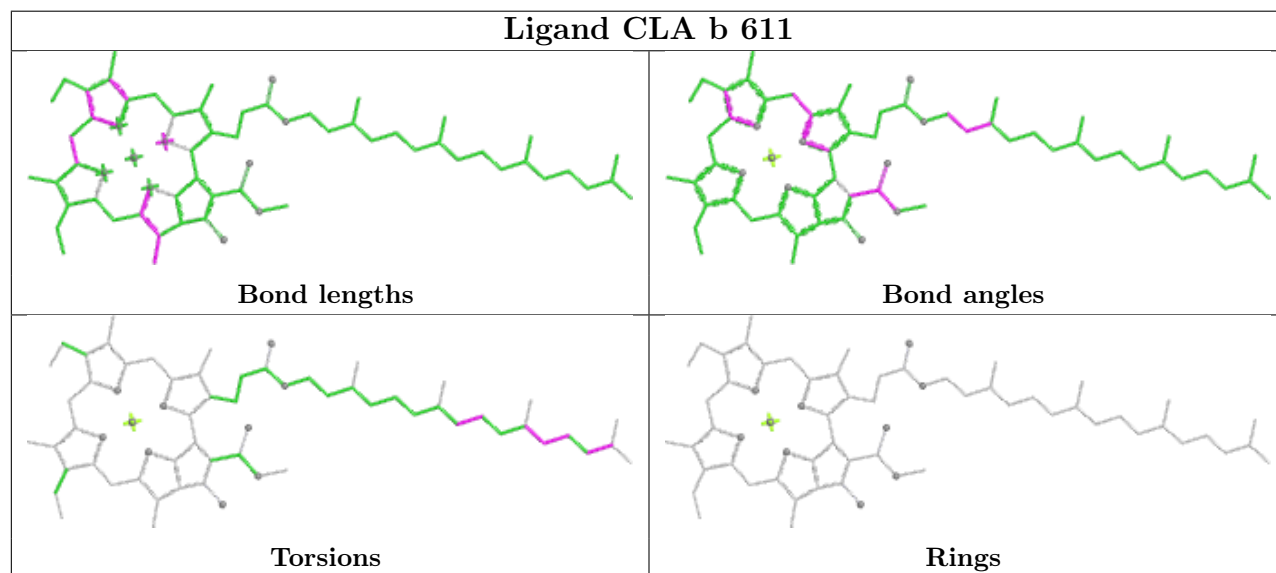
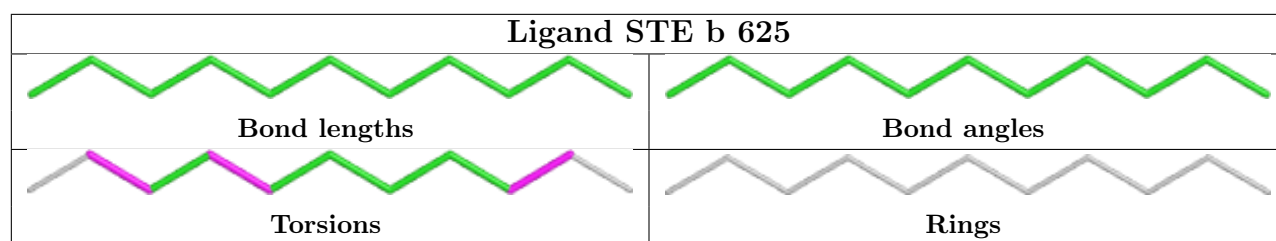


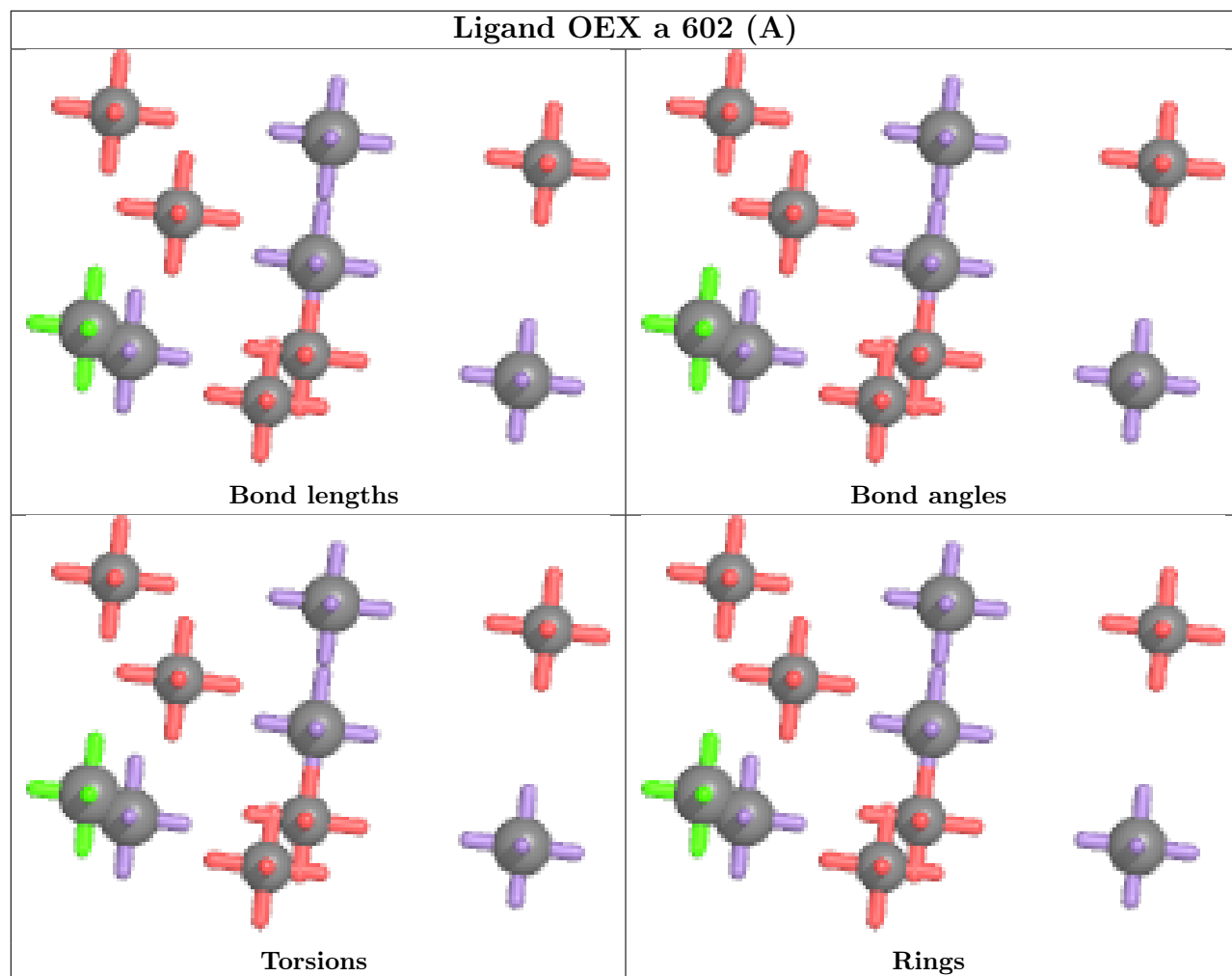
Ligand BCR d 404	
 Bond lengths	 Bond angles
 Torsions	 Rings
Ligand CLA b 608	
 Bond lengths	 Bond angles
 Torsions	 Rings
Ligand DGD C 523	
 Bond lengths	 Bond angles
 Torsions	 Rings



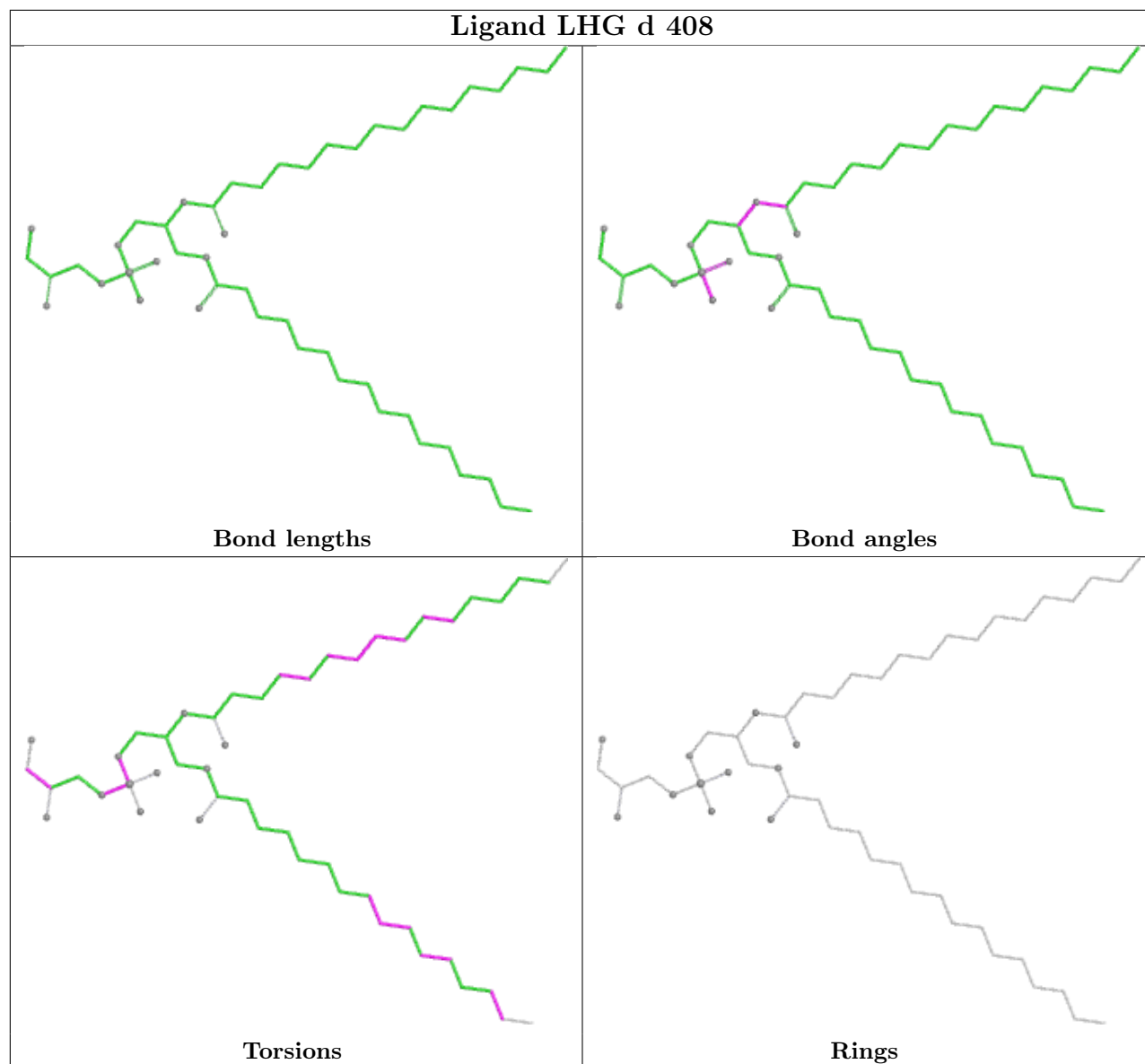




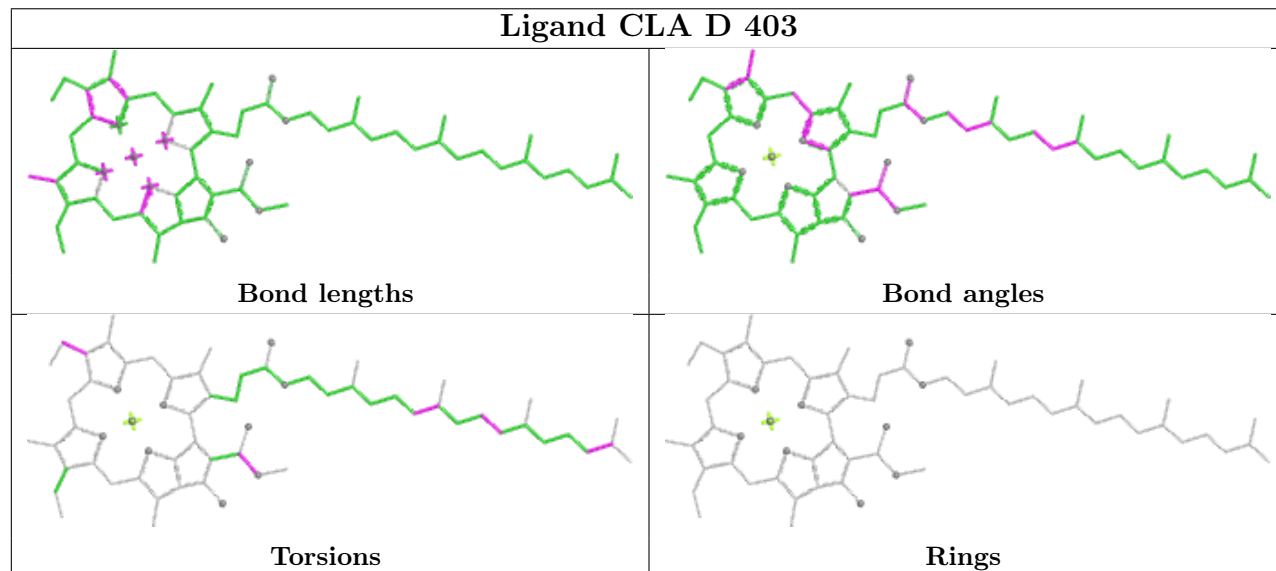


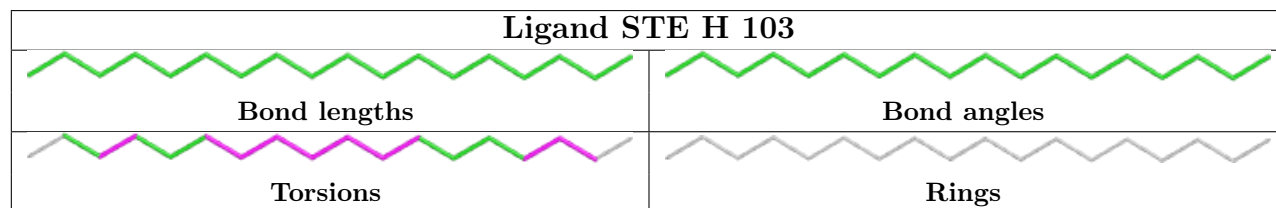
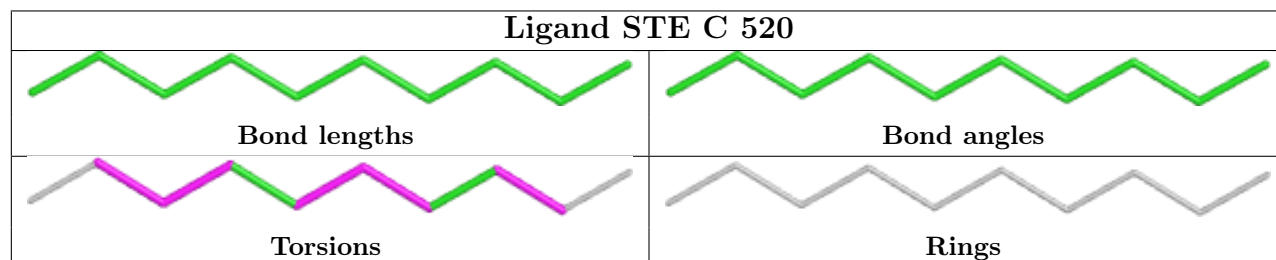
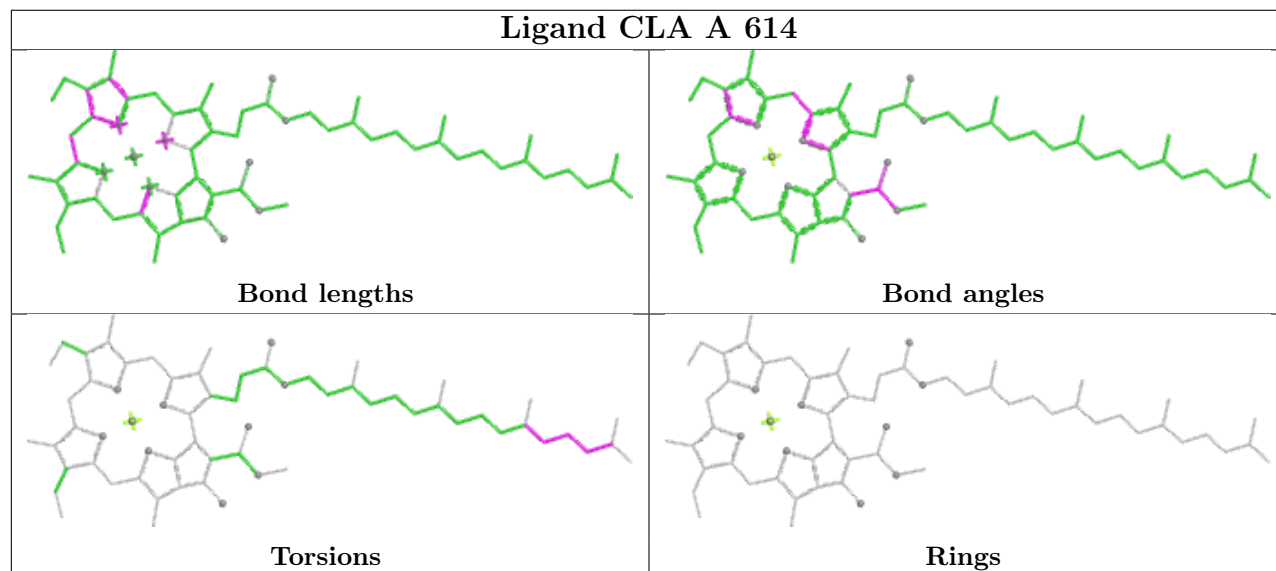
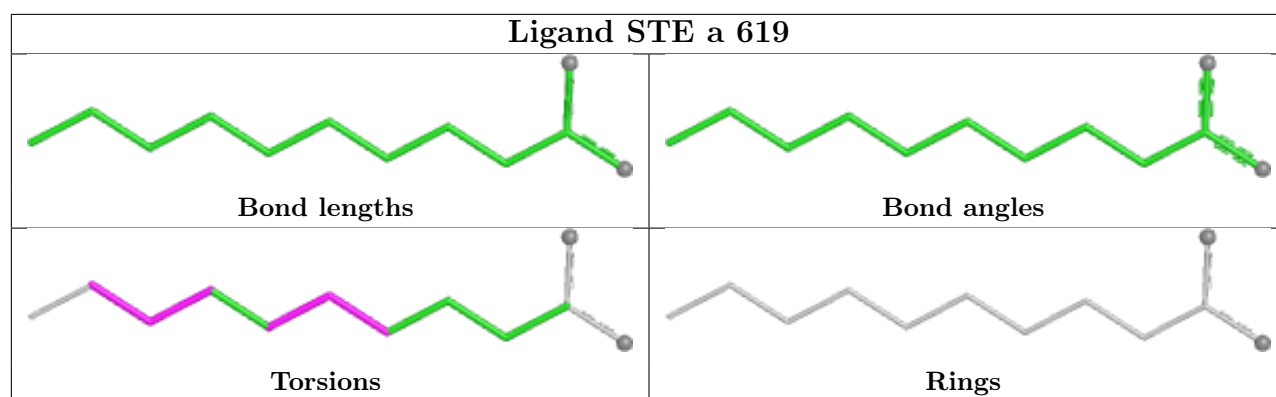


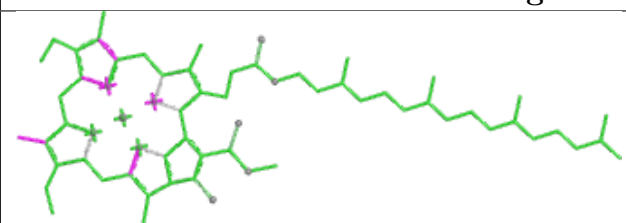
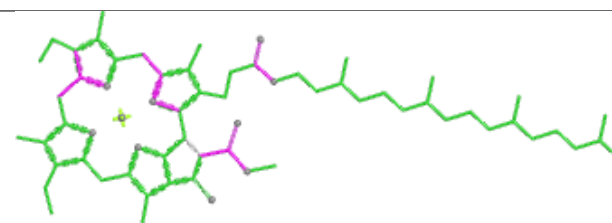
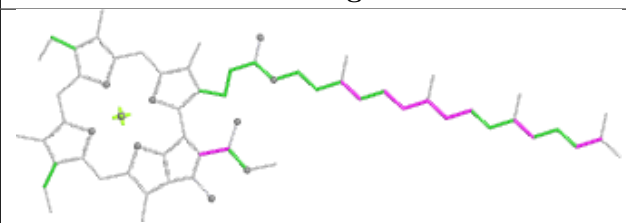
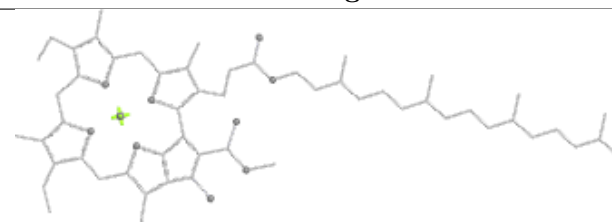
Ligand LHG d 408



Ligand CLA D 403

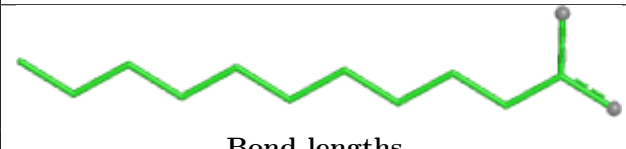
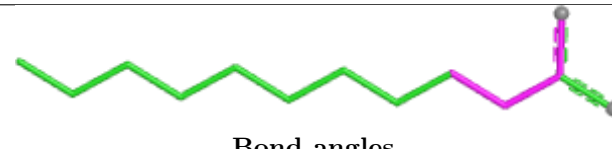
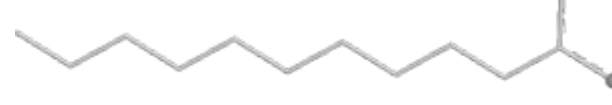


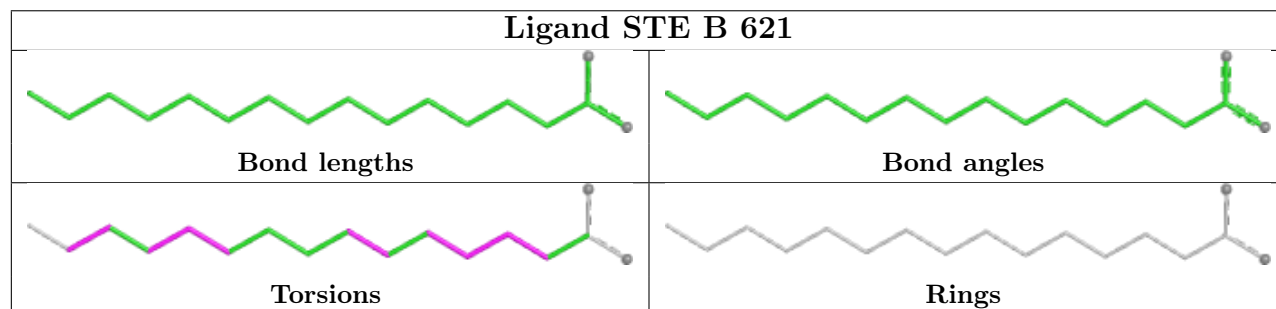
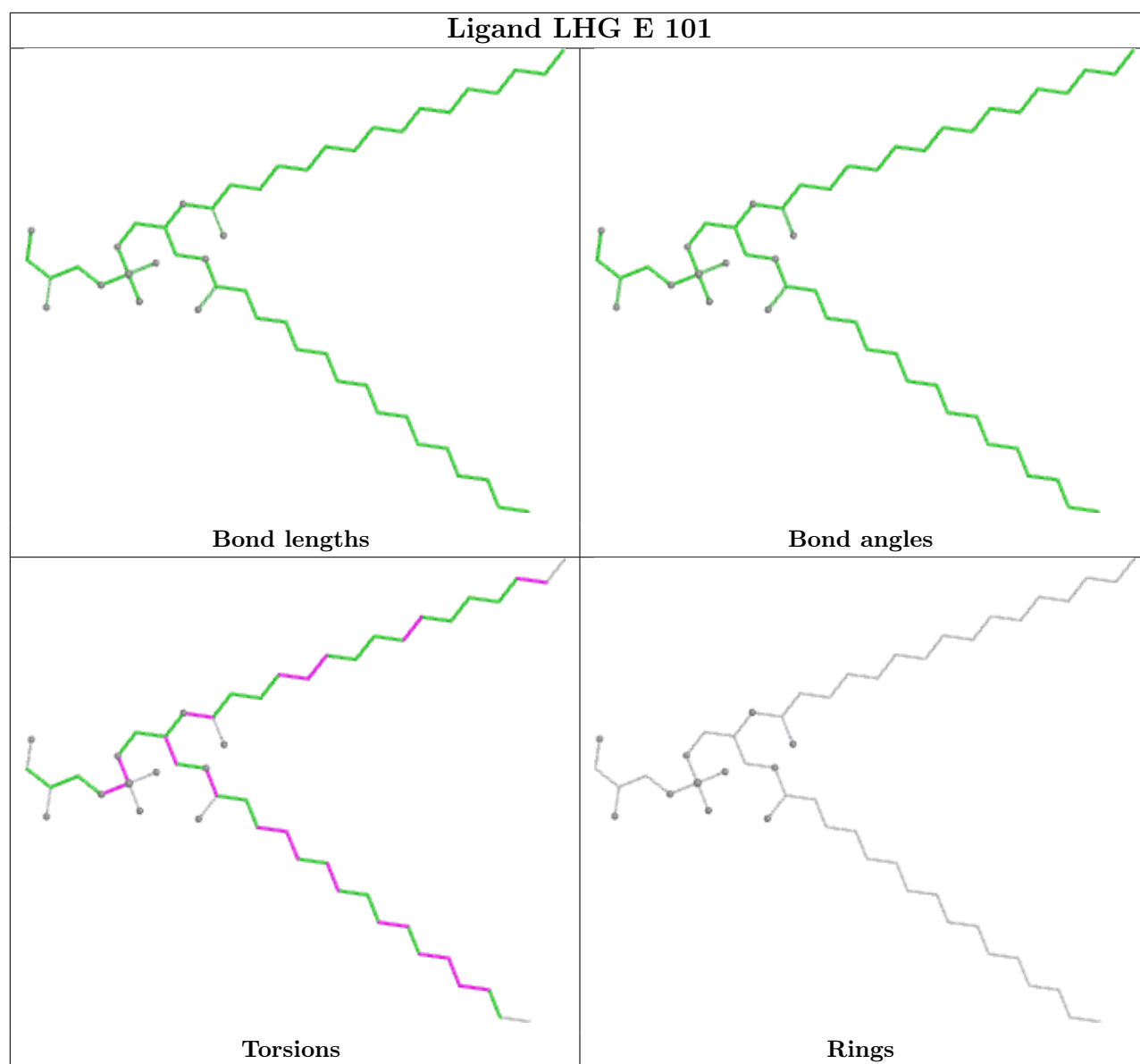


Ligand CLA c 507	
	
Bond lengths	Bond angles
	
Torsions	Rings

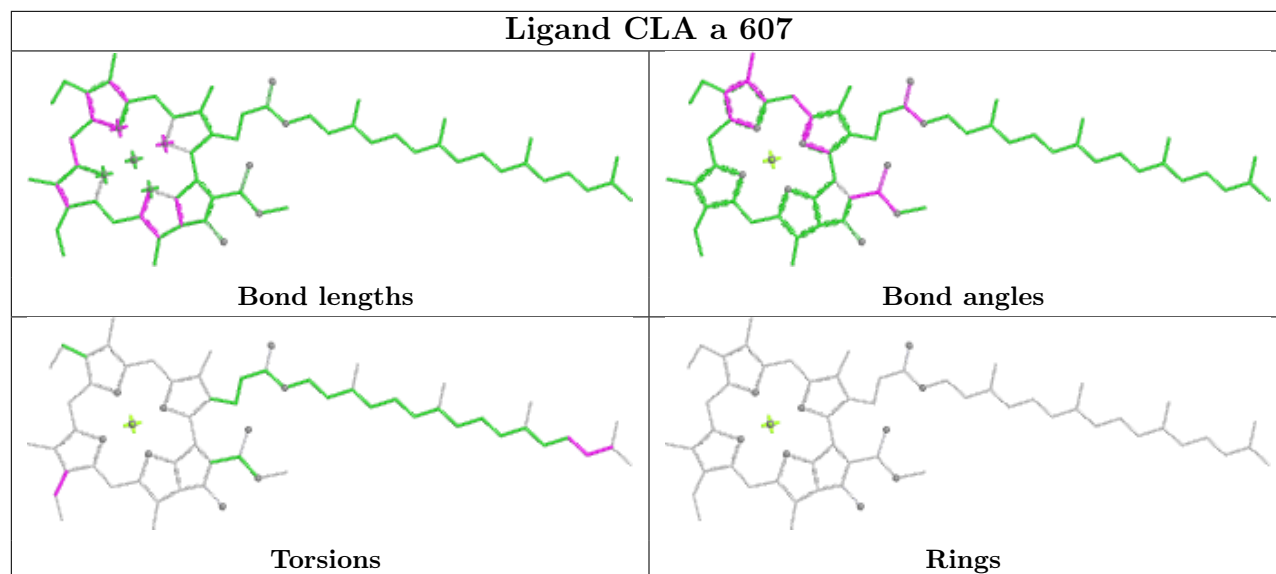
Ligand STE e 101	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand STE C 529	
	
Bond lengths	Bond angles
	
Torsions	Rings

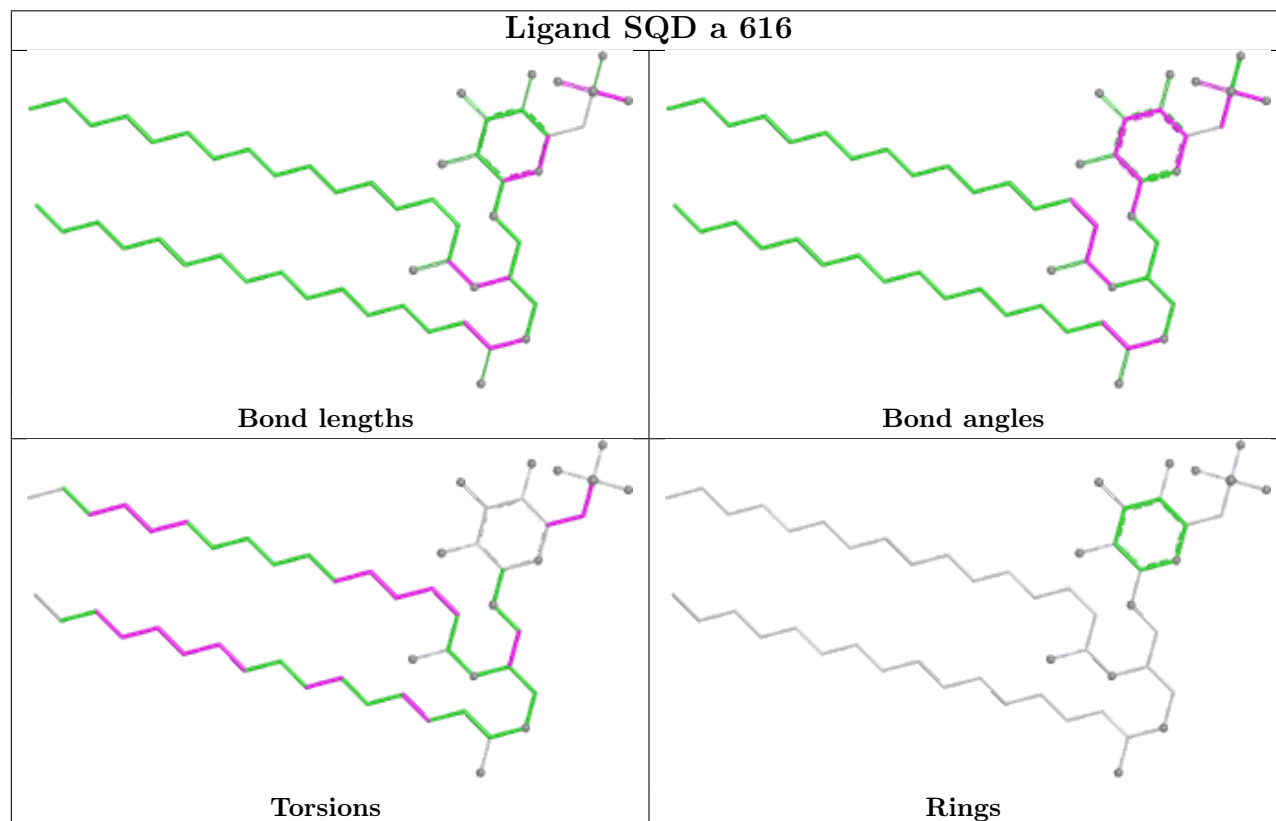
Ligand STE e 104	
	
Bond lengths	Bond angles
	
Torsions	Rings

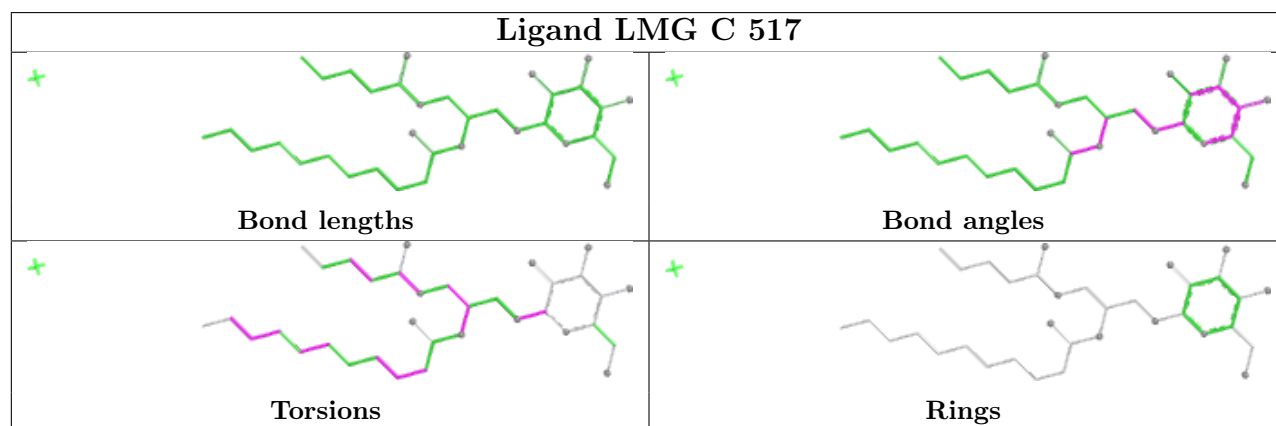
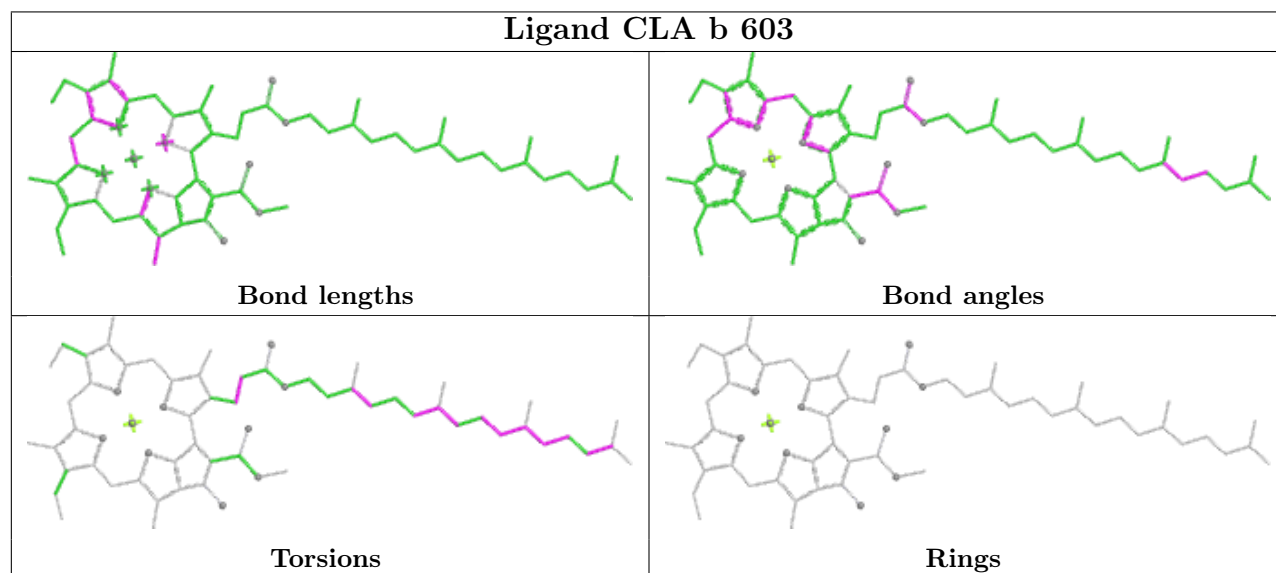
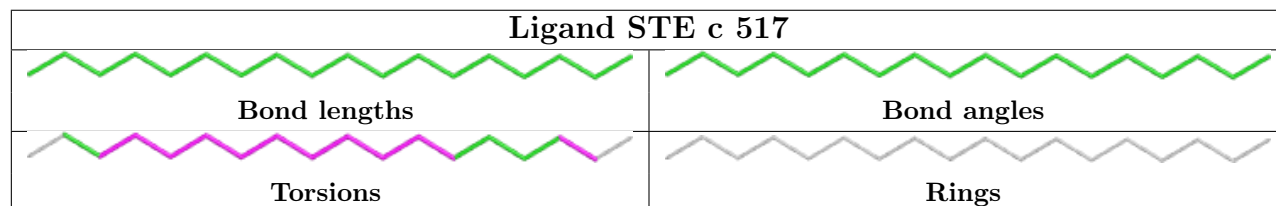
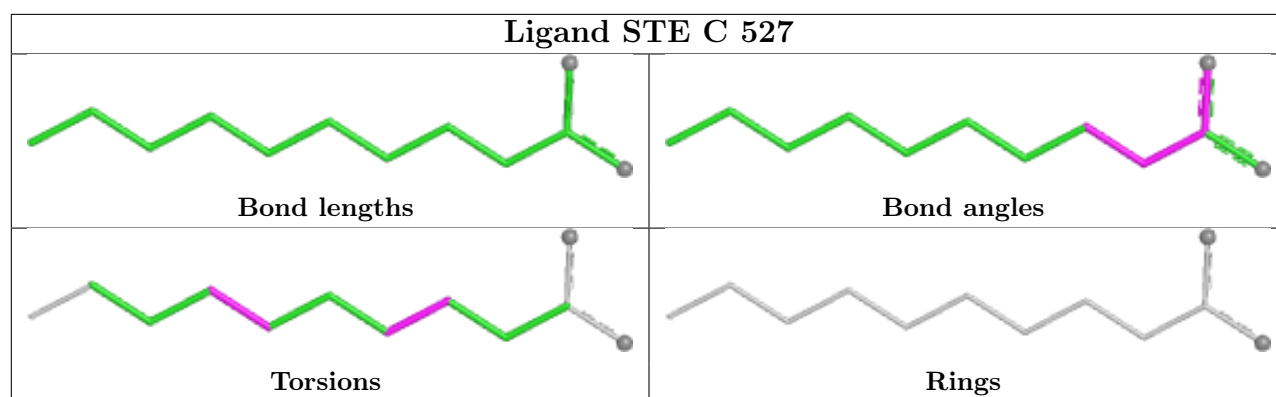


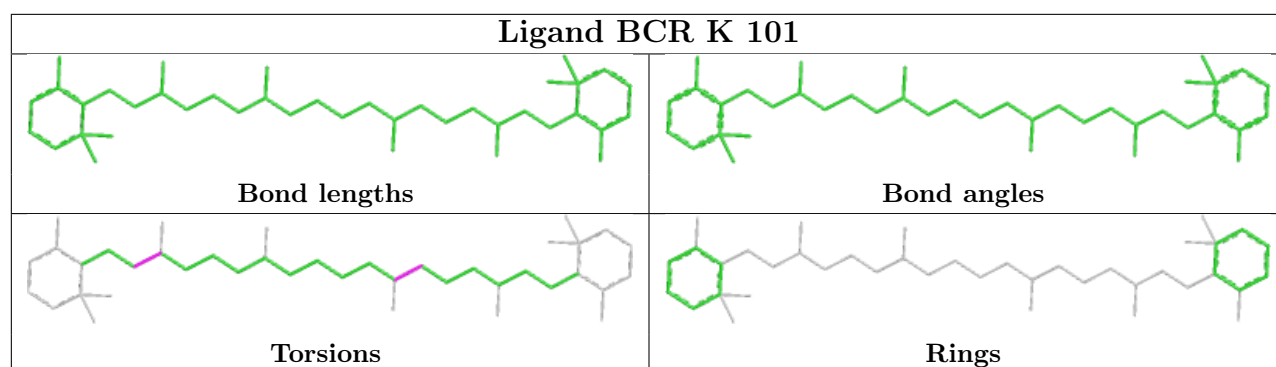
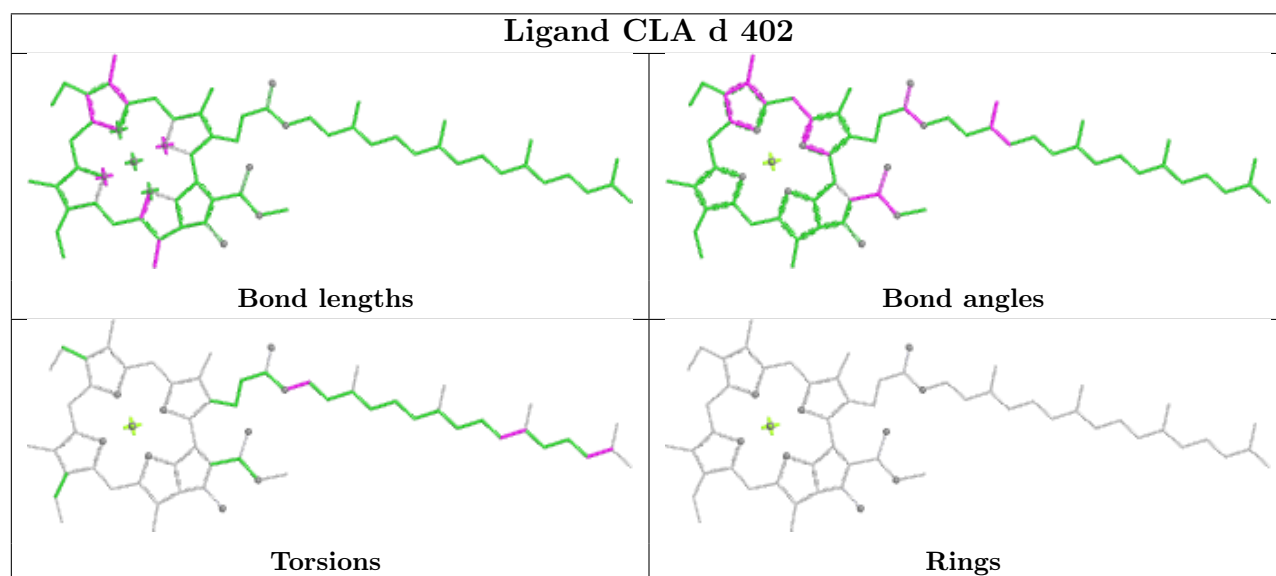
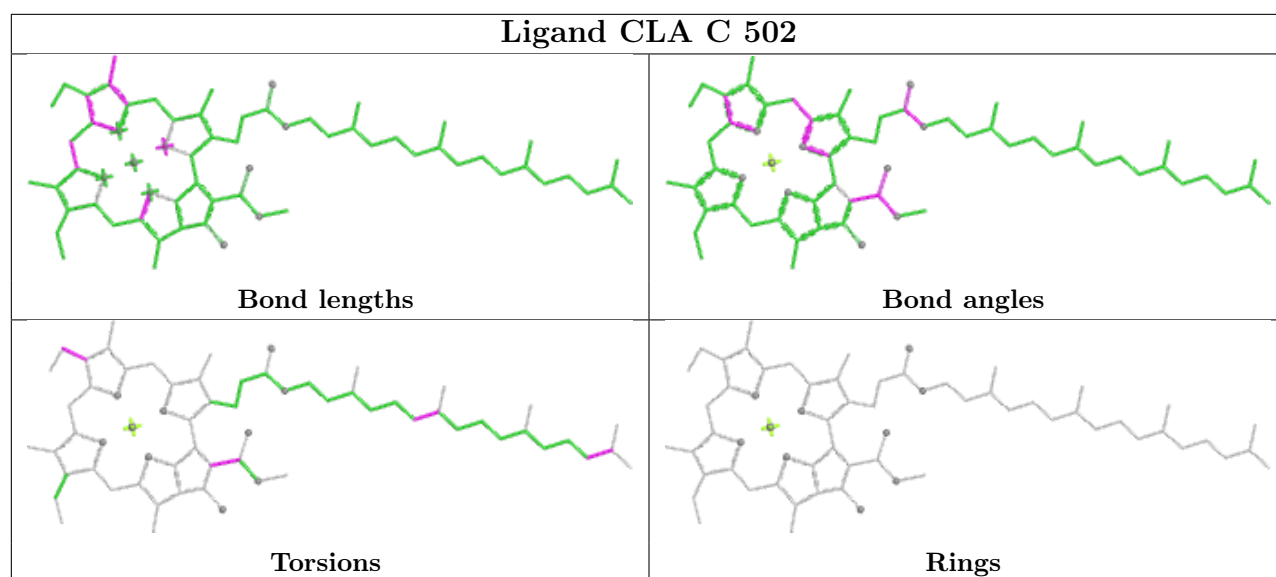
Ligand CLA a 607

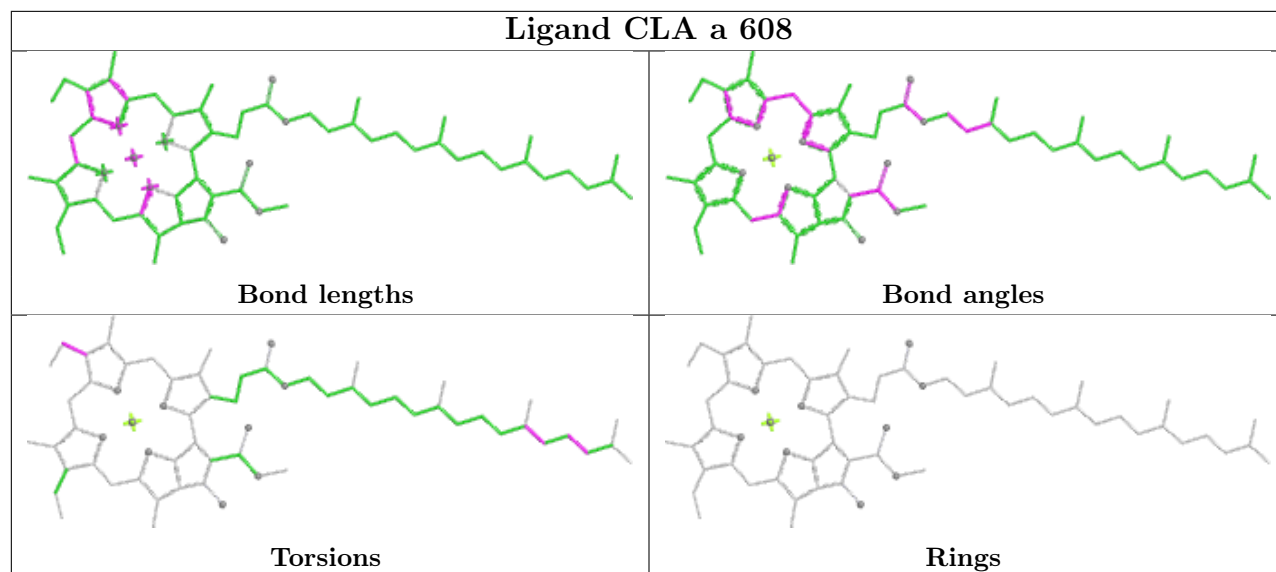
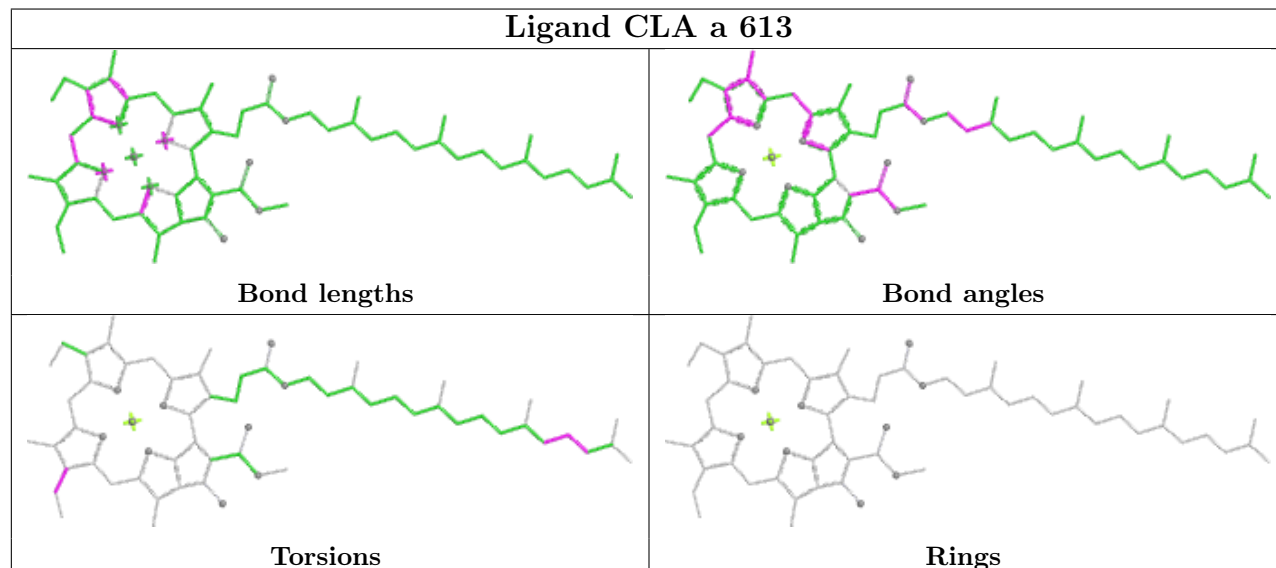
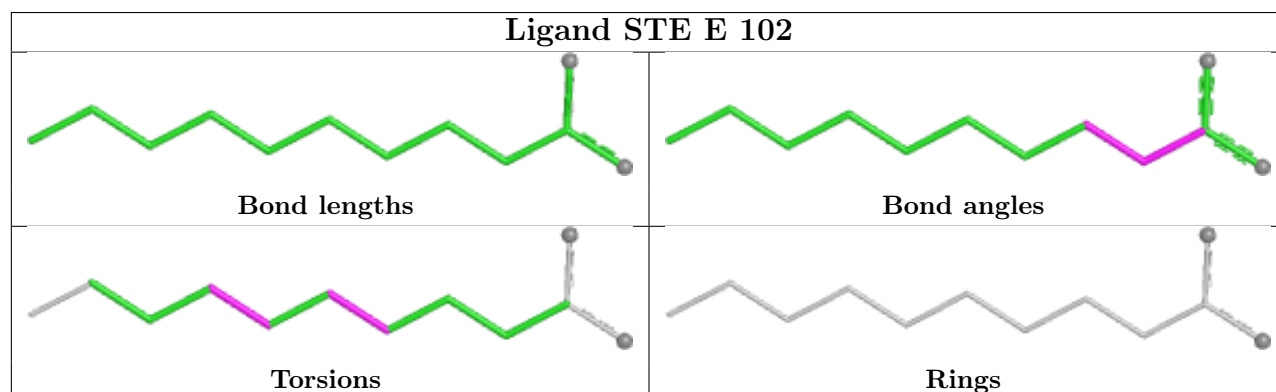


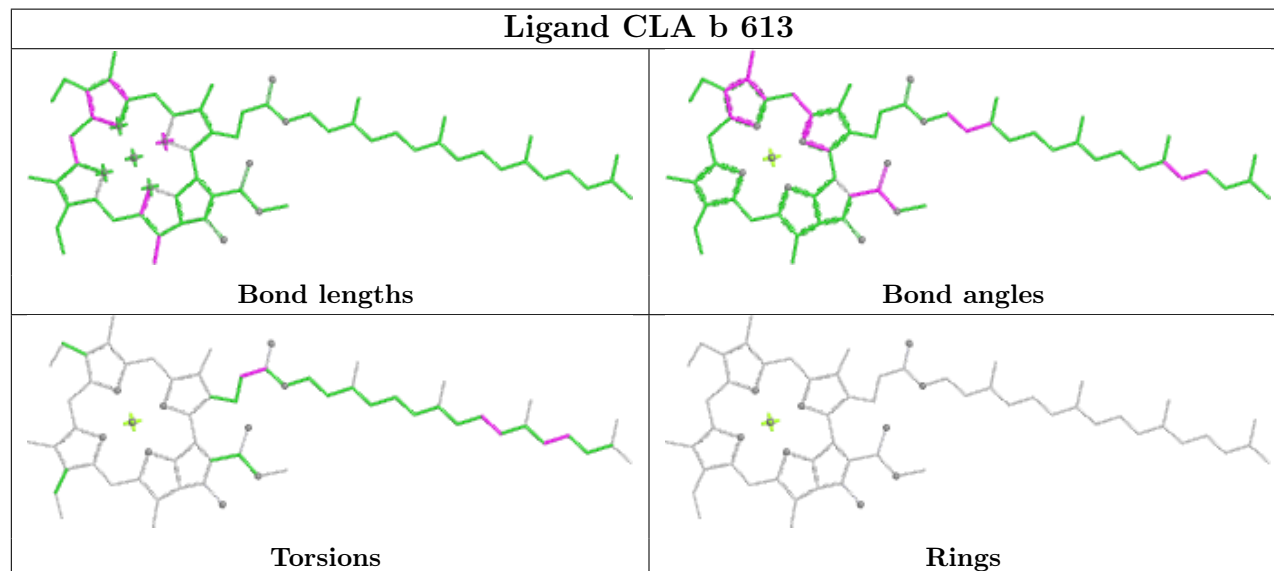
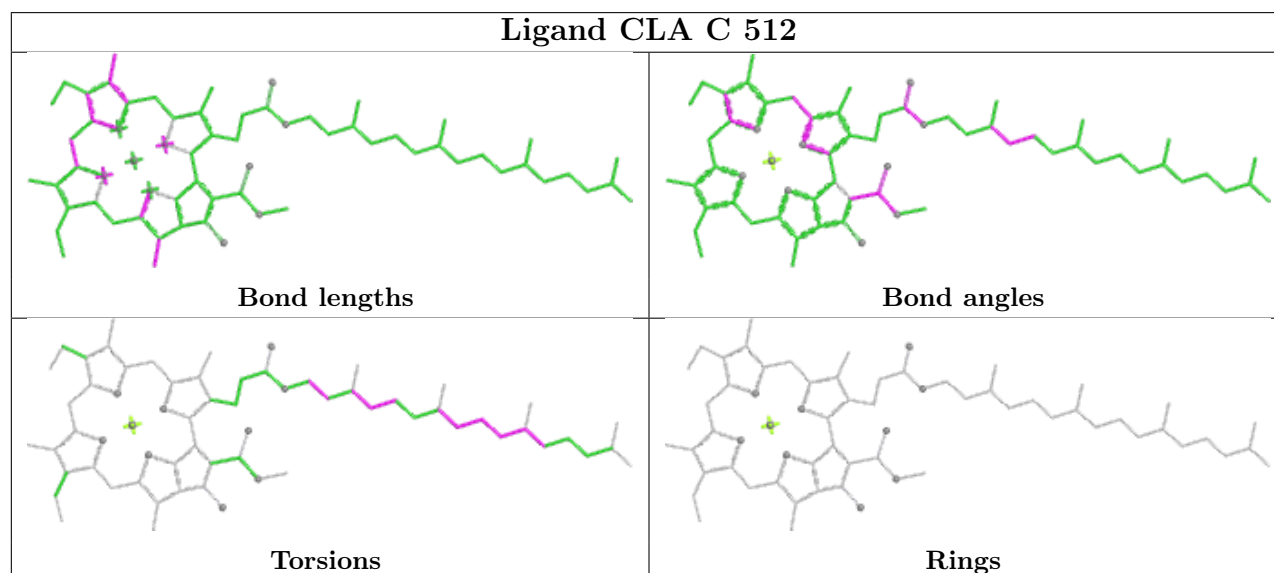
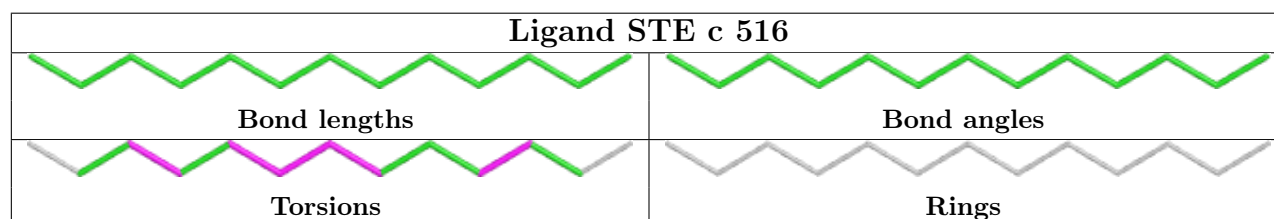
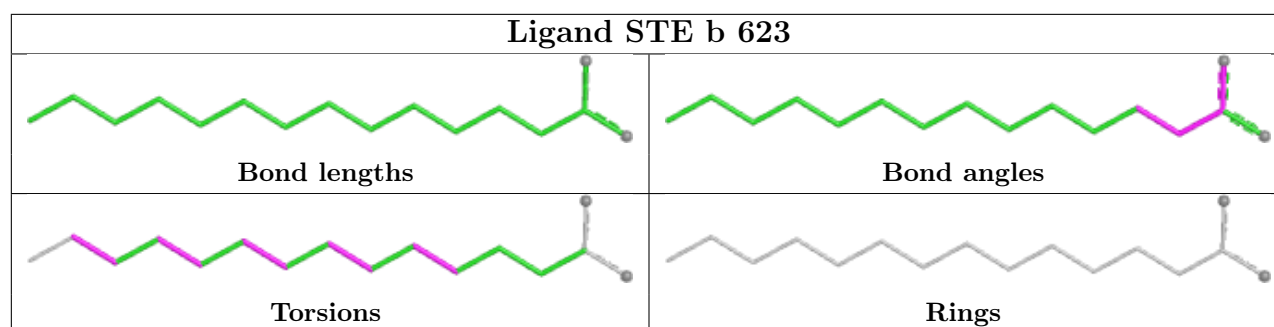
Ligand SQD a 616

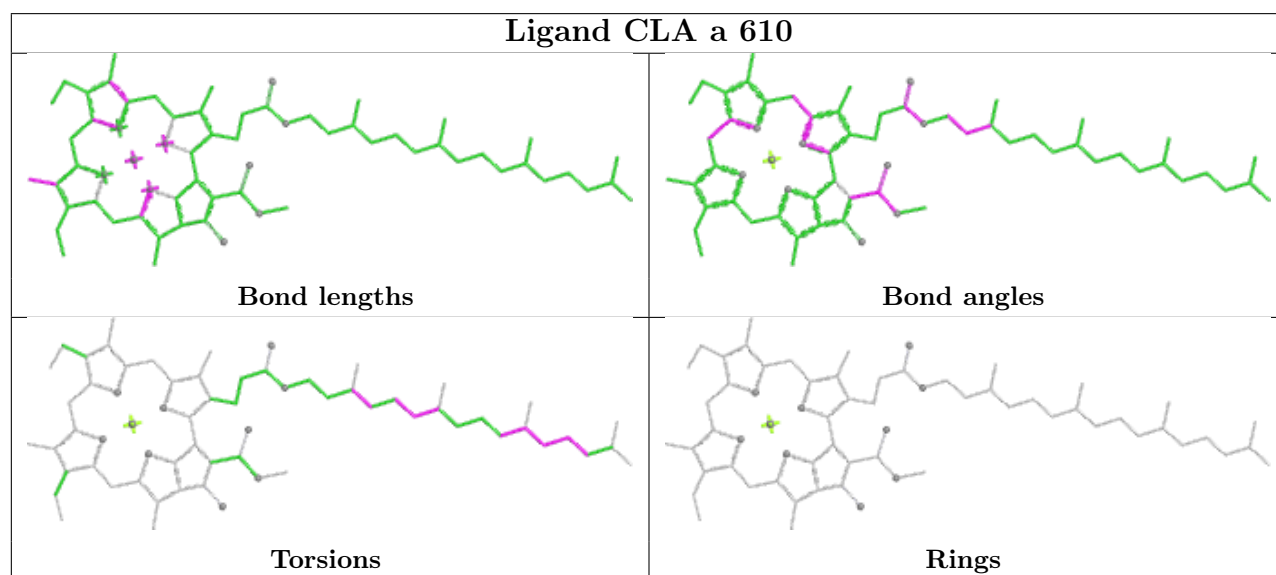
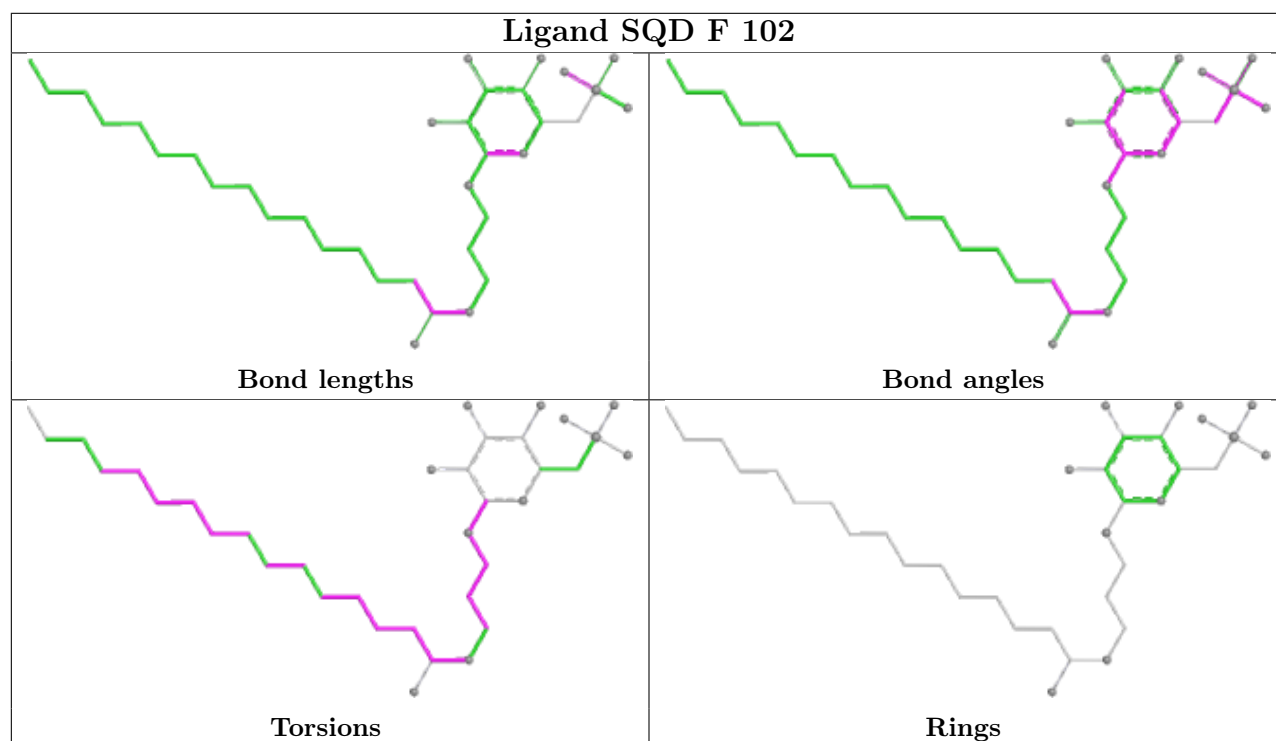
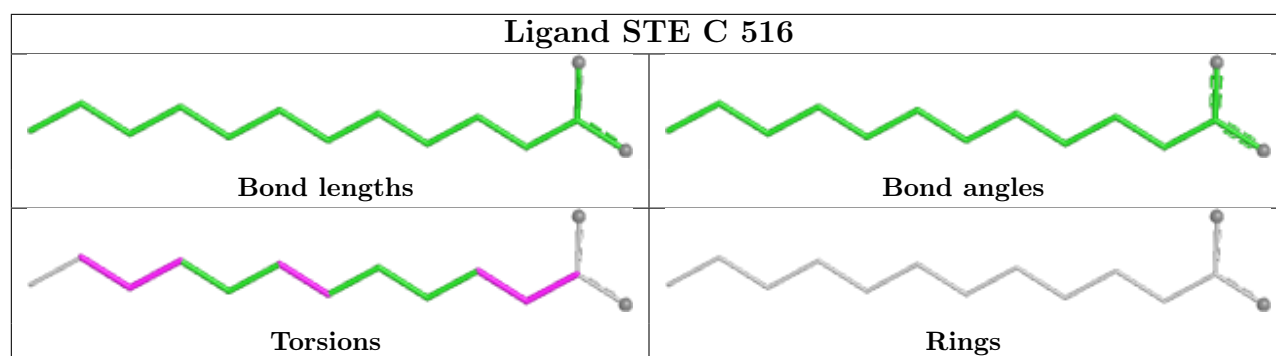


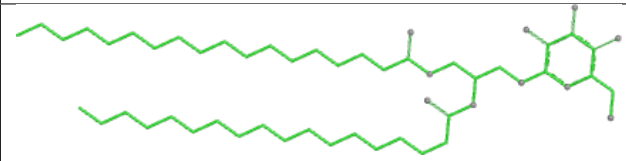
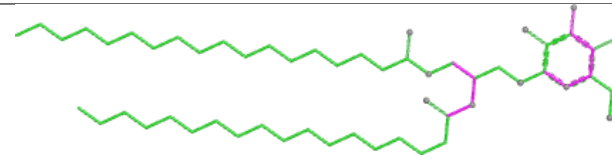
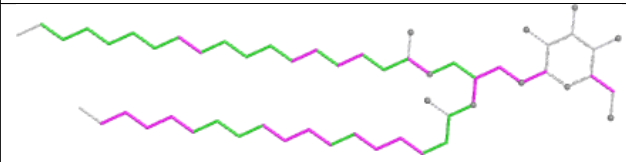
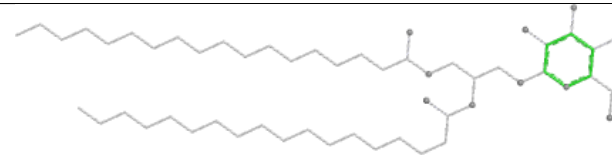
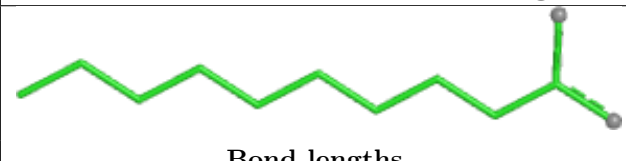
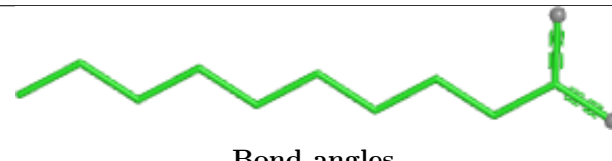
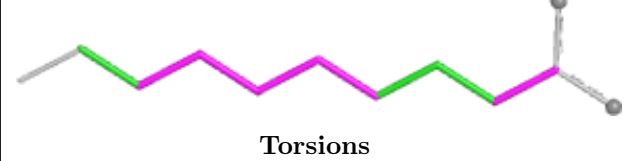
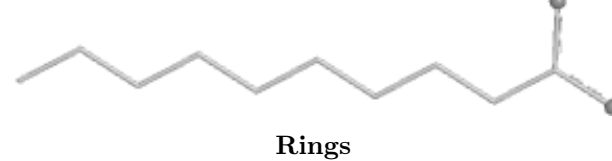
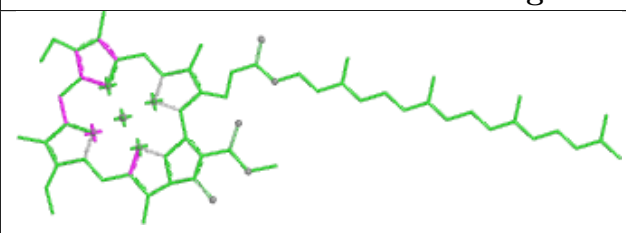
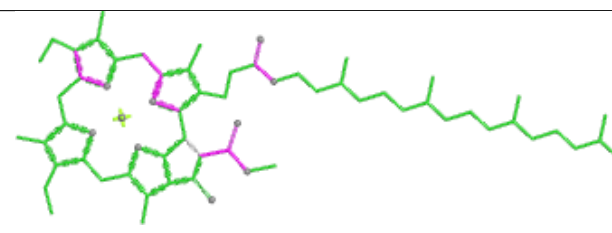
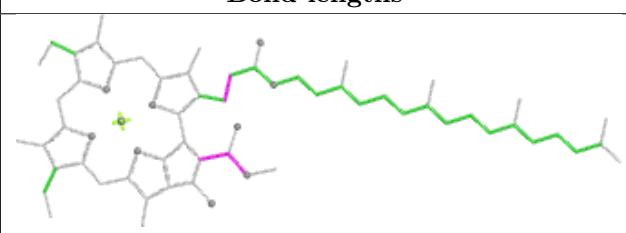
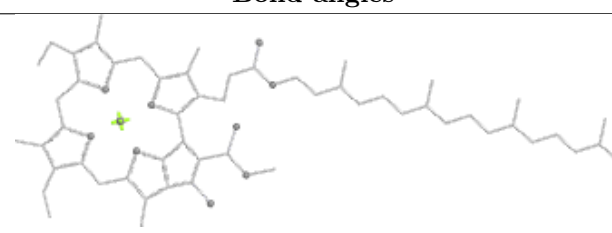




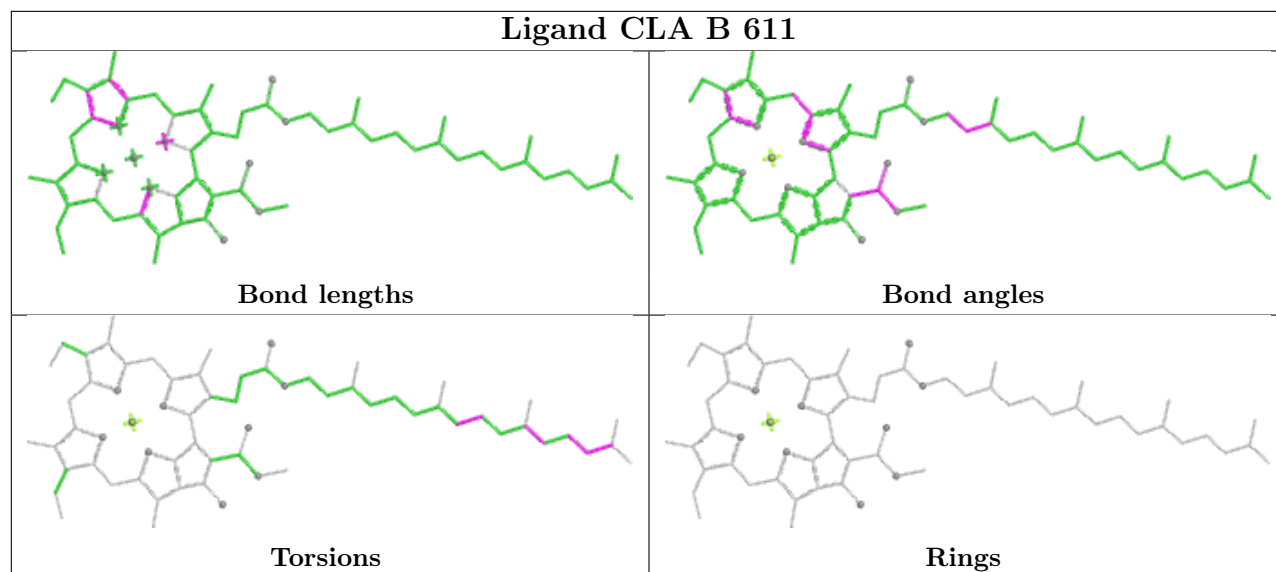
Ligand CLA a 608**Ligand CLA a 613****Ligand STE E 102**



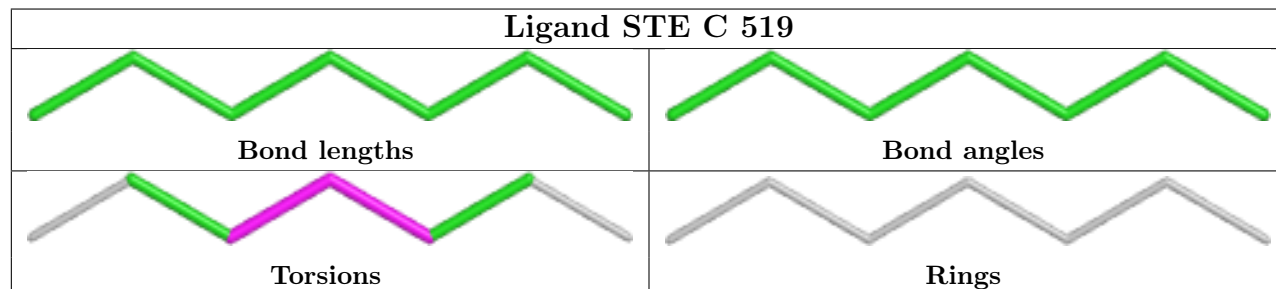


Ligand LMG b 622	
 Bond lengths	 Bond angles
 Torsions	 Rings
Ligand STE i 101	
 Bond lengths	 Bond angles
 Torsions	 Rings
Ligand CLA c 501	
 Bond lengths	 Bond angles
 Torsions	 Rings

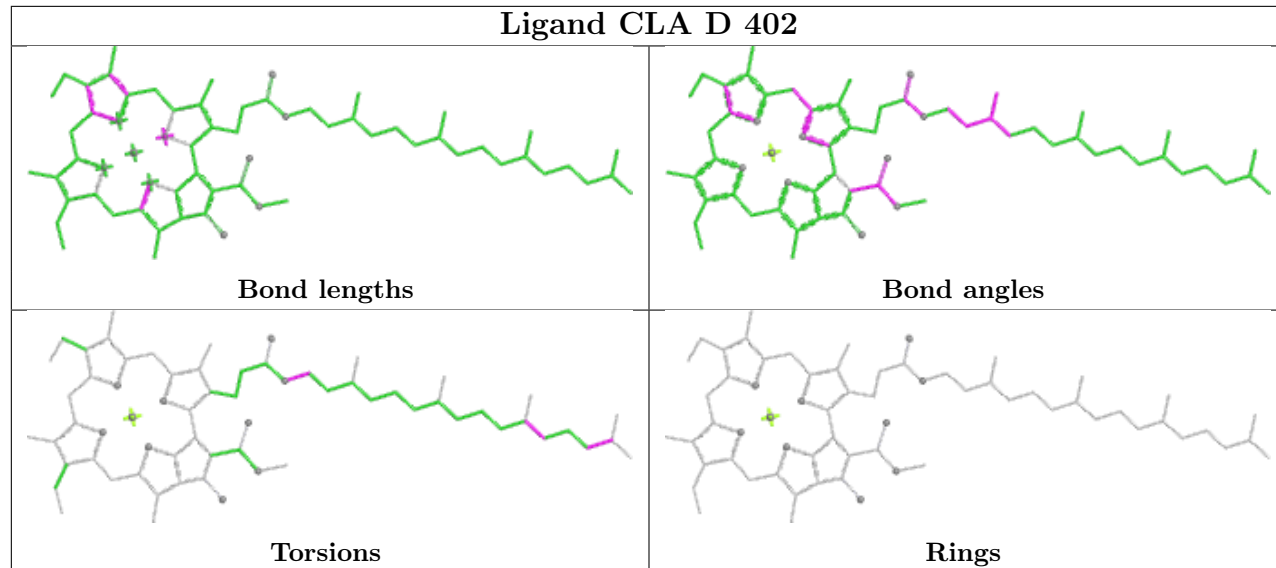
Ligand CLA B 611

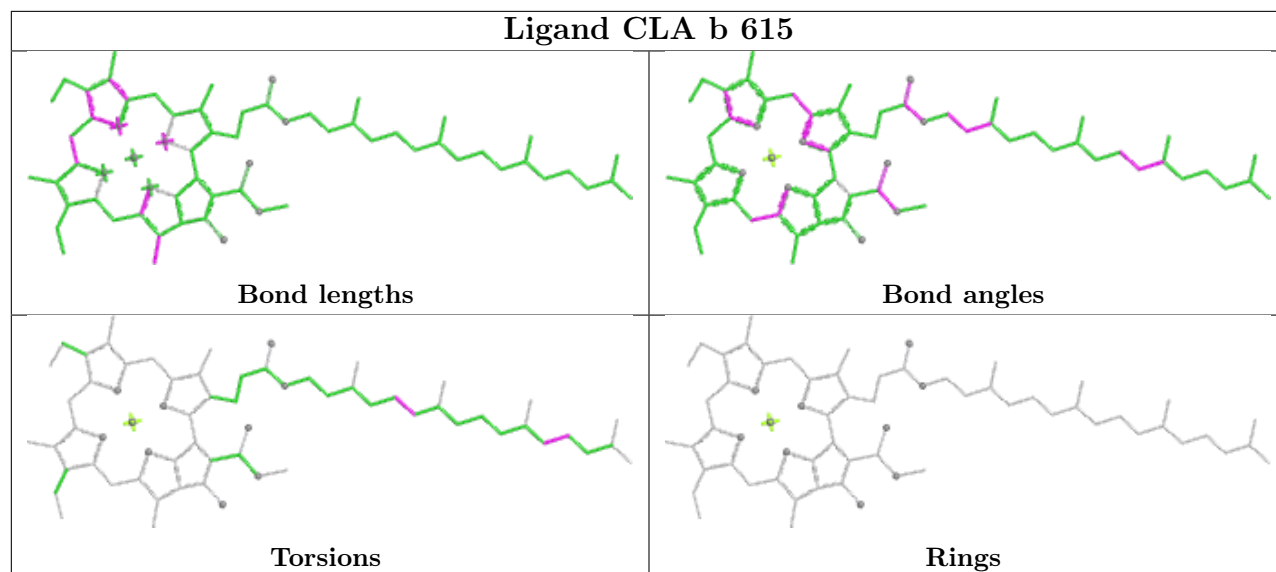
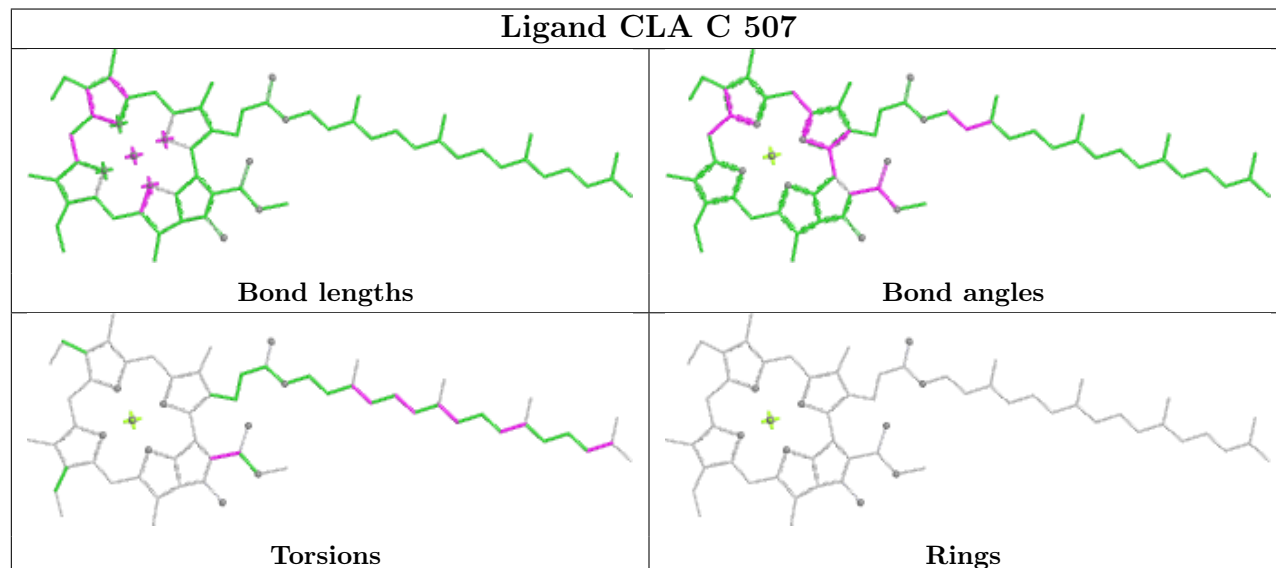


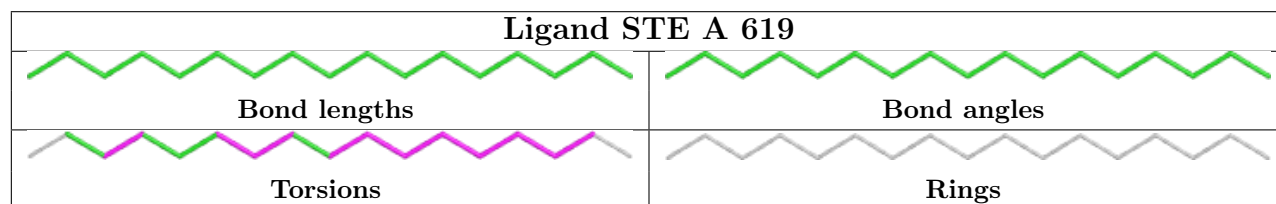
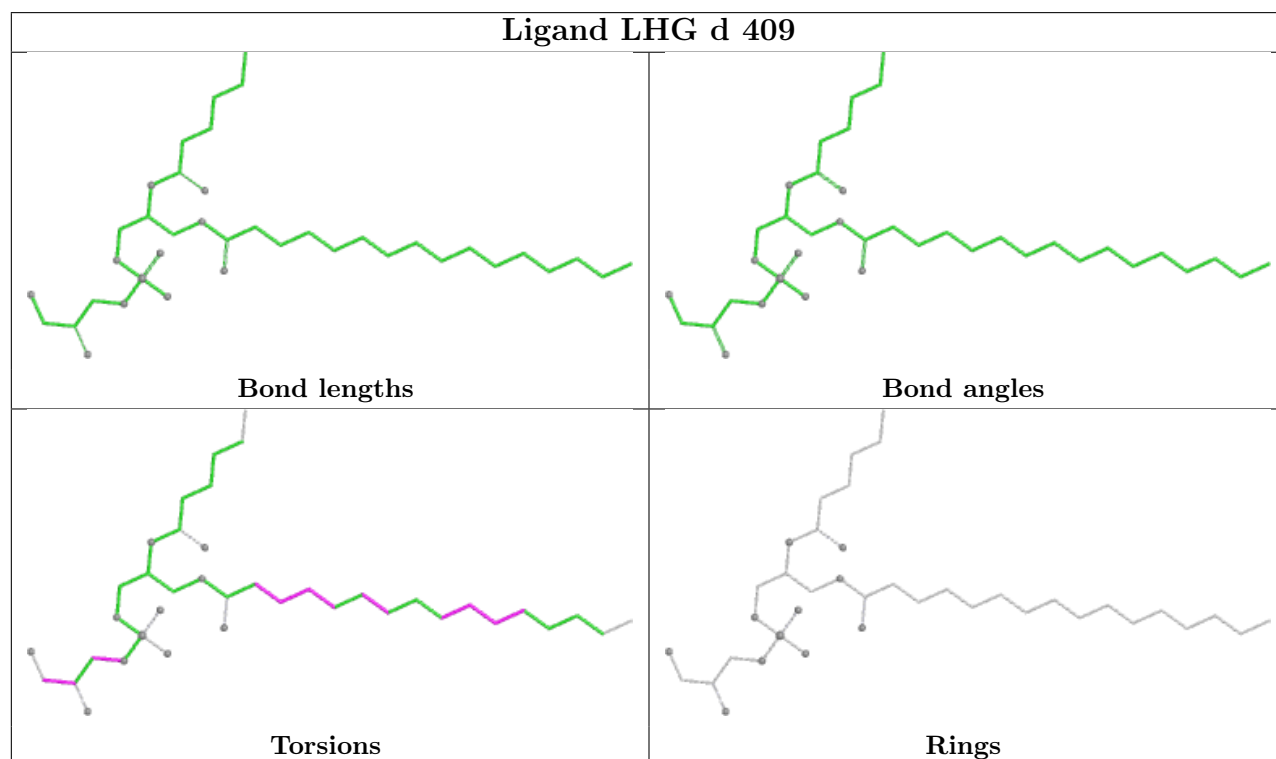
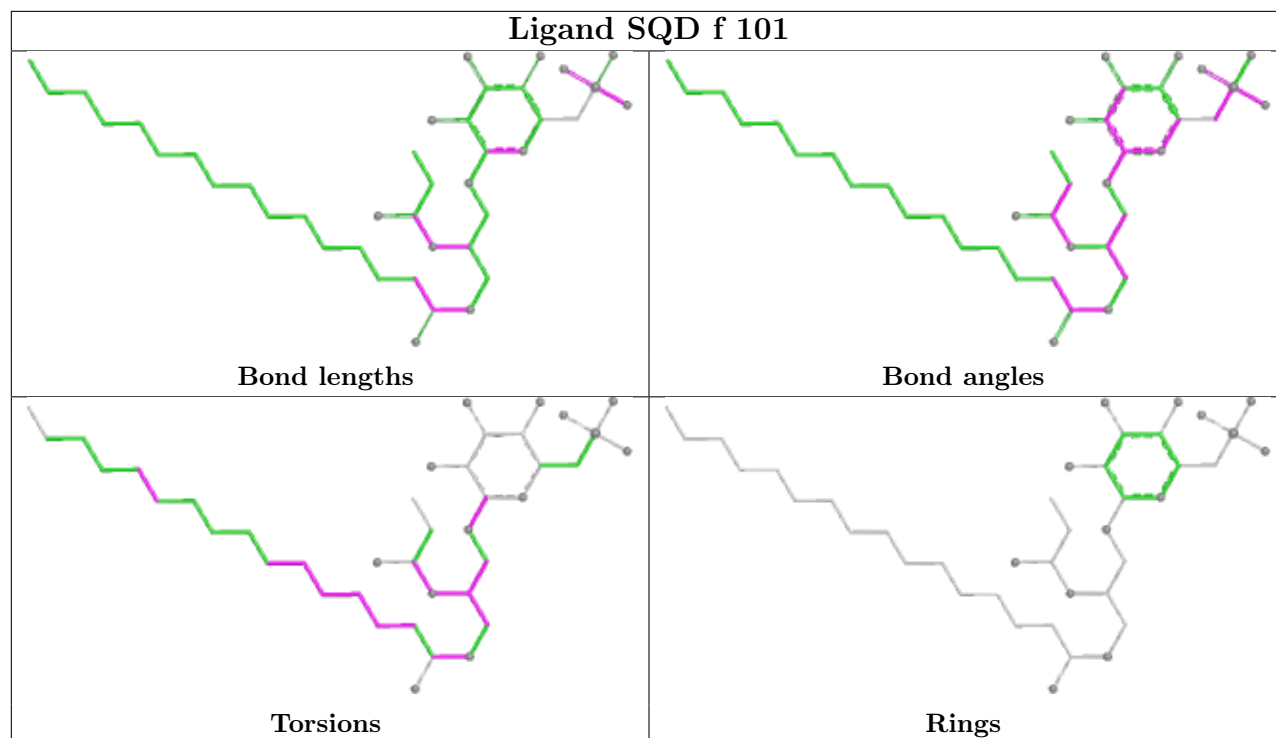
Ligand STE C 519

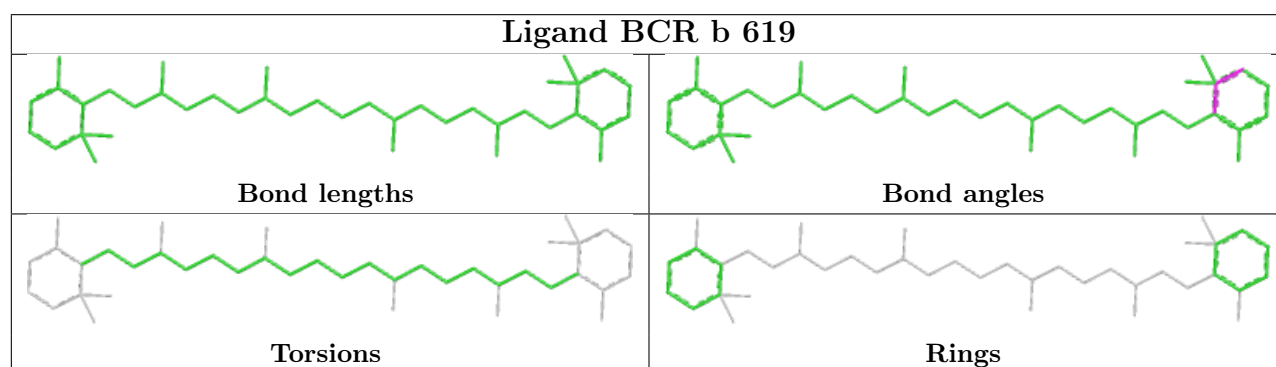
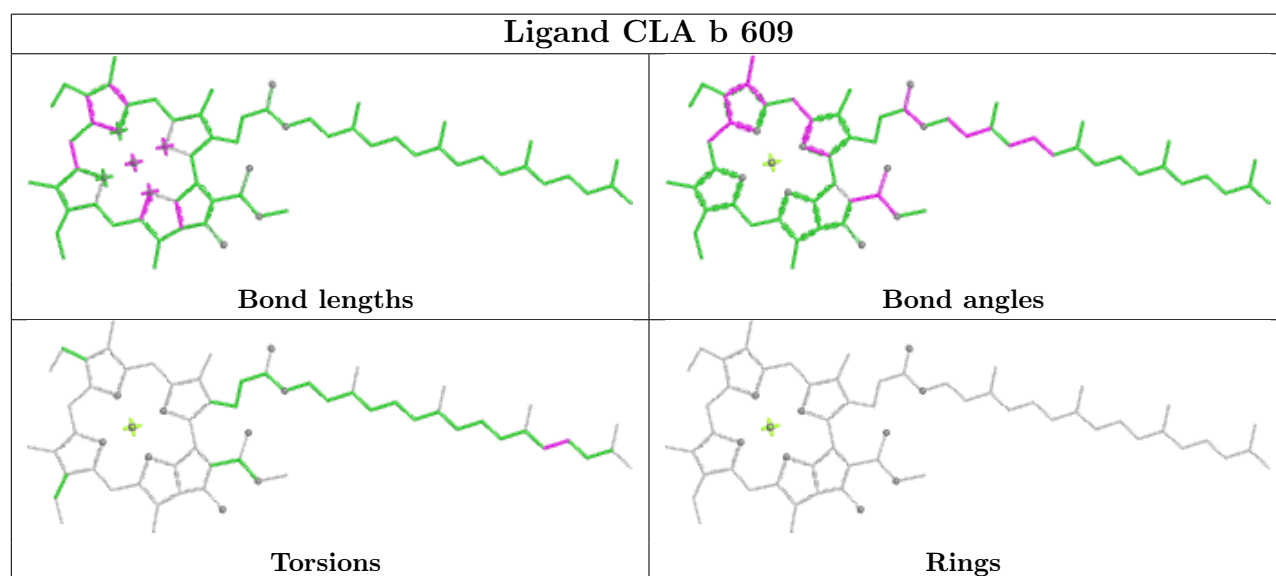
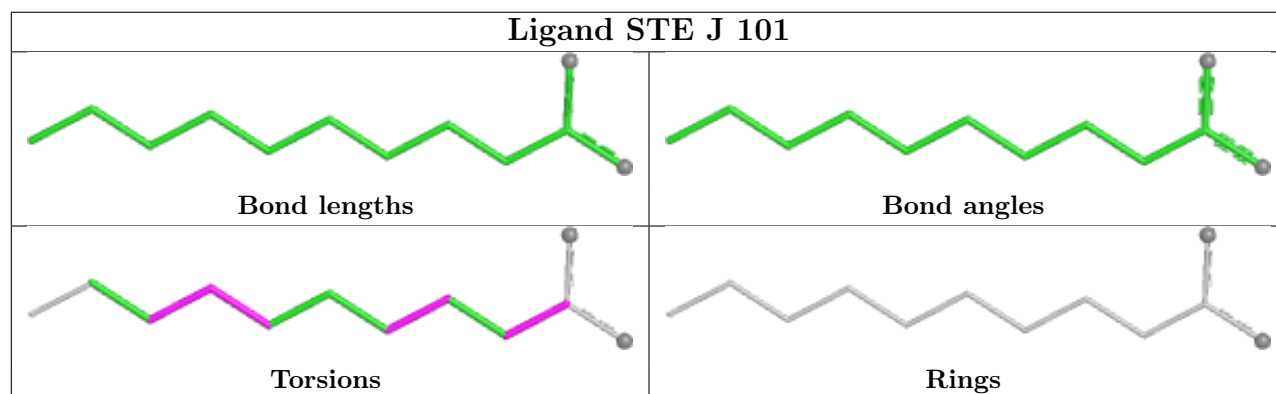
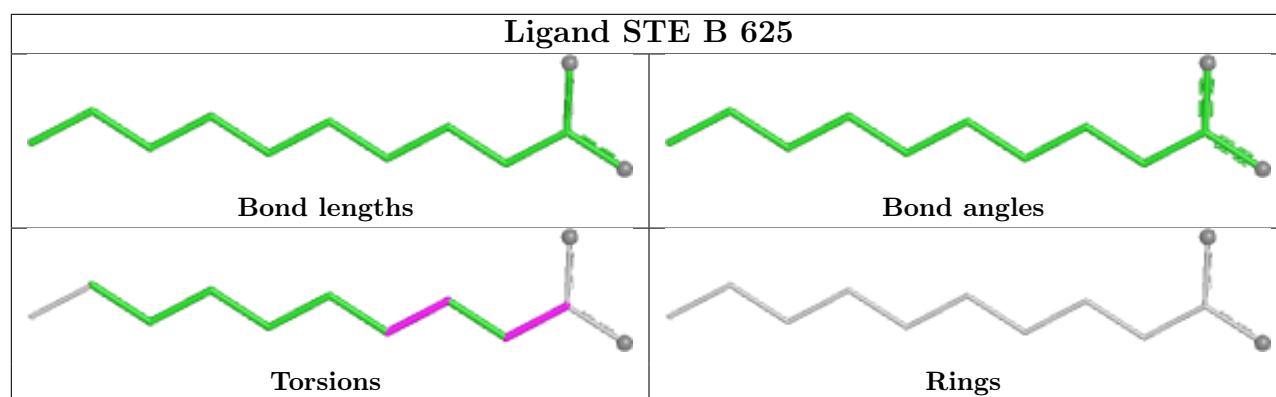


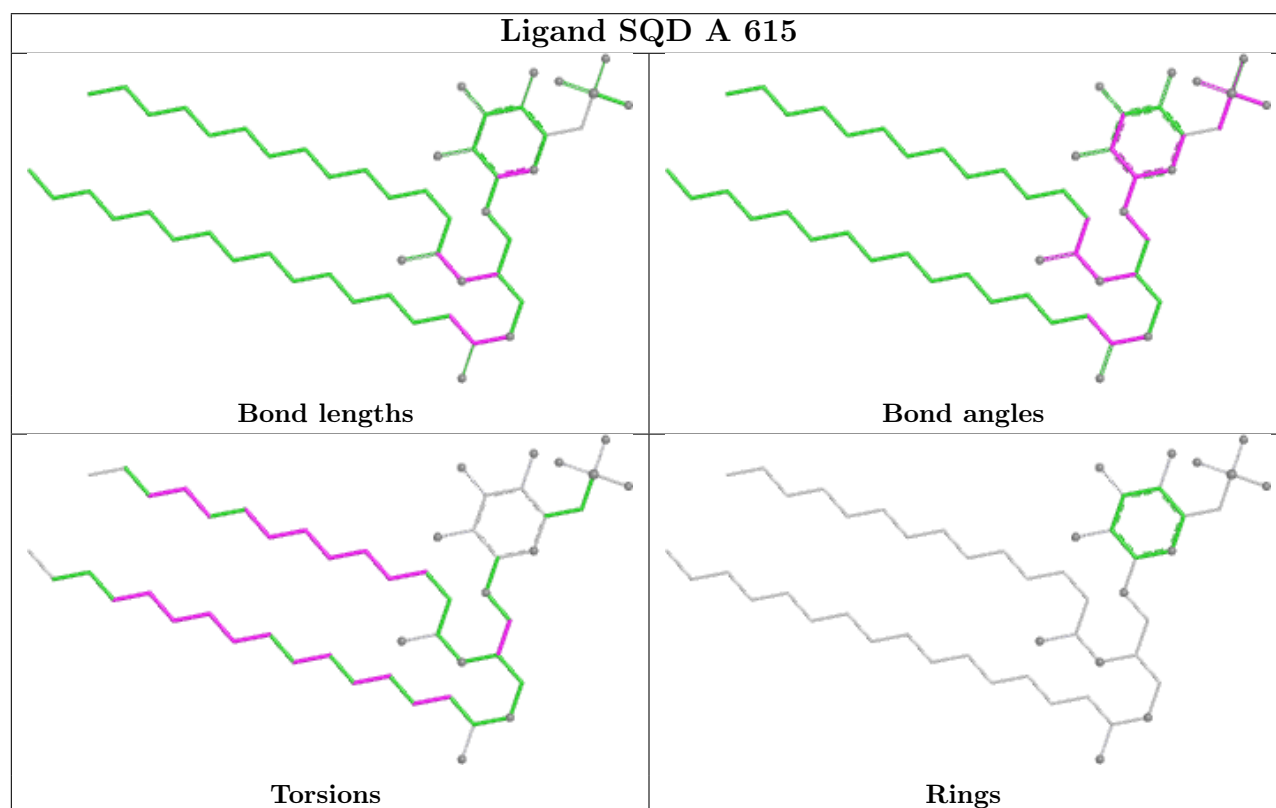
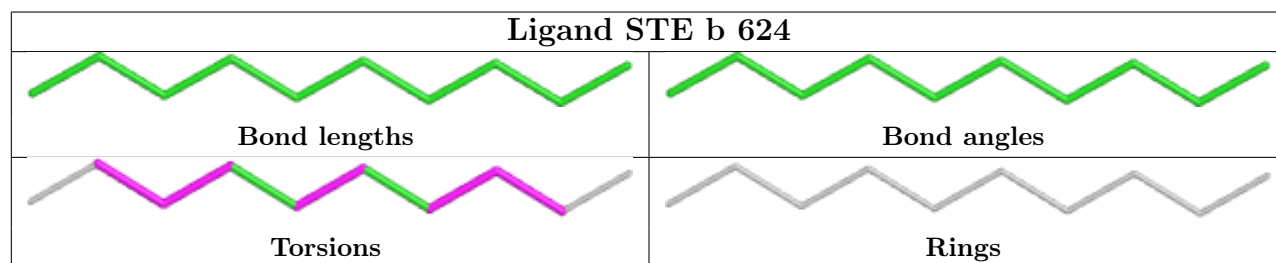
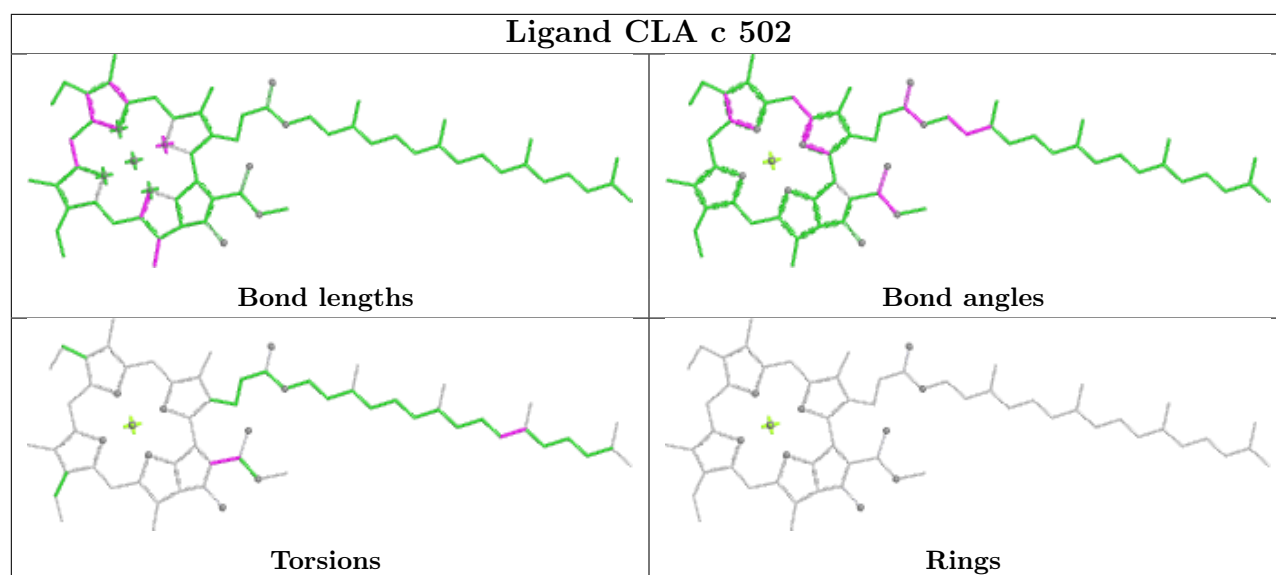
Ligand CLA D 402

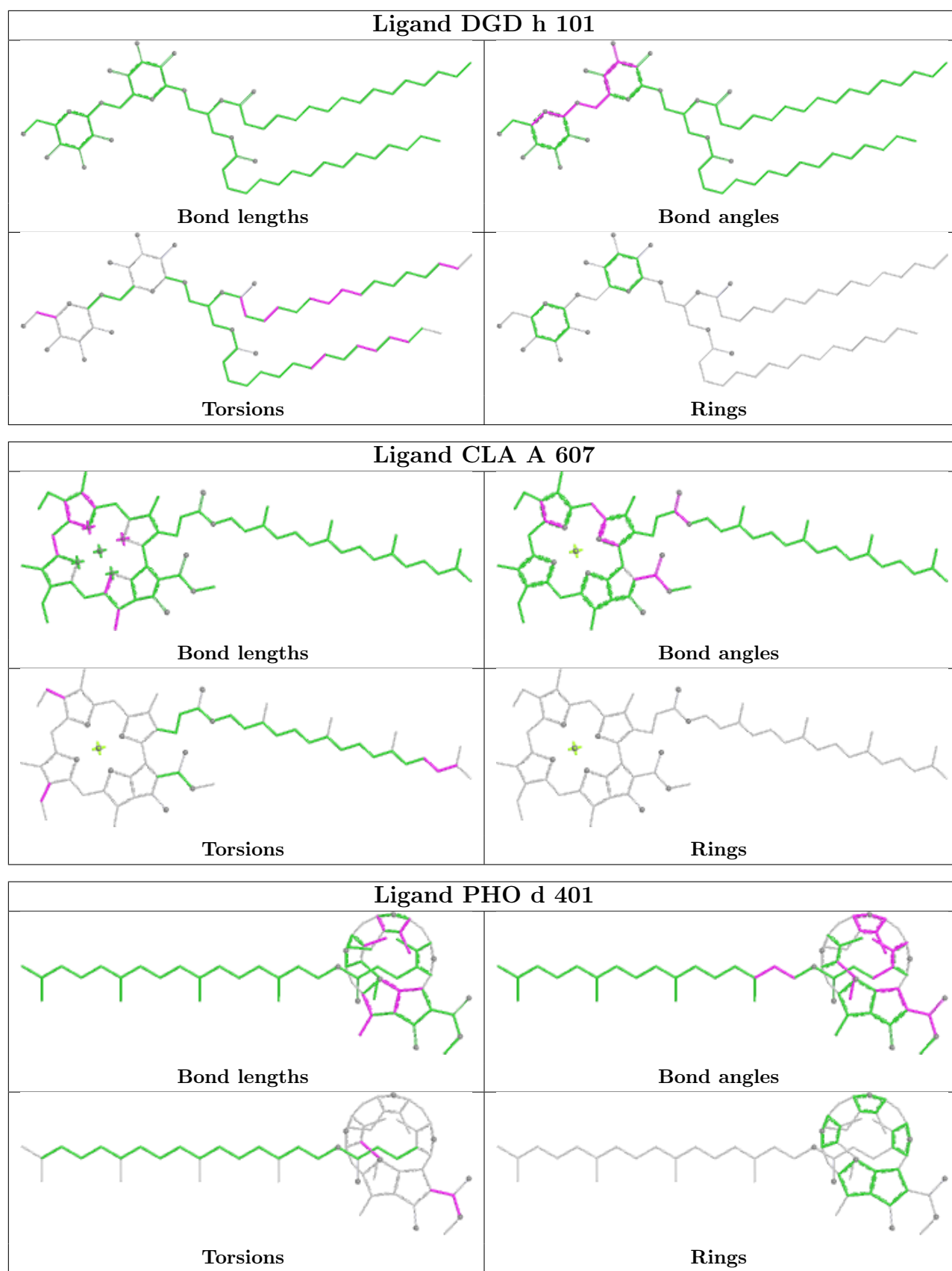


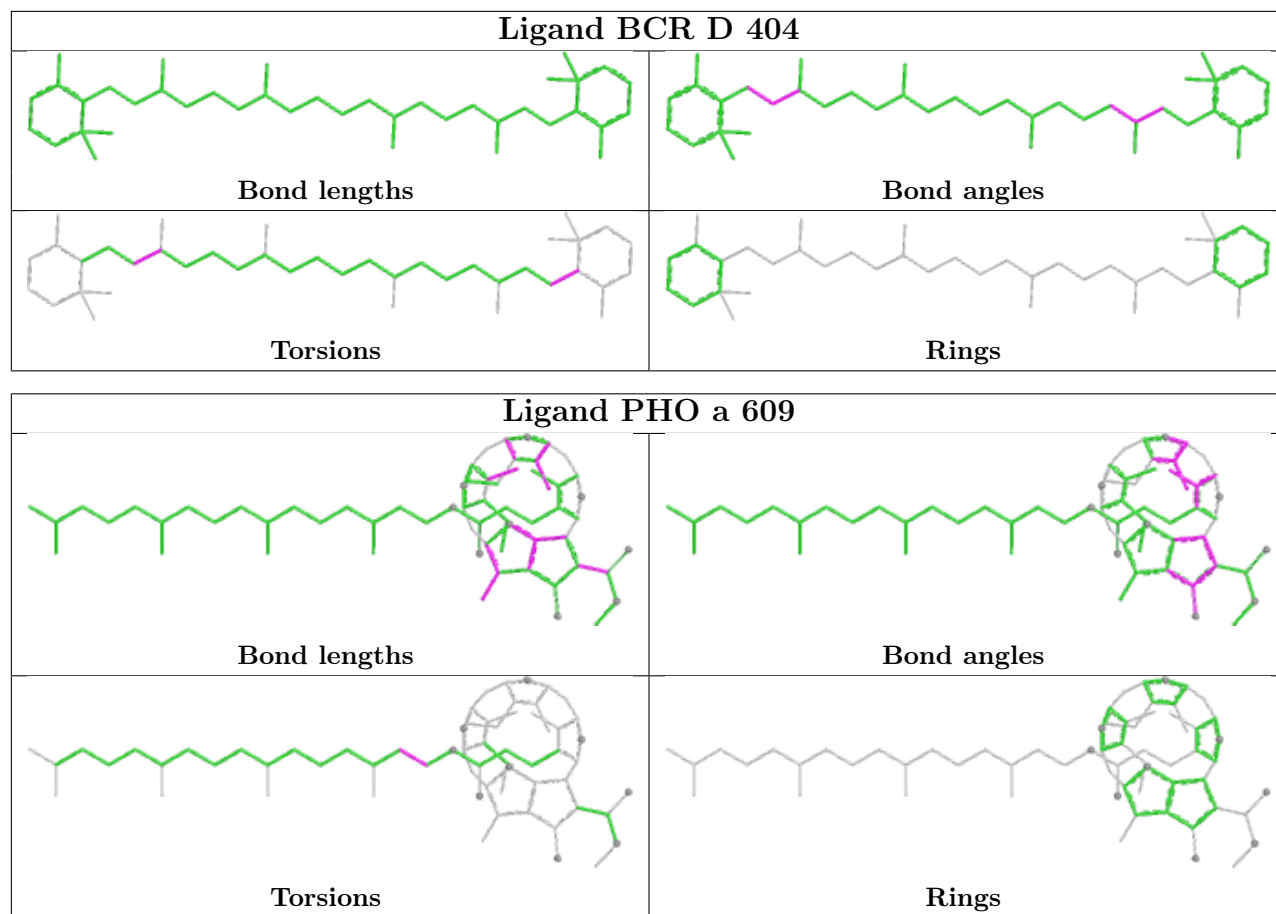
Ligand CLA b 615**Ligand CLA C 507**

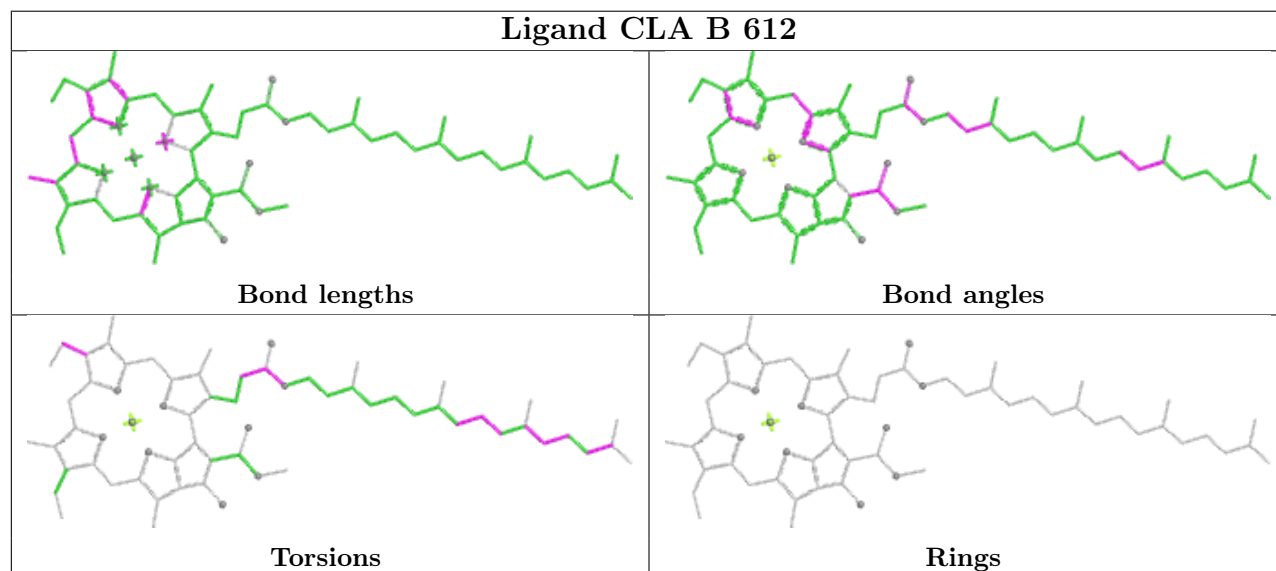
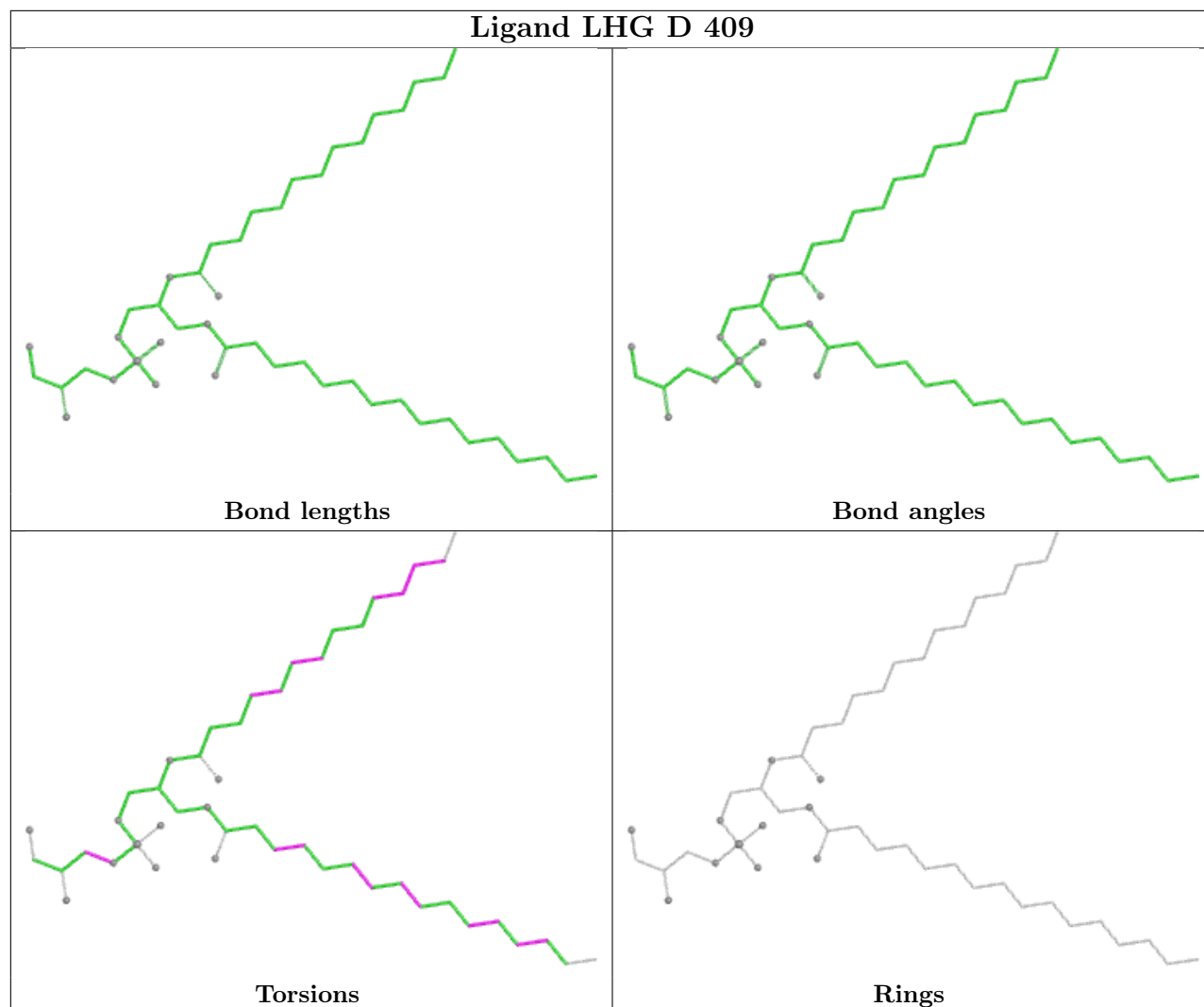


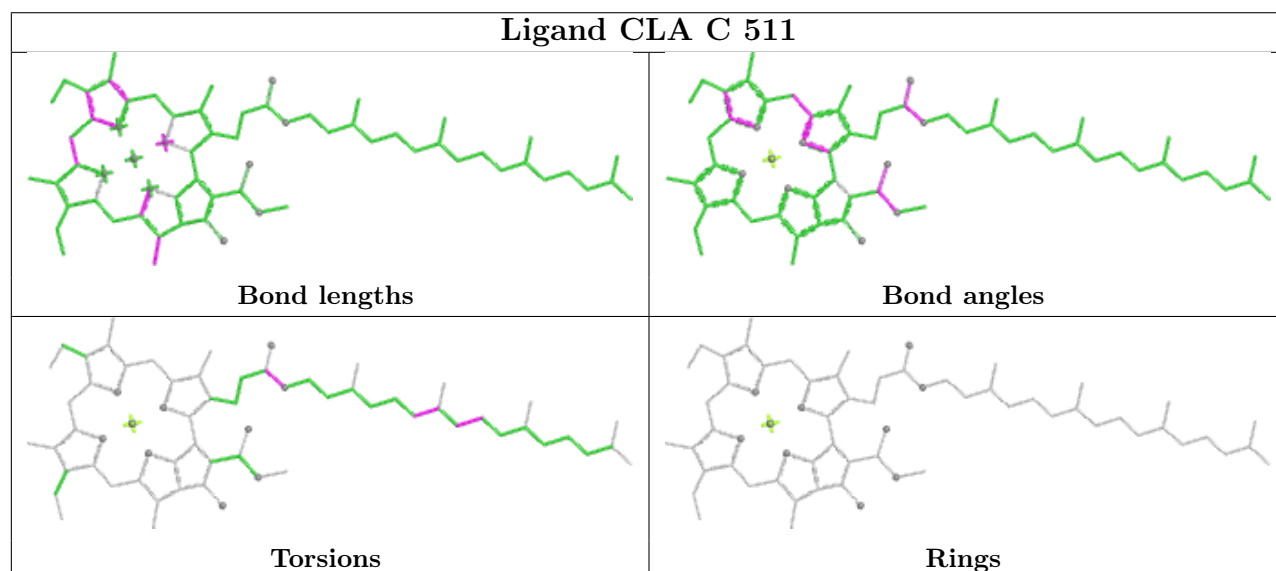
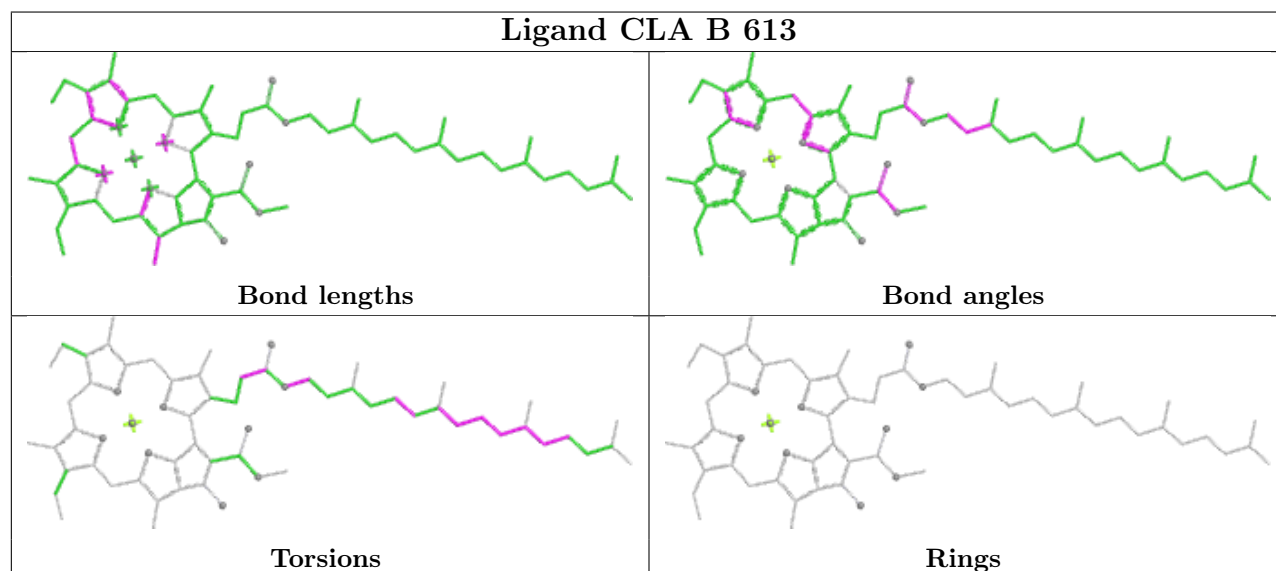
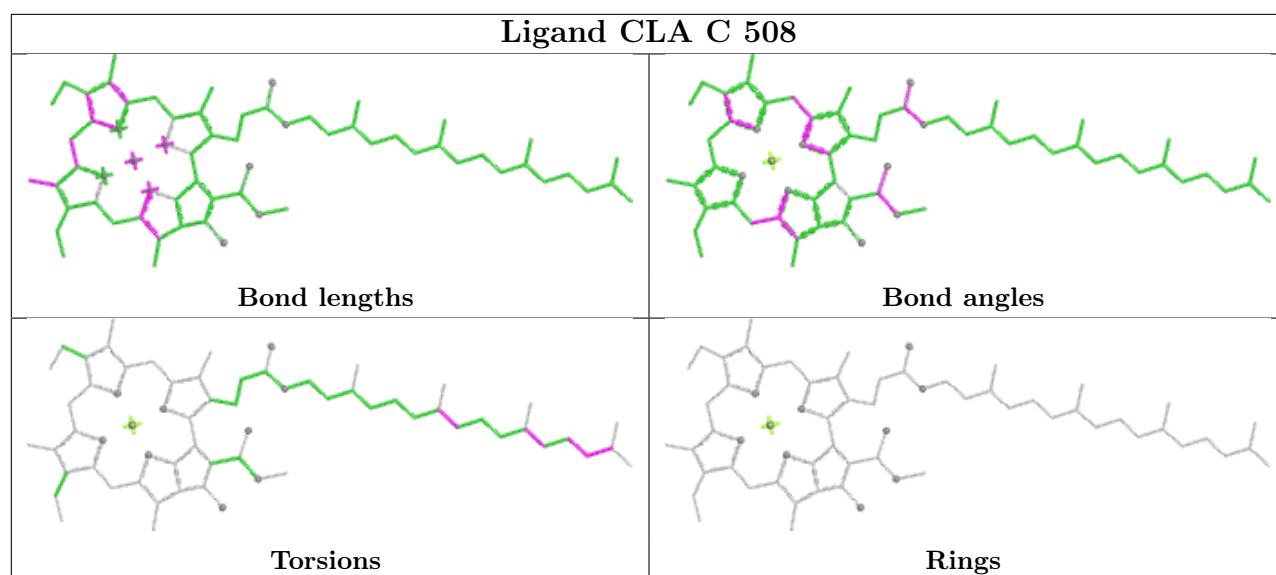


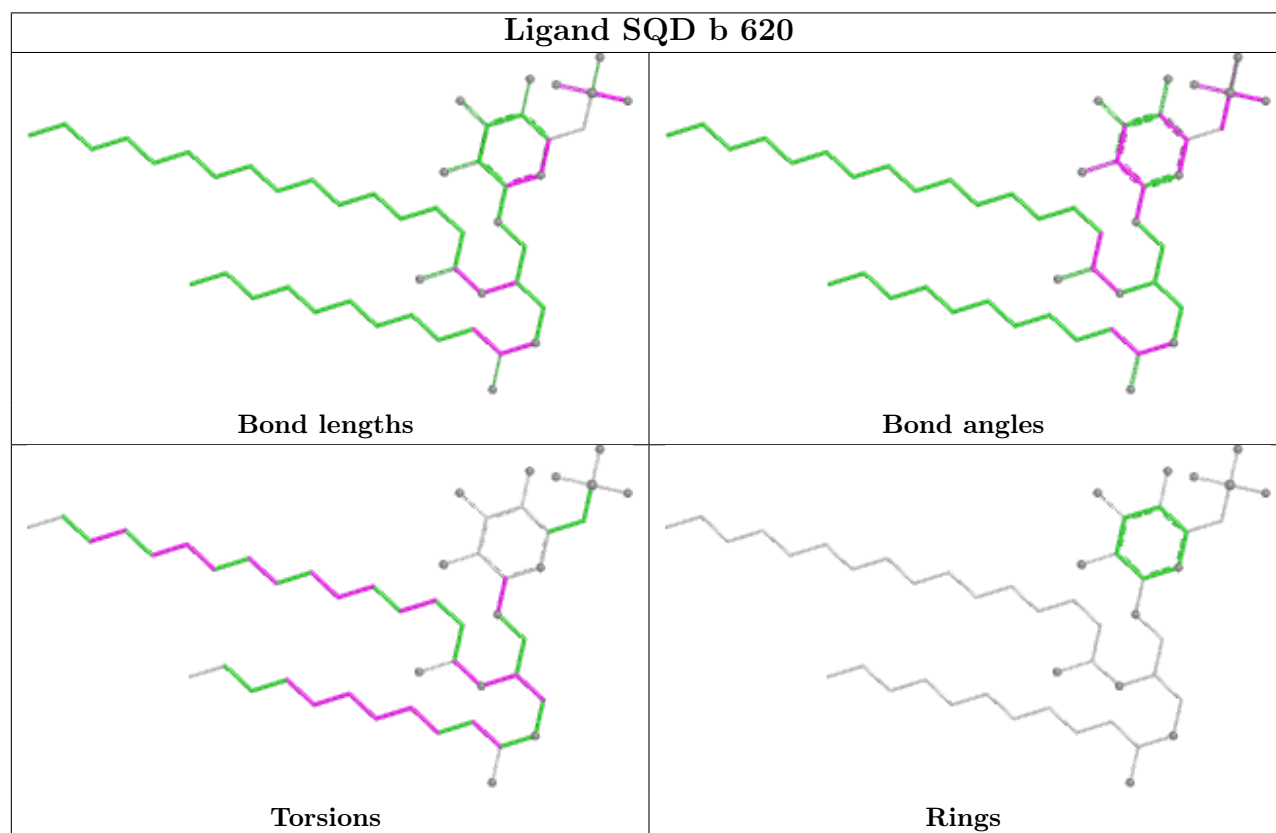
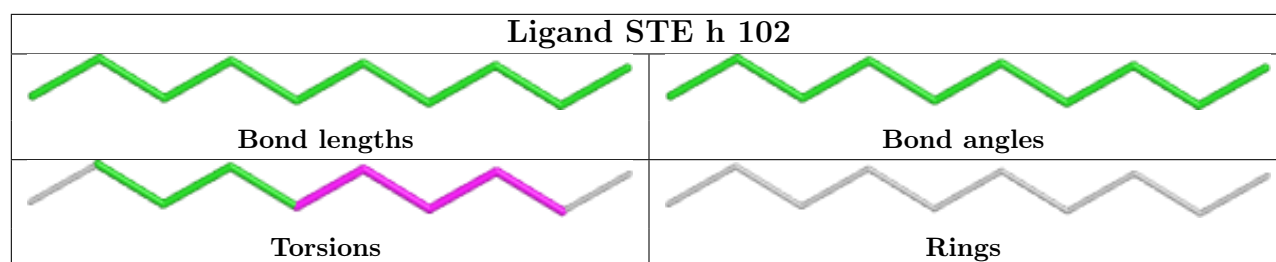




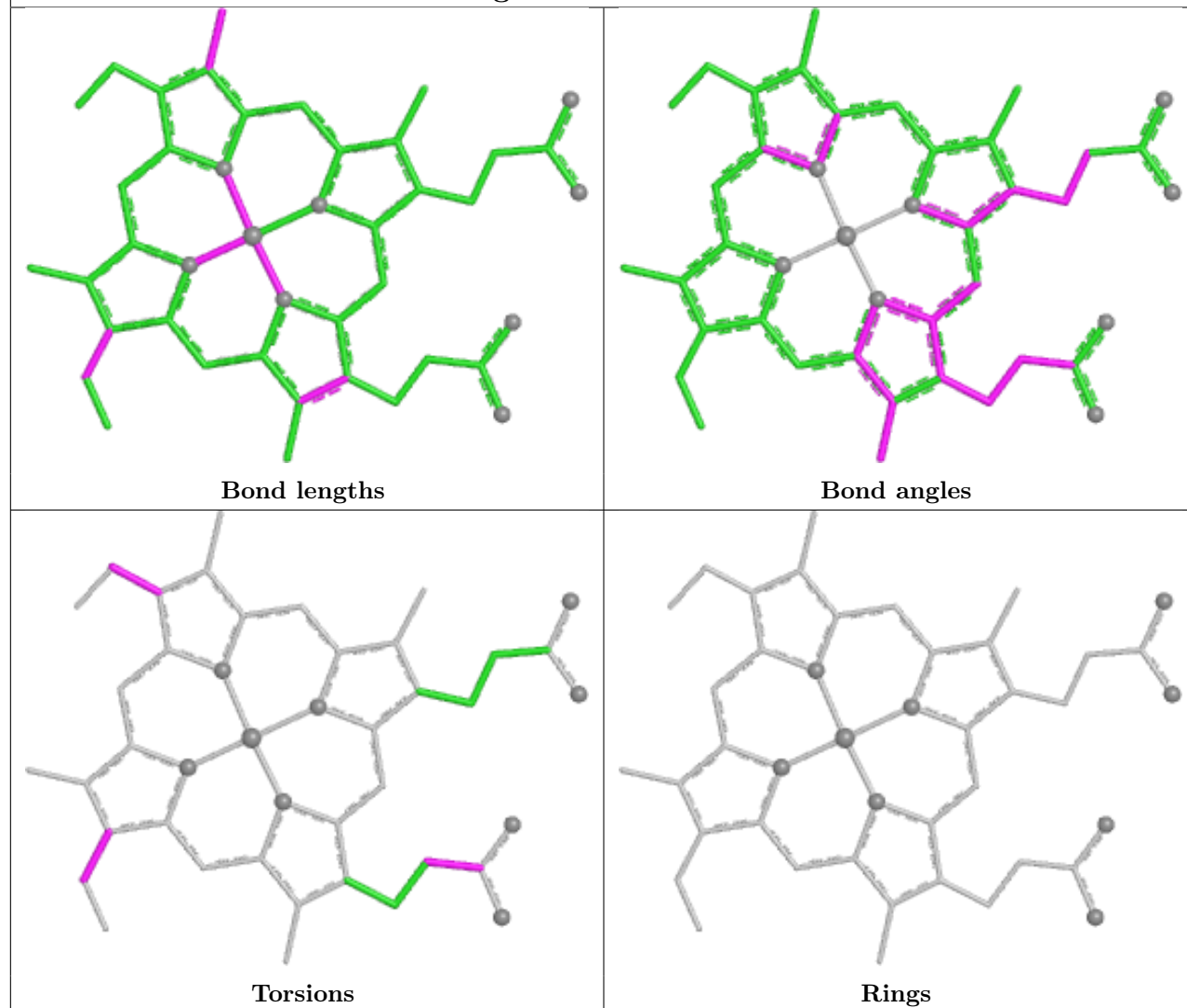




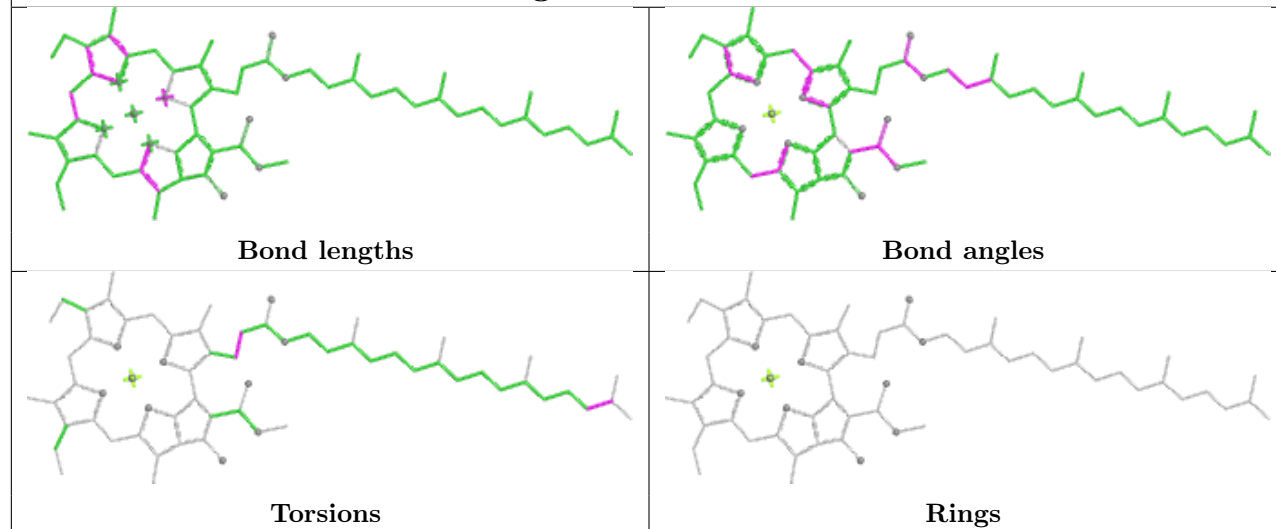


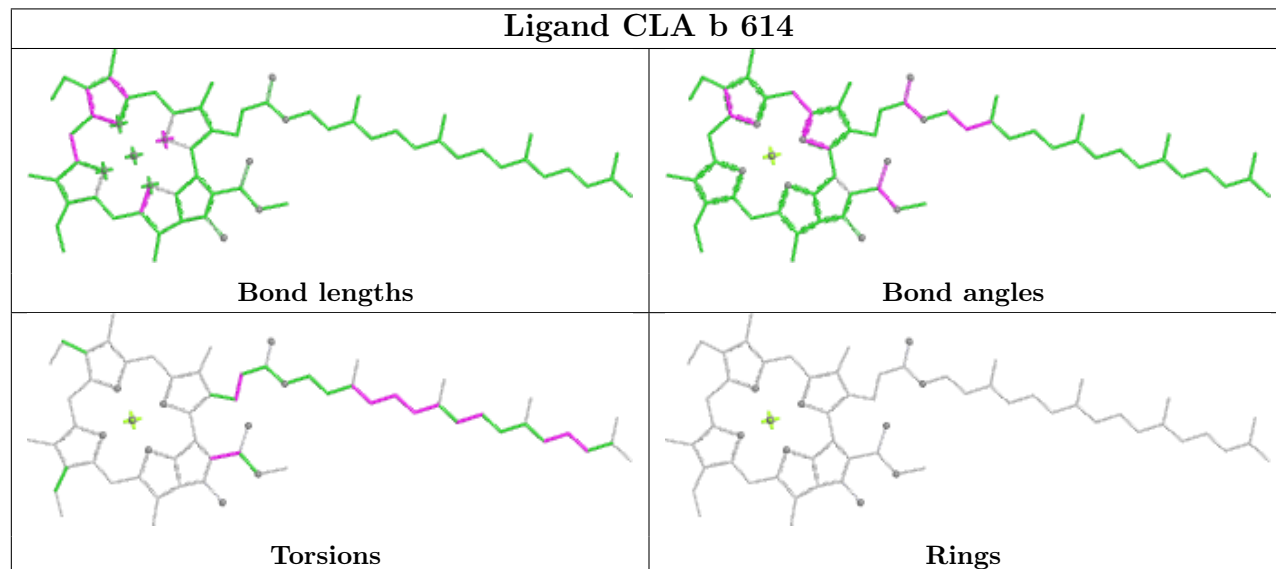
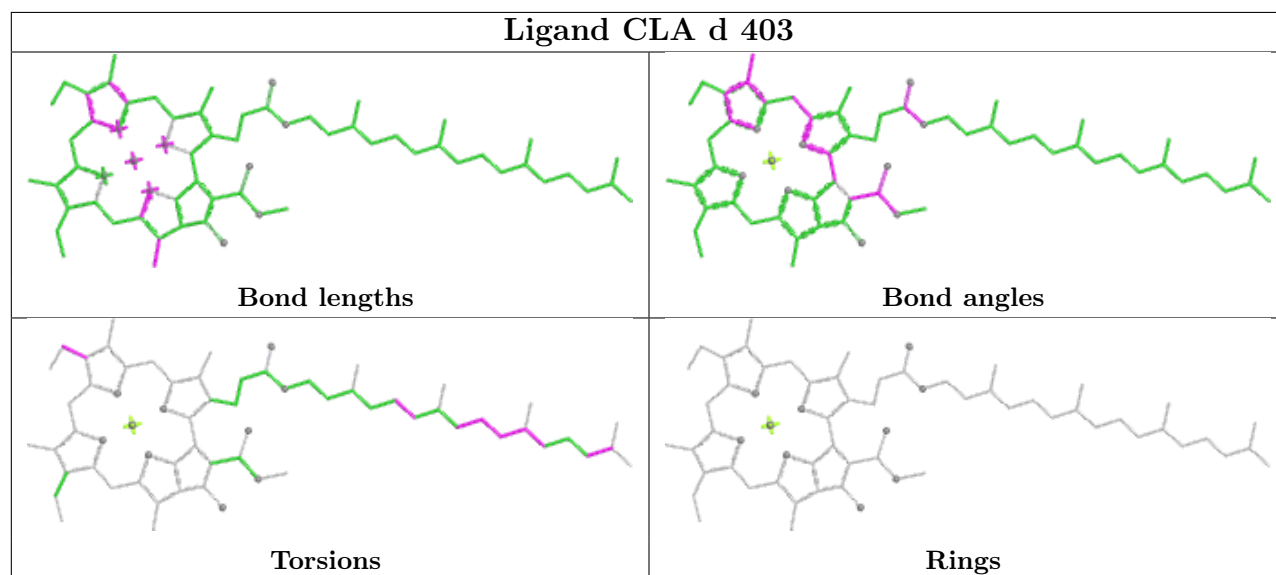
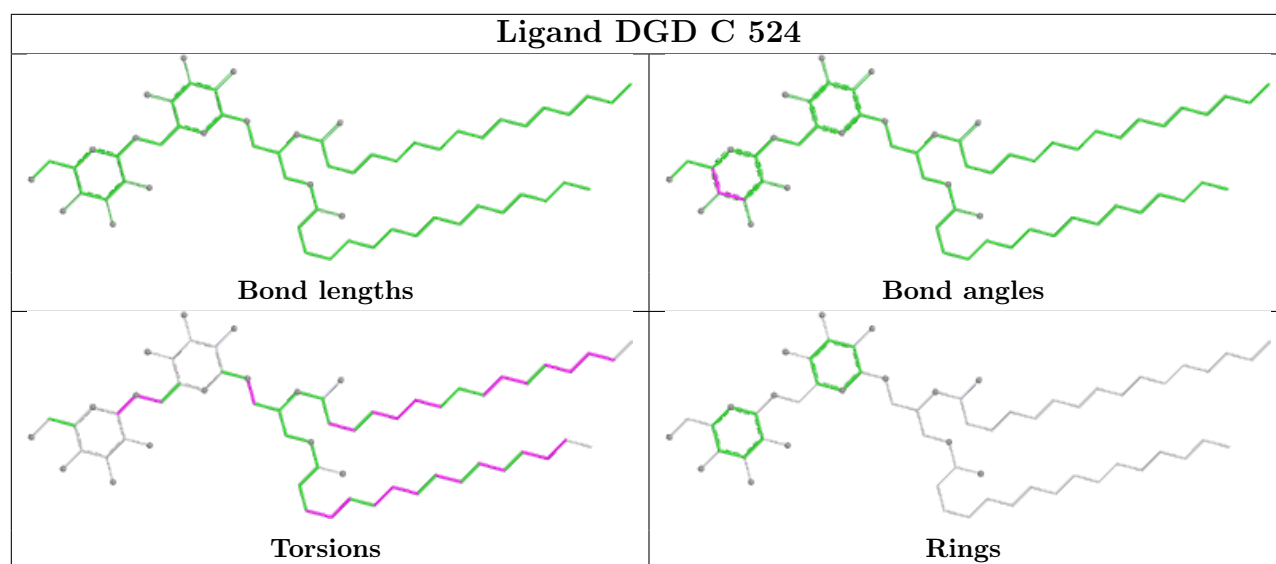


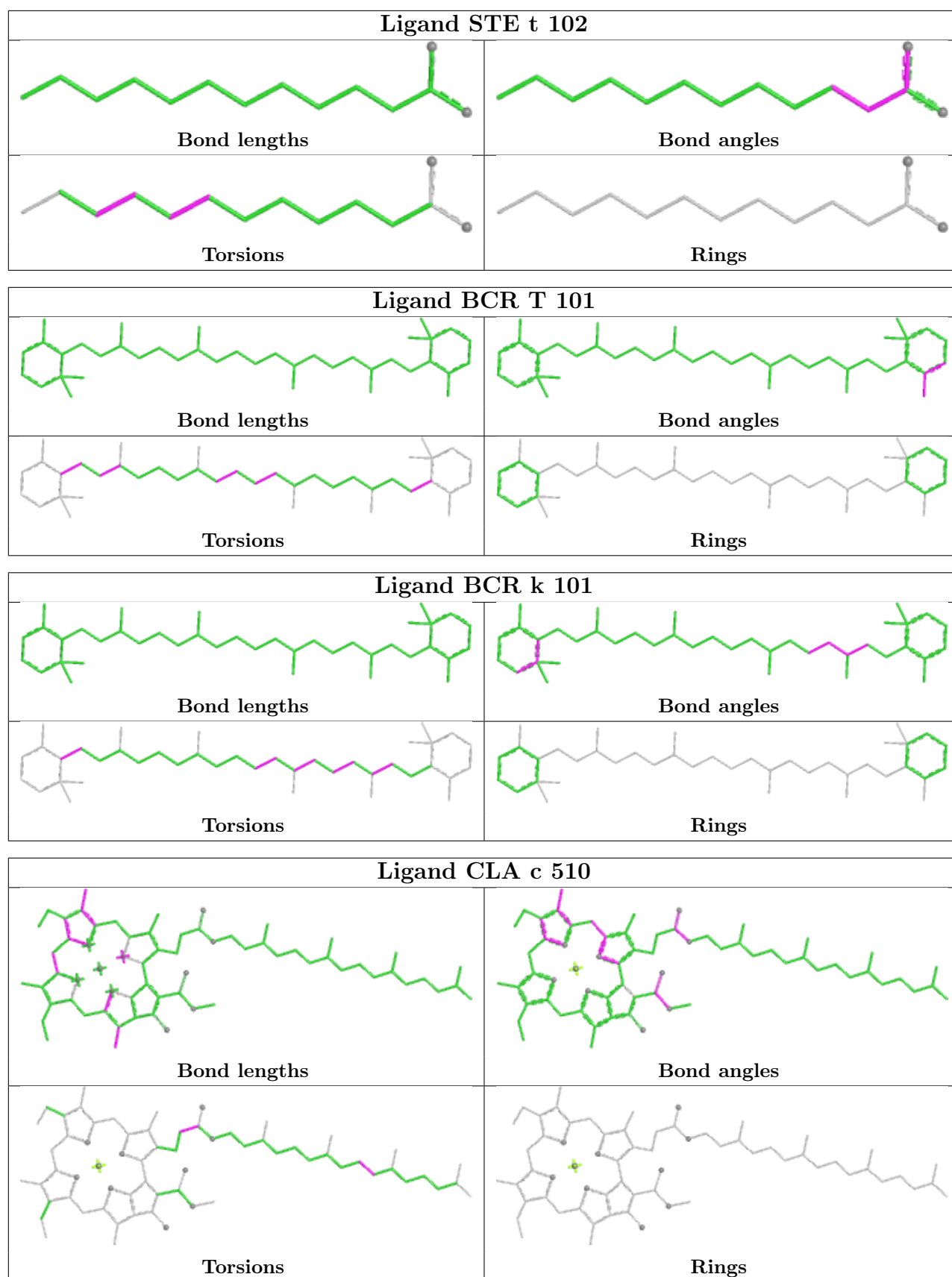
Ligand HEC V 201

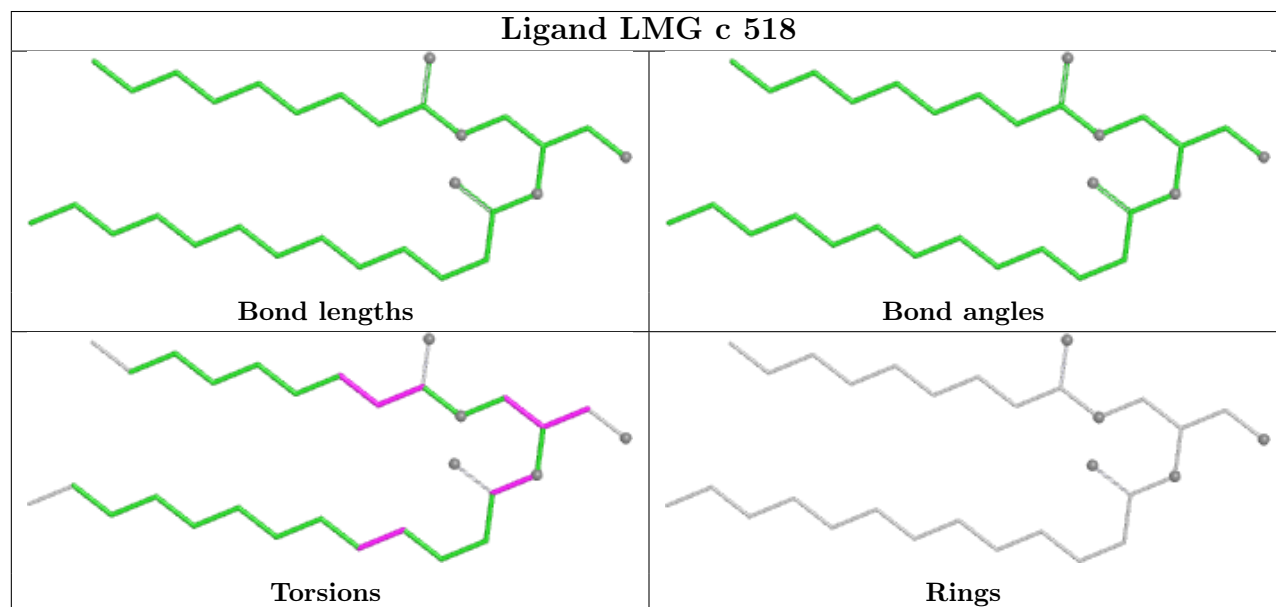
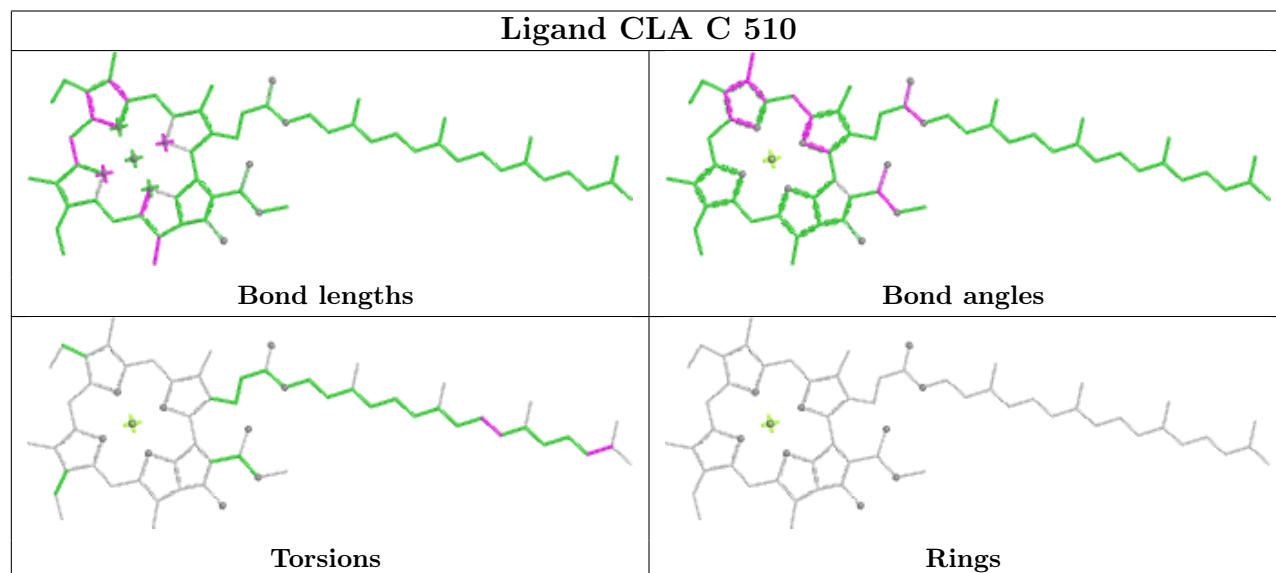
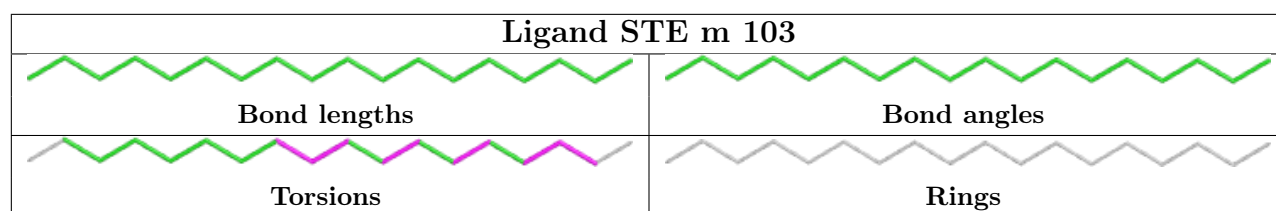


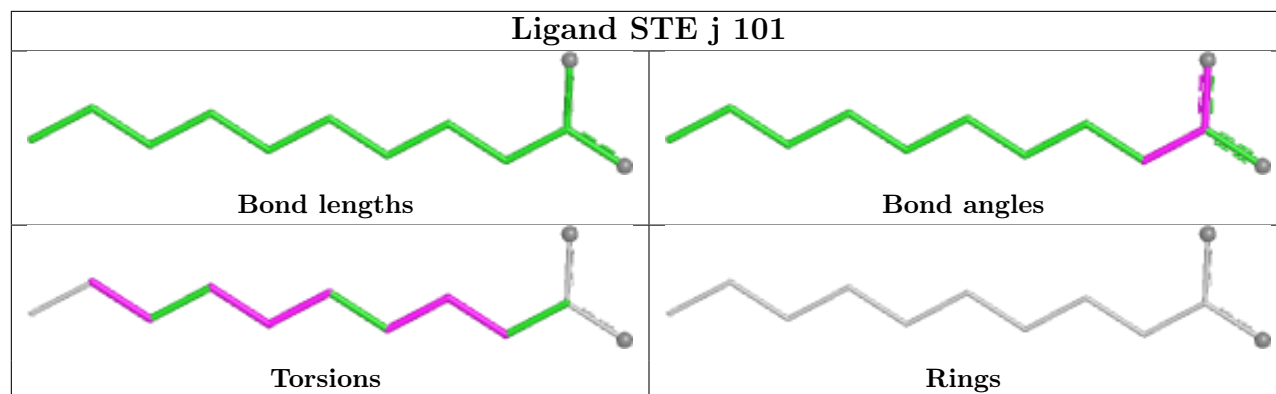
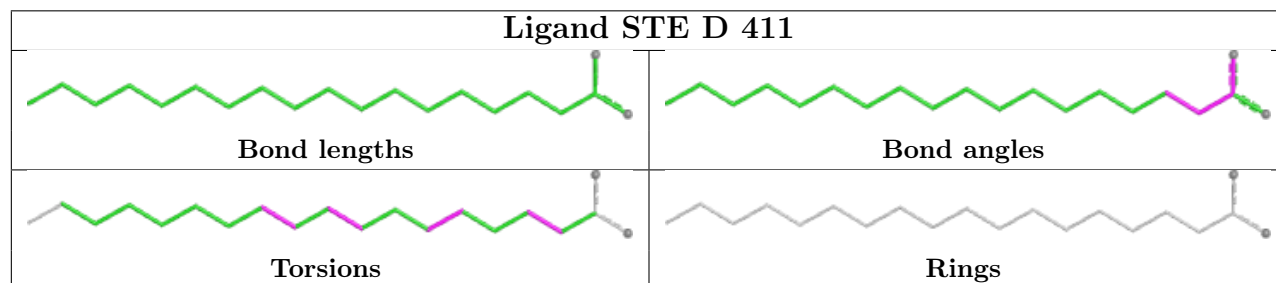
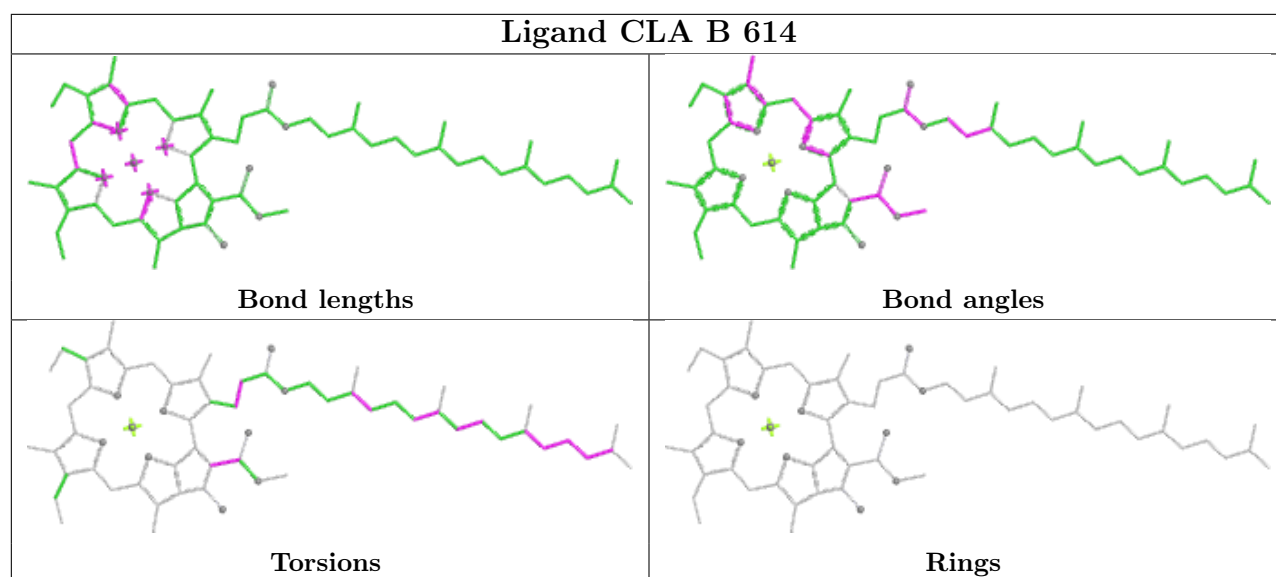
Ligand CLA B 610

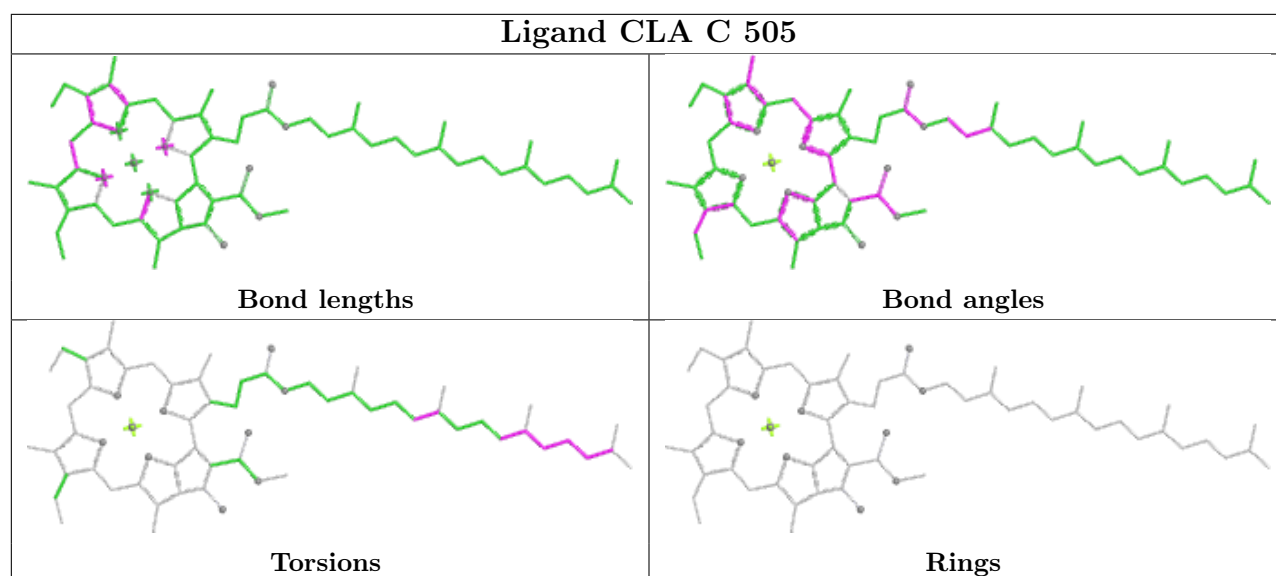
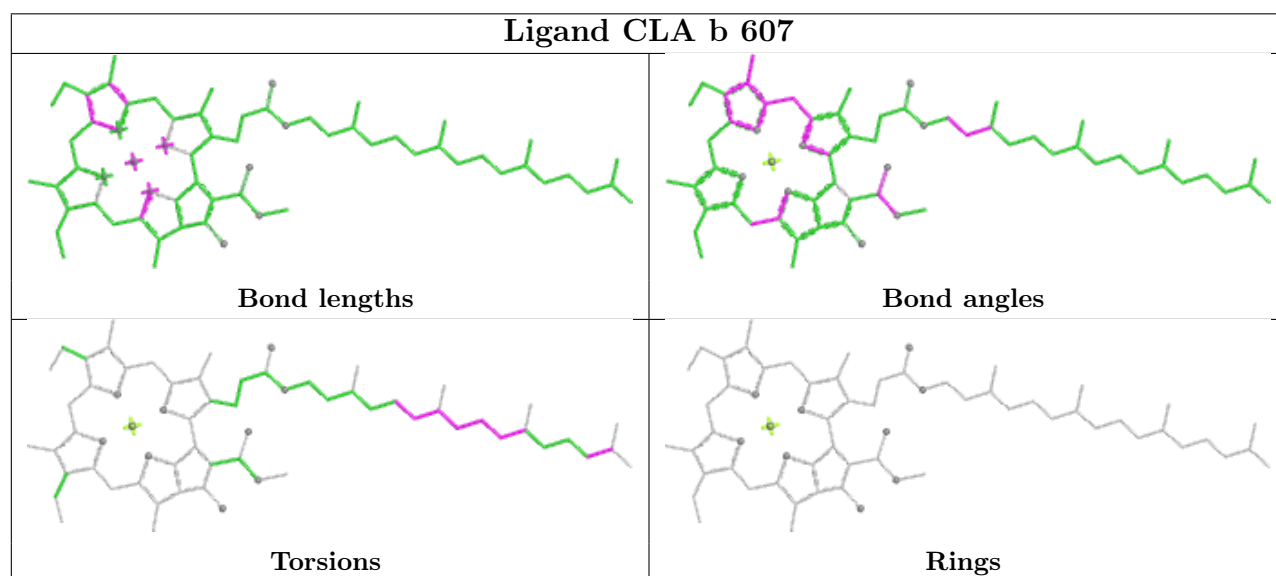
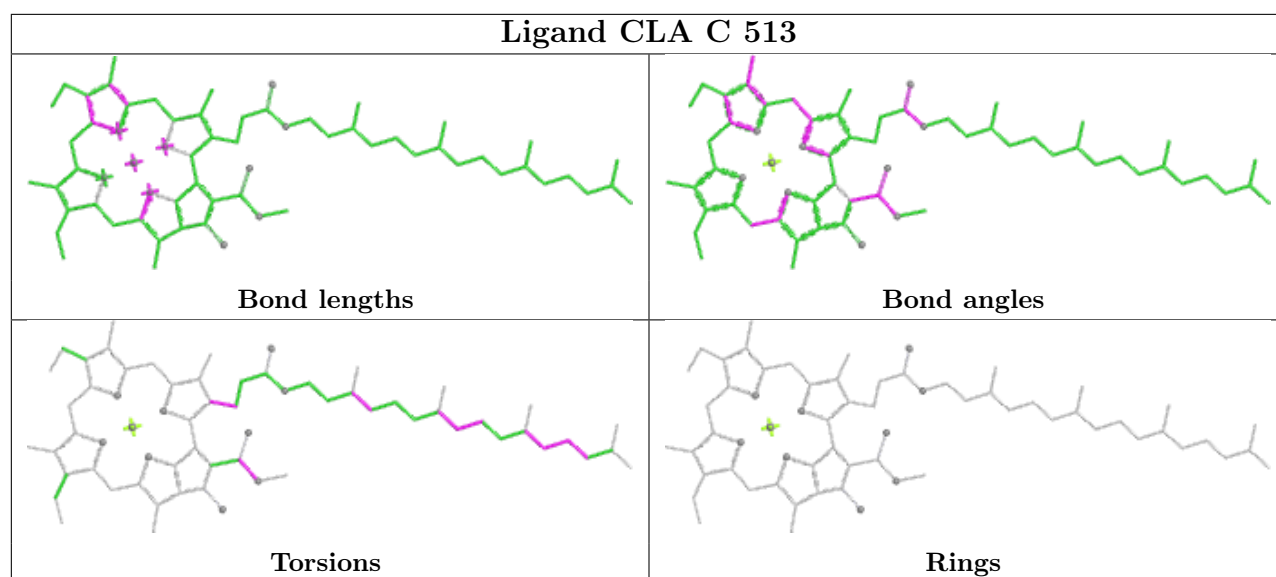


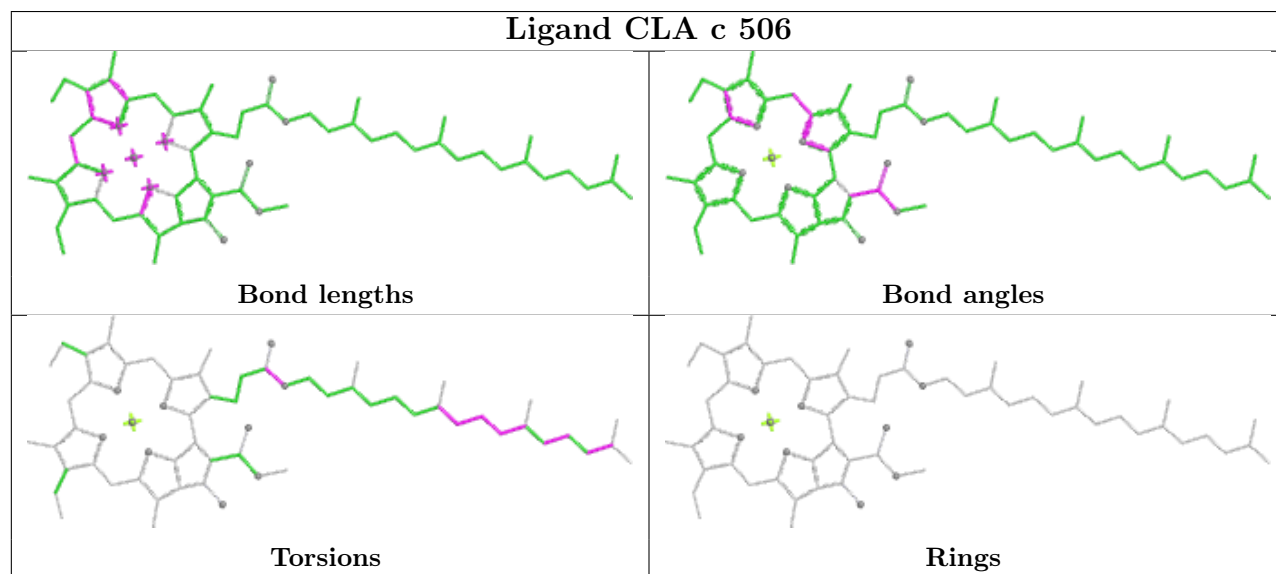
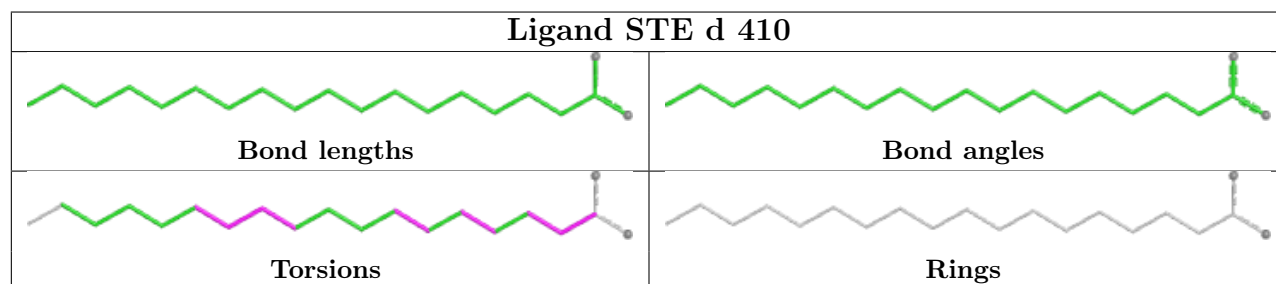
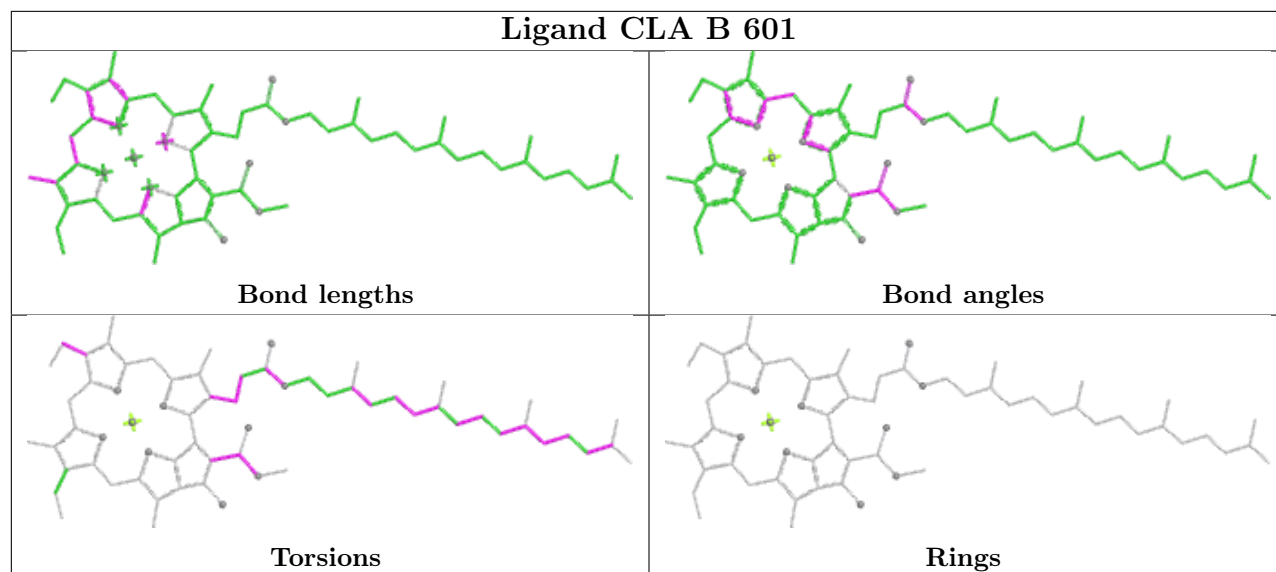


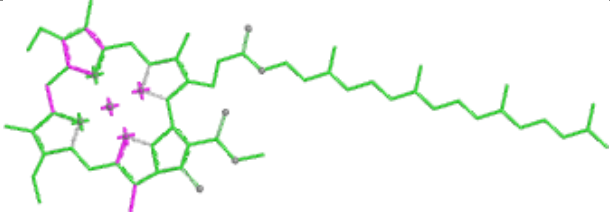
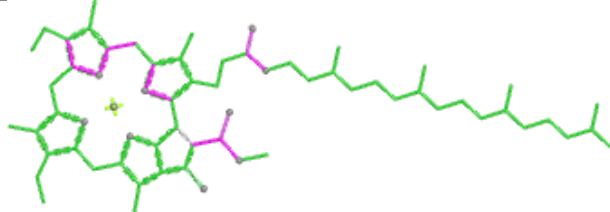
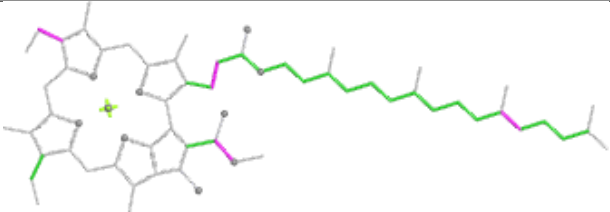
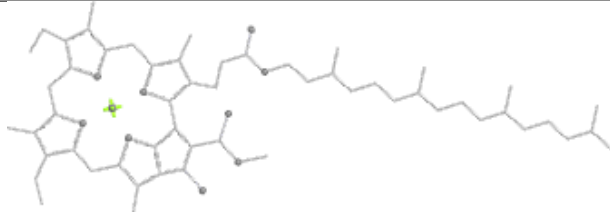
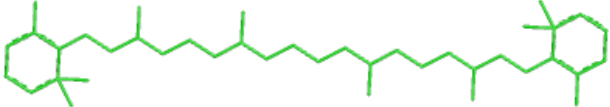
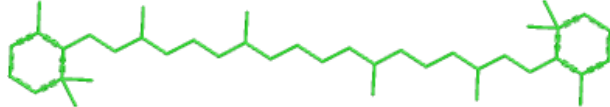
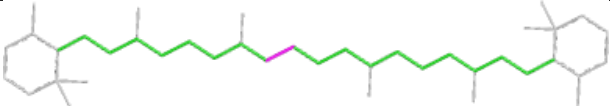
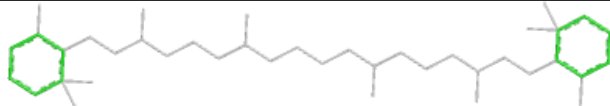
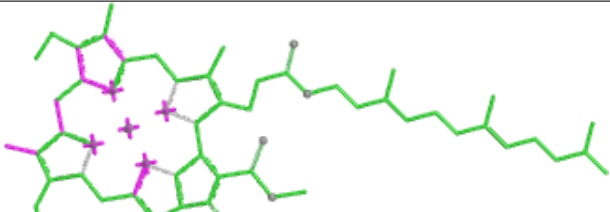
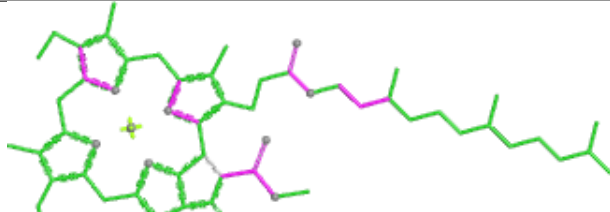
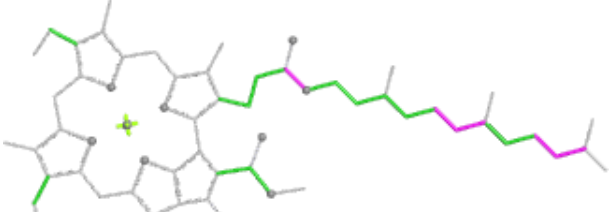
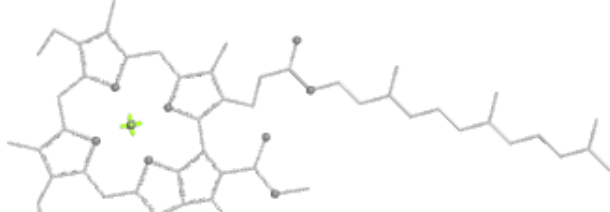


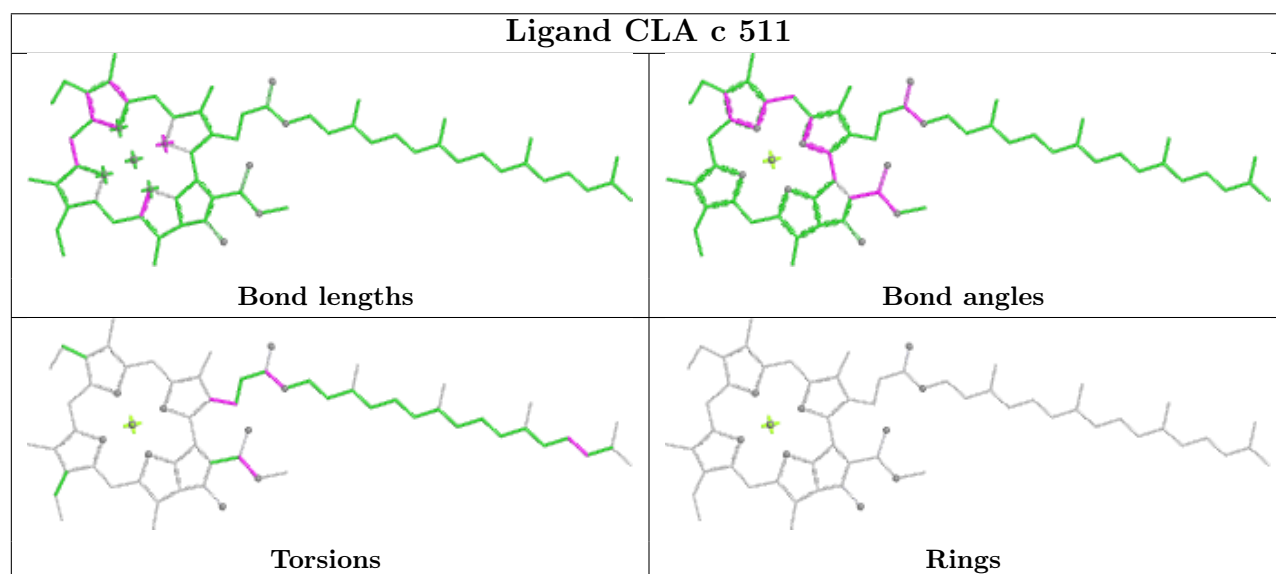
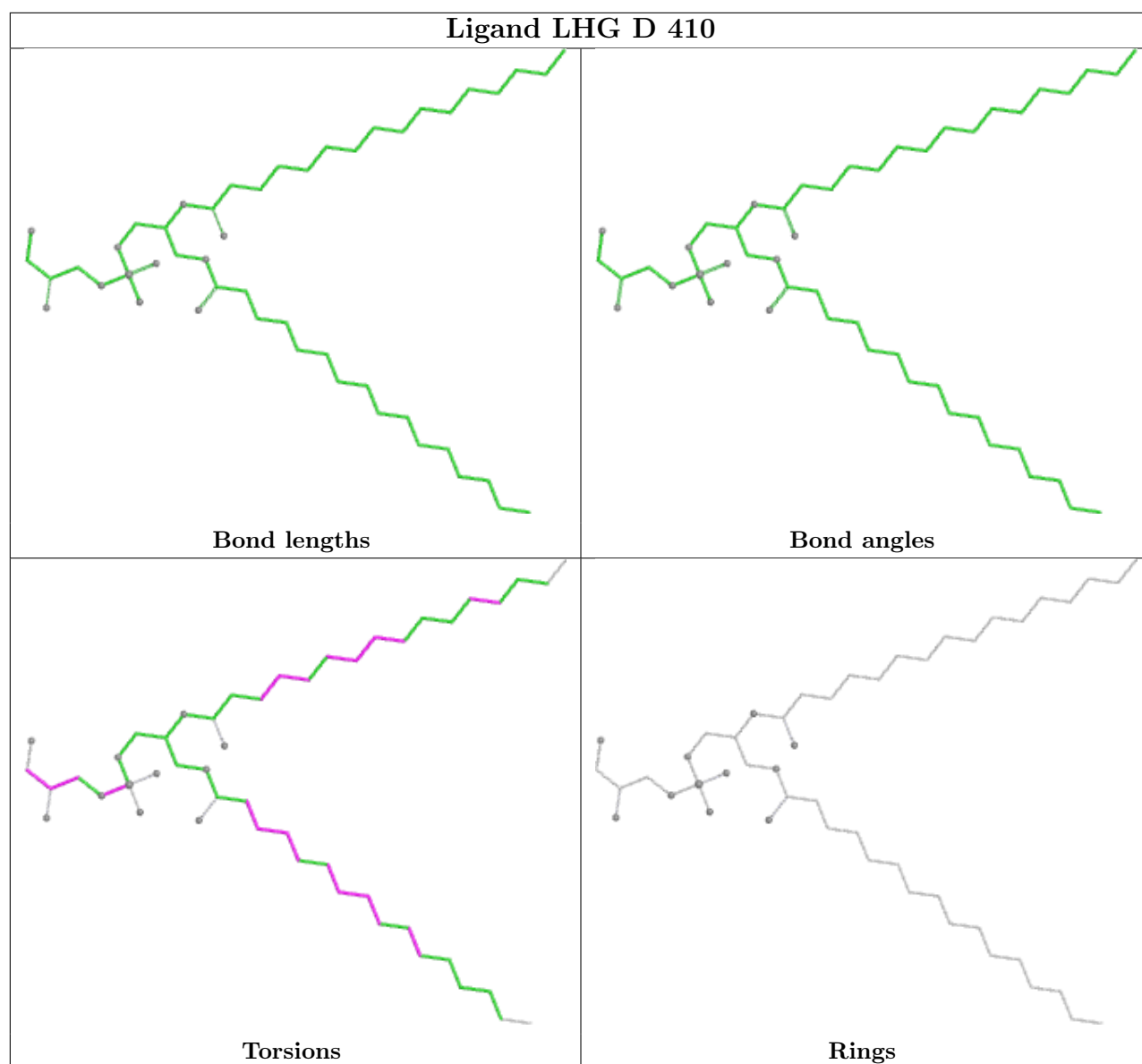


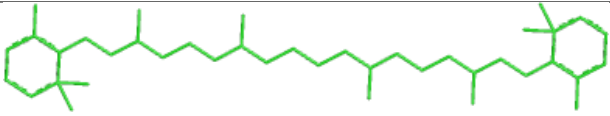
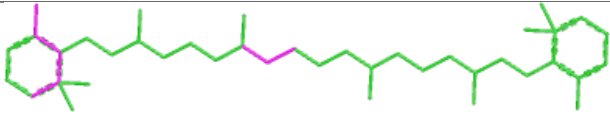
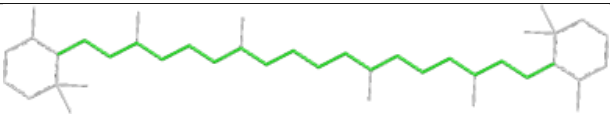
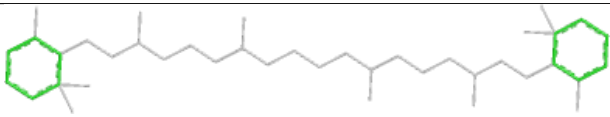
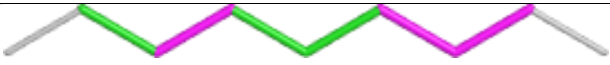
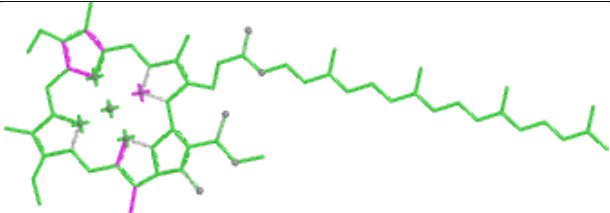
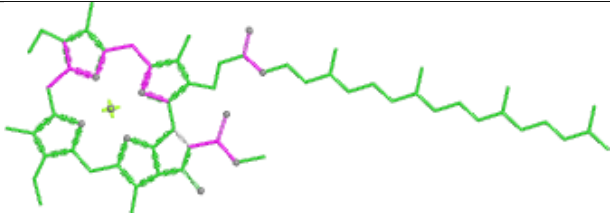
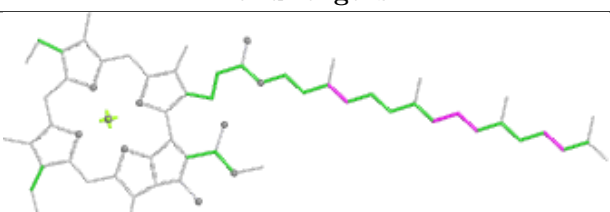
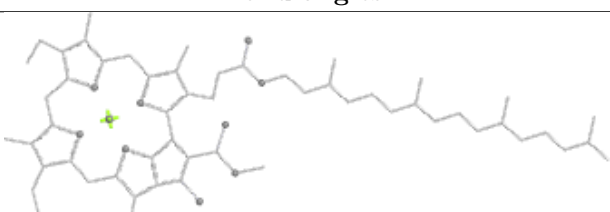
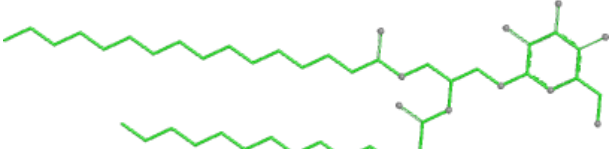
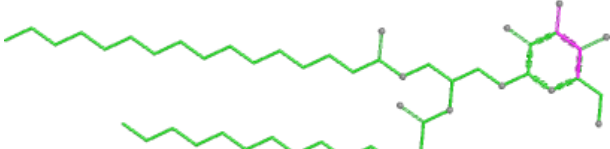
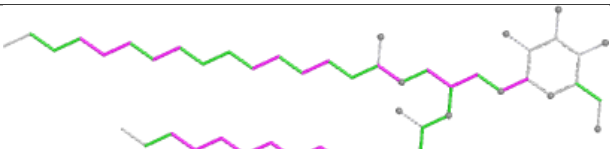
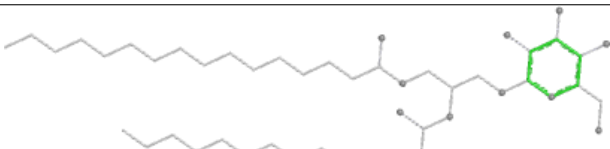


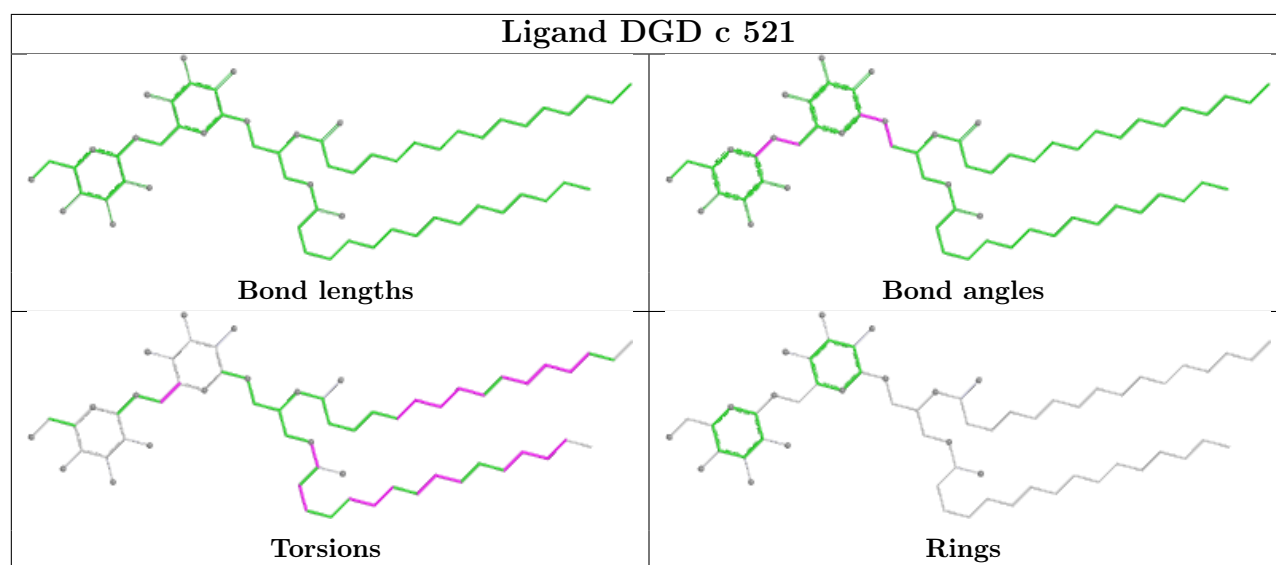
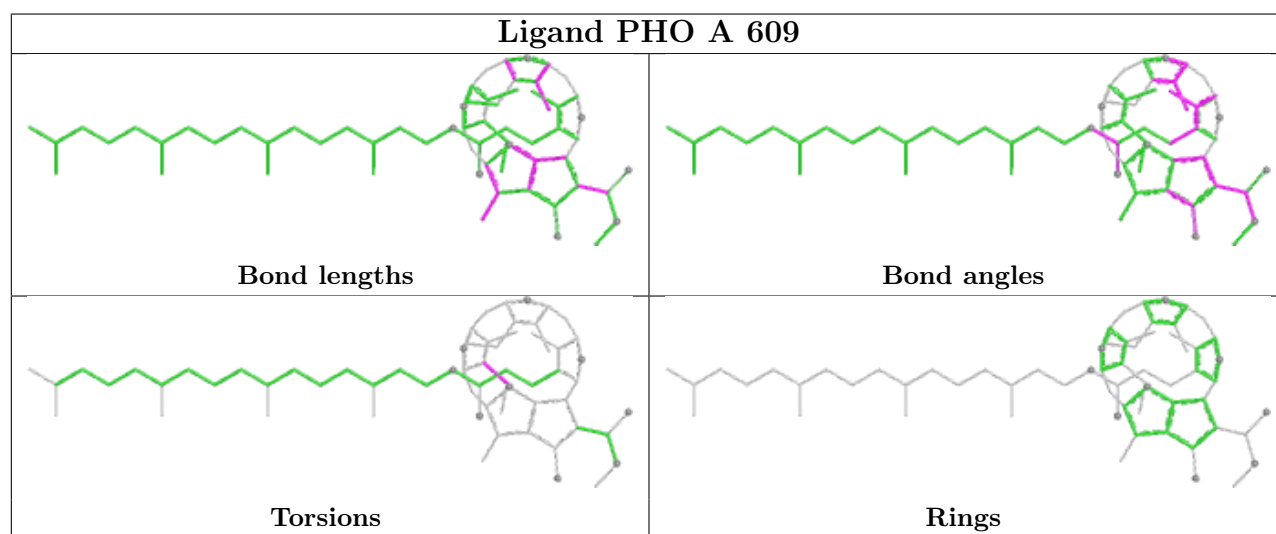
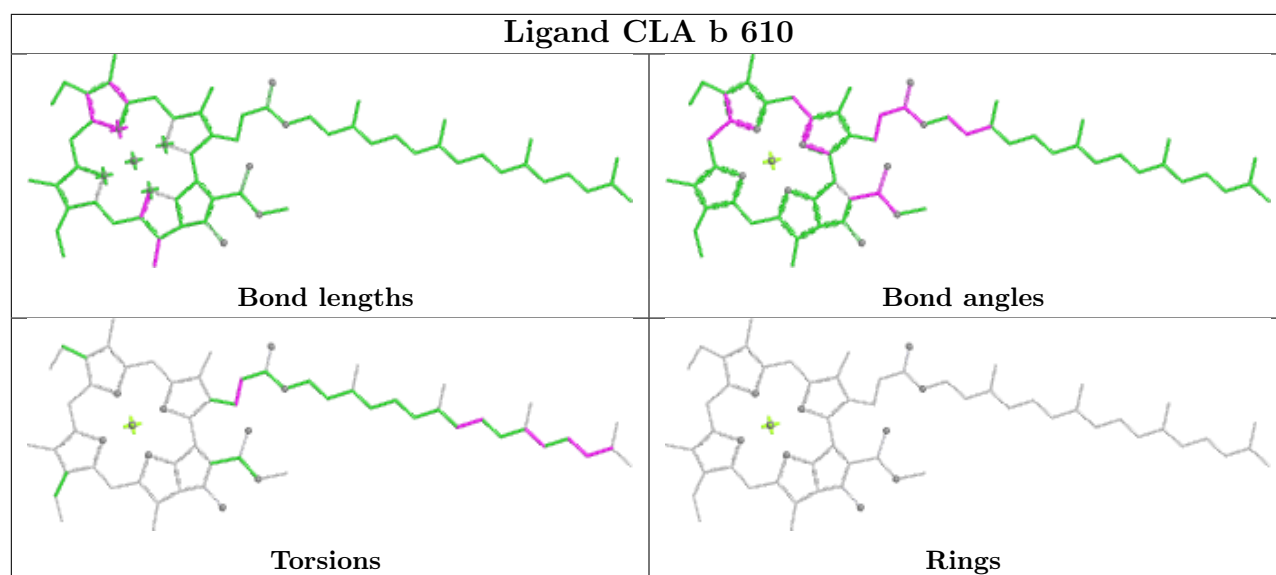


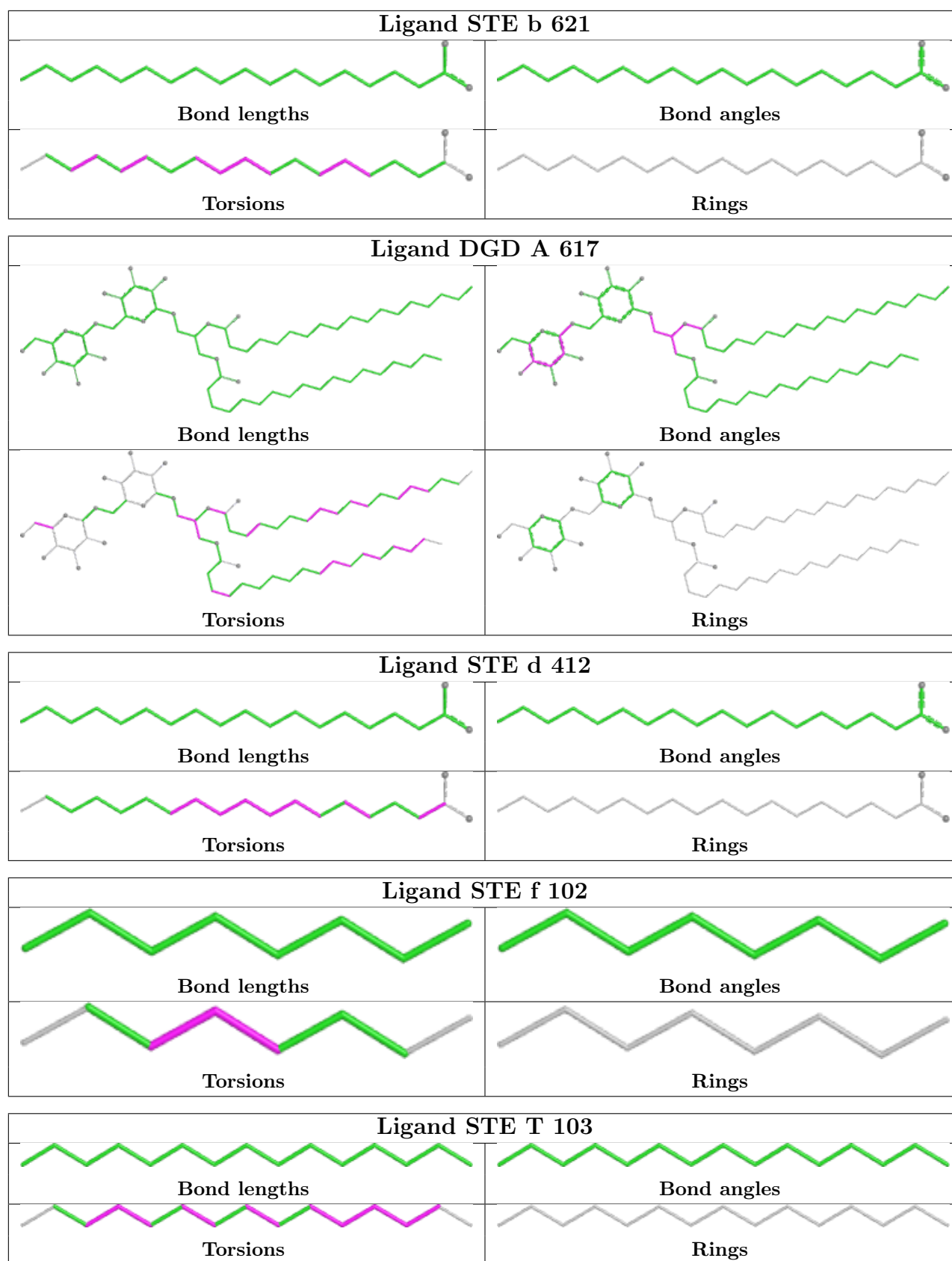


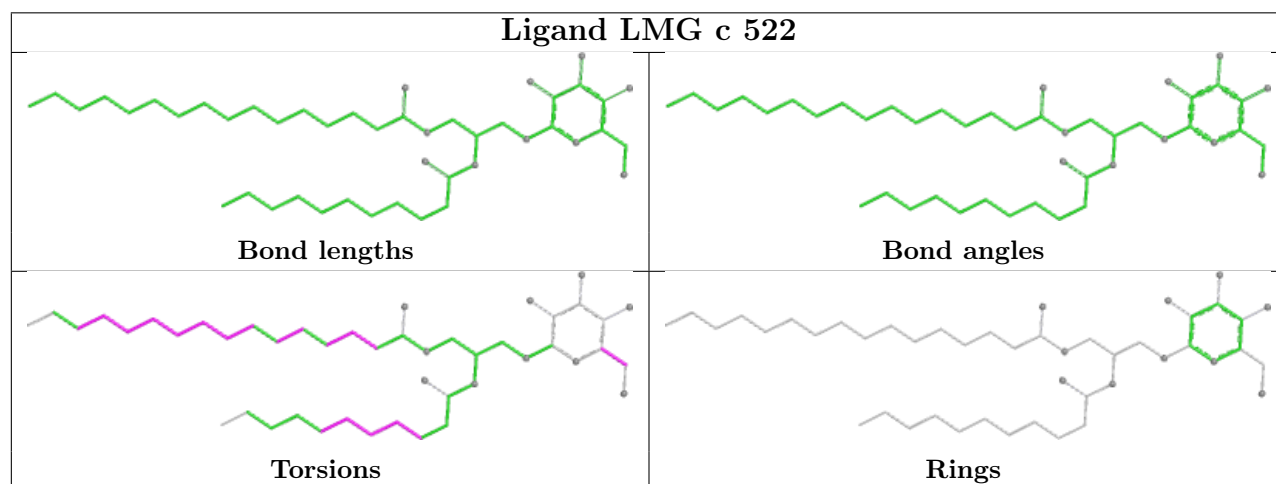
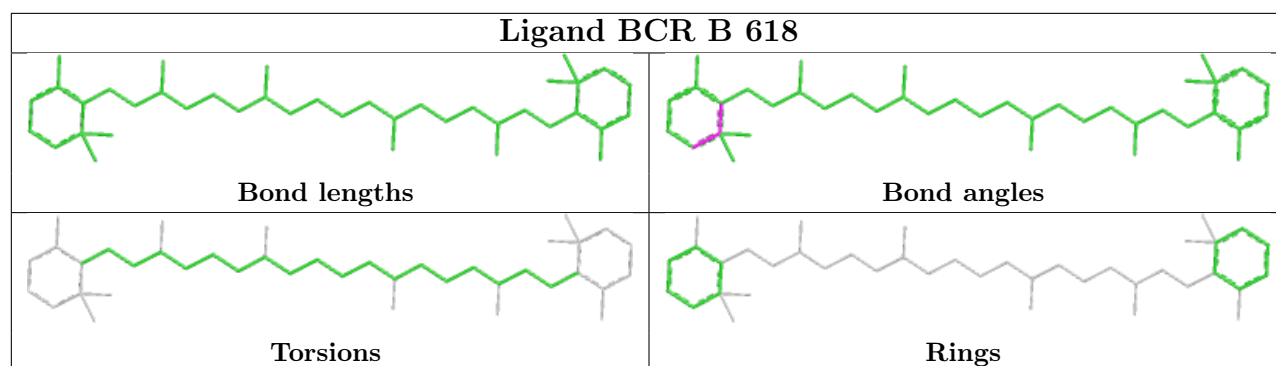
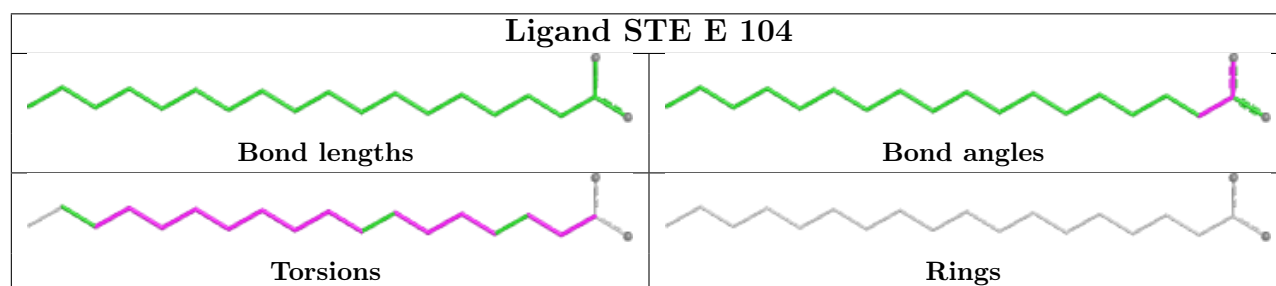
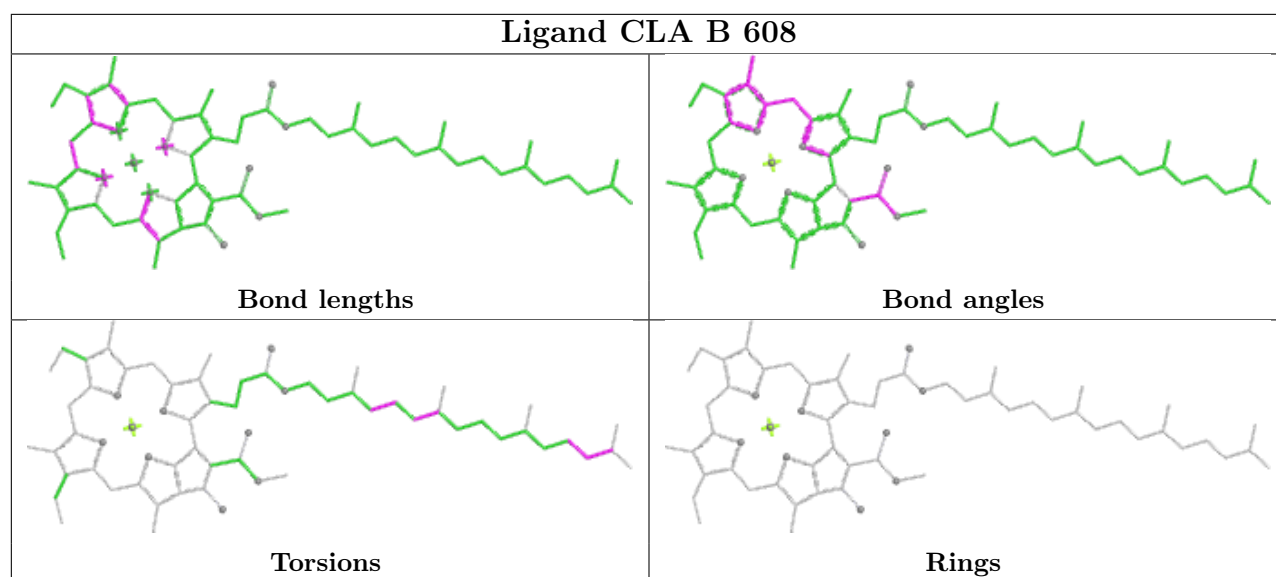
Ligand CLA C 501	
 Bond lengths	 Bond angles
 Torsions	 Rings
Ligand BCR C 514	
 Bond lengths	 Bond angles
 Torsions	 Rings
Ligand CLA B 616	
 Bond lengths	 Bond angles
 Torsions	 Rings



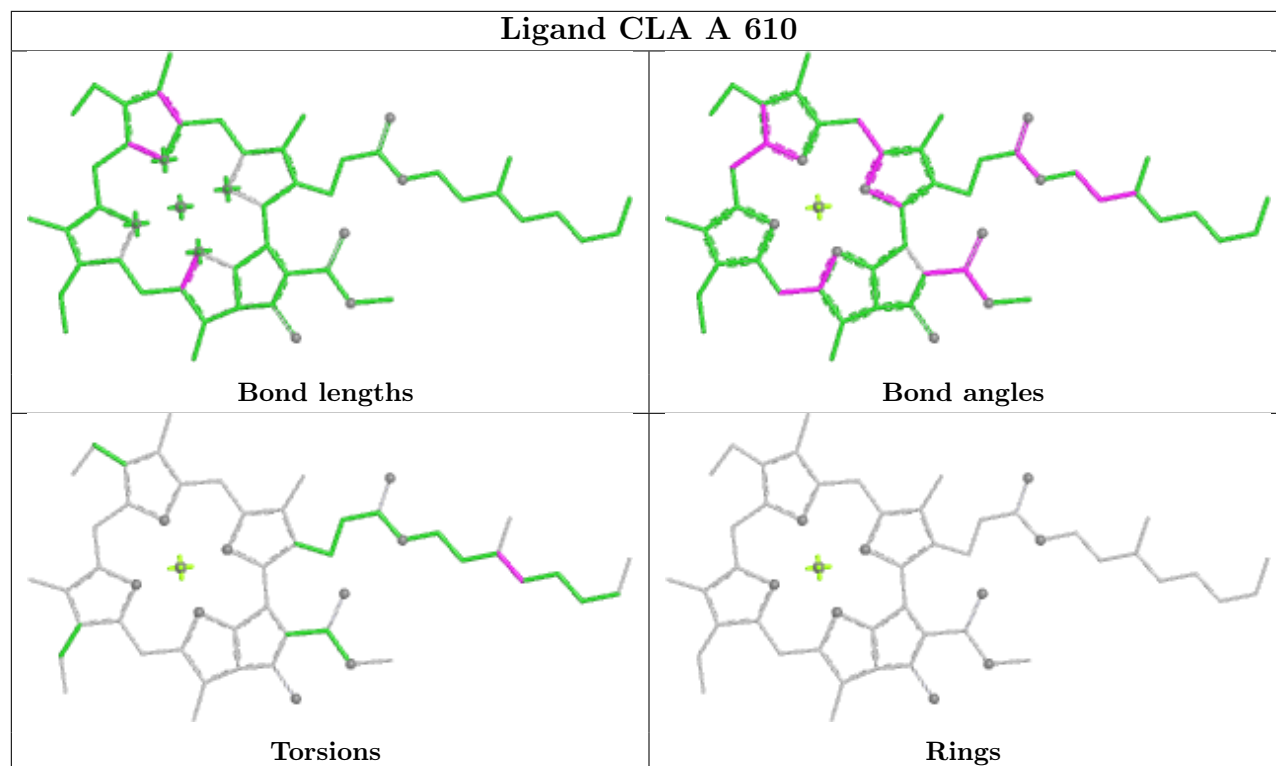
Ligand BCR b 618	
 Bond lengths	 Bond angles
 Torsions	 Rings
Ligand STE D 412	
 Bond lengths	 Bond angles
 Torsions	 Rings
Ligand CLA B 603	
 Bond lengths	 Bond angles
 Torsions	 Rings
Ligand LMG a 618	
 Bond lengths	 Bond angles
 Torsions	 Rings



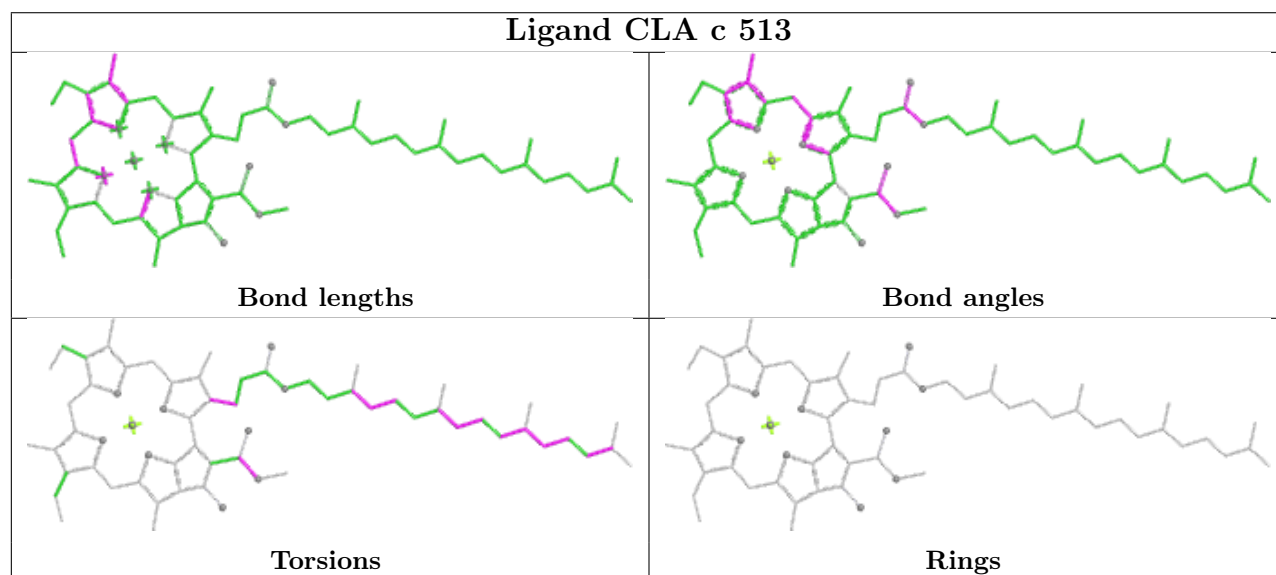


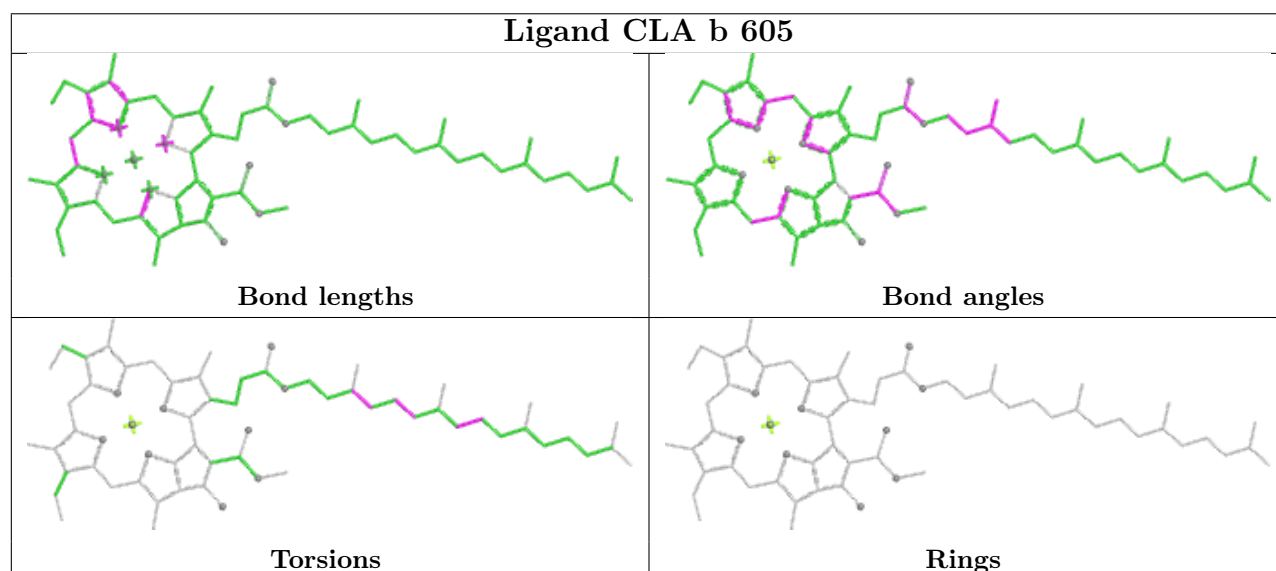
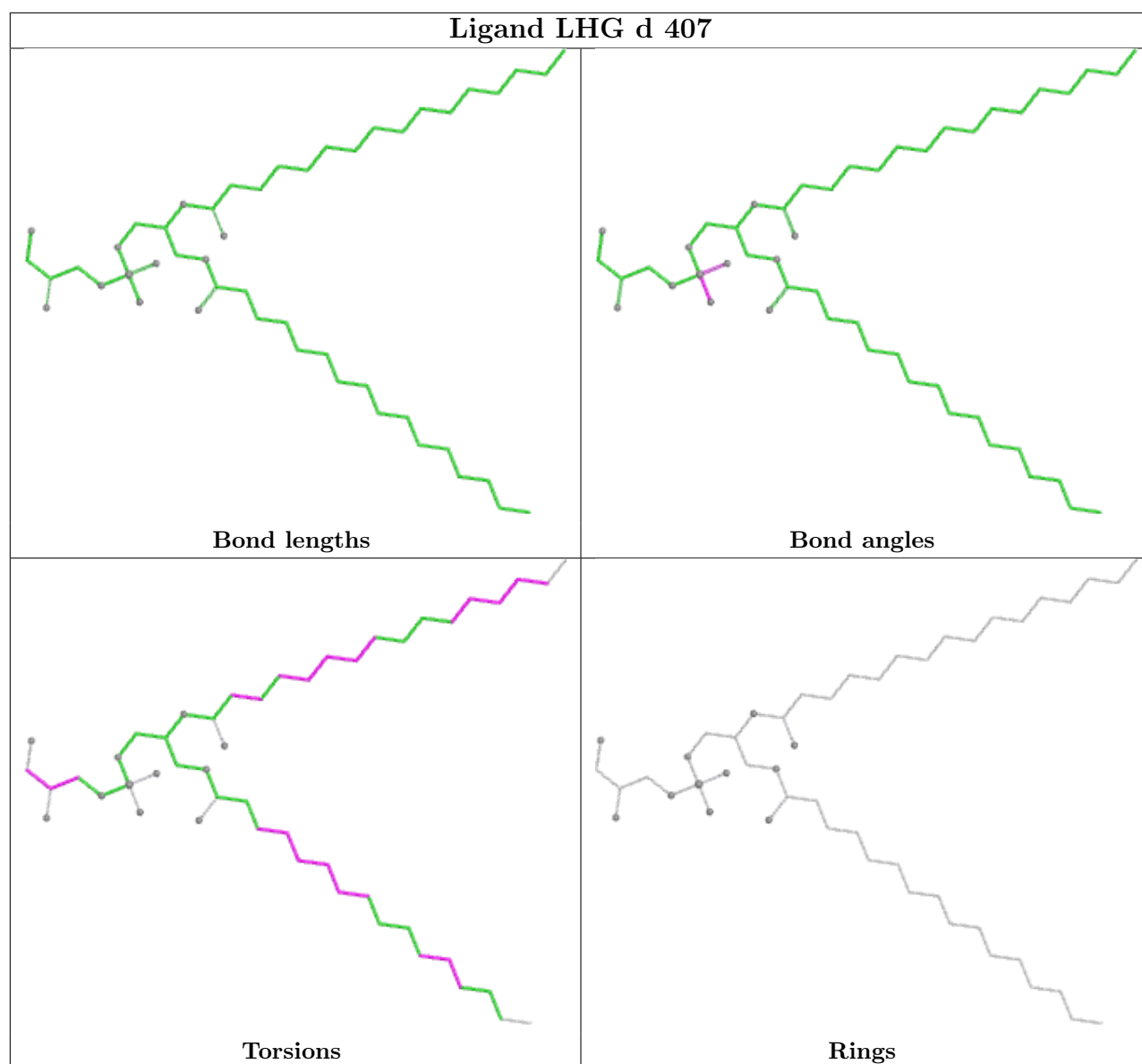


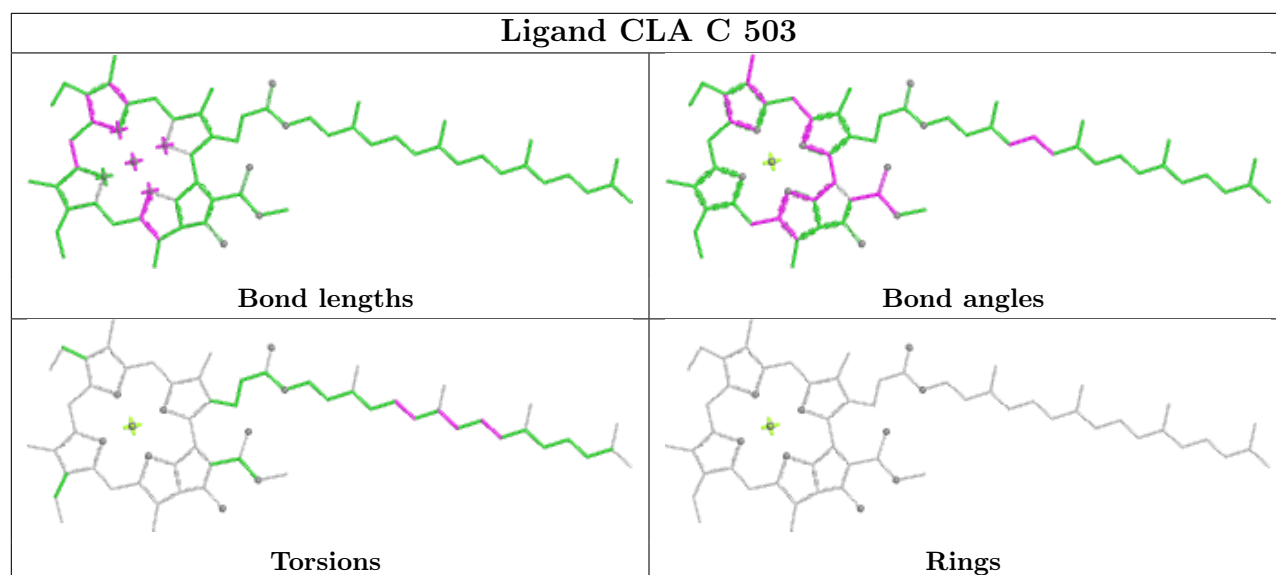
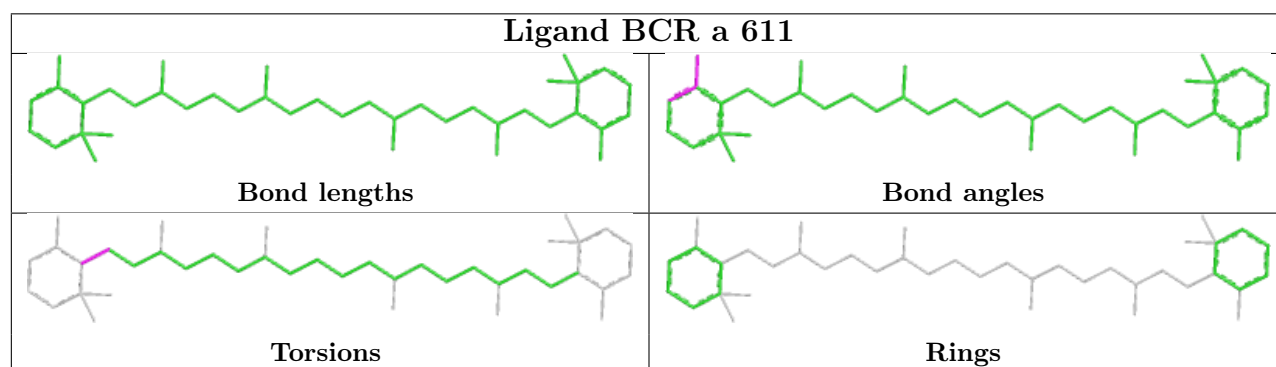
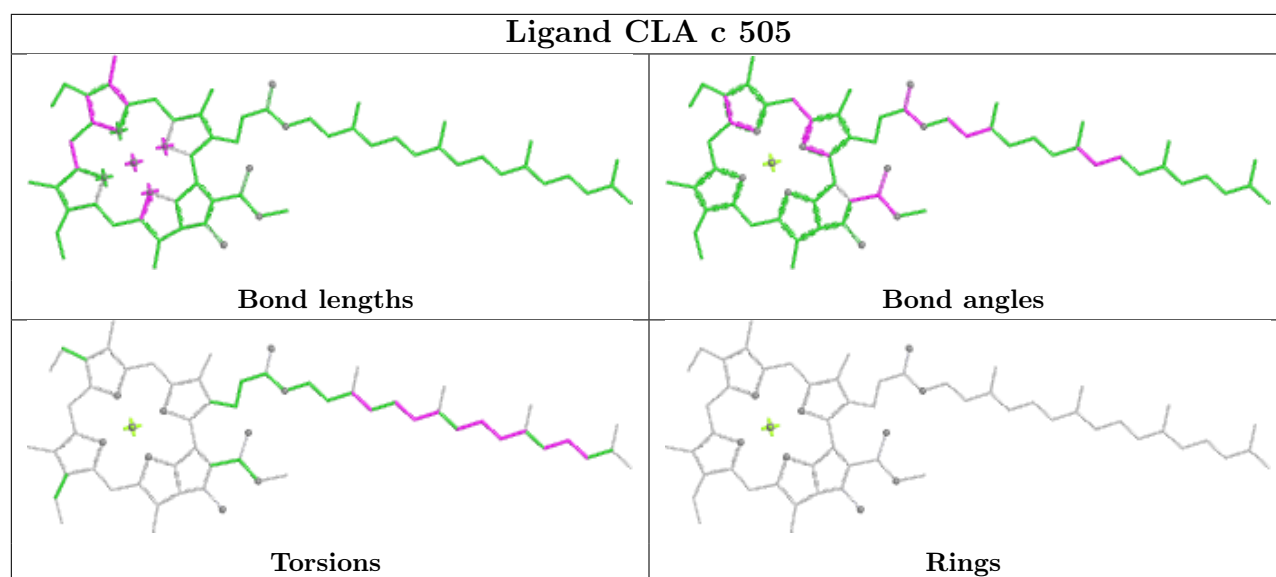
Ligand CLA A 610

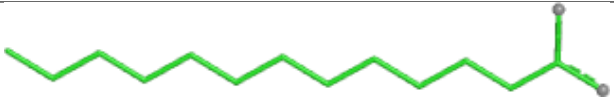
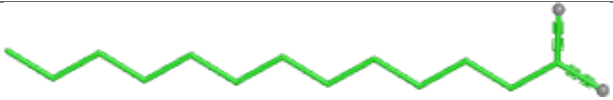
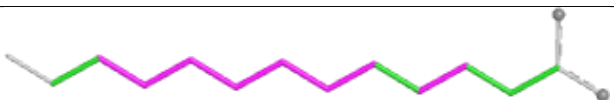
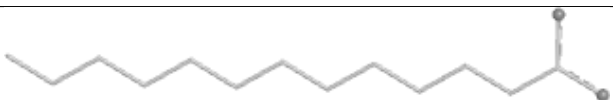


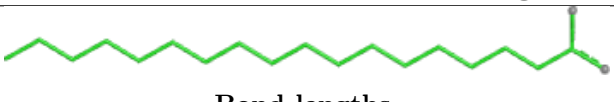
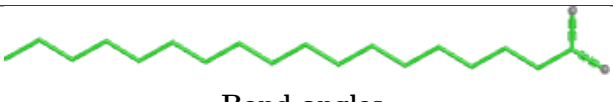
Ligand CLA c 513

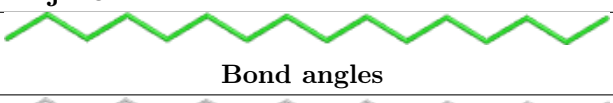


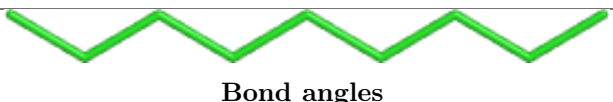


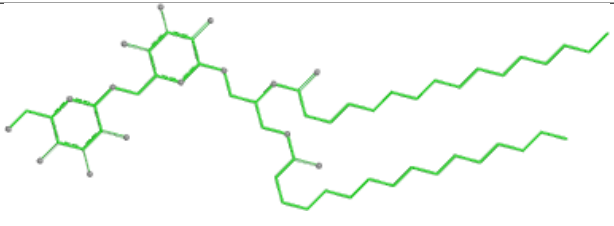
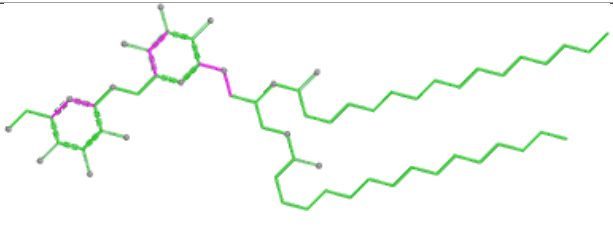
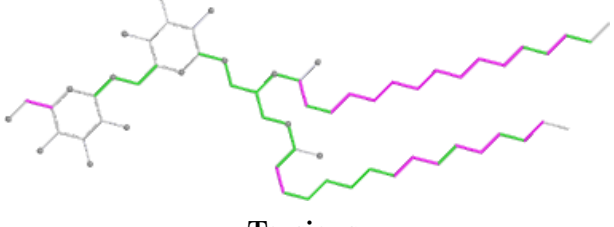
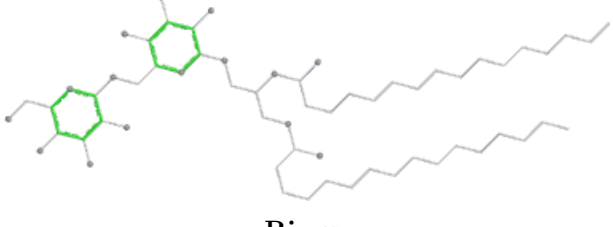


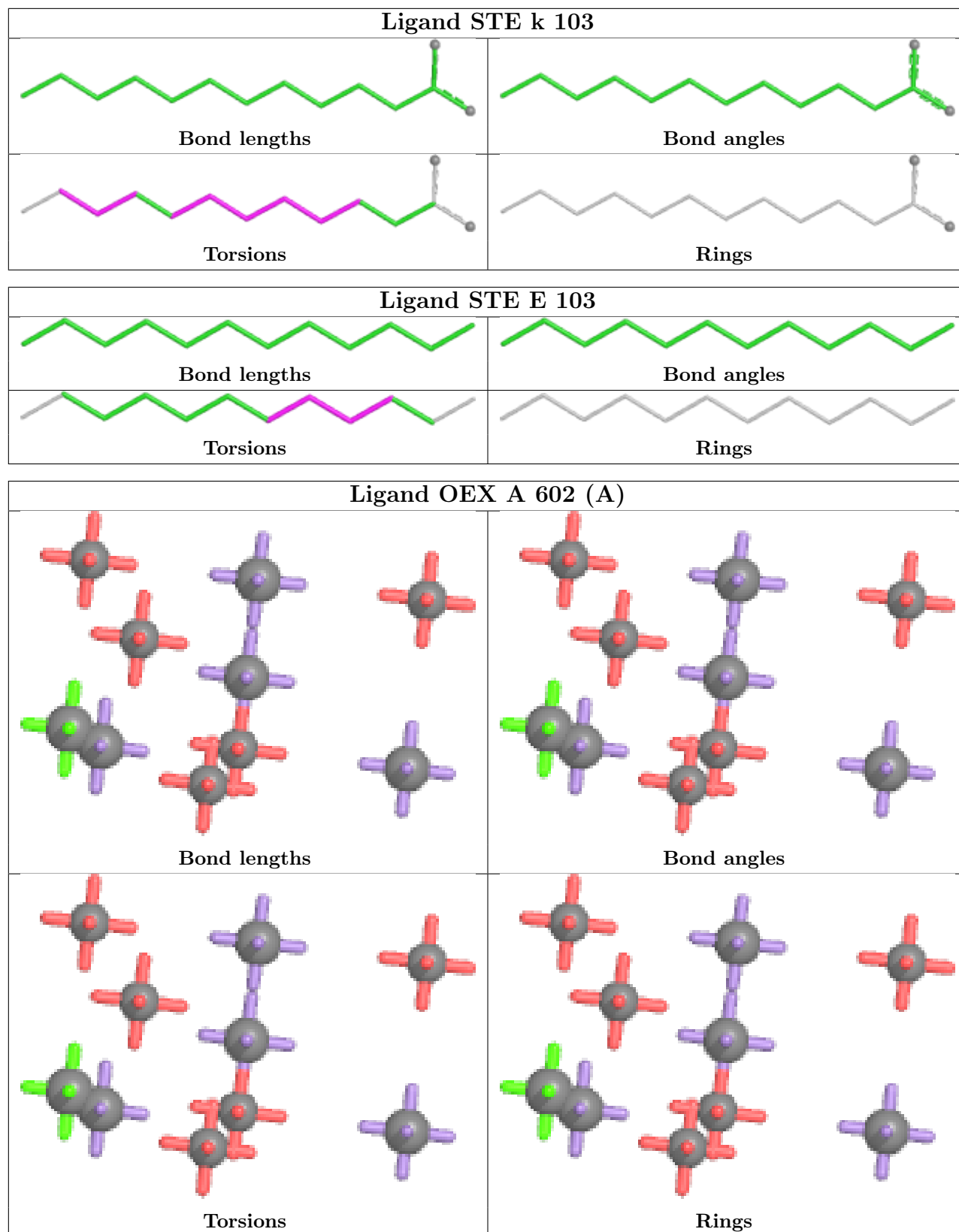
Ligand STE I 102	
 Bond lengths	 Bond angles
 Torsions	 Rings

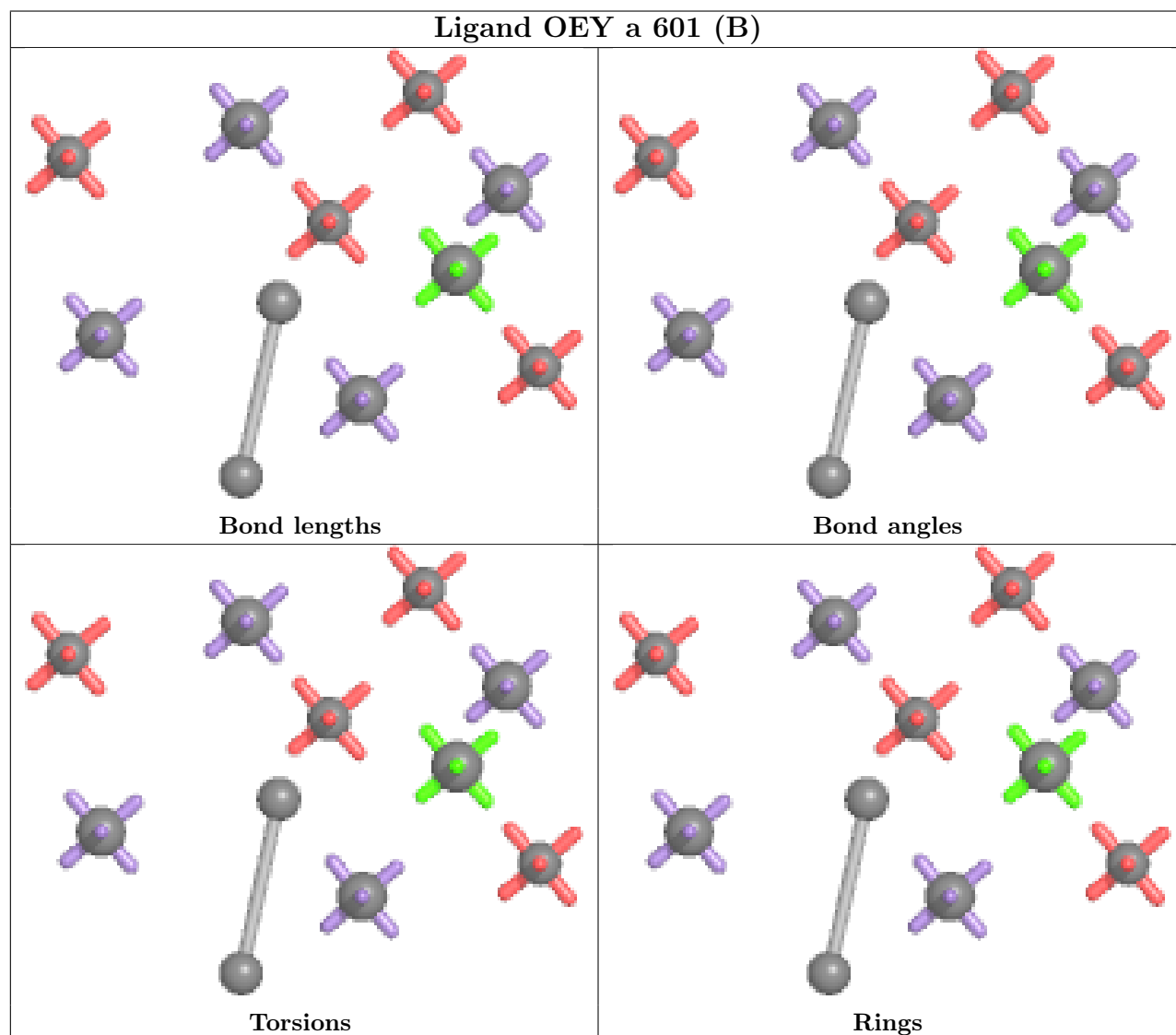
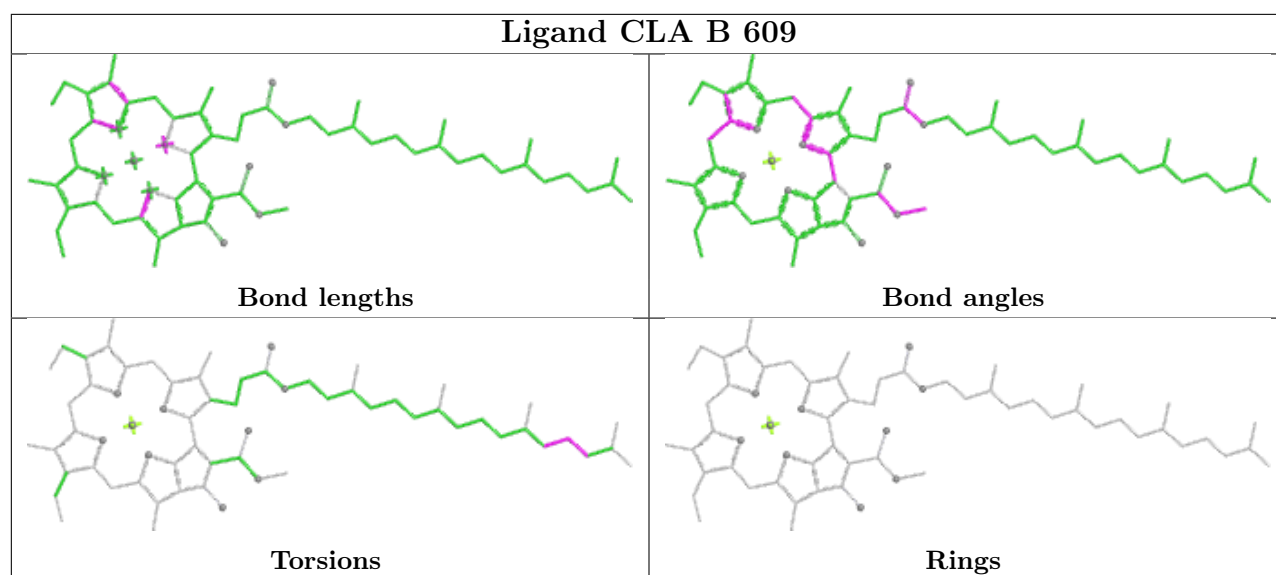
Ligand STE d 406	
 Bond lengths	 Bond angles
 Torsions	 Rings

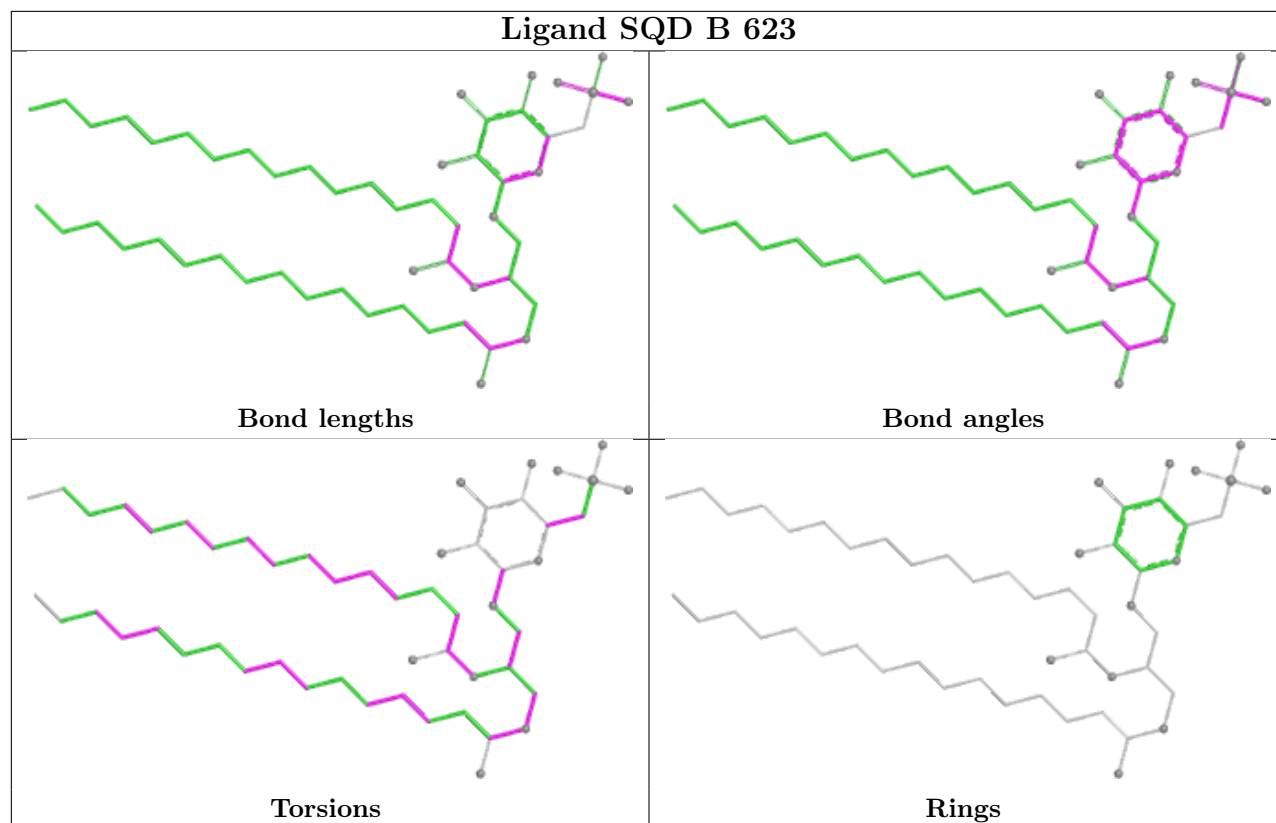
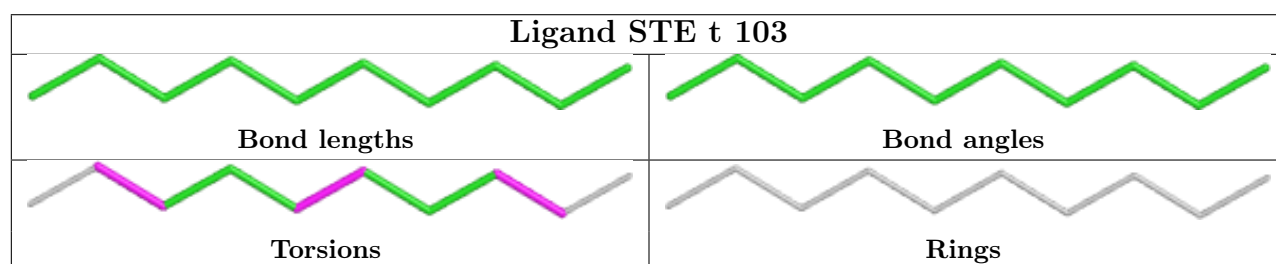
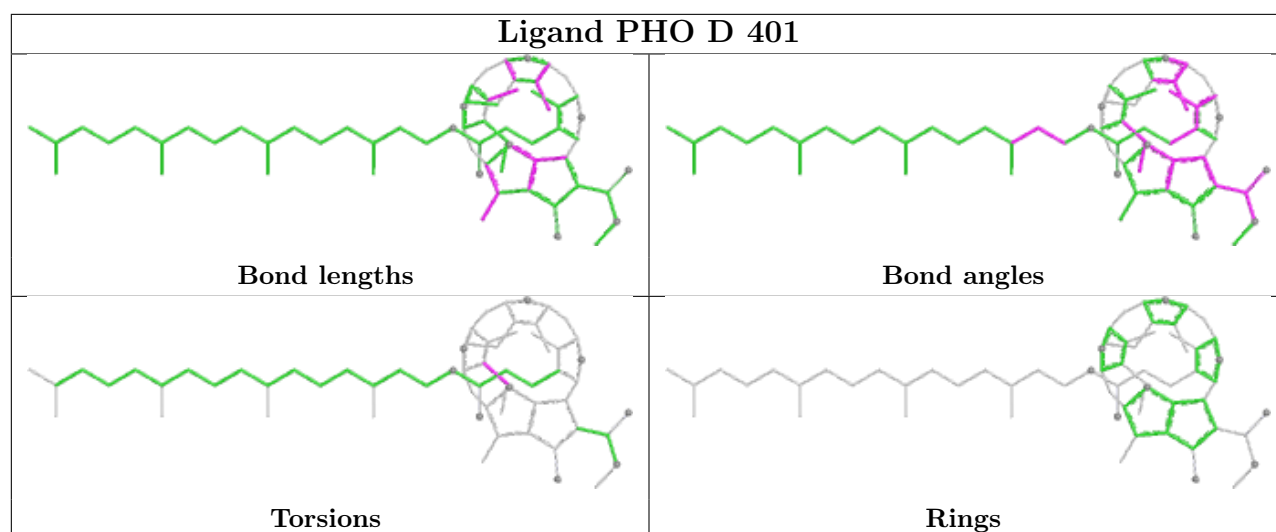
Ligand STE j 102	
 Bond lengths	 Bond angles
 Torsions	 Rings

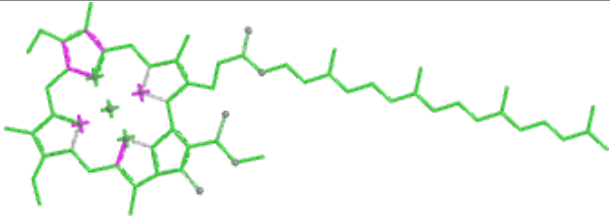
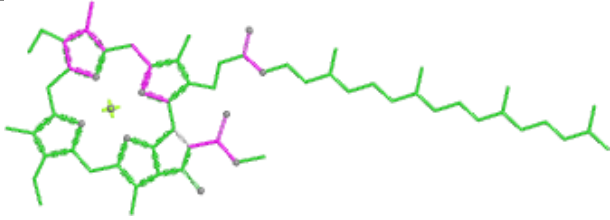
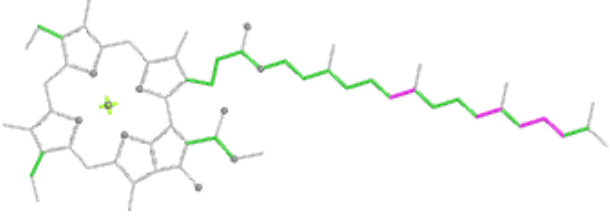
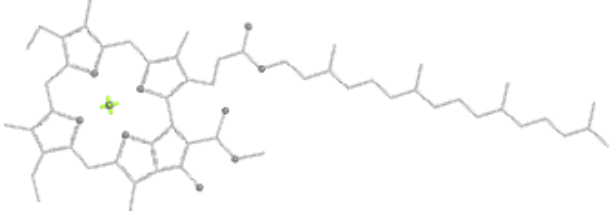
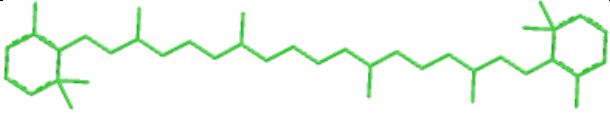
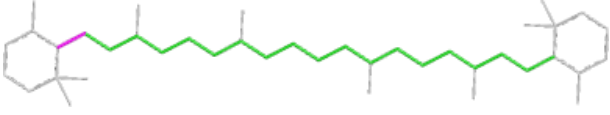
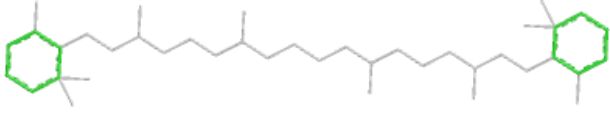
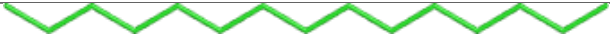
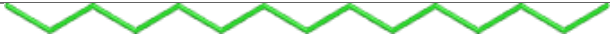
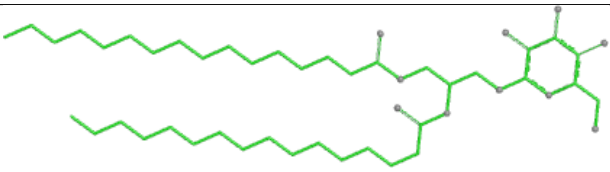
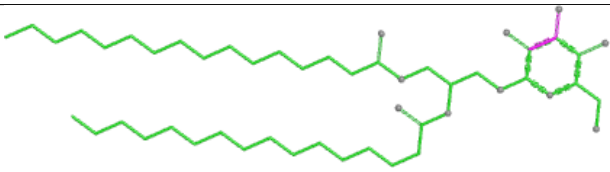
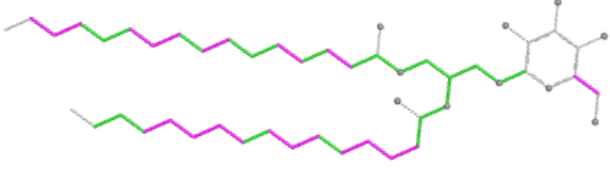
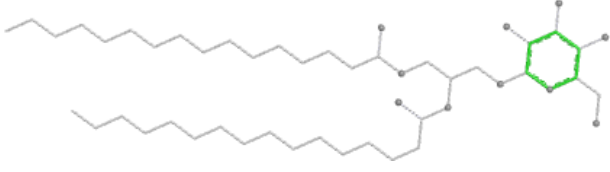
Ligand STE z 101	
 Bond lengths	 Bond angles
 Torsions	 Rings

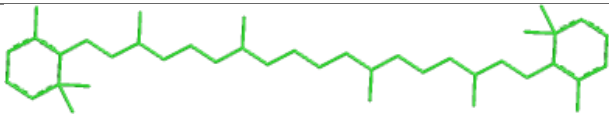
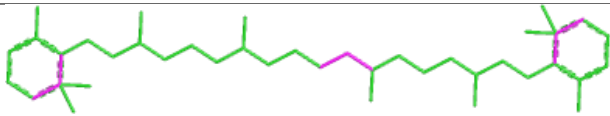
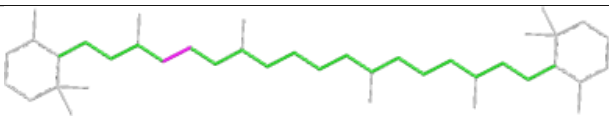
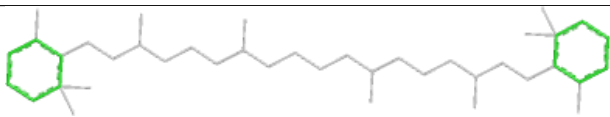
Ligand DGD H 102	
 Bond lengths	 Bond angles
 Torsions	 Rings

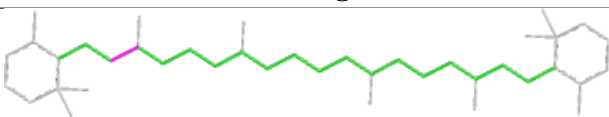
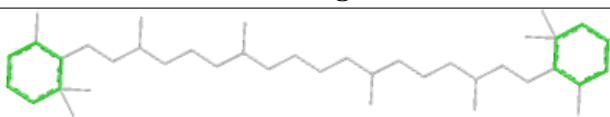


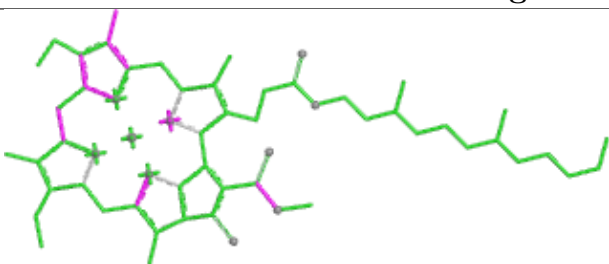
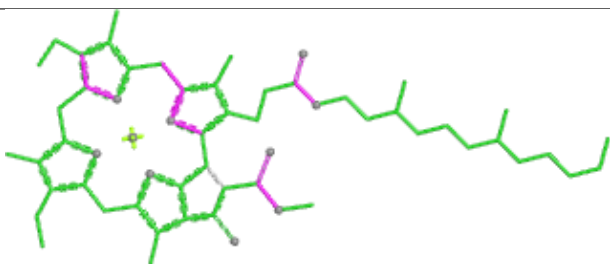
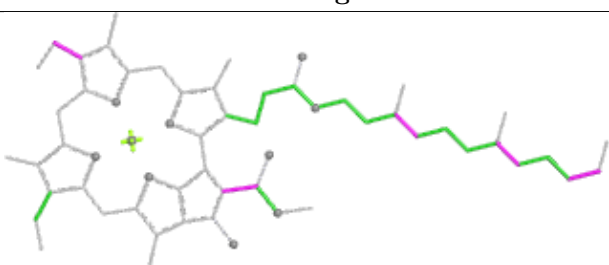
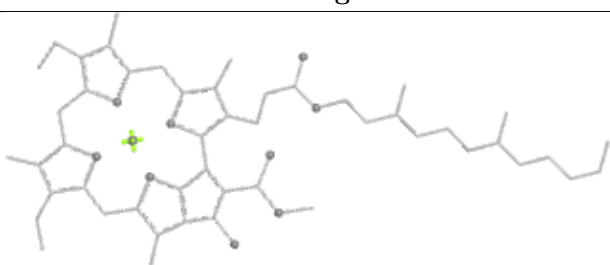


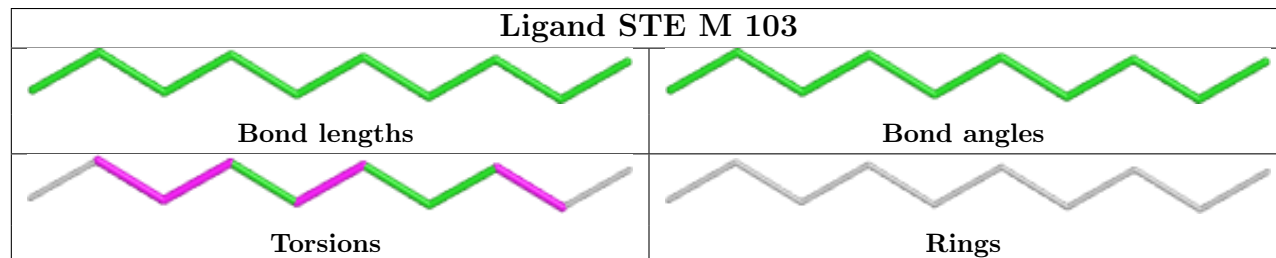
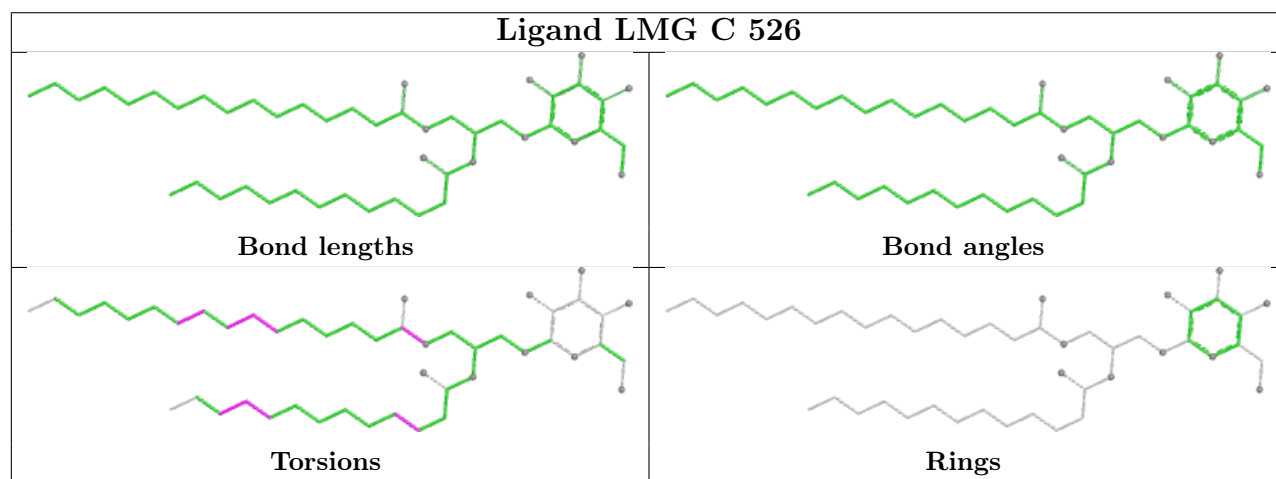
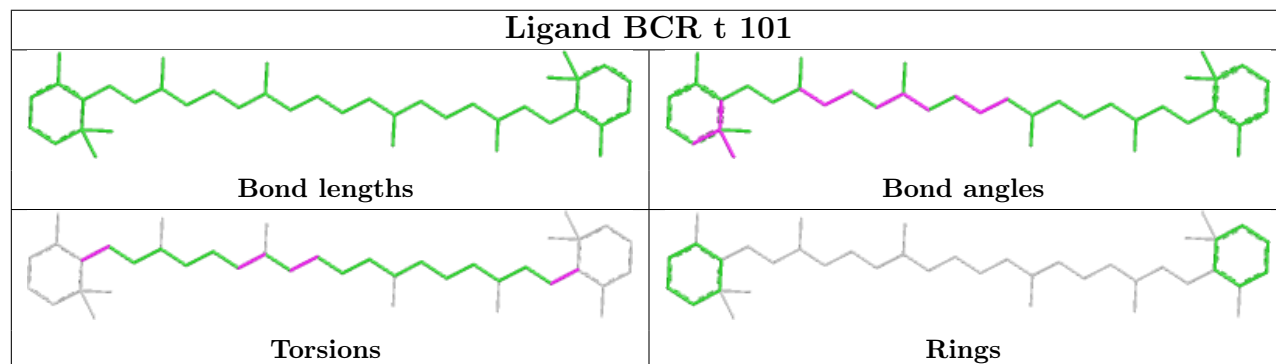
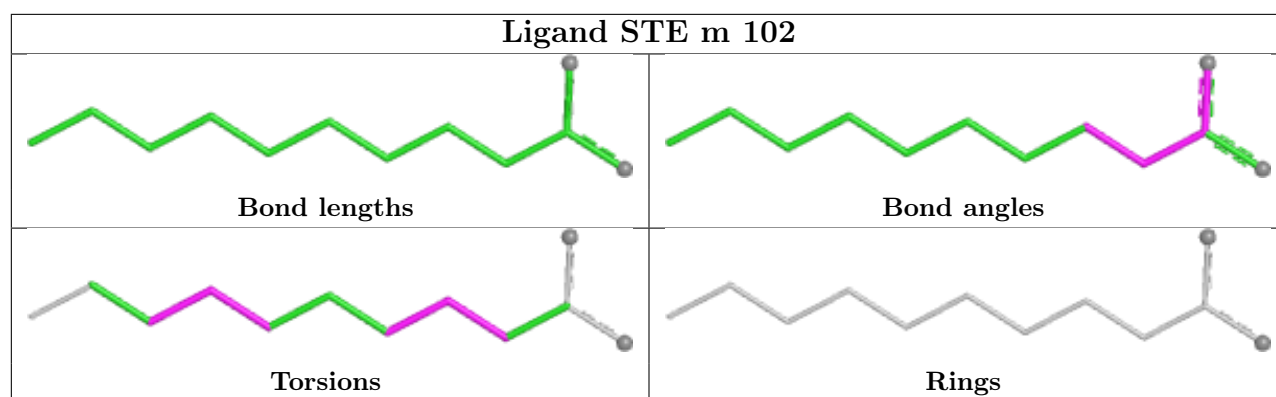


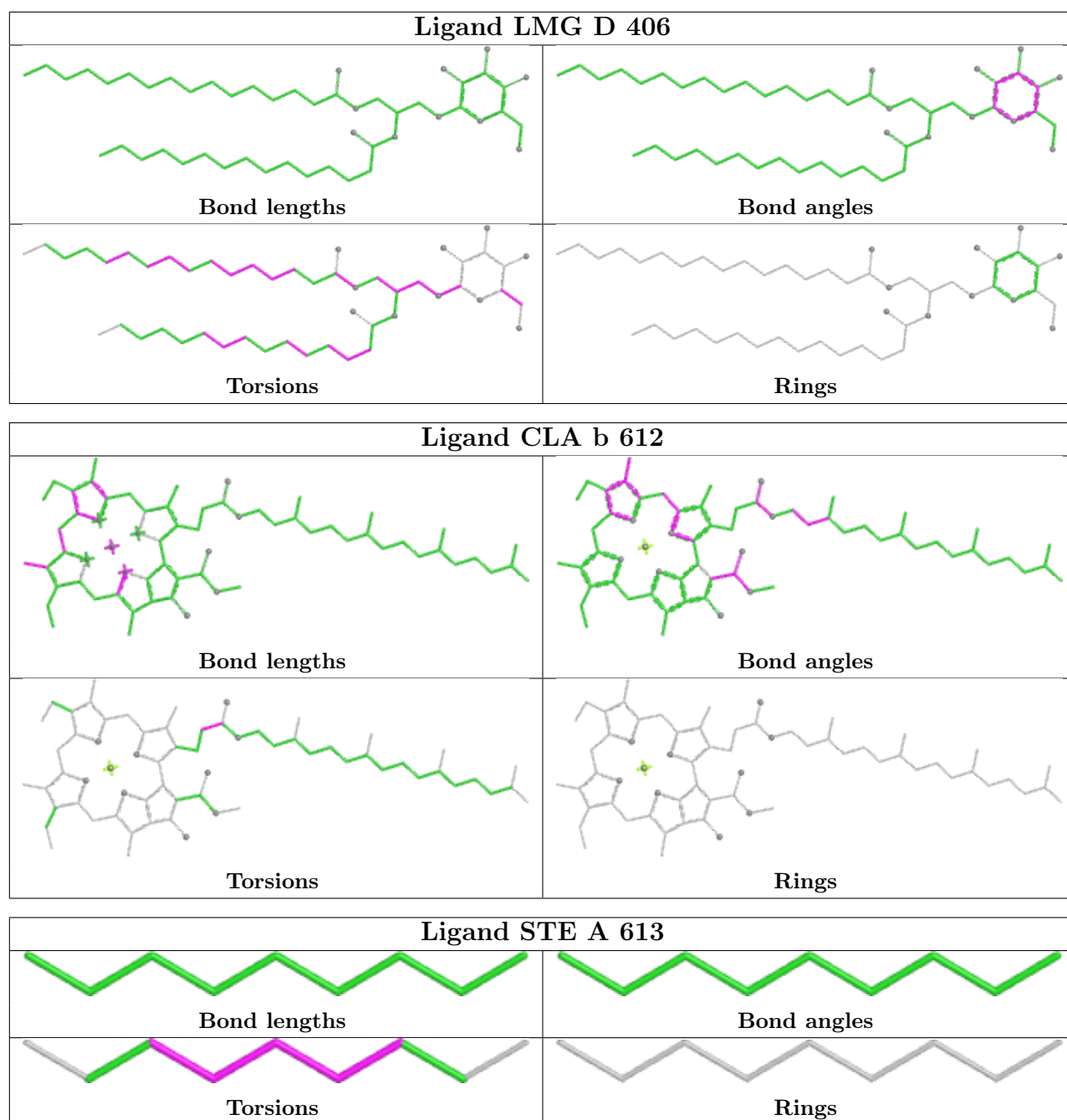
Ligand CLA B 602	
 Bond lengths	 Bond angles
 Torsions	 Rings
Ligand BCR b 617	
 Bond lengths	 Bond angles
 Torsions	 Rings
Ligand STE a 620	
 Bond lengths	 Bond angles
 Torsions	 Rings
Ligand LMG D 407	
 Bond lengths	 Bond angles
 Torsions	 Rings

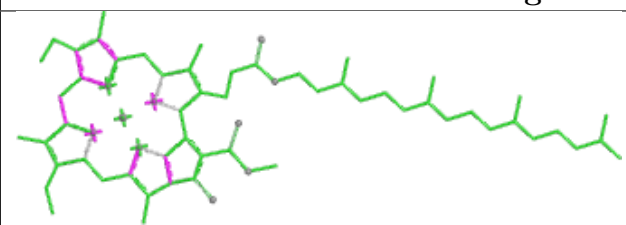
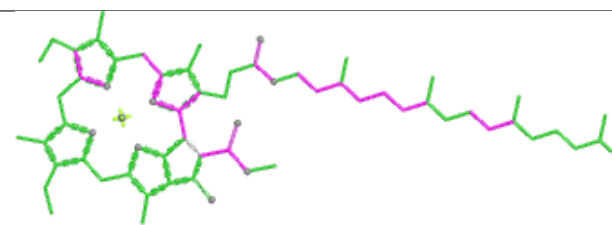
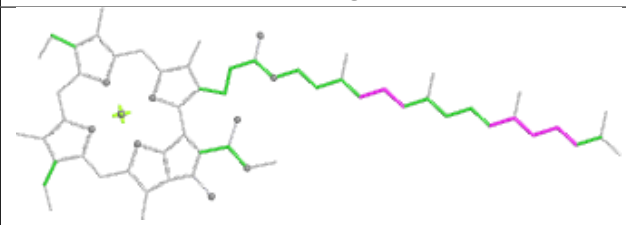
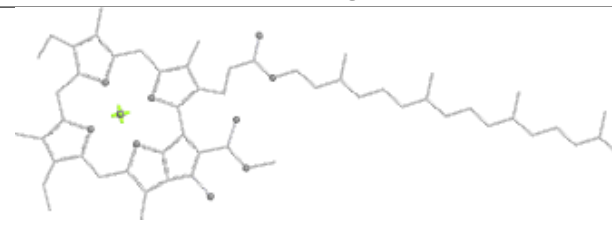
Ligand BCR H 101	
	
Bond lengths	Bond angles
	
Torsions	Rings

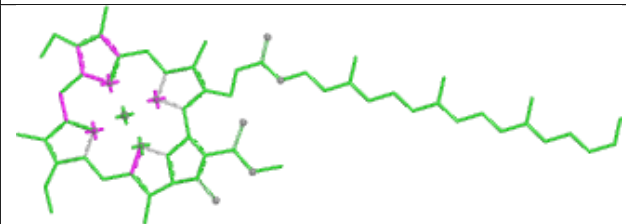
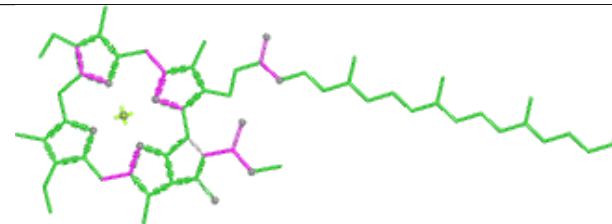
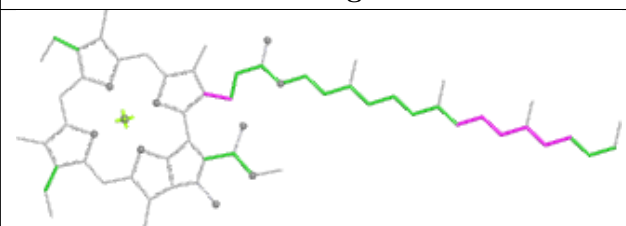
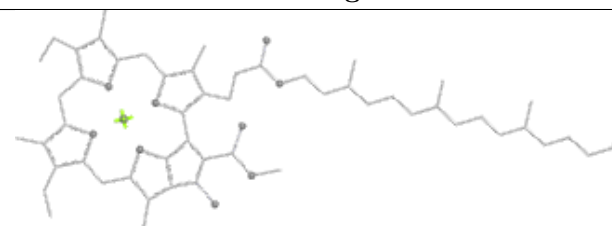
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Bond lengths	Bond angles
	
Torsions	Rings

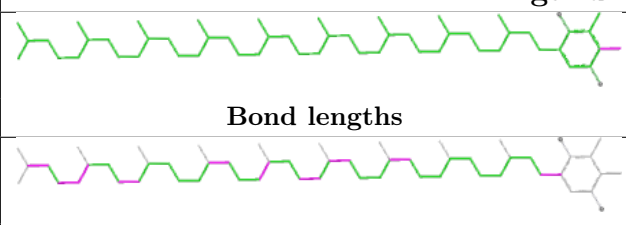
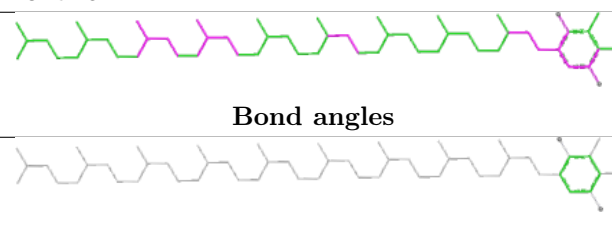
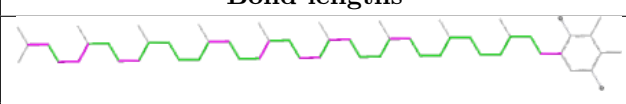
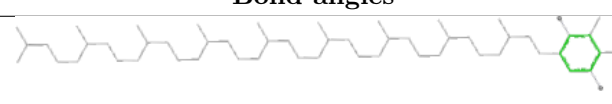
Ligand CLA C 504	
	
Bond lengths	Bond angles
	
Torsions	Rings

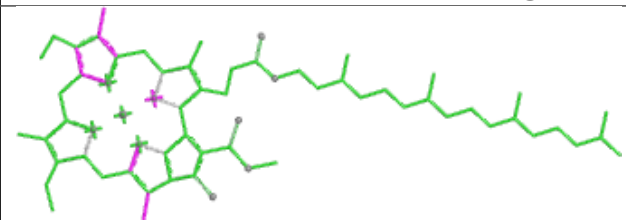
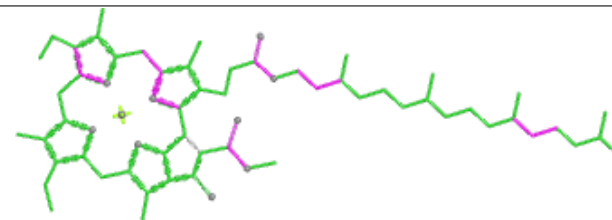
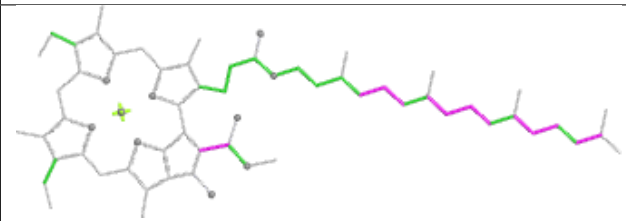
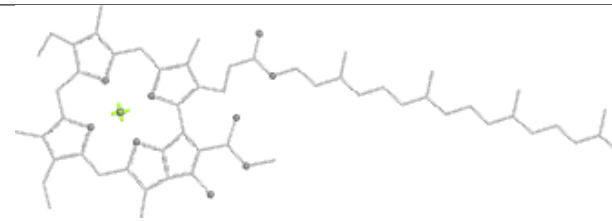


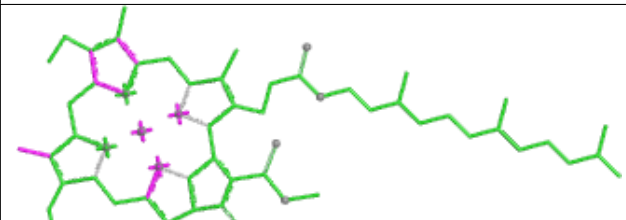
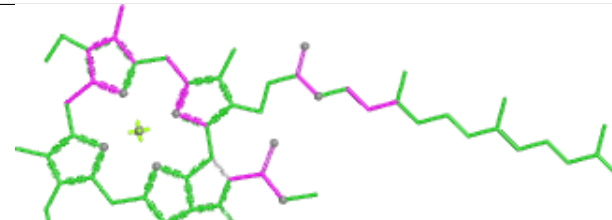
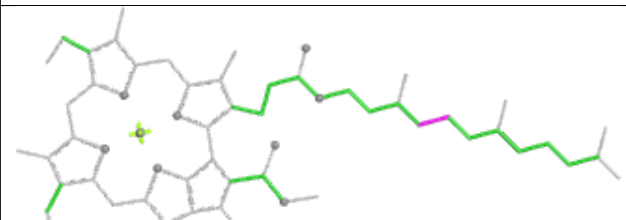
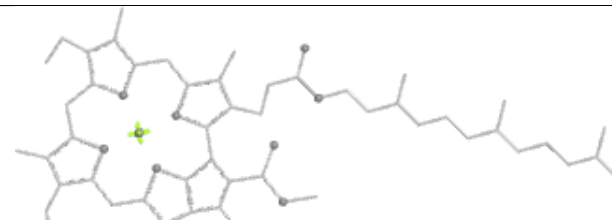


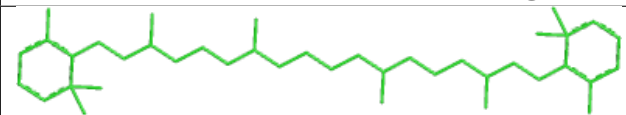
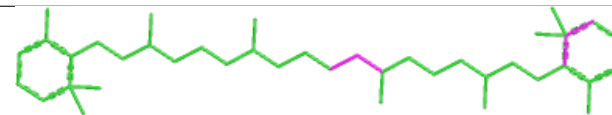
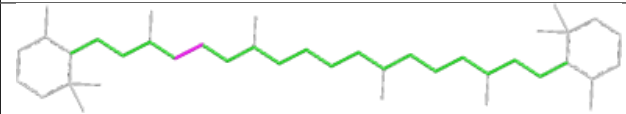
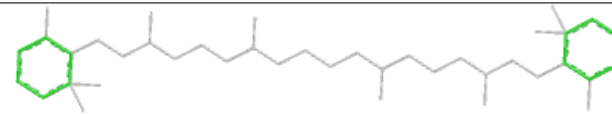
Ligand CLA b 604	
	
Bond lengths	Bond angles
	
Torsions	Rings

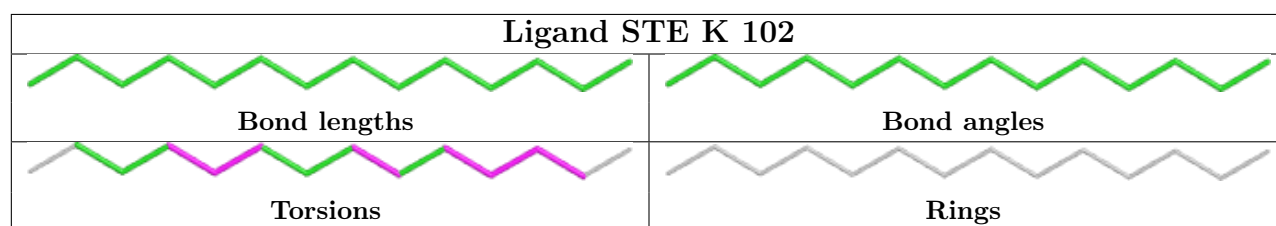
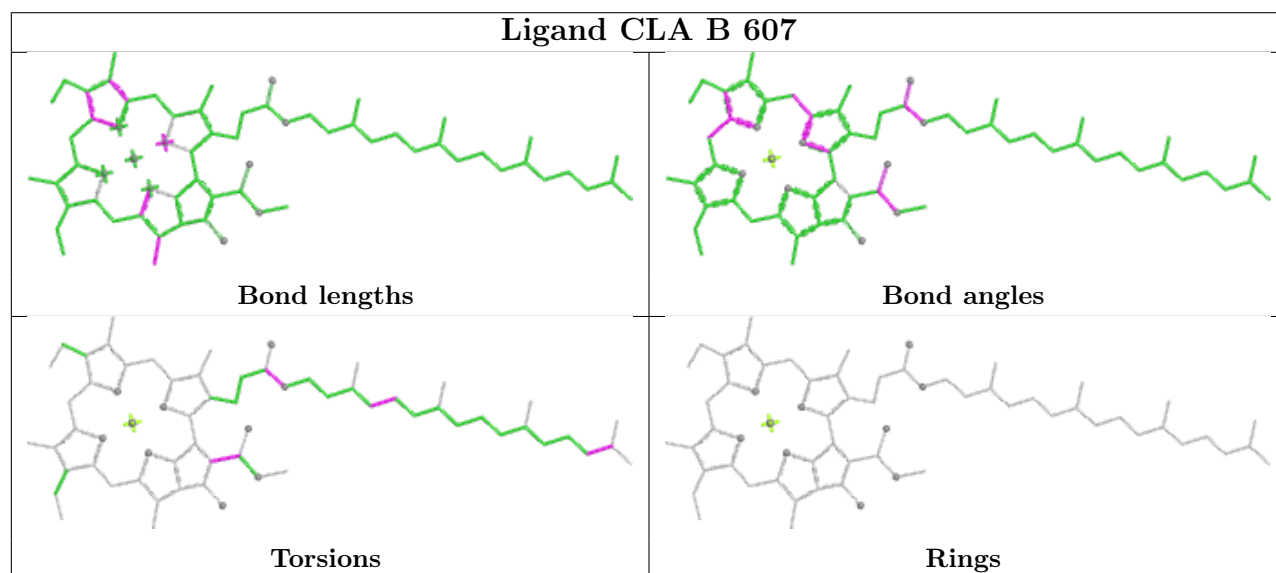
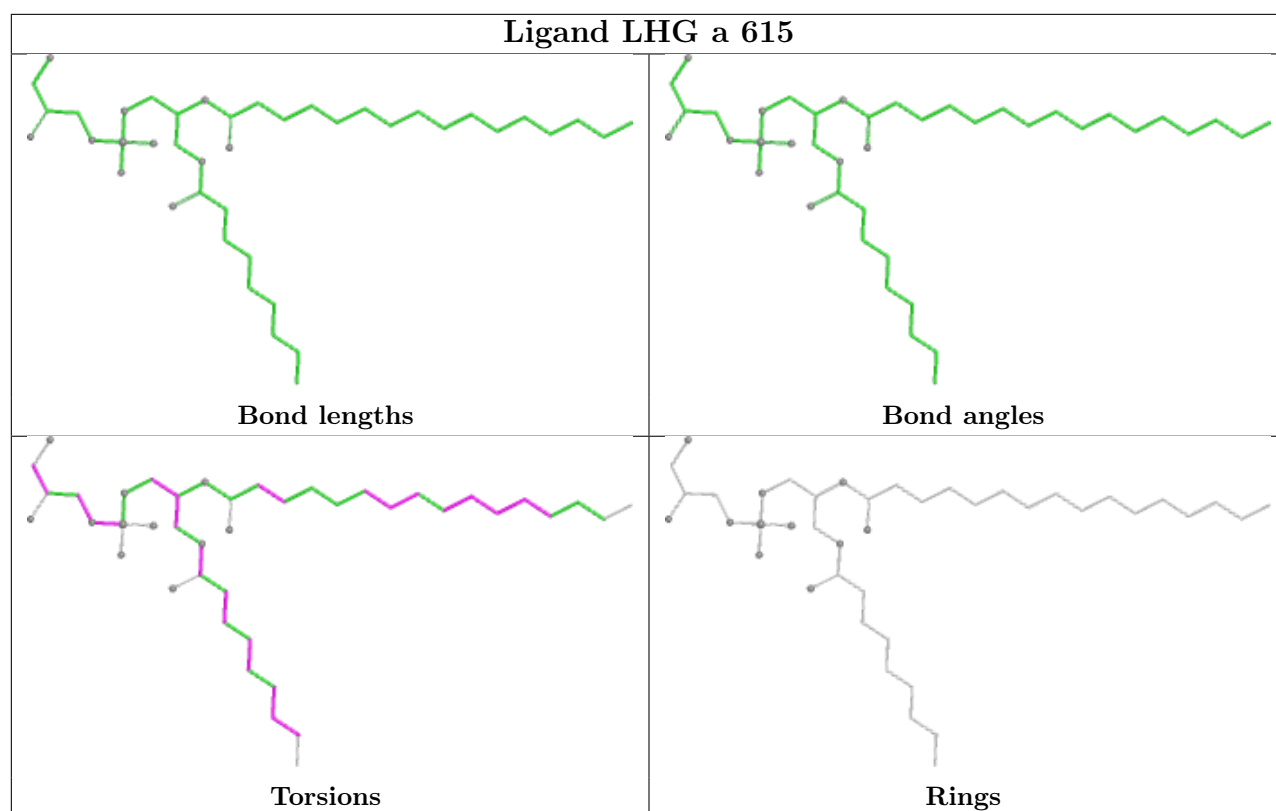
Ligand CLA c 508	
	
Bond lengths	Bond angles
	
Torsions	Rings

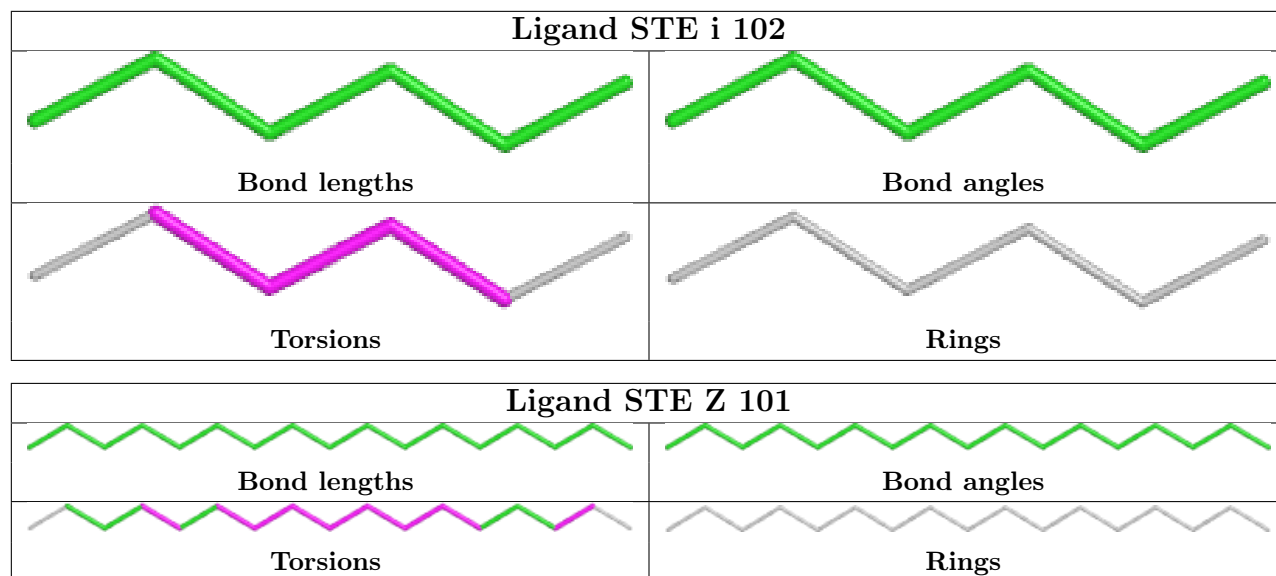
Ligand PL9 a 612	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA C 509	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA b 616	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand BCR x 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%)	-0.41	1 (0%) 90 93	11, 26, 44, 76	69 (20%)
1	a	334/344 (97%)	-0.33	1 (0%) 90 93	10, 28, 52, 76	69 (20%)
2	B	505/510 (99%)	-0.26	5 (0%) 79 84	16, 30, 56, 87	5 (0%)
2	b	505/510 (99%)	-0.12	5 (0%) 79 84	24, 34, 63, 95	1 (0%)
3	C	442/461 (95%)	-0.22	0 100 100	12, 33, 48, 70	11 (2%)
3	c	451/461 (97%)	-0.06	4 (0%) 81 85	12, 37, 55, 83	12 (2%)
4	D	341/352 (96%)	-0.44	0 100 100	12, 28, 43, 70	10 (2%)
4	d	341/352 (96%)	-0.27	0 100 100	12, 32, 51, 70	11 (3%)
5	E	82/84 (97%)	0.41	1 (1%) 76 81	30, 46, 62, 81	1 (1%)
5	e	82/84 (97%)	0.53	2 (2%) 59 67	37, 54, 68, 83	0
6	F	34/45 (75%)	0.13	1 (2%) 53 60	33, 40, 53, 77	0
6	f	34/45 (75%)	0.35	1 (2%) 53 60	38, 46, 68, 86	0
7	H	65/66 (98%)	0.00	1 (1%) 72 78	28, 36, 53, 68	0
7	h	63/66 (95%)	0.28	2 (3%) 50 56	33, 44, 58, 61	0
8	I	35/38 (92%)	-0.17	0 100 100	29, 36, 59, 76	0
8	i	35/38 (92%)	-0.02	1 (2%) 53 60	29, 38, 67, 86	0
9	J	36/40 (90%)	0.29	1 (2%) 55 62	32, 44, 75, 86	0
9	j	36/40 (90%)	0.47	4 (11%) 10 11	36, 51, 78, 83	0
10	K	37/46 (80%)	0.35	0 100 100	38, 47, 64, 72	0
10	k	37/46 (80%)	0.34	0 100 100	43, 50, 66, 77	0
11	L	37/37 (100%)	-0.38	0 100 100	24, 27, 57, 65	0
11	l	36/37 (97%)	-0.45	1 (2%) 55 62	24, 28, 63, 74	0
12	M	32/36 (88%)	-0.24	0 100 100	25, 30, 53, 73	0
12	m	31/36 (86%)	-0.24	0 100 100	26, 31, 49, 61	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	O	244/272 (89%)	0.05	4 (1%) 70 77	24, 39, 74, 119	1 (0%)
13	o	244/272 (89%)	0.11	6 (2%) 58 66	23, 39, 75, 120	0
14	T	29/32 (90%)	-0.36	1 (3%) 48 54	24, 29, 51, 68	0
14	t	29/32 (90%)	-0.27	1 (3%) 48 54	24, 30, 61, 76	0
15	U	97/134 (72%)	0.01	0 100 100	29, 40, 63, 89	0
15	u	97/134 (72%)	-0.09	1 (1%) 79 84	29, 38, 54, 84	0
16	V	137/163 (84%)	-0.18	0 100 100	27, 37, 52, 68	0
16	v	137/163 (84%)	0.13	0 100 100	30, 43, 62, 79	0
17	Y	27/46 (58%)	1.31	5 (18%) 3 3	46, 66, 91, 93	0
17	y	30/46 (65%)	0.91	2 (6%) 24 27	55, 66, 77, 92	0
18	X	38/41 (92%)	0.16	1 (2%) 57 64	35, 44, 61, 69	0
18	x	39/41 (95%)	0.44	2 (5%) 33 38	42, 52, 74, 95	0
19	Z	62/62 (100%)	1.04	4 (6%) 25 28	51, 62, 100, 108	0
19	z	62/62 (100%)	1.06	5 (8%) 18 20	55, 66, 109, 118	0
20	R	28/41 (68%)	0.87	1 (3%) 46 52	53, 62, 72, 80	0
20	r	28/41 (68%)	1.34	5 (17%) 3 4	59, 73, 89, 90	0
All	All	5293/5700 (92%)	-0.08	69 (1%) 75 80	10, 35, 66, 120	190 (3%)

The worst 5 of 69 RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
13	o	58	ASN	6.4
3	c	24	THR	4.9
19	z	33	TRP	4.1
17	Y	25	ILE	3.9
19	Z	62	VAL	3.8

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

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
14	FME	t	1	10/11	0.91	0.09	30,35,52,59	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
14	FME	T	1	10/11	0.93	0.08	28,33,51,62	0
8	FME	I	1	10/11	0.95	0.07	38,41,48,48	0
12	FME	M	1	10/11	0.95	0.09	35,43,59,60	0
12	FME	m	1	10/11	0.96	0.08	30,42,61,67	0
8	FME	i	1	10/11	0.97	0.08	33,42,46,52	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
30	STE	C	529	14/20	0.58	0.20	56,71,82,83	0
30	STE	i	101	12/20	0.58	0.16	67,81,92,93	0
30	STE	C	520	10/20	0.62	0.19	49,62,65,69	0
30	STE	E	104	20/20	0.68	0.18	51,66,72,74	0
30	STE	A	620	11/20	0.70	0.19	54,61,73,76	0
30	STE	I	101	17/20	0.72	0.16	52,59,66,67	0
30	STE	j	102	16/20	0.72	0.18	55,67,81,82	0
33	LMG	D	406	50/55	0.72	0.18	36,61,85,91	0
30	STE	H	103	18/20	0.73	0.18	54,62,69,70	0
30	STE	K	102	14/20	0.73	0.16	55,64,74,75	0
30	STE	e	101	9/20	0.73	0.24	62,74,80,80	0
30	STE	A	619	17/20	0.74	0.15	53,59,67,67	0
30	STE	i	102	6/20	0.74	0.20	52,66,69,70	0
29	PL9	a	612	55/55	0.75	0.17	43,59,70,75	0
30	STE	e	103	9/20	0.75	0.18	54,61,70,74	0
30	STE	c	517	18/20	0.75	0.17	64,71,81,85	0
34	LHG	a	615	42/49	0.75	0.16	51,77,87,102	0
30	STE	C	519	7/20	0.76	0.18	50,55,58,62	0
30	STE	E	103	12/20	0.76	0.17	59,67,92,95	0
30	STE	C	516	14/20	0.76	0.16	53,60,63,71	0
30	STE	a	619	12/20	0.76	0.14	52,60,75,76	0
33	LMG	b	622	55/55	0.77	0.17	51,61,76,78	0
33	LMG	a	617	55/55	0.77	0.16	36,55,67,73	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
30	STE	C	518	5/20	0.78	0.17	50,56,60,61	0
30	STE	f	102	8/20	0.78	0.20	53,58,65,69	0
30	STE	h	102	10/20	0.78	0.18	59,66,74,76	0
33	LMG	c	518	30/55	0.78	0.15	41,73,82,83	0
34	LHG	E	101	49/49	0.78	0.15	42,64,87,97	0
32	DGD	A	617	66/66	0.78	0.15	45,55,76,79	0
29	PL9	A	612	55/55	0.79	0.17	35,57,71,75	0
30	STE	k	103	14/20	0.79	0.13	59,62,75,76	0
30	STE	e	104	13/20	0.79	0.17	66,70,79,81	0
30	STE	A	613	9/20	0.80	0.17	53,57,66,66	0
30	STE	B	625	12/20	0.80	0.14	43,55,66,67	0
30	STE	T	102	16/20	0.80	0.20	36,49,79,80	0
30	STE	t	103	10/20	0.80	0.16	44,54,62,62	0
30	STE	Z	101	17/20	0.80	0.19	50,69,83,84	0
33	LMG	C	517	36/55	0.80	0.14	44,54,62,68	0
30	STE	z	101	9/20	0.81	0.20	56,57,62,63	0
33	LMG	c	523	48/55	0.81	0.15	49,62,80,82	0
31	SQD	a	616	54/54	0.82	0.13	38,56,83,92	0
30	STE	a	620	15/20	0.82	0.19	42,52,65,65	0
30	STE	C	527	12/20	0.83	0.15	36,43,49,54	0
30	STE	J	101	12/20	0.83	0.13	46,49,61,65	0
30	STE	d	410	20/20	0.83	0.13	45,58,73,76	0
30	STE	T	103	15/20	0.84	0.16	47,52,72,78	0
30	STE	B	624	18/20	0.84	0.12	44,49,78,78	0
30	STE	E	102	12/20	0.84	0.14	56,67,76,77	0
30	STE	I	102	15/20	0.84	0.14	43,48,63,63	0
30	STE	j	101	12/20	0.84	0.13	48,55,60,65	0
33	LMG	B	620	45/55	0.84	0.14	34,54,77,84	0
30	STE	b	623	16/20	0.84	0.15	43,53,60,63	0
31	SQD	A	616	43/54	0.85	0.11	39,51,78,85	0
30	STE	m	102	12/20	0.85	0.13	43,50,72,72	0
30	STE	b	625	11/20	0.85	0.15	50,53,59,59	0
30	STE	c	516	13/20	0.85	0.15	57,64,69,70	0
33	LMG	C	522	48/55	0.86	0.12	37,53,66,69	0
30	STE	A	618	8/20	0.86	0.15	46,52,56,57	0
30	STE	B	621	17/20	0.86	0.12	35,45,64,66	0
30	STE	d	412	20/20	0.86	0.13	37,47,63,70	0
30	STE	b	621	20/20	0.87	0.11	39,49,64,64	0
33	LMG	m	101	51/55	0.87	0.11	35,46,57,61	0
33	LMG	C	526	48/55	0.87	0.13	39,60,75,76	0
33	LMG	c	522	46/55	0.87	0.12	40,58,67,68	0
31	SQD	B	623	54/54	0.88	0.11	34,55,68,72	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
30	STE	C	528	16/20	0.88	0.12	38,44,58,58	0
31	SQD	b	620	49/54	0.88	0.11	38,52,68,74	0
30	STE	b	624	10/20	0.88	0.12	46,51,69,73	0
33	LMG	M	101	51/55	0.88	0.11	31,48,56,62	0
30	STE	D	411	20/20	0.88	0.12	35,41,64,72	0
33	LMG	a	618	49/55	0.88	0.11	35,54,68,70	0
28	BCR	C	521	40/40	0.89	0.10	36,46,59,59	0
26	CLA	b	601	65/65	0.89	0.11	37,54,77,83	0
30	STE	t	102	14/20	0.89	0.11	37,45,57,58	0
31	SQD	f	101	41/54	0.89	0.12	49,66,75,86	0
30	STE	d	406	20/20	0.90	0.11	37,45,67,71	0
31	SQD	a	614	54/54	0.90	0.11	40,57,69,70	0
30	STE	D	412	9/20	0.90	0.13	50,54,61,64	0
30	STE	M	102	15/20	0.91	0.10	38,44,60,69	0
26	CLA	C	513	65/65	0.91	0.10	40,51,74,77	0
30	STE	m	103	18/20	0.91	0.11	33,41,60,61	0
28	BCR	c	514	40/40	0.91	0.10	45,53,59,62	0
28	BCR	k	101	40/40	0.91	0.10	44,52,58,61	0
28	BCR	k	102	40/40	0.91	0.11	42,47,56,60	0
26	CLA	B	601	65/65	0.91	0.10	26,42,71,76	0
30	STE	M	103	10/20	0.92	0.11	40,43,50,50	0
32	DGD	C	524	62/66	0.92	0.10	31,41,83,92	0
32	DGD	h	101	62/66	0.92	0.09	31,41,48,55	0
26	CLA	c	512	65/65	0.92	0.09	40,48,70,73	0
31	SQD	F	102	36/54	0.92	0.11	42,62,71,72	0
26	CLA	c	513	65/65	0.92	0.11	41,53,77,81	0
28	BCR	d	404	40/40	0.92	0.10	37,43,70,74	0
28	BCR	C	514	40/40	0.92	0.10	39,48,54,58	0
31	SQD	A	615	52/54	0.92	0.10	29,49,73,78	0
33	LMG	D	407	51/55	0.93	0.10	29,42,70,73	0
28	BCR	D	404	40/40	0.93	0.09	30,39,71,79	0
28	BCR	T	101	40/40	0.93	0.07	23,34,43,45	0
32	DGD	H	102	62/66	0.93	0.09	26,36,44,49	0
32	DGD	c	520	62/66	0.93	0.09	32,41,70,76	0
26	CLA	C	512	65/65	0.93	0.09	35,44,68,76	0
26	CLA	C	503	65/65	0.93	0.08	29,36,41,46	0
28	BCR	B	618	40/40	0.93	0.08	25,35,42,46	0
26	CLA	C	511	65/65	0.93	0.09	35,42,54,57	0
34	LHG	D	410	49/49	0.93	0.10	26,39,56,57	0
28	BCR	x	101	40/40	0.93	0.09	33,41,52,52	0
26	CLA	c	503	65/65	0.93	0.08	32,38,44,46	0
28	BCR	b	618	40/40	0.94	0.07	25,35,44,46	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
28	BCR	b	619	40/40	0.94	0.07	28,40,54,54	0
26	CLA	b	606	65/65	0.94	0.08	26,33,58,62	0
28	BCR	c	515	40/40	0.94	0.09	30,42,48,52	0
26	CLA	b	616	60/65	0.94	0.09	27,37,75,82	0
28	BCR	A	611	40/40	0.94	0.07	25,32,36,37	0
28	BCR	H	101	40/40	0.94	0.08	28,35,48,53	0
32	DGD	c	521	62/66	0.94	0.08	27,42,65,76	0
28	BCR	t	101	40/40	0.94	0.07	28,34,42,43	0
28	BCR	K	101	40/40	0.94	0.09	35,42,53,61	0
26	CLA	B	606	65/65	0.94	0.08	23,29,57,64	0
28	BCR	b	617	40/40	0.94	0.07	26,35,42,44	0
29	PL9	d	405	55/55	0.94	0.07	23,30,35,37	0
34	LHG	d	407	49/49	0.94	0.10	32,43,58,62	0
27	PHO	d	401	64/64	0.95	0.07	26,33,38,42	0
32	DGD	C	525	62/66	0.95	0.08	27,38,64,82	0
26	CLA	C	509	65/65	0.95	0.08	27,34,52,55	0
29	PL9	D	405	55/55	0.95	0.06	21,28,35,36	0
28	BCR	B	617	40/40	0.95	0.06	23,34,41,43	0
26	CLA	C	510	65/65	0.95	0.07	28,35,48,57	0
28	BCR	B	619	40/40	0.95	0.07	26,37,49,54	0
26	CLA	b	610	65/65	0.95	0.07	26,32,40,45	0
28	BCR	C	515	40/40	0.95	0.08	25,35,45,47	0
26	CLA	C	504	59/65	0.95	0.07	28,34,68,73	0
26	CLA	C	506	65/65	0.95	0.09	26,35,68,72	0
26	CLA	c	504	60/65	0.95	0.08	25,38,64,69	0
26	CLA	c	505	65/65	0.95	0.08	27,36,54,57	0
26	CLA	c	506	65/65	0.95	0.09	31,39,74,79	0
28	BCR	a	611	40/40	0.95	0.06	22,30,38,41	0
26	CLA	c	508	64/65	0.95	0.08	31,38,80,90	0
26	CLA	c	509	65/65	0.95	0.09	31,39,52,56	0
26	CLA	c	510	65/65	0.95	0.07	31,39,51,60	0
26	CLA	c	511	65/65	0.95	0.09	35,46,57,61	0
33	LMG	d	411	44/55	0.95	0.09	34,42,65,70	0
26	CLA	C	508	65/65	0.95	0.08	26,33,80,90	0
34	LHG	D	409	47/49	0.95	0.10	26,36,66,71	0
26	CLA	a	607	65/65	0.95	0.07	19,26,37,49	0
26	CLA	d	403	65/65	0.95	0.08	29,35,67,71	0
27	PHO	A	609	64/64	0.95	0.06	19,26,29,32	0
27	PHO	D	401	64/64	0.95	0.06	24,28,33,37	0
34	LHG	d	409	39/49	0.95	0.09	31,38,57,59	0
34	LHG	l	101	49/49	0.95	0.08	29,39,47,55	0
32	DGD	C	523	62/66	0.96	0.08	23,35,63,69	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
26	CLA	b	614	65/65	0.96	0.07	25,33,60,66	0
26	CLA	b	615	65/65	0.96	0.07	26,33,52,62	0
26	CLA	C	507	65/65	0.96	0.07	25,33,45,55	0
32	DGD	c	519	62/66	0.96	0.09	25,33,62,69	0
26	CLA	c	501	65/65	0.96	0.07	27,33,44,48	0
26	CLA	c	502	65/65	0.96	0.07	28,35,48,54	0
26	CLA	B	610	65/65	0.96	0.06	20,27,35,37	0
26	CLA	B	612	65/65	0.96	0.06	20,26,35,43	0
26	CLA	B	614	65/65	0.96	0.08	23,28,60,65	0
26	CLA	B	616	60/65	0.96	0.08	23,30,75,85	0
26	CLA	c	507	65/65	0.96	0.07	30,37,46,52	0
26	CLA	C	501	65/65	0.96	0.06	23,29,40,43	0
26	CLA	C	502	65/65	0.96	0.07	27,33,46,53	0
26	CLA	B	604	65/65	0.96	0.07	21,25,60,62	0
26	CLA	a	608	65/65	0.96	0.08	23,32,79,84	0
26	CLA	a	610	65/65	0.96	0.08	20,26,66,72	0
26	CLA	a	613	65/65	0.96	0.06	18,27,40,44	0
26	CLA	d	402	65/65	0.96	0.07	21,26,46,56	0
26	CLA	B	602	65/65	0.96	0.06	22,28,47,53	0
26	CLA	b	602	65/65	0.96	0.07	28,34,48,52	0
26	CLA	b	603	65/65	0.96	0.07	23,29,51,55	0
27	PHO	a	609	64/64	0.96	0.06	21,26,32,35	0
34	LHG	B	622	49/49	0.96	0.08	26,36,46,57	0
26	CLA	C	505	65/65	0.96	0.07	24,31,52,59	0
26	CLA	b	607	65/65	0.96	0.07	21,29,53,63	0
26	CLA	b	608	65/65	0.96	0.06	26,34,46,48	0
26	CLA	b	609	65/65	0.96	0.07	28,37,50,56	0
26	CLA	B	608	65/65	0.96	0.06	20,27,43,53	0
34	LHG	d	408	49/49	0.96	0.08	27,36,46,53	0
26	CLA	b	611	65/65	0.96	0.06	22,29,44,47	0
26	CLA	b	613	65/65	0.96	0.07	21,28,60,67	0
26	CLA	b	605	65/65	0.97	0.06	23,30,41,46	0
26	CLA	B	613	65/65	0.97	0.06	19,26,60,66	0
26	CLA	B	603	65/65	0.97	0.06	20,26,45,49	0
26	CLA	B	615	65/65	0.97	0.06	22,29,52,59	0
26	CLA	A	608	65/65	0.97	0.08	21,28,77,84	0
26	CLA	B	605	65/65	0.97	0.05	19,25,37,44	0
26	CLA	D	402	65/65	0.97	0.06	19,24,42,47	0
26	CLA	b	612	65/65	0.97	0.06	21,29,37,46	0
26	CLA	D	403	65/65	0.97	0.07	24,30,95,105	0
34	LHG	D	408	49/49	0.97	0.07	25,34,44,45	0
26	CLA	A	610	54/65	0.97	0.06	20,25,53,55	0

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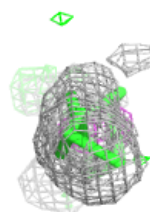
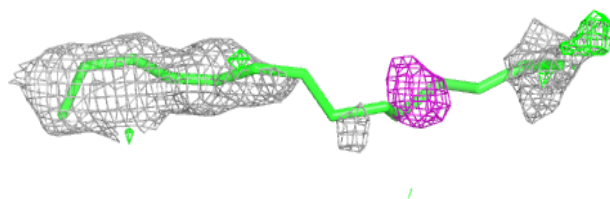
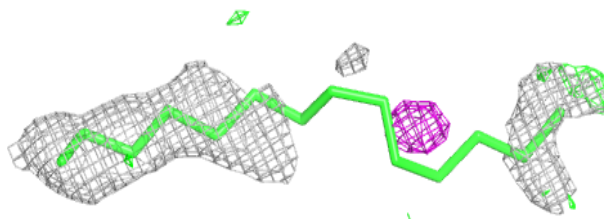
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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
26	CLA	B	607	65/65	0.97	0.06	19,26,50,58	0
26	CLA	A	614	65/65	0.97	0.05	19,24,38,48	0
26	CLA	B	609	65/65	0.97	0.06	24,30,45,54	0
25	BCT	A	606	4/4	0.97	0.06	25,28,30,34	0
26	CLA	B	611	65/65	0.97	0.06	20,25,42,44	0
26	CLA	A	607	65/65	0.97	0.05	17,24,38,47	0
26	CLA	b	604	65/65	0.97	0.07	23,28,59,74	0
35	HEM	F	101	43/43	0.97	0.08	35,41,49,55	0
35	HEM	e	102	43/43	0.97	0.08	43,49,59,68	0
25	BCT	a	606	4/4	0.98	0.05	34,36,41,47	0
36	HEC	v	201	43/43	0.98	0.06	27,32,37,43	0
23	FE2	a	603	1/1	0.99	0.01	34,34,34,34	0
24	CL	A	604	1/1	0.99	0.03	25,25,25,25	0
24	CL	A	605	1/1	0.99	0.09	26,26,26,26	0
24	CL	a	604	1/1	0.99	0.05	26,26,26,26	0
24	CL	a	605	1/1	0.99	0.06	29,29,29,29	0
21	OEY	A	601[B]	11/11	0.99	0.03	21,24,28,29	11
21	OEY	a	601[B]	11/11	0.99	0.03	23,26,29,30	11
22	OEX	A	602[A]	10/10	0.99	0.03	23,24,27,28	10
36	HEC	V	201	43/43	0.99	0.05	24,28,37,39	0
22	OEX	a	602[A]	10/10	0.99	0.03	22,25,28,29	10
23	FE2	A	603	1/1	1.00	0.01	27,27,27,27	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.

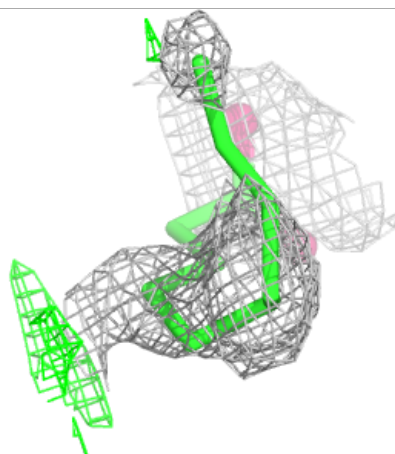
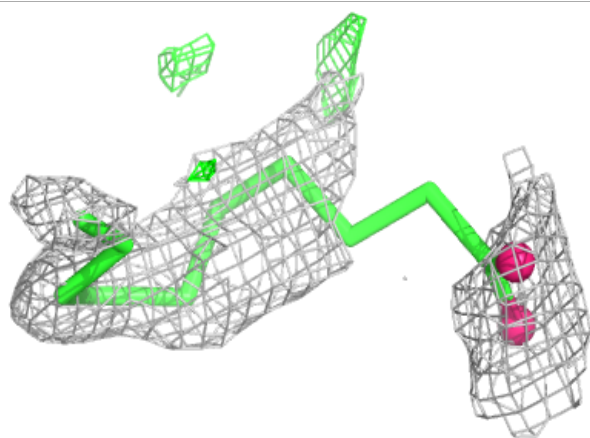
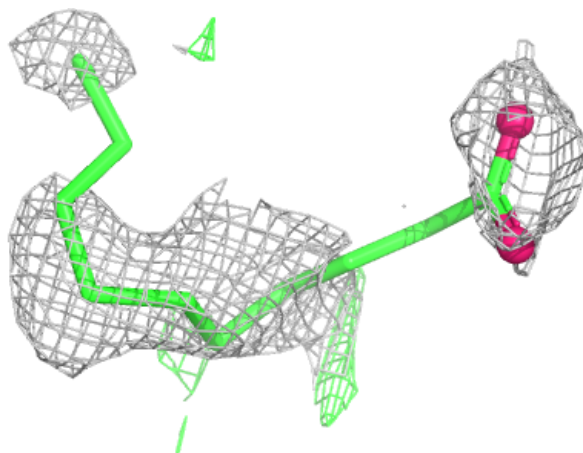
Electron density around STE C 529:

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



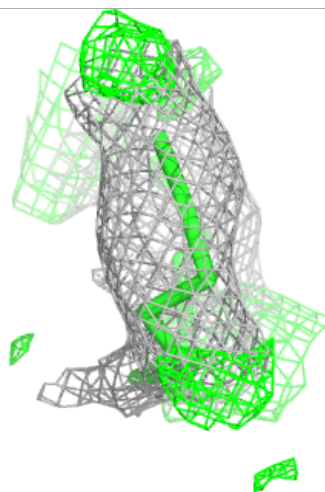
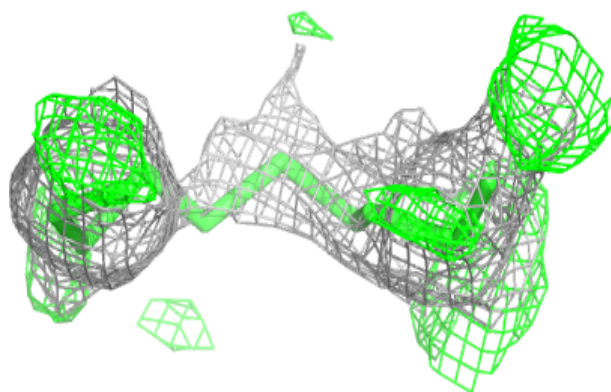
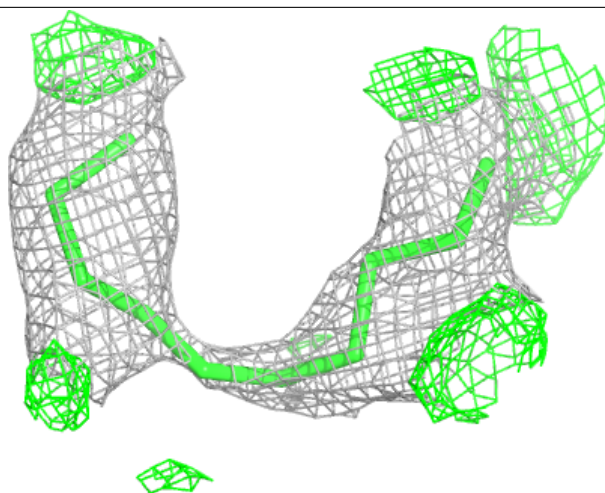
Electron density around STE i 101:

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



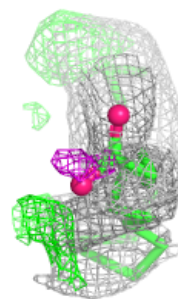
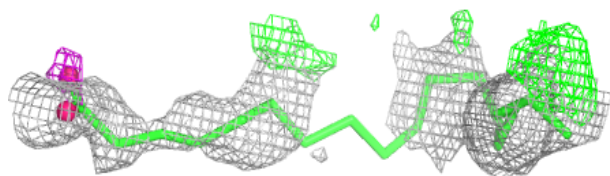
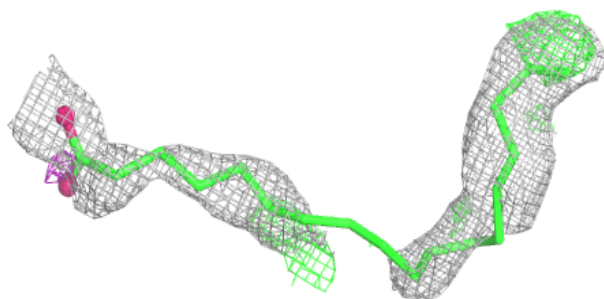
Electron density around STE C 520:

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

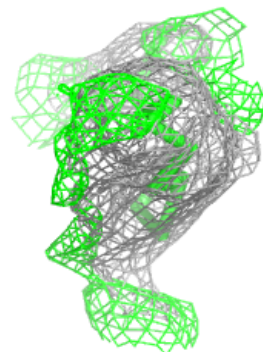
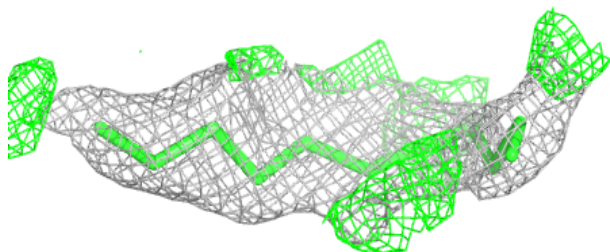
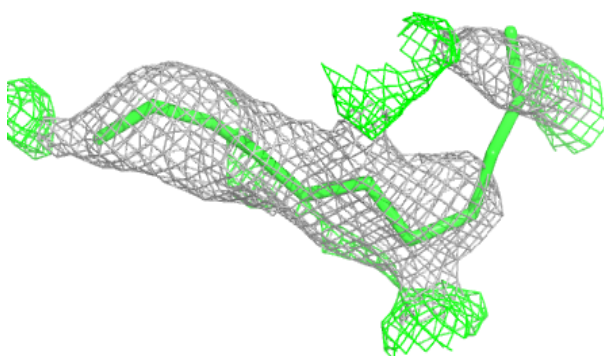


Electron density around STE E 104:

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

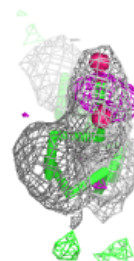
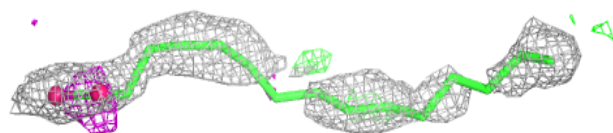
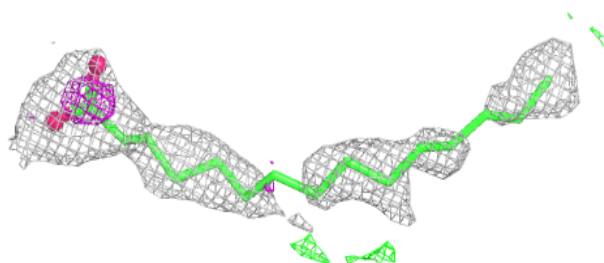
**Electron density around STE A 620:**

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

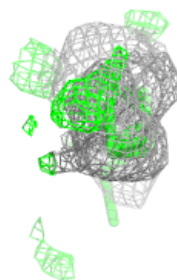
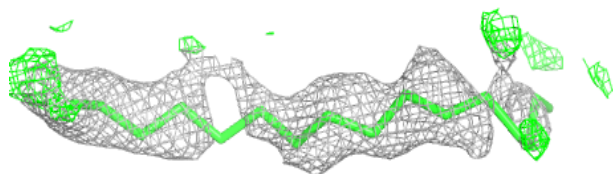
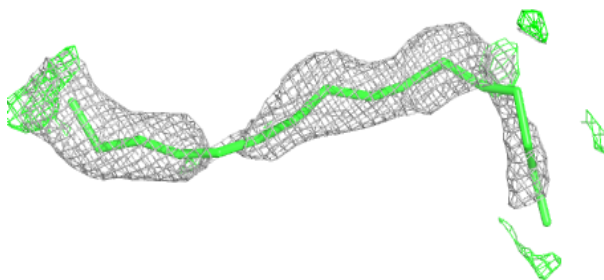


Electron density around STE I 101:

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

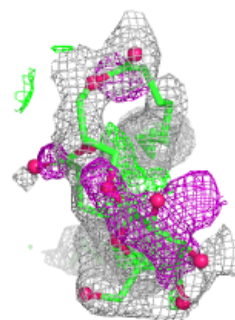
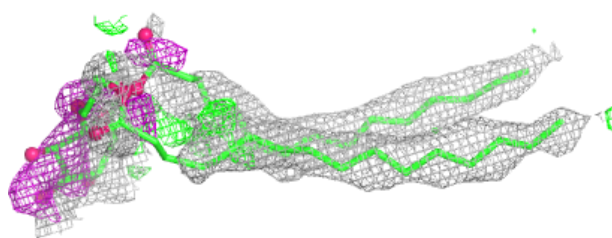
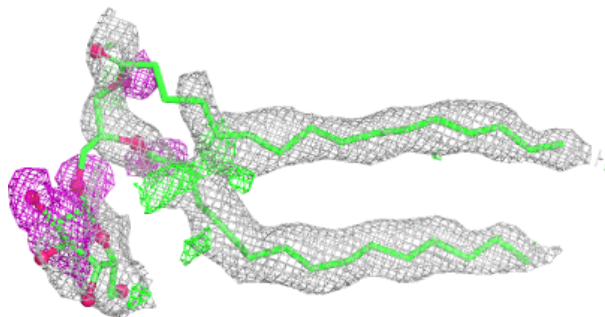
**Electron density around STE j 102:**

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

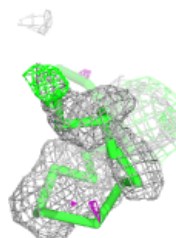
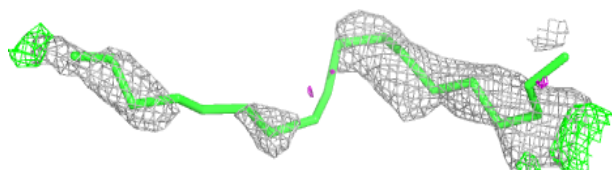
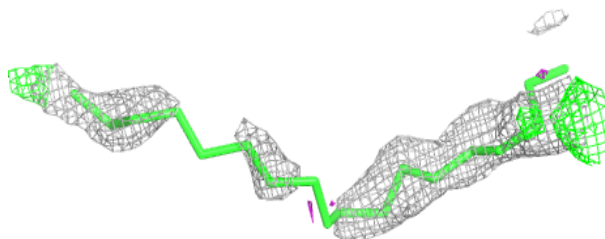


Electron density around LMG D 406:

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and green (positive)

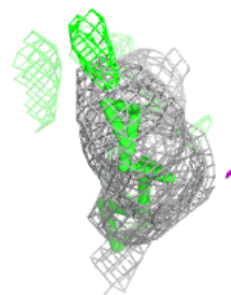
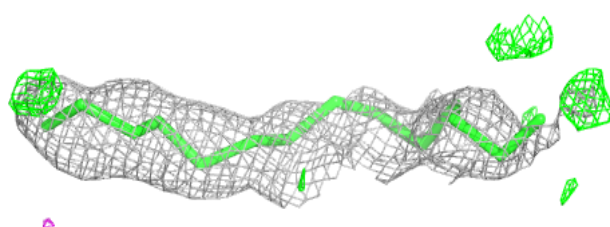
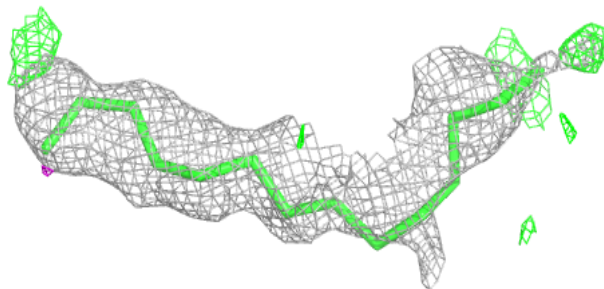
**Electron density around STE H 103:**

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and green (positive)

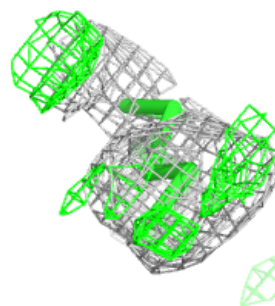
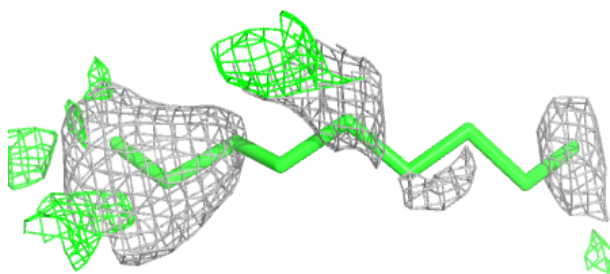
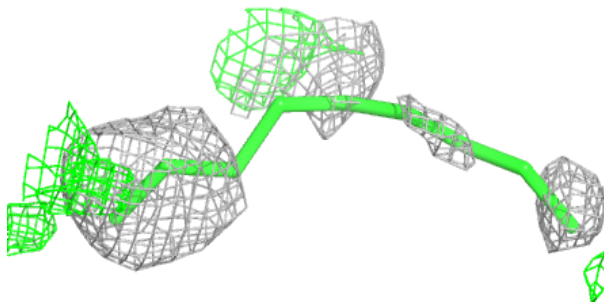


Electron density around STE K 102:

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and green (positive)

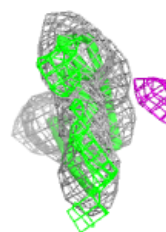
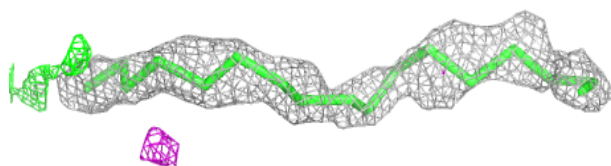
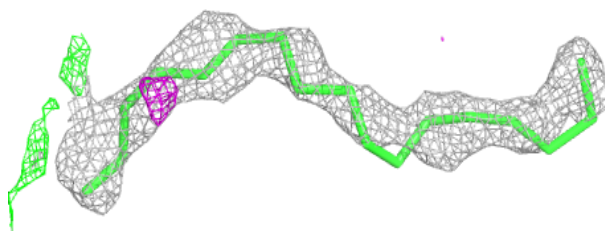
**Electron density around STE e 101:**

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and green (positive)

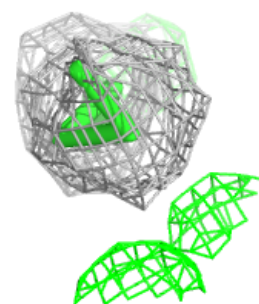
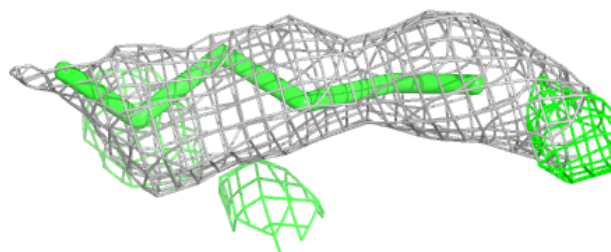
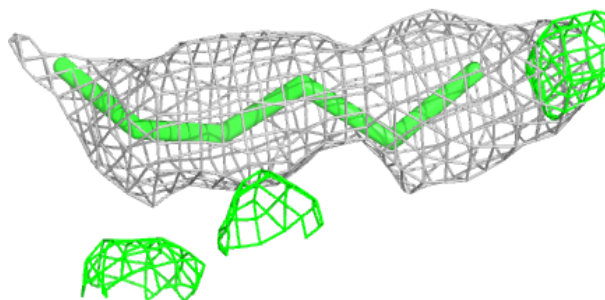


Electron density around STE A 619:

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and green (positive)

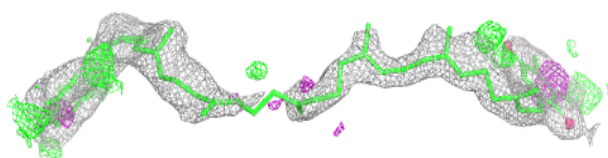
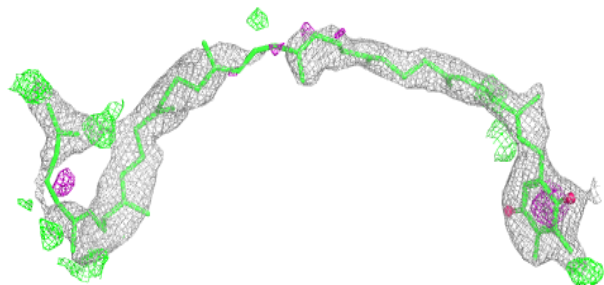
**Electron density around STE i 102:**

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and green (positive)

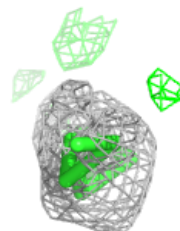
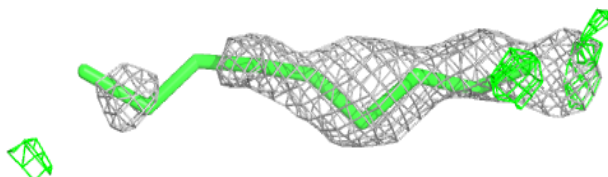
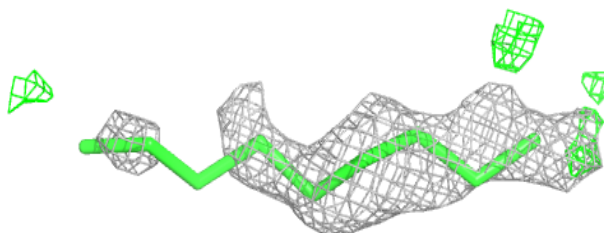


Electron density around PL9 a 612:

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and green (positive)

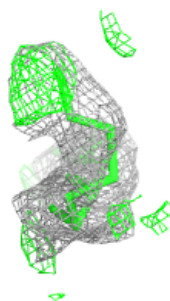
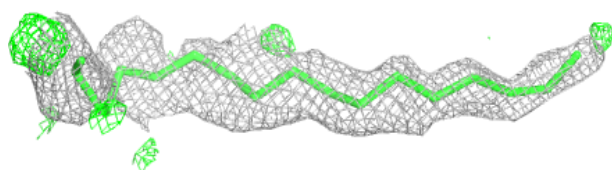
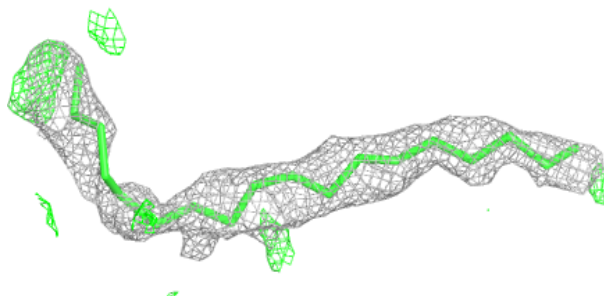
**Electron density around STE e 103:**

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and green (positive)

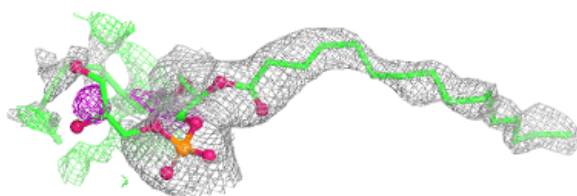
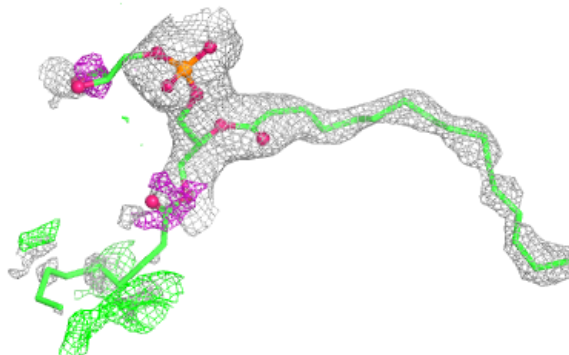


Electron density around STE c 517:

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and green (positive)

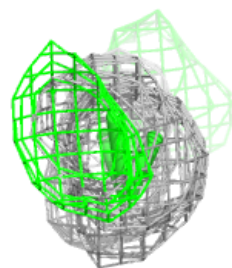
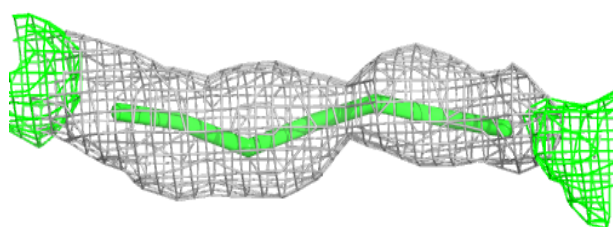
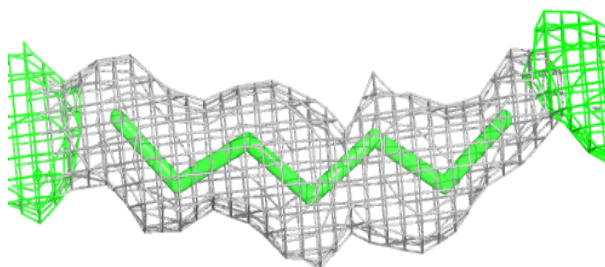
**Electron density around LHG a 615:**

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

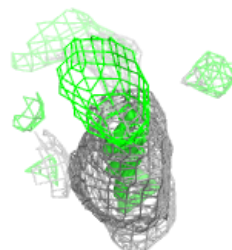
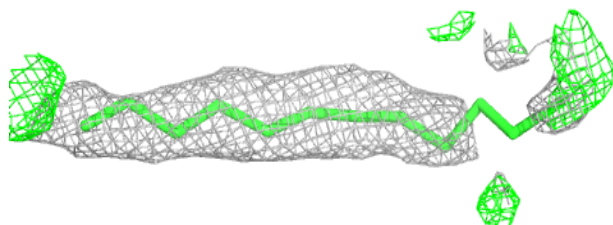
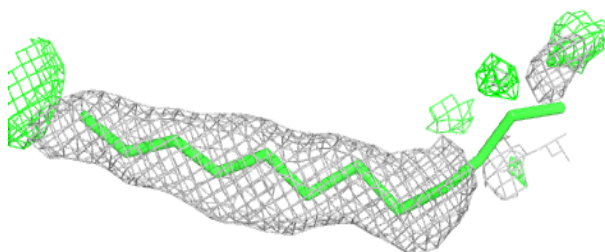


Electron density around STE C 519:

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

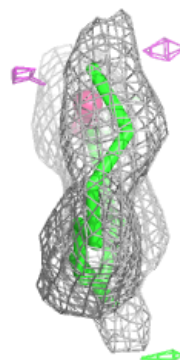
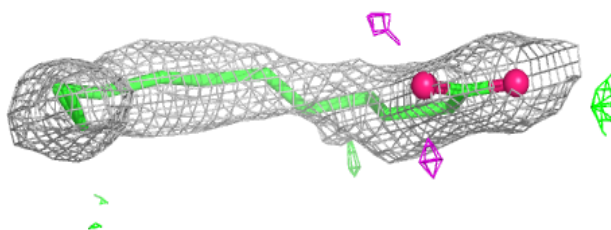
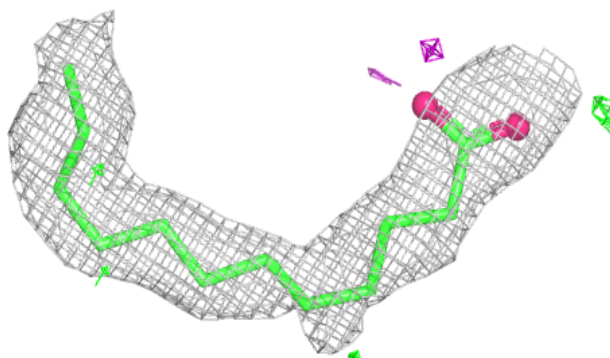
**Electron density around STE E 103:**

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

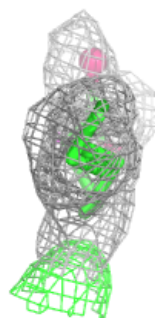
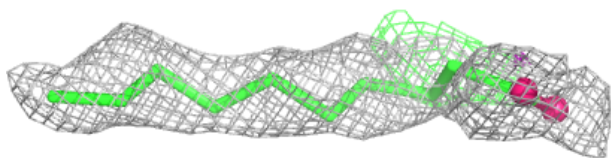
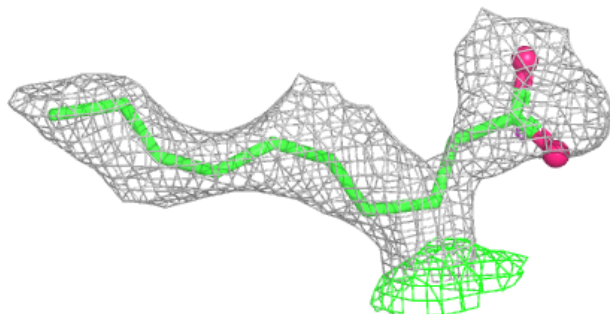


Electron density around STE C 516:

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

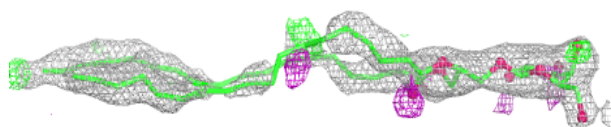
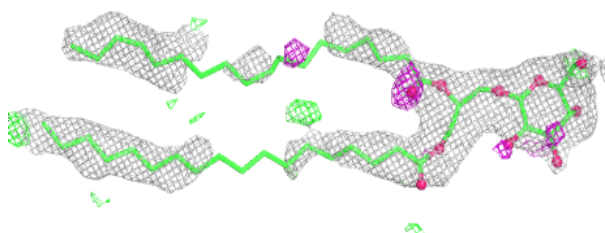
**Electron density around STE a 619:**

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



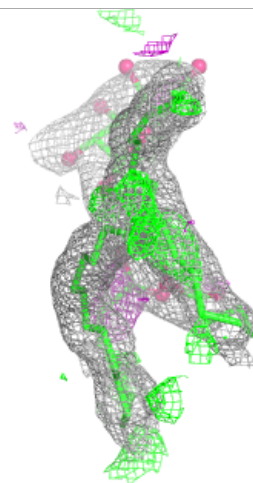
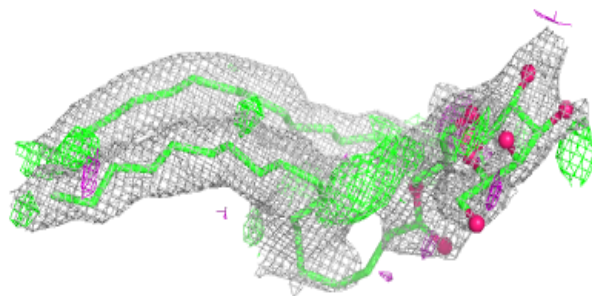
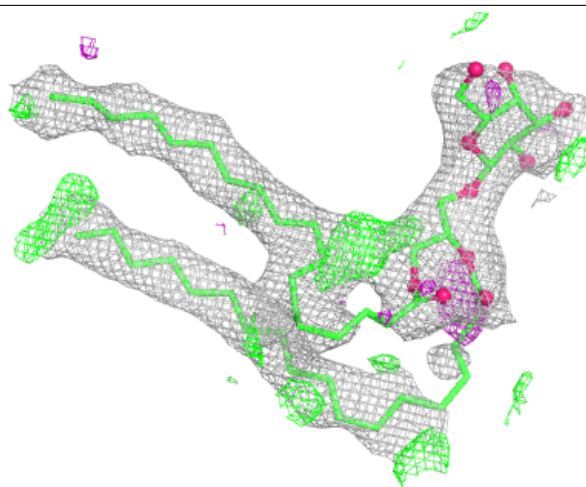
Electron density around LMG b 622:

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



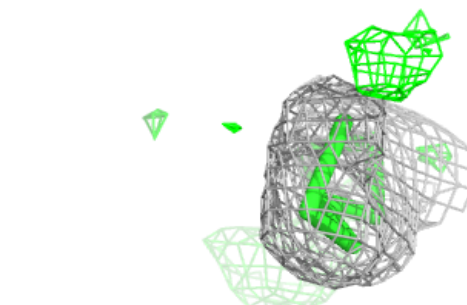
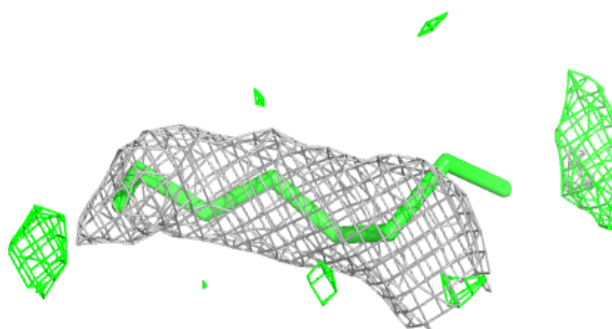
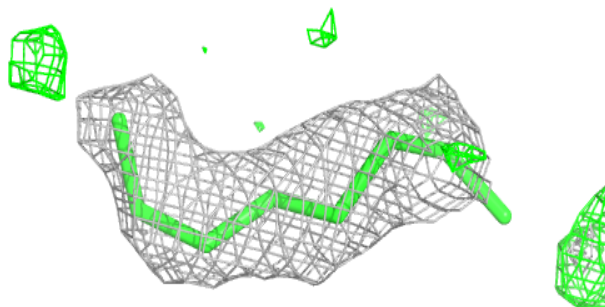
Electron density around LMG a 617:

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

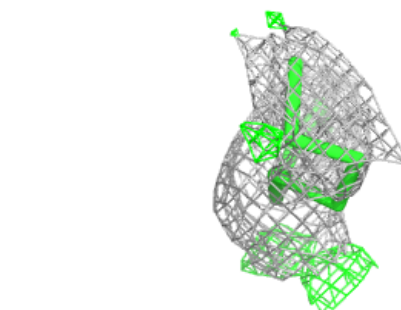
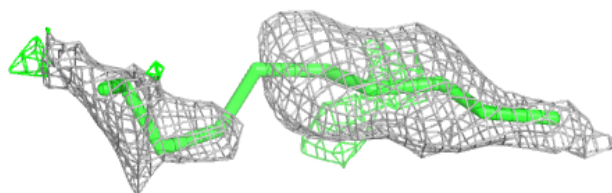
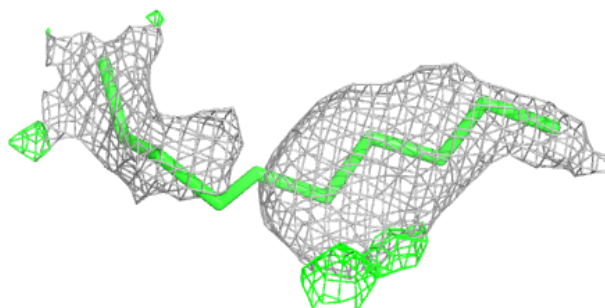


Electron density around STE f 102:

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

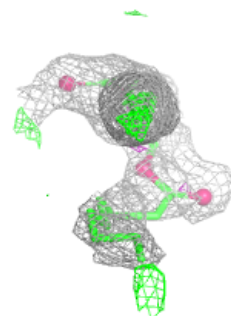
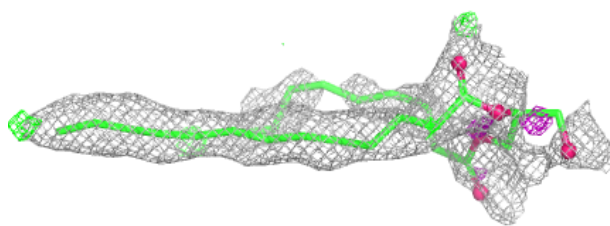
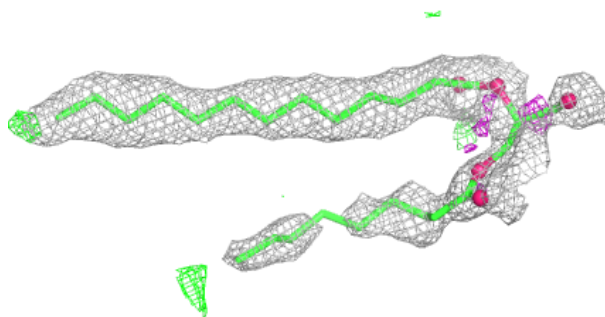
**Electron density around STE h 102:**

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



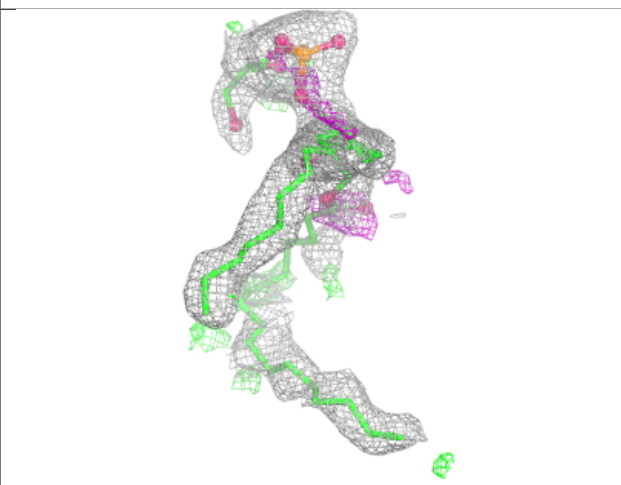
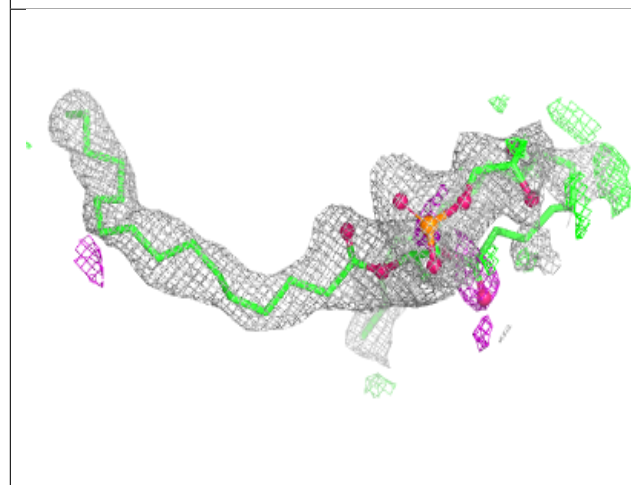
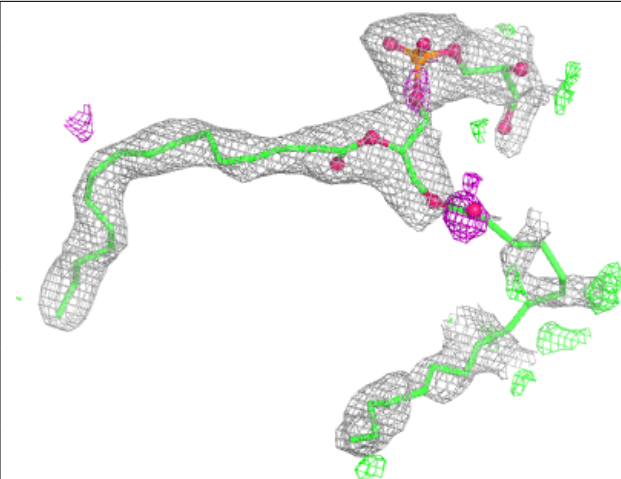
Electron density around LMG c 518:

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



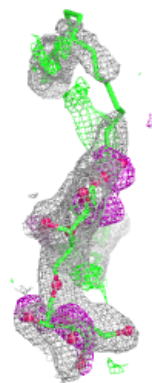
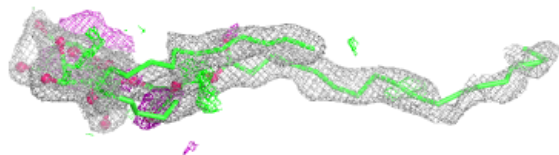
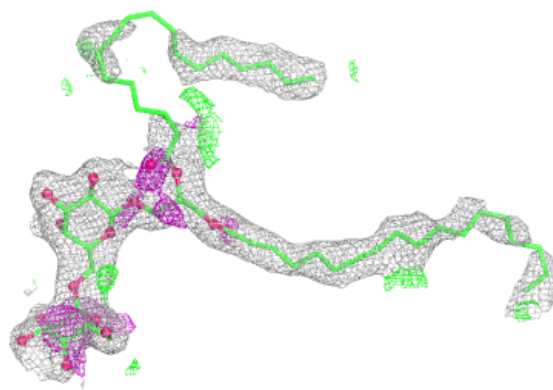
Electron density around LHG E 101:

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

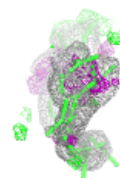
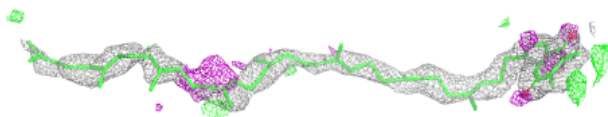
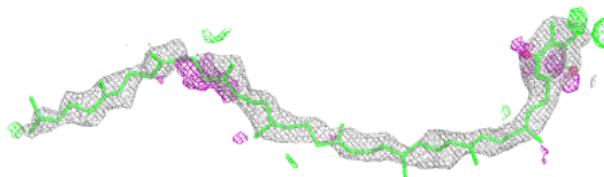


Electron density around DGD A 617:

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

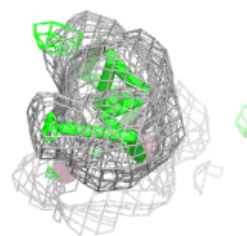
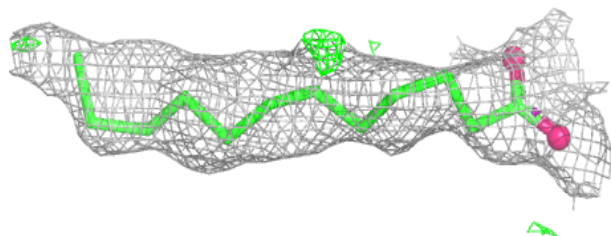
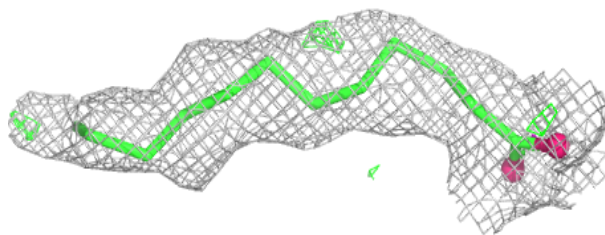
**Electron density around PL9 A 612:**

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

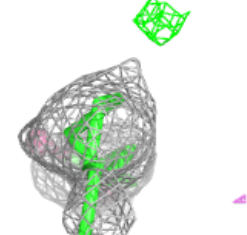
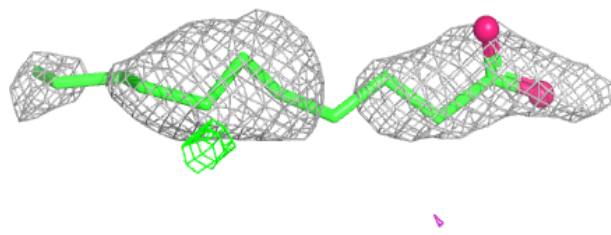
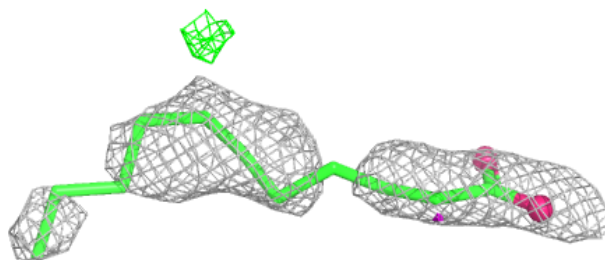


Electron density around STE k 103:

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

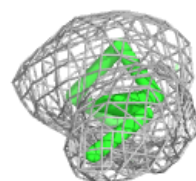
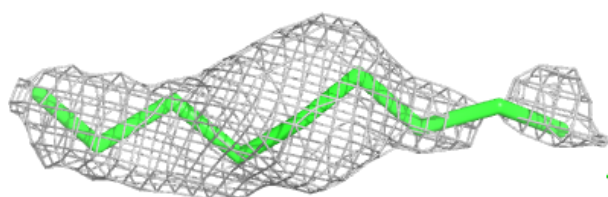
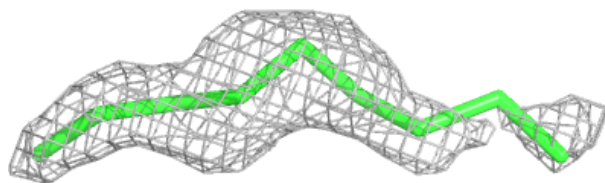
**Electron density around STE e 104:**

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

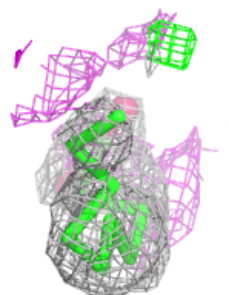
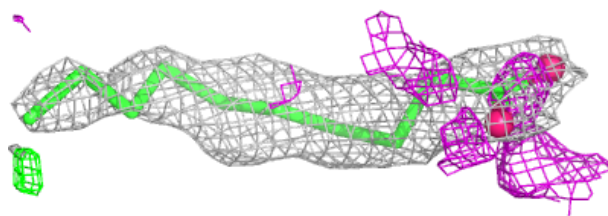
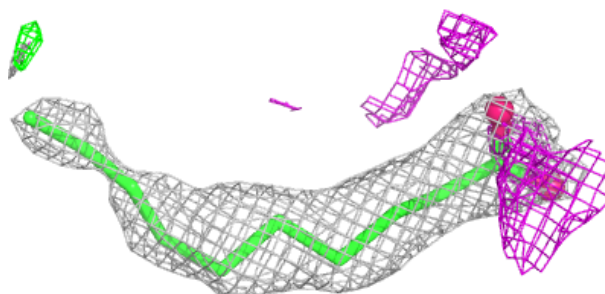


Electron density around STE A 613:

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

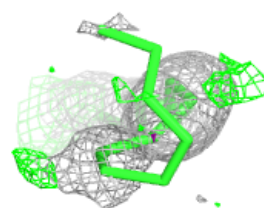
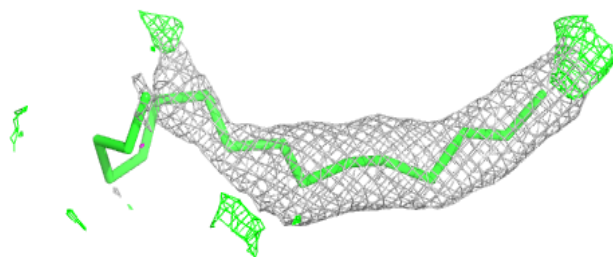
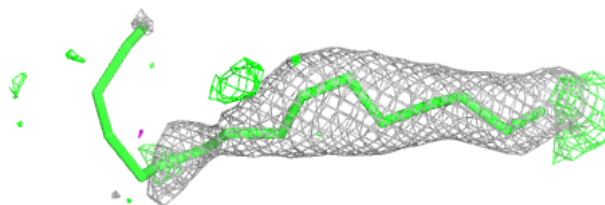
**Electron density around STE B 625:**

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

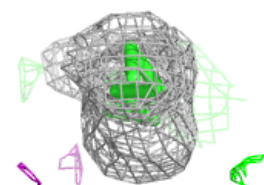
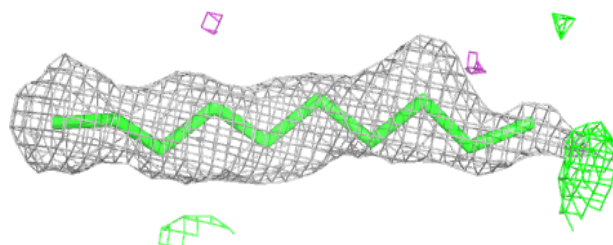
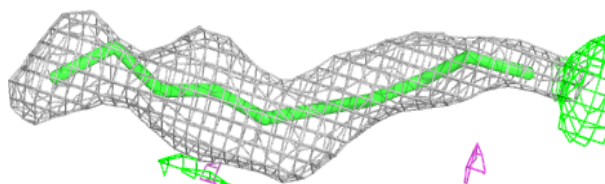


Electron density around STE T 102:

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

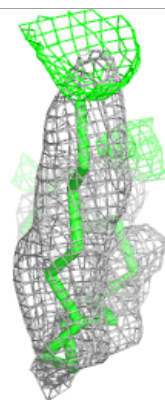
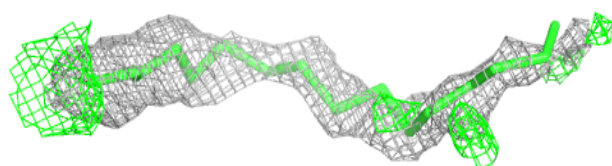
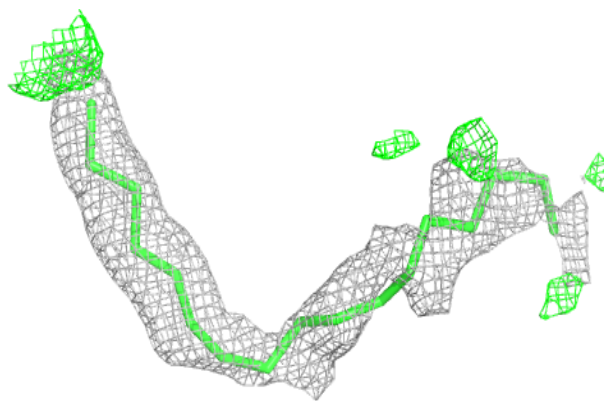
**Electron density around STE t 103:**

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

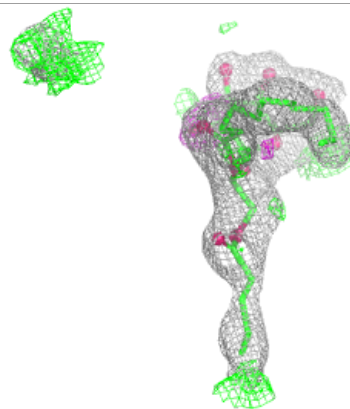
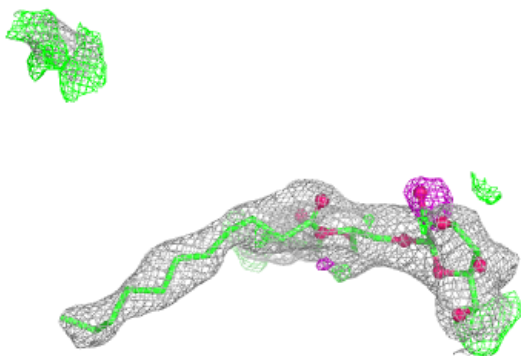
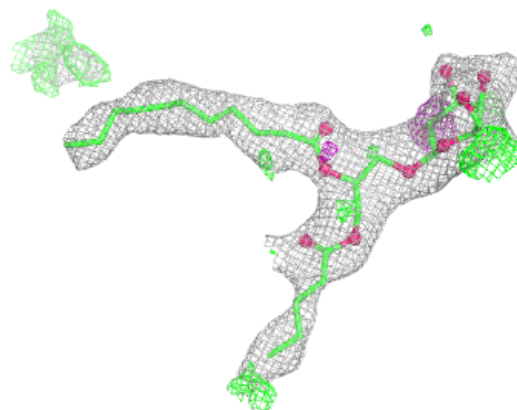


Electron density around STE Z 101:

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

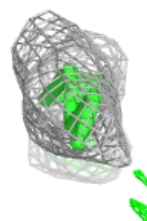
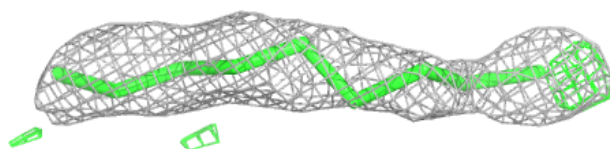
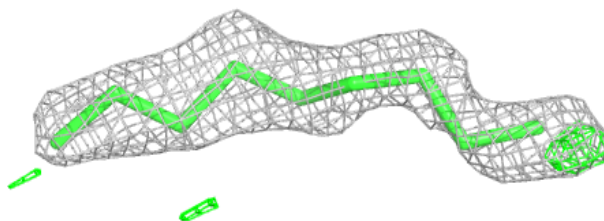
**Electron density around LMG C 517:**

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

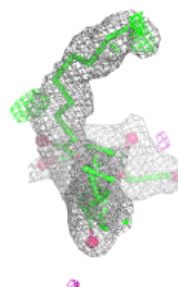
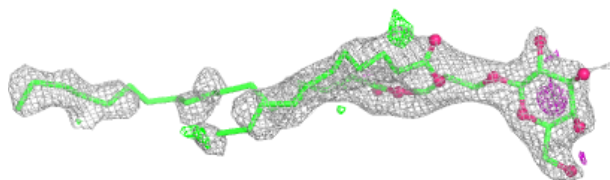
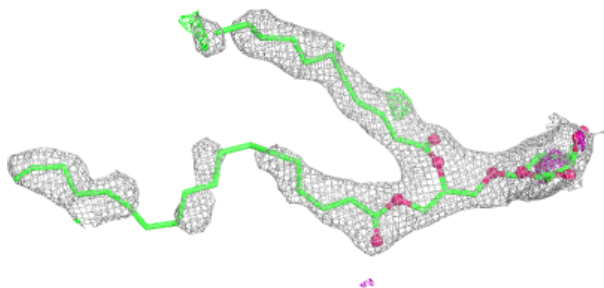


Electron density around STE z 101:

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

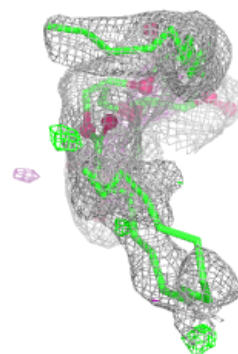
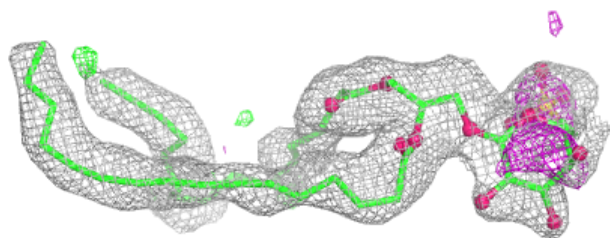
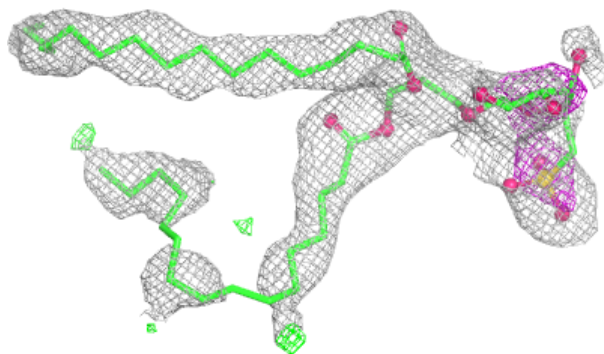
**Electron density around LMG c 523:**

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

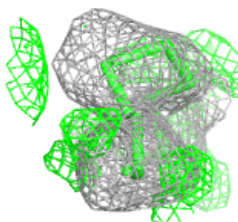
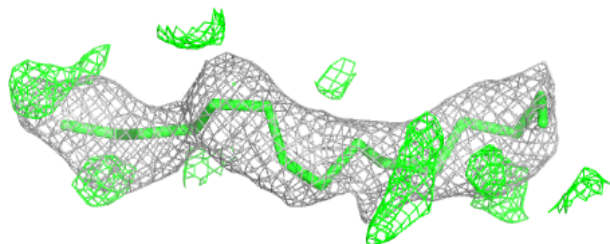
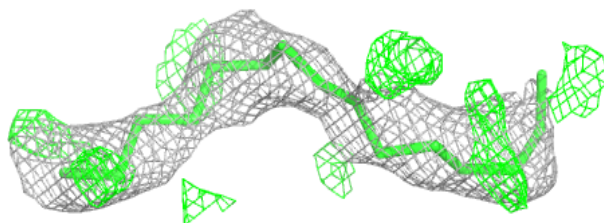


Electron density around SQD a 616:

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

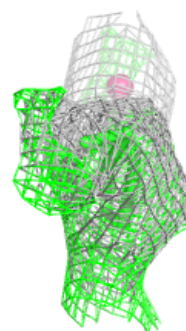
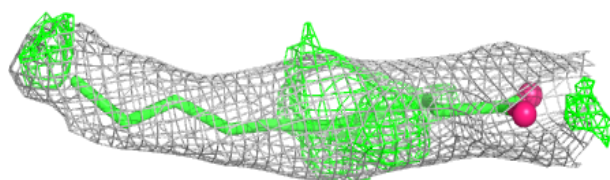
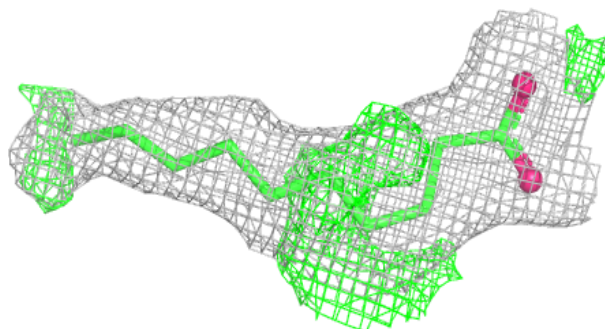
**Electron density around STE a 620:**

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

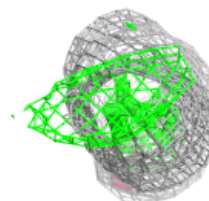
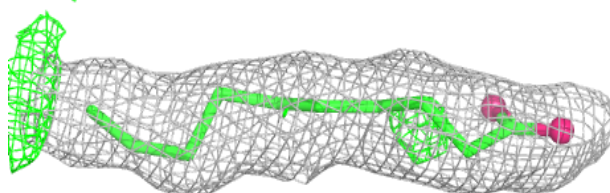
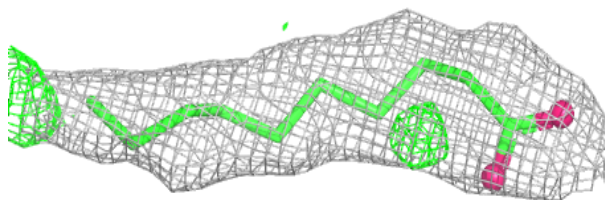


Electron density around STE C 527:

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

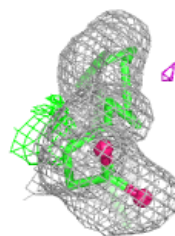
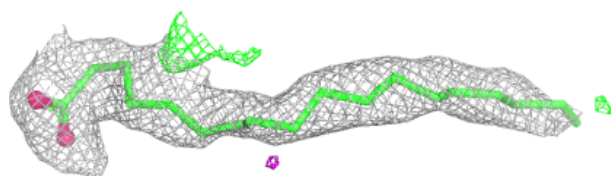
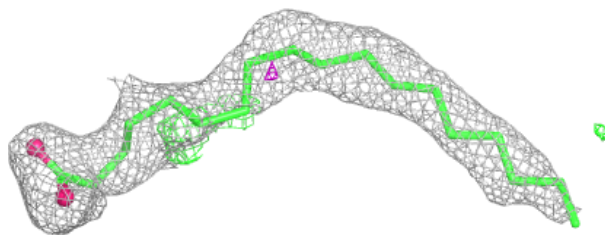
**Electron density around STE J 101:**

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

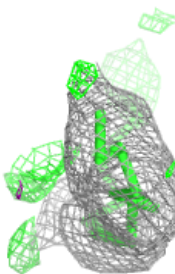
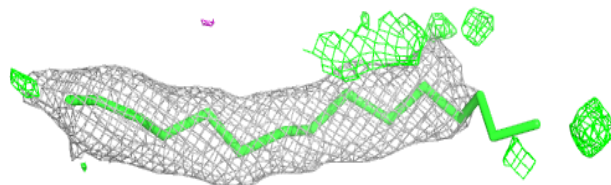
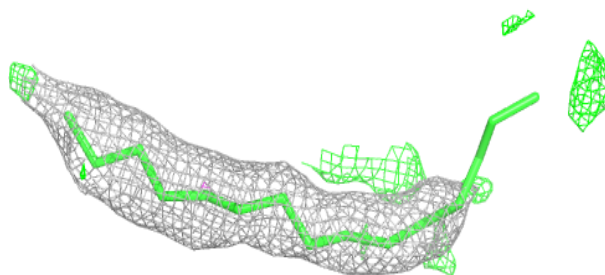


Electron density around STE d 410:

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

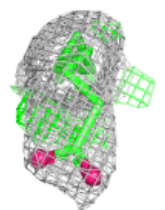
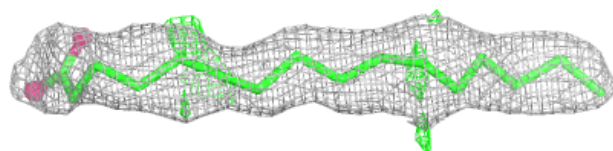
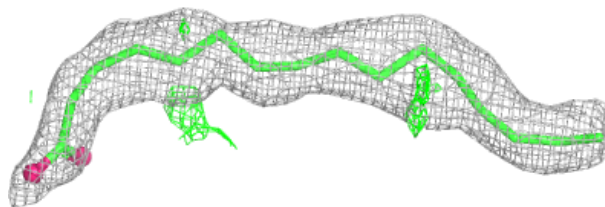
**Electron density around STE T 103:**

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

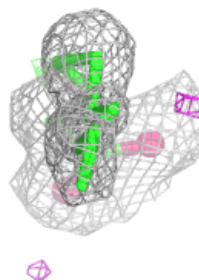
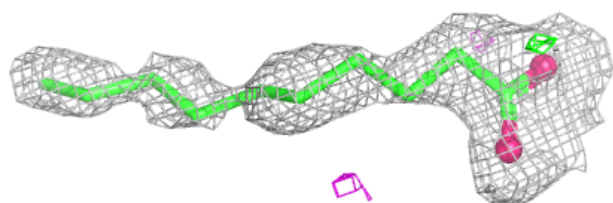
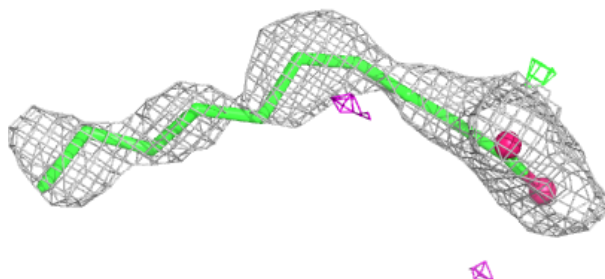


Electron density around STE B 624:

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

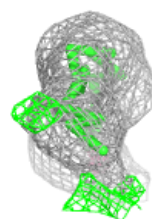
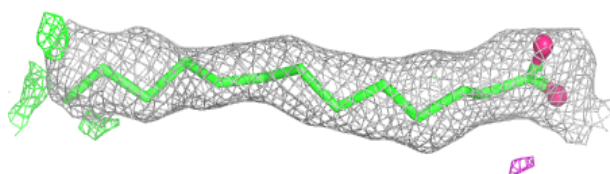
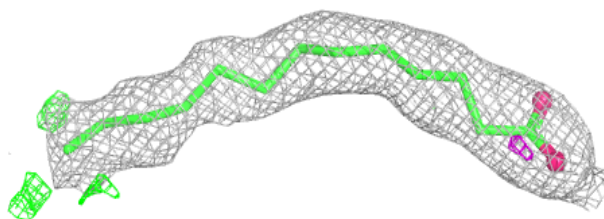
**Electron density around STE E 102:**

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

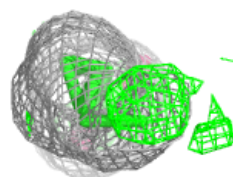
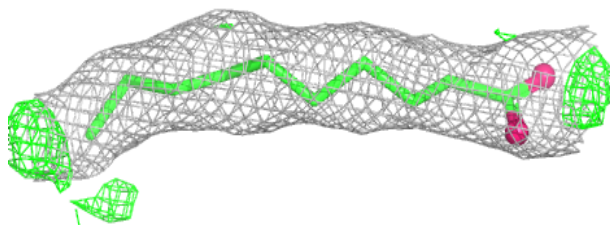
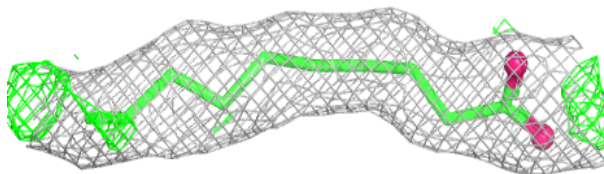


Electron density around STE I 102:

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

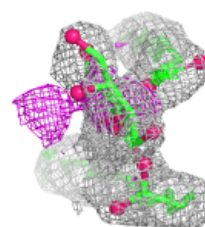
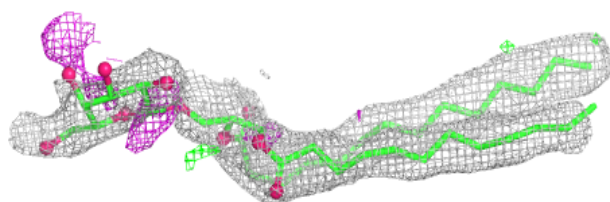
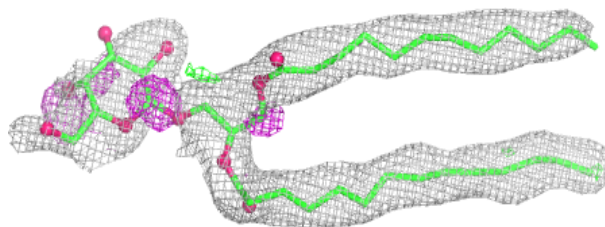
**Electron density around STE j 101:**

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

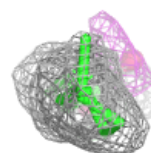
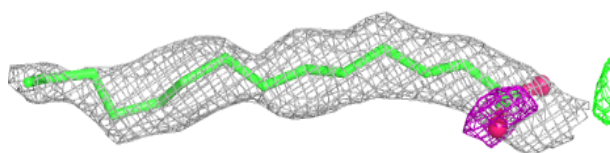
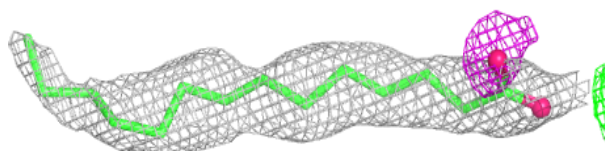


Electron density around LMG B 620:

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

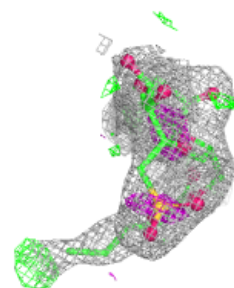
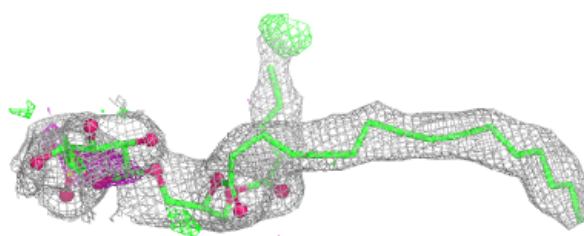
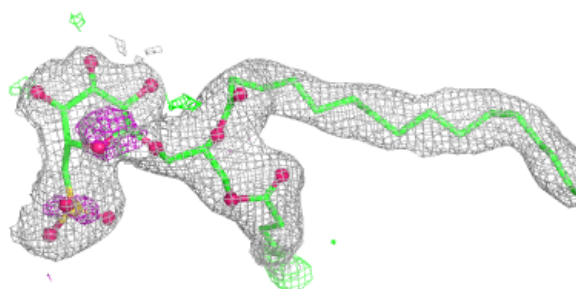
**Electron density around STE b 623:**

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

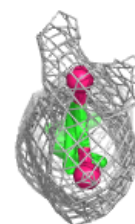
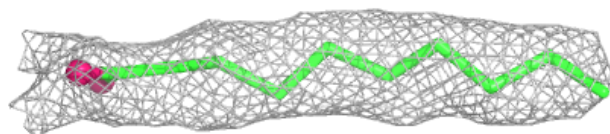
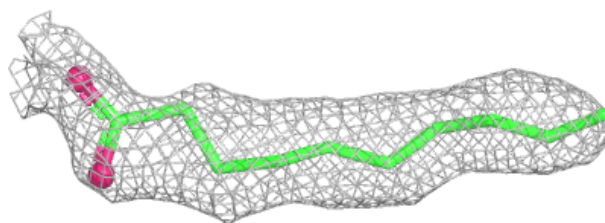


Electron density around SQD A 616:

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

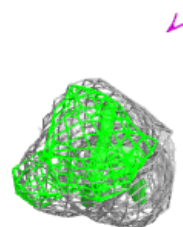
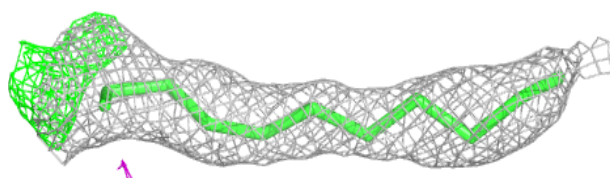
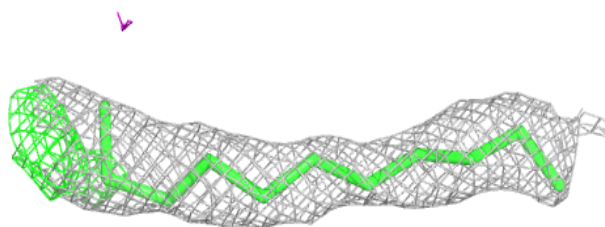
**Electron density around STE m 102:**

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

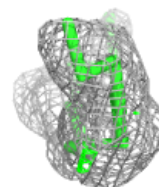
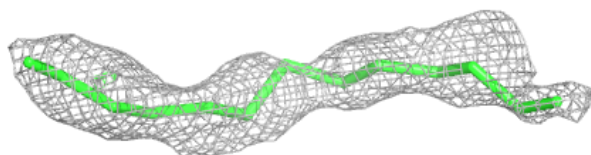
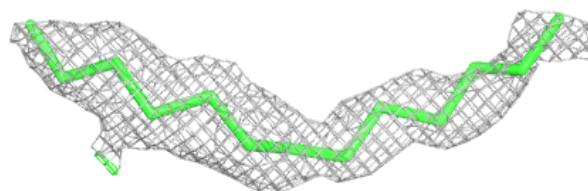


Electron density around STE b 625:

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

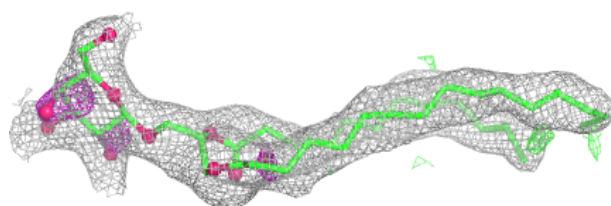
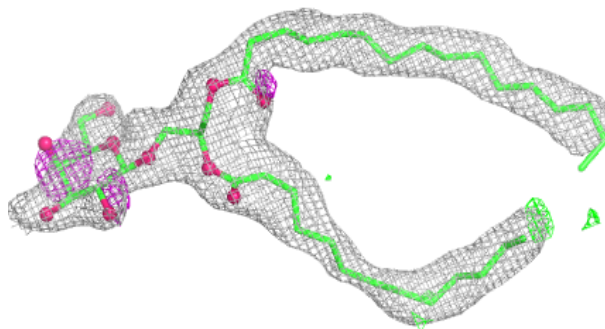
**Electron density around STE c 516:**

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

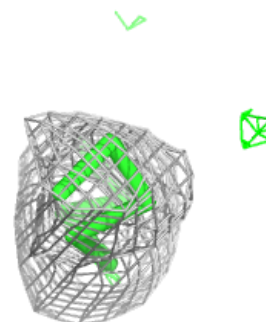
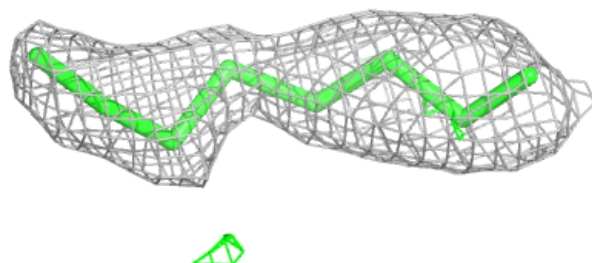
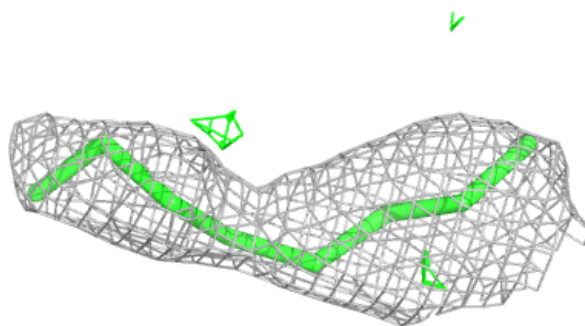


Electron density around LMG C 522:

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

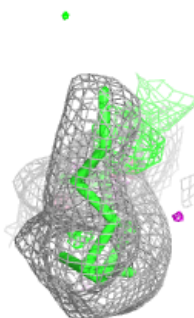
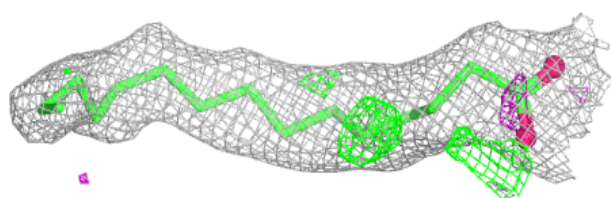
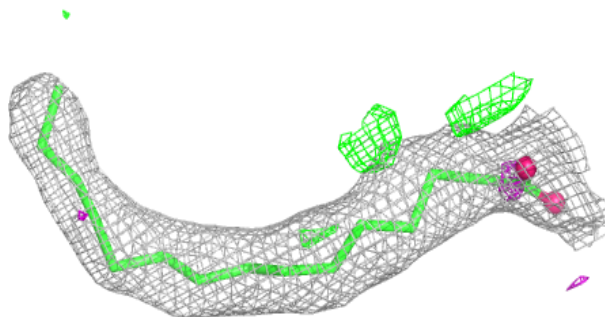
**Electron density around STE A 618:**

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

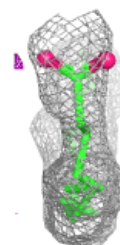
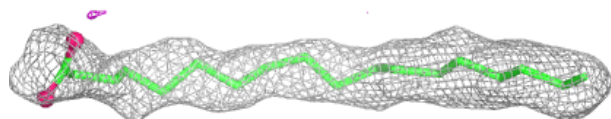
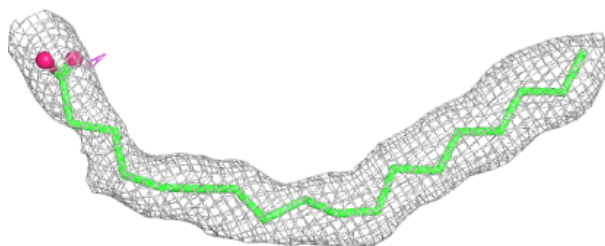


Electron density around STE B 621:

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

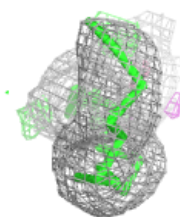
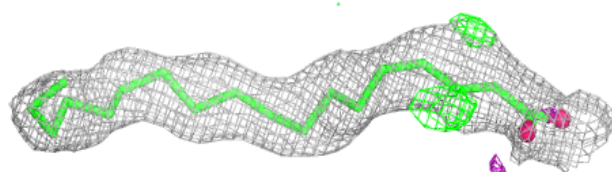
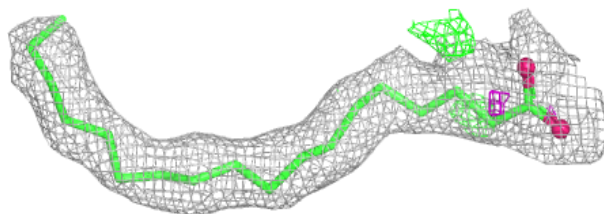
**Electron density around STE d 412:**

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

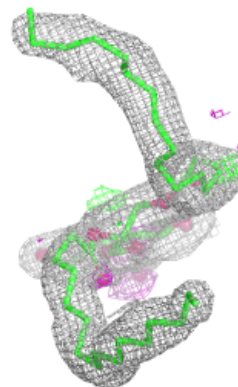
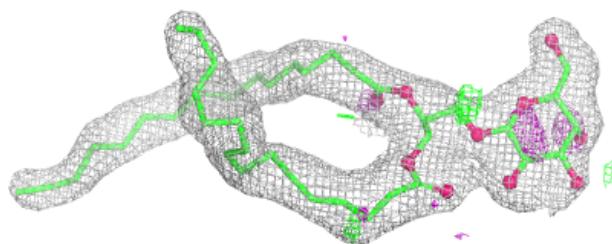
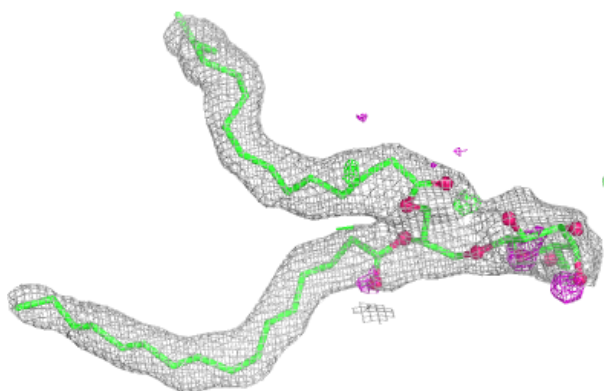


Electron density around STE b 621:

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

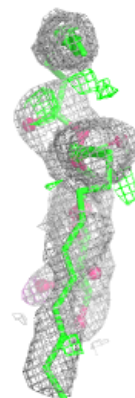
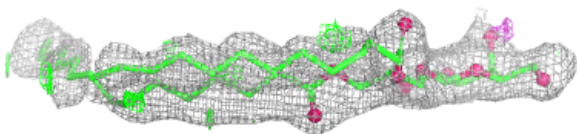
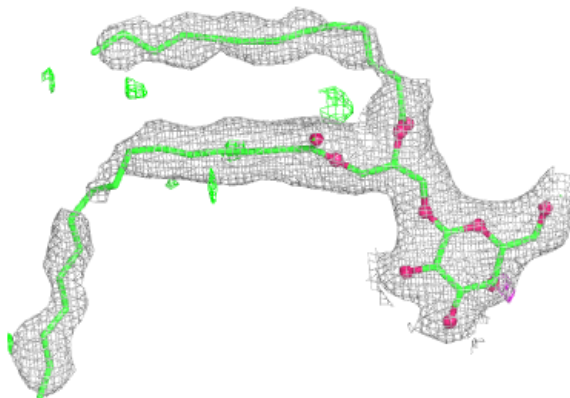
**Electron density around LMG m 101:**

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

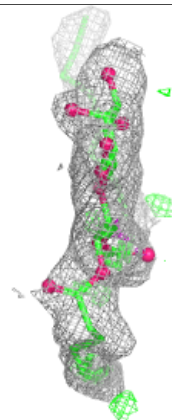
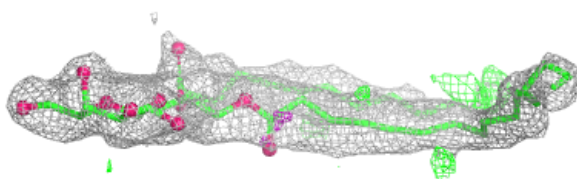
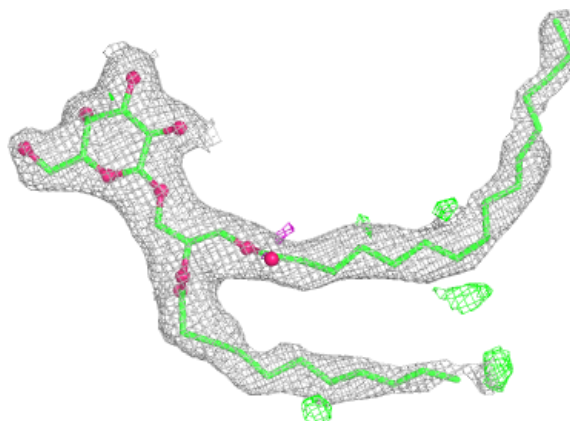


Electron density around LMG C 526:

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

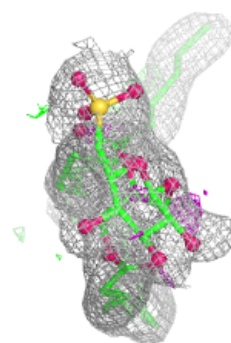
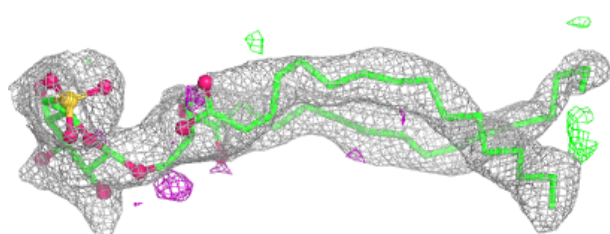
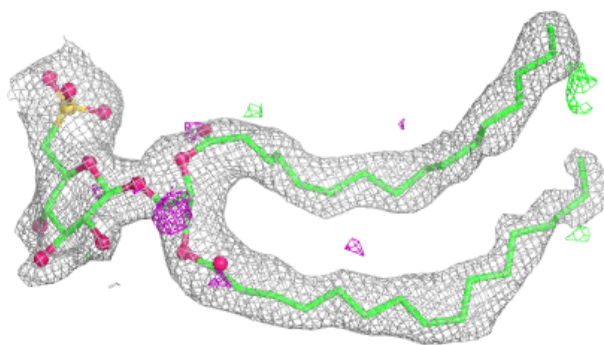
**Electron density around LMG c 522:**

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

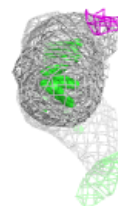
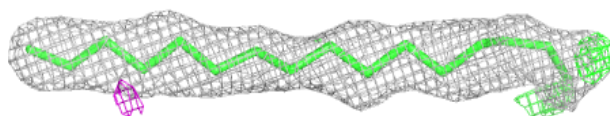
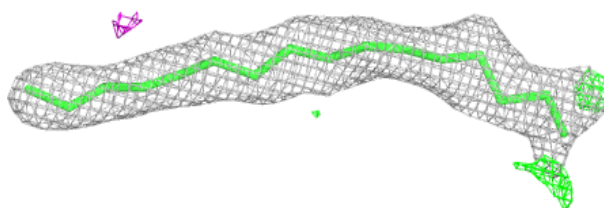


Electron density around SQD B 623:

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

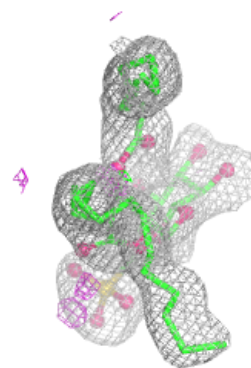
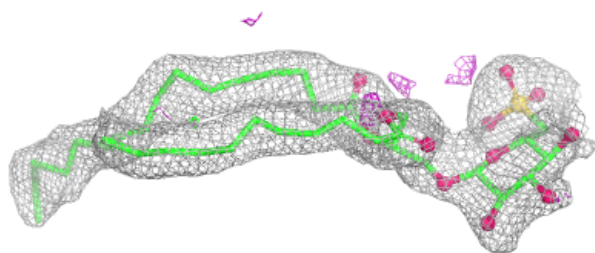
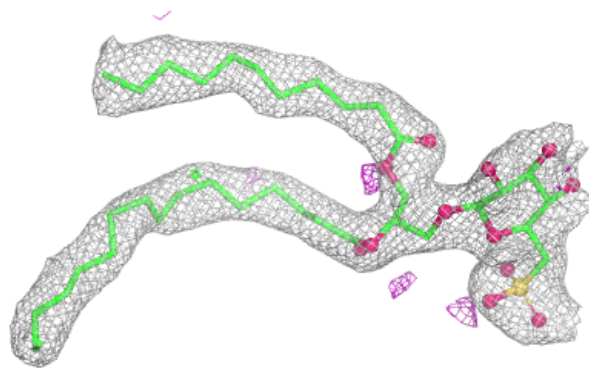
**Electron density around STE C 528:**

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

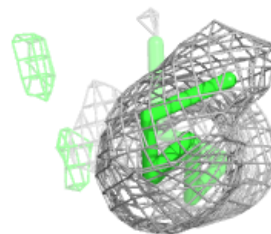
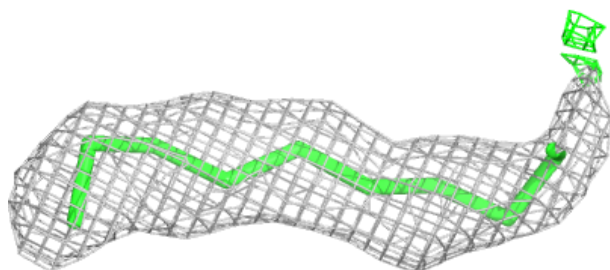
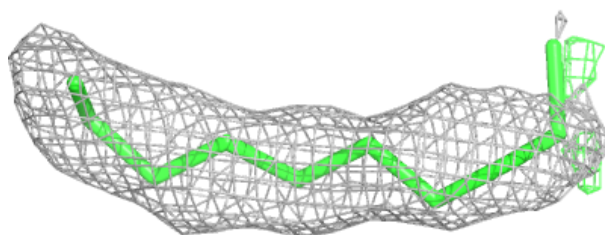


Electron density around SQD b 620:

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

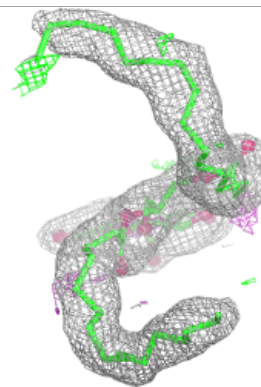
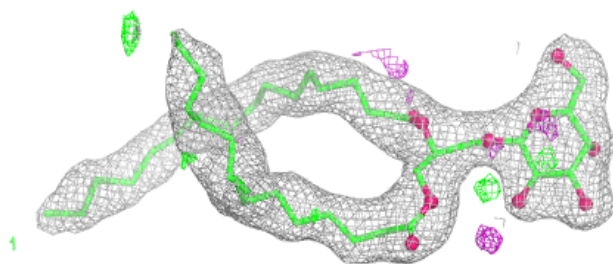
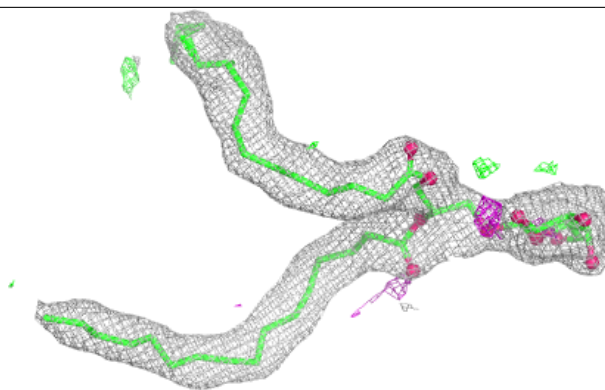
**Electron density around STE b 624:**

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

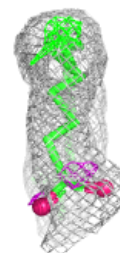
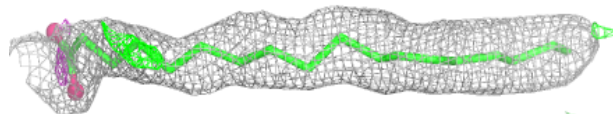
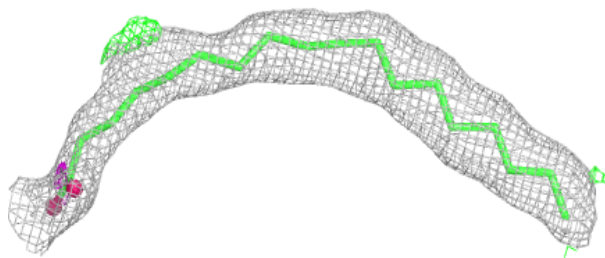


Electron density around LMG M 101:

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

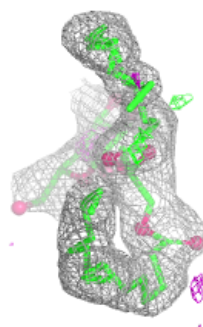
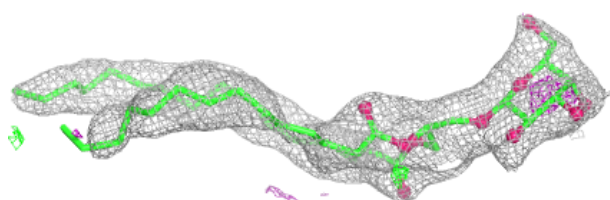
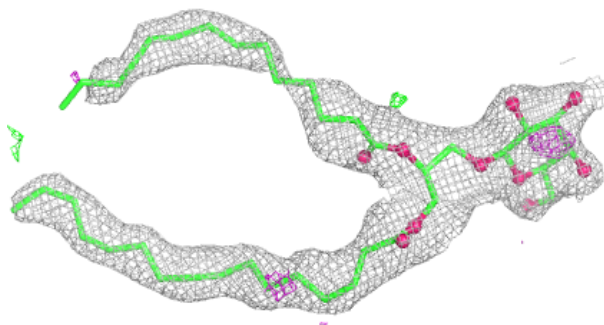
**Electron density around STE D 411:**

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

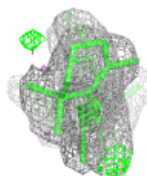
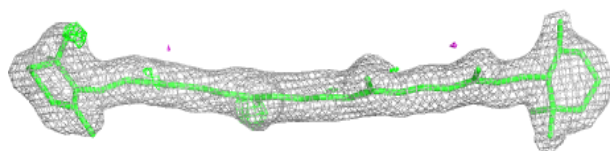


Electron density around LMG a 618:

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

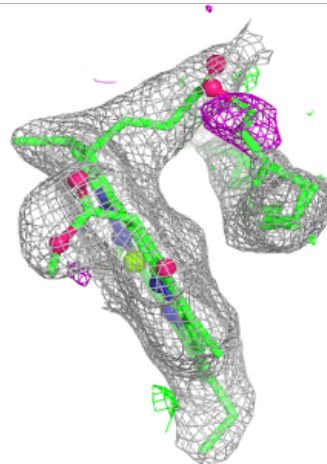
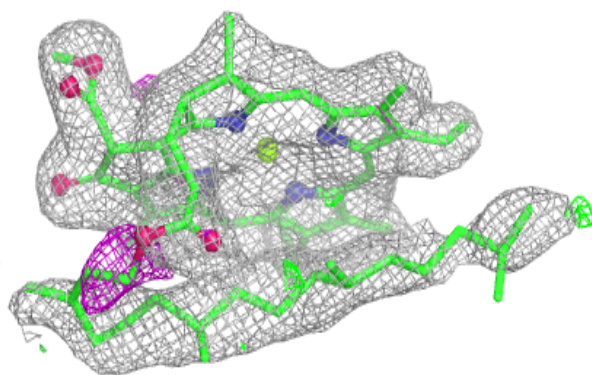
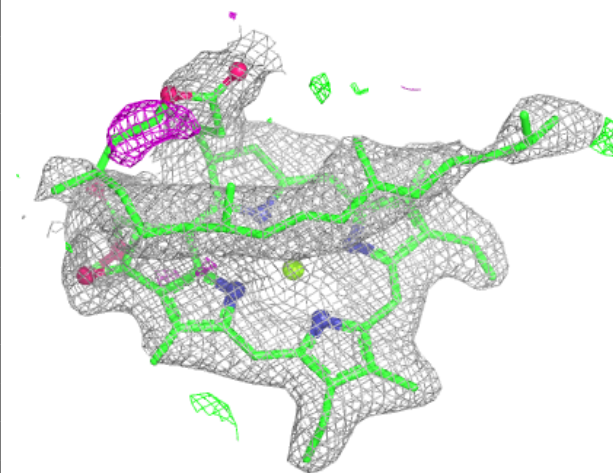
**Electron density around BCR C 521:**

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



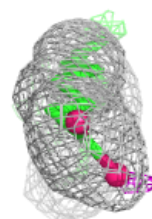
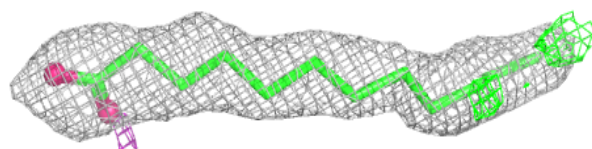
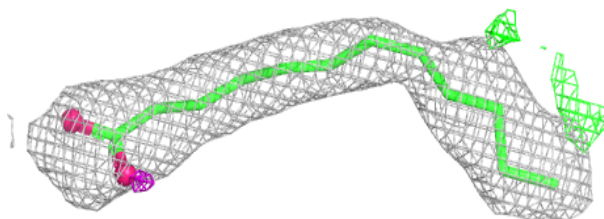
Electron density around CLA b 601:

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

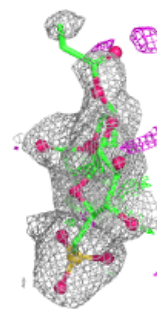
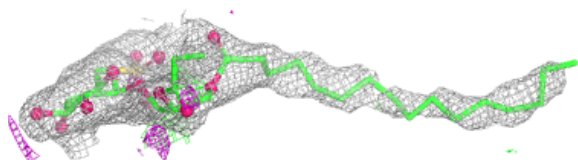
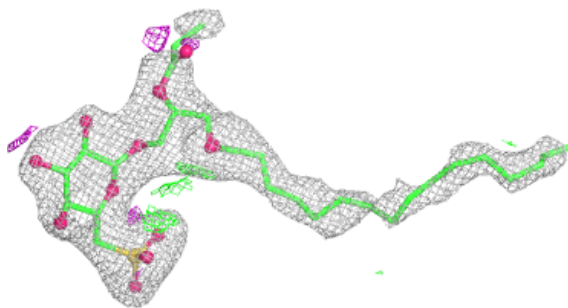


Electron density around STE t 102:

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

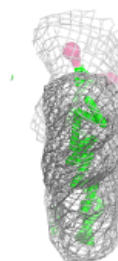
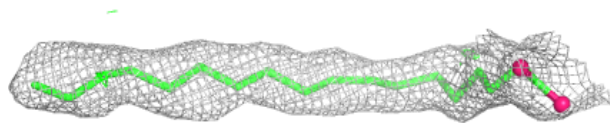
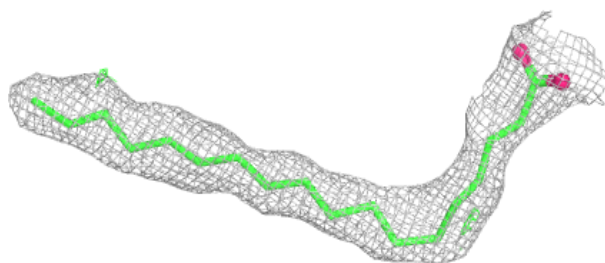
**Electron density around SQD f 101:**

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



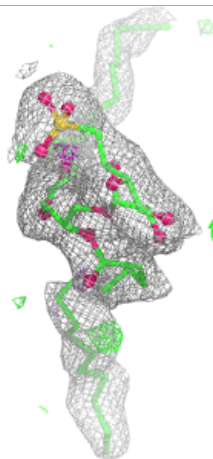
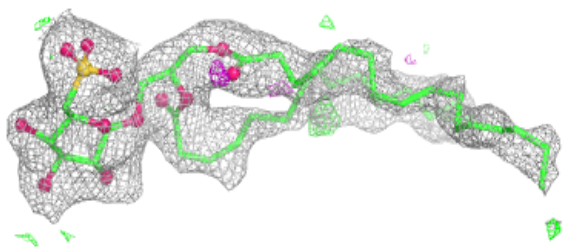
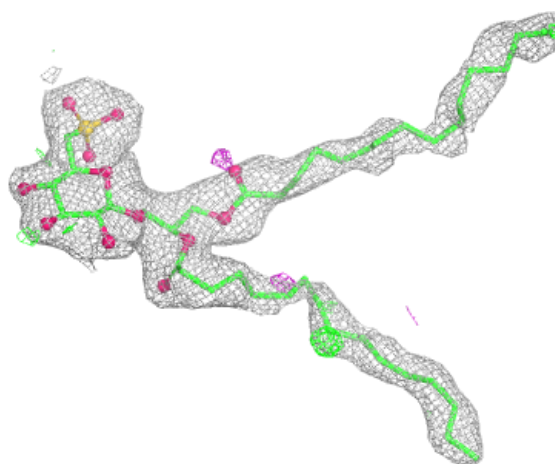
Electron density around STE d 406:

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



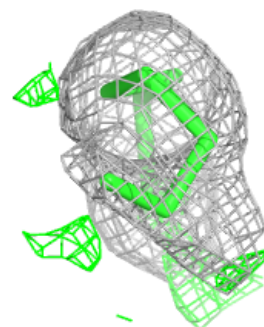
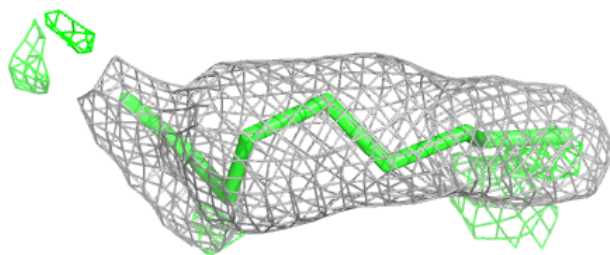
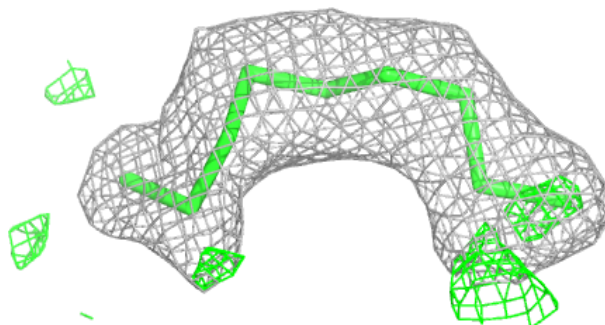
Electron density around SQD a 614:

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

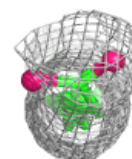
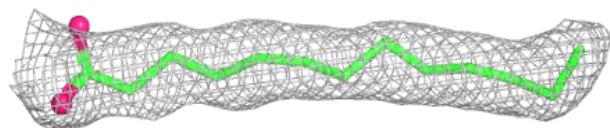
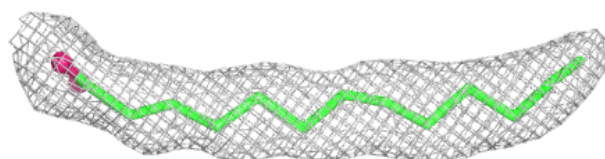


Electron density around STE D 412:

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

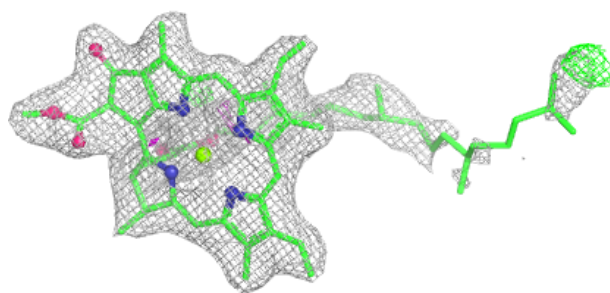
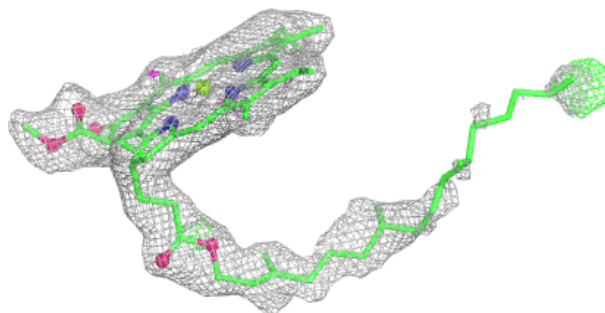
**Electron density around STE M 102:**

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

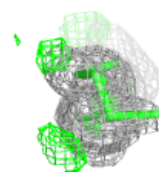
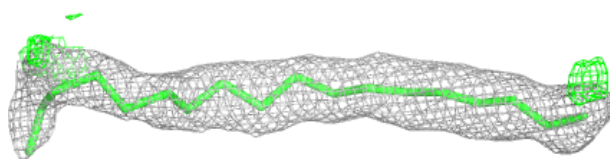
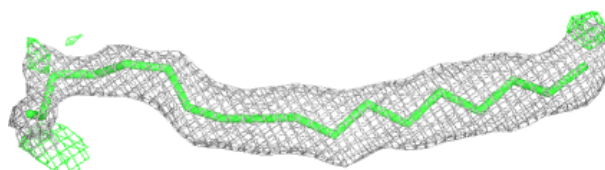


Electron density around CLA C 513:

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

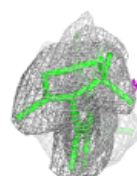
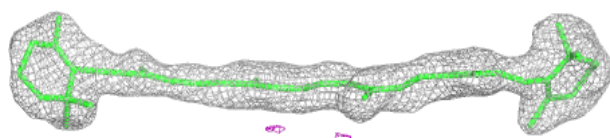
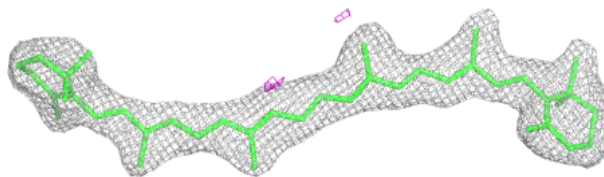
**Electron density around STE m 103:**

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

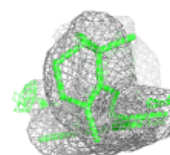
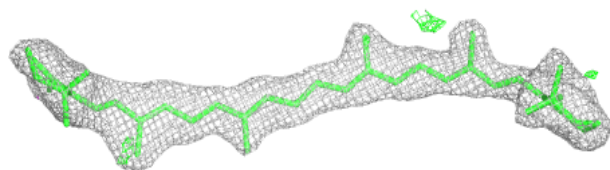
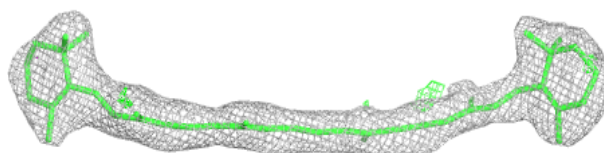


Electron density around BCR k 101:

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

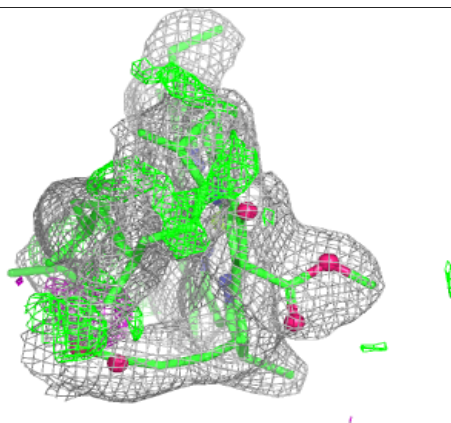
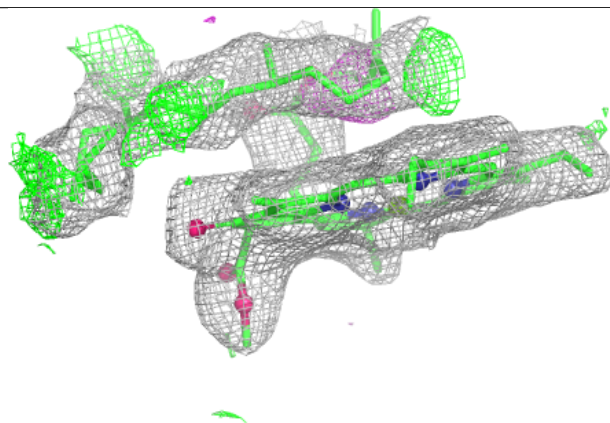
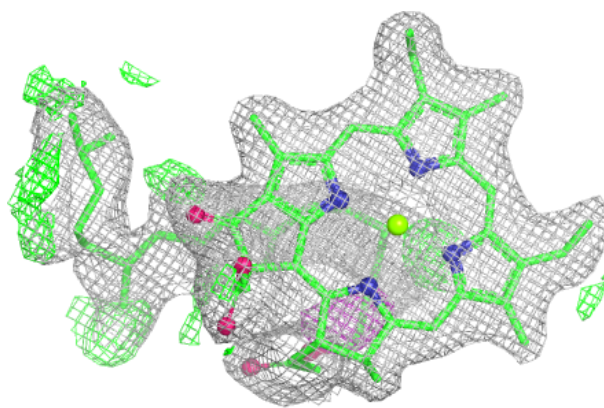
**Electron density around BCR k 102:**

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

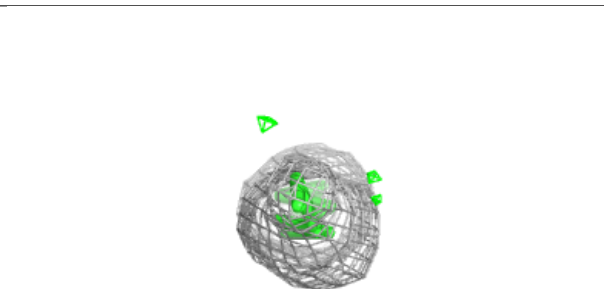
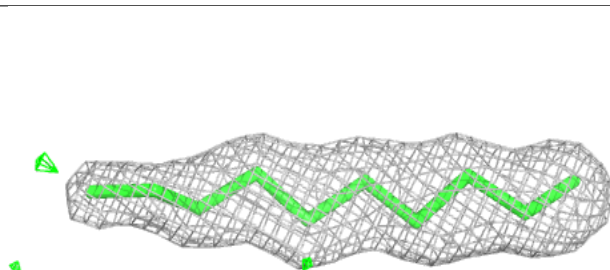
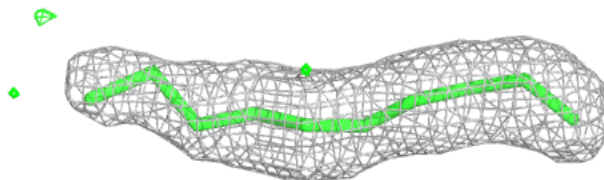


Electron density around CLA B 601:

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

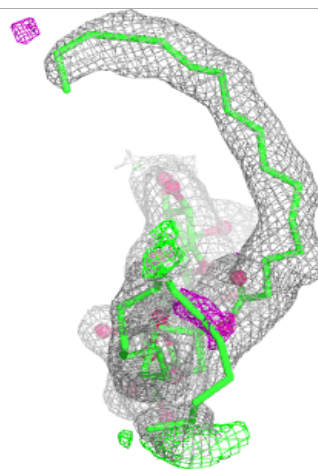
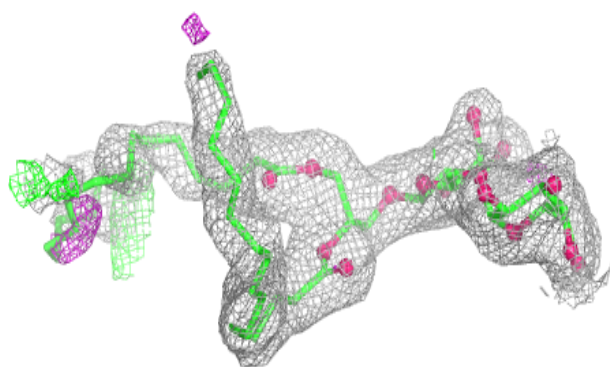
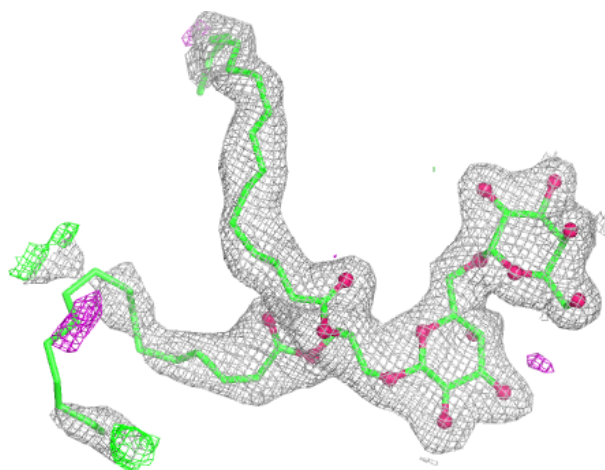
**Electron density around STE M 103:**

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



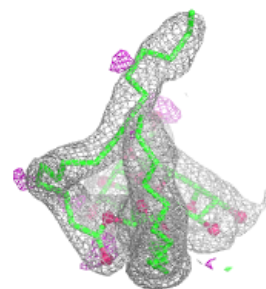
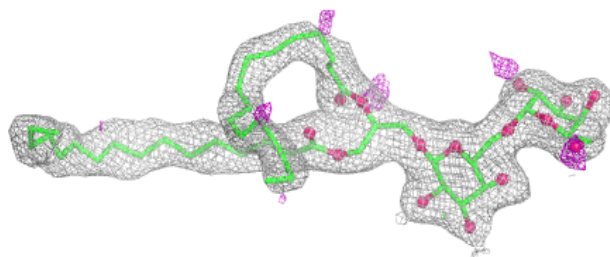
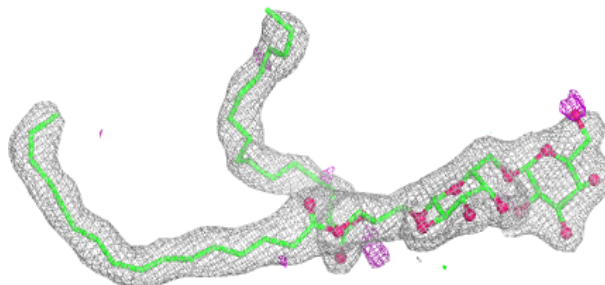
Electron density around DGD C 524:

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



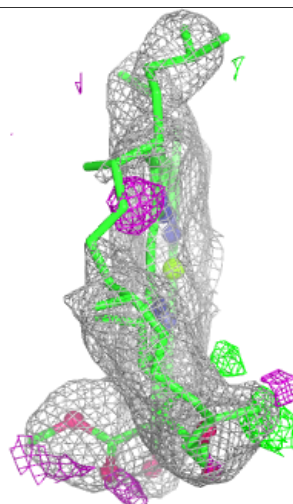
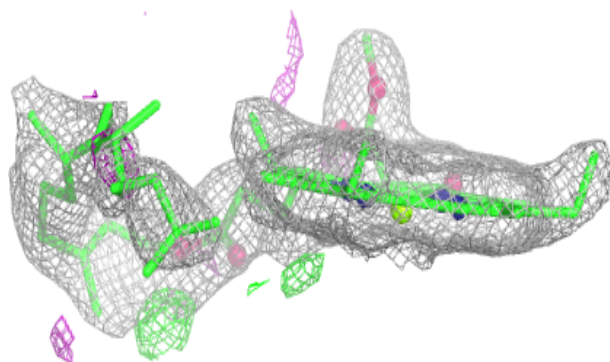
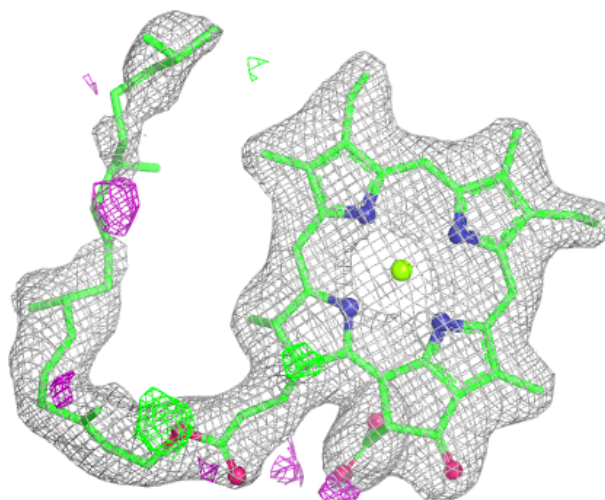
Electron density around DGD h 101:

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



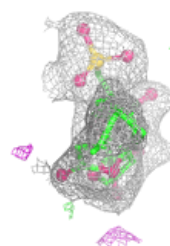
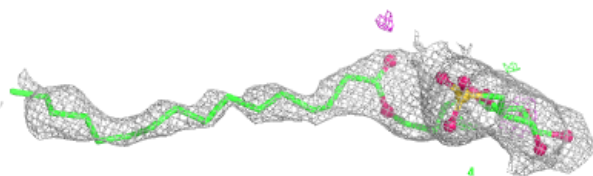
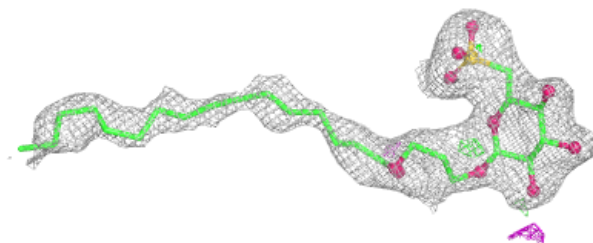
Electron density around CLA c 512:

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

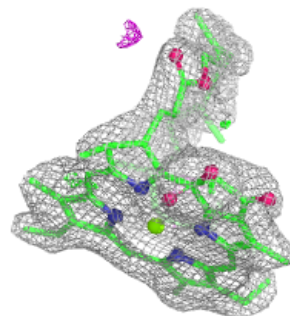
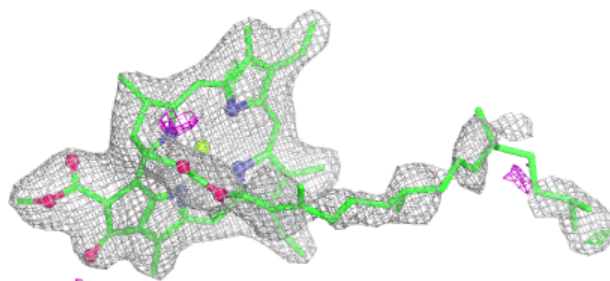
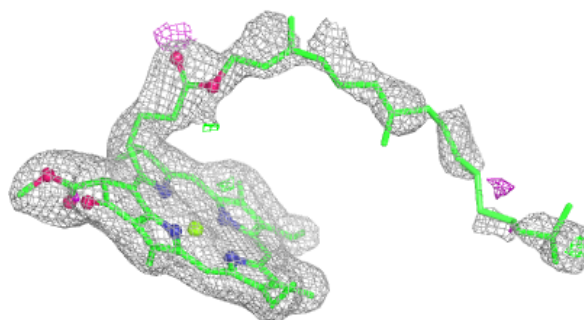


Electron density around SQD F 102:

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

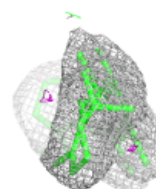
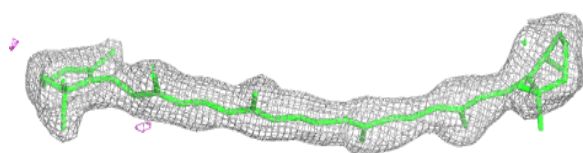
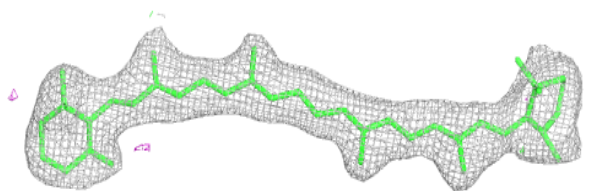
**Electron density around CLA c 513:**

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

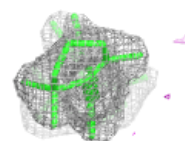
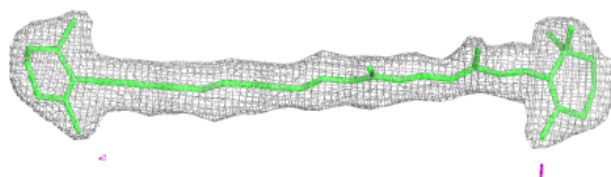
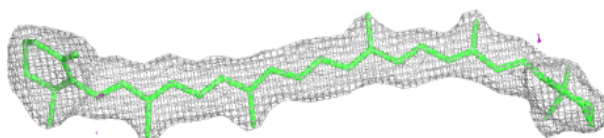


Electron density around BCR d 404:

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

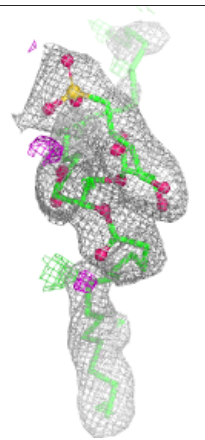
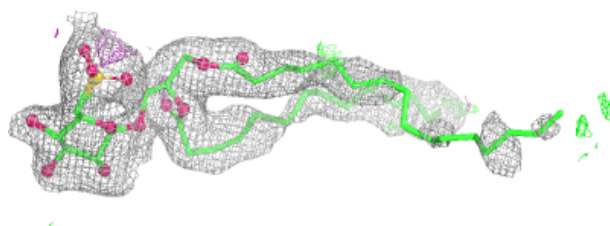
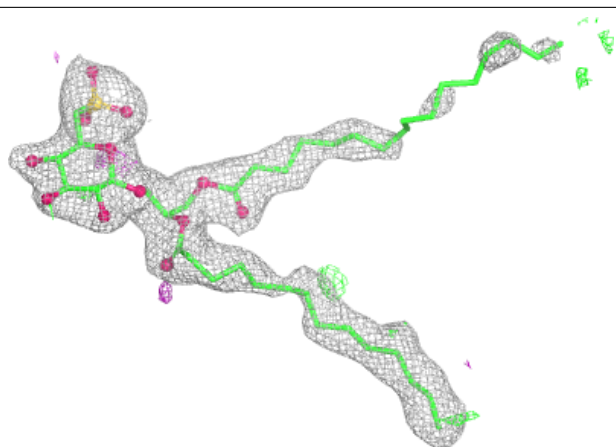
**Electron density around BCR C 514:**

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

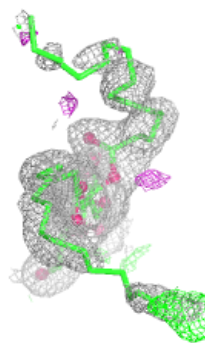
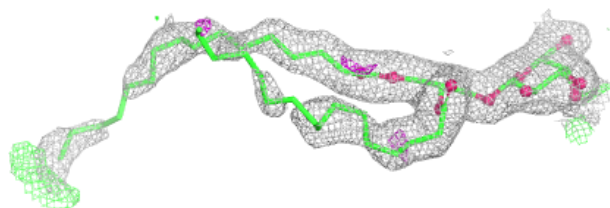
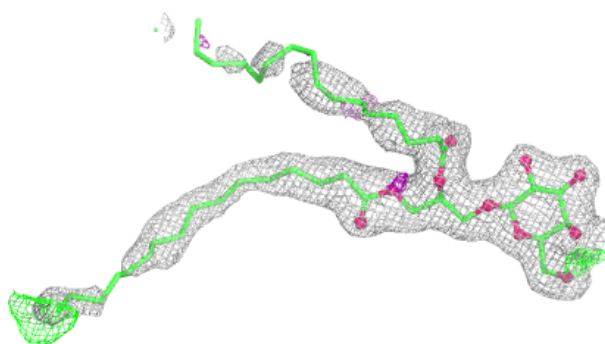


Electron density around SQD A 615:

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

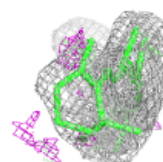
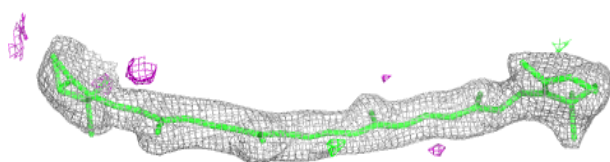
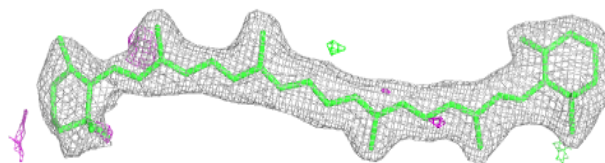
**Electron density around LMG D 407:**

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

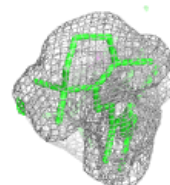
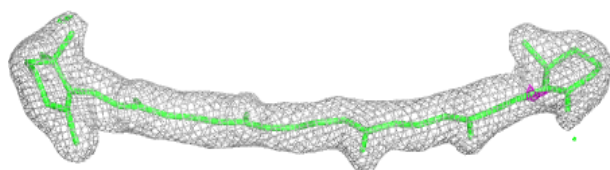
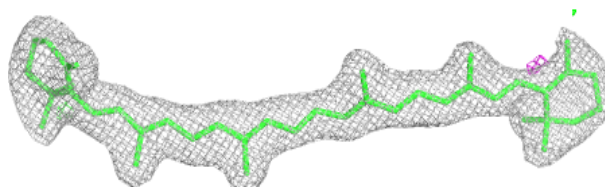


Electron density around BCR D 404:

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

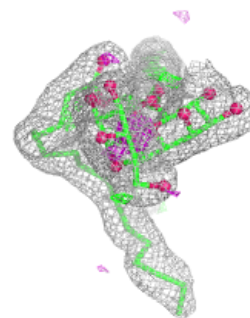
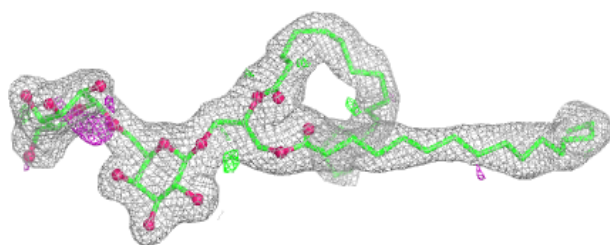
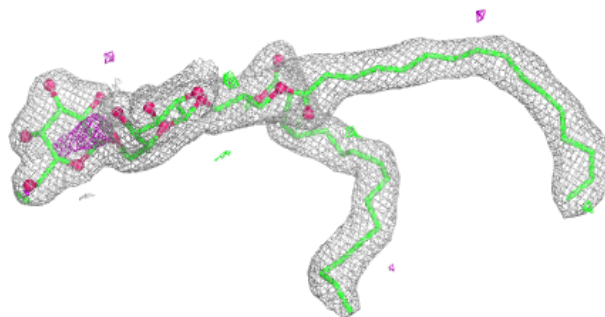
**Electron density around BCR T 101:**

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

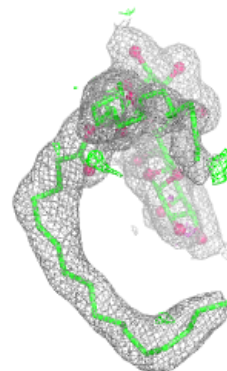
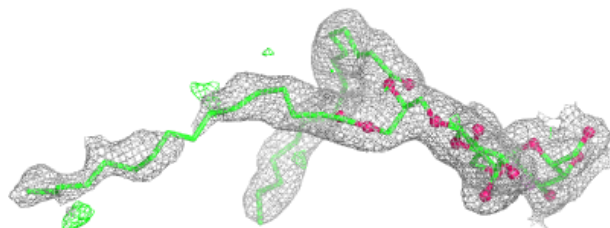
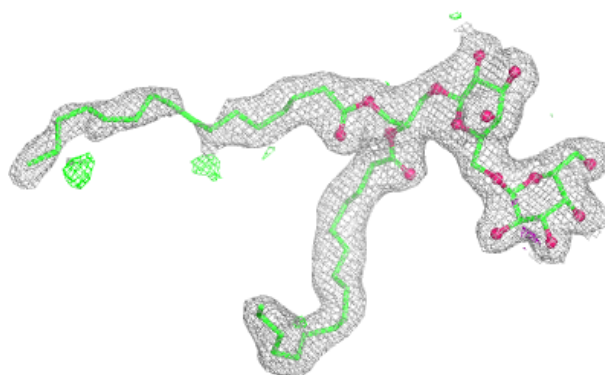


Electron density around DGD H 102:

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

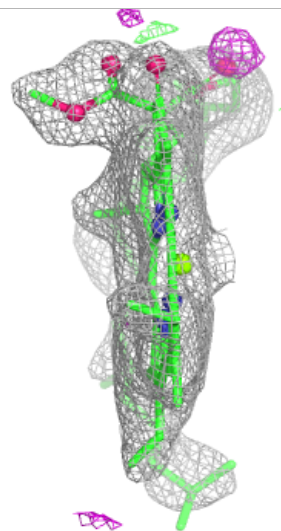
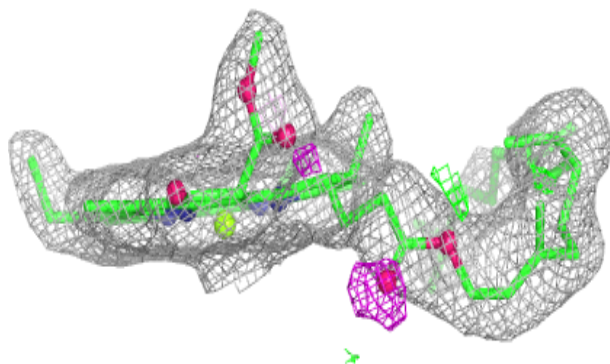
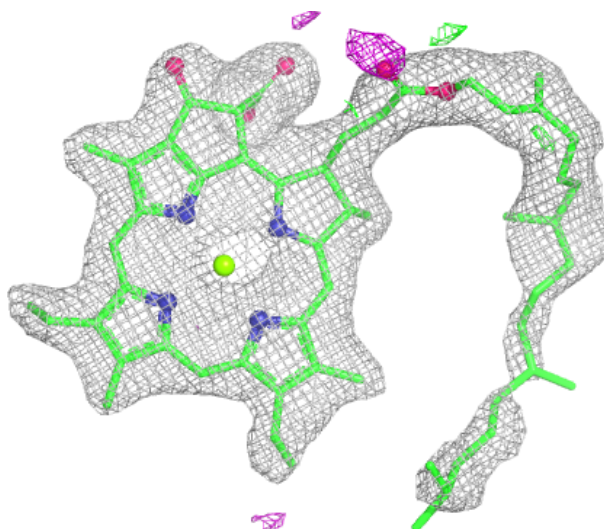
**Electron density around DGD c 520:**

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



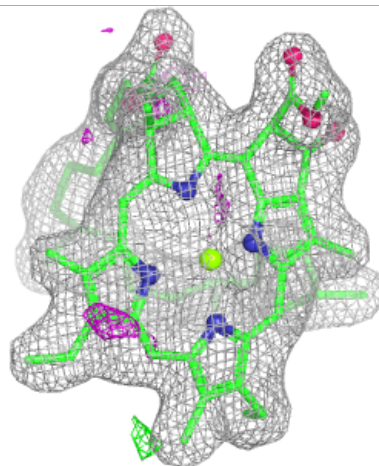
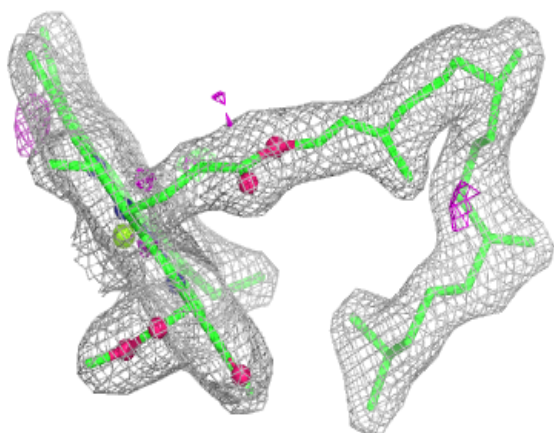
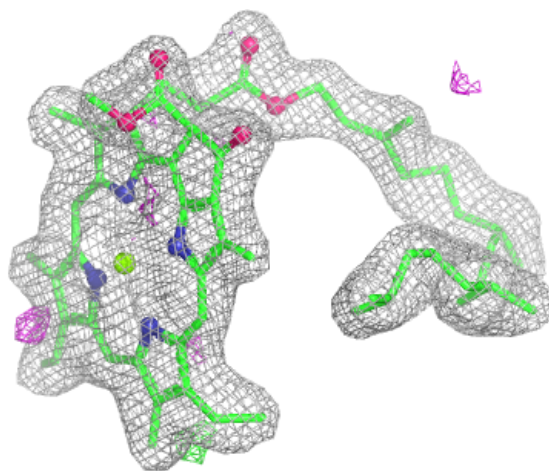
Electron density around CLA C 512:

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



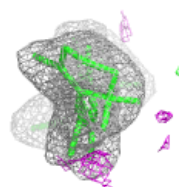
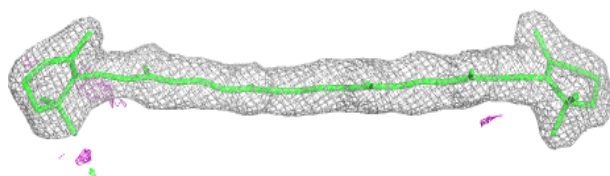
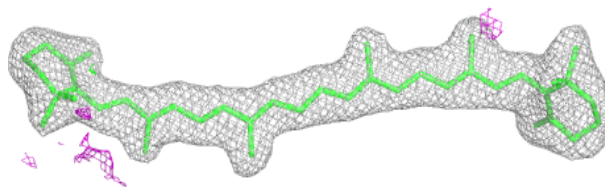
Electron density around CLA C 503:

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

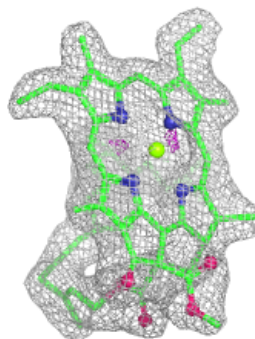
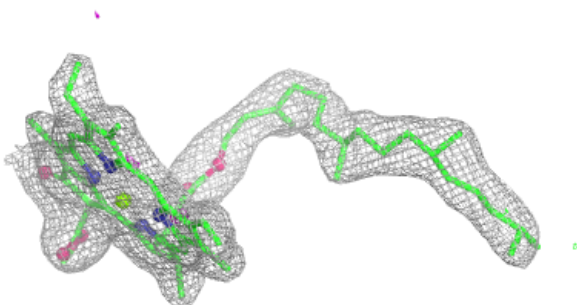
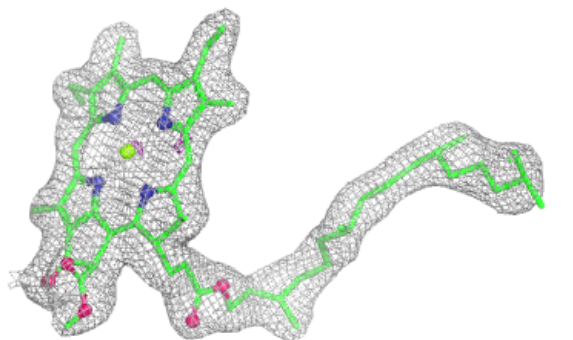


Electron density around BCR B 618:

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

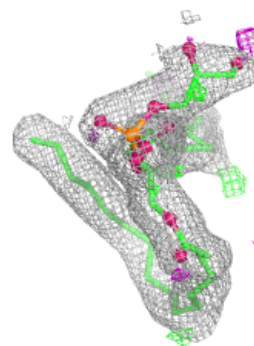
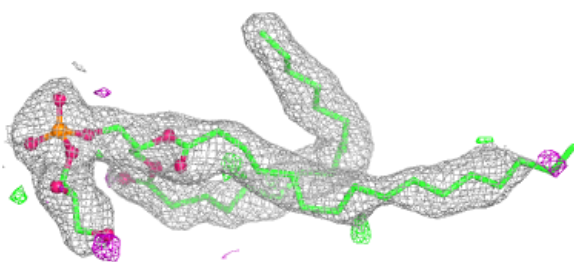
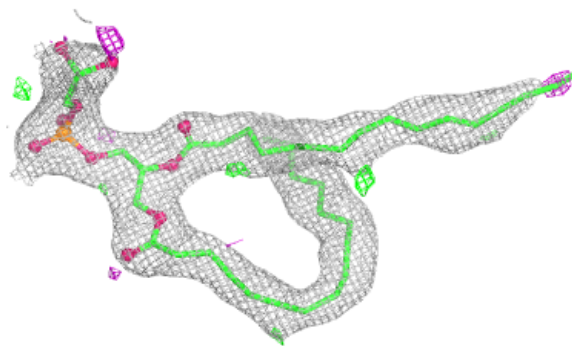
**Electron density around CLA C 511:**

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

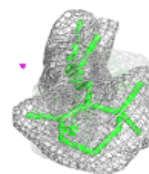
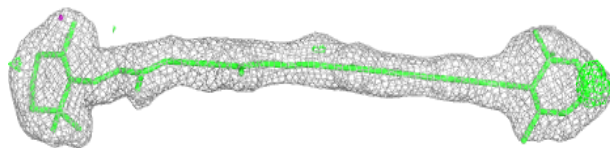
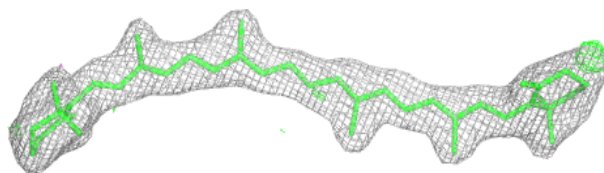


Electron density around LHG D 410:

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

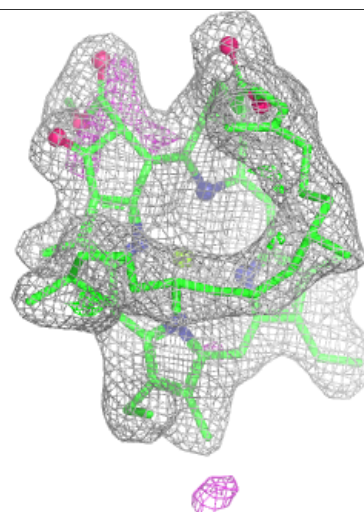
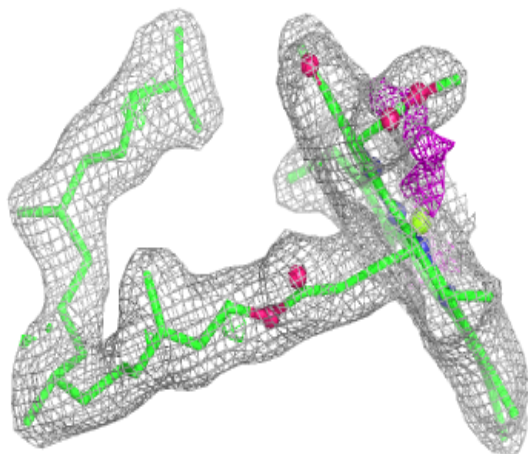
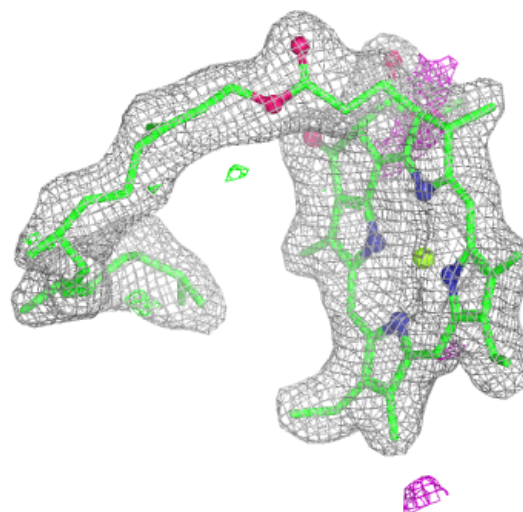
**Electron density around BCR x 101:**

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



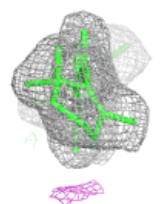
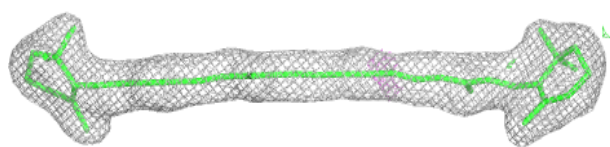
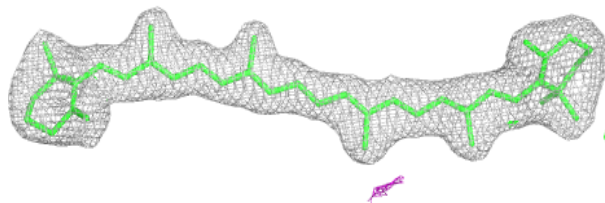
Electron density around CLA c 503:

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

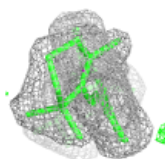
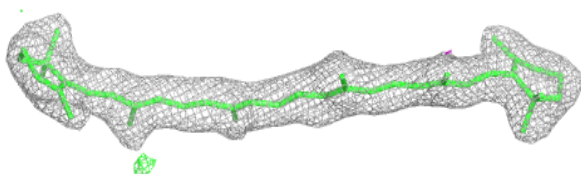
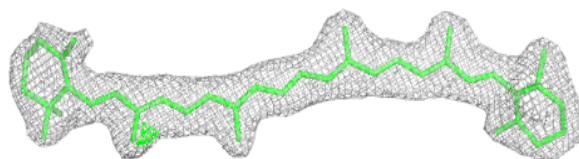


Electron density around BCR b 618:

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

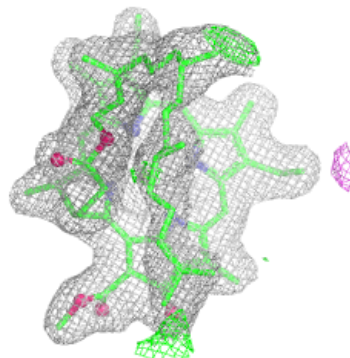
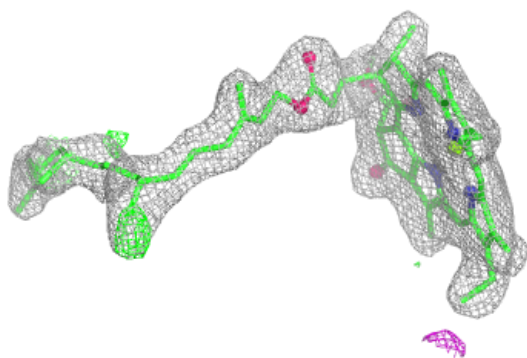
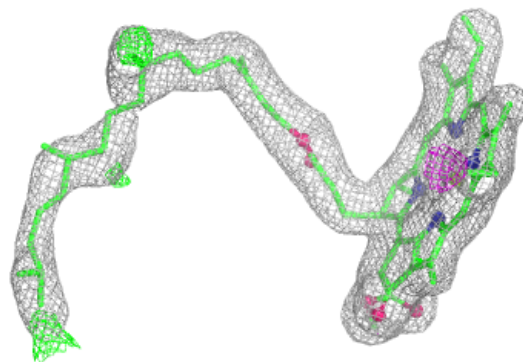
**Electron density around BCR b 619:**

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

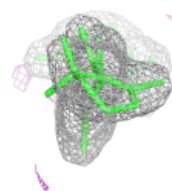
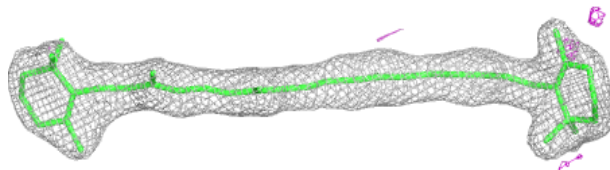
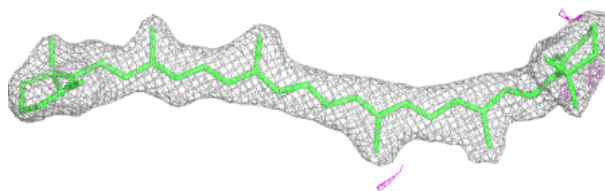


Electron density around CLA b 606:

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

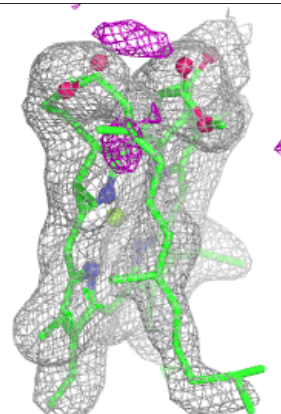
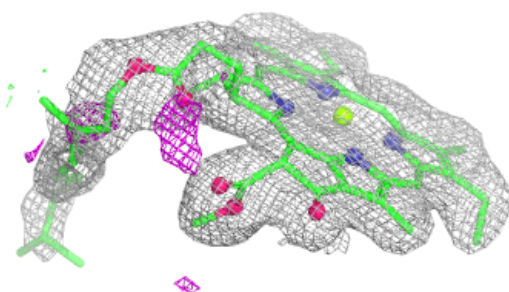
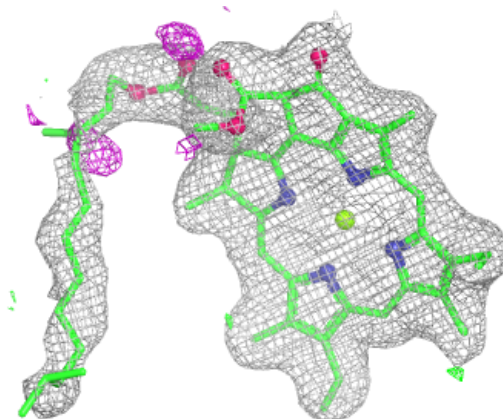
**Electron density around BCR c 515:**

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

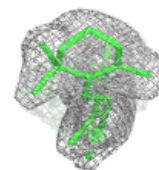
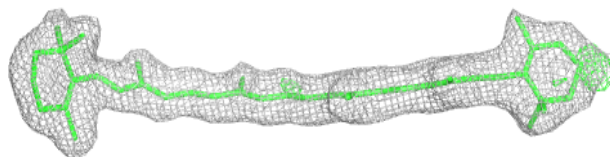
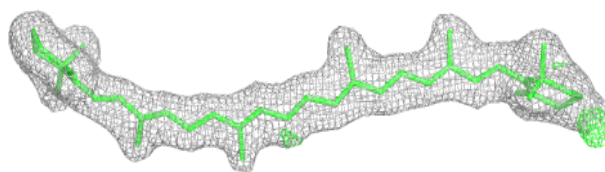


Electron density around CLA b 616:

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

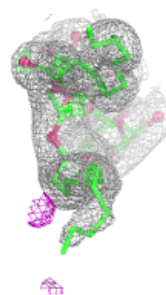
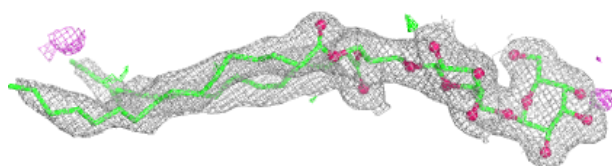
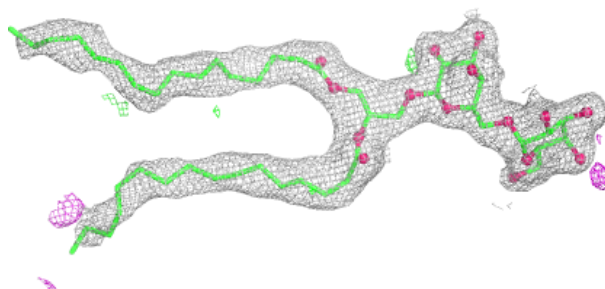
**Electron density around BCR H 101:**

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

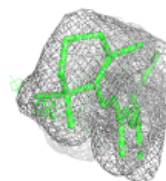
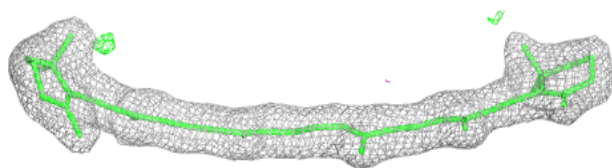
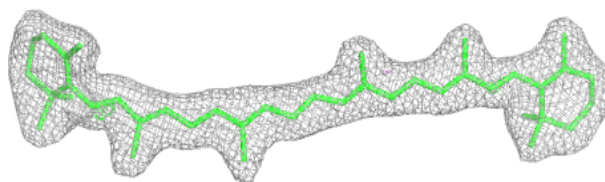


Electron density around DGD c 521:

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

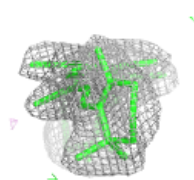
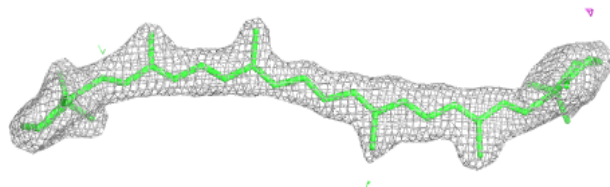
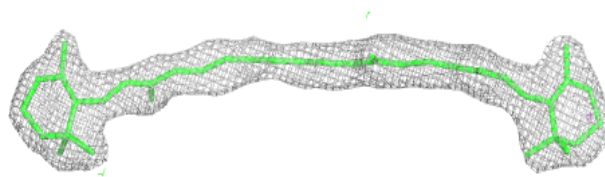
**Electron density around BCR t 101:**

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



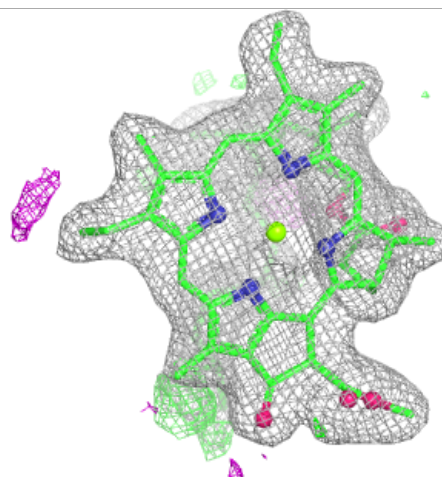
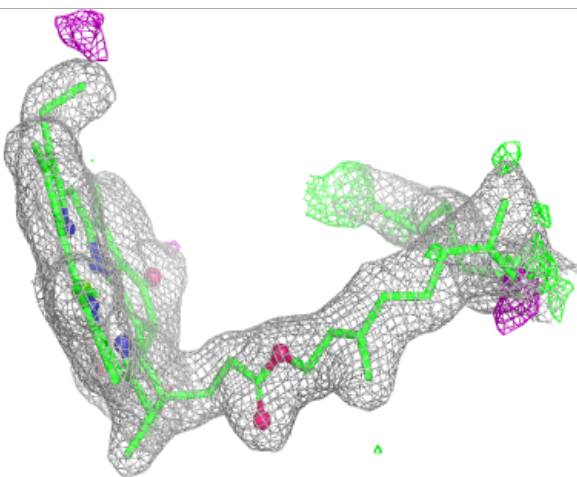
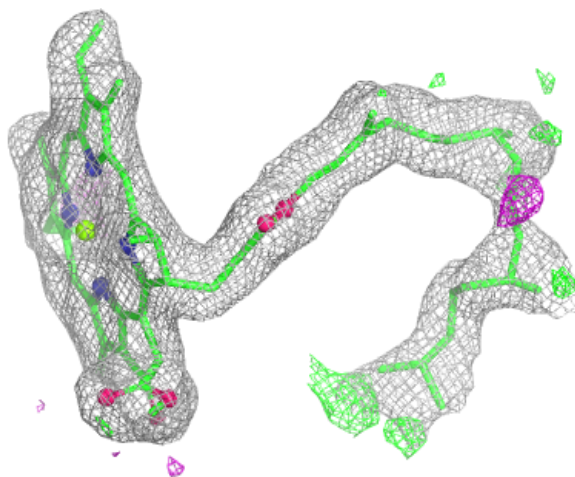
Electron density around BCR K 101:

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



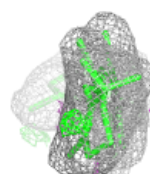
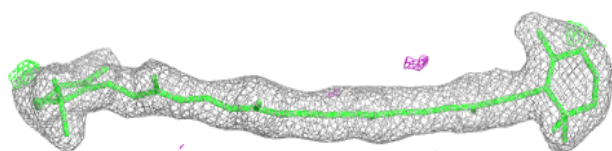
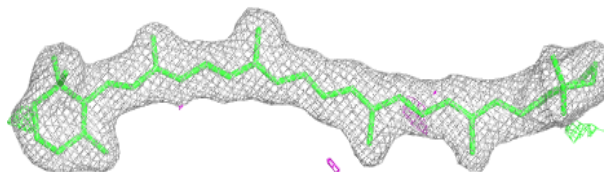
Electron density around CLA B 606:

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

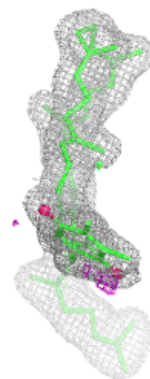
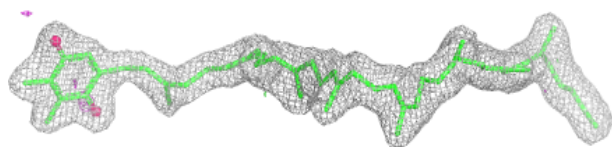
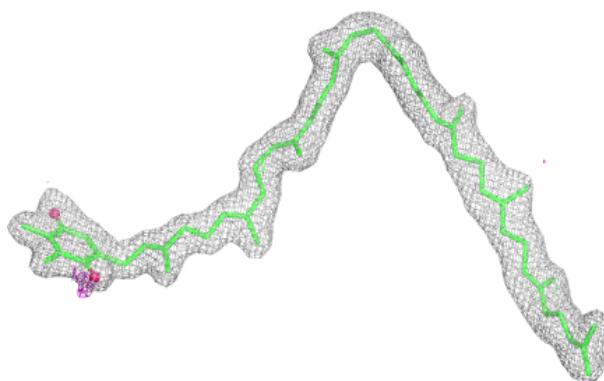


Electron density around BCR b 617:

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

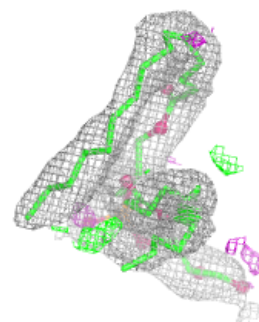
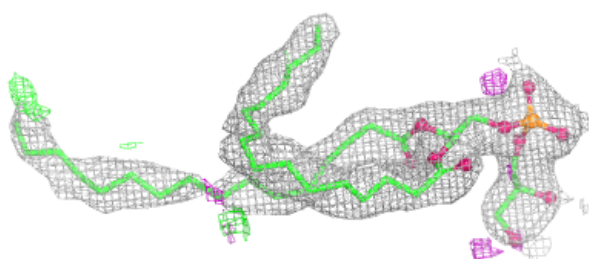
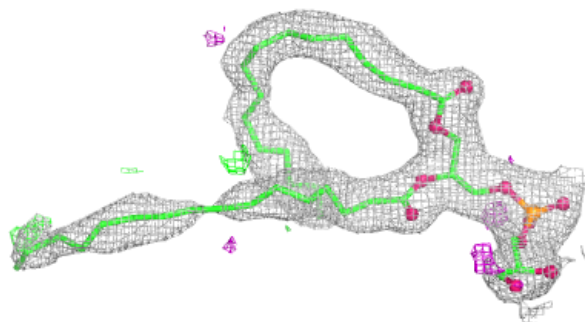
**Electron density around PL9 d 405:**

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

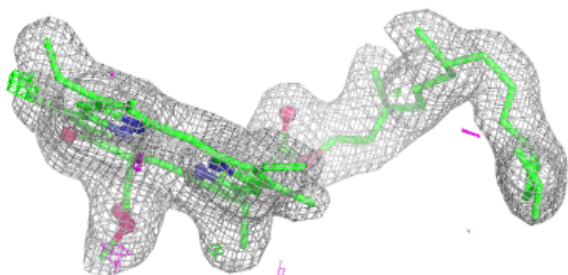
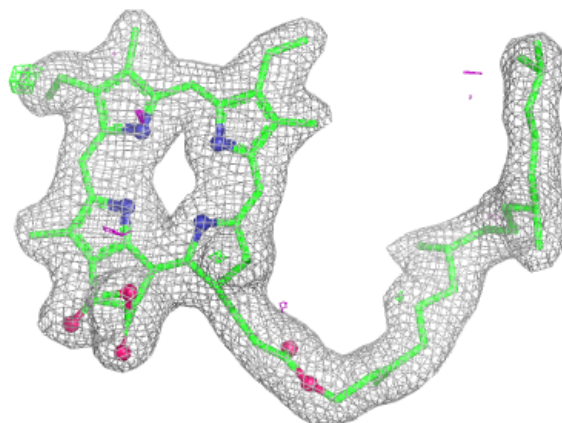


Electron density around LHG d 407:

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

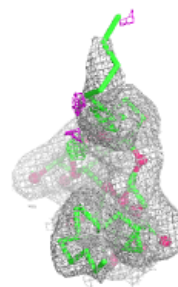
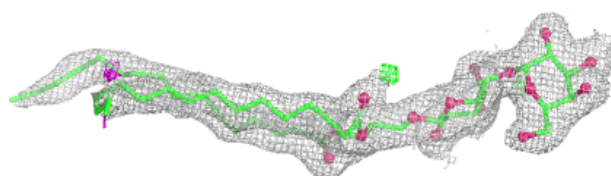
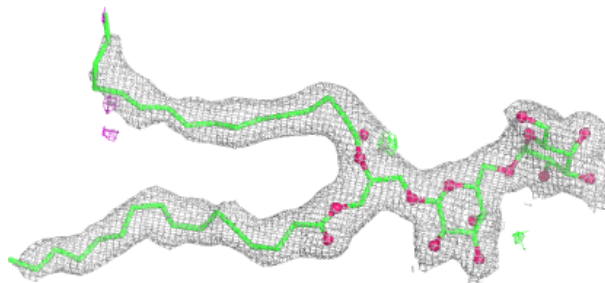
**Electron density around PHO d 401:**

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



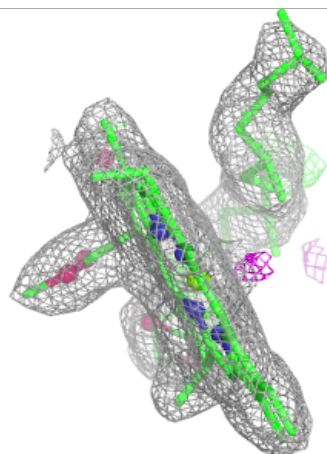
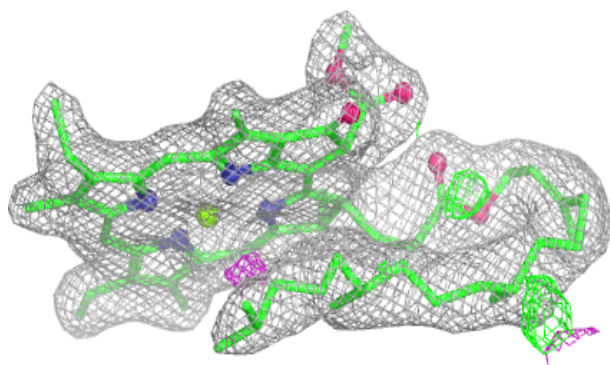
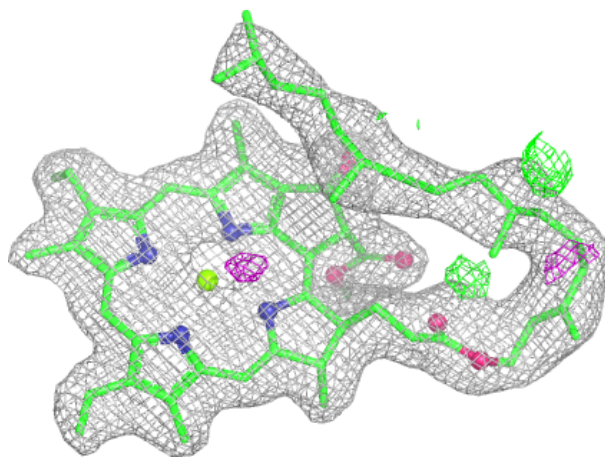
Electron density around DGD C 525:

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



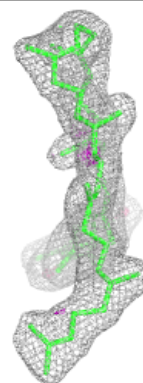
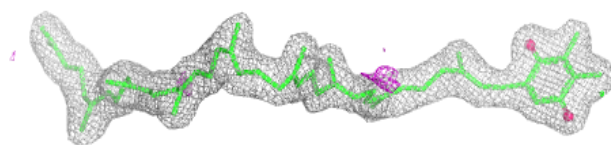
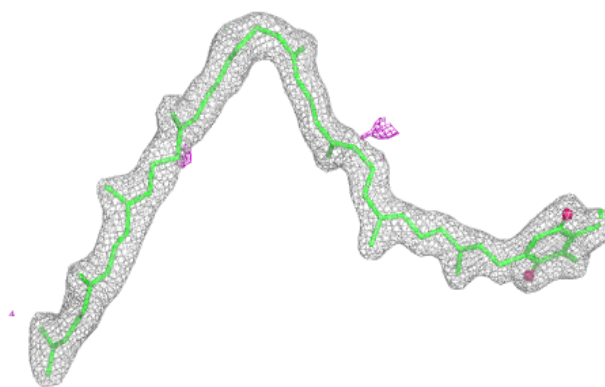
Electron density around CLA C 509:

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

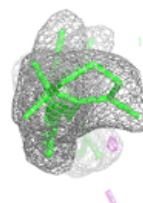
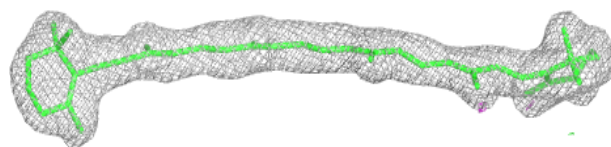
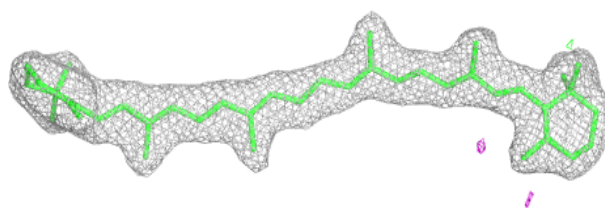


Electron density around PL9 D 405:

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

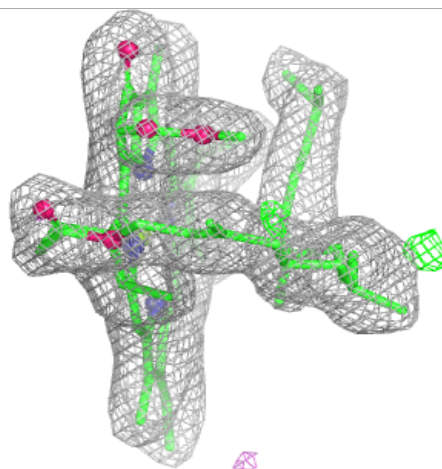
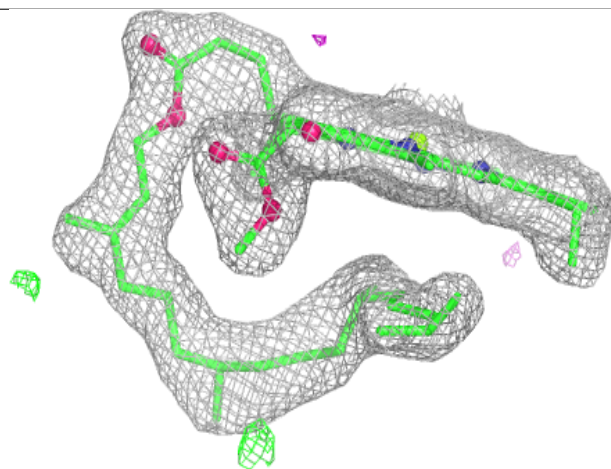
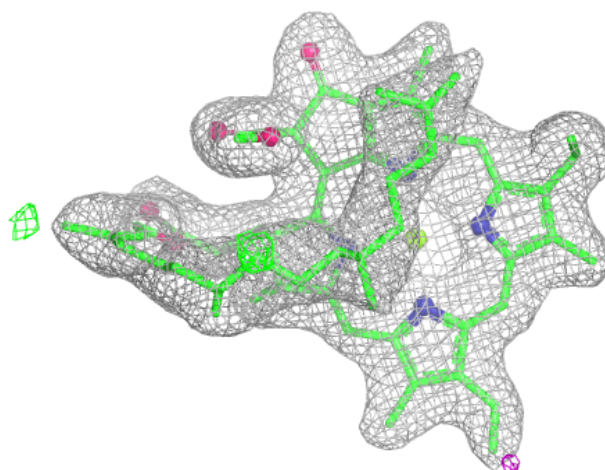
**Electron density around BCR B 617:**

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



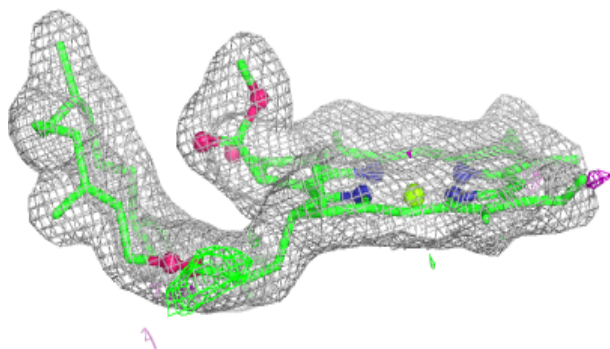
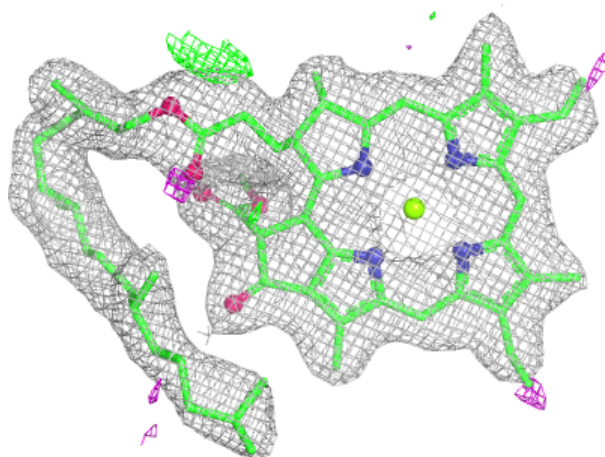
Electron density around CLA C 510:

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



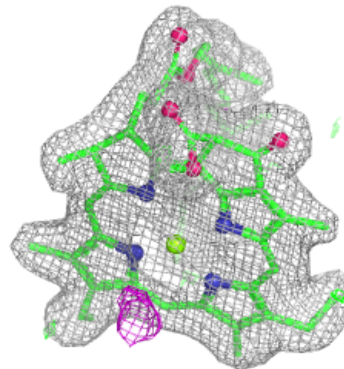
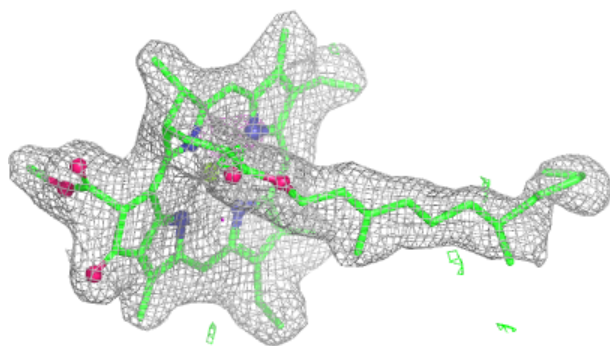
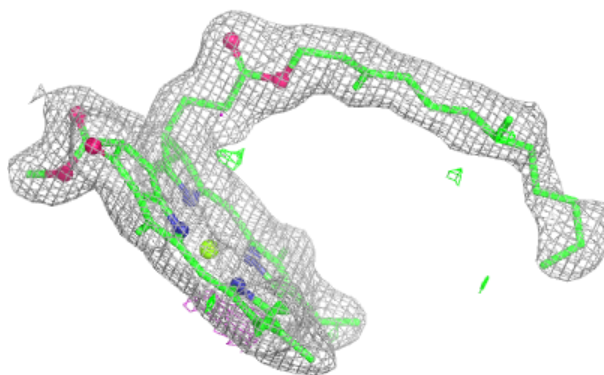
Electron density around CLA b 610:

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

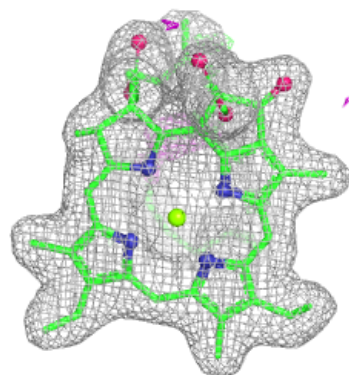
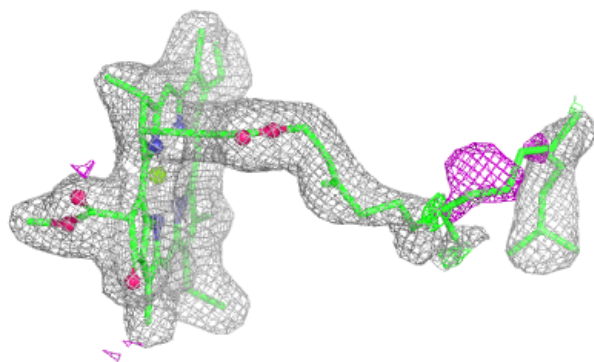
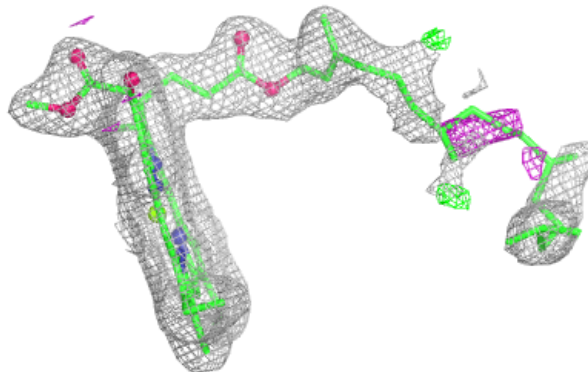


Electron density around CLA C 504:

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

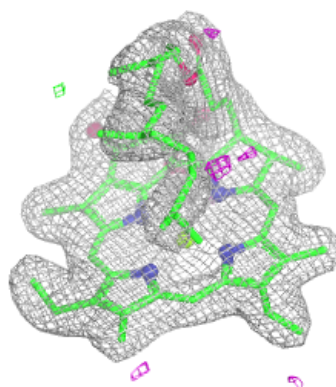
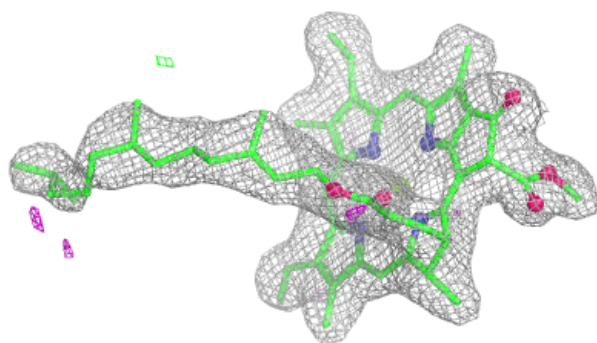
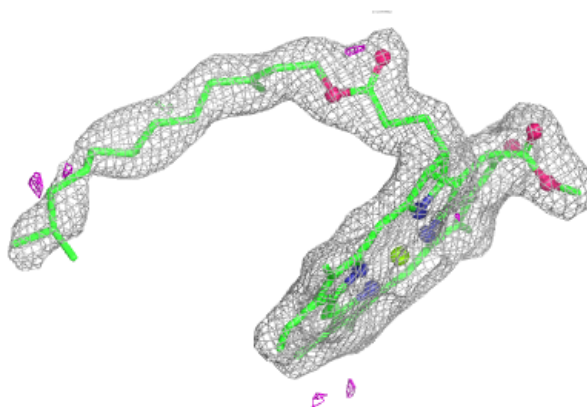
**Electron density around CLA C 506:**

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

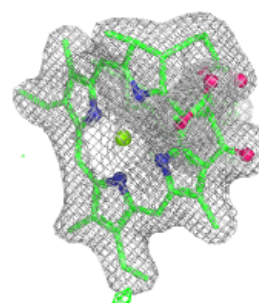
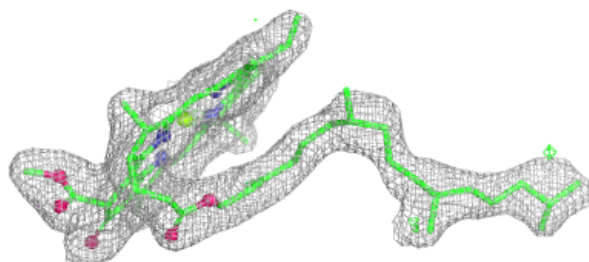
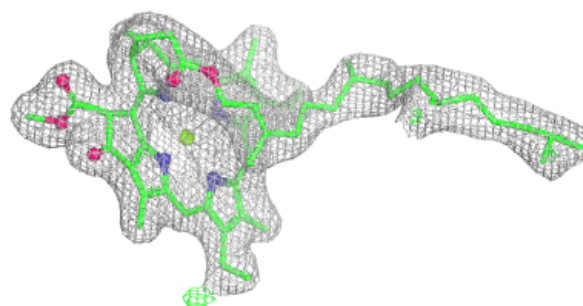


Electron density around CLA c 504:

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

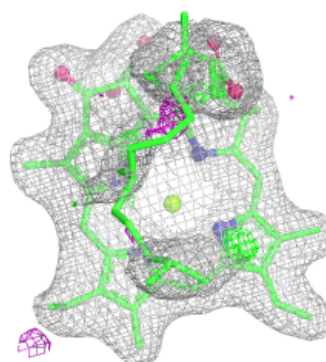
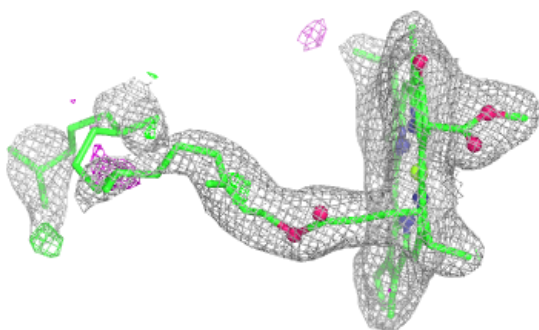
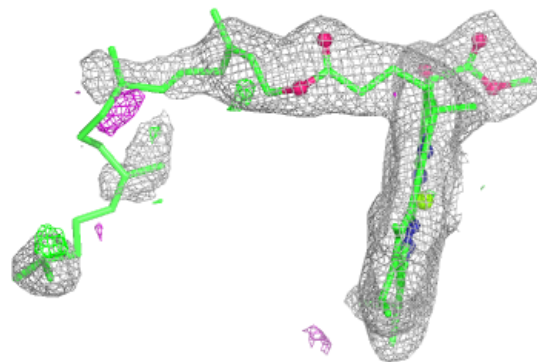
**Electron density around CLA c 505:**

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

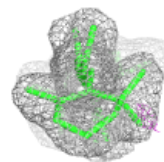
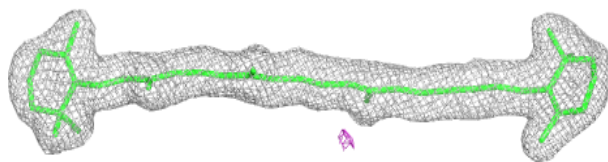
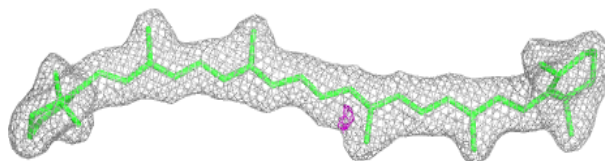


Electron density around CLA c 506:

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

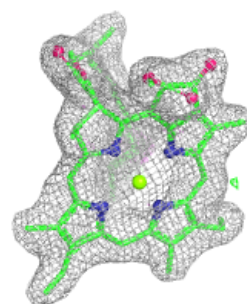
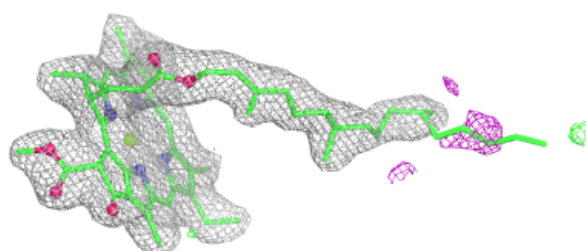
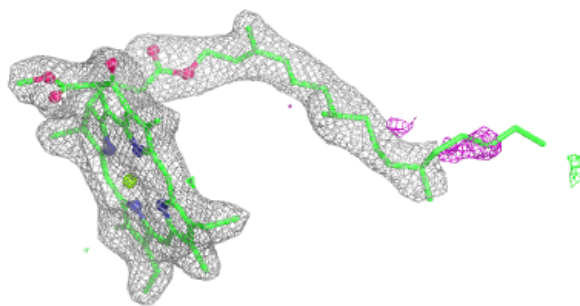
**Electron density around BCR a 611:**

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



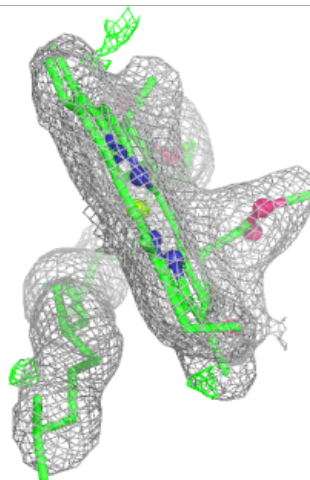
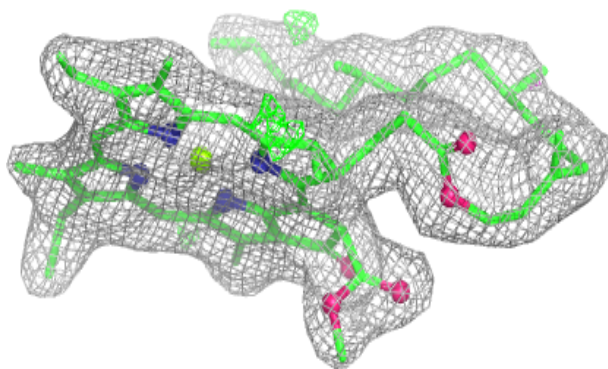
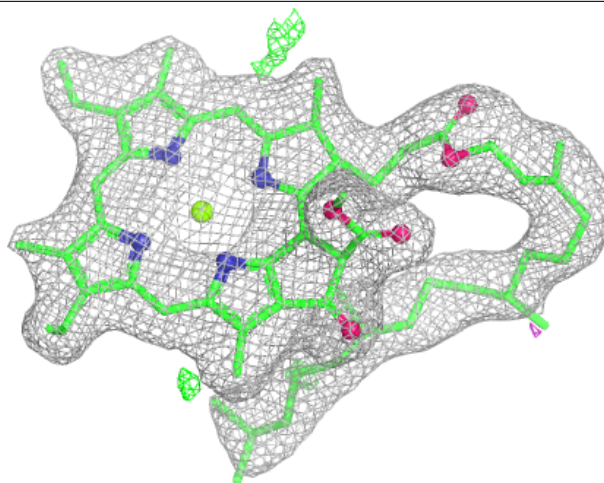
Electron density around CLA c 508:

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



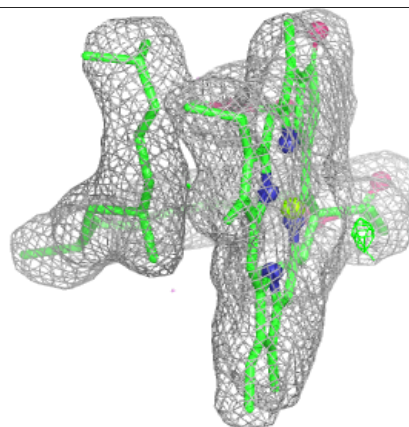
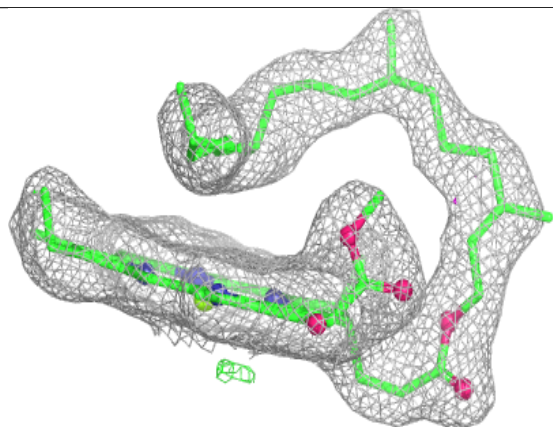
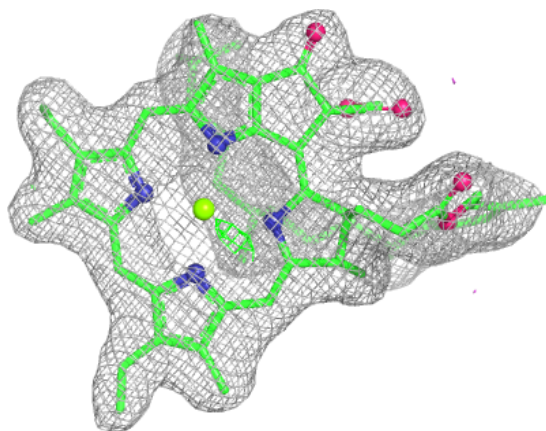
Electron density around CLA c 509:

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

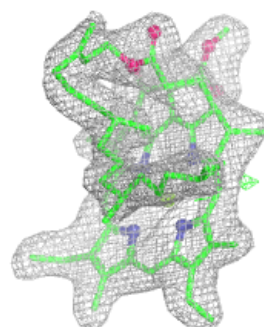
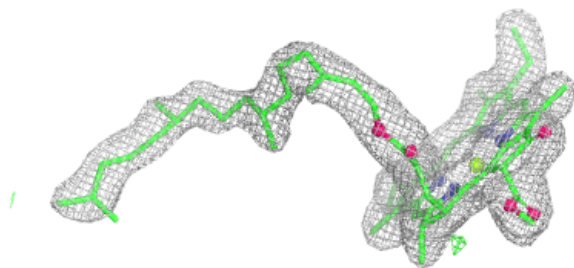
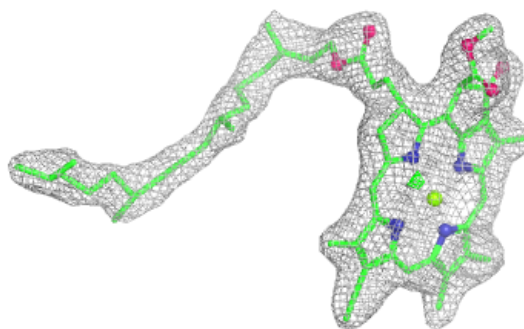


Electron density around CLA c 510:

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

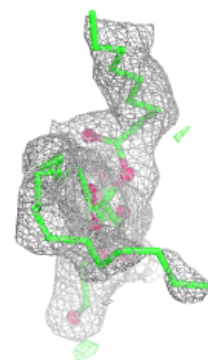
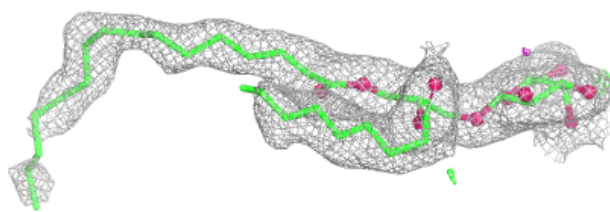
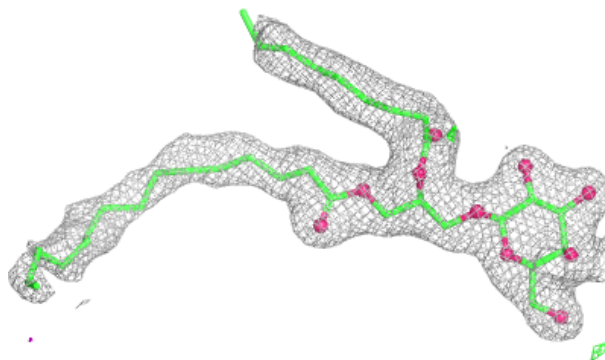
**Electron density around CLA c 511:**

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

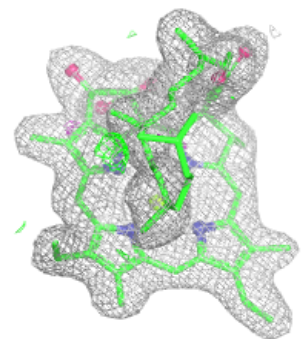
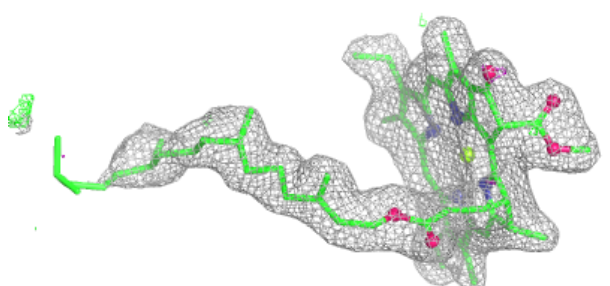
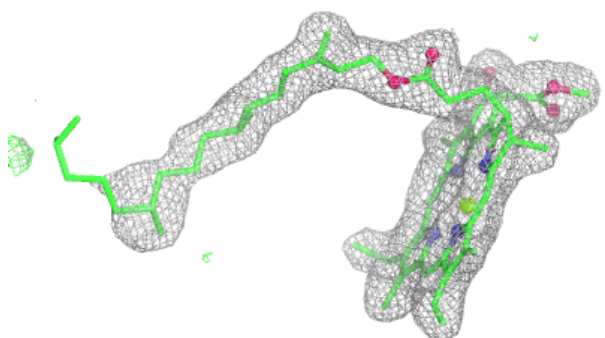


Electron density around LMG d 411:

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

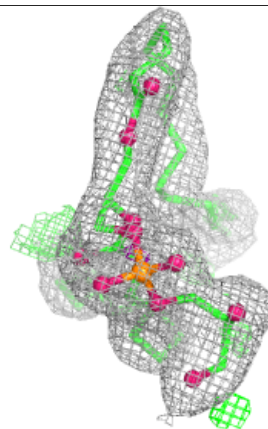
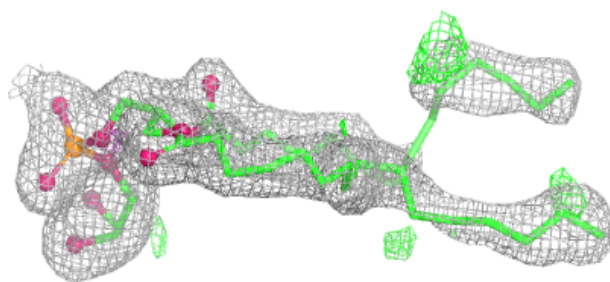
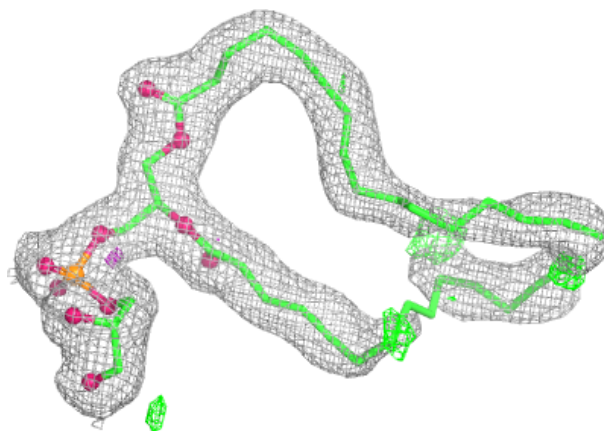
**Electron density around CLA C 508:**

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

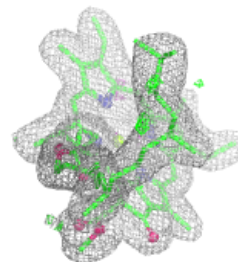
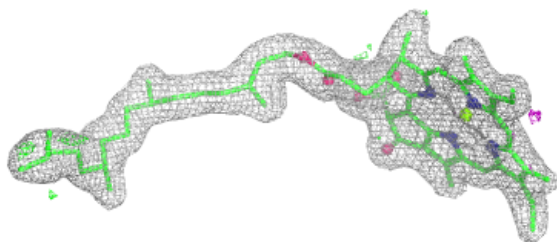
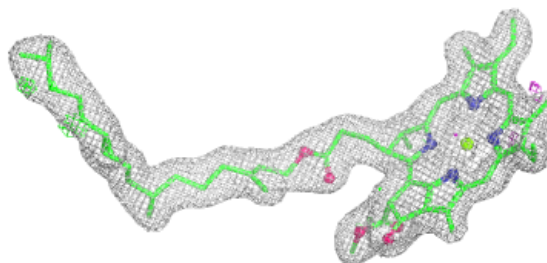


Electron density around LHG D 409:

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

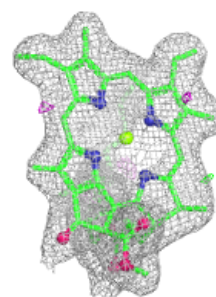
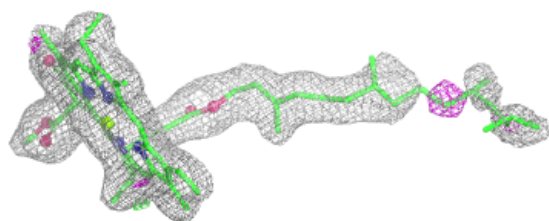
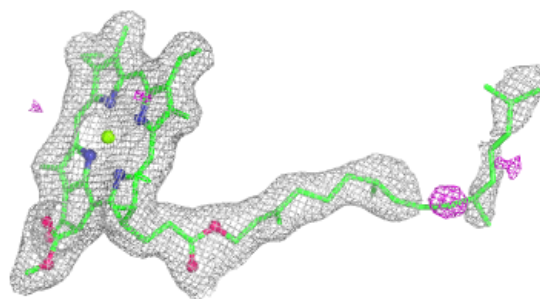
**Electron density around CLA a 607:**

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

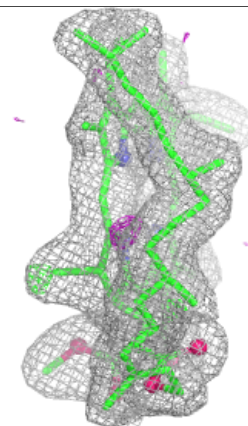
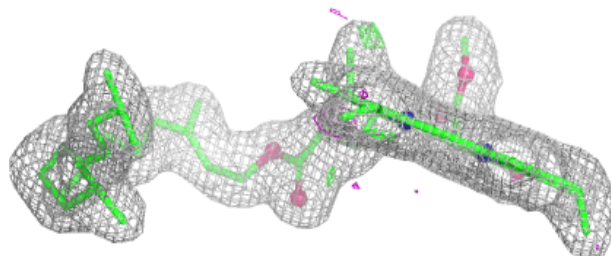
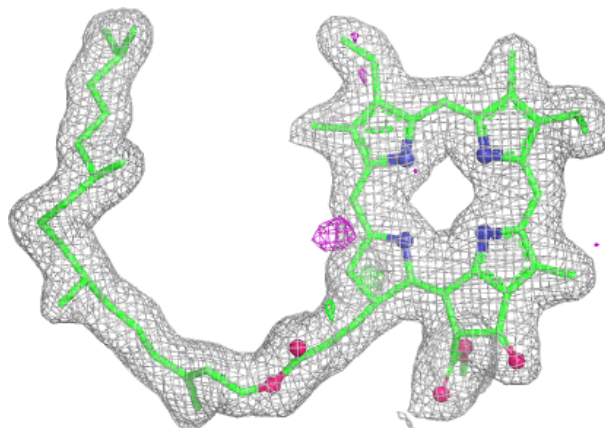


Electron density around CLA d 403:

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

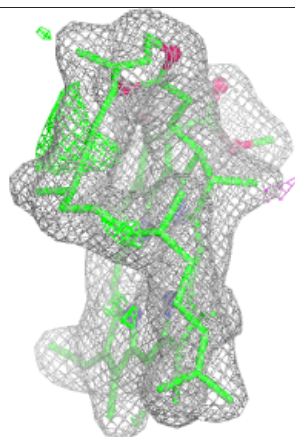
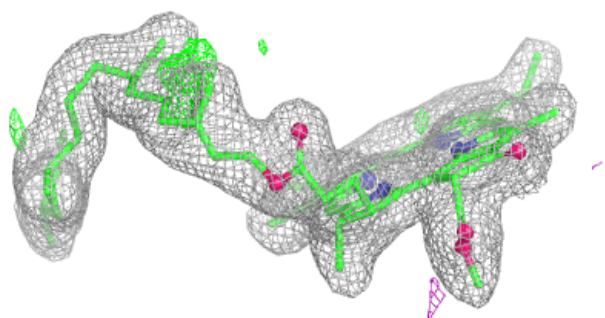
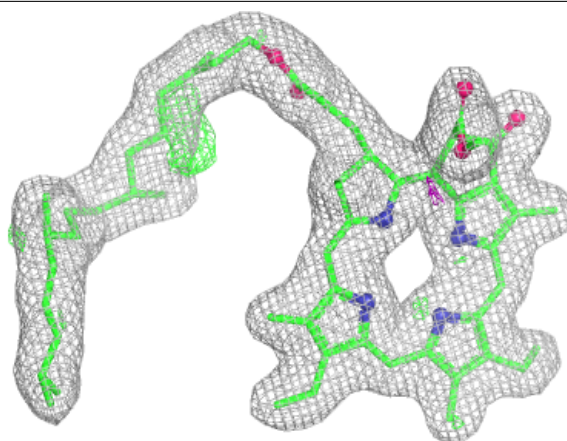
**Electron density around PHO A 609:**

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



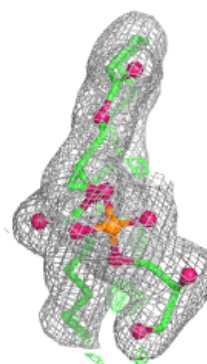
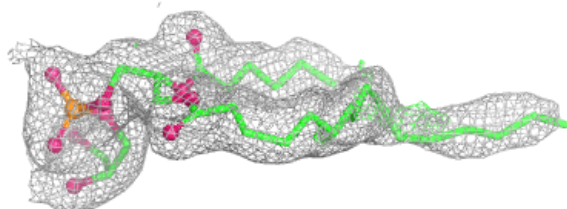
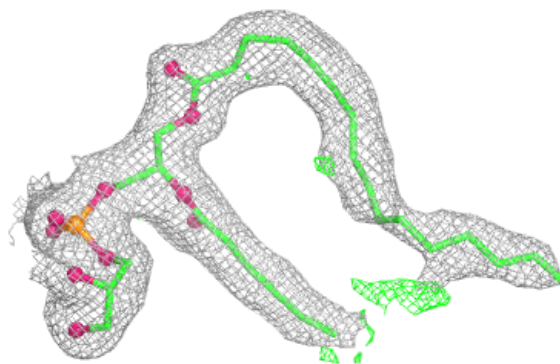
Electron density around PHO D 401:

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



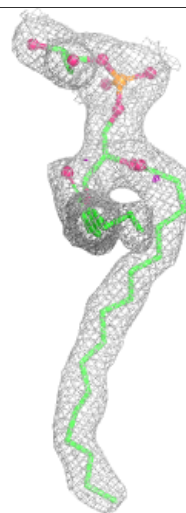
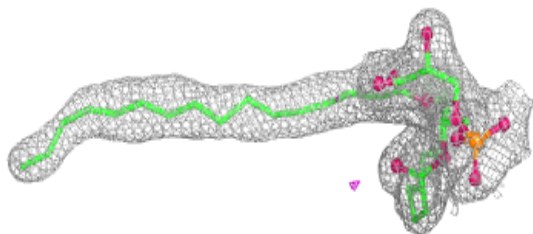
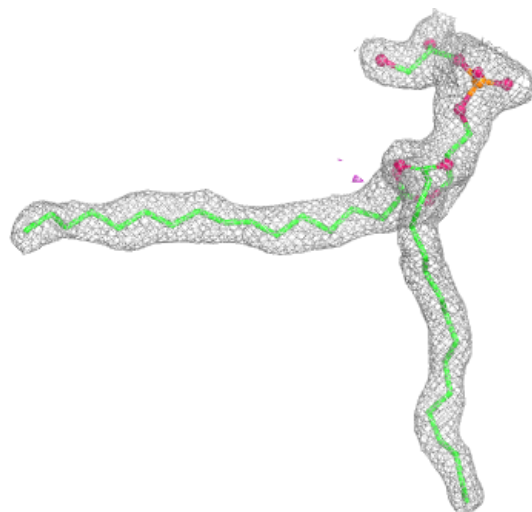
Electron density around LHG d 409:

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



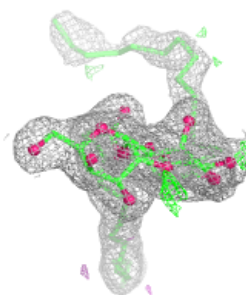
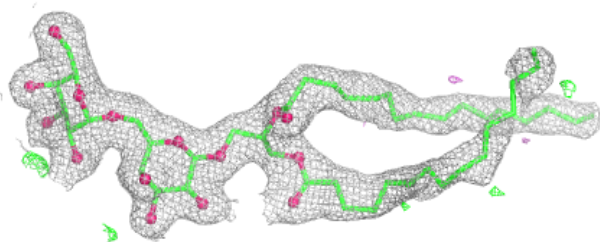
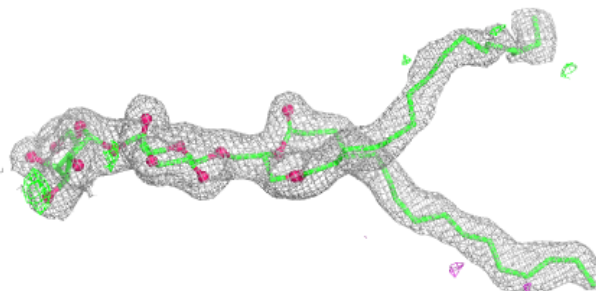
Electron density around LHG 1 101:

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

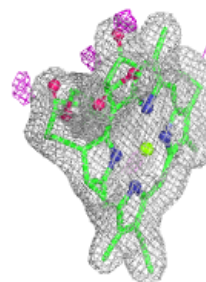
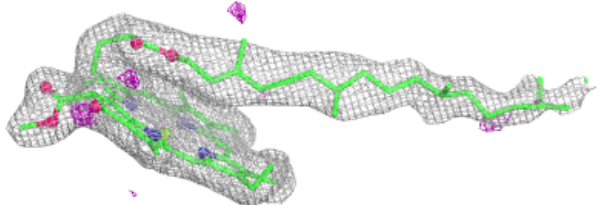
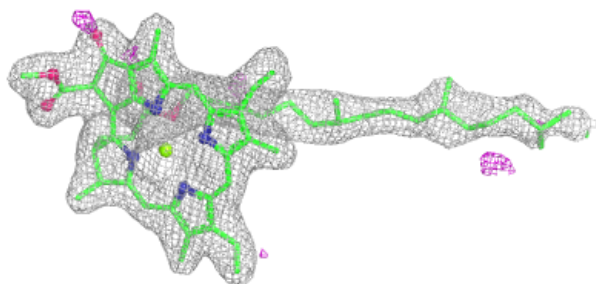


Electron density around DGD C 523:

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

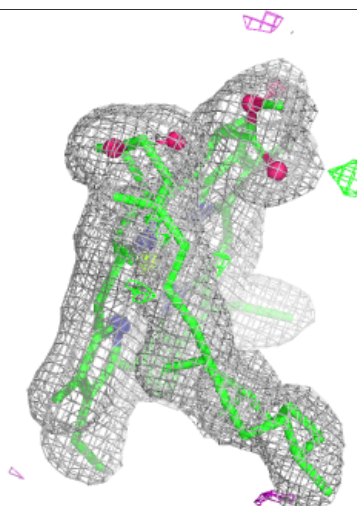
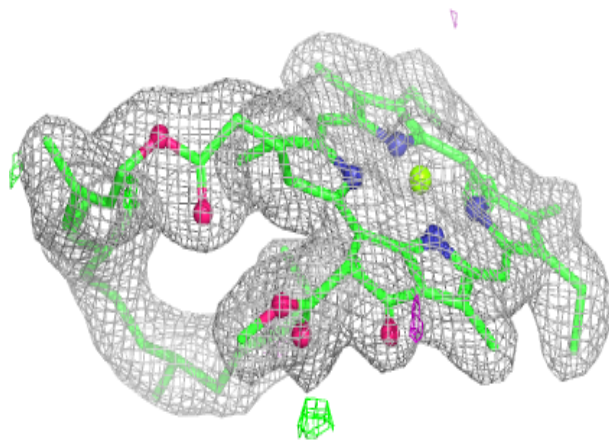
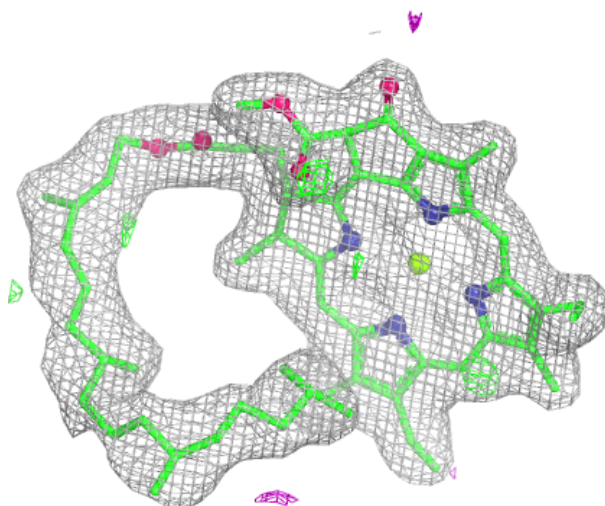
**Electron density around CLA b 614:**

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



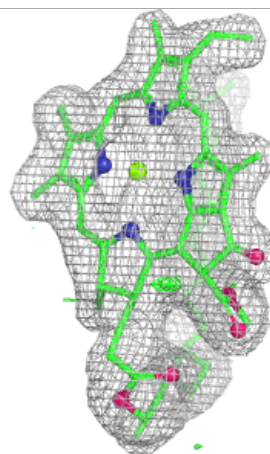
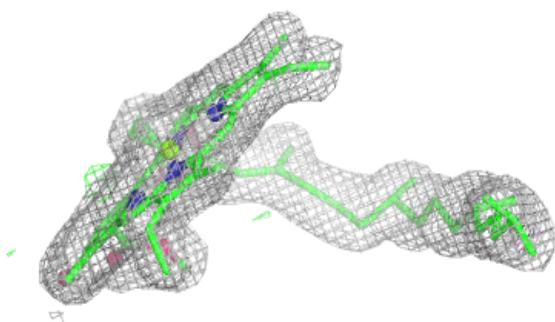
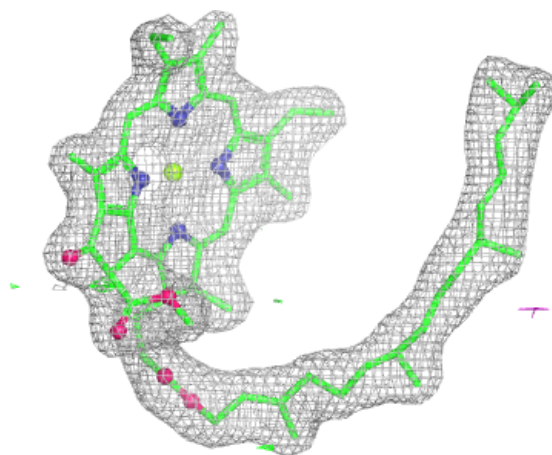
Electron density around CLA b 615:

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



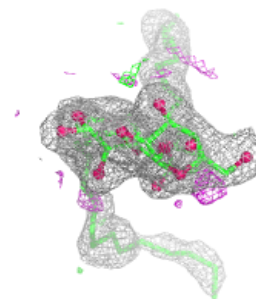
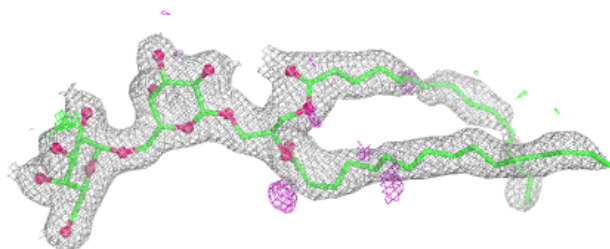
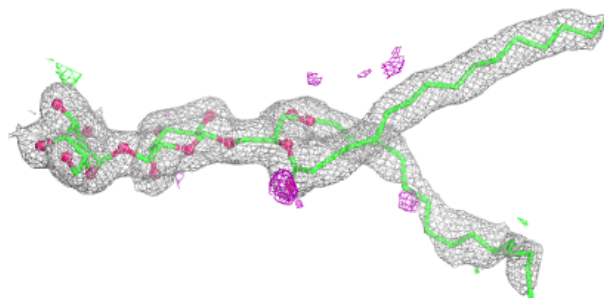
Electron density around CLA C 507:

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

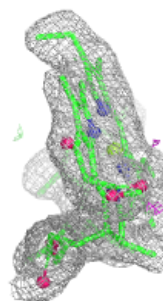
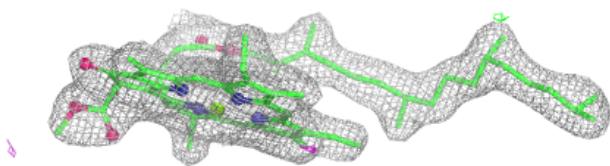
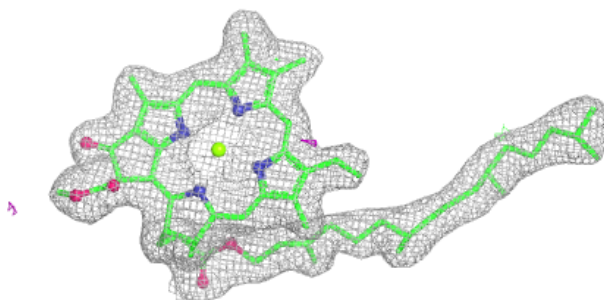


Electron density around DGD c 519:

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

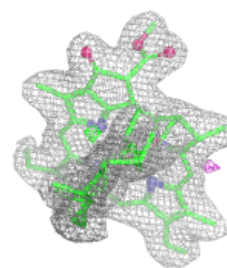
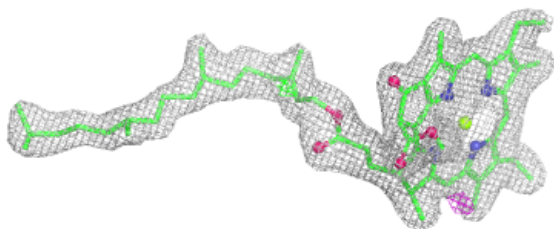
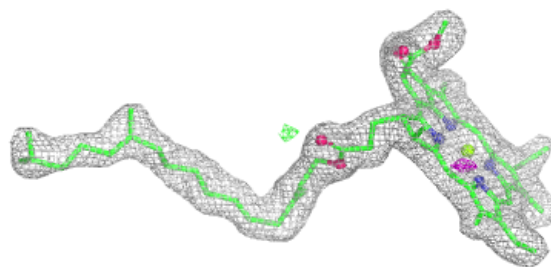
**Electron density around CLA c 501:**

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



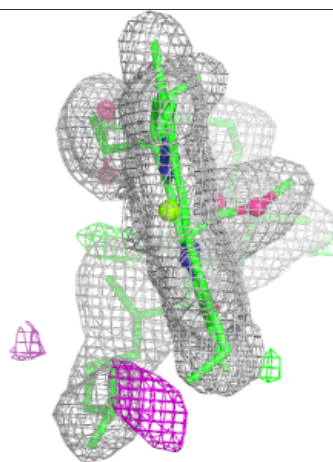
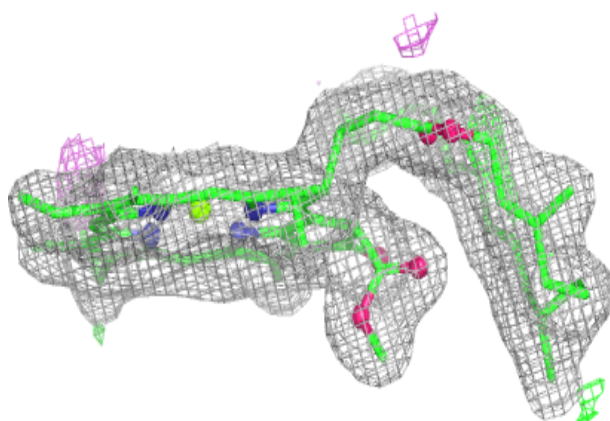
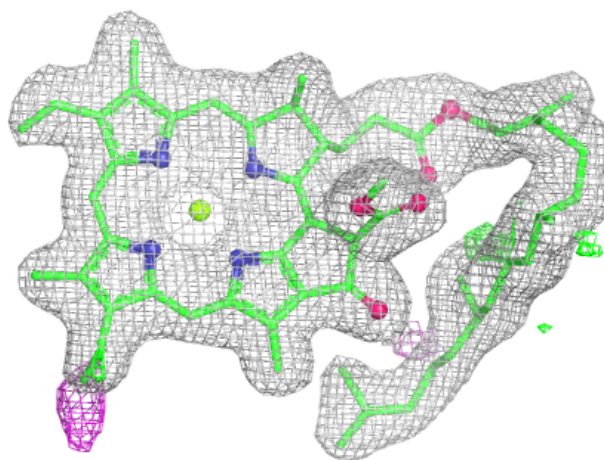
Electron density around CLA c 502:

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



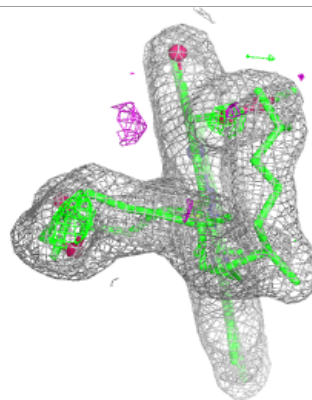
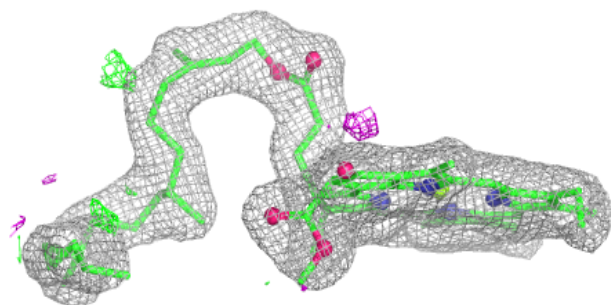
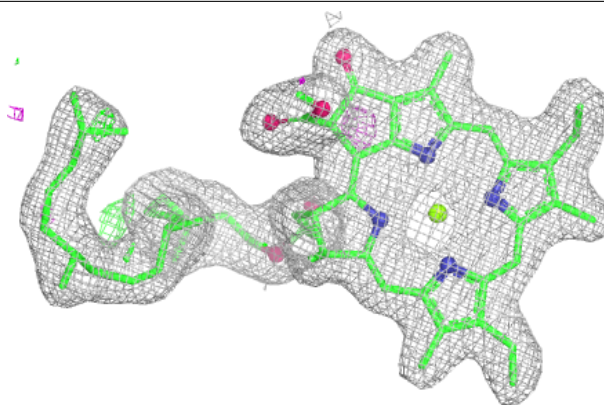
Electron density around CLA B 610:

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

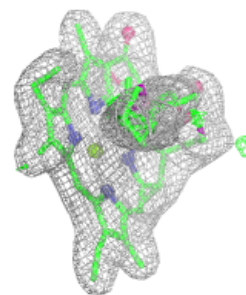
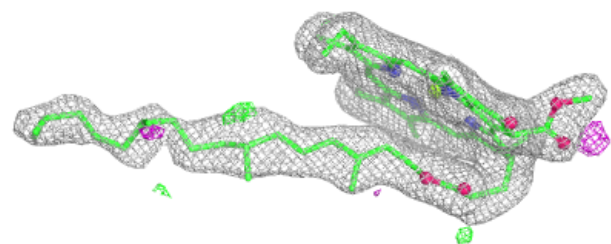
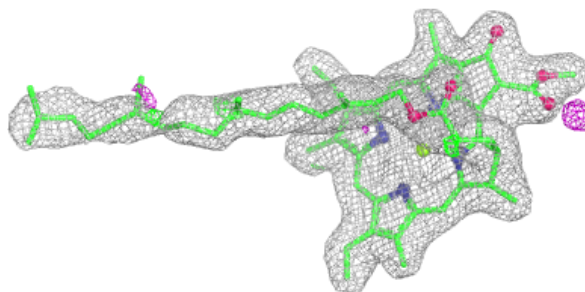


Electron density around CLA B 612:

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

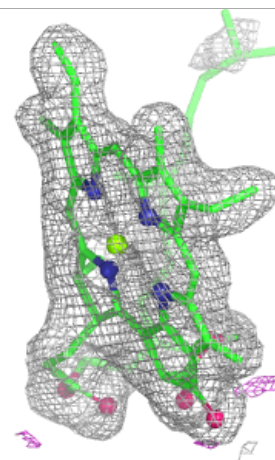
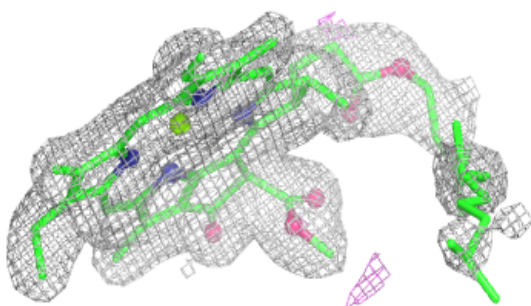
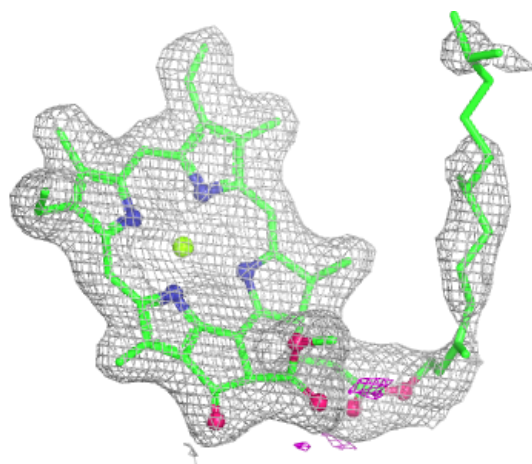
**Electron density around CLA B 614:**

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



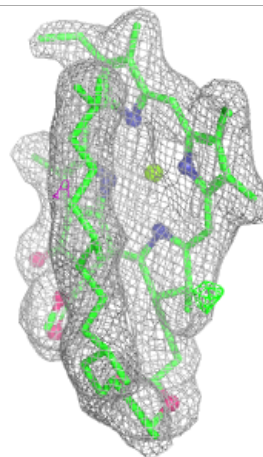
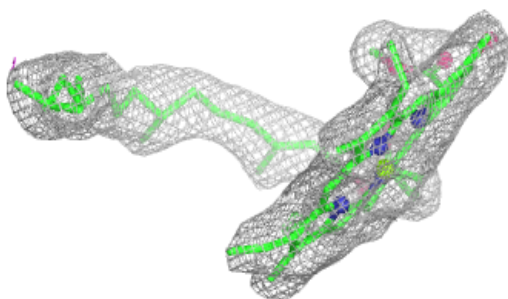
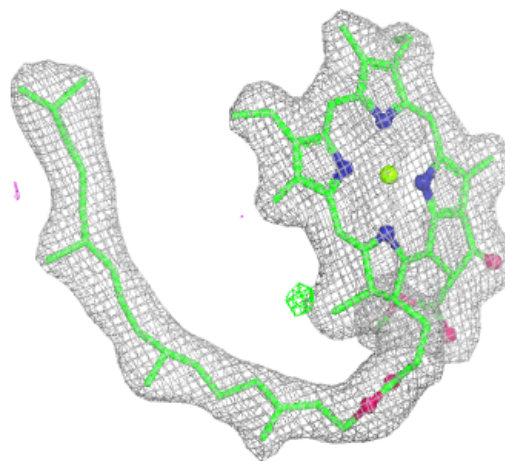
Electron density around CLA B 616:

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



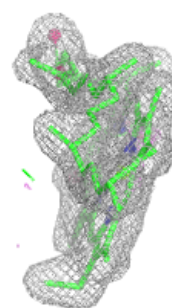
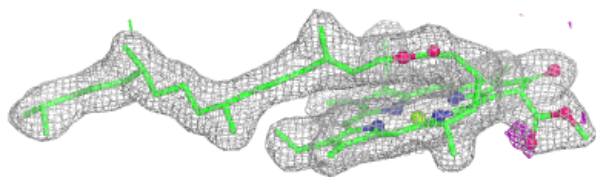
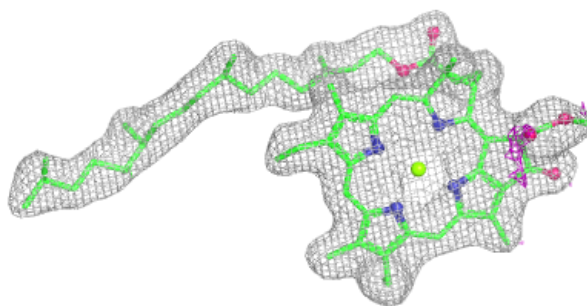
Electron density around CLA c 507:

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

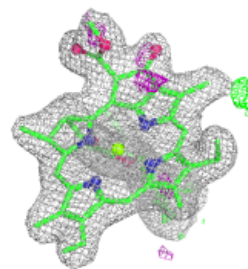
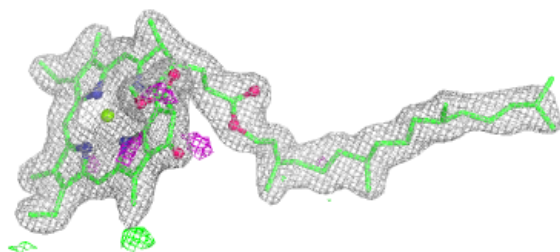
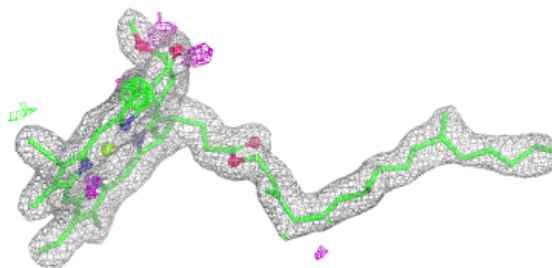


Electron density around CLA C 501:

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

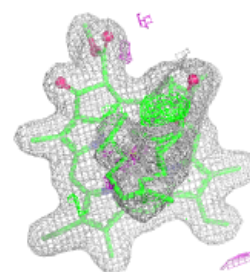
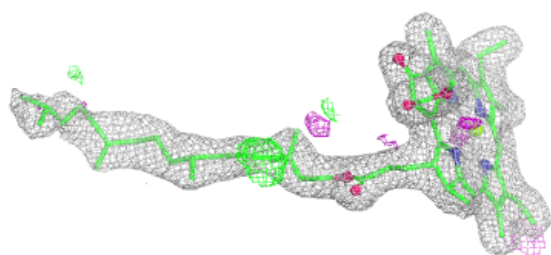
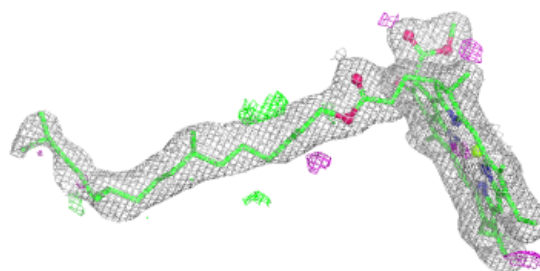
**Electron density around CLA C 502:**

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

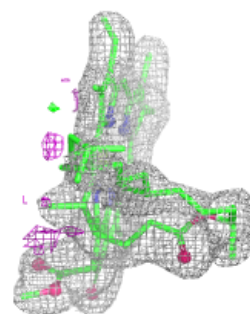
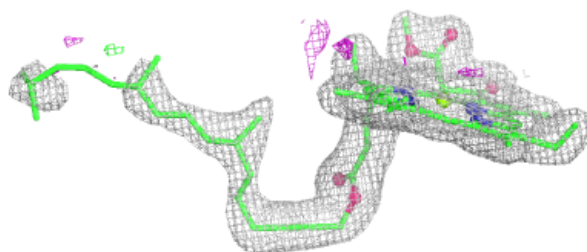
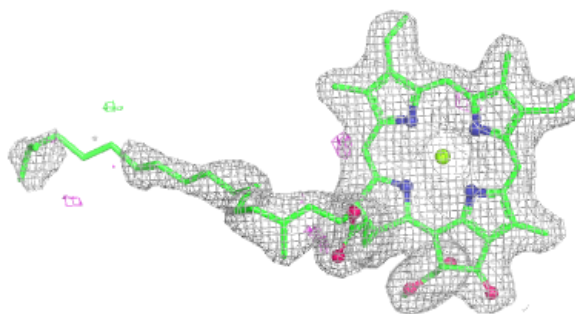


Electron density around CLA B 604:

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

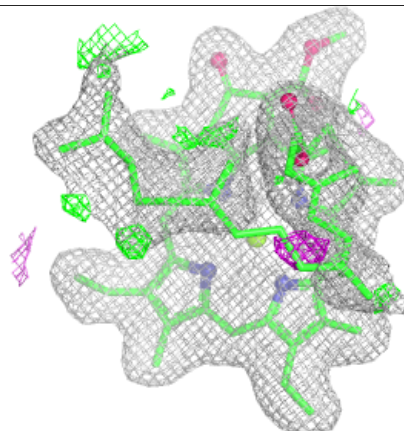
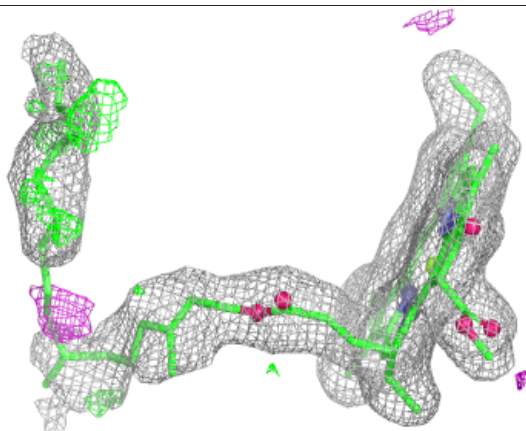
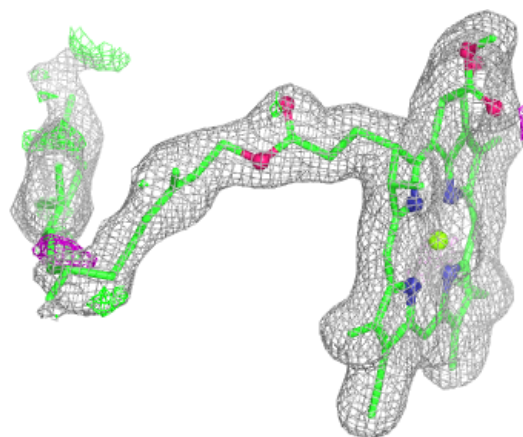
**Electron density around CLA a 608:**

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

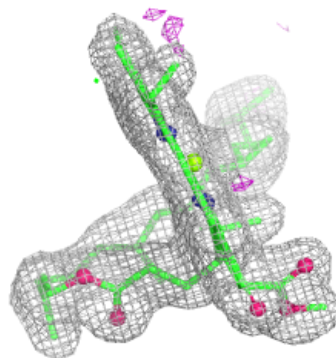
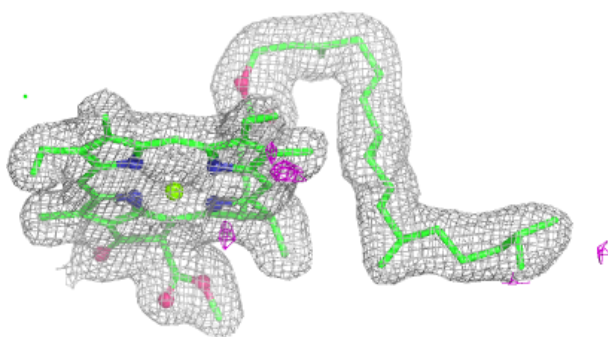
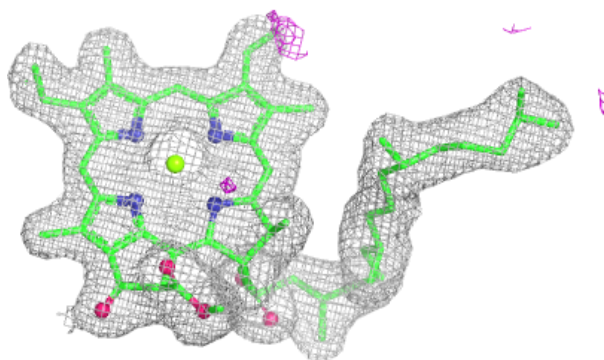


Electron density around CLA a 610:

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

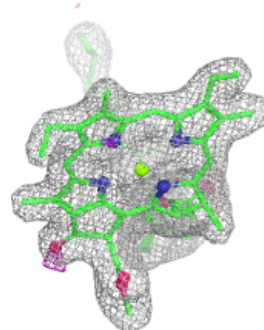
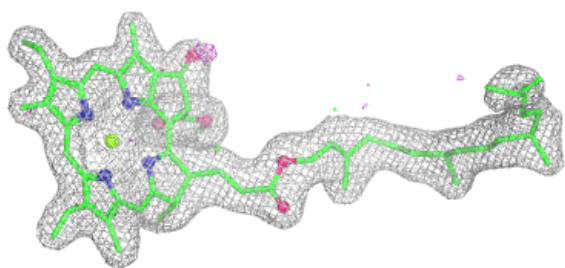
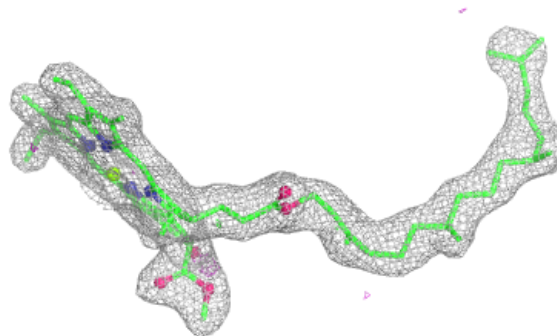
**Electron density around CLA a 613:**

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

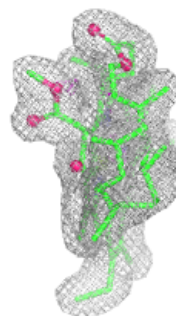
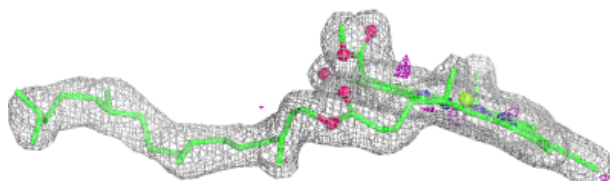
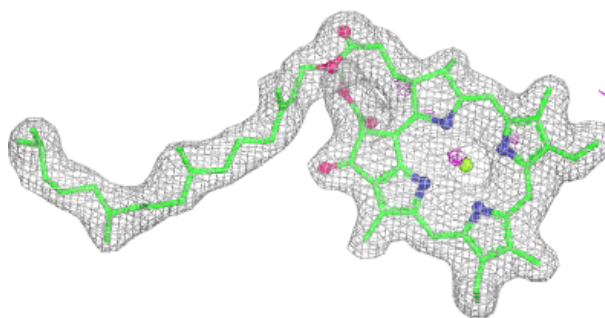


Electron density around CLA d 402:

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

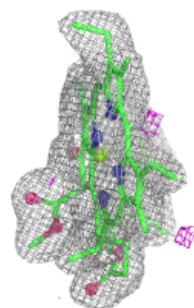
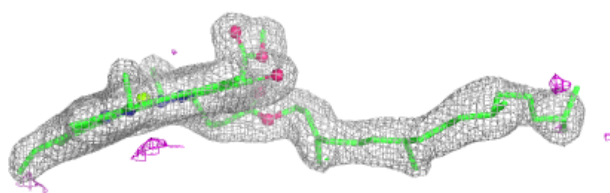
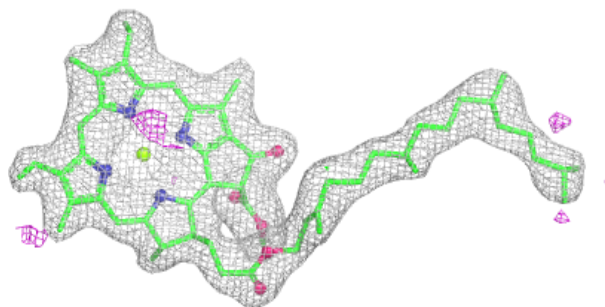
**Electron density around CLA B 602:**

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

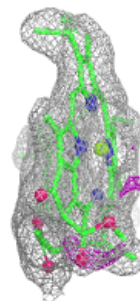
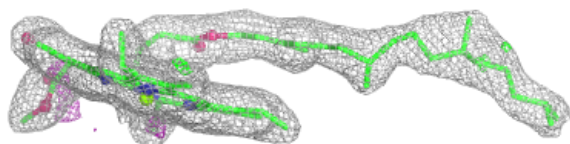
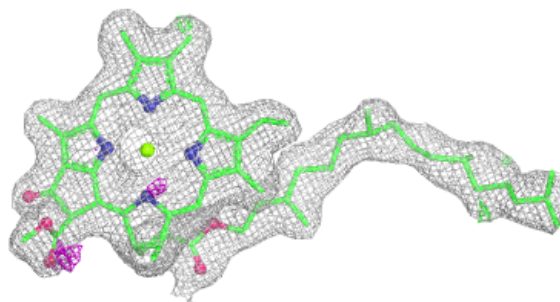


Electron density around CLA b 602:

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

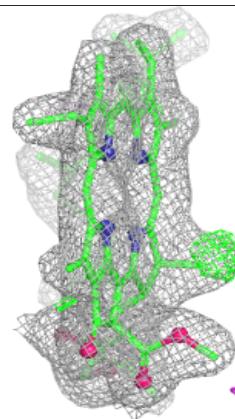
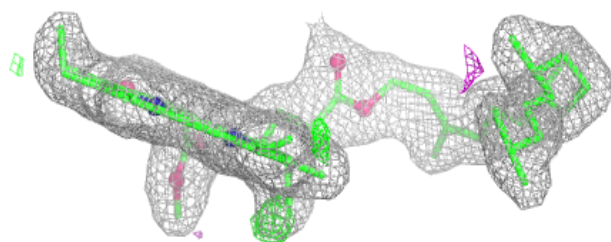
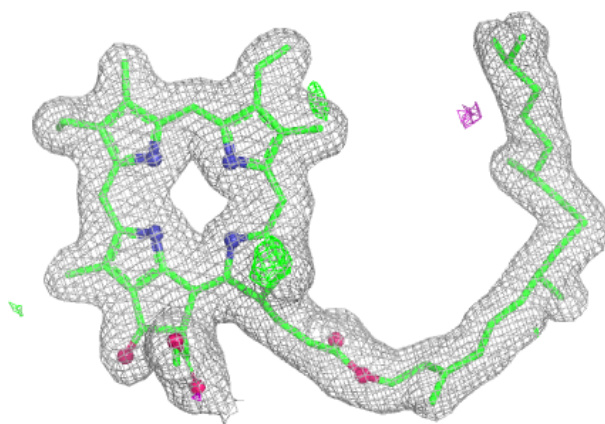
**Electron density around CLA b 603:**

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



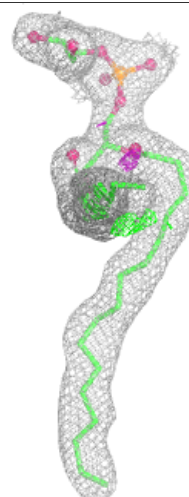
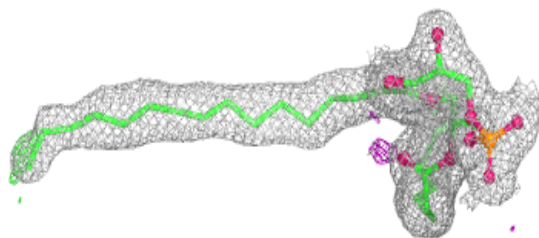
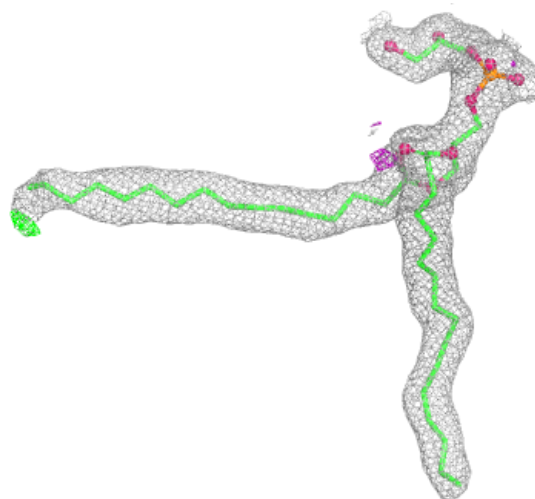
Electron density around PHO a 609:

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



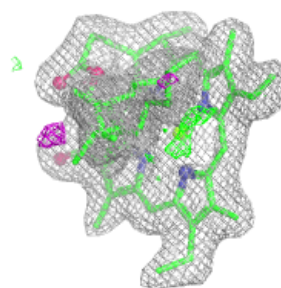
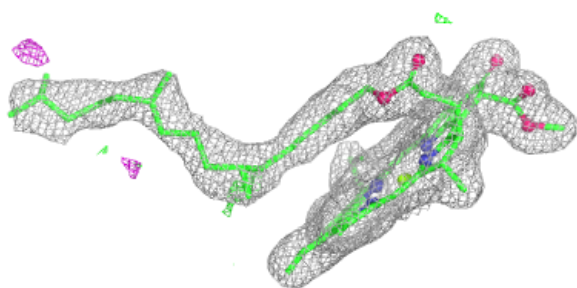
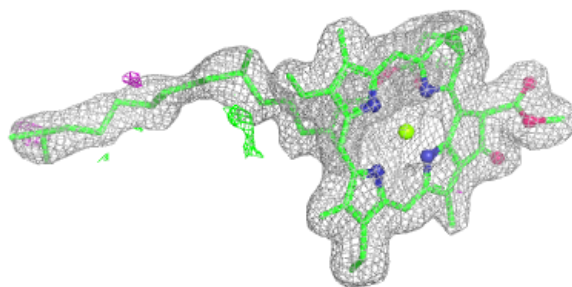
Electron density around LHG B 622:

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

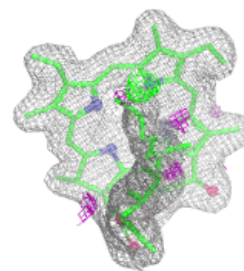
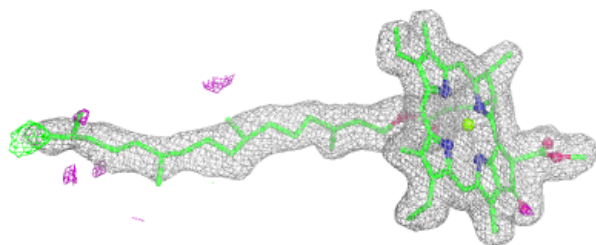
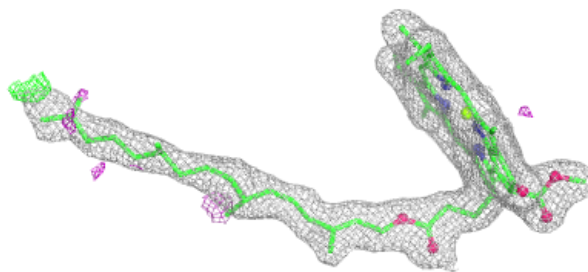


Electron density around CLA C 505:

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

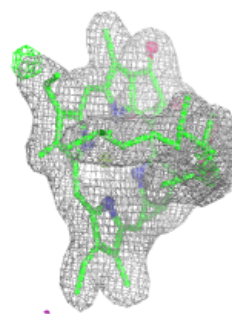
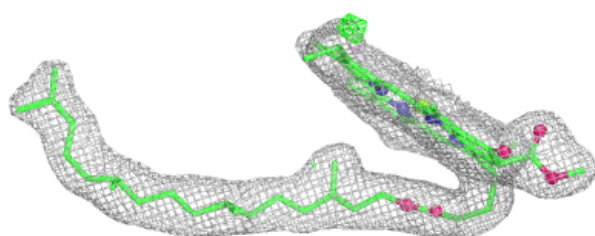
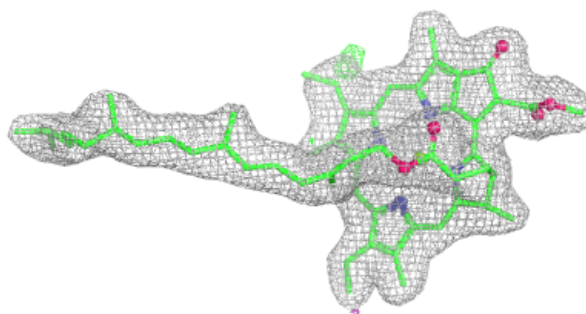
**Electron density around CLA b 607:**

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

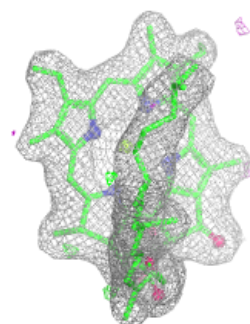
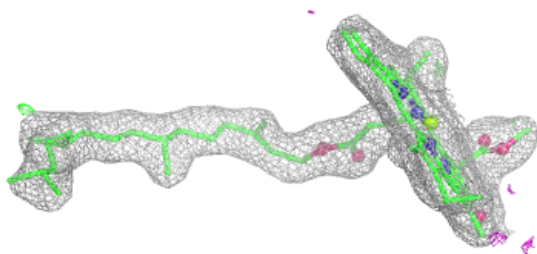
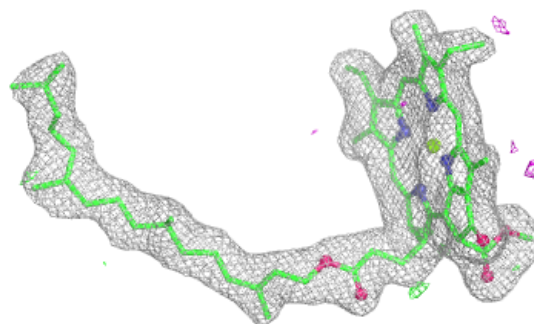


Electron density around CLA b 608:

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

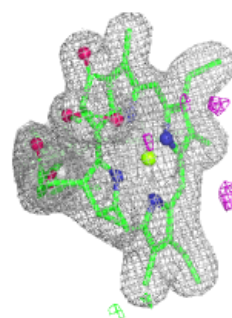
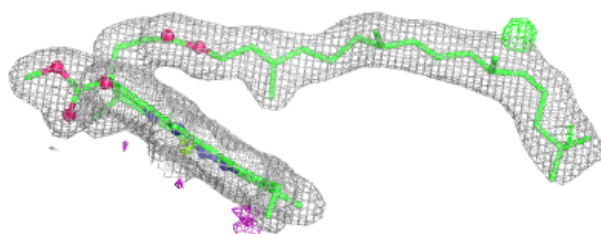
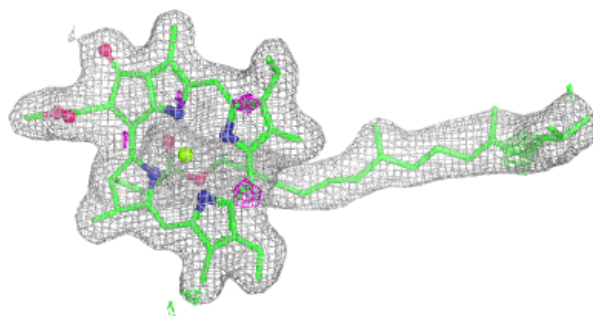
**Electron density around CLA b 609:**

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

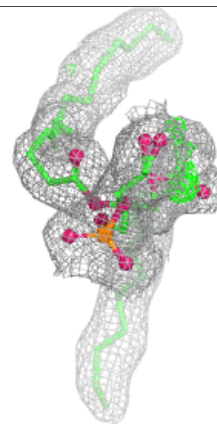
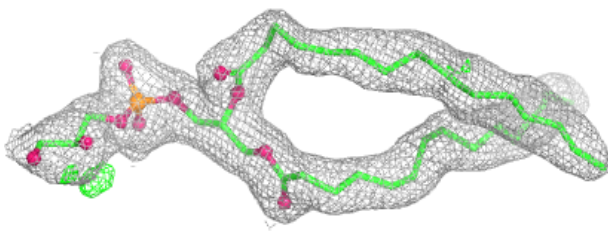
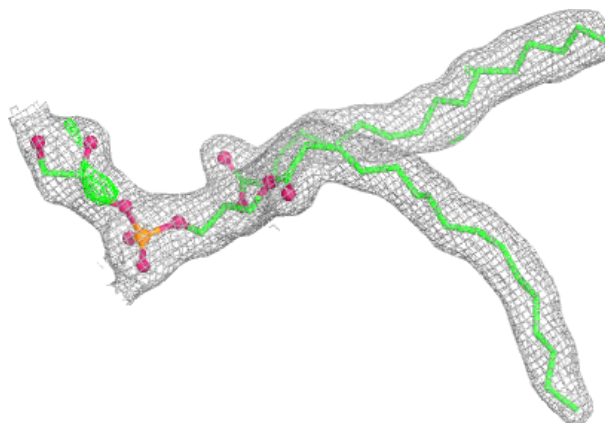


Electron density around CLA B 608:

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

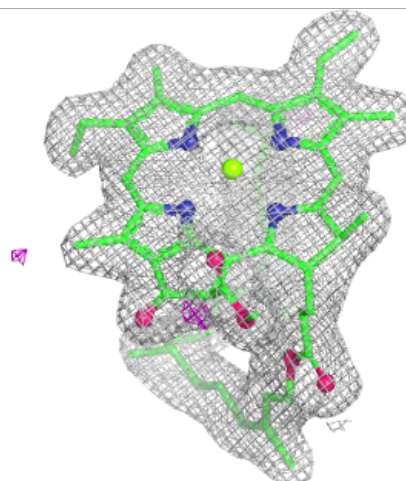
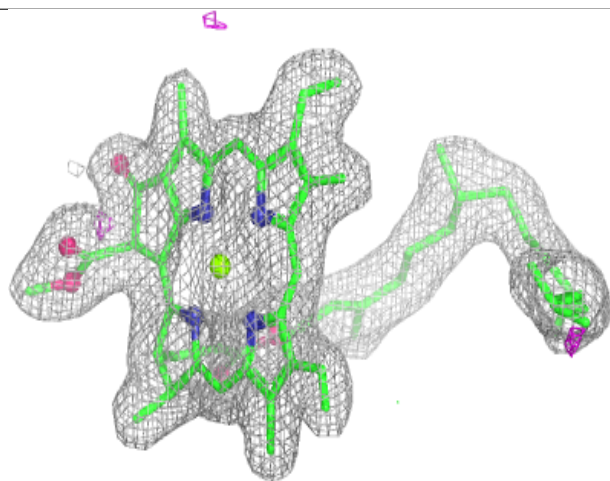
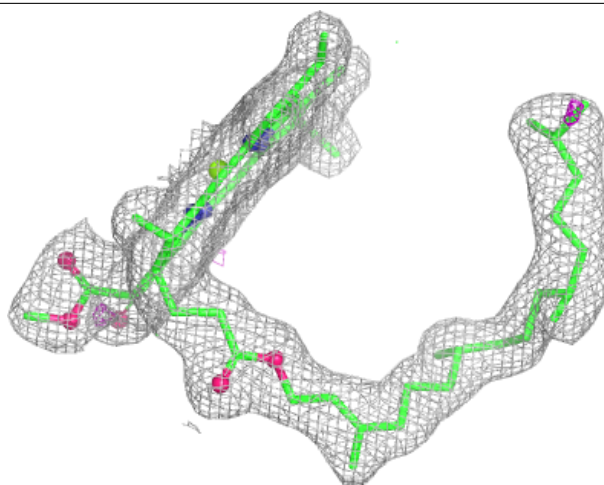
**Electron density around LHG d 408:**

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



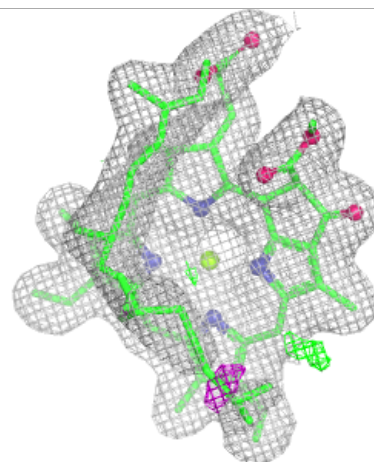
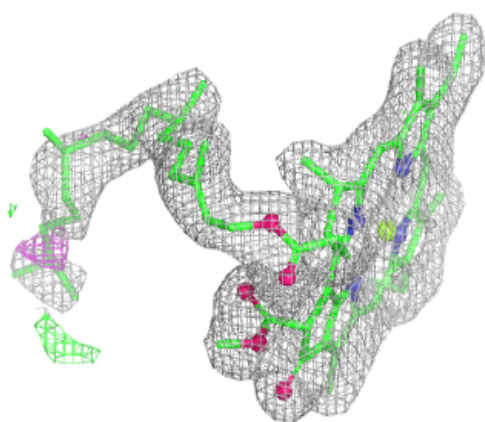
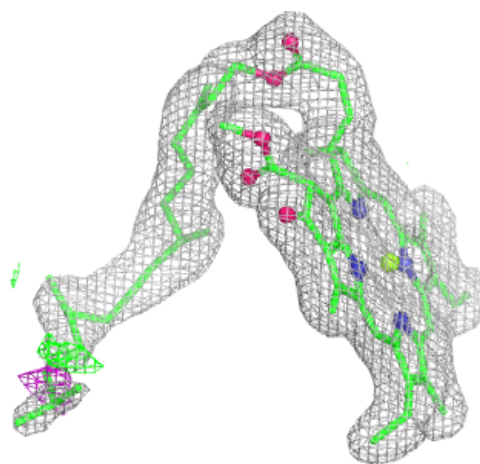
Electron density around CLA b 611:

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



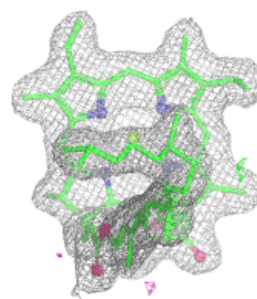
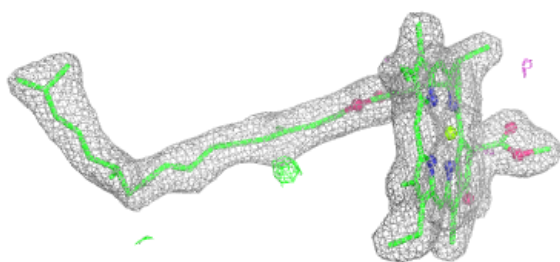
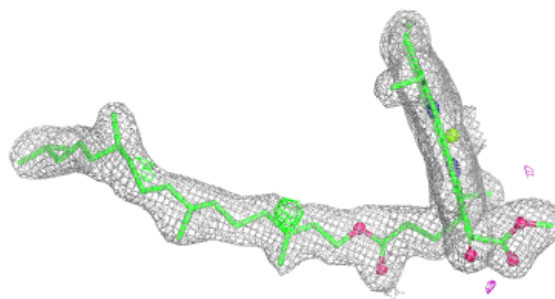
Electron density around CLA b 613:

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



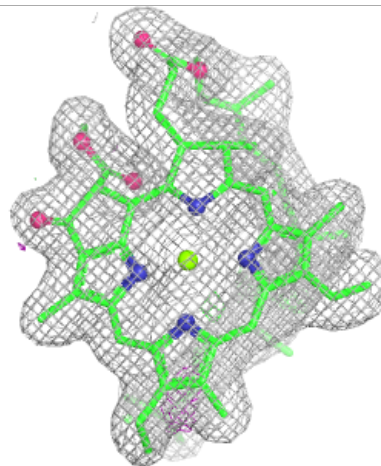
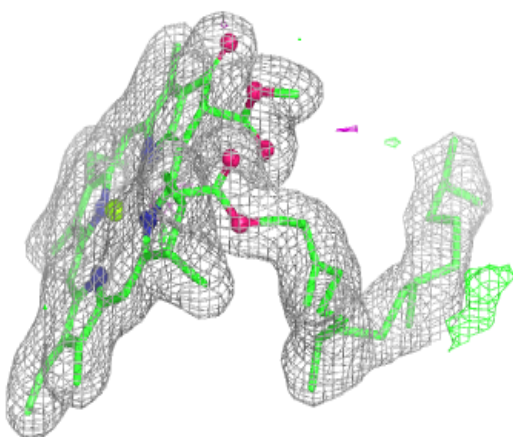
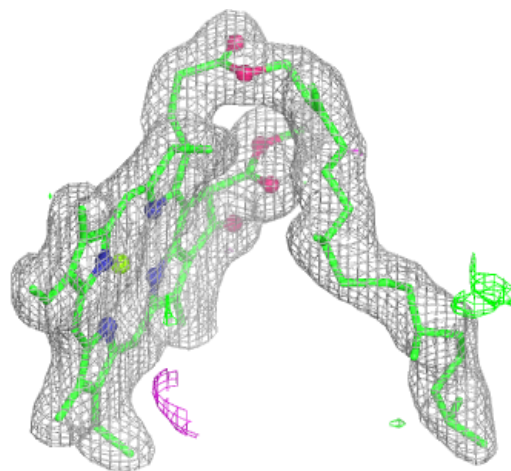
Electron density around CLA b 605:

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



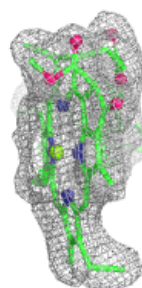
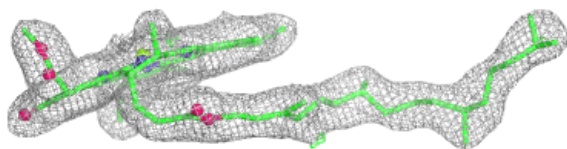
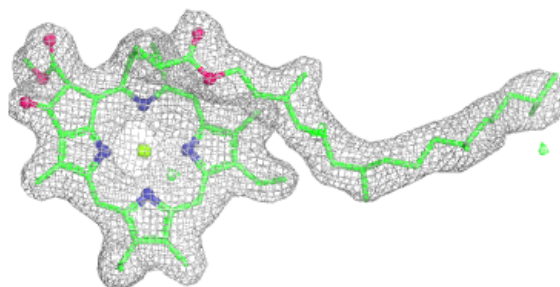
Electron density around CLA B 613:

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



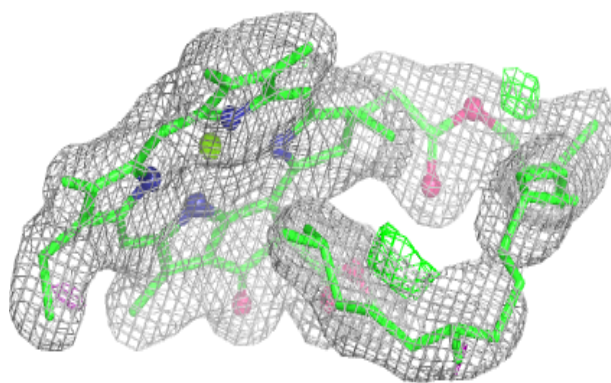
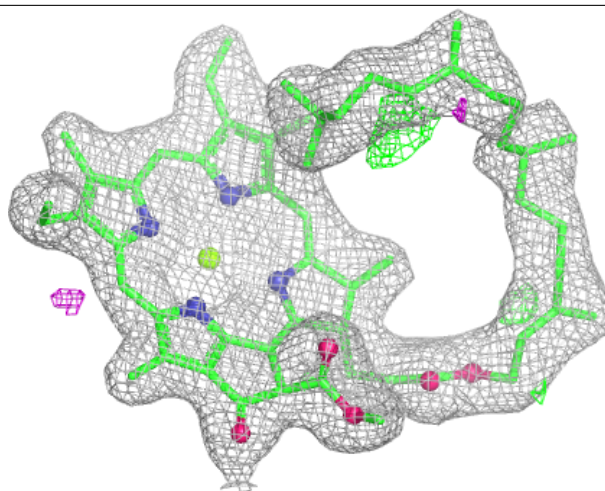
Electron density around CLA B 603:

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



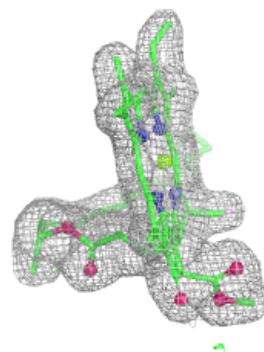
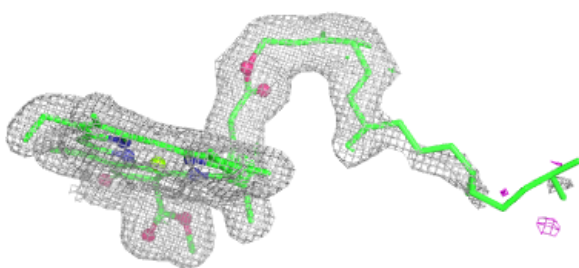
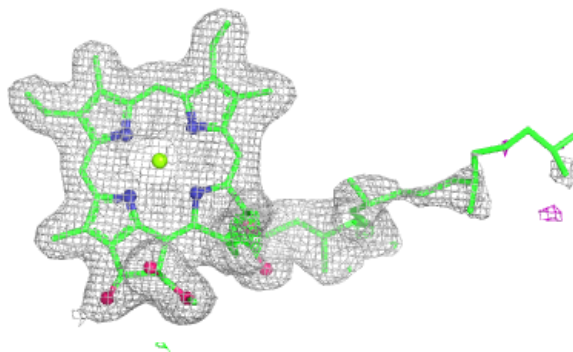
Electron density around CLA B 615:

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

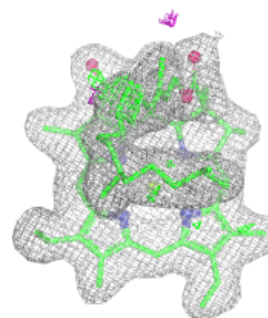
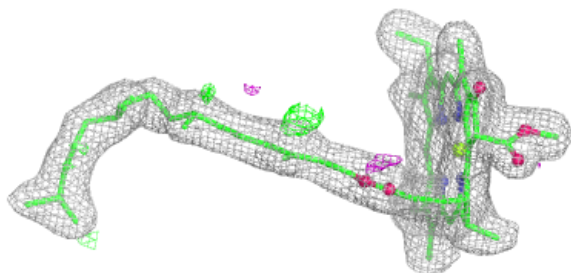
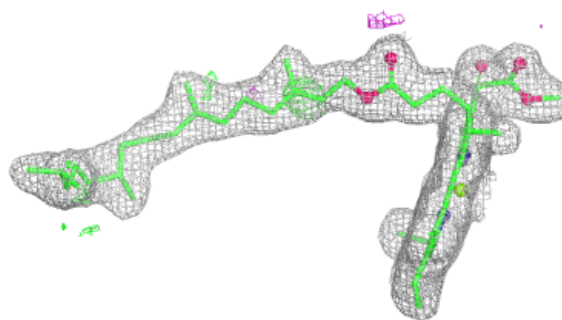


Electron density around CLA A 608:

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

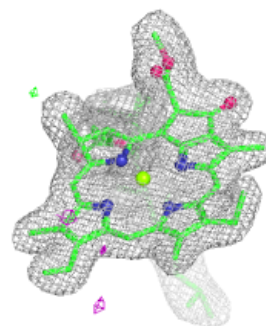
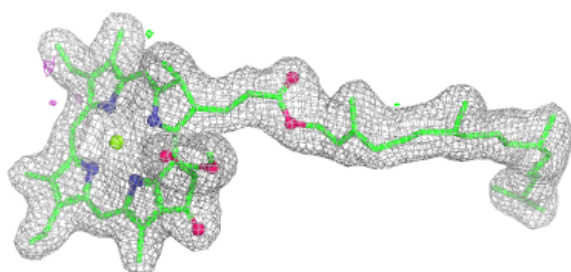
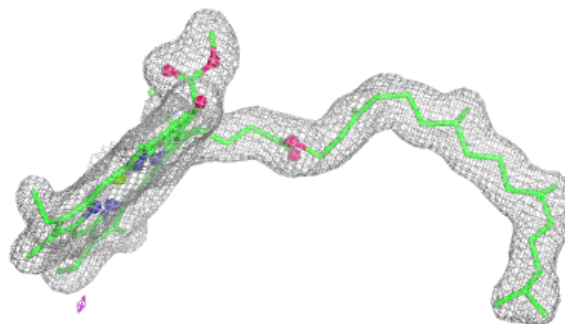
**Electron density around CLA B 605:**

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

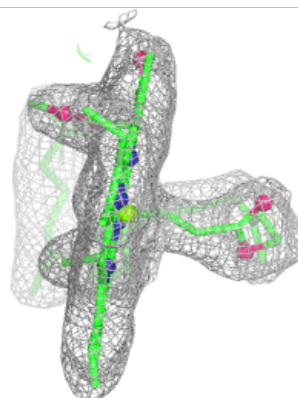
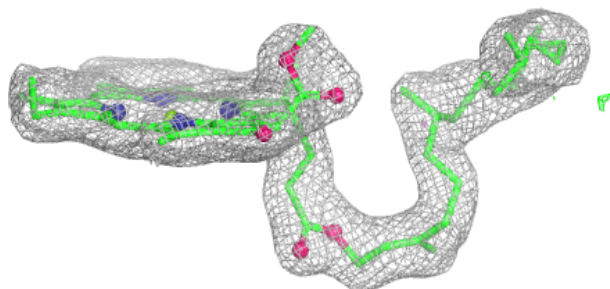
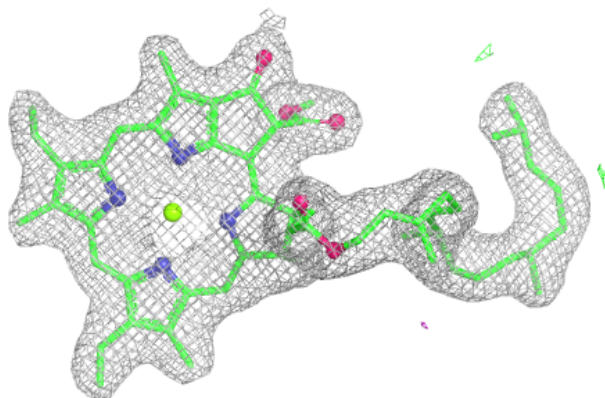


Electron density around CLA D 402:

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

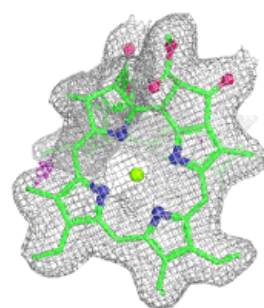
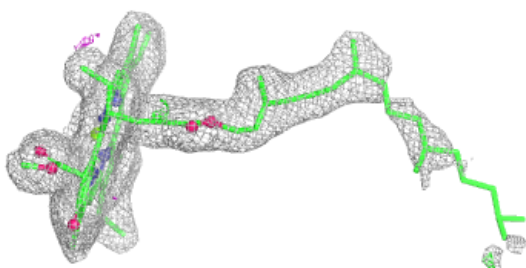
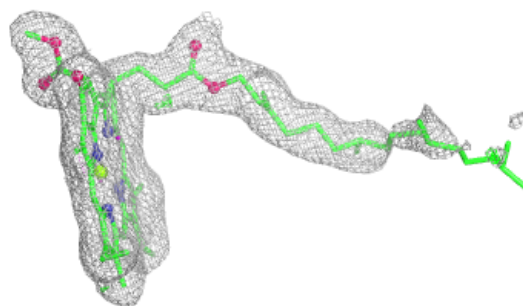
**Electron density around CLA b 612:**

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



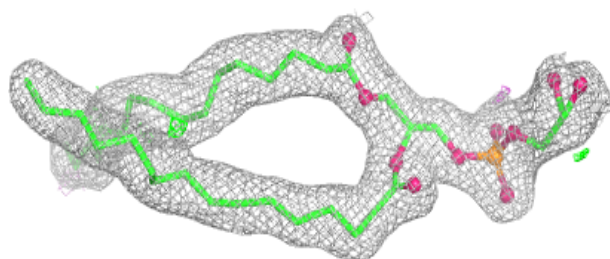
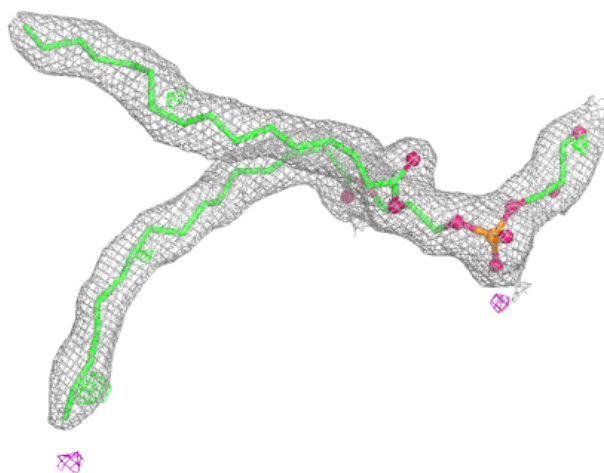
Electron density around CLA D 403:

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



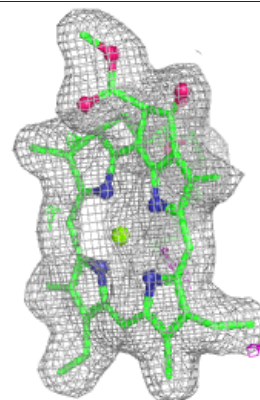
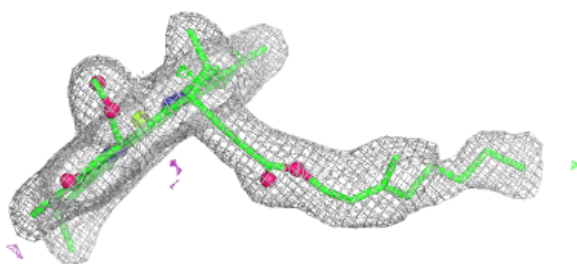
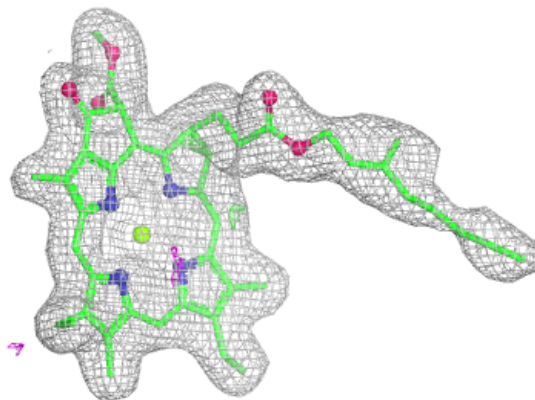
Electron density around LHG D 408:

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

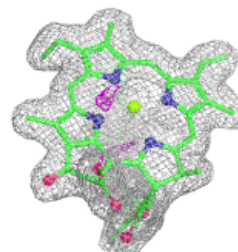
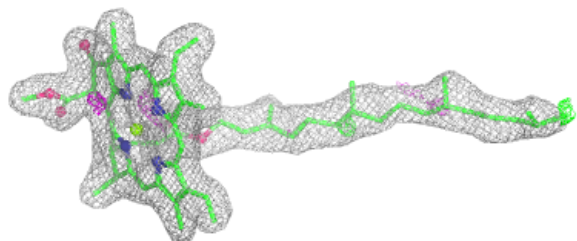
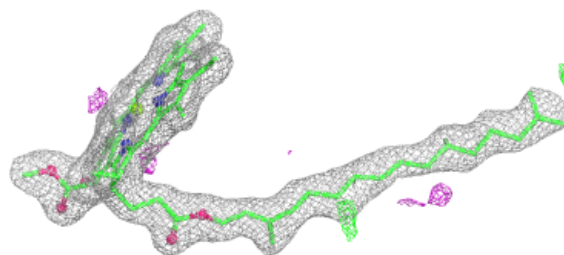


Electron density around CLA A 610:

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

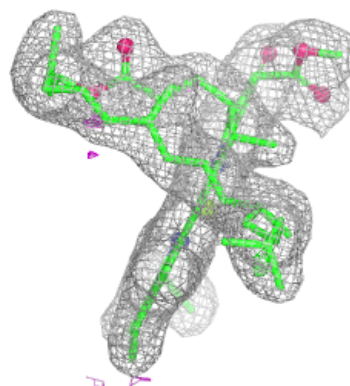
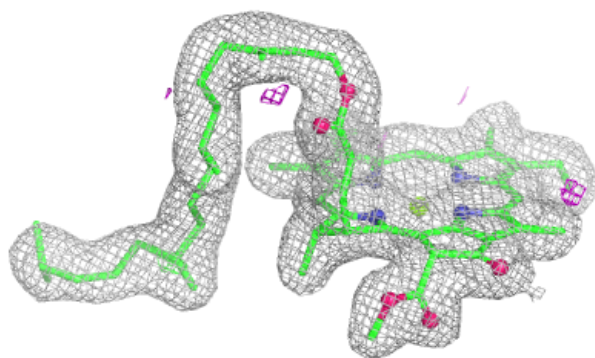
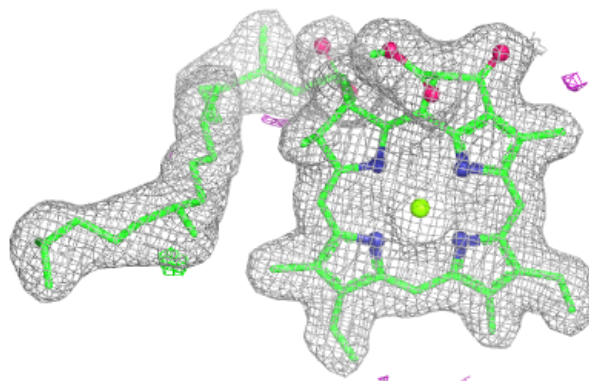
**Electron density around CLA B 607:**

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

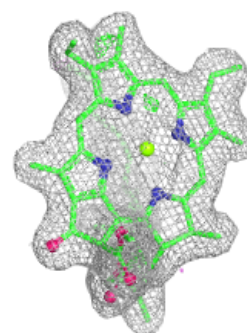
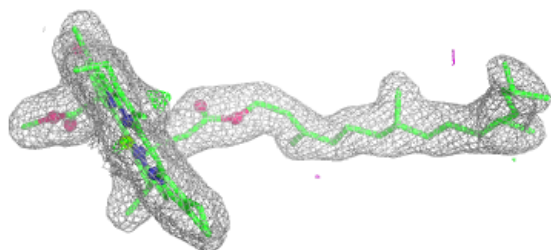
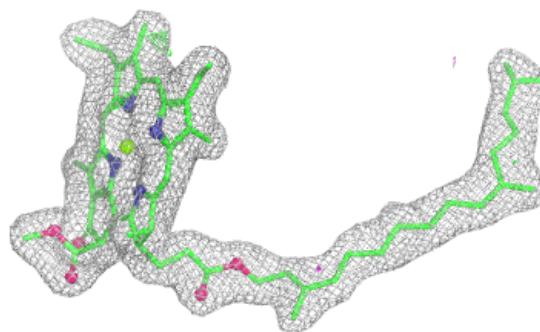


Electron density around CLA A 614:

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

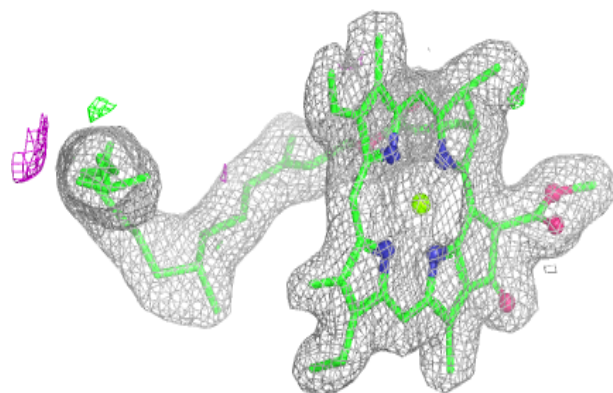
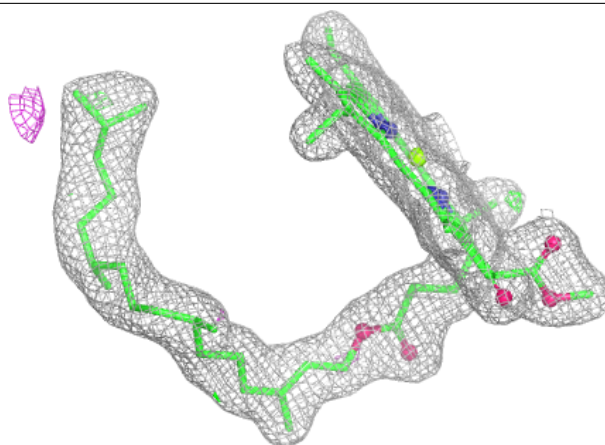
**Electron density around CLA B 609:**

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



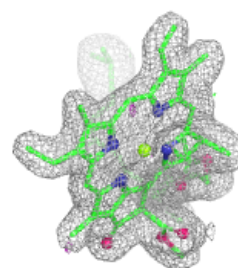
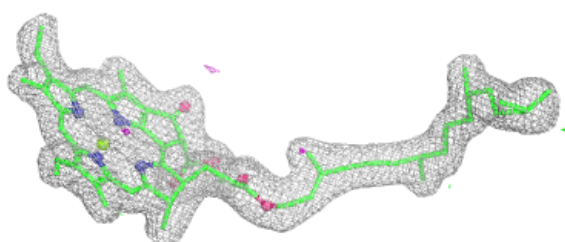
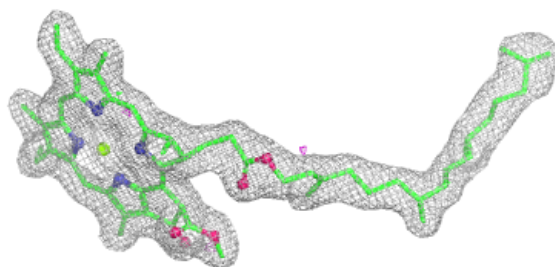
Electron density around CLA B 611:

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

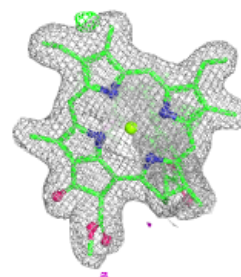
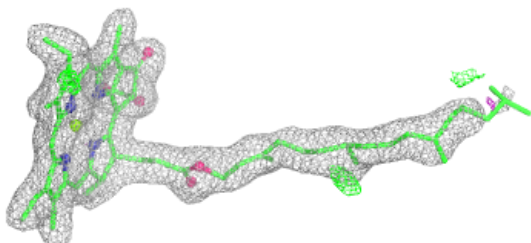
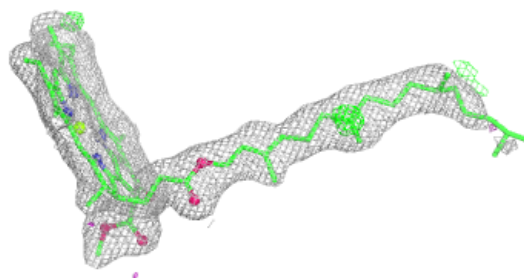


Electron density around CLA A 607:

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

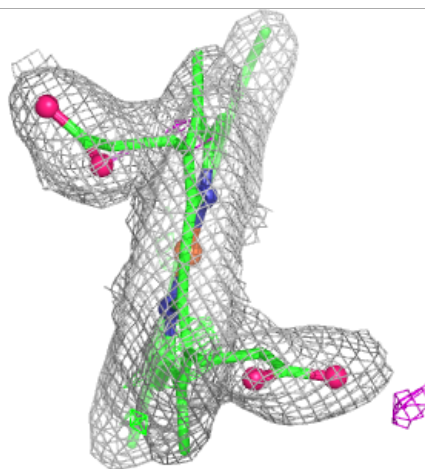
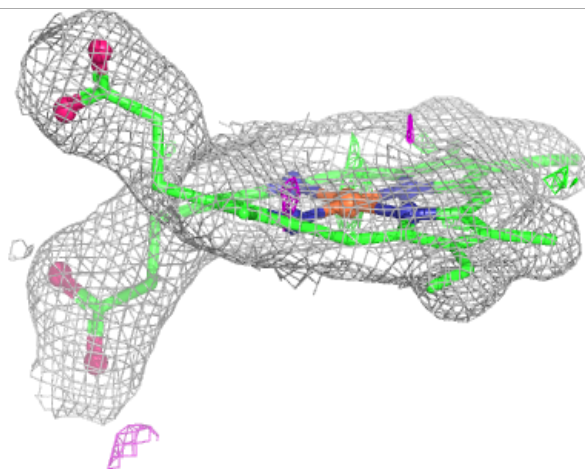
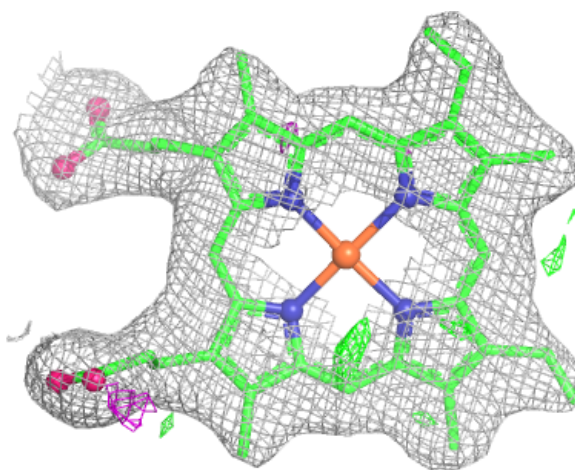
**Electron density around CLA b 604:**

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



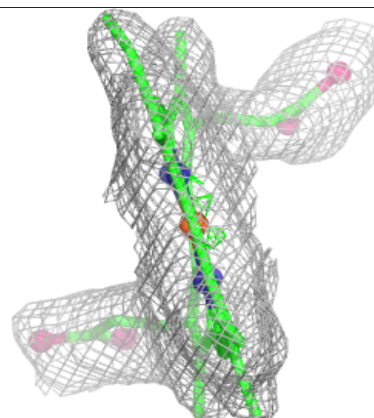
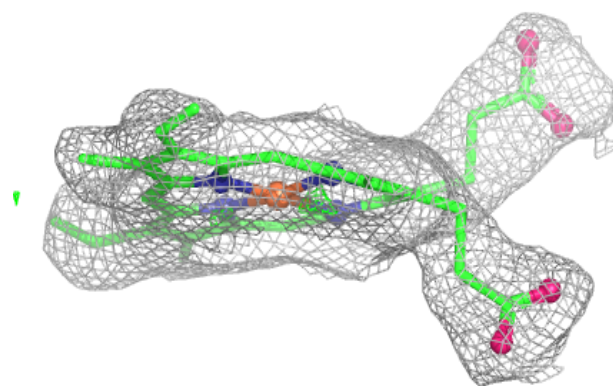
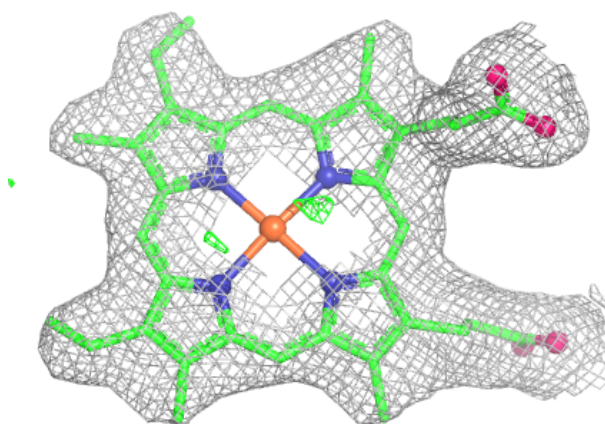
Electron density around HEM F 101:

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



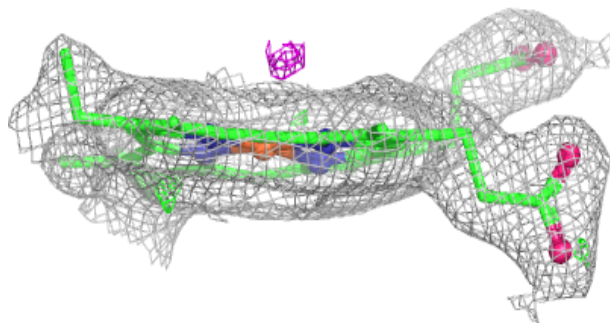
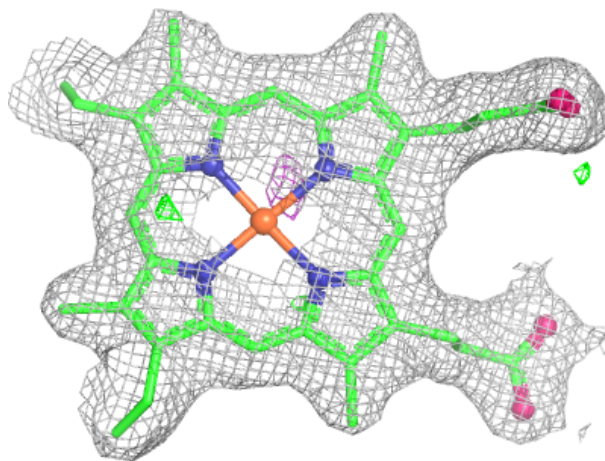
Electron density around HEM e 102:

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



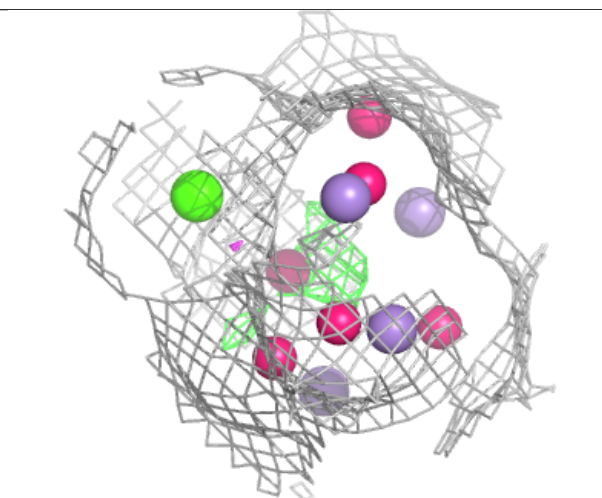
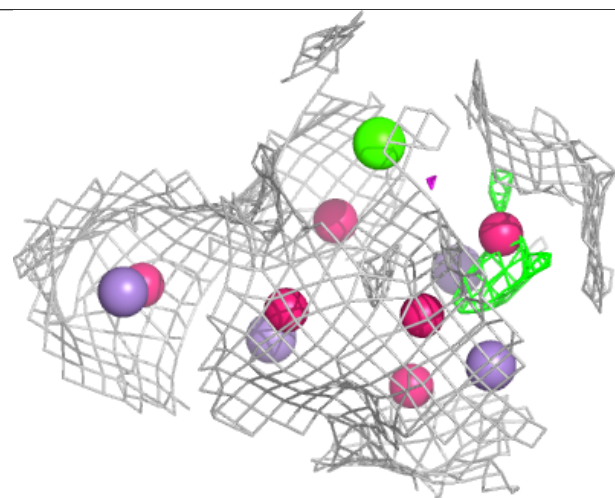
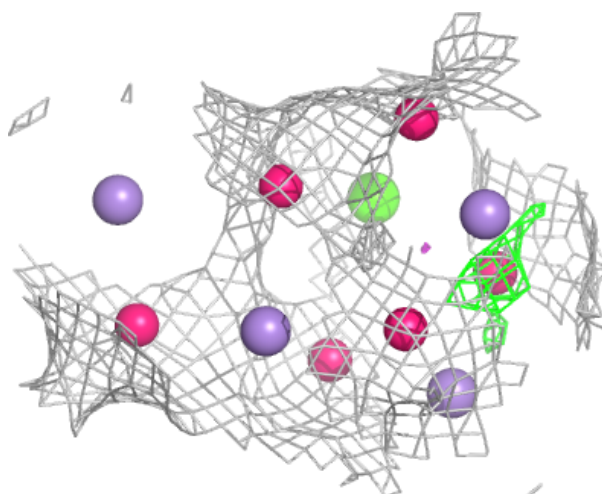
Electron density around HEC v 201:

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



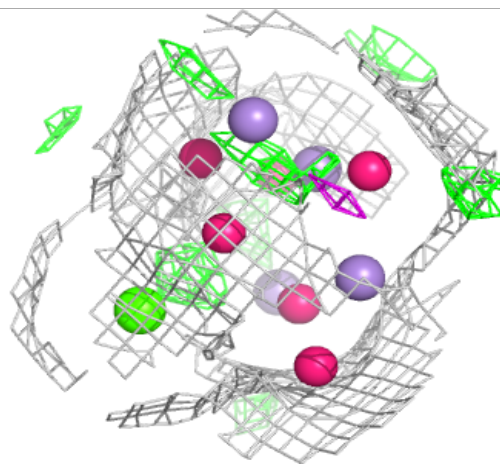
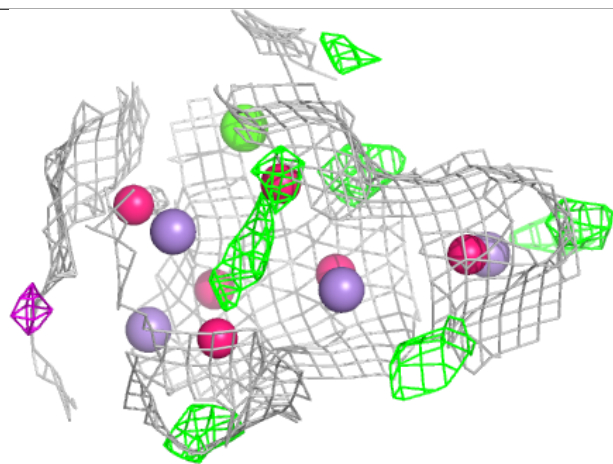
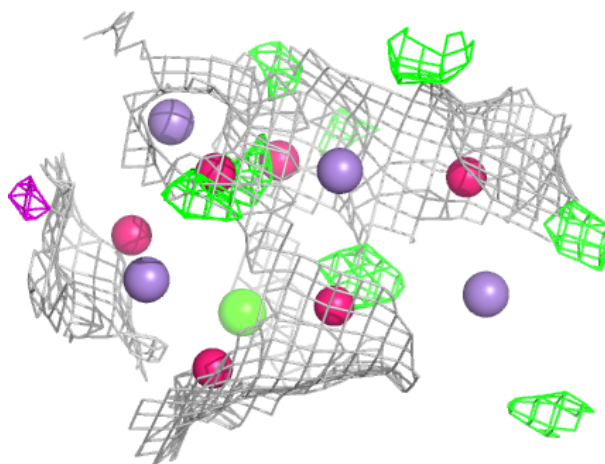
Electron density around OEY A 601 (B):

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



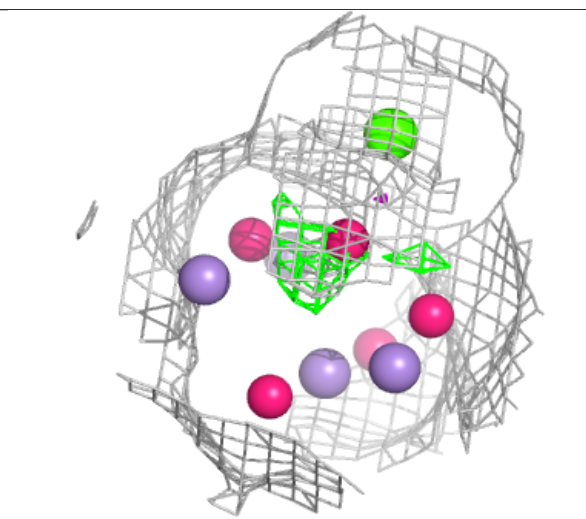
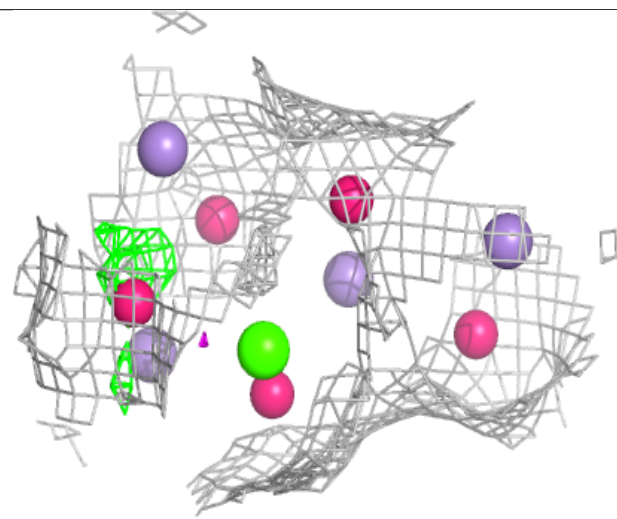
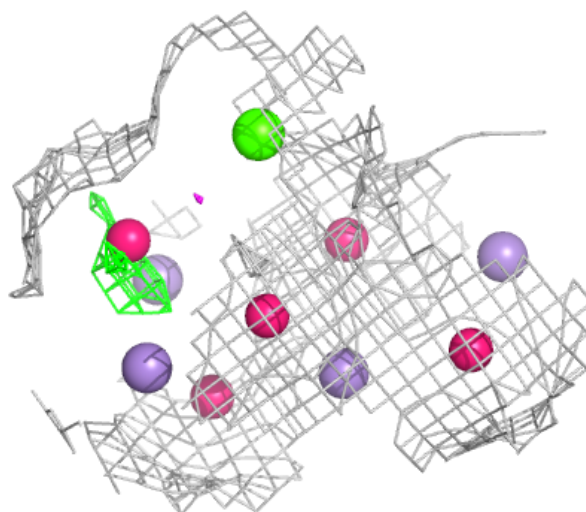
Electron density around OEY a 601 (B):

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



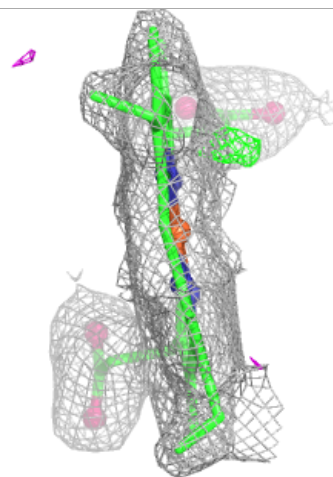
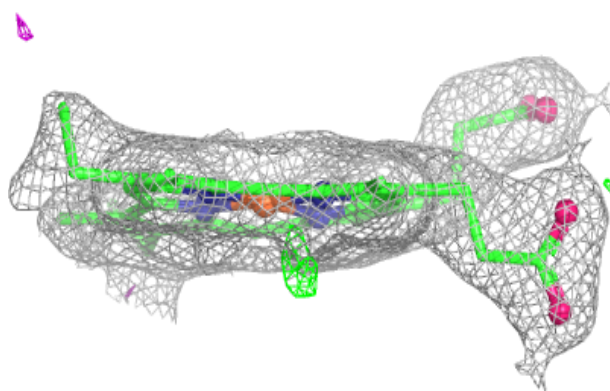
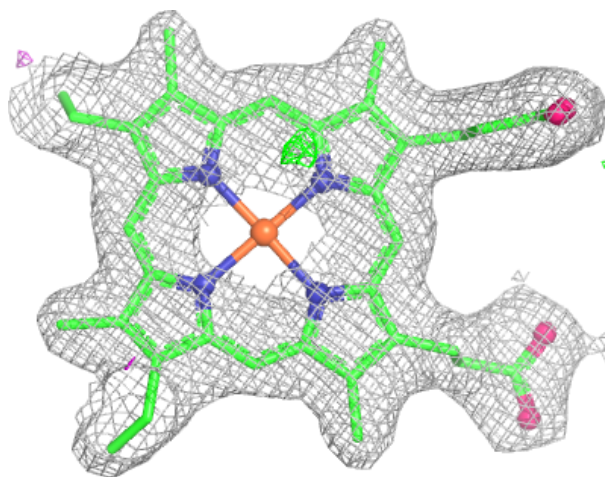
Electron density around OEX A 602 (A):

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



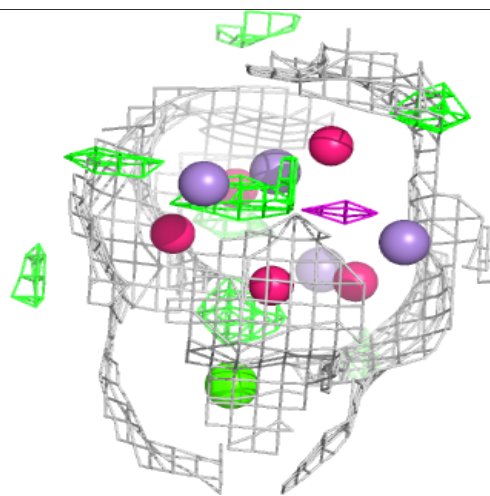
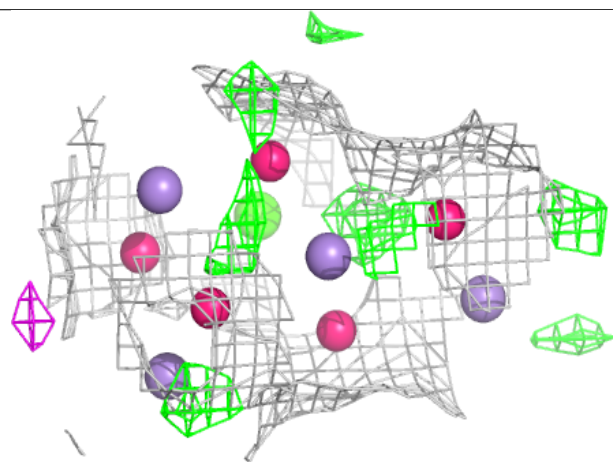
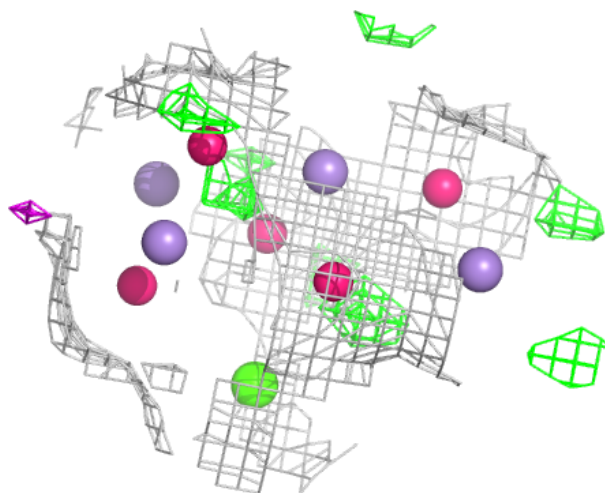
Electron density around HEC V 201:

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



Electron density around OEX a 602 (A):

$2mF_o-DF_c$ (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.