wwPDB X-ray Structure Validation Summary Report (i)

Mar 5, 2024 – 11:34 AM EST

PDB ID	:	2PNO
Title	:	Crystal structure of human leukotriene C4 synthase
Authors	:	Ago, H.; Kanaoka, Y.; Irikura, D.; Lam, B.K.; Shimamura, T.; Austen, K.F.; Miyano, M.
Deposited on	:	2007-04-24
Resolution	:	3.30 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 (i) symbol.

The types of validation reports are described at
http://www.wwpdb.org/validation/2017/FAQs#types.

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

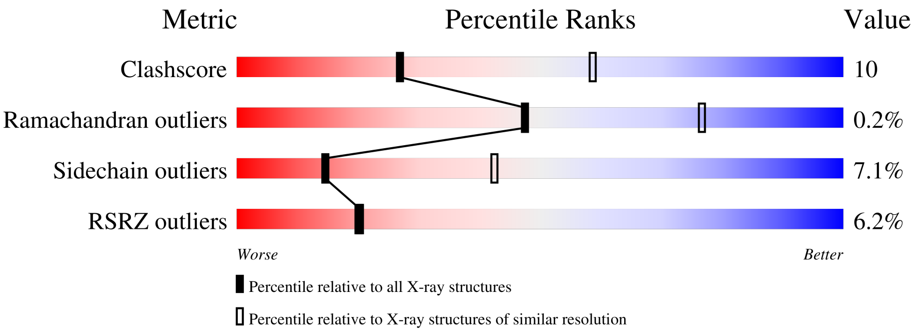
MolProbity	:	4.02b-467
Mogul	:	1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	2.36
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.36

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 3.30 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))
Clashscore	141614	1205 (3.34-3.26)
Ramachandran outliers	138981	1183 (3.34-3.26)
Sidechain outliers	138945	1182 (3.34-3.26)
RSRZ outliers	127900	1115 (3.34-3.26)

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 <=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	156	3% / 76% 16% • 6%
1	B	156	3% / 77% 14% • 6%
1	C	156	8% / 74% 17% • 6%
1	D	156	10% / 65% 26% • 6%
1	E	156	3% / 72% 19% • 6%
1	F	156	2% / 68% 24% • 6%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
1	G	156	4% 74% 18% • 6%
1	H	156	3% 74% 19% • 6%
1	I	156	14% 76% 17% • 6%
1	J	156	5% 74% 17% • 6%
1	K	156	9% 65% 26% • 6%
1	L	156	4% 77% 15% • 6%

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
3	LMT	A	256	-	-	-	X
3	LMT	A	262	-	-	-	X
3	LMT	B	213	-	-	-	X
3	LMT	B	218	-	-	-	X
3	LMT	B	227	-	-	-	X
3	LMT	B	242	-	-	-	X
3	LMT	B	260	-	-	-	X
3	LMT	C	214	-	-	-	X
3	LMT	C	216	-	-	-	X
3	LMT	C	237	-	-	-	X
3	LMT	D	238	-	-	-	X
3	LMT	E	230	-	-	-	X
3	LMT	E	231	-	-	-	X
3	LMT	E	263	-	-	-	X
3	LMT	E	266	-	-	-	X
3	LMT	E	269	-	-	-	X
3	LMT	F	233	-	-	-	X
3	LMT	F	241	-	-	-	X
3	LMT	G	235	-	-	-	X
3	LMT	G	251	-	-	-	X
3	LMT	G	267	-	-	-	X
3	LMT	H	234	-	-	-	X
3	LMT	H	250	-	-	-	X
3	LMT	I	240	-	-	-	X
3	LMT	J	239	-	-	-	X
3	LMT	K	225	-	-	-	X
3	LMT	L	226	-	-	-	X

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
3	LMT	L	265	-	-	-	X

2 Entry composition (i)

There are 3 unique types of molecules in this entry. The entry contains 14603 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 Leukotriene C4 synthase.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	146	Total 1115	C 743	N 189	O 181	S 2	0	0	0
1	B	146	Total 1129	C 757	N 189	O 181	S 2	0	1	0
1	C	146	Total 1129	C 750	N 195	O 182	S 2	0	0	0
1	D	146	Total 1123	C 754	N 186	O 181	S 2	0	1	0
1	E	146	Total 1131	C 758	N 189	O 182	S 2	0	1	0
1	F	146	Total 1121	C 753	N 186	O 180	S 2	0	1	0
1	G	146	Total 1102	C 742	N 177	O 181	S 2	0	1	0
1	H	146	Total 1122	C 752	N 186	O 182	S 2	0	1	0
1	I	146	Total 1123	C 754	N 186	O 181	S 2	0	1	0
1	J	146	Total 1110	C 746	N 180	O 182	S 2	0	1	0
1	K	146	Total 1114	C 748	N 183	O 181	S 2	0	1	0
1	L	146	Total 1114	C 745	N 186	O 181	S 2	0	1	0

There are 72 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	151	HIS	-	expression tag	UNP Q16873
A	152	HIS	-	expression tag	UNP Q16873
A	153	HIS	-	expression tag	UNP Q16873
A	154	HIS	-	expression tag	UNP Q16873
A	155	HIS	-	expression tag	UNP Q16873

Continued on next page...

Continued from previous page...

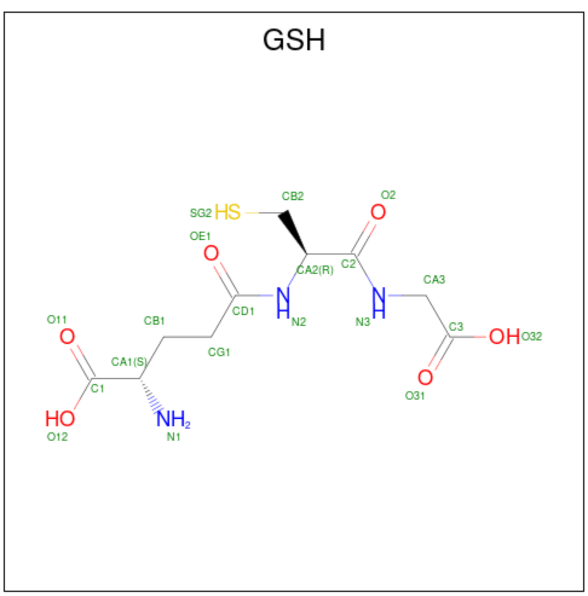
Chain	Residue	Modelled	Actual	Comment	Reference
A	156	HIS	-	expression tag	UNP Q16873
B	151	HIS	-	expression tag	UNP Q16873
B	152	HIS	-	expression tag	UNP Q16873
B	153	HIS	-	expression tag	UNP Q16873
B	154	HIS	-	expression tag	UNP Q16873
B	155	HIS	-	expression tag	UNP Q16873
B	156	HIS	-	expression tag	UNP Q16873
C	151	HIS	-	expression tag	UNP Q16873
C	152	HIS	-	expression tag	UNP Q16873
C	153	HIS	-	expression tag	UNP Q16873
C	154	HIS	-	expression tag	UNP Q16873
C	155	HIS	-	expression tag	UNP Q16873
C	156	HIS	-	expression tag	UNP Q16873
D	151	HIS	-	expression tag	UNP Q16873
D	152	HIS	-	expression tag	UNP Q16873
D	153	HIS	-	expression tag	UNP Q16873
D	154	HIS	-	expression tag	UNP Q16873
D	155	HIS	-	expression tag	UNP Q16873
D	156	HIS	-	expression tag	UNP Q16873
E	151	HIS	-	expression tag	UNP Q16873
E	152	HIS	-	expression tag	UNP Q16873
E	153	HIS	-	expression tag	UNP Q16873
E	154	HIS	-	expression tag	UNP Q16873
E	155	HIS	-	expression tag	UNP Q16873
E	156	HIS	-	expression tag	UNP Q16873
F	151	HIS	-	expression tag	UNP Q16873
F	152	HIS	-	expression tag	UNP Q16873
F	153	HIS	-	expression tag	UNP Q16873
F	154	HIS	-	expression tag	UNP Q16873
F	155	HIS	-	expression tag	UNP Q16873
F	156	HIS	-	expression tag	UNP Q16873
G	151	HIS	-	expression tag	UNP Q16873
G	152	HIS	-	expression tag	UNP Q16873
G	153	HIS	-	expression tag	UNP Q16873
G	154	HIS	-	expression tag	UNP Q16873
G	155	HIS	-	expression tag	UNP Q16873
G	156	HIS	-	expression tag	UNP Q16873
H	151	HIS	-	expression tag	UNP Q16873
H	152	HIS	-	expression tag	UNP Q16873
H	153	HIS	-	expression tag	UNP Q16873
H	154	HIS	-	expression tag	UNP Q16873
H	155	HIS	-	expression tag	UNP Q16873

Continued on next page...

Continued from previous page...

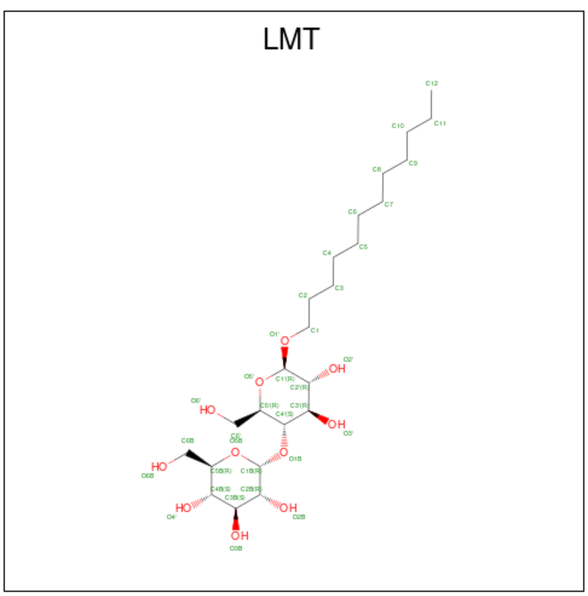
Chain	Residue	Modelled	Actual	Comment	Reference
H	156	HIS	-	expression tag	UNP Q16873
I	151	HIS	-	expression tag	UNP Q16873
I	152	HIS	-	expression tag	UNP Q16873
I	153	HIS	-	expression tag	UNP Q16873
I	154	HIS	-	expression tag	UNP Q16873
I	155	HIS	-	expression tag	UNP Q16873
I	156	HIS	-	expression tag	UNP Q16873
J	151	HIS	-	expression tag	UNP Q16873
J	152	HIS	-	expression tag	UNP Q16873
J	153	HIS	-	expression tag	UNP Q16873
J	154	HIS	-	expression tag	UNP Q16873
J	155	HIS	-	expression tag	UNP Q16873
J	156	HIS	-	expression tag	UNP Q16873
K	151	HIS	-	expression tag	UNP Q16873
K	152	HIS	-	expression tag	UNP Q16873
K	153	HIS	-	expression tag	UNP Q16873
K	154	HIS	-	expression tag	UNP Q16873
K	155	HIS	-	expression tag	UNP Q16873
K	156	HIS	-	expression tag	UNP Q16873
L	151	HIS	-	expression tag	UNP Q16873
L	152	HIS	-	expression tag	UNP Q16873
L	153	HIS	-	expression tag	UNP Q16873
L	154	HIS	-	expression tag	UNP Q16873
L	155	HIS	-	expression tag	UNP Q16873
L	156	HIS	-	expression tag	UNP Q16873

- Molecule 2 is GLUTATHIONE (three-letter code: GSH) (formula: $C_{10}H_{17}N_3O_6S$).



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
2	A	1	Total	C	N	O	S	0	0
			20	10	3	6	1		
2	B	1	Total	C	N	O	S	0	0
			20	10	3	6	1		
2	C	1	Total	C	N	O	S	0	0
			20	10	3	6	1		
2	D	1	Total	C	N	O	S	0	0
			20	10	3	6	1		
2	E	1	Total	C	N	O	S	0	0
			20	10	3	6	1		
2	F	1	Total	C	N	O	S	0	0
			20	10	3	6	1		
2	G	1	Total	C	N	O	S	0	0
			20	10	3	6	1		
2	H	1	Total	C	N	O	S	0	0
			20	10	3	6	1		
2	I	1	Total	C	N	O	S	0	0
			20	10	3	6	1		
2	J	1	Total	C	N	O	S	0	0
			20	10	3	6	1		
2	K	1	Total	C	N	O	S	0	0
			20	10	3	6	1		
2	L	1	Total	C	N	O	S	0	0
			20	10	3	6	1		

- Molecule 3 is DODECYL-BETA-D-MALTOSIDE (three-letter code: LMT) (formula: $C_{24}H_{46}O_{11}$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
3	A	1	Total C O 35 24 11	0	0
3	A	1	Total C 7 7	0	0
3	A	1	Total C O 23 18 5	0	0
3	A	1	Total C 9 9	0	0
3	A	1	Total C 9 9	0	0
3	A	1	Total C 9 9	0	0
3	A	1	Total C O 18 13 5	0	0
3	A	1	Total C 9 9	0	0
3	B	1	Total C O 23 18 5	0	0
3	B	1	Total C O 23 18 5	0	0
3	B	1	Total C O 23 18 5	0	0
3	B	1	Total C O 18 13 5	0	0
3	B	1	Total C 12 12	0	0
3	B	1	Total C 9 9	0	0
3	B	1	Total C 9 9	0	0
3	C	1	Total C O 35 24 11	0	0
3	C	1	Total C O 35 24 11	0	0
3	C	1	Total C O 35 24 11	0	0
3	C	1	Total C 9 9	0	0
3	C	1	Total C 9 9	0	0
3	D	1	Total C 9 9	0	0
3	D	1	Total C O 35 24 11	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
3	D	1	Total C 9 9	0	0
3	E	1	Total C 10 10	0	0
3	E	1	Total C O 35 24 11	0	0
3	E	1	Total C O 23 18 5	0	0
3	E	1	Total C 6 6	0	0
3	E	1	Total C O 35 24 11	0	0
3	E	1	Total C 9 9	0	0
3	E	1	Total C 9 9	0	0
3	E	1	Total C 9 9	0	0
3	E	1	Total C O 35 24 11	0	0
3	E	1	Total C O 35 24 11	0	0
3	F	1	Total C 9 9	0	0
3	F	1	Total C O 23 18 5	0	0
3	F	1	Total C O 18 13 5	0	0
3	F	1	Total C 9 9	0	0
3	G	1	Total C 9 9	0	0
3	G	1	Total C O 23 18 5	0	0
3	G	1	Total C 9 9	0	0
3	G	1	Total C 9 9	0	0
3	G	1	Total C 9 9	0	0
3	H	1	Total C O 23 18 5	0	0

Continued on next page...

Continued from previous page...

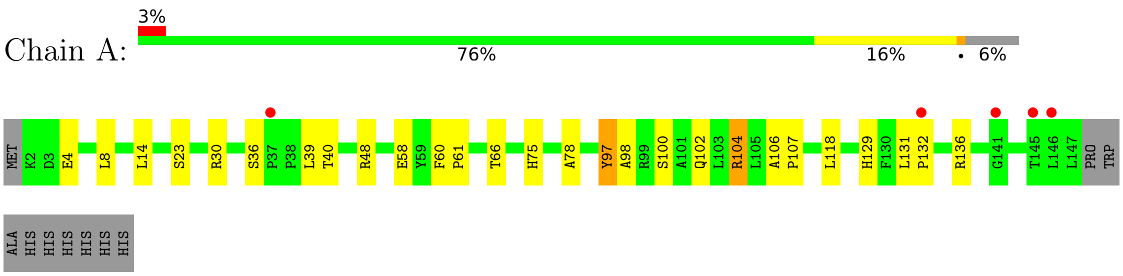
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
3	H	1	Total C 9 9	0	0
3	I	1	Total C O 18 13 5	0	0
3	I	1	Total C 9 9	0	0
3	I	1	Total C 9 9	0	0
3	I	1	Total C 9 9	0	0
3	J	1	Total C O 35 24 11	0	0
3	J	1	Total C 9 9	0	0
3	K	1	Total C 7 7	0	0
3	K	1	Total C O 23 18 5	0	0
3	L	1	Total C 9 9	0	0
3	L	1	Total C 9 9	0	0
3	L	1	Total C 9 9	0	0
3	L	1	Total C 9 9	0	0
3	L	1	Total C 7 7	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.

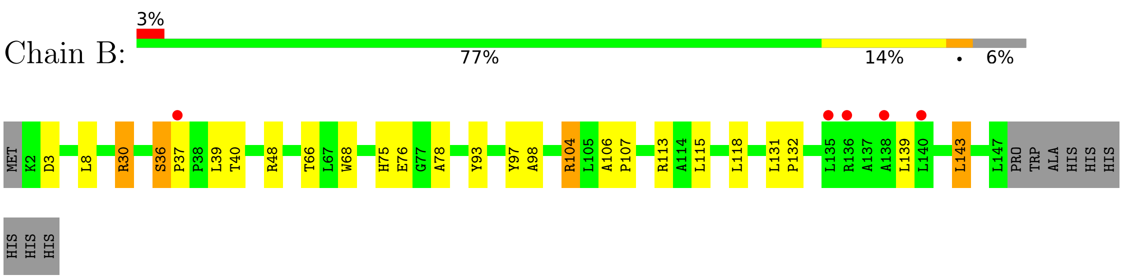
- Molecule 1: Leukotriene C4 synthase

Chain A:



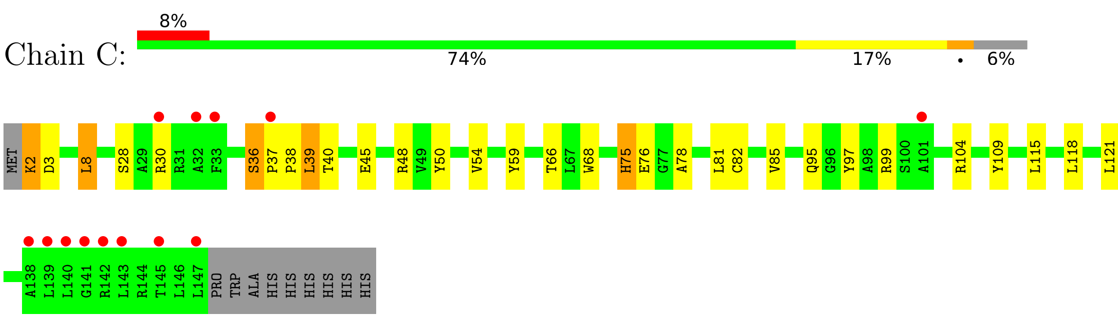
- Molecule 1: Leukotriene C4 synthase

Chain B:



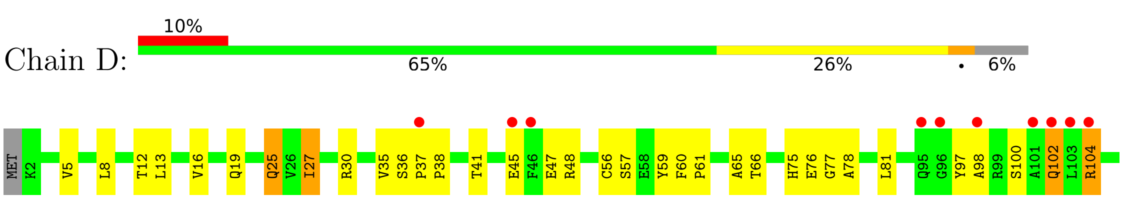
- Molecule 1: Leukotriene C4 synthase

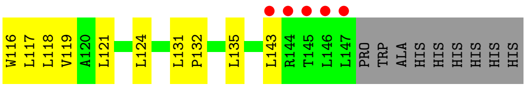
Chain C:



- Molecule 1: Leukotriene C4 synthase

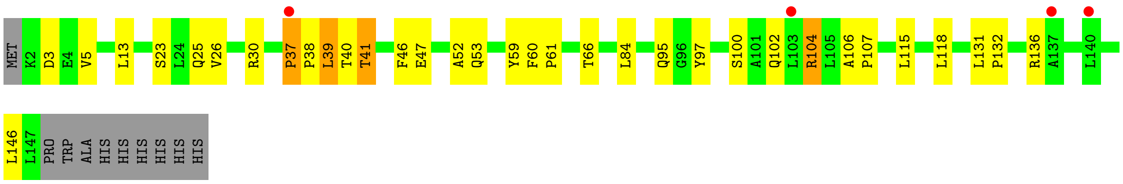
Chain D:





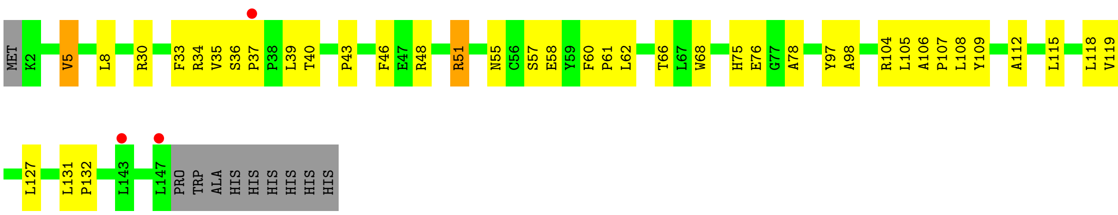
• Molecule 1: Leukotriene C4 synthase

Chain E:



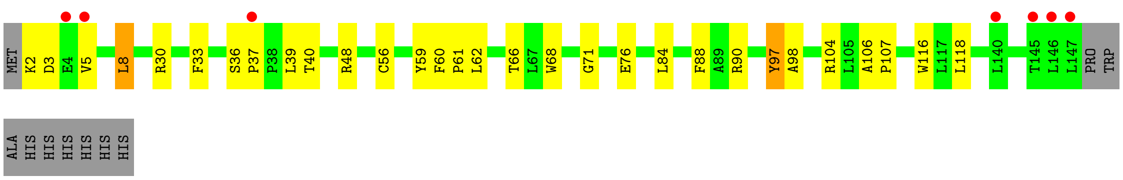
• Molecule 1: Leukotriene C4 synthase

Chain F:



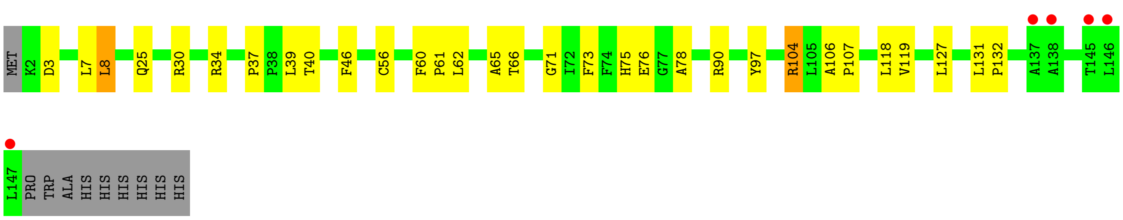
• Molecule 1: Leukotriene C4 synthase

Chain G:



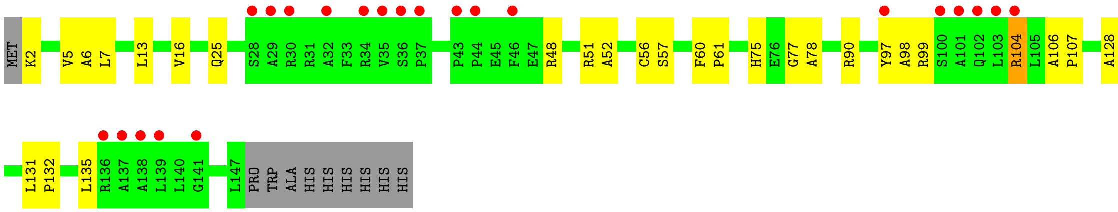
• Molecule 1: Leukotriene C4 synthase

Chain H:



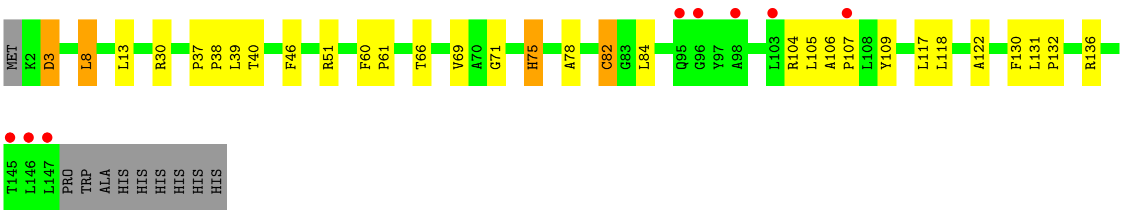
• Molecule 1: Leukotriene C4 synthase

Chain I:



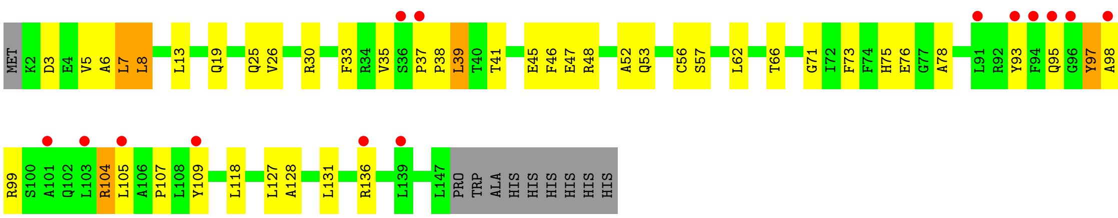
• Molecule 1: Leukotriene C4 synthase

Chain J:



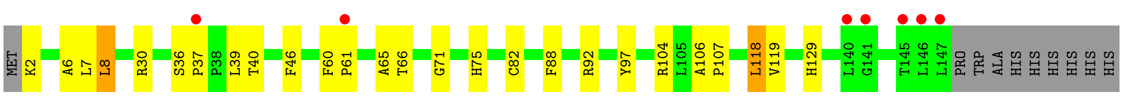
• Molecule 1: Leukotriene C4 synthase

Chain K:



• Molecule 1: Leukotriene C4 synthase

Chain L:



4 Data and refinement statistics

Property	Value	Source
Space group	C 2 2 21	Depositor
Cell constants a, b, c, α, β, γ	117.50Å 293.90Å 206.50Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	15.00 – 3.30 48.98 – 3.30	Depositor EDS
% Data completeness (in resolution range)	100.0 (15.00-3.30) 100.0 (48.98-3.30)	Depositor EDS
R_{merge}	0.08	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	3.78 (at 3.33Å)	Xtriage
Refinement program	REFMAC 5.2.0019	Depositor
R, R_{free}	0.221 , 0.255 0.234 , (Not available)	Depositor DCC
R_{free} test set	No test flags present.	wwPDB-VP
Wilson B-factor (Å^2)	86.6	Xtriage
Anisotropy	0.136	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.35 , 65.9	EDS
L-test for twinning[2]	$< \lvert L \rvert > = 0.49$, $< L^2 > = 0.32$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.90	EDS
Total number of atoms	14603	wwPDB-VP
Average B, all atoms (Å^2)	71.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 17.06% of the height of the origin peak. No significant pseudotranslation is detected.*

[1] Intensities estimated from amplitudes.

[2] Theoretical values of $< \lvert L \rvert >$, $< L^2 >$ 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: LMT, GSH

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	0.34	0/1144	0.46	0/1563
1	B	0.35	0/1162	0.47	0/1587
1	C	0.33	0/1158	0.46	0/1580
1	D	0.35	0/1156	0.47	0/1580
1	E	0.34	0/1164	0.45	0/1590
1	F	0.34	0/1154	0.45	0/1578
1	G	0.31	0/1135	0.44	0/1555
1	H	0.33	0/1155	0.45	0/1579
1	I	0.33	0/1156	0.46	0/1580
1	J	0.35	0/1143	0.46	0/1565
1	K	0.35	0/1147	0.47	0/1569
1	L	0.33	0/1147	0.45	0/1568
All	All	0.34	0/13821	0.46	0/18894

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts (i)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	A	1115	0	1139	22	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	B	1129	0	1166	26	0
1	C	1129	0	1166	24	0
1	D	1123	0	1155	37	0
1	E	1131	0	1171	29	0
1	F	1121	0	1156	35	1
1	G	1102	0	1113	22	1
1	H	1122	0	1151	24	0
1	I	1123	0	1155	20	0
1	J	1110	0	1129	27	0
1	K	1114	0	1135	40	0
1	L	1114	0	1128	22	0
2	A	20	0	15	2	0
2	B	20	0	15	1	0
2	C	20	0	15	1	0
2	D	20	0	15	0	0
2	E	20	0	15	0	0
2	F	20	0	15	2	0
2	G	20	0	15	0	0
2	H	20	0	15	1	0
2	I	20	0	15	1	0
2	J	20	0	15	2	0
2	K	20	0	15	0	0
2	L	20	0	15	2	0
3	A	119	0	182	3	0
3	B	117	0	180	3	0
3	C	123	0	172	8	0
3	D	53	0	80	6	0
3	E	206	0	299	11	0
3	F	59	0	89	4	0
3	G	59	0	102	3	0
3	H	32	0	51	0	0
3	I	45	0	72	5	0
3	J	44	0	63	1	0
3	K	30	0	47	0	0
3	L	43	0	81	1	0
All	All	14603	0	15362	304	1

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 10.

The worst 5 of 304 close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:E:30:ARG:NH1	1:E:37:PRO:HA	1.73	1.04
1:B:75:HIS:HD2	1:B:78:ALA:H	1.12	0.96
1:K:75:HIS:HD2	1:K:78:ALA:H	1.05	0.96
1:H:66:THR:CG2	1:H:118:LEU:HB3	1.95	0.95
1:A:75:HIS:HD2	1:A:78:ALA:H	1.18	0.91

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

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:F:34:ARG:NH1	1:G:33:PHE:O[8_545]	2.12	0.08

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	144/156 (92%)	137 (95%)	7 (5%)	0	100	100
1	B	145/156 (93%)	136 (94%)	9 (6%)	0	100	100
1	C	144/156 (92%)	138 (96%)	5 (4%)	1 (1%)	22	54
1	D	145/156 (93%)	140 (97%)	5 (3%)	0	100	100
1	E	145/156 (93%)	137 (94%)	7 (5%)	1 (1%)	22	54
1	F	145/156 (93%)	139 (96%)	6 (4%)	0	100	100
1	G	145/156 (93%)	138 (95%)	7 (5%)	0	100	100
1	H	145/156 (93%)	138 (95%)	7 (5%)	0	100	100
1	I	145/156 (93%)	138 (95%)	7 (5%)	0	100	100
1	J	145/156 (93%)	138 (95%)	6 (4%)	1 (1%)	22	54
1	K	145/156 (93%)	137 (94%)	8 (6%)	0	100	100
1	L	145/156 (93%)	139 (96%)	5 (3%)	1 (1%)	22	54
All	All	1738/1872 (93%)	1655 (95%)	79 (4%)	4 (0%)	47	77

All (4) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	L	75	HIS
1	C	75	HIS
1	E	37	PRO
1	J	75	HIS

5.3.2 Protein sidechains (i)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all 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	105/120 (88%)	98 (93%)	7 (7%)	16	45
1	B	108/120 (90%)	102 (94%)	6 (6%)	21	52
1	C	108/120 (90%)	99 (92%)	9 (8%)	11	36
1	D	107/120 (89%)	100 (94%)	7 (6%)	17	46
1	E	109/120 (91%)	99 (91%)	10 (9%)	9	31
1	F	107/120 (89%)	101 (94%)	6 (6%)	21	52
1	G	103/120 (86%)	96 (93%)	7 (7%)	16	44
1	H	107/120 (89%)	99 (92%)	8 (8%)	13	39
1	I	107/120 (89%)	101 (94%)	6 (6%)	21	52
1	J	105/120 (88%)	99 (94%)	6 (6%)	20	51
1	K	105/120 (88%)	95 (90%)	10 (10%)	8	29
1	L	104/120 (87%)	96 (92%)	8 (8%)	13	38
All	All	1275/1440 (88%)	1185 (93%)	90 (7%)	14	42

5 of 90 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	H	97	TYR
1	J	136	ARG
1	H	127	LEU
1	I	135	LEU
1	K	8	LEU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 28 such sidechains are listed below:

Mol	Chain	Res	Type
1	E	129	HIS
1	L	129	HIS
1	H	25	GLN
1	K	19	GLN
1	H	19	GLN

5.3.3 RNA (i)

There are no RNA molecules in this entry.

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

There are no non-standard protein/DNA/RNA residues in this entry.

5.5 Carbohydrates (i)

There are no monosaccharides in this entry.

5.6 Ligand geometry (i)

69 ligands are modelled in this entry.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
3	LMT	C	214	-	36,36,36	0.52	1 (2%)	47,47,47	0.81	1 (2%)
3	LMT	D	247	-	8,8,36	0.28	0	7,7,47	0.43	0
3	LMT	E	232	-	5,5,36	0.30	0	4,4,47	0.32	0
3	LMT	B	242	-	11,11,36	0.28	0	10,10,47	0.48	0
3	LMT	B	227	-	23,23,36	0.59	1 (4%)	26,27,47	0.78	1 (3%)
3	LMT	A	215	-	36,36,36	0.50	0	47,47,47	0.65	0
3	LMT	I	257	-	8,8,36	0.28	0	7,7,47	0.44	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	#|Z| > 2	Counts	RMSZ	#|Z| > 2
3	LMT	B	213	-	23,23,36	0.57	1 (4%)	26,27,47	0.73	1 (3%)
3	LMT	E	221	-	9,9,36	0.23	0	8,8,47	0.53	0
3	LMT	A	262	-	8,8,36	0.30	0	7,7,47	0.45	0
2	GSH	L	212	-	18,19,19	3.11	2 (11%)	23,24,24	1.30	5 (21%)
3	LMT	C	237	-	36,36,36	0.48	0	47,47,47	0.72	0
2	GSH	A	201	-	18,19,19	3.04	2 (11%)	23,24,24	1.28	5 (21%)
3	LMT	E	249	-	8,8,36	0.28	0	7,7,47	0.45	0
3	LMT	L	226	-	8,8,36	0.28	0	7,7,47	0.45	0
2	GSH	B	202	-	18,19,19	3.03	2 (11%)	23,24,24	1.38	4 (17%)
3	LMT	F	219	-	8,8,36	0.29	0	7,7,47	0.41	0
3	LMT	L	255	-	8,8,36	0.26	0	7,7,47	0.46	0
3	LMT	F	233	-	23,23,36	0.60	1 (4%)	26,27,47	0.76	1 (3%)
2	GSH	D	204	-	18,19,19	3.05	2 (11%)	23,24,24	1.41	4 (17%)
2	GSH	C	203	-	18,19,19	3.04	2 (11%)	23,24,24	1.22	5 (21%)
3	LMT	A	256	-	18,18,36	0.63	1 (5%)	21,22,47	0.70	0
3	LMT	D	238	-	36,36,36	0.45	0	47,47,47	0.73	0
3	LMT	G	222	-	8,8,36	0.24	0	7,7,47	0.54	0
3	LMT	G	235	-	23,23,36	0.52	0	26,27,47	0.63	0
3	LMT	I	252	-	8,8,36	0.27	0	7,7,47	0.46	0
2	GSH	F	206	-	18,19,19	3.09	2 (11%)	23,24,24	1.41	4 (17%)
3	LMT	G	267	-	8,8,36	0.31	0	7,7,47	0.41	0
3	LMT	K	225	-	23,23,36	0.57	1 (4%)	26,27,47	0.79	1 (3%)
3	LMT	F	241	-	18,18,36	0.65	1 (5%)	21,22,47	1.16	2 (9%)
3	LMT	A	244	-	8,8,36	0.28	0	7,7,47	0.43	0
3	LMT	A	217	-	6,6,36	0.31	0	5,5,47	0.36	0
2	GSH	E	205	-	18,19,19	3.03	2 (11%)	23,24,24	1.21	4 (17%)
3	LMT	C	261	-	8,8,36	0.33	0	7,7,47	0.49	0
3	LMT	L	223	-	8,8,36	0.25	0	7,7,47	0.48	0
3	LMT	B	236	-	18,18,36	0.70	1 (5%)	21,22,47	1.08	2 (9%)
3	LMT	H	250	-	8,8,36	0.29	0	7,7,47	0.41	0
3	LMT	E	268	-	36,36,36	0.54	1 (2%)	47,47,47	0.82	1 (2%)
3	LMT	E	243	-	36,36,36	0.45	0	47,47,47	0.60	0
3	LMT	E	269	-	36,36,36	0.49	1 (2%)	47,47,47	0.69	0
3	LMT	G	251	-	8,8,36	0.30	0	7,7,47	0.41	0
3	LMT	L	254	-	8,8,36	0.25	0	7,7,47	0.52	0
2	GSH	I	209	-	18,19,19	3.09	2 (11%)	23,24,24	1.35	4 (17%)
3	LMT	E	231	-	23,23,36	0.57	0	26,27,47	0.73	0
3	LMT	J	239	-	36,36,36	0.45	0	47,47,47	0.77	1 (2%)
3	LMT	D	220	-	8,8,36	0.28	0	7,7,47	0.39	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	#|Z| > 2	Counts	RMSZ	#|Z| > 2
3	LMT	H	234	-	23,23,36	0.57	1 (4%)	26,27,47	0.79	1 (3%)
2	GSH	G	207	-	18,19,19	3.03	2 (11%)	23,24,24	1.33	5 (21%)
3	LMT	B	260	-	8,8,36	0.29	0	7,7,47	0.41	0
3	LMT	I	258	-	8,8,36	0.29	0	7,7,47	0.42	0
2	GSH	J	210	-	18,19,19	3.11	2 (11%)	23,24,24	1.27	4 (17%)
3	LMT	C	246	-	8,8,36	0.27	0	7,7,47	0.45	0
3	LMT	L	265	-	6,6,36	0.32	0	5,5,47	0.34	0
3	LMT	E	266	-	8,8,36	0.29	0	7,7,47	0.40	0
2	GSH	H	208	-	18,19,19	3.07	2 (11%)	23,24,24	1.36	4 (17%)
3	LMT	A	229	-	8,8,36	0.27	0	7,7,47	0.49	0
3	LMT	A	245	-	8,8,36	0.30	0	7,7,47	0.42	0
3	LMT	B	259	-	8,8,36	0.26	0	7,7,47	0.48	0
3	LMT	B	218	-	23,23,36	0.60	1 (4%)	26,27,47	0.98	2 (7%)
3	LMT	F	248	-	8,8,36	0.27	0	7,7,47	0.47	0
3	LMT	E	263	-	8,8,36	0.31	0	7,7,47	0.33	0
3	LMT	G	264	-	8,8,36	0.29	0	7,7,47	0.42	0
3	LMT	I	240	-	18,18,36	0.61	1 (5%)	21,22,47	0.82	0
3	LMT	A	228	-	23,23,36	0.54	0	26,27,47	0.58	0
3	LMT	C	216	-	36,36,36	0.50	0	47,47,47	0.77	1 (2%)
3	LMT	E	230	-	36,36,36	0.52	0	47,47,47	0.99	2 (4%)
3	LMT	K	224	-	6,6,36	0.30	0	5,5,47	0.35	0
2	GSH	K	211	-	18,19,19	3.06	2 (11%)	23,24,24	1.44	5 (21%)
3	LMT	J	253	-	8,8,36	0.25	0	7,7,47	0.51	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
3	LMT	C	214	-	-	14/21/61/61	0/2/2/2
3	LMT	D	247	-	-	1/6/6/61	-
3	LMT	E	232	-	-	0/3/3/61	-
3	LMT	B	242	-	-	4/9/9/61	-
3	LMT	B	227	-	-	7/15/31/61	0/1/1/2
3	LMT	A	215	-	-	9/21/61/61	0/2/2/2
3	LMT	I	257	-	-	3/6/6/61	-
3	LMT	B	213	-	-	7/15/31/61	0/1/1/2
3	LMT	E	221	-	-	3/7/7/61	-

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
3	LMT	A	262	-	-	3/6/6/61	-
2	GSH	L	212	-	-	2/24/24/24	-
3	LMT	C	237	-	-	10/21/61/61	0/2/2/2
2	GSH	A	201	-	-	2/24/24/24	-
3	LMT	E	249	-	-	4/6/6/61	-
3	LMT	L	226	-	-	4/6/6/61	-
2	GSH	B	202	-	-	2/24/24/24	-
3	LMT	F	219	-	-	4/6/6/61	-
3	LMT	L	255	-	-	2/6/6/61	-
3	LMT	F	233	-	-	6/15/31/61	0/1/1/2
2	GSH	D	204	-	-	2/24/24/24	-
2	GSH	C	203	-	-	2/24/24/24	-
3	LMT	A	256	-	-	10/10/26/61	0/1/1/2
3	LMT	D	238	-	-	10/21/61/61	0/2/2/2
3	LMT	G	222	-	-	3/6/6/61	-
3	LMT	G	235	-	-	7/15/31/61	0/1/1/2
3	LMT	I	252	-	-	3/6/6/61	-
2	GSH	F	206	-	-	2/24/24/24	-
3	LMT	G	267	-	-	1/6/6/61	-
3	LMT	K	225	-	-	12/15/31/61	0/1/1/2
3	LMT	F	241	-	-	4/10/26/61	0/1/1/2
3	LMT	A	244	-	-	4/6/6/61	-
3	LMT	A	217	-	-	2/4/4/61	-
2	GSH	E	205	-	-	1/24/24/24	-
3	LMT	C	261	-	-	0/6/6/61	-
3	LMT	L	223	-	-	5/6/6/61	-
3	LMT	B	236	-	-	9/10/26/61	0/1/1/2
3	LMT	H	250	-	-	3/6/6/61	-
3	LMT	E	268	-	-	6/21/61/61	0/2/2/2
3	LMT	E	243	-	-	9/21/61/61	0/2/2/2
3	LMT	E	269	-	-	9/21/61/61	0/2/2/2
3	LMT	G	251	-	-	2/6/6/61	-
3	LMT	L	254	-	-	3/6/6/61	-
2	GSH	I	209	-	-	2/24/24/24	-
3	LMT	E	231	-	-	9/15/31/61	0/1/1/2

Continued on next page...

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
3	LMT	J	239	-	-	8/21/61/61	0/2/2/2
3	LMT	D	220	-	-	2/6/6/61	-
3	LMT	H	234	-	-	7/15/31/61	0/1/1/2
2	GSH	G	207	-	-	2/24/24/24	-
3	LMT	B	260	-	-	5/6/6/61	-
3	LMT	I	258	-	-	2/6/6/61	-
2	GSH	J	210	-	-	2/24/24/24	-
3	LMT	C	246	-	-	4/6/6/61	-
3	LMT	L	265	-	-	1/4/4/61	-
3	LMT	E	266	-	-	4/6/6/61	-
2	GSH	H	208	-	-	2/24/24/24	-
3	LMT	A	229	-	-	3/6/6/61	-
3	LMT	A	245	-	-	4/6/6/61	-
3	LMT	B	259	-	-	4/6/6/61	-
3	LMT	B	218	-	-	6/15/31/61	0/1/1/2
3	LMT	F	248	-	-	1/6/6/61	-
3	LMT	E	263	-	-	4/6/6/61	-
3	LMT	G	264	-	-	2/6/6/61	-
3	LMT	I	240	-	-	7/10/26/61	0/1/1/2
3	LMT	A	228	-	-	7/15/31/61	0/1/1/2
3	LMT	C	216	-	-	10/21/61/61	0/2/2/2
3	LMT	E	230	-	-	9/21/61/61	0/2/2/2
3	LMT	K	224	-	-	2/4/4/61	-
2	GSH	K	211	-	-	2/24/24/24	-
3	LMT	J	253	-	-	2/6/6/61	-

The worst 5 of 37 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	D	204	GSH	O2-C2	9.33	1.41	1.23
2	L	212	GSH	O2-C2	9.23	1.41	1.23
2	F	206	GSH	O2-C2	9.12	1.41	1.23
2	C	203	GSH	O2-C2	9.12	1.41	1.23
2	J	210	GSH	O2-C2	9.10	1.41	1.23

The worst 5 of 70 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	K	211	GSH	CA2-CB2-SG2	-4.49	109.15	114.19
2	F	206	GSH	CA2-CB2-SG2	-4.05	109.64	114.19
2	D	204	GSH	CA2-CB2-SG2	-3.94	109.76	114.19
2	I	209	GSH	CA2-CB2-SG2	-3.89	109.82	114.19
2	H	208	GSH	CA2-CB2-SG2	-3.86	109.86	114.19

There are no chirality outliers.

5 of 309 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
3	A	228	LMT	C4'-C5'-C6'-O6'
3	A	228	LMT	C2-C1-O1'-C1'
3	A	256	LMT	C4'-C5'-C6'-O6'
3	A	256	LMT	O5'-C5'-C6'-O6'
3	B	218	LMT	C4'-C5'-C6'-O6'

There are no ring outliers.

31 monomers are involved in 53 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
3	C	214	LMT	2	0
3	D	247	LMT	1	0
3	E	221	LMT	2	0
2	L	212	GSH	2	0
3	C	237	LMT	1	0
2	A	201	GSH	2	0
3	E	249	LMT	3	0
2	B	202	GSH	1	0
3	F	219	LMT	3	0
2	C	203	GSH	1	0
3	D	238	LMT	2	0
3	G	222	LMT	3	0
3	I	252	LMT	1	0
2	F	206	GSH	2	0
3	A	244	LMT	2	0
3	E	268	LMT	4	0
3	E	243	LMT	1	0
3	L	254	LMT	1	0
2	I	209	GSH	1	0
3	E	231	LMT	1	0
3	J	239	LMT	1	0
3	D	220	LMT	3	0

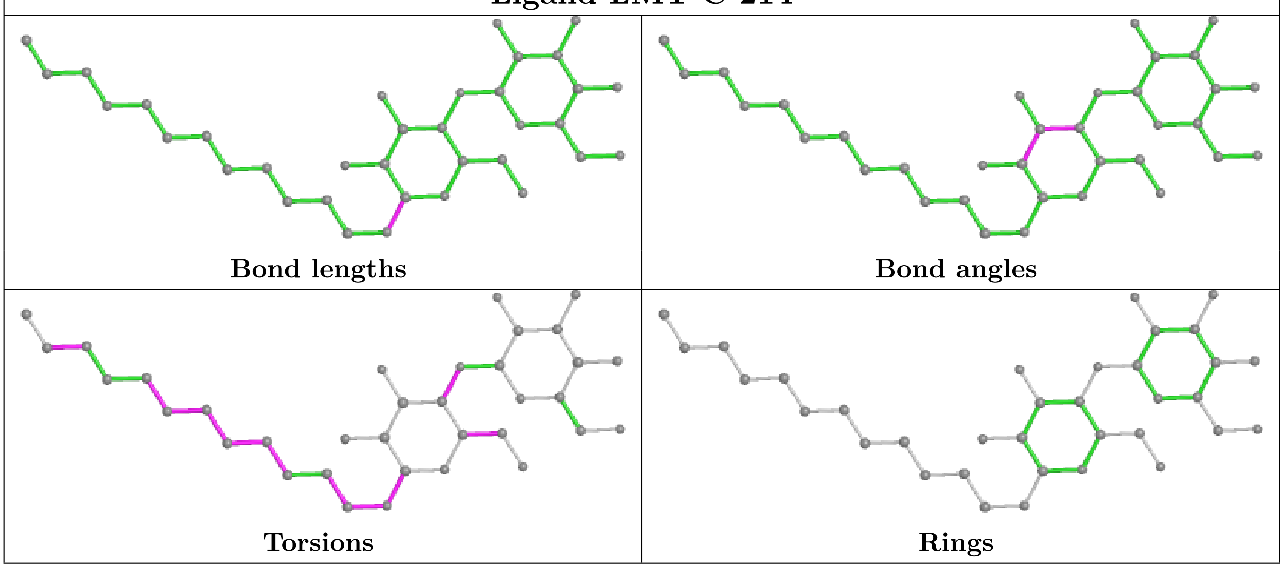
Continued on next page...

Continued from previous page...

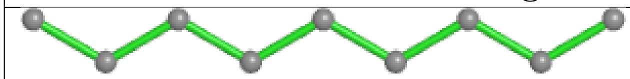
Mol	Chain	Res	Type	Clashes	Symm-Clashes
3	I	258	LMT	3	0
2	J	210	GSH	2	0
2	H	208	GSH	1	0
3	A	245	LMT	1	0
3	B	218	LMT	3	0
3	F	248	LMT	1	0
3	I	240	LMT	1	0
3	A	228	LMT	1	0
3	C	216	LMT	5	0

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

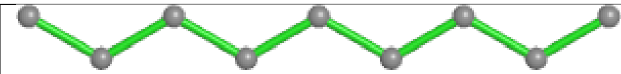
Ligand LMT C 214



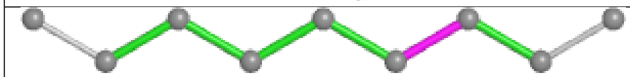
Ligand LMT D 247



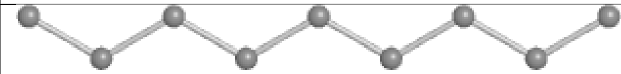
Bond lengths



Bond angles

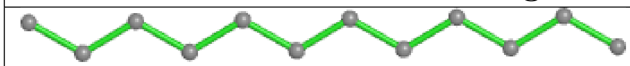


Torsions

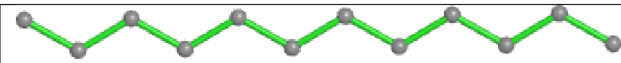


Rings

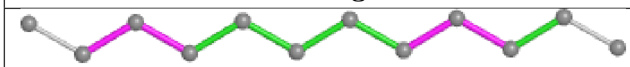
Ligand LMT B 242



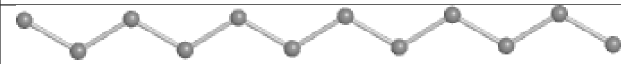
Bond lengths



Bond angles

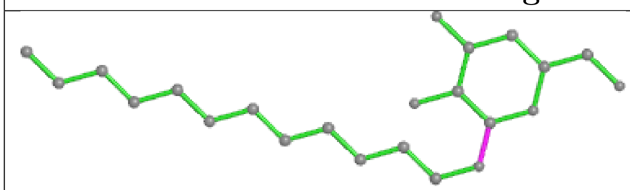


Torsions

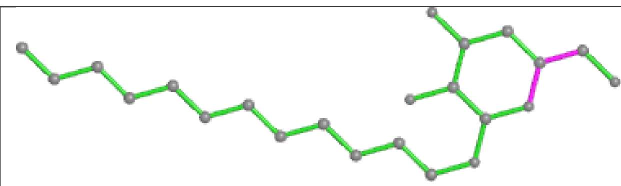


Rings

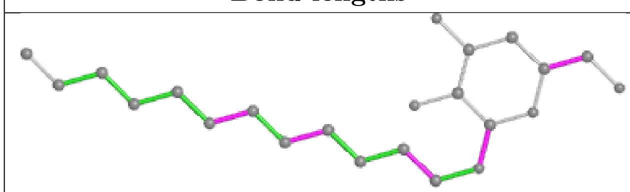
Ligand LMT B 227



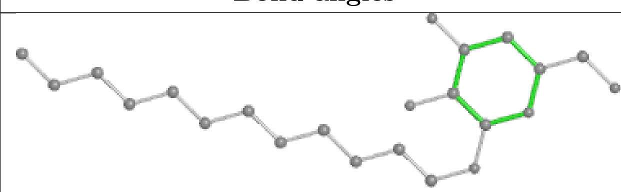
Bond lengths



Bond angles

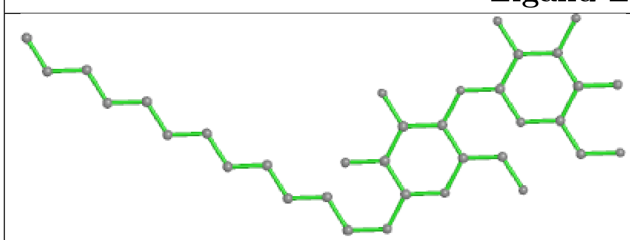


Torsions

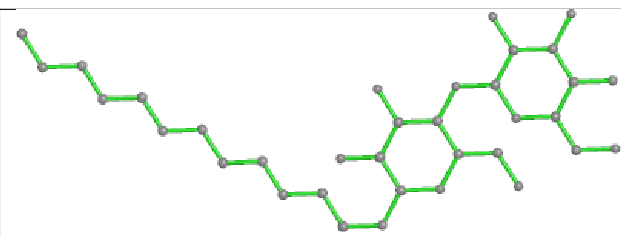


Rings

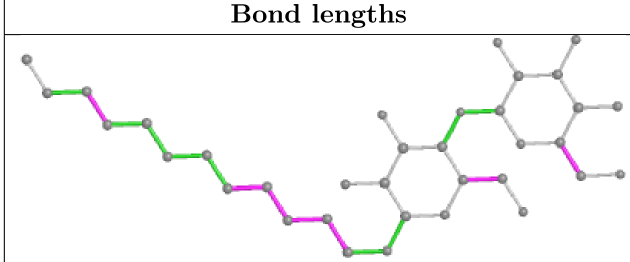
Ligand LMT A 215



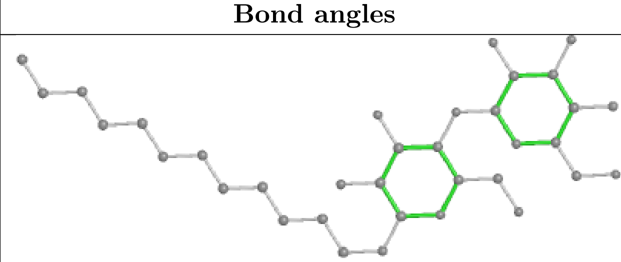
Bond lengths



Bond angles

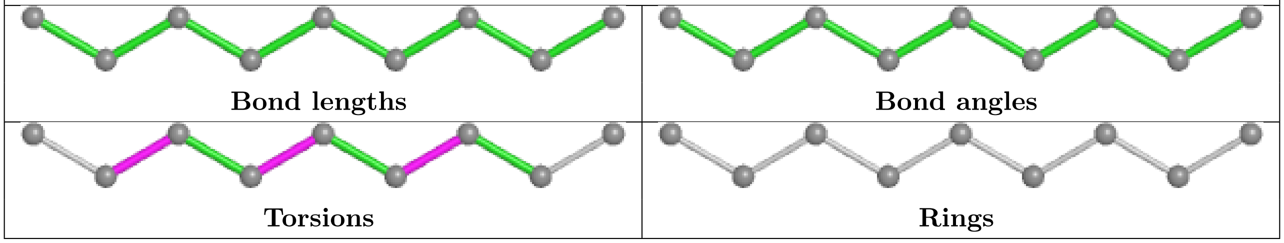


Torsions

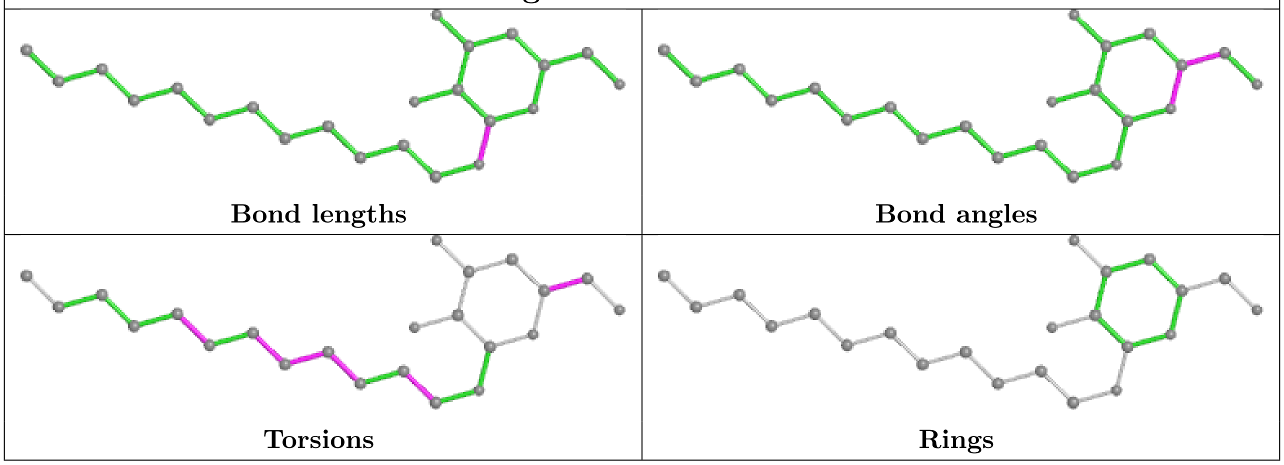


Rings

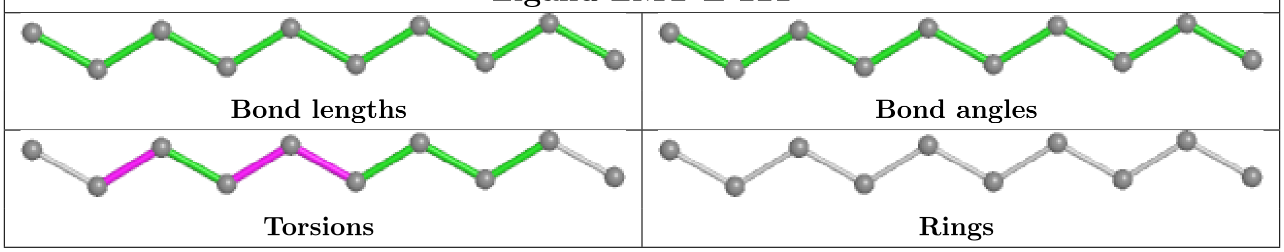
Ligand LMT I 257



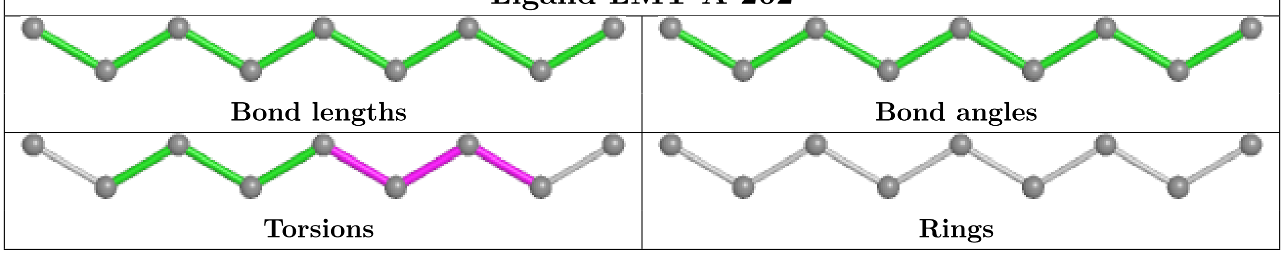
Ligand LMT B 213



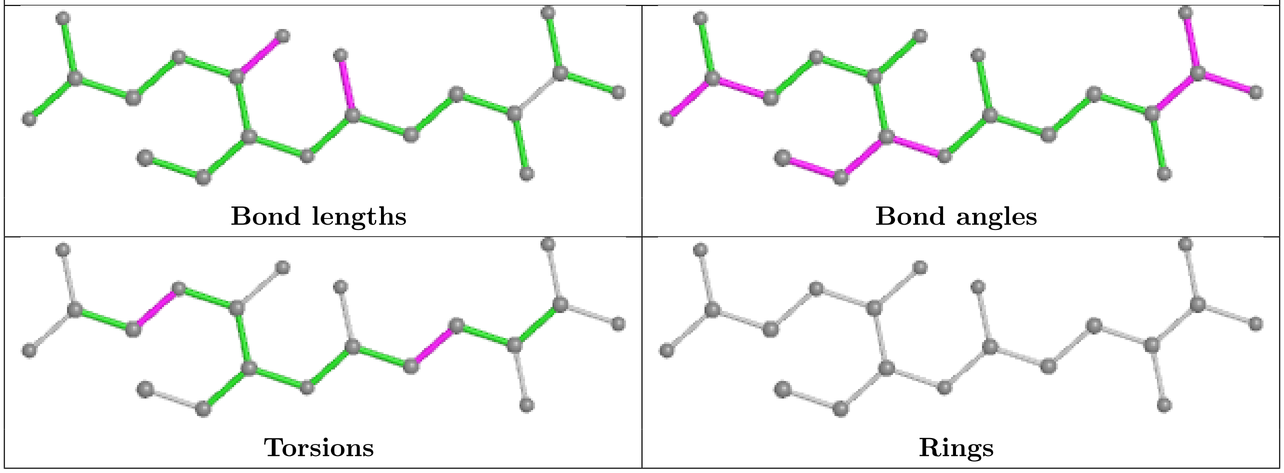
Ligand LMT E 221



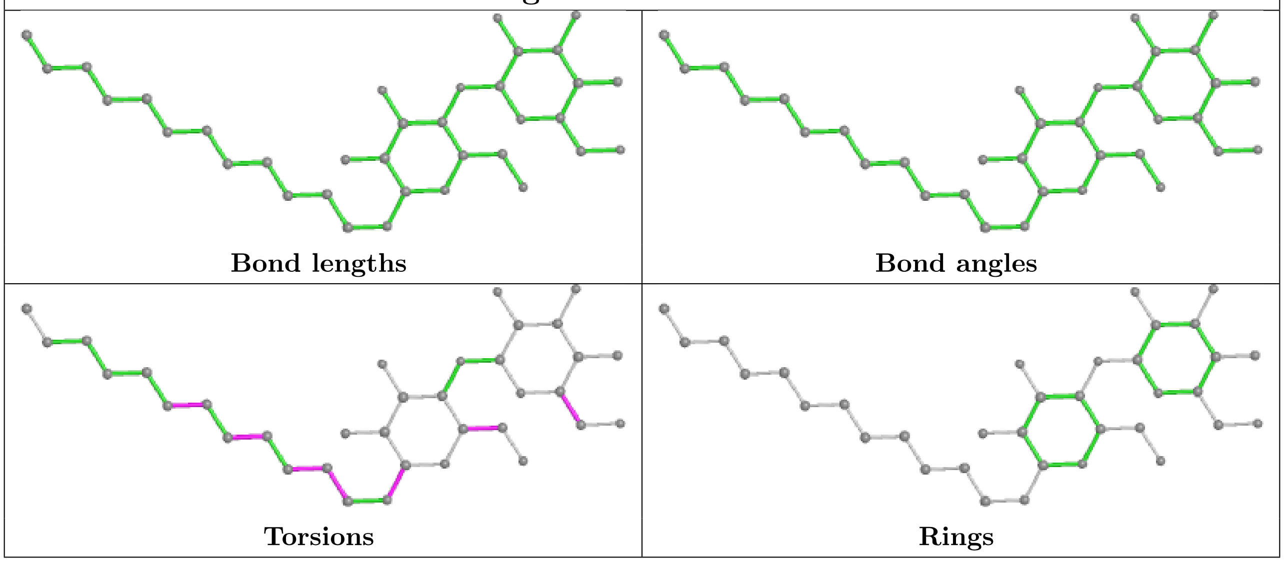
Ligand LMT A 262



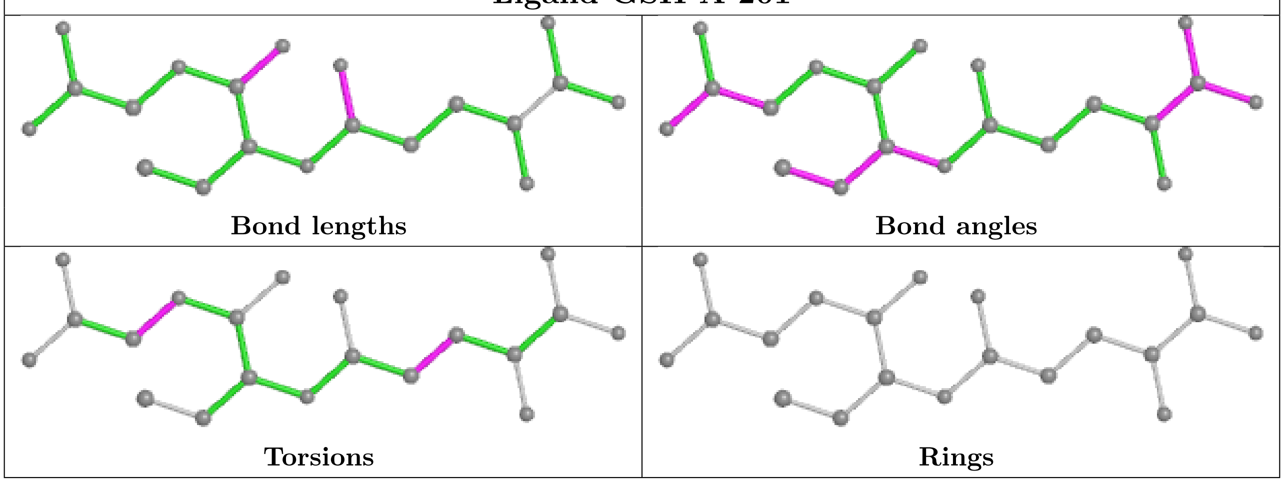
Ligand GSH L 212



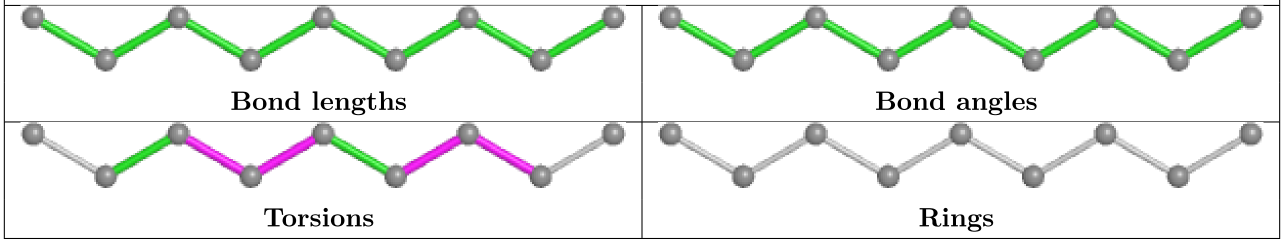
Ligand LMT C 237



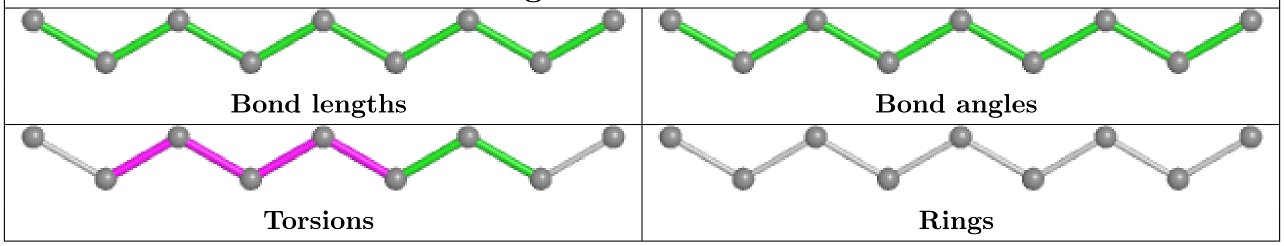
Ligand GSH A 201



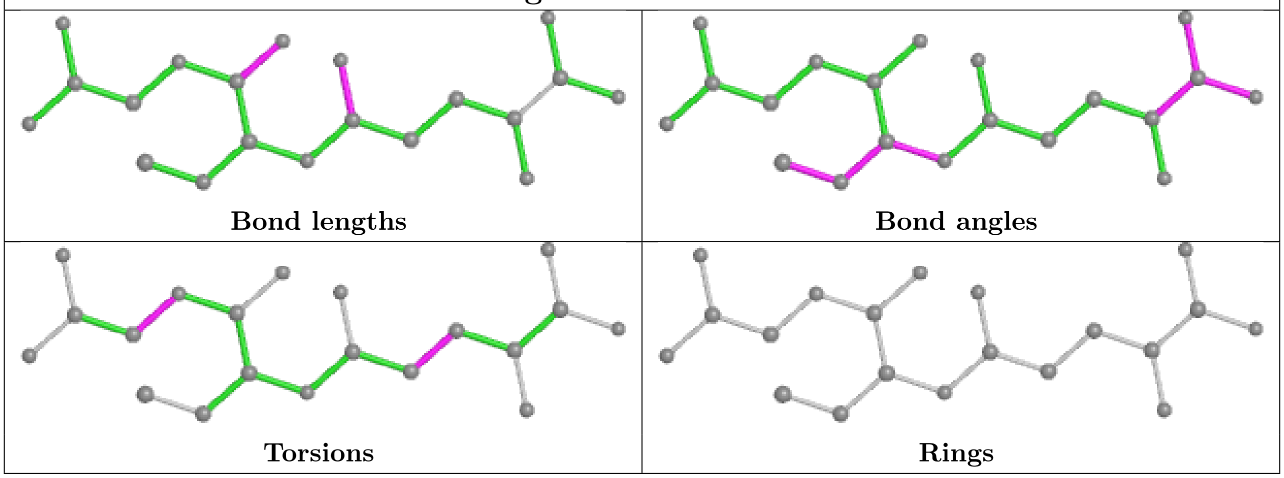
Ligand LMT E 249



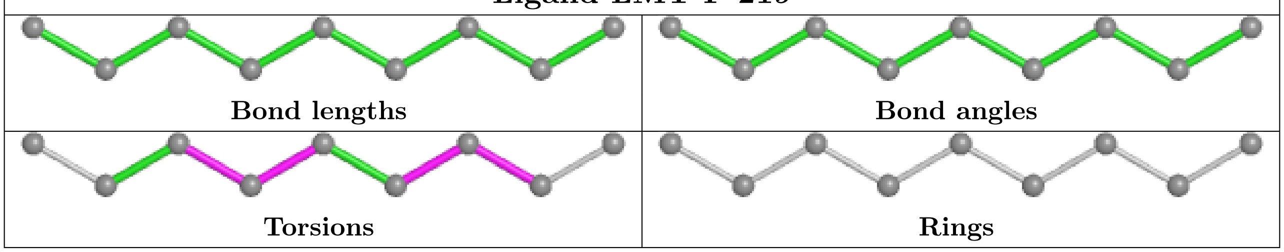
Ligand LMT L 226



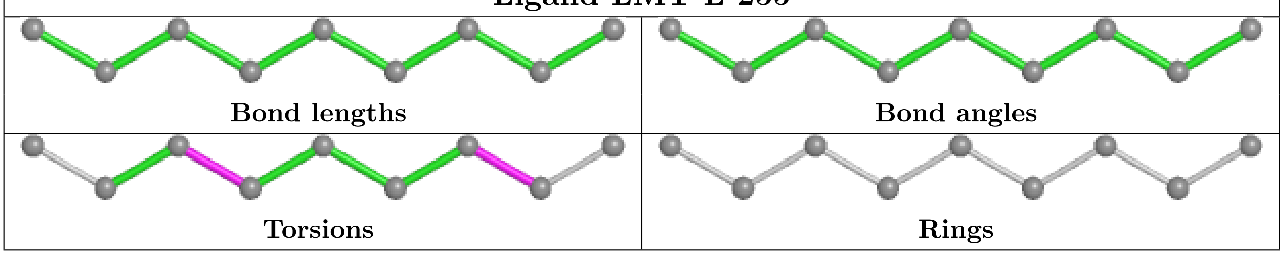
Ligand GSH B 202



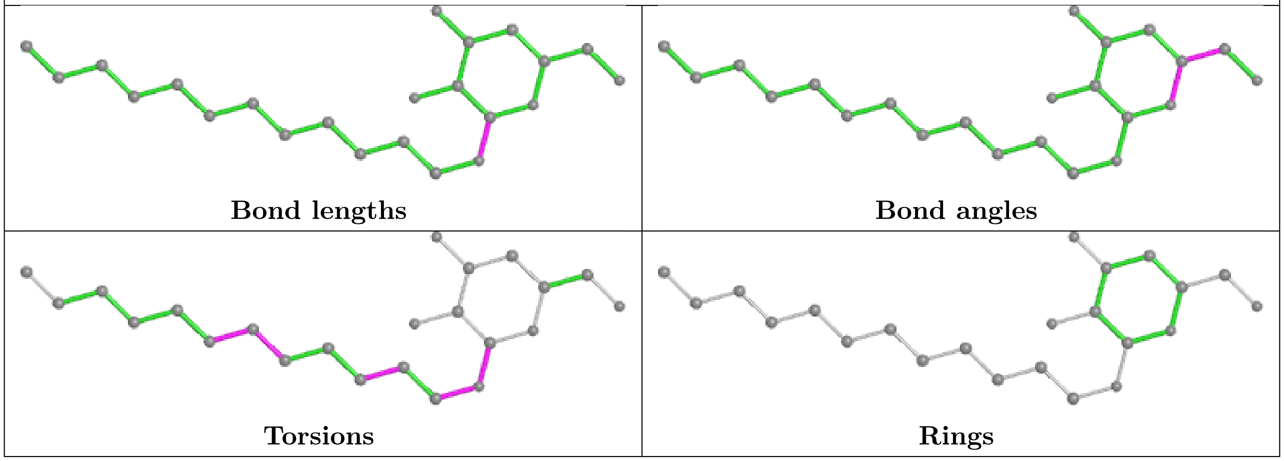
Ligand LMT F 219



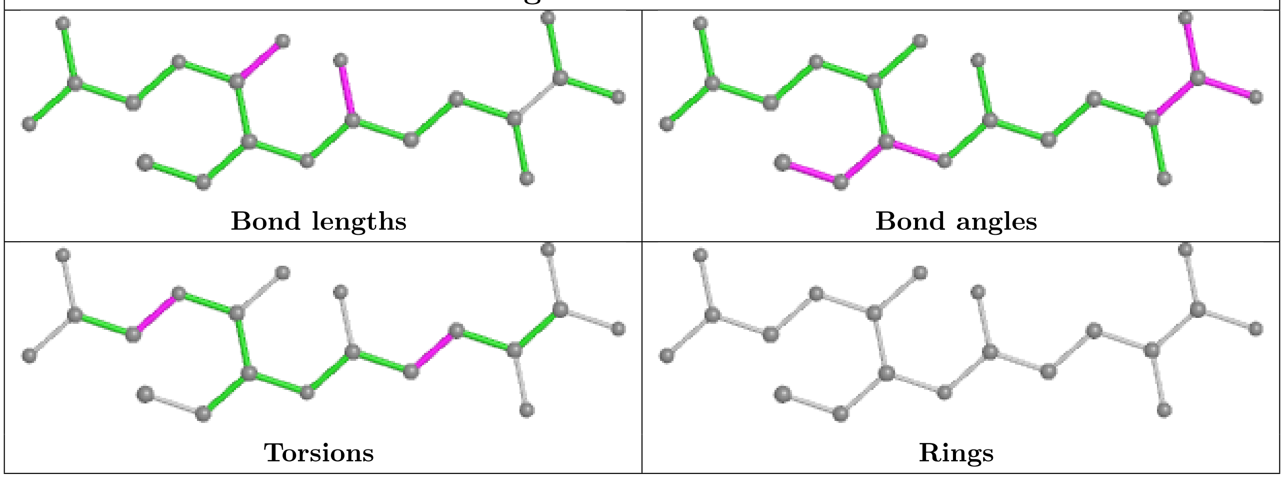
Ligand LMT L 255



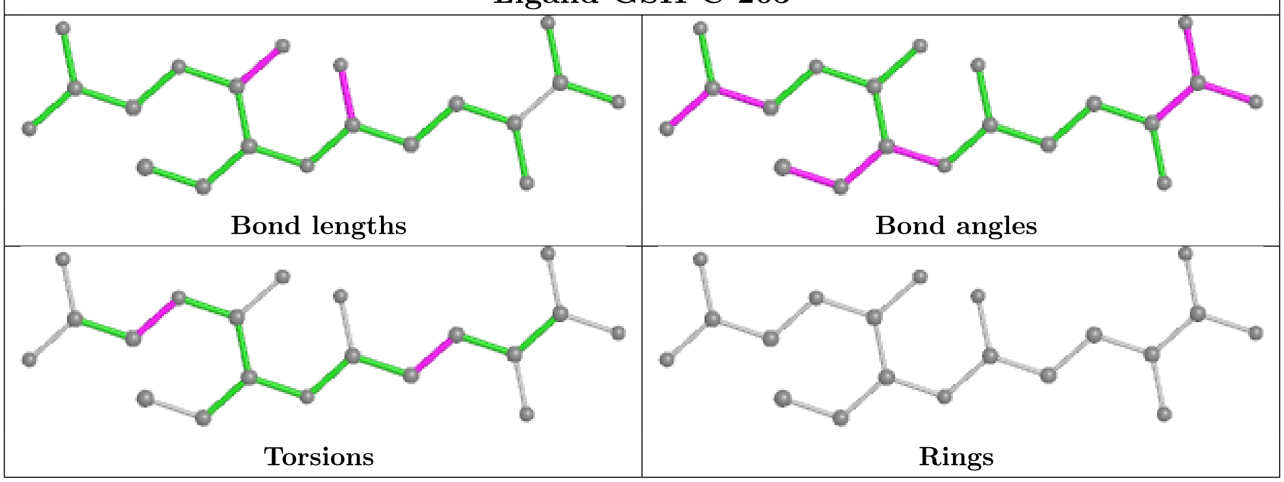
Ligand LMT F 233



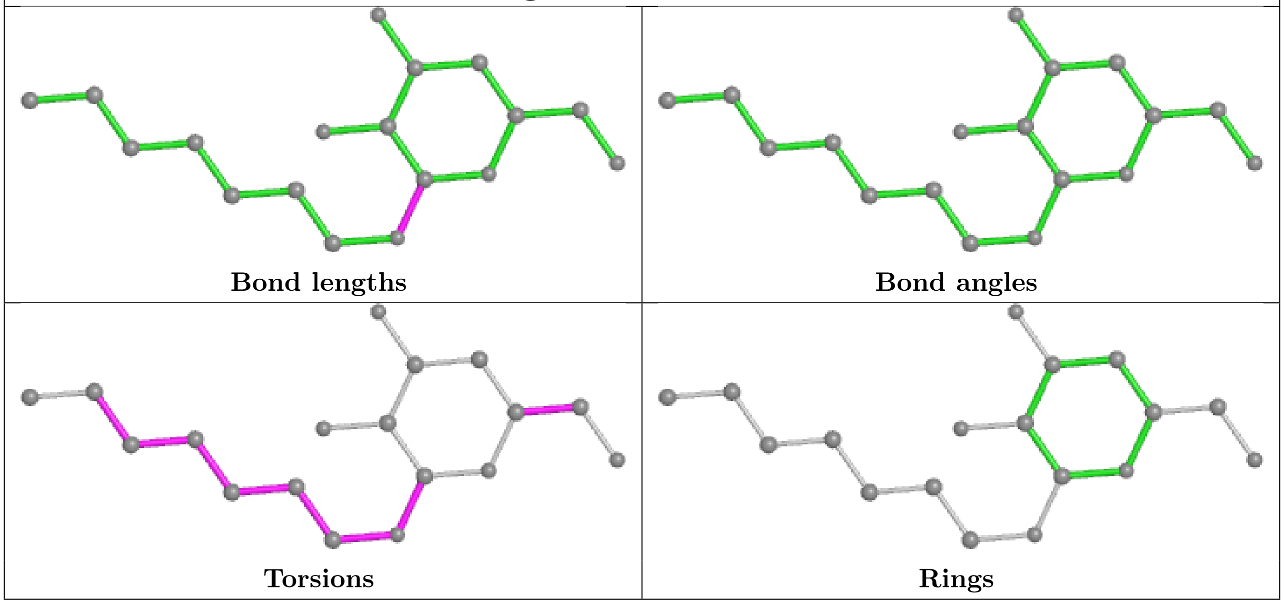
Ligand GSH D 204



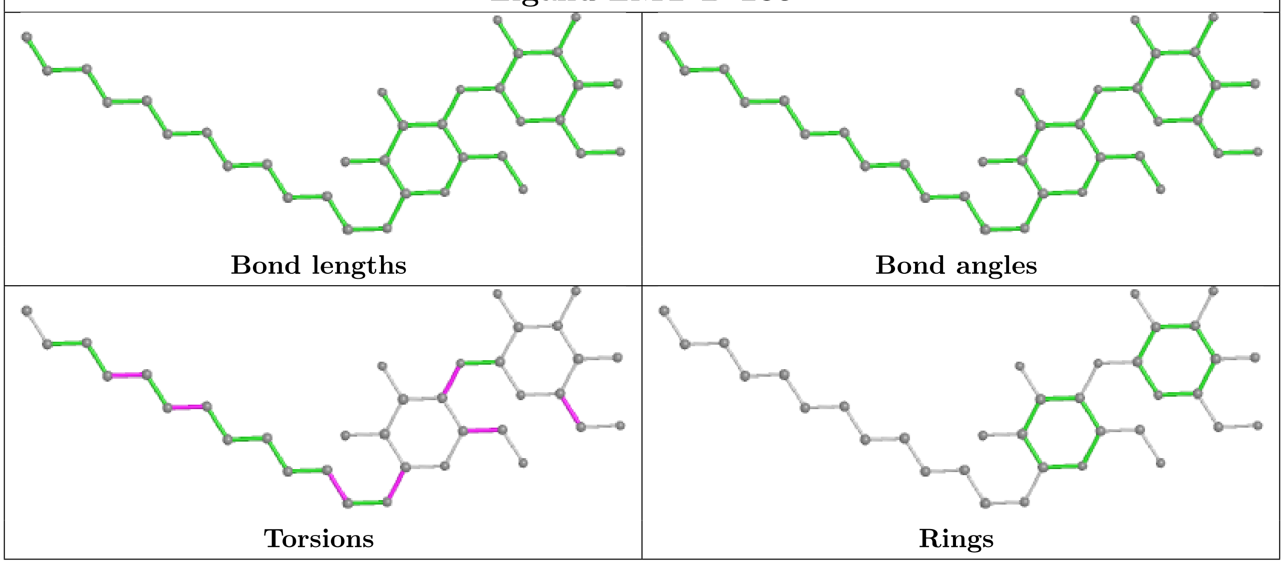
Ligand GSH C 203



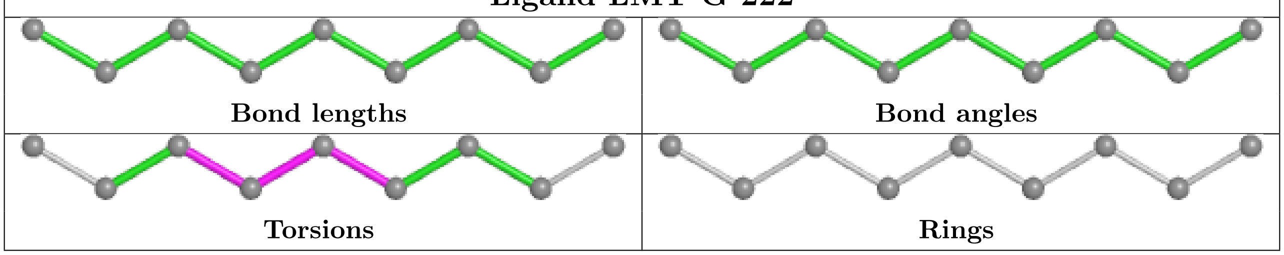
Ligand LMT A 256



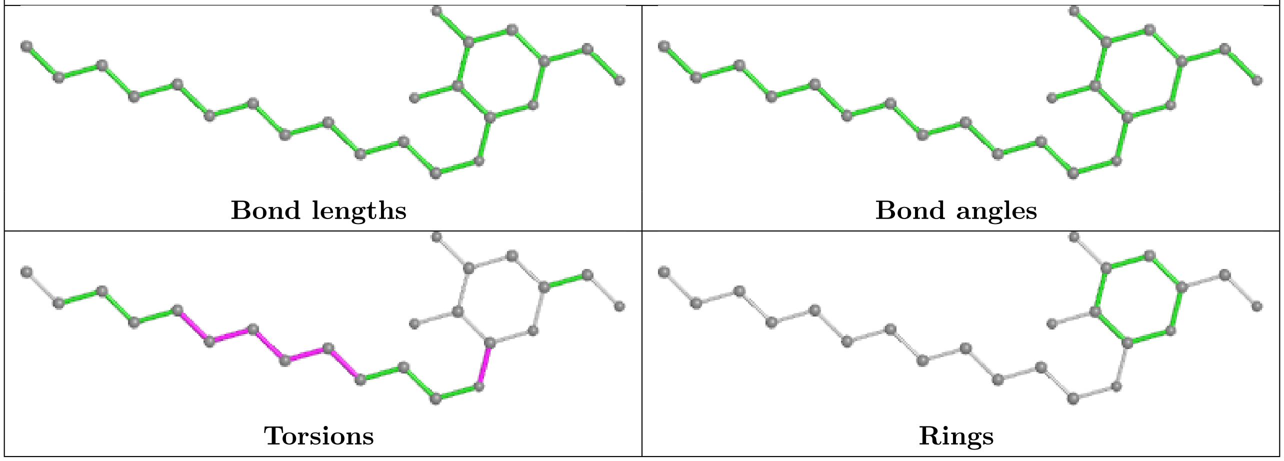
Ligand LMT D 238



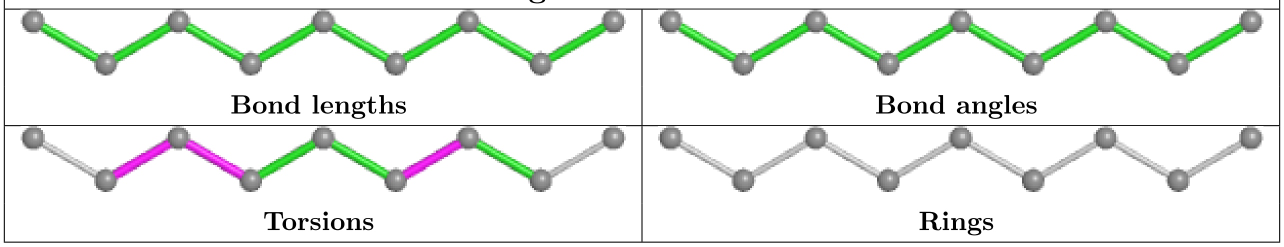
Ligand LMT G 222



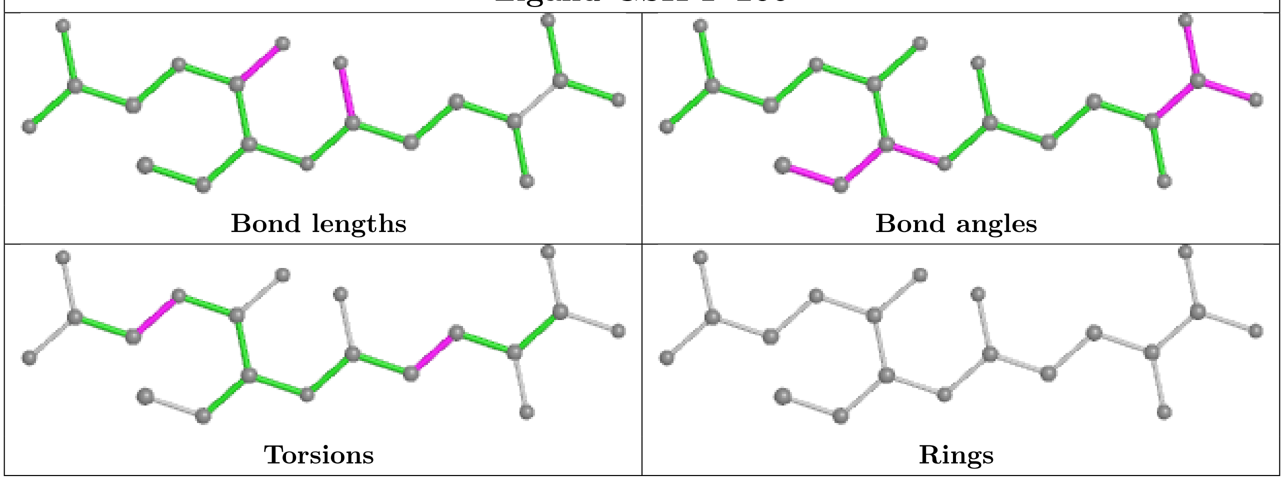
Ligand LMT G 235



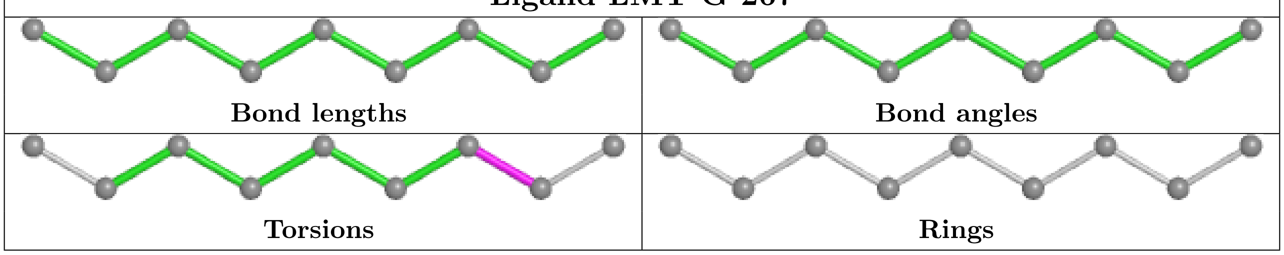
Ligand LMT I 252



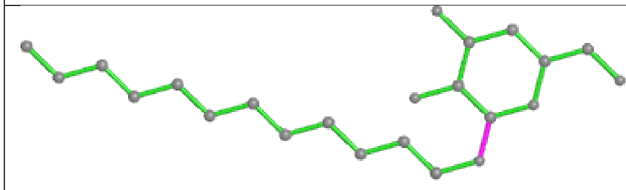
Ligand GSH F 206

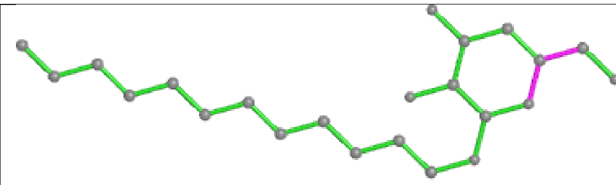


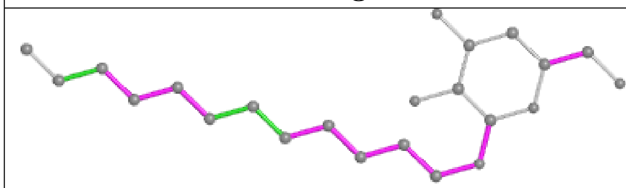
Ligand LMT G 267

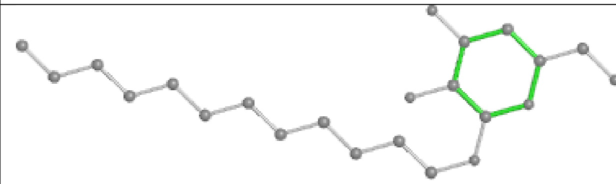


Ligand LMT K 225

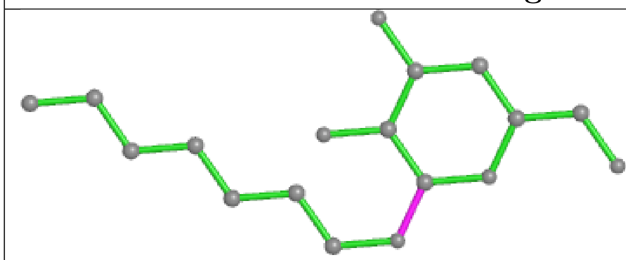

Bond lengths

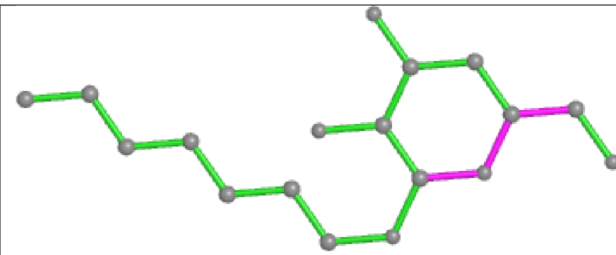

Bond angles

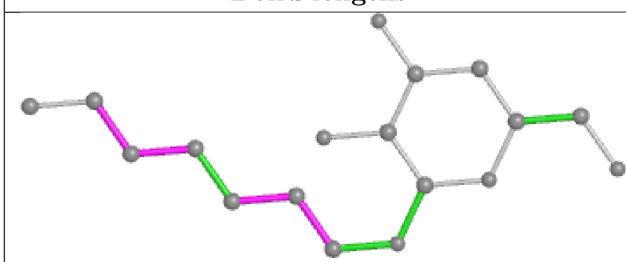

Torsions

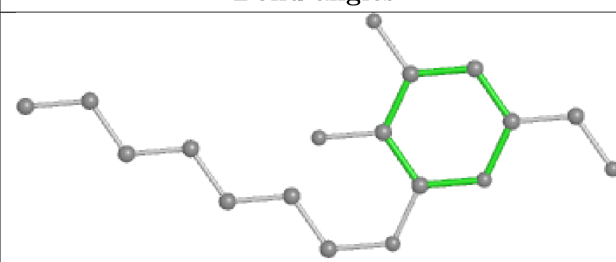

Rings

Ligand LMT F 241

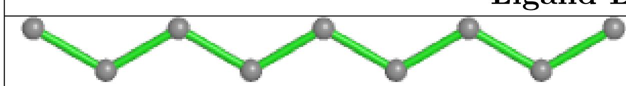

Bond lengths

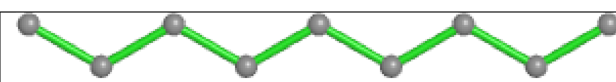

Bond angles

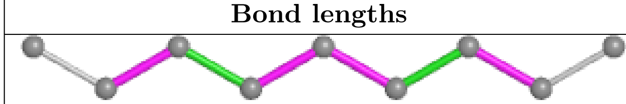

Torsions

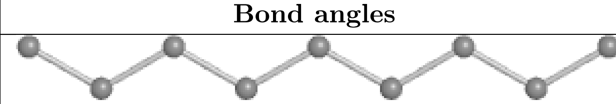

Rings

Ligand LMT A 244

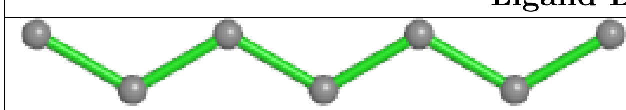

Bond lengths

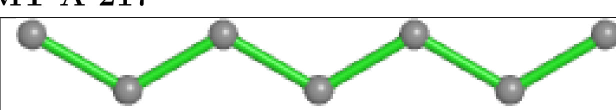

Bond angles

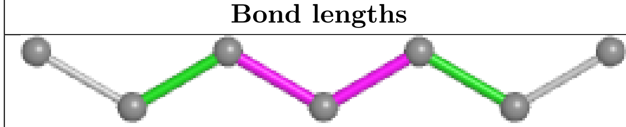

Torsions

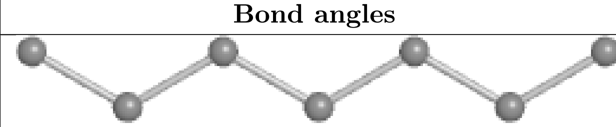

Rings

Ligand LMT A 217

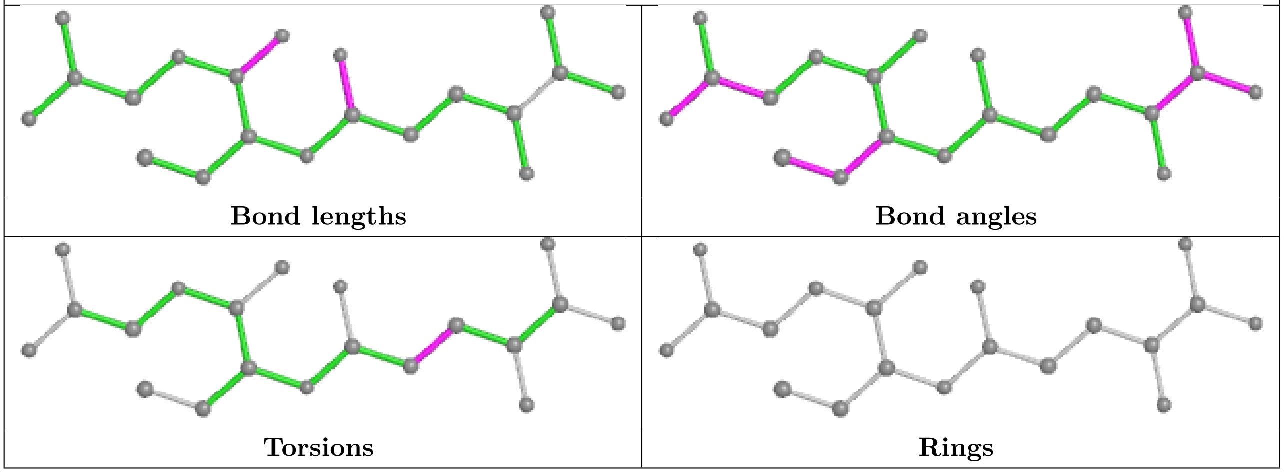

Bond lengths


Bond angles

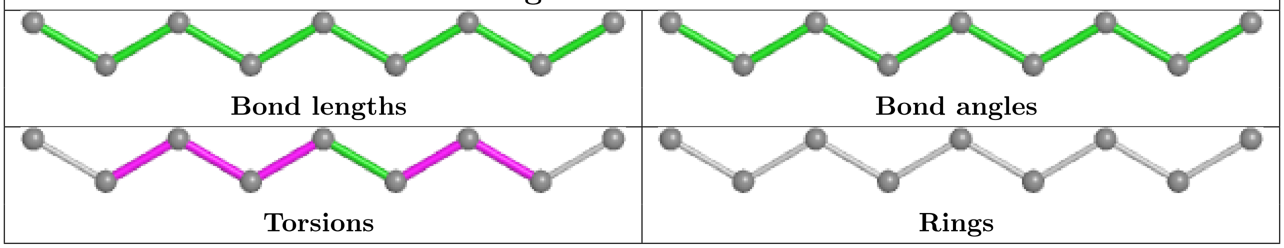

Torsions


Rings

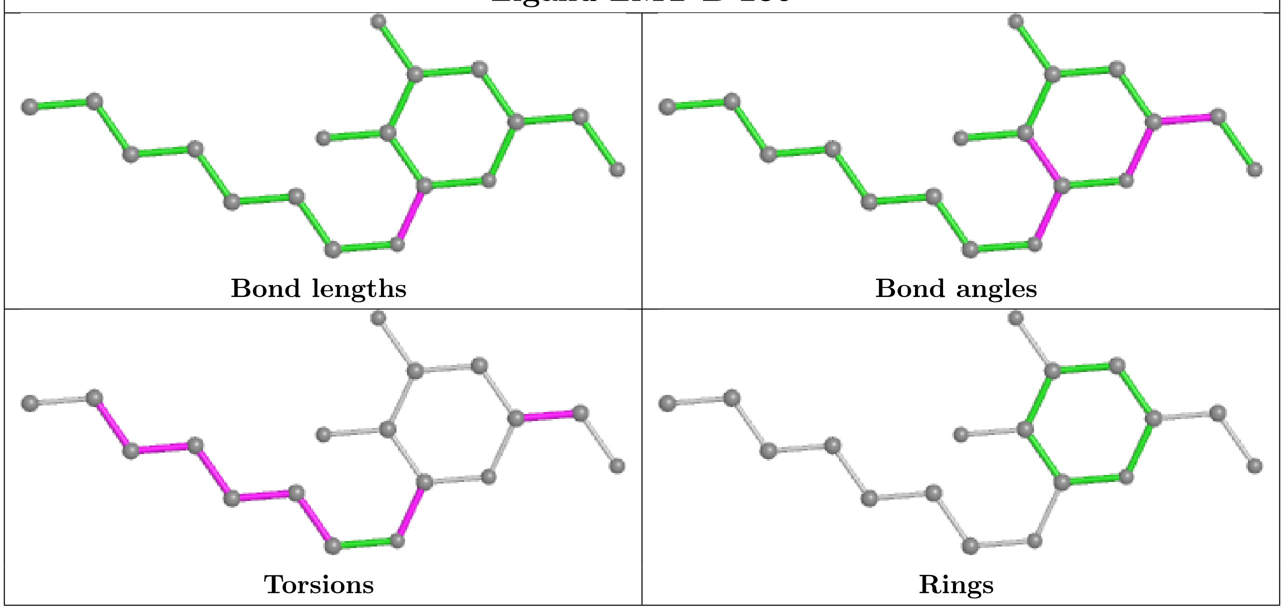
Ligand GSH E 205



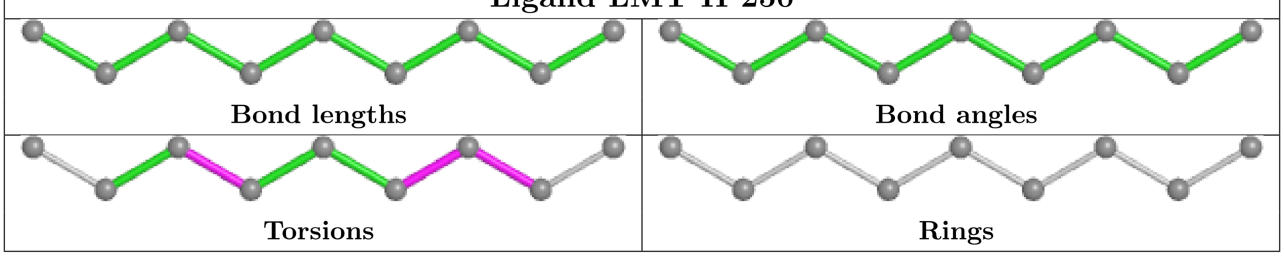
Ligand LMT L 223



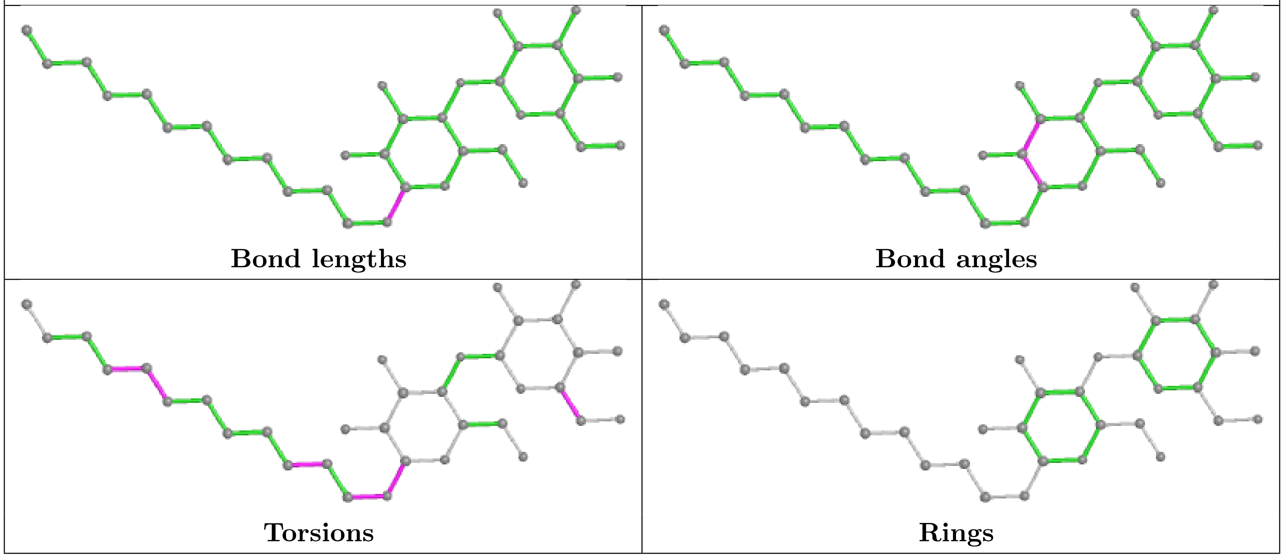
Ligand LMT B 236



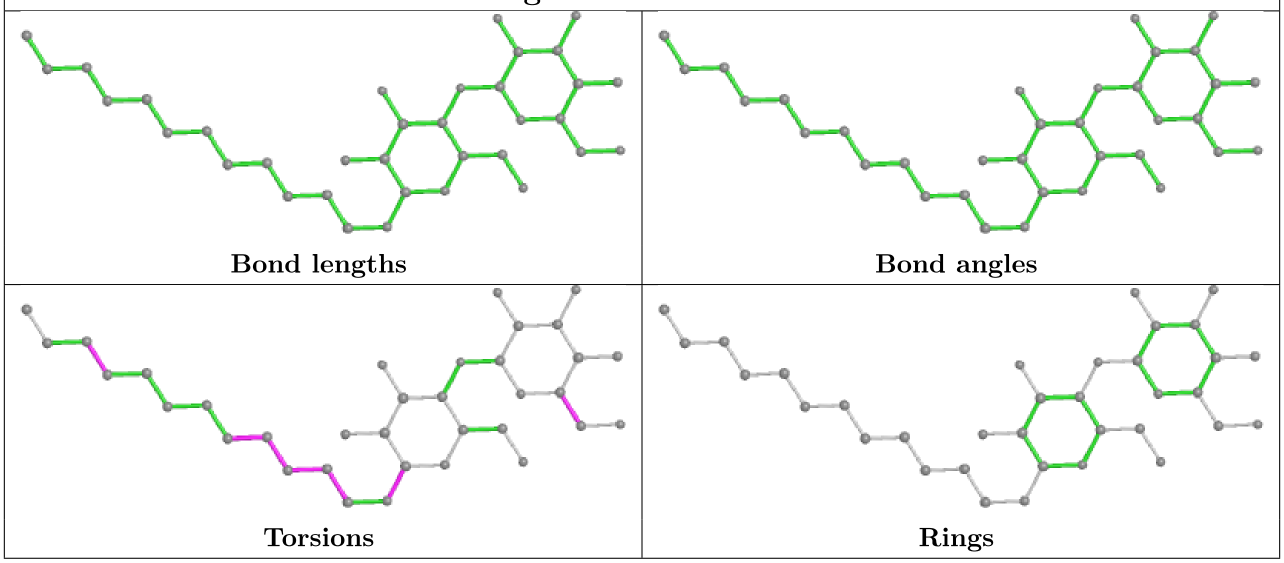
Ligand LMT H 250



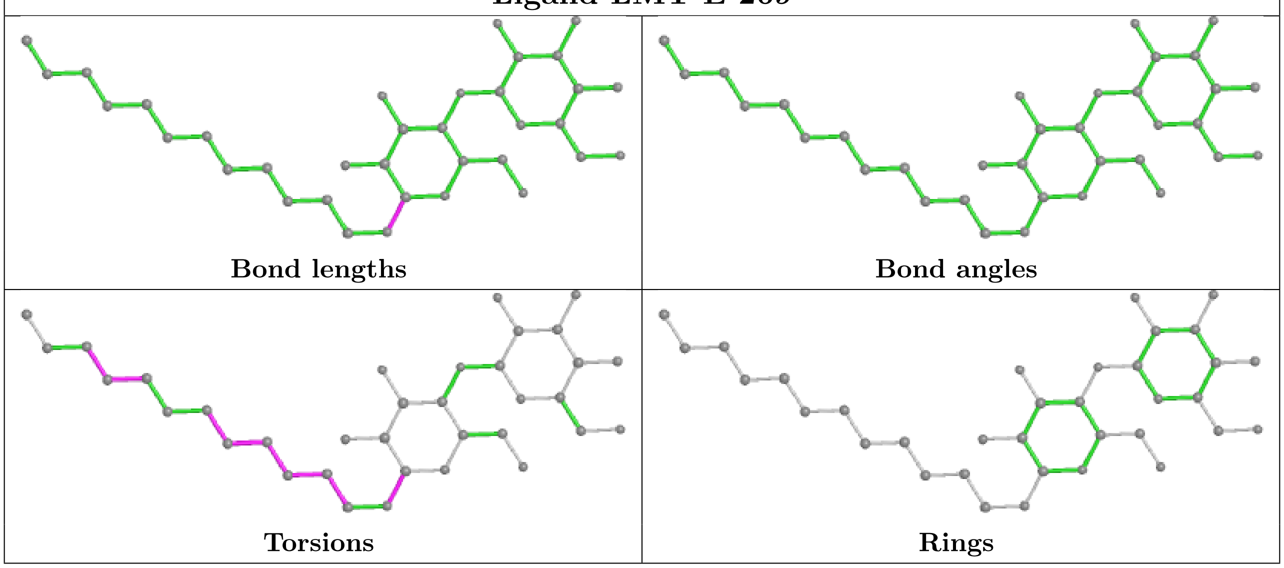
Ligand LMT E 268



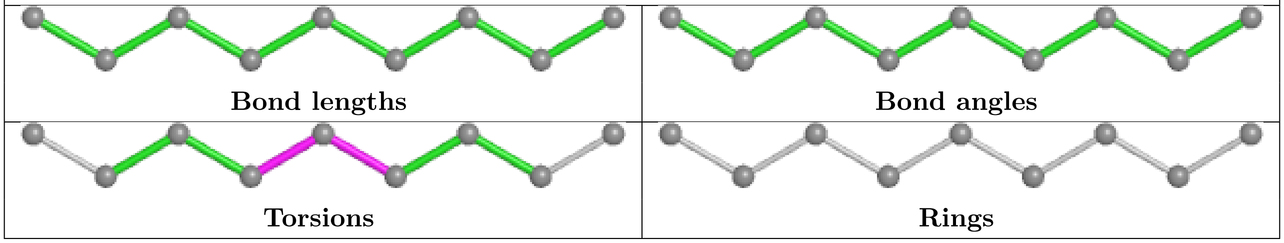
Ligand LMT E 243



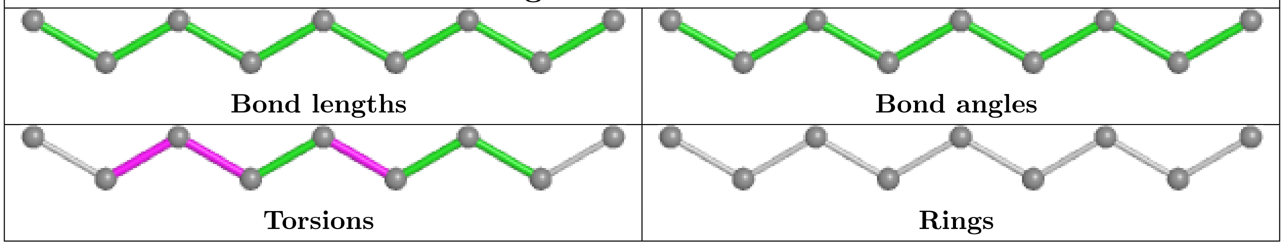
Ligand LMT E 269



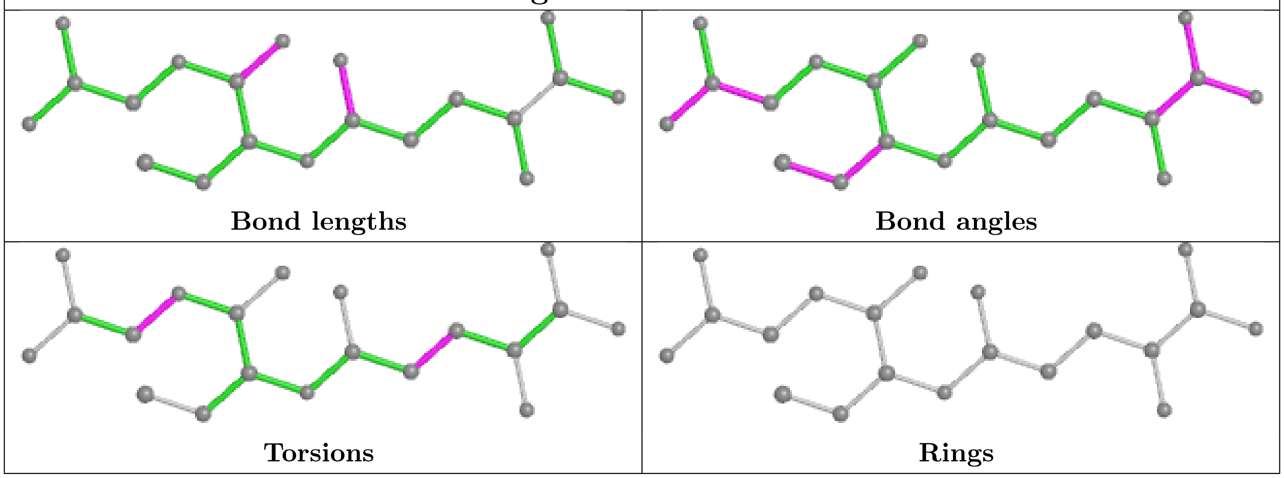
Ligand LMT G 251



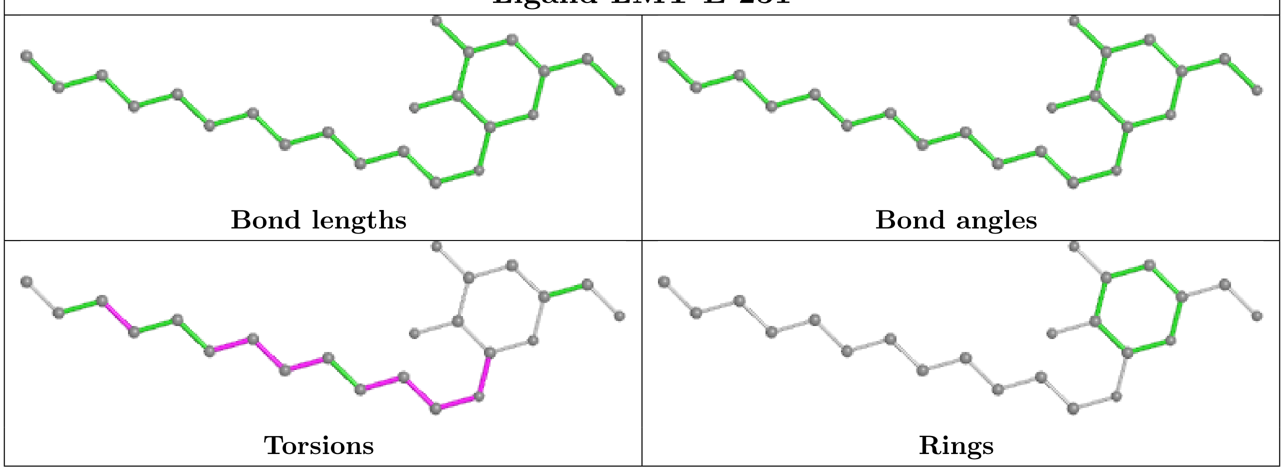
Ligand LMT L 254



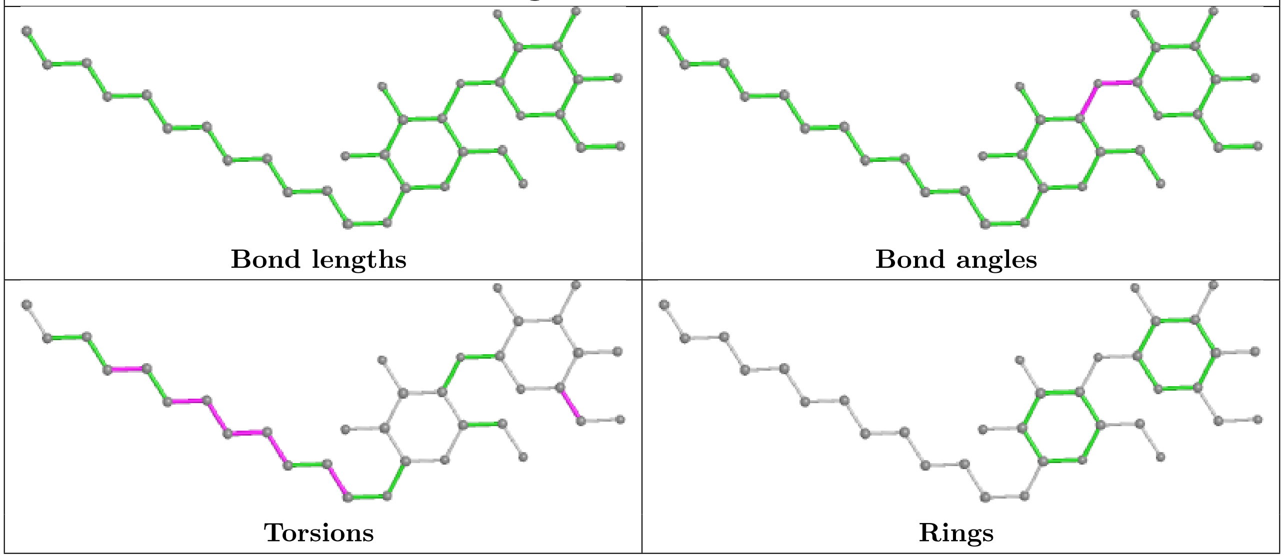
Ligand GSH I 209



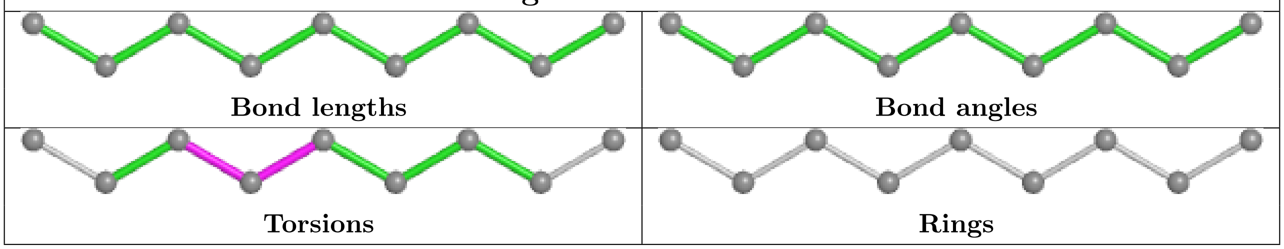
Ligand LMT E 231



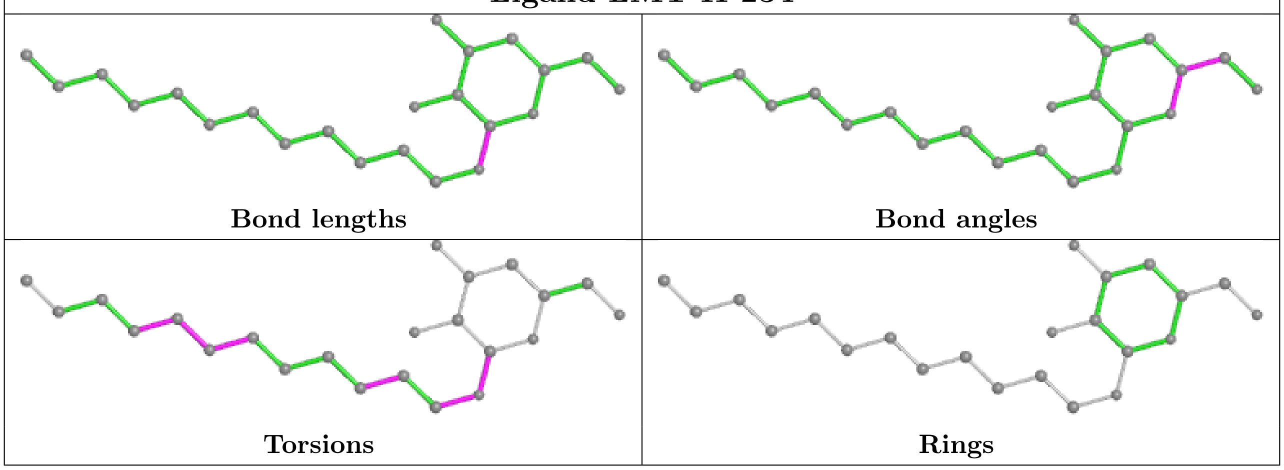
Ligand LMT J 239



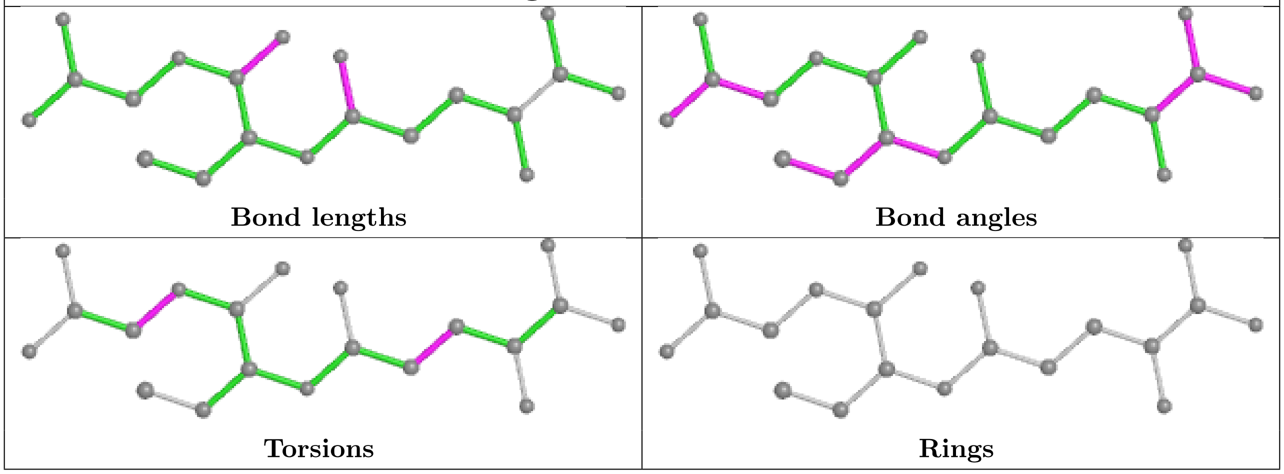
Ligand LMT D 220



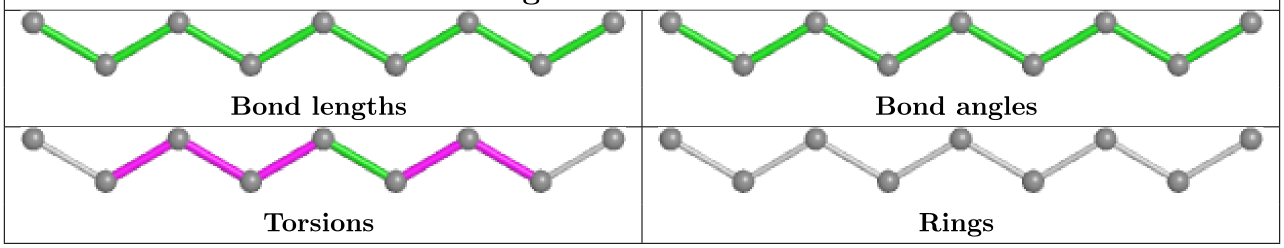
Ligand LMT H 234



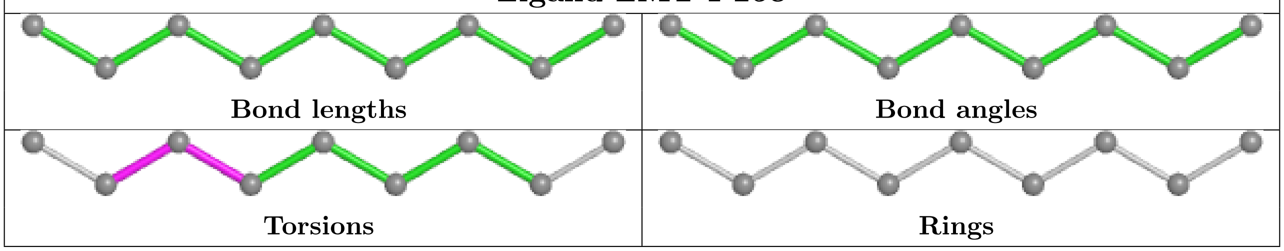
Ligand GSH G 207



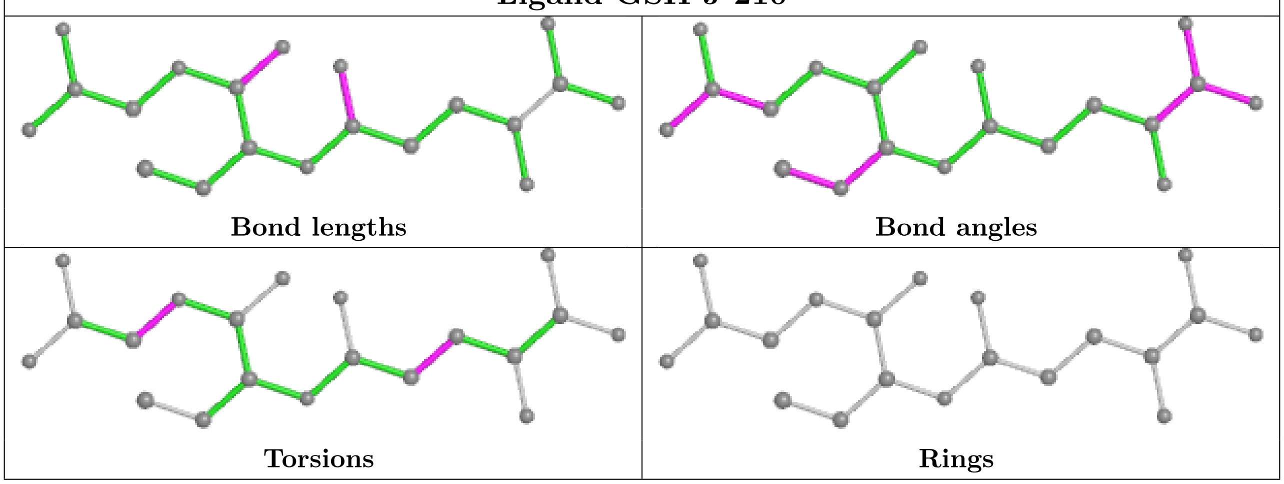
Ligand LMT B 260



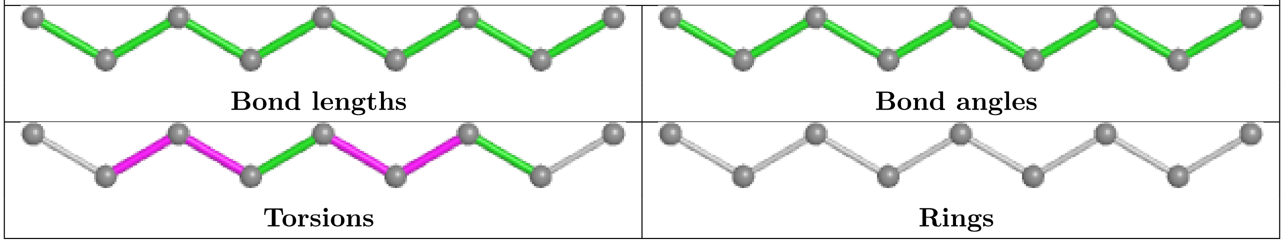
Ligand LMT I 258



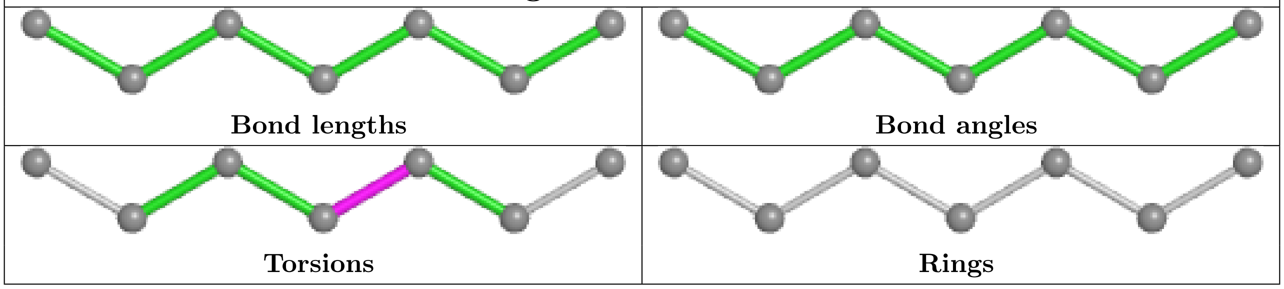
Ligand GSH J 210



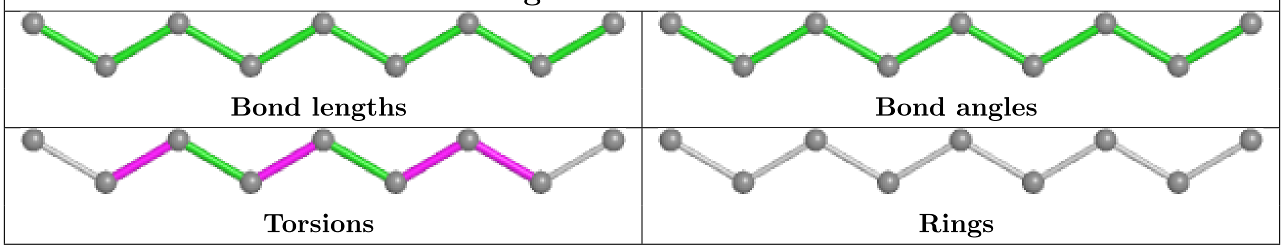
Ligand LMT C 246



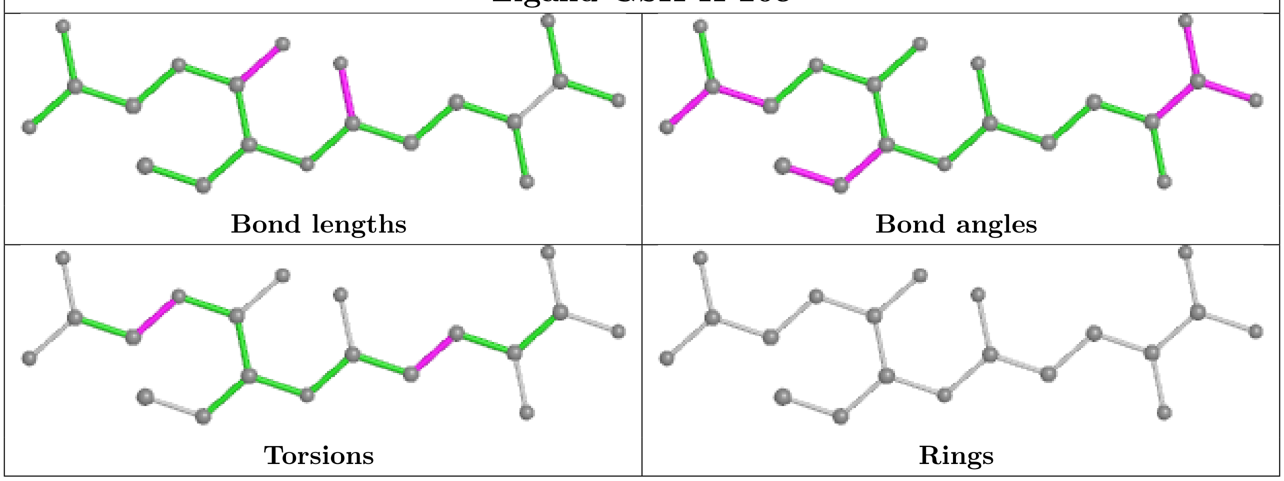
Ligand LMT L 265



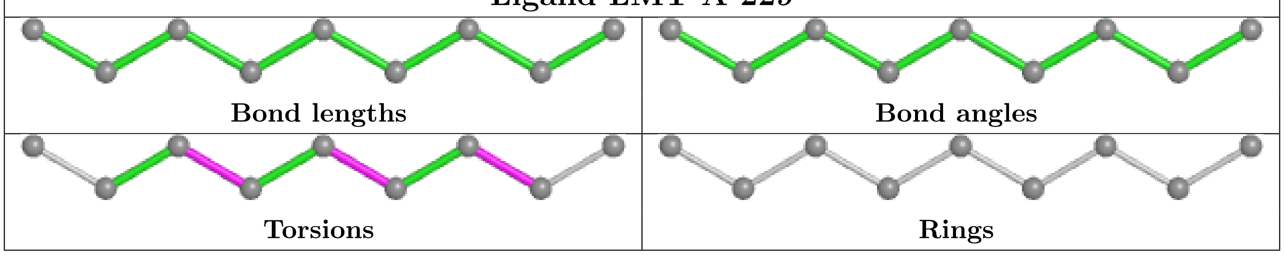
Ligand LMT E 266



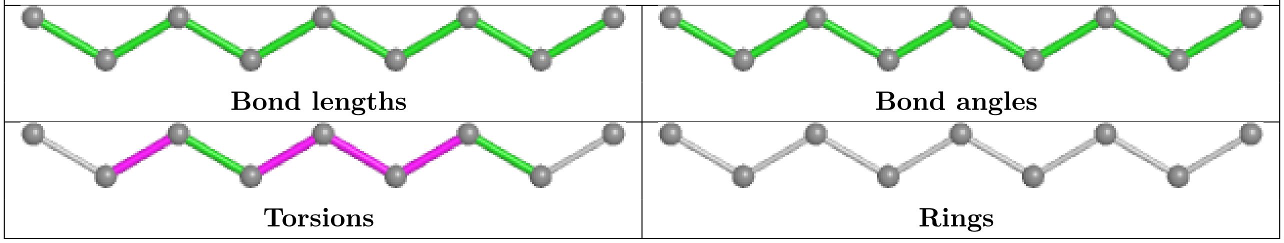
Ligand GSH H 208



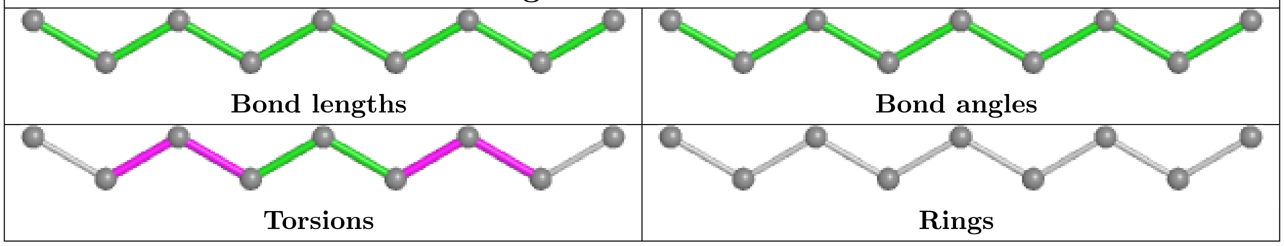
Ligand LMT A 229



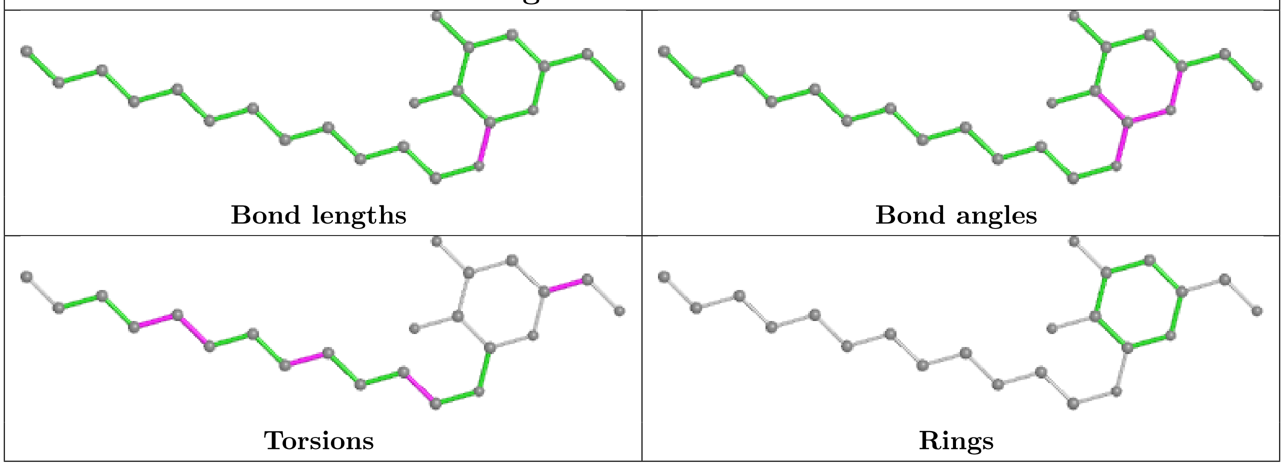
Ligand LMT A 245



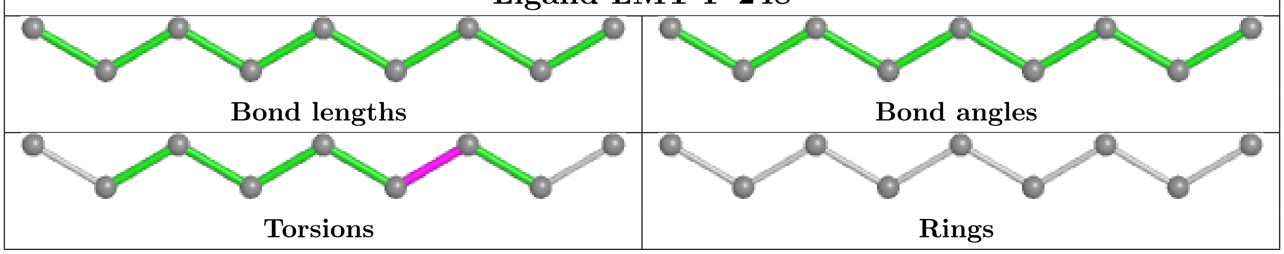
Ligand LMT B 259



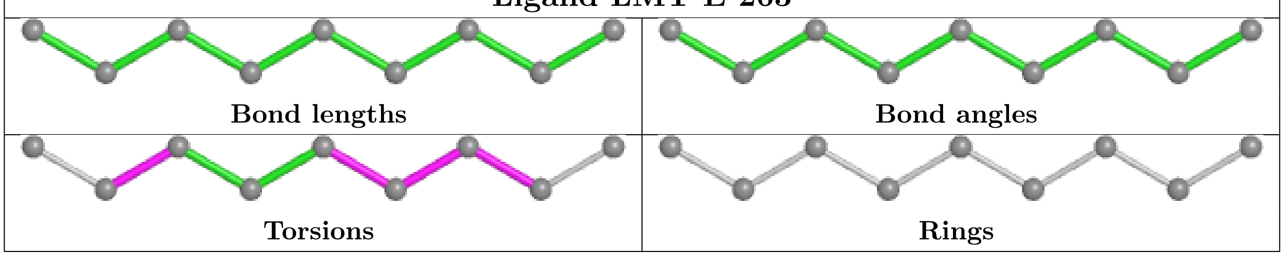
Ligand LMT B 218



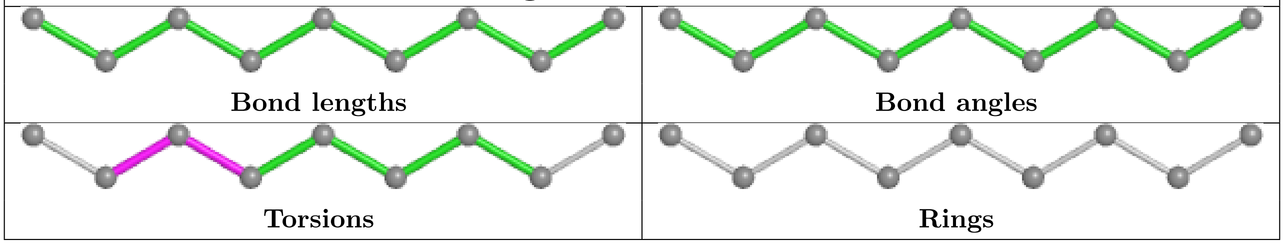
Ligand LMT F 248



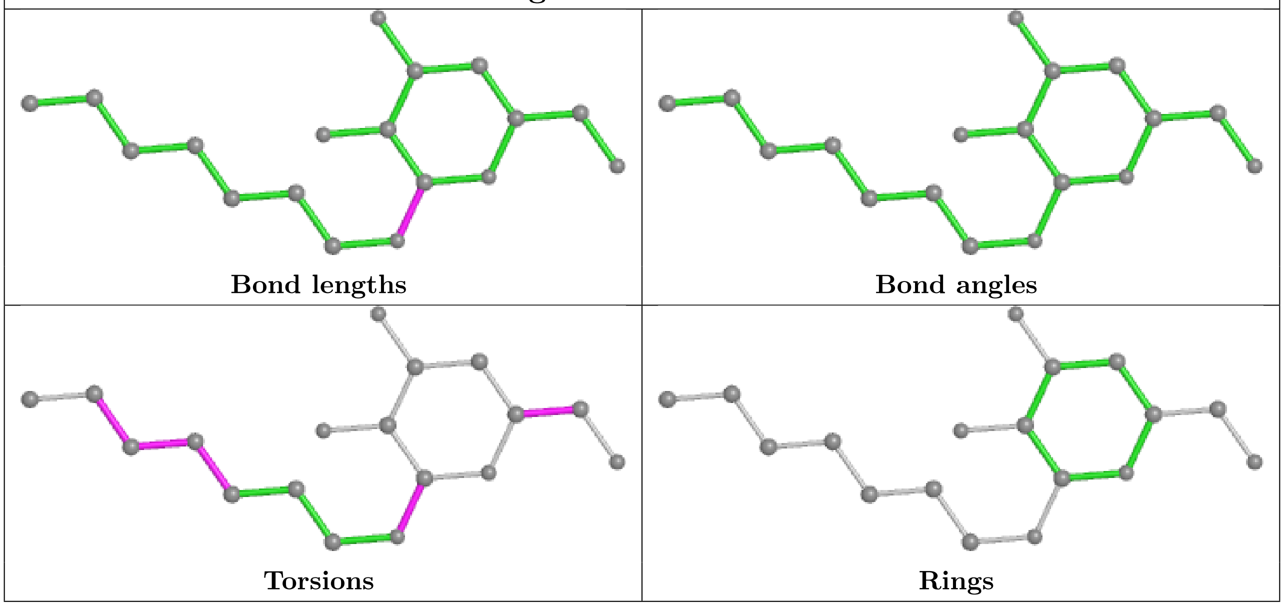
Ligand LMT E 263



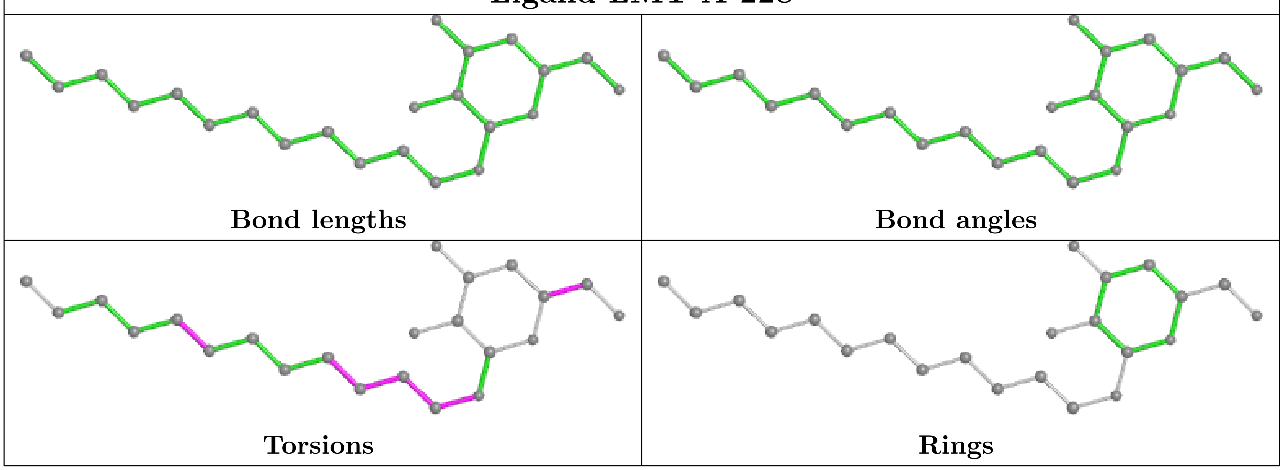
Ligand LMT G 264



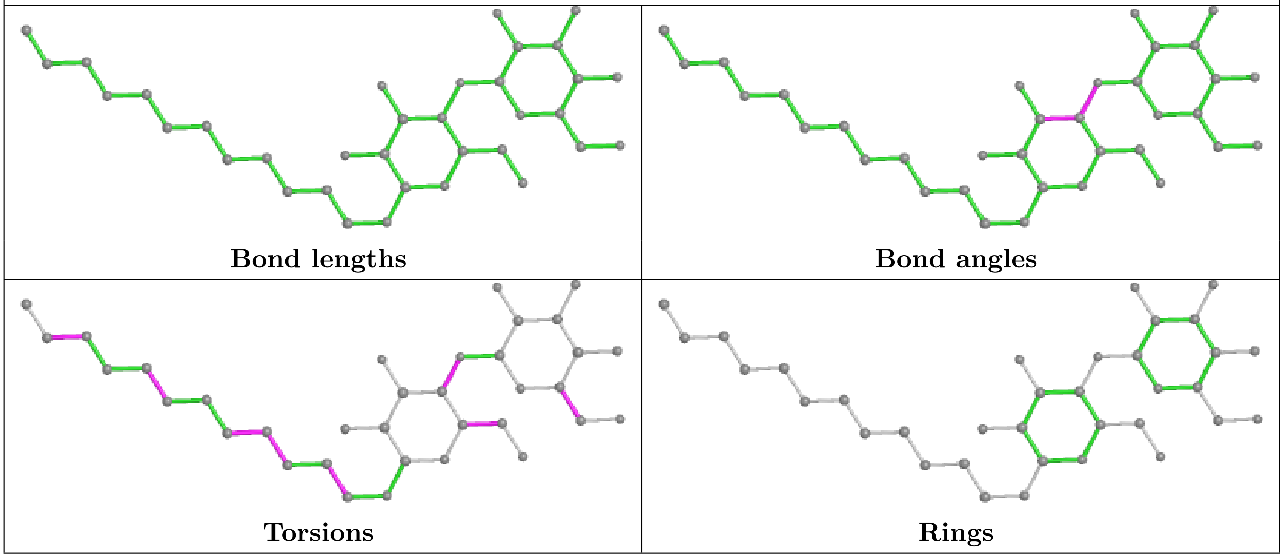
Ligand LMT I 240



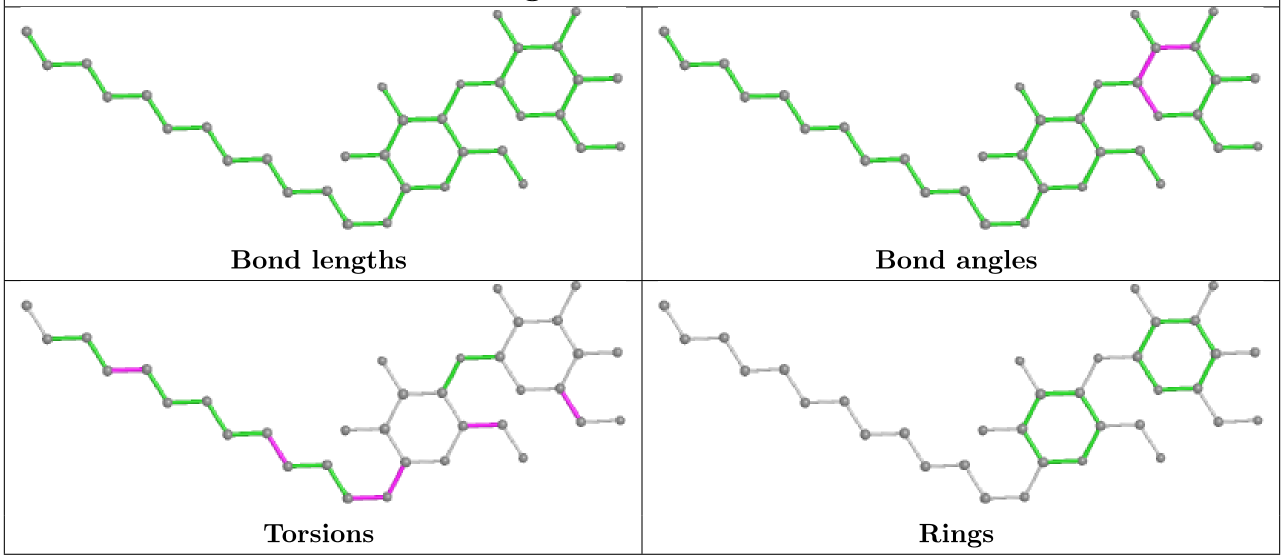
Ligand LMT A 228



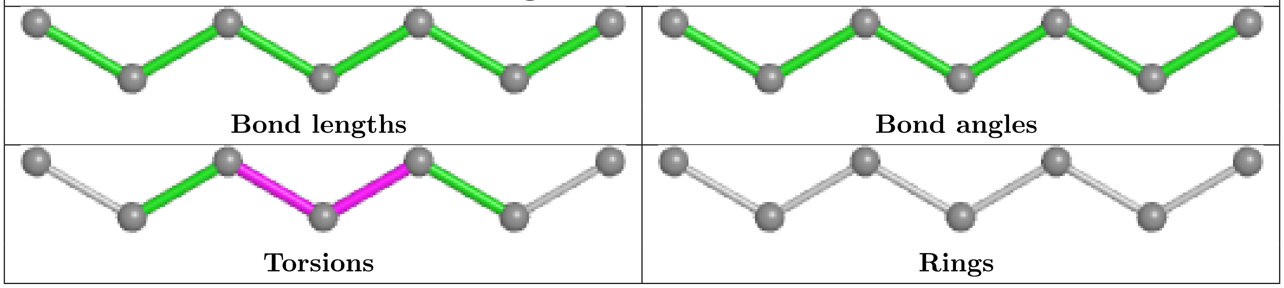
Ligand LMT C 216

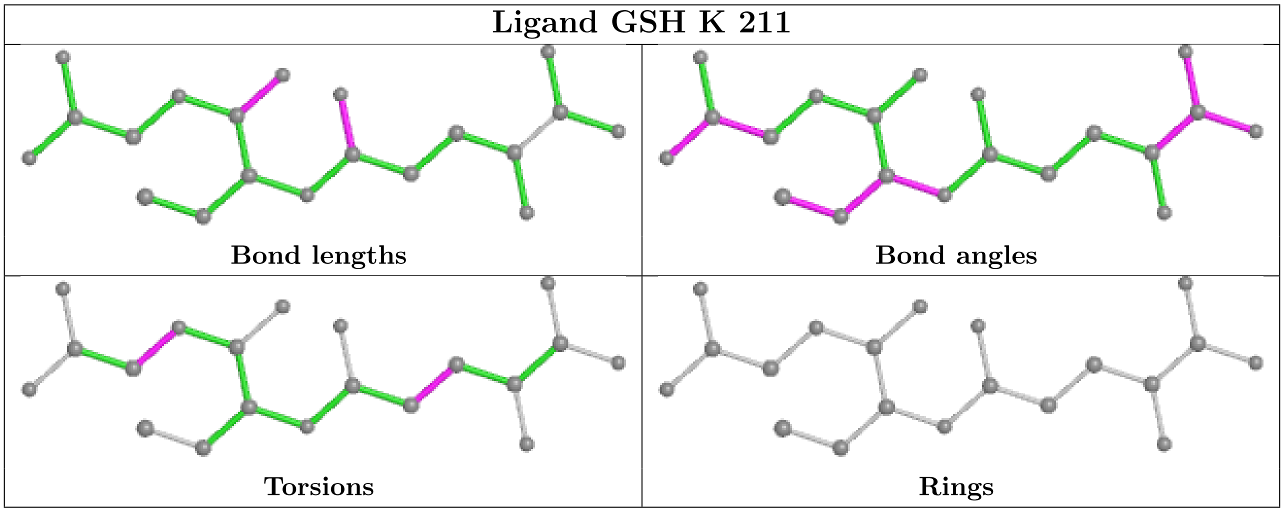


Ligand LMT E 230

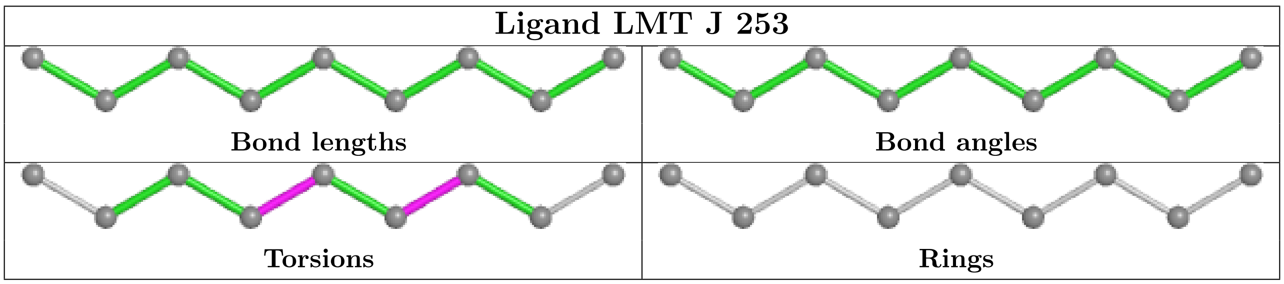


Ligand LMT K 224





Ligand GSH K 211



Ligand LMT J 253

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 (i)

6.1 Protein, DNA and RNA chains (i)

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, 95^{th} 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	146/156 (93%)	0.17	5 (3%)	45	43	51, 67, 94, 119	0
1	B	146/156 (93%)	0.12	5 (3%)	45	43	51, 67, 95, 119	0
1	C	146/156 (93%)	0.35	13 (8%)	9	10	51, 67, 93, 119	0
1	D	146/156 (93%)	0.36	15 (10%)	6	6	52, 67, 93, 119	0
1	E	146/156 (93%)	0.13	4 (2%)	54	52	51, 67, 93, 118	0
1	F	146/156 (93%)	0.10	3 (2%)	63	62	51, 67, 94, 118	0
1	G	146/156 (93%)	0.02	7 (4%)	30	28	51, 67, 96, 119	0
1	H	146/156 (93%)	0.04	5 (3%)	45	43	52, 67, 94, 119	0
1	I	146/156 (93%)	0.46	22 (15%)	2	2	52, 67, 94, 119	0
1	J	146/156 (93%)	0.17	8 (5%)	25	23	52, 67, 94, 119	0
1	K	146/156 (93%)	0.29	14 (9%)	8	8	52, 67, 94, 119	0
1	L	146/156 (93%)	0.20	7 (4%)	30	28	52, 67, 93, 119	0
All	All	1752/1872 (93%)	0.20	108 (6%)	20	20	51, 67, 97, 119	0

The worst 5 of 108 RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
1	L	147	LEU	8.1
1	D	147	LEU	6.0
1	L	145	THR	5.4
1	G	147	LEU	5.2
1	D	145	THR	4.8

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

There are no non-standard protein/DNA/RNA residues in this entry.

6.3 Carbohydrates (i)

There are no monosaccharides 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, 95^{th} 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
3	LMT	E	269	35/35	0.13	0.60	139,180,186,187	0
3	LMT	C	214	35/35	0.42	0.54	100,130,142,142	0
3	LMT	E	266	9/35	0.44	0.40	102,107,109,110	0
3	LMT	H	250	9/35	0.55	0.58	80,82,84,84	0
3	LMT	F	233	23/35	0.56	0.56	73,112,131,132	0
3	LMT	G	251	9/35	0.57	0.61	82,85,92,92	0
3	LMT	H	234	23/35	0.59	0.55	97,124,139,139	0
3	LMT	E	231	23/35	0.59	0.48	84,124,138,139	0
3	LMT	E	230	35/35	0.61	0.49	88,147,154,154	0
3	LMT	B	227	23/35	0.63	0.51	67,109,127,127	0
3	LMT	E	263	9/35	0.64	0.50	75,77,80,80	0
3	LMT	L	226	9/35	0.64	0.71	90,94,99,100	0
3	LMT	A	256	18/35	0.65	0.71	92,111,114,114	0
3	LMT	B	260	9/35	0.66	0.43	108,111,112,112	0
3	LMT	K	225	23/35	0.67	0.45	79,111,129,132	0
3	LMT	E	268	35/35	0.67	0.37	54,139,155,156	0
3	LMT	A	262	9/35	0.70	0.49	74,81,85,85	0
3	LMT	A	215	35/35	0.70	0.38	76,105,113,113	0
3	LMT	C	216	35/35	0.71	0.44	52,122,137,139	0
3	LMT	G	267	9/35	0.71	0.53	71,72,75,75	0
3	LMT	D	238	35/35	0.72	0.48	106,133,145,145	0
3	LMT	C	237	35/35	0.72	0.45	100,125,136,136	0
3	LMT	J	239	35/35	0.74	0.54	117,138,148,150	0
3	LMT	F	241	18/35	0.74	0.62	83,110,113,114	0
3	LMT	G	235	23/35	0.74	0.52	82,108,127,127	0
3	LMT	I	240	18/35	0.75	0.86	99,121,123,124	0
3	LMT	B	218	23/35	0.75	0.42	68,106,117,118	0
3	LMT	I	252	9/35	0.77	0.39	79,81,85,85	0
3	LMT	B	242	12/35	0.78	0.41	72,77,87,87	0
3	LMT	A	228	23/35	0.78	0.39	78,104,118,119	0
3	LMT	L	265	7/35	0.78	0.41	52,57,62,62	0

Continued on next page...

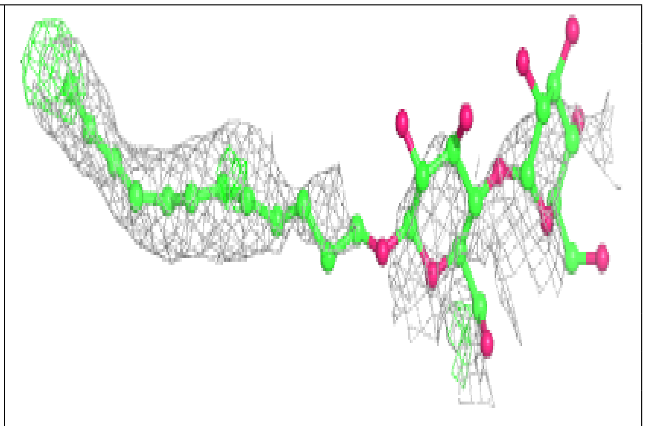
Continued from previous page...

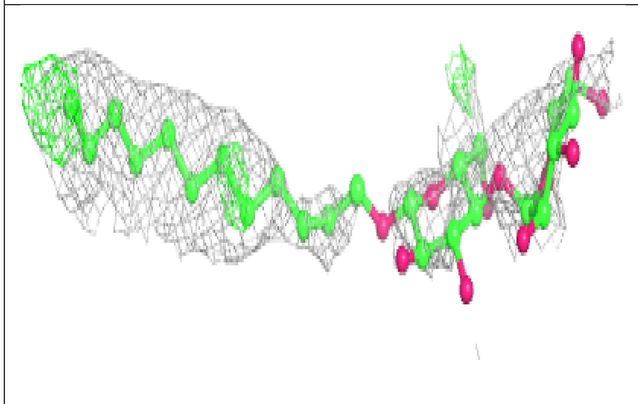
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
3	LMT	B	236	18/35	0.79	0.38	62,99,103,105	0
3	LMT	B	213	23/35	0.79	0.41	96,112,119,120	0
3	LMT	J	253	9/35	0.81	0.37	106,107,108,108	0
3	LMT	L	254	9/35	0.81	0.39	99,99,101,101	0
3	LMT	E	243	35/35	0.81	0.31	94,109,113,114	0
3	LMT	G	264	9/35	0.82	0.35	65,68,70,70	0
3	LMT	B	259	9/35	0.82	0.39	114,115,116,116	0
3	LMT	E	249	9/35	0.83	0.37	56,65,75,77	0
3	LMT	I	258	9/35	0.83	0.54	66,69,71,72	0
3	LMT	I	257	9/35	0.84	0.27	79,83,85,85	0
3	LMT	A	217	7/35	0.84	0.32	62,64,67,68	0
3	LMT	L	255	9/35	0.85	0.31	85,89,94,95	0
3	LMT	K	224	7/35	0.86	0.31	81,83,84,84	0
3	LMT	D	247	9/35	0.86	0.31	65,73,74,75	0
3	LMT	F	248	9/35	0.86	0.32	66,69,80,81	0
3	LMT	A	229	9/35	0.88	0.42	77,78,80,80	0
3	LMT	C	261	9/35	0.88	0.27	46,53,62,63	0
3	LMT	E	232	6/35	0.88	0.38	59,62,63,64	0
3	LMT	C	246	9/35	0.91	0.25	66,73,82,82	0
2	GSH	I	209	20/20	0.91	0.32	56,61,65,69	0
3	LMT	D	220	9/35	0.91	0.46	49,56,62,62	0
2	GSH	J	210	20/20	0.91	0.20	56,61,65,70	0
2	GSH	D	204	20/20	0.91	0.25	56,61,65,69	0
2	GSH	K	211	20/20	0.92	0.20	56,61,65,70	0
3	LMT	A	244	9/35	0.92	0.32	53,60,64,64	0
3	LMT	F	219	9/35	0.92	0.27	68,74,77,77	0
3	LMT	A	245	9/35	0.93	0.23	53,59,64,64	0
3	LMT	L	223	9/35	0.93	0.22	64,67,69,70	0
2	GSH	E	205	20/20	0.94	0.22	55,61,65,69	0
2	GSH	H	208	20/20	0.94	0.23	56,61,65,69	0
2	GSH	B	202	20/20	0.95	0.22	56,61,65,69	0
2	GSH	G	207	20/20	0.96	0.18	56,61,65,69	0
2	GSH	A	201	20/20	0.96	0.25	55,61,65,69	0
3	LMT	E	221	10/35	0.96	0.26	64,70,71,72	0
2	GSH	L	212	20/20	0.96	0.21	56,61,65,69	0
2	GSH	C	203	20/20	0.96	0.29	56,61,65,69	0
3	LMT	G	222	9/35	0.97	0.27	55,56,59,59	0
2	GSH	F	206	20/20	0.97	0.16	56,61,65,69	0

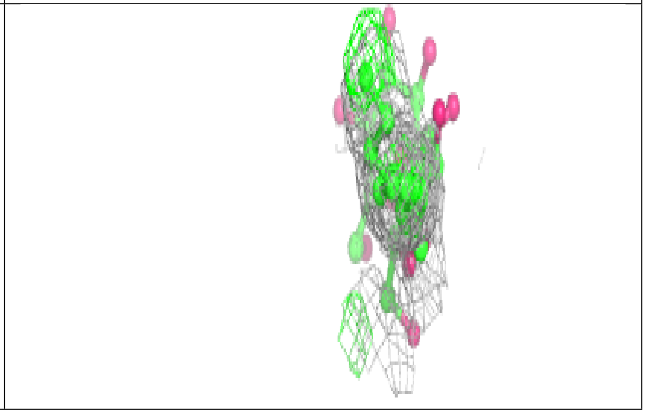
The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation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

Electron density around LMT E 269:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

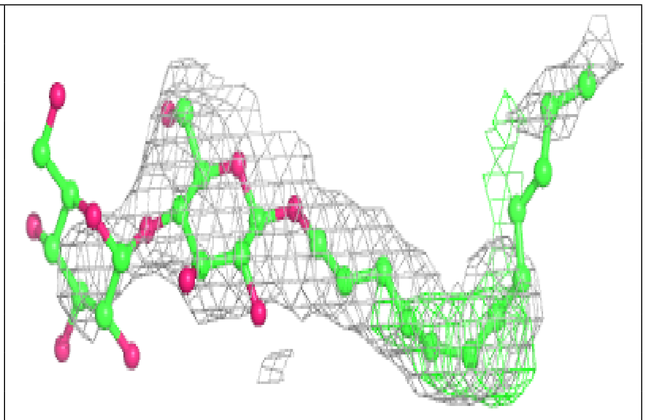


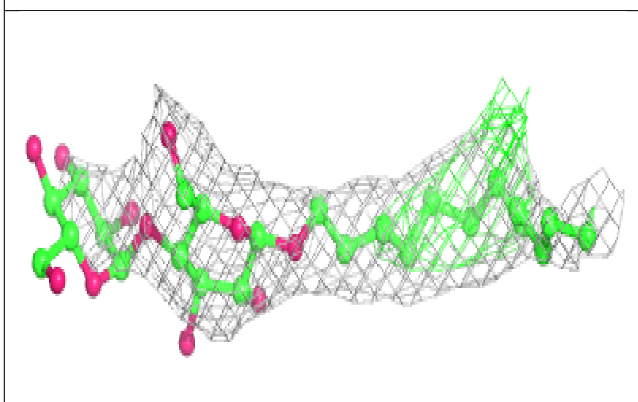


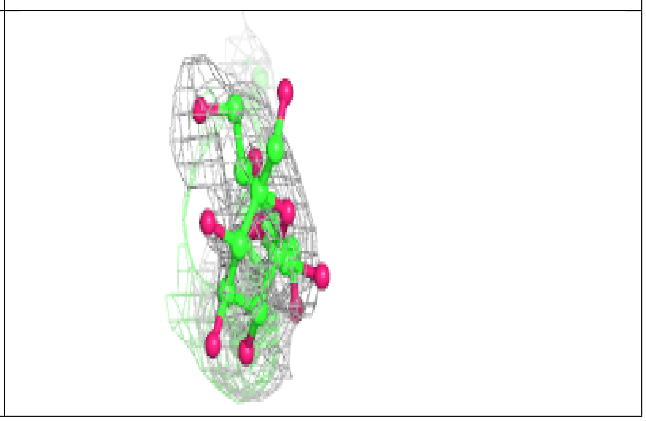


Electron density around LMT C 214:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

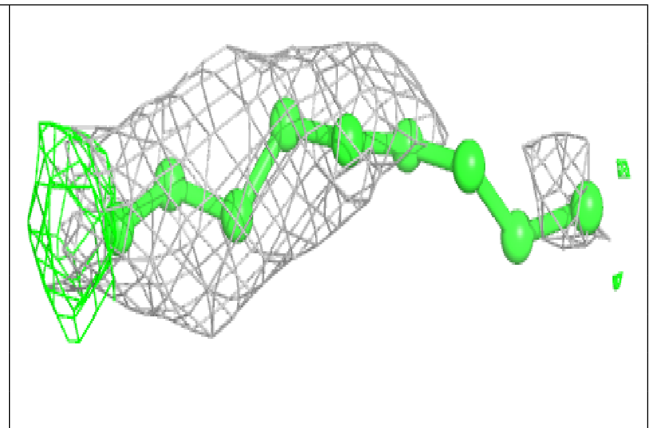


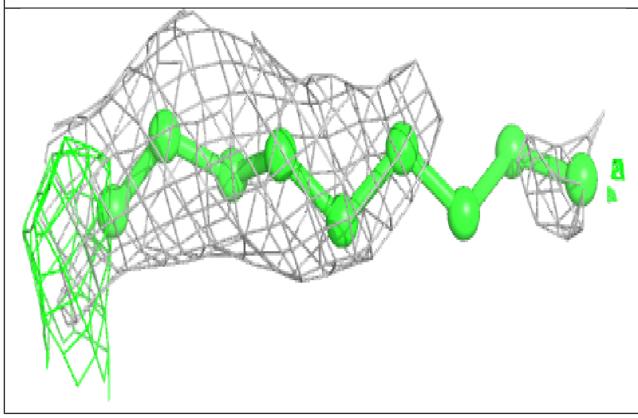


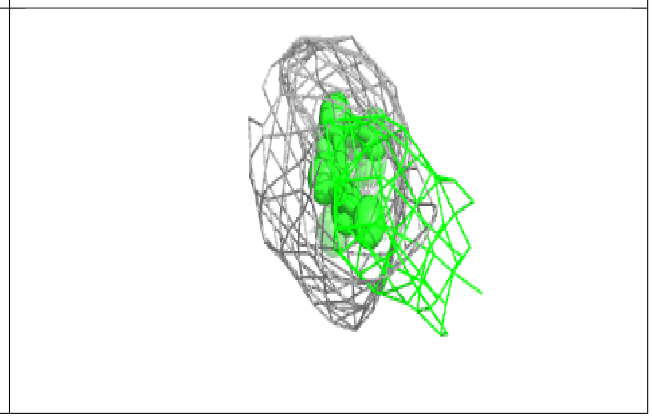


Electron density around LMT E 266:

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

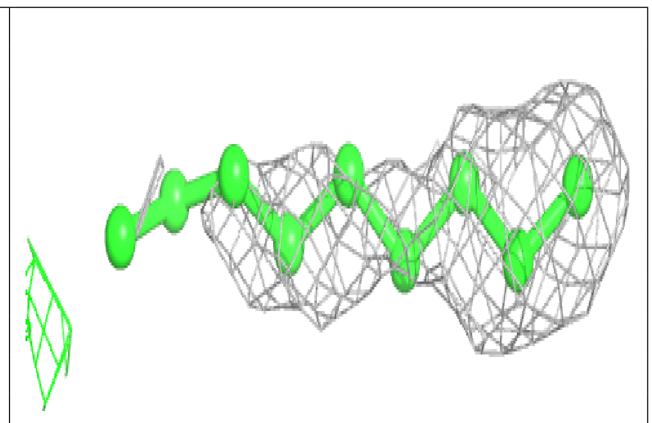


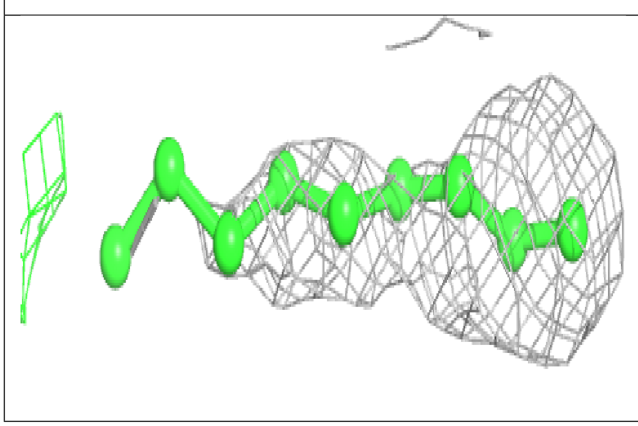


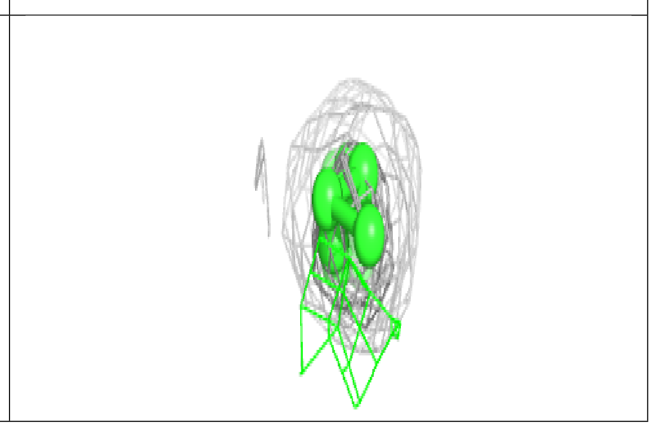


Electron density around LMT H 250:

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

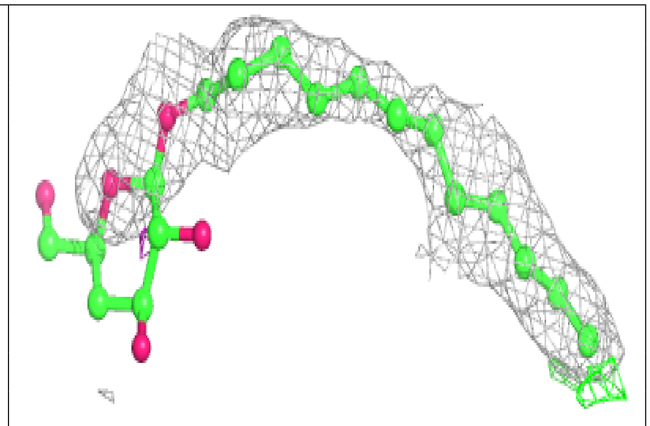


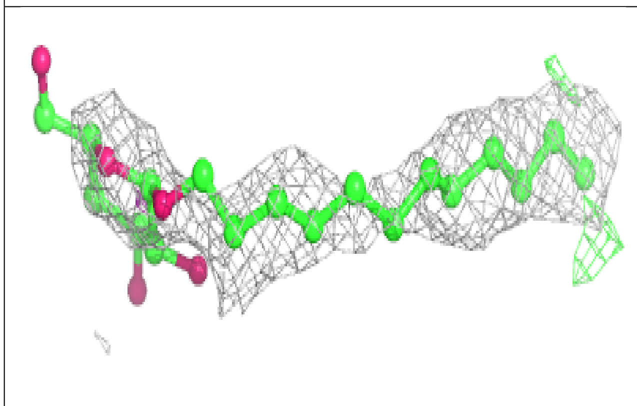


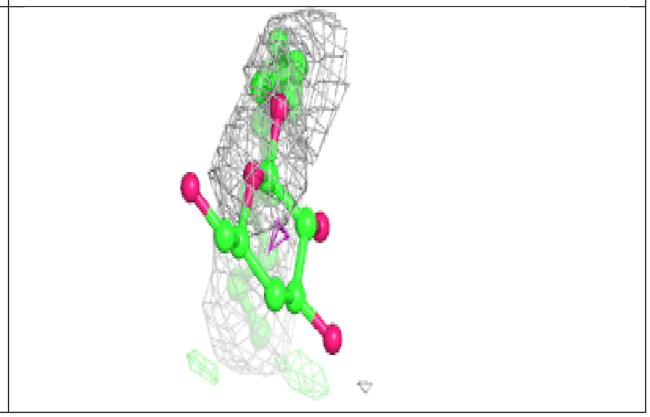


Electron density around LMT F 233:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

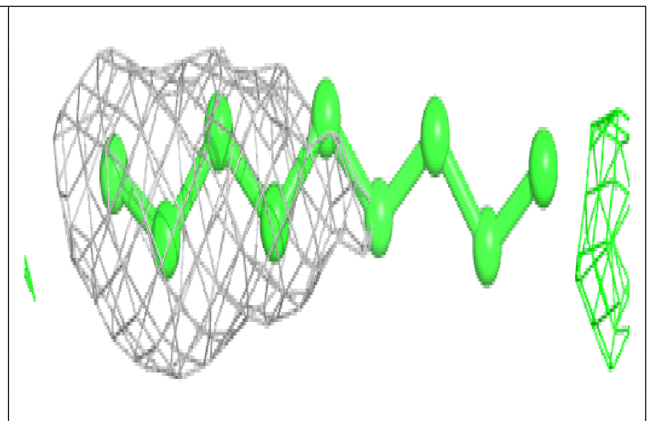


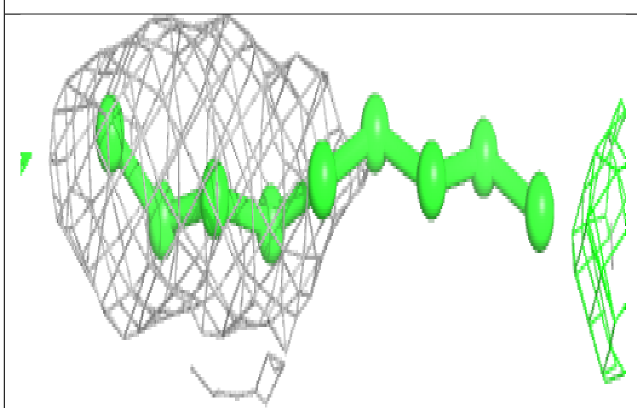


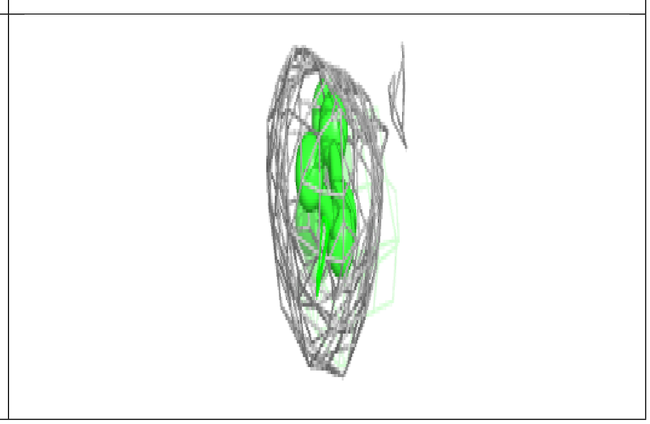


Electron density around LMT G 251:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

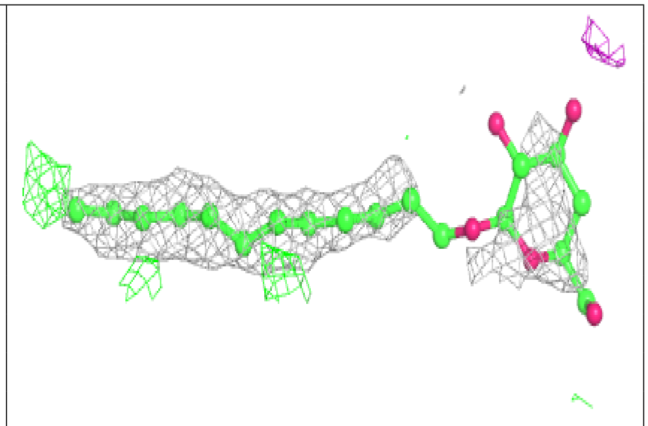


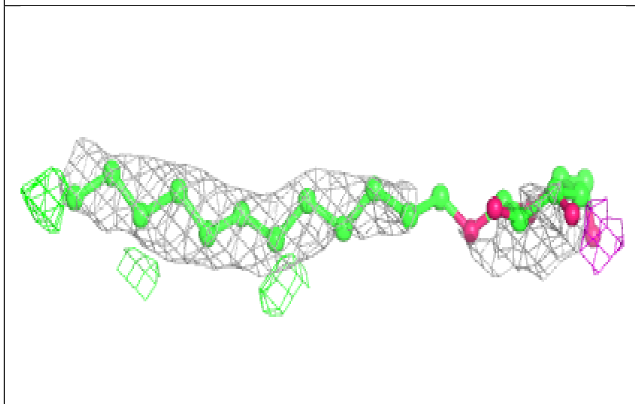


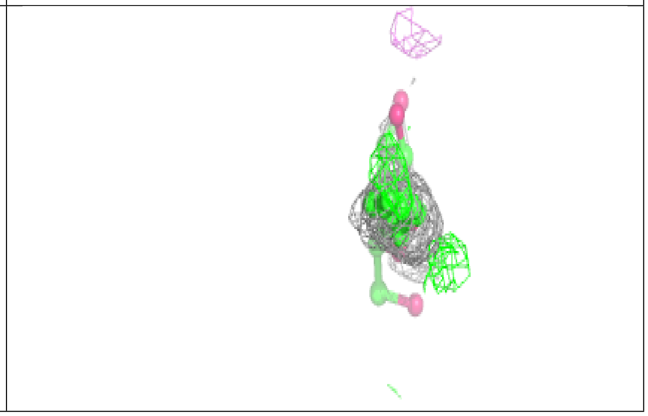


Electron density around LMT H 234:

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

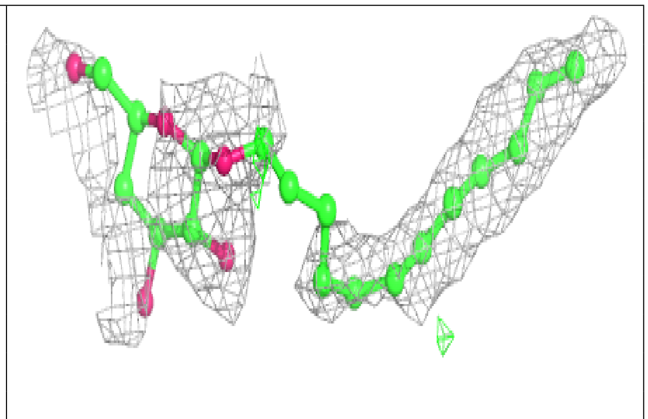


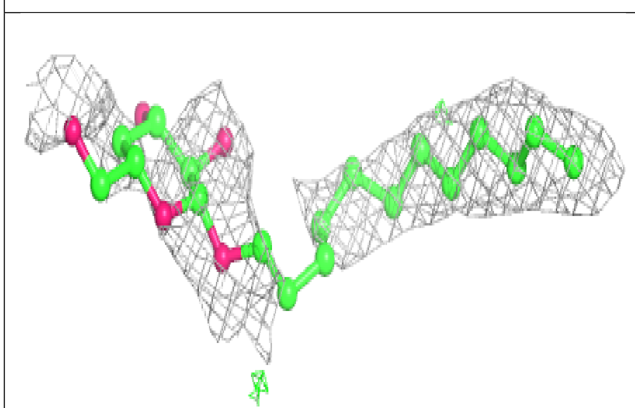


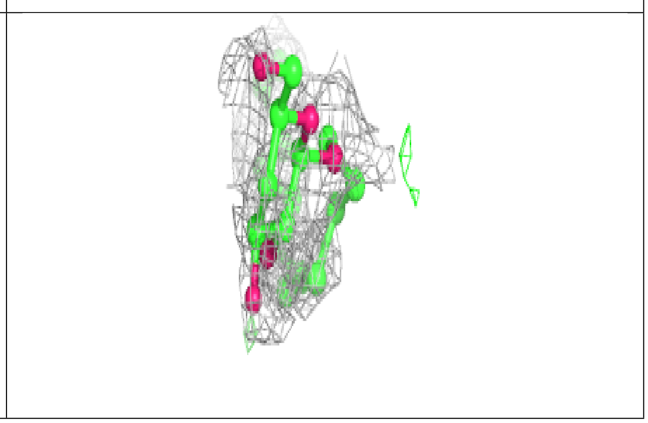


Electron density around LMT E 231:

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

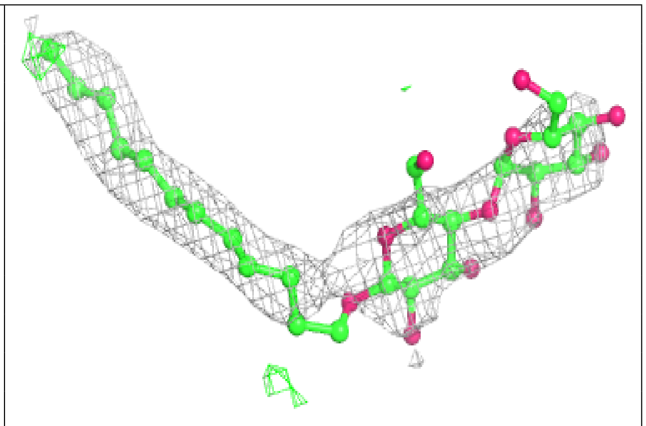


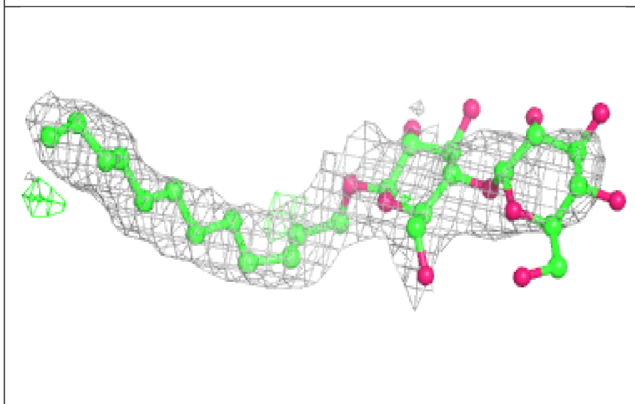


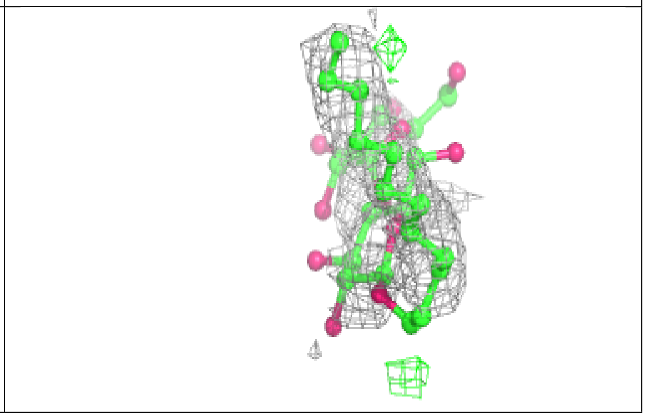


Electron density around LMT E 230:

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

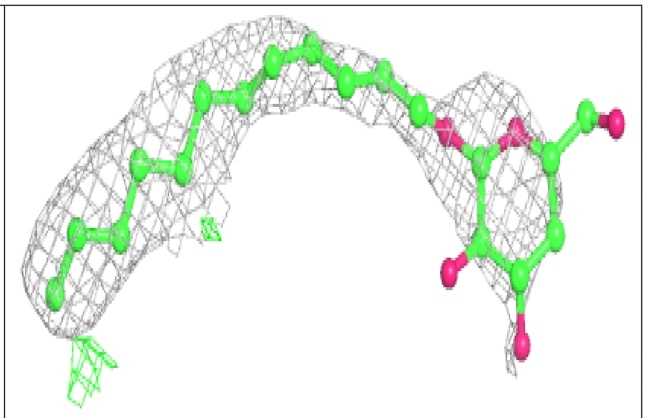


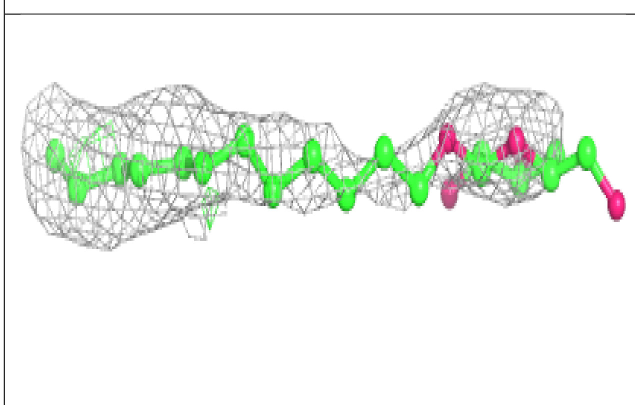


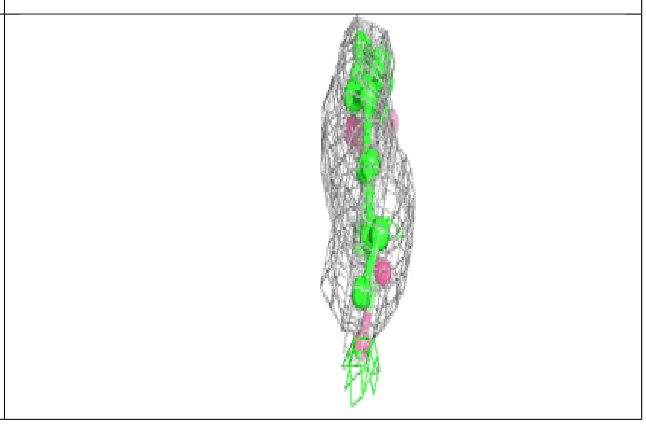


Electron density around LMT B 227:

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

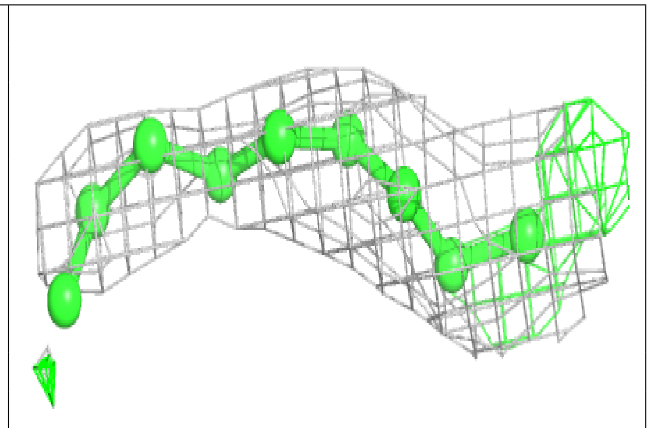


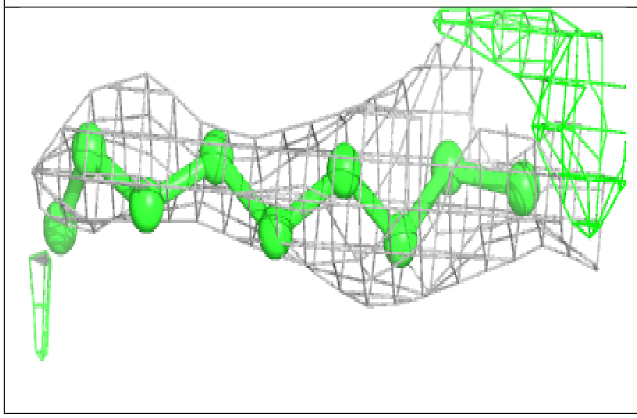


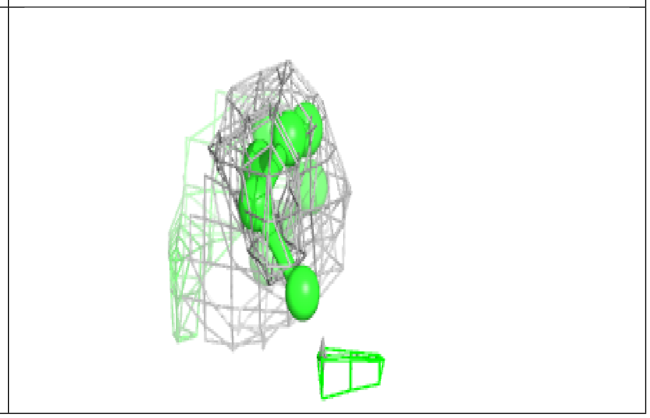


Electron density around LMT E 263:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

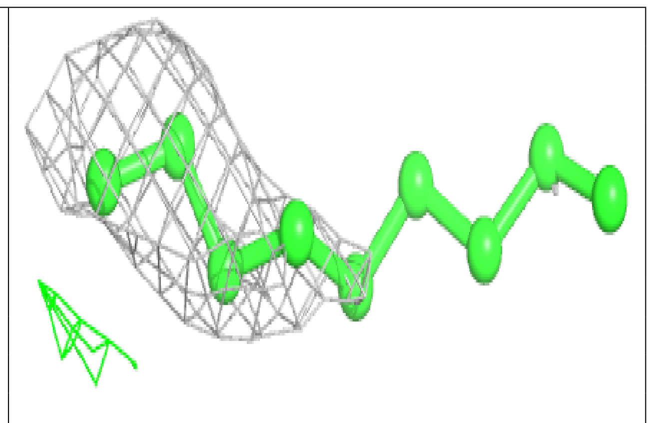


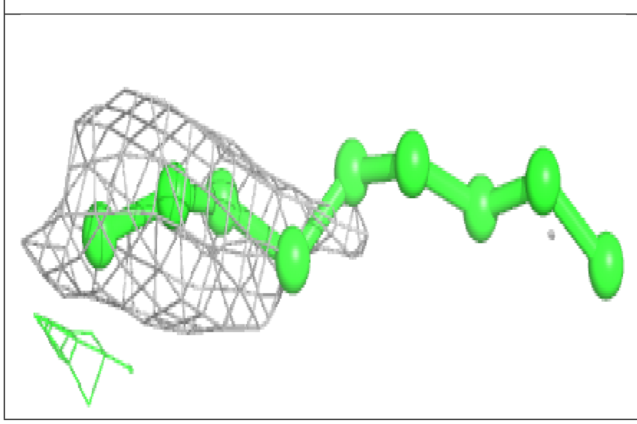


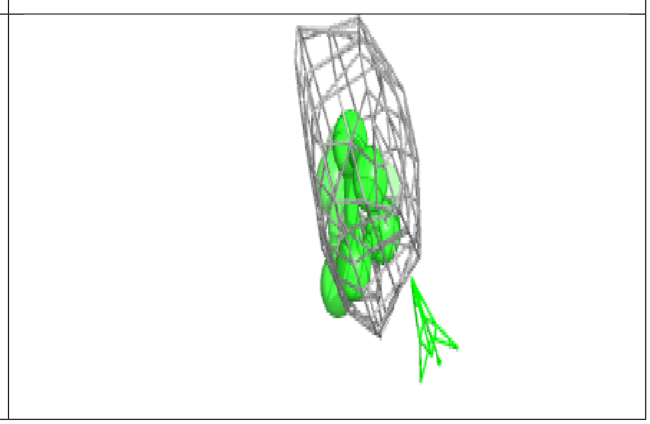


Electron density around LMT L 226:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

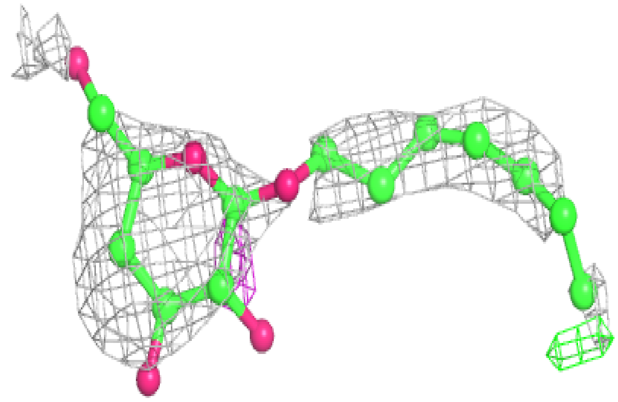


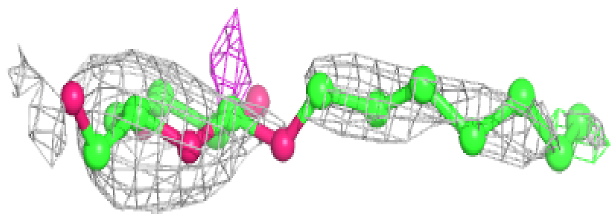


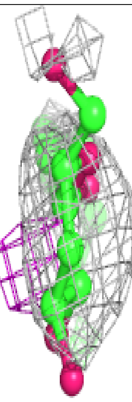


Electron density around LMT A 256:

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

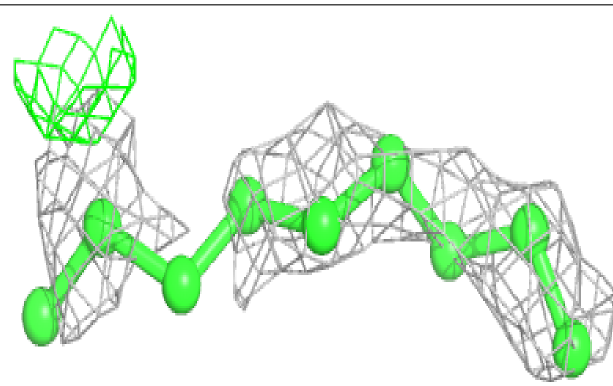


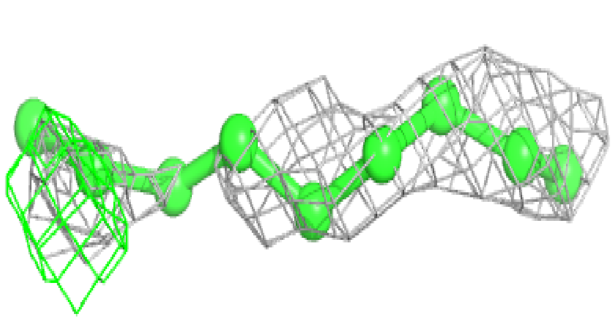


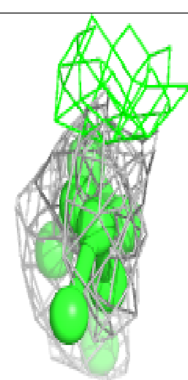


Electron density around LMT B 260:

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

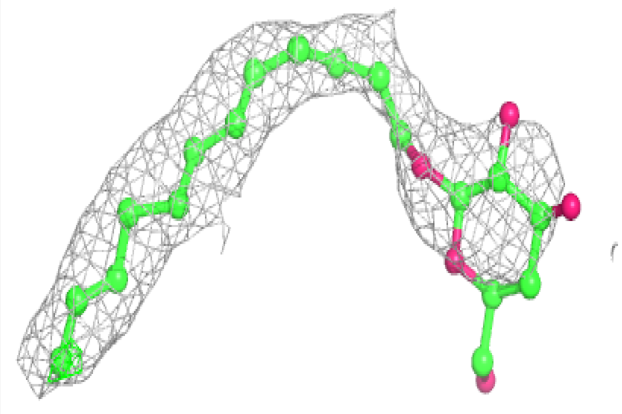


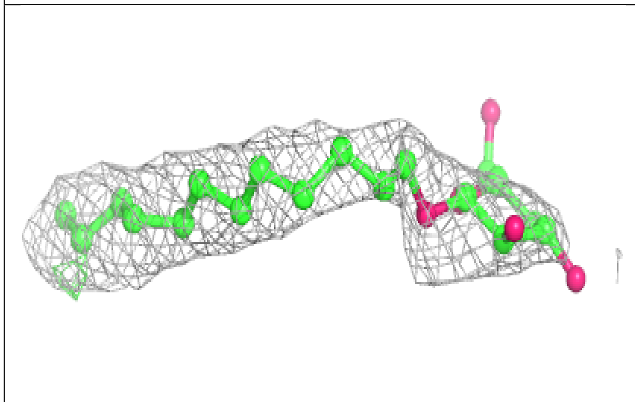


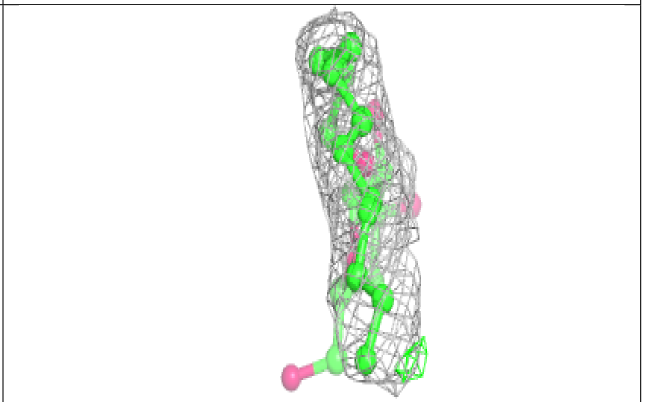


Electron density around LMT K 225:

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

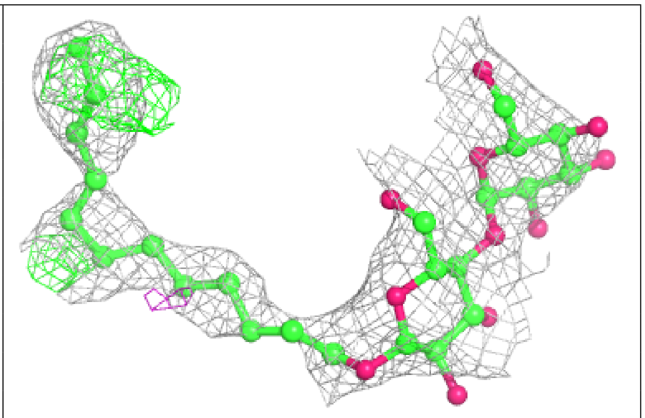


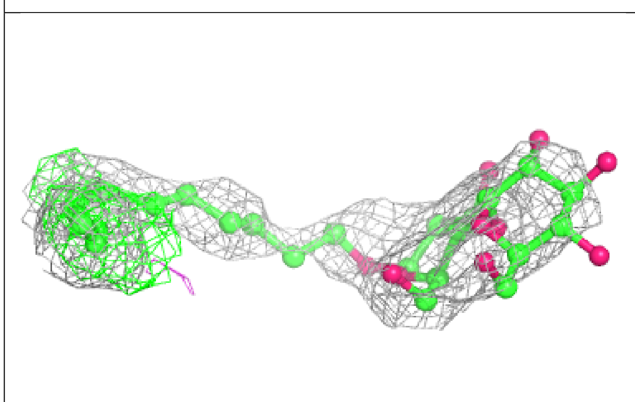


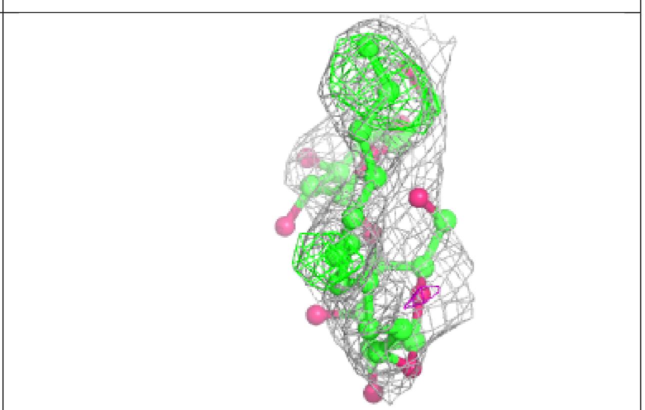


Electron density around LMT E 268:

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

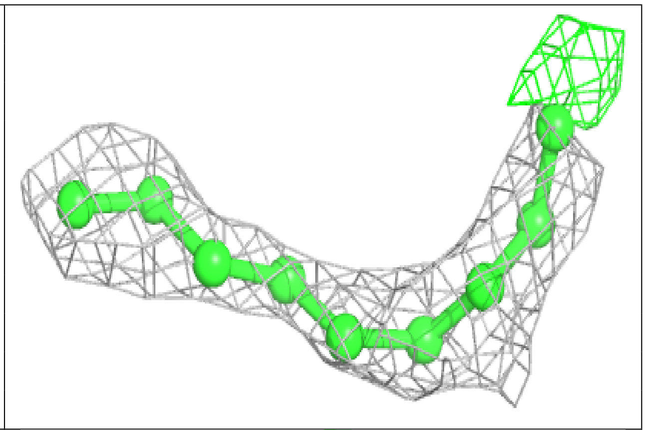


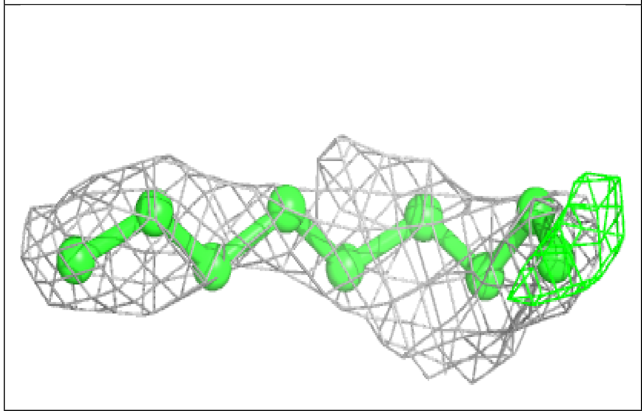


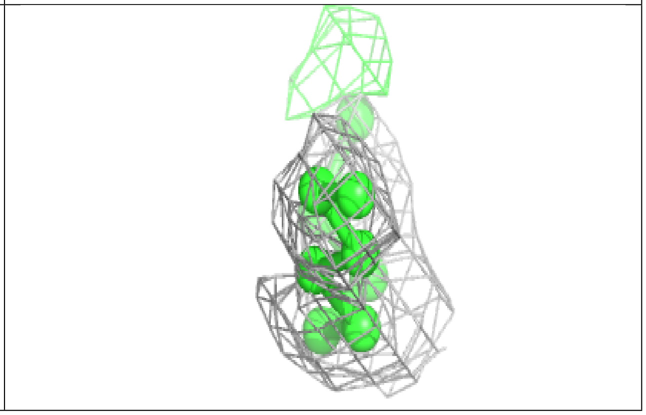


Electron density around LMT A 262:

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

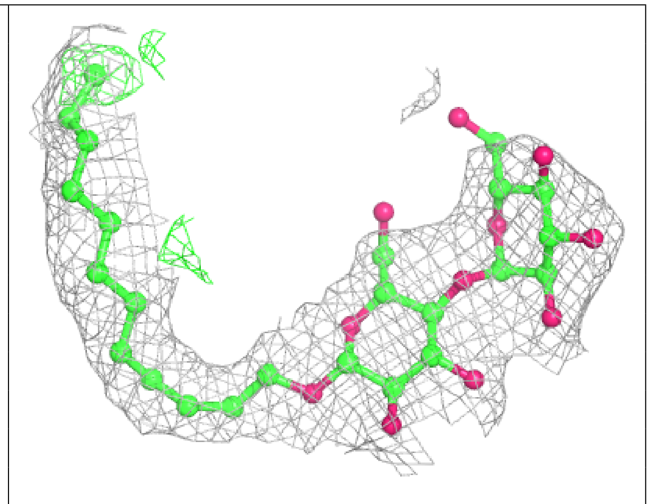


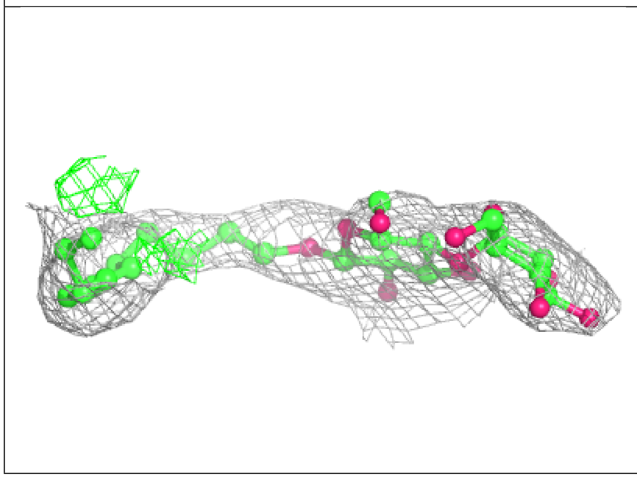


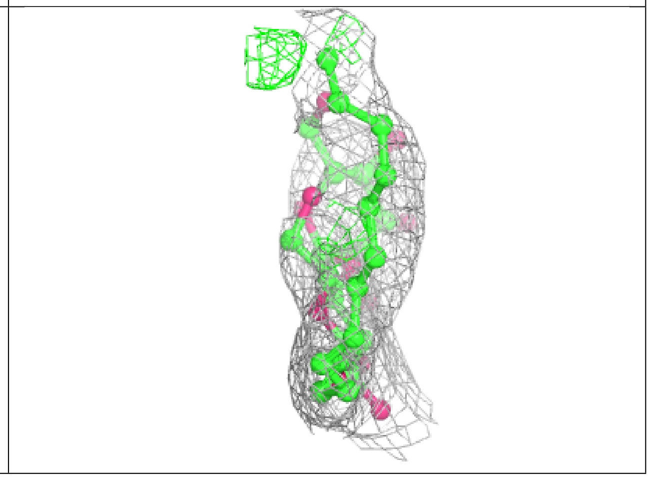


Electron density around LMT A 215:

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

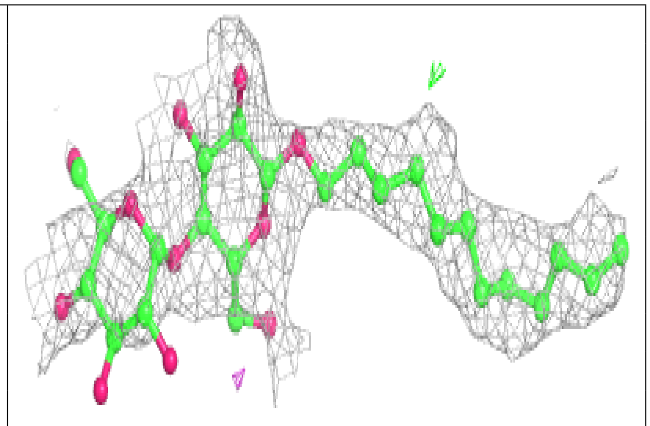


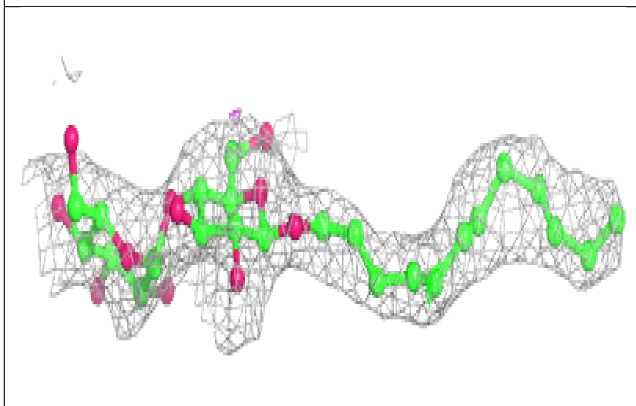


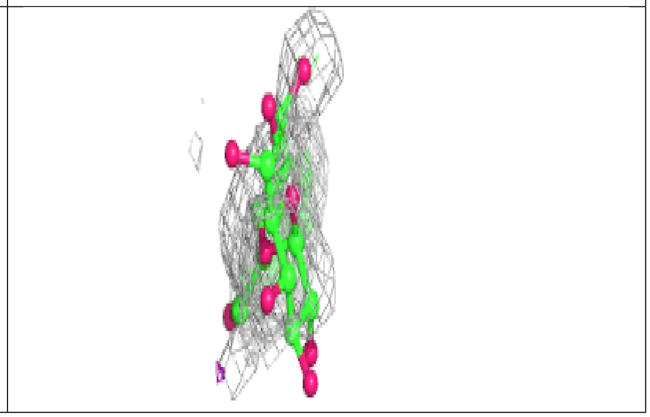


Electron density around LMT C 216:

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

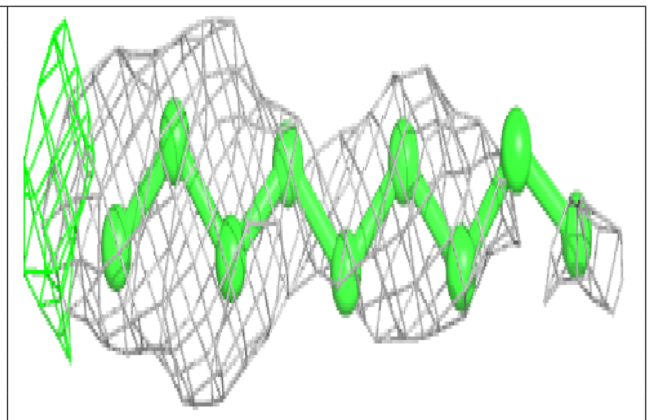


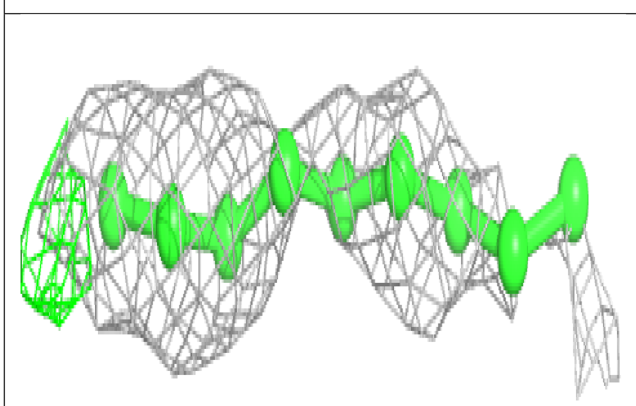


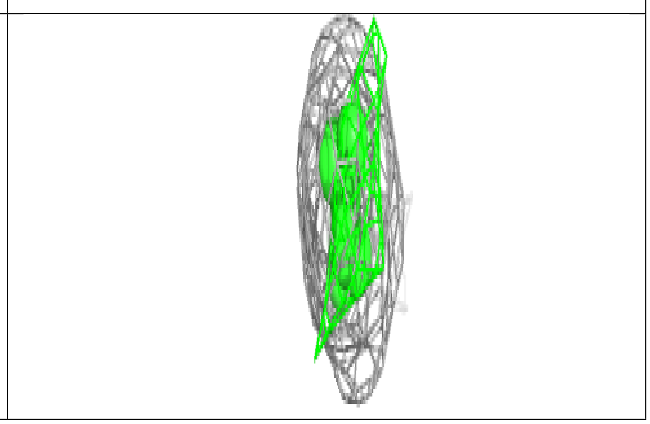


Electron density around LMT G 267:

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

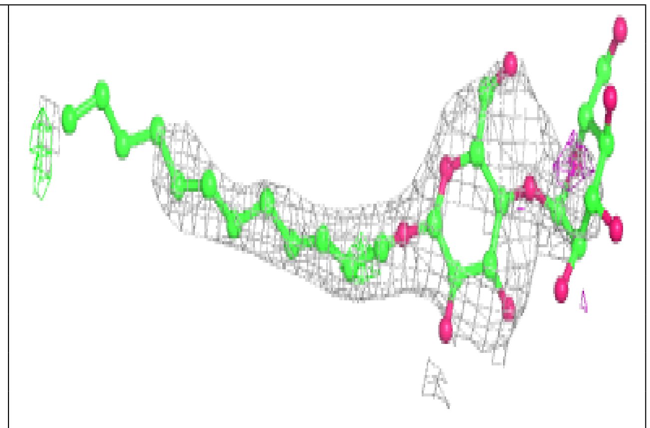


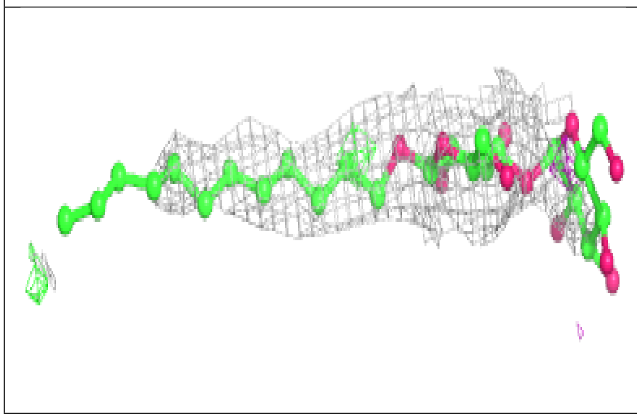


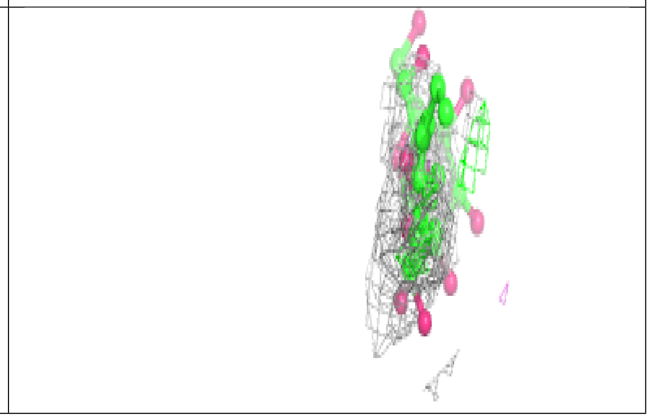


Electron density around LMT D 238:

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

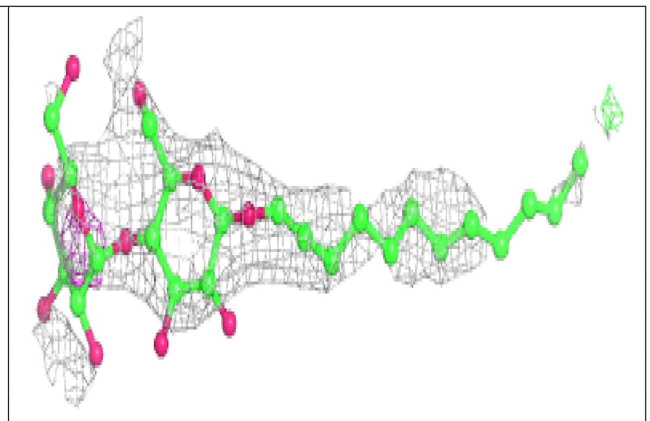


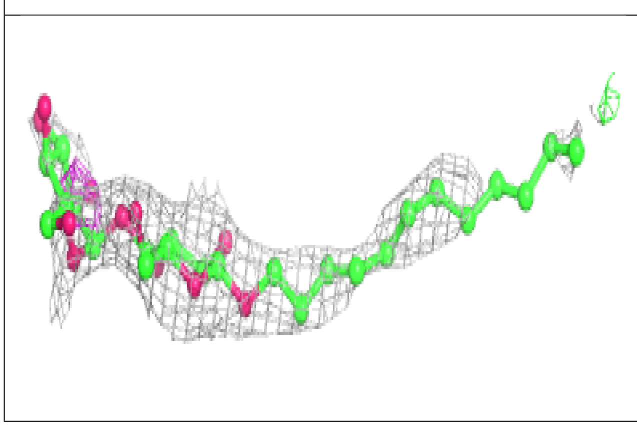


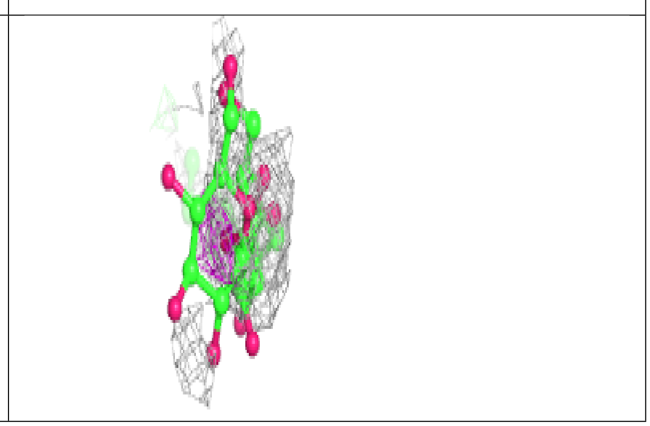


Electron density around LMT C 237:

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

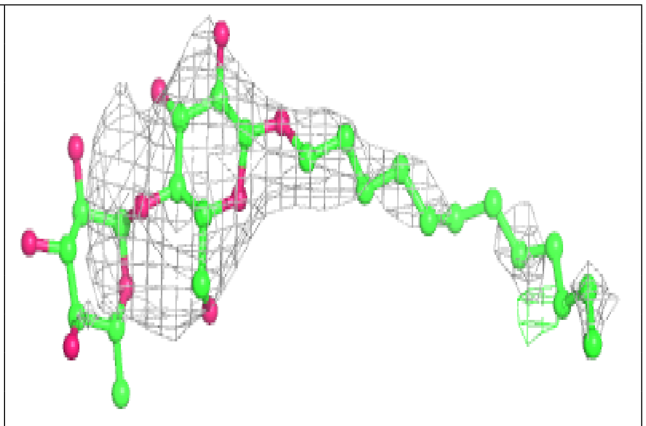


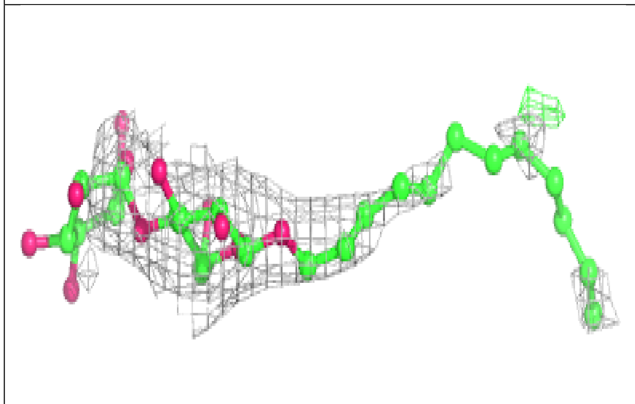


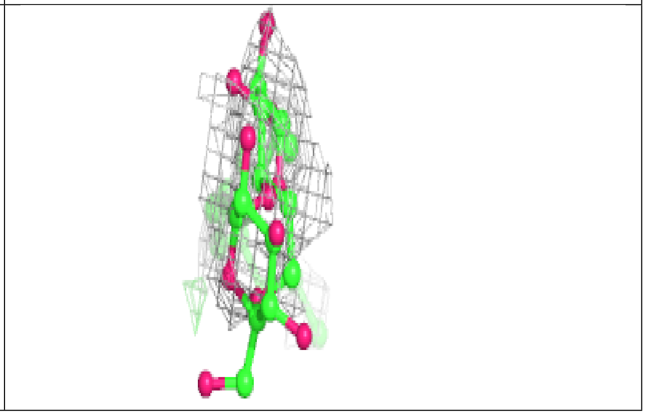


Electron density around LMT J 239:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

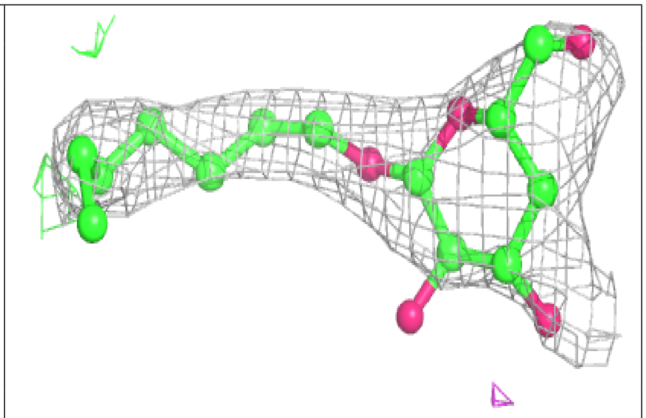


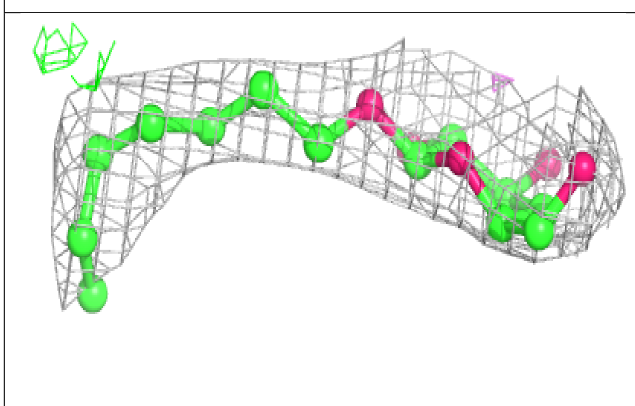


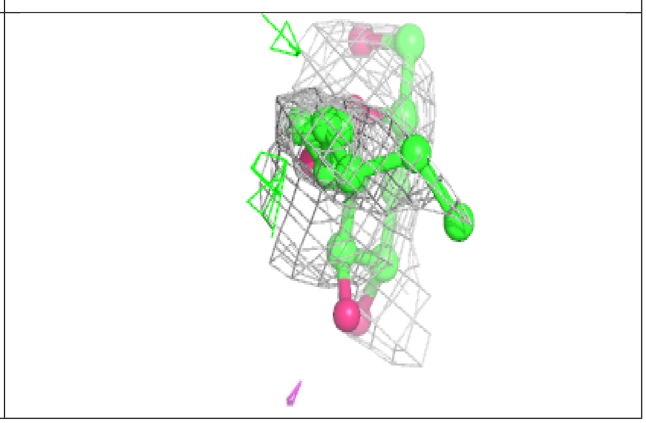


Electron density around LMT F 241:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

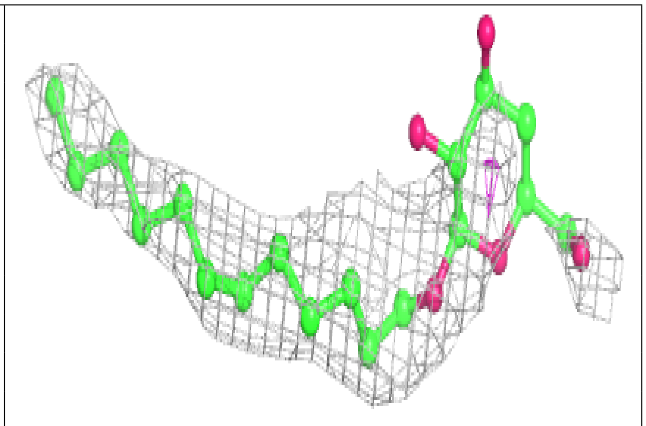


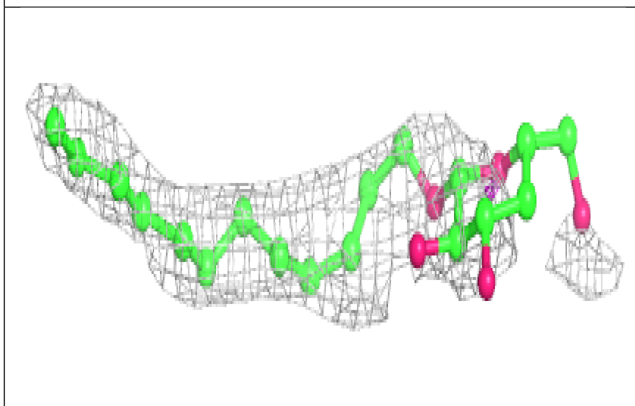


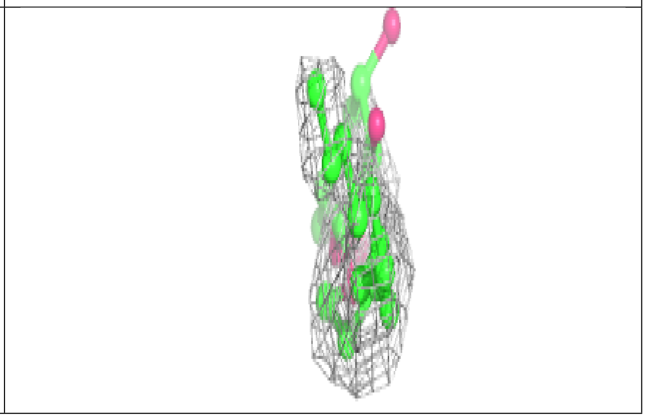


Electron density around LMT G 235:

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

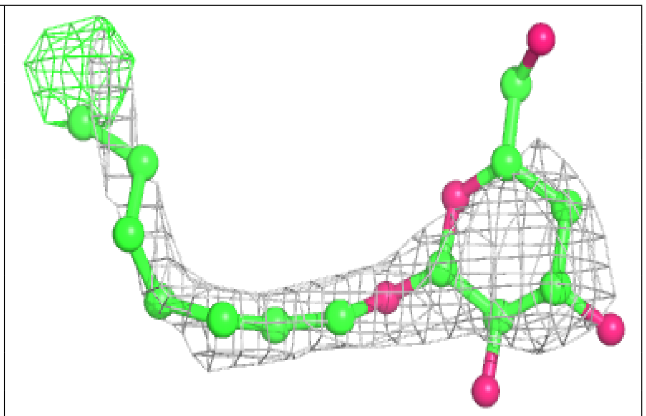


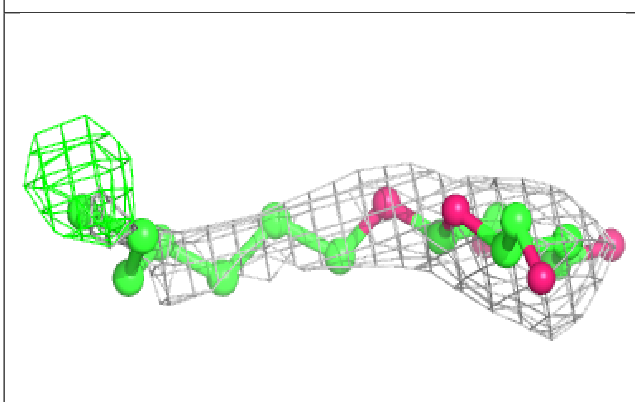


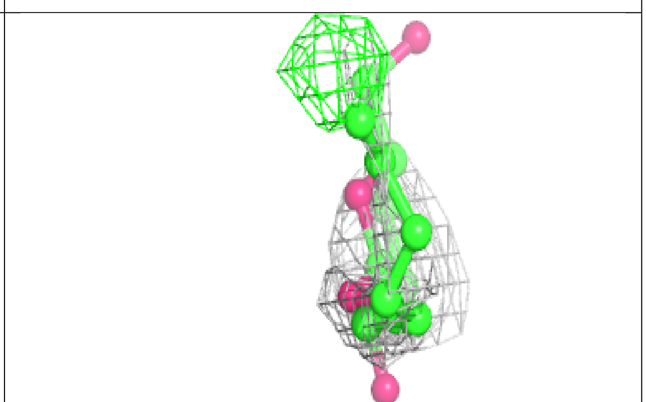


Electron density around LMT I 240:

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

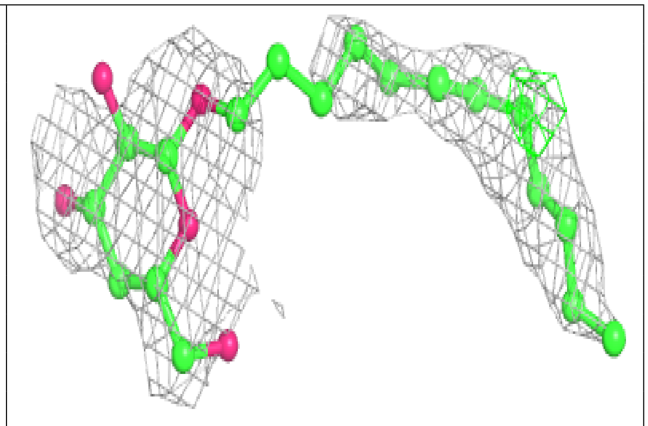


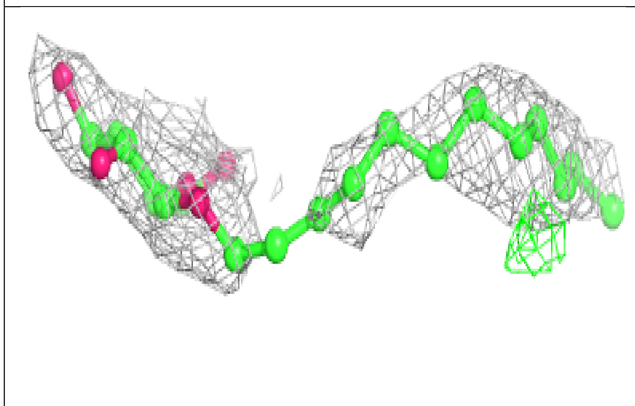


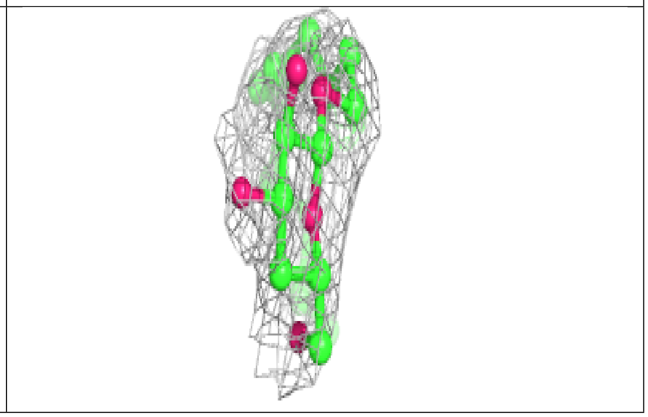


Electron density around LMT B 218:

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

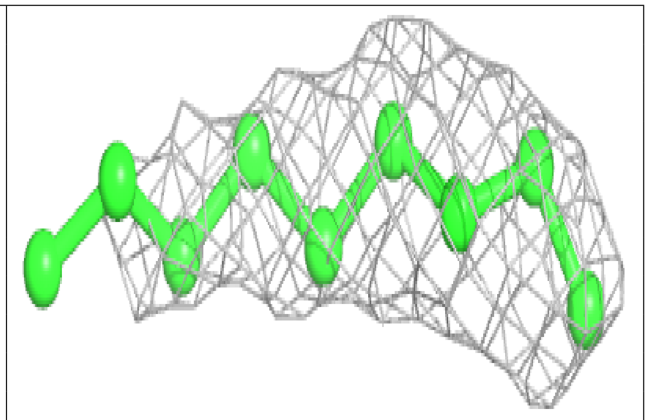


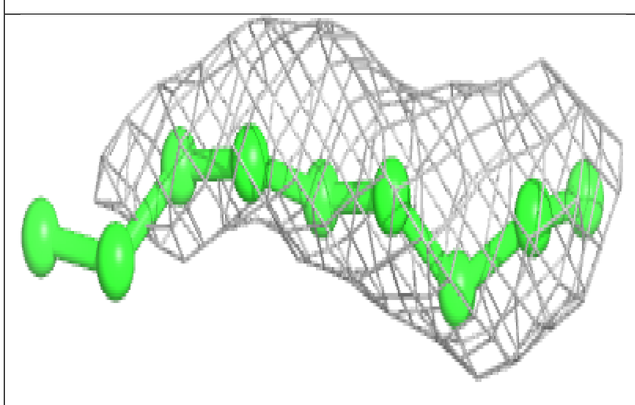


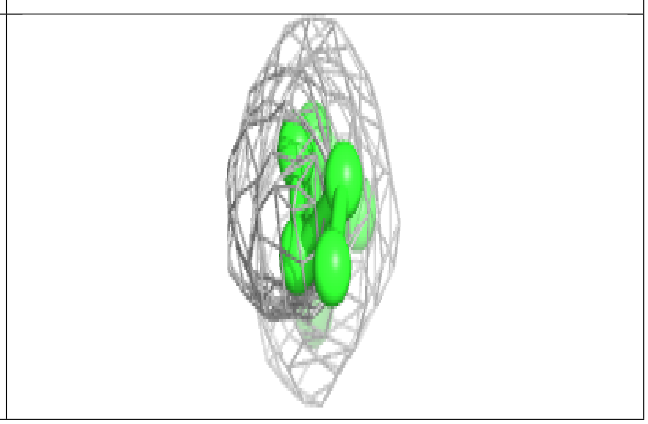


Electron density around LMT I 252:

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

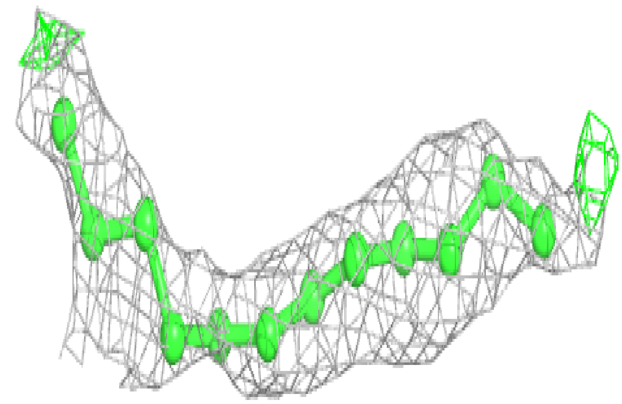


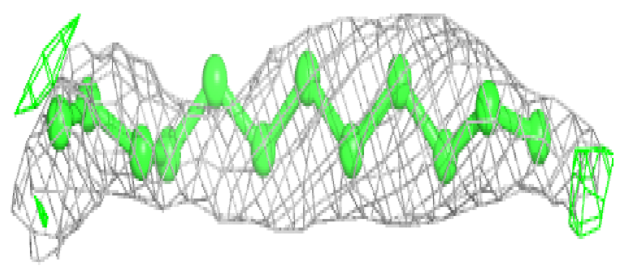


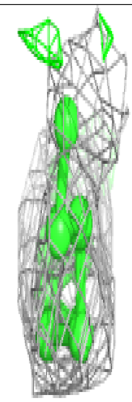


Electron density around LMT B 242:

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

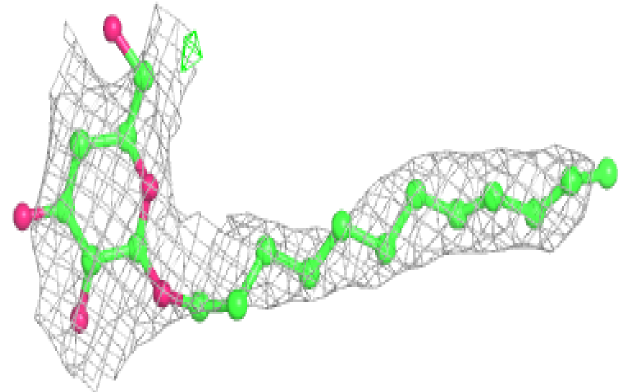


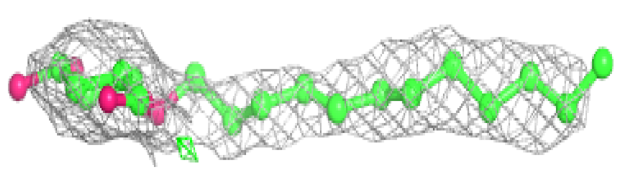


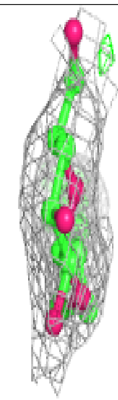


Electron density around LMT A 228:

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

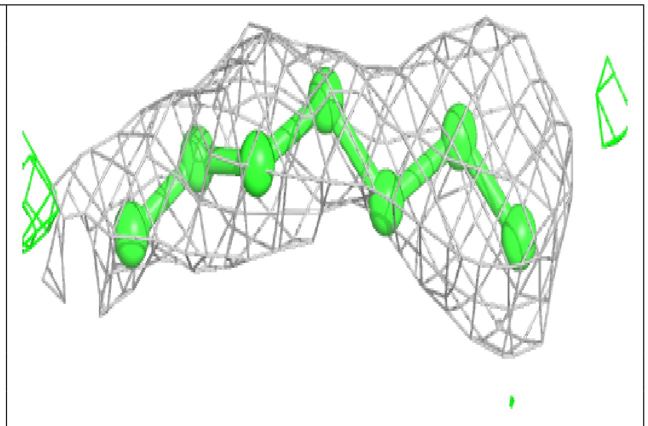


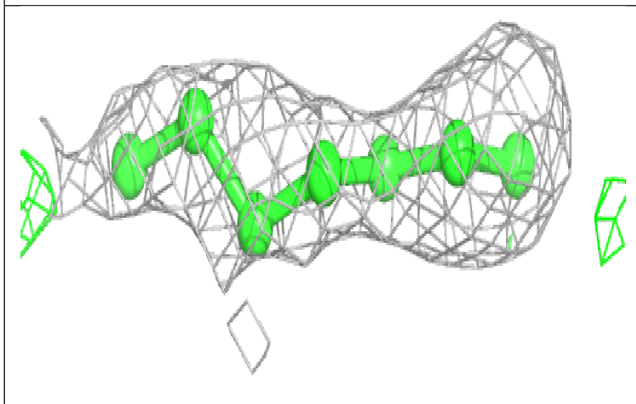


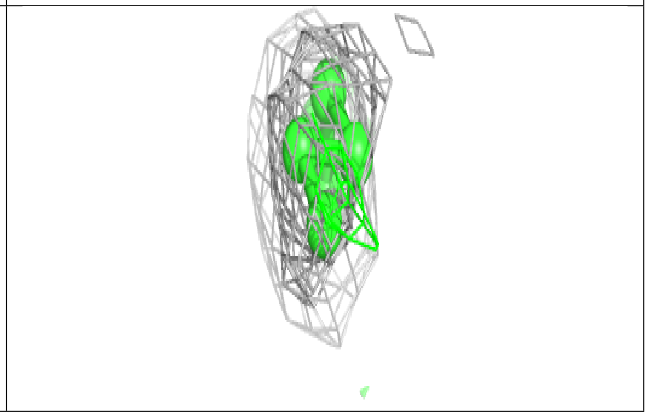


Electron density around LMT L 265:

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

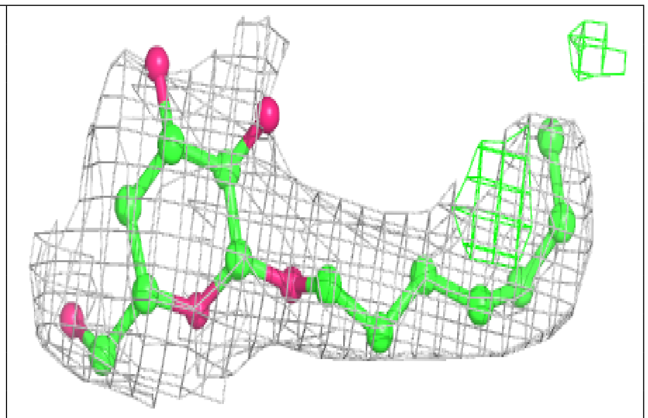


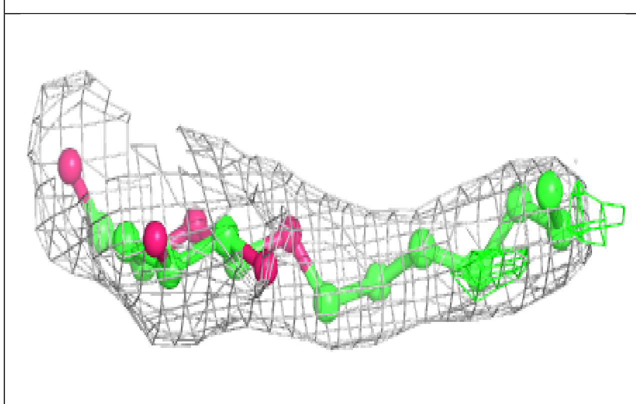


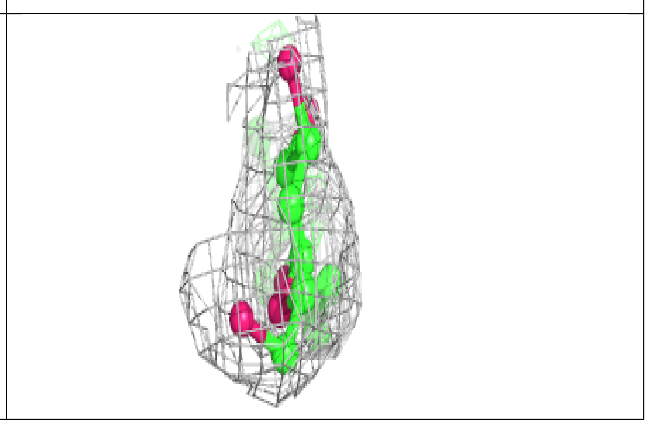


Electron density around LMT B 236:

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

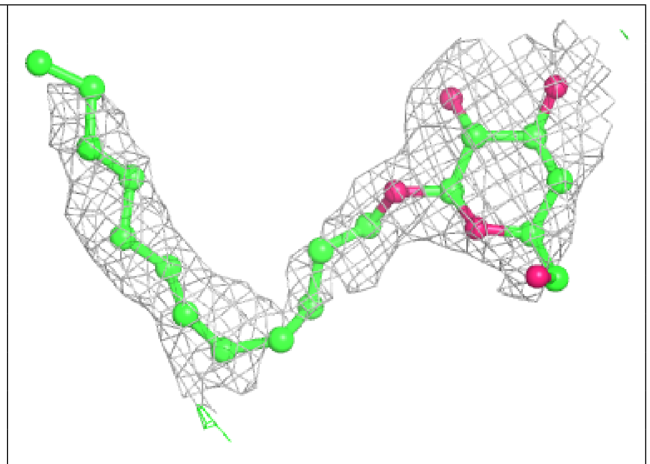


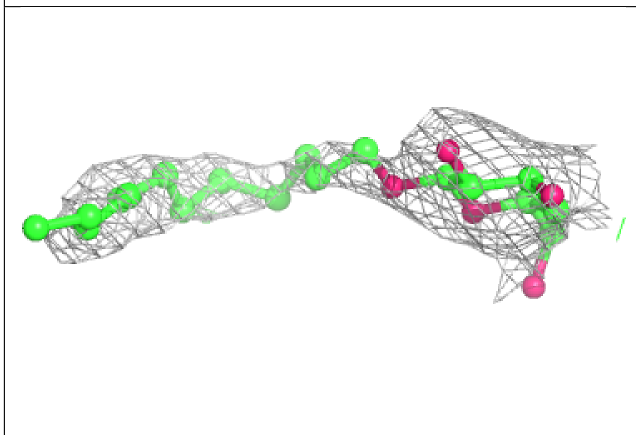


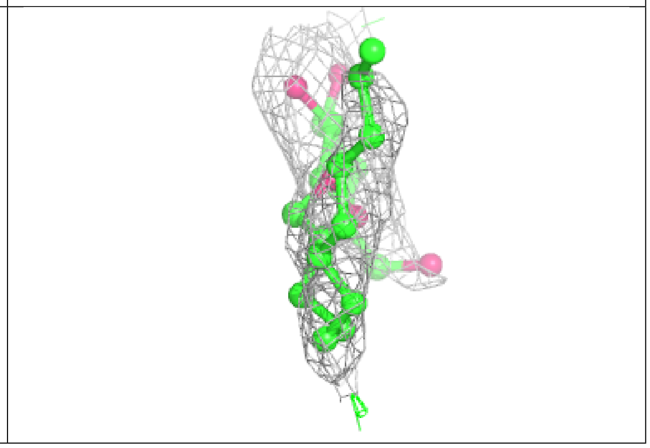


Electron density around LMT B 213:

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

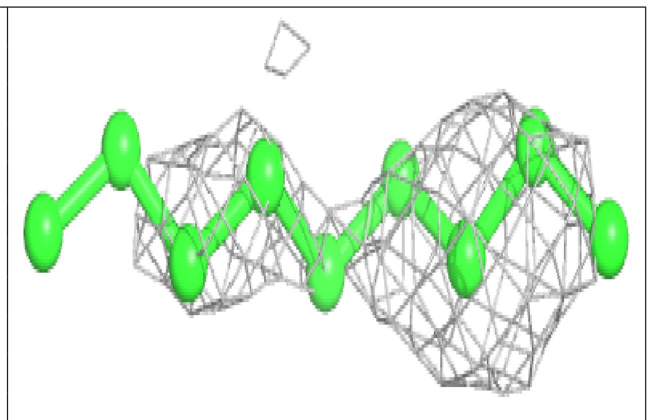


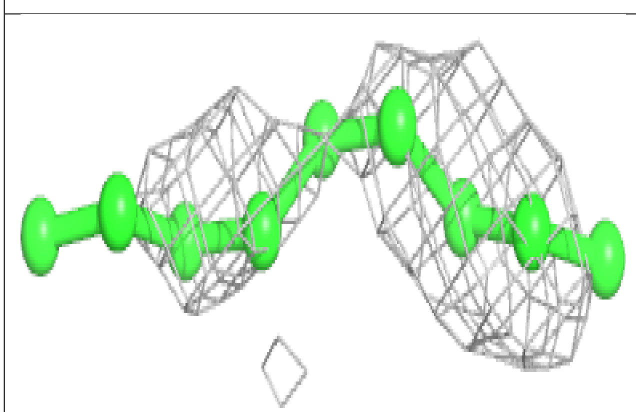


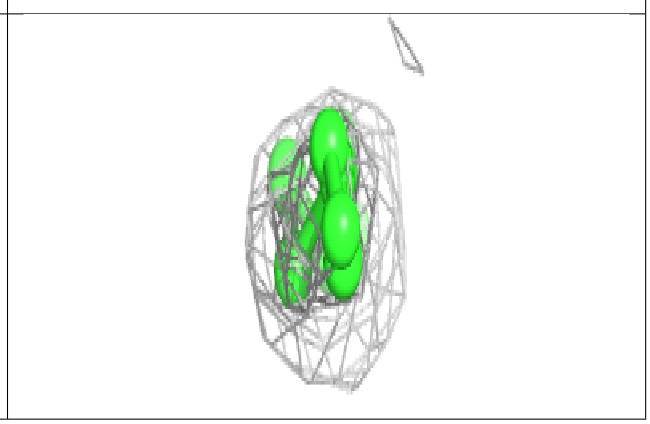


Electron density around LMT J 253:

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

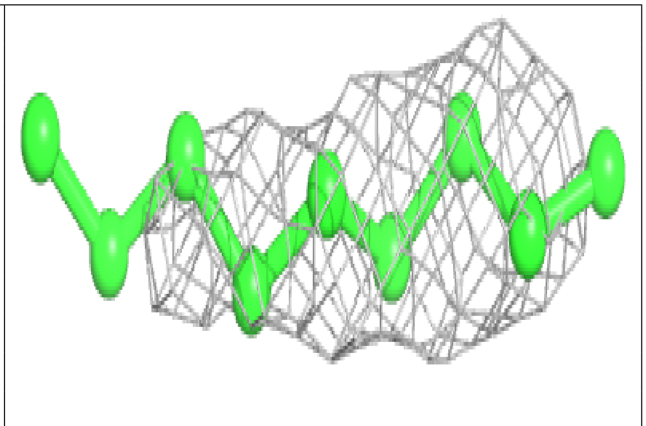


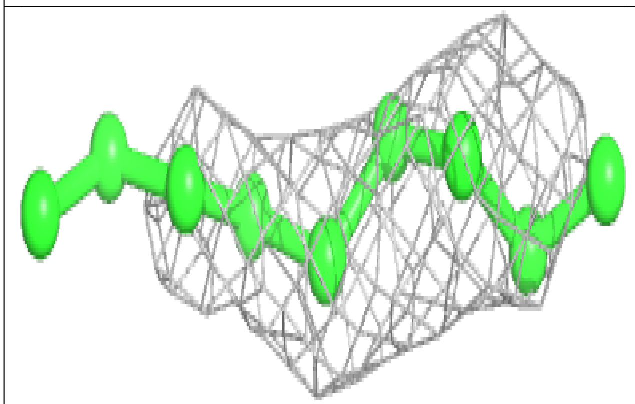


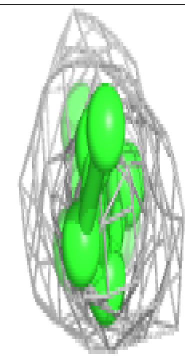


Electron density around LMT L 254:

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

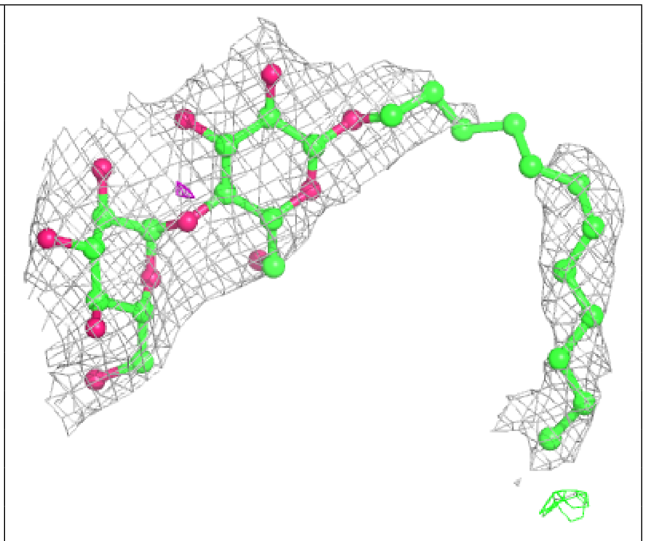


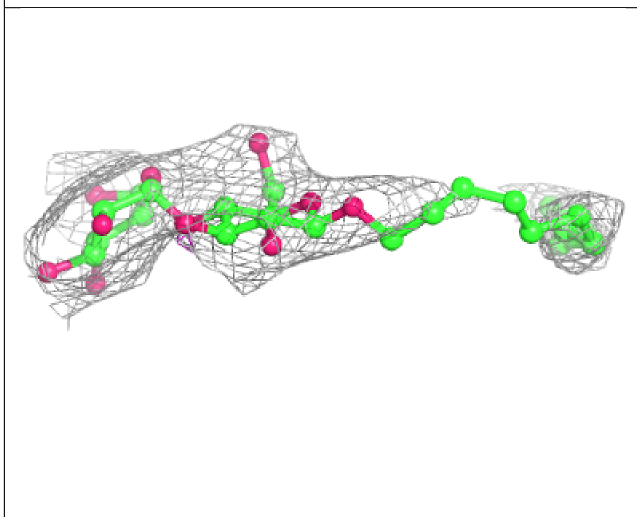


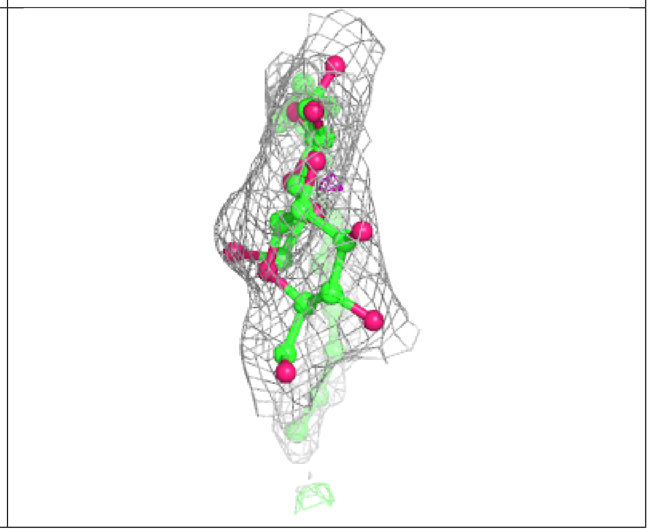


Electron density around LMT E 243:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

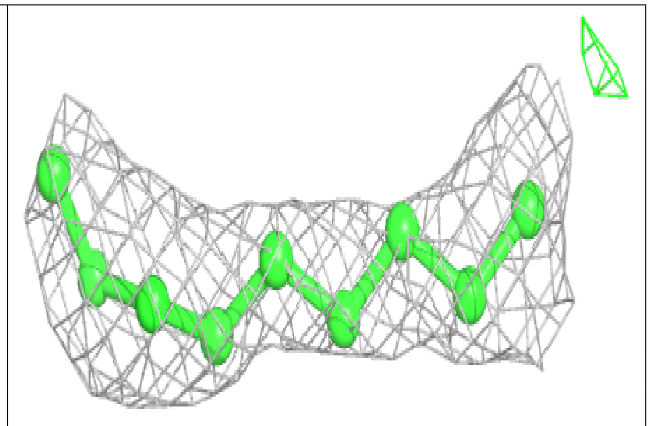


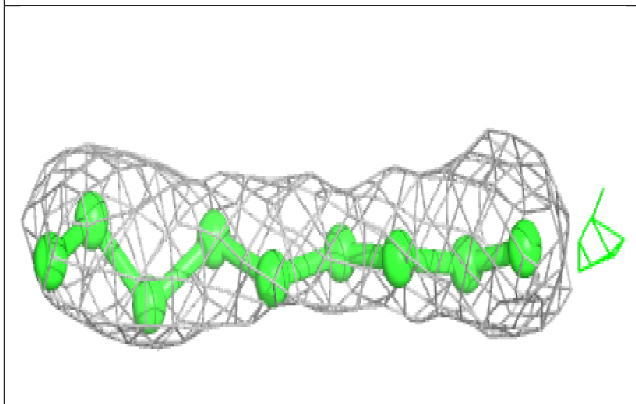


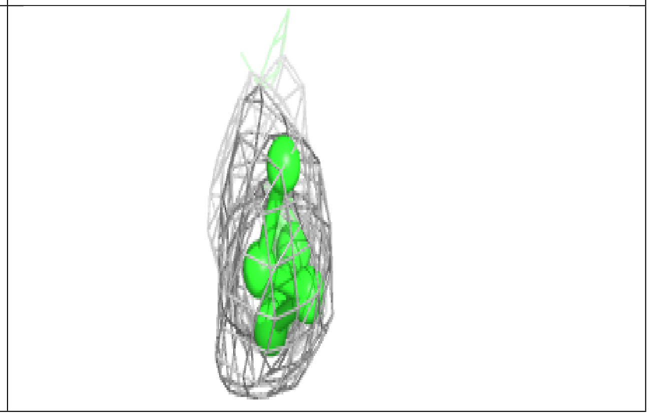


Electron density around LMT G 264:

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

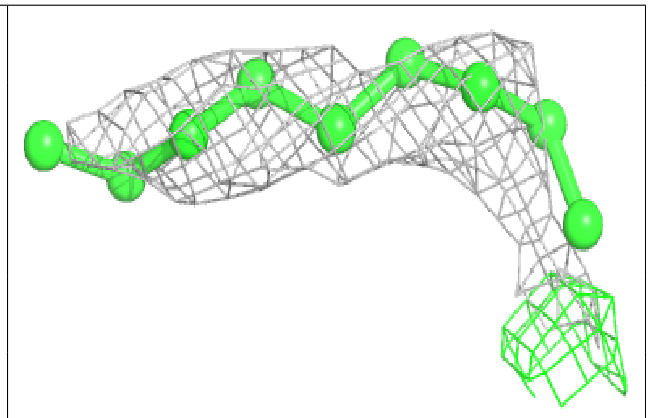


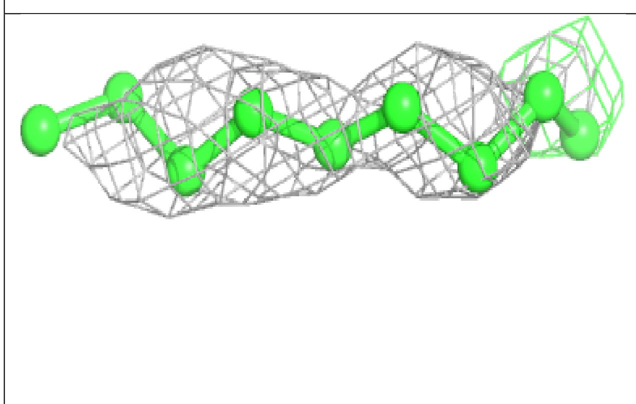


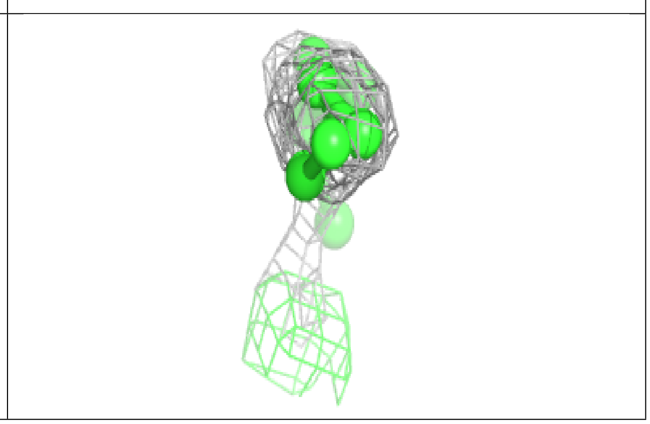


Electron density around LMT B 259:

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

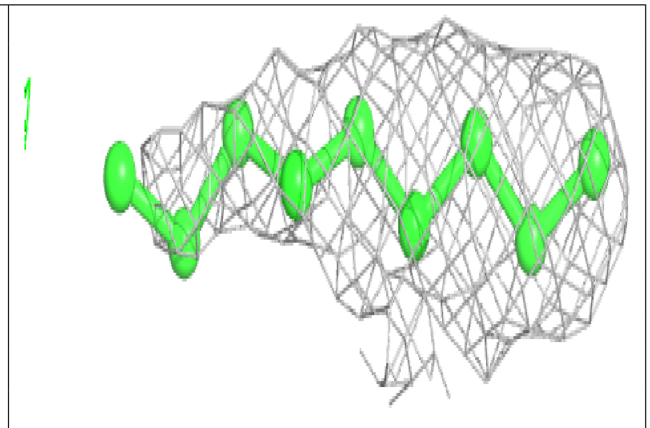


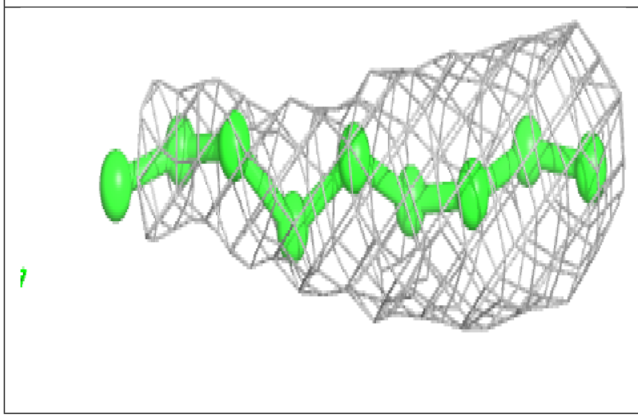


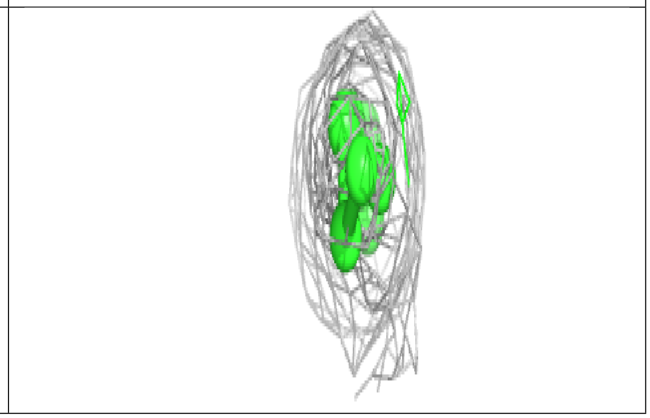


Electron density around LMT E 249:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

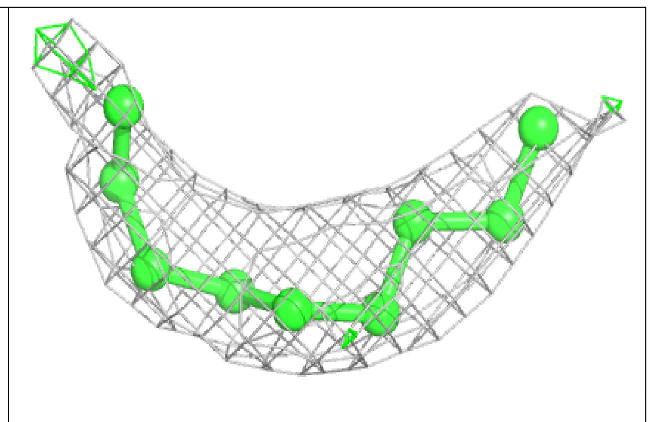


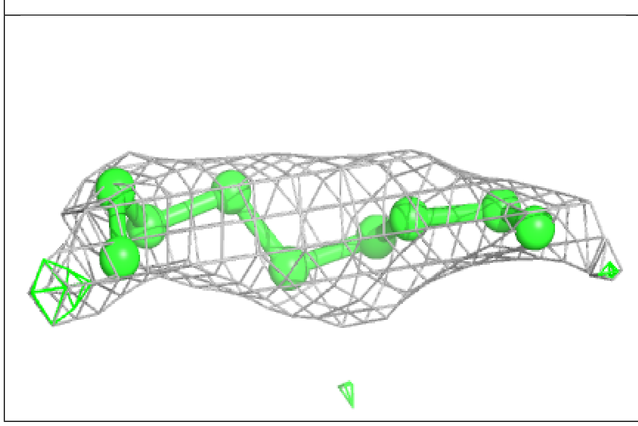


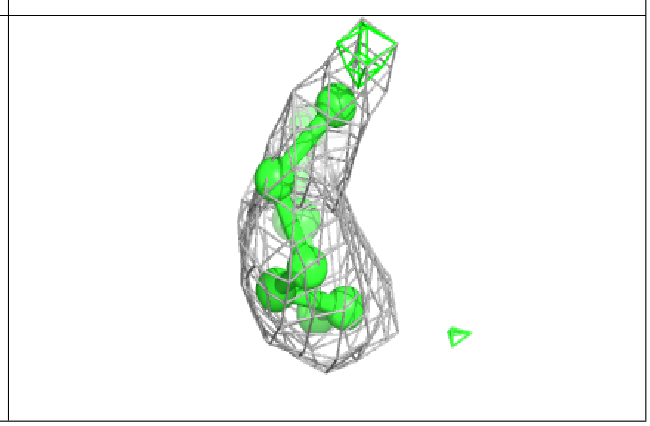


Electron density around LMT I 258:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

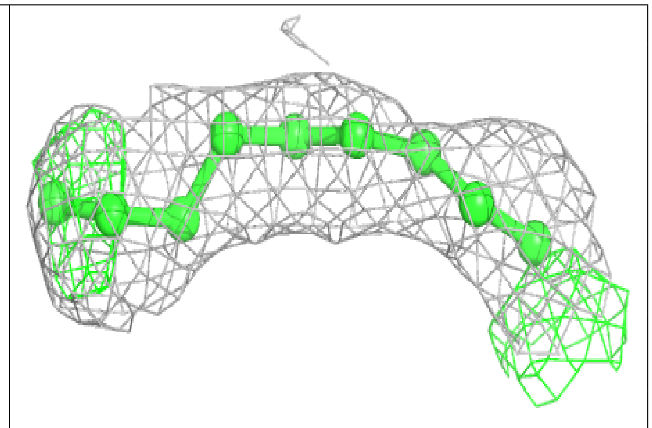


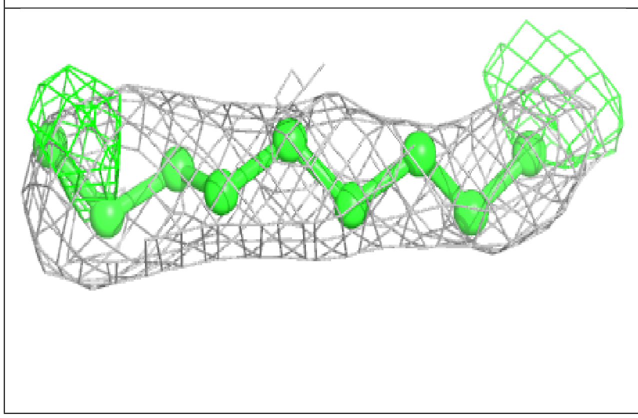


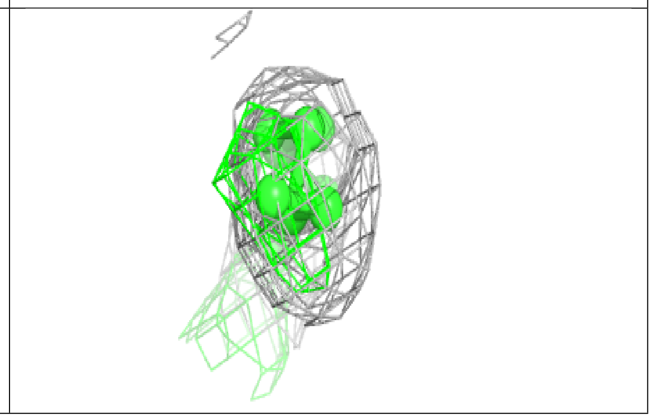


Electron density around LMT I 257:

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

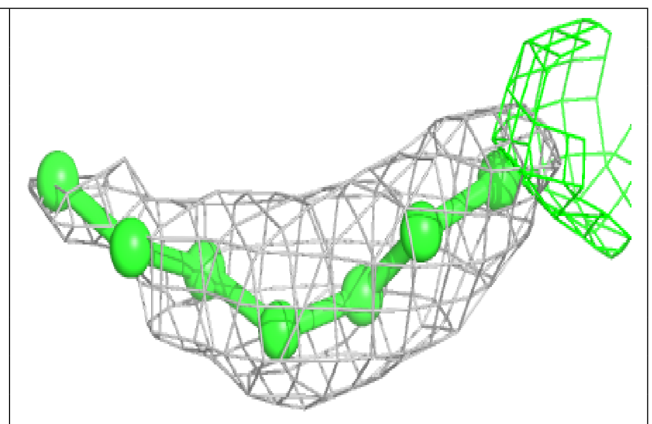


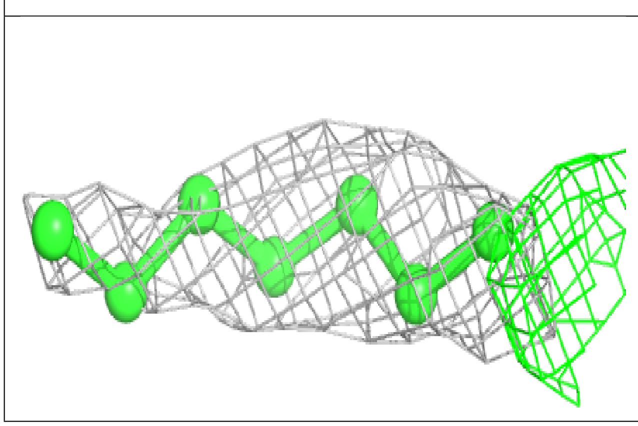


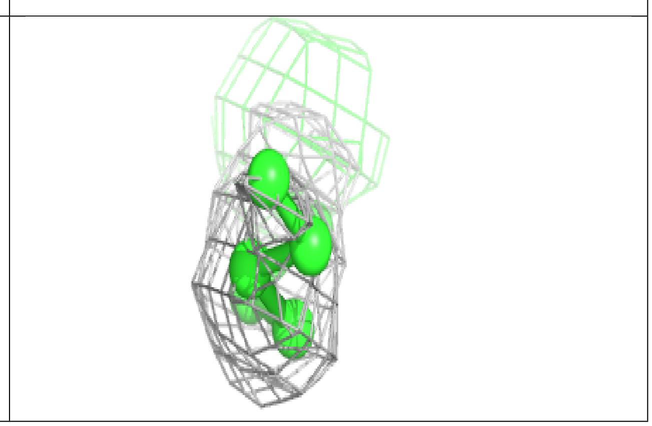


Electron density around LMT A 217:

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

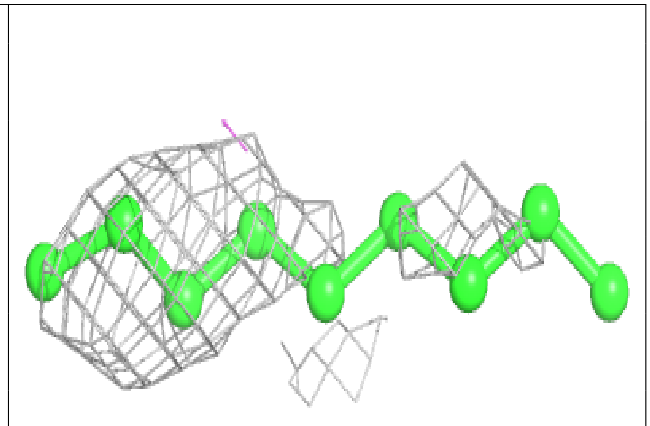


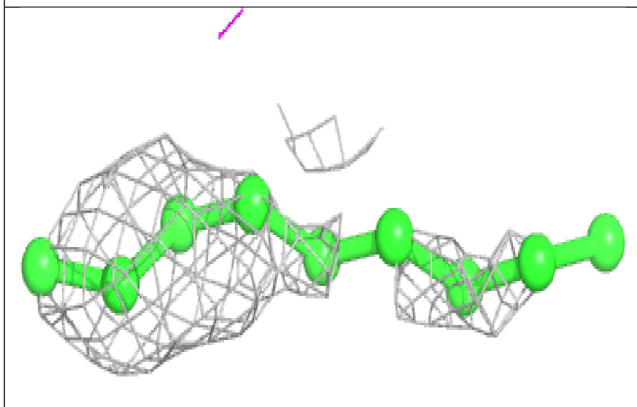


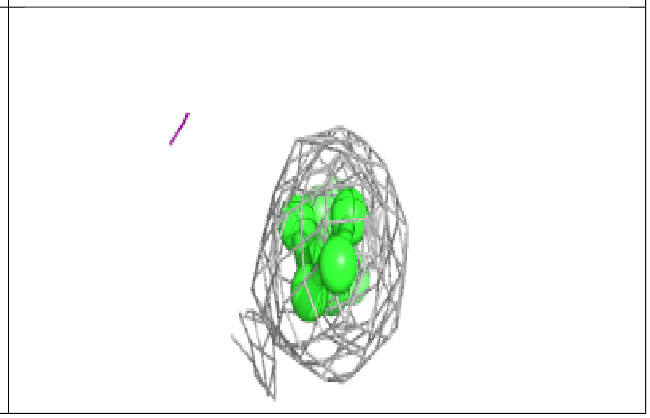


Electron density around LMT L 255:

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

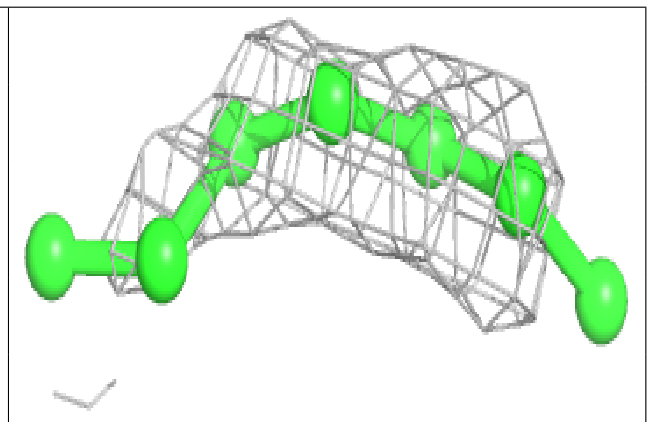


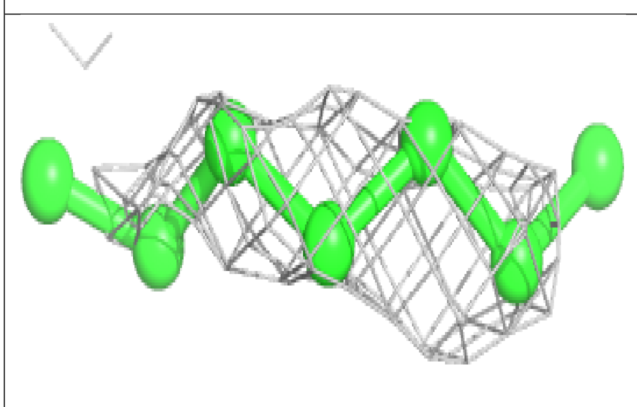


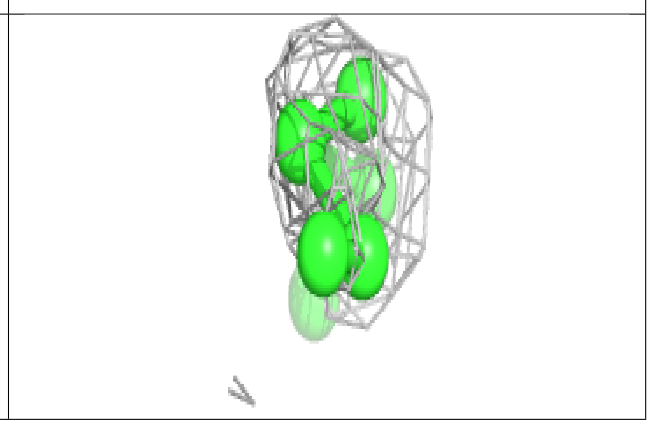


Electron density around LMT K 224:

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

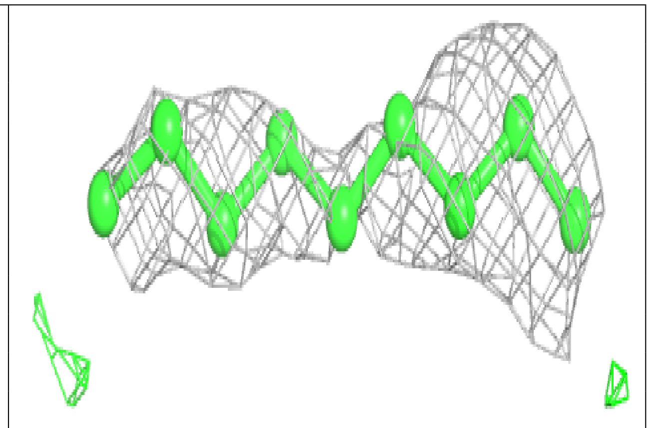


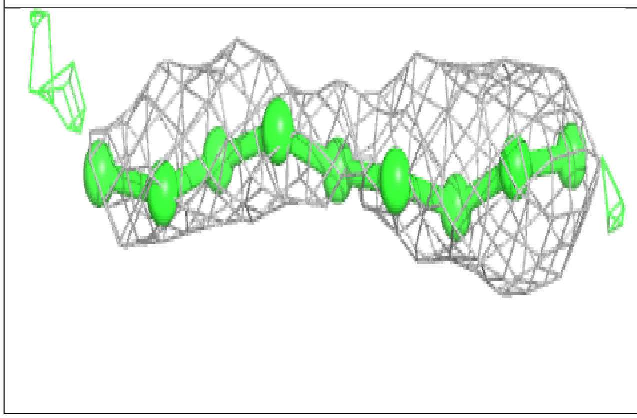


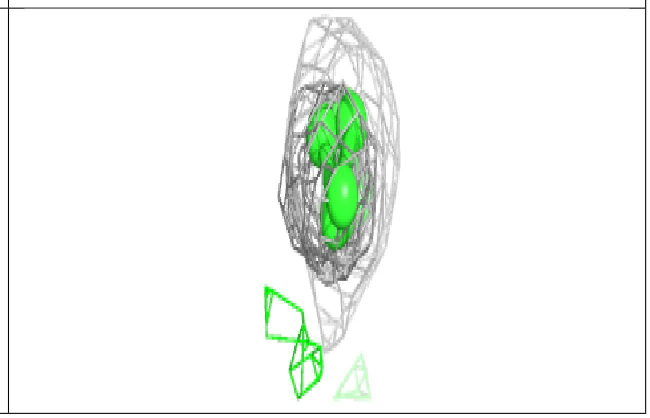


Electron density around LMT D 247:

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

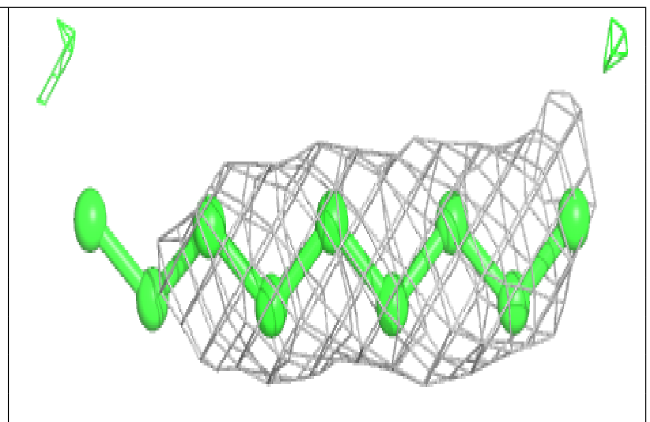


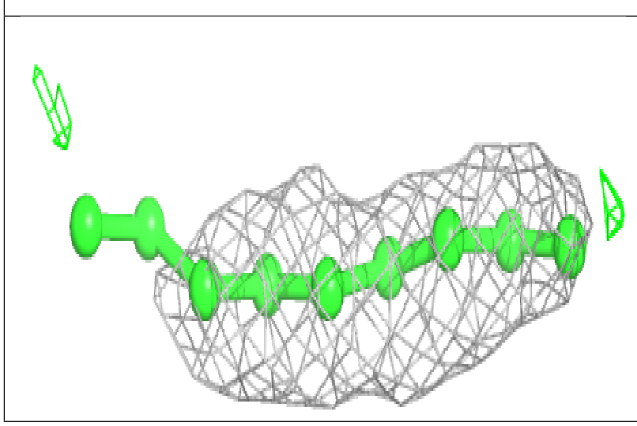


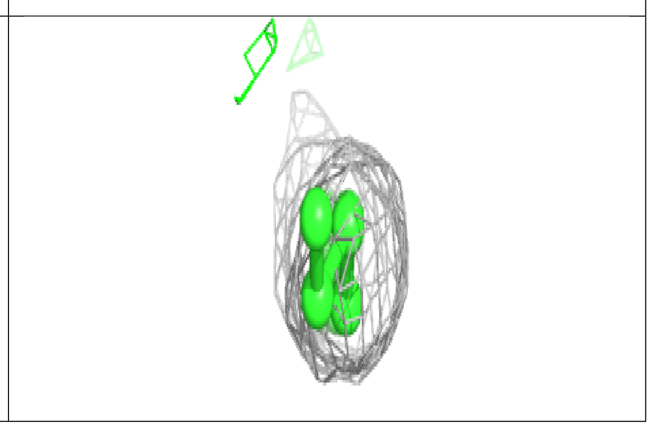


Electron density around LMT F 248:

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

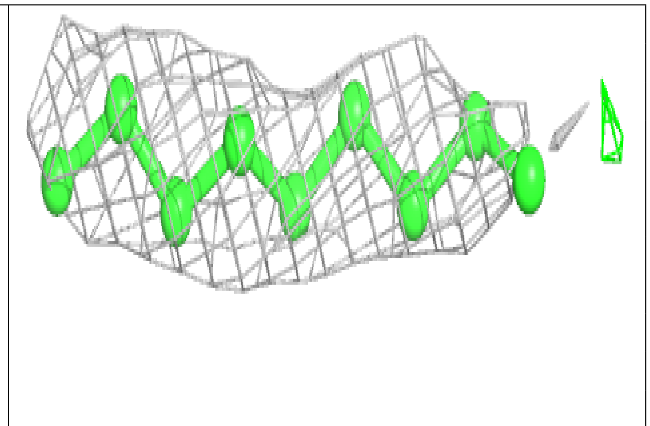


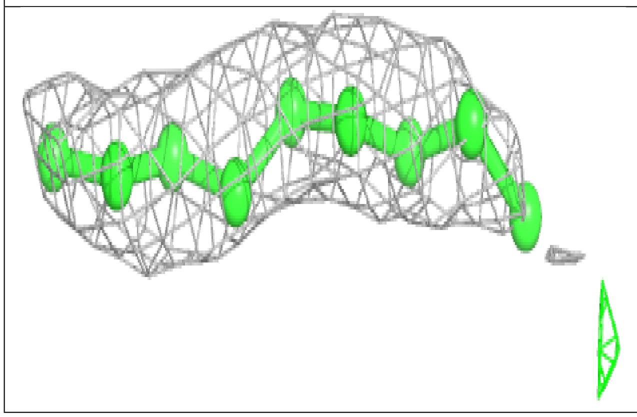


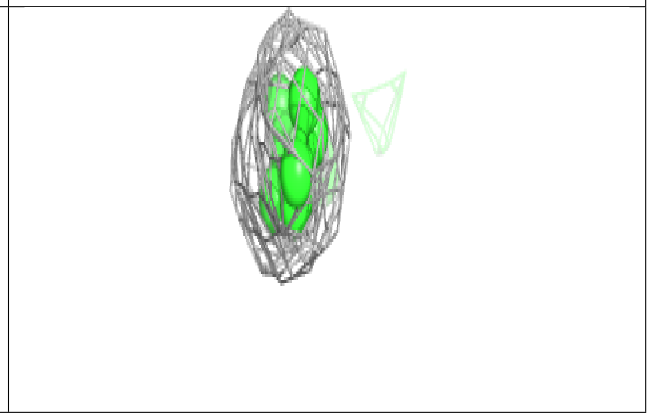


Electron density around LMT A 229:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

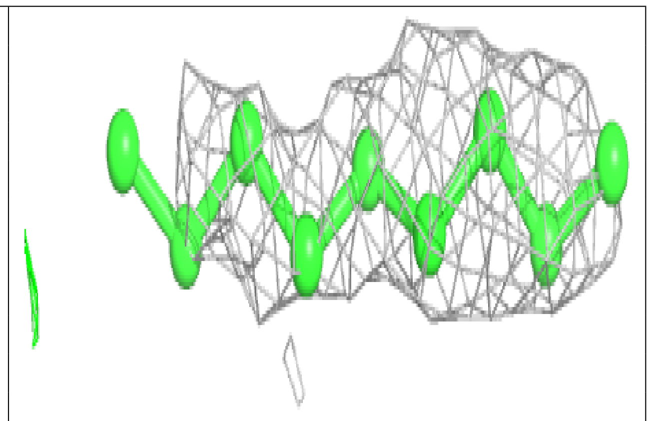


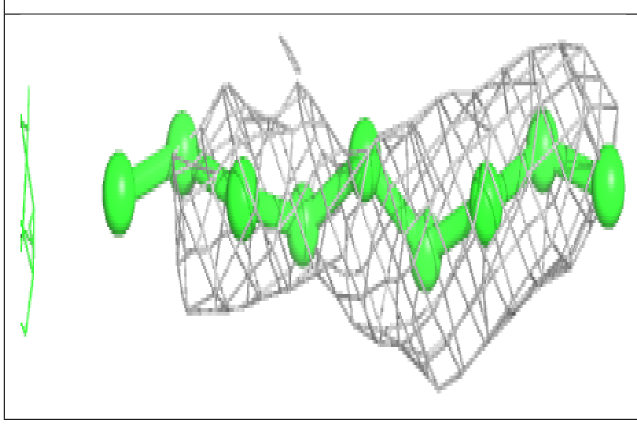


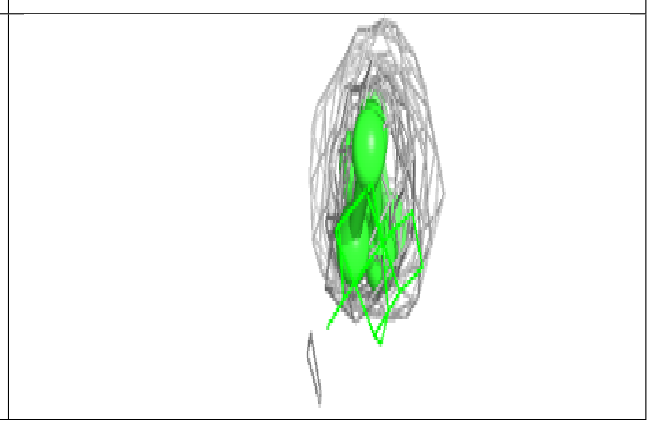


Electron density around LMT C 246:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

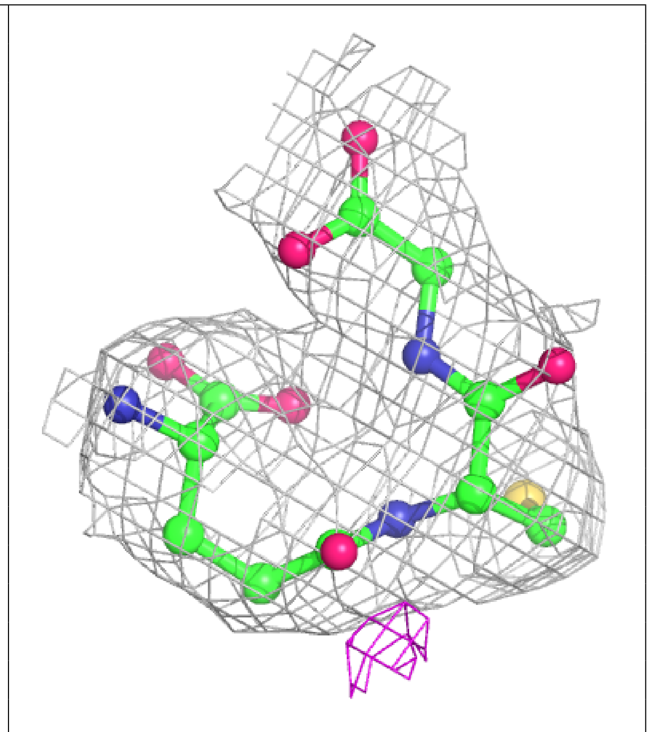


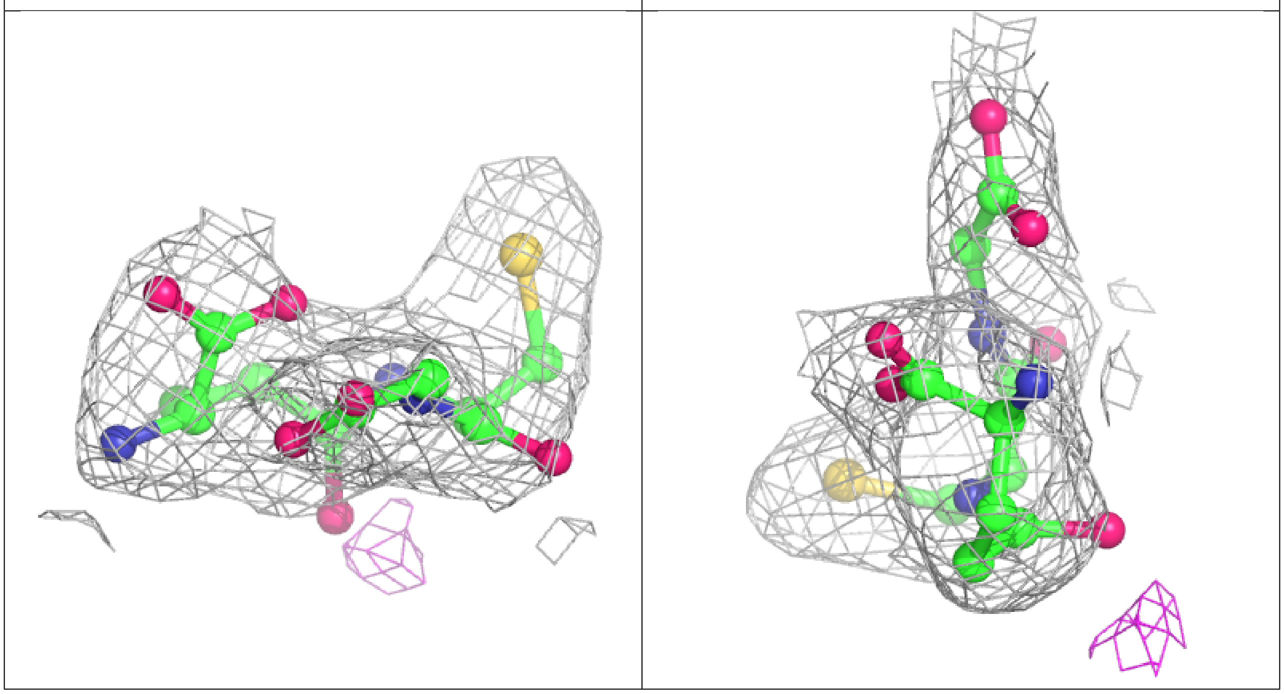




Electron density around GSH I 209:

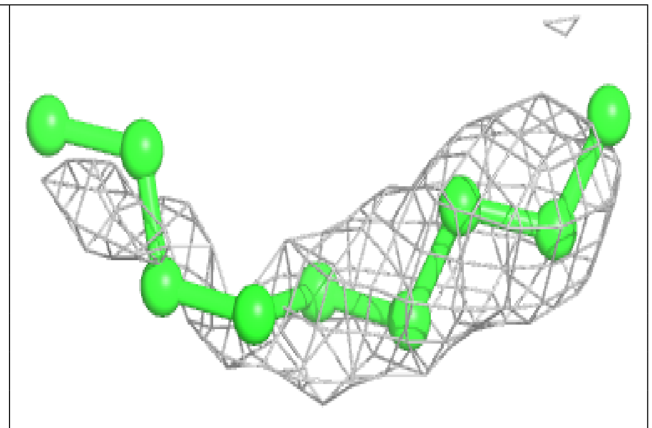
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

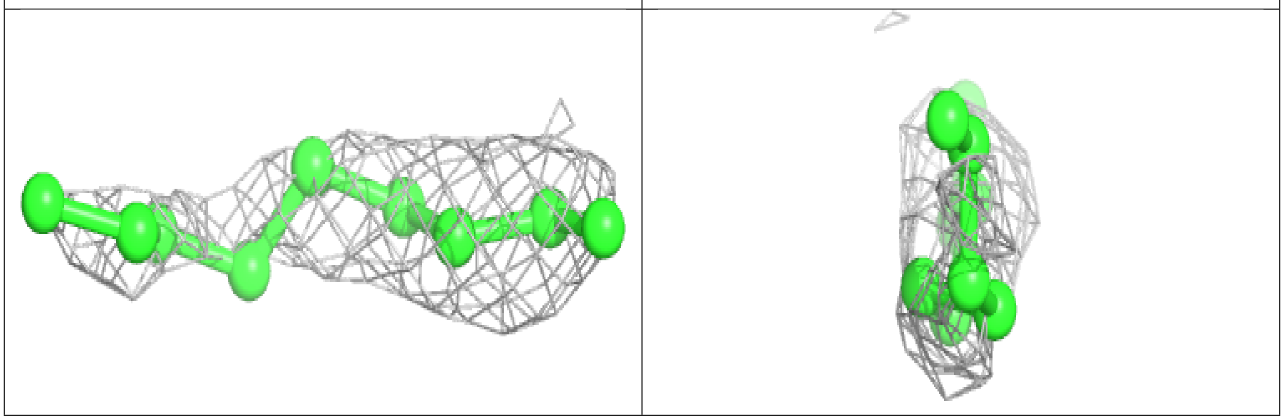




Electron density around LMT D 220:

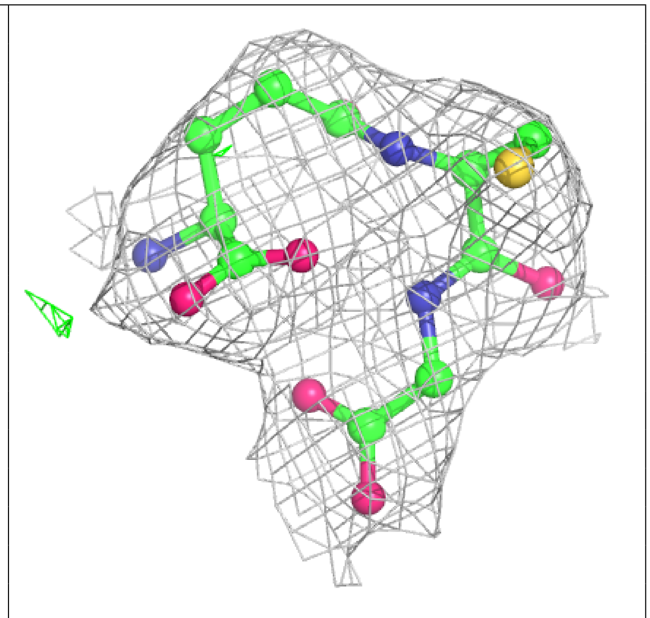
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

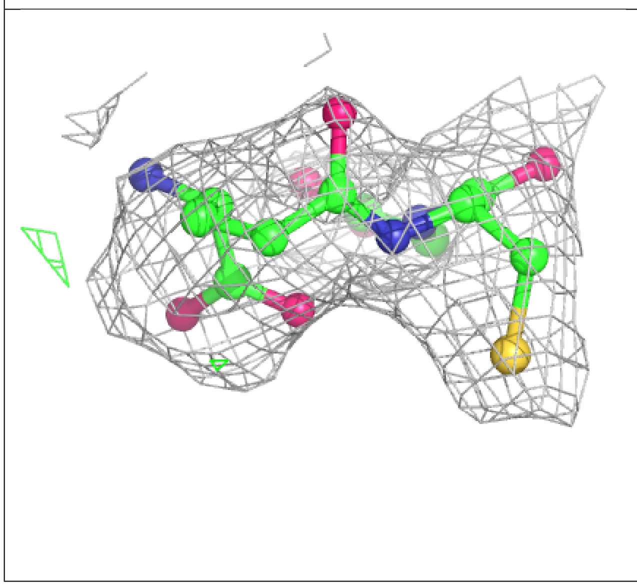


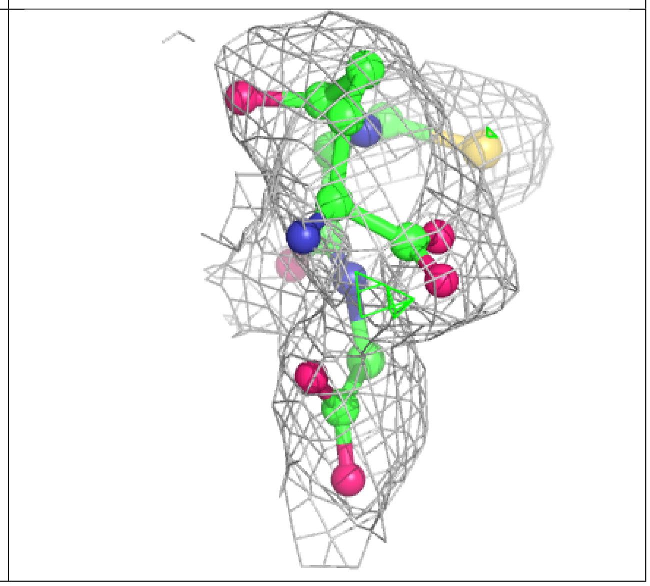


Electron density around GSH J 210:

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

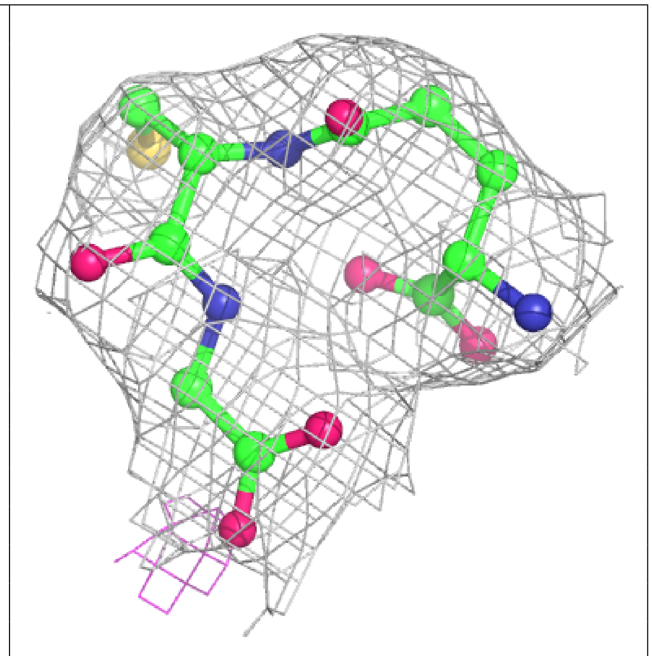


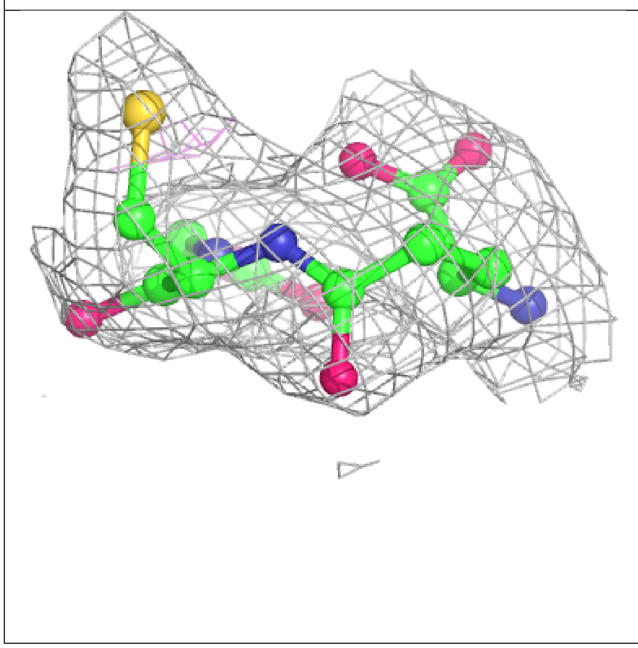


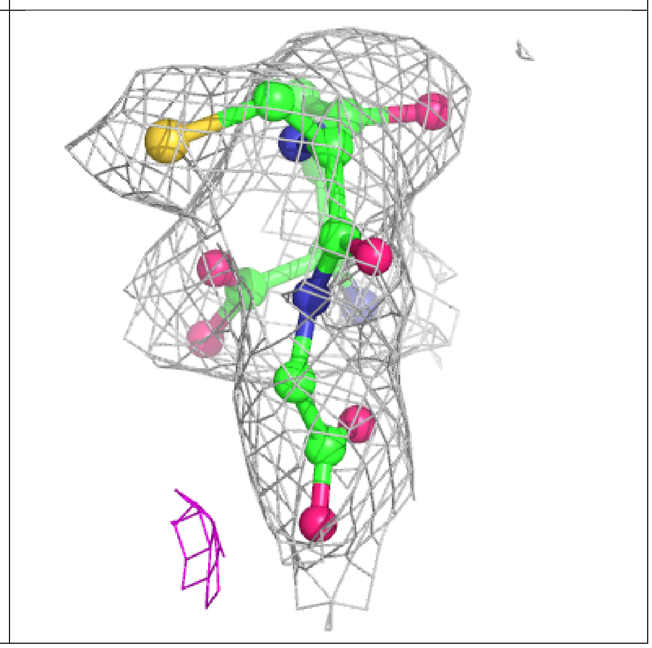


Electron density around GSH D 204:

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

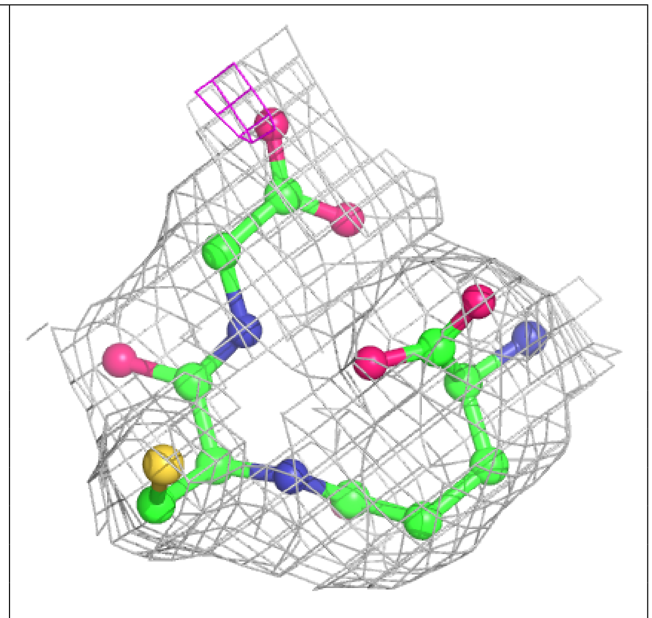


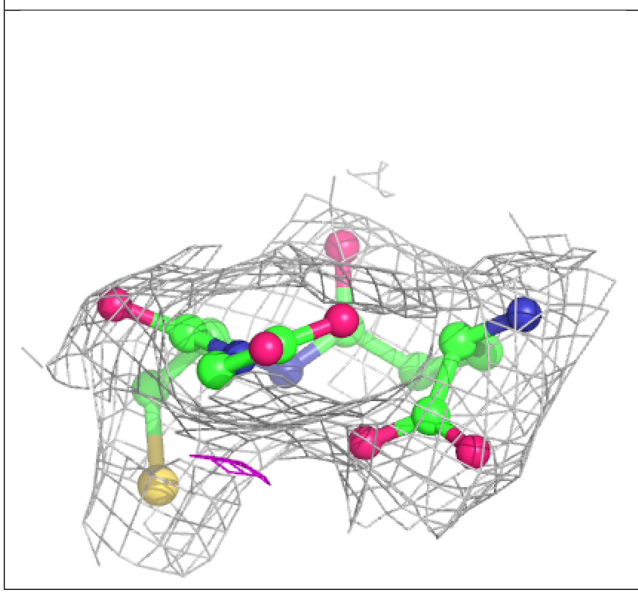


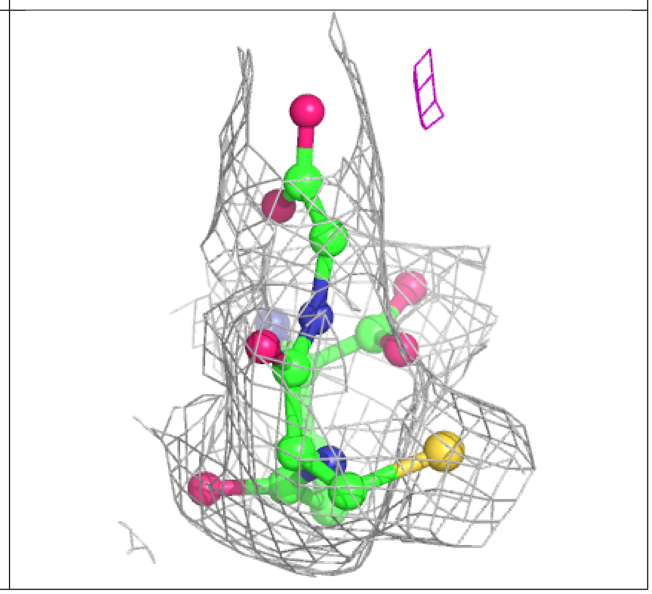


Electron density around GSH K 211:

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

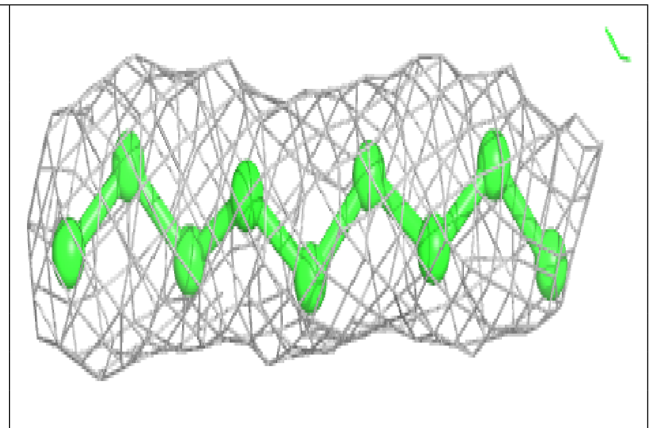


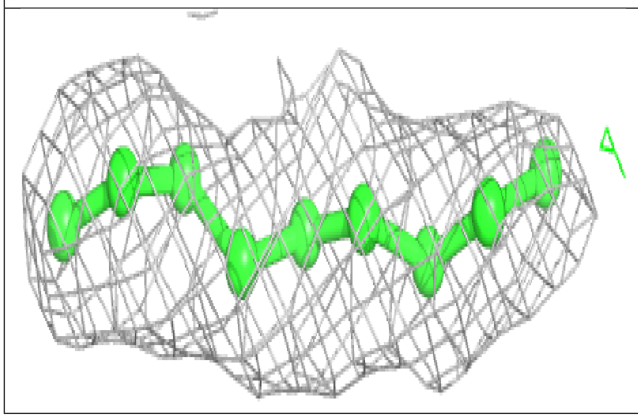


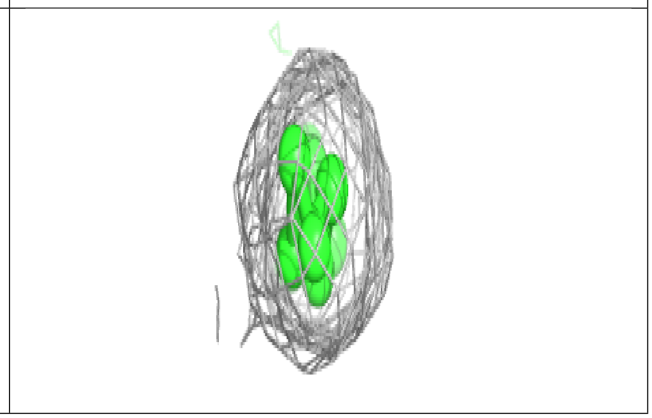


Electron density around LMT A 244:

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

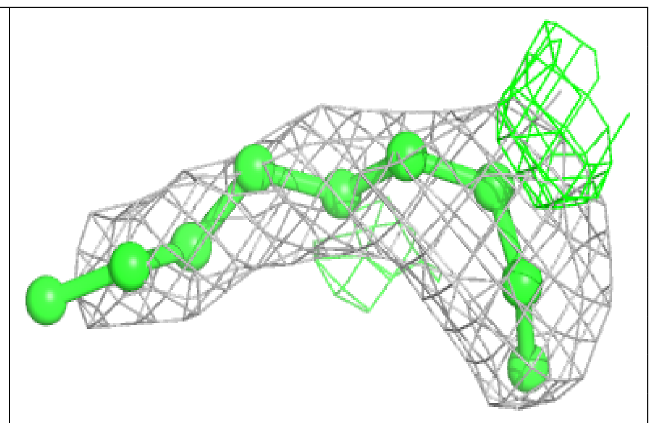


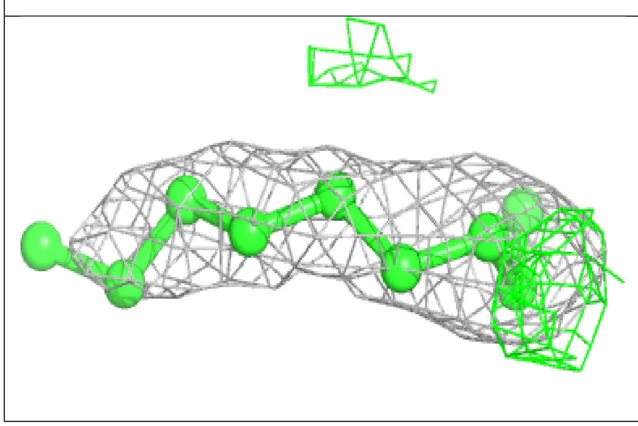


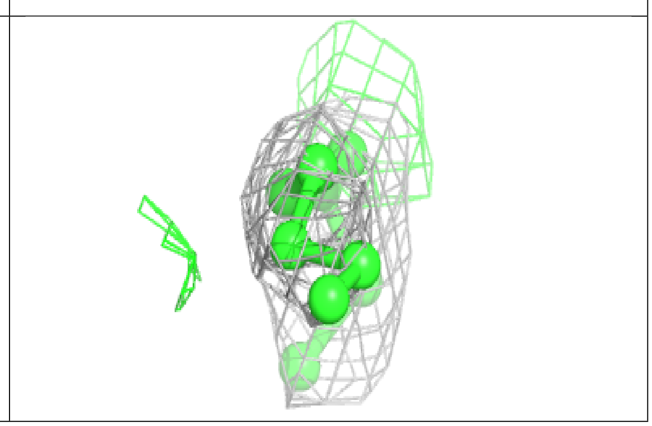


Electron density around LMT F 219:

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

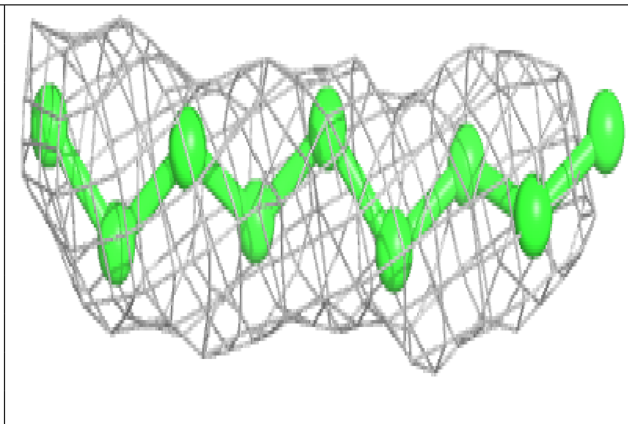


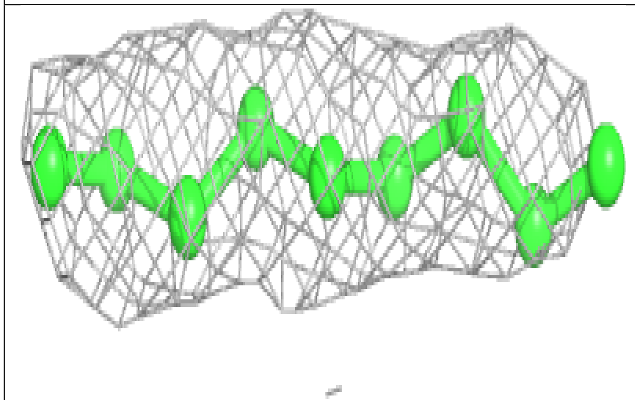


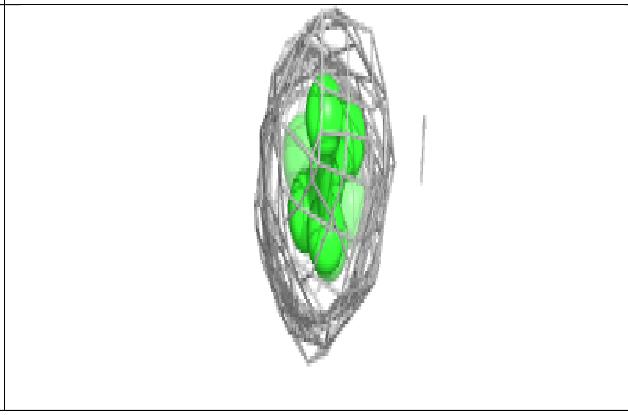


Electron density around LMT A 245:

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

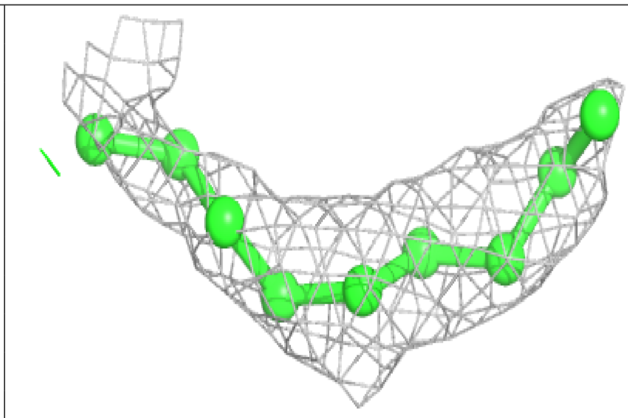


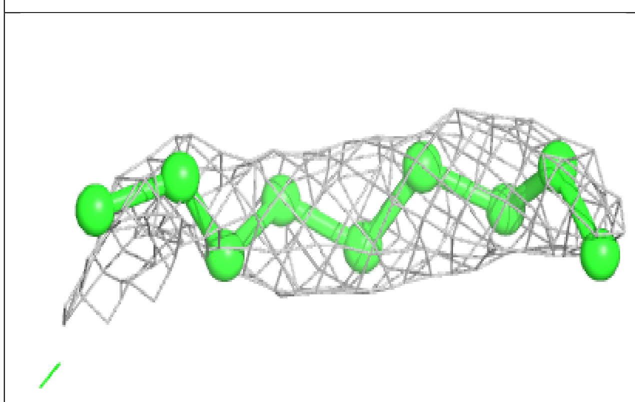


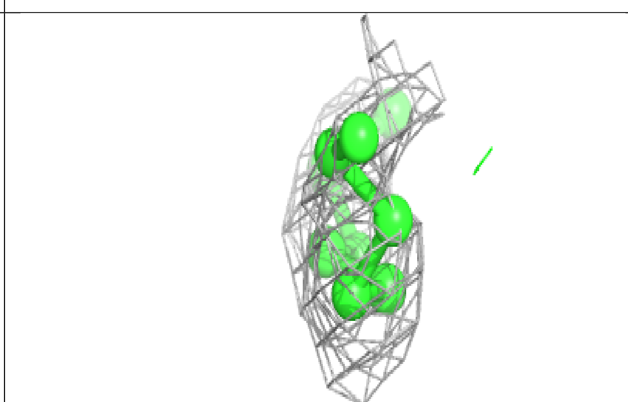


Electron density around LMT L 223:

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

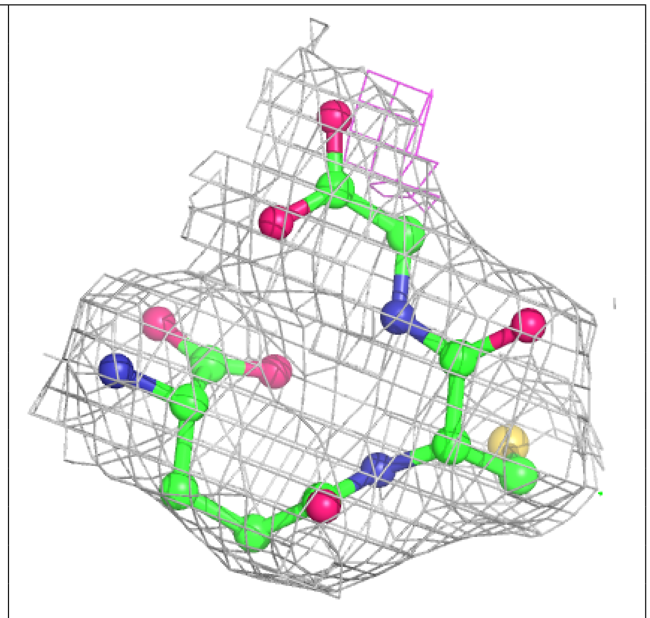


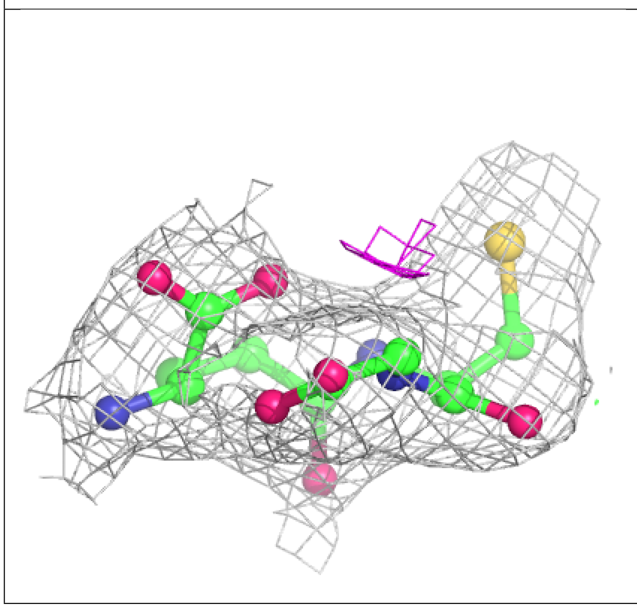


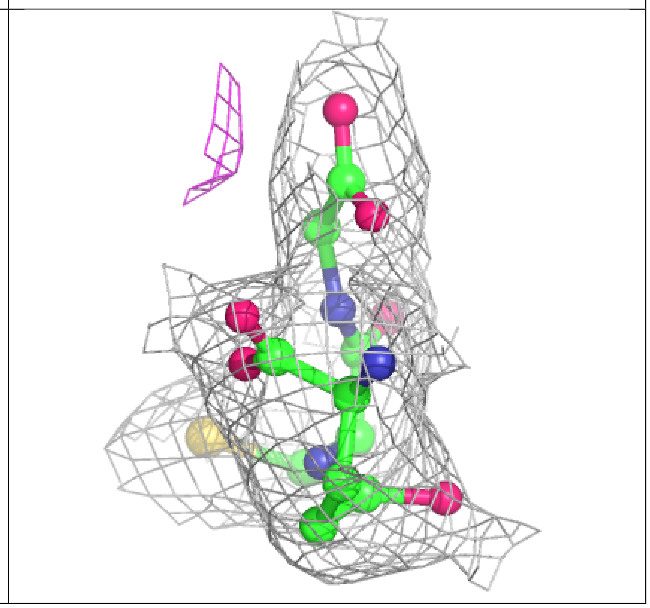


Electron density around GSH E 205:

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

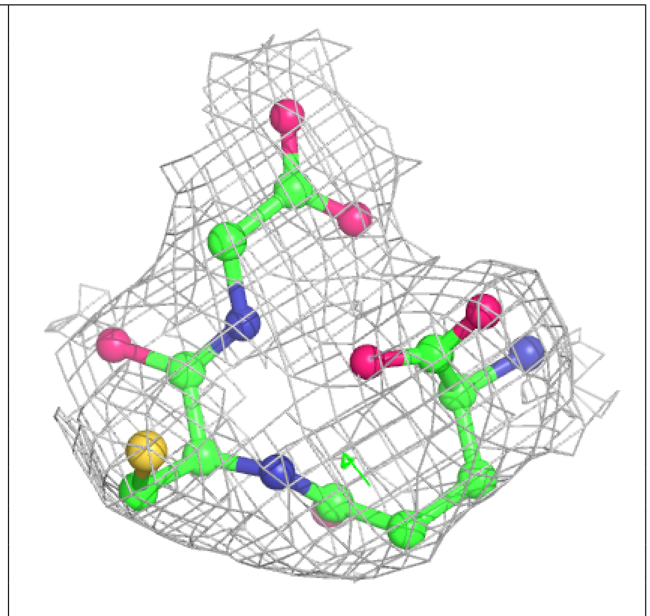


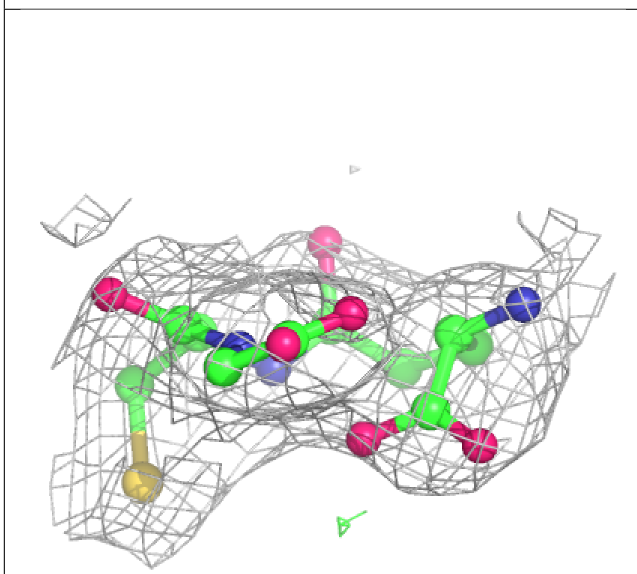


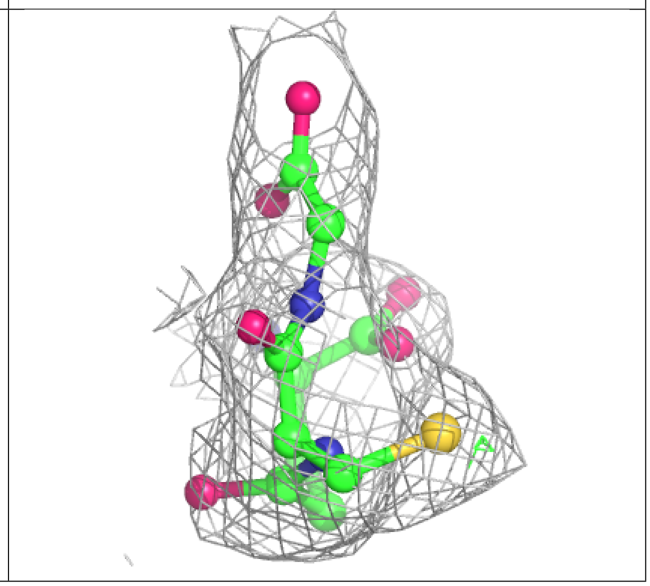


Electron density around GSH H 208:

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

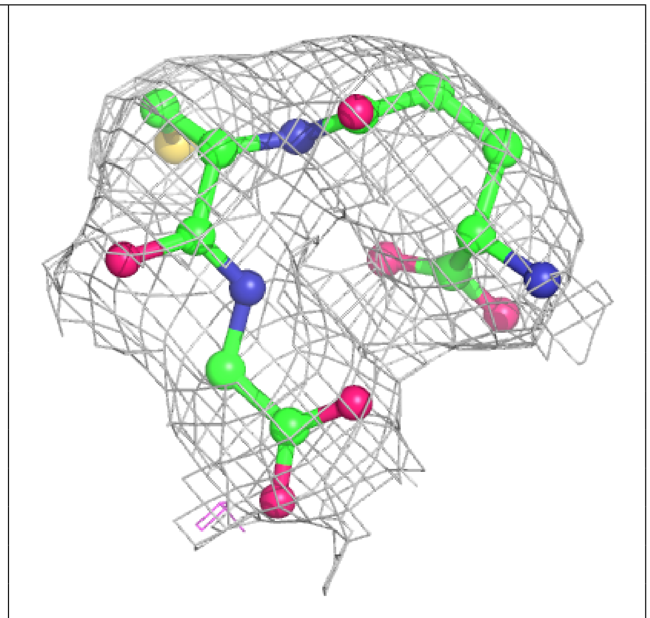


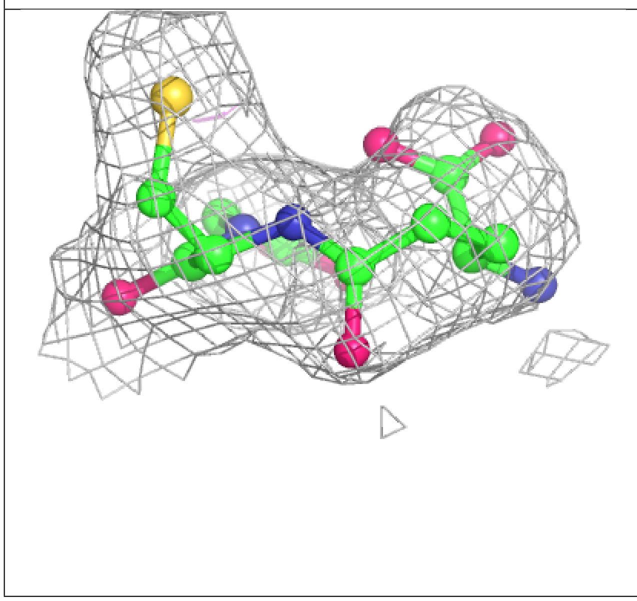


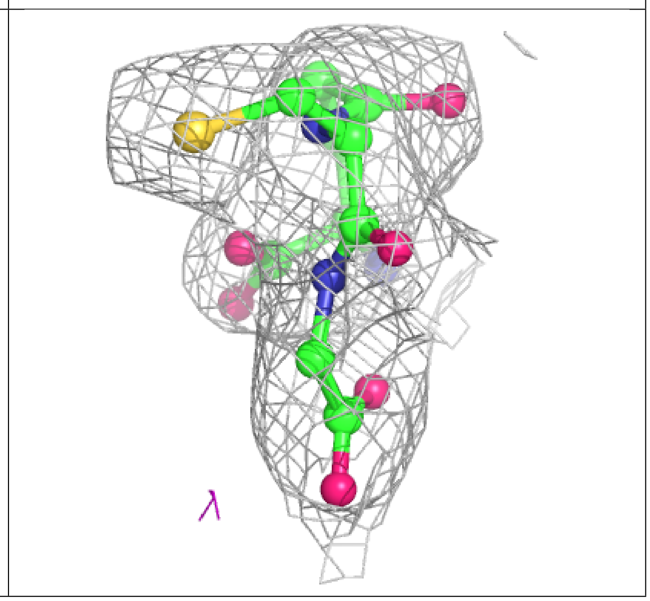


Electron density around GSH B 202:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

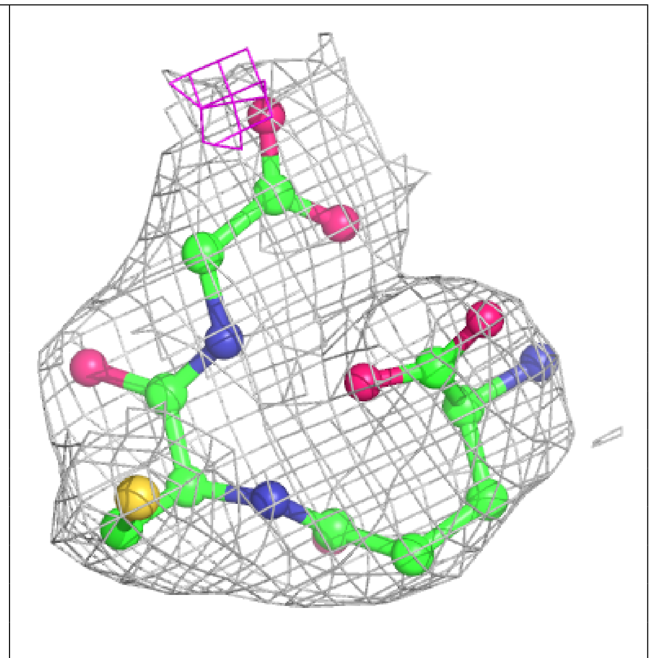


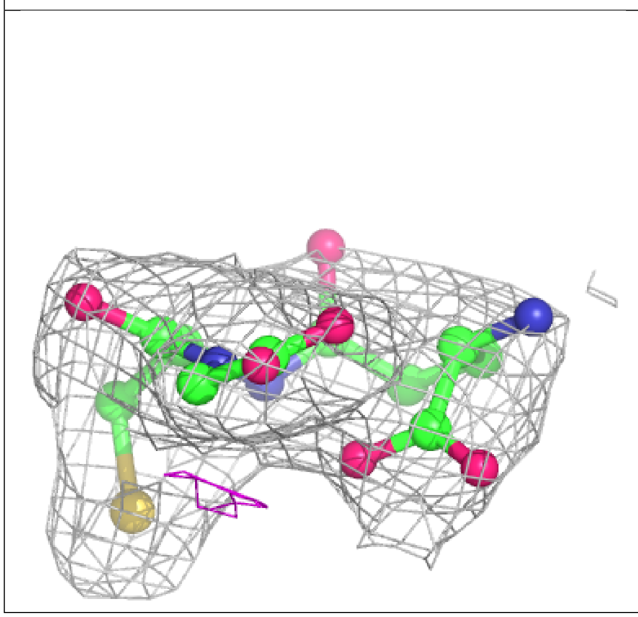


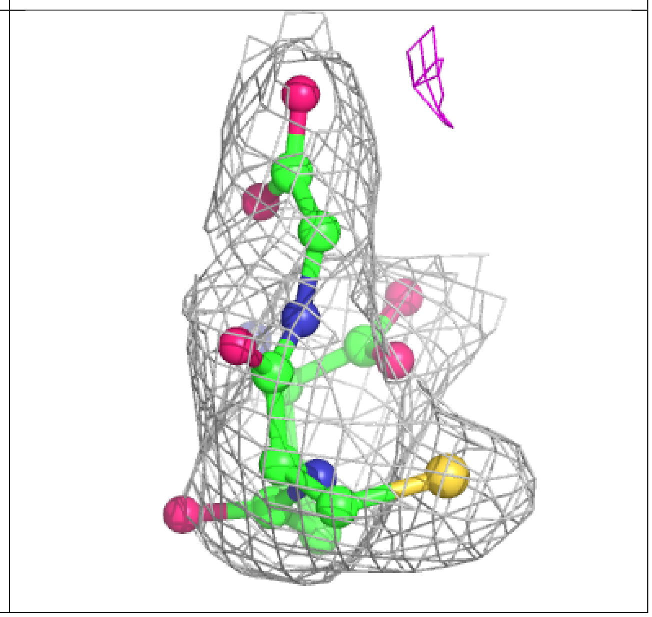


Electron density around GSH G 207:

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

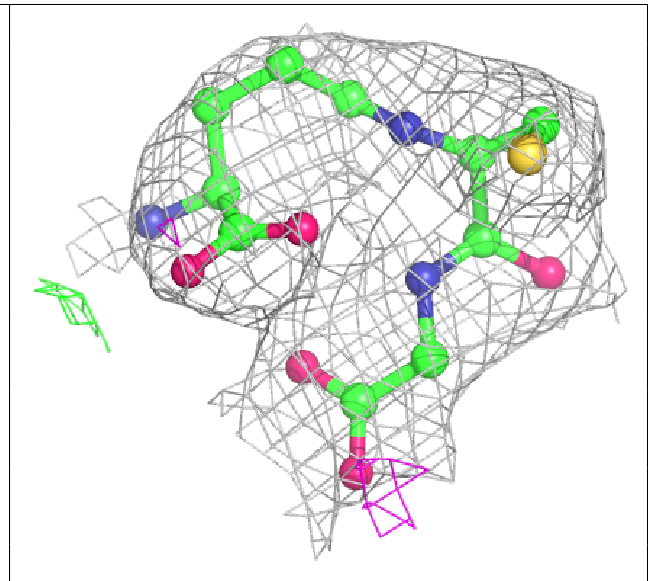


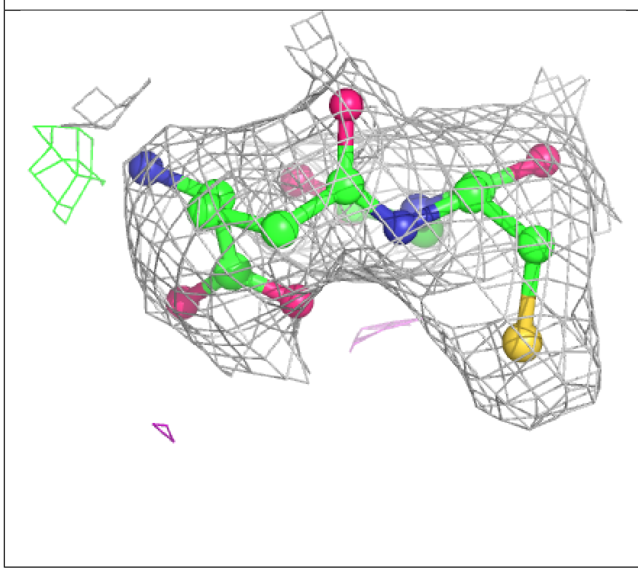


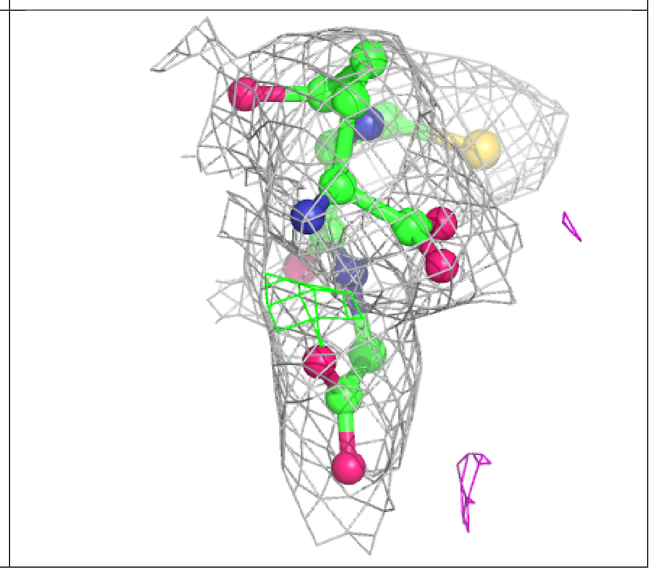


Electron density around GSH A 201:

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

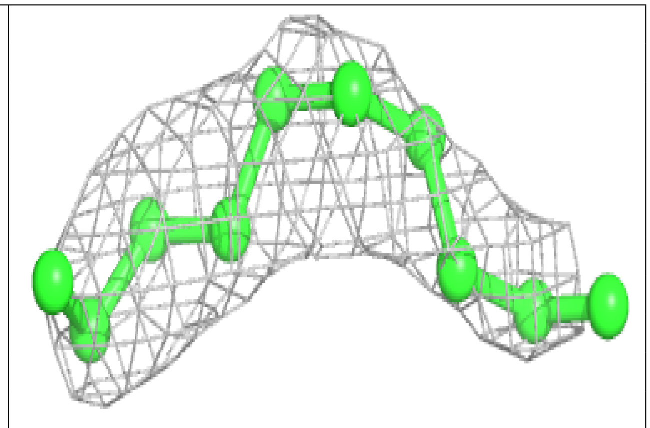


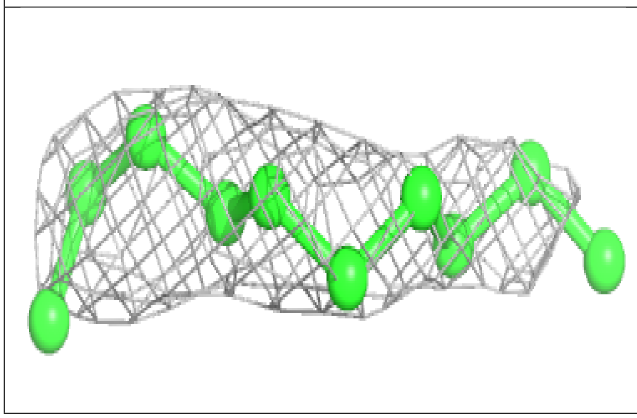


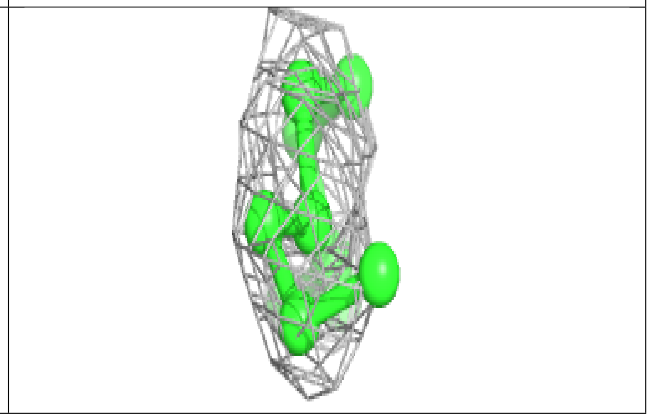


Electron density around LMT E 221:

2mF$_o$-DF$_c$ (at 0.7 rmsd) in gray
mF$_o$-DF$_c$ (at 3 rmsd) in purple (negative)
and green (positive)

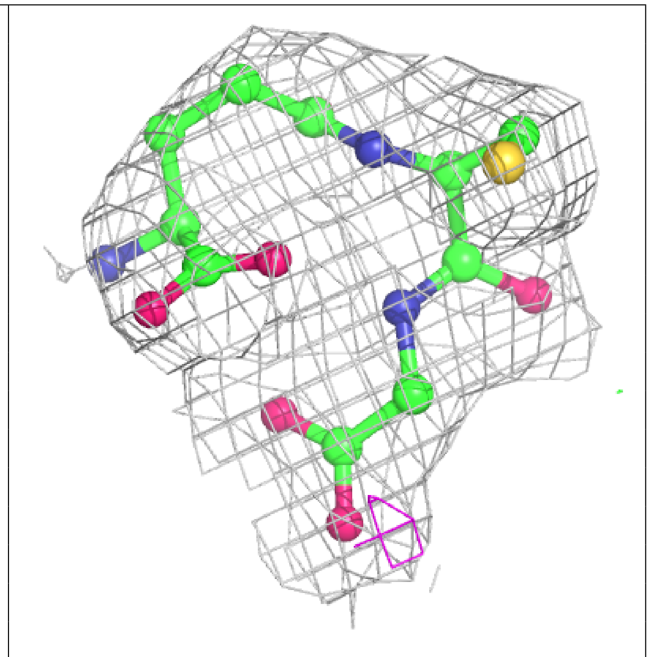


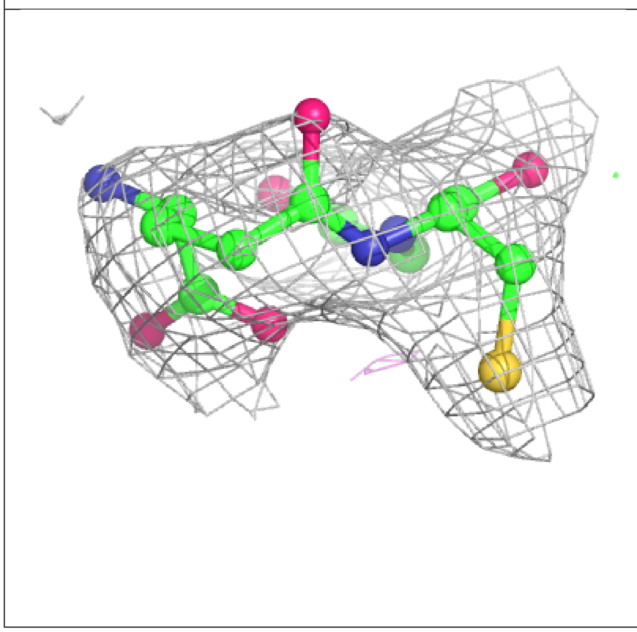


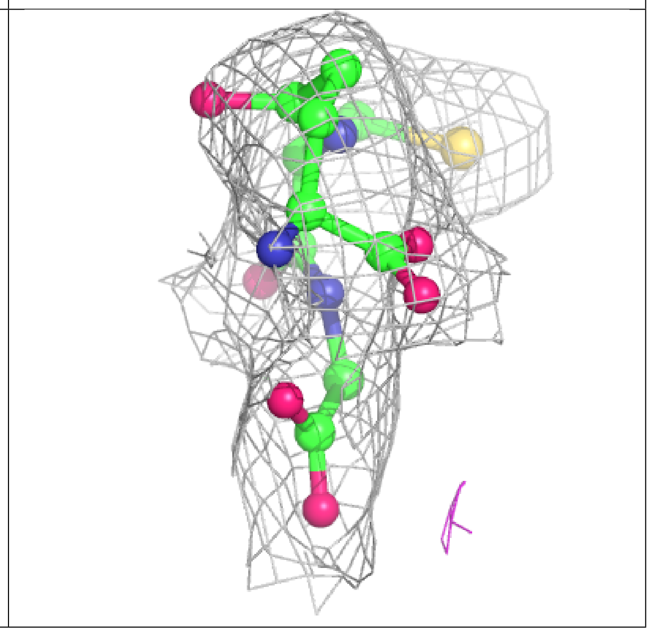


Electron density around GSH L 212:

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

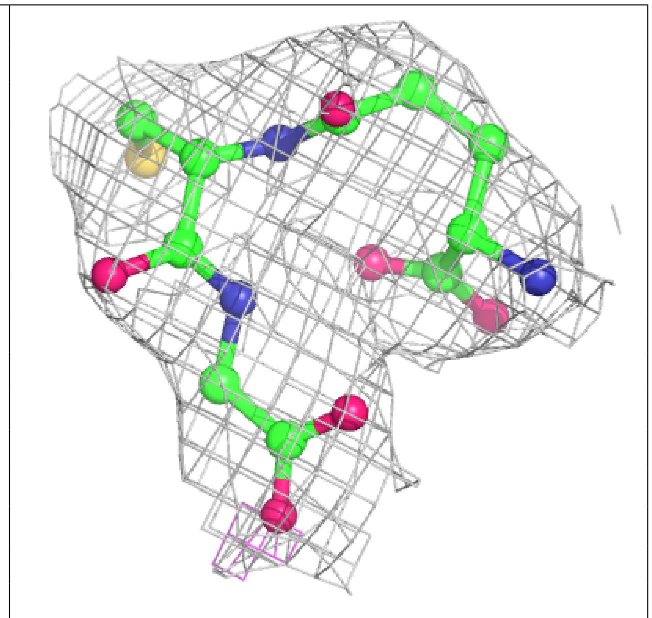


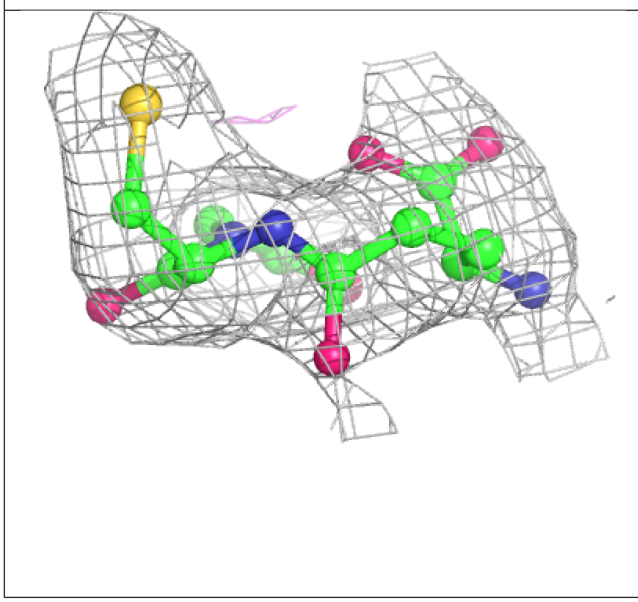


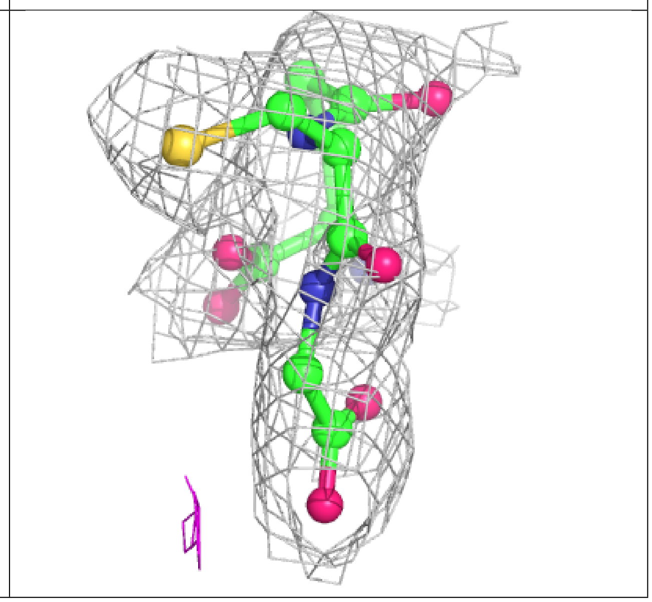


Electron density around GSH C 203:

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

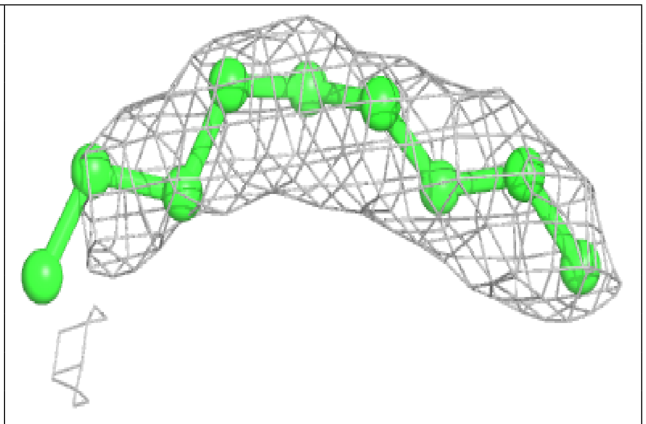


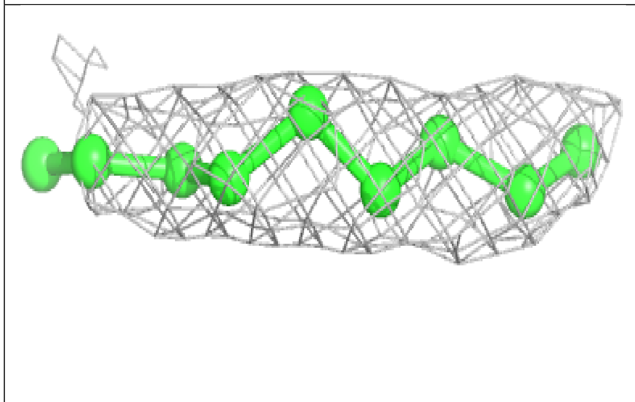


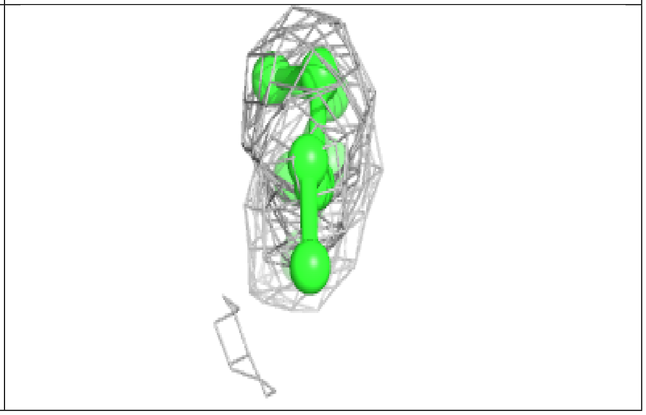


Electron density around LMT G 222:

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

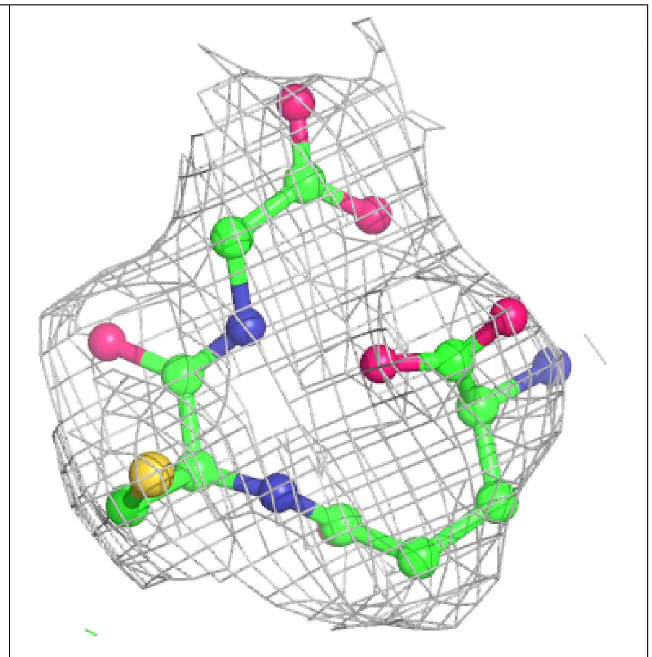


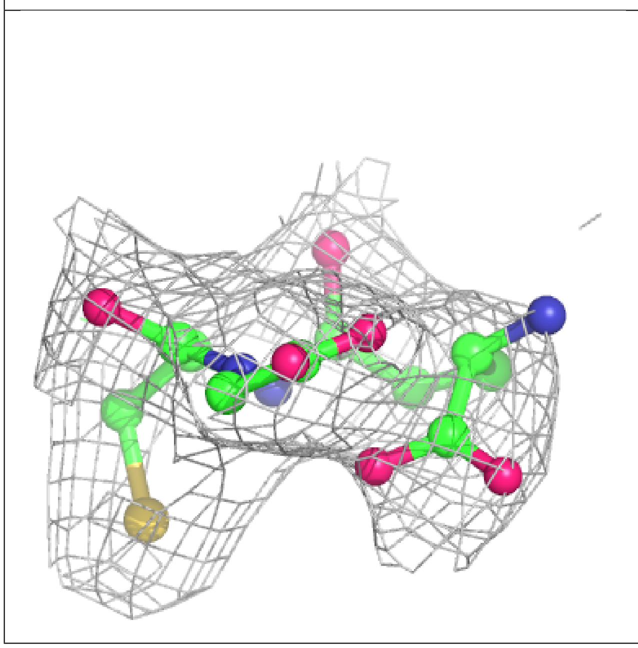


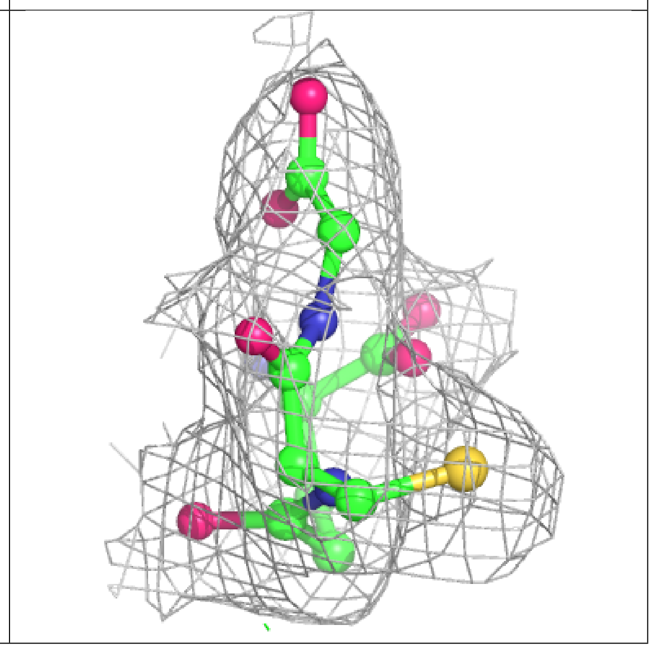


Electron density around GSH F 206:

$2mF_o$-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.