

## SUPPLEMENTARY MATERIAL

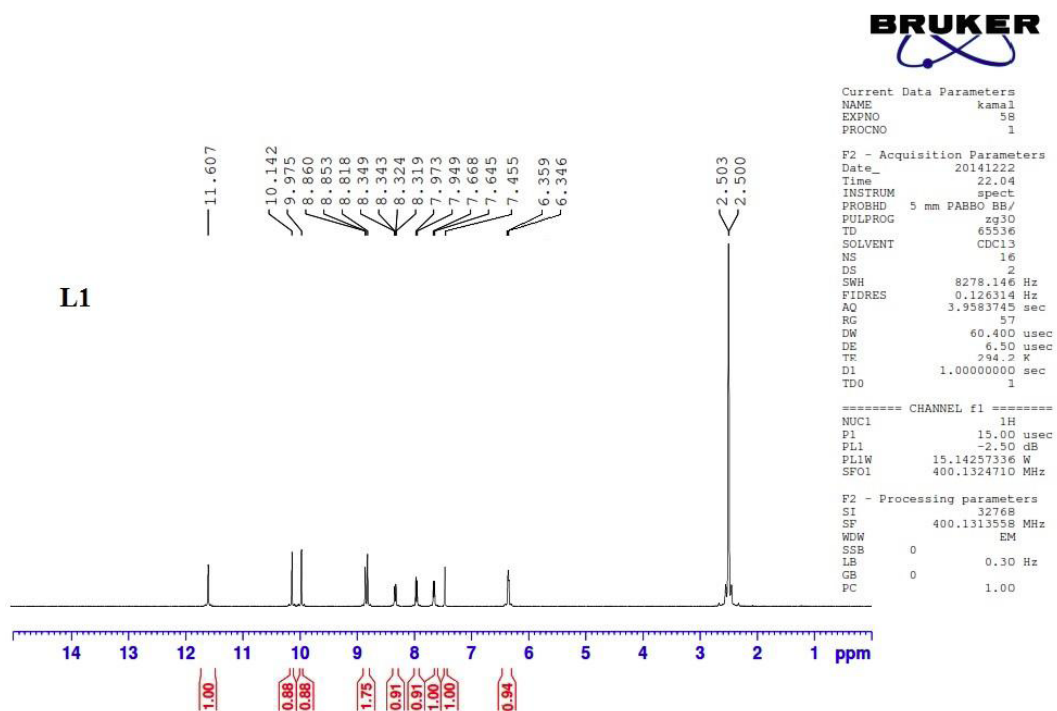


Figure a1: <sup>1</sup>H NMR spectrum of L1.

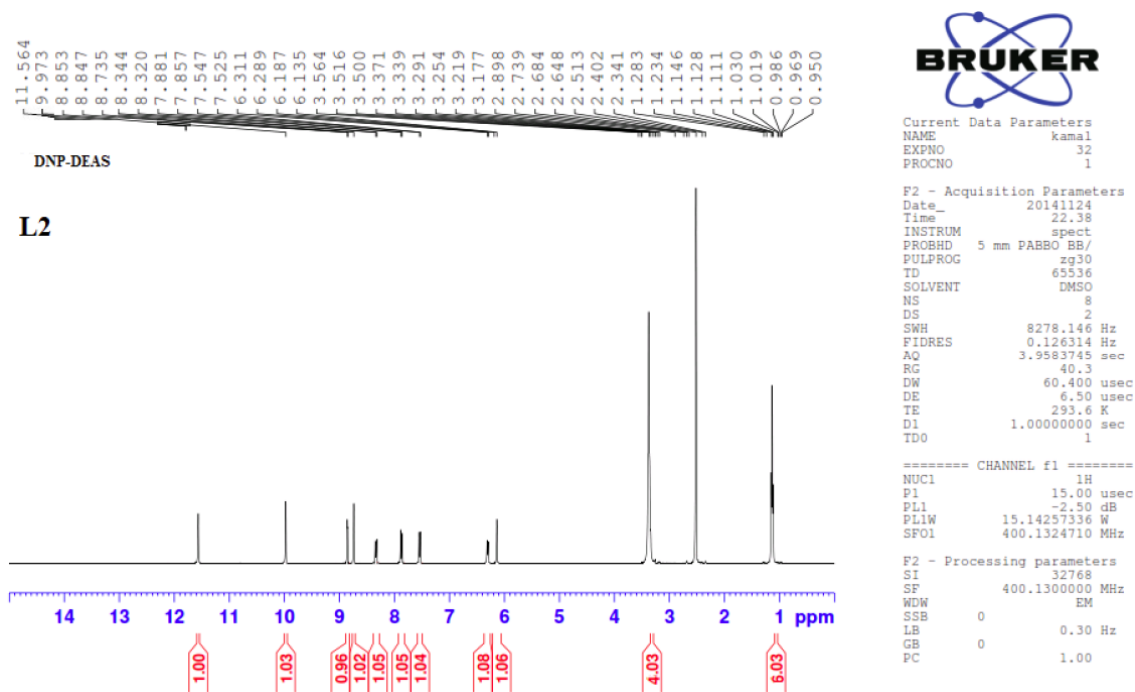


Figure a2: <sup>1</sup>H NMR spectrum of L2.

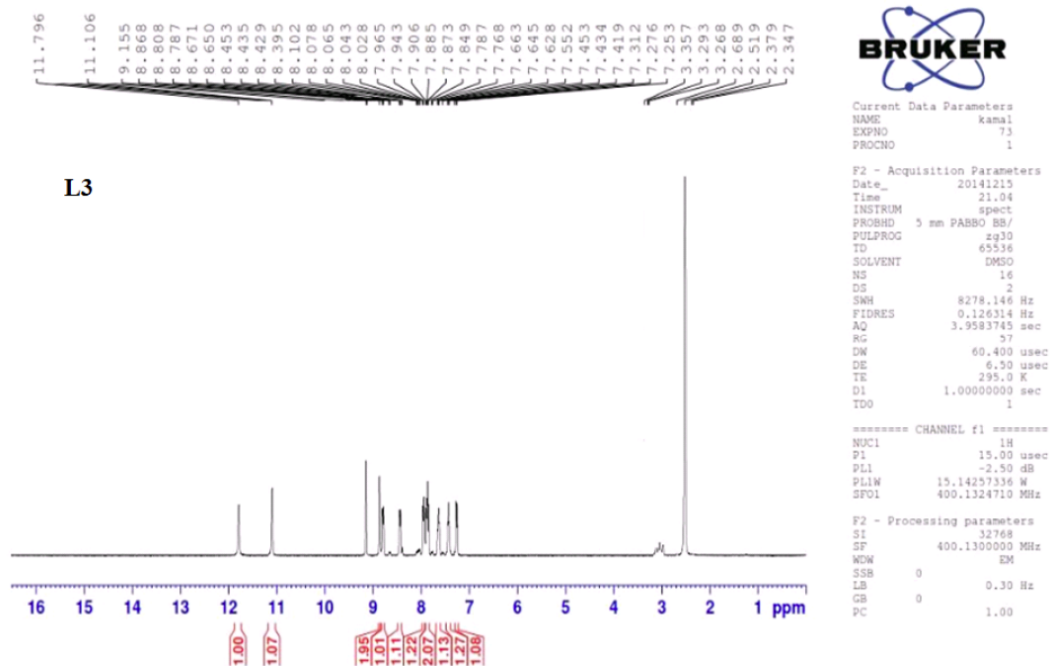


Figure a3: <sup>1</sup>H NMR spectrum of L3.

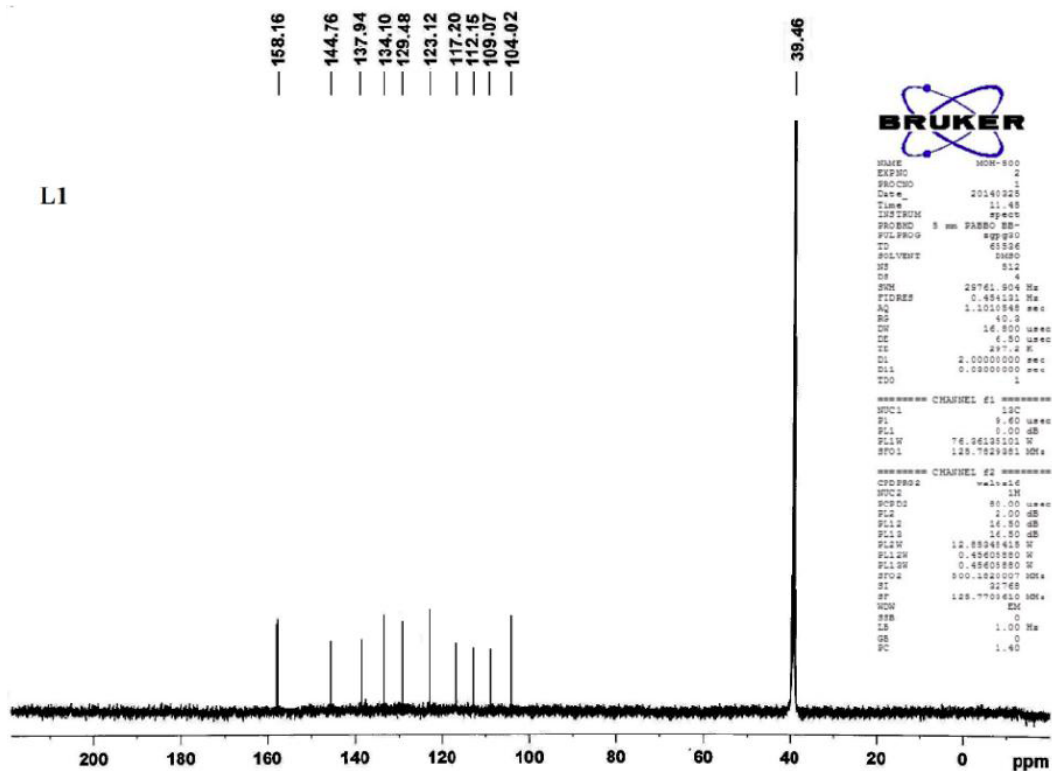


Figure a4: <sup>13</sup>C NMR spectrum of L1.

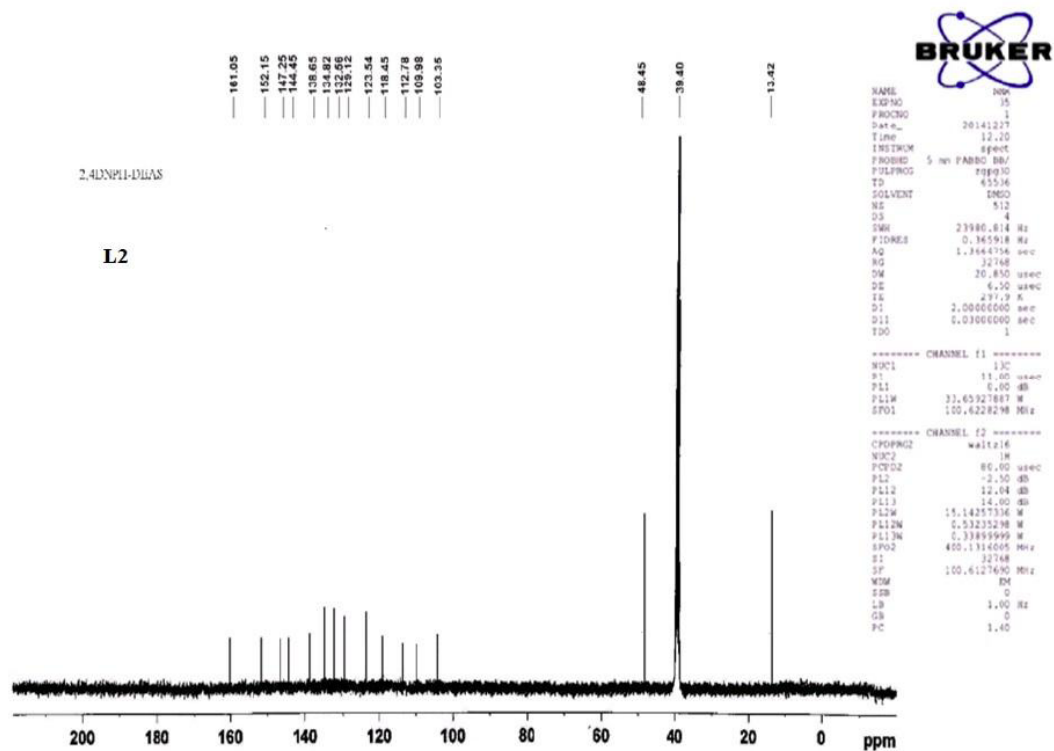


Figure a5:  $^{13}\text{C}$  NMR spectrum of L2.

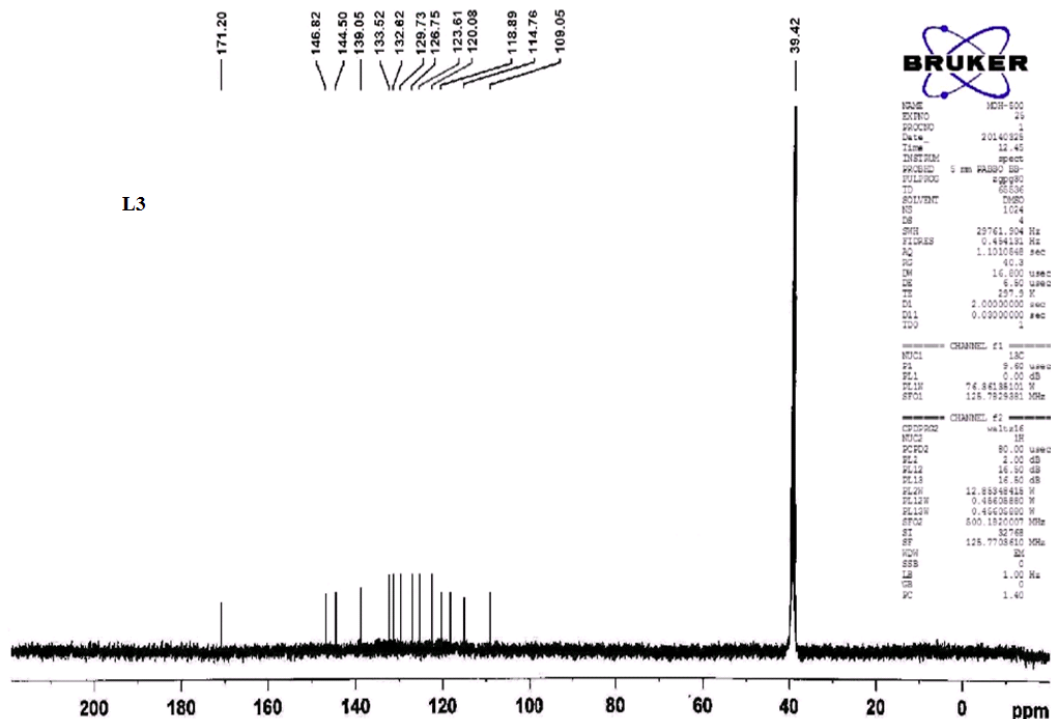


Figure a6:  $^{13}\text{C}$  NMR spectrum of L3.

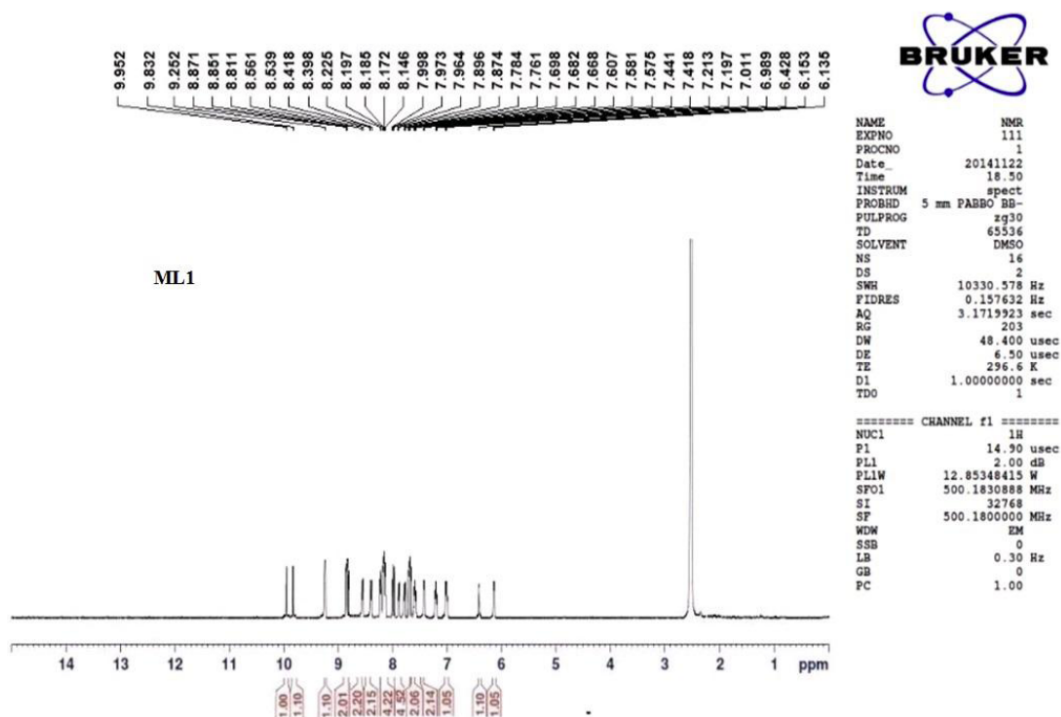


Figure a7: <sup>1</sup>H NMR spectrum of ML1.

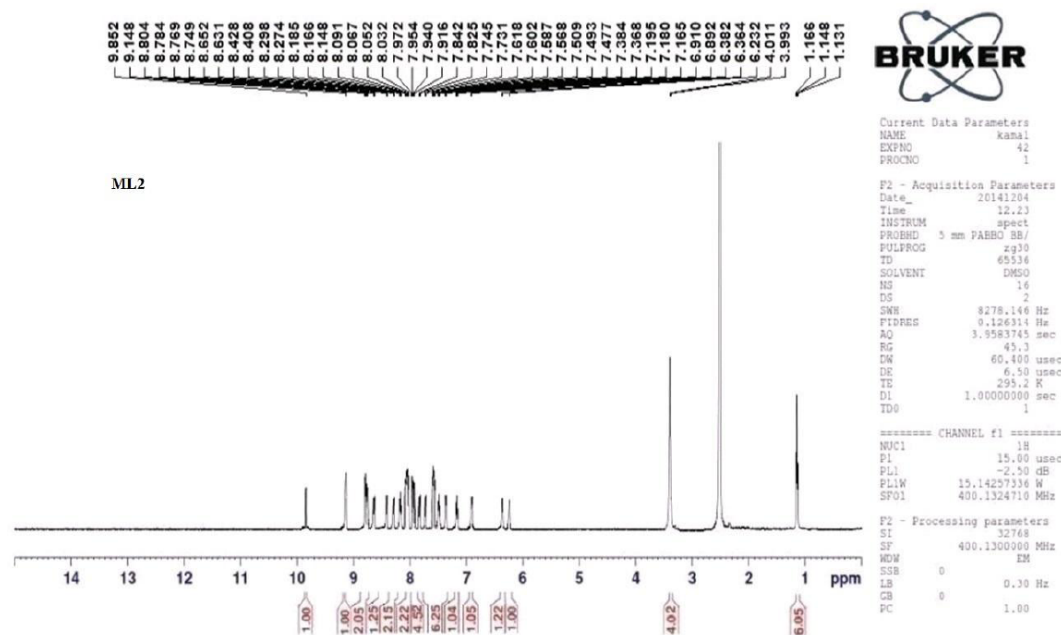


Figure a8: <sup>1</sup>H NMR spectrum of ML2.

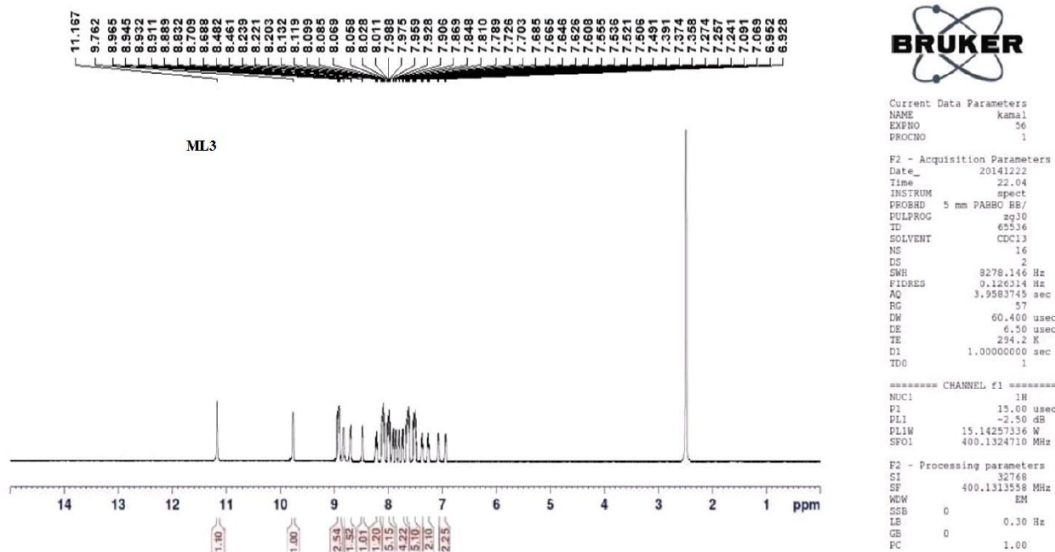


Figure a9: <sup>1</sup>H NMR spectrum of ML3.

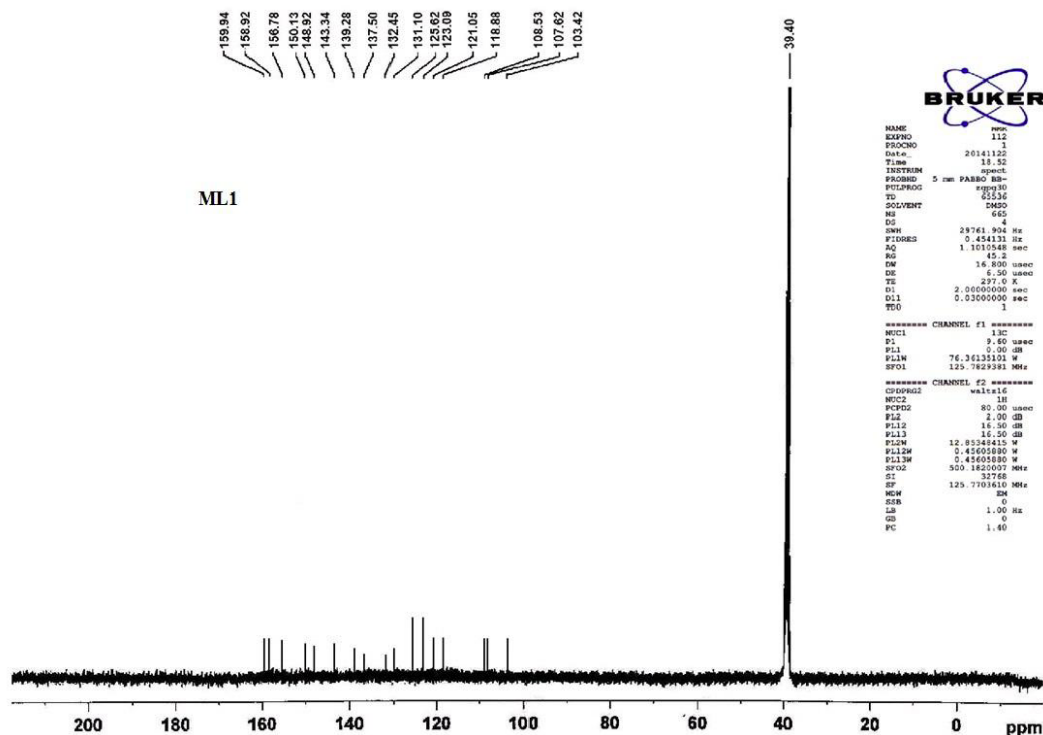


Figure a10: <sup>13</sup>C NMR spectrum of ML1.

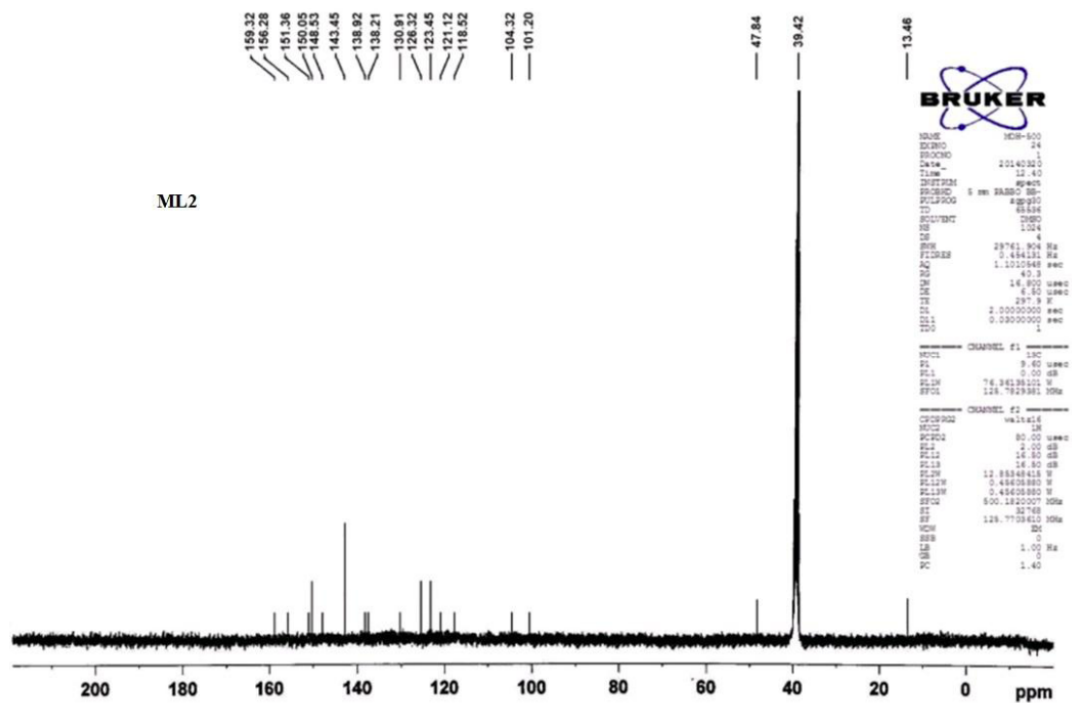


Figure a11: <sup>13</sup>C NMR spectrum of ML2.

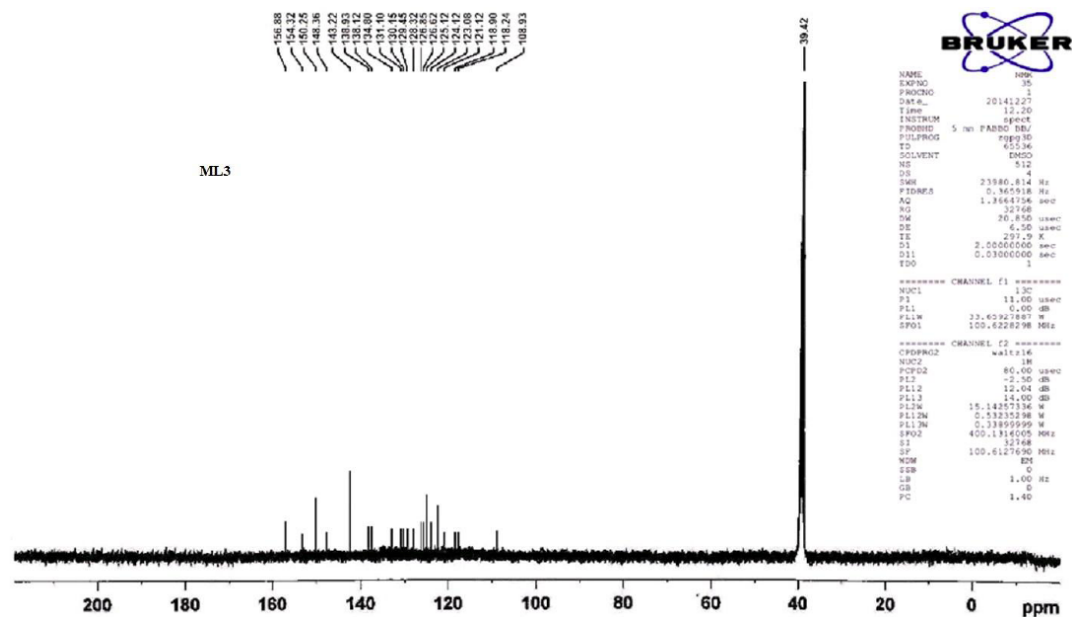
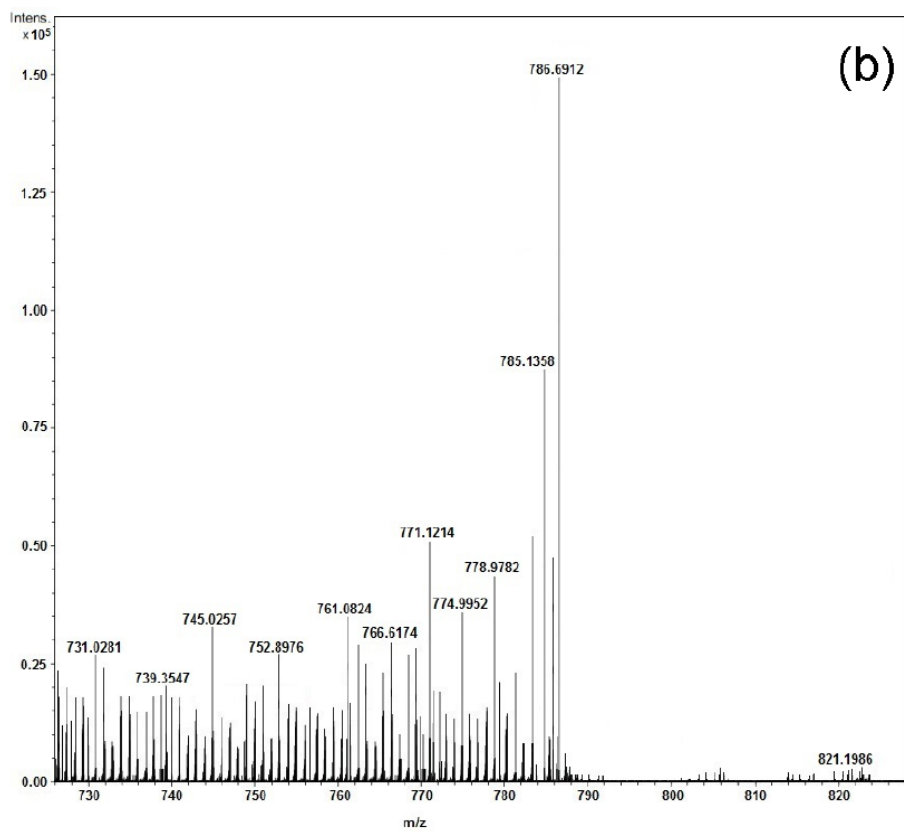
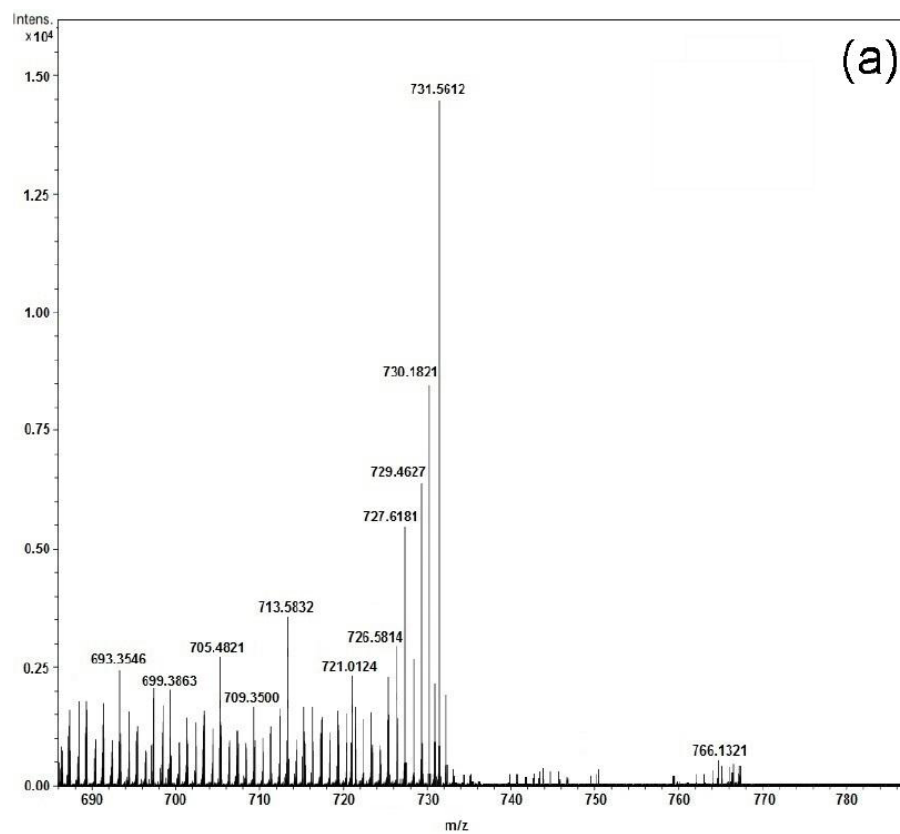
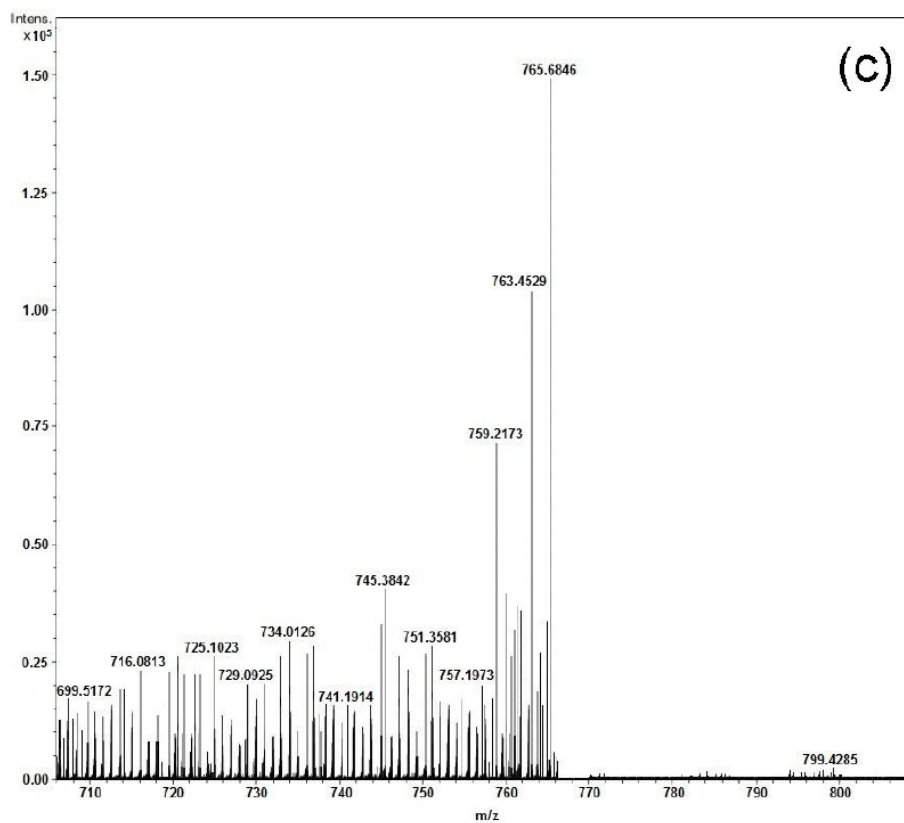
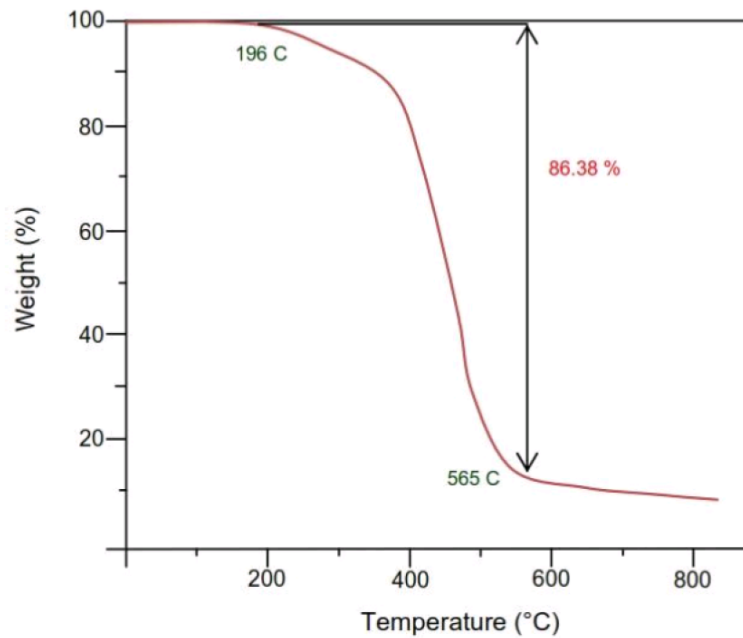


Figure a12: <sup>13</sup>C NMR spectrum of ML3.





**Figure a13-a15:** Mass spectrum of the complexes a) ML1, b) ML2 and c) ML3.



**Figure a16:** TGA curve of the complex ML1.



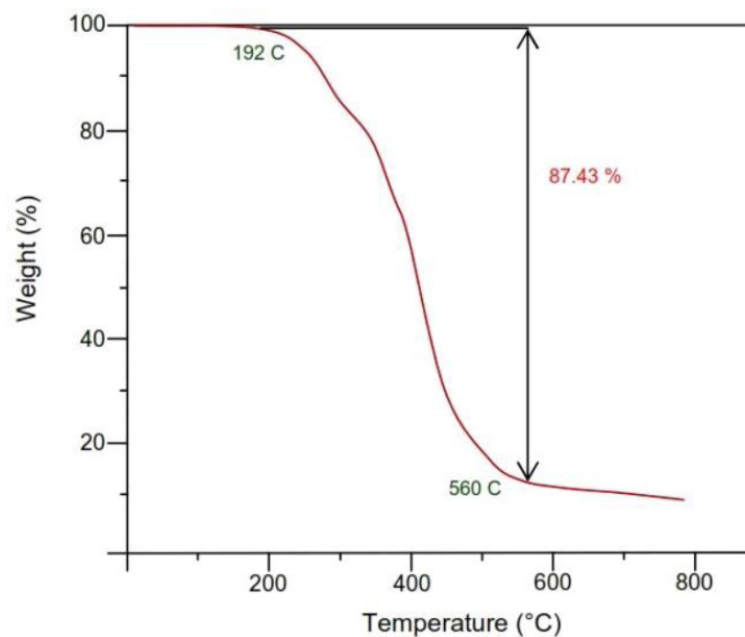


Figure a17: TGA curve of the complex ML2.

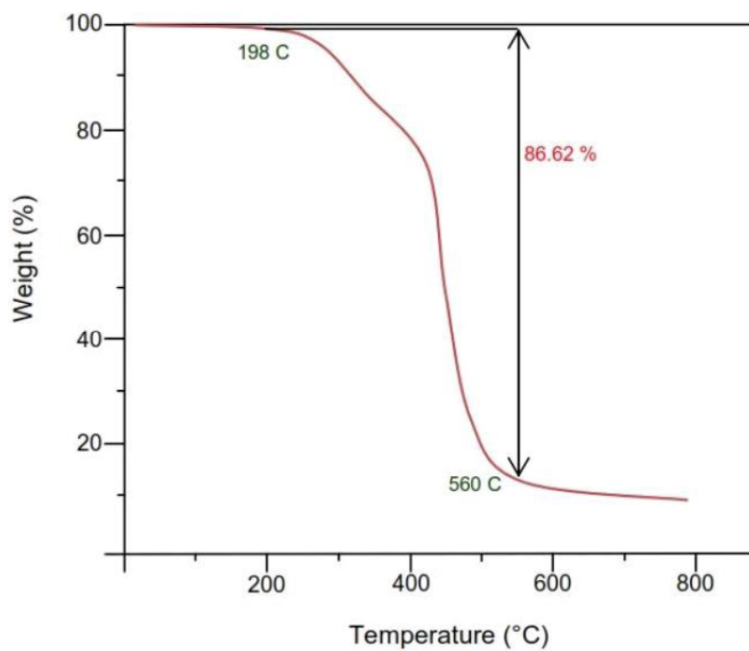


Figure a18: TGA curve of the complex ML3.

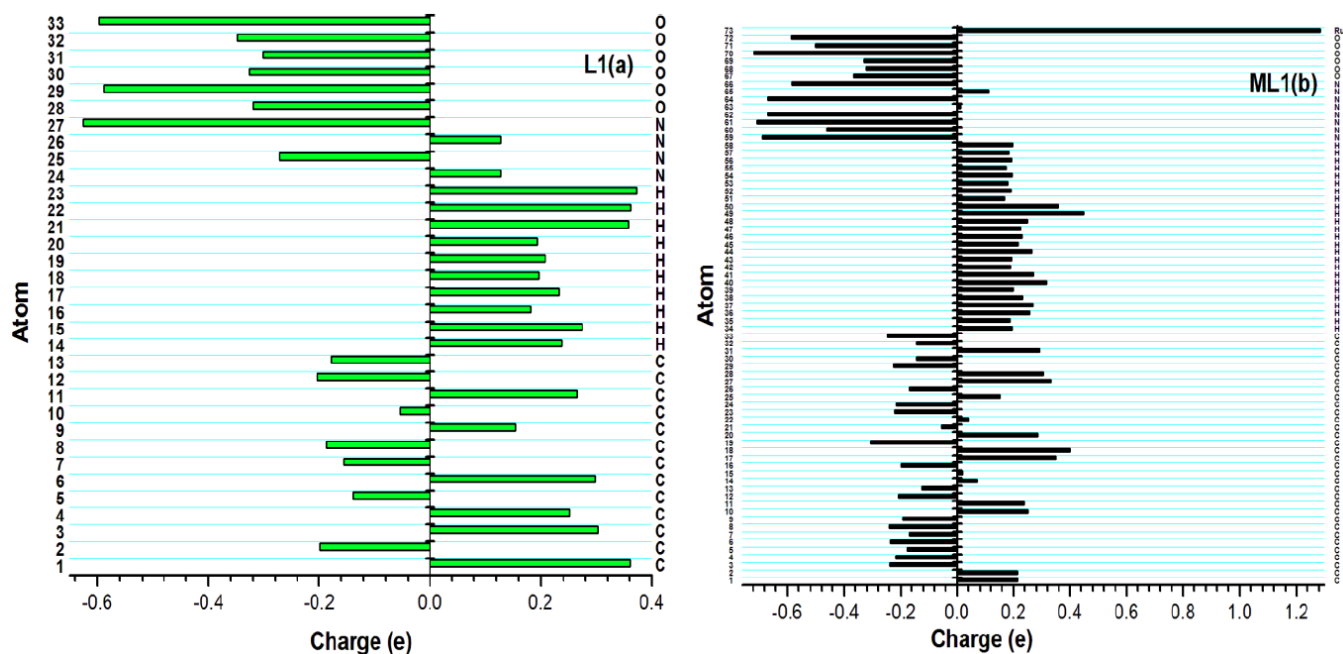


Figure a19: Mulliken atomic charge distribution of complexes a) L1 and b) ML1.

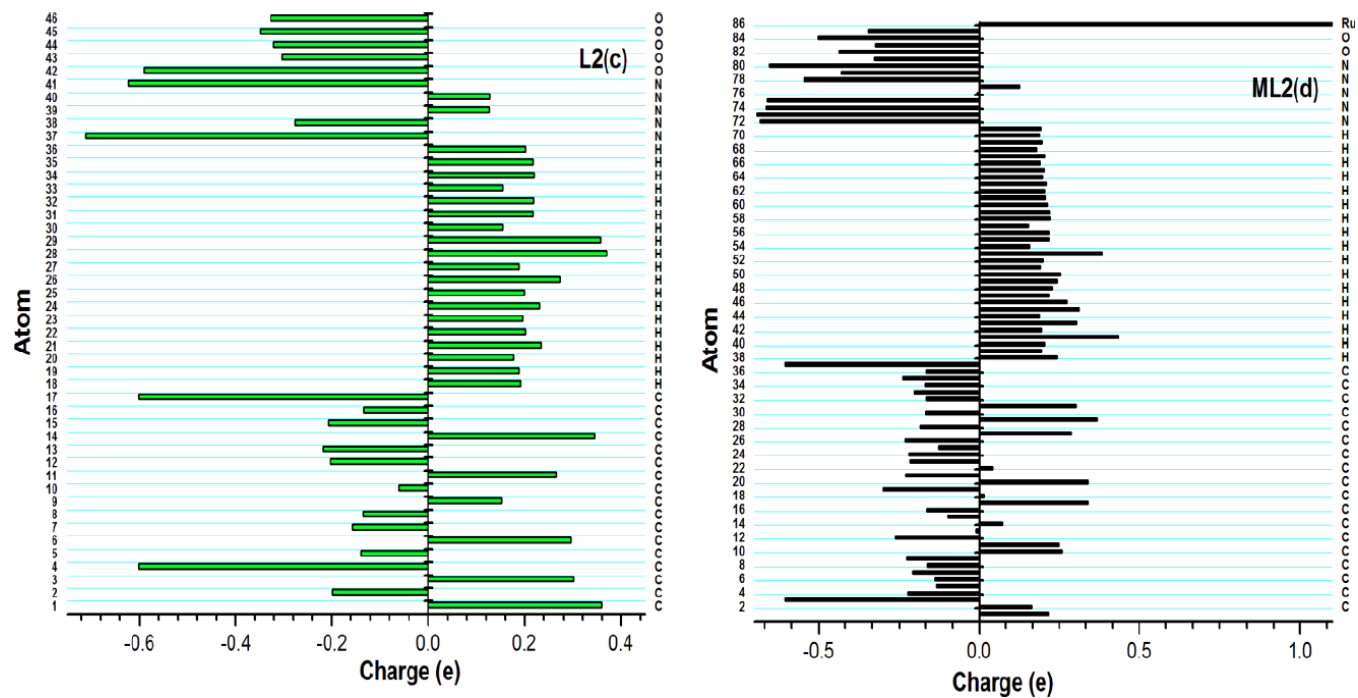
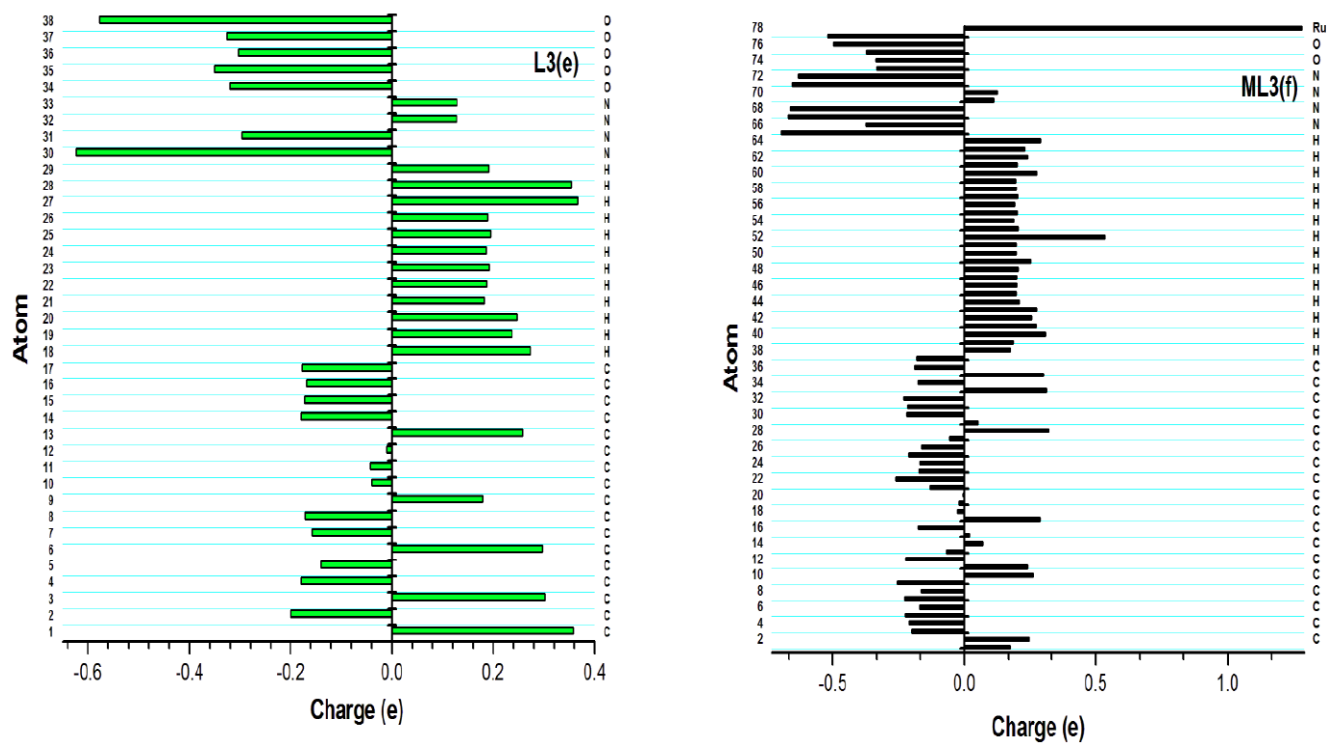


Figure a20: Mulliken atomic charge distribution of complexes c) L2 and d) ML2.


**Figure a21:** Mulliken atomic charge distribution of complexes e) L3 and f) ML3.

**Table S1:** FT-IR Spectral Data of Complexes ML1, ML2 and ML3

Compound	$\nu_{\text{OH}} \text{ cm}^{-1}$	$\nu_{\text{C=N}} \text{ cm}^{-1}$	$\nu_{\text{C-O}} \text{ cm}^{-1}$	$\nu_{\text{M-O}} \text{ cm}^{-1}$	$\nu_{\text{M-N}} \text{ cm}^{-1}$
L1	3436	1616	1258	-	-
L2	3427	1618	1243	-	-
L3	3445	1612	1254	-	-
ML1	-	1595	1272	466	508
ML2	-	1600	1266	456	505
ML3	-	1598	1262	461	490

**Table S2:**  $^1\text{H}$  NMR Spectral Data of the Ligands and its Complexes ( $\delta$ )

Compound	OH (s)	NH (s)	CH=N (s)	Aromatic (m)	$\text{CH}_3\text{CH}_2^-$
L1	11.60	9.97	8.85	8.21-6.54	-
L2	11.56	9.97	8.73	8.85-7.12	1.11, 3.33
L3	11.79	11.10	9.15	8.65-7.50	-
ML1	-	9.83	9.25	8.85-6.10	-
ML2	-	9.85	9.14	8.90-6.30	3.90
ML3	-	11.16	9.76	8.97-6.90	-

**Table S3:  $^{13}\text{C}$  NMR Spectral Data of the Ligands and its Complexes ( $\delta$ )**

Compound	CH=N	Aromatic C
L1	144.76	104.02-158.16
L2	144.45	103.25-161.05
L3	144.50	109.50-171.20
ML1	156.78	103.42-159.94
ML2	156.28	101.20-159.32
ML3	156.88	108.93-154.32

**Table S4: Calculated Structural Parameters of the Complexes ML1, ML2 and ML3**

Bond length (A°)	Value (A°)	Bond angle(A°)	Value (A°)
<b>Complex ML1</b>			
73Ru-71O	1.8901	71O-73Ru-60N	89.9958
73Ru-60N	1.9262	60N-73Ru-61N	89.9962
73Ru-61N	1.9257	61N-73Ru-59N	90.0001
73Ru-59N	1.9266	59N-73Ru-62N	90.0042
73Ru-64N	1.8885	62N-73Ru-64N	90.0251
73Ru-62N	1.9262	64N-73Ru-71O	86.8435
60N-66N	1.3520	73Ru-71O-17C	109.5056
60N-25C	1.4464	66N-60N-25C	109.4938
25C-18C	1.3140	66N-60N-73Ru	109.4832
17C-18C	1.5411		
71O-17C	1.4098		
<b>Complex ML2</b>			
86Ru-80N	1.8888	84O-86Ru-80N	104.1419
86Ru-73N	1.9263	80N-86Ru-74N	89.5429
86Ru-79N	1.9257	74N-86Ru-73N	86.8238
86Ru-75N	1.9264	73N-86Ru-75N	89.9770
86Ru-74N	1.9360	75N-86Ru-79N	89.9914
86Ru-84O	1.8895	79N-86Ru-84O	90.0323
79N-78N	1.3513	78N-79N-25C	109.4978
25C-79N	1.4464	86Ru-84O-17C	109.5042
25C-18C	1.3148	78N-79N-86Ru	109.5405
18C-17C	1.5397		
17C-84O	1.4100		
<b>Complex ML3</b>			
78Ru-76O	1.8892	66N-78Ru-76O	90.0337
78Ru-65N	1.8013	76O-78Ru-65N	102.0439
78Ru-68N	1.9257	65N-78Ru-68N	90.0006
78Ru-71N	1.9260	68N-78Ru-71N	90.0040
78Ru-67N	1.9250	71N-78Ru-67N	90.0159

78Ru-66N	1.9261	67N-78Ru-66N	90.0108
72N-66N	1.3523	72N-66N-21C	109.4725
66N-21C	1.4469	78Ru-76O-17C	109.5173
21C-18C	1.2669	72N-66N-78Ru	109.5240
18C-17C	1.5402		
17C-76O	1.4109		