

## *Supplementary Information*

# Synthesis, characterization and biological activity of metal complexes and their Schiff base ligands

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<b>Lists of figures</b>	<b>Page no</b>
1. Figure 1 Mass spectra of Cu(II) Complex	2
2. Figure 2 TGA of complex Cu(II) Complex	2
3. Figure 3 <sup>1</sup> H NMR spectra of Cu(II) Complex	3
4. Figure 4 <sup>13</sup> C NMR spectra of Cu(II) Complex	3
5. Figure 5 <sup>1</sup> H NMR spectra of ligand	4
6. Figure 6 <sup>13</sup> C NMR spectra of ligand	4
7. Figure 7 Mass spectra of Zn(II) Complex	5
8. Figure 8 IR spectra of Zn(II) Complex	5
9. Figure 9 TGA of Zn(II) Complex	6
10. Figure 10 IR of Cu(II) Complex	6
11. Figure 11 <sup>1</sup> H NMR of Zn(II) Complex	7

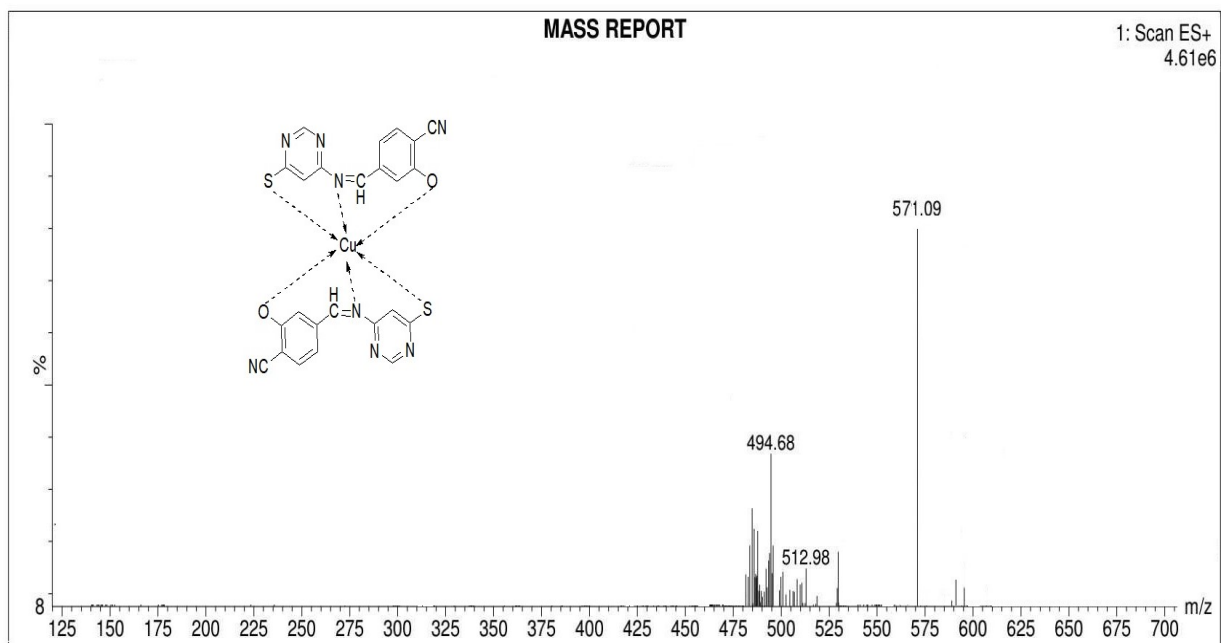


Figure 1 Mass spectra of Cu(II) Complex

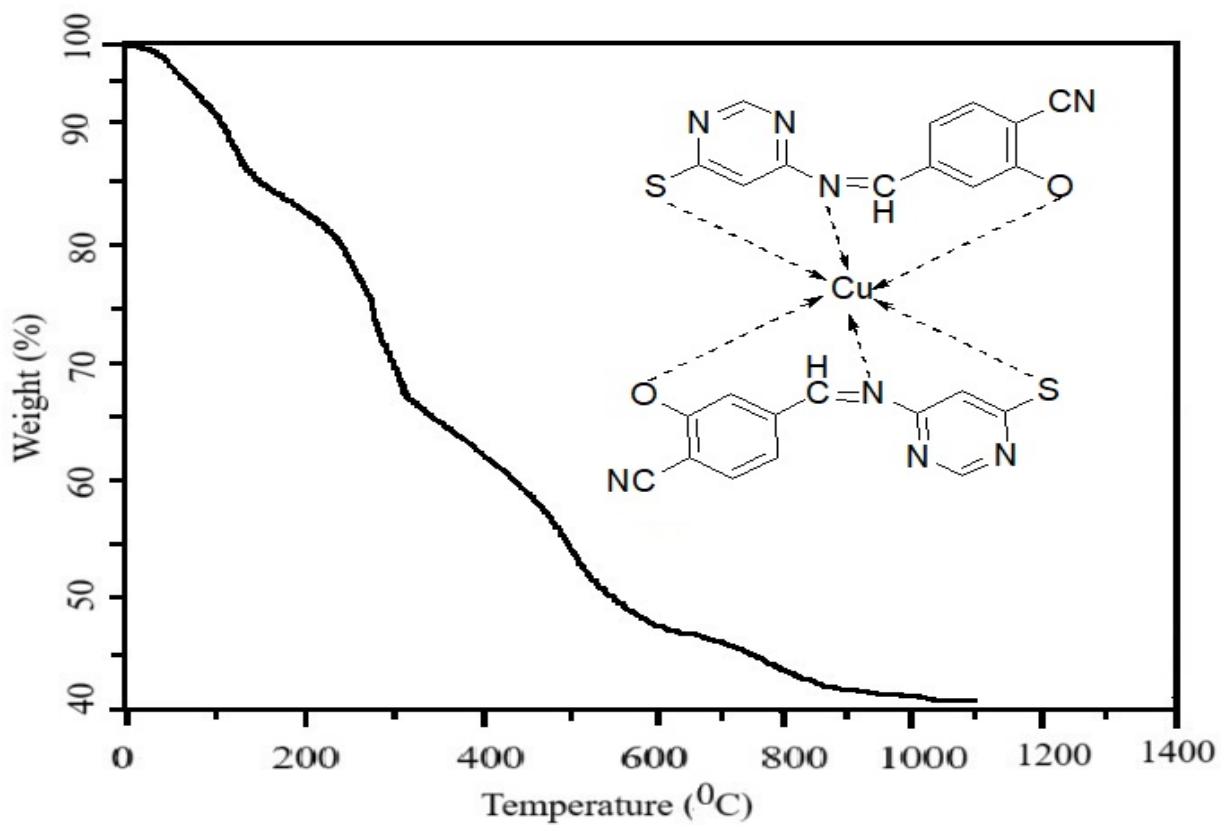


Figure 2 TGA of complex Cu(II) Complex

Sample code: RK Cu

VARIAN 400MHz  
Solvent: dmso  
Date: 15 Dec 2023

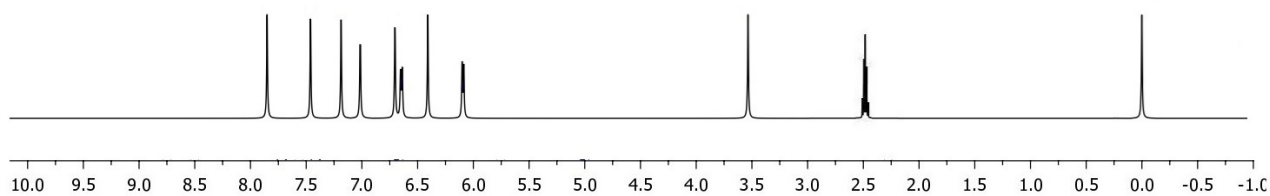
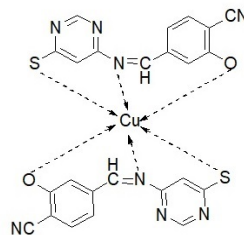


Figure 3  $^1\text{H}$  NMR spectra of Cu(II) Complex

171.64 [9]  
171.64 [21]  
165.62 [24]  
165.62 [14]  
159.30 [4]  
159.30 [29]  
153.48 [2]  
153.48 [32]  
134.15 [22]  
134.15 [12]  
133.12 [26]  
133.12 [16]  
129.42 [11]  
129.42 [20]  
117.68 [23]  
117.68 [13]  
115.38 [37]  
115.38 [18]  
95.38 [25]  
95.38 [15]

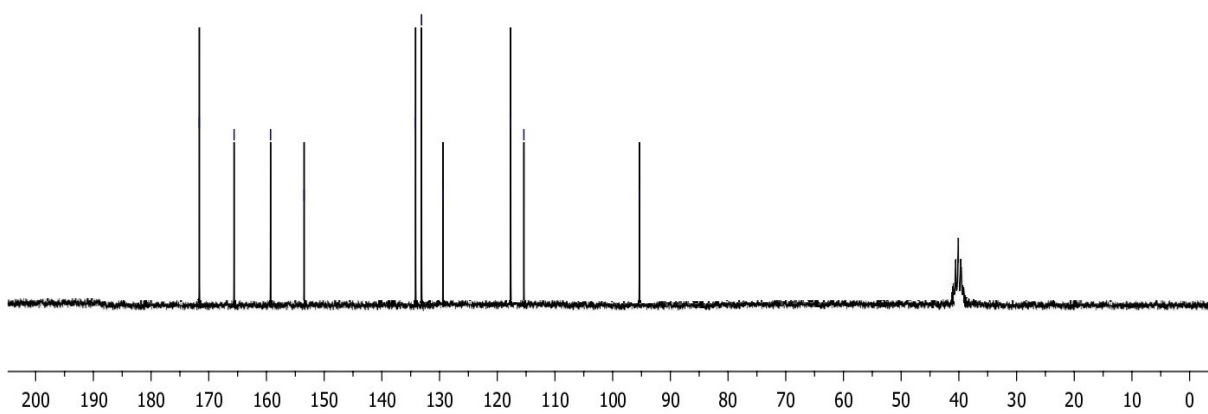
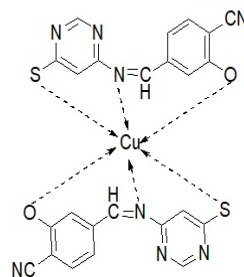


Figure 4  $^{13}\text{C}$  NMR spectra of Cu(II) Complex

Sample code: RK  
VARIAN 400MHz  
Solvent: dms  
Date: 10 Dec 2023

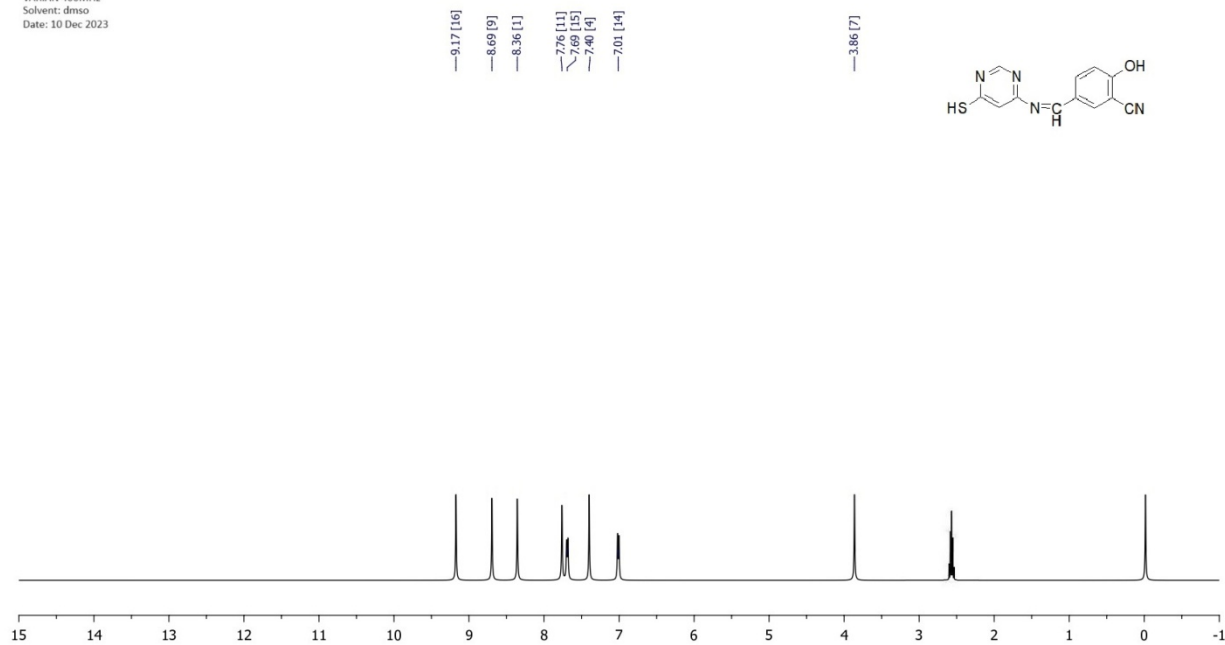


Figure 5  $^1\text{H}$  NMR spectra of ligand

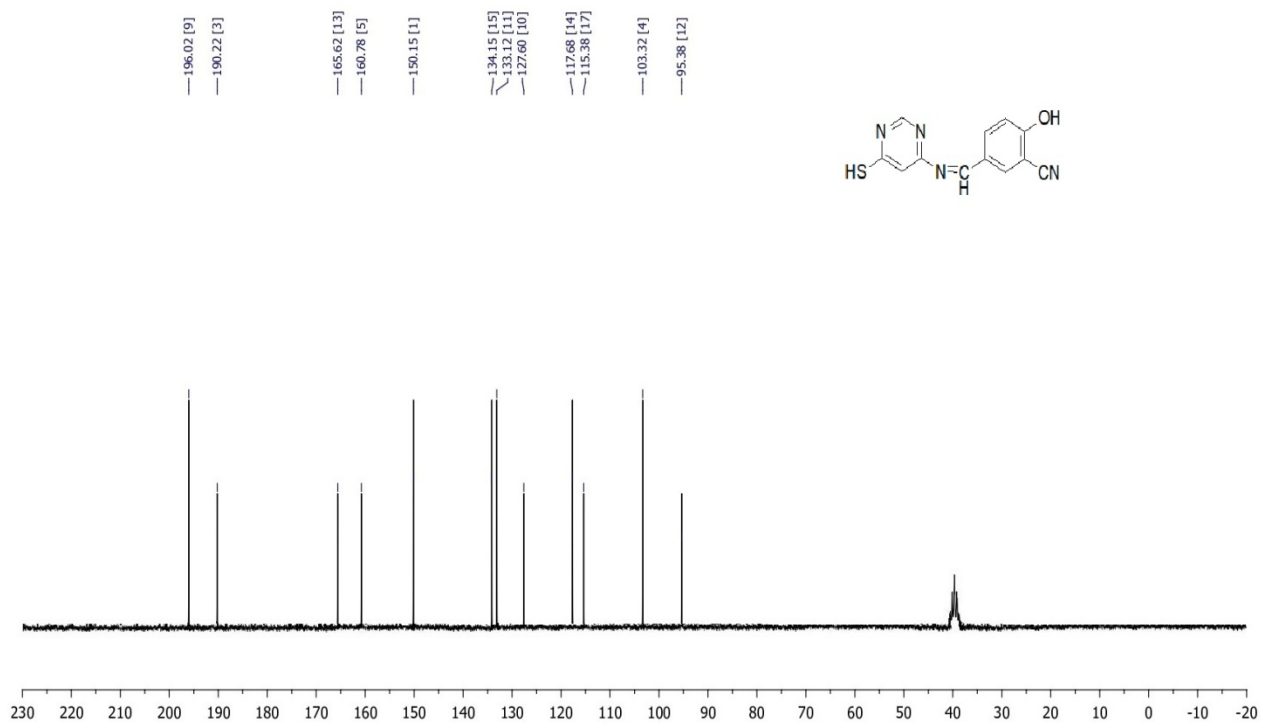


Figure 6  $^{13}\text{C}$  NMR spectra of ligand

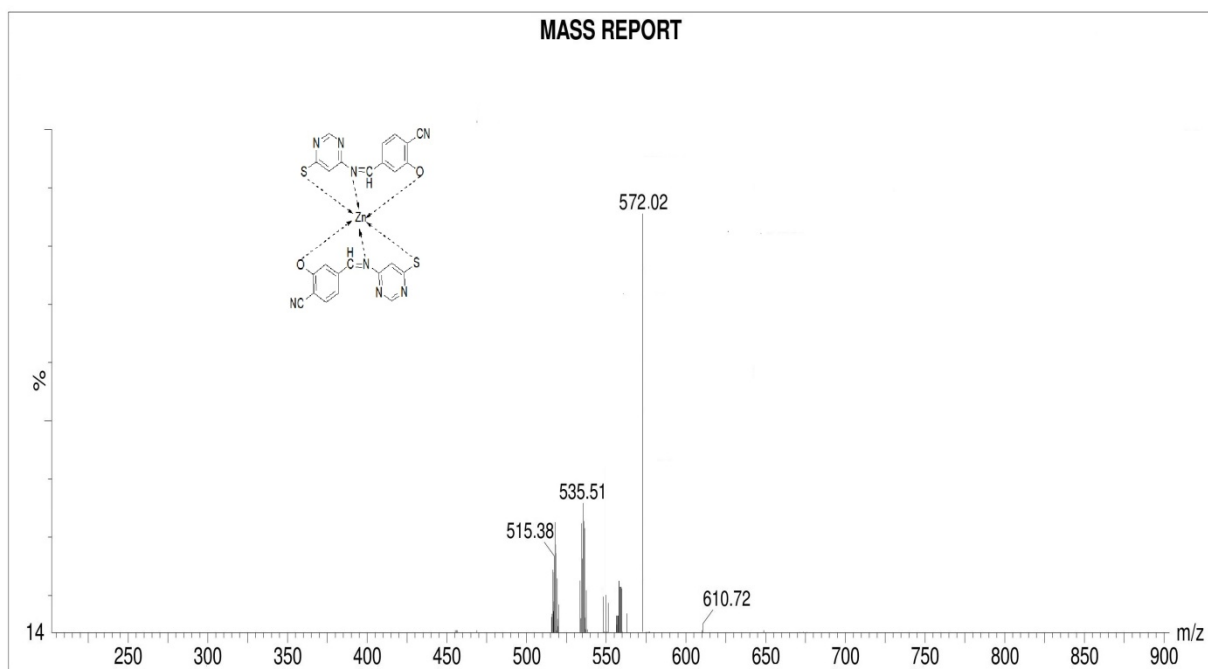


Figure 7 Mass spectra of Zn(II) Complex

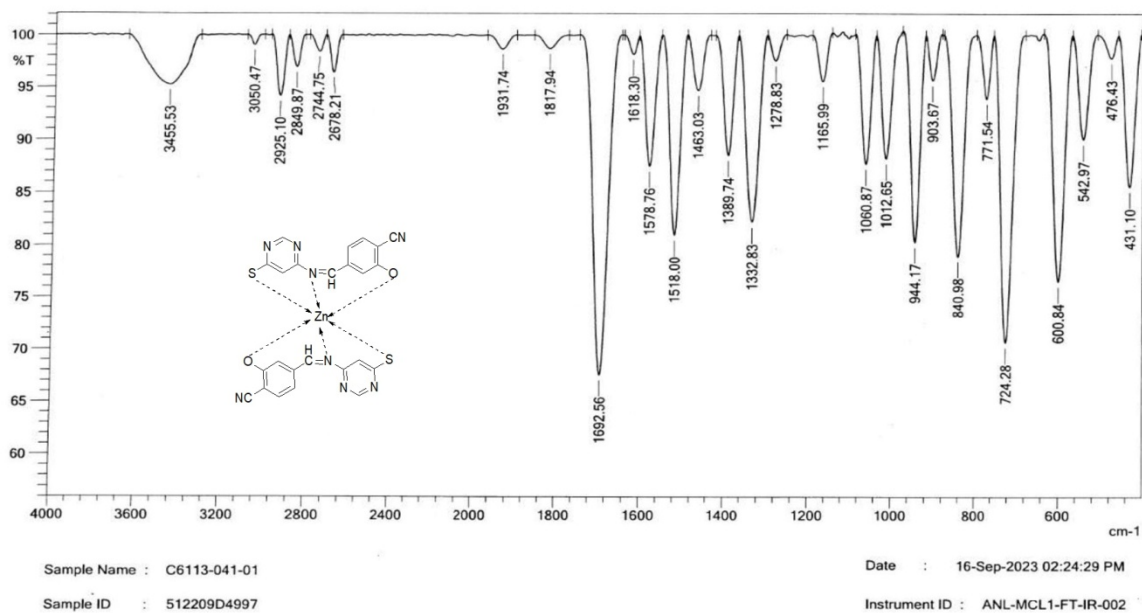


Figure 8 IR spectra of Zn(II) Complex

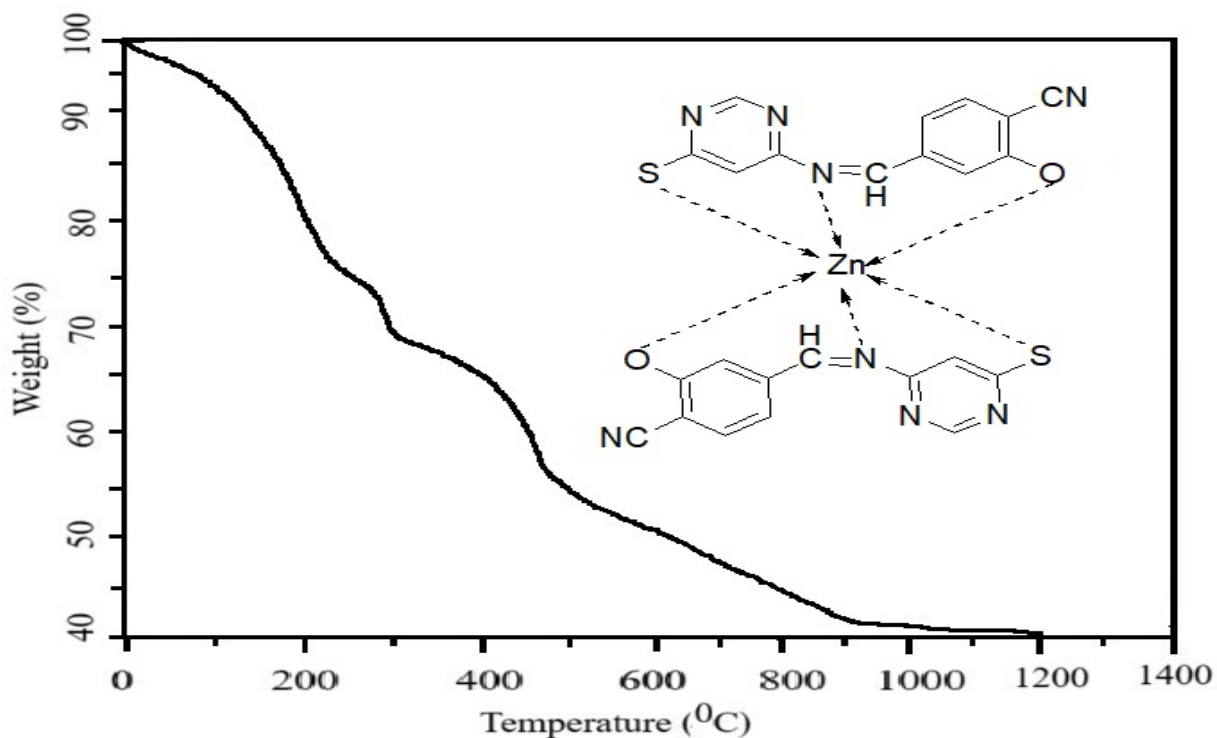


Figure 9 TGA of Zn(II) Complex

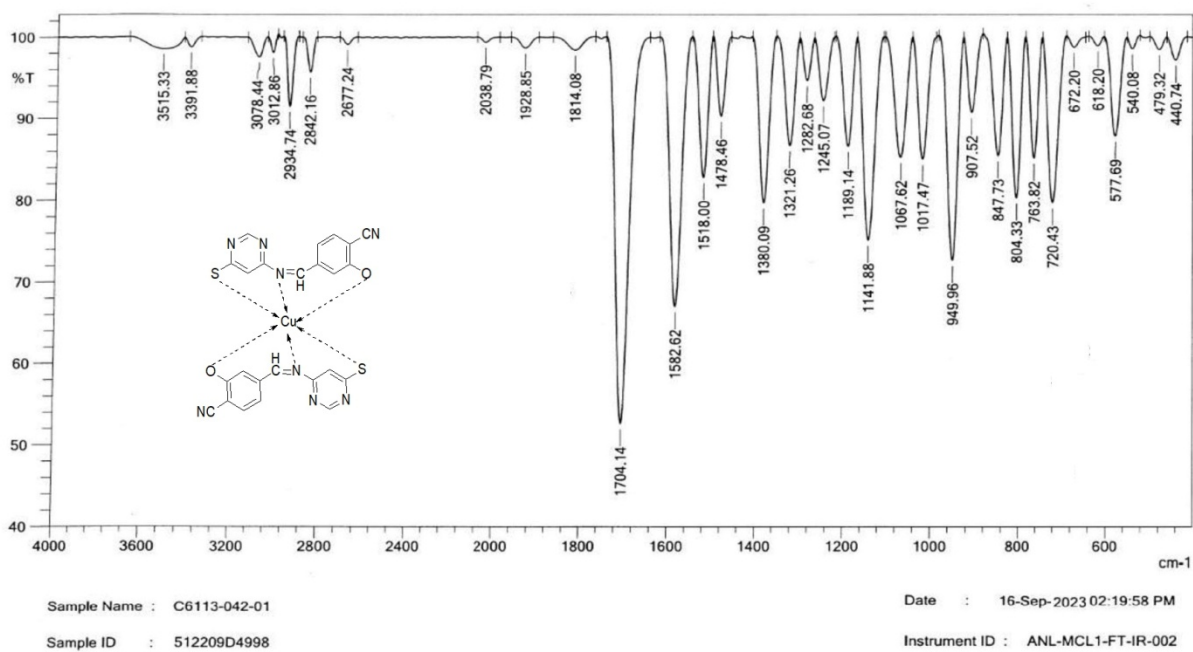


Figure 10 IR Spectra of Cu(II) Complex

Sample code: RK Zn

VARIAN 400MHz  
Solvent: dmsd  
Date: 17 Dec 2023

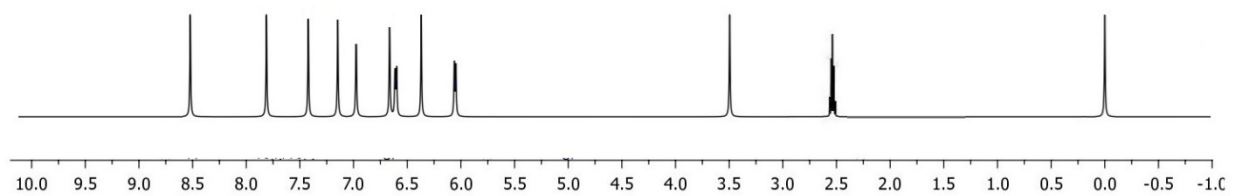
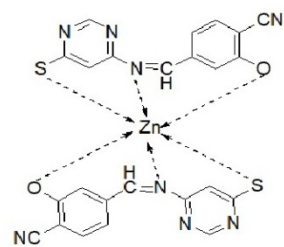


Figure 11 <sup>1</sup>H NMR of Zn(II) Complex