

Supporting Information

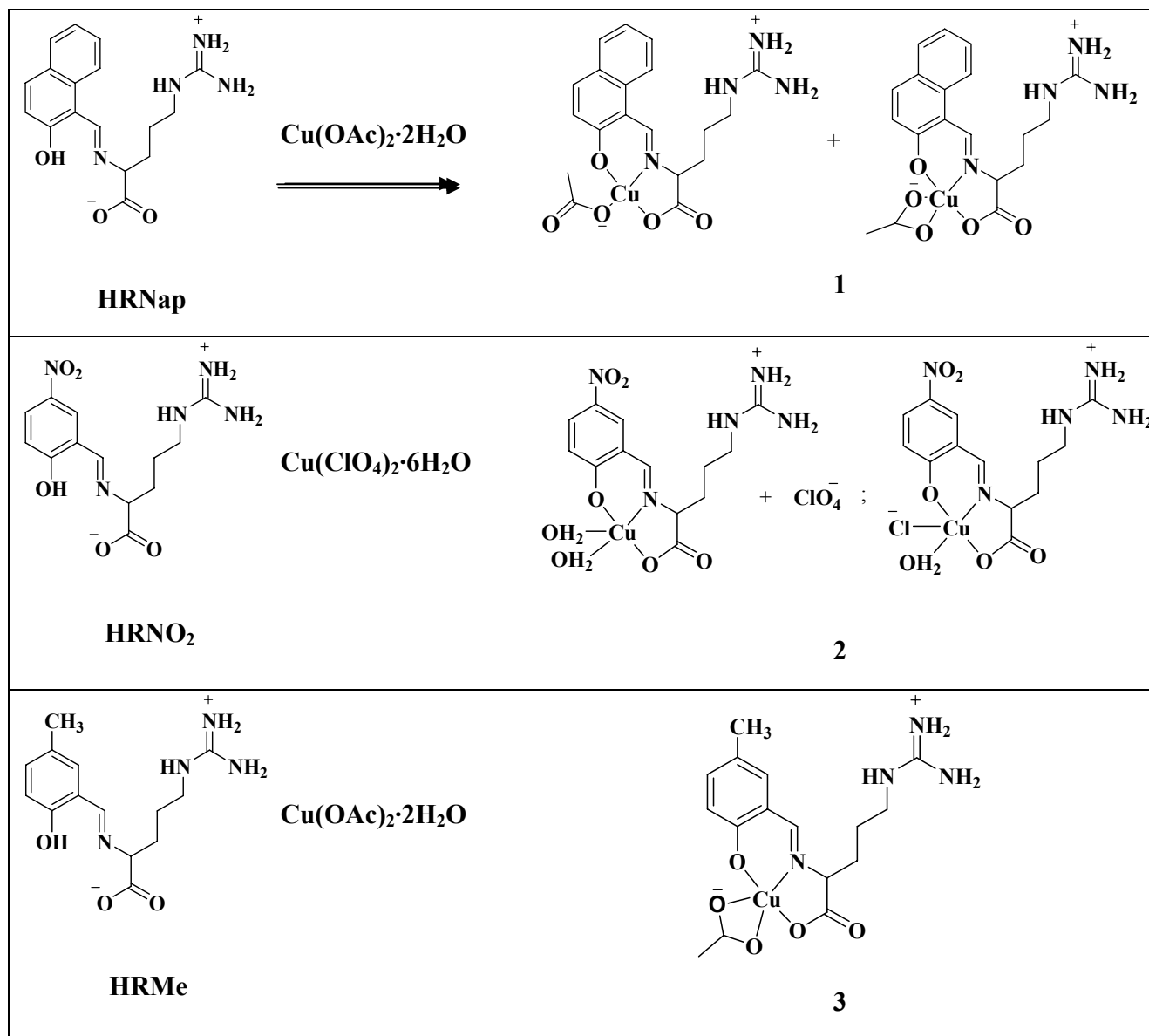


Fig. S1 Complexation of Cu(II) salts with different arginine Schiff bases used in this study.

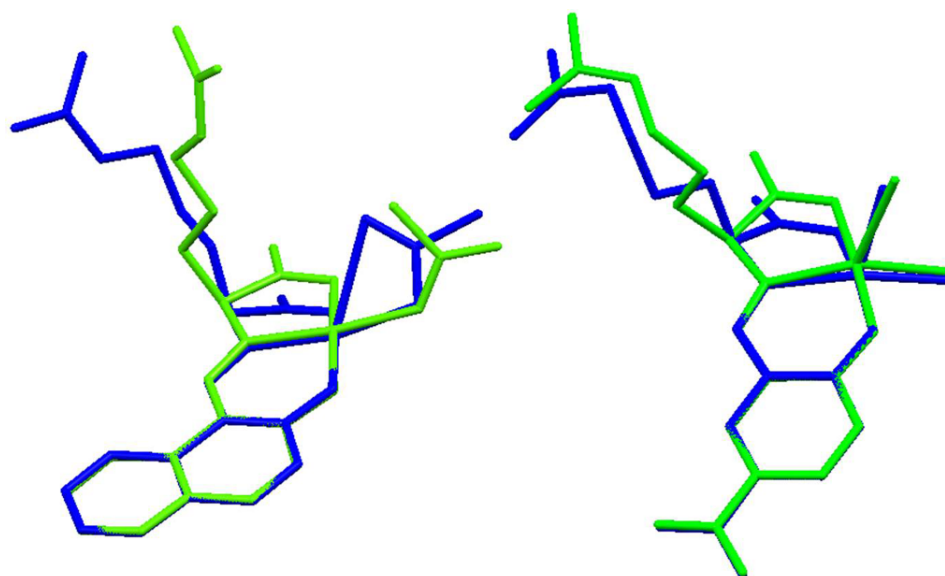


Fig. S2 Superimposed images of (left) **1a** and **1b** (shown in green and blue respectively); (right) **2a** and **2b** (shown in green and blue respectively). The arginine side chains in **1** are obviously much deviated than that in **2**.

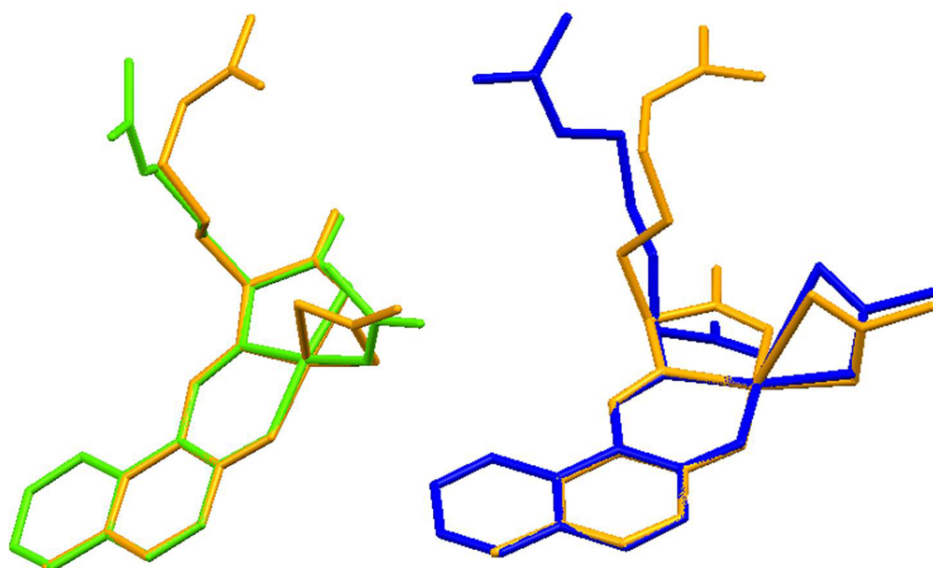


Fig. S3 Superimposed images of **3** (orange) with **1a** (left) and **1b** (right) respectively.

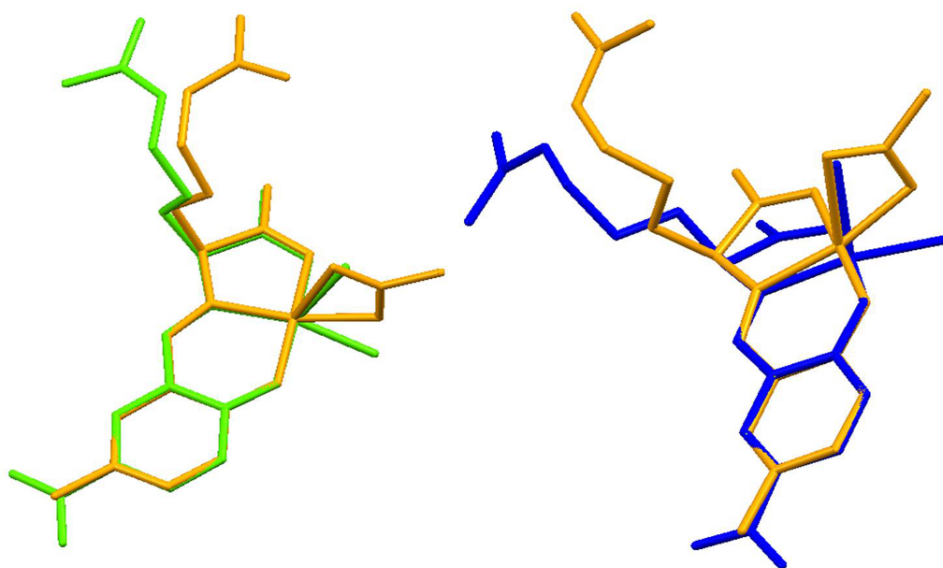


Fig. S4 Superimposed images of **3** (orange) with **2a** (left) and **2b** (right) respectively.

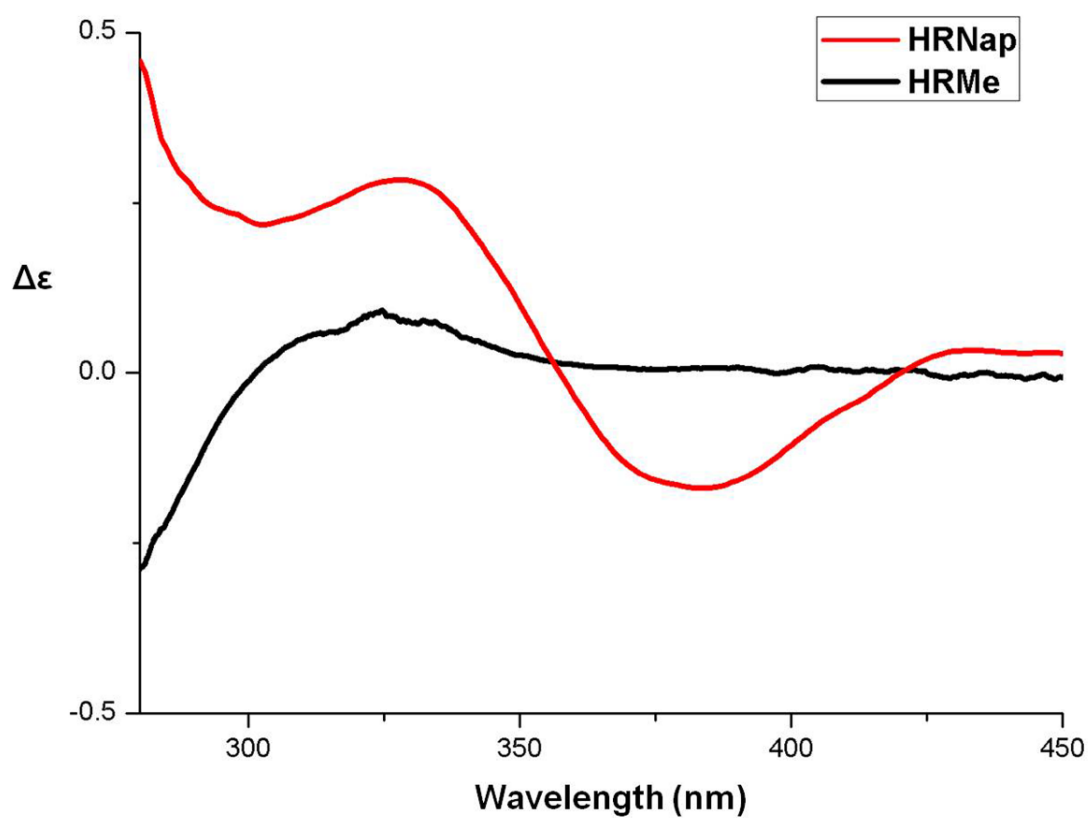


Fig. S5 CD spectrum of HRNap and HRMe ligands in MeOH.

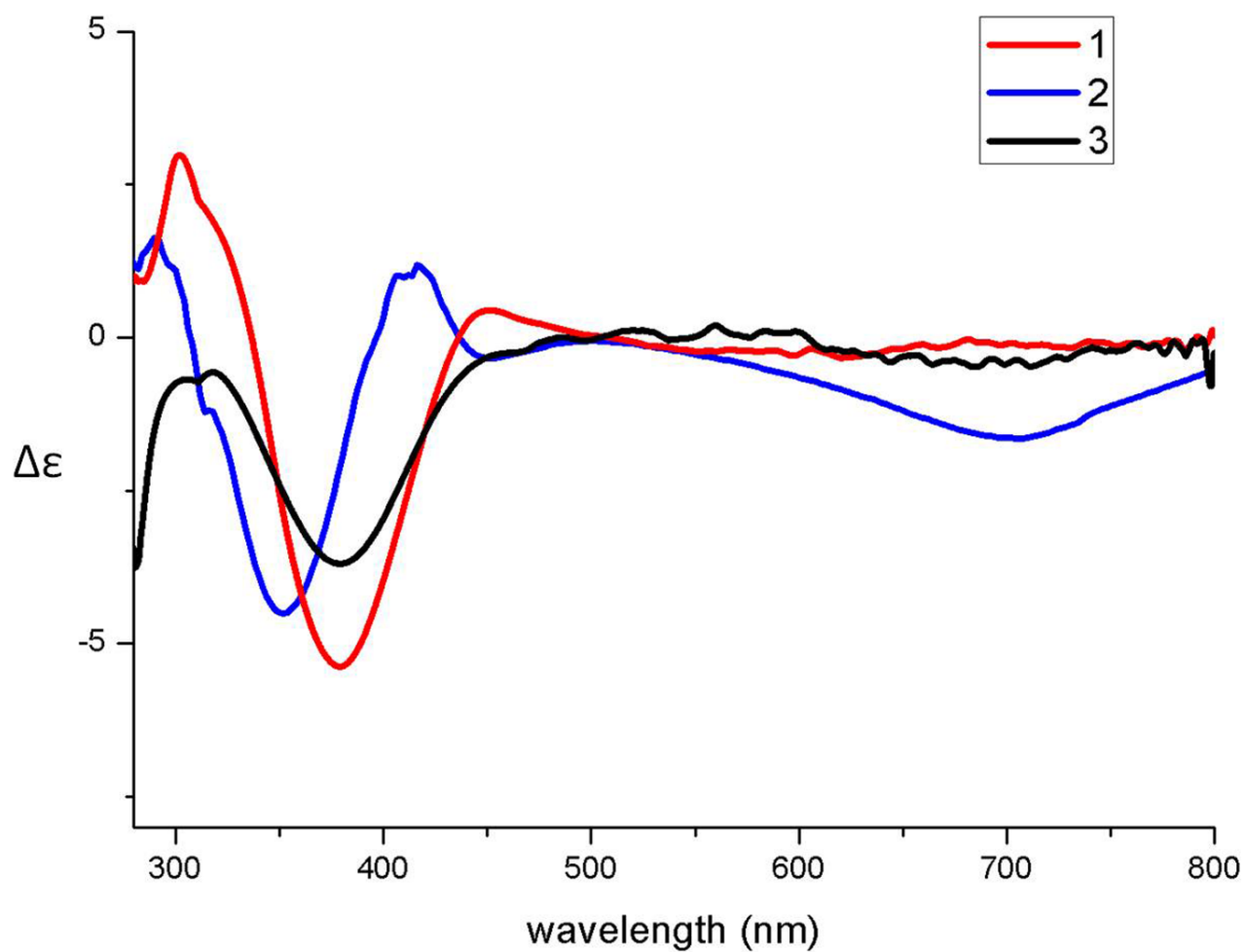


Fig. S6 CD spectrum of **1**, **2** and **3** in ethanol/ water mixture (1:1, v/v).

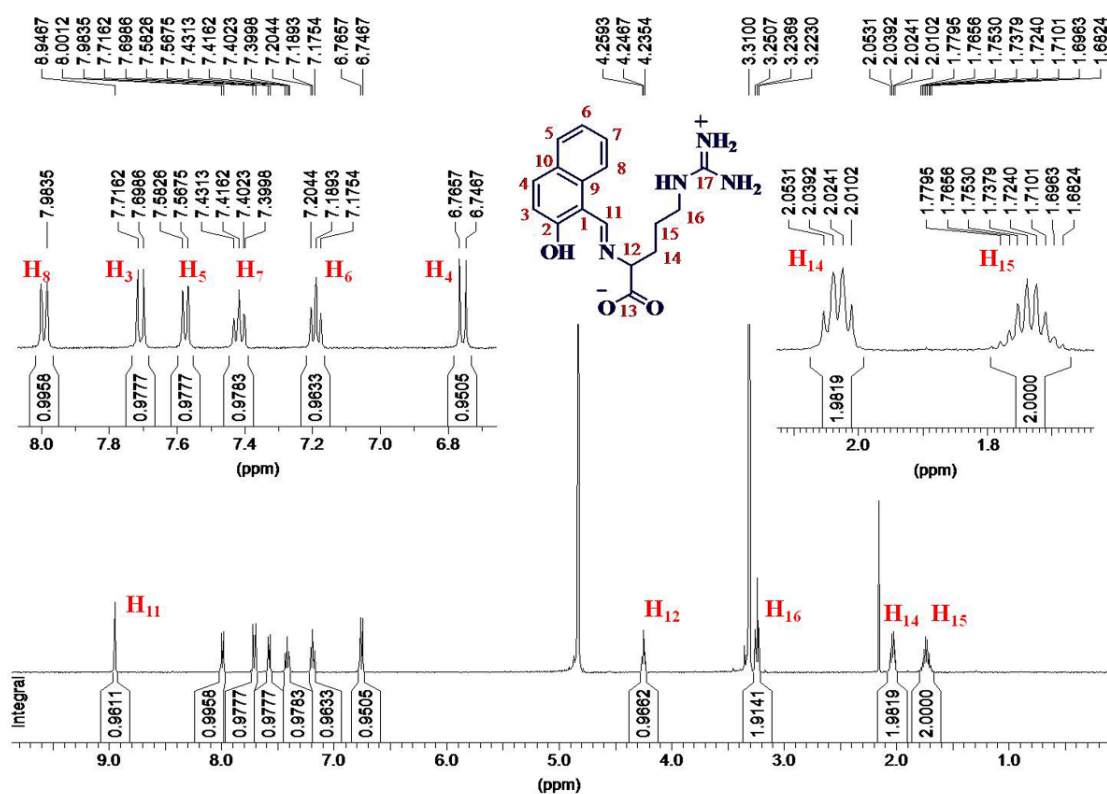


Fig. S7 ¹H NMR of HRNap ligand.

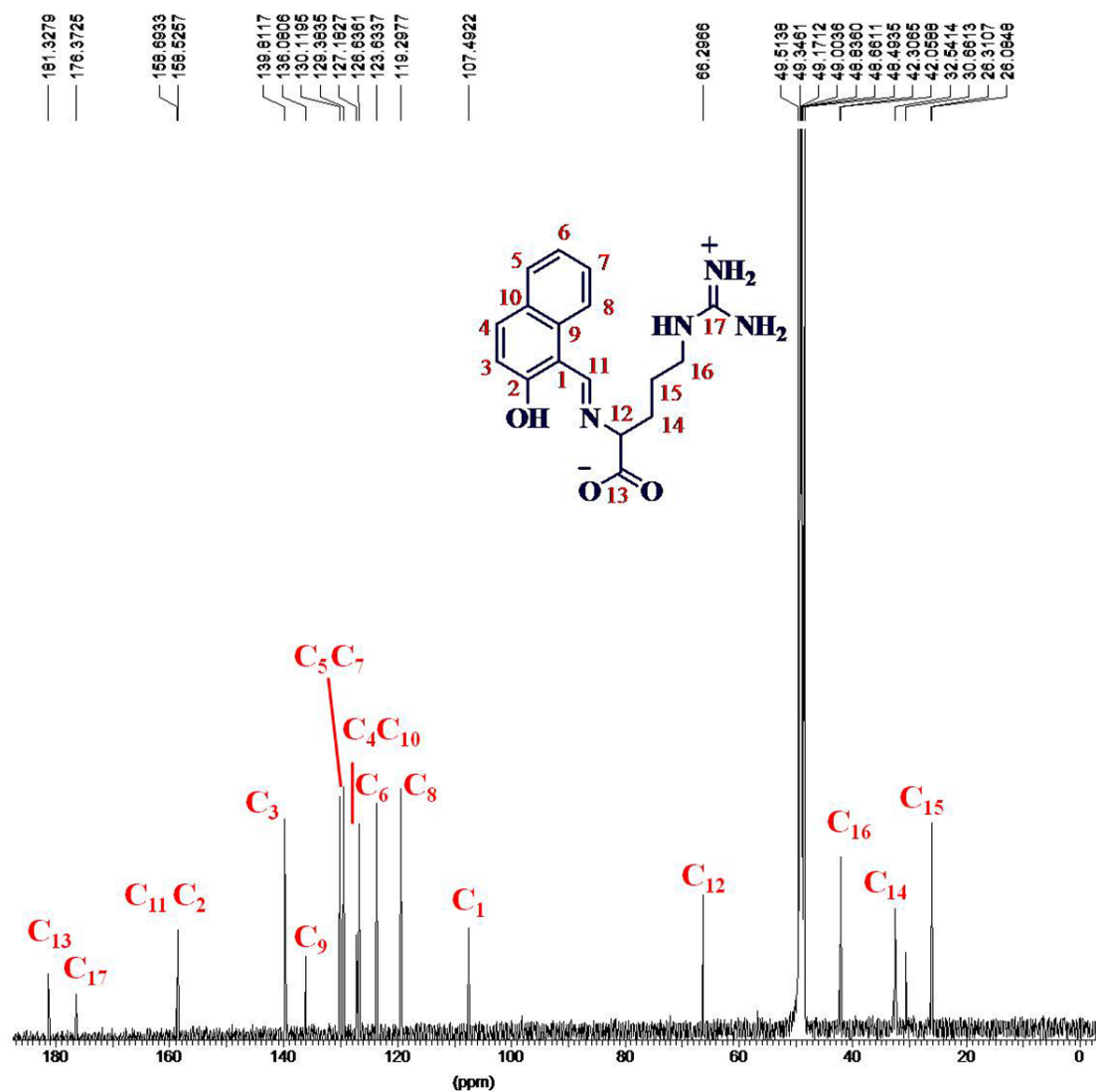


Fig. S8 ^{13}C NMR of HRNap ligand.

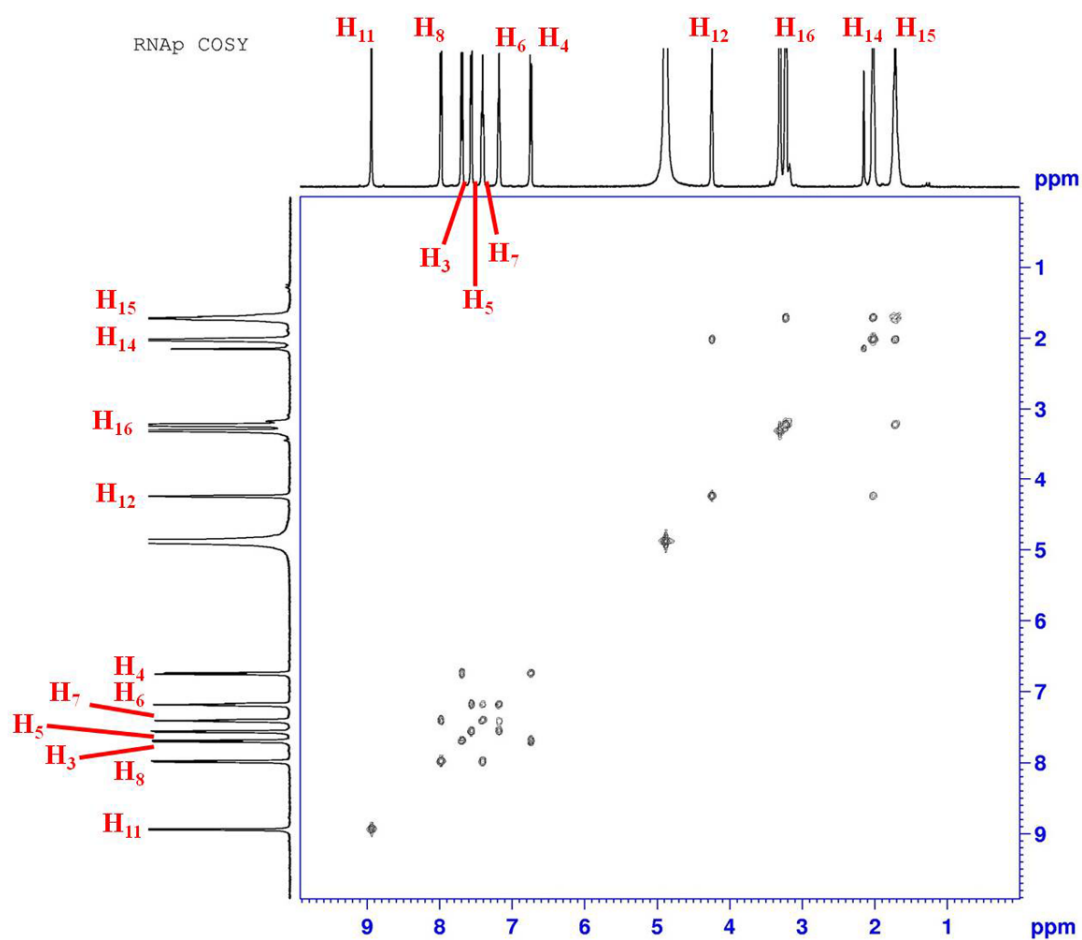


Fig. S9 COSY NMR of HRNap ligand.

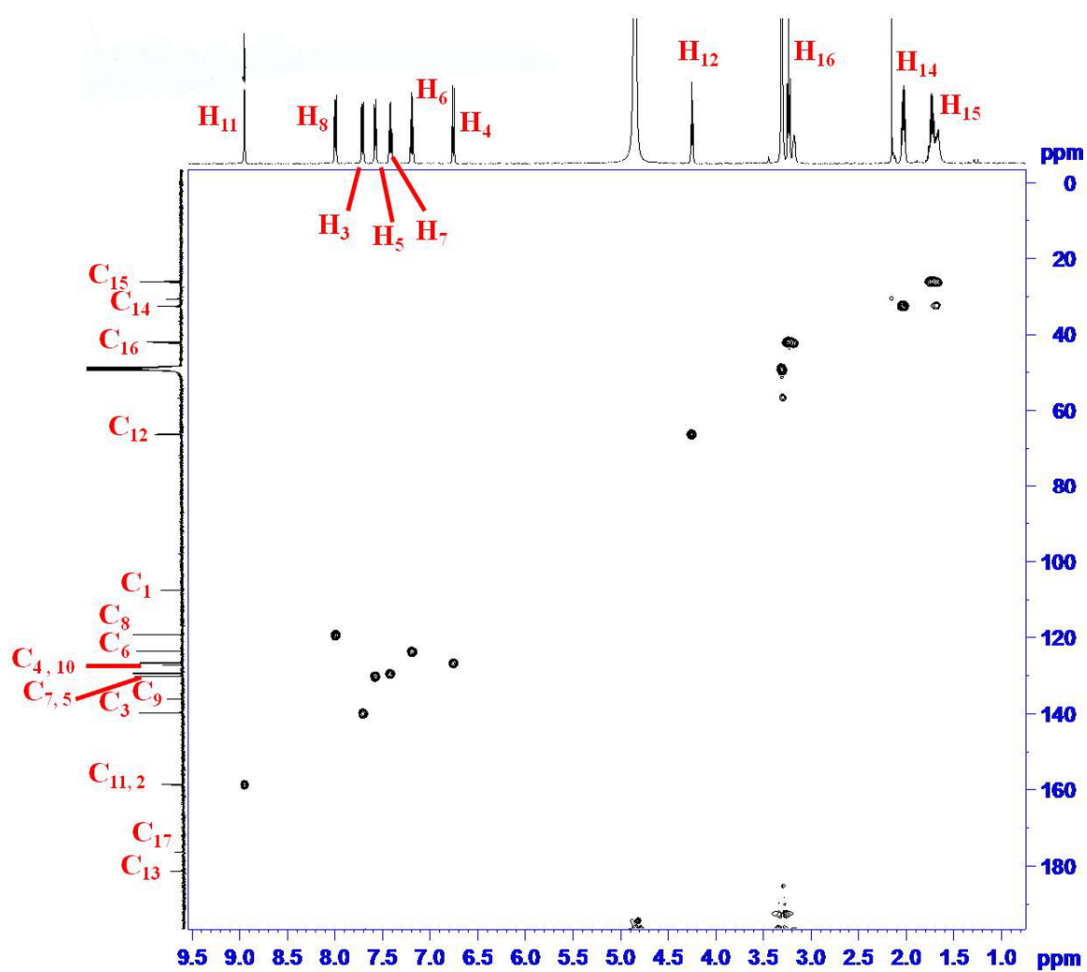


Fig. S10 ^1H - ^{13}C HMQC NMR of HRNap ligand.

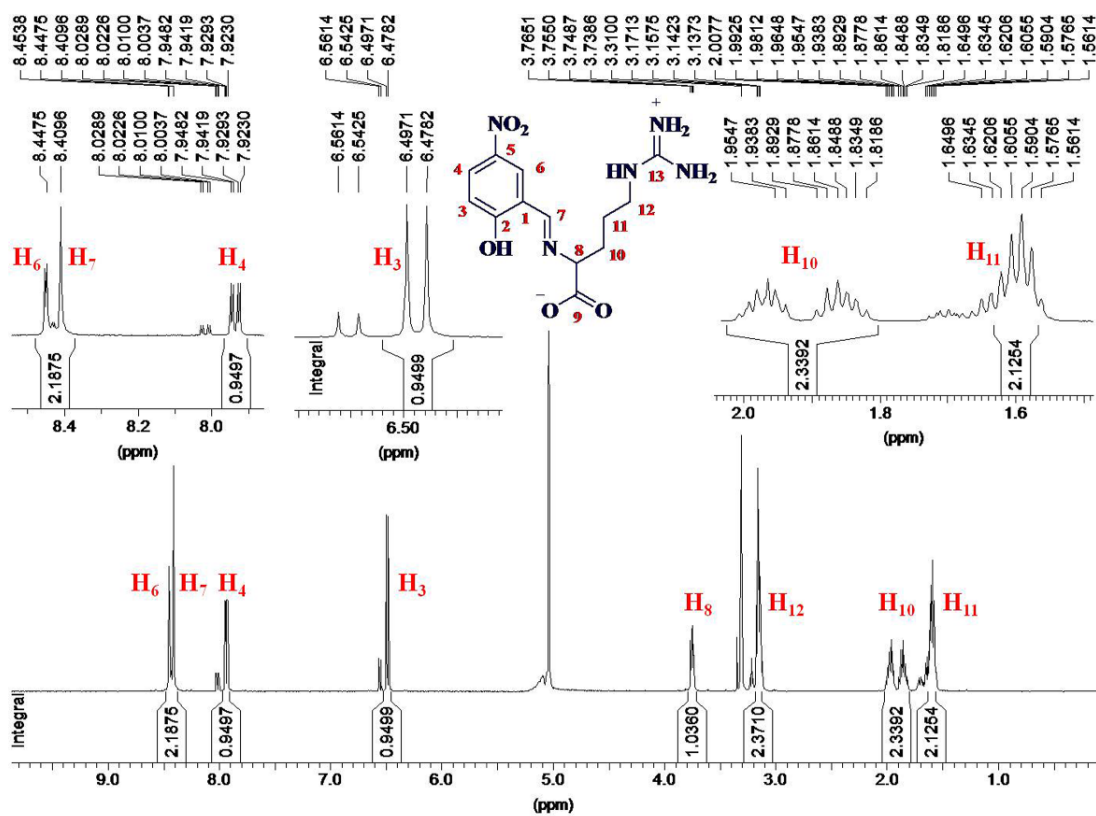


Fig. S11 ^1H NMR of HRNO₂ ligand.

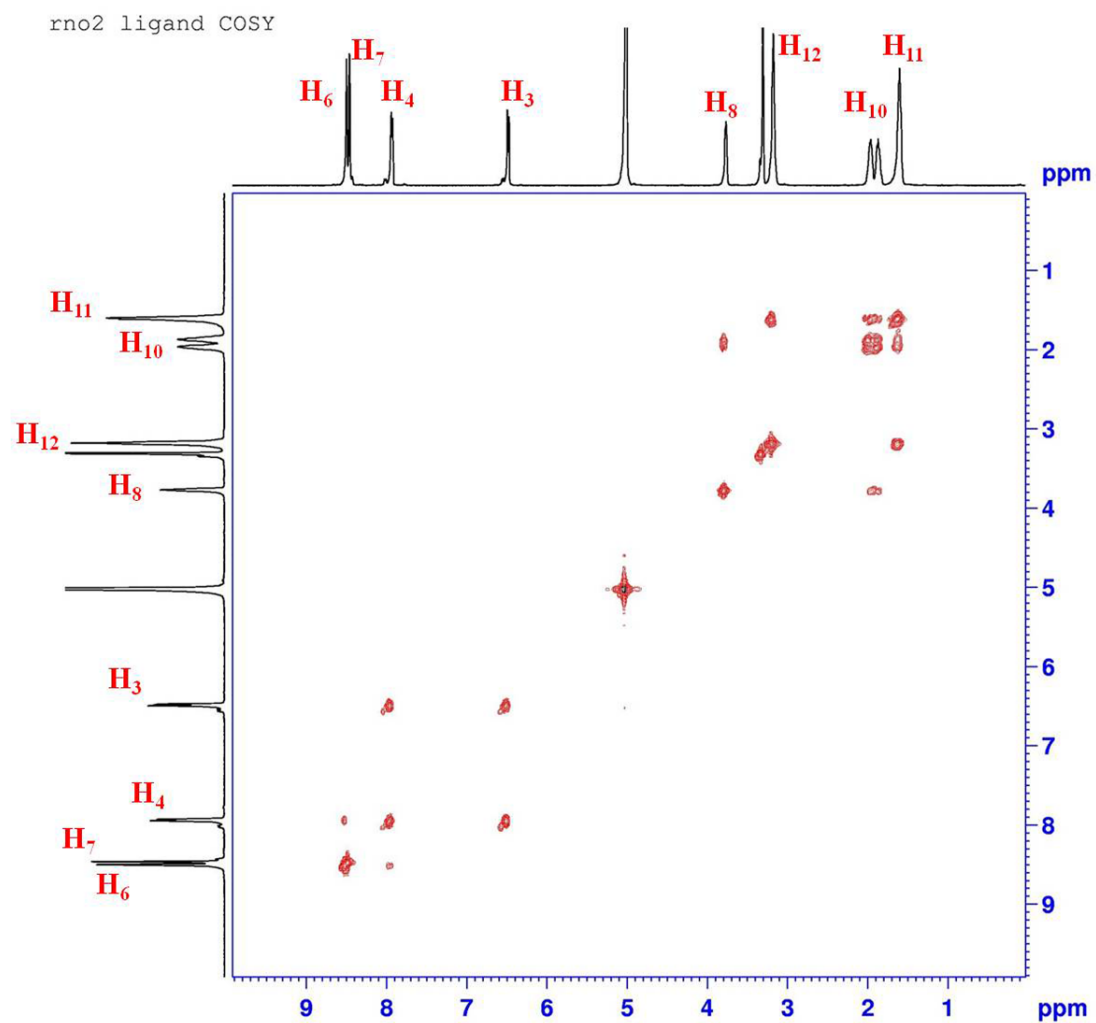


Fig. S12 COSY NMR of HRNO₂ ligand.

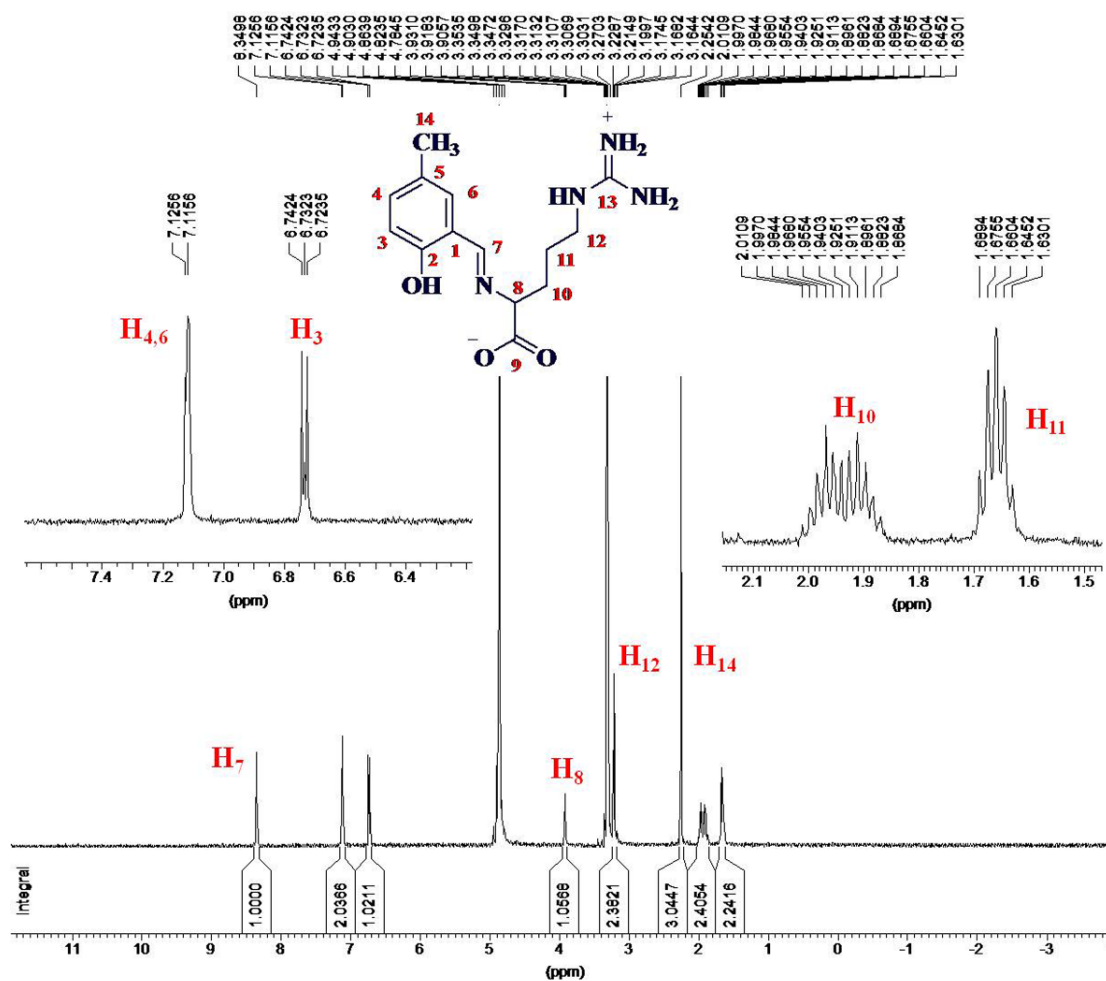


Fig. S13 ¹H NMR of HRMe ligand.

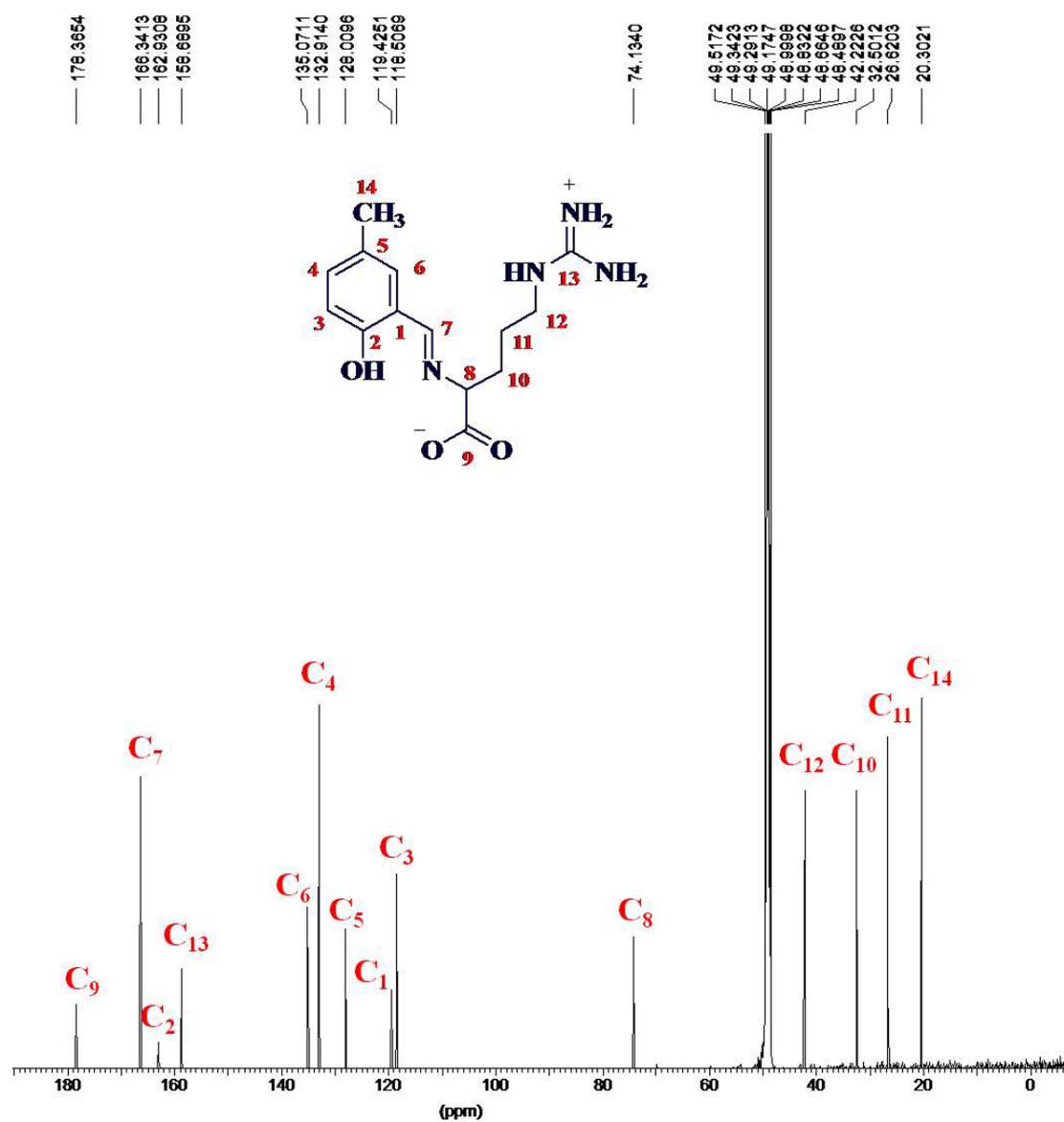


Fig. S14 ^{13}C NMR of HRMe ligand.

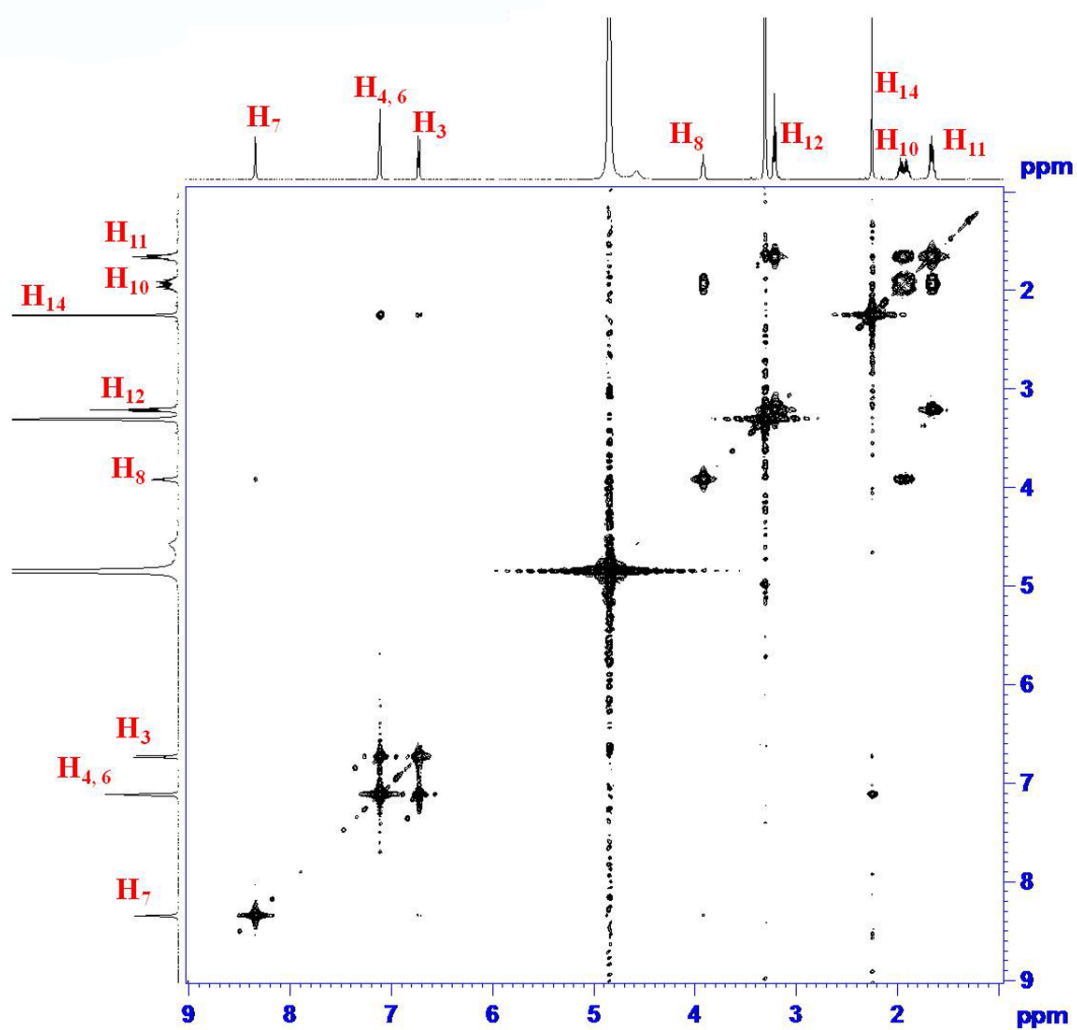


Fig. S15 COSY NMR of HRMe ligand.

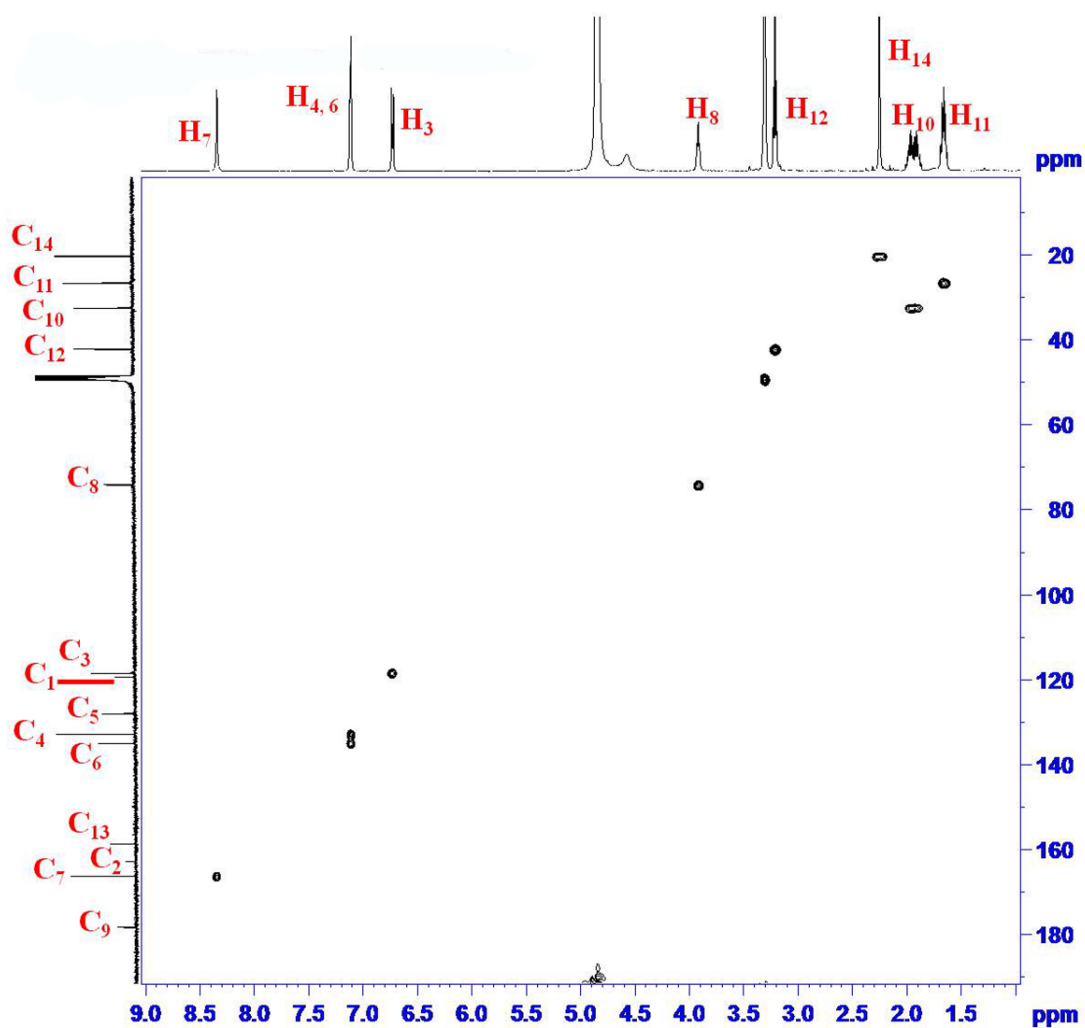


Fig. S16 ^1H - ^{13}C HMQC NMR of HRMe ligand.

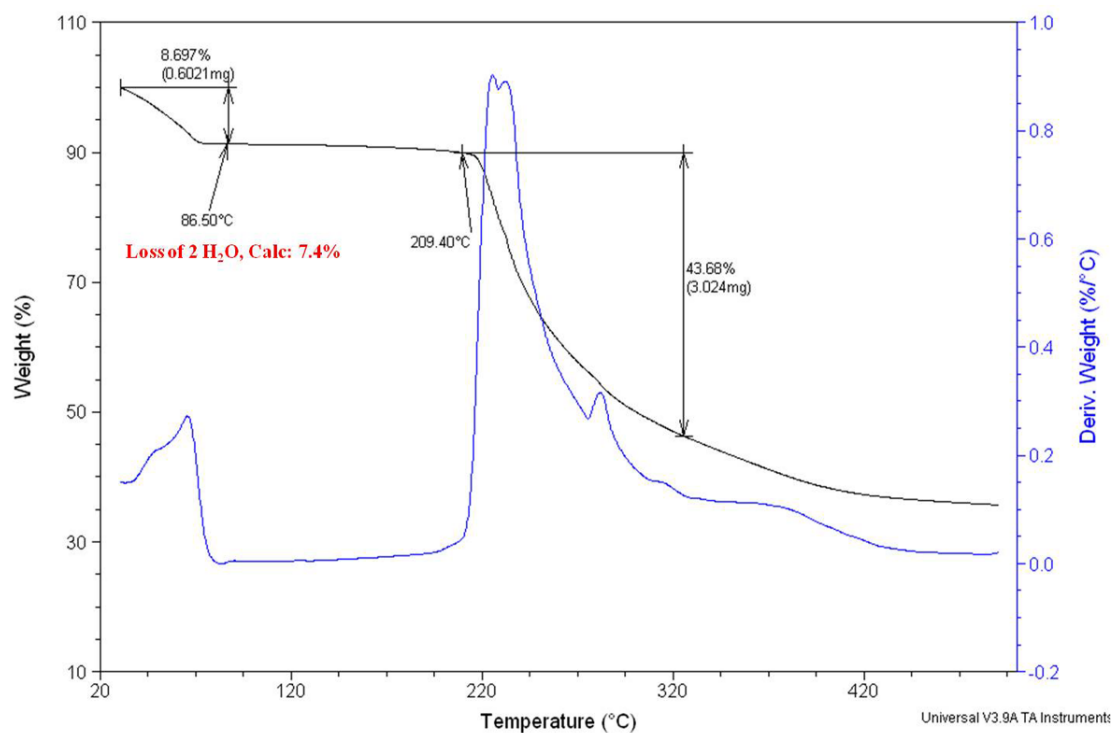


Fig. S17 TGA of $[\text{Cu}(\text{RNaP})(\text{OAc})] \cdot 2\text{H}_2\text{O}$, 1.

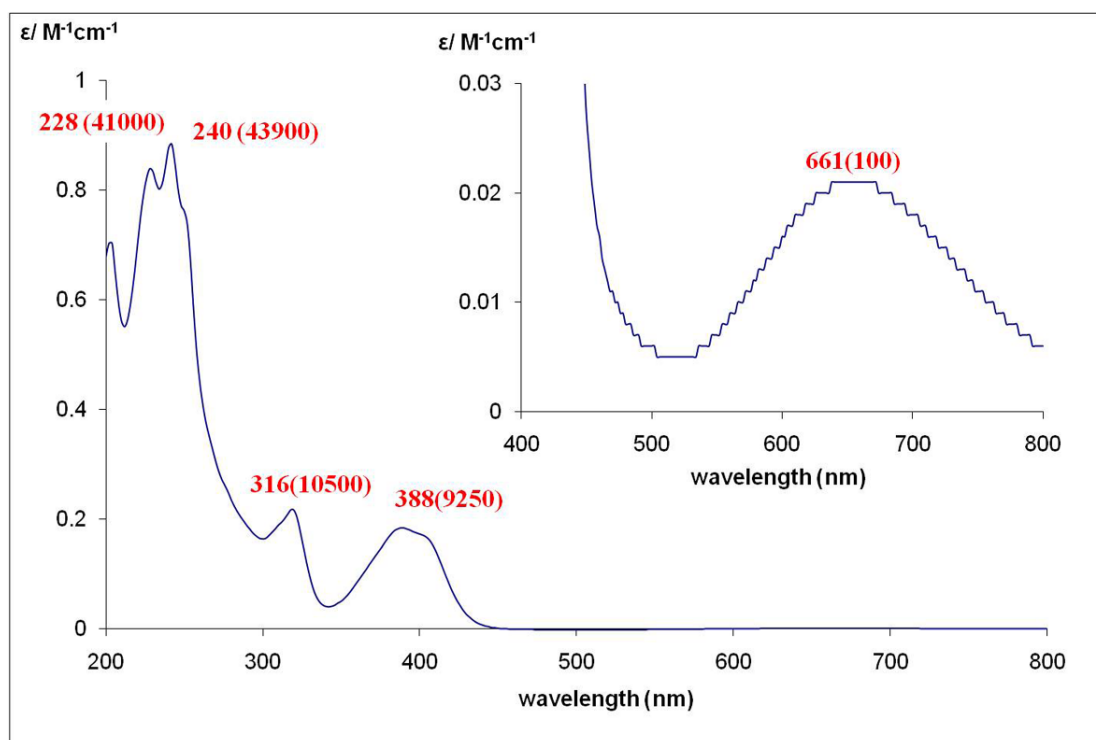


Fig. S18 UV-visible spectrum of $[\text{Cu}(\text{RNaP})(\text{OAc})] \cdot 2\text{H}_2\text{O}$, 1.

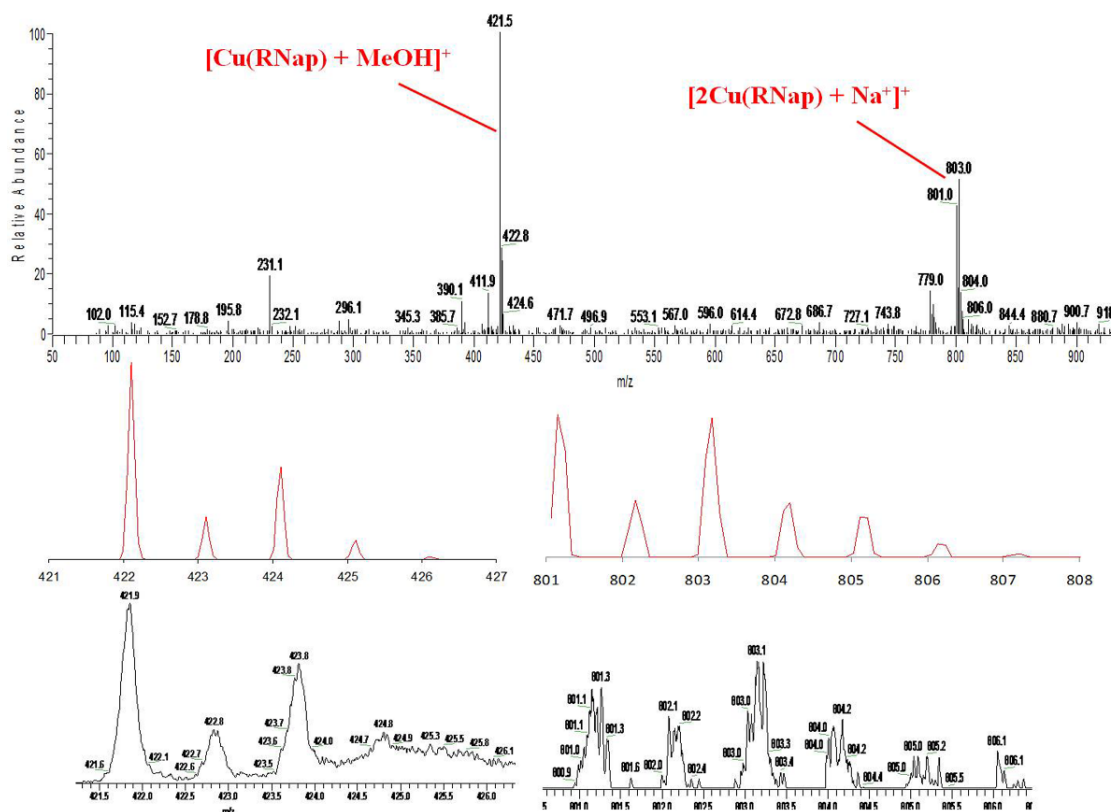


Fig. S19 Positive mode ESI spectrum of $[Cu(RNap)(OAc)] \cdot 2H_2O$, **1** and its simulated isotopic spectrum.

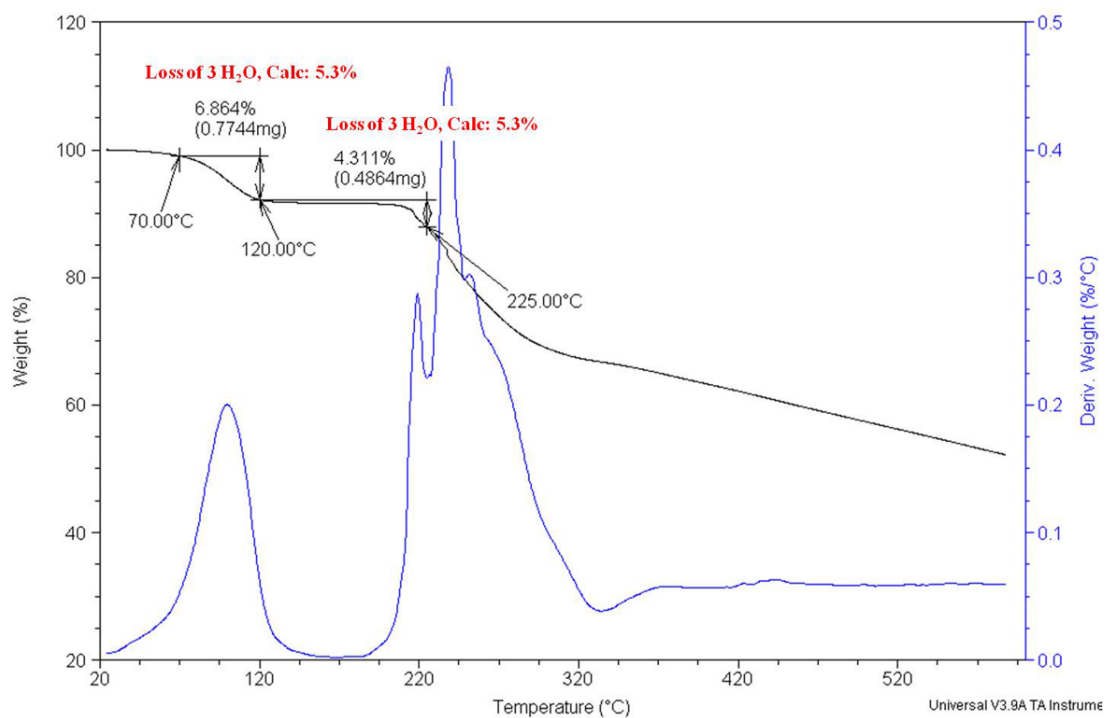


Fig. S20 TGA of [Cu(RNO₂)Cl(H₂O)]·{[Cu(RNO₂)(H₂O)₂](ClO₄)}·3H₂O, 2.

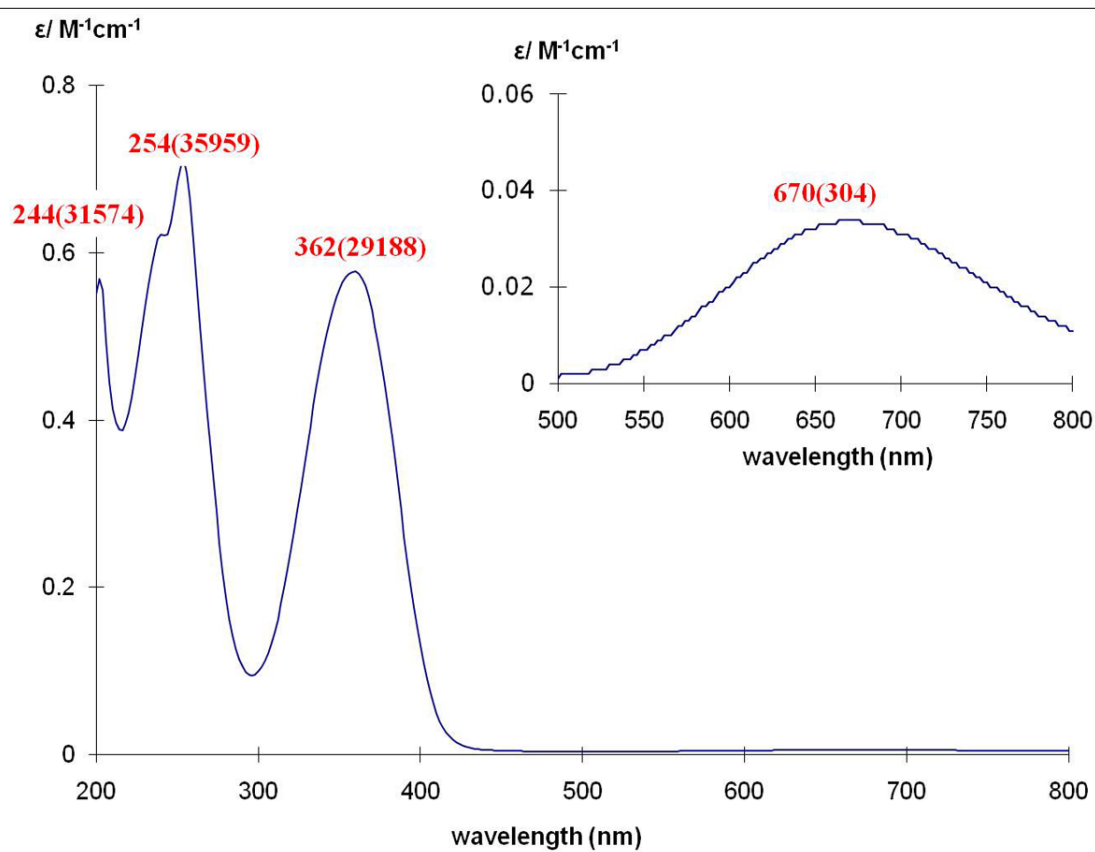


Fig. S21 UV-visible spectrum of $[\text{Cu}(\text{RNO}_2)\text{Cl}(\text{H}_2\text{O})] \cdot \{[\text{Cu}(\text{RNO}_2)(\text{H}_2\text{O})_2](\text{ClO}_4)\} \cdot 3\text{H}_2\text{O}$, 2.

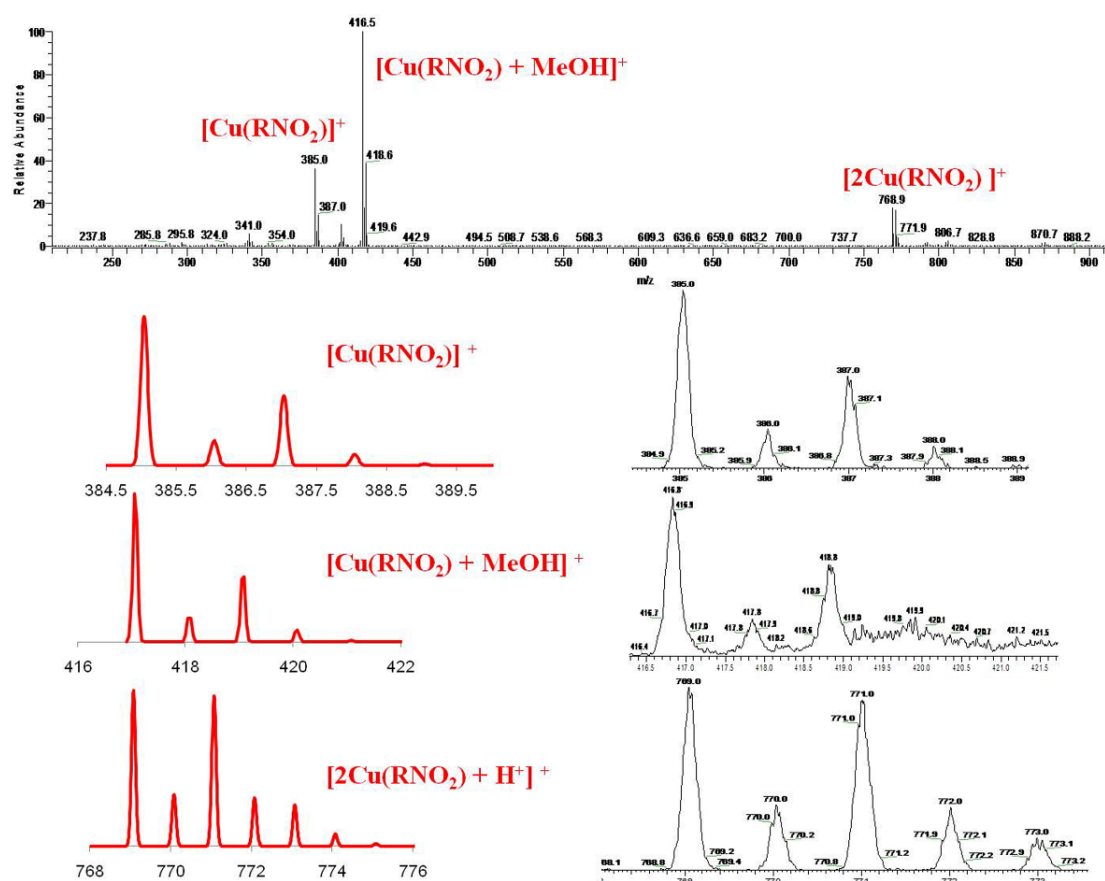


Fig. S22 Positive mode ESI spectrum of $[\text{Cu}(\text{RNO}_2)\text{Cl}(\text{H}_2\text{O})] \cdot [\text{Cu}(\text{RNO}_2)(\text{H}_2\text{O})_2](\text{ClO}_4) \cdot 3\text{H}_2\text{O}$, **2** and its simulated isotopic spectrum.

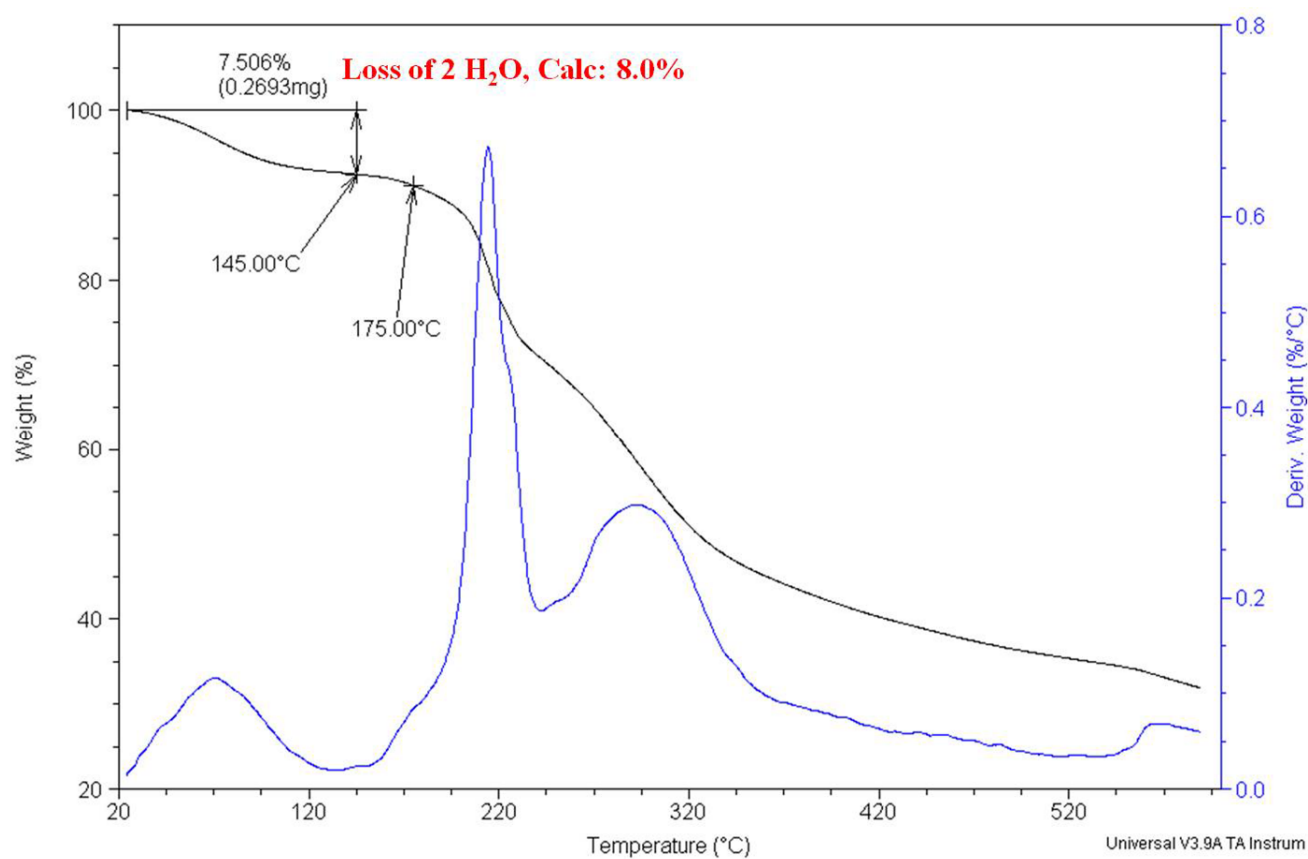


Fig. S23 TGA of $[\text{Cu}(\text{RMe})(\text{OAc})] \cdot 5\text{H}_2\text{O}$, 3.

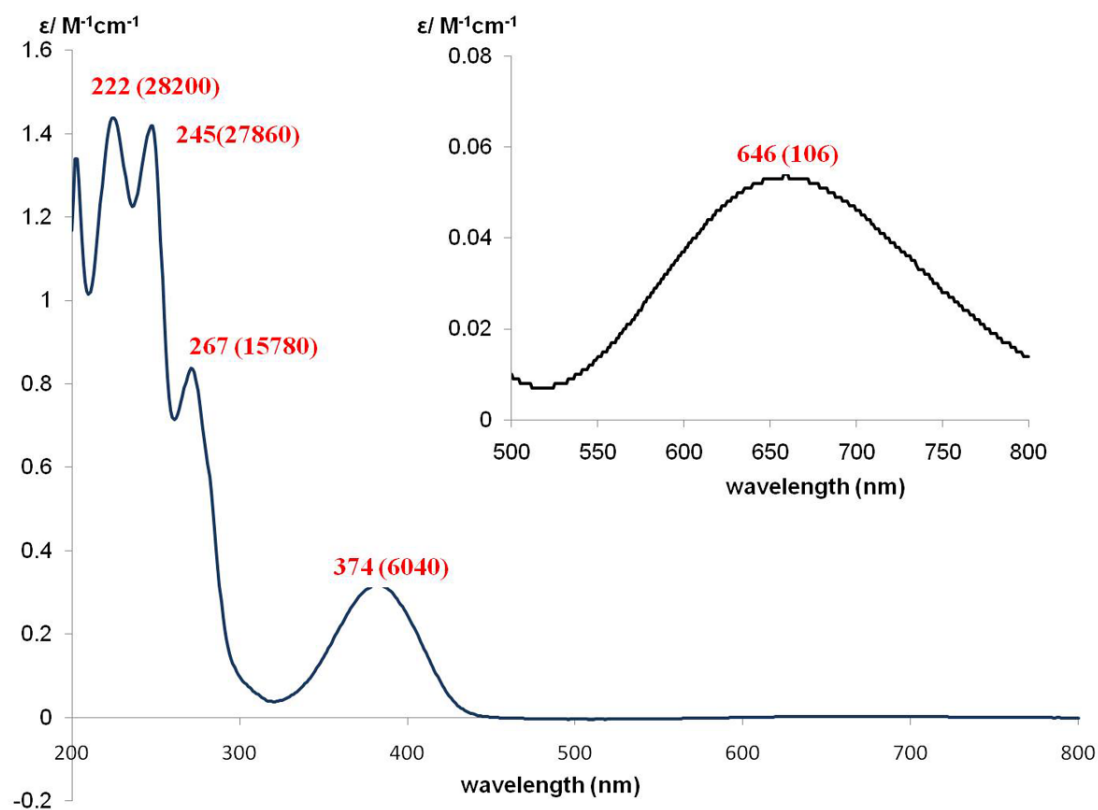


Fig. S24 UV-visible spectrum of $[\text{Cu}(\text{RMe})(\text{OAc})] \cdot 5\text{H}_2\text{O}$, 3.

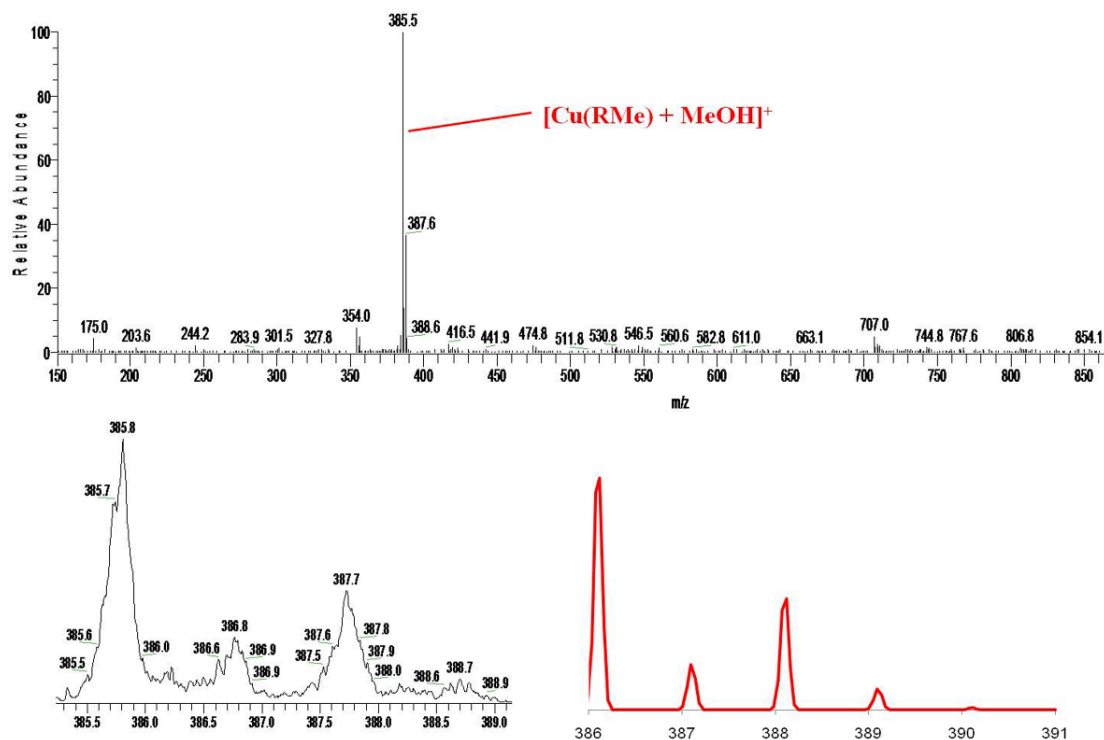


Fig. S25 Positive mode ESI spectrum of $[\text{Cu}(\text{RMe})(\text{OAc})] \cdot 5\text{H}_2\text{O}$, **3** and its simulated isotopic spectrum.