

Supporting Information:

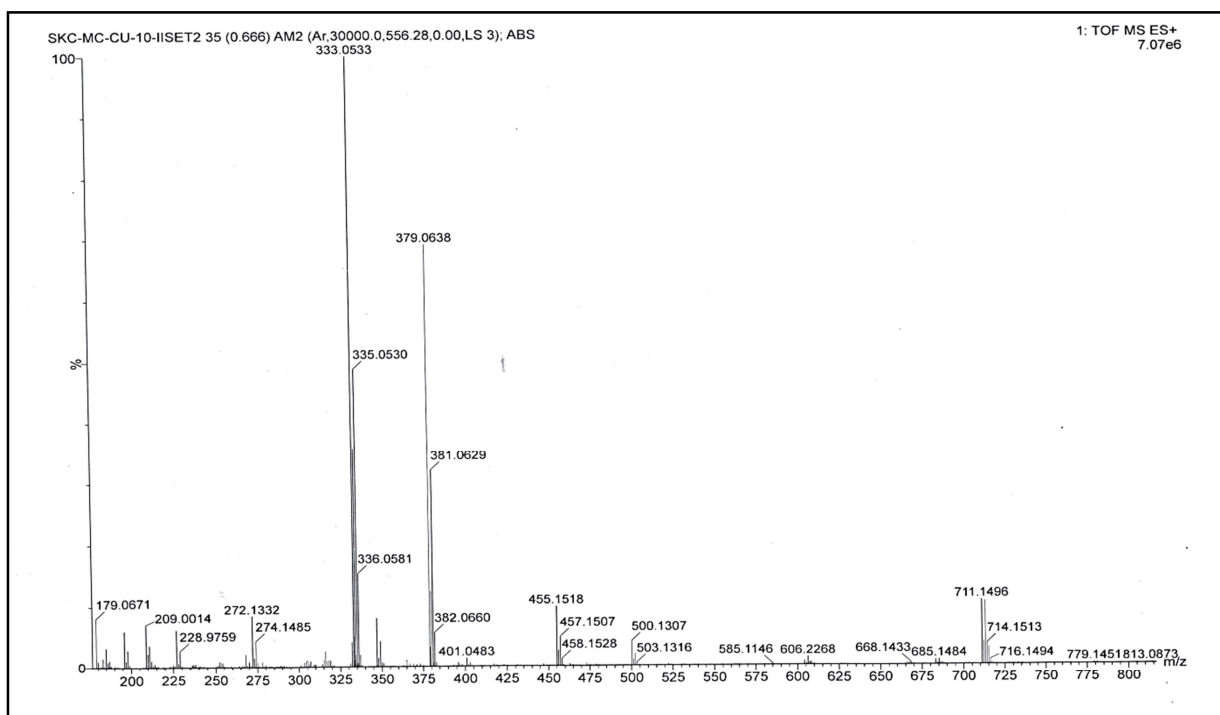


Fig. S1: ESI-MS spectra of complex 1.

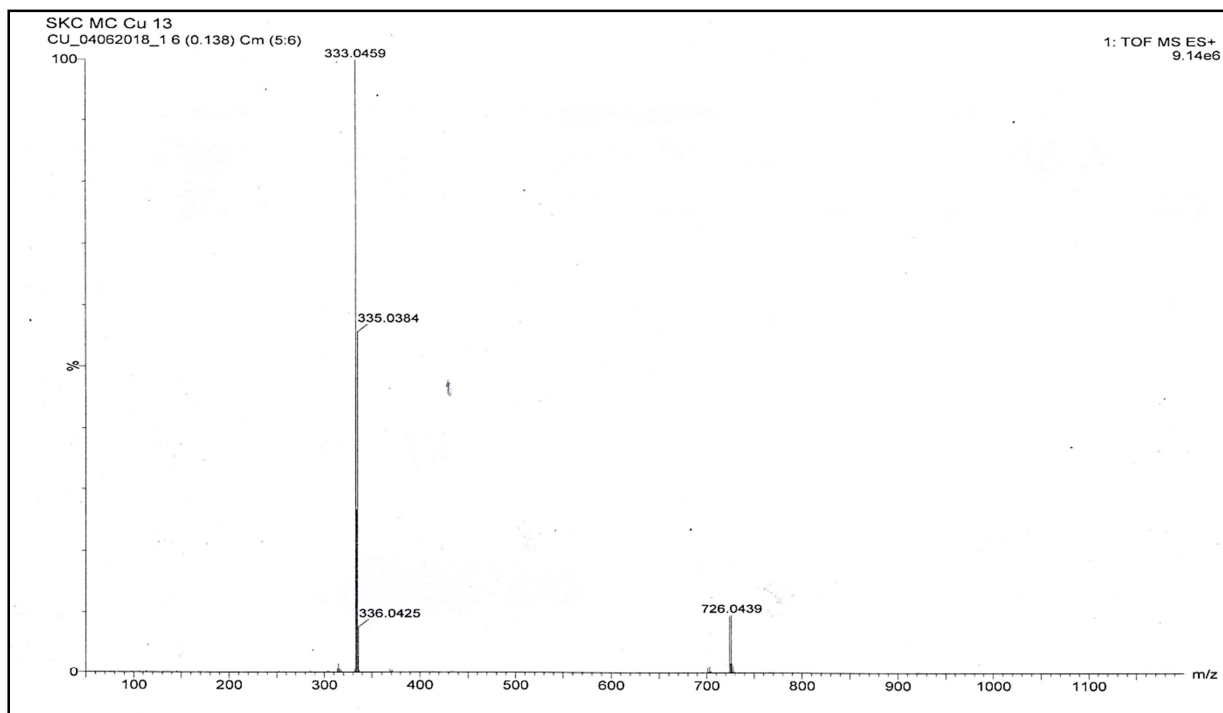


Fig. S2: ESI-MS spectra of complex 2.

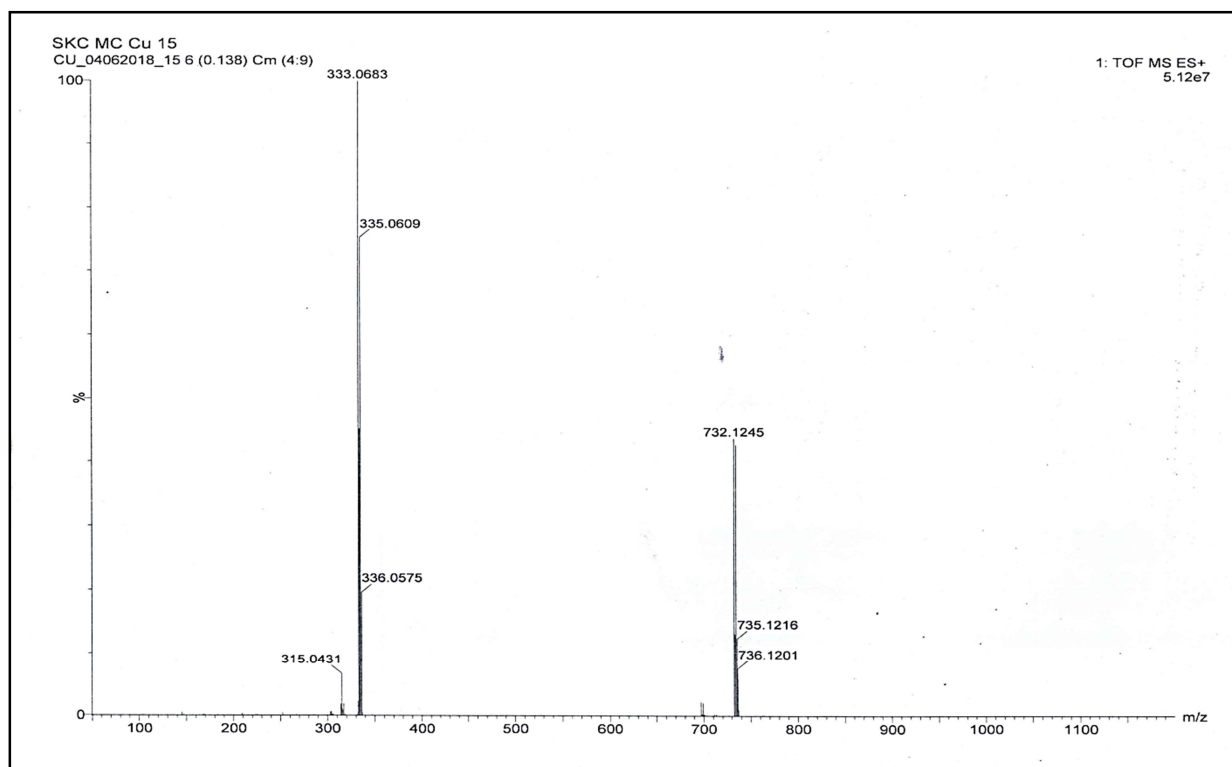


Fig. S3: ESI-MS spectra of complex 3.

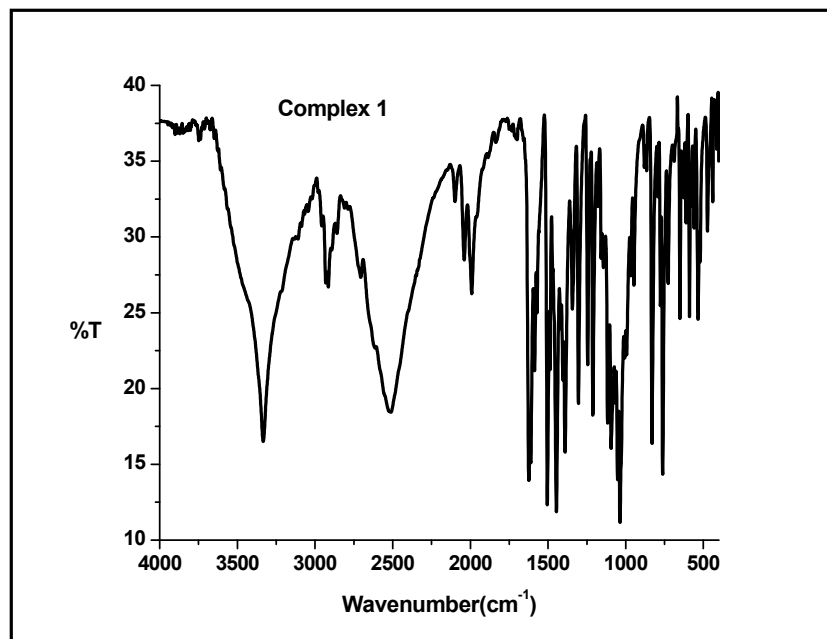


Fig. S4: IR spectra of complex 1.

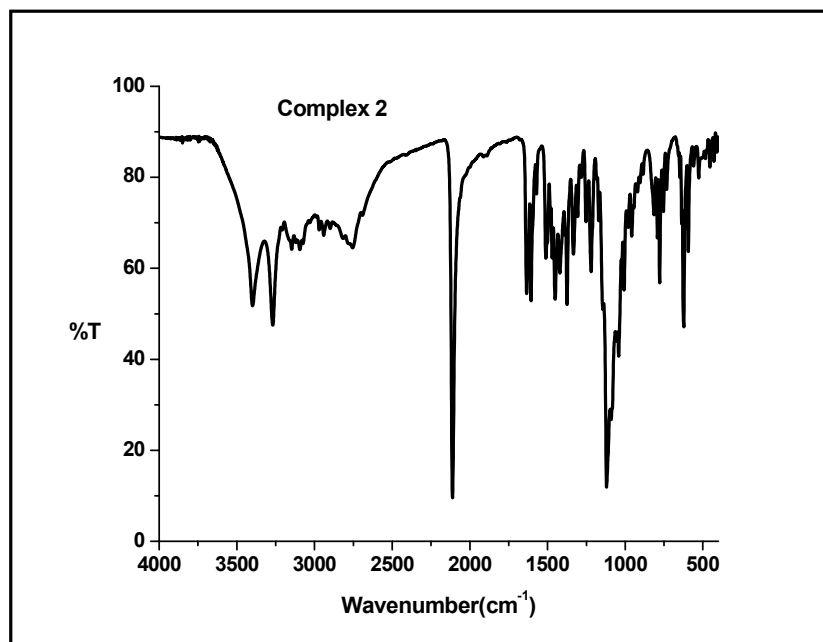


Fig. S5: IR spectra of complex 2.

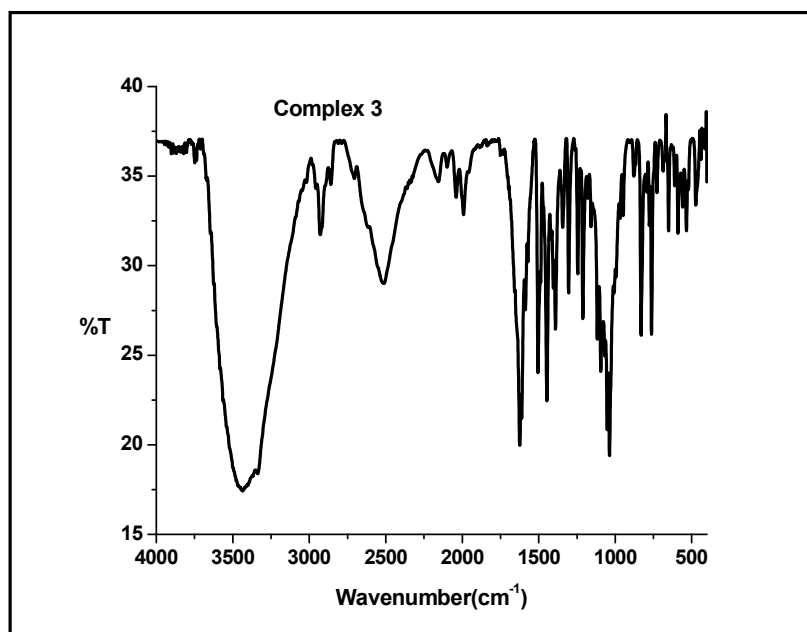


Fig. S6: IR spectra of complex 3.

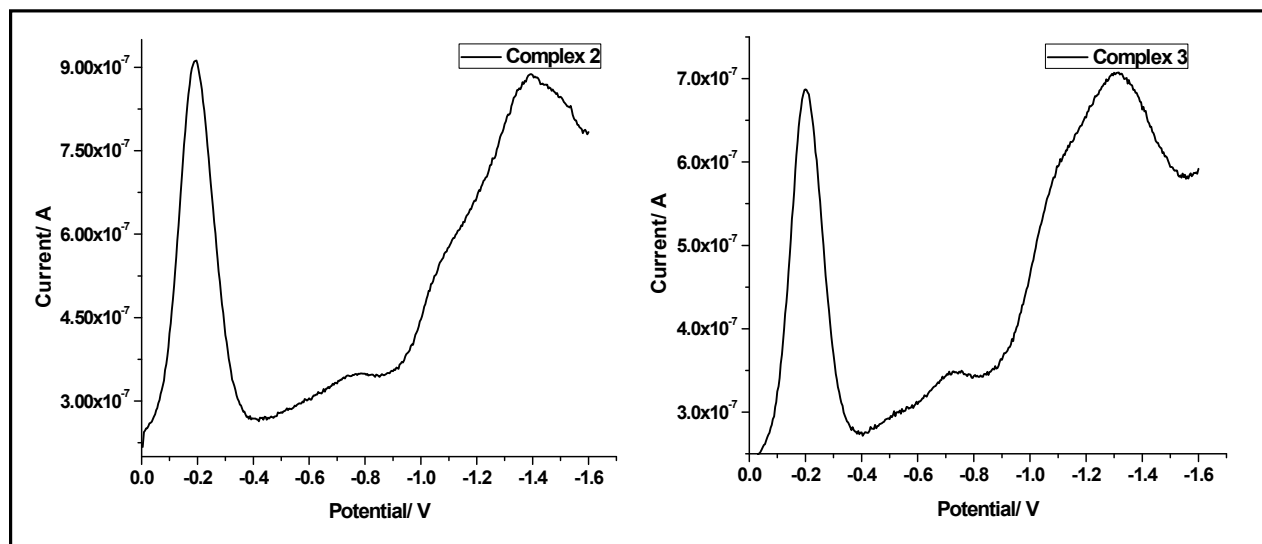


Fig.S7: Differential Pulse Voltamograms of complexes 2 and 3 in DMF medium.

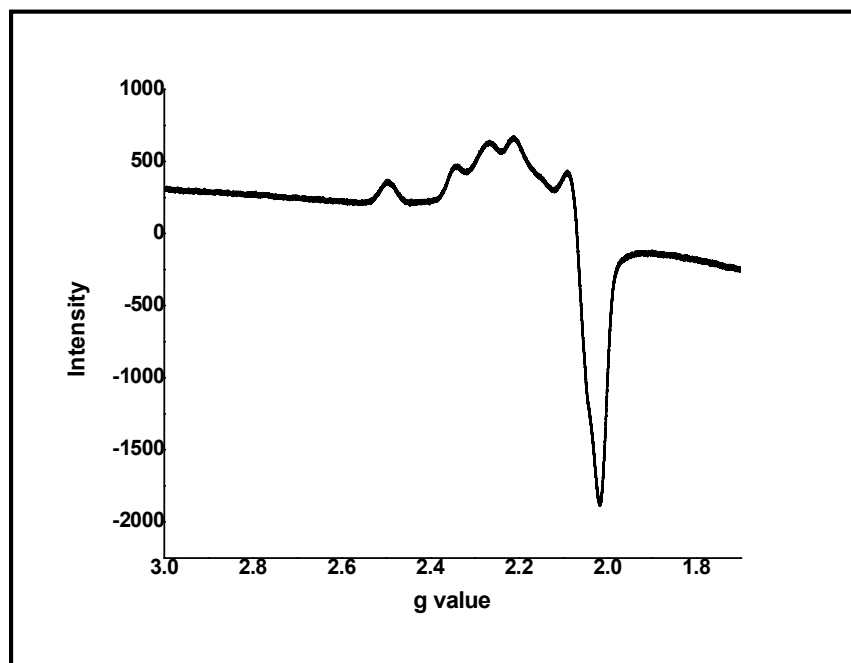


Fig. S8: X-band EPR spectra of complex 3.

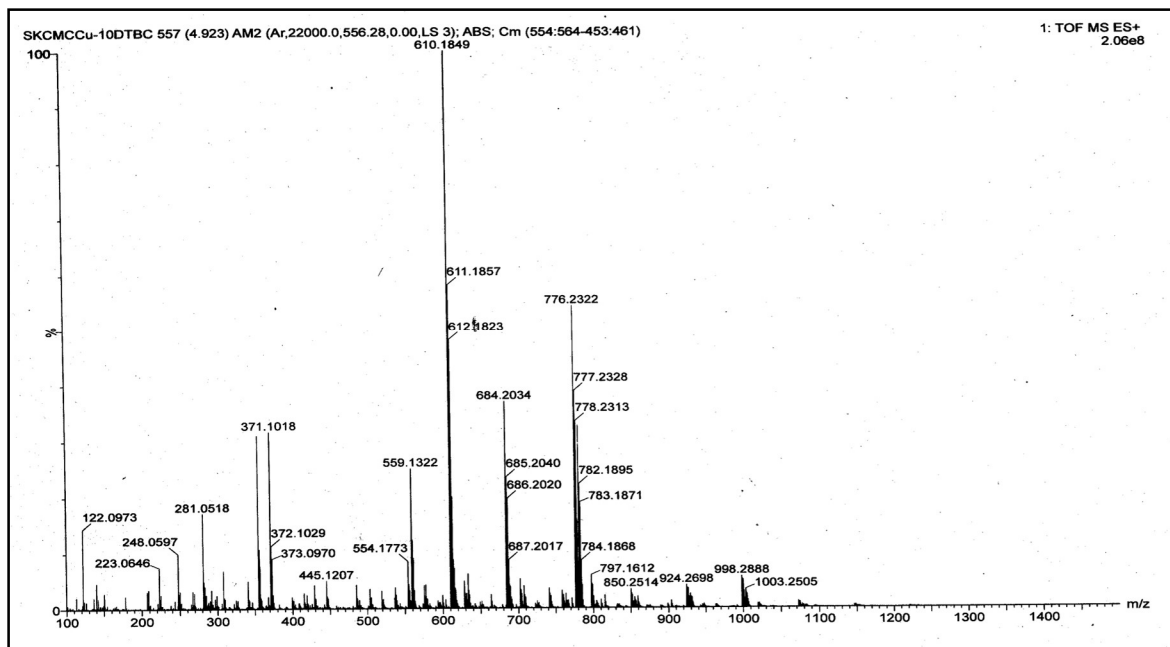


Fig. S9: ESI-MS of a 1:100 mixture of complex **1** and 3,5-DTBC in MeOH after 10-15 minutes of mixing.

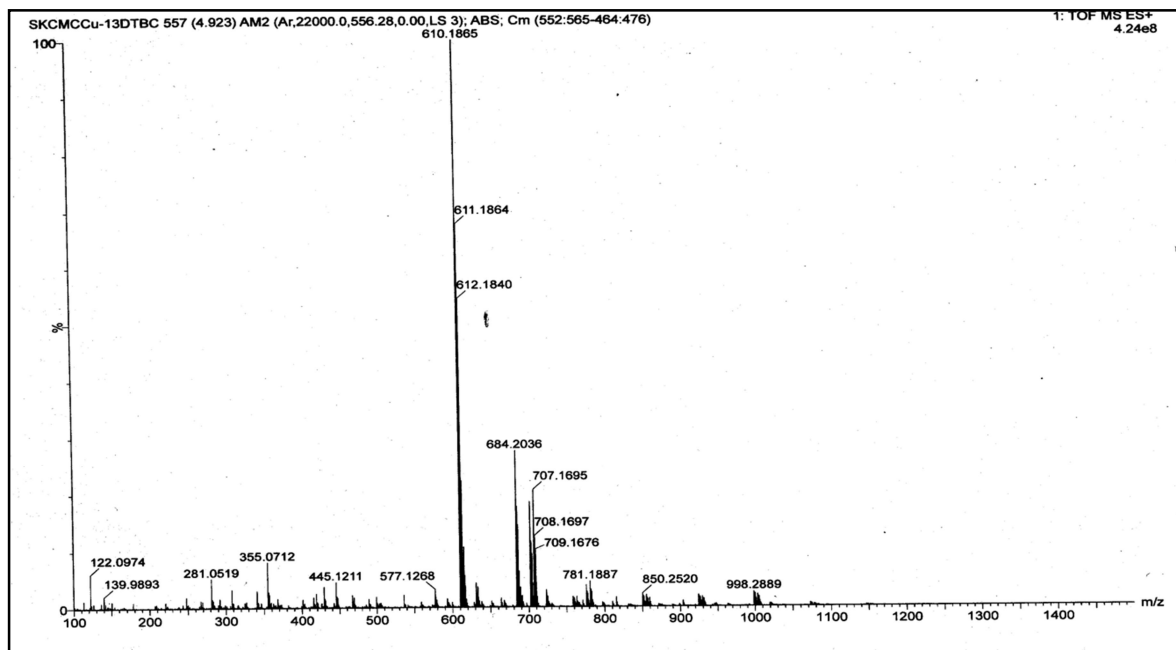


Fig. S10: ESI-MS of a 1:100 mixture of complex **2** and 3,5-DTBC in MeOH after 10-15 minutes of mixing.

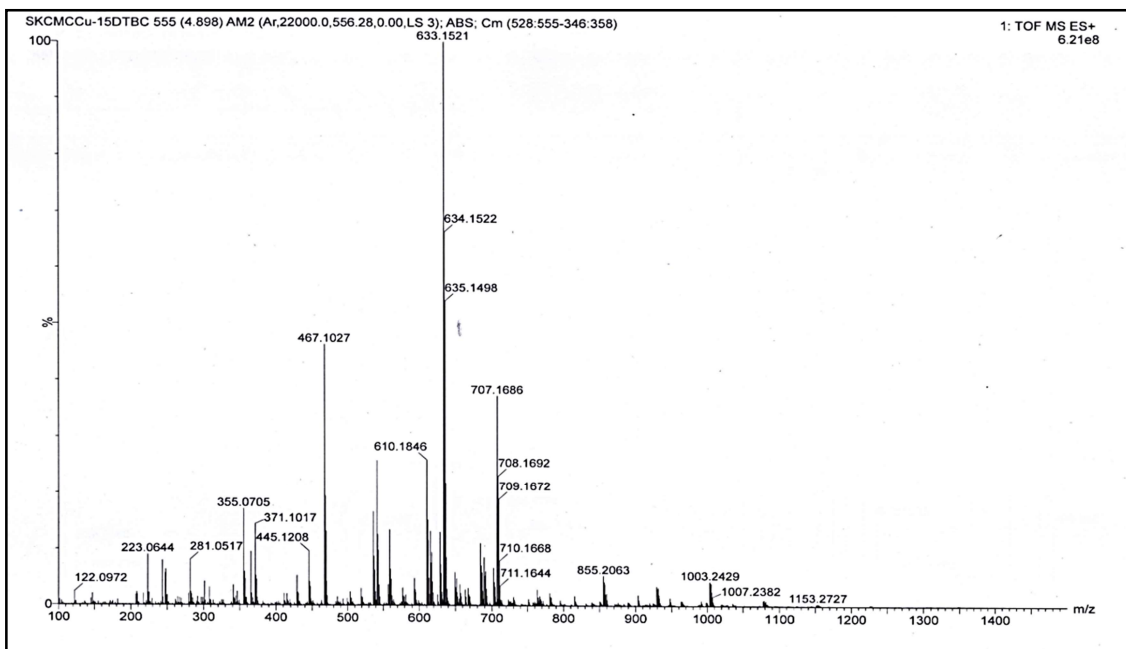


Fig. S11: ESI-MS of a 1:100 mixture of complex **3** and 3,5-DTBC in MeOH after 10-15 minutes of mixing.

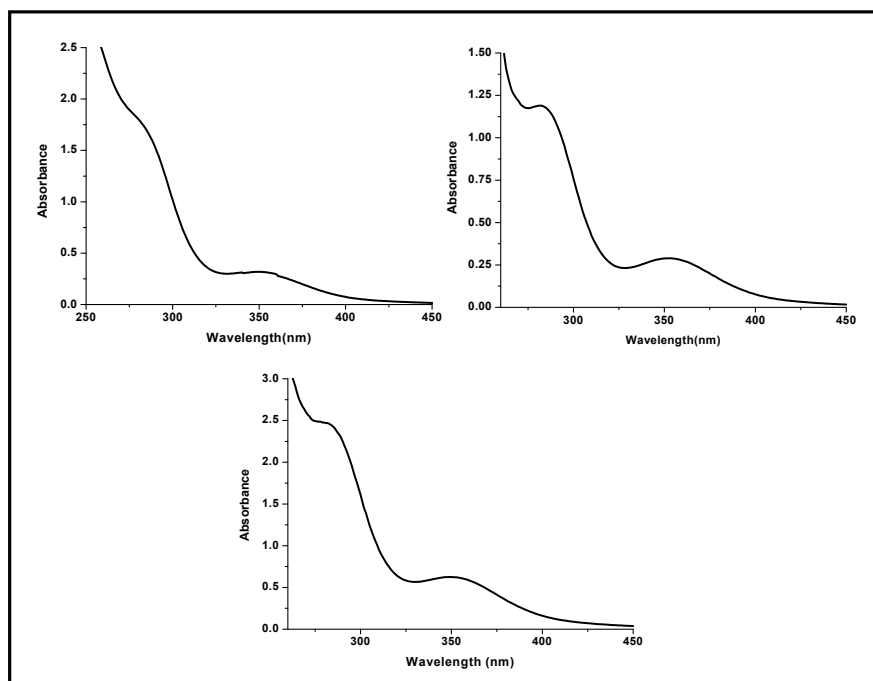


Fig. S12: Electronic spectra of I_3^- obtained from the oxidation of I^- by H_2O_2 generated during catechol oxidation catalysed by complexes **1**, **2** and **3**.

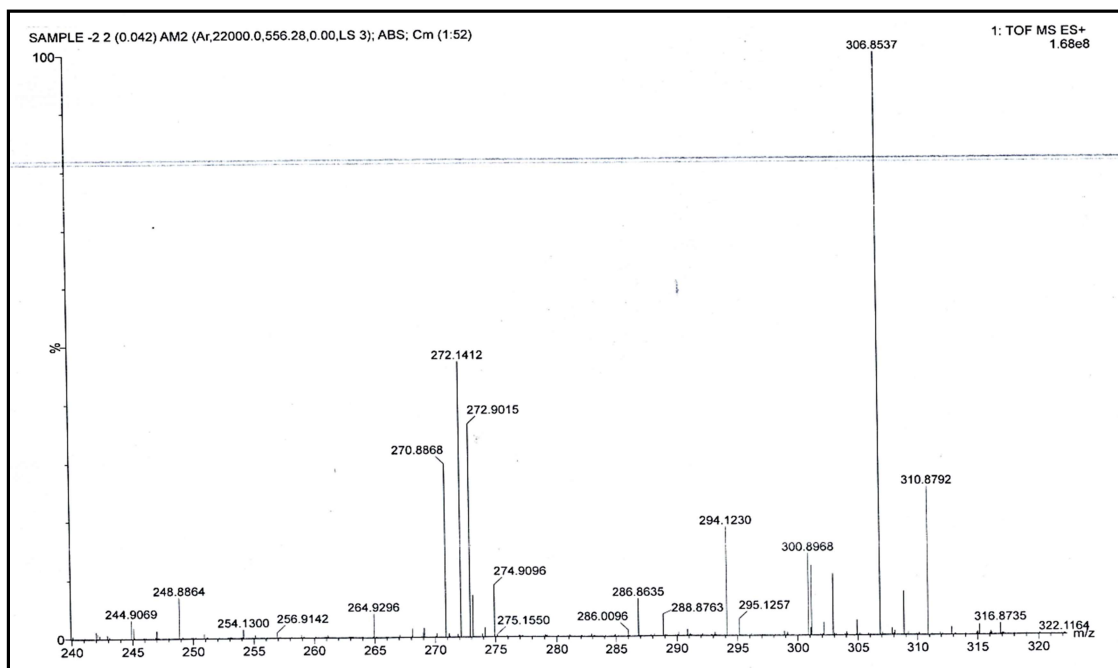


Fig. S13: ESI-MS of complex 1 with excess of Na₂S.

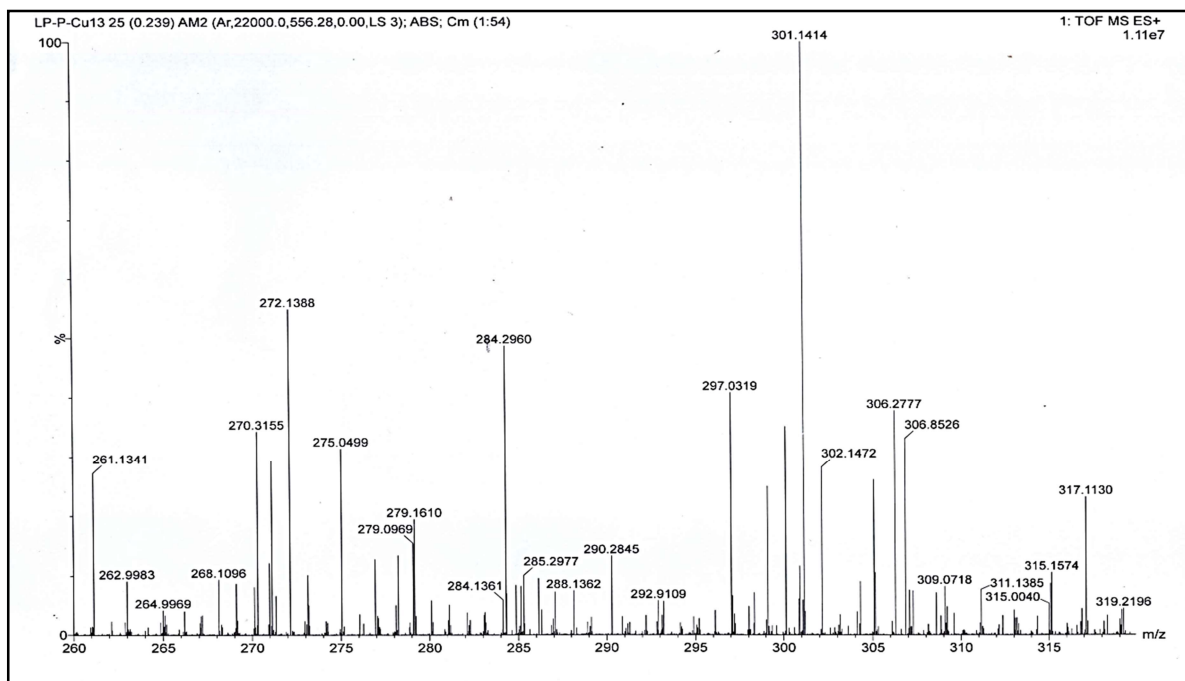


Fig. S14: ESI-MS of complex 2 with excess of Na₂S.