

SUPPLEMENTARY MATERIALS

Synthesis, Characterization, and In Vivo Anti-Cancer Activity of New Metal Complexes Derived from Isatin-*N*(4)antipyrinethiosemicarbazone Ligand Against Ehrlich Ascites Carcinoma Cells

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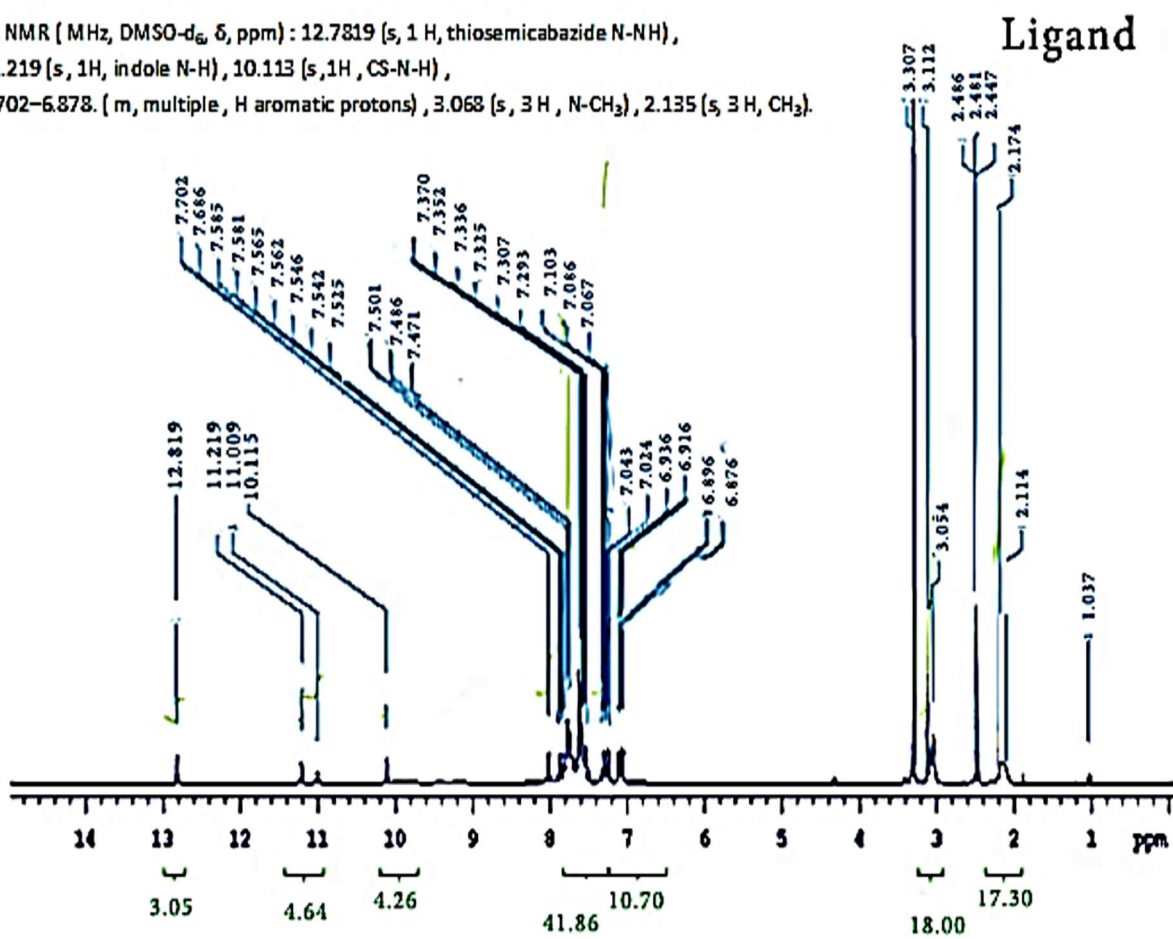
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¹H-NMR spectra

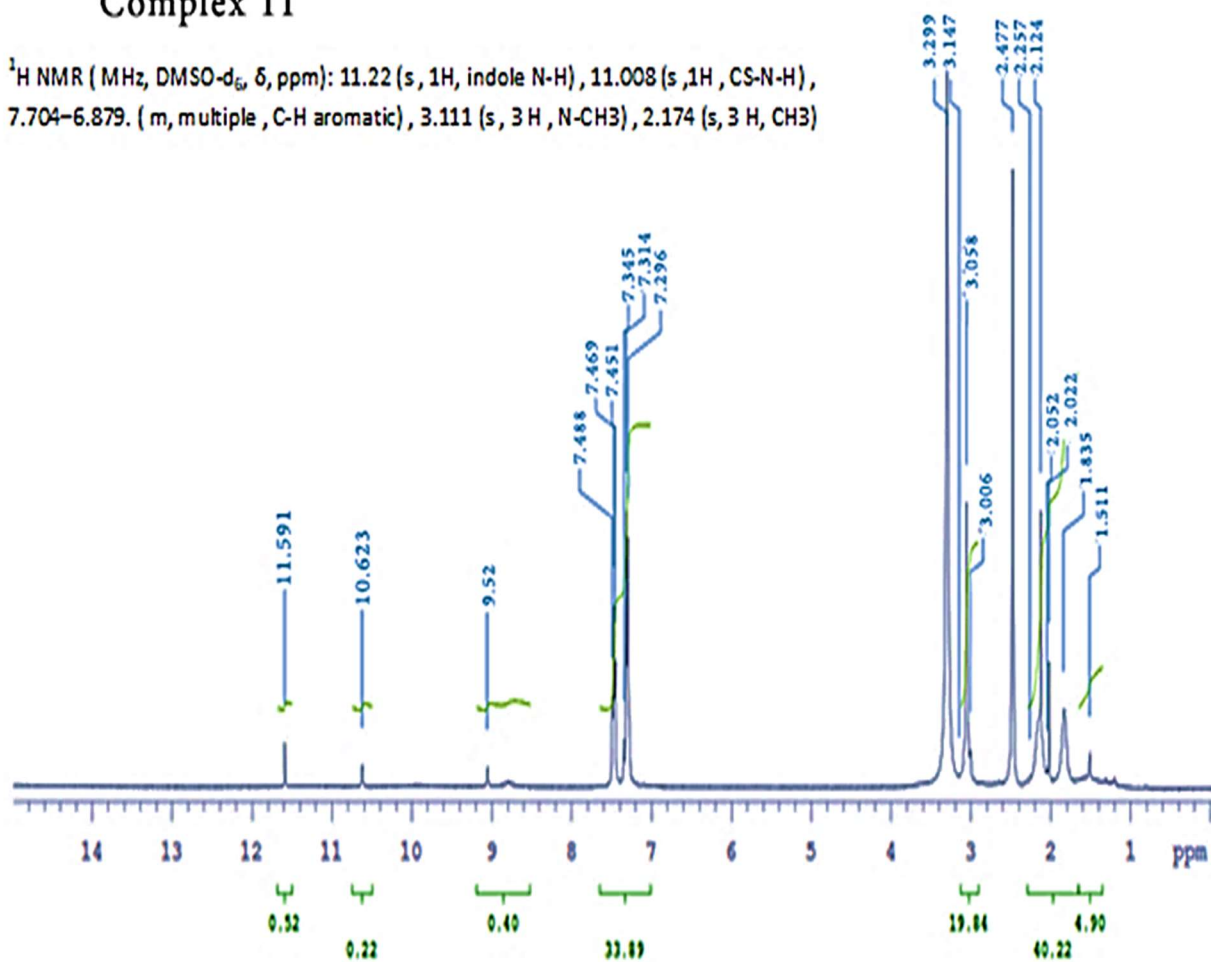
¹H NMR (MHz, DMSO-d₆, δ, ppm) : 12.7819 (s, 1 H, thiosemicabazide N-NH),
11.219 (s, 1H, indole N-H), 10.113 (s, 1H, CS-N-H),
7.702–6.878. (m, multiple, H aromatic protons), 3.068 (s, 3 H, N-CH₃), 2.135 (s, 3 H, CH₃).



¹H-NMR spectra of the ligand 1.

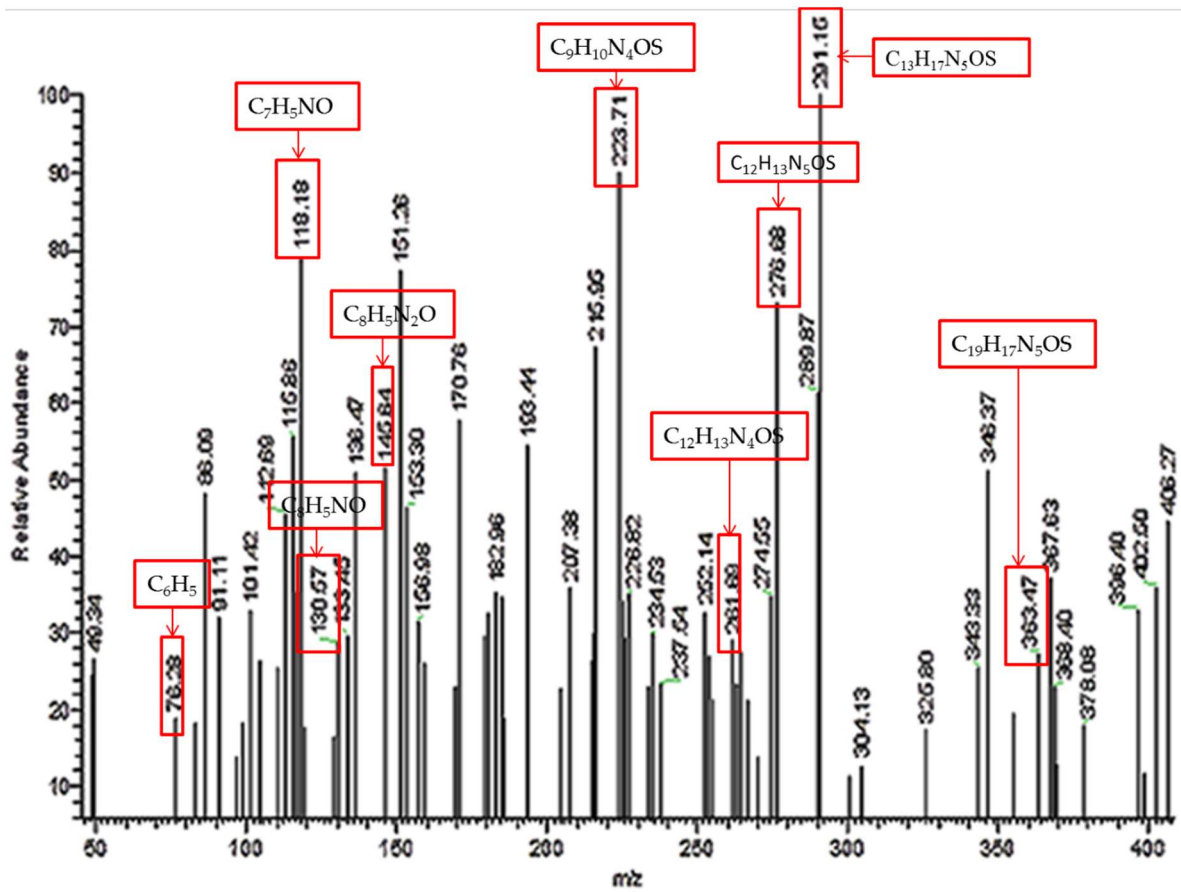
Complex 11

^1H NMR (MHz, DMSO-d_6 , δ , ppm): 11.22 (s, 1H, indole N-H), 11.008 (s, 1H, CS-N-H), 7.704–6.879. (m, multiple , C-H aromatic), 3.111 (s, 3 H , N-CH₃), 2.174 (s, 3 H, CH₃)

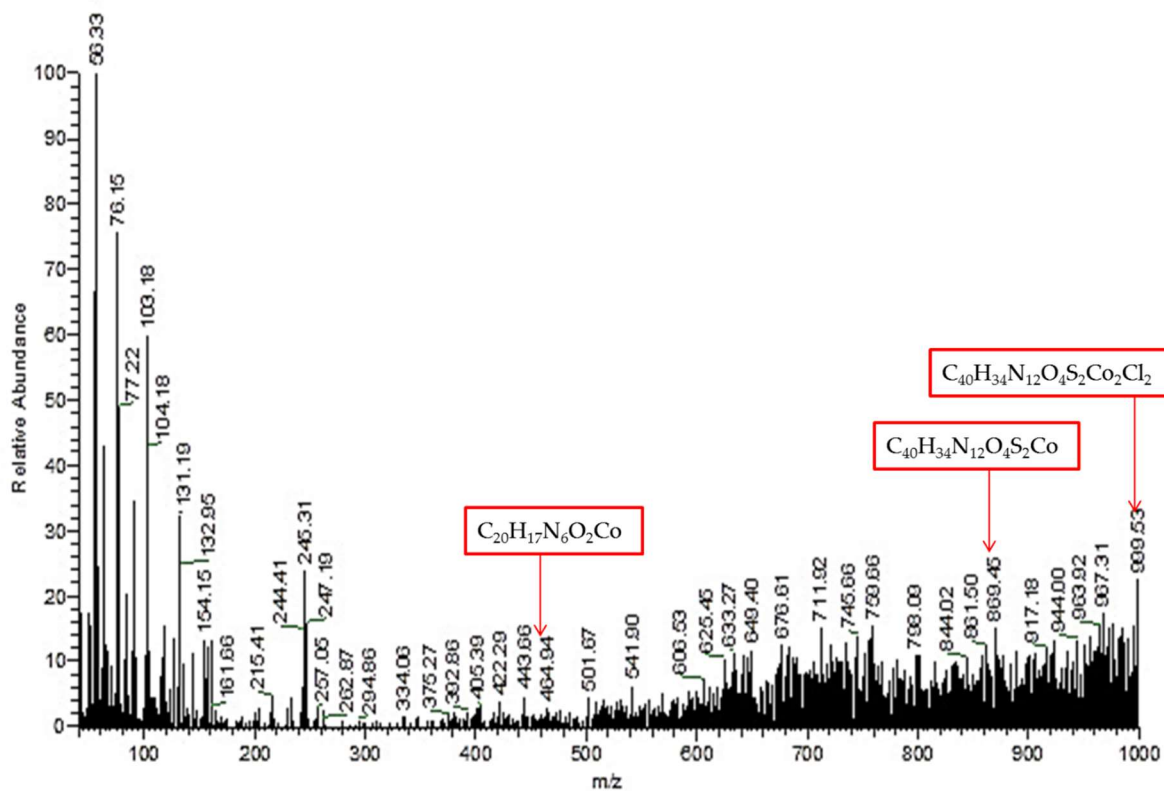


^1H -NMR spectra of complex 11.

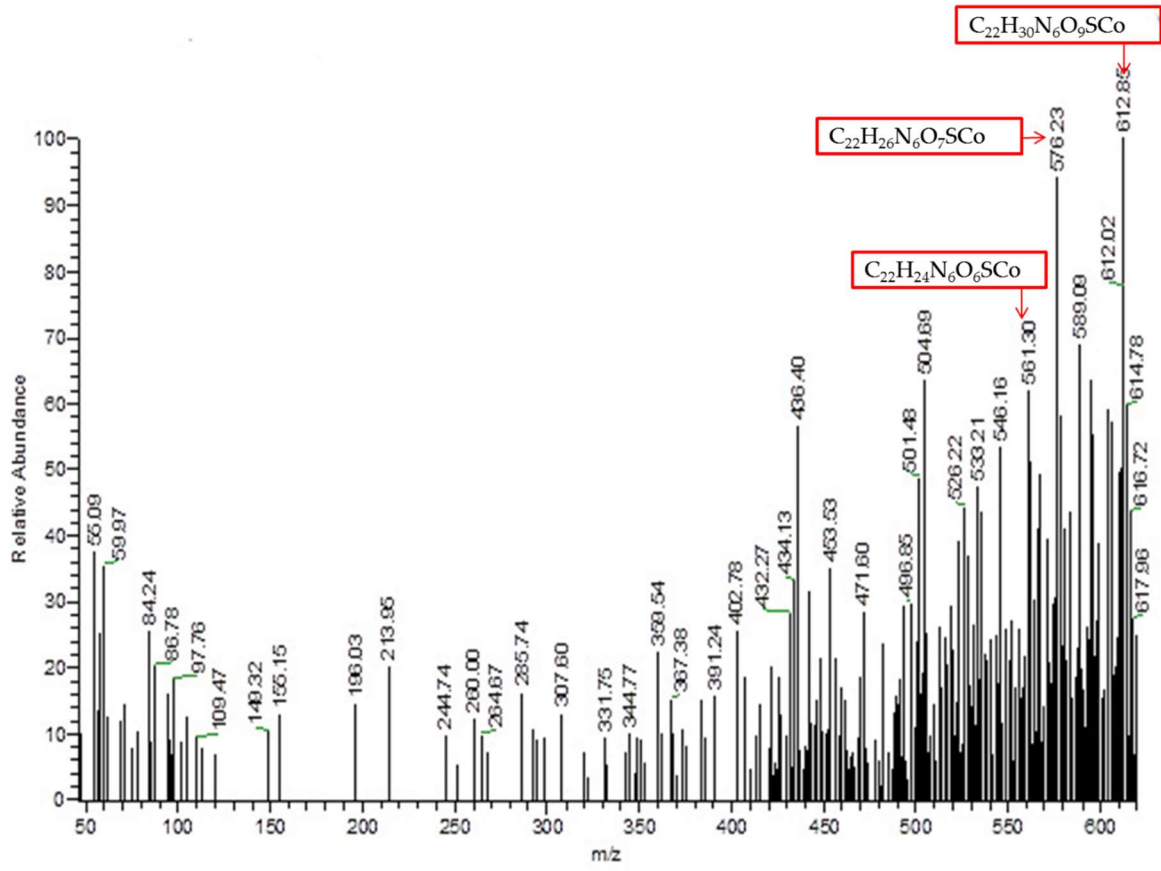
Mass spectra



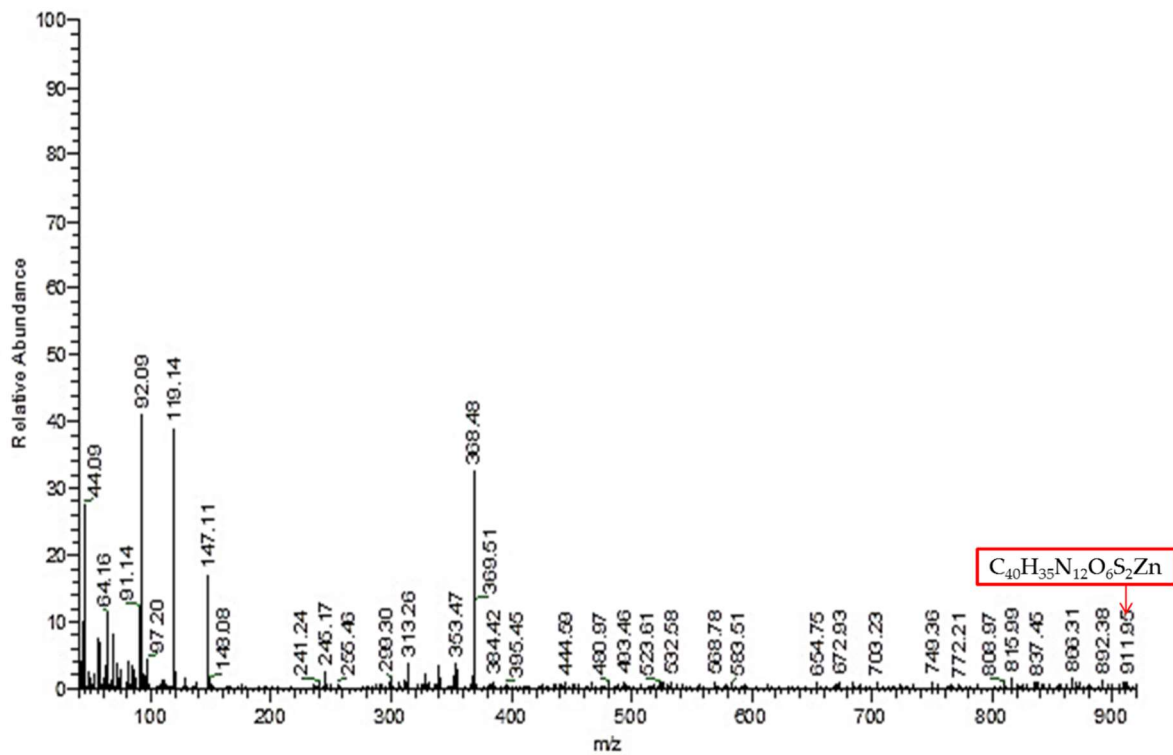
Mass spectra of ligand 1



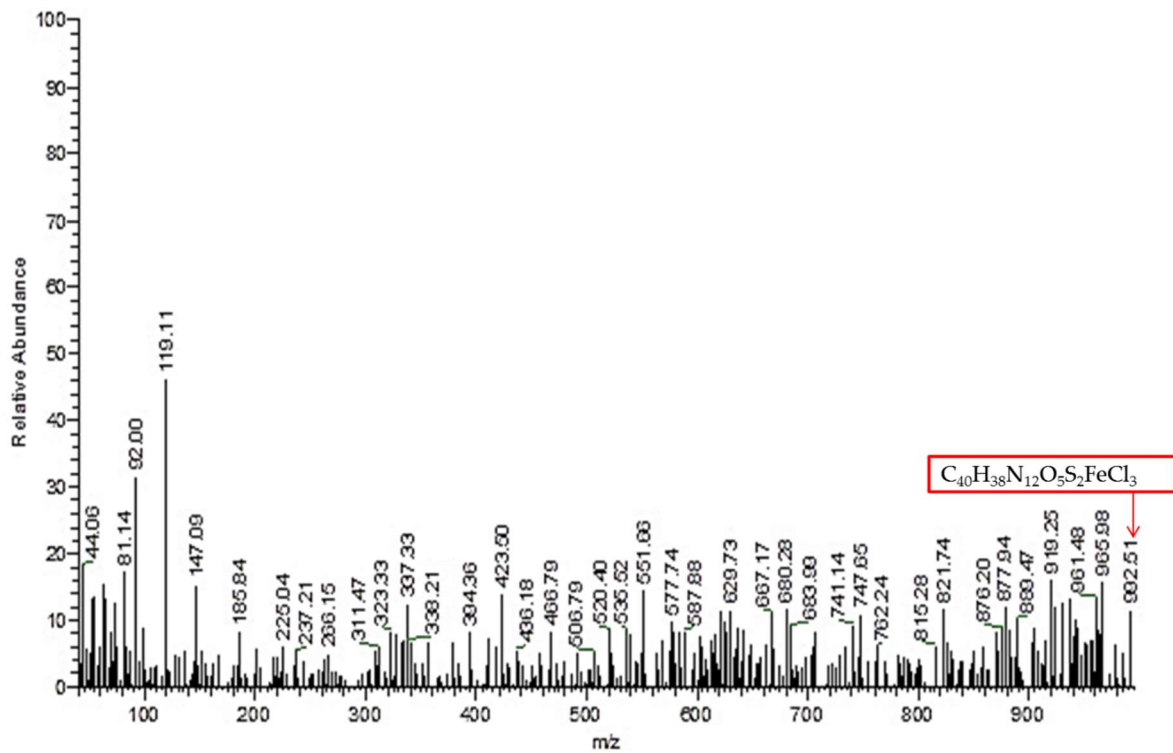
Mass spectra of complex 7



Mass spectra of complex 8

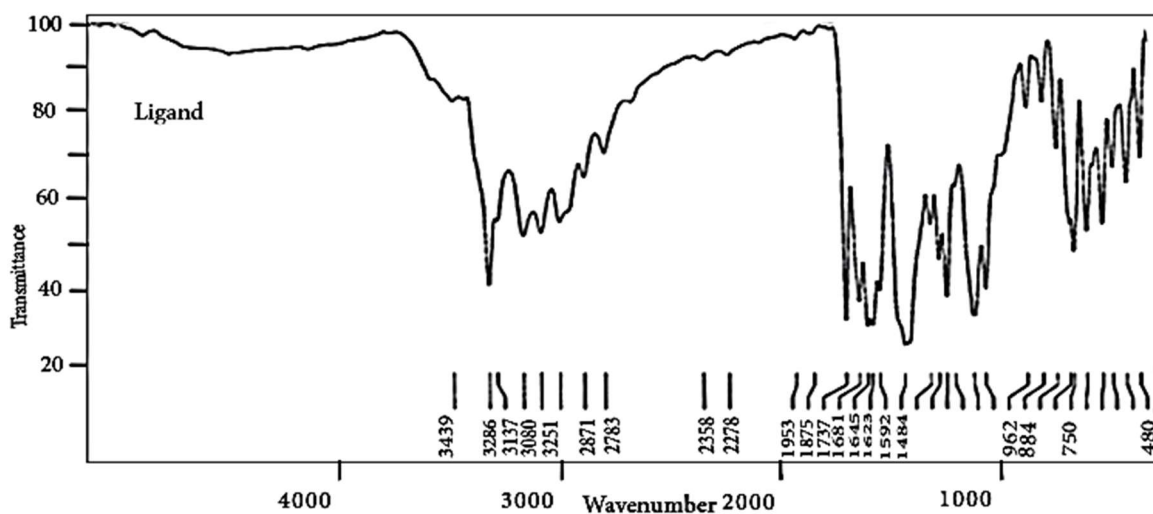


Mass spectra of complex 11

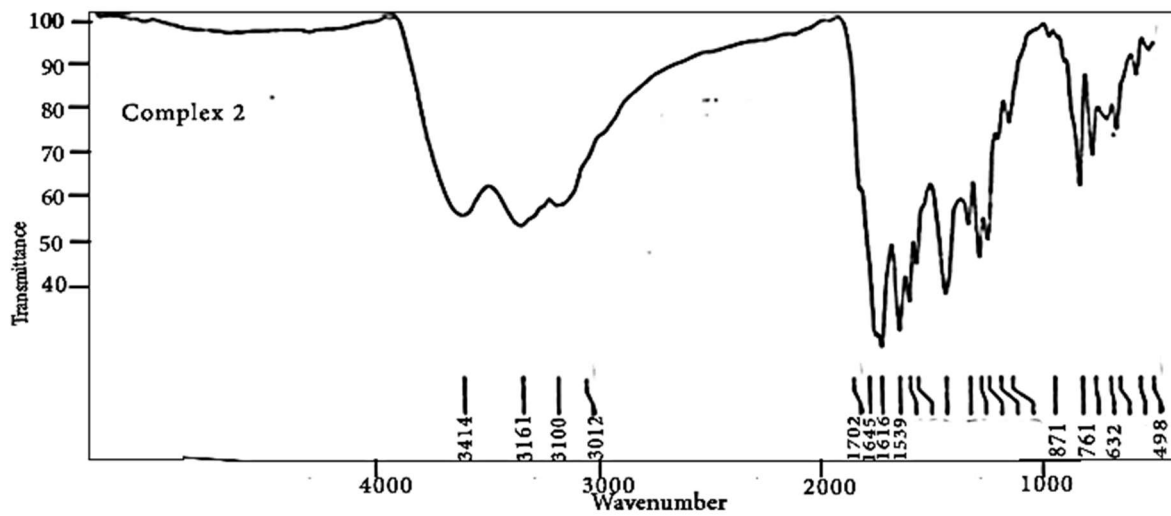


Mass spectra of complex 12

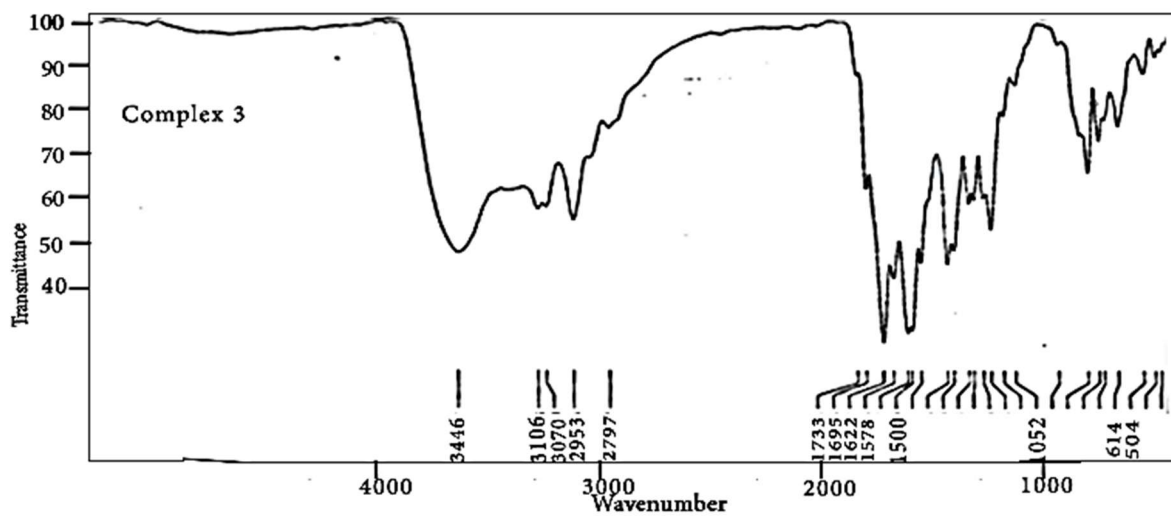
IR spectra



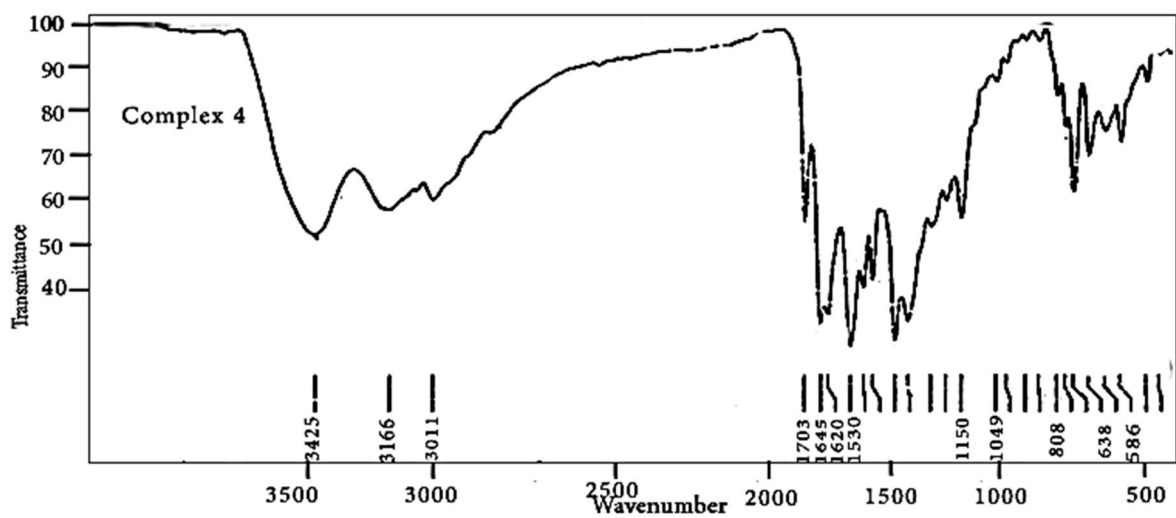
IR spectra of ligand



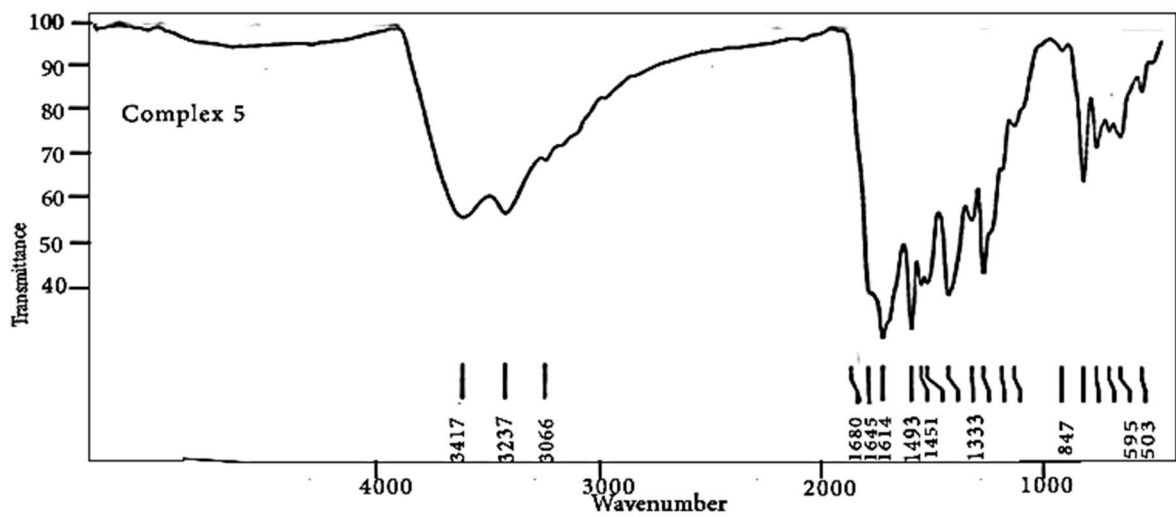
IR spectra of complex 2



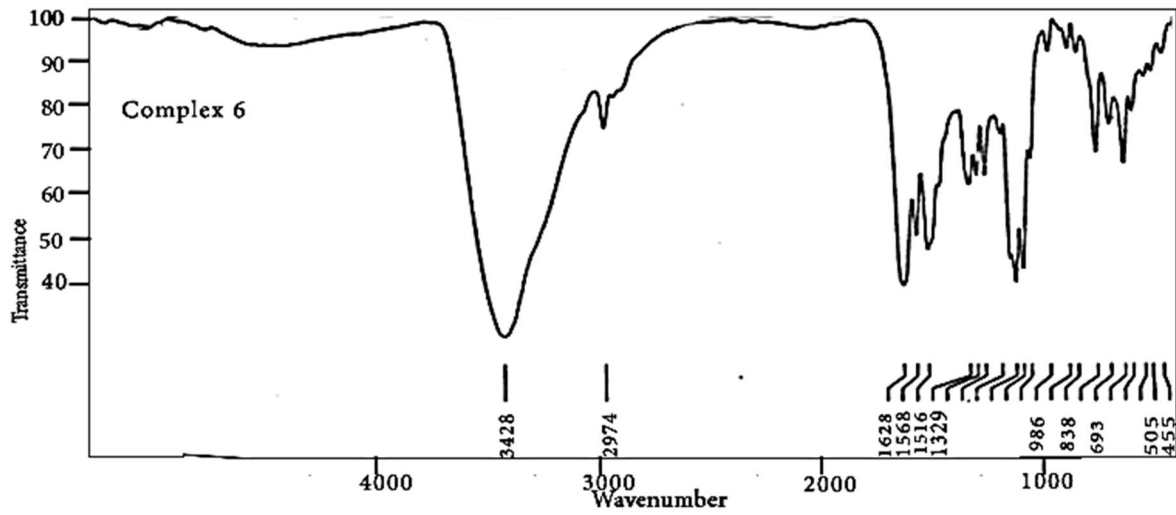
IR spectra of complex 3



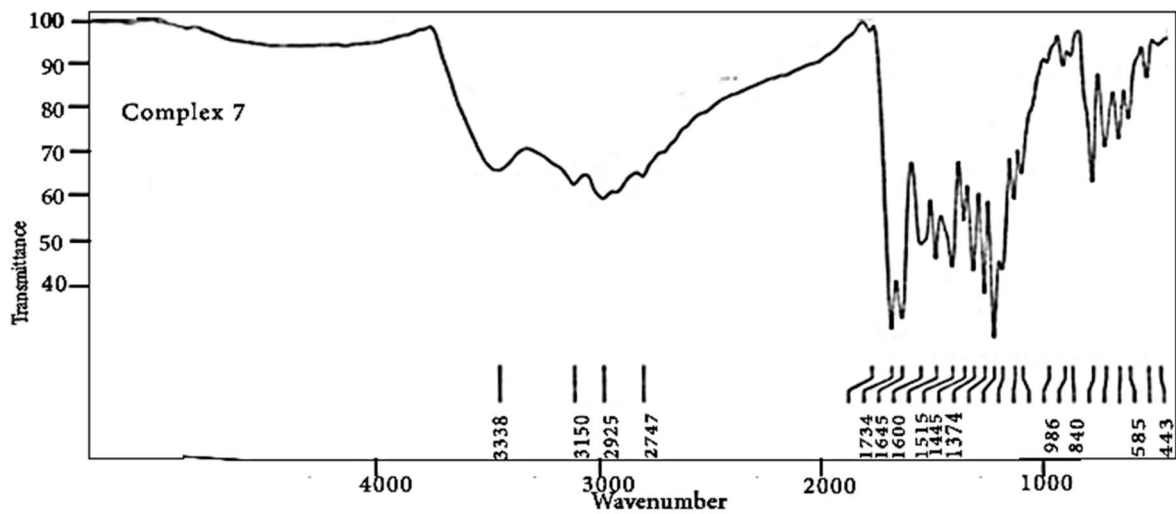
IR spectra of complex 4



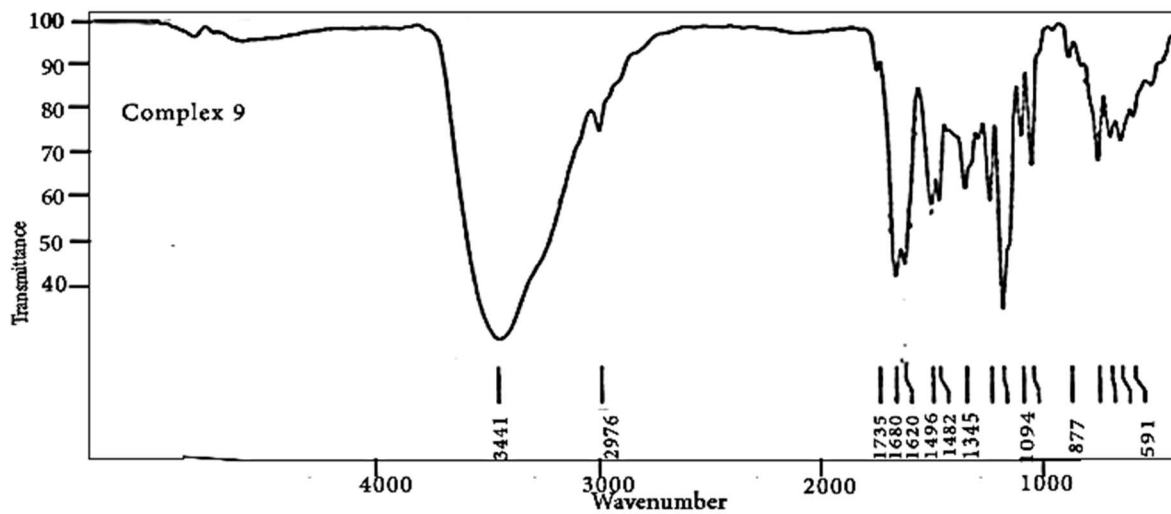
IR spectra of complex 5



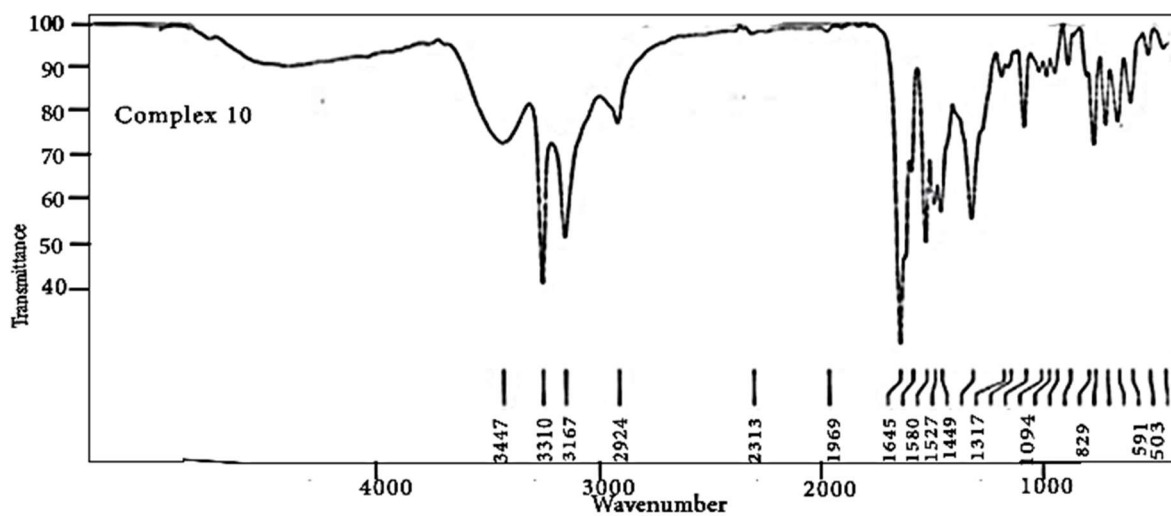
IR spectra of complex 6



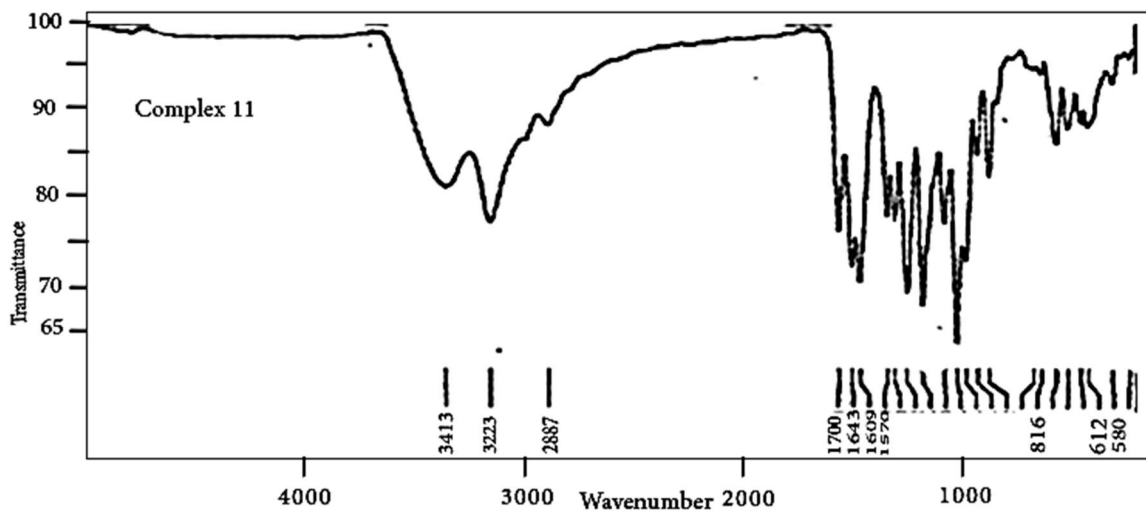
IR spectra of complex 7



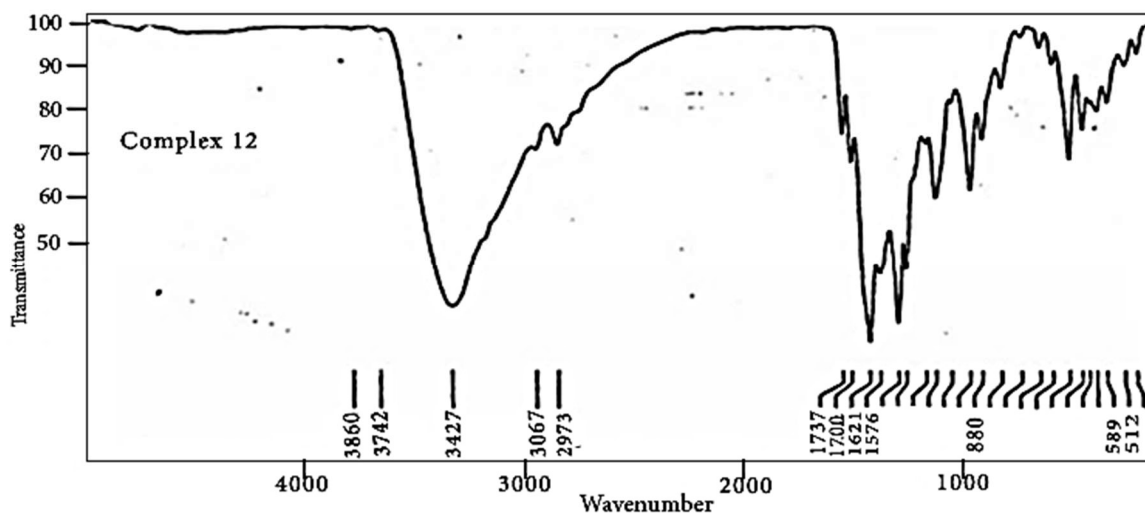
IR spectra of complex 9



IR spectra of complex 10

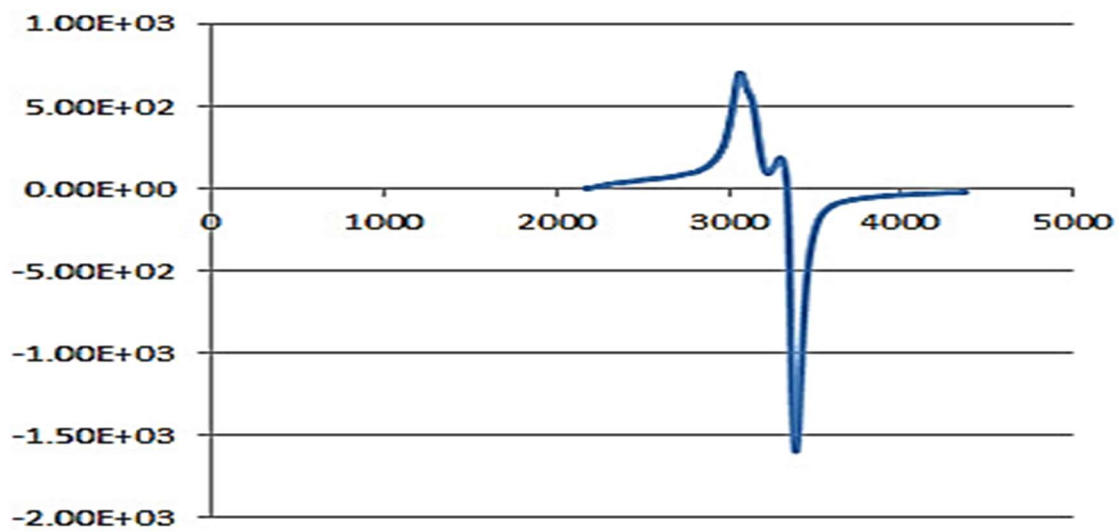


IR spectra of complex 11

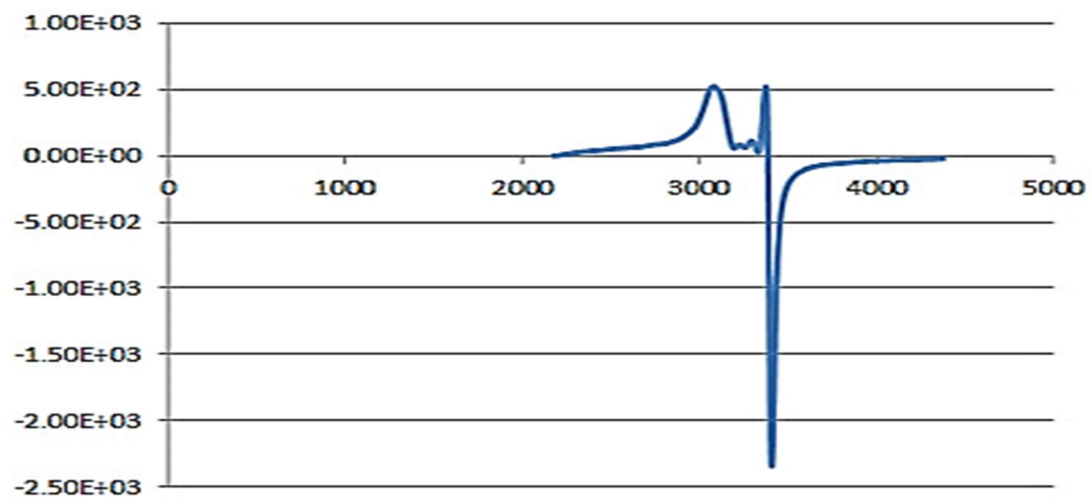


IR spectra of complex 12

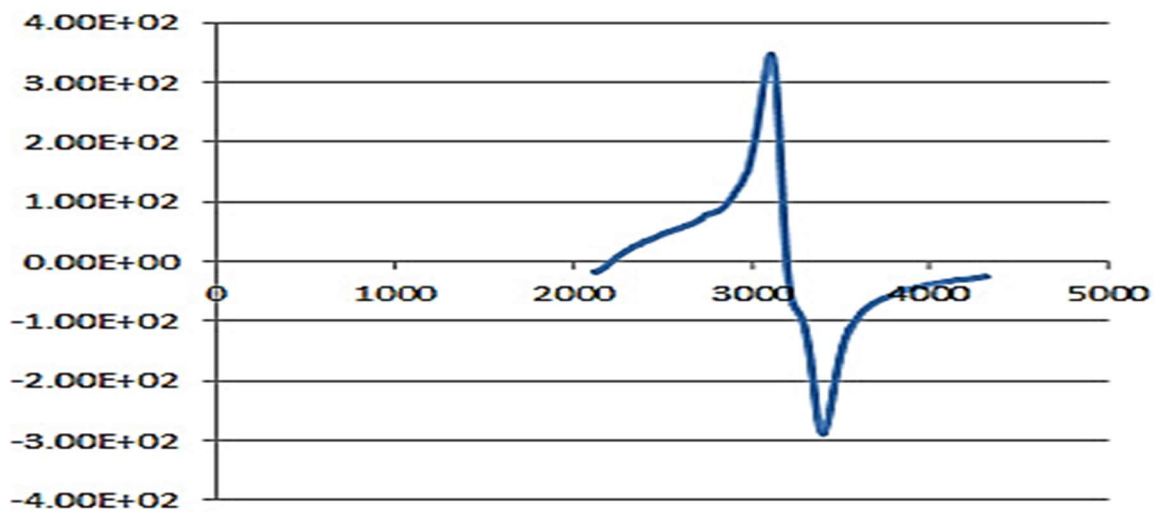
EPR spectra



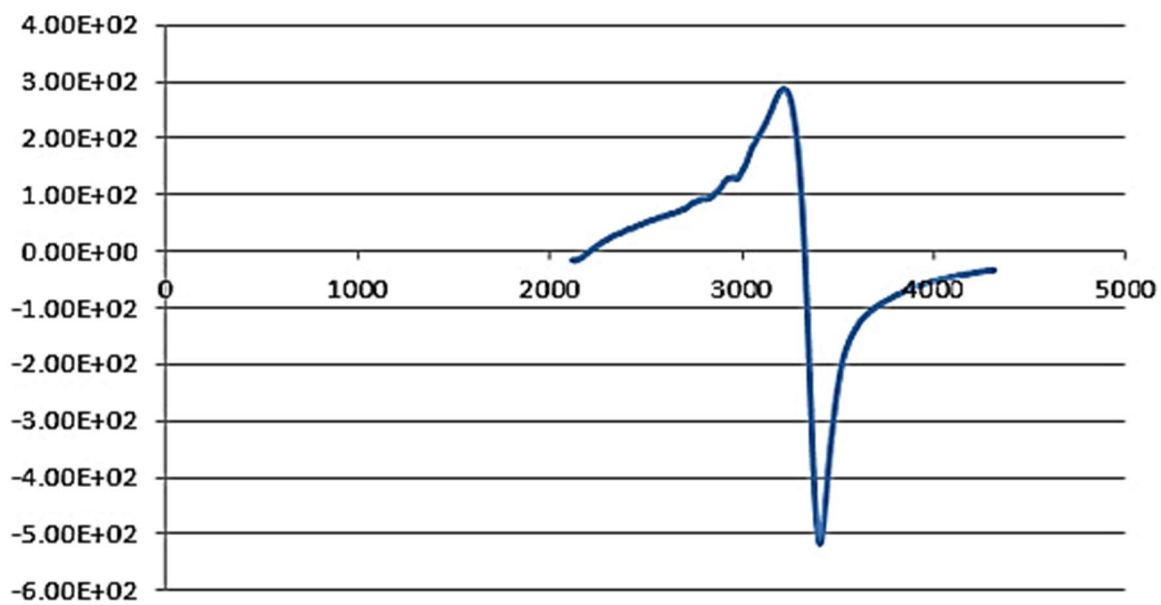
EPR spectra of complex 2



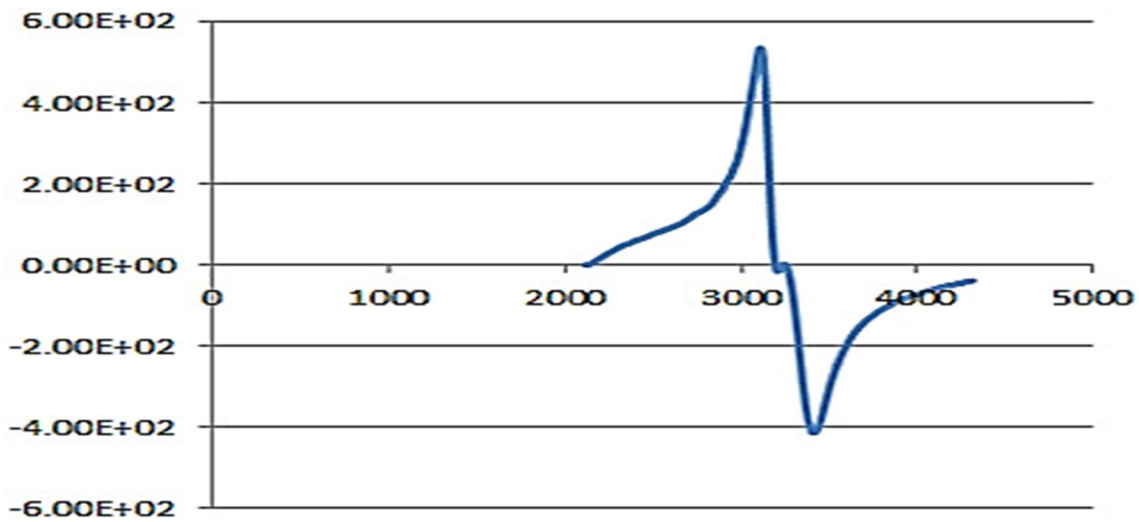
EPR spectra of complex 3



EPR spectra of complex 4

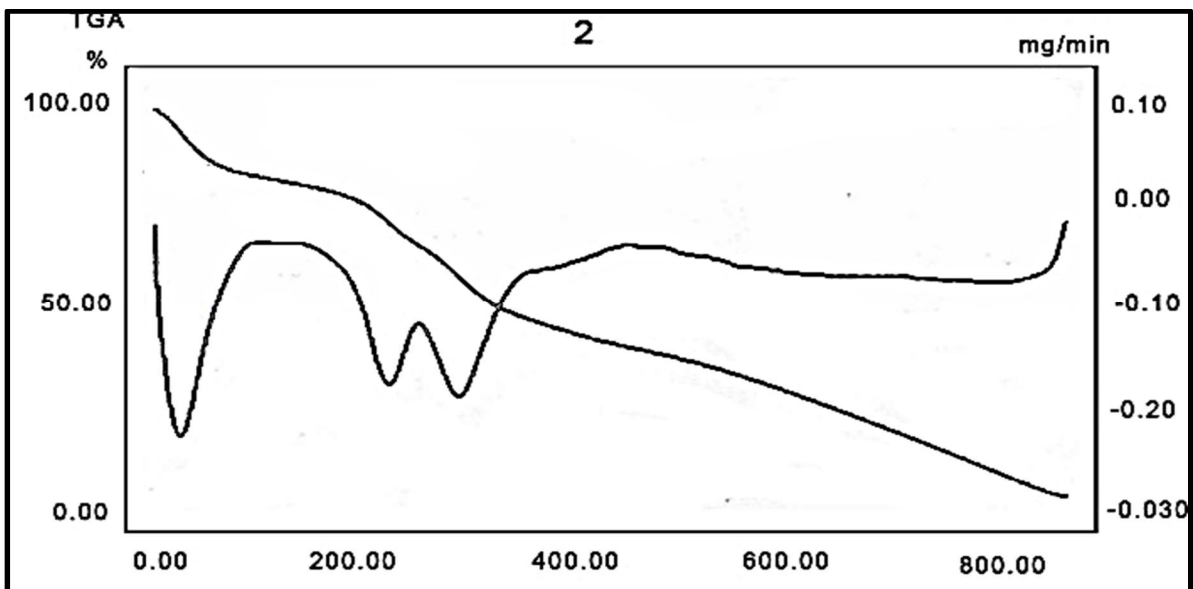


EPR spectra of complex 5

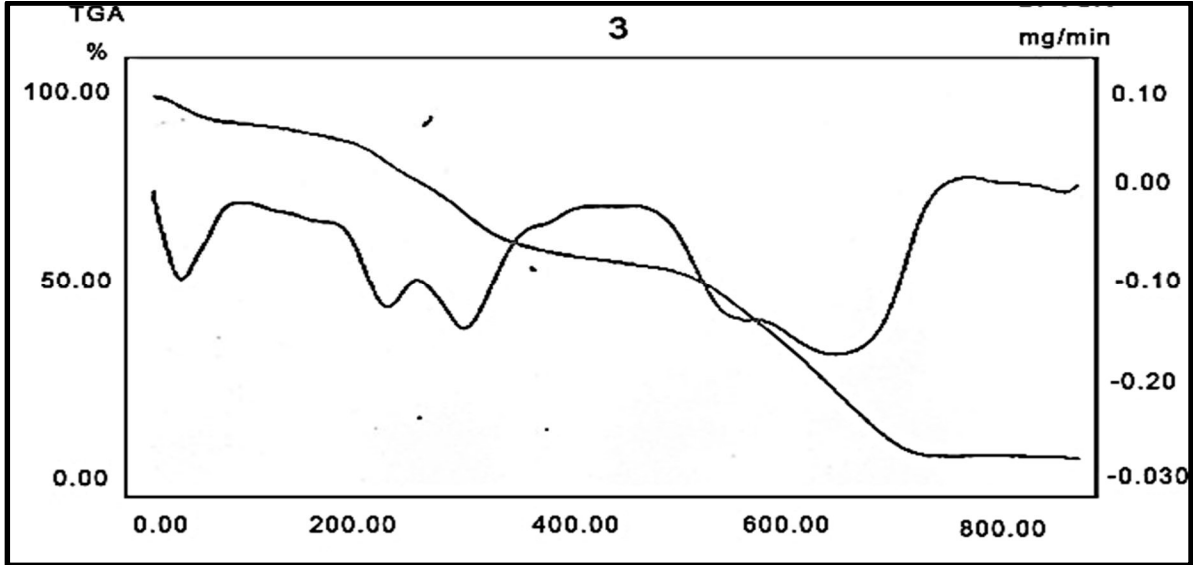


EPR spectra of complex 6

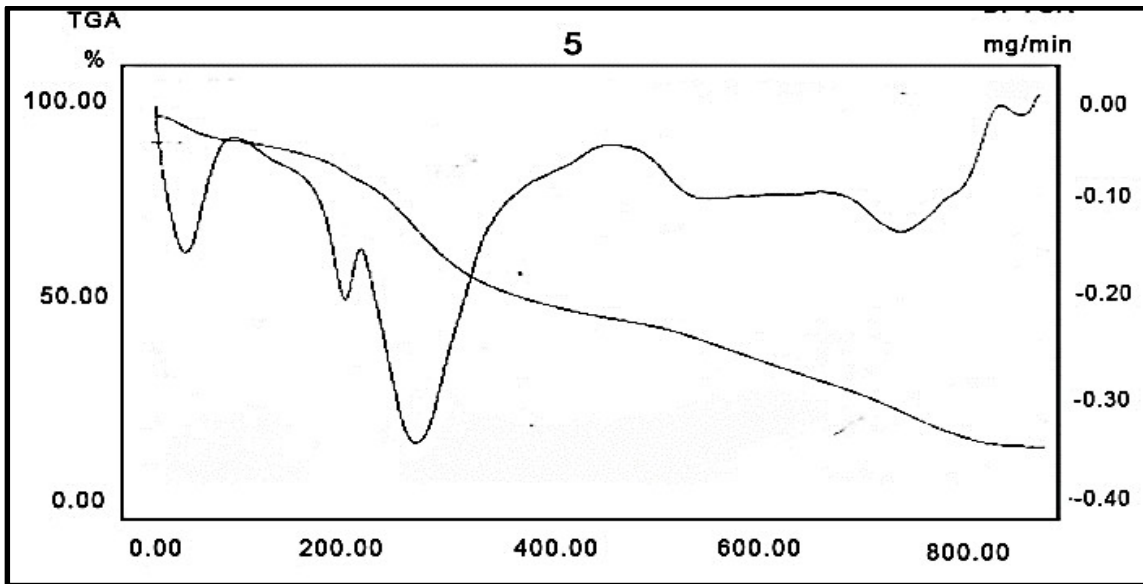
TGA spectra



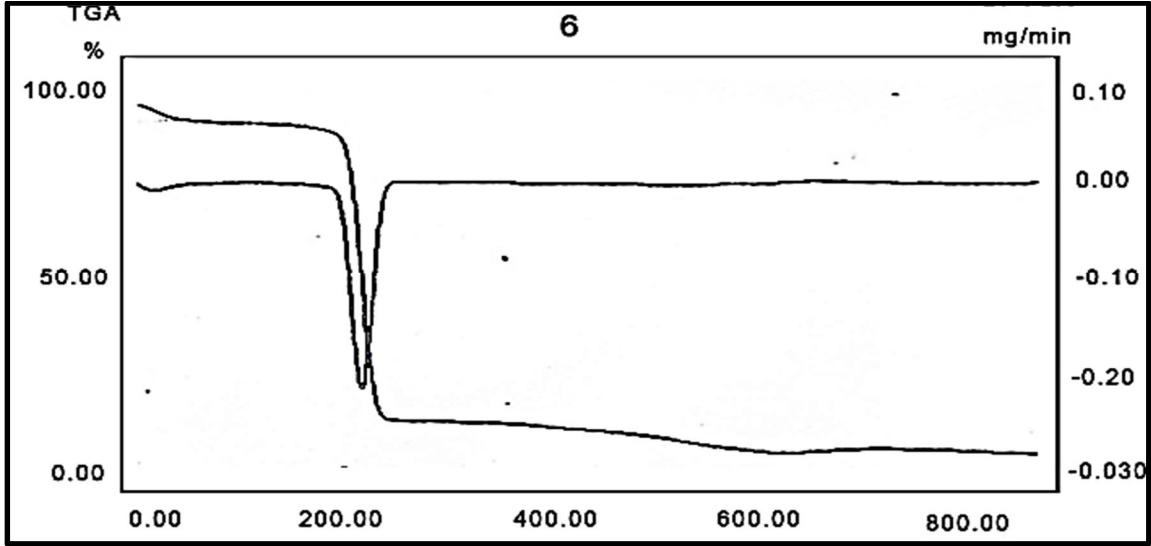
TGA spectra of complex 2



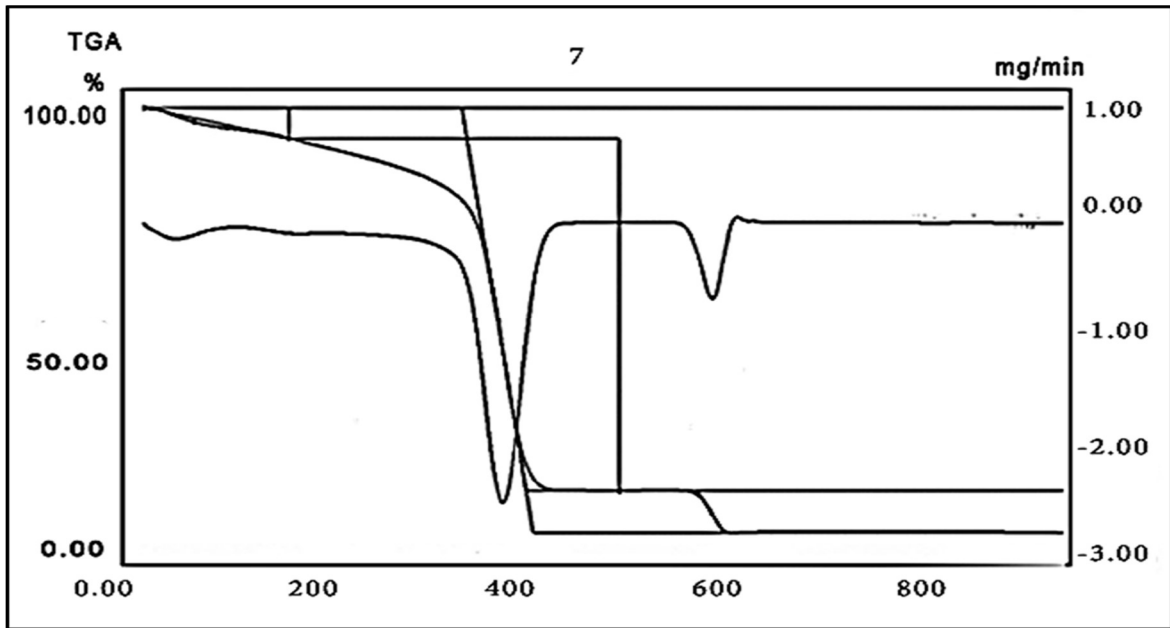
TGA spectra of complex 3



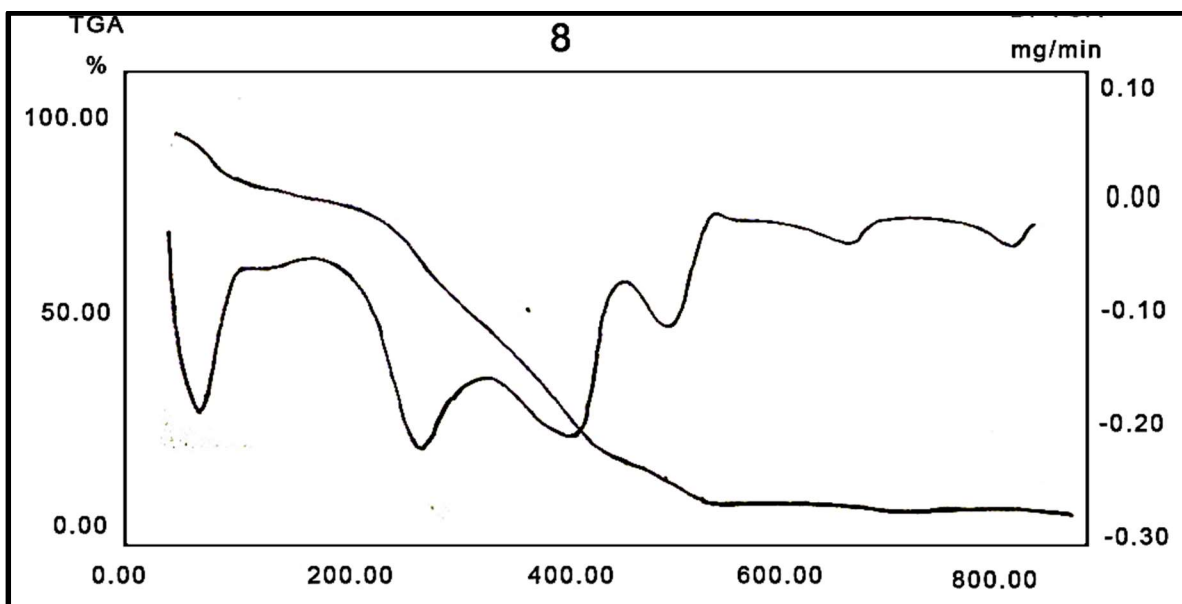
TGA spectra of complex 5



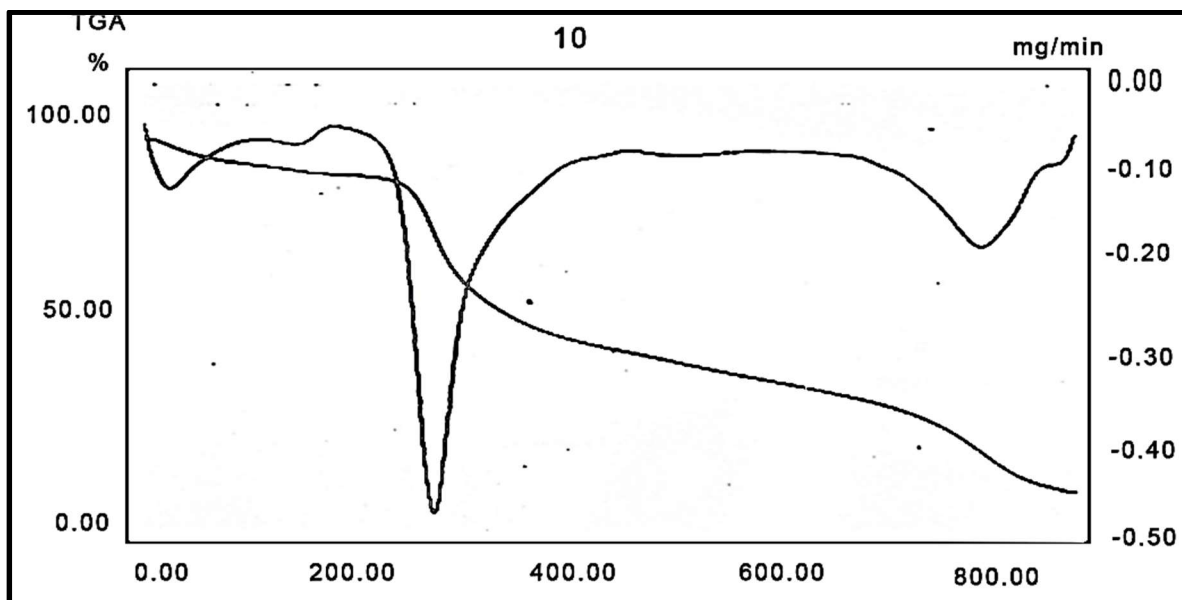
TGA spectra of complex 6



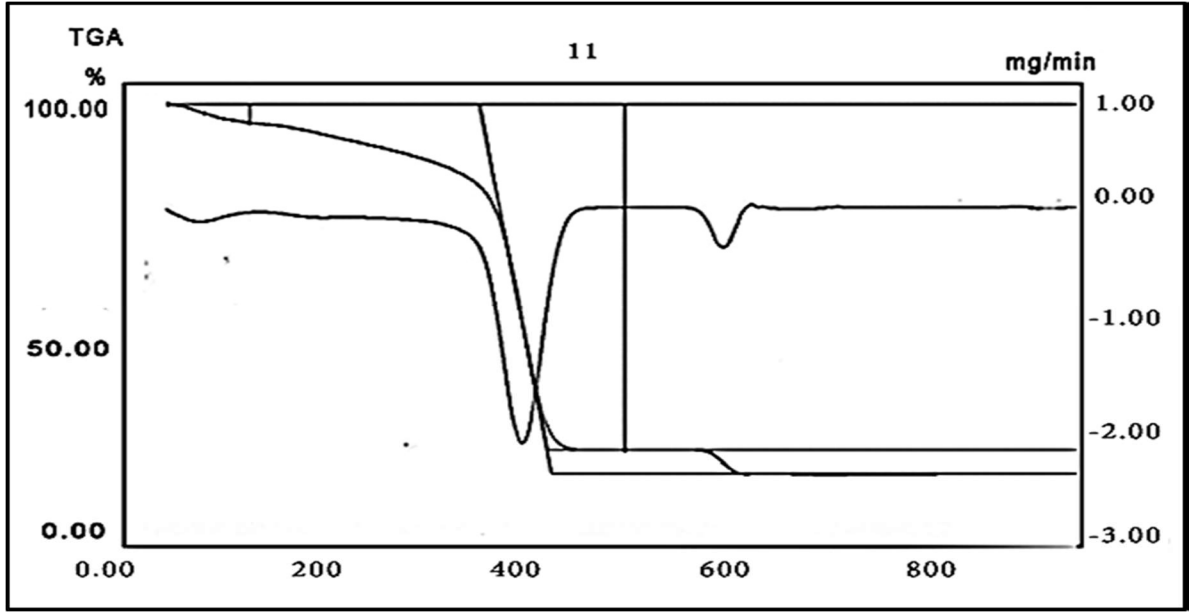
TGA spectra of complex 7



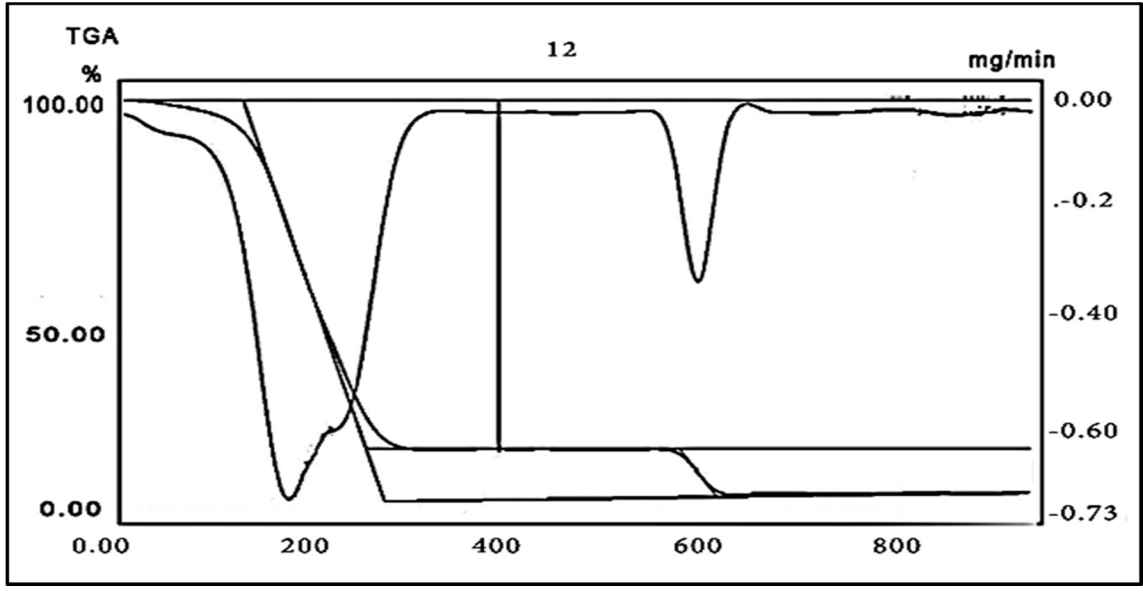
TGA spectra of complex 8



TGA spectra of complex 10

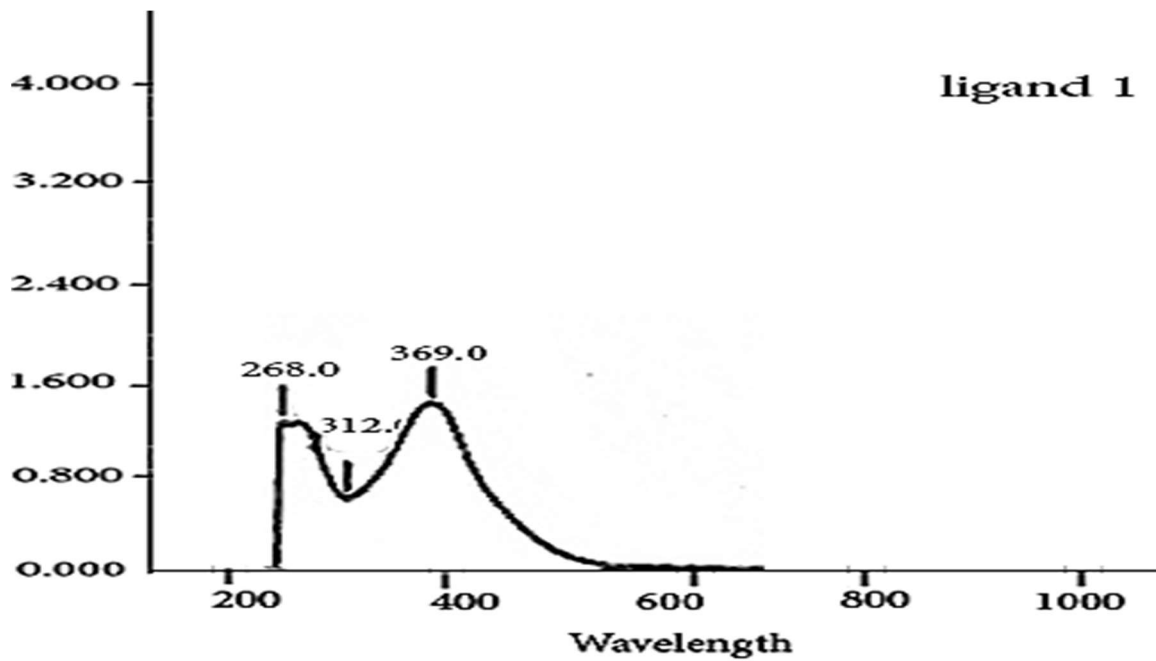


TGA spectra of complex 11

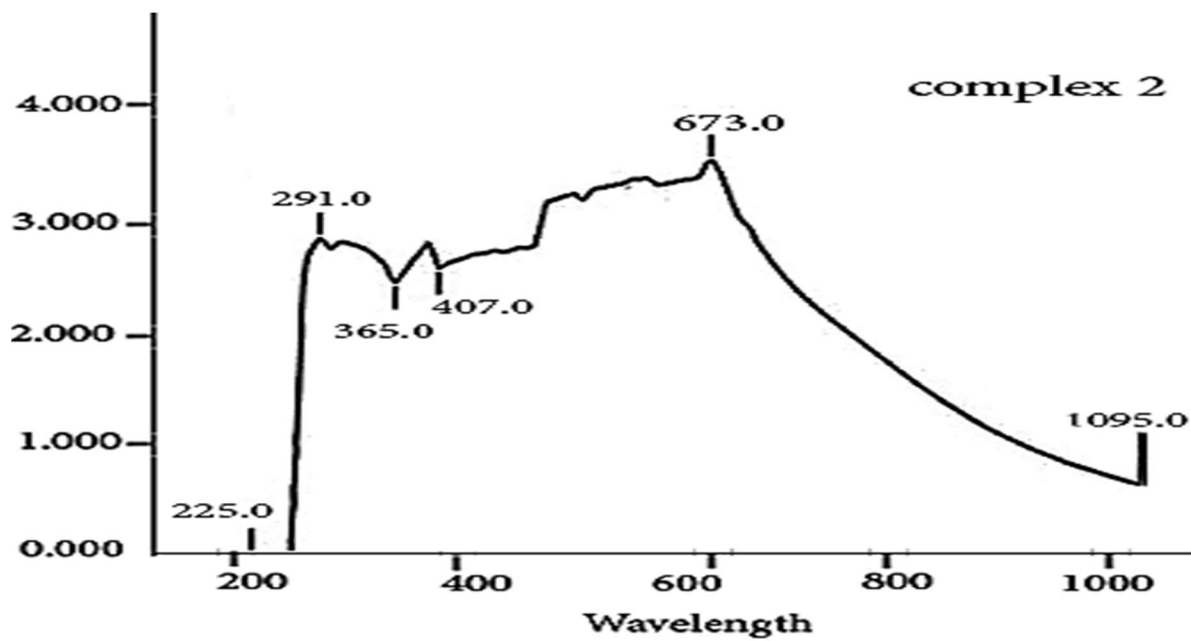


TGA spectra of complex 12

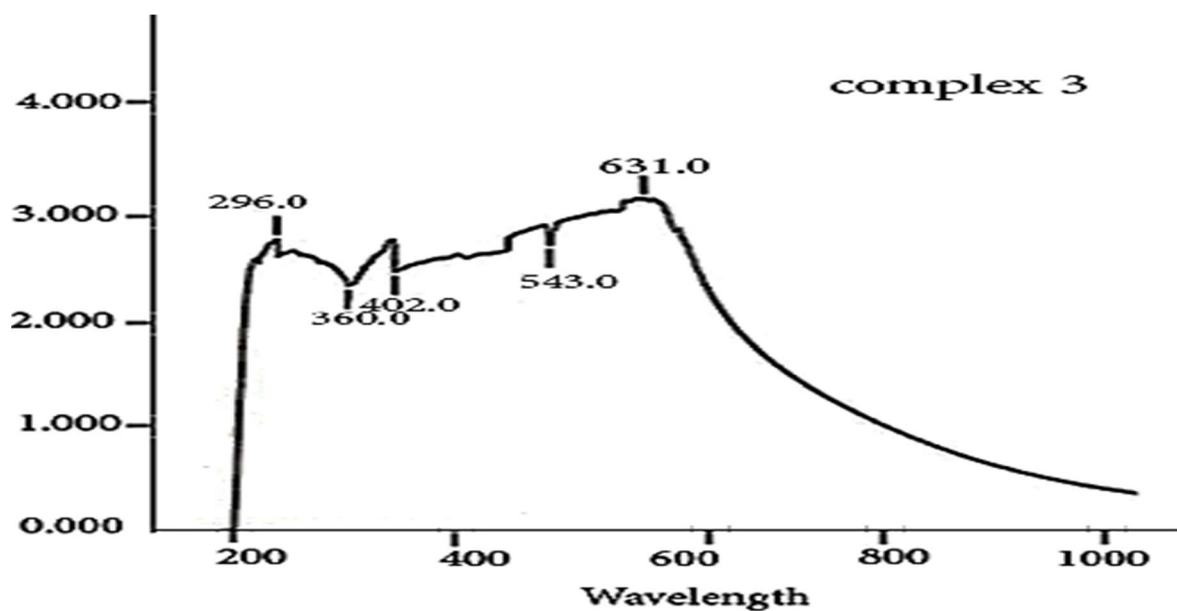
UV-Visible spectra



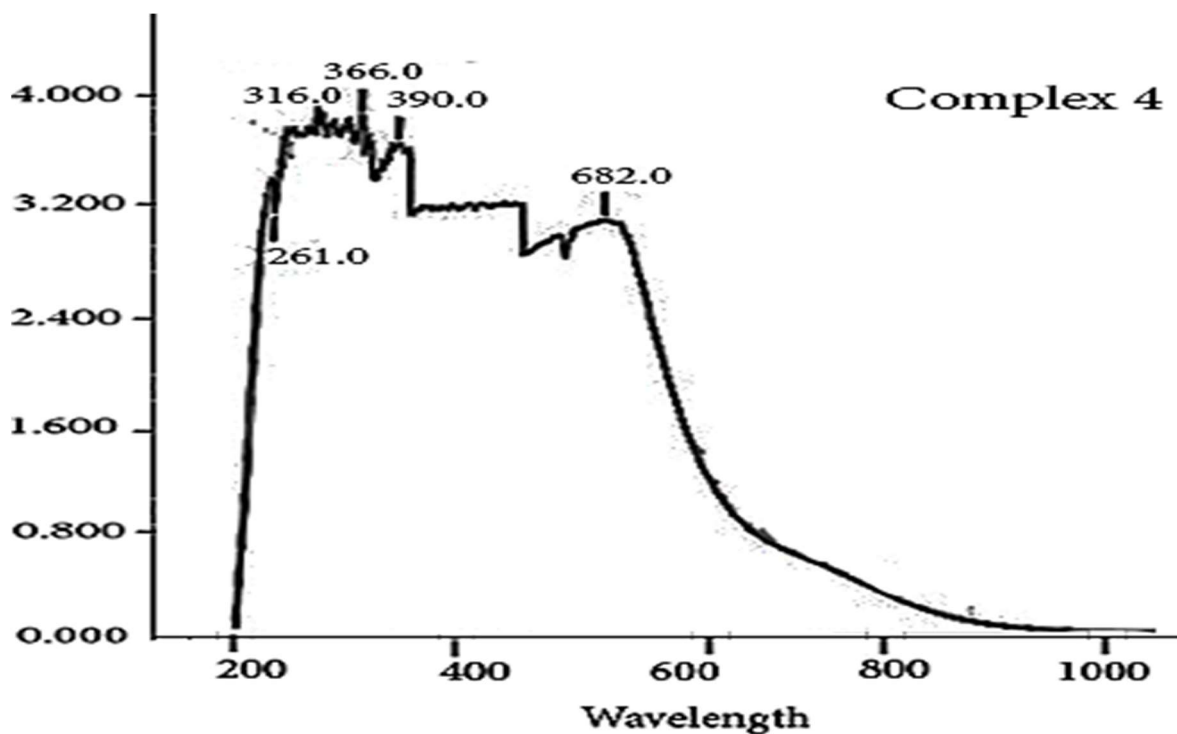
UV-Visible spectra of ligand 1



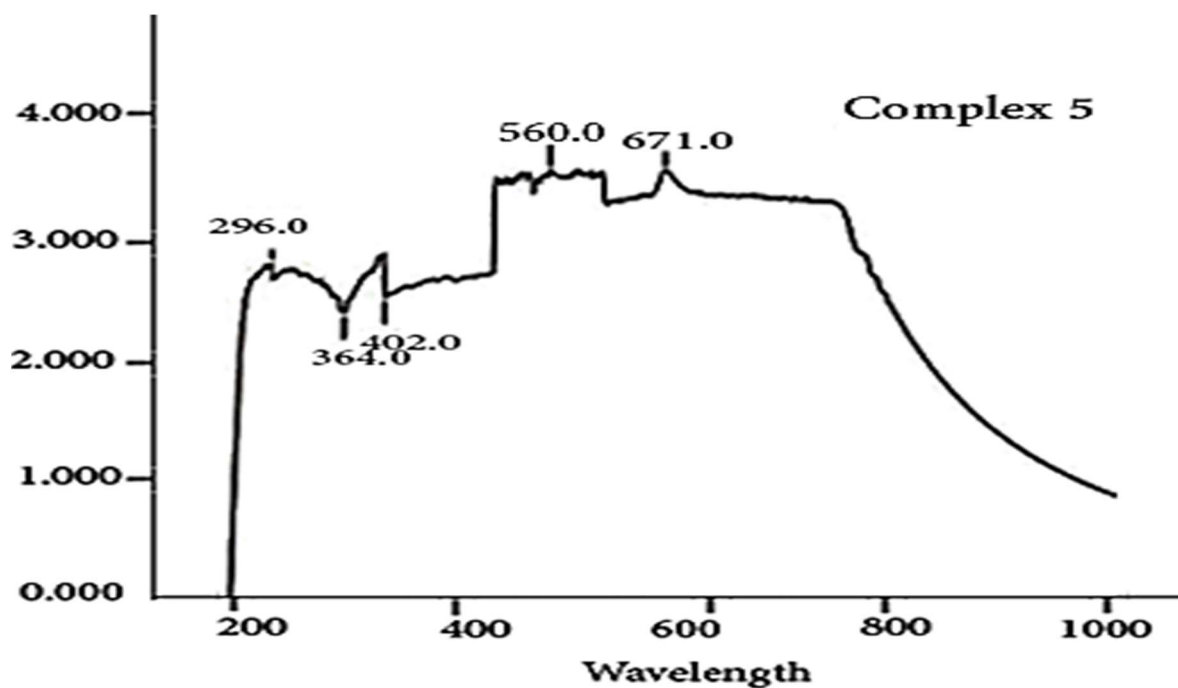
UV-Visible spectra of complex 2



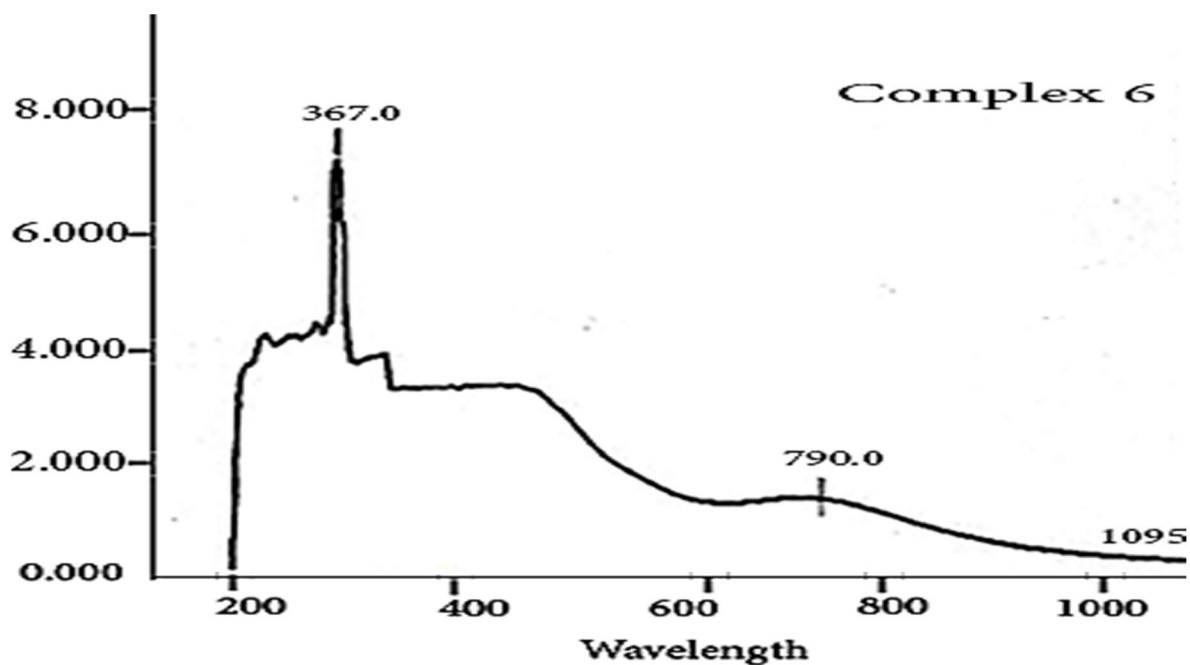
UV-Visible spectra of complex 3



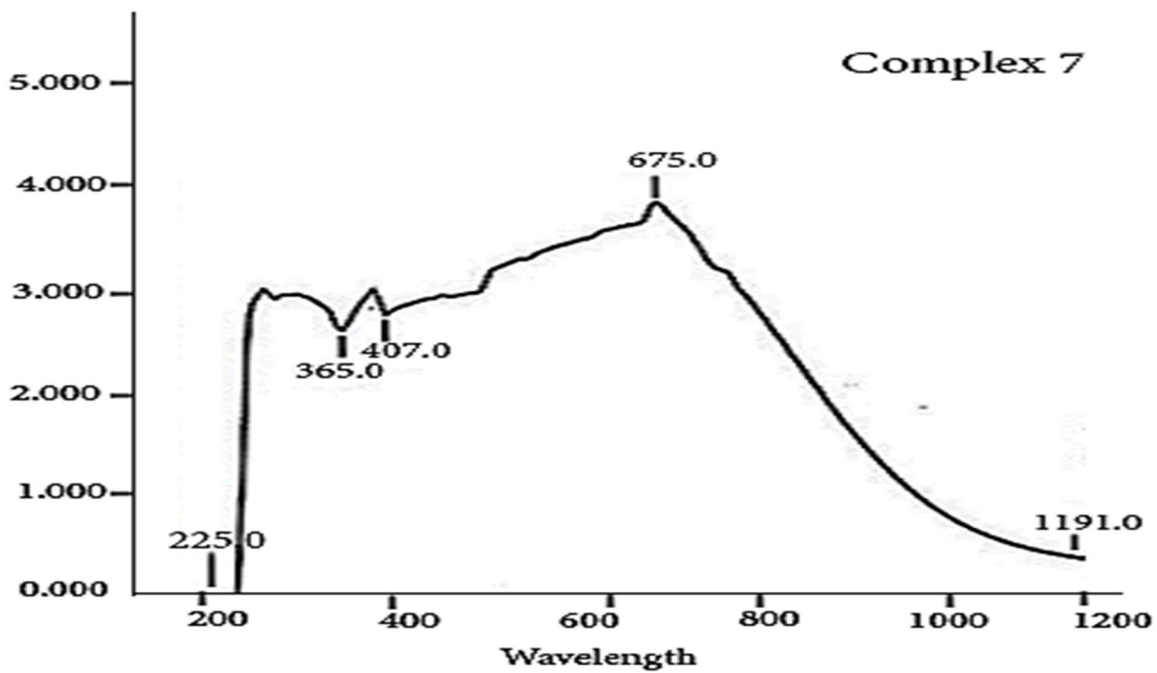
UV-Visible spectra of complex 4



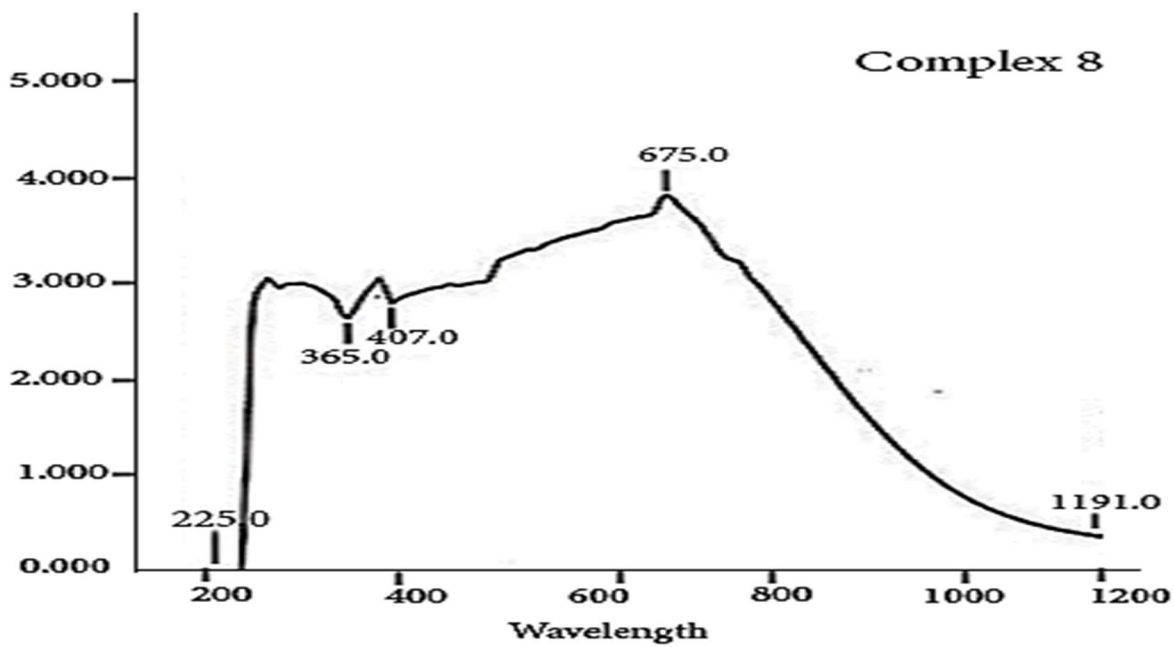
UV-Visible spectra of complex 5



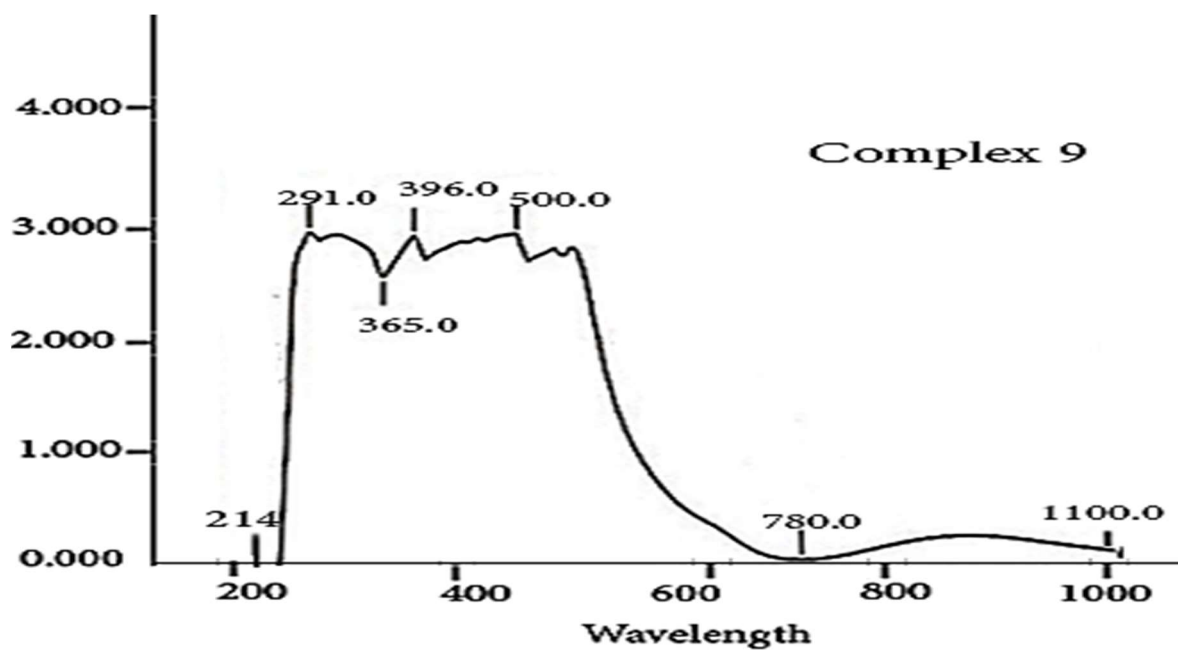
UV-Visible spectra of complex 6



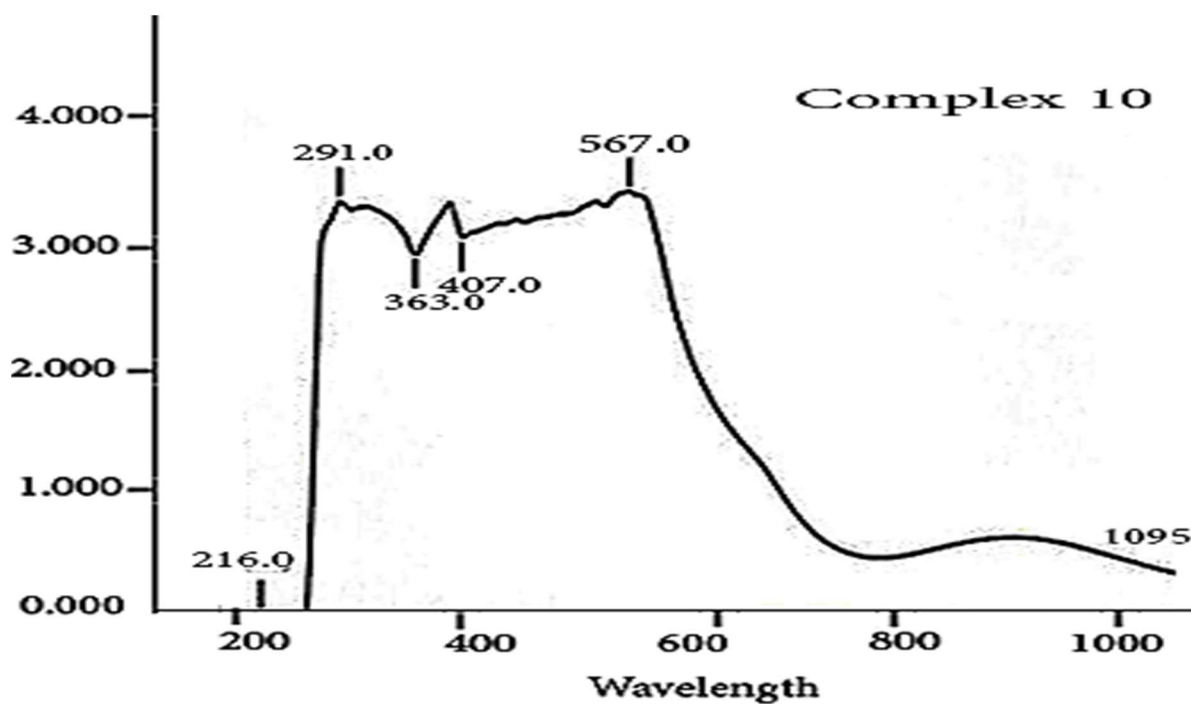
UV-Visible spectra of complex 7



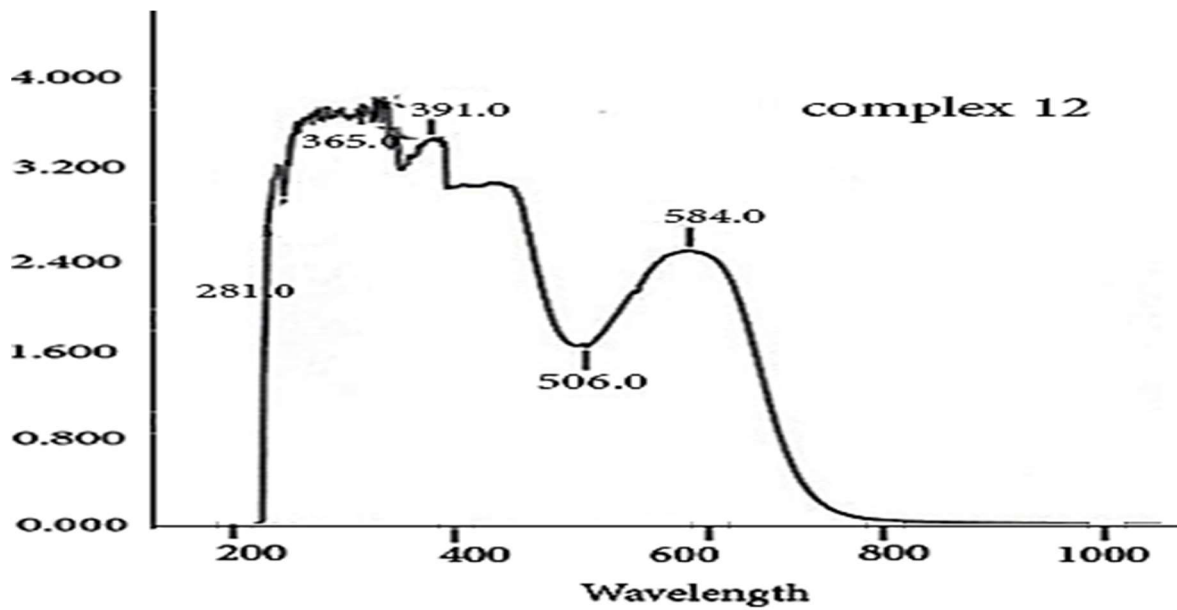
UV-Visible spectra of complex 8



UV-Visible spectra of complex 9



UV-Visible spectra of complex 10



UV-Visible spectra of complex 12