Electronic Supplementary Material (ESI) for RSC Advances.

Fig. 1S

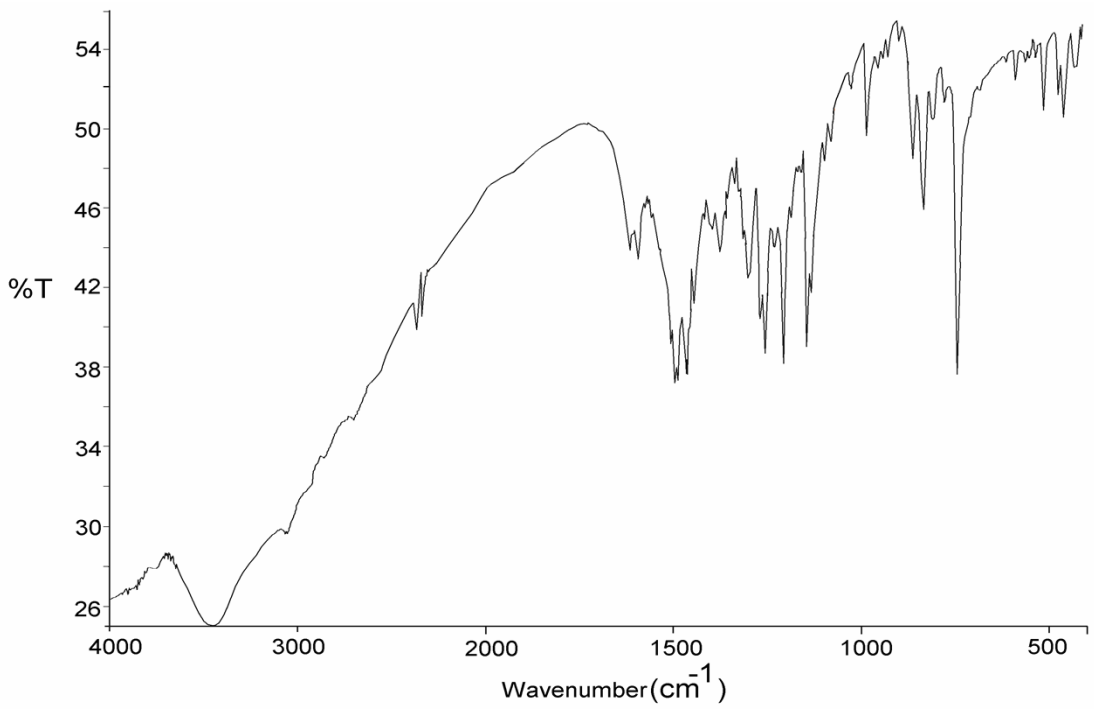

Fig. 1S: FTIR spectrum for $Cu^{(II)}(HPAN)_2$

Fig. 2S

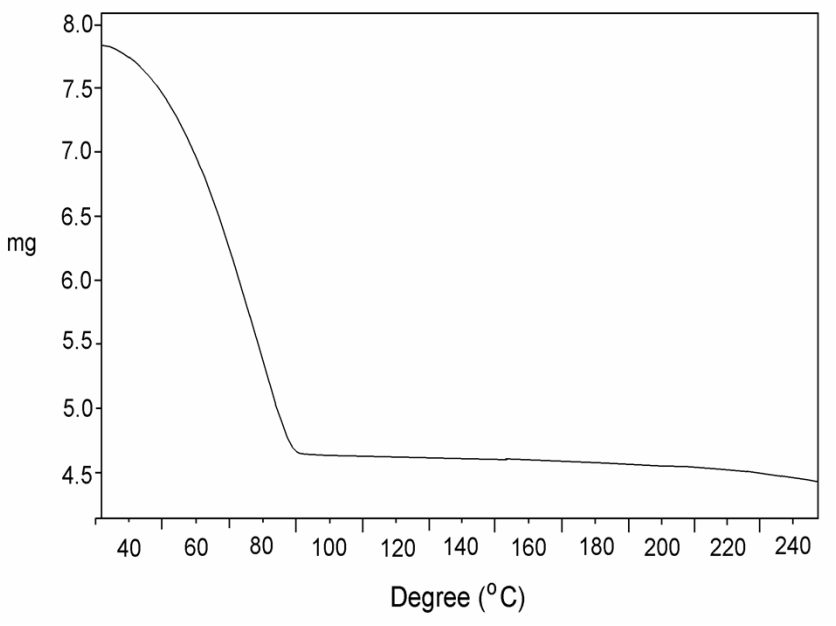

Fig. 2S: TGA curve of $Cu^{(II)}(HPAN)_2$

Fig. 3S:

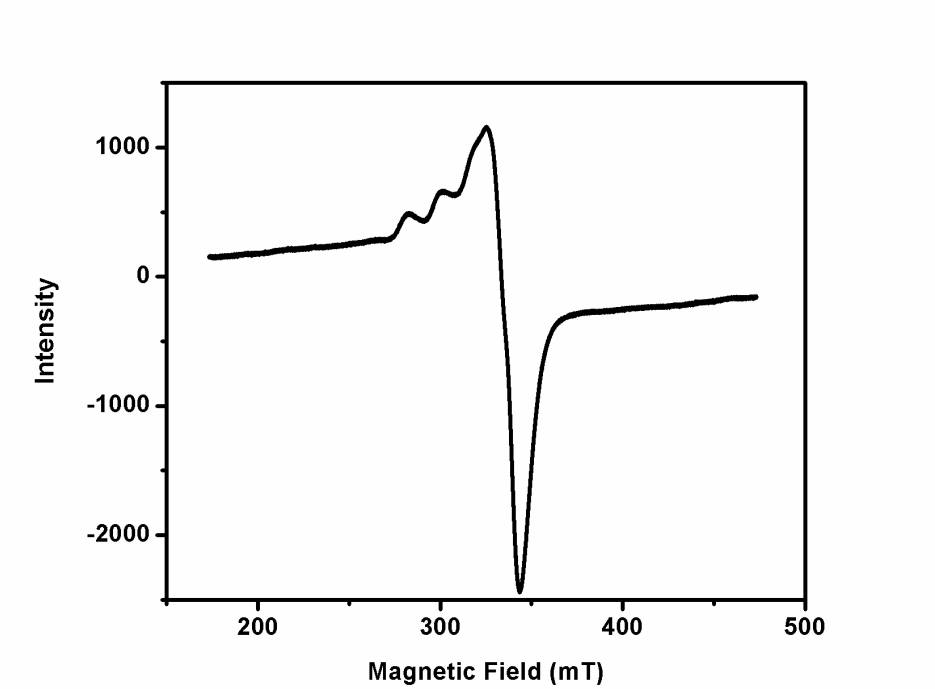

Fig. 3S: EPR spectrum of $[Cu^{II}(HPAN)_2]$ recorded at 298 K

Fig. 4S

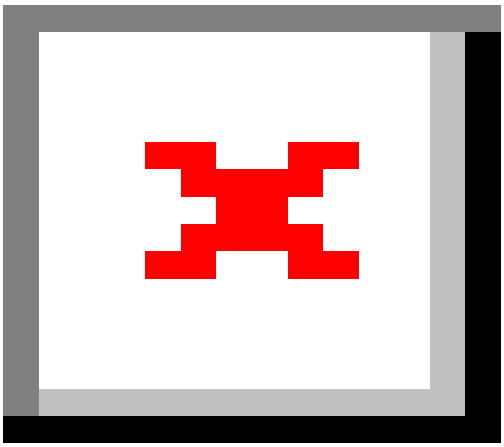

Fig. 4S: Mass spectrum of $Cu^{(II)}(HPAN)_2$

Fig. 5S

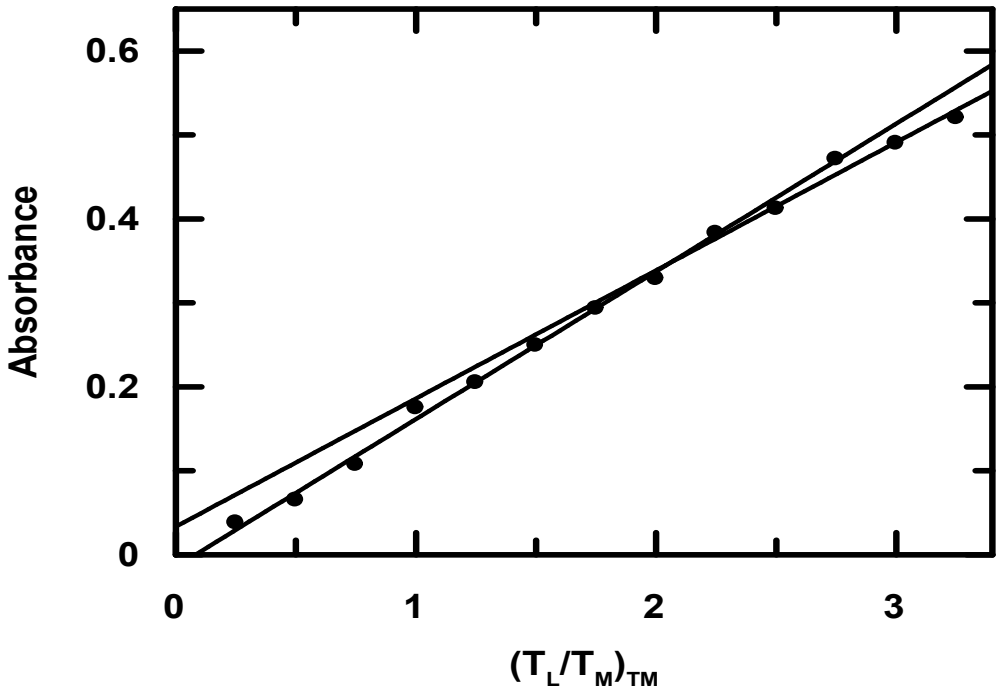

Fig. 5S: A typical plot for the determination of stoichiometry in solution by mole ratio method, following change in absorbance at 520 nm for Cu(II) and HPAN; [$NaNO_3$] = 0.05M, Temp = 25^oC.

Fig. 6S:

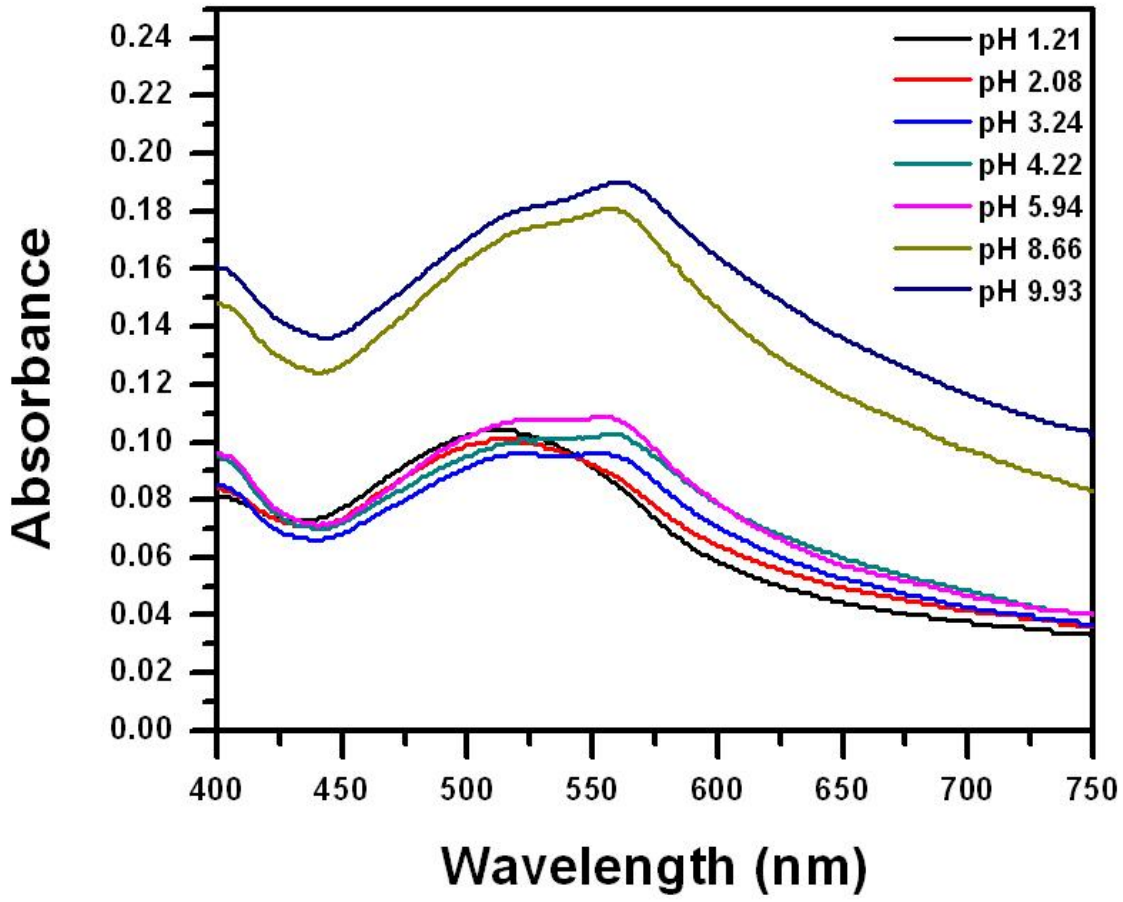

Fig. 6S: Absorption spectra for HPAN in the presence of Cu(II) in aqueous solution at different pH (1) 3.81,(2) 5.65, (3) 7.71, (4) 9.50,(5)11.66 [HPAN] = 12μM, $[Cu^{+2}]$ = 6μM, $[NaNO_3]$ = 0.05 M, Temperature = 298 K.

Fig. 7S

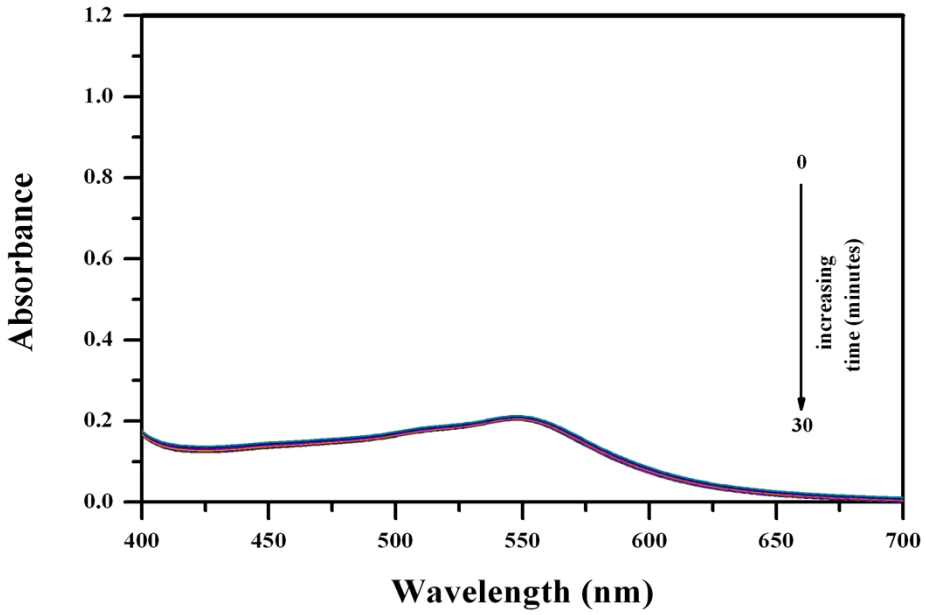

Fig. 7S: Plot of absorbance of $[Co^{(II)}\text{-}(HPAN)_2]$ in the presence of NADPH and cytochrome c reductase in phosphate buffer medium (pH ~ 7.4) containing 0.12 M NaCl for time t = 0 to t = 30 minutes at 310 K in an enzymatic assay that monitors gradual reduction of the azo bond. The spectra indicate gradual loss of absorbance at 543 nm. [NADPH] = 0.00032gm/ml; Cytochrome c reductase = 8 U/Lit. $[Co^{(II)}\text{-}(HPAN)_2]$ = 100 μM.