Electronic Supplementary Material (ESI) for RSC Advances.
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Fig. 1S

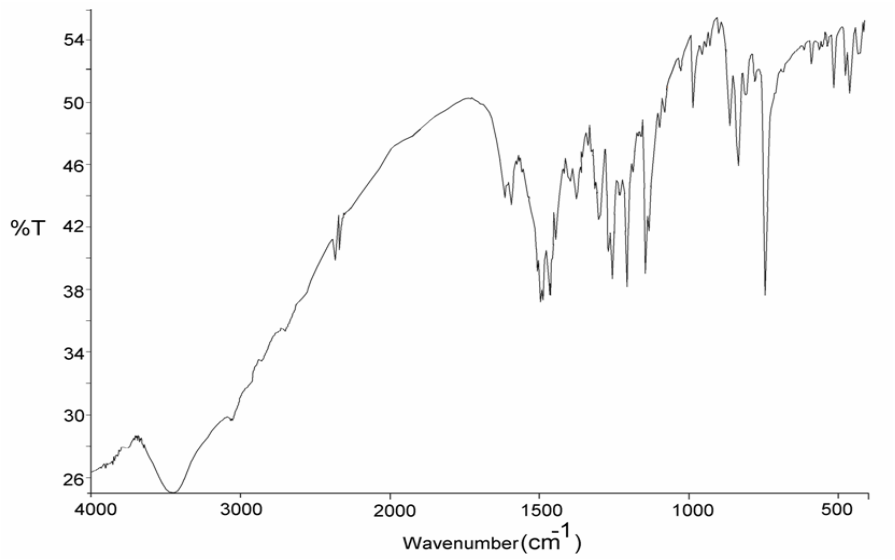

Fig. 1S: FTIR spectrum for $Cu^{II}(HPAN)_2$

Fig. 2S

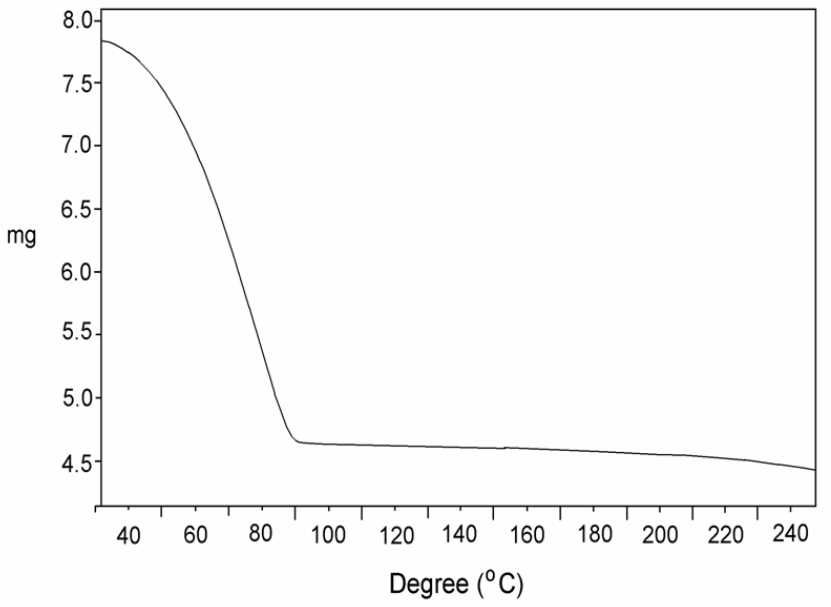

Fig. 2S: TGA curve of $Cu^{II}(HPAN)_2$

Fig. 3S

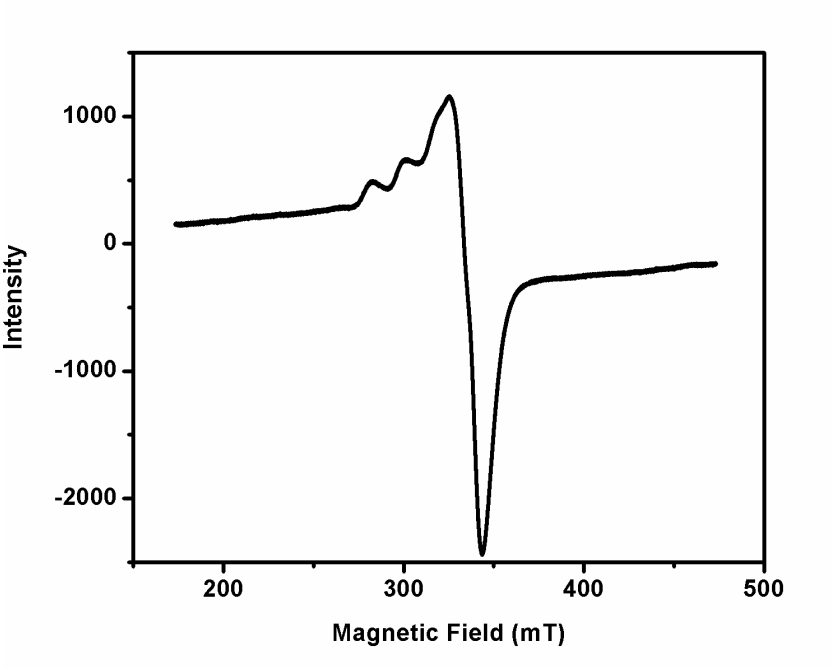

Fig. 3S: EPR spectrum of $Cu^{II}(HPAN)_2$ recorded at 298 K

Fig. 4S

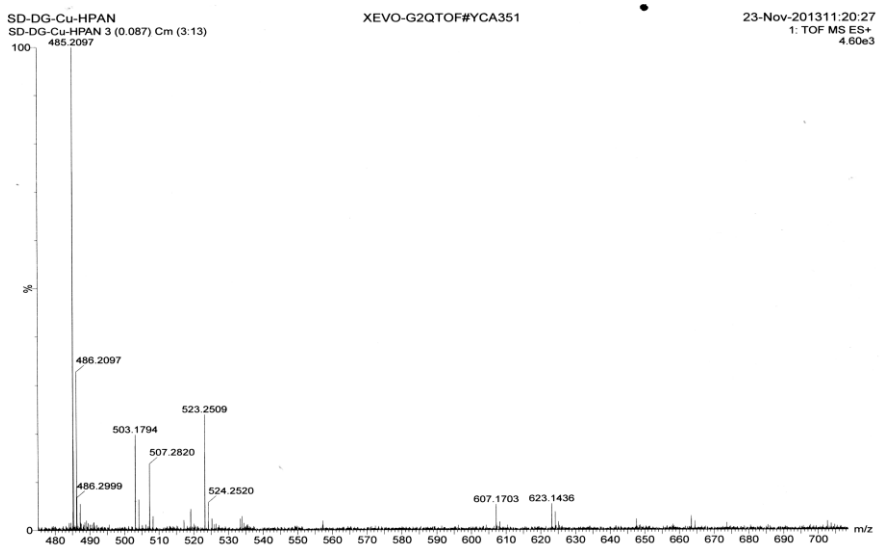

Fig. 4S: Mass spectrum of $Cu^{II}(HPAN)_2$

Fig. 5S

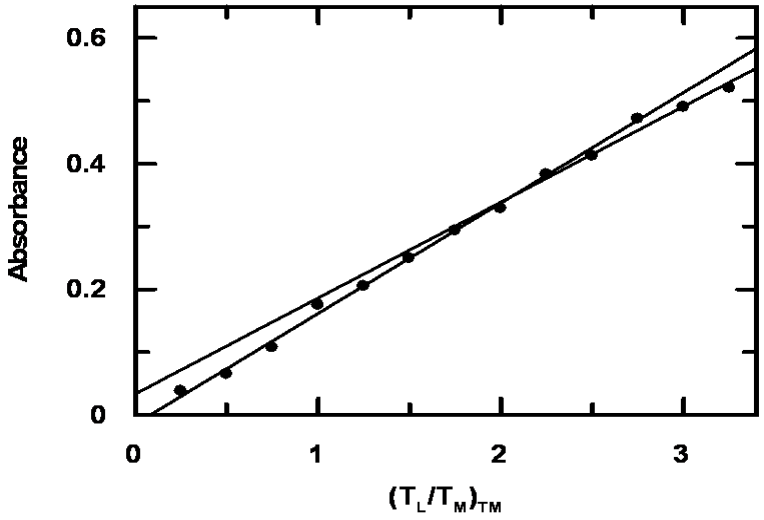

Fig. 5S: A typical plot for the determination of stoichiometry in solution by mole ratio method, following change in absorbance at 520 nm for Cu^{II} and HPAN; [$NaNO_3$] = 0.05 M, Temp = 25°C.

Fig. 6S

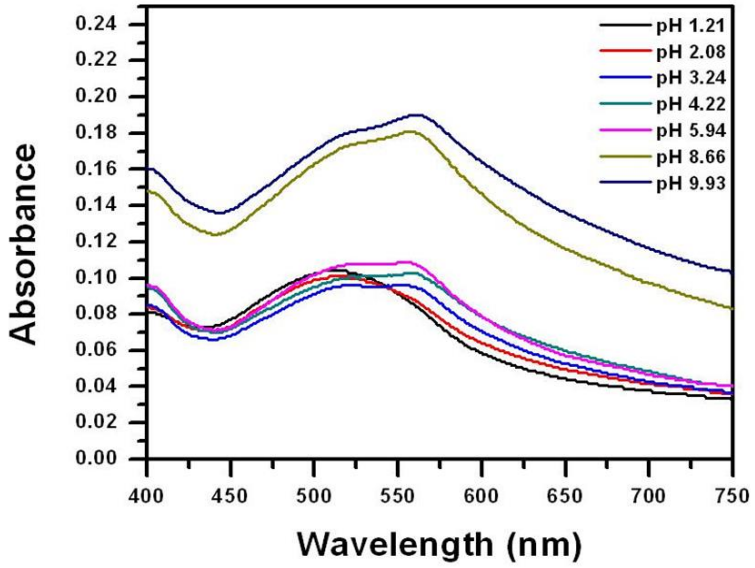

Fig. 6S: Absorption spectra for HPAN in the presence of Cu^{II} in aqueous solution at different pH (1) 3.81 (2) 5.65 (3) 7.71 (4) 9.50 (5) 11.66 [HPAN] = 12µM, [Cu^{II}] = 6µM, [$NaNO_3$] = 0.05 M, Temperature = 298 K

Fig. 7S

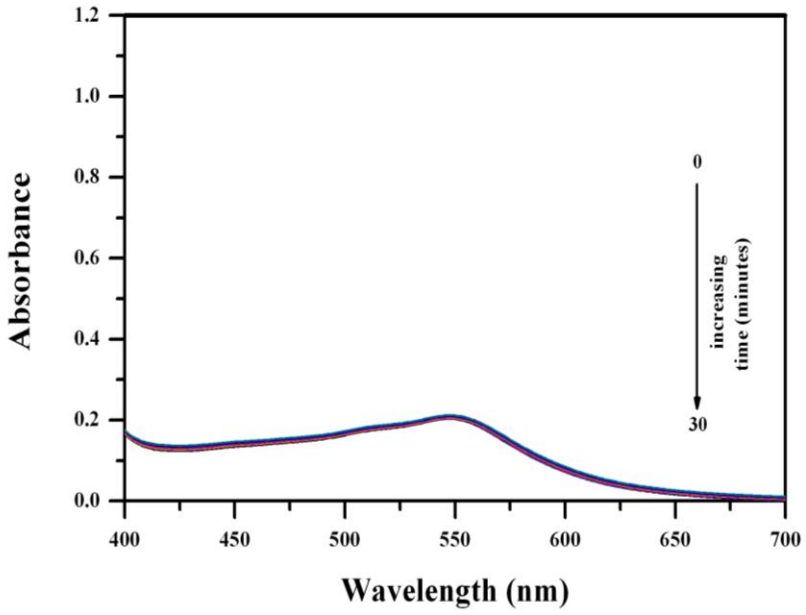

Fig. 7S: Plot of absorbance of [Co^{II}-$(HPAN)_2$] in the presence of NADPH and cytochrome c reductase in phosphate buffer medium (pH ~ 7.4) containing 0.12 M NaCl for time t = 0 to t = 30 minutes at 310 K in an enzymatic assay that monitors gradual reduction of the azo bond. The spectra indicate gradual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