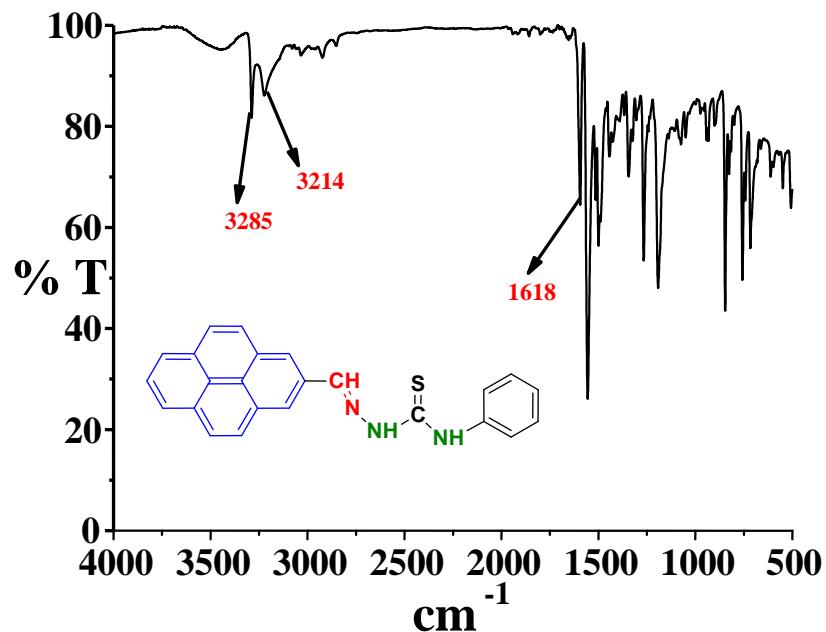
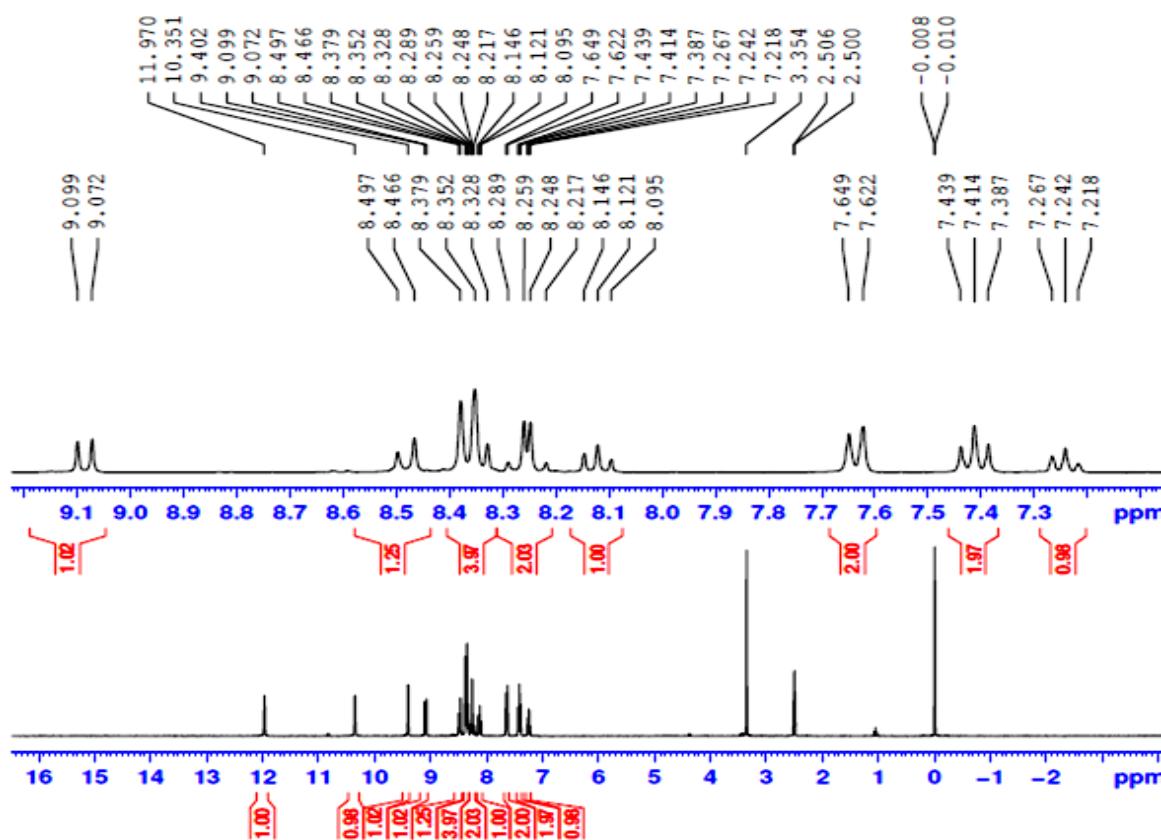


## Supporting Information

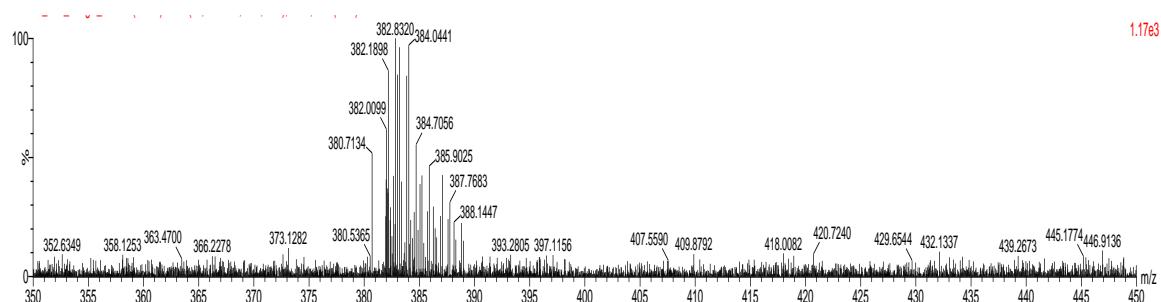
Figure S1. FTIR Spectrum of R1



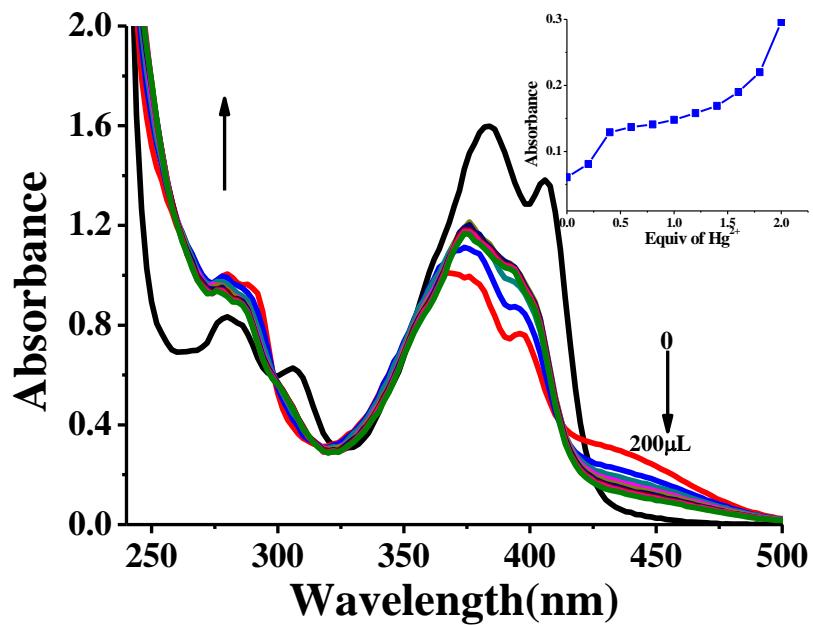
**Figure S2.**  $^1\text{H}$  NMR Spectrum of R1



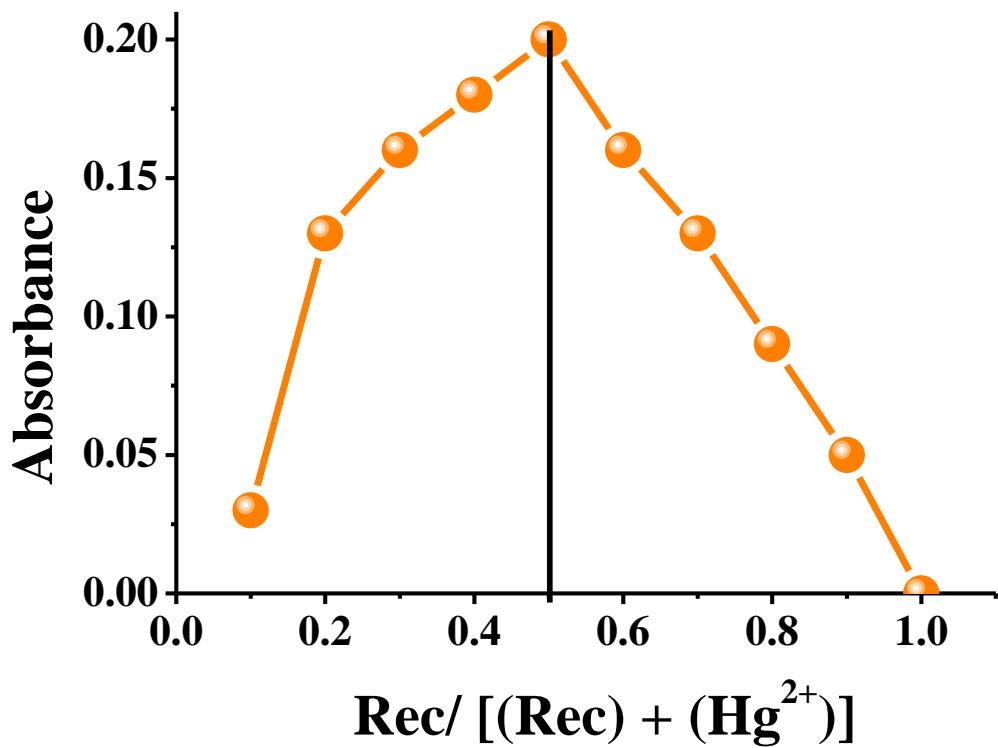
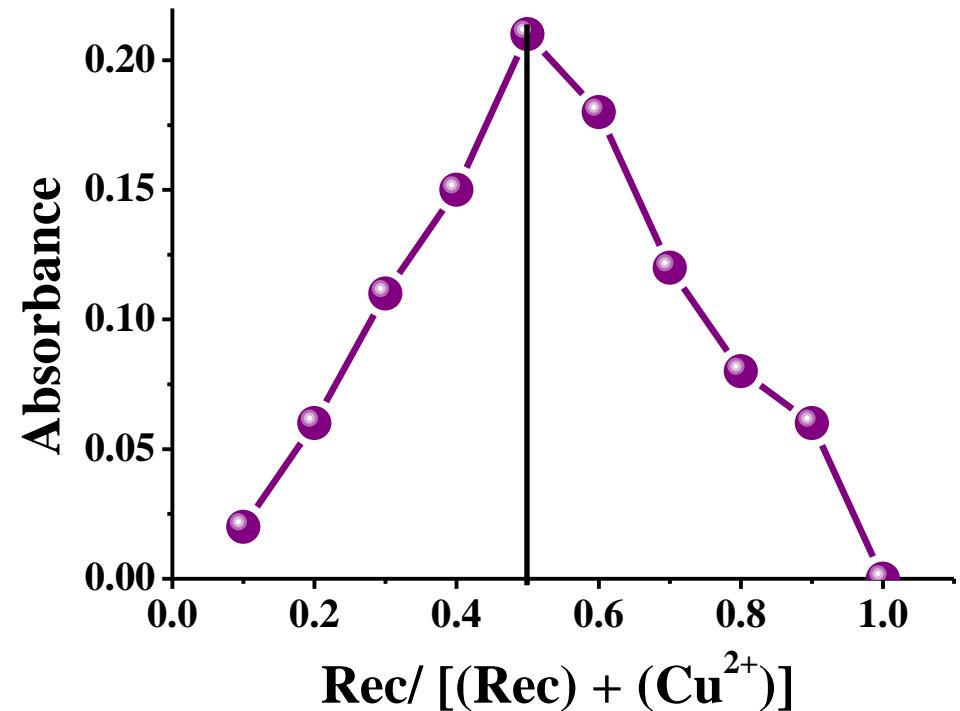
**Figure S3. ESI Mass Spectrum of R1**



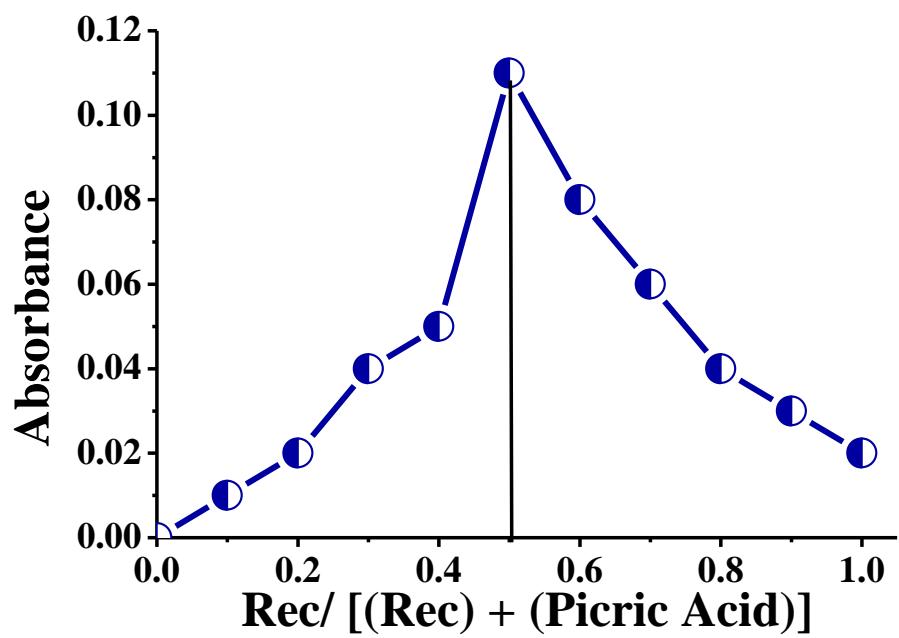
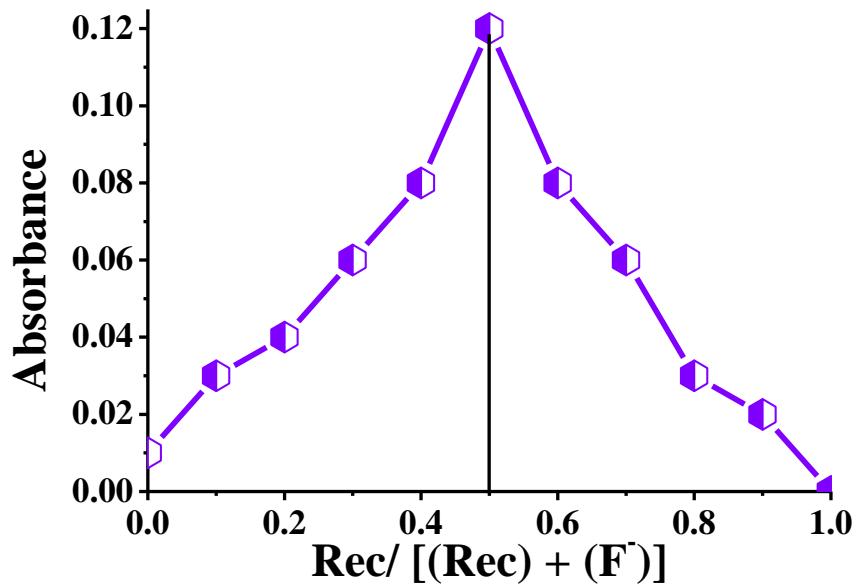
**Figure S4.** UV-vis spectrum of R1 ( $5 \times 10^{-5}$  M, in CH<sub>3</sub>CN) upon titration with Hg<sup>2+</sup> ( $1.5 \times 10^{-3}$  M, in CH<sub>3</sub>CN) (Inset: Changes of absorbance upon addition of Hg<sup>2+</sup> ion at 370 nm).



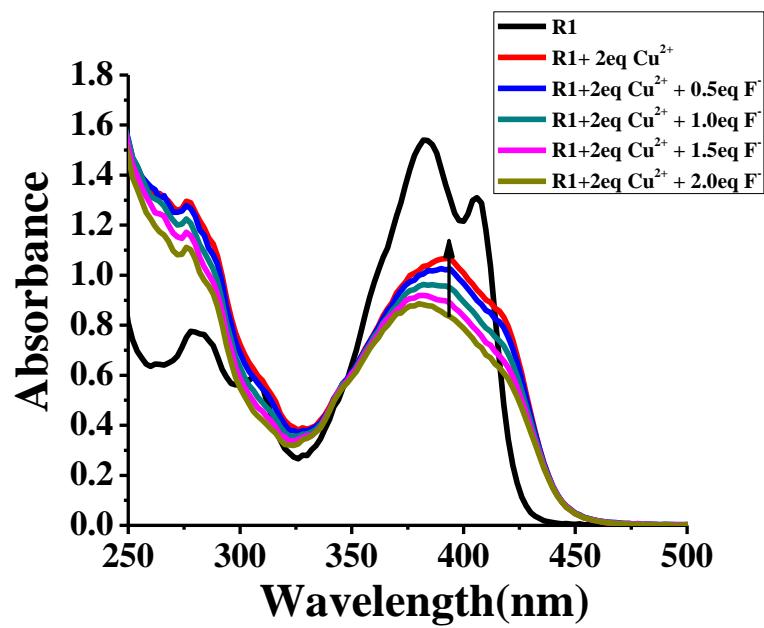
**Figure S5.** Job's plot of R1 with  $\text{Cu}^{2+}$  and  $\text{Hg}^{2+}$  ions



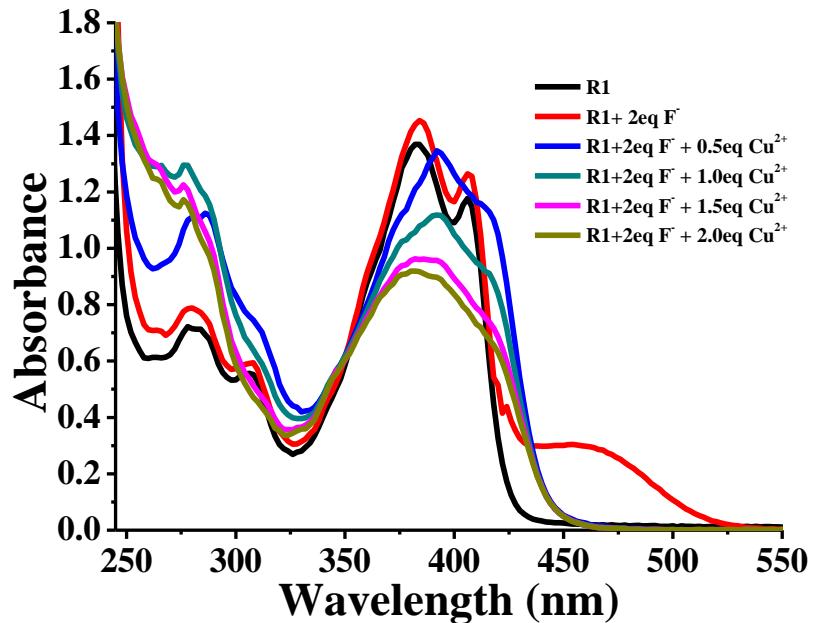
**Figure S6.** Job's plot of R1 with F<sup>-</sup> ions and picric acid



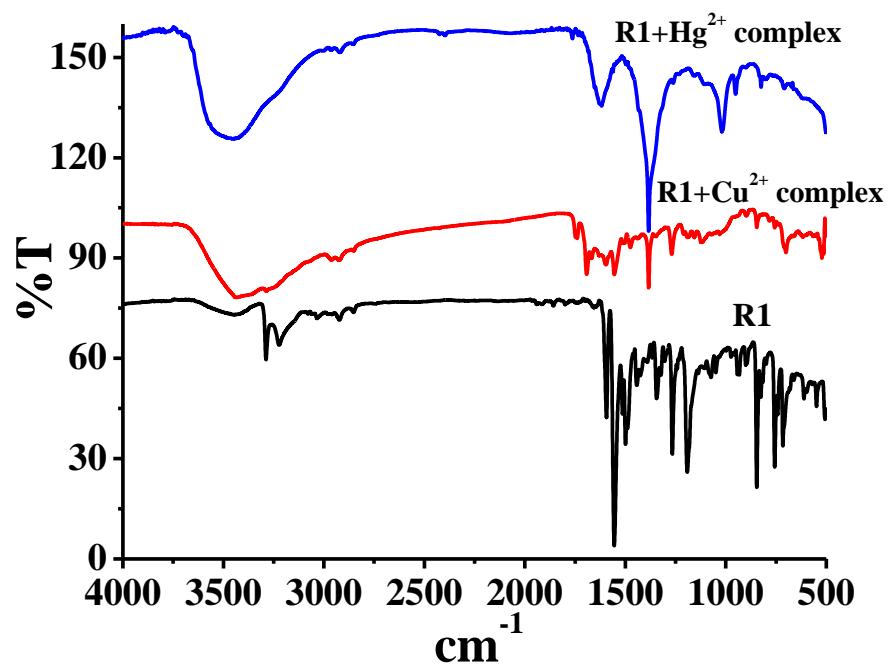
**Figure S7.** UV-vis spectra of **R1** recorded in  $\text{CH}_3\text{CN}$  ( $5 \times 10^{-5}$  M) on addition of  $\text{Cu}^{2+}$  (2 equiv.) and then titration with  $\text{F}^-$  (0-200 $\mu\text{L}$ )



**Figure S8.** UV-vis spectra of R1 recorded in  $\text{CH}_3\text{CN}$  ( $5 \times 10^{-5}$  M) on addition of  $\text{F}^-$  (2 equiv.) and then titration with  $\text{Cu}^{2+}$  (0-200 $\mu\text{L}$ )



**Figure S9.** FTIR Spectrum of R1 and R1+complexes



**Figure S10.**  $^1\text{H}$  NMR Spectrum of R1 and R1+complexes

