Supporting Information

Figure S1. FTIR Spectrum of R1
Figure S2. $^1$H NMR Spectrum of R1
Figure S3. ESI Mass Spectrum of R1
**Figure S4.** UV-vis spectrum of R1 (5 x 10^{-5} M, in CH_{3}CN) upon titration with Hg^{2+} (1.5 x 10^{-3} M, in CH_{3}CN) (Inset: Changes of absorbance upon addition of Hg^{2+} ion at 370 nm).
Figure S5. Job’s plot of R1 with Cu$^{2+}$ and Hg$^{2+}$ ions
Figure S6. Job’s plot of R1 with F⁻ ions and picric acid
Figure S7. UV-vis spectra of R1 recorded in CH$_3$CN (5 x 10$^{-5}$ M) on addition of Cu$^{2+}$ (2 equiv.) and then titration with F$^{-}$ (0-200µL)
Figure S8. UV-vis spectra of R1 recorded in CH$_3$CN (5 x 10$^{-5}$ M) on addition of F$^-$ (2 equiv.) and then titration with Cu$^{2+}$ (0-200µL)
Figure S9. FTIR Spectrum of R1 and R1+complexes
Figure S10. $^1$H NMR Spectrum of R1 and R1+complexes