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Pyrene pyridine- conjugate as Ag selective Fluorescent chemosensor

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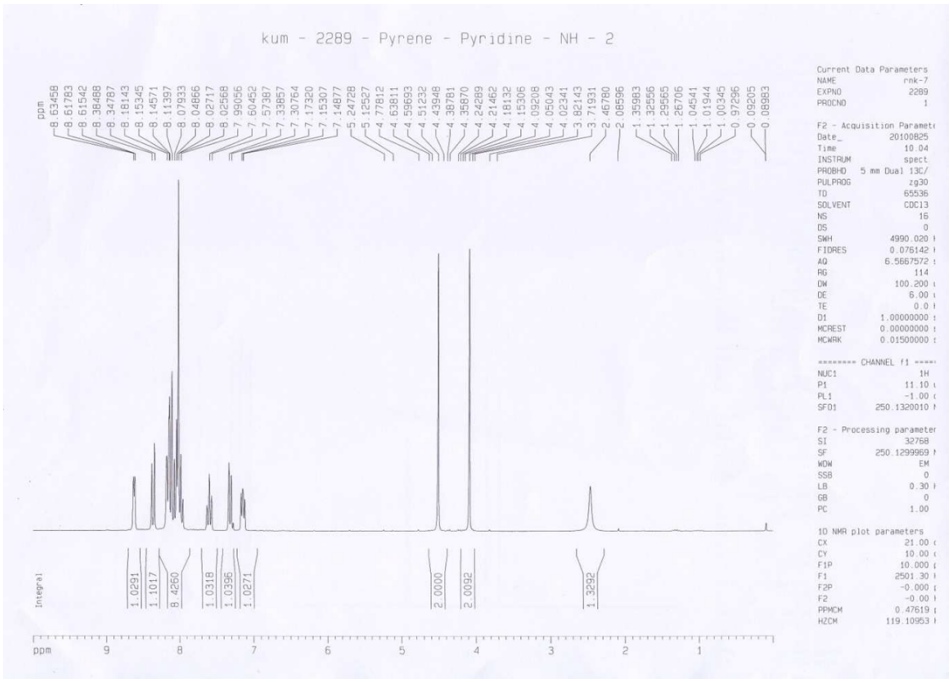


Fig. S1. ^{1}H NMR spectra of compound **2**

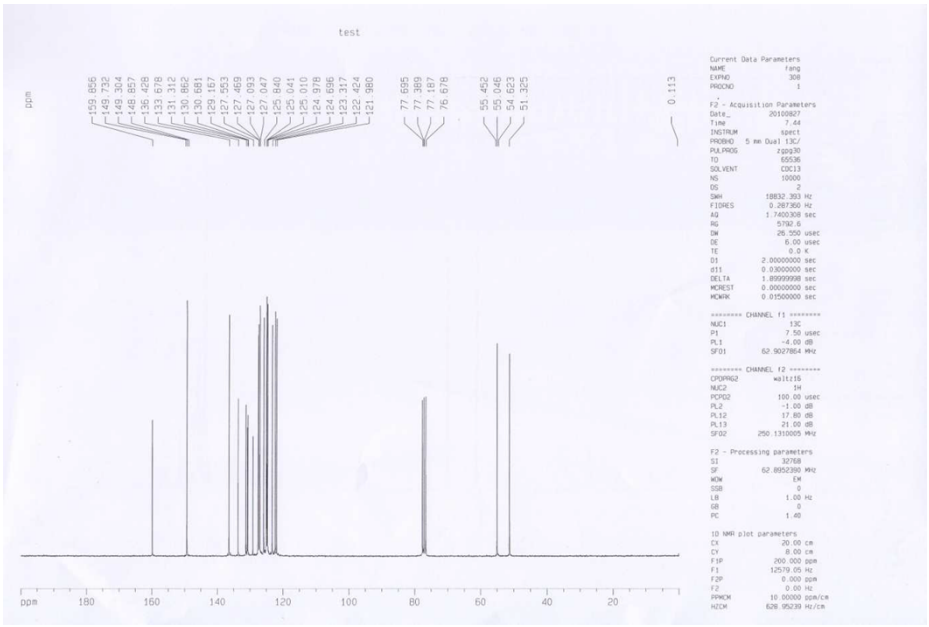


Fig. S2. ^{13}C NMR spectra of compound **2**

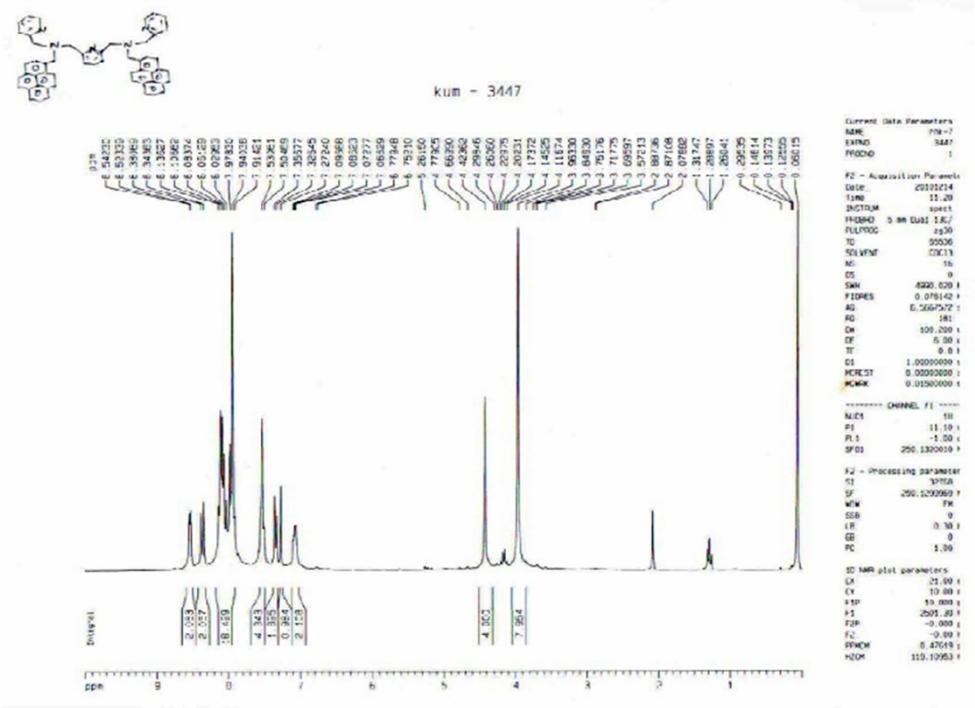


Fig. S3. ^{1}H NMR Spectrum of **PPC**

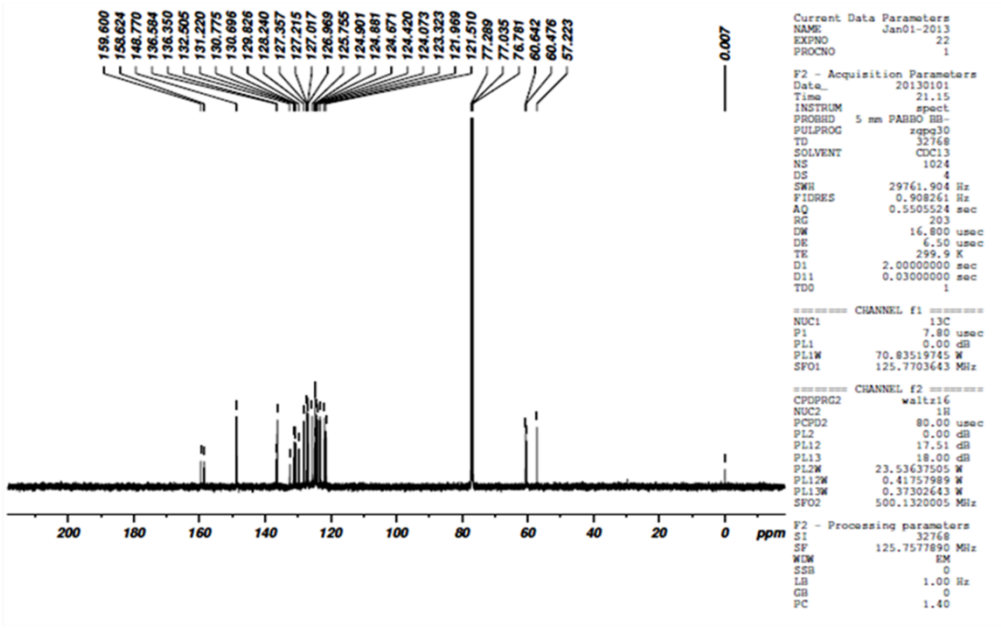


Fig. S4. ^{13}C NMR Spectrum of **PPC**

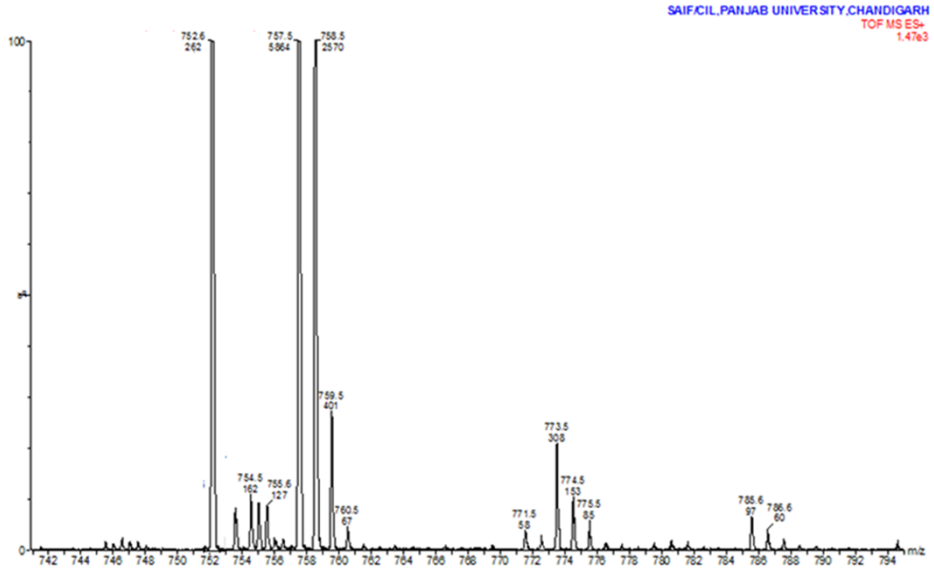


Fig. S5. Mass Spectrum of **PPC**

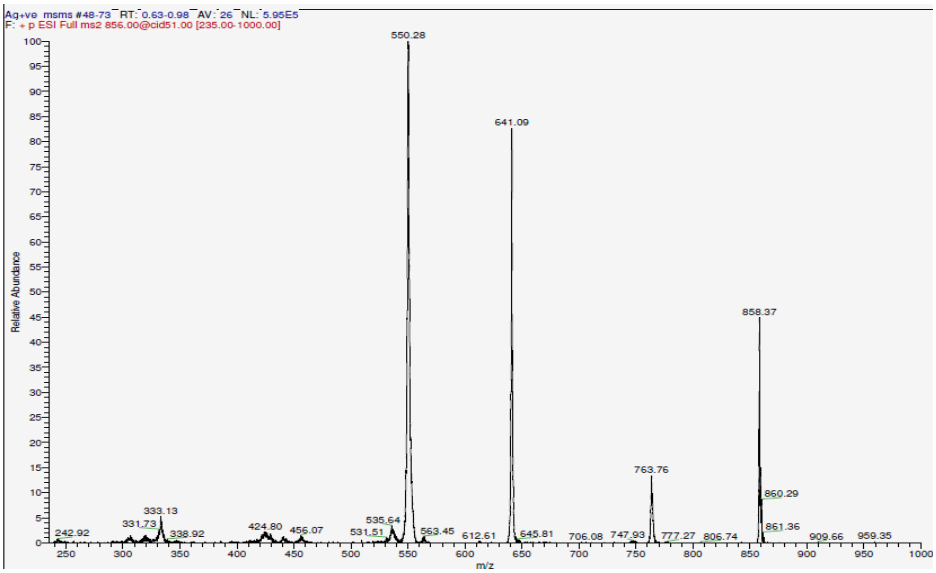


Fig. S6. Mass Spectrum of **PPC** + Ag^{+}

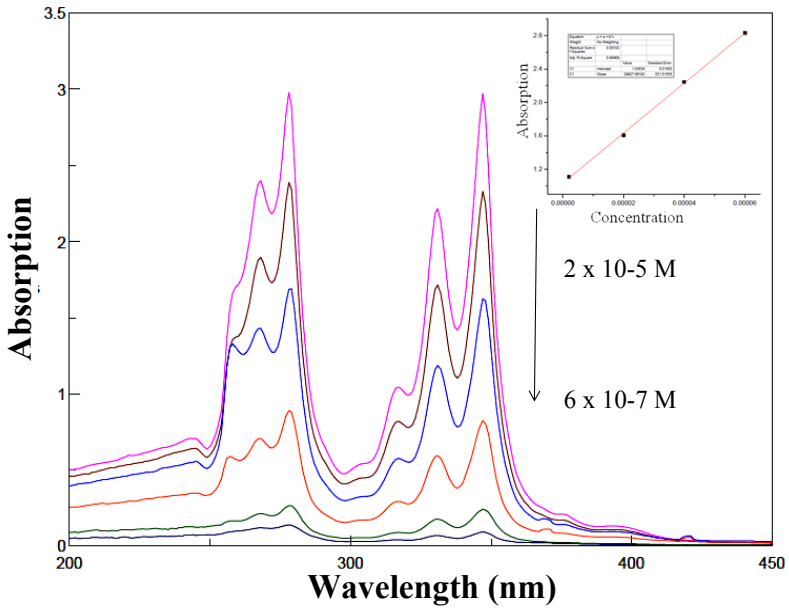


Fig. S7. UV-visible absorption spectrum of **PPC** in different concentrations (DMSO /H_2O, 1;1 v/v, HEPES = 50 mM, pH=7.4)

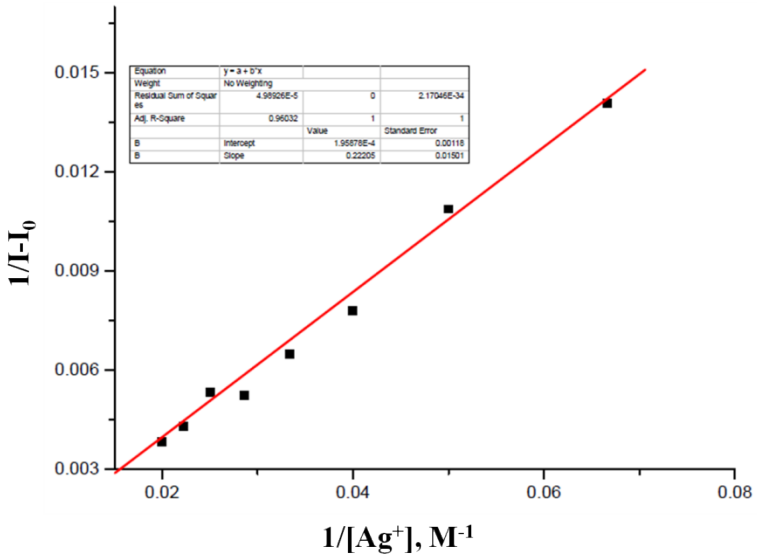
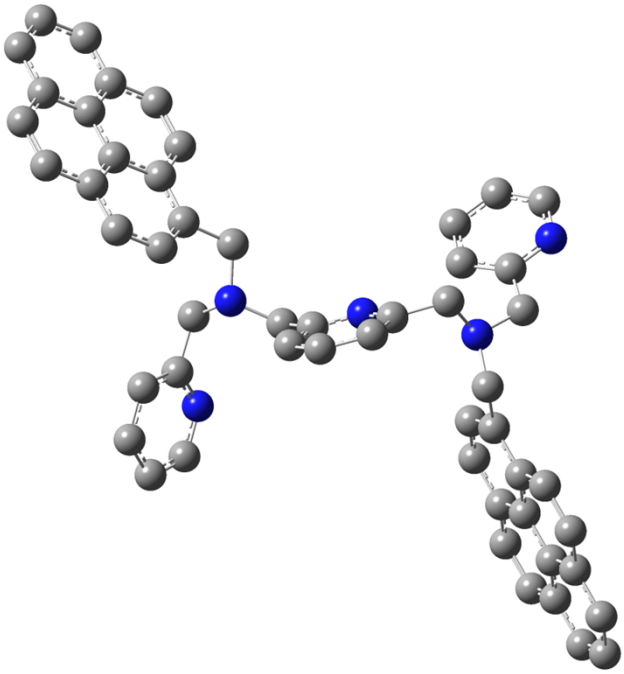


Fig. S8. The detection limit of **PPC** with Ag^{+}

LOD= 0.29 X 10^{-8} M^{-1}

LOQ = 0.88 X 10^{-8} M^{-1}



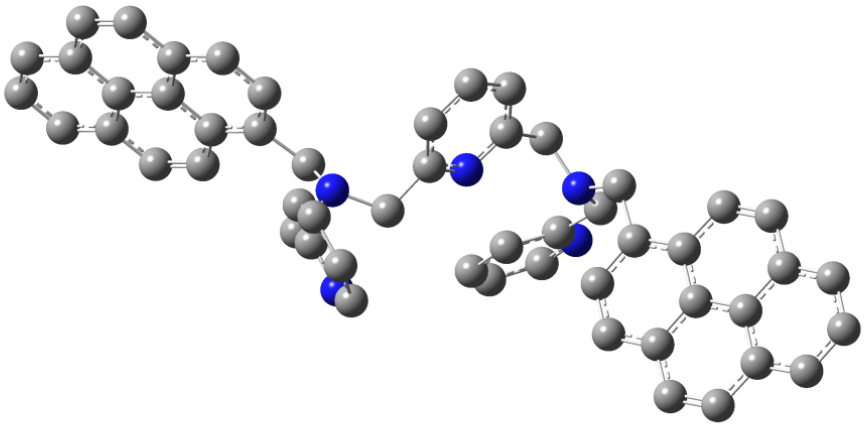
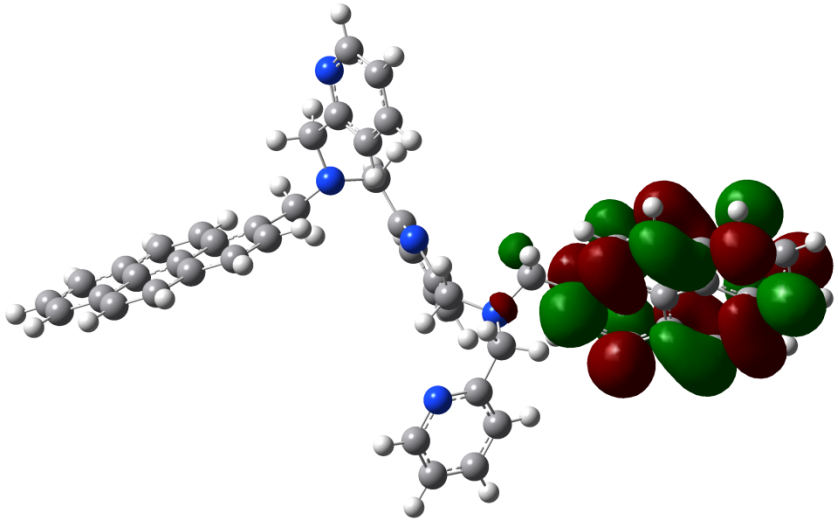


Fig. S9. Geometry of the **PPC** optimized using Gaussian 03 at B3LYP /6-31G level of theory



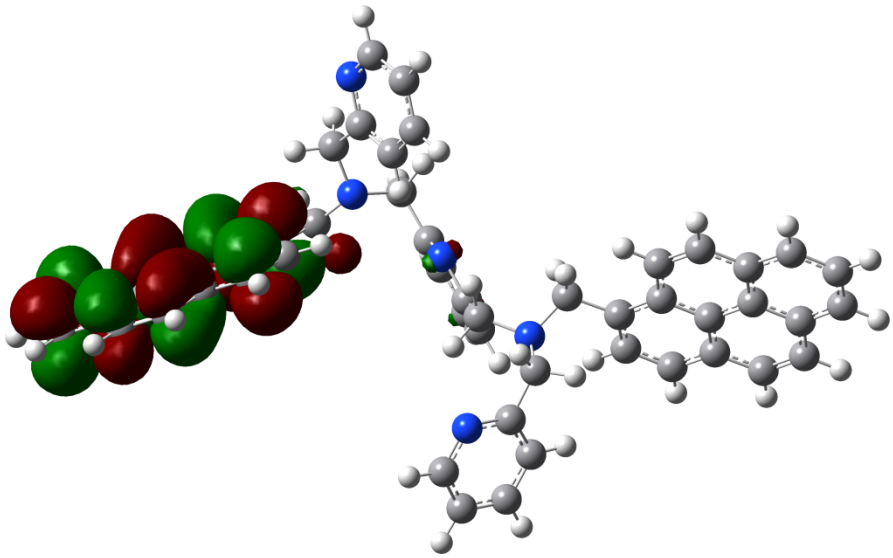


Fig. S10. Highest occupied molecular orbital (top) and Lowest Unoccupied Molecular Orbital (bottom) of **PPC** calculated using Gaussian 03 software at B3LYP /6-31G level of theory

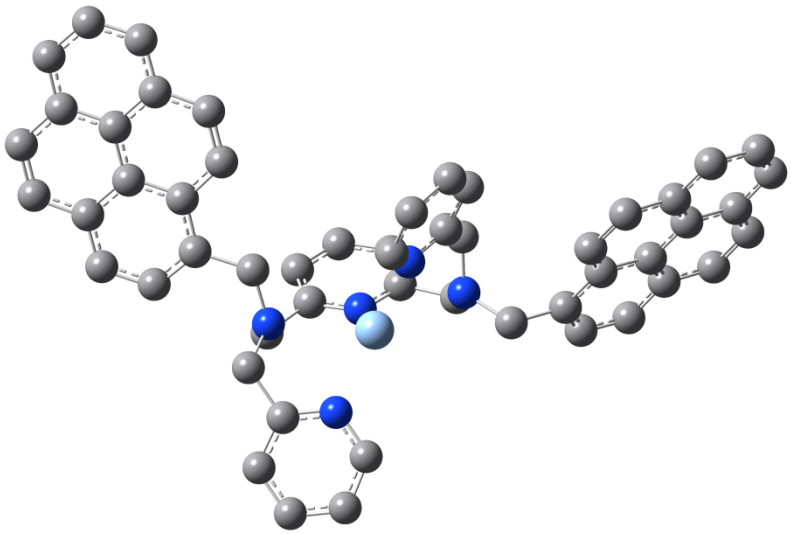
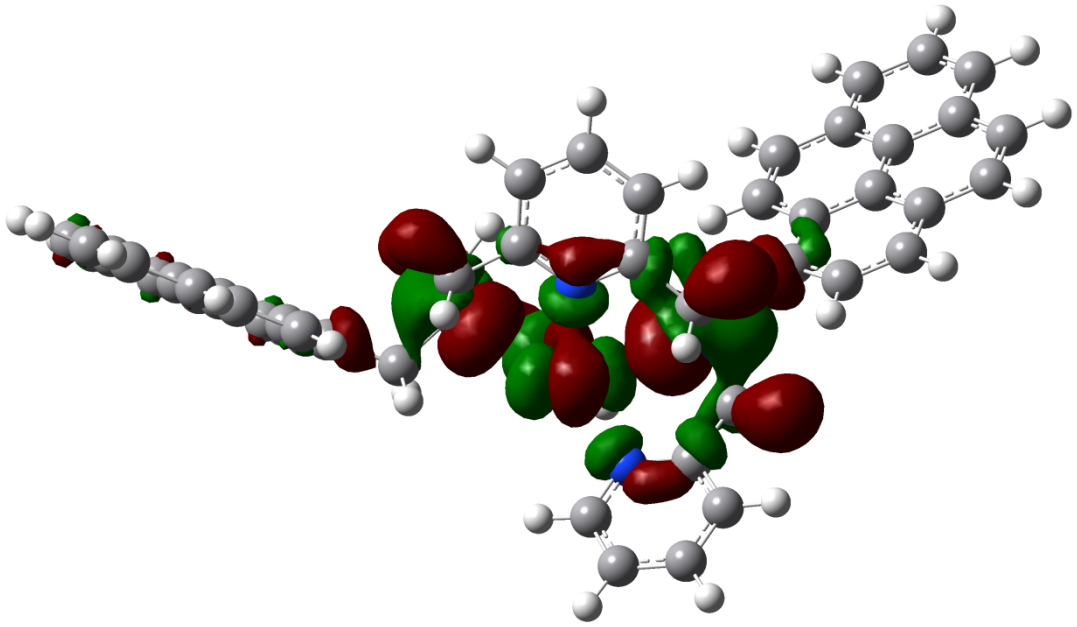


Fig. S11. Geometry of the **PPC+Ag**$^{+}$ optimized using Gaussian 03 at B3LYP /GenECP level of theory



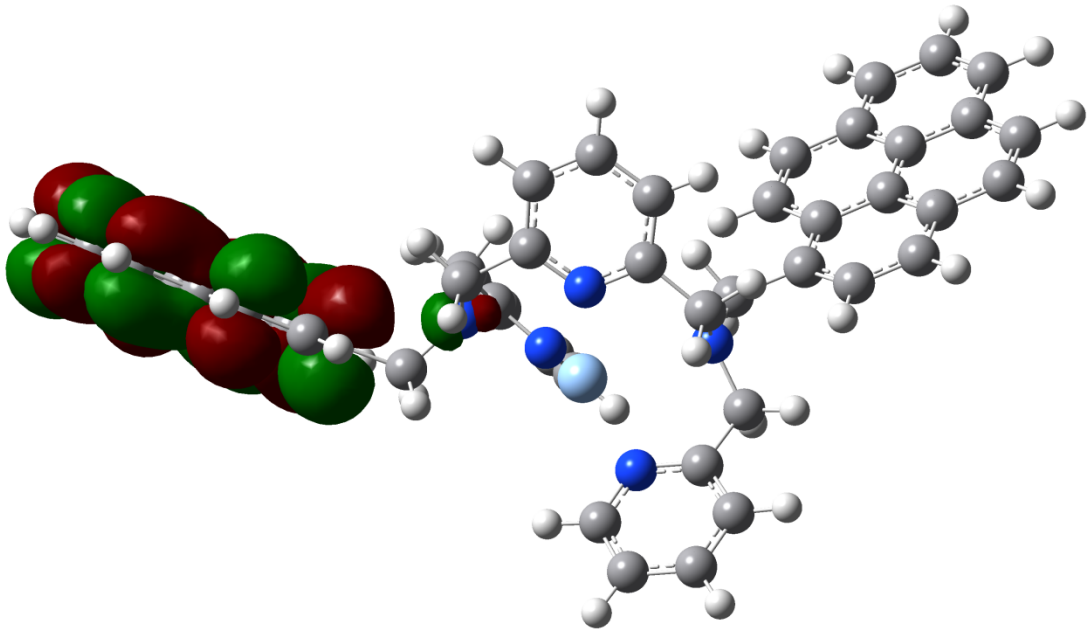


Fig. S12. Highest Occupied Molecular Orbital (top) Lowest Unoccupied Molecular Orbital (bottom) of **PPC+Ag**$^{+}$ calculated using Gaussian 03 at B3LYP /GenECP level of theory

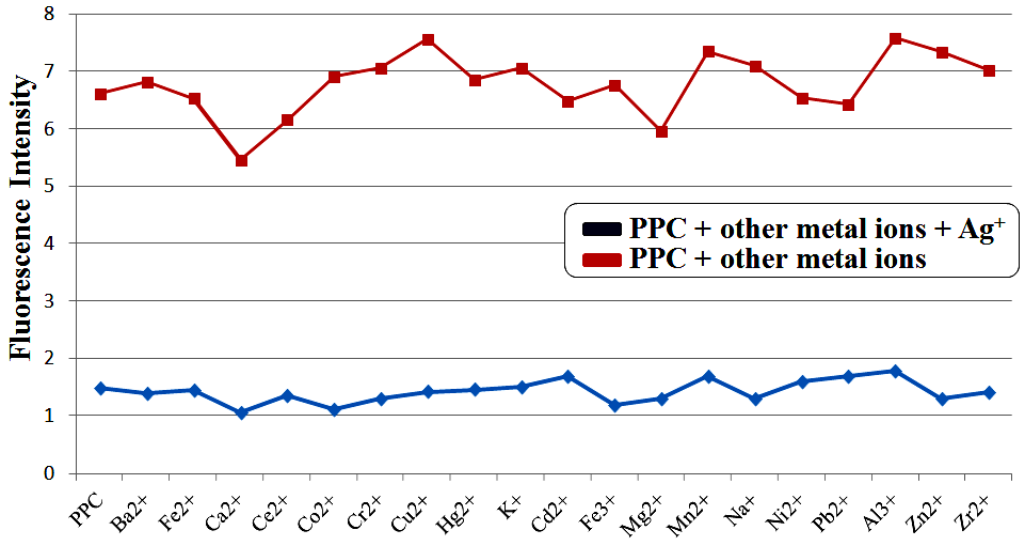


Fig. S13. Selectivity coefficient of **PPC** with Ag^{+} ion