

Electronic Supplementary Information (ESI)

Reaction-Based Conjugated Polymer Fluorescent Probe for Mercury(II): Good Sensing Performance with “Turn-on” Signal Output

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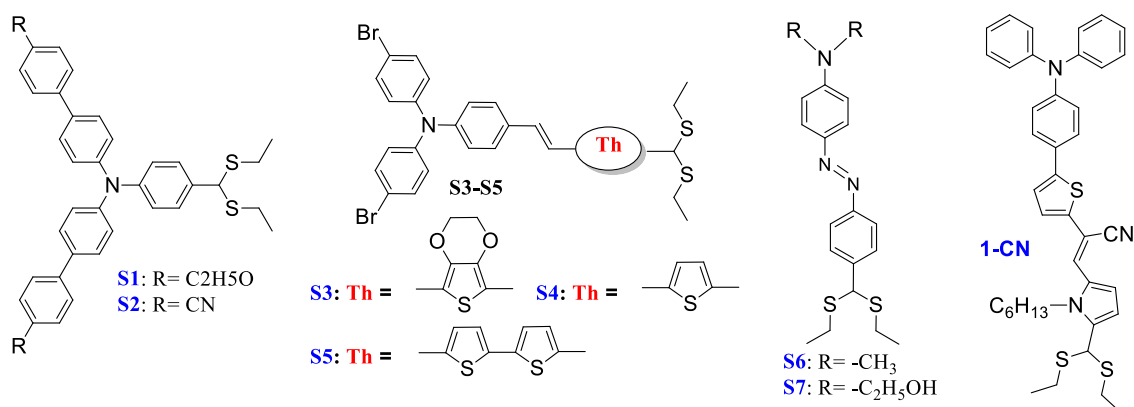


Chart S1. Different chemical Hg^{2+} sensors designed in our group.

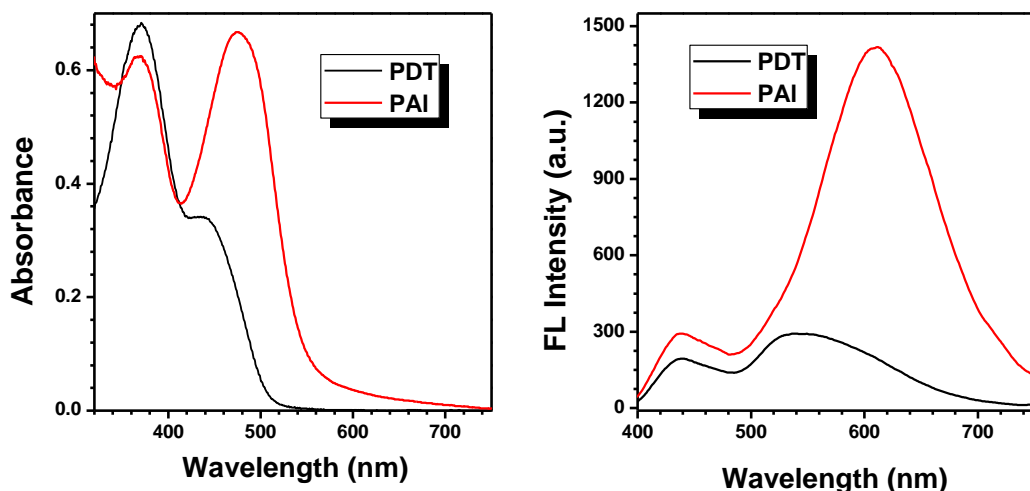


Figure S1. The UV-vis absorption (Left), fluorescent emission (Right) spectra of PAI and PDT in THF.

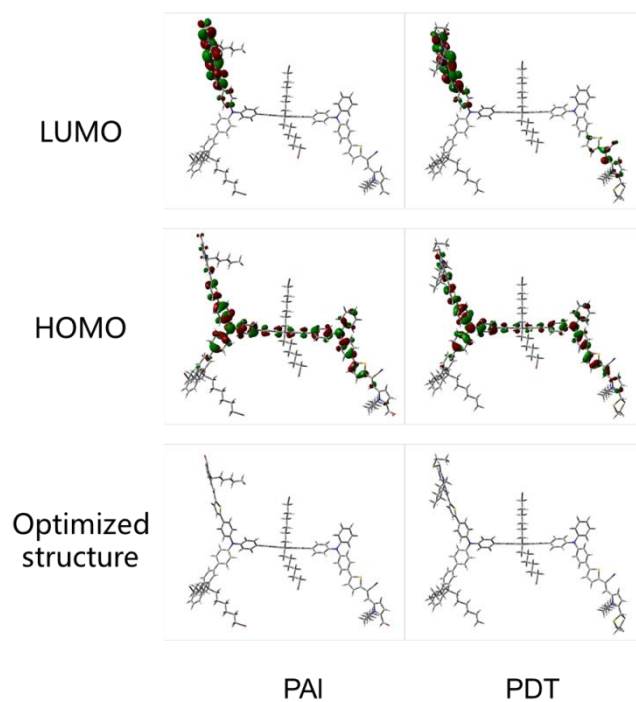


Figure S2. Frontier molecular orbitals optimized at the B3LYP/6-31G* level of theory and electronic cloud distribution in dimers of **PAI** and **PDT**.

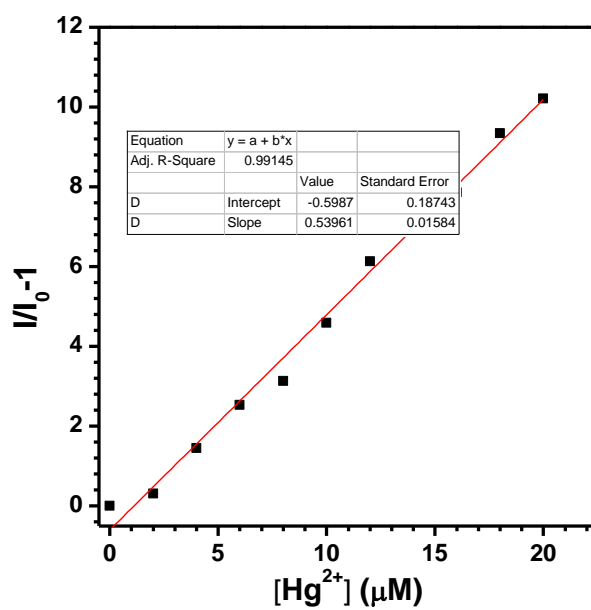


Figure S3. Fluorescence intensity of **PDT** in THF at 610 nm versus concentrations of Hg^{2+} .

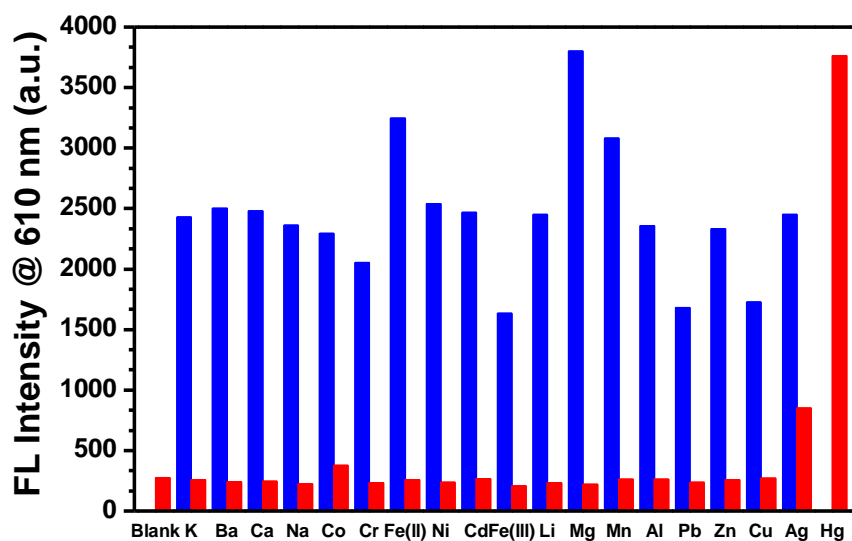


Figure S4. Fluorescence intensity at 610 nm of **PDT**(5 μ M) upon the addition of various metal ions (blue bar: **PDT** with other metals, red bar: **PDT** with Hg^{2+} (10 μ M) and other metals (50 μ M)).

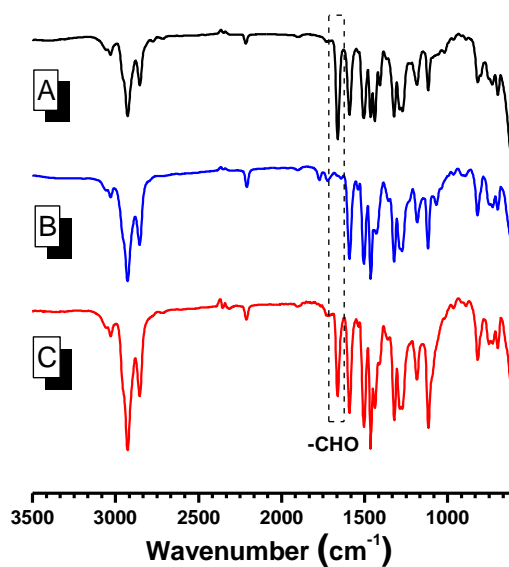


Figure S5. FTIR spectra of **A** (**PAI**), **B** (**PDT**), and **C** (**PDT** in presence of excess Hg^{2+}).

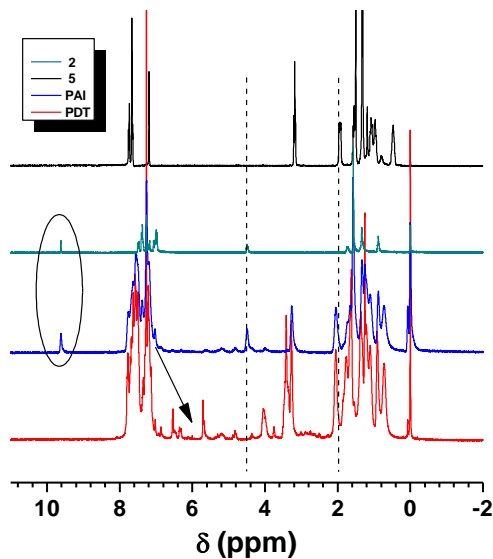


Figure S6. ^1H NMR spectra of **2**, **5**, PAI and PDT.

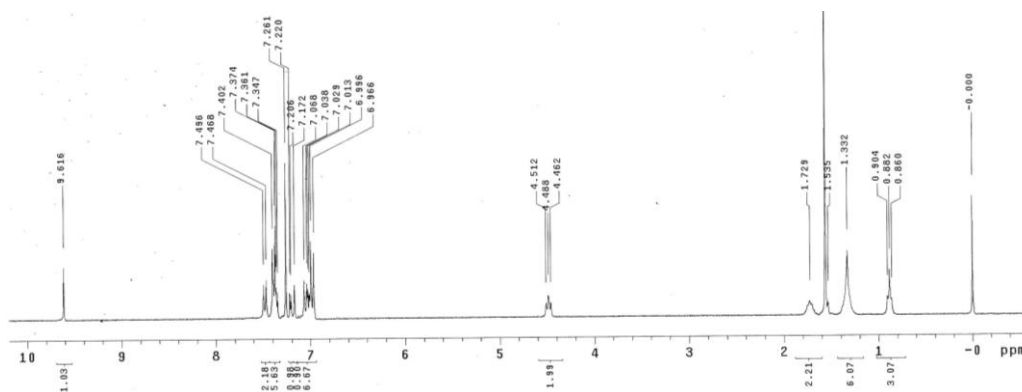


Figure S7. ^1H NMR spectrum of **2**

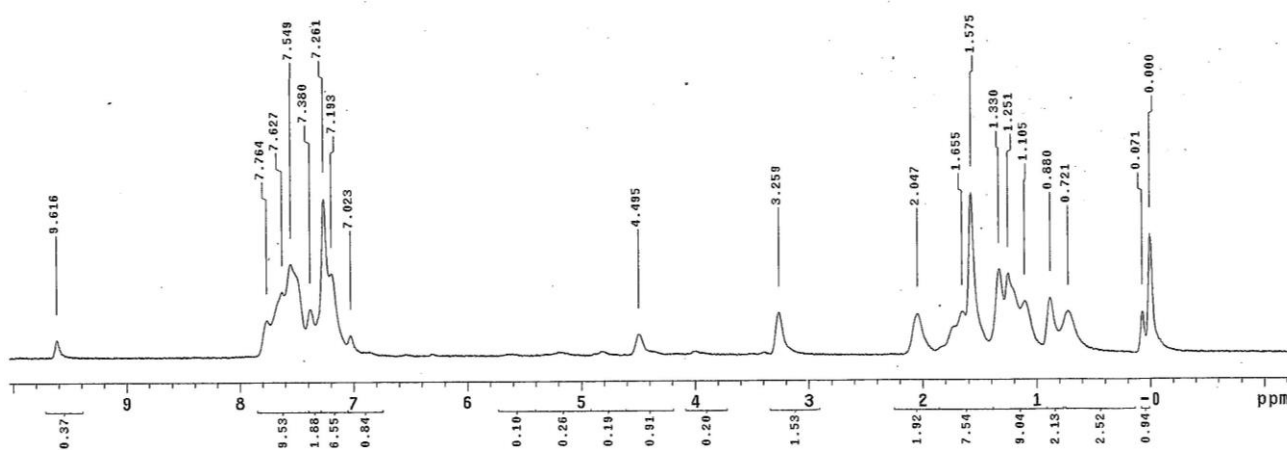


Figure S8. ^1H NMR spectrum of PA1

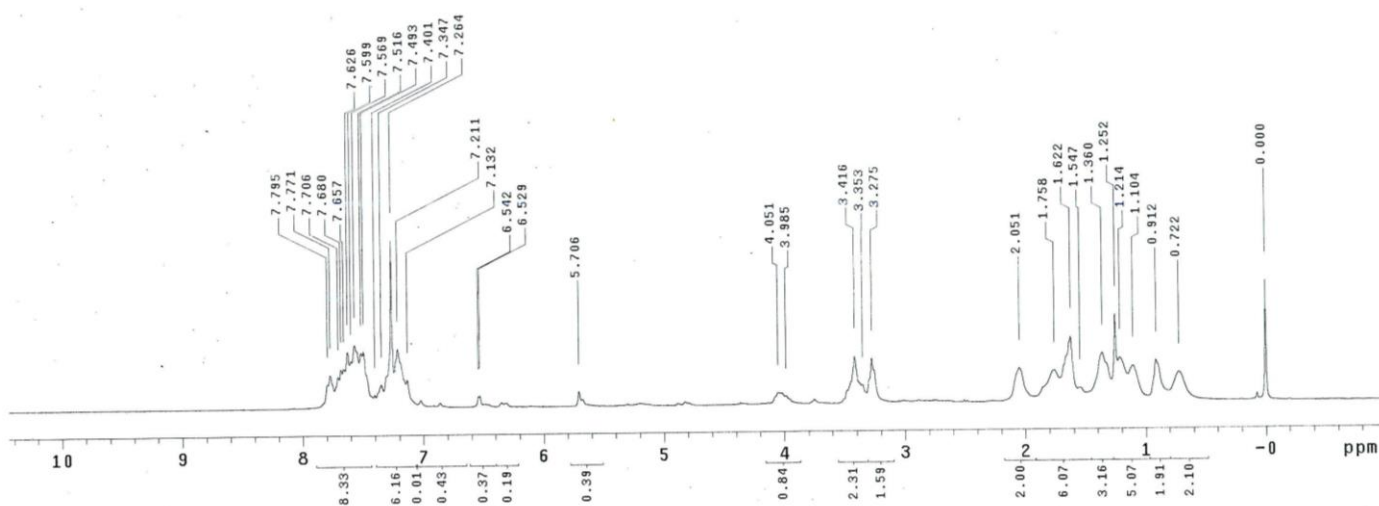


Figure S9. ¹H NMR spectrum of PDT

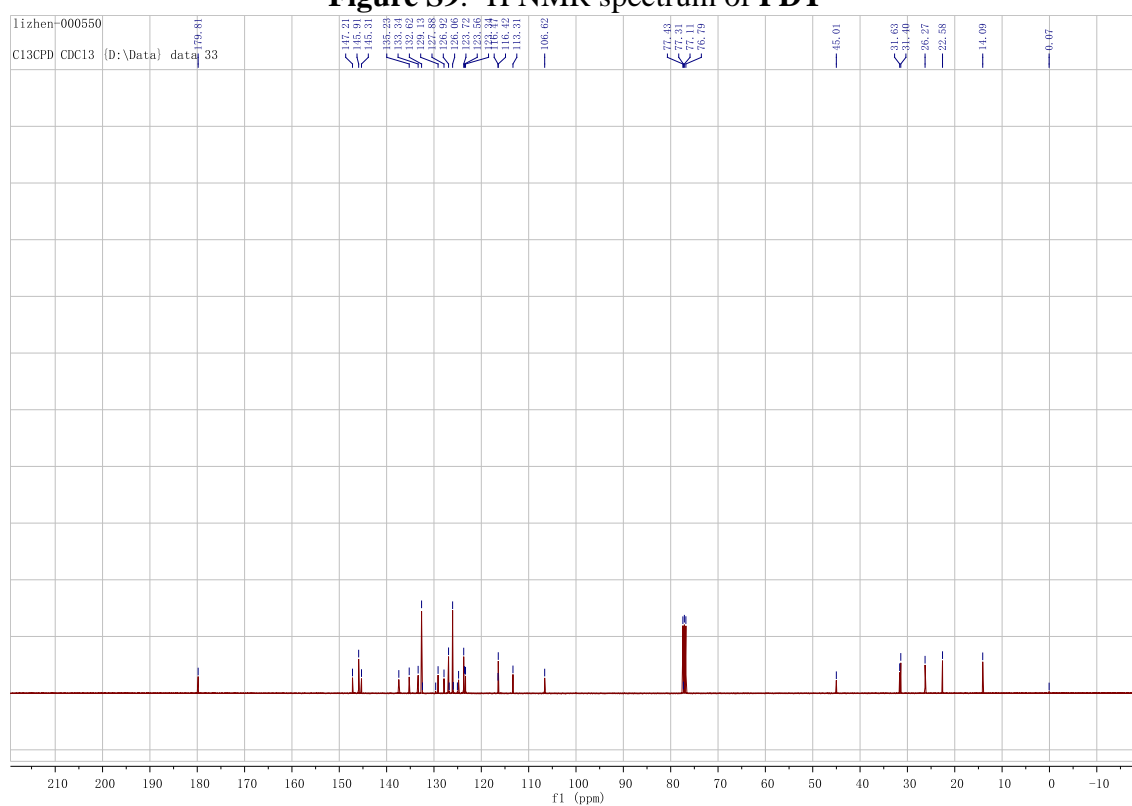


Figure S10. ¹³C NMR spectrum of compound 2