

Electronic Supporting Information

Pyrene Bearing Azo-Functionalized Porous Nanofibers for CO₂ Separation and Toxic Metal Cation Sensing

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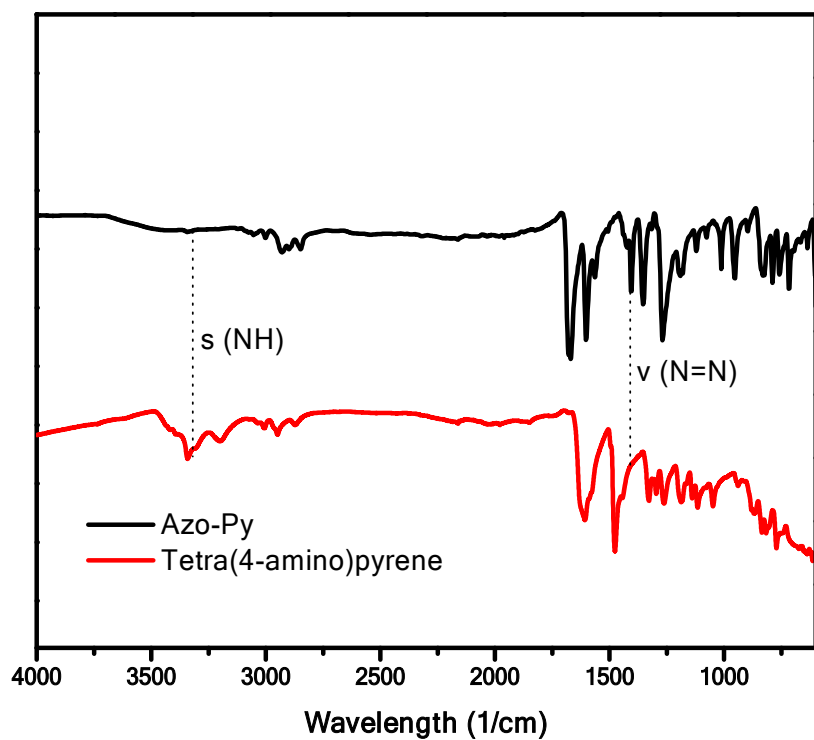


Figure S1: FT-IR spectra of of Azo-Py and tetra(4-amino)pyrene

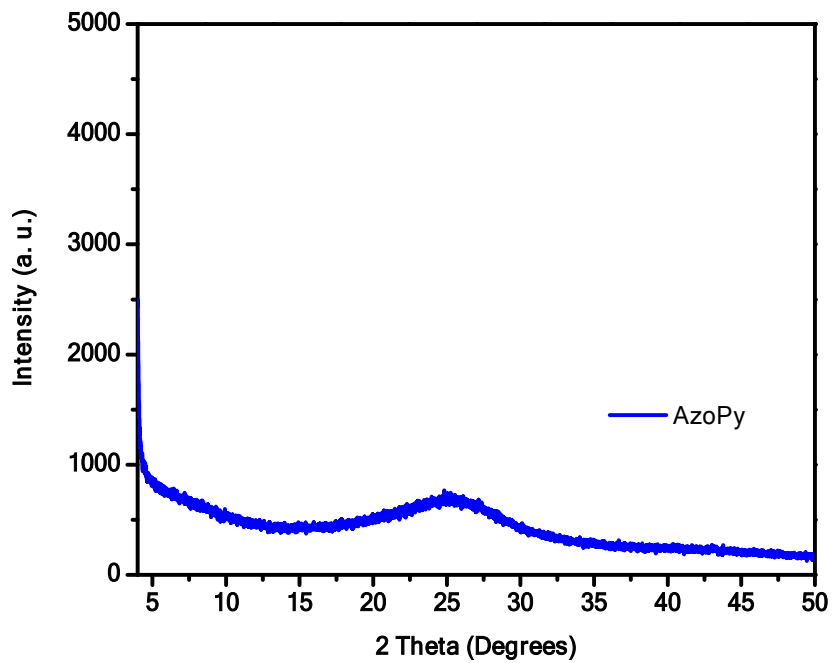


Figure S2: Powder X-ray diffraction patterns of Azo-Py

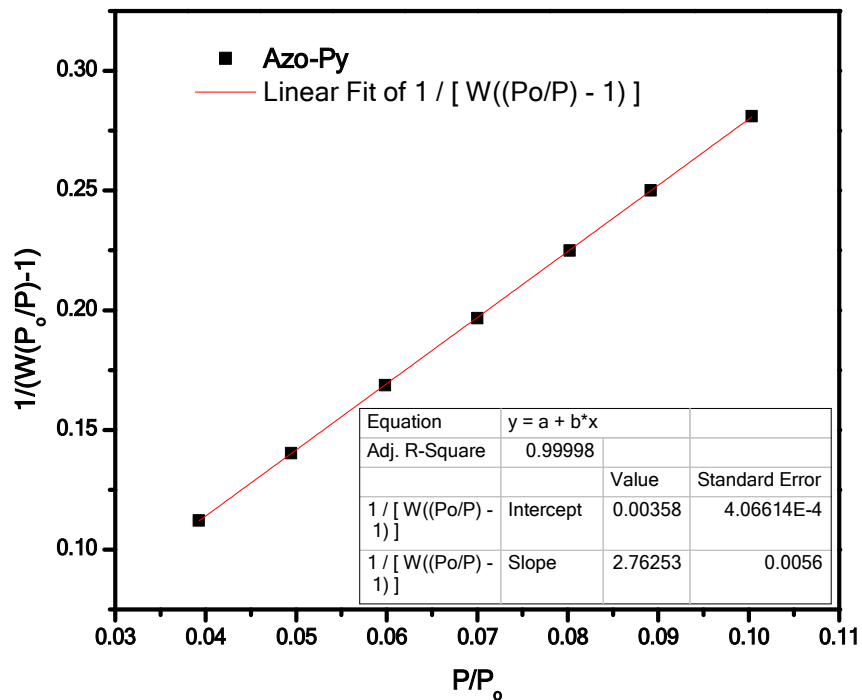


Figure S3: BET plot of Azo-Py from N₂ isotherm at 77 K

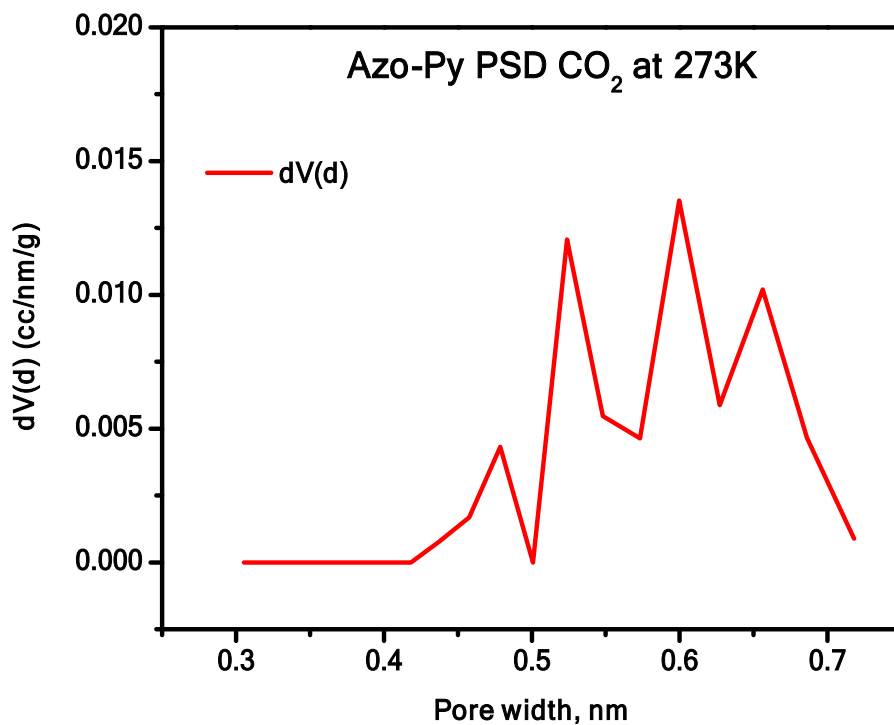


Figure S4: Pore size distribution of Azo-Py from CO₂ isotherms at 273 K (pores with <0.7 nm in diameter)

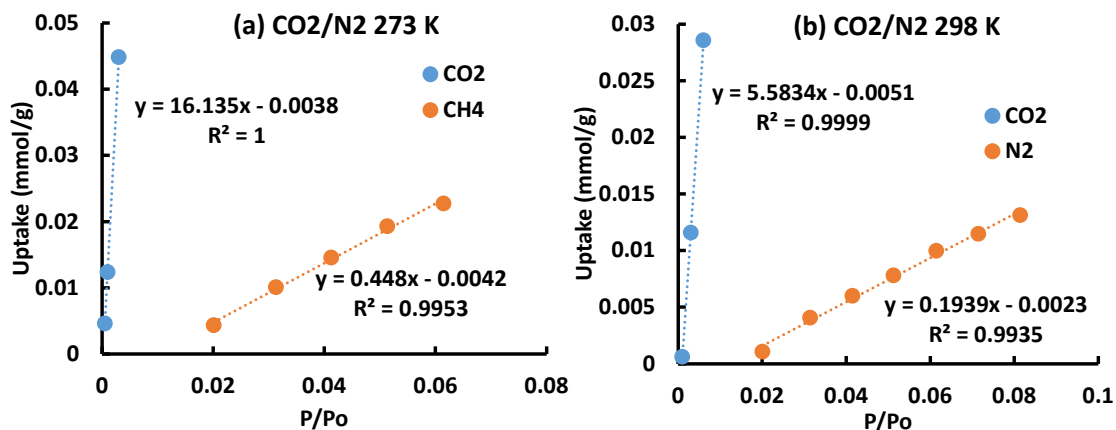


Figure S5 (a and b): Initial slope determination of CO₂ and N₂ low pressure adsorption for CO₂/N₂ selectivity calculations at 273 (a) and 298 K (b)

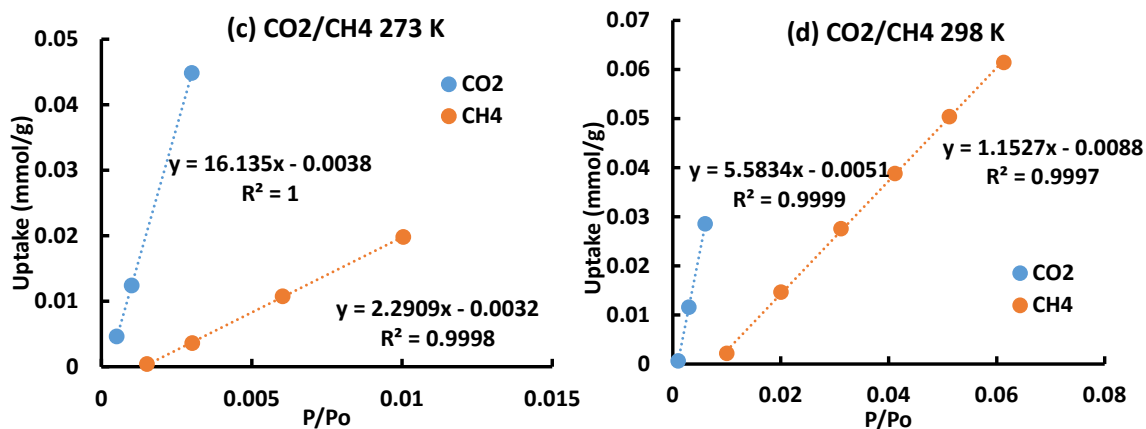


Figure S5 (c and d): Initial slope determination of CO₂ and CH₄ low pressure adsorption for CO₂/CH₄ selectivity calculations at 273 (c) and 298 K (d)

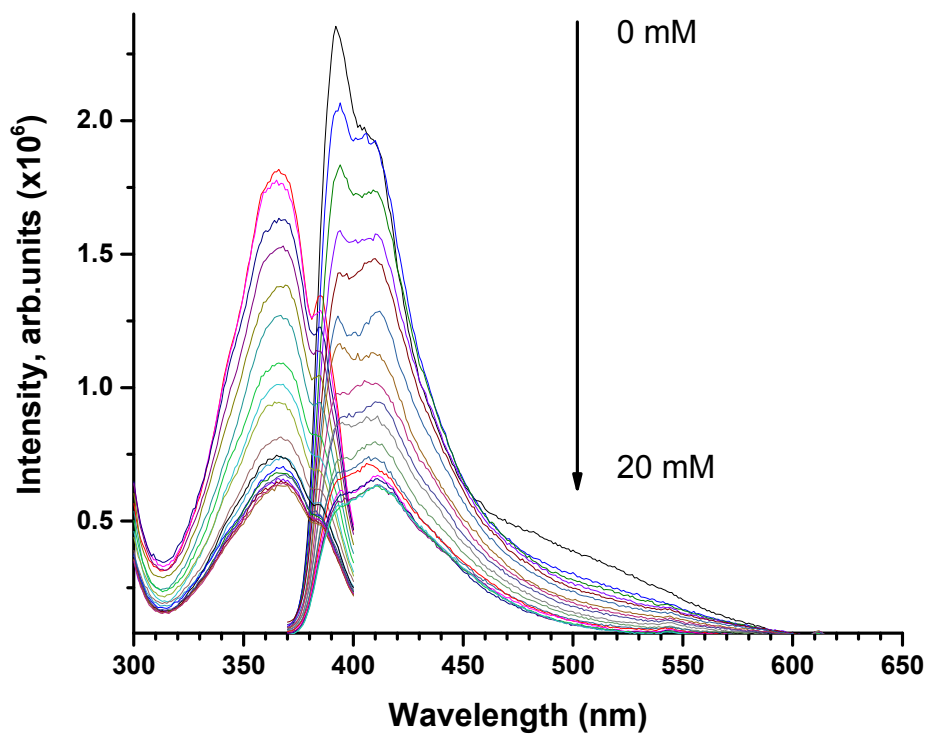


Figure S6. Emission spectra of Azo-Py with successive additions of millimolar quantities of 0.1 M aluminum chloride.

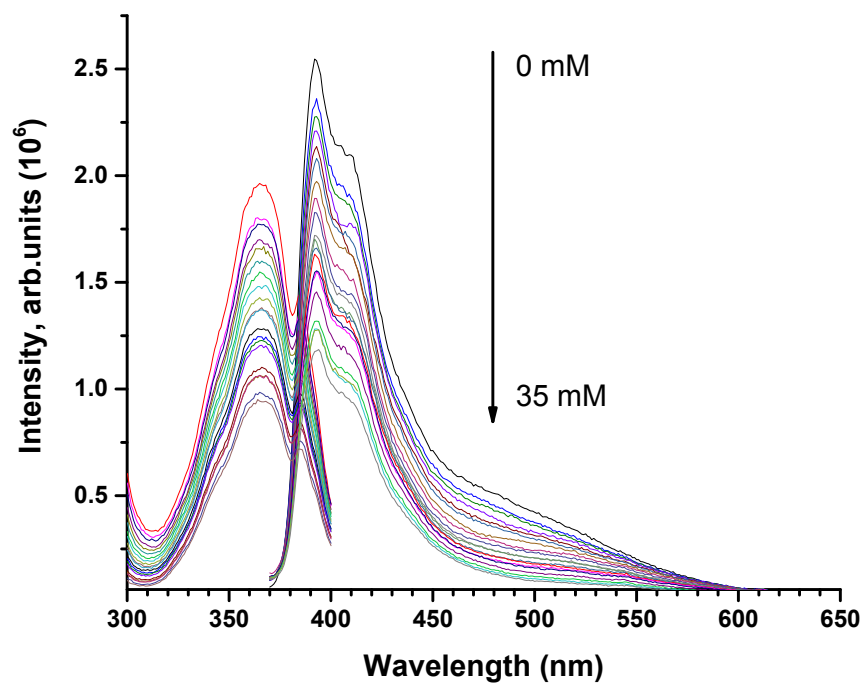


Figure S7. Emission spectra of Azo-Py with successive additions of millimolar quantities of 0.1 M lead nitrate.

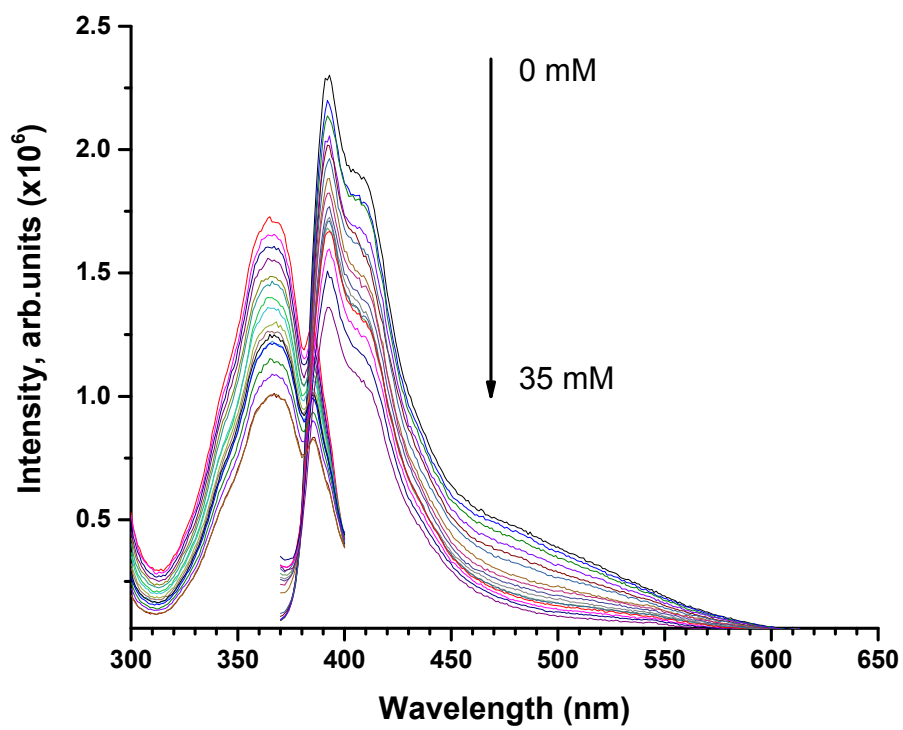


Figure S8. Emission spectra of Azo-Py with successive additions of millimolar quantities of 0.1 M thallium nitrate.