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Preparation of two new polyimide bond linked porous covalent organic frameworks and their fluorescent sensing application for sensitive and selective determination of Fe^{3+}

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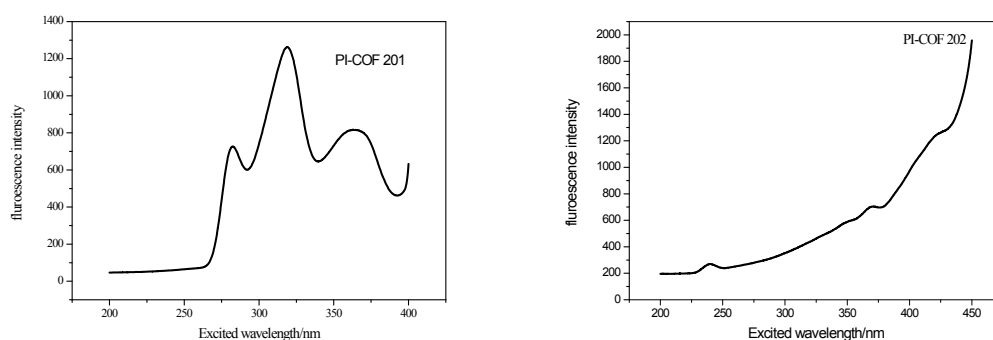


Figure S1. Excitation spectra of PI-COF 201 in DMF and PI-COF 202 in acetonitrile.

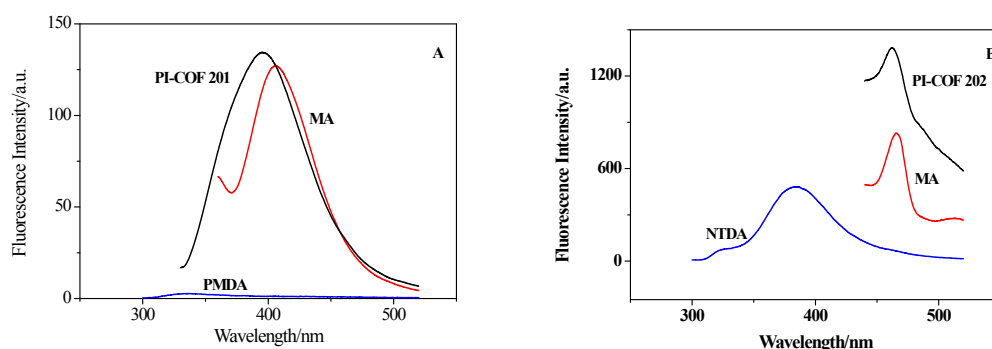


Figure S2. Fluorescence spectra of PI-COF 201 and corresponding monomers in DMF excited at $\lambda_{\text{ex}} = 320.0\text{nm}$ (A) and PI-COF 202 and corresponding monomers in acetonitrile excited at $\lambda_{\text{ex}} = 370\text{nm}$ (B)

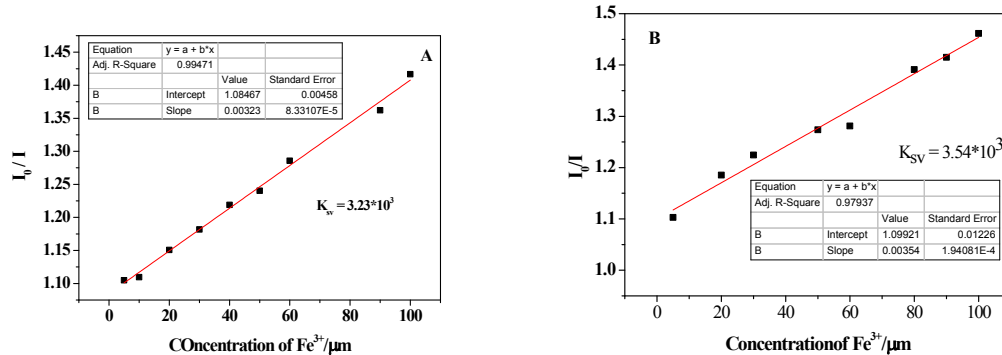


Figure S3. Stern–Volmer plots of fluorescence quenching of PI-COF 201(A, in DMF) and PI-COF 202(B, in acetonitrile) nanoparticles (1 mg) with Fe^{3+} .

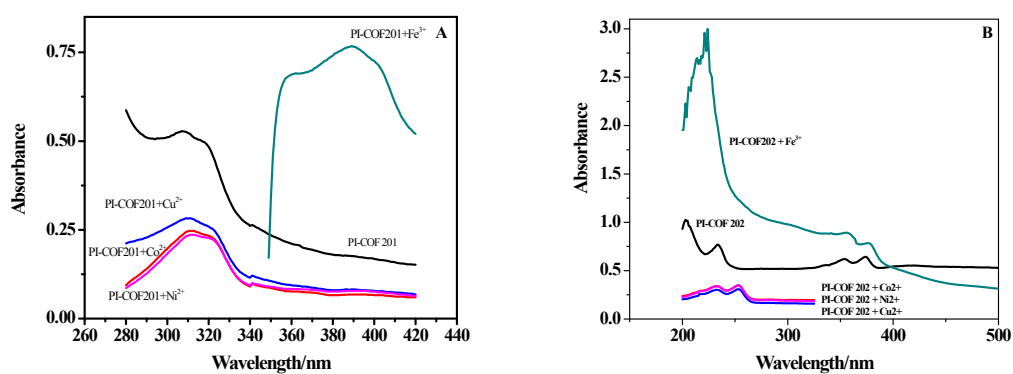


Figure S4. Absorption spectra of PI-COF 201 and metal ion incorporated PI-COF 201 suspensions(A) and PI-COF 202 and metal ion incorporated PI-COF 202 suspensions(B) (metal ion = Fe^{3+} , Co^{2+} , Ni^{2+} and Cu^{2+})