

Supporting Information for the manuscript

Guest-induced reversible structural transitions and concomitant on/off luminescent switch of an Eu(III) metal-organic framework and its application in detecting picric acid

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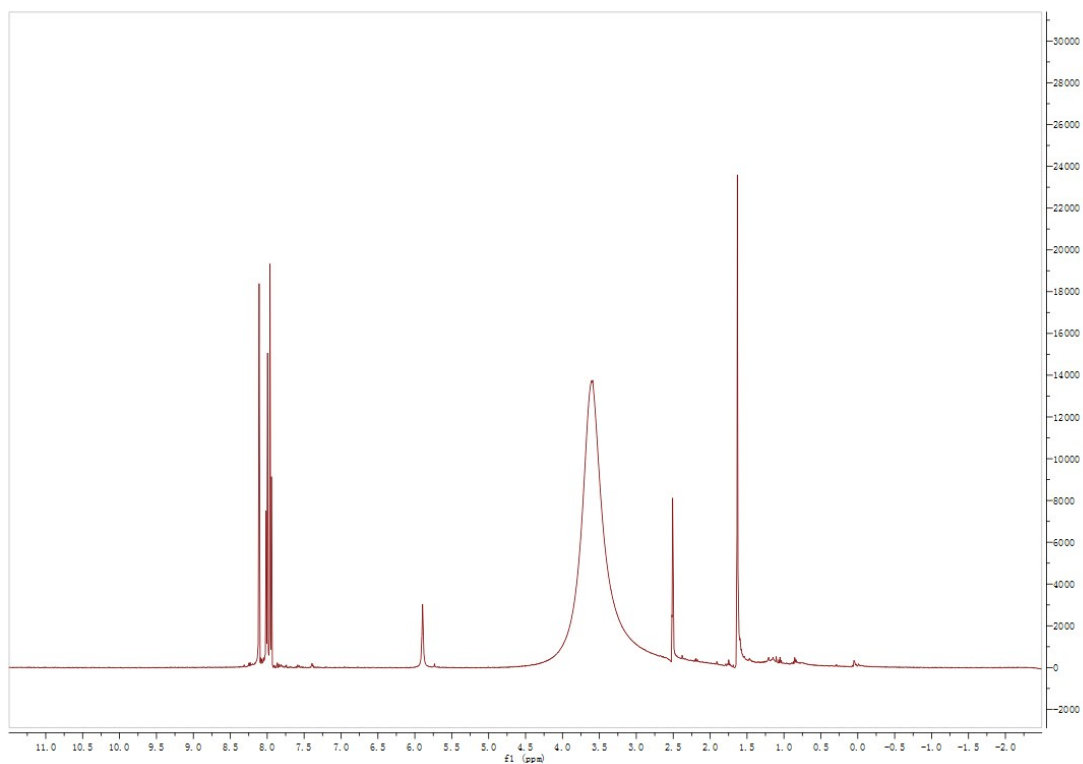


Fig. S1 ^1H NMR of H_2MHFDA in $\text{d}_6\text{-DMSO}$.

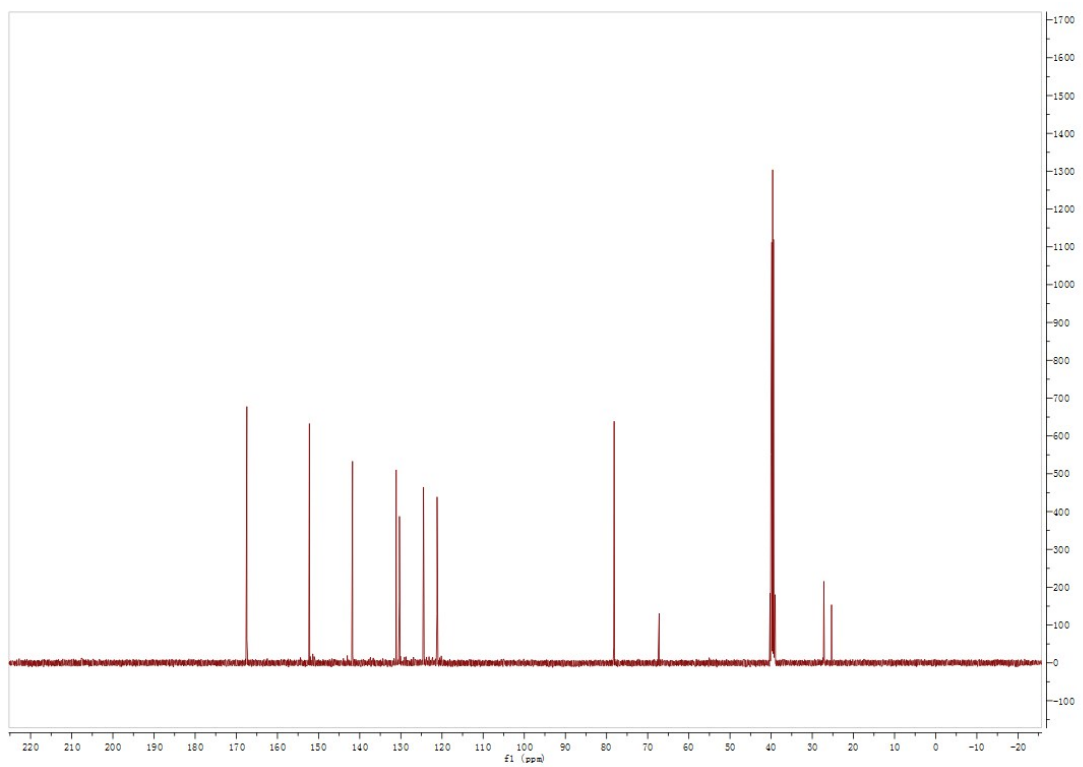


Fig. S2 ^{13}C NMR of H_2MHFDA in $\text{d}_6\text{-DMSO}$.

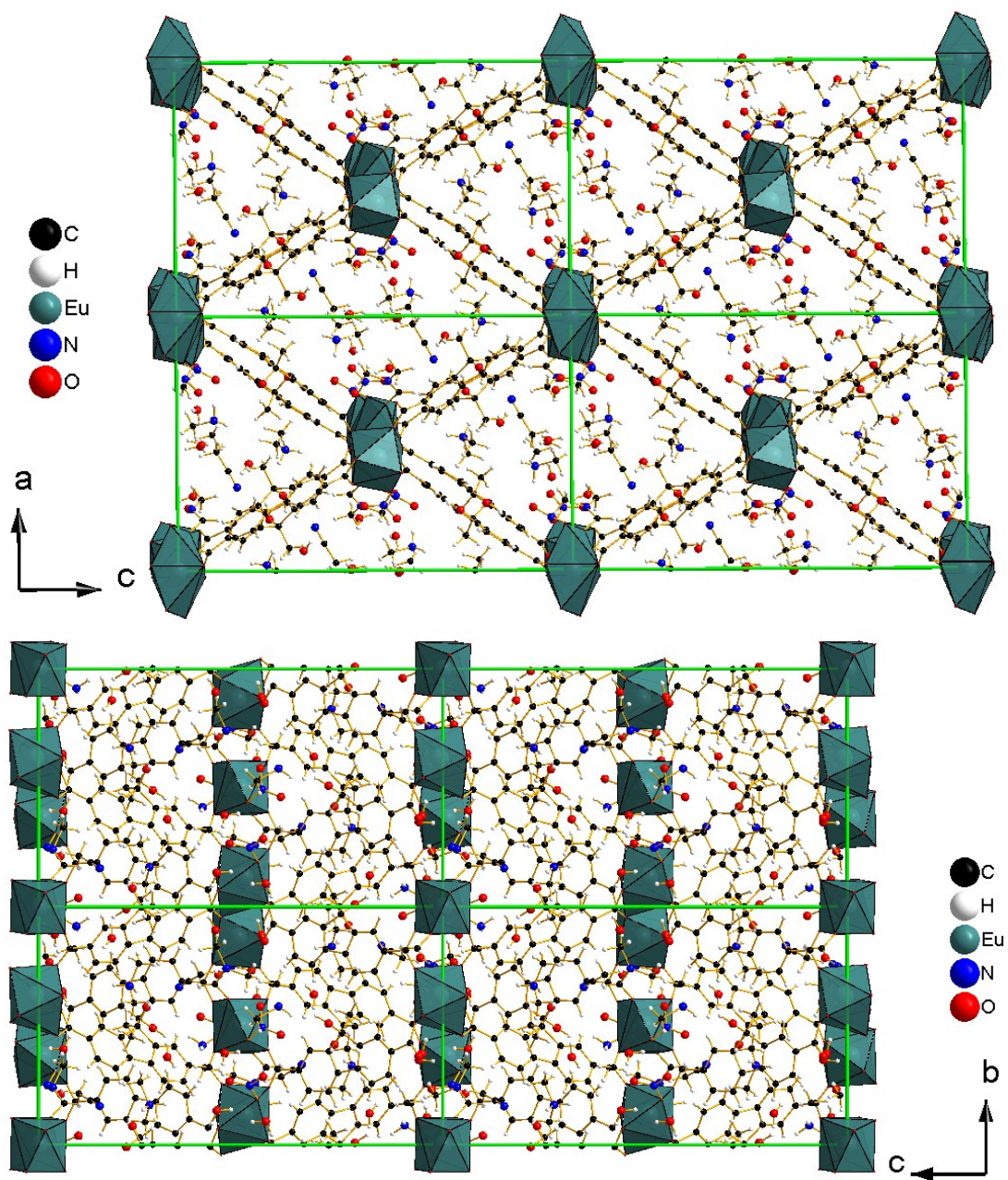


Fig. S3 Framework of **1** with solvents and cations in channel.

Fig. S5 The excitation spectra of **1,1a** and **1b** monitored at 614 nm at room temperature.

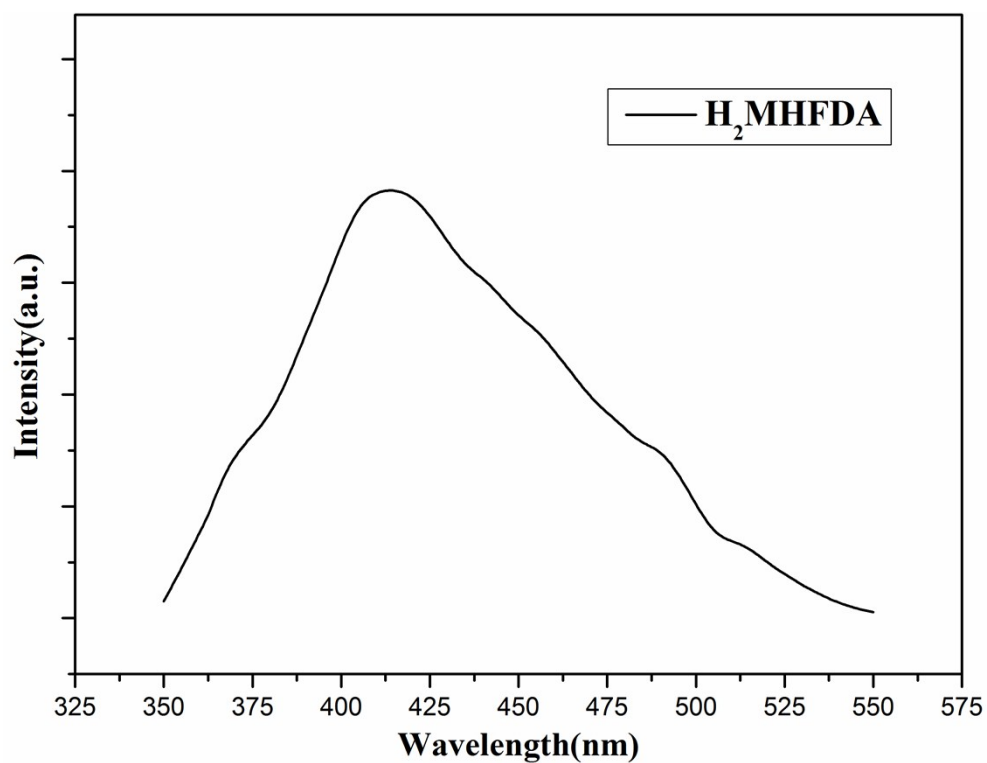


Fig. S6 The emission spectra of organic ligand H₂MHFDA in solid state at room temperature. The main emission peaks is at 412nm ($\lambda_{ex} = 334$ nm).

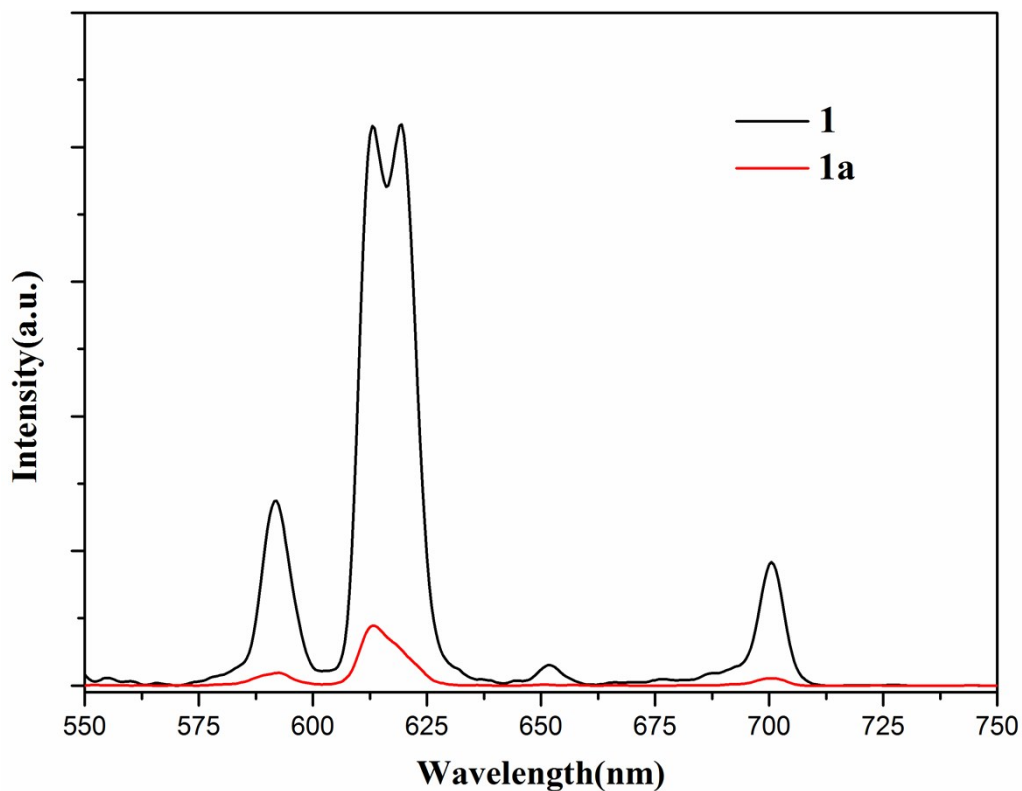


Fig. S7 The emission spectra of **1** and **1a** activated at 170 °C dispersed in DMSO excited at 340 nm at room temperature.

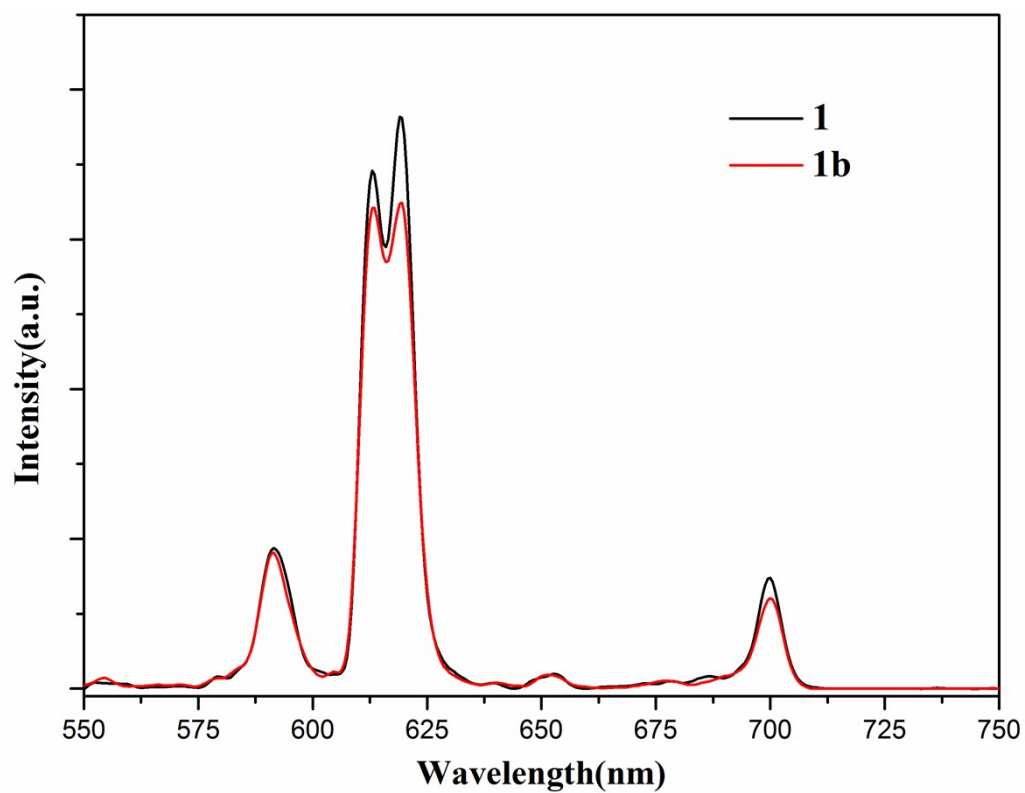


Fig. S8 The emission spectra of **1** and **1b** dispersed in DMF excited at 340 nm at room temperature.