## **Supplementary Information**

## Thiophene containing microporous and mesoporous nanoplates for separation of mercury from aqueous solution

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**Fig. S1** <sup>1</sup>H NMR of (a) 1,3,5-Tris(2-thienyl)benzene and (b) 2-acetyl thiophene.



Fig. S2 Elemental mapping of C, Fe, S in Th-2 polymer.



Fig. S3 TGA spectra of Th-1, Th-2 and Th-3 polymers.



Fig. S4 Adsorption capacity of Hg(II) using Th-1, Th-2 and Th-3 polymers.



**Fig. S5** EDAX spectra of Th-1, Th-2 and Th-3, suggesting that 8, 20 and 10 wt% of sulfur is present in Th-1, Th-2 and Th-3 respectively. The strong Si peak in the spectra is because of the sampling in silicon wafer.



**Fig. S6** Adsorption capacity of Th-2 estimated in the range of pH 2-11, having concentration of Hg(II) solution 200 mg L<sup>-1</sup>.