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## **Supplementary materials**

## Thiol-/thioether-functionalized porous organic polymers for simultaneous removal of mercury(II) ion and aromatic pollutants in water

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	C (%)	H (%)	S (%)
POP-SH	58.18	3.74	5.94
POP-SMe	57.00	3.92	4.84

 Table S1 Elemental analysis results of POP-SH and POP-SMe



Fig. S1 Langmuir adsorption isotherms of pollutants on new adsorbents: (a)  $Hg^{2+}$ , (b) toluene, and (c) m-xylene.



Fig. S2 Pseudo-second-order adsorption model of pollutants on new adsorbents: (a)  $Hg^{2+}$ , (b) toluene, and (c) m-xylene.



Fig. S3 The SEM images of (a) POP-SH and (b) POP-SMe after three adsorption cycles.



Fig. S4 The EDX figures of POP-SH and POP-SMe after three adsorption cycles.



**Fig. S5** The nitrogen adsorption-desorption isotherms of (a) POP-SH and (b) POP-SM after three adsorption cycles. The inserts are their pore distribution curves.