Unprecedented 3D entanglement of 1D zigzag coordination polymers leading to a robust microporous framework

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Fig. S1 View showing the 3D framework of 1 with open channels along c direction. DMSO has been omitted

Fig. S2 TGA plots of 1-DMSO (a) and 1-DMF (b) over the temperature range from 30 to 500 °C at a heating rate of $\beta = 3 ^\circ C/min$ under the N$_2$ atmosphere. 1-DMF was obtained by immersing the evacuated material in DMF for 10 h.
Fig. S3 IR Spectra of the as-synthesized sample 1·DMSO, the evacuated sample 1, and the re-solvated sample. The bands marked with asterisks are attributable to the ν(CH₃) absorptions (3000 and 2910 cm⁻¹) and the ν(S=O) absorption (1030 cm⁻¹), clearly indicating the presence of DMSO molecules in the as-synthesized and the re-solvated samples.

Fig. S4 XRD pattern for (a) 1 (evacuated at 120 ºC under vacuum for 24 h), and (b) 1·DMF (obtained by immersing 1 in DMF for 10 h)
Fig.S5 Comparison of the IR Spectra of the evacuated sample 1 (a), and the re-solvated 1·DMF obtained by immersing 1 in DMF for 10 h (b). The band (1660 cm$^{-1}$) marked with asterisk is attributable to the $\nu$(C=O) absorption of the DMF molecules in 1·DMF.