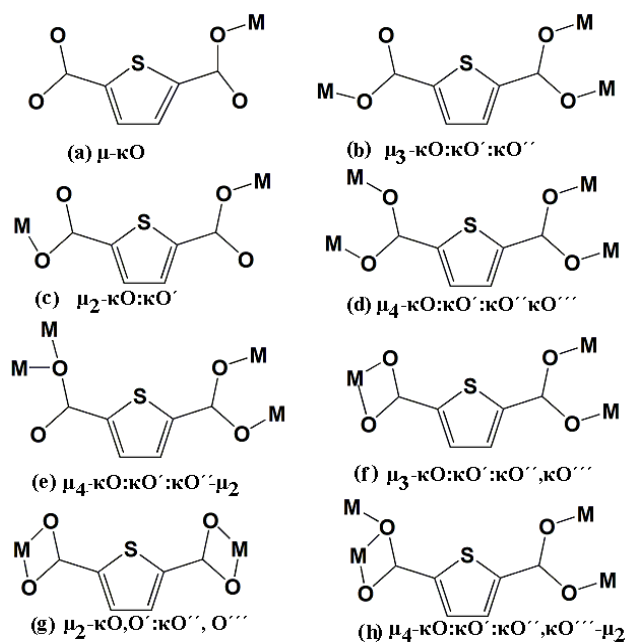


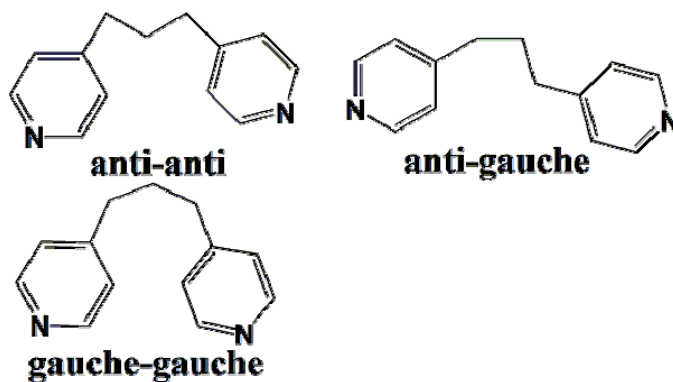
Electro Supporting Information (ESI)

A new 8-connected porous coordination polymer with crystal structure and selectivity adsorption properties†

Hua-Hong Zou,* Yan-Ping He, Liu-Cheng Gui, Fu-Pei Liang*



Scheme S1 various coordination modes of Tda²⁻ in its metal complex.



Scheme S2 three coordination configurations of bpp.

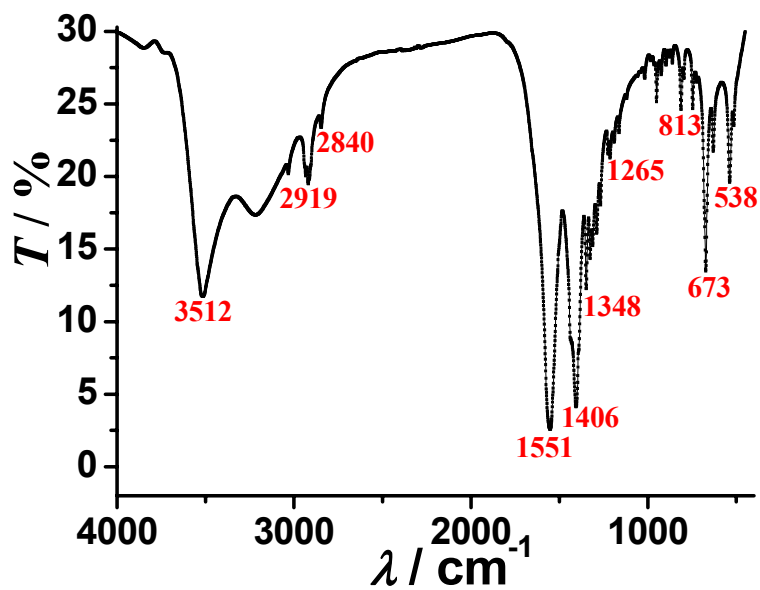


Fig. S1 the IR spectra of compound 1.

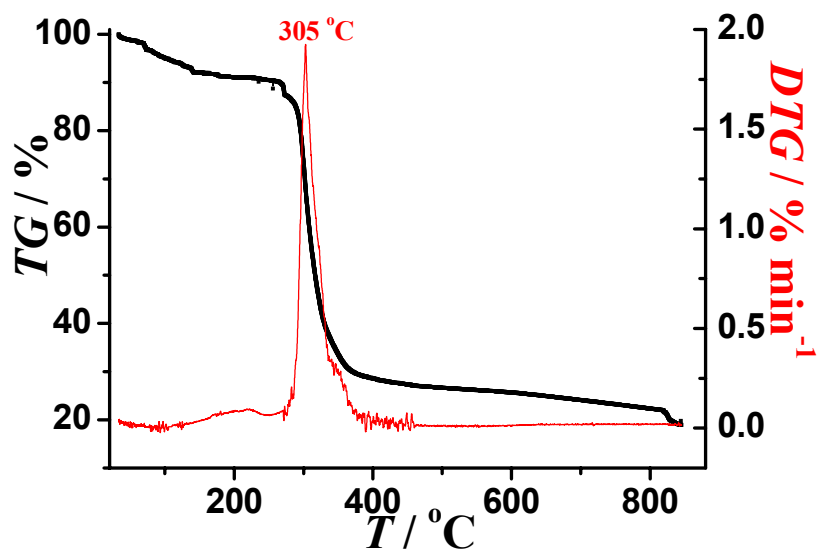


Fig. S2 The TG and DTG curves of compound 1.

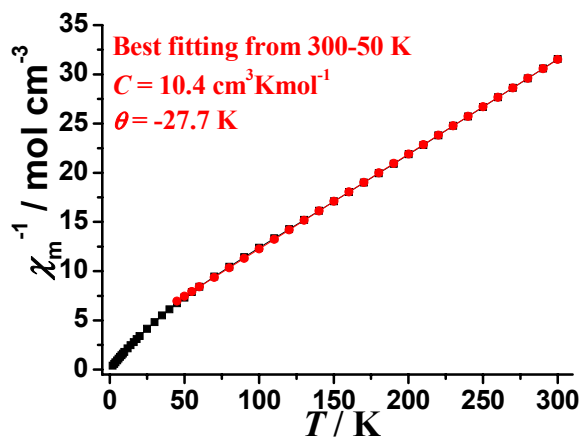


Fig. S3 χ_m^{-1} vs T for 1, the red line represents the best fit from 50-300 K.

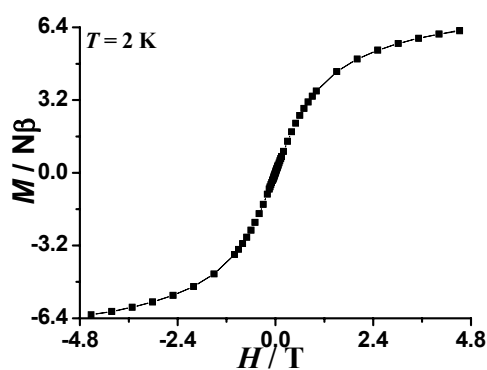


Fig. S4 hysteresis loop at 2 K.

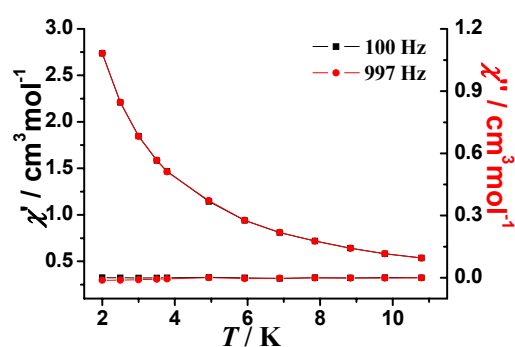


Fig. S5. AC magnetic measurements for **1** at $H_{ac} = 2.5$ Oe and $H_{dc} = 0$ Oe.

Table S1. Selected bond lengths (Å) and angles (°) for **1**.

Selected bond (Å)			
Co1-O1	2.069(5)	Co2-O2	2.047(6)
Co1-O1a	2.069(5)	Co2-O4	2.056(6)
Co1-O3	2.054(5)	Co2-O5g	2.160(4)
Co1-O3a	2.054(5)	Co2-O6g	2.235(5)
Co1-O5e	2.161(4)	Co2-N1	2.112(6)
Co1-O5g	2.161(4)	Co2-N2c	2.164(7)
Selected angles (°)			
O1-Co1-O3	92.5(2)	O2-Co2-O4	90.7(2)
O1-Co1-O1a	87.6(2)	O2-Co2-N1	92.5(2)
O1-Co1-O3a	174.5(2)	O2-Co2-N2c	86.4(2)
O1-Co1-O5e	84.3(2)	O2-Co2-O5g	103.3(2)
O1-Co1-O5g	89.9(2)	O2-Co2-O6g	162.7(2)
O1a-Co1-O3	174.5(2)	O4-Co2-N1	84.8(2)
O1a-Co1-O3a	92.5(2)	O4-Co2-N2c	177.1(2)
O1a-Co1-O5e	89.9(2)	O4-Co2-O5g	92.4(2)
O1a-Co1-O5g	84.3(2)	O4-Co2-O6g	95.2(2)
O3-Co1-O3a	87.8(2)	O5g-Co2-O6g	60.3(2)

O3-Co1-O5e	95.6(2)	O5g-Co2-N1	164.0(2)
O3-Co1-O5g	90.2(2)	O5g-Co2-N2c	88.1(2)
O3a-Co1-O5e	90.2(2)	O6g-Co2-N1	104.2(2)
O3a-Co1-O5g	95.6(2)	O6g-Co2-N2c	87.5(2)
O5e-Co1-O5g	172.0(2)	N1-Co2-N2c	95.5(2)

Symmetry code: a = 3/2-x, 1-y, z; c = 1/2+x, 2-y, 3/2-z; e = 1-x, 1-y, 1-z; g = 1/2+x, y, 1-z.