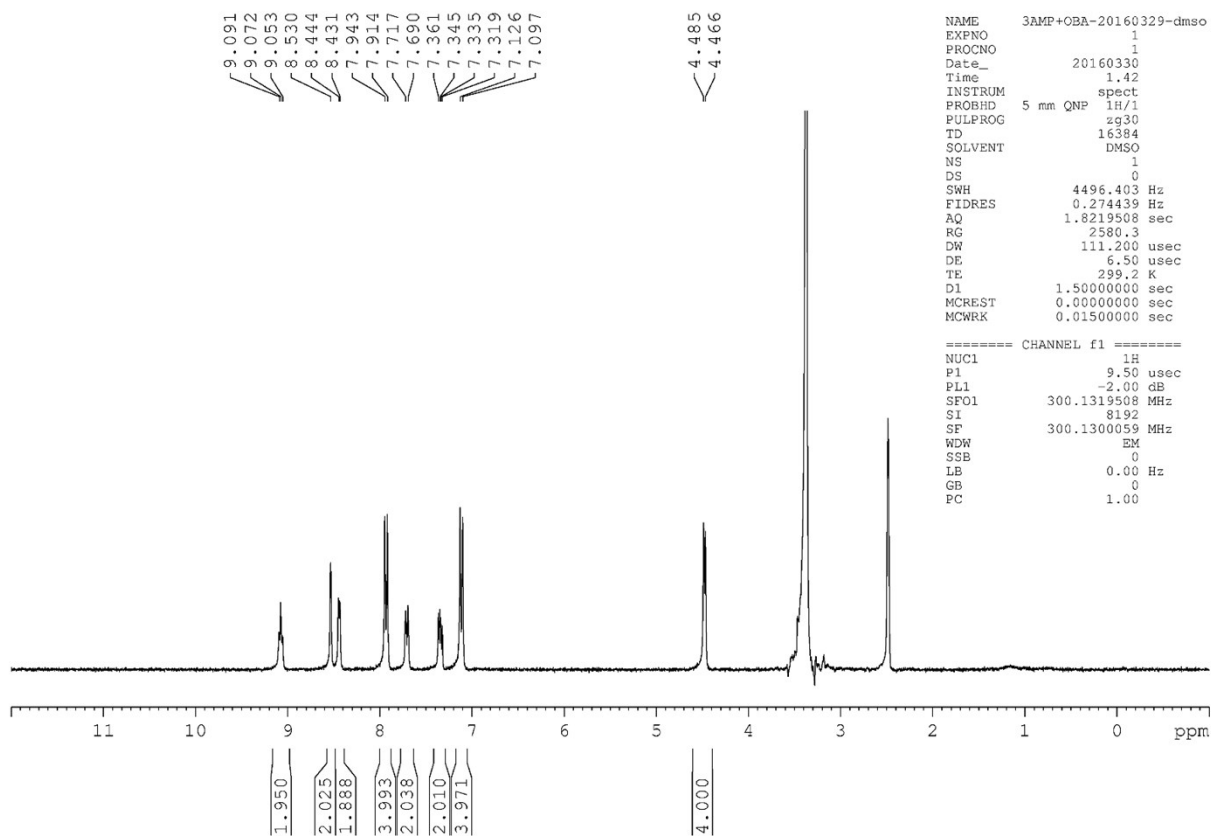


**Zn(II) and Cd(II) coordination polymers with a new angular bis-pyridyl-bis-amide: synthesis, structures and sensing properties**

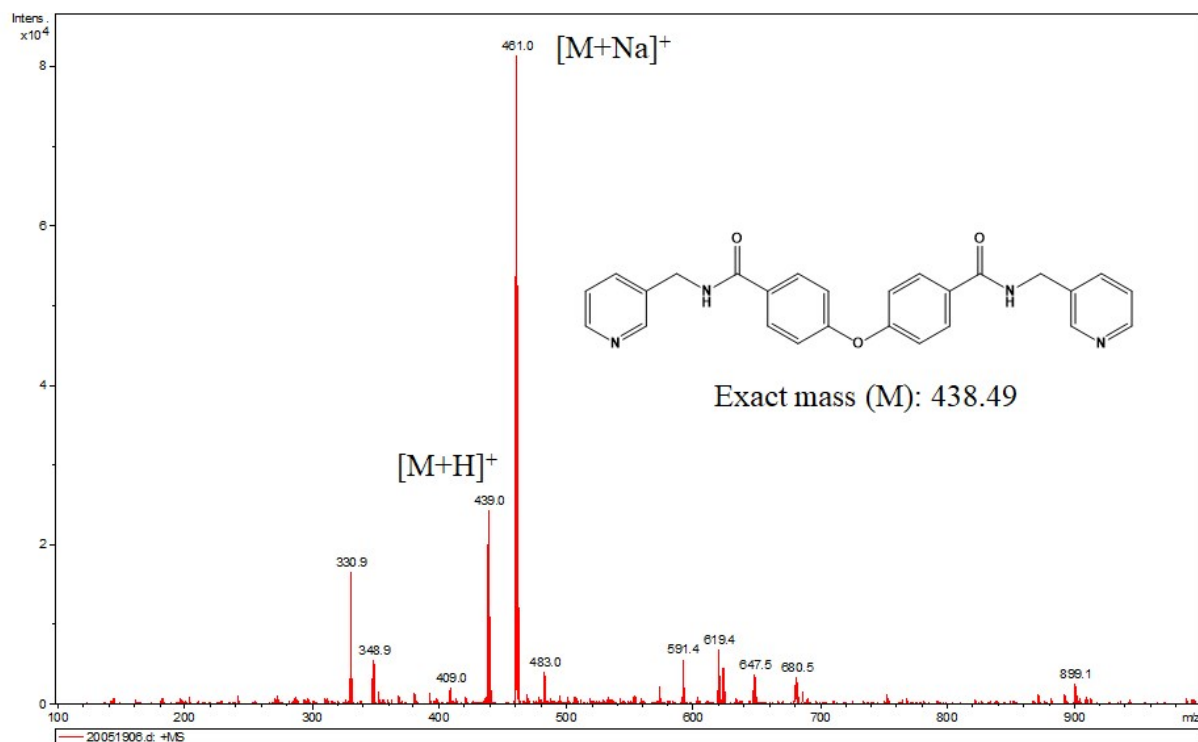
Xiang-Kai Yang, Wei-Te Lee, Ji-Hong Hu and Jhy-Der Chen\*

Department of Chemistry, Chung-Yuan Christian University, Chung-Li 320,  
Taiwan, R. O. C.

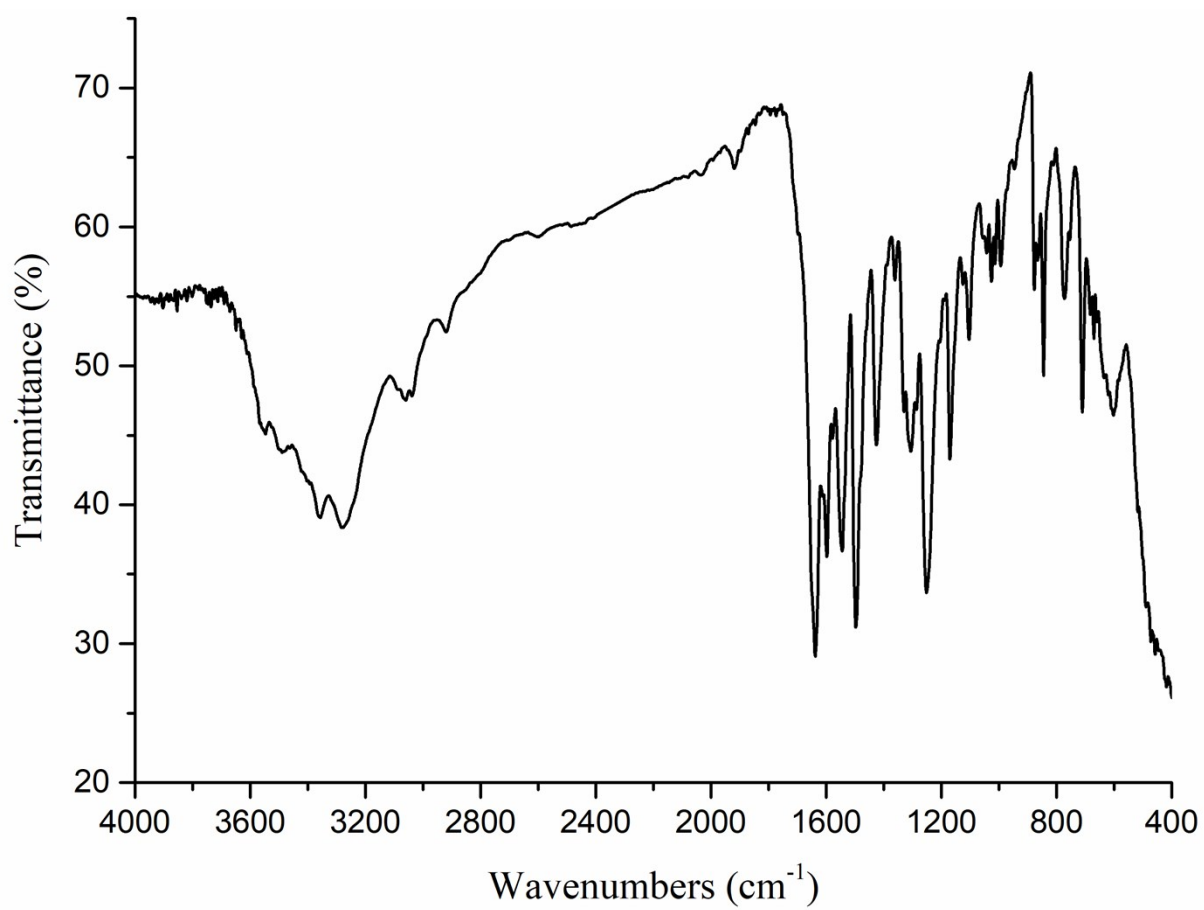
**Fig. S1**  $^1\text{H}$  NMR of ligand **L** in  $\text{DMSO-d}_6$



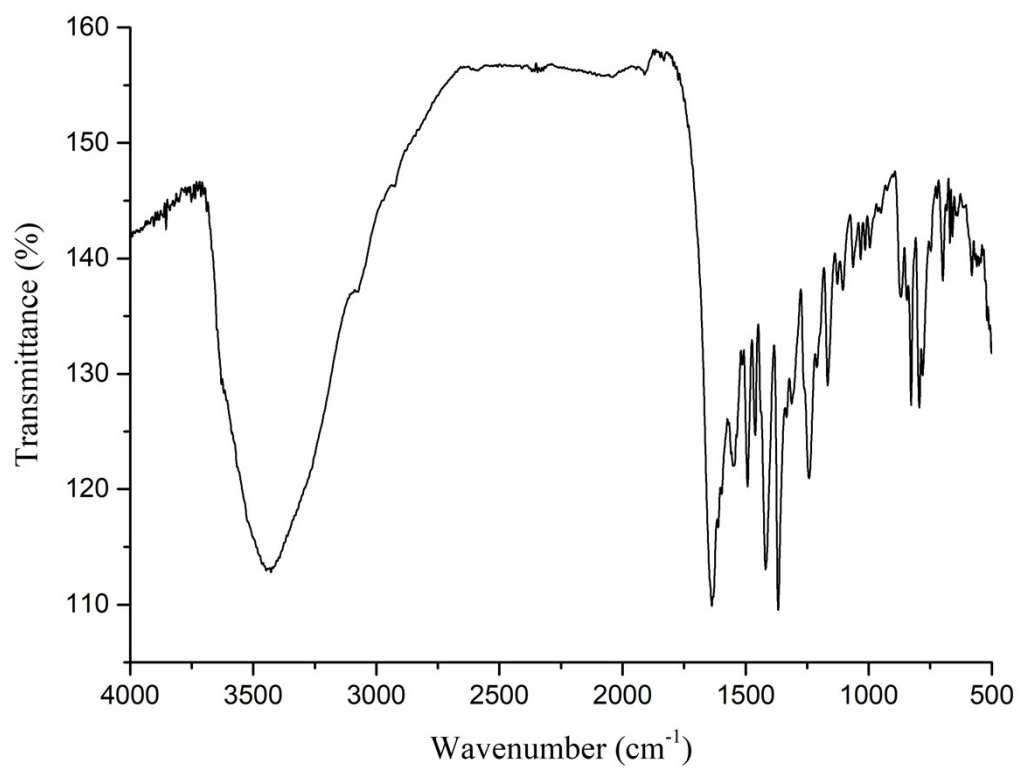
**Fig. S2** Ion-Trap-MS of ligand **L** dissolved in methanol



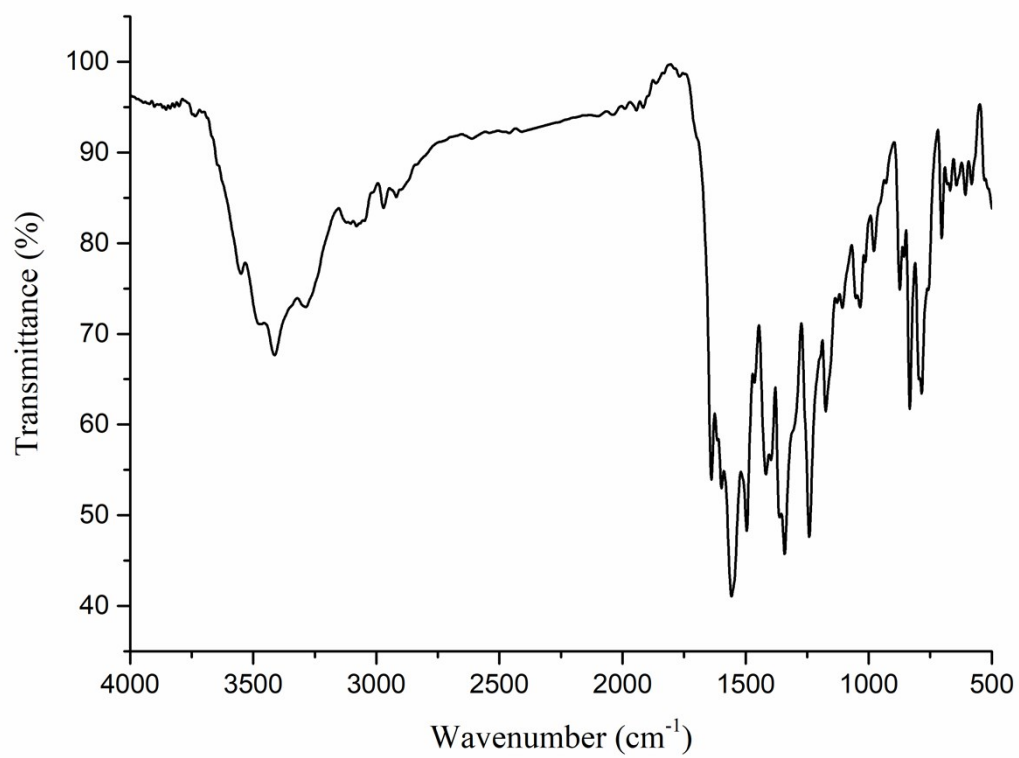
**Fig. S3** IR spectrum of **L**.



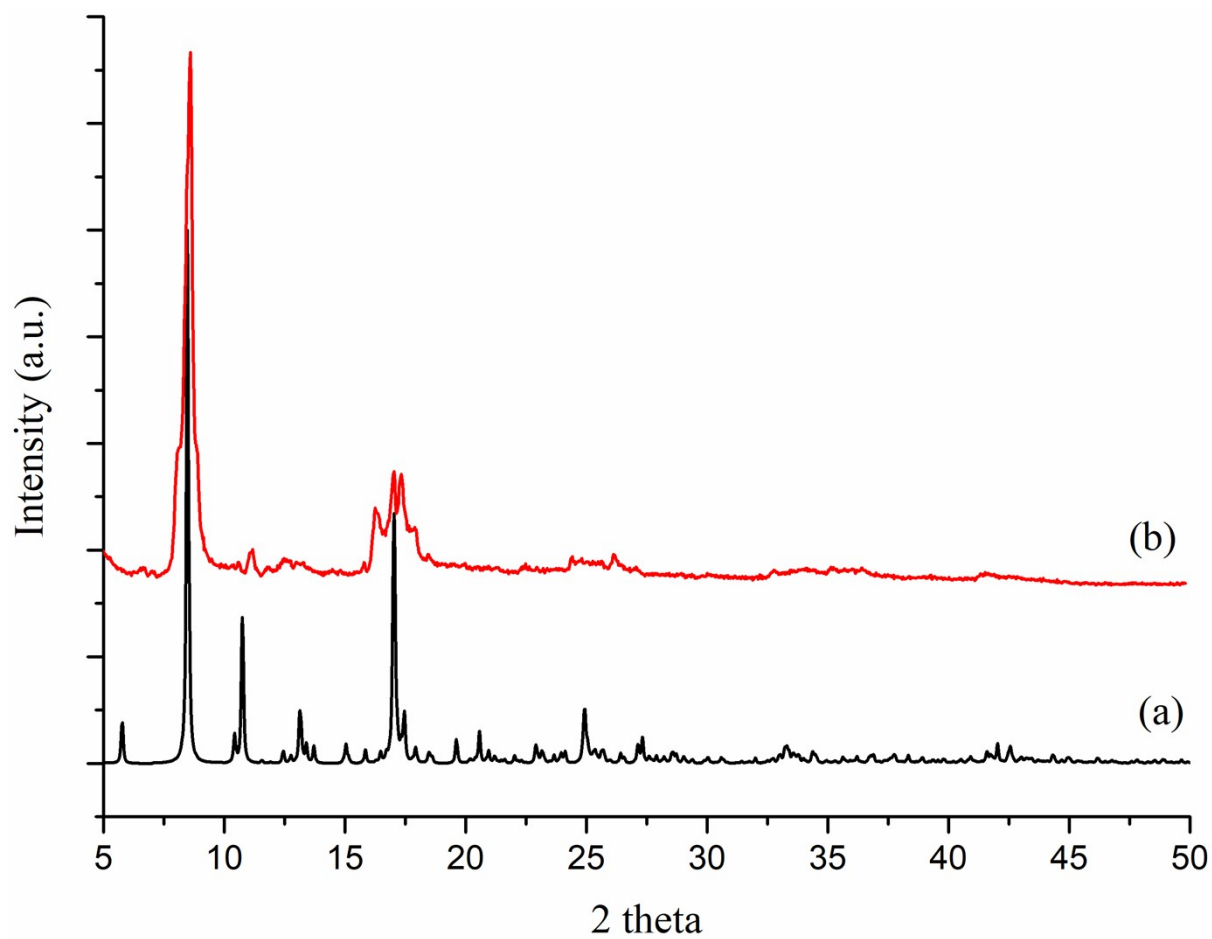
**Fig. S4** IR spectrum of **1**.



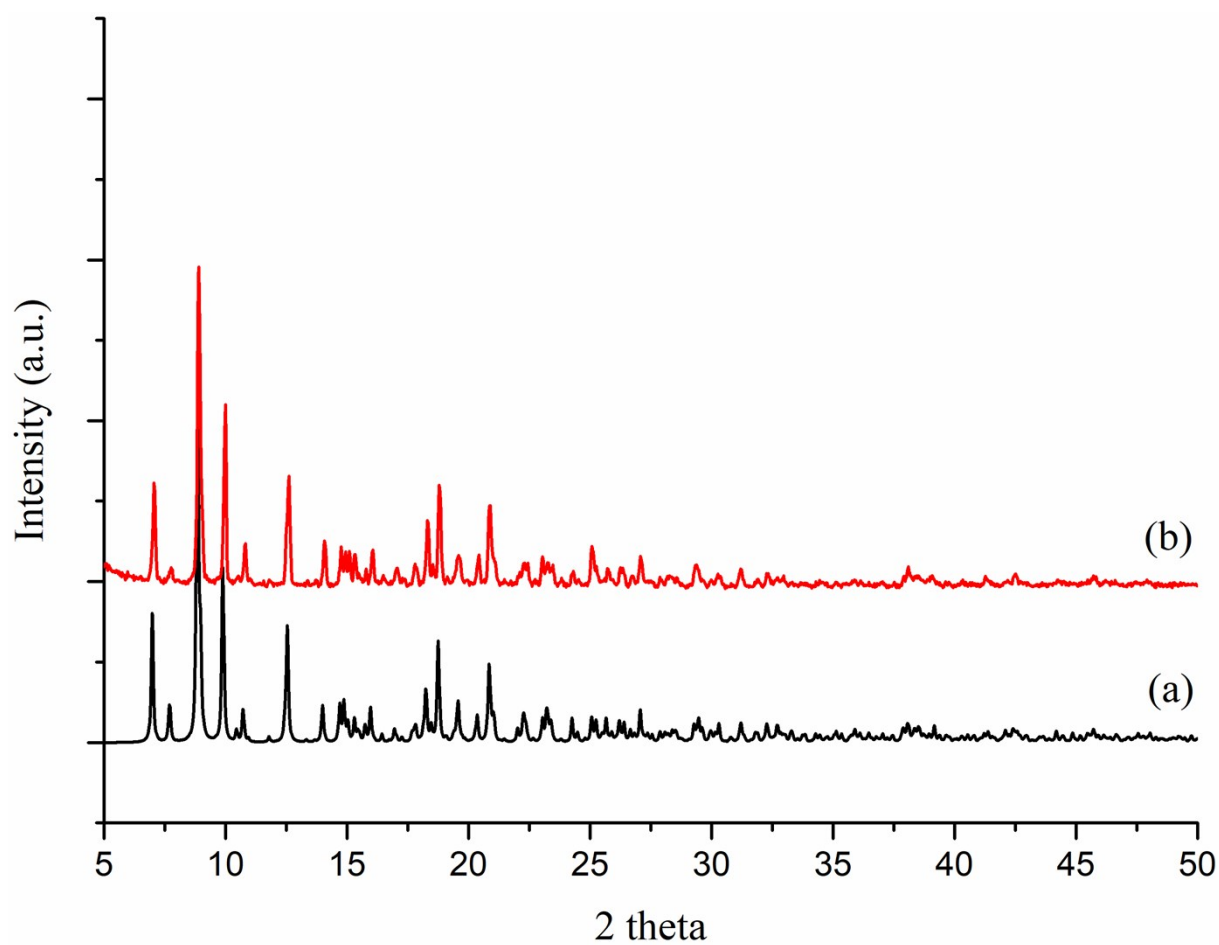
**Fig. S5** IR spectrum of **2**.



**Fig. S6** The PXRD patterns of (a) simulated single-crystal x-ray data and (b) bulk materials as synthesized for complex **1**.

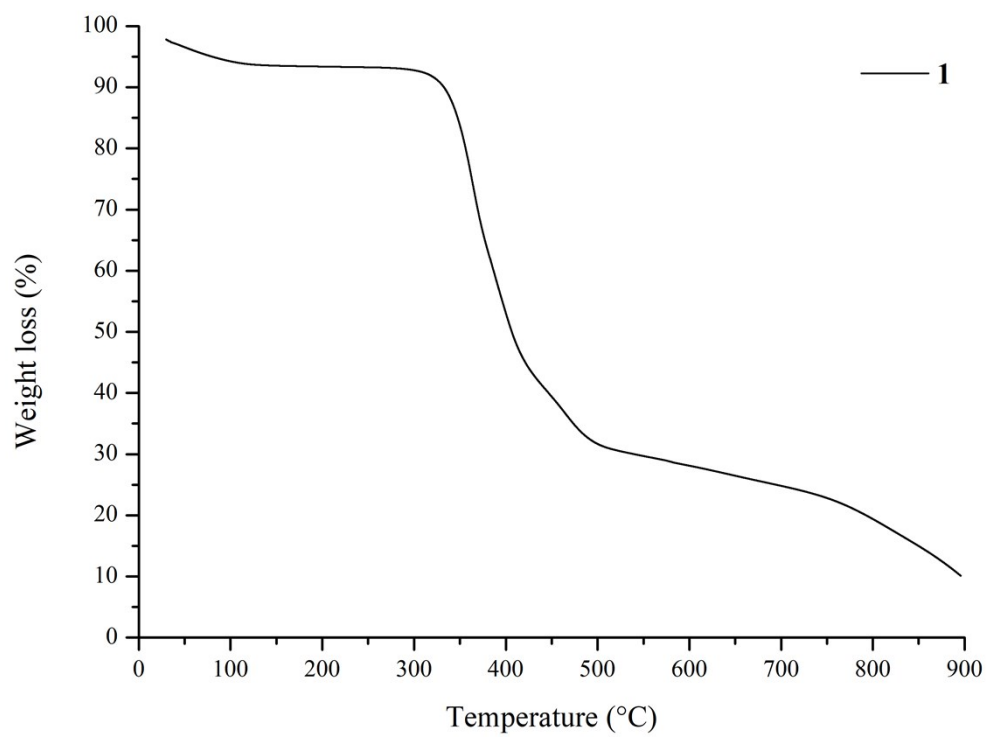


**Fig. S7** The PXRD patterns of (a) simulated single-crystal x-ray data and (b) bulk materials as synthesized for complex **2**.

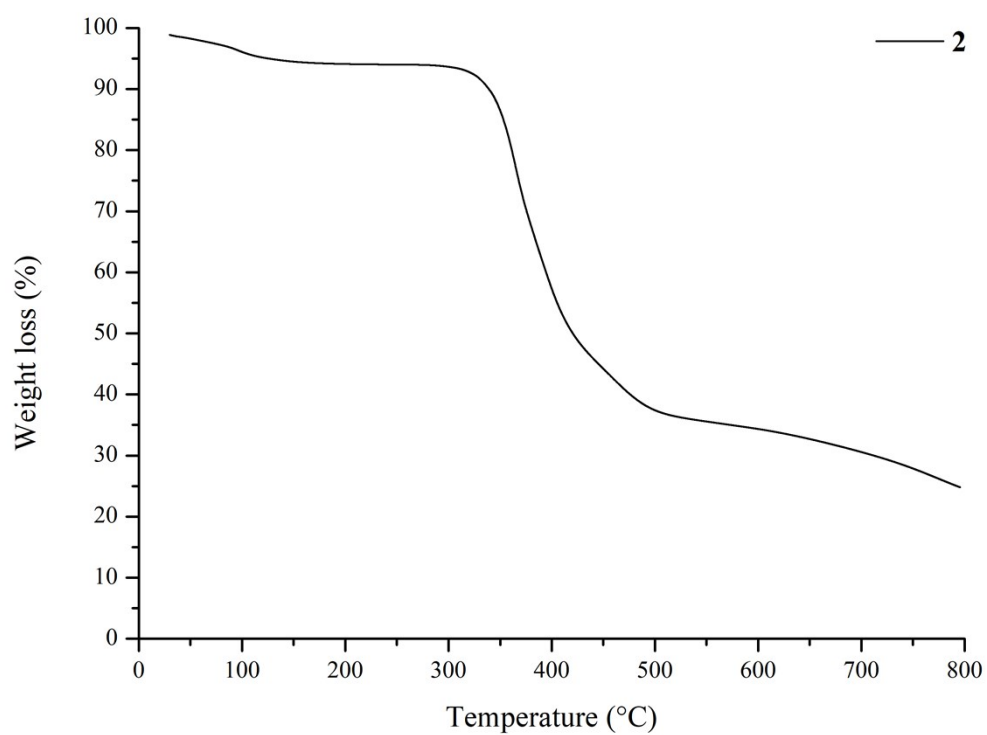




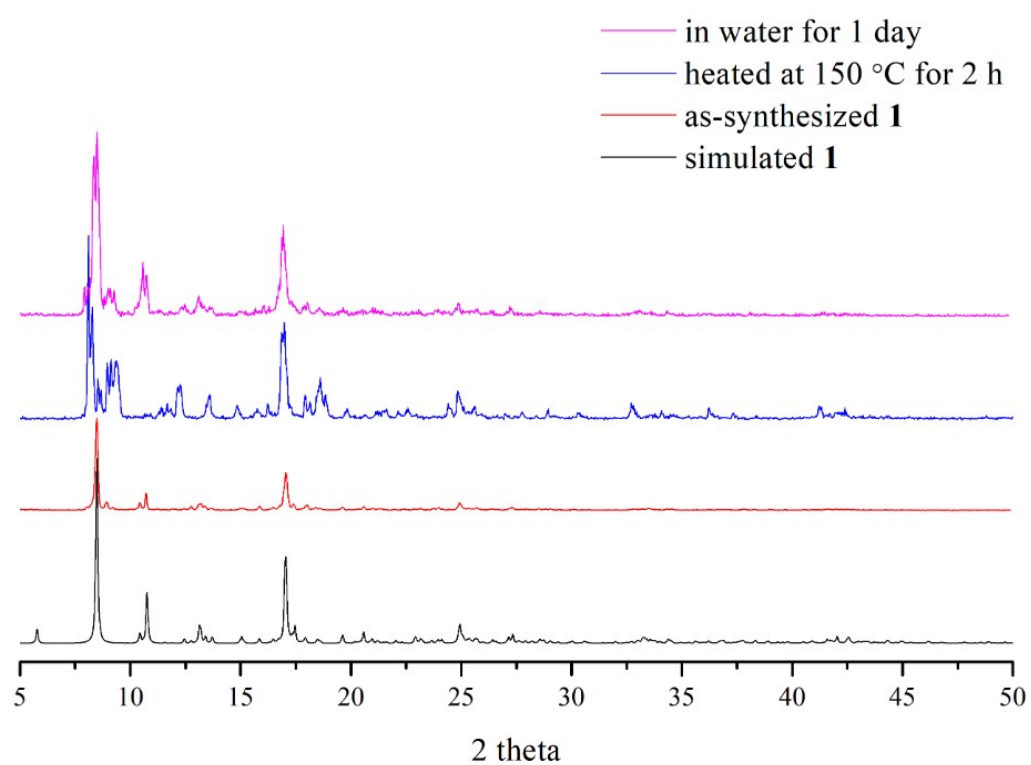
**Fig. S8** The thermal gravimetric analysis (TGA) curve for complex **1**.



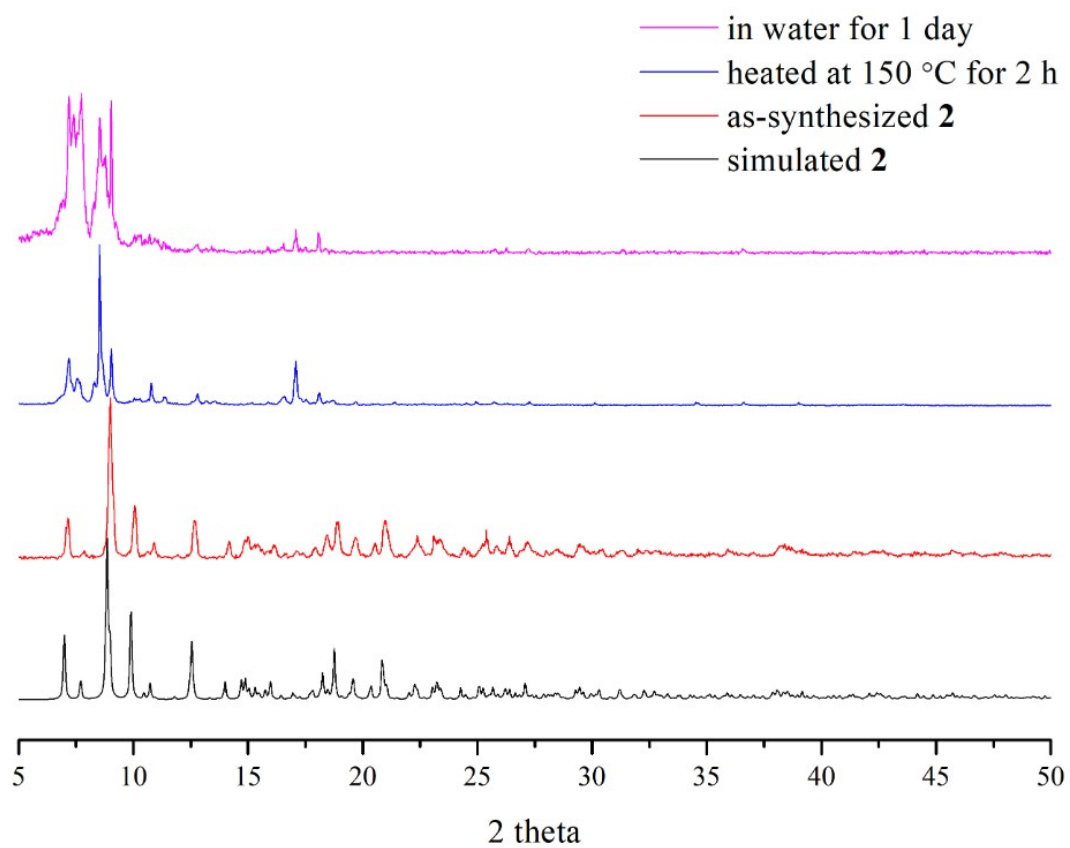
**Fig. S9** The thermal gravimetric analysis (TGA) curve for complex **2**.



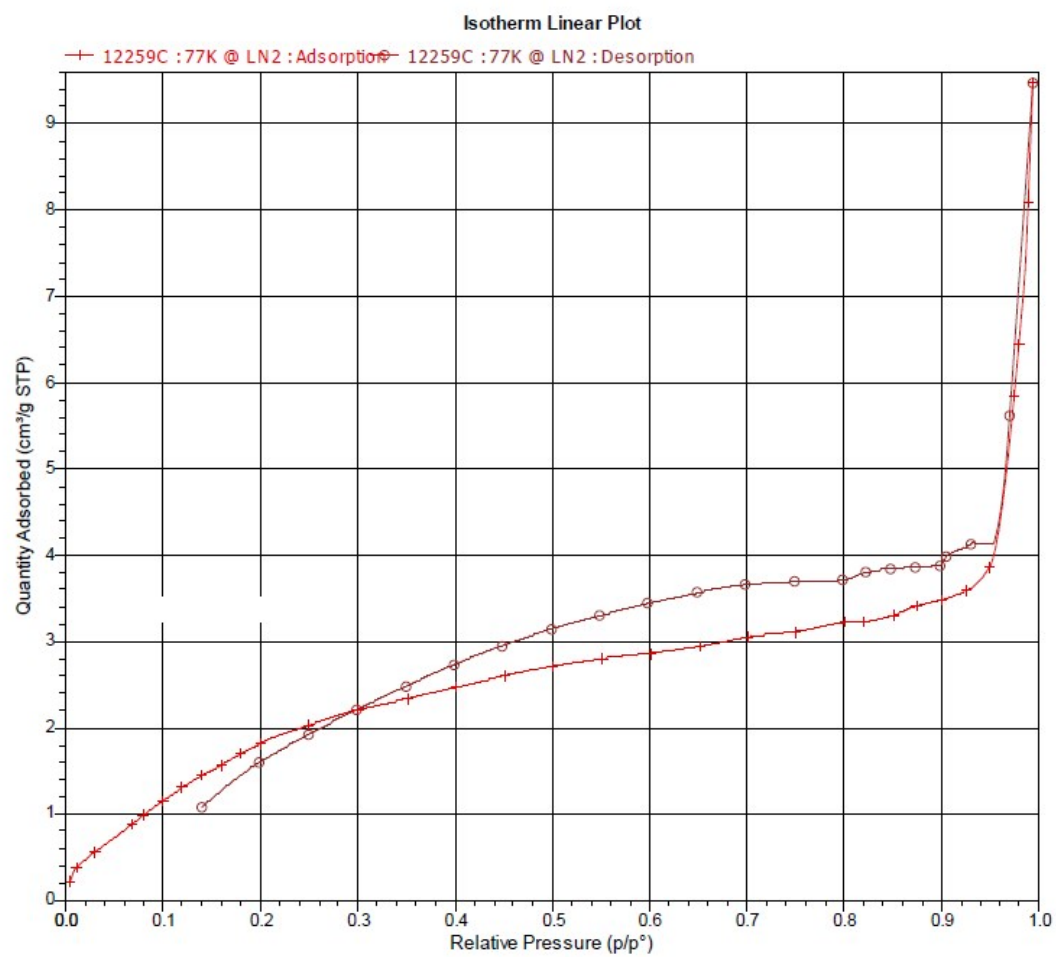
**Fig. S10** PXRD patterns of **1** upon removal and adsorption of the water molecules.



**Fig. S11** PXRD patterns of **2** upon removal and adsorption of the water molecules.



**Fig. S12** N<sub>2</sub> sorption isotherm of the desolvated **1**.



**Fig. S13** N<sub>2</sub> sorption isotherm of the desolvated **2**.

