Supplementary Material (ESI) for Chemical Communications

Supporting Information

New Mimic of Zeolite: Heterometallic Organic Host Framework Accommodating Inorganic Cations

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All the syntheses were performed in polytetrafluoroethylene-lined stainless steel autoclaves under autogenous pressure. Reagents were purchased commercially and used without further purification. Elemental analyses (C and H) were performed on an EA1110 CHNS-0 CE elemental analyzer and Elemental analyses (Cu and Zn) were measured by an electron probe microanalyzer (EPMA-810). IR (KBr pellet) spectra were recorded on a Nicolet Magna 750FT-IR spectrometer. Thermal analysis was carried out on a Netzsch STA449C thermal analyzer from 40 to 700°C at a heating rate of 15°C/min. X-ray powder diffraction experiments were performed in a Rigaku Dmax 2500 instrument with a ultra 18Kw Cu rotating anode point source.

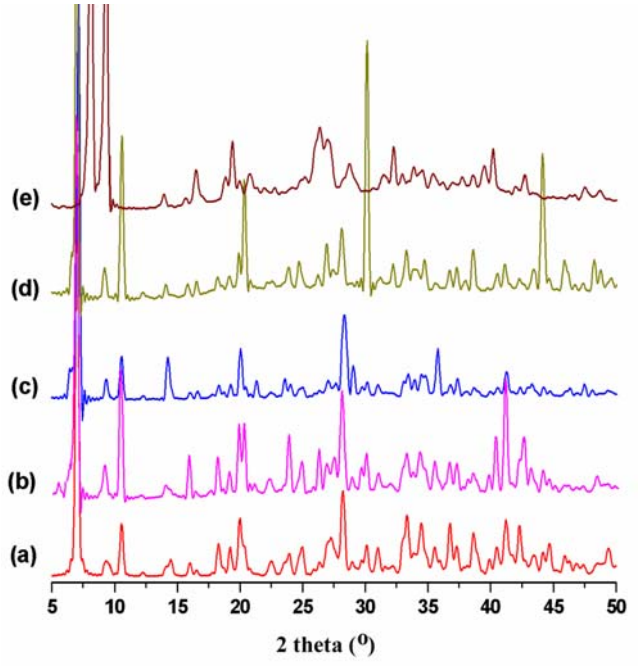

Fig. S1 XPRD patterns of **1** (a: simulated powder patterns of **1**, b: powder sample of **1**, c: after heating **1** to 129°C for 5 h, d: after rehydration of sample c for 24 h, e: after heating **1** to 260°C for 5 h).

Elemental analysis

Compounds	Calc.	Found
$[Na_2(H_2O)_{10}][CuZn_4(OH)_4(btec)_2]\cdot 2H_2O$	C, 20.79; H, 2.79	C, 20.85; H, 2.81
$[Li_2(H_2O)_{10}][CuZn_4(OH)_4(btec)_2]\cdot 2H_2O$	C, 21.38; H, 2.87	C, 21.53; H, 3.02
$[K_2(H_2O)_{10}][CuZn_4(OH)_4(btec)_2]\cdot 2H_2O$	C, 20.23; H, 2.72	C, 20.31; H, 2.65