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Supplementary Material

Coordination assemblies of the M^{II}-tm/bpt (M = Zn/Cd/Co/Ni) mixed-ligand system: positional isomeric effect, structural diversification and properties

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Table **S1**. Selected Hydrogen-bond Geometry (Å) for complex **6**

D—H···*A*	*D*—*H*	*H*···*A*	*D*···*A*	*D*—H···*A*
		6		
N3—H3···O2vi	0.87	1.92	2.793 (13)	176
O7—H7A···O2	0.86	1.88	2.663 (9)	151
O7—H7B···O11vii	0.85	2.48	2.967 (14)	117
O7—H7B···O10viii	0.85	2.17	2.993 (18)	150
N8—H8···O9	0.87	2.02	2.717 (13)	137
O8—H8A···O6ix	0.85	2.00	2.761 (15)	148
O8—H8B···O10viii	0.85	2.01	2.84 (2)	168
O10—H10B···N7viii	0.86	2.14	3.00 (2)	176
O10—H10C···O2x	0.84	1.90	2.740 (18)	175
O11—H11A···O10xi	0.85	2.16	3.01 (12)	177
O11—H11B···N4ix	0.84	2.17	3.000 (14)	175

Symmetry codes: (vi) −*x*+2, −*y*, −*z*+2; (vii) *x*, *y*−1, *z*; (viii) −*x*+1, −*y*+1, −*z*+1; (ix) *x*, *y*+1, *z*−1; (x) *x*−1, *y*+1, *z*; (xi) *x*+1, *y*, *z*.

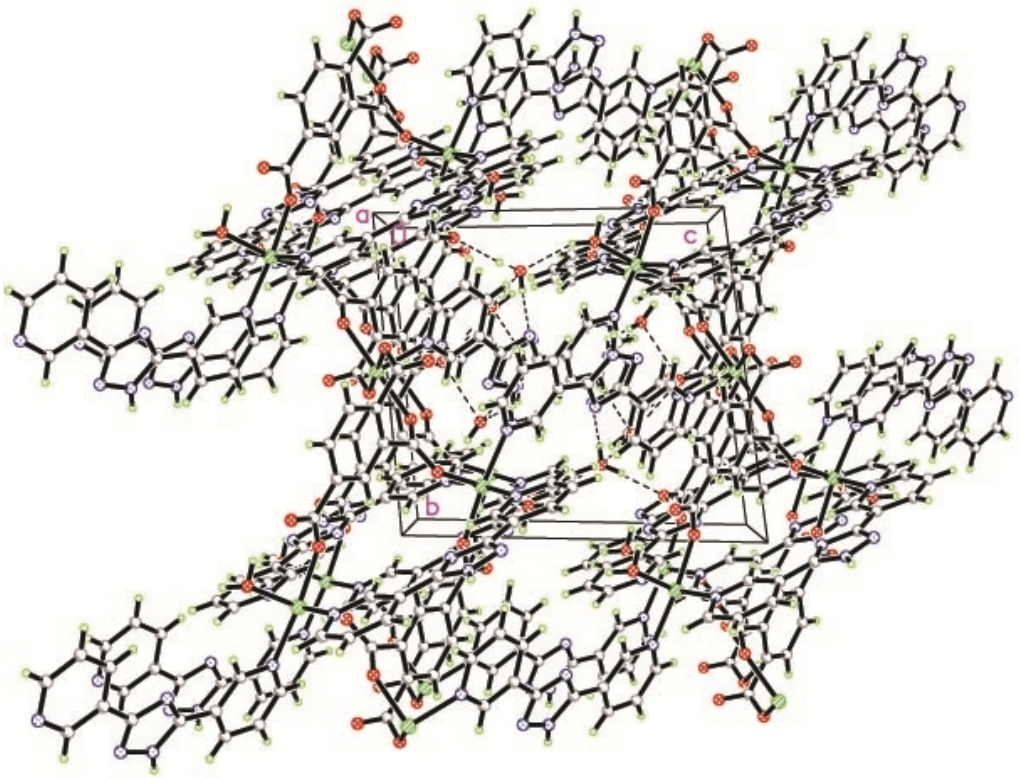

Fig **S1**. Show the 3-D packing drawing of **6**.

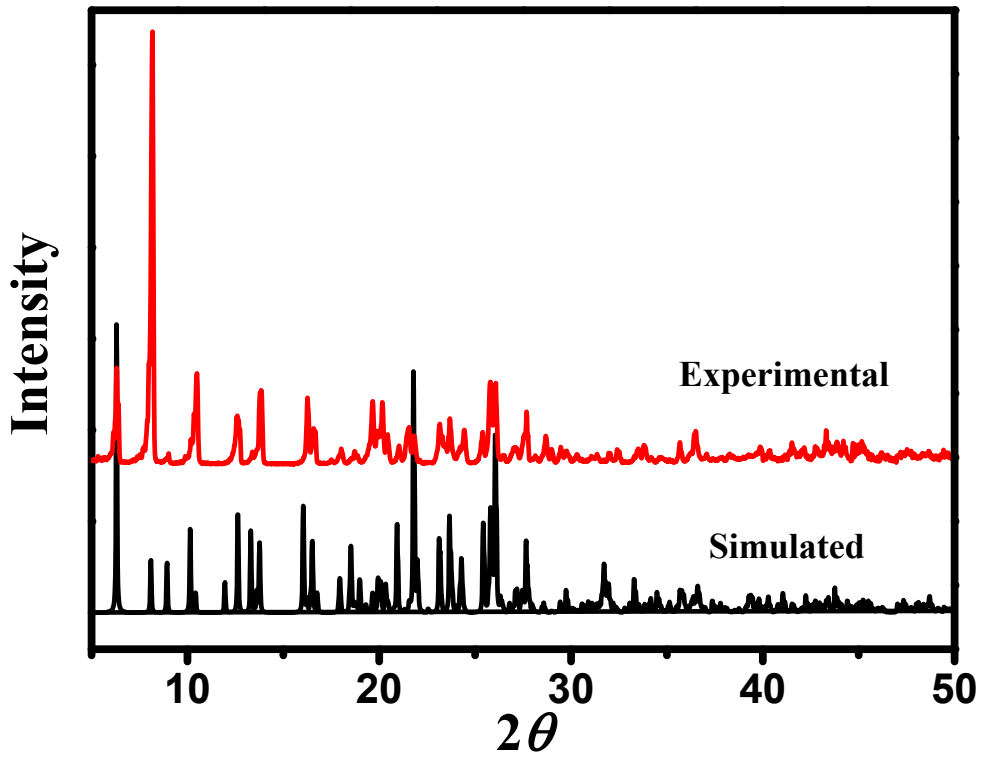

Fig **S2.** Measured and calculated powder X-ray diffraction (PXRD) pattern of **1**.

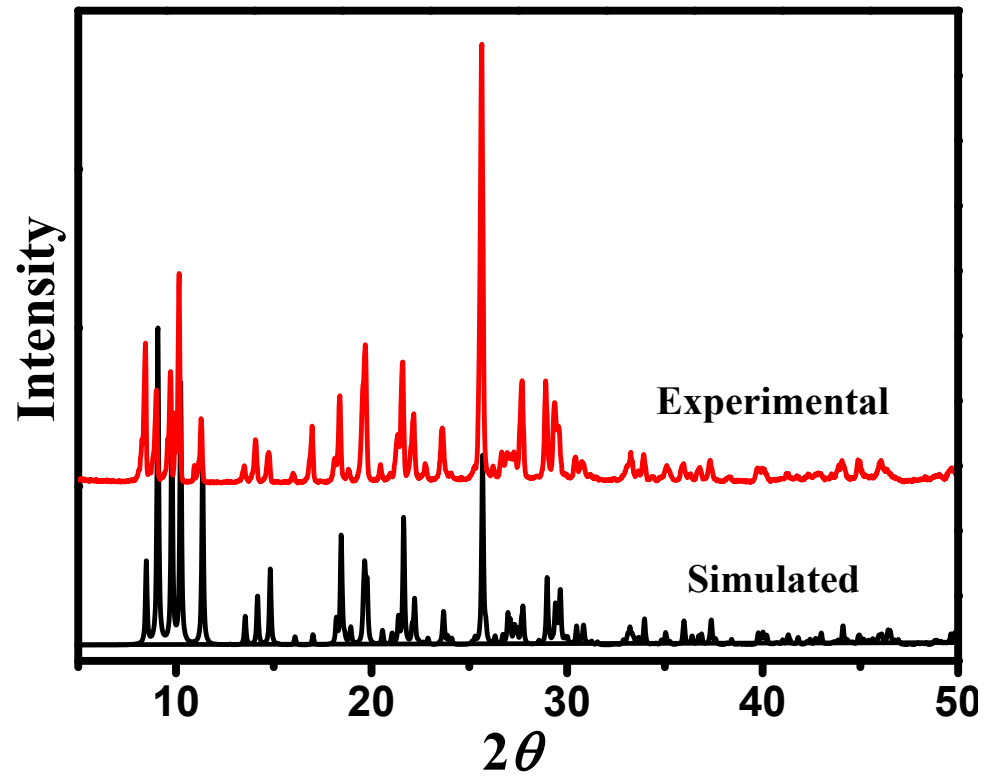

Fig **S3.** Measured and calculated powder X-ray diffraction (PXRD) pattern of **2**.

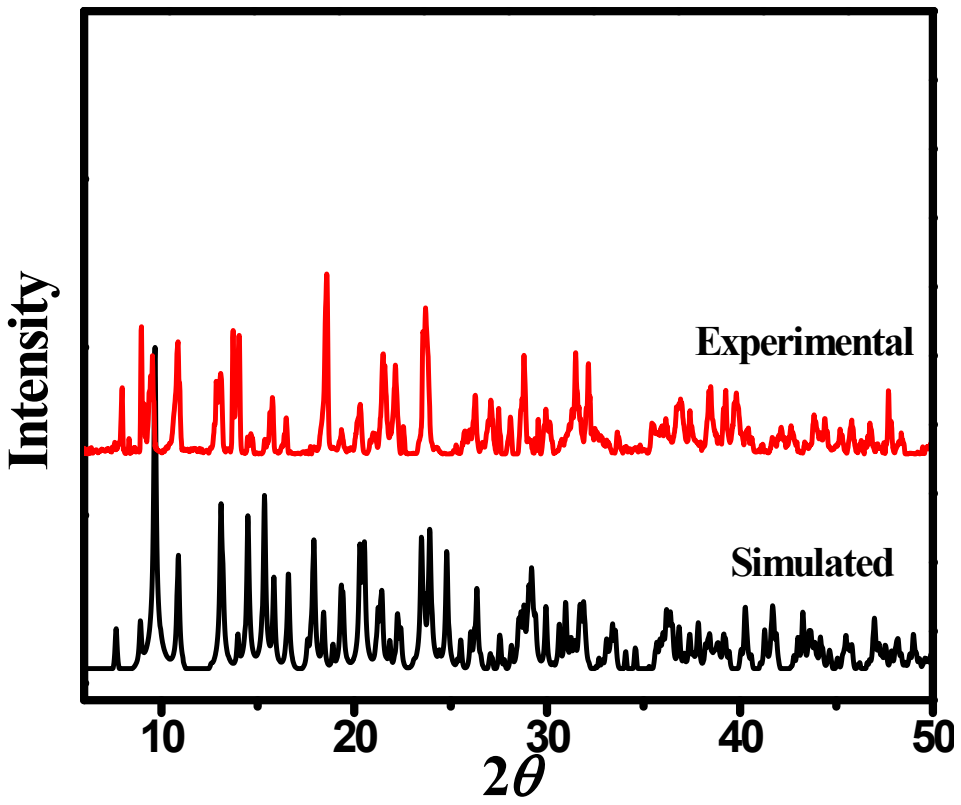

Fig **S4.** Measured and calculated powder X-ray diffraction (PXRD) pattern of **3**.

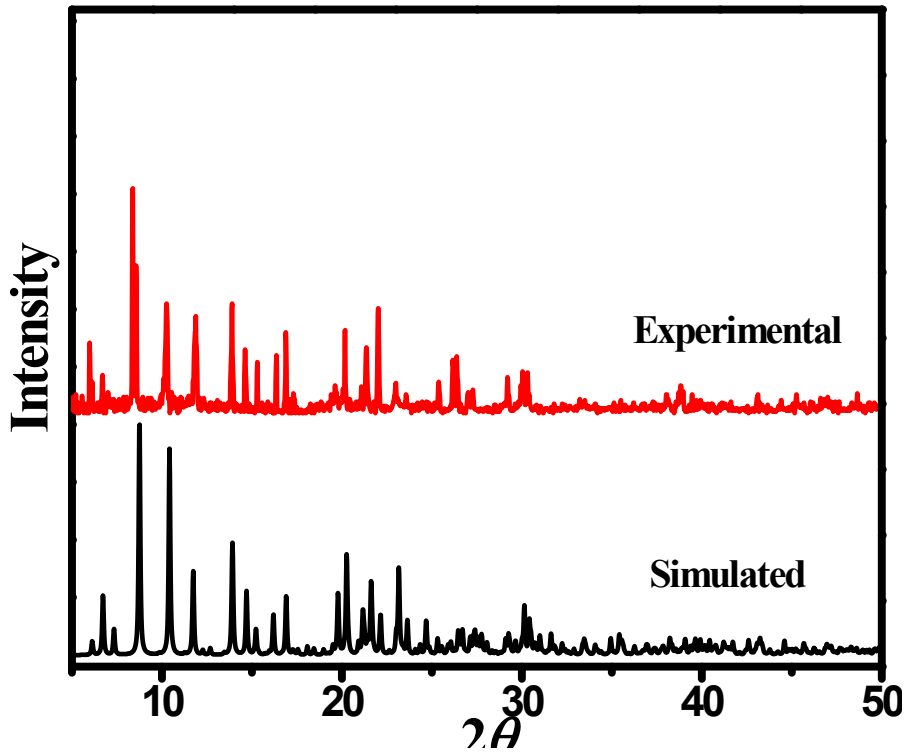

Fig **S5.** Measured and calculated powder X-ray diffraction (PXRD) pattern of **4**.

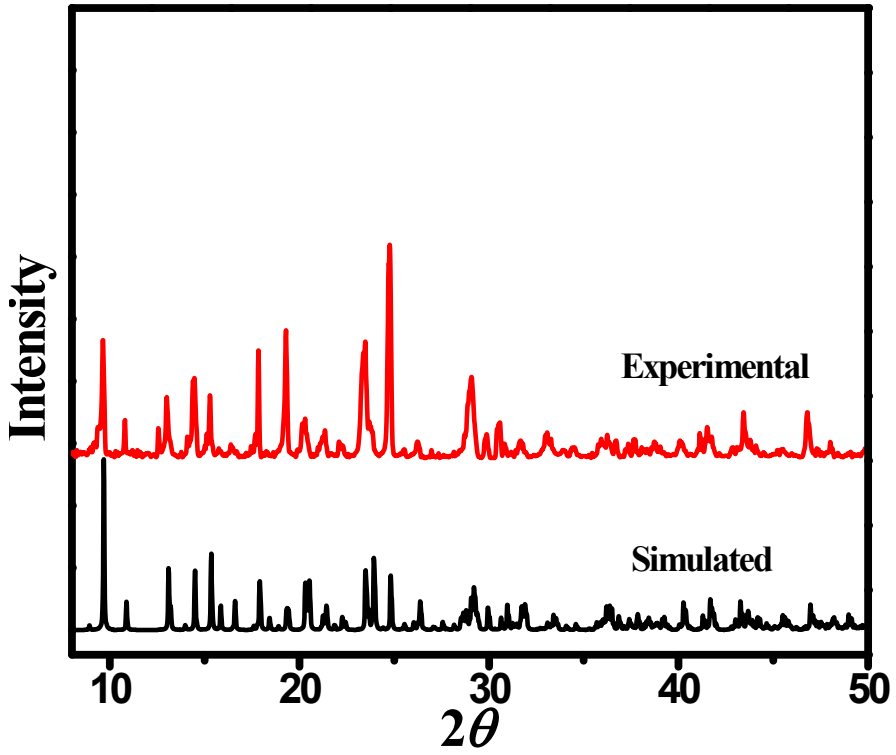

Fig **S6.** Measured and calculated powder X-ray diffraction (PXRD) pattern of **5**.

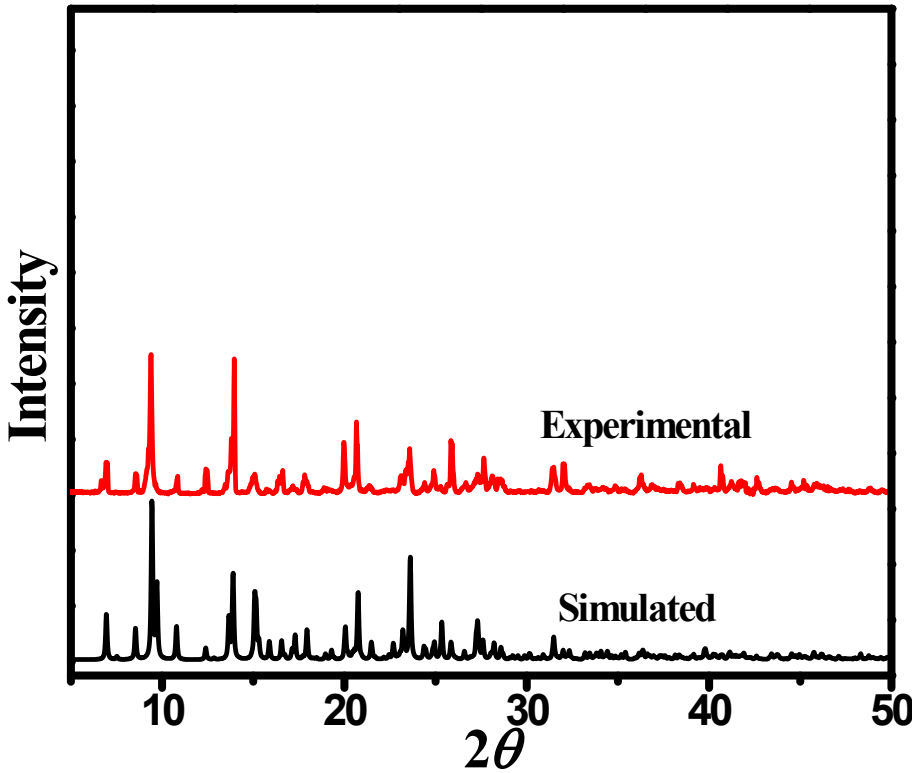

Fig **S7.** Measured and calculated powder X-ray diffraction (PXRD) pattern of **6**.

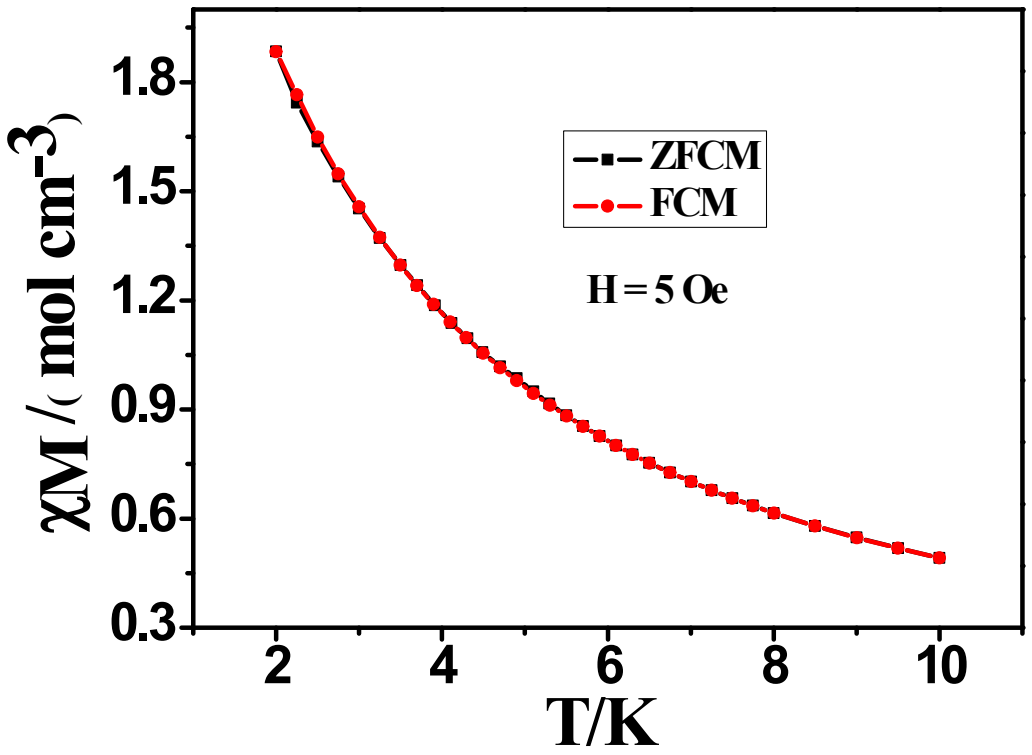

Fig **S8**. Plots of zero-field cooled magnetization (ZFC) and field-cooled magnetization (FC) and in a field of 5 Oe for 1 using a SQUID.