

# **Structural diversity in coordination polymers with semirigid Lewis acidity ligand: structures and properties**

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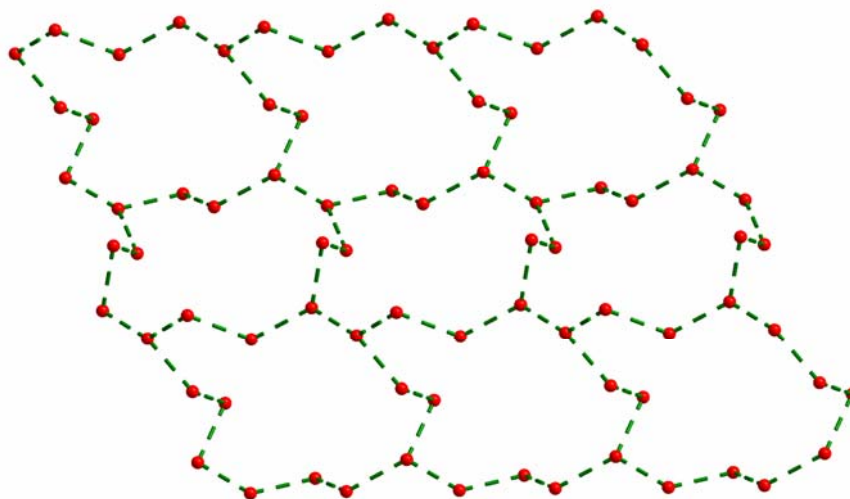
**Dr. Yong-Qing Huang**

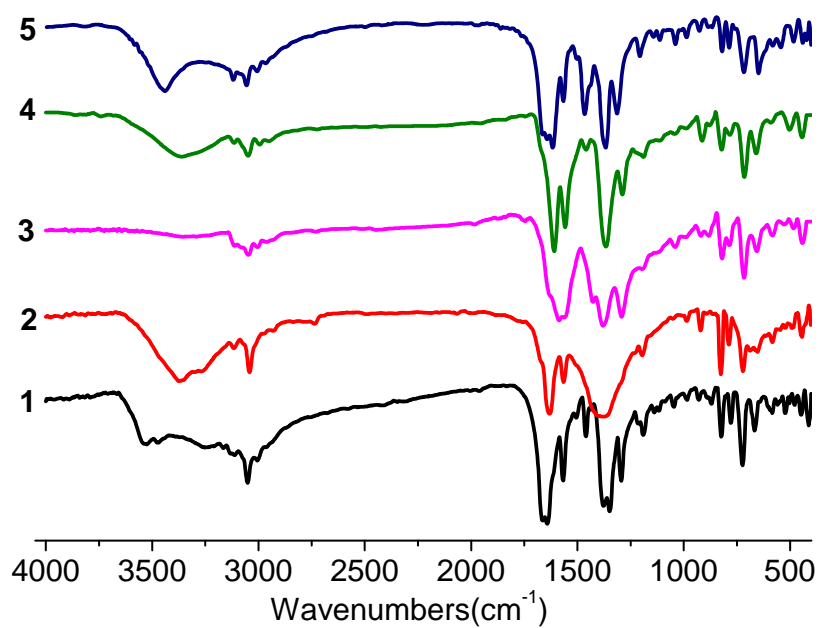
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**Table S1** Distances(Å) and angles (°) of hydrogen bondings for **2** and **4**<sup>a</sup>

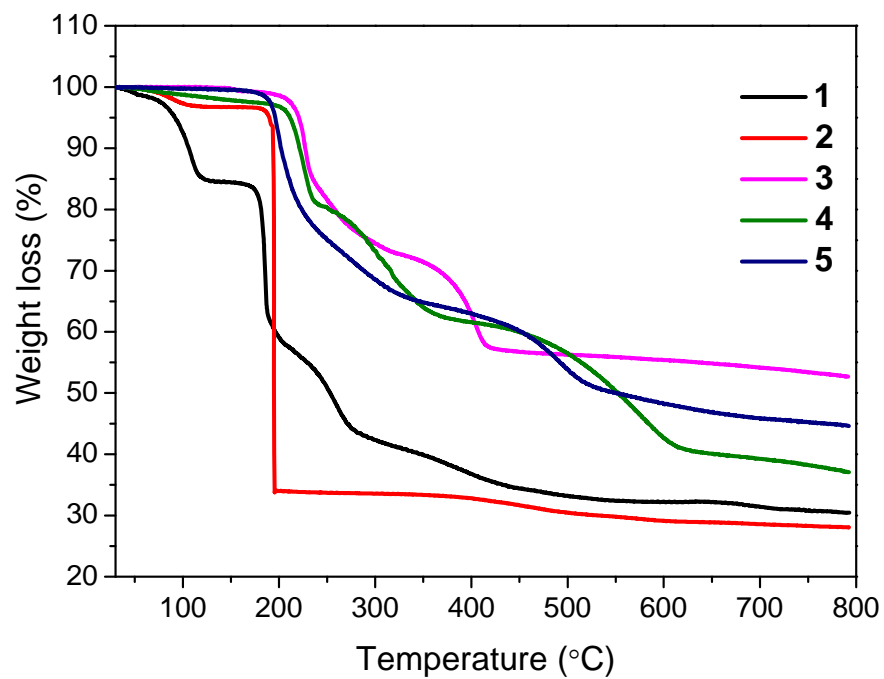
D-H...A	Distance		Angle
	(D...A)	D-H-A	(D-H-A)
<b>2</b>			
O(1W)-H(1WA)...O(7)#1	3.183(7)	O(1W)-H(1WA)-O(7)#1	156(8)
O(1W)-H(1WB)...O(1W)#2	3.076(6)	O(1W)-H(1WB)-O(1W)#2	142(8)
<b>4</b>			
O(1W)-H(1WA)...O(7)#3	2.23(12)	O(1W)-H(1WA)-O(7)#3	139(16)
O(1W)-H(1WB)...O(2)#4	1.98(7)	O(1W)-H(1WB)-O(2)#4	160(18)

<sup>a</sup> Symmetry transformations used to generate equivalent atoms: #1  $x-1/2, -y+5/2, z+1/2$ ; #2  $-x+3/2, y+1/2, -z+3/2$ ; #3  $-x, -y+2, -z+1$ ; #4  $-x+1/2, -y+3/2, -z+1$ .

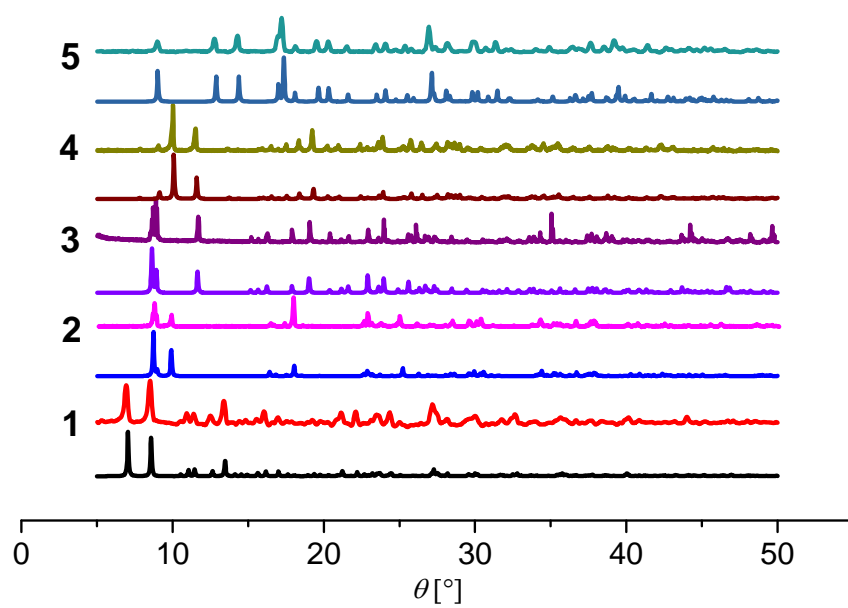
**Fig. S1** View of 2D layered water cluster in complex **1**.



**Fig. S2** The IR spectra of complexes 1-5.



**Fig. S3** TGA plots of complexes 1-5.



**Fig. S4** Powder X-ray diffraction (PXRD) pattern of complexes **1–5**. Down: calculated from single crystal data; Top: experimental.