

SUPPLEMENTARY MATERIAL

Metal Ion-Driven assembly of Two New Coordination Polymers Constructed by Asymmetric Tricarboxylate and Imidazole-Containing Ligands: Syntheses, Crystal Structures and Luminescent properties

Wenlong Liu^a, Xueying Wang^b, Mengqiang Wu^a, Bing Wang^{c,d,*}

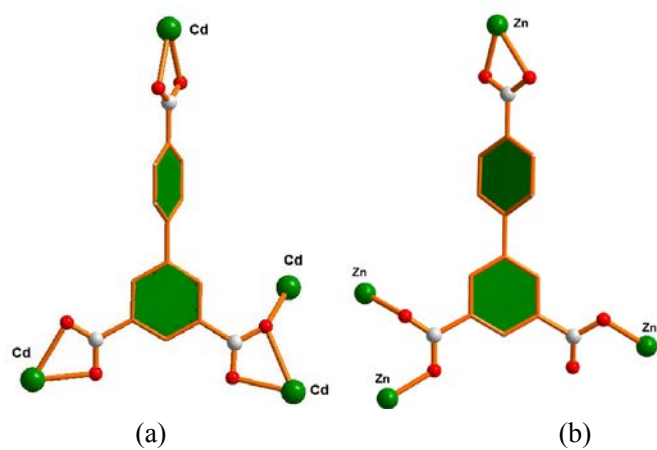
^a School of Energy Science and Engineering, University of Electronic Science and Technology of China, Chengdu, 611731, PR China

^b College of Chemistry and Molecular Sciences, Wuhan University, Wuhan, 430072, PR China

^c Yibin University, Yibin, 644000, PR China

^d Innovation and Practice Base for Postdoctors, Yibin University, Yibin, 644000, PR China.

*Email: liuwenlong6666@126.com



Scheme S1 The coordination modes about the carboxylate ligand

Table S1. Selected bond lengths (Å) and angles (°) for Complexes 1 and 2

Complex 1			
Cd(1)—N(1)	2.273 (4)	Cd(1)—O(1)	2.288 (3)
Cd(1)—O(2)	2.423 (3)	Cd(2)—N(4) ⁱ	2.229 (4)
Cd(2)—O(4) ⁱⁱⁱ	2.315 (3)	Cd(2)—O(3) ⁱⁱ	2.252 (3)
Cd(2)—O(5)	2.296 (3)	Cd(2)—O(6)	2.349 (3)
Cd(2)—O(4) ⁱⁱ	2.568 (3)		
N(1)—Cd(1)—O(1)	96.60 (13)	N(1)—Cd(1)—O(2)	144.78 (13)
O(1)—Cd(1)—O(2)	55.25 (10)	N(4) ⁱ —Cd(2)—O(3) ⁱⁱ	129.33 (11)
O(3) ⁱⁱ —Cd(2)—O(4) ⁱⁱⁱ	88.37 (10)	N(4) ⁱ —Cd(2)—O(5)	107.07 (13)
O(3) ⁱⁱ —Cd(2)—O(4) ⁱⁱ	53.91 (9)	O(5)—Cd(2)—O(4) ⁱⁱⁱ	148.73 (10)
O(3) ⁱⁱ —Cd(2)—O(5)	103.00 (12)	N(4) ⁱ —Cd(2)—O(6)	121.92 (12)
N(4) ⁱ —Cd(2)—O(4) ⁱⁱⁱ	86.47 (11)	O(3) ⁱⁱ —Cd(2)—O(6)	108.67 (12)
O(5)—Cd(2)—O(6)	55.77 (10)	O(5)—Cd(2)—O(4) ⁱⁱ	91.65 (11)
O(4) ⁱⁱⁱ —Cd(2)—O(6)	93.05 (10)	O(4) ⁱⁱⁱ —Cd(2)—O(4) ⁱⁱ	117.99 (7)
N(4) ⁱ —Cd(2)—O(4) ⁱⁱ	85.16 (11)	O(6)—Cd(2)—O(4) ⁱⁱ	141.07 (11)
Complex 2			
Zn(1)—O(1)	1.943 (2)	Zn(1)—N(1)	2.042 (2)
Zn2—O(4) ⁱ	1.9780 (19)	Zn2—O(5) ⁱⁱⁱ	2.048 (3)
Zn2—N(4) ⁱⁱ	2.019 (2)	Zn2—O(6) ⁱⁱⁱ	2.298 (3)
Zn2—O(3)	2.021 (2)		
O(1)—Zn(1)—N(1)	103.61 (9)	O(4) ⁱ —Zn2—N(4) ⁱⁱ	106.59 (9)
O(3)—Zn2—O(5) ⁱⁱⁱ	89.75 (9)	O(4) ⁱ —Zn2—O(6) ⁱⁱⁱ	92.44 (9)
O(4) ⁱ —Zn2—O(3)	107.22 (8)	N(4) ⁱⁱ —Zn2—O(6) ⁱⁱⁱ	100.62 (10)
N(4) ⁱⁱ —Zn2—O(3)	97.30 (9)	O(3)—Zn2—O(6) ⁱⁱⁱ	148.30 (8)
O(4) ⁱ —Zn2—O(5) ⁱⁱⁱ	124.88 (11)	O(5) ⁱⁱⁱ —Zn2—O(6) ⁱⁱⁱ	58.55 (10)
N(4) ⁱⁱ —Zn2—O(5) ⁱⁱⁱ	123.11 (12)		

Symmetry codes: For **1**: (i) $x+1/2, y+3/2, z+1$; (ii) $x, -y+3, z+1/2$; (iii) $-x+1/2, -y+7/2, -z+2$; For **2**: (i) $-x-1/2, -y+1/2, -z$; (ii) $x-1/2, y-3/2, z$; (iii) $-x, -y, -z$.

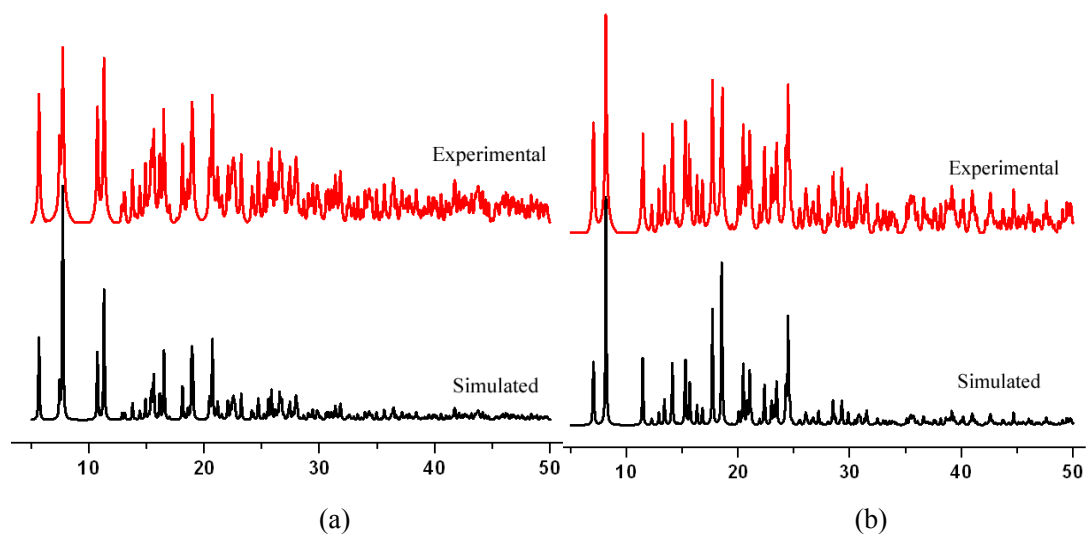


Fig.S1 XRPD for complexes (a) Complex 1; (b) Complex 2.