

## ***Supporting Information***

### **Two novel Cd(II) complexes with unprecedented four- and six-fold interpenetration**

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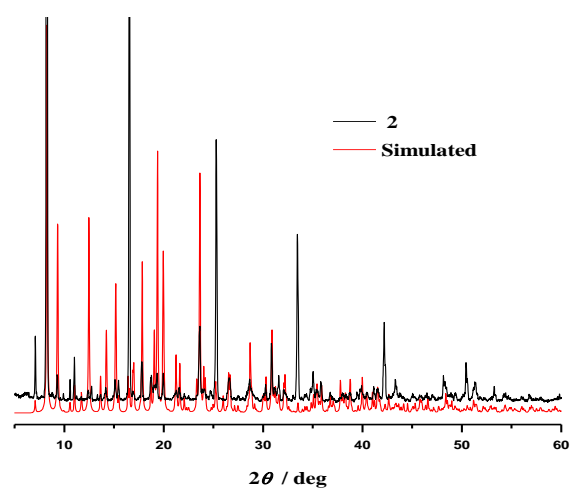
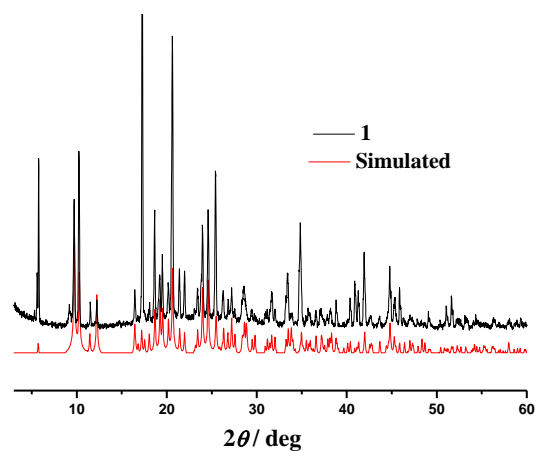
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#### **Catalogue:**

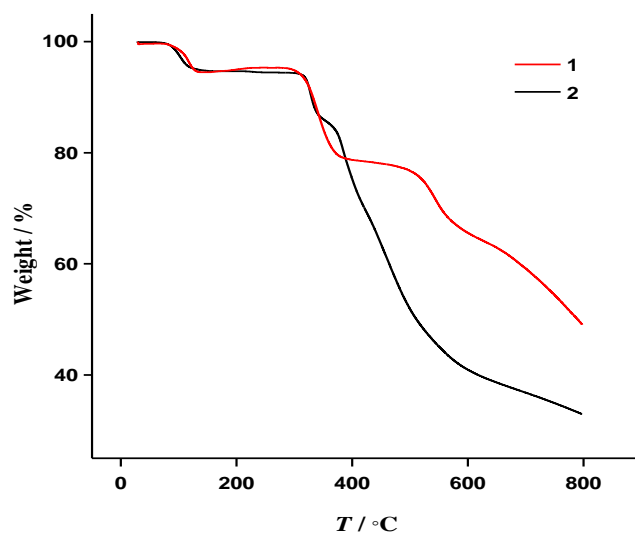
**Fig. S1** The PXRD patterns of compounds 1 and 2.

**Fig. S2** The curves of TGA for compounds 1 and 2.

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



**Fig. S1** The PXRD of Compounds **1** and **2**.



**Fig. S2** TGA curves for compounds **1** and **2**.

**Table S1.** Selected bond lengths [ $\text{\AA}$ ] and angles [ $^\circ$ ] for **1** and **2**.

<b>1</b>			
Cd1—N1	2.338(3)	N1 <sup>#1</sup> —Cd1—N1	89.24(12)
N1 <sup>#1</sup> —Cd1—N1 <sup>#3</sup>	180.00(12)	N1 <sup>#2</sup> —Cd1—N1 <sup>#3</sup>	90.76(12)
<b>2</b>			
Cd1—O2	2.233(4)	Cd1—N4 <sup>#1</sup>	2.319(4)
Cd1—O4	2.282(3)	Cd1—N1	2.364(3)
Cd1—O5	2.312(4)	Cd1—O6	2.370(3)
O2—Cd1—O4	173.61(11)	O5—Cd1—N1	94.66(10)
O2—Cd1—O5	86.04(11)	N4 <sup>#1</sup> —Cd1—N1	161.45(11)
O4—Cd1—O5	92.67(10)	O2—Cd1—O6	87.21(11)
O2—Cd1—N4 <sup>#1</sup>	86.00(11)	O4—Cd1—O6	95.1(1)
O4—Cd1—N4 <sup>#1</sup>	88.23(11)	O5—Cd1—O6	168.00(9)
O5—Cd1—N4 <sup>#1</sup>	103.84(10)	N4 <sup>#1</sup> —Cd1—O6	85.56(10)
O2—Cd1—N1	93.97(11)	N1—Cd1—O6	75.92(10)
O4—Cd1—N1	92.38(11)		

Symmetry codes: For **1**: #1 -x+y, -x, z; #2 -y, x-y, z; #3 x-y, x, -z+2; For **2**: #1 x-1,y+1,z-1;