

Supplementary Information

Title: Two unusual self-threading frameworks self-assembled from mixed ligands and cobalt/zinc ions

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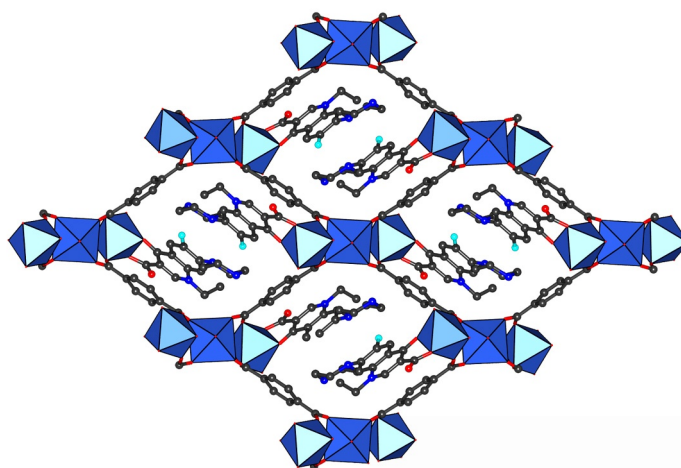


Fig. S1 View of the 2D layer linked by linear bdc^{A} spacers.

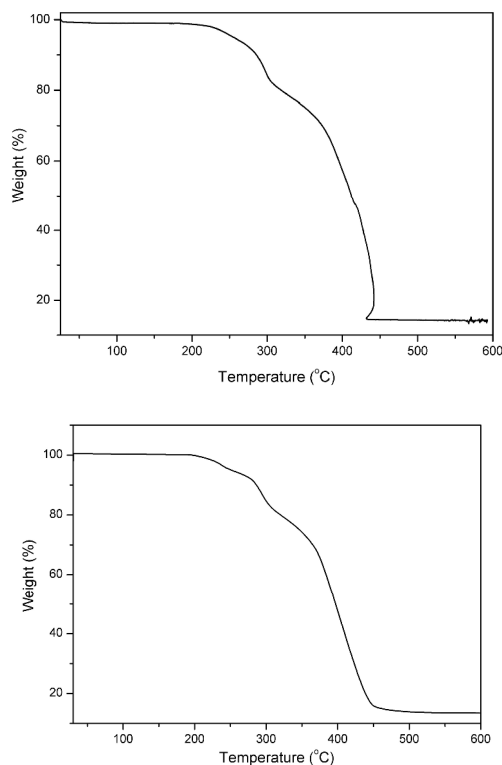


Fig. S2 TG curves of compounds **1** (top) and **2** (bottom).

Table S1 Selected Bond Lengths [Å] and Angles [°] for **1** and **2**^a

1			
Co(1)-O(11)	2.0205(16)	Co(1)-O(9)	2.0412(16)
Co(1)-O(4)	2.0579(16)	Co(1)-O(1W)	2.1367(17)
Co(1)-O(8A)	2.1516(15)	Co(1)-O(5)	2.2164(15)
Co(2)-O(6)	2.0734(14)	Co(2)-O(6B)	2.0734(15)
Co(2)-O(7A)	2.1046(14)	Co(2)-O(7C)	2.1046(14)
Co(2)-O(2WB)	2.1166(16)	Co(2)-O(2W)	2.1166(16)
O(11)-Co(1)-O(9)	89.26(6)	O(11)-Co(1)-O(4)	170.36(6)
O(9)-Co(1)-O(4)	85.84(7)	O(11)-Co(1)-O(1W)	92.70(6)
O(9)-Co(1)-O(1W)	90.46(7)	O(11)-Co(1)-O(8A)	79.93(14)
O(9)-Co(1)-O(8A)	176.30(6)	O(1W)-Co(1)-O(8A)	86.22(6)
O(9)-Co(1)-O(5)	97.71(7)	O(4)-Co(1)-O(5)	86.04(6)
O(6)-Co(2)-O(6B)	180.0	O(6)-Co(2)-O(7A)	88.48(6)
O(6)-Co(2)-O(7C)	91.52(6)	O(6)-Co(2)-O(2WB)	92.76(6)
O(7A)-Co(2)-O(2W)	88.97(6)	O(7A)-Co(2)-O(2WB)	91.03(6)
O(6)-Co(2)-O(2W)	87.24(6)	O(2WB)2-Co(2)-O(2W)	180.00(4)
2			
Zn(1)-O(11)	2.110(3)	Zn(1)-O(9)	2.127(3)
Zn(1)-O(6)	2.134(4)	Zn(1)-O(3A)	2.214(3)
Zn(1)-O(1W)	2.223(4)	Zn(1)-O(1)	2.245(3)
Zn(2)-O(2B)	2.158(3)	Zn(2)-O(2)	2.158(3)
Zn(2)-O(4A)	2.178(3)	Zn(2)-O(4C)	2.178(3)
Zn(2)-O(2WB)	2.209(3)	Zn(2)-O(2W)	2.209(3)
O(11)-Zn(1)-O(9)	85.29(13)	O(11)-Zn(1)-O(6)	170.40(15)
O(9)-Zn(1)-O(6)	87.51(14)	O(11)-Zn(1)-O(3A)	94.57(13)
O(9)-Zn(1)-O(3A)	178.20(15)	O(6)-Zn(1)-O(3A)	92.83(13)
O(11)-Zn(1)-O(1W)	95.90(13)	O(9)-Zn(1)-O(1W)	91.41(15)
O(6)-Zn(1)-O(1W)	90.61(14)	O(6)-Zn(1)-O(1)	87.39(14)
O(2B)-Zn(2)-O(2)	180.0	O(2)-Zn(2)-O(4A)	88.09(14)
O(2)-Zn(2)-O(2W)	91.25(12)	O(2)-Zn(2)-O(2WB)	88.75(12)
O(2B)-Zn(2)-O(4A)	91.91(14)	O(4A)-Zn(2)-O(2W)	89.59(12)
O(4A)-Zn(2)-O(2WB)	90.41(12)	O(2WB)-Zn(2)-O(2W)	180.0

^a Symmetry codes: A -x+1, y-1/2, -z+3/2, B -x+1, -y+1, -z+2, C x, -y+3/2, z+1/2 for **1**. A -x+1, y-1/2, -z-1/2, B -x+1, -y-1, -z, C x, -y-1/2, z+1/2 for **2**.