Electronic Supplementary Information (ESI)

Two Azido-bridged Cobalt(II) Coordination Polymers with Nicotinate

Co-ligand: Synthesis, Structures and Magnetic Properties

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		1	
Co(1)-O(4)#1	2.058(5)	Co(2)-O(1)#4	2.022(6)
Co(1)-O(2)#2	2.086(5)	Co(2)-O(3)#1	2.030(6)
Co(1)-N(5)	2.117(6)	Co(2)-N(4)	2.163(6)
Co(1)-N(1)#3	2.171(6)	Co(2)-N(1)	2.166(6)
Co(1)-N(1)	2.202(6)	Co(2)-Cl(1)	2.499(3)
Co(1)-Cl(1)	2.485(3)	Co(2)-O(1)W	2.521(3)
O(4)#1-Co(1)-O(2)#2	85.1(2)	O(1)#4-Co(2)-O(3)#1	166.0(2)
O(4)#1-Co(1)-N(5)	88.7(2)	O(1)#4-Co(2)-N(4)	92.4(2)
O(2)#2-Co(1)-N(5)	92.9(2)	O(3)#1-Co(2)-N(4)	88.3(2)
O(4)#1-Co(1)-N(1)#3	176.5(2)	O(1)#4-Co(2)-N(1)	97.4(2)
O(2)#2-Co(1)-N(1)#3	94.7(2)	O(3)#1-Co(2)-N(1)	96.4(2)
N(5)-Co(1)-N(1)#3	94.8(2)	N(4)-Co(2)-N(1)	97.3(2)
O(4)#1-Co(1)-N(1)	92.5(2)	O(1)#4-Co(2)-Cl(1)	89.41(17)
O(2)#2-Co(1)-N(1)	90.9(2)	O(3)#1-Co(2)-Cl(1)	89.35(18)
N(5)-Co(1)-N(1)	176.0(2)	N(4)-Co(2)-Cl(1)	176.77(19)
N(1)#3-Co(1)-N(1)	84.1(2)	N(1)-Co(2)-Cl(1)	85.15(17)
O(4)#1-Co(1)-Cl(1)	87.70(17)	O(1)#4-Co(2)-O(1)W	82.91(42)
O(2)#2-Co(1)-Cl(1)	171.40(17)	O(3)#1-Co(2)-O(1)W	83.07(32)
N(5)-Co(1)-Cl(1)	91.52(18)	N(4)-Co(2)-O(1)W	92.55(62)
N(1)#3-Co(1)-Cl(1)	92.28(17)	N(1)-Co(2)-O(1)W	170.13(02)
N(1)-Co(1)-Cl(1)	84.74(16)	O(1)W-Co(2)-Cl(1)	84.97(92)
#1 x-y+1,x+1,-z+2 #2	-y+4/3,x-y+5/3,z+2/3	#3 -x+1/3,-y+5/3,-z+5/3	#4 y-1,-x+y,-z+1
2			
Co(1)-N(1)#1	2.020(2)	Co(1)-N(4)	2.068(2)
Co(1)-O(1)#2	2.0267(15)	Co(1)-O(2)#3	2.1606(16)
Co(1)-N(1)	2.037(2)		
N(1)#1-Co(1)-O(1)#2	94.71(8)	N(1)-Co(1)-N(4)	109.25(9)
N(1)#1-Co(1)-N(1)	134.57(5)	N(1)#1-Co(1)-O(2)#3	84.60(8)
O(1)#2-Co(1)-N(1)	91.19(7)	O(1)#2-Co(1)-O(2)#3	178.75(7)
N(1)#1-Co(1)-N(4)	114.87(8)	N(1)-Co(1)-O(2)#3	88.57(7)
O(1)#2-Co(1)-N(4)	95.69(7)	N(4)-Co(1)-O(2)#3	85.54(7)
#1 x+1/2,-y+1/2,-z #2 -x+3/2,-y,z-1/2 #3 -x+1,y+1/2,-z+1/2			

 Table S1. Selected Bond Lengths [Å] and Angles [°] for 1 and 2.



Fig. S1. The XRPD diagrams for complexes: (a) 1; (b) 2.