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A series of MOFs based on a triangle ligand tri(4-pyridylphenyl)amine combined with carboxylate or nitrate auxiliary ligand

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Table S1. Selected Bond Lengths (Å) and Angles (deg) for Compounds **1.**

Compound **1**			
Co(1)-O(5)	1.961(5)	Co(1)-O(1)	2.044(2)
Co(1)-N(3)	2.151(2)	Co(1)-N(1)	2.159(4)
Co(2)-O(4)	1.976(2)	Co(2)-N(2)	2.193(2)
Co(2)-N(4)	2.238(4)	O(5)-Co(1)-O(1)	87.39(6)
O(1)-Co(1)-O(1)	174.78(12)	O(5)-Co(1)-N(3)	90.53(7)
O(1)-Co(1)-N(3)	90.51(10)	N(3)-Co(1)-N(3)	178.93(14)
O(5)-Co(1)-N(1)	180.0	O(1)-Co(1)-N(1)	92.61(6)
N(3)-Co(1)-N(1)	89.47(7)	O(4)-Co(2)-O(4)	72.42(16)
O(4)-Co(2)-N(2)#1	87.91(10)	O(4)-Co(2)-N(2)#2	91.56(9)
N(2)-Co(2)-N(2)	179.34(13)	O(4)-Co(2)-N(4)	143.79(8)
N(2)-Co(2)-N(4)	90.33(7)		

.**Table S2.** Selected Bond Lengths (Å) and Angles (deg) for Compounds **2.**

Compound **2**			
Zn(1)-N(2)	2.020(4)	Zn(1)-O(2)	1.972(3)
Zn(1)-O(1)	1.965(3)	Zn(1)-N(3)	2.041(4)
O(1)-Zn(1)-O(2)	99.96(14)	O(1)-Zn(1)-N(2)	110.81(14)
O(2)-Zn(1)-N(2)	104.81(15)	O(1)-Zn(1)-N(3)	106.83(15)
O(2)-Zn(1)-N(3)	115.11(15)	N(2)-Zn(1)-N(3)	117.90(15)

Table S3. Selected Bond Lengths (Å) and Angles (deg) for Compounds **3.**

Compound **3**			
Zn(1)-N(2)	2.071(3)	Zn(2)-N(3)	2.067(3)
Zn(1)-O(1)	1.988(2)	Zn(3)-O(4)	2.039(2)
Zn(2)-O(5)	2.006(3)	Zn(2)-O(7)	2.025(2)
Zn(1)-O(9)	1.959(2)	Zn(3)-O(12)	1.993(2)
Zn(2)-O(13)	1.992(2)	Zn(1)-O(1W)	2.063(3)
Zn(3)-O(2W)	2.028(3)	Zn(3)-O(3W)	1.981(2)
O(1W)-Zn(1)-N(2)	104.40(10)	O(13)-Zn(2)-O(5)	106.23(11)
O(13)-Zn(2)-O(7)	104.92(9)	O(5)-Zn(2)-O(7)	113.63(10)
O(13)-Zn(2)-N(3)	117.62(12)	O(5)-Zn(2)-N(3)	114.89(11)
O(7)-Zn(2)-N(3)	99.22(10)	O(3W)-Zn(3)-O(12)	104.35(10)
O(3W)-Zn(3)-O(2W)	97.07(10)	O(12)-Zn(3)-O(2W)	104.47(12)
O(3W)-Zn(3)-O(4)	98.05(10)	O(12)-Zn(3)-O(4)	136.39(10)
O(2W)-Zn(3)-O(4)	108.92(10)	O(9)-Zn(1)-O(1)	134.31(9)
O(9)-Zn(1)-O(1W)	99.14(10)	O(1)-Zn(1)-O(1W)	106.44(10)
O(9)-Zn(1)-N(2)	105.88(11)		

Table S4. Selected Bond Lengths (Å) and Angles (deg) for Compounds **4.**

Compound **4**			
Cu(1)-O(1)	2.0279(19)	Cu(1)-O(4)	2.0712(16)
Cu(1)-O(1W)	2.0804(16)	Cu(1)-N(4)	2.107(2)
Cu(1)-N(2)	2.1165(19)	Cu(1)-N(3)	2.1324(19)
O(1)-Cu(1)-O(4)	88.32(7)	O(1)-Cu(1)-O(1W)	93.91(7)
O(4)-Cu(1)-O(1W)	92.89(7)	O(1)-Cu(1)-N(4)	174.12(7)
O(4)-Cu(1)-N(4)	86.76(7)	O(1W)-Cu(1)-N(4)	89.55(7)
O(1)-Cu(1)-N(2)	85.86(8)	O(4)-Cu(1)-N(2)	88.13(7)
O(1W)-Cu(1)-N(2)	178.95(7)	N(4)-Cu(1)-N(2)	90.76(8)
O(1)-Cu(1)-N(3)	86.41(7)	O(4)-Cu(1)-N(3)	174.53(8)
O(1W)-Cu(1)-N(3)	88.93(7)	N(4)-Cu(1)-N(3)	98.42(8)
N(2)-Cu(1)-N(3)	90.03(8)		

Figure S1. Powder X-ray Diffraction Patterns of Compounds **1-4.**