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Title: A Series of Metal–organic Complexes Constructed from In Situ Generated Organic Amines

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**S–Table S1.** The selected bond lengths (Å) of compounds **1–5**.

<b>1</b>			
Zn(1)–N(1)	2.003(3)	Zn(2)–N(2)#2	1.998(4)
Zn(1)–N(4)	2.002(4)	Zn(2)–N(8)	1.999(4)
Zn(2)–N(3)	1.980(4)	Zn(3)–N(7)	2.000(3)
Zn(2)–N(5)#1	1.986(3)	Zn(3)–N(6)	1.999(4)
<b>2</b>			
Cd(1)–N(8)	2.302(4)	Cd(1)–N(1)	2.323(4)
Cd(1)–O(1)	2.299(4)	Cd(1)–N(5)	2.340(4)
Cd(1)–N(4)	2.302(4)	Cd(1)–O(4)	2.528(4)
<b>3</b>			
Co(1)–N(3)#1	2.129(5)	Co(1)–N(2)	2.175(4)
Co(1)–N(1)	2.150(5)	Co(1)–N(6)	2.174(5)
Co(1)–N(7)	2.151(5)	Co(1)–N(5)	2.183(5)
<b>4</b>			
Co(1)–N(3)	2.077(3)	Co(1)–O(2)	2.110(2)
Co(1)–N(1)	2.093(3)	Co(1)–O(4)	2.119(2)
Co(1)–O(1)	2.108(2)	Co(1)–O(3)	2.169(2)
<b>5</b>			
Zn(1)–N(1)	2.1138(19)	Zn(1)–O(2)#1	2.2427(18)
Zn(1)–N(3)	2.0875(19)	Zn(1)–O(3)	2.1701(18)
Zn(1)–O(1)#1	2.0960(16)	Zn(1)–O(4)	2.1683(18)

<sup>a</sup> Symmetry codes: **1** #1  $-x+3/2, y+1/2, -z+3/2$ ; #2  $x-1/2, y-1/2, z$ ; **3** #1  $-x+1, y, -z+1/2$ ; **5** #1  $x+1, -y+1/2, z+1/2$

**S–Table S2.** The geometrical parameters of hydrogen bonds in **2–5**.

D–H···A	d(D–H)/Å	d(H···A)/Å	d(D···A)/Å	∠DHA/°
<b>2</b>				
N(2)–H(2A)···O(2)#1	0.86	1.96	2.749(5)	151.9
N(3)–H(3A)···O(2)#2	0.86	2.15	2.820(5)	134.5
N(6)–H(6)···O(3)#3	0.86	1.88	2.726(5)	166.6
N(7)–H(7)···O(4)#3	0.86	1.94	2.746(5)	156.6
<b>3</b>				
N(4)–H(4A)···Cl(1)#1	0.86	2.36	3.170(5)	157.4
N(8)–H(8)···Cl(1)	0.86	2.29	3.123(6)	161.6
N(9)–H9···Cl(1)	0.86	2.38	3.196(5)	157.8
N10–H10···Cl(1)#1	0.86	2.29	3.108(6)	158.7

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<b>4</b>				
N(2)-H(5)···O(3)#1	0.83(4)	2.03(4)	2.852(4)	169(4)
N(4)-H(9)···O(1)#2	0.80(5)	2.01(5)	2.807(4)	170(5)

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<b>5</b>				
N(2)-H(5)···O(4)#1	0.88(3)	1.93(3)	2.780(3)	163(3)
N(4)-H(6)···O(1)#2	0.80(4)	2.07(3)	2.798(3)	151(3)
C(15)-H(11)···O(1)#3	0.89(3)	2.55(3)	3.324(3)	146(3)

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<sup>a</sup> Symmetry codes: **2** #1  $-x+2, -y+2, -z+1$ ; #2  $x+1, y, z$ ; #3  $-x+1, -y+2, -z+2$ ; **3** #1  $x+1/2, y-1/2, z$ ; **4** #1  $-x+1, -y+2, -z$ , #2  $-x+2, y-1/2, -z+1/2$ ; **5** #1  $-x, -y+1, -z+2$ ; #2  $-x, y+1/2, -z+3/2$ ; #3  $x, -y+1/2, z+1/2$ .

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