

Supporting Information

Binodal (7,9)-connected network based on distinct tricobalt(II) clusters: structure, topology and cooperative magnetism

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Table S1. Selected bond lengths (Å) and angles (°).

1					
Co1-O1	2.0281(1)	Co1-O6	2.098(5)	Co2-O8	2.052(5)
Co1-O5a	2.118(5)	Co1-N1	2.162(7)	Co2-O4b	2.093(5)
Co2-O2	2.120(5)	Co2-N3c	2.161(6)	Co2-N2	2.162(6)
Co2-O3	2.196(5)	Co3-O7	1.966(1)	Co3-O2	2.038(7)
Co3-O1W	2.145(2)	Co3-O1S	2.16(2)	Co3-O2W	2.260(1)
O1-Co1-O6	94.26(2)	O1-Co1-O5a	90.19(2)	O6-Co1-O5a	87.3(3)
O6d-Co1-O5a	175.4(2)	O1-Co1-N1	176.6(2)	O6-Co1-N1	88.1(2)
O5a-Co1-N1	87.3(2)	O8-Co2-O4e	174.5(2)	O8-Co2-O2	94.0(2)
O4e-Co2-O2	91.3(3)	O8-Co2-N3c	91.9(2)	O4e-Co2-N3c	86.1(2)
O2-Co2-N3c	96.9(2)	O8-Co2-N2	86.2(2)	O4e-Co2-N2	88.7(2)
O2-Co2-N2	173.4(2)	O8-Co2-O3	89.8(2)	O4e-Co2-O3	92.4(2)
O2-Co2-O3	81.6(2)	N3c-Co2-O3	177.8(2)	N2-Co2-O3	91.9(2)
O7-Co3-O2	103.9(4)	O7-Co3-O1W	159.5(6)	O2-Co3-O1W	96.2(5)
O7-Co3-O1Sf	87.5(6)	O2-Co3-O1Sf	91.8(5)	O1W-Co3-O1Sf	95.8(9)
O7-Co3-O1S	150.3(7)	O7-Co3-O1S	87.5(6)	O1S-Co3-O2W	82.0(5)
O1S-Co3-O1Sf	66.6(1)	O7-Co3-O2W	78.2(4)	O2-Co3-O2W	176.0(5)

Symmetry codes: a) $-x+y+1, -x+1, z$; b) $-x+1, -y+1, -z+1$; c) $x-y, x, -z+1$; d) $x, y, -z+3/2$; e) $-x+1, -y+1, -z+1$; f) $x, y, -z+1/2$.

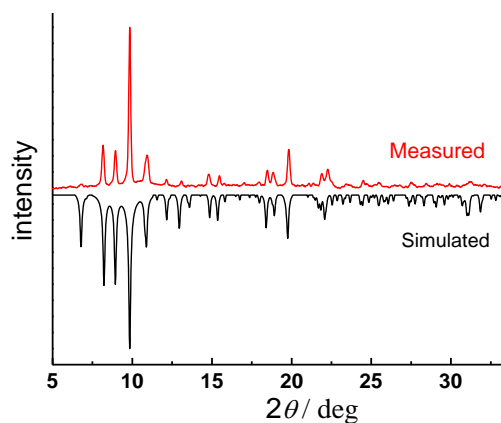


Fig. S1. Measured PXRD and simulated patterns of 1.

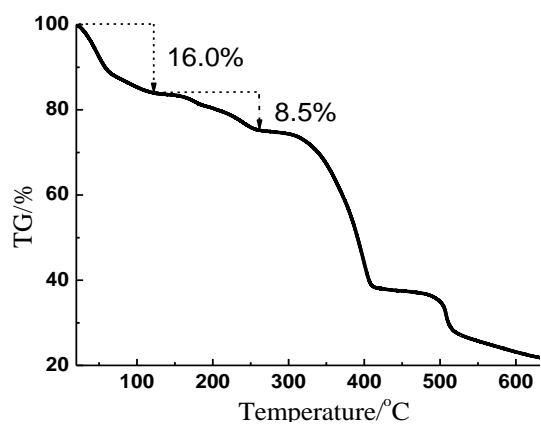


Fig. S2. TGA curve of **1**.