Electronic Supplementary Information for Dalton Transactions

Supporting Information

Controlling synthesis of novel chiral polyoxometalate-based compound and racemic compound from the same system

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Table S1. Selected bond distances (Å) and angles (°) for the compound 1

Cu(3)-O(1W)	2.333(19)	N(6)-Cu(2)-N(12)	172.9(14)
Cu(1)-N(1)	1.97(2)	N(2)-Cu(3)-O(1W)	97.2(8)
Cu(1)-N(9)	1.98(3)	N(2)-Cu(3)-N(4)	165.6(9)
Cu(2)-N(10)	1.95(2)	C(2)-N(1)-Cu(1)	112.6(16)
Cu(2)-N(6)	1.98(2)	N(4)-Cu(3)-O(1W)	97.1(8)
Cu(3)-N(7)	1.97(3)	N(6)-Cu(2)-N(11)	96.1(10)
Cu(3)-N(2)	2.03(2)	O(29)-Na(1)-O(1)#1	107.9(7)
Na(1)-O(2)	2.199(18)	O(2)-Na(1)-O(29)	156.9(7)
Na(1)-O(1)#1	2.315(17)	O(29)-Na(1)-W(6)	78.7(5)
Na(1)-O(10)	2.23(2)	O(1)#1-Na(1)-W(3)	132.6(5)

Symmetry transformations used to generate equivalent atoms: #1 x-1,y,z; #2 x+1,y,z

Table S2. Selected bond distances (Å) and angles (°) for the compound 2

O(18)-Cu(6)#2	1.99(2)	Cu(6)#2-O(18)-W(17)	162.2(12)
O(64)-Cu(3)	2.33(4)	N(14)-Cu(1)-N(9)	85.5(10)
Cu(1)-N(4)	1.99(4)	N(1)-Cu(3)-O(64)	96.1(12)
Cu(1)-N(5)	2.03(3)	N(7)-Cu(3)-O(64)	95.7(12)
Cu(2)-N(3)	1.97(3)	N(8)#3-Cu(4)-N(12)	92.0(15)
Cu(4)-N(8)#3	1.98(5)	N(8)-Cu(4)-O(27)	90.0(14)
Cu(4)-O(27)#3	2.39(2)	C(4)-N(1)-Cu(3)	110(2)
Cu(7)-N(15)#4	1.88(7)	C(10)-N(8)-Cu(4)	109(4)
Cu(7)-N(16)#4	1.90(8)	C(5)-N(9)-Cu(1)	106(2)

Symmetry transformations used to generate equivalent atoms:
#1 x+1,y,z ; #2 x-1,y,z ; #3 -x+2,-y+1,-z+1; #4 -x+1,-y+2,-z

Figure S1. IR spectra for compound **1.**

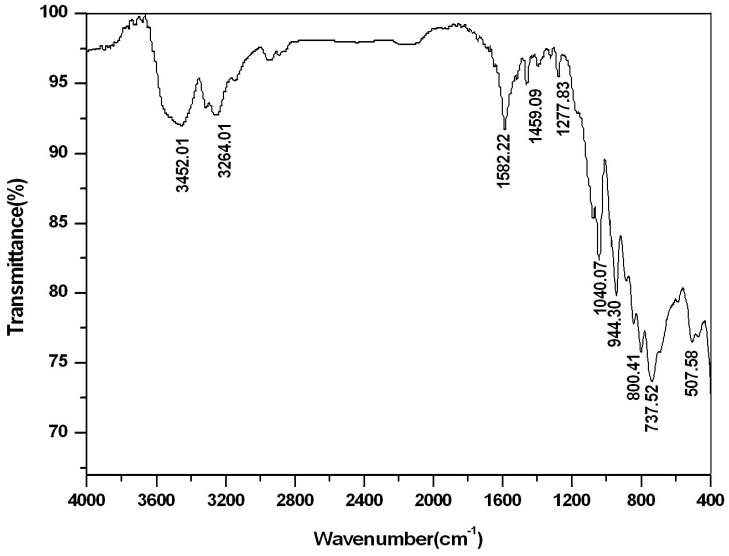

Figure S2. IR spectra for compound **2.**

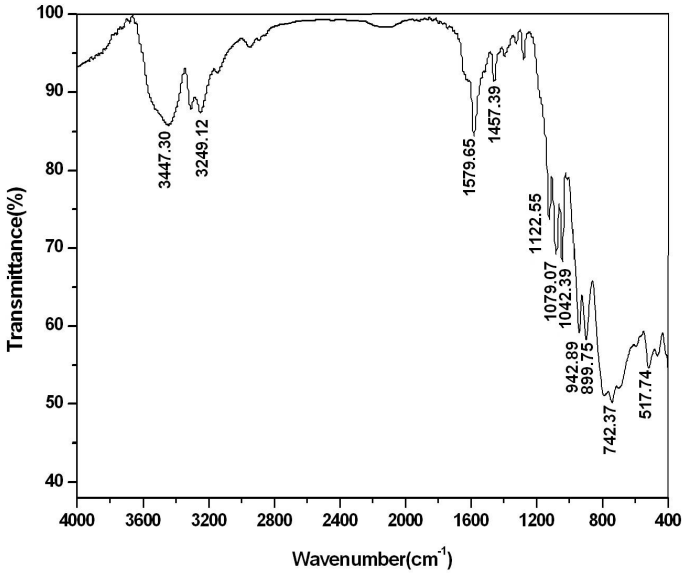

Figure S3. TG curve of compound **1**.

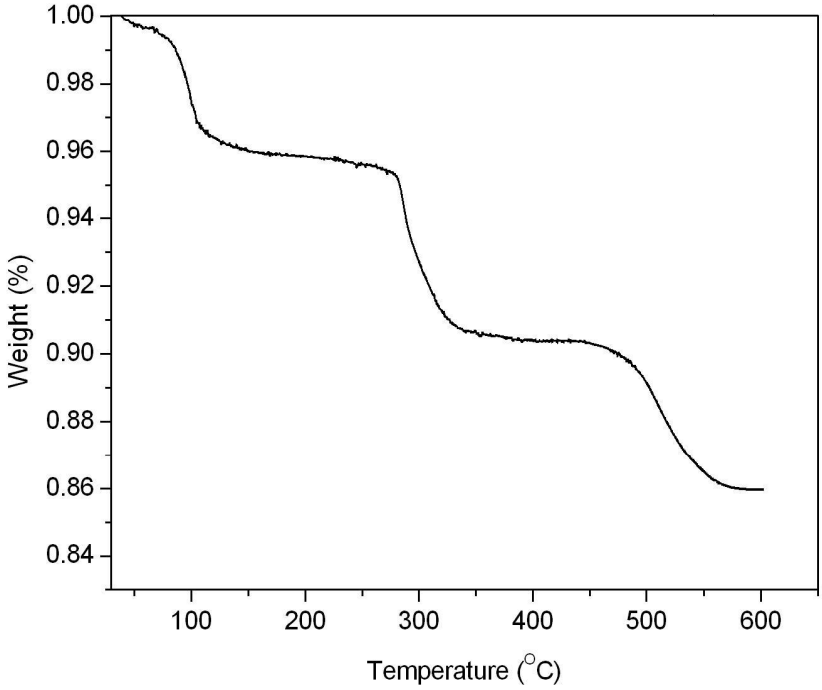

Figure S4. TG curve of compound **2**.