

A disulfide ligand with axial chirality generated *in situ* for the construction of an unusual h_xg topological coordination polymer

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

Mn(1)–O(1)	2.227(3)	Na(1)–O(1)	2.369(2)
Mn(1)–O(1)#1	2.227(3)	Na(1)–O(1)#1	2.369(2)
Mn(1)–O(1)#2	2.227(3)	Na(1)–O(1)#2	2.369(2)
Mn(1)–O(3)	2.202(4)	Na(1)–O(1)#3	2.369(2)
Mn(1)–O(3)#1	2.202(4)	Na(1)–O(1)#4	2.369(2)
Mn(1)–O(3)#2	2.202(4)	Na(1)–O(1)#5	2.369(2)
Mn(1)–Na(1)	3.0644(10)	Na(1)–Mn(1)#4	3.0644(10)
S(1)–S(1)#6	2.0358(18)		
Mn(1)–Na(1)–Mn(1)#4	180.0	O(1)–Na(1)–O(1)#3	102.56(9)
C(5)–S(1)–S(1)#6	105.31(13)	O(1)#2–Na(1)–O(1)#1	77.44(9)
Mn(1)–O(1)–Na(1)	83.56(8)	O(1)–Na(1)–O(1)#1	77.44(9)
O(3)#1–Mn(1)–O(3)	86.17(18)	O(1)#3–Na(1)–O(1)#1	180.0
O(3)#1–Mn(1)–O(3)#2	86.17(18)	O(1)#2–Na(1)–O(1)#4	102.56(9)
O(3)–Mn(1)–O(3)#2	86.17(18)	O(1)–Na(1)–O(1)#4	180.00(12)
O(3)#1–Mn(1)–O(1)#2	169.44(13)	O(1)#3–Na(1)–O(1)#4	77.44(9)
O(3)–Mn(1)–O(1)#2	88.70(13)	O(1)#1–Na(1)–O(1)#4	102.56(9)
O(3)#2–Mn(1)–O(1)#2	102.71(14)	O(1)#2–Na(1)–O(1)#5	180.00(3)
O(3)#1–Mn(1)–O(1)#1	102.71(14)	O(1)–Na(1)–O(1)#5	102.56(9)
O(3)–Mn(1)–O(1)#1	169.44(13)	O(1)#3–Na(1)–O(1)#5	77.44(9)
O(3)#2–Mn(1)–O(1)#1	88.70(13)	O(1)#1–Na(1)–O(1)#5	102.56(9)
O(1)#2–Mn(1)–O(1)#1	83.42(10)	O(1)#4–Na(1)–O(1)#5	77.44(9)
O(3)#1–Mn(1)–O(1)	88.70(13)	O(1)#2–Na(1)–Mn(1)	46.24(6)
O(3)–Mn(1)–O(1)	102.71(14)	O(1)–Na(1)–Mn(1)	46.24(6)
O(3)#2–Mn(1)–O(1)	169.44(13)	O(1)#3–Na(1)–Mn(1)	133.76(6)
O(1)#2–Mn(1)–O(1)	83.42(10)	O(1)#1–Na(1)–Mn(1)	46.24(6)
O(1)#1–Mn(1)–O(1)	83.42(10)	O(1)#4–Na(1)–Mn(1)	133.76(6)
O(3)#1–Mn(1)–Na(1)	127.93(12)	O(1)#5–Na(1)–Mn(1)	133.76(6)
O(3)–Mn(1)–Na(1)	127.93(12)	O(1)#2–Na(1)–Mn(1)#4	133.76(6)
O(3)#2–Mn(1)–Na(1)	127.93(12)	O(1)–Na(1)–Mn(1)#4	133.76(6)
O(1)#2–Mn(1)–Na(1)	50.20(7)	O(1)#3–Na(1)–Mn(1)#4	46.24(6)
O(1)#1–Mn(1)–Na(1)	50.20(7)	O(1)#1–Na(1)–Mn(1)#4	133.76(6)
O(1)–Mn(1)–Na(1)	50.20(7)	O(1)#4–Na(1)–Mn(1)#4	46.24(6)
O(1)#2–Na(1)–O(1)	77.44(9)	O(1)#5–Na(1)–Mn(1)#4	46.24(6)
O(1)#2–Na(1)–O(1)#3	102.56(9)		
Symmetry codes: #1: -z+1/2,-x+1/2,y; #2: -y+1/2,z,-x+1/2; #3: z-1/2,x+1/2,-y+1; #4: -x,-y+1,-z+1; #5: y-1/2,-z+1,x+1/2; #6: x,-y+1/2,-z+3/2.			

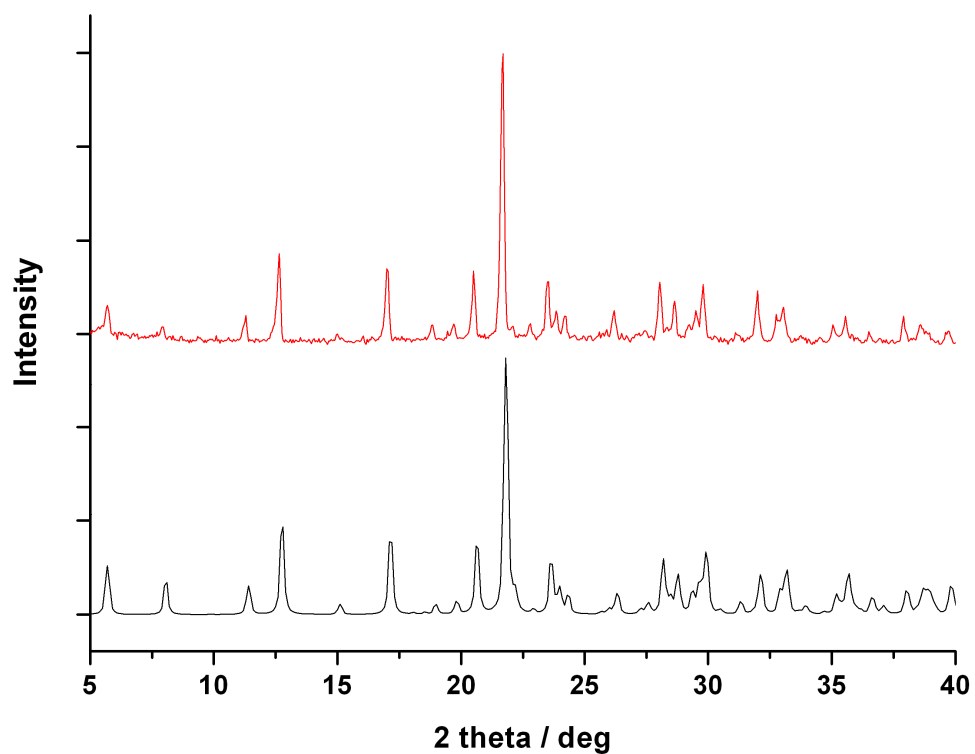


Fig. S1. X-ray powder diffraction of **1**. Black: simulated from single crystal data; Red: observed for complex **1**.

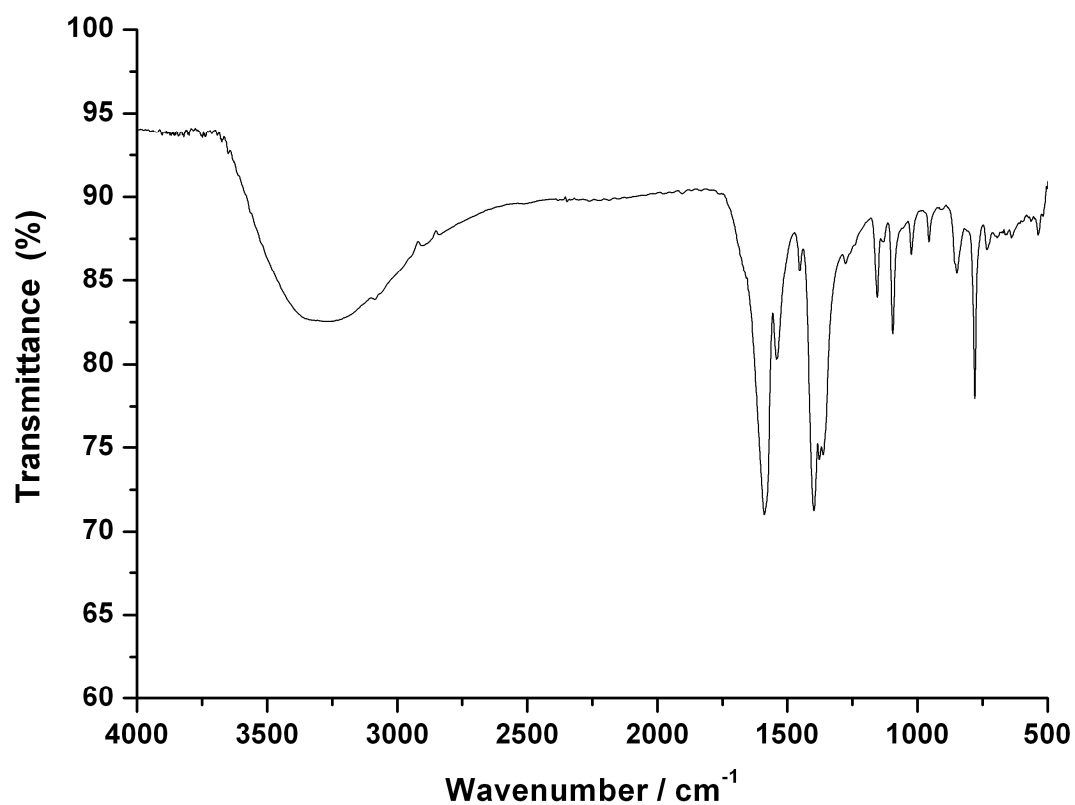


Fig. S2. FT-IR spectrum of **1**.