

Supporting Information

A New Enantiopure Unsaturated Dicarboxylate as 4-Connected Unit in Flexible Homochiral
PtS-type Frameworks

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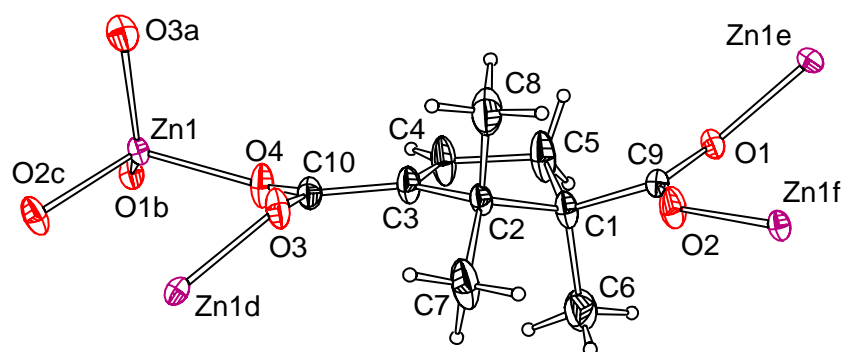


Figure S1. A view of 1 with 30% probability displacement ellipsoids; H atoms are shown as small spheres of arbitrary radii. (Symmetry codes: a = $1/2-y, -1/2+x, -1/4+z$; b = $3/2-x, -1/2+y, -1/4-z$; c = $y, -1+x, -z$; d = $1/2y, 1/2-x, 1/4+z$; e = $3/2-x, 1/2+y, -1/4-z$; f = $1+y, x, -z$).

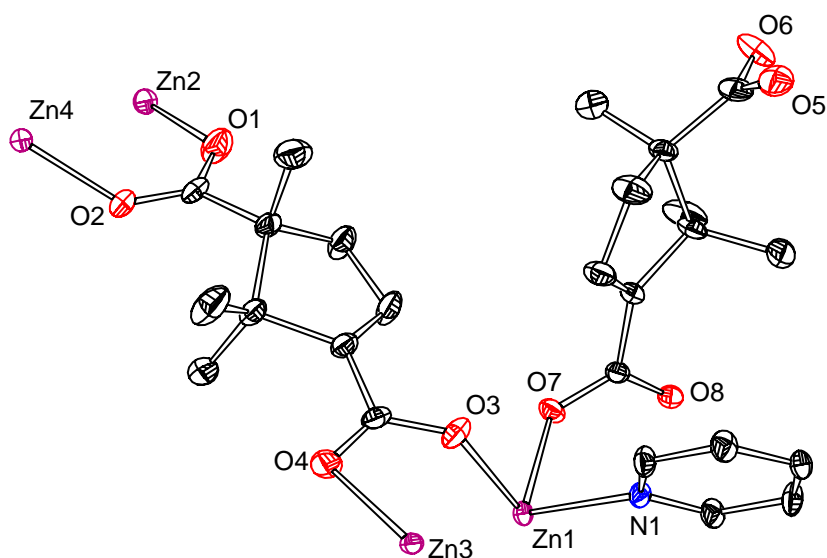


Figure S2. A view of the asymmetry unit of 2 with 30% probability displacement ellipsoids.

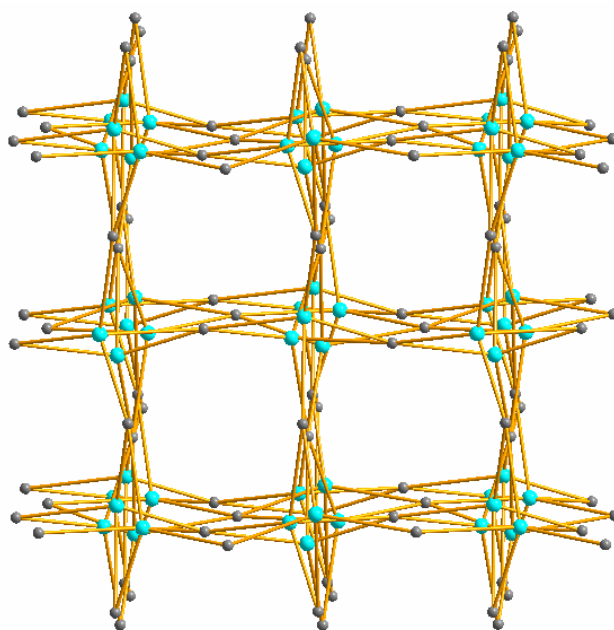


Figure S3. View of the distorted pts topological net of **1**. The tced ligands are reduced as planar 4-connected nodes (dark) and the Zn atoms are reduced as tetrahedral nodes (sky blue).

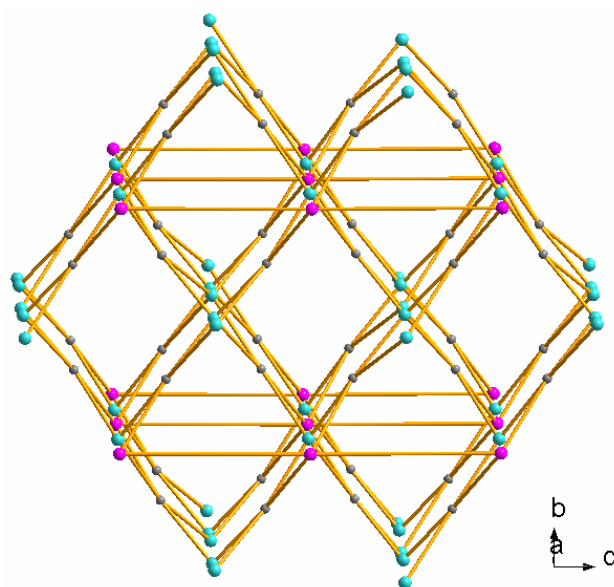


Figure S4. View of the (4,6)-connected topological net of **2**. The tced ligands are reduced as planar 4-connected nodes (dark) and the Zn atoms are reduced as tetrahedral nodes (sky blue) and octahedral nodes (purple).

Thermal Analysis The simultaneous DSC-TGA thermal analysis was performed on TA Instruments SDT Q600 under the flowing nitrogen atmosphere. The flow rate of the nitrogen gas was controlled at about 100 mL per minute.

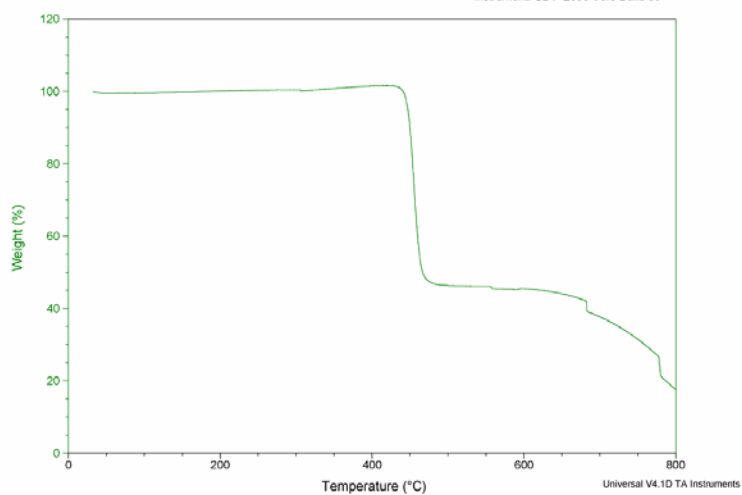


Figure S5. The TGA diagram of **1**.

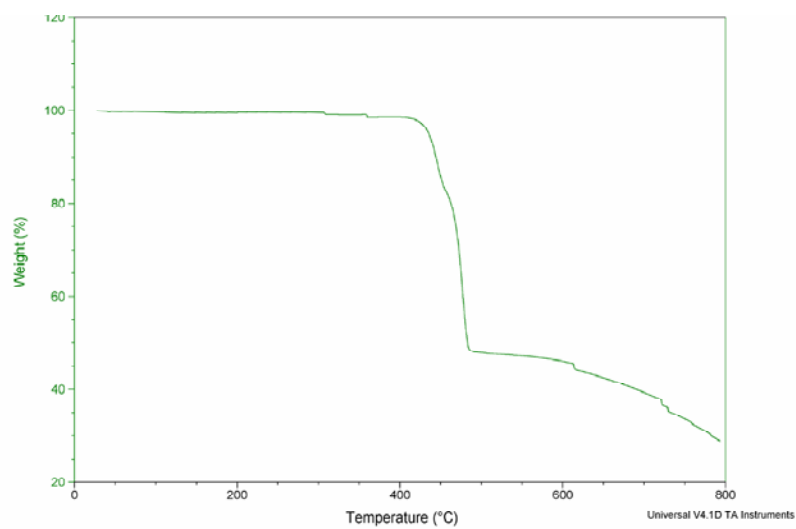


Figure S6. The TGA diagram of **2**.

X-ray Powder Diffraction X-ray powder diffraction experiments were performed on a Bruker D8 Advance X-ray powder diffractometer operating at 40kV and 40mA (CuK α radiation, $\lambda = 1.5418\text{\AA}$). The data collection was carried out with a step size of 0.03 degree and counting time of 1s per step. The 2-theta angular range is from 5 to 40 degrees.

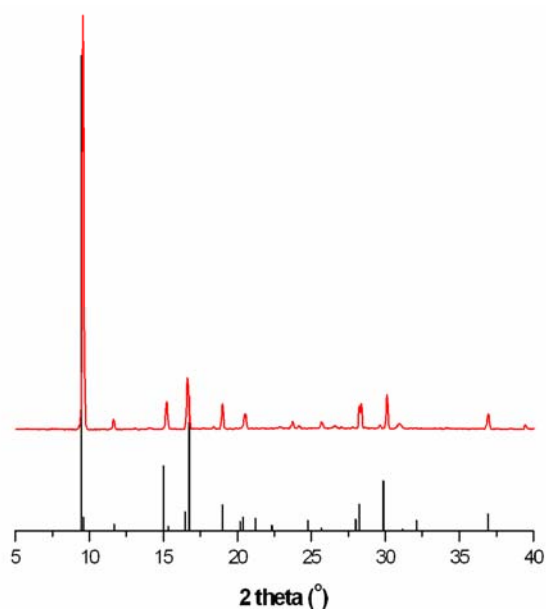


Figure S7. XPRD patterns for 1: (bottom) calculated on the basis of the structure determined by single-crystal X-ray diffraction; (top) taken at room temperature.

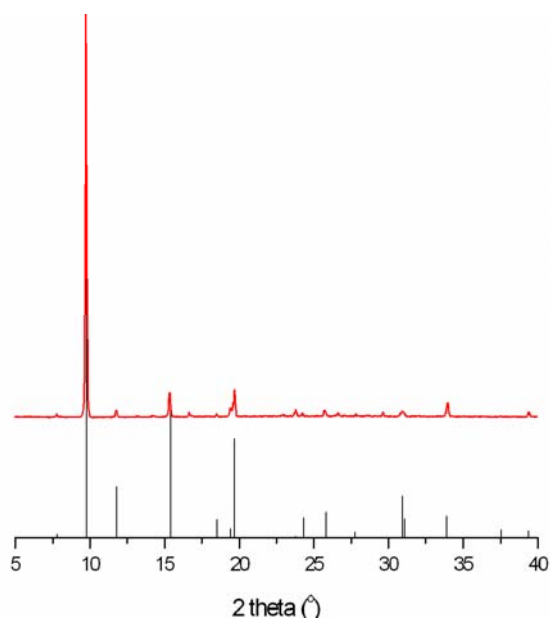


Figure S8. XPRD patterns for 2: (bottom) calculated on the basis of the structure determined by single-crystal X-ray diffraction; (top) taken at room temperature.