

Supporting information

A New Heart-Like Co-Containing Polyoxoanion Based on the Lacunary Preyssler Anion

Zhiming Zhang,^a Shuang Yao,^a Yanfei Qi,^a Yangguang Li,^{*,a} Yonghui Wang^a and Enbo Wang^{*,a}

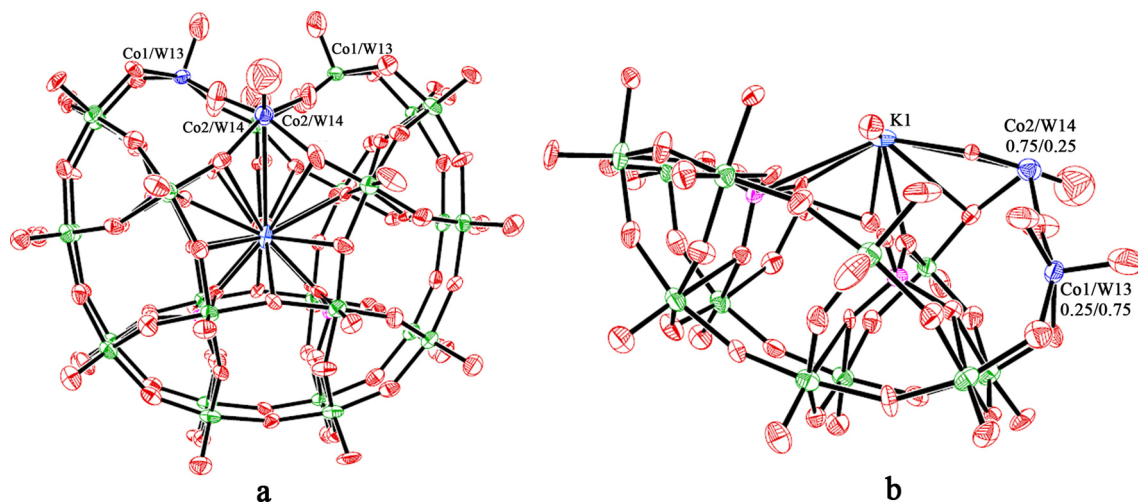


Fig. S1. (a) ORTEP drawing of polyoxoanion **2** with thermal ellipsoids at 50 % probability; (b) ORTEP drawing of the asymmetric unit of polyoxoanion **2** with thermal ellipsoids at 50 % probability.

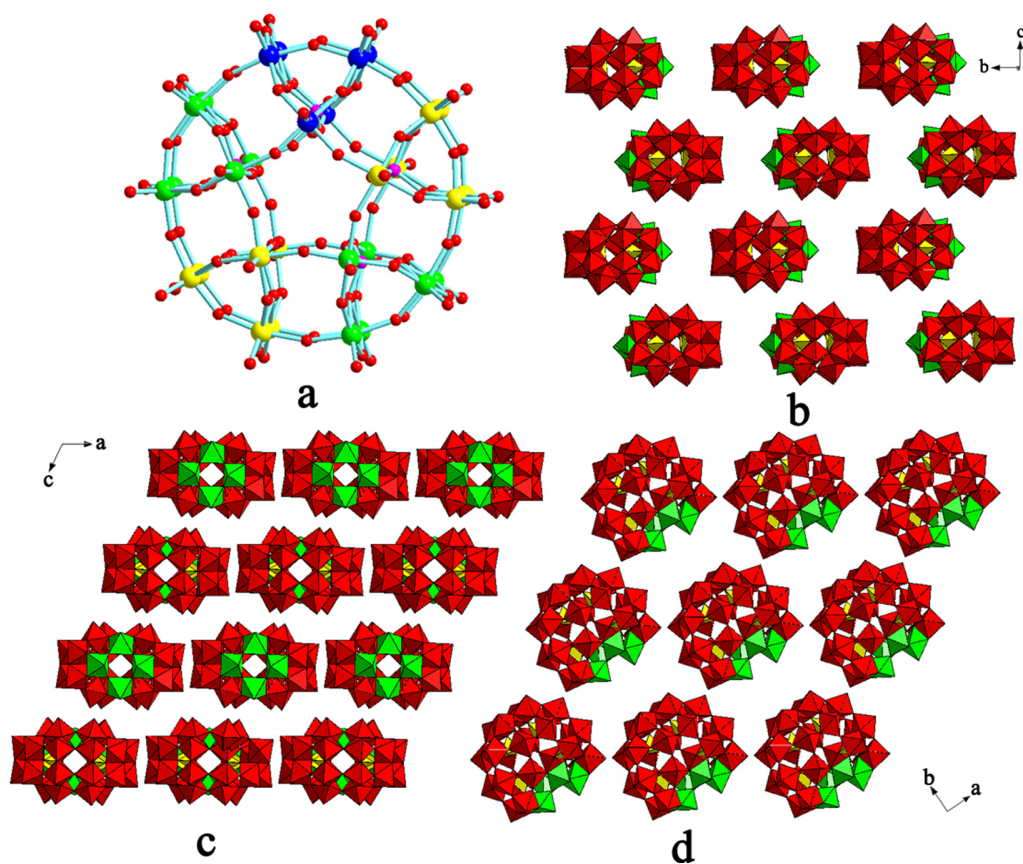


Fig. S2. (a) Polyhedral and ball-and-stick representation of anion $[P_5W_{30}O_{110}]^{15-}$, built up of five $\{\alpha\text{-PW}_6\text{O}_{22}\}$ subunits. (b), (c), (d) polyhedral representation of the packing arrangements of polyoxoanion **2** viewed along different directions, K^+ , Na^+ and the lattice water molecules are omitted for clarity. Color codes: W (red), P (yellow), $\{W_2Co_2O_8(H_2O)_2\}$ (green) and O (red).

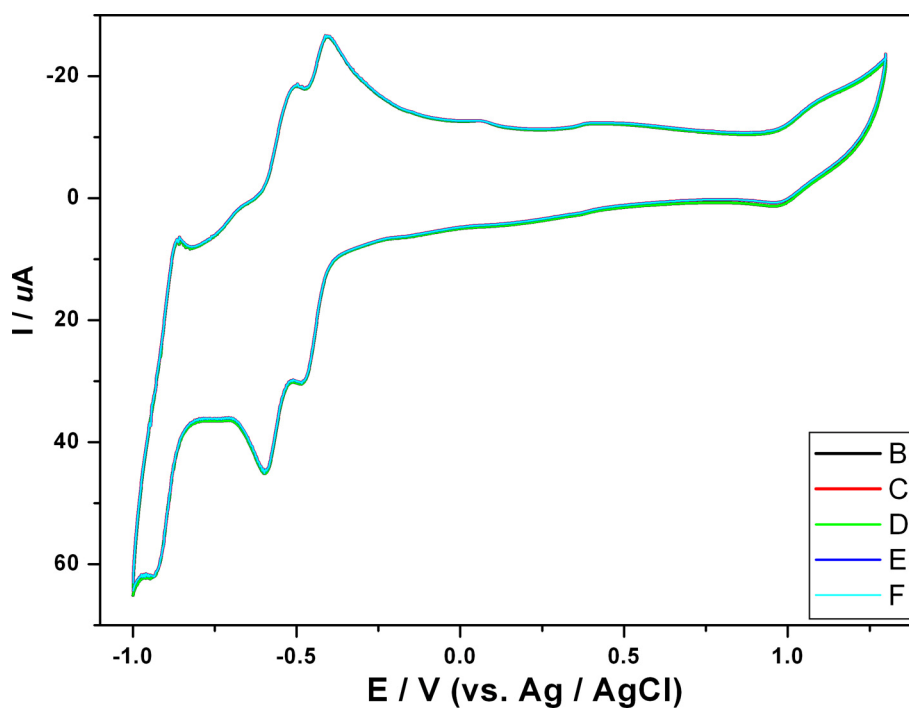


Fig. S3. The cyclic voltammogram of compound **1** (10^{-4} M) in a pH 4 buffer solution (0.4M $\text{CH}_3\text{COONa} + \text{CH}_3\text{COOH}$). The CV curves were detected per 6 hours for five times.

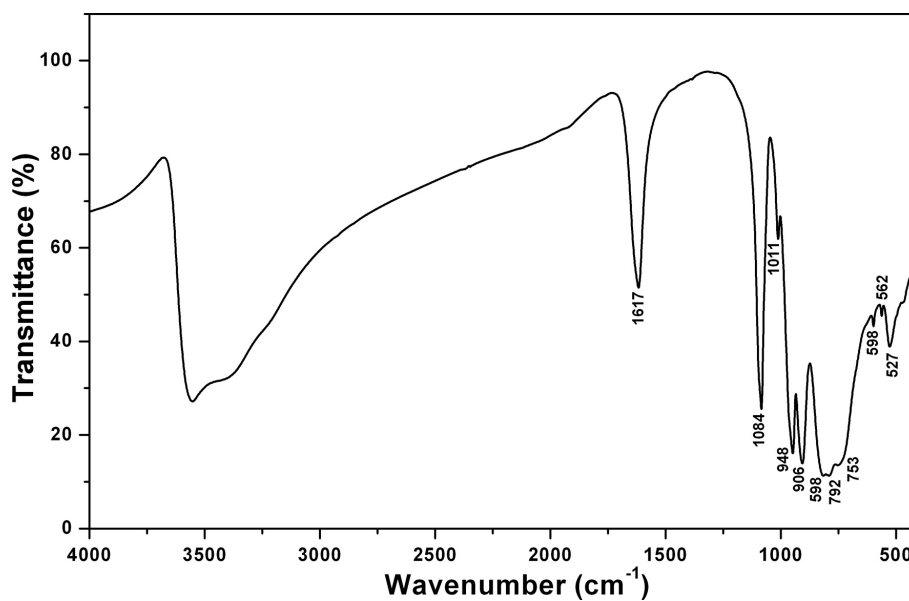


Fig. S4. IR spectrum for compound **1**.

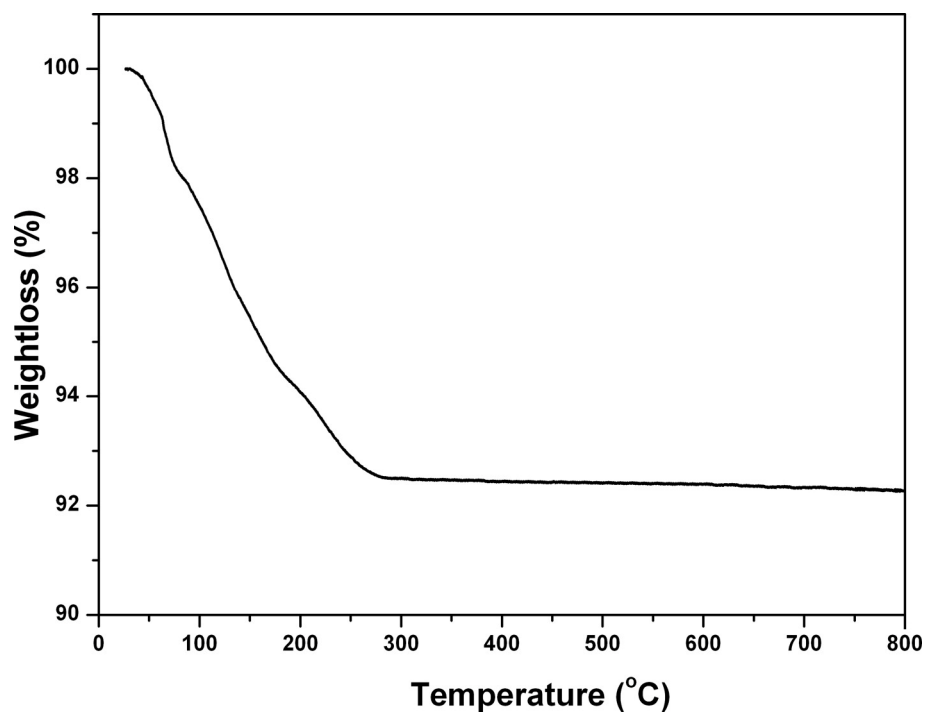


Fig. S5. The TG curve of compound **1**. The weight loss of 7.50 % in the range of 28 ~ 283 °C is attributed to the loss of all lattice and coordinated water molecules (calcd. 7.47 %).