

## Structure of a 3-Dimensional Tb(III)3,5-pyridinedicarboxylato Coordination Polymer

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The hydrothermal reaction of  $\text{Tb}(\text{NO}_3)_3 \cdot 5\text{H}_2\text{O}$  with 3,5-pyridinedicarboxylic acid (3,5-PDCH<sub>2</sub>) in the presence of sodium acetate (NaOAc) led to the formation of a 3-dimensional Tb(III)-coordination polymer of an empirical formula of  $[\text{Tb}(3,5\text{-PDC})(\text{CO}_2)(\text{H}_2\text{O})_2] \cdot \text{H}_2\text{O}$ . This polymer contains a bridging oxalato ligand ( $\mu_2, \eta^4\text{-C}_2\text{O}_4^{2-}$ ), which was probably formed by dimerization of carboxylate ( $\text{CO}_2^-$ ) groups dissociated from the 3,5-PDC ligand. The compound was structurally characterized by X-ray diffraction. Crystallography data for this compound: monoclinic space group  $P2_1/n$ ,  $a = 7.651(1)$ ,  $b = 9.865(2)$ ,  $c = 14.837(2)$ ,  $\beta = 98.31(1)^\circ$ ,  $Z = 4$ ,  $R(\omega R_2) = 0.0226$  (0.0576).

