

STM Analysis of a Chiral Helical One-dimensional Nickel(II) Coordination Polymer

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C_2 -symmetric nickel(II) salen complexes [NiL] **1** were deposited on a highly oriented pyrolytic graphite (HOPG) surface from their acetone solutions. They aggregate easily to single, segregated, homochiral polymeric chains of (*M*)-1D- $\frac{1}{n}$ [NiL] (**2**) on the substrate as also found in single crystals. In STM topography, the single helical 1D structures **2** found on the surface were in excellent agreement with the dimension of aligned dimeric aggregates of **1** obtained from X-ray crystallography. Weak intermolecular Ni^{II}...OMe coordinations ($d_{\text{MeO-Ni}} = 0.35$ nm) were found to be responsible for the formation of the chiral, helical and 1D assemblies on the substrate.

Key words: Coordination Polymer, Helical Structures,
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