

A New One-Dimensional Coordination Polymer [Co(CCl₃COO)₂(CH₃OH)₂(μ-4,4'-bipy)]_n: Synthesis and Structural Aspects

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A new one-dimensional coordination polymer [Co(CCl₃COO)₂(CH₃OH)₂(μ-4,4'-bipy)]_n (**1**), has been synthesised and its crystal structure determined by single-crystal X-ray diffraction. The structure consists of a one-dimensional linear chain of cobalt(II) centres linked by bridging 4,4'-bipyridine units. The Co(II) ion lies at an inversion centre forming an elongated octahedral coordination sphere. There is an intramolecular hydrogen bond [2.02(5) Å] between a trichloroacetate oxygen and a methanolic hydrogen forming a planar six-membered ring.

Key words: 1D-Coordination Polymer, 4-4'-Bipyridine, Cobalt(II), Crystal Structure