2D and 3D Silver(I)-Ethylenediamine Coordination Polymers with Ag-Ag Argentophilic Interactions

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Z. Naturforsch. **2007**, 62b, 1112 – 1116; received February 21, 2007

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Two complexes of silver(I) salts with ethylenediamine (etda) as a ligand were prepared and characterized. The study of the crystal structures (of the 2-hydroxy-4-nitro-benzoate trihydrate (1) and nitrate (2)) has shown that the formation of 2D and 3D coordination polymer networks results from etda ligands bridging the silver atoms which are connected *via* Ag–Ag argentophilic interactions.

Key words: Silver Compound, Ethylenediamine, Coordination Polymer, Crystal Structure, Ag–Ag Interaction