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

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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.

\textit{Key words:} Silver Compound, Ethylenediamine, Coordination Polymer, Crystal Structure, Ag–Ag Interaction