

Metallkomplexe mit 2,2'-Dipyridylamin als Liganden: Kristallstrukturen der Komplexe mit CdX₂ (X = Cl, Br, I) und CuCN

Metal Complexes with 2,2'-Dipyridylamine as Ligand:
Crystal Structures of the Complexes with CdX₂ (X = Cl, Br, I) and CuCN

Joachim Pickardt*, Benedikt Staub

Institut für Anorganische und Analytische Chemie, Technische Universität Berlin,
Straße des 17. Juni 135, D-10623 Berlin

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2,2'-Dipyridylamine Complexes, Cadmium Halides, Copper(I) Cyanide, Crystal Structure

Reactions of 2,2'-dipyridylamine (dpyam) with cadmium halides yield crystals of [Cd(dpyam)(H₂O)Cl₂] (**1**), [Cd(dpyam)Br₂] (**2**), and [Cd(dpyam)I₂] (**3**). With CuCl₂ and KCN a complex [Cu(dpyam)CN]·H₂O (**4**) is obtained. Depending on the size of the halide ions the coordination changes from octahedral in **1** to trigonal bipyramidal in **2** and tetrahedral in **3**. The coordination in **4** is trigonal. Due to the geometric strain imposed by the ligand all coordination polyhedra show significant distortions. **1** and **2** form dimers by halide bridges. With the exception of **3** all compounds form “supramolecular” structures via hydrogen bonds, *e.g.* chains or networks.

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