

NEW SOLVATOMORPH OF TETRAKIS(μ_2 -ACETATO-O,O')- BIS(ISONICOTINAMIDE-N)-DI-COPPER(II): SYNTHESIS, IR, TGA AND X-RAY STUDY

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Abstract. Dinuclear tetracarboxylato-bridged copper(II) complex, $[\text{Cu}_2(\text{OAc})_4(\text{ina})_2] \cdot 2\text{dmsO}$ (**1**), where $\text{OAc}^- = \text{CH}_3\text{COO}^-$, ina=isonicotinamide and dmsO=dimethylsulfoxide, has been prepared and crystal structure has been determined by single X-ray diffraction. The compound consists of dinuclear units, in which two Cu(II) ions are bridged by four *syn,syn*- $\eta^1:\eta^1$ - μ -acetato bridges, showing a paddle-wheel cage-type with a square-pyramidal geometry. In the crystal structure, intermolecular N-H...O hydrogen bonds link the molecules into a 1D linear chain.

Keywords: copper, isonicotinamide, X-ray, paddle-wheel structure.

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