

Structural, spectroscopic and magnetic properties of new copper(II) complexes with a terpyridine ligand.

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Streszczenie

Four mononuclear complexes of the dimethylterpyridine ligand 1,3-bis(6-methylpyridin-2-yl)pyridine, L, $C_{17}H_{15}N_3$, of the general formula $CuLX_2$ were prepared from different copper(II) salts ($X = Cl^-$ -**1a**, Br^- -**1b**, **-1c** and **-1d**). Their properties have been characterized through analytical, spectroscopic (EPR, ESI-MS, and IR) and magnetic measurements. Single crystal X-ray structure analyses of these complexes revealed five-coordinate metal ions in **1a**, **1b** and **1c**, whereas **1d** turned out to contain a six-coordinate Cu(II) center and to have both unique magnetic and structural properties, rationalized in terms of the hydrogen-bonding interactions seen in its crystal lattice.

Słowa kluczowe

Coordination modes, copper, magnetic properties

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