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Title:	Syntheses, X-ray crystal structure and magnetic studies of a new dinuclear Cu II complex, [Cu ₂ (μ-Cl) ₂ L ₂ Cl ₂]:2CH ₃ CN, L: N,N,N',N'-tetraisopropylpyridine-2,6-dicarboxamide
Authors:	Kapoor, Ramesh (/jspui/browse?type=author&value=Kapoor%2C+Ramesh)
Keywords:	Amide groups Antiferromagnetics Apical positions Basal edges
Issue Date:	2010
Publisher:	Elsevier B.V.
Citation:	Journal of Molecular Structure, 981 (1-3), pp. 40-45.
Abstract:	Reaction of anhydrous copper(II) chloride with N,N,N',N'- tetraisopropylpyridine-2,6-dicarboxamide (L) leads to the synthesis of [Cu ₂ Cl ₄ L ₂]:2CH ₃ CN, 1. The ligand coordinates to each CuII ion in a bidentate fashion through pyridine nitrogen and only one of the carbonyl oxygen atoms of the amide group rather than using tridentate coordination mode O-N-O. The structure can be described as a dichloro bridged centrosymmetric dimer where the two copper centers are pentacoordinated in a square pyramidal fashion. The two pyramids are arranged sharing a basal edge with their apical positions oriented opposite to each other. The crystal packing investigations show a 2D sheet in the lattice held together by dimeric acetonitrile entities. Complex 1 shows weak antiferromagnetic coupled Cu ²⁺ ions.
Description:	Only IISERM authors are available in the record.
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