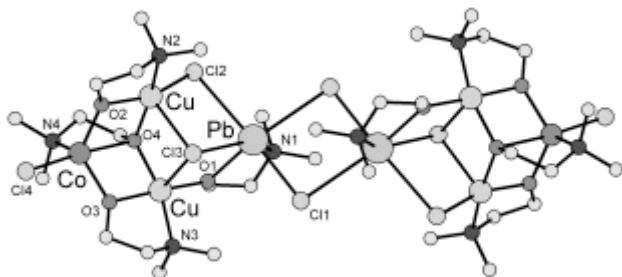


W0194

**A Unique Heterotrimetallic Cu<sub>4</sub>Co<sub>2</sub>Pb<sub>2</sub> Complex with the 2-(dimethylamino)ethanol Ligand.** D.S.Nesterov,<sup>1</sup> V.N.Kokozay,<sup>1</sup> B.W.Skelton<sup>2</sup>, <sup>1</sup>Chemistry Dept., National Taras Shevchenko Univ., Volodymyrska Str. 64, Kyiv 01033, Ukraine, <sup>2</sup>Chemistry, Univ. of Western Australia, Crawley, Western Australia 6009, Australia.

The synthetic strategy<sup>1</sup>, based on the self-assembly of building blocks, generated *in situ*, into crystalline materials, has been successfully applied for the preparation of a novel octanuclear coordination compound [Cu<sup>II</sup><sub>2</sub>Co<sup>II</sup>Pb<sup>II</sup>Cl<sub>4</sub>(L)<sub>4</sub>]<sub>2</sub> (HL = 2-(dimethylamino)ethanol). It was obtained by reaction of copper powder with cobalt chloride, lead chloride and an acetonitrile solution of 2-(dimethylamino)ethanol in air.

The complex exhibits a centrosymmetric molecule with the inversion centre situated at the mid-point of the central Pb<sub>2</sub>Cl<sub>2</sub> unit. The hexacoordinate Pb presents a very distorted coordination geometry with Pb–O(N, Cl) distances in



the range 2.303(4)–3.1988(18) Å. The Cu atoms adopt distorted square pyramidal geometries. The Co atom has a trigonal bipyramidal environment. The compound crystallizes in the monoclinic system with space group P2<sub>1</sub>/c and the cell dimensions: a = 19.7380(10), b = 10.9365(9), c = 13.908(2) Å, ∠β = 97.549(2)°, Z = 2, V = 2976.2(5) Å<sup>3</sup>.

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*References:*

[1]. D.S. Nesterov, V.G. Makhankova, V.N. Kokozay and B.W. Skelton, *Inorg. Chim. Acta*, 2005, 358, 4519.