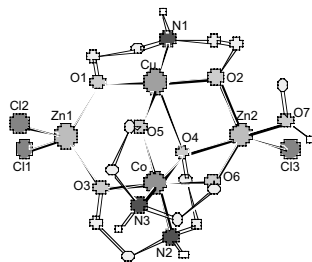


W0044

A Unique Heterotrimetallic Cu^{II}Co^{III}Zn^{II}₂ Complex With Diethanolamine Ligand. D.S. Nesterov,¹ V.G. Makhankova,¹ V.N. Kokozay,¹ B.W. Skelton², ¹Dept. Of Chemistry, National Taras Shevchenko Univ., Volodymyrska Str. 64, Kyiv 01033, Ukraine, ²Chemistry, Univ. Of Western Australia, Crawley, Western Australia 6009, Australia.

The reaction of copper powder with cobalt chloride, zinc oxalate and methanol solution of diethanolamine (H₂L) in air affords a novel heterotrimetallic complex [CuCoZn₂(L)₃Cl₃(HOMe)]·MeOH. The complex exhibits a tetranuclear CuCoZn₂ core in which metal centers are bridged with oxygen atoms of L groups.



have distorted tetrahedral and trigonal bipyramidal environments, respectively. The Cu atom has a square-pyramidal geometry with the axial Cu–O4 bond length of 2.473(5) Å. The environment of the Co atom is almost octahedral with Co–N(O) distances in the range 1.892(5)–1.951(7) Å. In the lattice the molecules are linked by hydrogen bonds involving uncoordinated methanol molecules. The compound crystallizes in the monoclinic system with space group P2₁/c and the cell dimensions: a = 8.3310(10), b = 24.830(4), c = 12.355(2) Å, ∠_β = 95.103(2)°, Z = 4, V = 2545.6(7) Å³.

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