

Contents

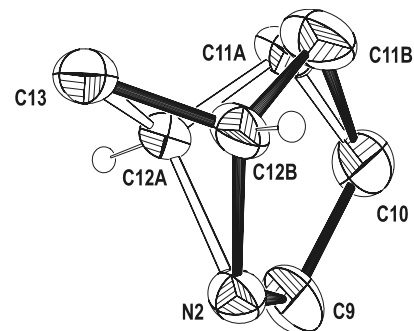
Papers

**Edmund Kwiatkowski, Grzegorz Romanowski,
Waldemar Nowicki, Marek Kwiatkowski**

Polyhedron 25 (2006) 2809

Dioxovanadium(V) complexes of Schiff bases derived from *S*-(+)-2-(aminomethyl)pyrrolidine and aromatic *o*-hydroxycarbonyl compounds: Synthesis, characterization and structure

Two diastereomers, which differ in absolute configurations of chiral centres and in conformation of five-membered rings, in one crystal of *N*-(7-methylsalicylidene)-(*S*)-(2-pyrrolidinylmethyl)amine dioxovanadium(V).

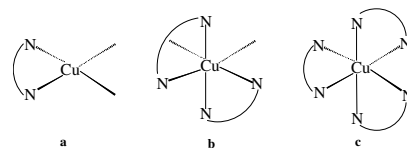


**Enrico Prenesti, Pier Giuseppe Daniele,
Silvia Berto, Simona Toso**

Polyhedron 25 (2006) 2815

Spectrum–structure correlation for visible absorption spectra of copper(II) complexes showing axial co-ordination in aqueous solution

Structure proposed for the complexes: (a) Cu(bipy); (b) Cu(bipy)₂; and (c) Cu(bipy)₃. The ligand is schematised for sake of simplicity.

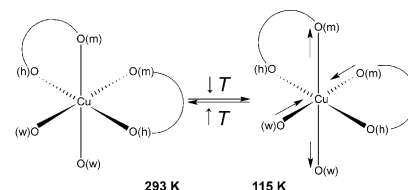


**Bojan Kozlevčar, Amalija Golobič,
Peter Strauch**

Polyhedron 25 (2006) 2824

Dynamic pseudo Jahn–Teller distortion in a compressed octahedral CuO₆ complex

The coordination sphere of *cis*-[Cu(C₈H₇O₃)₂·(H₂O)₂] at 115 K, with three rhombic coordination axes, differs importantly from the room temperature one, where compressed axial axes were determined. The MSDA analysis confirms the vibrational disorder in the structure at high temperature, and its gradual freezing by decreasing temperature. These results are in agreement with the EPR data that also show the reversibility of this change. Based on the EPR data, a {d_{z²}}¹ ground state is proposed, although the room temperature spectrum suggests a {d_{x²−y²}}¹ ground state, but with a small g₃ value (close to g_e).



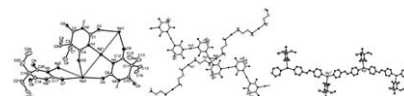
**Veysel T. Yilmaz, Fatih Yilmaz,
Haydar Karakaya, Orhan Büyükgüngör,
William T.A. Harrison**

Polyhedron 25 (2006) 2829

Silver(I)-barbital based frameworks: Syntheses, crystal structures, spectroscopic, thermal and antimicrobial activity studies

Three Ag^I-barb coordination polymers have been reported. Na₃[Ag₃(μ-barb)₆] is a 3D mixed-metal complex, while {[Ag₂(μ-barb)₂][Ag₂(μ-en)₂] · 5H₂O}_n contains the barb dianion and features 2D grid-type layers, which are further connected by extensive hydrogen bonds resulting in a 3D

framework with open channels. [Ag(barb)-(μ-bpe)]_n consists of 1D helical chains connected by hydrogen bonds between barb ligands to form 2D supramolecular sheets, which are further linked by aromatic π-π stacking interactions into a 3D network. The barb ligand has been shown to be able to exhibit different coordination modes. Different coordination modes of barb are seen in Na₃[Ag₃(μ-barb)₆] and {[Ag₂(μ-barb)₂][Ag₂(μ-en)₂] · 5H₂O}_n. Antimicrobial studies of the title complexes were also performed. While barb and the other coligands did not show any significant antimicrobial activity, complexes **1–3** exhibited a wide spectrum of antimicrobial activity against selected bacteria and fungi.



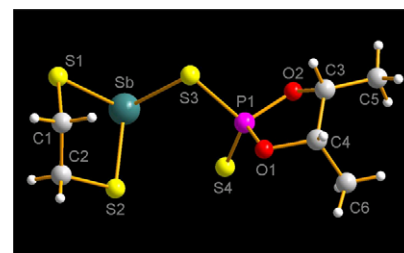
**H.P.S. Chauhan, U.P. Singh, N.M. Shaik,
S. Mathur, V. Huch**

Polyhedron 25 (2006) 2841

Synthetic, spectroscopic, X-ray structural and antimicrobial studies of 1,3-dithia-2-stibacyclopentane derivatives of phosphorus based dithiolato ligands

Mixed 1,3-dithia-2-stibacyclopentane derivatives with phosphorus based dithiolato ligands of the types $\overline{\text{SCH}_2\text{CH}_2\text{SSb}(\text{S})\text{POGO}}$ {where G = —CH(Me)—CH(Me)— and —C(Me)₂—C(Me)₂—} and $\overline{\text{SCH}_2\text{CH}_2\text{SSb}(\text{S})\text{P}(\text{OR})_2}$

{where R = Prⁿ, Buⁿ and Ph} have been synthesized and characterized by physico-chemical and spectral [UV, IR, NMR (¹H, ¹³C and ³¹P)] methods. The antimicrobial activities of these complexes were found in vitro against a number of microorganisms by the disc diffusion method and they were found to be better antimicrobial agents than the tested standard antibiotics (chloroamphenicol and terbinafin). The single crystal X-ray diffraction analysis of 1,3-dithia-2-stibacyclopentane 2, 3-butylenedithiophosphate revealed a monodentate mode of bonding of the dithiophosphate ligand in the complex.

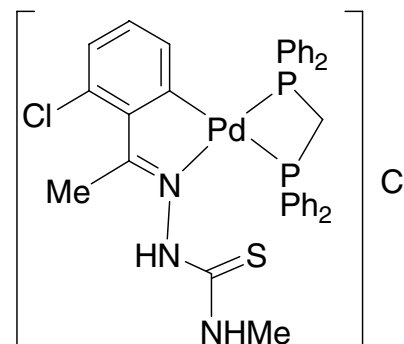


**Javier Martínez, Luis A. Adrio,
José M. Antelo, M^a Teresa Pereira,
Jesús J. Fernández, José M. Vila**

Polyhedron 25 (2006) 2848

New thiosemicarbazone palladacycles with chelating bis(diphenylphosphino)methane

The reaction of tetranuclear cyclometallated palladium thiosemicarbazone compounds with Ph₂PCH₂PPh₂ and hydrochloric acid affords mononuclear palladacycles with a chelated diphosphine as 1:1 electrolytes.

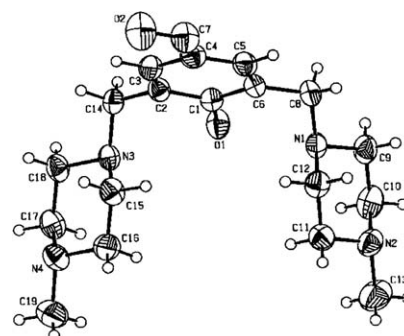


**K. Shanmuga Bharathi, A. Kalilur Rahiman,
K. Rajesh, S. Sreedaran, P.G. Aravindan,
D. Velmurugan, V. Narayanan**

Polyhedron 25 (2006) 2859

Synthesis of new 'end-off' μ-phenoxo and bis-μ-acetato tri-bridged copper(II), nickel(II) and zinc(II) complexes: Spectral, magnetic, electrochemical and catalytic studies

A new end-off type acyclic ligand with two N-methyl piperazine arms, 2,6-bis[(4-methylpiperazin-1-yl)-4-formylphenol] [L] has been synthesized by a simple Mannich reaction. L crystallises in the triclinic space group *P* $\bar{1}$. The mono and binuclear complexes of Cu(II), Ni(II) and Zn(II) have been prepared. Spectral, magnetic, electrochemical and catalytic studies on the complexes have been carried out.



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