



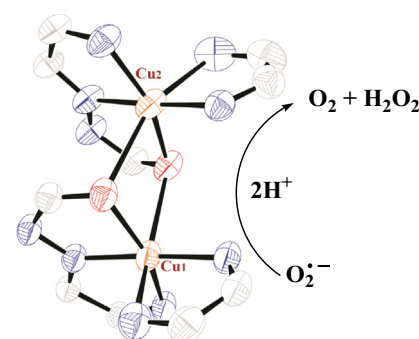
Contents

Yogendra Pratap Singh, Ram N. Patel, Yogendra Singh, Ray J. Butcher, Pradeep Kumar Vishakarma and R.K. Bhubon Singh

Polyhedron 122 (2017) 1

Structure and antioxidant superoxide dismutase activity of copper(II) hydrazone complexes

Three new copper(II) complexes have been synthesized and characterized using various physico-chemical techniques. The structures of the complexes have been determined by single crystal X-ray diffraction analysis. Antioxidant SOD activity tests showed that copper(II) complexes possess significant scavenging effect against free radicals.

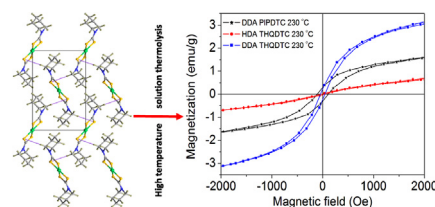


Charles Gervas, Sixberth Mlowe, Matthew P. Akerman, Itegbeyogene Ezekiel, Thomas Moyo and Neerish Revaprasadu

Polyhedron 122 (2017) 16

Synthesis of rare pure phase Ni_3S_4 and Ni_3S_2 nanoparticles in different primary amine co-ordinating solvents

High temperature solution based thermoly- $\rightarrow$ s- $\rightarrow$ is of single source precursors has been employed to synthesize phase pure magnetic nickel sulfide nanoparticles.

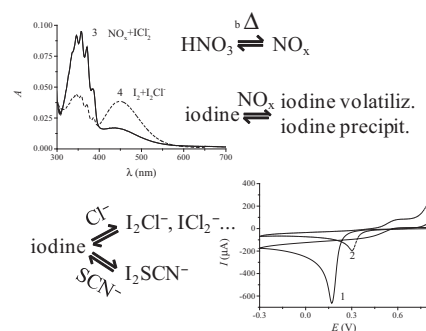


Denis Badocco, Francesca Romanini, Valerio Di Marco, Andrea Mondin and Paolo Pastore

Polyhedron 122 (2017) 25

Formation of volatile iodine compounds under hot concentrated acid conditions (nitric acid or aqua regia) and in diluted acid solutions with or without thiocyanate

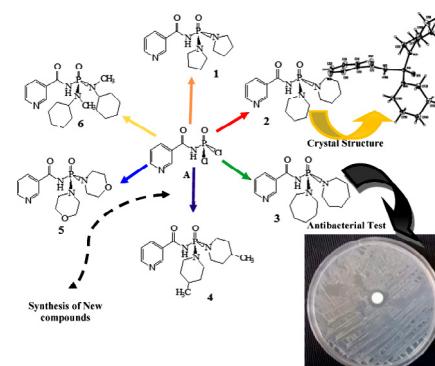
The chemistry of iodine was investigated in microwave heated concentrated HNO_3 and in cold diluted HNO_3 . I_2 formed in the former conditions regardless of the starting iodine form. Iodine evaporation and/or precipitation was avoided in heated aqua regia and adding thiocyanate in the cold diluted acid solution.



Nasrin Oroujzadeh, Khodayar Gholivand and Negin Rezaei Jamalabadi
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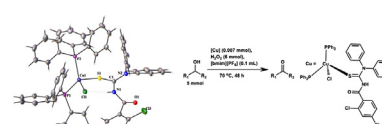
New carbacylamidophosphates containing nicotinamide: Synthesis, crystallography and antibacterial activity

Six new carbacylamidophosphates containing nicotinamide were synthesized. Characterization and spectral study of the products were carried out by ^1H , ^{13}C , ^{31}P , NMR, IR spectroscopy and elemental analysis. Crystal structures of four compounds were studied using X-ray crystallography. The in vitro antibacterial activities of all compounds were tested against *S. aureus* and *E. coli* bacteria.


N. Gunasekaran, N.S.P. Bhuvanesh and R. Karvembu
Polyhedron 122 (2017) 39

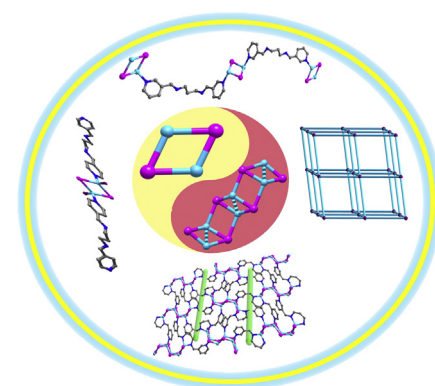
Synthesis, characterization and catalytic oxidation property of copper(I) complexes containing monodentate acylthiourea ligands and triphenylphosphine

A rare monodentate coordination mode has been observed for 3,3-dialkyl/aryl-1-(2,4-dichlorobenzoyl)thiourea ligands with the Cu(I) ion. The resulting four-coordinated tetrahedral copper(I) complexes were found to be active catalysts in 1-butyl-3-methylimidazolium hexafluorophosphate medium in the presence of H_2O_2 for the oxidation of various alcohols at 70 °C. Interestingly, the present catalytic system worked for the oxidation of alcohols without any additive and base.


Jing Huang, Li-Hua Huo, Zhao-Peng Deng and Shan Gao
Polyhedron 122 (2017) 46

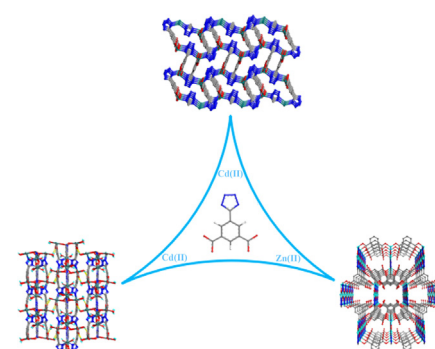
Influence of the $[\text{CuI}]_n$ ($n = 2$ and 6) clusters and conformations of flexible bis(pyridyl) ligands on the topological structures and luminescent properties of cuprous iodide complexes

Five cuprous iodide complexes assembled from five flexible bis(pyridyl) ligands were synthesized and characterized, which exhibit mono- and dinuclear unit, chain, layer, as well as **pcu** net.


Xiao-Fang Wang, Ying Pan, Zhan Li, Xiu Li, Shi-Lun Qiu and Ming Xue
Polyhedron 122 (2017) 55

Constructing three new metal–organic frameworks based on a mixed-donor ligand: Topological analysis and fluorescence properties

Three new MOFs comprising one mixed-donor ligand (5-tetrazolylisophthalic acid, H_3TZI) are synthesized and structurally characterized. **JUC-165** features 3D frameworks including 1D rectangular channels and it performs (5,5)-connected frameworks with a Schläfli symbol of 4^66^4 , **JUC-166** shows a 2D rarely sandwich-like tri-layer, and **JUC-167** exhibits (4,4)-connected 3D frameworks with a Schläfli symbol of 4^26^38 . The fluorescence properties of these three new MOFs were measured at room temperature.



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