Structural Studies on Copper(II) Carboxylate Complexes containing Pyrazole

Magda Monari[a], Luciano Pandolfo[b], Claudio Pettinari[c], [a]*Department of Energy Engineering, University of Bologna, Italy.* [b]*Department of Chemical Sciences, University of Padova, Italy.* [c]*Department of Chemical Sciences, University of Camerino, Italy.* E-mail: magda.monari@unibo.it

Polynuclear copper derivatives are the subject of an increasing number of studies [1, 2]. Trinuclear copper derivatives characterized by the presence of the triangular core $[Cu_3(\mu_3\text{-}OH)(\mu\text{-}pz)_3(RCOO)_2$ (R = H, C_2H_5, C_3H_7)] have been prepared and characterized by X-ray studies. Copper(II) formate gives $[Cu_3(\mu_3\text{-}OH)(\mu\text{-}pz)_3(HCOO)_2\text{-}(Hpz)_2]$, **1**, whereas copper propionate and butyrate afford $[Cu_3(\mu_3\text{-}OH)(\mu\text{-}pz)_3(C_2H_5COO)_2\text{-}(EtOH)]$, **2**, and $[Cu_3(\mu_3\text{-}OH)(\mu\text{-}pz)_3\text{-}(C_3H_7COO)_2(MeOH)(H_2O)]$, **3**, respectively, both containing solvent molecules coordinated to the copper atoms.

Here we report a comparison of their geometries and their supramolecular architectures which show the formation of interesting 1D coordination polymers.

[1] Solomon E.I., Sundaram U.M., Machonin T.E., *Chem. Rev*., 1996, **96**, 2563. [2] La Monica G., Ardizzoia G.A., *Progr. Inorg. Chem*., 1997, **46**, 151.

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