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#### Research paper

1D and 3D Coordination Polymers Based on the  $Cu_3(\mu_3-OH)(\mu-pz)_3$  and  $Cu(Hpz)_3$  SBUs Connected by the Flexible Glutarate Dianion.

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## **ACCEPTED MANUSCRIPT**

### 1D and 3D Coordination Polymers Based on the $Cu_3(\mu_3-OH)(\mu-pz)_3$ and $Cu(Hpz)_3$ SBUs Connected by the Flexible Glutarate Dianion.

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#### Abstract

Different synthetic procedures lead to different coordination polymers (CPs) based either on the trinuclear triangular  $[Cu_3(\mu_3-OH)(\mu-pz)_3]^{2+}$  or on the mononuclear  $[Cu(Hpz)_3]^{2+}$  (Hpz = pyrazole) secondary building units (SBUs), bridged by the flexible glutarate (Glu) dianion. The mononuclear complex  $[Cu(HGlu)_2(Hpz)_4]$  was also obtained as byproduct. One of the CPs based on the trinuclear SBU displays a relevant porosity due to three intersecting channels, accounting for about 40% of the solvent accessible void space.

Keywords: Coordination polymers; Copper(II); Bicarboxylates; Pyrazole; Trinuclear derivatives

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