

Electronic Supplementary Information

A Dodecanuclear Copper(II) Cage Self-Assembled from Six Dicopper Building Units

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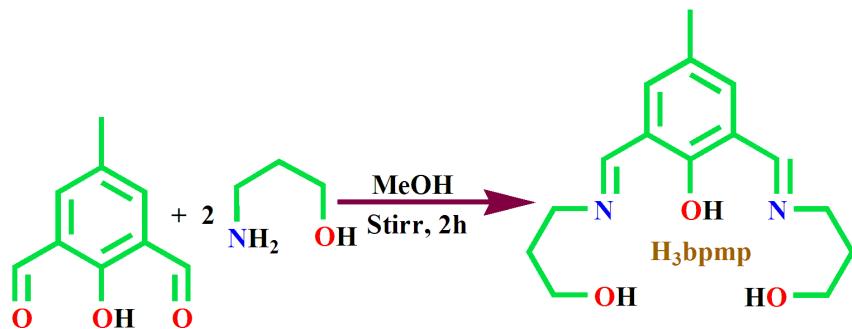
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Scheme S1. Scheme of the H₃bpmp ligand synthesis.

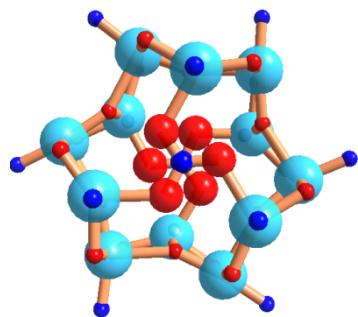


Figure S1. Ball and stick representation of the molecular core of **1**. Most of the ligand and solvent atoms have been omitted for clarity. Atom color code: Cu cyan, N blue, O red.

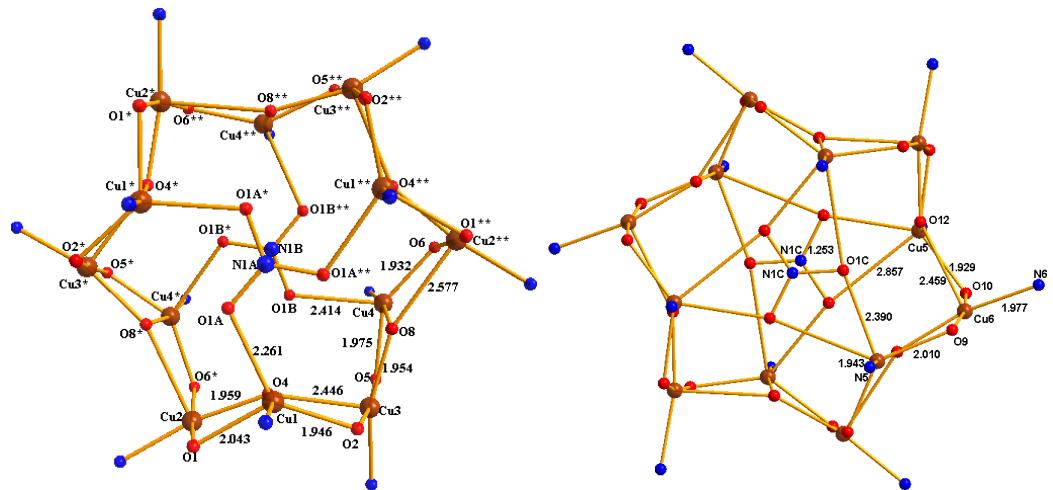


Figure S2. Ball and stick representation of the molecular core of **1** showing the bond lengths around the Cu1, Cu2, Cu3, Cu4, Cu5 and Cu6 sites. Most of the ligand and solvent atoms have been omitted for clarity. Atom color code: Cu brown, N blue, O red.

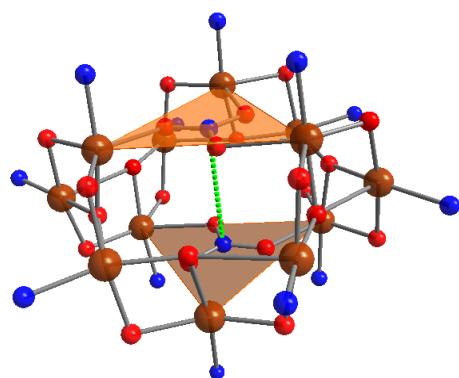


Figure S3. Side view of the [Cu₁₂] complex highlighting the templating positions of the nitrate anion pair (green dotted line between the two N atoms) at the center of the two [Cu₃] motifs.

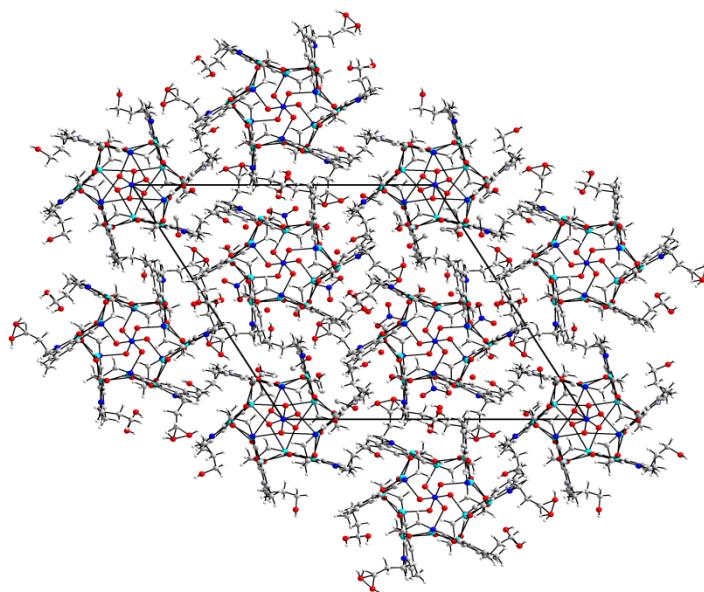


Figure S5/ S4. The crystal packing projected down the *c* axis.

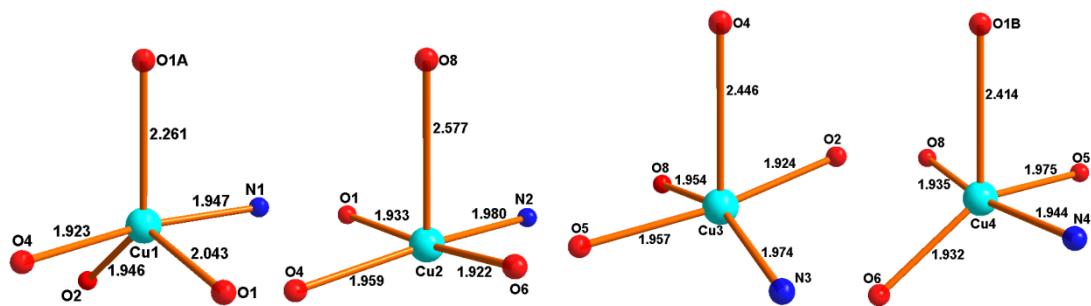


Figure S5. The four unique copper(II) sites (Cu1 to Cu4) with distorted square pyramidal NO₄ coordination geometries ($\tau = 0.639, 0.006, 0.180$ and 0.444).

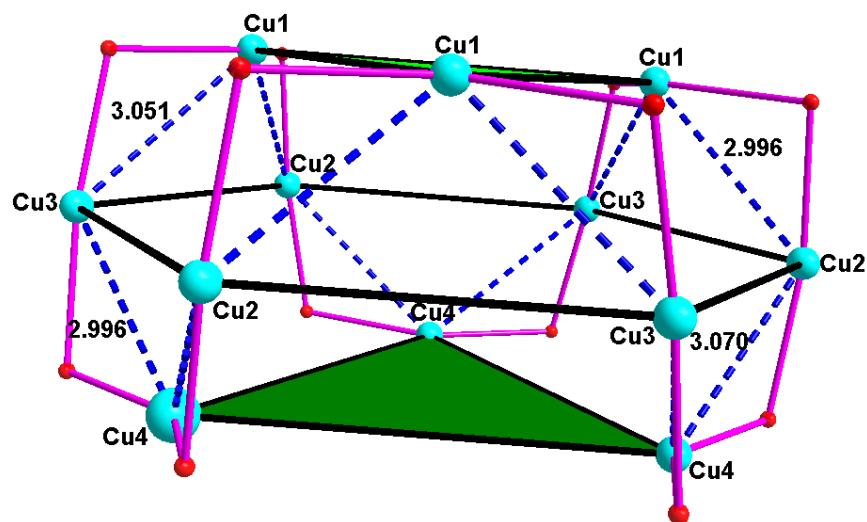


Figure S6. Location of the four unique copper(II) sites in three layers (Cu1, Cu2 and Cu3, and Cu4) within the cuboctahedral cage.

Reference

- (1) M. N. Burnett, C. K. Johnson, ORTEP III, Report ORNL-6895, Oak Ridge National Laboratory, Oak Ridge, TN, 1996.