

A Doubly End-on Azido-bridged Trinuclear Cu(II) Complex: Synthesis, Spectral
and DFT Functional Studies

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Abstract

A trinuclear, doubly azido-bridged Cu(II) complex, $[\text{Cu}_{1.50}(\text{L})(\text{N}_3)_3(\text{CH}_3\text{OH})]_2$, (LH = $[(\text{CH}_3)_2\text{NCH}_2\text{CH}_2\text{N}=\text{CHC}_6\text{H}_3(\text{OH}) (\text{OMe})]$), has been synthesised and fully characterised by elemental analyses, IR, UV-Vis, EPR and DFT studies. Its single crystal X-ray structure reveals that adjacent CuII ions are linked by double end-on azido-bridges; thus the full molecule is generated by the site symmetry of a crystallographic two-fold rotation axis.

Key words : COPPER(II); SCHIFF BASE; AZIDE BRIDGE; X-RAY
STRUCTURE