

Synthesis and Structural Characterization of a Monofunctionalized Phloroglucin-Derivative: A Precursor for Heterotrinnuclear *meta*-Phenylene Bridged Complexes

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Dedicated to Professor Wolfgang Jeitschko on the occasion of his 70th birthday

As part of our synthetic efforts for new triplesalen derivatives, we reacted 2,4,6-triacetyl-1,3,5-trihydroxybenzene (**1**) with excess $\text{Cu}(\text{ClO}_4)_2 \cdot 6\text{H}_2\text{O}$, imidazole, and ethylenediamine. However, not the triple ketimine derivative was formed but the mononuclear Cu^{II} complex $[\text{LCu}^{\text{II}}(\text{ImH})]\text{ClO}_4 \cdot 0.5\text{EtOH} \cdot 0.5\text{H}_2\text{O}$ ($\text{HL} = 6-(1-(2\text{-aminoethylimino})\text{ethyl})-2,4\text{-diacetyl-1,3,5-trihydroxybenzene}$) with only one ketimine function. This complex forms a one-dimensional coordination polymer in the solid state through the apical binding of a keto-oxygen atom of one cation to the Cu^{II} ion of a neighboring cation. Magnetic measurements reveal the presence of weak antiferromagnetic intra-chain interactions.

Key words: Cu Complexes, N Ligands, Magnetic Properties