

## A study of the comparative donor properties to Cu<sup>II</sup> of the terminal amino and imidazole nitrogens in peptides.

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### Streszczenie

The synthesis of the tetrapeptides Ala-Gly-Gly-His, Boc-Ala-Gly-Gly-His (Boc = t-butoxycarbonyl), Ala-Gly-Gly-His( $\pi$ -bom)( $\pi$ -bom =  $N^\pi$ -benzoxymethyl), Ala-Gly-Gly-His-OMe, and Ala-Gly-Pro-His is reported, together with the results of a pH-metric and spectroscopic (absorption, c.d., and e.s.r.) study of their complexes with H<sup>+</sup> and Cu<sup>II</sup>. The work was designed to study the initial site of binding to Cu<sup>II</sup> in peptides containing both a terminal amino nitrogen and a histidyl residue. Results show that the  $\pi$ -N of the imidazole ring of the histidyl residue is the primary anchoring site for copper(II) co-ordination, and that the next nitrogen to bond can be the terminal amino N, forming a macrocyclic chelate ring.

### Adres publiczny

<https://doi.org/10.1039/DT9900003565>

### Strona internetowa wydawcy

<https://www.rsc.org/>