

## Unusual gain in the coordination ability of vasopressin-like peptides towards Cu<sup>2+</sup> ions by insertion of the highly hydrophobic side chain.

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Potentiometric and spectroscopic data show an unusual gain in the stability constants of Cu<sup>2+</sup> complexes with vasopressin analogues having the highly hydrophobic naphthalene-alanine residue inserted in position three (Nal<sup>3</sup>). The naphthalene derivative is a much more powerful ligand for binding Cu<sup>2+</sup> ions than the parent peptide. Theoretical calculations indicate the effective hydrophobic protection of the metal site by Tyr<sup>2</sup> and Nal<sup>3</sup> aromatic side-chains. The interaction of the guanidine moiety of Arg<sup>4</sup> with naphthalene can also increase distinctly the stability of the respective 4N complex.

### Adres publiczny

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### Strona internetowa wydawcy

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

