

Complexes of aminophosphonates. Part 3. Copper(II) complexes of several monophosphono and diphosphono dipeptides.

Autorzy

T. Kiss

Eniko Farkas

Henryk Kozłowski

Zdzisław Siatecki

Paweł Kafarski

B. Lejczak

Rok wydania

1989

Czasopismo

Journal of the Chemical
Society, Dalton Transactions

Strony

1053-1057

DOI

10.1039/DT9890001053

Kolekcja

Naukowa

Język

Angielski

Typ publikacji

Artykuł

Streszczenie

The stoichiometries and stability constants of the proton and copper(II) complexes of several monophosphono dipeptides (where the C-terminal carboxylate group is replaced by a phosphonate moiety) and diphosphono dipeptides (where both the C-terminal carboxylate and the N-terminal amino groups are replaced by phosphonate moieties) have been determined pH-metrically at 25°C and at an ionic strength of 0.2 mol dm⁻³(KCl). From the stability data and spectral parameters of the complexes, it has been established that the PO₃²⁻/CO₂⁻ and PO₃²⁻/NH₂ substitutions do not significantly change the basic bonding modes of the simple dipeptides. However, the copper(II)-induced deprotonation and co-ordination of the peptide-amide group becomes less favoured, although, similarly to the NH₂ group, the terminal PO₃²⁻ group can act as an anchor to bind the metal ion and thus induce deprotonation of amide NH.

Adres publiczny

<https://doi.org/10.1039/DT9890001053>

Strona internetowa wydawcy

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