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Autorzy

T. Kiss

Eniko Farkas

Henryk Kozłowski

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Streszczenie

The stoichiometries and stability constants of the proton, cobalt(II), nickel(II), copper(II) and zinc(II) complexes of 2-amino-3-phosphonopropionic acid (β-P-Asp), 3-amino-3-phosphonopropionic acid (α-P- Asp) and 2-amino-4-phosphonobutanoic acid (γ-P- Glu) have been determined pH-metrically at 25 °C and at an ionic strength of 0.2 mol dm^{-3} (KCl). [p]From the stability data and the spectral parameters of the complexes, it has been established that, similarly as for the aminocarboxylate analogues, the metal ion bonding mode is basically bidentate with P-Glu and tridentate with P-Asp. However, the more basic character of the $-PO_3^{2-}$ group than that of the $-COO^-$ group leads to an enhanced formation of various protonated complexes. PO_3^{2-}/COO^- substitution in the α-position results in a more marked ambidentate character of P-Asp in the copper(II) complexes than does that in the β-position.

Adres publiczny

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