

Complexes of aminophosphonates. Part 6. Copper(II) complexes of some catecholaminophosphonic acids.

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Streszczenie

The stoichiometries and stability constants of the proton and copper(II) complexes of L-1-amino-2-(3',4'-dihydroxyphenyl)ethylphosphonic acid (L- adep), 1-amino-1-(3',4'-dihydroxyphenyl)methylphosphonic acid (3,4-admp), and 1-amino-1-(2',3'-dihydroxyphenyl)methylphosphonic acid (2,3-admp) 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 the spectral (visible and e.s.r.) parameters of the complexes, it has been established that similarly to the aminocarboxylate analogues the ligands show marked ambidentate character. At lower pH aminophosphonate-type complexes while at higher pH catecholate-type complexes are formed. In the intermediate pH range various monomeric and dimeric species with the participation of all binding sites are produced. In the case of 2,3-admp, where the chelate-forming donor-group pairs are not fully separated from each other, the tendency to dimer formation is more favoured.

Adres publiczny

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