# Complexes of aminophosphonates -10. Copper(II) complexes of phosphonic derivatives of iminodiacetate and nitrilotriacetate.

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Streszczenie

pH-Metric and spectroscopic (absorption and EPR) studies were made on the proton and copper(II) complexes of phosphonic and mixed carboxylic-phosphonic derivatives of iminodiacetic acid and nitrilotriacetic acid. The stoichiometries and stability constants of the complexes formed were determined at 25°C and at an ionic strength of 0.20 mol $dm^{-3}$ (KCl). Stability data and spectroscopic measurements revealed that in spite of the increased basicity of the coordinating phosphonate donors, the carboxylic analogues remain more efficient copper(II) binders as the larger space requirement and higher electrostatic repulsion between the binegative phosphonate donors overcompensate the former effect. The $PO_3^{2-}/CO_2^{-}$ substitution results in a significant rhombic distortion in the geometry of the complexes.

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