



Equilibria in cobalt(II)- amino acid- imidazole system under oxygen-free conditions. Part I. Studies on mixed ligand systems with L- α -alanine.

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Streszczenie

Glass electrode, potentiometry and UV/Vis spectrophotometry experiments have been carried out in order to determine the equilibria in an oxygen-free Co(II)-Amae-Himid system in aqueous solution, where Amac = L-alpha-alanine and Himid = 1,3-diazole (imidazole). The presence of axial imidazole in the structure of the ternary complex was implicated by using a [Co(imid)(2)](n) polymer as starting material. Two proposed coordination modes of the mixed-ligand complex have been confirmed both by suitable experimental methods and by a fitting procedure (using EMF and absorbance data). One of these coordination modes is known as a model imitating the metal center in hemoglobin, whereas the other one has not been considered as yet.