Potentiometric, electrochemical and UV/VIS investigation of a copper (II) complex with β -alanyl-L-histidine

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The main goal of this study was to investigate complexation of L-carnosine and its constituent amino acids β -alanine and L-histidine with copper (II) in a buffer at pH = 10. For this study the following methods were used: potentiometry, cyclic and differential pulse voltammetry and UV/VIS spectroscopy. The results have shown that L-histidine and L-carnosine formed a complex with copper in a 1:1 ratio, while no complexation with β -alanine was observed.

Keywords: potentiometry, voltammetry, copper, carnosine, metal complex

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