Influence of the dispersion medium composition on the stability and electrokinetic properties of bilirubin

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Abstract

The electrokinetic properties and stability of aqueous dispersions with bilirubin have been investigated by the method of microelectrophoresis and photometry according to the composition of the dispersion medium (pH, concentration of singly-, doubly- and triple-charged electrolytes, amino acids). The acid-base equilibrium for the aqueous dispersions of bilirubin takes several hours to be established. The pH of the isoelectric point of bilirubin measured by microelectrophoresis in potassium chloride solution makes up 3.9 ± 0.1 . It has been shown that the interaction of bilirubin with the simplest amino acids, iron cations II,III has a specific character.