

Electrokinetic properties of hemoglobin in aqueous solutions of HCl and KCl

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Abstract

Investigated of stability and electrokinetic properties of aqueous dispersions of equine and bovine hemoglobin depending on the time of adsorption and the composition of the aqueous phase (pH, ionic strength solution), detected their isoelectric point. Electrokinetic properties were studied by microelectrophoresis and sustainability – by photometric method.

It is established that: acid-base equilibrium for aqueous dispersions of hemoglobin is formed during the day. The value pH of isoelectric point for the dispersion of horse hemoglobin is 6.3 ± 0.1 and for the dispersion of bovine hemoglobin is 6.7 ± 0.1 . It is shown that an increase in ionic strength decreases the electrokinetic potential according to the classical theory of the electric double layer.