

Sorption of H⁺ and OH⁻ on chlorophyll, the effect of pH on the stability of aqueous dispersions of chlorophyll

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Abstract

The effect of single-charged electrolytes (KCl, HCl) on the sorption of H⁺ and OH⁻ ion on chlorophyll, depending on the composition of the aqueous phase (KCl and pH concentration) have been studied with the method of continuous potentiometric titration. All studies were performed after purifying the solution from carbon dioxide.

It has been found out that the point of zero charge of chlorophyll in the solutions of KCl changes in the pH range from 4.0 to 3.0. The isoelectric point of chlorophyll was determined by using the viscosimeter and the spectrophotometric method. It was shown that pH isoelectric point and pH point zero charge coincide. It is proved that the change in pH value affects the coagulation threshold.