

98-0022

The invention relates to the physicochemical material analysis methods, particularly, to the instrumental determination of water and water solutions alkalinity.

The method comprises location of the analyzing sample into the electrolytical cell divided by the cationic membrane in the anodic and cathodic chambers, electrolysis of the analyzed sample at application of the constant current having the constant current strength value, measuring the voltage drop maximum dependence in the anodic chamber, determination of the voltage drop maximum value and determination of the alkalinity according to the dependence;

$$A = K \cdot I \cdot t,$$

where:

A - analyzing sample alkalinity, mg-Eq/L;

K - electrolytic cell constant which is determined by testing using the standard solutions (solutions with known alkalinity) mg-Eq/(L.C);

I - value of the applicated current strength, A;

t - time for achievement of maximum voltage drop value into the anodic chamber, sec.

The method allows to increase the accuracy and to automatize the alkalinity determination, reduce the time and reagents consumption per an analysis.

Claims: 1

Fig.: 2