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**Calibration of ionometric transducers for information-measuring systems and automatic control systems in real mode**

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Currently, there are a number of ways ISE calibrations, each of which depends on several factors: the amount and nature of the sample, frequency analysis, metrological characteristics and electrode-active properties of the material of the electrodes themselves. However, these calibration methods have limitations when used in the flow-injection analysis method (FIA).

A method has been developed for calibrating flow-through type ionometric transducers (IT) of a planar design in the concentration range (or in its immediate vicinity) in which the Nernst equation is not satisfied, which consists in testing the ISE potential on the background electrolyte or buffer solution used as a carrier in FIA.

The standard exchange current density influences the reproducibility of the measurement results using redox electrodes and especially newly developed and old ISE in the absence of concentration (soak the ISE for 24 hours before starting the measurement in a solution approximately equal to the midpoint of the linear portion of the dynamic range of the determined concentrations of about $10^{-3}$- $10^{-4}$ M) and the working electrode surface passivity, respectively.

The denomination of the developed method calibration ISE in FIA in the concentration lies in the fact that in the process of measuring the potential difference between the standard solution (use of maximum permissible concentration of potential-ion and fold her concentration) and the support all running IMS system is washed carrier is eliminated or reduced effect memory, which entails an increase in the accuracy of the subsequent series of similar analyzes. Time required output for calibration IT is about 10 seconds, and ensures the removal of the previous solution, and the self-healing of the working surface of the ISE. Reduced error by changing the temperature of the sample solution with the potentiometric measurement of the flow.

Due to the use of the calibration technique, the measuring transducer itself and its manufacturing technology exert the most influential value on the measurement uncertainty of type B.