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**MEASUREMENT METHODS UPDATING FOR TANDEM-GENERATOR EGP-10K  
WITH USING OF DIGITAL TECHNOLOGY**

During the last 10 years a number of fundamental and applied research at the electrostatic charge-exchange accelerator EGP-10K INR NAS with the proton and deuteron beams were performed. Currently, the program of optimization of the accelerator parameters, especially – the energy and intensity of the beam has being implemented. At the same time the possibilities of the transport and use of the accelerator beam through the creation of additional sections of beam tube and reaction chambers, as well as the possibilities of the measurements and data processing particularly, in the reconstructed measuring center of the previous single-stage accelerator EG-5, were improved. This paper presents the results of modernization of infrastructure of the experimental studies with the beams of the accelerator EGP-10K using the latest equipment and modern digital technique for beam diagnostics, registration of the reaction products and visualization of the obtained data.

*Keywords:* tandem-generator, beams of hydrogen ions, diagnostics of charged particles beams, visualization of beam spatial distributions, multi-parameters measurements, experimental data analysis, remote control of measurements.