

**Analytical Complexes for Ion Beam Analysis and Modification of Materials in St. Petersburg and Bratislava,**

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Megavolt ion beams have proven to be of interest for ion beam analysis as well as for materials modification. In the last years the High Voltage Ion Accelerators Department of the Efremov Institute (St. Petersburg) and the Department of Nuclear Physics and Technology of the Slovak Technical University developed analytical complexes suitable for both techniques. The base of the complex in St. Petersburg is a 5 MeV Van de Graaff accelerator and in Bratislava a 0.9 MeV electrostatic open air accelerator. The accelerators are able to produce a variety of continuous homogeneous and highly collimated mass-analysed ion beams from several to dozens  $\mu\text{A}$  in the energy range 50 keV up to 900 keV (Bratislava) and 400 keV up to 5 MeV (St. Petersburg) using singly charged ions. These complexes including various end stations for ion beam analysis (RBS, channelling, PIXE, NRA, ERD) and ion implantation are suitable for research and modification of different materials.