RESEARCH AND DEVELOPMENT OF THE ELECTRON AND ION ACCELERATORS AT NRNU MEPHI FOR RESEARCH AND APPLICATIONS

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MEPhI has been the one of the leading institutions for the research and development of the linear particle accelerators in the USSR and Russia for the last 70 years. During this time our researchers took part in the most important accelerator projects from "Synchrophasotron" to NICA and SYLA. Starting the 1980th they have been participated in the largest international projects in cooperation with SLAC, CERN, DESY, KEK. Over these years more than 40 compact electron and ion accelerators have been manufactured and provided to different users during those years.

Today MEPhI take part in three major Russian accelerators projects as NICA, SYLA and SRC. A number of applied electron accelerators are currently under development also. New methods and technologies are been researched to product new accelerating structures and other components for accelerators. Some of the main results of the particle accelerators development will be presented in the report.