Abstract:

We will describe nuclear research in Nazarbayev University, and will present the first results of study of resonances in alpha+^{13}C reaction at low energies. The aim of the project is to obtain experimental data of the excitation functions of the \(^{13}\text{C}\) \((\alpha, \alpha)^{13}\text{C}\) elastic scattering at the initial beam energy of \(^{13}\text{C}\) from 1.7MeV/A to energies close to zero by using the Thick Target Inverse Kinematics method. The experiment has been done in Astana by using a new heavy ion accelerator DC-60 which provides beams with the energies in the range of 0.34-1.77 MeV/nucleon.