## 22. THE MANUFACTURE AND COMPOUND INVESTIGATION OF THE ISOTOPE SUPPORTLESS TARGETS WITH HIGHER PURITY AND RADIATION DURABILITY FOR THE NUCLEAR PHYSICS EXPERIMENTS

## V. B. Bondarenko, I. P. Dryapachenko, L. P. Katzubo, G. M. Kozeryatska, E. M. Mozhzhukhin, Yu. M. Pavlenko, I. V. Posmityukh, O. V. Khvastunov, O. F. Sharov

Method is presented for target manufacturing from the isotope materials with melting temperature up to 2300 °C. Vacuum evaporation unit (VUP-5M) was used after the appropriate modernization. Target compound determination with using of the nuclear physics measurements of the Rutherford back scattering (RBS) of the accelerated ions was studied. The target thickness was determined as gravimetric as RBS methods.