FORWARD-ANGLE ISOTOPIC AND ELEMENT DISTRIBUTIONS INDUCED IN THE 18 O (35 · A MeV) + 9 Be REACTION

A. G. Artukh¹, G. F. Gridnev¹, A. G. Semchenkov^{1,3}, M. Grushezki², F. Koscielniak^{1,2}, O. V. Semchenkova^{1,3}, Yu. M. Sereda^{1,3}, J. Szmider^{1,2}, Yu. G. Teterev¹, I. N. Vishnevsky³

¹ Joint Institute for Nuclear Research, Dubna, Russia ² Henryk Niewodniczanski Institute of Nuclear Physics, Crakow, Poland ³ Institute for Nuclear Research, Kyiv, Ukraine

The double achromatic, large solid angle, high momentum acceptance, and high-resolving separator COMBAS was created in the Flerov Laboratory of Nuclear Reactions, JINR. The layout of experimental setup (separator structure and detector arrangement) is presented. The forward-angle isotopic and element distributions induced in the ¹⁸O (35 · A MeV) + ⁹Be (14mg/cm²) reaction were obtained and analyzed. The Q_{gg}-systematics, as a criterion for the binary production of isotopes, was used for isotopic yields description.