**PHOTONUCLEAR METHOD FOR THE PRODUCTION OF MEDICAL RADIOISOTOPE 72AS**

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The method of induced activity was used to study photonuclear reactions on a natural mixture of selenium isotopes. The experiment was performed on a bremsstrahlung of an RM-55 electron accelerator at an electron energy of 55 MeV. The study examined the possibility of producing 72As isotope in photonuclear reactions on a natural mixture of selenium isotopes. Experimental data on the cross-sections of photoproton reactions on Se isotopes are not available in the literature. The yields of the formation of 73,74,75,76,81,81mSe isotopes as a result of natSe(γ, in) reactions, the target nuclide 72As and the side nuclides 71,74,76,77,78,79As as a result of natSe(γ, in1p) reactions were measured. The experimentally obtained yields of photonuclear reactions are compared with the yields calculated using theoretical cross-sections of photonuclear reactions from and the TALYS program.