Contribution ID: **350** Type: **Oral report**

DETERMINATION OF PHOTONEUTRON PRODUCTION FROM DIFFERENT TARGETS IRRADIATED BY ELECTRON BEAM

Thursday, 23 September 2021 16:15 (25 minutes)

This research focused on photoneutron production determination using two different photoneutron converters BeO, D2O. Experiment was carried out on a linear electron accelerator [1] in A. Alikhanyan National Laboratory in Yerevan, Armenia. A set of targets was irradiated by 70MeV electron beam. Reaction rates were determined as a result of investigations. Besides experimental results, a number of simulations were also conducted using MCNP software [2] to determine reaction rates and they were compared with ones obtained from the experiment.

REFERENCES

1. A.Sirunyan, A.Hakobyan, G.Ayvazyan, et al. LUE-75 Linear Accelerator Facility at Yerevan Physics Institute. J. Contemp. Phys. 53, 271–278 (2018). https://doi.org/10.3103/S1068337218040011

2. C.J.Werner(editor), "MCNP Users Manual - Code Version 6.2", Los Alamos National Laboratory, report LA-UR-17-29981 (2017).

Primary author: MELYAN, Elmira (Brno University of technology)

Co-authors: KATOVSKÝ, Karel (Brno university of technology); BALABEKYAN, Anahit (Yerevan State University)

Presenter: MELYAN, Elmira (Brno University of technology)

Session Classification: Section 2. Experimental and theoretical studies of nuclear reactions

Track Classification: Section 2. Experimental and theoretical studies of nuclear reactions.