

Progress Report
NRDC-2023 Technical Meeting
(9-12 May, 2023, Vienna)

Institute for Nuclear Research, ATOMKI
(S. Takács)

Nuclear Data Activities at ATOMKI in 2022-2023

The usual experimental work was resumed back after COVID period. New experiments were performed at atomki cyclotron and tandetron laboratories, as well as at facilities of collaborating international laboratories. Data evaluations of the experiments are ongoing.

1. Organization and Staff

The organizational structure of the institute had changed again, from laboratories to research groups.

The following groups may publish experimental nuclear data for compilation in EXFOR.

Nuclear technology group: Number of active staff member: 5 persons.

Nuclear astrophysics group: Number of active staff member: 7 persons.

Experimental nuclear physics group: Number of active staff member: 5 persons.

2. EXFOR compilation

During the covered period 6 new entries were created and 14 old entries were revised and transmitted to IAEA NDS.

The compiled new entries include all the newly published articles and other articles assigned for compilation to ATOMKI.

3. Nuclear data related activities in ATOMKI:

- Compilation of all newly measured and published experimental data in EXFOR. (continuous)
- Compilation of nuclear decay data
- Evaluation of cross sections for medical isotope production and charged particle beam monitoring. (technical contracts)
- Imaging Technologies for Process Investigations and Components Testing: Radioactive tracing of industrial processes by using Thin Layer Activation (TLA) and Positron Emission Tomography. (CRPs)

4. Publications in 2022 – 2023

About 35+ papers were published during the last period. Papers published on research work made in international collaborations with variety of compilation responsibility.