

## Nuclear Data Center (NDC) of KAERI

Progress Report to the  
Technical Meeting of Nuclear Reaction Data Centers (NRDC)  
23 - 26 May, 2017

Web: <http://atom.kaeri.re.kr/>

### 1. General

Nuclear Data Center (NDC) of Korea Atomic Energy Research Institute (KAERI) has a director, 17 members (3 in evaluation, 2 in measurement, 2 in atomic and molecular data, 4 in processing and validation, 2 in applications, 4 in reactor physics). Recently, 5 members in charge of accelerator development joined the center.

Mission of KNDC is disseminating outcomes of international network as well as promoting domestic nuclear activities and related applications. Nuclear data are required in the R&D of nuclear technology and related fields. Its research consists on measurement, evaluation, processing and validation of nuclear data. The research is necessary to ensure safety and economics of nuclear technology. KNDC was established with the mission that is to provide nuclear data on time for nuclear power and related fields.

KNDC is performing nuclear data compilation/evaluation, processing and validation in close cooperation with the international nuclear data network:

- Compilation of nuclear data into EXFOR under the guidance of IAEA/NDS
- Participating in the formal JEFF and WPEC subgroup of NEA
- Participating in IAEA CRP on photonuclear data and photon strength functions

### 2. EXFOR Activity

We are continuing data compilation for nuclear reaction data obtained in Korea under the guidance of IAEA/NDS.

Since last meeting, total 7 Entries were produced and listed in Table 1. These entries contain the experimental data on the cross sections and isomeric yield ratio by photonuclear reaction using the bremsstrahlung beam, and the neutron capture and total cross sections. Four of total 7 entries were entered at the EXFOR and the others are PRELIM status.

Table 1. Compilation statistics

#	TRANS	ENTRY	SUBJECT	STATUS
1	G036	G3121	Gamma	EXFOR
2	G036	G3122	Gamma	EXFOR
3	3176	30837	Neutron	EXFOR
4		30838	Neutron	PRELIM
5	G037	G3123	Gamma	EXFOR
6		30839	Neutron	PRELIM
7		G3124	Gamma	Compiled

- **Checking Code**

The draft is checked through the following website.

<http://www.jcprg.org/exfor/tool/>

### **3. Cooperation with domestic experimental group**

The workshop on Nuclear Data Measurement and Related Subject was held on December 2 in 2016. This annual workshop was organized by Kyungpook National University (KNU) and supported by Dongnam Institute of Radiological & Medical Sciences (DIRAMS), Pohang University of Science and Technology (POSTECH) and our center (KNDC). The purpose of the workshop is to share recent activities and achievements on nuclear data measurements and evaluations.

### **4. Website service**

KNDC website (<http://atom.kaeri.re.kr/>) was redesigned and updated continuously. The newly designed table of nuclides allows the user to easily navigate through the nuclides and will provide the following data on a page describing the nuclide.