Nuclear Data Center (NDC) of Korea Atomic Energy Research Institute (KAERI)

Progress Report to the
IAEA Technical Meeting of Nuclear Reaction Data Centers (NRDC)
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1. General

Nuclear Data Center (NDC) of Korea Atomic Energy Research Institute (KAERI) has a director, 11 permanent staffs (2 in evaluation, 2 in measurement, 2 in atomic and molecular data, 3 in processing and validation, 2 in applications), 2 postdoctoral researchers, 2 students and 1 secretary.

Mission of KAERI/NDC is dissemination outcomes of international network as well as promoting domestic nuclear activities and related applications.

KAERI/NDC is performing nuclear data compilation/evaluation, processing and validation in close collaboration with the international nuclear data network, namely:

- Compilation of nuclear data into EXFOR under the guidance of IAEA/NDS
- Participating in the formal JEFF and WPEC subgroup of NEA
- Measurement of neutron capture for U-238 with EC-JRC-IRMM
- Evaluation of nuclear data for Fe-56 with BNL

2. EXFOR Activity

Since the NRDC2014 Meeting, we are continuing data compilation for nuclear reaction data obtained in Korea under the guidance of IAEA/NDS.

The total 7 Entries were produced and listed in Table 1. These entries contain mainly experimental data for the production cross sections by proton induced reaction and photonuclear reaction using the bremsstrahlung beam. Three of total 7 entries were entered into the EXFOR database and the others were compiled.

Table 1. The present compilation statistics

#	TRANS	ENTRY	SUBJECT	STATUS
1	G031	G3111	Gamma	EXFOR
2	D095	D7006	Charged particle	EXFOR
3	D096	D7007	Charged particle	EXFOR
4	D097	D7008	Charged particle	PRELIM
5	D098	D7009	Charged particle	PRELIM
6		D7010	Charged particle	Reserved
7		G3112	Gamma	Reserved

- **Checking Code**

The drafts are checked through the following website.

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

3. Others

3.1 Collaboration with domestic experimental group

The workshop on Nuclear Data Measurement and Related Subject was held on November 27 – 28 in 2014. 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. Domestic and international researchers in the field of accelerator facilities invited as well to the workshop.

3.2 Reconstruction of website

Our KAERI NDC website is being redesigned. The main aim of this update is to pack more information on one page reducing the need to search across multiple locations. The newly designed table of nuclide allows the user to easily navigate through the nuclides and will provide the following data on a page describing the nuclide.

- Nuclear property and decay information including atomic mass, binding energy, half-life, etc.
- Available nuclear data evaluations and EXFOR data
- Cross section plot for the evaluated and measured nuclear data

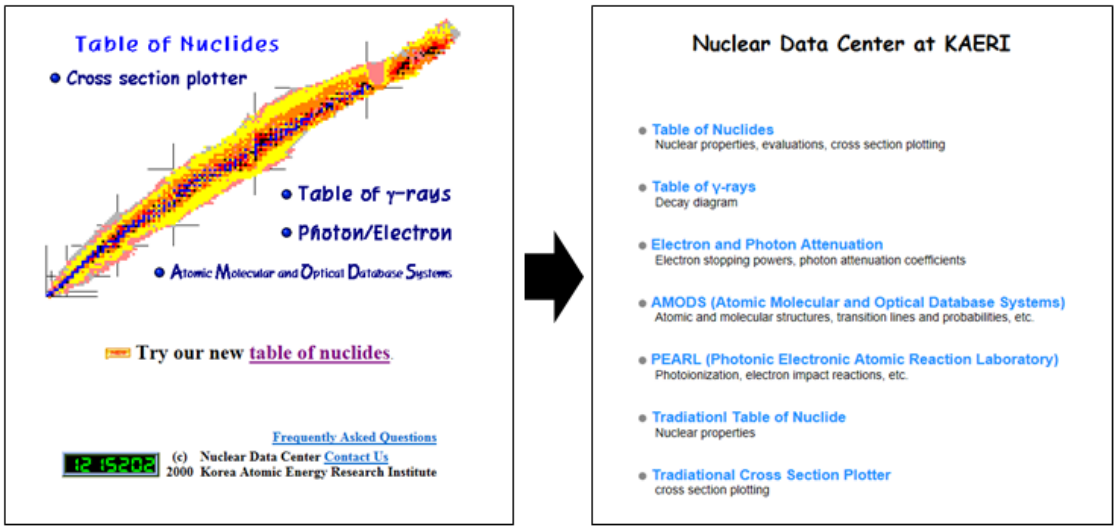

Figure 1. Main screen of website (old and new)

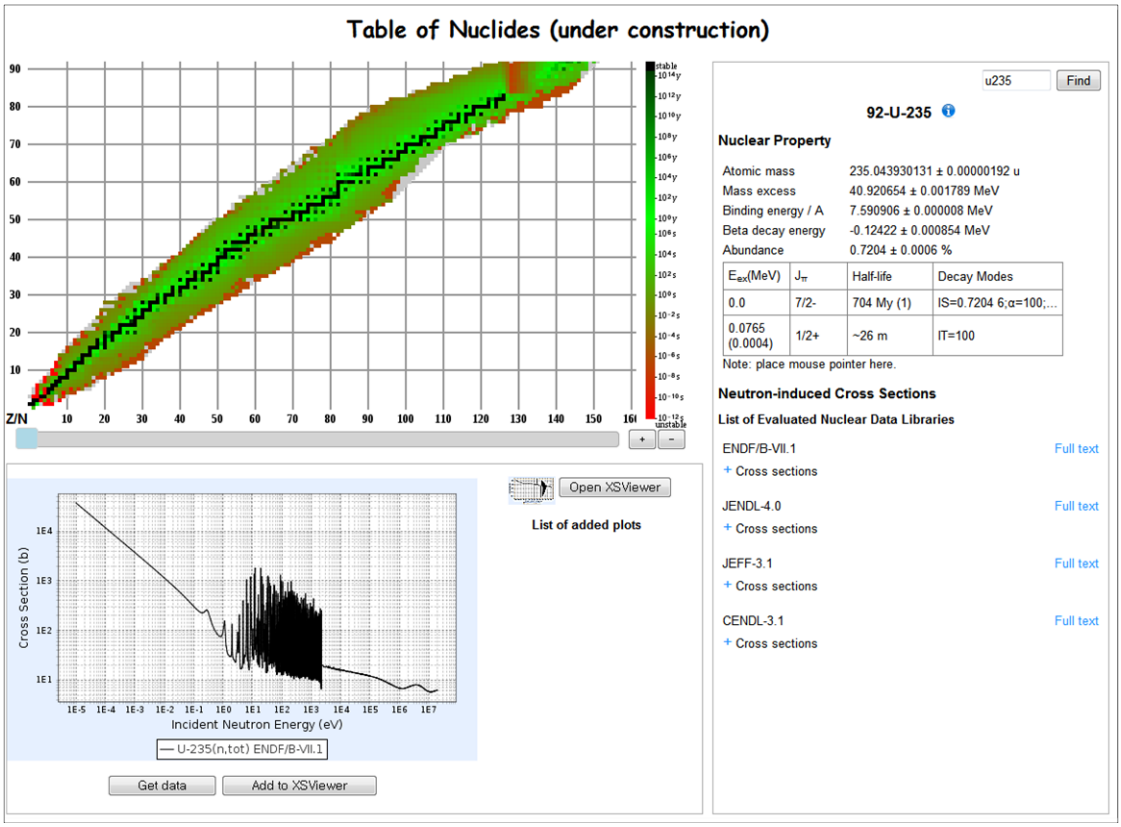

Figure 2. Table of nuclides screen