

Progress Report of the KAERI/NDEL - 2002

Jonghwa Chang
(KAERI/NDEL, Daejeon, Korea)

1. General

KAERI/NDEL is funded from a 4 years (2001~2004) national nuclear R&D project, "Evaluation of Nuclear Data for Nuclear R&D Projects."

2. Data Services

KAERI/NDEL is providing nuclear data on-line service targeting non-nuclear data experts. The address is <http://atom.kaeri.re.kr/>. The statistics are as follows:

Item	1999	2000	2001	2002
Data retrieved/month	7,644	20,138	19,973	18,480
IP/month	984	3,689	3,257	3,864

3. Experimental Facility

Experimental activities at two domestic facilities have been supported by KAERI/NDEL for improving nuclear data measurement capability.

- Pohang E-Linac based TOF; 10.8 m, 60 MeV, 80 mA, 1.5 us, 12 Hz
- KIGAM Tandem VDG based TOF; 1.7 MV, 300 uA, 2 ns, 8 MHz

4. Measurements

- Natural elements (Ta, W, Dy, Ti, Sm, Ag) transmission data at 0 – 100 eV at Pohang TOF.
- Dy isotopes capture data in the resonance region at KURRI linac, Japan.
- Gd isotopes capture data in the unresolved resonance region at TIT pelletron, Japan.

5. Evaluation Works

Main directions of nuclear data development are the Fission Products cross section data for Transmutation, the data for Thorium cycle, the Photon-production data for in-core detector, and the Intermediate energy data for ADS.

The cross sections of 19 fission products below 20 MeV are submitted for ENDF/B-VII.

6. Staff and Computers

KAERI/NDEL has 9 regular staffs, and 1 full time consultant scientist;

- Evaluation: 5,
- Multi-group library generation and benchmark: 4,
- Data services: 1.

Computers;

- A cluster of Linux PCs for evaluation,
- 3 HP desk side Workstations for the multi-group library generation and benchmarks,
- 1 Linux PC for internet web server, 1 Linux PC for backup.