

PROGRESS REPORT
to 2001 NRDC Meeting on Technical Aspects of Co-operation
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I. General Situation

The first half of 2001, Drs. Zhou Chunmei and Liu Tingjin were retired, and the second half Dr. Shen Qingbiao will be retired; next year Dr. Yu Baosheng will be also retired. That time CNDC will be basically in the younger generation.

II. Evaluation

China Evaluated Nuclear Data Library, version 3 (CENDL-3) were accomplished in 2000.

CENDL-3 contains about 206 nuclides. Among them, the data of 161 nuclei will be newly or reevaluated:

(1) Fissile nuclei 15 ($^{233-239}\text{U}$, ^{237}Np , $^{238-242}\text{Pu}$, $^{241, 242}\text{Am}$)

(2) Structure material nuclei 34

(Natural elements Ni, Cu, Zr, Hf, Pb and their isotopes, ^{23}Na , $^{\text{Nat}}\text{Si}$)

(3) Light nuclei 3 ($^6, ^7\text{Li}$, ^9Be)

(4) Fission product nuclei 109

(For example, $^{85, 87}\text{Rb}$, $^{136, 138, 140-144}\text{Ce}$, $^{151, 153, 154, 155}\text{Eu}$)

The files 1~4, 6, 12~15 are included in important nuclides (major fissile nuclide, structure materials and light nuclide), only files 1~5 are given for minor fissile and fission product nuclides. The data for structure materials are given for both natural element and their all isotopes. The double differential cross sections (file 6) for light nuclei were calculated with code LUNF and represent experimental data well.

The benchmark testing for CENDL-3 is being carried out. Several problems in physics and format have been found on major fissile nuclides, and are being improved.

III. CINDA and EXFOR Compilation

1. CINDA

118 entries were compiled from the works in "communication of Nuclear Data Progress" in 1999~2000.

2. EXFOR

Two young staffs of CNDC have started the EXFOR compilation, and fished 16 entries measured in China.

IV. Publication

<<*Communication of Nuclear Data Progress*>>(CNDP) has been published for 24 issues by CNDC and Atomic Energy Press science 1989, and it (350 books/each issue) has also been distributed by IAEA nuclear data section as an INDC document.

V. Activities and Cooperation during 2000

1. Meeting Hold in China

- 1) “The Working Meeting on Fission Nuclei”, Mar. 6~8, Beijing;
- 2) “The Standing Committee Meeting of China Nuclear Data Committee, Aug. 4, Beijing;
- 3) “The Working Meeting of Multi-group Constant and Benchmark Test”, Aug. 23~28, Nanchang;
- 4) “The Working Meeting on Nuclear Data Measurement”, Nov. 27~Dec, 2, Kunming

2. Foreign Scientists Visited in CNDC

Dr. Charles Dunford, NNDC, USA, Jun. 25~29;

Dr. Tokio Fukahori, JAERI, Japan, Sep. 3~10.

3. Staffs of CNDC Worked or Visited in Foreign Country

Han Yinlu worked in KAERI, Oct. 10, 1998~Apr. 7, 2000;

Rong Jian works in JAERI on Aug. 1, 2000, for one year;

Zhuang Youxiang, Zhou Chunmei and Huang Xiaolong

visited the Central Research Institute of Management, Economics
and

Information, Moscow, Russia, Oct. 2~10, 2000.