

China Nuclear Data Center (CNDC) Progress Report

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1. General Situation

The second half of 2002, the head of CNDC has been changed to the younger generation, the new director is Dr. GE Zhigang; There are four groups in CNDC, as shown in Table 1.

Table 1 Organization chart of the CNDC as in May 2003 is giving below

Nuclear Data Evaluation Group	Nuclear Theory Group	Macroscopic Data Group	Data Library Group
Huang Xiaolong (Head) <u>Fan sheng</u> Wu Zhendong <u>Chen Guochang</u> <u>Zhuang Youxiang</u>	Ge Zhigang (Head) <u>Han Yinlu</u> <u>Zhang Jingshang</u> <u>Wang Shunuan</u>	<u>Liu Ping</u> (Head) <u>Rong Jian</u> <u>Wu Haicheng</u>	<u>Yu Hongwei</u> (Head) <u>Shu Nengchuan</u> Jing Yongli

2. Nuclear Data Evaluation

CENDL-3.0 was accomplished during 1996~2000, it includes 214 nuclides for general purpose. A new five year plan (from 2001 to 2005) has been started for the development of nuclear data evaluation and library construction. CENDL-3.0, both general purpose data file and special purpose data file, will be developed further to CENDL-3.1. The general purpose data file will include more nuclides (>300) and more files (for example covariance data files). More fission product nuclides will also be increased. The data for important nuclides will be improved further. The resonance parameters will be investigated and evaluated. The fission yield data and decay data will be continuously evaluated.

The nuclear data measurement, evaluation and validation will still be combined in CENDL-3.1 improvement and development.

The planned status of CENDL-3.1 is shown in Table 2.

Table 2. The planned status of CENDL-3.1

Nuclides	Planned in CENDL-3.1	Evaluated in CENDL-3.0	CENDL-3.1 Total
Fissile nuclide	29	15	44
Structure material	55	42	97
Fission products	91	109	200
Light nuclide	7	3	10
Total evaluated	182	169	351

3. CINDA and EXFOR Compilation

3.1 CINDA Total 25 entries were compiled from the papers of "Communication of Nuclear Data Progress" No. 27~28 in 2002. The entry compilations of the journals published in China are in progress.

3.2 EXFOR 5 entries (32609, 32646, 32647, 32648, 32649) measured in China. were compiled in cooperation with Dr. O.Schwerer.

4. Publication

"Communication of Nuclear Data Progress" (CNDP) has been published for 2 issues (No.26~28) during 2002, and it (350 books/each issue) has also been distributed by IAEA Nuclear Data Section as an INDC document. Now the editor-in-chief are Zhao Zhixiang and GeZhigang from on No.29 of the CNDP..

5. A New Task - Basic Data Library for Nuclear Physics

CNDC has got a new task of "The Basic Data Library for Nuclear Physics" during 2002~2005 in cooperation with China Committee of CODATA. It includes 7 sub-libraries: (1) Original experimental data, (2) Nuclear structure data, (3) Nuclear reaction data, (4) Nuclear decay data, (5) Nuclear model parameters, (6) Special purpose data, for example, astrophysics data, and (7) Related programs.

6. Activities and Cooperation during 2002

6.1 Meetings Held in China

- (1) The network meeting on the 10th years plan of nuclear data measurement, April 27~30, Hangzhou city, Zhejiang province;
- (2) The meeting on annual plan of nuclear data evaluation, July 15~19, Mudanjiang city, Heilongjiang province;
- (3) The Standing Committee Meeting of the Third China Nuclear Data Committee, September, 5, Beijing city;

6.2 The International Meetings in Nuclear Data Field Attended by Staffs of CNDC

- (1) NEA Working Party Research on International Nuclear Data Evaluation Cooperation, May 8~11, Yu Hongwei, Brussels, Belgium;
- (2) The 24th Meeting of International Nuclear Data Committee Meeting, May 14~17, Zhao Zhixiang, Vienna, Austria;
- (3) IAEA Advisory Group Meeting on Network of Nuclear Reaction Data Centers, May 27~30, Zhuang Youxiang, Paris, France;
- (4) Research Co-ordination Meeting on Fission Product Yield Data Required for Transmutation of Minor Actinide Nuclear Waste, Nov. 25~29, Liu Tingjin, Vienna, Austria;

6.3 The Foreign Scientists in Nuclear Data Field Visited CNDC/CIAE

Drs. T.V.Golashvili, V.P.Chechev and A.Demidov, Ministry of Atomic Energy of Russia Federation, Dec. 15~24;

6.4 Staffs of CNDC Worked in or Visited Foreign Country

Wu Zhendong, JAERI, from Sep. 9, 2002 to Sep. 8, 2003.