The Progress Report of CNDC to NRDC Meeting

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1 General

CENDL is carried out by China Nuclear Data Center and China Nuclear Data Network, China Nuclear Data Committee assumes responsibility the management of CENDL project. China Nuclear Data Center serves as the secretariat of Chinese Nuclear Data Committee. A young staff has joined in CNDC this year, the CNDC staffs are 19 now. The follows are the organization of the committee and the network

Committee Chair:	Dr. Zhao Zhixiang, CIAE
Technical working party:	Evaluation Working Party
	Measurements Working Party.
	Benchmark Working Party.
China Nuclear Data Network:	China Institute of Atomic Energy.
	Peking University,
	Sichuan University.
	Lanzhou University.
	Tsinghua University
	Nankai University,
	Jilin University
	Zhenzhou University ,
	Northwest University and et al

The progress and achievements in China nuclear data field are carried in the issue of Communication of Nuclear Data Progress (CNDP)

2. EXFOR Compilation

18 neutron reaction experiments and 3 charged particle experiments have been compiled since 2005 NRDC meeting. The list of 10 most important Chinese journals relevant to nuclear data has been provided to NDS

3 Nuclear Data Evaluation

CENDL-3.1:

CENDL-3.1 includes comprehensive data evaluations for all neutron reactions in the energy range from 10^{-5}eV to 20MeV for 200 nuclides. The ENDF-6 format is adopted, the files 1, 2, 3, 4, 6, 12~15 are included for major fissile nuclide, structure material and light nuclide, files 1, 2, 3, 4, 5 are given for minor fissile and fission production nuclides.

Nuclear data for ADS

In order to satisfy the need of ADS project of China, a code MEND for calculating the nuclear data in medium energy region has been developed, The following nuclear data have been calculated

and evaluated:

Nuclear data for incident neutron from 20 to 250MeV: ^{50,52,53,54}Cr, ^{54,56,57,58}Fe, ^{90,91,92,94,96}Zr, ^{180,182,183,184,186}W, ^{204,206,207,208}Pb,^{238}U.

Nuclear data for incident proton from theshold energy to 250MeV: ^{54,56,57,58}Fe, ^{180,182,183,184,186}W, ^{204,206,207,208}Pb,^{209}Bi,^{238}U.

Structure and decay data

CNDC have taken permanent responsibility for evaluating and updating NSDD for A=51, 52 and 195-198.The mass chain A=51 and 67 have been revised using available experimental decay and reaction data, A=67 was published in NDS in 2005 and A=51 have been sent to NNDC in review. Now A=196 was being updated.

The decay data evaluation covers the following nuclides: ^{7}Be, ^{101}Mo,^{175}Hf, ^{225}Ra, ^{231,232}Th, ^{231,233}Pa and ^{232,233,234,236}U. All evaluations including decay scheme were completed.

Fission yield

Based on the experimental data , the systematics on mass distribution of fission product nuclides and the systematics on independent yield were studied respectively. The systematics codes were developed and the parameters were determined by fitting experimental data. Cumulative yield data from ^{235}U and ^{238}U fission were evaluated for each about 50 fission product nuclides as a base of updating CENDL/FY and for some practical applications.

4 International Co-operation:

At present, The scientists of CNDC participate in three IAEA Coordinated Research Projects:

- Evaluated Nuclear Data for Thorium-Uranium Fuel Cycle;
- Parameters for Calculation of Nuclear Reactions of Relevance to Non-energy Applications (RIPL-3);
- Updated Decay Data Library for Actinides.