

Center of Nuclear-Physics Data (CNPD) RFNC-VNIIEF.
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Compilation.

We continue the correction and translation to the EXFOR format of our experimental data and the compilation of the new experimental data. Now we prepare for EXFOR library our experimental data on boron that will be reported in October 2001 on the International Conference in Japan ("Nuclear data and Technology"). We also, compile experimental data in collaboration with NNDC and CJD.

Experimental data compilation and checking have been made using the VMS operating system with the help of NNDC software.

Collaboration.

We worked in collaboration with the NNDC during two months. Charged particle data from the "Nuclear Physics" have been scanned (1980 - 2000) and compiled. These data have been compiled with the new identifier - "T".

In collaboration with BBDC we prepared a project to CRDF. The results of our efforts will be clear up in November 2001.

Software.

In collaboration with NNDC and IAEA we take part in the discussion about the migration strategy for existing databases.

Now we develop new SaBa's interface, include to it new nuclei (up to Fluorine) and thermonuclear reaction rates calculations. The results of this work we'll present in October 2001 on the International Conference in Japan ("Nuclear data and Technology").

Evaluation activity.

The evaluation activity was stimulated by participation of the CNPD staff in some international projects.

In collaboration with CJD we worked on the ISTC #731 project that was fulfilled. In the frame of this work the following results were achieved:

- New spectra and cross section measurements of γ -production on inelastic 14.3 MeV neutron scattering were performed. There were used wide range of construction materials and liquid-metal carries. There were investigated 28 nuclei. These data were established with such uncertainties (10% for the most nuclei) that they may be used as the standard data for creation evaluated libraries for thermonuclear applications.
- New experimental data were compared with the data from the literature and from EXFOR and ENDF libraries;
- Results of the experiments were compiled into EXFOR in collaboration with CJD.

In the frame of work on the ISTC #731 project we have performed new experiments and prepared adopted data for neutron-gamma-production cross-sections on 28 nuclei.

According to the ISTC #1145 project we develop the evaluated nuclear library for transmutation (TENDL).

103 isotopes including 4 effective fission fragments from the following world libraries of evaluated constants (ENDF/B-IV, ENDL-82, JENDL-3, CENDL-2, BROND-2) were involved into the current version of TENDL library.

The methods and criteria of data selection, the content of TENDL library and functional potentialities of the special program shell are described in the report that will be also presented in October 2001 on the International Conference in Japan (“Nuclear data and Technology”).