CJD: Progress Report, 2005/06

IAEA Technical Meeting

"Co-ordination of the Network of Nuclear Reaction Data Centers"

(Vienna, IAEA, Nuclear Data Section, 25 – 29 September 2006)

A.I.Blokhin, V.N.Manokhin, V.G.Pronyaev, K.I.Zolotarev, M.V.Mikhailukova, N.A.Demin

1. Staff

Total number of staff in the CJD is 9. This is divided into 6 professional staff and three support staff. In August 2006 Dr. A.Pashchenko left the IPPE.

2. Data Compilation

2.1. EXFOR activity.

New and revised entries / subentries since the 2005 NRDC meeting

CJD TRANS	TRANS- Status	Entries Total	Entries New	Entries Revised	Subents Total	Subents New	Subents Revised
Area 4							
4135	Final	50	9	41	76	19	57
4136		21	3	18	83	38	45
4137		17	8	9	94	51	43
4138	Prelim.	48	5	43	534	99	435
Sum		136	25	111	787	207	580

2.2. CINDA activity.

Nominally the CINDA activity is continued. All types of publications (Russian scientific journals, preprints and so on) are investigated to include in CINDA compilation. We are going to adopt the new technology process created by the NDS and NEA DB for a CINDA compilation and to start in a participation of exchange of CINDA compilation.

3. Publications

In during 2005-2006 the three issues of the journal "Yadernye Konstanty" were prepared and printed.

4. Nuclear Data Services

The nuclear data services are provided through direct contact with the users from many Russian organizations. Mainly the compilation of the evaluated data of the different types are needed. That is why the requests obtained by the CJD in last time are needed in a specialist labour. Within the CJD A.Blokhin, V.Pronyaev and K.Zolotarev are responsible for the Nuclear Data Services.

4. NUCLEAR DATA EVALUATION Activity

- 1. BROND-2.2(mod) processing and integral testing
- 2. New data library ACDAM for the activation/damage calculations is compiled in the Russian Nuclear Data Center and consists from three parts:
 - <u>Activation/transmutation neutron cross-section base (From the element H (A=1) to Po (A=210)</u>, in the neutron energy range 10⁻⁵ to 20- MeV and it includes 704 target isotopes with data presentation: in ENDF-6 format).
 - Decay Data Library (DeDaL)
 - <u>Damage Data Library (DDL)</u> (60 elements/isotopes in the neutron energy range 10⁻⁵ to 20- MeV. The data for main structural elements and basic impurities involved in alloys and steels are included in the DDL in ENDF-6 format.
- 3. New version of the Russian Reactor Dosimetry File is prepared and now it is under the compilation and benchmark testing. Evaluated data files were made for the 26 reactions with the covariance matrices. Some of them were included into the IRDF-2002 compiled by the NDS. New evaluated data sets were prepared in during 2006.
- 4. CJD was engaged in re-evaluation and preparation of evaluated neutron data for minor actinides and fission products for the FOND Library which is a base for the ABBN group constant system. The correction, processing and testing of modified evaluated data files is under way.