

CJD PROGRESS REPORT**NRDC Technical Meeting****(23 - 25 April 2013, Vienna)**

Russian Nuclear Data Center

(CJD, IPPE, Obninsk, Russian Federation)

Introduction

During the time passed after the previous NRDC2012 meeting the current work concerning EXFOR compilation and fulfillment of NRDC2012 Conclusions and Actions was continued. Large part of activity was related to the nuclear data evaluation.

1. Staff

At present moment the number of CJD staff is 15. After reorganization in 2011, CJD is now the theoretical division of "Center for perspective researches" in the State Scientific Centre of the Russian Federation – Institute for Physics and Power Engineering named after A.I. Leypunsky – SSC RF – IPPE.

2. EXFOR activity.

After the NRDC2012 Meeting:

- Exfor Transes 4156-4159 were transmitted as final;
- Exfor Trans 4160 was transmitted as preliminary.

EXFOR compilation statistics – area 4

Trans	Date/status	Entries Total	Entries New	Entries Revised	Subents Total	Subents New in old+in new	Subents Revised
4156	21-06-2012/final	28	1	27	274	21+3=24	250
4157	04-10-2012/final	29	6	23	325	54+43=97	228
4158	15-01-2013/final	25	3	22	156	11+43=54	102
4159	10-04-2013/final	43	1	42	256	39+5=44	212
Final		125	10	115	1009	219	792
4160	10-04-2013/prelim.	24	2	22	234	0+6=6	228
Total		149	12	137	1245	125+100=225	1020

- The efforts were continued to get numerical data from authors.

Good cooperation was established with authors:

V.Shorin, V.Khryachkov (4RUSFEI);
 V.Dement'ev (4RUSKUR);
 A.Filatenkov (STC "Yafi" near 4RUSRI);
 O. Shcherbakov, A.Vorobiev, I.Guseva (4RUSLIN);
 Sh.Zeynalov, D.Testov (4ZZZDUB).

- Neutron induced data Transes were checked and comments were sent: 10 for area 1, 2 for area 2, 4 for area 3.

- Russian journals YF, AE, IZV, PTE, ZET, ZEP, FCY, FCY/L are scanned and information for CoCoS is sent to NDS in coordination with V.Semkova.

3. NRDC2012 Actions.

CJD is responsible for NRDC-2012 Actions: 1, 3, 5, 7, 31, 32, 35, 37, 38, 43, 47, 50, 60, 73.

A1 – Almost all registered in CoCoS articles were compiled. One article (of V.Khryachkov) published in March 2013 is not compiled yet.

A3 - All very urgent and urgent corrections were made. Normal corrections will be continued.

A5 - Anatoly Andreev was nominated from the CJD for participation in the EXFOR working group coordinated by V.Zerkin.

A7 – All questions have been answered.

A31 – Will be continued.

A32 – Will be continued.

A35 – Finished in trans 4154.

A37,38 – Not all English translations of AE and YF were added. AE – 12 added, YF – 15 added in Transes 4156-4160.

Will be continued.

In corrected Entries – complex corrections are done in all SUBENTs and all found misprints, mistakes, duplications (not mentioned in NDS error list) are corrected.

A43 – Finished in Trans 4157

A47 – Finished in Trans 4158

A50 – Not finished yet. Corrected – 10 Entries, rest -11.

A60 – EXFOR+ format is not used in compilation.

A73 – No feedback was sent.

4. Computer and software matters. WEB-site service.

- New versions of CHEX and EXFOR dictionaries were copied and used in compilation.
- The digitizers of Sarov and GSYS are used to digitize graphical data for EXFOR.
- Tool of web-service for compilers developed by V.Zerkin, Janis Trans Checker (NEA DB) are used to check Transes. Both are found to be very useful.
- The information from web-site of users feedback is helpful for correction of the old Entries.
- EXFOR status compilation web-page CoCoS is used to find the articles for compilation.
- CJD web-site (Russian/English) is still under reconstruction as also IPPE web-site.

5. Nuclear data evaluation activity.

Nuclear data evaluation process and compilation of nuclear data for the BROND-3 project was continued in CJD. During 2012 year the evaluations were done for:

- activation cross-sections of reactor bismuth-lead coolant nuclei;
- evaluated data files for U, Pu, Fe, Cr, Ni, Zr, Nb isotopes;
- covariance matrixes of uncertainties for evaluated cross-sections.

Testing and benchmarking of produced BROND-3 library preliminary version is still on, additions and updating are planned to be done.

6. Journal YK.

The journal “Yadernye Konstanty”-2010, issue 1-2 is the last published one. The next issue is planned to be prepared at 2013 year, if financial support will be obtained for this publication. YK 1999 – 2007 issues are available to read from the old CJD web-site <http://www.ippe.obninsk.ru/podr/cjd/> .

7. Acknowledgments.

Great thanks to:

- Naohiko Otsuka and Emmeric Dupont for their comments of Transes and productive discussions;
- Valentina Semkova for her collaboration concerning CoCoS;
- Viktor Zerkin for his very helpful comments about computer codes and tools for EXFOR;
- experimentalists for sent authors' data and very useful explanations;
- EXFOR data base users for their feedback and comments, which are important for EXFOR improvement.