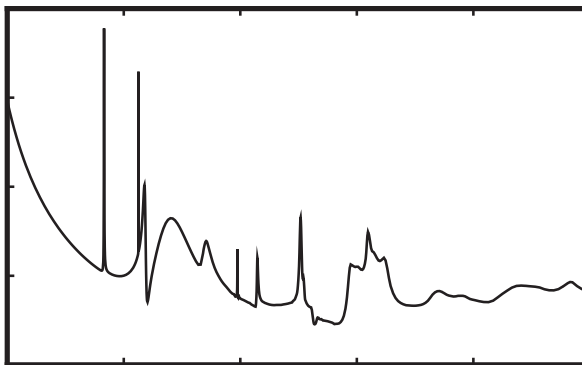




NUCLEAR DATA

NEWSLETTER



Nuclear Data Section (NDS)

International Atomic Energy Agency
Vienna

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All services provided to users are free of charge.

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FENDL2 for FTP file transfer of FENDL-2.0;
RIPL for FTP file transfer of RIPL;
NDSOHL for files saved in NDIS Telnet session

Web: <http://www-nds.iaea.org>

Staff Items

We extend our very best wishes and thanks to Kevin McLaughlin and Meinhart Lammer in their recent retirement from the IAEA. Kevin, in addition to his work in Nuclear Data Section, provided support to many successful Workshops at the ICTP, Trieste. Meinhart was the key contributor for CINDA in NDS, and more recently the coordinator of this activity in the Neutron Data Centres Network.

Both will be missed by us after approximately 30 years each of service; they have been our friends and reliable co-workers. However, we will not lose them entirely as they are both still based in Vienna and will be with us from time to time.

We would also like to say hello to Marco Verpelli and Svetlana Duneava who are joining us. We extend a very warm welcome to both of them.

Online News

The following INDC Reports are available online at http://www-nds.iaea.org/indc_sel.html: INDC(CCP)-436, INDC(BLR)-018, INDC(NDS)-443, 444 and 446.

Computer Codes and Packages

ENDF – WINENDF Package.

Updated in September 2003, contains all comprehensive evaluated data libraries, (ENDF/B-VI, release 8, JENDL-3.3, JEF-3.0, BROND-2 and CENDL-2) a retrieval and merger system for MS Windows, Manuals and Documentation in PostScript format, Utilities and Preprocessing codes. Includes PRE-PRO 2002. Available on CD-ROM on request.

New Data Libraries

POINT2003, by D.E.Cullen (2003). A temperature dependent version of the ENDF/B-VI, Release 8, Library. For use in applications this library has been processed into the form of temperature dependent cross sections at eight temperatures between 0 and 2100 Kelvin, in steps of 300 Kelvin. Available online: <http://www-nds.iaea.or.at/point2003/> or on CD-ROM on request.

Minsk Actinide Library, by M.M. Maslov et al. (2003). The library includes evaluated

neutron reaction data for Th-232, U-232,233,234,238, Np-238, Pu-238, Pu-242, Am-241,242-g,242-m,243, Cm-243,245,246 in ENDF-6 format. 2003 update includes new evaluations for Th-232 and U-232, 233, 234 and 238 isotopes. The data are available on CD-ROM on request or online:

<http://www-nds.iaea.org/minscact/>

For documentation, see report IAEA-NDS-164, Rev. 5 (August 2003), available on-line:

<http://www-nds.iaea.org/reports/nds-164.pdf>

WIMS-D Library (2003). The IAEA WIMS-D Library Update Project (WLUP) to update the multi-group nuclear data library of the WIMS code is completed. The following products are freely available on CD-ROM or on-line on <http://www-nds.iaea.org/wimsd/>

- WIMSD-IAEA-69 group cross section library: It includes more than 170 materials from selected evaluated nuclear data files in an energy structure of 69 groups. The library was extensively validated over 200 benchmark cases.
- WIMSD-IAEA-172 group cross section library: It includes more than 170 materials from selected evaluated nuclear data files in an energy structure of 172 groups. The library was extensively validated over 200 benchmark cases.
- Draft document with a detailed description of the library, the processing methods and the benchmark test cases.
- NJOY inputs for evaluated nuclear data processing.
- Benchmarks inputs for the WIMS-D code.
- Benchmarks results for the libraries considered in WLUP.
- Auxiliary codes and procedures to update and to maintain the WIMS-D library.
- WIMS-D updates to extent the code capabilities.

Offline News

Updated databases and libraries are now available on CD-ROM:

EXFOR+CINDA/Java2 on CD-ROM, (September 2003).

Integrated EXFOR and CINDA databases with a

user friendly and flexible interface and a powerful search engine. Modern technologies are used: JAVA, SQL and relational databases. Contains EXFOR and CINDA libraries as of **September 2003**.

These programs were written by Viktor Zerkin, Nuclear Data Section, IAEA, 2002-2003.

Full version for Windows is available on CD-ROM on request.

Coordinated Research Projects

IAEA Coordinated Research Projects (CRPs) are a valuable mechanism for stimulating research in IAEA Member States of relevance to Agency programmes. CRPs of the Nuclear Data Section, both active and recently completed and additional information can be found at:

www.iaea.org/programmes/ripc/nd/crps.htm

Selected Reports and Documents

Chart of the Nuclides. *Wall chart of the Nuclides from KAPL and General Electric Co, 15th edition (revision to 1996).*

Available cost free on request by users from developing countries.

Karlsruher Nuklidkarte. *Wall Chart of the Nuclides from Karlsruhe, 6th edition (1995).* Available cost free on request by users from developing countries.

INDC(BLR)-018. *Neutron Data Evaluation of U-233.* V.M. Maslov, Yu. V. Porodzinskij, N.A. Teterova, A.B. Kagalenko, N.V. Kornilov, M. Baba and A. Hasegawa, August 2003. This report is available as hard copy or online at: http://www-nds.iaea.org/indc_sel.html

INDC(CCP)-436. *Articles Translated from Journal Yadernye Konstanty (Series: Nuclear Constants Issue No. 1-2, 2002),* August 2003. This report contains the full English version of Nuclear Constants journal and includes 1 paper translated from Russian and 1 paper originally published in English:

-Analysis and Evaluation of the Spectra and Production Cross-Sections of Gamma-Rays by A. V. Ignatyuk et al.

-Investigation of Resonance Structure of the Neutron Cross-Sections and the α -Value of ^{235}U for Different Temperatures by Yu. Grigoriev et al.

Available as hard copy or online at:

http://www-nds.iaea.org/indc_sel.html

INDC(GER)-049. *Progress Report on Nuclear Data Research in the Federal Republic of Germany for the Period April 1, 2002 to March 31, 2003.* Edited by S.M. Qaim.

Forschungszentrum Juelich, Germany, July 2003.

This report is available as hard copy.

INDC(JPN)-190. *Progress Report (January 2002 to December 2002).* Edited by J. Katakura, Japanese Nuclear Data Committee, March 2002.

This report is available as hard copy.

INDC(JPN)-191. *Proceedings of the 2002 Symposium on Nuclear Data, November 21-22, 2002, JAERI, Tokai, Japan.* Edited by Takaaki Ohsawa and Tokio Fukahori, June 2003. This report is available as hard copy.

INDC(NDS)-443. *Development of a Database for Prompt Gamma-Ray Neutron Activation Analysis. Summery Report of the Third Research Coordination Meeting,* IAEA Headquarters, Vienna, Austria, 24-26 March 2003. Prepared by R.M. Lindstrom, R.B. Firestone and R. Paviotti-Corcuera, April 2003. This report is available as hard copy or online at: http://www-nds.iaea.org/indc_sel.html

INDC(NDS)-444. *Nuclear Data for the Production of Therapeutic Radionuclides.* Summary Report of First Research Coordination Meeting, IAEA Headquarters, 25-27 June 2003. Prepared by J. Sublet and R. Paviotti-Corcuera, June 2003. This report is available as hard copy or online at: http://www-nds.iaea.org/indc_sel.html

INDC(NDS)-446. *Report on the IAEA Technical Meeting on Co-ordination of the Network of Nuclear Reaction Data Centres,* Vienna, 17-19 June 2003, prepared by O. Schwerer (August 2003). This report is available as hard copy or online at: http://www-nds.iaea.org/indc_sel.html

JAERI-Data/Code-2003-011. *The Libraries FSXLIB and MATXSLIB based on JENDL-3.3.* Okazuaki Kosako et al. (2003). This report is available as hardcopy.

NEA/JEFF Reports. *Complete collection of JEFF-Reports, numbers 1-18 in pdf format.* The Joint Evaluated File (JEF) was started in 1982 as a collaborative project among NEA Data Bank member countries. The main objective is to provide participating countries with a common and unique source of nuclear data for

the calculation and prediction of different nuclear applications. These reports are available on CD-ROM.

NEA/WPEC-9. Fission Neutron Spectra of Uranium-235. A report of the Working Party on International Evaluation Co-operation of the NEA Nuclear Science Committee. Prepared by D.G. Madland (co-ordinator) A.V. Ignatyuk (Monitor). OECD (2003). Available in hardcopy. Evaluated fission neutron spectra for

19 incident neutron energies between 0 and 15 MeV are available on:

<http://t2.lanl.gov/data/fspect.html>

Note: Unless indicated otherwise, the quoted data files, printed materials, or computer codes are available cost-free upon request. When requesting data files or codes, kindly give us your desired specifications.

Co-operating nuclear data service centers

For services to customers in USA and Canada:

US National Nuclear Data Center, Bldg. 197D, Brookhaven National Laboratory, P.O. Box 5000, Upton, NY 11973-5000, USA. Tel. +1 631-344-2902; Fax +1 631-344-2806; E-mail: nndc@bnl.gov; Worldwide Web: <http://www.nndc.bnl.gov/> For information on online services and requests contact: Ms. V. McLane.

For services to customers in OECD countries in Western Europe and Japan:

NEA Data Bank: OECD Nuclear Energy Agency, Le Seine Saint-Germain, 12 blvd des Iles, F-92130 Issy-les-Moulineaux, France. Tel. +33 1 4524 (plus extension); Fax +33 1 45241110; E-mail: (name)@nea.fr or nea@nea.fr; Worldwide Web: <http://www.nea.fr> username: NEADB. Contact: C. Nordborg, ext. 1090.

For services to the countries of the former USSR:

Neutron data: Russia Nuclear Data Center, Centr Jadernykh Dannykh (CJD), Fiziko-Energeticheskij Institut, Ploschad Bondarenko, 249020 Obninsk, Kaluga Region, Russia. Tel. +7 08439-9-8982; Fax +7 095-230-2326; E-mail: manokhin@ippe.obninsk.ru. Worldwide Web <http://rncd.ippe.obninsk.ru/> Contact: V.N. Manokhin.

Charged-particle data: Russia Nuclear Structure and Reaction Data Center (CAJAD), Kurchatov Institute, Kurchatov's Square 1, 123 182 Moscow, Russia. Tel. +7 095-196-9968; Fax +7 095-882-5804; E-mail: feliks@polyn.kiae.su Contact: F.E. Chukreev.

Photonuclear data: Centre for Photonuclear Experiments Data, Centr Dannykh Fotoyadernykh Eksperimentov (CDFE), Skobel'syn Institute of Nuclear Physics, Lomonosov Moscow State University, Leninskie Gory, 119 922 Moscow, Russia. Tel. +7 095-939-3483; Fax +7 095-939-0896; E-mail: varlamov@depni.sinp.msu.ru or varlamov@depni.npi.msu.su. Worldwide Web <http://depni.sinp.msu.ru/cdfe/> Contact: V.V. Varlamov.

For services to customers in China:

China Nuclear Data Center, China Institute of Atomic Energy, P.O. Box 275(41), Beijing 102413, China. Tel. +86 10-6935-7275; Fax +86 10-6935-7008; E-mail: gezg@iris.ciae.ac.cn Contact: Ge Zhigang.

Computer codes of US origin to all countries:

Radiation Safety Information Computational Center (RSICC), Oak Ridge National Laboratory, P.O. Box 2008, Oak Ridge, TN 37831-6362, USA. Tel. +1 865-574-6176; Fax +1 865-574-6182; E-mail: pdc@ornl.gov. Worldwide Web <http://epicws.epm.ornl.gov/> (there may be charges and release restrictions)

Computer codes of non-US origin to all countries:

NEA Data Bank, see above, contact: E. Sartori, ext. 1072; E-mail: sartori@nea.fr (there may be release restrictions)

The IAEA Nuclear Data Section offers data centre services primarily to non-OECD countries (except Russia and China, see above). However, most products advertised in this Newsletter, specifically INDC reports, IAEA-NDS-documents, etc., are provided, upon request to customers in all countries. For online services see the first page of this Newsletter. **Users of countries in Latin America and Caribbean** may use IAEA-NDS mirror at Worldwide Web <http://www-nds.ipen.br>

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