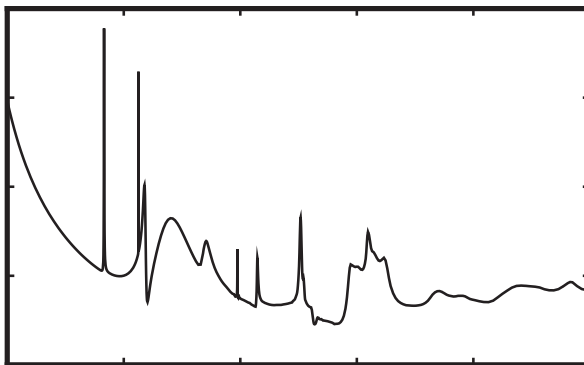




NUCLEAR DATA

NEWSLETTER



Nuclear Data Section (NDS)

International Atomic Energy Agency
Vienna

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Specifications

All services provided to users are free of charge.

Please contact us on the following addresses:

Nuclear Data Section
International Atomic Energy Agency
P.O. Box 100
A-1400 Vienna
Austria

e-mail: services@iaeand.iaea.or.at
fax: (43-1) 26007
cable: INATOM VIENNA
telex: 1-12645
telephone: (43-1) 2600-21710

Online: TELNET or FTP: iaeand.iaea.or.at
username: IAEANDS for interactive Nuclear Data Information System
usernames: ANONYMOUS for FTP file transfer;
FENDL2 for FTP file transfer of FENDL-2.0;
RIPL for FTP file transfer of RIPL;
NDSOHL for FTP access to files sent to NDIS "open" area.

Web: <http://www-nds.iaea.or.at>

Announcement

Professor Dr. Syed M. Qaim, Head of the Division of "Nuclear Data and Radionuclide Production", Institute of Nuclear Chemistry of the Research Centre Jülich, and Professor at the University of Köln, was awarded an honorary doctorate by the Kossuth Lajos University, Debrecen, Hungary, on 3 November 1999. Professor Qaim is a member of International Nuclear Data Committee (INDC), which provides guidance on the priorities for future work of the IAEA Nuclear Data Section.

Online News

The following **INDC Reports** are posted on http://iaeand.iaea.or.at/indc_sel.html: INDC(CCP)-421, 424, INDC(CZR)-001, INDC(HUN)-034 and INDC(NDS)-406.

EXFOR+ENDF retrieval + interactive plotting by ZVVIEW is now available at <http://www-nds.iaea.or.at/zvd/>. This is a tool for retrieval of integral reaction cross sections from experimental database EXFOR and major evaluated data libraries and their graphical comparison using ZVVIEW (a package specially designed for interactive plotting of nuclear reaction cross sections). The combined EXFOR + ENDF + ZVVIEW tool is under development as a cooperative project involving the US National Nuclear Data Center (NNDC) and the IAEA Nuclear Data Section.

PHYSICO – Nuclear Structure Calculation Tools – HSICC and LOGFT calculate internal conversion coefficients and Log ft values for beta and electron-capture decay, average beta energies, and capture fractions. Available online at: <http://www-nds.iaea.or.at/physico/index.html> for downloading or online calculations. The tool is being prepared by NNDC.

Offline News

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

IAEA-NDS-CD-07, EXFOR, database of experimental nuclear reaction cross sections (version January 2000). Updated and revised version of the IAEA-NDS-CD-04.

CINDA on CD-ROM. The CD-ROM searchable index to literature and computer files on microscopic neutron data (version December 1999) is available on request. Prepared by NEA Data Bank, Paris.

JENDL Dosimetry File 99 (JENDL/D-99) on CD-ROM. The CD-ROM with data for 67 dosimetry reactions in pointwise and 641 group structure form. Figures with comparison of JENDL/D-99 and IRDF-90 are given in PDF format. Prepared by JAERI, Japan (1999).

Computer Codes and Packages

NMF-90, Neutron Metrology File is available online on <http://www-nds.iaea.or.at/> or in diskettes with the summary report **IAEA-NDS-171**, Rev. 1 (1999) by E.M. Zsolnay, E.J. Szondi and H.J. Nolthenius available on <http://www-nds.iaea.or.at/reports/nds-171.pdf> or as hardcopy. The Neutron Metrology File is an integrated database for performing neutron spectrum adjustment (unfolding) calculations. It contains four different adjustment codes, the group version of dosimetry reaction cross section library IRDF-90/NMF-G with covariance files, six input data sets for reactor benchmark neutron fields and a number of utility codes for processing and plotting the input and output data.

DROSG-2000: Neutron Source Reactions. Data files with computer codes for 56 monoenergetic neutron source reactions. Compiled by M. Drosg. Report **IAEA-NDS-87**, Rev. 5 (January 2000), with summary of content is available on request as hardcopy or online: <http://www-nds.iaea.or.at/reports/nds-87.pdf>. Supersedes earlier version DROSG-96. DROSG-2000 package is available in diskettes or online: <http://www-nds.iaea.or.at/drosg2000.html>.

SaBa: The Library of Evaluated and Experimental Data on Charged Particles for Fusion Applications. Evaluated and experimental data for 52 reactions with a set of data processing procedures which provide a user-friendly interface for presentation and evaluation of cross sections. Report **IAEA-NDS-191** by A.G. Zvenigorodskij, V.A. Zherebtsov, L.M. Lazarev, et al. (December 1999) with detailed description of the package is available on request as hardcopy or online: <http://www-nds.iaea.or.at/reports/nds-191.pdf>.

SaBa package is available in diskettes or online:
<http://www-nds.iaea.or.at/reports/data/saba/disk1.zip>,
[../disk2.zip](http://www-nds.iaea.or.at/reports/data/saba/disk2.zip), [../disk3.zip](http://www-nds.iaea.or.at/reports/data/saba/disk3.zip).

Selected Reports and Documents

CINDA 99, Supplement 2 to CINDA 97 (1988-1999). The index to literature and computer files on microscopic neutron data.

INDC(CCP)-421. *Measurements of Critical Parameters of ^{239}Pu and ^{235}U Spherical Assemblies, which contain Nickel as a Reflector and a Filler of the Central Cavity, for the Purpose of Nuclear Data Testing.* M.I. Kuvshinov, V.P. Gorelov, V.P. Egorov, V.I. Il'yin (1999). Available online: http://iaeand.iaea.or.at/indc_sel.html.

INDC(CCP)-423. *Annual Report 1998. Nuclear Physics Department of the IPPE, Obninsk.* Ed. by B.D. Kuzminov (1999).

INDC(CCP)-424. *Selected articles translated from Yadernye Konstanty (Nuclear Constants) (Series: Nuclear Constants Issue No. 1 1999).*
 1. *Re-Evaluated Resonance Parameters of ^{233}U .* G.B. Morogovskij. 2. *Resolved Resonance Parameters for ^{238}Np .* G.B. Morogovskij.
 3. *Level Density Parameters for the Back-Shifted Fermi Gas Mode in the Mass Range $24 \leq A \leq 250$.* V.I. Plyaskin, R.A. Kosilov.
 4. *Phase Analysis of the $p^3\text{He}$ and $p\text{T}$ Elastic Scattering Cross-Sections in the 0 – 20 MeV Energy Region.* L.M. Lazarev, B.M. Dzyuba. Available online: http://iaeand.iaea.or.at/indc_sel.html. Also available online are two original English contributions from same issue: "Evaluations of Neutron Cross Sections for ^{241}Am and ^{243}Am " by A.V. Ignatyuk, et al., and "Some Considerations Concerning $^{58}\text{Ni}(n,\alpha)$ Reaction" by V. Manokhin.

INDC(CPR)-049. *Communication of Nuclear Data Progress*, No. 22 (1999). China Nuclear Data Center. Ed. by Liu Tingjin and Zhuang Youxiang. Annual review on the activity in the nuclear data field in China.

INDC(CZR)-001. *Assessment of Nuclear Data Needs for Broad-Group SCALE Library Related to VVER Spent Fuel Applications*, K. Zalesky and L. Markova (1999). Available online: http://iaeand.iaea.or.at/indc_sel.html.

INDC(HUN)-034. *The Group Version of the International Reactor Dosimetry File IRDF-90 for Use in the Neutron Metrology File NMF-90 (IRDF-90/NMF-G)*, E.J. Szondi (1999). Available online: http://iaeand.iaea.or.at/indc_sel.html.

INDC(NDS)-406. *Extension and Improvement of the FENDL Library for Fusion Applications. Summary Report of an IAEA Consultants' Meeting*, Fiziko-Energeticheskij Institut, Obninsk, Russia, 22–24 June 1999. Prepared by M. Herman (1999). Available online: http://iaeand.iaea.or.at/indc_sel.html.

INDC(NDS)-409. *Summary Report of the Third Research Co-ordination Meeting on "Compilation and Evaluation of Photoneuclear Data for Applications"*, Japan Atomic Research Institute, Tokai, Japan, 25–29 October 1999. Prepared by P. Obložinský (2000).

INDC(NDS)-411. *Development of a Database for Prompt γ -ray Neutron Activation Analysis. Summary Report of the First Research Co-ordination Meeting*, IAEA, Vienna, Austria, 2-4 November 1999. Prepared by R. Paviotti-Corcuera and R.M. Lindstrom (2000).

INDC(NDS)-412. *Measurement, Calculation and Evaluation of Photon Production Data. (Final Report of a Co-ordinated Research Project)*. Ed. by P. Obložinský, F.S. Dietrich and A. Mengoni (1999).

INDC(SUD)-004. *On the Systematics of the $(n,2n)$ Reaction Cross-sections at 14.5 MeV Neutrons*. Khalda T. Osman and F.I. Habbani (2000).

JAERI-Review 99-028. *JAERI TANDEM and Van der Graaf Annual Report 1998* (1999).

JAERI-Review 99-031. *Nuclear Energy System Department Annual Report (April 1, 1998 – March 31, 1999)* (1999).

The reports by the Working Party on International Evaluation Co-operation of the NEA Nuclear Science Committee are available on request:

NEA/WPEC-4, 1999. *^{238}U Capture and Inelastic Cross-Sections*. Co-ordinators: T. Nakagawa and H. Takano, Monitor: A. Hasegawa.

NEA/WPEC-8, 1999. *Present Status of Minor Actinide Data*. Co-ordinators: T. Nakagawa and H. Takano, Monitor: A. Hasegawa.

NEA/WPEC-18, 1999. *Epithermal Capture Cross Section of ^{235}U* . Co-ordinator: C.R. Lubitz, Monitor: R.W. Roussin.

NEA/SEN/NSC/WPPR(98)1 (JEF/DOC-768). *Evaluation of ^{242}Pu Data for Incident Neutron Energy Range 5-20 MeV*. Anabella Tudora (1998).

JEFF Report 15, 1999. *LWR Pin Cell Benchmark Intercomparisons*. Intercomparison study organized by the JEFF Project with contributions from the UK, France, Germany, the Netherlands, Slovenia and the USA.

JEFF Report 16, 1999. *Intercomparison of Calculations for GODIVA and JEZEBEL*. Intercomparison study organized by the JEFF Project with contributions from Britain, France, the Netherlands and Switzerland.

Glenn T. Seaborg Memorial Issue of **Journal of Radioanalytical and Nuclear Chemistry**, Vol. 243, No. 1 (January 2000) with 34 review papers covering all aspects of nuclear chemistry and applications is available on request.

International Conference

ND2001: International Conference on Nuclear Data for Science and Technology, October 7 – 12, 2001, Tsukuba International Congress Center (EPOCHAL Tsukuba), Tsukuba, Japan.

Topics:

1. Evaluation of Nuclear Reaction Data and Evaluated Data Libraries
2. Nuclear Structure and Decay Data
3. Nuclear Data relevant to Astrophysics and Frontier Nuclear Physics
4. Experimental Facilities and Measurements
5. Basic Nuclear Theories relevant to Data Evaluation
6. Processing, Testing and Verification & Evaluation of Nuclear Data

7. Applications to Fission Technology
8. Applications to Fusion Technology
9. Applications to Accelerator Technology including Accelerator-Driven Systems
10. Medical, Environmental, Industrial, Space Technology and other Applications
11. Standards and Dosimetry
12. Nuclear Safety and Nuclear Data
13. Data Dissemination and International Collaboration

Contact:

Dr. Akira HASEGAWA
Nuclear Data Center
Department of Nuclear Energy System
Japan Atomic Energy Research Institute
Tel: +81-29-282-5480
Fax: +81-29-282-5766
e-mail: hasegawa@ndc.tokai.jaeri.go.jp
<http://www.ndc.tokai.jaeri.go.jp/nd2001/>

Specifications

DAT tapes: 4 mm only, either in TAR format, IBM format or VMS format, uncompressed or compressed. Preferable for very large data libraries (up to several Gigabytes).

PC diskettes: DOS standard diskettes, 3.5 inch. Preferable for not too large files (if compressed up to several Megabytes).

CD-ROM: recording format ISO 9660. Please specify maximum file-name length on your system.

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 on magnetic tapes or diskettes, kindly give us your acceptable 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](mailto:) 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. +7 084-399-8982; Fax +7 095-230-2326; e-mail: manokhin@ippe.rssi.ru. Contact: V.N. Manokhin.

Charged-particle data: Russia Nuclear Structure and Reaction Data Center (CAJAD), Kurchatov Institute, 46 Ulitsa Kurchatova, 123 182 Moscow, Russia. Tel. +7 095-196-9968; Fax +7 095-882-5804; e-mail: chukreev@polyn.kiae.su or feliks@polyn.kiae.su. Contact: F.E. Chukreev.

Photonuclear data: Centre for Photonuclear Experiments Data, Centr Dannykh Fotoyadernykh Eksperimentov (CDFE), Moscow State University, Vorob'evy Gory, 119 899 Moscow, Russia. Tel. +7 095-939-3483; Fax +7 095-939-0896; e-mail: varlamov@cdfe.npi.msu.su or varlamov@depni.npi.msu.su. 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 10-6935-7830; Fax +86 10-6935-7008; e-mail: tong@mipsa.ciae.ac.cn. Contact: Liu Tong.

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. (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. (There may be release restrictions.)

The IAEA Nuclear Data Section offers data center 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.