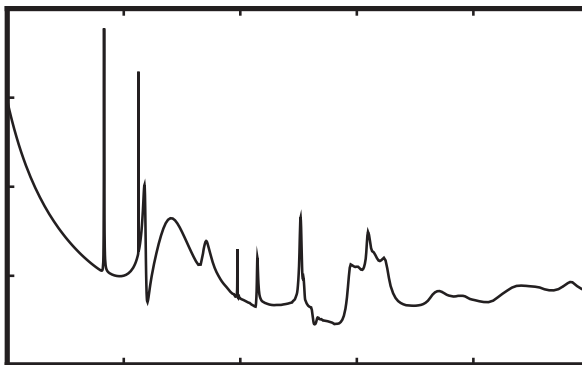




NUCLEAR DATA

NEWSLETTER



Nuclear Data Section (NDS)

International Atomic Energy Agency
Vienna

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All services provided to users are free of charge.

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.org
fax: (43-1) 26007
cable: INATOM VIENNA
telex: 1-12645
telephone: (43-1) 2600-21710

Online: TELNET or FTP: iaeand.iaea.org
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.
NDSOINL for FTP access to files sent to NDIS "open" area.

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

Announcements

Due to the change of the IAEA Internet service providers we recommend to replace the string *or.at* with *org* in all our Web, host and e-mail addresses (e.g. use <http://www-nds.iaea.org> for the NDS Web page instead of <http://www-nds.iaea.or.at>).

On-line Nuclear Data Services for Latin America and the Caribbean became fully operational in March 2000. A regional site provides a full mirror of the IAEA-NDS major nuclear data services and can be reached at: <http://www-nds.ipen.br>.

Staff Items

Dr. Pavel Oblozinsky left the NDS after seven years of service. He was NDS Deputy Head and Head of the Nuclear Data Development Unit. His present position is the Deputy Head of the National Nuclear Data Center, BNL, USA (e-mail: oblozinsky@bnl.gov).

Dr. Andrej Trkov took over duties as NDS Deputy Head and Head of the Nuclear Data Development Unit (e-mail: a.trkov@iaea.org, tel.: +43-1-2600 21712).

Ms. Elisabeth (Liesl) Baumgartner left the section after many years of service and is now secretary of the Director of Division of Physical and Chemical Sciences.

Ms. Andrea Scherbaum took over duties as NDS secretary and Ms. Rebecca Anglim took over duties as secretary of the Nuclear Data Development Unit.

Online News

The following **INDC Reports** are available from http://iaeand.iaea.org/indc_sel.html: INDC(CCP)-425 and INDC(NDS)-414, 415, 417, 418.

IAEA Photonuclear Data Library, March 2000, prepared under the IAEA Coordinated Research Project (1996-1999) is available online at: <http://www-nds.iaea.org/photonuclear/>. It contains recommended evaluated photonuclear data for 164 isotopes for incident photons (gamma rays) with energy mostly up to 140 MeV.

It is available on CD-ROM for local data retrievals using Web browsers.

Charged-particle cross section database for medical radioisotope production, March 2000, developed under the IAEA Co-ordinated Research Project (1995-1999) is available online at: <http://www-nds.iaea.org/medical/>. It contains recommended evaluated cross sections for 48 reactions induced by light charged particles with incident energies up to several tens of MeV (maximum 100 MeV). A hardcopy of the report will be published under IAEA-TECDOC series. The data are available on CD-ROM for local data retrievals using Web browsers.

FENDL/A in Pictures Presentation

(Version 0.1, April-May 2000) includes plots of FENDL/A-2.0 activation cross section library (11805 reactions) in comparison with experimental data retrieved from EXFOR. Interactive plotting with the ZVView package is provided. It is available online at: <http://www-nds.iaea.org/fendl2apic/>.

EXFOR Basics: A Short Guide to the Nuclear Reaction Data Exchange Format by Ms. V. McLane, Report **IAEA-NDS-206**, Rev. 2000/09 is available on request as hardcopy or online: <http://www-nds.iaea.org/reports/nds-206.pdf>.

EXFOR Systems Manual, compiled and edited by V. McLane, Report **IAEA-NDS-207**, Rev. 2000/09 is available on request as hardcopy or online: <http://www-nds.iaea.org/reports/nds-207.pdf>.

Offline News

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

CINDA on CD-ROM. The CD-ROM searchable index to literature and computer files on microscopic neutron data (version December 1999, Rev. 1) is available on request. Prepared by NEA Data Bank, Paris.

IAEA-NDS-CD-04, ENDF, (updated in August 2000), contains all comprehensive evaluated data libraries (ENDF/B-VI, Release 7, JENDL-3.2, JEF-2.2, BROND-2 and CENDL-2), a retrieval and merger system for MS Windows, Manuals and Documentation in PostScript format, Utilities and Pre-processing (PREPRO2000) codes.

New Data Libraries

ENDF/B-VI Library, Release 7, (including revisions up to April 2000) is available through Telnet/NDIS and Web from the NDS Web server and on CD-ROM. A revised report **IAEA-NDS-100** containing descriptions of the content and major modifications is available as hard copy and online:
<http://www-nds.iaea.org/reports/nds-100.pdf>.

ENDF/B-VI Charged-Particle Sublibraries, Version: April 2000, are available through Telnet/NDIS and Web from NDS server and on CD-ROM. The proton induced reaction sub-library is extended by including materials and extending energy range. The revised report **IAEA-NDS-105** containing a description of sublibraries is available as hard copy and online:
<http://www-nds.iaea.org/reports/nds-105.pdf>.

Nuclear Wallet Cards, Sixth Edition, January 2000, by J.K. Tuli, is available on request as hardcopy or online:
<http://www-nds.iaea.org/wallet/>.

Computer Codes and Packages

PREPRO2000: 2000 ENDF/B Pre-processing Codes by D.E. Cullen designed to pre-process evaluated data files in ENDF format. This is a modular set of computer codes containing versions prepared for and tested on most platforms. The following codes are included: ACTIVATE, CONVERT, COMPLIT, DICTION, EVALPLOT, FIXUP, GROUPIE, LEGEND, LINEAR, MERGER, MIXER, RECENT, RELABEL, SIGMA1, SIXPAK and VIRGIN. The codes and documentation are available on request on diskettes (for particular platform) or CD-ROM (for all platforms) or can be downloaded from:

<http://iaeand.iaea.org/ndspub/endl/prepro/>.

PREPRO2000 codes **completely supersede** all earlier versions and it is strongly recommended that all users of these codes migrate to the 2000 version of this package.

SaBa: The Library of Evaluated and Experimental Data on Charged Particles for Fusion Applications. The package updated for PCs with MS Word 97 (May 2000) is available on CD-ROM on user's request. The content and functionality of the package are described in the

report IAEA-NDS-191 available on request or online:

<http://www-nds.iaea.org/reports/nds-191.pdf>.

Selected Reports and Documents

INDC(CCP)-425. *Analysis and Reevaluation of the Neutron Cross Sections for ^{23}Na* . E.L. Trykov and I.R. Svin'in (2000). Available online: http://iaeand.iaea.org/indc_sel.html.

INDC(GER)-046. *Progress Report on Nuclear Data Research in the Federal Republic of Germany for the Period April 1, 1999 to March 31, 2000*, ed. by S.M. Qaim, Forschungszentrum Juelich (July 2000).

INDC(JPN)-185 (JAERI-CONF-2000-005). *Proceedings of the 1999 Symposium on Nuclear Data*, November 16 - 19, 1999, JAERI, Tokai, Japan, ed. N. Yamano and T. Fukahori (March 2000).

INDC(JPN)-186. *Progress Report (January 1999 to December 1999 inclusive)*, ed. J. Katakura, Japanese Nuclear Data Committee (March 2000).

INDC(NDS)-414. *Report of the IAEA Nuclear Data Section to the International Nuclear Data Committee for the Period January - December 1999*, ed. M.A. Lone and D.W. Muir (July 2000). Available online:
http://iaeand.iaea.org/indc_sel.html.

INDC(NDS)-415. *Update of X- and γ -Ray Decay Data Standards for Detector Calibration and other Applications*, Summary Report of the Second Research Co-ordination Meeting, PTB, Braunschweig, Germany, 10 - 12 May 2000, prepared by M. Herman and A.L. Nichols (September 2000). Available online:
http://iaeand.iaea.org/indc_sel.html.

INDC(NDS)-417. *Primer Taller Regional de Capacitacion Sobre Acceso en Linea a Datos Nucleares*, Informe Sumario, IPEN - Sao Paulo, Brasil, 20 - 24 Marzo 2000 (Summary Report on the First Regional Workshop on Online Access to Nuclear Data, Sao Paulo, Brazil, 20 - 24 March 2000) ed. M.P. Zamudio Igami and R. Paviotti-Corcuera (in Spanish, June 2000). Available online:
http://iaeand.iaea.org/indc_sel.html.

INDC(NDS)-418. *Report of the IAEA Advisory Group Meeting on Network of Nuclear Reaction*

Data Centres, Institute of Physics and Power Engineering, Obninsk, Russia, 15 – 19 May 2000, prepared by V.G. Pronyaev and O. Schwerer (August 2000). Available online: http://iaeand.iaea.org/indc_sel.html.

INDC(UK)-056. *Progress Report: Data Studies During 1999*, United Kingdom Nuclear Science Forum, ed. by A.L. Nichols (August 2000).

Yadernye Konstanty 1999 (2). *Investigation of delayed neutron decay curves at fission of ^{235}U and ^{239}Pu by thermal neutrons* (S.B. Borzakov, Yu.S. Zamjatnin, C. Panteleev et al., in Russian). *Differential cross sections of $U(n,xn)$ reaction at 14.3 MeV neutron energy* (B.V. Devkin, M.G. Kobozev, A.A. Lychagin et al., in Russian). *The evaluation of the gamma-ray production cross sections at the nonelastic interaction of fast neutrons with aluminium nuclei* (A.G. Zvenigorodskij, M.S. Shvetsov, A.M. Shvetsov et al., in Russian). *The evaluation of the gamma-ray production cross sections at the nonelastic interaction of fast neutrons with lead nuclei* (A.G. Zvenigorodskij, M.S. Shvetsov, A.M. Shvetsov et al., in Russian). *Evaluation of neutron cross sections for ^{242}Cm , ^{243}Cm and ^{244}Cm* (A.I. Blokhin, A.S. Badikov, K.I. Zolotarev et al., in English). *Evaluation of the total gamma-ray production cross sections at the nonelastic interaction of fast neutrons with iron* (M.V. Savin, Ju.Ja. Nefedov, A.B. Livke et al., in Russian). *Evaluation of angular distributions and discrete gamma-line production cross sections of iron* (M.V. Savin, A.V. Livke, A.G. Zvenigorodskij, in Russian). *Resolved resonance parameters of ^{232}Pa* (L.A. Bakhanovich, G.B. Morogovskij, in Russian). *BOFOD-99: present status of the evaluated photoneuclear data file* (A.I. Blokhin, N.N. Buleeva, V.V. Vozyakov et al., in English). The MSU INP CDFE Web-server: nuclear data bases hypertext presentation (I.N. Boboshin, A.V. Varlamov, V.V. Varlamov et al., in Russian). *Library of the neutron reaction group cross sections included in the ABBN-93 constant set* (S.V. Zabrodskaja, Zh.I. Korchagina, V.N. Koshcheev et al., in Russian). *Library of 28-group displacement hydrogen, helium and tritium production cross section in the ABBN-93 constant set* (S.V. Zabrodskaja, M.N. Nikolaev, A.M. Tsibulya, in Russian). *Discrete processes modelling and geometry description in RTS&T code* (I.I. Degtyarev, O.A. Liashenko,

A.E. Lokhovitskii et al., in English). *Verification benchmark calculations in low and medium energy regions using RTS&T code* (I.I. Degtyarev, A.E. Lokhovitskii, O.A. Liashenko et al., in English). *Summary of CONSYST code* (G.N. Manturov, M.N. Nikolaev, A.Ju. Polyakov et al., in Russian).

International Conference

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

Key Dates

Deadline for submission of abstracts:
December 20, 2000

Third announcement:
April 30, 2001

Deadline for submission of manuscripts:
August 31, 2001.

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://wwwndc.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, 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 08439-9-8982; Fax +7 095-230-2326; E-mail: manokhin@ippe.obninsk.ru. Worldwide Web <http://rndc.ippe.obninsk.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. Worldwide Web <http://depni.npi.msu.su/cdf/>. 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: yxzhuang@mipsa.ciae.ac.cn. Contact: Zhuang Youxiang.

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. (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. **Users of countries in Latin America and Caribbean** may use IAEA-NDS mirror at Worldwide Web <http://www-nds.ipen.br>.