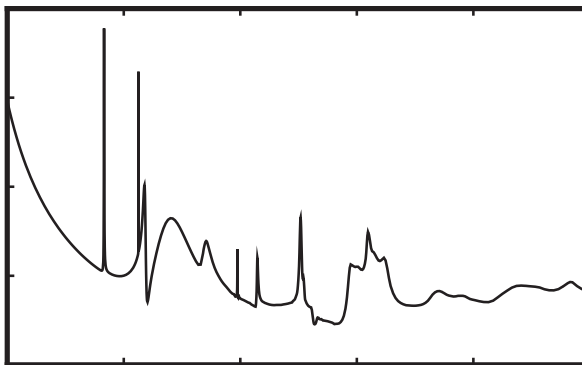




NUCLEAR DATA

NEWSLETTER



Nuclear Data Section (NDS)

International Atomic Energy Agency
Vienna

CONTENTS

Issue No. 32

September 2001

Announcement

Staff Items

Online News

Offline News

Computer Codes and Packages

Selected Reports and Documents

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;
NDSONL for files saved in NDIS Telnet session

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

Announcement

To be notified personally of new databases or IAEA nuclear data publications please download, fill up and send back the form published on:

<http://www-nds.iaea.org/servform.txt>.

Staff Items

Former Nuclear Data Section Head Douglas Muir has retired from the IAEA on 30 June 2001, and he has returned to the USA. He plans to remain active in the field of nuclear data and to keep up his contacts with friends and colleagues. His e-mail address is:
dwmuir@mailaps.org.

Dr. Alan Nichols is expected to take the duties of the Nuclear Data Section Head in October 2001. His e-mail address A.Nichols@iaea.org, phone: +43-1-2600-21709, Fax: +43-1-26007.

Online News

The following **INDC Reports** are available on http://iaeand.iaea.org/indc_sel.html:
INDC(NDS)-424, 425, 427.

POINT2000, by D.E. Cullen. A temperature dependent version of the ENDF/B-VI, Release 7, Library. Point-wise cross sections, given for 8 temperatures between 0 and 2100 Kelvin, in steps 300 Kelvin, are available now online:
<http://www-nds.iaea.org/point2000/>.

Offline News

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

Reference Neutron Activation Library (RNAL), November 2000, is available on CD-ROM.

IAEA-NDS-CD-09, EXFOR/ACCESS, database of experimental nuclear reaction cross sections (Version 1.20, May 2001). A run-time version of relational database under MS ACCESS with enhanced search and retrieval capabilities and built-in interactive graphic tools.

Computer Codes and Packages

Updates to PREPRO2000 by D.E. Cullen. Updates to the graphical pre-processing codes EVALPLOT, COMPLIT and to the LEGEND.

Available on CD-ROM or can be downloaded from:
<http://www-nds.iaea.org/ndspub/endl/PREPRO/>.

ENDVER: Evaluated Data File Verification Support Package by A. Trkov.

The ENDVER package can be used to convert EXFOR data into computational C4 format, display them and compare graphically with the contents of a specified evaluated data file. The package also contains utilities to retrieve selected materials from a master library in ENDF format, extract cross sections (including differential and double differential data) and output them in two-column PLOTTAB "curves" format. The package is available on CD-ROM and online on
<http://www-nds.iaea.org/ndspub/endl/ENDVER>.

Selected Reports and Documents

IAEA-TECDOC-1211. *Charged particle cross-section database for medical radioisotope production: diagnostic radioisotopes and monitor reactions.* Final report of a co-ordinated research project, May 2001, IAEA, Vienna. The report describes the handling of the experimental data, data compilation and analysis by an account of the semi-empirical methods of fitting used, the strength and deficiencies of the theoretical model calculations and the results of evaluations of cross sections for 48 reactions induced by light charged-particles with incident energies up to several tens of MeV (maximum 100 MeV), production cross sections for 26 most important diagnostic radioisotopes and cross sections for 22 beam monitor reactions induced by protons, deuterons, tritons, 3-He and alpha particles. Data are available on:
<http://www-nds.iaea.org/medical/>.

INDC(CCP)-428. *Annual Report January 2000 - December 2000 Nuclear Physics Department of the IPPE.* Ed. by B.D. Kuzminov, IPPE Obninsk, Russia (2001).

INDC(CPR)-052. *Communication of Nuclear Data Progress, No. 24 (2000).* China Nuclear Data Centre. Ed. by Liu Tingjin and Zhuang Youxiang.

INDC(CPR)-054. *Thermal Neutron Capture for A=26-35.* Zhou Chunmei and R.B. Firestone (June 2001).

INDC(CPR)-055. *Thermal-Neutron Capture Date Update and Revision for Some Nuclides with A>190.* Zhou Chunmei (June 2001).

INDC(GER)-047. *Progress Report on Nuclear Data Research in the Federal Republic of Germany for the period April 2000 - March 2001.* Ed. S.M. Qaim, Forschungszentrum Juelich GmbH, Germany (July 2001).

INDC(JPN)-187. *Progress Report (January 2000 to December 2000).* Japanese Nuclear Data Committee. Ed. J. Katakura (March 2001).

INDC(JPN)-188. *Proceedings of the 2000 Symposium on Nuclear Data, November 16-17, 2000.* (Eds) Naoki Yamano and Tokio Fukahori, Japan Atomic Energy Research Institute (March 2001).

INDC(NDS)-423. *Long Term Needs for Nuclear Data Development.* Summary Report of the Advisory Group Meeting, IAEA Headquarters, Vienna, Austria, 28 November - 1 December 2000. Prepared by D.W. Muir and M. Herman (May 2001).

INDC(NDS)-424. *Development of a Database for Prompt Gamma-Ray Neutron Activation Analysis.* Summary Report of the Second Research Coordination Meeting, IAEA Headquarters, Vienna, Austria, 14-17 May 2001. Prepared by M.A. Lone, S.F. Mughabghab and R. Paviotti-Corcuera. Available online: http://www-nds.iaea.org/indc_sel.html.

INDC(NDS)-425. *Summary Report of the Consultants' Meeting on Improvement of the Standard Cross Sections for Light Elements.* IAEA Headquarters, Vienna, Austria, 2-4 April 2001. Prepared by A.D. Carlson, D.W. Muir and V.G. Pronyaev, June 2001. Available online: http://www-nds.iaea.org/indc_sel.html.

INDC(NDS)-427. *Report on the IAEA Consultants' Meeting on the Co-ordination of Nuclear Reaction Data Centres (Technical Aspects).* IAEA Headquarters, Vienna, Austria, 28-30 May 2001. Prepared by O. Schwerer, July 2001. Available online: http://www-nds.iaea.org/indc_sel.html.

INDC(NDS)-428. *Long Term Needs for Nuclear Data Development. Texts of papers presented at the Advisory Group Meeting.* IAEA Headquarters, Vienna, Austria. 28 November - 1 December 2000. Compiled by M. Herman (August 2001).

INDC(UK)-057. *Progress Report: Data Studies During 2000,* United Kingdom Nuclear Science Forum, ed. by A.L. Nichols (June 2001).

Radiochimica Acta, Vol. 89, No. 4-5 (2001). *Special Issue: Nuclear Data for Medical Applications*, ed. by S.M. Qaim. Papers presented at the IAEA/ICTP Workshop on Medical Physics and Nuclear Data for Medical Applications, Trieste, Italy, October 1999. The limited number of copies is available cost free for the scientists from developing countries. For others, please see following web address for purchase possibilities:
<http://www.radiochimacta.de>.

Yadernye Konstanty (Nuclear Constants), 2000 (2). *Investigation of the ^{232}Th Neutron Cross-Sections in Resonance Energy Range* (Grigor'ev Yu.V., Kitaev Y.Ya., Sinitza V.V., Zhuravlev B.V., Borzakov S.B., Faikov-Stanchik H., Ilchev G.L., Pantleev Ts.Ts., Kim G.N., in English). *Act-1000 - Group Activation Cross Section Library for VVER-1000 Type Reactor* (Zolotarev K.I., Pashchenko A.B., in Russian). *Evaluation of $^{54}\text{Fe}(n,2n)^{53m+g}\text{Fe}$ Reaction Cross Sections for High Energy Dosimetry Applications* (Zolotarev K.K., Pashchenko A.B., in English). *Application of Mathematical Model of Nucleus for Prediction of β -unstable Heavy Nuclide Binding Energies* (Badaev O.P., in Russian). *The Evaluated Neutron Data Library FOND-2.2.* (Koshcheev V.N., Nikolaev M.N., Korchagina Zh.A., Savos'kina G.V., in Russian). *The Library of Main Decay Data, Capture Photon Spectrum and Fission Product Yields.* (Zabrodskaia S.V., Nikolaev M.N., Tsybulya A.M., in Russian). *Abstract of the WIMS/ABBN Code* (Zherdev G.M., Tsybulya A.M., in Russian).

ENDF-6 Formats Manual. Revised version of April 2001. Available online on <http://www-nds.iaea.or.at/ndspub/documents/endl/endl102>.

Chart of the Nuclides 2000, Japanese Nuclear Data Committee and Nuclear Data Centre, JAERI, 2000, is available cost-free on request.

Nuclides and Isotopes, 15th edition, 1996. Wall chart, General Electric Co. and KAPL, Inc., is available cost-free on requests from scientists from developing countries.

Chart of the Nuclides, 6th edition, 1995. Wall chart, Karlsruhe, is available cost-free on requests from scientists from developing countries.

Note: Unless indicated otherwise, the quoted data files, printed materials, or computer codes are available cost-free upon request.

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://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/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 10-6935-7830; 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>.