



**A newsletter of the Nuclear Data Section (NDS)
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All services provided to users are free of charge. Please contact us on the following addresses:

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Online News

Ongoing Service

The Nuclear Data Section is currently compiling an electronic library of all documents produced by the IAEA pertaining to Nuclear Data Services. These documents are from the IAEA-NDS, INDC and IAEA TECDOC series. Many only existed originally in microfiche or paper form. All known documents will eventually be converted to PDF and placed on our web site.

This project is ongoing and can be viewed on:

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

Staff Items

The Nuclear Data Section extends a warm welcome to Dr. Alberto Mengoni. A Nuclear Physicist, Alberto has taken the position of Head of the Nuclear Data Services Unit. As well as being directly responsible for the availability and provision of nuclear data to all Member States, Alberto is involved in the organization of Workshops and CRPs related to nuclear data for applications. Telephone: +41-1-2600-21717; e-mail: a.mengoni@iaea.org

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, can be found at:

<http://www.iaea.org/programmes/ripc/nd/crps.htm>.

Announcement

Prof Dr Syed M. Qaim - Chairman of the International Nuclear Data Committee,
from the Institut für Nuklearchemie, Forschungszentrum Jülich, Germany:

The Egyptian Atomic Energy Authority has awarded Prof Qaim their prestigious Medal of Honour for furthering Egyptian research and development activities (related primarily to the newly installed cyclotron in Cairo), and the Egyptian Nuclear Physics Association has also award him its Medal and Certificate of Merit for the promotion of science in Egyptian universities. These two awards are based on extensive co-operation between Germany and Egypt over the previous 15 years in the field of nuclear applications. Part of these activities were financed under IAEA Programmes, while a major part was covered by Egyptian-German bilateral co-operation agreements.

Database News

EXFOR - comprehensive library of experimental nuclear reaction data induced by neutrons, charged particles and photons.

- NDS-NNDC "Merge-Project" has been finished, and a common master file is now in use.
- Available via retrieval systems on CD* and Web:
<http://www-nds.iaea.org/exfor/>
- Contains 15,000 entries and 101,725 data tables

CINDA - Bibliographical references to experimental nuclear reaction data, and calculations, reviews, compilations and evaluations of neutron reaction and spontaneous fission data.

- Extended by information from EXFOR
- photonuclear and charged particle reaction data
- missing neutron data
- Available via retrieval systems on CD* and Web:
<http://www-nds.iaea.org/cinda/>
- Contains 429,010 lines, 59,524 publications and 180,944 blocks.

ENDF - evaluated cross sections, spectra, angular distributions, fission product yields, photo-atomic and thermal scattering law data, with emphasis on neutron induced reactions. Database contains basic national recommended libraries (USA, European, Japanese, Russian and Chinese), specialized and archival libraries.

- Contains 429,010 lines, 59,524 publications and 180,944 blocks.

- Extended by IRDF-2002 and JEFF-3.1 data
Available via retrieval systems on Web:
<http://www-nds.iaea.org/endl/>
- Contains 12 Libraries, 10,989 evaluations.

*All databases work on MS-Access, MySQL and Sy-Base.

Computer Codes and Data Libraries

These databases and libraries are on CD-ROM and are available cost free on request:

ADS-Application Library for Accelerator Driven Systems

ADS-ENDF: Contains selected evaluated nuclear data files in ENDF-6 format.

ADS-ACE: Contains point wise continuous-energy cross-section data in ACE format for MCNP calculations; also includes probability tables (PT) in the unresolved resonance range.

ADS-MATXS: Contains multigroup cross-section data in MATXS format. Thermal scattering cross-section data are also included for hydrogen bound in water. These data are available online at:
<http://www-nds.iaea.org/at/ads/> or as CD-ROM on request.

ENDF-WINENDF Update, July 2005

This package contains all comprehensive evaluated data libraries (ENDF/B-VI release 8, JENDL-3.3, JEFF-3.1, BROND-2 and CENDL-2). Update includes ENDF Utility Codes version 7.0, new Pre-Processing Codes 2004 (updated July 2005), and retrieval and merger system for MS Windows, with manuals and documentation in PostScript format. Available as CD-ROM on request.

EXFOR-CINDA Database and Retrieval Systems, version 1.80, data updated as of June 2005.

- Integrated CINDA and EXFOR
- Renewed database contents (see database news)
- Advanced interactive search
- Help based on Dictionaries
- Interactive graphics with ZVView
- Does not need installation; can run from CD
- Works with local and remote databases
- Includes non-interactive EXFOR retrievals

Two CD-ROMs are available:

- “for Windows” with MS-Access databases
- “for Applications” for Linux and Window with MySQL databases

Developed by V. Zerkin, Nuclear Data Section, IAEA, 2001-2005.

ENDVER/GUI and EXFOR-CINDA package:

- ENDVER with Graphics User Interface
- Integrated ENDVER-EXFOR
- PostScript graphics with PlotC4
- Interactive graphics with ZVView
- Does not need installation; runs from CD-ROM
- Works on Linux and Windows
- Has all features of EXFOR-CINDA CD

EndVer – Integrated Tools for ENDF Evaluators. Version 1.3, June 2005. ENDVER/GUI is an integrated software package for comparison of evaluated nuclear data files with experimental data from the EXFOR database and contains interactive plotting.

Developed by A. Trkov and V. Zerkin, NDS, IAEA, 2004-2005.

XNWLUP Version August 2005. An updated version was recently received and uploaded to the address below. These data are available on CD-ROM on request

<http://www-nds.iaea.org/wimsd/downloads.htm>

Selected Reports and Documents

Chart of the Nuclides 2004. Prepared by the the Japanese Nuclear Data Committee and Nuclear Data Center, Japan Atomic Energy Research Institute. Available cost free on request for scientists and teachers from developing countries.

Chart of the Nuclides. Prepared by Knolls Atomic Power Laboratory and distributed by Lockheed Martin (16th edition, revised to 2002). Available cost free on request for scientists and teachers from developing countries.

Karlsruher Nuklidkarte. Wall Chart of the Nuclides from Karlsruhe, 6th edition (1995). Available

cost free on request for scientists and teachers from developing countries.

Karlsruher Nuklidkarte Desk Chart of the Nuclides from Karlsruhe, 6th edition (1995). Updates from 1998. Available cost free on request for scientists and teachers from developing countries.

INDC(CCP)-442. Article translated from *Journal Yadernye Konstanty (Nuclear Constants)*. (Series: *Nuclear Constants, Issue No. 1, 1987*), June 2005. This report contains 1 paper translated from Russian:

- *Conversion Probabilities of Low-Energy ($h\nu \leq 3$ keV) Nuclear Transitions in the Electron shells of Free Atoms* by D.P. Grechukhin and A.A. Soldatov.

This report is available as hard copy or online at: http://www-nds.iaea.org/indc_sel.html

INDC(JPN)-195. *Proceedings of the 2004 Symposium on Nuclear Data*, JAERI, Tokai, Japan 11-12 November 2004. Edited by Y. Tahara and T. Fukahori, March 2005. Available as hard copy on request.

INDC(NDS)-0471. *Covariances of Nuclear Reaction Data: GANDR Project, Summary Report of a Technical Meeting, IAEA, Vienna, Austria, 11-13 April 2005.* Prepared by A. Trkov, April 2005. This report is available as hard copy or online at:

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

INDC(NDS)-0472. *IAEA International Database on Irradiated Nuclear Graphite Properties, Summary Report of the 7th Meeting of the Technical Steering Committee, IAEA Headquarters, Vienna, 16-17 March 2005.* Prepared by D. Humbert and A.J. Wickham, June 2005. This report is available as hard copy or online at:

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

INDC(NDS)-0474. *A test library for Accelerator Driven Systems.* Prepared by D. Lopez Aldama and A. Trkov, August 2005. This report is available as hard copy or online at:

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

INDC(NDS)-0475. *Status of Thermal Neutron Scattering Data for Graphite.* Prepared by M. Mattes and J. Keinert, July 2005. This report is available as hard copy or online at:

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

INDC(SEC)-0107. *Guidelines for Nuclear Data Verification and Validation.* Prepared by A. Trkov, August 2005. This report is available as hard copy or online at:

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

JAERI-Research 2005-013. *Proposal of New ^{235}U Nuclear Data to Improve k_{eff} Biases on ^{235}U Enrichment and Temperature for Low Enriched Uranium Fueled Lattices Moderated by Light Water.* Prepared by H. Wu, K. Okumura and K. Shibata. This report is available on CD-ROM on request.

Nuclear Wallet Cards 2005 7th Edition, by Jagdish K. Tuli, National Nuclear Data Center. These pocket size wallet cards are available as hard copy on request.

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: D. Rochman.

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://rmdc.ippe.obninsk.ru/> Contact: V.N. Manokhin.
Charged-particle data: Russia Nuclear Structure and Reaction Data Center (CAJAD), Kurchatov Institute, Kurchatov 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), Skobeltsyn 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: pdcr@ornl.gov. Worldwide Web <http://epicws.epm.ornl.gov/> (there are 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)
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>

Users in India and neighbouring countries may use IAEA-NDS mirror at

Worldwide Web <http://www-nds.indcentre.org.in>



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