

About the IAEA

Founded in 1957 as the “Atoms for Peace” organization of the United Nations.



About the Department of NA...

Work on nuclear data libraries:
<http://www-nds.iaea.org/>

EXFOR Experimental nuclear reaction data	LiveChart of Nuclides Interactive Chart of Nuclides	CINDA Nuclear reaction bibliography
ENDF Evaluated nuclear reaction libraries	ENSDF evaluated nuclear structure and decay data (-XUNDL) **	NSR Nuclear Science References *

NuDat 2.6 selected evaluated nuclear structure data **	RIPL reference parameters for nuclear model calculations	IBANDL Ion Beam Analysis Nuclear Data Library	Charged particle reference cross section Beam monitor reactions
PGAA Prompt gamma rays from neutron captures	FENDL-2.1 Fusion Evaluated Nuclear Data Library, Version 2.1	Photonuclear cross sections and spectra up to 140MeV	IRDF International Reactor Dosimetry and Fusion File
NAA Neutron Activation Analysis Portal	Safeguards Data recommendations, August 2008	Medical Portal Data for Medical Applications	Standards • Neutron cross-sections, 2006 • Decay data, 2005



Work on A+M Data...

- Our tools: meetings, consultancies, coordinated research projects and the IAEA good name.
- Encourage data development and evaluation.
- Scientific challenge: uncertainty assessment for calculated collision data.
- Organizational challenge: database management with widely distributed sources.
- Social challenge: Strengthening the network of researchers working on A+M data for fusion.

Welcome to this school and workshop!



About the IAEA...

Our work belongs to Nuclear Applications

IAEA Departments: Nuclear Applications, Nuclear Energy, NS and Security, Safeguards, Technical Cooperation

Nuclear Sciences and Applications

Food and Agriculture, Human Health, Programme of Action for Cancer Therapy - PACT, Environment, Water Resources, Radioisotope Production and Radiation Technology, Nuclear Science

In Focus
50th Anniversary of the IAEA's Nuclear Sciences and Applications Laboratories in Seibersdorf

Events
8 - 13 October 2012
24th Fusion Energy Conference, San Diego, USA. Details

About Us
Mission & Role, Contact

follow us on

A+M Data Unit at IAEA...

www-nds.iaea.org

International Atomic Energy Agency
Atomic Molecular Data Services
 Provided by the Nuclear Data Section

Atomic and Molecular Data Unit Activities

The Atomic and Molecular Data Unit operates within the Nuclear Data Section of the International Atomic Energy Agency, Vienna, Austria. The primary objective of the Atomic and Molecular Data Unit is to establish and maintain internationally recommended numerical databases on atomic and molecular collision and radiative processes, atomic and molecular structure characteristics, particle-solid surface interaction processes and physico-chemical and thermo-mechanical material properties for use in fusion energy research and other plasma science and technology applications.

• Databases on Atomic and Molecular Data for Fusion.

• Online Computing Capabilities

• Knowledge Base for Atomic, Molecular and Plasma-Material Interaction Data for Fusion

Our Unit achieves its objectives by coordinating the activities of the **International Atomic and Molecular Data Center Network (ICMDCN)** and **Code Center Network (CCN)**, initiation and conducting **International Coordinated Research Projects (ICRP)**, organization of various types of **Expert Meetings**, publication of **technical reports** on meetings and research activities and using other forms (research contracts, research agreements, consultancies) for stimulation of the generation, collection and critical assessment of the required atomic, molecular (A+M) and plasma-material interaction (PMI) data information.

The activity of Our Unit is supervised and biennially reviewed by the Subcommittee on Atomic and Molecular Data for Fusion of the International Fusion Research Council (IFRC A+M Subcommittee), an advisory body to the Agency's Director General.

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