

Editor, Publishing Section, Division of Conference and Document Services Department of Management (99/048). This P-3 post edits scientific and technical files and manuscripts and takes these through to electronic dissemination or to press. In particular, the position edits (primarily on screen) scientific and technical files and manuscripts, including mathematics and figures, in conformity with the Agency's editorial policy and style; advises scientific staff on the preparation of electronic publications (Internet, CD-ROM); performs such other tasks as may be assigned by the Chief Editor, Publishing Section; and liaises with authors with regard to the scientific and technical aspects of files and manuscripts. The position requires an advanced university degree (strong preference given to a relevant scientific field) or equivalent; at least six years of experience editing scientific publications; good knowledge of electronic publishing techniques and procedures; and English mother tongue or principal language of education.

Closing Date: 19 November 1999

Quality Assurance/Management Engineer, Nuclear Power Engineering Section, Division of Nuclear Power, Department of Nuclear Energy (99/051). This P-5 position will advise on and assist in implementing the Agency's programmes with regard to the promotion of excellence in the integrated management of nuclear power programmes in Member States with emphasis on optimization of the overall performance of nuclear power plants throughout their entire lifetime. The position requires an advanced university degree or equivalent higher level degree in

nuclear engineering or physics; at least 15 years' experience in the nuclear power programme area, including a number of years at the managerial level in a nuclear utility and international experience; experience with the application of IAEA standards on quality assurance; extensive expertise in the establishment and implementation of quality assurance/quality management in nuclear power projects; acquaintance with current managerial issues relevant to nuclear power utilities; good written and spoken abilities in English; management ability to handle several tasks and to adjust to changes; communication skills for interacting and delivering lectures in an international environment; and the ability to use computer applications as working tools.

Closing Date: 19 November 1999

Nuclear Power Engineer, Nuclear Power Engineering Section, Division of Nuclear Power, Department of Nuclear Energy (99/054). This P-3 position will assist in implementing the Agency's activities with regard to nuclear power plant technology, including information exchange on the performance and modernization of control and instrumentation systems, improvements in man-machine interface, operator support systems and the use of training simulators. The position requires an advanced university degree in nuclear engineering appropriate to the duties of the post; six years' professional experience in nuclear power plant control and instrumentation and training simulators engineering; in-depth expertise and familiarity with nuclear power project planning and implementation; practical

experience in lecturing on nuclear power plant control and instrumentation; experience in co-ordinating international activities on control and instrumentation and training simulators; and the ability to use computer applications as working tools. Fluency in English (oral and written) is essential. Ability in another official Agency language (French, Russian or Spanish) is desirable.

Closing Date: 19 November 1999

READER'S NOTE

The IAEA Bulletin publishes short summaries of vacancy notices as a service to readers interested in the types of professional positions required by the IAEA. They are not the official notices and remain subject to change. On a frequent basis, the IAEA sends vacancy notices to governmental bodies and organizations in the Agency's Member States (typically the foreign ministry and atomic energy authority), as well as to United Nations offices and information centres. Prospective applicants are advised to maintain contact with them. Applications are invited from suitably qualified women as well as men. *More specific information about employment opportunities at the IAEA may be obtained by writing to the Division of Personnel, P.O. Box 100, A-1400 Vienna, Austria.*

POST ANNOUNCEMENTS ON THE INTERNET

The IAEA's vacancy notices for professional positions, as well as sample application forms, are available through a global computerized network that can be accessed directly. Access is through the Internet. *They can be accessed through the IAEA's World Atom services on the World Wide Web at the following address: <http://www.iaea.or.at/worldatom/vacancies>.* Also accessible is selected background information about employment at the IAEA and a sample application form. Please note that applications for posts cannot be forwarded through the computerized network, since they must be received in writing by the IAEA Division of Personnel, P.O. Box 100, A-1400 Vienna, Austria.



**INTERNATIONAL NUCLEAR
INFORMATION SYSTEM
(INIS)**

TYPE OF DATABASE
Bibliographic

PRODUCER
International Atomic Energy
Agency in co-operation with
103 IAEA Member States and
19 international organizations.

IAEA CONTACT
IAEA, INIS Section
P.O. Box 100
A-1400 Vienna, Austria
Tel.: (43-1) 2600-22842
Fax: (43-1) 26007-22842
E-mail:
INIS.CentreServicesUnit@iaea.org
*More information over
IAEA's internet service at*
<http://www.iaea.org/inis/inis.htm>

To subscribe to the INIS Database
on the Internet go to
<http://www.iaea.org/inis/inisdb.htm>
Demo database available cost free.

**NUMBER OF RECORDS ON LINE
FROM JANUARY 1970 TO DATE**
over 2 million

SCOPE
Worldwide information on the
peaceful uses of nuclear science
and technology; economic and
environmental aspects of other
energy sources

COVERAGE
The central areas of coverage are
nuclear reactors, reactor safety,
nuclear fusion, application of
radiation or isotopes in medicine,
agriculture, industry, and pest
control. Also covered are related
fields such as nuclear chemistry,
nuclear physics, and material
science. Special emphasis is placed
on the environmental, economic
and health effects of nuclear
energy as well as on the economic
and environmental aspects of non-
nuclear energy sources. Legal and
social aspects associated with
nuclear energy are also covered.



**POWER REACTOR
INFORMATION SYSTEM
(PRIS)**

TYPE OF DATABASE
Factual

PRODUCER
International Atomic Energy
Agency in cooperation with
32 IAEA Member States

IAEA CONTACT
IAEA, Nuclear Power
Engineering Section
P.O. Box 100
A-1400 Vienna, Austria
Tel.: (43-1) 2600
Telex: (1)-12645
Fax: (43-1) 26007
E-mail:
r.spiegelberg-planer@iaea.org
*More information over
IAEA's internet services at*
[http://www.iaea.org/
programmes/a2/](http://www.iaea.org/programmes/a2/)

SCOPE
Worldwide information on power
reactors in operation, under
construction, planned or
shutdown, and data on operat-
ing experience with nuclear
power plants in IAEA Member
States.

COVERAGE
Reactor status, name, location,
type, supplier, turbine generator
supplier, plant owner and opera-
tor, thermal power, gross and net
electrical power, date of con-
struction start, date of first criti-
cality, date of first
synchronization to and, date of
commercial operation, date of
shutdown, and data on reactor
core characteristics and plant
systems; energy produced;
planned and unplanned energy
losses; energy availability and
unavailability factors; operating
factor and load factor.



**NUCLEAR DATA
INFORMATION SYSTEM
(NDIS)**

TYPE OF DATABASE
Numerical and bibliographic

PRODUCER
International Atomic Energy
Agency
in cooperation with the United
States National Nuclear Data
Centre at the Brookhaven National
Laboratory, the Nuclear Data Bank
of the Nuclear Energy Agency,
Organization for Economic
Co-operation and Development in
Paris, France, and a network of over
20 other nuclear data centres
worldwide

IAEA CONTACT
IAEA Nuclear Data Section,
P.O. Box 100
A-1400 Vienna, Austria
Tel.: (43-1) 2600
Telex (1)-12645
Fax: (43-1) 26007
E-mail: o.schwerer@iaea.org
*More information over
IAEA's internet service at*
<http://www-nds.iaea.org/>

SCOPE
Numerical nuclear physics data
files describing the interaction of
radiation with matter, and related
bibliographic data.

DATA TYPES
Evaluated neutron reaction data in
ENDF format; experimental nuclear
reaction data in EXFOR format, for
reactions induced by neutrons,
charged particles, or photons;
nuclear half-lives and radioactive
decay data in the systems NUDAT
and ENSDF; related bibliographic
information from the IAEA data-
bases CINDA and NSR; various
other types of data.

*Note: Off-line data retrievals from
NDIS also may be obtained from the
producer on diskettes, CD-ROMs and
4mm DAT tape cartridge.*



**ATOMIC AND MOLECULAR
DATA INFORMATION SYSTEM
(AMDIS)**

TYPE OF DATABASE
Numerical and bibliographic

PRODUCER
International Atomic Energy
Agency in cooperation with the
International Atomic and
Molecular Data Centre network, a
group of 16 national data
centres from several countries.

IAEA CONTACT
IAEA Atomic and Molecular Data
Unit, Nuclear Data Section
E-mail: j.a.stephens@iaea.org
*More information over
IAEA's internet service at*
[http://www.iaea.org/
programmes/amdis](http://www.iaea.org/programmes/amdis)

SCOPE
Data on atomic, molecular,
plasma-surface interaction, and
material properties of interest to
fusion research and technology

COVERAGE
Includes ALADDIN formatted
data on atomic structure and
spectra (energy levels, wave
lengths, and transition
probabilities); electron and
heavy particle collisions with
atoms, ions, and molecules (cross
sections and/or rate coefficients,
including, in most cases, analytic
fit to the data); sputtering of
surfaces by impact of main
plasma constituents and self
sputtering; particle reflection
from surfaces; thermophysical
and thermomechanical
properties of beryllium and
pyrolytic graphites.

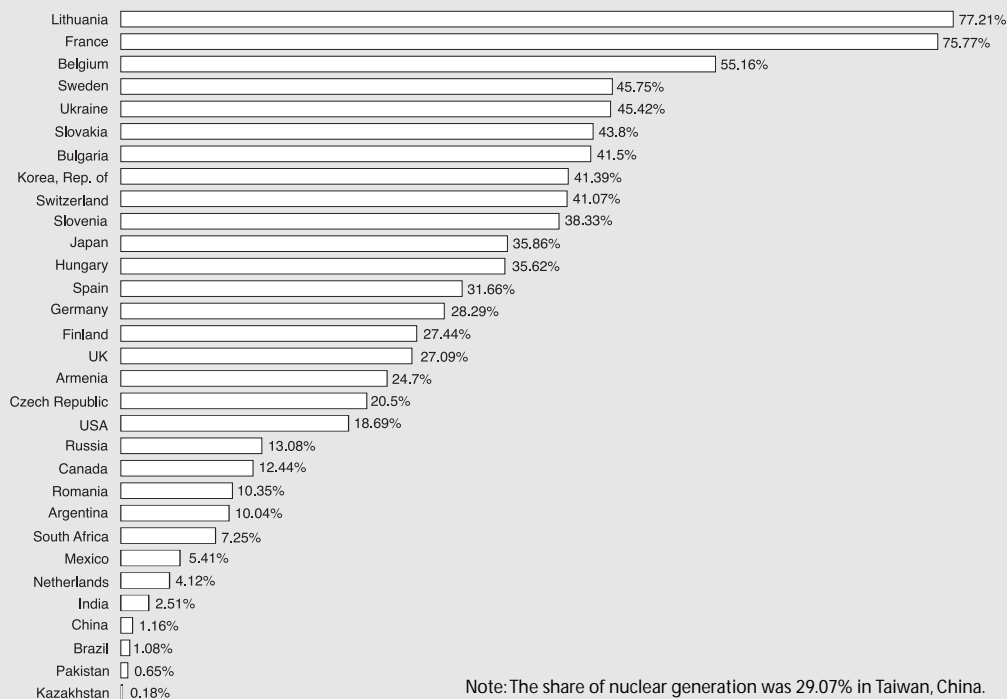
*Note: Off-line data and biblio-
graphic retrievals, as well as
ALADDIN software and manual,
also may be obtained from the
producer on diskettes, magnetic
tape, or hard copy.*

NUCLEAR POWER STATUS AROUND THE WORLD

	REACTORS IN OPERATION		REACTORS UNDER CONSTRUCTION	
	NO. OF UNITS	TOTAL NET MWE	NO. OF UNITS	TOTAL NET MWE
ARGENTINA	2	935	1	692
ARMENIA	1	376		
BELGIUM	7	5 712		
BRAZIL	1	626	1	1 229
BULGARIA	6	3 538		
CANADA	14	9 998		
CHINA	3	2 167	6	4 420
CZECH REPUBLIC	4	1 648	2	1 824
FINLAND	4	2 656		
FRANCE	58	61 653	1	1 450
GERMANY	20	22 282		
HUNGARY	4	1 729		
INDIA	10	1 695	4	808
IRAN			2	2 111
JAPAN	53	43 691	2	1 863
KAZAKSTAN	1	70		
KOREA, REP. OF	15	12 340	3	2 550
LITHUANIA	2	2 370		
MEXICO	2	1 308		
NETHERLANDS	1	449		
PAKISTAN	1	125	1	300
ROMANIA	1	650	1	650
RUSSIAN FEDERATION	29	19 843	4	3 375
SOUTH AFRICA	2	1 842		
SLOVAKIA	5	2 020	3	1 164
SLOVENIA	1	632		
SPAIN	9	7 377		
SWEDEN	12	10 040		
SWITZERLAND	5	3 079		
UNITED KINGDOM	35	12 968		
UKRAINE	16	13 765	4	3 800
UNITED STATES	104	96 423		
WORLD TOTAL*	434	348 891	36	27 536

*This total includes Taiwan, China where six reactors totaling 4884 MWe are in operation. One unit of 1300 MWe is under construction. Table reflects status as of December 1998 as reported to the IAEA; data are preliminary and subject to change.

NUCLEAR SHARE OF ELECTRICITY GENERATION as of December 1998



Note: The share of nuclear generation was 29.07% in Taiwan, China.

HOW TO ORDER SALES PUBLICATIONS

IAEA publications may be purchased from the following sources, or through major local booksellers. Payment may be made in local currency or with UNESCO coupons.

AUSTRALIA

Hunter Publications
58A Gipps Street, Collingwood, Victoria 3066
Tel.: +61 3 9417 5361; Fax: +61 3 9419 7154
E-mail: jpdavies@ozemail.com.au

BELGIUM

Jean de Lannoy
202 Avenue du Roi, B-1060 Brussels
Tel.: +32 2 538 4308; Fax: +32 2 538 08 41
E-mail: jean.de.lannoy@infoboard.be
Website: <http://www.jean-de-lannoy.be>

BRUNEI

Contact source in Malaysia

CHINA

IAEA Publications in Chinese:
China Nuclear Energy Industry Corporation
Translation Section, P.O. Box 2103, Beijing

DENMARK

Munksgaard International Publishers
P.O. Box 2148, DK-1016 Copenhagen K
Tel.: +45 33 12 85 70; Fax: +45 33 12 93 87
E-mail: subscription.service@mail.munksgaard.dk
Website: <http://www.munksgaard.dk>

EGYPT

The Middle East Observer
41 Sherif Street, Cairo
Tel.: +20 2 3939 732; 3926 919
Fax: +20 2 3939 732, 3606 804
E-mail: fouda@soficom.com.eg

GERMANY

UNO-Verlag, Vertriebs- und Verlags
Dag Hammarskjöld-Haus
Poppelsdorfer Allee 55, D-53115 Bonn
Tel.: +49 228 94 90 20; Fax: +49 228 21 74 92
E-mail: unoverlag@aol.com
Website: <http://www.uno-verlag.de>

HUNGARY

Librotrade Ltd., Book Import
P.O. Box 126, H-1656, Budapest
Tel.: +36 1 257 7777; Fax: +36 1 257 7472
E-mail: books@librotrade.hu

INDIA

Viva Books Private Limited
4325/3, Ansari Road, Darya Ganj, New Delhi-110002
Tel.: +91 11 327 9280; 328 3121; 328 5874
Fax: +91 11 326 7224
E-mail: vinod.viva@gndel.globalnet.ems.vsnl.net.in

ISRAEL

YOZMOT Literature Ltd.
P.O. Box 56055, IL-61560, Tel Aviv
Tel.: +972 3 5284851; Fax: +972 3 5285397

ITALY

Libreria Scientifica Dott.
Lucio di Biasio, "AEIOU", Via Coronelli 6, I-20146
Milan
Tel.: +39 2 48 95 45 52; 48 95 45 62
Fax: +39 2 48 95 45 48

JAPAN

Maruzen Company, Ltd.
P.O. Box 5050, 100-31 Tokyo International
E-mail: yabe@maruzen.co.jp
Website: <http://www.marzun.co.jp>

MALAYSIA

Parry's Book Center Sdn. Bhd
60 Jalan Nagara, Taman Melawati

53100 Kuala Lumpur, Malaysia
Tel.: +60 3 4079176; 4079179; 4087235, 4087528
Fax: +60 3 407 9180
E-mail: haja@pop3.jaring.my
Website:
<http://www.mol.net.my/~parrybooks/parry.htm>

NETHERLANDS

Martinus Nijhoff International
P.O. Box 269, NL-2501 AX, The Hague
Swets and Zeitlinger b.v.,
P.O. Box 830, NL-2610 SZ Lisse
Tel.: +31 793 684 400; Fax: +31 793 615 698
E-mail: info@nijhoff.nl
Website: <http://www.nijhoff.nl>

POLAND

Ars Polona
Foreign Trade Enterprise
Krakowskie Przedmiescie 7, PL-00-068 Warsaw
Tel.: +4822 826 1201ext 147, 151, 159
Fax: +48 22 826 6240
E-mail: ars_pol@bevy.hsn.com.pl
Website: <http://www.arspolona.com.pl>

SINGAPORE

Parry's Book Center Pte. Ltd.
P.O. Box 1165, Singapore 913415
Tel.: +65 744 8673; Fax: +65 744 8676
E-mail: haja@pop3.jaring.my
Website:
<http://www.mol.net.my/~parrybooks/parry.htm>

SLOVAKIA

Alfa Press Publishers
Hurbanovo námestie 3, SQ-815 89, Bratislava
Tel./fax: +421 7 566 0489

SPAIN

Diaz de Santos, Lagasca 95
E-28006 Madrid
Tel.: +34 1 431 24 82; Fax: + 34 1 575 55 63
E-mail: madrid@diazdesantos.es

Diaz de Santos

Balmes 417, E-08022 Barcelona
Tel.: +34 3 212 8647; Fax: + 34 3 211 4991
E-mail: balmes@diazsantos.com
General e-mail: librerias@diazdesantos.es
Web site: <http://www.diazdesantos.es>

UNITED KINGDOM

The Stationery Office, International Sales Agency
51 Nine Elms Lane, London SW8 5DR
Tel.: +44 171 873 9090; Fax: + 44 171 873 8463
E-mail: Orders to: book.orders@theso.co.uk
Enquiries to: ipa.enquiries@theso.co.uk

UNITED STATES OF AMERICA

BERNAN ASSOCIATES
4611-F Assembly Drive, Lanham,
MD 20706-4391, USA
Tel.: 1-800-274-4447 (toll free)
Fax: (301) 459-0056; 1-800-865-3450 (toll free)
E-mail: query@bernan.com
Web site: <http://www.bernan.com>

Orders and information may also be addressed to:

International Atomic Energy Agency
Sales and Promotion Unit, Wagramerstr. 5
P.O. Box 100, A-1400 Vienna, Austria
Tel.: +43 1 2600-22529, 22530
Fax: +43 1 2600-29302
E-mail: sales.publications@iaea.org
Web site:
<http://www.iaea.org/worldatom/publications>

SAFETY STANDARD SERIES

NEAR SURFACE DISPOSAL OF RADIOACTIVE
WASTE: Safety Requirements
Safety Standard Series No. WS-R-1
ISBN 92-0-101099-0 Price: ATS170/e12.35

DECOMMISSIONING OF NUCLEAR POWER
PLANTS AND RESEARCH REACTORS: Safety Guide
Safety Standard Series No. WS-G-2.1
(in production)

DECOMMISSIONING OF MEDICAL, INDUSTRIAL
AND RESEARCH FACILITIES: Safety Guide
Safety Standard Series No. WS-G-2.2
(in production)

TECHNICAL REPORTS SERIES

MODERN INSTRUMENTATION AND CONTROL FOR
NUCLEAR POWER PLANTS: A Guidebook
Technical Report Series No. 387
ISBN 92-0-101199-7 Price: ATS1900/e138.08

HYDROGEOLOGICAL INVESTIGATION OF SITES
FOR GEOLOGICAL DISPOSAL OF RADIOACTIVE
WASTES
Technical Report Series No. 391
ISBN 92-0-100299-8 Price: ATS280/e20.35

DESIGN MEASURES TO FACILITATE
IMPLEMENTATION OF SAFEGUARDS AT FUTURE
WATER COOLED NUCLEAR POWER PLANTS
Technical Report Series No. 392
ISBN 92-0-104798-3 Price: ATS360/e26.16

NUCLEAR GEOPHYSICS AND ITS APPLICATIONS
Technical Report Series No. 393
ISBN 92-0-100699-3 Price: ATS680/e49.42

GUIDANCE FOR COMPARATIVE ASSESSMENT OF
THE HEALTH AND ENVIRONMENTAL IMPACTS OF
ELECTRICITY GENERATION SYSTEMS
Technical Report Series No. 394
(in production)

STATE-OF-THE-ART TECHNOLOGY FOR
DECONTAMINATION AND DISMANTLING OF
NUCLEAR FACILITIES
Technical Report Series No. 395
(in production)

NUCLEAR FUSION

WORLD SURVEY OF ACTIVITIES IN CONTROLLED
FUSION RESEARCH, 1997 Edition on CD-ROM,
Nuclear Fusion, Special Supplement 1997
Price: ATS 450/e32.70

MISCELLANEOUS

ATOMIC AND PLASMA-MATERIAL INTERACTION
DATA FOR FUSION (Part A)
Price: ATS 400/e29.07

ATOMIC AND PLASMA-MATERIAL INTERACTION
DATA FOR FUSION
Price: ATS800/e58.14

All prices are in ATS (Austrian Schillings) or Euro where noted. Further information about IAEA sales publications may be obtained from the Agency's Division of Publications (Email: sales.publications@iaea.org) A comprehensive listing of IAEA sales publications is accessible via the Agency's *WorldAtom* Internet services at <http://www.iaea.org>.

**IAEA
CO-ORDINATED RESEARCH PROJECTS**

TECHNOLOGIES AND METHODS FOR LONG TERM STABILIZATION AND ISOLATION OF URANIUM MILL TAILINGS

This CRP will assist Member States in the development of techniques, procedures and processes for the stabilization of uranium mining/milling waste sites in support of their sustainable long-term management and remediation, and encourage a harmonized and systematic approach where feasible.

DEVELOPMENT OF MANAGEMENT PRACTICES FOR SUSTAINABLE CROP PRODUCTION SYSTEMS ON TROPICAL ACID SOILS THROUGH THE USE OF NUCLEAR AND RELATED TECHNIQUES

This CRP will address the sustainable agricultural production of tropical acid soils along three main lines of investigation: i) utilization of acid-tolerant and phosphorus-efficient plant genotypes, ii) addressing issues of acid soil infertility, and iii) developing improved soil management and conservation practices. The overall objective is to develop integrated soil, water and nutrient management practices to increase and sustain productivity of tropical acid soils. The focus of this project will be the acid soils of the Savannah ecosystem in the humid and sub-humid tropics of Africa and Latin America. The project will be implemented through 1999 with researchers having an active involvement in existing networks in tropical acid soils and experience in multi-disciplinary approaches.

QUALITY ASSURANCE OF MASS PRODUCED AND RELEASED FRUIT FLIES

Area-wide pest control using the sterile insect technique (SIT) provides an environment-friendly and cost effective alternative to conventional approaches using pesticides. SIT is based on nuclear techniques in which radiation-sterilized pest insects are mass-produced and released on an area-wide basis to halt pest reproduction. Constant monitoring of mass-production processes together with insect quality ensures that gamma-sterilized insects are fully compatible and competitive with non-steriles. This CRP will benefit a growing number of Member States now and in the future as they turn to area-wide control of fruit flies using SIT as a means of expanding agricultural development, production and trade while protecting the environment. It aims to improve quality assurance, data management and information exchange on a global level.

MUTATIONAL ANALYSIS OF ROOT CHARACTERS IN ANNUAL FOOD PLANTS RELATED TO PLANT PERFORMANCE

Historically, the genetic analysis of root traits has been neglected largely because of the difficulty in accessing this below-ground organ. Consequently, few root mutants of crop plants have been described to date. The paucity of root mutants has resulted in the inability to evaluate specific root traits in breeding programmes. However, some changes in attitude are developing and root-associated ergonomically important genes have recently been identified for wheat and rice. The CRP will focus on the application of mutation techniques and related biotechnology to generate and utilize mutants for the identification of root properties and genes for improvement of productivity and sustainability of crop plants.

**IAEA
SYMPOSIA & SEMINARS**

1999

OCTOBER

Seminar on Mutation Techniques and Molecular Genetics for Tropical and Subtropical Plant Improvement in Asia and the Pacific Region
Manila, Philippines, 11-15 October

Seminar on IAEA Safeguards for the 21st Century
Seoul/Taejon, Korea, 18-20 October

International Conference on Irradiation to Ensure Safety and Quality of Food
Antalya, Turkey, 19-22 October

NOVEMBER

Seminar on Integrated Information Systems (safeguards)
Vienna, Austria, 22-26 November

Seminar on National Legislation
Vienna, Austria, 22-26 November

International Symposium on Restoration of Environments with Radioactive Residues
*Arlington, Virginia USA
29 November-3 December*

YEAR 2000

Selected listing

Conference on the Safety of Radioactive Waste Management
Cordoba, Spain, 13-17 March

International Conference on Nuclear Power in the 21st Century -- Issues and Prospects
New York, USA, 22-26 May

International Symposium on Radiation Technology in Emerging Industrial Applications
Beijing, China, 4-8 September

International Symposium on the Uranium Production Cycle and the Environment
Vienna, Austria, 2-6 October

International Symposium on Nuclear Techniques in Integrated Plant Nutrient, Water, and Soil Management
Vienna, Austria, 16-20 October

International Symposium on Isotopic Tools for Monitoring Nutritional Status in Nutrition and Development Programmes
date, venue to be determined

All information subject to change. See box at left.

These are selected listings, subject to change. More complete information about meetings can be obtained from the IAEA Conference Services Section at the Agency's headquarters in Vienna, or by referring to the IAEA's periodical *Meetings on Atomic Energy*, prepared by the Agency's Division of Public Information, and by visiting the IAEA's *WorldAtom* Internet services at <http://www.iaea.org>. More information about the IAEA's co-ordinated research projects may be obtained from the Research Contracts Administration Section at IAEA headquarters. The programmes are designed to facilitate global co-operation on scientific and technical subjects in various fields, ranging from radiation applications in medicine, agriculture, and industry to nuclear power technology and safety.

