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Setembro 2005

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Todas as publicações aqui referenciadas encontram-se disponíveis para consulta na Biblioteca.

Notícias

biblioteca do conhecimento online

Sessões de formação SCOPUS

A Scopus é uma nova ferramenta de navegação que abrange uma grande colecção multidisciplinar de resumos, referências e indicadores desde 1960, permitindo aceder aos artigos através de links ao texto completo sempre que disponível.

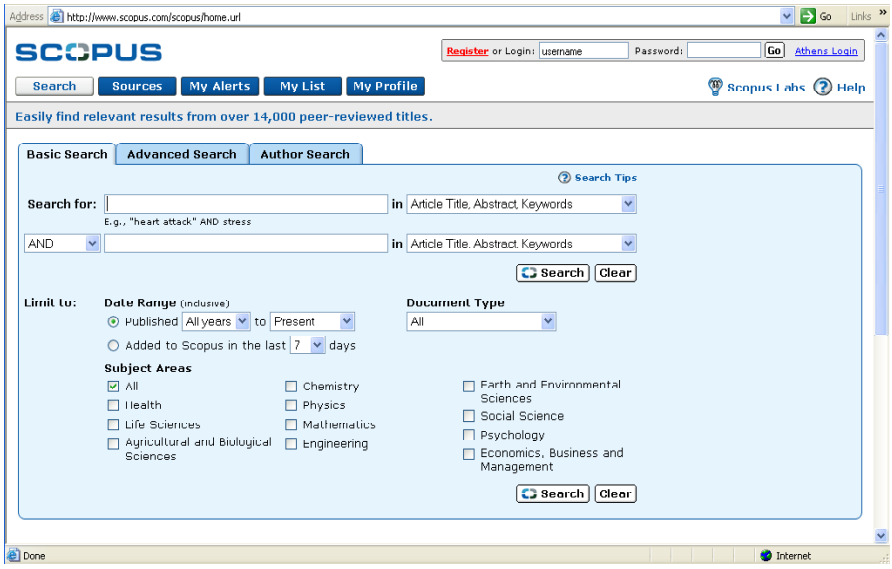
Sendo uma base referencial que facilita o acesso ao texto integral, tem como objectivo tornar mais amigável a pesquisa por autor, titulo, fonte, área de conhecimento, tal como fazer uma avaliação do artigo/autor por número de citações. Já neste mês de Setembro, irão realizar-se algumas sessões de formação em Scopus, para bibliotecários e público em geral. As sessões terão lugar nos seguintes dias e locais :

- **20/09 - Universidade Nova de Lisboa**

Uma sessão à tarde uma sessão no Anfiteatro A13 das 14h até às 17h, na Faculdade de Economia, Travessa Estêvão Pinto, Campolide;

Esta ferramenta tem vindo a ser desenvolvida pela Elsevier desde 2002 e pretende ser uma alternativa ao *Web of Science* da ISI, está agora em acesso para teste até Outubro de 2006 em

http://www.scopus.com/scopus/home.url.



Foi lançado para teste o novo portal *b-on*:

http://secure.b-on.pt:8331.

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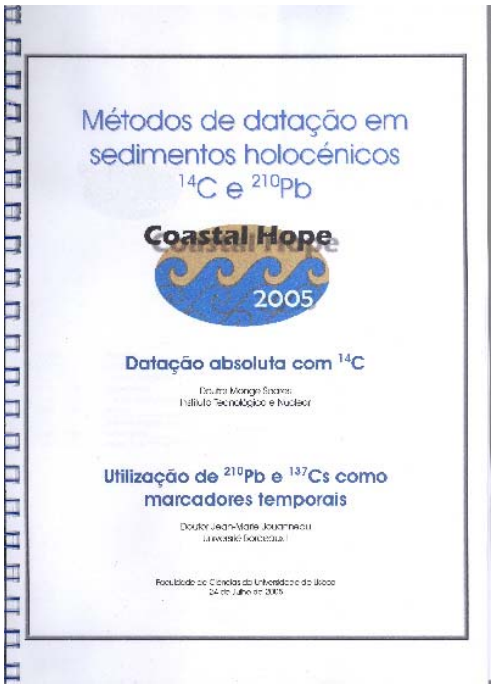
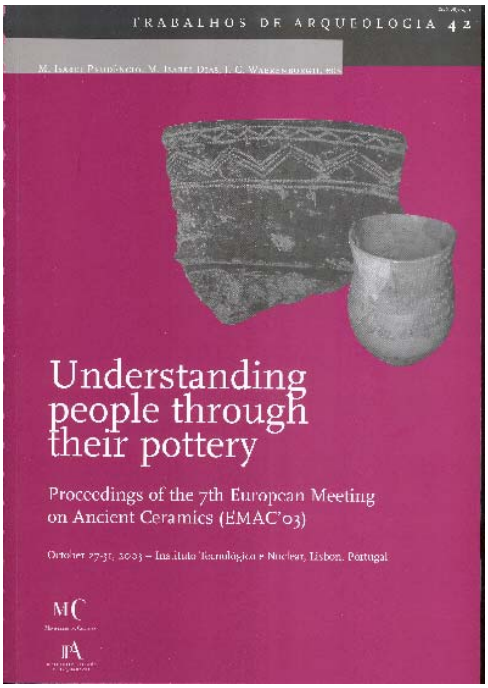
Publicações ITN



- **Métodos de Datação em Sedimentos Holocénicos ^{14}C e ^{210}Pb – Coastal Hope 2005**, A. Monge Soares e Jean Marie Jouanneau, FCUL, 24 Julho de 2005.



- **Understanding People Through Their Pottery**, M. Isabel Prudêncio, M. Isabel Dias e J.C. Waerenbourgh (eds.), *Proceedings of the 7th European Meeting on Ancient Ceramics (EMAC'03)*, October 27-31, 2003, ITN, Lisbon, Portugal. *Trabalhos de Arqueologia* **42** (2005), IPA.

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Publicações Oferecidas

Radiation Oncology Physics: A Handbook for Teachers and Students

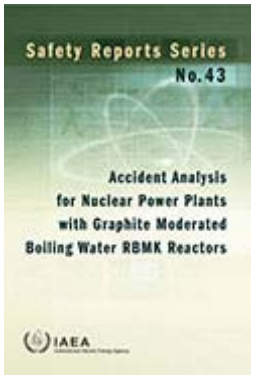
This publication is aimed at students and teachers involved in programmes that train professionals for work in radiation oncology. It provides a comprehensive overview of the basic medical physics knowledge required in the form of a syllabus for modern radiation oncology. It will be particularly useful to graduate students and residents in medical physics programmes, to residents in radiation oncology, as well as to students in dosimetry and radiotherapy technology programmes. It will assist those preparing for their professional certification examinations in radiation oncology, medical physics, dosimetry or radiotherapy technology. It has been endorsed by several international and national organizations and the material presented has already been used to define the level of knowledge expected of medical physicists worldwide.
STI/PUB/1196, 657 pp.; 137 figures; 2005, ISBN 92-0-107304-6, English. 65.00 Euro. Date of Issue: 25 August 2005.

http://www-pub.iaea.org/MTCD/publications/PDF/Pub1196_web.pdf

Subject Classification: 0101 - Nuclear medicine (including radiopharmaceuticals);
0103 - Medical physics (including dosimetry).

Cota (ITN):

Safety Reports Series



Accident Analysis for Nuclear Power Plants with Graphite Moderated Boiling Water RBMK Reactors

Safety Reports Series No. 43

Accident analysis is an important tool for confirming the adequacy and efficiency of provisions within the defence in depth concept for the safety of nuclear power plants. In 2002, the IAEA published Safety Reports Series No. 23 on Accident Analysis for Nuclear Power Plants, containing general rules and practical guidance for performing accident analysis applicable to any reactor design. The specific features of individual reactor types are taken into account in separate Safety Reports. The current report provides additional guidance with respect to the specific design features of the graphite moderated boiling water reactors with pressurized channels known as RBMKs. In particular, guidance is provided regarding categorization of initiating events, selection of acceptance criteria, and initial and boundary conditions. Specific suggestions are offered for analysis of different groups of initiating events. The report is intended primarily for analysts coordinating, performing or reviewing computational analyses of transients and accidents for nuclear power plants with RBMKs, on both the utility and regulatory sides.

STI/PUB/1211, 59 pp.; 9 figures; 2005, ISBN 92-0-112804-5, English. 38.00 Euro. Date of Issue: 29 August 2005.

http://www-pub.iaea.org/MTCD/publications/PDF/Pub1211_web.pdf

Subject Classification: 0603 - Nuclear power plants; 0612 - Safety analysis; 0703 - Reactor technology.

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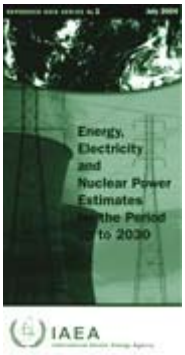
Reference Data Series

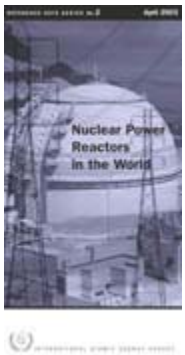


Energy, Electricity and Nuclear Power Estimates for the Period up to 2030

Reference Data Series No. 1

This annual publication contains estimates of energy, electricity and nuclear power trends up to the year 2030, using a variety of sources, such as the IAEA's Power Reactor Information System and data prepared by the United Nations.

IAEA-RDS-1/25, 53 pp.; 10 figures; 2005, ISBN 92-0-108705-5, English. Date of Issue: July 2005
Subject Classification: 0701 - Nuclear power planning and economics.



Nuclear Power Reactors in the World April 2005

Reference Data Series No. 2
This is the twenty-fifth edition of Reference Data Series No. 2, which presents the most recent reactor data available to the IAEA. It contains summarized information as of the end of 2004 on: (1) power reactors operating or under construction, and shut down; and (2) performance data on reactors operating in the IAEA Member States, as reported to the IAEA. The information is collected by the Agency through designated national correspondents in the Member States. The replies are used to maintain the IAEA's Power Reactor Information System (PRIS).

IAEA-RDS-2/25, 77 pp.; 6 figures; 2005, ISBN 92-0-104205-1, English. Date of Issue: April 2005.

Subject Classification: 0700 - Nuclear power.
.

Code of Conduct on the Safety and Security of Radioactive Sources: Guidance on the Import and Export of Radioactive Sources

The IAEA Code of Conduct on the Safety and Security of Radioactive Sources (the 'Code', IAEA/CODEOC/2004) describes how States can safely and securely manage high risk radioactive sources. Paragraphs 23 – 29 of the Code relate to the import and export of radioactive sources, and some States requested further guidance on how these paragraphs should be implemented. 'Guidance for the Import and Export of Radioactive Sources' (the 'Guidance') has, therefore, been developed by technical and legal experts nominated by IAEA Member States. It provides specific guidance on how States can implement paragraphs 23 – 29 of the Code. This Guidance has been approved by the IAEA Board of Governors, endorsed by the IAEA General Conference, and has been published as a supplement to the Code.

IAEA/CODEOC/IMP-EXP/2005, 2005, Multilingual. Date of Issue: 30 March 2005.

http://www-pub.iaea.org/MTCD/publications/PDF/Imp-Exp_web.pdf

Subject Classification: 1400 - Physical protection of radioactive material.

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NUCLEAR ENERGY AGENCY

Nuclear Science

Pellet-clad Interaction in Water Reactor Fuels

Seminar Proceedings, Aix-en-Provence, France, 9-11 March 2004

This book presents the proceedings of an international seminar which reviewed recent progress in the field of pellet-clad interaction in light water reactor fuels. It also draws a comprehensive picture of current understanding of relevant phenomena and their impact on the nuclear fuel rod, under the widest possible conditions. State-of-the-art knowledge is presented for both uranium-oxide and mixed-oxide fuels.

Table of contents:

- Characterisation of Volatile Fission Products, Including Iodine, after a Power Ramp by L. Desgranges, B. Pasquet, X. Pujol, I. roure, Th. Blay, J. Lamongagne, Th. Martella, B. Lacrois, O. Comiti, L. Caillot
- Testing and Modelling Iodine-Induced Stress Corrosion Cracking in Stress-Relieved Zircaloy-4 by D. Le Boulch, L. Fournier, C. Sainte-Catherine
- Observation of a Pellet-Cladding Bonding Layer in High-Power Fuel by S. Van den Berghe, A. Leenaers, B. Vos, L. Sannen, M. Verwerft
- Cladding Liner Surface Effects and PCI by G. Lysell, K. Kitano, D. Schrire, and J-E. Lindback

Session IV. In-Pile Rod Behaviour

- Results of WWER High Burn-Up Fuel Rod Examinations in the Process of and After Their Testing in the MIR Reactor under Power Cycling Conditions by A. V. Bouroukine, G. D. Lyadov, S. V. Lobin, V. A. Ovchinikov
- Ramp Testing of SBR MOX Fuel by M. Barker, P. Cook, R. Weston, G. Dassel, C. Ott, R. Stratton, D. Papaioannou, and C. Walker
- PCI Behaviour of Chromium Oxide-Doped Fuel by C. Nonon, J-C Menard, S. Lansiart, J. Noirot, S. Martin, G-M. Decroix, O. Rabouille, C. Delafoy, and B. Petitprez
- PCMI of High Burn-Up Fuel as Manifested by Different Types of Instrumentation and Measurements in the Halden Reactor Experimental Programme by W. Wiesenack and T. Tverberg
- Power Ramping in the OSIRIS Reactor: Database Analysis for Standard UO2 Fuel with Zy-4 Cladding by C. Mougel, B. Verhaeghe, C. Verdeau, S. Lansiart, S. Beguin, and B. Julien
- Experimental Data on PCI and PCMI within the IFPE Database by J.C. Killeen, E. Sartori, and J. A. Turnbull

Session IV. Modelling of the Mechanical Interaction between Pellet and Cladding

- Modelling the Effect of Oxide Fuel Fracturing on the Mechanical Behaviour of Fuel Rods by T. Helfer, P. Garcia, F. Sidoroff, J-M. Ricaud, and D. Plancq
- Crack and Dishing Evolution Models and PCI-SCC Considerations for Fuel Pellets in a Quasi-Bi-Dimensional Environment by A. C. Marino
- Non-Linear Behaviour of Multi-Phase MOX Fuels: A Micromechanical Approach by S. Rousette, J-M. Gatt, J-C. Michel
- The Mechanical Response of Cladding with a Hydride Lens under PCMI Loading Conditions by R. Montgomery, J. Rashid, R. Dunham, O. Ozer, S. K. Yagnik, and R. Yang
- Assessment of Cladding Relaxation and PCMI Models in INFRA by Y-M. Kim, Y-S. Yang, C-B. Lee, D-H. Kim, and Y-H. Jung
- Two-Dimensional (2-D) Pellet-Cladding Modelling using FEM at NRI Rex plc by M. Valach, and J. Zymak
- Modelling 3-D Mechanical Phenomena in a 1-D Industrial Finite Element Code: Results and Perspectives by V. Guicheret-Retel, F. Trivaudey, M. L. Boubakar, R. Masson, and Ph. Thevenin
- The COPERNIC Mechanical Model and its Application to Doped Fuel by C. Garnier, P. Mailhe, P. Vesco, L.C. Bernard, C. Delafoy, and P. Garcia
- Modelling of Thermal Mechanical Behaviour of High Burn-Up VVER Fuel at Poer Transients with Special Emphasis on the Impact of Fission Gas Induced Swelling of Fuel Pellets by V. Novikov, A. Medvedev, G. Khvostov, S. Bogatyr, V. Kuzetsov, and L. Korystin
- TOUTATIS: An application of the Cast3M Finite Element Code for PCI Three-Dimensional Modelling by F. Bentejac, and N. Hourdequin
- Methodology for Multi-Dimensional Simulation of Power Ramp Tests by C. Struzik, D. Plancq, B. Michel, P. Garcia, and C. Nonon.
- Modelling of Pellet-Clad Interaction during Power Ramps by G.Zhou, J. E. Lindback, H. C. Schutte, L. O. Jernkvist, and A. R. Massih

List of Participants

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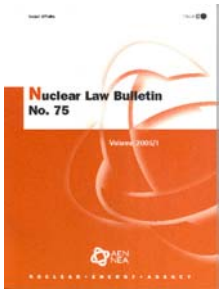
Radioactive Waste Management

NEA Sorption Project Phase II

Interpretation and Prediction of Radionuclide Sorption onto Substrates Relevant for Radioactive Waste Disposal Using Thermodynamic Sorption Models

This report presents the results of Phase II of the NEA Sorption Project, which was initiated as a major international contribution towards demonstrating the consistency and applicability of different thermodynamic sorption models to support the selection of a sorption parameter, namely Kd values, for safety assessments. It was implemented in the form of a comparative modelling exercise based on selected datasets for radionuclide sorption by both simple and complex materials. The project was conducted under the auspices of the Integration Group for the Safety Case (IGSC) of the OECD/NEA Radioactive Waste Management Committee (RWMC).

Table of contents:

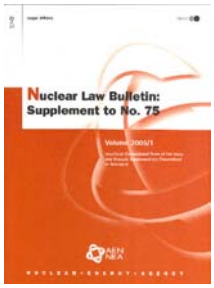


Nuclear Law Bulletin No. 75 (June 2005)

Language: English , Published: 22-JUL-05 , 176 pages
NEA#06011, ISSN: 0304-341X,

-Synopsis

Considered to be the standard reference work for both professionals and academics in the field of nuclear law, the Nuclear Law Bulletin is a unique international publication providing its subscribers with up-to-date information on all major developments falling within the domain of nuclear law. Published twice a year in both English and French, it covers legislative developments in almost 60 countries around the world as well as reporting on relevant jurisprudence and administrative decisions, international agreements and regulatory activities of international organizations.



Supplement to Nuclear Law Bulletin No. 75 (June 2005)

Unofficial Consolidated Texts of the Paris and Brussels Supplementary Conventions as Amended
Language: English , Published: 22-JUL-05 , 36 pages
NEA#06013, ISBN: 92-64-01214-1,

NEA News — *2005 – No. 23.1*

NEA News is the journal of the NEA. It features articles on the latest nuclear energy issues concerning the economic and technical aspects of the nuclear fuel cycle, radiation protection, radioactive waste management, nuclear safety, nuclear legislation and nuclear scientific modelling.

In this issue:

- Nuclear regulatory decision making
- An analysis of uranium exploration and price
- Lessons drawn from recent NPP operating experience
- Management of uncertainty in safety cases and the role of risk
- Safety of the nuclear fuel cycle
- News briefs