

Ano II - Nº 3-4/05 Março/Abril 2005

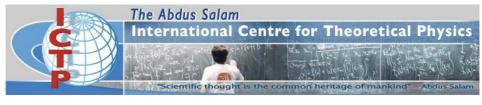
Informação sobre Instituições e/ou Actividades Científicas

Îndice



• Informação sobre Instituições...... 1

http://www.iaea.org



http://www.ictp.it

News from ICTP http://news.ictp.it/



http://europa.eu.int/comm/research/energy/index_en.htm

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





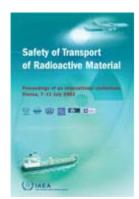
http://www.asn.gouv.fr/publications/controle/



Ano II - Nº 3-4/05 Março/Abril 2005

Publicações Oferecidas





Safety of Transport of Radioactive Material

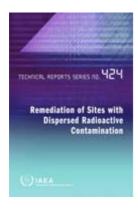
Proceedings Series

Radioactive material is used throughout the world for many applications that benefit mankind encompassing agriculture, industry, medicine, electric power generation, and research. The transport of this material places it outside of controlled facilities, in the public domain, and often entails movement between countries. The IAEA was assigned the task of developing, maintaining, and providing the application of safety standards for the transport of radioactive material. This conference was convened to discuss the safety of the international transport of radioactive material. It was held in Vienna in July 2003 and was co-sponsored by ICAO, IMO and the UPU. These proceedings contain the opening addresses, papers from the background session and other papers presented at the conference, summaries of all discussions, and the summary and findings of the conference president. Contributed papers are provided in a CD-ROM that accompanies this volume.

STI/PUB/1200, 319 pp.; 19 figures; 2004, ISBN 92-0-108504-4, English. 138.00 Euro. Date of Issue: 23 December 2004.

Subject Classification: 0606 - Transport of radioactive material.

http://www-pub.iaea.org/MTCD/publications/PDF/Pub1200_web.pdf



Remediation of Sites with Dispersed Radioactive Contamination

Technical Reports Series No. 424

This report provides an overview of remediation technologies that are particularly suited to the remediation of dispersed contamination. Dispersed low level contamination poses a particular challenge. Many techniques are not efficient below certain concentration thresholds or entail more severe impacts on certain environmental compartments than the contamination itself. The technologies are outlined in brief, and their advantages and limitations are discussed. The need for a holistic design of the remedial action is stressed.

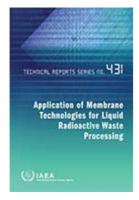
STI/DOC/010/424, 117 pp.; 23 figures; 2004, ISBN 92-0-114603-5, English. 21.00 Euro. Date of Issue: 4 February 2005.

Subject Classification: 0611 - Radioactive waste management; 0804 - Waste management.

http://www-pub.iaea.org/MTCD/publications/PDF/D424_web.pdf



Ano II - Nº 3-4/05 Março/Abril 2005



Application of Membrane Technologies for Liquid Radioactive Waste Processing

Technical Reports Series No. 431

Membrane separation processes have made impressive progress since the first synthesis of membranes almost 40 years ago. This progress was driven by strong technological needs and commercial expectations. As a result the range of successful applications of membranes and membrane processes is continuously broadening. In addition, increasing application of membrane processes and technologies lies in the increasing variations of the nature and characteristics of commercial membranes and membrane apparatus. The objective of the report is to review the information on application of membrane technologies in the processing of liquid radioactive waste. The report covers the various types of membranes, equipment design, range of applications, operational experience and the performance characteristics of different membrane processes. The report aims to provide Member States with basic information on the applicability and limitations of membrane separation technologies for processing liquid radioactive waste streams.

STI/DOC/010/431, 145 pp.; 53 figures; 2004, ISBN 92-0-106804-2, English.

http://www-pub.iaea.org/MTCD/publications/PDF/TRS431 web.pdf

Subject Classification: 0804 - Waste management.



Standardized High Current Solid Targets for Cyclotron Production of Diagnostic and Therapeutic Radionuclides

Technical Reports Series No. 432

Radionuclides continue to play an important role in diagnostic and therapeutic applications in modern nuclear medicine. Many of these radionuclides are produced using cyclotron accelerators, and the corresponding laboratory production methodologies and technologies are subject to constant improvements. This publication summarizes the laboratory protocols developed over a three year period for the production of radionuclides using solid target technology, in particular thallium-201, iodine-123, iodine-124 and palladium-103, which are important radioisotopes for use in medical diagnosis and therapy. This publication is a suitable guide for radioisotope laboratories, cyclotron and radiochemical production facilities, and will be of interest to those dealing with production and applications of radioisotopes and radiopharmaceuticals for nuclear medicine and industrial purposes. A CD-ROM is included.

STI/DOC/010/432, 71 pp.; 0 figures; 2004, ISBN 92-0-109304-7, English.

http://www-pub.iaea.org/MTCD/publications/PDF/TRS432/TRS432 start.pdf

Subject Classification: 0103 - Medical physics (including dosimetry); 0300 - Nuclear Measurements, Techniques and Instrumentation.



Ano II - Nº 3-4/05 Março/Abril 2005



Methods for Maintaining a Record of Waste Packages during Waste Processing and Storage

Technical Reports Series No. 434

During processing, radioactive waste is converted into waste packages, sent for storage and ultimately for disposal. A principal condition for acceptance of a waste package for storage or disposal is its full compliance with waste acceptance criteria for disposal or storage. To declare compliance of a waste package with waste acceptance criteria, a system for generating and maintaining records should be established to record and track all relevant information, from raw waste characteristics, through changes related to waste processing, up to final checking and verification of waste package parameters. Records generated during waste processing are a constituent part of the more complex system of waste management record keeping, covering the entire life cycle of radioactive waste from generation to disposal and even the post-closure period of a disposal facility. The IAEA is systematically working on the preparation of a set of publications to assist its Member States in the development and implementation of such a system. This report covers all the principal aspects of the establishment and maintenance of records during waste processing and storage.

STI/DOC/010/434, 37 pp.; 2 figures; 2005, ISBN 92-0-114704-X

http://www-pub.iaea.org/MTCD/publications/PDF/TRS434_web.pdf

Subject Classification: 0804 - Waste management.



Implications of Partitioning and Transmutation in Radioactive Waste Management

Technical Reports Series No. 435

Partitioning and transmutation (P&T) is a potential complementary route in the management of the spent fuel resulting from the generation of nuclear power. It has the potential to open new avenues for long term waste management by eliminating longterm radionuclides and their thermal effects and thus reducing the necessity or capacities of disposal facilities. Recycling and reuse of nuclear material and other transuranic radioisotopes would have positive effects on the sustainability of nuclear energy and reduce proliferation concerns by burning nuclear material and other transuranic radionuclides. This report analyses, from an international perspective, the current status of P&T, the potential options for its implementation and its impact on waste management programmes and strategies.

STI/DOC/010/435, 126 pp.; 25 figures; 2004, ISBN 92-0-115104-7, English.

http://www-pub.iaea.org/MTCD/publications/PDF/TRS435_web.pdf

Subject Classification: 0804 - Waste management.



Ano II - Nº 3-4/05 Março/Abril 2005

IAEA Safety Standards

Regulatory Control of Radiation Sources

Safety Guide



Regulatory Control of Radiation Sources Safety Guide

Safety Standards Series No. GS-G-1.5

This Safety Guide is intended to assist States in implementing the requirements established in "Legal and Governmental Infrastructure for Nuclear, Radiation, Radioactive Waste and Transport Safety" Safety Standards Series No. GS-R-1 for a national regulatory infrastructure to regulate any practice involving radiation sources in medicine, industry, research, agriculture and education. The Safety Guide provides advice on the legislative basis for establishing regulatory bodies, including the effective independence of the regulatory body. The Safety Guide provides guidance on implementing the functions and activities of regulatory bodies: the development of regulations and guides on radiation safety; implementation of a system for notification and authorization; carrying out regulatory inspections; taking necessary enforcement actions; and investigating accidents and circumstances potentially giving rise to accidents. The various aspects relating to the regulatory control of consumer products is explained, including justification, optimization of exposure, safety assessment and authorization. Guidance is also provided on the organization and staffing of regulatory bodies.

STI/PUB/1192, 67 pp.; 0 figures; 2004, ISBN 92-0-105004-6, http://www-pub.iaea.org/MTCD/publications/PDF/Pub1192 Web.pdf

Subject Classification: 0605 - Radiation sources and accelerators; 1400 - Physical protection of radioactive material.

IAEA Safety Standards

Geotechnical Aspects of Site Evaluation and Foundations for Nuclear Power Plants





Geotechnical Aspects of Site Evaluation and Foundations for Nuclear Power Plants Safety Guide

Safety Standards Series No. NS-G-3.6

This publication is a revision of the former safety standards of the IAEA Safety Series No. 50-SG-S8. The scope has been extended to cover not only foundations but also design questions related to geotechnical science and engineering, such as the bearing capacity of foundations, design of earth structures and design of buried structures

STI/PUB/1195, 53 pp.; 0 figures; 2005, ISBN 92-0-107204-X, English.

http://www-pub.iaea.org/MTCD/publications/PDF/Pub1195 web.pdf

Subject Classification: 0603 - Nuclear power plants; 0701 - Nuclear power planning and economics.

SAFETY STANDARDS SERIES

Application of the Concepts of Exclusion, Exemption and Clearance

SAFETY GUIDE

(IAEA

Application of the Concepts of Exclusion, Exemption and Clearance Safety Guide

Safety Standards Series No. RS-G-1.7

This Safety Guide provides guidance on the application of the concepts of exclusion, exemption and clearance as established in the International Basic Safety Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources. The Safety Guide includes specific values for activity concentrations for both radionuclides of natural origin and those of artificial origin that may be used for bulk amounts of material for the purposes of applying the concepts of exclusion and exemption.

STI/PUB/1202, 29 pp.; 0 figures; 2004, ISBN 92-0-109404-3, English.

http://www-pub.iaea.org/MTCD/publications/PDF/Pub1202_web.pdf

Subject Classification: 0609 - Radiation protection; 1300 - Environment.



Ano II - Nº 3-4/05 Março/Abril 2005



Occupational Radiation Protection in the Mining and Processing of Raw Materials Safety Guide

Safety Standards Series No. RS-G-1.6

This Safety Guide, which is jointly sponsored by the IAEA and the ILO, supersedes Safety Series No. 26, Radiation Protection of Workers in the Mining and Milling of Radioactive Ores (1983 Edition). Safety Series No. 26 dealt mainly with activities involving uranium or thorium ores. This Safety Guide updates the previous guidance material and extends its coverage to include activities involving all raw materials for which radiation protection measures need to be considered, as well as including additional guidance on authorization of mining and processing activities, inspection and compliance. The main purpose of this Safety Guide is to provide practical guidance on meeting the requirements of the Basic Safety Standards as they relate to the radiation protection of workers in the mining and processing of raw materials, and thus to facilitate the preparation and adoption, by Member States, of national and local regulations, rules, and working procedures in this area of industrial activity. This Safety Guide is aimed at regulatory bodies, operators of mines and mineral processing facilities, health and safety committees, workers and their representatives, and health and safety professionals.

STI/PUB/1183, 95 pp.; 0 figures; 2004, ISBN 92-0-115003-2, English.

http://www-pub.iaea.org/MTCD/publications/PDF/Pub1183_web.pdf

Subject Classification: 0601 - Uranium mining and milling; 0609 - Radiation protection.



Regulations for the Safe Transport of Radioactive Material

1996 Edition (As Amended 2003

SAFETY REQUIREMENTS

(6) IAEA

Regulations for the Safe Transport of Radioactive Material, 1996 Edition (As Amended 2003) Safety Requirements

Safety Standards Series No. TS-R-1

The transport regulations, first published in 1961, establish standards of safety to provide an acceptable level of control of radiation, criticality and thermal hazards to persons, property and the environment that are associated with the transport of radioactive material. Very high levels of safety have been achieved through the worldwide adoption of these Regulations. The regulations apply to the transport of radioactive material by all modes on land, in water, or in the air, including transport that is incidental to the use of the radioactive material. Transport comprises all operations and conditions associated with and involved in the movement of radioactive material, including the design, fabrication and maintenance of packaging, and the preparation, consigning, handling, carriage, storage in transit and receipt at the final destination of packages. This publication supersedes all previous editions, and its requirements took effect from 1 January 2005.

Contents: Section I. Introduction; Section II. Definitions; Section III. General provisions; Section IV. Activity limits and material restrictions; Section V. Requirements and controls for transport; Section VI. Requirements for radioactive materials and for packagings and packages; Secion VII. Test procedures; Section VIII. Approval and administrative requirements; Schedules of requirements for the transport of specified types of radioactive material consignments; Annex I. Summary of approval and prior notification requirements; Annex II. Conversion factors and prefixes.

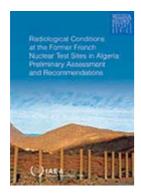
STI/PUB/1194, 228 pp.; 7 figures; 2004, ISBN 92-0-105704-0, English.

http://www-pub.iaea.org/MTCD/publications/PDF/Pub1194_web.pdf

Subject Classification: 0606 - Transport of radioactive material.



Ano II - Nº 3-4/05 Março/Abril 2005



Radiological Conditions at the Former French Nuclear Test Sites in Algeria: Preliminary Assessment and Recommendations

Radiological Assessment Reports

There are various locations around the world that have been affected by radioactive residues. Some of these residues are the result of past peaceful activities, while others result from military activities, including residues from the testing of nuclear weapons. Stimulated by concern about the state of the environment, movement away from military nuclear activities and improved opportunities for international cooperation, attention in many countries has turned to assessing and, where necessary, remediating areas affected by radioactive residues.

STI/PUB/1215, 60 pp.; 27 figures; 2005, ISBN 92-0-113304-9, English.

Subject Classification: 0609 - Radiation protection; 1300 - Environment.

http://www-pub.iaea.org/MTCD/publications/PDF/Pub1215_web.pdf



Energy Indicators for Sustainable Development: Guidelines and Methodologies

This publication presents a set of energy indicators for sustainable development and is a versatile analytical tool for countries to track their progress on energy for sustainable development. The thematic framework, guidelines, methodologies and energy indicators set out in this publication reflect the expertise of five international agencies and organizations (International Atomic Energy Agency, United Nations Department of Economic and Social Affairs, International Energy Agency, Eurostat and European Environment Agency) recognized worldwide as leaders in energy and environmental statistics and analysis. General guidelines and specific methodology sheets for 30 energy indicators are outlined in this report for statisticians, analysts, policy makers and academics to use in their efforts to analyse the effects of energy policies on the social, economic and environmental dimensions of sustainable development.

STI/PUB/1222, 161 pp.; 1 figures; 2005, ISBN 92-0-116204-9, English.

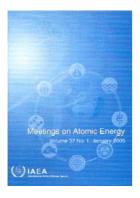
http://www-pub.iaea.org/MTCD/publications/PDF/Pub1222 web.pdf

Subject Classification: 0700 - Nuclear power; 0701 - Nuclear power planning and economics; 1300 - Environment.



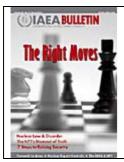
Ano II - Nº 3-4/05 Março/Abril 2005

Publicações Periódicas



Meetings on Atomic Energy Vol 37 nº 1, January 2005

Meetings on Atomic Energy is an edited worldwide listing of current and planned conferences, symposia, seminars, exhibitions and training courses related to nuclear energy and its peaceful uses. This on-line edition is updated regularly and features the most current information available to the IAEA. Use the search functions below to find information about meetings and training courses.



Magazines, Journals & Newsletters

Magazine

The IAEA Bulletin is the flagship magazine of the IAEA. Published since 1959 and now issued in Arabic, Chinese, English, French, Spanish and Russian editions, the Bulletin features essays and reports on issues influencing the IAEA and global nuclear developments.

http://www.iaea.org/Publications/Magazines/Bulletin/



Ano II - Nº 3-4/05 Março/Abril 2005





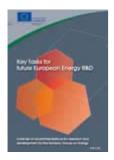
Nº 44 - February 2005

Features: Earth and Space: The planet and its mirror

Enlargement: Polish Excellence

Other articles: The double life of a citizen physicist / European science – from Nobel to Descartes / A helping hand for fledgling firms / What makes a man? / Dialling the 112 lifeline / ...

http://europa.eu.int/comm/research/rtdinfo/index en.html



Key Tasks for future European Energy R&D - A first set of recommendations for research and development by the Advisory Group on Energy

The objective of this first report is to identify key tasks for energy R&D in order to contribute to the definition of a possible energy RTD strategy, over various time horizons (short, medium, long-term) and to serve as an input for the shaping of future activities in energy research, carried out within the EU, at EC or national levels.

http://europa.eu.int/comm/research/energy/pdf/swog en.pdf



Assessing the Impact of Energy Research

Assessment of the impact of research is of real importance in today's world, partly because research is known to be a key factor in future economic growth and partly because of pressures for public accountability. Aware that, in the field of energy research, Member States were taking different approaches to evaluation and impact assessment, in June 2001 the European Commission brought together an informal group of experts with the aim of gaining an idea of the current status of these activities in the EU and establishing what might be done to improve standards and achieve harmonisation. The Group, known as EREVIA (Energy Research Evaluation and Impact Assessment), held six meetings over a period of 16 months. This report is based on the Group's presentations and discussions. Interim versions were considered at each of the Group's meetings.

http://europa.eu.int/comm/research/energy/pdf/erevia en.pdf



Ano II - Nº 3-4/05 Março/Abril 2005



NUCLEAR ENERGY AGENCY



Radioactive Waste Management

Stability and Buffering Capacity of the Geosphere for Long-term Isolation of Radioactive Waste

Application to Argillaceous Media - "Clay Club" Workshop Proceedings - Braunschweig, Germany, 9-11 December 2003

OECD Publishing



Ano II - Nº 3-4/05 Março/Abril 2005

Publicações Portuguesas Oferecidas

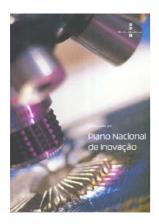


Comunicações do IGM

Tomo 90 (2003)

Versão online:

http://www.igm.ineti.pt/edicoes_online/comunicacoes/tomo90.htm



Bases para um Plano Nacional de Inovação

... Na sequência do trabalho conjunto que tem vindo a ser realizado, nos últimos meses, pelo Ministério das Actividades Económicas e do Trabalho e pelo Ministério da Ciência, Inovação e Ensino Superior foi elaborado um documento que faz o balanço das acções realizadas com vista ao estabelecimento de um Plano Nacional de Inovação.....

http://www.mcies.pt/docs/ficheiros/Doc_principal.pdf



Ano II - Nº 3-4/05 Março/Abril 2005

TESES DE LICENCIATURA

ELIN FIGUEIREDO, A Espectrometria de Fluorescência de Raios X na Caracterização Química de um Conjunto de Artefactos Metálicos Pré-históricos do Castro de Pragança, Licenciatura em Conservação e Restauro, Universidade Nova de Lisboa, Faculdade de Ciências e Tecnologia, 2005. Orientadores: Prof. Dra. Raquel Henriques da Silva, Prof. Dr. João M. Peixoto Cabral e Dra. Maria de Fátima Araújo.