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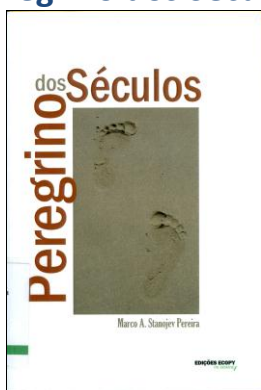


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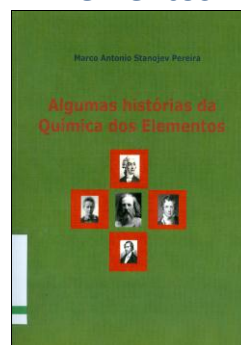
Livros Oferecidos

Peregrino dos Séculos



Marco António Stanojev Pereira

Algumas histórias da Química dos Elementos



Marco António Stanojev Pereira



United Nations



UNIDIR
UNITED NATIONS INSTITUTE
FOR DISARMAMENT RESEARCH



Viewing Nuclear Weapons through
a Humanitarian Lens

John Borrie & Tim
Caughley (eds)
2013, 170 p.

Versão em PDF

Publicações Oferecidas



Operating Experience with Nuclear Power Stations in Member States in 2012 — 2013 Edition (CD-ROM)

Operating Experience with Nuclear Power Stations in Member States

Subject Classification: -STI/PUB/1620(ISBN:978-92-0-194310-1)
3528 pp.; **Language: English**, Date Published: 2013

Disponível em CD.



DESCRIPTION

This CD-ROM contains the 44th edition of the IAEA's series of annual reports on operating experience with nuclear power plants in Member States. It is a direct output from the IAEA's Power Reactor Information System (PRIS) and contains information on electricity production and overall performance of individual plants during 2012. In addition to annual information, the report contains a historical summary of performance during the lifetime of individual plants and figures illustrating worldwide performance of the nuclear industry. The CD-ROM contains also an overview of design characteristics and dashboards (not included into the web version) of all operating nuclear power plants worldwide.

Proceedings Series - International Atomic Energy Agency



Preparing for Future Verification Challenges: Summary of an International Safeguards Symposium held in Vienna, 1–5 November 2010

Proceedings Series - International Atomic Energy Agency

Subject Classification: 0402 Hydrology
STI/PUB/1580(ISBN:978-92-0-15610-9) 1165 pp.;
Language: English

[Download Volume 1 of this book, PDF, 19.06 MB:](#)

[Download Volume 2 of this book, PDF, 24.214 MB:](#)

DESCRIPTION

This publication presents the proceedings of the latest IAEA symposium on isotopes in hydrology, marine ecosystems and climate change studies. At the symposium, five major topics were addressed through invited talks and oral presentations. These five sessions covered: the role of isotopes in understanding and modelling climate change, marine ecosystems and the water cycle; carbon dioxide sequestration and related aspects of the carbon cycle, such as ocean acidification; isotopes and radionuclides in the marine environment, groundwater assessments for large aquifers; analytical methods and instrumentation for the application of isotopes in environmental, climate and hydrological studies. Leading scientists in the field of climate change and hydrology, as well as representatives from climate change and environmental bodies and organizations, exchanged their views and experience.



Management and Storage of Research Reactor Spent Nuclear Fuel: Proceedings of a Technical Meeting held in Thurso, United Kingdom, 19–22 October 2009

Proceedings Series - International Atomic Energy Agency

Subject Classification: 0803-Spent fuel management

STI/PUB/1592(ISBN:978-92-0-138210-8) 262 pp.

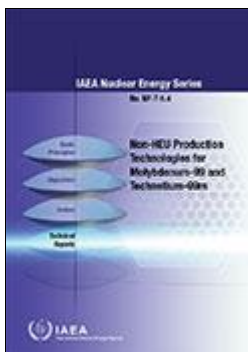
Language: English

Versão em PDF

DESCRIPTION

The intermediate storage of research reactor spent nuclear fuel is a real challenge for operators, as this period in some cases can extend for over 50 years until a final decision is made. This publication presents the proceedings of a technical meeting to discuss good practices for the management and storage of research reactor spent fuel. The information provided on these issues will be of interest to managers of research reactors and research reactor spent nuclear fuel facilities.

IAEA Nuclear Energy Series



Non-HEU Production Technologies for Molybdenum-99 and Technetium-99m

IAEA Nuclear Energy Series NF-T-5.4

Subject Classification: 0103-Medical physics (including dosimetry)

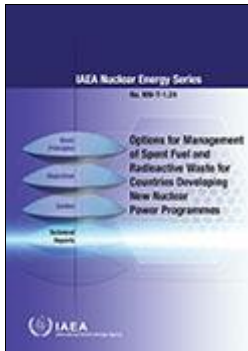
STI/PUB/1589(ISBN:978-92-0-137710-4)

Language: English

Versão em PDF

DESCRIPTION

Technetium-99m (^{99m}Tc) is used in approximately 85% of diagnostic imaging procedures in nuclear medicine worldwide. Interruptions in the supply of molybdenum (^{99}Mo), which is used to produce ^{99m}Tc , prompted governments and international agencies to step up efforts to identify both short- and long-term solutions to supply shortages. These calls for action resulted in economic and technology studies on the ^{99}Mo supply chain. The present publication supports global efforts to eliminate the civilian use of highly enriched uranium in $^{99}\text{Mo}/^{99m}\text{Tc}$ production and proposes several alternative or supplementary technologies.



Options for Management of Spent Fuel and Radioactive Waste for Countries Developing New Nuclear Power Programmes

IAEA Nuclear Energy Series NW-T-1.24

Subject Classification: 0804-Waste management
STI/PUB/1601(ISBN:978-92-0-140710-8) 54 pp.;7 figures;

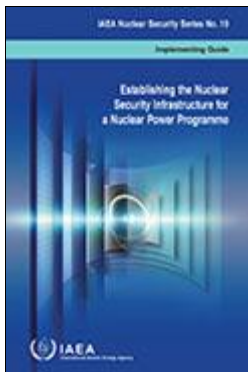
Language: English

Versão em PDF

DESCRIPTION

Countries embarking upon a nuclear power programme should understand the importance of establishing an adequate radioactive waste and spent nuclear fuel management infrastructure. To assist in overcoming any challenges this might represent, this publication provides an overview of management practices in use in mature nuclear power programmes. Primarily addressing decision makers, it provides them with the level of strategic and technical information needed to understand overarching management issues of the various waste streams and spent fuel generated in nuclear power production. In addition it examines the political, legal, societal, economic and technical challenges associated with each of the strategic options considered.

IAEA Nuclear Security Series



Establishing the Nuclear Security Infrastructure for a Nuclear Power Programme

IAEA Nuclear Security Series 19

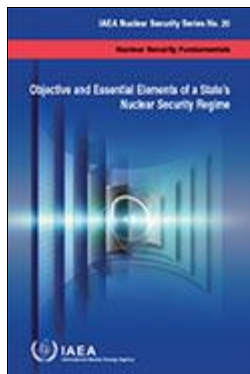
Subject Classification: 1400-Physical protection of radioactive material
STI/PUB/1591(ISBN:978-92-0-138010-4) 73 pp.;1 figures;

Language: English

Versão em PDF

DESCRIPTION

This publication provides guidance on the actions to be taken by a State in implementing an effective nuclear security infrastructure for a nuclear power programme. The topics covered are: development of national policy and strategy; common nuclear security measures; infrastructure issues relating to nuclear and other radioactive material; associated facilities; and cooperation with other States. The guidance provided is intended primarily for use by national policy makers, national legislators, competent authorities, institutions and individuals involved in the establishment, implementation, maintenance or sustainability of the nuclear security infrastructure for a nuclear power programme.



Objective and Essential Elements of a State's Nuclear Security Regime

IAEA Nuclear Security Series 20

Subject Classification: 1400-Physical protection of radioactive material
STI/PUB/1590(ISBN:978-92-0-137810-1) 15 pp.

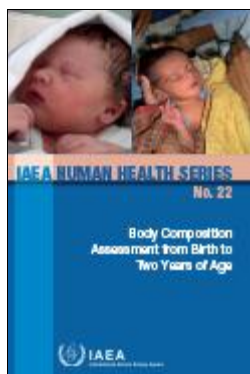
Language: English

Versão em PDF

DESCRIPTION

This IAEA Nuclear Security Series publication provides nuclear security fundamentals, recommendations, and supporting guidance for Member States to assist them in implementing new nuclear security regimes, or in reviewing and if necessary strengthening existing ones. The IAEA Nuclear Security Series also serves as guidance for Member States with respect to their activities in relation to binding and non-binding international instruments. The Nuclear Security Fundamentals are the primary publication in the IAEA Nuclear Security Series, and set out the objective of an effective national nuclear security regime and essential elements of such a regime. They are aimed at national policy makers, legislative bodies, competent authorities, institutions, and individuals involved in the establishment, implementation, maintenance or sustainability of a State's nuclear security regime.

IAEA Human Health Series



Body Composition Assessment from Birth to Two Years of Age

IAEA Human Health Series 22

Subject Classification: 0100-Life Sciences
STI/PUB/1550(ISBN:978-92-0-127710-7) 62 pp.;21 figures;

Language: English

Versão em PDF

DESCRIPTION

This publication was developed by an international group of experts as an integral part of the IAEA's efforts to contribute to the transfer of technology and capacity building in this field in order to assist Member States in their efforts to improve the nutrition and health of the most vulnerable population groups, infants and young children. The book provides practical information on the assessment of body composition from birth up to two years of age and is intended for nutritionists, paediatricians and other health professionals. The body composition assessment techniques included in this publication were selected as methodologies with the highest potential for standardization globally — based on considerations such as access to equipment, cost and the training needs of staff — and include stable isotope dilution for total body water assessment, as well as dual energy X ray absorptiometry and air displacement plethysmography. In addition, the importance of standardization of anthropometric measurements is highlighted in this book, as basic measurements of body weight and length are crucial for accurate body composition assessment.



Roles and Responsibilities, and Education and Training Requirements for Clinically Qualified Medical Physicists

IAEA Nuclear Security Series 25

Subject Classification: 0103-Medical physics (including dosimetry)
 STI/PUB/1610(ISBN:978-92-0-142010-7) 71 pp.;2 figures;

Language: English

Versão em PDF

DESCRIPTION

This publication addresses the shortfall of well trained and clinically qualified medical physicists working in radiation medicine. The roles, responsibilities and clinical training requirements of medical physicists have not always been well defined or well understood by health care professionals, health authorities and regulatory agencies. To fill this gap, this publication provides recommendations for the academic education and clinical training of clinically qualified medical physicists, including recommendations for their accreditation certification and registration, along with continuous professional development. The goal is to establish criteria that support the harmonization of education and clinical training worldwide, as well as to promote the recognition of medical physics as a profession.



Standard Operating Procedures for PET/CT: A Practical Approach for Use in Adult Oncology

IAEA Nuclear Security Series 26

Subject Classification: 0101-Nuclear medicine (including radiopharmaceuticals)
 STI/PUB/1616(ISBN:978-92-0-143710-5) 116 pp.;19 figures;

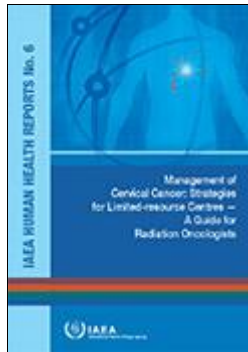
Language: English

Versão em PDF

DESCRIPTION

This publication provides guidance to Member States for the development of, or improvement of nuclear security systems and measures for the detection of criminal or unauthorized acts with nuclear security implications involving nuclear and other radioactive material out of regulatory control. It describes the elements of an effective nuclear security detection architecture which is comprised of an integrated set of nuclear security systems and measures, and is based on an appropriate legal and regulatory framework for the implementation of the national detection strategy. The publication is an implementing guide within the IAEA Nuclear Security Series publications and is intended for use by national policy makers, legislative bodies, competent authorities, institutions, and individuals involved in the establishment, implementation, maintenance or sustainability of nuclear security systems and measures for the detection of nuclear and other radioactive material out of regulatory control.

IAEA Human Health Reports



Management of Cervical Cancer: Strategies for Limited-resource Centres - A Guide for Radiation Oncologists

IAEA Human Health Reports 6

Subject Classification: 0100-Life Sciences

STI/PUB/1556 (ISBN:978-92-0-128810-3) 77 pp.; 17 figures;

Language: English

Versão em PDF

DESCRIPTION

Clinical guidelines for the management of cervical cancer exist in the published literature. However, these guidelines have usually been developed in and for an affluent environment where all modern diagnosis and treatment modalities and tools are available to the practitioner. This publication is aimed at radiation oncologists working in centres with limited resources and treating a large number of patients with cervical cancer. The approach and techniques recommended are intended to be evidence based, simple, feasible and resource-sparing, to the extent that this is possible when dealing with a complex treatment modality such as radiotherapy.



Record and Verify Systems for Radiation Treatment of Cancer: Acceptance Testing, Commissioning and Quality Control

IAEA Human Health Reports 7

Subject Classification: 0100-Life Sciences

STI/PUB/1607 (ISBN:978-92-0-141710-7) 39 pp.; 1 figures

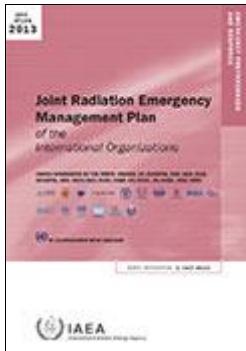
Language: English

Versão em PDF

DESCRIPTION

This publication serves as a useful guide for medical physicists in radiation oncology, radiation oncologists and radiation therapists, ensuring accuracy, safety and quality in radiation therapy. Record and verify systems (RVSS) were developed to reduce the risk of treatment errors in radiation oncology. These have recently evolved into complete radiotherapy information management systems that interface with imaging systems, treatment planning computers, and treatment delivery systems. To function as intended, RVSS must be subject to a comprehensive quality assurance (QA) programme. This publication provides practical guidelines for a comprehensive QA programme and its implementation. It describes the QA programme, including acceptance tests and the commissioning process that should be used in conjunction with the installation of a new RVSS. It is also highlighted that some of the tests performed at installation must be repeated regularly as part of the periodic quality control checks.

Emergency Preparedness and Response



Joint Radiation Emergency Management Plan of the International Organizations EPR-JPLAN (2013)

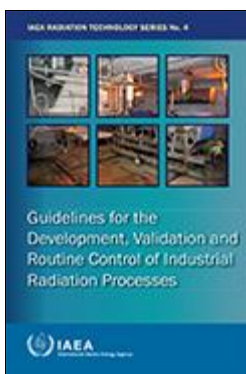
Emergency Preparedness and Response

Subject Classification: -EPR-JPLAN (2013)121 pp.;13 figures;

Language: English

Versão em PDF

IAEA Radiation Technology Series



Guidelines for Development, Validation and Routine Control of Industrial Radiation Processes

IAEA Radiation Technology Series 4

Subject Classification: 0501-Radiation processing

STI/PUB/1581(ISBN:978-92-0-135710-6) 129 pp.;15 figures;

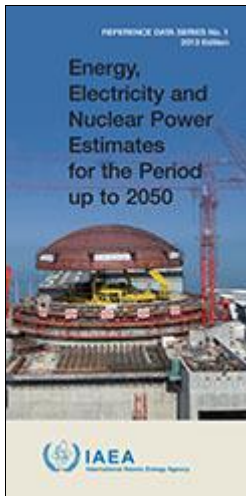
Language: English

Versão em PDF

DESCRIPTION

Quality assurance is vital for the success of radiation technologies and requires the development of standardized procedures and the harmonization of process validation and control. The guidelines in this publication have been developed based on requests from Member States to provide guidance on fulfilling the requirements of the International Standard for Development, Validation and Routine Control for a Radiation Process, published by the International Organization for Standardization (ISO). While the ISO standard was developed for the sterilization of healthcare products, the present guidelines are generalized and are therefore relevant to any radiation process. This is possible since the principles involved in regulating a radiation process for achieving quality products are generally the same for any product or application. In several places, additional information has been included to provide insight into the radiation process that could help irradiator operators and their quality managers to provide better service to their customers

Reference Data Series



Energy, Electricity and Nuclear Power Estimates for the Period up to 2050 2013 Edition

Reference Data Series 1

Subject Classification: 0701-Nuclear power planning and economics

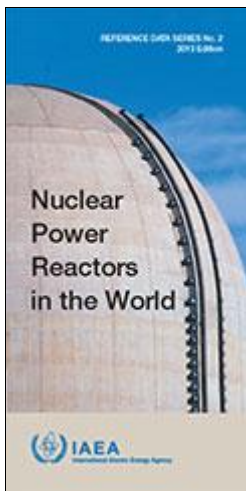
IAEA-RDS-1/33

ISBN:978-92-0-111910-0, 53 pp.

[Versão em PDF](#)

DESCRIPTION

The 33rd edition of the annual Reference Data Series No.1 contains estimates of energy, electricity and nuclear power trends up to the year 2050, using a variety of sources, such as the IAEA's Power Reactor Information System and data prepared by the United Nations.



Nuclear Power Reactors in the World 2013 Edition

Reference Data Series 2

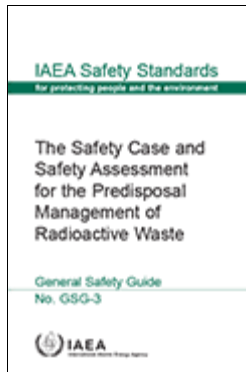
Subject Classification: 0700-Nuclear power IAEA-RDS-2/33

(ISBN:978-92-0-144110-2) 80 pp.;6 figures;

[Versão em PDF](#)

DESCRIPTION

This is the 33rd 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 2012 on: power reactors operating, under construction, and shut down; and performance data on reactors operating in the IAEA Member States, as reported to the IAEA. The information is collected through designated national correspondents in the Member States and the data area used to maintain the IAEA's Power Reactor Information System (PRIS).

IAEA Safety Standards Series**The Safety Case and Safety Assessment for the Predisposal Management of Radioactive Waste***IAEA Safety Standards Series GSG-3*

Subject Classification: 0611-Radioactive waste management

STI/PUB/1576(ISBN:978-92-0-134810-4)

Language: English**Versão em PDF****DESCRIPTION**

This Safety Guide provides recommendations and guidance for the development and regulatory review of the safety case and supporting safety assessment throughout the lifetime of a facility. The recommendations and guidance provided in this Safety Guide can be used irrespective of how the safety case and safety assessment processes are addressed within national regulatory frameworks. It summarizes the most important considerations in assessing and demonstrating the safety of facilities and activities and recommends the steps that should be followed in developing the safety case and performing the safety assessment.