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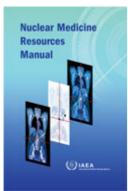




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Publicações Oferecidas





Nuclear Medicine Resources Manual

This resources manual provides comprehensive guidance at an international level in many aspects of nuclear medicine practice, including education, training, facilities and equipment, quality systems, and radiopharmacy and clinical practice. The manual has been written with routine clinical practice in mind and therefore provides advice on many practical points that should help both new and also more developed nuclear medicine centres. The new centres will find specific information essential for setting up the provision of the service, and the more developed centres will find numerous updated protocols and suggestions on improving operational performance. The manual will be of interest to nuclear medicine physicians, radiologists, medical educationalists, diagnostic centre managers, medical physicists, medical technologists, radiopharmacists, specialist nurses, clinical scientists, laboratory scientists, and those engaged in high quality systems in public health.

STI/PUB/1198, 529 pp.; 55 figures; 2006, ISBN 92-0-107504-9, English.

http://www-pub.iaea.org/MTCD/publications/PDF/Pub1198_web.pdf

Subject Classification: 0101 - Nuclear medicine (including radiopharmaceuticals).



Sterile Insect Technique

Principles and Practice in Area-Wide Integrated Pest Management

Dyck, V.A.; Hendrichs, J.; Robinson, A.S. (Eds.)

2005, XIV, 787 p., Hardcover ISBN: 1-4020-4050-4

Summary

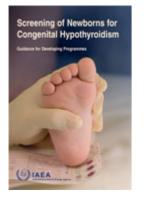
The 28 chapters of this book, written by 50 authors from around the world, review all aspects of the SIT. The book covers a wide variety of topics written from a generic perspective: History and principles of the SIT, Technical components of the SIT, Supportive technologies to improve the SIT, Economic, environmental and management considerations, Application of the SIT, Impact of area-wide IPM programmes that integrate the SIT, and Future development of the SIT.

Table of Contents (PDF):

http://www-naweb.iaea.org/nafa/ipc/public/sit-tablecontents.pdf



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Screening of Newborns for Congenital Hypothyroidism Guidance for Developing Programmes

Congenital hypothyroidism, when undiagnosed or if there is a lack of proper treatment management, results in an unnecessary health, economic and social burden. Formalized screening programmes to detect congenital hypothyroidism in newborn infants, and its timely treatment, can prevent lifelong human suffering caused by severe mental retardation. With the involvement of the IAEA, such screening programmes have been introduced successfully in a large number of countries. However, in many other countries, such programmes have not yet been established. This publication is intended to assist these countries in establishing and sustaining a comprehensive screening system for newborns and draws on experience gained over more than a decade. It provides information for making sound screening policy decisions and describes how a newborn screening system. The intended result is that more successful programmes will be established bringing about a significant improvement in child health care, worldwide

STI/PUB/1234, 122 pp.; 36 figures; 2006, ISBN 92-0-109905-3, English. Date of Issue: 10 February 2006.

http://www-pub.iaea.org/MTCD/publications/PDF/Pub1234_web.pdf

Subject Classification: 0100 - Life Sciences.

Safety Reports Series



Development and Review of Plant Specific Emergency Operating Procedures

Safety Reports Series No. 48

Emergency operating procedures (EOPs) are essential for maintaining the fundamental safety functions and for preventing core damage during both design basis accidents and beyond design basis accidents in nuclear power plants (NPPs). This publication is applicable for all reactor technologies and comprehensively deals with all aspects of the development, implementation and review of EOPs using state-of-the-art experience. The primary objective of this publication is to provide guidance and to be used as a reference for teams of experts in charge of the development or review of EOPs at specific NPPs.

STI/PUB/1226, 92 pp.; 3 figures; 2006, ISBN 92-0-103705-8, English.

http://www-pub.iaea.org/MTCD/publications/PDF/Pub1226_web.pdf

Subject Classification: 0603 - Nuclear power plants; 0610 - Accident response; 0702 - Nuclear power operations.



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Technical Report Series



() IAEA

Remediation of Sites with Mixed Contamination of Radioactive and Other Hazardous Substances

Technical Reports Series No. 442

The IAEA attaches great importance to the dissemination of information that can assist Member States with the development, implementation, maintenance and continuous improvement of systems, programmes and activities that support the management of the legacies of past practices and accidents. In response to this, the IAEA has initiated a comprehensive programme of work covering all aspects of environmental remediation. Mixed radioactive and hazardous substances contamination poses a particular challenge because of the combination of types of hazards and potential exposures. While radionuclides and toxic (heavy) metals pose similar and mostly compatible challenges, organic contaminants often require different approaches that may not be compatible with the former. Additional complexity is introduced into the problem by a different and sometimes conflicting regulatory framework for radiological and non-radiological contamination, including the prescribed waste management routes. In consideration of the added complexities of remediating 'mixed' contamination, the IAEA has determined that this subject sufficiently warrants the development of a specialized report for assisting Member States.

STI/DOC/010/442, 232 pp.; 27 figures; 2006, ISBN 92-0-104705-3, English.

http://www-pub.iaea.org/MTCD/publications/PDF/TRS442_web.pdf

Subject Classification: 0804 - Waste management

IAEA - TECDOC



Radiation Treatment of Gaseous and Liquid Effluents for Contaminant Removal Proceedings of a Technical Meeting held in Sofia, Bulgaria, 7-10 September 2004

IAEA TECDOC Series No. 1473

Strategies to tackle environmental pollution have been receiving increasing attention throughout the world in recent years. Power generation using fossil fuel such as coal, natural gas and petroleum is responsible for the release of pollutants into the atmosphere along with the off-gases from industries, power stations, residential heating systems and vehicles. During the combustion process various pollutants such as fly ash, sulphur oxides (SO2 and SO3), nitrogen oxides (NOx = NO2 + NO) and volatile organic compounds are emitted. Radiation processing using electron beam accelerators has shown very promising results in this regard. Over the last few years, radiation treatment techniques have been developed and deployed for ensuring environmental safety from gaseous and liquid effluents. It has been demonstrated that electron beam flue gas treatment (SOx and NOx removal), wastewater purification and sludge hygienization can be effectively deployed. This publication provides a good summary of all the relevant information in this field.

IAEA-TECDOC-1473, 2005, ISBN 92-0-110405-7, English.

http://www-pub.iaea.org/MTCD/publications/PDF/te_1473_web.pdf

Subject Classification: 0501 - Radiation processing.



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NUCLEAR ENERGY AGENCY

Download complete issue (pdf format, 1.025 mb)

2005 Volume 23, No. 2

Editorial - Luis E. Echávarri, NEA Director-General Facts and opinions Nuclear energy and the security of supply

Security of energy supply was a major concern for OECD governments in the early 1970s. Since then, successive oil crises, volatility of hydrocarbon prices, as well as terrorist risks and natural disasters, have brought the issue back to the centre stage of policy agendas.

Evolving roles and responsibilities in radiological protection

One of the only truly consistent things in life is the knowledge that things will continue to change. In the area of radiological protection, change is not always fast, and it is not always deep, but it has clearly been present over the past 10 to 20 years. These changes will all have more or less profound effects on the roles and responsibilities of the radiological protection profession. This article presents an initial analysis of these changes, with a view to helping those concerned be better prepared to meet the challenges that may arise. The NEA and the IAEA: partnering for progress

We are often asked, "What is the difference between the OECD Nuclear Energy Agency (NEA) and the International Atomic Energy Agency (IAEA)?" Or, to put it bluntly, why are two international intergovernmental agencies needed in the nuclear field?

NEA updates

Funding the decommissioning of nuclear power plants Lessons from 40 years of nuclear safety and regulation Over a decade of nuclear emergency management at the NEA Focus on safety: the FIRE Project

News briefs

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KIDinfo Magazine on European Research N° 48 - February 2006

http://europa.eu.int/comm/research/rtdinfo/48/index_en.html

FEATURES



The oceans and climate

The oceans store heat and marine currents distribute it to the four corners of the globe. They store large quantities of atmospheric CO2 while the seabed produces and stores vast quantities of methane. How could climate warming upset this complex ecosystem?

SOLVAY COUNCIL

A scientific conclave and public meeting

December 2005 saw the 23rd Solvay Council and what has become a traditional gathering of Nobel Prize laureates and Fields Medal holders. The subject of discussion on this occasion was the quantum structure of time and space. The three days of debate for the scientists were followed – as a fitting culmination to the Year of Physics – by a public meeting that gave rise to passionate exchanges between the public who attended in large numbers and the scientists who were eager to communicate.

THE SOLVAY COUNCIL

Concerted voices on strings

Quantum mechanics describes the world of the infinitely small, explaining the very special interactions at particle level. Einstein's theory of general relativity applies to the infinitely big, combining space and time within a single entity (space-time) whose deformation explains the universal gravitational attraction between the large galactic and stellar objects in the universe. The major challenge for contemporary physics is to make the link between these two approaches and formulate a new unified theory – to which scientists have already given the name 'quantum gravity'. Initiated in the 1970s, the development of the 'strings' mathematical approach is raising huge hopes of achieving this. Explanations from Robbert Dijkgraaf, Professor at Amsterdam University (NL), and from Brian Greene, Professor at Columbia University (US), two of the guests at the Solvay Council who spoke at the public conference that closed this scientific meeting.

SPACE RESEARCH

Women WISE up for space

The mind boggles! A group of women in excellent physical and mental health agreed to spend 60 days in a confined space, cut off from any direct contact with the outside world. During these two months they did not leave their beds once and remained permanently in a near-horizontal position, with the head slightly lower than the feet. They followed a very strict diet, a regime of specially designed physical exercises, and were subjected to daily medical checks. These women volunteers on the WISE(1) international project did it all in the interests of space and medical research, thinking of the cosmonauts which they themselves would never be. RTD *info* looks at a very unique experience.







RENEWABLE ENERGIES

The wild card of distributed production

The effective liberalisation of electricity production, distribution and marketing, formerly protected by centralised and monopolistic systems, is completely changing the European energy market. Provided it can succeed in offering kilowatt-hours at increasingly competitive rates, renewable energy has an excellent opportunity to win a share of the market as an inherent part of the innovative approach known as 'distributed production'. Over the past five years, the consortium of 32 partners working on the *Dispower* (1) European project has been engaged in research that is today making it possible to propose technological solutions and management tools for the opening up of networks, as well as the economic models needed to rise to this challenge.

ALTERNATIVES TO EXPERIMENTS USING ANIMALS

Action stations for in vitro

Tuesday 13 December 2005 was an important day for the chemicals sector. It was then that the EU Competition Council gave the green light for the entry into force of the famous REACH legislation. Industrialists are now obliged to organise a vast evaluation and control exercise to ensure the safety for human health and the environment of almost 30 000 chemicals currently available on the market. While REACH is an historic advance for public health and the quality of life, its implementation raises the controversial and far from secondary issue of a massive increase in experiments inflicting suffering on animals. The desire to limit substantially the hecatomb among laboratory animals is serving to shed the spotlight on progress in *in vitro* tests. In many respects, the latter could even prove scientifically superior in guaranteeing that chemical molecules are without risk to man or nature.

PORTRAIT

Wolfgang Heckl's straight talking

Recognised as one of Europe's leading pioneers in the nanosciences and their applications, Wolfgang Heckl has been committed to the cause of sharing knowledge and making it accessible to all since a very young age. A long-standing firm favourite with the German media, today he is also known outside national borders with a reputation that, in 2004, brought him the Descartes Prize for science communication. RTD *info* presents a profile of a very warm and friendly biophysicist who is Professor of experimental physics at the *Ludwig-Maximilians* University as well as Director of Munich's famous *Deutsche Museum*

MARIE CURIE ACTIONS – EXCELLENCE AWARDS The added value of mobility

Through its Marie Curie Actions, the EU makes a significant contribution to the mobility of young people who are attracted to research and want to make it their career. The annual Excellence Awards – or 'EXA' for short – are part of this approach and are awarded to researchers who seized the opportunity to work beyond their national borders and made their mark at the highest level of research in their field. At a ceremony in Dublin, in December 2005, a scientific jury chaired by Jocelyn Bell Burnell – the British astrophysicist who was involved in the discovery of pulsars – named the five winners of the 2005 awards. Below are brief profiles of these notable representatives of the up and coming generation of European excellence.

POLITICAL SCIENCES

Analysis of a stalled constitution

Like the Tower of Babel, it was at the closing stages when the vast political enterprise that was supposed to culminate in a constitution for the European Union ultimately failed, felled by a double French and Dutch 'no' in their referendums. The tortuous path that led to the text being drawn up by the 'Giscard' Convention, adopted at intergovernmental level after a laborious process of introducing amendments, and then launched perilously for ratification in the Member States is an experience that was studied 'live' and in depth by political science researchers with the dosei project (1). they highlight the conflicting and paralysing national preferences against which europe has been struggling for more than a decade in seeking desperately to define its goals and reform its functioning.









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