REPROLAM
Red de Optimización de Protección Radiológica Ocupacional en LatinoAmerica y Caribe

NEWSLETTER

NUMBER 4, APRIL 2022

ISODOSIS
DOSIMETRÍA
COMPUTACIONAL

REPROLAM
BASES OF THE SURVEY ON DOSIMETRY COMPUTATIONAL

The survey presented here is part of a series of regional surveys, promoted by REPROLAM and supported by the IAEA (under project RLA9088), which aim to strengthen regional capacities so that end users and technical support organizations (TSO) comply with the requirements of occupational radiological protection. This specific survey seeks to reveal the current situation of Computational Dosimetry in Latin America and the Caribbean in terms of capabilities and needs.

This survey, prepared online, covers all the people and groups that use numerical methods (Monte Carlo) in the area of dosimetry and radiological protection in the countries of the Region.

The survey is individual in order to facilitate contact for future training, software distribution, intercomparisons, etc.

The final product of the survey will be a report that will identify the capabilities and needs in the field of Computational Dosimetry and Occupational Radiological Protection in Latin America and the Caribbean.

The survey consists of the following sections:

- Personal information
- Institution where you work
- Use of the Monte Carlo methodology
- Monte Carlo code
- Intercomparisons
- Cluster
- Training
- Suggestions and comments

The survey will be available from April 2

The survey link is: **https://forms.office.com/r/R2Mz4ag3ZN**

The survey will remain on the REPROLAM page, **http://www.reprolam.com/**

The report will be made with the information collected until April 30

In case of doubts, you can send your query to Sebastian Gossio (sebastian.gossio2010@gmail.com)

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SAFETY FIRST

Space dedicated to common understanding and the promotion of Safety Culture through information, analysis, dissemination of experiences and related news.

SAFETY CULTURE WHY SO MANY CONCEPTS? WHICH TO CHOOSE?

It is enough to do a quick Internet search on the definition of Safety Culture to verify the diversity of concepts that exist for this term. This is fundamentally due to the complexity of this concept and the difficulty that has existed in achieving its understanding and practical assimilation since its appearance, after the accident at the Chernobyl Nuclear Power Plant. Some authors, organizations or industry sectors have made their own formulations in search of greater clarity or to adapt them to a certain work environment or to the particularities of an industry or sector. On the other hand, advances in the knowledge and study of this concept have revealed the key importance, within this topic, of some elements such as leadership, shared values, basic beliefs, decision-making, among other aspects. , which some authors have considered important to highlight in their definitions. Here are just a few definitions of Safety Culture:

CONCEPT	SOURCE/ENVIRONMENT
Set of characteristics and attitudes in organizations and individuals that establish that, as a top priority, nuclear power plant safety issues receive the attention they deserve based on their significance.	IAEA INSAG 4, Safety Culture, Nuclear Safety
It is the product of individual and group values, attitudes, perceptions, competencies, and behavior patterns that determine commitment to, and the style and capability of, the organization's security management system.	Advisory Committee on Safety of Nuclear Installations, Human Factors Study Group Nuclear Safety
Safety Culture refers to the enduring values, priority and commitment that is placed on safety by every individual and every group at every level of the organization. It reflects individual, group and organizational attitudes, norms and behaviors related to the safe provision of air navigation services.	CANSO Air navigation services organization. Aviation Safety
An organization's values and behaviors modeled by its leaders and internalized by its members, which serve to make nuclear safety the highest priority.	Institute of Nuclear Power Operations, 2004 [38]/ Nuclear Safety
Set of characteristics and attitudes in organizations and individuals that establishes that, with a paramount priority, the issues of protection and security receive the attention that their importance requires	IAEA International Basic Safety Standards, 2014 [11]/ Radiological Protection and Safety

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CONCEPT	SOURCE/ENVIRONMENT
The Safety Culture is the set of practices (ways of doing) and mentality (ways of thinking) that are widely shared by the members of an organization in terms of controlling the most significant risks associated with their activities.	ICSI Institute for an Industrial Safety Culture Industrial Safety
Patient safety culture is the extent to which an organization's beliefs, values, and norms support and promote patient safety. Those beliefs extend to all levels of the organization (/eg system, department, unit) and influence the actions and behaviors of staff throughout the organization.	AHRQ Agency for Healthcare Research and Quaility Patient Safety
Safety culture refers to the interaction between the requirements of the safety management system (SMS), the way people interpret them, according to their attitudes, values and beliefs, and the way they actually act, which is reflected in their decisions and behavior. The hallmark of positive safety culture is the common behavior of managers and employees to always act safely, especially when confronted with competing targets.	European Union Agency for Railways Railway Security

After an extensive review of these and other definitions, the Ibero-American Forum of Nuclear and Radiological Regulatory Bodies (FORO) defined the Culture of Safety in the field of activities with sources of ionizing radiation as:

"The Safety Culture in Organizations that carry out activities with radiation sources is the set of characteristics and attitudes in Organizations, their managers and workers that ensure that, as an absolute priority, Safety issues receive the attention they deserve due to their importance. ".

It should be noted that in this definition, in addition to the emphasis placed on certain cultural elements, only the word "Safety" is used, and the fact is that the concept attempts to integrate under a single safety culture the aspects of radiological protection of people and the environment. environment and radiological and physical safety of sources of ionizing radiation. In this way, the concept adheres to the most advanced trend that recognizes that in terms of Safety Culture both issues, radiological safety and physical safety, cannot be seen within an Organization as independent Safety Cultures but as a Safety Culture encompassing both.

If you are a manager or work promoting the Safety Culture in your organization, remember that, whatever the concept of safety culture that you adopt, its fundamental essence must be the priority of safety as a value shared by all, all levels of the organization.

Rubén Ferro (Cuba) y Renán Ramírez (Perú)

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INTERNATIONAL RADIOLOGICAL PROTECTION SCHOOL (IRPS) - 2022 EDITION

22 - 26 AUGUST 2022
STOCKHOLM UNIVERSITY, SWEDEN

Applications for the fourth session of the International Radiological Protection School (IRPS) are now open.

Although feedback was generally positive after conducting the IRPS fully online in 2021 due to the COVID-19 pandemic, a follow-up survey among participants and speakers confirmed that a face-to-face format should be prioritized for the organization of future editions of the IRPS. . Accordingly, the 2022 edition of the IRPS is scheduled to take place in person in Stockholm on August 22-26, 2022, following the successful cooperation with the Swedish Radiation Safety Authority (SSM) and the Radiation Protection Research Center (CRPR).) from Stockholm University.
The IRPS-2022 programme, which is currently being finalized, will be designed to provide participants with an in-depth understanding of the international radiation protection system, how it is intended to be interpreted for application in diverse and emerging circumstances, and how it is evolving based on of new scientific knowledge and lessons learned. The school will be driven by the same spirit of knowledge transfer that prepares tomorrow's leaders in radiation protection by learning from today's experts as in previous editions. Renowned experts in the multidisciplinary area of radiation protection will deliver comprehensive lectures and illustrative interactive case studies. To get a general impression of the IRPS structure and program, Table 1 provides a preliminary schedule and Table 2 describes the preliminary content of the learning modules. More information and a final program will be sent to admitted participants in due course.

Table 1: IRPS-2022 indicative schedule. All times are provided in CEST. A number of extracurricular activities are planned for some evenings after the conferences end, depending on the possibilities and circumstances at the time of school. Details will be provided to admitted participants in due course.

Day 0 21. August	**Day 1** 22. August	**Day 2** 23. August	**Day 3** 24. August	**Day 4** 25. August	**Day 5** 26. August
	Registration 8h00	*Start of Day 2* 9h00	*Start of Day 3* 9h00	*Start of Day 4* 9h30	*Start of Day 5* *9h30*
	Start of IRPS 2022 9h00	Lectures 6-8	Lectures 11-13	Lectures 16-18	*Mini Workshop*
	Lectures 1&2	*Lunch*	*Lunch*	*Lunch*	Lecture 20
	Lunch				*Lunch*
	Lectures 3-5	Lectures 9&10	Lectures 14&15	Lecture 19	Case study feedback
	Case Study I	*Case Study II*	*Case Study III*	*Case Study IV*	*Self-assessment quiz*
					End of IRPS 2022 16h30
Registration 16h00-18h00	*End of Day I* 18h30	*End of Day II* 17h50	*End of Day III* 17h35	*End of Day IV* 17h15	

Tabla 2: Módulos y contenido preliminares de IRPS-2022. El cuadro tiene por objeto proporcionar una orientación sobre el contenido del proyecto de programa IRPS-2022. Los nombres y el contenido de las conferencias y módulos pueden cambiar según la disponibilidad de los disertantes y otras circunstancias.

Module name	Content (can be subject to changes)
The RP system – Past, present and future I	• International radiological protection framework – the essentials; • Principles of radiological protection: justification, optimisation, dose limitation – related dose criteria;
The RP system – Past, present and future II	• RP constraints and reference levels; • Radiological protection – Ethics; • Overview of science updates, policy standards and regulations: UNSCEAR, ICRP, NCRP, International BSS, Euratom BSS; • Areas of significant evolution throughout the successive fundamental recommendations; • Health risk estimates and dose criteria & Effective dose concept and its use; • Practice/intervention to exposure situations; • RP of the environment; • Decommissioning and waste management from an RP perspective (tbc).
State of the art of RP science	• Radiation biology; • Radiation epidemiology; • UNSCEAR; • RP in diagnostic and therapeutic healthcare; • Topical lecture (tbc).
The RP system – Towards a more holistic approach	• Social science and sound communication to support RP; • Stakeholder involvement and prevailing circumstances; • Risk communication (tbc); • Experience from former accidents (tbc).
Wrapping up	• Mini-workshop on challenges in applying the RP system (tbc); • Ongoing work under the NEA Committee on Radiological Protection and Public Health (CRPPH) (tbc); • Case study feedback and Q&A; • Self-assessment quiz.
Case studies	• Managing public and occupational exposure to radon; • Decommissioning, clearance and site release, with a focus on radiological protection of the environment; • Emergency and recovery management; • New case study (tbc).

Para más información: https://www.oecd-nea.org/jcms/pl_27499/international-radiological-protection-school-irps-2022-edition

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XII CONGRESO REGIONAL DE SEGURIDAD RADIOLÓGICA Y NUCLEAR
X CONGRESO REGIONAL IRPA
PROTECCIÓN RADIOLÓGICA: ADAPTÁNDONOS A NUEVOS ESCENARIOS

DESDE EL 23 AL 27 DE OCTUBRE DE 2022 - SANTIAGO, CHILE

El XII CONGRESO REGIONAL DE SEGURIDAD RADIOLÓGICA Y NUCLEAR - X CONGRESO REGIONAL IRPA que se realizará en Santiago de Chile del 23 al 27 de octubre del presente año, está recibiendo resúmenes hasta el 30 de Abril en las siguientes áreas temáticas:

PROTECCIÓN RADIOLÓGICA
Protección Radiológica ocupacional en Medicina
Protección Radiológica ocupacional en Industria
Protección Radiológica ocupacional en Investigación
Protección Radiológica del paciente
Protección Radiológica del público
Protección Radiológica del medio ambiente
Radiobiología
Dosimetría Biológica
Radioepidemiología
Radiofarmacia
Dosimetría
Instrumentación
Radiación natural, NORM y TENORM

CULTURA DE SEGURIDAD
Cultura de seguridad radiológica y nuclear
Percepción del riesgo y comunicación con el público
Ética en el uso de radiaciones ionizantes
Educación y entrenamiento en Protección Radiológica

INNOVACIÓN Y TECNOLOGÍA
Nuevas tecnologías y abordajes
Inteligencia artificial aplicada a Protección Radiológica
Radiaciones no ionizantes

SEGURIDAD
Seguridad en las instalaciones nucleares y radiológicas
Políticas y Marco Regulatorio en Protección Radiológica
Recomendaciones en Protección Radiológica
Emergencias radiológicas y nucleares
Gestión de Desechos Radiactivos
Transporte de Material Radiactivo
Garantía y Control de Calidad

Organizado en cooperación con:

Mayores detalles en:
https://www.sochipra.cl/congreso-regional-santiago-de-chile-2022/

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INTERNATIONAL CONFERENCE ON THE SAFETY AND TECHNOLOGY OF RADIOACTIVE SOURCES: ACHIEVEMENTS AND FUTURE EFFORTS

JUNE 20-24, 2022, VIENNA, AUSTRIA

The deadline for applications for financial support through InTouch+ has been extended to March 4, 2022.

Radioactive sources are widely used for beneficial purposes throughout the world in medical, industrial, agricultural, research, and educational applications. Ensuring your safety and security continues to be a topic of global attention and significant improvements and progress have been made in this regard in recent decades. Despite these efforts, incidents and emergencies still occur that could have significant consequences, reminding States of the need to continue improving the technological and physical safety of radioactive sources throughout their life cycle; and the goal of achieving the highest possible level of safety and security of radioactive sources globally requires a coordinated approach.

The purpose of the conference is to encourage the exchange of experiences and anticipate future developments related to establishing and maintaining a high level of safety and security of radioactive sources throughout their life cycle.

The conference will provide a forum to:

• Exchange information on how to meet current challenges related to the safety and security of radioactive sources, including lessons learned during the COVID 19 pandemic;
• Raise awareness and exchange experiences regarding preparedness for and response to radiological incidents and emergencies involving radioactive sources;
• Promote coordination between the competent national authorities for the technological and physical safety of radioactive sources;
• Share experiences in the development of government (eg policies and strategies), legislative and regulatory frameworks for radioactive sources and associated facilities;
• Exchange information on the planning, establishment, maintenance and sustainability of national regimes for radiation and nuclear physical security of radioactive sources, including physical and technological security systems for facilities and activities (other than transport), as well as such as knowledge management, education and training;
• Review the impact of research and technological advances related to future applications of nuclear science and technology on the safety and security of radioactive sources;
• Share experiences in technological advances and future planning for the establishment, maintenance and sustainability of security and protection measures;
• Facilitate cooperation between all competent authorities and other interested parties at the national and international levels, as appropriate;
• Promote the IAEA's nuclear security standards and guidance, and their use by States;
• Promote the universalization and use of the relevant legally binding ones (eg, Joint Convention on Safety in the Management of Spent Fuel and on Safety in the Management of Radioactive Waste – “Joint Convention”, Convention on Assistance in Case of Accident Nuclear or Radiological Emergency – “International Assistance”, and the International Convention for the Suppression of Acts of Nuclear Terrorism – ICSANT) and non-legally binding international instruments (e.g., the Code of Conduct on the technological and physical security of radioactive sources and their complementary orientations).

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DEADLINES AND KEY DATES

October 15, 2021: submission of synopses through IAEA-INDICO (extended deadline)
February 15, 2022: Notification of acceptance of abstracts for oral or poster presentation (extended date)
March 4, 2022: Submission of form B (along with form A) via the InTouch+ platform (extended deadline)
March 4, 2022: Submission of form C (along with form A) via the InTouch+ platform (deadline extended)
March 30, 2022: electronic submission of extended synopses through IAEA-INDICO (extended deadline)
No Deadline: Submission of Form A only (no paper submission, no grant application) via the InTouch+ platform

For more information:https://www.iaea.org/events/safety-security-radioactive-sources-2022

BIODOSIMETRIC TOOLS APPLIED TO THE STUDY OF EXPOSED POPULATIONS

Semi-presential modality
From March 28 to May 2 - Monday to Friday from 9:00 a.m. to 11:00 a.m. - URUGUAY

OBJECTIVES:
Provide the student with tools for the determination and quantification of the effect of exposure to genotoxic agents on human health.
The course will be theoretical-practical.

Inquiries: Dr Wilner Martinez-López:
wilnermartinezlopez@gmail.com

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The Network for the Optimization of Occupational Radiological Protection in Latin America and the Caribbean (REPROLAM) is a scientific and cultural society, without profit, political, religious or racial, of unlimited duration, which has the objective of promoting the optimization of occupational radiation protection. REPROLAM seeks to expand academic and scientific cooperation among its members, with the aim of promoting adequate radiation protection for workers.

Visit our website for more information: http://www.reprolam.com/
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