

## Summary of IRPA 15 – KOREA- activities

The 15th Congress of the International Radiological Protection Association (**IRPA**), organized by the Korean Association for Radiation Protection (**KARP**), was held in Seoul, Korea from 18 January to 5 February 2021.

Under the theme of “**Bridging Radiation Protection Culture and Science - Widening Public Empathy**”, **IRPA15** provided invaluable opportunities to discuss and strengthen the correlation between Radiation Protection culture and science, and share developing scientific knowledge and related experiences in radiation protection not only among experts but also with the public.

**IRPA15** began on January 18 with an Opening Ceremony in which the president of the congress Jong K. Kim, from South Korea; Program Committee Chair Wolfgang Weiss, from Germany; outgoing IRPA President Roger Coates, from the UK; the new president of the **IRPA** (2021-2024) Bernard Le Guen, from France; the entire **IRPA** Executive Council, in their respective countries, and participants from around the world.



Jong Kyung Kim - President of IRPA 15 Congress  
Welcome words



Roger Coates-President of IRPA

759 participants were registered. The Congress program included 85 virtual sessions. 650 papers were presented. Eight scientific topic areas were addressed:

1. *Underpinning Science;*
2. *Dosimetry and Measurement;*
3. *The System of Protection, Standards and Regulation;*
4. *Practical Implementation: Medical Sector;*
5. *Practical Implementation: Industry and Research;*
6. *Emergency Preparedness and Response;*
7. *Existing Exposures,*
8. *Non-ionizing Radiation.*

Four cross-cutting thematic areas were developed:

- I. *Ethics;*
- II. *Communication and Public Understanding;*
- III. *Radiation Protection Culture;*
- IV. *Human Capital and Competency and Culture.*

Additionally, areas of current interest were arranged into Special Sessions, Enhanced Topic Sessions and Thematic

Due to the Covid-19 pandemic situation, live Webinar Sessions for a number of key issues such as **“Communication and Public Understanding”**, **“Women in Radiation”** and **“The Future of the System of Radiological Protection”** were carried out but many of the presentations were based on a “click and play” basis (pre-recorded) with limited options for discussion.

Two important prizes were awarded during the **IRPA15** congress:



The **Sievert Award** was presented to Professor Eliseo Vano in recognition of his outstanding contributions to radiological protection in medical applications of ionizing radiation.

The **Gold Medal for Radiation Protection of the Royal Swedish Academy of Sciences** was awarded to Dale L. Preston for the developed risk regression models and modelling software that are widely used in radiation epidemiology.

IRPA 15 placed special emphasis on supporting and encouraging the new generation of radiation protection professionals and, in addition to the Young Scientists Award (IRPA15 YSA), included presentations by representatives of the **IRPA Young Generation Network (YGN)** in different sessions of the congress and a session organized by the **YGN** on "Artificial intelligence in radiological protection" was held.



Key papers will be published in a special issue of the Journal of Radiation Protection.

On January 27, 2021, the Closing Ceremony of the **IRPA15** International Congress was held with a virtual session. The president of the congress, Jong Kim, made a summary of the statistical data related to **IRPA15** and the Chair of the Program Committee, Wolfgang Weiss, presented the conclusions of the congress from the technical aspects and made an analysis of the state of the art in radiological protection, the topics that were discussed and the pending challenges.



Juan Carlos Lentijo IAEA - Congratulatory Comments

Finally, Bernard Le Guen, the new president of **IRPA**, delivered a welcoming speech addressed to all radiation protection professionals, inviting them to work together to improve radiation protection in their respective subjects and workplaces, through national and regional radiation protection societies and in collaboration with international organizations and stakeholders.



Bernard Le Guen

Article provided by: Marina Di Giorgio- Member of the IRPA15 Program Committee (ICPC)

## **ALMERA webinar series: Fundamentals of gamma ray spectrometry**

Virtual event in 3 sessions-registration until March 5. Platform: Cisco WebEx

The IAEA ALMERA Coordination Team would hereby like to announce an upcoming Webinar series entitled “**Foundations of gamma-ray spectrometry**” which will take place virtually during the spring of 2021. The Webinar series will consist of 3 separate sessions which will focus on the basics of gamma-ray spectrometry as applied in a typical environmental radioactivity monitoring laboratory.

The sessions aim to provide a general foundation of gamma-ray spectrometry to persons who are new to this field, or as repetition of some basic theory for more experienced practitioners.

Each session will last an estimated 1.5-2 hours, including time for questions. Some pen-and-paper “homework exercises” emphasizing relevant topic(s) will be prepared for each session. Participants can then work on the exercises individually after the session is over.

The lecturer for the Webinar series is Mr Alexander Mauring, Gamma Spectrometry Specialist at IAEA's Terrestrial Laboratory in Seibersdorf and Scientific Coordinator of the ALMERA Network.

### **Session 1: Gamma-ray spectrometry basics**

Date and time: 10 March 2021 09:00-11:00 CET (08:00-10:00 GMT)

### **Session 2: Gamma spectrum analysis and activity calculations**

Date and time: 7 April 2021 09:00-11:00 CET (08:00-10:00 GMT)

### **Session 3: Efficiency calibration of HPGe detectors**

Registration for the seminars is done by completing this online form:

<https://www.surveymonkey.com/r/almeraregistration>

## **Virtual Conference\_ Higher Institute of Technologies and Applied Sciences: "State of the art of equipment and / or procedures in Medicine Radiation**

Havana, Friday March 12, 2021, 2:00 p.m. (Cuban time)

This scientific-teaching activity is part of the **Virtual Conference on Medical Physics and Radiological Protection**, which aims to promote, update and disseminate knowledge on current issues in medical physics and radiation protection.

It will be made up of the following topics:

- **New techniques in RT of external beams.** *Dr. Rodolfo Alfonso Laguardia (InSTEC-UH, Cuba)*

- **Technological advances in Brachytherapy.** *Jorge L. Morales (INOR, Cuba)*

- **State of the art in relevant radiodiagnosis procedures.** *José Luis Rodríguez (Las Condes Clinic, Chile)*

- **State of the Art of MN equipment:** SPECT-CT hybrid systems and dedicated organ equipment. *Dr. Leonel Torres (DIC-CENTIS) / RMN. Achievements and challenges. Carlos Calderón (INOR-Cuba).*

**Moderated by:** *Dr. Adlin López Díaz (InSTEC-UH, Cuba)*

To register for the virtual conference and receive a certificate, click here: <https://moodle.instec.cu/course/view.php?id=168#section-3>



**IAEA–IOMP webinar:  
Patients Undergoing Recurrent CT Imaging: Managing Cumulative Doses**  
16 March 2021, 2 pm CET



We have so many tools and means to practice radiation safety. The transition from radiation safety to radiation safety culture occurs when we are able to make everyone involved practice safety. Thus, radiation safety culture has much to do with establishing culture. Experts from 4 major international organizations shall deliberate on this important topic and will cover both diagnostic and therapeutic activities in which staff in medical institutions are involved with.

**Moderator: Jenia Vassileva (IAEA)**  
**Presenter: Madan Rehani (IOMP)**

**About the webinar:**

Computed tomography (CT) and other diagnostic imaging and image-guided interventional procedures provide immense benefits for the diagnosis and management of many health conditions. The benefits far outweigh the radiation risks when the procedure is performed when required for the clinical care of the patient and with the minimum necessary exposure to achieve the diagnostic or interventional objective.

However, the risks increase when a patient undergoes recurrent imaging procedures involving ionizing radiation, from which some organs might accumulate higher doses in the range where epidemiologists believe there is increased probability of radiation-related adverse effects (particularly cancer).

Information made available from the wider use of automatic radiation exposure monitoring systems shows that the number of patients who accumulate effective doses of 100 mSv and higher over a few years as a result of recurrent CT procedures is greater than previously known. A study in which the IAEA has been involved estimated that this might concern nearly one million patients globally per year. The webinar will present the current knowledge on recurrent imaging and actions proposed at the IAEA Technical Meetings on radiation protection of patients undergoing recurrent imaging in 2019 and 2020. .

To register: [https://iaea.webex.com/mw3300/mywebex/default.do?nomenu=true&siteurl=iaea&service=6&rnd=0.3179243986384125&main\\_url=https%3A%2F%2Fiaea.webex.com%2Fec3300%2Feventcenter%2Fevent%2FeventAction.do%3FtheAction%3Ddetail%26%26%26EMK%3D4832534b00000004c90d5aab5b3c74264d910af4c623107c6bfc1ac85f5db69bd8560a5fe9035e85%26siteurl%3Diaea%26confViewID%3D180153894727327074%26encryptTicket%3DSDJTSwAAAAThLjR92L0KaahAavqJ5GPi5n2lpZbqz2fVy1-s17nn0Q2%26](https://iaea.webex.com/mw3300/mywebex/default.do?nomenu=true&siteurl=iaea&service=6&rnd=0.3179243986384125&main_url=https%3A%2F%2Fiaea.webex.com%2Fec3300%2Feventcenter%2Fevent%2FeventAction.do%3FtheAction%3Ddetail%26%26%26EMK%3D4832534b00000004c90d5aab5b3c74264d910af4c623107c6bfc1ac85f5db69bd8560a5fe9035e85%26siteurl%3Diaea%26confViewID%3D180153894727327074%26encryptTicket%3DSDJTSwAAAAThLjR92L0KaahAavqJ5GPi5n2lpZbqz2fVy1-s17nn0Q2%26)

## REPROLAM WEBINAR

### Experiences of the implementation of the national registry of doses for Latin America and Spain. The European platform on occupational exposure data "ESOREX"

March 31, 2021. Time: 5:00 p.m. - Vienna



#### Agenda:

GSG Part 3 and GSG 7 Requirements on Dose Recording. Luiz Ernesto Matta. IRD / CNEN - Brazil (5 minutes)

Prototype of the National Dose Registry for Latin America (RND), experiences of its implementation in the region. Results of the National Dosage Bank of Cuba (BND). Maryzury Valdés Ramos. CPHR - Cuba (20 minutes)

Nicaraguan Experiences in the Implementation of the RND. Norma Alejandra Roas Zúniga. LA-FRAM-UNAM - Nicaragua (10 minutes)

Spanish experience with the National Dosimetric Bank (BDN). The European platform on occupational exposure data, ESOREX. Maria Luisa Tormo. CSN - Spain. (15 minutes)

Link: [meet.google.com/qua-icxq-hcs](https://meet.google.com/qua-icxq-hcs)

## WHO Scholar Level 1 course on radiation risk communication to improve benefit-risk dialogue in paediatric imaging

Virtual

March 22-26, 2021: Onboarding Week



The World Health Organization (WHO) invites applications for the pilot cohort of the WHO Scholar Level 1 course on communicating radiation risks in paediatric imaging.

The course is primarily targeted at health-care providers who refer pediatric patients for radiological imaging OR who perform radiological imaging in paediatric patients.

Medical and dental school students, as well as those belonging to other academic and research institutions, may also apply.

This course is intended to support health care providers:

- to improve their capabilities to communicate known or potential radiation risks associated with paediatric imaging procedures and
- to support risk-benefit dialogue during the process of paediatric health care delivery.

More information in: <https://www.learning.foundation/who-pediatric-radiation-communication>

## First Latin American Conference on Solid State Dosimetry and Radiation Measurements

Online Event- September 13-17, 2021

The Brazilian Society of Solid-State Dosimetry, with the endorsement of the International Solid State Dosimetry Organization (ISSDO), is pleased to announce the First Latin American Conference on Solid State Dosimetry and Radiation Measurements which will take place online September 13-17, 2021. The conference will be preceded by the Shigueo Watanabe School "Concepts and Trends in Radiation Dosimetry and its Applications", September 8-10, 2021, to introduce the young generations to this research field.

### MainTopics:

*Basic physical processes*

*Material characteristics*

*Instrumentation/detectors*

*Monitoring and detection*

*Medical dosimetry*

*Dose reconstruction*

More information in: <http://lassd2021.com.br/>



## EUROPEAN COMMISSION publication: European study on clinical diagnostic reference levels for X-ray medical imaging

The EUCLID project aimed to study the feasibility of establishing diagnostic reference levels (DRLs) based on clinical indication in the context of Council Directive 2013/59/Euratom.

Document available at: <https://op.europa.eu/en/publication-detail/-/publication/a78331f7-7199-11eb-9ac9-01aa75ed71a1>

## IAEA

### Now Available: New Drone Technology for Radiological Monitoring in Emergency Situations

In the aftermath of a nuclear accident, such as the one at Fukushima Daiichi Nuclear Power Plant in 2011, the radiologically contaminated area in the vicinity of a reactor can be too dangerous for people to enter to monitor radiation. A new technology using drones, developed by the IAEA for use by the authorities of Fukushima Prefecture in Japan, will make this task easier.



An IAEA-developed instrumentation and methodology for Unmanned Aerial Vehicles (UAVs) equipped with radiation detectors, cameras and GPS devices has been tested and validated under real conditions in the Fukushima Prefecture in Japan and is now available for practical use in routine or emergency situations. Based on this experience, the IAEA is ready to assist interested Member States to develop and implement this technology for radiological mapping following a nuclear or radiological emergency.

Link: <https://www.iaea.org/es/newscenter/news/ya-esta-disponible-nueva-tecnologia-de-drones-para-la-monitorizacion-radiologica-en-situaciones-de-emergencia>



## **ISoRED- International Society of Radiation Epidemiology and Dosimetry Webinar series**

ISoRED is pleased to introduce the webinar series ***Community Building in Epidemiology and Dosimetry Research***. The webinar series aims to support the society's mission to bring together radiation researchers from around the world to discuss studies of ionizing radiation effects in humans, epidemiologic methodology and dosimetry; support capacity building and training for the next generation of epidemiologists, statisticians and dosimetrists; promote and facilitate international collaborations.

Webinars are expected to take place monthly starting in January 2021 and will each feature an organization that performs research in radiation epidemiology and dosimetry. Participating organizations will present on

- ***The mission of their organization***
- ***Highlights of past consequential multidisciplinary research***
- ***Ongoing multidisciplinary research and future plans***
- ***Collaboration and training opportunities***

Each webinar will be about 1 hour long and will feature presentations from senior and early career investigators.

**IMPORTANT:** Interested groups can send a brief summary of the proposal to Dr. Ourania Kosti (OKosti@nas.edu) with a copy to Pablo Andres (andresp@cab.cnea.gov.ar).