

NUMBER 7, JULY 2021



### AVAILABLE

WEBINAR RECORDING "Improvement in the justification and optimization of 2D and 3D dental images through education and training. "

#### About the webinar

During the last two decades, there have been important advances in dentomaxillofacial radiology. In particular, intraoral images went digital, reducing the patients' radiation exposure. This method has been included in undergraduate education in dentistry.

Panoramic imaging of the jaws has become widespread in general dentistry, but the necessary education in the method, including the challenges and limitations related to the use and interpretation of panoramic radiographs, has not been implemented at the same pace. This opens up the possibility of an examination being performed for an incorrect indication, and therefore without adequate justification.

In addition, cone beam computed tomography (CBCT) has been introduced in dentomaxillofacial radiology, and the number of machines in private, public and specialized dentistry has increased, in some countries by a factor of 100 during the last ten years. Although CBCT is sometimes referred to as low-dose CT, the dose of a CBCT exam can be more than 50 times that of an intraoral exam, depending on the volume.

Along with radiation protection regulations, the education and training of dental professionals play a key role in ensuring quality and safety in dentomaxillofacial radiology. Those standards and demands differ between countries. This webinar will discuss the need for a more comprehensive education among dentists in 2D and 3D imaging to increase knowledge and understanding of methodology, interpretation, optimization and justification and therefore radiation protection.

#### Learning objectives

Learn about the link between justification, optimization, radiation protection and population dose in dentomaxillofacial radiology. Learn about the current state of radiographic methods and their use in dentistry and in undergraduate and graduate radiology education.

Understand the need for education to make the right decisions about justification and optimization of 2D and 3D images. Learn about the proposed standards for 2D and 3D imaging graduate education.

Access the full Webinar at: http://ns-files.iaea.org/video/Improved\_2D\_3D\_training-20210521.mp4



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### XIII CONGRESS OF THE BRAZILIAN SOCIETY OF NUCLEAR BIOSCIENCES 2021

October 4 to 8 in 3D virtual platform

The Congress will be an excellent opportunity for participants to exchange information and establish collaborations for the development of health, environment and radiation safety projects in a perspective transdisciplinary.

Addressed to:researchers, professionals, students and entrepreneurs with experience in biology, biomedicine, pharmacy, medicine, chemistry and physics

#### OBJECTIVES

• Share experiences on the development and use of radioisotopes produced in dedicated nuclear reactors or cyclotrons, which contribute to the improvement of technologies used in health (molecular imaging and radiotherapy), environment (water quality and pollution control) and agriculture. and food safety (pest control and food irradiation).

- Compare the efficiency and safety between nuclear, radiological and alternative technologies, in applications in health and the environment.
- Present the scenarios of bioscience research and innovative nuclear technologies in the guest speakers' countries.
- Compare models used in radiobiology, both for low radiation doses and for high exposure rates, considering the advances in experimental biology and, especially in biochemistry and biophysics.
- Discuss the perception of risks by society (nuclear, radiological, health and environmental risk), the regulatory structure that should be updated according to the state of the art, and education and training implemented.
- Stimulate entrepreneurship for accommodation for young people trained to act in the sector.

#### **DEADLINE:**

Abstracts for electronic panel presentation: **until July 5**. Regular online registration without job submission: **September 24** 

Information: www.sbbn.org.br Inscription: http://iupab2020.sbbq.org.br/pagina\_interna.php?idPagina=435



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LASSD 2021 – FIRST LATIN AMERICAN CONGRESS ON SOLID STATE DOSIMETRY AND FIRST SCHOOL SHIGUEO WATANABE: CONCEPTS AND TRENDS IN RADIATION DOSIMETRY AND ITS APPLICATIONS September 8-10, 2021



The Brazilian Solid State Dosimetry Society, 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 that will take place online from 13 to September 17, 2021. The conference will be preceded by the Shigueo Watanabe School "Concepts and Trends in Radiation Dosimetry and its Applications", from September 8 to 10, 2021, to introduce young generations to this field of research.

This school aims to cover the basic fundamentals of solid state dosimetry. However, in addition to the basic solids dosimetry process, applied topics such as: nanodosimetry, semiconductors, EPR and RPL dosimetry will be addressed. The lectures will be useful for beginners, students and young professionals who like to refresh, deepen and broaden their knowledge. We are very excited and look forward to interesting discussions on solid state dosimetry. The school honors Professor Shigueo Watanabe, a pioneer in solid state dosimetry who in his prime of 95 years still goes to the lab to work and is an inspiration to those in the field. More details on the program will be released in due course. The school is coordinated by prof. J.F.D. Chubaci of the University of Sao Paulo.

#### SCHOOL TOPICS

Fundamentals of ionizing radiation dosimetry TL dosimetry: principles and applications OSL dosimetry: principles and applications RPL dosimetry: principles and applications Magnetic resonance dosimetry and its applications Quality assurance and uncertainty estimates Neutron Dosimetry: Principles and Applications Spatial dosimetry: principles and applications Medical radiation dosimetry Archaeological and geological dating Environmental dosimetry Semiconductor detectors and their application in radiation dosimetry



This event will be a great opportunity to meet colleagues who work in the area, share scientific results, and strengthen this field of research that is important for Latin America. More information in: http://lassd2021.com.br/txt/7



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### ICRP 2021 VI International Symposium on the System Radiation Protection

From November 7 to 10, 2022- Canada



The Planning Committee, with representatives from the International Commission on Radiation Protection, Canadian Radiation Protection Association, Canadian Nuclear Safety Commission and Health Canada, have decided to postpone ICRP 2021 until November 2022. This gives us one more year to determine the best way for everyone to meet personally safely.

One of the benefits of organizing an event like this is the digital platforms that have emerged throughout this pandemic. Those unable to travel to Vancouver will still be able to send ePosters, and other options are being explored to engage those unable to do so in 2022.

Questions about registrations, submitted abstracts, reserved accommodation and other information related to this postponement can be found in the frequently asked <u>questions section of icrp2021.com</u>.

We look forward to welcoming the international radiation protection community to ICRP 2021 + 1 in Vancouver, November 7-10, 2022.

Any other inquiries should be directed to ICRP Communications and Development Manager Kelsey Cloutier.



#### **CANCELLED**: "III SYMPOSIUM ON RADON IN BRAZIL: NATIONAL PROGRAM ON THE IMPACT OF RADON (III SRNBR) " AND" II LATIN AMERICAN RADONIO SYMPOSIUM (II SLARN) "

Unfortunately, due to the facts of public knowledge about COVID-19, the Organizing Committee of the III SRnBr-IISLARn informs the postponement of the Symposium on Radon in Brazil and the II Latin American Radon Symposium that was scheduled to take place between 6 and 10 of December this year. The new date is set and will take place in the period from July 25 to 29, 2022.

The main objective of the postponement to the second half of 2022 is to maintain the III SRnBr-IISLARn face-to-face modality. Our community includes scientists, general practitioners, and students. The Organizing Committee of the III SRnBr-IISLARn does not ratify the carrying out of activities that encourage the agglomeration of people at a time when the World Health Organization and the Brazilian Government still indicate social isolation. Rio de Janeiro, June 03, 2021

Thomas F da C Campos President III SRnBr - II SLARn

www.3srnbr.com



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## **RESOURCES AND DOWNLOADS**



#### IAEA IMPLEMENTATION OF THE "BONN CALL FOR ACTION TOOLKIT"

#### About the Toolkit:

The Bonn Call for Action Toolkit is an online platform that offers new and existing implementation resources to improve radiation protection in medicine.

The toolkit was created as a result of the International Conference on Radiation Protection in Medicine in 2017 by the IAEA and other organizations.

#### About the "Bonn Call for Action"

The "Bonn Call for Action" seeks to foster coordinated work to address emerging issues in radiation protection in medicine. It was published at a 2012 international conference organized by the IAEA held in Bonn, Germany, and reinforced at the follow-up conference in Vienna, Austria, in 2017.

#### 10 proposed actions:

- 1- Improve the implementation of the justification principle.
- 2- Improve the implementation of the principle of optimization of protection and security.
- 3- Strengthen the role of manufacturers in contributing to the general security regime.
- 4- Strengthen the education and training of health professionals in radiation protection.
- 5- Shape and promote a strategic research agenda for radiation protection in medicine
- 6- Increase the availability of improved global information on medical exposures and occupational exposures in medicine.
- 7- Improve the prevention of incidents and accidents related to medical radiation
- 8- Strengthen the culture of radiation safety in health care
- 9- Promote a better benefit-risk-radiation dialogue
- 10- Strengthen the implementation of security requirements worldwide

To access, go to: https://gnssn.iaea.org/main/bonn-toolkit1/SitePages/Home.aspx



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### Guidance for Medical Physicists Responding to a Nuclear or Radiological Emergency

### AVAILABLE

### IAEA GUIDELINES: Guidance for Medical Physicists Responding to a Nuclear or Radiological Emergency

To access the download, go to:

https://www.iaea.org/publications/13483/guidance-for-medical-physicists-responding-to-a-nuclear-or-radiological-emergency?fbclid=lw AR33x92zvV-SgifF9kmSrkc0hz469td6vP0eAc-gWAyO7FOEFm8yis-PdS4

