



IRPA

INTERNATIONAL RADIATION PROTECTION ASSOCIATION

IRPA EXECUTIVE COUNCIL REPORT FOR THE TERM 2021 -2024



**IRPA EXECUTIVE COUNCIL
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2021 - 2024**

EDITION 2024

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1. Introduction

The International Radiation Protection Association (IRPA) is an independent non-profit association of radiation protection professionals. Members of IRPA join through national and regional radiation protection societies (the Associate Societies - AS).

The Mission Statement of IRPA is as follows:

IRPA is the international professional association for radiation protection.

The primary objective of the Association is to provide a medium whereby international contacts and co-operation may be promoted among those engaged in radiation protection work, which includes relevant aspects of such branches of knowledge as science, medicine, engineering, technology and law as well as ethics and societal values, to contribute to the protection of people and the environment and to facilitate the safe use of ionizing and non-ionizing radiation for the benefit of mankind.

Through radiation protection professionals in national and regional Associate Societies, IRPA promotes excellence in radiation protection by providing benchmarks of good practice and enhancing professional competence and networking. IRPA encourages the application of the highest standards of professional conduct, skills, and knowledge for the benefit of individuals and society.

As part of its current Strategic Plan IRPA has declared the following Vision:

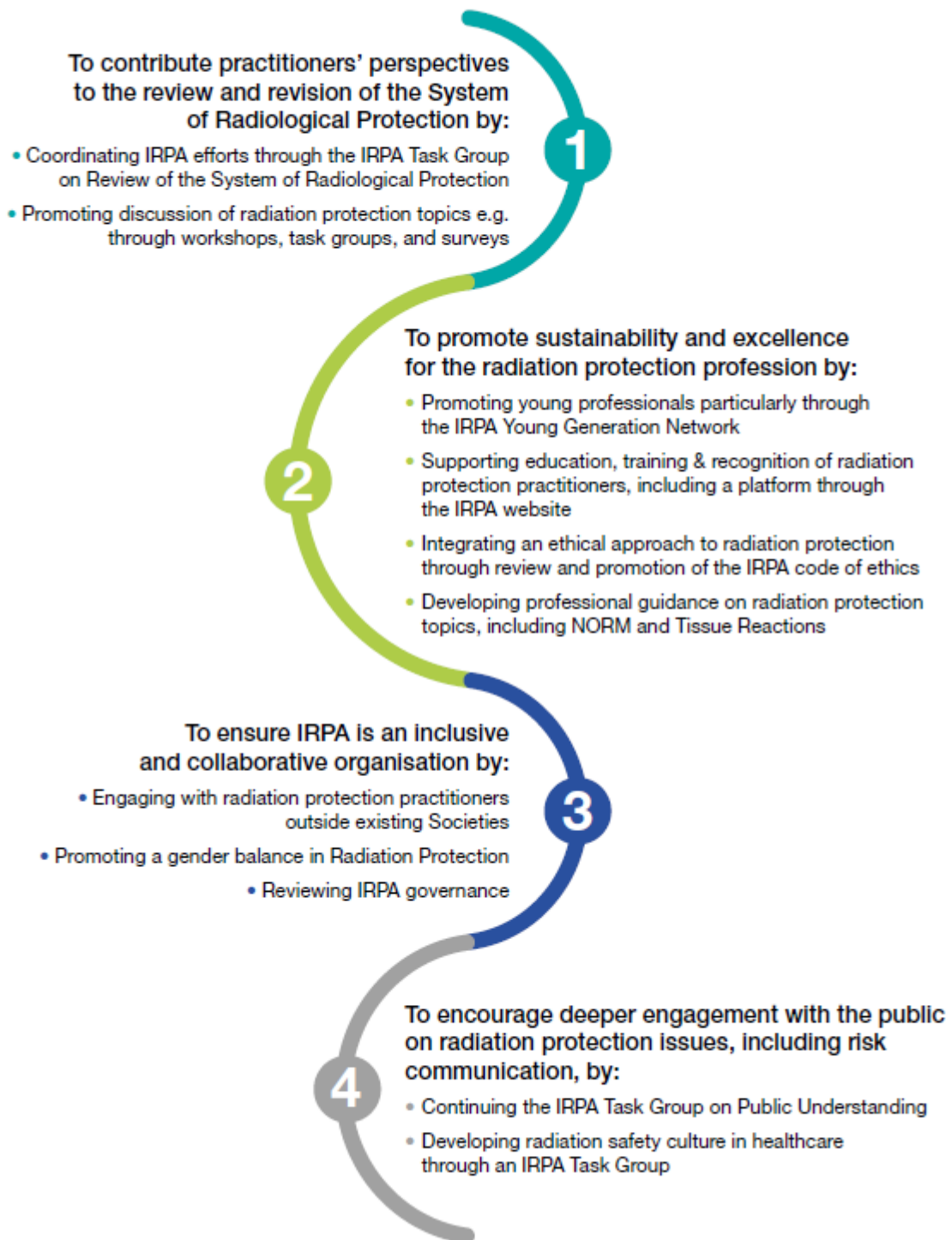
IRPA is the international voice of the radiation protection profession.

IRPA's primary objectives, as laid out in our 2021 – 2024 strategic plan, are:

- Supporting the organisation of regional and international congresses
- Supporting existing Associate Societies and creation of new Societies
- Maintaining active connections with all Associate Societies and relevant international organizations.

IRPA is recognized by its members, stakeholders and the public as the international voice of the radiation protection profession in the enhancement of radiation protection culture and practice worldwide

PRIORITIES FOR THE 2021-24 TERM



2. International Cooperation

One of IRPA's main strengths is our ability to involve professionals and practitioners across all fields of radiation protection, covering scientific research, teaching, regulation, medical practice, nuclear and non-nuclear industry, national/international policy, and all other fields. With more than 18,000 members in 68 countries and 53 Associate Societies, we encompass

the full spectrum of national experiences, from large, developed countries through to practitioners working in small developing nations.

IRPA has established excellent relationships with many international organisations that are engaged in the practice of radiation protection, and through these relationships we seek to influence the development of international principles, standards and practices by providing the perspectives and experiences of the practitioner.

2.1 Memorandums of Understanding (MoU)

IRPA has signed several MoUs during the current term. These include:

2.1.1 International Society of Radiology (ISR)

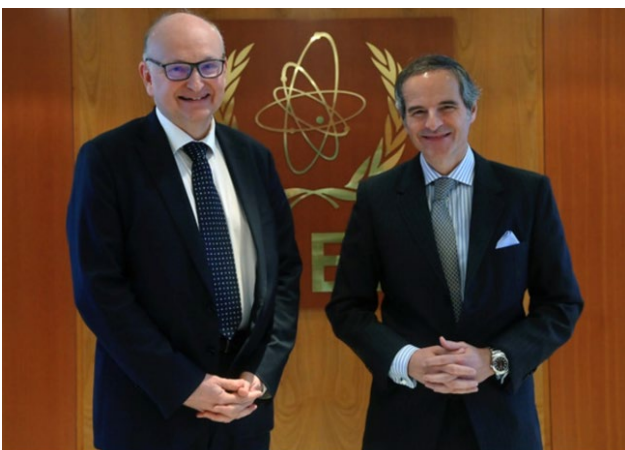
This agreement, signed in December 2021, recognizes that both organizations complement each other in promoting the safe use of radiation, and will enhance cooperation between both groups.

2.1.2 International Organization for Medical Physics (IOMP)

IRPA signed a renewed agreement with IOMP in March 2023. The objective of this agreement is to promote the safe use of radiation in healthcare without compromising on quality of care. Both organizations are confident that this MoU will serve as the basis for many fruitful collaborations in the future.

2.1.3 International Atomic Energy Agency (IAEA)

The International Radiation Protection Association (IRPA) and International Atomic Energy Agency (IAEA) have a long tradition of collaboration in the field of radiation protection and safety. IRPA is an incredible association of professionals with a network on all continents. Giving these professionals a voice in the work of the IAEA is a milestone accomplishment.



Meeting between the International Atomic Energy Agency (IAEA) Director General, Rafael Mariano Grossi, and the IRPA president – March 2023

The IRPA President met IAEA Director General Rafael Mariano Grossi and discussed current and future opportunities for cooperation between the IAEA and IRPA, some of which are described below:

1-Rays of hope initiative

The IAEA's Rays of Hope initiative was launched in 2022 to support countries in establishing or scaling up safe, secure and effective radiation medicine capabilities, and to bridge a major shortfall in both equipment and skilled personnel in many developing countries.

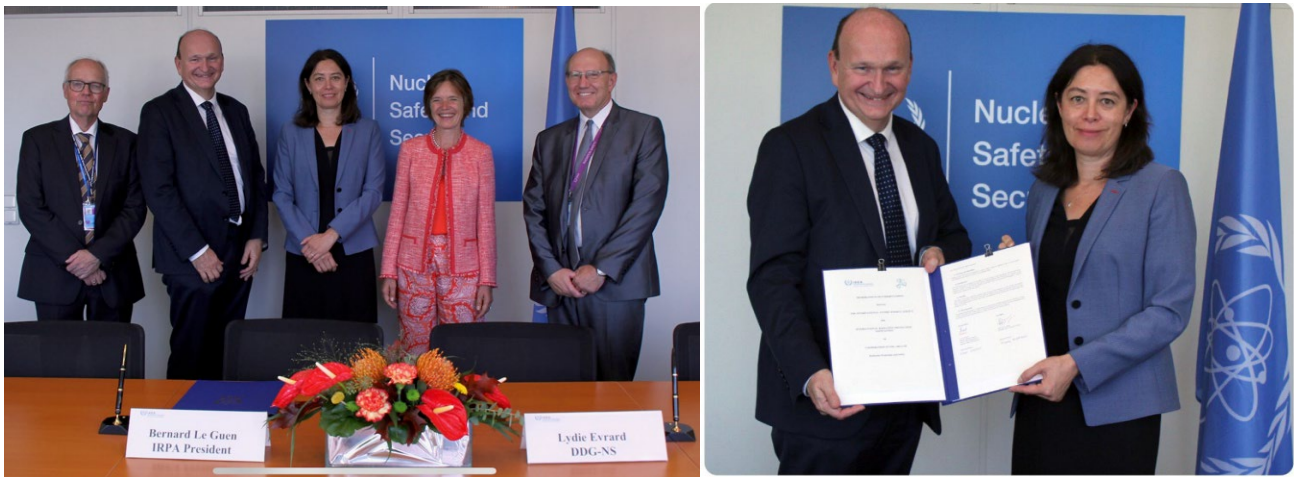
To ensure the success of this initiative, the training, support of personnel and the involvement of national and local organizations must go hand in hand with the procurement of equipment. A culture of safety requires a local environment that fosters collaboration, quality and safety. Discussions on this point were held during the IRPA-IAEA joint sessions at recent IRPA Congresses. There is still much work needed before activities and practices can become embedded in a total risk management culture.

IRPA is honored to participate in this incredible IAEA adventure for the benefit of patients and will support this IAEA initiative through the participation of IRPA experts in IAEA expert missions or in the development of relevant guidance and education tools on safety culture, such as e-learning modules and training courses.

2- The IAEA plays a very active role in financially supporting the participation of Young Professionals at IRPA regional congresses, particularly in Africa and Latin America. Thanks to this support, as well as support from our own IRPA Montreal Fund, many students and young professionals from different regions were able to participate in the IRPA Young Professionals Awards organized at the five regional IRPA congresses held during this term.

3 IRPA has recently launched a new IRPA task group on Women in Radiation (WiR). The objective is to promote a wide exchange of experiences and values on the gender perspective in RP within IRPA. This also provides an opportunity to propose candidates for the IAEA Lise Meitner Programme (LMP) which provides early- and mid-career women professionals with opportunities to participate in a multiweek visiting professional programme and advance their technical and soft skills.

4- For more than 30 years, IAEA has collaborated with IRPA in the framework of the Inter-Agency Committee on Radiation Safety (IACRS) to assist radiation protection professionals, regulators, operators, and other users in radiation safety. IRPA will continue to participate in the development, review and/or revision of IAEA radiation safety standards, play an active observer role at the Radiation Safety Standards Committee (RASSC), and provide expertise at IAEA technical and advisory meetings.



An **IAEA - IRPA MoU** was signed with **Lydie Evrard, Deputy Director General** in September 2023 and sets forth the framework for cooperation between the IAEA and IRPA in the area of radiation protection and safety. This was a milestone achievement and long-term goal of our President, Bernard Le Guen.

2.2 Cooperation and Partnership Activities of IRPA

2.2.1 IAEA

IRPA has observer status at IAEA's Radiation Safety Standards Committee (RASSC). Several presentations have been made, in many cases reflecting the aforementioned key IRPA issues. IRPA also presented at the international conference on Radiation Protection in Geneva, as part of the Education and Training Steering Committee.

Agency staff are engaged in several of our work programmes, in particular on radiation safety culture in healthcare, and we are also pleased to involve IAEA in all our regional and international congresses.

The IAEA held the 3rd International Conference on Occupational Radiation Protection at the International Conference Centre (CICG) in Geneva, Switzerland, from 5 to 9 September 2022. The conference had a key focus on 'Strengthening Radiation Protection of Workers – Twenty Years of Progress and the Way Forward'. This conference provided a forum for experts in occupational radiation protection of workers, and IRPA was pleased to have participated and cooperated with the IAEA in this important event.

2.2.2 International Commission on Radiological Protection (ICRP)

IRPA is recognized by ICRP as a Special Liaison Organization (SLO), and in this capacity, we are pleased to attend their annual meeting of SLOs. IRPA participated at the ICRP symposiums in both Vancouver (2022) and Tokyo (2023). These two conferences were an opportunity for IRPA to present "Views of the radiation protection Profession on Refinement of the System." IRPA welcomes the inclusive approach taken by ICRP and will continue to actively participate in the revision of the ICRP general recommendations as the international voice of the RP profession.

IRPA also has observers on several ICRP Task Groups:

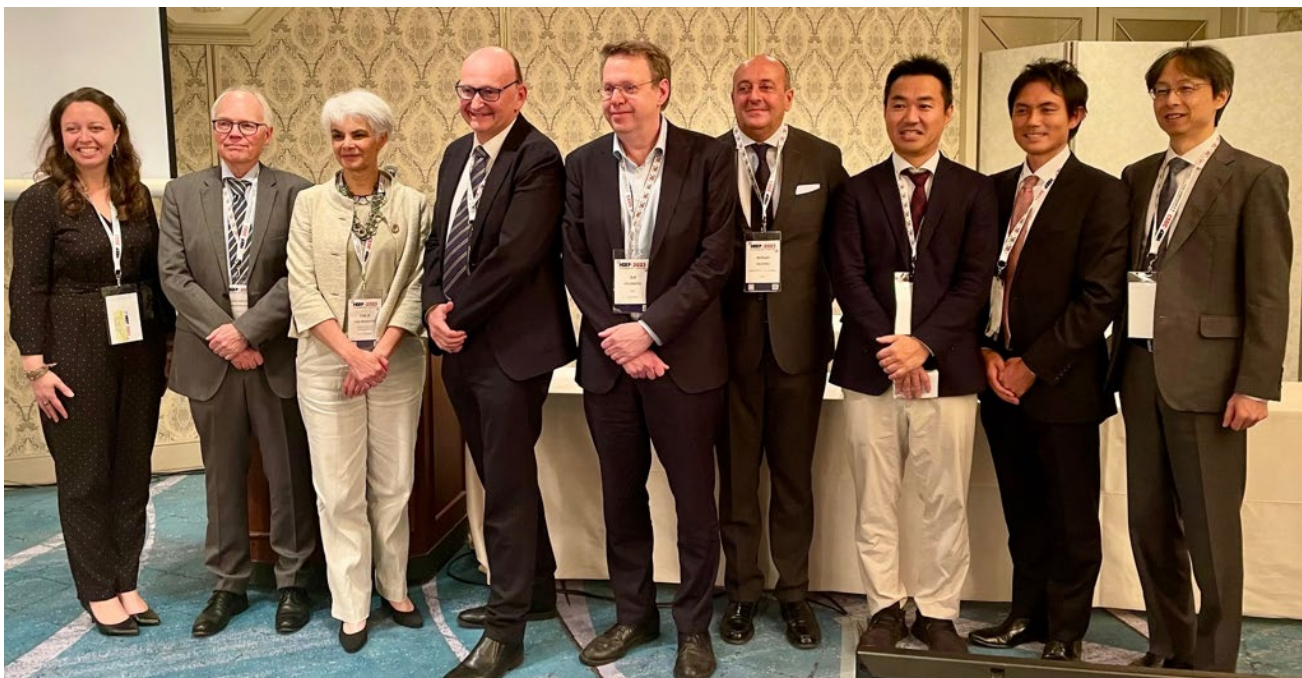


- 1- the Principle of Justification in Radiological protection.
- 2- tolerability and reasonableness including a balanced view of risks
- 3- Strengthening expertise and raising public awareness.

Bernard le Guen and Werner Ruhm (ICRP president)

Discussion/consultation on the System of Protection

A defining feature of many international meetings and conferences in Vancouver then in Tokyo during the past several years has been the emphasis given to the future development of the system of protection.



Discussion on Justification with Herca, WHO, the IAEA and ICRP representatives during a session in Tokyo

2.2.3 Nuclear Energy Agency (NEA) Committee on Radiological Protection and Public Health (CRPPH)

IRPA is recognized by NEA as a Special Liaison Organization, and in this capacity IRPA was pleased to attend their meetings of the CRPPH. It is an occasion to provide comments on CRPPH activities and share information on IRPA activities with all CRPPH members.

2.2.4 World Health Organization (WHO) Pan American Health Organization (PAHO)

During the 2021-2024 term, IRPA EC members had the opportunity to participate in various round tables on key healthcare issues alongside WHO on topics such as non-ionizing radiation and radiation protection in healthcare.

We very much appreciate that WHO offered to make the publication on the IRPA/WHO/IOMP/ IAEA Joint Initiative on Radiation Safety Culture in Healthcare available free of charge.

2.2.5 International Commission on Radiation Units and Measurement (ICRU)

ICRU is a standardization body set up in 1925 by the International Congress of Radiology, originally as the X-Ray Unit Committee. Its objective is to develop concepts, definitions and recommendations for the use of quantities and their units for ionizing radiation and its interaction with matter, particularly in respect to the biological effects induced by radiation.

IRPA provides a financial grant to support the work of ICRU. The IRPA president participated at the annual ICRU meeting (Pavia Italy, 25 April 2022) to the CNAO foundation (National Center for Hadron Therapy). One of the latest ICRU Reports on RP Dosimetry (Report 95) will provide key input to the next ICRP recommendations.



ICRU board

This Commission meeting in Pavia was an occasion to focus particularly on hadron therapy activities and to visit the CNAO installation with his director Sandro Rossi. It was also an opportunity for IRPA to present progress on our current activities.

2.2.6 International Commission on Non-Ionizing Radiation Protection (ICNIRP)

IRPA enjoys a special relationship with ICNIRP, since ICNIRP was chartered as an independent commission (to continue the work of the International Non-Ionizing Radiation Committee (INIRC) of IRPA) during the 7th IRPA International Congress in Montreal in 1992.

IRPA participated in a joint meeting with ICNIRP, ICRP, ILO and WHO in Munich, Germany, in June 2023. The meeting was organized by the WHO. The objectives were to increase mutual understanding of the approaches and systems of RP, and to explore possibilities for continued collaboration. One of the main outcomes of the meeting was an agreement between ICRP and ICNIRP to enhance collaboration between them and with other organisations representing similar interests. The focus is on opportunities to strengthen specific projects and share knowledge and lessons learned.

2.2.7 European Commission Article 31 Group

IRPA is an observer at the annual Article 31 Group meetings. The IRPA president participates on behalf of IRPA at these meetings.

2.2.8 Inter-Agency Committee on Radiation Safety (IACRS)

In 1990 the Inter-Agency Committee on Radiation Safety (IACRS) was formed to serve as a forum for collaboration between international organisations in matters of radiation safety. IACRS provides a platform for interaction between relevant international bodies to contribute to a common understanding of the scientific basis and legal framework for the application of the system of radiation protection, with a goal of global harmonization of radiation safety standards. It is currently comprised of the following organisation members: The European Commission, Food and Agriculture Organisation (FAO), International Atomic Energy Agency (IAEA), International Labour Organization, Organisation for Economic Co-operation and Development/ Nuclear Energy Agency (OECD/NEA), Pan American Health Organization (PAHO), United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR). Five other non-governmental organizations have observer status: International Commission on Radiological Protection (ICRP), International Commission on Radiation Units & Measurements (ICRU), IEC (International Electrotechnical Commission), International Radiation Protection Association (#IRPA) and International ISO - International Organization for Standardization



IRPA attends IACRS meetings as an observer. IACRS recently celebrated its 30th anniversary of the thirteen international member organisations working together towards consistent and comprehensive radiation protection, safety principles, and criteria.

After the recent publication of an IACRS report on ionising radiation screening devices at airports, which helped regulators to translate safety principles into practical regulatory actions, transfer knowledge, and assist in promoting internationally-accepted safety standards, the Committee has chosen to focus on a joint process to consider and document all potential implications of the new operational quantities in ICRU Report 95, "Operational Quantities for External Radiation Exposure" (December 2020). This publication will have potential impacts on workplace monitoring and will need a gradual and prudent period of adoption.

The other discussion during this term was on non-medical imaging, which is the intentional exposure of individuals to radiation for purposes other than medical diagnosis, such as screening passengers at airports. In addition, the IAEA recently launched a very exciting project, dubbed "Navigator." Radiation Safety Navigator is an online, interactive course that provides those responsible for radiation safety communication with hands-on guidance, communication tips, ready-to-use messaging and expanded explanations of key radiation protection terms.

2.2.9 International Organization for Medical Physics (IOMP) cooperation



John Damilakis (IOMP), Bernard le Guen and Claire Louise Chapple (IRPA), among others at the IOMP Conference on Medical Physics

In December 2023, the IRPA President was officially invited by IOMP to the International Conference on Medical Physics - 2023 (ICMP-2023) in Mumbai, India. He participated with John Damilakis, IOMP President, in a joint session on Radiation Safety Culture in Healthcare and a joint meeting on the 'Future of Radiation Protection in the Medical Field'.

In working with IOMP, IRPA seeks to enhance cooperation between the Radiation Protection and Medical Physics societies at a national level. This is the best way to work together towards common goals on Radiation Protection.

2.2.10 Ibero-American Forum of Radiation and Nuclear Safety Regulatory Agencies (FORO)

The Ibero-American FORUM of Radiological and Nuclear Regulatory Bodies (FORO) is an association created in 1997 with the aim of promoting radiological, nuclear and physical safety at the highest level in the Ibero-American region. The FORO is currently made up of the radiological and nuclear regulatory bodies of Argentina, Brazil, Chile, Colombia, Cuba, Spain, Mexico, Paraguay, Peru and Uruguay, and intends to incorporate new members as progress is made on the consolidation of its organizational and institutional structure.

Since 2013, IRPA and FORO have a practical arrangement on cooperation activities, as well as a long friendship. FORO and IRPA believe that while each group has its specific contributions to the field of radiation protection, collaboration between the two organizations in areas of common interest will contribute to the overall joint goal of the safe use of radiation without compromising on quality.

Joint meeting in Santiago de Chile

With the help of Alfredo de los Reyes (FORO and CSN), IRPA has an opportunity to organize a meeting with representatives from Spain (Elvira Romera Gutiérrez, Consejo de Seguridad Nuclear (CSN)), Chile (Luis Huerta Torchio, President of Comisión Chilena de Energía Nuclear (CCHEN), Argentina (Marina di Giorgio, Autoridad Regulatoria Nuclear (ARN)), Cuba (Ruben Ferro, Centro Nacional de Seguridad Nuclear (CNSN)) and IRPA (Ana Maria Bomben and Bernard Le Guen). The goal is to develop more opportunities for collaboration and to allow for discussion on Radiation Protection Culture, Radiation Protection in the medical field, and NORM.



There is a marked increase of medical devices in Latin America, with a corresponding increase in demand for Radiation Protection experts. Skills and competencies for those operating these devices are becoming key questions. The management of the lifecycle of a medical device, from procurement to disposal, is crucial to ensure overall safety.

On the topic of Naturally Occurring Radioactive Material (NORM); many countries do not have clear policies/strategies to manage NORM residues. There is a need for appropriate characterization to determine NORM inventory and risks, including activity concentrations and dose estimations. Generally, there is a lack of specific NORM residue management facilities for processing, storage and disposal. IRPA has created a specific Task Group on this topic to promote and share good practices.

This meeting was a first step in the ongoing cooperation between IRPA and FORO

2.3 Technical Agreements with international organizations:

2.3.1 International Society of Radiographers and Radiological Technologists (ISRRT)

There is a long tradition of mutual interest between ISRRT and IRPA. The IRPA president was officially invited by the Society of Radiographers of South Africa (SORSA), a member of the International Society of Radiographers and Radiological Technologists (ISRRT), to participate in the SORSA 2023 Congress in Cape Town, South Africa. This event was organized in association with the International Society of Magnetic Resonance Technologists (International Society for MR Radiographers & Technologists (ISMRT), a



section of ISMRM. It was an opportunity to give a lecture on the radiation safety in health care and explain the link between the two international organizations.

3. Good Practice and Professionalism

3.1 New Societies and Associate Society Development

The Societies Admissions and Development Committee (SADC) is one of the standing committees of IRPA. One of its objectives is to encourage and support radiation protection societies that are not affiliated to IRPA to apply for Associate Society status. It also supports and encourages professionalism in all Associate Societies.

During the term, the SADC had discussions with several existing and potential future Associate Societies, and at the end of the current term is supporting the development of a new society and facilitating the possibility for it to join IRPA when ready.

The SADC also supported efforts to reach out to professionals in countries without Associate Societies, to support engagement beyond their national borders and to promote future interest in engaging more deeply through IRPA.

Further actions are being considered, for example to use the IRPA website to host materials on good practices such as: membership structure; young persons; public understanding and outreach; regulatory and government liaison; professional standards and guidance; career information and guidance; international liaison; and member communications. This initiative should be further developed in the following term.

3.2 Education and Training

Education and Training (E&T) is a key factor in establishing effective national radiation protection programmes. The IRPA E&T Plan has been developed along three main lines:

- Cooperation with international and regional organizations dealing with E&T in Radiation Protection.
- Internal stimulation of E&T within IRPA by organizing Refresher Courses and including E&T in the discussion forums during IRPA Congresses.
- Encouragement and support for the organization of E&T activities either by IRPA or by its Associate Societies.

3.2.1 International Cooperation on Education and Training

Cooperation with the IAEA

Establishing a national strategy for education and training is a priority to build competence in a sustainable and timely manner. The first objective of the IAEA strategic approach is to assist member states in aligning their legal and regulatory framework for education, training, qualifications and competence in Radiation Protection and Safety. IRPA fully supports this strategy.

21st IAEA STEERING COMMITTEE ON EDUCATION AND TRAINING IN RADIATION, TRANSPORT AND WASTE SAFETY



Cooperation has continued with the IAEA, through the annual participation of the IRPA president in the Steering Committee for Education and Training in Radiation Protection and Waste Safety.

Many IRPA Radiation Protection Associate Societies and organisations around the world have concerns on the future availability of suitably qualified RP professionals.

IRPA performs a survey among the IRPA Associate Societies every 4 years. According to the responses, 62% of the IRPA AS are involved in training of professionals. 33% have developed and published standards or guidance documents.

14% of respondents play a role in the accreditation of professionals. In most countries the competence of radiation protection experts needs to be recognized by the competent authority for these professionals to be eligible to undertake certain defined radiation protection responsibilities. The process of recognition may involve formal certification, accreditation, registration, etc.

67% of respondents have special arrangements to promote the involvement of young members who represent the future of the profession. International and national cooperation are essential to guarantee the sustainability of necessary skills and to transfer knowledge to the next generation. IRPA has an important role to play in this regard and has recently struck a new Task Group on mentoring.

Overall, it is necessary to address three key aspects:

- engaging the future professional:
- gaining RP knowledge and skills:
- retention, development and career progression.

IRPA supports the flow of students into science-based topics and actively promotes our profession. The availability of university and other training courses, together with research opportunities, must be supported.

Cooperation with EUTERP

In the European context, IRPA has continued cooperation with the EUTERP Foundation platform (www.euterp.eu) on European Training and Education in Radiation Protection. For example, the 8th Conference on Education and Training ETRAP, held in Groningen in June 2023, was organized by EUTERP, IAEA and IRPA.

The Scientific Program Committee included a member of the IRPA EC and a member of the IRPA YGN. The IRPA EC member also chaired the session dedicated to 'Integration of social

sciences and humanities and public engagement' and gave a presentation on 'Development of the radiation protection workforce knowledge base through sharing of ideas and practices' in the session 'Attracting and preserving a component workforce in radiation protection'.

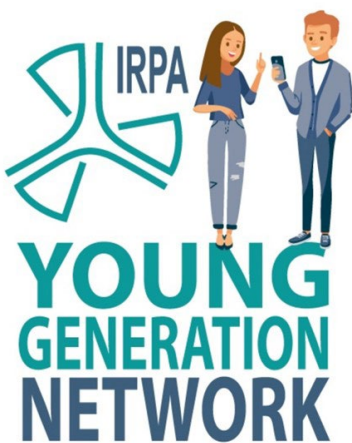
The importance of cooperation between IRPA and EUTERP in Education and Training in Radiological Protection is very evident. Consider, for instance, the themes of the conference and the discussions with the professional audience on: -Competence standards for trainers; - Online and hybrid learning: innovation and experiences gained; -Competence based system vs. Qualification based systems; -Integration of social sciences and humanities and public engagement; -Attracting and preserving a competent workforce in radiation protection.

3.2.2 IRPA Refresher Courses

One of the most in-demand and traditional components of IRPA international and regional congresses is the Refresher Courses (RC) programme. RCs provide participants with the opportunity to update their knowledge in specific areas of RP science and practice. They are aimed either at providing a broad overview of the current state of a given topic, or at giving experienced practitioners a more detailed understanding of up-to-date developments in a field. They also offer obvious benefits in terms of radiation protection culture enhancement. Guidance on RCs has been included as annex to the Guidance for Organisers of an IRPA Regional Congress.

The number of RCs during the term 2021-2024 is quite large. They constitute a valuable asset for all RP professionals, which IRPA wishes to preserve properly on its website, making them accessible to everyone.

3.3 Young Professionals Program



IRPA already has a well-established Young Generation Network, consisting of those who represent the future of our profession. Since its establishment in 2018, the Young Generation Network (YGN) has been dedicated, with the support of the International Radiation Protection Association (IRPA), to a variety of activities to promote communication, collaboration, and professional development of students, young professionals and scientists in radiation protection and its allied fields.

Many activities have been performed so far, with emphasis on important events, collaborations, and publications. The experiences obtained from each activity are summarized and used to inform how the IRPA YGN will aim to achieve its ongoing activities. The YGN continues to work towards the goals stated in the 2022-2024 Strategic Agenda despite the very specific challenges faced by a

“young generation network”; namely, extending the network, building new relationships with other networks focused on the young generation, and participating in (remote) events. Whether local or global, the future of radiological protection relies on the contribution of young professionals.



YGN team 2021-2024

Sharing ideas, experiences, achievements, and developing good relationships are vital to this network. Therefore, the YGN hopes to continue participating in various regional or international events in the future, with the support of IRPA and its Associate Societies.



Young health Physicist in India

3.4 IRPA TG on the Review of the System of Radiological Protection

The efficiency, communicability, and understandability of the system of Radiological Protection is a high priority for the International Radiation Protection Association (IRPA), the global voice of the RP professionals.

The Task Group was established at the start of this term to collate feedback from IRPA AS on the ICRP proposals for the Revision of the System of Protection and consolidate views reflecting both areas of broad consensus and the spectrum of views of the profession. Feedback was initially obtained from the Associate Societies on areas of the System that might benefit most from review, and early thoughts on directions for improvement. This feedback was presented at the October 2021 ICRP workshop and included the entire range of views received. Following this, a second call for feedback was issued requesting AS to provide more details on their three most important issues concerning the revision of the System for Radiation Protection. Later in the year a third call was issued requesting practical examples relating to the System of Radiation Protection, with a final request for comment on the ICRP priorities for the revision issued just prior to the Vancouver Conference in November 2022. The IRPA feedback has been presented at the North American IRPA Regional Congress, the Health Physics Society Annual meeting and at the ICRP Symposium. A summary of the various responses, highlighting commonalities in views as well as some individual concerns, is given in the proceedings of ICRP2021+1 and on the IRPA website.

Seventeen Associate Societies responded to the call for TG members, with a total of thirty IRPA members nominated to the TG. The initial call for feedback on the ICRP paper received detailed comments from sixteen Societies, with nine Societies providing input to the second call for feedback, seven responding to the 3rd call and five to the final one.

The various sets of feedback provide a good overview of the main issues, and an indication of direction for the ICRP in addressing these issues, including the following priorities for review:

- Reasonableness and tolerability in the System of Radiological Protection
- Ethics of Radiological Protection - in medicine & more generally
- Application of the principle of Justification
- Communication - particularly with the public
- Exposure situations & categories of exposure
- Impact of uncertainties on System of RP
- Needs for training & education on the RP System

The opinions of a wide range of radiation protection professionals have been included; however, it can be noted that initially most of the feedback provided was quite general. Although the third set of feedback provided more details of experiences in the practical applications of the RP System, more examples of this would be welcome in the next term, particularly within the regulatory framework. A similar observation can be made for other international and regional entities addressing the revision. There are often many comments high on general reflections but low on specifics or practical examples of difficulties or challenges encountered, or indeed potential solutions to these. Ongoing work of the IRPA TG might usefully focus on further practical experience or examples that members are willing to

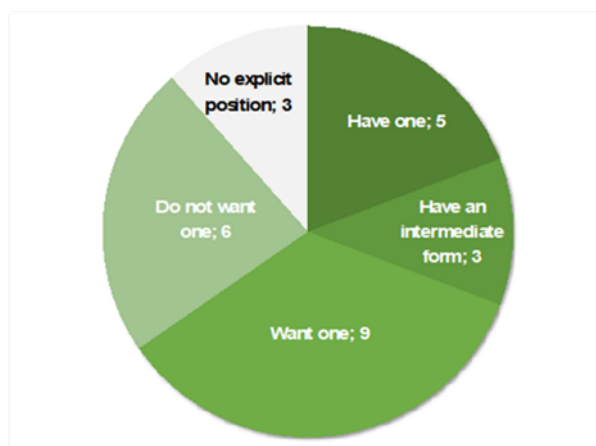
share and, as ICRP proposals develop, practical exploration and feedback on implementation of these.

3.5 Higher Education, Research and Training TG

This has been one of the more productive TGs, with two published papers plus a standalone guidance sheet entitled 'Ten Tips for Radiation Safety Culture in the Higher Education, Research and Teaching sector', all of which can be found on the IRPA website. Although work was initially planned on development of a 'toolbox' for improving RS Culture in HERT, the advent of COVID alongside the relatively small number of IRPA members available to carry out this work has led to it being postponed for the foreseeable future. Although the TG is being closed at the end of this term, the published materials will remain on the website and a new TG in this area may be initiated if and when there is sufficient support across a number of AS to take it forward.

3.6 Mentoring TG

A new IRPA initiative on mentorship has been launched by IRPA. Radiation protection professionals face challenges on how to best convey their knowledge and experience to recently hired radiation protection staff, many of whom may have limited professional experience. From the young professionals' point of view, mentorship is critically important to the start of a successful career and has the potential to bring many benefits to both the mentee and mentor. With this in mind, the IRPA Executive Committee endorsed the creation of a Task Group on Mentorship Practices in September of 2022 with full involvement from the IRPA Young Generation Network (YGN). Kevin Nelson and Sylvain Andresz serve as co-chairs in this effort. To obtain a better understanding of existing mentorship programs, a survey was sent to AS Presidents in November of 2022. The figure below lists the partial results of this survey.



The next step for the TG was to evaluate mentorship program formats and create a draft guidance document, which is now posted on the IRPA website.

3.7 Radiation Safety Culture in Healthcare TG



This TG was established to continue IRPA's work on Radiation Safety Culture in healthcare, following preparation of the joint guidance document with WHO, IOMP and IAEA. The group has over 20 members, representing 15 Associate Societies. Participants were provided with a pre-publication copy of the guidance and have been supporting each other in using the included tools to develop their own local projects for assessment and/or improvement of the radiation safety culture in their institution or region. A series of online meetings have been held, initially with the whole group and then split into three smaller subgroups, to discuss progress and share ideas and issues. The individual projects are wide-ranging, including several surveys to assess the current state of radiation safety culture, development of education and training materials, and a variety of engagement strategies to improve RS culture in the local setting. Settings are also varied, including nuclear medicine departments, paediatric radiology, cardiology and vascular radiology.

Early work of the TG has already been presented at a meeting of the European ALARA Network and the IOMP annual conference in Mumbai, with further dedicated sessions planned at the IRPA International Congress in Orlando. The group hopes to run a dedicated workshop in 2025 to share the work of the TG and consider development of further written material to assist practitioners with implementation of the original guidance publication.

3.8 Tissue Reactions TG

The issue of tissue reactions is complex, as tissues are affected in different ways through different mechanisms. Evidence for effects on the lens of the eye has been built up over many years with a dose limit set to prevent cataracts. Evidence for effects on other tissues within the body and the dose levels at which such effects may occur has also been well reviewed. These effects are of particular interest in the medical field where the risk-benefit relationship is very important for patient management.

This TG was initiated in this IRPA term, building on previous experience gained with the three TGs organized by the same staff that looked specifically at the dose to the lens of the eye as well as the specificities linked to a broader vision of tissue reactions.

The TG is intended to collect the view of professionals of IRPA Associate Societies on wider issues relating to tissue reactions to contribute to creating awareness about early and late effects of radiation. Moreover, it will assess whether professionals of the Associate Societies are informed about tissue reactions in a radiation protection context and if they are involved in this area, as well as their perspectives on the evolution of this topic.

The twelve TG members from different geographical areas (Africa, North and South America, Asia and Europe) have prepared a questionnaire that has been distributed to IRPA AS. The survey will collect information on areas of interest on tissue reactions and promote a wide exchange of information at the international level. The questionnaire contains 30 questions

regarding tissue reactions, covering occupational exposure, medical exposures in radiotherapy, and interventional and diagnostic imaging. 22 Societies are participating in this survey, with the hope that more will follow.

This is an opportunity to obtain the views of the IRPA community and from different countries on monitoring dose, methods of protection, and the ongoing path toward the implementation of recommendations at legislative level,

3.9 Women in Radiation TG

The objectives of this Task Group are:

- promote a wide exchange of experiences and values for a gender perspective in RP within IRPA
- develop IRPA's Statement for Women in RP.

These elements will permit the evaluation of real opportunities, roles and mandates that are exercised in the workplace in different countries in order to promote and trigger actions with a view to equal opportunities.

Membership of this Task Group includes 17 members nominated by 16 Associate Societies, covering all regions: Africa, Asia, Australia, Europe and North and Latin America (Argentina, Australia, Austria, China, Croatia, Kenya, Iran, Israel, Japan, Korea, Nigeria, Portugal, Romania, Tunisia, United Kingdom, Germany-Switzerland).

IRPA activities with gender perspective related to Radiation Protection have been addressed previously

1. Panel on "Development of women in the nuclear sector - perspectives and experiences of professionals in the area of radiological and nuclear safety". (XI Latin American IRPA Regional Congress on Radiation Protection and Safety, held in Havana, Cuba, in April 2018).
2. Special Session on Women in Radiation (WiR) (IRPA15 International Congress, Korea, January 2021) Recommendation to IRPA to create a TG and to draft an IRPA's Statement for women in Radiation Protection.
3. A publication in the Journal of Radiological Protection "Women in radiation (WiR)—a perspective for the strengthening of radiation protection". J. Radiol. Prot. 42 (2022) 010502; (<https://doi.org/10.1088/1361-6498/ac2909>).
4. The IRPA TG on Women in Radiation (WiR) was created in December 2021 and the Associate Societies of IRPA were called to nominate candidates to the TG. The nomination is still open.

Working Methods: The work of the Task Group is conducted principally via email and virtual meetings. Methodology includes:

- Starting points for discussion/survey and data collection
- Develop an IRPA'S Statement for women in RP

- Workshops (virtual) for data collection and to disseminate the Statement.
- Presentations on the TG and the TG findings at IRPA Regional and International Congress
- Preparation of a Guideline on improving gender balance.

In order to address the first objective, it was proposed that each member of the TG consider the following points from the perspective of their countries and regions as triggers for further discussions:

1. Main needs/challenges faced by women working in the radiation field
2. Strategies to address and eliminate bias and discrimination towards gender balance
3. The role of women and the next generation in the promotion of Safety Culture and Ethics in Radiation Protection
4. Regional-international cooperation for strengthening RP and Enhancing Radiation Protection Culture through a Gender Perspective

A survey evaluating the above-mentioned points was distributed among the TG members between March 2022 and March 2023. The results of the survey were presented during the "Third IRPA International Webinar, held by IRPA in collaboration with the Health Physics Society (HPS), July 13th, 2023.

The TG's next activity will be hosting a Round Table on WiR/WiN during the IRPA16 International Congress in Orlando, USA from 8 to 12 July. WiR and WiN panelists will be invited to share their vision and experiences. The proposed topics are centered around key points discussed during the survey.

3.10 Public Understanding TG

Through experiences from past emergencies, including the accident at TEPCO's Fukushima Daiichi Nuclear Power Plant in 2011 and the following post-disaster recovery, the importance of enhancing our efforts on public understanding of radiation and risk is recognised both by IRPA and the Associate Societies. There was a strong request for IRPA to assist societies and individual members by providing tools and training to improve our ability to communicate effectively outside of our profession. At the same time, there is a growing need and interest for the Associate Societies to enhance their programmes in this important area, and also for every individual radiation protection professional to become much more engaged and competent in communicating with members of the public.

This is a key but challenging activity which needs further support. IRPA therefore continues a TG activity for Public Understanding based on the results in the previous TGs on Public Understanding (2013-2016 and 2016-2020). The current TG has a membership from the following 11 countries: Argentina, Australia, Belgium, Canada, Hungary, Japan, Netherlands, Nigeria, South Africa, UK and USA, and from IOMP and IRPA YGN.

Following the release of the IRPA Practical Guidance for Engagement with the Public on Radiation and Risk that has been published in October 2020, the TG was seeking views on the practicality of the Guidance, ongoing challenges faced by the profession and on gaps that

still could be addressed by the IRPA TG. On July 2023, the TG conducted a short survey to collect views from individuals of Associate Society members.

The group received 174 answers from 23 countries. The respondents' expertise is mainly Research, Education, Medicine, Regulatory, and Industry. Approximately 97% of the respondents have more than 6 years of experience in radiation protection field. 87% of the respondents stated that they have been involved in communicating radiation risk to the public (residents, patients, media, etc.) or they are interested in communicating with the public and 96% of them are involved in communicating radiation risk to the public more or less frequently. However, less than half of the respondents are aware of the IRPA Practical Guidance. Most of them are aware of the Guidance through their Associate Society or through IRPA, highlighting the importance of communication between Associate Societies and IRPA, and of sharing information from IRPA within Associate Society.

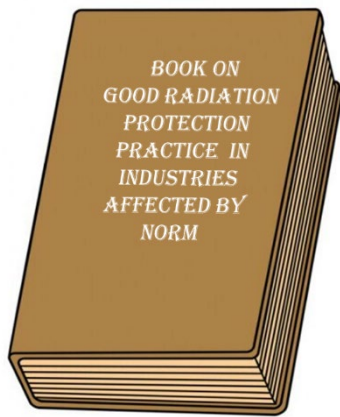
On the question of 'Which sections of the Guidance did you find particular useful', the responses were that almost all sections were useful, but at the same time, they would like more details in almost all sections. Many respondents answered that they believe there is a need for additional guidance on communicating radiation and risk, and it became clear that they feel it is challenging when communicating radiation and risk in areas/scenarios such as 'Communicating with the Public in support of Emergency Planning or in the Event of a Radiation Incident', 'Public Outreach', 'Communicating with a public related to existing or planned new nuclear power plant', 'Communicating with Patients as part of a Medical Diagnosis or Treatment' and so on. The TG also received many useful and helpful comments and suggestions from the respondents. The output of this survey will be used to help inform the future activities of IRPA TG and to help IRPA TG develop further guidance. The survey results were introduced in the IRPA webinar on April 24, 2024, and the recording video is available on the IRPA website; https://www.youtube.com/watch?v=_CGQ67sKp_g.

3.11 Naturally Occurring Radioactive Materials (NORM) TG

IRPA identified that the regulation and management of naturally occurring radioactive material (NORM) is an important area that would benefit from more active involvement of practitioners. The NORM Task Group (TG) was formed as a networking opportunity and to consider practical NORM related issues. A key objective has been to formulate a handbook of practical guidance. Rainer Gellermann (Germany) and Jim Hondros (Australasia) are co-chairs, and task group members come from almost 18 different associate societies. The co-chairs are proactive and hold weekly meetings to review progress and activity. During the period July 2023 to June 2024, the IRPA NORM Task Group met virtually on two occasions.

The program of work for the group remains focused on the handbook, however, over this period has changed due to new and revised priorities and task group members' competing time commitments. A summary of activities is provided here.

NORM Handbook.



A preliminary draft handbook has been developed; however, task group members have different views on the purpose of the handbook. Based on this, a halt has been placed to its development and task group members have been surveyed to determine a) their best use of time and b) what is the most useful practical document that can be produced. The divergence of views is seen to be indicative of the NORM space, where in practice, there are many different views on management of NORM by operators, regulators and practitioners. An update on progress is intended to be provided at the upcoming Orlando conference. The NORM Task Group is proposed to continue for the next term to resolve the issues and finalise publication of the Handbook.

Focus on Africa

The NORM Task Group has been a catalyst for bringing together NORM activities in Africa. Three African task group members have taken on the task of producing the first ever overview of NORM management in Africa, developing a questionnaire that has been answered by 16 different African countries. The African task group members are being mentored by other task group members and will be presenting their findings at the Orlando conference.

Other Activities

Jim Hondros (Co-Chair) participated in the 6th Asian and Oceanic IRPA Regional Congress in Mumbai India, February 2023. Rainer Gellermann (Co-Chair) and Bernard le Guen (IRPA president) participated in the International NORM Workshop in Siracusa Italy, June 2023.



Siracusa (Italy) : Norm in Oil and Gaz facilities congress - June 2023

Under the lead of the representative from Italy, the NORM Task Group undertook a survey on the regulations of radon in situations with NORM. It is a complex area, and preliminary results

were discussed at the European NORM Association conference in Rome. A publication on the survey results is in preparation.

Task group members have been working together and have developed position papers. Note that the position papers state that they do not represent the position of IRPA but do acknowledge IRPA and the NORM task group. Papers have included: A Survey of NORM Waste Management in Europe, A Survey of Radon Management Methods.

Task Group members have also been involved in the organisation of the IRPA16 Congress in Orlando and will be actively contributing to the session on NORM and radon.

3.12 Non-Ionising Radiation TG

The IRPA EC identified an increasing need to develop a strategy for activities in the field of Non Ionising Radiation (NIR).

During the last year, the IRPA Non-Ionizing Radiation Task Group (IRPA NIR TG) has continued elaborating strategies to improve communication of information related to NIR to the public. A first action consists of the preparation of a document entitled « Recommendations for the public concerning the reliability of sources of information regarding the possible health impact of non-ionizing radiation ». This document is being worked upon, and will likely result in two versions: one for the general public, and one for professionals.

Second, we are preparing a detailed response to SCHEER regarding the reclassification made in 2022 on the non-scientific basis regarding non-invasive brain stimulation devices (notably, transcranial current stimulation hardware). The TG is hopeful that it will result in a reversal of this over-classification, in order to preserve innovation and encourage the development of novel brain stimulation therapies.


Third, the TG has been exchanging with INSERM (French national institute of research in health and medicine) to propose a formal support regarding communication to the public and training actions for members of parliament and senate, as an attempt to ensure that novel regulations are made using evidence-based knowledge available.

Finally, during the last meeting of the International Advisory Committee (IAC) on electromagnetic fields of the World Health Organization, the TG co-chairs presented on these issues in an invited presentation and have offered to connect with them on these topics, especially from the regulatory perspective.


4. Enhancing Effectiveness of IRPA

The IRPA EC recognized the need to upgrade some of our internal systems in order to provide better service to the Associate Societies. Particular attention has been given to improving the website and to developing the IRPA Bulletin as key communications tools. The opportunity has also been taken to update the Rules and propose changes to the Constitution in order

to align with modern practices. This will be considered at the upcoming General Assembly during IRPA15.



IRPA - INTERNATIONAL RADIATION PROTECTION ASSOCIATION
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EC Members Login ▾

IRPA is the international voice of the radiation protection profession. It is an association of radiation protection professionals joining through national and regional radiation protection societies. We promote the worldwide enhancement of professional competence, radiation protection culture, and practice by providing benchmarks of good practice, and encouraging the application of the highest standards of professional conduct, skills, and knowledge for the benefit of individuals and society.



IRPA 16
69TH HPS ANNUAL MEETING 2024


16th International Congress • 7-12 July 2024
Orlando, FL • Rosen Shingle Creek
"Radiation Harmonization: Standing United for Protection"



Sievert Award

The International Radiation Protection Association (IRPA) is pleased to announce Dr. María del Rosario Pérez as the winner of the 2024 Rolf M. Sievert Award. This award is made in recognition of outstanding contributions to radiological protection and honours the memory of a pioneer in radiological protection, Professor Rolf Sievert.


[Read more...](#)



Who are we?

IRPA is an international association of individual radiation protection practitioners joining through national or regional societies. Our members cover all fields of radiation protection from countries across the globe. Find out more about what we do and why you should engage with us!

[Read more...](#)



Associate Societies

IRPA is made up of 53 Associate Societies in 68 countries. If your national association isn't already a part of IRPA, then read on for more information on the benefits of becoming an Associate Society. Even if you don't have a national association, let us know and we can help get you on your way.

[Read more...](#)

NEWS

[REGISTER FOR UPDATES](#)

[IRPA webinar recording now available](#)

2024-05-13 In case you missed the latest IRPA webinar from April 24, 2024, you can now view the recording online. This webinar covered the IRPA Task Group on Public Understanding, the Young Generation Network, and of course, IRPA16!



A new procedure for determining the 'IRPA view of the profession' has been established, noting that as the "voice of the profession", IRPA is expected and must be able to formulate positions and opinions. This is available on the website.

4.1 Financial Management and the Montreal Fund

In general, IRPA finances remained stable during this period (1.1.2021 - 29.2.2024), with dues at \$3.50 per member (discounted for Associate Societies (AS) in developing countries, based on their per capita income level), as in previous period and the proceeds received from the IRPA - 15 Congress in South Korea (USD 30,000).

AS have been diligent in paying their annual dues to IRPA despite the special Covid circumstances having a negative impact on their finances. As the dues are the main source of income, IRPA's diverse activities depend on receiving AS dues on time.

Total income for the period (including contributions to the Montreal Fund) was USD 243.386,14 and total expenses (including support from the Montreal Fund) was USD 177.119,46, resulting in a net income of USD 66.266,68. The total assets at the end of the period were USD 342.355,62, including the Montreal Fund (USD 60.214,77).

The outcome of the independent review and the IRPA financial accounts are a part of the IRPA term report. Roger Coates, IRPA president 2016 – 2020, carried out an independent review of the IRPA financial accounts for the period 1.1.2021-29.2.2024 and the accounts were approved by the IRPA Executive Council. The outcome of the independent review and the IRPA financial accounts are a part of the IRPA term report (see Annex 1 and 2).

IRPA Financial Accounts to March 2024: Independent Review by R Coates

I have reviewed the financial accounts as supplied to me by IRPA Treasurer Sig Magnusson. I have sampled in some detail several expenses payments to various EC members as well as invoices for professional services. I have not found any reason to doubt the accuracy or realism of the accounts, and taken overall the income sources and key expenditures align with reasonable expectations and previous experience. I note that there are several outstanding payments of annual dues from several Associate Societies, and would encourage further efforts to ensure that dues received align with expectations and rules.

Signed

3 April 2024



Roger Coates
IRPA President 2016-2020

IRPA and Burk & Associates, Inc. ("BAI"), have entered into an agreement on financial management services as of 1 June 2023. BAI provides accounting services to IRPA, as well as preparing and filing IRPA tax report. BAI has provided similar services to the Health Physics Society for many years. The annual compensation to BAI is modest – the same amount as IRPA has paid annually for preparing and filing of the IRPA tax report

The Montreal Fund (MF) provides support for the attendance of young professionals from lesser developed countries at IRPA Congresses. The Fund received generous contributions from Australasia, Italy, Netherlands, Nordic, and UK AS in the amount of USD 16.795. The organizers of IRPA 15 made a very generous contribution of USD 10.000 to the Montreal Fund. Due to the special Covid circumstances, only USD 15.000 of the USD 30.000 pledged by the MF to IRPA 15 was needed. The Fund supported young professionals to IRPA 15 and the Regional Congresses in North America, Africa, and Latin America in the amount of USD 28.520.

Two IRPA AS – UK and Nordic – have made pledges to the Montreal Fund for annual contributions in the amounts of GBP 2 500 and 500 EUR, respectively. Other AS are encouraged to make pledges for annual contributions to ensure the sustainability of the Fund.

IRPA is most grateful for the continued support of the Montreal Fund which at the end of the period contained USD 60.214,77. Support for attendance at the IRPA 16 International Congress in the amount of USD 32,000 will be provided leaving about USD 28 000 in the Montreal Fund. Increased contributions to the Montreal Fund are urgently needed to ensure continued support for young professionals from lesser developed countries at the same level as now. The need for support is increasing year by year.

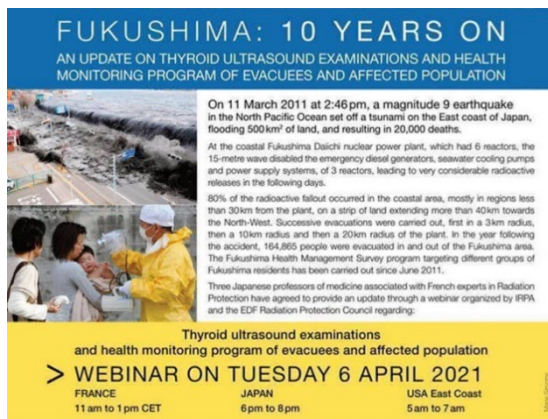
4.2 Reaching Out to RP Professionals Everywhere

A key initiative during the 2021 – 2024 term, led by the IRPA President and Vice-President, was to reach out to more radiation protection professionals, including those in IRPA Associate Societies and those in countries without such societies.

Open webinars offered by IRPA during the term were central to this initiative. They were an opportunity for IRPA to provide more regular updates regarding its activities to all members and other stakeholders, such as updates on the work of Task Groups, or information on upcoming congresses. These webinars were all very well attended and received and will continue into the next term.



An important example was a webinar organized by the IRPA President with Japanese colleagues on 6th April 2021, dedicated to the health consequences of the Fukushima accident, 10 years on. It focused on 2 items: health monitoring programs of the evacuated population and affected population, and thyroid screenings. The Fukushima accident



FUKUSHIMA: 10 YEARS ON
AN UPDATE ON THYROID ULTRASOUND EXAMINATIONS AND HEALTH MONITORING PROGRAM OF EVACUEES AND AFFECTED POPULATION

On 11 March 2011 at 2:46 pm, a magnitude 9 earthquake in the North Pacific Ocean set off a tsunami on the East coast of Japan, flooding 500 km² of land, and resulting in 20,000 deaths.

At the coastal Fukushima Daiichi nuclear power plant, which had 6 reactors, the 15-metre wave disabled the emergency diesel generators, seawater cooling pumps and power supply systems, of 3 reactors, leading to very considerable radioactive releases in the following days.

80% of the radioactive fallout occurred in the coastal area, mostly in regions less than 30km from the plant, on a strip of land extending more than 40km towards the North-West. Successive evacuations were carried out, first in a 3km radius, then a 10km radius and then a 20km radius of the plant. In the year following the accident, 154,865 people were evacuated in and out of the Fukushima area. The Fukushima Health Management Survey program targeting different groups of Fukushima residents has been carried out since June 2011.

Three Japanese professors of medicine associated with French experts in Radiation Protection have agreed to provide an update through a webinar organized by IRPA and the EDF Radiation Protection Council regarding:

Thyroid ultrasound examinations and health monitoring program of evacuees and affected population

> WEBINAR ON TUESDAY 6 APRIL 2021

FRANCE 11 am to 1 pm CET
JAPAN 6 pm to 8 pm
USA East Coast 5 am to 7 am

PARTICIPANTS

Prof. Shunichi Yamashita

Vice-President
MD, PhD - Fukushima Medical University,
Director General, Center for Advanced
Radiation Emergency Medicine,
National Institutes for Quantum and
Radiological Science and Technology, Chiba,
Professor Emeritus, Nagasaki University

The thyroid consequences of the
Fukushima accident with an update
on the follow-up study of children and
adolescents

Prof. Aya Goto

MD, MPH, PhD - Professor of Health
Information and Epidemiology Center
for Integrated Science and Humanities,
Fukushima Medical University

Overview of the main challenges
for the health professional to accompany
the local population with regard to social
and psychological problems following
the accident

Prof. Martin Schlumberger

MD - Professor emeritus of oncology
at University Paris Saclay and past chair
of oncology and nuclear medicine
department at Institut Gustave Roussy,
Villejuif, France

Interpretation of the thyroid cancer
incidence and its variations in the adults
and children

Dr. Thierry Schneider

PhD - Nuclear Protection Evaluation Centre
CEPN Director

Support for local populations following
the Fukushima accident: some lessons
for post-accident management

Dr. Bernard le Guen

MD, PhD - President of the International
Radiation Protection Association (IRPA),
Radiation Protection and Health senior fellow
expert for the EDF group
Chair of the webinar

Prof. Koichi Tanigawa

MD, PhD - Director, Futaba Medical Center,
Fukushima Prefecture Specially-Appointed
Professor, Fukushima Medical University,
Professor Emeritus, Hiroshima University

Health issues of the affected population
after the Fukushima Daiichi Nuclear power
plant accident

Hokusai: The great wave



revealed the complexity of long-term management of the consequences (lasting contamination of the environment, lasting disturbance of economic and social life, concern for and the long-term management of the health effects potentially associated with chronic exposure of populations in the long term). Returning populations to decontaminated areas is proving difficult. The human and social consequences of pollution have been marked (loss of confidence in the authorities and experts, strong concern among families about health, particularly that of children, feeling of discrimination, exclusion and powerlessness). The quality and the speed of the rehabilitation of contaminated land determine the essential aspects of the post-crisis situation and the impact of the accident on the local populations.

In addition:

- Efforts were made to promote remote access to some parts of IRPA Regional Congresses where practicable.
- Professionals working in countries without an IRPA Associate Society were invited to join IRPA Task Groups.

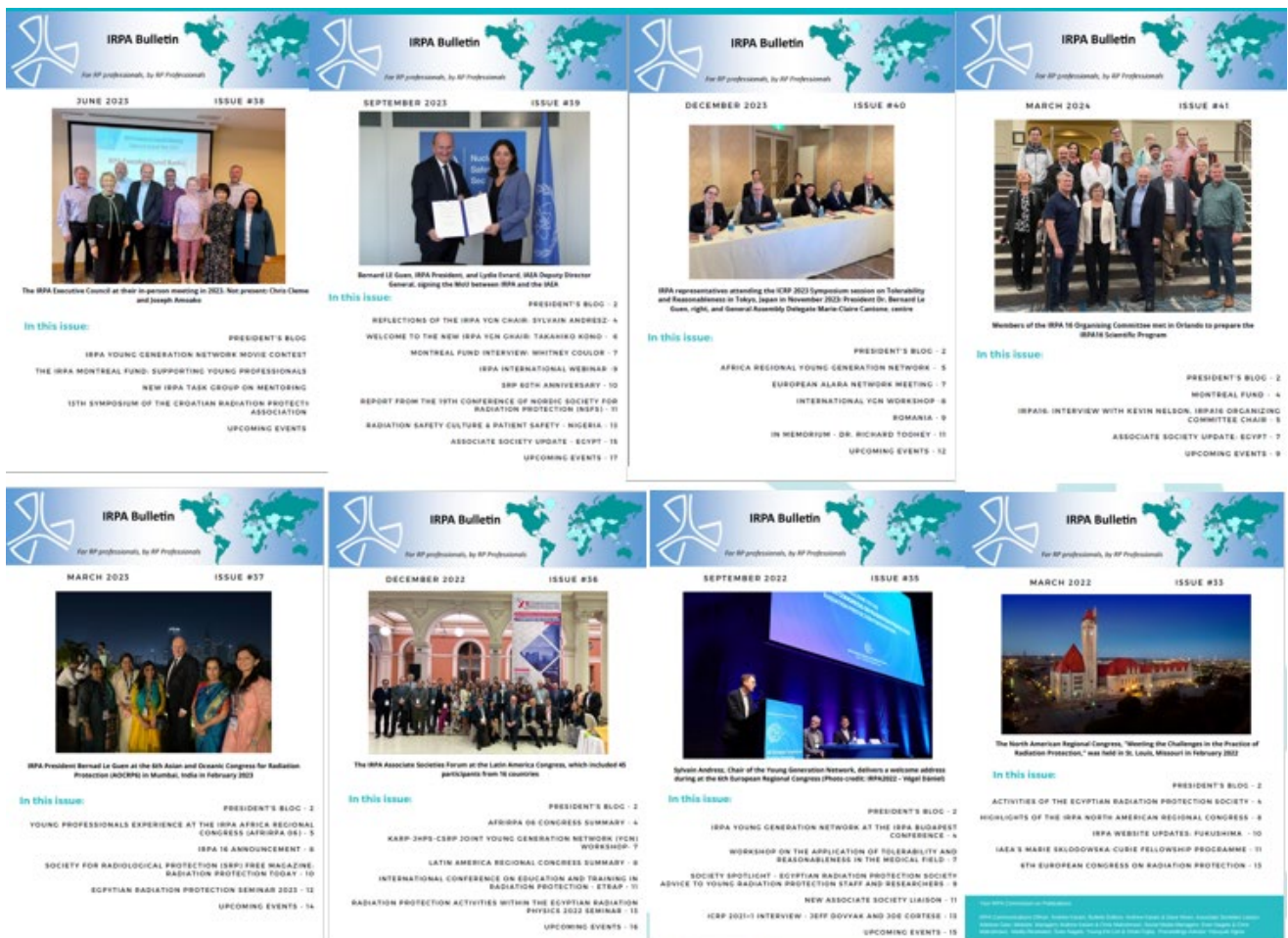
These actions were aimed at engaging all radiation protection professionals, especially those in small and developing countries or Associate Societies, and those without an Associate Society in their country, to support the profession of radiation protection world-wide.

4.3 Publications and Communication

The Commission on Publications plays a major role in IRPA communications through the IRPA website (which includes the IRPA News), the IRPA Bulletin, social media, and other means.

The IRPA Bulletin continues to be published once every quarter. During the current term, the mailing list was updated and transferred over to MailChimp, which provides a superior email automation experience for both the users and recipients. The use of MailChimp will be expanded to cover more IRPA communications in the future.

A renewed focus on social media was implemented in the latter part of the current term, focusing primarily on sharing posts on LinkedIn.



IRPA bulletin

4.4 IRPA Questionnaire Outcome

During each four-year term, IRPA sends out a survey to all Associate Societies. The goal of the survey is to update information on all IRPA Associate Societies, collect information on activities or programs that being carried out by ASs and that could be shared with other Societies as examples of good practice, and also to solicit suggestions or feedback on as well as on the role of IRPA within the profession, and how to improve IRPAs activities and effectiveness,

The survey was sent out on. Of the current 53 Associate Societies located in 66 countries, 27 responded, representing 34 countries and covering all regions (Africa: 2, Asia/Oceania: 6, Europe: 14, North America: 2 and South America: 3). The 27 Associate Societies having responded represent approximately 15000 of IRPA's membership (18,000+ members).

Main results

When looking at the total number of members for year 2022 and year 2023, it can be observed that:

- 44% of ASs that responded the questionnaire increased their members comparing 2023 and 2022,

- 28% decreased their members
- 28% were unchanged.

The membership numbers the ASs cover a wide range:

- only one AS had less than 20 members in 2023,
- 6 ASs had members between 501 and 1000,
- 3 ASs had more than 1001 members
- the AS with the highest membership was 2732 members.

When the gender balance is analyzed, the average number of women who are members of the IRPA ASs is 34 %, with a range from 10 % to 58 %.

The IRPA Associate Societies were asked to classify their members according their type of work/expertise in university/research/teaching, medical/health physicist, other health care sector, nuclear industry, other industry, regulator, consultancy, governmental & advisory bodies and other. When analyzing the responses, a wide range of members who work on a given topic can be observed:

- 27 % of members work in university/research/teaching (range from 6 to 70%)
- 14 % of members work as regulators (range from 1 to 60 %)
- 13 % of members work in medical, health physics or other medical fields (with a range of 1 to 39 %)

This shows that IRPA needs to address all topics on radiation protection to reach all IRPA ASs and their members with up-to-date information.

Regarding the dissemination of information to members/non-members:

- 70 % of the IRPA ASs have a journal (dates of creation from 1950 to 2013), with an average of 4 issues/year and a highly variable number of pages.
- 40 % of these are electronic journals only, while 55% have both electronic and printed versions
- 68% of the journals edited by the ASs are available to members and non-members, providing a way to reach more people interested in radiation protection with verified information.
- For the broader dissemination of information, 93% of the ASs reported that they have a website.

When the IRPA ASs were asked how many meetings (in-person or virtual) they had organized during 2022 and 2023 and analyzing the information received, the average was 9 meetings in the 2 years (range from 1 to 32) with a highly variable number of participants in each meeting and covering a wide spectrum of radiological protection topics.

When the IRPA AS were asked if ASs played a role in the training of radiation protection professionals, the results showed that 67 % of the ASs were involved in training with different modalities.

4.5 IRPA president invitation to an IRPA AS congress

Participation in the 30th Conference of Nuclear Societies in Israel



The IRPA president was invited to the 30th Conference of Nuclear Societies in Israel by the Israel Nuclear Society (INS) and the Israel Society of Radiation Protection (ISRP). He opened the congress and gave a lecture on behalf of IRPA. The conference highlighted the role of nuclear energy as a crucial element in achieving low-carbon energy production by 2050.

Bernard Le Guen, Raquel Bar-Deroma and Jean Koch

Participation in the XIX conference of the Nordic Society for Radiation Protection (NSFS)

The IRPA president participated in the XIX conference of the Nordic Society for Radiation Protection (NSFS) as invited speaker and opened the first session of the conference in Malmö, Sweden.



The first Inaugural NSFS meeting took place in Stockholm in 1964 with the participation of Rolf Sievert himself. This invitation was an occasion to present all IRPA activities, and particularly the work of the IRPA task group on the evolution of the System of Radiological Protection.

Bernard le Guen, Eva Forssell-Aronsson and Christian Bernhardsson

Participation in the webinar dedicated to the 60th NSFS anniversary

The IRPA president and IRPA treasurer represented IRPA during the webinar.

5. Congresses Overview

5.1 IRPA Regional Congresses

5.1.1 12th Latin America Regional Congress, Santiago de Chile

23 – 27 October 2022



The AS Forum in Santiago de Chile

The IRPA president participated in the opening ceremony of the XII regional congress of nuclear and radiological safety in Santiago de Chile and, along with the IRPA Executive Officer, Ana Maria Bomben, chaired the Latin American and Caribbean Societies forum. The forum was attended by representatives from 16 countries. The IRPA president gave a keynote lecture on the review of the system of radiological protection.

Special thanks to Pablo del Río López, president of the organizing committee, and all of the team who succeeded in making this congress a resounding success.

5.1.2 6th Asian and Oceanic Congress on Radiation Protection, Mumbai, India

7 – 11 February 2023

The congress was organized by the Australasian Radiation Protection Society (ARPS) with support of societies from Asia as well as IRPA, IAEA, ICRP, IOMP, UNSCEAR and WHO. It was an opportunity to encourage and stimulate exchange of information between RP practitioners in Asia.



Opening ceremony in Mumbai

AOCR6 focused on the recent developments in Radiological safety aspects, detectors, dosimetry, radiation principles in the application of radiation technology and in Nuclear Power generation including waste management. Nuclear applications involving radiation sources in the human health and industrial sectors require special attention, considering the high number of workers involved and the risks associated with operating facilities that involve new medical and industrial technologies.

The medical use of ionising radiation is increasing worldwide and similarly within the Asia-Pacific region. Radiology, in particular, has seen enormous growth with the latest medical equipment and practices becoming more commonplace in this region.



IRPA Associate Society Forum in Mumbai

5.1.3 6th European Regional Congress, Budapest, Hungary

30 May - 3 June 2022

The Sixth European Regional IRPA Congress was held in Budapest, Hungary from 30 May – 3 June 2022 with the theme: Radiation Protection for Everyone. The preparation was affected by the Covid-19 epidemic, but the local and the international organizers succeeded in preparing and operating a very successful congress.

Nearly 450 radiation protection professionals met to share their work and have discussions on 14 topic areas. 13 young researchers took part in the Young Scientists and Professionals competition. The winner received free registration to the IRPA 16 congress in addition to a significant monetary prize.



The AS Forum in Budapest

Selected papers of the this congress have been published online in the Radiation Protection Dosimetry journal: <https://academic.oup.com/rpd/issue/199/8-9>. Congress proceedings are available on the IRPA website at <https://irpa.net/page.asp?id=54849>. They include all abstracts of the congress and 2 papers. The page also has links to the materials from all the refresher courses of the congress.

5.1.4 6th African Regional IRPA Congress (AFRIRPA06), Accra, Ghana,

10 – 13 October 2022



Several main challenges in Radiation Protection for Africa were discussed during the AFRIRPA congress. These include:

- Maintenance of a strong safety culture
- Implementation of radiation protection programmes at end-user facilities
- Provision of a quality dosimetry service

- Dose record management of occupational radiation exposures.
- Sharing Incidents or near misses to reinforce radiation safety practice in workplaces.

Nuclear applications involving radiation sources in the human health and industrial sectors require special attention, considering the high number of workers involved and the risks associated with operating facilities that involve new technologies in these areas.

The main discussion was on the importance of implementing a national or regional intercomparison program for dosimetry for imaging or treatment to improve the harmonization of practices and to increase the local level of professionalism. There is a need for such harmonization in Africa, so that we can control and minimize health risks while maximizing the benefits of the use of radiation. Imaging centers must become reference centers for radiation protection.

5.1.5 1st North American Regional IRPA Congress Saint Louis USA

20-23 February 2022

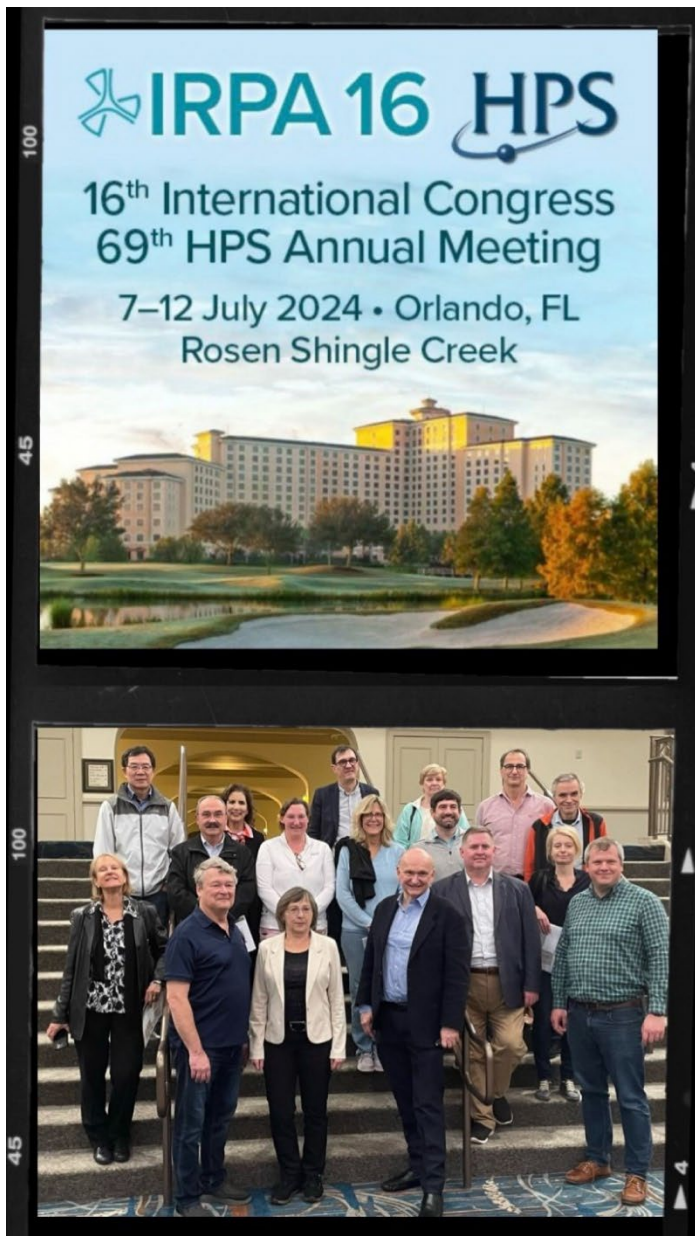


Whitney Color, John Cardarelli II , Bernard le Guen and Mike Mahathy



The 1st North American IRPA Regional Congress meeting was held on 20-23 February 2022 at the Union Station Hotel in St. Louis, Missouri, USA. Although the temperatures were cold, the meeting was well attended. On site and virtual attendance was approximately 400. IRPA President Bernard Le Guen served as the keynote speaker as well as providing talks on IRPA initiatives. Plans are underway to have Canada serve as the site of the 2nd North American IRPA Regional Congress.

5.2 IRPA16 International Congress, Orlando USA, July 2024



The selection of Orlando, Florida USA as the site of the IRPA 16 International Congress was confirmed by the IRPA General Assembly in a virtual meeting in January of 2021. IRPA 16 will be hosted by the Health Physics Society (USA), CRPA (Canada) and SMSR (Mexico). This will mark the first time in 51 years that an IRPA International Congress has been held on US soil, the last being IRPA 3 which was held in the Washington DC area in September of 1973.

Renate Czarwinski from the German-Swiss Association for Radiation Protection was chosen as Chair of the IRPA 16 Program Committee and Chunsheng Li, CRPA, as Secretary to this committee.

Eleven main areas were identified for IRPA 16 by the Program Committee. These areas included:

- Underpinning Sciences, e.g., radiation biology/epidemiology
- Systems of Protection for Ionizing and Non-ionizing Radiation
- Dosimetry and Measurements

- Radiation Protection in Health Care
- Radiation Protection in Nuclear Power and Fuel Cycle
- Radiation Protection in Industrial, Agriculture, Veterinary and Aerospace Applications
- Radiation Protection in NIR Applications
- Nuclear and Radiological Emergencies
- Radioactive Waste Management
- Naturally Occurring Radiation
- Communication and Stakeholder Involvement

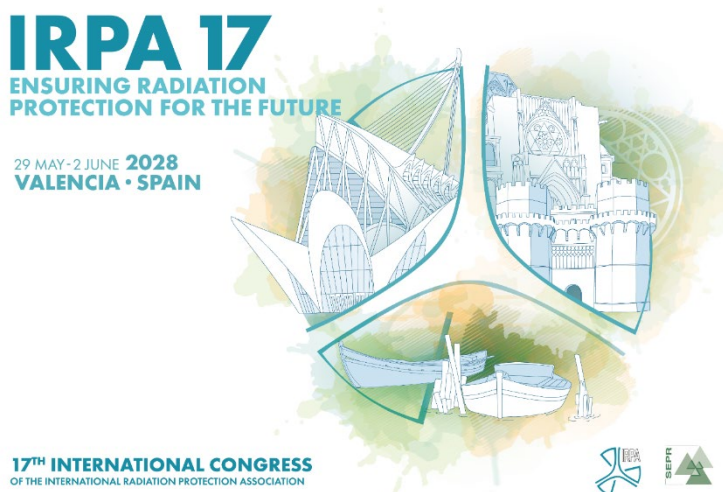
Fourteen core members, representing eleven different AS, were selected to participate as part of the IRPA 16 Program Committee. Over 800 abstracts were received in the eleven main topic areas for the conference. All were reviewed and ranked, in a blinded fashion by the core and corresponding members in each of the main areas.

The International Congress Support Committee (ICSC), chaired by Brent Rogers from the Australasian Radiation Protection Society, was responsible for soliciting and distributing financial support for the participation of students and young professionals from developing countries as well as participants from countries not currently associated with IRPA. \$30,000 (USD) was provided by the Montreal Fund to help support travel and participation in IRPA 16 to eleven individuals.

IAEA distributed \$50,000 (USD) from a US EPA grant to twenty-nine (29) radiation protection professionals from Africa, Latin America, the Caribbean and South American to attend IRPA 16. All individuals receiving funding will be presenting papers at IRPA 16.

An attendance of 1,100 for IRPA 16 is anticipated.

5.3 IRPA17 International Congress, 2028 Valencia



After the selection of Valencia (Spain) as the preferred host for the IRPA17 International Congress during the General Assembly of January 2021, the Spanish Society for Radiological Protection (SEPR) has been working hard on all aspects of the congress. The IRPA EC was able to view some of their preparations firsthand at a meeting in Valencia on May 12, 2023. Two important milestones have been already

reached: the selection of the Congress venue, blocking the IRPA 17 dates, and the contracting of a Professional Congress Organizer (PCO) to support the organization. The venue for the Congress will be the Valencia Conference Centre, a top-class convention

centre, capable of fulfilling all the needs of a Congress of this magnitude, surrounded by first-rate hotel infrastructure. The PCO, Cevents SL, is an experienced Spanish PCO whose highly trained staff and advanced technological systems ensures flexible handling and full technical support to the organization.

The SEPR has created a Task Force of enthusiastic committed members that will form the core of the International Congress Organizing Committee (ICOC), gathering both young and experienced people covering all areas necessary to organize a perfect congress. There is also great support from the collaborating partner Associate Societies from France (SFRP), Italy (AIRP), Germany – Switzerland (FS) and Portugal (SPPCR).

The proposed theme for the Congress is “Ensuring Radiation Protection for the Future” and the project is inspired by two key objectives. One of them is fostering radiation protection culture worldwide, to guarantee sustainable uses of radiation for tomorrow. The second objective is that IRPA 17 contribute to empowering the young generation of RP professionals, maintaining the awards for young people, integrating young professionals and researchers as full members of the Scientific and Organizing Committees, organizing social activities and collaborating with the IRPA YGN. To encourage maximum participation, IRPA 17 will offer affordable economic conditions for everyone, with very special conditions for young professionals and differentiated rates by country groups in accordance with IRPA policy.

On the other hand, the Congress will also encourage public participation and dissemination of information to the public. Outreach talks will be organized for university students and for all citizens in general, and the congress will also make extensive use of digital communication tools such as social networks, webinars, streaming broadcasts of the main sessions, recording of the courses, etc. in order to maximize its impact.

5.4 Next IRPA Regional Congresses, 2026

Typically, there have been four Regional Congresses held during the middle of the IRPA four-year cycle. We are particularly pleased that in 2026 there will be the following four confirmed Regional Congresses:



- Asia/Oceania Regional Congress (AOCRP7): Beijing China
- European Regional Congress: Liverpool, UK
- African Regional Congress: Cameroon
- Latin American Regional Congress: Medellin, Colombia

Liverpool flag



Executive Council in Valencia , Spain in 2023

19 Executive Councils Meetings: **16 virtual EC meetings and 3 in person**
(Budapest , Valencia , Orlando)



Executive Council Meeting in Orlando , July 2024

**Left to right: Klaus Henrichs (Germany) , Dave Niven (Canada), Claire Louise Chapple (UK),
Cameron Jeffries (Australia) , Bernard le Guen (IRPA president, France), Kevin Nelson (VP for
IRPA16 Congress affair, USA), Marie Claire Cantone (Italy), Christopher Clement (Vice President),
Ana Maria Bomben (Argentina), Sigurður Magnusson (Financial Officer, Iceland), Hiroko
Yoshida (Japan)**

***missing Joseph Amoako (Ghana)**

Annex 1 : Income expenses 01 01 2024 to 02 29 2024

1:44 PM
03/19/24
Cash Basis

IRPA
Profit & Loss
January 2021 through February 2024

	Jan - Dec 21	Jan - Dec 22	Jan - Dec 23	Jan - Feb 24	TOTAL
Income					
4000 · Dues	52.977,23	25.498,32	90.245,97	17.787,00	186.508,52
4200 · Montreal Fund Contributions	11.400,00	4.604,25	5.676,05	5.114,50	26.794,80
4300 · Meeting Income	30.000,00	-	-	-	30.000,00
4500 · Other Income	-	-	5,00	-	5,00
4900 · Interest	-	-	12,37	65,45	77,82
Total Income	94.377,23	30.102,57	95.939,39	22.966,95	243.386,14
Expense					
5000 · Travel	-	36.984,41	42.401,43	4.910,85	84.296,69
5200 · Support					
5200.10 · Int'l Organization Support	7.500,00	7.500,00	7.500,00	3.000,00	25.500,00
5200.20 · Associate Society Support	-	1.530,00	3.000,00	-	4.530,00
5200.40 · Montreal Fund Support	15.000,00	13.520,00	-	-	28.520,00
5200 · Support - Other	1.000,00	-	2.000,00	-	3.000,00
Total 5200 · Support	23.500,00	22.550,00	12.500,00	3.000,00	61.550,00
5300 · Professional Services	1.548,00	1.598,00	248,36	-	3.394,36
5600 · Registration	-	294,46	609,07	-	903,53
5800 · Meeting Expenses	-	1.112,20	6.810,00	-	7.922,20
5900 · Bank Fee	124,01	225,00	610,00	50,00	1.009,01
6200 · Website	9.456,55	3.771,35	1.815,77	-	15.043,67
6300 · Awards	3.000,00	-	-	-	3.000,00
Total Expense	37.628,56	66.535,42	64.994,63	7.960,85	177.119,46
Net Income (Loss)	56.748,67	(36.432,85)	30.944,76	15.006,10	66.266,68

Annex 2 : IRPA balance sheet

1:45 PM
03/19/24
Cash Basis

IRPA
Balance Sheet
As of February 29, 2024

	Dec 31, 21	Dec 31, 22	Dec 31, 23	Feb 29, 24
ASSETS				
Current Assets				
Checking/Savings				
1000 - Chase Bank 3006				
1000.10 - Chase Bank 3006 Montreal Fund	-	-	5.351,75	5.351,75
1000.20 - Chase Operating 3006	171.025,78	134.592,93	147.536,77	139.755,92
Total 1000 - Chase Bank 3006	171.025,78	134.592,93	152.888,52	145.107,67
1100 - Chase Savings 3022				
1100.10 - Chase Montreal Fund 3022	58.339,97	49.424,22	49.424,22	49.424,22
1100.20 - Chase Operating Savings 3022	103.471,86	112.387,61	112.387,61	112.387,61
Total 1100 - Chase Savings 3022	161.811,83	161.811,83	161.811,83	161.811,83
1150 - MSB General Fund 2447				
1150.10 - MSB Montreal Fund 2447	-	-	324,30	5.438,80
1150.20 - MSB General Fund 2447	-	-	12.324,87	29.997,32
Total 1150 - MSB General Fund 2447	-	-	12.649,17	35.436,12
Total Checking/Savings	332.837,61	296.404,76	327.349,52	342.355,62
Total Current Assets	332.837,61	296.404,76	327.349,52	342.355,62
TOTAL ASSETS	332.837,61	296.404,76	327.349,52	342.355,62
LIABILITIES & EQUITY				
Liabilities				
Current Liabilities				
Other Current Liabilities				
2500 - Short Term Loan	100,00	100,00	100,00	100,00
Total Other Current Liabilities	100,00	100,00	100,00	100,00
Total Current Liabilities	100,00	100,00	100,00	100,00
Total Liabilities	100,00	100,00	100,00	100,00
Equity				
3100 - Retained Earnings	63.638,41	120.387,08	83.954,23	114.898,99
3500 - Retained Earnings- Unrestricted				
3500.10 - Retained Earnings- Unrestricted	214.048,97	214.048,97	214.048,97	214.048,97
Total 3500 - Retained Earnings- Unrestricted	214.048,97	214.048,97	214.048,97	214.048,97
3600 - Retained Earnings - Restricted				
3600.10 - Retained Earnings - Restricted	61.939,97	61.939,97	61.939,97	61.939,97
Total 3600 - Retained Earnings - Restricted	61.939,97	61.939,97	61.939,97	61.939,97
3900 - Current Year Net Income Offset	(63.638,41)	(63.638,41)	(63.638,41)	(63.638,41)
Net Income	56.748,67	(36.432,85)	30.944,76	15.006,10
Total Equity	332.737,61	296.304,76	327.249,52	342.255,62
TOTAL LIABILITIES & EQUITY	332.837,61	296.404,76	327.349,52	342.355,62

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