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Gabriel Dupont (center), winner of the IRPA16 Young Scientists and Professionals Award

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A MESSAGE FROM THE EDITORS

ANDREW KARAM

For many of us the end of a year – and the looming start of the next – offers an opportunity to reflect on the year that is ending, what went well and what did not, and to think about how to improve in the year to come. Editors, according to the latest hypotheses, are a variety of people and have a tendency to view this time of year the same way. So let's tell you what we've been talking about for IRPA Communications in 2025.

Our profession is over a century old, dating back to the very earliest days during which the early investigators realized that x-rays could cause skin burns; in those years the current form of our profession began to take shape. With what we've learned in the century past radiation protection has become, in many ways, simpler because we've developed routine procedures, "best" practices, fairly comprehensive regulations – all supported by a century of research and experience. Radiation protection has, in fact, become so routine that most radiation protection is now the responsibility of professionals in safety, hazardous materials, medicine, radiography, and more – one need not be an RP professional to practice, or even to manage, radiation protection. One result of this is that many RP societies are losing membership – if we are to maintain our status as a legitimate profession and if we are to continue to evolve as a profession it is essential that we continue to attract new RP professionals and to help our early-career colleagues to build and to advance within their careers as well as to see that our profession can be interesting and fulfilling.

For this reason, we will be emphasizing articles in the Bulletin as well as features on the IRPA website aimed at younger RP professionals. In the Bulletin we will be covering the work and people of the Young Generation Network, on our website we will be giving IRPA members – at any stage of their career – the opportunity to tell us how (and why) they ended up with a career in radiation protection and what form that career has taken to date. We will also continue to build our Careers in Radiation Protection webpage and will look to see what other information and tools we can provide or develop to help those considering an RP career and those in the early stages of their career.

We also understand that, to many IRPA members, the IRPA leadership is largely a mystery. For that reason we will be running profiles of the members of the Executive Council, giving readers the opportunity to learn how and why our leaders decided on a career in Radiation Protection, how they built their careers, what their professional interests are, and more. This will also include quarterly Messages from the various EC members that will give them an opportunity to share with you their thoughts on issues of importance to them.

Finally, we welcome any contributions you might wish to make! Have you made an interesting discovery? Or maybe you've developed a novel or interesting way of addressing a RP issue? Did you get a chance to take a trip that you learned something from? Have you got a thought-provoking way of viewing an issue that might benefit us all? Let us know! Tell us – write a short piece (less than 500 words) and we'll share your experience with others.

The bottom line is that the Bulletin is for you, the readers. Let us know how it can be more useful to you; let us know if you've done or learned something that might be helpful or interesting to other RP professionals. We welcome your contributions!



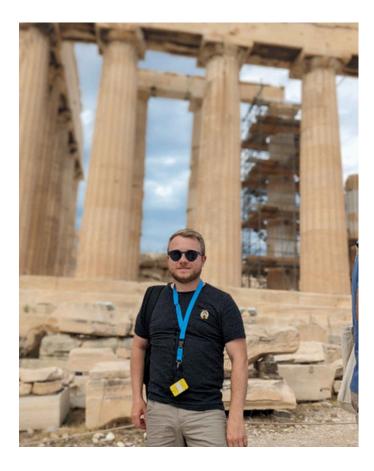
IRPA YOUNG PROFESSIONAL GOLD MEDAL WINNER: GABRIEL DUPONT

Gabriel Dupont is a young radiation protection professional working at Atron Metrology. His presentation - and winning entry - for the IRPA Young Professional Award at IRPA 16 in Orlando, Florida was on the topic of *Calibration of Radiation Survey Meters and Dosimeters Without Using Radioactive Sources*. We caught up with Gabriel after the Congress to find out a little bit more about him.

I am Gabriel Dupont, a research engineer working for ATRON METROLOGY, a French private company based in Normandy. I was awarded my nuclear engineering degree in the Superior National Engineering School of Caen (ENSICAEN) in 2016, then I pursued an industrial PhD thesis with ATRON METROLOGY and the Corpuscular Physics Laboratory of Caen (LPC Caen) to develop a method of calibrating radiation survey meters dose meters using an electron accelerator producing x-rays rather than the traditional radioactive sources.

I defended my thesis in 2019 and since then, I have been working with the same company as a research engineer and metrology and nuclear measurement expert for the technical and scientific directorate. I am also a part-time lecturer in Radiation Protection and Nuclear Engineering in the University of Caen and the Nuclear Sciences and Technologies National Institute (INSTN).

During my spare time, I am a volunteer for an association which promotes science and skepticism for the general public, especially for the younger generations! Finally, I like History (as you can see in the photo below, visiting new countries and discovering foreign cultures!





MEET THE NEW EC MEMBERS: HIELKE FREERK BOERSMA

The next few issues of the IRPA Bulletin will have profiles on our newest Executive Committee Members. For this issue, we begin with Hielke Freerk Boersma!

How did you end up in this field of radiation protection?

To some extent 'by accident', although that is not completely fair. After receiving my PhD in theoretical nuclear physics in the early nineties, I decided not to continue in scientific research, but rather to look for a job in environmental protection. But these were hard days to find a job, especially without specific experience in the field of interest. After about a year I managed to get enrolled in a program that allowed me to work in community-based research in a science shop (these shops were first established at Dutch universities in the seventies and aim at providing access to scientific knowledge and technology to laymen and non-governmental organizations).



As part of this job (first primarily in acoustics, later on also as coordinator of a science shop at the University of Utrecht) I participated in my first radiation protection training courses – thus taking an opportunity I had not really had during as a student. In 1997 I had the opportunity to apply for a full-time position as RP Expert at the University of Groningen, although I had not yet complete all required RP training. I was nonetheless appointed and therefore ended an interesting but also exhausting period with three different part-time positions.

Why did you want to join the IRPA Executive Council?

After my initial years in radiation protection, during which I completed my RP training, implemented the new radiation protection organization at my university and was also involved in the E&T program in radiation protection at our institute, I was invited to become active in the Dutch Society for Radiation Protection (NVS). Looking back at my motivation to become active in the science shops in the Netherlands, I think I have always wanted to share my knowledge and experience with a wider community, outside of my colleagues in Groningen. I therefore grasped this opportunity with both hands. In 2002 I was elected board member of the NVS, and served the NVS as its president from 2008 – 2014. This period gave me the opportunity to expand my international network in radiation protection. My final period on the NVS board was primarily devoted to the organization of the 5th regional IRPA congress in The Hague (2018). Parallel to all this, I also increased my international activities in Education & Training, most visible in my membership on the board of directors of the European Foundation for E&T in Radiation Protection (EUTERP). I firmly believe that for the IRPA EC being 'the voice for radiation protection professionals' - persons who are active as local radiation protection experts and/or training providers should be represented as they are still close to the work floor. With that in mind, I was very honored to be nominated by the NVS as a candidate for the IRPA EC. And of course, I accepted this nomination – my driving force was and is my wish to share my knowledge and experience - now with the global community of RP professionals!



MEET THE NEW EC MEMBERS: HIELKE FREERK BOERSMA

What would you like to see IRPA accomplish over your term?

In my motivation statement for accepting my nomination, I already expressed my wish to contribute to the work of IRPA in the field of Education & Training. IRPA has done a great deal of work over the past decades, also in Education and Training in Radiation Protection. A good example of this being the <u>report on Certification Schemes for RP Experts</u> published in 2016. IRPA also promotes CPD through refresher courses at the regional and international congresses. These are in general well attended and appreciated. I would, however, love to see IRPA be a little more visible in CPD in between the congresses.

What was the first survey meter you ever used?

Frankly speaking, I don't know. I am a true theoretician from origin, and of course I held survey meters during my RP training, and even probably during my undergraduate study as a physics student, but I don't remember their details. I can, however, tell you my current favorite meter: that is a MiniTrace β that we have been using for about a decade and gives quick first results for all the relevant ionizing radiation within our university.

Are you team Rem or team Sv?

I am very much team Sv – usually I don't actually realize there is another team. From high school onwards, I was raised in SI-units – only interrupted during a short period in my undergraduate years where Berkeley Physics Course was the standard ;-)

If you could be any radionuclide, which would you be, and why?

Being a radionuclide is not really on my bucket list, so that would be an easy way out of this question. If I would however have to choose a radionuclide as my favorite, I immediately think of Hafnium – it definitely has something to do with the nice symbol/acronym ;-). But I also have been using Hf-181 for about two decades as starting point for risk analyses in my training courses – a nowadays uncommon nuclide that was used in nuclear solid state physics. I also feel somewhat attracted to Flerovium (FI), the artificial radionuclide with atomic number 114. This dates back to my work as PhD student when I – as a spin-off of my research – spent some time calculating characteristics of the nucleus FI-298 (then 298-114) in the so-called island of stability, rather far away from the artificially produced radionuclides at that time (early nineties).

Is there anything else you'd like to say to the IRPA membership?

I would like to encourage every radiation protection professional to get active in his or her national / regional associate society. It will cost you some time, but it gives a lot of new knowledge and experience, and a valuable network of colleagues and even friends. And, very important, you will be at the front of the developments in radiation protection in your country. In other words:



MEET THE NEW EC MEMBERS: HIELKE FREERK BOERSMA

I want to end my contribution with an example of what I think turned out to be fun indeed. During the preparation of the 5th European regional IRPA congress in 2018 we discussed the possibility of having an art exhibition during the congress.



We came into contact with the former medical physicist Arie van't Riet who produces <u>X-ray art</u>: beautifully colored X-rays of animals and plants. Initially, there were some second thoughts about this idea: to what extent should an IRPA congress 'promote' art made by using X-rays, keeping in mind the possible discussion on justification. We however managed to convince everyone of the positive effect on the well-being of the participants, while no negative effects occur during the production of this art – the exhibition turned out to be a great success. We even had Arie produce a specific piece of art for the congress that was offered to key note speakers and volunteers (see figure below). It now also decorates a wall in my house...



Figure: X-ray art work 'Stages of Tulips – inspired by 'Encouraging Sustainability in Radiation Protection' (photo: Arie van't Riet)



THE ARPS JOURNEY TO IRPA 18 IN DARWIN, AUSTRALIA

By Cameron Jeffries Past President, Australasian Radiation Protection Society On behalf of everyone who has been part of our journey

One highlight of the successful 16th IRPA Congress in Orlando hosted by the Health Physics Society was the selection of Darwin, Australia as the preferred location for the 18th IRPA Congress after a successful bid by the Australasian Radiation Protection Society (ARPS) to host. This is the culmination of a long journey over many years by a number of ARPS members. This journey has been part of a process for ARPS to more actively engage internationally with IRPA and IRPA Associate Societies.

In 1988, the year of Australia's bicentennial, ARPS proudly hosted the 7th IRPA Congress in Sydney. More than 20 years later, in 2011, the next generation of ARPS agreed on the importance of ensureing Australasia actively participates in the international community through IRPA.

And so, the journey began with our first and modest bid to host IRPA15 during IRPA13 in Glasgow. Whilst we were hopeful, our bid looked like "an expression of interest" compared to the very strong Korean Association for Radiation Protection (KARP) bid to host IRPA15. This was to be our first lesson! Rarely does a first bidder win. More importantly, the act of preparing and gathering support and making the bid gave us much needed experience. We had also identified that KARP developed very strong connections with IRPA and the international radiation protection community demonstrating a commitment to being involved in more than just running a congress. We were pleased and very supportive of the KARP success.

Fast forward four years to the IRPA Congress in Cape Town, and we thought that we ready to win the right to host the Congress in 2024. We had worked to hone our bid and gather additional support. However, this was not the case and the United States, under the leadership of Kevin Nelson presented a better and more inclusive bid than ours.

We continued to learn.

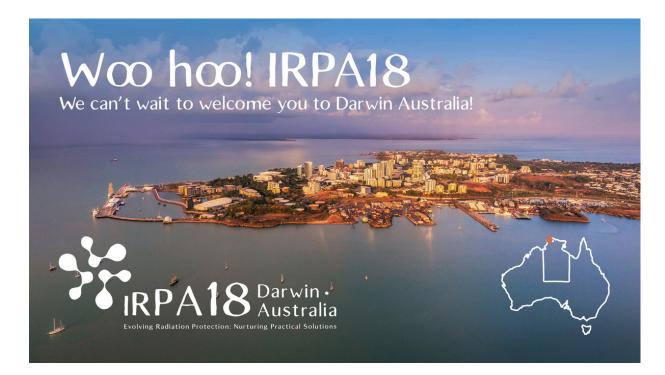
We learnt that although we had been more active in the international sphere we were still not engaged enough – we needed to do more. Consequently, ARPS stepped up and became even more involved in IRPA activities, including actively supporting the successful Congress team, and becoming more active in the IRPA organisation, from IRPA executive roles to task group activities. This also included reaching out and assisting regional organisations which expanded our appreciation of regional needs and opportunities. Along the way, we also hosted an IRPA regional congress, and an ICRP Symposium.



THE ARPS JOURNEY TO IRPA 18 IN DARWIN, AUSTRALIA

A key learning is that an IRPA Congress depends on three independent groups: the Local Organising Committee, the International Congress Program Committee and the International Congress Support Committee. A key role for the local organising committee is to bring together the independent work of these three groups under the leadership of the Vice President for Congress Affairs.

Despite almost insurmountable challenges, KARP ran a highly successful hybrid 2020/2021 Congress (IRPA15) and are to be congratulated. From this we learnt that the organising committee needs to be tenacious and also flexible. To have a clarity of purpose and a focused outcome, while maintaining the ability to adapt, were the qualities that shone through. The Congress also reinforced the fundamental importance of the international networks. At the Congress, we made our bid for the 2028 Congress remotely and unfortunately, again, we were unsuccessful. We had thought we were ready but took the loss as a chance to reflect on whether we really did want to host a Congress.



The answer to our deliberations was a resounding "**Yes!**". We still wanted to do this and knew we could, but we knew that we needed to do more. The opportunity arose with the invitation to be involved in a number of the organising committees for IRPA16 at Orlando, which ARPS members accepted. This provided ARPS members with first-hand knowledge of the internal administration and machinations of running a Congress.

So, with the lessons learnt, the skills obtained and a passion to deliver, the ARPS team approached the IRPA18 selection process with a quiet confidence and a knowledge that we were ready to deliver an international Congress to the standards sets by preceding Congresses.



THE ARPS JOURNEY TO IRPA 18 IN DARWIN, AUSTRALIA



One of the most important parts of the 13 year bid process has been meeting our colleagues along the way. We have built incredible professional friendships with many people around the world. In many cases this has moved beyond professional friendship to celebrating and commiserating the highs and lows of everyday life. Our members are involved with almost all IRPA Task Groups, where we share our experiences in the development of the profession.

ARPS also changed the host city on offer for each bid. In one way, each International Congress provides the opportunity for people to visit parts of the world that they might never otherwise visit. Australia and New Zealand are blessed to have a multitude of amazing destinations to visit. In selecting each of our potential host cities we were very careful to consider accessibility and affordability for our international guests, a variety of social activities and access to high quality facilities.

Darwin, as the preferred host for IRPA18, offers a unique experience of Australia - an experience that even many Australians do not have! Being located on the northern coast, Darwin is much closer to the rest of the world being only a short hop from Singapore or other Asian cities. There is a very real opportunity to take some extra time before or after IRPA18 to visit other parts of Australia and New Zealand.

If I had to summarise the journey, I would say that working for and winning an IRPA Congress is one of the most rewarding achievements. It requires passion, commitment, dedication and above all a recognition that IRPA is an international organisation, with a powerful sense of community.

In 2032, Darwin and ARPS will welcome IRPA delegates with open arms and you will be part of our family.



ASSOCIATE SOCIETY PROFILE: PORTUGUESE RADIATION PROTECTION SOCIETY (SPPCR)

By Luis Neves SPPCR

The Portuguese Radiation Protection Society (SPPCR) is a non-profit association under Portuguese law, recognized with the statute of public utility (<u>www.sppcr.pt</u>) and affiliated to IRPA. It was founded in 1993 and has 70 active members, mostly belonging to universities, hospitals and public institutes, as well as professionals from the private sector. The Portuguese Society also comprises the field of non-ionizing radiation. Given that the nuclear industry is essentially non-existent in Portugal, most of our activities are related to radiation protection in medicine and natural radioactivity (radon).

The Portuguese Society regularly publishes a journal, named "Radioproteção", and also occasionally books. We also organizes meetings, webinars and short courses, and provide advice to the government regarding changes in the national law.



5th Congress of Radiation Protection of the Portuguese Speaking Countries, held in Coimbra, Portugal, 2016. From left to right: José Marcus Godoy (President of SBPR), Luís Neves (President of SPPCR) and Eduardo Gallego (member of the Executive Council of IRPA).



ASSOCIATE SOCIETY PROFILE: PORTUGUESE RADIATION PROTECTION SOCIETY (SPPCR)

A strong collaboration has been established over time with the Brasilian Radiation Protection Society (SBPR), which originally came about through a series of international conferences which were jointly organized by the two groups – the Radiation Protection Congresses of the Portuguese Speaking Countries. The first joint meeting was organized in Lisbon in 2009 by the Presidents João Quintela de Brito (SPPCR) and Alfredo Lopes Filho (SBPR), while the 10th meeting took place very recently in Brasil, Rio de Janeiro, in October 2024.

We are happy to observe an increasing participation of other Portuguese speaking countries in these meetings, namely from Angola and Mozambique, and we expect that new Radiation Protection Societies may be established soon in these countries and will in turn become IRPA members.





International Joint Conference Radio 2024 and 10th Congress of Radiation Protection of the Portuguese Speaking Countries, held in Barra da Tijuca, Rio de Janeiro, Brasil, 2024. From left to right: Eduardo Medina Gironzini (FRALC), Luís Neves (President of SPPCR), Alfredo Lopes Filho (Organizing comittee, SBPR), Alcides Pereira (SPPCR), Josilto de Aquino (President of SBPR), Denise Levy (organizing comittee, SBPR) and Pedro Vaz (SPPCR).



IRPA TASK GROUP UPDATE: WOMEN IN RADIATION (WIR)

Established in December 2021, the IRPA Task Group on Women in Radiation (WiR) comprises 26 dedicated members nominated by 23 Associate Societies, representing diverse regions including Africa, Asia, Australia, Europe, North America, Latin America and the Caribbean.



Between March 2022 and March 2023, the Task Group conducted a survey to evaluate the core values of WiR. This effort culminated in a Round Table discussion on Women in Radiation/Women in Nuclear (WiR/WiN) held during the IRPA 16th International Congress in Orlando, USA, in July 2024.

On October 30, 2024, the Task Group convened for a virtual meeting with two primary objectives. The first goal of the meeting was to review and discuss the insights gained from the IRPA Orlando Round Table. This dialogue provided valuable feedback that the Task Group aims to incorporate into its ongoing initiatives. The second focus of the meeting was to begin drafting the IRPA Statement on Women in Radiation. This important document will encapsulate the Task Group's commitment to promoting gender equity and addressing the challenges women face in the radiation field. By building on previous discussions and activities, the Task Group aims to ensure that the statement is both comprehensive and impactful.

By addressing these crucial points, the Task Group is taking significant steps to solidify its position on key issues affecting women in radiation, thereby fostering a more inclusive environment within the profession. The outcomes of these activities are expected to lay a strong foundation for future initiatives and discussions, furthering IRPA's mission to advocate for equity, inclusivity, and intersectionality. This proactive approach of reflecting on past dialogues while also taking actionable steps will help moving toward meaningful change. The insights gained from these efforts will inform the forthcoming statement, addressing the experiences and needs of women in radiation from around the world. This commitment to inclusivity is vital for advancing both the individuals involved and the field as a whole.

If you have topics, you believe should be included in the statement or are interested in collaborating with us, we warmly encourage you to reach out to mdigiorg@gmail.com or paula.veevers@health.qld.gov.au



MALAYSIAN RADIATION PROTECTION ASSOCIATION (MARPA)

The Malaysian Radiation Protection Association (MARPA) was established on September 15, 2002 as a non-governmental organization representing Malaysia's leading professionals in radiation protection and safety. The organization's founding was marked by its first Annual General Meeting, where the inaugural board members were elected.

In 2006, MARPA achieved significant international recognition by becoming the 46th member of the International Radiation Protection Association (IRPA) and the 7th member of the Asian and Oceanic Association of Radiation Protection (AOARP). While the association has approximately 700 registered members, around 200-300 members actively participate in MARPA's programs and initiatives.

In recent developments, MARPA collaborated with the Malaysian Nuclear Agency to organize two major events: the Radiation Protection Conference (RPC) and the Symposium of Quality. The association had also submitted a bid to host IRPA18 at the International Congress in Orlando, Florida, USA.

MARPA plays a crucial role as a member of the Nuclear Technology Technical Committee, ensuring that all plans under Malaysia's National Nuclear Technology Policy are properly implemented and monitored.



MARPA committee in the front line after the 2024 Annual General Meeting



Radiation Protection Conference 2024 dinner at Johor Baharu, Malaysia



MARPA representatives with Kevin Nelson, Chair of the IRPA 16 organizing committee, at IRPA16 in Orlando, Florida, USA





Do you have news to share? Send it to: cop@irpa.net

We'll share it via the IRPA News and the IRPA Bulletin. Stories for the Bulletin are normally 200-300 words plus images.

We're always looking for updates from our Associate Societies for our Society Spotlight. Let us know what your society has been up to. Meetings, conferences, general events or any good news is always welcome!

Your IRPA Commission on Publications:

IRPA Communications Officer: Dave Niven Bulletin Editors: Andy Karam, Dave Niven Associate Societies Liaison: Michèle Légaré Website Manager: Dave Niven Social Media Managers: Sara Dumit & Dave Niven

Great news! You can now donate directly to the IRPA Montreal Fund through PayPal! Visit the <u>Montreal Fund page</u> on the IRPA website for the donation link.



