



IRPA BULLETIN

For RP professionals, by RP professionals

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PRESIDENT's BLOG

Time flies. We are almost one year into the IRPA term 2016-2020, and it is important that we gather pace on our programme. We have now published our Strategic Programme for this period [see irpa.net homepage], and we have invited all the Associate Societies (AS) to help us deliver this by nominating persons into the various working groups and committees. Our strategy is designed both to assist the AS in becoming more effective in their own domains, and also to allow the 'voice of the profession' to be heard by the international organisations. But none of this can be achieved without the full support and involvement of you, the practitioners, so please lend us your experience and enthusiasm by getting involved.

In terms of our 'international voice of the profession' engagement programme, I have been particularly struck by how many organisations are now asking for our inputs and involvement. Almost weekly we receive requests and invitations, and I have counted 26 such events covering our first year of this term. This is a challenge. It is almost impossible to engage in all, either because of finance or other limited resource, so we inevitably have to both prioritise and share the workload, involving all the Executive Council members and other relevant 'experts' from the AS. But the size of the opportunities demonstrates that IRPA really is now regarded by our stakeholders as 'the international voice of the radiation protection profession', and of course this is something of which we can be proud.

We intend to use the Bulletin to inform you of some of the work with which IRPA is engaged. You will read here about a major programme to help improve radiation protection culture in healthcare, where we are working closely with our international partners IOMP and WHO to put more practical medical 'flesh' onto the bones of the top tier RP Culture Guidance which we published in 2014. Also, in February the French Society (FSRP) hosted a Workshop on 'ALARA and Reasonableness', supporting the wider IRPA consultation on the effectiveness of the System of Protection. It was a great pleasure to attend this event, and you will be able to read more about it in the Bulletin.

Roger Coates OBE
IRPA President



INTERNATIONAL RADIATION PROTECTION ASSOCIATION

STRATEGIC PROGRAMME
2016 - 2020



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THE 4TH REGIONAL IRPA-WHO-IOMP WORKSHOP ON RADIATION SAFETY CULTURE IN HEALTHCARE

(Bernard le Guen, IRPA Executive Officer)

Following the IRPA initiative in 2008 on radiation protection culture, which resulted in the publication of the first guiding principle on radiation protection in 2014, IRPA submitted a proposal in 2015 to cooperate with WHO (World Health Organisation) and IOMP (International Organisation for Medical Physicians) on **Radiation Safety Culture in HealthCare**.

The intent of IRPA's proposal is for the medical sector to utilise the key nuclear safety principles that were developed after the Chernobyl accident. It also involves the collective development of a method for identifying the needs of medical professions by taking account of regional contexts with a view to creating a safe healthcare environment to which all professionals and patients naturally aspire.

Following the success of three previous regional workshops (Buenos Aires 2015, Geneva 2015, South Africa 2016), the fourth workshop was held in Doha, Qatar in February 2017 with supports from the Hamad Medical Corporation and the Middle East Federation of Organizations of Medical Physics (MEFOMP). In total, 135 Arabic-speaking participants from Qatar, Saudi Arabia, the United Arab Emirates, Oman, Egypt, Lebanon and Jordan participated in this workshop.

Discussions focused on the high-tech explosion and on the culture supporting the safe use of these technologies for patients and hospital staff. Accidents can happen in any country even if the country's organisational arrangements appear to be robust. In France for example, a radiotherapy accident resulted in the overexposure of hundreds of patients. This accident highlighted the extent to which training, retraining and human factors are still essential factors even with new technologies and protocols. During the two-day workshop, the group reflected on the nature of multi-culturalism. How can we create a common culture within one team with large numbers of medical personnel coming from very different continents and countries? Whilst language may be a barrier, this also applies to the working methods and the training received by these professionals forming part of the same team. Discussions also focused on how to establish a benevolent system that advocates the reporting of events and near-misses as an absolute necessity, an essential factor when it comes to fostering safety culture.

With a vision to develop a joint IRPA-OMS-IOMP *guiding principle* within the next two years, intended for health-care professionals, the next workshop has been scheduled for November 2017 in Malaysia and the final workshop in February 2018 in USA.





IRPA WORKSHOP ON REASONABLENESS IN THE IMPLEMENTATION OF THE ALARA PRINCIPLE

In line with the initiatives being discussed by IRPA on the subject of communication about the radiological protection system, the French Society for Radiological Protection (SFRP) organised a workshop within the scope of its IRPA activities to further address the quest for reasonableness in the implementation of ALARA principles.

This workshop took place on 23rd and 24th February 2017 in Paris with 30 participants from different European and Asian IRPA associate societies as well as delegates from international organisations. The objectives of the workshop were to: 1) Review the implementation of ALARA and question the respective roles of decision-aiding techniques and stakeholders in the optimisation process; 2) Initiate discussions on ethical and societal values that underpin the concept of reasonableness.

In addition to general presentations on the ALARA principle and its ethical issues, the implementation of ALARA was addressed for three main situations: ALARA in the nuclear sector, ALARA in the medical sector and ALARA in existing exposure situations (mainly radon and post-accident situations). Working groups were set up to address the different exposure situations in greater depth. The main conclusions highlighted: 1) The need to better address the links between justification and optimisation, especially in the medical sector; 2) The role of radiological protection culture in initiating dialogue with stakeholders on reasonable exposure levels; 3) Existing experience for addressing reasonableness in implementation of ALARA but with limited dialogue and decision-making processes explicitly addressing this issue; 4) Insufficient dialogue on the clarification of criteria for assessing the degree of reasonableness.

Considering the results of this workshop, SFRP has decided to suggest organising a second IRPA workshop in the autumn of 2018, in order to continue discussions on the subject of reasonableness in the implementation of ALARA. This second workshop will provide an opportunity to further investigate different contexts such as waste management, non-ionising radiation and emergency situations as well as the development of an integrated and graded approach for implementing ALARA in the future. The main focus will be to initiate in-depth discussions on the clarification of criteria and processes for assessing the degree of reasonableness in the implementation of ALARA. The presentations are available on the SFRP website (www.sfrp.asso.fr).

Thierry Schneider (SFRP President) & Bernard le Guen (IRPA Executive Officer)





The 5th European IRPA Congress

From 4 to 8 June 2018 the Dutch Society for Radiation Protection (NVS) will be hosting the 5th European IRPA Congress in the World Forum, The Hague, the Netherlands.

Since mid-2015 the Scientific Programme Committee (SPC) has met on average every three months to prepare the scientific programme for the congress. The programme format and the key themes have now been decided. In designing the programme, the SPC is working closely with the Local Organising Committee (LOC).

The scientific programme has four components: the regular scientific presentations, refresher courses, poster sessions and the Young Professional Award session.

As usual, the scientific presentations will take place in plenary or parallel sessions. The five key themes include 'medical applications' and 'industrial applications'. The SPC intends to invite a number of prominent speakers for the plenary sessions.

The refresher courses will be very different from what you are used to from previous IRPA congresses: a cluster of refresher courses on Monday morning 4 June and Wednesday 6 June will replace the preliminary hour very early in the day. And we are trying to provide at least two contributions on each topic: a basic lecture and a lecture covering either current developments with regard to a specific subject or a more in-depth examination. We are convinced that this approach will produce more coherent training sessions that meet our participants' needs more effectively.

The traditional poster sessions will also be different. We want to use digital poster boards on which any of the posters can be called up throughout the congress. And via the congress app participants can arrange to meet the creator of the poster. During the breaks special elevator pitches will be held where a small number of poster creators will answer questions about their poster. So no more long queues for partially empty poster boards!



5th European IRPA Congress
4 - 8 June 2018

The Hague, The Netherlands

**Encouraging Sustainability
in Radiation Protection**



5th European IRPA Congress - continued

All the European associate societies will have the opportunity to nominate a candidate for the Young Professional Award (YPA). On Thursday afternoon, 7 June, all the candidates will present their work. That afternoon as few as possible and preferably no regular scientific presentations will be held, so that everyone is able to see and listen to up-and-coming/young radiation protection experts. And in addition to the YPA, we have well advanced plans to create a public award for the best young professional.

As we said above, the Wednesday will be reserved for refresher courses. The SPC and LOC are busy organising a number of technical visits, some combined with a refresher course. Although the locations are not yet definitive, the options being considered are medical, waste and nuclear applications.

The YPA is not the only activity for young radiation protection experts. We hope to dedicate one of the refresher courses on the Monday morning specifically to young radiation protection experts and the Young Generation chapters of the European IRPA Societies. As well, there will be a special lunch session for this group. In this way we hope to help stimulate the involvement of the younger generation.

The congress organisers hope this overview of the programme has fired your enthusiasm and that we will see you at the congress in 2018. Registration has opened in March 2017 and we look forward to receiving your contributions from now on. You will find detailed information in our 2nd Announcement that can be downloaded from our website www.irpa2018europe.com. If you're not ready to register yet, you can always express your interest in the congress on our website.

Don't forget to put 4 to 8 June 2018 in your diary!

Hielke Freerk Boersma
Congress President 5th European IRPA Congress
NVS Board Member for Congress Affairs



Steering Committee IRPA 2018 The Hague



CIPRaM 2016

The Iberoamerican Conference on Radiation Protection in Medicine (CIPRaM2016) was held in Madrid, Spain, between 18 and 20 October 2016, jointly organized by WHO, PAHO, IAEA, FORO, ICRP and IRPA, and hosted by the Ministry of Health, Social Services and Equality of Spain (MSSSI) in cooperation with the Spanish Council of Nuclear Safety (CSN). It was organized to promote the application of the new international radiation basic safety standards (which are the global benchmark for radiation safety requirements) in the health sector, and will support the implementation of the Bonn Call for Action (which identifies ten priorities to improve radiation protection in health care), in Ibero-American countries. It provided an opportunity for exchanging information and experiences on radiation protection in medicine, and for strengthening cooperation across Iberoamerican countries on this topic.

The Conference objectives were: 1) Assess the progress of the implementation of the Bonn Call for Action in Ibero-American countries; 2) Identify problems and possible solutions for the implementation of the Bonn Call for Action; 3) Promote good practices to improve radiation protection in medicine; 4) Define progress indicators for the implementation of the priority actions identified in the Bonn Call for Action.

The Conference gathered 250 participants from 20 countries, including 99 invited speakers equally distributed between Latin American and the Iberian Peninsula, who reviewed the advances in the implementation of the Bonn Call for Action, identified problems, proposed solutions and suggested progress indicators. The Conference was structured in plenary sessions including an opening session; an introductory session with a historical perspective regarding RP in medicine, and eight thematic sessions addressing radiation protection in medical and dental radiodiagnosis, interventional radiology, nuclear medicine and radiotherapy, the challenges to universities and research, to technical and nurses staff, medical physicists and RP experts, and the health authorities and RP regulators.

The format of each thematic session included a keynote lecture on key issues/problems, the proposed solutions and possible indicators of success, taking into account the priorities of the Bonn Call for Action; a round table including several panelists representing key stakeholders relevant to the area/discipline, who provided their comments/views on the problems, solutions and indicators proposed by the keynote speaker and a final discussion with active participation of the audience

The conference has contributed to strengthen regional cooperation in the field of RP in medicine and its conclusions will guide future work in both LA and IP countries. The IRPA Vice-president Eduardo Gallego was co-chairing the session on Universities and Research.

More information at <http://cipram-madrid-2016.es/>





IRRS 2016 Scientific Meeting

(Lorraine Currivan, Chairperson, Irish Radiation Research Society)

The Irish Radiation Research Society www.irrs.eu is a unique vibrant community of scientists and clinicians sharing the common interest of understanding the multiple effects of radiation – from the impact of environmental exposure to its efficient clinical use.

The 2016 annual meeting took place on November 11-12th in Trinity College Dublin. This meeting is an opportunity to meet, share ideas and continue to contribute to our field. It is an opportunity for IRRS members to give an update on on-going research activities as well as enabling young researchers to present their exciting work and engage with the society.

Professor Don Jones from the Department of Cancer Studies and Molecular Medicine, University of Leicester was the invited speaker. He heads up a research group 'measurement mechanisms and consequences of DNA damage in radiation oncology, chemotherapy and chemical carcinogenesis'. In his keynote lecture Prof Jones critically examined some of the common methods for assessing DNA damage highlighting their benefits, limitations and common pitfalls or misconceptions.

A number of radiation protection presentations were made including a key note speech by Dr Jack Madden, Office of Radiological Protection, Environmental Protection Agency (EPA) on 'Transposing the Euratom Basic Safety Directive in Ireland – a time for change' and 'Development and Application of Monte Carlo Models for HPGe Gamma Spectrometry' by PhD student Niall Murphy, University College Dublin.

In addition, a number of collaborative projects were presented as posters: 1) Progress report on the radionuclide analysis of Japanese bottled water (EPA and Hirosaki University Japan); 2) Installation of HPGe detector system at Waterford Institute of Technology and analysis of marine samples (EPA and Waterford Institute of Technology); 3) The determination of $^{241}\text{Pu}/^{239,240}\text{Pu}$ ratios in alpha counting of ingrown ^{241}Am in old electroplated samples (EPA, University College Dublin and Dublin Institute of Technology Kevin Street); 4) Validation of a rapid method for ^{134}Cs in seawater using an extraction chromatography resin (EPA and Dublin Institute of Technology Kevin Street).

The full programme can be seen here

<http://irrs.eu/documents/IRRS2016Scientificprogramme.pdf>





Lord Carlile To Be First Patron of UK Radiation Protection Society

The Society for Radiological Protection (SRP) is delighted to announce that Lord Carlile of Berriew QC CBE has accepted an invitation to become its first Patron.

The SRP is a Chartered organisation specialising in radiation safety and security with a membership of over 2,200 from industry, medicine, academia and regulation. Founded more than 50 years ago as a learned society, the SRP has now developed into a leading professional body and holds the Register of Chartered Radiological Protection Professionals.

“In recognition of this change, SRP wishes to expand its activities into the Parliamentary arena” explained SRP President Professor Peter Cole, “While recognising that radiological protection matters do not often concern Parliament, we believe that, when they do, our Society should be in a position to make a significant contribution to such discussions. A Parliamentary patron will be of great assistance in achieving this aim. Lord Carlile, who has a long standing interest and expertise in the related field of security, will be an outstanding mentor for the Society’s developing role.” For more details, please visit: <https://srp-uk.org/news/article/172/lord-carlile-to-be-srp-s-first-patron>

The IRPA Guidance on Eye Dose Monitoring

We are also pleased to announce that “**IRPA Guidance on Implementation of Eye Dose Monitoring and Eye Protection of Workers**” has been published.

As you know, the International Commission on Radiological Protection revised its eye dose threshold for cataract induction in April 2011, specifying a limit of 0.5 Gy, compared with the previous threshold doses for visual-impairing cataracts of 5 Gy for acute exposures and > 8 Gy for highly fractionated ones.

Further, ICRP recommended a reduction in the equivalent dose limit for occupational exposure in planned exposure situations for the lens of the eye from 150 mSv to 20 mSv in a year, averaged over defined periods of 5 years, with no dose in a single year to exceed 50 mSv. This revised dose limit is incorporated into IAEA International Basic Safety Standards, and into the Council Directive Euratom which must be implemented by the Member States by February 2018. The new IRPA Guidance accounts for previously published ICRP thresholds.

The document has just been posted on our website.
www.irpa.net

Hoping that these new documents will be a valuable tool for IRPA in the future, we wish you a pleasant reading.

Best regards,
Bernard le Guen, MD, PhD, IRPA Executive Officer