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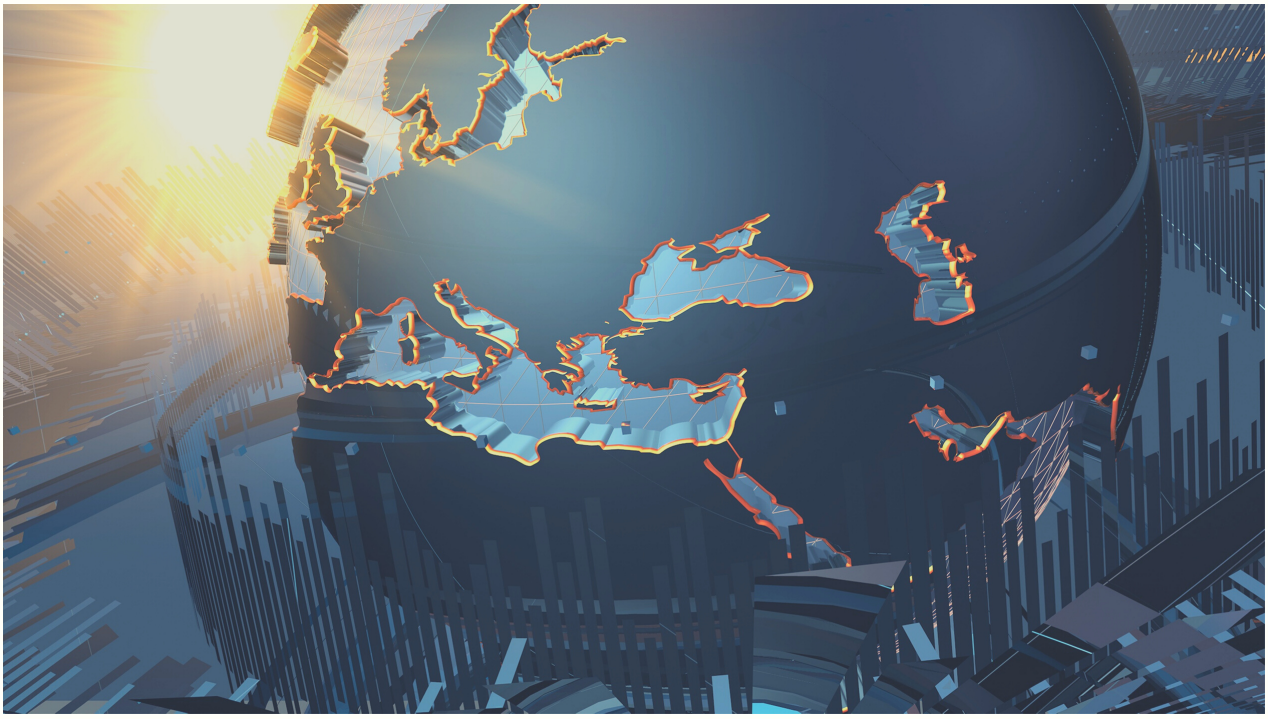
IRPA Bulletin

For RP professionals, by RP professionals



In this issue:

PRESIDENT'S BLOG

ROGER COATES

We live in challenging times! The worldwide covid-19 epidemic is playing havoc with all our lives, both personal and professional, and it is certainly a challenging position to be leading an international organisation at this time. But we have to move on, and gradually we are all getting used to video meetings and seminars as a normal way of doing business. And the same goes for IRPA.

Later in this Bulletin our Korean colleagues give an update on plans for the **IRPA15 Congress** in January 2021. In essence what is being developed is a hybrid event. There will be a short focused in-person conference in Seoul on 18/19 January, but we expect that the overwhelming majority of international delegates and presenters will join a virtual on-line congress over a slightly extended period. There will be 'live' sessions over the two week period 18-29 January, although the majority of the congress presentations will be pre-recorded and available on a 'click and play' basis extending for a further week (three weeks in all), including the Refresher Courses and all papers and posters. This will give a different congress experience, but it does make it more accessible to the worldwide radiation protection community. I encourage all those who have submitted papers/posters to engage with this new format, and for the rest of our profession to take advantage of this great new learning opportunity. For the latest news keep in touch with the website https://www.irpa2020.org/

There is also of course a significant impact on the **IRPA General Assembly**, usually held in association with the international congress. We have now decided that the event must be virtual, and will be held on Thursday 14 January 2021 – just before the IRPA15 congress. All the relevant information and presentations etc. will be made available well in advance of the meeting, and indeed we will arrange for as much as possible of the necessary voting also to take place just before the meeting itself. All Associate Societies will be kept informed of the developing details.

We are very pleased to announce the publication of our latest guidance document – Practical Guidance for Engagement with the Public on Radiation and Risk. IRPA strongly believes that all radiation protection professionals and radiation protection societies have a duty to engage with the public, to play our part in helping to address and alleviate concerns, and to ensure that solutions put forward really do take account of the issues, perceptions and concerns of all interested parties. The objective of this guidance document is two-fold. Firstly, it is to enthuse all radiation protection professionals to become more active public advocates for radiation protection. Secondly, it is to provide information, experiences and techniques to help all of us in our profession to become more effective and comfortable in this challenging task. I invite all RP societies to engage very actively on this essential topic by promoting public engagement in your local contexts. The guidance can be found here on the IRPA website.

IRPA is also making good progress with developing our guidance on '**Reasonableness in the optimisation of protection**'. We have completed a first round of consultation with the RP Associate Societies, and appreciate very much the responses received. In the light of these comments we are now developing a second round of consultation with the Associate Societies but also with wider key international organisations. This will shortly be available through our website http://irpa.net/index.asp.

There has been recent progress on two of the topics on our Horizon Scanning list – those topics with on-going international consideration which could have an impact on the profession. The Inter-Agency Committee (IACRS) has recently issued a statement on **Radon Dose Coefficients**, which has a potentially significant impact on assessed doses from radon – see a summary on the IRPA website. Additionally, the IRPA Eye Lens Task Group has completed its study on **implementation issues for the eye lens dose limit**, which will shortly be published in the Journal of Radiological Protection and will be available through the IRPA website.

All in all a very busy time, in challenging circumstances. But the new way of working also gives its benefits through greater potential access to activities for the wider RP community.

Keep safe.

Roger Coates, IRPA President

The unforeseen worldwide strike of COVID-19 has consistently affected every aspect of our lives throughout the year 2020. The Organising Committee of the IRPA15 International Congress, scheduled to be held in Seoul, South Korea, on 18-22 January 2021, is also facing challenges while preparing the congress in the midst of the inevitable impacts the virus has imposed on us.

Although the pandemic situation is being prolonged, we know that through our cooperation and encouragement, we will be able to overcome the crisis. The IRPA15 International Congress Organising Committee (ICOC) is considering various possibilities and is open to all availabilities to quickly adapt to the changes and lead our congress to a success, nonetheless.

The ICOC is currently having discussions on whether we hold the congress in a Hybrid form where participants may choose to attend the congress in person or through an on-line platform. The Hybrid form of event, especially designed for IRPA15, consists of a short in-person event in Seoul on 18-19 January, in a smaller scale than originally planned. We expect that the majority of international delegates and presenters will be participating virtually, but they are always welcome to take part in the offline congress hopefully with relaxed regulations regarding COVID-19.

The virtual congress encompasses the following components:

i) Recorded sessions, oral presentations, and even some live stream sessions will be available online.

ii) All papers and posters will be uploaded electronically and will be available for view from 18 January to 5 February.(3 weeks)

iii) Virtual booths and online-advertising options will be available for sponsors and exhibitors.

A detailed timetable will be accessible in a due course.

We invite all presenters and authors who submitted abstracts to attend IRPA15 through this online format of the congress. Instructions will also be sent out individually.

We expect all information to be finalised and announced by the end of September or early October.

Since over 900 papers including plenaries were submitted to be presented, we do not foresee any changes in the scientific programme. Among those, selected papers will be published in Journal of Radiological Protection and Journal of Radiation Protection and Research. Below are the upcoming key dates of the congress.

- 30 November 2020: Full Paper Submission closes
- 16 October 2020: Early Online Registration deadline
- 31 December 2020: Standard Online Registration deadline

We sincerely hope for your continued commitment and participation in IRPA15. Your support will be greatly appreciated and helpful to the ICOC in making further critical decisions. Please be with us by our side when we defeat the challenges and triumphs.

If you have any questions or inquiries,
please contact IRPA15 Secretariat

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ASSOCIATE SOCIETY HIGHLIGHTS: THE KOREAN ASSOCIATION FOR RADIATION PROTECTION (KARP)

The KARP is the leading academic society for radiation protection and professional promotion of safe radiological practices among industry workers as well as the general public in South Korea for more than 45 years. The role of KARP has increased year by year. The membership currently comprises approximately 710 actively working members among over 1,500 registered members representing balanced proportions of expertise in science, industry applications, and medicine. In support of the association objectives to provide pertinent and professional information exchange and to lead collaboration, the KARP holds biannual conferences and workshops for researchers and industry workers. The official journal, Journal of Radiation Protection and Research (JRPR), is co-published with the Japan Health Physics Society (JHPS), and the Australasian Radiation Protection Society (ARPS) quarterly. The professional and issued research reports are also released for members and the general public including translations of ICRP publications. The remarkable achievements were produced though deep collaborations with other academic societies and international organizations. It is also a frequent host of public education programs and social events to raise awareness of radiation protection (RP) in the general public.

The KARP has long maintained cooperative relations with other international associations for radiation protection and hosted the 3rd ICRP symposium on the system of radiological protection in cooperation with International Commission on Radiological Protection (ICRP). And now the 15th congress of IRPA will be opened in Seoul, Korea in next January, which was postponed from last May because of the COVID-19 pandemic. However, the first mega-disaster experienced in our times does not stop its running until today. The organizing committee is considering a virtual online event in January instead of an in-person one, which has already become one of the new normal life in human society. Nevertheless, lots of interests and encouragement from international colleagues can make the successful IRPA15 expected.

FIG. 1. ‘TO READ RADON CORRECTLY’, SEMI-PROFESSIONAL, CULTURAL BOOK FOR THE GENERAL PUBLIC PUBLISHED BY KARP AND KNS.

ASSOCIATE SOCIETY HIGHLIGHTS
THE KOREAN ASSOCIATION FOR RADIATION PROTECTION (KARP)

The official journal of KARP, JRPR, was launched in 1976. The current title, JRPR, is used since 2016. Since September 2019, the JRPR, which is a peer-reviewed open access journal, is co-published by three-member societies —KARP, JHPS, and ARPS — as the official journal of the three societies. JRPR's Editorial Committee comprises three Editors-in-Chief representing the three societies, respectively, twelve Editors from the three societies (4 each), fifteen International Editors from foreign societies, and a Managing Editor in Korea who runs the JRPR on a daily basis. The JRPR, in order to broaden its global scope, is trying to appoint International Editorial Board Members from various international radiation protection societies outside the three societies. JRPR currently exempts publication charges for authors – Young Scientists, in particular – to promote vigorous manuscript submissions from RP societies.

FIG.2. COVER PAGE OF THE FIRST CO-PUBLISHED ISSUE OF JRPR.

The purpose of the JRPR is to disseminate scientific and technical information on radiation protection and related issues, covering both ionizing and non-ionizing radiations The topics cover radiation physics and detection, radiation dosimetry, dose monitoring and evaluation, radiation biology and epidemiology, radiation risk assessment, radiation public health and environmental impacts, radiation safety and regulations, training and education, and social science. It is believed that the new co-published JRPR, along with the well-established Asian and Oceanic Congress on Radiation Protection (AOCRP), will significantly enhance the exchange of scientific knowledge and experience in radiation protection among researchers in Asia, Oceania, and the entire world.

FIG. 3. 2019 EDITORS-IN-CHIEF MEETING (ADELAIDE, NOVEMBER 19, 2019)

FIG.4. 2020 EDITORS-IN-CHIEF MEETING (ZOOM, SEPTEMBER 16, 2020)

Journal of Radiation Protection and Research

"The Official Journal of KARP, JHPS, and ARPS"

Peer-reviewed, Open-Access, Free Publication for Authors from 3 Societies!!

Aim and scope:

To disseminate scientific and technical information on radiation protection and related issues covering both ionizing and non-ionizing radiation. These include not only man-made radiation and radionuclides but also cosmic radiation and naturally occurring radioactive material (NORM). Specific expertise covers radiation physics and detection, radiation dosimetry, dose monitoring and evaluation, radiation biology and epidemiology, radiation risk assessment, radiation public health and environmental impact, radiation safety and regulations, training and education, and social science and participation including social communication and risk communication. The fields of radiological protection include uses of radiation/radioisotopes, nuclear industry and research, NORM industry and research, radiation diagnosis and therapy, accelerator research, and radioactive waste.

Topics

1. Fundamental Basis and Theory of Radiological Protection
2. Radiation Detection, Dosimetry, Monitoring and Dose Evaluation
3. Radiation Biology, Epidemiology and Risk Assessment
4. Radiation Public Health and Environmental Impact
5. Radiation Safety and Regulations, Emergency Preparedness and Response
6. Training and Education, Risk Communication, Social Science and Participation
7. Radiological Protection in Diagnosis and Therapy
8. Decommissioning and Radioactive Waste

Editors-in-Chief

Chan Hyeong Kim	*Hanyang University, Republic of Korea (KARP)*
Takeshi Iimoto	*The University of Tokyo, Japan (JHPS)*
Riaz Akber	*Safe Radiation, Australia (ARPS)*

Frequency of publication

The JRPR is quarterly issued on March 31st, June 30th, September 30th, and December 31st.

Journal Homepage: http://jrpr.org (For Manuscript Submission, visit http://submit.jrpr.org)

Contact information: Geehyun Kim, Managing Editor of JRPR (E-mail: jrpr.gkim@gmail.com)

"As of Oct. 1, JRPR papers have been cited more than 60 times in 2020!"

RADON DOSE COEFFICIENTS (DCS)

ROGER COATES

One of the topics on IRPA's Horizon Scanning list, which monitors issues which could have a significant impact on radiation protection practice, is that of radon dose coefficients (DCs) – sometimes termed 'Dose Conversion Factors (DCFs)'. The Inter Agency Committee on Radiation Safety (IACRS) has issued an overview on this topic, which will be of interest to many IRPA members. UNSCEAR and ICRP have produced a supporting document with additional technical details.

Both ICRP and UNSCEAR have recently reviewed the latest scientific information on the risks of radon exposure. Whilst noting the considerable uncertainties associated with this information, the organisations reached differing conclusions:

- UNSCEAR concluded that the totality of recently assessed evidence is compatible with its previous assessments, and hence that it is appropriate to continue the use of the factor of 5.7 mSv per WLM for estimating radon exposure levels in its dose assessments for public and workers.

- Based on an updated review of epidemiological data which gave substantially higher risk estimates, ICRP recommends a single rounded DC value for use in most circumstances of occupational exposure of 10 mSv per WLM. ICRP has also indicated that this value is applicable to exposures in homes. This represents an increase from their previous recommendation of 4 mSv per WLM for public at home, and 5 mSv per WLM for workplace exposure.

Taking account of the above recommendations and uncertainties, IACRS notes that no changes are necessary to the International Basic Safety Standards recommendations on the use of radon Reference Levels expressed in terms of Bq/m3.

Authorities generally base their DCs on ICRP recommendations. National authorities therefore need to decide if, and when, to update their radon DCs, taking account of the latest ICRP recommendations. IACRS noted that "The new DCF for radon could be implemented immediately, or it may be practical to do so after the full set of new DCFs for occupational exposures is available to ensure a consistent approach. All updated DCFs for occupational exposures should be published within a year."

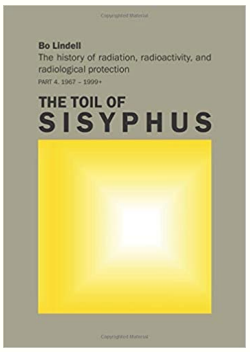
The use of the new ICRP recommendation for the radon DC will increase the assessed dose for radon by a factor of around two. Where assessed radon workplace exposures are significant, employers will need to review their protection measures to ensure that protection remains optimised and doses remain within limits.

There will be other implications of this new information on radon DCs. For example, the use of the new ICRP DC for assessing contributions to national exposure, such as in pie charts, will also increase the relative contribution of radon by around a factor of two.

For more information see the IRPA website: http://irpa.net/page.asp?id=54819

BO LINDELL'S 4TH VOLUME - THE TOIL OF SISYPHUS

ANDY KARAM



The final volume of Bo Lindell's magisterial series on the history of radiation, radioactivity, and radiological protection has recently been translated into English and is available for a free PDF download, or for purchase in hard copy from Amazon.com.

The final volume begins in 1967 and the final chapter describes events in 2010, a period of time that saw a huge increase in nuclear medicine and radiation oncology, the use of radioactivity in research programs on Earth and in space, some major accidents, a tremendous shift in public perception of radiation and radioactivity, and so much more. Some of that "much more" includes changes in the ways that radiation was regulated, responding in part to changing public perceptions of radiation. Lindell captures all of this as well as charting the evolution of the profession of radiation safety – professional societies, details of various UNSCEAR and ICRP meetings, and so forth. Like the other books in this series, it is the most comprehensive treatment of the history of our profession and our subject matter that exists.

It would have been easy to write this book as a dry recitation of dates, names, and events – the way we always hated learning history in school. But Lindell writes from a standpoint of more than simply an expert in the field – he lived and worked in the field during the entire period of time covered by this volume and he knew many of those about whom he writes, making this book as much memoir as history, and it makes for a much more interesting read. This is helped by the wonderful translation, which lets Lindell's personality come through. Unfortunately, the last parts of the book also cover the loss of many of the great figures in our profession, lending a more somber tone to the final chapters – although here, too, the fact that Lindell knew so many of them personally adds a personal touch and a poignancy to many of these that makes them into much more than simple obituaries.

For those of you who are interested in understanding how we got to where we are today in all the various facets of radiation science and radiation safety, The Toils of Sisyphus is essential reading – as are the other volumes. Like the other books in this series, it is impressively researched, quite well-written, and filled with anecdotes and information that simply cannot be found elsewhere.

You can access the PDFs through http://www2.irpa.net/page.asp?id=54818; the page that this links to has further links to take you to either of two download sites; alternately you can find all four volumes on Amazon.com at a very reasonable price (less than $10 per volume at this time in the US).

NEW EDITORS AND WHAT'S UP NEXT!

The torch has been passed onto two new editors for the IRPA Bulletin - Andy Karam and Dave Niven. You can read a little bit about us below. We definitely have to thank the previous editors Chunsheng Li and Ali Shoustarian for all of the hard work they put into the Bulletin over the last few years. Besides creating a great product for every issue, they also left a wonderful template and organizational system in place, making our job much easier going forward!

We also have to thank the IRPA Communications Chair, Chris Clement, for helping with the transition and for trusting us to take over from Ali and Chunsheng. We promise to take good care of this publication!

Look out for these great upcoming articles in the next IRPA Bulletin. If you have suggestions for articles or something to publish, email us at bulletin@irpa.net.

- The European Atlas of Natural Radiation
- Insights into the IRPA Guidance on Public Engagement
- Summary of the IAEA International Conference on Radiation Safety

Andy Karam got his start in the US Navy's nuclear power program in 1981 and has worked in radiation safety in one form or another every since. He's focused on issues related to radiological and nuclear terrorism and emergency response for nearly 20 years, most recently as a subject matter expert for the New York Police Department's Counterterrorism Division and (at present) for Mirion Technologies. Outside of work, Andy is writing project is on radiological and nuclear terrorism. While he's based in New York City, he travels extensively (when conditions permit) and enjoys collecting art and crafts from places he's visited - as well as New York's great food and the occasional dram or two of good whiskey.

Dave Niven works in Canada as a Health Physicist for the University Health Network - a network of hospitals and research groups in downtown Toronto. He is also very involved in the Canadian Radiation Protection Association and currently serves as the Chief Editor of the Bulletin for their Association as well. On nice days, whenever he's not working or editing you could find him out for a run. If the weather isn't cooperating, he's probably inside catching up on some video games and sipping a bit of whiskey.