

## **SEPTEMBER 2021**

**ISSUE #31** 



Kaunas, Lithuania - photo by Andy Karam

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# **PRESIDENT'S BLOG**

## DR. BERNARD LE GUEN

Radiation safety is something that happens all over the world – that's implied by the name of our organization – but it's easy to get caught up in what's happening in our own nation, our province or prefecture, our city, or even simply at our workplace. And then we look at this issue of the Bulletin and we read about work by the United Nations, we read about our colleagues in Egypt and Lithuania, an upcoming Regional Congress in North America, and then about our younger colleagues around the world. And it reminds us that our profession really does span the globe – and that it needs to.



There isn't a nation on Earth that lacks hospitals – whose patients (and often staff) are exposed to ionizing radiation from diagnostic and therapeutic procedures. Radioactive sources come into play wherever people are exploring, extracting, and processing natural resources; our security systems (which are ever-more ubiquitous) use ionizing radiation, and it's essential in any number of other human endeavors. On top of that, there's all the radiation and radioactivity in nature, some of which call for protective measures as well. Our profession, our subject matter, and our impact is truly global in nature.

This also points out the broad reach of our work – medical radiation safety alone touches the lives of virtually every person on Earth, nuclear energy is an important bulwark against continued greenhouse gas emissions, and the world needs the resources whose discovery and recovery we facilitate. Not only that, but what we work with – ionizing radiation – is something that most people find both frightening and nearly incomprehensible, yet we all take it in stride, just as carpenters do with their tools.

We often undervalue ourselves and our profession, and we should not. I'd like to invite each of you think about those who are affected by our work – our students, our patients, customers, licensees, and so many more – and to realize that our profession is an important one, and that we are all integral to its success.

I will also note that in the coming weeks and months we'll have the opportunity to meet around IRPA to prepare the radiation protection of tomorrow, thanks to the ICRP initiative Keeping the ICRP Recommendations Fit for Purpose. I thank all the IRPA associations that have already responded by sending their proposals and I assure you that your association, IRPA will represent you at the virtual ICRP workshop.

## IRPA PERSPECTIVE ON 'REASONABLENESS' IN THE OPTIMISATION OF RADIATION PROTECTION



One of the latest IRPA Publications -Perspective on "Reasonableness" in the Optimisation of Radiation Protection



# **68TH SESSION OF UNSCEAR**

ADELENE GAW & JULIE BURTT<sup>1</sup>



The United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) was established by the General Assembly of the United Nations in 1955 [1]. Its mandate is to assess and report levels and effects of exposure to ionizing radiation [1]. For more information on UNSCEAR, please visit the <u>website</u>.

The UNSCEAR secretariat manages the preparation of evaluations, organization of the annual sessions, supports the expert and ad hoc working groups, submission of documents for the Committee's deliberation and coordinates the publication of these documents after their approval. It also supports the Chair during annual presentations of the Committee's report to the UN General Assembly. A team photo of the UNSCEAR secretariat during the last 68th session is provided in Figure 1.



Figure 1: UNSCEAR secretariat (from left to right), Sarah Rowley, Biljana Stajic, Esther Marsha, Susan Habersack, Borislava Batandjieva-Metcalf, Ferid Shannoun, Kristel Aquino, Suzanne Jovanovic, Alex Stanley, Moritz Zimmermann, and online Adelene Gaw and Julie Burtt.

<sup>1</sup> Part time in-kind experts from Canada at the UNSCEAR secretariat



# **68TH SESSION OF UNSCEAR**

## ADELENE GAW & JULIE BURTT 1



The 68th UNSCEAR Session took place from 21 to 25 June 2021. Due to the ongoing global COVID-19 pandemic, for the second year, it was held virtually. The Session was attended by over 220 participants from 27 States that are members of UNSCEAR, 4 observer countries and 12 international organizations.

This session also marked the 65th anniversary of UNSCEAR. The high level representatives from the United Nations Environment Programme (Ms. Andersen), the United Nations Office in Vienna (Ms. Waly), and the International Atomic Energy Agency (Mr. Grossi) provided congratulatory statements. Videos of these statements can be view on the <u>website [2]</u>.

The Session was chaired by Gillian Hirth (Australia). Borislava Batandjieva-Metcalf (Secretary) presented an update on the secretariat's work since the Committee's 67th Session in November 2020. This included the publication of the <u>UNSCEAR 2019 Report – Sources, Effects and Risks of Ionizing</u> <u>Radiation</u> in December 2020 [3] and an advanced online publication of Annex B of the UNSCEAR 2020 Report, <u>Levels and Effects of Radiation Exposure due to the Accident at Fukushima Daiichi Nuclear</u> <u>Power Station: Implications of information Published Since the UNSCEAR 2013 Report</u> in March 2021 [4].

The UNSCEAR secretariat is planning to publish annex A and annex C of the UNSCEAR 2020 Report on medical exposure and biological mechanisms and organise topical webinars on these subjects later this year.

The session also included a technical discussion on the evaluation of occupational exposure to ionizing radiation, which was approved by the Committee for publication in early 2022. Further, the Session included discussions on the progress reports for the following UNSCEAR evaluations:

- Second primary cancer after radiotherapy;
- Epidemiological studies of radiation and cancer;
- Public exposure due to ionizing radiation;
- Implementation of the Committee's strategy to improve collection, analysis and dissemination of data on radiation exposure; and
- Implementation of the Committee's public information and outreach strategy for 2020-2024.

Finally, the session included discussions on the implementation of the Committee's future programme of work (2020-2024), which comprises an evaluation on circulatory diseases from radiation exposure and is planned to commence later this year.



A report to the General Assembly providing details on the deliberations of the Session will be presented at the 76th General Assembly in New York in October 2021 and will be published afterwards on the UNSCEAR website [5].

The 69th Session of UNSCEAR is planned to be held from 9 to 13 May 2022 in Vienna, Austria.

#### **References:**

- 1. UNSCEAR, About Us (unscear.org).
- 2. UNSCEAR, 65th-anniversary-remarks (unscear.org).
- 3. UNSCEAR, UNSCEAR 2019 Report, Sources, Effects and Risk of Ionizing Radiation, <u>2019</u> (<u>unscear.org</u>).
- 4. UNSCEAR, UNSCEAR 2020 Report, Sources, Effects and Risk of Ionizing Radiation, Annex B (Advance Copy): Levels and Effects of Radiation Exposure Due to the Accident at the Fukushima Daiichi Nuclear Power Station: Implications of Information Published since the UNSCEAR 2013 Report, <u>2020b (unscear.org)</u>.
- 5. UNSCEAR, All General Assembly reports and resolutions relating to UNSCEAR (unscear.org).



# SUMMARY OF THE JOINT KARP-JHPS-CSRP WORKSHOP ON "PERSPECTIVES OF YOUNG PROFESSIONALS THROUGH SOME ISSUES RELATED TO THE FUKUSHIMA ACCIDENT"

The joint workshop of YGN (Young Generation Network) among KARP (Korean Association for Radiation Protection), JHPS (Japan Health Physics Society) and CSRP (Chinese Society of Radiation Protection) was held on August 27, 2021 with a topic of recent issues related to the Fukushima Daiichi NPP accident. The objectives of this joint workshop were:

- 1. To promote collaboration among young RP (Radiation Protection) communities of associated societies in Asian region,
- 2. To share RP related knowledge and information by young RP professionals, and
- 3. To discuss recent RP issues related to the Fukushima accident.

The IRPA YGN Leadership Committee Members in three societies and the chairperson of the KARP YSG (Young Scientists Group) organized the programme of this joint workshop and invited representative young professionals from each society. This workshop was held as one of the special sessions during the KARP summer workshops. Due to the COVID-19 pandemic, this event was held as an on-line (for all participants) and off-line (only for Korean participants if available) conference.

As a representative of the hosting society, the president of KARP, Dr. Kyo-Youn Kim delivered his welcome address to celebrate the joint workshop of YGN. After that, three presentations by young professionals (Dr. Hisanori Fukunaga, JHPS, Dr. Jinfeng Li, CSRP, and Mr. Jai Oan Cho, KARP) were delivered with moderating by the KARP YSG chairperson, Dr. Jeongin Kim. Dr. Hisanori Fukunaga introduced his experience on medical health care for populations in the Fukushima area. Dr. Jinfeng Li presented the planned discharge of treated water in Fukushima area and its radiological impacts to the population. As a last speaker of the workshop, Mr. Jai Oan Cho introduced public acceptance of nuclear energy in Korea since the Fukushima accident.



**Invited Speakers and Session Chairperson** 

Clockwise from top-left: Mr. Jai Oan Cho (KARP), Dr. Jinfeng Li (CSRP), Dr. Jeongin Kim (Chairperson) and Dr. Hisanori Fukunaga (JHPS))

After three presentations by young professionals, all speakers and participants discussed the presented topics. The questions and curiosities raised by participants were personalized dose assessment and uncertainty analysis for individual risk assessment, radiation dose levels estimated of decontamination workers in Fukushima area and effective risk communication with the public who are concerned about discharge of treated water. In addition, public acceptance of the nuclear energy depending on the living area (neighboring area or far from NPP sites), measures for other non-radiological issues (i.e. psychological support and societal effects) in the affected area and effective ways for promoting nuclear energy and facilitating the public understanding of the health effects and risks of radiation exposure were deeply discussed by all participants.



**Q&A Session and Discussion** 

After the discussion with all speakers and participants, three representatives from each RP society (Dr. Hiroko Yoshida (JHPS), Dr. Yujuan Niu (CSRP) and Dr. Kyo-Youn KIM (KARP)) delivered congratulatory remarks to all participants. In particular, they emphasized roles of young RP professionals and continuous collaboration among young professionals in the near future to promote social consensus and safety culture on radiation protection practices.



## **Congratulatory Remarks**

From left: Dr. Hiroko Yoshida (JHPS), Dr. Yujuan Niu (CSRP) and Dr. Kyo-Youn Kim (KARP))

In this workshop, more than 60 young professionals participated with the on-line platform and approximately 30 Korean scientists joined this event at the off-site conference room. Lastly, the Young Generation Networks among 3 societies will keep organizing regional and international collaborative events and is expecting to have the face-to-face events soon after COVID-19 pandemic ends.



# RADIATION PROTECTION ASSOCIATION OF LITHUANIA

# HTTP://WWW.LRSD.LT/

The Radiation Protection Association of Lithuania (LRSD) celebrates its 20th anniversary this year. While this is a relatively short amount of time, this interval is very important to us because it happened so soon after Lithuania was reborn as a nation. After Lithuania regained its independence in 1990, it became important to create an independent radiation protection infrastructure for the population and the environment: the legal framework, the regulatory institutions, the training system for radiation protection specialists, as well as technical assistance institutions. This was done in collaboration with politicians and radiation safety, as well as the many other professionals involved in radiation protection of the population and the environment.

In order to implement the provisions of Lithuania's Law on Radiation Protection, the Radiation Protection Center, Lithuania's regulatory body for radiation protection was established in 1997 and, at that moment, the Center held the largest number of radiation protection specialists in Lithuania. Some of these were professionals who worked in the field of environmental protection, as well as in Physics, Botany, Geology and other field; they worked at Lithuania's universities, in civil protection and state border protection, for the nation's food and veterinary institutions, and in many other areas as well. Some Lithuanian specialists were invited to participate in the events of the Nordic Radiation Protection Association and after Lithuania regained its independence, there was the further opportunity to participate activities of the International Atomic Energy Agency (IAEA) and to cooperate with specialists in other nations who were working in the radiation protection field across a wide variety of areas: medicine, nuclear energy, training, science, and public administration institutions, to name a few.



Officers of the LRSD



Neringa – amazing Lithuanian resort at the sea, situated on the Curonian Spit (picture from www.kopos.lt)



In order to bring together radiation protection specialists working in different institutions and based on the experience of the Nordic Society for Radiation Protection, in 2001 the Radiation Protection Center invited all potential stakeholders to a discussion on the need to establish a professional society, which became the LRSD. We primarily formed the LRSD to ensure that we could have effective cooperation between different specialities, among the radiation protection specialists in Lithuania, and between Lithuania and radiation protection specialists in other countries. All of the invited participants unanimously supported this idea and, today, the LRSD connects 87 radiation specialists in different fields and professions, but all united in their desire to excel in radiation safety.

The main goal of the LRP was to enable members to share their knowledge and their experiences, to disseminate their international experience, to create a code of ethics for LRSD members, to participate in the development of Lithuania's radiation protection infrastructure, to communicate with other public and state institutions, to disseminate information to habitants of Lithuania, and to involve young people to engage in radiation protection activities. Therefore LRSD participates in drafting of legislation, discussions about different radiation protection aspects, and it provides recommendations and opinions with regards to relevant radiation-related questions to Lithuanian regulatory institutions. And, as you might imagine, the largest number of papers presented at one of our meetings takes place at our annual conference organized on the occasion of the anniversary of the Chernobyl nuclear reactor accident. Finally, the LRSD is continually working to help to make its members aware of important information, news that's relevant to the field of radiation protection, training courses, and more to all of our members.



The first known book printed in Lithuanian, Catechism of Martynas Mažvydas, published in 1547

With regards to our nation, Lithuania is simultaneously one of the youngest nations and one of the oldest peoples in Europe. The Lithuanian language is one of the oldest languages on Earth, dating back to the original Proto-Indo-European language that was the basis of all of the languages in Europe and, indeed, much of Asia and the Middle East as well – there are features of our language that are found in Sanskrit and Ancient Greek, for example, and Lithuanian is often studied by linguists and has been used as important source material for those who work to reconstruct the original Proto-Indo-European language.



Aside from our language, Lithuania is a Baltic state, bordered by Poland, Belarus, Latvia, and a tiny piece of Russia called Kaliningrad. Our nation has some hills in the nation's center, but is mostly fairly flat with a mixture of farms and forest as well as our seashore and beaches along the Baltic Sea which forms the eastern border of Lithuania. Over the centuries Lithuania has been both larger and smaller and has sometimes ceased to exist independently altogether it joined with Poland to form the Polish-Lithuanian Commonwealth in the 16th and 17th centuries and, at its peak, stretched to the Black Sea and included Kiev, Smolensk, and Brest and was among the largest nations in Europe.



With time, however, Lithuania's size and influence shrank once more until it was absorbed into the Russian Empire (and, to a lesser degree, into Prussia and the Hapsburg Empire) in the late 18th century. We finally regained our independence and emerged again (briefly) as an independent state in the aftermath of the First World War and more permanently on March 11, 1990.



One of our lovely forests

Lithuania today is a member of NATO and of the European Union, as well as the United Nations, the World Trade Organization, the Organization for Security and Cooperation in Europe, and many other international organizations. We are proud to have been ranked fifth in the world in the global Climate Change Performance Index (just behind Sweden) and we are also proud of our work in restoring wildlife populations, replanting forests, and that we have made tremendous progress towards recycling and other environmentally important practices.

We could write much more about Lithuania and about the LRSD – more than there is room for in this article – but will stop now and will simply say that we are proud of our country and of the LRSD and we invite you to visit us.

## MOHAMED GOMAA

It is important to acknowledge the efforts of many of my colleagues to support Egyptian national activities. Dr. Galal El-sayad is one who deserves significant recognition for supporting the Egyptian National Network of Radiation Physics and Radiation Protection (NNRP).

Dr. El-sayad worked in the physics department at the Egyptian Atomic Energy Authority (EAEA) for many years. After graduating with his doctorate from Uppsala Sweden, he worked at the Beta Laboratory. From there he went to teach at a Libyan university, and then finally moved to the US to work in the instrumentation industry at Amale International Inc. Dr El-syad was popular in the Arab scientific community not only because of his knowledge and skills, but also because he speaks Arabic and is always willing to give advice to those in need. He has assisted several laboratories in constructing gamma ray spectrometers and helped them acquire radiation measurements and dosimetry equipment.



Dr. Galal El-sayad

For years, Dr. El-sayad has supported not only the NNRP but also other Egyptian societies including the Egyptian Nuclear Physics Association (ENPA) which held its last in-person conference in March 2021 (on a Nile boat between Aswan and Luxor) and the Egyptian Society for Nuclear Sciences and Applications (ESNSA), who's last in-person conference took placejust before the spread of the COVID-19 in February 2020. He has also supported the most recent NNRP conference in 2018 and may previous conferences.

Aside from his company in the US, Dr. El-sayad greatly enjoys life via walking activities and birdwatching. He has also become an excellent photographer. Recently he moved from the eastern US to California. I am proud to be friends with Dr. Galal El-sayad.



**Hussein Abou Lilea** 

Another friend who supported our activities but has sadly passed away is Professor Hussein Abou Lilea. He was also was a colleague at EAEA before moving on to work at Egyptian and Arabic universities. After retiring he also went to instrumentation industry at Satco. Currently his son Samy is running the company with help of Dr. Adel IMAM, an instrumentation engineer. I am proud to know the late Prof Abou Lilea and his family.



Finally, I must also include Dr. Anas Elnaggar and his family for their support. My colleague Dr. Anas was medical doctor who taught postgraduate and training courses at medical facilities. I had known him since the mid-sixties when he was studying for a masters degree in radiation physics and radiation biology and I was completing my PhD thesis in neutron shielding at Middlesex Hospital Medical School, London University.

Dr. Elnaggar and I worked together at the Radiation Protection Department of the EAEA until 1982, when he left to work in Saudi Arabia. After returning home, he turned his attention to nuclear safety and medical emergencies. In 1996 we traveled together to Vienna to attend IRPA-6. He had many contributions to the community, including editing papers submitted to the ESNSA journal and its conferences as well as the proceedings of the NNRPP conferences. His passing in 2008 was marked with sorrow by his students and coworkers.



Dr. Anas Elnaggar

Recently I learned that Richard Griffith and Wolfgang Weiss had also both passed away. Those from the eighties remember all our colleagues who worked together assisted us over the years, both internationally and nationally.



Mohamed Gomaa (standing) Dr. Samy Abou Lilea to his right, discussing with Dr. Galal El-sayad



# Meeting the Challenges in the Practice of Radiation Protection

This coming February the Health Physics Society (HPS) joins with the American Academy of Health Physics (AAHP), American Association of Physicists in Medicine (AAPM), American Nuclear Society (ANS), Conference of Radiation Control Program Directors (CRCPD), Canadian Radiation Protection Association (CRPA), National Council on Radiation Protection and Measurements (NCRP) and Mexican Society of Irradiation and Dosimetry (SMID) to host the first ever North American Regional Congress for the International Radiation Protection Association (IRPA) both virtually and in person in St. Louis Missouri!

Great accommodations, fantastic scientific program, great food and music all with your fellow radiation safety colleagues from across North America. Join us and expand your knowledge and find solutions to problems you may be facing. Come and share your ideas and work with us, call for papers is open until October 15, 2021. Engage in networking and meet new people in radiation protection, you never know when that new connection may prove to be a valuable resource. Take the opportunity to learn about radiations safety topics outside your typical health physics practice. If you are excited as we are about this conference, start making your travel plans and join us in St. Louis!

You can find all the details on the <u>conference website</u>, and there's still time to <u>submit your</u> <u>abstract</u> before the October 15 deadline. We've listed a few of the highlights here to whet your appetite:

# ACCOMMODATIONS

Accommodations for the North American Regional Congress will be held at the St. Louis Union Station Hotel. The hotel occupies the 1894 Union Station, connects to the Union Station Aquarium and St. Louis Ferris Wheel, and is just minutes away from the Scottrade Center, the Peabody Opera House, Busch Stadium, the Gateway Arch, Lumiere Place Casino, and the Americas Dome





The Union Station hotel has many activities for all ages available and is a great opportunity to bring your family to explore St. Louis without ever leaving the hotel. The 120,000 square foot aquarium offers educational opportunities to learn about Missouri's local freshwater rivers and aquatic animals, a 250,000 gallon marine habitat with sharks of all shapes and sizes, and mysterious deep sea creatures such as octopi and jelly fish. Take a ride on the St. Louis Wheel, a 200-foot-high observation wheel that is fully enclosed and boasts views of the St. Louis skyline. Families may also enjoy the Union Station Carousel, Mini Golf, a Mirror Maze, and a Ropes Course all in the same building as the conference hotel.

# SOCIAL EVENTS

### **IRPA Night Out**

If you are looking for live local St. Louis, MO music and Cajun themed food, then come on out to the Broadway Oyster Bar on Tuesday night, February 22, 2022. IRPA will be hosting a night out for all attendees to relax and socialize. Tickets will be available to purchase later, and transportation to and from will be provided. For more information on Broadway Oyster Bar, check out their <u>website</u>. A limited menu will be available beforehand to preorder food selections, and the price of food will be included in the ticket. Drinks will be available for purchase at the venue.

### **Breweries**

Beer lovers of all kinds can find joy in the local breweries in St. Louis. Home to the original Anheuser-Busch brewery built in 1852 by a German immigrant, you can schedule a tour of the brewery, see the Anheuser-Busch Clydesdale horses in person which were once used to carry beer in the 19th century, and taste some Anheuser-Busch products in the process. <u>Schlafly, Four Hands, Square One Brewery &</u> <u>Distillery, and Urban Chestnut</u> are other breweries within a 10-minute drive that offer craft beers of all types.



## The Gateway Arch

Known as the Gateway to the West, the Arch is an architectural feat that's at the top of the to-do list when visiting St. Louis. Get a group of fellow attendees to ride the tram to the top of the arch or explore the Museum at the Gateway Arch below. <u>Tickets</u> are selling out early and quickly, so make sure to buy tickets before arriving to town!