



19th EAN WORKSHOP

INNOVATIVE ALARA TOOLS

JOINTLY ORGANISED WITH THE

PODIUM (Personal Online Dosimetry Using computational Methods) PROJECT

Athens, 26th -29th November 2019

Meeting and Dates

The 19th workshop of the European ALARA Network (EAN) will be a joint meeting with the PODIUM (Personal Online Dosimetry Using Computational Methods) project consortium. It will be hosted by the Greek Atomic Energy Commission (EEAE) in **Athens, Greece from 26th to 29th of November 2019.**

The first day of the joint workshop (26th November 2019) will be dedicated to presenting the main results of PODIUM (project funded through the H2020 CONCERT Programme), while the following days (27th -29th November 2019) will be dedicated to the EAN workshop on innovative ALARA Tools.

Purpose and Scope

Innovations in instrumentation, computing and information technology have provided numerous tools for improving our day-to-day lives. In the same way, new and innovative approaches to radiation protection (RP) could also be developed in particular in the ALARA process. However, as with most new technologies, issues and challenges need to be identified and tackled. The PODIUM Project and the European ALARA Network have come together to organize a joint workshop to present PODIUM results, innovative ALARA tools and discuss broadly their use in advancing RP and ALARA.

The main aim of the **PODIUM** project is the development of an online dosimetry application based on computer simulations without the use of physical dosimeters. Real movements of exposed workers captured by tracking tools have been used together with Monte Carlo simulations for the development of the application. The methodology has been applied in two crucial workplaces where improvements in dosimetry are urgently needed: neutron and interventional radiology workplaces. The availability of advanced online dosimetry applications such as these in the radiation protection field will increase awareness among workers and should improve the implementation of the ALARA principle. Therefore, during the workshop emphasis will be given



on how exposed workers can be trained by using real-time dose results to effectively apply the ALARA principle.

The main objectives of the **European ALARA Network** workshop are:

- to present and review recent and emerging innovative “ALARA Tools” used in the different steps of the ALARA process;
- to investigate the benefits of the tools and identify potential limits and obstacles in their application;
- to disseminate the knowledge on “ALARA Tools” in support of the ALARA process;
- to investigate how innovative “ALARA Tools” and innovation may (re)shape the ALARA process for the next years: evolution or revolution?

Provisional Scientific Programme

- ✓ 26th November: Presentation and discussion of the results of the PODIUM Project
- ✓ 27th November: Morning Setting the Scene session and topical sessions; working groups session (afternoon)
- ✓ 28th November: topical sessions (continued); working groups session (afternoon)
- ✓ 29th November (up to noon): presentation of the outputs of the working groups; first workshop conclusions and recommendations

Target audience

The workshop is addressed to a variety of stakeholders, including Radiation Protection Experts (RPEs), Medical Physics Experts (MPEs), Radiation Protection Officers (RPOs), as well as occupational health services, dosimetry services and regulators. The workshop will give the opportunity for these stakeholders to meet, be informed on the latest developments in the field and brainstorm on how innovation can shape the future of radiation protection.

Working Groups (provisional)

A significant part of the EAN Workshop program is devoted to discussions within Working Groups (each participant can participate in one Working Group). The workshop conclusions and recommendations will summarise the main points of the presentations and the discussions held during the Working Groups. The provisional topics for discussion by the Working Groups are:

1. Are there specific challenges in the ALARA process that may be resolved by innovative “ALARA Tools” (developed or under development)?
2. Are there specific issues which may limit the development and/or the use of innovative “ALARA Tools” (technical, legislative, ethical etc.)? How will we deal with these issues?
3. What is the role of the RPEs, MPEs and RPOs with respect to these tools?
4. There is currently a lot of focus on research and innovation in areas beyond that of traditional RP research, such as deep-learning and artificial intelligence, big data, etc. Do these have the potential to shape the ALARA process in the next years?



Location

The workshop will be hosted by the Greek Atomic Energy Commission (EEAE) at the Congress Center of the National Centre for Scientific Research “Demokritos” (Patr. Gregoriou E & 27 Neapoleos Str, 15341 Agia Paraskevi, Athens).

Registration

More information about registration will be available soon.

Local Organising Committee

Eleftheria Carinou, Sotirios Economides, Vasiliki Tafili, Zoi Thrapsanioti (EEAE)

Programme Committee

Sylvain Andresz, Nuclear Protection Evaluation Centre, CEPN, France

Anja Almen, Lund University, Sweden

Eleftheria Carinou, Greek Atomic Energy Commission, EEAE, Greece

Pascal Croüail, Nuclear Protection Evaluation Centre, CEPN, France

Julie Gilchrist, Public Health England, PHE, United Kingdom

Cristina Nuccetelli, National Institute of Health, ISS, Italy

Una O'Connor, St. James's Hospital, Ireland

Filip Vanhavere, SCK•CEN, Belgium

Fernand Vermeersch, SCK•CEN, Belgium

Contact Details

Vasiliki Tafili (vasiliki.tafili@eeae.gr)