EURADOS
European Radiation Dosimetry Group e.V.

U.PORTO
FACULDADE DE CIÊNCIAS UNIVERSIDADE DO PORTO

IPOPORTO
INSTITUTO PORTUGUÊS DE ONCOLOGIA DO PORTO, FRANCISCO GENTIL, EPE

SECOND announcement

EURADOS Annual Meeting 2023
AM2023

Porto, Portugal, 12th to 15th June 2023

Including

- EURADOS School on "Contribution of dosimetry in the field of nuclear emergency preparedness and radiological accident management"
- Meetings of the EURADOS Working Groups
- WG2 Learning Network
- IC2022ph and IC2022n participant meetings
- Early career event
- EURADOS General Assembly and Council Meeting

INVITATION

I am very happy to invite you all for the next EURADOS Annual Meeting in the beautiful and warm city of Porto in Portugal.

EURADOS is more active than ever, and each year we work hard to make the EURADOS Annual Meeting a strong and successful event. The EURADOS Annual Meetings are and continue to be an important event on the agenda of the community working in the field of ionising radiation dosimetry.

Last year we have celebrated our 40th anniversary in Belgrade, and this year we will celebrate for our 41st in Porto. We believe that the networking is very important, and bringing all active and interested scientists and radiation protection dosimetry experts together in one meeting is beneficial for everybody. That is why we keep on combining our statutory meetings with the Working Group meetings. And to continue the tradition, we will also organise a lively conference dinner and welcome reception. The Annual meeting will also include a very interesting EURADOS School (the 16th already!), devoted to the contributions of dosimetry in the field of nuclear emergency preparedness and radiological accident management. The general agenda of the Annual Meeting 2023 is summarised in the table below. This 2nd announcement provides more details on the agenda of the EURADOS School, all other events and registration.

We look forward to seeing many colleagues from the EURADOS network and many others interested in the AM2023 in Porto.

Filip Vanhavere
EURADOS Chairperson

Dear EURADOS Community,

We'd like to welcome you to the wonderful historical city of Porto, Portugal's second largest city, as well as the city that named the country. But Porto is perhaps more renowned for being home to Port wine, one of the most famously recognised wines in the World. Porto's steep hills, picturesque houses and historical streets, blended with intriguing world-renowned modern architecture will create the perfect setting for the EURADOS meetings that will take place at both Porto's Engineering School (FEUP) and Porto's Institute of Oncology (IPO-Porto).

The University of Porto is Portugal's best University, home to 14 different Faculties, including the Faculty of Engineering and the Faculty of Physics and Astronomy, and one business school, hosting 34,000 students from multiple nationalities, and about 3.400 Research and Teaching staff. It's also home to 48 Research Units, which together have published more than 25 thousand indexed papers between 2016-2020, corresponding to 24% of the Portuguese scientific production in that period. The University of Porto has also more than 400 active patents and has created circa 99 spin-offs demonstrating its strong societal commitment for innovation and improvement of quality-of-life improvement.

IPO-Porto is the largest specialized cancer centre in Portugal, dedicated to patient care, training, and research in Oncology. IPO Porto is accredited by OECI as a Comprehensive Cancer Center (Porto.CCC) in consortium with the i3S. The Research Centre of IPO-Porto (CI-IPOP) includes more than 200 members and has 5 translational research groups of which the Medical Physics, Radiobiology & Radiation Protection group. CI-IPOP has more than 150 active clinical trials, its activity is supported by IPO Porto's Biobank and by an Early phase clinical trial Unit dedicated to investigator-initiated trials. CI-IPOP long-term objective is to understand the pathobiological mechanisms of tumorigenesis and enable Precision Oncology.

It is in this environment that we wish to welcome all of you to join us at the EURADOS AM 2023, wishing that you have a wonderful scientific experience, blended with cultural and personal delights. Welcome!

Pedro Teles

João Santos

CONTENTS

AGENDA OF THE EURADOS ANNUAL MEETING 2023

Time	Monday 12.06.2023		Tuesday 13.06.2023		Wednesday 14.06.2023	Thursday 15.06.2023	Friday 16.06.2023
08.00-09.00		WG10 Workshop on TL[1)]	Registration[1)]		Registration[1)]	Registration[2)]	
09.00-09.30	Council meeting[1)]		WG meetings[1)]	IC2022n participant meeting[1)]	WG meetings[1)]	16th EURADOS School[2)]	Council meeting[2)]
09.30-10.00							
10.00-10.30	Coffee break[1)]						
10.30-11.00	Council meeting[1)]	WG10 Workshop on TL[1)]	Coffee break[1)]		Coffee break[1)]	Coffee break[2)]	
11.00-11.30			WG meetings[1)]	IC2022ph participant meeting[1)]	WG meetings[1)]	16th EURADOS School[2)]	
11.30-12.00							
12.00-12.30							
12.30-13.00	Registration[1)]		Lunch[1)]		Lunch[1)]	Lunch[1)]	
13.00-13.30							
13.30-14.00	WG meetings[1)]		WG meetings[1)]	WG2 Learning network[1)]	35th EURADOS General Assembly[2)]	16th EURADOS School[2)]	
14.00-14.30							
14.30-15.00							
15.00-15.30					Coffee break[2)]	Coffee break[2)]	
15.30-16.00	Coffee break[1)]		Coffee break[1)]		35th EURADOS General Assembly[2)]	16th EURADOS School[2)]	
16.00-16.30	WG meetings[1)]		WG meetings[1)]	WG2 Learning network[1)]			
16.30-17.00							
17.00-17.30							
17.30-18.00							
19:00-20:00	Welcome drink[1)]		Early career event				
From 20:00					Conference dinner		

[1)] takes place at FEUP (see p. 12)

[2)] takes place at IPO (see p. 12)

IMPORTANT DATES

- Call for registration — 13th March 2023
- Deadline for early registration (reduced fee) — 5th May 2023
- Deadline for registration — 1st June 2023
- EURADOS Annual Meeting 2023 — 12th - 15th June 2023
- EURADOS General Assembly — 14th June 2023
- 16th EURADOS School — 15th June 2023

EURADOS WORKING GROUP MEETINGS

The following table lists the Working Groups (WG) which meet from Monday, June 12th to Wednesday, June 14th. All meetings run in parallel.

The agenda for each WG meeting will be distributed in advance to the WG members and can be downloaded from the registration platform and the new conference app.

Even if you are new to EURADOS, you are welcomed to present your work at a WG meeting. Please contact a WG Chairperson.

Working Group (WG)	WG Chairperson and email address	
WG2 – Harmonisation of individual monitoring	Marie-Anne Chevallier	marie-anne.chevallier@irsn.fr
WG3 – Environmental dosimetry	Arturo Vargas	arturo.vargas@upc.edu
WG6 – Computational dosimetry	Hans Rabus	hans.rabus@ptb.de
WG7 – Internal dosimetry	David Broggio	david.broggio@irsn.fr
WG9 – Dosimetry in radiotherapy	Liliana Stolarczyk	lilsto@rm.dk
WG10 – Retrospective dosimetry	Liz Ainsbury	liz.ainsbury@hsa.gov.uk
WG11 – High-energy radiation fields	Marco Caresana	marco.caresana@polimi.it
WG12 – Dosimetry in medical imaging	Željka Knežević	zknez@irb.hr
Pilot group – Dosimetry in nuclear medicine	Weibo Li	wli@bfs.de

IC2022n AND IC2022ph PARTICIPANT MEETINGS

The two participants' meetings of the EURADOS Intercomparison on neutron dosemeters (IC2022n) and the one on whole body photon dosemeter (IC2022ph) will take place together on Tuesday, June 13th, from 09:00 to 12:30. The aims are to present and discuss the results of these two Intercomparison exercises. The meeting is primarily designed for the participants of IC2022n and IC2022ph but it is open to all interested persons.

Please, register for this event via the EURADOS AM2023 registration platform.

WG2 LEARNING NETWORK

The Learning Network will be held on Tuesday, June 13th, from 13:30 to 18:00. There will be topical contributions and discussions. It is intended for staff, in particular trainee managers, of individual monitoring services, but is open to anyone attending the Annual Meeting.

Please, register for this event via the EURADOS AM2023 registration platform.

INDUSTRIAL EXHIBITION

The industrial exhibition will take place during the coffee breaks of the Annual Meeting.

Booths can only be offered at FEUP from Monday, June 12th to Wednesday, June 14th. Unfortunately, it cannot be continued at IPO, where the General Assembly and the EURADOS School will take place on Wednesday afternoon and Thursday, June 15th.

The fee for an exhibition booth, consisting of a table and two chairs is 1,500 €. EURADOS sponsors (see www.eurados.org/sponsors) receive a 10 % discount. The exhibitor fee includes participation in all events of AM2023, coffee breaks, lunches (on Tue, Wed and Thu), the welcome drink (on Mon) and the conference dinner (on Wed) for two people from the company.

If you are interested in presenting your company, please contact office@eurados.org and kindly include all information needed for issuing the invoice.

EARLY CAREER EVENT

The early career scientist network takes place on Tuesday, June 13th, at 19:00 and aims to foster a space for early career researchers within the field of dosimetry to network. During this event, the attendees will meet up in an informal space (bar or café) to freely exchange ideas, get to know each other, and foster discussion. Ideas regarding how EURADOS can best support early career scientists will be gathered and later presented to the EURADOS Council.

Please, register for this event via the EURADOS AM2023 registration platform.

CONFERENCE DINNER

A conference dinner is scheduled on Wednesday, June 14, at 20:00 in the Palácio da Bolsa, Rua Ferreira Borges, Porto (https://palaciodabolsa.com).

For registered participants, the costs are included in the registration fee. The costs for accompanying persons are 120 €, to be paid by cash at the registration desk.

Please, register for this event via the EURADOS AM2023 registration platform.

CONFERENCE APP

New to EURADOS AM2023 is the online tool, the Whova conference app. You can download the app from the app store on your mobile phone free of charge. If you use the same e-mail address for the registration in the app that was used in your online registration form, you should be able to directly access EURADOS AM2023. The app provides updated information on the meeting and event agendas, rooms, floor plans, last minute announcements, chat among participants and more.

EURADOS GENERAL ASSEMBLY

The 35th General Assembly (GA) will be held on Wednesday, June 14th, from 13:30 to 18:00. It will cover statutory topics of the association (elections of new Council members, Treasurer report), but also activity reports from the EURADOS Chairperson and Working Groups. The winners of the EURADOS Young Scientist Grant, the additional Grant for Ukrainian scientists and Award will be also presented. The detailed agenda of the General Assembly will be distributed to the Voting Members. This event is open to any interested persons.

AGENDA

13:30-13:35	Opening address (*Filip Vanhavere*)
13:35-13:40	Verification of the number of Voting Members present or represented (*Isabelle Clairand*)
13:40	Acceptance of the agenda
13:40-14:10	Chairperson's report (*Filip Vanhavere*)
14:10-14:20	Financial report 2022 and budget plan 2023 (*Oliver Hupe*)
14:20-14:30	Report from financial auditors (*Rick Tanner, Sebastian Trinkl*)
14:30	Approval of financial report and discharge of the Extended Executive Board from liability
14:30-14:40	Presentation and election of new Voting Members
14:40-15:00	Presentation and election of new Chairperson, Vice-Chairperson and Council Members
15:00-15:30	*Coffee Break*
15:30-15:50	Presentation of EURADOS Young Scientist Award and Grant winners 2022 (*Elena Fantuzzi*)
15:50-17:20	Report of EURADOS Working Groups (10 min each)

- WG2: *Marie-Anne Chevallier*
- WG3: *Arturo Vargas*
- WG6: *Hans Rabus*
- WG7: *David Broggio/Bastian Breustedt*
- WG9: *Liliana Stolarczyk*
- WG10: *Liz Ainsbury*
- WG11: *Marco Caresana*
- WG12: *Željka Knežević*
- Pilot Group: *Lara Struelens*

17:20-17:30	Announcement of the results of the elections
17:30	Closure (*new Chairperson*)

Please, register for this event via the EURADOS AM2023 registration platform.

Preliminary programme of the 16th EURADOS School

Time	Topic	Speaker
9:00	Welcome on behalf of the Scientific Committee	**Liz Ainsbury** and **Pedro Teles** UKHSA (UK) and IPO (Portugal)
9:05	Introduction - historical aspects, and the need for radiation emergency preparedness	**Eduardo Gallego** UPM (Spain)
9:35	Biological effects in nuclear and radiological accidents	**Isabel Bravo** IPO (Portugal)
10:05	When do we need a sound risk assessment based on monitoring and modelling in a nuclear emergency to assure proper decision making and a balanced long-term health care for the population?	**Wolfgang Raskob** KIT (Germany)
10:35	Coffee break	
11:00	Preparing for people monitoring and using the data to inform the wider monitoring programme	**Matt Simpson** UKHSA (UK)
11:30	EURADOS developments on emergency internal dosimetry	**María Antonia López** CIEMAT (Spain)
12:00	Biological and physical retrospective dosimetry	**Liz Ainsbury** UKHSA (UK)
12:30	Lunch	
13:30	Environmental monitoring and the use of unmanned aerial systems for radiological surveillance	**Arturo Vargas** UPC (Spain)
14:00	Contribution of computational dosimetry to the management of radiological accidents	**Christelle Huet** IRSN (France)
14:30	Current status of nuclear facilities in Ukraine and the associated radiological risks in wartime	**Olena Parenyuk** NAS (Ukraine)
14:50	Coffee break	
15:20	Case studies – Internal dosimetry and longer term population monitoring, Goiania	**Luiz Bertelli** LANL (USA)
15:40	Case studies - How useful is the dose assessment in the medical management of radiological accidents?	**Jean-François Bottollier-Depois** IRSN (France)
16:00	Case studies - The current nuclear risk in Europe	**Johan Camps** SCK CEN (Belgium)
16:20	Closure of the EURADOS School	

16th EURADOS SCHOOL

Contribution of dosimetry in the field of nuclear emergency preparedness and radiological accident management

Thursday, 15th June 2023

Scope

Ionising radiation is of huge benefit to society, including in medicine and industry. However, there remains a small but very real risk of radiation accidents or malicious events which may lead to small or very large numbers of individuals being exposed to unplanned doses, either patients, workers, or members of the public.

Ionising radiation dosimetry in its various forms, including environmental, computational, individual monitoring, internal and external dose assessment, is a crucial part of any radiation emergency response, not least following a large scale civil nuclear accident. In such scenarios, direct monitoring of doses to individuals and the environment as well as prediction of the pathways for exposure which relies on detailed calculations using a variety of models and approaches, directly support decision making in terms of incident resolution (who should try and fix the problem and how), as well as protective actions for potentially exposed members of the public and the environment. Dosimetry is also key to the recovery phase, including the initial and longer term clean up as well as the long-term consequences for exposed workers, members of the public, non-human biota and the environment.

The EURADOS School 2023 will seek to establish the basics of preparedness for nuclear emergency situations, before introducing the audience to the key considerations of dosimetric monitoring and modelling to support real time decision making and prediction of evolution of the accident, individual monitoring and external and internal dosimetry for individuals and the environment. The contribution of dosimetry to communication to the public and stakeholders, which is essential for both the acute and clean up phases of the incident, will also be considered, as will the next steps in terms of the longer term. Case studies on real or potential incidents will be presented to put the presented theory into practical context.

Topics

- Introduction to past major nuclear accidents
- Nuclear emergency preparedness
- Radiation dosimetry and modelling in support of the acute and longer term response
- Stakeholder involvement and communication

Scientific Committee

- Liz Ainsbury (UK Health Security Agency – UKHSA, United Kingdom)
- Isabelle Clairand (Institut de Radioprotection et de Sûreté Nucléaire – IRSN, France)

- Marco Silari (European Organization for Nuclear Research - CERN, Switzerland)
- Pedro Teles (University of Porto – FCUP, Portugal)
- Filip Vanhavere (Nuclear Research Centre – SCK CEN, Belgium)
- Arturo Vargas (Universitat Politècnica de Catalunya – UPC, Spain)

Event Accreditation

We have requested the EURADOS School to be accredited by EBAMP as CPD event for Medical Physicists. More information will be distributed later.

Although the Annual Meeting is scheduled as a full live event, we foresee the possibility to follow the EURADOS School online. A special fee will be asked to follow the online School.

Please, register for this event via the EURADOS AM2023 registration platform.

SATELLITE EVENT

Training Course on "How to Measure and Analyze Luminescence Signals for Potential Applications in Radiation Dosimetry: Theory and Computational Procedures" (WG10)

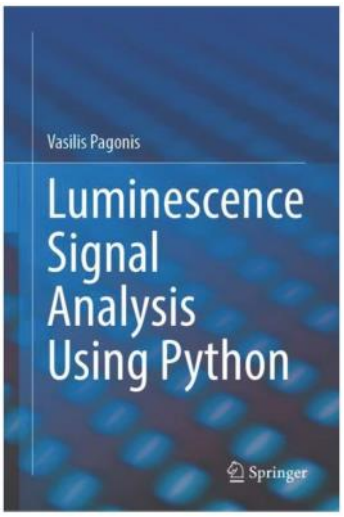
The training course takes place on Monday, June 12th, 08:00-12:30 and consists of two parts:

PART I: *Steve McKeever, Emeritus Regents Professor of Physics, Oklahoma State University, USA*

"Garbage in: Garbage Out". Understanding What You Measure is Critical

The discussion will cover understanding kinetics, what the standard equations mean and don't mean, how to collect the data, essential basic analytical tools, rudimentary and novel peak fitting approaches.

PART II: *Vasilis Pagonis, Emeritus Professor of Physics, McDaniel College, USA and Associate Editor, Radiation Measurements*



Luminescence signal analysis with open access software in Python and R

Practical examples will be demonstrated using software codes in Python and R for TL/OSL analysis, using actual experimental data files from dosimetric materials. Codes will be made available at the workshop in the form of Jupyter notebooks, which participants will be able to download freely from the web. Using their own laptops, participants can log into their Google Drive account and can run the codes immediately in the Google cloud, within the so-called Google Colab.

Attendees or their institutions will also be able to claim a 20 % discount on a recently published textbook on this topic. A flyer

can be downloaded on the EURADOS website or in the "Documents" folder on the AM2023 registration platform (www.eurados-registration.org).

More information on prices and registration for the Training Course is available on the EURADOS website: www.eurados.org/events-overview/TC_TL.

In case of questions, please contact the WG10 Chairperson: liz.ainsbury@ukhsa.gov.uk.

The registration procedure and participation fee are independent on the AM2023 conference fee.

VENUE AND TRANSPORTATION

The EURADOS Annual Meeting 2023 will take place at:

Faculty of Engineering of the University of Porto (FEUP)
R. Dr. Roberto Frias
4200-465 Porto
https://sigarra.up.pt/feup/en

from Monday to Wednesday noon and at:

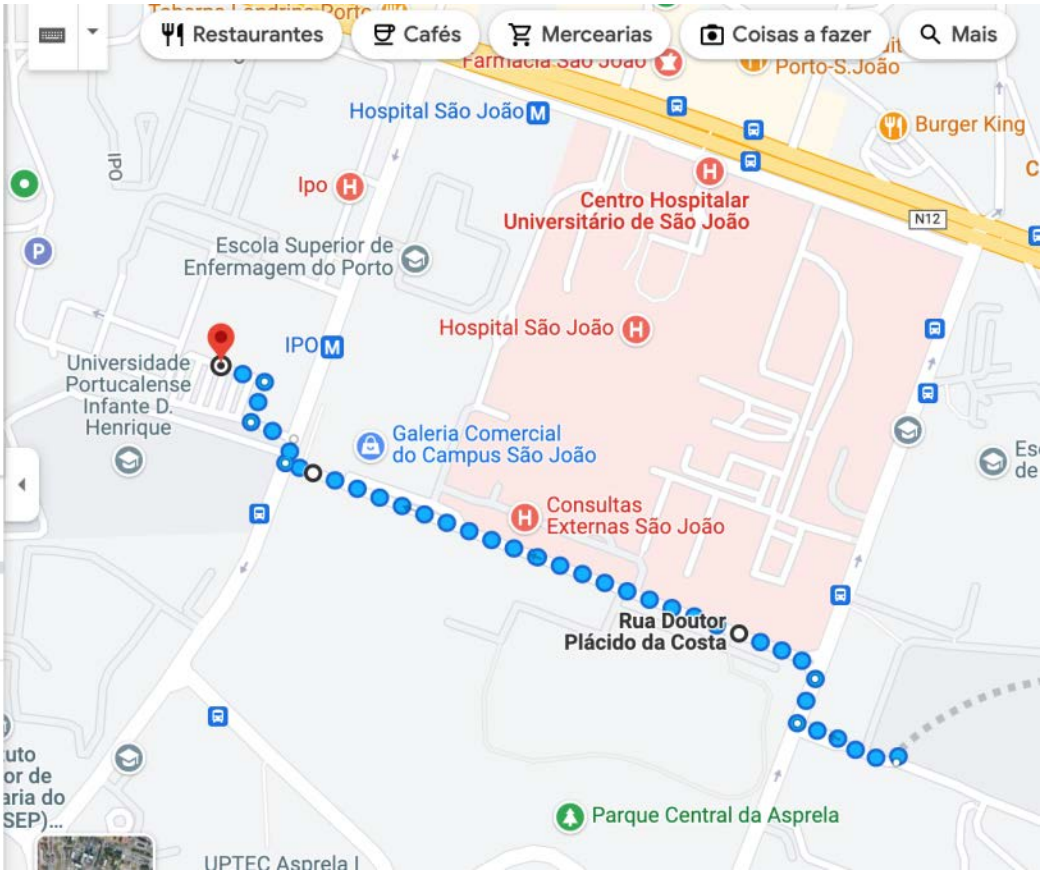
Instituto Português de Oncologia do Porto (IPO)
R. Dr. António Bernardino de Almeida 865
4200-072 Porto
https://ipoporto.pt

on Wednesday afternoon and Thursday.

The Working Group meetings, industrial exhibition and all lunches will take place at FEUP. Coffee breaks will be served Monday to Wednesday morning at FEUP, Wednesday afternoon and Thursday at IPO.

The General Assembly and the EURADOS School will take place at IPO.

The two conference venues are located within walking distance of each other (850 m), https://goo.gl/maps/6TXXL9Jz6nfdP6dX7



How to reach the venue from Porto airport "Francisco Sá Carneiro"

You can reach the venue directly from the airport by taking the metro. Take line E and alight at station "Trindade". Then take line D direction "Hospital de São João" and alight at station "IPO".

The price of the tickets depends on the number of zones crossed. For more information please check:

For the Metro: https://en.metrodoporto.pt
For the bus: https://www.stcp.pt/en/travel

There is also a transportation app easily downloadable at www.move-me.mobi

HOTEL RESERVATION

A list of suggested hotels can be downloaded in the "Documents" folder on the registration platform (www.eurados-registration.org).

LOCAL ORGANISATION

Pedro Teles (FCUP)
João Miranda dos Santos (IPO)

Contact
phone +351 220 402 335
Email: ppteles@fc.up.pt

REGISTRATION

Please register online via www.eurados-registration.org by **1st June 2023.**

The registration platform will open on **13th March 2023.**

Early registration (reduced fee) incl. payment is possible until **5th May 2023.**

CONFERENCE FEE[1)]

Registration and payment latest 5th May 2023		Registration and payment after 5th May 2023	
Full Fee:	300 €	Full Fee:	375 €
Reduced Fee[2)]:	250 €	Reduced Fee[2)]:	325 €

[1)] The fee is waived for retired persons, but online registration is mandatory.

[2)] Reduced fee for participants from sponsoring institutions (see www.eurados.org/Sponsors)

The fee includes participation in all events of AM2023, coffee breaks, lunches (on Tue, Wed and Thu), the welcome drink (on Mon) and conference dinner (on Wed).

Special fee[3)] only for EURADOS School online attendance	
Full Fee:	125 €
Reduced fee[2)]:	100 €

[3)] This fee applies to participants who attend this event only (for the others, it is included in the registration fee of the conference). No other events will be streamed online!

The login data for access to the online participation in the EURADOS School will be sent by e-mail in the week before the Annual Meeting, provided that the payment of the fee has been received by EURADOS. The invoices will be sent after registration has been completed. Please note: the payments have to be done by bank transfer. EURADOS cannot accept credit card payment, neither in advance, nor on-site in Porto.

ENQUIRIES ON REGISTRATION AND PAYMENT

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EURADOS SPONSORS

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Mirion Technologies	National Centre for Nuclear Research Swierk	Nuclear Research and Consultancy Group

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SCK CEN - Belgian Nuclear Research Centre	STUK – Radiation and Nuclear Safety Authority	SURO - National Radiation Protection Institute

Swedish Radiation Safety Authority	Tecnatom	Universidade de Lisboa / Instituto Superior Técnico
UK Health Security Agency	Vinca Institute of Nuclear Sciences	Vinçotte Controlatom
Veneto Institute of Oncology IRCCS-IOV		