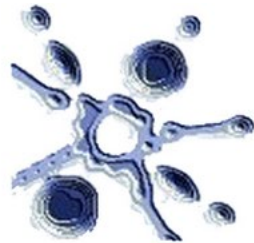

EURADOS EDUCATION AND TRAINING VISION AND STRATEGY: FROM TRAINING EVENTS AND SCIENTISTS SUPPORT TO WEBINARS ON RADIATION DOSIMETRY

Joao G. Alves

on behalf of EURADOS Council and WG chairpersons



ETRAP

27-30 June 2023

Groningen, The Netherlands

8th Conference on Education and Training in Radiation Protection

Outline

- About EURADOS
- EURADOS Education and Training: Policy
- EURADOS Education and Training: Actions and Activities
- EURADOS knowledge dissemination: Actions and Activities
- Promotion of Education and Training
- Conclusions

EURADOS, European Radiation Dosimetry Group

Founded in 1982 , since 2008 registered in Germany as “e.V.” as *non-profit* organization

- **Goal:**

- to promote research and development and European cooperation in the field of dosimetry of ionizing radiation

- **Activities:**

- coordination of working groups
 - Promotion of technical development and its implementation in routine work
 - contribution to compatibility within Europe and conformance with international practices
 - organization of scientific meetings and training activities
 - organization of intercomparisons and benchmark studies

- **Financial resources**

- from sponsoring institutions,
 - from levies raised for organized activities (annual meetings, training courses and IC exercises),
 - from projects funded by the European Commission.

- EURADOS maintains a network of experts, reference and research laboratories, industry and dosimetry services.

<http://www.eurados.org>

EURADOS Strategic Research Agenda

EURADOS SRA

Visions for Radiation Dosimetry over the next two decades – Strategic Research Agenda of the European Radiation Dosimetry Group: Version 2020

J.F. Bottollier-Depois, I. Clairand, E. Fantuzzi, P. Fattibene, R. Harrison, O. Hupe, P. Olko, V. Olšovcová, W. Rühm, M. Silari, R. Tanner, F. Vanhavere

First Edition in 2014 by:

W. Rühm, E. Fantuzzi, R. Harrison, H. Schuhmacher, F. Vanhavere, J. Alves, J.F. Bottollier-Depois, P. Fattibene, Ž. Knežević, M.A. Lopez, S. Mayer, S. Miljanić, S. Neumaier, P. Olko, H. Stadtmann, R. Tanner, C. Woda

Available: http://www.eurados.org/en/Documents_Publications



EURADOS (as of May 2023)

- **EURADOS General Assembly**

83 Voting Members (institutions) from 33 countries represented by designated individuals

- **Associate Members**

685 active scientists from 51 countries contributing to the overall EURADOS objectives

- **EURADOS Officers (Executive Board)**

Chair: F. Vanhavere (SCK•CEN, Belgium)

Vice-Chair: O. Hupe (PTB, Germany)

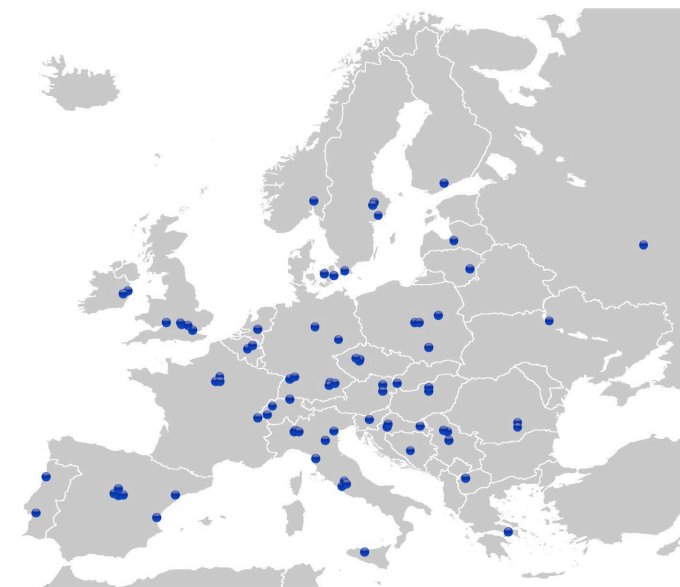
Secretary: I. Clairand (IRSN, France)

Treasurer: O. Hupe (PTB, Germany) (temporary)

- **EURADOS Council (as of 15th June 2023)**

V. Chumak, I. Clairand, M. Figel, O. Hupe, Ž. Knežević,

V. Olšovcová, F. Rossi, R. Saponi, A. Szumska, R. Tanner, S. Trinkl, F. Vanhavere



Voting Members from outside Europe too: e.g. Japan

EURADOS Working Groups

- **Associate Members**

685 active scientists from 51 countries contributing to the overall EURADOS objectives

- **Eight EURADOS Working Groups and 1 Pilot Group**

WG	Title	Chairperson
WG02	Harmonization of individual monitoring	M.-A. Chevallier, IRSN, France
WG03	Environmental monitoring	A. Vargas, UPC, Spain
WG06	Computational dosimetry	H. Rabus, PTB, Germany
WG07	Internal dosimetry	D. Broggio, IRSN, France
WG09	Radiation dosimetry in radiotherapy	L. Stolarczyk, Aarhus Univ, Denmark
WG10	Retrospective dosimetry	E. A. Ainsbury, UKHSA, UK
WG11	High energy radiation fields	M. Caresana, PoliMi, Italy
WG12	Dosimetry in medical imaging	P. Ferrari, ENEA, Italy
Pilot Group	Dosimetry in nuclear medicine	Weibo Li, BfS, Germany

EURADOS E&T Policy is aimed to:

- **maintain** expertise in the field of radiation dosimetry, often performed by small numbers of highly specialized staff;
- **provide** training and not to test or recognize competence;
- **provide** training activities limited to *radiation dosimetry*, which is only one of the various topics of competence for radiation protection;
- **collaborate** with other international organizations and European Platforms not to duplicate initiatives and to avoid overlapping;
- **support** young scientists in the field of radiation dosimetry;
- **disseminate** research achievements of the dosimetry community and technical recommendations in Europe and worldwide;
- **provide** guidelines, review studies and reference documents on radiation dosimetry.

EURADOS E&T actions and activities

- ***Continuous learning and updating of knowledge*** encouraged and offered within EURADOS WGs, where senior and junior researchers work together; WG meetings at AM are open to any new interested participant.
- ***Regular training events each year at EURADOS Annual Meeting:***
 - ✓ *EURADOS/Winter School,*
 - ✓ *Scientific Workshops,*
 - ✓ *Learning Networks*
 - ✓ *Inter-comparison Participant's meeting*
- ***Training courses on specific topics***, some of them already held in repeated, slightly updated, editions;
- ***Regular actions every year to support early career scientists:***
 - ✓ *EURADOS Award*
 - ✓ *EURADOS Grant*
 - ✓ *EURADOS Young Scientist Conference Support*
- ***Publications and dissemination actions:***
 - ✓ *EURADOS Reports*
 - ✓ *EURADOS Webinars, recorded and made available in EURADOS Youtube Channel*
 - ✓ *Proceedings of Scientific Workshop published in Journals*
 - ✓ *Presentations of EURADOS Schools available on EURADOS website*

Training activities at EURADOS Annual Meeting (1/2)

EURADOS/Winter School

- Held since 2007 at AM, usually alternatively with Scientific Workshops but in some years in conjunction with Scientific workshop too
- 1 -1,5 day
- Refresh courses
- Topics relevant on radiation dosimetry, selected by Council in agreement with the hosting Institution of the AM
- Scientific Committee from EURADOS Council and WG Chairpersons
- intended for students and those new to the subject area, though with some competence on radiation science
- Presentations made available on EURADOS website

Scientific Workshop

- Held at AM in the period 2007 -2012, , in some years in conjunction with Winter School too;
- 0,5 – 1 day
- Scientific symposia to present research results of EURADOS WGs or research projects where EURADOS had contributed
- Intended to disseminate knowledge rather than training event
- Content published in Scientific Journals

EURADOS Winter Schools (EURADOS School since 2020) @ AM

- 1-1,5 day refresh lectures

-
- AM2023 Contribution of Dosimetry in the Field of Nuclear Emergency Preparedness and Radiological Accident Management
- AM2022 Computational Methods in Dosimetry – State of the art and emerging developments
- AM2021 Fetal Radiation Risk: dose assessment in occupational, medical and emergency situations
- AM2020 Eye Lens Dosimetry
- AM2019 Radon: Dosimetry, Metrology and Regulation
- AM2018 Application of physical and computational phantoms in dose assessment
- AM2017 Internal dosimetry for radiation protection and medicine
- AM2016 Dosimetry for epidemiological cohorts
- AM2015 The Fukushima Daiichi nuclear accident - the role of dosimetry in assessing the consequences
- AM2014 Relative Biological Effectiveness, radiation weighting factor and quality factor
- AM2013 Status and Future Perspectives of Computational Micro- and Nanodosimetry
- AM2011 Radiation Protection for Medical Staff
- AM2010 Radiological Emergencies – Internal exposures
- AM2009 Low-Dose Radiation Effects
- AM2008 Retrospective Dosimetry
- AM2007 Uncertainties in Radiation Dosimetry

Presentations available:
www.eurados.org

EURADOS Scientific Workshops @ AM

- to present and Disseminate WG activity
- Held during AMs in 2004 – 2012 period

Published in the
open literature:

- | | | |
|----------|---|--------------------------|
| • AM2012 | Dosimetry for second cancer risk estimation in radiotherapy | <i>Rad Meas</i> |
| • AM2010 | Accelerator radiation protection and shielding | <i>Radiat Prot Dosim</i> |
| • AM2009 | Cosmic Radiation and Aircrew Exposure | <i>Radiat Prot Dosim</i> |
| • AM2008 | Dosimetric Issues in the Medical Use of Ionizing Radiation | <i>Radiat Prot Dosim</i> |
| • AM2007 | Characterization of Workplaces for the Assessment of the Doses to Individuals | <i>Radiat Prot Dosim</i> |
| • AM2006 | Uncertainties in Dosimetry – Principles through Practice | <i>Radiat Prot Dosim</i> |
| • AM2005 | Radiation Protection Dosimetry and Dosimetry for Medical Applications | <i>Radiat Prot Dosim</i> |
| • AM2004 | Biological and Physical Dosimetry for Radiation Protection | <i>Radiat Prot Dosim</i> |

Training activities at EURADOS Annual Meeting (2/2)

WG02 – Harmonization in Individual Monitoring actions:

Inter-comparison Participant's meeting

Since 2009

(2-3 hours, no fee for IC participants)

EURADOS WG02 has organized regular, self-sustained IC exercises since 2008. At the end a participants' meeting is held to:

- summarize IC, schedule and Irradiation tests, overall results
- discuss the results of the IC exercise, main features and/or outliers and lessons learnt
- promote exchange of information among participants,
- Voluntary: few participants discuss their own results

Learning Network

Since 2017

(2-3 hours, no fee)

- to promote harmonization of IM in EU
- Topics identified within the WG02 programme for further work
- In general, 3-4 topics introduced by a moderator, followed by discussion in 3-4 groups, then reconvene and a summary is presented to all by a rapporteur
- Feedback sheet distributed to assess relevance of the action
- Suggestions for the next LN

EURADOS Learning Network

EURADOS WG02 promotion of Harmonization in Individual Monitoring



	Title of the session at the Learning Network
AM2023	Calibration: how and how often Reporting uncertainty and minimum dose How to deal with type testing
AM2022	Responses in emergency situations Extremity/skin doses Lost and non-returned dosimeters
AM2020	Dosimetry and Information Technology CR-39 supply problems Verification and validation
AM2019	Eye-lens dosimetry Transit and background dose subtraction ISO/IEC 17025:2017
AM2018	Dosimetric aspects of QA/QC Traceability - Validation of the method Management aspects of QA Causes of "bad" results
AM2017	Dosimetric aspects of QA/QC Privacy on personal data Homemade type testing Assuring the quality of test and calibration results The use of customer surveys and feedback to improve a dosimetry service How does YOUR dose report looks like?

EURADOS Training Courses

- Aims**
- Maintain competence in the field of dosimetry in Europe
 - Answer to needs of the “dosimetric community” as it is often difficult to find Training Actions in specific areas and techniques (e.g. Individual Monitoring, measurement methods, etc)
 - Collaborate in the implementation of EC directives and technical recommendations

Topics Present and future needs focussed on: radiation quantities, monitoring techniques, biokinetics, interpretation of monitoring data, dose assessment, uncertainty estimation, quality management, standards, etc

- At present**
- Duration: 3-5 days
 - Attendance limited (roughly <40 participants)
 - Self-sustained action (low fee but should cover all expenses)
 - Training material provided
 - QA: feedback for improvements (2nd, 3rd editions) welcome

- Activity by a specific WG**
- Nomination of a Scientific Committee of WG members
 - Preparation of a training programme
 - Appointment of lecturers
 - Organization of the training action in collaboration with host Institute
 - Training material provided
 - Continuous improvement: attendants' feedback

EURADOS Training Courses (2009 – 2022)

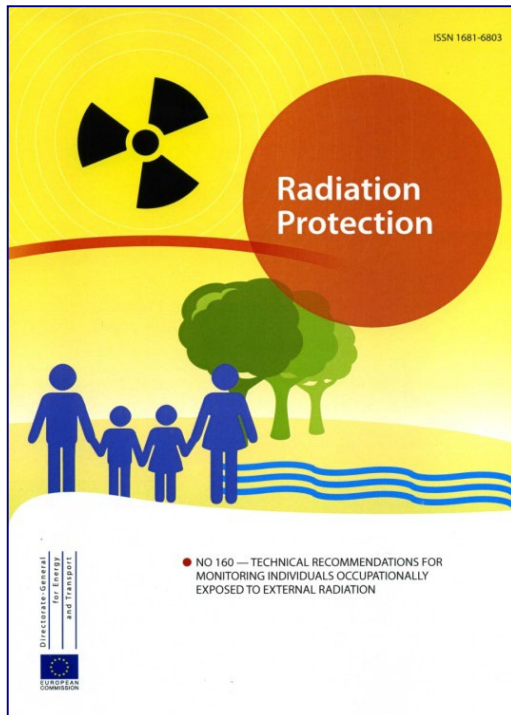
WG	Training Course (title, venue)	Year	Px
WG 11	Unfolding of Bonner Sphere Spectrometer Neutron Measurements - Paul Scherrer Institute (PSI), Villigen, Switzerland, July 2022	2022	23
WG 06	Application of Monte Carlo Methods for Individual Monitoring and Dosimetry of Ionizing Radiation, IFJ, Krakow, Poland, April 2022	2022	7
WG 07	European Technical Recommendations for Monitoring Individuals for Occupational Intakes of Radionuclides (Radiation Protection 188), IAEA, Vienna, Austria, March 2019	2019	26
WG 02	European Technical Recommendations for Monitoring Individuals Occupationally Exposed to External Radiation (Radiation Protection 160)		
6 th	IST, Bobadela, Lisbon, Portugal, October 2022	2022	40
5 th	IRSN Fontenay-aux-Roses, France, May 2019	2019	39
4 th	Azienda Ospedaliero Univ Careggi, UO Fisica Sanitaria, Firenze, Italy, April 2017	2017	47
3 rd	Instituto Superior Técnico, Bobadela, Portugal, May 2015	2015	25
2 nd	Ruđer Bošković Institute, Zagreb, Croatia, Nov 2013	2013	32
1 st	Institute of Nuclear Physics of the Polish Academy of Sciences, Krakow, Poland, Nov 2012	2012	41
WG 06	EURADOS Voxel Phantom School		
3 rd	Karlsruhe Institute of Technology, Karlsruhe, Germany, March 2018	2018	11
2 nd	Helmholtz Zentrum München, Neuherberg, Germany, May, 2014.	2014	25
1 st	IRSN, Fontenay-aux-Roses, France, October, 2011	2011	31
WG 07	Monte Carlo Methods for calibration of body counters,		
2 nd	Karlsruhe Institute of Technology (KIT), Karlsruhe, Germany, March, 2018	2018	11
1 st	Karlsruhe Institute of Technology (KIT), Karlsruhe, Germany, November, 2013	2013	14
WG 10	School on Retrospective Dosimetry (Practical exercise in Solid State & Cytogenetic dose reconstruction) , Helmholtz Zentrum München, Neuherberg, Oct 2012	2012	12
WG 07	EURADOS-IAEA Regional Training Course on Advanced Methods for Internal Dose Assessment Czech Technical University, Prague, Czech Republic, February 2009.	2009	34

EURADOS Training Course on EC RP-160 : a successful serie

EU-Trimer project (tender issued by EC) for the preparation of the European Technical Recomm. for Monitoring Individuals Occupationally Exposed to External Radiation

Radiation Protection 160 published in 2009.

- **WG02** TC on the Implementation of RP 160 and lessons learned from IC exercises



Location: Kraków, Poland

Local organising committee: Maciej Sudziński, IFJ, Poland; Renata Kopeć, IFJ, Poland; Paweł Cicho, IFJ, Poland

Programme committee: João Garcia Alves, ISETN, Portugal; Peter Ambrós, PTB, Germany; David Bartlett, United Kingdom; Janwillem van Oija, The Netherlands; Hannes Stadmann, Seibersdorf Labor GmbH, Austria

Registration: Registration through the EU website at: <http://eurados-training@ed.eu>

Contact: Renata Kopeć, renata.kopiec@ifj.edu.pl

Acceptance of registration will be done based on first come, first served basis. If needed however, the organisers may limit the number of candidates from the same institute. EURADOS will confirm when your application is accepted. Upon confirmation you will be informed about bank data for payment of the fee.

Certificate: EURADOS will issue a certificate of participation at the end of the course

EURADOS
European Radiation Dosimetry Group

Kraków, Poland
12-16 November 2012
EURADOS Training Course
European Technical Recommendations for Monitoring Individuals Occupationally Exposed to External Radiation
(Radiation Protection 160)

Location: Zagreb, Croatia

at the Institut Ruder Bošković

Date: 25-29 November 2013

EURADOS
The European Radiation Dosimetry Group is an independent society of more than 50 scientific institutions with a focus on the dosimetry of ionising radiation. EURADOS was founded in 1981 and is seated in Braunschweig, Germany as an 'eingetragene Verein, i.e.V.' <http://www.eurados.org>

EURADOS
Azienda Ospedaliera Universitaria Careggi
U.O. Fisica Sanitaria
Azienda Ospedaliera Universitaria Careggi
Firenze, Italia

EURADOS
Institut de Radioprotection et de Sûreté Nucléaire
Fontenay-aux-Roses and Croissy Sur Seine Cedex / Paris, France

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EURADOS Training Course on EC RP-160 : a successful serie

- **WG02** 6 TCs on the Implementation of RP 160 and lessons learned from IC exercises

2012 Institute of Nuclear Physics, Krakow, (Poland)

41 participants



2013 Ruđer Bošković Institute, Zagreb (Croatia)

32 participants



2015 Instituto Superior Técnico, LPSR, Bodadela (Portugal)

27 participants



2017 AO Univ Careggi, UO Fisica Sanitaria, Florence (Italy)

47 participants



2019 IRSN, Fontenay-aux-Roses, (France)

39 participants



2022 Instituto Superior Técnico, LPSR, Bodadela (Portugal)

40 participants



EURADOS-CONCERT Training Courses

(2017-2019)

TC organized in the framework of
CONCERT - EJP for the Integration of RP Research under Horizon 2020

WG	Training Course	Year	Px
WG06+WG07	EURADOS-CONCERT Short Training Course on Application of Monte Carlo methods for dosimetry of ionizing radiation. Karlsruhe Institute of Technology, Karlsruhe, Germany, March	2018	11
WG10	EURADOS-CONCERT School on Uncertainty analysis processes for retrospective dosimetry and associated research. IRSN, Fontenay-aux-Roses, France, June	2017	20

WG	Training Course	Year	Px
WG10	RENEB-EURADOS-CONCERT: ADORE Application of cytogenetic and EPR/OSL techniques for biological dosimetry and physical retrospective dosimetry. Bundesamt für Strahlenschutz, Helmholtz Zentrum München, Germany, June-July	2019	12
WG10	EURADOS-CONCERT School on Uncertainty in biological, physical, and internal dosimetry following a single exposure. IRSN, Fontenay-aux-Roses, France, April	2019	23

EURADOS Award, Grant and Conference Support

- Established in 2014 (Award and Grants) and in 2019 (Conference Support)
- Motivate early career associate members and researchers (< 35 years old or < 8 years after PhD completion)
- Encourage their involvement in WG activities
- Amount confirmed by the EURADOS Council annually
- A&G deadline for applications usually October each year, YSCS deadlines all year long
- 3 Council Members appointed as *Selection Committee*, who evaluate and rank the applications. Winners are proposed to the Council for approval.

Award

- Prize (500 euro) as recognition of excellent work performed within a topic identified in the EURADOS Strategic Research Agenda (SRA);
- The work should be published in a peer reviewed publication and/or presented at an international conference or workshop.

Grant

- Support up to 4.000 euro for a research stay at an EURADOS Voting Member to develop work within the topics identified in the EURADOS Strategic Research Agenda (SRA);
- The final outcome shall result in a peer reviewed publication and/or presentation at international conference or workshop.

Conference Support

- To support early career associate members and researchers to attend Conferences and/or courses (500 euro each)
- List of supported conferences annually selected by EURADOS Council
- Deadline for applications set according to various Conferences deadlines

EURADOS Young Scientist delivered supports since 2014

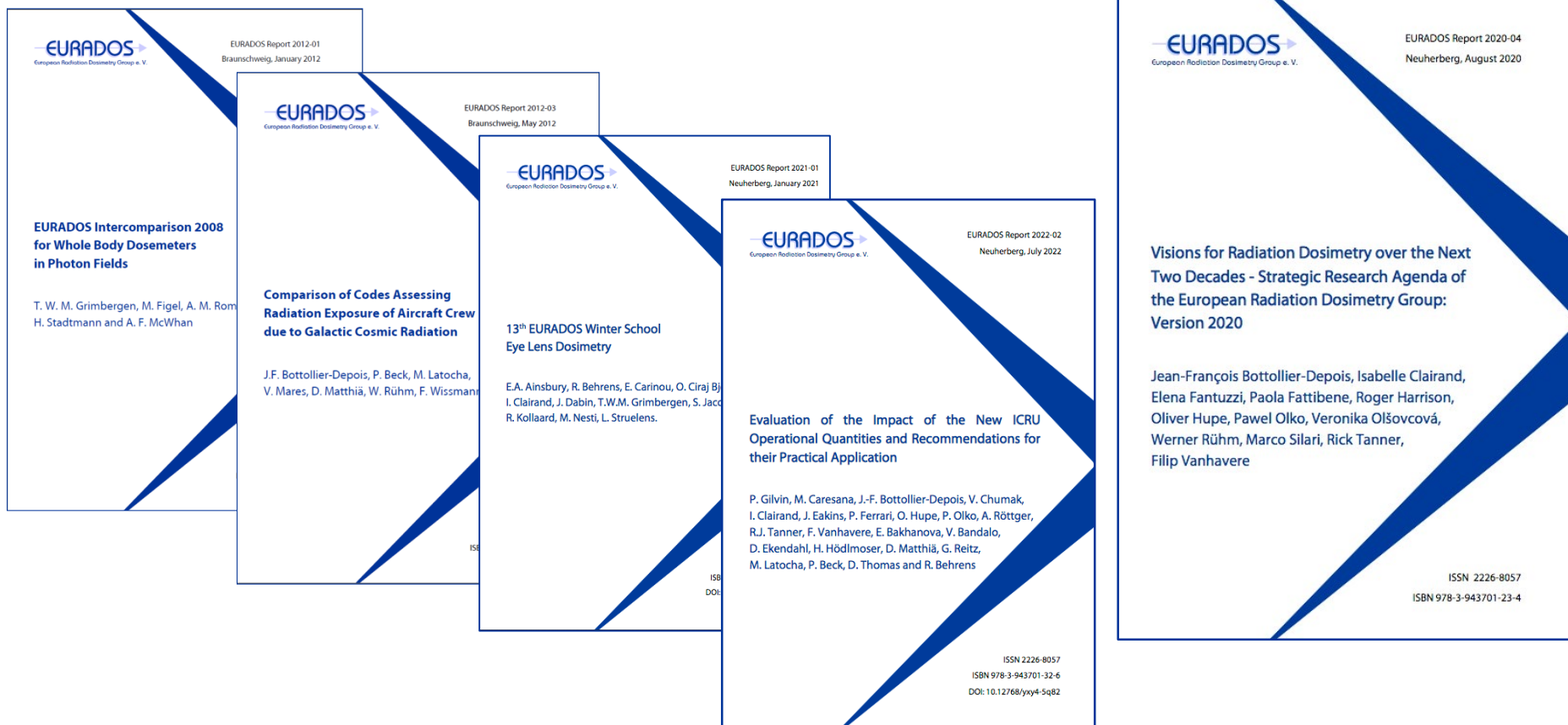
Year	# of Awards	# of Grants	# of YSCS
2022	1	2	10
2021	1	1	1
2020	1	1	0 (due to COVID Pandemic)
2019	1	1	5
2018	0 (no applications)	1	--
2017	1	1	--
2016	2	0 (no applications)	--
2015	2	1	--
2014	1	2	--
Total	10	10	16

- In 2023:
- 1 Award, 1 Grant to be announced soon,
 - 12 YSCS already announced to be assigned for 2023 selected Conferences

Details, rules and requirements are available on
<https://eurados.sckcen.be/eurados-events-opportunities>

Dissemination of knowledge and results on radiation dosimetry: EURADOS Reports, since 2012

Publication of EURADOS and WG research results. Comprehensive review or guidelines on relevant topics. They can be used as reference on the treated topic of radiation dosimetry. Since 2012, 33 EURADOS Reports were published, on average 3 per year.



http://www.eurados.org/en/Documents_Publications/Reports_documents

Dissemination of knowledge and results on radiation dosimetry: EURADOS Webinars, since December 2020

- Main **aim** of a better and wider dissemination of the scientific results of the EURADOS WGs
- **Registration for attendance** is invited through EURADOS newsletter and Social media and can be made directly on the EURADOS Website
- **Announcement** at least 4-weeks in advance
- **Duration:** 1-hour webinar, with short lectures given by 3-4 speakers
- **Q&A** Final Session
- **Polls** on the content during webinar, to get feedback and statistics information from the audience on relevant issues of the topics
- **Topics** on main needs or recent achievements or of the dosimetry community, including research projects. Sometimes to disseminate EURADOS Relevant Reports. In the future some educational topics on basic dosimetry are planned as following EURADOS early career scientists' request;
- **Average attendance** of about **170 people**, about 2/3 of originally registered
- **Frequency:** at least 8 every year
- Recorded and available on **EURADOS YouTube Channel (Please, go in visit it!!!)**

EURADOS Webinars are on EURADOS Youtube channel

On <https://www.youtube.com/Eurados> :

EURADOS WEBINARS ▶ Riproduci tutti



19th EURADOS Webinar:
Calculation of Radiation...

EURADOS
70 visualizzazioni • 1 mese fa



18th EURADOS Webinar:
Things to consider when yo...

EURADOS
61 visualizzazioni • 2 mesi fa



17th EURADOS Webinar:
EURADOS Report on New...

EURADOS
187 visualizzazioni • 4 mesi fa



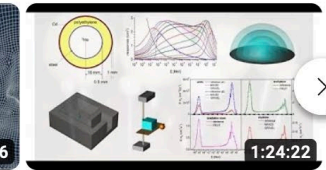
16th Webinar:
Intercomparison IC2021 are...

EURADOS
93 visualizzazioni • 6 mesi fa



15th Webinar: PODIUM -
personal online dosimetry...

EURADOS
101 visualizzazioni • 7 mesi fa



14th webinar: EURADOS
comparison on neutron...

EURADOS
175 visualizzazioni • 1 anno fa

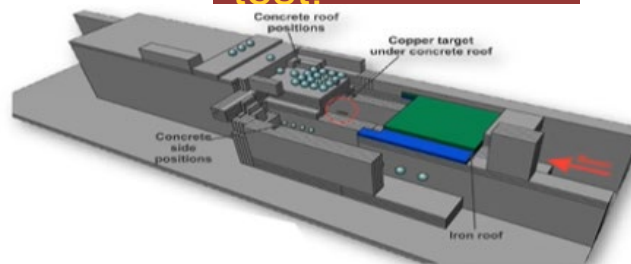


The EURADOS WG 10 and RENE 2019 biological and physical retrospective dosimetry field test.



Retrospective dosimetry techniques for internal exposures to ionising radiation and their applications.

April 2021



The CERF and CSBF workplace exposure facilities at CERN.

January 2021



Accreditation of Individual Monitoring Services (EURADOS Report 2020-02)

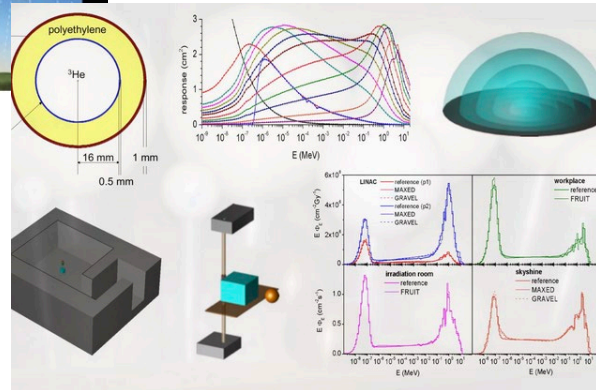
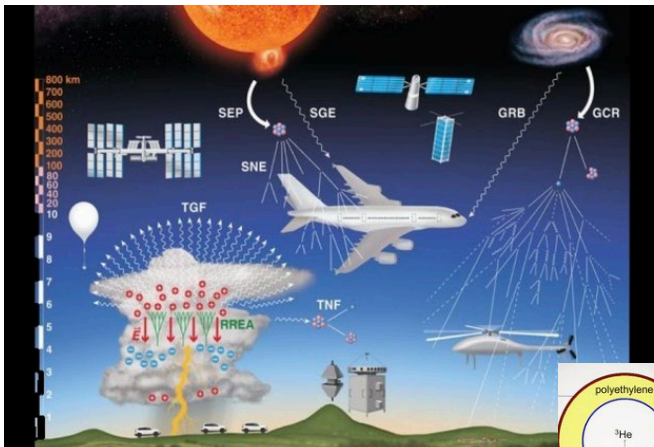
March 2021



Dosimetry for workplace and environmental radiation monitoring.

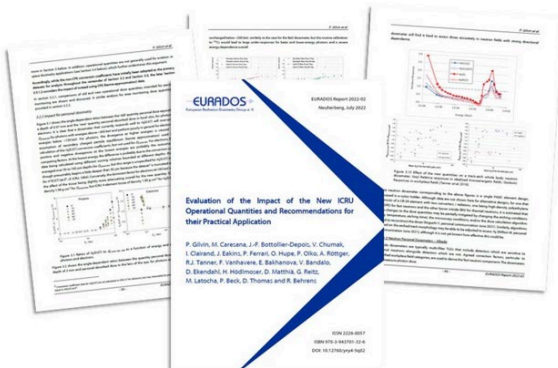
June 2021

12th EURADOS Webinar: Research Center of Cosmic Rays and Radiation Events in the Atmosphere (CRREAT)



21st EURADOS Webinar: Out-of-field doses for paediatric and pregnant patients in radiotherapy

14th EURADOS Webinar: EURADOS comparison exercise on neutron spectra unfolding in Bonner spheres spectrometry (BSS)



17th EURADOS Webinar: EURADOS Report on New Operational Dose Quantities - Impact Evaluation & Recommendations for Implementation

21 EURADOS Webinars, since December 2020

#/Year	#	Webinar titles	Px	#/Year	#	Webinar titles	Px
4/2023	20 st	Out-of-field doses for paediatric and pregnant patients in radiotherapy	119	1/2022	11 th	Challenges and developments in relation to the production of new radiopharmaceuticals	183
3/2023	19 th	Calculation of Radiation Exposure at Aviation Altitudes in Case of Solar Particle Events	122	9/2021	10 th	Accuracy and quality control of skin dose mapping software: results from the VERIDIC project	118
2/2023	18 th	Things to consider when your simulations are finished – teasers from "EURADOS WG6 Intercomparisons in Computational Dosimetry" (Special Issue of Radiation Measurements)	112	8/2021	9 th	Correlating micro- and nano-dosimetry with initial biological damage	176
1/2023	17 th	EURADOS report on New Operational Dose Quantities - Impact Evaluation & Recommendations for Implementation	288	7/2021	8 th	Inter-comparisons of personal dosimeters: Lessons Learnt	227
7/2022	16 th	Intercomparison IC2021 area of passive area dosimetry systems – a review by organizers and participants	149	6/2021	7 th	Joint EURADOS-NERIS webinar - The use of unmanned aerial systems (“drones”) to characterize the radiological situation in the aftermath of nuclear or radiological accidents	212
6/2022	15 th	PODIUM Project – Personal online dosimetry using computational methods	201	5/2021	6 th	ICRU Report 94: Methods for Initial-Phase Assessment of Individual Doses Following Acute Exposure to Ionizing Radiation	142
5/2022	14 th	EURADOS comparison exercise on neutron spectra unfolding in Bonner spheres spectrometry (BSS)	61	4/2021	5 th	Dosimetry for workplace and environmental radiation monitoring	190
4/2022	13 th	Small photon field dosimetry: current status and challenges	214	3/2021	4 th	Retrospective dosimetry techniques or internal exposures to ionizing radiation and their applications	180
3/2022		In collaboration with MEENAS Consortium: Current situation in Ukrainian nuclear industry - in Chernobyl and Zaporizhzhia NPPs and Kharkiv neutron source facility	483	2/2021	3 rd	Accreditation of Individual Monitoring Services (IMs) – EURADOS report 2020-02	187
2/2022	12 th	Research Center of Cosmic Rays and Radiation Events in the Atmosphere (CRREAT)	123	1/2021	2 nd	The CERF and CSBF workplace exposure facilities at CERN	130
				1/2020	1 st	The EURADOS WG 10 and RENE 2019 biological and physical retrospective dosimetry field test	147

Promotion of E&T: endorsement of conferences and E&T sessions

EURADOS endorsed since 2009 have promoted the continuation of a series of conferences on dosimetry like *Individual Monitoring Conference (IM)* and *Neutron and Ion Dosimetry Symposium*

- Preparation work
- Scientific committee members
- Set-up of scientific programme
- Selection of abstracts, oral and poster communications
- Organization of refresher courses
- Chairing sessions
- Review of papers for publication



- IM2022 - NEUDOS-14 April 2022, Krakow (Poland)

- IM2015 April 2015, Bruges (Belgium)
- IM2010 March 2010, Athens (Greece)
- IM2005 April 2005, Vienna (Austria)
- IM2000 September 2000, Helsinki (Finland)
- NEUDOS-13 May 2017, Krakow (Poland)
- NEUDOS-12 June 2013, Aix-en-Provence (France)
- NEUDOS-11 October 2009, Cape Town (South Africa)
- NEUDOS-10 June 2006, Uppsala, Sweden

Education and Training Sessions at events

- Radiation Protection Platforms (MELODI, ALLIANCE, NERIS, EURAMED)
- Radiation Protection Week, EUTERP
- International Radiation Protection Association meetings

Conclusions

EURADOS Education and Training:

a key issue to support knowledge dissemination and skills in radiation dosimetry

EURADOS E&T actions

- ***To respond*** to the needs of the radiation dosimetry community,
- ***Are*** provided on a regular basis with established formats
- ***Address*** topics in radiation dosimetry, implementation of technical recommendations and/or of good practice in dosimetry
- ***Are*** a contribution to international E&T action in general the fields of radiation protection and radiation dosimetry.

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Thank you for your attention!