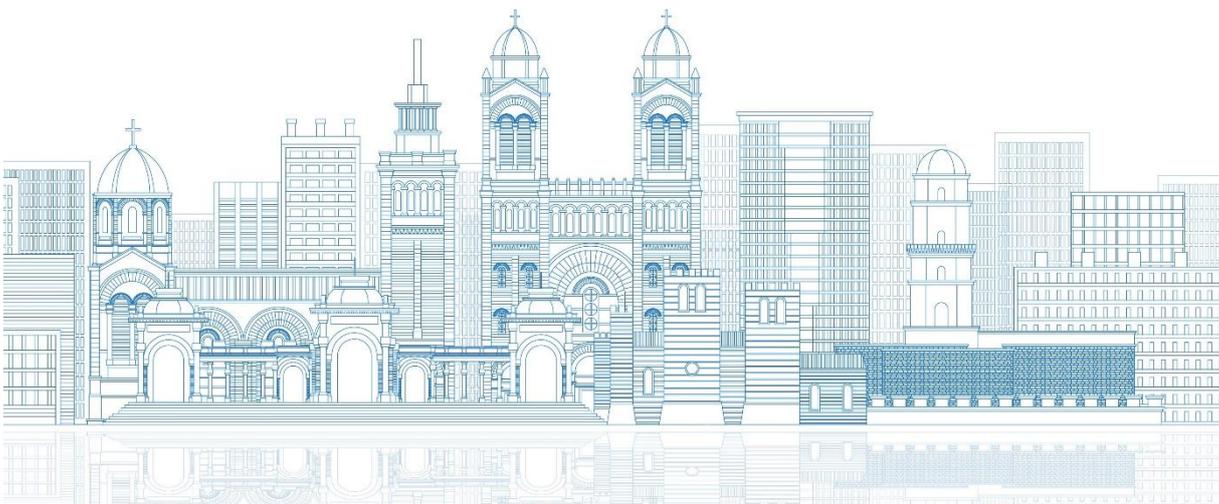


ICRER 2024

6th International Conference on Radioecology & Environmental Radioactivity

MARSEILLE, FRANCE
24-29 NOVEMBER 2024



CONFERENCE PROGRAMME

About ICRER 2024 edition

The 6th edition of the ICRER conference, jointly organized by the Institut de Radioprotection et de Sûreté Nucléaire (IRSN) and the Norwegian Radiation and Nuclear Safety Authority (DSA) in cooperation with the International Union of Radioecology (IUR), the International Atomic Energy Agency (IAEA), the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR), the European Radiation Dosimetry Group (EURADOS), the International Commission on Radiological Protection (ICRP), the Journal of Environmental Radioactivity (JER), the European Radioecology Alliance and the Société Française de Radioprotection (SFRP), is making a welcome return only two years after its last edition.

The conference is taking place from November 24 to 29, 2024, in the charming city of Marseille, France.

In an era of transformative technological advancements, we're delighted to introduce at ICRER 2024 discussions on cutting-edge topics such as big data and climate change, in addition to the traditional themes of radioecology and environmental radioactivity (environmental monitoring, NORM, nuclear legacy, human and environmental dose assessment, transfer modelling).

Get ready to connect with experts, share innovative ideas, and build partnerships that will influence the future of radioecology and more!

Committees

ICRER 2024 Scientific committee

Tatsuo Aono - Fukushima Institute for Research, Education and Innovation (F-REI) - Japan
Justin Brown - Norwegian Radiation and Nuclear Safety Authority (DSA) - Norway
Joanne Brown - International Atomic Energy Agency (IAEA) – UK
Julia Carpenter - Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) - Australia
Jing Chen - United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) - Canada
José Marcus De Oliveira Godoy - Pontifical Catholic University of Rio de Janeiro (PUC-Rio) - Brazil
Laureline Février - Institute for Radiation Protection and Nuclear Safety (IRSN) - France
Rodolphe Gilbin - Institute for Radiation Protection and Nuclear Safety (IRSN) / European Radioecology Alliance (ALLIANCE) - France
Kathy Higley - Oregon State University (OSU) - USA
Olivier Isnard - Institute for Radiation Protection and Nuclear Safety (IRSN) - France
Sanjay Kumar Jha - Bhabha Atomic Research Centre (BARC) - India
Mathew Johansen - Australian Nuclear Science and Technology Organisation (ANSTO) - Australia
Valery Kahsparov - National University of Life and Environmental Sciences of Ukraine (NUBiP) - Ukraine
Olivier Masson - Institute for Radiation Protection and Nuclear Safety (IRSN) - France
Carmel Mothersill - McMaster University (McMaster) / International Union of Radioecology (IUR) - Canada
Jelena Mrdakovic Popic - Norwegian Radiation and Nuclear Safety Authority (DSA) - Norway
Olivier Radakovitch - Institute for Radiation Protection and Nuclear Safety (IRSN) - France
Thierry Schneider - Centre d'étude sur l'Évaluation de la Protection dans le domaine Nucléaire (CEPN) / International Commission on Radiological Protection (ICRP) - France
Steve Sheppard - Journal of Environmental Radioactivity (JER) - Canada
Trevor Stocki - Radiation Protection Bureau - Health Canada - Canada
Yevgeniya Tomkiv - Norwegian University of Life Sciences (NMBU) - Norway
Hirofumi Tsukada - Institute of Environmental Radioactivity, Fukushima University (IER-Fukushima University) - Japan
Filip Vanhavere - Belgian Nuclear Research Centre (SCK CEN) - Belgium
Andrezj Wojcik - Stockholm University (SU) - Sweden

ICRER 2024 Organisation team

Laureline Février - Institute for Radiation Protection and Nuclear Safety (IRSN) - France
Marianne Suignard - Institute for Radiation Protection and Nuclear Safety (IRSN) - France
Carol Robinson - Norwegian Radiation and Nuclear Safety Authority (DSA) - Norway
Sabrina Giner - Institute for Radiation Protection and Nuclear Safety (IRSN) - France
Denis Maro - Institute for Radiation Protection and Nuclear Safety (IRSN) - France
Olivier Masson - Institute for Radiation Protection and Nuclear Safety (IRSN) - France
Olivier Radakovitch - Institute for Radiation Protection and Nuclear Safety (IRSN) - France
Hélène Faye - Institute for Radiation Protection and Nuclear Safety (IRSN) - France
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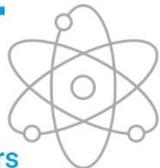
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- Training (Radon, worker exposure)



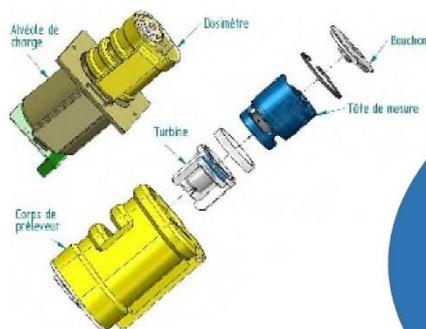
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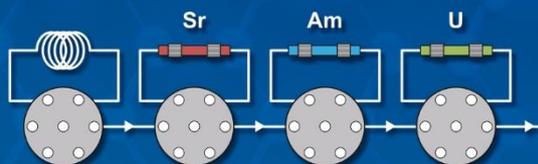
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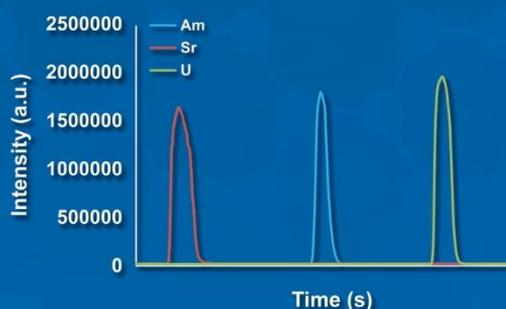
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- Radiopharmacy (e.g. ZR Resin: Ga-67/8, Zr-89, Ti-44/5, Ge-68; CU Resin: Cu-67; TK201: Cu-61/4 and TK221 & TK211/2/3 for nca Lu-177 and Tb-161,...).

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Guest speaker



Gonéri Le Cozannet

Gonéri Le Cozannet is researcher in the area of coastal risks and adaptation at BRGM, the French geological survey. He is member of the French Climate Change Committee (Haut Conseil pour le Climat) and one of the lead authors of the Working Group 2 of the 6th assessment report on impacts, vulnerability and adaptation.

Climate change: what do we learn from the 6th assessment report of the IPCC?

As anticipated decades ago, limited progress in reducing greenhouse gas emissions has led to climate change reaching 1.3°C above preindustrial levels. This rise significantly impacts human activities and the global economy, with climate-related disasters resulting in over €10 billion in losses in France in 2022 alone, according to the insurance industry. This presentation will highlight key findings from the IPCC's 6th Assessment Report on climate change, its impacts and the adaptation and mitigation options. Mitigation and adaptation are interconnected; for example, long-lived critical infrastructures, like nuclear plants, must consider future sea-level rise over the coming decades and centuries. Yet, the rate of sea-level rise acceleration depends on greenhouse gas emissions and the response of polar ice sheets to warming, which implies that decision must be taken in a context of deep uncertainties.

Plenary speakers



Hildegard Vandenhove, IAEA

Optimization of Radiation Protection in the Management of Radioactive Waste and Environmental Releases, Decommissioning and Remediation: A Key Contribution to Enabling Sustainability



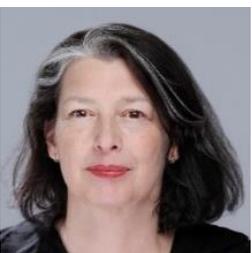
Georg Steinhauser, Technische Universität Wien

Understanding the wild boar paradox



Mike Wood, University of Salford, United Kingdom

Radioecology – in memoriam?



Deborah Oughton - Norwegian University of Life Sciences

Does Nuclear Power have a Future in Norway?

The European Radioecology Alliance (ALLIANCE) is a collaborative network of 29 members from 16 European and non-European countries, uniting research institutes and individual experts to advance radioecology. Its main goals are to coordinate research activities aligned with a Strategic Research Agenda (SRA), foster interdisciplinary collaborative initiatives, support young researchers, and provide novel science-based evidence for policymakers. The ALLIANCE is opened to new members and seeks to address global challenges while enhancing integration across disciplines and geographic regions.

This special session, organised by the ALLIANCE, will present some of the latest advances in radioecology research led by its members. These presentations will highlight cutting-edge results directly related to the research priorities outlined in the Alliance's SRA and the collaborative efforts of the five Thematic Working Groups: Atmospheric Radionuclides in Transfer Processes, Marine Radioecology, Human Food Chain, Naturally Occurring Radioactive Materials (NORM), and Effects of Radiation and Radiological Contamination at Different Levels.

Each presentation, identified by the Alliance logo in the ICRER 2024 programme, highlights the Alliance members' contribution to advancing radioecological research and addressing pressing environmental challenges such as the protection of non-human biota species, research questions related to exposure characterisation and radiological impact assessment.

This virtual session provides a unique opportunity to explore the diverse applications of radioecology, from modelling soil-vegetation-atmosphere interactions to studying radiological impacts in aquatic and terrestrial ecosystems.

The session includes :

- O1-03 - Refining radioecological impact assessment in relation to the discharge of oil and gas produced water in the offshore marine environment - F. Dal Molin (CEFAS, UK)
- O1-07 - Overview of new research questions emerging from the RadoNorm project on the characterization of exposure to NORM - L. Février (IRSN, France)
- O5-02 - Protecting non-human biota against ionising radiation: challenges in the implementation of international recommendations and the experience at the regulatory level in Germany - C. Werner (BFS, Germany)
- O5-11 - Assessing Radiocesium Accumulation, Germline Mutations in Wild Boar, and Chromosomal Aberrations in Japanese Macaque Chronically Exposed to Fukushima Radiation - D. Anderson (Fukushima University, Japan)
- O6-12 - Modelling soil – vegetation – atmospheric interactions of radon products in a Belgian Scots pine forest site - J. Vives i Batlle (SCK.CEN)
- O6-14 - Radioactive fish in the contaminated Glubokoye Lake within the Chornobyl Exclusion Zone and the effectiveness of countermeasures taken - H.C Teien (NMBU, Norway)
- O6-21 - The radiological impact from NORM discharges in the North Sea – A near-field study - G. de With (NRG, Netherlands)



The Alliance welcomes research institutions and individual researchers interested in contributing to this collective effort to coordinate research in the field of radioecology. **Contact : rodolphe.gilbin@irsn.fr** (Rodolphe Gilbin, president of the ALLIANCE)

A particular highlight of the conference will be the **Alliance's Young Researchers' meeting**, which will take place on Tuesday 26th of November at 17:00. This dynamic and interactive session is designed to showcase innovative contributions from early career scientists and stimulate discussion on the future directions of radioecology research.

Programme at a glance - Morning

	Monday, November 25	Tuesday, November 26	Wednesday, November 27	Thursday, November 28	Friday, November 29
7:30 - 8:00	Reception opening	Reception opening	Reception opening	Reception opening	Reception opening
8:00 - 9:00		Refresher course: Ecosystem approaches in radioecology	Refresher course: Radiation-induced transgenerational and multigenerational effects in human and non-human biota	Refresher course: Environmental risk assessment (including use of ERICA tool)	
9:00 - 10:00	Welcome addresses Guest speaker G. Le Cozannet	Technical session 6	Technical session 2	Technical session 6	Technical lectures
		Technical session 1	Technical session 9	Technical session 3	
10:00 - 11:00	Coffee break	Coffee break / Poster Session		Coffee break / Poster Session	Alliance best poster awards
	Plenary speaker H. Vandenhove				Coffee break
11:00 - 12:00	Plenary speaker G. Steinhauser	Technical session 4	Technical session 6	Technical session 5	Plenary speaker M. Wood
		Technical session 1	Technical session 9	Technical session 3	Plenary speaker D. Oughton
12:00 - 13:00	IUR Young Investigator awards IUR Vernadsky awards	Lunch break	Lunch break	Technical session 6	Closing addresses
13:00 - 14:00	Lunch break		Lunch break	Lunch break	

Plenary sessions and events

	Plenary lectures		Workshops, seminars and meetings
	Technical lectures		Refresher courses
	Awards		Social activities and events

Programme at a glance - Afternoon

	Sunday, November 24	Monday, November 25	Tuesday, November 26	Wednesday, November 27	Thursday, November 28
13:30 - 14:00					
14:00 - 15:00	Workshop: "Ring of Five" Task Group	Technical session 6	Technical session 7	Technical session 4	Technical session 2
15:00 - 16:00				Coffee break / Poster session	
16:00 - 17:00			Coffee break / Poster session	Technical session 4	Technical session 2
17:00 - 18:00	Reception opening	Technical session 6	Technical session 1	Alliance's Young Researchers' meeting	Alliance General Assembly
18:00 - 19:00	Welcome cocktail until 20:00	Workshop: Improvement of Radiological Monitoring Networks with NaI Scintillator and SiPM for Routine and Emergency Surveillance			
19:00 - 19:30			Gala dinner (not included in the registration fee) until 23:00		
				Workshop: The use of the IAEA MARIS database	
				Social activities Marseille guided tour	Technical session 5
					Technical session 6
					Coffee break / Poster Session
					Technical session 5
					Technical session 8
					IUR General Assembly

Technical sessions

- | | | | |
|--|--|--|--|
| | 1. Management of NORM impacted areas, including legacy sites, high-background areas and radon impacted sites and NORMs in drinking water and food: from risk assessment to remediation | | 2. Radioactive waste management and disposal |
| | 3. New development on measurements and metrology | | 4. Emergency preparedness and revitalization: lessons from the past and current world events |
| | 5. Effects of radioactivity on the ecosystems: from a mechanistic understanding to a holistic approach of radiation protection | | 6. Understanding and modelling radionuclide mobility and bioavailability in the environment |
| | 7. Consequences of global changes on radioecology | | 8. Advancing radioecology with artificial intelligence and Big Data |
| | 9. Fostering engagement between radioecology and society: promoting communication and citizen science initiatives | | |

Detailed programme – Monday, November 25

8:00-9:00	Welcome desk Reception opening	
9:00-9:30	Auditorium Welcome address	
	Aurélie Biancarelli, Mairie de Marseille	
	Jean-Christophe Gariel, IRSN Per Strand, DSA	
9:30-10:10	Auditorium Guest lecturer	
	Climate change: what do we learn from the 6th assessment report of the IPCC G. Le Cozannet – BRGM	
10:10-10:40	Room "Vieux-Port 500" Coffee break	
10:40-12:00	Auditorium Plenary lectures	
	Optimization of radiation protection in the management of radioactive waste and environmental releases, decommissioning and remediation: A key contribution to enabling sustainability H. Vandenhove, IAEA	
	Understanding the wild boar paradox G. Steinhauser, TUW	
12:00-12:30	Auditorium Awards	
	IUR Young Investigator awards IUR Vernadsky award	
12:30-14:00	Room "Vieux-Port 500" Lunch break	
14:00-16:00	Auditorium Session 6 – Chairs: A. Hosseini (DSA) & O. Radakovitch (IRSN)	Room "Vieux-Port 300" Session 7 – Chairs: O. Masson (IRSN) & M. Johansen (ANSTO)
	06-01 - The IAEA programme on methods for radiological and environmental impact assessment (MEREIA) J. Brown, IAEA	07-01 - Identifying French nuclear test fallout in the Southern Hemisphere with Pu isotopes F. Guillevic, Basel Univ.
	06-02 - Enhancing radiological risk assessment: Thailand's first national database on elemental transfer to rice P. Skrikongpan, Salford Univ.	07-02 - Changes in world seafood ingestion dose in response to declining levels of fallout radionuclides in world oceans and trends in seafood consumption patterns M. Johansen, ANSTO
	06-03 - Deriving reference activity concentrations in Spanish terrestrial and aquatic ecosystems to protect public and environment A. Real, CIEMAT	07-03 - Lessons learned and perspectives in experimental marine radioecology to assess the influence of ocean changes on the bioaccumulation of radioisotopes M. Metian, IAEA
	06-04 - Model for radionuclide transport in running water and calculation of environmental concentration induced by flood event R. Vachon, SKB	07-04 - Preliminary assessment of the impact of climate change on solid-liquid fractionation of radionuclides in the Rhône River (France) P. Boyer, IRSN
	06-05 - Characterization of solid/liquid fractionation dynamics of radionuclides in rivers: application to numerical models L. Flipo, IRSN	07-05 - Interception and uptake by plant leaves of tritium from precipitation A. Melintescu, Horia Hulubei
	06-06 - Prediction of Distribution coefficients in rivers by a geochemical model integrating parametric uncertainty and natural variability P. Ciffroy, EDF	
16:00-16:30	Room "Vieux-Port 500" Coffee break / Poster Session	
16:30-18:30	Auditorium Session 6 – Chairs: C. Robinson (DSA) & F. Coppin (IRSN)	Room "Vieux-Port 300" Session 1 – Chairs: J. Brown (IAEA) & J. Carpenter (ARPANSA)
	06-07 - Stable isotope analysis reveals the important ¹³⁷ Cs sources for fish in river and lake food webs in Fukushima I. Yumiko, NIES	01-01 - Assessing the exposure situations with naturally occurring radioactive materials across European countries by means of the e-NORM survey J. Mrdakovic Popic, DSA
	06-08 - Where does the iodine go? – new insights from the modelling of iodine 127 and 129 recycling in forested environment Y. Thiry, ANDRA	01-02 - High Natural Radioactivity in Sand Beaches around the Angra dos Reis Nuclear Power Plants J.M. Godoy, PUC-Rio
	06-09 - A potential role of organic matter in the forest floor as a temporary reservoir of radiocesium in Fukushima, Japan T. Manaka, FFPRI	01-03 - Refining radioecological impact assessment in relation to the discharge of oil and gas produced water in the offshore marine environment F. Dal Molin, CEFAS
	06-10 - Identification of phosphorus nutrition as a potential new factor impacting radiocesium contamination of oak trees in forest N. Kobayashi, Tokyo Univ.	01-04 - Radioecological footprint of wind turbines in electricity production C. Walther, Leibniz Univ.
	06-11 - A review of radiocesium transfer factor to mushrooms, berries and game in European forests contaminated by Chernobyl and global fallouts P. Calmon, IRSN	01-05 - Assessment of naturally occurring radionuclides in Mara River sediments: "Implications for radiological risk to Biota in Lake Victoria Goldfield, Tanzania" D. Seif, Dar es Salaam Univ.
	06-12 - Modelling soil – vegetation – atmospheric interactions of radon products in a Belgian Scots pine forest site J. Vives i Batlle, SCK CEN	01-06 - Radioecological Assessment of Radionuclide Levels in Phosphate Fertilizers Utilized in Uruguay A. Noguera, CURE
18:30-19:30	Auditorium Workshop Improvement of radiological monitoring networks with NAL scintillator ANS SIPM for routine and emergency surveillance – R. Dielmann (Bertin Technologies)	

Detailed programme – Tuesday, November 26

7:30-8:00	Welcome desk Reception opening	
8:00-9:00	Auditorium Refresher course Ecosystem approaches in radioecology – R. Gilbin (IRSN)	
9:00-10:20	Auditorium Session 6 – Chairs: M. Johansen (ANSTO) & J. Brown (IAEA) 06-13 - Lessons learned from 10 years of research within CERAD CoE on the transfer of radionuclides through environmental systems <i>H.-C. Teien, NMBU</i> 06-14 - Radioactive fish in the contaminated Glubokoye Lake within the Chernobyl Exclusion Zone and the effectiveness of countermeasures taken <i>H.-C. Teien, NMBU</i> 06-15 - Competition differentiates Cs-137 concentrations in between sympatric salmonids in a highly contaminated zone <i>M. Sakai, NIES</i> 06-16 - Concentration ratios in fish - natural variation and uncertainties associated with extrapolation of missing data <i>S. Peura, SKB</i>	Room "Vieux-Port 300" Session 1 – Chairs: J. Mrdakovic Popic (DSA) & F. Dal Molin (CEFAS) 01-07 - Overview of new research questions emerging from the RadoNorm project on the characterization of exposure to NORM <i>L. Février, IRSN</i> 01-08 - Spatial and temporal analysis of the sedimentary record of ²³⁸ U and ²³² Th series in seven major French rivers: the role of geology and NORM occurrence <i>M. Zembracki, IRSN</i> 01-09 - Mobilization of radionuclides and trace elements from acid-forming alum shale <i>L. Skipperud, NMBU</i> 01-10 - A preliminary assessment of non-human biota impacted by acid rock drainage from a waste pile at a former uranium mine in Brazil <i>S. Xu, Xu Environmental Consulting AB</i>
	Room "Vieux-Port 500" Coffee break / Poster Session	
	Auditorium Session 4 – Chairs: M. Cornu (IRSN) & T. J. Stocki (Health Canada) 04-01 - Experience of emergency preparedness and response in wartime conditions <i>Y. Kyrylenko, SSTC NRS</i> 04-02 - Lessons identified from the lost (and recovered) radiological source in Western Australia <i>D. Hardman, ARPANSA</i> 04-03 - Food and feed radioactivity monitoring network as part of emergency preparedness and response system in Norway <i>A. Nalbandyan-Schwarz, DSA</i> 04-04 - Enhancing radiological emergency preparedness and response: Improvements in FDMT modelling capabilities <i>A. Hosseini, DSA</i>	Room "Vieux-Port 300" Session 1 – Chairs: L. Février (IRSN) & J. M. Godoy (PUC-Rio) 01-11 - Mapping radon progeny isotopes in Catalonia: preliminary insights from the MARACA Project <i>E. Prieto, URV</i> 01-12 - Long-term atmospheric radon and thoron measurements and their correlation with environmental and geogenic conditions <i>W. Ringer, AGES</i> 01-13 - Radon concentrations at drinking water treatment plants in the Netherlands <i>M. Van der Linden, RIVM</i> 01-14 - Temporal variations of ²²² Rn in drinking water in Norway <i>A.S. Aarsand, NMBU</i>
	Room "Vieux-Port 500" Lunch break	
13:40-15:00	Auditorium Session 4 – Chairs: O. Masson (IRSN) & C. Robinson (DSA) 04-05 - Seattle scenario: Modelling of radiological impacts in urban area of Seattle <i>E. Fojcikova, Abmerit Ltd-nuclear and space</i> 04-06 - Potential catastrophic scenario event in Zaporizhzhia NPP: Radiological consequences in local, medium and global scale as modelled by DSS ESTE <i>L. Liptak, Abmerit Ltd-nuclear and space</i> 04-07 - Hazard analysis of sunken nuclear submarine in Norwegian sea <i>N.U.H. Syed, DSA</i> 04-08 - An interdisciplinary approach to post-accident management of the marine environment subjected to radioactive contamination <i>H. Durand, IRSN</i>	Room "Vieux-Port 300" Session 2 – Chairs: C. Debayle (IRSN) & B. Zorko (IJS) 02-01 - International comparison of key indicators for final disposal of radioactive contaminated soil. Online questionnaire in Japan, France and Finland <i>T. Yasutaka, AIST</i> 02-02 - Updating regulations for the final management of spent nuclear fuel and radioactive waste – the protection of the environment <i>M. Nordén, SSM</i> 02-03 - The case study of Andra low and intermediate level waste disposal within the IAEA's program on Methods for Radiological and Environmental Impact Assessment (MEREIA) <i>E. Leclerc, ANDRA</i> 02-04 - Dose assessment of future humans and other organisms from the low and intermediate level repository SFR <i>U. Kautsky, SKB</i>
	Room "Vieux-Port 500" Coffee break / Poster Session	
	Auditorium Session 4 – Chairs: O. Isnard (IRSN) & A. Hosseini (DSA) 04-09 - What is the impact of decontamination on radionuclide transfers across Fukushima landscapes? <i>O. Evrard, CEA</i> 04-10 - Lessons learned from the Fukushima accident: Insights into emergency monitoring during the transition and long-term monitoring phases <i>S. Mikami, JAEA</i> 04-11 - Evaluation and comparison of remediation strategies after a nuclear accident <i>M. Simon Cornu, IRSN</i>	Room "Vieux-Port 300" Session 2 – Chairs: J. Mrdakovic Popic (DSA) & F. Coppin (IRSN) 02-05 - Retrospective radiological environmental impact assessment of historical dumping of radioactive waste on humans and non-human marine biota <i>B. Zorko, IJS</i> 02-06 - Sorting and release of bulk material using the NES soil sorting facility <i>G. Ernst, NES</i> 02-07 - Challenges and approaches in disused radioactive sources management: Insights from Ukraine <i>K. Fuzik, SSTC NRS</i> 02-08 - NORM Waste from Oil & Gas activities – Decontamination and treatment <i>P. Bernard, Veolia</i>
	Room "Vieux-Port 300" Meeting	
17:00-19:00	Auditorium Meeting ALLIANCE Young Researchers meeting	Room "Vieux-Port 300" Meeting ALLIANCE General Assembly
19:00-23:00	Salle Eugénie Social activity Gala dinner (not included in the registration fee)	

Detailed programme – Wednesday, November 27

7:30-8:00	Welcome desk Reception opening	
8:00-9:00	Auditorium Refresher course	
	Radiation-induced transgenerational and multigenerational effects in human and non-human biota – O. Armand (IRSN)	
9:00-10:20	Auditorium Session 2 – Chairs: C. Debayle (IRSN) & T. J. Stocki (Health Canada)	Room "Vieux-Port 300" Session 9 – Chairs: J. Carpenter (ARPANSA) & O. Radakovitch (IRSN)
	02-09 - Resuspension of Pu trace in the air from past irradiated U reprocessing activities in a UF4 conversion facility O. Masson, IRSN	09-01 - OPENRED: Development of a citizen science network for the measurement of environmental gamma radiation in Spain F. Sanz, Ibercivis Foundation
	02-10 - Iodine-129 Paradox in Nuclear Fuel Cycle - Is Dilution a Solution? H. Wainwright, MIT	09-02 - Exploring the potential of citizen science for radon research Y. Tomkiv, NMBU
	02-11 - An operational workflow using non-stationary geostatistics for mapping contamination from in situ radiological measurements: a case study in the Fukushima area M. Meziane, Mines Paris Tech/IRSN	09-03 - OpenRadiation: a collaborative project for radioactivity measurements in the environment by the public J.M. Bertho, IRSN
	02-12 - 1D Numerical modelling of radionuclide transfer in deep geological disposal: A comparative study between MELODIE and COMSOL R. Deptulski, IRSN	09-04 - The Remlingen Public Lab for Radioactivity Measurements – Exploring the potential for science-citizen collaborations in an emotionally charged debate environment W. Schulz, Hannover Univ.
10:20-10:50	Room "Vieux-Port 500" Coffee break / Poster Session	
10:50-12:30	Auditorium Session 6 – Chairs: C. Robinson (DSA) & M. Simon-Cornu (IRSN)	Room "Vieux-Port 300" Session 9 – Chairs: Y. Tomkiv (NMBU) & J. M. Bertho (IRSN)
	06-17 - Using taxonomy and phylogeny to predict inter-taxa radionuclide transfer and enhance radioactivity monitoring in the coastal environment D. Hunt, UWE/CEFAS	09-05 - Public attitudes and its changes before and after the offshore discharge of ALPS-treated water from the Fukushima Daiichi Power Station M. Aoyagi, NIES
	06-18 - Exploring the fate and dynamics of low-level Cs-137 in the Malaysian ecosystem M.S. Mohd Sanusi, UTM	09-06 - Promoting trust and communication: a framework for radiological monitoring and assessment in Australia J. Carpenter, ARPANSA
	06-19 - Hydro-sedimentary modelling of radionuclides transport applied to harbor area (the Cherbourg roadstead, Normandy, France) A. Ohier, EAMEA	09-07 - Beating lung cancer caused by radon through the RadoNorm Citizen Science Incubator D. Aksamit, AHS RadonHunt
	06-20 - Modeling cesium-137 concentrations in a global fallout affected watershed by coupling an hydrosedimentary model with a trace metal transfer equation F. Guillory, IRSN	09-08 - Environmental radioactivity monitoring in Italy: RADIOLAB and EyeRAD projects F. Groppi, Milan Univ.
	06-21 - The radiological impact from NORM discharges in the North Sea – A near-field study G. de With, NRG	09-09 - Empowering collaboration: Integrating knowledge management and civil society engagement as a key for European radioactive waste management initiatives C. Debayle, IRSN
12:30-14:00	Room "Vieux-Port 500" Lunch break	
14:00-15:00	Auditorium Workshop	In the city Social activities
	A new global look at radionuclides in marine organisms and seafood dose	
15:00-18:00	In the city Social activities	Marseille guided tour
	Marseille guided tour	

Detailed programme – Thursday, November 28

7:30-8:00	Welcome desk Reception opening	
8:00-9:00	Auditorium Refresher course Environmental risk assessment (including use of ERICA tool) – D. Coppelstone (Stirling Univ.)	
9:00-10:20	Auditorium Session 6 – Chairs: M. Johansen (ANSTO) & B. Salbu (NMBU) 06-22 - Tritiated water cycle modeling with anthropogenic tritium releases including the Fukushima Daiichi Nuclear Power Plant accident M. Gusyev, Fukushima Univ. 06-23 - Establishing baseline levels of tritium and gamma emitters on Canada's Pacific West Coast in advance the Fukushima ALPS effluent arrival E. Priebe, CNL 06-24 - Transport of C-14 in terrestrial and aquatic environments A. Ikonen, EnviroCase, Ltd. 06-25 - Mechanistic and ecophysiological study of carbon 14 transfer in a freshwater fish F. Alonzo, IRSN	Room "Vieux-Port 300" Session 3 – Chairs: T. Aono (F-REI) & J. M. Godoy (PUC-Rio) 03-01 - New analytical possibilities in gamma spectrometry at the LAFARA underground facility T. Zambardi, Toulouse Univ. 03-02 - Quantification of low-level iodine 129 by ICP-MS/MS for environmental monitoring C. Carrier, IRSN 03-03 - New insights for the use of ultra-low ²³⁶ U/ ²³⁸ U isotope ratio by ICP-MS/MS for environmental analysis H. Jaegler, IRSN 03-04 - When everything counts – the challenge of identifying natural radionuclides in food samples as part of the first German total diet study P. Hofmann, BFS
	Room "Vieux-Port 500" Coffee break / Poster Session	
	Auditorium Session 5 – Chairs: R. Gilbin (IRSN) & O. C. Lind (NMBU) 05-01 - Ecosystem Services (ES) in Environmental Radiological Protection: Updates from ICRP Task Group 125 S. Donaher, Tennessee Knoxville Univ. 05-02 - Protecting non-human biota against ionising radiation: challenges in the implementation of international recommendations and the experience at the regulatory level in Germany C. Werner, BFS 05-03 - Competing risk model; a new integrated approach to assessing assessing contextual impacts of ionising radiation C. Seymour, McMaster Univ. 05-04 - Development of population level biomarkers for low dose radiation: the importance of non-targeted effects C. Mothersill, McMaster Univ.	Room "Vieux-Port 300" Session 3 – Chairs: T. Aono (F-REI) & J. M. Godoy (PUC-Rio) 03-05 - Radiation monitoring network optimization for improving emergency response strategies during nuclear power plant accidents A. Gellenoncourt, INSTN 03-06 - Use of spectral unmixing for rapid foodstuffs analysis in radiological post-accidental situations K. Galliez, IRSN Room "Vieux-Port 300" Session 6 – Chairs: L. Février (IRSN) & J. Mrdakovic Popic (DSA) 06-26 - Modelling of radionuclide migration with groundwater in the Chernobyl exclusion zone: compartmental approach coupled to Smart-Kd concept I. Iarmosh, Leibniz Univ. 06-27 - Towards a consistent understanding of U, Th and Ra in an evolving landscape - linking geochemistry, Kd values and activity ratios of the decay chain radionuclides F. Lidman, SLU
	Room "Vieux-Port 500" Lunch break	
14:00-15:20	Auditorium Session 5 – Chairs: R. Gilbin (IRSN) & O. C. Lind (NMBU) 05-05 - Ionizing radiation, radiosensitivity, and species evolution: a matter of perspective G. Turqueto Duarte, SCK CEN 05-06 - Chronic irradiation at Chernobyl-level dose rates affects shoot development in young pine (Pinus sylvestris) seedlings B. De Rouck, SCK CEN 05-07 - Long term transgenerational stress responses in Lemna minor plants exposed chronically to different radiation types press the need for building quantitative Adverse Outcome Pathways for environmental radiation protection N. Horemans, SCK CEN 05-08 - An integrative study of ionizing radiation effects on fitness and ecological function of a keystone planktonic secondary consumer P. Techer, IRSN	Room "Vieux-Port 300" Session 6 – Chairs: L. Février (IRSN) & J. Mrdakovic Popic (DSA) 06-28 - Enhancing uranium sorption modelling: inclusion of speciation simulation and chemometric tools D. Serraima, Barcelona Univ. 06-29 - Influence of the nature of a contamination (liquid or from organic material) and its ageing on the retention parameters of uranium in soils M. Roulier, IRSN 06-30 - Improving the understanding of radium mobility in wetland soil environments A.L. Nivresse, Subatech 06-31 - Parametric modelling of radium sorption in soils J. Serra Ventura, Barcelona Univ.
	Room "Vieux-Port 500" Coffee break / Poster Session	

Detailed programme – Thursday, November 28 (cont'd)

	<i>Auditorium</i> Session 5 – Chairs: S. Frelon (IRSN) & C. Mothersill (McMaster Univ.)	<i>Room "Vieux-Port 300"</i> Session 8 – Chairs: T. J. Stocki (Health Canada) & M. Simon-Cornu (IRSN)
15:50-17:50	05-09 - Combined uranium and nanoplastic exposure result in changes to uptake and retention in model organism <i>Daphnia magna</i> <i>O.C. Lind, NMBU</i>	08-01 - The IAEA's Marine Radioactivity Information System MARIS: novel developments facilitating data sharing and scientific studies <i>P. Mc Ginnity, IAEA</i>
	05-10 - Tritium dosimetry and effects following different types of organically bound tritium (OBT) chronic exposures over multiple generations of rodents <i>M. Stuart, CNL</i>	08-02 - Radiological status of the environment in the vicinity of nuclear sites: how to assess it <i>C. Mercat, Orano</i>
	05-11 - Assessing radiocesium accumulation, germline mutations in wild boar, and chromosomal aberrations in Japanese macaque chronically exposed to Fukushima radiation <i>D. Anderson, Hirosaki Univ.</i>	08-03 - Machine learning and data science – opportunities and challenges for modelling radioactivity in the environment <i>E. Petermann, BfS</i>
	05-12 - Plants under stress: unraveling the role of miRNAs in rice adaptation to ionizing radiations <i>S. Bordignon, SCK CEN</i>	08-04 - New advances in radioecology with artificial intelligence. Application to the forecasting of airborne ¹³⁷ Cs <i>V. Nicoulaud-Gouin, IRSN</i>
	05-13 - Assessment of the effects of ionizing radiation in bees – BEERAD <i>B. Gagnaire, IRSN</i>	08-05 - A neural network encoder-decoder for time series prediction: Application on ¹³⁷ Cs particulate concentrations in nuclearized rivers <i>K. Pele, IRSN</i>
	05-14 - Environmental radioactivity impacts bioenergetic in tree frog of Fukushima <i>L. Dasque, IRSN</i>	08-06 - Meta-modelling of atmospheric dispersion simulations for emergency response in case of nuclear accident <i>I. Korsakissok, IRSN</i>
17:50-18:50	<i>Auditorium</i> Meeting IUR General Assembly	

Detailed programme – Friday, November 29

7:30-9:00	<i>Welcome desk</i> Reception opening
9:00-10:00	<i>Auditorium</i> Technical lectures
	If the source term includes particles - then impact assessments will suffer from unacceptable large uncertainties <i>B. Salbu, NMBU</i>
	Current work of the ICRP related to environmental radiological protection <i>C. Adam-Guillermin, IRSN</i>
	Global perspectives on radiation exposure: UNSCEAR's role in advancing risk assessment and environmental protection <i>C. Robinson, DSA</i>
10:00-10:30	<i>Auditorium</i> Awards
	ALLLANCE best poster awards
10:30-11:00	<i>Room "Vieux-Port 500"</i> Coffee break
11:00-12:20	<i>Auditorium</i> Plenary lectures
	Radioecology – in memoriam? <i>M. Wood, Salford Univ</i>
	Does Nuclear Power have a Future in Norway? <i>D. Oughton, NMBU</i>
12:20-12:40	<i>Auditorium</i> Closing addresses
	Marc Gleizes, IRSN
	Carol Robinson, DSA

Social events

Welcome cocktail



The Palais du Pharo and its Espace Vieux-Port 300 will be holding the Welcome Cocktail on Sunday, November 24 from 6 pm to 8 pm.

Gala dinner



The Salon Eugénie, located on the left wing of the Palais du Pharo, will host the gala dinner on Tuesday, November 26 from 7 pm to 11 pm.

Social activities

The visits to "Abbaye St Victor" and "Abbaye St Victor aux Catalans" on Wednesday, November 27 at 3:30 pm, departing from the "Palais du Pharo", are compatible with the day's programme. The tours will begin after the conclusion of the workshop planned for that day.



ABBAYE ST VICTOR

Meeting point at 3:30 pm: Palais du Pharo

The former abbey, dedicated to the Christian martyr Victor, is an ancient Greco-Roman quarry, a necropolis, a basilica and one of the oldest Palaeochristian churches in Marseille.



ABBAYE ST VICTOR AUX CATALANS

Meeting point at 3:30 pm: Palais du Pharo

Departing from Saint Victor's Abbey, follow the guide on an "imperial" tour of the Pharo Gardens and head for the Catalans beach, where you can enjoy a magnificent sunset or a refreshing swim !



PETIT TRAIN

Meeting point at 3:30 pm: Palais du Pharo

From the Old Port to Notre Dame de la Garde, via the Corniche, on the seafront, you'll discover the Palais du Pharo, St Victor's Abbey, the breathtaking view from the Fausse Monnaie bridge, or the famous Vallon des Auffes.



AUTOUR DU VIEUX PORT

Meeting point at 2:45 pm: Under the "Ombrière Norman Foster"

On this guided tour, you'll discover Marseille's Old Port, which for 26 centuries has been the prestigious stage on which the city's history has been played out.



QUARTIER DU PANIER

Meeting point at 2:45 pm: In front of the "Hôtel de ville", Quai du Port, 13002 Marseille

It's the place to be when you visit Marseille ! This district, located behind the north bank of the Old Port right in the centre of town, is the historic heart of the city.

Posters – Monday and Tuesday

P1-01 - Assessment of radiological environmental impact on a former fertilizer NORM site

J. Guillen, UNEX

P1-02 - Naturally occurring radionuclides in the German diet: Levels of Ra-226, Ra-228, U-234, U-238 and Pb-210 in food from the BfR MEAL Study

M. Achatz, BfS

P1-03 - Evaluation of radiological health risk due to consumption of milk products in the Mafikeng town of South Africa

S. F. Olukotun, North-West Univ.

P1-04 - Possible enhanced levels of natural radioactivity originating from NORM while performing the construction works at the site of new coal storage dome of the Thermal Power Plant

I. Prlic, IMI

P1-05 - Monitoring of Radioactivity in Austrian Animal Feed

E. M. Lindner-Leschinski, AGES

P1-06 - Assessment of Human Health Risk due to NORMs and heavy metals near selected uranium mines

N. Mohlala, NNR

P1-07 - Investigation of the relationship between multiple hazards including NOR, heavy metals and REE in a Th-enriched area in Norway

S. Beltran Torres, DSA

P1-08 - RESRAD Simulation of Environmental Radioactivity Measurements and its Associated Dose and Excess Lifetime Cancer Risks (ELCR) in the KOSH region, South Africa

A. Ocwewang, NNR

P1-09 - Transfer from soil of Ra-228 and deposition from air of Rn-220 progeny to plants in an area rich in Th-232

R. Gjelsvik, DSA

P1-10 - Indoor radon measurements in Kuwait

D. Al-Azmi, PAAT

P1-11 - Naturally occurring radioactive materials (NORM) in energy production sectors: oil and gas, coal fired power plants and geothermal energy

B. Michalik, GIG

P2-01 - Transfer of sediment-derived carbon into aquatic plants for radioecological modeling of ^{14}C

Z. Shirani, UEF

P2-02 - Content of soil-derived carbon in soil biota and fauna living near soil surface: Implications for radioactive waste

S. Majlesi, Helsinki Univ.

P2-03 - Phytoremediation of radionuclide-contaminated soil - long-term trial in sunflower cultivation

H. Keßler, Hannover Univ.

P2-04 - Can duckweed be used to clean radioactive wastewater? From concept to practice

N. Horemans, SCK CEN

P2-05 - Competitive sorption of aluminum and europium onto hematite

S. Hilpmann, HZDR

P2-06 - Radiolysis bubbles in bituminized waste products evaluation with X-Ray Tomography and Ultrasonic waves

G. Matta, IRSN

P2-07 - First measurement of $^{135}\text{Cs}/^{137}\text{Cs}$ isotope ratio in Japanese soil before the accident at the Fukushima Daiichi Nuclear Power Station

S. Asako, JAEA

P2-08 - The potential of plant-fungal symbioses for bioremediation of radioactively contaminated soil from nuclear installations in Germany

S. Dubchak, Hannover Univ.

P2-09 - Analyzing Free-Text Responses in Online Surveys on Social Acceptance of Final Disposal of Radioactive Soil: An International Comparison between Japan, France, and Finland

T. Masaki, Hokkaido Univ.

P2-10 - - Material Diversity in Deep Geological Repositories: Exploring Microbial Impacts

T. Le, Liberec Technical Univ.

P2-11 - Specific clearance: practical application and procedures in the Netherlands

P. Bekhuis, RIVM

Posters – Monday and Tuesday

P4-01 - Dispelling false claims of a depleted uranium release with evidence from dispersion modelling and environmental measurements
K. Lotter, AGES

P4-02 - Examples of mitigating the effects of radioactive contamination inputs by changing nuclear power plant regimes (France) and water body regimes (Ukraine)

I. Sinitsyn, IPS-NAS

P4-03 - The Goiânia accident, Brazil 1987 – Sparkling dust caused a tragedy

S. A. Fagerjord, DSA

P4-04 - Comparisons of radiocesium activity concentrations between coppiced and planted konara oaks after the Fukushima Daiichi Nuclear Power Plant accident

W. Sakashita, FFPRI

P4-05 - Impact of a Hypothetical Nuclear Weapon Burst Over Ukraine on European Agriculture and Food Production: A Study of Radiological Consequences

M. Marcisovska, Abmerit Ltd-nuclear and space

P4-06 - Radioactive contamination of biota in Polar regions – results of over twenty five years of collaboration between three Polish institutions

J.-W. Mietelski, IFJ PAN

P5-03 - Radiation situation of the territory of settlements located near the preserved uranium facilities of Northern Kazakhstan

M. Aumalikova, NJSC - Astana medical Univ.

P6-01 - Radiological assessment of medical releases for human and aquatic wildlife

J. Vives i Batlle, SCK CEN

P6-02 - Sea-Air exchange of tritium (HTO) in the Western English Channel. Experimental measurement and modelling

O. Connan, IRSN

P6-03 - Modelling of radionuclide contaminated sediment in the western Irish Sea

L. Bacon-Hall, Liverpool Univ.

P6-04 - Respective contribution of ^3H discharges from three nuclear facilities and resulting frequency of coastal marking on the English Channel coastline: modelling inputs from Mars2D

C. Godinot, IRSN

P6-05 - Risk of radionuclide contamination in saline agriculture

J. Mihalik, Khalifa Univ.

P6-06 - Characterisation of seaweed species used as bioindicators for the environmental monitoring of Swedish nuclear power plant

G. Pedehontaa-Hiaa, Lund Univ.

P6-07 - Polonium-210 activity concentration in twelve seaweed species from the Irish coastline

C. Angus, EPA

P6-08 - Tissue free water tritium and organically bound tritium in flatfishes of Fukushima coast before and after the discharge of treated water from the Fukushima Daiichi Nuclear Power Station

M. Terashima, JAEA

P6-09 - Sorption behavior of Cs-137 in a river–sea system boundary area

T. Hyoe, IER

P6-10 - Experience of UNDBE model application on examples radionuclide pollution transport of the Loire River (France) and Kiev reservoir (Ukraine)

V. Sizonenko, IPS-NAS

P6-11 - Estimation of transfer parameters to non-human biota in a Mediterranean freshwater ecosystem

J. Guillen, UNEX

P6-12 - Vertical distribution of Cs-137 in bottom sediments represents time changes of water contamination: Fukushima and Chernobyl

M. Gusyev, Fukushima Univ.

P6-13 - Deciphering sources of ^{137}Cs in French rivers over the nuclear era by Bayesian inference of a watershed erosion model from sediments core datasets

P. Boyer, IRSN

P6-14 - Study on the development of a method for measuring the settling velocity of small particles in water and its application to flocculated particles in brackish water

Y. Watanabe, JAEA

P6-15 - Factors controlling ^{137}Cs concentrations in suspended solids in the Abukuma river during high-flow events

N. Suzuki, Fukushima Univ.

P6-16 - Radiocesium mobility in the environment after the Fukushima Dai-ichi nuclear power plant accident. -Source estimation of particulate ^{137}Cs in rainwater drainage in residential area using tracers

Y. Kazuya, JAEA

P6-17 - Radiocesium mobility in the environment after the Fukushima Dai-ichi nuclear power plant accident. - Temporal changes in radiocesium concentrations in a reservoir and a pond

H. Funaki, JAEA

P6-18 - Cesium-137 in riverine sediments in two regions in southernmost Sweden

K. Stenström, Lund Univ.

P6-19 - Distribution of long-lived radionuclides in size fractions of soil aggregates at the semipalatinsk test site: application for the radioecological assessment of areas

A. Kabdyrakova, NNC

P6-20 - Planning of characterization of legacy contaminants in a Norwegian river and wetland

M. Holmstrand, IFE

P6-21 - Transfer factors of $^{239+240}\text{Pu}$ to the poultry's muscular tissue on a long-term intake

A. Mamyrbayeva, NNC

P6-22 - Radionuclides in hoofed animals of the Semipalatinsk Test Site

A. Panitskiy, NNC

P7-01 - Exposure doses estimation to uranium personnel of the mining enterprise and the population of Stepnogorsk city, Kazakhstan using tooth enamel EPR method

K. Zhumadilov, Eurasian National Univ.

Posters – Wednesday and Thursday

P3-01 - Determination of Pu-239 in various environmental samples on mass-shift mode as PuO₂+ by triple quadrupole inductively coupled plasma-mass spectrometry

S. Pichler, AGES

P3-02 - Rapid mineralization of environmental samples with microwave for determination of ²³⁸Pu, ²³⁹⁺²⁴⁰Pu, ²³⁴U, ²³⁵U and ²³⁸U

M. Rodier, SPRA

P3-03 - A new method of a simultaneous separation and distillation of water from environmental samples for tritium analysis

H. Kakiuchi, IES

P3-04 - Developing carbon-14 passive monitoring devices from tritium passive monitoring devices

V. Durand, IRSN

P3-05 - The Development of Continuous Beta Monitoring System in the Environment of Underwater Beta and Gamma Contamination

S. Yun, UNIST

P3-06 - Twelve years of Worldwide Proficiency Testing for Radionuclides in Sea Water Samples - Overview of IAEA Support to Quality Assurance in Member State Laboratories

K. Sobiech-Matura, NAML, IAEA

P3-07 - Quantification of the natural and synthetic components in caffeine by Carbon-14 determination through a batch combustion and liquid scintillation counting method

A. K. Kambikkanath, Mangalore Univ.

P5-01 - Radioactivity of residues from waste incineration facilities in Finland

S. Virtanen, STUK

P5-02 - Tritium distribution in environmental compartments at underground nuclear test locations of the Semipalatinsk Test Site

L. Timonova, NNC

P5-04 - The open-source MARIM database to assess the radiological impact on microorganisms

F. Ploquin, Clermont Auvergne Univ./CNRS

P5-05 - Physiological effects of gamma irradiation combined to Nosema ceranae infection in the honeybee, *Apis mellifera* – BEERAD

M. Crevet, IRSN

P5-06 - The radionuclide activity concentrations in marine fishes around off Fukushima in Japan

T. Aono, F-REI

P5-07 - Population modelling to compare risks for fitness and function in a secondary consumer exposed to radionuclides over multiple generations

F. Alonzo, IRSN

P5-08 - BEECONNECT: a connected “flower” to measure the effects of radioactive contamination on the cognitive health of insect pollinators

O. Armant, IRSN

P5-09 - Evaluation of potassium transporters affecting caesium distribution in the plant shoot

M. Kihana, IES

P5-10 - From root to shoot: uptake, translocation and speciation of Eu(III) in hydroponically grown plants

M. Klotzsche, HZDR

P5-11 - Assessing radiological hazards, lead content, levels of other heavy metals, and fingerprint development for paints from selected african countries: implications for environmental health using gamma-ray spectroscopy and ICP-MS analysis

S. F. Olukotun, North-West Univ.

P5-12 - Ionizing radiation of *Gammarus fossarum* affect their reproduction but not their food consumption

S. Frelon, IRSN

P5-13 - The MIRCOCOM microbeam: a versatile instrument for environmental research

C. Adam-Guillermin, IRSN

P5-14 - Protein expression patterns and activities of two metabolic enzymes (CS and LDH) highlight a disturbance in the metabolic pathways of tree frogs living in the Chernobyl Exclusion Zone

S. Frelon, IRSN

P5-15 - Soil trophic interactions under radio contamination: an in-situ study in the Fukushima Prefecture cedar forests

O. Armant, IRSN

Posters – Wednesday and Thursday

P6-23 – Variability of radionuclide activity across soil layers and their occurrence in riverbed sediments (Aragats massif, Armenia)

N. Movsisyan, CENS

P6-24 - Radiocesium mobility in the environment after the Fukushima Dai-ichi nuclear power plant accident. -Variation of ¹³⁷Cs concentration in sediments in a brackish lake, Matsukawa-ura lagoon

T. Misono, JAEA

P6-25 - Radiocesium mobility in the environment after the Fukushima Dai-ichi nuclear power plant accident - Evaluation of the particle size distribution of the SPM and the radioactive SPM

A. Tomohisa, JAEA

P6-26 - Radiocesium mobility in the environment after the Fukushima Dai-ichi nuclear power plant accident - ¹³⁷Cs and ¹⁴C in freshwater fish (Masu trout) 7 years after the Fukushima nuclear accident: Comparison of wild fish and farmed fish

N. Takahiro, JAEA

P6-27 - Radiocesium mobility in the environment after the Fukushima Dai-ichi nuclear power plant accident: Simulation study on ¹³⁷Cs behavior in brackish lake, Matsukawa-ura Lagoon

S. Kazuyuki, JAEA

P6-28 - Radionuclide Transport in Permafrost Conditions: Facilitating Dose Calculations from Small Modular Nuclear Reactors in the Arctic

T. J. Stocki, Health Canada

P6-29 - Distributions of Sr-90 and Cs-137 activity concentrations in soils impacted by the Fukushima nuclear accident

N. Kavasi, F-REI

P6-30 - Further development of radioecological investigations in arid environment

H. Mauritius, RadCon GmbH

P6-31 - IAEA-Coordinated Research Advances Knowledge of Soil-Plant Transfer Factors in Arid and Semi-Arid Environments

A. Lee Zhi Yi, IAEA

P6-32 - The uptake of atmospheric tritium by vegetable crops under climatic conditions of the steppe zone of Kazakhstan

Y. Polivkina, NNC

P6-33 - Experimental study of aerial tritium uptake by crops under laboratory and field conditions

Y. Syssoyeva, NNC

P6-34 - Content of tritium in the plant cover of underground test locations at the semipalatinsk test site

P. Krivitskiy, NNC

P6-35 - Natural and anthropogenic radionuclides content in milk samples and in other food and environmental matrices in Northern Italy

M. Colucci, Milan Univ.

P6-36 - Transfer of radioactivity from agricultural soils to food crops in Croatia with focus on elevated activities from Pelješac peninsula

K. Magdić Košiček, RBI

P6-37 - Cs and nutrients Ca, Mg, K transfer in compartments soil/solution/*Arabidopsis thaliana* depending on K concentration

C. Latrille, CEA

P6-38 - Transfer factors of radionuclides from soil to plants at the semipalatinsk test site beyond test locations

N. Larionova, NNC

P6-39 - Investigating the transport behavior and uptake of I-125 and Tc-99 considering the influence of plant-microbe interactions

T. Nishad, Hannover Univ.

P6-40 - Sorption of Ba and Sr onto Gibbsite and Quartz: a batch and modeling study

V. Dück, HZDR

P6-41 - Impact of organic matter on radium mobility in soils

S. Rihs, Strasbourg Univ.

P6-42 - Measuring uptake of radium in crops

S. Grolander, SLU

P6-43 - Characterization of uranium-natural organic matter dissolved complexes by spectrofluorescence analysis

H. Carreira, IRSN

P6-44 - Colloidal vectors of Uranium in an Aqueous Environment as determined by using the LC-OCD-OND-UV-ICPMS: Application to the Former Mining Site of Rophin (Puy-de-Dôme, France)

M. Chaillou, Subatech

P6-45 - How do uranium and malic acid affect the microbial community in a reference soil?

R. E. Linares Jiménez, HZDR

P6-46 - Uranium, thorium, and transition metal mobility and bioavailability in sediment, flora, and fauna in a North American salt marsh

S. Donaher, Tennessee Knoxville Univ.

P6-47 - Release of uranium from contaminated soils under flow-through saturated conditions

E. Reinoso-Maset, NMBU

P6-48 - Bioassociation of europium by *Phaseolus vulgaris* plants

J. Dauwe, HZDR

P8-01 - Leveraging multi-omics data integration in the study of Chernobyl tree frogs

E. Goujon, IRSN

P9-01 - CzechRad – new device for Citizen Monitoring developed in Czechia by SÚRO

P. Kuča, SÚRO

P9-02 - Enhancing radiological impact assessments of nuclear facilities to better support reaching a consensus on sufficient maturity among different stakeholders

A. Ikonen, EnviroCase, Ltd.

P9-03 - Akademeia High School Radon Hunt - citizen science for raising radon awareness and active way for teaching

D. Aksamit, AHS RadonHunt

Meeting spaces

