



# ENVIRA

14-19 September 2025  
KRAKÓW, POLAND

# 2025

## 8<sup>th</sup> INTERNATIONAL CONFERENCE ON ENVIRONMENTAL RADIOACTIVITY



**ENVIRA 2025:  
RADIONUCLIDES IN  
CLIMATE CHANGE  
STUDIES**

# PROGRAMME



THE HENRYK NIEWODNICZAŃSKI  
INSTITUTE OF NUCLEAR PHYSICS  
POLISH ACADEMY OF SCIENCES



COMENIUS  
UNIVERSITY  
BRATISLAVA



POLISH ACADEMY OF SCIENCES



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*Dear Colleagues,*

*We are pleased to invite you to attend ENVIRA 2025, the 8th International Conference on Environmental Radioactivity organized by the Institute of Nuclear Physics Polish Academy of Sciences in cooperation with Comenius University in Bratislava. The conference will be held between 14th – 19th September 2025. ENVIRA 2025 will focus on “Radionuclides in Climate Change Studies”.*

*Looking forward to meeting you in Kraków.*

*On behalf of the Organizing Committee*

*Jerzy W. Mietelski*

*Pavel Povinec*

Organized by the Institute of Nuclear Physics  
Polish Academy of Sciences in cooperation with  
Comenius University in Bratislava.

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University of Tsukuba, Tsukuba, Japan

## INVITED SPEAKERS

**Marc Caffee**, PRIME Lab, Purdue University, West  
Lafayette, IN, USA

**Magdalena Długosz-Lisiecka**, Institute  
of Applied Radiation Chemistry, Lodz  
University of Technology, Poland

**Francisco Javier Guillén Gerada**,  
Environmental Radioactivity Laboratory,  
Dpt. Applied Physics, University of  
Extremadura, Cáceres, Spain

**Irena Hajdas**, Department of Earth Sciences,  
Laboratory of Ion Beam Physics, ETH Zürich,  
Switzerland

**Katsumi Hirose**, Department of Materials  
and Life Sciences, Faculty of Science and  
Technology, Sophia University, Japan

**Xiaolin Hou**, Xi'an AMS Center, Institute of  
Earth Environment, Chinese Academy of  
Sciences, Xi'an, China

**Gi Hoon Hong**, State Key Laboratory of  
Estuarine and Coastal Research, East China  
Normal University, 500 Dongchuan Rd.,  
Minhang, Shanghai, China

**Yayoi Inomata**, Institute of Nature and  
Environmental Technology, University of  
Kanazawa, Japan

**A. J. Timothy Jull**, The University of Arizona,  
Tucson, USA; HUN-REN Institute for Nuclear  
Research, Debrecen, Hungary

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**Dominic Larivière**, Department of Chemistry,  
Université Laval, Quebec, Canada

**Sanghan Lee**, Korea Research Institute of  
Standards and Science, Daejeon 34113,  
Republic of Korea

**Martin Martschini**, Universität Wien, Fakultät  
für Physik, Isotope Physics – VERA  
Laboratory, Wien, Austria

**Olivier Masson**, LERCM - Laboratory for  
Continental and Marine Radioecological  
Studies, Institut de Radioprotection et de  
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Institute of the CAS, Czech Republic

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Resource Engineering, Technical University  
of Denmark (DTU), Denmark

**Yoko Shimada**, Kyoto University, Japan

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**Colin Seymour**, McMaster University, Canada

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**Daisuke Tsumune**, Center for Research in Radiation, Isotopes, and Earth System Sciences, University of Tsukuba, Tsukuba, Japan

**Gabriele Wallner**, University of Vienna, Faculty of Chemistry, Institute of Inorganic Chemistry, Vienna, Austria

**Phillip E. Warwick**, GAU Radioanalytical, National Oceanography Centre, University of Southampton, Southampton, UK

**Vasyl Yoschenko**, Fukushima University, Japan

**Weihua Zhang**, Radiation Protection Bureau of Health Canada, Canada

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## CONFERENCE VENUE



### 4\* Galaxy hotel

address: **22A Gęsia St., Kraków**



## LOCATION:

The conference will be held in the conference center of the 4\* Galaxy Hotel (address: 22A, Gęsia St.) in Kraków. This is the modern hotel, located near the Vistula river bank and the Kazimierz district – the historical and moody Jewish part of Kraków. Meanwhile, the distance to the most important parts of the historical center of medieval Kraków, like the main city Main Market Square (Rynek Główny) and Wawel Royal Castle with famous Royal Route is also a short one, about only 2 km to each of those places., so accessible even by walk.

## CONFERENCE ROOMS:

4\* Galaxy hotel offers a few multifunctional conference rooms and an exhibition space with a total area of 1550 square meters and the Business Room. Conference rooms are functional and spacious, located on the ground floor and first floor of the building.

## PARKING AREA:

Galaxy hotel provides parking space at an additional fee. Also, the hotel parking lot allows charging of electric vehicles (information at the front desk).

## PROGRAMME:

All oral and poster sessions, opening and closing ceremonies, Welcome Reception, coffee breaks and lunches, registration desk will be organized at the Galaxy hotel.



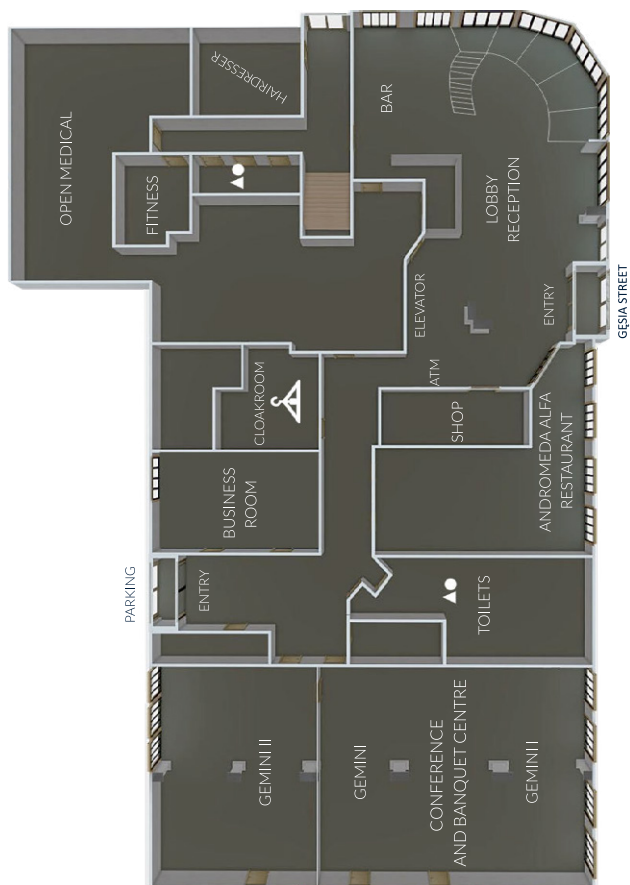
## REGISTRATION:

<b>14.09.2025</b>	Sunday	<b>16:00–19:00</b>
<b>15.09.2025</b>	Monday	<b>08:00–18:00</b>
<b>16.09.2025</b>	Tuesday	<b>08:00–18:00</b>
<b>17.09.2025</b>	Wednesday	<b>08:00–16:00</b>
<b>18.09.2025</b>	Thursday	<b>08:00–18:00</b>
<b>19.09.2025</b>	Friday	<b>08:00–15:00</b>



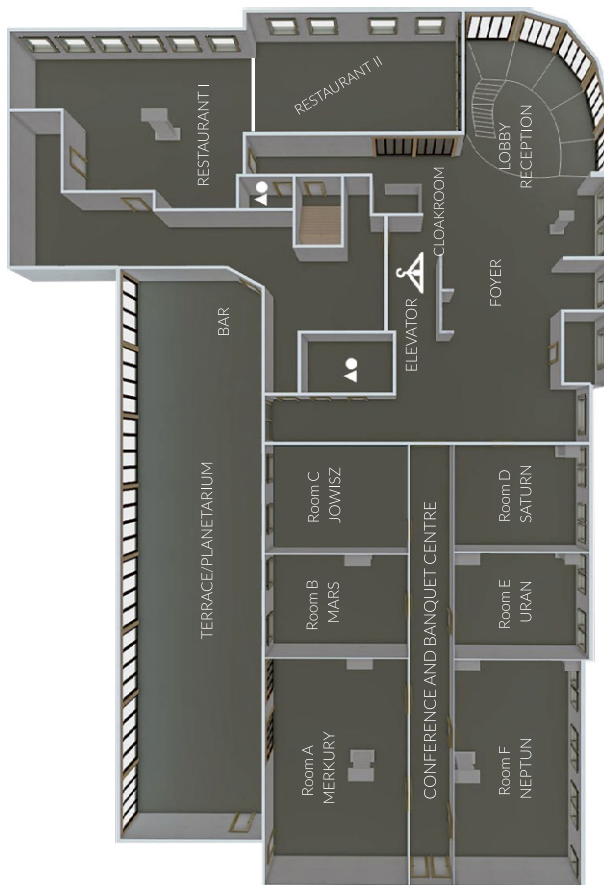
# CONFERENCE AND BANQUET CENTRE

LEVEL 0



# CONFERENCE AND BANQUET CENTRE

LEVEL 1



## SPECIAL EVENTS

### OPENING CEREMONY

**15.09.2025, Monday**

Time: 9:00 – Galaxy hotel, Conference Room 1st floor

### WELCOME PARTY

**14.09.2025, Sunday**

Time: 19:00–21:00 Galaxy Hotel, Foyer 1st floor

### SOCIAL PROGRAMME - TOURS:

**17.09.2025, Wednesday**

Time: from 15:10, Galaxy hotel

### BANQUET

**18.09.2025, Thursday**

Place: Zalesie Mannor House ( 25 km from Kraków)

Pick up time and place: 18:45 – Galaxy hotel

### CLOSING CEREMONY

**19.09.2025, Friday**

Time: 12:35, Galaxy hotel, Conference Room 1st floor

### POSTER SESSIONS

**Monday, Tuesday**

Conference Room ground and 1st floor



# TIMETABLE



## SUNDAY 14.09.2025

12:00-19:00	<b>Registration</b>
14:00-18:00	<b>PreConf. Meeting</b> <b>Ring of 5</b> <i>O. Masson</i>
18:00-19:00	<b>Informal opening</b> <b>Invited Lecture</b> of K. Zyczkowski: <i>100 years of Quantum Mechanics and 125 years of quantum physics</i>
19:00-21:00	<b>Welcome Reception</b>

## MONDAY 15.09.2025

### Plenary Session 1

(All plenary sessions are in the main lecture room)

*P. Povinec, J.W. Mietelski*

9:00-09:30	<b>Opening ceremony</b>
9:30-11:00	<b>ENVIRA 2025 Fellow Awards, ENVIRA 2025 Science Award</b> P. Povinec: <i>Laudation</i> ENVIRA Scientific Award Winner's lecture
11:00-11:30	<b>Coffee break</b>
11:30-12:30	<b>The introduction Lecture:</b> [236] Walter Kutschera <i>The climate on Earth – do we really understand it?</i>
12:30-13:30	<b>Lunch</b>

### S1A Radioanalytics

(main lecture room)

*P. Hofmann, M. Eriksson*

13:30-13:45	[31] Mauritius Hiller <i>Data Base of Radioecological Parameters for Arid Environments</i>
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13:45-14:00	[74] Sanghan Lee <i>Development of Shrimp Reference Material for Radioactivity Measurement and Its Application in Proficiency Test</i>
14:00-14:15	[235] Renata Kierepko <i>Low-background, digital gamma-rays spectrometer with active shield equipped with beta plastic scintillation detector – a system for the simultaneous detection of gamma and beta radiation emitters and cosmic rays</i>
14:15-14:30	[232] Christos Tsabaris <i>A new radioactivity system to inspect suspicious material/objects for maritime security needs</i>
14:30-14:45	[130] Americus Perez <i>Uranium mineralization in Camarines Norte, Philippines I. In-situ gamma spectrometry, geochemistry, and mineralogy</i>
14:45-15:00	[115] José Luis García León <i>Application of a sensitive LSC measurement procedure to the determination of <math>^3\text{H}</math> in drinking water and rainwater in the city of Seville</i>
15:00-15:15	[109] Michal Fejgl <i>Photon dose rate monitoring station with source-specific detection</i>

### S1B Radionuclide impact of nuclear facilities and their decommissioning on the environment

(Gemini room)

*S. Kumar Sahoo, Y. Kumamoto*

13:30-13:45	[111] Olivier Radakovitch <i>National propositions for post-accidental management in case of nuclear releases in the marine environment</i>
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13:45-14:00 [6] Natalia Alegria *Influence of the "Galerna" meteorological phenomenon on the emission of radiological "false alarms" in real time*

14:00-14:15 [90] Christelle Antonelli *How past and actual releases from a U-conversion facility impact the aquatic environment?*

14:15-14:30 [71] Guillaume Pedehontaa-Hiaa *Assessment of metal distribution in algae used as bioindicators for the environmental monitoring of Swedish nuclear power plants*

14:30-14:45 [106] Shigeto Fujimura *Vermiculite application to inhibit radiocesium uptake by paddy rice*

14:45-15:00 [200] Assiya Kunduzbayeva *Mobility of artificial radionuclides in soils of Semipalatinsk test site under various conditions of radioactive contamination*

15:00-15:15 [82] Ali Hosseini *Estimation of Doses from Ingestion of Contaminated Food in the Event of a Nuclear Detonation*

15:15-15:30 [207] Dmitri Gudkov *Radionuclide contamination of fish of different ecological groups in water bodies within the Chornobyl exclusion zone*

15:30-16:00 **Coffee break**

### **S2A Radiochemistry** (main lecture room)

*H.E. Heldal, J. Kaizer*

16:00-16:15 [58] Henry Moll *The ability of calcium oxalates to incorporate Eu(III) and Cm(III)*

16:15-16:30 [34] Dimitrios C. Xarchoulakos *Uranium and thorium preconcentration from liquid samples via the use of a polymeric complexing membrane*

16:30-16:45 [135] Ruslan Cusnir *Radiochemical separation of  $^{227}\text{Ac}$  in environmental samples using solid-phase extraction with ion-imprinted polymer resin*

16:45-17:00 [144] Filip Jędrzejek *Enhancing Uranium Recovery from Coal Ash Using Semipermeable Membranes and Radiochemical Methods: A Novel Approach*

17:00-17:15 [161] Tomislav Ilievski *Application of Solid Phase Extraction for Automated Sequential Separation of Radionuclides from Environmental Samples*

17:15-17:30 [147] Matic Dokl *Novel Extraction Chromatographic Method for Determination of Selenium-79 in Radioactive Waste Samples*

17:30-17:45 [159] Alex Tarancón Sanz *Development of a fast method using PSresins for the determination of  $^{210}\text{Pb}$  in environmental samples*

17:45-18:00 [134] István Papp *Simultaneous determination of  $^{93}\text{Zr}$ ,  $^{93}\text{Mo}$  and niobium radionuclides from decommissioning samples, extension of the method for analysis of actinides*

### **S2B NORM** (Gemini room)

*E. Prieto, R. Breier*

16:00-16:30 [246] Bogusław Michalik *NOR in NORM: naturally occurring radionuclides in naturally occurring radioactive materials-characteristics, principles of measurement organization, and interpretation of measurement results*

- 16:30-16:45 [60] Caroline Licour *Environmental Assessment of Natural and Artificial Radionuclides in Beira Interior, Portugal: Insights for NORM Management*
- 16:45-17:00 [160] Jan Helebrant *Citizen radiation monitoring: Building a resilient society while obtaining valuable data on natural radioactivity*
- 17:00-17:15 [164] Michal Bonczyk *Discharge of radium isotopes into to the environment as a results of dewatering of underground coal mines in Upper Silesia, Poland*
- 17:15-17:30 [150] András Kocsonya *Radiological characterisation of building materials*
- 17:30-17:45 [53] Jacques Bezuidenhout *Modelling the relationship between naturally occurring radionuclides and grain size of sediment from the Karoo Supergroup*
- 17:45-18:00 [46] Matthew Omoniyi Isinkaye *Monte Carlo-Based Cancer Risk Assessment of Radon Contamination in Groundwater of Artisanal Mining Areas of Southwest Nigeria*

18:00-19:00 **POSTER I**  
(with refreshment, first floor)

## TUESDAY 16.09.2025

### Plenary Session 3 Radionuclides in Climate Change Studies -1

*D. Struminska, S.H. Lee*

- 09:00-9:30 [179] Gi-Hoon Hong *Anthropogenic radionuclides as tracers of climate change in the Pacific Ocean and its northwestern marginal seas*
- 09:30-10:00 [64] Katsumi Hirose *Impacts of climate change in the North Pacific: which are the most important anthropogenic radionuclide tracers of oceanic change?*
- 10:00-10:30 [190] Jakub Kaizer *Distribution of  $^3\text{H}$  and  $^{14}\text{C}$  in the Pacific Ocean and its connection with climate change*
- 10:30-11:00 [208] Xiaolin Hou *Anthropogenic Radionuclides in China Seas and Northwest Pacific; level, distribution, sources, variation and impacts of climate changes*
- 11:00-11:30 **Coffee break**

### Plenary Session 4 Radionuclides in Climate Change Studies -2

*M. Długosz-Lisiecka, M. Garcia-Leon*

- 11:30-12:00 [151] Jixin Qiao *Exploring Anthropogenic Radioisotopes as Tracers in Oceanic and Climatic Studies*
- 12:00-12:30 [73] Yayoi Inomata *Transport of radiocaesium in the North Pacific Ocean related with climate change*
- 12:30-13:00 [123] Daisuke Tsumune *Modeling the Fate of Cs-137 in the Ocean: Toward Detection of Climate Variability*
- 13:00-14:00 **Lunch**

### S3A Marine radioactivity (main lecture room)

**Y. Inomata, D. Tsumune**

- 14:00-14:15 [65] Katsumi Hirose *Partitioning of plutonium between bottom waters and sediments in the Far Eastern Seas*
- 14:15-14:30 [181] Xiaolin Hou *Variation of  $^{239,240}\text{Pu}$  in coral and its response to climate system in South China Sea*
- 14:30-14:45 [22] Yuichiro Kumamoto *Fukushima-derived radiocesium in the western North Pacific Ocean a decade after the accident*
- 14:45-15:00 [61] Yutaka Tateda *Review of the marine radioecology of tritium in Japanese coastal waters*
- 15:00-15:15 [103] Shizuho Miki *Determination of background concentrations of tritium in the freshwater of Fukushima and in the seas around Japan.*
- 15:15-15:30 [96] Seongbong Seo *Pathways and Distribution Characteristics of Radioactive Material Dumped in the East/Japan Sea*
- 15:30-15:45 [212] Tzu-Hao Wang  *$^{135}\text{Cs}/^{137}\text{Cs}$  signals from Sellafield reprocessing plant: implications for radiocesium source terms and  $^{135}\text{Cs}$  inventory in Northern European Seas*
- 15:45-16:00 [28] Vandana Pulhani *Radiation Fallout Levels in Coastal Marine Environment Insights from the IAEA-RCA-7028 Project*

### S3B Radionuclides as tracers

of environmental processes (Gemini room)

**N. Alegria, M. Jeřkovský**

- 14:00-14:30 [249] Phillip Warwick *Environmental research at Southampton – four decades of environmental radioactivity*

- 14:30-14:45 [166] Edyta Łokas *Isotopic signatures of artificial radionuclides: an important tool in today's world*
- 14:45-15:00 [98] Kotaro Saito *Spatial variations in radioactive Cs of soil and crop within a field in Fukushima, Japan*
- 15:00-15:15 [68] Junko Takahashi *Effects of preferential flow and radiocesium-rich microparticles (CsMPs) on spatial heterogeneity of  $^{137}\text{Cs}$  in forest soils after the Fukushima accident*
- 15:15-15:30 [169] Anna Banel *Challenges in Characterization of Legacy Alpha-Emitting Radionuclides in a Norwegian River and Wetland*
- 15:30-15:45 [121] Yuichi Onda *Modeling Rainfall-Induced Soil Moisture Effects on Ambient Dose Rates in Fukushima Forests*
- 15:45-16:00 [120] Rikus le Roux *Radon concentrations, causes, and exposure in South African tourist caves*
- 16:00-16:30 **Coffee break**

### S4A Radionuclides in Biota

(main lecture room)

**K. Szufa, Y. Tateda**

- 16:30-16:45 [146] Lígia Lopes *Effects of radon exposure on the bioactive compound profile of *Mentha spicata* L.*
- 16:45-17:00 [95] Paul Grzegorzczuk *Effects of Low-Dose Ionizing Radiation on Cataractogenesis and Lens Protein Expression in Voles (*Myodes glareolus*) from the Chornobyl Exclusion Zone*

- 17:00-17:15 [88] Julia Maetzkow  
*Interaction of Phaseolus vulgaris plants with U(VI): Release of root exudates and their impact on the U(VI) speciation*
- 17:15-17:30 [89] Muiyiwa Michael Orosun  
*Radial Distribution of  $^{137}\text{Cs}$  in Japanese cedar and Its Implications for Sustainable Forest Management in Fukushima*
- 17:30-17:45 [211] Hilde Elise Heldal  
*Assessing marine pollution in the Black Sea: radionuclide dynamics in marine biota and sediments*

## S4B Natural Radionuclides (Gemini room)

*C. Licour, F. Guillen*

- 16:30-16:45 [84] Rafael Garcia-Tenorio  
*Behavior and distribution of  $^{210}\text{Po}$  in a brackish ecosystem of Uruguay*
- 16:45-17:00 [108] Yoshikazu Kikawada  
*Spatiotemporal variations of K-40 in atmospheric fallout caused by volcanic eruptions: A case study for Kyushu Island, Japan*
- 17:00-17:15 [182] Jarosław Wiecezorek  $^{210}\text{Po}$  in Inhalable Products: Comparison of Committed Doses Using the Human Respiratory Tract Model (HRTM)
- 17:15-17:30 [148] Dorice Seif  
*Seasonal Variation and Radiological Risk Assessment of Naturally Occurring Radionuclides in Water and Fish from Gold Mining regions of the Lake Victoria Goldfields, Tanzania*
- 17:30-17:45 [35] Jalal Sharib *The distribution of beryllium-7 concentration in rainwater in two seasons*

## POSTER II

(with refreshment, ground floor)

## Plenary Session 5 Radionuclide Tracers

*J. Qiao, X. Hou*

- 09:00-9:30 [165] Timothy Jull  
*Extreme solar and other cosmic events recorded in  $^{14}\text{C}$  in tree rings*
- 09:30-10:00 [75] Sanghan Lee  
*Long-Term Distribution of  $^{137}\text{Cs}$  in Seawater around the Korean Peninsula: Assessing the Impact of the Fukushima Nuclear Accident*
- 10:00-10:30 [163] Dagmara Strumińska-Parulska  
*Plutonium studies in the Southern Baltic Sea*
- 10:30-11:00 [117] Rafael Garcia-Tenorio  
*Direct plutonium Transfer from soils to animal biota in Palomares*
- 11:00-11:30 **Coffee break**

## Plenary Session 6 Radionuclides in Climate Change Studies -3

*A. Ioannidou, GH Hong*

- 11:30-12:00 [152] Magdalena Długosz-Lisiecka  
 *$^7\text{Be}$  and other radionuclides as climate change tracers in the air*
- 12:00-12:30 [13] Weihua Zhang  
*Observed Atmospheric  $^{133}\text{Xe}$  Concentrations in the Arctic and North Atlantic Oscillation (NAO)*
- 12:30-13:00 [253] Francisco Javier Guillén Gerada  
*Transfer parameters in Mediterranean ecosystems*
- 13:00-14:00 **Lunch**

## SSA Radiochemistry and Biota (main lecture room)

*A. Banel, C. Tsabaris*

- 14:00-14:15 [217] Imanol Pérez  
*Validation of a method for the determination of  $^{99}\text{Tc}$  in environmental samples using TK-TcScint resin*
- 14:15-14:30 [220] Elmo Wiikinkoski *NPE-free Cocktail for Environmental LSC Measurements*
- 14:30-14:45 [59] Raúl Eduardo Linares Jiménez  
*The impact of uranium and malic acid on soil microbial communities and a Mesorhizobium isolate*
- 14:45-15:00 [196] Yanqin Ji *Novel Simultaneous Separation and Determination of Seven Radionuclides in Food for the Ingestion Dose Assessment*

## SSB Natural Radionuclides (Gemini room)

*V. Pulhani, W. Zhang*

- 14:00-14:15 [122] Farkas-Áron Bálint *Preliminary results in: Simultaneous determination of  $^{210}\text{Bi}$ ,  $^{210}\text{Po}$ ,  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  with spontaneous deposition on various surfaces by liquid scintillation counting*
- 14:15-14:30 [215] Concepción Olondo Castro  
*TENORM and alpha spectrometry industries: spectra deconvolution*
- 14:30-14:45 [149] Jessie Samaniego  
*Baseline Terrestrial Radioactivity around the Potential Nuclear Installation Sites in the Philippines*
- 14:45-15:00 [80] Erol Sari *Historical Deposition and Distribution of Microplastics in Marine Sediments at the Mouth of the Kocasu River, Southern Marmara Sea, Türkiye*
- 15:10-19:00 **Conference Excursions:**  
Wieliczka salt mine (leave 15:30),  
Ojców & Pieskowa Skala (leave 15:10),  
Guided city walk (leave 15:30)

## THURSDAY 18.09.2025

### Plenary Session 7 Mass Spectrometry

*I. Hajdas, A.J.T. Jull*

- 09:00-9:30 [30] Martin Martschini *Ultra-sensitive radionuclide detection with Ion-Laser InterAction Mass Spectrometry*
- 09:30-10:00 [33] Marc Caffee *Accelerator Mass Spectrometry: Techniques for Measurement of Long-Lived Radionuclides and Applications*
- 10:00-10:30 [112] Gabriele Wallner  
*Steps towards the determination of  $^{237}\text{Np}$ / $^{239}\text{Pu}$  atom ratios on air filters from Vienna, Austria*
- 10:30-11:00 [178] Dominic Lariviere  
*Exploiting new advances in micro-extraction to improve the detection and quantification of environmentally relevant radionuclides*
- 11:00-11:30 **Coffee break**

### Plenary Session 8 Atmosphere

*G. Wallner, M. Caffee*

- 11:30-12:00 [72] Olivier Masson  
*Radionuclide resuspension: driving force of the persistence of anthropogenic radionuclides at trace level in the atmosphere*
- 12:00-12:30 [94] Irka Hajdas  
*Aging of the atmosphere and radiocarbon dating*
- 12:30-13:00 [221] Ivan Sykora *Long term monitoring of Bratislava aerosol radioactivity*
- 13:00-14:00 **Lunch**



## S6A Atmosphere (main lecture room)

**E. Łokas, O. Masson**

- 14:00-14:15 [194] Robert Breier  
*Simulation of particle fluxes and cosmogenic nuclide production in the earth's atmosphere revisited*
- 14:15-14:30 [104] Alexandra Ioannidou  
*Airborne  $^{210}\text{Pb}$  and trace elements as tracers for atmospheric pollution in Helsinki metropolitan area*
- 14:30-14:45 [226] Ivan Kontuľ  
*Radiocarbon in the gaseous and particulate constituents of the atmosphere in Bratislava, Slovakia*
- 14:45-15:00 [189] Elena Prieto  
*Measurement Strategies and Detection Limits for Particulate Filter Gamma-Ray Spectrometers in Real-Time Monitoring*
- 15:00-15:15 [66] Philipp Steinmann  
*Long-term observations of Beryllium-7 and Sodium-22 in ground-level air*
- 15:15-15:30 [49] Daniel Lienhard  
*A new experimental setup for the on-line measurement of radionuclides at the Jungfraujoch high altitude research station*
- 15:30-15:45 [62] Soichiro Suzuki  
 *$^{134}\text{Cs}$ ,  $^{137}\text{Cs}$  and  $^{239+240}\text{Pu}$  concentrations in surface air at Chiba City, Japan during 2016 to 2023: factors controlling their seasonal and interannual variations*
- 15:45-16:00 [131] Konstantinos Kanoutos  
*Radon Progeny Monitoring Outdoors Using Multiple NaI Detectors*

## S6B Mass Spectrometry (Gemini room)

**C. Antonelli, M. Martschini**

- 14:00-14:15 [177] Miroslav Jeřkovský  
*Progress in the determination of  $^{10}\text{Be}$  using Accelerator Mass Spectrometry in the CENTA laboratory*

- 14:15-14:30 [231] Jerzy Mietelski  
*Anthropogenic U-236 in Arctic and Antarctic moss and lichens*
- 14:30-14:45 [209] Katarzyna Szufa  
*Isotopic signatures of the plutonium sources in the Antarctic environment*
- 14:45-15:00 [193] Maoyi Luo  
*Simultaneous determination of Pu isotopes,  $^{237}\text{Np}$ ,  $^{241}\text{Am}$  and  $^{244}\text{Cm}$  in seawater samples by Accelerator Mass Spectrometry*
- 15:00-15:15 [86] Angel Bautista VII  
*Increasing iodine-129 concentrations in the West Philippine Sea*
- 15:15-15:30 [171] Kamil Wojciechowski  
*Measurements of  $^{236}\text{U}/^{239}\text{Pu}$  mass ratio using Inductively Coupled Plasma Mass Spectrometry in cryoconite samples on glaciers of western Norway*
- 15:30-15:45 [222] Hyuncheol Kim  
*Automated radiochemistry for Environmental Radioactivity*
- 16:00-16:30 **Coffee break**

## S7A Radioecology (main lecture room)

**A. Kunduzbayeva, O. Radakovitch**

- 16:30-16:45 [25] Andrew Maddison  
*Air Sampling at Barakah NPP – Challenges with environmental conditions on system performance and enhancements made to instruments and monitoring protocols*
- 16:45-17:00 [42] Francisco Pinero Garcia  
*Can cooking practices affect dietary exposure to  $^{210}\text{Po}$  in seafood?*
- 17:00-17:15 [40] Djamel Taieb Errahmani  
*Radiological characterization, carbon-borne survey and radioecological risk assessment of soils from Ghazaouet, Western Algeria*



17:15-17:30 [142] Sergiy Dubchak  
*Exploring plant-fungal symbioses  
 for bioremediation of radioactively  
 contaminated soils from nuclear sites in  
 Germany*

#### S7B Soil and Sediment (Gemini room)

**K. Szarłowicz, V. Yoschenko**

16:30-16:45 [87] Jan Mihalik  
*The distribution of Sr in the calcium-  
 rich soils in the Arabian Peninsula*

16:45-17:00 [137] Claudia Landstetter  
*Determination of the depth distribution  
 of Cs-137 in forest soil profile in Austria*

17:00-17:15 [83] Inna Iarmosh  
*Modelling of radionuclides sorption in  
 sediments of the Chornobyl exclusion  
 zone based on smart-Kd approach*

17:15-17:30 [153] Robert-Csaba Begy  
*The Effect of Radon-222 Escape on  
 210Pb-Based Sediment Chronology:  
 Implications for Dating Accuracy in  
 Lacustrine Systems*

18:45-23:30 **Gala Dinner**  
*(returning buses from 22:00)*

## FRIDAY 19.09.2025

### Plenary Session 9 Radioecology -1

**R. Kierepko, D. Lariviere**

9:00-9:30 [44] Carmel Mothersill  
*Development of population level  
 biomarkers for low dose radiation: the  
 importance of non-targeted effects*

9:30-10:00 [99] Vasyl Yoschenko  
*Application of isotopic approach to  
 assess the quasi-equilibrium levels of  
<sup>137</sup>Cs in Fukushima forests*

10:00-10:30 [118] Yoko Shimada  
*Estimation of air dose in forest  
 considering slope directional movement  
 of Cs in forest soil*

10:30-11:00 [229] Joseph Lapka  
*Measurements of Radioactivity  
 Equilibrium and Disequilibrium  
 in Oil Scale*

11:00-11:30 **Coffee break**

#### S8A Radioecology -2 (main lecture room)

**C. Mothersill, I. Svetlik**

11:30-11:45 [56] Hikaru Miura  
*Environmental distribution and  
 migration of cesium-bearing  
 microparticles emitted from the  
 Fukushima accident*

11:45-12:00 [37] Airi Mori  
*Assessment of averted doses for the  
 verification of seafood distribution/  
 consumption restrictions imposed after  
 the FDNPP accident*

12:00-12:15 [205] Ignasi Reichardt  
*Maximum likelihood spectral  
 reconstruction for real-time  
 gamma-ray spectroscopy*

12:15-12:30 [127] Jakub Buda  
*The negative effects of environmental radioactivity on microbial communities inhabiting the surface of glaciers*

#### WS8B Radon and NORM (Gemini room)

**A. Csordas, I. Kontul'**

11:30-11:45 [138] Daniel Janecki *Radon exhalation from polymetallic nodules collected for research from the Clarion–Clipperton zone of the Pacific Ocean*

11:45-12:00 [85] Franck Dal Molin  
*Corrected  $^{210}\text{Pb}$  based estimations of sediment accumulation rates in a marine area contaminated by legacy oil derived NORM discharges*

12:00-12:15 [113] Anita Csordás *Correlation analysis between the in-situ measured and estimated annual gamma-dose values*

12:15-12:30 [157] Michele Guida  
*Radon levels in highly NaCl /  $\text{CaCO}_3$  mineralized karst mixed waters: the Case-Study of the Capodifume Springs Group in the National Park of the Cilento and Vallo di Diano-European Geopark (Southern Italy)*

12:30-12:35 *Technical break for moving to the main lecture room*

#### Plenary Session 10

#### Closing Session (main lecture room)

**J.W. Mietelski, P. Povinec**

12:35-13:05 [45] Colin Seymour  
*Competing risk model; a new integrated approach to assessing contextual impacts of ionising radiation*

13:05-13:30 **Closing ceremony:**  
*Student awards for best oral and poster presentation, ENVIRA 2027 venue*

13:00-14:00 **Lunch**

## POSTER SESSIONS

**Presenting author and poster title only.**  
**For full details, please refer to the Book of Abstracts using the code number.**

[7] Natalia Alegria *Study of Radioactivity in the reservoirs that supply water to Great Bilbao*

[8] Sangyun Lee *Development of a Deep Learning-Based Model for Radionuclide Identification*

[9] Chandrasekaran Anandanarayanan  
*Determination of natural radioactivity and the associated radiation hazards in decorated vitrified tiles collected from Tamil Nadu, India*

[10] Peggy Hofmann *Analyzing low levels of naturally occurring radionuclides in foods – Insights from the first German total diet study*

[11] Samuel Odumu Ogana JOHN *Estimation of Radon ( $^{222}\text{Ra}$ ) activity concentration levels and associated effective dose in bottled drinking water from South Africa*

[12] Pilar Blanco Rodríguez *Distribution coefficient in soils with natural enrichment of long-lived natural radionuclides ( $^{238}\text{U}$  and  $^{226}\text{Ra}$ )*

[14] Michaela Achatz *Dose Assessment of Natural Radionuclides in Food Consumed in Germany*

[15] Jacques Bezuidenhout *Natural Radioactivity in the Pilanesberg Alkaline Ring Complex*

[16] Jeremy Pomare Douglas *FRN application and conventional methods for soil redistribution analysis in the la Zanguenga micro-basin (Panama Canal)*

[17] Myung Ho Lee *Analysis of Radioactive Concentrations in Metal Samples Irradiated by Neutron*

[18] Abimbola Odudu *Radionuclide Assessment of Oil Palm Plantation Soils in Ondo and Ekiti State, Nigeria.*

[19] Elisa Gordo Puertas *A comparative study between  $^7\text{Be}$  detected in TSP and PM10*

- [20] Magdalena Gembal *Proficiency testing for Cs-137 and Cs-134 determination in soil*
- [21] Paweł Czerski *Contamination of wild animal bones with the radioactive isotope Sr-90*
- [23] Amin Shahrokhi *An Overview of the Feasibility of Leveraging Deep Learning for Environmental Radioactivity: Opportunities, Challenges, and Interdisciplinary Solutions*
- [24] Yutaka Tateda *Possibility of F1NPS-derived radio-caesium in fish of Eastern China Sea as bio-indicator for ocean tracer*
- [26] Seung-Tae Lee *Transport of Fukushima-derived  $^{137}\text{Cs}$  into the South China Sea via Subtropical Mode Water intrusion through the Luzon Strait*
- [29] Thennaarassan Natarajan *In-situ gamma radiation assessment of coastal and hinterland regions of Kanyakumari high background natural radiation area, India*
- [32] Marina Konstantinova *Impact of Soil Organic Matter on the Formation of  $^{137}\text{Cs}$  and  $^{239,240}\text{Pu}$  Secondary Peaks in Vertical Soil Profiles*
- [36] Jalal Sharib *Enrichment Factor and geoaccumulation index of heavy metals in the surface sediments in the Sembrong catchment*
- [38] Jalal Sharib *Short-term soil erosion rate in different land use areas in the sembrong catchment*
- [39] Hideki Tsuji *Model simulation and cost-benefit assessment of countermeasures to reduce the  $^{137}\text{Cs}$  load from un-decontaminated dam lakes in Fukushima, Japan*
- [41] Djamel Taieb Errahmani *Environmental radiological risk assessment of algae from Algiers coastline*
- [43] Francisco Pinero Garcia *What is the potential bioaccessibility of naturally occurring radionuclides in snus when consumed?*
- [47] Hyunmi Lee *The spatial-temporal variation and transport of artificial radionuclides ( $^{137}\text{Cs}$  and  $^{239,240}\text{Pu}$ ) around Korea Seas (East Sea, Yellow Sea, Southern coastal of Korea)*
- [50] Lee Jaeun *Distribution of  $^{137}\text{Cs}$  in the East Sea and coastal water off southern Korea Peninsula*
- [51] Lee Jaeun *Annual distribution and deposition of atmospheric  $^{210}\text{Pb}$  in Busan, the largest port city in Korea*
- [54] Alua Kabdyrakova *Background Levels of Natural and Artificial Radionuclides in Soils of the Local Area of the Eurasian Steppe Zone: Contribution to Global Environmental Monitoring*
- [55] Kyeong Ok Kim *Influence of Distribution Coefficients on the Transport of Radioactive Materials in the East Sea*
- [57] Konstantina Kehagia *Monitoring of  $^{226}\text{Ra}$  and uranium isotopes concentrations in underground water samples released from a phosphogypsum disposal area*
- [63] Soichiro Suzuki *Observation of plutonium isotopes in surface air at Chiba City, Japan from 2016 to 2023: occurrence of anomalous  $^{238}\text{Pu}$*
- [67] Takaki Tsubono *Transport of the Cs-137 water in the North Pacific subtropical mode water at the end of March 2011 to the East China Sea and Sea of Japan*
- [69] Satvir Singh *Assessing uranium contamination in groundwater of North-East Punjab: Spatial and vertical distribution and extraction using  $\text{NdFeO}_3$*
- [70] Kerneese Ramjarrie *Monitoring Terrestrial Gamma Radiation to Characterize Mud Volcanic Activity: Evidence from the Piparo Mud Volcano, Trinidad and Tobago*
- [76] Jennyvi Ramirez *Age dating of sediment cores in Sorsogon Bay, Philippines using  $^{210}\text{Pb}$  method: A revisit*
- [77] Joanna Najman *Optimization of a liquid scintillation counting methodology for the determination of tritium in water using the Hidex 300 SL spectrometer*
- [78] Terezia Eckertova *Different models for calculation of  $^{222}\text{Rn}$  flux and validation with experimental data in Bratislava, Slovakia*

- [79] Alžbeta Brandýsová *Radon flux maps for the Slovak Republic based on several approaches and their experimental verification*
- [81] Hannah Keßler *Phytoremediation of radionuclide-contaminated soil - long-term trial in sunflower cultivation*
- [91] Ana Noguera Rocha *Gamma radiation and Radon exhalation in Uruguayan building materials*
- [92] Sara Taha Sayed Sakr *Distribution and origin of naturally occurring radioactive materials (NORMs) in mylonitic rocks of north Abu Rusheid, Eastern Desert, Egypt*
- [93] Daisuke Tsumune *Simulation-Based Assessment and Validation of Radiological Environmental Impacts from the Oceanic Discharge of ALPS Treated Water*
- [97] Motoki Terashima *Influence of humification on bioavailable radiocesium concentrations in fallen leaves of Fukushima broadleaf forests*
- [100] Yumiko Ishii *Linking prey composition to variability of radiocesium contamination in masu salmon: Insights from DNA metabarcoding in a forested river system*
- [101] Hyemi Cha *Feasibility Study on Simulation-Based Efficiency Calibration for Environmental Gamma Spectrometry*
- [102] Yoshimura Kazuya *Extensive study on vertical migration of  $^{137}\text{Cs}$  in undisturbed soil after the Fukushima Dai-ichi Nuclear Power Plant accident.*
- [105] Cheol Su Kim *An Efficient Separation Method of  $^{90}\text{Sr}$  for Various Environment Samples Using Cation Exchange Resin*
- [107] Klaudia Lanczewska *Analysis of  $^{210}\text{Po}$ ,  $^{234}\text{U}$  and  $^{238}\text{U}$  in the components of the post-mining environment in the Sudetes*
- [110] Yihong Xu *Records of plutonium isotopes in different sedimentary environments in China*
- [114] Anita Csordás *Estimate the Po-210 content of consumables*
- [116] Adam Kimak *Pu and U isotopic signatures in sediment samples from Lake Bo Langvlei, South Africa*
- [119] Agata Oszczak-Nowińska *Polyelectrolyte complexes of chitosan and sodium alginate for the sorption of selected radionuclides from aqueous solutions*
- [124] Katarzyna Szarłowicz *The Influence of Ionizing Radiation for the Stability of  $^{137}\text{Cs}$  Natural Sorbent Based on Dioctahedral Vermiculite*
- [125] Fern Rose Peregrino *Atmospheric Dispersion Modelling and Radiological Environmental Impact Assessment for the Potential Reopening of the Bataan Nuclear Power Plant, Philippines*
- [128] Francisco Javier Guillén Gerada *Association of heavy metals and radionuclides to wastes from non-operating metallic mining sites in Extremadura (Spain)*
- [129] Francisco Javier Guillén Gerada *Development of scenarios to assess the transfer of radionuclides to groundwater from liquid discharges in NORM industries*
- [132] Liangliang Yin *Determination of  $^{210}\text{Po}$  in seafood using large-area grid ionization chamber alpha Spectrometry*
- [133] Konstantinos Kanoutos *A Computer Code for the Calculation of Efficiency Correction Factors due to Self-attenuation in  $\gamma$ -Spectroscopic Analysis of NORM*
- [139] Maksym Gusyev *Evaluating impacts of the Fukushima Daiichi Nuclear Power Plant accident on tritium tracer applications in Fukushima Prefecture waters, Japan*
- [140] Botvinnik Palattao *Recovery of Rare Earth Elements and Carbon Sequestration of Phosphogypsum: Implications for Climate Action Resource Utilization*
- [143] Stella Winkler *MetroPOEM – Metrology for the harmonisation of measurements of environmental pollutants in Europe*

- [145] Dagmara Struminska-Parulska *Evaluation of radioactivity in chanterelle (Cantharellus cibarius) and health implications*
- [154] Mefleh Hamideen *Investigation of environmental radiation of sand and soil samples from Dead Sea beach, Jordan*
- [155] Mireia Pérez Baeza *Radiological characterization of building materials produced in Spain for compliance with external gamma dose limits*
- [156] MISBAH JAVED *Improving the efficiency and performance of electrostatic collection for radon measurement*
- [162] B. S. Bajwa *Comparative analysis of spatial and depth wise distribution of uranium in groundwater of South-west & North-east region of Punjab state, India*
- [167] Katarzyna Kołtonik *Radionuclides in glacier mice and cryoconite on Icelandic glaciers*
- [168] Dariusz Sala *Radionuclide contaminants as a potential threat to ecosystems from melting Alpine glaciers in high-mountain environments*
- [172] Sohini Bose *Dissecting Radionuclide Uptake Pathways: Investigating Radionuclide Transport Mechanisms in Model Plants*
- [173] Anna Cwanek *Unprecedented radioactive pollution in Spitsbergen air during the 21st century*
- [174] Anna Cwanek *Activity concentration and atomic ratio of man-made actinides determined by a quadrupole mass spectrometry*
- [175] Ainur Mamyrbayeva *Features of artificial  $^{90}\text{Sr}$  and  $^{239+240}\text{Pu}$  accumulation by poultry organs and tissues*
- [176] Pedro Ángel Salazar-Carballo *Intercomparison of Radon Concentration Measurements in Volcanic Touristic Caves*
- [183] Boris Bobál' *Measurement of  $^{14}\text{C}$  in liquid fuels using Accelerator Mass Spectrometry*
- [184] Ivo Světlík *Radiocarbon dating in wildlife forensics*
- [185] Yuliya Zaripova *Assessment of Beta-Emitting Radionuclide Accumulation in Food and Tobacco Products During Long-Term Storage*
- [186] Sinikka Virtanen *Nationwide environmental radiation monitoring programme in Finland*
- [187] Valtteri Suorsa *Environmental radioactivity measurement capabilities at STUK*
- [191] Natalya Larionova *Artificial Radionuclides In The Plant Cover Of Test Locations Of Radiological Warfare Agents At The 4 Site*
- [192] Pavel Krivitskiy *Natural radionuclides in the soil and vegetation cover in the Zhambyl district of Almaty region*
- [195] Jozef Masarik *Geant4 simulation of geomagnetic field*
- [197] Dániel Vincze *Determination of Cs-137 activity concentrations in soil samples from Hungary*
- [198] Hyemi Cha *A Low-Background Room-Temperature Semiconductor Detection System for the Analysis of Strontium-90 in Seawater*
- [199] Hyehyun Kim *Proton Exchange Membrane (PEM) electrolytic enrichment system for tritium analysis in seawater*
- [201] Almira Aidarkhanova *Distribution of radiocarbon in the forest ecosystems soil of the Republic of Kazakhstan*
- [202] Valtteri Suorsa *Radioanalytical and emergency preparedness activities at STUK*
- [203] Zhanna Tleukanova *Application of sorption method for treatment of contaminated water from  $^{238}\text{U}$  on the example of STS water bodies*
- [204] Grzegorz Olszewski *Development and validation of a radioanalytical method for analyzing the  $^{148}\text{Gd}$  content in environmental and bioassay samples*
- [206] Otavio Vieira *Amazonian Wood Traceability by Nuclear Analytical Techniques*
- [210] Katarzyna Szufa *Doses to Antarctic biota*

- [213] Jakub Kaizer *Determination of ultratrace amounts of natural uranium by Accelerator Mass Spectrometry at CENTA*
- [214] Paul Blowers *Radiochemical preparation of marine biota samples for measurement of technetium-99 by iCAP TQ ICP-MS*
- [218] Zahra Shirani *Uptake of sediment-derived  $^{14}\text{C}$  into freshwater benthic organisms in a controlled microcosm experiment*
- [219] Soroush Majlesi *Transfer of sediment-derived carbon into blackworm (*Lumbriculus variegatus*) and crucian carp (*Carassius carassius*): Implications for  $^{14}\text{C}$  biosphere assessment in freshwater ecosystems*
- [224] Pavel Povinec *Radiocarbon dating and PIXE analysis of historical paintings*
- [225] Ivan Kontul' *Activity size distribution of  $^{7}\text{Be}$  in aerosol samples collected in Bratislava, Slovakia*
- [227] Pavel Povinec *Radiocarbon variations in tree rings and climate change*
- [230] Renata Kierepko *Network of CzechRad mobile gamma radiation detectors in Poland – infrastructure for detailed spatial area mapping of dose rates, hotspot identification, and detection of radiation events related to warfare*
- [233] Michał Dorosz *Assessing Chlorine Contamination in Marine Fish Tissue Using Instrumental Neutron Activation Analysis*
- [234] Michał Dorosz *Introduction of the  $k_0$ -INAA method to the research workshop of the MARIA Research Reactor*
- [237] Mikołaj Wielgat *Rooks as possible bioindicators of radioactive contamination in the vicinity of the Mayak facility*
- [238] Magdalena Laskowska *Ordered mesoporous silica SBA-15 functionalized with phosphonic acid groups for strontium removal from radioactive contaminated wastewater*
- [239] Anna Wójcik-Gargula *Modeling of Neutron-Induced Air Activation in a Compartment Intended for the Installation of the HRNS Diagnostic System at ITER*
- [240] Tomasz Mróz *Photonuclear Neutrons from Synchrotron Linac: Bridging Environmental Science and Isotope Technology at SOLARIS*
- [241] Stefan Tombiński *LVis & tRAYcy: Laboratory Management & Monte-Carlo Software for gamma and alpha spectroscopy applications*
- [242] Anumaija Leskinen *Environmental radiation surveys of FIR1 research reactor decommissioning*
- [243] Vandana Pulhani *IAEA-RCA: Role in fostering Technical Co-operation in Nuclear Technologies in the Asia-Pacific region*
- [244] Sylwia Błażej *A need to revise radiological standards for building materials as a result of the obligatory use of bio-fuels*
- [245] Sylwia Błażej *Monitoring of radioactivity in air and total atmospheric precipitation at IFJ PAN in Krakow between 2021 - 2025*
- [254] Jerzy W. Mieliski *Anthropogenic radioactive substances in poultry eggs*

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Posters are organized into two sessions held in separate rooms. Therefore, all authors are kindly requested to display their posters on Monday before Plenary Session 1 and to leave them up until Thursday afternoon. During their assigned session (I or II), authors are expected to remain near their posters to be available for discussion with other participants.





## WELCOME TO KRAKÓW



The royal city of Kraków is a unique symbol of Polish national identity. Enchantingly picturesque, rich in relics of all epochs, it represents the thousand-year-long history of the Polish nation.



In Kraków you can admire many different styles of architecture, unique Romanesque objects, monumental Gothic edifices, and masterpieces by some of the most outstanding architects of the Renaissance and Baroque period. Kraków has always been a centre of Polish culture and science. Damaged by fires, wars and foreign occupation, it has always revived and continued to fascinate with its beauty.



As long ago as the 11th century Kraków became the capital city of Poland. The Royal Castle and cathedral on Wawel Hill was the coronation and burial place of Polish monarchs.

In the 13th century the layout of the city, which has been preserved till today, was established with what is still one of the biggest market squares in Europe (200 x 200 m), a Gothic-Renaissance Cloth-hall (Sukiennice) and the Town-hall tower. The city fortification system was built in the 13-15th centuries, parts of the wall, four turrets and a barbican have survived to this day.

In the 14th century the Academy of Kraków (later the Jagiellonian University) one of the oldest universities in Europe was founded. Nicolaus Copernicus (Mikolaj Kopernik) was one of its.

Kraków is renowned for its numerous old churches, including the Gothic St. Mary's Church famous for its magnificent altar carved by Wit Stwosz.

Probably the most famous landmark in Kraków is Wawel Castle situated on Wawel Hill overlooking the river Vistula. This Renaissance castle boasts a beautiful arcaded courtyard, magnificent interiors and the famous Flemish tapestries.

As well as the Renaissance castle Kraków also has a number of beautiful palaces of the same period. These belonged to the rich citizens of the city. One example is the Pod Baranami Palace.

After the partition of Poland (by the end of the 18th century), Wawel became a necropolis for national heroes and poets. In this period many museum collections were founded, such as the art collection of the Czartoryski Family (with Leonardo da Vinci's „Lady with an Ermine”).

In 1978 Kraków was entered in the UNESCO World Heritage Register.





## CONFERENCE EXCURSIONS

### WEDNESDAY, 17.09.2025

#### I. WIELICZKA SALT MINE



As you walk down 360 steps into the salt mine, you get the impression of entering a vast underground city, complete with huge caverns and underground lakes. This underground world has earned a place on the UNESCO World Cultural Heritage List thanks to the creativity of the miners who carved chapels out of the walls, hundreds of meters below the surface. Legend has it that the salt mines in Wieliczka were a part of the dowry of the Hungarian princess, Kinga, when she wed Bolesław the Chaste over 700 years ago, making the Wieliczka Salt Mine one of the oldest in all of Europe.

Our route through the mine leads you through galleries and chambers on three levels, from 64 to 135 meters below the ground, including the unique and richly ornamented Chapel of the Saint Kinga. The last stop in the mine is the souvenir shop. From here, a lift carries you back to the surface. (Lift down instead of walking down stairs - only on special request).

The tour includes: transportation, English speaking guide, entrance fee to the mine. Temperature in the mine is 14 °C/57 °F all year round.

#### PLEASE NOTE:

Departure time: **15:30**

Departure place: **Galaxy Hotel**

Duration: **4 hours**

The tour is not recommended for people with claustrophobia.

Due to a limited number of groups allowed to visit the Wieliczka Salt Mine, please confirm your participation in this excursion during registration.

#### II. KAZIMIERZ DISTRICT AND THE OLD TOWN (WALKING TOUR)

For over a thousand years, Kraków has been a place of many events that changed the fate of Polish history. Our tour of this beautiful city is a great introduction to learn about its history, monuments and to know the most important figures related to our city. You will begin your tour walking from conference venue, through the Planty Park – the largest urban park in the Europe, encircling the oldest part of the city - to the Main Market Square which is a part of the The Royal Route - the most ceremonial route through the city, the route of grand entrances, parades, and funerary processions. Royal Route begins by St. Florian's Church in the Matejki Square and runs past Krakow's Barbican (built late in the 15th century), Florian's Gate, across the Main Market Square, the route leads to the Wawel Hill – the seat of royal power until 17th century and Wawel Cathedral – the largest necropolis of royalty and national heroes in this part of Europe. Nearly every Polish monarch was buried at Wawel. The Cathedral and its vaults contain the tombs of kings and queens, their children, national heroes, great poets and Church dignitaries.



#### PLEASE NOTE:

Departure time: **15:30**

Departure place: **Galaxy hotel – reception**

Duration: **3 hours**

Itinerary may be changed due to weather, traffic, etc.

### III. OJCÓW NATIONAL PARK AND THE PRĄDNIK VALLEY



<https://www.ojcow.pl>

Discover the charms of the Ojców National Park and the Prądnik Valley. While visiting Ojców, you will learn why we have the Łokietek Cave and how it happened that Casimir the Great built a castle here and the Club of Hercules was built near Krakow. Guided trip to Ojców and Pieskowa Skała to see additional attractions near Krakow: Pieskowa Skała Castle – from the outside.

#### PLEASE NOTE:

Departure time: **15:10**

Departure place: **Galaxy Hotel – reception desk**

Duration: **5 hours**

Itinerary may be changed due to weather, traffic, etc.



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### GALA DINNER 18.09.2025, THURSDAY

### WE INVITE YOU TO FOLWARK ZALESIE MANOR COMPLEX

200 year long history, located on a hill with a view of all the Beskidy Mountains, with beautiful Babia Góra, Dobczycki Reservoir and the Tatra Mountains in the background.

That green land is located just 25 km away from the Main Market in Krakow and 10 km away from the Salt Mine in Wieliczka.

Venue of Thursday evening banquet (the conference organizer provides transportation on the: Hotel Galaxy — Zalesie Manor Complex — Hotel Galaxy route.



#### PLEASE NOTE:

Pick up time: **18:45**

Pick up place: **Galaxy hotel**

Dinner duration: **19:30–23:30**





Conference office:



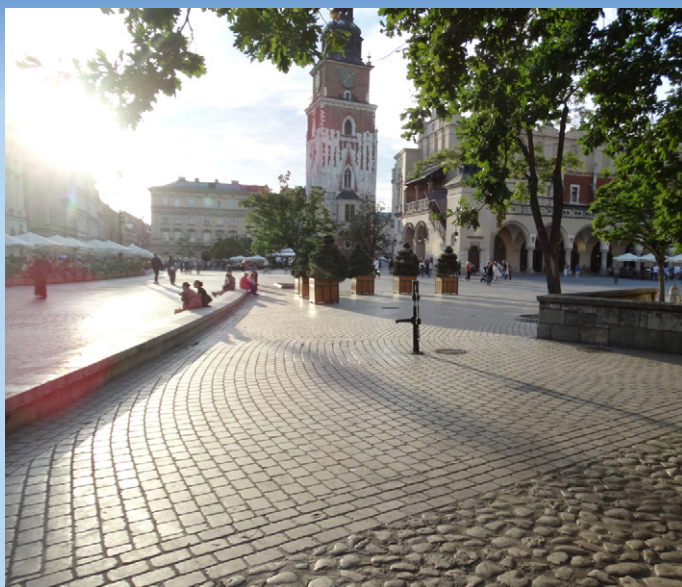
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**KRAKÓW 2025**