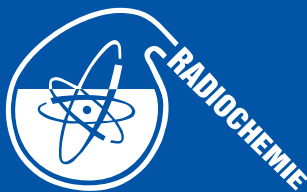
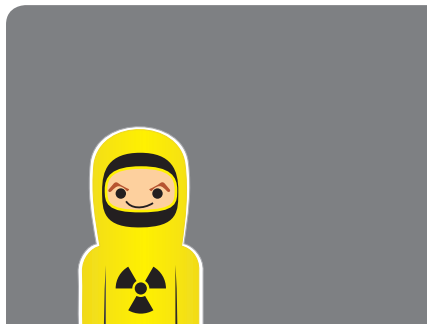


# RadChem 2026



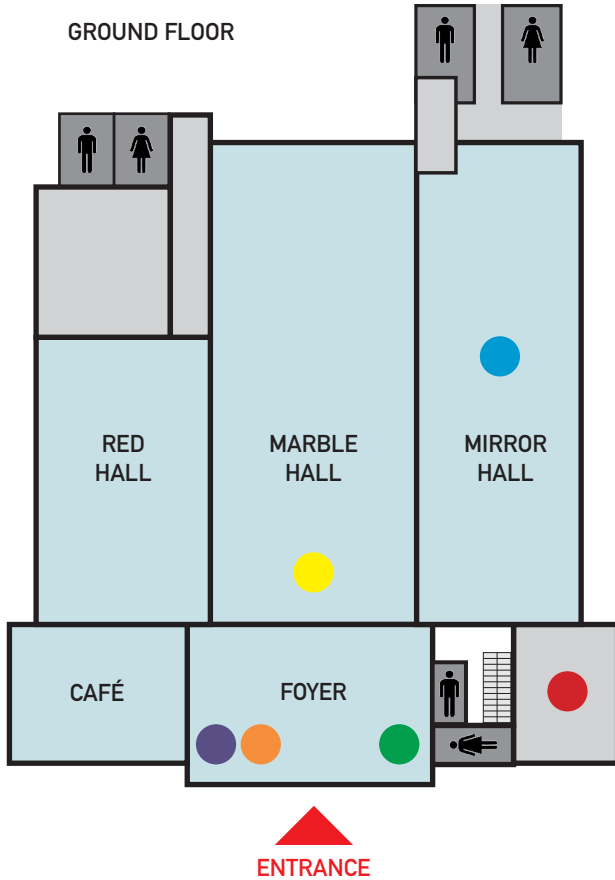
**PROGRAMME**



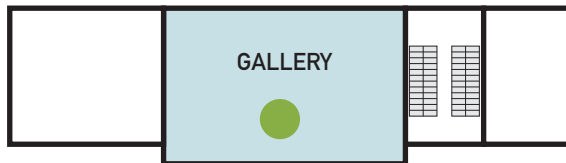
**10 – 15 May 2026**








Mariánské Lázně, Czech Republic

# CASINO CONFERENCE CENTRE



## FIRST FLOOR



-  Registration
-  Information
-  Coffee break, Lunch
-  Exhibitors
-  Poster Session
-  Cloakroom
-  Conference secretariat

Welcome to the anniversary 20<sup>th</sup> Radiochemical Conference. The conference is held in Mariánské Lázně, the second largest Czech spa and one of the nicest city – gardens in the Czech Republic. RadChem 2026 aims at maintaining the 65-year tradition of radiochemical conferences (the 1<sup>st</sup> Radiochemical Conference was held in 1961), dealing with all aspects of nuclear and radiochemistry, organised in the Czech Republic (or formerly in Czechoslovakia).

More than 280 scientists from 30 countries registered for the conference. The verbal sessions, where more than 125 invited and contributed presentations are scheduled to be presented, will be complemented by the corresponding poster sessions. Selected “hot topics” in nuclear and radiochemistry will be covered in six plenary opening lectures delivered by invited recognized experts. The conference will be opened by the prestigious Hevesy Medal Award Ceremony including the lecture given by its 2026 laureate, Prof. Jerzy Wojtek Mietelski (Institute of Nuclear Physics, Kraków, Poland). In conjunction with the technical programme, an exhibition covering technologies, equipment, technical and management services in areas pertaining to the theme of the conference will be held.

The extensive social programme is expected to provide an opportunity for informal contacts and discussions among the participants. Among others, RadChem 2026 is a proud host of EuChemS Division of Nuclear Chemistry annual meeting. The interaction of all the above activities is hoped to maintain the high standard of this long-lasting series of conferences and through this contribute to the flourish of our Science.

Enjoy RadChem 2026

RadChem 2026 Organising Committee

## CONFERENCE LOCATION

**Mariánské Lázně** is a spa town in Cheb District in the Karlovy Vary Region of the Czech Republic. It has about 13,000 inhabitants. Most of the town's buildings come from its Golden Era in the second half of the 19<sup>th</sup> century, when many celebrities and top European rulers came to enjoy the curative carbon dioxide springs. The town centre with the spa cultural landscape is well preserved and is protected by law as an urban monument reservation.

In 2021, the town became part of the transnational **UNESCO World Heritage Site** under the name „Great Spa Towns of Europe“ because of its springs and architectural testimony to the popularity of spa towns in Europe during the 18<sup>th</sup> through 20<sup>th</sup> centuries.

## GENERAL TOPICS

- Radionuclides in the Environment, Radioecology (RER)
- Radioanalytical Methods (NAM)
- Chemistry of Actinide and Trans-actinide Elements (TAN)
- Radiation Chemistry (RCH)
- Production and Application of Radionuclides (PAR)
- Separation Methods, Speciation (SEP)
- Chemistry of Nuclear Fuel Cycle, Radiochemical Aspects of Radioactive Waste Management (NFC)
- Radiopharmaceutical Chemistry, Labelled Compounds (RFC)
- Education (EDU)

## ORGANISING COMMITTEE

### **General Chairman**

Mojmír Němec - Czech Technical University in Prague

### **Vice-Chairmen**

Václava Havlová - IAEA, Vienna

Jan Kučera - Academy of Sciences of the Czech Republic

Jan John - Czech Technical University in Prague

### **Secretariat**

Kateřina Čubová - Czech Technical University in Prague

Terézia Němcová - Czech Technical University in Prague

### **Executive Group**

Martin Matějka - Czech Technical University in Prague

Alena Zavadilová - Czech Technical University in Prague

Miroslava Semelová - Czech Technical University in Prague

Xenie Lytvynenko - Czech Technical University in Prague

Barbora Drtinová - Czech Technical University in Prague

Tomáš Prajs - Czech Technical University in Prague

Pavel Bartl - Czech Technical University in Prague

Tomáš Prášek - Czech Technical University in Prague

Martin Šácha - Czech Technical University in Prague

Jiří Janda - University of Defence, Brno

Ondřej Lebeda - Nuclear Physics Institute, AS CR, Řež

Jiří Mizera - Nuclear Physics Institute, AS CR, Řež

Barbora Sedlářová - TGM Water Research Institute, Prague

Stanislav Smrček - Charles University, Prague

## SESSION ORGANISERS

### **Radionuclides in the Environment, Radioecology**

Jakub Kaizer - Comenius University in Bratislava, Slovakia

Michal Fejgl - National Radiation Protection Institute, Prague

### **Radioanalytical Methods**

Xiaolin Hou - Lanzhou University, China

Jan Kučera - Nuclear Physics Institute, AS CR, Rez

Jan Kameník - Nuclear Physics Institute, AS CR, Rez

### **Chemistry of Actinide and Trans-actinide Elements**

Andreas Türler - University of Bern, Switzerland

Václav Tyrpekl - Charles University, Prague

### **Radiation Chemistry**

Eros Mossini - POLIMI, Italy

Jan Bárta - Czech Technical University in Prague

### **Production and Application of Radionuclides**

Antonia Denkova - Delft University of Technology, The Netherlands

Jiří Mizera - Nuclear Physics Institute, AS CR, Rez

### **Separation Methods, Speciation**

Andreas Geist - Karlsruhe Institute of Technology, Germany

Mojmír Němec - Czech Technical University in Prague

Jiří Janda - University of Defence, Brno

### **Chemistry of Nuclear Fuel Cycle**

Eva de Visser-Týnová - NRG Pallas, Petten, The Netherlands

Václava Havlová - IAEA, Vienna

### **Radiopharmaceutical Chemistry, Labelled Compounds**

Constantin Mamat - HZ Dresden-Rossendorf, Germany

Ondřej Lebeda - Nuclear Physics Institute, AS CR, Rez

### **Education**

Marko Štok - JSI, Ljubljana, Slovenia

Elena Macerata - POLIMI, Italy

Jan John - Czech Technical University in Prague

## PRESENTERS

**The authors** are kindly requested to bring their presentations on flash drive and load them into the master computers in the lecture rooms well before the start of the respective sessions - preferably in the morning before the first session.

During registration, uploading the presentations will also be possible at Information stand in foyer.

The authors will not be allowed to use their own computers for verbal presentations.

## WIFI

**WIFI** is available at the conference venue

name: **RADCHEM**

password: **radchem2026**

## BOARDING INFORMATION

Coffee breaks and lunches are served daily in the Mirror Hall. The menu for lunch and coffee breaks, including the allergens, will be posted on the board every day.

### Special Diet Requirements

Persons with special dietary requirements can pick up their meal at the location marked „Special Diet Requirements “ upon presentation of the ticket obtained at the registration desk.

### **Café Imperial** - *Goethovo náměstí 7/21, 353 52 Mariánské Lázně*

Following the Concert and the Singing Fountain performance, the bar at the Imperial Hotel will be open, offering a pleasant setting for informal networking and a relaxed continuation of the evening.

A selection of alcoholic and non-alcoholic beverages, as well as light refreshments, will be available. Kindly note that all consumption is at participants' own expense.

### Opening hours

12 May until 02:00

14 May until 02:00

## POSTERS

Poster drop-off will be possible during registration on Sunday and Monday, and on Tuesday morning (08:00–12:00) in the foyer of the Casino Conference Centre.

Participants who prefer to install their posters themselves may do so on the day of their poster session between 08:00 and 12:00.

Posters will be attached to display boards using pins. The recommended poster size is up to A0 format.

Please collect your poster at the end of your poster session. Any posters left behind will be gathered and placed in the foyer of the Casino Conference Centre for later pickup.

## STUDENT POSTER COMPETITION

Students are invited to participate in the Student Poster Competition held in memory of Prof. Amares Chatt.

Posters will be evaluated by an Award Committee appointed by the RadChem 2026 Organising Committee. The decision of the Committee is final and cannot be appealed.

Registration for the poster competition is available at the Poster Drop-off Desk or the Information Desk until 12:00 on the day of the relevant poster session.

Participants in the Student Poster Competition are kindly requested to be present at their posters during the poster session in order to answer possible questions from the Award Committee.

The Award Ceremony will take place in the Red Hall on Thursday, 14 May, at 18:30.

**Participation in the Award Ceremony is a condition  
for receiving the award.**

Winners will receive a RadChem 2026 certificate as well as a financial prize.

## SOCIAL PROGRAMME

### Sunday, 10 May

18:00 - 18:30 RadChem 2026 opening  
*Marble Hall, Casino Conference Centre*

19:30 - 21:30 Welcome Reception  
*Mirror Hall, Casino Conference Centre*

### Monday, 11 May

19:30 - 21:00 Beer Party  
*Red Hall and Terrace, Casino Conference Centre*

### Tuesday, 12 May

20:00 - 21:45 Concert  
*Marble Hall, Casino Conference Centre*

### Wednesday, 13 May

13:00 - 18:00 Conference Trips  
*Surroundings*

19:00 - 22:00 Conference Dinner  
*Marble Hall, Casino Conference Centre*

### Thursday, 14 May

20:00 - 21:15 Jam Band Session  
*Marble Hall, Casino Conference Centre*

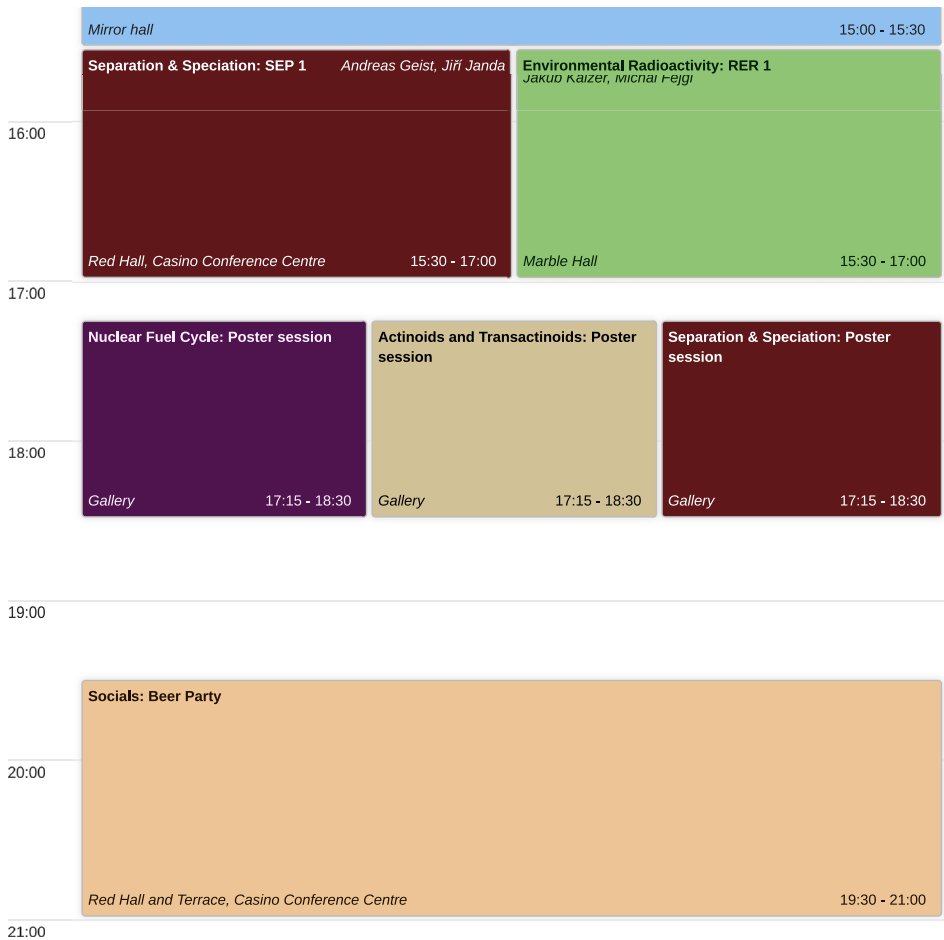
21:30 - 22:30 Good Night Drink @ Singing Fountain  
*Singing Fountain, The Colonnade*

# Programme at a glance

Sunday, 10 May 2026

15:00	<b>Registration</b>	
16:00		
17:00		
	<i>Foyer, Casino Conference Centre</i>	15:00 - 18:00
18:00	<b>Socials: RadChem 2026 Opening</b>	
	<i>Marble Hall, Casino Conference Centre</i>	18:00 - 18:30
	<b>Plenary: Hevesy Medal Award Ceremony</b>	<i>Zsolt Révay, Mojmír Němec</i>
19:00		
	<i>Marble Hall, Casino Conference Centre</i>	18:30 - 19:30
20:00	<b>Socials: Welcome Reception</b>	
21:00		
	<i>Mirror Hall, Casino Conference Centre</i>	19:30 - 21:30





08:00

**Separation & Speciation: SEP2**  
*Kenneth Czerwinski, Nora Vajda*

*Red Hall* 08:30 - 10:00

**Nuclear Analytical Methods: NAM 1 (NAM)**  
*Elisabete De Nadai Fernandes, Xiaolin Hou*

*Marble Hall* 08:30 - 10:00

09:00

10:00

**Coffee Break**

*Mirror Hall* 10:00 - 10:30

11:00

**Nuclear Fuel Cycle: NFC 2**  
*Eva De Visser - Týnová, Václav Týrpekl*

*Marble hall* 10:30 - 12:00

**Radionuclides Production & Application: PAR 1**  
*Andreas Türlér, Antonia Denkova*

*Red Hall* 10:30 - 12:00

12:00

**Lunch**

*Mirror Hall* 12:00 - 13:30

**DNRC EuChemS Annual Meeting (DNRC)** *Jon Petter Omtvedt*

*King Edward's Library* 12:15 - 13:15

13:00

14:00

**Actinoids and Transactinoids: TAN 2**  
*Christoph Düllmann, Alexander Yakushev*

*Red Hall* 13:30 - 15:00

**Nuclear Analytical Methods: NAM 2 (NAM)**  
*Jixin Qiao, Mojmir Němec*

*Marble Hall* 13:30 - 15:00

15:00

**Coffee Break**

*Mirror Hall, Casino Conference Centre* 15:00 - 15:30

16:00	<b>Separation &amp; Speciation: SEP 3</b> <i>Jan John, Pavle Mocilac</i>	<b>Environmental Radioactivity: RER 2</b> <i>Ana Noguera, Dr Nick Evans</i>
	<i>Marble Hall</i> 15:30 - 16:24	
17:00	<b>Education: EDU 1</b> <i>Jan John, Pavle Mocilac</i>	
	<i>Marble Hall</i> 16:24 - 17:00	<i>Red Hall</i> 15:30 - 17:00

18:00	<b>Radionuclides Production &amp; Application: Poster session</b>	<b>Education: Poster session</b>	<b>Nuclear Analytical Methods: Poster session (NAM)</b>
	<i>Gallery</i> 17:15 - 18:45	<i>Gallery</i> 17:15 - 18:45	<i>Gallery</i> 17:15 - 18:45

19:00

20:00	<b>Socials: Concert</b>
21:00	
	<i>Marble Hall</i> 20:00 - 21:45

# Wednesday, 13 May 2026

08:00

**Separation & Speciation: SEP 4** *Duoqiang Pan, Paul Duthell*

*Marble Hall* 08:30 - 10:00

**Nuclear Fuel Cycle: NFC 3** *Dr Nick Evans, Thorsten Stumpf*

*Red Hall* 08:30 - 10:00

09:00

10:00

**Coffee Break**

*Mirror Hall, Casino Conference Centre* 10:00 - 10:30

11:00

**Education: EDU 2** *Elena Macerata, Marko Štrok*

*Red Hall* 10:30 - 12:00

**Nuclear Analytical Methods: NAM 3 (NAM)**  
*Jiří Janda, Zsolt Révay*

*Marble Hall* 10:30 - 12:00

12:00

**Lunch**

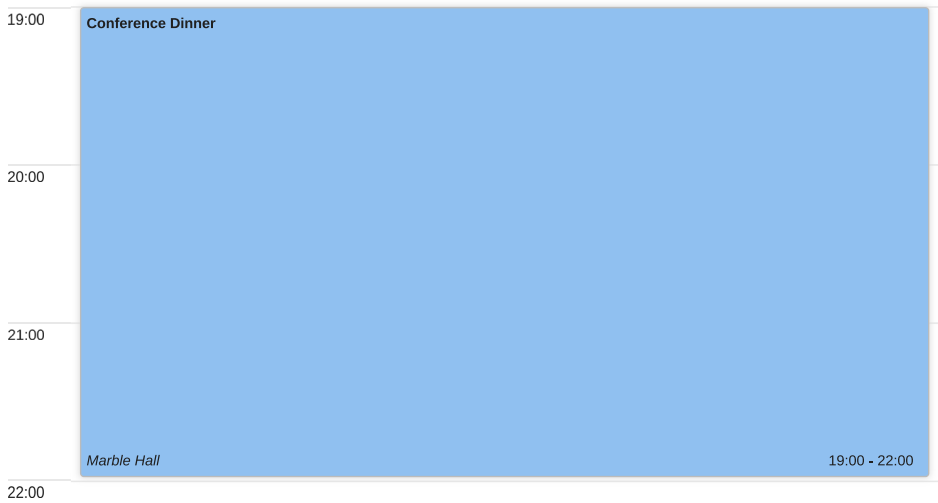
*Mirror Hall* 12:00 - 13:00

13:00

**Socials: Conference Trip**

14:00

15:00



08:00

**Nuclear Fuel Cycle: NFC 4**  
*Dr Christian Schreinemachers, Michael Ojovan*

**Nuclear Analytical Methods: NAM 4 (NAM)**  
*Jan Kučera, Zsuzsanna Macsik*

09:00

*Marble Hall* 08:30 - 10:00

*Red Hall* 08:30 - 10:00

10:00

**Coffee Break**

*Mirror Hall*

10:00 - 10:30

11:00

**Environmental Radioactivity: RER 3**  
*Claudia Landstetter, Sebastian Fichter*

**Radiopharmaceuticals: RPH1**  
*Martina Benešová-Schäfer, Constantin Mamat*

*Marble Hall* 10:30 - 12:00

*Red Hall* 10:30 - 12:00

12:00

**Lunch**

13:00

*Mirror Hall*

12:00 - 13:30

14:00

**Separation & Speciation: SEP 5**  
*Alex Tarancon Sanz, Mojmir Němec*

**Radiation Chemistry: RCH 1** *Eros Mossini, Jan Bárta*

*Marble Hall* 13:30 - 15:00

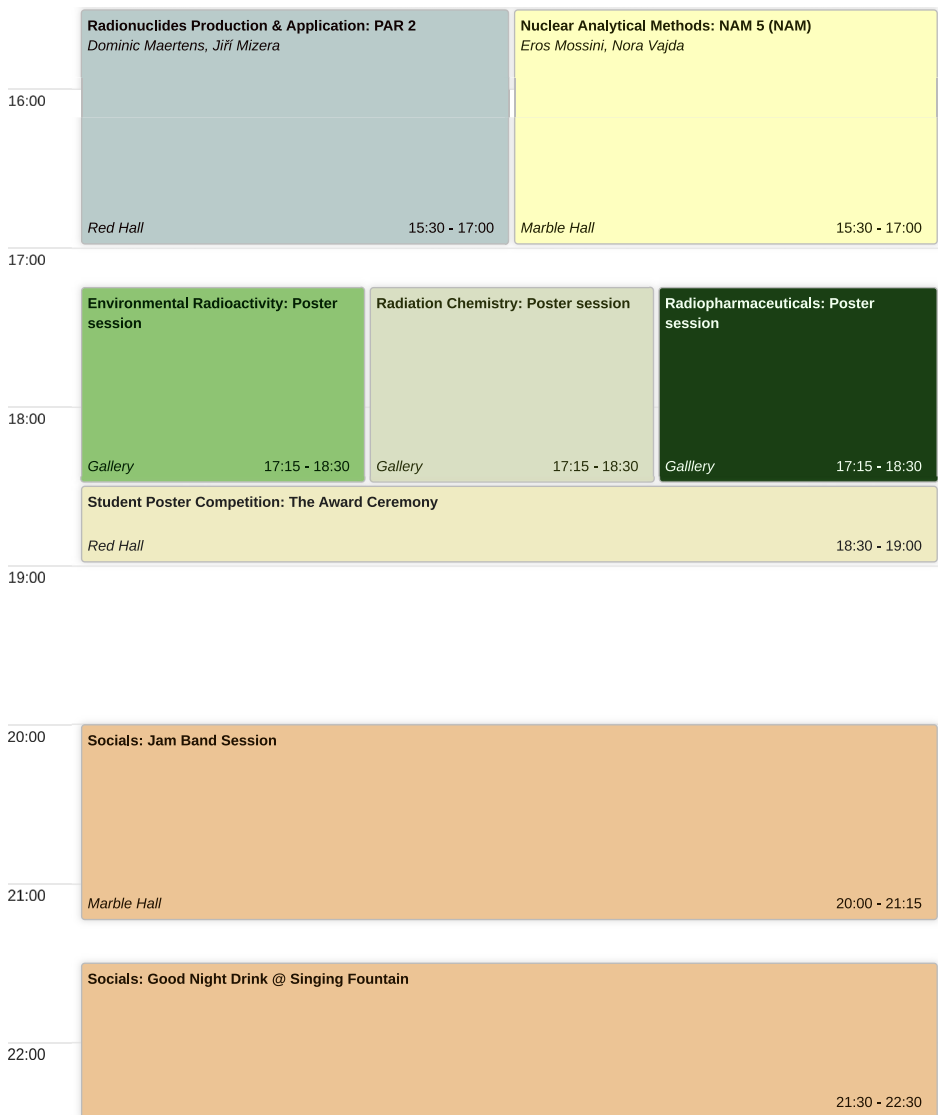
*Red Hall* 13:30 - 15:00

15:00

**Coffee Break**

*Mirror Hall*

15:00 - 15:30



# Friday, 15 May 2026

08:00

**Nuclear Fuel Cycle: NFC 5** *Barbora Drtinová, Susan Britz*

**Nuclear Analytical Methods: NAM 6 (NAM)**

*Jan Kamenik, Myung Ho Lee*

09:00

*Marble Hall*

08:30 - 10:00

*Red Hall*

08:30 - 10:00

10:00

**Coffee Break**

*Mirror Hall*

10:00 - 10:30

11:00

**Environmental Radioactivity: RER 4**

*Galina Lujanieni, Rainer Kadan*

**Separation & Speciation: SEP 6** *Sang-Han Lee, Viktor Goliás*

*Marble Hall*

10:30 - 12:00

*Red Hall*

10:30 - 12:00

12:00

**Socials: Closing Ceremony**

*Marble Hall*

12:00 - 12:30

**Lunch**

13:00

*Mirror Hall*

12:30 - 14:00

14:00

# Programme

Sunday, 10 May 2026

15:00

## Registration

**Session** | **Location:** Casino Conference Centre, Foyer, Reitenbergerova 4/95, Mariánské Lázně, Czech Republic

18:00

## Socials: RadChem 2026 Opening

**Session** | **Location:** Casino Conference Centre, Marble Hall

18:30

## Plenary: Hevesy Medal Award Ceremony

**Session** | **Location:** Casino Conference Centre, Marble Hall | **Conveners:** Mojmir Němec, Zsolt Révay

18:30

18:45-19:30 **A life of a physicist in the radiochemical laboratory**

### Speaker

Jerzy-Wojciech Mietelski

19:30

19:30

## Socials: Welcome Reception

**Session** | **Location:** Casino Conference Centre, Mirror Hall

21:30

08:00

## Registration

**Session** | **Location:** Casino Conference Centre, Foyer, Reitenbergerova 4/95, Mariánské Lázně, Czech Republic

12:00

08:20

## Socials: DNRC Medal Award

**Session** | **Location:** Marble Hall | **Conveners:** Marko Štok, Mojmir Němec

08:30

08:30

## Plenary: PLN 1

**Session** | **Location:** Marble Hall | **Conveners:** Marko Štok, Mojmir Němec

08:30–09:00

### Positioning Sg, Bh, Hs and Cn into the Periodic Table - a historic review

**Speaker**

Heinz Gäggeler

09:00–09:30

### Applications of cutting-edge mass spectrometry in multidisciplinary environmental studies

**Speaker**

Jixin Qiao

09:30–10:00

### Radiochemical Separation for the Recovery of $^{244}\text{Pu}$ from Legacy Mark 18A Targets

**Speaker**

Kenneth Czerwinski

10:00

10:30

## Plenary: PLN 2

**Session** | **Location:** Casino Conference Centre, Marble Hall | **Conveners:** Heinz Gaeggeler, Václava Havlová

10:30–11:00

### The role of actinide separation chemistry in sustainable nuclear fuel cycles

**Speaker**

Robin Taylor

11:00–11:30

### A Single-Center Heidelberg Experience: Molecular Biomarkers Beyond PSA for Risk Stratification in Combined Targeted Radioligand Therapy

**Speaker**

Martina Benešová-Schäfer

11:30–12:00

### Corrosion of nuclear waste glasses in long term tests

**Speaker**

Michael Ojovan

12:00

13:30

## Actinoids and Transactinoids: TAN 1

Session | Location: Casino Conference Centre, Marble Hall | Conveners: Andreas Türler, Václav Tyrpekl

13:30-14:00 **On the volatility and stability of the Sg(CO)<sub>6</sub> complex**

**Speaker**

Alexander Yakushev

14:00-14:20

**Towards livermorium chemistry: Atom-at-a-time gas chromatography studies with polonium**

**Speaker**

Katharina Hermainski

14:20-14:40

**Study of the Possibility of Applying Electrochemical Processes to Change the Oxidation State of Radiothallium Trace Amounts**

**Speaker**

Jakub Sochor

14:40-15:00

**Comparative Study of Mo and W Tracer Scale Extraction from Nitric or Perchloric Acid to Diisooctylphosphinic Acid**

**Speaker**

Pavel Bartl

15:00

13:30

## Nuclear Fuel Cycle: NFC 1

Session | Location: Casino Conference Centre, Red Hall | Conveners: Václava Havlová, Marco Cologna

13:30-14:00

**Recyclability of advanced nuclear fuels: Dissolution experiments on irradiated (U,Pu,Am)O<sub>2</sub> and (U,Am)O<sub>2</sub> fuels**

**Speaker**

Eva De Visser - Týnová

14:00-14:20

**Spent Nuclear Fuel Reprocessing in Accelerator Driven Advanced Nuclear Energy System**

**Speaker**

Fangli Fan

14:20-14:40

**Spent fuel surrogate with embedded caesium iodide**

**Speaker**

Václav Tyrpekl

14:40-15:00

**Self-Radiolysis of Tritiated Water**

**Speaker**

Todd Whitehorne

15:00

15:30

## Environmental Radioactivity: RER 1

**Session** | **Location:** Marble Hall | **Conveners:** Jakub Kaizer, Michal Fejgl

15:30-15:48

### Determination of $^{90}\text{Sr}$ and $\text{Pu}$ isotopes in soil samples from various regions in Austria over the last twenty years

**Speaker**

Claudia Landstetter

15:48-16:06

### Development and Technical Enhancement of Real-Time Monitoring Networks for Nuclear Emergency Response in the Czech Republic

**Speaker**

Michal Fejgl

16:06-16:24

### Seasonal Trends in Radionuclide Concentrations in Austrian Aerosols

**Speaker**

Rainer Kadan

16:24-16:42

### Electrolytic enrichment for low-level tritium measurements for environmental monitoring

**Speaker**

Paul Masselot

16:42-17:00

### Recent applications of accelerator mass spectrometry in environmental studies and radiopurity measurements at CENTA

**Speaker**

Jakub Kaizer

17:00

15:30

## Separation & Speciation: SEP 1

**Session** | **Location:** Casino Conference Centre, Red Hall | **Conveners:** Andreas Geist, Jiří Janda

15:30-16:00

### Extraction chromatographic separation of all actinides using single or stacked columns

**Speaker**

Nora Vajda

16:00-16:20

### Speciation of Polonium in Aqueous Solutions: First insights of X-ray Absorption Spectroscopy

**Speaker**

Paul Dutheil

16:20-16:40

## Optimization of $^{93}\text{Mo}$ radiochemical method for radioactive waste characterization: Improved Analytical Performance and Understanding on Separation Mechanisms

**Speaker**

Matic Dokl

16:40-17:00

## Chromatographic separation of $^{107}\text{Pd}$ for characterization of radioactive waste

**Speaker**

Marko Štok

17:00

17:15

## Actinoids and Transactinoids: Poster session

Session | Location: Gallery

17:15-17:18

### Investigation of Thorium Oxide Reaction Products with Halides by XRD

**Speaker**

Feng Yin

17:18-17:21

### Extraction behaviour of non-complexed ultra-trace amounts of homologues of dubnium

**Speaker**

Kateřina Havelková

17:21-17:24

### Studies on parameters affecting uranium leaching from granite

**Speaker**

Nektaria Varnava

17:24-17:27

### Thioalkane-Based Self-Assembled Monolayers for Surface Functionalization in Superheavy Element Detection

**Speaker**

Lucie Bartl

17:27-17:30

### Identification of the Neglected 1:3 Plutonium(VI)-Oxalate Complex

**Speaker**

Liang Xian

17:30-18:18

### Startup of Superheavy Element Chemistry at KURNS, Kyoto Univ.

**Speaker**

Tetsuya K. Sato

18:30

17:15

## Nuclear Fuel Cycle: Poster session

Session | Location: Gallery

17:15-17:18

### Decommissioning Sludge Waste Solidification in Geopolymer: An Optimization of Waste Loading and Physico-Mechanical Properties

Speaker

SAJID IQBAL

17:18-17:21

### pH-Dependent Synergistic Enhancement of U(VI) Transport by Phosphate and Bentonite Colloids

Speaker

Yanhui Wang

17:21-17:24

### Stabilization of chloride molten salts waste by vitrification

Speaker

Eva De Visser - Týnová

17:24-17:27

### Immobilization of $^{99}\text{Tc}$ by iron carbonate minerals

Speaker

Zarina Salkenova

17:27-17:30

### Evaluation of tungsten activation by neutrons generated during D+D nuclear fusion reactions

Speaker

Hee Soo Kim

17:30-17:33

### Investigating mineral sequence effects on radionuclide retardation in reactive transport models.

Speaker

Liya Tomy

17:33-17:36

### Development of an AI-Driven Intelligent Hybrid System for Real-Time Optimization and Advanced Decontamination of Metallic Radioactive Waste

Speaker

HUIGYEONG KIM

17:36-17:39

### Development of a virtual reality-controlled robotic arm for the retrieval of hard-to-reach objects.

Speakers

Boris Andris, Pavel Nykl

17:39-17:42

**Fixation of Non-Standard Intermediate-Level Liquid Radioactive Waste from NPP A1**

**Speakers**

Boris Andris, Pavel Nykl

17:42-17:45

**Radionuclide sorption efficiency depending on the basal-to-edge surface ratio of muscovite**

**Speaker**

Sieglinde Holzknecht

17:45-17:48

**Low-temperature decontamination medium for primary circuit of NPPs**

**Speaker**

Jan Houzar

17:48-17:51

**Preparation of Simulated MOX Ceramic Nuclear Fuel Microspheres by Microwave-assisted Internal Gelation Process**

**Speaker**

Wei Tian

17:51-17:54

**Analysis Development at Japan Nuclear Fuel Chemical Analysis Co., Ltd (J-CAL)**

**Speaker**

Eimitsu Fujita

17:54-17:57

**Adsorption and Separation of Heat-generating Elements and Platinum Group Metals from High-Level Liquid Waste using Extractant-impregnated Amberlite XAD7-HP Adsorbent**

**Speaker**

Masahiko Kubota

17:57-18:00

**From Liquid to Solid: Stabilization of Uranium Waste by PSI-Based Coagulation**

**Speaker**

Lucie Bartl

18:00-18:18

**Geopolymer matrices and their behaviour under surface repository conditions**

**Speaker**

Barbora Vašková

18:30

17:15

**Separation & Speciation: Poster session**

Session | Location: Gallery

17:15-17:18

**Recovery Correction and Quantitative Reliability Assessment of <sup>99</sup>Tc Radiochemical Analysis Using Rhenium as a Surrogate Tracer and TEVA Resin Separation**

**Speaker**  
BOGIL KIM

17:18-17:21

**A study on removal of Cs from simulated seawater by ammonium phosphomolybdate (AMP) and natural zeolite alginates**

**Speakers**  
CHUAN-PIN LEE, Yu-Hung Wang, Liang-Yu Tao

17:21-17:24

**Ti-based core-shell shaping for Ac-225/Bi-213 separation**

**Speaker**  
Thomas Staes

17:24-17:27

**Development of radiation-stable and selective sorbent materials for direct <sup>213</sup>Bi generators**

**Speaker**  
Jasper Mampaey

17:27-17:30

**Efficient removal of perrhenate (ReO<sub>4</sub><sup>-</sup>) as a non-radioactive surrogate for pertechnetate (TcO<sub>4</sub><sup>-</sup>) from high-chloride and nitrate media by bis-guanidinium salts**

**Speaker**  
Lapislazuli Chekrain Valappil

17:30-17:33

**Automation of AMP Pre-treatment for 60 L Seawater Cs-137 Analysis: Comparative Evaluation of Recovery Yield and Reduction of Hands-on Time**

**Speaker**  
BOGIL KIM

17:33-17:36

**Effect of sulfation and complexation on the sorption of La, Eu and Lu on tetravalent metal oxides**

**Speaker**  
Topi Suominen

17:36-17:39

**Rapid chemical separation of niobium for  $^{94}\text{Nb}$  activity measurement in radioactive wastes**

**Speakers**

Gyuhyeon Kim, Kwang-Soon Choi

17:39-17:42

**Conceptual design of a tritium removal system to improve tritium removal efficiency and increase processing capacity at room temperature**

**Speaker**

Seung-il Kim

17:42-17:45

**CHALMEX Solvent Extraction for Spent Fuel Recycling: Performance, Scale-Up and Safety Considerations**

**Speaker**

Letizia Di Matteo

17:45-17:48

**Comparison of the effectiveness of various extraction agents for separating europium into ionic liquids**

**Speaker**

Daria Matějková

17:48-17:51

**ELECTROCHEMICAL BEHAVIOUR OF SELECTED METALS IN IONIC LIQUIDS FOR ELECTRODEPOSITION APPLICATIONS**

**Speaker**

Michal Fícel

17:51-17:54

**Static Testing Varying Ratio of Iodine or Iodomethane with Silver Zeolite - Capacity and Morphology**

**Speaker**

Rachael Roenfeldt

17:54-17:57

**Separation of Zr in complex Ca rich matrices in nuclear decommissioning**

**Speaker**

Karel Burian

17:57-18:00

**Selective dissolution and Separation of Lanthanides from Simulated Spent Fuel Using Betaine-Lactic Acid Deep Eutectic Solvent**

**Speaker**

Fangli Fan

18:00-18:03

**Removal of Iron and Aluminium from Reactor Storage Pool Water Using Polymer Membranes**

**Speaker**

Kryštof Konečný

18:03-18:06

**Separation and Recovery of the Platinum Group Metals Pd, Ru and Rh by adsorption on hexacyanoferrates structures for spent nuclear fuel reprocessing**

**Speaker**

Iga Zuba

18:06-18:09

**Remarkable Separation of Trace Amount Plutonium Using a Hydrophilic Multiamide Ligand: Synthesis, Extraction, Spectroscopic, Crystal Structure and Density Functional Theory Studies**

**Speaker**

Tiansheng He

18:09-18:12

**TK300 - A new calixarene-based resin for the separation of Cs**

**Speaker**

Illarion Dovhyi

18:12-18:15

**New developments in Triskem: Preparation of extraction chromatographic separation materials based on new non-resin supports**

**Speaker**

Aude Bombard

18:15-18:18

**Sulfur-containing extraction systems for Rh, Ru and Pd in nitrate media relevant to spent nuclear fuel reprocessing**

**Speaker**

Ondřej Holas

18:30

19:30

21:00

**Socials: Beer Party**

**Session** | **Location:** Casino Conference Centre, Red Hall and Terrace

08:30

### Separation & Speciation: SEP2

Session | Location: Red Hall | Conveners: Nora Vajda, Kenneth Czerwinski

08:30-09:00

#### The Role of Group Actinide Separation Process (GrASP) for a Sustainable Fuel Cycle

Speaker

Quinn Summerfield

09:00-09:20

#### Pyrochemical Group Separation of Lanthanides from Spent Nuclear Fuel Powder

Speaker

Mu Lin

09:20-09:40

#### N,N-Dibutyl Octanamide (DBOA)-Based Solvent Systems for Actinide Co-Extraction: A TBP Alternative for the CHALMEX Process

Speaker

Esraa Darwish

09:40-10:00

#### Novel Highly Selective Bistriazolyl-Phenanthroline and Phenanthroline-Dicarboxamide Ligands for i-SANEX Separations

Speaker

Pavle Mocijac

10:00

08:30

### Nuclear Analytical Methods: NAM 1

Session | Location: Marble Hall | Conveners: Xiaolin Hou, Elisabete De Nadai Fernandes

08:30-09:00

#### The role of neutron activation analysis in the detection of errors in reference materials

Speaker

Jan Kučera

09:00-09:20

#### Updating the spectroscopy database for high-resolution Prompt Gamma Activation Analysis

Speaker

Zsolt Révay

09:20-09:40

#### Latest Developments in Application of Machine Learning Algorithms in Analysis of PGAA Spectra

Speaker

David Knežević

09:40-10:00

**INAA of sands from the Northwest China deserts, supposed source materials for Australasian tektites**

**Speaker**

Olena Bakhmachuk

10:00

10:30

**Nuclear Fuel Cycle: NFC 2**

**Session** | **Location:** Marble hall | **Conveners:** Eva De Visser - Týnová, Václav Tyrpekl

10:30-11:00

**Spark Plasma Sintering of Ceramic Fuels: New Materials and Microstructures**

**Speaker**

Marco Cologna

11:00-11:20

**Insights and correlation of microstructure and redox chemistry of surrogate MIMAS MOX ceramic materials**

**Speaker**

Egor Iwaschko

11:20-11:40

**Improvements on the manufacturing and characterization of Cr-doped UO<sub>2</sub> as evolutionary ATF materials**

**Speaker**

Abel Milena Pérez

11:40-12:00

**Experimental studies for the obtention and characterisation of a reliable analogue for Pellet-Cladding Interaction**

**Speaker**

Jone M. Elorrieta

12:00

10:30

**Radionuclides Production & Application: PAR 1**

**Session** | **Location:** Red Hall | **Conveners:** Antonia Denkova, Andreas Türler

10:30-11:00

**Ac-225 production at PanTera: from Th-229 generator produced Ac-225 towards large-scale photonuclear production**

**Speaker**

Dominic Maertens

11:00-11:20

**Production and gas-phase transport investigation of Kr and Xe radioisotopes for lead-cooled fast reactor development**

**Speaker**

Haohan ZHANG

11:20-11:40

**Modernization in processing and dissemination of experimental cross section data in EXFOR**

**Speaker**  
Naohiko Otuka

11:40-12:00

**Developing a  $^{166}\text{Dy}/^{166}\text{Ho}$ -generator using acidic alumina separation**

**Speaker**  
Marouscha Puister

12:00

12:15

**DNRC EuChemS Annual Meeting**

**Session** | **Location:** King Edward's Library | **Convener:** Jon Petter Omtvedt

13:15

13:30

**Actinoids and Transactinoids: TAN 2**

**Session** | **Location:** Red Hall | **Conveners:** Alexander Yakushev, Christoph Düllmann

13:30-14:00

**Actinide Dioxide Nanoparticles via Hydrothermal Oxalate Decomposition: The First Decade**

**Speaker**  
Karin Popa

**Location**  
Red Hall

14:00-14:20

**Unlocking the Potential of Thorium: Innovative Approaches to Detection, Separation, and Application**

**Speaker**  
Jian Lin

**Location**  
Red Hall

14:20-14:40

**Actinide endohedral fullerenes: novel actinide bonding behaviors inside fullerene cages**

**Speaker**  
Ning Chen

**Location**  
Red Hall

14:40-15:00

**New insights into the selective extraction of Am from a PUREX raffinate solution**

**Speaker**  
Katharina Peters

15:00

13:30

## Nuclear Analytical Methods: NAM 2

Session | Location: Marble Hall | Conveners: Mojmir Némec, Jixin Qiao

13:30-13:48

### Isolation and quantification of anthropogenic, cosmogenic and interstellar radionuclides in deep-sea ferromanganese crusts

Speaker

Dominik Koll

13:48-14:06

### Optimization of $^{41}\text{Ca}$ determination using 300 kV accelerator mass spectrometry at MILEA

Speaker

Filip Babčícký

14:06-14:24

### Simultaneous Analytical Method for $^{237}\text{Np}$ , Pu isotopes, $^{241}\text{Am}$ and $^{244}\text{Cm}$ in small-size seawater using 300 kV AMS system

Speaker

Yang Wu

14:24-14:42

### Development of a simultaneous measurement method for actinides by laser ablation coupled to inductively coupled plasma triple quadrupole mass spectrometry (LA-ICP MS/MS)

Speaker

Jeremy Marechal

14:42-15:00

### Determining $^{236}\text{U}$ , $^{239}\text{Pu}$ and $^{240}\text{Pu}$ concentrations, along with $^{236}\text{U}/^{238}\text{U}$ , $^{236}\text{U}/^{239}\text{Pu}$ and $^{240}\text{Pu}/^{239}\text{Pu}$ ratios by quadrupole mass spectrometry - methodological considerations

Speaker

Anna Cwanek

15:00

15:30

## Environmental Radioactivity: RER 2

Session | Location: Red Hall | Conveners: Nick Evans, Ana Noguera

15:30-16:00

### Colloid-Facilitated Transport of Uranium Elevates Environmental Risk: A Key Challenge for Immobilization-Based Remediation

Speaker

Duoqiang Pan

16:00-16:20

### Cobalt and europium adsorption on nanoplastic particles

Speaker

Galina Lujanieni

16:20-16:40

**Tracing Nuclear Fallout: Questioning the dominance of weapon  $^{137}\text{Cs}$  in wild boar**

**Speaker**  
Tobias Blenke

16:40-17:00

**Global fallout pattern of  $^{137}\text{Cs}$  recorded in Greenland ice core: Transport, scavenging, and methodological constraints**

**Speaker**  
XUE ZHAO

17:00

15:30

**Separation & Speciation: SEP 3**

Session | Location: Marble Hall | Conveners: Pavle Mocilac, Jan John

15:30-15:48

**Water-Soluble Phenanthroline Masking Agent for Selective Separation of Am(III) and Ln(III) by Competitive Extraction**

**Speaker**  
Ze-Yi Yan

15:48-16:06

**EBTzPhen: a new CHON-compliant ligand for the selective separation of Am(III) from Cm(III) and light lanthanides in the AmSel process**

**Speaker**  
Giulia De Amicis

16:06-16:24

**Anodic Electrodeposition for the Separation of Radionuclides of Transition Metals**

**Speaker**  
Sebastian Siegrist

16:24

16:24

**Education: EDU 1**

Session | Location: Marble Hall | Conveners: Pavle Mocilac, Jan John

16:24-16:42

**Future Perspectives of Nuclear and Radiochemistry Education in the New Era of the Silk Road according to Chinese Nuclear Energy Development**

**Speaker**  
Wangsuo Wu

16:42-17:00

**Development of Education in the Nuclear Sector in Slovakia: Current Challenges and Strategic Direction**

**Speaker**  
Eva Viglašová

17:00

17:15

**Education: Poster session**

Session | Location: Gallery

17:15-17:18 **RadLab: The mobile student lab**

**Speaker**

Lisa Friesen

17:18-18:39 **Introduction of the Radiation Education Forum in Japan**

**Speaker**

YOSHIMUNE OGATA

18:45

17:15

**Radionuclides Production & Application: Poster session**

Session | Location: Gallery

17:15-17:18

**Development of an Accelerator-Based  $^{68}\text{Ge}$  Production Method Using Ga-Ni Electroplated Targets at a 30 MeV Cyclotron Facility**

**Speaker**

taylan ÖZBEY

17:18-17:21

**Development of a  $^{57}\text{Co}$  Production Method Based on Electroplated  $^{58}\text{Ni}$  Targets and DGA Resin Separation**

**Speaker**

Gazi Güneş

17:21-17:24

**Assessment of blood mineral profile in ewes using  $^{65}\text{Zn}$ -labelled nano- and microparticles**

**Speaker**

Elisabete De Nadai Fernandes

17:24-17:27

**HPLC Investigation of  $^{211}\text{At}$  in Aqueous Solutions under Various Experimental Conditions Relevant to Radiopharmaceutical Applications**

**Speaker**

Feng Yin

17:27-17:30

**Secondary neutron effect in low-energy charged-particle activation cross section measurement**

**Speaker**

Naohiko Otuka

17:30-17:33  **$^{237}\text{Np}$  production from a  $^{238}\text{U}$  target bombarded with protons**

**Speaker**

Anna Cwanek

17:33-17:36 **Chromatographic analysis of astatine-211 methanol solutions**

**Speaker**  
Masashi Murakami

17:36-17:39

**Adsorption and Separation Behavior of Yttrium from Strontium in Acid Solution Using DODGAA-Impregnated Adsorbent**

**Speaker**  
Kai Taneichi

17:39-17:42 **Gamma-Recoil Survival of Neutron-Activated Gold Complexes**

**Speaker**  
Atsushi Toyoshima

17:42-18:39

**Preparation of a  $^{228}\text{Ra}$  target for  $^{225}\text{Ac}$  production via the  $^{228}\text{Ra}(n,\gamma)^{229}\text{Ra}$  reaction under thermal neutron irradiation**

**Speaker**  
Naoki Osawa

18:45

17:15

**Nuclear Analytical Methods: Poster session**

Session | Location: Gallery

17:15-17:18

**Limits of generic efficiency calibration in HPGe gamma-ray spectrometry: A multi-geometry assessment**

**Speaker**  
Tereza Tomanova

17:18-17:21 **Asymmetric alpha spectra peak fit in ALF software**

**Speaker**  
Jerzy-Wojciech Mietelski

17:21-17:24

**Ultrasensitive analytical method for total Pu and Np in aerosol samples by accelerator mass spectrometry**

**Speaker**  
Yang Wu

17:24-17:27

**Optimization of analytical procedures for  $^{55}\text{Fe}$  and  $^{63}\text{Ni}$  radionuclides in seawater**

**Speaker**  
Da-Young Kam

17:27-17:30

**Interference-free separation of  $^{93}\text{Zr}$  with TK400, ZR and TBP resins and its quantification by LSC**

**Speaker**

Flora Mbouyom

17:30-17:33

**Actinides and  $^{129}\text{I}$  analyses with the 300 kV multi-isotope low-energy AMS**

**Speaker**

Maoyi Luo

17:33-17:36

**Neutron activation analysis as a preliminary estimate of the activation (of individual components) of concrete**

**Speaker**

Daniela Veselá

17:36-17:39

**Comparative Performance Evaluation of LSC and a Semiconductor Beta Detector for Environmental Radioactivity Analysis**

**Speaker**

Mee Jang

17:39-17:42

**Detection of the radionuclide by porous scintillator**

**Speaker**

Yaxing Wang

17:42-17:45

**Efficient recovery of  $^{226}\text{Ra}$  from ocean waters using strong acid cation exchange resin**

**Speaker**

Filip Jędrzejek

17:45-17:48

**An Innovative LSC Methodology for Low-Level Tritium Monitoring to Support Sustainable Groundwater Management**

**Speaker**

Sy Minh Tuan HOANG

17:48-17:51

**Discriminating honeys from Brazilian Pantanal using neutron activation analysis**

**Speaker**

Vanderlei Doniseti Acastio dos Reis

17:51-17:54

**Analytical challenges in discrimination of natural background and artificial radionuclide signatures in mobile urban gamma spectrometry for CBRN response**

**Speaker**

Barbara Wiaderek

17:54-17:57

**A Database of Terrorist Incidents Involving Hazardous Materials as a Tool for Radiological and CBRN Risk Assessment**

**Speaker**

Klaudia Rzakowska

17:57-18:00

**Development of a compact analytical device based on silicon drift detector for determination of electron-capture decay radionuclides**

**Speaker**

Ayako Nitta

18:00-18:03

**Investigation of internal standards for precise determination of Ni by Liquid Electrode Plasma Atomic Emission Spectrometry (LEP-AES)**

**Speaker**

YUUKI MANOME

18:03-18:06

**Urban mining of rare earth elements from construction and demolition waste evaluated by neutron activation analysis**

**Speaker**

Antonio N. Zamuner Filho

18:06-18:09

**Rapid determination of  $^{90}\text{Sr}$  in seawater by automated radiochemical separation followed by TQ-ICP-MS**

**Speaker**

MyoungJung Kim

18:09-18:12

**Real-time Monitoring of Dynamic Distribution Coefficients in Solvent Extraction**

**Speaker**

Adelaide Fanner

18:12-18:15

**Simulation of different prompt gamma activation set-ups at MLZ Garching**

**Speaker**

Edis Hrustanbegovic

18:15-18:18

**Determination of nitrogen in powdered synthetic nanodiamonds and CVD diamonds by instrumental photon activation analysis**

**Speaker**

Ivana Krausová

18:18-18:21

**Determination of lanthanoids in NIST SRM 1547 and SRM 1573a by INAA and RNAA**

**Speaker**

Jiří Mizera

18:21-18:24

**Determination of hydrocarbon oil index in radioactive waste and transfer of radioactivity during sample preparation**

**Speaker**

Zdeňka Zachová

18:24-18:27

**Electron Accelerator Microtron MT25 as a suitable Source for Photon Activation Analysis**

**Speakers**

David Chvátíl, Václav Olšanský

18:27-18:30

**Validation of a method for the radiochemical separation of Mo-93 in radioactive waste using extraction chromatography and measurement of a solid sample by X-ray spectrometry**

**Speaker**

Olga Roszkopfová

18:30-18:33

**New development in Triskem: TK227 Resin**

**Speaker**

Illarion Dovhyi

18:33-18:39

**Radiostrontium Analysis using Barium Silicate-Based Sr Sorbent II: Comparison of Various Measurement Methods**

**Speaker**

YOSHIMUNE OGATA

18:45

20:00

21:45

**Socials: Concert**

**Session** | **Location:** Marble Hall

08:30

## Nuclear Fuel Cycle: NFC 3

Session | Location: Red Hall | Conveners: Nick Evans, Thorsten Stumpf

08:30-09:00

### How to efficiently decommission activated concrete? Radiochemical and structural investigations to support a numerical model of German NPPs

Speaker

Maud Zilbermann

09:00-09:20

### Radiochemical Aspects in Siting of Geological Disposal Facility

Speaker

Václava Havlová

09:20-09:40

### THE BEHAVIOUR OF epsilon-PARTICLES IN THE SPENT NUCLEAR FUEL IN CEMENTITIOUS WATERS: RUTHENIUM RELEASE UNDER OXIDIZING AND REDUCING CONDITIONS

Speaker

Javier Giménez

09:40-10:00

### Use of a Novel Electrochemical Gradient Technique to Simulate Radioactive Contamination on Stainless Steel

Speaker

Khalifa Alsulami

10:00

08:30

## Separation & Speciation: SEP 4

Session | Location: Marble Hall | Conveners: Duoqiang Pan, Paul Dutheil

08:30-08:48

### Controlled Synthesis of Phosphonic Acid-Based Polymers and Their Adsorption Performance for Uranium(VI) in Strongly Acidic Environments

Speaker

Zhineng Wu

08:48-09:06

### Study on preparation of boron nitride-based adsorbents and their adsorption performance for uranium and iodine

Speaker

Peng Zhang

09:06-09:24

### Study on the Mechanism of Highly Selective Separation of Th(IV)/U(VI) Using COFs Designed for Precise Coordination Pockets

Speaker

zengyuan li

09:24–09:42

**Integrated Spectro-Electrochemical Study of Technetium Redox Reactions and Ligand-Dependent Speciation in Aqueous Media**

**Speaker**

Mario Löw

09:42–10:00

**Reduction of  $^{226}\text{Ra}$  in Moroccan phosphogypsum using combined  $\text{CaCl}_2$  treatment and acid leaching**

**Speaker**

Loubna El Faroudi

10:00

10:30

**Education: EDU 2**

**Session** | **Location:** Red Hall | **Conveners:** Marko Štok, Elena Macerata

10:30–10:48

**IAEA Approaches to Knowledge Transfer in Radioactive Waste Management**

**Speaker**

Václava Havlová

10:48–11:06

**Radiochemistry Research, Education, and Training Program in Action**

**Speaker**

WENDEE JOHNS

11:06–11:24

**Utilizing Gap Analysis for Developing Undergraduate Radiochemistry Talent**

**Speaker**

Kenneth Czerwinski

11:24–11:42

**Modernizing Lab Preparation: Implementing Digital Interactive Scripts in a Physics Lab Course**

**Speaker**

Charlotte Fischer

11:42–12:00

**Bringing nuclear science to master students from non-nuclear fields. A case study of ENEN2plus 14C workshop**

**Speaker**

Jan Kameník

12:00

10:30

**Nuclear Analytical Methods: NAM 3**

**Session** | **Location:** Marble Hall | **Conveners:** Jiří Janda, Zsolt Révay

10:30–10:48

**Radioanalytical method for the separation of  $^{225}\text{Ac}$  for bioassay monitoring**

**Speaker**

Zsuzsanna Macsik

10:48-11:06

**Isotopic techniques to trace the authenticity of beef from a terroir in the Brazilian Cerrado biome**

**Speaker**

Thales Nagayoshi Alves Kornfeld

11:06-11:24

**Energy and position determination of alpha and beta particles with a Timepix detector chip**

**Speaker**

Jeroen Plomp

11:24-11:42

**Comparison of Neutron activation analysis (NAA) with a digestion/ICP-MS protocol for the analysis of lichens in two mining-affected areas in Northern Ontario (Canada).**

**Speaker**

Francois Caron

11:42-12:00

**Overcoming Isobaric Interferences in  $^{36}\text{Cl}$  Analysis: An Optimized ICP-MS/MS Strategy, Improved  $^{36}\text{Cl}$  Determination in Nuclear and Environmental Samples by ICP-MS/MS**

**Speaker**

Amayes Gaston-Bellegarde

12:00

13:00

18:00

**Socials: Conference Trip**

Session | Location: Surroundings

08:30

### Nuclear Fuel Cycle: NFC 4

Session | Location: Marble Hall | Conveners: Michael Ojovan, Christian Schreinemachers

08:30-09:00

#### Competitive sorption effects of Al on the retardation of Eu by quartz and K-feldspar: Experimental and mechanistic modelling insights

Speaker

Susan Britz

09:00-09:20

#### Pyrite solubility and its capacity to immobilize <sup>99</sup>Tc in metabolite-rich environments

Speaker

Vijay Kumar Saini

09:20-09:40

#### Leaching of irradiated MOX fuel under repository-relevant conditions: Impacts on microstructure

Speaker

Christian Schreinemachers

09:40-10:00

#### Competitive Sorption of Trivalent Metals on Hematite: Relevance for Actinide Retention in Repository Environments

Speaker

Stephan Hilpmann

10:00

08:30

### Nuclear Analytical Methods: NAM 4

Session | Location: Red Hall | Conveners: Zsuzsanna Macsik, Jan Kučera

08:30-09:00

#### Radioanalytical Chemistry for In-situ and On-line Determination of Radionuclides

Speaker

Xiaolin Hou

09:00-09:20

#### A simplified and robust method for the non-radiometric determination of Tc-99 in spent ion exchange resins

Speaker

Gabriele Magugliani

09:20-09:40

#### Novel HCl-free analytical method using cation-exchange resin for highly selective determination of <sup>113m</sup>Cd

Speaker

Van-Khoai Do

10:00

09:40-10:00

**Work Package 5 - ICARUS within the EURAD-2 programme: Innovative ChARacterization techniques for large volUmeS**

**Speaker**  
Eros Mossini

10:30

**Environmental Radioactivity: RER 3**

**Session** | **Location:** Marble Hall | **Conveners:** Claudia Landstetter, Sebastian Fichter

10:30-10:48

**Tc soil to plant uptake from pot experiments to imaging at the nanoscale**

**Speaker**  
Clemens Walther

10:48-11:06

**Influence of soil amendment with fly ash from Coal-Fired Power Plant on the transfer of naturally occurring radionuclides to wheat**

**Speaker**  
Francisco Javier Guillén Gerada

11:06-11:24

**Distribution of Natural Radionuclides and Dose Assessment in Phosphate-Fertilized Soils**

**Speaker**  
Ana Noguera

11:24-11:42

**Doramad - The Story of Radioactive Toothpaste**

**Speaker**  
Nick Evans

11:42-12:00

**Adaptations of Phaseolus vulgaris crop root exudate release to U(VI) in hydroponic environment**

**Speaker**  
Julia Maetzkow

12:00

10:30

**Radiopharmaceuticals: RPH1**

**Session** | **Location:** Red Hall | **Conveners:** Martina Benešová-Schäfer, Constantin Mamat

10:30-10:56

**Immunomodulatory Nanoradiopharmaceuticals—Preclinical and clinical investigations**

**Speaker**  
Kattesh Katti

10:56-11:12

**Ultra-small gold nano-particles as carriers of Auger electron emitters for improved radionuclide targeted therapy**

**Speaker**

Antonia Denkova

11:12-11:28

**Development of Cage-Like Macropa Chelators for the Stable Complexation of Barium-131 and Radium-223**

**Speaker**

Constantin Mamat

11:28-11:44

**Can the astatine atom in radiopharmaceuticals be involved in both halogen and hydrogen bond interactions?**

**Speaker**

Lu Liu

11:44-12:00

**Synthesis and characterization of macropa-based complexes for the stable coordination of radiometals**

**Speaker**

Rodrigo Castro Biondo

12:00

13:30

**Radiation Chemistry: RCH 1**

**Session** | **Location:** Red Hall | **Conveners:** Eros Mossini, Jan Bárta

13:30-14:00

**Extreme Light Infrastructure - Research Opportunities in Radiation Science**

**Speaker**

Martin Precek

14:00-14:20

**Determination of Hydroxyl Radicals in Aqueous Systems Exposed to Low-Energy X-Rays**

**Speaker**

Kristýna Havlinová

14:20-14:40

**Scintillating (Ce,La)F<sub>3</sub>:Tb<sup>3+</sup> nanoparticles for XPDT: evaluation of dark and radiation-induced cytotoxicity.**

**Speaker**

Xenie Lytvynenko

14:40-15:00

**Deepest studies of the effects and implications of TODGA radiolytic degradation compounds on actinides partitioning processes**

**Speaker**

Hitos Galán

15:00

13:30

## Separation & Speciation: SEP 5

Session | Location: Marble Hall | Conveners: Alex Tarancon Sanz, Mojmir Němec

13:30-13:48

### Inorganic Resin Materials for the Separation of Ra-223 and Ac-225

**Speaker**

Esther Spruit

13:48-14:06

### Ti-based core-shell shaping for Ac-225/Bi-213 separation

**Speaker**

Thomas Staes

14:06-14:24

### The development of a separation method for <sup>111</sup>Ag from neutron-irradiated Pd targets using dimethylglyoxime

**Speaker**

Filippos Karantoumanis

14:24-14:42

### Scrubbing of radium from a loaded organic phase in milliflow reactors: detection challenges and performance optimization for medical radioisotope purification by solvent extraction

**Speaker**

Samuele Servici

14:42-15:00

### Extraction of radon from spring water into vegetable oils: Production of highly active preparations for medicinal purposes

**Speaker**

Viktor Goliás

15:00

15:30

## Radionuclides Production & Application: PAR 2

Session | Location: Red Hall | Conveners: Jiří Mizera, Dominic Maertens

15:30-15:48

### Molybdenum Disulfide Nanotubes for the Next-Generation <sup>99</sup>Mo/<sup>99m</sup>Tc Generator

**Speaker**

Gauri

15:48-16:06

### Photonuclear Reactions: The Future of Large Scale Theranostic Radionuclide Production for Medical Applications

**Speaker**

Andreas Türler

16:06-16:24

### Production and radiochemical separation of no-carrier-added <sup>149</sup>Pm for medical application

**Speaker**

Xiuyun Chai

16:24-16:42

**Proton-Induced Reactions at Intermediate Energies: The Missing Experimental Basis and the Infrastructure Bottleneck**

**Speaker**

Tomasz Mróz

16:42-17:00

**Production and radiochemical separation of  $^{255}\text{Fm}$  for nuclear science applications**

**Speaker**

Andrea Tzeitel Loria Basto

17:00

15:30

**Nuclear Analytical Methods: NAM 5**

**Session** | **Location:** Marble Hall | **Conveners:** Nora Vajda, Eros Mossini

15:30-15:48

**Selection criteria for ionic liquids for actinide electrodeposition in alpha-spectrometric source preparation**

**Speaker**

Tereza Tomanová

15:48-16:06

**A Study of Simple Alpha Source Preparation using a Micro-coprecipitation Method**

**Speaker**

MYUNG HO LEE

16:06-16:24

**Optimized Characterization Strategy for Activation Products in NPP Metallic Waste**

**Speaker**

Tae-Hong Park

16:24-16:42

**Validation and verification of direct tritium determination method from waters (drinking, surface, ground waters, waste waters and operational from nuclear facilities)**

**Speaker**

Dominik Juracka

16:42-17:00

**From linear/impregnated to crosslinked/porous/covalent grafted plastic scintillation resins: a robust plastic scintillator platform for high capacity separation and on column detection of radionuclides**

**Speaker**

Alex Tarancon Sanz

17:00

17:15

**Environmental Radioactivity: Poster session**

Session | Location: Gallery

17:15-17:18

**Phosphorylation of Amino Acids with a PO<sub>2</sub> Synthase and Their Interaction with f-Elements**

Speaker

Jeremy Long

17:18-17:21

**Synthesis of Phosphorylated Peptides Using (py)2PO<sub>2</sub>[OTf] and Their Interaction with f-Elements**

Speaker

Tom Pfandt

17:21-17:24

**Accelerator Mass Spectrometric Analysis of <sup>129</sup>I/<sup>127</sup>I ratios in INL sagebrush modelling FCF pyroprocessing's impact on environmental iodine levels in the Idaho desert**

Speaker

Jacob Brookhart

17:24-17:27

**Retrospective determination of <sup>131</sup>I thyroid equivalent doses via <sup>129</sup>I AMS analysis**

Speaker

Michal Fejgl

17:27-17:30

**Onboard Rapid Determination of Radiocesium in Seawater: Development and Operational Application in Open-Ocean Monitoring**

Speakers

Jaeeun Lee, Intae Kim

17:30-17:33

**Bacillus pasteurii Ureolytic Products Coupled with U(VI) Immobilization: The Evolutionary process and action mechanism of Carbonate and Metabolic Protein**

Speaker

Xiaojing Lu

17:33-17:36

**Basin-scale redistribution of Cs-137 and Pu-239,240 in the western Indian Ocean: A 6-decade perspective**

Speaker

Jaeeun Lee

17:36-17:39

**Hidden bioremediation potential: metal-tolerant rhizobacteria capable of barium and strontium removal from uranium-impacted ecosystems**

**Speaker**

Vira Vellanyk

17:39-17:42

**Spatially Resolved and Radiochemical Characterization of Strontium in Ivory by Combined LIBS and AMS Analysis**

**Speaker**

Alena Zavadilová

17:42-17:45

**From Surfaces to Transport: In Situ Insights into f-Element Retention under Close to Nature Conditions**

**Speaker**

Andrea Kozłowski

17:45-17:48

**Distribution of  $^{137}\text{Cs}$  in the Tropical Pacific: Impact of Climate Variability on the North Equatorial Current (NEC)**

**Speaker**

Eun-Ran Baek

17:48-17:51

**Kinetics of cobalt and europium adsorption on nanoplastic particles in natural waters**

**Speaker**

Galina Lujanieni

17:51-17:54

**Determination of isotope-specific soil-plant transfer factors for  $^{226}\text{Ra}$  and  $^{228}\text{Ra}$  in German crops**

**Speaker**

Sergiy Dubchak

17:54-17:57

**Uranium concentrations in groundwater on a uraniumiferous region: Case of Santa Quitéria, Ceará State, Brazil**

**Speaker**

José Marcus Godoy

17:57-18:00

**Study of radiocesium removal from aqueous environment using high-charge swelling clays**

**Speaker**

Katarzyna Szarłowicz

18:00-18:03 **A study on the analysis of  $^{14}\text{C}$  activity in biological samples in Taiwan**

**Speaker**

Liang-Yu Tao

18:03-18:06

**High-Resolution Environmental Radiation Baseline for Nuclear Emergency Preparedness in Hanoi (Vietnam)**

**Speaker**

Tuan HOANG

18:06-18:09

**Radiological Characterization and Indoor Health Risk Assessment of Fly Ash-Based Building Materials of Some Power Plants in Vietnam**

**Speaker**

Tuan HOANG

18:09-18:12

**Neutron activation analysis for assessing potential use of recycled construction and demolition wastes as agricultural remineralizers**

**Speaker**

Luiz Antonio Gonçalves de Azevedo

18:12-18:15

**Radioactive Sleep Masks**

**Speaker**

Nick Evans

18:15-18:18

**Anthropogenic and natural radionuclides in tissues of the Wilson's Storm Petrel (*Oceanites oceanicus*) breeding on King George Island (Maritime Antarctica)**

**Speaker**

Mikolaj Wielgat

18:18-18:20

**Radioactivity and radon exhalation in bedrocks and soils used in traditional architecture in Korea**

**Speaker**

Sang-Han Lee

18:20-18:22

**Optimizing phytoremediation efficiency of soils from German nuclear facilities**

**Speaker**

Ninja Braukmüller

18:22-18:24

**Radiostrontium Analysis using Barium Silicate-Based Sr sorbent I: Sorption Characteristics for Application in Seawater**

**Speaker**

Haruka Minowa

18:24-18:26

**Determination of  $^{129}\text{I}$  in Natural Samples from the Czech Republic Using AMS**

**Speaker**  
Vít Mareš

18:26-18:28

**Sorption of Cs(I) on Czech bentonite BCV\_2017 under synthetic groundwater conditions**

**Speaker**  
Erik Marenčák

18:28-18:30

**Determination of  $^{236}\text{U}$  in aqueous and other environmental samples from the area of the Czech Republic**

**Speaker**  
Tomáš Prášek

18:30

17:15

**Radiation Chemistry: Poster session**

Session | Location: Gallery

17:15-17:17

**First studies of Bis-Ethoxy BtzPhen ligand for the CHON compliant AmSel Process**

**Speaker**  
Margherita Grieco

17:17-17:20

**$\gamma$ -IRRADIATION EFFECT ON DIFFERENT CLAYS' STABILITY**

**Speaker**  
Alicia Negrón-Mendoza

17:20-17:23

**Chemical effects of the irradiation temperature on the radiolysis of iron-pentacarbonyl ices**

**Speaker**  
Gergő Lakatos

17:23-17:26

**Radiation Stability of CsPbBr<sub>3</sub> polymer nanocomposites**

**Speaker**  
Magdalena Rusová

17:26-17:29

**Solvent-Driven Radiolytic Transformation of HCB in Propan-2-ol under Gamma Irradiation**

**Speaker**  
Muslum Gurbanov

17:29-17:32

**Challenges in the development of a novel composite material suitable for colorimetric detection of gamma radiation**

**Speaker**  
Klára Fricová

17:33-17:36

**Investigating the capacity and damage of ion exchange resins upon irradiation at RMC's SLOWPOKE-2 nuclear reactor**

**Speaker**  
Francois Caron

17:36-17:39

**The influence of Tb<sup>3+</sup> content on La<sub>1-x</sub>Tb<sub>x</sub>F<sub>3</sub> and Ce<sub>0,15</sub>La<sub>0,85-x</sub>Tb<sub>x</sub>F<sub>3</sub> properties**

**Speaker**  
Marie Urbanová

17:39-18:30

**Advanced Fenton Oxidation of Simulated Spent Mixed-Bed Ion-Exchange Resins**

**Speaker**  
Eros Mossini

18:30

17:15

**Radiopharmaceuticals: Poster session**

Session | Location: Gallery

17:15-17:18

**Experience with the production of <sup>68</sup>Ga- and <sup>64</sup>Cu-labelled radiopharmaceuticals in BIONT**

**Speaker**  
Pavol Rajec

17:18-17:21

**NuCapCure - Development of innovative proton and neutron therapies with high cancer specificity by 'hijacking' the intracellular chemistry of haem biosynthesis**

**Speaker**  
Daniela Veselá

17:21-17:24

**Preparation of terbium-161 labeled radioimmunoconjugates based on monoclonal antibodies**

**Speaker**  
Barbora Brzková

17:24-18:30

**Optimization of the Preparation of [<sup>161</sup>Tb]Pertuzumab Radioimmunoconjugates**

**Speaker**  
Tereza Janská

18:30

18:30

## **Student Poster Competition: The Award Ceremony**

**Session** | **Location:** Red Hall

19:00

20:00

## **Socials: Jam Band Session**

**Session** | **Location:** Marble Hall

21:15

21:30

## **Socials: Good Night Drink @ Singing Fountain**

**Session**

22:30

08:30

## Nuclear Fuel Cycle: NFC 5

Session | Location: Marble Hall | Conveners: Susan Britz, Barbora Drtinová

08:30-08:48

### Sustainable Waste Form Development: Solidification of Cobalt Captured Zeolite Waste into Geopolymer

Speaker  
SAJID IQBAL

08:48-09:06

### Impact of a chabazite-rich zeolite on the retention of $^{137}\text{Cs}$ , $^{60}\text{Co}$ , and $^{99}\text{Tc}$ in metakaolin-based acid-activated geopolymers

Speaker  
Fabio Fattori

09:06-09:24

### $\text{MgNa}_3\text{H}(\text{PO}_4)_2$ sorbent for purification of wastewater from activated corrosion products of reactor structural materials

Speaker  
Elizaveta Artiushova

09:24-09:42

### The behaviour of Tc(I) in the environment: A study of the interaction of $[\text{Tc}(\text{CO})_3(\text{H}_2\text{O})_3]^+$ on minerals

Speaker  
Caroline Börner

09:42-10:00

### Radionuclide Sorption on Natural, Synthetic and Composite Sorbents

Speaker  
Marek Hupian

10:00

08:30

## Nuclear Analytical Methods: NAM 6

Session | Location: Red Hall | Conveners: Jan Kameník, Myung Ho Lee

08:30-08:48

### Spectroscopic Tools for Online Monitoring Across Various Solvent Extraction Systems

Speaker  
Justin Cooper

08:48-09:06

### Feasibility study for the usage of 3D printed tools in a radiochemical laboratory

Speaker  
Patrick Haaß

09:06–09:24

**Strengthening Global Radioanalytical Reliability: An Integrated Metrological Infrastructure for Decommissioning, Environmental Monitoring, and Waste Characterization**

**Speaker**  
Sang-Han Lee

09:24–09:42

**Improving the sensitivity of atmospheric  $^{14}\text{C}$  measurement by liquid scintillation counting through method optimization**

**Speaker**  
Hugo JAEGLER

09:42–10:00

**Tools for the radiochemist, from method development to calibration to tracers to proficiency testing**

**Speaker**  
Lawrence Jassin

10:00

10:30

**Environmental Radioactivity: RER 4**

**Session** | **Location:** Marble Hall | **Conveners:** Rainer Kadan, Galina Lujaniene

10:30–10:48

**Spatiotemporal distributions and mass budgets of artificial radionuclides (Cs-137 and Pu-239,240) in the seas surrounding Korea**

**Speaker**  
Jaeun Lee

10:48–11:06

**Assessment of the actinide isotopic fingerprint and fractionation in soil samples from a nuclear research site**

**Speaker**  
Sebastian Fichter

11:06–11:24

**Current levels of radionuclide contamination and dose rates in fish of the Chernobyl exclusion zone**

**Speaker**  
Dmitri Gudkov

11:24–11:42

**Radionuclides transport with groundwater in Chernobyl exclusion zone: geochemical modelling coupled to sensitivity analysis**

**Speaker**  
Inna Iarmosh

11:42–12:00

**Danube monitoring of  $^{137}\text{Cs}$ ,  $^{239}\text{Pu}/^{240}\text{Pu}$ , and  $^{90}\text{Sr}$  in the years 2017–2024**

**Speaker**  
Krystle Elbers

12:00

10:30

## Separation & Speciation: SEP 6

Session | Location: Red Hall | Conveners: Viktor Goliáš, Sang-Han Lee

10:30-10:48

### Spectroscopic Insights into Cm(III) Coordination with Unsymmetrically Substituted Diglycolamides

Speaker

Thomas Sittel

10:48-11:06

### Innovative and sustainable TODGA-based solvents: redesigning the organic phase for SNF recycling

Speaker

Massimiliano Federico Silvio Tentorio

11:06-11:24

### Assessment of TODGA degraded solvent in the AmSel process

Speaker

Iván Sánchez-García

11:24-11:42

### Ab initio study of thermodynamic properties of ruthenium-nitrosyl system

Speaker

LORIS GELIN

11:42-12:00

### Volatilization of Ru to RuO<sub>4</sub> and liquid-liquid extraction methods for its recovery from spent nuclear fuel

Speaker

Michael Seidel

12:00

12:00

12:30

## Socials: Closing Ceremony

Session | Location: Marble Hall

For your notes

For your notes

For your notes



# 20<sup>th</sup> Radiochemical Conference

## Organizers



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