

Program

10-15 May 2026



RadChem 2026

Casino Conference Centre
Reitenbergerova 4/95, Mariánské Lázně, Czech Republic

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36

Sunday 10 May

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:**
Mojmír Němec (Czech Technical University in Prague, FNSPE, Department of Nuclear Chemistry), Zsolt Révay
(Technische Universität München - FRM II)

18:45-19:30

A life of a physicist in the radiochemical laboratory

Speaker

Jerzy-Wojciech Mietelski (The Henryk Niewodniczanski Institute of Nuclear Physics, Polish Academy of Sciences (IFJ PAN))

19:30

19:30

Socials: Welcome Reception

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

21:30

Monday 11 May

08:00

Registration

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

12:00

08:30

Plenary: PLN 1

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

Mojmír Němec (Czech Technical University in Prague, FNSPE, Department of Nuclear Chemistry), Marko Štok (Jožef Stefan Institute)

08:30–09:00

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

Speaker

Heinz Gaggeler (Paul Scherrer Institut)

09:00–09:30

Applications of cutting-edge mass spectrometry in multidisciplinary environmental studies

Speaker

Jixin Qiao (Technical University of Denmark)

09:30–10:00

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

Speaker

Kenneth Czerwinski (University of Nevada, Las Vegas)

10:00

10:00

Coffee Break

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

10:30

10:30

Plenary: PLN 2

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

Václava Havlová (International Atomic Energy Agency), Heinz Gaeggeler (Paul Scherrer Institut)

10:30–11:00

The role of actinide separation chemistry in sustainable nuclear fuel cycles

Speaker

Robin Taylor (The University of Manchester)

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 (Wuhan University of Technology)

12:00

12:00

Lunch**Break** | **Location:** Casino Conference Centre, Mirror Hall

13:30

13:30

Actinoids and Transactinoids: TAN 1**Session** | **Location:** Casino Conference Centre, Marble Hall | **Conveners:**
Václav Tyrpekl (Faculty of Science, Charles University), Andreas Türler

13:30-14:00

On the volatility and stability of the Sg(CO)₆ complex**Speaker**

Alexander Yakushev (GSI Helmholtzzentrum für Schwerionenforschung GmbH)

14:00-14:20

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

Katharina Hermainski (Johannes Gutenberg University Mainz / GSI Helmholtzzentrum Darmstadt)

14:20-14:40

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

Jakub Sochor (Czech Technical University in Prague, FNSPE, Department of Nuclear Chemistry)

14:40-15:00

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

Pavel Bartl (Czech Technical University in Prague)

15:00

13:30

Nuclear Fuel Cycle: NFC 1**Session** | **Location:** Casino Conference Centre, Red Hall | **Conveners:**
Václava Havlová (International Atomic Energy Agency), Marco Cologna (EC-JRC)

13:30-14:00

Recyclability of advanced nuclear fuels: Dissolution experiments on irradiated (U,Pu,Am)₂O₃ and (U,Am)₂O₃ fuels**Speaker**

Eva De Visser - Týnová (NRG PALLAS & FNSPE, CTU Prague)

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 (Canadian Nuclear Laboratories)

15:00

15:00

Coffee break**Break** | **Location:** Mirror hall

15:30

15:30

Environmental Radioactivity: RER 1**Session** | **Location:** Marble Hall | **Conveners:**

Jakub Kaizer (Faculty of Mathematics, Physics and Informatics, Comenius University in Bratislava), Michal Fejgl (National Radiation Protection Institute)

15:30–15:48

Determination of ^{90}Sr and Pu isotopes in soil samples from various regions in Austria over the last twenty years**Speaker**

Claudia Landstetter (AGES)

15:48–16:06

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

Michal Fejgl (National Radiation Protection Institute)

16:06–16:24

Seasonal Trends in Radionuclide Concentrations in Austrian Aerosols**Speaker**

Rainer Kadan (AGES)

16:24–16:42

Electrolytic enrichment for low-level tritium measurements for environmental monitoring**Speaker**

Paul Masselot (ASNR)

16:42–17:00

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

Jakub Kaizer (Faculty of Mathematics, Physics and Informatics, Comenius University in Bratislava)

17:00

15:30

Separation & Speciation: SEP 1**Session** | **Location:** Casino Conference Centre, Red Hall | **Conveners:**

Jiří Janda (-), Andreas Geist (Karlsruhe Institute of Technology (KIT))

15:30–16:00

Extraction chromatographic separation of all actinides using single or stacked columns**Speaker**

Nora Vajda (RadAnal Ltd.)

16:00–16:20

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

Paul Dutheil (Université de Strasbourg, CNRS, IPHC UMR 7178, 23 Rue du Loess, 67200, Strasbourg, France)

16:20–16:40

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

Speaker

Matic Dokl (Technical University of Denmark)

16:40–17:00

Chromatographic separation of ^{107}Pd for characterization of radioactive waste

Speaker

Marko Štok (Jožef Stefan Institute)

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 (Institute for Radiation Sciences, The University of Osaka)

17:18–17:21

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

Speaker

Kateřina Havelková (FNSPE CTU)

17:21–17:24

Studies on parameters affecting uranium leaching from granite

Speaker

Nektaria Varnava (Department of Chemistry, University of Cyprus)

17:24–17:27

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

Speaker

Lucie Bartl (Department of Nuclear Chemistry, Faculty of Nuclear Sciences and Physical Engineering, Czech Technical University in Prague, 115 19 Prague, Czech Republic)

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 (Kyoto Univ.)

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 (Korea Advanced Institute of Science and Technology (KAIST))

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 (NRG PALLAS)

17:24-17:27

Immobilization of ^{99}Tc by iron carbonate minerals**Speaker**

Zarina Salkenova (Helmholtz-Zentrum Dresden-Rossendorf e.V., Bautzner Landstraße 400, 01328 Dresden, Germany)

17:27-17:30

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

Hee Soo Kim (Korea Institute of Fusion Eenergy)

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 (HZDR)

17:45-17:48

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

Jan Houzar (Department of Nuclear Chemistry, Faculty of Nuclear Sciences and Physical Engineering, Czech Technical University, 115 19 Prague, Czech Republic)

17:48-17:51

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

Wei Tian (Chinese Academy of Sciences, Institute of modern Physics)

17:51-17:54

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

Eimitsu Fujita (Japan Nuclear Fuel Chemical Analysis Co., Ltd.)

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 (Tohoku University, Japan Nuclear Fuel Chemical Analysis co., Ltd)

17:57-18:00

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

Lucie Bartl (Department of Nuclear Chemistry, Faculty of Nuclear Sciences and Physical Engineering, Czech Technical University in Prague, 115 19 Prague, Czech Republic)

18:00-18:18

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

Barbora Vašková (Czech Technical University in Prague)

18:30

17:15

Separation & Speciation: Poster session

Session | Location: Gallery

17:15-17:18

Recovery Correction and Quantitative Reliability Assessment of ⁹⁹Tc 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 (Center for Energy and Environmental Research, National Tsing Hua University 300044(NTHU) Taiwan), Yu-Hung Wang (Institute of Nuclear Engineering and Science, National Tsing Hua University, Hsinchu 300044, Taiwan (R.O.C)), Liang-Yu Tao (Radiation Monitoring Center, Nuclear Safety Commission, Kaohsiung City 833172, Taiwan (R.O.C))

17:21-17:24

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

Speaker

Thomas Staes (SCK CEN)

17:24-17:27

Development of radiation-stable and selective sorbent materials for direct ^{213}Bi generators**Speaker**

Jasper Mampaey (SCK CEN)

17:27-17:30

Efficient removal of perrhenate (ReO_4^-) as a non-radioactive surrogate for pertechnetate (TcO_4^-) 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 (University of Helsinki)

17:36-17:39

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

Gyuhyeon Kim (Korasol, Co., Ltd.), Kwang-Soon Choi (Korasol, Co., Ltd.)

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 (Neosiskorea Co. Ltd.)

17:42-17:45

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

Letizia Di Matteo (Chalmers University of Technology)

17:45-17:48

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

Daria Matějková (Czech technical University in Prague, Department of Nuclear Chemistry, Brehova 7, 115 19 Prague 1, Czech Republic)

17:48-17:51

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

Michal Fícel (KJCH FJFI ČVUT)

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 (UJV Řež, a.s.)

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 (CTU in Prague, CVR Rez, Czech Republic)

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 (Czech Technical University, Institute of Nuclear Chemistry and Technology)

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 (China Institute of Atomic Energy)

18:09-18:12

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

Illarion Dovhyi (Triskem International)

18:12-18:15

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

Aude Bombard (Triskem)

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

Socials: Beer party

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

21:00

Tuesday 12 May

08:30

Separation & Speciation: SEP2

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

Kenneth Czerwinski (University of Nevada, Las Vegas), Nora Vajda (RadAnal Ltd.)

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 (Institute of Modern Physics, Chinese Academy of Sciences)

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 (Chalmers University of Technology)

09:40–10:00

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

Speaker

Pavle Mocijac (Lanzhou University)

10:00

08:30

Nuclear Analytical Methods: NAM 1

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

Xiaolin Hou (Lanzhou University), Elisabete De Nadai Fernandes (Nuclear Energy Center for Agriculture, University of São Paulo)

08:30–09:00

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

Speaker

Jan Kučera (Nuclear Physics Institute of the Czech Academy of Sciences)

09:00–09:20

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

Speaker

Zsolt Révay (Technische Universität München - FRM II)

09:20–09:40

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

Speaker

David Knežević (Technische Universität München - FRM II)

09:40-10:00

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

Speaker

Olena Bakhmachuk (1. Czech Academy of Sciences, Nuclear Physics Institute. 2. Czech Technical University in Prague, Faculty of Nuclear Sciences and Physical Engineering)

10:00

Coffee Break

Break | **Location:** Mirror Hall

10:00

10:30

10:30

Nuclear Fuel Cycle: NFC 2

Session | **Location:** Marble hall | **Conveners:**

Eva De Visser - Týnová (NRG), Václav Týrpekl (Faculty of Science, Charles University)

10:30-11:00

Spark Plasma Sintering of Ceramic Fuels: New Materials and Microstructures

Speaker

Marco Cologna (Joint Research Centre (JRC))

11:00-11:20

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

Speaker

Egor Iwaschko (Forschungszentrum Jülich GmbH)

11:20-11:40

Improvements on the manufacturing and characterization of Cr-doped UO₂ as evolutionary ATF materials

Speaker

Abel Milena Pérez (CIEMAT)

11:40-12:00

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

Speaker

Jone M. Elorrieta (CIEMAT)

12:00

10:30

Radionuclides Production & Application: PAR 1

Session | **Location:** Red Hall | **Conveners:** Andreas Türler, Antonia Denkova (TU Delft)

10:30-11:00

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

Speaker

Dominic Maertens (PanTera NV)

11:00-11:20

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

Speaker

Haohan ZHANG (Paul Scherrer Institut (PSI))

11:20–11:40

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

Naohiko Otuka (International Atomic Energy Agency)

11:40–12:00

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

Marouscha Puister

12:00

12:00

Lunch**Break** | **Location:** Mirror Hall

13:30

12:15

DNRC EuChemS Annual Meeting**Session** | **Location:** King Edward's Library | **Convener:**

Jon Petter Omtvedt (University of Oslo, Department of Chemistry)

13:15

13:30

Actinoids and Transactinoids: TAN 2**Session** | **Location:** Red Hall | **Conveners:**

Christoph Düllmann, Alexander Yakushev (GSI Helmholtzzentrum für Schwerionenforschung GmbH)

13:30–14:00

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

Karin Popa (European Commission, Joint Research Centre, Karlsruhe, Germany)

Location

Red Hall

14:00–14:20

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

Jian Lin (Xi'an Jiaotong University)

Location

Red Hall

14:20–14:40

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

Ning Chen (Soochow University)

Location

Red Hall

14:40–15:00

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

Katharina Peters (Forschungszentrum Jülich Institute of Nuclear Waste Management)

15:00

13:30

Nuclear Analytical Methods: NAM 2

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

Jixin Qiao (Technical University of Denmark), Mojmir Němec (Czech Technical University in Prague, FNSPE, Department of Nuclear Chemistry)

13:30–13:48

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

Speaker

Dominik Koll (Australian National University & Helmholtz-Zentrum Dresden-Rossendorf)

13:48–14:06

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

Speaker

Filip Babčický

14:06–14:24

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

Speaker

Yang Wu (China Institute for Radiation Protection)

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 (Autorité de Sureté Nucléaire et de Radioprotection (ASNR), PSE-ENV/SAME/LERCA, F-78110, Le Vésinet, France.)

14:42–15:00

Determining ^{236}U , ^{239}Pu and ^{240}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 (Institute of Nuclear Physics, Polish Academy of Sciences)

15:00

15:00

Coffee Break

Break | **Location:** Casino Conference Centre, Mirror Hall, Reitenbergerova 4/95, Mariánské Lázně, Czech Republic

15:30

15:30

Environmental Radioactivity: RER 2

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

Nick Evans (Nottingham Trent University), Ana Noguera (Centro Universitario Regional del Este, Universidad de la República)

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 Lujaniene (Center for Physical Sciences and Technology, Vilnius, Lithuania)

16:20–16:40

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

Tobias Blenke

16:40–17:00

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

XUE ZHAO (Department of Environmental and Resource Engineering, Technical University of Denmark)

17:00

15:30

Separation & Speciation: SEP 3**Session** | **Location:** Marble Hall | **Conveners:**

Pavle Mocijac (Lanzhou University), Jan John (České vysoké učení technické v Praze)

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 (兰彦嫣)

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 (Politecnico di Milano, Dipartimento di Energia, P.zza L. da Vinci 32, 20133 Milano)

16:06–16:24

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

Sebastian Siegrist (Paul Scherrer Institut)

16:24

16:24

Education: EDU 1**Session** | **Location:** Marble Hall | **Conveners:**

Jan John (České vysoké učení technické v Praze), Pavle Mocijac (Lanzhou University)

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 (Univerzita Komenského v Bratislave, Prírodovedská fakulta, Katedra jadrovej chémie)

17:00

17:15

Education: Poster session**Session** | **Location:** Gallery

17:15–17:18

RadLab: The mobile student lab

Speaker

Lisa Friesen (Leibniz University Hannover)

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

YOSHIMUNE OGATA (Aichi Medical University)

18:45

17:15

Radionuclides Production & Application: Poster session

Session | Location: Gallery

17:15-17:18

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

taylan ÖZBEY (Turkish Energy, Nuclear and Mineral Research Agency)

17:18-17:21

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

Gazi Güneş (TURKISH ENERGY, NUCLEAR AND MINERAL RESEARCH AGENCY (TENMAK))

17:21-17:24

Assessment of blood mineral profile in ewes using ^{65}ZnO -labelled nano- and microparticles**Speaker**

Elisabete De Nadai Fernandes (Nuclear Energy Center for Agriculture, University of São Paulo)

17:24-17:27

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

Feng Yin (Institute for Radiation Sciences, The University of Osaka)

17:27-17:30

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

Naohiko Otuka (International Atomic Energy Agency)

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

Anna Cwanek (Institute of Nuclear Physics, Polish Academy of Sciences)

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

Masashi Murakami (Institute for Radiation Sciences, The University of Osaka)

17:36-17:39

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

Speaker

Kai Taneichi (Japan Nuclear Fuel Chemical Analysis Co., Ltd.)

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

Atsushi Toyoshima (Institute for Radiation Sciences, the University of Osaka)

17:42–18:39**Preparation of a ^{228}Ra target for ^{225}Ac production via the $^{228}\text{Ra}(n,\gamma)^{229}\text{Ra}$ reaction under thermal neutron irradiation****Speaker**

Naoki Osawa (Nagaoka University of Technology)

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 (University of Defence)

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

Jerzy-Wojciech Mietelski (The Henryk Niewodniczanski Institute of Nuclear Physics, Polish Academy of Sciences (IFJ PAN))

17:21–17:24**Ultrasensitive analytical method for total Pu and Np in aerosol samples by accelerator mass spectrometry****Speaker**

Yang Wu (China Institute for Radiation Protection)

17:24–17:27**Optimization of analytical procedures for ^{55}Fe and ^{63}Ni radionuclides in seawater****Speaker**

Da-Young Kam (Korea Atomic Energy Research Institute)

17:27–17:30**Interference-free separation of ^{93}Zr with TK400, ZR and TBP resins and its quantification by LSC****Speaker**

Flora Mbouyom (SCK CEN & VUB)

17:30–17:33**Actinides and ^{129}I analyses with the 300 kV multi-isotope low-energy AMS****Speaker**

Maoyi Luo (China Institute for Radiation Protection)

17:33–17:36**Neutron activation analysis as a preliminary estimate of the activation (of individual components) of concrete**

Speaker

Daniela Veselá (Research Centre Řež)

17:36–17:39

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

Mee Jang (Korea Atomic Energy Research Institute)

17:39–17:42

Detection of the radionuclide by porous scintillator**Speaker**

Yaxing Wang

17:42–17:45

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

Filip Jędrzejek (AGH University of Krakow, Faculty of Energy and Fuels, Department of Nuclear Energy and Radiochemistry)

17:45–17:48

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

Sy Minh Tuan HOANG (Thu Dau Mot University)

17:48–17:51

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

Vanderlei Doniseti Acao dos Reis (Embrapa Pantanal; CENA/USP)

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 (Wojskowa Akademia Techniczna)

17:54–17:57

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

Klaudia Rzadzowska

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 (Japan Atomic Energy Agency)

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 (Japan Atomic Energy Agency)

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 (Federal University of Catalão/Nuclear Energy Center for Agriculture, University of São Paulo)

18:06-18:09

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

MyoungJung Kim (Korea Atomic Energy Research Institute)

18:09-18:12

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

Adelaide Fanner (Idaho National Laboratory)

18:12-18:15

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

Edis Hrustanbegovic (FRM2)

18:15-18:18

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

Ivana Krausová (Nuclear Physics Institute of the CAS)

18:18-18:21

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

Jiří Mizera (Czech Academy of Sciences, Nuclear Physics Institute)

18:21-18:24

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

Zdeňka Zachová (ÚJV Řež, a.s.)

18:24-18:27

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

David Chvátíl (Nuclear Physics Institute CAS), Václav Olšanský (Nuclear Physics Institute CAS)

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 Rosskopfová (Dept. of Nuclear Chemistry, FNS CU)

18:30-18:33 **New development in Triskem: TK227 Resin**

Speaker

Illarion Dovhyi (Triskem International)

18:33-18:39

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

Speaker

YOSHIMUNE OGATA (Aichi Medical University)

18:45

20:00

21:45

Socials: Concert

Session | **Location:** Marble Hall

Wednesday 13 May

08:30

Nuclear Fuel Cycle: NFC 3

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

Thorsten Stumpf (Helmholtz-Zentrum Dresden-Rossendorf e. V.), Nick Evans (Nottingham Trent University)

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 (Helmholtz-Zentrum Dresden-Rossendorf / Institute of Resource Ecology)

09:00–09:20

Radiochemical Aspects in Siting of Geological Disposal Facility

Speaker

Václava Havlová (International Atomic Energy Agency)

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 (Universitat Politècnica de Catalunya (Barcelons, Spain))

09:40–10:00

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

Speaker

Khalifa Alsulami (Dalton Nuclear Institute, The University of Manchester)

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 (Lanzhou University)

08:48–09:06

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

Speaker

Peng Zhang (Lanzhou University)

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 (Helmholtz-Zentrum Dresden-Rossendorf)

09:42–10:00

Reduction of ^{226}Ra in Moroccan phosphogypsum using combined CaCl_2 treatment and acid leaching**Speaker**

Loubna El Faroudi (Green Energy Park (IRESEN, UM6P), Benguerir, Morocco)

10:00

10:00

Coffee Break**Break** | **Location:** Casino Conference Centre, Mirror Hall, Reitenbergerova 4/95, Mariánské Lázně, Czech Republic

10:30

10:30

Education: EDU 2**Session** | **Location:** Red Hall | **Conveners:**

Elena Macerata (Politecnico di Milano), Marko Štrok (Jožef Stefan Institute)

10:30–10:48

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

Václava Havlová (International Atomic Energy Agency)

10:48–11:06

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

WENDEE JOHNS (University of Nevada, Las Vegas)

11:06–11:24

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

Kenneth Czerwinski (University of Nevada, Las Vegas)

11:24–11:42

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

Charlotte Fischer (Leibniz University Hannover)

11:42–12:00

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

Jan Kameník (Nuclear Physics Institute of the Czech Academy of Sciences)

12:00

10:30

Nuclear Analytical Methods: NAM 3**Session** | **Location:** Marble Hall | **Conveners:** Jiří Janda (-), Zsolt Révay (Technische Universität München - FRM II)

10:30–10:48

Radioanalytical method for the separation of ^{225}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 (Nuclear Energy Center for Agriculture, University of São Paulo)

11:06–11:24

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

Speaker

Jeroen Plomp (Delft University of Technology)

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 (Royal Military College of Canada, Kingston)

11:42–12:00

Overcoming Isobaric Interferences in ³⁶Cl Analysis: An Optimized ICP-MS/MS Strategy, Improved ³⁶Cl Determination in Nuclear and Environmental Samples by ICP-MS/MS

Speaker

Amayes Gaston-Bellegarde (Autorité de surêté nucléaire et radioprotection (ASNR))

12:00

12:00

Lunch

Break | **Location:** Mirror Hall

13:30

13:30

Socials: Conference Trip

Session | **Location:** Surroundings

18:00

19:00

Conference Dinner

Break | **Location:** Marble Hall

22:00

Thursday 14 May

08:30

Nuclear Fuel Cycle: NFC 4

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

Michael Ojovan (The University of Sheffield), Christian Schreinemachers (Forschungszentrum Jülich GmbH, Institute of Fusion Energy and Nuclear Waste Management, IFN-2: Nuclear Waste Management)

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 (GRS gGmbH)

09:00–09:20

Pyrite solubility and its capacity to immobilize ⁹⁹Tc in metabolite-rich environments

Speaker

Vijay Kumar Saini (Helmholtz-Zentrum Dresden-Rossendorf e.V.)

09:20–09:40

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

Speaker

Christian Schreinemachers (Forschungszentrum Jülich GmbH, Institute of Fusion Energy and Nuclear Waste Management, IFN-2: Nuclear Waste Management)

09:40–10:00

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

Speaker

Stephan Hilpmann (Helmholtz-Zentrum Dresden-Rossendorf, Institute of Resource Ecology)

10:00

08:30

Nuclear Analytical Methods: NAM 4

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

Jan Kučera (Nuclear Physics Institute of the Czech Academy of Sciences), Zsuzsanna Maccsik

08:30–09:00

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

Speaker

Xiaolin Hou (Lanzhou University)

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 (Politecnico di Milano)

09:20–09:40

Novel HCl-free analytical method using cation-exchange resin for highly selective determination of ^{113m}Cd

	<p>Speaker Van-Khoai Do (Japan Atomic Energy Agency)</p>
	<p>09:40–10:00</p> <p>Work Package 5 - ICARUS within the EURAD-2 programme: Innovative ChARacterization techniques for large volUMes</p> <p>Speaker Eros Mossini (Politecnico di Milano)</p>
10:00	
10:00	
10:30	<p>Coffee Break</p> <p>Break Location: Mirror Hall</p>
10:30	
10:30	<p>Environmental Radioactivity: RER 3</p> <p>Session Location: Marble Hall Conveners: Sebastian Fichter (Helmholtz-Zentrum Dresden-Rossendorf), Claudia Landstetter (AGES GmbH)</p>
	<p>10:30–10:48</p> <p>Tc soil to plant uptake from pot experiments to imaging at the nanoscale</p> <p>Speaker Clemens Walther (Universität Hannover, IRS)</p>
	<p>10:48–11:06</p> <p>Influence of soil amendment with fly ash from Coal-Fired Power Plant on the transfer of naturally occurring radionuclides to wheat</p> <p>Speaker Francisco Javier Guillén Gerada (LARUEX, University of Extremadura)</p>
	<p>11:06–11:24</p> <p>Distribution of Natural Radionuclides and Dose Assessment in Phosphate-Fertilized Soils</p> <p>Speaker Ana Noguera (Centro Universitario Regional del Este, Universidad de la República)</p>
	<p>11:24–11:42</p> <p>Doramad - The Story of Radioactive Toothpaste</p> <p>Speaker Nick Evans (Nottingham Trent University)</p>
	<p>11:42–12:00</p> <p>Adaptations of Phaseolus vulgaris crop root exudate release to U(VI) in hydroponic environment</p> <p>Speaker Julia Maetzkow (HZDR)</p>
12:00	
10:30	<p>Radiopharmaceuticals: RPH1</p> <p>Session Location: Red Hall Conveners: Martina Benešová-Schäfer, Constantin Mamat (HZDR)</p>
	<p>10:30–10:56</p> <p>Immunomodulatory Nanoradiopharmaceuticals—Preclinical and clinical investigations</p> <p>Speaker Kattesh Katti (University of Missouri)</p>

10:56-11:12

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

Antonia Denkova (TU Delft)

11:12-11:28

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

Constantin Mamat (HZDR)

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 (Helmholtz-Zentrum Dresden-Rossendorf)

12:00

12:00

Lunch**Break** | **Location:** Mirror Hall

13:30

13:30

Radiation Chemistry: RCH 1**Session** | **Location:** Red Hall | **Conveners:**

Jan Bárta (Czech Technical University in Prague, Faculty of Nuclear Sciences and Physical Engineering), Eros Mossini (Politecnico di Milano)

13:30-14:00

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

Martin Precek (ELI ERIC)

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)F₃:Tb³⁺ nanoparticles for XPDT: evaluation of dark and radiation-induced cytotoxicity.**Speaker**

Xenie Lytvynenko (Czech Technical University in Prague)

14:40-15:00

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

15:00

Speaker

Hitos Galán (Centro de Investigaciones Energéticas, Medioambientales y Tecnológicas (CIEMAT))

13:30

Separation & Speciation: SEP 5**Session** | **Location:** Marble Hall | **Conveners:**

Mojmír Němec (Czech Technical University in Prague, FNSPE, Department of Nuclear Chemistry), Alex Tarancon Sanz (Universitat de Barcelona)

13:30-13:48

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

Esther Spruit (Tu Delft)

13:48-14:06

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

Thomas Staes (SCK CEN)

14:06-14:24

The development of a separation method for ^{111}Ag from neutron-irradiated Pd targets using dimethylglyoxime**Speaker**

Filippos Karantoumanis (Jožef Stefan Institute)

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 (SCK CEN & KU Leuven)

14:42-15:00

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

Viktor Goliáš (Charles University in Prague, Faculty of Science, Department of Geochemistry, Mineralogy and Mineral resources)

15:00

15:00

Coffee Break**Break** | **Location:** Mirror Hall

15:30

15:30

Radionuclides Production & Application: PAR 2**Session** | **Location:** Red Hall | **Conveners:**

Jiří Mizera (Nuclear Physics Institute, Academy of Sciences of the Czech Republic), Dominic Maertens (PanTera NV)

15:30-15:48

Molybdenum Disulfide Nanotubes for the Next-Generation $^{99}\text{Mo}/^{99\text{m}}\text{Tc}$ Generator**Speaker**

Gauri (Delft University of Technology)

15:48-16:06

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

Andreas Türler (University of Bern)

16:06–16:24

Production and radiochemical separation of no-carrier-added ^{149}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 (Henryk Niewodniczanski Institute of Nuclear Physics Polish Academy of Sciences)

16:42–17:00

Production and radiochemical separation of ^{255}Fm for nuclear science applications**Speaker**

Andrea Tzeitel Loria Basto (Johannes Gutenberg Universität Mainz)

17:00

15:30

Nuclear Analytical Methods: NAM 5**Session** | **Location:** Marble Hall | **Conveners:** Eros Mossini (Politecnico di Milano), Nora Vajda (RadAnal Ltd.)

15:30–15:48

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

Tereza Tomanová (NBC Defence Institute)

15:48–16:06

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

MYUNG HO LEE (KRIST)

16:06–16:24

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

Tae-Hong Park (Korea Atomic Energy Research Institute, University of Science and Technology)

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 (Department of Nuclear Chemistry, Faculty of Natural Sciences Comenius University Bratislava)

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 (Universitat de Barcelona)

17:00

Environmental Radioactivity: Poster session

Session | Location: Gallery

17:15–17:18

Phosphorylation of Amino Acids with a PO₂ Synthase and Their Interaction with f-Elements

Speaker

Jeremy Long

17:18–17:21

Synthesis of Phosphorylated Peptides Using (py)₂PO₂[OTf] and Their Interaction with f-Elements

Speaker

Tom Pfandt (TU Dresden)

17:21–17:24

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

Speaker

Jacob Brookhart (Idaho National Laboratory)

17:24–17:27

Retrospective determination of ¹³¹I thyroid equivalent doses via ¹²⁹I AMS analysis

Speaker

Michal Fejgl (National Radiation Protection Institute)

17:27–17:30

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

Speakers

Jaeun Lee (Korea Institute of Ocean Science and Technology (KIOST)), Intae Kim (Korea Institute of Ocean Science and Technology (KIOST))

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

Jaeun Lee (Korea Institute of Ocean Science and Technology (KIOST), University of Science and Technology (UST))

17:36–17:39

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

Speaker

Vira Velianyk (Technical University of Liberec)

17:39-17:42

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

Alena Zavadilová (Czech Technical University in Prague, Faculty of Nuclear Sciences and Physical Engineering)

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}Cs in the Tropical Pacific: Impact of Climate Variability on the North Equatorial Current (NEC)**Speaker**

Eun-Ran Baek (Korea Institute of Ocean Science and Technology (KIOST), University of Science and Technology (UST))

17:48-17:51

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

Galina Lujaniene (Center for Physical Sciences and Technology, Vilnius, Lithuania)

17:51-17:54

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

Sergiy Dubchak (Leibniz University Hannover)

17:54-17:57

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

José Marcus Godoy (Pontifícia Universidade Católica do Rio de Janeiro)

17:57-18:00

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

Katarzyna Szarłowicz (AGH University of Krakow Faculty of Energy and Fuels Department of Nuclear Energy and Radiochemistry al. A. Mickiewicza 30 30 - 059 Krakow)

18:00-18:03

A study on the analysis of ^{14}C activity in biological samples in Taiwan**Speaker**

Liang-Yu Tao (Radiation Monitoring Center, Nuclear Safety Commission, Kaohsiung City 833172, Taiwan)

18:03-18:06

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

Tuan HOANG (Thu Dau Mot University)

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 (Thu Dau Mot University)

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 (CENA - USP)

18:12-18:15

Radioactive Sleep Masks**Speaker**

Nick Evans (Nottingham Trent University)

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**

Mikołaj Wielgat (The Henryk Niewodniczański Institute of Nuclear Physics Polish Academy of Sciences, Kraków, Poland)

18:18-18:20

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

Sang-Han Lee (Korea Research Institute of Standards and Science (KRISS))

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 (The Jikei University School of Medicine)

18:24-18:26

Determination of ^{129}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 (CTU in Prague)

18:28-18:30

Determination of ^{236}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 (Politecnico di Milano)

17:17-17:20

 γ -IRRADIATION EFFECT ON DIFFERENT CLAYS' STABILITY**Speaker**

Alicia Negron-Mendoza (Instituto de Ciencias Nucleares, Universidad Nacional Autonoma de Mexico)

17:20-17:23

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

Gergő Lakatos (HUN-REN Institute for Nuclear Research and University of Debrecen, Doctoral School of Chemistry)

17:23-17:26

Radiation Stability of CsPbBr₃ polymer nanocomposites**Speaker**

Magdalena Rusová (FNSPE CTU)

17:26-17:29

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

Muslum Gurbanov (Institute of Physics)

17:29-17:32

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

Klára Fricová (Vysoká škola chemicko-technologická v Praze)

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 (Royal Military College of Canada, Kingston)

17:36-17:39

The influence of Tb³⁺ content on La_{1-x}Tb_xF₃ and Ce_{0,15}La_{0,85-x}Tb_xF₃ properties**Speaker**

Marie Urbanová (Czech Technical University in Prague)

17:39-18:30

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

Eros Mossini (Politecnico di Milano)

18:30

17:15

Radiopharmaceuticals: Poster session

Session | Location: Gallery

17:15-17:18

Experience with the production of ⁶⁸Ga- and ⁶⁴Cu-labelled radiopharmaceuticals in BIONT**Speaker**

Pavol Rajec (BIONT a.s. Bratislava)

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 (Research Centre Řež)

17:21-17:24

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

Barbora Brzková (Fakulta jaderná a fyzikálně inženýrská, ČVUT)

17:24-18:30

Optimization of the Preparation of [161Tb]Pertuzumab Radioimmunoconjugates**Speaker**

Tereza Janská (Katedra jaderné chemie, Fakulta jaderná a fyzikálně inženýrská, České vysoké učení technické v Praze)

18:30

18:30

Student Poster Competition: The Award Ceremony

Session | Location: Marble 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

Friday 15 May

08:30

Nuclear Fuel Cycle: NFC 5

Session | **Location:** Marble Hall | **Conveners:** Barbora Drtinová (CTU Prague), Susan Britz

08:30–08:48

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

Speaker

SAJID IQBAL (Korea Advanced Institute of Science and Technology (KAIST))

08:48–09:06

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

Speaker

Fabio Fattori (Politecnico di Milano)

09:06–09:24

MgNa₃H(PO₄)₂ sorbent for purification of wastewater from activated corrosion products of reactor structural materials

Speaker

Elizaveta Artiushova (PSI & UniBE)

09:24–09:42

The behaviour of Tc(I) in the environment: A study of the interaction of [Tc(CO)₃(H₂O)₃]⁺ on minerals

Speaker

Caroline Börner (Helmholtz-Zentrum Dresden-Rossendorf)

09:42–10:00

Radionuclide Sorption on Natural, Synthetic and Composite Sorbents

Speaker

Marek Hupian (Department of Nuclear Chemistry, Faculty of Natural Sciences, Comenius University Bratislava)

10:00

08:30

Nuclear Analytical Methods: NAM 6

Session | **Location:** Red Hall | **Conveners:** Myung Ho Lee (KRIST), Jan Kameník (Nuclear Physics Institute of the Czech Academy of Sciences)

08:30–08:48

Spectroscopic Tools for Online Monitoring Across Various Solvent Extraction Systems

Speaker

Justin Cooper (Idaho National Laboratory)

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 (Korea Research Institute of Standards and Science)

09:24–09:42

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

Speaker

Hugo JAEGLER (Autorité de sûreté nucléaire et de radioprotection (ASNR), PSE-ENV/SAME)

09:42–10:00

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

Speaker

Lawrence Jassin (Eckert & Ziegler Isotope Products)

10:00

10:00

Coffee Break

Break | Location: Mirror Hall

10:30

10:30

Environmental Radioactivity: RER 4

Session | Location: Marble Hall | Conveners: Galina Lujaniene, Rainer Kadan (AGES)

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 (Korea Institute of Ocean Science and Technology (KIOST), University of Science and Technology (UST))

10:48–11:06

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

Speaker

Sebastian Fichter (Helmholtz-Zentrum Dresden-Rossendorf)

11:06–11:24

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

Speaker

Dmitri Gudkov (Institute of Hydrobiology of the NAS of Ukraine)

11:24–11:42

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

Speaker

Inna Iarmosh (Leibniz University Hannover / Helmholtz-Zentrum Dresden-Rossendorf)

11:42–12:00

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

12:00	<p>Speaker Krystle Elbers (AGES GmbH)</p>
10:30	<p>Separation & Speciation: SEP 6 Session Location: Red Hall Conveners: Sang-Han Lee (Korea Research Institute of Standards and Science), Viktor Goliáš (Charles University in Prague, Faculty of Science, Department of Geochemistry, Mineralogy and Mineral resources)</p>
	<p>10:30-10:48 Spectroscopic Insights into Cm(III) Coordination with Unsymmetrically Substituted Diglycolamides Speaker Thomas Sittel (Karlsruhe Institute of Technology (KIT))</p>
	<p>10:48-11:06 Innovative and sustainable TODGA-based solvents: redesigning the organic phase for SNF recycling Speaker Massimiliano Federico Silvio Tentorio (Politecnico di Milano)</p>
	<p>11:06-11:24 Assessment of TODGA degraded solvent in the AmSel process Speaker Iván Sánchez-García (Centro de Investigaciones Energéticas, Medioambientales y Tecnológicas (CIEMAT))</p>
	<p>11:24-11:42 Ab initio study of thermodynamic properties of ruthenium-nitrosyl system Speaker LORIS GELIN</p>
	<p>11:42-12:00 Volatilization of Ru to RuO₄ and liquid-liquid extraction methods for its recovery from spent nuclear fuel Speaker Michael Seidel (FJFI ČVUT)</p>
12:00	
12:00	<p>Lunch Break Location: Mirror Hall</p>
13:30	
13:30	<p>Socials: Closing Ceremony Session Location: Marble Hall</p>
14:00	