2026

49th Annual

Actinide Separations Conference

SRNL®

SAVANNAH RIVER NATIONAL LABORATORY

June 16-18, Augusta Country Club

Augusta, Georgia

Daily Agenda

Tuesday 6.16.26

Morning

Registration	7:30 AM
Welcoming Remarks	8:15 AM
Plenary Speaker	8:30 AM
Seaborg Award	
Analytical Insights	9:15 AM
Break	10:05 AM
Lunch	11:45 AM

Afternoon

Pyrochemistry	1:00 PM
Break	3:05 PM
Poster Session*	5:35 – 7:30 PM

*After 6:00 PM, jackets are suggested for gentlemen. No jeans or denim are allowed for private functions. Augusta Country Club Dress Code.

Wednesday 6.17.26

Morning

Registration	7:30 AM
Targeted Isotope Recovery	8:00 AM
Break	9:40 AM
Board Lunch & Meeting	12:35 PM

Thursday 6.18.26

Morning

Fuel Cycle	8:00 AM
Break I	9:15 AM
Break II	10:40 AM
Lunch	12:05 PM

Afternoon

Fuel Cycle & Alternatives	1:15 PM
Break I	2:55 PM
Break II	4:20 PM
Banquet*	6:45 PM

*After 6:00 PM, jackets are suggested for gentlemen. No jeans or denim are allowed for private functions. Augusta Country Club Dress Code.

Talk Schedule

Dean R. Peterman Seaborg Award Presentation

Tuesday

8:30 AM

Analytical Insights

9:15 AM	Current Adventures in Online Monitoring of Actinide Processing at SRNL	Robert Lascola	SRNL
9:40 AM	Portable XRF as a Process Verification and Accountability Measurement Method for Actinide Processing	John Ahern	LANL
10:05 AM	*Break*		
10:30 AM	In Situ Monitoring of Actinide and Lanthanide Species in Glass Ion-Exchange Columns Using UV–Vis–NIR Reflectance Spectroscopy and Chemometrics	Luke Sadergaski	ORNL
10:55 AM	Revisiting the Redox Kinetics of Pu(IV-III) Using Hydroxylamine Nitrate	Chelsea Goetzman	SRNL
11:20 AM	EXAFS Insights into Neptunium Coordination in the PUREX Media	Daria V. Boglaienko	PNNL

Pyrochemistry

Tuesday

1:00 PM	Toward a Better Understanding of Electrorefining End-of-Run Behavior	Devin Rappleye	BYU
1:25 PM	Dissolution of Used Nuclear Oxide Fuel Constituents in Molten Salt Media	Steven D. Herrmann	INL
1:50 PM	Assessing Machine-Learning Approaches for Digital-Twin Development in Sn–Ni Electrorefining	Anderson Fuller	BYU

2:15 PM	Small-Scale Direct Oxide Reduction of Cerium Oxide	Jarom Chamberlain	LANL
2:40 PM	Electrorefining of Tin as a Plutonium Surrogate: Improvements in Automation and Investigation of Parameters	Bryant Johnson	BYU
3:05 PM	*Break*		
3:30 PM	Electrolytic Reduction of Surrogates for PuO_2 on Liquid Metal Cathodes	Hayden Hansen	UofUtah
3:55 PM	A Geometry Informed One-Dimensional Molten Salt Electrorefining Model with Coupled Transport and Anode Evolution	Dakota S. Banks	BYU
4:20 PM	Corrosion Testing of Chemically Modified Tantalum Coupons in a Molten Salt Environment with Chlorine and Oxygen Gases	Greg Chipman	SRNL
4:45 PM	Progress Made on Chlorination and Reduction in an Integrated Single Process	Cameron Vann	BYU
5:10 PM	Dynamic Electrodeposition in Molten Salts for Uranium Coatings	Olivia R. Dale	LANL

Targeted Isotope Recovery

Wednesday

8:00 AM	Production of Promethium-147 at Oak Ridge National Laboratory: A Five-Year Journey	Lætitia H. Delmau	ORNL
8:25 AM	Separating Actinium, Thorium, and Radium with Titania Resin	Nicholas Becker	UofUtah
8:50 AM	Titanium Phosphates for Ion Exchange Studies	Paula Ramirez	UNLV
9:15 AM	Development of Ionic-Liquid-Impregnated Polymeric Resin for f-Block Separations in Nitric Acid Media	Steven J. Schultz	LANL
9:40 AM	*Break*		
10:05 AM	Rapid Analysis of Th and Ra impurities in ^{225}Ac	Madeleine Eddy	Eichrom
10:30 AM	Purification of Actinium-225 from Thorium via Selective Precipitation	Steven J. Schultz	LANL
10:55 AM	Purification of ^{230}U for Targeted Alpha Therapy Applications	Nicholas Becker	UofUtah
11:20 AM	Thorium and Plutonium Interactions with Zirconium Molybdate	Andrew Duckworth	UofFl
11:45 AM	Americium Recovery at Los Alamos	Katherine Luebke	LANL
12:10 PM	Kinetic Studies of U(IV) and Pu(IV) in Aqueous Nitric and 30% TBP/n-Dodecane Solutions	Erik D. Reinhart	PNNL

Fuel Cycle

Thursday

8:00 AM	Advanced Voloxidation: Beyond Off-gas Management	Richard T. Mayes	ORNL
8:25 AM	Sulfonamide-Based Extractants for Nitric Acid-Free Direct Dissolution and Recovery of Uranium from Used Nuclear Fuel	Jeffrey D. Einkauf	ORNL
8:50 AM	Advanced Voloxidation of Fresh and Irradiated Fuels	Ian M. Hobbs	INL
9:15 AM	*Break*		
9:25AM	Direct Extraction of UNF simulants	Gabriel B. Hall	PNNL
9:50 AM	Role of Water in the Direct Extraction of Oxidized Uranium Oxide into DEHiBA	Peter Tkac	ANL
10:05 AM	Isolation of U(VI) from Cs, La, Ce, Np, Pu, & Am using Anion Exchange Chromatography in Alkaline Media	Joel Castillo	PNNL
10:40 AM	*Break*		
10:50 AM	Implementation of Voloxidation and Direct Dissolution Processes into the ARTEMIS Facility Modeling Framework	Drace Penley	ANL
11:15 AM	Recent Advancements in the Group Actinide Separation Process (GrASP)	Quinn E. Summerfield	UNLV
11:40 AM	Developing a Flowsheet for the Recycling of Np from Used Nuclear Fuel	Gabriel A. Flores	ANL

Fuel Cycle & Alternatives

Thursday

1:15 PM	Resumption of Production-Scale Aqueous Nitrate Plutonium Purification at LANL	Casey Finstad	LANL
1:40 PM	Aqueous Recovery of Plutonium at Lawrence Livermore National Laboratory	S. A. Di Pietro	LLNL
2:05 PM	Overview of Aqueous Scrap Recovery and Hydroxide Precipitation of Pu-238 Mixed-Oxide Fuel Sources	Ryan Bermel	LANL
2:30 PM	Separation of Plutonium from Dissolved Pyrochemical Residues by Anion Exchange with Reillex HPQ Resin	Matthew Mills	SRNL
2:55 PM	*Break*		
3:05 PM	Chromatographic Separation of Medical Radionuclides from Proton-Irradiated Thorium Targets	Michael E. Fassbender	LANL
3:30 PM	Incorporation of Am(VI) into the Uranyl Nitrate Hexahydrate Crystal Lattice: Optimization of Am(VI) Oxidation Kinetics, Stability and Purification	Jennifer M. Pyles	UofAL
3:55 PM	Synthesis of Anhydrous Actinide Fluorides Without Hydrofluoric Acid Through the Volatilization of Organic Co-Adducts	Samuel R. Lee	LANL
4:20 PM	*Break*		
4:30 PM	Impact of Outer-Sphere Cations on Selective Precipitation of Actinides in Aqueous Solutions	Brittany L. Huffman	LANL
4:55 PM	Effects of Early Fuel Cycle Pathways on the Oxygen Isotope Fractionation of Uranium Oxides	Brandon E. Mowes	UofUtah
5:20 PM	Neutralization and Characterization of Aqueous Plutonium Waste	James Louis-Jean	SRNL

Poster Listings

1	Tucker A. Burnett	Metal Mediated Electrochemical Treatment of Nitrated Organic TRU Waste	LANL
2	Cassara J. Higgins	The Exploration of Room Temperature Ionic Liquids as a Solid Matrix for Gamma Calibration Standards	LANL
3	Nischal Maharjan	Raman-Based Biphasic Quantification of Nitric Acid Extraction Under PUREX Conditions in Slug Flow	GIT
4	Julia L. Brumaghim	Exploring Solid-State Uranyl Oxo Interactions for Selective Ligand Design	CU
5	Allison Cicero	Divalent Lanthanide Extraction using Crown Ether Extractants	UNL
6	Stephanie Castro Baldivieso	Impact of Molten Gallium on the Microstructure and Corrosion Behavior of Aluminum Alloys for Used Nuclear Fuel Reprocessing	INL
7	Jeffrey R. McLachlan	Revealing the Unique Redox Chemistry of f-Element–3,4,3-LI(1,2-HOPO) Complexes	LBNL
8	Tatiana G Levitskaia	Alkaline UNF Processing: Overview of Latest Advances in Uranium Recovery and Purification	PNNL
9	Jeanette Piña	Development of Transuranic Stimuli-Responsive Metal-Organic Frameworks	SRNL
10	Nabarupa Bhattacharjee	Sulfonamide Extractants for Direct Uranium Dissolution Without Acid Pretreatment	ORNL
11	Nathan Bessen	Distribution Ratios of Direct Extracted Metals	PNNL
12	Steven M. Rehbein	Conditional Rate Expression for the Reduction of Plutonium(IV) by Ferrous Sulfamate in Nitric Acid Media	INL
13	Travis S. Grimes	Gamma Irradiation Effects on the Functional Longevity of Direct Dissolution Solvent	INL
14	Joel Castillo	Isolation of U(VI) from Cs, La, Ce, Np, Pu, & Am using Anion Exchange Chromatography in Alkaline Media	PNNL
15	Christy Santoyo	Actinide Material Interaction with Additively Manufactured Ceramic Crucibles	LLNL
16	Alena Denisenko	Ion-Selective Electrodes Technology for Safer and More Efficient Waste Management in Aqueous Recovery Systems	SRNL

17	Morgan Cram	Leveraging Machine Learning for Predictive Design of Refractory Alloys: Insights into Alloy Selection for Equipment Design	SRNL
18	Sasha Mills	Sulfate Conversion of Reillex HPQ Anion-Exchange Resin to Support Safe Waste Disposal	SRNL
19	Monica Mullis	Separation of Lanthanum from Cerium in Molten Salts and Evaluation Method Development	SRNL
20	Wyatt Nobley	Kinetic and Thermodynamic Investigation of the Direct Extraction of Metal Oxides into Organic Solvent	ORNL
21	Johnathan J. Klein	Observing Mixed Stoichiometry in Extractions of Trivalent f-Elements by TODGA	CSM
22	Samantha J. Kruse	Impacts of Ionizing Radiation on the Recovery of Uranium from Caustic Guanidinium Carbonate Media	INL
23	Gia Thinh Tran	Tbx-Er_2-xTi_2O_7 Pyrochlores as Proxy for Actinide Immobilization	SRNL
24	Amanda M. Ziegler	Complexation of Ce^{4+} to Serum Transferrin with Different Synergistic Anions for the Separation of Radionuclides from Environmental Samples	CSM
25	Carter Fitzgerald	Cold Testing and Comparison of 2-cm Centrifugal Contactors	SRNL
26	Claire Morgan	Large-Scale Resin Conversion System for Reillex™ HPQ	SRNL
27	Samuel R. Lee	Ultrasonic Separation (UltraSep) for the Removal of Actinide Hydroxide Precipitates from Aqueous Suspensions	LANL
28	Jarrod M. Gogolski	Safe Dissolution of Legacy Uranium-Fissium Material	SRNL
29	Perry Levin	Hydride-Dehydride and Casting (HYDEC) Engineering Development System Testing	SRNL
30	Vinh T. Nguyen	Separations Strategy for Aluminum-Clad UNF using Sulfur Chlorides	SRNL
31	Jeffrey D. Einkauf	Redox-Switchable Crystallization for Selective Actinide Separations	ORNL
32	Breanna K. Vestal	Achieving Favorable Kinetics in the Low-Temperature Chlorination of Zircaloy Cladding	ORNL
33	Carmen Chamberlain	Trapping of Fission Product Fluorides by UF_4	ORNL
34	Emmanuel Atongo Dassi	Reducing Anion Contaminants in Recycled Lixiviants via Bipolar Membrane Electrodialysis for the Closed-Loop ISR Extraction of Uranium	SIU

35	Bonnie E. Klamm	Supporting Plutonium Science at the Actinide Spectroscopy Laboratory (ASL)	LANL
36	Raul E. Ortega	Characterization of Actinide Metal Complexes Through Optical and Potentiometric Methods	LANL
37	Bronson Samel-Garloff	Rapid Identification of Americium in Acidic Complex Mixtures via Luminescence	LANL
38	Robert J. Nicholas	Optimizing Hydraulic Performance of Miniature Mixer-Settlers for Nuclear Separations	SRNL
39	S. A. Simpson	In-situ, Real Time Detection of Impurity Transport in Plutonium Electrorefining	LLNL
40	Andrew Oliveira	Utilizing Trace Elemental Impurities and Stable Oxygen Isotope Ratios as a Novel Nuclear Forensic Signature	UU
41	Christopher P. Woodley	Mechanochemical Reduction of Cerium Halides using Ca and Li with Ce Metal Separation	LANL
42	Zachary L. Magnuson	On-line Observation of Ion Exchange Resin Processes Using a Printed Microfluidic Device	SRNL
43	Samuel Hartness	Numerical Modeling of Ion Chromatography in a Novel Microfluidic Device	SRNL
44	Yoon Lee	Development of a Thermodynamic Properties Framework for Actinide Activity Predictions	SRNL
45	Nicole Hege	On-Line Monitoring for Bi-Phasic Systems	SRNL
46	Miah Hoppens	Exploring Ultrafiltration for Actinide Activity Reduction in Pu-238 Caustic Waste	LANL
47	William Gilbraith	Quantification of Actinide Oxidation State Without the Use of Calibration Standards via Multivariate Data Analysis	SRNL
48	Tyler Williams	Techno-Economic Outlook of a Privately-Owned, Pyrochemical Nuclear Fuel Recycling Plant	PO