CONFERENCE PROGRAM

SUNDAY 25 FROM 16:00 TO 19:00 - REGISTRATION & WELCOME DRINK *(location : PANETERIE)*

***Plenary talks (location: CELLIER BENOIT XII)**: 40min + 10 min Q&A*
***Invited talks** (location: see below): 25min + 5min Q&A*
***Oral talks** (location: see below): 15 min + 5 min Q&A*
***Posters** (location: PANETERIE): A0 + portrait*

Conference room #1: CELLIER BENOIT XII

- Surface Science and Corrosion
- Compounds, Complexes and Coordination Chemistry
- Metallurgy and Materials Science
- Nuclear Fuel Cycle

Conference room #2: CHAMBRE DU TRÉSORIER

- Solution and Gas-phase Chemistry
- Condensed Matter Physics
- Environmental Behavior and Chemistry
- Detection and Analysis

	Monday, 26		Tuesday, 27		Wednesday, 28		Thursday, 29	
8:00	*registration*							
9:00	**PuFutures Opening**		9:00	**T. Albrecht-Schoenzart**	9:00	**F. Freibert**	9:00	**G. Bordier**
9:50	**P. Roussel**		10:00	**A. Gaunt**	**J. Bouchet**	10:00	**M. Freyss**	**N. Dacheux**	10:00	**G. Horne**	**M. Savina**
10:50	coffee break		10:30	coffee break		10:30	coffee break		10:30	coffee break	
11:10	**T. Gouder**	**F. Réal**	11:00	**J. März**	**A. Dioguardi**	11:00	**A. Perron**	**X. Gaona**	11:00	**Ph. Martin**	**M. Krachler**
11:40	S. Miro	G. Deblonde	11:30	A. Hastings	A. Landa	11:30	N. Abdul-Jabbar	A. Diacre	11:30	L. McDonald	S. Hickam
12:00	S. Sen-Britain	N. Jordan	11:50	D. Fellhauer	B. Maiorov	11:50	L. Sweet	D. Reed	11:50	C. Sabatier	B. Schacherl
			12:10	H. La Pierre	E. Bourasseau	12:10	A. Smith	J. Aupiais	12:10	P. Vacas Arquero	S. Picart
12:30	Lunch		12:30	Lunch		12:30	Lunch		12:30	Lunch	
14:00	**A. Hixon**		14:00	**B. Amadon**		14:00	**K. Kvashnina**		14:00	**Pe. Martin**	
15:00	**L. Jolly**	**R. Abergel**	15:00	**P. Yang**	**P. Soderlind**	15:00	~~**S. McCall**~~	**E. Balboni**	15:00	**H. Colledge**	**D. Meier**
15:30	B. Ravat	D. Tolu	15:30	J. Wacker	E. Bauer	15:30	G. Bernard-Granger	M. Altmaier	15:30	M. Fucina	B. Chung
15:50	H. Arena	M. Maloubier	15:50	coffee break		15:50	coffee break		15:50	coffee break	
16:10	coffee break		16:20	J. Murillo	J. Jeffries	16:20	**D. Reilly**	**C. Den Auwer**	16:20	R. Johns	M. Higginson
16:40	~~**S. Donald**~~ **B. Chung**	**E. Batista**	16:40	K. Sockwell	B. Labonne	16:50	L. Burakowsky	F. Quinto	16:40	M.-M. Desagulier	E. Villa-Aleman
17:10	D. T. Carver	S. Minasian	17:00	A. Gaiser	R. Tutchton	17:10	P. Chevreux	M. Cot-Auriol	17:00	H. Rasmussen	L. Tandon
17:30	R. Caprani	L. Daronnat	17:20			17:30	A. Marchi	J. Beam	17:20	J.-P. Bayle	A. Zhang
17:50	C. Hours	N. Cicchetti				17:50			17:40	**PuFutures Closing**	
18:10			18:00	Poster Session					18:00		
						19:30	CONFERENCE DINNER				

Monday Sept. 26	SURFACE SCIENCE AND CORROSION Chairpersons: Scott BAZLEY & François DELAUNAY	SOLUTION AND GAS-PHASE CHEMISTRY Chairpersons: Annie KERSTING & Christophe DEN AUWER
	Conference room #1: CELLIER BENOIT XII	
09:00 – 09:50	***Conference Opening & Welcome Address***	
PLENARY TALK 09:50 – 10:40	**Paul ROUSSEL (AWE)** *"The Pu4f line shape revisited"*	
	Conference room #1: CELLIER BENOIT XII	*Conference room #2: CHAMBRE DU TRÉSORIER*
INVITED TALK 11:10 – 11:40	**Thomas GOUDER (European Commission - JRC)** *"Role of intermediate oxides in actinide corrosion"*	**Florent RÉAL (University of Lille)** *"Challenges in relativistic electronic structure calculations of gas-phase reactivity and thermodynamics of actinide species"*
11:40 – 12:00	**Sandrine MIRO (CEA)** *"Alteration mechanisms of MOX samples: Studtite formation assessed by Raman Spectroscopy and 18O Isotopic Labeling"*	**Gauthier DEBLONDE (LLNL)** *"Unravelling the heavy side of radiochemistry: macrochelators unlock novel actinide chemistry"*
12:00 – 12:20	**Shohini SEN-BRITAIN (LLNL)** *"Hydrogen corrosion of uranium studied using in-situ and post-mortem analysis"*	**Norbert JORDAN (HZDR)** *"Complexation of Cm (III) with aqueous phosphates at elevated temperatures: a luminescence, thermodynamic, and ab initio study"*
	Conference room #1: CELLIER BENOIT XII	
PLENARY TALK 14:00 – 14:50	**Amy HIXON (University of Notre Dame)** *"Speciation in the Pu (VI)-oxalate System"*	
	Conference room #1: CELLIER BENOIT XII	*Conference room #2: CHAMBRE DU TRÉSORIER*
INVITED TALK 15:00 – 15:30	**Lionel JOLLY (CEA)** *"Nature and growth of oxide scale on plutonium metal stabilized with 1 at% of gallium"*	**Rebecca ABERGEL (UC Berkeley / LBNL)** *"From actinium to einsteinium: Expanding the synthetic and structural toolkit for actinide coordination"*
15:30 – 15:50	**Brice RAVAT (CEA)** *"Ga Behavior during oxidation of a Pu alloy stabilized in delta phase"*	**Damien TOLU (CEA)** *"Simulation of alpha radiolysis in organic solution with plutonium at ultrashort time scales"*
15:50 – 16:10	**Hélène ARENA (CEA)** *"Alpha dose rate and decay dose impacts on the long-term alteration of HLW nuclear glasses"*	**Melody MALOUBIER (CNRS)** *"First M4-edge RIXS measurement on Pa (V) complexes in aqueous solution"*
INVITED TALK 16:40 – 17:10	~~**Scott DONALD**~~ ← **Brandon CHUNG (LLNL)** *"Evolution of δ-Stabilized Pu-Ga Alloys during Oxidation"*	**Enrique BATISTA (LANL)** *"New Methodology for Large-Scale Molecular Dynamics Simulation of Actinides in Solution"*
17:10 – 17:30	**D. Travis CARVER (LANL)** *"High Energy X-Ray Characterization of Microstructure at Macroscopic Depths in Pu Alloys"*	**Stefan MINASIAN (LBNL)** *"The Role of Orbital Overlap in Chemical Bonding for Actinide Hexafluoride Complexes"*
17:30 – 17:50	**Rafael CAPRANI (CEA)** *" Fission products speciation in high burnup SFR fuel: fabrication and experimental characterization of Pu-bearing simulated fuel"*	**Loïc DARONNAT (CEA)** *"Effect of Calmodulin variants on the redox behaviour of Pu (IV)"*
17:50 – 18:10	**Charles HOURS (CEA)** *"ESEM-monitored dissolution of (U,Th)O2 heterogeneous mixed oxides for spent fuel modeling"*	**Nicholas CICCHETTI (University of Nevada, Las Vegas)** *"Stabilization and Characterization of Heptavalent Neptunium in Acid"*

CONFERENCE PROGRAM

Tuesday Sept. 27

	COMPOUNDS, COMPLEXES AND COORDINATION CHEMISTRY Chairpersons: Ping YANG & Nicolas DACHEUX	CONDENSED MATTER PHYSICS Chairpersons: Alexander LANDA & Bernard AMADON
	Conference room #1: CELLIER BENOIT XII	
PLENARY TALK 9:00 – 09:50	**Thomas ALBRECHT-SCHOENZART (Florida State University)** *"The Quest for Californium (II) and the Importance of Trail Markers from Other Transuranium Elements and Lanthanides"*	
	Conference room #1: CELLIER BENOIT XII	*Conference room #2: CHAMBRE DU TRÉSORIER*
INVITED TALK 10:00 – 10:30	**Andrew GAUNT (LANL)** *"Molecular Synthetic Transuranium Chemistry"*	**Johann BOUCHET (CEA)** *"Simulating plutonium at high temperature"*
INVITED TALK 11:00 – 11:30	**Juliane MÄRZ (HZDR)** *"In Search of Covalency in Tetravalent Actinide (Th - Pu) Monosalen Complex Series"*	**Adam P. DIOGUARDI (LANL)** *"^{239}Pu nuclear magnetic resonance in the candidate topological insulator PuB_4"*
11:30 – 11:50	**Ashley HASTINGS (University of Notre Dame)** *"Plutonium Metal–Organic Frameworks: a Platform to Harness Hydrolysis and Probe Structural Radiation Stability"*	**Alexander LANDA (LLNL)** *"Ab initio study of advanced metallic nuclear fuels for fast breeder reactors"*
11:50 – 12:10	**David FELLHAUER (KIT)** *"Synthesis and characterization of ternary M-Pu (VI)-O (H) solid phases in alkaline electrolyte solutions"*	**Boris MAIOROV (LANL)** *"Thermodynamic and dynamic studies of delta-Pu and its alloys using Resonant Ultrasound Spectroscopy"*
12:10 – 12:30	**Henry LA PIERRE (Georgia Institute of Technology)** *"High-Valent U, Np, and Pu Imidophosphorane Mono-Oxo Complexes"*	**Emeric BOURASSEAU (CEA)** *"Thermodynamic properties of (U,Pu) mixed-oxide fuel: empirical interatomic potential calculations"*
	Conference room #1: CELLIER BENOIT XII	
PLENARY TALK 14:00 – 14:50	**Bernard AMADON (CEA)** *"Role of electronic interaction on structural properties of actinides and phases of plutonium"*	
	Conference room #1: CELLIER BENOIT XII	*Conference room #2: CHAMBRE DU TRÉSORIER*
INVITED TALK 15:00 – 15:30	**Ping YANG (LANL)** *"Electronic Structure of Molecular Plutonium and Actinide Complexes"*	**Per SODERLIND (LLNL)** *"Density-functional theory for plutonium"*
15:30 – 15:50	**Jennifer WACKER (LBNL)** *"Complexation of Actinides with Biologically-Inspired Chelators"*	**Eric BAUER (LANL)** *"Nuclear magnetic resonance studies of plutonium compounds"*
16:20 – 16:40	**Jesse MURILLO (LANL)** *"Synthesis and Study of Isostructural F-Block Complexes Featuring eta (6)-Arene Interactions"*	**Jason JEFFRIES (LLNL)** *"Magnetic dichroism in Ga-stabilized delta-Pu"*
16:40 – 17:00	**Kirstin SOCKWELL (University of Notre Dame)** *"The first crystal structure of Pu $(C_2O_4)_2$ and insight into the structural ambiguity of An$(C_2O_4)_2$ sheets – U$(C_2O_4)_2{\cdot}6H_2O$, Np$(C_2O_4)_2{\cdot}6H_2O$ and Pu$(C_2O_4)_2{\cdot}6H_2O$"*	**Baptiste LABONNE (CEA)** *"Atomic-scale modelling investigation of structural and thermodynamic properties of Americium-bearing oxides "*
17:00 – 17:20	**Alyssa GAISER (Michigan State University)** *"Investigation of the f-Block Elements with the Biological Ionophore Valinomycin"*	**Roxanne TUTCHTON (LANL)** *"Electronic Correlation Induced Expansion of Fermi Pockets in delta-Pu"*
18:00 – 21:00	**POSTER SESSION** *Conference room #3: PANETERIE*	

CONFERENCE PROGRAM

Wednesday Sept. 28

	METALLURGY AND MATERIALS SCIENCE Chairpersons: Paul ROUSSEL & Benoit OUDOT	ENVIRONMENTAL BEHAVIOR AND CHEMISTRY Chairpersons: David L. CLARK & Mavrik ZAVARIN
PLENARY TALK 9:00 – 09:50	*Conference room #1: CELLIER BENOIT XII* **Franz FREIBERT (LANL)** *"Thermodynamics of Plutonium and its Metal Alloys"*	
	Conference room #1: CELLIER BENOIT XII	*Conference room #2: CHAMBRE DU TRÉSORIER*
INVITED TALK 10:00 – 10:30	**Michel FREYSS (CEA)** *"First-principles modeling of actinide mixed oxide bulk properties and radiation effects"*	**Nicolas DACHEUX (Univ Montpellier)** *"Formation of $PuSiO_4$: lessons coming from chemical analogues"*
INVITED TALK 11:00 – 11:30	**Aurelien PERRON (LLNL)** *"Alloyed Plutonium: Thermodynamics and Application to Transformations"*	**Xavier GAONA (KIT)** *"Aquatic chemistry and thermodynamics of plutonium: applications to repository science and environmental studies"*
11:30 – 11:50	**Najeb ABDUL-JABBAR (LANL)** *"Recovery of Thermal Expansion in Aged and Pre-Conditioned Pu-Ga Alloys"*	**Aurélie DIACRE (CEA)** *"Characterization of the Pu and Cs temporal evolution in sediment transiting the Ukedo and Takase Rivers, Japan"*
11:50 – 12:10	**Lucas SWEET (PNNL)** *"Crystallite Size Distributions of PuO2 Evaluated by X-Ray Diffraction Line Profile Analysis and Microscopy"*	**Donald REED (LANL)** *"The Role of Pu (III) in Groundwater Contaminant and Repository Assessments"*
12:10 – 12:30	**Alice SMITH (LANL)** *"Kinetic Response of the δ-phase ^{239}Pu-Ga Alloys Lattice to Self-Irradiation and Thermal Processes"*	**Jean AUPIAIS (CEA)** *"Transferrin and Fetuin: potential vectors for Pu accumulation in liver and skeleton"*
PLENARY TALK 14:00 – 14:50	*Conference room #1: CELLIER BENOIT XII* **Kristina KVASHNINA (HZDR)** *"Plutonium Chemistry by Innovative Synchrotron Methods"*	
	Conference room #1: CELLIER BENOIT XII	*Conference room #2: CHAMBRE DU TRÉSORIER*
INVITED TALK 15:00 – 15:30	~~**Scott McCALL (LLNL)**~~ ~~*"Dimensional changes due to radiation damage in naturally aged δ Pu (Ga) and α Pu"*~~ ← *CANCELLED*	**Enrica BALBONI (LLNL)** *"Plutonium fate and transport in the environment: from the desert to salt marshes"*
15:30 – 15:50	**Guillaume BERNARD-GRANGER (CEA)** *"MOX fuel sintering investigations"*	**Marcus ALTMAIER (KIT)** *"Complexation speciation and thermodynamics of tri- and tetravalent plutonium with EDTA and citrate in high ionic strength systems"*
INVITED TALK 16:20 – 16:50	**Dallas REILLY (PNNL)** *"Nano/Atom-Scale Investigation of Pu-Fe Inclusions in δPu"*	**Christophe DEN AUWER (Université Côte d'Azur)** *"Actinide speciation in marine radioecology"*
16:50 – 17:10	**Leonid BURAKOWSKY (LANL)** *"Systematics of the ambient melting points of soichiometric mixed oxide (MOX) fuel"*	**Francesca QUINTO (KIT)** *"Retention and Near-Field Release of ^{99}Tc, ^{233}U, ^{237}Np, ^{242}Pu and ^{241}Am from the Long-Term In-Situ Test at the Grimsel Test Site"*
17:10 – 17:30	**Pierrick CHEVREUX (CEA)** *"Study of carbochlorination of Plutonium oxide and electrochemistry of Pu in molten salt for Molten Salt Reactor (MSR) applications"*	**Manon COT-AURIOL (CEA)** *"Isotopic effect on the formation kinetics of Pu (IV) intrinsic colloids"*
17:30 – 17:50	**Alexandria MARCHI (LANL)** *"Isothermal Dilatometry of δ-^{239}Pu: Evidence of Contraction at Early Ages"*	**Jeremiah BEAM (LANL)** *"Plutonium Oxidation State Distribution in High Ionic Strength Environments"*

19:30 – **CONFERENCE DINER**

CONFERENCE PROGRAM

Thursday Sept. 29

	NUCLEAR FUEL CYCLE Chairpersons: Gregory HORNE & Christophe JOUSSOT-DUBIEN	DETECTION AND ANALYSIS Chairpersons: Klaus LUETZENKIRCHEN & Jean AUPIAIS
	Conference room #1: CELLIER BENOIT XII	
PLENARY TALK 9:00 – 09:50	**Gilles BORDIER (CEA)** *"Stakes and scientific challenges for a sustainable use of Uranium and Plutonium in the French nuclear fuel cycle"*	
	Conference room #1: CELLIER BENOIT XII	*Conference room #2: CHAMBRE DU TRÉSORIER*
INVITED TALK 10:00 – 10:30	**Gregory HORNE (INL)** *"Recent Advances in Radiation-Induced Actinide Redox Chemistry"*	**Mike SAVINA (LLNL)** *"Nuclear fuel analysis by resonance ionization mass spectrometry"*
INVITED TALK 11:00 – 11:30	**Philippe MARTIN (CEA)** *"Extreme multi-valence states in mixed actinide oxides $U_{1-y}M_yO_{2\pm x}$"*	**Michael KRACHLER (European Commission - JRC)** *"Analytical Strategies for Bulk and Spatially-resolved Analysis of U and Pu Isotopes in Nuclear Samples"*
11:30 – 11:50	**Luther McDONALD (U. UTAH)** *"Morphology Signatures of the Nuclear Fuel Cycle"*	**Sarah HICKAM (LANL)** *"Local structure and distribution of impurities in PuO_2: forensic signatures of formation conditions"*
11:50 – 12:10	**Catherine SABATHIER (CEA)** *"TEM characterization of MOX fuel irradiated to 13.1% FIMA in the PHENIX reactor"*	**Bianca SCHACHERL (KIT)** *"Pu M4 and M5 edge Resonant Inelastic X-ray Scattering of PuO_2"*
12:10 – 12:30	**Pablo VACAS ARQUERO (CIEMAT)** *"First gamma irradiation studies of AmSel extraction system"*	**Sébastien PICART (CEA)** *"Coulometry analysis of plutonium in the presence of excess uranium: focus on the effect of sulfate complexation"*
	Conference room #1: CELLIER BENOIT XII	
PLENARY TALK 14:00 – 14:50	**Peter MARTIN (University of Bristol)** *"Advances in the Micro-Analysis of Environmentally Sourced Nuclear Materials"*	
	Conference room #1: CELLIER BENOIT XII	*Conference room #2: CHAMBRE DU TRÉSORIER*
INVITED TALK 15:00 – 15:30	**Hannah COLLEDGE (NNL)** *"Preparation of Homogenous (U,Pu) Mixed Oxides via Oxalate Precipitation"*	**David MEIER (PNNL)** *"Recent Developments on the Production and Morphological Analysis of Plutonium Oxalate and Oxide Compounds"*
15:30 – 15:50	**Meghann FUCINA (CNRS)** *"Synthesis of plutonium trichloride for molten salt reactor technology"*	**Brandon CHUNG (LLNL)** *"Morphological Provenance Signatures from Plutonium and Uranium Oxide Scales"*
16:20 – 16:40	**Russel JOHNS (LANL)** *"A Contemporary Investigation of Clementine"*	**Matthew HIGGINSON (AWE)** "Development of Direct Analysis Approaches on Solid Plutonium Samples for Actinide Analysis"
16:40 – 17:00	**Marie-Margaux DESAGULIER (CEA)** *"Manufacturing of $(U,Pu)O_{2-x}$ mixed oxides with high plutonium contents (> 60 mol.%)"*	**Eliel VILLA-ALEMAN (Savannah River National Laboratory)** *"Spectroscopy Research of Pu-bearing Compounds at the Savannah River National Laboratory"*
17:00 – 17:20	**Hope RASMUSSEN (LANL)** *"Effects of salt concentration and ionic strength on transuranic separations from aqueous chloride waste streams using a quaternary ammonium ionic liquid"*	**Lav TANDON (LANL)** *"Challenges Associated with Plutonium Pyrochemical Process Monitoring Deploying Unique Analytical Tools & Techniques"*
17:20 – 17:40	**Jean-Philippe BAYLE (CEA)** *"Modelling of $(U-Pu)O_2$ powder die compaction for nuclear fuel fabrication and characterization method for elasto-plastic model identifications"*	**Adah ZHANG (Sandia National Laboratories)** *"A Functional Statistical Modelling Approach to Using Plutonium Particle Features from Scanning Electron Microscope Images"*
	Conference room #1: Cellier Benoit XII	
17:50 – 18:10	***Conference Closing Address***	

POSTER SESSION: *Location: Conference room #3: PANETERIE*

Posters (Maximum poster size is A0 – Portrait) can be hung from Sunday to Thursday - the PANETERIE room will be open for the duration of the conference

SURFACE SCIENCE AND CORROSION

P1	**Thomas Barral (CEA)** *"Understanding the evolution of an interface during the dissolution of Nd-doped UO_2 by macro-/microscopic dual approach."*
P2	**Art Nelson (LLNL)** *"Electrochemical surface modification and oxidation of Pu characterized by X-ray photoelectron spectroscopy"*

COMPOUNDS, COMPLEXES AND COORDINATION CHEMISTRY

P3	**Jacob Branson (LBNL)** *"Evaluating the Electronic Structure of Actinide(IV) Hexafluorides Using Fluorine K-edge X-ray Absorption Spectroscopy and Time-Dependent Density Functional Theory"*
P4	**Thomas Dalger (CEA)** *"Stabilization of spent salts by an oxidation and distillation process: focus on sodium carbonates stability in molten salts"*
P5	**Tamara Duckworth (HZDR)** *"Coordination chemistry of N-Donor Ligands with early Actinides"*
P6	**David Fellhauer (KIT)** *"Crystal structure and stability of pentavalent $Ca_1/3Na_1/3PuO_2(OH)_2$ and $Ca_{0.5}NpO_2(OH)_2$"*
P7	**Nicholas Katzer (LBNL)** *"Synthesis of a Transplutonium Organometallic"*
P8	**Olivier Lemoine (CEA)** *"Electrochemical behavior of plutonium in molten calcium chloride and fluoride medium"*
P9	**Marisa Monreal (LANL)** *"Investigating the Local Structure of Actinide-Molten Salts Using Neutron Pair-Distribution Function Analysis"*
P10	**Appie Peterson (LBNL)** *"Amidate Supported Single-Molecule Precursors for Actinide Oxide Materials"*
P11	**Jenifer Shafer (Colorado School of Mines)** *"Soft Donor vs Soft Matter: Controlling Transplutonium Chemistry"*
P12	**Matthieu Virot (CEA)** *"Multi-Scale Characterization of Pu Nanostructures using Synchrotron-based SAXS and XAS Techniques"*

CONDENSED MATTER PHYSICS

P13	**Frédéric Gendron (CEA)** *"Electronic Structure and Magnetic Properties of PuO_2"*
P14	**Christine Wu (LLNL)** *"Thermodynamics for plutonium monocarbides and mononitrides from first principles"*

ENVIRONMENTAL BEHAVIOR AND CHEMISTRY

P15	**Marcus Altmaier (KIT)** *"Cement-organics-radionuclide-interactions studied within the collaborative EC funded project EURAD-CORI"*
P16	**Annie Kersting (LLNL)** *"Plutonium transport under acidic solution conditions in vadose zone sediments at the Hanford Site, USA"*
P17	**Camille Mehault (CEA)** *"Modelling the gas generation of actinide bearing materials in storage containers"*
P18	**Théo Montaigne (CEA)** *"MOX fuel alteration mechanisms under deep geological repository conditions"*
P19	**Donald Reed (LANL)** *"Waste Isolation Pilot Plant (WIPP) TRU Repository Actinide Research"*
P20	**Pascal Reiller (CEA)** *"Formation of alkaline earth(II) triscarbonatouranyl(VI) complexes: thermodynamic study and ionic strength influence by time-resolved laser-induced fluorescence spectroscopy"*

METALLURGY AND MATERIALS SCIENCE

P21	**Nabeel Anwar (University of Southampton)** *"Large-Scale Quantum Mechanical Simulations for Actinide Oxides containing Defects"*
P22	**Luiza Braga Ferrreira dos Santos (HZDR)** *"Incorporation of lanthanides into zirconia: a study of solid phase transformations"*
P23	**Bradley Childs (LLNL)** *"Alternative Pathways to Produce Actinide Metals"*
P24	**Franz Freibert (LANL)** *"Glenn T. Seaborg Institute, LANL"*
P25	**Aidan Friskney (University of Sheffield)** *"Hot isostatic pressing: A thermal treatment process for Pu immobilization"*
P26	**Laura Gardner (University of Sheffield)** *"Dissolution of U-doped zirconolite: A ceramic candidate for the management of the civil UK Pu inventory"*
P27	**Zachary Levin (LANL)** *"Stress Relaxation Experiments in Plutonium"*
P28	**Michael Ling (AWE)** *"Observation on the thermal stability of a Pu-Ga alloy containing very low Ga"*
P29	**Emily Moore (LLNL)** *"Actinide Phase Diagrams: Thermodynamic Assessment of the Pu-U-Fe-Ga-Al-Ni system"*
P30	**Elanor Murray (University of Birmingham)** *"Molecular Dynamics Simulations of Helium Diffusion and Clustering in PuO_2"*

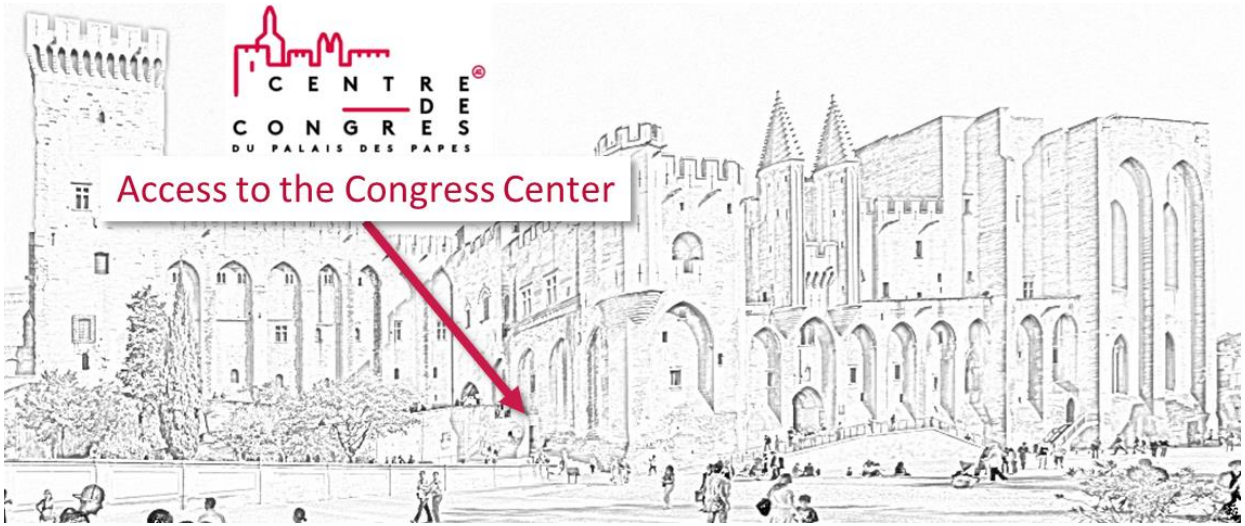
P31	**Mary O'Brien (LANL)** *"Investigating the Effect of Soluble Hydrogen on Plasticity in Uranium"*
P32	**Sandra Reinhard (Leibniz Universität Hannover, Institute of Radioecology and Radiation Protection)** *"Comparison of ^{239}Pu- and ^{242}Pu-Colloids: Influence of radiolysis on structure and stability"*
P33	**Cheng Saw (LLNL)** *"Linear Oxide Growth on a Uranium Surface at 50C"*
P34	**Scott Simpson (LLNL)** *"Small Scale Pyrochemistry with In-situ Material Doping"*
P35	**Andrew Swift (LLNL)** *"Chemical Compatibility and Characterization of Materials for Nuclear Applications"*
P36	**Vijay Varsani (AWE)** *"Plutonium Casting Modelling – Beyond the Present"*
P37	**Olaf Walter (European Commission - JRC)** *"Actinide oxalates for nano-oxides"*
P38	**Clarissa Yablinsky (LANL)** *"Comparison of Techniques for Collecting Young's Modulus Data in Alpha and Delta Plutonium"*
P39	**Stephen Parker (LANL)** *"Thermophysical Properties of Liquid Actinide Halides"*

NUCLEAR FUEL CYCLE

P40	**Sofian Benarib (CEA)** *"Hydrothermal conversion of uranium(IV)-cerium oxalates into uranium-cerium mixed oxides"*
P41	**Lewis Blackburn (University of Sheffield)** *"Progress Towards the Immobilisation of the UK Plutonium Inventory in Titanate Ceramics"*
P42	**Ruth Carvajal Ortiz (NNL)** *"Pyrochemical alpha-active processing apparatus"*
P43	**Phillip Hammer (University of Nevada, Las Vegas)** *"Electrolytic Recovery of Actinide Metals from Aqueous and Non-Aqueous Electrolytes"*
P44	**Anna Hautecouverture (CEA)** *"Actinides mixed oxides $U_{1-x}U_xO_2$ synthesis by Combustion Synthesis"*
P45	**Kiel Holliday (LLNL)** *"Expanding Aqueous Plutonium Chemistry Capabilities at LLNL"*
P46	**Julien Margate (CEA)** *"Sonochemical conversion of UO_2 into U(VI) peroxides reveals unexpected morphologies"*
P47	**Trieu-Duy Tran (CEA)** *"DEM modeling of (U-Pu)O_2 agglomerates for nuclear fuel manufacture"*
P48	**Karen Van Hecke (SCK CEN)** *"Separation of Am and Pu from aged PuO_2 powder"*
P49	**Laurent Venault (CEA)** *"Influence of plutonium oxidation state on the formation of molecular hydrogen, nitrous acid and nitrous oxide from alpha radiolysis of nitric acid solution"*
P60	**Aurelien Perrot (CEA)** *"Experimental approach to study the alteration of MOX MIMAS fuels in an underwater storage situation"*

DETECTION AND ANALYSIS

P50	**Guillaume Bailly (CEA)** "Analysis of Plutonium(IV) acidic solutions with UV-Vis spectrophotometry and Partial Least-Squares regression
P51	**Sarah Crooks (AWE)** *"Alternative Standardisation and Control of Ceric Sulphate Titrimetric Methods"*
P52	**Samuel Cross (AWE)** *"Analysis of microgram plutonium solutions using High Resolution Gamma Spectroscopy for the quantification of plutonium assay, isotopics and trace impurities"*
P53	**Aurelie Diacre (CEA)** *"Simultaneous measurement of uranium and plutonium isotopic ratio in MOX particles by Secondary Ion Mass Spectrometry"*
P54	**Alexa Hanson (LANL)** *"Raman Signatures of Plutonium Halide Species"*
P55	**Rebecca Sanderson (NNL)** *"Determination of chloride in plutonium dioxide by electrochemical dissolution"*
P56	**Brian Scott (LANL)** *"PuO_2 Processing Signatures for Nuclear Forensics"*
P57	**Pier Lorenzo Solari (SOLEIL synchrotron)** *"Probing actinide chemistry and structure with x-rays at the MARS beamline"*
P58	**Dung Vu (LANL)** *"Portable LIBS for Nuclear Processing and Applications"*
P59	**Samuel Webb (SLAC National Accelerator Laboratory)** *"A High-Energy Resolution Fluorescence Detection (HERFD) Microprobe Beamline at SSRL for Nuclear Forensics Applications"*



GENERAL INFORMATION

NAME BADGES MUST BE WORN DURING ALL TECHNICAL SESSIONS, AND EVENTS.

Due to security control at the entry of the congress center, it is strongly recommended to leave your suitcases at the hotel.

REGISTRATION

Location: Conference room #3: PANETERIE

- Sunday 25 from 4:00 pm to 7:00 pm: main registration & welcome drink
- From Monday 26 to Thursday 29: opportunity to register in the morning from 8 a.m. to 9 a.m.