

Time	Num	Monday, July 13	Presenting Author	Institution
		<b>Opening Remarks</b>		
8:15			William Goldstein	Lawrence Livermore National Laboratory
			David K. Shuh	Lawrence Berkeley National Laboratory
			James. G. Tobin	Lawrence Livermore National Laboratory
		<b>Plenary Session 1</b>	<b>Session Chair: James G. Tobin (LLNL)</b>	
8:30	IPL1	Plutonium metal and alloys for energy and defense	Siegfried S. Hecker	CISAC/Stanford University
9:05	IPL2	Microbial Transformations of Actinides in the Environment	Francis Livens	University of Manchester
9:40	IPL3	Higher-rank magnetic order parameter in NpO <sub>2</sub>	Roberto Caciuffo	Institute for Transuranium Elements
10:15		<b>Break</b>		
		<b>Session 1A: Nuclear Fuels, Materials and Wasteforms-1</b>	<b>Session Chair: Rodney Ewing (Univ. of Michigan)</b>	
10:45	1A1	Ceramography and Crystallography of Mixed Actinide Oxide Fuels	Fred G. Hampel	Los Alamos National Laboratory
11:00	1A2	Multi-physics modeling of a molten-salt electrolytic process for nuclear waste treatment	K. R. Kim	Korea Atomic Energy Research Institute
11:15	1A3	Contribution to the thermodynamic modeling of Americium behaviour in MA bearing MOX-fuels	Jean-C. Dumas	CEA Cadarache, FRANCE
11:30	1A4	Molecular Dynamics Analysis of Diffusion of uranium and oxygen ions in uranium dioxide	Tatsumi Arima	Kyushu University
11:45	1A5	Phase state in the Pu-Si-O ternary system	Tepei Uchida	Japan Atomic Energy Agency
12:00	1A6	Diffusion Behaviors of Plutonium and Americium in Polycrystalline Urania	Isamu SATO	Japan Atomic Energy Agency
		<b>Session 1B: Coordination and Organometallic Chemistry-1</b>	<b>Session Chair: John Gibson (LBNL)</b>	
10:45	1B1	Quantifying Covalency in Actinide Metal-Ligand Bonds	David L. Clark	Los Alamos National Laboratory
11:15	1B2	New Au Oxidation Routes for Uranium and Investigations of Persistent Anionic Interactions in Mixed Lanthanide and Uranium Systems	Robert K. Thomson	Los Alamos National Laboratory
11:30	1B3	X-ray absorption fine structures of uranyl(V) complexes in non-aqueous solutions	Koichiro Takao	Forschungszentrum Dresden-Rossendorf
11:45	1B4	Is the ground state of the later actinocenes multi configurational?	Nik Kaltsoyannis	University College London
12:00	1B5	Synthesis, crystal structure, vibrational spectra and magnetic behavior of isotopic [An(H <sub>2</sub> O) <sub>9</sub> ](CF <sub>3</sub> SO <sub>3</sub> ) <sub>3</sub> (An = U, Cm, Cf) salts	Patric Lindqvist-Reis	Institut für Nukleare Entsorgung
12:15		<b>Working Lunch and Poster Session Poster</b>		
		<b>Session 2A: Metallurgy-1</b>	<b>Session Chair: Siegfried S. Hecker (CISAC/Stanford University)</b>	
2:15	2A1	Pu Alloy Behaviour on Self-irradiation and External Effects (allotted extra time for translation)	L. F. Timofeeva	A. A. Bochvar All-Russia Research Institute of Inorganic Materials (VNIINM)
3:00	2A2	Selection and evaluation of a new Pu density measurement fluid.	Krystyna Dziewinska	Los Alamos National Laboratory
3:15	2A3	Phase transformation in Pu alloys at low temperature: in situ characterisations.	Gwenaél Texier	CEA
3:30	2A4	Microstructural influence on the delta to alpha prime transformation in Pu-Ga alloys	Jeremy Mitchell	Los Alamos National Laboratory
3:45	2A5	Production and Investigation of Thin Films of Metal Actinides (Pu, Am, Cm, Bk, Cf)	V. Radchenko	Research Institute of Atomic Reactor, Russia
		<b>Session 2B: Analysis, the Environment and Bio-transformations-1</b>	<b>Session Chair: Francis Livens (Univ. of Manchester)</b>	
2:15	2B1	Speciation of Actinides by Time-resolved Laser Fluorescence Spectroscopy	Petra J. Panak	Physikalisch-Chemisches Institut, University of Heidelberg
2:45	2B2	Studies of the system Plutonium - Pore Water - Opalinus Clay by CE-ICP-MS and CE-RIMS	Thomas J. Wunderlich	Institute for Nuclear Chemistry, University of Mainz, Germany
3:00	2B3	Characterization of Bio-mineralized PuO <sub>2</sub> , NpO <sub>2</sub> and UO <sub>2</sub> by X-Ray Absorption Spectroscopy	Hakim Boukhalfa	EES-14, Los Alamos National Laboratory, Los Alamos, New Mexico, USA 87544
3:15	2B4	Sorption behavior of americium and europium onto oxide surfaces in the presence of picolinate	Euo Chang Jung	Korea Atomic Energy Research Institute
3:30	2B5	Nuclear reactors during World War II in Germany: reality or fiction?	Razvan Aurel Buda	Institute for Nuclear Chemistry, University Mainz
3:45		<b>Break</b>		
		<b>Session 3A: Spectroscopy, Magnetism and Superconductivity-1</b>	<b>Session Chair: Norman Edelstein (LBNL)</b>	
4:15	3A1	Specific heat and magnetism of UFe <sub>6</sub> Al <sub>6</sub>	Alexander V. Andreev	Institute of Physics, Na Slovance 2, 18221 Prague, CZ
4:30	3A2	Actinides and Actinyl Luminescence	Rebecca Bradshaw	University of Oxford
4:45	3A3	Synthesis and Magnetic Studies of Ternary Germanides U <sub>3</sub> Co <sub>4</sub> Ge <sub>7</sub> and U <sub>3</sub> Co <sub>2</sub> Ge <sub>7</sub>	Klara Uhlírova	Charles University in Prague, Faculty of Mathematics and Physics
5:00	3A4	Kinks in the dispersion of f-electrons: first results from ARPES	Tomasz Durakiewicz	Los Alamos National Laboratory
5:15	3A5	Crystal structure and physical properties of ternary U compounds U <sub>3</sub> Bi <sub>4</sub> M <sub>3</sub> (M = Rh, Ni)	T. Klimczuk	Los Alamos National Laboratory
5:30	3A6	Uranium Corrosion Investigation using ToF-SIMS	Doug Farr	Los Alamos National Laboratory
5:45	3A7	Exploring 5f-electron molecular magnetism	Nicola Magnani	Institute for Transuranium Elements, Joint Research Centre, European Commission, Karlsruhe, Germany
		<b>Session 3B: Separations and Solution Chemistry-1</b>	<b>Session Chair: Tsuyoshi Yaita, Japan Atomic Energy Agency</b>	
4:15	3B1	Hydrolysis of Pu(VI) at elevated temperatures	Linfeng Rao	Lawrence Berkeley National Laboratory
4:30	3B2	Automated Chemistry Efforts at LLNL using Eichrom's DGA resin	Roger Henderson	Lawrence Livermore National Laboratory
4:45	3B3	NMR Contribution to Actinide complexes studies in solution	Claude Berthon	CEA
5:00	3B4	Nuclear Magnetic Resonance Spectroscopy and Relaxivity of the Actinide ions and their Complexes	Jean F. Desreux	University of Liege, Belgium
5:15	3B5	SANS and EXAFS investigation of alkyl chain length and branching effects of N,N-dialkylamides on aggregation properties	Shinichi Suzuki	Japan Atomic Energy Agency
5:30	3B6	Use of Electrospray Ionization Mass Spectrometry (ESI-MS) for the characterization of actinides complexes in solution	Laurence Berthon	CEA-Marcoule DEN-DRCP-SCPS-LCSE, France
5:45	3B7	Determination of the stoichiometry of lanthanide-BTP-complexes with nano-ESI-TOF MS	Michael Steppert	Forschungszentrum Karlsruhe, Institut für Nukleare Entsorgung, GE
6:00		End of session		

Time	Num	Tuesday, July 14	Presenting Author	Institution
		<b>Plenary Session 2</b>	<b>Session Chair: David K. Shuh (LBNL)</b>	
8:30	2PL1	Exotic Magnetism and Superconductivity in Actinide Compounds	Yoshinori Haga	Japan Atomic Energy Agency
9:05	2PL2	Actinides in the Nuclear Fuel Cycle and Their Impact on Geologic Disposal	Rodney C. Ewing	University of Michigan
9:40	2PL3	Study of Actinide Chemistry in CIAE	Ye Guoan	CIAE, China
10:15		<b>Break</b>		
		<b>Session 4A: Spectroscopy, Magnetism and Superconductivity-2</b>	<b>Session Chair: Lester Morss (US DOE)</b>	
10:45	4A1	Electronic structure and spectral properties of Curium and Berkelium.	Alexander B. Shick	Institute of Physics, ASCR, Prague, Czech Republic
11:00	4A2	Magnetism of Neptunium in NpX <sub>2</sub> (X=Al, Fe, Os) ferromagnetic compounds probed with XMCD	Fabrice Wilhelm	European Synchrotron Radiation Facility, Grenoble, France
11:15	4A3	Electronic absorption spectra of U <sup>3+</sup> and U <sup>4+</sup> in molten LiCl-RbCl eutectic	Takayuki Nagai	Japan Atomic Energy Agency
11:30	4A4	Magnetism in hydrogenated UTGe compounds	Anna Maria Adamska	Charles University
11:45	4A5	Electrochemical reactions of actinides on single crystal surface in LiCl-KCl Eutectic	Yong Joon Park	Korea Atomic Energy Research Institute
12:00	4A6	Magnetization of UNiGa under pressure	Martin Misek	DCMP, Faculty of Mathematics and Physics, Charles University, Czech Republic
		<b>Session 4B: Coordination and Organometallic Chemistry-2</b>	<b>Session Chair: Marinella Mazzanti (CEA-Grenoble)</b>	
10:45	4B1	Molecular solids of actinide hexacyanoferrate : structure and bonding	C. Den Auwer	CEA Marcoule
11:15	4B2	Exotic new volatile oxygen-bearing compounds of some actinides found during last 10 years	V. P. Domanov	Joint Institute for Nuclear Research, Dubna
11:30	4B3	First structural approach of the phase diagram of mixed Actinide(IV)-Actinide(III) oxalates (An(IV)=Th, U, Np, Pu and An(III)=Pu, Am, Cm)	B. Arab-Chapelet	Commissariat a l'energie atomique (CEA)
11:45	4B4	Investigating the metal-nitrogen bond in actinide complexes	Dominique Guillaumont	CEA Marcoule
12:00	4B5	The Synthesis, Characterization, and Reactivity of Uranium(IV) Homoleptic Alkyl Complexes	Skye Fortier	University of California, Santa Barbara
12:15		<b>Working Lunch and Poster Session</b>		
		<b>Session 5A: Solid State Physics-1</b>	<b>Session Chair: Yoshinori Haga (Japan Atomic Energy Agency)</b>	
2:15	5A1	First-principles electronic and elastic properties of plutonium metal	Per Soderlind	Lawrence Livermore National Laboratory
2:45	5A2	Groundstate electronic structure of the actinide carbides and nitrides	Leon Petit	Department of Physics and Astronomy, University of Aarhus
3:00	5A3	Antiferromagnetic order in the new systems NpNiSi <sub>3</sub> and PuNiSi <sub>3</sub>	Eric Colineau	European Commission
3:15	5A4	Influence of aluminium and gallium in substitution with plutonium a'	G. Robert	CEA-DAM-DIF
3:30	5A5	LDA+DMFT theory of energy gap enhancement with pressure in the Pu-monochalcogenides	Michi-To Suzuki	Uppsala University
		<b>Session 5B: Separations and Solution Chemistry -2</b>	<b>Session Chair: Lynda Soderholm (Argonne National Laboratory)</b>	
2:15	5B1	Thermodynamical investigation of the interaction An <sup>3+</sup> /DTPA (An = Pu, Am, Cm, Cd) by CE-ICP-MS	Sylvain Topin	CEA
2:30	5B2	Formation of polynuclear plutonium complexes and their role in Pu redox chemistry	Clemens Walther	Research Center Karlsruhe, Institute for Nuclear Waste Disposal
2:45	5B3	Complexation of protactinium(V) with oxalic and diethylene-triamine-pentaacetic acids	Mickael Mendes	CNRS
3:00	5B4	Structural investigations on actinide(III)-BTBP and lanthanide(III)-BTBP 1:2 complexes in organic solution	Sascha Trumm	Forschungszentrum Karlsruhe
3:15	5B5	Study on Coordination Characteristics of Neptunium Ions in Calcium Nitrate Hydrate Melt by Raman Spectrometry	Toshiyuki Fujii	Research Reactor Institute, Kyoto University, Japan
3:30	5B6	Spectroscopic Investigations for the Chemical Bond Properties of the Actinide and Lanthanide-Soft Donor Complexes and Molecular Design of New Ion Recognition Ligands	Tsuyoshi Yaita	Japan Atomic Energy Agency
3:45		<b>Break</b>		
		<b>Session 6A: Nuclear Fuels, Materials and Wasteforms-2</b>	<b>Session Chair: Sue Clark (Washington State Univ.)</b>	
4:15	6A1	Numerical Analysis of Irradiated Am Samples in Experimental Fast Reactor Joyo	Hiroshi Sagara	Tokyo Institute of Technology/Idaho National Laboratory
4:30	6A2	Synthesis and Characterisation of Pu-doped Zirconolites	Matthew Gilbert	CRR, University of Manchester
4:45	6A3	Recovery behavior of thermal conductivity in self-irradiated MOX fuel	Kyoichi Morimoto	Japan Atomic Energy Agency
5:00	6A4	Leaching of UO <sub>2</sub> pellets doped with alpha-emitters (238/239Pu) in a synthetic Callovian-Oxfordian deep groundwater	Magaly Tribet	CEA Marcoule Research Center
5:15	6A5	Electro-deposition Behaviors of Minor Actinides with Liquid Cadmium Cathode	Hirohide Kofuji	Japan Atomic Energy Agency
5:30	6A6	The Development of a Method for the Simultaneous Measurement of Cerium IV and Chromium VI Species in Nuclear Fuel Reprocessing Process Streams	Ian Nickson	Lancaster University, UK
5:45	6A7	Characterization of the local chemical properties of spent nuclear fuel by shielded LA-ICP-MS	Yeong-Keong Ha	Korea Atomic Energy Research Institute
		<b>Session 6B: Heavy Elements-1</b>	<b>Session Chair: Robert Eichler (PSI)</b>	
4:15	6B1	Tentative Title: Historical Perspective	Ken Moody	LLNL
4:45	6B2	Nuclear chemistry of Actinides and transactinides at IMP	Qin Zhi	Institute of Modern Physics, Chinese Academy of Science
5:15	6B3	Production and Properties of the Transactinide Elements	Dawn Shaughnessy	Lawrence Livermore National Laboratory
5:30	6B4	Anion-exchange behavior of Db in HF/HNO <sub>3</sub> mixed solution using a new on-line chemical apparatus	Kazuaki Tsukada	Advanced Science Research Center, Japan Atomic Energy Agency
5:45	6B5	Entrance-Channel Effects in Odd-Z Transactinide Compound Nucleus Reactions	Sarah L. Nelson	Lawrence Livermore National Laboratory
6:00		End of Session		

Time	Num	Wednesday, July 15	Presenting Author	Institution
		<b>Plenary Session 3</b>	<b>Session Chair: Ken Moody (LLNL)</b>	
8:30	3PL1	Chemical investigation of superheavy elements 112 and 114	Robert Eichler	Paul Scherrer Institute
9:05	3PL2	Dynamical Mean Field Theory of the Actinides	Gabriel Kotliar	Rutgers University
9:40	3PL3	Third phase formation in the extraction of thorium nitrate by trialkyl phosphates	P. R. Vasudeva Rao	Indira Ghandi Centre for Atomic Research
10:15	<b>Break</b>			
		<b>Session 7A: Nuclear Fuels, Materials and Wasteforms-3</b>	<b>Session Chair: Richard Haire (ORNL)</b>	
10:45	7A1	The Preliminary Study of Dihydroxyurea Application in Plutonium Purification Cycle	Xian Liang	China Institute of Atomic Energy
11:00	7A2	Partitioning of U, Np, Th, and Eu between acidic aqueous Al(NO <sub>3</sub> ) <sub>3</sub> solutions and various TOPO extraction chromatographic materials	Jenifer Shafer	Washington State University
11:15	7A3	Oxygen potential of (Pu <sub>0.81</sub> Am <sub>0.08</sub> Nd <sub>0.11</sub> )O <sub>2-x</sub>	Shuhei Miwa	Japan Atomic Energy Agency
11:30	7A4	Comparative study of the structural and electrochemical properties of noble metal inclusions in a LiO <sub>2</sub> matrix	Silvia Stumpf	European Commission / JRC / ITU
11:45	7A5	Oxygen potential measurements of Cm <sub>0.09</sub> Pu <sub>0.91</sub> O <sub>2-x</sub> by EMF method	Haruyoshi Otake	Japan Atomic Energy Agency
12:00	7A6	Solid State Synthesis of Neptunium Mononitride at Low Temperatures	Kiel Holliday	University of Nevada, Las Vegas
		<b>Session 7B: Separations and Solution Chemistry-3</b>	<b>Session Chair: Anne E. V. Gordon (Auburn University)</b>	
10:45	7B1	Development of Spent Fuel Reprocessing Process based on Selective Sulfurization - Study on the Pu, Np and Am Sulfurization	Akira Kirishima	Institute of Multidisciplinary Research for Advanced Materials, Tohoku University
11:00	7B2	Developing the Solvent Extraction Chemistry of Hexavalent Americium	Leigh Martin	Idaho National Laboratory
11:15	7B3	Future nuclear fuel cycles: prospect and challenges for actinide recycling	Dominique Warin	CEA
11:30	7B4	Selective recovery of minor trivalent actinides from high level liquid waste by R-BTP/SiO <sub>2</sub> -P <sub>2</sub> O <sub>5</sub> adsorbents	Yuichi Sano	Japan Atomic Energy Agency
11:45	7B5	Inner-sphere complexes of NpO <sub>2</sub> <sup>+</sup> on dispersed particles of amorphous ferric oxides	Shinya Nagasaki	The University of Tokyo
12:00	7B6	Two-phase extraction of actinides and selectivity studies using multidentate 10-N-Si based ligands	Mohan S. Bharara	Auburn University
12:15	<b>Working Lunch and Poster Session</b>			
		<b>Session 8A: Metallurgy-2</b>	<b>Session Chair: Jeremy Mitchell (LANL)</b>	
2:15	8A1	Phase stabilities of plutonium	Hyunchae Cynn	LLNL
2:30	8A2	Study of phase equilibrium of the Pu <sub>2</sub> O <sub>3</sub> -PuO <sub>2</sub> system by the first principles calculation and CALPHAD approach	Satoshi Minamoto	ITOCHU Techno-Solutions Corporation
2:45	8A3	The Solubility of hydrogen and deuterium in alloyed, unalloyed and impure plutonium metal	Scott Richmond	Los Alamos National Laboratory
3:00	8A4	Preparation of U, Np and Pu metals by mercury amalgamation methods: recent achievements and perspectives	Rachel Eloirdi	European Commission, Joint Research Centre, Institute for Transuranium Elements
3:15	8A5	The mechanical properties of alpha and delta-stabilized plutonium	Brandon W. Chung	Lawrence Livermore National Laboratory
3:30	8A6	Crystallographic And Magnetic Properties of the two New Actinides Compounds: Np <sub>2</sub> Co <sub>17</sub> and Np <sub>2</sub> Ni <sub>17</sub>	Halevy Itzhak	NRCN - Israel
		<b>Session 8B: Coordination and Organometallic Chemistry-3</b>	<b>Session Chair: Nik Kaltsoyannis (University College London)</b>	
2:15	8B1	Catalysis vs. Oxophilicity: Breaking the Myth of Inactive Actinide-Oxo Complexes	Moris Eisen	Technion -Israel Institute of Technology, Haifa, Israel
2:30	8B2	Uranyl Peroxide Polyoxyometalate Fullerene Topologies: Symmetry vs. Minimal Pentaagonal Adjacencies	Ginger Sigmon	University of Notre Dame
2:45	8B3	Synthesis of Magnetic Uranium-Containing Molecules	Jeffrey D. Rinehart	University of California Berkeley
3:00	8B4	Using a Soft PNP Pincer Ligand to Promote New Reactivity Patterns and Structures for the Actinide Series	Thibault Cantat	Los Alamos National Laboratory
3:15	8B5	Coordination chemistry of pentavalent uranyl in anhydrous conditions	Marinella Mazzanti	CEA-Grenoble
3:30	8B6	U(VI) oxygen polyhedra as pillars for building frameworks from uranium-based layers	Laurent Jouffret	UCCS - Unite de Catalyse et de Chimie du Solide - UMR 8181
3:45	<b>Break</b>			
		<b>Session 9A: Solid State Physics-2</b>	<b>Session Chair: Ladia Havela (Charles University)</b>	
4:15	9A1	A Moving Target: Responding to Magnetic and Structural Disorder in Lanthanide- and Actinide-based Superconductors	Corwin H. Booth	Lawrence Berkeley National Laboratory
4:30	continued			
4:45	9A2	Electrical transport measurements of delta-Pu with multiple delta-eta stabilizers	Scott McCall	Lawrence Livermore National Laboratory
5:00	9A3	Dynamical Processes in UO <sub>2+x</sub> : Discovery of a Novel Type of Polaron	Steven D. Conradson	LANL
5:15	9A4	Study of soft phonons in delta-Pu-Ga near the delta-alpha? transition	Tai-C. Chiang	University of Illinois at Urbana-Champaign
5:30	9A5	Neutron Scattering Study on U-dichalcogenide	Naoto Metoki	Advanced Science Research Center, JAEA
5:45	9A6	Uranium Nanostructures	Ross Springell	ESRF
		<b>Session 9B: Separations and Solution Chemistry-4</b>	<b>Session Chair: Trevor Hayton (UCSB)</b>	
4:15	9B1	Physicochemical properties of dicesium tetravalent plutonium hexanitate in uranium crystallization process	Masaumi Nakahara	Japan Atomic Energy Agency
4:30	9B2	Solid-liquid separation of oxidized americium from fission product lanthanides	Thomas C. Shehee	Washington State University
4:45	9B3	Unique Extraction Behavior of Americium and Curium in a System of TRP and Calcium Nitrate Hydrate Melt	Genki Okude	Graduate School of Engineering, Kyoto University
5:00	9B4	The Extraction of Actinides with Diamides of Dipicolinic Acid	Alena Paulenova	Oregon State University
5:15	9B5	Americium and curium separation in molten chloride melt utilizing the divalency of Am	Hajimu Yamana	Research Reactor Institute, Kyoto University
5:30	9B6	Uranium extraction from natural waters by ionic liquids	Gabriele Wallner	Institute of Inorganic Chemistry, University of Vienna, Austria
5:45	9B7	Flavonoids - organic compounds with strong interactions towards uranium	G. Geipel	Research Center Dresden-Rossendorf
6:00	End of Session			

Time	Num	Thursday, July 16	Presenting Author	Institution
<b>Plenary Session 4</b>				
<b>Session Chair: Ken Raymond (UC Berkeley/LBNL)</b>				
8:30	4PL1	Actinide hydrolysis and aggregation in aqueous solutions	Lynda Soderholm	Argonne National Laboratory
9:05	4PL2	New Cubic Structure Compounds as Actinide Host Phases	Sergey Stefanovsky	SIA Radon, RU
9:40	4PL3	Angle Resolved Photoemission Study on Uranium Compounds	Shin-ichi Fujimori	Japan Atomic Energy Agency
<b>Break</b>				
10:15				
<b>Session 10A: Solid State Physics-3</b>				
<b>Session Chair: Gunter Kaindl (Free University of Berlin)</b>				
10:45	10A1	5f-electronic states of neptunium compounds: NpGe <sub>3</sub> , NpCd <sub>11</sub> and NpRhGa <sub>5</sub>	Yoshichika Onuki	Graduate School of Science, Osaka University
11:00	10A2	The properties of vacancies and interstitials in plutonium	Chris Marianetti	Columbia University
11:15	10A3	Ab initio study of the plutonium dioxide surfaces : role of electronic correlations	Gerald Jomard	CEA, DAM, DIF, F 91297 Arpajon, France
11:30	10A4	Electronic structure of Pu materials from angle-resolved photoemission	John J. Joyce	Los Alamos National Laboratory
11:45	10A5	Phonon DOS of alpha- and delta-plutonium by inelastic x-ray scattering: Evidence the delta-phase is stabilized by unconventional sources of entropy	Michael Manley	Lawrence Livermore National Laboratory
12:00	10A6	Lattice dynamics, elastic constants and phase diagrams of the light actinides	Johann Bouchet	CEA
<b>Session 10B: Coordination &amp; Organometallic Chemistry-4</b>				
<b>Session Chair: Wayne Lukens (LBNL)</b>				
10:45	10B1	Novel Non-fullerene Uranyl Peroxide Nanoclusters	Daniel K. Unruh	University of Notre Dame
11:00	10B2	Actinide sulfide ions in the gas phase: a preliminary FTICR-MS study of the reactivity and thermochemistry of ThS <sup>+</sup> and US <sup>+</sup>	Joaquim Marcalo	Instituto Tecnológico e Nuclear
11:15	10B3	Reactions of heterocycles with uranium ferrocene diamide complexes	Paula L. Diaconescu	University of California, Los Angeles
11:30	10B4	Coordination ligands for environmental extraction and sensing applications	Anne E. V. Gorden	Auburn University
11:45	10B5	Use of hetero N,O-donor ligands for selective actinide extraction ? Complexation study of actinides and lanthanides with N-octyl-N-tolyl-1,10-phenanthroline-2-carboxamide (O <sub>2</sub> TaP <sub>2</sub> TA)	Atsushi Ikeda-Onno	Japan Atomic Energy Agency
12:00	10B6	Modeling Actinide Chemistry in the Gas-Phase and at Interfaces	Wibe A. de Jong	Pacific Northwest National Laboratory
<b>Working Lunch and Poster Session</b>				
12:15				
<b>Session 11A: Spectroscopy, Magnetism, and Superconductivity-3</b>				
<b>Session Chair: Roberto Caciuffo (Institute for Transuranium Elements)</b>				
2:15	11A1	Fermi surface gapping driven by magnetic fluctuations causes the hidden order of URu2Si <sub>2</sub>	Peter Oppeneer	Dept. of Physics & Mat. Science, Uppsala University, Sweden
2:45	11A2	The 5f7 (Am <sup>2+</sup> , Cm <sup>3+</sup> , and Bk <sup>4+</sup> ) Spectroscopy Story, EPR and Optical Studies	Norman M. Edelstein	Chemical Sciences Division, Lawrence Berkeley National Laboratory
3:00	11A3	Laser-induced breakdown spectroscopy for uranium concentration analysis in glass matrix using the strongest hydrogen emission line of the Balmer series, H $\gamma$ (656.28 nm), as external standard	D. H. Lee	KAIST
3:15	11A4	High Resolution X-ray Emission Spectroscopy (HRXES): an Advanced Tool for Actinide Research	Tonya Vitova	Institute for Nuclear Waste Disposal, Forschungszentrum Karlsruhe (FZK)
3:30	11A5	Magnetism and superconductivity in UCoGe doped by transition metals	Jiri Pospisil	DCMP, Faculty of Mathematics and Physics, Charles University, Czech Republic
<b>Session 11B: Coordination &amp; Organometallic Chemistry-5</b>				
<b>Session Chair: Christophe Den Auwer (CEA)</b>				
2:15	11B1	Electrochemical studies of uranyl nitrate complexes in 1-alkyl-3-methylimidazolium nitrate ionic liquids	Yasuhisa Ikeda	Tokyo Institute of Technology
2:30	11B2	Exploring redox properties of the actinyls - multimetallic complexes and non-innocent ligands	Clint A. Sharrad	University of Manchester
2:45	11B3	The reaction of Th <sup>2+</sup> and C <sup>3H8</sup> in the gas-phase: a combined theoretical and experimental study	Maria del Carmen Michelini	Dipartimento di Chimica, Università della Calabria, Italia
3:00	11B4	Synthesis, Characterization and Reactivity of Uranyl(V) Ketimate and Diketimate Complexes	Trevor W. Hayton	University of California Santa Barbara
3:15	11B5	Covalency Trends in Metallocene Dichlorides (M = Ti, Zr, Hf, Th, U) From Soft X-ray Absorption and Hybrid Density Functional Theory	Stosh A. Kozimor	Los Alamos National Laboratory
3:30	11B6	A Structural and Spectroscopic Study of Uranium 2,6-Bis(benzimidazolyl)pyridine Complexation	Roy Copping	Lawrence Berkeley National Laboratory
<b>Break</b>				
3:45				
<b>Session 12A: Nuclear Fuels, Materials and Wasteforms-4</b>				
<b>Session Chair: Claude Guet (CEA)</b>				
4:15	12A1	Uptake of Np by cementitious materials: redox behavior of Np(IV/V) under hyperalkaline conditions	Xavier Gaona	Paul Scherrer Institut
4:30	12A2	Phase separation behavior of (U, Pu, Am, Np, Sm) O <sub>2-x</sub>	Akira Komeno	Japan Atomic Energy Agency
4:45	12A3	Experimental investigations in the U-Si-C system	Henri Noel	CNRS-University of Rennes - France
5:00	12A4	Vaporisation behaviour and thermodynamics of plutonium oxide	Petronela Gotcu	European Commission, Joint Research Centre, Institute for Transuranium Elements, Karlsruhe, Germany
5:15	12A5	Homogeneity at molecular scale of (U,Pu)O <sub>2</sub> solid solutions probed by XAS	P. Martin	CEA (Commissariat à l'Energie Atomique)
5:30	12A6	Thermal conductivities of (Np,Am)N and (Pu,Am)N solid solutions	Tsuyoshi Nishi	Japan Atomic Energy Agency
5:45	12A7	Basic actinide chemistry and physics research in close cooperation with hot laboratories: ACTILAB	Kazuo Minato	Japan Atomic Energy Agency
<b>Session 12B: Analysis, the Environment and Bio-transformations-2</b>				
<b>Session Chair: Gerhardt Geipel (Research Center Dresden-Rossendorf)</b>				
4:15	12B1	Effects of Uranium(VI) Sorption Kinetics on the Comparison of K <sub>d</sub> Values Determined at Various Solution Conditions	Ruth M. Tinnacher	Lawrence Livermore National Laboratory
4:30	12B2	Correlation between the activity concentration of plutonium ( <sup>238</sup> Pu and <sup>239+240</sup> Pu) in atmospheric precipitation in Krakow, Poland and meteorological conditions (NAO)	Renata Kierepko	The Henryk Niewodniczanski Institute of Nuclear Physics, Polish Academy of Science
4:45	12B3	Analysis of the chemical properties of neptunium under the deep geological environmental conditions in Korea	B. Y. Kim	KAIST
5:00	12B4	Bioreduction of Np in Aquifer Sediments	Gareth Law	University of Leeds
5:15	12B5	Characterisation of an Uranium Accumulating Plant in its Terrestrial Ecosystem and Under Laboratory Conditions	K. Viehweger	Research Center Dresden-Rossendorf
5:30	12B6	Delineating Hydrated Uranyl Phosphates: Powder XRD and ATR-IR Studies	Christopher R. Armstrong	Washington State University
5:45	12B7	Interaction of trivalent actinides with CaCO <sub>3</sub> : Process understanding on a molecular level	Thorsten Stumpf	Institut für Nukleare Entsorgung, Forschungszentrum Karlsruhe
6:00		End of Session		

Time	Num	Friday, July 17	Presenting Author	Institution
		<b>Session 13A: Solid State Physics-4</b>	<b>Session Chair: Michael Manley (LLNL)</b>	
8:00	13A1	Peculiarities of U-based Laves phases	Antonio P. Goncalves	Instituto Tecnológico e Nuclear, Portugal
8:30	13A2	Fermi Surface Properties of Non-Magnetic NpCd11	Yoshiya Homma	Oarai Center, IMR, Tohoku University
8:45	13A3	First observation of superconductivity in a neptunium based compound: <u>unconventionality of NpPd5Al2</u>	Jean-Christophe Griveau	Institute for Transuranium Elements
9:00	13A4	Superconductivity in U- and Pu-based heavy fermion materials	Eric Bauer	Los Alamos National Laboratory
9:15	13A5	Thermoelectric properties of transuranium-based <u>unconventional superconductors</u>	Krzysztof Gofryk	Institute for Transuranium Elements, Karlsruhe, Germany
9:30	13A6	Structure, properties, and theoretical electronic structure of UCuOP and NpCuOP	Daniel Wells	Northwestern University, Chemistry Department
9:45	13A7	Low-temperature specific heat of delta-Pu: Pu-Ce study	Ladislav Havela	Charles University
		<b>Session 13B: Separations and Solution Chemistry-5</b>	<b>Session Chair: P. R. Vasudeva Rao, Indira Ghandi Centre for Atomic Research</b>	
8:00	13B1	Trivalent Actinide - Lanthanide Separations using TALSPEAK: <u>Explorations of the Basic Chemistry</u>	Ken Nash	Washington State University
8:30	13B2	Ionic liquids for actinides extraction	Ali Ouadi	IPHC CNRS, FR
8:45	13B3	Cm(III), Am(III), and U(VI) solvation and complexation in room temperature ionic liquids: spectroscopic and theoretical studies	C. Gaillard	Institut de Physique Nucleaire de Lyon
9:00	13B4	Reactivity of Plutonium Colloids in Solution	Richard E. Wilson	Argonne National Laboratory
9:15	13B5	Thermodynamics of the extraction of tetravalent plutonium under PUREX conditions	Michael Alex Brown	Oregon State University
9:30	13B6	Spectroscopic identification of tri-n-butyl phosphate adducts with Pu(IV) <u>hydrolyzed species</u>	Peter Tkac	Radiation Center, Oregon State University
9:45	13B7	Alternative red-ox reagents in NPEX and TRUEX processes of UREX+	Artem V. Gelis	Chemical Sciences and Engineering Division, Argonne National Laboratory
10:00		<b>Break</b>		
		<b>Plenary Session 5</b>	<b>Session Chair: Linfeng Rao (LBNL)</b>	
10:30	5PL1	Actinide-Specific Sequestering Agents	Ken N. Raymond	UC Berkeley/LBNL
11:05	5PL2	New Developments in Actinide Organometallic Chemistry	Jaqueline L. Kiplinger	Los Alamos National Laboratory
11:40	5PL3	Development of a New Extractant and a New Extraction Process for <u>Minor Actinide Separation</u>	Yasuji Morita	Japan Atomic Energy Agency
12:15		CLOSE		
12:30		ADJOURN		