

Nuclear Fuel Cycle: A Chemistry Conference (NFC3) / MAY 4 & 5, 2021

May 4		
10:00	introduction	
	ACT K1	K. TAKAO
	10 min questions	
10:55	ACT O1	G. CHUPIN
	ACT O2	E. MONTOYA
	ACT O3	R. ONO
	ACT O4	B. PERRIN
11:55	20 min questions	
12:15	END OF SESSION	
	lunch time	
13:30	SEP K1	E. MOSSINI
	10 min questions	
14:10	SEP O1	P. WEßLING
	SEP O2	G. COLOMBO DUGONI
	SEP O3	D. MORENO MARTINEZ
	SEP O4	I. SÁNCHEZ GARCÍA
15:10	20 min questions	
15:30	15 min break	
15:45	SEP K2	J. SHAFER
	Questions 10 min	
16:25	SEP O5	D. MAERTENS
	SEP O6	M. EDDY
	SEP O7	A. DRESSLER
	SEP O8	E. MAKOMBE
17:25	20 min questions	
17:45	END OF SESSION	

May 5		
10:00	introduction	
	MAT K1	C. SCHREINEMACHERS
	10 min questions	
10:55	MAT O1	P. FOUQUET-MÉTIVIER
	MAT O2	L. GONZALES
	MAT O3	M. MASSONET
	MAT O4	K. KOTTRUP
	MAT O5	J. SIMEON
12:10	20 min questions	
12:30	END OF SESSION	
	Lunch time	
14:00	W&G K1	G. THOROGOOD
	10 min questions	
14:40	W&G O1	D. COMANDELLA
	W&G O2	M. COT-AURIOL
	W&G O3	A. MATVEENKO
	W&G O4	C. GILLET
15:40	20 min questions	
16:00	15 min break	
16:15	W&G O5	E. PERRY
	W&G O6	R. PÉNÉLOPE
	W&G O7	A. RODIONOVA
	W&G O8	S. A. KULIKOVA
17:15	20 min questions	
17:35	END OF SESSION	



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ACTINIDE AND FISSION PRODUCT CHEMISTRY

ACT K1	<i>Coordination Chemistry of Actinide(VI, IV) Nitrates for Development of Nuclear Fuel Materials Selective Precipitation (NUMAP) Reprocessing</i>	Koichiro TAKAO Tokyo Institute of Technology
ACT O1	<i>Synthesis and Characterization of a hexanuclear plutonium(IV) in acetate solution from EXAFS and DFT</i>	Geoffroy CHUPIN CEA
ACT O2	<i>DFT Study on the Chemical Behavior of High Yielding Fission Products (Cs-137, I-129) in a UO₂ Framework</i>	Eduardo MONTOYA University of Nevada, Las Vegas
ACT O3	<i>Crystal Structures of Tetravalent f-Block Metals with Bis(2-pyrrolidone) Linker Molecules at Different HNO₃ Concentration</i>	Ryoma ONO Tokyo institute of technology
ACT O4	<i>Plutonium alpha radiolysis of nitric acid solutions</i>	Brandon PERRIN CEA

ACTINIDES SEPARATION

SEP K1	<i>PyTri-Diol behavior at conditions relevant for i-SANEX and EURO-GANEX processes</i>	Eros MOSSINI Politecnico di Milano
SEP O1	<i>Activating the Aromatic Core of the Water-soluble Complexing Agent PTD</i>	Patrik WEßLING Heidelberg University
SEP O2	<i>Deep Eutectic Solvents: promising co-solvents for Spent Nuclear Fuel reprocessing</i>	Greta COLOMBO DUGONI Politecnico di Milano
SEP O3	<i>Speciation in solvent extraction organic phases studied by molecular dynamics simulations: bifunctional amidophosphonic acid extractants</i>	Diego MORENO MARTINEZ CEA
SEP O4	<i>Development of a gamma irradiation loop and the evaluation of the EURO-GANEX process resistance</i>	Iván SÁNCHEZ GARCÍA CIEMAT
SEP K2	<i>Technical Opportunities for Decreasing Cost and Proliferation Hazard Associated with Reprocessing Technologies</i>	Jenifer SHAFER ARPA-E
SEP O5	<i>Use of TBP and N,N-dialkylamides for uranium extraction with 25 mm annular centrifugal contactors: effect of residence time on extraction performance</i>	Dominic MAERTENS SCK CEN / KU Leuven
SEP O6	<i>How Aqueous Complexes Shape ALSEP Kinetics</i>	Madeleine EDDY Colorado School of Mines
SEP O7	<i>The effect of immobilization mode of amidophosphonate ligands onto silica surfaces on the uranium extraction efficiency</i>	Aline DRESSLER CEA
SEP O8	<i>Malonamides for the multi-recycling of nuclear spent fuel.</i>	Elizabeth MAKOMBE CEA/ICSM



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ACTINIDE MATERIALS: NUCLEAR FUELS AND RADWASTE MATRICES

MAT K1	Structural changes of Nd- and Ce-doped ammonium diuranate during the conversion to $U_{1-y}Ln_yO_{2\pm x}$	Christian SCHREINEMACHERS Forschungszentrum Jülich GmbH
MAT O1	Study of melting temperatures of (U,Pu)O ₂ SFRs fuels: influence of Pu and Am contents and oxygen stoichiometry	Pauline FOUQUET-MÉTIVIER CEA
MAT O2	Chromium doped Uranium Nitride as an advanced technology fuel	Luis GONZALEZ Chalmers University of Technology
MAT O3	Impact of the method of preparation and sintering conditions on the dissolution of (U,Ce)O _{2±6}	Malvina MASSONNET ICSM/CEA
MAT O4	Molten salt irradiation and waste management	Konstantin KOTTRUP NRG
MAT O5	Sintering map approach on MOX SFR nuclear fuels with various plutonium contents	Julie SIMEON CEA

WASTE MANAGEMENT & GEOLOGICAL REPOSITORY

WG K1	Pb₂Tc₂O_{6.86}, a Stable Valence V Technetium Oxide?	Gordon THOROGOOD ANSTO
WG O1	Electrospun microporous membranes loaded with cerium oxide nanoparticles for the decontamination of nuclear wastewaters	Daniele COMANDELLA European Commission - JRC
WG O2	Sonochemical conversion of UO ₃ into U(VI) intrinsic colloids in near-neutral conditions	Manon COT-AURIOL CEA/ICSM
WG O3	Matrices for the immobilization of waste from pyrochemical processing of spent nuclear fuel	Anna MATVEENKO Lomonosov Moscow State University
WG O4	Effects of complex irradiation scenarios on ISG nuclear glass structure, properties and leaching behavior	Célia GILLET CEA/ICSM
WG O5	The Fabrication and Oxidative Dissolution of Mixed Oxide Fuels under the Reducing Conditions of a Geological Disposal Facility	Emma PERRY University Of Cambridge
WG O6	Development of iodine filters directly convertible into conditioning matrices	Raphaël PÉNÉLOPE CEA
WG O7	Sorption and spatial distribution of radionuclides onto fractured rocks of the exocontact zone of the Nizhnokansky granitoid massif	Anastasiia RODIONOVA GEOKHI RAS
WG O8	Immobilization of metal chlorides in magnesium potassium phosphate compound	Svetlana A. KULIKOVA Vernadsky Institute, Russian Academy of Sciences

