

Sunday, October 6, 2019

Westin Zagreb Hotel

Registration: 4:30 – 6:00 pm, Opera Ante Welcome Hall (17th Floor)

Welcome Reception: 6:00 – 7:30 pm, Opera Hall (17th Floor)

#	Session Title	Time	Paper Title	Presenter
Monday, October 7, 2019				
Meeting Room: Westin Zagreb Hotel, Crystal Ballroom 2/3				
1	Global Progress in HEU Minimization Chaired by Chris Landers (DOE-NNSA)	9:00 am	Opening Remarks	Ambassador W. Robert Kohorst U.S. Embassy in Croatia
		9:15 am	Welcome to 40 th RERTR International Meeting	Paul Kearns Director, Argonne National Laboratory
			NNSA Nonproliferation Initiatives and Partnerships	Brent Park Deputy Administrator for Defense Nuclear Nonproliferation, DOE-NNSA
			International Atomic Energy Agency Efforts to Promote Nuclear Nonproliferation	Christophe Xerri Director, Division of Nuclear Fuel Cycle, Waste Technology and Research Reactors, IAEA
2	HEU Minimization Structures Plenary Chaired by John Stevens (ANL)	9:45 am	Reactor Conversion: By the Numbers	Chris Landers (DOE-NNSA)
			Nuclear Material Removal Collaboration with Research Reactor Conversions	Scott Roecker (DOE-NNSA)
			IAEA and RERTR: A History of Collaboration	Frances Marshall (IAEA)
10:30 am Coffee Break, Crystal Ballroom Foyer Area				
3	Life After Conversion I Chaired by Sunday Jonah (CERT)	11:00 am	Technical Highlights from 40 RERTR Conferences and Reactor Conversions	John Stevens (ANL)
			Framatome-CERCA™ Successes in Research Reactor Conversions	Francois Gauché (Framatome – CERCA™)
			Status of Hungary after the HEU-LEU Conversion	Istvan Vidovszky (Centre for Energy Research)
12:00 pm Lunch Break				
4	Life After Conversion II Chaired by Ross Finlay (ANSTO)	1:30 pm	Towards a HEU-free World: INVAP's Experience, Challenges, Milestones and Perspective	Matías Márquez (INVAP)
			Support of ÚJV Řež, a. s. for Shipments of Spent Nuclear Fuel within the M3 Program	Josef Podlaha (ÚJV Řež, a. s.)
			Comparison of Thermal Hydraulics Characteristics of NIRR-1 LEU Core with HEU Core	Sunday Jonah (CERT)
2:30 pm Coffee Break, Crystal Ballroom Foyer Area				
5	HEU Removal Operations and Fuel Transportation Chaired by Scott Roecker (DOE-NNSA)	3:00 pm	History of the U.S. Origin Program and Its Current End State	Jeff Galan (DOE-NNSA)
			Current Status of the Russian Research Reactor Fuel Return Program	Igor Bolshinsky (INL)
			NAC's OPTIMUS™ Packaging for Research Reactor Wastes	Jeff England (NAC Intl.)
			Impacts to the Advanced Test Reactor Fresh Fuel Shipping Container (ATR FFSC) for the Transport of LEU Fuel	Kerry Dunn (SRNL)
			Corrosion Protection of Spent Aluminum-Clad Research Reactor Fuel during Long Term Wet Storage	Lalgudi Ramanathan (IPEN)
5:00 pm Adjourn				

6:00 pm Poster Session, Refreshments, Panorama Hall (17th Floor)

6	Poster Session – Refreshments Chaired by Caryn Warsaw (ANL) Traditional Croatian Entertainment by ETNOSphere	6:00 – 7:15 pm	Calculated Studies in Support of the Creation of a Uranium-Zirconium Hydride Critical Assembly with Low Enriched Uranium Zirconium Carbonitride Fuel	Svyatoslav Sikorin (JIPNR-Sosny)
			USHPRR Fuel Fabrication Pillar Fabrication Process Status	Bruce Nielson (INL)
			Current Status on the Development of High-density LEU U ₃ Si ₂ Fuel in KAERI	Yong Jin Jeong (KAERI)
			Update of Regulatory Oversight of NIRR-1 Core Conversion	Kayode Adedoyin (NNRA)
			European Developments for Monolithic UMo Fuel: UMo Foil Manufacturing Project	Sylvain Lorand (Framatome – CERCA™)
			Depleted Uranium Manufacturing Studies for KUCA LEU Conversion Fuels	Jerome Allenou (Framatome – CERCA™)
			Y-12 National Security Complex LEU-Mo Casting Update	Danielle Turpin (Y-12 NSC)
			First-Principles Study of Surface Properties of Crystalline and Amorphous Uranium Aluminides	Abdellatif Yacout (ANL)
		7:15 – 8:00 pm	Microstructural Characterization of U-7Mo Dispersion Fuel Plates Irradiated at High Power	Dennis Keiser (INL)
			Fabrication of Atomized LEU-7 wt.% Mo Powder for KUCA Core Conversion	Kyuhong Lee (KAERI)
			Transition Cores Accident Analyses for the Conversion of the University of Missouri Research Reactor from Highly-Enriched to Low-Enriched Uranium	David Jaluvka (ANL)
			UMo Benchmark Experiment Data Needed to Support Computational and Nuclear Data Validation	Margaret Marshall (INL)
			Scale-Up of Atomic Layer Deposition Coating and Heat Treatment of Uranium-Molybdenum Powder	Laura Jamison (ANL)
			DART Simulation of Plate-Type Fuels to High Burnup	Gerard Hofman (ANL)
			Microstructure-Based Process Modeling and Integration of U-10Mo	Vineet Joshi (PNNL)
			Evaluation of Fuel Swelling and Irradiation Creep Behavior for a MURR LEU U-10Mo Monolithic Plate: A Finite Element Analysis Based Study	Laura Jamison (ANL)
Verification and Validation of Thermal-Hydraulic Analysis Software: The University of Missouri Research Reactor as a Case Study	David Jaluvka (ANL)			

Tuesday, October 8, 2019

Meeting Room: Westin Zagreb Hotel, Crystal Ballroom 2/3

7	LEU Fuel Design and Qualification Chaired by Bruno Baumeister (TUM)	8:00 am	Status of KJRR Fuel Qualification - Update	Jong Man Park (KAERI)
			Review on the Development of Very High Density Fuels by CMAD Group	Marisol Lopez (CNEA)
			SEMPER FIDELIS: Post Irradiation Examination Results	Ann Leenaers (SCK•CEN)
			Non-Destructive Examination Preliminary Results of EMPIrE	Adam Robinson (INL)
			A Qualification Base Report on High-Density U ₃ Si ₂ Al Dispersion Fuel for High-Power Research Reactors	Yeon Soo Kim (ANL)
			Status of LEU U-10Mo Monolithic Fuel Testing and Qualification Efforts to Support U.S. High Performance Research Reactor Conversions	James Cole (INL)

10:00 am Coffee Break, Crystal Ballroom Foyer Area

			USHPRR Fuel Fabrication Pillar Fabrication Status, Process Optimizations and Future Plans	Curt Lavender (PNNL)
			Y-12 Past, Present and Future Supplying Uranium	Lloyd Jollay (Y-12 NSC)

8	Fuel Fabrication Technology Chaired by Scott Ravenhill (DOE-NNSA)	10:30 am	USHPRR Fuel Element Specifications and Plate Demonstration Plans	David Jaluvka (ANL)
			Impact Assessment for the MIT Research Reactor LEU Fuel Fabrication	Lin-wen Hu (MIT)
			Manufacturing of the HiPROSIT Irradiation Experiment: High Density U ₃ Si ₂ Fuel Plates	Bertrand Stepnik (Framatome – CERCA™)
			Future HALEU supply – A Front-end Industrial Actor's View	Antonin Hodde (Orano)
12:30 pm Lunch Break				
9	High Performance Reactor Conversions Chaired by David Jaluvka (ANL)	1:30 pm	U.S. High Performance Research Reactor LEU Conversion Design and Qualification Progress	Erik Wilson (ANL)
			Progress Update on the MIT Research Reactor (MITR) Conversion from Highly Enriched Uranium to Low Enriched Uranium Fuel	Lin-wen Hu (MIT)
			Conversion Status of the University of Missouri-Columbia Research Reactor from Highly Enriched to Low-Enriched Uranium Fuel	Les Foyto (MURR)
			Recent Work on Conversion of the NIST Research Reactor	Thomas Newton (NIST), David Diamond (BNL)
			Present Status of the ATR LEU Fuel Project and the Element Test Campaign	Jere Jenkins (INL)
			High Flux Isotope Reactor Conversion from High-Enriched to Low-Enriched Uranium Fuel – A 2019 Progress Update	Prashant Jain (ORNL)
3:30 pm Coffee Break, Crystal Ballroom Foyer Area				
10	International Conversion Progress, LEU Reactor Development and Post-Conversion Performance Chaired by Tom Hanlon (IAEA)	4:00 pm	History And Current Status of the KUCA Dry Core Conversion Project	James Morman (ANL)
			Status of the IVG.1M Fuel Test	Vyacheslav Gnyrya (IAE-NNC)
			Experimental and Analytical Transient Studies of Material Movements Inside Critical Configurations Using Low Enriched Uranium Fuel	Yousry Gohar (ANL)
			Non-reactor Tests of HEU and LEU Fuel and Reflector Material (Beryllium Oxide) as Part of the IGR Reactor Conversion	Yuliya Baklanova (IAE-NNC)
			Progress of the Kijang Research Reactor (KJRR) Project in Korea	Hoan-Sung Jung (KAERI)
			A Glance of Ghana Research Reactor Under Two Project and Supply Agreements	Henry Odoi (GAEC)
6:00 pm Adjourn				
Wednesday, October 9, 2019 Meeting Room: Westin Zagreb Hotel, Crystal Ballroom 2/3				
11	Fuel Irradiation Testing and Characterization Chaired by Jong Man Park (KAERI)	8:00 am	High-Temperature FLiBe Salt and Materials Irradiation Tests Supporting Molten Salt Reactors Development at the MIT Research Reactor	Lin-wen Hu (MIT)
			Low Enrichment Nuclear Fuel Based on Uranium-Zirconium Carbonitride: Performance of the Methodical Reactor Experiment	Andrei Bakhin (LUCH)
			Current Plans for Irradiation Testing of Low Enriched Uranium Silicide Fuel in Support of High Flux Isotope Reactor (HFIR) Conversion	Irina Glagolenko (INL)
			Overview and Status of the FUTURE-HFIR Irradiation Experiment	Warren Jones (INL)
			Design of Full Size Plate Irradiation Test for U-10Mo Monolithic Fuel Qualification	Margaret Marshall (INL)
			A Transmission Electron Microscopy Study of Low Burnup U-7Mo Samples	Daniele Salvato (SCK•CEN)
10:00 am Coffee Break, Crystal Ballroom Foyer Area				
			Projection of Irradiation Behavior of U ₃ Si ₂ Dispersion Fuel at High Fuel Loading and High Operating Power	Gerard Hofman (ANL)

12	Fuel Performance Measurement, Analysis and Modeling Chaired by Adam Robinson (INL)	10:30 am	Evaluation of the Thickness of PVD-Deposited Mo, Zr Coatings as Diffusion Barriers Between U-Mo and Al Using Heavy Ion Irradiation	Jingyi Shi (TUM)
			Fission Product Release Testing to Support Qualification of an LEU Fuel for the Advanced Test Reactor	Kyle Metzroth (MPR Assoc.)
			Operational Effects of the BR2 Driver Fuel Transition	Gareth Newman (SCK•CEN)
			Attaining Uniform Thickness of U-10Mo and Zr in Monolithic Fuel	Vineet Joshi (PNNL)
			Review of the Technical Basis for Properties and Fuel Performance Data Used in USHPRR HEU to LEU Conversion Analysis Compared to the Preliminary UMo Report	Laura Jamison (ANL)
12:30 pm Lunch Break				
13	Conversion and Systems Analyses Chaired by Ann Leenaers (SCK•CEN)	2:00 pm	Non-parametric Statistical Safety Analysis Tools to Support ATR Conversion to LEU	Brian Hallee (MPR Assoc.)
			Safety Analysis of the IVG.1M Reactor with LEU Fuel	Ruslan Irkimbekov (IAE-NNC)
			Computational Codes Developed by RERTR for LEU Conversion and Used at Research and Test Reactors Worldwide	Jeremy Licht (ANL)
			Overview of Beyond Design Studies Performed within the Framework of BR2 Decennial Safety Review	Frank Wols (SCK•CEN)
			Four Design Demonstration Elements (DDEs) to be Irradiated in the Advanced Test Reactor (ATR) and Belgian Reactor 2 (BR2)	Gregory Housley (INL)
			Involute Working Group – Progress towards Validation of CFD for Involute-Plate Reactors Safety Analysis	Aurelien Bergeron (ANL)
4:15 pm Summary and Closure Brian Waud (DOE-NNSA) and John Stevens (ANL)				
Adjourn				