

RERTR-2016: 37th INTERNATIONAL MEETING ON REDUCED ENRICHMENT FOR RESEARCH AND TEST REACTORS

Sunday, October 23

Registration: 4:30 – 6:00 pm, Radisson Blu Astrid Hotel (Foyer Second Floor)

Welcome Reception: 6:00 – 8:00 pm

Windows of Antwerp and Diamond Club

#	Session Title	Time	Paper Title	Presenter
Monday, October 24				
Meeting Room: Radisson Blu Scala 2,3,4 Ballroom				
	Opening and Welcome John Stevens	9:00 am	Welcome to Belgium and the RERTR-2016 International Meeting	Minister Jan Jambon, Deputy Prime Minister and Minister of Security and Home Affairs
1	Global Progress in HEU Minimization Chaired by Jordi Roglans-Ribas	9:15 am	1. SCK•CEN Opening Remarks	Eric van Walle (SCK•CEN)
			2. Opening Remarks	David Huizenga (DOE-NNSA)
			3. IAEA Activities in Support of HEU Minimization: 2016 Update	Frances Marshall (IAEA)
10:00 am Coffee Break, Diamond Club and Scala Ballroom Foyer				
	Global Progress in HEU Minimization (Continued) Chaired by Sven Van den Berghe	10:30 am	4. Conversion of the VVR-K Reactor	Petr Chakrov (KZ-INP)
			5. Conversion of Prototype MNSR	Yiguo Li (CIAE)
			6. The Use of Highly-Enriched Uranium as Fuel in Russia	Pavel Podvig (Princeton University)
			7. Reactor Conversion Highlights and Challenges	Jeff Chamberlin (DOE-NNSA)
12:00 pm Lunch, Windows of Antwerp and Diamond Club				
2	MNSR and Other International Conversions to LEU Operation Chaired by Yusuf Ahmed	1:30 pm	1. Report on GHARR-1 MNSR Core Removal	Henry Odoi (NNRI-GAEC)
			2. Update on Activities Towards Conversion of NIRR-1: Progress and Challenges	Sunday Jonah (ABU)
			3. Current State of Conversion of the IGR Reactor and IVG.1M Reactor to LEU Fuel	Alexandr Vurim (NNC)
			4. Physical and Power Startups of WWR-K Research Reactor with LEU Fuel	Asset Shaimerdenov (KZ-INP)
3:00 pm Coffee Break, Diamond Club and Scala Ballroom Foyer				
3	Perspectives on Fuel Performance and Qualification Chaired by Adam Robinson	3:30 pm	1. Preparatory Studies for the Qualification of Cobra LTA's with Gadolinium as Burnable Absorber in the BR2 Reactor	Silva Kalcheva (SCK•CEN)
			2. Progress on U.S. High Performance Research Reactor LEU Fuel Element Designs	Erik Wilson (ANL)
			3. U.S. Progress in U-Mo Monolithic Fuel Development	Barry Rabin (INL)
			4. Lifetime Testing of Two IRT-3M (High Density U-9%Mo) LEU Lead Test Assemblies in the MIR Research Reactor	Semyon Maynskov (JSC "SSC RIAR")
			5. Reprocessing of Research Reactor Spent Fuel and Management of the Arising Waste	Vanessa Vo Van (AREVA-NC)
5:30 pm Adjourm				
RERTR-2016 Banquet – Grand Café Horta, Art Nouveau Room Reception 7:00 pm, Dinner 8:00 pm <i>(Walking directions will be provided)</i>				

Tuesday, October 25

Meeting Room: Radisson Blu Scala 2,3,4 Ballroom

4	Fuel Development – Fabrication Technology I Chaired by Natraj Iyer	8:30 am	1. USHPRR Fuel Fabrication Capability Pillar Baseline Process and Alternatives	Jared Wight (PNNL)
			2. Production of Monolithic UMo Plates for the EMPIRE Irradiation Experiment	Christian Steyer (FRM II)
			3. Manufacturing Progress Status of EMPIRE UMo Irradiation Experiment	Bertrand Stepnik (AREVA-NP)
			4. Y-12 National Security Complex U-Mo Fabrication for MP-1	Hollie Longmire (Y-12)
10:00 am Coffee Break, Diamond Club and Scala Ballroom Foyer				
5	High Performance Reactor Conversions Chaired by Erik Wilson	10:30 am	1. Updates on the MIT Research Reactor (MITR) Conversion from HEU to LEU	Lin-Wen Hu (MIT)
			2. Updated Accident Analyses for the Conversion of the University of Missouri Research Reactor from Highly-Enriched to Low-Enriched Uranium	Les Foyto (MURR)
			3. Continuing LEU Conversion Activities at the High Flux Isotope Reactor	David Renfro (ORNL)
			4. Activities in Support of Conversion of the NBSR to LEU Fuel	Thomas Newton (NIST)
			5. Status of the Conceptual Design for ATR LEU Conversion	Thomas Maddock (INL)
12:30 pm Lunch, Windows of Antwerp and Diamond Club				
6	Conversion Analysis and Methods Chaired by David Renfro	1:30 pm	1. RHF LEU U7Mo Design Risk Mitigation Activities: Looking at Alternate Absorber Configurations	Benoit Dionne (ANL)
			2. LEU Conceptual Design Analyses for the Conversion of the Transient Reactor Test Facility (TREAT)	Heather Connaway (ANL)
			3. Neutronics Characterization of a High Density Uranium Zirconium Carbon Nitride LEU Fuel	Yousry Gohar (ANL)
			4. Reactor and Out-of-Pile Testing of a High Density Uranium Zirconium Carbon Nitride LEU Fuel	Dennis Keiser (INL)
3:00 pm Coffee Break, Diamond Club and Scala Ballroom Foyer				
7	Fuel Development – Fabrication Technology II Chaired by Hollie Longmire	3:30 pm	1. Production of Monolithic UMo Foils and Plates	Gunes Argon (BWXT)
			2. Alternative Zirconium Diffusion Barrier Application Methods	Chuck Gunzel (PNNL)
			3. Integrated Modeling and Characterization for U-Mo Metal Fuel Fabrication for United States High Performance Research Reactors	Curt Lavender (PNNL)
			4. USHPRR Fuel Development Flow Testing Overview	Warren Jones (INL)
5:00 pm Adjourn				
Setup Posters in Windows of Antwerp				
8	Poster Session and Reception Windows of Antwerp Chaired by John Holland	6:00 – 7:30 pm	1. Image Analysis Method for Measuring the Cladding Thickness of Nuclear Fuel Plates	Michelangelo Durazzo (IPEN/CNEN-SP)
			2. Thermal Analysis for U-Mo/Al Dispersion Fuel	Gwan Jeong (UNIST)
			3. Diffusion in UAl4: Calculations based on the compound defect structure	Laura Kniznik (CNEA)
			4. Ultrasonic Testing for U-Mo Research Reactor Plate-type Fuels During Fabrication	Yoon-Sang Lee (KAERI)
			5. CNEA Developments in U-Mo-Zry-4 Miniplates, Dog Bone Studies and Plates Co-Rolling Control	Marisol López (CNEA)
			6. Circumstances Surrounding Switch between MC003 and MR123/08 Fuel Elements (Experimental Verification of MARIA Core Numerical Models)	Marek Migdal (NCNR)
			7. Inventories Estimation Method in Solid Residuals of a Irradiated HEU (from Mo-99 Production Targets) Purification and Down-blending Process	Patricio Martin dos Reis (CNEA)

8	Poster Session and Reception (continued) Windows of Antwerp Chaired by John Holland	6:00 – 7:30 pm	8. Adopting the Monte-Carlo Methodology in Dynamic Reactor Core Analysis	Melpomeni Varvayanni (NCSR)
			9. Characterization of ALD and PVD Coated U(Mo) Powders for EMPIRE Experiment	Florence Vanni (CEA / AREVA-NP)
			10. Hydrogen Embrittlement and Corrosion Behavior of Uranium-Molybdenum Nuclear Fuels	Fabio Oliveira (CNEN)
			11. Argentina's Efforts to Recover and Down-blend Irradiated HEU from Mo-99 Production Targets	Jorge Vaccaro (CNEA)
			12. In-situ Observation of Irradiation-induced α -U Phase Reversion in U-Mo	Bei Ye (ANL)
			13. Mini-plate Fabrication Using Coated U-Mo Atomized Powders	Sunghwan Kim (KAERI)

Wednesday, October 26 Meeting Room: Radisson Blu Scala 2,3,4 Ballroom				
9	Fuel Irradiation Testing and Characterization Chaired by Dennis Keiser	8:00 am	1. Scoping Study for Irradiation of LEU Circular Involute Plates in the BR2 Reactor	Vadim Kuzminov (SCK•CEN)
			2. Irradiation Tests Supporting LEU Conversion of Very High Power Research Reactors in the U.S.	Nicolas Woolstenhulme (INL)
			3. Post Irradiation Examination Results of the AFIP-7 Experiment	Adam Robinson (INL)
			4. Irradiation of U-Mo/Mg Dispersion Fuel in the NRU Reactor	Ning Wang (CNL)
			5. Status Update on the Mini-Plate Experiments Planned for Irradiation in ATR	Irina Glagolenko (INL)
10:00 am Coffee Break, Diamond Club and Scala Ballroom Foyer				
10	Safety Analysis and Regulation Chaired by Thomas Newton	10:30 am	1. Transient Thermal-Hydraulic Safety Analysis of the BR2 Research Reactor with RELAP5	Ugur Emre Sikik (SCK•CEN)
			2. HFIR Conversion to LEU UMo Monolithic Fuel: Activities to Support Steady-State Safety Margin Evaluation	Erik Wilson (ANL)
			3. NIRR-1 to LEU Core Conversion and Safety Measures	Kayode Adedoyin (NNRA)
			4. Procedure and Equipment for Irradiated HEU GHARR-1 MNSR Core Removal	Alexander Denisov (Sosny)
12:00 pm Lunch, Windows of Antwerp and Diamond Club				
11	Fuel Performance Measurement, Analysis and Modeling Chaired by Abdellatif Yacout	1:30 pm	1. Microstructural Characterization to Support Development of Dispersion and Monolithic LEU U-Mo Fuels	Dennis Keiser (INL)
			2. Assessment of the Methods for Suppression of Breakaway Swelling in U-Mo/Al Dispersion Fuel	Yeon Soo Kim (ANL)
			3. Quantitative Comparability of Heavy Ion and In-pile Induced IDL Growth in UMo/Al Fuels	Harald Breitschütz (FRM II)
			4. 2-D Fuel Meat Temperature Assessment of SELENIUM Plates	Bei Ye (ANL)
			5. Revised Swelling Analysis of the RERTR-12 Experiment	Walter Williams (INL)
3:30 pm Coffee Break, Diamond Club and Scala Ballroom Foyer				
12	4:00 pm Summary and Closure John Stevens (ANL) and Sven Van de Berghe (SCK•CEN)			
5:00 pm Adjourn				

Thursday October 27	Optional Technical Tour of SCK•CEN Facilities (Bus transportation and lunch provided) <i>Buses will depart the Radisson Blu Astrid Hotel at 8:00 am and return by 6 pm.</i>
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