

## Sunday, October 2

Registration: 4:30 – 6:00 pm, Vienna Marriott Hotel, Floor 1, Foyer II

Welcome Reception: 6:00 – 8:00 pm, Ballrooms A & B

#	Session Title	Time	Paper Title	Presenter	Organization/ Country
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## Monday, October 3

Meeting Room: IAEA C-Building (Fourth Floor) Board Room C

<b>Opening and Welcome</b>	Chaired by Jeff Chamberlin DOE-NNSA	2:00 pm	Welcome to the IAEA and RERTR-2022 International Meeting: A World of Progress and Reopening	Amb. Laura Holgate	UNVIE/US
		2:10 pm		DDG Mikhail Chudakov	IAEA
		2:20 pm		Vyacheslav Gnyrya	NNC/ Kazakhstan
		2:40 pm		Jeff Chamberlin	NNSA/US

1	<b>HEU Minimization Programs</b>  Chaired by Kyle Sallee DOE-NNSA	3:00 pm	1. IAEA Programs HEU Minimization, Research Reactor Projects, Fuel Return Program	John Dewes	IAEA
		3:20 pm	2. HEU Minimization in Japan	Masafumi Sato	MEXT/Japan
		3:25 pm	3. Fireside Chat: Offices of Conversion and Nuclear Material Removal	Chris Landers, Tiffany Blanchard-Case Facilitated by Kyle Sallee	NNSA/US
		4:00 pm	4. Proliferation Resistance Optimization (PRO-X) Overview	Alex Meehan	NNSA/US

4:20 pm Self-Hosted Refreshment Break

2	<b>Proliferation Resistance Now and for the Future</b>  Chaired by Alex Meehan DOE-NNSA	4:40 pm	1. Subcritical Experiment Using U-7Mo LEU Fuel at KUCA Facility	Hironobu Unesaki	Kyoto University/ Japan
		5:00 pm	2. Present Status of UTR-KINKI and Preliminary Feasibility Study on its Future Conversion to Low-Enriched Fuel	Genichiro Wakabayashi	Kindai/Japan
		5:20 pm	3. Nigeria Research Reactor-2 (NIRR-2) Project Perspectives on Proliferation Resistance	Sunday Jonah	CERT/Nigeria
		5:40 pm	4. INVAP Perspectives and Initiatives for Proliferation Resistance as Research Reactors Designer	Diego Ferraro	INVAP/ Argentina
		6:00 pm	5. IAEA Support to New Research Reactor Programmes: Planning for Sustained Utilization	Nuno Barradas	IAEA

6:20 pm Adjourn

## Tuesday, October 4

Meeting Room: IAEA C-Building (Fourth Floor) Board Room C

3	<b>Panel: Qualification and Fabrication of Sustainable Fuel</b>  Chaired by John Stevens ANL	9:00 am	1. Integration of Fuel Testing and Fabrication Efforts to Support Regulatory Qualification of LEU U-10Mo Monolithic Fuel	James I. Cole	INL/US
		9:10 am	2. Overview of Research Reactor Fuel Development at KAERI	Jong Man Park	KAERI/Korea
		9:20 am	3. Framatome CERCA™ sustainability of LEU fuel fabrication	Dominique Geslin	CERCA/France
		9:30 am	Facilitated discussion among the three panelists to inject interplay of fuel fab constraints and QC and relationship to fuel qualification campaigns	Group	

10:00 am Self-Hosted Refreshment Break

4	<b>Fuel Qualification and Irradiation Campaigns</b>  Chaired by Bruno Baumeister TUM	10:20 am	1. Licensing Process of a New Fuel Type Element in Poland on an Example of the Experimental Fuel Element for Samples Irradiation in the Fast Neutron Spectrum	Maciej Lipka	NCBJ/Poland
		10:40 am	2. Developments of High-density Atomized U <sub>3</sub> Si <sub>2</sub> Fuel Plates in KAERI	Tae Won Cho	KAERI/Korea
		11:00 am	3. Update of Fuel Meat Swelling Determination of Coated-(U-7Mo)/Al Dispersion Fuel from EMPIRE	Bei Ye	ANL/US
		11:20 am	4. New Results from the Scanning Electron Microscopy Characterization of Fuel Plates Irradiated in the EMPIRE Irradiation Experiment	Dennis Keiser	INL/US
		11:40 am	5. Post-irradiation Optical Microscopy, Chemical Burn-up Analysis, and Blister Threshold Testing of the MP-1 Irradiation Experiment	Adam Robinson	INL/US
		12:00 pm	6. Design of the University of Missouri Design Demonstration Element Test for Irradiation in the Advanced Test Reactor	Irina Glagolenko	INL/US

12:20 pm Lunch Break					
5	Fuel Fabrication Challenges and Advances  Chaired by Yong Jin Jeong KAERI	1:40 pm	1. Status and Plans of U.S. U-10Mo Fuel Fabrication	Curt Lavender	PNNL/US
		2:00 pm	2. USHPRR HFIR Silicide Fabrication Update	Zach Huber	PNNL/US
		2:20 pm	3. USHPRR Critical Characteristics	Paul T Gee	PNNL/US
		2:40 pm	4. U-Mo Bare Foil Rolling Progress for FRM II Conversion	Kevin Buducan	TUM/Germany
3:00 pm — Refreshments, Poster Area					
6	Poster Session and Refreshments  Chaired by Caryn Warsaw ANL	3:00 – 4:00 pm	Fuel Plate Cladding Thickness Estimation Thanks to Acoustic Microscopy	Abdelhak Megzari	U. Montpellier/ France
			Effect of Heat Treatments on the Irradiation Behavior of Monolithic U-Mo Fuels	Jan-Fong Jue	INL/US
			Development of Technology for Manufacturing of Dispersion Type Targets for Fission Mo-99 Production	Luis Olivares	CCHEN/Chile
			The HANARO Irradiation Test of Coated U-7Mo/Al-5Si Mini-plates	Yong Jin Jeong	KAERI/Korea
			Identification and Assessment of the Hazards in a Nuclear Fuel Fabrication Facility with LEU	Hade Elsayed	EAEA/Egypt
			Recent Developments in PLTEMP/ANL V4.3 Code for Research Reactor Thermal Hydraulics Analysis	Jeremy Licht	ANL/US
			The STAT7 V1.1 Code for Statistical Propagation of Uncertainties in Steady-State Thermal Hydraulics Analysis of Research Reactors	Erik Wilson	ANL/US
			Low Enriched Nuclear Fuel Based on Uranium-Zirconium Carbon-Nitride: Reactor Tests and Post-Reactor Studies	S.N. Sikorin	JIPNR-Sosny/ Belarus
			USHPRR MP-1 Irradiation Test: Assessment of Edge Pitting and Bond Line Corrosion in Vendor Produced Fuel Plates	Jeffrey Giglio	INL/US
			Non-destructive Post-Irradiation Examination and Fuel Swelling Analysis of the MP-1 Irradiation Experiment	Adam Robinson	INL/US
			Assessment of Critical Data for Qualification of U-10Mo Monolithic Fuel	William Hanson	INL/US
			Fabrication Process Research and Development to Support HFIR LEU Silicide	Zach Huber	PNNL/US
			Modeling of Thermal Conductivity in a Uranium Silicide Dispersion Fuel to Support Conversion of HFIR to LEU Fuels	Curt Lavender	PNNL/US
			Modeling Insights in Forming and Rolling Complex Geometries of Highly Loaded Uranium Silicide Dispersion Fuels	Curt Lavender	PNNL/US
Recent Progress in U-10Mo Mechanical and Thermophysical Property Characterization	Jason Schulthess	INL/US			
Fine Mapping of the Power Density Distribution of MTR Fuel Using Gamma Spectroscopy	Guy Gabrieli	SNRC/Israel			
About the Limits of Optical Microscopy Measurement for Al-Fuel Cladding Thickness	Bertrand Stepnik	Framatome/ France			
PRO-X Auxiliary Capabilities: Balancing Performance & Proliferation for Research Reactor Products	M. Alex Brown	ANL/US			
7	U.S. High Performance Reactor Conversions  Chaired by Andrew Hebden ANL	4:00 pm	1. U.S. High Performance Research Reactor LEU Conversion Design, Testing and Fabrication Progress	Erik Wilson	ANL/US
		4:20 pm	2. High Flux Isotope Reactor Low-Enriched Uranium Conversion Activities – 2022 Status Update	Carol Sizemore	ORNL/US
		4:40 pm	3. Alternative HEU-LEU Mixed Core Transition Strategy for the MIT Research Reactor	Lin-Wen Hu	MIT/US
		5:00 pm	4. A Progress Update on the Highly Enriched Uranium to Low-Enriched Uranium Fuel Conversion at the University of Missouri Research Reactor	Maria Pinilla	MU/US
		5:20 pm	5. Analysis Methods for Lead Test Assemblies in the Advanced Test Reactor	Collin Clark	INL/US
		5:40 pm	6. NIST Neutron Source Preconceptual Design	Dagistan Sahin	NIST/US
6:00 pm Adjourn					
Wednesday, October 5					
Meeting Room: IAEA C-Building (Fourth Floor) Board Room C					
8	HEU Removal Operations and Fuel Transportation  Chaired by Jeff England NAC Intl.	9:00 am	1. Packaging of Critical Assembly Fuel Materials for Shipment in the ES-3100	Trent Andes	CNS Y-12/US
		9:20 am	2. The Role of Nuclear Criticality Safety in Enabling the Transport of Highly Enriched Uranium (HEU) (and Other Fissile Materials) to Support Global Strategic Removal Projects	Charlotte Davis	NTS/UK
		9:40 am	3. Mobile Packaging Program Overview	Joshua Smith	NNSA/US
		10:00 am	4. Nigerian Nuclear Regulatory Authority Experience on NIRR-1 Core Conversion from HEU to LEU Fuel	Godwin Omeje	NNRA/Nigeria

10:20 am Self-Hosted Refreshment Break					
9	<b>International Reactor Conversion Progress and Partnerships</b>  Chaired by Sunday Jonah CERT	10:40 am	1. Acceptance Test of WCTC with LEU Fuel at the IVG.1M Research Reactor Site in Kazakhstan	Igor Bolshinsky	INL/US
		11:00 am	2. First Steps for the Optimization of Experimental Facilities at FRM II during Conversion	Daniel Bonete-Wiese	TUM/Germany
		11:20 am	3. RELAP5 Safety Analyses in Support of the BR2 COBRA Lead Test Assembly Irradiation	Frank Wols	SCK-CEN/Belgium
		11:40 am	4. Benchmark between the MAIA and DART Fuel Performance Codes on the E-FUTURE U-Mo/Al Dispersion Fuel Test	Stéphane Valance	CEA/France
		12:00 pm	5. Water Channel Thickness Estimation through High Frequency Ultrasonic Measurements	Rhofrane Mrabti	U. Montpellier/ France
12:20 pm Lunch Break					
10	<b>Design and Analysis Methods</b>  Chaired by Diego Ferraro INVAP	1:40 pm	1. Identification of Relevant Parameters for the Structural Analysis of an Involute LEU Fuel Plate	Aurelien Bergeron	ANL/US
		2:00 pm	2. First Steps Towards the Development of a Tool for Sensitivity Analysis and Uncertainty Propagation Studies for Steady-State Thermal-Hydraulic Simulations of Research Reactors	Ronja Schönecker	TUM/Germany
		2:20 pm	3. Improvements to Thermal-Hydraulics Models and Methods for MTR-Type Reactors	Mauro Nasso	INVAP/ Argentina
		2:40 pm	4. Neutronic Simulation of Curved Fuel Plate with Flat Plate Geometry	Lap-Yan Cheng	BNL/US
		3:00 pm	5. Process Modeling of U-10Mo and U <sub>3</sub> Si <sub>2</sub> Using Integrated Computational Materials Engineering	Curt Lavender	PNNL/US
3:20 pm Self-Hosted Refreshment Break					
11	<b>Licensing and Conversion Reactor Experience</b>  Chaired by Dennis Vinson SRNL	3:40 pm	1. Physical Start-up of IVG.1M Reactor with Low-Enriched Uranium Fuel	I.V. Prozorova	NNC/ Kazakhstan
		4:00 pm	2. Six-Year Experience of the WWR-K Reactor Operation with LEU Fuel	Asset Shaimerdenov	INP/ Kazakhstan
		4:20 pm	3. Practical Application of LEU Fuel for NIRR-1 Safe Operation	Kayode James Adedoyin	NNRA/Nigeria
		4:40 pm	4. Utilization and Operation of the Dalat Nuclear Research Reactor after Full Core Conversion	Kien Cuong Nguyen	VINATOM/ Vietnam
		5:00 pm	5. Five Years of Operating GHARR-1 on LEU Fuel: Successes and Challenges	Henry Cecil Odoi	GAEC/Ghana
5:20 pm Summary and Closure					
Jeff Chamberlin (DOE-NNSA) and John Stevens (ANL)					
5:40 pm Adjourn					