

Sunday, November 5

Registration: 4:30 – 6:00 PM, Embassy Suites by Hilton Denver Downtown Convention Center, Crystal Foyer, Third Floor

Welcome Reception: 6:00 – 8:00 PM, Crystal Ballroom

| # | Session Title | Time | Paper Title | Presenter | Organization/ Country |
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Monday, November 6

Meeting Room: Crestone Ballroom, Third Floor

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| 1 | Welcome to Denver and RERTR-2023 International Meeting: Research Reactors & HALEU for a Brighter Future Chaired by Chris Landers (NNSA) and John Stevens (ANL) | 9:00 am | Opening Remarks | Jeff Chamberlin | NNSA/US |
| | | 9:15 am | BR2 LEU Conversion Status: Initial Post-Irradiation Neutronics Analysis of COBRA-LEU-LTAs in BR2 Operational Cycles | Silva Kalcheva | SCK/Belgium |
| | | 9:35 am | Capabilities of the Converted KUCA LEU Cores for HALEU Criticality Studies | Yoshiyuki Takahashi | KUCA/Japan |
| | | 9:55 am | The New Multi-Purpose Research Reactor in Nigeria (MPRR): Alignment with the IAEA Milestones Approach and Integration of Proliferation Resistance Measures | Sunday Jonah | CERT/Nigeria |
| | | 10:15 am | Kindai University Reactor Role in Assuring the Future Nuclear Workforce | Genichiro Wakabayashi | Kindai/Japan |

10:35 AM Refreshment Break

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| 1 | HEU Minimization Programs Chaired by Allison Johnston (NNSA) | 11:00 am | The Conversion of FRM II to LEU – Status and Path Forward | Bruno Baumeister | TUM/ Germany |
| | | 11:20 am | Development of High-Density LEU Targets Based on Atomized Powder | Kinam Kim | KAERI/Korea |
| | | 11:40 am | Silo Storage for IVG.1M Irradiated Highly Enriched Uranium | Kris Gaines | ORNL (Remove)/US |
| | | Noon | Fireside Chat with Chris Landers and Guests | Chris Landers et al | |

12:30 PM Lunch Break

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| 2 | Proliferation Resistance Now and for the Future Chaired by Alex Meehan (NNSA) | 2:00 pm | IAEA Support for Research Reactor Fuel Cycle Programmes | John Dewes | IAEA |
| | | 2:20 pm | INVAP Progress and Plans for the Next Generation of Research Reactors | Matias Marquez | INVAP/ Argentina |
| | | 2:40 pm | Flux Traps in Research Reactors: Implications for Neutron Flux and Conversion to Low-Enrichment Uranium Fuel | Hadi Abuzif | Ben-Gurion Unive/Israel |
| | | 3:00 pm | TRIGA Reactor Digital Control and Monitoring for Operation and Operator Training | Alex Nellis | Penn State/USA |

3:05 PM Refreshment Break

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| 3 | Fuel Qualification and Irradiation Campaigns Chaired by Abdellatif Yacout (ANL) | 3:30 pm | An Update on the High Density Silicide Fuel Post Irradiation Examinations | Ann Leenaers | SCK/Belgium |
| | | 3:50 pm | Update on Recent Results from the Scanning Electron Microscopy Characterization of Fuel Plates Irradiated in EMPIRE | Dennis Keiser | INL/USA |
| | | 4:10 pm | FUTURE-MONO-1 Irradiation Test Status Update | Christian Schwarz | TUM/ Germany |
| | | 4:30 pm | Thermophysical Property Characterization of Irradiated U-10wt.%Mo Mini-plates from the MP-1 Experiment | Tsvetoslav Pavlov | INL/USA |
| | | 4:50 pm | Conversion of NNC reactors: Features of the Energy Start-up of the IVG.1M Reactor | Irina Prozorova | NNC/ Kazakhstan |

5:10 PM Adjourn

Tuesday, November 7

Meeting Room: Crestone Ballroom, Third Floor

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| 4 | Fuel Fabrication Updates Chaired by Christian Schwarz (TUM) | 8:30 am | From Whiteboards to Excel to SQL: Managing DRIP | Camilla McKinnon | BYU/USA |
| | | 8:35 am | New Manufacturing Process Line at Framatome CERCA's Facility for TRIGA Fuel Production | Jerome Allenou | CERCA/ France |
| | | 8:55 am | A Critical Review on the History of Fabricating Monolithic U-Mo Fuel Plates | Jason Schulthess | INL/USA |
| | | 9:15 am | Status of U-10Mo Fuel Fabrication at BWX Technologies | Robert Johnson | BWXT/USA |
| | | 9:35 am | USHPRR Fuel Fabrication Pillar: A Modeling Framework to Inform the Fabrication of U-10Mo Monolithic and U3Si2 Fuel | Ayoub Soulami | PNNL/USA |
| 9:55 AM Refreshment Break | | | | | |
| 5 | Applications/Operations Chaired by Chris Heysel (McMaster) | 10:30 am | Installation of and Operational Experiences with the Penn State Breazeale Reactor's New Digital Control System | Ethan Kunz | Penn State/USA |
| | | 10:35 am | Special Hardware for Irradiation Testing of the Design Demonstration Elements | Greg Housley | INL/USA |
| | | 10:55 am | Capabilities of Advanced Irradiations and Fuel Testing at MARIA Reactor | Gawel Madejowski | NCNR/Poland |
| | | 11:15 am | Twenty-Nine Years of Operating a Research Reactor: Evaluation of Ghana's MNSR | Henry Odoi | GAEC/Ghana |
| | | 11:35 am | Opportunities and New Challenges – FRM II Sailing in Troubled Waters | Axel Pichlmaier | TUM/ Germany |
| | | 11:55 am | Development of a Sandwich Formula Uncertainty Quantification Widget for MCNP | Caroline Sears | MIT/USA |
| Noon Lunch Break | | | | | |
| 6 | U.S. High Performance Reactor Conversions Chaired by Dhongjik Yoon (ANL) | 1:30 pm | Massachusetts Institute of Technology Reactor (MITR) LEU Conversion Update | Lin-wen Hu | MIT/USA |
| | | 1:50 pm | University of Missouri Research Reactor (MURR) LEU Conversion Update | Maria Pinilla | MURR/USA |
| | | 2:10 pm | NBSR Update and Progress in Analytical Studies to Support the NBSR Conversion | Lap Cheng | BNL/USA |
| | | 2:30 pm | ATR Updates for Using Low Enriched Fuel | Collin Clark | INL/USA |
| | | 2:50 pm | High Flux Isotope Reactor Low-Enriched Uranium Conversion Activities – 2023 Status Update | Carol Sizemore | ORNL/USA |
| 3:10 PM — Refreshment Break | | | | | |
| 7 | International Reactor Conversion Progress and Partnerships Chaired by Caleb Braun (MURR) | 3:30 pm | Validation and Comparison of 2D and 3D RANS Models for Flow through Curved Channels in MTR-type Nuclear Fuel Assemblies | Evan Bures | Texas A&M/ USA |
| | | 3:35 pm | Modeling Updates for System Transient Simulations of RHF Research Reactor Using RELAP5 | Yeongshin Jeong | ANL/USA |
| | | 3:55 pm | Development of a Composite Involute Fuel Plate Model for Fluid-Structure Interaction Analyses | Marta Sitek | ANL/USA |
| | | 4:15 pm | Present Status and Future Plans of the Low-Enrichment Conversion Project at UTR-KINKI | Masato Tabuchi | Kindai/Japan |
| | | 4:35 pm | Conversion of NNC Reactors: Conversion of IGR Reactor | Ruslan Irkimbekov | NNC/ Kazakhstan |
| 4:55 PM - Break between Oral Sessions and Poster Session | | | | | |

**6:00 PM Poster Session and Reception
Crystal Ballroom, Third Floor**

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| 8 | <p align="center">Poster Session and Reception</p> <p align="center">Chaired by Caryn Warsaw (ANL)</p> | 6:00 – 7:30 pm | Building a Robust Fuel Assembly Measurement System | Daniel Fuentes Rodriguez | PNNL/USA |
| | | | TRIGA Reactor Digital Control and Monitoring for Operation and Operator Training | Alex Nellis | Penn State/USA |
| | | | Data Interpretation and Machine Learning for U-10Mo Non-Destructive Examination | Camilla McKinnon | PNNL/USA |
| | | | Development of a Sandwich Formula Uncertainty Quantification Widget for MCNP | Caroline Sears | MIT/USA |
| | | | From Whiteboards to Excel to SQL: Managing DRIP | Camilla McKinnon | PNNL/USA |
| | | | Installation of and Operational Experiences with the Penn State Breazeale Reactor's New Digital Control System | Ethan Kunz | Penn State/USA |
| | | | Validation and Comparison of 2D and 3D RANS Models for Flow through Curved Channels in MTR-type Nuclear Fuel Assemblies | Evan Bures | Texas A&M/USA |
| | | | Tritium Yield Measurements for Lithium Containing Salts with Nuclear Track Method | Andrew Maier | Ohio State/USA |
| | | | Innovative Surface Coating Technology for U-Mo Nuclear Fuel Performance under Neutron Irradiation | Dongjun Park | KAERI/Korea |
| | | | Flow Behavior in Involute-plate Research Reactor: RANS, LES and DNS Simulations | Jeremy Licht | ANL/USA |
| | | | Mechanical Properties of Irradiated U-10wt.%Mo Alloy Degraded by Porosity Development | Jeffrey Giglio | INL/USA |
| | | | Characterization of Zirconium Diffusion-Barrier Interlayer in Irradiated MP 1 Fuel Plates | Jan-Fong Jue | INL/USA |
| | | | MP-2 Design, Irradiation Status, and Expected Sample Availability | Margaret Marshall | INL/USA |
| | | | Porosity Observations with FUTURE-HFIR Silicide Plates | Theron Marshall | INL/USA |
| | | | COMSOL Results for the Proposed LEU Silicide Fuel Designs under 95 MW Nominal Conditions for HFIR Conversion | Prashant Jain | ORNL/USA |
| | | | Verification and Validation of RELAP5/MOD3.3 to Support the Research and Test Reactors Program | Dhongik Yoon | ANL/USA |
| | | | Modelling NBSR Water Gap Flow Distributions for DDE and LEU Element | Mauricio Tano | INL/USA |
| | | | CARTHAGE Flow Test Facility and DDE Modeling | Theron Marshall | INL/USA |
| | | | Flow Test of USHPRR LEU Fuel Elements for Hydraulic Performance Evaluation | Andrew Hebden | ANL/USA |
| | | | PARET/ANL 7.6 Modeling Approaches and Validations | Jeremy Licht | ANL/USA |
| Safety Updates of NIRR-1 Oversight | Kayode Adedoyin | NNRA/Nigeria | | | |
| Economical Zirconium/Titanium Electroplating at Low-Throughput Commercial Scales | Vineet Joshi | PNNL/USA | | | |

Wednesday, November 8

Meeting Room: Crestone Ballroom, Third Floor

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| 9 | Fuel Fabrication Challenges and Advances Chaired by Bryon Curnutt (INL) | 8:30 am | USHPRR Fuel Fabrication Pillar: Achievements and Advancements in Fabrication of U-10Mo Monolithic Fuel | Vineet Joshi | PNNL/USA |
| | | 8:50 am | Impact of the Fabrication Specification Tolerances of U-10Mo LEU Fuel on MITR and MURR | Valerio Mascolino | ANL/USA |
| | | 9:10 am | Uncertainty Quantification for the NBSR – Integrating Full-Core Sensitivity Coefficients and Nuclear Data Covariance Matrices | Lap Cheng | BNL/USA |
| 9:30 AM Refreshment Break | | | | | |
| 10 | Fuel Performance Analysis and Modeling Chaired by Gaweł Madejowski (NCNR) | 9:50 am | Evaluation of Uranium Silicide (U ₃ Si ₂) Fuel Using 80 MeV Xenon Ions at the ATLAS Material Irradiation Station | William Limestall | IIT/USA |
| | | 10:10 am | Validation of the Thermal Calculation in the DART Fuel Performance Code Through the Benchmark with the PLTEMP/ANL Code and the Comparison with Measured Oxide Layer Thickness Data | Bei Ye | ANL/USA |
| | | 10:30 am | Integrating a Mechanical Analysis Module into DART to Predict Local Swelling in Monolithic and Dispersion Fuel Plates | Yeon Soo Kim | ANL/USA |
| | | 10:50 am | Water Channel Thickness Estimation Through High Frequency Ultrasonic Device | Rhofrane Mrabti | Univ. of Montpellier/ France |
| | | 11:10 am | Irradiation Thermo-Mechanical Analysis of LEU Fuel for MURR Conversion | Firat Cetinbas / Dhongik Yoon | ANL/USA |
| 11:30 AM Lunch Break | | | | | |
| 11 | Design and Analysis Methods Chaired by Dennis Vinson (SRNL) | 1:00 pm | Preliminary Comparison of Depletion and Fuel Management Software MCODE and ADDER for the MIT Research Reactor | Maurane Garanzini | MIT/USA |
| | | 1:20 pm | Fluid Structure Interaction Modelling for MITR and NBSR DDEs | Mauricio Tano | INL/USA |
| | | 1:40 pm | Impacts of Irradiated MURR LEU Fuel Thermo-Mechanical Behavior on Thermal Hydraulics Safety Analysis | Dhongik Yoon | ANL/USA |
| | | 2:00 pm | System Code Modelling for NBSR DDE | Theron Marshall | INL/USA |
| 2:30 PM Summary and Closure Jeff Chamberlin (DOE-NNSA) and John Stevens (ANL) | | | | | |
| 3:00 PM Adjourn | | | | | |