NERI PROJECT REVIEW SCHEDULE

DAY 1

Session 1: 10:00 am – 12:00 pm

- Panel 1 – 07-035 Computations for Advanced Nuclear Fuels – *Sudarshan K. Loyalka, University of Missouri-Columbia*
- Panel 2 – 07-023 Chemistry of Transuranic Elements in Solvent Extraction Processes: Factors Controlling Redox Speciation of Plutonium and Neptunium in Extraction Separation Processes – *Alena Paulenova, Oregon State University*
- Panel 3 – 07-057 Optimization of Heat Exchangers – *Ivan Catton, University of California-Los Angeles*
- Panel 4 – 07-003 An Advanced Integrated Diffusion/Transport Method for the Design, Analysis, and Optimization of the Very High-Temperature Reactors – *Farzad Rahnema, Georgia Institute of Technology*
- Panel 5 – 07-071 Identification and Analysis of Critical Gaps in Nuclear Fuel Cycle Codes Required by the SINEMA Program – *Adrian Miron, University of Cincinnati*

Session 2: 1:00 pm – 3:00 pm

- Panel 1 – 07-064 Fundamental Studies of Irradiation-Induced Defect Formation and Fission Product Dynamics in Oxide Fuels – *James Stubbins, University of Illinois*
- Panel 2 – 08-039 Real-Time Detection of Actinide Compositions in the UREX+ Process – *Sean M. McDeavitt, Texas Engineering Experiment Station*
- Panel *3* – 07-030 Liquid Salts as Media for Process Heat Transfer from Very High-Temperature Reactors: Forced Convective Channel Flow Thermal Hydraulics, Materials, and Coatings – *Kumar Sridharan, University of Wisconsin-Madison*
- Panel 4 – 07-011 Implications of Graphite Radiation Damage on the Neutronic, Operational, and Safety Aspects of Very High-Temperature Reactors – *Ayman I. Hawari, North Carolina State University*

- Panel 5 – 07-037 Experimental Development and Demonstration of Ultrasonic Measurement Diagnostics for Sodium Fast Reactor Themohydraulics – *Akira Tokuhiro, Kansas State University*

Session 3: 3:20 pm – 5:20 pm

- Panel 1 – 07-059 Analysis of Advanced Fuel Assemblies and Core Designs for the Current and Next Generations of LWRs – *Jean Ragusa, Texas A&M University*

- Panel 2 – 07-015 Radiation-Induced Segregation and Phase Stability in Candidate Alloys for the Advanced Burner Reactor – *Gary Was, University of Michigan & Brian Wirth, University of California-Berkeley*

- Panel 4 – 07-017 Advancing the Fundamental Understanding and Scale-up of TRISO Fuel Coaters via Advanced Measurement and Computational Techniques – *Muthanna Al-Dahhan, Washington University*

- Panel 5 – 08-014 An Innovative Approach to Precision Fission Measurements Using a Time Projection Chamber – *Nolan Hertel, Georgia Institute of Technology*

DAY 2

Session 4: 8:00 am – 10:00 am

- Panel 1 – 07-046 Fundamental Processes of Coupled Radiation Damage and Mechanical Behavior in Nuclear Fuel Materials for High-Temperature Reactors – *Simon Phillpot, University of Florida*

- Panel 2 – 07-063 Neutronic and Thermal-Hydraulic Coupling Techniques for Sodium Cooled Fast Reactor Simulations – *Jean Ragusa, Texas A&M University*

- Panel 3 – 08-055 Cladding and Structural Materials for Advanced Nuclear Energy Systems – *Gary Was, University of Michigan*

- Panel 4 – 07-018 Fission Product Transport in TRISO-Coated Particle Fuels: Multi-Scale Modeling and Experiment – *Izabela A. Szlufarska, University of Wisconsin-Madison*

- Panel 5 –08-033 Deployment of a Suite of High-Performance Computational Tools for Multiscale Multiphysics Simulation of Generation-IV Reactors – *Michael Z. Podowski, Rensselaer Polytechnic Institute*

Session 5: 10:20 am – 12:20 pm

- Panel 1 – 07-060 Powder Metallurgy of Uranium Alloy Fuels for Transuranic-Burning Fast Reactors – *Sean M. McDeavitt, Texas Engineering Experiment Station*

- Panel 2 – 08-041 Performance of Actinide-Containing Fuel Matrices Under Extreme Radiation and Temperature Environments – *Brent J. Heuser, University of Illinois, Urbana-Champaign*

- Panel 3 – 07-069 Establishing a Scientific Basis for Optimizing Compositions, Processing Paths, and Fabrication Methods for Nanostructured Ferritic Alloys for Use in Advanced Fission Energy Systems – *G.R. Odette & Takuya Yamamoto, University of California-Santa Barbara*

- Panel 4 – 08-043 A Research Program on Very High-Temperature Reactors – *Sudarshan Loyalka, University of Missouri-Columbia*

- Panel 5 – 08-067 Advanced Aqueous Separation Systems for Actinide Partitioning – *Ken Nash, Washington State University*

Session 6: 1:20 pm – 3:20 pm

- Panel 1 – 08-020 Risk-Informed Balancing of Safety, Non-Proliferation, and Economics for the Sodium-Cooled Fast Reactor – *George Apostolakis, Massachusetts Institute of Technology*

- Panel 2 – 08-051 Radiation Damage in Nuclear Fuel for Advanced Burner Reactors: Modeling and Experimental Validation – *Niels Gronbech Jensen, University of California-Davis*

- Panel 3 – 07-024 Materials and Design Methodology for Very High-Temperature Nuclear Systems – *James Stubbins, University of Illinois*

- Panel 4 – 07-058 Experimental and Computational Fluid Dynamics Analysis of Advanced Convective Cooling Systems – *Victor M. Ugaz & Yassin A. Hassan, Texas Engineering Experiment Station*

- Panel 5 – 07-027 New Fission Product Waste Forms: Development and Characterization – *Alexandra Navrotsky, University of California-Davis*

Session 7: 3:40 pm – 5:40 pm

- Panel 1 – 07-051 Economic, Repository, and Proliferation Impacts of Advanced Nuclear Fuel Cycles – *K.B. Cady, Cornell University*

- Panel 2 – 08-058 Advanced Instrumentation and Control Methods for Small and Medium Export Reactors with IRIS Demonstration – *Wesley Hines, University of Tennessee*

- Panel 3 – 07-020 Emissivity of Candidate Materials for Very High-Temperature Reactor Applications: Role of Oxidation and Surface Modification Treatments – *Kumar Sridharan, University of Wisconsin-Madison*