

Molten Salt Reactor Workshop 2018—*Creating a Self-Sustaining Environment for MSR Success* Sponsored by: GAIN, NEI, and ORNL

Workshop Objectives: *Understanding the opportunities, hearing the objectives, and addressing the challenges*

Final Agenda

Event contacts	General Chair: Lou Qualls, 865-574-0259 (office); 865-803-8631 (mobile); quallsal@ornl.gov Co-Chair: David Holcomb, 865-576-7889 (office); 865-898-2193 (mobile); holcombde@ornl.gov		
Wednesday, October 3, 2018			
Time	Event	Lead	Location
7:00 a.m.	ORNL Visitor Center Check-in		ORNL Conference Center, TN Rooms 202 A-C
8:00 a.m.	Welcome <ul style="list-style-type: none"> • ORNL Welcome Keynote Talks (Working Breakfast) <ul style="list-style-type: none"> • Opening Remarks • U.S. IMSR Commercialization Before 2030 • Advanced Nuclear Economics – MIT’s Recently Released Future of Nuclear Energy in a Carbon-Constrained World 	Alan Icenhour, ORNL Alice Caponiti, DOE-NE David Hill, Terrestrial Energy USA John Parsons, Massachusetts Institute of Technology	
9:30 a.m.	Break		
10:00 a.m.	Perspectives on Advanced Nuclear Power <ul style="list-style-type: none"> • A Technology-Inclusive, Risk-Informed, and Performance-Based Approach to Licensing Non-Light-Water Reactors • Canadian Regulatory Framework and MSR Technology Reviews • Modeling Deployment Scenarios for Fast MSR Fleet • Advanced Reactor Fuel Cycle Issues 	Session Chair: Jordan Rader, ORNL William Reckley, NRC Marcel de Vos, CNSC Eva Davidson, ORNL Everett Redmond, NEI	ORNL Conference Center, TN Rooms 202 A-C

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Wednesday, October 3, 2018			
Time	Event	Lead	Location
12:00 p.m.	Lunch (Sponsored event) / Extended Networking	Sponsored by NEI	
1:00 p.m.	Enabling Technologies for MSRs <ul style="list-style-type: none"> Advanced Manufacturing to Enable the Next Generation of Nuclear Plants Irradiated Material Advanced Repair Welding Remote Handling Operations at the SNS Radiation Hardened Technology for Remote Maintenance 	Session Chair: Scott Greenwood, ORNL David Gandy, EPRI Wei Tang, ORNL Michael Dayton, ORNL Chuck Britton, ORNL	ORNL Conference Center, TN Rooms 202 A-C
3:00 p.m.	Break		
3:30 p.m.	Enabling Technologies for MSRs, cont. <ul style="list-style-type: none"> On-line Monitoring for Chemical Characterization and Process Control An Overview of the Material-Salt Compatibility Program at ORNL MSR Modeling and Simulation Needs 	Session Chair: Scott Greenwood, ORNL Amanda Lines, PNNL Stephen Raiman, ORNL Nick Brown, Pennsylvania State University Ben Betzler, ORNL	ORNL Conference Center, TN Rooms 202 A-C
5:00 p.m.	Break		
5:15 p.m.	Reception: Heavy Hors d'oeuvres (in lieu of dinner) <ul style="list-style-type: none"> Reflections on the MSRE Experience 	Syd Ball, ORNL	ORNL Conference Center, TN Room 202 A-C
7:30 p.m.	Adjourn Day 1		

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Thursday, October 4, 2018			
Time	Event	Lead	Location
8:00 a.m.	<ul style="list-style-type: none"> Day 2 Welcome and Overview (<i>Working Breakfast</i>) Advanced Reactor Development: Molten Salt Reactors 	Lou Qualls, ORNL Brian Robinson, DOE-NE	ORNL Conference Center, TN Rooms 202 A-C
8:15 a.m.	<i>International Activities</i> <ul style="list-style-type: none"> MSR Research in China MSR Research in the Czech Republic MSR Irradiation Program at NRG Petten Development of Molten Salt Capabilities at Canadian Nuclear Laboratories 	<i>Session Chair: David Holcomb, ORNL</i> Hongjie Xu, Shanghai Institute of Applied Physics Jan Uhlíř, Research Centre Rez Ralph Hania, NRG-EU Krishna Podila, CNL Dan Cluff, CNL	
10:15 a.m.	Break		
10:45 a.m.	<i>MSR Research at Universities</i> <ul style="list-style-type: none"> MSRE Criticality Benchmark: Progress and Challenges Qualification of Alloys for Structural Applications in Fluoride High Temperature Reactors Development and Application of a Molten Salt Chemistry Database in Modeling MSR Performance 	<i>Session Chair: Ben Betzler, ORNL</i> Massimiliano Fratoni, University of California, Berkeley Preet Singh, Georgia Institute of Technology Ted Besmann, University of South Carolina	ORNL Conference Center, TN Rooms 202 A-C
12:15 p.m.	Break		

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Thursday, October 4, 2018			
Time	Event	Lead	Location
12:30 p.m.	Working Lunch: <ul style="list-style-type: none"> Critical Infrastructure Resilience and rNPPs – A Case for MSRs? Getting to Market: The Good, the Bad, and the Ugly 	Moderator: Gary Mays, ORNL (retired) Sherrell Greene, Advanced Technology Insights Dan Ingersoll, NuScale Power	ORNL Conference Center, TN Rooms 202 A-C
1:30 p.m.	Developer Forum	Moderator: Nick Smith, Southern Company	
3:15 p.m.	Break		
3:45 p.m.	MSR Community Panel Discussion Opportunities and Issues Toward Success	Moderator: Lou Qualls, ORNL MSR community stakeholders	ORNL Conference Center, TN Rooms 202 A-C
4:45 p.m.	Closing Remarks	Dan Vega, DOE-NE	
5:00 p.m.	Adjourn the Workshop	Lou Qualls, ORNL	