

2019 Test Research and Training
Reactors Annual Conference


September 22 – 26, 2019
INL Meeting Center
Idaho Falls, ID

<h1>Schedule</h1>		
Sunday, September 22, 2019		
10:00 am – 12:00 pm	ANS Stds. Mtg	Meeting Center Rm 114
2:00 pm – 5:00 pm	Exec. Comm. Mtg	Meeting Center Rm 114
<p>For US callers dialing in from outside the local calling area: Dial the toll free number. When the auto attendant answers press 1 for conference calls and then dial the five digit Conference DN (60683).</p> <p>Access from Public Network: (208) 526-0683 Toll Free Access: 1-800-414-2147 Conference DN: 60683</p>		
3:00 pm – 8:00 pm	Registration	Meeting Center
6:00 pm – 8:00 pm	Reception	Meeting Center Rm 102
Monday, September 23, 2019		
7:00 am – 5:00 pm	Registration	Meeting Center
7:00 am – 5:00 pm	Exhibits	Meeting Center Foyer/Rm 111, 112, 113
7:30 am – 8:30 am	Breakfast	Meeting Center Rm 111/112/113
8:30 am – 9:00 am	Welcome	Meeting Center Rm 102
9:00 am – 10:00 am	General Session I General Session I-A	Meeting Center Rm 102 Meeting Rm 111/112/113
10:00 am – 10:30 am	Break	Meeting Center Rm 111/112/113
10:30 am – 12:00 pm	General Session II General Session II-A	Meeting Center Rm 102 Meeting Rm 111/112/113
12:00 pm – 1:00 pm	Lunch	Meeting Center Rm 111/112/113
1:00 pm – 2:30 pm	General Session III	Meeting Center Rm 102
2:30 pm – 3:00 pm	Break	Meeting Center Rm 111/112/113
3:00 pm – 5:30 pm	General Session IV General Session IV-A	Meeting Center Rm 102 Meeting Rm 111/112/113
4:50 pm – 5:30 pm	Business Meeting	Meeting Center Rm 102

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Tuesday, September 24, 2019		
6:00 am – 7:00 am	5k Walk/Run	Idaho Falls Greenbelt
7:00 am – 5:00 pm	Exhibits	Meeting Center Foyer/Rm 111, 112, 113
7:30 am – 8:30 am	Breakfast	Meeting Center Rm 111/112/113
8:30 am – 10:00 am	General Session V	Meeting Center Rm 102
10:00 am – 10:30 am	Break	Meeting Center Rm 111/112/113
10:30 am – 12:00 pm	General Session VI General Session VI-A	Meeting Center Rm 102 Meeting Rm 111/112/113
12:00 pm – 1:00 pm	Lunch	Meeting Center Rm 111/112/113
12:30 pm – 5:30 pm	INL Tours	Meet in Meeting Center Lobby
7:00 – 9:00 pm	Evening Activity/ Light Hor d'oeuvre	Museum of Idaho Archimedes Exhibit
Wednesday, September 25, 2019		
7:00 am – 5:00 pm	Exhibits	Meeting Center Foyer/ Rm 111, 112, 113
7:30 am – 8:30 am	Breakfast	Meeting Center Rm 111/112/113
8:30 am – 10:00 am	NRC Session I	Meeting Center Rm 102
10:00 am – 10:30 am	Break	Meeting Center Rm 111/112/113
10:30 am – 12:00 pm	NRC Session II	Meeting Center Rm 102
12:00 pm – 1:00 pm	Lunch	Meeting Center Rm 111/112/113
1:00 pm – 2:30 pm	NRC Session III	Meeting Center Rm 102
2:30 pm – 3:00 pm	Break	Meeting Center Rm 111/112/113
3:00 pm – 5:00 pm	NRC Session IV	Meeting Center Rm 102
7:00 pm – 9:00 pm	Banquet	Downtown Event Center 480 Park Avenue



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Thursday, September 26, 2019		
7:00 am – 12:00 pm	Exhibits	Meeting Center Foyer/ Rm 111, 112, 113
7:00 am – 8:00 am	Breakfast	Meeting Center Rm 111/112/113
8:00 am – 10:00 pm	General Session VII	Meeting Center Rm 102
10:00 – 10:30	Break	
NRC PUBLIC MEETING 10:30 – 12:30	NEIMA and New Criteria for Commercial Non- Power Reactors	Meeting Center Rm 102 Bridge Number: 888-322- 7213 Passcode: 33407#

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Monday, September 23

8:30 am – 4:50 pm

8:30 – 8:45	Welcome	Robert Boston, DOE-ID Manager
8:45 – 9:00	INL Overview	Marianne Walck, INL DLD and Chief Research Officer

9:00 – 10:00 General Session I – Versatile Test Reactor Project Sean O’Kelly, Chair

9:00 – 9:30	Fast Test Reactor Experiment Programs	Kemal Pasamehmetoglu
9:30 -10:00	Versatile Test Reactor Preliminary Design Considerations	John Bumgardner

10:00 – 10:30 Break - Meeting Center Rm 111/112/113

10:30 – 12:00 General Session II - Reactor Upgrades and Age Management Rm 102 – Tom Newton, Chair

10:30 – 10:40	Sponsor Presentation	ThermoFisher Scientific
10:40 – 11:00	A Life Cycle and Aging Management investment strategy to sustain long term strategic irradiations at ATR	Hans Vogel
11:00 – 11:20	Breazeale Reactor Beam Lab Refurbishment Progress Report	Jeffrey A. Geuther
11:20 – 11:40	External Review of the Deuterium Cold Source Project	Mike Middleton
11:40 – 12:00	Update on status of Oregon State instrumented fuel element	Robert Schickler

11:00 – 12:00 General Session II-A - Reactor Upgrades and Age Management Rm 111/112/113 – Melinda Krahenbuhl, Chair

11:00 – 11:20	Conversion of the Idaho State University AGN Control Console to Solid State Circuitry	Ashoak Naragarn
11:20 – 11:40	Lessons Learned from Upgrading the UUTR	Matthew Lund
11:40 – 12:00	UMASS Lowell I&C Upgrades	Thomas Regan

12:00 – 1:00 Lunch Meeting Center Rm 111/112/113

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1:00 – 2:30 General Session III – Research Activities		
Rm 102 – Steve Reese, Chair		
1:00 – 1:10	Sponsor Presentation	NAC International
1:10 – 1:30	59 Years and Counting – Ongoing Research Activities in the ZED-2 Reactor	Luke Yaraskavitch
1:30 – 1:50	The Future of Neutron Science at NCNR	Tom Newton
1:50 – 2:10	Modernization and enhancement of neutron spectrum correction software for ATR irradiation experiments	Michael Reichenberger and John Boyington
2:10 – 2:30	Innovative measurement systems for in-pile irradiation experiments	Josh Daw
2:30 – 3:00 Break – Meeting Center Rm 111/112/113		
3:00 – 5:30 General Session IV – Operations		
Rm 102 – Les Foyto, Chair		
3:00 – 3:10	Sponsorship Presentation	MURR
3:10 – 3:30	An Overview of TREAT Operations Since Restart	Andy Beasley
3:30 – 3:50	ATR Path to Excellence	Kelly Estes
3:50 - 4:10	Operational Overview and Capabilities of TREAT	Sam Giegel
4:10 – 4:30	Fuel Examinations at UT-Austin	Larry Hall
4:30 – 4:50	2019 Status Report-Research Reactor Infrastructure Program	Doug Morrell
3:00 – 5:30 General Session IV-A – Operations		
Rm 111/112/113 – Jeff Geuther, Chair		
3:10 to 3:30	Impact of Samarium on Power Distribution and Consequent Safety Rod Worths, in the Advanced Test Reactor	Nathan Manwaring
3:30 to 3:50	Reactivity Initiated Accident Testing in TREAT	Leigh Ann Emerson
3:50 to 4:10	Automation of Sensitivity Studies for U10Zr	Brenna Carbo
4:10 to 4:30	Low-enriched depletion benchmarks in the ATR	Joseph Nielsen
4:30 to 4:50	DOE Independent Oversight Program	Kevin Witt
4:50 – 5:30	TRTR Business Meeting	

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Tuesday, September 24

8:30 – 10:00 General Session V – Research and Utilization

Dave Schoonen, Chair

8:30 – 8:40	Sponsorship Presentation	BWXT
8:40 – 9:00	Temperature and flux sensors for test reactors	Troy Unruh
9:00 – 9:20	Reestablishing Liquid Metal Cooled Fuel Testing at TREAT	Bruce Kelly
9:20 – 9:40	ATRC Neutronics Model Validation Efforts	Joshua Peterson-Droogh
9:40 – 10:00	TREAT Experiments: Sweetening Nuclear Fuels Research Through the Use of Additive Manufacturing	Cody Race

10:00 – 10:30 Break - Meeting Center Rm 111/112/113

10:30 – 12:00 General Session VI – Advanced Instrumentation and Experiments


Rm 102 – Sarah Don, Chair

10:30 – 10:40	Information & Updates	Sean O’Kelly
10:40 – 11:00	Low Activation Materials for Holders and Containments in Test Reactor Experiments	Joe Palmer
11:00 – 11:20	Applications of low-cost computing & IO board <i>Raspberry Pi</i>	Garrett Wendel
11:20 – 11:40	TREAT Advanced Instrumentation Deployment	Kevin Tsai
11:40 – 12:00	Real-time axial neutron flux profile measurement at ATR-C	Rose Holtz

10:40 – 12:00 General Session VI-A – Advanced Instrumentation and Experiments

Rm 111/11/113 – Clive Townsend, Chair

10:40 – 11:00	Emulating a GA NM-1000 Wide-Range Channel Using an NMP-1000 and an NLW-1000	Randall Hyde
11:00 – 11:20	Deterioration and Replacement of Reactor Water Cleanup System Resin Columns at MURR	Bruce Meffert
11:20 – 11:40	Breazeale Reactor Control Console Renovation	Jeff Geuther



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11:40 – 12:00	Development of a High Temperature Neutron Flux Detector	Martin Shaw
12:00 – 1:00	Lunch (persons on tours get in line first)	
12:30 – 5:50	Tours – ATR and TREAT 1:45 – ATR 3:00 – Travel to TREAT 3:30 – Tour TREAT 4:45 – Return to Idaho Falls	
7:00 – 9:00 pm	Social at Museum of Idaho – 200 N. Eastern Ave	

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Wednesday, September 25

8:30 – 5:00 NRC Day		
8:30 – 10:30	NRC	
	Introduction	Greg Castro
Session #1	NEIMA implementation background and schedule implications	Duke Kennedy
Session#1a	NPUF rulemaking implications for NRC and RTR licensees	Duke Kennedy, Al Adams
Session #2	Discussion of methods available for licensees to licensing amendments more repeatable and efficient	Patrick Boyle
10:30 – 11:00 Break - Meeting Center Rm 111/112/113		
11:00 – 12:00		
Session #2a	NRC Summer Intern and hiring programs information	Greg Casto
Session #3	Discussion of 50.59 screening and evaluation practices	Tony Mendiola, Patrick Boyle, Greg Casto
12:00 – 1:00 Lunch		
1:00 – 2:30	NRC	
	Introduction	Tony Mendiola
Session #4	Operator licensing information program and revisions to examiner standards	Michele DeSouza
2:30 – 3:00 Break – Meeting Center Rm 111/112/113		
3:00 – 5:00	NRC	
Session #5	Facility inspections program	Kevin Roche
Session #6	Security inspection program and Part 71 spent fuel transport regulation	Bill Schuster
7:00 – 9:00	Banquet – Downtown Event Center – 480 Park Avenue Keynote Speaker: Harold McFarlane “70 X 70: A Brief History of Idaho’s Reactors”	

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Thursday, September 26

8:00 – 10:00 General Session VII

Dave Broussard, Chair

8:00 – 9:00	NSUF Research Reactor Fitness Workshop Results Panel	Brenden Heidrich
9:00 – 9:20	MIT NRL Initial Operator Training Program	Marshall Wade
9:20 – 9:40	IAEA Integrated RR Utilization Review	Ron Crone
9:40 – 10:00	IAEA Activities in Support Of Capacity Building With Use And Access To Research Reactors	Ram Sharma
10:00 – 10:10	Closing Remarks	Sean O'Kelly
10:10 – 10:30 Break		
10:30 – 12:30	NRC Public Meeting - Section 106 of the Nuclear Energy Innovation and Modernization Act (NEIMA) and New Criteria for Commercial NPUF	Duke Kennedy and Al Adams