

2024 DOE-NE Advanced Reactor Technologies Gas-Cooled Reactor Program Review Meeting

July 16-18, 2024

July 16-17: Energy Innovation Laboratory (EIL)

July 18: Collaborative Computing Center (C3)

**All buildings are established General Access Area (GAA), no badging is required.*

Agenda

Thursday, July 18th, 2024

Collaborative Computing Center (C3), C3 Auditorium (Rooms 1131A-1131B)

955 MK Simpson Blvd, Idaho Falls, ID 83401

(All times are MT)

High Temperature Metals

08:00 High Temperature Metals Program Overview Mike McMurtrey, INL

08:15 High Temperature Materials Heramb Mahajan, INL

Methods, Modeling, and Validation

08:30 ART GCR Design, Methods and Validation Overview Paolo Balestra, INL

08:50 Water-Cooled Natural Convection Shutdown Heat Removal Test Facility Matthew Jasica, ANL
(NSTF) data and status

09:20 Break (20 minutes)

09:40 Progress in the High Temperature Test Facility (HTTF) Benchmark Robert Kile, INL

10:10 Advanced Cross Section Library generation using reduced order models Yifeng Che, INL

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Methods, Modeling, and Validation (Continued)

- 10:40 AIR cooled RCCS CFD modeling validation..... Sinan Okay, Penn State University
- 11:00 **Break for lunch setup (20 minutes)**

Methods, Modeling, and Validation NEUP Projects (60 minutes)

- 11:20 Investigating Heat Transfer in Horizontally Oriented HTGR Under Bindra Hitesh,
Normal and PCC ConditionsPurdue University
- 11:50 Thermal Hydraulics Investigation of Horizontally Oriented Layout Muthanna Al Dahhan,
Micro HTGRs Using Integrated Advanced Measurement Techniques Missouri S&T

Methods, Modeling, and Validation

- 12:20 HTGR Validation: NEUP Survey and DatabaseSunming Qin, INL
- 12:50 TREAT TRISO Transient Testing Pre-test Analysis Using Mustafa K. Jaradat and
NEAMS Tools Jacob A. Hirschhorn, INL
- 13:20 **Break (20 minutes)**
- 13:50 International Collaborations Overview..... Paolo Balestra, INL
- 14:20 Questions/Discussions..... Paolo Balestra, INL
- 14:30 Final Remarks 2024 Program Review..... Gerhard Strydom, INL
- 14:40 **Adjourn**