MARVEL Technology Review

You are invited to participate in the second annual MARVEL Technology Review Webinar on October 19-20, 2022, from 9:00 am to 2:00 pm MT (11:00 am to 4:00 pm ET).

The Microreactor Applications Research Validation and Evaluation Project (MARVEL) is a DOE Microreactor Program-sponsored research effort led by Idaho National Laboratory, in collaboration with Los Alamos National Laboratory and Argonne National Laboratory, to demonstrate microreactor technology and application integration. It will be the *FIRST* microreactor connected to and powering a microgrid! The MARVEL team would like to share their experiences and progress with the broader stakeholder community.

The objectives of this event are to:

- Day 1: Provide an update on MARVEL's technical progress in 2022
- Day 2: Review utilization options and gather initial feedback from the industry on intent to use MARVEL and potential timeframes.

This is an *invitation only* event. If you have questions or know of others that would like an invitation, please email lori.braase@inl.gov.

To register for the virtual <u>MARVEL Technology Review</u> on October 19, 2022, at 9:00 a.m. MST, click on the link below:

https://attendee.gotowebinar.com/register/156537895951182606

To register for the <u>Utilization of MARVEL</u> on October 20, 2022, at 9:00 a.m. MST, click on the link below:

https://attendee.gotowebinar.com/register/1952365839551321100

After registering, you will receive a confirmation email containing information about joining the webinar.



Microreactor Program website - https://gain.inl.gov/SitePages/MicroreactorProgram.aspx



MARVEL Technology Review Agenda October 19, 2022; 9:00 am – 2:00 pm MT

MT	Topic	Presenter
9:00 am	Welcome / Logistics	Lori Braase
9:05 am	Microreactor Program Overview	Janelle Eddins, DOE-NE John Jackson, Microreactor NTD
	MARVEL Overview & Status	
<mark>9:</mark> 20 am	Reactor Design Overview	Yasir Arafat, Project Lead
	Fission & Safety	
10:0 <mark>0 am</mark>	Neutronics	Travis Lange
10:30 am	Fuel Performance Evaluation	Jordan Evans
11:00 am	Thermal Hydraulics & Safety Basis	Carlo Parisi
	Reactivity Controls	
11:30 pm	Control Drum and Shutdown Rod	Anthony Crawford
	Construction & Assembly	
12:15 pm	Final Assembly and Construction	Yasir Arafat
12:45 pm	Open Forum / Q&A	Yasir Arafat Lori Braase



MARVEL Utilization Agenda October 20, 2022; 9:00 am – 2:00 pm MT

MT	Topic	Presenter
9:00 am	Logistics	Lori Braase
9:05 am	MARVEL Utilization Overview	John Jackson
	MARVEL Reactor Technology	
9:15 am	Readiness & Startup Testing	Yasir Arafat
9: <mark>45</mark> am	MARVEL Control Simulator	Ben Baker
10:1 <mark>5 a</mark> m	Advanced Sensor & Controls Deployment	Troy Unruh
	MARVEL Applications	
10:45 am	Integrated Energy Systems Including Nuclear	Shannon Bragg-Sitton
11:15 am	Microgrids and MARVEL	Kurt Myers
11:35 am	Hydrogen Production: Heat & Power	Micah Casteel
11:55 am	INL Net Zero Pilot	Sam Dixon
	Accessing MARVEL: Funding & Schedule	
12:30 pm	GAIN Nuclear Energy Voucher Program	Chris Lohse
12:45 pm	Cleantech Integrated Energy Systems Network (CIESN) Incubator	Richard Adams Corey McDaniel
1:00 pm	Initial User Engagement	John Jackson
1:15 pm	Industry Needs/Feedback to Inform MARVEL Testing Requirements and Schedule	John Jackson Lori Braase
1:45 pm	Summary and Call to Action	John Jackson Yasir Arafat

