NATIONAL ENERGY TECHNOLOGY LABORATORY

2020 HIGH PERFORMANCE MATERIALS PROJECT REVIEW MEETING
Virtual Agenda
Tuesday, September 22, 2020

Tuesday, September 22, 2020

Introduction - Robert Schrecengost, DOE FE

1:10 PM **Keynote**
AM of Nickel components and joining of Dissimilar Metal Welds
Sebastian Dryepondt, Oak Ridge National Laboratory (ORNL)

Advanced Manufacturing & Computational Materials Modeling
Moderator Clint Noack
Facilitator Michael Verti

1:30 PM **Additively Manufactured Graded Composite Transition Joints for Dissimilar Metal Weldments in Utra-Supercritical Power Plant**
Xingbo Liu, WVU

1:40 PM **Multiscale Modelling of Microstructure Evolution during Rapid Solidification for Additive Manufacturing**
Tomorr Haxhimali, Lawrence Livermore National Laboratory

1:50 PM **Digital Twin Model for Advanced Manufacture of a Rotating Detonation Engine Injector**
Shane Coogan, Southwest Research Institute

2:00 PM **Integrated Computational Materials and Mechanical Modeling for Additive Manufacturing of Alloys with Graded Structure used in Fossil Fuel Power Plants**
Wei Xiong, University of Pittsburgh

2:10 PM **ICME for Advanced Manufacturing of Nickel Superalloy Heat Exchangers with High Temperature CREEP Plus Oxidation Resistance for Supercritical CO_2**
Brett Tossey, Det Norske Veritas, (DNV) GL USA, Inc.

2:20 PM **Facilitated Discussion**

3:00 PM **Adjourn**