

AGENDA

NDE of AMT Technical Exchange

NRC Headquarters, 11555 Rockville Pike, Rockville, MD 20852

Day 1 (May 2, 2023)

Speaker	Organization	Title	Time
Isaac Anchondo Rob Tregoning	NRC	Welcome/Introductions/ Opening remarks	9:00-9:15
David Rudland John Wise	NRC	NRC perspective on NDE of AMT	9:20-10:00
William Chuirazzi Robert Montgomery Amir Ziabari	Idaho National Lab, Pacific Northwest National Lab, and Oak Ridge National Lab	DOE AMMT Efforts on Non-Destructive Evaluation for Additively Manufactured Nuclear Components	10:00-10:40
Break			
Joseph Turner	University of Nebraska-Lincoln	Ultrasonic NDE for metal additive manufacturing: impact of microstructure	11:00-11:40
Christopher Kube	Pennsylvania State University	In process and post- build NDE of powder bed fusion Gr-91 stainless steel	11:40-12:20
Lunch			
Jesse Waller	NMSU	An update on ANSI/America Makes AMSC NDE Gap progress	1:40-2:20
David Moore	Sandia National Laboratories	Characterization of Additively Manufactured Samples with Mechanical Testing and Nondestructive Inspection Techniques: A Path Forward for Qualification	2:20-3:00
Break			

Alexander Heifetz	Argonne National Laboratory	Detection of Microscopic Subsurface Defects in Metals with Unsupervised Learning of Pulsed Infrared Thermography Images	3:20-4:00
Pingsha Dong	University of Michigan	Effects of distributed defects and interactions on fatigue behavior of AM components and a zone-based NDE methodology	4:00-4:40

Day 2 (May 3, 2023)

Speaker	Organization	Title	Time
Steve Mahaut	CEA-LIST	NDE and monitoring for AM parts and process	9:00-9:40
Udisien Woy	Nuclear Advanced Manufacturing Research Centre	A systemic perspective on developing non-destructive evaluation (NDE) strategies for additive manufacturing (AM) applications in nuclear.	9:40-10:20
Break			
Ron Aman	EWI	Considerations and Experience Applying NDE to AM Materials and Components	10:40-11:30
George Connolly	Electric Power Research Institute, Inc.	UT and FMC/TFM for Additively-Manufactured Components: Recent Experiences	11:30-12:10
Lunch			

Andrew Gavens	Naval Nuclear Laboratory	Using Process Compensated Resonance Testing to Differentiate Laser Powder Bed Fusion Additively Manufactured Witness Coupons Produced With Varying Process Parameters	1:30-2:10
Adam Wick	Naval Nuclear Laboratory	Embedding Surface-connected Cracks in 316L Stainless Steel Laser Powder Bed Fusion Manufactured Pipe Specimens for Qualification of Phased Array Ultrasonic Testing Inspection Techniques	2:10-2:50
Break			
Peter Collins	Iowa State University	On the process-structure-property-performance for additively manufactured titanium alloys	3:10-3:50
Reza Zoughi Peter Collins	Iowa State University	A Vision for Comprehensively Bringing Additive Manufacturing (AM) and Nondestructive Evaluation (NDE) together in a National Testbed	3:50-4:30
NRC Wrap-up/Open Discussion/Adjourn			