

NSF EPSCoR Research Infrastructure Improvement (RII) Award

The 2nd LAMDA Additive Manufacturing Frontiers Conference

“Enhancing Additive Manufacturing Through Advanced Cybersecurity and Machine Learning”

February 3, 2022

Zoom Meeting Link

<https://lsu.zoom.us/j/8942757897?pwd=VFh1ZWhtc3VSR3hiWC9KMjY5SVBuc0p0T09>

Physical Space: Frank H. Walk Design Presentation Room

Engineering Laboratory Annex 140, LSU, Baton Rouge, LA, 70803

Agenda

8:30 – 8:40CST	Welcoming Remarks and Overview Dr. Michael Khonsari, Louisiana Board of Regents
MORNING SESSION CHAIR: Dr. Les Butler, LSU	
8:40 – 9:00CST	Dr. Felix H. Kim (NIST) Developing X-Ray Computed Tomography Phantom and Data with Controlled Flaws
9:00 – 9:10	Q&A and Discussion
9:10 – 9:30CST	Drs. Pramita Mitra and Ellen Lee (Ford Motor Company) *NO RECORDING PLEASE* On Leveraging Blockchain to Secure the AM Digital Thread
9:30 – 9:40	Q&A and Discussion
9:40 – 10:00CST	Dr. Eric Biedermann (Vibrant) Process Compensated Resonance Testing for Reduction of Mechanical Testing Burden in AM Process Qualification, Monitoring and Control
10:00-10:10	Q&A and Discussion
10:10 – 10:30CST	Dr. Michele Maasberg (United States Naval Academy) Crime Scripts and Cost/Security Balance Guide the Choice of Cyber-Physical Trust Anchor for Linkage to Blockchain
10:30-10:40	Q&A and Discussion
10:40-10:50	Break
10:50-12:00	Beginning of LAMDA TECHNICAL MEETING CONTENT
10:50-11:10	Shengmin Guo (LSU) , Summary of LAMDA SD-1 research: Complex Concentrated Alloys (CCAs) with balanced mechanical performance. (Including response to RSV and ERB)
11:10-11:30	Guoqiang Li (SU/LSU) , Summary of LAMDA SD-2 research: AM-compatible Thermoset Shape Memory Polymers (TSMPPs) with enhanced service life. (Including response to RSV and ERB)
11:30-12:00	Wynton A Johnson (LSU) , Summary of LAMDA education and outreach activities
12:00-12:15	Ramu Ramachandran (LaTech) LAMDA Survey (Please bring laptops)
12:15-1:00	Lunch (virtual reality demonstration)
AFTERNOON: LAMDA TECHNICAL Reports, SESSION CHAIRS: Drs. Shengmin Guo and Guoqiang Li, LSU	

1:00 – 1:50	Wenjin Meng (LSU), Jonathan Raush (ULL), Collin Wick (LaTech), Shawn Chen (LaTech), Jihun Hamm (TU), Wang (LSU), Guo (LSU) SD1 – Complex concentrated alloys (CCAs)
1:50 – 2:00	Q&A
2:00– 2:50	Wick (LaTech), Gli (SU/LSU), Pojman (LSU), Mensah (SU), Khattab (ULL) SD-2 – Thermoset Shape Memory Polymers (TSMPs)
2:50 – 3:00	Q&A
3:00-3:10	Saber Nemati (LSU) Student Poster Preparation
3:10– 3:20	Break
3:20-3:30	Concluding Remarks Dr. Michael Khonsari, Louisiana Board of Regents