

NSF EPSCoR Research Infrastructure Improvement (RII) Award 2021 LAMDA Symposium

August 6, 2021

Zoom Registration Required

<https://us02web.zoom.us/join/zoom-join?pwd=Z0UucUtrD4sEtAfjUsZotqRwECru9SRcPtU>

Agenda

8:15 – 8:30	Overview of the EPSCoR RII project (Michael Khonsari)
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8:30 – 10:30	Session 1: Project Progress Report* Session Chair: Phillip Sprunger
8:30 – 8:50	Overview of LAMDA SD-1 research: Complex Concentrated Alloys (CCAs) with balanced mechanical performance. (Shengmin Guo)
8:50 – 9:10	Overview of LAMDA SD-2 research: AM-compatible Thermoset Shape Memory Polymers (TSMPs) with enhanced service life. (Guoqiang Li)
9:10 – 9:20	Current status in the development of the LAMDA Core User Facilities (Wenjin Meng / Xiaodong Zhou)
9:20 – 9:30	LAMDA Industry Partnerships (Andrew Mallow / Dimitris Nikitopoulos)
9:30 – 9:55	LAMDA WFDD efforts (Kristen S Williams)
9:55 – 10:00	LAMDA seed grants (Ramu Ramachandran)
10:00 – 10:10	Graduate Student Retreat/Meeting (Saber Nemati / Congyuan Zeng / Rifat-E-Nur Hossain / Mohammad Khairul Habib Pulok)
10:10-10:30	External Evaluation Report (Cindi Dunn)
10:30 – 10:45	Break

***Presentation times include 5 min for Q&A**

10:45 – 11:45	Session 2: SD-1 Technical Presentations* Session Chair: Shengmin Guo
10:45 – 11:05	Wick-SChen (LaTech)/ Hamm (TU) / Raush (ULL)/ Meng (LSU): SD1 -Complex concentrated alloys (CCAs)- A progress report (Multiscale DFT/MD/MC/Calphad calculations, ML, and testing)
11:05 – 11:20	Xin Li/Butler (LSU): Three, four, and five-dimensional microstructural characterizations and reconstruction
11:20 – 11:30	Raush (ULL): Digital image correlation (DIC) system
11:30 – 11:45	Arden Moore (LaTech): In-situ Infrared Temperature Sensing for Real-Time Defect Detection in Additive Manufacturing

***Presentation times include 5 min for Q&A**

11:45 – 12:15	Lunch break
12:15 – 2:10	Student presentations (judged by ERB): 16 Presentations (each 5 min + 2 min Q&A) Session Chair: Saber Nemati

2:10 – 3:10	Session 3: SD-2 Technical Presentations* Session Chair: Guoqiang Li
2:10 – 2:25	Collin Wick (LaTech)/Andrew Peters (LaTech)/Guoqiang Li (SU/LSU): Molecular dynamics simulation of high enthalpy storage thermoset shape memory polymers
2:25 – 2:40	John Pojman (LSU): Thermoset shape memory polymer synthesized with frontal polymerization
2:40 – 2:55	Samuel Ibekwe (SU)/Patrick Mensah (SU)/Guoqiang Li (SU/LSU): SMA z-pinned glass fiber reinforced shape memory vitrimer composite laminate for impact mitigation and delamination healing
2:55 – 3:10	William Chirdon/Ahmed Khattab (ULL): Improved Weathering Performance of Poly(Lactic Acid) through Carbon Nanotube Addition: Thermal, Microstructural, and Nanomechanical Analyses

***Presentation times include 5 min for Q&A**

3:10 – 3:25	Break
3:25 – 4:10	Discussions of ERB and IAB(Separate breakout rooms)
4:10 – 4:25	Feedback from the ERB and IAB and student presentation awards Session Chair: Michael Khonsari
4:25 – 4:40	Concluding Remarks (Michael Khonsari)