

Wednesday, June 8 - Physical Sciences Building, Room 120

8:30	Registration, coffee, etc.	
	Welcome: Upgrade and Overview Talks	
8:45	Welcome & Introduction	Paul Shade (Air Force Research Lab), Margaret Koker (GeoSoilEnviro Center for Advanced Radiation Sources)
9:10	Upgrade & Overview	Joel Brock (CHESS), Ernie Fontes (CHESS)
9:40	<i>"High-energy x-ray studies of structural materials at the Advanced Photon Source"</i>	Jon Almer
10:10	<i>"Making important known-unknowns knowable: mapping strain fields using high energy white beam x-rays."</i>	Mark Croft (Rutgers, The State University of New Jersey)
10:40	BREAK	
	Session I: Processing – Structure - Properties	
11:00	<i>"Deformation Simulation of Experimentally Characterized Microstructures in Titanium"</i>	Thomas Bieler (Michigan State University)
11:30	<i>"The importance of large, "real" dimension testing for structural, light weight metals and alloys"</i>	Andreas Kulovits (ALCOA Inc.)
12:00	<i>"Grain-scale investigations of deformation and surface treatment in stainless steel"</i>	Jette Oddershede (Danmarks Tekniske Universitet)

12:30	GROUP PHOTO - Clark Atrium	
12:35	LUNCH - Clark Atrium	
	Session II: Processing-Induced Design Limitations	
1:30	<i>"Leveraging Synchrotron Capabilities for Understanding Damage Tolerance"</i>	Douglas Wells (NASA's Marshall Space Flight Center)
2:00	<i>"Characterization of residual stress for process and product validation of heavy equipment using high-energy x-ray diffraction"</i>	Justin Mach (Caterpillar)
2:30	<i>"Structural Life Prediction Accounting for Residual Stresses"</i>	Eric Tuegel (Air Force Research Laboratory)
3:00	BREAK	
	Session III: Additive Manufacturing	
3:20	<i>"Additive Manufacturing: Potential, Reality and Challenges"</i>	James Williams (The Ohio State University)
3:50	<i>"Modeling and Validation of Distortion and Residual Stresses for Powder-Bed Additive Manufacturing Process"</i>	Ade Makinde (GE Global Research Center)
4:20	<i>"Understanding the link between processing, structure, and performance in additively manufactured lattice materials"</i>	Mark Messner (Lawrence Livermore National Lab)
4:50	BREAK	
5:00	Tours of CHESS, highlighting A2 and F2 stations	

6:00	DINNER - Wilson Lab Lower Lawn	
Thursday, June 9 - Wilson Lab, Room 374		
9:00	Summary of the previous day	Armand Beaudoin (CHESS & University of Illinois at Urbana-Champaign)
9:30	Discussion and creation of upgrade white paper	
11:30	Close out and summary	Matt Miller (CHESS)
12:00	LUNCH (Boxed Lunch)	