

## Center for Advanced Non-Ferrous Structural Alloys An Industry/University Cooperative Research Center

# DRAFT Agenda: CANFSA Virtual Fall IAB Meeting October 13-15, 2020

### \*All times Mountain\*

### Tuesday, October 13, 2020

8:30 AM	Welcome, Attendee Introductions, Agenda Changes
9:00 AM	Overview and Status of CANFSA
9:15 AM	D. Meyer, NSF/IUCRC Updates and Review of LIFE Form Process
	www.iucrc.com
	Select meeting: TBD; password: TBD (will be updated)
9:45 AM	A. Saville, Project 36A-L: Microstructural Evolution in Titanium Alloys Under Additive Manufacturing Conditions (Mines)
10:15 AM	Break (15 min)
10:30 AM	B. Milligan, Project 29-L: Identification of Deformation Mechanisms of Thermally Stable Cast Al-Cu Alloys via Neutron Diffraction (Mines)
11:00 AM	B. Puerling, Project 43-L: Thermodynamics of Refractory Alloys (Mines)
11:30 AM	N. Brown, Serrated Yielding in Ni Alloys (Mines)
11:45 AM	J. Neuchterlein, New Member Introduction - Elementum 3D
12:05 PM	Lunch
12:05 PM 1:00 PM	Lunch B. McBride, Project 31-L: Accumulative Roll Bonding of Al and Ti Sheets Toward Low Temperature Superplasticity (Mines)
	B. McBride, Project 31-L: Accumulative Roll Bonding of Al and Ti Sheets
1:00 PM	<ul><li>B. McBride, Project 31-L: Accumulative Roll Bonding of Al and Ti Sheets Toward Low Temperature Superplasticity (Mines)</li><li>B. Rodgers, Project 36E-L: In-Situ Characterization of Microstructural</li></ul>
1:00 PM 1:30 PM	<ul> <li>B. McBride, Project 31-L: Accumulative Roll Bonding of Al and Ti Sheets Toward Low Temperature Superplasticity (Mines)</li> <li>B. Rodgers, Project 36E-L: In-Situ Characterization of Microstructural Evolution During Simulated Additive Manufacturing in Model Alloys (Mines)</li> <li>J. Shin, Project 36D-L: Characterizing Additively Manufactured Inconel</li> </ul>
1:00 PM 1:30 PM 2:00 PM	<ul> <li>B. McBride, Project 31-L: Accumulative Roll Bonding of Al and Ti Sheets Toward Low Temperature Superplasticity (Mines)</li> <li>B. Rodgers, Project 36E-L: In-Situ Characterization of Microstructural Evolution During Simulated Additive Manufacturing in Model Alloys (Mines)</li> <li>J. Shin, Project 36D-L: Characterizing Additively Manufactured Inconel 718/738 (Mines)Break (15 min)</li> </ul>
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### Wednesday, October 14, 2020

8:00 AM	S. Shirley, Project 40: Evaluation of Processing Path Effects on Microstructure and Properties of Powder Al TM Alloy (Mines)	
8:30 AM	B. Ellyson, Project 33A-L: In-situ Studies of Strain Rate Effects on Phase Transformations and Microstructural Evolution in β-Titanium (Mines)	
9:00 AM	G. Storey, Project 39: Solute and Precipitate Effects on Magnesium Recrystallization (Mines)	
9:30 AM	C. Johnson, Project 30-L: Mechanisms of Grain Refinement in Laser Powder Bed Fusion of In-Situ Metal Matrix Composite 6061 Aluminum Alloys (Mines)	
10:00 AM	Break (15 min)	
10:15 AM	B. McArthur, Project 34: Phase and Texture Evolution Preceding Abnormal Grain Growth in Ni-based Aerospace Alloys (Mines)	
10:45 AM	C. Becker, Project 32-L: Development of Cabinet Based Computed Tomography Methods for Studies of Microstructures and Defects in Metals (Mines)	
11:15 AM	New Student Introductions (A. Miklas (Mines), S. Blazanin (ISU), C. Smith (Mines))	
	New Faculty Introduction (S. Pathak (ISU))	
12:00 PM	Lunch	
1:00 PM	N. Delfino de Campos Neto, Project 37: Advanced Engineered Coatings with Extended Die Life for Tooling (Mines)	
1:30 PM	A. Temple, Predicting Mechanical Behavior (ISU)	
2:00 PM	LIFE Form Review Process	
2:45 PM	Break (15 min)	
3:00 PM	IAB Workshop (IAB and Directors Only, Closed to Non-Members)	
4:00 PM	NSF Closed Session with Industry (IAB & Center Evaluator, Closed to Non-Members)	
5:00 PM	Adjourn	
Thursday, October 15, 2020		

8:30 AM	J. Klemm-Toole, Combining In-Situ and Ex-Situ Characterization to Understand Crystallographic Texture Development in Metal Additive Manufacturing (Mines)
9:00 AM	T. Ales, Spatially Resolved Acoustic Spectroscopy (SRAS) (ISU)
9:30 AM	D. Tong, Origins of Time-dependent Aluminum Springback
9:45 AM	Break (15 min)



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10:00 AM	C. Rietema, Development of Advanced 12Cr 1Mo Ferritic/Martensitic Steel for Reactor Core Applications
10:30 AM	P. Collins, A new way of looking at ML/AI for Metallic Systems (ISU)
10:45 AM	Report out to CANFSA directors (IAB and Directors Only, Closed to Non-Members)
12:00 PM	Adjourn