

Final Agenda: CANFSA Spring IAB Meeting, April 3-5, 2019

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

## Iowa State University, Ames, IA

## Wednesday, April 3, 2019

<ul> <li>12:45 PM Overview and Status of CANFSA</li> <li>1:00 PM NSF/IUCRC Updates and Review of LIFE Form Process – D. Meyer www.iucrc.com, "Advanced NonFerrous Struct. Alloys (CANFSA)" Password: ames2019</li> <li>1:30 PM Project 29-L: B. Milligan, Identification of Deformation Mechanisms in Thermally Stable Cast Al-Cu Alloys Via Neutron Diffraction (Mines)</li> <li>2:00 PM Project 22: J. Jankowski, Development of Novel High Temperature Aluminum Alloys (Mines)</li> <li>2:30 PM Project 30-L: C. Johnson, Microstructural Evolution of Metallic Alloys During Rapid Solidification (Mines)</li> <li>3:00 PM Break (15 min)</li> <li>3:15 PM Project 31-L: B. McBride, Accumulative Roll Bonding of Al And Ti Sheets Toward Low Temperature Superplasticity (Mines)</li> <li>3:45 PM Project 34: B. McArthur, In-Situ Observation of Phase and Texture Evolution Preceding Abnormal Grain Growth in Ni-Based Aerospace Alloys (Mines)</li> <li>4:15 PM Guest: T. Copland-Johnson, Characterization of Oxidation Layers on Accident Tolerant Nuclear Fuel Cladding Alloys (ISU)</li> </ul>	12:30 PM	Welcome, Attendee Introductions, Agenda Changes
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4:45 PM LIFE Form Review Session	4:45 PM	LIFE Form Review Session
5:15 PM Adjourn	5:15 PM	Adjourn
5:30 PM Social (drinks and hors d'oeuvres), Reiman Gardens, Speer Room	5:30 PM	Social (drinks and hors d'oeuvres), Reiman Gardens, Speer Room

## Thursday, April 3, 2019

8:00 AM	Welcome and Agenda Changes (Continental breakfast)
8:05 AM	New Project Discussion
9:30 AM	Project 33a-L: B. Ellyson, In-Situ Studies of Strain Rate Effects on Phase
	Transformations and Microstructural Evolution in Beta-Titanium Alloys
	(Mines)



10:00 AM	Project 33b-L: J. Copley, In-Situ Studies of Strain Rate Effects on Phase Transformations and Microstructural Evolution in Multi-Principal Element
	Alloys (Mines)
10:30 AM	Break (15 min)
10:45 AM	Postdoc-L: Y. Guo, Electron Microscopy Studies of Phase Transformations and
	Microstructural Evolution in TRIP/TWIP $\beta$ -Ti and Multi-Principal Element
	Alloys (Mines)
11:15 AM	Project 17: S. Mills, Characterization of Microstructure Evolution in Nickel-
	Titanium-Hafnium Intermetallics (Mines)
11:45 PM	Project 35: M. Mendoza, Characterization of Microstructures and Mechanical
	Properties in Linear Friction Welded and Electron Beam Additively
	Manufactured Ti-6Al-4V (ISU)
12:15 PM	LIFE Form Review Session
12:45 PM	Lunch
1:30 PM	Project 36a-L: A. Saville, Rationalization of Liquid/Solid and Solid/Solid
	Interface Instabilities During Thermal–Mechanical Transients of Metal Additive
2 00 D) (	Manufacturing (Mines)
2:00 PM	Project 36b-L: M. Kenney, Rationalization of Liquid/Solid and Solid/Solid
	Interface Instabilities During Thermal–Mechanical Transients of Metal Additive
2 20 DM	Manufacturing (ISU)
2:30 PM	Postdoc-L: J. Klemm-Toole, New postdoc introduction (Mines)
2:45 PM	Project 32-L: G. Becker, Development of Cabinet Based Computed
	Tomography Methods for Studies of Microstructures and Defects in Metals (Mines)
3:15 PM	ISU Undergraduates, Low Cost Bench Top Metal Additive Manufacturing
3:25 PM	Break (15 min)
3:40 PM	Project 14: C. Campbell, Characterization of Regions in Ti-6Al-4V Forgings
J.40 I WI	with Diminished Ultrasonic Inspectability (Mines)
4:10 PM	Postdoc-L: M. Jose Quintana and T. Ales, Spatially Resolved Acoustic
	Spectroscopy (SRAS) (ISU)
4:40 PM	Project 37-L: N. Delfino de Campos Neto, Advanced Engineered Coatings with
	Extended Die Life for Tooling (Mines)
5:10 PM	LIFE Form Review Session

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5:40 PM Adjourn

6:00 PM Social at Torrent Brewing and dinner on your own

## Friday, April 4, 2019

8:00 AM	Welcome and Agenda Changes (Continental breakfast)
8:05 AM	Project 38-L: S. Midson, On-Demand Casting of Net-Shape Titanium
	Components for Improved Weapon System Reliability (Mines)
8:20 AM	Project 28-L: K. Clarke, Laboratory Testing to Identify Permanent PVD
	Coatings to Minimize Lubricant Use During Forging (Mines)
8:35 AM	LIFE Form Review Session
8:45 AM	New project selection and member voting
10:30 AM	IAB Workshop (IAB and Directors Only, Closed to Non-Members)
11:45 AM	NSF Closed Session with Industry (IAB & Center Evaluator, Closed to Non-
	Members)
12:45 PM	Report out to CANFSA directors (Boxed lunch)
1:30 PM	Adjourn

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