



NSF I/UCRC CR³ IAB

Fall Meeting

November 8-9 2023

Rubin Campus Center, WPI

Wednesday, November 8, 2023

- 8:30 a.m.** **Breakfast and Registration**
- 9:00 a.m.** **Welcome and CR3 Updates**
B. Mishra and A. Mirza
- Welcome and CHTE Updates**
T. Christiansen and B.J. Bernard
- 9:30 a.m.** **Presentation by Thomas Dahmen, Head of Technology at Asgaard Metals, Copenhagen, Denmark**
- 10:00 a.m.** **Presentation 2 (tbd)**
- 10:30 a.m.** **Break**
- 10:45 a.m.** **Funded Project Updates: Moderator: B. Mishra**
- 10:45 a.m. A: Contactless Flow Measurement of Molten Materials (CSM/Gopher)
B. Raadam, J. Lee, C. Anderson
- 11:05 a.m. B: Assessment of Environmental Properties of Non-Ferrous Metal Production Slags (KUL/Boliden)
K. Koukouza, V. Cappuyns, Y. Pontikes, B. Blanpain
- 11:25 a.m.** **Focus Group Sessions for A & B – Two parallel sessions**
- A: Contactless Flow Measurement of Molten Materials (CSM/Gopher)
Odeum A
- B: Assessment of Environmental Properties of Non-Ferrous Metal Production Slags (KUL/Boliden) *Mid-Century Room*
- 12:30 p.m.** **Lunch**
Odeum C
- 1:30 p.m.** **Funded Project Updates: Moderator: C. Anderson**
- 1:30 p.m. C: Cleaning of fayalite/olivine slags using H₂ (and CO): Measurement for the recovery of technology elements, e.g. Pb, Zn, Sb, As, etc. from bath smelting slags (KUL) *S. Keshavarz, B. Blanpain*
- 1:50 p.m. D: Structure Property Relations of Slags, Application and Carbonation Potential (KUL/Boliden)
V. Hallet, Y. Pontikes

- 2:10 p.m. Focus Group Sessions for C & D – Two parallel session**
- C: Cleaning of fayalite/olivine slags using H₂ (and CO): Measurement for the recovery of technology elements, e.g. Pb, Zn, Sb, As, etc. from bath smelting slags (KUL) [New}
Mid-Century Room
- D: Structure Property Relations of Slags, Application and Carbonation Potential (KUL/Boliden) *Odeum A*
- 3:10 p.m. Break and Poster Session**
Odeum Lobby
- 3:30 p.m. Funded Projects Updates: Moderator: Y. Pontikes**
- 3:30 p.m. E: Adhesive and Sealant Waste Reduction (WPI/GM)
C. Ruhatiya, B. Mishra
- 3:50 p.m. F: Increased Gas Injection Efficiency through Sonic Jetting Regime Using Hydrogen and Ammonia (CSM/Aurubis)
L. Torrez, C. Anderson
- 4:00 p.m. Focus Group Sessions for E & F – Two parallel sessions**
- E: Adhesive and Sealant Waste Reduction (WPI/GM)
Mid-Century Room
- F: Increased Gas Injection Efficiency through Sonic Jetting Regime Using Hydrogen and Ammonia (CSM/Aurubis)
Odeum A
- 5:00 p.m. Meeting Adjourns**
- 5:00 p.m. Bus leaves from the front of Higgins Labs**
- 5:45 p.m. The Publick House,
277 Main Street
Sturbridge, MA 01566**

Thursday, November 9, 2023

- 8:30 a.m. Breakfast**
- 9:00 a.m. Funded Projects Updates: Moderator: Y. Pontikes**
- 9:00 a.m. G: G-METS Distillation for Continuous Efficient Lead Refining (WPI/Gopher, Aurubis, Campine, East Penn)
A. Telgerafchi, A. Powell
- 9:20 a.m. H: Metal Recovery from Industrial By-Products Using Bromine (CSM)
A. Hirata Miyaski, C. Anderson
Odeum A
- 9:40 a.m. Focus Group Sessions for G & H – Two parallel sessions**
- G: G-METS Distillation for Continuous Efficient Lead Refining (WPI/Gopher, Aurubis, Campine, East Penn)
Odeum A
- H: Metal Recovery from Industrial By-Products Using Bromine (CSM)
Odeum A

- 10:40 a.m.** **Break**
- 11:00 a.m.** **Review of 2024 Project Proposals and Mid-Year Project Proposals – Odeum A**
M. Bauer, A. Mirza
- 24-01 Solid Liquid Separation in Low-Melting Point Systems (Aurubis) *M. Chintinne, A. Specht, E. Klaffenbach*
- 24-03 Kinetic of FeNi-sulfidization in Ni-Matte with Sulphur Injection into Matte (SMS Group) *M. Reuter, S. Geimer, M. Kalisch*
- MID 01 Solar Panel Recycling (WPI) *Y. Wang*
- MID 02 Silver, Gold and PGM Distribution Between Doré and Litharge Slag in Pyrometallurgical lead refining *S. Nicol*
- MID 03 Identify and Develop Processes to Recover and Produce Saleable Silica from Mine Wastes *E. Ngai*
- MID 04 Roadmap CO₂ Reduction on Lead Blast Furnace *H. Goovaerts, R. Vanparys, A. Mirza*
- 12:10 p.m.** **Lunch**
Odeum C
- 1:15 p.m.** **IAB Meeting – Closed Session** *A. Mirza – Chair*
Odeum A
- 1:15 p.m.** **Directors Meet with Guests & Potential Members**
- 3:15 p.m.** **IAB Debrief with Directors**
- 3:45 p.m.** **Meeting Adjourns**