



## Center for Resource Recovery & Recycling

### 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*

**9:10 a.m. 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 (TBD)**

**10:30 a.m. Break**

**10:45 am CR3 Center Update for CR3**

*B. Mishra*

**11:00 a.m. Funded Project Updates: Moderator: B. Mishra**

11:00 a.m. A: Contactless Flow Measurement of Molten Materials (CSM/Gopher)

*B. Raadam, J. Lee, C. Anderson*

11:20 a.m. B: Assessment of Environmental Properties of Non-Ferrous Metal Production Slags (KUL/Boliden)

*K. Koukouza, V. Cappuyns, Y. Pontikes, B. Blanpain*

**11:40 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*

**12:40 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 H<sub>2</sub> (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: Adhesive and Sealant Waste Reduction (WPI/GM)

*C. Ruhatiya, B. Mishra*

- 2:10 p.m. Focus Group Sessions for C & D – Two parallel sessions**
- C: Cleaning of fayalite/olivine slags using H<sub>2</sub> (and CO): Measurement for the recovery of technology elements, e.g. Pb, Zn, Sb, As, etc. from bath smelting slags (KUL) [New}  
*Odeum A*
- D: Adhesive and Sealant Waste Reduction (WPI/GM)  
*Mid-Century Room*
- 3:10 p.m. Break and Poster Session**  
*Odeum Lobby*
- 3:40 p.m. Funded Projects Updates: Moderator: Y. Pontikes**
- 3:40 p.m. E: Structure Property Relations of Slags, Application and Carbonation Potential (KUL/Boliden)  
*V. Hallet, Y. Pontikes*
- 4:00 p.m. F: Increased Gas Injection Efficiency through Sonic Jetting Regime Using Hydrogen and Ammonia (CSM/Aurubis)  
*L. Torrez, C. Anderson*
- 4:15 p.m. Focus Group Sessions for E & F – Two parallel sessions**
- E: Structure Property Relations of Slags, Application and Carbonation Potential (KUL/Boliden) *Odeum A*
- F: Increased Gas Injection Efficiency through Sonic Jetting Regime Using Hydrogen and Ammonia (CSM/Aurubis)  
*Mid-Century Room*
- 5:00 p.m. Meeting Adjourns**
- 5:15 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)  
*Mid-Century Room*

- 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*
- 24-03      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 (Glencore) *S. Nicol*
- MID 03      Identify and Develop Processes to Recover and Produce Saleable Silica from Mine  
Wastes (Canmet) *E. Ngai*
- MID 04      Roadmap CO<sub>2</sub> Reduction on Lead Blast Furnace (Campine) *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**