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 a.m. 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 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: 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 H2 (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_

4:15 p.m. 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 CO₂ 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