Optional Short Course: Recycling Metals from Industrial Waste
June 26-28, 2018
http://csmspace.com/events/recycmetals/

Cost for CR³ members: $230 (1 Attendee per CR³ Member). Non-Members: $1500
Note: The short course is scheduled to run until 11:15 a.m. June 28th

Agenda
NSF I/UCRC CR³ Industry Advisory Board Meeting
June 28-29, 2018
Colorado School of Mines
Marquez Hall, 1600 Arapahoe Street, Golden, CO

Thursday, June 28, 2018
8:00 a.m. Breakfast and Registration - Atrium
     Getting On-Line - Life Forms
8:30 a.m. Welcoming Remarks – Marquez Hall, Room 326
     C. Anderson, D. Apelian
     Opening Remarks: IAB
     M. Bauer
     NSF Update
     Prakash Balan
     CR³ NSF Assessment Coordinator’s Update
     S. Shipp
     CR³ Updates
     B. Mishra

9:20 a.m. Funded Project Updates – Marquez Hall, Room 326
8:20 a.m. A: Innovative Refining Technologies for Sb Recovery (WPI)
          Q. Wang, Y. Wang

9:40 a.m. B: Waste Water Treatment Sludge & High Value Grinding Swarf Recycling (WPI)
          H. Lee, B. Mishra

10:00 a.m. Coffee Break
10:20 a.m. Focus Group Sessions for A & B – Two parallel sessions
          A: Innovative Refining Technologies for Sb Recovery (Umicore)
            Marquez Hall, Room 335
          B: Waste Water Treatment Sludge & High Value Grinding Swarf Recycling (GM)
            Marquez Hall, Room 326
11:20 a.m.  **Funded Project Updates – Marquez Hall, Room 326**
11:20 a.m.  C: Pretreatment Processes of Waste PCBs (University of Tokyo)
            *J. Ponou, T. Fujita*
11:40 a.m.  D: Online Slag and Bullion Analysis by LIBS (Umicore)
            *E. François, B. Blanpain*

12:00 p.m.  **Focus Group Sessions for C & D – Two parallel sessions**
            C: Pretreatment Processes of Waste PCBs (JX Nippon)
            Marquez Hall, Room 335
            D: Online Slag and Bullion Analysis by LIBS (Umicore)
            Marquez Hall, Room 326

1:00 p.m.   **Lunch - Atrium**

2:00 p.m.   **Center Presentation for CSM Short Course Guests followed by Q&A – Marquez Hall, Room 326 - Center Directors, Guests and IAB**

3:00 p.m.   **New 2018 Projects – Overview and Initial Focus Group Formation/Meeting**
            Marquez Hall, Room 326
            - Copper Separation from Steel – Marquez Hall, Room 326 – *B. Mishra*
            - Optimization of Concrete Mixtures Containing Metallurgical Process Residues for 3D Printing – Marquez Hall, Room 204 – *Y. Pontikes*

3:30 p.m.   **Coffee Break**

3:45 p.m.   **Funded Projects Updates – Marquez Hall, Room 326**
3:45 p.m.   E: Vacuum Distillation of Complex Lead Bullion (CSM)
            *E. Tshijik Karumb, P. R. Taylor*
4:05 p.m.   F1: Auto-Al Scrap Material Flow Analysis with Compositional Projections (WPI) - FINAL
            *S. Kelly, D. Apelian*
4:20 p.m.   F2: Sorting of Wrought Aluminum Scrap for Automotive Manufacturing (WPI)-FINAL
            *S. Zummar Ghazaleh, D. Apelian*

4:35 p.m.   **Focus Group Sessions for E & F – Three parallel sessions**
            E: Vacuum Distillation of Complex Lead Bullion (Umicore)
            Marquez Hall, Room 335
            F1: Auto-Al Scrap Material Flow Analysis with Compositional Projections (Steinert)
            Marquez Hall, Room 326
            F2: Sorting of Wrought Aluminum Scrap for Automotive Manufacturing (Steinert)
            Marquez Hall, Room 326

6:30 p.m.   **Reception and Dinner**
            Golden Vista Room / Golden Hotel
            800 Eleventh Street / Golden, CO
Friday, June 29, 2018

8:00 a.m.  Breakfast – Marquez Hall, Room 108

8:30 a.m.  Funded Projects Update – Marquez Hall, Room 326
   8:30 a.m.  G: Paint Sludge (New) (CSM)  
             V. Vaccarezza, C. Anderson
   8:50 a.m.  H: Recovery of Valuable Metals from Flue Dust and Other Fines from Mechanical Treatment of e-Scrap (WPI)  
             H. Lee, B. Mishra
   9:10 a.m.  I: Electro-Oxidation of Metals & Inorganics in Metallurgical Operations (New) (KUL)  
             P. Subramanian, J. Fransaer

9:30 a.m.  Focus Group Sessions for G, H – Three parallel sessions
   G: Paint Sludge (GM)  
      Marquez Hall, Room 108
   H: Recovery of Valuable Metals from Flue Dust and Other Fines from Mechanical Treatment of e-Scrap (Aurubis)  
      Marquez Hall, Room 335
   I: Electro-Oxidation of Metals & Inorganics in Metallurgical Operations (Umicore)  
      Marquez Hall, Room 326

10:30 a.m.  Coffee Break

10:45 a.m.  Initial Review of 2019 Project Proposals and Collaboration Discussion  
            Marquez Hall, Room 326  
            M. Bauer and IAB

12:00 p.m.  Lunch – Marquez Hall, Room 108
   Presentation
      • Nicholas Jian, East Penn Manufacturing

1:00 p.m.  2019 Project Proposal Collaboration Discussion (continued)  
            and Planning of Future CR3 projects – Marquez Hall, Room 326  
            M. Bauer and IAB

2:00 p.m.  IAB Meeting – Closed Session- Marquez Hall, Room 326  
            M. Bauer – Chair

2:00 p.m.  Center Directors Meet with CR3 IAB Guests and Potential Members – Marquez Hall, Room 335

3:30 p.m.  IAB Debrief with Directors – Marquez Hall, Room 326

5:00 p.m.  Meeting Adjourns

6:30 p.m.  Optional (Self-Pay) Dinner Event  
            Barrels and Bottles  
            600 12th Street  
            Golden, CO