NSF I/UCRC CR: Virtual IAB Meeting  
May 18-20, 2020

Monday, May 18, 2020
9:15 a.m.  Welcome and Opening Remarks: IAB  
  M. Bauer
  CR³ NSF Assessment Coordinator’s Update  
  S. Shipp
  CR³ Updates  
  B. Mishra

9:30 a.m.  Focus Group Sessions

  9:30 a.m.  A: Optimization of Concrete Mixtures for 3D Printing (KUL/Umicore)  
  G. Beersaerts, Y. Pontikes
  10:15 a.m.  B: Near Real Time Sub-ppm Detection of Elements in Metals (WPI/East Penn)  
  S. Bong, Y. Wang
  11:00 a.m.  C: Copper Separation from Steel (WPI/SMS)  
  H. Jin, B. Mishra
  11:45 a.m.  D: Moisture Analysis of Heterogeneous Solid Material Flows (KUL/Gopher)  
  R. Chukka, B. Blanpain

12:30 p.m.  Adjourn – Day 1

Tuesday, May 19, 2020

9:00 a.m.  General Discussion

9:15 a.m.  Focus Group Sessions Continued

  9:15 a.m.  E: Alternative Fluxes for Lead Bullion Refining (CSM/Metallo Belgium)  
  T. Boundy, P. Taylor
  10:00 a.m.  F: Optimized Sorting and Separation Technologies for Remanufacturing with Product Centric Recycled/Reclaimed Scrap (WPI/US ARL)  
  A. Gupta, B. Mishra
  10:45 a.m.  G: Paint Sludge (CSM/GM)  
  V. Vaccarezza, C. Anderson
11:30 a.m.  H: Electro-Oxidation of Metals & Inorganics in Metal Operations (KUL/Umicore)
   *P. Subramanian, J. Fransaer*

12:15 p.m.  Adjourn – Day 2

**Wednesday, May 20, 2020**

9:00 a.m.  **Initial Review of 2021 Project Proposals**
   *M. Eschen – PSC Chair*

   21-01. Increased Gas Injection Efficiency through Sonic Jetting Regime, suggested by Umicore and Metallo (10 minutes)

   21-02. Assessment of Environmental Properties of Non-ferrous Metal Production, suggested by Boliden and Aurubis (10 minutes)

   21-03. Metal Recovery from Industrial By-Products Using Bromine, suggested by Gopher and ICL (10 minutes)

   21-04. Recovery of Titanium Oxide from Bauxite Residue, suggested by GMR (10 minutes)

   21-05. Vapor Compression Distillation for Efficient Magnesium Alloy and Rare Earth Magnet Recycling, suggested by ICL (10 minutes)

   21-06. Adhesive and Sealant Waste Reduction, suggested by GM (10 minutes)

   21-07. Machining Fluid Filtration and Particle Count Measurement, suggested by GM (10 minutes)

10:15 a.m.  **CR³ Roadmap Discussion**
   *M. Bauer*

10:30 a.m.  **NSF Phase I Application Process**
   *B. Mishra*

11:00 a.m.  **IAB Meeting – Closed Session**
   *M. Bauer – Chair*

12:00 p.m.  **IAB Debrief with Directors**

12:30 p.m.  **CR3 Meeting Adjourns**