IAB FALL 2022 MEETING, NOV 15-16

Venue Location:  Kimberly-Clark Corporation (Free parking on campus)
BLDG. 600 - Activity Center
1400 Holcomb Bridge Rd
Roswell, GA 30076

Online Access:
Tuesday, November 15
9:00 AM – 3:30 PM (ET)
Zoom Link

Wednesday, November 16
9:00 AM – 12:00 PM (ET)
Zoom Link
Monday, November 14

6:30 PM ET  WELCOME RECEPTION – KIMBERLY-CLARK CORPORATION
BLDG. 600 - Activity Center
1400 Holcomb Bridge Rd
Roswell, GA 30076
*See campus map*

Tuesday, November 15

8:00 AM ET  CONTINENTAL BREAKFAST – KIMBERLY-CLARK CORPORATION
BLDG. 600 – Activity Center

9:00 AM ET  WELCOME
David Grewell, Center Director

9:05 AM ET  Q&A ON UPDATE ON CENTER ACTIVITIES-VIDEO
- David Grewell, Center Director
- New process for NSF L.I.F.E. forms coming

9:15 AM ET  RIGHTCYCLE PROGRAM – KIMBERLY-CLARK CORPORATION
Ashley Davis, Global Sustainability Manager, KCP Personal Protective Equipment

9:45 AM ET  PROJECT L.I.F.E. REVIEW
Prerecorded presentations will be provided. **Projects requesting continuation of funding.**

Ten minutes per project of discussion and completion of Level of Interest Feedback Evaluation [LIFE] form.

9:45 AM  (C01) The Little-Known Nylon: Nylon 59 Properties
Eric Cochran, Jason Locklin, Iowa State University/University of Georgia

9:55 AM  (C02) Closed-loop Control for Strengthening 3D Printed (FDM) Parts Through Ultrasonic Welding
Lokesh Narayanan, David Grewell, North Dakota State University

10:05 AM  (C03) Natural Fiber Reinforced Nylon-Based Composites for Under the Hood Applications
Vikram Yadama, Raul Pelaez-Samaniego, Manuel Garcia-Perez, Washington State University

10:15 AM ET  BREAK
10:30 AM (C04) **Bio-Based Coatings for High-Performance Flexible Paper Packaging Application**
Suraj Sharma, Sudhagar Mani, University of Georgia

10:40 AM (C05) **Hemicellulose Derived Commodity Chemicals for Packaging and Coating Applications**
Breeanna Urbanowicz, Maria Pena, Sergiy Minko, University of Georgia

10:50 AM (C06) **Bio-Based Core-Shell Impact Modifiers to Increase Toughness of Composites and Adhesives**
Eric Cochran, Iowa State University

11:00 AM (C07) **Exploration of Bio-Based Functional Building Blocks for Durable Coatings**
Dean Webster, Mukund Sibi, North Dakota State University

11:10 AM (C08) **Investigation of the Marine Degradability of Polymers of Interest to IAB Members**
Branson Ritchie, University of Georgia

11:20 AM ET **IAB REVIEW AND DISCUSS RECOMMENDATIONS FOR THE SPRING MEETING FORMAT**
- Continue with Hybrid Meetings
- Project presentation format
- Spring meeting format
- Meeting locations

12:00 PM ET **LUNCH**
BLDG. 600 – Activity Center

1:00 PM ET **PROJECT L.I.F.E. REVIEW**
Prerecorded presentations will be provided.
*Projects requesting new funding.*

1:00 AM (N01) **Bio-Based Coatings for High-Performance Paper Packaging Application and Improved Understanding of Their Water Barrier Properties**
Suraj Sharma, Sudhagar Mani, University of Georgia

1:10 AM (N02) **Water Barrier Mechanisms in Biobased Polymers**
Andriy Voronov, Sergiy Minko, North Dakota State University/University of Georgia

1:20 PM (N03) **Improved Understanding for Water Permeability in Bio-Based Materials**
Bakhtiyor Rasulev, North Dakota State University

1:30 PM (N04) **Development of Biobased VOC-free Powder Coating Resin Systems**
Jinwen Zhang, Eric Cochran, Washington State University/Iowa State University
1:40 PM  (N05) Utilizing Hemp Hurd. Improving Hemp Hurd Performance as Filler in Plastic Manufacturing
Ali Amiri, Chad Ulven, Breeanna Urbanowicz, Maria Pena, North Dakota State University/University of Georgia

1:50 PM  (N06) Development of Hempseed Oil-Based Lignin-Containing Isocyanate-Free Polyhydroxyurethanes as Recyclable Plastics and Foams
Baoming Zhao, Xiao Zhang, Jinwen Zhang, Washington State University

2:00 PM ET  BREAK

2:10 PM  (N07) Investigation on Life Cycle Assessment of Natural and Recycled Glass Fibers for Reinforcement of Nylon
Sudhagar Mani, Hui Li, University of Georgia/Washington State University

2:20 PM  (N08) Chemical Recycled PLA Based Monomer as High-Performance Additive for Nylon Based Blends or/and Composites
Yu Chung Chang, Jinwen Zhang, Washington State University

2:30 PM  (N09) Epoxy Functionalization of Lignin Using an Efficient Process and Preparation of Thermosets
Dean Webster, Mukund Sibi, North Dakota State University

2:40 PM ET  BREAK

2:50 PM  (N10) Novel Nitrogen-Metal-Doped Biochar Adsorbents Generated using Wastestreams of Wood and Crop Fiber for Removal of Per- and Polyfluoroalkyl Substances (PFAS) from Stormwater
Indranil Chowdhury, Manuel Garcia Perez, Washington State University

3:00 PM  (N11) Production of Cellulose Films
David Grewell, Mitch Michel, Pranav Nawani, North Dakota State University/Iowa State University/Washington State University

3:10 PM  (N12) Biobased Film Produced from Cellulose and Nanocellulose Fibers with Environmentally Friendly and Economical Solvents
Hang Liu, Washington State University

3:20 PM ET  TODAY’S WRAP UP
David Grewell, Center Director

3:30 PM ET  ADJOURN

6:00 PM ET  Dinner at Brookwood Grill
Dinner Speaker: Lori Shaffer, Vice President Global Nonwovens
880 Holcomb Bridge Rd., Roswell, GA 30076
Wednesday, November 16

8:00 AM ET  CONTINENTAL BREAKFAST – KIMBERLY-CLARK CORPORATION

9:00 AM ET  READOUT AND DISCUSSION OF LIFE FORMS
Chair of IAB (Clay Bunyard)/ALL

10:00 AM ET  CLOSED DOOR IAB-ONLY MEETING FOR VOTING
There will be lab tours and a room set aside for people not involved in the closed door IAB meeting

11:30 AM ET  ANNOUNCE PROPOSALS/ACTION ITEMS AND PLAN FOR NEXT SEMIANNUAL MEETING
Chair of IAB (Clay Bunyard)/ALL

11:45 AM ET  CLOSING REMARKS (Lunch will be provided)
BLDG. 600 – Activity Center

12:00 PM ET  PI’S TRAINING AND EXPECTATIONS (MANDATORY FOR ALL PIS)
David Grewell