Agenda
WBC I/UCRC Industry Advisory Board Meeting

October 7-8, 2013
InterContinental Toronto Centre
Toronto, Ontario

Monday, October 7:
IAB TECHNICAL COMMITTEE SESSION (Ontario Room)

7:30 a.m. Continental Breakfast
Registration
Getting on-line

7:45 a.m. Welcome
Introduction of Participants
Chip Frazier
Fred Kamke

8:00 a.m. Director's Update
Chip Frazier

8:15 a.m. NSF I/UCRC Program Director Message
Larry Hornak

8:35 a.m. NSF I/UCRC Presentation/LIFE Form Overview
Eric Sundstrom

8:45 a.m. Funded Project Updates and LIFE Form Evaluations

8:45 a.m. Final Report: Preliminary Investigation of Adhesive Bonds Using IR Microscopy
(C-01-KA)
Fred Kamke, Paul Boehm and Shawn Freitas (OSU)

Fred Kamke, Jesse Paris and Matthew Schwartzkopf (OSU)

9:45 a.m. *Project Update: Influence of Filler Particle Size on Adhesive Penetration and
Performance (A-24-FR)
Xing Yang and Chip Frazier (VT)

10:15 a.m. Break

10:30 a.m. *Project Update: Methodologies for Ranking Resins by their Effect on Durability
of Wood Composites (B-02-NA)
John Nairn and Babak Mirzaei (OSU)

11:00 a.m. *Project Update: Understanding the Differences in Bonding Characteristics of
Douglas-fir and Southern Yellow Pine Wood (B-18-ZS)
Audrey Zink-Sharp, Kyle Mirabile and Scott Renneckar (VT)

11:30 a.m. Project Update: Resin Efficiency for Non-Structural Panels (A-22-SM)
Jörn Dettmer and Greg Smith (UBC), Nick Lampert and Lech Muszynski
(OSU)

12:00 p.m. Lunch
Niagara Room
12:45 p.m. **Funded Project Updates and LIFE Form Evaluations (continued)**

**Ontario Room**

12:45 p.m.  
*Project Update: Formaldehyde Determination Through Liquid Extraction (A-14-FR)*  
**Chip Frazier** and Mohammad Tasooji (VT)

1:15 p.m.  
*Project Update: Fundamentals of Formaldehyde Detection and Emissions Determination (A-12-CO)*  
**Ashley Hellenbrand** (Maine)

1:45 p.m.  
*Fundamental Research Project Update: Mechanisms of Wood-Generated Formaldehyde Emission (I/UCRC Fundamental Research Grant)*  
**Chip Frazier** and Sara Blosch (VT)

2:15 p.m.  
**Chip Frazier** (VT)

2:45 p.m.  
*Project Update: Improving Blending Efficiency and Resin Distribution by Using a Discrete Element Modeling for Rotary Drum Blender (A-11-SM)*  
**Ying-Li (Ingrid) Tsai** and Greg Smith (UBC)

3:05 p.m.  
*Project Update: Adhesion Fundamentals in Spotted Gum (Corymbia sp.) (Queensland-13)*  
**Chip Frazier** (VT)

3:35 p.m.  
*Fundamental Research Project Update: Multi-scale Investigation of Adhesive Bond Durability (I/UCRC Fundamental Research Grant)*  
**Fred Kamke** (OSU)

4:05 p.m.  
*Research Discussion and Planning*  
Introduction of New Project Proposals, OSU and VT:

1. *Application of Accelerated Weathering for the Development of an NDT Product Durability Assessment Toolkit (D-02-KA), F. Kamke, OSU, PhD Project (Frederick Laleicke)*

2. *Adhesive Systems for Light-Weight Cross-Laminated Timber Products (D-03-MU), L. Muszynski and Arijit Sinha, OSU, MS Project*

Preparing for Tuesday's research discussion

4:15 p.m.

5:00 p.m.  
Review of evening and Day 2 activities, Adjourn  
**Linda Caudill**

6:00-8:00 p.m. **Technical Forum and Social**  
*Duke of Devon, 66 Wellington Street W., Toronto, 416-642-3853*  
**Plymouth Room**

- Jörn Dettmer, *Property comparison of North American manufactured PB and MDF (A-22-SM)*
- Ashley Hellenbrand, University of Maine, *Formaldehyde Emissions From "Native" Wood (A-12-CO)*
- Matthew Schwarzkopf, Oregon State, *A Stereomicroscopic Optical Method for the Assessment of Load Transfer Patterns Across the Adhesive Bond Interphase (based on project A-04-KA)*
• **Shawn Freitas** and Paul Boehm, Oregon State, *Preliminary Investigation of Adhesive Bonds Using Fourier-Transform Infrared (FTIR) Microscopy (C-01-KA)*

• Jesse Paris, Oregon State, *Wood-Adhesive Penetration: Non-destructive 3D Visualization and Quantification* (based on project A-04-KA)

• Ingrid Tsai, British Columbia, *Coefficient of Static Friction between Resinated strand and Non-resinated Strand under Different Contact Pressure* (based on project A-11-SM)

• Xing Yang, Virginia Tech, *Rheological Behavior of Phenol-formaldehyde Adhesive: Impact of Organic Fillers*


• Linda Caudill, WBC Center, *Overview of the WBC website*

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**Tuesday, October 8:**

**IAB TECHNICAL AND EXECUTIVE COMMITTEE SESSIONS**

7:30 a.m. **TECHNICAL COMMITTEE SESSION**  
Continental Breakfast and social time (NSF, Industry)  
Ontario Room

8:00 a.m. **LIFE Form Review, Discussion and Recommendations** (NSF and Industry only)  
Dan Sand, Chair  
Eric Sundstrom

9:00 a.m. **Concurrent Event: Faculty Breakfast**  
Azure Restaurant  
(reserved table)

10:15 a.m. Break

10:30 a.m. **Completion of NSF Industry and Faculty Questionnaires**  
Presentation of IAB Decisions and Recommendations, Discussion Planning for Future IAB Meetings  
Dan Sand, Chair  
Eric Sundstrom

11:45 a.m. **Summary and Closing Remarks**  
Chip Frazier

12:00 p.m. Adjourn IAB Technical Committee  
Lunch on your own

1:30 p.m. **Roundtable Session: Industry Research Needs**  
Ontario and Niagara Rooms

1:30 p.m. **Welcome**  
Chip Frazier

1:30 p.m. **Introduction of Participants**  
Fred Kamke

1:30 p.m. **Review of Goals and Objectives**  
Linda Caudill

1:45 p.m. **WBC Member Presentations**  
• Dan Sand, Georgia-Pacific Chemicals  
• Phil Cote, Willamette Valley Company  
• Ron Staib, Ashland  
• Jack Winterowd, Weyerhaeuser Company
2:10 p.m. Breakout Groups
Groups to assign scribe/presenter, brainstorming:
Fundamental research needs of wbc industry

2:45 p.m. Break

3:00 p.m. Breakout Groups reconvene: review and summarize outcomes

3:15 p.m. Individual Group Report-outs
Record Outcomes for Sharing

4:00 p.m. Wrap up and Adjourn

*This presentation/poster will be accompanied by a request for new or continued funding.*