

WE'RE GOING VIRTUAL IN 2020!

TWO high-powered conferences in ONE virtual event!



Co-located with
IBBC 2020
International Bioenergy & Bioproducts Conference



November 2-4, 2020

tappipeers.org • tappi-ibbc.org

PROGRAM TRACKS

Career Development ✓	Engineering, Reliability, Corrosion & Materials	Energy, Recovery, Lime Kiln and Recaust	Environmental
Nonwood	Pulping & Bleaching	Recycling Forum	Sustainability
IBBC Conference			

PROGRAM

AS OF 08/05/20 (SUBJECT TO CHANGE)

Monday, November 2	
11:00am - 11:30am	Welcome & Awards
11:30am - 12:15pm	Session 1: Opening Session & Keynote ✓ Session Chair: Danny Tandra, Clyde Industries, Inc. Keynote Speaker: Steve Voorhees, CEO, WestRock
12:15pm - 1:15pm	Hot Topic Breakfast I
1:15pm - 2:45pm	Session 2: Reliability Case Studies Session Chair: Qiang Han, International Paper Applications of Infrared Thermography in Industrial Facilities James Brady, Brady Infrared Inspections, Inc. Hydraulic Root Cause Failure Analysis Jack Weeks, GPM Hydraulic Consulting, Inc. Mill Reliability Case Study: Mechanical Seal Upgrade Helps Pulp and Paper Mill Combat Severe Service Conditions for Mission-Critical ClO ₂ Pumps

The bolded speakers will be the presenters of the presentation.

	Kenneth Sawilchik, John Crane
1:15pm - 2:45pm	<p>Session 3: Getting the Most from Your Chips Session Chair: Dan Nicholson, Solenis, LLC</p> <p>Energy Saving Potential of Screen Fractionation for Production of BCTMP Quanqing Zha, Reza Amiri and Zhirun Yuan, FPInnovations</p> <p>What limits the strength of paper made from high yield pulps - fiber strength or bonding strength? Per Engstrand, FSCN - Fibre Science and Communication Network</p> <p>No Cost Solution to Woodchip Handling Amy Duncan, Dos Santos International, LLC</p>
2:45pm - 3:00pm	Sponsor & Exhibit Break
3:00pm - 4:30pm	<p>Session 4: TBA Session Chair: TBA</p> <p>Vision 2020: Into the Future of Pulp and Paper Mill Sustainability Roger Drost, Aggreko</p> <p>New Revenue Opportunities for Pulp and Paper Sector from Carbon Capture Katja Kuparinen, LUT University; Satu Kähkönen, Esa Vakkilainen, Lahti University of Technology LUT</p> <p>TBA</p>
3:00pm - 4:30pm	<p>Session 5: Methods to Improve Operations and Capital Projects Session Chair: Scott Curry, CQ Strategy Ltd.</p> <p>FEL 1 and 2 – The Beginnings of Successful Paper Machine Conversions Dale Midyette, Jacobs Engineering</p> <p>Process Simulation: Bridging the Knowledge Gap Chris Flynn, Andritz</p> <p>When there are too many choices - Monte Carlo is the right choice Bill Nichols, KBR</p>
3:00pm - 4:30pm	<p>Session 6: Best Cooking and Washing Session Chair: Sabrina Burkhardt, TBA</p> <p>Down Flow Cooking Process Optimization – A Case Study At A Southern US Mill Marcio Silveira, BTG</p> <p>DD-washer Performance Optimization using Latest Measurement Technology Riku Kopra, South-Eastern Finland University of Applied Sciences, Fiber Laboratory</p> <p>TBA</p>

The bolded speakers will be the presenters of the presentation.

4:30pm – 4:45pm	Sponsor & Exhibit Break
4:45pm - 6:00pm	Session 7: New Technology Showcase ✓ Session Chair: <i>TBA</i>
4:45pm - 6:00pm	Session 8: TBA Session Chair: <i>TBA</i> Advances in Online Monitoring for Pulp and Paper Wastewater Treatment Applications David Spencer , <i>Environmental Business Specialists, LLC</i> A Case History of Paper-Mill Sludge Pond Closure Using Engineered Turf Final Cover to Address Environmental and Technical Challenges Ming Zu , <i>Watershed Geosynthetics</i> Strategies for Meeting Recovery Boiler Particulate Emission Limits with Electrostatic Precipitators Ivan Sretenovic , <i>Southern Field Environmental Elements</i>
4:45pm - 6:00pm	Session 9: TBA Session Chair: <i>TBA</i> Alternative Pulping Platform: Deploying CCR Technology for Non-Wood Fibers Ed Lehrburger , <i>PureHemp Technology LLC</i> TBA TBA
6:00pm - 6:30pm	Young Professionals/Women in Industry Session

The bolded speakers will be the presenters of the presentation.

Tuesday, November 3

11:00am - 11:45am	IBBC Session 1: Opening Session & Keynote Session Chair: <i>Jean-Pierre Bousquet, Valmet</i> TBA TBA
11:45am - 12:30pm	Session 10: State of the Industry✓ Session Chair: <i>TBA</i>
12:30pm-1:30pm	Hot Topic Breakfast II
1:30pm - 3:00pm	Session 11: Black Liquor Processing: Evaporators to Boilers Session Chair: <i>TBA</i> Black Liquor Evaporators Upgrade - Life Cycle Cost Analysis James Cantrell, Jacobs Engineering Deposit Formation From Stripped Condensate Torsten Meyer, University of Toronto The impact of utilizing the leading edge sootblower nozzle on recovery boiler heat exchanger tubes Danny Tandra, Clyde Industries, Inc.
1:30pm - 3:00pm	Session 12: Improving Processability of Green Liquor Session Chair: <i>TBA</i> Settling and Filtering Properties of Green Liquor Dregs Elizabeth Maggs, Xiaosong Mao, Torsten Meyer, Andrew K. Jones, and Honghi Tran, University of Toronto Microfiltration of Green Liquor for Increased Pulp Production, Improved Green Liquor Quality, and Energy Savings Rohan Bandekar, NORAM Engineering Removal of Aluminum From Raw Green Liquors Thiago Silva Pinto de Faria, Suzano S.A
1:30pm - 3:00pm	Session 13: State of Recycling Market (RC1) Session Chair: <i>Cesar Basilio, Thiele Kaolin Company</i> How the US Paperboard Industry Will Solve the Country's Recycling Crisis Bill Moore, Moore & Associates
1:30pm - 3:00pm	Session 14: Non Metallics Session Chair: <i>Josh Lauer, WestRock</i> Rehabilitating Aging Plant Pipelines with Minimal Operational Downtime Steve Soldati, Aegion/Insituform

The bolded speakers will be the presenters of the presentation.

	<p>Advanced Condition Assessment in Non Metallics: Creating a Systematic Approach Cody Stevens, <i>Corrosion Probe, Inc.</i></p> <p>Lessons Learned for FRP and CRM in harsh chemical services Michael Yee, RTCONSULTS</p>
1:30pm - 3:00pm	<p>Session 15: TBA Session Chair: TBA</p>
1:30pm - 3:00pm	<p>IBBC Session 2: Supporting the Sustainable Bioeconomy Session Chair: Jaya Shankar Tumuluru, Idaho National Laboratory</p> <p>Canada's Bioproducts Industry: Innovation Driven Stephane Lariviere, FPInnovations</p> <p>Using the Stage Gate Process in Biorefinery Project Development Jim Riley, Jacobs</p> <p>Phosphorylated cellulose fibers: A biomaterial for the future of pulp and paper industry Dan Belosinschi, Innofibre</p>
3:00pm - 3:15pm	Sponsor & Exhibit Break
3:15pm - 4:45pm	<p>Session 16: Managing Dissolving Tank Operation and Safety (RBE3) Session Chair: TBA</p> <p>Development of Converging-Diverging Multi-Jet Nozzles for Molten Smelt Shattering in Kraft Recovery Boilers Eric Jin, Tony Habib, Simon Youssef, and Steve Osborne, <i>Babcock and Wilcox</i>; Honghi Tran, <i>University of Toronto</i></p> <p>Can Jellyroll Smelt be Effectively Shattered? Taoxin Jiang, University of Toronto</p> <p>Scale Formation in Recovery Boiler Smelt Dissolving Tanks Honghi Tran, University of Toronto</p>
3:15pm - 4:45pm	<p>Session 17: Lime Kiln Panel Session Chair: TBA</p>
3:15pm - 4:45pm	<p>Session 18: Effective Bleaching Strategies Session Chair: Mathias Lindström, International Paper</p> <p>Impact of Ozone Bleaching on Effluent Discharge Alexis Métais, Xylem and Hannu Råmark, <i>Andritz Oy</i></p>

The bolded speakers will be the presenters of the presentation.

	<p>Extention of a Steady-State Model for the First Chlorine Dioxide Brightening Stage in ECF-Light Bleaching Sequences for Softwood Kraft Pulps Brian N. Brogdon, <i>Future Bridge Consulting Services, LLC</i></p> <p>Pulp Bleaching, ClO₂ Technology & Related Challenges J. Barry Billett, <i>Nouryon</i></p>
3:15pm - 4:45pm	<p>Session 19: Corrosion & Materials Engineering Session Chair: TBA</p>
3:15pm - 4:45pm	<p>IBBC Session 3: Biomass Processing and Conversion Pathways Session Chair: Jean-Pierre Bousquet, Valmet</p> <p>The Relationships Between the Forest Biomass Compositions and Pyrolysis Performances Sudhagar Mani, <i>University of Georgia</i></p> <p>Sandwich Belt High Angle Conveyors in Harmony with the Environment Joseph Dos Santos, <i>Dos Santos International</i></p> <p>Pellets Production Using Sludge From Pulp Mill Bruna Virginia Rodrigues, <i>Universidade Federal de Viçosa</i></p>
4:45pm - 5:00pm	Sponsor & Exhibit Break
5:00pm - 6:30pm	<p>Session 20: Recycling Session Chair: Marty Daniels, Thiele Kaolin Company</p> <p>The Usefulness of Two-Side ERIC Buchner Handsheets for Deinking Agent Development Robert (Danny) Haynes, <i>TBA</i></p> <p>Determination of Vegetable Oil in Recycled Paper Yao Ntifafa, <i>Maria Szajda-Lam, Ashok Ghosh, Peter Hart, WestRock</i></p> <p>Incorporation of Post-Consumer Pizza Boxes in the Recovered Fiber Stream: Impacts of Grease on Finished Product Quality Ashok Ghosh, <i>Peter W. Hart, Adele Panek, Tran Nguyen, Meredith Dooley, WestRock</i></p>
5:00pm - 6:30pm	<p>Session 21: The Bleaching Environment Session Chair: Ashok Ghosh, WestRock</p> <p>On the Mass Transfer of Oxygen in the Delignification Process Jari Käyhkö, <i>South-Eastern Finland University of Applied Sciences</i></p> <p>Peracetate/Singlet Oxygen Chemistry Used in Brightening Bleached Kraft Pulp is a Practical Oxidant for Paper Machines Howard Kaplan, <i>Kaplan Consulting, LLC</i></p>

The bolded speakers will be the presenters of the presentation.

	<p>Xylan Adsorption on Cellulose Fibers: A Fundamental Adsorption Study Christopher Albert, Thomas Schwartz, <i>University of Maine</i>; <i>M. Sefik Tunc, Gary Craig, Darrell Waite, Sappi North America</i></p>
5:00pm - 6:30pm	<p>Session 22: Bio Oil Session Chair: Matthew L. Tunnicliffe, FPInnovations</p> <p>Effect of Surface Modification on Corrosion Control of Type 409 Stainless Steel in Hydrothermal Liquefaction Processing of Biomass Elliott Asare, McMaster University</p> <p>Corrosion Studies with Blends of Pine Derived Bio-Oil and Heavy Fuel Oil Jim Keiser, Oak Ridge National Laboratory</p> <p>Quality Control in Stainless and High Alloy Castings Shankar Venkataraman, Schmidt + Clemens GmbH + Co. KG</p>
5:00pm - 6:30pm	<p>IBBC Session # 4- Advances in Bioenergy Research Session Chair: Sudhagar Mani, University of Georgia</p> <p>Impact of C5-Hydrolysis as Pretreatment on Carbon Products Produced From Lignocellulosic Jagannadh Satyavolu, University of Louisville</p> <p>Improving Forest Residue Quality Through Air Classification and Specific Gravity Separation Neal Yancy, <i>Idaho National Laboratory</i></p> <p>Corn Stover Pellet Particle Morphology: Impact of Feedstock Properties and Pelleting Process Conditions Jaya Shanka Tumuluru, <i>Idaho National Laboratory</i></p>
<h2>Wednesday, November 4</h2>	
11:00am – 12:30pm	<p>Session 23: Strategies to Improve Energy Usage in Mills Session Chair: TBA</p> <p>Boiler Retrofit Improves Efficiency and Increases Biomass Firing Rates Samit Pethe, Paul W. Cloninger, <i>Jansen Combustion and Boiler Technologies Inc.</i> and Ryan R. Shortreed, Ken M. Hardison, <i>Domtar Paper Company LLC</i></p> <p>Practical Strategies for Reducing Pulp and Paper Mill Energy Use Richard Reese, <i>CleanTech Partners</i></p> <p>Has the Time Come for Industrial Scale Energy Storage in The Pulp and Paper Industry Aurel Giroux, Stantec Consulting</p>
11:00am – 12:30pm	<p>Session 24: Reliability Centered Maintenance Session Chair: Rebecca Knecht, Evergreen Engineering Inc.</p>

The bolded speakers will be the presenters of the presentation.

	<p>MRO Spare Parts & RCM Jay Shellogg, Strategic Maintenance Reliability</p> <p>Where RCM fits in the Maintenance Function Jay Shellogg, Strategic Maintenance Reliability</p> <p>Understanding Epoxy Coating Options for Mill Asset Protection and Rehabilitation Max Silva, A&W Maintenance</p>
11:00am – 12:30pm	<p>Session 25: Lime Kiln Design to Increase Productivity Session Chair: TBA</p> <p>Successful conversion to gas firing – how to avoid the downsides and get increased productivity and less emissions Adriano Greco, <i>FCT Combustion Inc.</i></p> <p>Impact of Burner Design on Combustion Efficiency and Lime Kiln Performance Eduardo Tater, <i>Fives Pillard</i></p> <p>Rotary Kiln Lining Installation Guidelines Tim Baker, <i>JT Thorpe & Sons, Inc.</i></p>
11:00am – 12:30pm	<p>IBBC Session 5 - Wood Based Foams and Packaging Films Session Chair: Sudhagar Mani, University of Georgia</p> <p>Development of chitosan and CNF composite films with improved barrier properties for the packaging products Prabaharan Ponnusamy, <i>University of Georgia</i></p> <p>Strong, Lightweight Lignin-based Foams Ramakrishna Trovagunta, <i>North Carolina State University</i></p> <p>Lifecycle assessment and techno-economic analysis of producing lignin-based carbon-foam Kamalakanta Sahoo, <i>USDA- Forest Products Laboratory</i></p>
12:30pm - 2:00pm	<p>Session 26: Effects of Process Conditions on Lime Kiln Operation Session Chair: TBA</p> <p>Studying the Effects of Rings on Flow and Temperature in Lime Kilns with CFD Patrick Gareau, <i>University of Toronto</i></p> <p>How process conditions affect lime recovery kiln thrust positions - a detailed review of operations and mechanics for this phenomenon Andrew Wisner, <i>Metso</i></p> <p>TBA</p>
12:30pm - 2:00pm	<p>IBBC Session 6: Biocomposites and Bioproducts Session Chair: Jaya Shankar Tumuluru, Idaho National Laboratory</p>

The bolded speakers will be the presenters of the presentation.

	<p>Flexible Bioplastics from Woody Biomass for Sustainable Packaging Jian Yu, <i>University of Hawaii at Manoa</i></p> <p>Wood Based Composites for Packaging Application a New Approach Van Hai Le, <i>Inha University</i></p> <p>Feasibility study for the implementation of an industrial plant that produces biodegradable dishes based on rice straw Elizabeth Palomino Nolasco, <i>Pulpacking Peru</i></p>
--	---

The bolded speakers will be the presenters of the presentation.