

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

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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 09/15/20 (SUBJECT TO CHANGE)

Monday, November 2	
10:00am – 5:00pm	Virtual Exhibit Hall Open
11:00am - 11:30am	Welcome & Awards
11:30am - 12:15pm	Session 1: Opening Session & Keynote ✓ Session Chair: <i>Danny Tandra, Clyde Industries, Inc.</i> Imagining and Delivering on the Promise of a Sustainable Future Keynote Speaker: <i>Steve Voorhees, CEO, WestRock</i>
12:15pm - 1:15pm	Hot Topic Breakfast I

The bolded speakers will be the presenters of the presentation.

<p>1:15pm - 2:45pm</p>	<p>Session 2: Reliability Case Studies Session Chair: <i>Qiang Han, International Paper</i></p> <p>Applications of Infrared Thermography in Industrial Facilities James Brady, Brady Infrared Inspections, Inc.</p> <p>Hydraulic Root Cause Failure Analysis Jack Weeks, Magenta-Technologies, LLC</p> <p>Mill Reliability Case Study: Mechanical Seal Upgrade Helps Pulp and Paper Mill Combat Severe Service Conditions for Mission-Critical ClO₂ Pumps Pearley LaChance, John Crane</p>
<p>1:15pm - 2:45pm</p>	<p>Session 3: Getting the Most from Your Chips Session Chair: <i>Dan Nicholson, Solenis, LLC</i></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>Energy Saving Potential of Screen Fractionation for Production of BCTMP Quanjing Zha, Reza Amiri and Zhirun Yuan, FPIInnovations</p>
<p>2:45pm - 3:00pm</p>	<p>Sponsor & Exhibit Break</p>
<p>3:00pm - 4:30pm</p>	<p>Session 4: Mill Sustainability Session Chair: <i>Heather Jennings, Probiotic Solutions</i></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>
<p>3:00pm - 4:30pm</p>	<p>Session 5: Methods to Improve Operations and Capital Projects Session Chair: <i>Scott Curry, CQ Strategy Ltd.</i></p> <p>FEL 1 and 2 – The Beginnings of Successful Paper Machine Conversions Dale Midyette, Jacobs Engineering</p> <p>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>
<p>3:00pm - 4:30pm</p>	<p>Session 6: Best Cooking and Washing Session Chair: <i>Sabrina Burkhardt, Amazon</i></p>

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	<p>Down Flow Cooking Process Optimization – A Case Study At A Southern US Mill Marcio Silveira, BTG</p> <p>No Cost Solution to Woodchip Handling Amy Duncan, Dos Santos International, LLC</p>
4:30pm – 4:45pm	Sponsor & Exhibit Break
4:45pm - 6:15pm	<p>Session 7: New Technology Showcase✓ Session Chair: TBA</p> <p>Development of Novel Acoustic Sensors With Learning Algorithm to Forecast Dissolving Tank Anomalies Zachary Payne, Andritz</p>
4:45pm - 6:15pm	<p>Session 8: Environmental Operations Session Chair: Dan Curry, Evergreen Packaging</p> <p>Advances in Online Monitoring for Pulp and Paper Wastewater Treatment Applications David Spencer, Environmental Business Specialists, LLC</p> <p>A Case History of Paper-Mill Sludge Pond Closure Using Engineered Turf Final Cover to Address Environmental and Technical Challenges Ming Zu, Watershed Geosynthetics</p> <p>New Learnings and Strategies for Meeting Future Recovery Boiler Particulate Emission Limits with Existing Electrostatic Precipitators Ivan Sretenovic, Southern Field Environmental Elements</p>
4:45pm - 6:15pm	<p>Session 9: TBA Session Chair: TBA</p> <p>Alternative Pulping Platform: Deploying CCR Technology for Non-Wood Fibers Ed Lehrburger, PureHemp Technology LLC</p> <p>TBA</p> <p>TBA</p>

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Tuesday, November 3

10:00am – 5:00pm	Virtual Exhibit Hall Open
11:00am - 11:45am	IBBC Session 1: Opening Session & Keynote Session Chair: <i>Jean-Pierre Bousquet, Valmet</i> TBA Richard Hess, Idaho National Laboratory
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>Eric Jin, Babcock & Wilcox</i> Black Liquor Evaporators Upgrade - Life Cycle Cost Analysis James Cantrell, Jacobs Engineering 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>Thanh Trung, FITNIR Analyzers Inc.</i> Settling and Filtering Properties of Green Liquor Dregs Elizabeth Maggs, Xiaosong Mao, Torsten Meyer, Honghi Tran, University of Toronto; Andrew Jones, International Paper CleanFlow Microfiltration Technology for Green and White Liquor Rohan Bandekar, Jon Foan, Jim Wearing, NORAM Engineering; Anna Oldmark, Lennart Kallen, Cleanflow AB; Mikael Lindstrom, KTH Royal Institute of Technology; Jakob Liedberg, NORAM International AB Removal of Aluminum From Raw Green Liquors Thiago Silva Pinto de Faria, Suzano S.A

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<p>1:30pm – 3:00pm</p>	<p>Session 13: Recycling Session Chair: <i>Marty Daniels, Thiele Kaolin Company</i></p> <p>The Usefulness of Two-Side ERIC Buchner Handsheets for Deinking Agent Development Robert (Danny) Haynes, TBA</p> <p>Determination of Vegetable Oil in Recycled Paper Yao Ntifafa, Maria Szajda-Lam, Ashok Ghosh, Peter Hart, WestRock</p> <p>Incorporation of Post-Consumer Pizza Boxes in the Recovered Fiber Stream: Impacts of Grease on Finished Product Quality Ashok Ghosh, Peter W. Hart, Adele Panek, Tran Nguyen, Meredith Dooley, WestRock</p>
<p>1:30pm - 3:00pm</p>	<p>Session 14: Non Metallics Session Chair: Josh Lauer, WestRock</p> <p>Rehabilitating Aging Plant Pipelines with Minimal Operational Downtime Steve Soldati, Aegion/Insituform</p> <p>TBA</p> <p>Lessons Learned for FRP and CRM in harsh chemical services Michael Yee, RTCONSULTS</p>
<p>1:30pm - 3:00pm</p>	<p>Session 15: Managing Natural Disasters Panel Discussion Session Chair: <i>Dan Curry, Evergreen Packaging</i></p> <p>Natural Disaster Planning and Response Kim Fail, International Paper</p> <p>Actions for Planning and Responding to Natural Disasters Diane Hardison, Domtar Paper Company</p> <p>Maintaining Operations Through a Pandemic TBA</p>
<p>1:30pm - 3:00pm</p>	<p>IBBC Session 2: Supporting the Sustainable Bioeconomy Session Chair: <i>Jaya Shankar Tumuluru, Idaho National Laboratory</i></p> <p>Canada's Bioproducts Industry: Innovation Driven Stephane Lariviere, FPInnovations</p> <p>Using the Stage Gate Process in Biorefinery Project Development Jim Riley, Jeff Katz, Jacobs Engineering</p> <p>Phosphorylated cellulose fibers: A biomaterial for the future of pulp and paper industry Julien Bley, Innofibre</p>

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3:00pm - 3:15pm	Sponsor & Exhibit Break
3:15pm - 4:45pm	<p>Session 16: Managing Dissolving Tank Operation and Safety Session Chair: <i>Danny Tandra, Clyde Industries, Inc.</i></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? Markus Bussmann, <i>University of Toronto</i></p> <p>Scale Formation in Recovery Boiler Smelt Dissolving Tanks Honghi Tran, <i>University of Toronto</i></p>
3:15pm - 4:45pm	<p>Session 17: Key Maintenance Issues for Rotary Kilns Panel Discussion Session Chair: <i>Peter Gorog, Houghton Cascade Holdings, LLC</i></p> <p>Panelists:</p> <p>Palle Hansen - <i>Valmet</i> Justin Bready - <i>Kiln Technology</i> Josh Brant - <i>Andritz</i></p>
3:15pm - 4:45pm	<p>Session 18: Effective Bleaching Strategies Session Chair: <i>Mathias Lindström, International Paper</i></p> <p>Impact of Ozone Bleaching on Effluent Discharge Alexis Métais, <i>Xylem</i> and Hannu Råmark, <i>Andritz Oy</i></p> <p>Extension of a Steady-State Chlorine Dioxide Brightening Model for Z-ECF Bleaching of Softwood Kraft Pulps Brian N. Brogdon, <i>Future Bridge Consulting Services, LLC</i>; Lucian A Lucia, <i>NC State University</i></p> <p>Pulp Bleaching, ClO₂ Technology & Related Challenges J. Barry Billett, <i>Nouryon</i></p>
3:15pm - 4:45pm	<p>IBBC Session 3: Biomass Processing and Conversion Pathways Session Chair: <i>Jean-Pierre Bousquet, Valmet</i></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</p>

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	<p>Joseph Dos Santos, <i>Dos Santos International</i></p> <p>Pellets Production Using Sludge From Pulp Mill Bruna Virgínia Cunha Rodrigues, Claudio Mudadu Silva, Angélica de Cássia Oliveira Carneiro, Caio Moreira Miquelino Eieto Torres, Mateus Alves de Magalhães, <i>Universidade Federal de Viçosa</i></p>
4:45pm - 5:00pm	Sponsor & Exhibit Break
5:00pm-6:30pm	<p>Session 19: Maintenance Alternatives for Asset Life Cycle Extension Panel Session Chair: John Grocki, <i>Advantage Resources Consulting, L.L.C.</i></p> <p>Wallpaper Keven Henrie, <i>Great Basin Industrial</i></p> <p>Composite Tube Marcelo Senatore, <i>Sandvik</i></p> <p>Metal Spray Patrick Fitzgerald, <i>Integrated Global Services</i></p> <p>Weld Overlay Martin Denault, <i>ESAB</i></p>
5:00pm – 6:30pm	<p>Session 20: State of Recycling Market Session Chair: Cesar Basilio, <i>Thiele Kaolin Company</i></p> <p>How the US Paperboard Industry Will Solve the Country's Recycling Crisis Bill Moore, <i>Moore & Associates</i></p>
5:00pm - 6:30pm	<p>Session 21: The Bleaching Environment Session Chair: Ashok Ghosh, <i>WestRock</i></p> <p><i>Peracetate/Singlet Oxygen Chemistry Used in Brightening Bleached Kraft Pulp is a Practical Oxidant for Paper Machines</i> Howard Kaplan, <i>Kaplan Consulting, LLC</i></p> <p><i>Xylan Adsorption on Cellulose Fibers: A Fundamental Adsorption Study</i> Christopher Albert, Thomas Schwartz, <i>University of Maine</i>; M. Sefik Tunc, Gary Craig, Darrell Waite, <i>Sappi North America</i></p>
5:00pm - 6:30pm	<p>Session 22: Bio Oil Session Chair: Matthew L. Tunnicliffe, <i>FPInnovations</i></p> <p>TBA</p> <p>Corrosion Studies with Blends of Pine Derived Bio-Oil and Heavy Fuel Oil Jim Keiser, <i>Oak Ridge National Laboratory</i></p>

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	<p>Quality Control in Stainless and High Alloy Castings Shankar Venkataraman, <i>Schmidt + Clemens GmbH + Co. KG</i></p>
<p>5:00pm - 6:30pm</p>	<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, <i>University of Louisville</i></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>
<p>Wednesday, November 4</p>	
<p>10:00am – 11:00am</p>	<p>Women in Industry _ Young Professional</p>
<p>10:00am – 2:00pm</p>	<p>Virtual Exhibit Hall Open</p>
<p>11:00am – 12:30pm</p>	<p>Session 23: Strategies to Improve Energy Usage in Mills Session Chair: Pasi Miikkulainen, Andritz Inc.</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>Total Pulp and Paper Mill Energy Evaluations Richard Reese, Ken Gilbreath, Jeff Fochs, <i>CleanTech Partners</i></p> <p>Has the Time Come for Industrial Scale Energy Storage in The Pulp and Paper Industry Aurel Giroux, <i>Stantec Consulting</i></p>
<p>11:00am – 12:30pm</p>	<p>Session 24: Reliability Centered Maintenance Session Chair: Rebecca Knecht, Evergreen Engineering Inc.</p> <p>Reducing MRO Inventory Using RCM Principles Jay Shellogg, <i>Strategic Maintenance Reliability</i></p> <p>Where RCM fits in the Maintenance Function Jay Shellogg, <i>Strategic Maintenance Reliability</i></p> <p>Epoxy Coating Systems are Essential in Mill Maintenance</p>

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	Max Silva, A&W Maintenance
11:00am – 12:30pm	<p>Session 25: Lime Kiln Design to Increase Productivity Session Chair: Ray Leary, Houghton Cascade Holdings, LLC</p> <p>Successful conversion to gas firing – how to avoid the downsides and get increased productivity and less emissions Adriano Greco, FCT Combustion Inc.</p> <p>Impact of Burner Design on Combustion Efficiency Eduardo Tater, Fives Pillard</p> <p>Kiln Lining Installations a “Contractor’s Perspective” Tim Baker, JT Thorpe and Sons Engineering and Refractory Services</p>
11:00am – 12:30pm	<p>IBBC Session 5 - Wood Based Foams and Packaging Films Session Chair: Sudhagar Mani, University of Georgia</p> <p>Life Cycle Assessment (LCA) of Chitosan – CNF Composite Film Manufacturing Processes for Packaging Applications Prabaharan Ponnusamy, University of Georgia</p> <p>Strong, Lightweight Lignin-based Foams Ramakrishna Trovagunta, Stephen S. Kelley and Nathalie Lavoine, North Carolina State University</p> <p>Lifecycle assessment and techno-economic analysis of producing lignin-based carbon-foam Kamalakanta Sahoo, USDA- Forest Products Laboratory</p>
12:30pm - 2:00pm	<p>Session 26: Effects of Process Conditions on Lime Kiln Operation Session Chair: Wei Ren, FPInnovations</p> <p>Studying the Effects of Rings on Flow and Temperature in Lime Kilns with CFD Patrick Gareau, University of Toronto</p> <p>How process conditions affect lime recovery kiln thrust positions - a detailed review of operations and mechanics for this phenomenon Andrew Wisner, Metso</p>

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12:30pm - 2:00pm	<p>IBBC Session 6: Biocomposites and Bioproducts Session Chair: <i>Jaya Shankar Tumuluru, Idaho National Laboratory</i></p> <p>Flexible Bioplastics from Woody Biomass for Sustainable Packaging Jian Yu, <i>University of Hawaii at Manoa</i></p> <p>Bio-Based Transparent Wood Composites: A New Approach and its Potentials Applications Van Hai Le, Ruth M. Muthoka, HyunChan Kim, Jaehwan Kim, Dickens O. Agumba, <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>
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