“Embracing Technology”

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“Presentations only” (without written papers) are not included.

Session 2A – PROCESS CONTROL

1 Achieving Chemical Cost Saving at a Paper and Pulp Mill by Implementing Advanced Control for Bleach Plant
   Ankur Mehrotra, Andritz Technologies Pvt. Ltd; presented by Juri Lahtinen, Andritz Automation

2 Kiln Infrared Cameras for Brick Loss Detection and Residual Carbonate Control
   Barry Hirtz, Canfor Pulp; Devin Marshman, Carl Sheehan, Spartan Controls

3 The Development of Reliable On-Line Fiber Wall Thickness Measurement, from laboratory to Commercial Reality (presentation only)
   Lars Norin, PulpEye Canada

4 Online Quality Measurements are the Key to Understanding and Optimizing your Fibreline
   James Goldman, Valmet Automation

5 Troubleshooting a Black Liquor Concentrator Solids Control Problem via Modeling and Simulation
   Wei Ren, Bruce Allison, FPInovations,

6 Auditing Your Lab to Insure Sensor Reliability
   Sandy Beder-Miller, BTG Americas

Session 3A ~ PULP & PAPER

1 Application of Low Consistency Refining of reject Pulp in Producing Multi Ply Folding Boxboards (presentation only)
   Hanya Hemasian Ettefagh, Ramin Farnood, Chemical Engineering & Applied Chemistry Department, University of Toronto; Ivan Pikulik, IPConsulting, Pointe Claire, QC

2 Simplified Model Predictive MD Control of Paper Machines
   Cristian Gheorghe, Michael Forbes, Joyce Choi, Pezhman Nafissi, Honeywell Process Solutions

3 Improving Runnability at the Wet-End of Pulp Drying Machines (presentation only)
   Javad Saberian, Frederic Parent, Nina Deng & Makhlouf Laleg, FPInovations, Pointe-Claire

4 Revival of a 40 Year Old Drying Line to Compete in Today’s Market
   Victor Zamora, John Toivanen, Andritz Canada

5 The Importance of Fibre Transverse Dimensions for Specifying Pulp Quality (presentation only)
   Ho Fan Jang, Bill Francis, FPInovations, Vancouver

6 Maximizing the Value of ARC Flash studies in Pulp and Paper Mills
   William Cheung, Andritz Automation
Session 3C - UBC STUDENT PRESENTATIONS

1 Cellulose-Mycelia Foam: Novel Bio-composite Material (presentation only)
   
   **Hoda Ahmadi**<sup>1</sup>, **Reza Korehei**<sup>1</sup>, **Mark Martinez**<sup>2</sup> and **James Olson**<sup>1</sup>
   
   1Department of Mechanical Engineering, The University of British Columbia, 2 Department of Chemical and Biological Engineering, The University of British Columbia

2 Optimization and Modelling of Hemicellulose Oligomers Production from Pulp Mill Residues for use as Pulp Strength Additives
   
   **Jingqian Chen**<sup>1</sup>, **Xue Feng Chang**<sup>1,2</sup>, **Xinyi Chen**<sup>1</sup>, **Rodger P. Beatson**<sup>2</sup>, **Heather L. Trajano**<sup>1</sup>.
   
   <sup>1</sup>Dept. of Chemical and Biological Engineering, University of British Columbia  <sup>2</sup>Chemical and Environmental Technology, British Columbia Institute of Technology

3 Mechanics of Creping in Tissue Making (presentation only)
   
   **Kui Pan**, **A. Srikantha**, **Phani**, and **Sheldon Green**, Department of Mechanical Engineering, University of British Columbia

4 Absorption and out-of Plane Swelling in Paper (presentation only)
   
   **Mathias Kvick** and **Mark Martinez**, Pulp and Paper Center, Chemical and Biological Engineering, University of British Columbia

5 Multiobjective Economic Model reductive Control and Its Application in the Mechanical Pulping Process
   
   **Hui Tian**<sup>1</sup>, **Bhushan Gopaluni**<sup>1</sup>, **Victor Zavala**<sup>2</sup>
   
   1Department of Chemical and Biological Engineering, University of British Columbia, 2Computation Institute at the University of Chicago and Mathematics and Computer Science Division at Argonne National Laboratory, Chicago

6 Effect of Alkaline Pre-extraction of Silica and Hemicellulose on the Kraft Pulping of Bamboo (presentation only)
   
   **Zhaoyang Yuan**<sup>1</sup>, **Nuwan S. Kapu**<sup>1</sup>, **Xue Feng Chang**<sup>2</sup>, **Rodger Beatson**<sup>2</sup>, **D. Mark Martinez**<sup>1</sup> 1Department of Chemical & Biological Engineering, University of British Columbia, Vancouver; 2Chemical & Environmental Technology, British Columbia Institute of Technology, Vancouver; Corresponding author: Zhaoyang Yuan

Session 4A ~ BIOPRODUCTS & ENERGY

1 Energy Efficiency and Profit Optimization Using Advanced Controls in Cogeneration Applications
   
   **Ben Janvier**, Energo Solutions

2 Biogas Treatment and utilization for Slave Lake Pulp Biomethanation with Power Generation Project
   
   **Megan DiJulio**<sup>1</sup>, **Shannon Fehr**<sup>1</sup>, **Daniel P. Bertoldo**<sup>2</sup>, **Peter J. McCarthy**<sup>2</sup>
   
   1Slave Lake Pulp, Division of West Fraser Mills Ltd., 2ADI Systems Inc.

3 The Importance of Considering Operating Regimes in P&P Mill for Efficient Energy Management (Presentation only)
   
   **Tatiana Rafione**, **Enrique Mateos-Espejel**, FPIinnovations, Pointe-Claire;  
   **Zoé Pépin-Levasseur**, **Luciana Savulescu**, CanmetENERGY, Natural Resources Canada

4 Benchmarking Energy Use in the P&P Industry: Approaches, Challenges and Benefits (Presentation only)
   
   **Bahador Bakhtiari**, **Serge Bédard**, Natural Resources Canada, CanmetENERGY;  **Enrique Mateos-Espejel**, FPIinnovations., Pointe-Claire

5 Important Lessons Learned During the Commercialization of the LignoBoost™ Technology and the Refining of Lignin for End Product Uses
   
   **Anders Littorin**, **H. Wallmo**, **Hanna Karlsson**, **Kristin Lindholm**, Valmet AB Gothenburg, Sweden;  **G Christiansen**, Valmet Inc, Charlotte· NC, USA

6 Control and Protection Systems for Condensing Turbo-Generators
   
   **Jim Strausz**, Canadian Industrial Optimization Services Ltd.
Session 4B ~ KRAFT PULPING

1  Model to Optimize the Design of Fiberglass Reinforced Plastic in Chlorine Dioxide Service
   **Geoff Clarkson**, UTComp Inc

2  Paper Mill Boiler Chemical Cleaning - Why, When and How
   **David Kittel**, **Dewey Johnson**, Valmet

3  Chemistry of Scale Control in the Pulp Mill
   **Michael Wang**, **Harold Petke**, Solenis

4  Advanced Applications for HDPE Pipes with new PE-RT Materials *(presentation only)*
   **Wes Long**, Performance Pipe; **Carl F. Baker**, Dow Chemical

5  Disposing of Secondary Sludge (Biosludge) in the Recovery Boiler

6  Towards a Safer Recovery Boiler Operation
   **Riley Hughes**, Valmet