



PACWEST 2015 TECHNICAL PAPERS

“Leveraging Our Competitive Advantages”

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

Session 2A – BIOPRODUCTS & ENERGY

- 1 Methanol Purification Plant Update** (*Presentation only*)
Jamie Percy, Alberta Pacific Forest Industries Inc., Boyle
- 2 Slave Lake Pulp Biomethanation with Power Generation Project**
Shannon Fehr, Megan DiJulio – Slave Lake Pulp, a division of West Fraser Mills Ltd; Peter McCarthy, Daniel Bertoldo – ADI Systems Inc
- 3 CO2 Impacts of Commercial Scale Lignin Extraction at Hinton Pulp using LignoForce Process & Lignin Substitution into Petroleum-based Products**
Kyle Wells, Dave Pors, West Fraser-Hinton Pulp; Jon Foan, Chris Chan, Noram – Vancouver; Kirsten Maki, Lamfeddal Kouisni, Michael Paleologou, FPInnovations – Thunder Bay, Ontario, and Pointe Claire, QC
- 4 Implementation of an Energy Management Information System at Northwood**
Teddy Townsley, Clair Meger, Canfor Pulp Ltd.; Chris Roberts, Spartan Controls
- 5 Application of process integration in Canadian pulp and paper mills: Opportunities towards an energy-efficient industry** (*Presentation only*)
Enrique Mateos-Espejel, FPInnovations, Pointe-Claire, Quebec; Zoé Périn-Levasseur, Étienne Bernier, and Luciana Savulescu, Natural Resources Canada, CanmetENERGY, Industrial Systems Optimization, Varennes, Quebec
- 6 Burning Bio-oil In the Biomass Boiler at Tolko Manitoba** (*Presentation only*)
Blair Rydberg, Tolko Industries; Manitoba Kraft Papers, The Pas MB
- 7 Organic Rankine Cycle Technology and Pulp & Paper** (*Presentation only*)
Iaria Peretti, Turboden

Session 2B ~ MECHANICAL PULPING & PAPERMAKING

- 1 Advanced Product Tracking in a Specialty Cellulose Mill**
Joe Rankin, Tembec; Larry Wasik, Mohamad Masudy Uma MK Ati, Aurel Systems
- 2 Cellulose Filaments: A novel bio-based strengthening agent** (*Presentation only*)
Xujun Hua, M. Laleg, and T. Owston, FPInnovations, Pointe Claire, QC
- 3 Peroxide Optimisation Program: Port Hawkesbury Paper Mill**
Dan Davies, Evonik Canada; Les Urquhart, Mark Frith, Port Hawkesbury Paper; Roy Kyte, Evonik Canada.
- 4 Why reducing variability is now more important than ever**
Lahoucine Ettaleb, FPInnovations, Pointe Claire, QC

- 5 **Runnability and Capacity of Pulp Drying Machines**
Javad Saberian, Ivan Pikulik, Theodore Radiotis, FPInnovations, Pointe-Claire, QC
- 6 **Outlook of Industry 4.0 - Evolution of Digital Information at Pulp & Paper Mills**
Timo Arra, Eurocon MOPSSys, Burnaby, BC

Session 3A ~ PROCESS CONTROL

- 1 **A Kinetic-Dynamic Model of the Causticizing Process Suitable for Control**
Bruce Allison, FPInnovations, Vancouver, BC
- 2 **Domtar Ashdown #3 Side Causticizing Optimization (Presentation only)**
Jeff Butler, Valmet; Josh Haywood, Ashdown Recovery Superintendent
- 3 **Achieving Maximum Value from Steam at a Pulp & Paper Mill by Implementing Advanced Control**
Sava Kovac Andritz Automation
- 4 **Benefits of Advance Process Control Solutions on Power Boilers**
David Eapen Valmet
- 5 **Is the Opposite Way a Better Way? (On the best way to control continuous digesters)**
Christer Svanholm, Eurocon MOPSSys
- 6 **Superior Recovery Boiler Water Chemistry Control**
Robert D. Baxter, Solenis LLC – Wilmington, DE

Session 3C ~ UBC STUDENT PRESENTATIONS

- 1 **Effect of Chitosan and Calcium Hydroxide on the Mechanical and Microbial Properties of Paper**
Ruhul A. Khan, Helon Law, Reza Korehei, James A. Olson, Pulp and Paper Centre, Department of Mechanical Engineering; D. Mark Martinez, Pulp and Paper Centre, Department of Chemical and Biological Engineering, University of British Columbia, Vancouver, BC
- 2 **New Novel Cellulosic Foam Materials (Presentation only)**
Reza Korehei, James Olson, Department of Mechanical Engineering; Mark Martinez, Department of Chemical and Biological Engineering, University of British Columbia, Vancouver, BC
- 3 **Performance Monitoring for the Cross-Directional Process of Paper Machines (Presentation only)**
Qiugang Lu, R. Bhushan Gopaluni, Department of Chemical and Biological Engineering, Philip D. Loewen, Department of Mathematics; Guy A. Dumont, Department of Electrical and Computer Engineering, The University of British Columbia, Vancouver; Michael G. Forbes, Johan Backstrom, Honeywell Process Solutions, North Vancouver
- 4 **Production of Pulp Strength Additives from Pulp Mill Residues (Presentation only)**
Jingqian Chen, Xinyi Chen, Heather L. Trajano, Dept. of Chemical and Biological Engineering, University of British Columbia
- 5 **Rheological and Mechanical Properties of Microfibrillated Cellulose Reinforced Sodium Alginate Biodegradable Films (Presentation only)**
Sadaf Shafiei-Sabet, Ruhul A. Khan, James A. Olson, Department of Mechanical Engineering; Mark Martinez, Department of Chemical and Biological Engineering, University of British Columbia, Vancouver
- 6 **Understanding Dewatering of Papermaking Suspensions (Presentation only)**
Daniel Paterson, Pulp and Paper Centre, Mechanical Engineering, N.J. Balmforth, Mathematics; Mark Martinez, Chemical and Biological Engineering, University of British Columbia, Vancouver; D. Hewitt, Applied Mathematics, Cambridge

Session 4A ~ KRAFT PULPING

- 1 **White Liquor Pressure Filter Troubleshooting**
Ralph Lunn, Zellstoff Celgar, Castlegar, BC
- 2 **ASB Dredging and Odour Control**
Jennifer Fowler, Hinton Pulp, A Division of West Fraser Ltd., *Dan Davies*, *Web Teetzel*, Evonik Canada
- 3 **Sodra Cell Varo Mill Expansion**
Raymond Burelle, *Anders Hjort*, *Håkan Dahllöf*, Valmet; *Jonas Eriksson*, Sodra Cell Varo
- 4 **Key considerations for a successful integration of co-generation systems into existing pulp mills**
William Cheung, Andritz Automation
- 5 **Optimized Planning of PM Cycles for Power Distribution Networks**
Shantanav Bhowmick, *Al Demers*, Canfor Pulp - Northwood Pulp Mill
- 6 **A New Sensor Based Approach to Brown Stock Washer Optimization**
Richard Van Fleet, *Sandra Beder-Miller*, BTG Americas Inc, Norcross, Georgia