



# **PACWEST 2018 TECHNICAL PRESENTATIONS**

## **“ADAPTING FOR THE FUTURE”**

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### **Session 2A – AUTOMATION & CONTROLS**

#### **1 Improved Pulp Mill Total Economy with Digester Optimization**

*Kari Lampela, Valmet*

#### **2 Kiln Infrared Cameras Part 2: Closed Loop Carbonate Control.**

*Barry Hirtz, Canfor Pulp; Devin Marshman, Spartan Controls*

#### **3 Alternative fiberline pH control methods when inlet pH sensors are not feasible**

*James Goldman, Valmet Automation, USA*

#### **4 Optimization of turbine governor performance for improved plant operation**

*Ben Janvier, Enero Solutions Inc., Montreal*

#### **5 Kappa QC analyzer with embedded bleaching controls**

*Kari Lampela, Valmet; James Goldman, Valmet Automation, USA*

### **Session 2B ~ TECHNOLOGY**

#### **1 Pulp dirt count measurement using on-line automated inspection technology (presented by *Colin Bridge*, PaperTech)**

*Kari M. Hilden, PaperTech Inc., North Vancouver*

#### **2 The future of full web dirt analysis of pulp, paper and paperboard**

*Vince Williamson, Asea Brown Boveri, USA*

#### **3 Using a Drone to Survey Fibre Inventory**

*Mitch Dunlop, Mercer Celgar*

#### **4 Minimizing Risk on New Technology Scale-Ups**

*Daniel Parker, Sacré-Davey Engineering Inc*

#### **5 Standardized On-machine Dirt Inspection at Hinton Pulp**

*Jennifer Boese, West Fraser-Hinton Pulp; Roland Trepanier, Optest Equipment Inc*

### **Session 3B ~ BIO PRODUCTS & ENERGY**

#### **1 Using Wood Powder as Fuel in Lime Kilns**

*Carsten Jensen; Susanne Wind, Hannibal Nielsen, Valmet, Finland*

#### **2 Improving Runnability of Pulp Drying Machine**

*Javad Saberian, FPIInnovations, Point Claire*

#### **3 Methanol, from waste byproduct to valuable fuel**

*Raymond Burelle, Valmet; Olle Wennberg, Anders Wernqvist, Valmet Finland*

#### **4 Energy Reduction in HWD BCTMP**

*Eric Xu, Andritz Inc.*

## **5 Production of sulfuric acid from the incineration of pulp mill non-condensable gases – a biorefinery concept**

*Naveen Chenna, Eevi Smolander, Asta Humalajoki, Tero Juutilainen, Erkki Välimäki; Veli-Matti Pietarinen, Valmet, Finland*

## **6 Improving Reliability and Achieving the Technical Limit of the #2 Pulp Machine at Hinton Pulp**

*Matthew Pors, Reece Mitchelson, West Fraser - Hinton Pulp*

## **Session 4A ~ MILL BEST PRACTICES**

### **1 Journey to world class lubrication**

*Sean McKinley; Tony Bass, Irving Paper, Saint John*

### **2 Condition Based Greasing**

*Douglas J. Martin; SKF Canada Limited*

### **3 HSPP-DCS checkout and Operator Training**

*Gerry Pageau, Howe Sound Pulp & Paper; Larry Wasik, Aurel Systems*

### **4 Cleaning TMP whitewater with a dispersed air flotation column – design review and optimization after seven years of operation**

*Kurt Woytiuk, Natalie Page, Sylvain Gendron, Patrick Neault, FPIInnovations / Alberta Newsprint*

### **5 Leak Detection & Repair Presentation: Economical Regulatory Compliance and Emission Reduction Target Solutions**

*Shalayne Martens, Rusty Hurl, Integra Technologies, Edmonton*

## **Session 4B ~ STUDENT PRESENTATIONS – OUR FUTURE**

### **1 Moving Horizon Estimator Design for Mechanical Pulping Process**

*Hui Tian, Bhushan Gopaluni, Department of Chemical and Biological Engineering, UBC, Vancouver, BC, Canada.*

### **2 Optimization and Modeling of Hemicellulose Oligomers Production from Pulp Mill Residues for use as Pulp Strength Additives**

*Jingqian Chen<sup>1</sup>, Rodger P. Beatson<sup>2</sup>, Xue Feng Chang<sup>2</sup>, Heather L. Trajano<sup>1</sup>*

<sup>1</sup>Dept. of Chemical and Biological Engineering, UBC <sup>2</sup>Chemical and Environmental Technology, British Columbia Institute of Technology

### **3 The Effect of Recirculation mode on bar forces in Low Consistency Refining**

*Reza Harirforoush, University of Victoria, Department of Mechanical Engineering, J. Olson, UBC, Department of Mechanical Engineering, P. Wild, University of Victoria, Department of Mechanical Engineering,*

### **4 A Numerical Study on Developing a Hydrocyclone-Specific Turbulence Model**

*Ehsan Zaman<sup>1,2</sup>, Ali Vakil<sup>2,4</sup>, Mark Martinez<sup>1,3</sup>, James Olson<sup>1,2</sup>*

<sup>1</sup>Pulp and Paper Centre, UBC, Vancouver, BC; <sup>2</sup>Department of Mechanical Engineering, UBC, Vancouver, BC

<sup>3</sup>Department of Chemical and Biological Engineering, UBC, Vancouver, BC <sup>4</sup>Coanda Research and Development Corporation, Burnaby, BC

### **5 Enhancing Barrier Performance of Lignocellulosic Papers**

*Mehr Negar Mirvakili, Savvas G. Hatzikiriakos, Peter Englezos  
Department of Chemical and Biological Engineering, UBC*

### **6 Discrete Element Modeling of Plybond Strength of Multi-Ply Paperboards**

*Taraneh Kordi<sup>1</sup>, Ramin Farnood<sup>2</sup>, Shakhawath Hossain<sup>3</sup>, Per Bergstrom<sup>4</sup>, Sohan Sarangi<sup>4</sup>, and Tetsu Uesaka<sup>5</sup>*

<sup>1</sup> Student at University of Toronto ; <sup>2</sup> Professor at University of Toronto; <sup>3</sup> Post-doctoral fellow at Mid Sweden University; <sup>4</sup> Student at Mid Sweden University; <sup>5</sup> Professor at University of Toronto