



# PaperWeek Detailed Program

**\*Please refer to program online for latest updates**

## MONDAY FEBRUARY 6, 2023

09:00 - 10:00

### BIOFOR Keynote

**Session Chair: Paul Stuart, Polytechnique Montreal**

"Innovative Bioeconomy Business Models The Future Kraft Bioproducts Mill - Now a Commercial Reality"

**Niklas von Weymarn, (CEO), Metsä Spring Oy (Finland)**

---

10:00 - 11:30

### Advances in Papermaking Chemistry

**Session Chair: Przem Pruszynski, Pruszynski Consulting**

10:00 "Quick Inversion Polymers: A New Family of Fixatives and Particle Retention Boosters", **Peter Jelinek, Kemira**

10:20 "Novel Alternatives to Starch as Dry Strength Additives", **Pascal Rivard, Solenis**

10:40 "Technologies and Strategies for Eliminating Talc Used for Pitch Control in Virgin Pulp", **Manoj Karivelil & James Thomas, Kemira**

11:00 “ Novel Chemistry for Controlling Difficult Deposits in Pulp and Paper”, **Maurice Rizcallah & Byron Holmes**, *Buckman*  
11:20 Discussion & Q&A

---

## **BIOFOR - PANEL on The Future Bioproduct Kraft Mill**

**Session Chair: Michael Paleologou, FPIInnovations**

Panelists:

- **Enrique Mateos-Espejel**, *FPIInnovations (Sr Researcher, Thermal Process Group)*
- **Marzouk Benali**, *NRCan (Manager Biorefinery Program)*
- **Farshad Piroozmand**, *Irving Pulp & Paper (Director Technical Operations)*
- **Bernard Bégin**, *Hydro-Québec (Commercial Engineer, Client Affairs and Energy Solutions)*

Increased wood and chemical costs, environmental pressures and competition from larger, more modern kraft pulp mills in countries with fast-growing wood species are making it difficult for Canadian kraft pulp mills to remain profitable. To address these problems, several European companies are converting their mills into large industrial entities in which as much as 25% of the revenues come from bioproducts other than papermaking pulp.

Hence, the main objective of this panel is to discuss options, novel approaches and roadmaps for enabling Canadian kraft pulp mills to modernize and upgrade their ageing assets in a progressive, logical and cost-effective manner with a view to converting themselves to bioproduct mills. Some of the questions to be addressed by this panel include:

- a) How do we set the stage for Canadian kraft pulp mills to be converted to bioproduct mills?
- b) Which bioproducts should we produce?
- c) Which technologies should be implemented?
- d) How do we come up with the right roadmap for the future?

---

11:30 - 12:30

## **Networking and Lunch Break**

---

12:30 - 14:00

## Energy Efficiency Programs/Incentives and Impacts

Session Chair: **Serge Bédard, Natural Resources Canada**

- Hydro-Québec - **Bernard Bégin**
  - NB Power - **Spencer Devereaux**
  - BC Hydro - **Hansi Liu-Atkinson & Tamara Berger**
  - NRCan - **Serge Bédard**
- 

## Reliability

“What is Robbing you of a Good Day at Work?”, **Tom Carr**, *Reliability Solutions LP*

What does a good day at work look like for you and the people around you? The ability to describe what a good day at work looks like is important in your journey to more reliable manufacturing. In manufacturing, no matter what the process, your good day at work depends on a lot of rotating or reciprocating equipment doing what it is supposed to do. If you listen closely to how people describe what a good day at work looks like, they are describing a manufacturing process that is running reliably. In this sense, everyone is interested in reliable manufacturing. When you ask machine operators what robs them of a good day at work, they will tell you specifics around unreliable processes or equipment. When you ask maintenance technicians what robs them of a good day at work, they will tell you when they are yanked and jerked around all day long while working on “break-ins”.

In our time together, we will explore why most seem to distance themselves from “reliability efforts” but value a “good day at work”. What if we could engage the masses and create passionate advocates for reliable manufacturing? I will show by presentation what is robbing you of a good day at work and give you a pathway to more reliable manufacturing... through your people.

After a 27 year career in the pulp and paper industry, Tom joined Reliability Solutions in 2011 to return to his passion for building people. During his career in pulp and paper, he worked as a craftsman, a maintenance instructor, a training coordinator, a reliability specialist and a maintenance supervisor. The different roles prepared him well to serve as a mentor and instructor for technicians and leadership teams in manufacturing that desire a step change in reliable manufacturing. Tom’s experience leads him to understand the different roles and responsibilities associated with this step change.

---

## **BIOFOR - Climate and Clean Tech Policies - Opportunities and Challenges for the Transformation of the Canadian Forest Sector - Natural Resources Canada**

**Session Chair: Bruno Gagnon – Acting Manager, Canadian Forest Service - Trade, Economics & Industry Branch, Natural Resources Canada**

Panelists:

**Monique Frison** - Director General, Trade, Economics and Industry Branch, Canadian Forest Service, Natural Resources Canada

**Minh-Tan Ton-That** - Senior Research Officer, National Research Council

**Serge Bédard** - Senior Project Manager - Industrial Decarbonization, Natural Resources Canada

**Hamed Bashiri** - CanmetENERGY, Natural Resources Canada

**Michael Wolinetz** - Partner, Navius Research

**Davis Chiu** - Director of Innovation at Paper Excellence Canada and Acting Head of Carbon Strategy for the Paper Excellence Group

---

14:00 - 14:30

### **Networking Break**

---

14:30 - 16:00

## **Tissue Making - Pulp Furnish for Tissue - Market Trends**

**Session Chair: Alyssa Day, ALPAC**

14:30 “Key Issues for NBSK demand & supply in changing global climate”, **Brian McClay**, *Brian McClay & Associates (TTOBMA)*

15:00 “ Eucalyptus Fibers for Tissue Application”, **Manoel Faez & Luiz Fernando**, *Suzano*

15:30 "Non-wood pulp - supply and availability", **XuejunZou**, *FPIInnovations*

---

## **Bleaching - Chemicals & Additives - I**

**Session Chair: Mona Henderson, Valmet**

14:30 "Energy Demand and Carbon Footprint of Bleaching Chemicals", **Alexis Metais**, *Xylem*

15:00 "Bleaching Controls", **Derek Hess**, *Domtar*

15:30 "Oxygen Delignification Model Using the Ji, Vanska and van Heiningen Equation", **Tom Mullen**, *Process Innovations*

---

## **BIOFOR - Panel on R&D&I - Boosting the Success of the Biorefinery Innovation Deployment**

**Session Chair: Virginie Chambost, EnVertis Consulting**

Panelists:

**Cascades CS+** - Frédéric Perreault, *(R&D Director)*

**Kruger** - Maxime Cossette *(Corporate VP - Fibre, Biomaterials & Sustainability)*

**Paper Excellence** - Davis Chiu *(Director of Innovation)*

**Suzano Canada** - Michael Rushton *(Chief Operating Officer)*

**Klabin** - Francisco Razzolini *(CTO and Executive Director for Technology)*

**Canfor Pulp** - Shabnam Sanei *(Director Bio-Innovation and Technology)*

In the context of identifying strategic investment within the bioeconomy, R&D&I has never been as critical as today. While dealing with a plethora of process/product opportunities, the forestry industry needs to adapt or even reinvent the way they manage innovation, to ensure its success while minimizing the risk to the core business. Many forestry companies have dedicated resources dealing with managing their innovation process, to guide strategic investment related to new process implementation and/or new non-core business product development. How has/should the innovation process be adapted? What are key success factors to foster innovation while maximizing in-house/external knowledge/expertise?

This panel assembles practitioners to discuss how leading forestry companies develop strategic biorefinery projects, triage process and product opportunities leading to strategic investment. Industry-led examples will be used to discuss the role of R&D&I and how R&D&I has evolved to deal with the complexity of biorefinery innovation. The panel will exchange on the importance to position R&D&I within the strategic planning process, while maximizing in-house and/or external expertise to

speed-up the innovation process. The panel will elaborate on key drivers and barriers to innovation within the forestry industry.

---

16:00 - 17:00

## Networking

---

\*Please note all schedule is set on Eastern Time

# TUESDAY FEBRUARY 7, 2023

09:00 - 10:00

## BIOFOR Keynote

**Session Chair: Orlando Rojas, UBC**

“Spinnova Presence in the Bioeconomy”

**Janne Poranen**, (Executive Chairman of the Board and Founder) *Spinnova Ltd*  
(Finland)

---

9:30 - 10:00

## Networking Break

---

10:00 - 11:30

## Papermaking Roundtable on Recycling

**Session Chair: Javad-Reza Saberian, Kruger**

10:00 “Recycled Fiber End Use Developments”, **Soile Kilpi**, *AFRY*

10:20 “Brown Fibre Recycling System Operations and Centrifugal Cleaning”, **Mike Lopane**, *Kadant*

10:40 "Virgin vs Recycled Fibres: Thoughts for a Sustainable Future", **Gopal Iyengar**, *Andritz*

11:00 "A Technical Approach to a Successful Starch Replacement", **Mike Wallace**, *Kemira*

11:20 Roundtable discussion

---

## **BIOFOR Keynote: 2022 Marcus Wallenberg Prize Innovation Presentation**

**Session Chair: Orlando Rojas, UBC**

"Dissolving Pulp for the Production of Ioncell Fibers from Steam-Exploded Birch Wood"

**Herbert Sixta**, (Professor and Winner of the 2022 Marcus Wallenberg Prize) *Aalto University (Finland)*

---

## **BIOFOR Keynote**

**Session Chair: Orlando Rojas, UBC**

"CIRC Experience in Advancing Cellulose Circularity"

**Julie Willoughby**, (Chief Scientific Officer) *Circ*

---

11:00 - 12:30

## **Mill Managers RELIABILITY Better Practices Roundtable (closed session, by invitation only)**

**Session Chair: Eric Ashby, VP Manufacturing, Domtar Fort Mills**

30 min – Presentation by Eric Ashby on Reliability Better Practices

60 min – Better practice sharing by participants on Technology / people / process

Each organization will be invited to share a 1 slide presentation (5 min) on a better practice at their mill (staff, process, accounting, operations, HR) and that can be implemented by other mills.

A more detailed agenda will be forthcoming.

---

12:00 - 12:30

## Networking and Lunch Break

---

12:30 - 14:00

## Energy & Process

**Session Chair: Serge Bédard, Natural Resources Canada**

12:30 "Integration of Carbon Capture in a Kraft Pulp Mill Operating Large-scale Lignin Extraction", **Elin Svenson & Henrik Skoglund**, *Chalmers University*

13:00 "Lime Kiln Fuel Switching- the Canadian context", **Kurt Woytiuk**, *FPInnovations*

13:30 "A Look at the Process Energy Needs, Bioenergy and GHG emissions related to Lignin Extraction", **Adam Rogerson**, *CanmetENERGY*

---

## Chemical Recovery & Utilities

**Session Chair: Aaron Ferris, Irving Pulp & Paper**

12:30 "Spout Runner Automated Smelt Spout Cleaner", **Al Ankersen**, *Babcock & Wilcox (B&W)*

13:00 "Polyamine - system wide corrosion control for steam boilers", **François Lacoste**, *Veolia Water Technologies*

13:30 "Crack Formation and Growth in Superheater Deposits - Implications of Numerical and Experimental Results", **Nikolai DeMartini**, *U of Toronto*

---

## Process Optimization & Reliability

**Session Chair: TBD**

12:30 "How to Reduce Costs and Increase Your Flow Measurements", **Beshr Alalawi**, *Laurentide*

13:00 "The Reliability University - An Initiative to Tackle Manpower Shortages", **Yoann Urruty**, *Spartakus Technologies*

13:30 "Valve Performance Factors - Testing, Design & Selection", **Vincent Laroche**, *CGIS*



---

14:00 - 14:30

## Networking Break

---

14:30 - 16:00

## Tissue Making - Pulp Furnish for Tissue - Fibre Enhancement & Sustainability

**Session Chair: Xuejun Zou, FPInnovations**

14:30 "Approaches to Overcome the Conflict of Strength and Softness Tissue Paper by Optimizing Fibre Properties", **Zhibin He**, *UNB (University of New Brunswick)*

15:00 "Improving Tissue Softness and Absorption Furnish Treatment and Embossing", **Hongbin Liu & Xingye An**, *TUST (Tianjin University of Science & Technology)*

15:30 "Carbon Footprint of Market Pulps: How to Measure It and Pathways to Reducing It", **Martin Fairbank**, *Martin Fairbank Consulting*

---

## Bleaching - Chemicals & Additives - II

**Session Chair: Mona Henderson, Valmet**

14:30 "Recent Advances in EDT's EnzOx Bleach Boosting Technology", **Jim Tausche**, *EDT Enzymes*

15:00 "You Have Several Bleaching Stages, why don't you use them?", **James Goldman**, *BTG*

15:30 "Hexeneuronic Acids (HexA) and Impact on Bleaching", **Risto Ikaheimo**, *Valmet*

---

## Environment

**Session Chair: Talat Mahmood, FPInnovations**

14:30 "Moving bed biofilm reactors (MBBRs) treating wastewaters from the forest industry – Experience from more than two decades with pure MBBR and BAS™ processes", **C. Scott & D. Lamarre**, *Veolia Water Technologies*

14:55 "Optimizing Dewatering Under Changing Sludge Characteristics", **Kerilynn Hnatuk**, *Alberta Newsprint Company & Scott McKay*, *Fournier Industries*

15:20 "Ways to Reduce Water Usage in your Facility and Meet ESG Commitments", **Steve Birtch**, *Aggreko*

15:40 "Environmental Noise Community Relations Management", **Pascal Everton**, *SoftDB*

---

## BIOFOR - PANEL on Emerging Innovations

**Session Chair: Paul Stuart, Polytechnique Montréal**

14:30 "SMART Chips - InnotechAlberta" **Marcus deOliveira**, *Innotech Alberta*

14:50 "Lactic Acid Fermentation from Woody Biomass" **Shah Purnank** and **Simon Gandrieau**, *FPIinnovations*

15:10 "Bark and wood residues as a source of renewable reducing agent in metallurgy" **Simon Langlois**, *CEGEP TR*

15:30 "Valorization of waste lignocellulose biomass residues" **Ganesan Aravind**, *UQTR*

15:50 "SSEIF®, Lignum's Biobased Functional Filler through Zero Waste Biorefinery" **Oh Jin Park**, *Lignum*

---

16:00 - 17:00

## Networking

---

\*Please note all schedule is set on Eastern Time

# WEDNESDAY FEBRUARY 8, 2023

09:00 - 10:00

## BIOFOR Keynote

**Session Chair: Paul Stuart, Polytechnique Montréal**

"Added-Value BioProducts Engineering Plant Biomaterials for Advanced Manufacturing"

**Gil Garnier**, (Director BioPRIA) *Monash University (Australia)*

---

9:30 - 10:00

## Networking Break

---

10:00 - 11:30

## Papermaking - Advances in Papermaking Technology & New Grade Development - I

**Session Chair: Shaune Hanley, Resolute FP**

10:00 "Improving Layer Purity with Aqua Layer Technology", **Petteri Halme**, *Valmet North America*

10:25 "Energy Savings Associated with Implementation of Advanced Consistency Meters on Paper Machines", **Lawrence Yane**, *Cristini*

10:50 "What is the purpose of a desuperheater and why are they important?", **Mike Soucy**, *Kadant*

11:15 "The Benefits of Thermal Spray Covers for Papermakers", **David Williams & Kevin Wilson**, *Valmet North America*

11:40 Discussion & Q&A

---

11:00 - 12:30

## Mill Managers SAFETY Roundtable (closed session, by invitation only)

**Session Chair: Eric Ashby, VP Manufacturing, Domtar Fort Mills**

Roundtable on Safety better practices.

Challenges and initiatives from each mill followed by open discussion

---

12:00 - 12:30

## Networking and Lunch Break

---

12:30 - 14:30

## Energy & Information Technology / Systems

**Session Chair: Bahador Bakhtiari, Natural Resources Canada**

12:30 "Digital Decision Support Tools for Improved Control Systems and Energy Efficiency in P&P mills", **Hakim Ghezzaz**, *CanmetENERGY*

13:00 "Successful implementation of Digital Twin technology on energy systems", **Benoit Janvier**, *Enero Solutions*

13:30 "Energy management systems", **Peter Bassett**, *EPS* & **Francis Fournier**, *Kruger*

14:00 "Achieving the best temperature control for your Steam Turbine bypass system", **Malte Madeheim**, *HORA/Armour Valve*

---

## Management and Analytics

**Session Chair: Martin Carignan & Dominic St-Onge, Différence GCS**

12:30 "A Case Study on Creating Plant Wide Enthusiasm about Operational Excellence", **Annie Quevillon**, *Kruger Products* & **Martin Carignan**, *Différence GCS*

13:15 "Process optimization through predictive modelling, making it work", **Vincent Béchard & Dominic St-Onge**, *Différence GCS*

---

## BIOFOR - PANEL on UBC's BioProducts Institute: Innovation for Added-Value Products from Biomass

**Session Chair: Orlando Rojas - UBC**

12:30 "The Bioproducts Institute creating impact in the pulp and paper sector, from biotechnology to biorefineries", **Orlando Rojas**, *Director of the Bioproducts Institute, University of British Columbia*

13:00 "From bio-products to applications: Looking deep into wood and fibers", **Johan Foster**, *NSERC Canfor Industrial Research Chair in Advanced Bioproducts, University of British Columbia*

13:30 "The Energy Reduction in Mechanical Pulping Program: new approaches to innovation", **Daniela Vargas Figueroa**, *Research Program Manager, Energy Reduction*

*in Mechanical Pulping, University of British Columbia*

14:00 **Panel Discussion with the speakers** : "Industry-focused programs to support the development of biobased innovations/technologies along the pathway towards impact/commercialization"

---

14:00 - 14:30

## Networking Break

---

14:30 - 16:30

## Tissue Making - Tissue 202

**Session Chair: Jessica Carette, Cascades**

14:30 "Forming and Structure Tissue", **Pierre Brunet**, *Andritz*

15:00 "Tissue Chemistry", **Lucyna Pawlowska**, *Kemira*

15:30 "Creping Process", **Shawn Hickey**, *BTG*

16:00 "Tissue Converting and Embossing", **Paulo Lazzareschi & Gianni Gambini**, *Gambini Group*

---

## Pulping

**Session Chair: TBD**

14:30 "Collection Handling Systems of NCG Non-Condensable Gases in the Modern Softwood Kraft Pulp Mills", **Kirsi Hovikorpi**, *AFRY*

15:00 "The Future of Refining: Automation for Final Product Quality", **Patrick Dixon**, *PULMAC*

15:30 "Fibre Morphology of different Softwood Species and Their Impact on Kraft Pulping and Paper", **Theodore Radiotis**, *FPIInnovations*

---

## BIOFOR - PANEL on BC Pulp & Paper BioAlliance: "best bet" biorefinery technologies

**Session Chair: Orlando Rojas - UBC**

14:30 "Introduction and The BioAlliance as a best bet for collaboration in the Canadian pulp and paper ecosystem in the global context", **Orlando Rojas**, *Director*

*of the Bioproducts Institute, University of British Columbia*

14:55 "The BioAlliance model, how all started and what lays ahead for the benefit of the industry", **Davis Chiu**, *Paper Excellence, Director of Innovation at PEC, Acting Head of Carbon Strategy for the PE Group*

15:20 "FPIInnovations successful experience in the BioAlliance: From lignin to PU foams", **Michael Paleologou**, *Senior Scientist, FPIInnovations*

15:45 "Renewable Natural Gas project as example of translation from the lab for the benefit to the industry", **Xiaotao (Tony) Bi**, *Director, Clean Energy Research Centre, University of British Columbia*

16:10 **Panel Discussion with the speakers** : "The "BioAlliance" between FPIInnovation, the BC Government, UBC's BioProducts Institute and the Forest Industry as a model to create a world-leading R&D bioeconomy environment

---

16:00 - 17:00

## Networking

---

\*Please note all schedule is set on Eastern Time

# THURSDAY FEBRUARY 9, 2023

09:00 - 10:00

## BIOFOR Keynote

**Session Chair: Paul Stuart, Polytechnique Montréal**

"Advanced Lignin-Based Processes and Products How to Create a Great (Biorefinery) Technology"

**Matti Heikkilä**, *MetGen Oy (Finland)*

---

9:30 - 10:00

## Networking Break

---

10:00 - 11:30

## Papermaking - Advances in Papermaking Technology & New Grade Development - II

**Session Chair: Frédéric Parent, FPInnovations**

10:00 "Winder upgrades and modifications for transitional and packaging grades", **Bassam Dib**, *SPN*

10:25 "Enhanced Forming with Sleeve Roll Technology", **Petteri Halme**, *Valmet North America*

10:50 "Eco-responsible Paper Coating for Food Packaging", **Sajjad Saeidlou**, *National Research Council of Canada*

11:15 "Production of Translucent Films for Packaging Applications Using Cellulose Filaments", **Rafik Allem**, *FPInnovations*

11:40 Discussion & Q&A

---

## BIOFOR - Lignin State-of-the-art: Products

**Session Chair: Michael Paleologou, FPInnovations**

10:00 Session Keynote: "Industrial Adoption of Lignin in Asphalt", **Natacha Mongeau**, *FPInnovations*

10:20 "Functional Lignin Nanoparticles: Generation and Possible Use", **Pedram Fatehi**, *Lakehead University*

10:40 "Lignin Modification and Depolymerization: the way to biobased material containing aromatic units", **Jaime Gracia-Vitoria**, *VITO (Belgium)*

11:00 "VOC/odor Reduction for Lignin-Based Thermoplastics", **Adrien Faye**, *National Research Council of Canada*

11:20 Discussion and Q&A

---

11:30 - 12:30

## Networking and Lunch Break

---

12:30 - 14:00

## Energy EXPLORE Workshop

**Session Chair: Bruno Poulin, CanmetENERGY**

A multivariate data analysis tool that transforms existing data into valuable information and knowledge to help understand and improve process operation. Improvements can be achieved through process variability reduction, troubleshooting, process monitoring, soft sensors, and enhanced process control.

---

## BIOFOR - Lignin State-of-the-art: Production and Characterization

**Session Chair: Michael Paleologou, FPInnovations**

12:30 Session Keynote: "The LignoForce™ Lignin Recovery System", **Jon Foan**, *NORAM Engineering & Constructors*

12:50 "Electrochemical Treatment of Black Liquor for Lignin Recovery - Recent Progress", **Jean-Noel Cloutier**, *Hydro-Québec*

13:10 "Advancing Lignin and Forest Biomass Markets Through Standards Development", **Jacob Ziegler & Lynn Barber**, *CSA Group*

13:50 "NMR Analysis of Lignins Using 31p Benchtop NRM Spectroscopy: Quantitative Assessment of Substructures and Comparison to High Field NMR", **Matthew C. Leclerc**, *Nanalysis Corp*

---

14:00 - 14:30

## Networking Break

---

14:30 - 16:00



# Tissue Making - Digitalization and Data Analytics - Application to Tissue Making

**Session Chair: Martin Desrosier, Kruger Products**

14:30 "Tissue Making Challenges and Solutions", **Timo Arra**, *TietoEVERY*

15:00 "An Overview of Creped Tissue Manufacturing", **Srikantha Phani**, *UBC (University of British Columbia)*

15:30 "Tissue Converting", **Rick Roeske**, *BWCS-GRB* & **Stefano Spinelli**, *PCMC-GB*

---

# BIOFOR - PANEL on Net-Zero Forests and Forestry

**Session Chair: Sandy Ferguson, SF Consulting**

Overview of carbon opportunities and challenges from the forest/forest products industry value chain - **Kate Lindsay**, *SVP/Chief Sustainability Officer, FPAC*

Mitigation pathways and forest carbon accounting (challenges and opportunities) - **Carolyn Smyth**, *Scientist, NRCan-CFS*

Sustainability plans, decarbonization strategies, and relevant projects - **Bill Adams**, *VP Sustainability and Innovation, Mercer International* and **Ara Erickson**, *VP Corporate Sustainability, Weyerhaeuser*

---

16:00 - 17:00  
**Networking**

\*Please note all schedule is set on Eastern Time