

**Coating & Graphic Arts (C)**Track Manager: **Steve Ottone**, *OMYA***Monday, April 16th****1:30 pm - 3:00 pm****C1 - The Road to Sustainable Packaging I: Implementing Solutions**Session Chair: **Steve Ottone**, *OMYA*

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| C1.1 | Partnerships and Consumer Demand: Advancing Sustainability at McDonald's and Beyond  | <b>Amy Duquette</b> , <i>HAVI</i>                            |
| C1.2 | Novel Bio Based Coatings for Novel Barrier Papers  | <b>Michael Bilodeau</b> , <i>HS Manufacturing Group, LLC</i> |
| C1.3 | Enhancing the Barrier Properties of Micro Nanofibrillated Cellulose by Inclusion of Pigment with Designed Surface Modification | <b>Cathy Ridgway</b> , <i>Omya International AG</i>          |

**3:30 pm - 5:00 pm****C2 - The Road to Sustainable Packaging II: Trends & Drivers**Session Chair: **Becky Smith**, *Dow Chemical*

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| C2.1 | Innovations in Sustainable Packaging: More Option to Meet Company Demands | <b>Ian Lifshitz</b> , <i>Asia Pulp &amp; Paper</i>            |
| C2.2 | Improving Recovery of Paper Foodservice Packaging                         | <b>Rhea Hale</b> , <i>WestRock</i>                            |
| C2.3 | Opportunities and Challenges in Foodservice Packaging                     | <b>Lynn M. Dyer</b> , <i>Food Service Packaging Institute</i> |
| C2.4 | The Role of Sports in Sustainability                                      | <b>Erik Distler</b> , <i>Green Sports Alliance</i>            |
| C2.5 | The Challenges of Waste Management in Paper Packaging                     | <b>Susan Robinson</b> , <i>Waste Management</i>               |

**Tuesday, April 17th****8:00 am - 10:00 am****C3 - Lightweight and High Graphic Quality Linerboard**Session Chair: **Jennifer Pennington**, *Eastman Kodak*

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| C3.1 | Lightweight and High Graphic Quality Market Trends                             | <b>Sarilee Norton</b> , <i>Norton Associates</i>         |
| C3.2 | TBD  |  |
| C3.3 | Trends in Printing and Imaging of High Graphic Quality Corrugated              | <b>Charles P. Klass</b> , <i>Klass Associates, Inc.</i>  |
| C3.4 | Digital Imaging of Corrugated  | <b>John Stoffel</b> , <i>Hewlett Packard</i>             |
| C3.5 | Solutions Under the Mill Roof  | <b>Doug Carter</b> , <i>Kamin, LLC</i>                   |
| C3.6 | Development of Corrugated Board Surfaces Suitable for Water Intensive Printing | <b>Per Svending</b> , <i>FiberLean Technologies Ltd.</i> |

**1:30 pm - 3:00 pm****C4 - Coating Operations Success Stories**Session Chair: **Martti Tuomisto**, *Advanced Dynamics*

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| C4.1 | Spray Applications for Paper and Board Surface Treatment  | <b>Pemo Klimczak</b> , <i>PMP</i>            |
| C4.2 | Further Development of the Curtain Coater Combining Best Coverage With an Easy and Safe Operation | <b>Martin Schmid</b> , <i>Voith Paper</i>    |
| C4.3 | The Influence of Base Sheet and Coating Formulations on Print Mottle of Graphic Papers            | <b>Brian Scheller</b> , <i>Verso</i>         |
| C4.4 | Energy Savings and Machine Speed Increase in Cartiera di Momo, Italy                              | <b>Geert Dumortier</b> , <i>Bekaert</i>      |
| C4.5 | Determining the Need and Benefit of Multizone Rolls in Calender Operations                        | <b>Stefan Wilms</b> , <i>Andritz Küsters</i> |

**3:30 pm - 5:00 pm****C5 - Another Look Into Functional Coatings**Session Chair: **Fadi Chakar**, *Encapsys*

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|------|---|--|
| C5.1 | PVOH Coatings to Achieve High Oxygen Barrier on Paper   | <b>Samuel Michel</b> , <i>Kuraray Europe GmbH</i>                    |
| C5.2 | Improvement of Barrier Properties of Paper by Coating Carboxymethylated Cellulose Nanofibrils | <b>Heetae Park, Hye Jung Youn</b> , <i>Seoul National University</i> |
| C5.3 | High-speed Manufacturing of Antimicrobial Paper   | <b>Martti Toivakka</b> , <i>Åbo Akademi University</i>               |

**Wednesday, April 18th****8:00 am - 10:00 am****C6 - Innovations for Enhanced Production Digital Printing**Session Chair: **Jim Niemiec**, *Verso*

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| C6.1 | Invited Speaker  |  |
| C6.2 | Improving the Inkjet Printability of Folding Boxboard                                      | <b>Peter Dahlvik</b> , <i>Omya International AG</i>          |
| C6.3 | Novel Approaches to Paper Surface Treatment for High-Speed Inkjet Production Printing      | <b>Lokendra Pal</b> , <i>North Carolina State University</i> |
| C6.4 | A New Mechanism for Enhancing Adhesion of Electrophoretographic Printing with Liquid Toner | <b>Daniel Varnell</b> , <i>Solenis</i>                       |

Wednesday, April 18th continued

10:30 am - 12:00 pm

**C7 - Innovations in Coating Pigments**

Session Chair: **Prakash Malla**, *Thiele Kaolin*

C7.1	Innovations in Kaolin	<b>Chris Boothby</b> , <i>IMERYS</i>
C7.2	Advances in Calcium Carbonate	<b>Tim Bradley</b> , <i>Omya</i>
C7.3	New Insights into the Technology and Market of TiO2 Pigment	<b>David Burdette</b> , <i>Allegiance Chemicals, LLC</i> & <b>Alain Cagnard</b> , <i>Kronos Worldwide, Inc</i>
C7.4	Synthetic Plastic Pigments	<b>Brian Einsla &amp; John Roper</b> , <i>Dow Chemicals</i> ; <b>Femi Kotoye</b> , <i>Trinseo, LLC</i>
C7.5	A Novel Sub-Micron Precipitated Silica for Glossy High Speed Ink Jet Media	<b>Michael Darsillo</b> , <i>Evonik Corporation</i>
C7.6	Calcined Clay: An Effective Alternative to TiO2 in Paper and Board	<b>Prakash B. Malla</b> , <i>Thiele Kaolin Company</i> ; <b>Dan Ma</b> , <i>Kamin, LLC</i>

1:30 pm - 3:00 pm

**C8 - Optimization of Coating Applications**

Session Chair: **Greg Welsch**, *Trinseo*

C8.1	A New Model and approach for Optimizing Barrier Properties in Paper Coatings and Extruded Films	<b>Doug Carter</b> , <i>KaMin LLC</i>
C8.2	Optimization of Coating with Water Based Barriers	<b>Tom Larsson</b> , <i>UMV Coating System</i>
C8.3	Microencapsulation – Enabler for Future Coatings	<b>Fadi Chakar</b> , <i>Encapsys</i>

**Papermaking Innovations (PM)**

Track Manager: **Jeff Reese**, *International Paper*

Monday, April 16th

1:30 pm - 3:00 pm

**PM1 - Worldwide Innovation Trends**

Session Chair: **Maja Mejsner**, *Paper Machinery Producer*

PM1.1	Innovation - An Added Value Or A Whim Only?	<b>Maja Mejsner</b> , <i>PMP - Paper Machinery Producer</i>
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3:30 pm - 5:00 pm

**PM2 - Papermaking Innovations Kick-Off and Roundtable**

Session Chair: **Jeff Reese**, *International Paper*

PM2.1		<b>Ciaran Little</b> , <i>Smithers Pira</i>
PM2.2	Roundtable	

Tuesday, April 17th

8:00 am - 10:00 am

**PM3 - Innovations for Packaging Machines and Energy**

Session Chair: **Tom Rodencal**, *Tom Rodencal & Associates*

PM3.1	Quality Improvement from the Wet End for Board and Packaging Grades	<b>Martin Lehrner</b> , <i>Voith Paper</i>
PM3.2	Press Fabric Innovations for Packaging Machines	<b>Daniel Hedou</b> , <i>AstenJohnson</i>
PM3.3	Gapforming Trends for Packaging Grades	<b>Moritz Strepp</b> , <i>Voith Paper</i>
PM3.4	Steam System Considerations for Conversion from Graphic Papers to Containerboard	<b>Mike Soucy</b> , <i>Kadant Johnson Systems</i>
PM3.5	Using Common Sense and Emerging Technologies to Reduce Energy Use	<b>Dick Reese</b> , <i>Paper Machine Energy Expert</i>

1:30 pm - 3:00 pm

**PM4 - Innovative Modeling and Advanced Process Control**

Session Chair: **Dale Midyette**, *Jacobs Engineering*

PM4.1	Multivariate Modelling to Optimize Paper Quality and Production Cost Based on Fiber Morphology Data	<b>Jarmo Kahala</b> , <i>Glocell Oy</i>
PM4.2	Back to the Future: Papermaking at the Cutting Edge	<b>Simon Mazier</b> , <i>Perceptive Engineering</i>
PM4.3	Is Running a Paper Machine Harder than Landing a Man on the Moon?	<b>Todd Jordan</b> , <i>BTG Americas Inc</i>

3:30 pm - 5:00 pm

**PM5 - Papermaking Roundtable**

Session Chair: **John Neun**, *John A. Neun, LLC*

Wednesday, April 18th

8:00 am - 10:00 am

**PM6 - Papermaking Success Stories**

Session Chair: **Martti Tuomisto**, *Advanced Dynamics*

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|-------|---|--|
| PM6.1 | Innovating for Success with Project Management Principles   | <b>James Stockard</b> , <i>Fisher Arnold</i>       |
| PM6.2 | Gentle and Safe Handling of Paper Rolls at Paper Mills and Converting Plants by Utilizing Horizontal Pressure Conveyors and Similar New Techniques                        | <b>Mikko Rantanen</b> , <i>MoveRoll Oy</i>         |
| PM6.3 | Forming and Press Section Optimization Concept – A Full Improvement Package for Vacuum System, Dewatering, Doctoring and Runnability                                      | <b>Jussi Lahtinen</b> , <i>Runtech Systems Inc</i> |
| PM6.4 | DS Smith, Kemsley, UK – PM 6: Existing Multistage Vacuum Blower and Liquid Ring Pump Replacement by Modern Variable Speed Vacuum Blowers on a Recycled Linerboard Machine | <b>Jussi Lahtinen</b> , <i>Runtech Systems Inc</i> |
| PM6.5 | Heat Recovery from Turbo Blower: A Case Study   | <b>Lawrence Yane</b> , <i>Enerquin Air Inc</i>     |
| PM6.6 | Advanced Drying Technology and Curl Control   | <b>Andreas Ziegelwanger</b> , <i>Voith Paper</i>   |

10:30 am - 12:00 pm

**PM7A - Innovative Approaches to Solving Age-Old Problems**

Session Chair: **Paula Hajakian**, *USG*

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| PM7A.1 | How Hot is too Hot - White Water Heating   | <b>Todd Varner</b> , <i>Jacobs</i>                             |
| PM7A.2 | Retrocommissioning and Energy Efficiency – Applying this Concept to the Paper Machine Vacuum System                          | <b>Douglas Sweet</b> , <i>Doug Sweet &amp; Associates, Inc</i> |
| PM7A.3 | Importance of Paper Machine Building Hall Ventilation: A Rigorous Approach for Evaluation and Problem Solving - Case Studies | <b>Ajit Ghosh</b> , <i>AKG Processing Consulting</i>           |

**PM7B - Innovations in Sheet and Fabric Measurement**

Session Chair: **Roland Trepanier**, *OpTest Equipment Inc*

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| PM7B.1 | Enhanced Safety for Press Felt Measurement and Evaluation                   | <b>Wyatt Boyett</b> , <i>Voith Paper</i>              |
| PM7B.2 | How To Judge Felt Permeability On The Fly                                   | <b>Marcell Lensvelt</b> , <i>Feltest Equipment BV</i> |
| PM7B.3 | Advances in Microwave Water Measurement Create New Papermaking Applications | <b>Frank Cunnane</b> , <i>Cristini NA</i>             |

1:30 pm - 3:00 pm

**PM8 - Innovations in Auxillary Systems**

Session Chair: **David Burton**, *AstenJohnson*

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| PM8.1 | The Highest Level of Fabric Performance Starts with the Cleanest Technique | <b>Mark Hodson</b> , <i>Voith Paper</i>    |
| PM8.2 | Zero Line Control for the Dryer Hood                                       | <b>Alfredo Sarli</b> , <i>Voith Paper</i>  |
| PM8.3 | Reduce Downtime by Eliminating Common Carrier Rope Run Problems            | <b>Bernard Bigras</b> , <i>Cristini NA</i> |

3:30 pm - 5:00 pm

**PM9 - Papermaking Innovations Wrap-Up Roundtable**

Session Chair: **Jeff Reese**, *International Paper*

**Papermaking Additives (PA)**

Track Manager: **Scott Rosencrance**, *Kemira*

Monday, April 16th

1:30 pm - 3:00 pm

**PA1 - Enzyme Technology**

Session Chair: **Larry Anker**, *Solenis*

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|-------|---|---|
| PA1.1 | Enzyme Overview for Paper (tutorial)  | <b>James Luo</b> , <i>Novozymes</i>                   |
| PA1.2 | Cellulolytic Enzymes – Versatile Tools in Papermaking                                 | <b>Philip Hoekstra</b> , <i>Buckman International</i> |
| PA1.3 | Latest Development of Enzymatic Technologies Provides a New Level of Stickies Control | <b>Mark Reed</b> , <i>Buckman International</i>       |

3:30 pm - 5:00 pm

**PA2 - Advances in Microbiology**

Session Chair: **Rosy Covarrubias**, *Buckman*

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| PA2.1 | Metagenomic DNA Testing as a Tool to Reduce Costly Slime and Odor Problems                                  | <b>Linda Robertson</b> , <i>International Paper</i> ; <b>&amp; John Tillotson</b> , <i>Microbe Detectives</i> |
| PA2.2 | Case Studies of a Surface Active Non-Oxidizing Biocide  | <b>Wilson Nova</b> , <i>LANXESS</i>   |
| PA2.3 | Monitoring and Control of the Biodegradation Rate of Cellulose-based Products for Agricultural Applications | <b>Rafik Allem</b> , <i>FPInnovations</i>   |

Tuesday, April 17th  
8:00 am - 10:00 am

**PA3 - Strength I: Dry Strength**

Session Chair: **Frank Sutman**, *Solenis*

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|-------|---|---|
| PA3.1 | New Strength Solutions for Packaging Grades Based on Vinylformamide-containing Polymers in Dual Component Systems   | <b>Anton Esser</b> , <i>BASF SE</i>                                 |
| PA3.2 | Novel Kraft Liner Retention and Drainage Polymer  | <b>Mike Wallace, Chris Lewis &amp; Arno De Beer</b> , <i>Kemira</i> |
| PA3.3 | Polyelectrolyte Multilayers and Other Dosage Strategies - Effects on Properties of Paper Sheets Produced in Lab and Pilot Scale Using Mill Process Waters | <b>Caroline Ankerfors</b> , <i>RISE Bioeconomy</i>                  |
| PA3.4 | Multi-Functional Polymer Additive for Improved Strength and Productivity  | <b>William Johnson</b> , <i>Nalco</i>                               |

1:30 pm - 3:00 pm

**PA4 - Strength II: Wet Strength**

Session Chair: **Joe Mahoney**, *Paper Chemistry Consultant*

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| PA4.1 | Wet Strength Resins for Paper and Paperboard Applications: An Overview   | <b>Harold Goldsberry</b> , <i>Kemira</i>          |
| PA4.2 | Towards Higher Wet Strength, Easier Repulpability, and Enhanced Compostability   | <b>Robert Pelton</b> , <i>McMaster University</i> |
| PA4.3 | Regulatory and Sustainability Initiatives Lead to Improved Polyaminopolyamide-epichlorohydrin (PAE) Wet Strength Resins and Paper Products | <b>Richard Riehle</b> , <i>Solenis LLC</i>        |

3:30 pm - 5:00 pm

**PA5 - Strength III: Natural**

Session Chair: **Leslie McLain**, *IMERYS*

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| PA5.1 | Production of Pulps with an Extremely High Fines Content for Use as Strength Agent | <b>Elisabeth Björk</b> , <i>RISE Bioeconomy</i>      |
| PA5.2 | Pilot Scale Trial with Fines-enriched Pulp as Strength Agent in a CTMP Middle Ply  | <b>Mikael Bouveng</b> , <i>RISE Bioeconomy</i>       |
| PA5.3 | Boosting the Elongation Potential of Paper by Additives                            | <b>Anna Sundberg</b> , <i>Åbo Akademi University</i> |

Wednesday, April 18th

8:00 am - 10:00 am

**PA6 - Advances in Sizing Technology**

Session Chair: **Lebo Xu**, *WestRock*

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| PA6.1 | Sizing Overview   | <b>John Leckey</b> , <i>Solenis LLC</i>                   |
| PA6.2 | Where did the Brightness Go?  | <b>Ashok Ghosh</b> , <i>WestRock</i>                      |
| PA6.3 | Efficacy of Cassava Gel, Polyvinyl acetate and Hydroxyethyl Cellulose as Sizing Agents for 30-cell Paper Egg Tray | <b>Kehinde Amoo</b> , <i>University of Ibadan Nigeria</i> |
| PA6.4 | Application of Cellulose Nanofibrils as an Additive for the Production of Durable Papers                          | <b>Hyeonji Park</b> , <i>Seoul National University</i>    |

1:30 pm - 3:00 pm

**PA8 - Filler Applications and Mixing Technology**

Session Chair: **Darren Swales**, *Kemira*

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| PA8.1 | Mixing Overview  | <b>Darren Swales</b> , <i>Kemira</i>                   |
| PA8.2 | Mineral/ Microfibrillated Cellulose Composite Materials: High Performance Products, Applications and Product Forms   | <b>David Skuse</b> , <i>FiberLean Technologies Ltd</i> |
| PA8.3 | In-Line PCC Technology Cleans Up Circulation Water From Dissolved Materials, Metals and Bio Based Microorganisms Resulting to Clean Process and High Runnability | <b>Jouni Matula</b> , <i>Wetend Technologies Ltd</i>   |

3:30 pm - 5:00 pm

**PA9 - Papermaking Additives Wrap-Up and Roundtable**

Session Chair: **Scott Rosencrance**, *Kemira*

**Control Systems (CS)**

Track Manager: **Michael Forbes**, *Honeywell International*

Monday, April 16th

1:30 pm - 3:00 pm

**CS1 - Keynote & Asset Optimization**

Session Chair: **Michael Forbes**, *Honeywell International*

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| CS1.1 | Keynote  | <b>Eric E. Harper</b> , <i>ABB Corporate Research</i>            |
| CS1.2 | Reducing Cost of Ownership and Improving Long Term Performance of QCS Controls | <b>Johan Backstrom</b> , <i>Honeywell International</i>          |
| CS1.3 | On Optimization of Paper Machines using Economic Model Predictive Control      | <b>Olle Trollberg</b> , <i>KTH Royal Institute of Technology</i> |

**Monday, April 16th continued**

**3:30 pm - 5:00 pm**

**CS2 - Imaging and Machine Vision Applications**

Session Chair: **Brian Mock, ECS**

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| CS2.1 | Evaluating the Contrast of Planar Periodic Patterns on Paper   | <b>Jukka-Pekka Raunio, Tampere University of Technology</b> |
| CS2.2 | Understanding the Challenges of Transitioning from Service to Application Support for Defect Detection | <b>Wesley Sweeny, Procemex</b>                              |
| CS2.3 | Integration of Machine Vision with Paper Machine Controls  | <b>Slawek Frackowiak, Industrial Video Solutions</b>        |

**Tuesday, April 17th**

**8:00 am - 10:00 am**

**CS3 - Measurement Technologies II**

Session Chair: **Steven Keller, Miami University**

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|-------|---|--|
| CS3.1 | Towards Total Production Monitoring of Basis Weight and Moisture                | <b>Catherine Östlund, RISE Bioeconomy</b>            |
| CS3.2 | Reliable On-line Paper Formation Measurement                                    | <b>Slawek Frackowiak, Industrial Video Solutions</b> |
| CS3.3 | Enhanced-performance Online Infrared Measurement                                | <b>Keith Lantz, Honeywell International</b>          |
| CS3.4 | Application of Near Infrared Sensors for Online Measurement of Paper Properties | <b>Sebastien Tixier, Honeywell International</b>     |

**1:30 pm - 3:00 pm**

**3:30 pm - 5:00 pm**

**CS5 - Pulp Measurements and Controls**

Session Chair: **Bruce Allison, FPInnovations**

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| CS5.1 | Model-based Control and Diagnostics Strategies for a Continuous Pulp Digester    | <b>Moksadur Rahman, Mälardalen University</b> |
| CS5.2 | Optimization of Brown Stock Washing Using Advanced Process Control               | <b>Abhijit Badwe, ABB</b>                     |
| CS5.3 | New Trends in Advanced Process Control and Applicability to Pulp Mill Operations | <b>Bill Poe, Schneider Electric</b>           |

**Wednesday, April 18th**

**8:00 am - 10:00 am**

**CS6 - Industry 4.0 for Process Control**

Session Chair: **Shih-Chin Chen, ABB**

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| CS6.1 | Agile Infrastructure for Pulp and Paper Applications in Digital Age  | <b>Shih-Chin Chen, ABB</b>                           |
| CS6.2 | The Cloud Historian – An IIOT Cornerstone for the Process Industries   | <b>Johan Backstrom, Honeywell International</b>      |
| CS6.3 | Digital Transformation and Change Agents   | <b>Mariana Sandin, OSIsoft</b>                       |
| CS6.4 | Cooperative Process Optimization Between Paper Machine and Stock Preparation Utilizing Plant Big Data Analysis | <b>Takashi Sasaki, Yokogawa Electric Corporation</b> |

**10:30 am - 12:00 pm**

**1:30 pm - 3:00 pm**

**CS8 - MD Controls**

Session Chair: **Kerry Figiel, International Paper**

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| CS8.1 | Fuzzy Control On A Fluff Pulp Machine to Reduce Moisture Variability | <b>Amanda Lucas, Global Process Automation, LLC</b> |
| CS8.2 | Improving Ash Controls and Ash Grade Changes                         | <b>Patrick Lawless, ABB</b>                         |
| CS8.3 | Have You Closed the Loop Around "Automatic" Grade Change Yet?        | <b>Seyhan Nuyan, Valmet</b>                         |

**3:30 pm - 5:00 pm**

**CS9 - CD Controls**

Session Chair: **Ake Hansson, Handix**

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| CS9.1 | Coordinating CD Actuators by Applying Actuator Deviation Penalty in Multivariable CD Control Optimization | <b>Calvin Fu, Valmet</b>                 |
| CS9.2 | Cross Direction (CD) Mapping Performance Indices  | <b>Kerry Figiel, International Paper</b> |
| CS9.3 | A New CD Actuator Mapping Representation and its Benefits to CD Controls                                  | <b>Shih-Chin Chen, ABB</b>               |

**Fluid Fundamental (FF)**Track Manager: **Paul Krochak**, *RISE Bioeconomy***Monday, April 16th****1:30 pm - 3:00 pm****FF1 - Coating Rheology**Session Chair: **Paul Krochak**, *RISE Bioeconomy*

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|-------|---|--|
| FF1.1 | Coating Rheology: What Do We Know and Recent Understanding  | <b>Douglas Bousfield</b> , <i>University of Maine</i>        |
| FF1.2 | Colloidal Rheology of Enzymatic Polymerized Polysaccharides | <b>Natnael Behabtu</b> , <i>DuPont Industrial BioScience</i> |
| FF1.3 | Pilot Coating with a Hemicellulose Based Barrier            | <b>Peter Rättö</b> , <i>RISE Bioeconomy</i>                  |

**3:30 pm - 5:00 pm****FF2 - Novel Characterization Methods**Session Chair: **Jordan MacKenzie**, *University of British Columbia*

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|-------|---|--|
| FF2.1 | Experimental Investigations on Fragmentation Mechanisms in a Model High Pressure Homogenizer    | <b>Christophe Brouzet</b> , <i>Royal Institute of Technology KTH</i> |
| FF2.2 | Non-destructive Fiber Analysis of Paper via Resonant Cavity Broadband Dielectric Spectroscopy   | <b>Mary Kombolias</b> , <i>US Government Publishing Office</i>       |
| FF2.3 | Crystal Particle Adhesion to Heat Transfer Surfaces in Falling Film Flow: A Computational Study | <b>Yuanzheng Zhu</b> , <i>Georgia Institute of Technology</i>        |

**Tuesday, April 17th****8:00 am - 10:00 am****FF3 - Controlling Web Structure**Session Chair: **Claes Holmqvist**, *RISE Bioeconomy*

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| FF3.1 | Improving Consistency Control   | <b>Michael Hendricks</b> , <i>BTG Americas Inc</i> |
| FF3.2 | Some Practical Aspects of Retention Aids Addition on Web Structure Variability              | <b>Paul Krochak</b> , <i>RISE Bioeconomy</i>       |
| FF3.3 | Monitoring Cross-Thickness Distributions of Fines and CMF by Dyeing and Optical Measurement | <b>Peter H. F. Hansen</b> , <i>RISE Bioeconomy</i> |
| FF3.4 | Unique Web Structures with Next Generation Fibre Foam Research Environment                  | <b>Jani Lehmonen</b> , <i>VTT</i>                  |

**1:30 pm - 3:00 pm****FF4 - Press Dewatering**Session Chair: **Jimmy Jong**, *FPIInnovations*

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|-------|---|---|
| FF4.1 | Rewet in Wet Pressing of Paper  | <b>David McDonald</b> , <i>JDMcD Consulting Inc</i> |
| FF4.2 | Mathematical Modelling and Simulation of Initial and Mechanical Dewatering of Paper Web in Paper Machine Sections | <b>Natalie Osti</b> , <i>Voith Paper</i>            |
| FF4.3 | Water Balance and Simulation of Wet Pressing in a Two-roll Press Section  | <b>John Xu</b> , <i>AstenJohnson</i>                |

**3:30 pm - 5:00 pm****FF5 - Production Dynamics**Session Chair: **John Xu**, *AstenJohnson*

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| FF5.1 | In-situ Measurements of Stock Flow Conditions in the Twin-wire Forming Zone           | <b>Claes Holmqvist</b> , <i>RISE Bioeconomy</i>    |
| FF5.2 | Improving Runnability of Pulp Drying Machines at the Wet-end                          | <b>Javad-Reza Saberian</b> , <i>FPIInnovations</i> |
| FF5.3 | Dimensional Stability Issues of Lightweight and New Paper Grades: Causes and Remedies | <b>Frederic Parent</b> , <i>FPIInnovations</i>     |

**Recycled Paperboard Technical Association (RPTA)**Track Manager: **Joanne Arnold**, *RPTA***Monday, April 16th****1:30 pm - 3:00 pm****RPTA1 - Maximizing Recycled Fiber Performance**Session Chair: **Chris Wetherford**, *Paperworks Industries, Inc*

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|---------|---|--|
| RPTA1.1 | Innovative Filling Design Driving Optimization of Dispersion Systems                    | <b>Kent Albert</b> , <i>Voith Paper</i>              |
| RPTA1.2 | Enzymatic Treatment Of Recycled Pulp For Improved Inter-Fiber Bonding and Pulp Drainage | <b>Yun Wang</b> , <i>Western Michigan University</i> |
| RPTA1.3 | Recycled Fiber Quality and the Impact of Refiner Plate Selection                        | <b>Arvind Singhal</b> , <i>Andritz</i>               |

**3:30 pm - 5:00 pm****RPTA2 - Energy Reduction in Recycle Fiber Mills**Session Chair: **Chris Wetherford**, *Paperworks Industries, Inc*

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| RPTA2.1 | Steam System Optimization of a Linerboard Paper Machine  | <b>Jean-Philippe Levesque</b> , <i>Cascades</i>                      |
| RPTA2.2 | Using Performance Management to Drive Energy Improvement | <b>Chris Conrad</b> , <i>Carauster</i>                               |
| RPTA2.3 | Successful Energy Conservation Projects in Board Mills   | <b>Joseph Peterson</b> , <i>Graphic Packaging International, LLC</i> |

Tuesday, April 17th  
8:00 am - 10:00 am

**RPTA3 - Water Usage in Recycled Paperboard Mills**

Session Chair: **Richard Townley**, *Graphic Packaging International Inc*

RPTA3.1 Using UV Technology to Generate Oxygen Radicals for Paper Mill Systems

**Lance Card**, *Paradigm Chemical*

RPTA3.2 Proper Water Management and the Bio-kidney Effect on Paper Mill Water Systems

**Ryan Coda**, *Voith Meri Environmental Solutions Inc*

RPTA3.3 Water Conservation with Effective Press Fabric Conditioning

**Gilles Boulianne**, *ColdwaterGroup, Inc*

RPTA3.4 Treatment and Re-use of Mill Effluent using a Breakthrough Anaerobic Reactor

**Martin Tielbaard**, *Paques Environmental Technologies Inc*

1:30 pm - 3:00 pm

**RPTA4 - Reliability**

Session Chair: **Richard Townley**, *Graphic Packaging International Inc*

RPTA4.1 The Maintenance Department vs the Maintenance Function

**Jay Shellogg**, *Strategic Maintenance Reliability*

RPTA4.2 Standard Work Implementation

**Todd Letherer**, *Graphic Packaging International*

**NETInc**

Track Manager: **Seshadri Ramkumar**, *Texas Tech University*

Monday, April 16th

1:30 pm - 3:00 pm

**N1 - Keynote: State of the Nonwovens Industry**

Session Chair: **Seshadri Ramkumar**, *Texas Tech University*

N1.1 State of the Nonwovens Industry

**David Rousse**, *INDA*

N1.2 The 2018 State of the Specialty Fabrics Industry

**Jeffrey C. Rasmussen**, *Industrial Fabrics Association International*

3:30 pm - 5:00 pm

**N2 - Technical Textiles**

Session Chair: **Avinav Nandgaonkar**, *Suominen Corporation*

N2.1 Atmospheric Pressure Plasma Treatment of Textiles and Nonwovens

**Rory Wolf**, *ITW Pillar Technologies*

N2.2 Nano-fibrillated Cellulose for Improved Filter Media

**Gurminder Minhas**, *Performance BioFilaments Inc*

N2.3 Comparison of Electrospun Polymers in Delivery of Vancomycin for Spinal Surgical Site Infections

**Sarah Haas**, *Thomas Jefferson University*

5:00 pm - 6:00 pm NETInc NETWORKING Happy Hour

Tuesday, April 17th

8:00 am - 10:00 am

**N3 - Nonwovens 101**

Session Chair: **Seshadri Ramkumar**, *Texas Tech University*

1:30 pm - 3:00 pm

**N4 - New Developments I**

Session Chair: **Mark Wolfinger**, *Lubrizol*

N4.1 Lab to Life Saving: Commercialization Path for Technical Non-Woven Wipes for Military and First Responders

**Amit Kapoor**, *First Line Technology*

N4.2 Human Centred Approach to Nonwoven Product Innovation

**Matthew Tipper**, *Nonwovens Innovation & Research Institute*

N4.3 The Intersection of Design and Technology

**Brian George**, *Thomas Jefferson University*

3:30 pm - 5:00pm

**N5 - New Developments II**

Session Chair: **John Jacquin**, *Michelman*

Special Lecture The Intersection of Innovation and Sustainability

**Roain Atwood**, *VFC*

N5.1 The Selection and Use of Waterbased Dispersions in Latex

**James Finn**, *Akron Dispersions*

N5.2 New & Emerging FR and Bio-Polymer Technologies in Performance Markets

**Edward Gregor**, *Edward C. Gregor & Associates, LLC*

N5.3 Structure and Properties of Nanoparticle Reinforced Elastomeric Nonwoven-based Composites

**Gajanan Bhat**, *University of Georgia*

Wednesday, April 18th

8:00 am - 10:00 am

**N6 - Sustainability**

Session Chair: **Brian George**, *Thomas Jefferson University*

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|------|--|---|
| N6.1 | Changing the Sustainability Story: Development of Science Based Sustainability Goals and Strategies                                | <b>Jesse Daystar</b> , <i>Cotton Incorporated</i>                         |
| N6.2 | Our Aging Population: Meeting Needs Respectfully and Profitably: A View of the Global Market for Incontinence Products 2017 - 2030 | <b>Janet O'Regan</b> , <i>Cotton Incorporated</i>                         |
| N6.3 | Soybeans for Nonwovens, Films and Paper  | <b>Robina Hogan</b> , <i>Omni Tech International/United Soybean Board</i> |
| N6.4 | Sustainable Composite Roofing  | <b>Shana Kaplan</b> , <i>Thomas Jefferson University</i>                  |

10:30 am - 12:00 pm

**N7 - Fiber & Process Improvements**

Session Chair: **Gaurav Pranami**, *IM-Bed Biosciences*

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|------|---|--|
| N7.1 | Fiber Characteristics and Breathability of Cotton Nonwovens           | <b>Natalia Castillo &amp; Seshadri Ramkumar</b> , <i>Texas Tech University</i> |
| N7.2 | Use of Nonwoven Materials in Industrial Baghouses                     | <b>Rob Eves</b> , <i>WL Gore and Associates</i>                                |
| N7.3 | Latest Needling Technologies for Product and Performance Improvements | <b>Mike Pate</b> , <i>Groz-Beckert</i>   |

1:30 pm - 4:00 pm

**N8 - Tour of Textile Technology Center at Gaston College**

**TAPPI / IDCON Reliability and Maintenance (RM)**

Monday, April 16th

1:30 pm - 3:00 pm

**RM1 - Building the Reliable Production Partnership**

Speaker: **Christer Idhammar**, *IDCON*

3:30 pm - 5:00 pm

**RM2 - Calculating the Cost of Unreliable Production**

Speaker: **Torbjorn Idhammar**, *IDCON*

Tuesday, April 17th

8:00 am - 10:00 am

**RM3 - Best Practice in Operator Equipment Care Routes and Documentation**

Speaker: **Owe Forsberg**, *IDCON*

1:30 pm - 3:00 pm

**RM4 - Root Cause Problem Elimination for the Frontline**

Speaker: **Torbjorn Idhammar**, *IDCON*

3:30 pm - 5:00 pm

**RM5 - Eliminating the Emotional Priorities in Work Management Planning**

Speaker: **Owe Forsberg**, *IDCON*

**PIMA Management (M)**

Track Manager: **Bob Mihalski**, *Green Bay Packaging*

Monday, April 16, 2018

9:30 am - 10:30 am

**M1 - Keynote**

Session Chair: **Steve Smith**, *Domtar*

When Generations Connect

**Hannah Ubl**, *BridgeWorks*

10:30 am - 11:30 am

**M2 - Paper360 / PIMA Executive Panel**

Session Chairs: **Jan Bottiglieri & Mark Rushton**, *Paper360*

**Berry Weirsum**, *CEO of Sappi Europe*

**Mike Garcia**, *President of Pulp & Paper for Domtar*

**Andreas Tuerk**, *Senior Vice President of Global Paper and Water Solutions for BASF*

1:30 pm - 3:00 pm

**M3 - Young Professional Perspectives on Innovation in an Established Industry**

Session Chair: **Steve Tremont**, *BASF*

3:30 pm - 5:00 pm

**M4 - Women in Industry Panel - Inclusion: How Teams Create Value**

Session Chair: **Terri Robinson**, *Voith*

**Lisa Yankie**, *Domtar*

**Anitra Collins**, *Graphic Packaging*

Tuesday, April 17, 2018

8:00 am - 10:00 am

**M5 - Digital Trends as Business Enablers**

Session Chairs: **Timo Arra**, *Mopysys* & **Dave Worzalla**, *International Paper*

M5.1 Digitalization: Industry 4.0 Trends Help Mills Improve Process Information Management

**Maria Karlström**, *Eurocon MOPSSys Inc*

M5.2 Factory of the Future – Interdependency of OT and IT

**John Dixon**, *Deloitte Consulting LLP*

M5.3 Third Trusted Party IoT Platforms – Future Enabler for Data Exchange, Benchmarking and Value Added Services

**Johan Engman**, *SSG Standard Solutions Group*

M5.4 Digital Trends as Business Enablers

**Mariana Sandin**, *OS/soft*

1:30 pm - 3:00 pm

**M6 - Superintendents' Roundtable**

Session Chairs: **Keith Kemp**, *AstenJohnson* & **Jeff Levensailor**, *Domtar*

**Todd Coltrain**, *Domtar*

**Jerry Gajewski**, *International Paper*

**James Chavers**, *International Paper*

**Randy Kittrell**, *WestRock*

3:30 pm - 5:00 pm

**M7 - Significant Injury & Fatality Prevention (SIF)**

Session Chairs: **Bob Mihalski**, *Green Bay Packaging* & **Pete Masias**, *Green Bay Packaging/PPSA*

**Pete Masias**, *Green Bay Packaging*

**Bill Edwards**, *Domtar*

**Bruce Kummerfeldt**, *PCA*

Wednesday, April 18, 2018

8:00 am - 10:00 am

**M8 - State of the Industry**

Session Chair: **Brian Duffy**, *Nalco Water*

**Matt Elhardt**, *Fisher International*

**Julie Lindley**, *Nalco Water*

**Rod Young**, *RISI*

10:30 am - 12:00 pm

**M9 - Mill Managers' Roundtable**

Session Chair: **Clay Enos**, *Fisher International*

**Kathy Collins**, *Domtar*

**Matt Archambeau**, *Verso*

**Jeff Hargrave**, *Graphic Packaging*

1:30 pm - 3:00 pm

**M10 - Transitioning for Tomorrow: Developing a Multi-Generational Workforce**

Session Chair: **Steve Jones**, *Fisher Arnold*

**Lisa Yankie**, *Domtar*