Paper Machine Measurement and Performance Kick-Off
Session Chair: Jeff Reese, International Paper

"Don't Forget the Most Important Machine…"
Jim Thompson, Talo Analytic International

"Measuring Paper Machine Performance”
Richard A. Reese, Dick Reese and Associates

PM Measurement and Performance Kick-off Roundtable
Jeff Reese, International Paper

Control Performance Indices & Their Applications
Session Chairs: Shih-Chin Chen, ABB; Ian Journeaux, NewPage

"A Fresh Look at Feed Forward Control"
Bill Henry, recently retired, previously with Smurfit-Stone Container Enterprises Inc.

"Basis Weight Variability as a Key Performance Index"
Jack Tippett, Emerson Process Management

"Quality Control System Performance – A Review to Evaluation Practices"
Merja Mäkelä, University of Applied Sciences

"New Indices for Quantifying Sheet Quality and Troubleshooting"
Shih-Chin Chen, ABB Inc.; Ian Journeaux, New Page Corp.

Best Practices for Microbial Control
Session Chair: Terry Williams, Rohm & Haas

"5,5-Dimethylhydantoin (DMH) a Highly Effective, Halogen Stabilizer for Wet End Applications"
M. Ludensky, S. Kopecky, Philip Sweeney, Ph.D., Lonza Inc.

"Management of Broke Spoilage"
Laura Rice, Nalco Company

"Best Practices for Microbial Control in Additives"
Kurt Bottjer, Ashland Hercules Water Technologies

"Best Practices for Influent Water Treatment"
Chris Rooks, Fred Ervin, Janet Woodward, Buckman Laboratories, Inc.
Papermaking Program  
Renaissance, St. Louis  
May 31st - June 3rd

- Paper Machine Measurement and Performance  
- Reducing Variability  
- Innovations and Best Practices: Wet End Chemistry  
- Paper Machine Energy

Monday June 1  
3:30pm-5:00pm

Pulp & Wet End PM Measurement & Performance  
Session Chair: Philip Wells, Wells Enterprises Inc.

"Papermakers, Are You Getting the Pulp Property Information you Need?"  
Alan F. Button, Buttonwood Consulting, LLC

"Refiner System Monitoring and Control Strategies"  
Shawn R. Berg, J&L Fiber Services

"Best Practices for the Stability and Agility of a Production Line"  
Seyhan Nuyan, Metso Automation

Forming and Forming Fabrics  
Session Chair: Jimmy Jong, FPInnovations - Paprican

"Effects of Forming Fabrics Design on Drainage, Paper Quality and Linting – Pilot Machine Trials"  
Francis Fournier, FPInnovations – Paprican

"Effect of Center Plane Resistance on the Drainage and Sheet Forming"  
John Xu, AstenJohnson Inc

"Three-Dimensional Flow Field Analysis Through Forming Fabrics: Part 2"  
Ali Vakil, University of British Columbia

Monitoring Methods for Microbial Growth - Panel Discussion  
undecided

Panelists: Janet Woodward, Buckman Laboratories, Inc  
Marko Kolari, Kemira  
Laura Rice, Naeco  
Linda Robertson, International Microbial Associates  
Terry Williams, Rohm & Haas

Tuesday June 2  
8:00am-10:00am

Reliability Measurement & Performance  
Session Chair: John Neun, Albany International

“Paper Machine Performance & Reliability, It's All in the Numbers”  
Mark Latino, Reliability Center, Inc.

"Reliability and Maintenance Performance Measurement"  
Christer Idhammar, IDCON, Inc.

"Domtar Espanola Reliability Case Study: How Asset Health Data Has Been Centralized For Early Potential Failure Visibility and Avoidance"  
Gary Clackett, Domtar Espanola; Don Fitzgerald, Ivara Corporation
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Tuesday June 2 (cont.)
8:00am-10:00am

"Enhancing Productivity through Improved Maintenance Operations: Case Study of How a Strategic Partnership Took a Paper Machine from Worst to First through Improved Operational Performance"
Daniel Konstantinovsky, ABB

Reducing PM Variability in the Thin & Thick Stock Flow Loops - Tutorial
Session Chairs: Joe Genco, University of Maine; Jay Shands, Johnson Foils

"Stabilizing Dry Fiber Flow in the Thick Stock System"
Kevin Starr, ABB Global Pulp and Paper Services

"Reducing Variability in Low Consistency Refining"
Brian Lacy, J&L Fiber Services

"Approach Flow Considerations for Reduced Variability"
Robert Blount, Bryan Reed, BE&K

"Stabilizing Saveall Filter Operations"
Jack Milliken, P.E., GL&V Pulp and Paper

Innovations in Retention & Drainage Technology
Session Chair: Rosy Covarrubias, Buckman

"Novel Retention and Drainage System Utilizes New Nanoparticle Silica Technology to Maximize Performance"
Mark Zempel, Eka Chemicals, Inc

"Improving Filler and Fines Retention While Achieving Controllable Drainage in High Speed Paper Machines - Ellipsis™ Cationic Micropolymer Technology"
Casimiro da Silva Santos, Nalco

"Second Generation Advanced Retention and Drainage Technology Continues to Improve Operational Efficiencies and Reduce Operating Costs"
John Hochu, Ashland Hercules Water Technologies

"Novel Technology Based on Dual-products for Retention Gives Increased Runnability and a Higher Ash Containing Sheet"
Lotta Kanto Öqvist, Ashland Deutschland GmbH; speaker will be Larry Anker, Ashland Hercules Water Technologies

Paper Machine and Vacuum System Energy Conservation
Session Chair: Raymond J. Krumenacker, Deublin Steam Systems

Richard A. Reese, Dick Reese and Associates, Inc.

"Reducing Energy Intensity in Papermaking Through Energy Efficiency"
Tom Wroblewski, P.E., CleanTech Partners
"Ten Myths Revealed about Paper Machine Vacuum Systems and Related Processes"

Jussi Lahtinen, Jyrki Uimonen, Runtech Systems Oy

10:30am-12:00PM
Steambox Measurement & Performance - Panel Discussion
Session Chair: Timothy Patterson, Ashland Hercules Water Technologies

Panelists: Philip Wells, Wells Enterprises
Metso
Honeywell
ABB

Improving Grade Change Performance
Session Chair: Ian Journeaux, NewPage

"Challenges with Paper Machine Grade Changes"
Joyce Choi, Danlei Chu, Honeywell

"Simplified Approach to Modeling of Grade Change in Paper Machine Dryer"
Senthilmurugan S, ABB Corporate Research Center; Tarun Mathur, ABB Corporate Research Center & IIT Bombay;
Kartikeya Milind Shah, IIT Bombay

"Raised Productivity with Virtual Sensors"
Jens Haag, Niels Hardt, Voith Paper Automation gmbH & Co.KG

Papermaking Additives Roundtable
Session Chair: Larry Anker, Ashland Hercules Water Technologies

Wet End Energy Conservation
Session Chair: Martti Tuomisto, Metso

"The Impact of Specialty Chemical Programs on Mill Energy Use"
Lisa M. Wesoloski, Nalco Company

"Innovative Mixing of Paper Chest with 6%-14% Consistency - Saves Energy and Improves Quality"
Dr. Wojtek Wyczalkowski, Marc Moseley, Philadelphia Mixing Solutions Ltd.

"Energy Efficiency in Paper Production using Direct Steam Injection"
David Degelau, Hydro-Thermal Corp.
Paper Machine Data Management
Session Chair: Keith Kemp, AstenJohnson

"Integrated Mill Intelligence Tools Help Maximize Paper Machine Performance"
Dean Ferguson, Capstone Technology Corp.

"Deploying a Real-Time Data and Events Infrastructure to Improve Paper Machine Operations"
Dave Stockford, OSIsoft

Jim Pigott, Tieto

MD Weight Variability in the Time Scale of 1 min-1Hz - Panel Discussion
Session Chair: Scott Pantaleo, International Paper

Panelists: Phil Taber, AstenJohnson (recently retired)
Timo Balser, Voith
Jim Ewald, Paperchine

Filler Tutorial
Session Chair: Scott Yeakey, OMYA Inc.

Scott Yeakey, Omya Inc.
Bruce Evans, Specialty Minerals, Inc.

Dryer Section Energy Conservation
Session Chair: Pekka Kormano, Deublin Steam Systems

"Energy Focused Dryer Performance Indicators"
Jeff Chaloux, Jim Maggard, Kadant Johnson

"A Systematic Approach to Optimize Dryer Performance and Energy Savings – Case Studies"
Ajit K. Ghosh, Visy Technical and Innovation Centre

"Dryer Fabrics and Energy Consumption in the Drying Section"
Ian Lang, AstenJohnson

Press Section Measurement & Performance
Session Chair: Ian Lang, AstenJohnson

"Reducing Variability in the Press Section"
Daniel Hedou, AstenJohnson

"Press Section Performance Monitoring"
Ross MacHattie, Honeywell
"Maximizing Machine Efficiency in the Press Section for Graphic Papers"
Robert M. Lowe, Melissa Callejo, Terry Lemerande, Bob Barlow, Nalco Company

"Enter Mini Shoe Presses"
Martti Tuomisto, Metso Paper USA, Inc.

Filler Technology Innovations
Session Chair: Larry Anker, Ashland Hercules Water Technologies

"Going from Acid to Neutral Papermaking and GCC Filling in Newsprint"
Louis Morimanno, Matti Forsblom, Omya

"Improved Productivity in Linerboard Using Kaolin Filler"
Leslie McLain, Perry Veal, Roger Wygant, IMERYS; Dr. Bill Smith, Paradigm Chemical Company; Eddy Turner

"Carbon Dioxide based Applications for Optimization of Calcium Carbonate Containing Papermaking Processes"
Lotta Jansson, Linde AG

"Innovative Process to Manufacture Calcium Carbonate by the Causticizing Process in a Kraft Pulp Mill"
Haruo Konno, Nippon Paper Industries, Co., Ltd

Tuesday June 2
3:30pm-5:00pm

Additional Energy Conservation Opportunities
Session Chair: Jeff Reese, International Paper

"Cost Savings with Effective Chemicals Mixing System at Mitsubishi Paper Hachinohe Mill PM 7"
Jouni Matula, Wetend Technologies Ltd.; Ryouhei Watanabe, Mitsubishi Paper Mills Limited

"Life Cycle Cost Based Optimization of PM Heat Recovery System for Machine Room Ventilation"
Kalle Riihimaki, Balance Engineering Ltd.

"Insulation, the Forgotten Technology; For Energy Conservation and Emission Reduction"
Ronald King, National Insulation Association

New Technology Showcase
Session Chair: Bill Butterfield, Stowe Woodward

Wednesday June 3
8:00am-10:00am

Clothing Performance Monitoring - Panel Discussion
Session Chair: Richard A. Reese, Dick Reese and Associates

Panelists: John Neun, Albany
Eric Diamond, Weavexx
David Buchanan, Voith
Dave Burton, AstenJohnson
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Wednesday June 3 (cont.)
8:00am-10:00am

Session Chair: Kerry Figiel, International Paper

Green Papermaking Additives
Session Chair: Philips Orianan, Georgia Pacific

"Green Papermaking – Chemical Innovations to Reduce Environmental Impact"
Michael O’Byrne, Ashland Hercules Water Technologies

"The Promise of Biobased and Biodegradable Polymer Materials in Paper & Paperboard Products - Reducing Carbon Footprint and Improving Environmental Performance"
Ramani Narayan, Michigan State University

"Agricultural Based Solvent Cleaners for the Pulp and Paper Industry"
George Thomas, Buckman Laboratories

"New Biosolvent Technology Addresses Environmental, Health, and Safety Issues of Traditional Solvents"
Mike Miller, Ashland Hercules Water Technologies

Wednesday June 3
10:30am-12:00pm

Papermaking Roundtable
Session Chair: Gary Nyman, International Paper

MD Weight Variability in the Frequency Range of 1-40 Hz - Panel Discussion
Session Chair: Paul Kristopeit, AstenJohnson

Panelists: Phil Taber, AstenJohnson (recently retired)
Ann Timberlake, Metso
TBD

Sizing Innovations
Session Chair: Darren Swales, Kemira

"Fatty Acid-Starch Complex in the Application of Linerboard Surface Sizing"
Jinhua Yan, Guangdong Industry Technical College; Yulin Deng, IPST @ Georgia Tech

"Dramatic Enhancements of the Ink-Jet Printability of Uncoated Paper"
Dr. Daniel F. Varnell, Ashland Hercules Water Technologies

"Alternative ASA Technology Advantage and Disadvantage"
Manuel Ruiz, Buckman Laboratories, Inc.
### Paper Machine Auxiliary System Measurement & Performance

**Session Chair:** Jon Kerr, Andritz

- "Practical On-Line Vibration Monitoring for Paper Machines"
  
  *J. Michael Robichaud, P.Eng., CMRP, Bretech Engineering Ltd.*

- "Papermachine Room Ventilation Guidelines"
  
  *John Nielsen, BE&K*

- "Monitoring the Performance of Pumping Systems"
  
  *Joe Ruggiero, ITT/Goulds; Mike Pemberton, ITT Industrial Process*

### Paper Machine Measurements and Control

**Session Chair:** Ross Elliot, Emerson

- "Optimized Cross Direction Control of Weight and Porosity"
  
  *Amor Lahouaoula, Honeywell; Ross MacHattie, Honeywell*

- "Multivariable Control and Energy Optimization of Tissue Machines Using Multiple Moisture Measurement"
  
  *Stephen Chu, Johan Backstrom, Honeywell*

- "Multivariable CD Control of a Large Linerboard Machine Utilizing Multiple Multivariable MPC Controllers"
  
  *Cristian Gheorghe, Amor Lahouaoula, Honeywell*

### Innovations in Deposit Control Technology

**Session Chair:** Eric Wagner, MWV

- "Advanced Control of Hydrophobic Contaminants in the Paper Machine Wet End"
  
  *Laura Sherman, Nalco Company*

- "Sustainable Cleaning & Deposit Control"
  
  *John Schwamberger, DuBois Chemicals*

  
  *Danny Haynes, Eka Chemicals, Inc.*

### PM Measurement & Performance Wrap-up Roundtable

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

### Fiber Scale Formation

**Session Chair:** Dr. Cyrus Aidun, IPST @ Georgia Tech

**Panelists:** "Mechanics of fiber-fiber interaction and paper formation: Theory and Practice"

*Dr. Cyrus Aidun, IPST @ Georgia Tech*
"Wet end Chemistry of papermaking and paper formation: Theory and Practice"
Dr. Yulin Deng, IPST @ Georgia Tech

"Modeling of flexible fiber suspensions and web formation"
Dr. Dewei Qi, Western Michigan University

Innovations in Strength Technology
Session Chair: Rosy Covarrubias, Buckman Laboratories

"Strength for the Future - Modern Concepts and Mechanisms"
Anton Esser, BASF Corporation

"Enhanced Fiber Additives for Strength and Machine Performance Improvement"
Jagannadh Satyavolu, Cargill, Inc.

"Use of PLA as a Paper-reinforcing Agent"
Asif Hasan, Biljana Bujanovic, Ph.D., Tom Amidon, SUNY-ESF