SESSION	AUTHOR	TITLE	CO-AUTHOR
7.2	Mehran Parsheh, University of Minnesota	Advances in Design of Elastic Guiding Vanes Used in Traditional and Stratified Headboxes	Anders A. Dahlkild, Royal Institute of Technology; Cyrus K. Aidun, Georgia Institute of Technology
7.3	Cyrus K. Aidun, Georgia Institute of Technology	The Effect of Turbulent Flow on Fiber Orientation in the Converging Nozzle of a Headbox	Mehran Parsheh, University of Minnesota
7.4	Allan Carlsson, KTH Mechanics	Fibre Orientation in the Boundary Layers of a Planar Converging Channel	Fredrik Lundell, KTH Mechanics; Daniel Söderberg, STFI-Packforsk
8	Michael Kocurek's Panel, North Carolina State University	Papermaking Innovations: Kick-Off and Panel Discussion	Ben Thorp, Flambeau River Biorefinery; Ivan I. Pikulik, FPInnovations (Paprican); Martin Hubbe, NCSU
9.1	Greg Going, Metso Paper	Paper Machine Efficiency Surveys	
9.2	Doug F. Sweet, Doug Sweet & Associates	Paper Mill Performance: From Ear Plugs to Control Rooms	
12.1	Henri Vaittinen, Metso	New Calendering and Coating Tools to Improve Coated Fine Paper Quality	Stig Renvall, Jouni Haavisto, Metso
12.2	Peter Burri, Omya	Parameters Influencing Flexo Printing on White Top Liner Board	Cathy Ridgway, Joachim Schoelkofp, Omya
13.1	Dr. Abhay Sharma , Ryerson University	ICC Color Profiling and Color Management	
13.2	Trish Wales, IDEAlliance	Paper is the Fifth Color in a Four Color Process	
13.3	Yu-Ju (Mandy) Wu, Western Michigan University	The Effect of Paper Properties on Color Reproduction Capability for Gravure LWC Printing	Alexandra Pekarovicova, Paul D. Fleming III, Western Michigan University; Mike Flickinger, Omnova; Michelle X. Wang, Armstrong
14.1	Andreas Zehnpfund, ABB Ltd.	Application of Multivariable Control Technique on Supercalenders	Jonas Berggren & Shih- Chin Chen, ABB Ltd.
14.2	Ross MacHattie, Honeywell	Wet Press Measurement and Control Results	Paul Baker & Bob Vyse, Honeywell
14.3	Amor Lahouaoula, Honeywell	Application of Cross Directional Multivariable Predictive Control to Linerboard Machines	Johan U. Backstrom, Robert N. Vyse & Thomas H. Steele, Honeywell
15	Dr. Chris Risbrudt, Forest Products Laboratory	Nanotechnology: A US Forest Service Perspective	Ted Wegner, Forest Products Laboratory
16.1	Christer Idhammar, IDCON, INC	The Partnership Organization	
16.2	Mark A. Latino, Reliability Center, Inc.	Don't BlameReduce Errors	
16.3	Stephen J. Bentley, Voith Industrial Services	Maintenance Outsourcing in the Paper Industry	
18	B. A. Thorp , Flambeau River Biorefinery	Compelling Case for Integrated Biorefineries	Benjamin A. Thorp IV & L. Diane Murdock-Thorp – no company listed
20.1	Juha Saari, ∀TT	Effect of Coating Pigment Choice on Printed Color Gamut	Ken Mueller, Specialty Minerals, Janne Laine, VTT, Amy Dimmick – no company listed
20.2	Abhay Sharma, Ryerson University	Practical ICC Profiling for Sheet-fed Printing	Scott Millwood, Ryerson University, Daniel Dejan, Joe Isaak, Sappi Fine Paper
20.3	Anthony Hiorns, Imerys	The Relationship Between Pigment Properties, Paper Structure and the Show-Through of Printed Colour	

04	Charles D. Klassis	Advances in Digital Printing Denal	Devid Hetfield Fasters
21	Charles P. Klass's Panel, Klass Associates	Advances in Digital Printing – Panel Discussion	David Hatfield, Eastman Kodak; J.P. Niemiec, NewPage Corporation; John Stoffel, Hewlett Packard
23.1	Fredrick Rosen, STFI- Packforsk	Estimation of Fibre Segment Orientation using Steerable Filtering	Daniel Söderberg, Marco F.C. Lucisano, Catherine Östlund, STFI-Packforsk
23.2	Gabriele Bellani, KTH Mechanics	Experimental Study of the Forming Process: Fluid Velocity and Fluid-Fiber Interaction Measurements	Fredrik Lundell, KTH Mechanics; Daniel Söderberg, STFI Packforsk
23.3	B.V. Ramarao , State University of New York	Relationship of 3D Structure of Pore Space to Manufacturing Process and Properties of Wood Fiber-Based Materials	S. Lavrykov, S.K. Singh, State University of New York Shri Ramaswamy, University of Minnesota
23.4	Cyrus K. Aidun, Georgia Institute of Technology	Measurement of Structural Properties of Coated Paper by X-Ray Microtomography	Yusuke Kondo, Nippon Paper
24.1	Matthias Schmitt, Voith Paper Fabrics	Advanced Innovative Fabric Materials for the Paper Machine Clothing (PMC	Heping Zhang, Juergen Abraham, Voith Paper Fabrics
24.2	Blake Hender, Voith Paper Fabrics	Efficiency Improvements Through the Use of Warp Exchange Technology	
25	Gary Nyman's Panel, International Paper	Camera / Imaging Systems	Kari K. Hilden, Papertech Inc., Mikko Ruuska, Viconsys
26.1	Michael O'Byrne, Hercules	Improving Paper Machine Efficiency and Productivity through Novel Chemistry	,.
26.2	Martin A. Hubbe, North Carolina State University	Water Release from Fractionated Stock Suspensions	Cedric A. Cole, John A. Heitmann, North Carolina State University
26.3	Kristian Salminen, VTT	Effects of Selective Addition of Papermaking Chemicals to Fines and Long Fibres on Strength and Runnability of Wet Paper	Elias Retulainen, S. Haavisto, VTT & Juan Cecchini, Metso
26.4	Xiang-Huai Wang, Enzymatic Deinking Technologies (EDT)	Application of Enzymatic Technologies for Improving Product Quality, Mill Efficiency and Production Cost Savings	Chengliang Jiang, Jianhua Ma, Enzymatic Deinking Technologies (EDT)
27.1	Janet Preston, Imerys	The Measurement and Analysis of the Distribution of Fountain Solution in Kaolin and Calcium Carbonate Containing Coatings	J.C. Husband, Imerys, N. Norouzi, D. Blair, University of Edinburgh; P.J. Heard, University of Bristol
27.3	Victor Lewis, Prisco	Fountain Solutions – Basic Principles & Trends	David Gerson
28.1	Tamijiro Kaneyuki, Nippon Paper	The Influence of Coating Rheology on Blade Forces Measured with a Laboratory Blade Device	Douglas W. Bousfield, University of Maine
28.2	Robert Rioux, University of Maine	Elastica Stiffness and Low Load Indentation Measurements for the Mechanical Properties of Coated Papers	Douglas W. Bousfield, University of Maine Nick Triantafillopoulos, ROHMNOVA
28.3	Cathy J. Ridgway, Omya	Effect of Latex and Pigment Volume Concentrations on Suspension and Consolidated Particle Packing and Coating Strength	Patrick A.C. Gane, Omya
30	Ryan Buma, Ascentium	Business Intelligence for Forest Products: Best Practices	
31	Ken Latino, MeadWestvaco	Utilizing RCA for Process Related Issues	
32.1	Junji Yamamoto,	New Automatic Control System for Fiber	Hidenobu Todoroki,

	Nippon Paper Industries	Orientation and Improvement of the Quality of Copy Paper	Katsumasa Ono, Takashi Ochi, Nippon Paper Industries, Takashi Sasaki & Hirofumi Sano, Yokogawa Electric Corporation
32.2	David W. Vahey, Forest Products Laboratory	Surface and Subsurface Fiber-Orientation- Angle Measurements in Three Office Papers	J.M. Considine, Forest Products Laboratory
32.3	Shih-Chin Chen, ABB Ltd.	Closed-Loop Control of Fiber Orientation of Sheet-Making Processes	Jonas Berggren, Andreas Zehnpfund, ABB Ltd.
33.1	Martti V. Tuomisto, Metso Paper USA	Enter Metal Belt Calenders	
33.2	Thomas Scherb, Voith Paper	Innovative Technology for Premium Tissue Production	Roberto Zane, Voith Paper (presenter)
33.3	Norbert Karner, Voith Paper	New Drying Technology for Higher Drying Rates and Improved Product Quality	Frank K. Herzog, Voith Paper (presenter)
34	Jeff Reese's Panel, International Paper	Improving Paper Machine Efficiency	Mike Garrick, Voith Paper Fabrics, Mike Lyles, Gary Nyman, International Paper, & Steve Smith, Domtar
36.1	Patricia Wild, EKA Chemicals	A Novel Coating Formulation for Silica Inkjet Layer Coatings	YIva Marie Wildlock, Kjell R. Andersson, Erik Lindgren, EKA Chemicals
36.2	Siv Lindberg, STFI	Making Subjective Assesments Objective - A Mottle Ruler for Calibration of Panel Assessments of Perceived Print Mottle	C-M Fahlcrantz, STFI- Packforsk; G. Forsgren, Iggesund Paperboard
36.3	Hannah Koivula, Åbo Akedemi University & University of Maine	Use of Confocal Laser Scanning Microscopy and Computer Model to Understand Ink Cavitation and Filamentation	Martti Toivakka, Åbo Akedemi University; Douglas Bousfield, University of Maine
37.1	Roger Wygant, Imerys	Metered Size Press Pigmentation for Fiber Reduction	Joel Kendrick, Jan Walter, Western Michigan University
37.2	Gregory Welsch, The Dow Chemical Company	Cost Saving Concepts for Production of High Quality Coated Papers – Part 1: Single Blade and Film Coat – Blade Coating Systems	Guillermo Bluvol, Peter Dahlvik, Omya; Alexander Hipp, Pekka Salminen, Dow Europe S.A.
37.3	John Roper, Dow Chemical Company	Combined Modeling and Experimental Studies to Optimize the Balance Between Fold Crack Resistance and Stiffness For Multilayered Paper Coatings	Pekka Salminen, Stefan Sandas, Dow Europe S.A.; Roger Carlsson, Iggesund Paperboard AB; Martti Toivakka, Parvez Alam, Åbo Akademi University
38.1	Johan Backstrom, Honeywell	Nonlinear Multivariable Grade Change of Paper Machines	Danlei Chu, Pezhman Nafissi, Paul Baker, Honeywell; Mattias Björklund, Mondi Paper
38.2	Rudolf Münch, Voith Paper Automation GmbH	Increased Added Value Due to Modern Grade Change Controls	•
38.3	Dr. Dave Lang , Metso Automation	Increasing Paper Machine Agility with a Novel Grade Change Concept	Dr. Seyhan Nuyan , Metso Automation
38.4	Timothy F. Murphy, ABB Automation Inc.	Quantifying Paper Machine Transition Performance	Kevin Starr, Pete Tran, Tim Mast, ABB Automation Inc.
39.1	Xuejun Zou, FPInnovations (Paprican)	Use of High-Yield Pulps in Freesheets - Current Trends and Issues in Papermaking and Digital Printing	
39.3	Yonghao Ni, Limerick Pulp and Paper Centre, University of New Brunswick	Characteristics of High Yield Pulp (HYP) and Their Effects on the Wet-end Chemistry of the Papermaking Process	Zhibin He, Limerick Pulp and Paper Centre, University of New Brunswick & Yajun Zhou, Tembec Inc.
40.1	Daniel Hédou,	Press Nip Dewatering: Adjust or Re-	

	AstenJohnson	Design?	
40.2	Olli Kääpä, Heimback	The Optimization of Press Dewatering and	
40.0	GmbH & Co. KG	it's Influence on Energy Savings	
40.3	David Buchanan , Voith Paper Fabrics	Improving Dewatering, Energy Usage, and Press Fabric Life by Optimizing the Nip System	
40.4	Eric J. Gustafson, Stowe Woodward	Continuous Nip Monitoring	
41.1	Jim Anderson, Hercules Inc.	Novel Biocide Improves Paper Machine Cleanliness, Efficiency and Product Quality	
41.2	Patrick Macuch, Nalco Company	Improved Paper Machine Efficiency and Product Quality through Online, Real-Time Monitoring and Control of Microbial Activity and Deposit Formation	Laura E. Rice, Nalco Company
41.3	Lotta Kanto Öqvist, Ashland	Improved Paper Machine Efficiency by Innovative Deposit Control Programs	Andreas Pohl, Ashland
41.4	R. Daniel Haynes, Eka Chemicals	Monitoring Colloidal Organics to Better Manage Deposit Runnability Issues	Sujit Banerjee, IPST
44.1	Dave Stockford, OSIsoft	Energy Management using a Real-time Enterprise Infrastructure	
46	Don Pomraning, Sinclair Group	Rapid Organizational Transformation – Ten Years of Lessons Learned in 90 Minutes	Randal Karg & Dan Rivard, Sinclair Group
47	Bruce Pease, ABB	Optimizing Work Flow with CMMS	Milton Shannon, ABB
48.1	Douglas W. Bousfield, University of Maine	Prediction of Wire Deflection and Activity Generation on Single Wire Machines	Vaughn Wildfong, Jay Shands, James Ronning, Johnson Foils, AstenJohnson
48.2	Jay Shands, JohnsonFoils	Evaluation of Gap Forming Rebuild Options: Part II – Development and Application of the Shoeblade Former and Engineered Shear Management Concepts	V.J. Wildfong, J.A. Ronning, M. Condon, JohnsonFoils; J.H. Jong, FPInnovations-Paprican
48.3	Daniel Söderberg , STFI-Packforsk	A Novel System for Online Wet-end Web Monitoring	Claes Holmqvist, STFI- Packforsk
48.3	Daniel Söderberg , STFI-Packforsk	Video 1	
48.3	Daniel Söderberg, STFI-Packforsk	Video 2	
49.1	Martin A. Hubbe, North Carolina State University	Factors Affecting Paper's Appearance	Joel J. Pawlak, North Carolina State University; Alexander A. Koukoulas, ANL Consultants
49.2	M. Patricia Wild, Eka Chemicals Inc.	An Innovative Approach to Higher Brightness and Whiteness	Richard Urbantas, Eka Chemicals Inc.
49.3	Rosa M. Covarrubias, Buckman Laboratories, Inc	Advances in Wet End Chemistry for High Bright Applications	Gary A. Headrick, Buckman Laboratories, Inc
49.4	Tony Hiorns, Imerys	Optimizing Optical Efficiency in Paper	Phil Jones, Benny Hallam, Leslie McLain, Imerys
50.1	Marc Foulger, GL&V	Press Rebuilds for Improved Pressing Efficiency	Denis Page, GL&V
50.2	Michael P. Riffle, Voith Paper Fabrics	Single Nip Presses and the Benefits of Innovative Press Fabric Designs	
50.3	Jussi Lahtinen, Runtech Systems	Improving Press Section Efficiency with Air Doctors	
50.4	Keith Kemp, AstenJohnson Inc.	Press Fabric for Single Shoe Press – it's what's on the inside that counts	Guillaume Bernard, AstenJohnson Inc.
51	Phil Sweeny's Panel, Lonza	Improving Microbiological Control - A Monograph Overview	Linda Robertson, International Microbial Associates, Chris Wiatr, Janet Woodward, Buckman Laboratories, Lynda Kiefer, M. Tod Stoner & Terry M. Williams (presenter), Rohm & Haas, Phil Prichard,

			Imerys, Doug Caulkins & Scott Frasca , RohmNova
54.1	Dewei Qi , Western Michigan University	Unsteady Dynamics of Fiber Suspensions	
54.2	Sheila Rezak, Georgia Institute of Technology	Direct Simulation of Fiber Suspension Using Lattice-Boltzmann Method	Jonathan Clausen, Cyrus K. Aidun, Georgia Institute of Technology
54.3	Jari. Hämäläinen, University of Kuopio	Prediction of the Sheet Formation Using the Fibre Floc Evolution Model	Taija Hämäläinen, University of Kuopio, Jarmo Korpijärvi, Numerola Oy
55.1	Kazunari Kamo, Nippon Paper Industries	Analysis of the Influence of Filler Loading and Grammage on Bonding	William W. Sampson, The University of Manchester
55.2	Daniel H. Varney, OMYA, Inc.	Modified Calcium Carbonates for Blade Applied Inkjet Papers	George A. Saunders, OMYA, Inc.
55.3	Jan Pekarovic, Western Michigan University	Process Variables of Pulp Alkali Pretreatment	Vidit Kumar, Paul D. Fleming III, Matej Pekarovic, Western Michigan University
55.4	Ankouri Sanjay Kumar Sinha, SLIET	Neem (Azadirachta Indica) as Alternative Wood Fiber Source with Environmental Advantages & Medicinal Properties for Pulp & Paper Industries	
57.1	Paul F. Richardson Ph.D. , Nalco Company	Chemical Additives to Enhance Press Dewatering in Board Production	Michael St. John Ph.D., James Chavers, Nalco Company
57.2	James M. Snyder, PaperboardPro	PaperboardPro	, ,
57.3	Bill Needelman, Filtration Science Solutions, Inc	Controlling Water Contamination in Paper Mills	Dave Webb, Industrial Hydraulics Division
57.4	Mike Sellers, Service Process Equipment	Understanding and Addressing Varnish in Paper Machine Systems	Greg J. Livingstone, Doug J. Muennich, CLEANOIL, Dave L. Wooton, Wooton Consulting
59	Femi Kotoye's Panel, Dow Chemical	Water Based Barrier Coatings	Gavin Davies, Sappi Technology Centre, David I. Gittins, Hannah Howard, Paul Meizanis, Paul Jones, David Skuse, Tony Lyons, Imerys
62.1	Jeff Hamilton, SAPPI	Managing Reliability – Properly Introducing Operator Basic Care to Facility Employees	
62.2	Tom Stigers , Solvay Paperboard	Mill Manager Roundtable: Reliability	
62.3	Carl Wright, Rock-Tenn	Mill Manager Roundtable: Reliability	
64.1	Daniel Söderberg, STFI-Packforsk & KTH Mechanics	A New Technique for Stratified Forming	
64.2	Daniel Söderberg, STFI-Packforsk & KTH Mechanics	The Fundamental Mechanism behind Headbox Jet Break-up	Outi Tammisola, KTH Mechanics
65.1	Richard A. Reese, Dick Reese and Associates, Inc.	DOE Paper Machine Energy Scorecard System	
65.2	Seyhan Nuyan, Metso Automation	New Steambox Redefines Heating and Profiling Efficiency	Ankur Gupta, Metso Automation
65.3	Jörg Bauböck, Andritz AG	Application of a Steel Yankee in Tissue Machines	
66.1	Jin H. Kim, Voith Paper	Improve Paper Machine Efficiency Through Improved Roll Reliability	
66.2	J. Michael Robichaud, Bretech Engineering Ltd.	Design Modifications of Papermachine Support Structures to Control Vibration	Andrew K. Costain, Dale G. Eyre, Bretech Engineering Ltd.

66.3	Chris M. Jackson, Corrugated Services Inc.	Utilizing PM and PdM Techniques to Maximize Paper Machine Efficiency	
67.1	Gina Paroline, Anton Paar USA, Inc.	Rheology Instrumentation and Measurements	
67.2	Detlev Glittenberg, Cargill Industrial Starches	Natural Rheology Modifiers	Don Hiscock , DuPont Soy Polymers
67.3	Derrick Burrell, Alco	Synthetic Rheology Modifiers	Wayne Kibble, Larry Fulton, Alco
68.1	Andrew DeMaio, Dow Chemical	Comparison Between North American and Imported Sheet Fed Offset Printing Papers	Femi Kotoye, David Smith, Shirley Muirhead, Dow Chemical
68.2	Guillermo Bluvol, Omya	Cost Saving Concepts for Production of High Quality Coated Papers – Part 2: Blade-Blade Coating Systems	Peter Dahlvik, Omya; Alexander Hipp, Pekka Salminen, Dow Europe S.A.
68.3	Jan-Erik P. Nordström, Stora Enso	Printing Development Trends	
69.1	Elisa Jannasch, Parsytec AG	Turning Quality Data into Integrated Decision Data	Helga Evers, Parsytec AG
69.2	Jarmo Kahala, Savcor Forest Oy	How to Perform Fast, Efficient and Reliable Data Analysis	
69.3	Dave Stockford, OSISoft	Data Mining using a Process Historian based Real-time Infrastructure System	
69.4	Jin Lou, Matrikon Inc	Paper Machine Performance Improvement Through Multivariate Data Analysis of Historical Data	Stephen Symons, Matrikon Inc., Tim Shope, AbitibiBowater
70.1	James Ronning,	Forming Section Water Handling	
70.2	Johnson Foils Douglas F. Sweet, Doug Sweet & Associates	Considerations Wet End Former Troubleshooting and Optimization – Vacuum Systems and Vacuum Dewatering Issues	
70.3	John Neun, Albany International	Wet End Optimization – Fabric Cleaning, Mist Elimination & Trim Squirts	
70.4	Kevin VanPembrook, Metso Automation	Wet-end Instrumentation and Control	
71	Alan Button's Panel, Buttonwood Consulting LLC	Green Papermaking	Richard Osa, STS Consultants; Joel Neuheimer, Forest Products Association of Canada; Ben Thorp presenting for Bob Byrne, Flambeau River Papers
72.1	David A. Young, Enerquin Air	Improving Dryer Section Runnability and Efficiency	
72.2	Paul Rouhiainen, Metso Paper	State-of-the-Art Developments in Dryer Section Runnability	
72.3	Kenneth C. Hill, Kadant Johnson Systems	Active Dryer Control for Sheet Break Recovery	David Vijh, Kadant Johnson Systems
72.4	Pekka Kormano, Deublin Steam Systems	Steam & Condensate Systems: Considerations for Dryer Section Runnability	
73.1	Charlie Floyd, Domtar	Keys to Sustainability at Kingsport	
73.2	Jeff Hamilton, SAPPI	Sustainability Within Sappi: More than Fiber and Energy	
73.3	Tom Stigers , Solvay Paperboard	Mill Manager Roundtable: Sustainability	
73.4	Carl Wright, Rock-Tenn	Mill Manager Roundtable: Sustainability	
74	Laurie Meister, Wausau Paper	Performance Excellence Roadmap	Bill Swisher, Breakthrough Management Group
76.1	Gerald L. Timm, Kadant Johnson	Drive Power and Torque in Papermachine Dryers	Gregory L. Wedel, Mikeal D. Skelton, Kadant Johnson
76.2	B.V. Ramarao , State University of New York	Heat and Moisture Transport in Paper going through a Hot Roll Nip	Sergiy A. Lavrykov, State University of New York

76.3	Kalle Riihimäki, Balance Engineering	Characteristics and Optimal Operation of the Paper Machine Heat Recovery Recuperator	