Session 1: Opening Session: Awards and Keynote Speaker

Art Holst
Session 2: Shifting Pigment Paradigms—(Sponsored by the Coating & Graphic Arts Division)

Douglas K. Stinebaugh

Influence of the Average Particle Size of Aragonitic Precipitated Calcium Carbonate on Coated Paper Properties

Amy C. Dimmick

Coating Talc Does Not Have to Have Poor Rheology!

David B. Willoughby and Shripal Sharma

Effect of Kaolin Addition to Calcium Carbonate Precoats

Tony Hiorns and Tara Nesbitt
Session 3: "So You Want to Make a Presentation at TAPPI?" Tutorial—(Sponsored by the Coating & Graphic Arts Division)

TAPPI "Paper Making" Basics
Linda Kim-Habermehl

Putting Punch in Your Power-Point Presentation
Paul Concannon, Paul W. Concannon and Linda H. Kim-Habermehl
Session 4: New Wet-End Additives—
(Sponsored by the Papermaking Additives Committee)

Eric R. Wagner

Advanced Wet-End System with Carboxymethyl-
Cellulose
Tomohisa Gondo, Osamu Kitao and Masasuke Watanabe

Performance of Cationic Styrene Maleimide 
Copolymer in Wet-End Papermaking
Mohini Sain, Edouard Valton and John Schmidhauser

Improving the Smoothness of Alkaline Bleached 
Board Using a Novel Precipitated Calcium 
Carbonate (PCC) Filler
Robert A. Gill, Elizabeth L. Ingram and William J. Haskins
Session 5: Equipment and Methods to Impact Sheet Properties—(Sponsored by the Paper & Board)

Jeff Levensailor

New Refiner Improves Sheet Properties & Reduces Refining Energy

Al Lankford

Modeling Refining and Its Impact on Paper Quality

J. Skowronski, E. Elaahi and B. Rutledge

Wet End Starch Application Equipment Improves Production, Runability, and Sheet Strength Characteristics

Dr. José Iribarne and Joseph Parisian

More Papers —>
Session 6: Challenges of Interlaboratory Testing in a Changing Industry—Tutorial (Sponsored by the Process & Product Quality Division)

Nancy J. Ross-Sutherland and Christopher J. Czyryca
Session 7: Fluid Mechanics of Fiber Slurries—(Sponsored by the Fluid Mechanics & Water Removal Committees of the Engineering Division)

Eric C. Eisert and Vaughn J. Wildfong

A Review of Gas Flows in Fiber Suspensions
Theodore J. Heindel

Concentric Mixing of Hardwood Pulp and Water
Aklilu T. G. Giorges, David E. White and Theodore J. Heindel

Activity Generation on Single Wire Tables
Douglas W. Bousfield and Vaughn Wildfong
Session 8: CIG Lunch and Learn: "Emerging Technologies and Markets"

Linda H. Kim-Habermehl

Comparison of Proximity Slot Die and Curtain Coating Technologies

Sam G. Iuliano

New Air Removal Hydrocyclones—The Vacuum Degasser and the Foam Blast

John A. Taylor
Session 9: CIG Lunch and Learn: Coating Operations

Cato Sandberg

High Quality Art Paper With Double Side Blade Coating in One Step

Pasquale Seca, Luca Mignani, Susanne Ohman and Mike Paczkowski

DryMaster—Self-contained Electric IR Moisture Profiler Reducing Start-up Time After a Break

Thomas Björnberg

Latest Coater Start-up Experiences

Ms Pam Hynnek

Flotation Dryer and Air Turn Start-up Issues

Preston Henderson
Session 10: New Technology Showcase  
—(Sponsored by the Coating & Graphic Arts Division)

Jan C. Walter

Caraustar New Team

Michael Smith

High Speed Automatic Label Application

Peter Hanna

Mottling/Print Mottling—Origins Identified by Novel EMTEC Ultrasonic

Giselher Gruener

Objective Measurement of Print Mottle Through a Scanner-based ImageXpert System

Prashant Mehta

Automating the Helio Test Using a Scanner-Based ImageXpert System

Prashant Mehta

RIT's New Heidelberg Web Press Laboratory

Bill Garno
Coating and Doctor Blades
Parker L. Phillips

New and Improved Astra-JetR Kaolin and Carbonate for Ink Jet Papers
Tony Lyons

CRYSTALGLOS R PCC for Coated Bleached Board Top Coats
William J. Haskins

Liberty 3794 Rheology Modifier for Paper Coatings
Charlie Burdick

Dow Emulsion Polymers Introduces A New Generation Binding Hollow Product: HSB 3042
Jim Galloway

Direct Food Contact Polymers for Water-Based Ink, Overprint Varnishes, and Coatings for Packaging
Rick Krause

A Time Dependent Change in Coating Viscosity: Improved Control of Viscosity Through Selection of Coating Components
Keith Cockerline, Dr. Franco Palumbo, Donald Hiscock and Thomas Merrifield
NovaPlex R1000—Providing a Step-change Improvement in LWC Roto Printability

Robin McCann

NovaPlex G1000—High Solids Glossing Pigments for Coated Papers and Board

Robin McCann
Session 11: New Technology Showcase — (Sponsored by the Paper & Board Division)

James R. Ruzicka

REEL-JET™ Water Jet Turn-Up

Roman Caspar

The Latest Developments In Camera Event Capturing Technology

Kari Hilden and Tanja Kannisto

The New SOLARONICS IRT Medium Wave Infrared Solution to Solve Wet Edge Problems

Joseph Poltorak

DuPont Appearance Analyzer™ with Print Showthrough Feature

Marci Muskin

A New Inexpensive WEB Inspection System for Holes and Other Defects

Kari Hilden and Tanja Kannisto

Vibre-Foil™ Forming Technology

William Petitt
Pro-Plan Pulp Mill & Recovery Optimization System
Norm Lasslett

Reduce Fuel Consumption to Steam Boiler by 1%
Peter Tung

An Enzymatic Approach to Stickies Control
Doug Yoder

TORNADO Pulper
Donald Danforth

BIOCLIN®: System Environmentally acceptable slime and deposit control
Jorg Oberkofler

GL&V’s Winder Safety Initiative
William J. Gilmore

Introducing Inno-Flo, A New & Powerful Microparticle System
Tom Cauley
Session 12: Microbiological Problems in Papermaking Systems—Tutorial: (Sponsored by the Microbiology Group)

*Linda R. Robertson*

Discovering Microbes in the Papermachine

*Linda Robertson*

Developing a Biocide Application Strategy

*Lynda Kiefer*

Classes of Biocides, Mode of Action, FDA & EPA

*Tod Stoner*
Session 13: Bill Babbington Roundtable—(Sponsored by the Maintenance and Mill Engineering Committee of the Engineering Division)

Jerry D. Kahn
Session 14: Finishing & Converting
Division Committee Meetings
Session 15: Film Press Roundtable—
(Sponsored by the Coating & Graphic Arts Division)

Nick G. Triantafillopoulos

Effect of Press Draw and Basis Weight on Woodfree Paper Properties During High Solids Surface Sizing

Juha Lipponen and Johan Grön

Characterization of Misting Phenomenon in Film Coating

Masahiro Sugihara, Toshiaki Miyakura, Hiroshi Miura and Kenji Yamada

Operational Aspects and Quality Potential for Film-Coated Mechanical Grades

Martin F. Kustermann and Michael Trefz

Novel Pigment-Starch Combination for the Online and Offline Coating of High-Quality Inkjet Papers

D. Glittenberg, A. Voigt and D. Donigian
Session 16: Overall Wet End Management—(Sponsored by the Papermakers Additives Committee)

Martin A. Hubbe

Factors Affecting the Performance of Inkjet Papers
Lutfar Rahman

Use of PAC in Conjunction with Polymers as a Retention System
Paul F. Richardson, Ph. D. and Michael R. St. John, Ph. D.

Drainage and Retention Improvement with Talc
Vicente B. Lasmarias and Shripal Sharma

Retention of Pretreated Calcium Carbonate with a PEO/Cofactor/Fixative System
Peter Englezos, Shivamurthy B. Modgi and Ian Throburn
Session 17: Winding Fundamentals Tutorial—(Sponsored by the Finishing & Converting Division)

Joseph F. Matthews and Timothy J. Walker
Session 18: Hot Topics Tutorial: Fluorescence and Its Relationship to Brightness and Color—(Sponsored by the Process & Product Quality Division)

Nancy J. Ross-Sutherland

Fluorescence and Its Relationship to Brightness and Color

Jeffrey A. Baker and S. Jerry Popson
Session 19: Spoilage of Additives and Fiber Stock—(Sponsored by the Microbiology Group)

*Linda R. Robertson*

Spoilage Problems in Papermaking Systems

*Laura E. Rice, Linda R. Robertson, Bruce E. Urtz and Juha Rintala*

The Forgotten Additives

*Janet H. Woodward and M. Tod Stoner*

Practical Experience with Biocide Tolerant/Resistant Microorganisms in Kaolin Slurry

*Philip M. Prichard*
Session 20: Headbox Operational Issues and Panel Discussion—
(Sponsored by the Fluid Mechanics Committee of the Engineering Division)

Jay A. Shands and Seppo J. Karrila, Ph. D.

Generation of Streamwise Vortices in a Slice Knife Model: Can Streaks be Generated at the Slice Exit?
T. Wei and T. Y. Hsu

The Effects of Headbox Fluid Dynamics on Paper Structure and Quality
Hannu Lepomaki

Behavior of Fiber Suspension Flow in Straight and Converging Channels
Cyrus K. Aidun

Experience with a Scanning Jet Velocity Sensor
Scott B. Pantaleo

Headbox Slice Reaction Beam Vibration—A Case Study
Paul M. Kristopeit
Session 21: Applied Coating Rheology Studies—(Sponsored by the Coating & Graphic Arts Division)

Steven P. Ottone

The Effect of Thickeners on Coating Suspension Rheology and Final Coating Structure

Basant G. Dimetry and Douglas W. Bousfield

A Time Dependent Change in Coating Viscosity: Improved Control of Viscosity Through Selection of Coating Components

Dr. Franco Palumbo, Thomas Merrifield, Donald Hiscock and Keith Cockerline

Flow of Coating Colors Through Filters

G. DePres, D. Chaussy, J-F. LeNest and E. Mauret
Session 22: Mill/Supplier Shoe Press Panel Discussion—(Sponsored by the Paper & Board Division)

Keith A. Kemp
Session 23: Calendering Fundamentals Tutorial—(Sponsored by the Finishing & Converting Division)

Joseph F. Matthews and Anthony V. Lyons
Session 24: Paper Industry Innovations in the Midwest—
(Sponsored by the Lake States Local Section)

Mark C. Neily

The State of the Paper Industry in Wisconsin: The Paper Industry Economic Cluster Initiative

Patrick J. Schillinger

Accelerating the Development and Industry Adoption of Process Improvements and Innovations Through a Center for Technology Transfer

Masood Akhtar

Vibrating Foil Forming Technology

Alan F. Button, William Pettit, Mike Bricco and Dale Reynebeau
Session 25: Spoilage of Additives and Fiber Stock Roundtable—(Sponsored by the Microbiology Group)

Linda R. Robertson

An Investigation of the pH Drops in Calcium Carbonate Storage Tanks

Linda Smith

What the Customer Wants

Lynda A. Kiefer, Janet H. Woodward, Ph. D., Philip M. Prichard and Laura E. Rice
Session 26: Hot Topics Luncheon

Paul Whiting

Troubleshooting Winder Problems (Paper & Board)

Michael Daul

Twist, Curl, and Strength (Paper & Board)

Shin-Chin Chen

Paper Machine Benchmarking (Paper & Board)

Pete Perry

Retaining Fines, Filler, Dyes, etc. (Paper & Board)

Marty Hubbe

Control System Security, Web-Based HMI, Ethernet I/O (ISA & PUPID)

Brad Carlberg

Coating Stability (Coating & Graphic Arts)

Rick Gagnon

Size Press, Water Box, and Coater Papermaking Additives—What they can and can not do for the papermaker. (Coating & Graphic Arts)

John Krasniewski
Coating Water Retention—Impacts on Machine Runnability and Paper Quality (Coating & Graphic Arts)

*Don Hiscock*

Automated Testing (Process & Product Quality)

*Jeff Baker and Ann Timberlake*

Deposit Control & Microbiology (Microbiology)

*Tod Stoner*

Troubleshooting Coater Operation (Coating & Graphic Arts)

*Timo Kiiha*

Head Box Operational Issues (Fluid Mechanics/Water Removal)

*Jay Shands*
Session 27: Advances in Methods to Analyze Coated Paper—(Sponsored by the Coating & Graphic Arts Division)

James T. Brown

Application of New Evaluation Method of Sheet Appearance to Various Coated Papers

Nobuhiro Matsuda, Kasuke Fujita, Hisashi Matsui and Yoshiaki Zama

Techniques for the Measurement of Total Volatile Organic Compound (TVOC) Content in Coatings, Coating Components, and Dyestuffs

Anthony J. Robinson, Larry Engel, Dr. Kevin M. Sweeny and Cathy Willis

Comparative Study of Brightness/Whiteness Using Various Analytical Methods on Coated Papers Containing Colorants

Burak Aksoy, Margaret K. Joyce and Paul D. Fleming

Using X-Ray Photoelectron Spectroscopy to Measure Fiber Coverage of Coated Paper

Ali Bashey, David Gracia and William Zegarski, Ph. D.
Session 28: Advances in Non-Impact Coating Technologies Roundtable—(Sponsored by the Coating & Graphic Arts Division)

Linda H. Kim-Habermehl

The Economic Advantages of Curtain Coating Tools to Reformulate for Curtain Coating

John Taylor

The DF Coater: A Non-Impact Coating System for High Quality Coating

Klaus Straenger, John Taylor, Masahiro Sugihara, Jonas Hannus, Marku Hamalainen and Klaus Straenger
Session 29: Recent Advances in Microparticle Technology—(Sponsored by the Papermaking Additives Committee)

Lawrence S. Anker

A New Microparticle to Improve Drainage of a NSSC-Containing Furnish

Laura M. Sherman and Bruce A. Keiser

Effect of Nanoparticles in Wood Containing Furnishes: Part 2

Duncan S. Carr

A New Multi Component Organic/Inorganic System, the Path Forward for Microparticle Technology

Philip A. Ford

Nanotechnology in Practice: Improving Machine Performance in a Newsprint Mill

Rosa M. Covarrubias, Bernard Kessler and Kelly Magee
Session 30: New/Emerging Technologies—(Sponsored by the Finishing & Converting Division)

Paul D. Cooper

New Edge Tracking and Control Technology Increases the Sheet Trim Width
Kari K. Hilden and Andy Dodsworth

Complete Automation of Shipping Using ATLS, Automated Truck Loading System
Alain Gobeil

The New Application of Automatic Guided Vehicles (AGVS)
Paul Roche

New Winding Technology Boosts the Limits of Conventional Winding
Mike Daul
Session 31: Paper Machine Measurement & Control—(Sponsored by the Process Control, Electrical, & Information Division)

Shih-Chin Chen

Using Neural Network Models to Affect the Bottom Line for Linerboard Applications

John B. Rudd, P.E.

Troubleshooting Profile Problems with the Informetric Systems Profile Historian

Ian Journeaux, Fay Sayajari, George Clark and David Miller

New Optimization of CD Control for Global and Localized Profile Performance

Tim Mast, Kevin Starr, Shih-Chin Chen and Pete Tran

Controllability of the Basis Weight Machine Direction Variations

Jörgen Ungh and Mats Hiertner
Session 32: Drying: Improving Productivity and Quality—(Sponsored by the Water Removal Committee of the Engineering Division)

Mary M. Toney and Eric C. Eisert

Drying Performance and Fabric Tension—Mill Trials
Ian Lang

Evaluation of Models for the Steam Supply System to Improve Control of the Paper Dryer
M. Karlsson, S. Stenstrom, O. Slätteke and B. Wittenmark

The Impact of Dryer Surface Deposits and Temperature Graduation in the First Dryer Section on Drying Productivity
F. Ahrens and I. Rudman

The Effect of Fiber Recycling on Paper Drying
John Howard Cameron and Theodore R. A. Zwick

More Papers —>
Session 33: Coater Runnability Interactive Panel—(Sponsored by the Coating & Graphic Arts Division)

Lawrence A. Gaspar, Charles P. Klass, Kari Lahtonen, Peter E. Perry, Douglas K. Stinebaugh, John A. Roper III and Martin F. Kustermann
Session 34: Wet End Measurement Techniques I—(Sponsored by the Papermaking Additives Committee)

T. Philips Oriaran

Applying Charge Measurements to Papermaking

Teresa Burke and Sylvain Renaud

Online Charge Measurements Enable Process Optimization and Automatic Control of Fixative Dosages

Lydia Bley Christen, R. Berger and S. Gruber

Rapid Wet-End Chemistry Testing

Brian Rutledge and Jerzy Skowronski
Session 35: Improvement Program
Case Study/Review/Discussion—
Roundtable—(Sponsored by the
Finishing & Converting Division)

Donald M. Hildebrand, Don Hildebrand, Dr. Tony Lyons, Paul
Cooper, Tom Wochenske, Jim Vissers and Tim Walker
Session 36: Brown/Fine Papers Roundtable—(Sponsored by the Paper & Board Division)

John Callaway
Session 37: Forming Phenomena—
(Sponsored by the Fluid Mechanics & Water Removal Committees of the Engineering Division)

Seppo J. Karrila, Ph. D. and Eric C. Eisert

A Twin Wire Drainage Model for Various Blade Configurations

Vaughn Wildfong, Joseph Genco, Douglas W. Bousfield and John Hassler

The Need for a System Approach to the Application of New Technology: Creating Value Through Product Improvement and Process Efficiency

Peter Slater

Pulsating Forming at Headbox Consistency in Bench Scale Provides Close Imitation of a Single-Wire Machine—or How to Tune a Lab Device for Desired Web Structure

Seppo Karrila, Jeffrey Champine and David White
Session 38: CIG Lunch & Learn: Printing & Converting Common Interest Group Meeting

Margaret K. Joyce and P. Dan Fleming, III
Session 39: CIG Lunch and Learn: Coating Materials

Hans B. Neubold

Metering Size Press Technology
Michael Altemeier

Paper Surface to Ink Interaction
Patrick A. C. Gane
Session 40: CIG Lunch and Learn: Advanced Coating Fundamentals

Doug Donigian and Marku Hamalainen
Session 41: Print Mottle Tutorial I—
(Sponsored by the Coating & Graphic Arts Division)

*Nancy Plowman Sandreuter and Ronald L. Van Gilder*
Session 42: Designing Base Sheet for Product Quality—(Sponsored by the Coating & Graphic Arts Division)

Stig V. Renvall

Basestock Influences on Coated Board Surface and Print Quality

Matti Lares

Application of High-Yield Pulps into Wood-free Coated Papers

Xuejun Zou and Yajun Zhou
Session 43: Wet End Measurement Techniques II—(Sponsored by the Papermaking Additives Committee)

Jose M. Rodriguez

Visualization of Polymer Adsorption on Pulp Fiber I: Polyacrylamide

Hiroki Nanko and Shaobo Pan

Optimizing a "Pitch Season" Forecast

S. Allen Grimsley, Matthew A. Blazey and Gordon C. Chen
Session 44: New Calendering Technology—(Sponsored by the Finishing & Converting Division)

Anthony V. Lyons

Fundamentals and Practical Experiments of Heat Transfer in Calenders

David Guérin and Véronique Morin

Development of Advanced On-Machine Calendering for Film Coated LWC Papers

Rex A. Robertson and Mikko Tani

Shoe-Nip Calender Possibilities for Board and Paper

Aleksandar Todorovic and Tarja Hämäläinen
Session 45: Pressing Part I: New Dewatering Techniques for Improving Production and Quality—(Sponsored by the Water Removal Committee of the Engineering Division)

Gary W. Nyman and Eric C. Eisert

The Air Press for Improved Dewatering
Jeffrey D. Lindsay, Frank S. Hada and Michael A. Hermans

Use of Steam Showers to Condition Press Fabrics
Philip Wells

Enhanced Water Removal Pressing
Brady Patterson
Session 46: Print Mottle Tutorial II—
(Sponsored by the Coating & Graphic Arts Division)

Ronald L. Van Gilder and Nancy Plowman Sandreuter
Session 47: Potpourri—Technical Papers

Brad S. Carlberg

Suspension Concentration and Fiber Length Effects on the Behavior of a Shear Flow Dilution Process in a Rectangular Channel

Eric A. Schmidt and Junyong Zhu

A Rapid Method to Measure Glycerides in Wood Chips: A Facile Method to Assess the Age (Seasoning) of Wood Chips

Bruce Sitholé and Larry H. Allen
Session 48: Effective Broke Handling Solutions: Roundtable—(Sponsored by the Papermaking Additives Committee)

Scott R. Yeakey

Roundtable "Effective Broke Handling Solutions"

Christopher M. Lewis, Scott Graham, Lutfar Rahman and Scott R. Yeakey
Session 49: New Calendering Technology—(Sponsored by the Finishing & Converting Division)

Anthony V. Lyons

Supercalender Control Strategies

R. Vyse, J. Backstrom, P. Neill and T. Steele
Session 50: Saveall Operations Tutorial—(Sponsored by the Paper & Board Division)

John O. Milliken and Terry L. Bliss
Session 51: Pressing Part II: New Fabric and Cleaning Technologies—
(Sponsored by the Water Removal Committee of the Engineering Division)

*Eric C. Eisert and Brady Patterson*

Vector Tri-axial Press Fabric Design Improves Press Section Performance

*Tom E. Coulter and David Buchanan*

New Technology Addresses Organic Loading in Wet Felts While Enhancing Press Section and Paper Machine Performance

*Ernest T. Young*

Shoe Press Dewatering, Methods to Increase Efficiency and Water Removal in the Press Section

*Peter F. Slater*
Session 52: Matte Pigment Experiments and Dry Co-Binder Addition Equipment—(Sponsored by the Coating & Graphic Arts Division)

John M. Krasniewski, Jr.

Coating Pigment Formulation Engineering to Optimize the Quality of Matte Lightweight-Coated Paper

R. W. Wygant

Advances in the Use of Dry Co-Binders in Coating Color Preparation

John Bergman and Tapani Niskanen
Session 53: Advances in Variable Imaging Technology Roundtable—(Sponsored by the Coating & Graphic Arts Division)

Margaret K. Joyce

Future of Digital Printing Technology
Howard Baldwin

New Liquid Toner and Indigo Printing Technology
Loretta Page

Substrate Requirements for Digital Printing
Rafik Loutfy

High Speed Continuous Inkjet Printing
Ltfar Rahnan

Integrating Digital Printing Technology Into Current Press Technology
Dan Flemming
Session 54: Troubleshooting Problems in the Papermaking Process
Tutorial— (Sponsored by the Papermaking Additives Committee)

Jerry M. Gess and Paul H. Wilson
Session 55: Coated Papers Roundtable — (Sponsored by the Paper & Board Division)

David L. Forsman

*Brad S. Carlberg*

Sonar-Based Volumetric Flow and Entrained Air Measurement for Pulp and Paper Applications

*Daniel L. Gysling*

A Computational Model for Predicting the Behavior of Pulp Fibers in Shear-Driven Flows

*M. Gosz, K. Cassel, M. Alkhader and S. Nair*

Pulper Additive Maximizes Recycled Fiber Quality: Impact on Tissue Production

*Andrew Fitzwilliam and Tim Fogarty*
Session 57: Papermachine Threading Panel—(Sponsored by the Water Removal Committee of the Engineering Division)

*Eric C. Eisert and Jeffrey R. Reese*

Defining the Threading Process, Benchmarking and the Importance of Achieving and Maintaining Benchmark Performance

*Elisabeth Rooney*
Session 58: Print Defects Tutorial—
(Sponsored by the Coating & Graphic Arts Division)

Nancy Plowman Sandreuter
Session 59: Troubleshooting Problems in the Papermaking Process Tutorial — (Sponsored by the Papermaking Additives Committee)

Jerry M. Gess and Paul H. Wilson
Session 60: Drying Technologies and Technical Service Case Study

Brad S. Carlberg

F. Ahrens, T. Patterson, J. Loughran and I. Rudman

Effect of High-Intensity Dryer Drum Location on Drying Rate
H. Noboa and J. Seyed-Yagoobi

Investigation of a New Approach for Paper Heating and Drying Via Microwave Energy, Part 2: Economics
F. Ahrens, T. Patterson, J. Loughran and I. Rudman

Protecting ROI with Scaleable Service and Information Technology
Chuck Smith and Keith Masters

More Papers —>
Session 61: Drying Technologies and the Latest in Research and Testing

Brad S. Carlberg

An Integrated Pulp and Paper Research Center in North America
Marc Foulger and Bruce Crossley

Impinging Evaporation Hood Design With Pulsed Air
Rob States

High Performance Impingement Paper Drying Using Pulse Combustion Technology
T. Patterson, F. Ahrens and G. Stipp
Session 62: Paper Machine Threading Panel—(Sponsored by the Water Removal Committee of the Engineering Division)

Eric C. Eisert and Jeffrey R. Reese