



(Program Subject To Change)
Tuesday, October 4

12:30 pm - 5:30 pm
Weyerhaeuser Longview Mill Tour

Wednesday, October 5

1:30 pm - 3:30 pm
Session : Plenary Session

Session Chair: **Gopal C. Goyal**, *International Paper*

"Plenary Session Presentation"
Mark Watkins, *MWV*

Find out what the bleached pulp customer expects

"Are Bleach Plant Effluents Still a Relevant Concern for the Protection of Aquatic Life?"
Paul Wiegand, *NCASI*

This presentation will focus on if further improvements in bleach plant effluent quality are needed

"Transforming the Bleaching Process"
Dominique D. Lachenal, *Grenoble INP - Pagora*

Learn what improvements will result from current bleaching research

4:00 pm - 5:30 pm
Session : Bleaching and the Biorefinery

This session will address what happens to pulp bleachability after removal of hemicellulose

Session Chair: **Peter Axegard**, *Innventia AB*

"Bleachability of Eucalyptus Kraft Pulp Derived from Pre-hydrolyzed Chips"
Jorge L. Colodette, PhD, *Federal University of Vicosa*
Jose Livio Gomide,
Gopal C. Goyal, *International Paper*
Flavio Tesser,
Caifang Yin,

"The Impact of Hot Water Extraction of Northern Hardwoods on Conventional Bleach Plant Operations and Potential Cost Savings."
Thomas E. Amidon, *State University of New York*
Gopal C. Goyal, *International Paper*
Caifang Yin, *International Paper*

"Bleaching Ability of Pre-hydrolysed Pulps in the Context of a Biorefinery Mill."
Christine Chirat, *Grenoble INP - Pagora*
Dominique D. Lachenal, *Grenoble INP - Pagora*

Thursday, October 6

8:30 am - 10:00 am
Session : Oxygen & Ozone

Session Chair: **Thomas J. McDonough**,

"On the Effect of Introducing Ozone in ECF Bleaching of Eucalyptus Kraft Pulp"
Dominique D. Lachenal, *Grenoble INP - Pagora*
Christine Chirat, *Grenoble INP-Pagora*
Shree Prakash Mishra, *Grenoble INP-Pagora*
Frederic Pouyet, *Grenoble INP-Pagora*

Determine if partial replacement of ClO₂ with ozone cuts costs without affecting pulp properties

"Properties of Oxygen Delignified Pulps Produced in Batch and Throughflow Reactors"
Adriaan Van Heiningen, *University of Maine*

This presentation addresses how oxygen delignification systems should be designed to achieve 75% delignification

"Achievements in Industrial Ozone Bleaching"
Alexis Metais, *ITT Wedeco*
Emil Germer, *ITT Wedeco*
Jean-Christophe Hostachy, *ITT Wedeco*

Why ozone bleaching is scarce in North America and widely used elsewhere will be discussed

10:30 am - 12:00 pm

Session : ClO2

Session Chair: **Jorge L. Colodette, PhD**, Federal University of Vicosa

"Environmental Performance of Modern ECF-Bleaching"

Peter Axegard, Innventia AB

Hear if further improvements in bleach plant effluent quality are needed

"Effect of Flow Dispersion in a D0 Bleaching Tower Evaluated by a Simplified CFD Model Combined to a Delignification Kinetic Model"

Gerard Mortha, Grenoble INP - Pagora

Learn how much will improving D0 tower flow patterns reduce bleaching cost

"The Stoichiometry of Chlorine Dioxide Delignification of Softwood Pulps after Oxidant-Reinforced Extraction"

Brian N. Brogdon, FutureBridge Consulting & Training, LLC

What can be done to maximize ClO2 efficiency in the first bleaching stage will be discussed

1:30 pm - 3:00 pm

Session : Peroxide

Session Chair: **Brian N. Brogdon**, FutureBridge Consulting & Training, LLC

"Na2CO3 as Alkali in Hydrogen Peroxide Bleaching of Softwood Kraft Pulp"

Hannu Hamalainen, Kemira Oyj

J. Ross Anderson, Kemira Chemicals Canada Inc.

Raymond Paquet, Kemira

Figure out if you can minimize the negative effects of replacing caustic with carbonate

"On the Role of Copper Ions in Alkaline Hydrogen Peroxide Bleaching of Kraft Pulps"

Pedro Loureiro, CIEPQPF, University of Coimbra

Sandrine Duarte, CIEPQPF, University of Coimbra

Dmitry Evtuguin, CICECO, University of Aveiro

M. Graça Carvalho, CIEPQPF, University of Coimbra

Learn why copper is a worse contaminant than manganese and what you can do about it

"A Novel Recovery and Recycle Process for Catalytic Molybdate in Acidic Peroxide Delignification"

Thomas Dietz, Evonik Industries AG

Marc Beiser, Evonik Industries AG

Considering using molybdate as a catalyst? If so, you will not want to miss this presentation

3:30 pm - 5:00 pm

Session : Mill Practices and Applications I

Session Chair: **Paul Robilliard**, Beca AMEC

"Modern Bleach Plant Advanced Process Control Utilizing Inline Sensors and Model Predictive Control"

Richard J. Van Fleet, Honeywell International

Sandy Beder-Miller, BTG Americas, Inc

Michel Dion, Honeywell International

Learn how your mill can update a bleach plant control system that was designed for chlorine

"Differences in Bleaching Responses from Fungal versus Bacterial Derived Enzymes"

Peter W. Hart, MWV

Mill experiences about whether you should try using enzymes will be discussed

"Assessment of Pulp Machine White Water Quality of Market Kraft Pulp Mills"

Jean Bouchard, FPInnovations, Pulp and Paper Division

Be here to learn if monitoring white water quality can prevent brightness problems

Friday, October 7

8:30 am - 10:00 am

Session : Eucalyptus Pulp Bleaching

Session Chair: **Christine Chirat**, Grenoble INP - Pagora

"The Final Bleaching of Eucalyptus Kraft Pulp with Chlorine Dioxide: What Factors Affecting its Efficiency?"

Olena Sevastyanova, The Royal Institute of Technology, KTH

Annbritt Forsström, Eka Chemicals AB, Sweden

Mikael E. Lindström, The Royal Institute of Technology, KTH, Stockholm

Eva Wackerberg, EKA Chemicals AB

Find out what factors limit the effectiveness of the final D stage

"Novel ECF Bleaching Sequence Using Peracetic Acid – New Possibilities and Gains"

Jorge L. Colodette, PhD, Federal University of Vicosa

Marcelo Costa, Kemira Chemicals Brazil

Paulo Henrique Morais, Kemira Chemicals Brazil

The benefits from using peracetic acid as the first bleaching stage will be discussed

"Reductive Degradation of Residual Chromophores in Kraft Pulp"

Hélio Carreira, CICECO, University of Aveiro

Pedro Loureiro, CIEPQPF, University of Coimbra

M. Graça Carvalho, CIEPQPF, University of Coimbra

Dmitry Evtuguin, CICECO, University of Aveiro

This presentation answers the question - Why should I consider a final dithionite stage

10:30 am - 12:00 pm
Session : ECF Bleaching

Session Chair: **Ashok K. Jain**, NCASI

"Steady-State Elemental Chlorine-Free (ECF) Bleach Sequence Modeling for Optimization: A Review of Techniques and New Applications"

Brian N. Brogdon, FutureBridge Consulting & Training, LLC

Determine how modeling can reduce your bleaching costs

"Combining Chlorine Dioxide and Molybdate Catalyzed Hydrogen Peroxide for Improved Delignification of Canadian Hardwood and Softwood Pulp"

Bernd Hopf, Evonik Industries AG

Dan Davies, Degussa Canada Inc.

Marcus de Oliveira,

Thomas Dietz, Evonik Industries AG

This presentation will discuss if you can use catalyzed peroxide to cut first-stage ClO₂ in half

"Near-Neutral Final Chlorine Dioxide Brightening:

Theory and Practice"

Zhi-Hua Jiang, FPInnovations (Paprican)

Richard M. Berry, FPInnovations (Paprican)

Learn how much ClO₂ you can save by adding CO₂ to the last stage

1:30 pm - 2:30 pm

Session : Mill Practices and Applications II

Session Chair: **Peter W. Hart**, MWV

"Optimization of an ECF Bleach Plant - An Australasian Mill Example"

Paul D. Robilliard, AMEC

One mill used basic bleaching knowledge to reduce bleaching costs by \$1 million per year with no capital investment - Learn How

"The Bleaching of Pulp"

Alan W. Rudie, USDA Forest Products Lab

Hear about a new resource that is available to help you use basic bleaching knowledge to optimize your bleach plant

Poster Session - Posters Available During Conference Reception, Lunch, and All Break Times

"A New Strategy for Metals Management - An Important Tool in Enhancing Bleaching of Pulp and Paper."

David R. Jones, Buckman.

Rosy M. Covarrubias, Buckman.

Michael R. Eisey, Buckman.

"Rethinking Pulp Bleaching— A Laboratory Evaluation of Bleaching Concepts and Technologies on Hardwood Kraft Pulp"

Klaus Doelle, SUNY-ESF

"Benefits and Methods of Improved Accuracy of Pulp Mill ISO Brightness Testing"

Sean M. Smith, Rock Tenn Company

"TCF bleaching of Soda-anthraquinone Pulp from Oil Palm Frond"

Wang Xiwen, South China University of Technology

"Effects of Final Bleaching Stage Using Hydrogen Peroxide and Peracetic Acid (Eq.) in the ECF Bleaching of Acacia D0EOPD1 Kraft Pulps"

Dede Ermawan, APRIL

"Chlorine Dioxide Reduction in Bleaching via Pretreatment without Inter Stage Washing"

Ravikishor Gandi, Georgia Institute of Technology

Jeffery Hsieh,

"Using a Benchmarking Perspective to Ensure Chlorine Dioxide Availability and Competitiveness"

Kalle Pelin, EKA Chemicals Ltd.

"Comparing Gradual Alkali System and Mg(OH)₂-based Process to Conventional Process in Hardwood High Yield Pulp Bleaching"

Farhad Zeinaly, Islamic Azad University

"Multistage Alkali Peroxide Bleaching in Low Kappa Kenaf Bast Pulp"

Farhad Zeinaly, Islamic Azad University

"The Effects of Xylanase and Acid Pretreatments on ECF Bleaching of Tobacco Stalk Soda-AQ Pulp"

Jalal Shakhsh, jalal. co

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