SESSION 2: RAW MATERIALS

Wood Supply Strategies to Enhance the Maritime Pine Kraft Pulp Quality
Denilson Da Silva Perez, Guillaume Chantre, Pierre Nougier and Mohamed Najar

Additional Hybrid Poplar with Papermaking Properties Superior to Aspen
Raymond C. Francis, A. F. Brown, R. P. Bosshart, S. E. Balch and Darrell M. Waite

Pulping and Papermaking Properties of Mimosa (Albizia Julibrissin)
Steve R. Duke, Hanjie Gu, David I. Bransby and Gopal A. Krishnagopalan

SESSION 3: WORKPLACE TRANSFORMATION

Effects of Change and Change Management on Employee Responses: An Overview of Results from Multiple Studies
Donald B. Fedor and David Herold

Workplace Transformation: Lessons for the Paper Industry
Charles Parsons and Raul Necochea

SESSION 4: ECONOMICS, LOGISTICS & SUPPLY CHAINS

Strategic Design of Robust Global Supply Chains: Two Case Studies from the Paper Industry
Marc Goetschalckx, T. Santoso, S. Ahmed and A. Shapiro

Impact of Forest Biotechnology on the Economics of Corrugated Box Production
David E. White, Jacobo L. Fernandez, Gary A. Baum, Gary Peter and Charles E. Courchene

Box Plant Trucking Logistics and Related Studies
J. C. Lu, P. S. McCarthy, J. Madariago, C. Charoensiriwath and H. Kim

SESSION 5: PULPING OF TROPICAL SPECIES

Influence of Alkali Charge on Hexenuronic Acid Formation and Pulping Efficiency for Lo-Solidsâ Cooking of Eucalyptus
Francides Gomes Silva and Fabio Almeida

Cooking Conditions for Eucalyptus Cammaldulensis and Populus Euphratica with Anthraquinone
Ahmed Abdullah and Mohammed H. Al Abbase

Kraft Pulping of Acacia Mangium
Takanori Miyanishi and Keigo Watanabe

SESSION 6: DEVELOPMENTS IN BLEACHING I

Statistical Determination of the Impact of Enzymes on Bleached Pulp Yield
Peter W. Hart and Harry Sharp III
Evaluation of ECF Bleached SW Kraft Pulps from Mature and Thinning Wood Resources
Arthur J. Ragauskas, Dong Ho Kim, Blair R. Carter and Charles E. Courchene

Improving the Efficiency of a Two-Stage Oxygen Delignification System
Juha P. T. Fiskari

SESSION 7: PULPING PROCESSES

Development of a Sulphur-Free, High-Yield Pulping Process
Karl B. Lonnberg, M. M. A. Quader and Elina Heikkila

A Decade of AQ Benefits at Canfor's Northwood Mill (1994-2004)
Augusto Quinde, Brian N. Brogdon, Lorna Fowler and Che-Man Lee

SESSION 11: MAINTENANCE AND MILL ENGINEERING

Mill Implementation of Troubleshooting Guides to Improve Operations
Albert W. Griffin, H. C. Anderson and Terri L. Knoke

The Future of Asset Management
James Davis and S. Bradley Peterson

Outsourcing Maintenance in the Pulp and Paper Industry
Fred Dew

SESSION 13: DIGESTER OPERATIONS

Improved Understanding of Chip Steaming and Impregnation
Sergey Y. Malkov, Aaron T. Leavitt and Bertil C. Stromberg

The Development of an Efficient Continuous Digester Chip Feeding System
Allen Turner, Bertil C. Stromberg, Eric Wiley and Ted M. Poulin

SESSION 15: INNOVATION AND EFFICIENCY IMPROVEMENT TOOLS I

Mill Application of a New Continuous Digester Model
Peter W. Hart, Ferhan Kayihan and Alan Bills

Integrated Dynamic Pulping Process Model
Jouni O. Savolainen

SESSION 18: OPTIMIZING THE ECF EXTRACTION STAGE

New Insights into Lignin Modification During Chlorine Dioxide Bleaching Sequences (IV): Modifications in (EP) and (EOP) and Its Impacts on the D1 Stage
Brian N. Brogdon and Lucian A. Lucia

High-Temperature Extraction: Understanding the Interaction of Variables through Modelling
Barbara Van Lierop, Michael Faubert, Zhi-Hua Jiang and George Sacciadis
Optimization of Chlorine Dioxide Bleaching Sequences for Kraft Pulps Through Improved Oxidative Alkaline Extraction Stage Performance
Brian N. Brogdon and John Bell

SESSION 19: RECOVERY BOILER PERFORMANCE IMPROVEMENT

Fume Sensor—An Online Boiler Optimization Tool
Alarick J. Tavares and Simon Youssef

Measured Data for Sootblowing Optimization
Erkki J. Valimaki and Keijo Salmenoja

SESSION 21: INNOVATION AND EFFICIENCY IMPROVEMENT TOOLS II

Overview of Advanced Simulation Models for Kraft Mills
Louis L. Edwards, Barry Malmberg and Yongxiang Gu

Including Chip Quality Parameters for Model Predictive Control of TMP Pulp Properties
Luc Laperriere, Robert Lanouette and Yang Li

SESSION 22: MIXING AND MASS TRANSFER IN OXYGEN DELIGNIFICATION

Pilot Scale Trials of a Low Consistency Oxygen Delignification System Performed with a Hydrodynamics ShockWave Power Reactor
Peter W. Hart, Melany M. Gilboe, George Adusei, Douglas Mancosky and Daniel A Armstead

Behavior of Oxygen Gas in Industrial Medium Consistency Oxygen Delignification Systems
William J. Miller

Gas Liquid Mass Transfer in Laboratory Oxygen Delignification Reactors
Joseph M. Genco, Deep Krathapalli and Adriaan Van Heiningen

SESSION 23: MILL ENERGY OPTIMIZATION

Method for Benchmarking Energy Use in Pulp and Paper Operations
David W. Francis and Thomas C. Browne

Energy Monitoring Keeps Cost Down in Louisiana Mill
Vesa Pylkkanen, Theodora Retsina and Maurice L. Broussard

Energy Reduction at a Kraft Mill: Examining the Effects of Process Integration, Benchmarking, and Water Reduction
Michael T. Towers

SESSION 24: RECOVERY BOILER CORROSION

Analysis of Causes of Tube Temperature Excursions in Recovery Boilers
Masahiro Kawaji, Desmond Tay, Thomas M. Grace and Honghi Tran

Corrosion and Cracking of Bottom Scrapers in Continuous Digesters
Angela Wensley, P.E.
SESSION 28: ADVANCES IN ECF BLEACHING

Hot Chlorine Dioxide Bleaching—A Modified Approach
Martin Ragnar and Stefan Backa

The Fate of Chlorine Species During High Temperature Chlorine Dioxide Bleaching
Jorge L. Colodette, Gustavo Ventori and Katia M. Eiras

The Possibilities to Reduce Chlorine Dioxide Consumption in the ECF Bleaching of Bamboo Kraft Pulp
Man T. Vu, Raimo J. Alen and Hannu K. Pakkanen

SESSION 31: MAINTAINING OR IMPROVING BLEACHED PULP PROPERTIES

The Use of Magnesium Hydroxide as a Cost Effective Cellulose Protector in the Pressurized Alkaline Peroxide (Eop) Bleaching Stage
Aileen R. Gibson, Arvind Thakore, Jim K. Oei, Robert J. Ringrose and Mark Wajer

Tailoring Fiber Properties During One-Stage Oxygen Delignification Fiber Acid Group Content Development
Dongcheng Zhang, Arthur J. Ragauskas, Qingxi Hou and Xin-Sheng Chai

SESSION 32: GASIFICATION & PULPING

Effects on Pulp Yield and Properties Using Modified Pulping Procedures Involving Sulfur Profiling and Green Liquor Pretreatment
Mathias Lindstrom, Adrianna G. Kirkman, Hasan Jameel and Ved Naithani

Economics of Integrating Black Liquor Gasification with Pulping: Part II—Effects of Yield Increases from Modified Pulping with Polysulfide
Mathias Lindstrom, Adrianna G. Kirkman and Hasan Jameel

SESSION 33: EVAPORATORS

A New Method to Improve Soap Separation in Black Liquor by Adding Extracted Neutrals of Tall Oil
Esa Pirttinen, Per J. Stenius, Tapani Vuorinen, Kari K. Kovasin and Kari Ala-Kaila

SESSION 35: WASHING AND FILTRATES

The Effect of Dissolved Organics Substances on the Distribution of Metal Ions in a Pulp Suspension
Akpojotor Shemi and Jeffery S. Hsieh

Modeling of Bleach Plant Washer Mineral Scale
Alan W. Rudie and Peter W. Hart

SESSION 36: CORROSION PREVENTION

Improving Mill Performance with Advanced Wear Protection
Chad Juliot, Jennifer S. Broadwater and Andreas Weckesser
SESSION 38: DEVELOPMENTS IN BLEACHING II

Improved Deresination During Oxygen Delignification Part II: Effects of Blended Surfactant Addition
Michael H. Schofield, Lawrence H. Allen, Jean Bouchard and Michel Faubert

Formation of Dissolved High Molecular COD and Lignin in ECF-Bleaching of Eucalyptus Kraft Pulp
Ulf H. Germgard and Jenny Radman

Defining the Benefits of High-Kappa Kraft Pulps for ECF Bleaching Operations
Arthur J. Ragauskas, Yunqiao Pu, Ved Naithani, Hasan Jameel and Lucian A. Lucia

SESSION 39: MILL WIDE INSPECTION PROTOCOLS FOR TANKS AND PRESSURE VESSELS