Session: 0  Introduction

0 - 1  Earth, Wind, Fire and Water: (Some) Recent Advances in Understanding the States of Matter
       Marc Donohue, Johns Hopkins University
       (No paper available.)

Session: 1  Coating Structure and Print Quality

1 - 1  Rate of Vehicle Removal from Offset Inks: Gravimetric Determination of Imbibition Behaviour of Pigmented Coating Structures
       Joachim Schoelkopf, University of Plymouth
       Patrick A. C. Gane, OMYA Inc.
       G. Peter Matthews, University of Plymouth
       Catherine Ridgway, OMYA AG
       Daniel C. Spielmann, OMYA AC

1 - 2  The Role of Pore Density in the Setting of Offset Printing Ink on Coated Paper
       Janet S. Preston, Imerys Minerals Ltd.
       Nick J. Elton, IMERYS Minerals Ltd.
       Anabelle Legrix, IMERYS Minerals Ltd.
       Christopher Nutbeem, IMERYS Minerals Ltd.

1 - 3  Effect of Coat Weight and Drying Condition on Coating Structure and Ink-Setting
       Yang Xiang, University of Maine
       Douglas W. Bousfield, University of Maine

Session: 2  Techniques for Coating Characterization

2 - 1  Print Quality vs. Coat Weight and Binder Distribution in Coated Paper
       Jarno Kansanaho, University of Jyvaskyla
       Heikki J. Hakkanen, University of Jyvaskyla
       Juha Korppi-Tommola, ENSO Espanola S.A.

2 - 2  Characterization of Coating Colours with NIR Spectroscopy
       Johan Pellfolk, Iggesund Paperboard, Holmen
       Susanna Joki, Iggesund Paperboard, Holmen
       Anders Brundin, Iggesund Paperboard, Holmen
       Philippe Letzelter, Iggesund Paperboard, Holmen

2 - 3  A Micro-Porosity Probe for Coated Papers
       Joshua Mathews, University of Maine
       Adriaan Van Heiningen, University of Maine
       Douglas W. Bousfield, University of Maine
Session: 3 Ingredient Interactions and Coating Properties

3 - 1 Microcalorimetric Study of Interactions Between Paper Coating Components
Charles Kan, Dow Chemical USA, John D. Oates, Dow Chemical USA
Mark Pollock, Dow Chemical USA, Ron Van Guilder, Dow Chemical USA
David L. Wolfe, Dow Chemical USA

3 - 2 The Effect of Binder Chemistry on the Colloidal Stability of Calcium Carbonate Suspensions
Kaj A. Backfolk, Abo Akademi University
Tom O. Grankvist, Abo Akademi University
Dan E. Eklund, Abo Akademi University

3 - 3 Physical and Chemical Modifications in Latex Binders and Their Effect on Coating Color Rheology
Annaleena Kokko, Abo Akademi University
Tom O. Grankvist, Abo Akademi University
Dan E. Eklund, Abo Akademi University

3 - 4 The Effect of Polymers on the Final Coating Structure
Sanna M. Rousu, Abo Akademi University
Tom O. Grankvist, Abo Akademi University
Dan E. Eklund, Abo Akademi University

3 - 5 Effects of Carboxylation and Neutralizing Agent of Polymer Interdiffusion and Water Permeability of Latexes
Caisa Andersson, Karlstad University
Lars M. Jarnstrom, Karlstad University
Ann-Charlotte Hellgren, Biosensor Applications Sweden AB

Session: 4 Innovations in the Coating Process

4 - 1 Bubble Elimination for Coating Material
Ryushi Suzuki, Opus System, Inc.
Yataka Tanada, Hosei University
Kazuhiko Iwamoto, Hosei University
Kazuyoshi Arai, Hosei University

4 - 2 An Experimental Study of a Metering Nip in a Metering Size Press
Janne Tapani Poranen, VTT Energy
Johan P. Gron, Valmet
Markku Kataja, VTT Energy
Antti V. Niemisto, Nuerola Oy

4 - 3 On the Dominant Flow Instabilities in High-Speed Blade Coating with Pond Application Systems
Charles Q. Chen, Appleton Papers Inc.

Session: 5 Physics and Modeling of the Coating Processes, Structure and Properties

5 - 1 Modeling of Coating Layer Mechanical Properties
Martti O. Toivakka, Abo Akademi University
Douglas W. Bousfield, University of Maine
| 5 - 2 | **Modeling Coating Structure Development Using a Monte-Carlo Deposition Method**  
David J. E. Vidal, PAPRICAN  
Xuejun Zou, PAPRICAN  
Tetsu Uesaka, PAPRICAN |
| 5 - 3 | **An Application of CFD to Blade Erosion by Particle Impact in Suspension Coating**  
Thomas D. Parish, Potlatch Corporation  
Ilias Iliopoulos, University of Minnesota  
L. E. Scriven, University of Minnesota |
| 5 - 4 | **Blade Coating of a Rough, Deformable Substrate**  
Manish Giri, University of Maine  
William N. Unertl, University of Maine  
Douglas W. Bousfield, University of Maine |
| 5 - 5 | **The Influence of Structural Anisotropy On Fluid Permeation In Porous Media**  
Paul Bodurtha, University of Plymouth  
G. Peter Matthews, University of Plymouth  
John P. Kettle, SCA Graphic Research AB  
Sven Lohmander, STFI  
P. W. James, University of Plymouth |
| 5 - 6 | **Maximally Random Jammed Sphere Packings**  
Juan Eroles, Princeton University  
(No paper available.) |