



2011 Technical Conference

Facing Today's Printing Ink Challenges



Eaglewood Resort and Spa, Itasca, IL October 18 - 20, 2011

Facing Today's Printing Ink Challenges

Tuesday, October 18, 2011

SHORT COURSE OFFERINGS (8:30 - 11:30 am - Concurrent Sessions - before conference)

Status Update of Global GHS Implementation

Jon Bang, The Wercs, Ltd. (Worldwide Environmental Regulatory Compliance Systems)

This short course offer will present a **Status Update of Global GHS Implementation** and how it will impact all industries here and abroad.

- Overview of GHS (Globally Harmonized System)
- Implementation Around the World
- OSHA GHS Changes and How to Prepare
- CLP Implementation Status
- Leveraging Technology to Comply with GHS Globally
- Available Expert Resources to Consider for Managing GHS

Introduction of Photo Initiator Chemistry: Making the Right Choice for Your Application

Eugene Sitzmann, BASF Corp.

The course objectives are to understand what photoinitiators are and how they work. We especially want to:

- Review fundamental principles, which will guide implementing the technology and see how they can be used to engineer solutions to maximize efficiencies of various coating processes.
- Learn how to select the type and amount of initiator appropriate for common ink systems, and
- Highlight the latest trends in the industry and point out where the likely growth will occur.

Tuesday, October 18, 2011

OPENING OF TECHNICAL CONFERENCE (1:30 - 5:00 pm)

Keynote Address:

The Future of Packaging - *Shanna Moore, DuPont*

This presentation will focus on current and future trends in the packaging market. What are Brand Owners asking for? One raw material suppliers perspective on addressing these needs now and into the future will be presented.

State of the Industry - *Rick Krause, BASF Corp.*

Each year NAPIM assembles industry data from and on behalf of NAPM members to provide a picture of the current state and outlook of our industry. This presentation will provide an overview of the current print market and a discussion of industry trends and directions.

Tuesday, October 18, 2011 continued

OPENING OF TECHNICAL CONFERENCE (1:30 - 5:00 pm)

The Future of Raw Materials Part 2 - Diane Parisi, Flint Group - Facilitator

A short follow-up of the materials covered in last year's raw material panel discussion will be followed by a second installment panel of suppliers experts covering Nitrocellulose, waxes, carbon black, polyamide and polyurethane resins, again discussing the current market drivers, market conditions (Supply shortages, environmental issues, capacity concerns, etc.) and future trends and outlook for the sourcing concerns of the industry.

Nitrocellulose - *Marcelo Sigalli & Jose Portinho, Cia Nitro Quimica Brasileira*

Waxes - *Joon Choo, Shamrock Technologies, Inc.*

Carbon Black - *Tom Powell, Orion Engineered Carbons*

Polyamides & Polyurethanes - *Matt Bianchi, BASF*

Tabletop Exhibits & Technology Spotlights

This venue will consist of both tabletop exhibits and technology spotlights which will take place in a designated section of the reception area. Tabletop Exhibits provide the traditional displays by NAPIM suppliers. Technology Spotlights are 7-10 minute "mini presentations" by NAPIM suppliers on newly developed technologies and products.

Wednesday, October 19, 2011 (8:00 am - Noon - Concurrent Sessions)

Process Economics

TiO₂ Selection Parameters for Ink Manufacturers - Brett Beauregard, Huntsman

Maximizing performance of TiO₂ pigment in an ink application is highly dependent upon matching the right grade of TiO₂ to desired end use properties. Design characteristics associated with the base pigment and the surface treatment can significantly impact end use performance. This presentation provides the formulator with an overview of TiO₂ pigment design, and how to select the right TiO₂ pigment grade depending upon final application properties desired.

Volatiles Determination for Thin-Film UV Coatings - Robin Wright, 3M

Many unsuccessful attempts have been made over the past 20+ years to develop a test method to measure volatiles from thin radiation curable coatings, especially pigmented inks. This presentation will focus on a new method for measuring volatiles from radiation curable acrylate monomers, oligomers, and blends. More significantly, the new method allows for volatiles from fully-formulated UV curable inks to be measured in the absence of interferences such as pigments. RadTech has endorsed the method and we are presently working with ASTM. This presentation will describe the method in detail, provide examples, show a short video, and update attendees on the current status of the test method within ASTM.

Using Press Simulators - Dillon Mooney, PIA

The benefits of simulation are well documented in other industries, and they hold true in printing, as well. Press training simulators are available for flexo, gravure, sheetfed, coldset, and heatset to reproduce a wide variety of printing conditions and problems, accelerating training that would otherwise be costly and time-consuming on-press. Technical personnel can see the virtual results of the interaction of press materials and settings, even the ability to mimic a specific job. Dillon Mooney, simulator specialist for Printing Industries of America, will discuss the use of press simulators and demonstrate the sheetfed offset training simulator.

Facing Today's Printing Ink Challenges

Wednesday, October 19, 2011 (8:00 am - Noon - Concurrent Sessions)

Process Economics *continued*

NPIRI Lecture Series 1st Place Winner

Water-based Polymer Emulsion for Printing Inks on Corrugated Substrates - *Rick Grandke, BASF*

This presentation will give a novel approach to design water-based polymers to increase opacity significantly over existing commercial materials.

Pigment Dispersion-State of the Art - *Steve Albrecht & Kerstin Iverson, AVEKA, Inc.*

Dispersions have become more important in our daily life, from the products we use every day to high technology applications emerging markets. The science of milling and processing dispersions is a dynamic field that requires the marriage of formulation and process to make a stable product. This presentation will cover dispersions from a processing point of view. The topics included in this talk range from the basics of what is a dispersion, formulation, characterization, and the current processing techniques being employed to make dispersions.

Wednesday, October 19, 2011 (8:00 am - Noon - Concurrent Sessions)

Regulatory Session

The Regulatory Picture Today-To the EU and Beyond - *Richard Johnson, Ph.D., Penn Color, Inc.*

New regulations have been implemented in Europe over the last several years, including REACH, CLP, and PIM. This presentation will provide an overview of what is happening in EU now that companies are submitting information under these regulations, and what to watch and watch out for, in the coming years. The issues and insights will then be applied to understand the global impact of the EU activities. The presentation will illustrate a range of resources that a company can use to understand its particular regulatory situation.

GHS Integration Into the HazCom Standard-Impact on Ink Manufacturers - *Jon Bang, TheWERCs*

This presentation will be a quick overview on GHS with a consideration of the various approaches to manage GHS globally.

- Overview of GHS (Globally Harmonized System)
- Leveraging Technology to Comply with GHS Globally
- Available Expert Resources to Consider for Managing GHS

OSHA Update and News Briefs - *Dave Currier, Flint Group*

What has changed with OSHA in the past year and where OSHA is going? This presentation will offer insight on what changes have occurred with OSHA's regulations, culture and their future plans. You'll gain insight into their pipeline of regulatory activities, focus of the current administration, combustible dust special emphasis program, new penalties structure, and proposed record-keeping changes. You will review the top 10 most common OSHA violations and much more. Additionally, you will hear tips on how to stay abreast of these every changing regulations to avoid being cited for a future or common violation.

Green Chemistry Legislative and Regulatory Initiatives - *Jim Solyst, Environ International Corp.*

The concept of green chemistry has received considerable attention in recent years from legislative bodies and regulatory agencies, as well as from industrial sectors. This presentation will describe how the traditional green chemistry community—best represented by the American Chemical Society—defines and promotes green chemistry principals and practices; and how stakeholders (USEPA, the chemical industry, and NGOs) have responded to the concepts growing interest and appeal. The presentation will cite how in California the term green chemistry has been recast to mean chemical regulation.

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Wednesday, October 19, 2011 (8:00 am - Noon - Concurrent Sessions)

Regulatory Session continued

Analytical Techniques to Identify Contaminants and Components on Food Contact Materials

Karim Bentayeb, PhD, USFDA

Set-off can be defined as the unintentional transfer of substances used in printing inks from the external printed surface of food packaging to the inner, food-contact, surface. At present the main solution is visual quality control. However, since components from varnishes covering inks cannot be seen, and no other technique is commercially available to detect set-off in food packaging, a new, rapid approach is needed. Ambient ionization sources (such as DART) provide the possibility of quickly detecting compounds on a solid surface through mass spectrometric identification of their ions.

Thursday, October 20, 2011 (8:00 am - Noon)

NEW TECHNOLOGY INNOVATIONS SESSION

DRUPA—Update and Overview - Dave Savastano, Ink World

Every four years DRUPA is the "big show" for the printing industry. Traditionally, ink manufacturers have a prominent position at the show. With DRUPA 2012 right around the corner, now is the time to look back at the past few DRUPA events to get an idea of what may be in store in 2012, as well as look ahead as to which ink companies will be on hand.

LED Technology for UV Applications - Stephen Metcalf, Air Motion Systems, Inc.

Power and scalability advances in commercially available LED UV light sources are driving adoption in digital, offset and flexo applications. Find out what's behind this trend, what's happening today, and what to expect in the next several years as printers contend with a bevy of new UV curing alternatives based on solid-state LEDs.

Mineral Oil and Food Packaging - Deborah White, Recycled Paperboard Technical Association

In the wake of several articles by a European scientist, the German government is actively considering a new regulation to limit the potential migration of mineral oil from food packaging to food. As a result, the packaging industry may need to consider all potential sources of mineral oil in their products, including inks. Learn the latest developments in the EU regulatory arena, the potential implications for North American food packaging regulation, and the industry response.

Tall Oil Rosin/BioFuel Classification - Industry Impact and Action - Hunter Harris, MeadWestvaco

The use of Bio Mass as an energy source is a key energy and environmental strategy in many countries. Tall Oil Rosin, derived from a co product of the Kraft pulping process called Crude Tall Oil (CTO), is a bio mass and may be subject to various market and regulatory bio mass energy. Existing legislation and incentives in the EU have already repurposed CTO for transportation fuel. US regulations are a threat, but have not progressed as far as in the EU. Industry is taking action to educate legislators and regulators to eliminate or minimize market distorting government action and maintain free market principles.

Digital vs Conventional—What the Future Holds - Jim Hamilton, InfoTrends

The printing & publishing markets are in the midst of two simultaneous transformations. Within digital print there is a shift from monochrome to color output. In conventional markets (i.e. offset, gravure, and flexo) there is a shift from long-run manufacturing to short-run, targeted, and personalized print. These trends are having an impact on the way print is used for a range of print applications. At the same time, high-speed inkjet technologies are gaining speed, productivity, and quality. This session will explore the growth of digital and its impact on the conventional printing market.





CONFERENCE AT A GLANCE

Conference Chairman

Mark Hill

INX International Ink Co.

Co-Chairman

Doug Anderson

Central Ink Corp.

Process Economics Session

Moderator

Steve Okunevich

Lubrizol Advanced Materials, Inc.

Co-Moderator

Jon Graunke

INX International Ink Co.

Regulatory Session

Moderator

Jerry Napiecek

Colorcon, No-Tox Products

Co-Moderator

Rich Johnson

Penn Color, Inc.

New Technology Innovations Session

Moderator

Bob Wichtendahl

Toyo Ink International Corp.

Co-Moderator

Doug Anderson

Central Ink Corp.

Pre Conference Events

Monday, October 17th

Noon-6:00 pm

NPIRI Board of Directors' Meeting

6:00-8:00 pm

NPIRI Directors' Reception*

* By invitation only

Technical Conference

Tuesday, October 18th

8:30 am-Noon

SHORT COURSES (concurrent sessions)

- Photoinitiators for Energy Curable Inks
- GHS for Ink Manufacturers

Noon-1:30 pm

Buffet Lunch

1:30-5:00 pm

Opening Session

- Keynote Address
- The Future of Food Packaging from a Brand Owner's Perspective
- The Future of Raw Materials Panel

5:00-7:30 pm

Tabletop Exhibits / Technology Spotlights
Dinner on Your Own

Wednesday, October 19th

7:00-8:30 am

Continental Breakfast

8:00 am-Noon

Process Economics Session (concurrent)

8:00 am-Noon

Regulatory Session (concurrent)

1:00-6:00 pm

Golf Outing

1:00-5:00 pm

NAPIM Board of Directors' Meeting

6:30-10:30 pm

Reception & Awards Dinner in conjunction
with NAPIM's Open Board Dinner

Thursday, October 20th

7:00-8:30 am

Continental Breakfast

8:00 am-Noon

New Technology Innovations Session

**REGISTER
TODAY!**

**REGISTRATION FORM
ENCLOSED**

Hotel Room Block Closes September 27, 2011

Room Rates: \$164 (includes resort fee)

Eaglewood Resort & Spa
1401 Nordic Road
Itasca, IL 60143

Reservations: 877-285-6150
www.eaglewoodresort.com

Mention NPIRI Technical Conference to obtain these room rates.

CONFERENCE SPECIAL EVENTS

TUESDAY - October 18th
(5:00-7:30 pm)

TABLETOP EXHIBITS &
TECHNOLOGY SPOTLIGHTS

During the conference opening day reception.

WEDNESDAY

October 19th - 7:00 pm

AWARDS DINNER

Toastmaster - Lisa Fine, NPIRI President
Joules Angstrom Corp.

Awards for TAM Service and
Technical Achievement
will be presented.

WEDNESDAY—October 19th

GOLF HOLE SPONSORSHIP

This year there will be an opportunity for hole sponsors with acknowledgement at the hole they sponsor.

Sponsorships are \$200 per hole.

Golf Tournament is \$85; Club rental is \$35

**To participate please sign up on the
registration form.**

WEDNESDAY—October 19th

NAPIM BOARD OF DIRECTORS FALL OPEN DINNER

(in conjunction with the Awards Dinner)

Reception 6:00 pm - Dinner 7:00 pm

Cost is \$105 per person

**If you are not attending the Technical Conference
please use the separate form**