### Sunday October 25, 2015

**8:00 AM - 4:30 PM**
Registration Table
**Location:** Lobby

<table>
<thead>
<tr>
<th>Tracks:</th>
<th>Web Handling Short Course</th>
<th>Web Slitting Short Course</th>
<th>SPE Short Course</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vacuum Short Course</strong></td>
<td>Web Handling</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Web Handling Short Course</strong></td>
<td>Dr. David Roisum, Finishing Technologies</td>
<td></td>
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<tr>
<td><strong>Web Slitting Short Course</strong></td>
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</tr>
</tbody>
</table>

**8:30 AM - 12:00 PM**

| 1:30 PM - 5:00 PM                  | Web Slitting Technology   |                           |                  |
|-----------------------------------|---------------------------|---------------------------|                  |
| **Vacuum Coating onto Polymer Films** | David Rumson, Slitting Education/Consultant | Location: Acacia 4-6 |                  |
| Donald J. McClure, Acuity Consulting and Training | Location: Acacia 1-3 |                           |                  |

**4:45 PM - 6:15 PM**
Keynote and Welcome Reception Sponsored by Precision Die Systems
**Location:** Sunset Veranda

**6:15 PM - 7:00 PM**
Opening Keynote - Economic Outlook
**Location:** Vista Ballroom - Robert Fry

**7:00 PM - 8:30 PM**
Opening Reception and TableTops Exhibition Sponsored by Nova Chemicals
**Location:** Royal Palm

### Monday October 26, 2015

**7:00 AM - 9:00 AM**
Breakfast Sponsored by L & M Instruments LLC - Followed by talk with the Concierge for Guests and Spouses
**Location:** Royal Palm

**7:00 AM - 5:00 PM**
Registration Table
**Location:** Royal Palm Foyer

<table>
<thead>
<tr>
<th>Tracks:</th>
<th>Web Coating Location: Orchid 2</th>
<th>Web Handling Location: Acacia 1-3</th>
<th>FlexPackCon Location: Orchid 3-4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sessions:</td>
<td>Flexible Devices</td>
<td>Drives and Static Control</td>
<td>Sustainable Solutions</td>
</tr>
<tr>
<td><strong>Vacuum Coating Location: Orchid 1</strong></td>
<td>Session Leaders: Andrew Jack, Vacuum Depositing Inc. and Joe Perdue, ECKART America</td>
<td>Session Leaders: Duane Smith, Davis Standard and Dave Rumson, Slitting Consultant/Educator</td>
<td>Session Leaders: Dr. Henk Blom, Rollprint Packaging Products</td>
</tr>
<tr>
<td><strong>Web Coating Location: Orchid 2</strong></td>
<td>Advances in Coating Technology Session Leaders: Dr. Greg Williams, Coveris Advanced Coatings and Dr. Mai Chen, DOW</td>
<td>Drive System Design for Low Web Speed Applications William Gilbert, Siemens Industry, Inc.</td>
<td>The Challenge of Flexible Packaging Recycling - Multilayer Films, Barrier Structures and Pouches Dr. Terry Cooper, ARGO Group International</td>
</tr>
<tr>
<td><strong>Web Handling Location: Acacia 1-3</strong></td>
<td></td>
<td>Coating and Printing Processes for the Surface Functionalization Andrea Glaue, KROENERT GmbH Co KG</td>
<td>Environmental Assessment of End-of-Life Options Abdelhadi Sahnooune, ExxonMobil Chemical Company</td>
</tr>
<tr>
<td><strong>FlexPackCon Location: Orchid 3-4</strong></td>
<td></td>
<td>Auto-Tuning Drives Clarence Klassen, KlassENGineering Inc.</td>
<td>Accelerating Sustainability in Packaging by Enhancing Recycle Stream Performance Dr. Didem Öner-Delirmanli, The DOW Chemical Company</td>
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**8:30 AM**
R2R Processing for Flexible Devices & Components Utilized in Wearable & Mobile Electronics
**Location:** Royal Palm

**9:00 AM**
R2R Processing for Flexible Devices & Components Utilized in Wearable & Mobile Electronics (continued)
**Location:** Royal Palm

**9:30 AM**
Current Activities of Coating Testbed and Converting Companies in Korea to Develop Functional Films by R2R Processes
**Location:** Royal Palm

**10:00 AM**
Break Sponsored by L & M Instruments LLC
**Location:** Royal Palm

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<tr>
<th>Sessions:</th>
<th>Advances in Coating Technology (continued)</th>
<th>Managing Static Accelerating Sustainability in Packaging by Enhancing Recycle Stream Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transparent Conductors Session Leaders: Andrew Jack, Vacuum</strong></td>
<td>Session Leaders: Dr. Greg Williams, Coveris</td>
<td>Dr. Kelly Robinson, Electrostatic Answers</td>
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<tr>
<td><strong>Advances in Coating Technology (continued)</strong></td>
<td></td>
<td>Dr. Didem Öner-Delirmanli, The DOW Chemical Company</td>
</tr>
<tr>
<td><strong>Rollers Session Leaders: Ken Guhse, Honeywell and Dr. David Roisum</strong></td>
<td></td>
<td>Dr. Didem Öner-Delirmanli, The DOW Chemical Company</td>
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<tr>
<td><strong>Sustainable Solutions (continued)</strong></td>
<td></td>
<td>Dr. Didem Öner-Delirmanli, The DOW Chemical Company</td>
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3M Advanced Conductor Technology
Scott J. Jones, 3M

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Jang Hwan Lee, SAM

Guidelines for Rolls Used in Web Handling Duane Smith, Davis-Standard LLC...178

A Compostable Solution for Flexible and Coated Paper Packaging...192
Randy Jester, BASF

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Roll-to-Roll Sputtered ITO/Ag/ITO Multilayer Films for Flexible Organic Solar Cells and Flexible Heaters
Han-Ki Kim, Sung-Hyun Park, Sang-Jin-Lee & Dr. Jae Heung Lee, Kyung Hee University.....148

After Over 100 Years of use, Mayer Rods are Still popular Today...171
Doug Krasucki, R.D. Specialties

Vacuum Pull Rolls - Design and Applications
Kristi Schmidt, Maxcess International Corporation.....179

Sustainable Collaboration: A Call to Action...N/A
Christopher Mitchell, Innovia

11:30 AM
New Materials for Transparent Conductors...149
Ajay Virkar, C3 Nano

Fundamental Causes of Coating Defects...173
Dr. Edward Cohen, Edward D Cohen Consulting Services

What is your Roller's True Shape and Why Does It Matter?...187
Steve Huff, Imperial Rubber

Efficient Design: Novel Packaging Technology
Rashi Tiwari, The DOW Chemical Company. N/A

12:00 PM
Lunch Sponsored by BASF
Location: Royal Palm

Sessions:
Process Sensitivities and Improvement
Session Leaders: Dante Ferrari, Celplast Metallized Products and Scott Jones, 3M

Advances in Coating and Lamination Technology
Session Leaders: Dr. Ken McCarthy, Clean Room Coating Solutions and John McGann, Henkel

Slitting and Splicing
Session Leaders: William Gilbert, Siemens and Steve Huff, Imperial Rubber

Food Safety and Preservation
Session Leader: Tom Dunn, FlexPacknology, LLC

1:30 PM
Metallizer with New Inductively Heated Evaporation Sources
Wolfgang Decker, Hilberg & Partner...204

Laminating System Application and Design Considerations...216
Bob Pasquale, New Era Converting Machinery

Improving Web Tension Regulation During Zero-Speed Splicing Operation...248
Prabhakar R. Papilla, Oklahoma State University

Food Safety Through Better Communication
Jim Huang, Bemis...266

2:00 PM
Mechanics-Driven Material Design for Optimized Barrier Films
Pierre Fayet, Tetra Pak (Suisse) SA...206

Latest Developments in Hot Melt Coating Technology for Special Tape Applications...227
Alexandre David and Gianni Zanatta, BOBST

Managing Sideforce, Can't Angle and Blade Profile in Tangent Slitting Applications to Reduce Edge Defects
Sean Craig, Maxcess...262

Food Safety Management Systems for Food Packaging Manufacturing: Vive la Difference...282
Tom Dunn, FlexPacknology, LLC

2:30 PM
AlOx - A Bright Past but do we Need to Protect the Future?...215
Steve Jackson, Camvac

Introducing Ultrasonic Welding Technology Into Continuous Web Lamination And Slitting Applications...242
Guy Gil, Chase Machine and Engineering

Shear Knife Overlap - The Most Common Set Up Error...N/A
Dave Rumson, Slitting Consultant/Educator

Changes in Regulation for Polymer Masterbatches...N/A
Dr. Mitchell Cheeseman, Steptoe & Johnson LLP

3:00 PM
Break Sponsored by BASF
Location: Royal Palm

Sessions:
Cathode and Substrate Heat Management
Session Leaders: Dante Ferrari, Celplast Metallized Products and Scott Jones, 3M

Advances in Coating and Lamination Technology (continued)
Session Leaders: Dr. Ken McCarthy, Clean Room Coating Solutions and John McGann, Henkel

Web Conveyance
Session Leaders: Duane Smith, Davis-Standard LLC and Clarence Klassen, KlassEnGineering Inc

Food Safety and Preservation (continued)
Session Leader: Tom Dunn, Flex Packnology LLC

3:30 PM
Cathode Heating in Reactive Magnetron Sputtering: A Previously Ignored Hysteresis Loop Provides a Direct Determination of the Secondary Electron Yield...297
Donald J. McClure,

Laminating to Digitally Printed Substrates for Flexible Packaging...316
Thomas Bezjian, PLC Technologies

How Accurately can I Guide my Web?...340
Jerry Brown, Essex Systems

Knowing Your Supply Chain: Traceability Solution for Products and Packaging...373
Dr. Michael Hogan, Applied DNA Sciences
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<th>Location</th>
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<td>4:00 PM</td>
<td>Substrate Thermal Heating Rates as a Function of Magnetically Controlled Plasma Impedance on Rotary Cathodes...306</td>
<td>Location: Vista Ballroom</td>
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<tr>
<td></td>
<td>Patrick Morse, Sputtering Components</td>
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<td></td>
<td>Drying Laboratory Methods for Characterization of Limited Rate Drying in Simulation Models...328</td>
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<td>Steve Zagar, B&amp;W Megtec</td>
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<td>Kevin Cole, Optimization Technology Incorporated</td>
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<td>Successes and Challenges Encountered in the Development of Active Packaging for Food...394</td>
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<td>Dr. Cynthia Ebner, Sealed Air Corporation</td>
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<td>4:30 PM</td>
<td>Sputter Coating of Plastic Film: Strategies for Reduction of Substrate Heat Load...311</td>
<td>Location: Royal Palm</td>
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<td>Holger Prehli, VON ARDENNE GmbH</td>
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<td>Functional Property Enhancement of Packaging and Labels Through Coating Jindal Films...338</td>
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<td>Combined Stresses for Webs Going Over Rollers...364</td>
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<td></td>
<td>Dr. David Roisum, Finishing Technologies, Inc.</td>
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<tr>
<td>5:00 PM - 6:00 PM</td>
<td>Vendor Session</td>
<td>Location: Vista Ballroom</td>
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<tr>
<td>6:00 PM - 7:30 PM</td>
<td>Reception and Tabletops Exhibition Sponsored by DOW</td>
<td>Location: Royal Palm</td>
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**Tuesday October 27, 2015**

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<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Location</th>
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</thead>
<tbody>
<tr>
<td>6:00 AM</td>
<td>Bernard Henry SK Fun Run</td>
<td>Location: Meet in Hotel Lobby</td>
</tr>
<tr>
<td>7:00 AM - 12:00 PM</td>
<td>Registration Table</td>
<td>Location: Royal Palms Foyer</td>
</tr>
<tr>
<td>7:00 AM - 9:00 AM</td>
<td>Breakfast Sponsored by Unimin</td>
<td>Location: Royal Palm</td>
</tr>
</tbody>
</table>

**Tracks:**
- **Vacuum Coating Location: Orchid 1**
- **Web Coating Location: Orchid 2**
- **Web Handling Location: Acacia 1-3**
- **FlexPackCon Location: Orchid 3-4**

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- **Barrier Adhesive for Flexible Packaging...452**
  - Mai Chen, DOW Chemical Company
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  - Neal Michal, Kimberly-Clark Corporation
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  - Raj Krishnaswamy, Braskem America...489
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  - Rick Weil, Mesirow Financial...N/A
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  - Kevin Cole, Optimization Technology Incorporated
- **Cationic Cure Mechanism for UV HMPSAs...461**
  - Natalie Ganio, Henkel Corporation
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  - Dr. David Roisum, Finishing Technologies, Inc.
- **M&A Panel Discussion: Sun Capital, Mesirow Financial, and Coversis Panel Discussion: Jeffery M Williams, Rick Weil, Dan Florian, Brian McGee, Coversis, Mearo Financial, Sun Capital, et al...N/A

**Time**
- **10:00 AM**
  - Break Sponsored by Unimin
  - Location: Royal Palm
- **10:30 AM - 11:30 AM**
  - Keynote: The U.S. Flexible Packaging Industry...500
  - Marla Donahue, Flexible Packaging Association
- **1:00 PM - 4:00 PM**
  - Dolphin Watch and Boat Sightseeing Tour
  - Location: Meet in Lobby
- **1:00 PM - 5:00 PM**
  - Scramble Golf Tournament Sponsored by Vacuum Depositing Inc.
  - Location: Meet in the Hotel Lobby for Carpooling to Course
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<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
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<tbody>
<tr>
<td>7:00 PM - 8:00 PM</td>
<td>John Reading Memorial Scotch Tasting</td>
<td>Acacia 1-3</td>
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<tr>
<td>7:00 AM - 9:00 AM</td>
<td>Breakfast Sponsored by Addvant</td>
<td>Vista Ballroom</td>
</tr>
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</table>

### Tracks:

**Vacuum Coating**
- Location: Orchid 1

**Web Coating**
- Location: Orchid 2

**Extrusion Coating**
- Location: Acacia 1-3

**FlexPackCon**
- Location: Orchid 3-4

### Sessions:

**Flexible Packaging & Barrier**
- Session Leaders: Don McClure, Acuity Consulting and Training and Dr. Anay Chilen, LEYBOLD OPTICS GmbH

**Flexible Electronics**
- Session Leaders: Mark Fehlmann, Madico, Inc. and Anand Sundararaman, Jindal Films

**Extrusion Coating Basics**
- Session Leader: Jim Cooper, Dow

**Processing Equipment and Materials**
- Session Leader: Dan Fajta, NOVA Chemicals

#### 8:30 AM
- Consumer Trends and Package Design
- Speaker: David Kessler & Bill Barlow, Printpack
- Glass...554 Substrates for Printed Electronic Applications
- Scott Pollard, Coming

#### 9:00 AM
- Consumer Trends and Packaging Design (continued)
- Speaker: David Kessler & William J. Barlow, Printpack
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- Mark Poliks, Systems Science and Industrial Engineering

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- Dr. Stella M. Van Eek, FHR Anlagenbau GmbH

### 10:00 AM
- Break Sponsored by Addvant
- Location: Orchid Foyer

### 10:30 AM
- Roll-to-roll ALD: Applications and Scaling Prospects...668
- Sami Sneck, Beneq

### 11:00 AM
- Optimizing the ALD Cycle for High Speed, Low Cost Barrier Films in Commercial Packaging Applications
- Bryan Danforth, Lotus Applied Technology...673

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- High Barrier Film for Flexible Packaging: Challenges and Latest Solutions for the Vacuum Web Coating Industry...681
- Fabiano Remediotti, Nordmeccanica Vacuum Division

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- Location: Vista Ballroom
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<th>FlexPackCon</th>
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<td>Location:</td>
<td>Orchid 1</td>
<td>Location: Orchid 2</td>
<td>Location: Acacia 1-3</td>
<td>Location: Orchid 3-4</td>
</tr>
<tr>
<td>Sessions:</td>
<td>Flexible Packaging &amp; Barrier (continued)</td>
<td>Solution Delivery Technology</td>
<td>Innovation Tools and Trends</td>
<td>Package Performance and Sealing</td>
</tr>
<tr>
<td>Session Leaders: Bill Barlow, Print Pack and Roland Trassl, AMAT</td>
<td>Session Leaders: Doug Krasucki, R.D., Specialties and Dr. Kelly Robinson, Electrostatic Answers, LLC</td>
<td>Session Leader: Donna Davis, ExxonMobil Chemical Company</td>
<td>Session Leader: David Constant, BASF Corporation</td>
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<tr>
<td>1:30 PM</td>
<td>Optimized High Barrier Properties of Plasma Assisted Deposited AlOx on BOPP and PET Films for Food Packaging Applications</td>
<td>Coating Process Performance: Start at the Beginning</td>
<td>Evaluating Your New Business Development (NBD) Process for Packaging</td>
<td>Functionality in Multilayer Films for Packaging</td>
</tr>
<tr>
<td>Dr. Anye Chifen, Bühler Alzenau GmbH</td>
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<td>...781</td>
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<td>2:00 PM</td>
<td>Understanding the Vacuum-Chamber Pressure Effect on Metallized Film Properties: Controlling the Timing of Vacuum Pump Maintenance</td>
<td>Solution Delivery for High-Precision Coating Todd Amdorfer, Carestream Contract Manufacturing</td>
<td>Innovation Contest: The Implementation of Innovation</td>
<td>Peelable Seal Films with Enhanced Moisture Barrier Properties for Flexible Packaging</td>
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<td>Eldridge Mount, EMMOUNT Technologies</td>
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<td>2:30 PM</td>
<td>Surface Functionalization of Web Substrates In-line With Metal and Metal Oxide Deposition</td>
<td>Optimizing Mix Performance</td>
<td>Developing an Effective Learning Strategy and Toolset to Innovate Successfully</td>
<td>Sealant Development for Flexible Packaging Using Light Microscopy</td>
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<td>Angelo Yializis, Sigma Technologies International</td>
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<td>3:00 PM</td>
<td>Break Sponsored by ExxonMobil Chemicals</td>
<td>Testing and Prediction of Puncture Resistance of Flexible Food Packages</td>
<td>10 Ways to Improve Corona &amp; Atmospheric Plasma Treatment Results</td>
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<td>...846</td>
<td>Dr. Lora Liang, N/A Mondelez International</td>
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<td>4:00 PM</td>
<td>Use of Plasma Sources and Feedback Control in Web Coating</td>
<td>Dispensing System Considerations</td>
<td>Creating Consumer Value Using High Barrier Films; A Campbell’s Brand Example</td>
<td>10 Ways to Improve Corona &amp; Atmospheric Plasma Treatment Results</td>
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<td>Frank Papa, Gencoa Ltd</td>
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<td>4:30 PM</td>
<td>Vacuum Web Coating: Solutions and Opportunities from High Power Pulsing</td>
<td>Flow Metering Associated with the Coating Operation</td>
<td>Speaker Panel Discussion Innovation Panel Discussion</td>
<td>Improving Oxidation of the Extrusion Melt at Higher Line Speeds and Lower Melt Temperatures for Better Heat Seal Integrity</td>
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<td>David J. Christle, Advanced Energy Industries</td>
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<td>...N/A</td>
<td>...877</td>
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<td>5:30 PM - 7:30 PM</td>
<td>Farewell Reception Sponsored by Olbrich</td>
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<td>Robert Hammond, Mica Corporation</td>
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  Camille Drake, Dirk Van Der Sanden, Brad Kramer

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  Sang-Jin Lee, Cheol Hwan Kim, Jae Seong Park, Han-ki Kim, Sung-Hoon Choa, Jae Heung Lee