A Word from the Chairman:

The 2019 edition of PEI’s Technical Forum returns to Louisville, KY and it is shaping up to be another great event for the porcelain enameling industry. Here is your chance to learn what is new in the world of porcelain enameling and pick up some ideas that will have a positive impact for you back in your plants and laboratories. We’ll have a full schedule of information-packed technical papers and practical shop-based presentations. This event is a must for everyone involved in porcelain enamel shop or laboratory operations as well as for those providing materials, equipment, chemicals and services to the industry.

Thanks to the following Program Committee members; Charles Baldwin (Chair), Monica Sawicki, PhD (Vice chair), Jason Butz, Peter Dority, Phil Flasher, Cullen Hackler, Stewart Hackler, Mike Horton, David Latimer, Joe Melaro, Frank Mohar, Glenn Pfendt, Jack Waggener and Ted Wolowicz. This team has spent several months finalizing this program. It includes over 25 presentations on what is new in the world of porcelain enameling.

Our 34th Back-to-Basics Workshop gets us off to a great start on Tuesday, May 7 and is followed by the 28th Suppliers’ Mart that evening. The traditional presentation of lectures and papers happens on Wednesday and Thursday during our 81st Technical Forum. We are delighted to have Mr. Tom Kiser (Worthington Energy Innovations) presenting the A I Andrews Memorial Lecture.

On Thursday afternoon we will have a seminar titled “Furnaces and Advanced Furnace Maintenance” which will be coordinated by Jeff Robenson, Kevin Coursin and Mike Horton.

Please send your registration form to PEI today and take advantage of the “early registration” discount. And, separately, be sure to make your hotel reservations directly with the Seelbach Hilton Hotel (1-800-333-3399). The PEI room rate is $179 plus taxes. You can also book your room online with the link from the PEI website, www.porcelainenamel.com.

On behalf of the entire Tech Forum Program committee, I look forward to seeing you in Louisville in May.

Charles Baldwin, Chairman
2019 PEI Tech Forum Program Committee
Advance Program - Tentative

2019 PEI Technical Forum, Suppliers’ Mart and “Back-to-Basics” Workshop

Monday May 6, 2019  Early Registration & Arrivals
4:00 PM – 6:00 PM  Early arrivals & registration

Tuesday May 7, 2019  34th Back-to-Basics Workshop and 28th Suppliers’ Mart

Chairman: Charles Baldwin – Ferro Corporation

Faculty: Jason Butz (Prince), Mike Horton (Worldwide Finishing), David Latimer (Whirlpool), Frank Mohar (Nordson), Suresh Patel (Chemetall), Glenn Pfendt (A. O. Smith) and Ian Toupin (Ferro)

7:30 AM – 8:30 AM  Registration
8:30 AM – 8:45 AM  Welcome and Introductions
8:45 AM – 12:00 PM  B2B Session One
                      Steel (metal) selection
                      Design and fabrication
                      Cleaning and metal preparation
                      P/E Frit, raw materials & mill additions
12:00 PM – 1:00 PM  Lunch
1:00 PM – 5:00 PM  B2B Session Two
                      Wet P/E coating
                      Electrostatic powder coating
                      Drying and firing
                      Inspection, handling and storage
                      Defect analysis and troubleshooting
3:00 PM – 5:00 PM  PEI Board of Directors Meeting
5:00 PM – 7:00 PM  Suppliers’ Mart Reception
Wednesday May 8, 2019  

**81st PEI Technical Forum and 28th Suppliers’ Mart**

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<tr>
<th>Time</th>
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| 8:30 AM - 8:45 AM | **Welcome and Introductions**  
  Michael Cukier – PEI President  
  Charles Baldwin – Tech Forum Chairman |
| 8:45 AM – 9:45 AM | **A. I. Andrews Memorial Lecture**  
  “America’s Energy Coach,” Tom Kiser, Worthington Energy Innovations |
| 9:50 AM – 10:05 AM | **Porcelain Enamel Markets**  
  “An Update on the Porcelain Enamel Market,” Sandra Frydryk, Ferro Corporation |
| 10:05 AM – 10:25 AM | **Break**                                                                                   |
| 10:25 AM – 12:00 PM | **Laboratory Investigations**  
  “The Effect of Application Equipment on Powder Performance,”  
  Ian Toupin, Ferro Corporation  
  Roger Wallace, A. O. Smith Protective Coatings  
  “Electrostatic Powder Application of Exhaust Pipes for Stoves,”  
  Dieter Jacobs and Johan DeSoete, Prince Minerals  
  “Investigation of Low Lithium/Lithium Free Frit to Meet German Food Contact Regulation,”  
  Ashton Kelchner, TOMATEC America  
| 12:00 PM – 1:00 PM | **Lunch**                                                                                   |
| 1:00 PM – 2:30 PM | **Enameling Processing and Systems**  
  “Advancements in Robotic Coatings Technologies and the Benefits They Bring,”  
  Mike Dilday, FANUC America  
  “Reduce, RECLAIM, Reuse, Recycle: Comparing Porcelain Coating Reclamation Systems,”  
  Glenn N. Pfendt  
  “Wet Spray Guns and Enamel Delivery,” Tim Byrne, Worldwide Finishing and Supply  
| 2:30 PM – 2:45 PM | **Break**                                                                                   |
2:45 PM – 3:45 PM  Enameling Equipment and Controls

“Application of Non-Contact Coating Thickness Measurement,” Martin Rola and Andor Bariska, Sapience Automation

3:45 PM – 5:15 PM  Cleaning and Metal Preparation
“Reducing Water Consumption While Maintaining Quality,” John O’Connor, Atotech USA

“Chemical Process Sustainability: Don’t Forget the Physics,” Ken Kaluzny, Coral Chemical Company

“Chemical Cleaning,” Scott Schaff, Americo Chemical

“Basting Basics – A Review of Blast Cleaning Processes,” Mat Loutzenheiser, Pangborn

5:15 PM – 7:15 PM  Suppliers’ Mart Reception

5:30 PM – 6:00 PM  ASTM B08.12 Committee Meeting

Thursday May 9, 2019  81st PEI Technical Forum and Furnace Seminar

8:30 AM - 8:40 AM  Welcome and Introductions
Monica Sawicki, PhD – Tech Forum Vice Chairman

8:40 AM – 9:15 AM  Enamel Products & Processes
“Update on Reactive Porcelain Enamel Coated Wire for Concrete Reinforcement,” Dr. Mark McGinley, University of Louisville


9:20 AM – 10:30 AM  Powder Enameling Systems
“New Developments in Electrostatic Powder Systems,” Frank Mohar, Nordson Corporation

“Color Change Enamel Systems,” Joe Glassco, Wagner Systems
"The Robots Are Coming, The Robots Are Coming!
Smart Factory Coating Applications Embracing the Use of Robots," Jeff Hale, Gema

10:30 AM – 10:45 AM  Break

10:45 AM - 11:40 AM  Porcelain Enamel Environmental Issues
"Cobalt and Other Conflict Minerals," Prakash Mishra, Umicore
"Environmental - New Silica Rule, EPA, OSHA, TSCA, etc.,”
Jack Waggener, AECOM
"Complying with the New Silica Rule - New Materials, Equipment and/or Measurements,” Glenn N. Pfendt

11:45 AM – 12:15 PM  PEI Committees and Programs
“ASTM B08.12,” Charles Baldwin, Ferro Corporation
“PEI Tech Forum Proceedings,” Charles Baldwin, Ferro Corporation
“2018 IEI Congress Review,” Glenn N. Pfendt
“The State of the Institute,” Cullen Hackler, PEI

12:15 PM - 1:15 PM  Lunch (lunch for “Furnace” seminar participants only)

1:15 PM - 4:15 PM  Seminar - Furnaces and Firing Technologies
(Specific registration is required)
We will have three presentations and then ask the speakers to remain as a panel to answer questions, etc. from the audience. Please send any questions that you have to us early and we will be sure they are asked of the panel.

4:15 PM  2019 PEI Tech Forum Concludes
2019 PEI Tech Forum & Back-to-Basics (B2B)

Registration Form
(online form at www.porcelainenamel.com)

Attendee Information

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Registration Fees (circle your choices)

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Payment Information

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Comments: _____________________________________________________________

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Please make your room reservations directly with the Seelbach Hilton Hotel (1-800-333-3399) – be sure to ask for the PEI room block and rate of $179 plus tax.

Contact the PEI office with any questions & mail or fax the completed form at your earliest convenience to: PEI, PO Box 920220, Norcross, GA 30010 Phone 770-676-9366 Fax 770-409-7280 www.porcelainenamel.com