#### 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 34<sup>th</sup> Back-to-Basics Workshop gets us off to a great start on Tuesday, May 7 and is followed by the 28<sup>th</sup> Suppliers' Mart that evening. The traditional presentation of lectures and papers happens on Wednesday and Thursday during our 81<sup>st</sup> 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 <u>Early arrivals & registration</u>

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	81 <sup>st</sup> PEI Technical Forum and 28 <sup>th</sup> Suppliers' Mart
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
0.43 AM - 9.43 AM	"America's Energy Coach," Tom Kiser, Worthington Energy
	Innovations
	innovations
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9:50 AM – 10:05 AM	Porcelain Enamel Markets  "An Undete on the Develoin Enamel Market" Sandra Englands
	"An Update on the Porcelain Enamel Market," Sandra Frydryk,
	Ferro Corporation
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10:05 AM – 10:25 AM	<u>Break</u>
40.05 ANA 40.00 DNA	Laborator La coffee Cons
10:25 AM – 12:00 PM	<u>Laboratory Investigations</u>
	"The Effect of Application Equipment on Powder Performance,"
	Ian Toupin, Ferro Corporation
	"Material Legico Francia Coll I III - Transcript or a la Francia
	"Water Heater Enamel Solubility: Temperature and Energy
	Impact," Roger Wallace, A. O. Smith Protective Coatings
	"Floring to the Control of Fig. 1. The Contro
	"Electrostatic Powder Application of Exhaust Pipes for Stoves,"
	Dieter Jacobs and Johan DeSoete, Prince Minerals
	"Investigation of Level ithing / ithing Face Fait to Mark Orange
	"Investigation of Low Lithium/Lithium Free Frit to Meet German
	Food Contact Regulation," Ashton Kelchner, TOMATEC
	America
	"O'C - I D. Mata'ala'a da Danala'a Farand la Lata "F'
	"Critical Raw Materials in the Porcelain Enamel Industry," Eric
	Jelen, Ferro Corporation
40-00 DM 4-00 DM	Longale
12:00 PM – 1:00 PM	<u>Lunch</u>
1.00 DM 2.20 DM	Enameling Dragoning and Customs
1:00 PM – 2:30 PM	Enameling Processing and Systems
	"Advancements in Robotic Coatings Technologies and the
	Benefits They Bring," Mike Dilday, FANUC America
	"Dada DEGLAMA Davida Davida Organiza Davida
	"Reduce, RECLAIM, Reuse, Recycle: Comparing Porcelain
	Coating Reclamation Systems," Glenn N. Pfendt, A. O. Smith
	Corporation
	"Mat Const. Const. and Engaged Delivery." Time Delivery
	"Wet Spray Guns and Enamel Delivery," Tim Byrne,
	Worldwide Finishing and Supply

"Larger Format Digital Printing for Enamels," Mark Wood, Digital Ceramics Ltd.

2:30 PM – 2:45 PM	Break
2:45 PM – 3:45 PM	Enameling Equipment and Controls "Advanced Furnace Maintenance," Chris Meid, Worldwide Finishing and Supply
	"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 <u>Enamel Products & Processes</u>

"Update on Reactive Porcelain Enamel Coated Wire for Concrete Reinforcement," Dr. Mark McGinley, University of Louisville

"Heat Transfer – Radiation, Convection and Conduction," Marty Sawyer, Trimac Industrial Systems

#### 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," P. 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, A. O. Smith Corporation

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 Pfendt, A. O. Smith Corporation

"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 Info	ormation
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Name	
Company	
Address	
Address	
City, State, Zip	
Phone	
Fax	
E-mail	
Website	

### Registration Fees (circle your choices)

	B2B Workshop	Technical Forum	Furnace Seminar	
PEI member company				
Before April 15, 2019	\$370.00	\$395.00	Confirm only	
After April 15, 2019	\$420.00	\$445.00	Confirm only	
Non member				
Before April 15, 2019	\$525.00	\$555.00	Confirm only	
After April 15, 2019	\$575.00	\$605.00	Confirm only	

#### **Payment Information**

Amount (check enclosed or charge)	
Credit card number (Visa, MC & AMEX only)	
Expiration date	
CVV Number	
Name on card	
Address and Zip Code (if different than above)	
Signature	

Comments:				

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