

AMERICAN CERAMIC SOCIETY

St. Louis Section and the Refractory Ceramics Division

Fifty-fifth Annual Symposium

on

Refractories

March 27-28, 2019

Hilton St. Louis Airport Hotel

Theme:

"Shaped Refractories"

DRAFT - PROGRAM

"Shaped Refractories"

<u>March 26th, 2019</u>

5:00 P.M. Kickoff Event – Westport Social

<u>March 27th, 2019</u>

- 7:15 A.M. Registration and Coffee
- 8:00 Morning Technical Sessions Welcome and Introductions

ACerS President

Sylvia Johnson

St. Louis Section Chairman *Chris Perry* Christy Refractories **Refractory Ceramics Division Chair** *Simon Leiderman* Shinagawa Advanced Materials

Co-Program Coordinators

Beau Billet Edward Orton Jr. Ceramic Foundation Dawn Hill Xertech Specialties, LLC

- 8:30 An Overview of Ceramic Forming Processes William M. Carty – New York State College of Ceramics Alfred University
- 9:00 Engineering Resilience with Precast Refractory Dana Goski and Matthew Lambert – Allied Mineral Products, Inc.
- 9:30 Ideal Casting Procedures for Optimal Precast Shape Refractories William L. Headrick Jr. – Missouri Refractories Company, Inc. (MORCO) Dale Zacherl – Almatis, Inc., USA Andreas Buhr – Almatis GmbH, Germany
- 10:00 Coffee Break
- 10:30 A Study of Controlled Drying of Refractory Castable Shapes James G. Hemrick and John L. Waters – Reno Refractories, Inc.
- 11:00 Comparison of Cement- and Hydratable Alumina-Bonded Alumina-Spinel Materials for Steel Ladle Purging Plugs Dale Zacherl – Almatis, Inc.
- 11:30 Fused Cast Refractories the World's First Pre-Cast Shapes Eric Hanson - Monofrax
- 12:00-1:15 Luncheon Banquet

Afternoon Session

1:15-2:00	Presentation of the T.J. Planje St. Louis Refractories Award to Dr. Dana G. Goski, PhD., Vice President, Research and Development – Allied Mineral Products, Inc.				
2:15	Non-Destructive Testing to Determine Internal Defects in Shaped Refractories Thomas R. Viverito – Morgan Advanced Materials				
2:45	Coffee Break				
3:15	The History of Refractory Bricks in Missouri Shannon Jaeger, Kelley Wilkerson and Jeffrey D. Smith – Missouri University of Science & Technology				
3:45	Thermally Induced Distinct Materials Behavior of Andalusite Bricks Hartmut Koerber, Yannick Hemberger and Peter Quirmbach – Deutsches Institut fuer Feuerfest und Keramik GmbH, Germany				
4:15	ACerS PCSA Overview Somnath Mandal – University of California, Irvine				
4:30	Questions & Discussion Co-Program Coordinator				
4:45	RCD Annual Members Meeting				
5:00	Closing Remarks <i>Chris Perry</i> Christy Refractories <i>Simon Leiderman</i> Shinagawa Advanced Materials				
5:00-7:00	Exposition and Cocktail Hour				
	Almatis, Inc. Alteo NA, LLC AluChem, Inc. American Ceramic Society BassTech International Bettersize Instruments Blastcrete Equipment, LLC Christy Minerals DiFK GmbH, Germany Electro Abrasives Elkem Materials, Inc. FX Minerals Gorka Cement Great Lakes Minerals, LLC Hindalco/GBL	IMERYS Aluminates Ingredient Masters, Inc. Kyanite Mining Corp. Monofrax Norchem, Inc Ferroglobe Orton Ceramic Foundation Possehl Erzkontor N.A. R-E-D Industrial Products Refractory Minerals Co., Inc. TAM Ceramics Washington Mills ZIRCAR Ceramics, Inc.			
7:00	Dinner Buffet				

<u>March 28th, 2019</u>

6:30 A.M. Refractory Ceramics Division (RCD) Breakfast Meeting

8:15 Morning Technical Sessions Welcome and Introductions

St. Louis Section Chairman Chris Perry Christy Refractories Refractory Ceramics Division Chair Simon Leiderman Shinagawa Advanced Materials

Co-Program Coordinators Beau Billet Edward Orton Jr. Ceramic Foundation Dawn Hill Xertech Specialties, LLC

8:30 Invited Paper – 2018 Alfred W. Allen Award Winner

New Advances in the Laboratory Characterization of Refractories: Testing, Modelling and Industrial Applications *Jacques Poirier - CNRS*

- 9:30 Thermomechanical Behavior and Slag Corrosion Mechanism of Spinel-Periclase-Zirconia Refractories for Ruhrstahl Heraeus Degasser Somnath Mandal – University of California, Irvine
- 10:00 Coffee Break
- 10:30 Phase Changes in Aluminum Phosphates Caused by Refractory Fabrication and Service James Bennett – National Energy Technology Laboratory, USDOE Anna Nakano and Jinichiro Nakano – National Energy Technology Lab, USDOE & AECOM Jack Widmer – National Energy Technology Lab, USDOE & ORISE
- 11:00 Regional Influences in Aluminosilicate Refractory Raw Material Selection Scot Graddick, Chris Parr and Phil Edwards – Imerys Aluminates
- 11:30 Processing of Magnesia Ceramic Shapes via Slip Casting Keith DeCarlo – Blasch Precision Ceramics William G. Carty - New York State College of Ceramics Alfred University
- 12:00 Questions & Discussion Co-Program Coordinator

Chris Perry Christy Refractories Simon Leiderman Shinagawa Advanced Materials

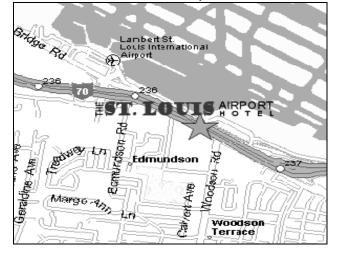
12:30 St. Louis Section Officer Business Meeting & Lunch

REGISTRATION FORM

Please select:	METHOD OF PAYMENT					
Pre-Registration Fee (Deadline March 20)	\$225.00	CHARGE MY CARD: \$				
On-Site Registration Fee	\$275.00					
Emeritus/Senior Fee	\$125.00	MC:				
Student Fee	\$50.00	CC#:				
Exhibitor for Exposition (Table Top) (Exhibitor cost does not include registra	\$300.00 tion fee)	EXP:			CVV:	
Need Electricity	NAME ON CARD:					
Lunch - Chicken Fish Pasta/V	SIGNATURE:					
Dinner Buffet		ADDRESS:				
Guest for Dinner	\$40.00	ZIP CODE for	CC:			
(Fill in below)	Company or Personal Check in U.S. Dollars (Make checks payable to: St. Louis Section)					
NAME:						
NAME ON BADGE:	Send To: Patty Smith Missouri S&T 105 Straumanis-James Hall 401 W. 16 th St. Rolla, MO 65409 Tel (573) 341-6265					
COMPANY:						
ADDRESS:						
CITY/STATE/ZIP:	Fax (573) 341-2071 Email: psmith@mst.edu NOTE: Dress Attire – Semi Casual (Tie Optional)					
EMAIL:						
TEL/FAX:						

LOCATION

Hilton St. Louis Airport Hotel 10330 Natural Bridge Road St. Louis, MO



A block of rooms has been set aside at the Hilton St. Louis Airport Hotel in St. Louis, MO for this meeting. Please refer to **Group Code ACS** at the Hilton when reserving a room for which the rate is \$113.00 single/double per night or you can reserve online. *Reservations must be made before March 7, 2019*

HOTEL ACCOMMODATIONS

Hilton Hotel (March 7, 2019)

The web page address is:

https://secure3.hilton.com/en_US/hi/reservation/book.htm? inputModule=HOTEL&ctyhocn=STLHIHF&spec_plan=ACS &arrival=20190325&departure=20190329&cid=OM,WW,HI LTONLINK,EN,DirectLink&fromId=HILTONLINKDIRECT

(314) 426-5500

Hampton Inn	(314) 429-2000
Drury Inn	(314) 423-7700
Marriott Airport	(314) 423-9700