AMERICAN CERAMIC SOCIETY

St. Louis Section
and the
Refractory Ceramics Division

Forty-ninth Annual Symposium

on

Refractories

March 27-28, 2013

Hilton St. Louis Airport Hotel

Theme:

“Refractory Challenges in the Chemical and Petro-Chemical Industries”
PROGRAM

“Refractory Challenges in the Chemical and Petro-Chemical Industries”

March 26th, 2013
5:00 P.M. Kickoff Event – Blues Hockey Game

March 27th, 2013
7:15 A.M. Registration and Coffee
8:00 Morning Technical Sessions
Welcome and Introductions

St. Louis Section Chairman
Dilip Jain
Kyanite Mining
Refractory Ceramics Division Chair
Bill Headrick
Missouri Refractories Company

Co-Program Coordinators
Jens Decker
Stellar Materials, Inc.
Rick Volk
UNI-REF, Inc.

8:15 60 Years of Petroleum & Petrochemicals Industry Refractories History & Opportunities for the Future
Ed Linck – Linck Refractory Services
Paul Schlett – Valero Energy Corporation

8:45 Refinery Catalytic Cracking Units – Refractory Uses and Challenges
Richard Parkinson – UOP, LLC

9:15 ASTM C-704 Abrasion Standard
Ben Markel – Resco Products

9:45 Coffee Break

10:15 Elevated Temperature Abrasion Testing
Donavin Duhon – Robert J. Jenkins and Co.

10:45 Invited Paper – 2012 Al Allen Award Winner
Effect of Alumina and Silica on the Hydration Behaviour of Magnesia Based Refractories
Wagner M. Silva and Modestino A. M. Brito – Magnesita Refractories S.A., Brazil
Christos G. Aneziris – Institute for Ceramics, Glass and Construction Materials, Technical University Freiberg, Germany

11:30 Questions and Discussion
Co-Program Coordinator

11:45-1:00 Luncheon Banquet
Afternoon Session

1:00-1:30 Presentation of the T.J. Planje St. Louis Refractories Award to J.P. Willi – Sunset Refractory Services, LLC

1:30 Material Selection for Gunite Veneer Repairs
Stephen Libby & Jim Stendera – Vesuvius Advanced Refractories R&D

2:00 Deterioration of Calcium Aluminate Bonded Insulating Monolithics in Field Conditions
Ken Moody – Refractory System Solutions

2:30 Coffee Break

3:00 Refractory Materials Based on Magnesia-Alumina Spinel for Improved Performance in Coal Gasification Environments
James Hemrick – Oak Ridge National Laboratory

3:30 The Use of Low Biopersistence Fibers in Refineries and Chemical Plants
Steve Chernack – Morgan Thermal Ceramics

4:00 Developing Better Refractories for The Steel Industry – The Steel Manufacturing Research Center (SMRC) at Missouri S&T
Kent Peaslee – Missouri S&T

4:30 Questions & Discussion
Co-Program Coordinator

4:45 RCD Annual Members Meeting

5:00 Closing Remarks
Dilip Jain
Kyanite Mining
Bill Headrick
Missouri Refractories Company

5:00-7:00 Exposition and Cocktail Hour

Almatis
Kerneos
AluChem
Kyanite Mining
Alteo
LAEIS GmbH
American Ceramic Society
Lancaster Products
BassTech International
Missouri S&T
Calucem, Inc.
Orton Ceramic Foundation
CE Minerals
Possehl Erzkontor N.A.
Christy Minerals
Refractories WORLDFORUM
Cilas Particle Size
Refractory Minerals
DIFK GmbH, Germany
SQ Chemical Company / Overseas Trade Network
Fibercon International
TAM Ceramics
Great Lakes Minerals
Washington Mills

7:00 Buffet Dinner
March 28th, 2013

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

8:15  Morning Technical Sessions
Welcome and Introductions

St. Louis Section Chairman
Dilip Jain
Kyanite Mining
Refractory Ceramics Division Chair
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Rick Volk
UNI-REF, Inc.

8:30  Evaluating the Resistance of Container-Glass Furnace Refractories to Alkali Attack
Dave Lankard – Lankard Materials Lab

9:00  Raw Material Concepts for SiO$_2$-Free High Strength Castables in the Temperature Range up to 1200°C
Dale Zacherl – Almatis
Andreas Buhr – Almatis GmbH, Germany
Bernd J. Baier – S. Schlussler Feuerungsbau GmbH

9:30  Energy Efficient Lining Designs for Today’s Fired Heaters
Steve Chernack – Morgan Thermal Ceramics

10:00  Coffee Break

10:30  Hydrogen Corrosion – General Principles and Experimental Approach
Prof. Peter Quirnbach – DIFK, Bonn Germany

11:00  Application of Cast-Off Materials as Proppants for Hydrofacturing
John R. Hellmann & Barry E. Scheetz – The Pennsylvania State University

11:30  Cement Bonded Alumina Systems for Chemical and Petro-Chemical Applications
Jake Wieland - AluChem

12:00  Questions & Discussion
Co-Program Coordinator

St. Louis Section Chairman
Dilip Jain
Kyanite Mining
Refractory Ceramics Division Chair
Bill Headrick
Missouri Refractories Company

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

Please select:

- Pre-Registration Fee (Deadline March 23) $225.00
- On-Site Registration Fee $275.00
- Emeritus/Senior Fee $125.00
- Student Fee $50.00
- Exhibitor for Exposition (Table Top) $300.00 (Exhibitor cost does not include registration fee)

- Lunch - [ ] Chicken [ ] Fish [ ] Pasta/Vegetarian
- Dinner

(Fill in below)

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☐ Company or Personal Check in U.S. Dollars (Make checks payable to: St. Louis Section)

Send To: Patty Smith
Missouri S&T
105 Straumanis-James Hall
401 W. 16th St.
Rolla, MO 65401
Tel (573) 341-6265; Fax (573) 341-2071
Email: psmith@mst.edu

NOTE: Dress Attire – Semi Casual (Tie Optional)

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 CER at the Hilton when reserving a room for which the rate is $104.00 single/double per night. **Reservations must be made before March 8th, 2013**

HOTEL ACCOMMODATIONS

Hilton Hotel (Mar 8, 2013) (314) 426-5500

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