ARCHITECTURAL CERAMICS IN THE 21st CENTURY: Design and Preservation of Contemporary & Historic Architecture

March 22-24, 2014
Cambridge, Massachusetts

An intensive 2-day conference exploring the use, performance, maintenance, and preservation/restoration of
• hollow clay tiles • terra cotta tiles, cladding, & rainscreens
• porcelain tiles & cladding • other architectural ceramics in new and existing buildings and monuments

Plus 1-day Tour Program focusing on structures using Guastavino tiles or ceramic cladding

Organized by:
• Technology & Conservation
• MIT Department of Architecture–Building Technology Program
• Historic Resources Committee, Boston Society of Architects/AIA

for
• architects • engineers • architectural conservators • building restoration specialists
• construction specifiers • campus planners • contractors • building maintenance supervisors
• objects conservators • construction managers/ supervisors • real estate developers
• operations/facilities managers & administrators of libraries, museums, & other cultural institutions; educational & commercial complexes; religious properties • federal, state, and local government officials responsible for the care, rehab, and/or continued viability of buildings
• manufacturers, fabricators, and suppliers of relevant components and systems
SCHEDULE

ARCHITECTURAL CERAMICS IN THE 21st CENTURY: Design and Preservation of Contemporary & Historic Architecture

SATURDAY, March 22, 2014
7:30-8:15 am Check-in
8:15-8:20 Welcome – Susan E. Schur, Hon. AIA, FAPT, Publisher-Editor, Technology & Conservation, and Prof. John A. Ochsendorf, Massachusetts Institute of Technology
8:20-9:05 Architectural Perspectives: Historic Uses and Styles – Tony Herbert, Honorary Research Fellow, University of Birmingham, Ironbridge International Institute for Cultural Heritage, & Past President of Tile & Architectural Ceramics Society
9:55-10:05 The Evolution and Regression of Clay Roofing Tile Forms – Matthew B. Bronski, PE, Associate Principal, Simpson Campuzo & Heger
10:05-10:20 Posters + Coffee Break

Developments in Materials, Technology, and Care
10:20-10:50 Mechanical and Structural Properties of Architectural Ceramics – Prof. Katherine T. Faber, Material Science & Engineering Dept., Northwestern University, & Co-Director-Art Institute of Chicago’s Center for Scientific Studies in the Arts
10:50-11:20 Chemical Properties and Weathering – Prof. Denis Brosnan, PE, Clemson University
11:35-11:50 Architectural Porcelain Enamel – Cullen L. Hackler, Executive Vice President, Porcelain Enamel Institute
11:50-12:05 Q&A
12:05-2:05 Luncheon at MIT-SAP’s Maki Building
2:05-2:35 Ceramic Innovation in the Work of the Guastavino Family – Prof. John A. Ochsendorf, Massachusetts Institute of Technology
2:35-3:00 Developments in Cleaning and Care – Prof. Frank G. Matero, University of Pennsylvania; Acting Chair - Historic Preservation
3:00-3:20 Evaluating Existing Architectural Ceramics: Field and Laboratory Techniques – Susan L. Knack-Brown, PE, Principal, Simpson Campuzo & Heger
3:20-3:40 Posters + Coffee Break

Conservation/Preservation of Buildings/Building Types of the 19th & 20th Centuries - Case Histories
3:40-4:10 Architectural and Structural Ceramics: From the Gothic to the Modern - Structural Investigations and Solutions – Edmund P. Meade, PE, FAPT, Principal & Director of Preservation, Robert Silman Associates
4:10-4:25 Tile Roof Renovation/Restoration of a Newport Mansion – Curt Cenga, Director of Properties, Preservation Society of Newport County, and Carl Rothbart, Associate Partner for Preservation, WASA/Studio A
4:25-4:45 Moravian Tile Projects – Adam Zayas, Head Ceramist, Moravian Pottery & Tile Works
4:45-5:00 Ceramic Panels for Ambitious Designs and Long-Life Cycles – Gerhard Plank, Agrob Buchtal, Deutsche Steinzeug Creme & Breuer AG
5:00-5:15 One Eagle Place, Piccadilly, London – Eric Parry, Principal, Eric Parry Architects
5:15-5:45 Ceramics Usage in Historic Islamic Structures – Prof. Renata Holod, University of Pennsylvania
5:45-6:00 Girih Tiles in Medieval Islamic Architecture – Peter J. Lu, Research Associate, Harvard University
6:00-6:15 Overview of European Ceramics Research & Fabrication Developments – Dr. Giorgio Tinellini, Director, Italian Ceramics Center, Bologna, and Professor, University of Bologna, Dept. of Civil, Chemical, Environmental & Materials Engineering
6:15-6:30 Q&A
6:30-8:00 Reception - Cambridge Marriott Hotel

SUNDAY, March 23, 2014
7:30-8:00 am Film presentations on mosaic conservation, tile manufacturing, and traditional tile craftsmanship - the Metropolitan Museum’s Moroccan court

New Technologies and Innovations in Design
8:00-8:30 A Timeless Modern Material – Ceramics and Building Today – David Fidler, FAIA, LEED BD+C AP, Principal, Design & Preservation, EYP/AE Inc.
8:30-8:45 New Types of Tiles – Eric Atrashan, Executive Director, Tile Council of North America, Inc.
8:45-9:25 New Applications for the Most Ancient of Materials – Eoin Billings, Director and Founding Partner, Billings Jackson Design
9:25-10:25 Sustainability, Standards, and Usage Implications of New/Improved Materials - from Manufacturers & Installers: Viewpoints – A. Tad Colbert, CEO, Ludowici Roof Tile Inc; John Krouse, President, Boston Valley Terra Cotta; David Dare, Managing Director, Shaw’s of Darwen Ltd.; and Bill Grieve, LEED AP, Standards Development & Green Initiative Manager, Tile Council of North America, Inc.; Dr. Giorgio Tinellini, Director, Italian Ceramics Center, Bologna, and Professor, University of Bologna, Dept. of Civil, Chemical, Environmental & Materials Engineering
10:25-10:40 Posters + Coffee Break
10:40-11:00 Setting Systems – Peter McKoon, Latricres International Inc.
11:00-11:25 Digital Material Systems – Prof. Martin Behchhold, Harvard University Graduate School of Design, and Director of GSD’s Technology Platform
11:40-12:00 Use of Color - Glazing and Integral – Matthew S. Calvey, President & CEO, Elgin Butler Co.
12:00-12:10 Q&A
12:10-2:05 Luncheon at MIT-SAP’s Maki Building

Bringing Architectural Ceramics into 21st Century Architectural Design & Ornamentation
2:05-2:25 Use of Terra Cotta and Tiling in Cladding of Buildings in Different Contexts – Jonathan Sakula, FiStructe, FiCE, Technical Director, Buro Happold
2:25-3:00 The Face of the London Underground: 150 Years of Ceramics and Faience – Mike Ashworth, Design and Heritage Manager, London Underground
3:00-3:20 New Types of Cladding – Giorgio Valentini, President, Atlantic Link
3:20-3:40 New Bond Street Dual Entrance/Facade – Eric Parry, Principal, Eric Parry Architects
3:40-4:00 Posters + Coffee Break
4:00-4:20 Terra Cotta Restoration Procedures for Modern Urban Structures vs. Those for Historic Buildings, Diane S. Kaese, RA, Kaese & Lynch
4:20-4:40 Contextual Ceramic Facades: Connecting the Past and Present – Nat Crosby, Sr. Project Manager, and Jason Forney, Sr. Associate, Brunner Cott & Associates
5:10-5:40 Summation and Challenges Presented – John Fidler, RIBA, FIIC, FAPT, FSA, President, John Fidler Preservation Technology, Inc.
5:40-6:00 Q&A

MONDAY, March 24, 2014

Optional Program (8:00am-2:00pm)

The program will focus on structures with cladding, tiles, and/or ornamentation of terra cotta or other architectural ceramics. This will include with a bus tour to view buildings in Cambridge and Boston and visits to an advanced ceramic fabrication facility and to the Boston Public Library where several different styles of Guastavino tile work will be seen and where short talks on the BPL’s tile work will be given by William Barry, Heritage Planning and Design, and by Prof. John A. Ochsendorf, MIT.
### CONFERENCE SESSIONS

The conference venues will be on the MIT campus in Cambridge, Massachusetts.

The Wong Auditorium where the conference sessions will be held is easily reached by public transportation. (There is very limited parking available near this site.) Continuing education credits will be available for attendees for the conference sessions on March 22 and March 23 and for the optional program on March 24.

### HOTEL INFORMATION

Hotel accommodations are attendees’ responsibility. However, a block of rooms have been reserved at the nearby Cambridge Marriott Hotel at the special rate of $169 (plus tax) per night (single or double room). Rate is valid until March 7, 2014.

**Group booking code for website bookings is: tcctcca.**

The direct link is:

http://www.marriott.com/hotels/travel/boscb-boston-marriott-cambridge/?toDate=3/25/14&groupCode=tcctcca&stop_mobi=yes&fromDate=3/21/14&app=revlink

*If booking through Central Reservations (1-888-236-2427), give them the group booking code which is: tcctcca.*

### CALL FOR POSTERS

The focus of the conference will be on the use of architectural ceramics in the facades and structures of historic and modern buildings and other components of the built environment. Attention also will be given to the decorative/artistic utilization of ceramics on the exterior of buildings/monuments. . . . Many advances in the manufacture and use of terra cotta and porcelain tiles, cladding, rainscreens, and solar screens have occurred during recent years, and these exciting research and implementation activities are continuing. The conference will explore various aspects of recent ceramic performance, life cycle, and sustainability studies, fabrication developments, design improvements, and new products, as well as construction techniques/pitfalls, and current conservation/preservation methods. In addition, several case histories will be presented detailing viable, cost-effective approaches to the design and care of architecture and decorative arts that incorporate ceramics, as well as innovative usages of ceramics in structures and building elements.

**Poster presentations on a project or research involving performance, detailing, specification, use, care, or repair of terra cotta and/or porcelain tile/cladding or hollow clay tile are welcomed.**

A poster presentation is one 30” x 40” board or two 20” x 30” boards showing project and/or research information relevant to the conference subject matter – exteriors of contemporary and/or historic/traditional buildings/structures utilizing ceramics as a major element of their design or as decorative feature(s). An area will be set aside during the conference for the display of posters and discussion.

**Poster proposals should be submitted by February 15, 2014 to:**

Technology & Conservation, 76 Highland Avenue, Somerville, MA 02143; e-mail: ses_tec_con@msn.com

### QUESTIONS?

If you have any questions, please contact Susan E. Schur, Hon. AIA, FAPT, at Technology & Conservation, Tel: 617-623-4488. e-mail: ses_tec_con@msn.com
REGISTRATION FORM

ARCHITECTURAL CERAMICS IN THE 21st CENTURY: Design and Preservation of Contemporary & Historic Architecture
March 22-24, 2014 – Cambridge, MA

REGISTRATION FEE:

$550/person .................................................. $ _______

Basic fee covers:
• the 8:00am–6:00pm conference program – Sat., March 22 & Sun., March 23, 2014
• the March 22 and March 23 luncheons, and
• the Saturday evening, March 22, reception

Please indicate any special accessibility or dietary needs:
_____ vegetarian meals ____________________________ other needs

Guest tickets for the March 22 reception can be purchased @ $50/ticket . . . . . . . . . .  $ _______

Optional Tour Program, Mon., March 24 – no charge for persons registered for the conference
I would like to attend the Guastavino tile and terra cotta cladding tour program. Please add my name to the waiting list. _______

TOTAL . . . . . . . . . . . .  $ _______

Check or money order for $ _________ U. S. funds (drawn on a U. S. A. bank) for registration fee (and for any guest tickets for the March 22, reception) is enclosed. Make check or money order payable to: The Technology Organization, Inc.

Please register me (us) for the conference:

Name(s) _________________________________________________________________________________________________________________________

Title __________________________________________________________________________________________________________________________

Organization _____________________________________________________________________________________________________________________

Address _________________________________________________________________________________________________________________________

City, State, Zip (Postal Code) ______________________________________________________________________________________________________

Tel: __________________________ Fax: __________________________ e-mail _____________________________________________________________

Each person listed on the registration must sign the following statement:

I(we) understand and agree that the participation of Technology & Conservation, The Technology Organization, Inc., conference organizers, and cooperating organizations and individuals in the 2014 “Architectural Ceramics in the 21st Century” conference is limited to providing educational background and guidance; that all transportation, accommodations, tour, and other arrangements in connection with this Conference are under the exclusive control of others and that Technology & Conservation, The Technology Organization, Inc., conference organizers, and cooperating organizations and individuals have no liability or responsibility whatsoever for the death of any person or for any loss, expense, delay, injury, or other damage to any person or property (however occurring) on, during, and/or in relation to this “Architectural Ceramics in the 21st Century” conference and the information furnished.

Signature(s) ____________________________________________________________________________________    Date  __________________________________________

Return this form, with check or money order (made payable to The Technology Organization, Inc.), to:
Technology & Conservation, 76 Highland Avenue, Somerville, MA 02143 U.S.A.

Refund policy: Prior to January 20, 2014 – 100% of the registration fee less $50 service charge; January 20-February 22, 2014 – 50% of registration fee; after February 22, 2014 – no refund.