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4th International Congress on Ceramics

including 3rd Ceramic Leadership Summit Track



www.ceramics.org/icc4

July 15-19, 2012 | Sheraton Chicago Hotel & Towers | Chicago, Illinois, USA

Shaping the Future of Ceramics

ICC4 features these premier keynote and plenary speakers:

- **Maxine Savitz**, General Manager (Retired), Honeywell Inc., and Vice President, National Academy of Engineering
- **Gary S. Calabrese**, Senior Vice President and Director, Photovoltaic Glass Technologies, Corning Inc.
- **Chi-Joon Choi**, President and CEO, LCR Division, Samsung Electro-Mechanics Co.
- **John Tracy**, Chief Technology Officer, The Boeing Co.
- **Athanasios Konstandopoulos**, Chairman of the Board, Centre for Research & Technology Hellas, and Director, Chemical Process Engineering Research Institute
- **Delbert Day**, Founder, Mo-Sci Corp.; Curators' Professor Emeritus of Materials Science and Engineering and Senior Investigator of the Graduate Center for Materials Research, Missouri University of Science and Technology
- **Mike Murray**, Global Technical Director, Engineered Materials Division, Morgan Crucible Co. plc
- **Yukio Sakabe**, Senior Vice President (Retired), Murata Manufacturing Co.
- **David S. Bem**, Global R&D Director, Dow Chemical Co.
- **Michael Holman**, Research Director, Lux Research



July 15-19, 2012
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4th International Congress on Ceramics

join us at icc4

ICC4 will bring together more than 600 international leaders in business and research to discuss emerging opportunities as well as what's in store for the future of ceramics and glass. More than 100 invited speakers from 40 countries will discuss innovations in:

- Energy, Environment and Transportation
- Biology and Medicine
- Aerospace
- Nanostructured Ceramics
- Infrastructure
- Security and Strategic Materials
- Electronic, Optical and Magnetic Ceramics and Devices
- Manufacturing and Business
- Entrepreneurship and Technology Transfer
- Workforce Development

Now more than ever manufacturers confront a dynamically changing landscape. Researchers are constantly exploring new materials and new processes. These worlds come together at ICC4 where industrial, academic and government leaders will share their expertise on everything from innovative ceramic research, design and manufacturing, to economic issues facing the ceramics and glass industry.

Sign up now to save \$125 on your ICC4 registration.

**ICC4 President and
Technical Program Co-Chair
Dr. Katherine T. Faber**

Northwestern University McCormick School
of Engineering and Applied Science
k-faber@northwestern.edu

**ICC4 Technical Program Co-Chair
Dr. Edgar Lara-Curzio**

Oak Ridge National Laboratory
laracurzioe@ornl.gov

ICC4 Endorsing Societies

Associação Brasileira de Cerâmica
Australian Ceramic Society
Belgian Ceramic Society
Ceramic Society of Japan
Chinese Ceramic Society
Czech Silicate Society
Danish Ceramic Society
Dutch Ceramic Society
Egyptian Academy of Science & Technology
European Ceramic Society
Finnish Ceramic Society
Georgian Ceramists Association
German Ceramic Society
Glass Manufacturing Industry Council
Groupe Français de la Céramique
Indian Ceramic Society
Institute of Materials, Metals & Mining (IOM³)
Italian Ceramic Society

Korean Ceramic Society
Materials Research Society of Latvia
Norwegian Ceramic Society
Portuguese Ceramics and Glass Society
Polish Ceramic Society
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Russian Ceramic Society
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Industry-Hungary
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Slovak Silicate Society
Slovenian Ceramic Society
Swedish Association for Materials
Technology
The Ceramics Society, A Division of IOM³
Turkish Ceramic Society
World Academy of Ceramics

The American Ceramic Society is pleased to host and organize ICC4. The International Ceramic Federation convenes the ICC every two years in cooperation with ACerS, the European Ceramic Society, the Ceramic Society of Japan and other ICF Member Societies.

keynote and plenary

Keynote Speaker



Savitz

Maxine Savitz, General Manager (Retired), Honeywell Inc., and Vice President, National Academy of Engineering

Title: *Materials: An Enabler*

Plenary Speakers



Calabrese

Gary S. Calabrese

Senior Vice President and Director, Photovoltaic Glass Technologies, Corning Inc.

Title: *Inventing the Future with New Materials*



Choi

Chi-Joon Choi

President and CEO, LCR Division, Samsung Electro-Mechanics Co.

Title: *The Technical Trend of Dielectrics of the Multi-Layer Ceramic Capacitors*



Tracy

John Tracy

Chief Technology Officer, The Boeing Co.

Title: *Materials and Technical Achievement: An Aerospace Perspective*



Konstandopoulos

Athanasios Konstandopoulos

Chairman of the Board, Centre for Research & Technology Hellas, and Director, Chemical Process Engineering Research Institute

Title: *Multifunctional Ceramic Reactors for Green Mobility and Clean Energy Production*



Day

Delbert Day

Founder, Mo-Sci Corp.; Curators' Professor Emeritus of Materials Science and Engineering and Senior Investigator of the Graduate Center for Materials Research, Missouri University of Science and Technology

Title: *From Academia to Business*



Murray

Michael Murray

Global Technical Director, Engineered Materials Division, Morgan Crucible Co. plc

Title: *Emerging Ceramic Technologies: A Perspective from Morgan Crucible Co.*



Sakabe

Yukio Sakabe

Senior Vice President (Retired), Murata Manufacturing Co.

Title: *Development of Electro-Ceramics of Today and the Future*



Bem

David S. Bem

Global R&D Director, Dow Chemical Co.

Title: *Dow Materials Innovation – Impacting the Future of Energy*



Holman

Michael Holman

Research Director, Lux Research

Title: *New Material Opportunities from Emerging Technology*



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4th International Congress on Ceramics

preliminary program schedule

Sunday, July 15, 2012

Registration	2:30 to 8 p.m.
Opening Ceremony and Keynote (Co-sponsored by Northwestern University and Argonne National Lab)	6 to 7:25 p.m.
Keynote Speaker - Maxine Savitz	
Welcome Reception	7:30 to 9:00 p.m.

Monday, July 16, 2012

Registration	7:30 a.m. to 6 p.m.
Plenary Session Introduction	8:30 to 8:45 a.m.
Plenary Speaker - Gary Calabrese	8:45 to 9:40 a.m.
Break (Sponsored by Corning Incorporated)	9:40 to 10 a.m.
Plenary Speaker - Chi-Joon Choi	10 to 10:55 a.m.
Plenary Speaker - John Tracy	11 to 11:55 a.m.
Lunch (Sponsored by The Boeing Co.)	Noon to 12:45 p.m.
Plenary Speaker - Athanasios Konstandopoulos	12:45 to 1:30 p.m.
Concurrent Sessions	1:40 to 3:40 p.m.
– Aerospace Session I	
– Nanostructured Ceramics Session I	
– Environment, Energy and Transportation Session I	
– Electronic, Optical and Magnetic Ceramics and Devices Session I	
– Workforce Development Session I	
Interactive Technology Forum (Sponsored by Samsung Electro-Mechanics) and Exhibit I	3:45 to 6:30 p.m.

Tuesday, July 17, 2012

Registration	7:45 a.m. to 6 p.m.
Plenary Speaker - Delbert Day	8:45 to 9:40 a.m.
Break (Sponsored by Kyocera)	9:40 to 10 a.m.
Concurrent Sessions	10 a.m. to Noon
– Aerospace Session II	
– Nanostructured Ceramics Session II	
– Environment, Energy and Transportation Session II	
– Electronic, Optical and Magnetic Ceramics and Devices Session II	
– 3rd Ceramic Leadership Summit Track (Sponsored by Morgan Crucible)	
Lunch	Noon to 12:45 p.m.
Plenary Speaker - Michael Murray	12:45 to 1:30 p.m.
Concurrent Sessions	1:40 to 3:40 p.m.
– Aerospace Session III	
– Nanostructured Ceramics Session III	
– Environment, Energy and Transportation Session III	
– Electronic, Optical and Magnetic Ceramics and Devices Session III	

Shaping the Future of Ceramics

Tuesday, July 17, 2012 (continued)

- Workforce Development Session II
 - 3rd Ceramic Leadership Summit Track (Sponsored by Morgan Crucible)
- Interactive Technology Forum (Sponsored by Samsung
Electro-Mechanics) and Exhibit II 3:45 to 6:30 p.m.

Wednesday, July 18, 2012

- Registration 7:45 a.m. to 4:30 p.m.
- Plenary Speaker - Yukio Sakabe 8:45 to 9:40 a.m.
- Break 9:40 to 10 a.m.
- Concurrent Sessions 10 a.m. to Noon
- Aerospace Session IV
 - Security and Strategic Materials Session I
 - Environment, Energy and Transportation Session IV
 - Infrastructure Session I
 - Workforce Development Session III
 - Biology and Medicine Session I
- Lunch on Own Noon to 1:30 p.m.
- Plenary Speaker - David Bem 1:30 to 2:15 p.m.
- Break 2:15 to 2:30 p.m.
- Concurrent Sessions 2:30 to 4:30 p.m.
- Security and Strategic Materials Session II
 - Environment, Energy and Transportation Session V
 - Nanostructured Ceramics Session IV
 - Infrastructure Session II
 - Biology and Medicine Session II
- Art Institute of Chicago Dinner 6:30 to 9:30 p.m.

Thursday, July 19, 2012

- Registration 7:30 a.m. to Noon
- Concurrent Sessions 8 to 9:20 a.m.
- Environment, Energy and Transportation Session VI
 - Environment, Energy and Transportation Session VII
 - Infrastructure Session III
 - Biology and Medicine Session III
- Break 9:20 to 9:40 a.m.
- Plenary Speaker - Michael Holman 9:40 to 10:40 a.m.
- Shaping the Future of Ceramics Wrap Up Session 10:40 a.m. to 12:15 p.m.



July 15-19, 2012
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4th International Congress on Ceramics

speakers

The following speakers have confirmed their participation in this must-attend event. Read their abstracts and biographies at www.ceramics.org/icc4.

Aerospace

John Koenig, Southern Research Institute

Glen Mandigo, US Advanced Ceramics Association

Toshihiro Ishikawa, UBE Industries, Ltd.

Takuya Aoki, Japanese Aerospace Exploration Agency; Chofu Aerospace Center

Jay E. Lane, Rolls-Royce Corp.

Allan P. Katz, Air Force Research Lab

Diletta Sciti, ISTE

Rhett Jefferies, FAA

Daniel Leiser, NASA

John Thornton, DSTO, Air Vehicles Division

Miklos Petervary, Boeing Co.

Christopher C. Berndt, Swinburne University of Technology

Biology and Medicine

Ashok Khandkar, BloXR, LLC

Meinhard Kuntz, CeramTec GmbH

Richard P. Rusin, 3M ESPE Dental Products

Serena Best, University of Cambridge

Christophe Chaput, 3DCeram

Edgar Zanotto, Universidade Federal de São Carlos

Kajal K. Mallick, University of Warwick

Emerging Topics in Ceramics Research

Greg Rohrer, Carnegie Mellon University

Electro-, Optical-, Magnetic-Ceramics and Devices

Takuya Aoki, TDK Technology Group

Michael Lanagan, Pennsylvania State University

John A. Rogers, University of Illinois at Urbana-Champaign

Anke Weidenkaff, EMPA - Swiss Federal Laboratories for Materials Testing and Research

Jürgen Rödel, Technical University of Darmstadt

Chong-il Park, Kyocera America, Inc.

Noriyuki Inoue, Pennsylvania State University

Jon-Paul Maria, North Carolina State University

John Van Dine, SAGE Electrochromics, Inc.

Jörg Töpfer, University of Applied Science, FHS Jena

Environment, Energy and Transportation

Krishan Luthra, GE Global Research

Yutai Katoh, Oak Ridge National Laboratory

Rajendra Nath Basu, CSIR-Central Glass and Ceramic Research Institute

Wolfgang Rossner, Siemens AG

S. K. Sundaram, Alfred University

Alan (Al) W. Weimer, University of Colorado

Minoru Kanehira, Shanghai Institute of Ceramics, CAS

Juan C. Nino, University of Florida

Masaki Ozawa, Tokyo Institute of Technology, Research Laboratory for Nuclear Reactors

Hasan Mandal, Sabancı University

Manfred Salinger, Pall Corporation

Paolo Colombo, University of Padova

George Muntean, Pacific Northwest National Lab

James J. O'Brien, The Dow Chemical Company

Koichi Eguchi, Kyoto University

Yuji Iwamoto, Nagoya Institute of Technology

Louis Winnubst, University of Twente

Lionel Lemay, NRMCA

Do Kyung Kim, KAIST

William Mustel, Saint-Gobain

Shaping the Future of Ceramics

Infrastructure

Hamlin Jennings, Concrete Sustainability Hub, MIT

Robert Moon, US Forest Service

Laurent Barcelo, Lafarge Canada, Inc.

Mariarosa Raimondo, CNR-ISTEC

Todd Rushing, US Army Corps of Engineers

Andreas Tselebidis, BASF

Wilasa Vichit-Vadakan, Siam Research and Innovation Co. Ltd.

Nanostructured Ceramics

Sudipta Seal, University of Central Florida

Lynnette Madsen, National Science Foundation

Kathleen K. Eggleston, University of Notre Dame

Lang Tran, Institute of Occupational Medicine

Debra Kaiser, Ceramics Division, Material Measurement Laboratory, NIST

Jeffrey Fagan, Polymers Division, NIST

Charles L. Geraci, NIOSH

Angela Hight Walker, Physical Measurements Laboratory, NIST

Don Ewert, nanoTox, Inc.

Zhong Lin Wang, Georgia Institute of Technology

Anne Hardy, Saint Gobain

Masaya Kawasumi, Toyota Central R & D Labs Inc.

Security and Strategic Materials

Richard A. Lowden, Oak Ridge National Laboratory

Marc Humphries, Congressional Research Service

Kohmei Halada, National Institute for Materials Science

Stanley C. Woodson, US Army Corps of Engineers

Douglas Freitag, USACA

Workforce Development

Angus Kingon, Brown University

Keith J. Bowman, Illinois Institute of Technology

Fumiyo Kaneko, Japan Society for the Promotion of Science, DC Office

Hongjie Luo, Shanghai Institute of Ceramics

Umesh Waghmare, Jawaharlal Nehru Centre for Advanced Scientific Research

Mario Affatigato, Coe College

Federico Rosei, Université du Québec

Judith A. Todd, Pennsylvania State University

Louis Mattos Jr., The Coca-Cola Company

Jean-Luc Adam, University of Rennes

Patrick Bessler, Fraunhofer Gesellschaft

Christianne Corbett, American Association of University Women

Mary Lynn Realff, Georgia Institute of Technology





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4th International Congress on Ceramics

3rd ceramic leadership summit track

Sponsored by Morgan Crucible

The Ceramic Leadership Summit is a biennial meeting that explores business opportunities, emerging technologies and critical issues that challenge the ceramic and glass materials community. The one-day program will focus on technology transfer, entrepreneurship and product innovation.

Tuesday July 17, 2012

8:45 to 9:40 a.m. - **ICC4 Plenary Lecture—From Academia to Business, Delbert Day**, Mo-Sci Corporation

10:00 a.m. to Noon - **Technology Entrepreneurship – the Next Generation of Technology Transfer**

Many people perceive the USA as the leader in entrepreneurship and technology transfer from basic research to a commercial setting. This moderated panel discussion will explore the development of commercial products through directed R&D with a focus on US-based small business ventures. It will follow a plenary talk by the founder of a successful ceramic materials company that takes technologies from the lab bench to established commercial products. The panel members - entrepreneurs, investors and technology transfer experts - will each make brief opening remarks. They will be followed by a question and answer session in which the moderator will develop the theme of starting, funding, staffing and growing technology-based businesses. There will be time for questions from the audience.

Organizer: **Richard Weber**, Materials Development Inc.

Moderator: **Tim Lavengood**, Evanston Technology Innovation Center

Panel Members:

Delbert Day, Mo-Sci Corporation - established glass and ceramics company

Collin Anderson, Digital Innovations - successful technology business

Alex Arzoumanidis, Psylotech, Inc. - early-stage technology business

Jonathan Goodman, Synthesis Intellectual Property, LLC - IP lawyer

Leslie Millar, University of Illinois Urbana-Champaign - technology transfer

John Banta, IllinoisVentures, LLC - seed and early-stage technology investment firm

Noon to 1:30 p.m. - **Lunch and ICC4 Plenary Lecture – Emerging Ceramic Technologies: A Perspective from Morgan Crucible Co., Michael Murray**, Morgan Crucible Co. plc, UK

1:40 to 3:40 p.m. - **International Technology Transfer & Entrepreneurship Case Studies**

– *Entrepreneurial Success of Balder LTD - Electro-optic Light Shutters for Eye-protection*, **Janez Pirs**, Jozef Stefan Institute, Slovenia

– *Development and Commercialization of High Performance Ceramics for Oil and Natural Gas Recovery*, **John Hellmann**, Pennsylvania State University, United States

– *From Technology Innovation to Industrialization: A Case of Ceramic Microbeads Based on Gel-bead Forming*, **Jinlong Yang**, Tsinghua University, China

– *Neoker, A Spin-Out of the University of Santiago de Compostela (Spain)*, **Victor Valcarcel**, CTO and CEO, Neoker, S.L., Spain

– *Thermoelectric Power Generation in Wide Temperature Region*, **Ryoji Funahashi**, National Institute of Advanced Industrial Science & Technology, Japan

interactive technology forum

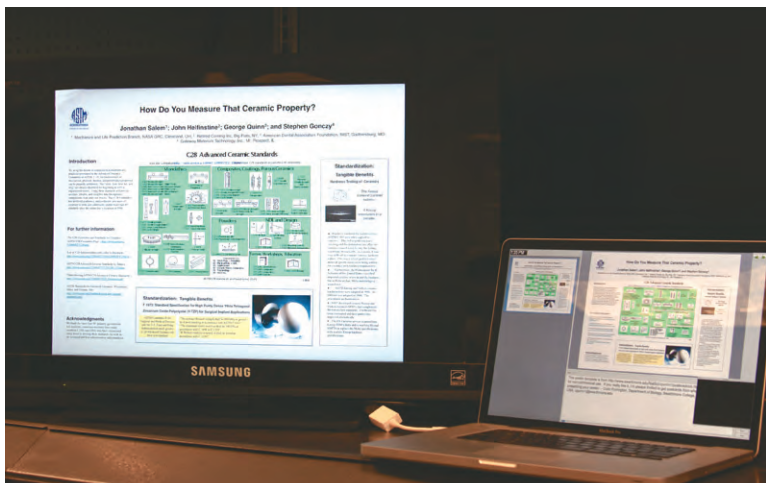
Sponsored by Samsung Electro-Mechanics

Monday, July 16

Tuesday, July 17

3:45 to 6:30 p.m.

Join us Monday and Tuesday evenings for two Interactive Technology Forum sessions. This highly-publicized, groundbreaking event features presentations from ceramic professionals using their laptop, iPad, or other electronic devices. Traditional posters and hands-on demonstrations will also be presented. The Interactive Technology Forum fosters usage of new technology to present technological developments. Fifty interactive posters will be displayed along with 200 traditional posters. This not-to-miss event takes place in conjunction with the ICC4 expo.



The Interactive Technology Forum fosters usage of new technology to present technological developments. Fifty interactive posters will be displayed along with 200 traditional posters. This not-to-miss event takes place in conjunction with the ICC4 expo.

Thank you to the **National Science Foundation** for providing funding towards the 32-inch monitors used in the Interactive Technology Forum.

Nominate a young professional for ICC4 Future Leaders Program

Know someone at your company, institution or university who is a rising star? Nominate them to be a part of the Future Leaders Program. With input from ceramic materials community executives, R&D leaders, researchers, engineers and academicians, this program is designed to help young professionals with high potential gain



a fuller understanding of their leadership abilities, including their strengths and development areas as applied to the materials science world. Attendees will walk away with what they need to succeed at their current company and in their career. Participants are eligible for a discounted registration rate that includes the Future Leaders Program, the 3rd Ceramic Leadership Summit track and the conference. Contact Megan Bricker (mbricker@ceramics.org) to nominate a young professional, to register at the special rate or for more information.



July 15-19, 2012
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4th International Congress on Ceramics

exhibit

The ICC4 Exhibit will be held in conjunction with the Interactive Technology Forum sessions, Monday, July 16 and Tuesday, July 17 from 3:45 p.m. to 6:30 p.m. Contact **Pat Janeway** at pjaneway@ceramics.org or 614-794-5826 to exhibit. No other ICC4 event takes place during this time.

Space Available: 15, 10 ft. by 10 ft. booths Rate: \$3,500

Exhibit package includes:

- Sponsorship of Interactive Technology Forum Reception
- Recognition on website and in program
- Signage recognizing sponsorship in Registration area and Exhibit Hall
- Recognition at the Opening/Welcome Reception
- One ICC4 registration
- Three exhibit-only passes for booth personnel
- Draped 8 ft. high back wall and 3 ft. high side rails, 6 ft. draped table, and 2 chairs
- Complimentary listing in online directory

Exhibit Sponsors:

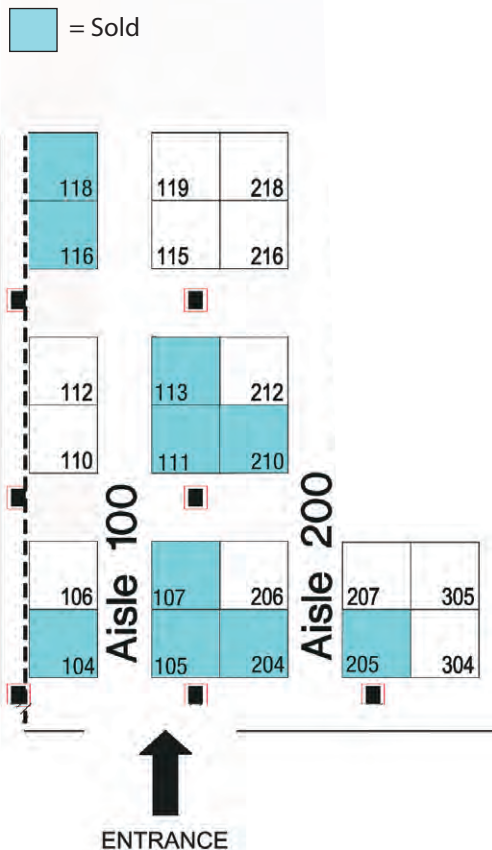
Alfred University



LAEIS



**SWINDELL
DRESSLER**



Shaping the Future of Ceramics

art institute & hotel

Dinner at the Art Institute of Chicago

Enjoy good company, good food and outstanding art at the world-renowned Art Institute of Chicago's Modern Wing on Wednesday, July 18th. Designed by Pritzker Prize-winning architect Renzo Piano, the Modern Wing provides a new home for the museum's collection of 20th- and 21st-century art.



hotel

Sheraton Chicago Hotel & Towers

301 E. North Water Street, Chicago, IL 60610, USA

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To reserve your room, visit www.ceramics.org/icc4.

Rates: Single/Double \$199

US Government Employee \$155





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4th International Congress on Ceramics

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Dileep Singh, Argonne National Lab
Carol Thompson, Northern Illinois Univ.
Richard Weber, Materials Development Inc.

optional short course

Sintering of Ceramics

Saturday, July 14 8:30 a.m. - 5:30 p.m. | Sunday, July 15 8:30 a.m. - 4:30 p.m.

Instructor: **Mohamed N. Rahaman**, Missouri University of Science and Technology

Engineers and scientists involved in research, development and production of ceramics from industry, national labs or academia are ideally suited for this course. Professionals interested in continuing education should also participate.

The course will follow the key topics of *Sintering of Ceramics*, by M. N. Rahaman, and will be supplemented by detailed case studies.

This two-day course covers following topics:

- Review of sintering basics: characterization of sintering, (methods used to measure/monitor the progress of sintering); driving forces; diffusion and defect chemistry
- Solid-state and viscous sintering
- Microstructure development and control
- Liquid-phase sintering
- Special topics: effect in homogeneities on sintering; constrained sintering of composites, adherent thin films, and multilayers; solid solutions additives (dopants); reaction sintering; viscous sintering with crystallization
- Sintering practice: 'how to do' sintering; effect of various materials and processing parameters on sintering
- Case studies: sintering of nano-ceramics; sintering of solid-oxide fuel cell systems; sintering of ceramic matrix composites; sintering of non-oxide ceramics and ultra-high temperature ceramics

Attendees will develop sufficient background in the principles and practices of sintering to be able to (i) do sintering to achieve specified target microstructures, (ii) understand the difficulties encountered in practical sintering, and (iii) take practical steps to rectify the problems encountered in producing required target microstructures.

Registration

Early-bird rates end June 14. Sign up now to save \$150.

ACerS Member - \$745

Student - \$295

Nonmember - \$835

Course plus Membership - \$865



Rahaman

Dr. Mohamed N. Rahaman is Professor of Materials Science and Engineering and Director of the Center for Bone and Tissue Repair and Regeneration at the Missouri University of Science and Technology. Rahaman's research interests cover processing, sintering, and microstructure control of advanced ceramics along with

biomaterials for bone and tissue repair and regeneration. Rahaman is the author of four books, including *Sintering of Ceramics*, and the author/co-author of over 150 publications.





July 15-19, 2012
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4th International Congress on Ceramics

optional tours

Sign up for a tour at www.ceramics.org/icc4.

Technical Tour

Thursday, July 19, 12:15-4:45 p.m.

Argonne National Lab Tour

Argonne integrates world-class science, engineering, and user facilities to deliver innovative research and technologies. This private, guided tour covers the scientific and engineering facilities situated on 1500 wooded acres where over 1250 scientists and engineers address sustainable energy, a healthy environment, and a secure nation. Transportation cost: \$28

Sunday, July 15, 1:15-3:45 p.m.

Thursday, July 19, 1:15-3:45 p.m.

Architectural River Cruise

Learn how, in the 19th Century, the modern city grew from a trading post to become the world's fastest growing metropolis. See at least 50 world famous structures, including Lake Point Tower, Wrigley Building, IBM Building, NBC Tower, Tribune Tower, Civic Opera House, Sears Tower, Marina City, Board of Trade, and scores more. Cost: \$53



Wednesday, July 18,

11 a.m.-2 p.m.

Grand Spaces in Public Places: A Tour of Chicago's Exceptional Interiors

Guests will explore the stunning interiors of the Rookery Building, the Chicago Cultural Center, the Marquette Building, City Hall and more!

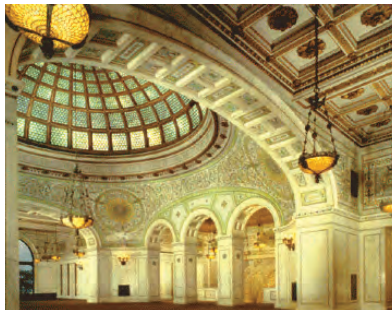
At the Cultural Center, guests

will view the newly restored Tiffany glass dome, with almost 3,000 faceted opalescent glass pieces. This striking dome is the largest ever designed by Tiffany. Cost: \$73

Sunday, July 15, 10 a.m.-1 p.m.

Ghosts and Gangsters Tour of Chicago

From the true stories of John Dillinger, to the horrific Great Chicago Fire and its aftermath, to the disaster at the Iroquois Theatre (and the ghosts of its victims) and more, guests will be tantalized, terrified and totally tickled by this exciting and unique tour of Chicago. Cost: \$58



Thursday, July 19,

12:15-2:45 p.m.

Illinois Institute of Technology Campus Tour

Sponsored by IIT, this tour highlights Ludwig Mies van der Rohe's influence and includes his masterpiece, S. R. Crown Hall. Renewed interest in modernism have led thousands

of visitors to campus each year to experience this living museum of modern architecture, a recent addition to the National Register of Historic Places. Transportation cost: \$28

Sunday, July 15, 11 a.m.-2 p.m.

A Little Bite of Chicago: A Tasting Tour

Dive into the culinary history of Chicago and tour through some of her ethnic neighborhoods. Along the way, the tour guide will tell stories of great chefs, ethnic traditions, and Chicago originals. The tour will stop for tasting opportunities at three locations (enough for lunch!) and you will even have the opportunity to shop at select locations. Cost: \$103

Monday, July 16, 11 a.m.-2 p.m.

An Epicurean Escapade: Cultural Tasting Tour of Chicago

Guests will experience the life and diversity of Chicago through this unique tasting walking tour. After the tour, guests will be able to explore on

