

ADVANCING
CONCRETE TECHNOLOGY
ENHANCING THE BUILT
ENVIRONMENT



INTERNATIONAL CONCRETE SUSTAINABILITY CONFERENCE

MAY 12-14, 2014 — BOSTON | WWW.CONCRETESUSTAINABILITYCONFERENCE.ORG

MIT CONCRETE SUSTAINABILITY HUB SHOWCASE

MAY 15, 2014 — BOSTON | CSHUB.MIT.EDU



Boston Harbor



MIT Maclaurin Building



Bunker Hill Bridge

EXPLORE CONCRETE SUSTAINABILITY WITH WORLD RENOWNED EXPERTS AT
THE EVENT ATTENDED BY TOP BUILDING INDUSTRY PROFESSIONALS



Join us for the 2014 *International Concrete Sustainability Conference* and the *MIT Concrete Sustainability Hub Showcase*, May 12-15, 2014, in Boston. The 9th annual *Sustainability Conference* and 5th annual *MIT CSH Showcase* will provide learning and networking opportunities on the latest advances, technical knowledge, continuing research, tools and solutions for sustainable concrete manufacturing and construction.

CONFERENCE DESCRIPTION

The *International Concrete Sustainability Conference* provides learning and networking opportunities on the latest advances, technical knowledge, continuing research, tools and solutions for sustainable concrete manufacturing and construction. Researchers, academics, students, engineers, architects, contractors, government officials, and concrete industry professionals attend and present at the *Conference*. Over 60 world renowned speakers will present on the following topics:



LIFE CYCLE ASSESSMENT Assessing carbon footprint, embodied energy and other environmental impacts for buildings, infrastructure, and concrete manufacturing.



LOW IMPACT DEVELOPMENT Pervious pavements and erosion control structures. Urban heat island reduction, light colored pavements and green roofs.



GREEN CONCRETE Recycled and alternative materials including aggregates, water, cementitious materials, and fuels. Beneficial use of byproducts.



NEW CONCRETE TECHNOLOGY Durability, extended service life models, performance based specifications, innovative concrete production methods.



SUSTAINABILITY INITIATIVES Green building codes, standards and rating systems. Federal, state and local initiatives to implement green buildings and infrastructure.



FUNCTIONAL RESILIENCE High performance concrete applications in buildings and infrastructure, fortified building codes, and disaster resistance.

CONFERENCE PRINCIPAL SPONSORS

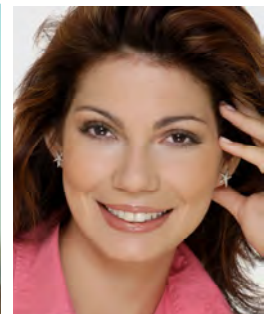


CONFERENCE CORPORATE SPONSORS



SPECIAL EVENT

*RMC Research & Education Foundation Walk for Sustainability Charity Event, May 15, 6:30-7:30 AM. To register visit www.rmc-foundation.org.



John L. Knott Jr.

Phil Williams

Michael Lepech

Lisa Bradley

Nick Santero

Styliani Papatzani

CONFERENCE KEYNOTE SPEAKERS (Partial list)

Jeremy Gregory, PhD, Executive Director, Concrete Sustainability Hub and Research Director, Massachusetts Institute of Technology, United States

John L. Knott, Jr., Executive Director, Health Product Declaration Collaborative, United States

Phillip Williams, PE, LEED AP, Vice President of Sustainability and Technical Systems, Webcor Builders/Webcor Consulting, United States

Michael Lepech, PhD, Assistant Professor, Department of Civil and Environmental Engineering, Stanford University, United States

Mark Webster, Structural Engineer, Simpson, Gumpertz & Heger, United States

Michael Culp, Team Leader, Sustainable Transport and Climate Change, FHWA, United States

Gina Ahlstrom, Senior Pavement Engineer, FHWA Office of Pavement Technology, United States

CONFERENCE TECHNICAL SPEAKERS (Partial list)

Mehdi Akbarian, Massachusetts Institute of Technology, United States, *The Impact of Pavement Properties on Vehicle Fuel Consumption within the Pavement Infrastructure*

Michael Bienvenu, PhD, Florida International University, United States, *Comparison of Fuel Consumption on Rigid Versus Flexible Pavements in Florida*

Lisa Bradley, PhD, AECOM, United States, *Hazard, Exposure, and Risk – Why All Three Are Important for Material Ingredients Decisions*

Francesco Di Maio, PhD, Delft University of Technology, The Netherlands, *Recycling End-of-Life Concrete: The C2CA Project*

Dirk Kestner, Walter P Moore, United States, *Embodied Energy and Carbon Impacts of Light Weight Concrete for Steel-framed Commercial Buildings*

Carl Lenngren, PhD, Lund University, Sweden, *Different Pavement Types and Rolling Resistance*

CONFERENCE SCHEDULE

MAY 12		HYATT REGENCY CAMBRIDGE	
6:00 pm - 7:00 pm		Opening Reception	
MAY 13		HYATT REGENCY CAMBRIDGE	
7:00 am - 8:00 am		Continental Breakfast	
8:00 am - 10:00 am		Opening General Session	
10:00 am - 10:30 am		Break	
10:30 am - 12:00 pm		Concurrent Technical Sessions	
12:00 pm - 1:30 pm		Lunch	
1:30 pm - 3:00 pm		Concurrent Technical Sessions	
3:00 pm - 3:30 pm		Break	
3:30 pm - 5:00 pm		Concurrent Technical Sessions	
6:00 pm - 7:00 pm		Reception	
MAY 14		HYATT REGENCY CAMBRIDGE	
7:00 am - 8:00 am		Continental Breakfast	
8:00 am - 10:00 am		Concurrent Technical Sessions	
10:00 am - 10:30 am		Break	
10:30 am - 12:00 pm		Concurrent Technical Sessions	
12:00 pm - 1:30 pm		Lunch	
1:30 pm - 3:00 pm		Concurrent Technical Sessions	
3:00 pm - 3:30 pm		Break	
3:30 pm - 5:00 pm		Closing General Session	

SHOWCASE DESCRIPTION

The MIT Concrete Sustainability Hub Showcase will be an opportunity to look back at the progress that has been made over the first five years of the Hub's existence and celebrate the developments to come in the next five years of the Hub's second phase. CSHub researchers will showcase research on concrete science, buildings, and pavements using poster sessions, plenary presentations, and interactive workshops. The event is an opportunity for stakeholders, including researchers, design professionals, and industry professionals to see first-hand the progress being made at MIT.

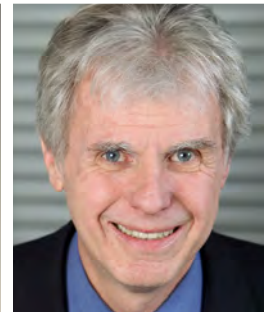
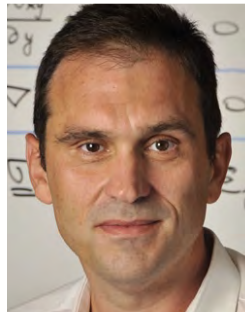


SHOWCASE SCHEDULE

MAY 14		MIT MEDIA LAB	
6:00 pm - 8:00 pm		Opening Reception and Poster Session	
MAY 15		HYATT REGENCY CAMBRIDGE	
6:30 am - 7:30 am		RMC Walk for Sustainability*	
7:00 am - 9:00 am		Continental Breakfast	
9:00 am - 12:00 am		General Session	
12:00 pm - 1:30 pm		Lunch	
1:30 pm - 3:30 pm		Buildings Research Workshop	
1:30 pm - 3:30 pm		Pavements Research Workshop	
1:30 pm - 3:30 pm		Concrete Science Research Workshop	

PROFESSIONAL DEVELOPMENT

Conference and Showcase attendees can receive up to 18 professional development hours (PDH's) depending on the sessions they attend.



Jeremy Gregory

Randy Kurchain

Franz Ulm

Krystyn Van Vliet

Roland Pellenq

Hamlin Jennings

Arash Noshadravan, Massachusetts Institute of Technology, United States, *Analyzing Cost and Hazard Resistance Trade-offs in Residential Construction*

Dr. Natt Makul, PhD, Phranakhon Rajabhat University, Thailand, *Utilization of Unprocessed High-volume Coal Fly Ash Combined with Biomass Rice Husk Ash in Cost Effective Self-Consolidating Concrete*

Hamed Maraghechi, Pennsylvania State University, United States, *Investigation of Using Alkali Activation to Enhance the Pozzolanic Performance of Recycled Glass Powder*

Styliani Papatzani, University of Bath - BRE Centre for Innovative Construction Materials, United Kingdom, *The Effect of the Addition of Nanoparticles of Silica on the Strength and Microstructure of Blended Portland Cement Pastes*

Nicholas Santero, PhD, PE International, United States, *Understanding Health Product Declarations and LEED*

Md Siddiqui, University of Texas at Austin, United States, *A Rational, Sustainable Approach to Pavement Concrete Mixture Design*

SHOWCASE SPEAKERS (Partial list)

Jeremy Gregory, PhD, Executive Director, Concrete Sustainability Hub and Research Director, Massachusetts Institute of Technology

Randolph E. Kirchain, PhD, Principal Research Scientist, Materials Systems Laboratory, Massachusetts Institute of Technology

Franz-Josef Ulm, PhD, Professor, Civil and Environmental Engineering, Massachusetts Institute of Technology

Roland J.-M. Pellenq, PhD, Senior Research Scientist, Massachusetts Institute of Technology

Hamlin Jennings, PhD, Adjunct Professor, Principal Investigator, Concrete Sustainability Hub, Massachusetts Institute of Technology

Krystyn J. Van Vliet, PhD, Associate Professor of Materials Science and Engineering, Massachusetts Institute of Technology

A complete list of Conference and Showcase speakers is available online at www.concretesustainabilityconference.org.

INTERNATIONAL CONCRETE SUSTAINABILITY CONFERENCE MIT CONCRETE SUSTAINABILITY HUB SHOWCASE

REGISTRATION FORM select the appropriate registration fee)

REGISTRATION DESCRIPTION	REGULAR ATTENDEE	SPEAKER/ GOV. EMPL. / PROF.	STUDENT
Combined 2014 International Concrete Sustainability Conference (May 12-14) and 2014 MIT Concrete Sustainability Hub Showcase (May 15)	<input type="checkbox"/> \$595 (Before 4/18) <input type="checkbox"/> \$695 (After 4/18)	<input type="checkbox"/> \$495	<input type="checkbox"/> \$195
2014 International Concrete Sustainability Conference only (May 12-14)	<input type="checkbox"/> \$495	<input type="checkbox"/> \$395	<input type="checkbox"/> \$145
Day 1 of the 2014 International Concrete Sustainability Conference (May 13)	<input type="checkbox"/> \$295	<input type="checkbox"/> \$245	<input type="checkbox"/> \$95
Day 2 of the 2014 International Concrete Sustainability Conference (May 14)	<input type="checkbox"/> \$295	<input type="checkbox"/> \$245	<input type="checkbox"/> \$95
2014 MIT Concrete Sustainability Hub Showcase (May 15)	<input type="checkbox"/> \$245	<input type="checkbox"/> \$195	<input type="checkbox"/> \$95

CONTACT INFORMATION

Name _____ Title _____

Company _____ Phone _____ E-mail _____

Address _____ St/Prov _____ Country _____ Zip _____

PAYMENT METHOD select preferred method of payment)

Check (make check payable to NRMCA).

Mail registration form and check to:
SunTrust Bank, c/o NRMCA
P.O. Box 79433
Baltimore, MD 21279

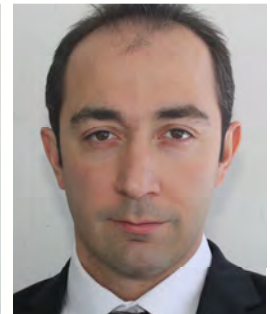
Credit Card VISA Mastercard Amex

Card Number _____ Exp. Date _____

Name on Credit Card (print) _____

Signature _____

Fax registration form to Jessica Walgenbach, Meetings Dept., NRMCA, (301) 565-8200.



Natt Makul

Mark Webster

Mehdi Akbarian

Dirk Kestner

Arash Noshadravan

Hamed Maraghechi

CONFERENCE AND SHOWCASE HOTEL

Hyatt Regency Cambridge, 575 Memorial Drive, Cambridge, MA 02139-4896

The 2014 International Concrete Sustainability Conference and MIT Concrete Sustainability Hub Showcase will take place at the Hyatt Regency Cambridge, (except as noted). The hotel is located within steps of the MIT campus and the Cambridge restaurant district and a short cab ride to downtown Boston.

- Conference Rate: \$239 per night plus tax (on or before April 18, 2014)
- Reservations online: www.concretesustainabilityconference.org
- Reservations by phone: 1-888-421-1442 (mention NRMCA).

CANCELLATION POLICY

NRMCA will refund registration fee less a \$125.00 administration fee (or 50% of paid registration fee, whichever is lower) if registration is cancelled on or before April 18, 2014. All cancellations after April 18, 2014 will not be refunded. Cancellations must be made in writing to NRMCA Meetings Dept., 900 Spring Street, Silver Spring, MD 20910 or by fax to (301) 565-8200. NRMCA reserves the right to close registration in order to not exceed capacity. NRMCA reserves the right to cancel the conference. If that should occur, NRMCA will notify registrants by fax or e-mail by April 18, 2014. NRMCA will refund the entire registration fee but not unused airline tickets, hotel reservation fees, or other travel related expenses.