



INTERNATIONAL
CONCRETE SUSTAINABILITY CONFERENCE
 NORTH AMERICA + LATIN AMERICA
 MAY 11-13, 2015 | MIAMI

Conference schedule mobile app



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CONFERENCE SCHEDULE

MAY 11, 2015 – INTERCONTINENTAL MIAMI

8:00 AM – 12:00 PM	BUS TOUR OF FLORIDA INTERNATIONAL UNIVERSITY CIVIL ENGINEERING — Join us for a tour of the Florida International University (FIU) College of Engineering and Computing where you will witness the cutting edge research facilities including the Titan America Structures and Construction Testing Laboratory and the International Hurricane Research Center Wall of Wind (WOW). Bus leaves hotel main entrance at 8:00 am and returns to hotel at approximately 12:00 pm.
12:30 PM – 7:00 PM	REGISTRATION OPEN (Bayfront Foyer)
1:00 PM – 5:00 PM	WOMEN IN CONCRETE FORUM (Bayfront A) — Join the Women in Concrete Alliance, the National Ready Mixed Concrete Association and the Iberoamerican Federation of Ready Mixed Concrete for the 2015 Women in Concrete Forum. The event will feature speakers and panel discussions on the role of women in the concrete industry and how gender diversity can help meet the challenge of concrete industry sustainability. Both women and men are invited to participate in this event. Speakers include: Esther Arieta, director of quality, Cementos Argos, Colombia Amparo Bocanegra, director of human resources, Cemex Colombia Kristen Braden, construction project manager, H.R. Gray Teresa Cendrowska, vice president of global cooperation, ASTM International Anne Ellis, past president ACI International / vice president, innovation and knowledge share director, AECOM Julie Garbini, executive director, RMC Research & Education Foundation Diana Maria Espinosa Bula, president, Colombian Engineers Society Kimberly Kayler, co-founder, Women in Concrete Alliance, president, Constructive Communication, Inc. Mónica Manolas, vice president of human resources, Cemex USA Lori Tiefenthaler, vice president, sustainability and marketing communications, Lehigh Hanson Lorena Alvarez Guerrero, sustainability director, Argos Central America & Caribbean
6:00 PM – 7:00 PM	RECEPTION (Sevilla)

MAY 12, 2015 – INTERCONTINENTAL MIAMI

7:00 AM – 6:00 PM	REGISTRATION OPEN (Bayfront Foyer)
7:00 AM – 8:00 AM	BREAKFAST (Courtyard Reception)
8:00 AM – 10:00 AM	OPENING GENERAL SESSION (Bayfront A) Allen Hamblen, chief executive officer and president, CalPortland Company, Inc. and incoming chairman, NRMCA <i>Welcoming Remarks and Progress Report on NRMCA Sustainability Initiatives</i> Mark Woerner, Assistant Director for Planning, Miami-Dade County Department of Regulatory and Economic Resources <i>The Challenges of Climate Change and Steps Miami-Dade County is Taking to Mitigate Weather Disasters</i> Leslie Chapman-Henderson, President and CEO, Federal Alliance for Safe Homes (FLASH) <i>Resilience on the Rise: A Report on the Disaster Safety and Mitigation Movement</i> Kirsten Ritchie, Director of Sustainable Design, Gensler <i>The Growing Demand for Transparency and Social Responsibility in the Building Sector</i>

10:00 AM – 10:30 AM	BREAK (Sevilla)		
10:30 AM – 12:00 PM	<p>SESSION T1A (Bayfront A) RESILIENCE</p> <p><i>Development of a New Lightweight-wind-resistant Composite Roof System</i>, Ehssan Amir Sayyafi, Florida International University</p> <p><i>Utilizing the Resiliency and Longevity of UHPC to Build a Sustainable World</i>, Kelly Henry, Lafarge</p> <p><i>Life Cycle Cost Implications of Hazard Resistance and Energy Use in Residential Buildings</i>, T. Reed Miller, Massachusetts Institute of Technology</p>	<p>SESSION T1B (Bayfront B) MATERIAL SCIENCE</p> <p><i>Evaluation of the Effect of Recycled Tire Rubber as Fine Aggregate Replacement on Concrete Properties</i>, David Holt, Texas State University</p> <p><i>Mechanical Properties of Concrete Mixed with Recycled Shredded Tires and High Percentage of Polypropylene Fibers</i>, Daniel Hussey, Manhattan College</p> <p><i>Sustainable Construction Concrete Using Recycled Glass</i>, Mahsa Kamali, University of Miami</p>	<p>SESSION T1C (Isles) LOW IMPACT DEVELOPMENT</p> <p><i>Developing Robust Rehabilitation Scenario Profiles for Life Cycle Assessment using Decision Tree Analysis</i>, James Mack, CEMEX</p> <p><i>New Category in Building Science Creates Innovative Above-Grade Concrete Application without Vertical Rebar</i>, Michael Niemann and C. R. Herro, HercuTech Inc. and Meritage Homes</p> <p><i>Going Net Zero using Concrete Wall Systems: A Case Study</i>, Alan Sparkman, Tennessee Concrete Association</p>
12:00 PM – 1:30 PM	LUNCH (Sevilla) – SPEAKER: Aris Papadopoulos, Founder, Resilience Action Fund, <i>The UN Role in Shaping the Emerging Global Resilience Movement</i>		
1:30 PM – 3:00 PM	<p>SESSION T2A (Bayfront A) RESILIENCE</p> <p><i>Resilience Matters</i>, Larry Rowland, Lehigh Hanson</p> <p><i>What Is A Resilient Passive Concrete Building?</i>, Steve Sunderman, Terrazia PC</p> <p><i>Sustainable Reinforcement Alternative: Glass Fiber Reinforced Polymer (GFRP) for Reinforced Concrete Balconies in Coastal Environments</i>, Matthew Trussoni, University of Miami</p>	<p>SESSION T2B (Bayfront B) MATERIAL SCIENCE</p> <p><i>High Performance Concrete</i>, Stephen Fleming, Prairie Materials</p> <p><i>An Investigation of Blended Cements with High Volume Intergrround Limestone</i>, Ash Kotwal, Texas State University</p> <p><i>Development of a High-Performance Fiber-Reinforced Cement Composite - HPFRCC From Lab Scale to Industrial Scale and Applications</i>, Andres Nunez, Argos</p>	<p>SESSION T2C (Isles) LOW IMPACT DEVELOPMENT</p> <p><i>Effect of Pavement-vehicle Interaction on Fuel Consumption by Field Measurement in Florida - Phase II</i>, Xin Jiao, Florida International University</p> <p><i>Integrated Multi-sensor Monitoring Systems for Sustainable Concrete-based Infrastructure Assets</i>, Mohamed Mahgoub, New Jersey Institute of Technology</p> <p><i>Maintaining and Cleaning Pervious Concrete Pavements: Experiences from the Field</i>, Alan Sparkman, Tennessee Concrete Association</p>
3:00 PM – 3:30 PM	BREAK (Sevilla)		
3:30 PM – 5:00 PM	<p>SESSION T3A (Bayfront A) MATERIAL SCIENCE</p> <p><i>AetherTM a Low CO2 Cement</i>, Laurent Barcelo, Lafarge</p> <p><i>Enhanced Cementitious Efficiency in Sustainable Concrete Mixtures with PLC – Influence of the Chemical and Physical Properties of PLCs and SCMs</i>, Tim Cost, Holcim (US) Inc.</p> <p><i>New Generation of Ultra-High Performance Glass-Concrete</i>, Arezki Tagnit-Hamou, Sherbrooke University</p>	<p>SESSION T3B (Bayfront B) MATERIAL SCIENCE</p> <p><i>Service Life Modeling of Reinforced High Volume Flyash (HVFA) Concrete Structures Containing Cracks</i>, Scott Jones, National Institute of Standards and Technology</p> <p><i>A Reality Check on the Evolution to Performance Specifications</i>, Colin Lobo, National Ready Mixed Concrete Association</p> <p><i>Performance Criteria for Concrete Resistant to Chloride Penetration</i>, Karthikeyan Obla, National Ready Mixed Concrete Association</p>	<p>SESSION T3C (Isles) LOW IMPACT DEVELOPMENT</p> <p><i>Paving the Way to Stormwater Management</i>, Steve Sunderman, Terrazia PC</p> <p><i>Extraction, Use and Disposal of Construction Materials in Europe and Southeast Asia: Case Studies in Great Britain and Thailand</i>, Napaporn Tangtinthai, Newcastle University</p> <p><i>Carbon Sequestration and the Impact on Concrete Performance</i>, Oscar Tavares, Alpena Community College</p>
6:00 PM – 7:00 PM	RECEPTION (Sevilla)		

MAY 13, 2015 – INTERCONTINENTAL MIAMI

6:00 AM – 7:00 AM	RMC RESEARCH & EDUCATION FOUNDATION – WALK FOR SUSTAINABILITY (Starts in the Bayfront Foyer) (Additional fee required)		
7:00 AM – 3:30 PM	REGISTRATION OPEN (Bayfront Foyer)		
7:00 AM – 8:00 AM	BREAKFAST (Sevilla)		
8:00 AM – 10:00 AM	<p>SESSION T4A (Bayfront A) MATERIAL SCIENCE</p> <p><i>Durability of Concrete with Recycled Aggregates from Returned Concrete</i>, Giorgio Ferrari, MAPEI SPA</p> <p><i>Admixture Compatibility of Alternative Supplementary Cementitious Materials</i>, Ehsan Ghafari, Missouri University of Science and Technology</p> <p><i>Producing Roller Compacted Concrete With Sustainability as a Goal</i>, Brian Killingsworth, National Ready Mixed Concrete Association</p> <p><i>Hybrid OR/MS and GIS to Optimize Ready-mix Concrete Deliveries</i>, Mohamed Mahgoub, New Jersey Institute of Technology</p>	<p>SESSION T4B (Bayfront B) MATERIAL SCIENCE</p> <p><i>An Innovative Depolluting Concrete Doped with Activated Carbon to Enhance Air Quality</i>, Matthieu Horgnies, Lafarge Research Center</p> <p><i>Fly Ash Sustainability: Technologies to Mitigate the Impact of Sorbent Injection on Product Quality</i>, Rafic Minkara, Headwaters</p> <p><i>Using Carbon Dioxide as a Beneficial Admixture in Ready-Mixed Concrete</i>, Sean Monkman, CarbonCure Technologies</p> <p><i>Development of Novel Cements with Optimized Carbon Capture Capabilities</i>, Cise Unluer, Nanyang Technological University</p>	<p>SESSION T4C (Isles) LIFE CYCLE ASSESSMENT</p> <p><i>A Simulation Framework for Assessment of Pavement Network Sustainability: Comparative Assessment of Pavement Material Types</i>, Mostafa Batouli, Florida International University</p> <p><i>Optimizing Concrete Pavement Type Selection Based on Life Cycle Cost Analysis</i>, Jiong Hu, Texas State University</p> <p><i>Athena Impact Estimator for Highways – A Web-enabled Environmental Life Cycle Assessment Software for Assessing Regional Materials Manufacturing, Roadway Construction, Use and Rehabilitation Life Cycle Stages</i>, Jamie Meil, Athena Institute</p> <p><i>Evaluating the Environmental Impact of Pavement-vehicle Interaction (PVI) using Life Cycle Assessment (LCA)</i>, T. Reed Miller, Massachusetts Institute of Technology</p>
10:00 AM – 10:30 AM	BREAK (Sevilla)		
10:30 AM – 12:00 PM	<p>SESSION T5A (Bayfront A) SOCIAL RESPONSIBILITY</p> <p><i>Gaining Value from an Environmental Product Declaration - A Simplified Approach to Develop more Sustainable Concrete Solutions</i>, David Green, BASF Corp</p> <p><i>Industry Average Slag Cement EPD – A Tool to Document How Use of Slag Cement Can Reduce the Environmental Footprint of Concrete Mixtures</i>, Jamie Meil, Athena Institute</p> <p><i>Real World Implementation of an On-demand System for Creation and Delivery of Environmental Product Declarations</i>, James Shilstone and Chris Erickson, Command Alkon, Inc. and Climate Earth</p>	<p>SESSION T5B (Bayfront B) MATERIAL SCIENCE</p> <p><i>Development and Application of Recycled Plastic Fibres to Reinforce Concrete</i>, Rabin Tuladhar, James Cook University</p> <p><i>Environmental Impacts of Replacing Natural Aggregates with Recycled Demolition Waste for Use in Concrete in New York City Area</i>, Ardavan Yazdanbakhsh, City College of New York</p> <p><i>Can Structural Design Strategies be Used to Offset the Lower Strength of Recycled Aggregate Concrete?</i>, Ardavan Yazdanbakhsh, City College of New York</p>	<p>SESSION T5C (Isles) LIFE CYCLE ASSESSMENT</p> <p><i>Beyond EPDs: Using LCA Models and Tools to Develop More Sustainable Cements and Concretes</i>, Daniel Duque, Cementos Argos S.A.</p> <p><i>Streamlining Life Cycle Assessments of Residential Construction</i>, Joshua Hester, Massachusetts Institute of Technology</p> <p><i>Concrete Specifications and Whole Building LCA in LEED V4 – A Case Study</i>, Dirk Kestner, Walter P Moore</p>
12:00 PM – 1:30 PM	LUNCH (Sevilla) – SPEAKER: Dr. Natalie West Kharkongor, Associate Professor, Indian Institute of Management Shillong, India, Green Economics: Sustainability Funding		
1:30 PM – 3:00 PM	<p>SESSION T6A (Bayfront A) SOCIAL RESPONSIBILITY</p> <p><i>Using the NRMCA Industry Average EPD to Lower the Impact of Concrete and Concrete Buildings</i>, Lionel Lemay, National Ready Mixed Concrete Association</p>	<p>SESSION T6B (Bayfront B) MATERIAL SCIENCE</p> <p><i>Performance Based Concrete Specifications – Solution for Sustainable Concrete?</i>, Rui Liu, Kent State University</p>	<p>SESSION T6C (Isles) LIFE CYCLE ASSESSMENT</p> <p><i>Modeling the Life-Cycle Impact (LCI) of Concrete through Comparative Life Cycle Analysis (LCA)</i>, Jacob Ellis, Texas State University</p>

Success in the New Social Economy with the Concrete Sustainability Council (CSC) Certification, Stefan van Uffelen, Concrete Sustainability Council

Guide to Material Ingredient Disclosure and Optimization for Ready Mixed Concrete, Frances Yang, Arup

Sustainable Concrete Without Chloride Limits, Antonio Nanni, University of Miami

Earth Concrete as a Promising Building Material, Claudiane Ouellet-Plamondon, Ecole de Technologie Superieure

Environmental impact of concrete containing RCA and PLC, Katherine Michaud, Queen's University

Urban Heat Island: City Texture Matters, Jake Sobstyl, Massachusetts Institute of Technology

3:00 PM –
3:30 PM

BREAK (Sevilla)

3:30 PM –
5:00 PM

CLOSING GENERAL SESSION (Bayfront A)
PANEL DISCUSSION

Resilient Communities: What Will it Take to Reduce the Economic, Environmental and Societal Toll of Natural Disasters?

We are now witnessing unprecedented loss of life and property from natural hazards such as earthquakes, fires, hurricanes, tornadoes and floods. In order to help reduce the effects of these disasters have on our communities, we may have to rethink the way we design and build our buildings and infrastructure to minimize economic, environmental and social impacts. This panel discussion will explore how we can advance community resilience through voluntary, community-based initiatives, adoption of stricter construction standards, and how policymakers could support investments that help to reduce exposure to loss and to shorten recovery periods.

Lionel Lemay, Senior Vice President, Sustainable Development, National Ready Mixed Concrete Association (Moderator)

Philippe Fonta, Managing Director—Business Applications, World Business Council for Sustainable Development

Fred Malik, FORTIFIED Programs Director, Insurance Institute for Business and Home Safety

Steve Sunderman, Architect, Terrazia PC

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