# THE INTERNATIONAL CONCRETE SUSTAINABILITY CONFERENCE

DUBAI, 26 - 27 NOVEMBER 2013 8.30am – 4.30pm Dubai World Trade Centre

# **5 KEY** LEARNING POINTS

- Learn about the latest developments in concrete sustainability and technology related to materials, design, manufacturing, and testing
- 2 Develop knowledge of sustainability initiatives adopted by local and international bodies
- **3** Gain awareness of green concrete, alternative and recycled materials, aggregates and cementitious materials
- 4 Witness live demonstrations on new concrete products and technologies

Meet senior delegates and network with decision makers from local authorities, consultants, contractors, concrete manufacturers and construction materials suppliers.



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The NRMCA, Grey Matters and Middle East Concrete invite you to join the world's premier thought leaders in the concrete industry for two days of discussion, learning and knowledge sharing on sustainability initiatives and technologies.





SILVER SPONSORS:









#### Dear Fellow Industry Professional,

I would like to extend an invitation to join the second edition of the International Concrete Sustainability Conference, once again hosted alongside the Middle East Concrete exhibition.

This year's conference, by popular demand, will include a second day – away from the lecture theatre – with a series of practical demonstrations designed to give life to some of the theories and innovations discussed on Day One.

Sustainability remains at the forefront of both the national, regional and, indeed, international agendas, with the introduction of LEED Version 4 set to be implemented in the last quarter of 2013, which will be followed in the first quarter of 2014 with the launch of new green building codes by the Dubai Municipality.

This technical conference, led by Grey Matters and the NRMCA, gathers together leading thinkers and academics from the concrete industry to deliver a range of sessions exploring all aspects of sustainability in the concrete sector – as well as exploring practical ways in which you can implement them into your business.

I hope you find the two days of the 2013 International Concrete Sustainability Conference interesting and informative – and that you also take the opportunity to develop new industry contacts.

#### Kind regards



Nathan Waugh Event Director Middle East Concrete

PS. DON'T FORGET Your delegate badge will also grant you FREE access to the Middle East Concrete exhibition, giving you access to thousands of innovative concrete products from around the world.

### **PROGRAMME OUTLINE**

DAY ONE	26 NOVEMBER 2013
8:30 - 9:15	Registration and Coffee
9:15 – 9:30	Welcome Address
9:30 – 10:30	<ul> <li>New Radical Materials and Resources Reporting Criteria in LEED V4</li> <li>Carbonation Curing of Sustainable Green Concrete Blocks with Portland Limestone Cement Emerging Trends in Concrete Construction</li> </ul>
10:30 – 11:00	Networking Coffee Break
11:00 – 12:30	<ol> <li>Specifying Durability Requirements for Concrete – Is There a Better Way?</li> <li>An Innovative Experimental Method to Determine Water Penetration Depth in Concrete</li> <li>Certification of Ready Mixed Concrete Production and Transport Facilities; Dubai Central Laboratory, Dubai Municipality - UAE</li> </ol>
12:30 - 14:00	Lunch and CCPf Graduation Ceremony
14:00 – 15:00	I. Optimised Concrete Dispatch Control for a More Rational Use of Resources II. New Sustainable Technology to Recover Returned Concrete
15:00 – 15:30	Networking Coffee Break
15:30 – 16:30	<ol> <li>Characterisation of High Percentages of Fly Ash with Sodium Sulfate as Activiator for Ultra Optimum Green Concretes</li> <li>Volarisation of Industrial Wastes for Building Applications with the Added Benefit of Carbon Sequestration</li> </ol>
DAY TWO	27 NOVEMBER 2013
9:00 - 12:00	Site Live Demonstrations I. Recovering Returned Concrete, Mapei UAE II. Concrete Waterproofing, Kryton Canada

# WHO SHOULD ATTEND?

The International Concrete Sustainability Conference will deliver vital information for:

- Researchers
- Engineers
- Architects
- Contractors
- Concrete producers

- Public works officials
- Material suppliers
- Concrete technologists
- Concrete industry professionals

Places are limited to 100 delegates – confirm your place today by contacting Ihab Bassiouni, Grey Matters Consultancy, on ihab.bassiouni@greymatters.ws Mobile No.: +971559547074

# **PROGRAMME AGENDA**

## DAY ONE

#### 09:00 - 09:15 REGISTRATION AND COFFEE

09:15 - 09:30 Welcome Address Lionel Lemay

Senior Vice President of Sustainability, National Ready Mixed Concrete Association

09:30 - 10:30

### **SESSION ONE**

#### New Radical Materials and Resources Reporting Criteria in LEED V4 Lionel Lemay Senior Vice President of Sustainability, National Ready Mixed Concrete Association

Carbonation Curing of Sustainable Green Concrete Blocks with Portland Limestone Cement Hilal El-Hassan American University in Dubai, Dubai, UAE

#### 10:30 - 11:00 **NETWORKING COFFEE BREAK** Abu Dhabi Room B

11:00 - 12:30

### **SESSION TWO**

#### Specifying Durability Requirements for Concrete – Is There a Better Way?

Senior Vice President of Engineering, National Ready Mixed Concrete Association

An Innovative Experimental Method to Determine Water Penetration Depth in Concrete. Mohammad Khodaparast SGC Engineering Company, Iran

#### **Certification of Ready Mixed Concrete Production and Transport Facilities;** Dubai Central Laboratory, Dubai Municipality, UAE

#### ABU DHABI ROOM A | 26 NOVEMBER 2013

#### 12:30 - 14:00 LUNCH AND CCPf GRADUATION CEREMONY Abu Dhabi Room B

Abu Dhabi Room

14:00 - 15:00

#### **SESSION THREE**

Optimised Concrete Dispatch Control for a More Rational Use of Resources Marco Severini Elettrondata, Italy

New Sustainable Technology to Recover Returned Concrete Giorgio Ferrari Mapei, UAE

15:00 - 15:30 NETWORKING COFFEE BREAK Abu Dhabi Room B

15:30 - 16:30

### **SESSION FOUR**

Characterisation of High Percentages of Fly Ash with Sodium Sulphate as Activator for Ultra Optimum Green Concretes Diego Valendia Concretos Argos, Columbia

Volarisation of Industrial Wastes for Building Applications with the Added Benefit of Carbon Sequestration Zaid Ghouleh McGill University, Canada



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# LIVE DEMONSTRATIONS

### **DAY TWO**

nycon

#### 9:00 -12:00 | 27 NOVEMBER 2013 ENGINEERING YARD, BEHIND ZABEEL HALL, DWTC (LOCATION MAP WILL BE SUPPLIED TO ALL DELEGATES)

### NEW TECHNOLOGY TO **RECOVER RETURNED CONCRETE**

A full scale demonstration of the new technology will be given. Two cubic metres of returned concrete in a truck mixer are treated with a new additive and

transformed, in few minutes, into a granular material that is discharged from the truck mixer and can be reused. after curing, as aggregates for the production of new concrete. No liquid and solid wastes are produced by this new sustainable technology. Courtesy of Mapei UAE, all ICSC delegates will enter a prize draw to win a Mont Blanc wallet or pen.

### TAKING THE RISK OUT OF **CONCRETE WATERPROOFING**

As the inventors of the crystalline waterproofing admixture Kryton takes the risk out of concrete waterproofing, see for your own eyes how our admixture completely waterproofs a concrete tank constructed using Cemex concrete by Ali & Sons. For the past 40 years Kryton has been waterproofing concrete with the most complete system, see our complete system in action: watch us perform a crack repair and demonstrate our Krystol Waterstop System. Kryton products have undergone more testing and received more approvals than any other. During our demonstration we will review our newest certificate from the Dubai Municipality.

BE SURE, BE KRYTON,

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# SPEAKERS

# LIONEL LEMAY PE SE, LEED AP

Mr. Lemay is Sr. Vice President, Sustainability and Technical Resources for the National Ready Mixed Concrete Association (NRMCA). He manages programmes that assist concrete producers, contractors and design professionals transform concrete manufacturing and construction to improve overall sustainability of the concrete industry. He manages programmes to educate concrete industry professionals, engineers and architects on the proper use and design of concrete for buildings, parking areas, roadways and other applications. Mr. Lemay has written numerous articles on concrete design and construction and is co-author of the McGraw-Hill book "Insulating Concrete Forms for Residential Design and Construction" and contributor for "FEMA 320 Taking Shelter From the Storm: Building a Safe Room For Your Home or Small Business". He is a Registered Professional Engineer and Structural Engineer in the State of Illinois. He is also a LEED Accredited Professional. Mr. Lemay holds Bachelors and Masters Degrees in Civil Engineering and Applied Mechanics from McGill University in Montreal, Canada.



# MOHAMMAD MAHDI KHODAPARAST

Concrete researcher and project manager of TUMC (Technical Unit of Materials & Concrete) at Power & Water University of Technology, Iran. He has a B.Sc in Civil Engineering – Hydraulic Structures. He is a Ph.D student at Coventry University, on Sulfate Resistance of Alkali Activated Natural Pozzolan Concrete. Mohammad has conducted several researches in concrete durability test methods. He has presented papers in international conferences on different subjects including Geopolymer concrete, Pre-stressed concrete bridges construction, Influence of nano silica in concrete permeability.

Mohammad has published several papers in Concrete Technology Journal of ACI.

# DIEGO FELIPE VELANDIA MSC.

Civil Engineer from Universidad Militar Nueva Granada, MEng in Structural Engineering from Universidad de los Andes, MSc in Structural Engineering and Materials from Cardiff University. Nowadays, PhD student from the University of Sheffield in UK. Different academic awards such as the Presidential Academic Award from the US Presidency, the South Wales Institute of Engineers Educational Trust, scholarships and registration with honours. Author of one book, conferences and journal papers. Research experience in different companies such as British Petroleum and Corus Group Steel Producer in UK. Now Technical Development Chief Engineer in Concretos Argos Colombia.

# MARCO SEVERINI

Marco Severini is CEO of Elettrondata, a leading Italian company established in 1973, dedicated to designing and manufacturing automatic control systems as well as accessories for concrete batching and mixing. Marco graduated in electronics and IT, and has been in the business for the last 25 years, developing automation solutions for the concrete industry worldwide.



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# HILAL EL-HASSAN PH.D.

Hilal El-Hassan is a Research Associate at McGill University in Montreal, Canada. Mr. El-Hassan finished his PhD degree in civil engineering majoring in the Structural and Environmental departments under the supervision of Professor Yixin Shao. He is a member of a team of graduate and doctoral students investigating the effect of early-age carbonation on concrete products including concrete masonry units, concrete pipes, and concrete pavement. Mr. El-Hassan's work on concrete masonry units examined the ability to permanently sequester carbon dioxide gas in the form of the thermodynamically stable calcium carbonate, while thriving to maximise the uptake in order to reduce global carbon dioxide emission. He has several publications in civil engineering journals including ACI and ASCE material journals discussing the different aspects of concrete carbonation and its effect on concrete microstructure.

### COLIN LOBO PH.D. P.E

Dr. Lobo is Sr. Vice President, Engineering for the National Ready Mixed Concrete Association (NRMCA). He manages research, education, certification programmes and represents the ready mixed concrete industry in various codes and standards committees. He is a member of ACI Committees 301 on Specifications and 318 on the Building Code for Structural Concrete. He serves on several committees of ASTM that develop standards for concrete and concrete materials. He is responsible for several industry education and certification programmes, including the NRMCA certification programme for concrete production facilities. Dr. Lobo has written numerous articles and industry publications on concrete technology. He is a co-author of ASTM Manual 49 Understanding ASTM C94 – Specification for Ready Mixed Concrete. Dr. Lobo holds a Ph.D. in Civil Engineering from Purdue University in the US. He is a licensed engineer in the state of Maryland, USA.

# ZAID GHOULEH B.ENG., M.ENG., PH.D (CAND.)

Obtaining a bachelor's degree in Materials Engineering from McGill University in 2005, Mr. Ghouleh resumed academic research after accruing a few years of industrial experience in metallurgy-related, specialty engineering fields. He attained a Master's degree under the same department in 2009, with a major focus on waste remediation and recycling. He later enrolled in the department of Civil Engineering to complete a Ph.D degree. His doctorate dissertation involves exploring innovative methodologies that promote sustainable building practices, ones to contribute to resource conservation and emission mitigation in the construction industry. His relevant areas of interest include waste valorisation, high temperature processing and thermodynamic simulations, accelerated carbonation, mineral sequestration, carbon capture and storage (CCS), and waste-derived concrete products.

# DR. GIORGIO FERRARI

Dr. Giorgio Ferrari is senior researcher at Mapei S.p.A., Milan (Italy). He graduated in Chemistry at the University of Padua in 1977. He is author of more than 50 scientific publications and presentations at international conferences in the field of concrete additives and environmental issues. He is also author of several international patents and two books. Fields of interest include research and development of new concrete additives, modelling of cement hydration and new sustainable construction materials and environmental protection.

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#### **DELEGATE RATES**

Full day conference including three coffee breaks and buffet lunch

#### STANDARD RATE

EARLY BIRD (Before 26 October, 2013)\$4GROUP DISCOUNT\$4(Groups of three or more booking and paying together)

\$550 per delegate\$470 per delegate\$400 per delegate

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### **SPONSORSHIP OPPORTUNITIES**

If you are interested in becoming a sponsor for the International Concrete Sustainability Conference or Middle East Concrete contact **nathanwaugh@dmgeventsme.com** or call +971 [4] 438 0355

This conference is part of NRMCA's Seminars, Training and Education Programmes (STEPS™) and it provides 12 credits towards earning one's CCPf (http://nrmca.org/Education/CCPf/index.htm) designation in all career tracks. CCPf, standing for Certified Concrete Professional, is the highest professional designation in the industry.

# INTERNATIONAL CONCRETE SUSTAINABILITY CONFERENCE **REGISTRATION FORM**



#### DUBAI WORLD TRADE CENTRE | 26 - 27 NOVEMBER 2013

(Please type or print clearly)	Date:
Family Name:	
First Name:	
Company/Organisation:	
Designation:	
E-mail:	
Telephone:	
Fax:	
Mobile:	
Mailing Address:	

#### **FEE ENCLOSED:**

**USD 550.00 Registration Fees:** Early Bird (Before 26 October, 2013): USD 470.00 USD 400.00 Group Registration (3 or more):

# RETURN REGISTRATION FORM AND FEE TO:

Fax: +971 4 88 49 524 Email: training@greymatters.ws

#### **PAYMENT:**

CASH ENCLOSED

CHEQUE ENCLOSED

CASH DEPOSIT

CHEQUE DEPOSIT

**BANK TRANSFER** 

Account Name: Grey Matters Consultancy Account No. (AED): 6200736068 IBAN: AE82035000006200736068 Bank: National Bank of Abu Dhabi Branch: Mall of the Emirates - Dubai, UAE Swift Code: NBADAEAAMOE

Account Name: Grey Matters General Trading Account No. (USD): 1024027484302 IBAN: AE260260001024027484302 Bank: Emirates NBD Branch: Dubai Main Branch - Dubai, UAE Swift Code: EBILAEAD

#### SIGNATURE:

IMPORTANT: Please mention the name of the delegate on the bank transfer/deposit receipt