ISCP UPDATES

10th ICCP Advance Registration Deadline: June 30th!

Advance registration for the 10th ICCP in Québec City, Québec Canada will close on June 30th. Register online now to receive $100 off ($50 for Students) of the on-site registration rates. You may register online at: http://www.concretepavements.org/10thiccp/registration.htm.

Conference attendees should reserve your hotel room at the Fairmont Le Château Frontenac as soon as possible to ensure you receive the lower conference room rates within the limited block of rooms. For Hotel Reservations, please go to: http://www.concretepavements.org/10thiccp/accomodations.htm.

Please view the Conference Brochure online and download a printable flyer and registration form at: http://www.concretepavements.org/10thiccp/10h_ICCP_flier_Jan_12_low_res.pdf (1.3 MB).

Please view the Preliminary Program online at: http://www.concretepavements.org/10thiccp/program.htm.

For the 10th ICCP details, you may visit the home page at: http://www.concretepavements.org/10thiccp/index.htm.

For more information on Québec City and the surrounding area, please visit the Québec City Tourism site at: http://www.quebecregion.com/en?a=con.

ISCP Welcomes Sponsors for the 10th ICCP

10th ICCP Advance Registration Deadline: June 30th! The International Society for Concrete Pavements (ISCP) welcomes sponsors for the 10th ICCP. Sponsorships are offered at four (4) levels: Platinum, Gold, Silver and Bronze. For Sponsorship details, please go to: http://www.concretepavements.org/10thiccp/sponsors.htm.

To become a Sponsor, please contact: Sherry Sullivan, Sponsorship Coordinator. Phone: (416) 449-3708 ext. 234 | E-mail: conference.sponsorships@concretepavements.org.

INDUSTRY RESOURCES/RESEARCH REPORTS

Optimizing Cementitious Content in Concrete Mixtures for Required Performance

The National Concrete Pavement Technology Center at Iowa State University has released a report that examines the effects of changing the cementitious content required at a given water-to-cement ratio (w/c) on workability, strength, and durability of a concrete mixture. This study investigates the effects of changing cement content and paste volume on strength and durability.

Concrete is the most commonly used material for all types of construction, and cement is a primary component. The cement content of a mixture is commonly perceived to control concrete strength. Based on this perception, a minimum cement content is often specified that may exceed the amount needed to achieve the desired strength and durability. This excess cement content has a negative impact on cost and the environment for the following reasons:
• Cement is the most expensive component in concrete
• Cement contributes about 80 percent of the carbon dioxide (CO₂) burden of a concrete mixture

Although workability is improved by increasing cement content, previous studies suggest that increasing cement content does not necessarily contribute to increase in concrete strength. Increased cement content also causes higher internal temperatures in the concrete during the finishing and curing processes. In addition, the high cement content causes the mixture to become sticky and may lead to increased risk of shrinkage and cracking problems. Therefore, cement content should be balanced to achieve the required performance while minimizing risk of these problems.

The goal of this project was to help the concrete industry use the right amount of cement with an appropriate water-to-cement (w/c) or water-to-cementitious materials (w/cm) ratio to meet given workability, strength, and durability requirements. The intended goal was to also optimize carbon dioxide emissions, energy consumption, and costs. The hypothesis behind this study is that when other parameters are kept constant, concrete properties such as strength and durability will not be improved significantly by adding additional cement after a certain minimum cement content is used.

The scope of this study was to investigate strength, chloride penetration and air permeability as indicators for performance of concrete mixtures with various w/cm and cementitious contents using a variety of binders. Fresh concrete properties such as slump, setting time and air content were also tested. The final report for this project presents and discusses workability, setting time, strength, chloride penetration and air permeability, and how they are affected by paste content of a mixture. Reducing excess cement content in concrete mixtures will help to reduce costs as well as the environmental and energy impacts associated with making cement.

To view the findings, figures and full report, please download a pdf (1.82 MB) at: http://www.intrans.iastate.edu/reports/taylor_ocm_w_cvr2.pdf

For more information, please contact: Peter Taylor, Associate Director, National Concrete Pavement Technology Center, Iowa State University
phone: 515-294-9333 | e-mail: ptaylor@iastate.edu
Please visit the CP Tech Center website at: www.cptechcenter.org

International Seminars: “New Concrete Pavement Technology” in Santiago & Punta Arenas, Chile

Two international seminars entitled “Test Technologies in Design and Construction of Concrete Pavements” were held in the cities of Santiago and Punta Arenas, Chile, March 27th to March 31st, 2012. The seminars were organized by the Ministry of Public Works of Chile, the Institute of Cement and Concrete of Chile, and TCPavements. ISCP and ACPA were the seminar sponsors.

Among the speakers were:

Jeff Roesler, ISCP Director and Associate Professor at the University of Illinois, who spoke about trends and innovations in concrete pavements;

Lev Khazanovich, ISCP Director and Professor at the University of Minnesota, who focused on the fundamentals of mechanistic design methods and nondestructive testing for pavement;

Juan Pablo Covarrubias V, ISCP Director and General Manager of TCPavements, who discussed Optimized slab concrete pavement design procedure and projects;

Juan Pablo Covarrubias Sr, former ISCP Board Member, who spoke about best construction practices in construction.

More than 180 people attended the Santiago seminar and 120 people attended the Punta Arenas seminar to learn about the trends and innovations that have been applied worldwide, to achieve better quality, greater durability, as well as more competitive and sustainable concrete pavements. Among the attendees were many representatives of professional, public and private sectors of Chile and various countries of Latin America.

For more information about these seminars, please contact via email: Juan Pablo Covarrubias (Jr) jpcovarrubias@tcpavements.com

For additional Seminar photos, please go to: https://plus.google.com/photos/1169763668057678362/albums/5729232590089354625?banner=pwa
CONFERENCE REMINDERS

International Conference on Long-Life Concrete Pavement (LLCP) 2012, in September

Registration continues for the International Conference on Long-Life Concrete Pavements, to be held in Seattle, Washington, September 18-21, 2012.

Registration dates are: 

Late: July 31, 2012

Very Late after: July 31, 2012

To register, please go to: 

For the conference website, please go to: 

For more information, please contact: Shiraz Tayabji, Fugro Consultants, Inc.; Phone: 410-302-0831 | E-mail: stayabji@aol.com

CALL FOR ABSTRACTS

Call for Abstracts for the Concrete for Sustainable Construction Conference to be Held in Kingdom of Bahrain, February 2013

The 9th International Conference and Exhibition on Concrete for Sustainable Construction will be held February 11-13, 2013 at the Gulf International Convention Center, Gulf Hotel Kingdom of Bahrain. The conference will be a continuation of the successful forums that have been held bi-annually since 1985.

Abstracts are due August 15, 2012 and should be forwarded through the Conference website at: www.concrete9.org or e-mail info@concrete9.org, vivek@mohandis.org.

Abstracts should clearly state the subject matter, the objectives and the important conclusions to be presented in the full paper. The length of the abstract should be between 300-500 words. The abstract must include the title of the paper, author’s name(s), affiliation(s), and mailing and email addresses. Selection of papers will take into account the originality, relevance and likely interest to Conference delegates. Guidelines for submitting the full manuscript for review and the preparation of the final draft will be communicated upon the acceptance of the abstract.

Chairman Dr. Jameel Al Alawi invites you all to participate in the 9th International Concrete Conference and Exhibition. The invitation is extended to all stakeholders in the real estate and the construction industry – investors, developers, clients and the public – to participate in this convention and make a significant contribution in charting the course of the industry for the future, both regionally and globally. This edition will also bring together engineers, designers, researchers and scientists from around the world to promote better understanding of matters of common interests to all stakeholders, ranging from the most recent research to the latest applications of high-strength and high performance concrete for construction. The symposium is supported by leading world organizations, such as American Concrete Institute – Saudi Arabian & Bahrain Chapters and the Concrete Society (UK).

The conference will host workshops and seminars and also present the opportunity to share technical and research papers as well as case studies on topics of interest, which will include: Concrete in a Sustainable World; Durability, Deterioration and Repair of Concrete Structures; Advances in Materials and Processes for Green Buildings; Design and Construction; Research and Development; etc.

The conference will cover a wide range of topics as envisioned in the following list. Each main topic will be covered by one session. Other emerging topics are welcomed and encouraged.

A Concrete in a Sustainable Environment

1. What is Sustainability
2. Carbon Footprint in Concrete Construction
3. Life Cycle Assessment and Life Cycle costs
4. Use of Recycled & Waste Materials
B Durability, Deterioration & Repair of Concrete Structures

1. Strategies for durable Concrete Structures and Life Cycle Costs
2. Pre & Post Concreting Factors Affecting Durability
3. Effects of Chemicals in Soil and Sea water on Concrete
4. Corrosion Protection Strategies
5. Repair Methods and Techniques
6. Rehabilitation of Waste materials
7. Strengthening and change of use
C Projects and Case Studies

1. Design and Construction of High Rise Buildings in GCC
2. Concrete Transportation Structures (Eg. Metro Structures, Bridges and Pavements)
3. Burj Khalifa Design and Construction challenges
4. Marine Structures
D Advances in Materials

1. Alternative Reinforcement materials
2. Alternative Concrete Constituents and Admixtures
3. Specialized Concrete Mixes
4. Light Weight Concrete
E Design and Construction

1. Status of Codes, Implementation in the Region
2. Foundations and Soil Improvement
3. Design Software for Concrete Structure
4. Pre-Tensioning, Post- Tensioning & Precast Applications
5. Innovative Construction Techniques

For details, please visit: www.concrete9.org
For information on attractions in Bahrain, please visit: www.bahraintourism.com.
CALL FOR ABSTRACTS & PAPERS DIGEST

June 30, 2012 Abstracts are requested for papers for the Fifth North American Conference on the Design and Use of Self-Consolidating Concrete 2013 (SCC2013), which will be held May 12-15, 2013 at the Westin Michigan Avenue in Chicago, Illinois, USA. Papers should address recent innovation, application and production of Self-Consolidating Concrete (SCC). All accepted papers will be published in the conference proceedings, and selected papers will be published in the Journal of Cement and Concrete Composite. For topics and abstract information, please go to: http://www.intrans.iastate.edu/events/scc2013/abstract-call-for-abstracts/. For conference information, please go to: http://www.intrans.iastate.edu/events/scc2013/about/.

August 1, 2012 The submission site for committee Calls for Papers for the 2013 TRB Annual Meeting is now open for your use at: http://pressamp.trb.org/CallForPapers/callforpapers.asp. Please use the submission form and follow the instructions that are linked to it. Subject area categories’ descriptors may be found at: http://onlinepubs.trb.org/onlinepubs/am/calls/Subjects.pdf

UPCOMING EVENTS

9th International Transportation Specialty Conference
Part of the Canadian Society of Civil Engineering (CSCE) 2012 Conference
June 6-9, 2012 in Edmonton, Alberta, Canada
http://csce2012.ca/

EUPAVE - Dedicated Bus and Tram Lanes Seminar and Site Visit
June 7-8, 2012 in Paris, France

fib Symposium: Concrete Structures for Sustainable Community
June 11-14, 2012 in Stockholm, Sweden
http://www.fibstockholm2012.se/

Symposium on Advances in Pavement Mechanics
June 17-20, 2012 in Notre Dame, Indiana, USA
http://nd.edu/~emipmc12/

International Congress on Durability of Concrete
June 18-21, 2012 in Trondheim, Norway
http://www.icdc2012.com

7th RILEM Conference on Cracking in Pavements
June 20-22, 2012 in Delft, the Netherlands
http://www.rilem2012.org

3rd Advanced Workshop on Concrete Pavements
July 5-7, 2012 Lac Delage, Quebec, Canada
http://www.concretepavements.org/3rdworkshop/

10th International Conference on Concrete Pavements
Organized by ISCP
July 8-12, 2012 in Quebec City, Canada
http://www.concretepavements.org/10thiccp

23rd Annual Concrete Materials Computer Modeling and Durability Workshop, NIST & RILEM
July 16-18, 2012 in Gaithersburg, Maryland, USA
http://www.nist.gov/el/building_materials/modeling-workshop.cfm

MAIREPAV7 Conference
August 28-30, 2012 in Auckland, New Zealand
http://www.mairepav7.co.nz/

SWIFT 2012 Conference and Trade Show
September 17 - 21, 2012 in Banff, Alberta, Canada
http://www.swiftconference.org/

FHW ACP International Conference on Long-Life Concrete Pavements
September 18-21, 2012 in Seattle, Washington, USA

7th Symposium on Pavement Surface Characteristics (SURF 2012)
September 19-22, 2012 in Norfolk, Virginia, USA
http://www.cpe.vt.edu/surf2012/index.html

4th International Conference on Accelerated Pavement Testing (APT 2012)
September 19-21, 2012 in Davis, California, USA
http://ucprc.ucdavis.edu/APT2012

For events taking place October through December, 2012 and in 2013, please go to: http://www.concretepavements.org/calendar.htm.