



International Society for Concrete Pavements

What's New at ISCP

ISCP Mid-Year Board Meeting on Hold

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Plans to hold the 2009 mid-year meeting of ISCP's Board of Directors in Sydney, Australia have been postponed. Alternate locations are now being considered and it is likely that the meeting date will be delayed to the latter part of the year.

Revised meeting plans will be posted on the ISCP website (www.concretepavements.org) as soon as they are complete. As always, the meeting will be open to all members.

Conference News

BCR²A'09 Conference: Participants and Exhibitors – Register Now!



The Eighth International Conference on the Bearing Capacity of Roads, Railways and Airfields (BCR²A'09) will take place at the University of Illinois in Champaign, Illinois, on June 29-July 2, 2009. The BCR²A'09 conference is of particular interest to academics, researchers, and practitioners involved in transportation geotechnics, pavement and railroad engineering disciplines and concerned with the many issues pertaining to the bearing capacity and mechanistic-based design of highway and airfield pavements and

railroad track structures. The BCR²A'09 conference will provide a forum to promote efficient design, construction and maintenance of the transportation infrastructure.

During the BCR²A'09 event, four half-day pre-conference workshops have also been organized on climatic effects on pavement infrastructure, pavement interlayer systems, railroad track design (including asphalt trackbeds), and designs for new and rehabilitated airport pavements. A post-conference visit to the Chicago O'Hare International Airport will be the highlighted technical tour.

Through a strictly refereed peer review process, the conference Scientific Committee has accepted approximately 160 high-quality papers, which will be presented during the conference and published in a two-volume hardcover proceedings with an indexed CD-ROM.

The BCR²A'09 conference is co-sponsored by several organizations including, FHWA, FAA, FRA, AAR, TRB, ASCE, and Illinois Department of Transportation.

Exhibit Opportunities: The BCR²A'09 Conference will be held at the new I Hotel and Conference Center (<http://www.stayatthei.com/>) on the campus of the University of Illinois at Urbana-Champaign. Indoor and outdoor advertising space will be available at the BCR²A'09 Conference Center for commercial displays and larger exhibits of equipment and products, as well as for literature and poster displays. This will provide an opportunity to display and demonstrate new products and equipment to an international audience, and to discuss solutions with experts from all over the world.

For registration and information about the conference schedule, exhibit space, travel arrangements, and lodging reservations, please visit the conference website:

<http://www.BCR2A.org/>

The deadline for early registration for participants and exhibitors is **May 1, 2009**.

11th International Symposium on Concrete Roads: Abstract Submittal Deadline Approaches

The 11th International Symposium on Concrete Roads will be held in Seville, Spain from October 13-15th, 2010. Abstracts for proposed manuscripts must be submitted in English by e-mail to the Symposium Secretariat (info@eupave.eu) by June 15th, 2009.

PRAIRIE
MATERIAL



For more information about the Symposium, please visit the Symposium website:

www.2010pavimentosdehormigon.org/content.php
(Spanish site; click on U.K. flag for English version)

ACI Hosts Session on Minimizing Pavement Cracking

The American Concrete Institute (ACI) San Antonio Chapter coordinated a Hot Topic Session during the ACI 2009 Spring Convention in San Antonio, Texas, USA. A panel of speakers discussed the following issues that designers face:

- Woody Vogt from Paradigm Consultants – *Paving Designer's Responsibilities to Minimize Cracking*
- Dan Zollinger from Texas A&M University – *Bases, Subgrades and Inter-layers and Use of Reinforcement*
- Neeraj Buch from Michigan State University – *Joint, Cracks, and Slab Thickness*
- Jay Shilstone from Shilstone-Day Technologies – *Concrete Mixture Design for Pavement*

Some of the presentations from the session are available for download at:

www.concrete.org/Convention/spring-Convention/PresentationDetail.asp?EventId=ZHOT

The session gathered an attendance of over 50 ACI members; the interest sparked may lead to sessions on similar topics at future ACI conventions.

FHWA Conference Ends on a High Note



Extending the service life was the theme of the National Conference on Preservation, Repair and Rehabilitation (PRR) that took place April 21st to 24th, 2009 in St. Louis, Missouri, USA. The timely conference was organized as a part of technology transfer activities for the US Concrete Pavement Technology Program that operates within the Federal Highway Administration (FHWA). The conference objective was to provide a national forum to address the technology needs related to preservation, repair and rehabilitation of concrete pavements.

A total of 155 attendees from eight countries and 29 US States participated. There were seven technical sessions and three practice oriented forums. The keynote presentations in the Plenary Session were presented by Mr. Raymond Debroux, Inspecteur Général, Service Public de Wallonie, Belgium and Chairman, PIARC Subcommittee on Concrete Roads who reviewed the European practices related to PRR of concrete pavements and by Mr. Fidel Saenz de Ormijana, Technical Director, Ferrovial Agroman U.S. Corporation who discussed Toll Roads Public Private Partnerships.

Inquiries related to the conference proceedings may be made to: Shiraz Tayabji, Fugro Consultants, Inc., Email: stayabji@aol.com.

Honorary Member Profile: Dr. B. Frank McCullough



B. Frank McCullough was "born of and raised by goodly parents" in Austin, Texas. His father owned a machine shop (which provided chores to young Frank to perform) and sufficient property for the construction of a small store. After stocking the store with supplies, his father made him (at age 14) the proprietor of the store and told him to "see where you can take it." The experiences Frank gained were great and provided valuable life lessons, with the most important being that you obtain from life what you put into it.

Dr. McCullough built upon that foundation of family values and hard work to earn B.S. and M.S. degrees in civil engineering from the University of Texas at Austin, and completed his Ph.D. studies in engineering at the University of California at Berkeley in 1969. Along the way, he gained some of his first pavement engineering experience at the Texas Highway Department, where he pioneered the use of pavement grooving techniques (for improving pavement skid characteristics) and use of "turned down guard rail" for safety.

Dr. McCullough is currently an Emeritus Professor of Transportation Engineering at The University of Texas – Austin, where he has conducted research and taught thousands of students over a period of nearly 50 years. During this time, Professor McCullough has been responsible for the conduct of more than 100 research projects concerning a broad range of topics related to Portland cement concrete pavements, asphalt concrete pavements, gravel and low-volume roads, highways, airports, high-speed guideways, and commercial building slabs. He was an early pioneer in the development of project- and network-level pavement management

systems for the Texas Highway Department, the U.S. Forest Service, and NCHRP, as well as in the development of mechanistic overlay design concepts. He has also been involved with the development and characterization of the properties of various construction materials, which have led to the conduct of projects for developing performance-based specifications. He was instrumental in the development of the 1986/1993 AASHTO Guide for the Design of Pavement Structures, which has a primary tool for pavement design around the world for more than 20 years.

Professor McCullough has also been a very active teacher and advisor, having guided more than 100 students to M.S. or Ph.D. degrees in Civil Engineering. He has also taught special short and continuing education courses for The University of Texas, the University of Minnesota, the Australian Road Research Board, the South African Road Research Board, the Asociacion Mexicana de Caminos, the Federal Highway Administration, the National Highway Institute, the U.S. Forest Service, and AASHTO.

He served as Director for the Center for Transportation Research at The University of Texas from 1980 to 1999. Under his direction the annual budget of the Center grew from \$800,000 per year to approximately \$10 million per year. By the time he retired from the position, the Center was engaging in more than 70 research projects each year and was employing more than 300 full- and part-time workers (faculty, professional staff, and graduate and undergraduate students.)

Dr. McCullough was a co-founder of the consulting firm Austin Research Engineers, which specialized in Highway and Airport Engineering. This company eventually expanded to three sites in the U.S. and satellite offices in Brazil and Nigeria. He also advised his son in forming the consulting firm Transtec, and has served as a consultant to the firm since 1993.

Frank still lives in the Austin, Texas, USA area with his wife of more than 50 years, Norma Jean. Together they have raised a family of 5 children and are now blessed with 12 grandchildren. Having spent most of his life in the Austin area, he has maintained close relations with the friends he has developed over the years. In fact, many of the friends with whom he graduated high school are his companions today in senior golf matches! He has also been very active in his church for more than 50 years in roles ranging from Scout master to high-level positions of administrative and moral responsibility.

Dr. McCullough was named an Honorary Member of ISCP in the Charter Class of 2001. The International Society for Concrete Pavements is proud to have Dr. B. Frank McCullough as an Honorary Member!

Member News

ISCP Member becomes ACI Fellow

American Concrete Institute (ACI) International recently announced the newest group of members who have been elected to the rank of Fellow. The honor of being a Fellow means the individual has made an outstanding contribution to the production or use of concrete materials, products, and structures in the areas of education, research, development, design, construction, or management. Fellows are nominated to and accepted by the ACI Board of Directors.

This year at the ACI 2009 Spring Convention in San Antonio, TX, USA, ISCP member and Director Neeraj Buch was elevated to the status of ACI Fellow. Neeraj Buch is a Professor and Director of the Pavement Research Center of Excellence with the Department of Civil and Environmental Engineering at Michigan State University, MI, USA.

A listing of all ACI Fellows can be found online at :

www.concrete.org/MEMBERS/mem_info_fellows.htm

ISCP congratulates Dr. Buch on being recognized by ACI for his accomplishments!

ISCP Member Garners ACI Achievement Award

Jussara Tanesi (employed by SaLUT, Inc and currently serving the US FHWA at the Turner Fairbank Highway Research Center) received the ACI Young Member Award for Professional Achievement for her contributions to the advancement of concrete technology, her contributions to ACI's programs through committee work and other activities, and by reporting on research and concrete technology in many countries and in several languages, thus advancing the goals and objectives of ACI at both the national and international levels.

A description of all ACI awards and the list of all winners from the March 2009 Convention is posted online at:

www.concrete.org/MEMBERS/mem_info_awards.htm

ISCP Welcomes New Members

ISCP would like to welcome the following new members, who have joined the Society since January 1, 2009:

Member	Name	Title	Employer/Affiliation	Country
1824	Seth Schulgen	Estimator	Williams Bros. Construction	USA
1825	Maria C F Albuquerque	Graduate Student	University of São Paulo	Brazil
1826	Paulo César Pinto	Graduate Student	University of São Paulo	Brazil
1827	André Naletto Mugayar	Graduate Student	University of São Paulo	Brazil
1828	Taís Sachet	Graduate Student	University of São Paulo	Brazil
1829	Dinh Van Hiep	Graduate Student	Saitama University/ Hanoi University of Civil Eng	Japan
1830	Yuanjie Xiao	Graduate Student	University of Illinois at Urbana-Champaign	USA
1831	Henry F Kling	CEO/ President	Zeiser Kling Consultants, Inc.	USA
1832	Vladimir Chupik	Consultant	Vladimir Chupik, Consultant	Czech Republic

ISCP thanks these new members for their support of the Society and looks forward to their participation in Society activities.

Thesis Abstract

Evaluation of Soy Methyl Ester Polystyrene Blends For Use in Concrete

*By: Kevin Christopher Coates, MSCE
Purdue University
December 2008
Major Professor: Jason Weiss*

There are hundreds of commercial admixtures and topically applied products available for use with concrete. These products have gone through a battery of tests to evaluate their performance for their intended use, as well as their affect on all properties of the fresh and finished concrete product. Just as the existing admixtures and topical compounds have been tested and evaluated, any new substances that may have possible applications with the modification of cementitious materials must also be tested and evaluated. This thesis evaluates the potential use of Soy Methyl Ester (SME) in the field of concrete. Soy Methyl Esters have been used as an alternative, renewable fuel source. SME has proven to have other promising applications related to the use of concrete. Through testing of the SME Polystyrene (SME-PS) blends in different applications, the performance of the SME is measured and in some cases compared to other commercial products. The effects of the SME on cementitious materials were measured for several properties including: compressive strength, shrinkage, viscosity, setting and hydration time, air content, evaporation rate, SME penetration, water absorption, and chloride penetration. The information acquired from these tests is meant to be used as a basis for continuing research related to the use of SME blends in the concrete construction industry. This pilot study has identified the potential for SME-PS blends to be used in both admixed and topical applications to reduce fluid transport. Results from sorption tests show that samples with SME-PS blends admixed reduce water absorption by 74-94%. In topical applications, reductions of 85-93% were obtained. Testing performed to examine chloride ion ingress showed reductions of up to 77% in chloride penetration depth. These reductions in absorption have direct implications on the durability of the concrete, and the results show the ability of SME-PS to reduce transport within cementitious systems without significantly impacting their basic mechanical properties.

Industry News

PIARC Virtual Library Provides Free Downloads Online

PIARC has a virtual library containing their technical reports, congress proceedings, and more. Some of these documents can be downloaded from online for free.

These documents and others from the PIARC library are available in English or French and can be found on the website:

<http://publications.piarc.org/en/technical-reports/>

Green Streets Calculator Now Available Online!

We all know that concrete pavements offer tremendous environmental advantages over alternative paving materials, but quantifying those advantages has been difficult. Until now!

The American Concrete Pavement Association (ACPA) has created an online calculator that allows agencies, planning organizations, roadbuilders, and others to calculate the estimated fuel- and cost-savings associated with building a concrete pavement versus an asphalt pavement. This calculator considers inputs such as pavement length, concrete and asphalt pavement thicknesses, fuel costs, traffic levels and pavement design life to calculate savings in fuel consumption (both during construction and by vehicles over the pavement life), reductions in emissions, and total financial savings.

Check out the ACPA online calculator at:

<http://1734298.sites.myregisteredite.com/green11/calculator.aspx>

Upcoming Events

2nd European Airport Pavement Workshop

May 13-14, 2009 in Amsterdam, The Netherlands

<http://www.crow.nl/engels/>

2009 Concrete Technology Forum: Focus on Performance Prediction

May 13-15, 2009 in Cincinnati, Ohio, USA

<http://www.concretetechnologyforum.org>

Eighth International Conference on the Bearing Capacity of Roads, Railways and Airfields

June 29 - July 2, 2009 in Champaign, Illinois, USA

<http://www.BCR2A.org>

TRB Data Analysis Working Group (DAWG) (Held in conjunction with MAIREPAV6)

July 7-10, 2009 in Torino, Italy

<http://www.trb.org/Studies/Programs/DAWG.asp>

Sixth International Conference on Maintenance and Rehabilitation of Pavements and Technological Control (MAIREPAV6)

July 8-10, 2009 in Torino, Italy

<http://www.mairepav6.it>

GeoHunan International Conference on Challenges and Recent Advances in Pavement Technologies and Transportation Geotechnics

August 3-6, 2009 in Hunan, China

<http://www.geohunan.org/>

9th International Conference of Chinese Transportation Professionals (ICCTP 2009)

August 5-9, 2009 in Harbin, China

<http://www.icctp.org.cn/default.asp>

XXVIIe International Baltic Road Conference

August 24-26, 2009 in Riga, Latvia

<http://www.lvceli.lv/en/?i=124>

4th International Conference on Modern Technologies in Highway Engineering

September 3-4, 2009 in Poznan, Poland

(no website provided to date)

XV Argentine Congress on Road Safety and Traffic

September 14-18, 2009 in Mar del Plata, Argentina

<http://www.congresodevialidad.org.ar/agenda.html>

21st Belgian Road Congress

September 22-25, 2009 in Gent, Belgium

<http://www.wegencongres.be>



9th International Conference on Concrete Block Paving

October 18-21, 2009 in Buenos Aires, Argentina

<http://www.iccbp2009.com.ar>

Ninth International Symposium on Brittle Matrix Composites (BMC9)

October 25-28, 2009 in Warsaw, Poland

<http://bmc.ippt.gov.pl/>

TREMTI 3: 3rd International Symposium on Stabilization and Recycling

November 12-14, 2009 in Antigua, Guatemala

<http://www.eupave.eu/documents/events/tremti-2009.xml>

International RILEM Conference on Progress of Recycling in the Built Environment

December 2-4, 2009 in São Paulo, Brazil

<http://www.recycle2009.org/index.html>

89th Transportation Research Board Annual Meeting

January 10-14, 2010 in Washington DC, USA

<http://www.trb.org>**13th International Winter Road Congress**

February 8-11, 2010 in Quebec City, Canada

<http://www.aipcrquebec2010.org>**1st International Conference on Pavement Preservation**

April 12-16, 2010 in Newport Beach, California, USA

<http://www.pavementpreservation.org/icpp/>**First International Conference on Nanotechnology in Cement and Concrete**

May 5-7, 2010, in Irvine, California, USA

<http://www.trb.org/Conferences/2010/Nanotech>**7th International Conference on Fracture Mechanics of Concrete and Concrete Structures**

May 23-28, 2010 on Jeju Island, South Korea

<http://www.framcos7.org/>**GeoShanghai 2010**

June 3-5, 2010 in Shanghai, China

<http://www.geoshanghai2010.org/index.asp>**7th International DUT Workshop on the Design and Performance of Sustainable and Durable Concrete Pavements**

October 10-11, 2010 near Seville, Spain

*(no website provided to date)***11th International Symposium on Concrete Roads**

Organized by EUPAVE

October 13-15, 2010 in Seville, Spain

<http://www.2010concreteroads.org/>**10th International Conference on Low-Volume Roads**

July 24-27, 2011 in Lake Buena Vista, Florida, USA

<http://www.trb.org/conferences/2011/10LVR>**24th World Road Congress**

September 25-30, 2011 in Mexico City, Mexico

<http://www.piarc.org/en/congresses-seminars/road-congresses.htm>**International Conference on Concrete Pavement Design, Construction, and Rehabilitation**

Tentatively planned for 2011

Chang'an University, Xi'an, Shaanxi Province, P.R. China

<http://www.concretepavements.org/>**10th International Conference on Concrete Pavements**

Organized by ISCP

Tentatively planned for a location in Canada in 2012

<http://www.concretepavements.org/>

If you wish to submit an announcement and/or link for an upcoming conference, meeting, or call for papers for the next ISCP e-newsletter, please contact us at newsletter@concretepavements.org.

The ISCP E-Newsletter is produced by Editor-in-Chief, Amanda Bordelon, Associate Editor, Dr. Jake Hiller, and Assistant Editors: Cristian Gaedicke, Corey Zollinger, and Nancy Whiting. Suggestions for future newsletters are welcomed at newsletter@concretepavements.org.

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