

MENU

What's New at ISCP

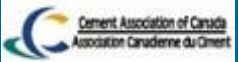
Research News

Industry Notes

Featured Thesis Abstract

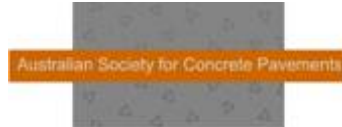
Upcoming Events

CORPORATE MEMBERS



What's New at ISCP

Australian Society for Concrete Pavements (ASCP) Holds Forum, Elects Officers



The recently-formed Australian Society for Concrete Pavements (ASCP) held a well-attended and successful industry forum in Sydney on March 31, 2008. Presenters from major contractors, the regional transport authority, and private consultants placed a high emphasis on quality in design, materials and construction.

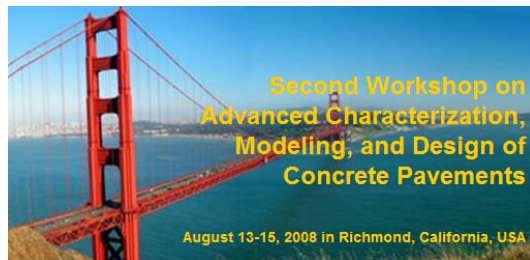
The elected officials for ASCP are: Mark Hoskins (Leighton Contractors) as President and Tracy Edwards (Connell Wagner) as Vice-President. ASCP is strongly backed by major sponsors, including the Roads & Traffic Authority (NSW), Abigroup Constructions, Leighton Contractors, Thiess, Maunsell, Macmahon Constructions, Connell Wagner, and Clark Equipment Sales.

The ASCP website development will be completed by the end of May, providing a resource centre for information on concrete pavements as well as many important member and industry services. A temporary website for ASCP is:

<http://www.concretepavements.com.au/>

The next ASCP Forum will be held on June 16th, 2008 and will focus on lean mix concrete subbases. Other presentations will take place related to heavy-duty concrete pavements and concrete pavement construction equipment.

Abstracts Deadline for 2nd Advanced Workshop Extended



The deadline for abstract submissions for the ISCP-Sponsored 2nd Workshop on "Advanced Characterization, Modeling, and Design of Concrete Pavements" has been extended to **April 30, 2008**. Each participant is expected to make a 10-minute presentation and lead a subsequent 10-minute group discussion on the presentation topic.

The workshop organizers, ISCP members [Jeff Roesler](#) and [Lev Khazanovich](#), urge interested participants to contact them to express interest and to submit a short abstract before the extended due date. This workshop will be held on August 13-15, 2008, in Richmond, California, USA. More information and online registration for this workshop can be found online at:

<http://www.concretepavements.org/2ndworkshop/>

Deadline for Student Poster Board Submittal Approaches

Graduate and undergraduate college students are encouraged to submit their work for the Student Poster Board Competition at the 9th International Conference on Concrete Pavements, August 17 – 21, 2008 in San Francisco, California, USA. The deadline for poster board submission is **May 1, 2008**. Suitable topics may be in areas such as: innovative technologies in



concrete pavement design, construction, materials, maintenance, performance, evaluation, rehabilitation, asset management, and others.

The best student poster board presentation at the conference session will be awarded the *B.F. McCullough Award*. In addition, student poster board authors are eligible to earn registration fee waivers for the International Conference (limit one fee waiver per poster). Grants for student conference travel may be available from participating chapters of the American Concrete Pavement Association (www.pavement.com).

For additional information, submittal details, and example posters please go to:

<http://www.concretepavements.org/9thiccp/student.html>

9th International Conference Paper Revisions Due

The deadline for accepted manuscript revisions for the [9th International Conference on Concrete Pavements](#) has been set at **Friday, April 18, 2008**. This deadline is required to facilitate any necessary re-reviews, final formatting, and preparation for publication before the 9th Conference. The manuscripts must be formatted in accordance to the publication guidelines found at:

<http://www.concretepavements.org/9thiccp/author.html>

Revised manuscripts can be submitted through e-mail to conference coordinator Nona Schaler at iscp9th@verizon.net.

Research News

ACPA Excellence in Concrete Pavement Award Nominations Open

The American Concrete Paving Association's (ACPA) 19th Annual Awards for Excellence in Concrete Pavement are open for nominations. The awards are designed to honor quality concrete pavements constructed in the United States and Canada each year. The awards program encourages high-quality workmanship in every concrete pavement project and serves as a forum for sharing information about highly successful projects.

The awards program recognizes contractors, engineers, and project owners who completed outstanding projects in 2007. Winning an Award for Excellence in Concrete Pavement provides the contractors, engineers, and owners with a level of prestige that can assist them in the development of future projects.

For more information or to nominate projects using the online form (deadline of **July 18, 2008**), please go to:

http://www.pavement.com/Events_and_Programs/Awards/Paving_Awards/index.asp

Industry Notes

New Chemical Admixture for Slip-form Paving

BASF Construction Chemical Company has developed a new liquid chemical admixture called Navitas 33, a rheology-controlling admixture (RCA). The RCA is designed for use in low-slump concrete mixtures, especially for slip-form paving operations to aid in finishing and providing more uniform edges. The admixture acts as a lubricant and lowers the yield stress to increase workability and flow during vibration only, when energy is added to the concrete. Unlike viscosity modifying admixtures (VMA), this chemical admixture does not impact the viscosity or slump of the mixture.

For more information about Navitas 33, go to:

<http://www.basf-admixtures.com/BasfAdmixturesInc/EN/Markets/Paving/msds/>

New NCHRP Report Released on Recycled Aggregates

The transportation infrastructure uses about 95 percent of all aggregates manufactured in the United States. With the vast majority of these aggregates being new, virgin aggregates, more transportation agencies are looking into utilizing recycled materials for reduced costs and to lessen environmental impacts of pavement construction. The National Cooperative Highway Research program (NCHRP) has just released a new document entitled "Performance-Related Tests of Recycled Aggregates for Use in Unbound Pavement Layers" by Dr. Athar Saeed of Applied Research Associate, Inc. for use by the pavement community. This report can be downloaded as a .pdf document at:



http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_598.pdf

The appendices for this report can also be downloaded at:

http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_w119.pdf

First Meeting Held for the U.S. National Concrete Consortium (NCC)

The first meeting of the U.S. National Concrete Consortium (NCC) was held on April 9-10th, 2008 and was hosted by the Louisiana Transportation Research Center in Baton Rouge, LA. Eighteen state DOTs from across the US (from California to New York and Georgia to Minnesota) were represented, as well as FHWA, several APCA Chapters, academia partners, and industry and suppliers involved in concrete pavement construction.

The meeting theme was "Sustainability in Concrete Construction" and an agenda can be found at:

http://www.cptechcenter.org/t2/ttcc_ncc_meeting.pdf

The purpose of the NCC is best expressed in its vision and mission statements:

- Vision – *"Academia, government agencies, and industry working together to continuously improve concrete performance and durability in a cost-effective manner."*
- Mission – *"Provide an ongoing National forum for Portland cement concrete (PCC) and pavement technology sharing to encourage uniform specifications, mutual problem solving, coordinated research, and implementation of new technologies. Promote quality design and construction practices."*

US State DOTs can join the through the Technology Transfer Concrete Consortium (TTCC) Pooled Fund Project:

http://www.pooledfund.org/documents/TPF-5_159/TTCC_Problem_Statemet.pdf

Featured Thesis Abstract

EVALUATION OF LABORATORY AND FIELD TECHNIQUES TO IMPROVE PORTLAND CEMENT CONCRETE PERFORMANCE

Dr. Tyson D. Rupnow

Ph.D. in Civil Engineering (2007)
Department of Civil, Construction, and Environmental Engineering
Iowa State University, Ames, Iowa, USA
Advisors: Professors Vernon R. Schaefer and Kejin Wang

This dissertation is presented as a compilation of five papers, four submitted, or to be submitted, to scholarly journals, and one submitted to a peer-reviewed conference. Each paper is presented as a chapter in the dissertation and includes a short literature review, research data, significant findings, and references. A general conclusion section follows the main body of the dissertation and summarizes the significant research findings from each paper and includes recommendations for further research.

The first paper presents a paste and concrete laboratory study investigating the two-stage mixing process and its effects on portland cement concrete mix consistency and concrete performance. In the paste study, mixing energy was varied to determine the effects on rheological and compressive strength properties. The concrete study investigated the two-stage mixing process and its effects on fresh and hardened concrete properties.

The second paper details a new characterization procedure for portland cement using the heat

signature. The first fifteen minutes of the heat generation curve are of particular interest. A Type I/II portland cement was used to determine the effects of initial water and initial cement temperature on the heat signature of the paste. Several other portland cements, including blended cements, were also investigated to show the differences in cement chemistry when comparing the heat generation curves.

The third paper investigates the effects of differing air entraining agent (AEA), water reducing agents, and supplementary cementitious materials (SCM) on the air void structure of fresh mortar samples. This study was conducted as part of a larger study investigating ternary mix designs. The air void analyzer (AVA) was used to document the air void structure and identify anomalies or incompatible material combinations. Cubes were cast for compressive strength testing at seven days to show incompatible combinations in terms of retarded strength gain.

The fourth paper uses AVA data from a sixteen-state pooled fund study to evaluate the AVA usage and sampling locations. Samples were obtained from the slip-formed concrete surface behind the paver on vibrators and between vibrators from sixteen states. AVA samples were obtained before the paver in three states. Statistical analysis (t-test) was conducted at an alpha level of 0.05 to determine significance.

The fifth paper presents data on the heat signature of ternary mixes. Fresh mortar samples were prepared and placed into 4-inch by 8-inch cylinder with a thermocouple wire and then placed in a curing chamber at 70°F for 24 hours. The heat signatures were characterized and the results were modeled using slope 1 and slope 2, maximum temperature, time-to-maximum temperature, area under the heat signature curve, initial set, and final set.

Upcoming Events

First International Symposium on Transportation and Development Innovative Practices

April 24-26, 2008 in Beijing, China

<http://www.jtzn.net.cn/tdibp>

11th International Conference on Durability of Building Materials

May 11-14, 2008 in Istanbul, Turkey

<http://www.11dbmc.org>

Symposium on Mechanics of Pavements and Paving Materials

During the inaugural International Conference of the Engineering Mechanics Institute (EM08)

May 18-21, 2008 in Minneapolis, Minnesota, USA

<http://www.ce.umn.edu/em08>

10th International Conference on Application of Advanced Technologies in Transportation - AATT 2008

May 27-31, 2008 in Athens, Greece

<http://www.civil.ntua.gr/aatt>

6th RILEM International Conference on Pavement Cracking

June 16-18, 2008 in Chicago, Illinois, USA

<http://www.ict.uiuc.edu/RILEM>

13th International Conference on Alkali-Aggregate Reaction in Concrete 2008 (ICAAR)

June 16-19, 2008 in Trondheim, Norway

<http://www.icaar2008.org>

5th International ACI/CANMET Conference on High Performance Concrete

June 18-20, 2008 in Manaus, Amazonia, Brazil

<http://ibracon1.locaweb.com.br/eventos/hpc2008/informacoes.asp>

2nd International Conference on "Advances in Concrete and Structures"

June 19-21, 2008 in Changsha, China

<http://cipres.hnu.cn/>

6th International Conference on Road and Airfield Pavement Technology

July 20-23, 2008 in Sapporo, Japan

<http://www.jsce.or.jp/committee/pavement/icpt2008.html>



2nd Workshop on Advanced Characterization, Modeling, and Design of Concrete Pavements

August 13-15, 2008 in Richmond, California, USA

<http://www.concretepavements.org/9thiccp/>

**9th International Conference on Concrete Pavements**

Organized by ISCP

August 17-21, 2008 in San Francisco, California, USA

<http://www.concretepavements.org/9thiccp/>**8th International Conference on Creep, Shrinkage, and Durability of Concrete and Concrete Structures (CONCREEP 8)**

September 30 - October 2, 2008 in Ise-Shima, Japan

<http://concrete-lab.civil.nagoya-u.ac.jp/concreep8/>**3rd International Conference on Accelerated Pavement Testing**

October 1-3, 2008 in Madrid, Spain

<http://www.cedex.es/apt2008/>**ASCE TD&I Pavement Conference**

October 15-18, 2008 in Seattle, Washington, USA

<http://content.asce.org/conferences/pavements2008/>**ACI Fall Convention**

November 2-6, 2008 in St. Louis, Missouri, USA

<http://www.concrete.org>**International Conference on Concrete Pavement Design, Construction, and Rehabilitation**

May 25-29, 2009 in Xi'an, China

<http://www.concretepavements.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>**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/>**11th International Symposium on Concrete Roads**

Organized by EUPAVE

October 13-15, 2010 in Seville, Spain

<http://www.eupave.eu>**10th International Conference on Concrete Pavements**

Organized by ISCP

Tentatively scheduled for August 2012 in Province of Quebec, Canada

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

ISCP President: Dan G. Zollinger, Ph.D, P.E. Texas A&M University CE/TTI Building, Rm 503e College Station, Texas, USA 77843 Phone: 979-845-9918 Fax: 979-845-0278 Email: dzollinger@concretepavements.org	ISCP Vice President: Kathleen T. Hall, Ph.D, P.E. 1271 Huntington Drive South Mundelein, Illinois, USA 60060 Phone: 847-549-8568 Fax: 847-589-4284	ISCP Secretary and Treasurer: Mark B. Snyder, Ph.D., P.E. 7085 Highland Creek Dr. Bridgeville, Pennsylvania, USA 15017 Phone: 412-221-8450 Fax: 412-221-0409 Email: mbsnyder@concretepavements.org <i>(Contact for membership inquiries)</i>
---	--	---