

# **International Society for Concrete Pavements**





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# What's New at ISCP

### **Greetings From the New President**



It's my pleasure to address the Society membership in my first edition of the President's message. Even though I've been a Society officer ever since the inception of ISCP, being President will be a new experience for me, one that I hope many of you in the Society someday aspire to. With the Society maturing as it is, there is constant consideration for needed changes that the new officers and I will be initiating over the next 3 years – one of which will be increased activity of the Board and members alike in Society activities and promotions. Society membership has a lot to offer and we're excited about making participation an interesting experience abounding with challenging

opportunities for learning and professional development for both practitioners and academicians alike.

Like many of you who have been members of ISCP since its beginning in 1999, I have been a part of the steady growth and development of the Society over these many years. I want to publicly recognize that much of this growth is attributable to our past president, Dr. Shiraz Tayabji. Before introducing the new board members and Society officers, it is only appropriate to again acknowledge and thank Shiraz for the many years of service that he has dedicated to the success and development of ISCP. The society has and is making great strides that can be largely attributed to Shiraz's dedication and commitment to make happen the things that did. The next time you cross paths with Shiraz, do not hesitate to extend a well-deserved hand of appreciation to him for the time he spent and sacrifices he made for the Society over the years.

It is certainly my privilege to welcome the new Society officers, who are no strangers to any of us and whom I've known for many, many years. Dr. Katie Hall, our new Vice-President, is a University of Illinois graduate and is world-renowned for her work in concrete pavement performance and rehabilitation. She comes in very well experienced being a former TRB chairman of the Rigid Pavement Design Committee and will be heading up the organization of our next conference in 2008. Dr. Mark Snyder, our past Secretary-Treasurer, has thankfully stayed on for another term in that capacity. Mark, a former classmate of mine at the University of Illinois, is also widely known and respected for his work on various durability and performance aspects of concrete pavements. I've always admired him for his skill and professionalism for many years, and his knowledge of association business development and logistics is and will continue to be extremely valuable to us.

I would like to extend a special welcome to first-time board members, Jamshid Armaghani (USA), Jose Balbo (BRAZIL), Anna-Carin Brink (S.AFRICA), Neeraj Buch (USA), Andre Jasienski (BELGIUM), Tatsuo Nishizawa (JAPAN), George Vorobieff (AUSTRALIA), and Leif Wathne (USA). We appreciate your willingness to serve on the Board and we look forward to your participation in the Society.

In order to enhance the international presence of the Society, we particularly encourage our international members to look for opportunities to develop ISCP-sponsored workshops or regional conferences in your countries. Currently, ISCP is actively co-sponsoring an international workshop with IBRACON in Recife, Brazil and is working on another possibility in South Africa, as was discussed at the January Board Meeting. Other conferences we want you to be aware of are listed at the end of this newsletter, but we especially note the 6th International DUT-Workshop on Fundamental Modeling of Design and Performance of Concrete Pavements (formerly the CROW Workshop) scheduled for September 15-16, 2006 in Priorij Consendonk, Old-Turnhout, Belgium. Besides the workshop, there are other activities that will be on the agenda for the mid-year meeting (see the meeting announcement later in this newsletter).

Several changes are in the making, and you'll find an announcement for a member survey that we encourage you to respond to regarding future directions of the Society. It is our interest to develop the standing committee activities. One of these is the Communications Committee, where we are in the process of establishing permanent positions of an editorial staff for the newsletter. Tentative positions and staff are: Editor in Chief, Dr. Erwin Kohler; Associate Editor, Mr. Jake Hiller; Assistant Editor, Ms. Amanda Bordelon. Hopefully, we'll soon have more news concerning the Editorial Committee and the journal activities where Dr. Neeraj Buch has volunteered to replace Dr. Norb Delatte as the journal editor. Please stay tuned as more developments take place.



Dan Zollinger, President, ISCP dzollinger@concretepavements.org

### Member Survey on ISCP's Future Plans



In April, ISCP will be conducting a survey to learn the opinions of its members about ISCP's future plans and activities. The survey will be sent out by email to all of ISCP's individual members, organizational members, board members, and officers. It will consist of about a dozen questions on ISCP's future plans and activities, and an additional few questions about the planning for the 9th international conference.

The responses to the survey will be compiled by the planning subcommittee and reported to the board and membership at the 2006 midyear meeting. The survey results are expected to be very helpful in the development of a strategic plan for the society's activities

and future directions, the first version of which could be presented at the January 2007 meeting at TRB. In addition, the responses to the survey questions about the 9th international conference will be helpful in the selection of the conference location and the development of the conference program.

Katie Hall, Vice-President, ISCP katiehall@concretepavements.org

### **ISCP Board Meetings Scheduled**

A meeting of the ISCP Board of Directors has been tentatively scheduled for the evening of Tuesday, July 11 in the Chicago, Illinois (USA) area in conjunction with the American Concrete Pavement Association Mid-Year meetings. As usual, the ISCP Board meeting will be open to the general membership. Current plans call for an optional group dinner (not subsidized) before the actual meeting. Meeting details (time, exact location, etc.) and an agenda will be mailed to all members later this month and will be included in the next electronic newsletter. A Board Meeting is also being planned for mid-September in Belgium in conjunction with the 6th International DUT Workshop. Details concerning this meeting will be reported in future newsletters.

### **Call for Nominations of Honorary Members**

The Society is seeking nominations for Honorary Membership for consideration by the Board of Directors at the upcoming mid-year meeting. Honorary members are individuals that have provided exemplary service to the International Society for Concrete Pavements and/or to the improvement of concrete pavement technology over his/her career. ISCP has honored 12 individuals with honorary member status since 2001.

Nominations for honorary membership may be submitted to the ISCP Secretary using the standard nomination form at any time by any ISCP member in good standing. On July 1 of each year, the ISCP secretary shall prepare copies of all active nominations and will distribute them to the ISCP Board of Directors for consideration at their mid-year meeting. Honorary members will be inducted at the next annual membership meeting of the ISCP or at the next International Conference, whichever occurs first. For more details on the Honorary Member procedures and details, please go to: http://www.concretepavements.org/Membership/honorary.htm

### ISCP Honorary Member Profile: Dr.-Ing. Josef Eisenmann

This is the second in a continuing series of articles that describes the background and accomplishments of the Society's honorary members.



Josef Eisenmann was born in München (Munich), Germany in 1928. After studying civil engineering at the Technical University of Munich (TUM), he worked at German Railways and as a research assistant for 12 years. In 1969, he became a Professor at TUM and was also appointed Director of the University Research Laboratory for Permanent Ways.

Dr.-Ing. Eisenmann taught classes and performed research in the fields of concrete and asphalt pavement for highways, airfields and railways. He has made many contributions to the theoretical development of concrete pavement analysis, including the creation of theories for calculating concrete pavement warping stresses and a method for calculating

k-factor (foundation stiffness) using the results of 30-cm diameter plate load tests. He also developed procedures for determining bending stresses in multi-layered rigid pavement systems (e.g., slab over cement-treated base) using either Westergaard's theories or Pickett and Ray's influence charts.

In addition to his theoretical work, Dr.-Ing. Eisenmann has made many practical contributions to the profession, particularly in the area of concrete railway applications. He has done extensive research in the field of ballasted railway track, including the use of prestressed concrete rail ties. He is the inventor of the "Rheda" slab track, a continuous reinforced concrete slab on a cement-treated base that features inserted concrete ties with a highly elastic rail fastening system and is used for new high-speed German railways between Hannover and Berlin, Köln-Rhein and Main, and Nürnberg and München, where train speeds reach 300 km/h (185 mph). A special new track featuring heavyweight, elastic-supported concrete slabs was developed to prevent vibrations and structure-borne sound in buildings located near railways and metros. More than 100 km (62 miles) are under traffic.

Dr.-Ing. Eisenmann is the author or co-author of more than 100 scientific and technical papers, and recently co-authored (with Professor Günther Leykauf) a book entitled "Betonfahrbahnen" ("Concrete Tracks"), which is available from Ernst & Sohn Publishing in Berlin. In addition, he is the chairman of the Committee for Design and Construction of Concrete Paving in the German Research Society for Roads and Traffic (Forschungsgesellschaft für Straßen- und Verkehrswesen), and he has actively participated in the Society for more than 30 years.

He has been decorated by the German Government (Bundesverdienstkreuz first Klasse) and the State of Bavaria (Bayerischer Verdienstorden and Leo von Klenze Medaille) for his contributions to concrete pavement and railway technology. Dr.-Ing. Eisenmann was inducted into the International Society for Concrete Pavements as an Honorary Member in September, 2001 and was also recently awarded the U.K. Institution of Civil Engineers Webb Prize.

Dr.-Ing. Josef Eisenmann retired from TUM in 1997, but is still active and delivers lectures worldwide concerning the areas of concrete pavement research and applications to which he has dedicated his professional life. ISCP is proud to have him as an honorary member!

## **Industry Notes**

### **ISCP Welcomes New Member CRSI**

Since 1924, the Concrete Reinforcing Steel Institute (CRSI) has worked to increase the use of reinforced concrete in the construction industry and member-fabricated reinforcing steel in site-cast concrete construction. To meet this objective, CRSI supports research and engineering support for the safe and proper use of materials in reinforced concrete construction.



CRSI and its members are the authoritative resource for information related to reinforcement in concrete construction. Their purpose is to improve the opportunity for success of every reinforced concrete project,



and to enhance the experience of all those who design and build reinforced concrete systems.

Robert Risser, incoming CRSI president in April 2006, says "CRSI is committed to working with ISCP to develop and promote understanding and best practices for the design, construction and maintenance of durable, long-life concrete pavement, such as Continuously Reinforced Concrete Pavement (CRCP)."

The CRSI website, www.crsi.org, and webstore, www.crsi.org/ecommerce, make it easy to find information and purchase reference materials.

The ISCP member contact for CRSI is Andrea Talley, Manager of Transportation Programs, email transportation@crsi.org. CRSI is located at 933 North Plum Grove Road, Schaumburg, Illinois 60007, telephone (847) 517-1200.

### ACPA Western States Chapter new Executive Director

Tim Hackworth is the new Executive Director of ACPA Western States Chapter. He replaced Tom Salata, who for eight years was actively involved in the industry advancement of concrete pavement in California and Nevada. The American Concrete Pavement Association and its affiliated chapters and state paving associations provide a range of services to public officials and members. http://www.wscacpa.com/

# **Research News**

### International Conference on Long-Life Concrete Pavements Extended!!

The International Society for Concrete Pavements is co-sponsoring the INTERNATIONAL CONFERENCE ON LONG-LIFE CONCRETE PAVEMENTS to be held in Chicago, Illinois (near O'Hare international Airport), October 25 to 27, 2006. Please note that an extra half day has been added to the conference as a result of an excellent response received from the Call for Papers. The conference is being organized as an activity under FHWA's Concrete Pavement Technology Program (CPTP). Other conference co-sponsors include the Federal Highway Administration, American Association of State Highway and Transportation Officials, American Concrete Pavement Association, Concrete Reinforcing Steel Institute, Illinois Department of Transportation, and the Portland Cement Association.

The conference program will consist of about 40 peer-reviewed presentations on best practices related to long-life concrete pavements. Implementable design, concrete materials, construction, and rehabilitation techniques that result in long-lasting concrete pavements is the focus of this conference. Highlights of the conference will be long-life concrete pavement practices in Europe, Australia, and a number of US states. Findings from the US AASHTO/FHWA May 2006 scan of several European countries will be presented.

For more up-to-date information on this conference including location, registration, tentative program, and organizer contacts, please visit: http://www.concretepavements.org/llcp.html

### ISCP to Co-Sponsor International Workshop in Brazil

ISCP is co-sponsoring (with the Brazilian Concrete Institute, IBRACON) a workshop to be held in Recife, Brazil on the best practices for concrete pavements. This workshop will gather experts from around the world to present and share their experiences concerning the best practices for concrete pavement design, construction and management to produce long-life, low-maintenance concrete pavements in any transportation setting. Applications of interest include airports, streets and highways, heavy duty floors and harbors, as well as urban infrastructure installations, such as parks, sidewalks, parking lots, etc.

The workshop will address a broad range of topics, including cast-in-place and precast paving, reinforcing issues and concrete paving innovations, such as colored concrete and other architectural considerations and applications.

The workshop is scheduled for October 21-23, 2007 (mark your calendar!), and abstracts are now being accepted for consideration. Details concerning the workshop organization and registration can be found at http://www.ibracon.org.br/pavement.workshop.

### Minne-ALF Now Available for Pavement Studies

In 1993, the Minnesota Department of Transportation (MnDOT) commissioned the University of Minnesota to construct a laboratory-based accelerated load test facility for pavements. This facility, dubbed "Minnesota Accelerated Loading Facility" or "Minne-ALF," was designed to be useful for a wide variety of structural and environmental response studies for both asphalt and concrete pavements. It safely simulates the linear passage of wheel loads moving at speeds of 40 mph or more without mobilizing a heavy mass.

MnDOT has used the results of Minne-ALF tests to approve alternate dowel materials for high-performance concrete pavements and for evaluating different retrofit dowel construction parameters.



The Minne-ALF can be configured in many different ways to address various test parameters. Load, deflection and other instrumentation data are collected automatically at user-specified intervals. The device is currently being reconfigured to provide direct control over joint widths for tests of joints with misaligned dowels. It can also be used to investigate a wide range of other pavement design, rehabilitation and behavior issues for both concrete and asphalt pavements, including:

- Curl and warp studies;
- Effects of increased load limits and modified truck gear configurations;
- "Optimization" of dowel load transfer systems (i.e., material selection, dowel size, shape and location);
- Foundation pumping and drainage studies;
- Asphalt mix stability and deformation studies; and
- Load equivalency studies

#### The Minne-ALF is now available for contract research activities

Inquiries should be directed to Dr. Lev Khazanovich at khaza001@umn.edu. More complete descriptions of the test stand and results to date are available online at: http://www.mrr.dot.state.mn.us/research/MnROAD\_Project/MnROADReports/MnRoadOnlineReports/minne.

pdf

## **Upcoming Events**

### ICAR's 14<sup>th</sup> Annual Symposium

April 23-26, 2006 in Austin, Texas, USA http://www.icar.utexas.edu

**Cool Pavements: Sustainable Materials for the Urban Environment Conference** April 24, 2006 in Tempe, Arizona, USA http://www.asusmart.org

### Pavement/Materials Today and Tomorrow

April 25-26, 2006 in Tempe, Arizona, USA http://www.fulton.asu.edu/paving/

### 2006 T&DI Airfield and Highway Pavement Specialty Conference: Meeting Today's Challenges with Emerging Technologies

April 30-May 2, 2006, in Atlanta, Georgia, USA http://www.asce.org/conferences/pavements2006

### ECF 16 - 16th European Conference of Fracture

July 3-7, 2006 in Alexandroupolis, Greece http://ecf16.civil.duth.gr

### 6th International DUT-Workshop on Fundamental Modeling of Design and Performance of Concrete Pavements (formerly the CROW Workshop)

September 15-16, 2006 in Priorij Consendonk , Old-Turnhout, Belgium http://tinyurl.com/87stb

### 10th International Symposium on Concrete Roads

September 18-22, 2006 in Brussels, Belgium http://www.concreteroads2006.org/



#### International Conference on Long-Life Concrete Pavements Oct. 25-27, 2006 in Chicago, Illinois, USA http://www.fhwa.dot.gov/pavement/concrete/2006conf.cfm

### 8th International Concrete Conference and Exhibition "Concrete in Hot and Aggressive Environments"

November 27-29, 2006 in Manama, Kingdom of Bahrain http://www.engineer-bh.com/icce/

### **Highway Geophysics Conference**

December 4-7, 2006 in St Louis, MO http://www.umr.edu/2006geophysics/

### Transportation Research Board 86th Annual Meeting

January 21-25, 2007 in Washington, DC, USA http://www.trb.org/meeting/



Advanced Characterisation of Pavement and Soil Engineering Materials June 20-22, 2007 in Athens, Greece http://www.3dfem.org

### XXIIIrd World Road Congress

September 17-21, 2007 in Paris, France http://www.paris2007.route.equipement.gouv.fr/index.en.html



International Workshop on Best Practices for Concrete Pavements October 21-23, 2007 in Recife, Pernambuco, Brazil www.ibracon.org.br/pavement.workshop



#### **9th International Conference on Concrete Pavements** Organized by ISCP August 2008 at a location to be determined http://www.concretepavements.org/

If you wish to submit 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 maintained by Editor-in-Chief, Erwin Kohler, Associate Editor, Jake Hiller, and Assistant Editor, Amanda Bordelon. 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. ProTech Engineering 73 Bedfor Road Mundelein, Illinois, USA 60060 Phone: 847-549-8410 Fax: 847-589-4284 Email: katiehall@concretepavements.org ISCP Secretary and Treasurer: Mark B. Snyder, Ph.D., P.E. 6305 Oyster Bay Court Bridgeville, Pennsylvania, USA 15017 Phone: 412-221-8450 Fax: 412-221-8450 Email: msnyder@concretepavements.org (Contact for membership inquiries)