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ORGANIZATIONAL MEMBERS & MAJOR EVENT SPONSORS:



ISCP NEWS

Robert Rodden, ISCP Director: "New ISCP Website Almost Complete!"



ISCP Members received an e-mail in late January stating that our Society's new website will be going live "soon". Please forgive the delay, as unforeseen issues in the member registration and experience portion of the website, as well as other functional issues with the site, have impeded its launch. The new ISCP website is currently live in a beta mode with testing of various features still ongoing. Building a completely new website with all the member features our Society needs to improve communication and to enhance your membership value is a lot of work!

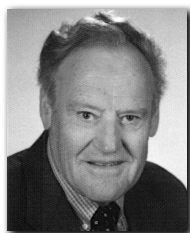
Our new website will serve as the front page of the internet for all things related to concrete pavements, including a continuously updated news feed, a global industry calendar for everything from conferences to webinars, project profiles, and a greatly enhanced list of resource offerings.

Upon its finalization, we will send a special note to all existing ISCP members with directions on how to register with the new online system. Key members-only features of the new website include:

- Access to members-only content, such as photo and presentation sharing
- Ability to participate in the online dialogue and groups/committees
- Free access to FHWA, ACPT and CPTP conference proceedings

Other new ISCP member benefits will be detailed in the upcoming announcement . . . so STAY TUNED!

Dr.-Ing. Josef Eisenmann, ISCP Honorary Member, Passes Away



Dr.-Ing. Josef Eisenmann, Honorary Member of ISCP since 2001, passed away January 29, 2015. He was a renowned civil engineer, professor, author, and concrete railway contributor/inventor.

Born in München (Munich), Germany in 1928, Josef Eisenmann studied civil engineering at the Technical University of Munich (TUM), then worked at the German Railways and as a research assistant for 12 years. He was a Professor at TUM from 1969 until his retirement in 1997. Dr.-Ing. Eisenmann's accomplishments include:

- Director of the *University Research Laboratory for Permanent Ways*
- Taught classes & researched in the fields of concrete & asphalt pavement for highways, airfields & railways
- Made many contributions to the theoretical development of concrete pavement analysis
- Developed procedures for determining bending stresses in multi-layered rigid pavement systems (e.g., slab over cement-treated base)
- Invented 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—used for new high-speed German railways where train speeds reach 300 km/h (185 mph)
- Author/co-author of more than 100 scientific & technical papers
- Chairman of the Committee for Design & Construction of Concrete Paving in the *German Research Society for Roads and Traffic (Forschungsgesellschaft für Straßen- und Verkehrswesen)*
- Decorated by the German Government (Bundesverdienstkreuz first Klasse) & the State of Bavaria (Bayerischer Verdienstorden and Leo von Klenze Medaille) for concrete pavement & railway technology
- Awarded the U.K. Institution of Civil Engineers Webb Prize
- Active lecturer worldwide concerning concrete pavement research & applications to which he dedicated his professional life

Dr.-Ing. Eisenmann was an active participant in the Society since its inauguration in 1998.

INDUSTRY NEWS

Leif Wathne Named Executive Vice President of ACPA



Leif Wathne, P.E., *ISCP Board of Directors* and *11th ICCP Chair*, was promoted to *Executive Vice President—American Concrete Pavement Association (ACPA)*. In this new position, Wathne will take on greater responsibilities across the Association and particularly with agency customers.

Gerald F. Voigt, P.E., *ACPA President & CEO* stated, "This promotion reflects the member confidence and positive results Leif has achieved during his 10 years with ACPA, including the successful implementation of the 'Accelerated Implementation and Deployment of Pavement Technologies (AID-PT) Program'." He added that this move also is result of ACPA's recent strategic planning and business outlook through 2017. Wathne previously served as *Vice President, Highways and Federal Affairs—ACPA*, from 2009 to 2014; and as *Director of Highways—ACPA* from May of 2005 to 2009. For more information, please go to: <http://www.acpa.org/wathneevp2015/>.

CALL FOR ABSTRACTS

3rd International Conference on Best Practices for Concrete Pavements

Paper submissions are invited for the **3rd International Conference on Best Practices for Concrete Pavements** to be held at the Centro de Convenções de Bonito, October 28-30, 2015 in the state of Mato Grosso Du Sol in Bonito, Brazil. The theme for the conference is "Challenges for the future of sustainable construction of concrete pavements". Organized by the University of São Paulo (USP) and the Brazilian Concrete Institute (IBRACON); and partnered with the European Pavement Association (EUPAVE) and the Federal Aviation Association (FAA), the 3rd Conference will be a parallel event to the 57th Brazilian Concrete Congress and for Conference.

Paper Due Dates: Abstract submission due: **April 30, 2015**
Approval of abstracts: **May 15, 2015**
Full papers due for review: **July 15, 2015**
Papers final acceptance: **August 1, 2015**

Please submit abstracts and papers via e-mail to: concpaybonito2015@gmail.com.

Papers written in English and Spanish will be accepted. For information and tips on the full paper, please go to: <http://ibracon.org.br/eventos/57CBC/ingles/artigos.asp>.

Held every four years, the **International Conference on Best Practices for Concrete Pavements** has become one of the most important international events dedicated to the discussion and new technology exchange on concrete pavements. The first two conferences were held in Recife, Brazil (2007) and Florianopolis, Brazil (2011). The 3rd Conference will focus on the theme of the future of sustainable construction of concrete pavements, with key speakers from South America, North America and Europe. Attendees will include public and private international road agencies, industry, academia, professional consulting and construction engineers, students, and all concerned with concrete pavements.

For the **conference paper topics**, speakers, preliminary program, call for abstracts and papers, and more information please go to: http://www.ibracon.org.br/eventos/57cbc/3rd_Concrete_Pavement.pdf.

For the 57th Brazilian Concrete Congress and for conference registration, please visit: <http://ibracon.org.br/eventos/57CBC/ingles/>.



INDUSTRY PUBLICATIONS & RESOURCES

2nd Ad Hoc Working Group for the Revision of the EU Green Public Procurement Criteria for Road Construction, January 28, 2015

The European Commission's Joint Research Centre (JRC) is currently revising Green Public Procurement (GPP) criteria for road construction. The document establishes the procurement criteria for design, construction and maintenance of roads based on a life-cycle approach and scientific evidence base.

EUPAVE participated in the 2nd Ad Hoc Working Group (AHWG) for the revision of the GPP criteria for road construction on January 28, 2015. Experts came together to review follow-up evidence gathered since the 1st AHWG meeting in March 2014. Following the 2nd AHWG meeting, the stakeholders submitted their written comments to the draft criteria. In its comments, EUPAVE highlighted that if rolling resistance is considered, pavement deflection should be included. EUPAVE also called for more ambitious requirements for durability, and for the consideration of local availability when it comes to sourcing materials. The JRC will conduct further follow-up investigations with a view to finalizing a draft of the criteria for consultation with the GPP Advisory Group, then internally within the Commission.

To read the entire report in PDF form, please go to: <http://www.eupave.eu/documents/position-papers/eupave-position-paper-green-public-procurement-gpp-for-road-construction.pdf>.

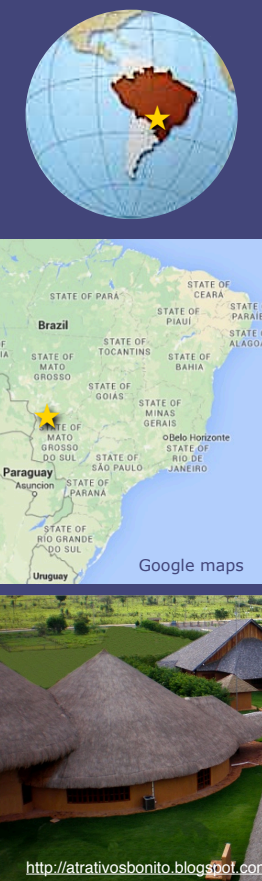
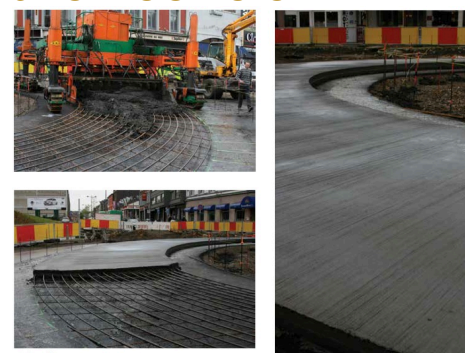
FEBELCEM Publication: Use of Precast & In-situ Cast Concrete for Public Square in Liège, Belgium



Federation of the Belgian Cement Industry (FEBELCEM) published a brochure (available in French and Dutch) that describes the design and construction of the public square in front of the Guillemins Railway Station in Liège, Belgium, designed by the famous architect Santiago Calatrava.

As the result of a global urbanistic vision, the Guillemins Esplanade refurbishment fulfilled various requirements, and was completed in 2014. Architects designed the public square as a starting point for further urban developments, with the aim of upgrading the entire area. Seven different surface finishing methods were applied on the precast and in-situ cast elements in order to achieve an aesthetic ensemble, meeting the high-level performance and sustainability criteria. The project illustrates numerous aspects of the use of concrete for infrastructure works and public spaces. From a practical viewpoint, the square is a polyvalent and flexible space—a meeting place, but mainly a multimodal transport platform . . . meeting today's efficiency and safety requirements. The square's pavement is composed of a combination of 380 4m x 3m precast

NUMEROUS ASPECTS OF THE USE OF CONCRETE FOR INFRASTRUCTURE WORKS & PUBLIC SPACES ...



PHOTO(s) above right:
CRC Paving:
 The roundabout was formed with a slip form paving machine and in several phases:

- Phase 1: concreting of the entire inner ring.
- Phase 2: concreting of the outer ring with anchored joint work.
- Phase 3: formation of the inside of the rumble strip.
- Phase 4: Concreting of the outside of the surpassable strip and construction of the center island.
- Phase 5: formation of switching the bus lanes taken into account

concrete slabs and cobblestones. The slabs are cast in two layers with an exposed aggregate concrete surface on top. Dark limestone aggregates are dominantly present on the surface in combination with white quartz. The infrastructure of the public square consists of a roundabout in continuously reinforced concrete (CRC) and a bus lane built with dowelled concrete slabs, both dark colored.

To download the brochure in French or Dutch, and to read more on the project, please go to: <http://www.eupave.eu/documents/news-items/20151302-febelcempubliation.xml?lang=en>.

Knowledge Module on Concrete Pavements



Since 2013, a working group of CROW ("technologie platform voor transport, infrastructuur en openbare ruimte": "Technology platform for transport, infrastructure and public space" in The Netherlands) updated several publications related to concrete pavements.



"The CROW Knowledge Module on Concrete Pavements" will no longer be printed publications. In the future, all new content will only be available in a digital module. Normally, access to this module requires a paid subscription. But, Cement&BetonCentrum, together with the Concrete Road Contractors' Association (CRCA), and the Ready Mixed Concrete Association (RMCA), have made it possible to have free access to this Module for the next 3 years, after becoming a member of the Dutch Knowledge Platform on Concrete Roads. This Membership is also free and has other advantages such as:

- Reduced participation fee to the Dutch Concrete Road Symposium
- Invitation to workshops
- Excursion of the Knowledge Platform.

For the **CROW (Dutch) website**, please go to: <http://www.crow.nl/online-kennis-tools/lidmaatschap-kennisplatform-betonwegen-incl-kennis?page=1&searchsort=date&pagesize=10>.

For the **CROW Website in English**, please go to: <https://translate.google.com/translate?hl=en&sl=auto&tl=en&u=http%3A%2F%2Fwww.crow.nl%2Fonline-kennis-tools%2Flidmaatschap-kennisplatform-betonwegen-incl-kennis%3Fpage%3D1%26searchsort%3Ddate%26pagesize%3D10>.

Evaluating the Performance of Alternative Supplementary Cementing Material in Concrete



The Center for Transportation Research at the University of Texas at Austin has released a report that characterizes and evaluates the performance of eight natural pozzolans to assess their potential as Class F fly ash replacements in concrete.

Uncertainty in the supply of Class F fly ash, due to impending environmental restrictions, has made it imperative to find and test alternate sources of supplementary cementitious materials (SCMs) that can provide similar strength and durability benefits to concrete as Class F fly ash. This project summarizes the key findings of research that was conducted to characterize and evaluate the performance of eight natural pozzolans, commercially available in Texas, to assess their potential as Class F fly ash replacements in concrete. Of the eight pozzolans tested, six were found to be viable alternatives for Class F fly ash. Methods to further enhance the performance of these SCMs were explored and guidelines are provided on the optimum SCM replacement levels for different applications. Finally, recommendations are presented on how to improve current testing practices for SCMs. To read the full report in PDF form, please go to: <http://library.ctr.utexas.edu/ctr-publications/0-6717-1.pdf>.

Restructuring at Beton Marketing Deutschland



In September 2014, the Board of VDZ—The German Cement Works Association—restructured the marketing activities of BetonMarketing Germany GmbH (BMD) and its three regional divisions. Under the Concrete Information Centre (IZB), the cement and concrete industry in Germany ensures the alignment of regional and national promotional activities, including continued cooperation with the Federation of the German ready-mixed concrete industry.

The new structure will be managed by three representatives from the associate bodies: Mr. Nolting, Professor Middel, and Mr. Bernhofen, enabling clear regional promotion and a consistent approach towards the market and customers. Until the new structure of IZB is finalized, Mr. Nolting will be in charge of BMD, caring for the ongoing projects and aligning the current work to the new structure, including the work on concrete pavements.



Mr. Nolting

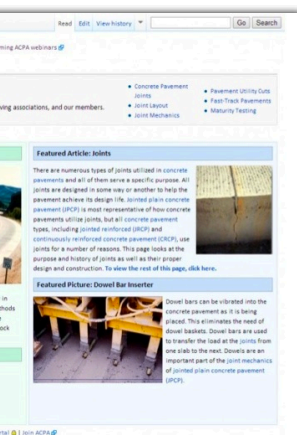
ACPA Announces Wikipave™ Website

ACPA announced the launch of its **Wikipave™** website, which places information about and related to concrete pavement at the fingertips of anyone, anywhere in the world. As is true of other wikis*, Wikipave is a collaborative application, which will allow ACPA staff, members, technology partners, and affiliated Chapter/State personnel to add, delete, or otherwise modify technical content, encyclopedic listings, definitions, photos and illustrations, and other content.

ACPA emphasizes that this free resource is available worldwide without limitation, but adds that content development and editing rights will be limited to ACPA and its members and affiliates.

For more information, please go to: <http://www.acpa.org/wikipave/>
 For the WikiPave site, please go to: <http://wikipave.org>.

*Wiki: a website that allows collaborative editing of its content and structure by its users.



ACPA Wikipave Website page



Evaluating the Performance of Alternative Supplementary Cementing Material in Concrete

Research Team:
 Rachel Case
 Robert Lee
 David Manning
 David Ponder
 Brian Smith
 Praveen Srinivasan
 Kelly Senger

CTR Technical Report: TRP-14-01
 Published January 2014
 Project Title: Evaluating the Performance of Alternative Supplementary Cementing Material in Concrete
 Project Number: TRP-14-01
 Project Location: Austin, Texas
 Project Duration: 12 months
 Project Funding: Provided by the Texas Department of Transportation and the Federal Highway Administration

Report prepared in cooperation with the Texas Department of Transportation and the Federal Highway Administration



ACPA Wikipave Website page

TechBrief Publication Number FHWA-HIF-15-006 | JANUARY 2015

Permeable Interlocking Concrete Pavement

Contents

- Introduction
- Benefits
- Applications and Limitations
- Typical Properties & Characteristics
- Design
- Construction Considerations
- Maintenance
- Performance
- Related Publications
- References

Introduction

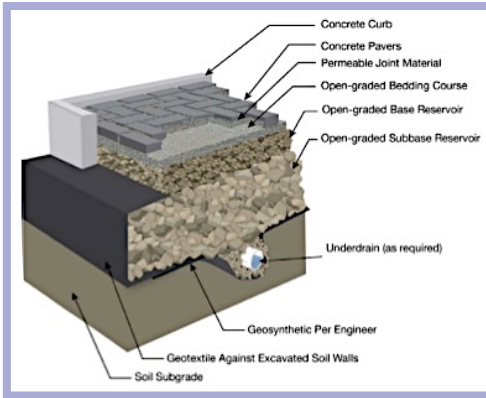
Permeable interlocking concrete pavements, also referred to as PICP, are concrete paving units with joints that create openings in the pavement surface when assembled into a pattern. The USFHWA has a fact sheet on PICP. The joints are filled with permeable aggregates that allow water to enter the surface. The permeable surface allows flow rates as high as 2,540 cm/hr (1,000 in/hr) (Borst 2010). The paving units are placed on a bedding layer of permeable aggregates or a base and subbase of open-graded aggregates. The concrete pavers, bedding and base layers are typically restrained by a concrete curb or edge apron. The base and subbase store water and allow it to infiltrate the soil subgrade. Perforated underdrains in the base or subbase are used to remove water that does not infiltrate within a given design period—typically 48 to 72 hours. Geosynthetics such as geotextiles, geogrids or geomembranes are applied to the subgrade depending on structural and hydrologic design objectives. Separation geotextiles are used on the sides of the base/subbase to prevent entrance of fines from adjacent soils. PICP may help achieve compliance with many national, provincial, state and local regulations as well as transportation agency design requirements for stormwater runoff control. For the full report in PDF form, please go to: <http://www.fhwa.dot.gov/pavement/concrete/pubs/hif15006.pdf>.

Related Publications

- The TechBrief presents an overview of permeable interlocking concrete pavement (PICP) and its use. General information is provided on PICP composition with a summary of benefits, limitations, applications and design considerations such as hydrologic design, structural design, and maintenance. Separation geotextiles are used on the sides of the base/subbase to prevent entrance of fines from adjacent soils.
- U.S. Department of Transportation Federal Highway Administration

Permeable Interlocking Concrete Pavement

The Federal Highway Administration (FHWA) has published a TechBrief titled "Permeable Interlocking Concrete Pavement (PICP)". This TechBrief presents an overview of PICP and its use. General information is provided on PICP composition with a summary of benefits, limitations and characteristics, along with important considerations such as hydrological design, structural design, construction, and maintenance. PICP consists of solid concrete paving units with joints that create openings in the pavement surface when assembled into a pattern. (The U.S. Environmental Protection Agency (EPA) has a fact sheet on PICP.)



The joints are filled with permeable aggregates that allow water to freely enter the surface. The permeable surface allows flow rates as high as 2,540 cm/hr (1,000 in/hr) (Borst 2010). The paving units are placed on a bedding layer of permeable aggregates which rests over a base and subbase of open-graded aggregates. The concrete pavers, bedding and base layers are typically restrained by a concrete curb in vehicular applications. The base and subbase store water and allow it to infiltrate into the soil subgrade. Perforated underdrains in the base or subbase are used to remove water that does not infiltrate within a given design period—typically 48 to 72 hours. Geosynthetics such as geotextiles, geogrids or geomembranes are applied to the subgrade depending on structural and hydrologic design objectives. Separation geotextiles are used on the sides of the base/subbase to prevent entrance of fines from adjacent soils. PICP may help achieve compliance with many national, provincial, state and local regulations as well as transportation agency design requirements for stormwater runoff control. For the full report in PDF form, please go to: <http://www.fhwa.dot.gov/pavement/concrete/pubs/hif15006.pdf>.

For the EPA fact sheet on PICP, please go to: <http://water.epa.gov/polwaste/npdes/swbmp/Permeable-Interlocking-Concrete-Pavement.cfm>.

CP Road Map E-News

The **CP Road Map E-News** is the newsletter of the Long-Term Plan for Concrete Pavement Research and Technology (CP Road Map), a U.S. national research plan developed and jointly implemented by the concrete pavement stakeholder community. To visit the CP Road Map website, please go to: <http://www.cproadmap.org/index.cfm>.

New "Moving Advancements into Practice (MAP)" Brief

Moving Advancements into Practice (MAP) Briefs describe promising research and technologies that can be used now to enhance concrete paving practices. The January 2015 MAP Brief, "Producing Freeze-Thaw Durable Concrete" describes the importance of developing a good air-void system in concrete mixes. To view the January 2015 News Brief, please go to: <http://www.cproadmap.org/publications/MAPbriefJanuary2015.pdf>.

News From the Road News from the Road highlights research around the United States that is helping the concrete pavement community meet the research objectives outlined in the CP Road Map. Below are the featured headlines of the January 2015 CP Road Map. To continue reading each article, please go to: http://www.cproadmap.org/publications/e-news_Jan2015.cfm.

Developing Standards for Testing Permeability-Reducing Admixtures

Concrete mixtures with low permeability are desirable because they resist the penetration of water and aggressive chemicals, thereby improving the durability and longevity of the structure. One approach for reducing permeability is the addition of permeability-reducing admixtures, which help fill and block capillary pores in the cement paste.

Washington State DOT Evaluates the Environmental Impact of Evolving Pavement Material Practices

In a recent project, the Washington State DOT (WSDOT) utilized Roadprint, an online Life Cycle Analysis (LCA) tool, to quantify the greenhouse gas emissions and energy consumption changes for pavement material practices at WSDOT between 1990 and 2010. During this time period, WSDOT began using both fly-ash and slag in its concrete mixes.

Virginia DOT Finds PCC Overlays an Effective Alternative to HMA

In 2012, the Virginia Department of Transportation (VDOT) rehabilitated a 5.1-mile section of the westbound lanes of US 58 using a 4-inch bonded concrete overlay over a 2.6-mile section and a 7-inch unbonded concrete overlay with an asphalt separation layer over a 2.2 mile section. The remaining 0.3 mile section was reconstructed. The existing pavement is an 8-inch continuously reinforced concrete pavement on a 6-inch cement-treated base.

Long-Term Performance of Concrete Pavements with Diamond Grinding

Diamond grinding has been used by various agencies to improve ride quality, increase skid resistance and reduce tire/pavement interface noise. The Texas Department of Transportation has used diamond grinding on both jointed concrete pavement and continuously reinforced concrete pavement. This study performed accident analysis both before and after diamond grinding on a recent project section.

Updates from the States: Iowa

Concrete pavement research for the state of Iowa is accomplished through research programs run by the Iowa Department of Transportation (Iowa DOT) Research and Technology Bureau, and guided by the Iowa Highway Research Board (IHRB). Pavement research is conducted in-house at the DOT and through various partnerships. To continue reading about Iowa, please go to: http://www.cproadmap.org/publications/e-news_2015_January-Iowa.cfm.

To read each of the CP Road Map articles above, please go to: http://www.cproadmap.org/publications/e-news_Jan2015.cfm. For more information, please contact by e-mail: Steve Klocke, *Program Manager-Snyder & Associates*: sklocke@snyder-associates.com Dale Harrington, *Program Manager-Snyder & Associates*: dharrington@snyder-associates.com.



CP Road Map E-News January 2015

Producing Freeze-Thaw Durable Concrete

Introduction

When concrete is in a wet environment and exposed to temperatures below 32°F, the concrete is subjected to freeze-thaw cycles. These cycles can cause damage to the concrete and can also cause scaling and spalling. Concrete is a brittle material and is susceptible to damage when it is exposed to freeze-thaw cycles. This can lead to a loss of strength and durability. The use of air-void systems can help to reduce the damage caused by freeze-thaw cycles. Air-void systems create a network of small, interconnected voids that allow water to escape from the concrete when it freezes. This helps to reduce the internal pressure that causes cracking and scaling. The use of air-void systems is a common practice for improving the freeze-thaw durability of concrete. This document provides information on the importance of developing a good air-void system in concrete mixes.

How do we get a good air-void system?

The ideal air-void system consists of small and well-distributed voids. This is why bubble size and spacing are so important for achieving good freeze-thaw durability. The January 2015 MAP Brief, "Producing Freeze-Thaw Durable Concrete" describes the importance of developing a good air-void system in concrete mixes.

News from the Road

News from the Road highlights research around the country that is helping the concrete pavement community meet the research objectives outlined in the CP Road Map.

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Cover: January 2015

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CONFERENCES & WORKSHOPS

World of Concrete Hosts Largest Crowd in Six Years



PHOTOS:
(3 above)
Opening Ceremony
Show Opening
Technology Center



World of Concrete 2015 (WOC2015) was held at the Las Vegas Convention Center, in Las Vegas, Nevada, USA, February 2-6, 2015. WOC is the industry's only annual international event dedicated to the concrete and masonry construction industries. WOC featured indoor/outdoor exhibits; hosted the industry's leading suppliers; showcased innovative products, technologies and exciting demonstrations; featured tools, construction machinery and equipment, safety training courses, new technologies, networking opportunities, and a world-class education program. Attendees included:

- Concrete contractors
- Construction managers
- Dealers/distributors
- Designers
- Rental equipment centers
- Specifiers
- Architects
- Engineers
- Producers of precast/prestress, brick/block, ready mix, pipe/block, and more.

Celebrating 41 years of industry excellence, World of Concrete 2015 exceeded expectations—an indication of a recovering economy. WOC 2015 was the largest in six years, and featured more than 1,460 companies exhibiting across more than 675,000 sq ft of exhibits for 55,779 attendees—a 16.2% rise from 2014. Jackie James, *Show Director, World of Concrete*, said, "With the industry ramping up again, education became a key asset at WOC this year. Class attendance was the largest in six years. In addition, international attendees made a big impact—scouring the show for new equipment, tools and technology to make their operations more efficient and profitable."

Vendors reported spirited buying and "Best show we've ever had" was a common sentiment. ISCP Member, ACPA had a commanding presence at World of Concrete. Mike Lipps, *Chairman-ACPA and Duit Construction Co., Inc.*; Jerry Voigt, *President and CEO-ACPA*; Bill Davenport, *VP-Communications-ACPA*; Larry Scofield, *Pavement Innovation-IGGA/ACPA*; and Steve Davis, *Georgia Concrete Paving Association-ACPA*, were all on hand to discuss key issues and answer technical questions for guests who stopped by the ACPA/IGGA shared booth space.

For more highlights, various competition winners, and complete information on the World of Concrete 2015, please go to: www.worldofconcrete.com.

Copy credit: "Double-Digit Growth at World of Concrete 2015" by William D Palmer, Jr, *Editor-in-Chief-Concrete Construction Magazine*: <http://worldofconcrete.com/UtilityNav/News/Entries/40562>; and "Contractors Find Their Edge at World of Concrete" - *Engineering News Record*: <http://enr.construction.com/products/materials/2015/0216-65279contractors-find-their-edge-at-world-of-concrete-2015.asp>.

**CELEBRATING
41 YEARS OF
INDUSTRY
EXCELLENCE...
WOC 2015
EXCEEDED
EXPECTATIONS
... LARGEST IN
6 YEARS ...**

PHOTOS:
(below)
Spec Mix Winners
Outdoor Lot 1
Educational Training



TRAINING

ACPA Launches 2 New Training Modules



**2 NEW
WEB-BASED
INSTRUCTIONAL
MODULES...
PROVIDE
PROFESSIONAL
TRAINING**

ACPA has launched two new web-based instructional modules that provide professional training about best practices for constructing smooth concrete pavements and handling aggregates for concrete paving.

Developed by ACPA and sponsored by the Federal Highway Administration, the courses are offered free of charge to participants involved in highway and heavy construction. The courses are targeted to concrete paving contractors, as well as agency personnel, consulting engineers, and others involved in construction management and/or concrete pavement project delivery.

Professional
Development
Hours:
4.5 PDH's will
be provided to
training
attendees

Professional
Development
Hours:
3.5 PDH's will
be provided to
training
attendees

Best Practices for Constructing Smooth Concrete Pavements

This 4.5-hour course covers all aspects of constructing smooth concrete pavements, from defining roughness to why smooth pavements are important. This comprehensive training also covers smoothness measurement, the "10 commandments" of smooth paving, and quality control methods.

Participants will be required to complete simple hurdle tests to proceed through the first six sections. An optional evidence-of-learning final exam is offered after the seventh section. For more information, please go to: <http://acpa.scholarlab.com> and click "Smoothness".

Best Practices for Handling Aggregates for Concrete Paving

This in-depth training covers basics of aggregates; acceptance criteria; tips and techniques for configuring a concrete plant site; stockpile management best practices; proper handling between stockpiles and concrete plants; and what can go wrong if poor techniques are used.

Participants will be required to complete simple hurdle tests to proceed through the first five sections. An optional evidence-of-learning final exam is offered after the sixth section.

For more information, please go to: <http://acpa.scholarlab.com> and click "Stockpile".

For complete details on ACPA Training courses, please go to: <http://www.acpa.org/stockpilesmoothness/>.

WEBINARS

TRB: Considerations for the Selection of Continuously Reinforced Concrete Pavement (CRCP) for Projects



Monday, March 30 (1.5 hours)

2:00 - 3:30 pm (Eastern) | 1:00 - 2:30 pm (Central) | NOON - 1:30 pm (Pacific)

TRB will conduct a webinar that will describe the considerations for selecting continuously reinforced concrete (CRCP) as the pavement type for state highway projects in California, Oregon and Texas. This webinar was organized by the TRB Standing Committees on Portland Cement Concrete Pavement Construction, Rigid Pavement Design, and Pavement Rehabilitation. Webinar presenters will cover a cooperative effort by the U.S. Federal Highway Administration (FHWA) with industry and its focus on long-life performance of concrete pavements.

Webinar Moderator: Greg Halsted, *Concrete Reinforcing Steel Institute*

Webinar Presenters: Justin Moderie, *Oregon Department of Transportation*
Bill Farnbach, *California Department of Transportation*
Andy Naranjo, *Texas Department of Transportation*
Sam Tyson, *U.S. Federal Highway Administration*

Webinar Outline: PART 1: Selection and use of CRCP by state highway agencies:

- Oregon Department of Transportation
- California Department of Transportation
- Texas Department of Transportation

PART 2: U.S. FHWA's focus on long-life concrete pavements

PART 3: Question and answer session

Learning Objectives: At the end of this webinar, participants will be able to:

Summarize the processes that have been used to select CRCP as the pavement type by highway agencies in California, Oregon and Texas, and Develop individual processes for considering the use of CRCP on state projects.

Participants must register in advance of the webinar, and there is a fee for non-TRB Sponsor or non-TRB Sustaining Affiliate employees. The first 60 minutes of the webinar will be for presentations and the final 30 minutes will be reserved for audience questions.

To register and for more information, please go to: <http://www.trb.org/Main/Blurbs/172135.aspx>.

ACPA 2015 Webinar & Meganar Programs ...



ACPA and the National Concrete Pavement Technology Center (CP Tech Center) are co-presenting a series of webinars. This program is sponsored by the FHWA. Below are the topics and dates. Included in the 2015 program is a series of webinars on concrete pavement overlays. ACPA is continuing to work on more detailed information, which will soon be posted on the "Education & Training" page of the ACPA website.

Concrete Overlays Series-Part 5: Concrete Pavement Overlay Design Details/Joints

Thursday, March 5 (1.5 hours)

1:00 - 2:30 pm (Eastern) | Noon - 1:30 pm (Central) | 10:00 am - 11:30 am (Pacific)

Webinar Presenter: Gary Fick, P.E., *Trinity Construction Management,*
for the National Concrete Pavement Technology Center (NCPTC)

Overview: This is the fifth installment of this multi-part series. In this program, Gary Fick, guest presenter, will present important information about design details specific to concrete overlays, including joint layout and other jointing considerations for concrete overlays.

For more information and registration, please go to: <http://www.acpa.org/2015webinar/>.

Professional
Development
Hours:
A certificate for
1.5 PDH's will
be provided to
attendees who
register &
attend as an
individual

Concrete Overlays Series-Part 6: Maintenance of Traffic in Concrete Pavement Overlay Design & Construction

Tuesday, March 26 (1.5 hours)

1:00 - 2:30 pm (Eastern) | Noon - 1:30 pm (Central) | 10:00 am - 11:30 am (Pacific)

Webinar Presenter: Dale Harrington, P.E., Snyder & Associates
for the National Concrete Pavement Technology Center (NCPTC)

Overview: This is the sixth installment of this multi-part series. In this program, guest presenter Dale Harrington, will cover the very important details of maintenance of traffic (MOT) during concrete pavement overlay design and construction. Misperceptions abound about the maintenance of traffic for concrete overlays, but the reality is MOT requirements should be and are similar to the approaches used when designing and placing an asphalt overlay. As this course will emphasize, there is no need to add complexity to the planning and engineering simply because the overlay type has changed.

This course will cover the essentials of location, geometrics, and other MOT requirements. It will also emphasize that these considerations will dictate the level of design detail required in the plans, and will provide information for rural, urban, and suburban overlay projects.

For more information and registration, please go to: <http://www.acpa.org/2015webinar/>.

Professional
Development
Hours:
1.5 PDH's
Available

Streetscapes: Strategies for Using Pervious Concrete & Permeable Interlocking Concrete Pavements

Tuesday, March 31 (1.5 hours)

1:00 - 2:30 pm (Eastern) | Noon - 1:30 pm (Central) | 10:00 am - 11:30 am (Pacific)

Webinar Presenters: Rich Cofoid, Sr. Marketing Product Manager, Increte Systems
David R. Smith, Technical Director, Interlocking Concrete Pavement Institute (ICPI)

Overview: The ACPA and the ICPI are pleased to present this program that provides a wealth of information for contractors, owners/agencies, consultants and others interested in using decorative, cast-in-place concrete pavements and interlocking/permeable interlocking concrete pavement systems (ICP/PICP). For the ICPI website, please go to: <http://www.icpi.org>.

To register for these webinars, to check the new details about upcoming webinars and meganars, for Government employees discount, and more information, please go to: <http://www.acpa.org/2015webinar/>.

For the CPTech Center website, please go to: www.cptechcenter.org.

Professional
Development
Hours:
1.5 PDH's
Available

ABSTRACT

Full-Depth Reclamation with Lime and Substandard Fly Ash

Sarah Dillon, E.I., Graduate Research Assistant, Civil and Environmental Engineering
L.K. Crouch, Ph.D., P.E., and **Kevin Young**, P.E.
Tennessee Technological University

Substandard fly ash, known as a high carbon or high loss-on-ignition (LOI) ash, is a plentiful material in the Southeast region of the United States. Its storage or disposal, however, requires continuous monitoring for leaching of heavy metals into nearby watersheds. Therefore, some use of this material could provide economic and environmental benefits.

A preliminary investigation was conducted into the performance of a substandard fly ash in full-depth reclamation (FDR). A foregoing FDR project by the Tennessee Department of Transportation (TDOT) at Land Between the Lakes (LBL) in Tennessee was used as a comparison for success of two different FDR materials obtained for the project, one from LBL and one from the Shelbyville Airport in Tennessee. The target compressive strength from the TDOT project was 500-psi (3.4-MPa) at 7-days with the use of cement.

FDR specimens were fabricated for compressive strength and modulus of elasticity testing using hydrated lime and substandard fly ash as the cementitious content. Based on preliminary results, the specimens yielded average 28-day compressive strengths of 552-psi (3.8-MPa) and 563-psi (3.9-MPa) for the LBL and Shelbyville materials, respectively, thus meeting the TDOT target value. The specimens also yielded an average 28-day modulus of elasticity greater than 450-ksi (3.1-GPa) for both FDR materials.

Additionally, a metal analysis was performed on a lime-fly ash (LFA) specimen to examine leaching from the stabilized material. The extraction fluid yielded metal concentrations lower than the Environmental Protection Agency (EPA) regulatory limit and was therefore determined not hazardous based on the characteristic toxicity.

Submitted for consideration in the 2015 World of Coal Ash Conference, May 5-7, 2015.

For more information, please contact:

Sarah Dillon | E-mail: <mailto:sadillon21@gmail.com>

First Call for Papers ISCP's 11th ICCP 2016

ISCP's 11th International Conference on Concrete Pavements (11th ICCP) will be held in San Antonio, Texas, USA, August 28-31, 2016. The 11th ICCP theme is:

"Concrete Pavements: Thinking Bigger, Thinking Better"

Potential **Authors** are invited to submit an abstract or letter of intent by **April 30, 2015**. Potential **Exhibitors** are encouraged to complete a Call for Papers response form indicating interest in receiving an exhibition registration package when they become available.

For the brochure of the Announcement and First Call for Papers, please go to: <http://www.concretepavements.org/11thiccp/>.

For questions and more information, please contact:

Leif Wathne, 11th ICCP Conference Chair:

E-mail: lwathne@acpa.org | Phone: 202.638.2272



IMPORTANT DATES:

April 30, 2015

Letters of intent/
abstracts

May 31, 2015

Approval of abstracts

September 30, 2015

Completed papers
due for review

December 15, 2015

Reviews completed
and authors notified

January 30, 2016

Submittal of revised
papers for re-review

February 28, 2016

Authors notified

April 30, 2016

"Camera-ready"
papers: electronic
versions due

CALL FOR ABSTRACTS/PAPERS DIGEST

April 30, 2015 Due date for abstracts and letters of intent for the **11th International Conference on Concrete Pavements (11th ICCP)** to be held in San Antonio, Texas, USA, August 28-31, 2016. For the Announcement and First Call for Papers brochure, please contact Leif Wathne, 11th ICCP Conference Chair: E-mail: lwathne@acpa.org. For the online version of the brochure, please go to: <http://www.concretepavements.org/11thiccp/11THICCPbrochure.pdf>.

April 30, 2015 Due date for abstracts for the **3rd International Conference on Best Practices for Concrete Pavement** to be held October 28-30, 2015 at the University of São Paulo in Bonito, Brazil. Please see the article on page 1 of the February 2015 ISCP Newsletter. Please submit abstracts and papers via e-mail to: concpavbonito2015@gmail.com.

May 8, 2015 Due date for abstracts and resúmenes for the **10th Uruguayan Road Congress**, to be held October 14-16, 2015 in the Conference Room of the Technological Laboratory of Uruguay in Montevideo, Uruguay (Av Italia 6201). For more information, please contact: Uruguayan Association of Roads: Phone: 598.2401.9459 | Fax: 598.2402.3007 | E-mail: secretaria@auc.com.uy | Website: www.auc.com.uy English: <https://translate.google.com/translate?hl=en&sl=auto&tl=en&u=http%3A%2F%2Fwww.auc.com.uy>.

CALENDAR

MARCH 2015

CPAM – 54th Annual Concrete Paving Workshop, USA

March 12 - 13, 2015, Breezy Point Conference Center, Breezy Point, Minnesota, USA, <http://www.concreteisbetter.com>

ASCE-Design of Concrete Pavements, USA

March 16-17, 2015, Wyndham Hotel Lake Buena Vista, Florida, USA, <http://mylearning.asce.org/diweb/catalog/item/id/241756/q/c=79&q=concrete&t=2116>

APRIL 2015

NCC – Spring 2015 Meeting, USA

April 21-23, 2015, Silver Legacy Resort Casino, Reno, Nevada <http://www.cptechcenter.org/ncc/TTCC-NCC-2015.cfm>

MAY 2015

Totally Concrete Expo-South Africa

May 12-15, 2015, Sandton Convention Centre, Johannesburg, South Africa, <http://www.totallyconcrete.co.za/>

9th International Conference on Managing Pavement Assets (ICMPA9)

May 18-21, 2015, in Alexandria, Virginia in the Washington, D.C. metropolitan area, USA, www.ICMPA9.org

JUNE 2015

James Lai Symposium on Pavement Mechanics and Materials

2015 ASCE Engineering Mechanics Institute Conference (MS 61)
June 16-19, 2015 in Palo Alto, California, USA, <http://www.emi2015.info/minisymposia/symposia>

JULY 2015

2015 AASHTO/TRB Conference on Transportation Infrastructure Maintenance and Operations

July 2015 in Des Moines, Iowa, USA, <http://bit.ly/1jLv6Tj>

AUGUST 2015

Concrete 2015

August 30, 2015 - September, 2015, in Melbourne, Victoria, Australia, <http://concrete2015.com.au/>

October 2015

11th International Symposium on Brittle Matrix Composites – BMC-11

October 12-14 2015 in Warsaw, Poland, <http://bmc11.ippt.pan.pl/>

3rd International Conference on Best Practices for Concrete Pavements

October 28-30, 2015 at the Centro de Convenções de Bonito, in the state of Mato Grosso Du Sol in Bonito, Brazil. Parallel event to the 57th Brazilian Concrete Congress and for Conference. Abstracts and papers: http://www.ibracon.org.br/eventos/57cbc/3rd_Concrete_Pavement.pdf

57th Brazilian Concrete Congress Conference

October 27-30, 2015 at the Centro de Convenções de Bonito, in the state of Mato Grosso Du Sol in Bonito, Brazil. <http://ibracon.org.br/eventos/57CBC/ingles/>.

November 2015

XXVth World Road Congress

November 2-6, 2015 in Seoul, South Korea, <http://piarcseoul2015.org/>

For events in 2016 and beyond, please go to: <http://concretepavementorg.ipage.com/wordpress/events/>

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https://www.linkedin.com/groups?home=&gid=3760764&trk=groups_members-h-logo
Questions? Please contact moderator Jeff Roesler: jroesler@illinois.edu

@ConcPaveSociety



The ISCP Newsletter is produced monthly by:

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ISCP invites members and friends to submit articles and calendar items future issues to:

newsletter@concretepavements.org. For the ISCP website, please go to: <http://concretepavementorg.ipage.com/wordpress>.

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