CONFERENCES & WORKSHOPS

ASOCRETO Concrete Meeting “EXPO RC 2014” & Specialized Pre-Events to be Held September, 2014 in Colombia, South America

The Asociación Colombiana de Productores de Concreto (ASOCRETO) is hosting the one of the biggest events in construction: Expo Reunión Concreto 2014 (EXPO RC 2014) with the theme “Competitiveness Without Borders”. The EXPO RC 2014 will be held September 24-26 in the Convention Center of Cartagena, Colombia with Specialized Pre-Events on September 23 and 24 at the Hotel Las Américas and Cartagena de Indias Convention Center, Cartagena, Colombia, South America.

This is the 50th Concrete Meeting and will be the venue designed specifically for colleagues and professionals of engineering and architecture from over 20 nationalities. Attendees will learn about the newest equipment and products, the latest trends, and the latest technologies and advances. They will have the opportunity to socialize and make contacts, and attend extra-curricular activities, special exhibitions, and product and equipment demonstrations.

There will be 140 national and international exhibitors from more than 25 companies in the construction industry. EXPO RC 2014 will host 2,300 attendees from 20 countries including civil engineers, architects, construction directors, resident officers, inspectors, consultants, builders, businessmen, technical personnel of construction, and many others.

- More than 90 meetings will simultaneously occur in 5 conference rooms
- 16 Topics related to the construction of cement and concrete
- Speakers from 14 countries—Germany, Brazil, Canada, Chile, Colombia, Spain, USA, France, Italy, Mexico, Norway, Panama, Switzerland and Venezuela

4 Specialized Pre-events September 23-24:

1) Conference Structures Inspection—How to avoid mistakes.
2) Seismic design of precast concrete structures: buildings and bridges
ASOCRÁVAS, 2nd National Meeting of Aggregates
Women in Concrete Alliance - WICA
3) Live demonstrations
4) Social activities of integration and meeting

Registration deadline is September 15, 2014.
For the Specialized Pre-Events, please go to: http://www.asocreto.org.co/programa_rc2014/pre-eventos_en.html.
For the program, please go to: http://www.asocreto.org.co/principal_rc2014/tarifas_en.html.

Reminder: 12th Symposium in Prague, Czech Republic September 23-26, 2014

The 12th International Symposium on Concrete Roads will be held September 23-26, 2014 in Prague, Czech Republic. Late registration began August 1, 2014. To read the ISCP article on the Symposium, please go to page 4 of the ISCP April 2013 Newsletter: http://www.concretepavements.org/Membership/Newsletter/ISCPAPRIL13Newsletter.pdf.

To register online, please go to: www.concreteroads2014.org/en/regISTRATION.

For questions, please contact: Symposium Secretariat: E-mail: iscr2014@guarant.cz.
IMCYC to Hold Training Courses on Concrete Pavements

The Instituto Mexicano del Cemento y del Concreto, A.C. (IMCYC) (Mexican Institute of Cement and Concrete, AC) will be holding three (3) training courses on concrete pavements at the IMCYC Headquarters, located in the Federal District of Mexico City, Mexico. They will be held in three consecutive months of 2014:

**September 11**  Construction of Concrete Pavements  
**October 9**  Evaluation of Concrete Pavements  
**November 13**  Repair, Rehabilitation and Preservation of Concrete Pavements

For registration and information, please contact:  
Veronica Andrade: E-mail: cursos@mail.imcyc.com  
Martha Velazquez: E-mail: mvelazquez@mail.imcyc.com

To purchase teaching materials, please contact:  
Michael Lopez Villanueva: E-mail: mlopez@mail.imcyc.com

For the website and calendar, please go to:  

Best Practices in Airfield Concrete Pavement Construction Workshop to be Held October 14-16 in Illinois, USA

The American Concrete Pavement Association (ACPA) will hold a comprehensive, three-day workshop titled: “Best Practices in Airfield Concrete Pavement Construction” October 14-16, 2014 at the ACPA Headquarters, 3rd floor conference room, in Rosemont, Illinois.

Leading experts from the ACPA, the FAA, and other companies in the airport construction community will present information and lead discussions. In addition to providing comprehensive information about airport pavement design and construction, the Workshop will cover various specifications (i.e., P-501, Unified Facilities Guide Specifications, etc.), advisory circulars, engineering briefs, and other resources.

Reference materials will be provided and topics include:
- Pavement Design
- Foundation Support
- Jointing
- Concrete Mixtures
- Stockpiling
- Concrete Plant Management
- Placing & Consolidating Concrete
- Finishing & Curing
- Acceptance Criteria
- Smoothness
- Department of Defense & Federal Aviation Guide Specifications

Registration fees: $750 for ACPA members  |  $900 for non-members  |  $500 for government employees.

For more information, registration, hotels, and other details, please go to:  

ACPA’s Concrete Pavement University to be Held at 51st Annual Meeting in December

ACPA’s Concrete Pavement University (CPU) will be held during the final two days of ACPA’s 51st Annual Meeting in Scottsdale, Arizona, USA—on Thursday, December 4 and Friday, December 5, 2014. CPU is one of the popular features of the ACPA Annual Meeting, and this year’s lineup aims to provide useful information on timely topics of relevance to contractors, promoters and others in the concrete pavement industry.

The topics include:
**Thursday, December 4**
- CPU track 1: Opening Keynote Session:  
  - Implications of the Elections on the Highway Bill and Funding Future Directions of Technology Implementation and Performance Measures
- CPU track 2: Quality in the Paving Process: Part A:  
  - Quality assurance concepts
- CPU track 3: Project Stories Session  
  - I-480 Turbine Interchange Project, North Carolina  
  - Whitetopping the French Quarter, New Orleans
- CPU track 4: Quality in the Paving Process: Part B  
  - Concrete Materials, Properties and Testing
- CPU track 5: Policy Concepts  
  - The Ideal Pavement Type Selection Process  
  - An Alternative Cost Analysis Parameter for Pavements
- CPU track 6: Quality in the Paving Process: Part C  
  - Paving w/ Quality in Mind
- CPU track 7: Innovations & Applications  
  - Kansas Internal Curing Test Section  
  - Other topics may be included or substituted
- CPU track 8: Quality in the Paving Process: Part D  
  - Applying Quality Concepts
- CPU track 9 – MIT Training  
  - Insights into the MIT Concrete Sustainability Hub and cement/concrete industries collaborative efforts, including discussion & question-and-answer opportunities

**Friday, December 5**
- Quality Control Plans Used Effectively  
- Traffic Management and the New Overlay Guide
- Quality Paving: Contractor Panel Discussion
- Pre-Paving and Mixture Production
- Life-Cycle Assessment Concepts and Tool Development
- Other topics may be included or substituted

(These two days are separate from the Annual Meeting.)

For more information, please go to:  
**ACPA Offers LCCA Publication in Spanish**

ACPA and the Cement and Concrete Institute (CCI) of Chile have collaborated to create the Spanish Life-Cycle Cost Analysis (LCCA) publication titled, “Análisis del costo del ciclo de vida: Una herramienta para evaluar mejor las inversiones y decisiones técnicas en pavimentación” (Life Cycle Cost Analysis: A tool to better evaluate the investments and decisions paving techniques). The publication begins by discussing LCCA in general terms and then providing detailed steps for conducting a single-project LCCA. The document also covers some applications and extensions of LCCA, such as the “mix of fixes” concept, sustainability in the context of LCCA, the role of LCCA in pavement type selection, the method of “Rehabilitating the Intersection with the City’s first unbonded concrete overlay” and total ownership costs. To order a copy of the Spanish LCCA (EB011S | PDF), and for more information, please go to: http://www.acpa.org/publications-for-purchase.

**News from the Road**

**MnROAD Celebrates 20 Years of Success**

The Minnesota Department of Transportation (MnDOT) owns and operates MnROAD—a unique cold-weather pavement research facility located near Albertville, Minnesota, USA. MnROAD celebrated its 20th Anniversary this summer on August 6, 2014. MnROAD has been very successful in producing implementable research and now has formed three (3) subcommittees to help in the future development of prioritized ideas that will be marketed to fund the research and required test sections. To continue reading this article, please go to: www.cproadmap.org/publications/e-news_Aug2014.cfm. To become involved with MnROAD, please contact: Ben Worel, MnROAD Operations Engineer: E-mail: ben.worel@state.mn.us | Telephone: 651-366-5522 | Website: http://www.dot.state.mn.us/mnroad/.

**Kansas Evaluates the Benefits of Internal Curing for Highway Pavements**

The Kansas DOT (KDOT) is in the process of evaluating the properties of internally cured concrete pavements. The project is testing 30 different mixes spread across the state and will be looking at the performance of the pavements through annual evaluations. To continue reading this article, please go to: http://www.cproadmap.org/publications/e-news_Aug2014.cfm. To read about this project's contribution to research objectives identified in “CP Road Map Track 1: Materials and Mixes for Concrete Pavements”, please go to: http://www.cproadmap.org/research/Track1.cfm.

**Research Finds Environmental Factors Impact Loss of Support and Load Transfer Efficiency**

Research by the New York State DOT (NYDOT) and the Ohio DOT (ODOT) on Interstate 490 near Rochester, New York investigated two areas: 1) Loss of support from environmental factors including curing and warping during curing and early use; and 2) Pavement performance with varying diameters and spacing of load transfer devices. To continue reading this article, please go to: http://www.cproadmap.org/publications/e-news_Aug2014.cfm. To read the PDF on this research titled “Monitoring and Modeling of Pavement Response and Performance, Task B: New York. Volume 1: I490, RT9A and 186 AC Pavement”, please go to: http://trid.trb.org/view/1144249.

**Toronto Evaluates Long-Term Performance of Unbonded Concrete Overlay**

The T-intersection of Bloor Street and Aukland Road in Toronto, Canada has been subjected to a heavy volume of slow-moving traffic—in excess of 30,000 Annual Average Daily Traffic (AADT) and primarily damaging the asphalt pavement. Traffic volume, vehicle type, and traffic movements caused severe rutting and shoving of the asphalt pavement—requiring the City of Toronto to intervene with frequent “mill and overlay” treatments. The City of Toronto and the Cement Association of Canada, addressed safety concern by rehabilitating the intersection with the City’s first unbonded concrete overlay. To continue reading this article, please go to: http://www.cproadmap.org/publications/e-news_Aug2014.cfm. To read the full report, “Ten-Year Performance Evaluation of Unbonded Concrete Overlay and Jointed Plain Concrete Pavement: A Toronto Case Study”, please go to: http://trid.trb.org/view/1301851.

**Updates from the States: Federal Highway Administration (FHWA)**

The FHWA’s Office of Research, Development and Technology (RDT) is located at the Turner-Fairbank Highway Research Center (TFHRC), a federally owned and operated national research facility in McLean, Virginia. This world-class facility houses more than 20 labs, data centers and support facilities; and conducts applied and exploratory advanced research in vehicle-highway interaction, nanotechnology, transportation safety research, pavements, structures, human-centered systems, operations and intelligent transportation systems, and materials. To continue reading this article, please go to: http://www.cproadmap.org/publications/e-news_Aug2014.cfm.

To read more about the FHWA, in "Updates from the States: FHWA (2014)", please go to: http://www.cproadmap.org/publications/e-news_2014_August-FHWA.cfm.
Overview of Concrete Pavement Overlays
TUESDAY, SEPTEMBER 4, 2014 (2 hours)
1:00 pm - 3:00 pm (EST) | Noon - 2:00 pm (CST) | 10:00 am - Noon (PST)

Webinar Presenter: Dale Harrington, P.E., Snyder & Associates
for the National Concrete Pavement Technology Center
Gary Fick, P.E., Trinity Construction Management Services, Inc.
for the National Concrete Pavement Technology Center

Webinar Outline:
• Overview of bonded and unbonded overlays, subset overlay types, and how and when they are used.
• Brief history of concrete resurfacing, as well as changes in the technology that have occurred in recent years.
• Brief discussions on evaluating pavements & selecting solutions; various concrete overlay options; overlay design considerations; materials and mixtures; work zone strategies; and construction of concrete overlays.
• How overlays fit with pavement preservation, rehabilitation and reconstruction strategies.
• “Lessons learned” from recent overlay projects—relate these experiences to planned future projects
• Current resources: Overlay design considerations and software solutions offered by the ACPA, University of Pittsburgh, etc.

This webinar (based on the “Guide to Concrete Overlays, 3rd Edition”) will focus on evaluating pavements and selecting solutions; various concrete overlay options; overlay design considerations; materials and mixtures; work zone strategies; construction of concrete overlays; and much more. It is the first in a series of webinars that will continue in 2015. Contractors, consultants and agencies will all benefit from this program, which is highly recommended for construction managers, project managers, superintendents, foremen, QC/QA personnel, pavement designers, inspectors, procurement personnel, and others who have either direct or indirect responsibility for rehabilitating and preserving pavements.

To register and for more information, please go to: http://www.acpa.org/overlayguide/

Designing & Specifying Pervious Concrete: Part 1 & Part 2
(1) TUESDAY, SEPTEMBER 9, 2014 (1.5 hours)
2:00 pm - 3:00 pm (EST) | 1:00 pm - 2:00 pm (CST) | 11:00 am - Noon (PST)

(2) TUESDAY, SEPTEMBER 16, 2014 (1.5 hours)
2:00 pm - 3:00 pm (EST) | 1:00 pm - 2:00 pm (CST) | 11:00 am - Noon (PST)

Webinar Presenter: Phil Kresge, Senior Director, National Resources

This two-part webinar provides an overview on implementing pervious concrete pavements as a solution to reducing stormwater runoff from building sites and other paved areas. Participants will learn about pervious concrete pavement systems, engineering properties, and construction techniques. Part 1 discusses hydrologic and structural design of pervious concrete pavements. Part 2 addresses the specifics that every specifier should consider when drafting pervious concrete specifications, with a focus on American Concrete Institute’s (ACI) “Committee 522 Guide to Specification for Pervious Concrete”. This webinar will help civil engineers, architects, landscape architects, public works officials, contractors, product suppliers, and land developers understand the principles behind pervious concrete design.

To register and for more information, please go to: http://www.concreteanswers.org/Specifier_Webinars/main.html.

For more information or for registration assistance, please contact: Jessica Walgenbach: E-mail: jwalgenbach@nrmca.org | Telephone: (240) 485-1152.

Sustainability Assessment of Pavement Systems
THURSDAY, SEPTEMBER 18, 2014 (2 hours)
1:00 pm - 3:00 pm (EST) | Noon - 2:00 pm (CST) | 10:00 am - Noon (PST)

Webinar Moderator: Kurt Smith, Applied Pavement Technology
Webinar Moderator: Tom Van Dam, NCE
Webinar Moderator: Steve Muench, University of Washington
John Harvey, University of California
Amian Mukherjee, Michigan Tech University
Steve Gillen, Illinois Tollway

Webinar Outline:
• PART 1: Sustainability state of affairs
• PART 2: Sustainability rating systems for roads
• PART 3: Current and future uses of life cycle assessment
• PART 4: Project Emmissions Estimator (PE-2)—use and application
• PART 5: Implementing sustainability within the Illinois Tollway
• PART 6: Question and answer session

Learning Objective:
At the end of this webinar, participants will be able to:
• Define sustainability as it relates to pavements
• Describe sustainability rating systems and how they consider pavements
• Understand life-cycle assessment and its use in providing insight into environmental effects
• List initiatives being used by highway agencies in implementing more sustainable pavement solutions
Thesis Abstract

Performance-Based Mechanistic-Empirical Approach to Assess Joint Sealant Effectiveness on Sustainability of Concrete Pavement Infrastructure

A Dissertation by: KEIVAN NESHVADIAN BAKHSH, PH.D., Texas A&M University School of Civil Engineering
Chair of Committee: Dan Zollinger, Ph.D., PE

The primary purpose of sealing joints in rigid pavement is to prevent or reduce the amount of water infiltrating into pavement structure. It is well accepted that the presence of moisture in a pavement structure is a contributor to a variety of governing distress types that eventually deteriorate the pavement structure and decrease the pavement service life. Effectiveness of joint sealants to protect jointed concrete pavement against water-related distresses has been a focus of great interest recently. An experimental program was carried out on the Riverside Campus of Texas A&M University to study the effectiveness of different sealant types—to limit drainage-related infiltration of the joint under different joint openings and bonding conditions. Results confirmed that if joint seals are properly installed, they can be very effective in preventing moisture infiltration. Unsealed joints had significantly higher flow rates compared to joints with damaged sealants. The test results in this study have also demonstrated the effect of sealant proper installation on performance. Using experimental data the actual number of wet days was defined and analyzed.

A faulting prediction model was developed. The erosion resistance of materials, number of wet days, and traffic load were precisely defined and considered in this model. The mechanistic empirical model presented in this dissertation can effectively analyze the faulting and erosion in jointed concrete pavements. The model is capable of being calibrated for local conditions as a distinct advantage over other faulting models. The model was successfully implemented and calibrated into a computerized format. Results show that the model fits well with the field data and can be implemented for design and maintenance management purposes.

By using the model the effectiveness of sealant in pavement, sustainability can be determined. The most valuable outcome of this study is the demonstration, mechanistically, of the role of joint sealing on the service life of jointed concrete pavements. Sealants, by limiting water infiltration into the pavement sublayers, can greatly improve concrete pavement performance.

For more information, please contact: Keivan Neshvadian, Ph.D., EIT | E-mail: Keivannb@tamu.edu
**September 15, 2014** Due date for PAPERS for the 2014 International Conference on Transportation in Africa (ICTA 2014) to be held December 17-19, 2014 in the capital city Accra, Ghana, Africa. Authors of accepted abstracts should forward full papers with abstract, workshop proposals, and a short biography by e-mail to: “Conference Paper Submission”: E-mail: icta2014articles@gmail.com. Please see conference article on page 2 in the July ISCP Newsletter: http://www.concretepavements.org/Membership/Newsletter/JULY2014Newsletter.pdf.

**September 26, 2014** Due date for ABSTRACTS for the 27th Biennial National Conference of the Concrete Institute of Australia in conjunction with the 69th RILEM Week conference to be held August 30-September 2, 2015 in Melbourne, Australia. The conference theme is Research into Practice. To submit an abstract online, please go to: http://concrete2015.com.au/call-for-abstracts/. For the website, please go to: http://concrete2015.com.au. Please see the article for Call for Abstracts on pages 5-6 in the July ISCP Newsletter: http://www.concretepavements.org/Membership/Newsletter/JULY2014Newsletter.pdf.

### Calendar

**September 2014**

**IMCYC “Construction of Concrete Pavements” Training Course**
September 10-11, 2014 in the IMCYC Headquarters in the Federal District of Mexico City, Mexico
http://imycy.com/; Click on “CURSOS 2014” (Courses 2014)

**8th International DUT-Workshop on Research and Innovations for Design of Sustainable and Durable Concrete Pavements**
September 20-21, 2014, in Prague, Czech Republic
http://www.cit.tudelft.nl/.../road%20and%20drainage%20engineering

**12th International Symposium on Concrete Roads**
September 23-26, 2014, in Prague, Czech Republic
http://www.concreteroads2014.org

**ASOCRETO Concrete Meeting "EXPO RC 2014" & Specialized Pre Events**
September 23-26, 2014, in Colombia, South America
Specialized Pre-Events: http://www.asocreto.org.co/programa_rc2014/pre-eventos_en.html

**IMCYC “Evaluation of Concrete Pavements” Training Course**
October 9, 2014 at the IMCYC Headquarters in the Federal District of Mexico City, Mexico
http://imycy.com/; Click on “CURSOS 2014” (Courses 2014)

**One-day Workshop: “2nd Workshop on Concrete Pavement Design” AND “5th Iberamerican Congress Concrete Pavement Conference”**
October 21-24, 2014 in Cancun, Mexico
Hosted by: Asociación Mexicana de Investigadores de Comunicación, A.C. (AMIC) and the Federación Iberoamericana del Hormigón Premezclado (FIHP)
http://www.hormigonfihp.org

**IMCYC “Repair, Rehabilitation and Preservation of Concrete Pavements” Training Course**
November 13, 2014 at the IMCYC Headquarters in the Federal District of Mexico City, Mexico
http://imycy.com/; Click on “CURSOS 2014” (Courses 2014)

**2014 International Conference on Construction Materials and Structures**
November 24-26, 2014, in Johannesburg, South Africa
http://www.iccsmats-wits.co.za/Intro.html

**ACPA 51st Annual Meeting**
December 2-5, 2014, at the Hyatt Regency Resort and Spa at Gainey Ranch, in Scottsdale, Arizona, USA
http://events.acpa.org

**October 2014**

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http://events.acpa.org

**November 2014**

**TRB 94th Annual Meeting**
January 11-15, 2015, at the Marriott Wardman Park, Omni Shoreham and Washington Hilton Hotels
http://trb.org/Calendar/Blurbs/168391.aspx

**World of Concrete— Exhibits & Concrete Seminars**
February 2-5, 2015 in the Las Vegas Convention Center, Las Vegas, Nevada
http://www.worldofconcrete.com

**WCPA Annual Concrete Pavement Workshop**
February 10-12, 2015, at the Oshkosh Premiere Waterfront Hotel in Oshkosh, Wisconsin
http://www.wisconcrete.org/events.html

For events in 2015 and beyond, please go to: http://www.concretepavements.org/calendar.htm.