



# Xtreme Speaker and Presentation Highlights

## **Lightweight Concrete 101 for QC & Test Lab Technicians,**

*Kevin Cavanaugh, Acrosa Lightweight/Cavanaugh & Assoc.*

Mixing, placing, and testing light weight concrete. Learn how light weight aggregates are made and about relevant standards, internal curing benefits and challenges, and storage and pre-wetting options.

## **Operations Environmental Safety Update,**

*Mitch Mariotti, VCNA Prairie*

Mitch has over 28 years of environmental and compliance management experience. He was one of the first in the nation to be designated as a certified concrete industry environmental professional by NRMCA.

## **When replace isn't an option,**

*Heath Morrall, Euclid Chemical*

When a tear out and replacement isn't possible or cost effective, what repair options are available? Knowing could save time and money when a problem arises.

## **The Power of Social Media,**

*Brian Dryfhout, Ozinga Bros.*

Many businesses are successful on social media, but some that aren't using it at all. Beginner or pro, this session will help you build your social media presence.

## **Beneficial Use of Recycled Materials in Flowable Fill: Recycled Glass as a Fly Ash Substitute and Dredged Material as a Sand Substitute**

*Pranshoo Solanki, Ph.D., P.E., UI-UC*

The results of studies evaluate the feasibility of using glass powder as a fly ash substitute and dredged material as a sand substitute in flowable fill mixes.

## **Quantifying Your Pump Mix Using the Sliding Pipe Rheometer,**

*Ryan Scott, GCP Applied Technologies*

The Sliding Pipe Rheometer ("Sliper") is a tool that allows the user to assess the pumping characteristics of concrete either in the laboratory or on the construction site.

## **Clearinghouse/Reporting of Violations Federal Requirement,**

*Candy Wendt and Fletcher Morgan, Mid-West Truckers Assoc.*

The Clearinghouse enables employers to identify drivers who commit a drug and alcohol program violation while working for one employer but fail to subsequently inform another employer.

## **Mass Concrete Mixture Development for Thermal Control,**

*Matthew D. D'Ambrosia, Ph.D., P.E., MJ2 Consulting*

Specifications for mass concrete often require explicit planning and control of thermal stresses. Development of low heat performance concrete (LHPC) will help to minimize cracking and improve service life by meeting multiple performance objectives.

## **Concrete Research Updates: A Look at Things to Come,**

*James Krstulovich, P.E., IDOT*

Hear about national studies as well as IDOT's own research and how these efforts might advance concrete practice in Illinois.

### Concrete as a solution to sustainability targets

*Hessam Azarijafari, Ph.D., MIT*

Learn about research at MIT's Concrete Sustainability Hub that quantifies concrete as a sustainable solution.

### Illinois Autonomous and Connected Track (I-ACT) – The Future of Transportation in Illinois,

*IMAD AL-Qadi Ph.D., UI-UC*

Headquartered in the decommissioned Chanute Air Force Base in Rantoul, the Illinois Autonomous and Connected Track (I-ACT), will provide a blank canvas for the next-generation transportation ecosystem.

### Ready-Mix Cellular Concrete,

*Roberto Montemayor, UI-UC*

Due to global concerns on climate change and sustainability, cellular concrete use and research have increased in the past years. Learn about production methods, applications, and benefits of cellular concrete.

### Non-contact ultrasonic for concrete construction decision-making,

*Quang Tran Ph.D. candidate, UI-UC*

A novel framework is introduced to predict the saw cut initiation time by integrating a one-sided non-contact, ultrasonic testing system (UTS) to estimate the concrete's final setting time.

### Highlights on the OSHA SILICA RULE Producers, Contractors, Are You Compliant?,

*Kevin Walgenbach, NRMCA*

OSHA is focusing on the concrete industry. This talk is vital for producers and contractors to be in compliance.

### Pave Ahead - There's a Better Way to Pave... It's Called Concrete,

*Luke B. McHugh, P.E., NRMCA*

Luke has 33 years of experience providing consulting engineering services for a variety of airside and landside projects and will share strategies for increasing the use of various forms of ready mixed concrete.

### Cement Slurry Projects,

*Brendan Dobbs, Byrne & Jones Construction*

Brendan has been project manager for several jobs and will talk about cement slurry as a source of soil stabilization as well as contrast it with the current method of using dry cement powder.

### Real-Time Concrete Quality Measurement from Batch Plant to Job Site,

*Todd Spindler North Central Regional Manager, Sika Corporation*

CiDRA Concrete Systems' SMARThatch™ technology features AIRtrac™ Mobile as an innovative concrete quality solution.

### Design of Concrete Overlays for Streets and Roads,

*Jeffery Roesler, Ph.D., P.E., UI-UC*

Review what concrete overlays are available for rehabilitating existing distressed pavements, when each one should be applied, the structural design methods available, other important features of overlay performance, and the role of macrofibers.

### CBD Oil Tests Positive for Marijuana/Driver Fired!,

*Candy Wendt and Fletcher Morgan, Mid-West Truckers Assoc.*

CBD oil is supposed to have the THC processed out of it but that is not always the case. Learn

about the ramifications of using this product.

### Title Technology and Innovation Panel:

*Chicago DOT, Illinois State Toll Highway Authority, Giatec Scientific Inc., S.T.A.T.E. Testing, Carbon Cure, Behnke Materials Engineering, GCP Applied Technologies*

A discussion about the use of various performance tests and monitoring systems.

### Internal Curing of Concrete to Improve Quality and Reduce Cracking,

*David A. Lange, P.E., UI-UC*

Concrete with internal curing technology is of increasing interest to reduce shrinkage cracking, improve durability, and enhance life cycle cost of bridges and pavements. Learn about internal curing methods and when they are suitable.

### Concrete Paving Issues / Solutions from Around the Globe,

*Michael E. Ayers, Ph.D., ILACPA*

Mike brings a unique skill set including his experience throughout the world, with ACPA National, as a university professor, and as president of Global Pavement Consultants, Inc. (GPC).

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