



NEWS

University of Illinois Builds Research Team to Improve Airport Technology

It's official! The CEAT Center is open for research. Researchers in the Department of Civil and Environmental Engineering at the University of Illinois at Urbana-Champaign have accepted the challenge to help improve the efficiency of our country's busiest airport—the O'Hare International Airport—with the establishment of a new research center, the Center of Excellence for Airport Technology (CEAT). [Click here for the rest of the story](#)

CEAT Technology Transfer Workshop

This one-day workshop entitled "Airport Pavement Instrumentation and Analysis" brings together researchers who study concrete pavements and concrete material behavior. The workshop will feature presentations and demonstrations, but will allow ample time for open discussion. The workshop will be on May 17 and is hosted by CEAT. [Click here for more information...](#)

Birdar tested at Dallas Airport

Streams of grackles, starlings and Boeings crisscross the pink sky at dusk over Trigg Lake near the airport as they come in to roost. Although the birds and jetliners appear to co-exist, the apparent harmony is deceiving. It's a potentially deadly combination of feathers and aluminum and a growing concern at DFW, the third-busiest U.S. airport. [Click here for the rest of the story](#)

RPI Lighting Research Center Joins CEAT

Light up the night! The FAA has invited the Lighting Research Center (LRC) at Rensselaer Polytechnic Institute to conduct research on new LED and tungsten halogen technologies for airport visual guidance. CEAT, in its role as the FAA COE for Airport Technology, will serve as an umbrella organization to encompass this new work. More information about LRC is found at their website: <http://www.lrc.rpi.edu/>

RESEARCH BRIEFS

Measurement of Water Content in Fresh Concrete Using the Microwave Method

Shortly after the institutionalization of microwave ovens into every household across the United States, concrete researchers realized that such a device could quickly evaporate the free water out of a fresh concrete sample. Now, almost two decades later, the method is still being investigated for its validity in estimating the water/cement (w/c) ratio of fresh concrete much quicker than the standard ASTM oven drying method. [Click here for the rest of the story](#)

Anti-icing Coating Study at O'Hare

Spring is here, but anti-icing research continues... New technological advances promise safer aircraft ground operations during winter storm conditions, less-costly environmental compliance with US EPA storm water runoff regulations, and faster reopening of closed runways and taxiways due to winter storms. [Click here for the rest of the story](#)

OUTREACH

Executive Summary of the OMP Open House

On *January 12, 2005*, the O'Hare Modernization Program (OMP) had their first Outreach Contractor Open House at the O'Hare Hilton Hotel. This program was a joint effort by OMP staff and the Center of Excellence for Airport Technology (CEAT). The multi-billion O'Hare Modernization Program will reconfigure O'Hare's outdated intersecting runway configuration into a modern parallel configuration, substantially reducing delays and increasing capacity. [Click](#)

[here for the rest of the story](#)

CONFERENCES AND EVENTS

FAA COE Annual Meeting

March 14-16

The FAA Centers of Excellence Annual Meeting was held this year at Central Florida University in Orlando, FL. CEAT Director, David Lange, gave a presentational overview of the Center and five CEAT Graduate Students presented posters on their FAA research projects. [Click here to read more on the meeting](#)

Brown Bag Seminar Series at OMP

March 10

David Lange presented "[In Search of Crack-Free Concrete: Current Research on Volume Stability and Microstructure](#)"

April 7

Marshall Thompson presented "[Subgrade Stability and Lime Treatment Applications at OMP](#)"

May 5

Jeff Roesler presents Coarse Aggregate Selection for Improved Rigid Pavement Joint and Cracking Performance

July 14

John Popovics presents New Technologies for NDT of Pavement Structures

ACI Spring Convention

April 17-20

Hilton New York New York, NY

www.concrete.org

CEAT Workshop on Pavement Instrumentation and Analysis

May 17

Room 3405 Siebel Center

University of Illinois Urbana, IL

<http://cee.uiuc.edu/research/CEAT/>

OMP Contractor Open House

May 20

Fountain Blue Convention Center Des Plaines, IL

[OMP website](#)

SCC 2005

October 30 November 2

Westin Hotel Chicago, Illinois

Combining the Second North American Conference on the Design and Use of Self-Consolidating Concrete (SCC) and the Fourth International RILEM Symposium on Self-Compacting Concrete

www.scc2005.info

AWARDS AND HONORS

Bill Buttlar

Campus Award for Excellence in Undergraduate Teaching

CEAT Researcher and UIUC Associate Professor Bill Buttlar received Honorable Mention for the Campus Award for Excellence in Undergraduate Teaching. He will be recognized at the Instructional Awards Banquet on *April 25, 2005*.

David Lange

Fellow of the American Ceramic Society

Center Director David Lange named Fellow of the American Ceramic Society. The award was presented at the Annual

Meeting in Baltimore on *April 12, 2005*.

Leslie Struble

Fellow of the American Concrete Institute

CEAT Researcher and UIUC Professor Leslie Struble named Fellow of the American Concrete Institute at their Spring Convention on *April 17, 2005*.

CONTACT INFO

Thanks for reading our quarterly e-newsletter. For more information about the Center of Excellence for Airport Technology at the University of Illinois, visit <http://cee.uiuc.edu/research/CEAT/>. For questions or comments, send email to [Vicki Dixon](mailto:Vicki.Dixon).