

Table of Contents

ACI Fall 2008 Convention

November 2-6, 2008

Renaissance Grand & Suites Hotel and America's Center

ACI Board Committees and Chairs	174
ACI Board of Direction.....	2
ACI Convention Committee.....	174
ACI Spring 2009 Convention.....	6 & 20
ACI Missouri Chapter 2008 Board of Directors	12
ACI St. Louis Chapter Convention Committee	13
ACI President's Welcome.....	3
ACI Registration/General Information	15
ACI Sustaining Members	7
Book Drive	21
Concrete Mixer	44 & 156
Contractors' Day Lunch	43 & 144
Convention Sponsors.....	10
Daily Program.....	53
Exhibitor Floor Plan	Between 24 & 25
Exhibitors	25
Future ACI Conventions	Outside Back Cover
General Information.....	15
Governor's Welcome	4
Hotel Map	Between 24 & 25
International Lunch.....	35 & 91
Mayor's Welcome	5
Membership Information	14
Numerical Committee Meeting Schedule.....	73
Opening Reception	36 & 101
Opening Session and Hardy Cross Lecture Series.....	36 & 100
Session Attendance Tracking Form	Between 172 & 173
Session Highlights	87
Special Events.....	33
Student Concrete Cylinder Competition	35 & 92
Student Lunch	39 & 115
Tours and Guest Events.....	45
Transportation.....	19
Where's That Meeting Room?	22

American Concrete Institute

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ACI President's Welcome

ACI Members and Guests—Welcome to St. Louis and the ACI Fall 2008 Convention!

It is with great pleasure that I welcome you to St. Louis. Although the organization that formed ACI held its first meeting in St. Louis amid the 1904 World's Fair, this November will be the first time a convention has been hosted in the Gateway City.



To ensure that every attendee has the opportunity to experience everything the heart of America has to offer, the ACI Missouri Chapter has put together an excellent program containing several technical tours including a tour of the Holcim Cement Plant.

Aside from the tours, St. Louis has endless amounts of landmarks and history for you to explore. St. Louis is known for the famous expedition led by the explorers Lewis and Clark, being host to the 1904 World's Fair and is home to the nation's tallest monument, the Gateway Arch. The ACI Missouri Chapter carefully constructed the Tours and Guest Events of the convention to include every aspect of this historic and charming city.

Other special events you do not want to miss include the Student Concrete Cylinder Competition, the Opening Session with Hardy Cross Lecture Series speaker Tony Fiorato, a dinner honoring Luke M. Snell, a reinvented Contractors' Day, and an Oktoberfest-themed Concrete Mixer.

The ACI Fall 2008 convention has so much to offer every attendee. Whether you are sitting in on technical and educational sessions, attending multiple committee meetings, or networking with friends and colleagues, this convention will provide ample opportunity for professional growth.

Camila and I look forward to sharing in this exciting week with all of you. We hope your convention and trip to St. Louis is productive and memorable! Thank you for your support and contributions to ACI.

Kind Regards,

A handwritten signature in black ink that reads "Luis E. García". The signature is written in a cursive, slightly stylized font.

Luis E. García
ACI President

Governor's Welcome



OFFICE OF THE GOVERNOR
STATE OF MISSOURI
JEFFERSON CITY
65101

November 2, 2008
American Concrete Institute Fall 2008 Convention
November 2-6, 2008
St. Louis, Missouri

Dear American Concrete Institute Members:

Welcome to the Fall 2008 Convention of the American Concrete Institute. It is my privilege to welcome you to St. Louis, Missouri, for this occasion.

Since 1904, the American Concrete Institute has facilitated discussion and debate of concrete-related issues. Members of the American Concrete Institute can take advantage of resources such as educational seminars, local discussion forums, and numerous publications aimed at current and relevant information relating to concrete.

During your stay in St. Louis, I encourage you to explore the many different attractions of this historic and diverse city. Best wishes for a productive and enjoyable convention.

Sincerely,

A handwritten signature in black ink that reads "Matt Blunt".

Matt Blunt

Mayor's Welcome



**OFFICE OF THE MAYOR
CITY OF ST. LOUIS
MISSOURI**

November 2, 2008

American Concrete Institute Fall 2008 Convention
St. Louis, Missouri

Greetings:

It is my pleasure to welcome everyone attending the American Concrete Institute Fall 2008 Convention, which is being held in the City of St. Louis. We are extremely pleased that St. Louis was chosen as the site for this important convention.

Our city has a rich and colorful history. Also known as the "Gateway to the West," we offer beautiful, culturally and ethnically diverse neighborhoods and fabulous attractions for the entire family.

While you are in St. Louis, I encourage you to take time to visit some of our world-famous amenities such as the Gateway Arch on the riverfront or Forest Park where our world-class Art Museum and Zoo are located.

I hope that this convention will offer you the opportunity to exchange new ideas and advances in the field of concrete technology, and that it will be a time to renew old friendships, meet new friends, and share inspiring stories.

Again, welcome to St. Louis, and I wish you much success for a productive and enjoyable convention.

Sincerely,

A handwritten signature in black ink that reads "Francis G. Slay". The signature is written in a cursive style with a large, sweeping "S" at the end.

Francis G. Slay
Mayor, City of St. Louis

Registration for the ACI Spring 2009 Convention in San Antonio opens November 10th!



**March 15-19, 2009
Marriott Rivercenter, San Antonio, TX**

Participate in the following special events:

Opening Session and
Awards Program

“A Night in Old San Antonio”
Concrete Mixer

CMC Technical Tour



**For more information on the Spring 2009 Convention in
San Antonio, TX, go to www.aciconvention.org.**

ACI Sustaining Members



ACS MANUFACTURING CORPORATION

ACS Manufacturing Corporation



Boral Material Technologies, Inc.



ALJANS



Buzzi Unicem



Allen Engineering Corp.



CANTERA
CONCRETE COMPANY
"Measured Quality"

Cantera Concrete Company



ALLFLAT



Cemex Inc.



Ash Grove Cement Company



Commercial Contracting Group



Ashford Formula



Concrete Engineering
Specialists



Baker Concrete
Construction, Inc.



Concrete Reinforcing
Steel Institute



The Chemical Company

BASF Admixtures, Inc.



BCS



CTL Group

ACI Sustaining Members



Dayton Superior



EUCLID CHEMICAL

The Euclid Chemical Co.

Expanded Shale, Clay and Slate Institute



Rotary Kiln Produced Lightweight Aggregate

Expanded Shale, Clay & Slate Institute

FGC, Inc.



Fibercon International



FUTURE TECH CONSULTANTS
Construction Materials Engineering,
Inspection & Testing Services

Future Tech Consultants

GRACE

W.R. Grace & Co.



Headwaters Resources, Inc.



Holcim (US) Inc.



ICS Penetron



Idra



Keystone Structural
Concrete, Ltd.



Kleinfelder



Lafarge North America



Lehigh Portland Cement Co.



Lithko Contracting, Inc.



Meadow Burke

W. R. MEADOWS



W. R. Meadows, Inc.



Metromont

ACI Sustaining Members



MUNICIPAL TESTING

Municipal Testing Lab



chemical solutions to concrete problems

Nox-Crete Products Group



OMYA Canada, Inc.

Operating Engineers
Training Trust



Oztec



Portland Cement Association



Precast/Prestressed Concrete
Institute



PNA Construction
Technologies Inc.



Propex Concrete Systems



RUENTEX

Ruentex Group



Scofield



Seretta Construction, Inc.



Sika Corp.



S. K. Ghosh Associates Inc.



Spurlino Materials



Structural Group



Structural Services, Inc.



Triad Engineering, Inc.



Tru Wall Concrete, Inc.



Westroc, Inc.

Convention Sponsors

The ACI Missouri Chapter wishes to thank the following organizations for their donations to make the ACI Fall 2008 Convention a success.

Mississippi River

Baker Concrete Construction, Inc.
Continental Cement Company
Holcim (US) Inc.
Vee-Jay Cement Contracting Co.

Missouri River

Center for Transportation Infrastructure and Safety
Lafarge

Illinois River

ACI Missouri Chapter
The Euclid Chemical Company
Sika Corporation

Meramec River

BASF Construction Chemicals, LLC
Buzzi Unicem
Ceco Concrete Construction
MC Industrial
The Korte Company

Kaskaskia River

ACI Arizona Chapter
ACI Greater Miami Valley Chapter
ACI Kansas Chapter
ACI Las Vegas Chapter
ACI Pittsburgh Area Chapter
Ahal Contracting Co., Inc.
Ash Grove Cement Co.
Breckenridge Material Co.
C.I.M. Partons
Concrete Council
Decorative Concrete Supply
Headwaters Resources
Lehigh Cement Company
Quality Testing & Engineering, Inc.
SCI Engineering, Inc.

Black River

Accurate Scale Co.
ACI Arkansas Chapter
ACI Florida Suncoast Chapter
ACI Georgia Chapter

Convention Sponsors

Black River cont'd

ACI Illinois Chapter
ACI New Jersey Chapter
ACI New Mexico Chapter
ACI Ontario Chapter
ACI Rocky Mountain Chapter
ACI San Antonio Chapter
ACI Southern California Chapter
ACI Western Michigan Chapter
Big River Industries
Buildex, Inc.
Century Concrete
Concrete Co. of Springfield
Five Star Ready Mix Concrete
Fordyce Concrete
Hunt Martin Materials
Illinois Cement
Independent Concrete Pipe Co.
Instron
J.H. Berra Paving
Kienstra Enterprises
L.G.M. Engineers
Landvatter Ready Mix
Monarch Cement Co.
Raineri Building Materials
Luke M. Snell
Tarlton
TXI Expanded Shale & Clay

Babbling Brook

Brundage Bone Concrete Pumping
Cimarron Wholesale
Concrete Promotional Group
KS RMCA & Aggregate Producers
L.G. Everist, Inc.
Los Angeles Chapter Convention Committee
Linn State Technical College
Midwest Concrete Industry Board
MO/KS ACPA
Jim Posadny
SEMO Ready Mix
Sierra Corp - Div. TK Products
Virginia Lab Supply

Sponsors are listed as of 10/13/08

ACI Missouri Chapter 2008 Board of Directors

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Danny Michael Stepp, Raineri Building Materials Inc.

Ganesh Thiagarajan, University of Missouri - Kansas City

James R. VanAcker, Hunt Martin Materials

Robert A. Wainscott, Central Concrete Co.

James F. Wills, Scotts Concrete



ACI St. Louis Chapter Convention Committee

Co-Chairs

Mark Luther, Holcim (US) Inc.
Timothy S. Vaughan, Paric Corporation

Contractors' Day

Beverly A. Garnant, American Society of Concrete Contractors

Exhibits

Ganesh Thiagarajan, University of Missouri - Kansas City
James R. VanAcker, Hunt Martin Materials
Dave Barnes, Vee-Jay Cement
Dan Stepp, Raineri Building Materials Inc.

Finance/Fundraising

Jim Posadny, Continental Cement Company
Mark Luther, Holcim (US) Inc.
James VanAcker, Hunt Martin Materials
Timothy S. Vaughan, Paric Corporation

Guest Program

Billie Snell, Arizona State University
Kathy Luther
Cassy Vaughan

Publicity Chair

Joseph S. Garza, Kienstra Material Service

Social Events

Eric K. Marlinghaus, Quality Testing and Engineering, Inc.
Rene LaBruee, Quality Testing and Engineering, Inc.

Student Program

Lawrence H. Taber, Black and Veatch
Patrick T. Earney, Trabue, Hansen and Hinshaw

Technical Program

Abdeldjelil Belarbi, Missouri University of Science and Technology
Vellor Gopalaratnam, University of Missouri - Columbia
John J. Myers, Missouri University of Science and Technology

Treasurer

John Harris, CASCO



WIN a \$500 gift certificate from ACI

Update your account and preferences with ACI by **February 2, 2009**, and you'll be eligible to win a \$500 gift certificate to use towards any product or service ACI currently offers, including:

- Books and documents from ACI's bookstore
- Membership fees
- Certification programs
- ACI conventions and other ACI events
- Educational seminars

For a chance to win, follow these steps:

1. Visit www.update.concrete.org and log in with your ACI Web site username and password.
2. Update any outdated or inaccurate contact information.
3. Click on "**Member/Customer Segmentation**" on the top of the page and update your preferences.
4. Check the "**Be entered into the drawing to win a \$500 ACI gift certificate**" box at the top of the page, and "**Submit Form.**"

The winner of the \$500 ACI gift certificate will be notified by phone or e-mail on or around February 2, 2009.

General Information

ACI Registration

C-100-105

ACI staff is available to answer your convention questions at the ACI Registration Desk during the following hours:


Saturday	2:00 PM - 6:00 PM
Sunday	7:30 AM - 5:00 PM
Monday	8:00 AM - 5:00 PM
Tuesday	8:00 AM - 5:00 PM
Wednesday	8:00 AM - 12:00 PM

Name Badges

ACI uses color-coded name badges to identify attendees. Name badges are as follows:

Member:	Blue
Attendee:	Black
Fellow:	Green
Honorary Member:	Red
Staff:	Orange
Guest:	Tan
Student:	Green Ribbon

Attention ACI Attendees!

First-time convention attendees have a  on their name badge. Please welcome them to the convention!

Schedule Changes

Renaissance Lobby & C-100-105

Cancellations, additions, and location changes to the convention schedule will be posted daily on a monitor inside the Renaissance Hotel Lobby or at the America's Center Rooms 100-105.

Set Your Clocks Back!

Daylight savings time ends on Nov. 2, 2008 at 2:00 AM. Be sure to set your clocks back one hour before going to bed the night before.

Emergencies

In the event of an emergency, we kindly request that you do NOT dial 9-1-1. Please go to the nearest house phone to reach security by dialing '0' at the Renaissance Grand or 5081 at the America's Center.

General Information

Beverage Breaks & Lunch Concessions

Saturday	Soda:	2:00 PM - 5:00 PM
Sunday - Tuesday	Coffee:	7:30 AM - 10:30 AM
	Lunch Concession:	11:00 AM - 2:00 PM
	Soda:	12:00 PM - 3:00 PM
Wednesday	Coffee:	7:30 AM - 10:30 AM

ACI Water Bottle

In an attempt to lessen the amount of bottled water thrown away during each convention, ACI has chosen not to provide bottled water to attendees. As a replacement, ACI will provide attendees with a reusable water bottle that can be filled at several water stations throughout the hotel. Thank you for your support, and enjoy!

Alcohol Policy

Nonalcoholic beer and soft drinks are available at all ACI-sponsored receptions. The legal drinking age in Missouri is 21.

ACI Bookstore

[Outside C-100](#)

Visit the ACI Bookstore during the following hours:

Saturday	2:00 PM - 6:00 PM
Sunday - Tuesday	8:00 AM - 5:00 PM
Wednesday	8:00 AM - 12:00 PM

Career Center

[ACI Bookstore—Outside C-100](#)

Looking for a job or an employee? Visit the ACI Bookstore to view ACI's Online Career Center. This job search engine is specifically targeted to the concrete industry. Job seekers, you'll have an opportunity to post your resume and to view, apply for, and save available jobs. Employers, you'll have the opportunity to post job openings, post internships FREE of charge, and target the individuals you want to attract.

Membership Information

[ACI Bookstore—Outside C-100](#)

To learn MORE about the new ACI membership benefits and how to become a member, visit the ACI Bookstore in [C-100-105](#).

ACI/Elsevier E-Learning

[Outside C-100](#)

ACI is expanding its reach to provide educational training via the Internet. This program is a partnership between ACI and Elsevier Inc., and will cover topics from ACI certification training to courses covering design, construction, and repair of concrete. E-Learning courses are expected to be available beginning in January 2009. Representatives from Elsevier are available throughout the week to help demonstrate and launch this new program.

General Information

Cyber Café and Wireless Hot Spot

C-100-105

Stay connected to home and work! Take advantage of the Cyber Café and FREE wireless hot spot available at the America's Center rooms C-100-105 during the following hours:

Saturday 2:00 PM - 6:00 PM

Sunday - Tuesday 8:00 AM - 5:00 PM

Wednesday 8:00 AM - 2:00 PM

To access the wireless connection, look for ACI Cybercafe 1, ACI Cybercafe 2, ACI Cybercafe 3, or ACI Cybercafe 4 in your network connections.

Session Handouts on Demand

Cyber Café—C-100-105

Session handouts for this convention are now available via the ACI Web site. Stop by the Cyber Café or go to www.aciconcrete.org/handouts to download or print a copy of the handouts for the sessions you plan to attend. Video and audio taping is prohibited without the speaker's express written consent.

Local Information/ACI Missouri Chapter

Renaissance Lobby

or C-100-105

ACI Missouri Chapter members will be happy to answer questions about the local area. Stop by their information desk during the following hours:

Saturday 2:00 PM - 6:00 PM

Sunday - Tuesday 8:00 AM - 5:00 PM

Restaurant Information Booth

America's Center

Stop by the restaurant information booth for information and suggestions.

Sunday 11:30 AM - 6:30 PM

Monday 11:00 AM - 5:00 PM

Hotel Restaurants and Lounges

Renaissance Grand & Suites

An American Place

R-Concourse Level, Hotel Building

Dinner Tuesday through Thursday 5:00 PM to 10:00 PM; Friday and Saturday 5:00 PM to 11:00 PM

This St. Louis restaurant is known as "One of the most beautiful restaurants in America, serving cuisine in touch with America's Heartland." Situated in the old lobby of the hotel, formal attire (jacket and tie) is required. Reservations recommended.

General Information

Renaissance Grand & Suites (cont.)

Capri Restaurant

R-Concourse Level, Hotel Building

Open daily for breakfast and lunch 6:30 AM to 2:00 PM, and dinner 5:00 PM to 10:00 PM

Specializing in midwestern American cuisine, Capri offers a wide variety of buffet options for breakfast such as crepe and omelette stations. Lunch and dinner menus offer items such as St. Louis-style pork steak, pasta, chicken, fish, and their signature Gooley Butter Cake.

Grand Lobby Bar

R-Concourse Level, Hotel Building

Cocktail and light fare menu: 2:00 PM to 1:00 AM daily

The Grand Lobby Bar is a sophisticated spot for cocktails and conversation prior to a delightful St. Louis dining experience.

Starbucks

R-Concourse Level, Hotel Building

6:30 AM to 8:00 PM daily

For a quick and light breakfast, snack, or lunch, stop by Starbucks to pick up coffee, pastries, yogurt, fruit, or sandwiches.

Washington Avenue Bistro

R-Suites Lobby, Suites Tower

11:00 AM to 10:00 PM daily

This lobby restaurant serves American Bistro cuisine for lunch and dinner.

Room Service

Sunday through Thursday 6:00 AM to 12:00 AM; Friday and Saturday 6:00 AM to 1:00 AM

Nearby Restaurants

Restaurants within walking distance of the Renaissance Grand & Suites Hotel include:

Flannery's—This Irish-inspired pub is open for lunch and dinner; 0.8 miles from the hotel.

Kitchen K—Contemporary restaurant featuring Hawaiian seafood flown in daily; 0.1 mile from the hotel.

Lucas Park Grille—A St. Louis steakhouse with stone fireplaces, plasma TVs, and eclectic lighting. Open for lunch and dinner; 0.2 miles from the hotel.

Mosaic—Modern fusion cuisine. First tapas and fusion restaurant in Downtown; 0.3 miles from the hotel.

General Information

Sen Thai—Offers a full line of Thai, Japanese, and Chinese cuisine for lunch and dinner; 0.5 miles from the hotel.

The Dubliner—Authentic European gastropub serving high-quality Irish-inspired food; 0.2 miles from the hotel.

Wasabi—Traditional Japanese cuisine in a unique, traditional atmosphere; 0.5 miles from the hotel.

Airport Transportation

Airport Shuttle: TransExpress Shuttle offers a scheduled transfer service, 7 days a week from 6:00 AM to 10:00 PM to Lambert-St. Louis International Airport (STL) from the Renaissance Grand & Suites Hotel for \$15.00 each way. Departing guests must make a reservation for any airport transfer after 6:30 PM. For a detailed list of departure times or to make a reservation, please call 1-800-844-1985 or visit: www.transexpress-stl.com. *Please note that TransExpress does make additional stops at other hotels on the way to and from the Renaissance Grand & Suites, which could delay your anticipated arrival/departure times.*

Taxis: Departing guests should speak with the hotel concierge to arrange transportation back to Lambert-St. Louis International Airport. The average cost of a taxi to the airport is approximately \$35.00-\$40.00 one way, depending on the number of passengers and the time of day.

MetroLink: MetroLink offers a light rail service to the Lambert-St. Louis International Airport for \$3.50 for the return trip. Departing guests will find the MetroLink Lambert station two blocks east of the Renaissance Grand & Suites Hotel. MetroLink is open from 4:30 AM to 11:00 PM Monday through Friday and 5:30 AM to 11:00 PM Saturday and Sunday, and runs approximately every 7 to 20 minutes, depending on the time of day. The approximate travel time to the airport is 38 minutes. For a detailed list of departure times and stations or to purchase your MetroLink ticket in advance, please go to www.metrostlouis.org. You may also purchase your MetroLink ticket at any MetroLink Station prior to boarding.

MetroLink also offers a Ride Free Zone from the Convention Center Station Monday through Friday from 11:30 AM to 1:30 PM to select downtown destinations. One-way fare is \$2.00.

General Information

Session Attendance Tracking Form

The Session Attendance Tracking Form found between pages 172 and 173 can be submitted to state boards that allow self-reporting of Continuing Education activities as evidence of participation. In most cases, one contact hour is equal to one professional development hour (PDH). Check with your state board for acceptance criteria.

Please note: ACI does not track and cannot provide documentation confirming attendee participation or attendance at any ACI session held during the convention.

Speaker Ready Room

C-200

The Speaker Ready Room is available to moderators, speakers, and committee chairs during the following hours:

Saturday 12:00 PM - 7:00 PM
Monday - Tuesday 7:00 AM - 7:00 PM
Wednesday 7:00 AM - 2:00 PM

All speakers are requested to check in at the Speaker Ready Room one day prior to their session to ensure that:

- **ACI has your presentation on the network in the session rooms; and your**
- **Speakers' session handouts are downloaded onto the ACI Web site.**



Audio and videotaping are strictly prohibited without the expressed written consent of the speaker.



In consideration of your fellow attendees, please turn off your cell phones and pagers when attending sessions and committee meetings.

ACI Spring 2009 Convention Information

Outside C-100-105

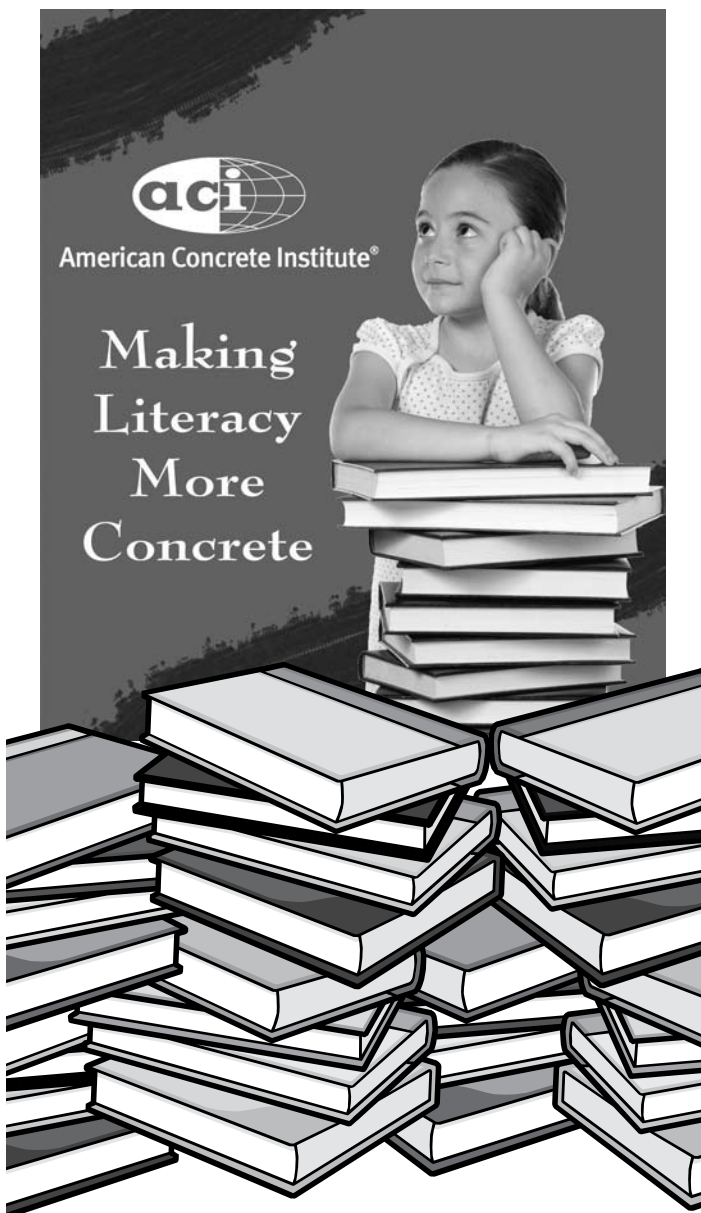


The ACI San Antonio Chapter will be available Saturday through Tuesday to answer your questions about San Antonio and activities at the spring 2009 convention. Mark your calendars for March 15-19, 2009, at the Marriott Rivercenter!

Book Drive!

Help ACI fight adolescent illiteracy by donating a new or gently-used children's book today!

Donations can be made in the exhibit area of the America's Center.



Where's That Meeting Room?

All rooms in red are in the Renaissance Grand & Suites Hotel

All rooms listed in blue are in the America's Center

R = Renaissance Grand & Suites Hotel

- R-LOBBY**, Hotel Building, Lobby Level
- R-AN AMERICAN PLACE**, Hotel Building, Lobby Level
- R-AUBERT**, Hotel Building, Mezzanine Level
- R-BENTON**, Hotel Building, Mezzanine Level
- R-CRYSTAL**, Hotel Building, 20th floor
- R-FLORA**, Hotel Building, 21st floor
- R-FORSYTH**, Suites Tower, 2nd floor
- R-HAWTHORNE**, Hotel Building, 21st floor
- R-KINGSBURY**, Concourse Building, 1st floor
- R-LACLEDE**, Hotel Building, 20th floor
- R-LAFAYETTE**, Hotel Building, Mezzanine Level
- R-LANDMARK BALLROOM**, Concourse Building 1st floor
- R-LANDMARK 1**, Concourse Building, 1st floor
- R-LANDMARK 2**, Concourse Building, 1st floor
- R-LANDMARK 3**, Concourse Building, 1st floor
- R-LANDMARK 4**, Concourse Building, 1st floor
- R-LANDMARK 5**, Concourse Building, 1st floor
- R-LANDMARK 6**, Concourse Building, 1st floor
- R-LANDMARK 7**, Concourse Building, 1st floor
- R-LENNOX**, Suites Tower, 2nd floor
- R-LINDELL**, Concourse Building, 1st floor
- R-LUCAS**, Hotel Building, 21st floor
- R-MAJESTIC BALLROOM**, Concourse Building, 2nd floor
- R-MAJESTIC A**, Concourse Building, 2nd floor
- R-MAJESTIC B**, Concourse Building, 2nd floor
- R-MAJESTIC C**, Concourse Building, 2nd floor
- R-MAJESTIC D**, Concourse Building, 2nd floor
- R-MAJESTIC E**, Concourse Building, 2nd floor
- R-MAJESTIC F**, Concourse Building, 2nd floor
- R-MAJESTIC G**, Concourse Building, 2nd floor
- R-MAJESTIC H**, Concourse Building, 2nd floor
- R-PARKVIEW**, Hotel Building, Mezzanine Level
- R-PORTLAND**, Hotel Building, Mezzanine Level
- R-PERSHING**, Concourse Building, 1st floor
- R-RATHSKELLER**, Suites Tower, Lower Level
- R-SHAW**, Hotel Building, Mezzanine Level
- R-SUITES LOBBY**, Suites Tower, Lobby Level
- R-WESTMINSTER**, Suites Tower, 2nd floor
- R-WESTMORELAND**, Concourse Building, 1st floor
- R-434**, Hotel Building, 4th floor

Where's That Meeting Room?

All rooms in red are in the Renaissance Grand & Suites Hotel

All rooms listed in blue are in the America's Center

C = America's Center

C-90, 1st floor

C-91, 1st floor

C-92, 1st floor

C-93, 1st floor

C-94, 1st floor

C-95, 1st floor

C-96, 1st floor

C-100, 1st floor

C-101, 1st floor

C-102, 1st floor

C-103, 1st floor

C-104, 1st floor

C-105, 1st floor

C-106, 1st floor

C-120, 1st floor

C-121, 1st floor

C-122, 1st floor

C-200, 2nd floor

C-220, 2nd floor

C-221, 2nd floor

C-222, 2nd floor

C-223, 2nd floor

C-224, 2nd floor

C-225, 2nd floor

C-226, 2nd floor

C-227, 2nd floor

C-228, 2nd floor

C-229, 2nd floor

C-230, 2nd floor

C-231, 2nd floor

C-232, 2nd floor

C-240, 2nd floor

C-241, 2nd floor

C-242, 2nd floor

Notes

Exhibitors

Exhibitor listing as of 10/7/08

Exhibits

C-100-105

The ACI Missouri Chapter and the American Concrete Institute wish to thank all exhibitors for their participation in and support of the ACI Fall 2008 Convention.

Exhibit Hours

Saturday	2:00 PM - 6:00 PM
Sunday	7:30 AM - 5:00 PM and 6:30 PM - 7:30 PM
Monday	8:00 AM - 5:00 PM
Tuesday	8:00 AM - 5:00 PM
Wednesday	8:00 AM - 12:00 PM

BASF Construction Chemicals, LLC

Booth #1

BASF's Construction Chemicals division is the worldwide supplier of chemical systems and formulations for the construction industry. The North American Construction Chemicals Division of BASF comprises four business lines that offer products and solutions primarily for commercial, residential, industrial, and infrastructure construction improving durability, water resistance, energy efficiency, safety, and aesthetics. BASF's innovative products and solutions help make products better. Contact BASF Construction Chemicals at 800-628-9990 or visit www.masterbuilders.com.

Big River Industries

Booth #4

Big River Industries is the nation's largest producer of rotary kiln expanded clay lightweight aggregates. With operations in Louisiana (Gravelite®), Alabama (Livlite®), and Arkansas (Arkalite®), Big River provides lightweight aggregates for structural concrete, concrete masonry, geotechnical fill, asphalt paving, and other applications throughout a 23-state area. To learn more about Big River Industries, visit www.bigriverind.com.

Buckeye Building Fibers LLC

Booth #52

Buckeye produces UltraFiber 500®, the patented cellulose fiber that provides unsurpassed secondary crack control in a variety of concrete applications. For more information on Buckeye, go to www.bkitech.com.

Butterfield Color

Booth #13

Butterfield Color is a manufacturer of coloring systems and tools for the decorative treatment of new or existing concrete. Products are suitable for interior floors, exterior hardscapes, and vertical surfaces: integral colors, shake-on color hardeners, stains, dyes, stamping tools, overlays, and sealers. Almost unlimited architectural expression is possible with concrete.

Exhibitors

Exhibitor listing as of 10/7/08

CON-CURE Corporation

Booth #51

Imagine a reusable device that can send real-time strength and temperature information directly to your computer automatically, so you always know the strength and curing rate of your fresh concrete. Impossible, you say? No! Stop by CON-CURE's booth to see their innovative new concrete maturity meters in action! Visit www.con-cure.com for more information.

Decon USA Inc.

Booth #11

Decon® Studrail®: The genuine punching shear reinforcement. Decon Studrails have superior seismic performance commonly used in post-tension slabs with direct loading on columns. Studrails will replace stirrups as well as drop panels, beams, and column capitals. A further Studrail application includes the replacement of hairpins or u-bars in the post-tensioned tendon anchorage zone. Updated and free design software is available at www.deconusa.com.

Electro TechCP

Booth #8

Electro TechCP is a unique organization that specializes in applying engineered solutions to corrosion problems. Electro TechCP possesses skills and experience not only in diagnosing corrosion problems, but also in designing optimal countermeasures for corrosion control. For additional information, go to www.cpmonitoring.com.

Engius

Booth #16

Engius offers technologies that enable you to work smarter, not harder. The IntelliRock concrete maturity and temperature profiling system helps you determine accurate concrete strength and temperature in real time. Now information from IntelliRock sensors can be transmitted wirelessly to computers at the job site. Engius also offers the EZ Cure line of affordable curing boxes that both heat and cool to maintain a constant curing temperature. Visit www.engius.com for more information.

ERICO

Booth #31

ERICO is a leading designer, manufacturer, and marketer of precision-engineered specialty metal products serving global niche product markets in a diverse range of electrical, construction, utility, and rail applications. LENTON®: Reinforcing bar splicing systems and other reinforcing products are used to connect steel reinforcement rods in concrete. Visit www.erico.com for more information.

Exhibitors

Exhibitor listing as of 10/7/08

The Euclid Chemical Company

Booth #28

The Euclid Chemical Company, founded in 1910, is a worldwide supplier of quality products and services for the concrete and masonry industry. Euclid offers a full line of admixtures and repair and maintenance products based on the latest technology. Euclid provides on-site service for guidance on proper product usage as well as complete specification assistance and laboratory support. To learn more about The Euclid Chemical Company, visit www.euclidchemical.com.

Flatwork Technologies

Booth #22

Flatwork is a revolutionary new products company specializing in state-of-the-art concrete finishing tools, products, and the flagship heat-spreading equipment known as Power Blanket. Keep crews working all winter long. Use Flatwork for all your cold weather, thawing, curing, heating, and ice/snow melting outdoor construction needs.

FORTA Corporation

Booth #36

Founded in 1978, FORTA is the oldest synthetic fiber reinforcement producer in the country. Celebrating 30 years, FORTA Corporation has grown to become a worldwide leader in synthetic fiber research and development. The most recent innovation is FORTA FERRO, a macro-synthetic fiber that allows for a higher replacement level of conventional steel reinforcement. For further information, go to www.fortacorp.com.

Fred Weber Inc.—Iron Mountain Trap Rock

Booth #25

For more information on Iron Mountain Trap Rock Pre-Mixed Floor Hardener, visit www.fredweberinc.com.

General Resource Technology

Booth #12

General Resource Technology's entire emphasis is the marketing of construction chemicals and fiber reinforcement systems for the concrete industry. This specific area of focus allows the organization to be completely responsive to the needs of its customers. General Resource Technology is committed to quality, service, and product performance. Visit www.grtinc.com for more information.

Exhibitors

Exhibitor listing as of 10/7/08

Germann Instruments, Inc.

Booths #15 & 20

Germann Instruments is the leader in nondestructive testing (NDT) of concrete structures. Their cutting-edge innovative product line includes: advance NDT equipment for concrete testing. For structural integrity—Impact-Echo, Mash, and MIRA/Eyecon 3-D Shear Wave Systems. Durability-Service Life, Rheometer, PROOVEit, Chloride & Profile. Freeze-thaw—EVA Analyzer & RapidAir. Fast-track construction—LOK-TEST, Coma-Meter. Corrosion survey—GalvaPulse, RapiCor. Repair quality—Bond-Test, CorroEye. Visit www.germann.org for additional information.

Grace Construction Products

Booth #21

Headquartered in Cambridge, MA, Grace Construction Products is a worldwide leading manufacturer of concrete admixtures and fibers; liquid pigments for colored concrete; cement processing additives; concrete masonry products; air and vapor barriers; roofing underlayments; self-adhered window; door, and deck flashings; structural waterproofing systems; and fire protection products.

Greenstreak Group Inc.

Booth #7

Since 1950, Greenstreak has served the general and architectural concrete construction industry. Greenstreak offers the largest selection of waterstops in North America for water, wastewater, and chemical containment. Stop by Greenstreak's booth to see the latest innovations for the slab-on-ground market including load transfer dowels/plates, dowel basket assemblies, and curing blanket. Visit www.greenstreak.com for more information.

Headwaters Resources Inc.

Booth #23

Headwaters Resources is America's largest manager and marketer of coal combustion products, including fly ash. Fly ash use improves concrete performance, making it stronger, more durable, and more resistant to chemical attack. Fly ash use also creates significant benefits for our environment by reducing landfill use and offsetting greenhouse gas emissions. Visit www.flyash.com for more information.

Holcim (US) Inc.

Booth #27

Holcim (US) is one of the largest cement manufacturers in the United States. Headquartered in Waltham, MA, there are 16 manufacturing facilities and more than 75 distribution terminals. For information on Holcim's portland/blended cement, masonry/mortar cement, mineral components, or technical services, visit www.holcim.us or call 888-646-5246.

Exhibitors

Exhibitor listing as of 10/7/08

ICI Rheocenter

Booth #24

ICI Rheocenter is the center of excellence in cement-based materials, focusing on rheology, cement admixture interactions, and special concrete such as SCC. ICI Rheocenter solves problems for companies from all over the world, such as cement producers, ready mixed concrete plants, and admixture producers. Visit www.nmi.is for more information.

Kryton International, Inc.

Booth #2

Kryton International has been a worldwide leader in the manufacturing and distribution of crystalline concrete waterproofing systems since 1973. Kryton's products are distributed in more than 40 countries and are requested by name by architects, engineers, building owners, and facility managers around the globe. Visit www.kryton.com to learn more about Kryton's products.

Lafarge

Booth #42

Lafarge is the largest diversified supplier of construction materials in the United States and Canada. The company's products, including a full line of cements, cement-related materials, and concrete, are used for residential, commercial, institutional, and public works construction. Visit www.lafarge.com for more information.

Maccaferri Group, Inc.

Booth #17

Maccaferri Group, Inc., has been globally active in fiber-reinforced concrete solutions for more than 25 years. Fiber-reinforced concrete is a new composite obtained by adding a single type or a blend of fibers to the concrete mixture. Wire and steel fibers are used to reinforce the concrete. Fibromac synthetic fibers are used as a complement to the concrete. Visit www.maccaferri-usa.com for more information.

Missouri University of Science and Technology

Booth #53

The Center for Transportation Infrastructure and Safety (CTIS) is a USDOT-sponsored National University Transportation Center at Missouri University of Science and Technology (formally University of Missouri-Rolla) undertaking research, technology transfer, and education in the theme areas of advanced materials, nondestructive testing technologies, and the transition-state fuel vehicle infrastructure. Visit ctis.utep.edu for more information.

Exhibitors

Exhibitor listing as of 10/7/08

NEES Consortium Inc.

Booth #29

NEES Consortium Inc. operates the Network for Earthquake Engineering Simulation (NEES) consisting of 15 university-based equipment sites. These NSF-funded sites include three shake tables, a large tsunami test facility, three field sites, two geotechnical centrifuges, and six large structural laboratories. NEES experimental sites are state of the art and used by researchers to study engineered systems under earthquake excitation. To learn more about the NEES Consortium, visit www.nees.org.

Octaform Systems Inc.

Booth #14

Octaform's finished, stay-in-place forming systems are engineered for a wide range of industries including precast and tilt-up. They can also be used for walls, tanks, and barriers. Visit www.octaform.com for more information.

Omya Canada, Inc.

Booth #3

Omya is the worldwide leader in high-quality calcium carbonate. Fine calcium carbonate fillers (new mineral admixture) can be used to optimize the particle packing of a concrete mixture design. It improves green strength, finishes, fluidity, and workability, and it reduces excessive bleeding and segregation. Savings can be achieved through cementitious content reduction. For more information, go to www.pshcanada.com.

Outokumpu Stainless

Booth #5

Outokumpu is an international stainless steel company with a vision to be the undisputed number one in stainless. Our plate, pipe, coil, and bar (including reinforcement bar) stainless products—particularly in duplex stainless—are becoming the materials of choice for construction. Duplex grades of stainless steel reinforcing bar are ideal for concrete because it combines many of the beneficial properties of ferritic and austenitic steels, offering high strength and high resistance to stress corrosion cracking along with very good resistance to uniform corrosion. Visit www.outokumpu.com for more information.

Proceq USA Inc.

Booth #19

Proceq USA offers a complete range of portable concrete testing instruments for nondestructive site investigations. Products include the Original SCHMIDT Concrete Test Hammer, Profometer 5+ Rebar Detection System, as well as a host of other products for ultrasonic pulse velocity, corrosion analysis, resistivity, permeability, and pulloff/bond strength test applications. Visit www.proceq-usa.com for additional information.

Exhibitors

Exhibitor listing as of 10/7/08

QuakeWrap Inc.

Booth #6

QuakeWrap Inc. is a leading designer, supplier, and installer of quality, innovative fiber-reinforced polymer (FRP) products for repair and strengthening structures. The company is also a pioneer research and development firm committed to providing economical solutions and unparalleled service to engineers, architects, and owners. Visit www.quakewrap.com for more information.

Sika Corporation

Booth #18

Sika Corporation Construction Products Division, Lyndhurst, NJ, is a technology leader with over 90 years of experience in concrete materials and restoration technology. Sika's product line includes concrete admixtures, sealants, adhesives, corrosion inhibitors and total corrosion management products, specialty mortars, epoxy resins, structural strengthening systems, grouts, anchoring adhesives, industrial flooring and wood floor adhesive systems, and installation products. Full service sales and technical offices support customers nationwide. Please visit the Sika Corporation Construction Products Division Web site at www.sikaconstruction.com.

Silica Fume Association

Booth #43

The Silica Fume Association provides high-performance concrete technology and practical know-how to the concrete construction industry. The Silica Fume User's Manual (FHWA pub# IF-05-016), Life 365 V2.0 Service-life and Life-cycle model, and other concrete tools are provided to help concrete producers and designers use silica fume and high-performance concrete economically and appropriately. Learn more about the Silica Fume Association by going to www.silicafume.org.

Solomon Colors

Booth #32

Solomon Colors is an 80-year-old producer of iron oxide pigment for the concrete industry. They supply A,H,X mortar color; dry ready mix pigment; and liquid pigment. They also sell a full line of automated color dispensing systems and offer a complete line of decorative concrete products through their Legacy and Brickform product lines. Visit www.solomoncolors.com for more information.

Exhibitors

Exhibitor listing as of 10/7/08

SYNTHEON INC.—a subsidiary of NOVA Chemicals

Booth #41

Elemix concrete additive is comprised of innovative polymeric spheres that have been specially formulated for use in concrete. It distributes uniformly in concrete, providing lighter weight and enhanced durability in structural and nonstructural applications. Elemix additive may also be used to provide excellent flexural strength and increased R-value. Visit www.elemix.com for more information.

Taylor & Francis Group

Booth #26

Taylor & Francis is a premier publisher of civil and construction engineering publications under the CRC Press and Routledge imprints. Please visit Taylor & Francis during the convention to peruse their newest offerings. For more information, please visit www.crcpress.com or www.routledge.com.

Thermo Fisher Scientific

Booth #44

Think Thermo Scientific for superior analytical instruments, laboratory equipment, software, services, consumables, and reagents. Find better workflow solutions spanning sample preparation, sample analysis, and data interpretation. For more information, please visit www.thermofisher.com.

Vector Corrosion Technologies

Booth #30

Vector Corrosion Technologies offers a portfolio of solutions for concrete corrosion repair and protection that includes electrochemical chloride extraction, cathodic protection, and an array of galvanic protection systems, including embedded galvanic anodes, galvanic jackets, and activated arc-spray zinc metalizing. Vector also provides evaluation, repair, and mitigation services for post-tension corrosion and temperature-resistant composite strengthening systems. Contact Vector at 813-830-7566 or visit www.vector-corrosion.com.

Xypex Chemical Corporation

Booth #40

Xypex Chemical Corporation manufactures high-performance products for the protection and waterproofing of concrete. For further information, visit www.xypex.com.

Special Events

Notable Concrete in St. Louis & Vicinity

ACI Committee 124, Aesthetics, has developed a compendium of notable concrete projects in St. Louis and the surrounding area. Sites include the Pulitzer Foundation for the Arts, Renaissance Grand & Suites Hotel, Ossenfort Road Bridge, Tarlton Corporation, and more. For a complete listing and map to visit these sites at your leisure during the convention, pick up a copy at the ACI Registration Desk or go to: <http://www.concrete.org/Convention/fall-Convention/NotableConcrete.htm>.

Saturday, November 1, 2008

Sustainable Development Workshop on Concrete, Green Building, and ISO Standards

R-MAJESTIC H

1:00 PM - 6:00 PM

Session Co-Moderators: Koji Sakai and Douglas J. Sordyl

This workshop will focus on environmental management for concrete and concrete structures, with specific focus on the new Standard under development by ISO/TC71/SC8. Discussion topics will include an evaluation system on the materials flow of concrete, environmental design of concrete structures, green concrete technologies for life-cycle design of concrete structures, and more.

✓Dining and Dancing on the Mississippi

\$78 U.S. per person

Depart: 6:30 PM Renaissance Grand—St. Charles Street exit;

Return: 10:30 PM

Experience the “Mighty” Mississippi first hand during a Gateway Riverboat dinner cruise. You will depart the hotel via luxury motor coach for the riverfront to board an authentic paddle wheeler. During the private 2-1/2 hour cruise, view the dramatic St. Louis skyline, enjoy a delicious prime rib dinner, and be entertained by one of St. Louis’ best Dixieland bands. The full menu includes:

Tossed Salad with Parmesan Vinaigrette Dressing

Roast Prime Rib of Beef with Au Jus

Choice of Potato

Choice of Vegetable

Fresh Rolls and Butter

Coffee and Iced Tea

Chef’s Special Dessert

A Cash Bar will be available.

Due to Riverboat’s requirements, tickets will NOT be available on site for purchase.

Sunday, November 2, 2008

First-Time Convention Attendee Breakfast

R-MAJESTIC B

8:00 AM - 9:00 AM

Sponsored by the ACI Convention Committee

Session Moderator: William E. Rushing Jr.

First-time convention attendees are invited to join Bill Rushing, Chair of the ACI Convention Committee, for a continental breakfast and a brief session to orient you to the week ahead. Attendees will have the opportunity to meet other convention attendees and learn about what an ACI convention has to offer.

✓ Holcim Plant Tour

7:30 AM - 12:30 PM

\$45 U.S. per person

Enjoy a tour of the Holcim Cement Plant. Opening in 2009, the Holcim Cement Plant is soon to be one of the largest producers of portland cement, estimated to produce over 4,000,000 metric tons of cement a year. No shorts are allowed on this tour, shirts/blouses with sleeves must be at least 4 inches in length, and you must wear closed-toe shoes. No high heels are allowed. A 20-minute safety video must be viewed before the tour begins. This tour includes a boxed breakfast. Departure for this tour will be located at the St. Charles Street exit at the Renaissance Grand.

✓ = Separate fee required

Sunday, November 2, 2008

✓ International Lunch

R-CRYSTAL

12:00 PM - 2:00 PM

\$43 U.S. per person

Hosted by the ACI International Committee



Speaker: Konrad Bergmeister
Professor
Universität für Bodenkultur
Vienna, Austria

Topic: Repair and Maintenance of Aging RC Bridges

Join other ACI attendees for a discussion on the repair and maintenance of aging RC bridges during the International Lunch with featured speaker Professor Konrad Bergmeister from the Universität für Bodenkultur in Austria. Dr. Bergmeister has a PhD in both rural architecture and civil engineering, as well as a master's degree in manufacturing systems from Clarkson University. In addition to his 18 years of professional experience, Dr. Bergmeister is also a member of the Berlin-Brandenburg Academy of Science and the German Academy of Science.

Tickets may be purchased at the ACI Registration Desk up to 24 hours prior to the event, based on availability. Please notify the ACI Registration Desk if you have any dietary restrictions.

Student Concrete Cylinder Competition

C-100

1:00 PM - 5:00 PM

Sponsored by Committee E801, Student Activities, and the ACI Missouri Chapter

Session Co-Moderators: Lawrence H. Taber and Patrick T. Earney

Students must produce a concrete cylinder made of specific cementitious materials that will withstand a compression test and other performance measuring criteria. Come cheer on your favorite team!

Testing device provided by SCI Engineering



SCI ENGINEERING, INC.

✓ = Separate fee required

Sunday, November 2, 2008

Building the Arch Film “Monument to the Dream”

C-100-105

3:30 PM

A film documenting the construction of the arch will be shown.

Opening Session and Hardy Cross Lecture Series

C-221

5:15 PM - 6:30 PM



This Opening Session officially kicks off the St. Louis Convention with the annual Hardy Cross Lecture Series, with featured speaker Tony Fiorato, former President, CTL Group. He will be discussing how Hardy Cross raised issues on engineering standardization that are just as relevant today as when he wrote them 80 years ago. The talk will address standardization of building codes, materials specifications, test methods, and how we can benefit from Cross' reflections on “intelligent standards versus standardized intelligence.”

Opening Reception

C-100-105

Approximately 6:30 PM - 7:30 PM

Sponsored by the ACI Missouri Chapter

Following the Opening Session, meet your colleagues, friends, and exhibitors for a beverage from the cash bar and light refreshments in the exhibit area. This is a networking opportunity you won't want to miss!

Monday, November 3, 2008

Workshop for Technical Committee Chairs

C-221

6:30 AM - 8:15 AM

Sponsored by the ACI Technical Activities Committee

Session Moderator: David A. Lange
Associate Professor
University of Illinois
Urbana, IL

ACI Technical Committee Chairs are expected to attend this breakfast workshop to meet with fellow chairs, TAC members, and ACI staff, and to hear updates on important recent developments of interest to ACI Technical Committee Chairs. There will be table discussions and short presentations. If you are unable to attend, please ask the secretary or another committee member to represent you in your absence.

Speaker Skills Training Breakfast: Teaching Methods and Educational Materials

C-232

7:00 AM - 8:30 AM

Sponsored by ACI Committee E803, Faculty Network Coordinating Committee

Session Moderator: Kenneth C. Hover
Professor of Structural Engineering
Cornell University
Ithaca, NY

Ken Hover, Professor and Weiss Presidential Fellow at Cornell University, will discuss how your ACI audience wants to hear what you have to say, and to see what you have to show. But while you can count on initial audience interest, you can't assume that everyone in the room sees your story, your problem, or your solution the same way you do. Given the wide range of backgrounds and expectations in the typical ACI audience, part of your challenge is to provide enough "handles" on your topic so that almost everybody can not only grab on, but carry something away. A continental breakfast will be served.

✓ = Separate fee required

Monday, November 3, 2008

✓ Student Lunch

C-221

12:00 PM - 2:00 PM

\$25 U.S. per person; FREE to students who preregister

Sponsored by the ACI Missouri Chapter and ACI Committee E801, Student Activities



Speaker: Daniel Baker
President
Baker Concrete Construction Inc.
Monroe, OH

Topic: Leadership 20/20—Up and Coming Leaders

Join other ACI members and students for the announcement of the Student Competition results. Following lunch, featured speaker Dan Baker, President of Baker Concrete Construction will give a presentation on Leadership 20/20—Up and Coming Leaders.

PREREGISTRATION IS REQUIRED TO ATTEND. Tickets may be purchased at the ACI Registration Desk up to 24 hours prior to the event, based on availability. Please notify the ACI Registration Desk if you have any dietary restrictions.

Sonic Systems for Concrete Testing Demonstration

C-100

2:00 PM - 3:00 PM

Germann Instruments will be demonstrating the following:

- DOCTer impact-echo for thickness and flaw detection
- s'MASH impulse response for rapid screening of flaws
- MIRA tomography 3D system for location of internal defects

Women in ACI Reception

R-AUBERT

5:00 PM - 6:00 PM

All registered convention attendees are invited to attend the Women in ACI Reception. This long-standing ACI tradition is a great opportunity to get to know other women in the concrete industry through networking and socializing. A hosted bar and light hors d'oeuvres will be served.

✓ = Separate fee required

Monday, November 3, 2008

University of Texas Reception

R-LANDMARK 1

6:30 PM - 8:00 PM

The Civil, Architectural & Environmental Engineering Department at the University of Texas is holding a reception for graduates, faculty, and friends. Catch up with former classmates, and colleagues following a day of meetings over appetizers and cocktails from the cash bar.

✓Dinner in Honor of Luke M. Snell

R-CRYSTAL

7:00 PM - 10:00 PM

\$75 U.S. per person



Over the course of 40 years, Luke Snell has been a driving force within the concrete industry. Named a Fellow of ACI, a Distinguished Professor of Arizona State University, and a professional engineer in three states, his concrete research and teaching experience has been influential to many. Join other ACI

attendees in celebrating Luke Snell's life-long achievements and strong dedication to ACI and the ACI Missouri Chapter during this honorary dinner.

Tickets may be purchased at the ACI Registration Desk up to 24 hours prior to the event, based on availability. Please notify the ACI Registration Desk if you have any dietary restrictions.

✓ = Separate fee required

Monday, November 3, 2008

**123 Forum: Should Sustainability be
Policy Driven?**

R-LANDMARK 2&3

7:30 PM - 10:00 PM

Sponsored by ACI Committee 123, Research and Current Developments

Session Moderator: Mohammad S. Khan

Following its long tradition, ACI Committee 123 brings industry experts together again to debate on another subject and to share their views with ACI patrons. The debate this time is whether sustainability should be policy driven. Sustainable materials and construction have received considerable attention during the last several years and significant accomplishments have been made. However, is our progress keeping pace with the ever growing needs of a sustainable development? Do we realize the importance of sustainable development? Are we adequately addressing environmental concerns related to the production of portland cement and depleting natural raw resources? Are we making the best use of supplementary cementitious materials? Are we exploring innovative aggregate types? Are we using nonpotable water sources for making and curing concrete? Are we improving the performance of substandard raw materials through innovative uses of chemical admixtures? If the answer to any or all of these questions is no, should sustainability be mandated and policy driven? Our panelists will address these and many other questions you might have.

Tuesday, November 4, 2008

✓ Holcim Plant Tour

7:00 AM - 12:00 PM

\$45 U.S. per person

Enjoy a tour of the Holcim Cement Plant. Opening in 2009, the Holcim Cement Plant is soon to be one of the largest producers of portland cement, estimated to produce over 4,000,000 metric tons of cement a year. No shorts are allowed on this tour, shirts/blouses with sleeves must be at least four inches in length, and you must wear closed-toe shoes. No high heels are allowed. A 20-minute safety video must be viewed before the tour begins. This tour includes a boxed breakfast. Departure for this tour will be located at the St. Charles Street exit at the Renaissance Grand.

Contractors' Day Events

✓ Architectural Walking Tour

Depart: 9:30 AM from the AIA Bookstore (911 Washington Avenue);

Return: 11:30 AM

\$8 U.S. per person

This 90-minute walking tour begins with a walk down Washington Avenue, through the historical loft district, and past the Merchandise Mart, The Roberts Orpheum Theater Building, and The Old Post Office. Other notable sites on this tour include The Chemical Building, The Union Trust Company, The Wainwright Building, and The Old Courthouse. Comfortable walking shoes are recommended.

✓ = Separate fee required

Tuesday, November 4, 2008

✓ Contractors' Day Lunch

C-221

12:00 PM - 2:00 PM

\$35 U.S. per person

Hosted by the ACI Missouri Chapter and the ACI Construction Liaison Committee



Speaker: Jeff Steinhart
Vice President of Engineering
Anheuser-Busch
St. Louis, MO

Topic: Innovation in the Construction Industry

Join other ACI convention attendees for the Contractors' Day Lunch. The featured speaker will be Jeff Steinhart, Vice President of Engineering for Anheuser-Busch. Jeff Steinhart is responsible for leading the Engineering and Environmental Affairs department for the company's domestic and international beer operations and the major capital projects for its subsidiaries.

Steinhart will be discussing innovation in the construction industry and will cover topics such as:

- Background on Anheuser-Busch
- The Roles of the Owner and Contractor
- A-B's Expectation of the Contractor Community
- Lessons Learned on Concrete
- Innovations in A/C/S
- Trends we need to be able to address

Tickets may be purchased at the ACI Registration Desk up to 24 hours prior to the event, based on availability. Please notify the ACI Registration Desk if you have any dietary restrictions.

✓ = Separate fee required

Tuesday, November 4, 2008

✓ Concrete Structures of St. Louis Bus Tour

Depart: 2:30 PM from the AIA Bookstore (911 Washington Avenue);

Return: 4:30 PM

\$20 U.S. per person

This narrated bus tour will take guests past the James Eads Bridge, Jefferson Memorial Expansion Site, The Gateway Arch, and The Old Courthouse, to name a few. In addition to the narrated bus tour, guests will also have the opportunity to take a short 10-minute walk through the City Museum, get a private 30-minute viewing of the Pulitzer, and exit the bus briefly to view the Eads Bridge.

Building the Arch Film “Monument to the Dream”

C-100

3:30 PM

A film documenting the construction of the arch will be shown.

Faculty Network Reception

R-PARKVIEW

5:00 PM - 6:00 PM

Hosted by ACI Committee E802, Faculty Network Coordinating Committee

Faculty members and students are invited to attend this informal reception for an opportunity to exchange ideas and network. Light hors d'oeuvres will be available. Each attendee will receive one drink ticket upon arrival at the reception.

Concrete Mixer: Echoes of Oktoberfest

R-MAJESTIC

6:30 PM - 8:00 PM

Sponsored by the ACI Missouri Chapter

Transport yourself back to nineteenth century Germany for an Oktoberfest-inspired Concrete Mixer. Hosted by the ACI Missouri Chapter, you will feel as though you're inside a festival hall in Munich, with long tables and benches, waitstaff in lederhosen, and an authentic Bavarian-style band. This social event is perfect for meeting industry leaders and reconnecting with friends and colleagues.

Please use the drink tickets found in your convention registration packet for this event.

✓ = Separate fee required

Tours and Guest Events

All tours (except the Architectural Walking Tour & Concrete Structures Bus Tour) will depart from the Renaissance Grand, St. Charles Street exit.

The Architectural Walking Tour & Concrete Structures Bus Tour will depart from the AIA Bookstore located at 911 Washington Avenue.

Sunday-Wednesday

Guest Hospitality—open to individuals who are registered for the guest program ONLY.

Continental Breakfast 7:00 AM-10:00 AM R-AN AMERICAN PLACE
Guest Suite open 10:00 AM-5:00 PM R-434

Sunday, November 2, 2008

Guest Overview R- AN AMERICAN PLACE

8:00 AM - 9:00 AM

Acquaint yourself with the week ahead! You'll also get a preview of the guest programs for the ACI Spring 2009 Convention in San Antonio, TX, and the ACI Fall 2009 Convention in New Orleans, LA.

✓Pere Marquette State Park

Depart: 9:30 AM; Return: 3:00 PM

\$55 U.S. per person

Today you will ride along America's newest scenic byway, the Great River Road, which stretches 50 miles through some of the most picturesque countryside along the Mississippi and Illinois rivers. Your destination is Pere Marquette State Park, named for Jacques Marquette, a French missionary and member of the European expedition led by Louis Joliet. In 1673, Marquette and Joliet traveled down the Mississippi River as far as the Arkansas River. A nature-lover's paradise, this 8000-acre park is famous for the exceptional beauty of its fall colors and for its bald eagles during the winter.

Before lunch, visit Pere Marquette's Visitor Center, which welcomes you with a three-dimensional map of the park, a gift shop and information center, a 270-gallon aquarium, and a wealth of other displays and exhibits of the Illinois River, wildlife habitat, local history, and geology.

For lunch, enjoy a scrumptious chicken entrée in the Lodge. Native stone and rustic timbers of the original Lodge blend with the new to provide first-class accommodations in a historical setting. The mammoth stone fireplace in the lobby soars to a roof height of 50 ft and is said to weigh 700 tons.

✓ = Separate fee required

Tours and Guest Events

All tours (except the Architectural Walking Tour & Concrete Structures Bus Tour) will depart from the Renaissance Grand, St. Charles Street exit.

Monday, November 3, 2008

✓ Gateway to St. Louis Tour

Depart: 8:00 AM; Return: 2:30 PM

\$67 U.S. per person

Trace the history of St. Louis beginning with the city's original settlement, Laclede's Landing. It is now a nine-block historic district filled with renovated turn-of-the-century buildings, housing, shops, eateries, and offices. Next, visit the famous Gateway Arch, the nation's tallest monument, commemorating the gateway to the west for thousands of nineteenth century pioneers. Take a tram ride to the top of this 630 ft stainless steel architectural wonder. Those not wanting to ride the tram may enjoy "Monument to the Dream," a film documenting the construction of the Arch. This film will also be shown on Sunday and Tuesday at 3:30 PM in the exhibit area.

Next, visit the Old Cathedral, the oldest cathedral west of the Mississippi. Across the street is the Old Courthouse, the setting for cases involving slavery, the fur trade, and equal rights. The Dred Scott Case is the most notable. Continuing west on Market Street, you will pass several of St. Louis's civic buildings, plazas, and a museum en route to historic St. Louis Union Station. Once the busiest rail terminal in the world, the Grand Hall and Train Shed have been magnificently renovated to house specialty stores and festive markets. After a brief walking tour of the Station, there will be time for lunch and shopping. Guests on this tour will be provided with a Union Station food voucher for the food court or one of the many dine-in restaurants located in the station.

At the St. Louis Cathedral you will see one of the largest collections of mosaics in the world—84,000 square feet in 8000 shades of color! Explore the historic Central West End neighborhood, the Barnes-Jewish Hospital Complex, and the mansions bordering Forest Park—fine examples of the "Golden Age" of St. Louis at the turn of the century. Forest Park was also the site of the 1904 World's Fair.

✓ = Separate fee required

Tours and Guest Events

All tours (except the Architectural Walking Tour & Concrete Structures Bus Tour) will depart from the Renaissance Grand, St. Charles Street exit.

Monday, November 3, 2008 (cont.)

✓ Frank Lloyd Wright House in Ebsworth Park

Depart: 9:00 AM; Return: 12:00 PM

\$62 U.S. per person

On this tour, you will visit The Frank Lloyd Wright House in Ebsworth Park, located in Kirkwood, MO, and nestled in grassy fields on 10.5 acres of land. The home has been placed on the National Register of Historic Places because of its significance in American architecture. Here you will enjoy a private tour of the home and see up close the excellent examples of Wright's democratic vision, intended to bring beautiful architecture to middle-class Americans at an affordable price. The house has retained all of its original Wright-designed furnishings and fabrics and is well noted for its architectural integrity. The house was built for Russell and Ruth Kraus in the 1950s. It was the architect's first building in the St. Louis area and is now only one of five in the State of Missouri.

En route back to the Renaissance Grand you will tour through downtown St. Louis and see architectural wonders such as the Gateway Arch, the Wainwright Building, and Eads Bridge. Please note that the tour will return to the hotel in time for you to enjoy lunch on your own.

This tour will also be offered again on Tuesday, November 4, 2008.

Guest Tea

R-CRYSTAL

3:30 PM - 5:00 PM

Please join Mrs. Camila García for afternoon tea in the beautiful Crystal Ballroom. This is a wonderful opportunity to get to know other registered guests and enjoy a refreshing break! A guest name badge is required to attend this event.

Tuesday, November 4, 2008

✓ Frank Lloyd Wright House in Ebsworth Park

Depart: 9:00 AM; Return: 12:00 PM

\$62 U.S. per person

See Monday, November 3, for tour description. Please note the tour will return to the hotel in time for you to enjoy lunch on your own.

✓ = Separate fee required

Technical Tours

The Architectural Walking Tour & Concrete Structures Bus Tour will depart from the AIA Bookstore located at 911 Washington Avenue.

Tuesday, November 4, 2008 (cont.)

✓ **Spirits of St. Louis Tour**

Depart: 9:00 AM; Return: 3:00 PM

\$79 U.S. per person

Enjoy nature at its finest at the Missouri Botanical Garden! The oldest botanical garden in the country and National Historic Landmark, the Garden has been internationally recognized for horticulture, education, and scientific research since its founding in 1859. It is truly a St. Louis treasure! A guided tram tour will wind its way through the 79 acres of flora and climates as diverse as the tropical rainforest and the driest desert. Visit the newly-renovated Climatron, the first geodesic dome greenhouse based on Buckminster Fuller's futuristic design. Included is a visit to the 14-acre Japanese Garden, considered one of the finest outside of Japan. There will be time to explore your favorite areas on your own before or after lunch. A food voucher to the Garden restaurant, Sassafras, is included.

En route to the King of Beers—The Anheuser-Busch Brewery—your tour guide will familiarize you with the rich history of the colorful Busch family. Situated in a complex with over 70 red brick structures on 100 acres, the brewery buildings are known for their unique architecture, and several are National Historic Landmarks. During the tour, you will see the world famous Clydesdales, the Fermentation Building, the Packing and Bottling Plant, the Brew House, and a film about the brewing process. No visit would be complete without a stop at the hospitality room to sample the family of Busch products. Comfortable walking shoes are recommended for this tour.

✓ = Separate fee required

Tours and Guest Events

All tours (except the Architectural Walking Tour & Concrete Structures Bus Tour) will depart from the Renaissance Grand, St. Charles Street exit.

Tuesday, November 4, 2008 (cont.)

✓ **Architectural Walking Tour**

Depart: 9:30 AM from the AIA Bookstore (911 Washington Avenue);

Return: 11:30 AM

\$8 U.S. per person

This 90-minute walking tour begins with a walk down Washington Avenue; through the historical loft district, and past the Merchandise Mart, The Roberts Orpheum Theater Building, and The Old Post Office. Other notable sites on this tour include The Chemical Building, The Union Trust Company, The Wainwright Building, and The Old Courthouse. Comfortable walking shoes are recommended.

✓ **Concrete Structures of St. Louis Bus Tour**

Depart: 2:30 PM from the AIA Bookstore (911 Washington Avenue);

Return: 4:30 PM

\$20 U.S. per person

This narrated bus tour will take guests past the James Eads Bridge, Jefferson Memorial Expansion Site, The Gateway Arch, and The Old Courthouse to name a few. In addition to the narrated bus tour, guests will also have the opportunity to take a short 10-minute walk through the City Museum, get a private 30-minute viewing of the Pulitzer, and exit the bus briefly to view the Eads Bridge.



✓ = Separate fee required

Tours and Guest Events

All tours (except the Architectural Walking Tour & Concrete Structures Bus Tour) will depart from the Renaissance Grand, St. Charles Street exit.

Wednesday, November 5, 2008

✓ Rivertown Tour

Depart: 9:00 AM; Return: 1:30 PM

\$56 U.S. per person

Upon departing, your tour guide will familiarize you with the rich history of St. Louis dating back to more than 1500 years ago, when St. Louis was a 20,000-person settlement known as Cahokia Mounds. En route you will receive a downtown overview including Laclede's Landing, the Riverfront, and the Gateway Arch. You will pass the first church of St. Louis and the Old Courthouse, the setting of the Dred Scott Case.

Travel back in time as you visit the largest prehistoric Indian center in America. Cahokia Mounds is the site of the most sophisticated prehistoric civilization that occupied the Cahokia area from 700 to 1500 A.D. At its peak, the population reached 20,000 and, at some point, vanished before the Europeans arrived.

Designated a World Heritage site in 1982, today Cahokia Mounds is essential to our understanding of the history of North America. You will begin your visit at the Interpretive Center, where you will have the opportunity to climb the man-made earthen mounds and see a wooden sun calendar.

Next experience the "Mighty" Mississippi first-hand during a Gateway Riverboat cruise. You will board a replica paddle wheeler for a one-hour sightseeing cruise where you can take in the views of the dramatic St. Louis skyline. A boxed lunch is included with your cruise ticket.



✓ = Separate fee required

Notes

Notes

Daily Program

All schedule and location changes will be posted daily in **C-100-105** and **R-Lobby**.

✓ = Separate fee required * = Themed Session

R = Renaissance Grand

C = America's Center

TG = Task Group

Friday, October 31, 2008

6:30 PM - 9:00 PM

TAC Technical Activities M1

R-LANDMARK 5

Saturday, November 1, 2008

8:00 AM - 6:00 PM

TAC Technical Activities M2

R-LANDMARK 5

12:00 PM - 6:00 PM

301 Specifications M1

R-MAJESTIC F & G

1:00 PM - 5:00 PM

EAC Educational Activities M1

R-MAJESTIC B

376 RLG Containment Structures M1

R-MAJESTIC A

1:00 PM - 6:00 PM

Sustainable Development Workshop on Concrete, Green Building, and ISO Standards

R-MAJESTIC H

6:30 PM - 10:30 PM

✓ Dining and Dancing on the Mississippi

7:30 PM - 10:00 PM

347-A Formwork—Specification

R-MAJESTIC C

Sunday, November 2, 2008

7:00 AM - 8:00 AM

First-Time Convention Attendee Breakfast

R-MAJESTIC B

7:30 AM - 12:30 PM

✓ Holcim Plant Tour

8:00 AM - 9:00 AM

562-Co Repair & Rehab—Coordination Meeting

C-222

First-Time Convention Attendee Breakfast

R-MAJESTIC B

8:00 AM - 9:30 AM

341-D Earthquake Res Brdgs—Perf Based Seismic Design

C-232

8:00 AM - 10:00 AM

E 706 Repair Application Procedures

R-PORTLAND

E 801 Student Activities

R-WESTMORELAND

Daily Program

All schedule and location changes will be posted daily in **C-100-105** and **R-Lobby**.

✓ = Separate fee required * = Themed Session

R = Renaissance Grand

C = America's Center

TG = Task Group

Sunday, November 2, 2008 (cont.)

8:00 AM - 11:00 AM

440-M	FRP—Repair of Masonry Str	R-LANDMARK 4
445-B	Shear & Torsn—Seismic Shear	R-FORSYTH
551	Tilt-Up	R-AUBERT

8:00 AM - 2:00 PM

TAC	Technical Activities M3	R-MAJESTIC A
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8:30 AM - 9:30 AM

546-A	Repair—Underwater	R-PARKVIEW
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8:30 AM - 10:00 AM

342	Bridge Evaluation	R-KINGSBURY
373	Prestressed/Tendons	R-BENTON

8:30 AM - 10:30 AM

549-A	Thin Reinforced—Premix GFRC	C-231
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8:30 AM - 11:30 AM

CLC	Construction Liaison	R-LANDMARK 7
MEMC	Membership	R-WESTMINSTER
315-B	Detailing—Constructibility	R-LANDMARK 2
408	Development and Splicing of Deformed Bars	R-LANDMARK 3

8:30 AM - 12:30 PM

314	Simplified Design of Buildings	R-LANDMARK 1
347	Formwork	R-RATHSKELLER

8:30 AM - 5:00 PM

301	Specifications M2	C-241
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9:00 AM - 12:00 PM

562-A	Eval, Repair, and Rehab—Life Safety	C-91
562-B	Eval, Repair, and Rehab—Loads	C-92
562-C	Eval, Repair, and Rehab—Structural Analysis	C-93
562-D	Eval, Repair, and Rehab—Struct Repair Design	C-94
562-E	Eval, Repair, and Rehab—Durability Quality Assurance	C-95
562-F	Eval, Repair, and Rehab—General	C-222

9:00 AM - 5:00 PM

376	RLG Containment Structures M2	R-LANDMARK 5
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Daily Program

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✓ = Separate fee required * = Themed Session

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Sunday, November 2, 2008 (cont.)

9:30 AM - 10:30 AM

546-B Repair—Material Selection Guide R-PARKVIEW

9:30 AM - 11:00 AM

341-A Earthquake Res Brdgs—Columns C-232

506-A Shotcreting—Evaluation R-LAFAYETTE

9:30 AM - 11:30 AM

201-C Durability—Condition Report R-MAJESTIC B

9:30 AM - 3:00 PM

✓ Pere Marquette State Park

10:00 AM - 11:30 AM

E 701 Materials for Concrete Construction R-PORTLAND

IC-Part International Partnerships Committee R-BENTON

350-C Env Str—Reinf and Devel R-LENOX

10:00 AM - 1:00 PM

SCO Scholarship Council R-WESTMORELAND

228 Nondestructive Testing R-MAJESTIC G

421 Reinforced Slabs R-LANDMARK 6

10:30 AM - 11:30 AM

546-C Repair—Guide R-PARKVIEW

10:30 AM - 1:30 PM

445-A Shear and Torsn—Strut & Tie R-KINGSBURY

10:30 AM - 2:00 PM

549 Thin Reinforced C-231

11:00 AM - 12:30 PM

341-B Earthquake Res Brdgs—Pier Walls C-232

506-G Shotcreting—Qualifications R-LAFAYETTE

11:00 AM - 1:00 PM

440-K FRP—Material Characteristics R-LANDMARK 4

Daily Program

All schedule and location changes will be posted daily in **C-100-105** and **R-Lobby**.

✓ = Separate fee required * = Themed Session

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TG = Task Group

Sunday, November 2, 2008 (cont.)

11:30 AM - 1:00 PM

HTC	Hot Topic	R-BENTON
221	Aggregates	R-MAJESTIC B
335	Composite Hybrid	R-PORTLAND
350-SC	Env Str—Steering Comm	R-LENNOX

12:00 PM - 2:00 PM

✓	International Lunch	R-CRYSTAL
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1:00 PM - 2:30 PM

440-D	FRP—Research and Dev.	R-LANDMARK 4
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1:00 PM - 3:00 PM

IC-Mem	International—Membership	R-PARKVIEW
345	Bridge Construction	R-LUCAS
445-C	Shear and Torsn—Punching Shear	R-FORSYTH

1:00 PM - 4:00 PM

BAC-SD	Board Advisory Committee on Sustainable Dev.	C-222
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1:00 PM - 5:00 PM

305	Hot Weather	R-MAJESTIC B
336	Footings	R-SHAW
350-E	Env Str—Precast/Prestressed	R-RATHSKELLER
355	Anchorage	R-LANDMARK 1
	Student Concrete Cylinder Competition	C-100

1:30 PM - 3:00 PM

	ASCC Foundation Meeting	R-WESTMORELAND
ISO/TC 71	ISO/TC 71 Advisory	R-FLORA
341-C	Equake Res Brdgs—Retrofit	C-232
506-B	Shotcreting—Fiber Reinforced	R-LAFAYETTE

1:30 PM - 3:30 PM

370	Dynamic and Vibratory Effects	R-BENTON
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1:30 PM - 5:00 PM

562	Eval, Repair, and Rehab	R-LANDMARK 2
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2:00 PM - 3:00 PM

548-TG	Polymers—TG	R-KINGSBURY
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Daily Program

All schedule and location changes will be posted daily in **C-100-105** and **R-Lobby**.

✓ = Separate fee required * = Themed Session

R = Renaissance Grand

C = America's Center

TG = Task Group

Sunday, November 2, 2008 (cont.)

2:00 PM - 3:30 PM

209-A	Creep & Shrinkage—Statistics Procedures	C-91
236-B	Material Science—Permeation Methods	R-LENNOX

2:00 PM - 4:00 PM

215	Fatigue	R-MAJESTIC A
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2:00 PM - 5:00 PM

RCC	Responsibility	R-WESTMINSTER
309	Consolidation	R-HAWTHORNE
315	Detailing	R-PORTLAND
352	Joints	R-MAJESTIC G

2:00 PM - 5:00 PM Sessions

Designing and Constructing Durable Long-Life Concrete Pavements, Part 1	C-240
Concrete Bridge Design for Extreme Events	C-230
IPS-1 Update Summary and Applications for RC Buildings	C-225
Emerging Technologies in Civil Infrastructure Applications	C-224
Uplifting Concrete in Churches, Museums, and Civic Architecture	C-223

2:30 PM - 5:00 PM

224	Cracking	R-AUBERT
440-F	FRP—Repair Strengthening	R-LANDMARK 4

3:00 PM - 5:00 PM

E 601	Seminar Oversight Committee	R-LUCAS
236-D	Material Science—Nanotechnology of Concrete M1	R-WESTMORELAND
341	Earthquake-Resistant Bridges	C-232
423/445	Adhoc Grp on Shear in Prestress Conc	R-LAFAYETTE

3:30 PM - 4:00 PM

“Monument to the Dream” building of the Arch film	C-100-105
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Daily Program

All schedule and location changes will be posted daily in **C-100-105** and **R-Lobby**.

✓ = Separate fee required * = Themed Session

R = Renaissance Grand

C = America's Center

TG = Task Group

Sunday, November 2, 2008 (cont.)

3:30 PM - 5:00 PM

IC-Cert	International—Certification	R-PARKVIEW
121	Quality Assurance	R-LANDMARK 3
201-A	Durability—Sulfate Attack	R-BENTON
439-A	Steel Reinf—Wire	R-KINGSBURY
445-E	Shear and Torsn—SOA Torsion	R-FORSYTH

4:00 PM - 5:00 PM

CLGE	Collegiate Concrete Council	R-LANDMARK 6
123	Research and Current Developments	R-MAJESTIC A

5:15 PM - 6:30 PM

Opening Session and Hardy Cross Lecture Series C-221

6:30 PM - 7:30 PM

Opening Reception C-100-105

6:30 PM - 9:30 PM

ITG-7	Specification for Tolerances for Precast Concrete	R-LAFAYETTE
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7:30 PM - 10:00 PM

Hot Topic Session: Renewal of Bridge Infrastructure: C-240
Inspection Maintenance and Security Upgrades

Monday, November 3, 2008

6:30 AM - 8:15 AM

Workshop for Technical Committee Chairs C-221

7:00 AM - 8:30 AM

IC-Conf	International—Conferences	R-LENNOX
	Speaker Skills Training Breakfast:	C-232
	Teaching Methods and Educational Materials	

8:00 AM - 9:30 AM

C 650	Tilt-Up Constructor Cert	C-91
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8:00 AM - 2:30 PM

✓ Gateway to St. Louis

8:15 AM - 10:15 AM

440-G	FRP—Student	C-242
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Daily Program

All schedule and location changes will be posted daily in **C-100-105** and **R-Lobby**.

✓ = Separate fee required * = Themed Session

R = Renaissance Grand

C = America's Center

TG = Task Group

Monday, November 3, 2008 (cont.)

8:30 AM - 10:00 AM

E 802	Teaching Methods and Educational Materials	R-MAJESTIC H
118	Computers	R-LUCAS
124	Aesthetics	R-LENNOX
439	Steel Reinforcement	R-HAWTHORNE
506-C	Shotcreting—Guide	R-LACLEDE
523-A	Cellular—Autoclaved Aerated	R-MAJESTIC B
524	Plastering	R-KINGSBURY
544-B	FRC—Education	C-241

8:30 AM - 10:30 AM

PUBC	Publications	R-PORTLAND
238	Workability of Fresh Concrete	R-LANDMARK 4

8:30 AM - 11:30 AM

C 610	Field Technician Cert	C-222
209	Creep and Shrinkage	R-AUBERT
311	Inspection	C-231
318-R	Code Reorganization M1	R-LANDMARK 5
350-G&K	Env Str—Tightness Testing/Haz Mat	R-SHAW
351-A	Equip Fdns—Static Fdns	R-LANDMARK 6
437	Strength Evaluation	R-MAJESTIC F
543	Piles	R-LANDMARK 3
546	Repair	R-LANDMARK 1
548-A	Polymers—Overlays	R-RATHSKELLER

8:30 AM - 12:00 PM

355-TG	Anchorage TG	R-MAJESTIC A
362-A	Parking Str—Standard	R-WESTMINSTER

8:30 AM - 12:30 PM

374	Seismic Design	R-LANDMARK 7
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8:30 AM - 1:00 PM

302	Floor Construction	C-227
350-B	Env Str—Durability	R-WESTMORELAND

8:30 AM - 6:30 PM

301	Specifications M3	C-232
350-D	Env Str—Structural	R-LANDMARK 2

Daily Program

All schedule and location changes will be posted daily in **C-100-105** and **R-Lobby**.

✓ = Separate fee required * = Themed Session

R = Renaissance Grand

C = America's Center

TG = Task Group

Monday, November 3, 2008 (cont.)

9:00 AM - 10:00 AM

343-A	Design	R-FLORA
343-B	Bridge Deck Design	R-FORSYTH

9:00 AM - 12:00 PM

✓ Frank Lloyd Wright House

9:00 AM - 12:00 PM Sessions

Research in Progress	C-223
Recent Advancements in Concrete Technology in Taiwan	C-224
ACI Student Fellowships and Young Member Initiatives	C-225
Session Honoring Professor David Darwin, Part 1	C-230
Designing and Constructing Durable Long-Life Concrete Pavements, Part 2	C-240

9:00 AM - 1:00 PM

365	Service Life	C-226
423	Prestressed	R-MAJESTIC G

9:00 AM - 2:00 PM

376-TG	RLG Containment Structures TG M1	R-MAJESTIC C
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10:00 AM - 11:30 AM

E 804	Educational Awards Nomination Committee	R-LUCAS
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10:00 AM - 12:00 PM

445-D	Shear and Torsion—Database	R-FORSYTH
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10:00 AM - 12:30 PM

506-E	Shotcreting—Specifications	R-LACLEDE
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10:00 AM - 1:00 PM

207	Mass Concrete	R-LENNOX
216	Fire Resistance	R-HAWTHORNE
232-A	Fly Ash—Use of Nat Pozzolans	R-FLORA
343	Bridge Design	R-MAJESTIC H
523	Cellular Concrete	R-MAJESTIC B

10:15 AM - 12:30 PM

440-I	FRP—Prestressed Concrete	C-242
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Daily Program

All schedule and location changes will be posted daily in **C-100-105** and **R-Lobby**.

✓ = Separate fee required * = Themed Session

R = Renaissance Grand

C = America's Center

TG = Task Group

Monday, November 3, 2008 (cont.)

11:30 AM - 1:00 PM

201-D	Durability—Oversight Committee	R-SHAW
304	Measuring/Mix/Trans/Placing	R-AUBERT
346	CIP Pipe	R-LUCAS
544-A	FRC—Production and Applications	C-222
548-C	Polymers—Str Design and Analysis	R-RATHSKELLER

11:30 AM - 2:00 PM

364-A	Rehabilitation—Evaluation	C-231
441	Columns	R-PORTLAND
447	Finite Element Analysis	R-LANDMARK 5
552	Cementitious Grouting	R-KINGSBURY

12:00 PM - 1:00 PM

	Media Lunch	R-MAJESTIC F
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12:00 PM - 2:00 PM

351-B	Equip Foundations—Equip Machinery	R-LANDMARK 6
444	Experimental Analysis	R-MAJESTIC A
	✓ Student Lunch	C-221

1:00 PM - 2:30 PM

C 631	Conc Transportation Const Insp	R-MAJESTIC F
228-TG	Nondestructive Testing TG	R-FLORA
548-B	Polymers—Sulfur Concrete	R-RATHSKELLER

1:00 PM - 3:00 PM

C 660	Shotcrete Nozzleman Cert	R-AUBERT
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1:00 PM - 4:00 PM

237	Self-Consolidating Concrete	R-MAJESTIC G
307	Chimneys	R-LANDMARK 1

1:00 PM - 5:00 PM

362	Parking Structures	R-MAJESTIC H
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1:30 PM - 4:30 PM

440-H	FRP—Reinforced Concrete	C-242
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2:00 PM - 3:00 PM

	Sonic Systems for Concrete Testing Demonstration	C-100
	Convention Session Moderator	R-LANDMARK 5
	Questions and Answer	

Daily Program

All schedule and location changes will be posted daily in **C-100-105** and **R-Lobby**.

✓ = Separate fee required * = Themed Session

R = Renaissance Grand

C = America's Center

TG = Task Group

Monday, November 3, 2008 (cont.)

2:00 PM - 3:30 PM

ACI 318/ ASCE7	ACI 318-ASCE 7 Coordination	R-LANDMARK 3
231	Early Age	R-LANDMARK 7
318-S	Spanish Translation	R-KINGSBURY
544-E	FRC—Mechanical Properties	C-222

2:00 PM - 4:00 PM

ITG-6	High-Strength Steel Reinforcement	R-PORTLAND
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2:00 PM - 5:00 PM

MKTC	Marketing	R-MAJESTIC C
232	Fly Ash and Natural Pozzolans	C-241
327	RCC Pavements	R-LUCAS
349-C	Nuclear Str—Anchorage	R-MAJESTIC A
351	Equipment Foundations	R-LANDMARK 6
364	Rehabilitation	C-231
365-A	Service Life—Std Model Development	C-226
375	Design for Wind Loads	R-LENNOX

2:00 PM - 5:00 PM Sessions

Session Honoring Professor David Darwin, Part 2	C-230
Use of Technology with Teaching	C-223
Evaluation of Existing Structures by Means of In-Situ-Load Testing and Structural Monitoring	C-224
Accelerated Bridge Design and Construction	C-225
Recent Advances in Precast Concrete Pavements	C-240

2:00 PM - 6:00 PM

369	Seismic Rehab	R-MAJESTIC B
445	Shear and Torsion	R-HAWTHORNE

2:00 PM - 6:30 PM

212	Chemical Admixtures	R-WESTMINSTER
360	Slabs-on-Ground	C-227

2:30 PM - 4:00 PM

533	Precast Panels	R-RATHSKELLER
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2:30 PM - 5:00 PM

CAC	Chapter Activities	R-MAJESTIC F
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Daily Program

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✓ = Separate fee required * = Themed Session

R = Renaissance Grand

C = America's Center

TG = Task Group

Monday, November 3, 2008 (cont.)

3:00 PM - 4:30 PM

C 601-C Masonry Testing Technician **R-WESTMORELAND**

3:00 PM - 5:00 PM

130 Sustainability of Concrete **R-LANDMARK 5**

506-F Shotcreting—Underground **R-LACLEDE**

3:30 PM - 5:00 PM

Guest Tea **R-CRYSTAL**

IC-Pub International—Pubs/Web site **R-SHAW**

122 Thermal Properties **R-FORSYTH**

214 Strength Tests **R-LANDMARK 7**

318-L International Liaison **R-KINGSBURY**

3:30 PM - 5:30 PM

446 Fracture Mechanics **R-LANDMARK 3**

3:30 PM - 6:00 PM

544-D FRC—Structural Uses **C-222**

3:30 PM - 6:30 PM

435 Deflection **R-FLORA**

4:00 PM - 5:30 PM

236 Material Science **R-MAJESTIC G**

4:30 PM - 6:00 PM

440-J FRP—Stay-in-Place Forms **C-242**

5:00 PM - 6:00 PM

Women in ACI Reception **R-AUBERT**

5:00 PM - 6:30 PM

E 702 Designing Concrete Structures **R-MAJESTIC F**

ITG-5 Precast Shear Walls for High Seismic **R-MAJESTIC C**

Applications

334 Shells **R-LENNOX**

350-J Env Str—Education **R-FORSYTH**

555 Recycled **R-MAJESTIC A**

5:00 PM - 7:00 PM

E 703 Concrete Construction Practices **R-MAJESTIC H**

Daily Program

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✓ = Separate fee required * = Themed Session

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C = America's Center

TG = Task Group

Monday, November 3, 2008 (cont.)

6:00 PM - 7:30 PM

TAC-Code TAC Codes Committee

R-WESTMORELAND

6:30 PM - 8:00 PM

University of Texas Alumni Reception

R-LANDMARK 1

7:00 PM - 8:30 PM

ACI/ASC ACI/ASCC Finisher Summit

R-LANDMARK 5

7:00 PM - 10:00 PM

✓Dinner in Honor of Luke M. Snell

R-CRYSTAL

7:30 PM - 10:00 PM

123 Forum: Should Sustainability be Policy Driven? **R-LANDMARK 2 & 3**

Tuesday, November 4, 2008

7:00 AM - 8:30 AM

TTTC TAC Technology Transfer

R-MAJESTIC H

7:00 AM - 12:00 PM

✓Holcim Plant Tour

8:00 AM - 9:30 AM

440-E FRP—Prof Education

R-LANDMARK 5

8:00 AM - 10:00 AM

230 Soil Cement

R-AUBERT

8:00 AM - 11:00 AM

332 B&C Residential Concrete—Sub B & C

R-LANDMARK 1

332 D&E Residential Concrete—Sub D & E

R-MAJESTIC B

8:00 AM - 12:00 PM

EAC Educational Activities M2

R-PORTLAND

8:30 AM - 10:00 AM

C 620 Laboratory Tech Cert

R-BENTON

225 Hydraulic Cements

R-LUCAS

325-A Pavements—Design

R-MAJESTIC A

348 Safety

R-FLORA

548 Polymers

R-HAWTHORNE

Daily Program

All schedule and location changes will be posted daily in **C-100-105** and **R-Lobby**.

✓ = Separate fee required * = Themed Session

R = Renaissance Grand

C = America's Center

TG = Task Group

Tuesday, November 4, 2008 (cont.)

8:30 AM - 10:30 AM

IJBRC International Joints and Bearings R-LANDMARK 6
Research Council

8:30 AM - 11:30 AM

201 Durability C-231 & 232
306 Cold Weather R-KINGSBURY
318 Building Code M1 R-LANDMARK 4
357 Offshore and Marine R-MAJESTIC F
506 Shotcreting C-242
522 Pervious Concrete R-WESTMORELAND

8:30 AM - 12:00 PM

117 Tolerances R-MAJESTIC C

8:30 AM - 12:30 PM

349-A&B Nuclear Structures—Design and Materials R-MAJESTIC H

8:30 AM - 3:30 PM

350-F Env Str—Seismic R-PARKVIEW

9:00 AM - 12:00 PM

IC International Committee C-222
TRRC TAC Repair and Rehab R-LANDMARK 2
376-TG RLG Containment Structures TG M2 R-MAJESTIC G

9:00 AM - 12:00 PM

✓ Frank Lloyd Wright House

9:00 AM - 12:00 PM Sessions

Industry Acceptance of SCC C-223
Innovative Bridge Decks C-224
Practical Use of Finite Element Analysis in the
Design of Concrete Structures, Part 1 C-225
Realistic Data for Realistic Expectations C-230
Advances in the Fire Design of Concrete Structures C-240
Slag Cement Concrete Developments C-241

9:00 AM - 1:00 PM

ITG-8 Performance Criteria for Concrete Materials R-LANDMARK 3

Daily Program

All schedule and location changes will be posted daily in **C-100-105** and **R-Lobby**.

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Tuesday, November 4, 2008 (cont.)

9:00 AM - 3:00 PM

✓Spirits of St. Louis

9:30 AM - 11:00 AM

✓Architectural Walking Tour

departs 911 Washington Avenue

9:30 AM - 11:30 AM

440-L FRP—Durability

R-LANDMARK 5

10:00 AM - 11:30 AM

C 630 Construction Inspector Cert

R-BENTON

325-C Pavements—Prestressed and Precast

R-MAJESTIC A

10:00 AM - 12:00 PM

211-A Proportioning—Editorial

R-FLORA

236-D Material Science—Nanotechnology of
Concrete M2

R-LANDMARK 7

503 Adhesives

R-HAWTHORNE

10:00 AM - 1:00 PM

371 Elevated Water Tanks with Concrete Pedestals

C-91

10:30 AM - 12:00 PM

544-F FRC—Durability

C-227

11:00 AM - 2:00 PM

332-F Residential Concrete—Slabs

R-MAJESTIC B

11:30 AM - 1:00 PM

CRC Concrete Research Council

R-MAJESTIC A

211-E Proportioning—Evaluation

R-LUCAS

213-TG Lightweight—Editorial TG

R-KINGSBURY

11:30 AM - 2:00 PM

515 Protective Systems

R-AUBERT

11:30 AM - 3:30 PM

350-A Env Str—General and Concrete

R-BENTON

Daily Program

All schedule and location changes will be posted daily in **C-100-105** and **R-Lobby**.

✓ = Separate fee required * = Themed Session

R = Renaissance Grand

C = America's Center

TG = Task Group

Tuesday, November 4, 2008 (cont.)

12:00 PM - 1:00 PM

223-D Shrinkage Compensating—Nonreinforced Concrete or Mortar C-222

12:00 PM - 2:00 PM

✓ Contractors' Day Lunch C-221

12:30 PM - 2:00 PM

C 640 Craftsman Cert R-WESTMORELAND

1:00 PM - 2:00 PM

223-C Shrinkage Compensating—Practitioner Guide C-222

1:00 PM - 3:30 PM

550 Precast Structures C-121

1:00 PM - 4:00 PM

440 Fiber Reinforced Polymer Reinforcement C-231 & 232

1:30 PM - 3:00 PM

120 History R-LENNOX

1:30 PM - 4:30 PM

213 Lightweight R-KINGSBURY

2:00 PM - 3:30 PM

234 Silica Fume C-227

325-D Proportioning for Pavements R-LANDMARK 3

544-C FRC—Testing C-120

2:00 PM - 5:00 PM

CPC Certification Programs C-226

222 Corrosion R-HAWTHORNE

223 Shrinkage Compensating C-222

229 Controlled Low-Strength R-LANDMARK 5

235 Electronic Data Exchange R-LUCAS

310 Decorative Concrete R-LANDMARK 7

332 Residential Concrete R-LANDMARK 4

349 Nuclear Structures C-122

563 Specs Repair of Struct Concrete in Buildings C-242

Daily Program

All schedule and location changes will be posted daily in **C-100-105** and **R-Lobby**.

✓ = Separate fee required * = Themed Session

R = Renaissance Grand

C = America's Center

TG = Task Group

Tuesday, November 4, 2008 (cont.)

2:00 PM - 5:00 PM Sessions

Recent Advances in Torsion Design of Structural Concrete	C-241
Open Paper Session	C-223
Contractors' Day Session: Concrete Construction Tolerances: Safety, Achievability and Clarity	C-224
Design and Construction of Elevated Concrete Pedestal Tanks	C-230
Practical Use of Finite Element Analysis in the Design of Concrete Structures, Part 2	C-225
Seismic Design and Detailing of Bridge Protection Systems	C-240

2:00 PM - 6:00 PM

233	Ground Slag	R-WESTMORELAND
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2:00 PM - 6:30 PM

318-A	General Concrete Constr	R-AUBERT
318-C	Serviceability/Safety	R-PORTLAND
318-H	Seismic Provision	R-LANDMARK 2
318-R	Code Reorganization M2	R-LANDMARK 1

2:30 PM - 4:30 PM

✓ Concrete Structures Bus Tour –	departs 911 Washington Avenue
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2:30 PM - 5:30 PM

TTCC	TAC Tolerances Coord. Comm.	R-FLORA
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3:00 PM - 5:00 PM

CC	Convention Committee M2	R-LANDMARK 6
372	Prestressed/Wire Wrapped	C-91

3:30 PM - 4:00 PM

"Monument to the Dream" building of the Arch film	C-100
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3:30 PM - 5:00 PM

363-A	High-Strength—State-of-the-Art Report	C-92
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3:30 PM - 6:00 PM

544	Fiber Reinforced Concrete	C-120
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Daily Program

All schedule and location changes will be posted daily in **C-100-105** and **R-Lobby**.

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TG = Task Group

Tuesday, November 4, 2008 (cont.)

3:30 PM - 6:30 PM

325 Pavements R-LANDMARK 3
350-L Env Str—Specification R-BENTON

4:00 PM - 5:00 PM

E 803 Faculty Network Coordinating C-227

4:30 PM - 6:30 PM

308/213 Guide on Internal Curing R-KINGSBURY

5:00 PM - 6:00 PM

Faculty Network Reception R-PARKVIEW

6:30 PM - 8:00 PM

Concrete Mixer R-MAJESTIC

Wednesday, November 5, 2008

7:00 AM - 8:30 AM

ACYM Advisory Committee for Young Members C-241
ACI/ASCE ACI/ASCE Coordination C-232

7:00 AM - 10:00 AM

TSC TAC Specifications C-231

8:00 AM - 10:30 AM

308-B Curing—Specifications C-220

8:30 AM - 9:30 PM

318-D,E&G 318 Subcommittees D, E & G C-228

8:30 AM - 11:30 AM

211 Proportioning C-242
303 Architectural CIP R-AUBERT
330-TG Parking Lots and Site Paving TG R-BENTON
363 High-Strength C-232
560 Design & Constr ICFs C-241

8:30 AM - 1:00 PM

318-B Reinforcement and Development C-221

Daily Program

All schedule and location changes will be posted daily in **C-100-105** and **R-Lobby**.

✓ = Separate fee required * = Themed Session

R = Renaissance Grand

C = America's Center

TG = Task Group

Wednesday, November 5, 2008 (cont.)

8:30 AM - 5:00 PM

359 Nuclear Reactors C-226

8:30 AM - 6:30 PM

350 Environmental Structures C-227

9:00 AM - 12:00 PM

ACIFdn ACI Foundation R-PORTLAND

9:00 AM - 12:00 PM Sessions

Use and Misuse of ACI Documents C-223

Adhesive Anchors: Their Importance in the
Construction of Concrete Structures C-224

People Who Made a Difference in Concrete C-225

*The Spirit of Structural Concrete in Performance-
Based Seismic Design of Bridges, Part 1 C-230

9:00 AM - 1:30 PM

✓ Rivertown Tour

9:00 AM - 5:00 PM

376-TG RLG Containment Structures TG M3 C-240

9:30 AM - 1:00 PM

318-D Flexure and Axial Loads C-229

318-E Shear and Torsion C-228

318-G Prestressed Precast C-222

10:00 AM - 12:30 PM

C 601-B Certified Quality Technical Mgr C-231

10:30 AM - 1:00 PM

308-A Curing—Guide C-220

11:30 AM - 1:00 PM

C 601-D Decorative Concrete Finisher C-242

1:00 PM - 4:00 PM

330 Parking Lots and Site Paving C-228

Daily Program

All schedule and location changes will be posted daily in **C-100-105** and **R-Lobby**.

✓ = Separate fee required * = Themed Session

R = Renaissance Grand

C = America's Center

TG = Task Group

Wednesday, November 5, 2008 (cont.)

2:00 PM - 5:00 PM

308 Curing C-231

2:00 PM - 5:00 PM Sessions

Early Age Test Methods for Performance Specifications C-224

Shotcrete Construction C-225

Advances in Fiber Reinforced Concrete— C-223

A Tribute to Gordon Batson

*The Spirit of Structural Concrete in Performance- C-230

Based Seismic Design of Bridges, Part 2

2:00 PM - 6:30 PM

318 Building Code M2 C-242

Thursday, November 6, 2008

8:00 AM - 5:00 PM

✓ACI/PCA 318-08 Building Code Seminar **R-LANDMARK 3**

9:00 AM - 5:00 PM

376-TG RLG Containment Structures TG M4 **R-WESTMINSTER**

10:00 AM - 5:00 PM

BOD Board of Direction **R-PORTLAND/BENTON**

Notes

Numerical Committee Meeting Schedule

Code	Committee	Day	Time	Room Name
ACI/ASC	ACI/ASCC Finisher Summit	Mon	7:00 PM-8:30 PM	R-LANDMARK 5
ACI 318/ASCE7	ACI 318/ASCE7 Coordination	Mon	2:00 PM-3:30 PM	R-LANDMARK 3
ACI/ASCE	ACI/ASCE Coordination	Wed	7:00 AM-8:30 AM	C-232
ACIFdn	ACI Foundation	Wed	9:00 AM-12:00 PM	R-PORTLAND
ACYM	Advisory Committee for Young Members	Wed	7:00 AM-8:30 AM	C-241
BAC-SD	Board Advisory Committee on Sustainable Dev.	Sun	1:00 PM-4:00 PM	C-222
BOD	Board of Direction	Thu	10:00 AM-5:00 PM	R-PORTLAND/BENTON
C 601-B	Certified Quality Technical Mgr	Wed	10:00 AM-12:30 PM	C-231
C 601-C	Masonry Testing Technician	Mon	3:00 PM-4:30 PM	R-WEST-MORELAND
C 601-D	Decorative Concrete Finisher	Wed	11:30 AM-1:00 PM	C-242
C 610	Field Technician Cert	Mon	8:30 AM-11:30 AM	C-222
C 620	Laboratory Tech Cert	Tue	8:30 AM-10:00 AM	R-BENTON
C 630	Construction Inspector Cert	Tue	10:00 AM-11:30 AM	R-BENTON
C 631	Conc Transportation Const Insp	Mon	1:00 PM-2:30 PM	R-MAJESTIC F
C 640	Craftsman Cert	Tue	12:30 PM-2:00 PM	R-WEST-MORELAND
C 650	Tilt-Up Constructor Cert	Mon	8:00 AM-9:30 AM	C-91
C 660	Shotcrete Nozzleman Cert	Mon	1:00 PM-3:00 PM	R-AUBERT
CAC	Chapter Activities	Mon	2:30 PM-5:00 PM	R-MAJESTIC F
CC	Convention Committee M2	Tue	3:00 PM-5:00 PM	R-LANDMARK 6
CLC	Construction Liaison	Sun	8:30 AM-11:30 AM	R-LANDMARK 7
CLGE	Collegiate Concrete Council	Sun	4:00 PM-5:00 PM	R-LANDMARK 6
CPC	Certification Programs	Tue	2:00 PM-5:00 PM	C-226

Numerical Committee Meeting Schedule

Code	Committee	Day	Time	Room Name
CRC	Concrete Research Council	Tue	11:30 AM-1:00 PM	R-MAJESTIC A
E 601	Seminar Oversight Committee	Sun	3:00 PM-5:00 PM	R-LUCAS
E 701	Materials for Concrete Construction	Sun	10:00 AM-11:30 AM	R-PORTLAND
E 702	Designing Concrete Structures	Mon	5:00 PM-6:30 PM	R-MAJESTIC F
E 703	Concrete Construction Practices	Mon	5:00 PM-7:00 PM	R-MAJESTIC H
E 706	Repair Application Procedures	Sun	8:00 AM-10:00 AM	R-PORTLAND
E 801	Student Activities	Sun	8:00 AM-10:00 AM	R-WEST-MORELAND
E 802	Teaching Methods and Educational Materials	Mon	8:30 AM-10:00 AM	R-MAJESTIC H
E 803	Faculty Network Coordinating	Tue	4:00 PM-5:00 PM	C-227
E 804	Educational Awards Nomination Committee	Mon	10:00 AM-11:30 AM	R-LUCAS
EAC	Educational Activities M1	Sat	1:00 PM-5:00 PM	R-MAJESTIC B
EAC	Educational Activities M2	Tue	8:00 AM-12:00 PM	R-PORTLAND
HTC	Hot Topic	Sun	11:30 AM-1:00 PM	R-BENTON
IC	International Committee	Tue	9:00 AM-12:00 PM	C-222
IC-Cert	International—Certification	Sun	3:30 PM-5:00 PM	R-PARKVIEW
IC-Conf	International—Conferences	Mon	7:00 AM-8:30 AM	R-LENNOX
IC-Mem	International—Membership	Sun	1:00 PM-3:00 PM	R-PARKVIEW
IC-Part	International—Partnerships Committee	Sun	10:00 AM-11:30 AM	R-BENTON
IC-Pub	International—Pubs/ Web site	Mon	3:30 PM-5:00 PM	R-SHAW
IJBRC	Int'l Joints and Bearings Research	Tue	8:30 AM-10:30 AM	R-LANDMARK 6
ISO/TC 71	ISO/TC 71 Advisory	Sun	1:30 PM-3:00 PM	R-FLORA
ITG-5	Precast Shear Walls for High Seismic Applications	Mon	5:00 PM-6:30 PM	R-MAJESTIC C

Numerical Committee Meeting Schedule

Code	Committee	Day	Time	Room Name
ITG-6	High-Strength Steel Reinforcement	Mon	2:00 PM-4:00 PM	R-PORTLAND
ITG-7	Spec for Tolerances for Precast Conc	Sun	6:30 PM-9:30 PM	R-LAFAYETTE
ITG-8	Performance Criteria for Concrete Materials	Tue	9:00 AM-1:00 PM	R-LANDMARK 3
MEMC	Membership	Sun	8:30 AM-11:30 AM	R-WEST-MINSTER
MKTC	Marketing	Mon	2:00 PM-5:00 PM	R-MAJESTIC C
PUBC	Publications	Mon	8:30 AM-10:30 AM	R-PORTLAND
RCC	Responsibility	Sun	2:00 PM-5:00 PM	R-WESTMINSTER
SCO	Scholarship Council	Sun	10:00 AM-1:00 PM	R-WEST-MORELAND
TAC	Technical Activities M1	Fri	6:30 PM-9:00 PM	R-LANDMARK 5
TAC	Technical Activities M2	Sat	8:00 AM-6:00 PM	R-LANDMARK 5
TAC	Technical Activities M3	Sun	8:00 AM-2:00 PM	R-MAJESTIC A
TAC-Code	TAC Codes Committee	Mon	6:00 PM-7:30 PM	R-WEST-MORELAND
TRRC	TAC Repair and Rehab	Tue	9:00 AM-12:00 PM	R-LANDMARK 2
TSC	TAC Specifications	Wed	7:00 AM-10:00 AM	C-231
TTCC	TAC Tolerances Coord. Comm.	Tue	2:30 PM-5:30 PM	R-FLORA
TTTC	TAC Technology Transfer	Tue	7:00 AM-8:30 AM	R-MAJESTIC H
117	Tolerances	Tue	8:30 AM-12:00 PM	R-MAJESTIC C
118	Computers	Mon	8:30 AM-10:00 AM	R-LUCAS
120	History	Tue	1:30 PM-3:00 PM	R-LENNOX
121	Quality Assurance	Sun	3:30 PM-5:00 PM	R-LANDMARK 3
122	Thermal Properties	Mon	3:30 PM-5:00 PM	R-FORSYTH
123	Research and Current Developments	Sun	4:00 PM-5:00 PM	R-MAJESTIC A
124	Aesthetics	Mon	8:30 AM-10:00 AM	R-LENNOX

Numerical Committee Meeting Schedule

Code	Committee	Day	Time	Room Name
130	Sustainability of Concrete	Mon	3:00 PM-5:00 PM	R-LANDMARK 5
201	Durability	Tue	8:30 AM-11:30 AM	C-231 & 232
201-A	Durability—Sulfate Attack	Sun	3:30 PM-5:00 PM	R-BENTON
201-C	Durability—Condition Report	Sun	9:30 AM-11:30 AM	R-MAJESTIC B
201-D	Durability—Oversight Committee	Mon	11:30 AM-1:00 PM	R-SHAW
207	Mass Concrete	Mon	10:00 AM-1:00 PM	R-LENNOX
209	Creep and Shrinkage	Mon	8:30 AM-11:30 AM	R-AUBERT
209-A	Creep & Shrinkage—Statistic Procedures	Sun	2:00 PM-3:30 PM	C-91
211	Proportioning	Wed	8:30 AM-11:30 AM	C-242
211-A	Proportioning—Editorial	Tue	10:00 AM-12:00 PM	R-FLORA
211-E	Proportioning—Evaluation	Tue	11:30 AM-1:00 PM	R-LUCAS
212	Chemical Admixtures	Mon	2:00 PM-6:30 PM	R-WESTMINSTER
213	Lightweight	Tue	1:30 PM-4:30 PM	R-KINGSBURY
213-TG	Lightweight—Editorial TG	Tue	11:30 AM-1:00 PM	R-KINGSBURY
214	Strength Tests	Mon	3:30 PM-5:00 PM	R-LANDMARK 7
215	Fatigue	Sun	2:00 PM-4:00 PM	R-MAJESTIC A
216	Fire Resistance	Mon	10:00 AM-1:00 PM	R-HAWTHORNE
221	Aggregates	Sun	11:30 AM-1:00 PM	R-MAJESTIC B
222	Corrosion	Tue	2:00 PM-5:00 PM	R-HAWTHORNE
223	Shrinkage Compensating	Tue	2:00 PM-5:00 PM	C-222
223-C	Shr Compensating—Practitioner Guide	Tue	1:00 PM-2:00 PM	C-222
223-D	Shr Compensating—Nonreinforced Concrete or Mortar	Tue	12:00 PM-1:00 PM	C-222

Numerical Committee Meeting Schedule

Code	Committee	Day	Time	Room Name
224	Cracking	Sun	2:30 PM-5:00 PM	R-AUBERT
225	Hydraulic Cements	Tue	8:30 AM-10:00 AM	R-LUCAS
228	Nondestructive Testing	Sun	10:00 AM-1:00 PM	R-MAJESTIC G
228-TG	Nondestructive Testing TG	Mon	1:00 PM-2:30 PM	R-FLORA
229	Controlled Low Strength	Tue	2:00 PM-5:00 PM	R-LANDMARK 5
230	Soil Cement	Tue	8:00 AM-10:00 AM	R-AUBERT
231	Early Age	Mon	2:00 PM-3:30 PM	R-LANDMARK 7
232	Fly Ash and Natural Pozzolans	Mon	2:00 PM-5:00 PM	C-241
232-A	Fly Ash—Use of Nat Pozzolans	Mon	10:00 AM-1:00 PM	R-FLORA
233	Ground Slag	Tue	2:00 PM-6:00 PM	R-WEST-MORELAND
234	Silica Fume	Tue	2:00 PM-3:30 PM	C-227
235	Electronic Data Exchange	Tue	2:00 PM-5:00 PM	R-LUCAS
236	Material Science	Mon	4:00 PM-5:30 PM	R-MAJESTIC G
236-B	Material Science—Permeation Methods	Sun	2:00 PM-3:30 PM	R-LENNOX
236-D	Material Science—Nanotechnology of Concrete M1	Sun	3:00 PM-5:00 PM	R-WEST-MORELAND
236-D	Material Science—Nanotechnology of Concrete M2	Tue	10:00 AM-12:00 PM	R-LANDMARK 7
237	Self-Consolidating Concrete	Mon	1:00 PM-4:00 PM	R-MAJESTIC G
238	Workability of Fresh Concrete	Mon	8:30 AM-10:30 AM	R-LANDMARK 4
301	Specifications M1	Sat	12:00 PM-6:00 PM	R-MAJESTIC F & G
301	Specifications M2	Sun	8:30 AM-5:00 PM	C-241
301	Specifications M3	Mon	8:30 AM-6:30 PM	C-232
302	Floor Construction	Mon	8:30 AM-1:00 PM	C-227

Numerical Committee Meeting Schedule

Code	Committee	Day	Time	Room Name
303	Architectural CIP	Wed	8:30 AM-11:30 AM	R-AUBERT
304	Measuring/Mix/Trans/ Placing	Mon	11:30 AM-1:00 PM	R-AUBERT
305	Hot Weather	Sun	1:00 PM-5:00 PM	R-MAJESTIC B
306	Cold Weather	Tue	8:30 AM-11:30 AM	R-KINGSBURY
307	Chimneys	Mon	1:00 PM-4:00 PM	R-LANDMARK 1
308	Curing	Wed	2:00 PM-5:00 PM	C-231
308-A	Curing—Guide	Wed	10:30 AM-1:00 PM	C-220
308-B	Curing—Specifications	Wed	8:00 AM-10:30 AM	C-220
308/ 213	Guide on Internal Curing	Tue	4:30 PM-6:30 PM	R-KINGSBURY
309	Consolidation	Sun	2:00 PM-5:00 PM	R-HAWTHORNE
310	Decorative Concrete	Tue	2:00 PM-5:00 PM	R-LANDMARK 7
311	Inspection	Mon	8:30 AM-11:30 AM	C-231
314	Simplified Design of Buildings	Sun	8:30 AM-12:30 PM	R-LANDMARK 1
315	Detailing	Sun	2:00 PM-5:00 PM	R-PORTLAND
315-B	Detailing— Constructibility	Sun	8:30 AM-11:30 AM	R-LANDMARK 2
318	Building Code M1	Tue	8:30 AM-11:30 AM	R-LANDMARK 4
318	Building Code M2	Wed	2:00 PM-6:30 PM	C-242
318-A	General Concrete Constr	Tue	2:00 PM-6:30 PM	R-AUBERT
318-B	Reinforcement and Development	Wed	8:30 AM-1:00 PM	C-221
318-C	Serviceability/Safety	Tue	2:00 PM-6:30 PM	R-PORTLAND
318-D E & G	318 Subcommittees D, E & G	Wed	8:30 AM-9:30 AM	C-228
318-D	Flexure and Axial Loads	Wed	9:30 AM-1:00 PM	C-229
318-E	Shear and Torsion	Wed	9:30 AM-1:00 PM	C-228

Numerical Committee Meeting Schedule

Code	Committee	Day	Time	Room Name
318-G	Prestressed Precast	Wed	9:30 AM-1:00 PM	C-222
318-H	Seismic Provisions	Tue	2:00 PM-6:30 PM	R-LANDMARK 2
318-L	International Liaison	Mon	3:30 PM-5:00 PM	R-KINGSBURY
318-R	Code Reorganization M1	Mon	8:30 AM-11:30 AM	R-LANDMARK 5
318-R	Code Reorganization M2	Tue	2:00 PM-6:30 PM	R-LANDMARK 1
318-S	Spanish Translation	Mon	2:00 PM-3:30 PM	R-KINGSBURY
325	Pavements	Tue	3:30 PM-6:30 PM	R-LANDMARK 3
325-A	Pavements—Design	Tue	8:30 AM-10:00 AM	R-MAJESTIC A
325-C	Pavements—Prestressed and Precast	Tue	10:00 AM-11:30 AM	R-MAJESTIC A
325-D	Proportioning for Pavements	Tue	2:00 PM-3:30 PM	R-LANDMARK 3
327	RCC Pavements	Mon	2:00 PM-5:00 PM	R-LUCAS
330	Parking Lots and Site Paving	Wed	1:00 PM-4:00 PM	C-228
330-TG	Parking Lots and Site Paving TG	Wed	8:30 AM-11:30 AM	R-BENTON
332	Residential Concrete	Tue	2:00 PM-5:00 PM	R-LANDMARK 4
332 B&C	Residential Concrete—Sub B & C	Tue	8:00 AM-11:00 AM	R-LANDMARK 1
332 D&E	Residential Concrete—Sub D & E	Tue	8:00 AM-11:00 AM	R-MAJESTIC B
332-F	Residential Concrete—Slabs	Tue	11:00 AM-2:00 PM	R-MAJESTIC B
334	Shells	Mon	5:00 PM-6:30 PM	R-LENNOX
335	Composite Hybrid	Sun	11:30 AM-1:00 PM	R-PORTLAND
336	Footings	Sun	1:00 PM-5:00 PM	R-SHAW
341	Earthquake-Resistant Bridges	Sun	3:00 PM-5:00 PM	C-232
341-A	Equake Res Brdgs—Columns	Sun	9:30 AM-11:00 AM	C-232
341-B	Equake Res Brdgs—Pier Walls	Sun	11:00 AM-12:30 PM	C-232

Numerical Committee Meeting Schedule

Code	Committee	Day	Time	Room Name
341-C	Equake Res Brgds—Retrofit	Sun	1:30 PM-3:00 PM	C-232
341-D	Earthquake Res Brgds—Perf Based Seismic Design	Sun	8:00 AM-9:30 AM	C-232
342	Bridge Evaluation	Sun	8:30 AM-10:00 AM	R-KINGSBURY
343	Bridge Design	Mon	10:00 AM-1:00 PM	R-MAJESTIC H
343-A	Design	Mon	9:00 AM-10:00 AM	R-FLORA
343-B	Bridge Deck Design	Mon	9:00 AM-10:00 AM	R-FORSYTH
345	Bridge Construction	Sun	1:00 PM-3:00 PM	R-LUCAS
346	CIP Pipe	Mon	11:30 AM-1:00 PM	R-LUCAS
347	Formwork	Sun	8:30 AM-12:30 PM	R-RATHSKELLER
347-A	Formwork—Specification	Sat	7:30 PM-10:00 PM	R-MAJESTIC C
348	Safety	Tue	8:30 AM-10:00 AM	R-FLORA
349	Nuclear Structures	Tue	2:00 PM-5:00 PM	C-122
349-A&B	Nuclear Structures—Design and Materials	Tue	8:30 AM-12:30 PM	R-MAJESTIC H
349-C	Nuclear Str—Anchorage	Mon	2:00 PM-5:00 PM	R-MAJESTIC A
350	Environmental Structures	Wed	8:30 AM-6:30 PM	C-227
350-A	Env Str—General and Concrete	Tue	11:30 AM-3:30 PM	R-BENTON
350-B	Env Str—Durability	Mon	8:30 AM-1:00 PM	R-WEST-MORELAND
350-C	Env Str—Reinf and Devel	Sun	10:00 AM-11:30 AM	R-LENNOX
350-D	Env Str—Structural	Mon	8:30 AM-6:30 PM	R-LANDMARK 2
350-E	Env Str—Precast/Prestressed	Sun	1:00 PM-5:00 PM	R-RATHSKELLER
350-F	Env Str—Seismic	Tue	8:30 AM-3:30 PM	R-PARKVIEW
350-G&K	Env Str—Tightness Testing/Haz Mat	Mon	8:30 AM-11:30 AM	R-SHAW

Numerical Committee Meeting Schedule

Code	Committee	Day	Time	Room Name
350-J	Env Str—Education	Mon	5:00 PM-6:30 PM	R-FORSYTH
350-L	Env Str—Specification	Tue	3:30 PM-6:30 PM	R-BENTON
350-SC	Env Str—Steering Comm	Sun	11:30 AM-1:00 PM	R-LENNOX
351	Equipment Foundations	Mon	2:00 PM-5:00 PM	R-LANDMARK 6
351-A	Equip Fdns—Static Fdns	Mon	8:30 AM-11:30 AM	R-LANDMARK 6
351-B	Equip Fdns—Equip Machinery	Mon	12:00 PM-2:00 PM	R-LANDMARK 6
352	Joints	Sun	2:00 PM-5:00 PM	R-MAJESTIC G
355	Anchorage	Sun	1:00 PM-5:00 PM	R-LANDMARK 1
355-TG	Anchorage TG	Mon	8:30 AM-12:00 PM	R-MAJESTIC A
357	Offshore and Marine	Tue	8:30 AM-11:30 AM	R-MAJESTIC F
359	Nuclear Reactors	Wed	8:30 AM-5:00 PM	C-226
360	Slabs on Ground	Mon	2:00 PM-6:30 PM	C-227
362	Parking Structures	Mon	1:00 PM-5:00 PM	R-MAJESTIC H
362-A	Parking Str—Standard	Mon	8:30 AM-12:00 PM	R-WESTMINSTER
363	High-Strength	Wed	8:30 AM-11:30 AM	C-232
363-A	High-Strength—State-of-the-Art Report	Tue	3:30 PM-5:00 PM	C-92
364	Rehabilitation	Mon	2:00 PM-5:00 PM	C-231
364-A	Rehabilitation—Evaluation	Mon	11:30 AM-2:00 PM	C-231
365	Service Life	Mon	9:00 AM-1:00 PM	C-226
365-A	Service Life—Std Model Development	Mon	2:00 PM-5:00 PM	C-226
369	Seismic Rehab	Mon	2:00 PM-6:00 PM	R-MAJESTIC B
370	Dynamic and Vibratory Effects	Sun	1:30 PM-3:30 PM	R-BENTON
371	Elevated Tanks with Concrete Pedestals	Tue	10:00 AM-1:00 PM	C-91

Numerical Committee Meeting Schedule

Code	Committee	Day	Time	Room Name
372	Prestressed/Wire Wrapped	Tue	3:00 PM-5:00 PM	C-91
373	Prestressed/Tendons	Sun	8:30 AM-10:00 AM	R-BENTON
374	Seismic Design	Mon	8:30 AM-12:30 PM	R-LANDMARK 7
375	Design for Wind Loads	Mon	2:00 PM-5:00 PM	R-LENNOX
376	RLG Containment Structures M1	Sat	1:00 PM-5:00 PM	R-MAJESTIC A
376	RLG Containment Structures M2	Sun	9:00 AM-5:00 PM	R-LANDMARK 5
376-TG	RLG Containment Structures TG M1	Mon	9:00 AM-2:00 PM	R-MAJESTIC C
376-TG	RLG Containment Structures TG M2	Tue	9:00 AM-12:00 PM	R-MAJESTIC G
376-TG	RLG Containment Structures TG M3	Wed	9:00 AM-5:00 PM	C-240
376-TG	RLG Containment Structures TG M4	Thu	9:00 AM-5:00 PM	R-WESTMINSTER
408	Development and Splicing	Sun	8:30 AM-11:30 AM	R-LANDMARK 3
421	Reinforced Slabs	Sun	10:00 AM-1:00 PM	R-LANDMARK 6
423	Prestressed	Mon	9:00 AM-1:00 PM	R-MAJESTIC G
423/ 445	Adhoc Grp on Shear in Prestress Conc	Sun	3:00 PM-5:00 PM	R-LAFAYETTE
435	Deflection	Mon	3:30 PM-6:30 PM	R-FLORA
437	Strength Evaluation	Mon	8:30 AM-11:30 AM	R-MAJESTIC F
439	Steel Reinforcement	Mon	8:30 AM-10:00 AM	R-HAWTHORNE
439-A	Steel Reinf—Wire	Sun	3:30 PM-5:00 PM	R-KINGSBURY
440	Fiber Reinforced Polymer Reinforcement	Tue	1:00 PM-4:00 PM	C-231 & 232
440-D	FRP—Research and Dev.	Sun	1:00 PM-2:30 PM	R-LANDMARK 4
440-E	FRP—Prof Education	Tue	8:00 AM-9:30 AM	R-LANDMARK 5
440-F	FRP—Repair Strengthening	Sun	2:30 PM-5:00 PM	R-LANDMARK 4
440-G	FRP—Student	Mon	8:15 AM-10:15 AM	C-242

Numerical Committee Meeting Schedule

Code	Committee	Day	Time	Room Name
440-H	FRP—Reinforced Concrete	Mon	1:30 PM-4:30 PM	C-242
440-I	FRP—Prestressed Concrete	Mon	10:15 AM-12:30 PM	C-242
440-J	FRP—Stay-in-Place Forms	Mon	4:30 PM-6:00 PM	C-242
440-K	FRP—Material Characteristics	Sun	11:00 AM-1:00 PM	R-LANDMARK 4
440-L	FRP—Durability	Tue	9:30 AM-11:30 AM	R-LANDMARK 5
440-M	FRP—Repair of Masonry Str	Sun	8:00 AM-11:00 AM	R-LANDMARK 4
441	Columns	Mon	11:30 AM-2:00 PM	R-PORTLAND
444	Experimental Analysis	Mon	12:00 PM-2:00 PM	R-MAJESTIC A
445	Shear and Torsion	Mon	2:00 PM-6:00 PM	R-HAWTHORNE
445-A	Shear and Torsion—Strut & Tie	Sun	10:30 AM-1:30 PM	R-KINGSBURY
445-B	Shear and Torsion—Seismic Shear	Sun	8:00 AM-11:00 AM	R-FORSYTH
445-C	Shear and Torsion—Punching Shear	Sun	1:00 PM-3:00 PM	R-FORSYTH
445-D	Shear and Torsion—Database	Mon	10:00 AM-12:00 PM	R-FORSYTH
445-E	Shear and Torsion—SOA Torsion	Sun	3:30 PM-5:00 PM	R-FORSYTH
446	Fracture Mechanics	Mon	3:30 PM-5:30 PM	R-LANDMARK 3
447	Finite Element Analysis	Mon	11:30 AM-2:00 PM	R-LANDMARK 5
503	Adhesives	Tue	10:00 AM-12:00 PM	R-HAWTHORNE
506	Shotcreting	Tue	8:30 AM-11:30 AM	C-242
506-A	Shotcreting—Evaluation	Sun	9:30 AM-11:00 AM	R-LAFAYETTE
506-B	Shotcreting—Fiber Reinforced	Sun	1:30 PM-3:00 PM	R-LAFAYETTE
506-C	Shotcreting—Guide	Mon	8:30 AM-10:00 AM	R-LACLEDE
506-E	Shotcreting—Specifications	Mon	10:00 AM-12:30 PM	R-LACLEDE
506-F	Shotcreting—Underground	Mon	3:00 PM-5:00 PM	R-LACLEDE

Numerical Committee Meeting Schedule

Code	Committee	Day	Time	Room Name
506-G	Shotcreting—Qualifications	Sun	11:00 AM-12:30 PM	R-LAFAYETTE
515	Protective Systems	Tue	11:30 AM-2:00 PM	R-AUBERT
522	Pervious Concrete	Tue	8:30 AM-11:30 AM	R-WEST-MORELAND
523	Cellular Concrete	Mon	10:00 AM-1:00 PM	R-MAJESTIC B
523-A	Cellular—Autoclaved Aerated	Mon	8:30 AM-10:00 AM	R-MAJESTIC B
524	Plastering	Mon	8:30 AM-10:00 AM	R-KINGSBURY
533	Precast Panels	Mon	2:30 PM-4:00 PM	R-RATHSKELLER
543	Piles	Mon	8:30 AM-11:30 AM	R-LANDMARK 3
544	Fiber Reinforced Concrete	Tue	3:30 PM-6:00 PM	C-120
544-A	FRC—Production and Applications	Mon	11:30 AM-1:00 PM	C-222
544-B	FRC—Education	Mon	8:30 AM-10:00 AM	C-241
544-C	FRC—Testing	Tue	2:00 PM-3:30 PM	C-120
544-D	FRC—Structural Uses	Mon	3:30 PM-6:00 PM	C-222
544-E	FRC—Mechanical Properties	Mon	2:00 PM-3:30 PM	C-222
544-F	FRC—Durability	Tue	10:30 AM-12:00 PM	C-227
546	Repair	Mon	8:30 AM-11:30 AM	R-LANDMARK 1
546-A	Repair—Underwater	Sun	8:30 AM-9:30 AM	R-PARKVIEW
546-B	Repair—Material Selection Guide	Sun	9:30 AM-10:30 AM	R-PARKVIEW
546-C	Repair—Guide	Sun	10:30 AM-11:30 AM	R-PARKVIEW
548	Polymers	Tue	8:30 AM-10:00 AM	R-HAWTHORNE
548-A	Polymers—Overlays	Mon	8:30 AM-11:30 AM	R-RATHSKELLER
548-B	Polymers—Sulfur Concrete	Mon	1:00 PM-2:30 PM	R-RATHSKELLER
548-C	Polymers—Str Design and Analysis	Mon	11:30 AM-1:00 PM	R-RATHSKELLER

Numerical Committee Meeting Schedule

Code	Committee	Day	Time	Room Name
548-TG	Polymers—TG	Sun	2:00 PM-3:00 PM	R-KINGSBURY
549	Thin Reinforced	Sun	10:30 AM-2:00 PM	C-231
549-A	Thin Reinforced—Premix GFRC	Sun	8:30 AM-10:30 AM	C-231
550	Precast Structures	Tue	1:00 PM-3:30 PM	C-121
551	Tilt-Up	Sun	8:00 AM-11:00 AM	R-AUBERT
552	Cementitious Grouting	Mon	11:30 AM-2:00 PM	R-KINGSBURY
555	Recycled	Mon	5:00 PM-6:30 PM	R-MAJESTIC A
560	Design & Constr ICFs	Wed	8:30 AM-11:30 AM	C-241
562	Eval, Repair, and Rehab	Sun	1:30 PM-5:00 PM	R-LANDMARK 2
562-A	Eval, Repair and Rehab—Life Safety	Sun	9:00 AM-12:00 PM	C-91
562-B	Eval, Repair, and Rehab—Loads	Sun	9:00 AM-12:00 PM	C-92
562-C	Eval, Repair, and Rehab—Structural Analysis	Sun	9:00 AM-12:00 PM	C-93
562-Co	Eval, Repair, and Rehab—Coordination Meeting	Sun	8:00 AM-9:00 AM	C-222
562-D	Eval, Repair, and Rehab—Structural Repair Design	Sun	9:00 AM-12:00 PM	C-94
562-E	Eval, Repair, and Rehab—Durability Quality Assurance	Sun	9:00 AM-12:00 PM	C-95
562-F	Eval, Repair, and Rehab—General	Sun	9:00 AM-12:00 PM	C-222
563	Specs for Repair of Struct Conc in Bldgs	Tue	2:00 PM-5:00 PM	C-242

Notes

Saturday, November 1, 2008

1:00 PM - 6:00 PM

Sustainable Development Workshop on Concrete, Green Building, and ISO Standards

R-MAJESTIC H

Sponsored by the Board Advisory Committee on Sustainable Development

Session Co-Moderators: Koji Sakai
Head Materials Section
Kagawa University
Takamatsu, Kagawa, Japan

Douglas J. Sordyl
Managing Director, Marketing, Sales &
Industry Relations
American Concrete Institute
Farmington Hills, MI

This workshop will focus on environmental management for concrete and concrete structures, with specific focus on the new Standard under development by ISO/TC71/SC8. Discussion topics will include an evaluation system on the materials flow of concrete, environmental design of concrete structures, green concrete technologies for life-cycle design of concrete structures, and more.

Introduction **1:00 PM**

Douglas J. Sordyl, Managing Director, Marketing, Sales & Industry Relations, American Concrete Institute, Farmington Hills, MI

Background on ISO/TC71/SC8 **1:10 PM**

Koji Sakai, Head Materials Section, Kagawa University, Takamatsu, Kagawa, Japan

Rating Systems—LEED and Green Globes **1:30 PM**

Julie Buffenbarger, Engineering and Architectural Specialist, Lafarge North America, Medina, OH

A Concrete Rating System **1:50 PM**

Terence C. Holland, Consulting Engineer, Auburn Township, OH

Environmental Design of Concrete Structures **2:10 PM**

Kenji Kawai, Associate Professor, Hiroshima University, Higashihiroshima, Japan

Saturday, November 1, 2008

1:00 PM - 6:00 PM

**Sustainable Development Workshop on Concrete,
Green Building, and ISO Standards (cont.)**

R-MAJESTIC H

“Green” Concrete Structures

2:30 PM

Mette Glavind, Head of Section, Concrete Center in Danish
Technological Institute, Taastrup, Denmark

Application of “ecoMA—the Social System Simulator

2:50 PM

by Using MultiAgent” to Materials Flow in Concrete Industries

Takafumi Noguchi, Research Associate, The University of Tokyo,
Tokyo, Japan

Plenary Session

3:30 PM

Koji Sakai, Head Materials Section, Kagawa University, Takamatsu,
Kagawa, Japan; and **Douglas J. Sordyl**, Managing Director, Marketing,
Sales & Industry Relations, American Concrete Institute, Farmington
Hills, MI

Closing

5:45 PM

Koji Sakai, Head Materials Section, Kagawa University, Takamatsu,
Kagawa, Japan

Sunday, November 2, 2008

7:30 AM - 12:00 PM

✓ **Holcim Plant Tour**

\$45 U.S. per person

Enjoy a tour of the Holcim Cement Plant. Opening in 2009, the Holcim Cement Plant is soon to be one of the largest producers of portland cement, estimated to produce over 4,000,000 metric tons of cement a year. No shorts are allowed on this tour, shirts/blouses with sleeves must be at least four inches in length, and you must wear closed-toe shoes. No high heels are allowed. A 20-minute safety video must be viewed before the tour begins. This tour includes a boxed breakfast. Departure for this tour will be located at the St. Charles Street exit at the Renaissance Grand.

✓ = Separate fee required

Sunday, November 2, 2008

8:00 AM - 9:00 AM

First-Time Convention Attendee Breakfast

R-MAJESTIC B

Sponsored by the ACI Convention Committee

Session Moderator: William E. Rushing Jr.
Assistant Vice-President
Waldemar S. Nelson & Co. Inc.
New Orleans, LA

First-time convention attendees are invited to join Bill Rushing, Chair of the ACI Convention Committee, for a continental breakfast and a brief session to orient you to the week ahead. Attendees will have the opportunity to meet other convention attendees and learn about what an ACI convention has to offer.

Sunday, November 2, 2008

12:00 PM - 2:00 PM

✓International Lunch

R-CRYSTAL

\$43 U.S. per person

Hosted by the ACI International Committee



Speaker: Konrad Bergmeister
Professor
Universität für Bodenkultur
Vienna, Austria

Topic: Repair and Maintenance of Aging RC Bridges

Join other ACI attendees for a discussion on the repair and maintenance of aging RC bridges during the International Lunch with featured speaker Professor Konrad Bergmeister from the Universität für Bodenkultur in Austria. Dr. Bergmeister has a PhD in both rural architecture and civil engineering, as well as a master's degree in manufacturing systems from Clarkson University. In addition to his 18 years of professional experience, Dr. Bergmeister is also a member of the Berlin-Brandenburg Academy of Science and the German Academy of Science.

Tickets may be purchased at the ACI Registration Desk up to 24 hours prior to the event, based on availability. Please notify the ACI Registration Desk if you have any dietary restrictions.

✓= Separate fee required

Sunday, November 2, 2008

1:00 PM - 5:00 PM

Student Concrete Cylinder Competition

C-105

Sponsored by ACI Committee E801, Student Activities, and the ACI Missouri Chapter

Session Co-Moderators: Lawrence H. Taber
 Structural Engineer
 Black & Veatch
 Kansas City, MO

 Patrick T. Earney
 Trabue, Hansen and Hinshaw
 Columbia, MO

Students must produce a concrete cylinder made of specific cementitious materials that will withstand a compression test and other performance measuring criteria. Come cheer on your favorite team!



Testing device provided by SCI Engineering



SCI ENGINEERING, INC.

Sunday, November 2, 2008

2:00 PM - 5:00 PM

Concrete Bridge Design for Extreme Events

C-230

Sponsored by Committee 343, Concrete Bridge Design

Session Co-Moderators: Nur Yazdani
Professor and Chairman of Civil
Engineering
University of Texas at Arlington
Arlington, TX

Claudia Pulido
Bridge Engineer
FIGG Bridge Engineers Inc.
Tallahassee, FL

This session will include several important presentations on concrete design issues dealing with extreme event loading. Topics will include the effects of earthquake, wind, flooding, wildfires, and blast in the design and detailing of concrete bridges. Presentations on bridge projects being planned, currently under construction, or recently completed will be included. This session is intended to provide practicing engineers, researchers, producers, and client agencies, including federal, state, and local agencies, with the latest developments regarding the effects of extreme events in the design of concrete bridges.

Methods for Determining Flotilla Impact Forces on Bridge Piers 2:00 PM

Issam Harik, Professor, University of Kentucky, Lexington, KY; and **Raymond Blythe**, and **Peng Yuan**, University of Kentucky

Durable and Economic Bridge Design for Extreme Events 2:20 PM

Arthur Wagner D'Andrea, Design Engineer, Louisiana Department of Transportation, Baton Rouge, LA

New Mississippi River Bridge Project: Seismic Design 2:40 PM

Brooks Brestal, Project Manager, Illinois Department of Transportation, Collinsville, IL

Concrete Bridge Design for Extreme Flood Effect 3:00 PM

Nur Yazdani, Professor and Chairman of Civil Engineering, University of Texas at Arlington, Arlington, TX; and **Muhammad Enam**, FAMU-Florida State University

Sunday, November 2, 2008

2:00 PM - 5:00 PM

Concrete Bridge Design for Extreme Events (cont.)

C-230

Fire-Resistant Design of Concrete Bridges

3:20 PM

Shrinivas Bhide, Director of Engineering, Bentley Systems Inc.,
Tampa, FL; and **David Bilow**, Portland Cement Association

**US 40/I-64 Seismic Retrofit: A Case Study in Retrofitting
With Concrete**

3:40 PM

John Finke, Manager, Jacobs Civil Inc., St. Louis, MO

Blast-Resistant Bridges: Design and Detailing

4:00 PM

Eric Williamson, Assistant Professor of Civil Engineering, University
of Texas, Austin, TX

Sunday, November 2, 2008

2:00 PM - 5:00 PM

Designing and Constructing Durable Long-Life Concrete Pavements, Part 1 C-240

Sponsored by Committees 325, Concrete Pavements, and 330, Concrete Parking Lots and Site Paving

Session Co-Moderators: Timothy Smith
Director
Cement Association of Canada
Ottawa, ON, Canada

David Akers
Senior Engineer
California Nevada Cement Association
San Diego, CA

Durable concrete pavements require careful materials selection and construction to translate designs into practice. In many harsh environments, durability is the controlling factor for pavement performance. Designers, specifiers, and builders of all types of pavements and exterior concrete slabs will learn the steps to making pavements last longer.

CP Road Map Activities Related to Long-Life Pavements 2:00 PM
Tom Cackler, Director, Iowa State University, Ames, IA

Construction of Long-Lasting Green Highways 2:25 PM
Timothy Smith, Director, Cement Association of Canada, Ottawa, ON, Canada

Long-Life Concrete Pavements in the U.S. 2:50 PM
Kurt Smith, Program Director, Applied Pavement Technology Inc., Urbana, IL

Long-Life Pavements in Europe and Canada 3:15 PM
Suneel Vanikar, Senior Project Manager, FHWA Office of Pavement Technologies, Washington, DC

Long-Life Pavement Design Using Street Pave 3:40 PM
Scott R. Haislip, Director, American Concrete Pavement Association, Munster, IN

Design and Construction of Concrete Overlays in Illinois 4:05 PM
Randy Riley, Executive Director, Illinois Chapter, Inc., Springfield, IL

Sunday, November 2, 2008

2:00 PM - 5:00 PM

Designing and Constructing Durable Long-Life Concrete Pavements, Part 1 (cont.)

C-240

**Heavy-Duty Pavement Joints and Curling:
What Works and What Does Not**

4:30 PM

**Jerry Holland, Director of Design Services, Structural Services Inc.,
Jonesboro, GA**



Sunday, November 2, 2008

2:00 PM - 5:00 PM

Emerging Technologies in Civil Infrastructure Applications C-224
Sponsored by the TAC Technology Transfer Committee Task Group

Session Moderator: Joseph Sanders
Vice President
Charles Pankow Builders Ltd.
Pasadena, CA

This session highlights the status of some of the Strategic Development Council's industry-critical technologies and the role played by the TTTC in its industry adoption process.

TAC Technology Transfer Committee: Its Role in Accelerating Technology Transfer 2:00 PM
Emmanuel K. Attiogbe, Manager Technical Services, BASF Admixtures, Cleveland, OH

ITG-7: Update Specification for Tolerance for Precast Concrete 2:30 PM
Charles S. Hanskat, Principal Engineer, Hanskat Consulting, Northbrook, IL

Building Information Modeling (BIM): Issues and Obstacles 3:00 PM
Allan Bommer, Chief Design Engineer, Bentley Systems Inc., Seattle, WA

Innovative Mitigation Strategies to Reduce Early-Age Cracking 3:30 PM
W. Jason Weiss, Professor, Purdue University, West Lafayette, IN; and **Dale Bentz**, National Institute of Standards and Technology

Sustainable Construction with Concrete 4:00 PM
Jean-Claude Roumain, Corporate Product Manager, Holcim U.S. Inc., Louisville, CO

ITG-8 Update: Performance Criteria for Concrete Materials 4:30 PM
Kenneth Rear, Vice President of Research & Support, KBR Resources Inc., Holmes Beach, FL

Sunday, November 2, 2008

2:00 PM - 5:00 PM

IPS-1 Update Summary and Applications for RC Buildings **C-225**

Sponsored by Committee 314, Simplified Design of Concrete Buildings

Session Co-Moderators: José M. Izquierdo-Encarnacion
Principal
PORTICUS
San Juan, PR

JoAnn Browning
Associate Professor
University of Kansas
Lawrence, KS

The document, *Essential Requirements for Reinforced Concrete Buildings*, presents simplified procedures to design regular structures based on the ACI 318 Building Code. Committee 314 has updated the document to comply with ACI 318-08 requirements and will present the background of its development and examples of its application.

History of IPS-1 and Comparison with ACI 318 **2:00 PM**

Luis E. García, Partner and President, Proyectos y Diseños Ltda,
Bogota, Colombia

Application of IPS-1 to Regular RC Buildings **2:50 PM**

José M. Izquierdo-Encarnacion, Principal, PORTICUS, San Juan, PR

Design and Economic Evaluation of Example Building Designed Using IPS-1 and ACI 318-08 **3:40 PM**

Jorge Segura, Engineer, Jorge Segura Franco & Cia, Bogota, Colombia

International Implications of IPS-1 **4:20 PM**

Guillermo Santana, Professor, University of Costa Rica, San Pedro,
Costa Rica

Sunday, November 2, 2008

2:00 PM - 5:00 PM

Uplifting Concrete in Museums, Churches, and Civic Architecture

C-223

Co-Sponsored by ACI Committee 124, Concrete Aesthetics, and the Materials Center, Sam Fox School of Design and Visual Arts, Washington University in St. Louis, supported by the American Institute of Architects in St. Louis

Session Moderator: Michael Paul
Senior Consultant
Duffield Associates Inc.
Wilmington, DE

This session will address the use of exposed concrete in buildings and other structures that engage and enhance the human spirit.

Introduction 2:00 PM

Michael Paul, Senior Consultant, Duffield Associates Inc.,
Wilmington, DE

Louis I. Kahn and the Nature of Concrete 2:05 PM

Robert McCarter, Ruth and Norman Moore Professor of Architecture,
Washington University, St. Louis, MO

Perret and Le Corbusier: A Dialogue in Reinforced Concrete 3:00 PM

Liane Hancock, Undergraduate Program Administrator, Washington
University, St. Louis, MO

Grace Cathedral—A Gothic Essay in Concrete 3:35 PM

Andrew Budek-Schmeisser, Assistant Professor, New Mexico
Institute of Mining and Technology, Socorro, NM; and **Barbara
Budek-Schmeisser**, New Mexico Institute of Mining and Technology

Architecture as Art—Tadao Ando's Pulitzer Foundation for the Arts 4:10 PM

James Cartwright, Architect, American Institute of Architects,
St. Louis, MO

Sunday, November 2, 2008

5:15 PM - 6:30 PM

Opening Session and Hardy Cross Lecture Series

C-221



This Opening Session officially kicks off the St. Louis Convention with the annual Hardy Cross Lecture Series, with featured speaker Tony Fiorato, former President, CTL Group. He will be discussing how Hardy Cross raised issues on engineering standardization that are just as relevant today as when he wrote them 80 years ago. The talk will address standardization of building codes materials specifications, test methods, and how we can benefit from Cross' reflections on "intelligent standards versus standardized intelligence."

Sunday, November 2, 2008

Approx. 6:30 PM - 7:30 PM

Opening Reception

C-100-105

Sponsored by the ACI Missouri Chapter

Following the Opening Session, meet your colleagues, friends, and exhibitors for a beverage from the cash bar and light refreshments in the exhibit area. This is a networking opportunity you won't want to miss!



Sunday, November 2, 2008

7:30 PM - 10:00 PM

Hot Topic Session: Renewal of Bridge Infrastructure: Inspection Maintenance and Security Upgrades

C-240

Sponsored by the ACI Missouri Chapter

Session Co-Moderators: Abdeldjelil Belarbi
 Distinguished Professor
 Missouri University of Science and
 Technology
 Rolla, MO

Vellore Gopalaratnam
Professor of Civil Engineering
University of Missouri-Columbia
Columbia, MO

It is time that we initiate a serious dialogue within the professional community in particular, and the nation at large on the critical tasks of renewing and securing our bridge infrastructure. Approximately 30% of America's 600,000 public bridges are classified as either structurally deficient or functionally obsolete, with the cost of rehabilitation or replacement estimated at over \$150 billion. Added to normal aging and deterioration is the new challenge of securing our critical bridges against the potential threat of terrorism. The economic and psychological impact of a successful attack on one of our critical bridges is likely to be devastating. This Hot Topic Session will bring together a panel of engineering experts from academic, state, and federal agencies to talk about the reconstruction efforts of the I-35 Bridge in Minneapolis, recent developments and challenges in highway bridge inspection and cost-effective security mitigation strategies for highway bridges. The discussions to follow will highlight recent advances in materials, construction, and inspection techniques, and threat-mitigation strategies that will aid in this renewal effort.

The Reconstruction of the 35W Bridge

7:30 PM

Jon Chiglo, Project Manager, Minnesota Department of Transportation, Minneapolis, MN

Developments and Challenges in Highway Bridge Inspection

8:00 PM

Glenn Washer, Assistant Professor, University of Missouri-Columbia, Columbia, MO

Sunday, November 2, 2008

7:30 PM - 10:00 PM

**Hot Topic Session: Renewal of Bridge Infrastructure:
Inspection Maintenance and Security Upgrades (cont.)**

C-240

Selecting Cost-Effective Security Mitigation Strategies for Highway Bridges **8:30 PM**

Steven Ernst, Senior Bridge Engineer, Federal Highway Administration, Washington, DC

Question and Answer **9:00 PM**

Abdeldjelil Belarbi, Distinguished Professor, Missouri University of Science and Technology, Rolla, MO; and **Vellore Gopalaratnam**, University of Missouri-Columbia



Monday, November 3, 2008

6:30 AM - 8:15 AM

Workshop for Technical Committee Chairs

C-221

Sponsored by the ACI Technical Activities Committee

Session Moderator: David A. Lange
Associate Professor
University of Illinois
Urbana, IL

ACI Technical Committee Chairs are expected to attend this breakfast workshop to meet with fellow chairs, TAC members, and ACI staff, and to hear updates on important recent developments of interest to ACI Technical Committee Chairs. There will be table discussions and short presentations. If you are unable to attend, please ask the secretary or another committee member to represent you in your absence.

Monday, November 3, 2008

7:00 AM - 8:30 AM

Speaker Skills Training Breakfast: Teaching Methods and Educational Materials

C-232

Sponsored by ACI Committee E803, Faculty Network Coordinating Committee

Session Moderator: Kenneth C. Hover
Professor of Structural Engineering
Cornell University
Ithaca, NY

Ken Hover, Professor and Weiss Presidential Fellow at Cornell University, will discuss how your ACI audience wants to hear what you have to say, and to see what you have to show. But while you can count on initial audience interest, you can't assume that everyone in the room sees your story, your problem, or your solution the same way you do. Given the wide range of backgrounds and expectations in the typical ACI audience, part of your challenge is to provide enough "handles" on your topic so that almost everybody can not only grab on, but carry something away. A continental breakfast will be served.

Monday, November 3, 2008

9:00 AM - 12:00 PM

ACI Student Fellowships and Young Member Initiatives C-225
Sponsored by ACI Committee E803, Faculty Network Coordinating Committee

Session Moderator: Norbert J. Delatte
Professor
Cleveland State University
Broadview Heights, OH

This session will highlight the research work and careers of ACI Fellowship awardees. An introductory presentation will provide an overview of ACI's Student and Young Member Programs.

Earthquake-Resistant Design of Coupled Wall Systems Incorporating High-Performance Fiber-Reinforced Concrete 9:00 AM
Remy Lequesne, PhD Candidate, University of Michigan, Ann Arbor, MI

The ACI Student Fellowship Program: Helping Students with Concrete Futures 9:20 AM
Stephan Durham, Assistant Professor, University of Colorado at Denver, Denver, CO

Fatigue Durability of Partially Post-Tensioned Concrete Members 9:40 AM
Jeffery Volz, Instructor and PhD Candidate, Missouri University of Science and Technology, Rolla, MO

Blast Performance of Long Carbon Fiber-Reinforced Concrete 10:00 AM
Andrew Coughlin, Masters Candidate, Hinman Consulting Engineers, San Francisco, CA

The Physical and Chemical Characteristics of the Shell of Air-Entrained Bubbles in Cement Paste 10:20 AM
Tyler Ley, Assistant Professor, Oklahoma State University, Stillwater, OK

Bond and Development of Reinforcing Steel for Structural Evaluation and Rehabilitation 10:40 AM
Lisa Feldman, Assistant Professor, University of Saskatchewan, Saskatoon, SK, Canada

Monday, November 3, 2008

9:00 AM - 12:00 PM

ACI Student Fellowships and Young Member Initiatives (cont.) [C-225](#)

Effects of Testing Variables on Concrete Beam Specimen Results **11:00 AM**

Joseph Clendenen, Technical Service Engineer, Holcim (U.S.) Inc.,
Ellsworth, WI

Optimization of Mass Concrete Bridge Construction **11:20 AM**

Kyle Riding, Graduate Research Assistant, Kansas State University,
Manhattan, KS

Monday, November 3, 2008

9:00 AM - 12:00 PM

Designing and Constructing Durable Long-Life Concrete Pavements, Part 2

C-240

Sponsored by ACI Committee 325, Concrete Pavements, and 330, Concrete Parking Lots and Site Paving

Session Co-Moderators: Timothy Smith
Director
Cement Association of Canada
Ottawa, ON, Canada

David Akers
Senior Engineer
California Nevada Cement Association
San Diego, CA

Durable concrete pavements require careful materials selection and construction to translate designs into practice. In many harsh environments, durability is the controlling factor for pavement performance. Designers, specifiers, and builders of all types of pavements and exterior concrete slabs will learn the steps to making pavements last longer.

HIPERPAV and SmartCure: Ensuring Optimal Early Age Concrete for Long-Life Durability

9:00 AM

Sabrina Garber, Project Manager, Transtec Group, Austin, TX

Protocol for Designing ASR-Resistant Concrete Mixtures

9:25 AM

Gina Ahlstrom, Concrete Pavement Engineer, Federal Highway Administration, Washington, DC

Long-Term Durability and Serviceability of Concrete Parking Lots in Texas

9:50 AM

Robert Lopez, Senior Advisor, Cement Council of Texas, Hurst, TX

Durability Testing of Pervious Concrete

10:15 AM

Matthew Offenber, Market Development Manager, W.R. Grace, Canton, GA; and **Michael Davy**, CEMEX

Best Practice for Early Opening of Concrete Pavements to Traffic

10:40 AM

Shiraz Tayabji, Regional Manager, Fugro Consultants Inc., Ellicott City, MD

Monday, November 3, 2008

9:00 AM - 12:00 PM

Designing and Constructing Durable Long-Life Concrete Pavements, Part 2 (cont.)

C-240

Set Time and Early Strength Variability of Concrete Paving Mixtures

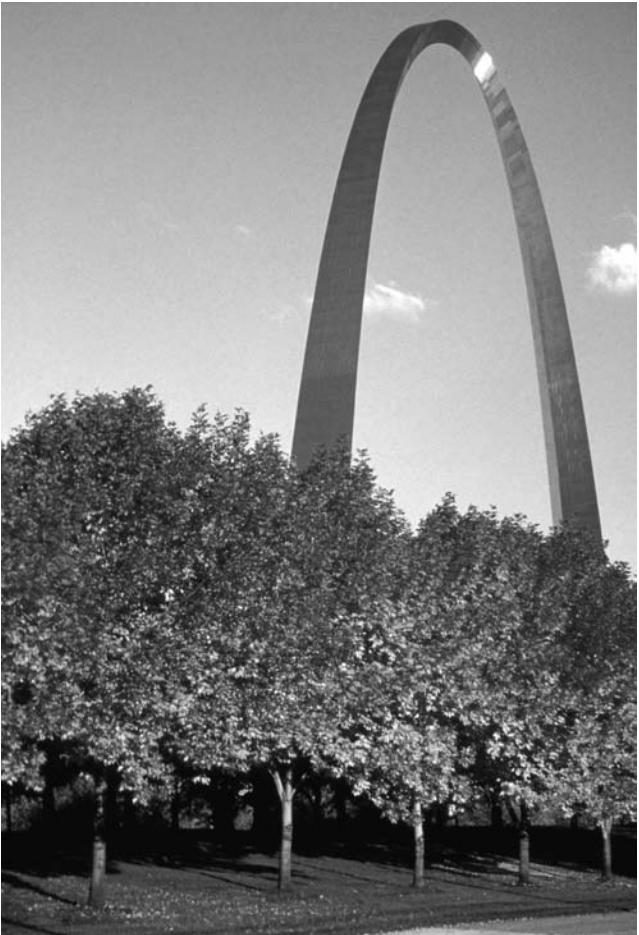
11:05 AM

Tim Cost, Senior Technical Service Engineer, Holcim (U.S.) Inc., Canton, MS

Optimizing Concrete Paving Mixtures

11:30 AM

James Shilstone Sr., Concrete Engineer, Shilstone Companies, Irving, TX



Monday, November 3, 2008

9:00 AM - 12:00 PM

Recent Advancements in Concrete Technology in Taiwan

C-224

Sponsored by the ACI Taiwan Chapter

Session Co-Moderators: Tony Liu
 Visiting Research Fellow
 National Taiwan University
 Taipei, Taiwan

 Ta-Peng Chang
 Professor
 National Taiwan University
 Taipei, Taiwan

In recent years, Taiwan has made many technological advancements in concrete technology. This half-day session will present the recent advancements in concrete technology, including the innovative construction methods, earthquake engineering research, self-consolidating concrete, and some case studies.

Innovative Construction Automation for High-Tech Facilities 9:00 AM
Willie Lai, President, Ruentex Development Co., Taipei, Taiwan

Development and Applications of SCC in Taiwan 9:30 AM
Yin-Wen Chan, Professor, National Taiwan University, Taipei, Taiwan;
Jenn-Chuan Chern, Public Construction Commission

Earthquake Engineering Research on Reinforced Concrete Buildings in Taiwan 10:00 AM
Shyh-Jiann Hwang, Professor, National Taiwan University, Taipei, Taiwan

Recent Research on Concrete Bridges in Taiwan 10:30 AM
Kuo-Chun Chang, Professor and Chair of Civil Engineering Department, National Taiwan University, Taipei, Taiwan

Design and Construction of Taipei 101—The World's Tallest Building 11:00 AM
Shaw-Song Shieh, Chairman of the Board, Evergreen Consulting Engineering, Taipei, Taiwan

Design and Construction of Concrete Bridges and Viaducts for Taiwan High-Speed Rail Project 11:30 AM
T.C. Kao, Adjunct Professor, National Taiwan University, Taipei, Taiwan

Monday, November 3, 2008

9:00 AM - 12:00 PM

Research in Progress

C-223

Sponsored by ACI Committee 123, Research and Current Developments

Session Co-Moderators: Matthew D'Ambrosia
Project Manager
CTL Group
Skokie, IL

Aleksandra Radlinska
Assistant Professor
Villanova University
Villanova, PA

This session will feature presentations of original unpublished results from ongoing research projects and leading-edge concrete technology and research throughout the world.

Fiber Reinforcement for Crack Control in High-Strength Prestressed Precast Segmental Concrete Bridge Structures 9:00 AM

Jimmy Susetyo, PhD Candidate, University of Toronto, Toronto, ON, Canada; and **Paul Gauvreau** and **Frank Vecchio**, University of Toronto

Test of Interior Post-Tensioned Slab-Rectangular Column Connections 9:15 AM

Sunendro Aris Himawan, PhD Candidate, Nanyang Technological University, Singapore; **Susanto Teng**, Nanyang Technological University

Seismic Response of Reinforced Concrete Buildings with Floor Diaphragm Openings 9:30 AM

Anamika Rathore, Design Engineer, Optimum Engineering, Glen Carbon, IL; **Nader Panahshahi**, Southern Illinois University; and **Mohamed Al Harash**, Frontec Solutions

Characterization of Thermal Properties of PCC Pavements 9:45 AM

Hak-Chul Shin, Professor, Louisiana State University, Baton Rouge, LA; and **Yoonseok Chung** and **Upender Kodide**, Louisiana State University

Monday, November 3, 2008

9:00 AM - 12:00 PM

Research in Progress (cont.)

C-223

Cross Section Stresses Due to Restrained Shrinkage in Concrete Deck Overlays 10:00 AM

Luis Orta, PhD Candidate, University of Western Ontario, London, ON, Canada; and **F. Michael Bartlett**, University of Western Ontario

Measuring the Early-Age and Long-Term Shrinkage of Hydraulic Cement Concrete 10:15 AM

Richard Weyers, Professor, Virginia Tech, Blacksburg, VA; **Andrei Ramniceanu**, Virginia Tech; and **David Mokarem** and **Michael Sprinkel**, Virginia Transportation Research Council

Internal Damage Assessment in Concrete Subjected to High Hydrostatic Pressure 10:30 AM

Eric Landis, Assistant Professor, University of Maine, Orono, ME; and **Cedric Poinard**, **Yann Malecot**, and **Laurent Daudeville**, Domaine Universitaire

Shrinkage-Reducing Admixtures: Interactions with Concrete's Pore Solution and Effects on Cement Hydration 10:45 AM

Farshad Rajabipour, Assistant Professor, University of Hawaii, Honolulu, HI; **Ethan Smith** and **Joseph Lichwa**, University of Hawaii; and **W. Jason Weiss**, Purdue University

Electrokinetic Transport in Concrete 11:00 AM

Paul Mlakar, Chief, U.S. Army Research and Development Center, Vicksburg, MS; and **M. McInerney**, **Charles Weiss** and **J. Peters**, U.S. Army Engineer Research and Development

Doubling Concrete Service Life: What's the VERDiCT? 11:15 AM

Dale Bentz, Chemical Engineer, National Institute of Standards and Technology, Gaithersburg, MD; and **Kenneth Snyder**, **Max Peltz**, and **Jeff Davis**, National Institute of Standards and Technology

Monday, November 3, 2008

9:00 AM - 12:00 PM

Research in Progress (cont.)

C-223

Water Management on Internal Curing

11:30 AM

Mauricio Lopez, Assistant Professor, Pontificia Universidad Catolica de Chile, Santiago, Chile; and **Alvaro Paul** and **Jalil Espinoza**, Pontificia Universidad Catolica de Chile

Mitigating Alkali-Silica Reaction in Hardened Concrete

11:45 PM

Anthony Bentivegna, Master's Candidate, University of Texas at Austin, Austin, TX; and **Kevin Folliard**, University of Texas at Austin



Monday, November 3, 2008

9:00 AM - 12:00 PM

Session Honoring Professor David Darwin, Part 1

C-230

Sponsored by ACI Committee 408, Development and Splicing of Deformed Bars

Session Co-Moderators: Emmanuel K. Attiogbe
Director Technical Services
BASF Admixtures
Cleveland, OH

Adolfo Matamoros
Assistant Professor
University of Kansas
Lawrence, KS

This session will showcase historical and recent developments in areas of research where Professor Darwin has made significant contributions to the practice of reinforced concrete design. Topics will include bond and development of reinforcement, cracking, durability, corrosion, finite element analysis, and fracture mechanics.

The Influence of Cracks on Durability 9:00 AM
W. Jason Weiss, Professor, Purdue University, West Lafayette, IN

Construction of Low-Cracking Bridge Decks 9:30 AM
JoAnn Browning, Associate Professor, University of Kansas, Lawrence, KS

Evaluation of Corrosion Testing Methods 10:00 AM
Javier Balma, Engineer, Walter P Moore & Associates, Kansas City, MO

Improving our Understanding and Ability to Measure the Potential for Corrosion of Reinforcing Bars in Reinforced Concrete 10:30 AM
Carl Locke, Emeritus Dean and Professor, University of Kansas, Lawrence, KS

Bar Details, Bond Splitting, Delaminations, and Corrosion 11:00 AM
Carl Peterson, Senior Consultant, Wiss, Janney, Elstner and Associates Inc., Chicago, IL

Interaction of Cracking and Corrosion 11:30 AM
Surendra P. Shah, Professor, Northwestern University, Evanston, IL

Monday, November 3, 2008

12:00 PM - 2:00 PM

✓ Student Lunch

C-221

\$25 U.S. per person; FREE to students who preregister

Sponsored by the ACI Missouri Chapter and ACI Committee E801, Student Activities



Speaker: Daniel Baker
President
Baker Concrete Construction, Inc.
Monroe, OH

Topic: Leadership 20/20—Up and Coming Leaders

Join other ACI members and students for the announcement of the Student Competition results. Following lunch, featured speaker Dan Baker, President of Baker Concrete Construction, will give a presentation on Leadership 20/20—Up and Coming Leaders.

PREREGISTRATION IS REQUIRED TO ATTEND. Tickets may be purchased at the ACI Registration Desk up to 24 hours prior to the event, based on availability. Please notify the ACI Registration Desk if you have any dietary restrictions.

✓ = Separate fee required

Monday, November 3, 2008

2:00 PM - 3:00 PM

Sonic Systems for Concrete Testing Demonstration

C-105

Germann Instruments will be demonstrating the following:

- DOCTer impact-echo for thickness and flaw detection
- s'MASH impulse response for rapid screening of flaws
- MIRA tomography 3D system for location of internal defects



Test smart - Build right

Monday, November 3, 2008

2:00 PM - 3:00 PM

**Convention Session Moderator Question
and Answer**

R-LANDMARK 5

Session Moderator: Lauren E. Mentz
Event Planner
American Concrete Institute
Farmington Hills, MI

This is a perfect opportunity to learn new ideas and techniques for planning and organizing your session. All potential and current moderators for upcoming convention sessions are strongly encouraged to attend this informational question and answer session.

Monday, November 3, 2008

2:00 PM - 5:00 PM

Accelerated Bridge Design and Construction

C-225

Sponsored by ACI Committee 343, Concrete Bridge Design

Session Moderator: Riyadh Hindi
Associate Professor
Bradley University
Peoria, IL

This session will focus on the most recent developments and advancements in design and/or construction of accelerated concrete bridges. The session will cover case studies and research including innovations used in the design and/or construction methods and procedures in a design-build project. This session will be suitable for researchers, practitioners, and students to learn of the state-of-the-art rapid bridge practices.

Rapid Construction of Modular Innovative Bridge Substructure 2:00 PM

Amir Mirmiran, Professor and Chair, Florida International University, Miami, FL; and **Yilei Shi** and **Bin Li**, Florida International University

Rapid Bridge Replacement, Elk Creek Tunnel Bridges 2:22 PM

Scott Nettleton, Engineering Manager, TY Lin International, Salem, OR; and **Justin Doornink**, TY Lin International

Experimental Seismic Testing of Precast U-Girder, Cast-in-Place Bent Cap Bridge Joints 2:45 PM

Kevin Almer, Graduate Student, University of Nevada-Reno, Reno, NV; and **David Sanders**, University of Nevada-Reno

Accelerated Design and Construction of the Russian River Bridge Replacement 3:07 PM

Ofelia Alcantara, Deputy Division Chief, Structure Design, California Department of Transportation, Sacramento, CA; and **Tariq Masroor**, **Ahmed Ibrahim**, and **Linan Wang**, California Department of Transportation

Accelerated Bridge Construction of Arch Bridge Using Vertically-Erected Steel-Concrete Composite Components 3:30 PM

Zhixiang Zhuo, Professor, Chongqing Jiaotong University, Chongqing, China; and **Fang Li**, and **Roy Imsben**, East & West Engineering Technologies, Inc.

Monday, November 3, 2008

2:00 PM - 5:00 PM

Accelerated Bridge Design and Construction (cont.)

C-225

**A Study of Precast Bridge Columns with Innovative
Plastic Hinges with Built-In Elastomers**

3:42 PM

M. Saiid Saiidi, Professor, University of Nevada-Reno, Reno, NV; and
David Sanders and **Sarira Motaref**, University of Nevada-Reno

Fast Track Construction of Bridge Decks

4:15 PM

Mohsen Issa, Professor, University of Illinois at Chicago, Chicago, IL

Rehabilitation of the Reynosa-Pharr International Bridge **4:37 PM**

Rodrigo Sanchez, Engineer, BASF Admixtures, Inc., Cleveland, OH;

Robert Gulyas, BASF Admixtures Inc.; and **Fernando Ayala**, BASF
Construction Chemicals, LLC



Monday, November 3, 2008

2:00 PM - 5:00 PM

Evaluation of Existing Structures by Means of In-Situ Load Testing and Structural Monitoring C-224

Sponsored by ACI Committee 437, Strength Evaluation of Existing Concrete Structures

Session Co-Moderators: J. Gustavo Tumialan
Senior Staff Engineer
Simpson Gumpertz & Heger Inc.,
Waltham, MA

Antonio Nanni
Professor and Chair
University of Miami
Coral Gables, FL

This session will present case studies of structural evaluation by means of in-situ load testing and structural monitoring of concrete structures, such as parking garages, buildings, bridges, and stadiums. The topics will include, but are not limited to, assessment of structural performance, validation of strengthening strategies, and analytical modeling to improve understanding of overall structural performance.

Monitoring a Soil-Nail Wall—Not as Easy as it Looks on Paper **2:00 PM**
Andrew Budek-Schmeisser, Assistant Professor, New Mexico Institute of Mining and Technology, Socorro, NM; and **Barbara Budek-Schmeisser**, New Mexico Institute of Mining and Technology

In-Situ Evaluation of Two Concrete Slab Systems **2:30 PM**
Nestore Galati, Design Engineer, Structural Group Inc., Elkridge, MD; **J. Gustavo Tumialan**, Simpson Gumpertz & Heger Inc.; **Antonio Nanni**, University of Miami; **Tarek Alkhrdaji**, Structural Group Inc.; and **Paul L. Ziehl**, University of South Carolina

Load Testing a Historic Monument **3:00 PM**
Frederick Heidbrink, Associate Principal, Wiss, Janney, Elstner Associates Inc., Northbrook, IL

Monday, November 3, 2008

2:00 PM - 5:00 PM

Evaluation of Existing Structures by Means of In-Situ Load Testing and Structural Monitoring (cont.) C-224

Evaluation of the Lateral Load-Resisting System of a Stadium Structure 3:30 PM

Stan Zagajeski, Staff Consultant, Simpson, Gumpertz & Heger Inc., Waltham, MA; **J. Gustavo Tumialan** and **Matthew Sherman**, Simpson, Gumpertz & Heger Inc.; and **Nestore Galati**, Structural Group Inc.

An Italian Perspective of Load Testing of Concrete Structures: Case Studies 4:00 PM

Paolo Casadei, Research Engineer, SGM Experimental Engineering, Milano, Italy; and **Filippo Masetti**, Simpson, Gumpertz & Heger Inc.

Direct Measurement of Girder Reactions in Bridge Load Tests 4:30 PM

Christina O'Neill, Graduate Student, University of Florida, Gainesville, FL; **H. R. Trey Hamilton III**, University of Florida; and **Marcus Ansley** and **Garry Roufa**, Florida Department of Transportation

Monday, November 3, 2008

2:00 PM - 5:00 PM

Recent Advances in Precast Concrete Pavements

C-240

Sponsored by the ACI Missouri Chapter

Session Co-Moderators: Vellore Gopalaratnam
Professor of Civil Engineering
University of Missouri-Columbia
Columbia, MO

Abdeldjelil Belarbi
Distinguished Professor
Missouri University of Science
and Technology
Rolla, MO

Recent advances in precast concrete pavements technology offers a viable option for rapid repairs ideally suited for urban applications. This session will highlight successes in recent precast concrete as well as precast, prestressed concrete projects and the Federal Highway Administration's effort in promoting the technology.

Introduction **2:00 PM**
Vellore Gopalaratnam, Professor of Civil Engineering, University of Missouri-Columbia, Columbia, MO

Precast Pavements—Current Practice, Future Directions **2:05 PM**
Shiraz Tayabji, Regional Manager, Fugro Consultants Inc., Ellicott City, MD

Summary of Recent Precast Prestressed Concrete Pavement Projects **2:30 PM**
Dave Merritt, Project Manager, City of Bettendorf, Austin, TX; and **Samuel Tyson**, Federal Highway Administration

Project Development, Construction, and Performance of a Precast Post-Tensioned Panel Pavement **2:55 PM**
Eric Krapf, Project Manager, MoDOT, Jefferson City, MO; and **John Donahue**, MoDOT

Monitoring and Performance Evaluation of an Innovative Precast Prestressed Concrete Pavement System **3:20 PM**
Vellore Gopalaratnam, Professor of Civil Engineering, University of Missouri-Columbia, Columbia, MO; and **Grant Luckenbill**, HDR Engineering

Monday, November 3, 2008

2:00 PM - 5:00 PM

Recent Advances in Precast Concrete Pavements (cont.) C-240

Overnight Installations of Three-Dimensional Intersections, Bridge Approaches, and Intermittent Repair Slabs 3:45 PM

Peter Smith, Vice President of Market Development and Product Engineering, The Fort Miller Co. Inc., Schuylerville, NY

Precast Bridge Approach Pavement, Iowa Projects 4:10 PM

Dean Bierwagen, Methods Engineer, IowaDOT, Ames, IA; and **Brent Phares** and **Terry Wipf**, Iowa State University

Question and Answer 4:35 PM

Vellore Gopalaratnam, Professor of Civil Engineering, University of Missouri-Columbia, Columbia, MO

Monday, November 3, 2008

2:00 PM - 5:00 PM

Session Honoring Professor David Darwin, Part 2

C-230

Sponsored by ACI Committee 408, Development and Splicing of Deformed Bars

Session Co-Moderators: Emmanuel K. Attiogbe
Director Technical Services
BASF Admixtures
Cleveland, OH

Adolfo Matamoros
Assistant Professor
University of Kansas
Lawrence, KS

This session will showcase historical and recent developments in areas of research where Professor Darwin has made significant contributions to the practice of reinforced concrete design. Topics will include bond and development of reinforcement, cracking, durability, corrosion, finite element analysis, and fracture mechanics.

Bond Strength of High-Yield Strength Reinforcement 2:00 PM

Paul S. Zia, Distinguished University Professor, North Carolina State University, Raleigh, NC

Bond Behavior of High Relative Rib Area Bars 2:30 PM

Oan Chul Choi, Professor, Soong Sil University, Seoul, Korea

Incorporating the Use of Fracture Mechanics in Modeling of Bond Behavior 3:00 PM

James Cox, Engineer, Sandia National Laboratories, Albuquerque, NM

Fundamentals of Bond in Reinforced Concrete 3:30 PM

Rolf Elgehausen, Professor, University of Stuttgart, Stuttgart, Germany

ACI 318-08 Provisions for Developing Reinforcement Using Headed Bars 4:00 PM

Michael Thompson, Assistant Professor, University of Wisconsin-Platteville, Platteville, WI

Bond Strength of FRP Hooked Bars 4:30 PM

Theresa Ahlborn, Assistant Professor, Michigan Technological University, Houghton, MI

Monday, November 3, 2008

2:00 PM - 5:00 PM

Use of Technology with Teaching

C-223

Sponsored by the ACI Educational Activities Committee

Session Co-Moderators: Daniel Jansen
Associate Professor
California Polytechnic State University
San Luis Obispo, CA

Charles Pierce
Associate Professor
University of South Carolina
Columbia, SC

This session will cover an assortment of modern tools available to improve teaching. Speakers will describe their own experiences with technology in the classroom and describe the benefits and pitfalls. The target audience includes educators, students, and industrial professionals wishing to incorporate new technology in the classroom or in professional presentations.

Welcome and Introduction 2:00 PM

Charles Pierce, Associate Professor, University of South Carolina, Columbia, SC

Walter P Moore Talk: Partnering University and Industry for an Applied Concrete Based Curriculum 2:05 PM

Heather Brown, Associate Professor, Middle Tennessee State University, Murfreesboro, TN

An Overview of Learning Styles and Technology Tools for Teaching 2:35 PM

Daniel Jansen, Associate Professor, California Polytechnic State University, San Luis Obispo, CA

Motivating Freshman and Sophomores with Case Studies, Clickers, and Demos 3:00 PM

W. Jason Weiss, Professor, Purdue University, West Lafayette, IN

Better than Blackboard: Teaching Engineering with Interactive Technology 3:30 PM

Thomas Descoteaux, Director, Master's in Civil Engineering Program, Norwich University, Northfield, VT; and **Alexander T. Messinger**, **Joseph F. Miller**, and **Scott Sabol**, Norwich University

Monday, November 3, 2008

2:00 PM - 5:00 PM

Use of Technology with Teaching (cont.)

C-223

Classroom Performance Systems (Clickers) to Stimulate Student Participation in Large Classes 4:00 PM

Neeraj Buch, Associate Professor, Michigan State University, East Lansing, MI

PowerPoint: Friend or Foe? 4:30 PM

Fred Meyer, Associate Professor and Director of Civil Engineering, U.S. Military Academy, West Point, NY

Monday, November 3, 2008

5:00 PM - 6:00 PM

Women in ACI Reception

R-AUBERT

All registered convention attendees are invited to attend the Women in ACI Reception. This long-standing ACI tradition is a great opportunity to get to know other women in the concrete industry through networking and socializing. A hosted bar and light hors d'oeuvres will be served.



Monday, November 3, 2008

6:30 PM - 8:00 PM

University of Texas Reception

R-LANDMARK 1

The Civil, Architectural & Environmental Engineering Department at the University of Texas is holding a reception for graduates, faculty, and friends. Catch up with former classmates and colleagues following a day of meetings over appetizers and cocktails from the cash bar.



Monday, November 3, 2008

7:00 PM - 10:00 PM



✓ **Dinner in Honor of Luke Snell**

R-CRYSTAL

\$75 U.S. per person

Sponsored by the ACI Missouri Chapter

Over the course of 40 years, Luke Snell has been a driving force within the concrete industry. Named a Fellow of ACI, a Distinguished Professor of Arizona State University, and a Professional Engineer in three states, his concrete research and teaching experience has been influential to many. Join other ACI attendees in celebrating Luke Snell's life-long achievements and strong dedication to the ACI Missouri Chapter during this honorary dinner.

Guests may choose one of the following entrees at the time of registration:

- 1) Seared 10 oz grilled ribeye with smoked onion ragout, gratin potato, and cabernet sauce and seasonal vegetables.
- 2) Penne pasta with baby spinach, roasted garlic, cremini mushrooms, sweet peas, and reggiano cream.
- 3) Roasted half chicken, roast chicken jus, mashed red bliss potatoes, carrots, and garlic spinach.

All served with:

Baby green oak, red oak, frisee, cucumber wrapper, red and yellow tomatoes, and sweet tomato vinaigrette salad and chocolate mint brûlée with mini biscotti dessert

Tickets may be purchased at the ACI Registration Desk up to 24 hours prior to the event, based on availability. Please notify the ACI Registration Desk if you have any dietary restrictions.

✓ = Separate fee required

Monday, November 3, 2008

7:30 PM - 10:00 PM

123 Forum: Should Sustainability be Policy Driven?

R-LANDMARK 2 & 3

Sponsored by ACI Committee 123, Research and Current Developments

Session Moderator: Mohammad S. Khan
Senior Vice President
Professional Service Industries, Inc.
Herndon, VA

Following its long standing tradition, ACI Committee 123 brings industry experts together again to debate on another subject and to share their views with ACI patrons.

Introduction 7:30 PM

Mohammad S. Khan, Senior Vice President, Professional Service Industries, Inc., Herndon, VA

Panelist Presentations 7:35 PM

The debate this time is whether sustainability should be policy driven. Sustainable materials and construction have received considerable attention during the last several years and significant accomplishments have been made. However, is our progress keeping pace with the ever growing needs of a sustainable development? Do we realize the importance of sustainable development? Are we adequately addressing environmental concerns related to the production of portland cement and depleting natural raw resources? Are we making the best use of supplementary cementitious materials? Are we exploring innovative aggregate types? Are we using nonpotable water sources for making and curing concrete? Are we improving the performance of substandard raw materials through innovative uses of chemical admixtures? If the answer to any or all of these questions is “no,” should sustainability be mandated and policy driven? Our panelists will address these and many other questions you might have.

Questions, Answers, and Discussion 8:25 PM

✓ = Separate fee required

Tuesday, November 4, 2008

7:00 AM - 12:00 PM

✓ **Holcim Plant Tour**
\$45 U.S. per person

Enjoy a tour of the Holcim Cement Plant. Opening in 2009, the Holcim Cement Plant is soon to be one of the largest producers of portland cement, estimated to produce over 4,000,000 metric tons of cement a year. No shorts are allowed on this tour, shirts/blouses with sleeves must be at least four inches in length, and you must wear closed-toe shoes. No high heels are allowed. A 20-minute safety video must be viewed before the tour begins. This tour includes a boxed breakfast. Departure for this tour will be located at the St. Charles Street exit at the Renaissance Grand.

✓ = Separate fee required

Tuesday, November 4, 2008

9:00 AM - 12:00 PM

Advances in the Fire Design of Concrete Structures

C-240

Sponsored by Joint ACI/TMS Committee 216, Fire Resistance and Fire Protection of Structures

Session Co-Moderators: Venkatesh Kumar Kodur
Professor
Michigan State University
East Lansing, MI

Long Phan
Research Structural Engineer
National Institute of Standards and
Technology
Gaithersburg, MD

Provision of appropriate fire safety measures to structural members is a major safety requirement in building design because fire represents a significant hazard in built infrastructure. The last few years have witnessed an increasing focus toward the development of performance-based approaches for the design of structures. This trend has also influenced the research and development activity in the fire safety area, and there have been concerted efforts in characterizing the fire behavior and in developing engineering approaches for fire safety design of concrete structures. In this session, attendees will be presented with recent research findings and studies on the fire performance of concrete (reinforced and prestressed) and masonry systems.

Introduction to ACI Committee 216 and Current Committee Activities

9:00 AM

Venkatesh Kumar Kodur, Professor, Michigan State University, East Lansing, MI

Codes, Loads, and Fire Endurance

9:05 AM

William Gamble, Professor, University of Illinois, Urbana, IL

Performance of High-Strength Concrete in Fire

9:30 AM

Long Phan, Structural Engineer, National Institute of Standards and Technology, Gaithersburg, MD

Damage Mechanisms and Repairability of High-Strength Concrete Exposed to Elevated Temperatures

9:55 AM

Kerr Gwin, Consulting Engineer, Gwin, Dobson & Foreman Inc., Altoona, PA; and **Wilasa Vichit-Vadakan**, Siam Cement Group

Tuesday, November 4, 2008

9:00 AM - 12:00 PM

Advances in the Fire Design of Concrete Structures (cont.) C-240

Experimental Studies on the Response of Restrained RC Beams Exposed to Design Fires 10:20 AM

Monther Dwaikat, Student, Michigan State University, East Lansing, MI; and **Venkatesh Kumar Kodur**, Michigan State University

Assessment of Fire-Affected Highway Structures after the MacArthur Maze Fire and Collapse and the I-5 Tunnel Fire in California 10:45 AM

Kent Sasaki, Unit Manager and Principal, Wiss, Janney, Elstner Associates, Inc., Emeryville, CA; and **Terrence Paret**, Wiss, Janney, Elstner Associates, Inc.

Elevated Temperature Performance of Geopolymer Concretes 11:10 AM
Jay Sanjayan, Associate Professor, Monash University, Melbourne, Australia

Compressive Strength and Young's Modulus Relationships for Concrete under Elevated Temperatures 11:35 AM

Yahya Kurama, Associate Professor, University of Notre Dame, South Bend, IN; and **Adam Knaack** and **David J. Kirkner**, University of Notre Dame.



Tuesday, November 4, 2008

9:00 AM - 12:00 PM

Industry Acceptance of SCC

C-223

Sponsored by ACI Committee 237, Self-Consolidating Concrete

Session Moderator: Joseph Daczko
Product Line Manager
BASF Construction Chemicals
Hiram, OH

This session will place before all attendees the level of acceptance of SCC in the concrete industry. Presentations will be given from various disciplines to provide an overall view of the current state of SCC usage. In addition to the current state of SCC use, consideration of some of the obstacles to further acceptance will be discussed.

The Current State of SCC Standardization 9:00 AM

Mark Bury, Senior Product Manager, BASF Admixtures Inc.,
Beachwood, OH

Acceptance of SCC—DOT Perspective 9:25 AM

M. Lwin, Director, FHWA DOT, Arlington, VA

Acceptance of SCC—Engineer's Perspective 9:50 AM

John Gruber, Principal Engineer, Bechtel, Frederick, MD

Acceptance of SCC—Contractor's Perspective 10:15 AM

Lloyd Keller, Director, EllisDon Corporation, Mississauga, ON, Canada

Acceptance of SCC—Ready Mix Supplier Perspective 10:40 AM

Colin L. Lobo, Vice President of Engineering, National Ready Mixed Concrete Association, Silver Spring, MD

Acceptance of SCC—Precast Producer Perspective 11:05 AM

Dean Frank, Director of Quality Programs, Prestressed Concrete Institute, Chicago, IL

Tuesday, November 4, 2008

9:00 AM - 12:00 PM

Innovative Bridge Decks

C-224

Sponsored by the ACI Missouri Chapter

Session Co-Moderators: Abdeldjelil Belarbi
 Distinguished Professor
 Missouri University of Science
 and Technology
 Rolla, MO

Vellore Gopalaratnam
Professor of Civil Engineering
University of Missouri-Columbia
Columbia, MO

This session provides the latest in research and practice using advance materials, including FRP, as well as new techniques for bridge deck design and performance evaluation. Furthermore, this session will provide bridge engineers and contractors with knowledge of the use of new techniques and advanced materials to extend the life of RC bridge structures including deck slabs.

Introduction **9:00 AM**

Abdeldjelil Belarbi, Distinguished Professor, Missouri University of Science and Technology, Rolla, MO

Design and Construction of Innovative GFRP RC Bridge Decks with Extended Service Life **9:05 AM**

Brahim Benmokrane, Professor, University of Sherbrooke, Sherbrooke, QC, Canada; and **Sylvie Goulet, E. El-Salakawy**, and **David Nadeau**, University of Sherbrooke

Challenges and Opportunities in the Design and Implementation of FRP-Reinforced Concrete Bridge Deck Slabs **9:30 AM**

Vellore Gopalaratnam, Professor of Civil Engineering, University of Missouri-Columbia, Columbia, MO; and **Abdeldjelil Belarbi**, Missouri University of Science and Technology

MoDOT Steel Free Hybrid Bridge Deck Design **9:55 AM**

John Finke, Professor, Jacobs Civil Inc., Saint Louis, MO; and **Steve Yordy**, Jacobs Engineering Group, Inc.

Tuesday, November 4, 2008

9:00 AM - 12:00 PM

Innovative Bridge Decks (cont.)

C-224

Canadian and Japanese Experience with Steel Free-Bridge Decks 10:20 AM

Aftab Mufti, Professor, ISIS Canada, Winnipeg, MB, Canada; **Gamil Tadros**, ISIS Canada; **Baidar Bakht**, JMBT Structures Research Inc.; and **Nemkumar Banthia**, University of British Columbia

Structural Response of Bridge Girders and Deck Systems with Advanced Materials under Field Load Testing 10:45 AM

John Myers, Associate Professor, Missouri University of Science and Technology, Rolla, MO; and **Dave Holdener**, University of Missouri Science and Technology

Life Cycle Cost of RC Bridge Decks 11:10 AM

Gamil Tadros, Structural Consultant, ISIS Canada, Winnipeg, MB, Canada; **Baidar Bakht**, JMBT Structures Research Inc.; and **Aftab Mufti** and **Gordon Spark**, ISIS Canada

Question and Answer 11:35 AM

Abdeldjelil Belarbi, Distinguished Professor, Missouri University of Science and Technology, Rolla, MO

Tuesday, November 4, 2008

9:00 AM - 12:00 PM

Practical Use of Finite Element Analysis in the Design of Concrete Structures, Part 1 C-225

Sponsored by ACI Committees 118, Use of Computers, and 447, Finite Element Analysis of Reinforced Concrete Structures

Session Co-Moderators: Ryan Riehle
President/CEO
BuildWays Corporation
Pittsburgh, PA

John Jakovich
Systems Manager and
Senior Structural Analyst
DYK Incorporated
El Cajon, CA

Allan Bommer
Chief Design Engineer,
Structural Concrete Products
Bentley Systems, Inc.
Seattle, WA

Finite element analysis case studies and methods will be presented demonstrating how finite element analysis is used today by practicing engineers to design concrete structures. Topics presented will provide attendees with practical solutions and techniques where finite element analysis can be applied for the design and analysis of various concrete structures such as liquid storage tanks, slabs, shear walls, dams, and more. Contractors, engineers, public agency employees, and structural engineers are encouraged to attend this session.

Snap Through of a Shallow Spherical Dome of a Prestressed Concrete Tank 9:00 AM

Bryan Strohman, Engineer, Simpson, Gumpertz & Heger Inc., Waltham, MA; and **Atis Liepins**, Simpson, Gumpertz & Heger Inc.

The Design of Outer Concrete Containments of LNG Tanks for Operation and Hazard Scenarios 9:30 AM

Josef Roetzer, Senior Engineering Manager, Dywidag International, Munich, Germany; and **Hamish Douglas**, Dywidag International

Tuesday, November 4, 2008

9:00 AM - 12:00 PM

Practical Use of Finite Element Analysis in the Design of Concrete Structures, Part 1 (cont.) **C-225**

FE Modeling and Dynamic Analysis of Above-Ground Liquid Containing Tanks **10:00 AM**

Halil Sezen, Assistant Professor, Ohio State University, Columbus, OH; and **Adem Dogangun** and **Ramazan Livaoglu**, Karadeniz Technical University

Design Moments Determination for Slabs and Walls for Prestressed Concrete Liquid Storage Tanks Using Finite Element Analysis **10:30 AM**

John Jakovich, Systems Manager and Senior Structural Analyst, DYK Incorporated, El Cajon, CA

Application of Fracture Mechanics to the Nonlinear Dynamic Analysis of Concrete Dams **11:00 AM**

Victor Saouma, Professor, University of Colorado, Boulder, CO

Finite Element Software for the Service Life Prediction of Concrete Structures **11:30 AM**

Kamel Henchi, Director of Software Development, SIMCO Technologies, Inc., Quebec, QC, Canada; **Jacques Marchand**, Laval University; and **Eric Samson**, SIMCO Technologies Inc.

Tuesday, November 4, 2008

9:00 AM - 12:00 PM

Realistic Data for Realistic Expectations

C-230

Sponsored by ACI Committee 214, Evaluation of Results of Tests
Used to Determine the Strength of Concrete

Session Co-Moderators: Kal Hindo
 Principal
 Kal R. Hindo & Associates
 Clearwater, FL

 David J. Akers
 Senior Engineer
 California Nevada Cement Association
 San Diego, CA

This session will educate contractors, engineers, material suppliers,
and public agencies in the proper use of statistics to evaluate concrete
test results.

Living with the Slump Test Variations

9:00 AM

David Richardson, Associate Professor, Missouri University of
Science and Technology, Rolla, MO; and **Luke M. Snell**, DEW School
of Construction, Arizona State University

Statistical Analysis of Air Content Data

9:25 AM

Eugene Takhtovich, Project Manager, HAKS, Long Island City, NY;
and **Paul St. John**, St. John Consulting Services

Analysis of Variation in Drying Shrinkage Test Data

9:50 AM

David J. Akers, Senior Engineer, California Nevada Cement Association,
San Diego, CA

Variability of Rapid Chloride Permeability Data

10:15 AM

Casimir Bognacki, General Manager of Material Engineering Division,
Port Authority of New York & New Jersey, Jersey City, NJ

Laboratory Proficiency Report/Washington, DC Area

10:40 AM

Colin L. Lobo, Vice President of Engineering, National Ready Mixed
Concrete Association, Silver Spring, MD

Variability in Concrete Production Test Data

11:05 AM

James Shilstone Sr., Concrete Engineer, Shilstone Companies,
Irving, TX; and **Mark Cheek**, Beta Testing & Inspection LLC

Tuesday, November 4, 2008

9:00 AM - 12:00 PM

Realistic Data for Realistic Expectations (cont.)

C-230

Drying Shrinkage—Myth or Reality

11:30 AM

Alfred Kaufman Jr., Manager Technical Services, ConcreteRx, Pt. Richmond, CA; and **Bob Foley**, Cemex Ready Mix



Tuesday, November 4, 2008

9:00 AM - 12:00 PM

Slag Cement Concrete Developments

C-241

Sponsored by the ACI Missouri Chapter

Session Co-Moderator: John J. Myers
Associate Professor
Missouri University of
Science and Technology
Rolla, MO

Abdeldjelil Belarbi
Distinguished Professor
Missouri University of
Science and Technology
Rolla, MO

This session will focus on slag cement concrete developments, with presentations on slag cement in concrete products.

Introduction **9:00 AM**

John J. Myers, Associate Professor, Missouri University of Science and Technology, Rolla, MO

De-Icer Scaling Resistance of Ternary Concrete Mixtures Containing Slag Cement **9:05 AM**

Jan R. Prusinski, Executive Director, Cement Council of Texas, Hurst, TX

The Effect of Ground Granulated Blast Furnace Slag (Slag Cement) on the Drying Shrinkage of Concrete—A Critical Review of Literature **9:30 AM**

Douglas R. Hooton, Professor, University of Toronto, Toronto, ON, Canada; **Jan R. Prusinski**, Cement Council of Texas; **Kyle Stanish**, Walker Restoration Consultants; and **Juan Angel**, University of Toronto

Structural Mass Concrete Featuring Slag Cement **9:55 AM**

Darrell F. Elliott, Manager of Technical Services, Buzzi Unicem USA, La Place, LA

Use of Slag Cement in Concrete Products **10:25 AM**

Gordon McLellan, Technical Manager, Hanson Slag Cement, Cape Canaveral, FL

Tuesday, November 4, 2008

9:00 AM - 12:00 PM

Slag Cement Concrete Developments (cont.)

C-241

High Volume Slag Blended Cement Concrete for High-Density Concrete at Elevated Temperatures 10:45 AM
Corina-Maria Aldea, Senior Materials Engineer, AMEC, Hamilton, ON, Canada; and **Bruce J. Cornelius, John Balinski, Barry Shenton**, and **James Sato**, AMEC

Solar Reflectance of Slag Cement Concretes 11:10 AM
Martha VanGeem, Principal Engineer, CTL Group, Skokie, IL

The Effect of Temperature on the Rate of Strength Development of Slag Cement Concrete 11:35 AM
Marios Soutsos, Lecturer of Civil Engineering, University of Liverpool, Liverpool, UK; and **S. Millard, John Bungey**, and **S. Barnett**, University of Liverpool

Tuesday, November 4, 2008

9:30 AM - 11:30 AM

✓Architectural Walking Tour

\$8 U.S. per person

This tour departs from the AIA Bookstore located at 911 Washington Avenue across from the Concourse Building

This 90-minute walking tour begins with a walk down Washington Avenue, through the historical loft district; and past the Merchandise Mart, The Roberts Orpheum Theater Building, and The Old Post Office. Other notable sites on this tour include The Chemical Building, The Union Trust Company, The Wainwright Building, and The Old Courthouse. Comfortable walking shoes are recommended.



✓ = Separate fee required

Tuesday, November 4, 2008

12:00 PM - 2:00 PM

✓ **Contractors' Day Lunch**

C-221

\$35 U.S. per person

Hosted by the ACI Missouri Chapter and the ACI Construction Liaison Committee



Speaker: Jeff Steinhart
Vice President of Engineering
Anheuser-Busch
St. Louis, MO

Topic: Innovation in the Construction Industry

Join other ACI convention attendees for the Contractors' Day Lunch. The featured speaker will be Jeff Steinhart, Vice President of Engineering for Anheuser-Busch. Jeff Steinhart is responsible for leading the Engineering and Environmental Affairs department for the company's domestic and international beer operations and the major capital projects for its subsidiaries.

Steinhart will be discussing innovation in the construction industry and will cover topics such as:

- Background on Anheuser-Busch
- The Roles of the Owner and Contractor
- A-B's Expectation of the Contractor Community
- Lessons Learned on Concrete
- Innovations in A/C/S
- Trends we need to be able to address

Tickets may be purchased at the ACI Registration Desk up to 24 hours prior to the event, based on availability. Please notify the ACI Registration Desk if you have any dietary restrictions.

✓ = Separate fee required

Tuesday, November 4, 2008

2:00 PM - 5:00 PM

Contractors' Day Session: Concrete Construction

C-224

Tolerances: Safety, Achievability and Clarity

Sponsored by the ACI Missouri Chapter

Session Moderator:

Beverly A. Garnant

Executive Director

American Society of Concrete Contractors

Saint Louis, MO

Several factors should be considered when construction tolerances are set. The maximum-permitted variations should not unduly affect structural strength and in-service performance. The tolerances should be understood, communicated, and measured during construction and inspection, and they should be achievable. It serves no purpose to set tolerances tighter than those that can be achieved on typical buildings with a normal standard of care unless there is an absolute need for setting tighter tolerances and a willingness to pay for the extra effort needed to meet those tolerances. As-built data and job-site examples presented in this session address all three of these considerations.

Ensuring Safety, But with Achievable and Understandable Tolerances

2:00 PM

Ward R. Malisch, Technical Director, American Society of Concrete Contractors, Northville, MI

Are Current Stair Tolerances Achievable?

2:40 PM

Heather Brown, Associate Professor, Middle Tennessee State University, Murfreesboro, TN

Are Current ADA Tolerances Achievable?

3:20 PM

W. Calvin McCall, Senior Materials Engineer, Concrete Engineering Specialists, Charlotte, NC; and **Scott Tarr**, Concrete Engineering Specialists

The ASCC Tolerance Manual for Concrete Buildings

4:00 PM

Bruce Suprenant, Senior Construction Engineer, Concrete Engineering Specialists, Boulder, CO

Tuesday, November 4, 2008

2:00 PM - 5:00 PM

Design and Construction of Elevated Concrete Pedestal Tanks C-230

Sponsored by ACI Committee 371, Elevated Tanks with Concrete Pedestals

Session Co-Moderators: Stephen Meier
VP Engineering & Technology
Tank Industry Consultants Inc.
Indianapolis, IN

Charles S. Hanskat
Principal Engineer
Hanskat Consulting
Northbrook, IL

Currently there are two types of elevated concrete pedestal tanks: concrete pedestal supporting a steel vessel (known as a composite tank), and concrete pedestal supporting a concrete vessel. This session will review the history and current practice of designing and constructing such tanks and present an overview of a recently completed ACI report that is a guide for design and construction of elevated concrete pedestal tanks.

Introduction to Elevated Concrete Pedestal Tanks 2:00 PM

Charles S. Hanskat, Principal Engineer, Hanskat Consulting, Northbrook, IL

Design of Composite Elevated Water Tanks 2:15 PM

Rolf Pawski, Principal Engineer, Landmark Structures, Wheaton, IL

Construction of Elevated Steel Tanks with Concrete Pedestals 2:45 PM

Kevin Binder, Engineering Supervisor, CBI Constructors Inc., Clive, IA

Design of Elevated Concrete Tanks 3:15 PM

Jeffrey Ward, Chief Structural Engineer, Crom Corporation, Gainesville, FL

Construction of Elevated Concrete Tanks 3:45 PM

Kenneth Harvey, Vice President Engineering, Crom Corporation, Gainesville, FL

Overview of Committee 371 Report on Concrete Pedestal Supported Tanks 4:15 PM

Atis Liepins, Senior Principal, Simpson, Gumpertz & Heger Inc., Waltham, MA

Tuesday, November 4, 2008

2:00 PM - 5:00 PM

Open Paper Session

C-223

Sponsored by ACI Committee 123, Research and Current Developments

Session Moderator: Narayanan Neithalath
Assistant Professor
Clarkson University
Potsdam, NY

This Open Paper Session is a forum for presenting recent technical information that could not be scheduled into other convention sessions.

Introduction 2:00 PM

Narayanan Neithalath, Assistant Professor, Clarkson University, Potsdam, NY

Development of Noncontact Ultrasonic Imaging for Concrete Elements 2:02 PM

Kerry Hall, Student, University of Illinois, Urbana, IL; and **John Popovics**, University of Illinois

Volume Change and Cracking in Internally-Cured Mixtures Made with Saturated Lightweight Aggregate Under Sealed and Drying Conditions 2:25 PM

Ryan Henkensiefken, Graduate Student, Purdue University, West Lafayette, IN; **Tommy Nantung**, Indiana DOT; **Dale Bentz**, National Institute of Standards and Technology; and **W. Jason Weiss**, Purdue University

Deflection Control of Slabs Based on Reinforcement Strength 2:48 PM

Admasu Desalegne, Student, University of Alberta, Edmonton, AB, Canada; **Adam Lubell**, University of Alberta; and **Jijun Tang**, Jacobs Engineering Group Canada

Properties and Potential Use of Cement Kiln Dust 3:10 PM

Sulapha Peethamparan, Assistant Professor, Clarkson University, Potsdam, NY; and **Jan Olek**, Purdue University

Self-Consolidating Pervious Concrete Overlay Construction at the MnROAD Test Facility 3:32 PM

John Kevern, Assistant Professor of Civil Engineering, University of Missouri, Kansas City, MO; and **Kejin Wang** and **Vernon Schafer**, Iowa State University

Tuesday, November 4, 2008

2:00 PM - 5:00 PM

Open Paper Session (cont.)

C-223

**Volumetric Stability of Concrete Using Recycled
Concrete Aggregates**

3:55 PM

Yogini Deshpande, Post-Doctorial Researcher, Michigan Technological University, Houghton, MI; and **Jacob Hiller**, Michigan Technological University

**Partial Confinement Utilization for Ultimate Analysis of
Circular Concrete Columns**

4:17 PM

Ahmed Abd El-Fattah, Graduate Student, Department of Civil Engineering, Kansas State University, Manhattan, KS; and **Hayder Rasheed** and **Asad Esmaeily**, Kansas State University

Evaluation of GFRP Bar Bond Strength

4:39 PM

Tarek Bashandy, Assistant Professor, Helwan University, Giza

Tuesday, November 4, 2008

2:00 PM - 5:00 PM

Practical Use of Finite Element Analysis in the Design of Concrete Structures, Part 2 C-225

Sponsored by ACI Committees 118, Use of Computers, and 447, Finite Element Analysis of Reinforced Concrete Structures

Session Co-Moderators: John Jakovich
 Systems Manager and
 Senior Structural Analyst
 DYK Incorporated
 El Cajon, CA

 Allan Bommer
 Chief Design Engineer,
 Structural Concrete Products
 Bentley Systems Inc.
 Seattle, WA

Finite element analysis case studies and methods will be presented demonstrating how finite element analysis is used today by practicing engineers to design concrete structures. Topics presented will provide attendees practical solutions and techniques where finite element analysis can be applied for the design and analysis of various concrete structures such as liquid storage tanks, slabs, shear walls, dams, and more. Contractors, engineers, public agency employees, and structural engineers are encouraged to attend this session.

Accuracy of Finite Element-Based Slab Design Moments **2:00 PM**
Ben Deaton, PhD Candidate, Georgia Institute of Technology, Atlanta, GA; and **Lawrence Kahn** and **Kenneth Will**, Georgia Institute of Technology

Assumptions in FE Slab Analysis and Their Design Implications **2:25 PM**
Allan Bommer, Chief Design Engineer, Structural Concrete Products, Bentley Systems Inc., Seattle, WA

Practical Finite Element Analysis Issues for an Irregular R/C High-Rise Building **2:50 PM**
Myoungsu (James) Shin, Project Engineer, Rosenwasser/Grossman Consulting Engineers, New York, NY; and **Benjamin Pimentel**, Rosenwasser/Grossman Consulting Engineers

Tuesday, November 4, 2008

2:00 PM - 5:00 PM

Practical Use of Finite Element Analysis in the Design of Concrete Structures, Part 2 (cont.)

C-225

Finite Element Modeling and Design of Reinforced Concrete Horizontal Diaphragms for Complex High-Rise Buildings 3:15 PM

Michael Seica, Project Engineer, Halcrow Yolles, Toronto, ON, Canada; **Neb Erakovic**, Halcrow Yolles; and **Ahmed Elrefai**, GMT Inc.

Finite Element Analysis of the IIT Campus Center Tube 3:40 PM

Jeffery Volz, Assistant Professor, Missouri University of Science and Technology, Rolla, MO; and **David Ekstrom**, Holabird & Root LLC

Practical Design of Concrete Shear Walls for Nuclear Facilities Using Finite Element Analysis 4:05 PM

Said Bolourchi, Principal Engineer, Optima Engineering, San Francisco, CA; and **Daniel Eggers** and **Christine Roy**, Simpson, Gumpertz & Heger, Inc.

Fabric-Formed Concrete Member Design

4:30 PM

Robert Schmitz, President, RP Schmitz Consulting Engineers, Brookfield, WI



Tuesday, November 4, 2008

2:00 PM - 5:00 PM

Recent Advances in Torsion Design of Structural Concrete C-241
Sponsored by Joint ACI-ASCE Committee 445, Shear and Torsion

Session Co-Moderators: **Abdeldjelil Belarbi**
Distinguished Professor
Missouri University of
Science and Technology
Rolla, MO

Gary Greene
Project Engineer
Professional Service Industries
South Riding, VA

The purpose of this session is to give an overview of some of the new approaches and discuss their use as a framework for design and analysis of structural concrete beam-type members under torsion and combined loading. It covers several topics from the historical background outlining the development of research on torsion of RC members, the various theories and models, existing detailing requirements for torsional members, and design examples using three major design codes.

Five Decades of Progress in Torsion Analysis and Design 2:00 PM
of Structural Concrete

Abdeldjelil Belarbi, Distinguished Professor, Missouri University of Science and Technology, Rolla, MO

Torsion of Structural Concrete—A Historical Overview 2:10 PM
Thomas Hsu, Moores Professor, University of Houston, Houston, TX

Structural Behavior of Members Subjected to Torsion 2:35 PM
Abdeldjelil Belarbi, Distinguished Professor, Missouri University of Science and Technology, Rolla, MO; **Gary Greene**, Professional Service Industries; and **Maria Vidigal de Lima**, Federal University of Uberlândia

Advances in Analytical Modeling of Torsional Members 3:00 PM
Yi-Lung Mo, Professor, University of Houston, Houston, TX;
Khaldoun Rahal, Kuwait University; and **Liang-Jenq Leu**, National Taiwan University

Tuesday, November 4, 2008

2:00 PM - 5:00 PM

Recent Advances in Torsion Design of Structural Concrete (cont.)

C-241

Members Subjected to Combined Loadings Including Torsion 3:25 PM

Gary Greene, Project Engineer, Professional Service Industries, South Riding, VA; and **Khaldoun Rahal**, Kuwait University

Behavior and Design of Precast L-Spandrel Beams 3:50 PM

Paul S. Zia, Distinguished University Professor, North Carolina State University, Raleigh, NC; **Gary Klein**, Wiss, Janney, Elstner Associates, Inc.; **Donald Logan**, Stresscon Corporation; and **Sami Rizkalla**, **Greg Lucier** and **Catrina Walter**, North Carolina State University

Detailing for Torsion in RC Members 4:15 PM

Neal Anderson, Consultant, Concrete Reinforcing Steel Institute, Schaumburg, IL

Design Examples for Torsion in RC Members Using Current Major Design Codes 4:35 PM

Walter Dilger, Professor of Civil Engineering, University of Calgary, Calgary, AB, Canada; **Christos Karayannis**, Democritus University of Thrace; and **Thomas Hsu**, University of Houston

Tuesday, November 4, 2008

2:00 PM - 5:00 PM

Seismic Design and Detailing of Bridge Protection Systems **C-240**
Sponsored by ACI Committee 341, Earthquake-Resistant
Concrete Bridges

Session Moderator: Ronald Watson
President
R. J. Watson Inc.
Amherst, NY

This session will cover information on the design and detailing of seismic isolation bearings, shock transmission units, and FRP strengthening systems.

Sliding Isolation Systems for Concrete Bridges **2:00 PM**
Ronald Watson, President, R.J. Watson Inc., Amherst, NY

A New SRMD Design Tool—The Multi-Surface Sliding Isolator **2:30 PM**
Paul Bradford, PE and Development Engineer, PB Engineering, West Falls, NY

CFRP Jackets as an Emergency Repair and a Protection System for Bridge Columns **3:00 PM**
Sarah Witt, Project Engineer, Fyfe Company LLC, San Diego, CA

Seismic/Wind Control of the Sutong Bridge Using Hybrid Viscous Damping Devices **3:30 PM**
Douglas Taylor, President, Taylor Devices, North Tonawanda, NY; and
Robert Schneider and **John Metzger**, Taylor Devices

The Construction Phase for the Replacement of the Expansion Joint for the Alex Fraser Bridge **4:00 PM**
Eric de Fleuriot, Manager, Earth Tech Canada, Burnaby, BC, Canada

Selection of Expansion Joint Systems to Accommodate Large Seismic Movements **4:30 PM**
Mark Kaczinski, PE/Vice President of Engineering, D.S. Brown Company, North Baltimore, OH; and **Larry Durain**, D.S. Brown Company

Tuesday, November 4, 2008

2:30 PM - 4:30 PM

✓ Concrete Structures of St. Louis Bus Tour

\$20 U.S. per person

This tour departs from the AIA Bookstore, located at 911 Washington Avenue across from the Concourse Building.

This narrated bus tour will take guests past the James Eads Bridge, Jefferson Memorial Expansion Site, The Gateway Arch, and The Old Courthouse, to name a few. In addition to the narrated bus tour, guests will also have the opportunity to take a short 10-minute walk through the City Museum, get a private 30-minute viewing of the Pulitzer, and exit the bus briefly to view the Eads Bridge.



✓ = Separate fee required

Tuesday, November 4, 2008

5:00 PM - 6:00 PM

Faculty Network Reception

R-PARKVIEW

Hosted by ACI Committee E803, Faculty Network Coordinating Committee

Faculty members and students are invited to attend this informal reception. During this time you will have an opportunity to exchange ideas and network. Light hors d'oeuvres will be available. Each attendee will receive one drink ticket upon arrival at the reception.



Tuesday, November 4, 2008

6:30 PM - 8:00 PM

Concrete Mixer: Echoes of Oktoberfest
Sponsored by the ACI Missouri Chapter

R-MAJESTIC

Transport yourself back to nineteenth century Germany for an Oktoberfest-inspired Concrete Mixer. Hosted by the ACI Missouri Chapter, you will feel as though you're inside a festival hall in Munich, with long tables and benches and authentic Bavarian music. This social event is perfect for meeting industry leaders and reconnecting with friends and colleagues.

Please use the drink tickets found in your convention registration packet for this event.



Wednesday, November 5, 2008

9:00 AM - 12:00 PM

Adhesive Anchors: Their Importance in the Construction of Concrete Structures

C-224

Sponsored by ACI Committee 355, Anchorage to Concrete

Session Moderator: Donald Meinheit
Affiliated Consultant
Wiss, Janney, Elstner Associates Inc.
Chicago, IL

The assembled panel will discuss aspects of adhesive anchor behavior, design, and applications. Each panel member will make a brief presentation relative to one of the four aspects of using adhesive anchors research, manufacturing, installation, and design. The major emphasis will be on polymeric adhesives.

Researchers' Perspective of Adhesive Anchor Behavior 9:00 AM

Werner Fuchs, Institute of Construction Materials, University of Stuttgart, Stuttgart, Germany

Manufacturers' Perspective of Producing Adhesive Anchors 9:10 AM

Peter Grzesik, Technical Services Engineer, Hilti North America, Tulsa, OK

Contractors' Perspective of Installing Adhesive Anchors 9:20 AM

Myles Murray, President, MAM LLC, Larkspur, CO

Structural Designers' Perspective on Designing and Specifying Adhesive Anchors 9:30 AM

Peter Carrato, Principal Civil Engineer, Bechtel Corporation, Frederick, MD

Panel Discussion 9:40 AM

Wednesday, November 5, 2008

9:00 AM - 12:00 PM

People Who Made a Difference in Concrete

C-225

Sponsored by ACI Committee 120, History of Concrete

Session Co-Moderators: Luke M. Snell
Eminent Scholar
DEW School of Construction
Arizona State University
Tempe, AZ

Kimberly Kramer
Director of Graduate Studies
Kansas State University
Manhattan, KS

This session will include a variety of papers on the technical advances in concrete and the people who made a difference in concrete. This session will have several short papers that provide insight into our past and the people who helped develop our concrete technology.

Alexandre Sarrasin, Boldness and Invention in Concrete Design 9:00 AM

Katrin Habel, Bridge Designer, UMA Engineering Ltd., Edmonton, AB, Canada

Doc's Blocks Floor and Roof Construction 9:20 AM

Anthony Dolhon, Senior Engineer, Wiss, Janney, Elstner Associates Inc., Pennington, NJ

Early Concrete Freeways: Setting the Stage for the Interstate System 9:40 AM

Kurt Smith, Program Director, Applied Pavement Technology Inc., Urbana, IL

Eugene Freyssinet: The Magnificent Journey to Invent and Revolutionize Prestressed Concrete Construction 10:00 AM

Kenneth Shushkewich, Structural Engineer, KSI Bridge Engineers, San Francisco, CA

Stephen J. Hayde—Father of the Lightweight Aggregate Industry 10:20 AM

John Reis, President, Expanded Shale, Clay, and Slate Institute, Salt Lake City, UT; and **Theodore Bremner**, University of New Brunswick

Wednesday, November 5, 2008

9:00 AM - 12:00 PM

People Who Made a Difference in Concrete (cont.)

C-225

The Hohokam and Caliche

10:40 AM

Luke M. Snell, Eminent Scholar, DEW School of Construction, Arizona State University, Tempe, AZ; and **Billie Snell**, Educational Consultant

**Joseph Louis Lambot—Father of the Concrete Canoe
(and Reinforced Concrete, too!)**

11:00 AM

Andrew Budek-Schmeisser, Assistant Professor, New Mexico Institute of Mining and Technology, Socorro, NM; and **Barbara Budek-Schmeisser**, New Mexico Institute of Mining and Technology

Oscar Niemeyer's Seductive Concrete Curves

11:20 AM

Jussara Tanesi, Concrete Materials Engineer and Lab Manager, FHWA/Global, Vienna, VA; and **Wael Ramadan**, WDG Architecture

Making a Texture on the Concrete Industry

11:40 AM

Mike Murray, President, Decorative Concrete Supply, Shawnee, KS

Wednesday, November 5, 2008

9:00 AM - 12:00 PM

***The Spirit of Structural Concrete in Performance-Based Seismic Design of Bridges, Part 1** C-230

Sponsored by ACI Committee 341, Earthquake-Resistant Concrete Bridges

Session Co-Moderators: **Pedro F. Silva**
Assistant Professor
The George Washington University
Washington, DC

Hossam Abdou
Project Manager
Alfred Benesch & Co.
Chicago, IL

This session is intended to provide the bridge community of practicing engineers, academics, researchers, producers, and client agencies including federal, state, and local agencies with the latest developments and the state of the art on performance-based seismic design of concrete bridges.

Performance-Based Seismic Design of the Cast-in-Place Segmental Folsom Bridge 9:00 AM

Alex Harrison, Senior Bridge Engineer, CH2M Hill, Sacramento, CA; and **Ayman Salama**, CH2M Hill

Nonlinear Modeling of Bridge Structures in California 9:25 AM

Bozidar Stojadinovic, Professor, University of California Berkeley, Berkeley CA; **Ady Aviram**, University of California Berkeley; and **Kevin Mackie**, University of Central Florida

Seismic Damage States for Bridge Columns and Correlation with Performance Parameters 9:50 AM

M. Saiid Saiidi, Professor, University of Nevada-Reno, Reno, NV; and **Ashkan Vosooghi**, University of Nevada-Reno

Analytical Assessment and Comparison of Seismic Performance Evaluation Procedures Used for Design of Highway Bridges 10:15 AM

Oh-Sung Kwon, Assistant Professor, Missouri University of Science and Technology, Rolla, MO; and **Amr Elnashai** and **Aman Mwafy**, University of Illinois

* Denotes themed session

Wednesday, November 5, 2008

9:00 AM - 12:00 PM

***The Spirit of Structural Concrete in Performance-Based Seismic Design of Bridges, Part 1 (cont.)** C-230

Direct Displacement-Based Design as an Alternative for Seismic Design of Bridges 10:40 AM

Mervyn Kowalsky, Associate Professor, North Carolina State University, Raleigh, NC; and **Vinicio Suarez**, UTPL

Damping-Enhanced Seismic Strengthening of RC Bridge Columns for Multi-Objective Performances 11:05 AM

Genda Chen, Professor, Missouri University of Science and Technology, Rolla, MO; and **Kazi Karim**, Missouri University of Science and Technology

Inelastic Web Crushing Performance Limits of High-Strength-Concrete Structural Walls 11:30 AM

Rigoberto Burgueno, Associate Professor, Michigan State University, East Lansing, MI; and **Eric Hines**, Le Messurier



* Denotes themed session

Wednesday, November 5, 2008

9:00 AM - 12:00 PM

Use and Misuse of ACI Documents

C-223

Sponsored by ACI Committee RCC, Responsibility in Concrete Construction

Session Co-Moderators: Jim Kretz
Field Operation Manager
Walbridge Aldinger
Detroit, MI

Boyd Clark
Technical Director Construction
Materials Services
RJ Lee Group Inc.
Monroeville, PA

This session includes topics regarding confusion between guidance and mandatory language documents, varying interpretations of documents, case studies, legal issues, and topics related to responsibility. A panel discussion where audience members can ask questions to the panel of speakers will be held following the presentations.

Poor Specifications I Have Seen

9:00 AM

Ward R. Malisch, Technical Director, American Society of Concrete Contractors, Northville, MI

Use and Misuse of ACI Documents

9:20 AM

Kenneth Bondy, Structural Engineer, Consulting Structural Engineer, West Hills, CA

Developing Complete and Unambiguous Specifications

9:40 AM

Eldon Tipping, President, Structural Services Inc., Richardson, TX

How to Abuse and Misuse ACI 301

10:00 AM

W. Calvin McCall, Senior Materials Engineer, Concrete Engineering Specialists, Charlotte, NC

The Adverse Affect High Cementitious Contents Have on High-Strength Concrete

10:20 AM

Casimir Bognacki, General Manager of Material Engineering Division, Port Authority of New York & New Jersey, Jersey City, NJ

Case Studies in the Misuse of Specifications

10:40 AM

Jeffrey Coleman, Attorney at Law/PE, Coleman Hull & Van Vliet, Minneapolis, MN

Wednesday, November 5, 2008

9:00 AM - 12:00 PM

Use and Misuse of ACI Documents (cont.)

C-223

Durability Beyond ACI 201

11:00 AM

Michael Thomas, Professor, University of New Brunswick,
Fredericton, NB, Canada

Panel Discussion

11:20 AM

Ward R. Malisch, Technical Director, American Society of Concrete Contractors, Northville, MI;

Kenneth Bondy, Consulting Structural Engineer, West Hills, CA;

Casimir Bognacki, General Manager of Material Engineering Division, Port Authority of New York & New Jersey, Jersey City, NJ;

Eldon Tipping, President, Structural Services Inc., Richardson, TX;

Jeffrey Coleman, Attorney at Law/PE, Coleman Hull & Van Vliet, Minneapolis, MN;

W. Calvin McCall, Senior Materials Engineer, Concrete Engineering Specialists, Charlotte, NC;

Michael Thomas, Professor, University of New Brunswick,
Fredericton, NB, Canada

Wednesday, November 5, 2008

2:00 PM - 5:00 PM

Advances in Fiber-Reinforced Concrete—A Tribute to Gordon Batson

C-223

Sponsored by ACI Committee 544, Fiber Reinforced Concrete

Session Co-Moderators: Nur Yazdani
Professor and Chairman
of Civil Engineering
University of Texas at Arlington
Arlington, TX

Matti Adan
Managing Engineer
Exponent
Menlo Park, CA

This session will be held to honor Professor Gordon Batson for his many years of dedicated service to ACI Committee 544 and to the development of the field of fiber-reinforced concrete. This session will include key presentations from experts from the academia and industry on recent advances in fiber-reinforced concrete application. Presentations will include topics on design, performance, and repair of concrete structures with a variety of fibers. The session will be of significant interest to academicians, practitioners, and others.

Introduction 2:00 PM

Nur Yazdani, Professor and Chairman of Civil Engineering, University of Texas at Arlington, Arlington, TX

Remarks by Gordon Batson 2:05 PM

Gordon Batson, Professor of Civil & Environmental Engineering, Clarkson University, Potsdam, NY

Rapid-Set Fiber-Reinforced Concrete for Repair and Retrofit 2:15 PM

P. Balaguru, Distinguished Professor of Civil and Environmental Engineering, Rutgers University, Piscataway, NJ

Prediction of Flexural Strength of RC Beams with Steel Fibers 2:38 PM

Jubum Kim, Assistant Professor of Civil Engineering, Pennsylvania State University Harrisburg, Middletown, PA

Fracture Properties of FRC 3:01 PM

Maria Lopez, Will Assistant Professor, Pennsylvania State University, University Park, PA

Wednesday, November 5, 2008

2:00 PM - 5:00 PM

Advances in Fiber-Reinforced Concrete—A Tribute to Gordon Batson (cont.)

C-223

Reduction of Secondary Steel in Post-Tensioned Anchorage Zones Using SFRC

3:24 PM

Kamal Tawfig, Professor and Chairman of Civil and Environmental Engineering, FAMU-Florida State University, Tallahassee, FL; **Stacey Johnson**, Figg Bridge Engineers; and **Nur Yazdani**, University of Texas at Arlington

FRC Performance Comparison: Direct Tensile Test, Beam-Type Bending Test, and Round Panel Tests

3:47 PM

Shih-ho Chao, Assistant Professor of Civil Engineering, University of Texas at Arlington, Arlington, TX; and **Nur Yazdani**, University of Texas at Arlington

Towards Rational Design Using Fibers in Concrete

4:10 PM

Vellore Gopalaratnam, Professor of Civil Engineering, University of Missouri-Columbia, Columbia, MO

Flexural Performance of Glass Fiber-Reinforced Cement Sandwich Panels

4:33 PM

Shashi Marikunte, Assistant Professor of Civil Engineering, Pennsylvania State University Harrisburg, Middletown, PA

Wednesday, November 5, 2008

2:00 PM - 5:00 PM

Early Age Test Methods for Performance Specifications C-224

Sponsored by ACI Committee 231, Properties of Concrete at Early Age

Session Co-Moderators: Zachary Grasley
 Assistant Professor
 Texas A&M University
 College Station, TX

 Maria Juenger
 Assistant Professor
 University of Texas
 Austin, TX

Presentation topics may focus on tests that are currently used in performance specifications or that may become used in future performance specifications. Parameters of concern include but are not limited to: 1) fresh properties such as viscosity, yield strength, or air void content and distribution; and 2) parameters such as permeability or diffusivity. Discussions of existing tests or novel tests are both welcome, as well as discussion of nondestructive techniques.

Please note that Part 2 of this session will take place during the ACI Spring 2009 Convention held in San Antonio.

Early Age Test and Criteria for Predicting Long-Term Chloride Penetration Resistance into Concrete 2:00 PM

Karthik Obla, Managing Director of Research & Materials Engineering, National Ready Mixed Concrete Association, Silver Spring, MD

Use of Early-Age Changes in Resistivity to Determine Development of Impermeability 2:30 PM

R. Doug Hooton, Professor, University of Toronto, Toronto, ON, Canada; and **Michelle Nokken**, Concordia University

Hollow Dynamic Pressurization as an Early Age Durability Test 3:00 PM

Christopher Jones, Research Assistant, Texas A&M University, College Station, TX; and **Zachary Grasley**, Texas A&M University

Investigation of Curing Effectiveness with Internal Sensors 3:30 PM

Michelle Nokken, Assistant Professor, Concordia University, Montreal, QC, Canada; and **Attila Zsaki**, Concordia University

Wednesday, November 5, 2008

2:00 PM - 5:00 PM

Early Age Test Methods for Performance Specifications (cont.)

C-224

Evaluation Techniques for Early Age Properties of High Early Strength White Cement for Terrazzo 4:00 PM

Chalermwut Snguanyat, Engineer, Siam Cement Group, Bangsue, Bangkok, Thailand; and **Wilasa Vichit-Vadakan**, Siam Cement Group

The Early-Age Setting Behavior of Cement Pastes Studied Using Rheological Properties and Ultrasonic Wave Propagation 4:30 PM

Gaurav Sant, Student, Purdue University, West Lafayette, IN; **Chiara Ferraris**, National Institute of Science and Technology; and **W. Jason Weiss**, Purdue University



Wednesday, November 5, 2008

2:00 PM - 5:00 PM

Shotcrete Construction

C-225

Sponsored by ACI Committees 506, Shotcreting; C660TG, Shotcrete Nozzleman Certification; and E703, Concrete Construction Practices

Session Co-Moderators: William Palmer
President
Complete Construction Consultants
Lyons, CO

Jean-Francois Dufour
Technical Director
King Packaged Materials Company
Blainville, QC, Canada

This session will cover the basics of shotcrete construction and practices based on the new edition of CCS-4 (*Shotcrete for the Craftsman*, ACI Shotcrete Nozzleman Certification Program, and new Shotcrete Technologies.)

Tribute to Ted Crom and Pertinence of Shotcrete Nozzleman Certification 2:00 PM

Lars Balck, Senior Vice President, The CROM Corporation, Asheville, NC

Strategic Development of the New CCS-4, *Shotcrete for the Craftsman* 2:30 PM

Jean-Francois Dufour, Technical Director, King Packaged Materials Company, Blainville, QC, Canada

Materials for Shotcrete and Construction 3:00 PM

Marc Jolin, Assistant Professor, Laval University, Quebec City, QC, Canada; and **Louis-Samuel Bolduc**, Laval University

Shotcrete Equipment and Placement of Shotcrete 3:30 PM

Raymond Schallom, Sales and Shotcrete Specialist, Allentown Shotcrete Technology, Allentown, PA

Use of Fibers in Shotcrete 4:00 PM

Peter Tatnall, Retired, Performance Concrete Technologies, Marietta, GA

Versatility of Shotcrete/Shotcrete Repairs 4:30 PM

Curt White, President, Coastal Gunite Construction Co., Bradenton, FL

Wednesday, November 5, 2008

2:00 PM - 5:00 PM

***The Spirit of Structural Concrete in Performance-Based Seismic Design of Bridges, Part 2** C-230

Sponsored by ACI Committee 341, Earthquake-Resistant Concrete Bridges

Session Co-Moderators: **Pedro F. Silva**
Assistant Professor
George Washington University
Washington, DC

Hossam Abdou
Project Manager
Alfred Benesch & Co.
Chicago, IL

This session is intended to provide the bridge community of practicing engineers, academics, researchers, producers, and client agencies including federal, state, and local agencies with the latest developments and the state of the art on performance-based seismic design of concrete bridges.

Performance-Based Design Approach for RC Circular Bridge Columns Under Combined Loadings 2:00 PM

Suriya Prakash Shanmugam, Professor, Missouri University of Science and Technology, Rolla, MO; and **Abdeldjelil Belarbi**, Missouri University of Science and Technology

Emergency Seismic Damage Repair of RC Bridge Columns 2:25 PM

M. Saiid Saiidi, Professor, University of Nevada-Reno, Reno, NV; and **Ashkan Vosooghi**, University of Nevada-Reno

Performance-Based Post-Earthquake Repair Metrics for RC Bridges 2:50 PM

Kevin Mackie, Assistant Professor, University of Central Florida, Oviedo, FL; and **Bozidar Stojadinovic**, University of California-Berkeley

A Manual for Performance-Based Seismic Retrofitting of Highway Bridges 3:15 PM

Ian Buckle, Professor, University of Nevada-Reno, Reno, NV

Performance-Damage Evaluation of RC Bridges Designed According to LFRD Seismic Design Specifications 3:40 PM

Tuong Nguyen, Graduate Fellow, George Washington University, North Hollywood, CA; and **Pedro F. Silva**, George Washington University

*Denotes themed session

Wednesday, November 5, 2008

2:00 PM - 5:00 PM

***The Spirit of Structural Concrete in Performance-Based Seismic Design of Bridges, Part 2 (cont.)**

C-230

Effects of Shear Key Failure on Seismic Performance of Post-Tensioned Box Girder Bridges 4:05 PM

J.I. Schoettler, Professor, University of California, San Diego, CA; and Jose Restrepo, University of California

Performance-Based Design Criteria for Seismic Investigation of the Approaches to the New Mississippi River Bridge in St. Louis 4:30 PM

Hossam Abdou, Project Manager, Alfred Benesch & Company, Chicago, IL; and Ihab Darwish, Alfred Benesch & Company



*Denotes themed session

Thursday, November 6, 2008

8:00 AM - 5:00 PM

✓ACI/PCA 318-08 Building Code Seminar
ACI and PCA Member Rate: \$457 U.S.
Nonmember Rate: \$597 U.S.

R-LANDMARK 3

7:30 AM Registration open. Pastries and coffee available.

Speakers: Neil M. Hawkins
Professor Emeritus
University of Illinois
Urbana, IL

Basile G. Rabbat
Manager, Structural Codes
Portland Cement Association
Skokie, IL

There are many important changes in ACI 318-08. The licensed design professional is required to assign exposure categories and classes based on the severity of the anticipated exposure of structural members to achieve durability. Requirements are presented to select effective stiffness to determine lateral deflections. A new simple procedure helps determine if compression members are considered braced or unbraced. Provisions are introduced for the design of headed stud assemblies. Design and detailing requirements are correlated with the Seismic Design Categories in the IBC. The use of high-strength confining steel is permitted to help reduce congestion. The beneficial effect of supplementary reinforcement and anchor reinforcement on the capacity of anchors is quantified. Seminar also includes lunch.

✓=Separate fee required

Notes

Notes

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