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ACI Members and Guests—Welcome to San Antonio and the ACI Spring 2009 Convention!

It is with great pleasure that I welcome you to San Antonio. Here you will find a destination that perfectly blends history, culture, and charm with great food and entertainment. San Antonio is the perfect location for the ACI Spring 2009 Convention.

Location aside, this convention has so much to offer each and every attendee. Whether you are attending multiple committee meetings, cheering for your favorite team during the Student Competition, networking with friends and colleagues, or sitting in on technical and educational sessions ranging in topics from sustainability to silica fume applications, this convention will provide many opportunities for professional growth.

To ensure that every attendee has the opportunity to experience everything San Antonio has to offer, the ACI San Antonio Chapter has put together an excellent program to do just that! Attendees can participate in a technical tour of the CMC Steel Texas plant, explore a local vineyard in the Texas Hill Country, tour the historic Alamo and Menger Hotel, and so much more! The San Antonio Chapter has also arranged “A Night in Old San Antonio” themed Concrete Mixer you are sure to enjoy.

Camila and I look forward to sharing in this exciting week with all of you. We hope your convention and trip to San Antonio is productive and memorable! Thank you for your support and contributions to ACI during this tough economic times.

Kind Regards,

Luis E. García
ACI President
Governor’s Welcome

Greetings:

As Governor of Texas, it is my honor to welcome you all to the spring 2009 convention of the American Concrete Institute.

Your industry provides cost-effective, durable and safe materials for building projects and infrastructure, and your presence at this convention showcases your dedication to the industry’s continued success and progress. This event will provide valuable information about the latest technological and safety advances in the evolving concrete industry.

I commend you all on your organization’s work to set reliable industry standards. Because of your efforts, consumers can rest assured that the concrete products we depend on are safe and reliable.

On behalf of all Texans, I welcome all visitors to our great state. San Antonio is one of the top tourist destinations in America, and this is a good chance for you to find out why. Sample great food, take in some local culture and experience the story that is Texas.

First Lady Anita Perry joins me in wishing you a successful convention.

Sincerely,

Rick Perry
Governor
Mayor’s Welcome

As the Mayor of the City of San Antonio, I am pleased to extend a hearty Texas size welcome to all the guests and members of the American Concrete Institute to San Antonio. We are delighted to serve as the host city for your 2009 convention.

We are the seventh largest city and very proud of the distinction of being one of the most unique and charming cities in the country. The heart of San Antonio is its rich history and multicultural character. While you are here, take time to visit the various sights and sounds that draw millions of visitors annually to San Antonio. From the historic Alamo to the famous River Walk, we have a multitude of choices for everyone. We pride ourselves on being a friendly and hospitable destination.

Thank you for choosing San Antonio for your spring convention. I hope that you have a successful event and a memorable stay.

Best wishes for continued success.

Sincerely,

Phil Hardberger
Mayor
ACI Fall 2009 Convention

New Orleans, LA

November 8-12, 2009 • Marriott

Highlights of the convention include:

• Technical sessions on topics such as planning for successful projects, building information modeling, admixtures, pervious concrete, shear and torsion, and more!
• Dinner honoring Professor Thomas Hsu
• Sunset on the River – Jazz Dinner Cruise
• Concrete Mixer at Mardi Gras World

For more information about the ACI Fall 2009 Convention, go to www.aciconvention.org. Registration opens July 1, 2009!
ACI Sustaining Members

ACS Manufacturing Corporation

ALJANS

Allen Engineering Corp.

Ash Grove Cement Company

Ashford Formula

Baker Concrete Construction, Inc.

The Chemical Company

BASF Admixtures, Inc.

BCS

Boral Material Technologies, Inc.

Buzzi Unicem

Cantera Concrete Company

Ceco Concrete Construction

Cemex Inc.

CHRYSO-ProMix Technologies

Commercial Contracting Corporation

Concrete Engineering Specialists
ACI Sustaining Members

Lithko Contracting, Inc.
Meadow Burke
W. R. Meadows, Inc.
Metromont Corporation
Municipal Testing Lab
Nox-Crete Products Group
OMYA Canada, Inc.
Operating Engineers Training Trust
Oztec

Portland Cement Association
PNA Construction Technologies, Inc.
Precast/Prestressed Concrete Institute
Propex Concrete Systems
Ruentex Group
Scofield
Seretta Construction, Inc.
Sika Corp.

Seismic and Building Code Consulting
ACI Sustaining Members

- Spurlino Materials
- Structural Group
- Structural Services, Inc.
- Triad Engineering, Inc.
- Tru Wall Concrete, Inc.
- Unibeton Ready Mix
- Universal Concrete Products, Ltd., Co.
- Wacker Neuson
- Webcor Concrete
- Westroc, Inc.
Join one or both of the ACI Facebook or LinkedIn groups today and start networking with thousands of other concrete professionals, receive special ACI announcements, and participate in technical discussions.

To join, simply visit ACI’s Web site at www.concrete.org, and click on the Facebook and LinkedIn links.
Convention Sponsors

The ACI San Antonio Chapter wishes to thank the following organizations for their donations to make the ACI Spring 2009 Convention a success.

**Habanero ($15,000)**
ACI San Antonio Chapter
Baker Concrete Construction, Inc.
Urban Concrete Contractors, Ltd.

**Serrano ($5,000)**
BASF Construction Chemicals
Boral Material Technologies, Inc.
Capitol Cement
Cement Council of Texas
Lattimore Materials Company
Martin Marietta Materials
The Euclid Chemical Co.

**Jalapeno ($2,500)**
Alamo Cement Company, Ltd.
Alamo Concrete Products, Ltd.
Bartlett Cocke General Contractors
CMC Construction Services
Fugro Consultants, Inc.
Ingram Ready Mix, Inc.
San Antonio Chapter of SEAoT
Terracon Consultants, Inc.
Texas Aggregate and Concrete Association
Texas Industries, Inc.

**Banana ($1,000)**
ACI Arizona Chapter
ACI Central Florida Chapter
ACI Central Texas Chapter
ACI Greater Miami Valley Chapter
ACI Greater Michigan Chapter
ACI Houston Chapter
ACI Las Vegas Chapter
ACI New Mexico Chapter
ACI Northeast Texas Chapter
ACI Pittsburgh Area Chapter
ACI South Texas Chapter
AIA San Antonio
American Spring Wire Corp.
Bexar Concrete Works, Ltd.
Clark/Hunt, A Joint Venture
G.W. Mitchell & Sons, Inc.
Headwaters Resources
McCarthy Building Company
Metropolitan Contracting Company, Ltd.
M.J. Lee Construction Co.
Professional Service Industries, Inc.
Raba-Kistner Consultants, Inc.
Relmco Inc.
Convention Sponsors

**Banana, cont’d ($1000)**
San Antonio Chapter of AGC of America
Shannon-Monk, Inc.
Summit Contracting
Texas Council of Engineering Laboratories
Texas Lehigh Cement Company
Texas Section of ASCE
The Consulting Engineers Group, Inc.
Vaughn Construction Company
Vulcan Materials Company

**Bell ($500)**
ACI Arkansas Chapter
ACI Florida Suncoast Chapter
ACI Georgia Chapter
ACI Illinois Chapter
ACI Intermountain Chapter
ACI Louisiana Chapter
ACI Maryland Chapter
ACI Missouri Chapter
ACI National Capitol Chapter
ACI New Jersey Chapter
ACI Northern California - Western Nevada Chapter
ACI Rocky Mountain Chapter
ACI San Diego Chapter
ACI Southern California Chapter
ACI South Florida Chapter
ACI Washington Chapter
Arias & Associates, Inc.
Bexar Chapter Texas Society of Professional Engineers
Drury Southwest, Inc.
Flexicore of Texas
Gosco Equipment, Inc.
Hamilton Form Company
Heldenfels Enterprises, Inc.
Jaster-Quintanilla San Antonio, LLP
Manco Structures, Ltd.
NAPCO Precast LLC
Redondo Manufacturing
Rock Engineering and Testing
Rosenberger Construction LP
San Antonio Branch of ASCE
Solomon Colors Inc.
SpawGlass Contractors, Inc.
Structural Engineering Associates

**ACI Amigos (Less than $500)**
C3S, Inc.
Civil Engineering Consultants
Red Hawk Contracting

Sponsors are listed as of 2/23/09
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Derek DeWitt, Lattimore Materials Company

Secretary
Emilio Hernandez, Martin Marietta Materials

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Jacob Ness, Jaster-Quintanilla San Antonio, LLP

Directors
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Steve Kosub, Terracon Consultants, Inc.
Alex Salcedo, Arias and Associates, Inc.
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Richard W. Kistner, Raba-Kistner Consultants, Inc.

Book Drive
Rick Fuentes, Fugro Consultants Inc.

Contractors’ Day
Michael S. Hutzler, CMC Construction Services
Marty Garza, Zachry Construction Corporation
Marcia Gonzalez, Terracon Consultants, Inc.
Jorge Hinojosa, Bexar Concrete Works, Ltd.
Doug McMurry, San Antonio Chapter of AGC of America

Exhibits
Kevin Copeland, Wiss, Janney, Elstner Associates, Inc.
Don Taubert, Capitol Cement

Finance
Justice Edge, Jaster-Quintanilla San Antonio, LLP
Frank Jaster, Civil Engineering Consultants

Guest Program
Rodney Cunningham, Boral Material Technologies

Social Events
Laura J. Campa, Terracon Consultants, Inc.
Annabell Statz-Jacobi, Martin Marietta Materials

Student Program
Manuel Diaz, University of Texas San Antonio
Steve Kosub, Terracon Consultants, Inc.
Alda Villaneuva, Terracon Consultants, Inc.

Treasurer
John Morgan, Raba-Kistner Consultants, Inc.

Volunteer Coordination
Jacob Ness, Jaster-Quintanilla San Antonio, LLP
“ACI has enabled me to remain technically competent, and ACI continues to expose me to all the happenings and new developments in our industry. More importantly, though, I am motivated to give back to this industry that has shown such support for me throughout my career.”

– Dick Stehly, Principal, American Engineering Testing, Inc.; 2008-2010 ACI Vice President; and member of the Concrete Legacy Society

The Concrete Legacy Society is a special group of individuals, who are passionate about the concrete industry, and have included ACI or the ACI Foundation in their estate plans, helping to ensure that future generations will have access to continued advancements in concrete knowledge.

ACI Foundation

www.ACIFoundation.org – 248-848-3778
**General Information**

**ACI Registration**

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**

Cancellations, additions, and location changes to the convention schedule will be posted daily on a monitor inside Salons G-I at the Marriott Rivercenter.

**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 and dial ‘0’.

**Photographs**

ACI plans to take photographs during the convention and reproduce them in ACI educational, news, or promotional material, whether in print, electronic, or other media, including the ACI Web site. By participating in the ACI Spring 2009 Convention, you grant ACI the right to use your name, photograph, and biography for such purposes.
Green Initiatives
Name Badge Recycling
In an effort to promote a “greener” convention, ACI asks that you recycle your name badge at the end of the convention. Drop your badge off at ACI Registration during posted registration hours. Thank you for your support!

ACI Water Bottles
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, reusable water bottles will be available for pick up on a first-come, first-served basis in the exhibit area. Water bottles may be filled at several water stations throughout the hotel. Thank you for your support, and enjoy!

Beverage Breaks
Beverages are available courtesy of ACI on the following days/times.

<table>
<thead>
<tr>
<th>Day</th>
<th>Beverage</th>
<th>Time</th>
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<tr>
<td>Saturday</td>
<td>Soda</td>
<td>2:00 pm – 5:00 pm</td>
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<tr>
<td>Sunday – Tuesday</td>
<td>Coffee:</td>
<td>7:00 am – 10:00 am</td>
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<tr>
<td></td>
<td>Soda</td>
<td>12:00 pm – 3:00 pm</td>
</tr>
<tr>
<td>Wednesday</td>
<td>Coffee</td>
<td>7:00 am – 10:00 am</td>
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</tbody>
</table>

Alcohol Policy
Nonalcoholic beverages are available at all ACI-sponsored receptions. The legal drinking age in Texas is 21.

Cyber Café and Wireless Hot Spot
Stay connected to home and work! Take advantage of the Cyber Café and FREE wireless hot spots available in Salons G-I during the following hours:

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
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<td>Saturday</td>
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<tr>
<td>Wednesday</td>
<td>8:00 am – 2:00 pm</td>
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</table>

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

ACI Book Drive

Collection bin located in SALONS G-I

Making Literacy More Concrete!

Illiteracy is a growing problem in the United States, with more than 50 million individuals unable to read at a basic level. In an effort to fight adolescent illiteracy, ACI is conducting a book drive during this convention.

ACI is asking that each attendee donate a new or gently-used children's book, grades K-12. Book donations may be made to the collection bin in the exhibit area, Salons G-I, during open exhibit hours.

Don't have any books to donate? Here are some of the wish-list items the San Antonio Youth Literacy Council could use:
- Dry Erase Boards
- Dry Erase Markers
- Projection Screen
- New Books: K–2nd grade

Donated books will go to the San Antonio Youth Literacy Council, an organization dedicated to promoting literacy skills to at-risk youth. The San Antonio Youth Literacy Council provides one-on-one reading assistance to elementary children. In 27 schools across San Antonio, volunteers tutor children who struggle with basic reading and comprehension skills. For more information on the San Antonio Youth Literacy Council, please go to www.sayl.org.

ACI Bookstore

Visit the ACI Bookstore during the following hours:

<table>
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<tr>
<th>Day</th>
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<tr>
<td>Saturday</td>
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<td>Wednesday</td>
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</tbody>
</table>

Career Center

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 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.
General Information

Membership Information

ACI Bookstore—SALONS G-I
To learn more about the new ACI membership benefits and how to become a member, visit the ACI Bookstore in Salons G-I.

ACI/Elsevier E-Learning

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 now available. Representatives from Elsevier are available throughout the week to help demonstrate and launch this new program.

Session Handouts on Demand

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.

Please note: Handouts are available from speakers who have elected to provide and post them to the ACI Web site. If you do not find a handout for a particular session, please contact the speaker for more information.

Session Attendance Tracking Form

The Session Attendance Tracking Form found after page 144 may 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.

Audio and videotaping are strictly prohibited without the express 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.
General Information

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

- Saturday: 3:00 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.

Airport Transportation

Airport Shuttle
SATRANS Airport Express offers a transfer service to the San Antonio International Airport for $18.00 one way. For a return transfer, please make arrangements at the concierge desk. For additional information on SATRANS Airport Express shuttles, please visit: www.saairportshuttle.com or call 210-281-9900. Please note that SATRANS Airport Express does make additional stops at other hotels on the way to the airport, which could delay your anticipated arrival/departure times.

Taxis
Departing guests should speak with the hotel concierge to arrange transportation back to the San Antonio International Airport. The average cost of a taxi to the airport is approximately $20.00 one way, depending on the time of day.

Local Information/ACI San Antonio Chapter
ACI San Antonio 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
General Information

Hotel Restaurants and Lounges

Starbucks  LOBBY LEVEL
Open daily 6:30 am – 7:00 pm
For a quick and light breakfast, snack, or lunch, stop by Starbucks to pick up coffee, pastries, yogurt, fruit, or sandwiches.

Sazo’s Latin Grill  2nd FLOOR
Open daily 6:00 am – 11:00 pm for breakfast, lunch, and dinner.
Sazo’s features Latin and Spanish fusion. Enjoy fine wines from the Central Texas region while savoring the flavors of Latin American and Mexican cuisine from Tapas to Seafood Paella.

Room Service
Room service is available 24 hours a day.

Restaurant Reservations  Outside SALONS G-I
Creative Dining and Entertainment will be available to make restaurant reservations and recommendations Sunday from 12:00 pm – 5:30 pm and Monday from 10:00 am – 5:30 pm.

ACI Fall 2009 Convention Information  Outside SALONS G-I
The ACI Louisiana Chapter will be available Saturday through Tuesday to answer your questions about New Orleans and activities at the fall convention. Mark your calendars for November 8-12, 2009! Registration opens July 1, 2009!
Book Drive!

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

Donations may be made in Salons G-I
## Where’s That Meeting Room?

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The ACI San Antonio Chapter and the American Concrete Institute wish to thank all exhibitors for their participation and support of the ACI Spring 2009 Convention.

Exhibit Hours
Saturday  2:00 pm – 6:00 pm
Sunday   7:30 am – 5:00 pm & 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.

Boral Material Technologies Inc.  Booth #22
Boral Material Technologies Inc., is a leading marketer of fly ash and all coal combustion products. With more than four decades of experience marketing fly ash to the concrete industry, Boral is a pioneer in the development of new construction material technologies. Visit www.boralmti.com.

Burgess Pigment Company  Booth #35
Burgess Pigment Company will be exhibiting Optipozz, a highly reactive metakaolin, a Class N pozzolan, for increased strength, durability, ASR and chemical resistance, as well as reduced shrinkage. Visit www.burgesspigment.com.

Carolina Stalite Company  Booth #24
Cement Council of Texas  Booth #27
The Cement Council of Texas (CCT) provides technical information to those individuals and agencies that write construction specifications. The CCT acts as a technical resource for designers, specifiers, and constructors on cement and concrete subjects with its professional engineering staff and other experts. It provides assistance in the proper applications of these products in all aspects of design and construction. Visit www.cementcounciloftexas.org for further information.

ChemCo Systems  Booth #7
ChemCo Systems makes epoxy- and polyurea-based adhesives, coatings, grouts, and control joint fillers applied by specialty contractors for structural concrete bonding, patching, protection, and restoration. ChemCo’s complete repair system offers the advantage of single sourcing and includes automated metering ratio pumps for epoxy crack injection, slab delamination, voids, and joints. For more information, contact ChemCo Systems at 1-800-757-6773, bors@chemcosystems.co, or www.chemcosystems.com.

Commercial Metals Company  Booth #29-32
Since 1915, Commercial Metals Company and subsidiaries have manufactured, recycled, and marketed steel and metal products, related materials, and services through a network including steel minimills, steel fabrication and processing plants, construction-related product warehouses, a copper tube mill, metal recycling facilities, and marketing and distribution offices in the U.S. and international markets. Visit www.cmc.com for further information.

CPS Security Solutions  Table #41
CPS offers a total security solution. CPS can design, engineer, and retrofit state-of-the-art security systems to fit any client's specifications, needs or concerns. Services offered include security officers, on-site trailers, patrol, camera systems, remote monitoring, burglar alarm, structured wiring, video monitoring, and solar mobile video surveillance units. For further information, go to www.cpssecurity.com.

Decon USA Inc.  Booth #16
Decon® Studrail® is 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 available on their Web site. For further information, go to www.deconusa.com.
Exhibitors
Exhibitor listing as of 2/19/09

Electro Tech CP, LLC  Booth #4
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.electrotechcp.com.

ElmTree System  Booth #21
The ElmTree System is a laboratory management software (LIMS) system designed specifically for engineering laboratories that test construction materials. Customized, comprehensive, and easy to use, ElmTree helps material testing labs operate more efficiently and profitably. Visit www.elmtreesystem.com.

The Euclid Chemical Co.  Booth #25
The Euclid Chemical Co., 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 Co., visit www.euclidchemical.com.

FORTA Corporation  Booth #34
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.

Germann Instruments, Inc.  Booth #28&33
Exhibitors
Exhibitor listing as of 2/19/09

Grace Construction Products  Booth #14&17

Headwaters Resources Inc.  Booth #26
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.

International Concrete Repair Institute  Booth #6
The mission of the International Concrete Repair Institute (ICRI) is to be a leading resource for education and information to improve the quality of repair, restoration, and protection of concrete and other structures in accordance with consensus criteria. To learn more about ICRI, go to www.icri.org.

James Instruments Inc.  Booth #2
James Instruments began in 1968 by supplying the now classic R-Meter reinforcing bar locator. James Instruments’ expanded product line of strength, ultra-sonic, reinforcing bar location, corrosion, moisture, and maturity provides updated technology to the nondestructive testing field. Visit www.ndtjames.com for further information.

Maccaferri Group, Inc.  Booth #23
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. Wirand 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.

McHugh Construction  Table #40
Exhibitors
Exhibitor listing as of 2/9/09

Octaform Systems Inc.  Booth #5
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 further information.

Outokumpu Stainless  Booth #12
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 they combine 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.

Post-Tensioning Institute  Booth #39
The Post-Tensioning Institute (PTI) is dedicated to expanding post-tensioning knowledge and applications through certification, code development, education, research, and marketing. PTI strives to provide a variety of meaningful benefits to its members such as: reduced registration rates for PTI events, certification workshops, and seminars; access to a variety of innovative technical publications; and much more. With the growing need for cost conscious environmentally friendly building practices, post-tensioning applications can help to improve your projects’ sustainability ratings and cut costs through reduced material consumption. To learn more about PTI, membership, and post-tensioning applications, visit www.post-tensioning.org or call 248-848-3180.

Proceq USA, Inc.  Booth #37
Proceq USA, Inc., 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.
Exhibit listing as of 2/9/09

QuakeWrap Inc. Booth #13
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.

SAS Stressteel Booth #38
SAS Stressteel provides innovative products and solutions for the construction industry. Offering fully threaded bars for a wide range of geotechnical and concrete construction applications, such as rock and soil anchors, stressed tie rods, mini-piles, multibar caissons, and high-strength reinforcing bars in sizes from No. 6 to No. 24 in yield strengths of 80, 97, and 150 ksi. Visit www.stressteel.com for more information.

Sika Corporation Booth #3
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 #18
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.

Sonoco Booth #11
A new member of the Sonotube® concrete form product family, Sonovoid® concrete void forms provide temporary support for cast-in-place concrete floors, beams and walls where expansive soils are present. After the concrete can support itself, moisture breaks down the void form, allowing room for soil expansion. Learn more at www.sonotube.com.
Superior Gunite Co.  
Superior Gunite has been in the gunite/shotcrete industry for over 50 years. Superior Gunite began with the very first pier repairs in the 1940s and has continued to develop and improve structural shotcrete. In an industry where there is no substitute for experience, Superior Gunite has an outstanding record. Visit www.superior-gunite.com for further information.

Taylor & Francis Group  
Taylor & Francis is a premier publisher of books in civil and construction engineering 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.

URETEK USA  
URETEK USA puts customers in control of their pavement lifting and soil stabilization problems and has been doing so for more than 25 years. With over 75,000 successful jobs worldwide, URETEK USA is part of a global organization focused on controlling complex pavement lifting and soil stabilization issues for departments of transportation, departments of public works, bridge, tunnel, and airport authorities nationwide.

URETEK USA’s patented Deep Injection™ (DI) process employs high-density expanding polymer to fill, densify, and stabilize low-density compressible soils to depths of 30 feet and beyond. The process is ideal for highways, bridge approach/departure slabs, as well as taxiways, runways, and tunnels with settlement problems caused by poor base and sub-base soil compaction. Visit www.uretekusa.com for further information.

Vector Corrosion Technologies  
Vector Corrosion Technologies offers a portfolio of solutions for concrete corrosion repair and protection that include 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 for further information.

Xypex Chemical Corporation  
Xypex Chemical Corporation manufactures high-performance products for the protection and waterproofing of concrete. For more information, visit www.xypex.com.
ACI’s Career Center

ACI’s Online Career Center brings together great job opportunities and great candidates. This job search engine is specifically targeted to the concrete industry.

- Easy online job management
- Resume searching access
- Company awareness
- FREE student internships

Don’t miss this unique opportunity to be seen by an exclusive audience of the industry’s best and brightest!

Special Events

Saturday, March 14, 2009

✓ LEED for New Construction and Major Renovations  SALON J
Technical Review Workshop
8:30 am – 5:00 pm
$365 U.S. per person; pre-registration required

The demand for green buildings that save money while protecting the environment and occupant health continues to increase. The USGBC’s LEED Rating System is the nationally recognized rating system for green buildings, and LEED is already being used in all 50 states. In the company of other concrete industry professionals, this full-day workshop will educate you on LEED credits and intents and how all members of the project team can contribute to its LEED certification. After attending this course, you will be aware of the changes to credits, prerequisites, and points in LEED 3.0, and understand the role that concrete can play in earning LEED points.

Paul H. Goldsmith is a USGBC LEED accredited professional, an expert in sustainable design, and champion of Harley Ellis Devereaux’s development of design standards for projects seeking LEED certification. For more information about Paul, go to: http://www.usgbc.org/ShowFile.aspx?DocumentID=3734.

If you are interested in becoming a LEED accredited professional, this workshop will also help prepare you for the LEED Professional Accreditation Exam. (Please note that USGBC plans to end registration for the current version of the LEED AP exam on March 31, 2009, with exams running through spring/summer 2009.) Now is the perfect time to earn your LEED accredited professional designation before the requirements change.

✓ = Separate fee required
First-Time Convention Attendee Breakfast  
8:00 am – 9:00 am  
Sponsored by the ACI Convention Committee

Session Co-Moderators:  Debrethann R. Orsak  
Vice-President/Manager of 
Business Development  
Cagley & Associates Inc.  
Rockville, MD

First-time convention attendees are invited to join Debby Orsak, ACI Convention Committee member, 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.

Student Concrete FRP Composites and Concrete Construction Competition  
12:00 pm – 5:00 pm  
Coordinated by ACI Committee E801, Student Activities, ACI Committee 440, Fiber Reinforced Polymer Reinforcement, and the ACI San Antonio Chapter

Sponsored by Fugro Consultants, Inc.

Session Co-Moderators:  Lawrence H. Taber  
Structural Engineer  
Black & Veatch  
Kansas City, MO  
John Newhook  
Professor  
Dalhousie University  
Halifax, NS, Canada

Students will design, construct, and test a concrete specimen reinforced with FRP bars to achieve the optimal load-to-weight ratio in the FRP Composites Competition. For the Concrete Construction Competition, students will present a solution to a realistic open-ended question. Stop by and cheer for your favorite team!

Opening Session & Awards Program  
5:15 pm – 6:30 pm  
The ACI Spring 2009 Convention officially begins during the Opening Session. Here, ACI will recognize individuals and groups for their contributions to ACI and achievements in the concrete industry. Please see pages 91 & 92 for a full listing of awardees.
Opening Reception

Approximately 6:30 pm – 7:30 pm
Sponsored by the ACI San Antonio Chapter and Capitol Cement

After the Opening Session & Awards Program, 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!

Hot Topic Session: Designing to Minimize Pavement Cracking

7:30 pm – 10:00 pm
Coordinated by the ACI San Antonio Chapter

See page 94 for sponsors

Session Co-Moderators: Woodward L. Vogt
President
Paradigm Consultants, Inc.
Houston, TX

Toby O. Martinez
Principal
Burge-Martinez Consulting, Inc.
San Antonio, TX

Don’t miss out on this Hot Topic Session. Come hear experts discuss issues that designers must consider to minimize the development of cracks in concrete pavements. The panel will also host a question and answer session following the presentation.

Student and Young Professional Networking Event

9:00 pm – 10:30 pm
Sponsored by the ACI Collegiate Concrete Council and Advisory Committee for Young Members

The ACI Collegiate Concrete Council and ACI Advisory Committee for Young Professionals invite all convention attendees to the first Student and Young Professional Networking Event. Meet fellow students and young professionals while networking with ACI members in a fun and casual environment. Attendees to the event will be entered in a drawing to win an iPod Nano or one of two $25 iTunes gift cards. In addition, the bar and grill will be open for attendees desiring to purchase food and beverages.
Student Lunch

12:00 pm – 2:00 pm

$49 U.S. per person; FREE to students who preregister

Sponsored by the ACI San Antonio Chapter; ACI Committee E801, Student Activities; and Baker Concrete Construction

Speaker: Richard S. Szecsy
Vice President for New Product Development and Risk Management
Lattimore Materials Company
McKinney, TX

Topic: Application of New Concrete Technology Versus Traditional Concrete Design

Join other ACI attendees and students for the announcement of the Student FRP Composites Competition results. Following lunch, featured speaker Richard Szecsy, Vice President for New Product Development and Risk Management for Lattimore Materials Company will give a presentation on the Application of New Concrete Technology Versus Traditional Concrete Design. The presentation will examine some specific cases where technology and traditional approaches to concrete design and construction are in conflict. The presentation is meant to challenge students that will be entering the market to think about their upcoming decisions regarding new technologies and their application when faced with historical and, in some cases, outdated viewpoints.

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.

University of Texas Reception

6:30 pm – 8:00 pm

The Civil, Architectural and 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.

= Separate fee required
Contractors’ Day Lunch
12:00 pm – 2:00 pm
$53 U.S. per person
Hosted by the ACI Construction Liaison Committee and the ACI San Antonio Chapter
Sponsored by Urban Concrete Contractors, Ltd.

Moderator: Rolfe Jennings
Technical Marketing Manager
CMC America
Sequin, TX

Speaker: Matthew Brace
Senior Vice President and Mills/Rebar Sales Marketing Manager
CMC Steel
Sequin, TX

Topic: Economic Overview of Current and Future Trends in Construction

Join other ACI convention attendees and contractors for the Contractors’ Day Lunch. Following lunch, Matthew Brace, Director of Commercial Mills for CMC Steel, will provide an overview of the current economic conditions and drivers that will help contractors manage downside risks in today’s market. Mr. Brace will discuss issues such as market trends in steel and concrete pricing and what may be affecting the types of construction.

Matthew Brace provides functional and strategic direction to enhance the successful and profitable growth of the Steel Group mills across all targeted markets and customer segments. He has worked in various sales and marketing positions in the metals industry for nearly 15 years. Mr. Brace started his career with Vermillion Iron Works while in college and worked for Auburn Steel and Birmingham Steel prior to joining CMC in 2000. At CMC he has served as Regional Sales Manager for the South Carolina Mill and Sales Manager for the East Mills.

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
Concrete Mixer—A Night in Old San Antonio
6:30 pm – 9:30 pm
Sponsored by the ACI San Antonio Chapter

Please use the ticket in your registration packet for entry into La Villita. Individuals without tickets will NOT be admitted.

Drink tickets are NOT required for this event.

This is a Concrete Mixer you won’t want to miss as you travel back in time for a Night in Old San Antonio (NIOSA). Meet the mariachi band in the main lobby at 6:00 pm and follow them to La Villita at 6:15 pm, approximately four blocks from the Marriott Rivercenter. Additionally, there will be ACI San Antonio Chapter representatives dressed in Texas shirts (see below) and holding balloons to guide you along the route to the event.

NIOSA is an abbreviated version of A Night in Old San Antonio which takes place every year in April during Fiesta Week in a historic arts village downtown. NIOSIA celebrates the cultural diversity of San Antonio. Fiesta is a 10-day city-wide celebration of the different cultures of San Antonio.

NIOSA is organized by the Conservation Society of San Antonio. In 1937, the San Antonio Conservation Society planned a 1-day Indian Festival along the banks of the San Antonio River to celebrate the heritage of the city’s early settlers while raising funds for historic preservation. Tonight you will enjoy authentic Texan cuisine and listen to the mariachi band while costumed dancers encourage you to join in on the celebration. Additionally, there will be a longhorn steer available for photos, so don’t forget your camera!

La Villita is an outdoor venue. Casual attire and comfortable walking shoes are recommended.
International Lunch
12:00 pm – 2:00 pm
$30 U.S. per person
Hosted by the International Committee

Speaker: José M. Izquierdo-Encarnación
Topic: Influence of Materials and Engineering Knowledge in the Constructed Patrimony: A Comparison of Four Continents

Featured speaker, José M. Izquierdo-Encarnación, ACI Past President and Principal Engineer, will give a presentation on the Influence of Materials and Engineering Knowledge in the Constructed Patrimony: A Comparison of Four Continents during the International Lunch.

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
Tours and Guest Events

All tours will depart from the main lobby

Tour tickets may be purchased until 24 hours prior to the event, based on availability.

Sunday-Wednesday

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

Continental Breakfast
7:00 am – 10:00 am
Sunday
Salon E
Monday-Wednesday
Atrium

Guest Lounge open
10:00 am – 4:00 pm
Atrium

Sunday, March 15, 2009

Guest Overview
8:00 am – 9:00 am
Salon E
Acquaint yourself with the week ahead! You'll also get a preview of the guest programs for the ACI Fall 2009 Convention in New Orleans, LA, and the ACI Spring 2010 Convention in Chicago, IL.

✓ San Antonio River Safari and Walking Tour
$88 U.S. per person
Depart: 10:00 am
Return: 2:00 pm

On this pseudo-safari you will cruise the San Antonio River on one of the river barges guided by a knowledgeable captain who will explain the history, architecture, and lore of this very charming metropolis. The culture and charm of the river will carry you through the excitement and beauty of this unexpected treat in the heart of the city.

Next, take a tour of the Buckhorn Museum, featuring a massive collection of over 3500 specimens of horned game animal trophies from all over the world. Other attractions here include the Hall of Fins with more than 70 mounted specimens, the Hall of Feathers, and the Texas Hall of History Wax Museum.

Following the museum tour, guests will walk to the IMAX Theater for the movie “The Price of Freedom” before moving on to the first mission in San Antonio and Texas shrine, The Alamo, one of the five missions established by the Spanish between 1718 and 1731. For lunch, you will visit the historic and haunted Menger Hotel where Teddy Roosevelt gathered his “Rough Riders” in the famous bar before riding to victory in the Spanish-American War.

✓ = Separate fee required
Tours and Guest Events

All tours will depart from the main lobby

Tour tickets may be purchased until 24 hours prior to the event, based on availability.

Sunday, March 15, 2009 (cont.)

✓ “This is San Antonio” Tour
$69 U.S. per person
Depart: 11:00 am
Return: 3:00 pm
You will begin your day with a cruise down the San Antonio River, where a knowledgeable captain will explain the history and lore of San Antonio and point out the great architecture of the city. Next, have lunch at Rio Rio Cantina, where you will enjoy authentic Mexican cuisine that will surely please your taste buds.

Following lunch, you will board deluxe transportation and pass by Hemis Fair Park, site of the 1968 World’s Fair, and pause to view the beautiful use of rock and water in the architectural wonder world of water at the base of the Tower of the Americas. Next, walk across the park to the Institute of Texan Cultures that houses dioramas, exhibits of artifacts, and historic photographs of each culture found in Texas. Continuing on you will pass by the Spanish Governor’s Palace, El Mercado, the Houston Street theater district, and the Municipal Auditorium to finally arrive at the Alamo. Originally called the Mission San Antonio de Valero, the Alamo played a pivotal role in Texas history. Lastly, visit the historic Menger Hotel, where bullet holes from the Spanish-American War can still be seen today.

✓ = Separate fee required
Tours and Guest Events

All tours will depart from the main lobby

Tour tickets may be purchased until 24 hours prior to the event, based on availability.

Monday, March 16, 2009

✓ Missions and Margaritas Tour

$97 U.S. per person

Depart: 9:00 am
Return: 2:00 pm

You will start the day traveling down the “Mission Trail” stopping first at Mission Concepción, most well known as one of the oldest unrestored stone churches in the nation. Next, you’ll visit Mission San José. Termed “the Queen of the Missions,” this elegant structure echoes reminders of an earlier time, when Texas was a frontier and the mission was a haven in an unsettled land.

Continuing on Mission Trail, you will pass Mission San Juan Capistrano and Mission Espada. With the distinctive silhouette of the bell tower, San Juan Capistrano makes a striking photo. Next to Mission Espada lies the Espada Aqueduct, the timeless irrigation system constructed by the missionaries in the 1730s that is still in use today.

Then it’s on to Aldaco’s, a favorite local restaurant, for a relaxing hour of margaritas and a cooking demonstration with lunch.

✓ La Cantera Shopping

$25 U.S. per person

Depart: 9:30 am
Return: 2:30 pm

The Shops at La Cantera consist of 1.3 million square feet of open air world-class retail and dining in the Texas hill country. This luxurious marketplace features a large variety of contemporary, high-quality retail options such as Burberry, LaCoste, Tiffany & Co., Ralph Lauren, and many more. On this tour you can experience some of the finest shopping in Texas set in a tranquil and soothing outdoor setting. Lunch is available at your leisure. La Cantera is located approximately 20 minutes from the Marriott Rivercenter. Visit www.shoplacantera.com.

Guest Tea

3:30 pm – 5:00 pm

Salon F

Please join Mrs. Camila García for afternoon tea. 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.

✓ = Separate fee required
Tours and Guest Events

All tours will depart from the main lobby

Tour tickets may be purchased until 24 hours prior to the event, based on availability.

Tuesday, March 17, 2009

✓ A Country Wine Affair—Texas Hill Country & Wine Tasting
$95 U.S. per person
Depart: 9:00 am
Return: 4:00 pm
Begin the day with a 40-minute drive to Gruene, TX. A quaint cotton gin town nestled in the Texas Hill Country, Gruene is filled with antique shops; a winery; and the world-famous “Gruene Hall,” the oldest Honky-Tonk in the state of Texas. For lunch, guests will dine at the Grist-Mill restaurant, featuring its beautiful view of the Guadalupe River.

After an adventurous afternoon it is off to Dry Comal Creek Vineyards, known for its rich alluvial soil laced with limestone and flattened shale chips. This land provides ideal growing conditions for grapes. Dry Comal Creek Vineyards is a relatively new venture, but its wines have achieved awards and recognition for their outstanding quality. The picturesque setting with lovely limestone structures is a beautiful setting to enjoy a few tastings and learn about the vineyards from the owner, who is also an expert of Texas wines.

✓ Festival of Flowers and Fauna Tour
$99 U.S. per person
Depart: 10:00 am
Return: 2:00 pm
The first stop of the tour is the San Antonio Botanical Center and Carriage House. Set on 33 acres, this spectacular complex features plants from all the regions of the state. Complementing the formal garden are an herb collection, a children’s garden, and an area designed specifically for the blind. The 90,000-square-foot Lucille Halsell Conservatory is an architectural wonder. Following the tour, lunch will be served at the Carriage House.

Next, stop at the McNay Art Museum grounds, where you will sample art and nature in harmony. Once the home of oil heiress Marion Koogle McNay, this Spanish-style home has been converted into the first privately-endowed art museum in Texas and displays European and American art. The grounds are meticulously kept and are artistically tempered with sculptures and landscaping.

✓ = Separate fee required
Tours and Guest Events

All tours will depart from the main lobby
Tour tickets may be purchased until 24 hours prior to the event, based on availability.

Wednesday, March 18, 2009

CMC Steel Texas Technical Tour
$27 U.S. per person
Depart: 9:00 am
Return: 3:00 pm

Founded in 1947 as a rail rerolling operation, CMC Steel Texas now has the capacity to melt 1 million tons of steel! Located in Seguin, TX, along the Guadalupe River, 30 miles from San Antonio, the plant occupies 850,000 square feet over 280 acres.

During the tour you will visit the melt shop where scrap metal is heated to 3000 °F and melted into liquid steel, cast into billets in a four-strand continuous caster, rolled into long products, and cooled on a football field-sized cooling bed. Following the tour of the melting shop, enjoy a BBQ lunch with other tour attendees. You must wear closed-toe shoes to participate in this tour. Old clothes and sunscreen are recommended. Hard hats, earplugs, goggles, and spark jackets will be provided.

✓ = Separate fee required
Daily Program

All schedule and location changes will be posted daily in Salons G-I.

✓ = Separate fee required   TG = Task Group

Friday, March 13, 2009

6:30 pm – 9:00 pm
TAC Technical Activities M1  CONF RM 12

Saturday, March 14, 2009

7:00 am – 6:00 pm
TAC Technical Activities M2  CONF RM 12

8:30 am – 5:00 pm
✓ LEED for New Construction and Major Renovations
Technical Review Workshop  Salon J

1:00 pm – 5:00 pm
EAC Educational Activities M1  CONF RM 13
301 Specifications M1  CONF RMS 17&18
376 RLG Containment Structures M1  CONF RM 14

7:30 pm – 10:00 pm
347-A Formwork-Specification  CONF RM 11

Sunday, March 15, 2009

7:00 am – 8:00 am
301-SC Spec-Steering Committee  CONF RM 11

7:00 am – 9:30 am
350-C Env Str-Reinf & Devel  CONF RM 10

7:00 am – 2:00 pm
TAC Technical Activities M3  SALON B

8:00 am – 9:00 am
562-CO Eval, Repair & Rehab-Coordination Meeting  CONF RM 18
First-Time Convention Attendee Breakfast  SALONS K&L

8:00 am – 9:30 am
341-A Equake Res Brdgs-Columns  CONF RMS 1&2

8:00 am – 10:00 am
E706 Repair Application Procedures  SUITE 642
E801 Student Activities  CONF RM 9

8:00 am – 11:00 am
445-B Shear & Torsn-Seismic Shear  SUITE 529
Daily Program

All schedule and location changes will be posted daily in Salons G-I.

✓ = Separate fee required      TG = Task Group

Sunday, March 15, 2009 (cont.)

8:00 am – 12:00 pm
TAC-RG1  TAC Review Group 1  SUITE 1905
TAC-RG2  TAC Review Group 2  SUITE 1951
TAC-RG3  TAC Review Group 3  SUITE 1952
TAC-RG4  TAC Review Group 3  SUITE 1906

8:30 am – 9:30 am
546-A  Repair-Underwater  CONF RM 15

8:30 am – 10:00 am
342  Bridge Evaluation  CONF RM 16
373  Prestressed/Tendons  CONF RM 11
440-I  FRP-Prestressed Concrete  CONF RM 6

8:30 am – 10:30 am
549-A  Thin Reinforced-Premix GFRC  CONF RM 13

8:30 am – 11:00 am
551  Tilt-Up  CONF RM 8

8:30 am – 11:30 am
CLC  Construction Liaison  CONF RM 17
MEMC  Membership  CONF RM 14
315-B  Detailing-Constructibility  SUITE 618
408  Development and Splicing  CONF RM 7

8:30 am – 12:00 pm
301  Specifications M2  CONF RMS 3&4

8:30 am – 12:30 pm
347  Formwork  CONF RM 12

9:00 am – 12:00 pm
562-F  Eval, Repair & Rehab-General  CONF RM 18

9:00 am – 5:00 pm
376  RLG Containment Structures M2  CONF RM 5

9:30 am – 10:30 am
546-B  Repair-Material Selection Guide  CONF RM 15

9:30 am – 11:00 am
341-B  Equake Res Brdgs-Pier Walls  CONF RMS 1&2
506-A  Shotcreting-Evaluation  CONF RM 10
Daily Program

All schedule and location changes will be posted daily in Salons G-I.

✓ = Separate fee required  TG = Task Group

Sunday, March 15, 2009 (cont.)

10:00 am – 11:30 am

- E701  Materials for Concrete Construction  CONF RM 6
- IC-Part  International-Partnerships & Publications  CONF RM 16
- 440-D  FRP-Research Development & Applications  SUITE 642

10:00 am – 1:00 pm

- 228  Nondestructive Testing  CONF RM 9
- 421  Reinf Slabs  CONF RM 11

10:00 am – 2:00 pm

✓ San Antonio River Safari and Walking Tour

10:30 am – 11:30 am

- 546-C  Repair-Guide  CONF RM 15

10:30 am – 1:30 pm

- 445-A  Shear & Torsn-Strut & Tie  CONF RM 13

10:30 am – 2:00 pm

- 549  Thin Reinforced  SALONS K&L

11:00 am – 12:30 pm

- 341-C  Equake Res Brdg-Retrofit  CONF RMS 1&2
- 506-G  Qualification for Projects  SUITE 529

11:00 am – 3:00 pm

✓ “This is San Antonio” Tour

11:30 am – 1:00 pm

- HTC  Hot Topic  SUITE 514
- 221  Aggregates  CONF RM 6
- 335  Composite Hybrid  CONF RM 14
- 350-SC  Env Str-Steering Comm  SUITE 642
- 374-TG2  Protocol for Testing RC Structural Elements  SUITE 618

11:30 am – 5:00 pm

- 562  Eval, Repair & Rehab  CONF RM 7
Daily Program

All schedule and location changes will be posted daily in Salons G-I.

☑ = Separate fee required   TG = Task Group

Sunday, March 15, 2009 (cont.)

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>12:00 pm – 2:00 pm</td>
<td>562-A Eval, Repair &amp; Rehab-Life Safety CONF RM 8</td>
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<td>562-B Eval, Repair &amp; Rehab-Loads CONF RM 10</td>
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<td>562-C Eval, Repair &amp; Rehab-Structural Analysis CONF RM 15</td>
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<td>562-D Eval, Repair &amp; Rehab-Structural Repair Design SUITE 1906</td>
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<tr>
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<td>562-E Eval, Repair &amp; Rehab-Durability Quality Assurance SUITE 1952</td>
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<tr>
<td>12:00 pm – 5:00 pm</td>
<td>Student Concrete FRP Composites and Concrete Construction Competition SALONS G-I</td>
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<tr>
<td>1:00 pm – 2:30 pm</td>
<td>ISO-TC 71 ISO/TC 71 Advisory SUITE 642</td>
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<tr>
<td>1:00 pm – 3:00 pm</td>
<td>301-H Spec-Tilt-Up Constr &amp; Arch Conc CONF RM 3</td>
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<td>345 Bridge Construction CONF RM 6</td>
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<tr>
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<td>445-C Shear &amp; Torsn-Punching Shear SUITE 529</td>
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<tr>
<td>1:00 pm – 3:30 pm</td>
<td>301-D Spec-Lightweight &amp; Massive Concrete CONF RM 11</td>
</tr>
<tr>
<td>1:00 pm – 4:00 pm</td>
<td>BAC-SD Board Advisory Committee on Sustainable Development CONF RMS 17&amp;18</td>
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<td>301-A Spec-Gen Reg. Definitions &amp; Tolerances CONF RM 4</td>
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<tr>
<td>1:00 pm – 5:00 pm</td>
<td>301-C Spec-Placing Consolidating &amp; Curing CONF RM 16</td>
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<td>305 Hot Weather CONF RM 9</td>
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<td>336 Footings SUITE 514</td>
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<td>355 Anchorage CONF RM 12</td>
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<td>1:30 pm – 3:00 pm</td>
<td>341-D Perf Based Seismic Design CONF RMS 1&amp;2</td>
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<td>506-B Shotcreting-Fiber Reinforced SUITE 1951</td>
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<tr>
<td>1:30 pm – 3:30 pm</td>
<td>370 Dynamic &amp; Vibratory Effects SUITE 1905</td>
</tr>
</tbody>
</table>
Daily Program
All schedule and location changes will be posted daily in Salons G-I.
✓ = Separate fee required  TG = Task Group

Sunday, March 15, 2009 (cont.)

2:00 pm – 3:00 pm
548-TG Polymers-TG SUITE 618

2:00 pm – 3:30 pm
209-A Statistics Procedures SUITE 544
236-B Material Science-Transport Mechanisms SUITE 1906

2:00 pm – 4:00 pm
215 Fatigue SALON B
440-L FRP-Durability SALONS K&L

2:00 pm – 5:00 pm
RCC Responsibility CONF RM 13
309 Consolidation CONF RM 8
315 Detailing SUITE 1952
352 Joints CONF RM 14

Sessions
2:00 pm – 5:00 pm
Improving the Infrastructure with Roller-Compacted Concrete Pavements SALON J
Methodology for Live Load Distribution for Bridge Evaluation SALON A
Residential Concrete Foundations—Science and Practice Can Coexist, Part 1 SALON M
Seismic Design of Punching Shear Reinforcement in Flat Plates SALON D
Transition from Fluid to Solid: Reexamining the Behavior of Concrete at Early Ages, Part 1 SALON C

2:00 pm – 6:30 pm
350-E Env Str-Precast/Prestressed CONF RM 10

2:30 pm – 5:00 pm
224 Cracking CONF RM 15

3:00 pm – 4:30 pm
441-E Columns with Multi-Spiral Reinforcement CONF RM 3
Daily Program

All schedule and location changes will be posted daily in Salons G-I.

✓ = Separate fee required   TG = Task Group

Sunday, March 15, 2009 (cont.)

3:00 pm – 5:00 pm
E601 Seminar Oversight Committee SUITE 1951
341 Earthquake Resistant Bridges CONF RMS 1&2
423/445 Adhoc Grp on Shear in Prestress Conc SUITE 642

3:30 pm – 5:00 pm
IC-Cert International-Certification SUITE 544
121 Quality Assurance CONF RM 11
201-A Durability-Sulfate Attack SUITE 1905
236-D Material Science - Nanotechnology of Concrete M1 SUITE 1906
439-A Steel Reinf-Wire CONF RM 6
445-E Shear & Torsn-SOA Torsion SUITE 529

4:00 pm – 5:00 pm
CLGE College Concrete Council CONF RMS 17&18
123 Research SALON B

4:00 pm – 5:15 pm
440-J FRP Stay in Place Forms SALONS K&L

4:00 pm – 6:00 pm
301-F Spec-Precast Concrete Panels CONF RM 4

4:30 pm – 6:30 pm
301-E Spec-Prestressed Concrete CONF RM 3
301-G Spec-Shrink Comp Conc & Ind Floor Slabs SUITE 618

5:15 pm – 6:30 pm
Opening Session & Awards Program SALONS E&F

6:30 pm – 7:30 pm
Opening Reception SALONS G-I

Session
7:30 pm – 10:00 pm
Hot Topic Session: Designing to Minimize Pavement Cracking SALON J

9:00 pm – 10:30 pm
Student and Young Professional Networking Event SAZO's
Daily Program

All schedule and location changes will be posted daily in Salons G-I.

✓ = Separate fee required      TG = Task Group

Monday, March 16, 2009

6:30 am – 8:15 am
Workshop for Technical Committee Chairs  SALON F

7:00 am – 8:30 am
IC-Conf International-Conferences  SUITE 529
524 Plastering  CONF RM 6
Speaker Skills Training Breakfast  CONF RMS 13&14

7:30 am – 8:30 am
Chapter Forum  CONF RM 11

8:00 am – 12:00 pm
350-D Env Str-Structural  CONF RM 4

8:30 am – 10:00 am
E802 Teaching Methods and Educational Materials  CONF RM 17
118 Computers  CONF RM 16
124 Aesthetics  SUITE 1905
439 Steel Reinforcement  CONF RM 10
506-C Shotcreting-Guide  SUITE 529
523-A Cellular-Autoclaved Aerated  SUITE 1952
544-B FRC-Education  CONF RMS 1&2

8:30 am – 10:30 am
PUBC Publications  SUITE 642

8:30 am – 11:30 am
C610 Field Technician Cert  CONF RMS 13&14
209 Creep & Shrinkage  CONF RM 3
311 Inspection  CONF RM 6
318-R Code Reorganization M1  CONF RM 11
437 Strength Evaluation  CONF RM 15
543 Piles  SUITE 544
546 Repair  CONF RM 18

8:30 am – 12:00 pm
355-TG Anchorage TG  CONF RM 9
362-A Parking Str-Standard  SALON B

8:30 am – 12:30 pm
374 Seismic Design  CONF RM 7

51
Daily Program

All schedule and location changes will be posted daily in Salons G-I.

✓ = Separate fee required  TG = Task Group

Monday, March 16, 2009 (cont.)

8:30 am – 1:00 pm
301-B Spec-Formwork & Reinforcement  Contact Chair
302  Floor Construction  SALON E
350-B Env Str-Durability  SUITE 618

8:30 am – 5:00 pm
313  Bins & Silos  SUITE 1906

Sessions
9:00 am – 12:00 pm
Building Sustainability with Slag Cement  SALON J
Research in Progress  SALON A
Residential Concrete Foundations—Science and Practice Can Coexist, Part 2  SALON M
Serviceability of Concrete Members Reinforced with Internal/External FRP Reinforcement, Part 1  SALON D
Transition from Fluid to Solid: Reexamining the Behavior of Concrete at Early Ages, Part 2  SALON C

9:00 am – 1:00 pm
365  Service Life  CONF RM 8
423  Prestressed  CONF RM 12

9:00 am – 2:00 pm
✓ Missions and Margaritas Tour

9:30 am – 2:30 pm
✓ La Canterra Shopping

10:00 am – 11:30 am
E804  Educational Awards Nomination Committee  SUITE 529
548-A Polymers-Overlays  SALONS K&L

10:00 am – 12:00 pm
445-D Shear & Torsn-Database  SUITE 514

10:00 am – 12:30 pm
506-E Shotcreting-Specifications  CONF RM 16
Daily Program
All schedule and location changes will be posted daily in Salons G-I.
✓ = Separate fee required      TG = Task Group

Monday, March 16, 2009 (cont.)

10:00 am – 1:00 pm
207  Mass Concrete SUITE 1905
216  Fire Resistance CONF RMS 1&2
232-A Fly Ash-Use of Nat Pozzolans CONF RM 17
343  Bridge Design CONF RM 10
523  Cellular Concrete SUITE 1952

10:30 am – 12:00 pm
440-E FRP-Prof Education SUITE 642

11:30 am – 1:00 pm
201-D Durability-Oversight Committee CONF RM 15
304  Measuring/Mix/Trans/Placing CONF RM 18
346  CIP Pipe SUITE 544
544-A FRC-Production & Applications SALONS K&L
548-C Polymers-Str Design & Analysis CONF RM 11

11:30 am – 2:00 pm
441  Columns CONF RMS 13&14
447  Finite Element Analysis CONF RM 6
552  Cementitious Grouting SUITE 529

11:30 am – 5:00 pm
376-TG1 RLG Containment Structures TG M1 CONF RM 5

12:00 pm – 1:30 pm
225  Hydraulic Cements SUITE 642

12:00 pm – 2:00 pm
351  Equip Foundations CONF RM 9
444  Experimental Analysis SUITE 514
✓ Student Lunch SALON F

12:00 pm – 3:00 pm
440-F FRP-Repair Strengthening SALON B

12:30 pm – 2:00 pm
214  Strength Tests CONF RM 16

12:30 pm – 3:00 pm
314  Simplified Design Buildings CONF RM 7
Daily Program

All schedule and location changes will be posted daily in Salons G-I.

✓ = Separate fee required  TG = Task Group

Monday, March 16, 2009 (cont.)

1:00 pm – 2:00 pm

- Convention Session Moderator Question and Answer Session
  - SUITE 1905
- Shotcreting-Underground
  - CONF RM 10

1:00 pm – 2:30 pm

- C631 Conc Transportation Const Insp
  - SUITE 618
- 548-B Polymers-Sulfur Concrete
  - SUITE 1952

1:00 pm – 3:00 pm

- C660 Shotcrete Nozzleman Cert
  - CONF RM 18
- 440-K FRP-Material Characteristics
  - CONF RM 11

1:00 pm – 3:30 pm

- Design for Wind Loads
  - SUITE 544

1:00 pm – 4:00 pm

- Self-Consolidating Concrete
  - CONF RM 12

1:00 pm – 5:00 pm

- Parking Structures
  - CONF RM 8

2:00 pm – 3:00 pm

- Scholarship Council M2
  - SUITE 3629

2:00 pm – 3:30 pm

- ACI 318/ASCE7 Coordination
  - SUITE 514
- 318-S Spanish Translation
  - SALONS K&L

2:00 pm – 5:00 pm

- Marketing
  - SUITE 642
- Fly Ash & Natural Pozzolans
  - CONF RMS 1&2
- Chimneys
  - CONF RM 10
- Rehabilitation
  - CONF RMS 13&14
Daily Program
All schedule and location changes will be posted daily in Salons G-I.
✓ = Separate fee required    TG = Task Group

Monday, March 16, 2009 (cont.)

Sessions
2:00 pm – 5:00 pm
Behavior of Concrete Transportation Structures Under Blast and Impact  SALON D
Consolidation: Back to the Basics in the 21st Century  SALON C
Developing Innovative Solutions for Design and Construction of Precast/Prestressed Concrete Structures  SALON J
The Practice and Placement of Structural Concrete in Seismic Design of Bridge Infrastructure  SALON A
What's This Report For? Using Engineering Reports to Make a Decision  SALON M

2:00 pm – 6:00 pm
ITG-6  High-Strength Steel Reinforcement  CONF RM 9
369  Seismic Rehab  CONF RM 16
445  Shear & Torsion  CONF RM 15

2:00 pm – 6:30 pm
212  Chemical Admixtures  SUITE 1905
301  Specifications M3  CONF RMS 3&4
360  Slabs on Ground  SALON E

2:30 pm – 3:30 pm
327  RCC Pavements  SUITE 1952

2:30 pm – 4:00 pm
533  Precast Panels  CONF RM 17

2:30 pm – 5:00 pm
CAC  Chapter Activities  SUITE 618

3:00 pm – 5:00 pm
130  Sustainability  CONF RM 11

3:00 pm – 6:00 pm
440-H  FRP-Reinforced Concrete  SALON B
Monday, March 16, 2009 (cont.)

3:30 pm – 5:00 pm
122  Thermal Properties  SUITE 514
318-L  International Liaison  CONF RM 6
Guest Tea  SALON F

3:30 pm – 5:30 pm
446  Fracture Mechanics  CONF RM 7

3:30 pm – 6:00 pm
544-D  FRC-Structural Uses  SALONS K&L

3:30 pm – 6:30 pm
350-J  Env Str-Education  SUITE 544
435  Deflection  SUITE 1952

4:00 pm – 6:00 pm
236  Material Science  CONF RM 12

5:00 pm – 6:00 pm
Women in ACI Reception  CONF RMS 17&18

5:00 pm – 6:30 pm
C601-C  Masonry Testing Technician  SUITE 642
E702  Designing Concrete Structures  SUITE 1951
TSTTTC  TAC-SDC-TTTC Coordination Meeting  SUITE 514
318-TG  Task Group Foundation  CONF RM 10
334  Shells  CONF RM 8
555  Recycled  CONF RM 11

5:00 pm – 7:00 pm
E703  Concrete Construction Practices  SUITE 529
351-B  Grtng Fndns-Equip Machnry  SUITE 618

6:00 pm – 7:30 pm
TAC-Code  Code Relationship  SUITE 1906

6:30 pm – 8:00 pm
University of Texas Reception  CONF RM 6

Session
7:30 pm – 10:00 pm
123 Forum: Are We Investing Enough in Research and Utilizing Research Funding Smartly?  SALON J
Daily Program
All schedule and location changes will be posted daily in Salons G-I.

✓ = Separate fee required      TG = Task Group

Monday, March 16, 2009 (cont.)

9:00 pm – 10:30 pm
Student and Young Professional
Networking Event

Tuesday, March 17, 2009

7:00 am – 8:30 am
TTTC  TAC Technology Transfer

8:00 am – 9:00 am
440-M  FRP-Repair of Masonry Str M1

8:00 am – 10:00 am
230  Soil Cement

8:00 am – 11:00 am
332-B&C  Residential Concrete Sub B & C
332-D&E  Residential Concrete Sub D & E

8:00 am – 12:00 pm
EAC  Educational Activities M2

8:30 am – 10:00 am
C620  Laboratory Tech Cert
325-A  Pavements-Design
348  Safety
548  Polymers

8:30 am – 11:30 am
201  Durability
306  Cold Weather
318  Building Code M1
357  Offshore & Marine
506  Shotcreting
522  Pervious Concrete

8:30 am – 12:00 pm
117  Tolerances

8:30 am – 12:30 pm
349-A&B  Nuclear Structures-Design & Materials
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<tr>
<th>Time</th>
<th>Event Description</th>
<th>Location</th>
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<tr>
<td>8:30 am – 3:30 pm</td>
<td>350-F Env Str-Seismic</td>
<td>CONF RM 11</td>
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<tr>
<td>9:00 am – 10:00 am</td>
<td>350-G&amp;K Env Str-Tightness Testing/Haz Mat</td>
<td>SUITE 514</td>
</tr>
<tr>
<td>9:00 am – 11:30 am</td>
<td>IC International Committee</td>
<td>CONF RM 6</td>
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<tr>
<td>9:00 am – 12:00 pm</td>
<td>TRRC TAC Repair &amp; Rehab</td>
<td>CONF RM 8</td>
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<td>9:00 am – 12:00 pm</td>
<td>376-TG2 RLG Containment Structures TG M2</td>
<td>CONF RM 10</td>
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<tr>
<td>9:00 am – 12:00 pm</td>
<td>Sessions</td>
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<td></td>
<td>Constructibility of SCC</td>
<td>SALON C</td>
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<tr>
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<td>Contractors’ Day Session, Part 1</td>
<td>SALON M</td>
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<tr>
<td></td>
<td>Design Methods for Nontraditional ICFs</td>
<td>SALON A</td>
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<tr>
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<td>Early Age Test Methods for Performance Specifications</td>
<td>SALON J</td>
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<td>Serviceability of Concrete Members Reinforced with Internal/External FRP Reinforcement, Part 2</td>
<td>SALON D</td>
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<td>9:00 am – 1:00 pm</td>
<td>ITG-8 ITG-8 Perform Criteria for Conc Matrls</td>
<td>CONF RM 7</td>
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<td>9:00 am – 4:00 pm</td>
<td>Texas Hill Country &amp; Wine Tasting</td>
<td>CONF RM 10</td>
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<td>10:00 am – 11:30 am</td>
<td>C630 Construction Inspector Cert</td>
<td>SUITE 1952</td>
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<td>325-C Pavements-Prestressed and Precast</td>
<td>CONF RM 4</td>
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<td>440-G FRP-Student</td>
<td>SUITE 544</td>
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</table>
Daily Program
All schedule and location changes will be posted daily in Salons G-I.

✓ = Separate fee required  TG = Task Group

Tuesday, March 17, 2009 (cont.)

10:00 am – 12:00 pm
211-A Proportioning-Editorial SUITE 529
236-D Material Science-Nanotechnology of Concrete M2 SUITE 1905
503 Adhesives SALON B

10:00 am – 1:00 pm
371 Elevated Tanks with Concrete Pedestals SUITE 514

10:00 am – 2:00 pm
✓ Festivals of Flowers and Fauna Tour

10:30 am – 12:00 pm
544-F FRC-Durability CONF RMS 1&2

11:00 am – 2:00 pm
332-F Residential Concrete-Slabs CONF RM 12

11:30 am – 1:00 pm
CRC Concrete Research Council CONF RMS 13&14
211-E Proportioning-Evaluation SUITE 544
213-TG Lightweight-Editorial TG SUITE 618
325-D Proportioning for Pavements SUITE 1951

11:30 am – 2:00 pm
515 Protective Systems CONF RM 4

11:30 am – 3:30 pm
350-A Env Str-General & Concrete SUITE 1952

12:00 pm – 1:00 pm
440-M FRP-Repair of Masonry Str M2 CONF RM 10

12:00 pm – 1:30 pm
238 Workability of Fresh Concrete SUITE 1905

12:00 pm – 2:00 pm
✓ Contractors’ Day Lunch SALON F

12:30 pm – 2:00 pm
C640 Craftsman Cert SALON E
Daily Program

All schedule and location changes will be posted daily in Salons G-I.

✓ = Separate fee required  TG = Task Group

Tuesday, March 17, 2009 (cont.)

1:00 pm – 2:00 pm
223-C  Shr Compensating-Constr  CONF RM 6

1:00 pm – 3:00 pm
201-C  Durability-Condition Report  SUITE 514

1:00 pm – 3:30 pm
550  Precast Structures  SUITE 642

1:00 pm – 4:00 pm
440  Fiber Reinforced Polymer  CONF RMS 17&18

1:30 pm – 3:00 pm
120  History  SUITE 1951
213  Lightweight  SUITE 544

2:00 pm – 3:30 pm
234  Silica Fume  CONF RM 15
325-E  Accelerated Paving  CONF RM 7
544-C  FRC-Testing  SALONS K&L

2:00 pm – 4:00 pm
211-F  Proportioning-Submittal  SUITE 529

2:00 pm – 5:00 pm
CPC  Certification Programs  CONF RM 6
222  Corrosion  SALON B
223  Shrinkage Compensating  CONF RMS 1&2
229  Controlled Low Strength  CONF RM 8
235  Electronic Data Exchange  SUITE 618
310  Decorative Concrete  SUITE 1905
332  Residential Concrete  CONF RM 16
349  Nuclear Structures  CONF RM 12
563  Specs Repair of Struct Conc in Bldgs  CONF RMS 13&14

Sessions
2:00 pm – 5:00 pm
Concrete—The Sustainable Material Choice in Practice, Part 1  SALON J
Concrete Thixotropy and Implication on Performance of SCC  SALON C
Tuesday, March 17, 2009 (cont.)

2:00 pm – 5:00 pm

Contracts’ Day Session, Part 2  SALON M
Open Paper Session  SALON A
Overlays for Bridges  SALON D

2:00 pm – 6:00 pm

233 Slag Cement  SALON E

2:00 pm – 6:30 pm

318-A General Concrete Constr M1  CONF RM 4
318-C Serviceability/Safety M1  CONF RM 3
318-H Seismic Provision M1  CONF RM 10
318-R Code Reorganization M2  CONF RM 9

3:00 pm – 5:00 pm

CC Convention Committee M2  SUITE 1906
372 Prestressed/Wire Wrapped  SUITE 514

3:30 pm – 5:00 pm

363-A High-Strength—Lightweight Concrete  SUITE 1951

3:30 pm – 5:30 pm

325 Pavements  CONF RM 7

3:30 pm – 6:00 pm

544 Fiber Reinforced Concrete  SALONS K&L

3:30 pm – 6:30 pm

350-L Env Str-Specification  SUITE 1952

4:00 pm – 5:00 pm

E803 Faculty Network Coordinating  SUITE 529

4:30 pm – 6:00 pm

308/213 Guide on Internal Curing  CONF RM 15

5:00 pm – 6:00 pm

Faculty Network Reception  CONF RMS 17&18
Daily Program
All schedule and location changes will be posted daily in Salons G-I.

✓ = Separate fee required    TG = Task Group

Wednesday, March 18, 2009

5:00 pm – 6:30 pm
350-H  Env Str-Editorial  SUITE 514

6:30 pm – 9:30 pm
Concrete Mixer—A Night in Old San Antonio  La Villita
See page 135 for details

7:00 am – 8:30 am
ACI/ASCE  ACI/ASCE Coordination  CONF RM 15
ACYM  Advisory Committee for Young Members  CONF RM 8

7:00 am – 10:00 am
TSC  TAC Specifications  CONF RM 14

8:00 am – 10:30 am
308-B  Curing-Specifications  CONF RM 4

8:30 am – 11:30 am
211  Proportioning  SALON E
303  Architectural CIP  CONF RM 3
330-TG  Parking Lots & Site Paving TG  CONF RM 2
363  High-Strength  CONF RM 15
560  Design & Constr ICFs  CONF RM 8

8:00 am – 1:30 pm
318-B  Reinforcement & Development  CONF RM 11
318-D  Flexure & Axial Loads  CONF RM 13
318-E  Shear & Torsion  CONF RM 7
318-G  Prestressed Precast  CONF RM 9

8:30 am – 6:30 pm
350  Environmental Structures  SALONS K&L

9:00 am – 12:00 pm
ACIFdn  ACI Foundation  SUITE 514
Daily Program

All schedule and location changes will be posted daily in Salons G-I.

✓ = Separate fee required  TG = Task Group

Wednesday, March 18, 2009 (cont.)

Sessions
9:00 am – 12:00 pm
Application of Soil Cement Technologies SALON D
Concrete—The Sustainable Material Choice in Practice, Part 2 SALON J
Curing Concrete SALON A
Tech Notes: Applications for Silica Fume Concrete SALON M

9:00 am – 3:00 pm
✓ CMC Steel Texas Technical Tour

9:00 am – 5:00 pm
376-TG3 RLG Containment Structures TG M3 SALON B

10:00 am – 12:30 pm
C601-B Certified Quality Technical Mgr CONF RM 14

10:30 am – 1:00 pm
308-A Curing-Guide CONF RM 4

11:30 am – 1:00 pm
C601-D Decorative Concrete Finisher CONF RM 2

12:00 pm – 2:00 pm
✓ International Lunch SALON F

1:00 pm – 4:00 pm
330 Parking Lots & Site Paving CONF RM 2

2:00 pm – 5:00 pm
308 Curing CONF RM 14

2:30 pm – 4:00 pm
318-A General Concrete Constr M2 CONF RM 13
318-C Serviceability/Safety M2 CONF RM 4
318-H Seismic Provisions M2 CONF RM 11
318-R Code Reorganization M3 CONF RM 3

4:00 pm – 6:30 pm
318 Building Code M2 SALON E
Daily Program

All schedule and location changes will be posted daily in Salons G-I.

✓ = Separate fee required    TG = Task Group

Thursday, March 19, 2009

8:00 am – 5:00 pm
318-08 ✓ACI/PCA 318-08 Building Code Seminar    SALON A

10:00 am – 5:00 pm
BOD    Board of Direction    SALON D
## Numerical Committee
### Meeting Schedule

<table>
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<tr>
<th>Code</th>
<th>Committee</th>
<th>Day</th>
<th>Time</th>
<th>Room Name</th>
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<tbody>
<tr>
<td>ACI 318/ASCE7</td>
<td>ACI 318/ASCE Coordination</td>
<td>Mon</td>
<td>2:00 pm-3:30 pm</td>
<td>SUITE 514</td>
</tr>
<tr>
<td>ACI/ASCE</td>
<td>ACI/ASCE Coordination</td>
<td>Wed</td>
<td>7:00 am-8:30 am</td>
<td>CONF RM 15</td>
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<tr>
<td>ACIfdn</td>
<td>ACI Foundation</td>
<td>Wed</td>
<td>9:00 am-12:00 pm</td>
<td>SUITE 514</td>
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<tr>
<td>ACYM</td>
<td>Advisory Committee for Young Members</td>
<td>Wed</td>
<td>7:00 am-8:30 am</td>
<td>CONF RM 8</td>
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<tr>
<td>BAC-SD</td>
<td>Board Advisory Committee on Sustainable Development</td>
<td>Sun</td>
<td>1:00 pm-4:00 pm</td>
<td>CONF RMS 17&amp;18</td>
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<td>BOD</td>
<td>Board of Direction</td>
<td>Thu</td>
<td>10:00 am-5:00 pm</td>
<td>SALON D</td>
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<tr>
<td>C601-B</td>
<td>Certified Quality Technical Mgr</td>
<td>Wed</td>
<td>10:00 am-12:30 pm</td>
<td>CONF RM 14</td>
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<tr>
<td>C601-C</td>
<td>Masonry Testing Technician</td>
<td>Mon</td>
<td>5:00 pm-6:30 pm</td>
<td>SUITE 642</td>
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<tr>
<td>C601-D</td>
<td>Decorative Concrete Finisher</td>
<td>Wed</td>
<td>11:30 am-1:00 pm</td>
<td>CONF RM 2</td>
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<tr>
<td>C610</td>
<td>Field Technician Cert</td>
<td>Mon</td>
<td>8:30 am-11:30 am</td>
<td>CONF RMS 13&amp;14</td>
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<tr>
<td>C620</td>
<td>Laboratory Tech Cert</td>
<td>Tue</td>
<td>8:30 am-10:00 am</td>
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<tr>
<td>C630</td>
<td>Construction Inspector Cert</td>
<td>Tue</td>
<td>10:00 am-11:30 am</td>
<td>SUITE 1952</td>
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<tr>
<td>C631</td>
<td>Conc Transportation Const Insp</td>
<td>Mon</td>
<td>1:00 pm-2:30 pm</td>
<td>SUITE 618</td>
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<tr>
<td>C640</td>
<td>Craftsman Cert</td>
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<td>12:30 pm-2:00 pm</td>
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<tr>
<td>C660</td>
<td>Shotcrete Nozzleman Cert</td>
<td>Mon</td>
<td>1:00 pm-3:00 pm</td>
<td>CONF RM 18</td>
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<td>CAC</td>
<td>Chapter Activities</td>
<td>Mon</td>
<td>2:30 pm-5:00 pm</td>
<td>SUITE 618</td>
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<td>CC</td>
<td>Convention Committee</td>
<td>Tue</td>
<td>3:00 pm-5:00 pm</td>
<td>SUITE 1906</td>
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<tr>
<td>CLC</td>
<td>Construction Liaison</td>
<td>Sun</td>
<td>8:30 am-11:30 am</td>
<td>CONF RM 17</td>
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<td>CLGE</td>
<td>Collegiate Concrete Council</td>
<td>Sun</td>
<td>4:00 pm-5:00 pm</td>
<td>CONF RMS 17&amp;18</td>
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<td>CPC</td>
<td>Certification Programs</td>
<td>Tue</td>
<td>2:00 pm-5:00 pm</td>
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<tr>
<td>CRC</td>
<td>Concrete Research Council</td>
<td>Tue</td>
<td>11:30 am-1:00 pm</td>
<td>CONF RMS 13&amp;14</td>
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<td>E601</td>
<td>Seminar Oversight Committee</td>
<td>Sun</td>
<td>3:00 pm-5:00 pm</td>
<td>SUITE 1951</td>
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<tr>
<td>E701</td>
<td>Materials for Concrete Construction</td>
<td>Sun</td>
<td>10:00 am-11:30 am</td>
<td>CONF RM 6</td>
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<td>Code</td>
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<td>E702</td>
<td>Designing Concrete Structures</td>
<td>Mon</td>
<td>5:00 pm-6:30 pm</td>
<td>SUITE 1951</td>
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<tr>
<td>E703</td>
<td>Concrete Construction Practices</td>
<td>Mon</td>
<td>5:00 pm-7:00 pm</td>
<td>SUITE 529</td>
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<tr>
<td>E706</td>
<td>Repair Application Procedures</td>
<td>Sun</td>
<td>8:00 am-10:00 am</td>
<td>SUITE 642</td>
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<tr>
<td>E801</td>
<td>Student Activities</td>
<td>Sun</td>
<td>8:00 am-10:00 am</td>
<td>CONF RM 9</td>
</tr>
<tr>
<td>E802</td>
<td>Teaching Methods and Educational Materials</td>
<td>Mon</td>
<td>8:30 am-10:00 am</td>
<td>CONF RM 17</td>
</tr>
<tr>
<td>E803</td>
<td>Faculty Network Coordinating</td>
<td>Tue</td>
<td>4:00 pm-5:00 pm</td>
<td>SUITE 529</td>
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<tr>
<td>E804</td>
<td>Educational Awards Nomination Committee</td>
<td>Mon</td>
<td>10:00 am-11:30 am</td>
<td>SUITE 529</td>
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<tr>
<td>EAC</td>
<td>Educational Activities M1</td>
<td>Sat</td>
<td>1:00 pm-5:00 pm</td>
<td>CONF RM 13</td>
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<tr>
<td>EAC</td>
<td>Educational Activities M2</td>
<td>Tue</td>
<td>8:00 am-12:00 pm</td>
<td>CONF RM 3</td>
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<tr>
<td>HTC</td>
<td>Hot Topic</td>
<td>Sun</td>
<td>11:30 am-1:00 pm</td>
<td>SUITE 514</td>
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<tr>
<td>IC</td>
<td>International Committee</td>
<td>Tue</td>
<td>9:00 am-11:30 am</td>
<td>CONF RM 6</td>
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<tr>
<td>IC-Cert</td>
<td>International-Certification</td>
<td>Sun</td>
<td>3:30 pm-5:00 pm</td>
<td>SUITE 544</td>
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<tr>
<td>IC-Conf</td>
<td>International-Conferences</td>
<td>Mon</td>
<td>7:00 am-8:30 am</td>
<td>SUITE 529</td>
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<tr>
<td>IC-Part</td>
<td>International-Partnerships &amp; Publications</td>
<td>Sun</td>
<td>10:00 am-11:30 am</td>
<td>CONF RM 16</td>
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<tr>
<td>ISO/TC 71</td>
<td>ISO/TC 71 Advisory</td>
<td>Sun</td>
<td>1:00 pm-2:30 pm</td>
<td>SUITE 642</td>
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<tr>
<td>ITG-6</td>
<td>High-Strength Steel Reinforcement</td>
<td>Mon</td>
<td>2:00 pm-6:00 pm</td>
<td>CONF RM 9</td>
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<tr>
<td>ITG-8</td>
<td>ITG-8 Perform Criteria for Conc Matrls</td>
<td>Tue</td>
<td>9:00 am-1:00 pm</td>
<td>CONF RM 7</td>
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<td>MEMC</td>
<td>Membership</td>
<td>Sun</td>
<td>8:30 am-11:30 am</td>
<td>CONF RM 14</td>
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<tr>
<td>MKTC</td>
<td>Marketing</td>
<td>Mon</td>
<td>2:00 pm-5:00 pm</td>
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<td>PUBC</td>
<td>Publications</td>
<td>Mon</td>
<td>8:30 am-10:30 am</td>
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<td>RCC</td>
<td>Responsibility</td>
<td>Sun</td>
<td>2:00 pm-5:00 pm</td>
<td>CONF RM 13</td>
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<tr>
<td>SCO</td>
<td>Scholarship Council M2</td>
<td>Mon</td>
<td>2:00 pm-3:00 pm</td>
<td>SUITE 3629</td>
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<tr>
<td>TAC</td>
<td>Technical Activities M1</td>
<td>Fri</td>
<td>6:30 pm-9:00 pm</td>
<td>CONF RM 12</td>
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# Numerical Committee Meeting Schedule

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<th>Code</th>
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<th>Day</th>
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<th>Room Name</th>
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<tr>
<td>TAC</td>
<td>Technical Activities M2</td>
<td>Sat</td>
<td>7:00 am-6:00 pm</td>
<td>CONF RM 12</td>
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<td>TAC</td>
<td>Technical Activities M3</td>
<td>Sun</td>
<td>7:00 am-2:00 pm</td>
<td>SALON B</td>
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<td>TAC-Code</td>
<td>Code Relationship</td>
<td>Mon</td>
<td>6:00 pm-7:30 pm</td>
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<tr>
<td>TAC-RG1</td>
<td>TAC Review Group 1</td>
<td>Sun</td>
<td>8:00 am-12:00 pm</td>
<td>SUITE 1905</td>
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<tr>
<td>TAC-RG2</td>
<td>TAC Review Group 2</td>
<td>Sun</td>
<td>8:00 am-12:00 pm</td>
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<tr>
<td>TAC-RG3</td>
<td>TAC Review Group 3</td>
<td>Sun</td>
<td>8:00 am-12:00 pm</td>
<td>SUITE 1952</td>
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<tr>
<td>TAC-RG4</td>
<td>TAC Review Group 4</td>
<td>Sun</td>
<td>8:00 am-12:00 pm</td>
<td>SUITE 1906</td>
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<tr>
<td>TRRC</td>
<td>TAC Repair &amp; Rehab</td>
<td>Tue</td>
<td>9:00 am-12:00 pm</td>
<td>CONF RM 8</td>
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<tr>
<td>TSC</td>
<td>TAC Specifications</td>
<td>Wed</td>
<td>7:00 am-10:00 am</td>
<td>CONF RM 14</td>
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<tr>
<td>TSTTTC</td>
<td>TAC-SDC-TTTC Coordination Meeting</td>
<td>Mon</td>
<td>5:00 pm-6:30 pm</td>
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<td>TTC</td>
<td>TAC Technology Transfer</td>
<td>Tue</td>
<td>7:00 am-8:30 pm</td>
<td>CONF RM 16</td>
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<tr>
<td>117</td>
<td>Tolerances</td>
<td>Tue</td>
<td>8:30 am-12:00 pm</td>
<td>SUITE 642</td>
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<tr>
<td>118</td>
<td>Computers</td>
<td>Mon</td>
<td>8:30 am-10:00 am</td>
<td>CONF RM 16</td>
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<tr>
<td>120</td>
<td>History</td>
<td>Tue</td>
<td>1:30 pm-3:00 pm</td>
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<td>121</td>
<td>Quality Assurance</td>
<td>Sun</td>
<td>3:30 pm-5:00 pm</td>
<td>CONF RM 11</td>
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<td>122</td>
<td>Thermal Properties</td>
<td>Mon</td>
<td>3:30 pm-5:00 pm</td>
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<td>123</td>
<td>Research</td>
<td>Sun</td>
<td>4:00 pm-5:00 pm</td>
<td>SALON B</td>
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<td>124</td>
<td>Aesthetics</td>
<td>Mon</td>
<td>8:30 am-10:00 am</td>
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<td>130</td>
<td>Sustainability</td>
<td>Mon</td>
<td>3:00 pm-5:00 pm</td>
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<td>201</td>
<td>Durability</td>
<td>Tue</td>
<td>8:30 am-11:30 am</td>
<td>SALONS K&amp;L</td>
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<tr>
<td>201-A</td>
<td>Durability-Sulfate Attack</td>
<td>Sun</td>
<td>3:30 pm-5:00 pm</td>
<td>SUITE 1905</td>
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<tr>
<td>201-C</td>
<td>Durability-Condition Report</td>
<td>Tue</td>
<td>1:00 pm-3:00 pm</td>
<td>SUITE 514</td>
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<tr>
<td>201-D</td>
<td>Durability-Oversight Committee</td>
<td>Mon</td>
<td>11:30 am-1:00 pm</td>
<td>CONF RM 15</td>
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<td>Time</td>
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<td>207</td>
<td>Mass Concrete</td>
<td>Mon</td>
<td>10:00 am-1:00 pm</td>
<td>SUITE 1905</td>
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<tr>
<td>209</td>
<td>Creep &amp; Shrinkage</td>
<td>Mon</td>
<td>8:30 am-11:30 am</td>
<td>CONF RM 3</td>
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<td>209-A</td>
<td>Statistic Procedures</td>
<td>Sun</td>
<td>2:00 pm-3:30 pm</td>
<td>SUITE 544</td>
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<tr>
<td>211</td>
<td>Proportioning</td>
<td>Wed</td>
<td>8:30 am-11:30 am</td>
<td>SALON E</td>
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<tr>
<td>211-A</td>
<td>Proportioning-Editorial</td>
<td>Tue</td>
<td>10:00 am-12:00 pm</td>
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<td>211-E</td>
<td>Proportioning-Evaluation</td>
<td>Tue</td>
<td>11:30 am-1:00 pm</td>
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<tr>
<td>211-F</td>
<td>Proportioning-Submittal</td>
<td>Tue</td>
<td>2:00 pm-4:00 pm</td>
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<tr>
<td>212</td>
<td>Chemical Admixtures</td>
<td>Mon</td>
<td>2:00 pm-6:30 pm</td>
<td>SUITE 1905</td>
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<tr>
<td>213</td>
<td>Lightweight</td>
<td>Tue</td>
<td>1:30 pm-3:00 pm</td>
<td>SUITE 544</td>
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<tr>
<td>213-TG</td>
<td>Lightweight-Editorial TG</td>
<td>Tue</td>
<td>11:30 am-1:00 pm</td>
<td>SUITE 618</td>
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<tr>
<td>214</td>
<td>Strength Tests</td>
<td>Mon</td>
<td>12:30 pm-2:00 pm</td>
<td>CONF RM 16</td>
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<td>215</td>
<td>Fatigue</td>
<td>Sun</td>
<td>2:00 pm-4:00 pm</td>
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<td>216</td>
<td>Fire Resistance</td>
<td>Mon</td>
<td>10:00 am-1:00 pm</td>
<td>CONF RMS 1&amp;2</td>
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<td>221</td>
<td>Aggregates</td>
<td>Sun</td>
<td>11:30 am-1:00 pm</td>
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<td>222</td>
<td>Corrosion</td>
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<td>223</td>
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<td>223-C</td>
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<td>1:00 pm-2:00 pm</td>
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<td>Cracking</td>
<td>Sun</td>
<td>2:30 pm-5:00 pm</td>
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<td>Hydraulic Cements</td>
<td>Mon</td>
<td>12:00 pm-1:30 pm</td>
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<td>228</td>
<td>Nondestructive Testing</td>
<td>Sun</td>
<td>10:00 am-1:00 pm</td>
<td>CONF RM 9</td>
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<td>229</td>
<td>Controlled Low Strength</td>
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<td>CONF RM 8</td>
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<td>230</td>
<td>Soil Cement</td>
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<td>CONF RM 4</td>
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<td>231</td>
<td>Early Age</td>
<td>Mon</td>
<td>2:00 pm-3:30 pm</td>
<td>CONF RM 6</td>
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## Numerical Committee Meeting Schedule

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<tr>
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<tr>
<td>232</td>
<td>Fly Ash &amp; Natural Pozzolans</td>
<td>Mon</td>
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<td>CONF RMS 1&amp;2</td>
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<td>232-A</td>
<td>Fly Ash-Use of Nat Pozzolans</td>
<td>Mon</td>
<td>10:00 am-1:00 pm</td>
<td>CONF RM 17</td>
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<td>233</td>
<td>Slag Cement</td>
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<td>2:00 pm-6:00 pm</td>
<td>SALON E</td>
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<td>234</td>
<td>Silica Fume</td>
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<td>2:00 pm-3:30 pm</td>
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<td>235</td>
<td>Electronic Data Exchange</td>
<td>Tue</td>
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<td>SUITE 618</td>
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<td>236</td>
<td>Material Science</td>
<td>Mon</td>
<td>4:00 pm-6:00 pm</td>
<td>CONF RM 12</td>
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<td>Material Science-Transport Mechanisms</td>
<td>Sun</td>
<td>2:00 pm-3:30 pm</td>
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<tr>
<td>236-C</td>
<td>Material Science-Nanotechnology of Concrete M1</td>
<td>Sun</td>
<td>3:30 pm-5:00 pm</td>
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<td>236-D</td>
<td>Material Science-Nanotechnology of Concrete M2</td>
<td>Tue</td>
<td>10:00 am-12:00 pm</td>
<td>SUITE 1905</td>
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<tr>
<td>237</td>
<td>Self-Consolidating Concrete</td>
<td>Mon</td>
<td>1:00 pm-4:00 pm</td>
<td>CONF RM 12</td>
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<tr>
<td>238</td>
<td>Workability of Fresh Concrete</td>
<td>Tue</td>
<td>12:00 pm-1:30 pm</td>
<td>SUITE 1905</td>
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<tr>
<td>301</td>
<td>Specifications M1</td>
<td>Sat</td>
<td>1:00 pm-5:00 pm</td>
<td>CONF RM 17&amp;18</td>
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<tr>
<td>301</td>
<td>Specifications M2</td>
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<td>CONF RMS 3&amp;4</td>
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<td>Mon</td>
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<td>CONF RMS 3&amp;4</td>
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<td>301-A</td>
<td>Spec-Gen Reg. Definitions &amp; Tolerances</td>
<td>Sun</td>
<td>1:00 pm-4:00 pm</td>
<td>CONF RM 4</td>
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<tr>
<td>301-B</td>
<td>Spec-Formwork &amp; Reinforcement</td>
<td>Mon</td>
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<td>301-C</td>
<td>Spec-Placing Consolidating &amp; Curing</td>
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<td>301-D</td>
<td>Spec-Lightweight &amp; Massive Concrete</td>
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<td>1:00 pm-3:30 pm</td>
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<td>301-E</td>
<td>Spec-Prestressed Concrete</td>
<td>Sun</td>
<td>4:30 pm-6:30 pm</td>
<td>CONF RM 3</td>
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<td>301-F</td>
<td>Spec-Precast Concrete Panels</td>
<td>Sun</td>
<td>4:00 pm-6:00 pm</td>
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<tr>
<td>301-G</td>
<td>Spec-Shrink Comp Conc &amp; Ind Floor Slabs</td>
<td>Sun</td>
<td>4:30 pm-6:30 pm</td>
<td>SUITE 618</td>
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<tr>
<td>301-H</td>
<td>Spec-Tilt-Up Constr &amp; Arch Conc</td>
<td>Sun</td>
<td>1:00 pm-3:00 pm</td>
<td>CONF RM 3</td>
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### Numerical Committee Meeting Schedule

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<thead>
<tr>
<th>Code</th>
<th>Committee</th>
<th>Day</th>
<th>Time</th>
<th>Room Name</th>
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<tr>
<td>301-SC</td>
<td>Spec-Steering Committee</td>
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<td>302</td>
<td>Floor Construction</td>
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<td>303</td>
<td>Architectural CIP</td>
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<td>304</td>
<td>Measuring/Mix/Trans/Placing</td>
<td>Mon</td>
<td>11:30 am-1:00 pm</td>
<td>CONF RM 18</td>
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<td>305</td>
<td>Hot Weather</td>
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<td>306</td>
<td>Cold Weather</td>
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<td>307</td>
<td>Chimneys</td>
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<td>308</td>
<td>Curing</td>
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<td>308/213</td>
<td>Guide on Internal Curing</td>
<td>Tue</td>
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<td>Curing-Guide</td>
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<td>Curing-Specifications</td>
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<td>Decorative Concrete</td>
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<td>Inspection</td>
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<td>Bins &amp; Silos</td>
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<td>8:30 am-5:00 pm</td>
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<td>314</td>
<td>Simplified Design Buildings</td>
<td>Mon</td>
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<td>315</td>
<td>Detailing</td>
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<td>Detailing-Constructibility</td>
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<td>318</td>
<td>Building Code M1</td>
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<td>Reinforcement &amp; Development</td>
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<td>Serviceability/Safety M1</td>
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<td>Flexure &amp; Axial Loads</td>
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<td>Shear &amp; Torsion</td>
<td>Wed</td>
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<td>Prestressed Precast</td>
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<td>International Liaison</td>
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<td>SALONS K&amp;L</td>
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<td>Task Group Foundation</td>
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<td>325</td>
<td>Pavements</td>
<td>Tue</td>
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<tr>
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<td>Pavements-Design</td>
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<td>8:30 am-10:00 am</td>
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<td>325-C</td>
<td>Pavements-Prestressed and Precast</td>
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<td>325-D</td>
<td>Proportioning for Pavements</td>
<td>Tue</td>
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<td>Accelerated Paving</td>
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<td>RCC Pavements</td>
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<td>Parking Lots &amp; Site Paving</td>
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<td>Residential Concrete</td>
<td>Tue</td>
<td>2:00 pm-5:00 pm</td>
<td>CONF RM 16</td>
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<td>332 B&amp;C</td>
<td>Residential Concrete Sub B &amp; C</td>
<td>Tue</td>
<td>8:00 am-11:00 am</td>
<td>CONF RM 9</td>
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<td>Code</td>
<td>Committee</td>
<td>Day</td>
<td>Time</td>
<td>Room Name</td>
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<td>Residential Concrete-Slabs</td>
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<td>CONF RM 12</td>
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<td>334</td>
<td>Shells</td>
<td>Mon</td>
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<td>335</td>
<td>Composite Hybrid</td>
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<td>CONF RM 14</td>
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<td>336</td>
<td>Footings</td>
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<tr>
<td>341</td>
<td>Earthquake-Resistant Bridges</td>
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<td>3:00 pm-5:00 pm</td>
<td>CONF RMS 1&amp;2</td>
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<td>341-A</td>
<td>Equake Res Brdgs-Columns</td>
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<td>CONF RMS 1&amp;2</td>
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<td>Equake Res Brdgs-Pier Walls</td>
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<td>Equake Res Brdgs-Retrofit</td>
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<td>CONF RMS 1&amp;2</td>
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<td>Bridge Construction</td>
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<td>CIP Pipe</td>
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<td>347</td>
<td>Formwork</td>
<td>Sun</td>
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<td>CONF RM 12</td>
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<tr>
<td>347-A</td>
<td>Formwork-Specification</td>
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<td>348</td>
<td>Safety</td>
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<td>349</td>
<td>Nuclear Structures</td>
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<td>349-A&amp;B</td>
<td>Nuclear Structures-Design &amp; Materials</td>
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<tr>
<td>349-C</td>
<td>Nuclear Str-Anchorage</td>
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<td>2:00 pm-5:00 pm</td>
<td>CONF RM 10</td>
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<td>Environmental Structures</td>
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<td>SALONS K&amp;L</td>
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<td>Env Str-General &amp; Concrete</td>
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<td>350-B</td>
<td>Env Str-Durability</td>
<td>Mon</td>
<td>8:30 am-1:00 pm</td>
<td>SUITE 618</td>
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### Meeting Schedule

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<th>Room Name</th>
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<td>350-C</td>
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<td>7:00 am-9:30 am</td>
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<td>Env Str-Structural</td>
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<td>8:00 am-12:00 pm</td>
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<tr>
<td>350-E</td>
<td>Env Str-Precast/Prestressed</td>
<td>Sun</td>
<td>2:00 pm-6:30 pm</td>
<td>CONF RM 10</td>
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<td>350-F</td>
<td>Env Str-Seismic</td>
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<td>350-G &amp; K</td>
<td>Env Str-Tightness Testing/ Haz Mat</td>
<td>Tue</td>
<td>9:00 am-10:00 am</td>
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<tr>
<td>350-H</td>
<td>Env Str-Editorial</td>
<td>Tue</td>
<td>5:00 pm-6:30 pm</td>
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<tr>
<td>350-J</td>
<td>Env Str-Education</td>
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<td>350-L</td>
<td>Env Str-Specification</td>
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<td>350-SC</td>
<td>Env Str-Steering Comm</td>
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<td>Equip Foundations</td>
<td>Mon</td>
<td>12:00 pm-2:00 pm</td>
<td>CONF RM 9</td>
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<td>351-B</td>
<td>Grtng Fndns-Equip Machnry</td>
<td>Mon</td>
<td>5:00 pm-7:00 pm</td>
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<td>352</td>
<td>Joints</td>
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<td>Anchorage TG</td>
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<td>Offshore &amp; Marine</td>
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<td>360</td>
<td>Slabs on Ground</td>
<td>Mon</td>
<td>2:00 pm-6:30 pm</td>
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<td>Parking Structures</td>
<td>Mon</td>
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<td>CONF RM 8</td>
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<td>362-A</td>
<td>Parking Str-Standard</td>
<td>Mon</td>
<td>8:30 am-12:00 pm</td>
<td>SALON B</td>
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<td>High-Strength</td>
<td>Wed</td>
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<td>CONF RM 15</td>
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<td>High-Strength—Lightweight Concrete</td>
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<td>3:30 pm-5:00 pm</td>
<td>SUITE 1951</td>
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<td>364</td>
<td>Rehabilitation</td>
<td>Mon</td>
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<td>CONF RMS 13 &amp; 14</td>
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<td>Service Life</td>
<td>Mon</td>
<td>9:00 am-1:00 pm</td>
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<td>Seismic Rehab</td>
<td>Mon</td>
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# Numerical Committee Meeting Schedule

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<th>Room Name</th>
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<tr>
<td>370</td>
<td>Dynamic &amp; Vibratory Effects</td>
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<tr>
<td>371</td>
<td>Elevated Tanks with Concrete Pedestals</td>
<td>Tue</td>
<td>10:00 am-1:00 pm</td>
<td>SUITE 514</td>
</tr>
<tr>
<td>372</td>
<td>Prestressed/Wire Wrapped</td>
<td>Tue</td>
<td>3:00 pm-5:00 pm</td>
<td>SUITE 514</td>
</tr>
<tr>
<td>373</td>
<td>Prestressed/Tendons</td>
<td>Sun</td>
<td>8:30 am-10:00 am</td>
<td>CONF RM 11</td>
</tr>
<tr>
<td>374</td>
<td>Seismic Design</td>
<td>Mon</td>
<td>8:30 am-12:30 pm</td>
<td>CONF RM 7</td>
</tr>
<tr>
<td>374-TG2</td>
<td>Protocol For Testing RC Structural Elements</td>
<td>Sun</td>
<td>11:30 am-1:00 pm</td>
<td>SUITE 618</td>
</tr>
<tr>
<td>375</td>
<td>Design for Wind Loads</td>
<td>Mon</td>
<td>1:00 pm-3:30 pm</td>
<td>SUITE 544</td>
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<tr>
<td>376</td>
<td>RLG Containment Structures M1</td>
<td>Sat</td>
<td>3:00 pm-6:00 pm</td>
<td>CONF RM 14</td>
</tr>
<tr>
<td>376</td>
<td>RLG Containment Structures M2</td>
<td>Sun</td>
<td>9:00 am-5:00 pm</td>
<td>CONF RM 5</td>
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<td>376-TG1</td>
<td>RLG Containment Structures TG M1</td>
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<td>376-TG2</td>
<td>RLG Containment Structures TG M2</td>
<td>Tue</td>
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<td>376-TG3</td>
<td>RLG Containment Structures TG M3</td>
<td>Wed</td>
<td>9:00 am-5:00 pm</td>
<td>SALON B</td>
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<tr>
<td>408</td>
<td>Development and Splicing</td>
<td>Sun</td>
<td>8:30 am-11:30 am</td>
<td>CONF RM 7</td>
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<tr>
<td>421</td>
<td>Reinf Slabs</td>
<td>Sun</td>
<td>10:00 am-1:00 pm</td>
<td>CONF RM 11</td>
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<td>423</td>
<td>Prestressed</td>
<td>Mon</td>
<td>9:00 am-1:00 pm</td>
<td>CONF RM 12</td>
</tr>
<tr>
<td>423/445</td>
<td>Adhoc Grp on Shear in Prestress Conc</td>
<td>Sun</td>
<td>3:00 pm-5:00 pm</td>
<td>SUITE 642</td>
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<td>435</td>
<td>Deflection</td>
<td>Mon</td>
<td>3:30 pm-6:30 pm</td>
<td>SUITE 1952</td>
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<td>437</td>
<td>Strength Evaluation</td>
<td>Mon</td>
<td>8:30 am-11:30 am</td>
<td>CONF RM 15</td>
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<tr>
<td>439</td>
<td>Steel Reinforcement</td>
<td>Mon</td>
<td>8:30 am-10:00 am</td>
<td>CONF RM 10</td>
</tr>
<tr>
<td>439-A</td>
<td>Steel Reinf-Wire</td>
<td>Sun</td>
<td>3:30 pm-5:00 pm</td>
<td>CONF RM 6</td>
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<tr>
<td>440</td>
<td>Fiber Reinforced Polymer</td>
<td>Tue</td>
<td>1:00 pm-4:00 pm</td>
<td>CONF RMS 17&amp;18</td>
</tr>
<tr>
<td>440-D</td>
<td>FRP-Research Development &amp; Applications</td>
<td>Sun</td>
<td>10:00 am-11:30 am</td>
<td>SUITE 642</td>
</tr>
<tr>
<td>440-E</td>
<td>FRP-Prof Education</td>
<td>Mon</td>
<td>10:30 am-12:00 pm</td>
<td>SUITE 642</td>
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<tr>
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<td>Committee</td>
<td>Day</td>
<td>Time</td>
<td>Room Name</td>
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<tr>
<td>440-F</td>
<td>FRP-Repair Strengthening</td>
<td>Mon</td>
<td>12:00 pm-3:00 pm</td>
<td>SALON B</td>
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<tr>
<td>440-G</td>
<td>FRP-Student</td>
<td>Tue</td>
<td>10:00 am-11:30 am</td>
<td>SUITE 544</td>
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<td>440-H</td>
<td>FRP-Reinforced Concrete</td>
<td>Mon</td>
<td>3:00 pm-6:00 pm</td>
<td>SALON B</td>
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<tr>
<td>440-I</td>
<td>FRP-Prestressed Concrete</td>
<td>Sun</td>
<td>8:30 am-10:00 am</td>
<td>CONF RM 6</td>
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<tr>
<td>440-J</td>
<td>FRP Stay in Place Forms</td>
<td>Sun</td>
<td>4:00 pm-5:15 pm</td>
<td>SALONS K&amp;L</td>
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<tr>
<td>440-K</td>
<td>FRP-Material Characteristics</td>
<td>Mon</td>
<td>1:00 pm-3:00 pm</td>
<td>CONF RM 11</td>
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<tr>
<td>440-L</td>
<td>FRP-Durability</td>
<td>Sun</td>
<td>2:00 pm-4:00 pm</td>
<td>SALONS K&amp;L</td>
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<tr>
<td>440-M</td>
<td>FRP-Repair of Masonry Str M1</td>
<td>Tue</td>
<td>8:00 am-9:00 am</td>
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<tr>
<td>440-M</td>
<td>FRP-Repair of Masonry Str M2</td>
<td>Tue</td>
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<tr>
<td>441</td>
<td>Columns</td>
<td>Mon</td>
<td>11:30 am-2:00 pm</td>
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<td>441-E</td>
<td>Columns with Multi-Spiral Reinforcement</td>
<td>Sun</td>
<td>3:00 pm-4:30 pm</td>
<td>CONF RM 3</td>
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<td>444</td>
<td>Experimental Analysis</td>
<td>Mon</td>
<td>12:00 pm-2:00 pm</td>
<td>SUITE 514</td>
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<tr>
<td>445</td>
<td>Shear &amp; Torsion</td>
<td>Mon</td>
<td>2:00 pm-6:00 pm</td>
<td>CONF RM 15</td>
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<td>445-A</td>
<td>Shear &amp; Torsn-Strut &amp; Tie</td>
<td>Sun</td>
<td>10:30 am-1:30 pm</td>
<td>CONF RM 13</td>
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<td>445-B</td>
<td>Shear &amp; Torsn-Seismic Shear</td>
<td>Sun</td>
<td>8:00 am-11:00 am</td>
<td>SUITE 529</td>
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<tr>
<td>445-C</td>
<td>Shear &amp; Torsn-Punching Shear</td>
<td>Sun</td>
<td>1:00 pm-3:00 pm</td>
<td>SUITE 529</td>
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<tr>
<td>445-D</td>
<td>Shear &amp; Torsn-Database</td>
<td>Mon</td>
<td>10:00 am-12:00 pm</td>
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<td>Shear &amp; Torsn-SOA Torsion</td>
<td>Sun</td>
<td>3:30 pm-5:00 pm</td>
<td>SUITE 529</td>
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<td>446</td>
<td>Fracture Mechanics</td>
<td>Mon</td>
<td>3:30 pm-5:30 pm</td>
<td>CONF RM 7</td>
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<td>Finite Element Analysis</td>
<td>Mon</td>
<td>11:30 am-2:00 pm</td>
<td>CONF RM 6</td>
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<td>Adhesives</td>
<td>Tue</td>
<td>10:00 am-12:00 pm</td>
<td>SALON B</td>
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<td>506</td>
<td>Shotcreting</td>
<td>Tue</td>
<td>8:30 am-11:30 am</td>
<td>CONF RMS 13&amp;14</td>
</tr>
<tr>
<td>506-A</td>
<td>Shotcreting-Evaluation</td>
<td>Sun</td>
<td>9:30 am-11:00 am</td>
<td>CONF RM 10</td>
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<tr>
<td>Code</td>
<td>Committee</td>
<td>Day</td>
<td>Time</td>
<td>Room Name</td>
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<td>506-B</td>
<td>Shotcreting-Fiber Reinforced</td>
<td>Sun</td>
<td>1:30 pm-3:00 pm</td>
<td>SUITE 1951</td>
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<td>506-C</td>
<td>Shotcreting-Guide</td>
<td>Mon</td>
<td>8:30 am-10:00 am</td>
<td>SUITE 529</td>
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<td>506-E</td>
<td>Shotcreting-Specifications</td>
<td>Mon</td>
<td>10:00 am-12:30 pm</td>
<td>CONF RM 16</td>
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<tr>
<td>506-F</td>
<td>Shotcreting-Underground</td>
<td>Mon</td>
<td>1:00 pm-2:00 pm</td>
<td>CONF RM 10</td>
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<tr>
<td>506-G</td>
<td>Qualifications for Projects</td>
<td>Sun</td>
<td>11:00 am-12:30 pm</td>
<td>SUITE 529</td>
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<td>515</td>
<td>Protective Systems</td>
<td>Tue</td>
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<td>522</td>
<td>Pervious Concrete</td>
<td>Tue</td>
<td>8:30 am-11:30 am</td>
<td>CONF RMS 17 &amp; 18</td>
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<td>523</td>
<td>Cellular Concrete</td>
<td>Mon</td>
<td>10:00 am-1:00 pm</td>
<td>SUITE 1952</td>
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<td>523-A</td>
<td>Cellular-Autoclaved Aerated</td>
<td>Mon</td>
<td>8:30 am-10:00 am</td>
<td>SUITE 1952</td>
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<td>524</td>
<td>Plastering</td>
<td>Mon</td>
<td>7:00 am-8:30 am</td>
<td>CONF RM 6</td>
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<td>533</td>
<td>Precast Panels</td>
<td>Mon</td>
<td>2:30 pm-4:00 pm</td>
<td>CONF RM 17</td>
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<tr>
<td>543</td>
<td>Piles</td>
<td>Mon</td>
<td>8:30 am-11:30 am</td>
<td>SUITE 544</td>
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<td>544</td>
<td>Fiber Reinforced Concrete</td>
<td>Tue</td>
<td>3:30 pm-6:00 pm</td>
<td>SALONS K &amp; L</td>
</tr>
<tr>
<td>544-A</td>
<td>FRC-Production &amp; Applications</td>
<td>Mon</td>
<td>11:30 am-1:00 pm</td>
<td>SALONS K &amp; L</td>
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<tr>
<td>544-B</td>
<td>FRC-Education</td>
<td>Mon</td>
<td>8:30 am-10:00 am</td>
<td>CONF RMS 1 &amp; 2</td>
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<tr>
<td>544-C</td>
<td>FRC-Testing</td>
<td>Tue</td>
<td>2:00 pm-3:30 pm</td>
<td>SALONS K &amp; L</td>
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<tr>
<td>544-D</td>
<td>FRC-Structural Uses</td>
<td>Mon</td>
<td>3:30 pm-6:00 pm</td>
<td>SALONS K &amp; L</td>
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<tr>
<td>544-F</td>
<td>FRC-Durability</td>
<td>Tue</td>
<td>10:30 am-12:00 pm</td>
<td>CONF RMS 1 &amp; 2</td>
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<tr>
<td>546</td>
<td>Repair</td>
<td>Mon</td>
<td>8:30 am-11:30 am</td>
<td>CONF RM 18</td>
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<tr>
<td>546-A</td>
<td>Repair-Underwater</td>
<td>Sun</td>
<td>8:30 am-9:30 am</td>
<td>CONF RM 15</td>
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<tr>
<td>546-B</td>
<td>Repair-Material Selection Guide</td>
<td>Sun</td>
<td>9:30 am-10:30 am</td>
<td>CONF RM 15</td>
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<td>546-C</td>
<td>Repair-Guide</td>
<td>Sun</td>
<td>10:30 am-11:30 am</td>
<td>CONF RM 15</td>
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<tr>
<td>548</td>
<td>Polymers</td>
<td>Tue</td>
<td>8:30 am-10:00 am</td>
<td>SALON B</td>
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<tr>
<td>Code</td>
<td>Committee</td>
<td>Day</td>
<td>Time</td>
<td>Room Name</td>
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<tr>
<td>548-A</td>
<td>Polymers-Overlays</td>
<td>Mon</td>
<td>10:00 am-11:30 am</td>
<td>SALONS K&amp;L</td>
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<td>548-B</td>
<td>Polymers-Sulfur Concrete</td>
<td>Mon</td>
<td>1:00 pm-2:30 pm</td>
<td>SUITE 1952</td>
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<td>548-C</td>
<td>Polymers-Str Design &amp; Analysis</td>
<td>Mon</td>
<td>11:30 am-1:00 pm</td>
<td>CONF RM 11</td>
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<td>Sun</td>
<td>2:00 pm-3:00 pm</td>
<td>SUITE 618</td>
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<td>549</td>
<td>Thin Reinforced</td>
<td>Sun</td>
<td>10:30 am-2:00 pm</td>
<td>SALONS K&amp;L</td>
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<td>549-A</td>
<td>Thin Reinforced-Premix GFRC</td>
<td>Sun</td>
<td>8:30 am-10:30 am</td>
<td>CONF RM 13</td>
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<td>550</td>
<td>Precast Structures</td>
<td>Tue</td>
<td>1:00 pm-3:30 pm</td>
<td>SUITE 642</td>
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<tr>
<td>551</td>
<td>Tilt-Up</td>
<td>Sun</td>
<td>8:30 am-11:00 am</td>
<td>CONF RM 8</td>
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<tr>
<td>552</td>
<td>Cementitious Grouting</td>
<td>Mon</td>
<td>11:30 am-2:00 pm</td>
<td>SUITE 529</td>
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<td>555</td>
<td>Recycled</td>
<td>Mon</td>
<td>5:00 pm-6:30 pm</td>
<td>CONF RM 11</td>
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<tr>
<td>560</td>
<td>Design &amp; Constr ICFs</td>
<td>Wed</td>
<td>8:30 am-11:30 am</td>
<td>CONF RM 8</td>
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<tr>
<td>562</td>
<td>Eval, Repair &amp; Rehab</td>
<td>Sun</td>
<td>11:30 am-5:00 pm</td>
<td>CONF RM 7</td>
</tr>
<tr>
<td>562-A</td>
<td>Eval, Repair &amp; Rehab-Life Safety</td>
<td>Sun</td>
<td>12:00 pm-2:00 pm</td>
<td>CONF RM 8</td>
</tr>
<tr>
<td>562-B</td>
<td>Eval, Repair &amp; Rehab-Loads</td>
<td>Sun</td>
<td>12:00 pm-2:00 pm</td>
<td>CONF RM 10</td>
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<tr>
<td>562-C</td>
<td>Eval, Repair &amp; Rehab-Structural Analysis</td>
<td>Sun</td>
<td>12:00 pm-2:00 pm</td>
<td>CONF RM 15</td>
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<tr>
<td>562-CO</td>
<td>Eval, Repair &amp; Rehab-Coordination Meeting</td>
<td>Sun</td>
<td>8:00 am-9:00 am</td>
<td>CONF RM 18</td>
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<td>562-D</td>
<td>Eval, Repair &amp; Rehab-Structural Repair Design</td>
<td>Sun</td>
<td>12:00 pm-2:00 pm</td>
<td>SUITE 1906</td>
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<td>562-E</td>
<td>Eval, Repair &amp; Rehab-Durability Quality Assurance</td>
<td>Sun</td>
<td>12:00 pm-2:00 pm</td>
<td>SUITE 1952</td>
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<td>562-F</td>
<td>Eval, Repair &amp; Rehab-General</td>
<td>Sun</td>
<td>9:00 am-12:00 pm</td>
<td>CONF RM 18</td>
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<td>563</td>
<td>Specs for Repair of Struct Conc in Bldgs</td>
<td>Tue</td>
<td>2:00 pm-5:00 pm</td>
<td>CONF RMS 13&amp;14</td>
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</table>
The demand for green buildings that save money while protecting the environment and occupant health continues to increase. The USGBC’s LEED Rating System is the nationally recognized rating system for green buildings, and LEED is already being used in all 50 states. In the company of other concrete industry professionals, this full-day workshop will educate you on LEED credits and intents and how all members of the project team can contribute to its LEED certification. After attending this course, you will be aware of the changes to credits, prerequisites, and points in LEED 3.0, and understand the role that concrete can play in earning LEED points.

Paul H. Goldsmith is a USGBC LEED accredited professional, an expert in sustainable design, and champion of Harley Ellis Devereaux’s development of design standards for projects seeking LEED certification. For more information about Paul, go to: http://www.usgbc.org/ShowFile.aspx?DocumentID=3734.

If you are interested in becoming a LEED accredited professional, this workshop will also help prepare you for the LEED Professional Accreditation Exam. (Please note that USGBC plans to end registration for the current version of the LEED AP exam on March 31, 2009, with exams running through spring/summer 2009.) Now is the perfect time to earn your LEED accredited professional designation before the requirements change.

✓ = Separate fee required
First-Time Convention Attendee Breakfast
Sponsored by the ACI Convention Committee

Session Co-Moderators: Debrethann R. Orsak
Vice-President/Manager of Business Development
Cagley & Associates Inc.
Rockville, MD

First-time convention attendees are invited to join Debby Orsak, ACI Convention Committee member, 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, March 15, 2009
12:00 pm – 5:00 pm

Student Concrete FRP Composites and Concrete Construction Competition
SALON G-I

Coordinated by ACI Committee E801, Student Activities, ACI Committee 440, Fiber Reinforced Polymer Reinforcement, and the ACI San Antonio Chapter

Sponsored by Fugro Consultants, Inc.

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

John Newhook  
Professor  
Dalhousie University  
Halifax, NS, Canada

Students will design, construct, and test a concrete specimen reinforced with FRP bars to achieve the optimal load-to-weight ratio in the FRP Composites Competition. For the Concrete Construction Competition, students will present a solution to a realistic open-ended question. Stop by and cheer for your favorite team!
Sunday, March 15, 2009
2:00 pm – 5:00 pm

Improving the Infrastructure with Roller-Compacted Concrete Pavements
Sponsored by ACI Committees 325, Concrete Pavements, and 327, Roller Compacted Concrete Pavements

Session Co-Moderators: Frank Lennox
Technical Service Manager
Buzzi Unicem
Chattanooga, TN

Anthony Sorcic
Technical Service Manager
Holcim (US) Inc.
Decatur, TX

With the soaring cost of asphalt, opportunities for innovative concrete products such as roller-compacted concrete (RCC) have never been greater. From streets and local roads to heavy-duty intermodal yards and port facilities, RCC has become the pavement of choice. This session will address the newest applications, design principles, and construction methods.

What’s New in RCC for Ports and Intermodal Yards 2:00 pm
Matthew W. Singel, Specialty Pavements Engineer, Cement Council of Texas, Hurst, TX

Roller-Compacted Concrete—More Than Just a Heavy-Duty Pavement 2:25 pm
Christopher R. Tull, President, CRT Concrete Consulting, Fishers, IN

Composite Pavements Using RCC 2:50 pm
Norbert J. Delatte, Assistant Professor, Cleveland State University, Broadview Heights, OH

City of Chattanooga’s Experience with RCC Pavements 3:15 pm
Ariel Soriano, Engineer Manager, City of Chattanooga, Engineering Department, Chattanooga, TN

RCC Experience in Canada 3:40 pm
Timothy J. Smith, Director of Transportation and Public Works, Cement Association of Canada, Ottawa, ON, Canada
Sunday, March 15, 2009
2:00 pm – 5:00 pm

Improving the Infrastructure with Roller-Compacted Concrete Pavements (cont.)

RCC Pavement Experience in Mexico 4:05 pm
Donato Figueroa-Gallo, Manager of Education and Training Programs, Instituto Mexicano del Cemento y del Concreto A.C., Mexico City, Mexico

RCC Pavement Construction—A Contractor’s Perspective 4:30 pm
Ronald L. Peltz, Managing Partner, A.G. Peltz Group LLC, Birmingham, AL
This session will provide a glimpse into the “Load Distribution Methods for Evaluating Existing Bridges” document. This document will provide an overview of current code criteria for transverse load distribution including their limitations and acceptability, a summary and description of the use of refined methods of analyses for transverse load distribution, and load test methods. Examples are presented to provide a correlation between the various methods of transverse load distribution for evaluation.

Current Code Criteria for Live Load Distribution 2:00 pm
Mohamed A. Mahgoub, Project Engineer, Alfred Benesch and Company, Lansing, MI

Code Limitations and Applicability 2:30 pm
Riyadh A. Hindi, Associate Professor, Bradley University, Peoria, IL

Use of Refined Methods of Analysis 3:00 pm
Walid S. Najjar, Manager – Department of Education and Research, WSP-SELLS, Briarcliff Manor, NY

Load Tests 3:30 pm
Jeffrey L. Smith, Structural Engineer, Federal Highway Administration, Frankfort, KY

Correlation of Refined Analysis Methods and Load Testing 4:00 pm
Andre G. Garner, Consulting Engineer, Garner Consulting, Austin, TX

Load Rating of Bridges Using Current Codes – Examples 4:30 pm
Lisa R. Feldman, Assistant Professor, University of Saskatchewan, Saskatoon, SK, Canada
The residential industry is considered a plain, generic, and simple industry for concrete construction. And yet, it now has one of the newest concrete codes and is seeing a strong growth of creativity and technically-challenged applications. This session provides evidence of some of the cutting-edge issues while also addressing many of the age-old characteristics that continue to hold back this industry.

Concrete Slabs for Residential Industry Use, Basis of Design, and Use of Design Software  2:00 pm
Raj K. Jalla, President and Chief Engineer, CEC Structures, Reston, VA

Concrete Slab Problems and Remedial Measures  2:30 pm
Robert T. Bartley, President, Bartley Corporation, Ashton, MD

Concrete Footing Performance Versus Science  3:00 pm
Scott R. Humphreys, Technical Director, Concrete Reinforcing Steel Institute, Schaumburg, IL

Reinforcement Does Not Always Start With “S”  3:30 pm
Joseph S. Balik, Senior Product Specialist, W.R. Grace and Company, Arlington Heights, IL

Investigation and Repair of Existing Concrete Foundations  4:00 pm
Ashok M. Kakade, Principal Engineer, Concrete Science Inc., Hayward, CA
Flat plate column connections are vulnerable to brittle shear failure. The unbalanced moment transferred at the connection during an earthquake can produce significant shear stresses that increase the vulnerability of these connections to brittle punching shear failure. The topics to be presented in this session include recommendations for designing flat plate-column connections with sufficient ductility to go through lateral drift without punching shear failure or loss of moment transfer capacity.

The Latest Provisions for Slab Shear Reinforcement and  2:00 pm
Seismic Design of Punching Shear Reinforcement in Flat Plates
Mustafa A. Mahamid, Project Engineer, Skidmore, Owings, and Merrill LLP, Chicago, IL

Punching Shear of Flat Plates in Earthquakes 2:30 pm
Amin Ghali, Professor, University of Calgary, Calgary, AB, Canada; and
Ramez B. Gayed, University of Calgary

Effective Slab Width in the Analysis of Flat Plate-Column Frames Under Lateral Loading 3:00 pm
Jaehong Kim, Consultant, S.K. Ghosh Associates, Palatine, IL; and
Satyendra Ghosh, S.K. Ghosh Associates

Solutions to Common Punching Shear Problems 3:30 pm
Amy M. Trygestad, Regional Structural Engineer, Northland Concrete and Masonry Company LCC, New Prague, MN
Seismic Design of Punching Shear Reinforcement in Flat Plates (cont.)

A Historical Review of Shear Failures in Flat Plate Slabs—Lessons Learned
Michael C. Mota, Regional Manager, Concrete Reinforcing Steel Institute, Williamstown, NJ

Repair and Strengthening of Reinforced Concrete Slab-Column Connection: State of the Art
Aly Said, Professor, University of Nevada, Las Vegas, NV
Sunday, March 15, 2009
2:00 pm – 5:00 pm

Transition from Fluid to Solid: Reexamining the Behavior of Concrete at Early Ages, Part 1
Sponsored by ACI Committee 231, Properties of Concrete at Early Ages

Session Co-Moderators: Kyle A. Riding
Assistant Professor
Kansas State University
Manhattan, KS
Jan Olek
Associate Professor
Purdue University
West Lafayette, IN

This session will focus on concrete early-age property development during the transition from fluid to solid. Topics will include new measurement techniques for determining concrete setting time, development of early-age concrete restrained stress and cracking potential, construction operations timing, and the influence of new cementitious binder systems.

Experimental Study on Restrained Drying Shrinkage
Mitsuo Ozawa, Assistant Professor, Gifu University, Gifu, Japan;
Toshiro Kamada, Osaka University; Hiroaki Morimoto, Gifu University; and Shiya Uchida, Japan Society for the Promotion of Science

Detecting Solidification Using Moisture Transport from Saturated Light Weight Aggregate
Ryan A. Henkensiefken, Technology Services Supervisor, US Concrete, San Jose, CA; and Tommy Edward Nantung, Jason Weiss, and Gaurav Sant, Purdue University

Identifying Fluid to Solid Transition in Cementitious Materials at Early Ages Using Ultrasonic Wave Velocity/Computer Simulation
Gaurav Sant, PhD Candidate and Teaching Assistant, Purdue University, West Lafayette, IN; Jason Weiss, Purdue University; Dale P. Bentz, National Institute of Standards and Technology; and Mukul Dehadrai, Tourney Consulting
Sunday, March 15, 2009
2:00 pm – 5:00 pm

Continuous Ultrasonic Assessment of Elastic Modules of Cementitious Materials Through Setting and Early Strength Gain
Kolluru V. Subramaniam, Associate Professor, The City College of New York, New York, NY; and Jaejun Lee, North Carolina State University

Transition from Fluid to Solid: Reexamining the Behavior of Concrete at Early Ages, Part 1 (cont.)

Early-Age Stiffening of Cement Paste Using Ultrasonic Wave Reflection
Chul-Woo Chung, Graduate Research Assistant, University of Illinois at Urbana Champaign, Urbana, IL; and John S. Popovics and Leslie Struple, University of Illinois at Urbana Champaign

Evaluation of a Quick Heat Generation Index Test for Characterization of Cementitious Materials
Tyson Rupnow, Concrete Research Engineer, Louisiana Transportation Research Center, Baton Rouge, LA; and Kejin Wang and Vernon R. Schaefer, Iowa State University
The ACI Spring 2009 Convention officially begins during the Opening Session. Here, ACI will recognize the following individuals and groups for their contributions to ACI and achievements in the concrete industry.

HONORARY MEMBERSHIP

Jo Coke
C. Terry Dooley
Jacob S. Grossman
William S. Phelan
Basile G. Rabbat

50-Year Members

Joseph Antebi
John Barnard
Jeffrey Borst
Merrifield Claudio
Robert Crist Jr.
Kenneth Cummins
Larry Feeser
William Gamble
Loris Gerber
Alejandro Graf
Asadour Hadjian
Michael Jordan
Mark Kroeger

FELLOW

Peter H. Bischoff
James M. LaFave
Benoît Bissonnette
Peter Marti
Allan P. Bommer
Richard J. McGrath
Andrew J. Boyd
Barzin Mobasher
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Kamran M. Nemati
Vicki L. Brown
Karthikeyan H. Obla
JoAnn P. Browning
William D. Palmer Jr.

Oscar Lehmann
Donald Leitch
V. Mohan Malhotra
Robert Mast
W. McCalla
Edward Navy
Sandor Popovics
Richard Ramsey
Miguel Santiago
Charles Seim
Peter Smith
Richard White

Neeraj Buch
Andrea J. Schokker
Oan Chul Choi
Jeffrey L. Smith
Norbert J. Delatte
Douglas J. Sordyl
Sofia Maria Carrato Diniz
Pericles C. Stivaros
Alvin C. Ericson
Arezki Tagnit-Hamou
Jorge L. Fuentes
Mostapha A. Vand
Jiann-Wen Woody Ju
Nur Yazdani
PERSONAL AWARDS
ARTHUR R. ANDERSON MEDAL
Kenneth C. Hover

ROGER H. CORBETTA CONCRETE CONSTRUCTOR AWARD
Peter H. Emmons

JOE W. KELLY AWARD
S. K. Ghosh

HENRY L. KENNEDY AWARD
W. Calvin McCall

ALFRED E. LINDAU AWARD
Instituto del Cemento y del Hormigón de Chile

HENRY C. TURNER MEDAL
Suneel N. Vanikar

CHARLES S. WHITNEY MEDAL
Skidmore, Owings & Merrill LLP

PAPER AWARDS
WASON MEDAL FOR MOST MERITORIOUS PAPER
Thomas H.-K. Kang, James M. LaFave, Ian N. Robertson, and Neil M. Hawkins

WASON MEDAL FOR MATERIALS RESEARCH
Pietro Lura, Brad Pease, Guy B. Mazzotta, Farshad Rajabipour, and Jason Weiss

ACI CONSTRUCTION AWARD
Shiro Ishikawa, Keisuke Matsukawa, Shigeki Nakanishi, and Hironobu Kawai

CHESTER PAUL SIESS AWARD FOR EXCELLENCE IN STRUCTURAL RESEARCH
Kyoung-Kyu Choi, Hong-Gun Park, and James K. Wight

ACI DESIGN AWARD
Hadi Rusjanto Tanuwidjaja
CHAPTER ACTIVITIES AWARD (DOMESTIC)
Alain Belanger
Cas J. Bognacki

CHAPTER ACTIVITIES AWARD (INTERNATIONAL)
Satish C. Dhupelia
Moetaz M. El-Hawary

ACI YOUNG MEMBER AWARD FOR PROFESSIONAL ACHIEVEMENT
Marc Jolin
Karthikeyan H. Obla
Jussara Tanesi

DELMAR L. BLOEM DISTINGUISHED SERVICE AWARD
John P. Busel
Ronald J. Janowiak
Frank A. Kozeliski

ACI CERTIFICATION AWARD
Merlyn Isaak
John E. McChord
Robert Alfredo Nuñez Moreno

ACI Foundation—CONCRETE RESEARCH COUNCIL BOASE AWARD
Basile G. Rabbat

ACI Foundation—CONCRETE RESEARCH COUNCIL PHILLEO AWARD
Henry G. Russell

WALTER P. MOORE, JR. FACULTY ACHIEVEMENT AWARD
Maria Juenger

Excellent Chapters
Arizona
Central & Southern Mexico
Georgia
Greater Miami Valley
India
Iran
Louisiana
Missouri
New Jersey
New Mexico
Northeast Texas
Peru
Southern California

Outstanding Chapters
Greater Michigan
Kansas
Las Vegas
Nebraska
Ontario
Pittsburgh Area
San Diego International
South Florida
Sunday, March 15, 2009
6:30 pm – 7:30 pm

Opening Reception
SALONS G-I

Sponsored by the ACI San Antonio Chapter and Capitol Cement

After the Opening Session & Awards Program, 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, March 15, 2009
7:30 pm – 10:00 pm

Hot Topic Session: Designing to Minimize Pavement Cracking  SALON J
Coordinated by the ACI San Antonio Chapter

Sponsored by Alamo Cement Company, Ltd.; Bartlett Cocke General Contractors; Terracon Consultants, Inc.; and Texas Aggregate and Concrete Association

Session Co-Moderators: Woodward L. Vogt
President
Paradigm Consultants, Inc.
Houston, TX

Toby O. Martinez
Principal
Burge-Martinez Consulting, Inc.
San Antonio, TX

Don’t miss out on this Hot Topic Session. Come hear experts discuss issues that designers must consider in order to minimize the development of cracks in concrete pavements. The panel will also host a question and answer session following the presentation.

Refreshments will be available courtesy of the ACI San Antonio Chapter.

The Paving Designer’s Responsibilities to Minimize Cracking  7:30 pm
Woodward L. Vogt, President, Paradigm Consultants, Inc., Houston, TX

Bases, Subgrades, and Inter-Layers  7:40 pm
Dan G. Zollinger, Professor, Texas A&M University, College Station, TX

Joint, Cracks, and Slab Thickness  8:10 pm
Neeraj Buch, Professor, Michigan State University, East Lansing, MI

Use of Reinforcement  8:40 pm
Dan G. Zollinger, Professor, Texas A&M University, Bryan, TX

Concrete Mixtures  9:20 pm
James M. Shilstone, Jr., President, Shilstone Companies, Irving, TX
Student and Young Professional Networking Event

SAZO’S

Sponsored by the ACI Collegiate Concrete Council and ACI Advisory Committee for Young Members

The ACI Collegiate Concrete Council and ACI Advisory Committee for Young Members invite all convention attendees to the first Student and Young Professional Networking Event. Meet fellow students and young professionals while networking with ACI members in a fun and casual environment. Attendees to the event will be entered into a drawing to win an iPod Nano or one of two $25 iTunes gift cards. In addition, the bar and grill will be open for attendees desiring to purchase food and beverages.
Monday, March 16, 2009
6:30 am – 8:15 am

Workshop for Technical Committee Chairs
SALON F
Sponsored by the ACI Technical Activities Committee

Session Moderator: David A. Lange
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, March 16, 2009
7:00 am – 8:30 am

Speaker Skills Training Breakfast  CONFERENCE ROOMS 13&14
Sponsored by ACI Committee E802, Teaching Methods and Educational Materials

Session Moderator: James H. Hanson
Assistant Professor
Rose-Hulman Institute
Terre Haute, IN

Speaker: Brian J. Gallagher
Vice President
Structural Group
Hanover, MD

Topic: Delivering Effective Technical Presentations

How to deliver effective technical presentations at ACI Conventions and achieve expected results. This presentation will guide ACI presenters through the process of preparing and delivering an effective presentation. The session will help ACI presenters deliver and communicate technical information in a clear, concise manner. The session will address understanding your audience, developing the presentation message, developing a presentation strategy, assessing and accommodating your audience, use of graphics and charts, and effectively delivering a concise message. After attending this session, ACI presenters will be prepared to deliver well-prepared, comprehensible, information-packed technical presentations that resonate with their audience.

7:30 am – 8:30 am

Chapter Forum  CONFERENCE ROOM 11
The discussion of this session is focused on ACI Chapter Risk Strategy. This session will discuss the risk factors facing ACI chapters, what insurance products are in place through ACI that covers those risks, and what additional insurance should the ACI chapters consider purchasing to fill any gaps in coverage.
Monday, March 16, 2009
9:00 am – 12:00 pm

Building Sustainably with Slag Cement

SALON J
Sponsored by ACI Committees 130, Sustainability of Concrete, and 233, Ground Slag in Concrete

Session Co-Moderators: Darrell Elliot
Technical Service Manager
Buzzi Unicem USA
La Place, LA

Corina Maria Aldea
Senior Materials Engineer
AMEC Earth and Environmental
Hamilton, ON, Canada

Presentations will be made on research and case studies that demonstrate how slag cement contributes to the sustainability of concrete.

Sustainable Aspects of Slag Cement in Concrete  9:00 am
Jan R. Prusinski, Executive Director, Cement Council of Texas, Hurst, TX

Sustainability Using Slag Cement Construction  9:22 am
David C. Weber, Executive Director, Slag Cement Association, Woodstock, GA

Performance-Based Specifications and Sustainable Development Using Slag Cement  9:44 am
Corina M. Aldea, Senior Materials Engineer, AMEC Earth and Environmental, Hamilton, ON, Canada; and Bruce J. Cornelius, AMEC Earth and Environmental

Sustainable Concrete in Mass Applications  10:06 am
Henry B. Prenger, Director of Technical Services, Lafarge, Baltimore, MD; and Paul D. Brooks, Holcim

Sustainable Solutions with Slag Cement  10:28 am
Julie K. Buffenbarger, Engineering and Architectural Specialist, Lafarge, Medina, OH

Use of Slag Cement for Improved Durability in VDOT Structures  10:50 am
Celik Ozyildirim, Principal Research Scientist, Virginia Transportation Research Council, Charlottesville, VA
Monday, March 16, 2009
9:00 am – 12:00 pm

Building Sustainably with Slag Cement (cont.)

Use of Slag Concretes for Durability and Extended Service Life  11:12 am
Doug Hooton, Professor, University of Toronto, Toronto, ON, Canada

On The Road to Low Energy Cements  11:34 am
Jean-Claude M. Roumain, Corporate Product Manager, Holcim (US) Inc., Louisville, CO
Monday, March 16, 2009
9:00 am – 12:00 pm

Research in Progress  SALON A
Sponsored by ACI Committee 123, Research and Current Developments

Session Co-Moderators: Matthew D’Ambrosia
Project Manager
CTLGroup
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.

James Instruments Awardee Presentation  9:00 am
Core-free Ultrasonic Technique for Evaluation of Concrete Pavements
Kyle Hoegh, PhD Graduate Student, University of Minnesota, Minneapolis, MN

Experimental Behavior of High-Performance Fiber-Reinforced Cementitious Composites Under Biaxial Stresses
Raymond R. Foltz, PhD Candidate, University of Illinois at Urbana Champaign, Urbana, IL; and James M. LaFave, University of Illinois at Urbana Champaign

Fiber-Reinforced Plastic (FRP) and Reactive Powder Concrete (RPC) Composite Systems for Structural Energy Dissipation
Tony C. Liu, Visiting Research Fellow, National Taiwan University, Great Falls, VA; and Hui-Jen Chiu and Jenn-Chuan Chern, National Taiwan University

Innovative Connection Details for Full-Depth Precast Bridge Deck Panels for Use on Prestressed Concrete Girders
Stephen Price, Research Assistant, Purdue University, West Lafayette, IN; Robert Frosch, Purdue University

Enamel Coating for Steel Corrosion Protection and Concrete-Steel Bond Enhancement
Genda Chen, Professor of Civil Engineering, Missouri University of Science and Technology, Rolla, MO; Mike Koenigstein, Roesch Incorporated; and Richard K. Brow, Signo Reis, and Dongming Yan, Missouri University of Science and Technology
Monday, March 16, 2009
9:00 am – 12:00 pm

Research in Progress (cont.)

SALON A

Hydration of C₃S - C-S-H Systems 10:15 am
Rouhollah Alizadeh, Graduate Research Assistant, National Research Council of Canada, Ottawa, ON, Canada; and James J. Beaudoin and Laila Raki, National Research Council of Canada

Effect of Supplementary Cementitious Material and Curing Temperature on the Cracking Tendency of Concrete 10:30 am
Benjamin E. Byard, Graduate Research Assistant, Auburn University, Auburn, AL; Anton K. Schindler, Auburn University; and Akash Rao, Design Engineering Inc.

Effects of Silica Fume on Nanomechanical Properties of Concrete 10:45 am
Paramita Mondal, Assistant Professor, University of Illinois at Urbana Champaign, Urbana, IL; and Surendra P. Shah and Laurence D. Marks, Northwestern University

Considerations in Designing High-Volume Fly Ash Mixtures 11:00 am
Dale P. Bentz, Chemical Engineer, National Institute of Standards and Technology, Gaithersburg, MD

Effects of Binder Types and Activating Media on the Structure and Strength of Cement-Free Binder Concretes 11:15 am
Deepak Ravikumar, Graduate Student, Clarkson University, Potsdam, NY; Sulapha Peethamparan and Narayanan Neithalath, Clarkson University

Using Air-Coupled Sensors to Evaluate Depth of a Surface-Breaking Crack in Concrete 11:30 am
Seong-Hoon Kee, Graduate Student, University of Texas at Austin, Austin, TX; and Jinying Zhu, University of Texas at Austin
The residential industry is considered a plain, generic, and simple industry for concrete construction. And yet, it now has one of the newest concrete codes and is seeing a strong growth of creativity and technically-challenged applications. This session provides evidence of some of the cutting-edge issues while also addressing many of the age-old characteristics that continue to hold back this industry.

**Performance-Based Applications for Residential Concrete**  9:00 am  
**Victor Villareal**, Technical Services Manager, TXI Operations, LP, Dallas, TX

**Fashioning Storm Resistance in Latin America for Multi-Family Housing**  9:30 am  
**Brent D. Anderson**, President, BDA Associates, LCC, Minneapolis, MN

**Concrete Foundation Wall Use, Basis of Design and Use of Software**  10:30 am  
**Raj K. Jalla**, President and Chief Engineer, CEC Structures, Reston, VA

**Concrete Foundation Wall Problems and Remedial Measures**  11:00 am  
**Robert T. Bartley**, President, The Bartley Corporation, Ashton, MD

**How Cold is Too Cold? Residential Foundations for Northern Climates**  11:30 am  
**James R. Baty**, Technical Director, Concrete Foundation Association, Mount Vernon, IA
Monday, March 16, 2009
9:00 am – 12:00 pm

Serviceability of Concrete Members Reinforced with Internal/External FRP Reinforcement, Part 1
Sponsored by ACI Committees 440, Fiber Reinforced Polymer Reinforcement, 224, Cracking, and 435, Deflection of Concrete Building Structures

Session Co-Moderators: Carlos E. Ospina
Design Engineer
Berger/ABAM Engineers Inc.
Federal Way, WA

Peter H. Bischoff
Professor
University of New Brunswick
Fredericton, NB, Canada

Presentation topics are related to recent advances in serviceability design of concrete members reinforced with either internal or external fiber-reinforced polymers (FRP). Presentations include analytical and experimental evidence related to deflection and cracking.

Deflection Control for FRP-Reinforced Concrete Members  9:00 am
Andrew Scanlon, Professor, Pennsylvania State University, University Park, PA

Effect of Sustained Loads on Flexural Crack Width in Concrete Members Reinforced with Internal FRP Reinforcement  9:25 am
Shawn P. Gross, Associate Professor, Villanova University, Villanova, PA; and Joseph R. Yost and Dennis Stephanski, Villanova University

Cracking and Deflection Behavior of One-Way Parking Garage Structural Slabs Reinforced with FRP Bars  9:50 am
Brahim Benmokrane, Professor, University of Sherbrooke, Sherbrooke, QC, Canada; and Sherif El Gamal, University of Sherbrooke

The Story Behind Proposed Changes to ACI 440 Deflection Requirements for FRP-Reinforced Concrete  10:15 am
Peter H. Bischoff, Professor, University of New Brunswick, Fredericton, NB, Canada; Shawn P. Gross, Villanova University; and Carlos E. Ospina, Berger/ABAM Engineers Inc.
Monday, March 16, 2009
9:00 am – 12:00 pm

Serviceability of Concrete Members Reinforced with Internal/External FRP Reinforcement, Part 1 (cont.)  SALON D

Moment of Inertia for Beams Reinforced with Deformed GFRP Reinforcing Bar  10:40 am
Jongsung Sim, Professor, Hanyang University, Ansan, Korea; Minkwan Ju, Hanyang University; and Hongseob Oh, Jinju National University

Effects of Type and Ratio of FRP Reinforcement on the Deflection and Cracking Behavior of Concrete Beams  11:05 am
Brahim Benmokrane, Professor, University of Sherbrooke, Sherbrooke, QC, Canada; Bahira Abdul Rahman and Sherif El Gamal, University of Sherbrooke

Effective Moment of Inertia for Concrete Beams Reinforced with FRP Reinforcement  11:30 am
Dagmar Svecova, Associate Professor, University of Manitoba, Winnipeg, MB, Canada; Hugues Vogel, University of Manitoba
Monday, March 16, 2009
9:00 am – 12:00 pm

Transition from Fluid to Solid: Reexamining the Behavior of Concrete at Early Ages, Part 2
Sponsored by ACI Committee 231, Properties of Concrete at Early Ages

Session Co-Moderators: Jason Weiss
Professor
Purdue University
West Lafayette, IN

Kyle A. Riding
Assistant Professor
Kansas State University
Manhattan, KS

This session will focus on concrete early-age property development during the transition from fluid to solid. Topics will include new measurement techniques for determining concrete setting time, development of early-age concrete restrained stress and cracking potential, construction operations timing, and the influence of new cementitious binder systems.

Early-Age Property Development of Concrete with Different Slag Contents 9:00 am
Aveline Darquennes, PhD Student, Université Libre de Bruxelles, Brussels, Belgium; and Stephanie Staquet, Bernard Espion, Aicha Kamen, and Marie Pauley Delplancke-Ogletree, Université Libre de Bruxelles

Flocculation Behavior of Cement Pastes Containing Clays and Fly Ash 9:30 am
Nathan A. Tregger, Graduate Research Assistant, Northwestern University, Evanston, IL; and Surendra P. Shah and Hilde Knai, Northwestern University

Flocculation in Cement Pastes Measured Through Use of Laser Microscopy 10:00 am
Raissa Ferron, Student, University of Texas at Austin, Austin, TX; and Carlos Negro, Complutense University

Effect of Accelerating Admixture on Flowable Fill Strength 10:30 am
Webert Lovencin, Project Administrator, Florida Department of Transportation, East Palatka, FL; Fazil Najafi, University of Florida
Monday, March 16, 2009
9:00 am – 12:00 pm

Transition from Fluid to Solid: Reexamining the Behavior of Concrete at Early Ages, Part 2 (cont.)

Monitoring the Liquid-to-Solid Transition in Concrete with Conventional Tests
Kenneth C. Hover, Professor of Structural Engineering, Cornell University, Ithaca, NY; Jon D. Abel, Cornell University; and Roberto C. Pinto, Universidade Federal de Santa Catarina

Simulation of Volume Changes of Cement Paste at Early Age
Karen Scrivener, Professor, Swiss Federal Institute of Technology at Lausanne, Lausanne, Switzerland; Ines Jaouadi, Laboratoire Central des Ponts et Chaussées; and Amor Guidoum, Swiss Federal Institute of Technology at Lausanne
Monay, March 16, 2009
12:00 pm – 2:00 pm

✓ Student Lunch

$49 U.S. per person; FREE to students who preregister
Sponsored by the ACI San Antonio Chapter; ACI Committee E801, Student Activities; and Baker Concrete Construction

Speaker: Richard S. Szecsy
Vice President for New Product Development and Risk Management
Lattimore Materials Company
McKinney, TX

Topic: Application of New Concrete Technology Versus Traditional Concrete Design

Join other ACI attendees and students for the announcement of the Student FRP Composites Competition results. Following lunch, featured speaker Richard Szecsy, Vice President for New Product Development and Risk Management for Lattimore Materials Company will give a presentation on the Application of New Concrete Technology Versus Traditional Concrete Design. The presentation will examine some specific cases where technology and traditional approaches to concrete design and construction are in conflict. The presentation is meant to challenge students that will be entering the market to think about their upcoming decisions regarding new technologies and their application when faced with historical, and in some cases, outdated viewpoints.

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, March 16, 2009
1:00 pm – 2:00 pm

Convention Session Moderator Question and Answer Session

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, March 16, 2009
2:00 pm – 5:00 pm

Behavior of Concrete Transportation Structures Under Blast and Impact
Sponsored by ACI Committee 370, Short Duration Dynamic and Vibratory Load Effects

Session Moderator: Eric Williamson
Associate Professor
University of Texas at Austin
Austin, TX

This session will address the response of transportation structures subjected to blast and impact loads. Session presenters will address the effects of high loading rates on concrete components and ways of modeling response. Design strategies to mitigate these extreme loading conditions will also be presented. Researchers and engineers should find the topical coverage timely and of great interest.

Analysis of Bridge Structures Subjected to Vessel Impact Loading with Consideration of Dynamic Amplification Effects
Gary R. Consolazio, Associate Professor, University of Florida, Gainesville, FL

Mitigation of Vehicle Bomb Threats to Reinforced Concrete Cable-Stayed Bridge Towers
James Ray, Research Structural Engineer, Engineering Research Development Center, Army Corps of Engineers, Vicksburg, MS

Response of a Concrete Tunnel to Blast Loads
Darrell D. Barker, Vice President, ABS Consulting Inc., San Antonio, TX

Damage Metrics for RC Column Models
Joseph M. Magallanes, Senior Engineer, Karagozian and Case, Burbank, CA; and John M. Crawford, Karagozian and Case

Performance of Retrofit Highway Barriers with Mechanical Anchors
Richard Klingner, Professor, University of Texas at Austin, Austin, TX; Eric Williamson, University of Texas at Austin

Concrete Barriers Under Impact Loading: Testing and Simulation
Akram Abu-Odeh, Associate Research Scientist, Texas A & M University, College Station, TX
The proper consolidation of concrete is paramount in obtaining a low permeability, high strength, and proper bond between the reinforcement and the concrete. Nevertheless, it is often an overlooked characteristic of the concrete that is not always properly monitored in the field. This session will explore all aspects related to concrete consolidation, old and new. Topics considered of interest are (but not limited to): what factors affect the consolidation of concrete, how to obtain the proper consolidation in concretes with different consistency, and how to measure the level of consolidation in the laboratory and in the field.

Applications of New Technology to Concrete Consolidation  2:00 pm
Richard Schulze, Managing Director, Wacker-Werke Gmbh & Co. KG, Munchen, Germany; Vincent E. Hunt, Wacker Corporation

Consolidation Measurements in the Field  2:30 pm
Paul Jaworski, National Sales Manager, Wyco Tool Company, Racine, WI

Effects of Consolidation on the Hardened Properties of RCC  3:00 pm
Timothy P. Dolen, Civil Engineer, United States Bureau of Reclamation, Denver, CO

Impacts of Consolidation on Pervious Concrete Testing  3:30 pm
Matthew A. Offenberg, Market Development Manager, CEMEX, Canton, GA; and Michael S. Davy, W.R. Grace and Company
Consolidation: Back to the Basics in the 21st Century (cont.)  

Consolidation Without Vibration for Concrete Pavements  
Surendra P. Shah, Professor, Northwestern University, Evanston, IL; and Nathan A. Tregger, Northwestern University

Consolidation of Self-Consolidating Concrete  
Joseph A. Daczko, Product Line Manager, BASF Admixtures Inc., Cleveland, OH
Monday, March 16, 2009
2:00 pm – 5:00 pm

Developing Innovative Solutions for Design and Construction of Precast/Prestressed Concrete Structures

SALON J

Sponsored by Joint ACI-ASCE Committee 550, Precast Concrete Structures

Session Co-Moderators:

Thomas D’Arcy
Founding President and Principal
The Consulting Engineers Group
San Antonio, TX

Paul Johal
Director of Research & Development
Precast Prestressed Concrete Institute
Chicago, IL

This session includes presentations on several precast/prestressed concrete research and design projects, including design of hybrid precast concrete walls for seismic regions; improving efficiency of the precast jointed wall system through introduction of precast walls with end columns (preWEC); total precast concrete stadium design approach; development of rational design methodology for precast, prestressed concrete spandrel beams; shake table tests of a quarter-scale three-story precast concrete building; and rational design methodology for precast concrete diaphragms in low and high seismic regions.

**Design of Hybrid Precast Concrete Walls for Seismic Regions**  2:00 pm

Yahya C. Kurama, Associate Professor and Director of Graduate Studies, University of Notre Dame, Notre Dame, IN; and Brian Smith, University of Notre Dame

**Improving Efficiency of the Precast Jointed Wall System Through Introduction of Precast Walls with End Columns (PreWEC)**  2:25 pm

Sri Sritharan, Associate Professor, Iowa State University, Ames, IA; and Sriram Aeleti, Iowa State University

**Total Precast Concrete Stadium Design Approach**  2:50 pm

Larbi M. Sennour, Executive Vice President, The Consulting Engineers Group, Inc., San Antonio, TX

**Development of Rational Design Methodology for Precast, Prestressed Concrete Spandrel Beams**  3:15 pm

Sami H. Rizkalla, Distinguished Professor, North Carolina State University, Raleigh, NC; and Greg W. Lucier, North Carolina State University
Monday, March 16, 2009
2:00 pm – 5:00 pm

Developing Innovative Solutions for Design and Construction of Precast/Prestressed Concrete Structures (cont.)

Shake-Table Tests of a Quarter-Scale Three-Story Precast Concrete Building
Mario E. Rodriguez, Research Professor, National University of Mexico, Mexico City, Mexico; and Guilo Leon, PREMEX

Development of Rational Design Methodology for Precast Concrete Diaphragms in Low and High Seismic Regions
Robert B. Fleischman, Professor, University of Arizona, Tucson, AZ; and Jose I. Restrepo, University of San Diego
The Practice and Placement of Structural Concrete in Seismic Design of Bridge Infrastructure
Sponsored by ACI Committee 341, Earthquake-Resistant Concrete Bridges

Session Moderator: Bassem Andrawes
Assistant Professor
University of Illinois at Urbana Champaign
Urbana, IL

This session is intended to provide practitioners and researchers with state-of-the-art information on the seismic analysis, design, and retrofitting of reinforced concrete bridges.

Ductility Enhancement of High-Strength Concrete 2:00 pm
Circular Bridge
Riyadh A. Hindi, Associate Professor, Bradley University, Peoria, IL; and Lonnie Marvel, STS/AECOM

Safety Evaluation of Seismic Behavior of the Bill Emerson Memorial Cable-Stayed Bridge 2:30 pm
Genda Chen, Professor, Missouri University of Science and Technology, Rolla, MO; and Dongming Yan, Missouri University of Science and Technology

Effective Stiffness of Reinforced Concrete 3:00 pm
Marc O. Eberhard, Professor, University of Washington, Seattle, WA; and Kenneth J. Elwood, University of British Columbia

Enhancing Seismic Performance of Concrete Columns by Replacing Lateral Steel with FRP Shells 3:30 pm
Amir Mirmiran, Professor, Florida International University, Miami, FL; and Yilei Shi and Bin Li, Florida International University

FHWA's New Seismic Retrofitting Manual, Part 1: Bridges 4:00 pm
Phillip Yen, Seismic Research Program Manager, Federal Highway Administration, McLean, VA; and Jerome S. O'Connor, MCEER

Seismic Retrofitting of Bridge Columns Using Shape Memory Alloys 4:30 pm
Bassem Andrawes, Assistant Professor, University of Illinois at Urbana Champaign, Urbana, IL; and Moochul Shin, University of Illinois at Urbana Champaign
Monday, March 16, 2009
2:00 pm – 5:00 pm

What’s This Report For? Using Engineering Reports to Make a Decision
Sponsored by ACI Committee E702, Designing Concrete Structures

Session Co-Moderators: Luke M. Snell
                        Visiting Eminent Scholar
                        Del E. Webb School of Construction
                        Arizona State University
                        Tempe, AZ

                        Lawrence H. Taber
                        Structural Engineer
                        Black & Veatch
                        Kansas City, MO

Engineers often receive engineering reports such as geotechnical reports, nondestructive testing reports, and petrographic analysis and have trouble understanding what to look for to actually make a decision. It’s worse when the report is incomplete or nonexistent. This session will cover what to look for in several common reports, how to interpret the information conveyed in those reports, and what an engineer should do when information is missing.

All Mixed Up: Unraveling the Concrete Mixture Design Report
Frank A. Kozeliski, Materials Engineer and Consultant, Gallup Sand and Gravel, Gallup, NM

Interpreting a Petrographic Report
Richard D. Stehly, Principal, American Engineering Testing, Saint Paul, MN

Interpreting NDT Reports
Mark A. Cheek, Vice President, Beta Testing and Inspection, LLC, Gretna, LA

What the Designer Needs to Know from the Geotechnical Report
Joseph A. Amon, Senior Consultant, Ardaman and Associates Inc., Tampa, FL

Cement Mill Test Reports—Why Doesn’t My Sample Match the Report?
David M. Suchorski, Technical Services Manager, Ashgrove, Overland Park, KS
Monday, March 16, 2009
2:00 pm – 5:00 pm

What’s This Report For? Using Engineering Reports to Make a Decision (cont.)

Understanding Special Inspectors Reports
Bryan Castle, Senior Materials Engineer, Western Technologies Inc., Phoenix, AZ

How to Read a Concrete Cylinder Report
Luke M. Snell, Visiting Eminent Scholar, Del E. Webb School of Construction, Arizona State University, Tempe, AZ

Deciphering Post-Tensioning Reports
James Rogers, Managing Director, Evaluation and Certification Services, LLC, Phoenix, AZ

Engineers and Reports: A Crazy Combination
Lawrence H. Taber, Structural Engineer, Black & Veatch, Kansas City, MO
Monday, March 16, 2009
5:00 pm – 6:00 pm

Women in ACI Reception

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 cash bar and light hors d’oeuvres will be served.

University of Texas Reception

6:30 pm – 8:00 pm

The Civil, Architectural and 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, March 16, 2009
7:30 pm – 10:00 pm

123 Forum: Are We Investing Enough in Research and Utilizing Research Funding Smartly?
Sponsored by ACI Committee 123, Research and Current Development

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

Introduction

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

Panelist Presentations

Following its long tradition, ACI Committee 123 brings industry experts together in San Antonio to debate on another subject and to share their views with ACI attendees. The debate pertains to whether we are investing enough in research and using research funding intelligently. We all know that research is the backbone of inventions and innovations and is critical to keep organizations and nations competitive in this global and challenging economy. We also know that sources of research funding are limited and many times innovative ideas do not get a chance to be explored. We need to take a hard look at our approach for research funding. Is research funding the primary responsibility of public agencies? Is private industry an active participant in funding research and contributing its fair share? Do we need to come up with innovative mechanisms of research sponsorship, partnering, and cost sharing? How could a broader collaboration among researchers make better and effective use of available research funding? Our panelists will address these and many other questions you might have.

Questions, Answers, and Discussion

8:25 pm
Tuesday, March 17, 2009
9:00 am – 12:00 pm

Constructibility of SCC
SALON C
Sponsored by ACI Committee 237, Self-Consolidating Concrete

Session Co-Moderators: Lloyd J. Keller
Director of Quality Assurance
Ellis Don Corporation
Mississauga, ON, Canada

Kirk Deadrick
Director of Quality Assurance
iCRETE
Duluth, GA

The presentations will show how and where SCC is now being used in commercial construction in the United States and Canada. Talks will be presented by speakers who represent the various interest groups that make up the construction process, academic, design and specification, materials supply, trade association, and construction contractor. Self-consolidating concrete has evolved from a specialized curiosity-driven material to a well designed and economic alternative that enables high-end construction projects to be more effectively built.

SCC in the Georgia Aquarium
9:00 am
Lawrence D. McDowell, Partner, Uzon and Case Engineers, Atlanta, GA

Estimating Formwork Pressure for SCC in Tall Construction
9:25 am
David A. Lange, Professor, University of Illinois, Urbana, IL

Using SCC in California Building Projects
9:50 am
Eric S. Peterson, Senior Structures Superintendent, Webcor Concrete, San Francisco, CA

SCC—Raw Materials, Batching Controls, and On-Site QC
10:15 am
Bryan Schulz, Technical Services Support Manager, Canadian Building Materials, Toronto, ON, Canada

Self-Consolidating Grout—A Specialty SCC for Grouting Masonry
10:40 am
Dennis W. Graber, Director of Technical Publications, National Concrete Masonry Association, Herndon, VA

SCC in Major Concrete Structures in Canada and the U.S.
11:05 am
Lloyd J. Keller, Director of Quality Assurance, Ellis Don Construction, Mississauga, ON, Canada; and Robert Quattrocchiocchil, Ellis Don Construction
Tuesday, March 17, 2009
9:00 am – 12:00 pm

Contractors’ Day Session, Part 1
SALON M
Coordinated by the ACI San Antonio Chapter

Sponsored by Boral Material Technologies, Inc.

Session Moderator: Michael S. Hutzler
Strategic Account Manager
CMC Construction Services
San Antonio, TX

Introduction to CRCP Pavements  9:00 am
Michael N. Plei, Transportation Structures Engineer, CMC Steel Group, Des Plaines, IL

Constructing CRCP for Highways, Streets, and Other Paving Areas  9:30 am
Dennis Warren, Executive Director, Texas Concrete Pavement Association, The Woodlands, TX

CRCP Materials, Tests, and Specifications  10:00 am
Richard B. Rogers, Director of Concrete Pavements, Cement Council of Texas, Hurst, TX
Design Methods for Nontraditional ICFs

Sponsored by ACI Committee 560, Design and Construction with Insulating Concrete Forms

Session Moderator: Carla V. Yland
President
Yland Research & Consulting LLC
Irvine, CA

Insulating Concrete Form (ICF) systems offer advantages in terms of speed of construction and energy savings. This session presents analytical and empirical methods of design based on full-scale testing of structural grid reinforced concrete ICF walls. Concepts of equivalent solid wall thickness and equivalent seismic behavior are also included.

Testing and Modeling of Structural Grid ICF Slender and Shear  9:00 am
Carla V. Yland, President, Yland Research and Consulting LLC, Irvine, CA

Design of Structural Grid ICF Walls by Slender Wall Method  9:30 am
Nader Namdar, President, Namdar Structural Engineering, Anaheim, CA

Application of ACI 318 to the Design of Structural Grid ICF  10:00 am
Robert C. Rogers, Team Leader, Steven Schaefer Associates Inc., Cincinnati, OH

A Survey of Design, Construction, and Market Development of ICFs  10:30 am
Thomas L. Klemens, Owner, Wordwright, Chicago, IL

Panel Discussion on Design  11:00 am
Tuesday, March 17, 2009
9:00 am – 12:00 pm

Early-Age Test Methods for Performance Specifications
SALON J
Sponsored by ACI Committees 231, Properties of Concrete at Early Ages, and 236, Material Science of Concrete

Session Co-Moderators:
Zachary C. Grasley
Assistant Professor
Texas A&M University
College Station, TX

Maria Juenger
Assistant Professor
University of Texas
Austin, TX

Presentation topics will focus on issues involving test parameters that are currently used in performance specifications, or which may be 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 structure; 2) strength or other critical mechanical properties; and 3) durability parameters such as permeability or diffusivity.

Test Methods to Evaluate the Air-Void System Size and Distribution in Fresh Concrete
Tyler Ley, Assistant Professor, Oklahoma State University, Stillwater, OK

Measurement of Early-Age Autogenous Deformation of Cement Pastes, Mortars, and Concretes
Dale P. Bentz, Chemical Engineer, National Institute of Standards and Technology, Gaithersburg, MD; Haejin Kim, National Ready Mixed Concrete Association; David W. Mokarem, Virginia Department of Transportation; Fernando Rodriguez, US Concrete; Pietro Lura, EMPA Material Science and Technology; and Jason Weiss, Purdue University

Measuring Autogenous Deformation of Innovative Cementitious Materials
Jason H. Ideker, Assistant Professor, Oregon State University, Corvallis, OR

Electrical Conductivity-Based Strength Predictions at Early Ages
Narayanan Neithalath, Assistant Professor, Clarkson University, Potsdam, NY
Use of Early-Age Changes in Electrical Conductivity to Evaluate Stability of Cement-Based Materials

Kamal H. Khayat, Professor, University of Sherbrooke, Sherbrooke, QC, Canada; and Carmel Joliecoeur, University of Sherbrooke

Assessing the Early-Age Cracking Tendency of Concrete

Kyle A. Riding, Assistant Professor, Kansas State University, Manhattan, KS; and Anton K. Schindler, Auburn University

Shrinkage-Based Design of Concrete

Aleksandra Radlinska, Assistant Professor, Villanova University, Villanova, PA; and Jason Weiss, Purdue University
Tuesday, March 17, 2009
9:00 am – 12:00 pm

Serviceability of Concrete Members Reinforced with Internal/External FRP Reinforcement, Part 2
Sponsored by ACI Committees 440, Fiber Reinforced Polymer Reinforcement; 224, Cracking; and 435, Deflection of Concrete Building Structures

Session Co-Moderators: Carlos E. Ospina
Design Engineer
Berger/ABAM Engineers Inc.
Federal Way, WA

Tarek Alkhrdaji
Engineering Manager
Structural Group
Elkridge, MD

Presentation topics are related to recent advances in serviceability design of concrete members reinforced with either internal or external fiber-reinforced polymers (FRP). Presentations include analytical and experimental evidence related to deflection and cracking.

Deflection and Cracking Behavior of RC Beams
Strengthened in Flexure

9:00 am
Stijn Matthys, Professor, Ghent University, Ghent, Belgium; and
Luc R. Taerwe, Ghent University

Modified Branson Formula for Deflection of FRP-Strengthened Beams

9:25 am
Hayder A. Rasheed, Associate Professor, Kansas State University, Manhattan, KS; and Hasan Charkas, AREVA NP Inc.

Cracking and Tension Stiffening of Concrete Beams with SRP Sheets

9:50 am
Jimmy Kim, Assistant Professor, North Dakota State University, Fargo, ND; and Amir Fam and Mark F. Green, Queen’s University

Deflection of Damaged Prestressed Girders Strengthened with CFRP Laminates

10:15 am
Bruno Massicotte, Professor, Ecole Polytechnique de Montreal, Montreal, QC, Canada; and Viacheslav Koval, Ecole Polytechnique de Montreal
Tuesday, March 17, 2009
9:00 am – 12:00 pm

Serviceability of Concrete Members Reinforced with Internal/External FRP Reinforcement, Part 2 (cont.)

Deflection Control of Concrete Beams and Slabs
Strengthened with Externally-Bonded FRP
Carlos E. Ospina, Senior Project Engineer, Berger/ABAM Engineers Inc., Federal Way, WA

Effective Moment of Inertia for Concrete Beams
Prestressed with Aramid Fiber Reinforced Polymer (AFRP) Tendons
Jimmy Kim, Assistant Professor, North Dakota State University, Fargo, ND

Design Implications of Creep and Long-Term Deflections in FRP-RC Beam Columns
Amir Mirmiran, Professor and Chair, Florida International University, Miami, FL; Hakan Erdogan, Middle East Technical University; and Aashish Singhvi, 12 Technologies Inc.
Join other ACI convention attendees and contractors for the Contractors' Day Lunch. Following lunch, Matthew Brace, Director of Commercial Mills for CMC Steel, will provide an overview of the current economic conditions and drivers that will help contractors manage downside risks in today's market. Mr. Brace will discuss issues such as market trends in steel and concrete pricing and what may be affecting the types of construction.

Matthew Brace provides functional and strategic direction to enhance the successful and profitable growth of the Steel Group mills across all targeted markets and customer segments. He has worked in various sales and marketing positions in the metals industry for nearly 15 years. Mr. Brace started his career with Vermillion Iron Works while in college and worked for Auburn Steel and Birmingham Steel prior to joining CMC in 2000. At CMC he has served as Regional Sales Manager for the South Carolina Mill and Sales Manager for the East Mills.

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
Green Building is revolutionizing the practice of architecture and engineering, forcing all design professions to look at the broader effects of their work. This two-part session will provide industry professionals with guidance to make better material selection decisions that reduce environmental and health impacts. Part 1 will focus on how to fabricate buildings using less virgin material and energy and cause less pollution and less waste while providing the benefits construction projects have delivered throughout history.

Performance-Based Specifications and Sustainability  2:00 pm
Karthik H. Obla, Managing Director of Research and Materials Engineering, National Ready Mixed Concrete Association, Silver Spring, MD

Supplementary Cementitious Materials for Sustainability  2:45 pm
Steve Ratchye, Senior Associate, Thornton Tomasetti, San Francisco, CA

Cementitious Blends and Their Impact on Sustainable Construction  3:15 pm
Bruce Blair, Vice President of Product Performance and Marketing, Lafarge, Herndon, VA

Pervious Concrete-ACI 522.1 Breaking New Ground for Sustainability  3:45 pm
Matthew A. Offenberg, Technical Service Manager, W.R. Grace, Canton, GA

Concrete and Climate Change  4:15 pm
Colin L. Lobo, Vice President of Engineering, National Ready Mixed Concrete Association, Silver Spring, MD
Concrete Thixotropy and Implication on Performance of SCC
SALON C
Sponsored by ACI Committees 236, Material Science of Concrete, and 238, Workability of Fresh Concrete

Session Co-Moderators: Kamal H. Khayat
Professor
University of Sherbrooke
Sherbrooke, QC, Canada

Chiara F. Ferraris
Physicist
National Institute of Science and Technology
Gaithersburg, MD

Workability of fresh concrete can be evaluated using rheometers. These rheometers have allowed better description of concrete flow using fluid mechanic models. Rheometry can enable the evaluation of the decrease of viscosity of concrete with time during mixing or pumping as well as the increase of viscosity with time after a given time of rest, which has direct influence on formwork pressure, static stability, and surface quality of concrete. This session will explore the importance of measuring thixotropy and structural build-up and mixture parameters affecting thixotropy, and its implications on concrete performance, including pumping, formwork pressure, segregation resistance, and surface finish.

Flow Properties of Structured Systems: Thixotropy 2:00 pm
Daniel De Kee, Professor, Tulane University, New Orleans, LA

Thixotropy of Fresh Concrete: From Measurements to Consequences 2:30 pm
Nicolas Roussel, Senior Researcher, Laboratoire Central des Ponts et Chaussées, Paris, France

Scientific and Empirical Methods to Capture the Structural Build-Up of SCC at Rest 3:00 pm
Peter H. Billberg, Postdoctoral Research, CBI Betong Institute, Stockholm, Sweden; and Kamal H. Khayat, Ahmed F. Omran, Trimbak Pavate, and Siwar Neji, University of Sherbrooke
Concrete Thixotropy and Implication on Performance of SCC

(continuation)

Positive and Negative Aspects of Thixotrophy for Self-Consolidating Concrete

Kamal H. Khayat, Professor, University of Sherbrooke, Sherbrooke, QC, Canada; and Ahmed F. Omran and Wael El Megid, University of Sherbrooke

How is Thixotropy Affected by the Composition of the Concrete?

Raissa Ferron, Professor, University of Texas, Austin, TX; Surendra P. Shah, Northwestern University

Thixotrophy and Cement Paste

Chiara F. Ferraris, Physicist, National Institute of Science and Technology, Gaithersburg, MD
Tuesday, March 17, 2009
2:00 pm – 5:00 pm

Contractors’ Day Session, Part 2
SALON M
Sponsored by the ACI San Antonio Chapter and Baker Concrete Construction

Session Moderator: Michael S. Hutzler
Strategic Account Manager
CMC Construction Services
San Antonio, TX

Concrete Sustainability  2:00 pm
Richard S. Szeczy, Vice President for New Product Development and Risk Management, Lattimore Materials Company, McKinney, TX

Concrete in Nuclear Construction  2:30 pm
Harold Mosley Jr., Project Director, Zachry Nuclear Inc., San Antonio, TX

Construction Management Program—Where Will Our Construction Leaders Come From?  3:00 pm
Earl E. Ingram, Assistant Professor, Ingram Readymix Inc., San Marcos, TX
Tuesday, March 17, 2009
2:00 pm – 5:00 pm

Open Paper Session
SALON A
Sponsored by ACI Committee 123, Research and Current Development

Session Co-Moderators: Narayanan Neithalath
Assistant Professor
Clarkson University
Potsdam, NY

Zachary C. Grasley
Assistant Professor
Texas A&M University
College Station, TX

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, Department of Civil and Environmental Engineering, Clarkson University, Postdam, NY

Mixing and Placement of An Ultra-High-Performance Concrete Using a Conventional Truck Mixer
Todd S. Rushing, Research Scientist, Concrete and Materials Branch, United States Army Engineer Center, Vicksburg, MA; and Brian H. Green, United States Army Engineer Center

Partial Confinement Utilization for Ultimate Analysis of Circular Concrete Columns
Ahmed Abd El Fattah, Graduate Student, Kansas State University, Manhattan, KS; and Asad Esmaeily and Hayder A. Rasheed, Kansas State University

Dispersion of Carbon Nanofibers in Cementitious Composites
Ardavan Yazdanbakhsh, Graduate Student, Texas A&M University, College Station, TX; and Zachary C. Grasley, Texas A&M University

Chloride Ion Penetration in Fly Ash and Glass Powder Modified Concretes: Influence of Microstructure and Test Methods
Jitendra Jain, Doctoral Student, Clarkson University, Potsdam, NY; and Narayanan Neithalath, Clarkson University

Freeze-Thaw Durability of Low Permeability Concrete
Gilson Lomboy, Doctoral Student, Iowa State University, Ames, IA; and Kejin Wang, Iowa State University
Tuesday, March 17, 2009
2:00 pm – 5:00 pm

Open Paper Session (cont.)

Pervious Concrete Mixture Proportioning Methodology and Experimental Validation
Karthik H. Obla, Managing Director of Research and Materials Engineering, National Ready Mix Concrete Association, Silver Spring, MD; and Haejin Kim and Colin L. Lobo, National Ready Mix Concrete Association

Effects of the Natural Pozzolans on the Permeability of Concrete Change with Age
Mauricio Lopez, Assistant Professor, Pontificia Universidad Catolica de Chile, Santiago, Chile; and Jose Tomas Castro, Pontificia Universidad Catolica de Chile

Seismic Design of Unbounded Post-Tension Split Walls
Elias I. Saqan, Assistant Professor of Civil Engineering, American University in Dubai, Dubai, United Arab Emirates; and Rami A. Hawileh, American University in Sharjah
Tuesday, March 17, 2009
2:00 pm – 5:00 pm

Overlays for Bridges

Sponsored by ACI Committee 345, Concrete Bridge Construction, Maintenance, and Repair

Session Moderator: Michael M. Sprinkel
Associate Director
Virginia Transportation Research Council
Charlottesville, VA

The objective of this session is to present the history and current practice for bridge overlays. The session will include the history (past, present, and future) of bridge overlays, a comparison of the performance of various overlays, case studies of overlays, overlay design, shrinkage considerations, and the selection and timing of overlay installations.

History (Past, Present, and Future) of Overlays  2:00 pm
Paul St. John, President, St. John Consulting Service, Scotia, NY

Case Studies of Overlay Performance—Reynosa Pfarr Bridge  2:25 pm
Robert J. Gulyas, Senior Engineer, BASF Construction Chemicals, Cleveland, OH

Lokern Road Bridge Rehabilitation Using Shrinkage-Compensating Concrete  2:50 pm
Edward H. Rubin, Consultant, CTS Cement, Alhambra, CA

Restrained Shrinkage Stresses in Rehabilitated Bridge Decks with Overlays  3:15 pm
Luis Orta, PhD Candidate, University of Western Ontario, London, ON

Swedish Design of Concrete Overlays  3:30 pm
Johan L. Silfwerbrand, Professor, Swedish Cement and Concrete Research Institute, Stockholm, Sweden

Selection and Timing of Overlays—Virginia Comparison of Thin Polymer Overlays and Concrete Overlays in Terms of Life Cycle Costs  3:55 pm
Richard E. Weyers, Professor, Virginia Tech University, Blacksburg, VA; and Michael M. Sprinkel, Virginia Transportation Research Council

Very Early Strength Overlays  4:20 pm
Michael M. Sprinkel, Associate Director, Virginia Transportation Research Council, Charlottesville, VA
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 and a cash bar will be available.
Concrete Mixer—A Night in Old San Antonio
6:30 pm – 9:30 pm
Sponsored by the ACI San Antonio Chapter

Please use the ticket in your registration packet for entry into La Villita. Individuals without tickets will NOT be admitted.

Drink tickets are NOT required for this event.

This is a Concrete Mixer you won’t want to miss as you travel back in time for A Night in Old San Antonio (NIOSA). Meet the mariachi band in the main lobby at 6:00 pm and follow them to La Villita at 6:15 pm, approximately four blocks from the Marriott Rivercenter. Additionally, there will be ACI San Antonio Chapter representatives dressed in Texas shirts (see page 38) and holding balloons to guide you along the route to the event.

NIOSA is an abbreviated version of A Night in Old San Antonio which takes place every year in April during Fiesta Week in a historic arts village downtown. NIOSA celebrates the cultural diversity of San Antonio. Fiesta is a 10-day city-wide celebration of the different cultures of San Antonio.

NIOSA is organized by the Conservation Society of San Antonio. In 1937, the San Antonio Conservation Society planned a 1-day Indian Festival along the banks of the San Antonio River to celebrate the heritage of the city’s early settlers while raising funds for historic preservation. Tonight you will enjoy authentic Texan cuisine and listen to the mariachi band while costumed dancers encourage you to join in on the celebration. Additionally, there will be a longhorn steer available for photos, so don’t forget your camera!

La Villita is an outdoor venue. Casual attire and comfortable walking shoes are recommended.
Wednesday, March 18, 2009
9:00 am – 12:00 pm

Application of Soil Cement Technologies
SALON D
Sponsored by ACI Committee 230, Soil Cement

Session Moderator: Charles Pierce
Associate Professor
University of South Carolina
Columbia, SC

This technical session is directed at those who are not familiar with soil cement and will include current applications and trends in the industry for those who are familiar with soil cement. The session will open with a brief overview of the various available soil cement and related material applications as well as clarification of the industry nomenclature. The session will cover a wide variety of topics including case studies for road/foundation stabilization as well as water resource project applications with soil cement. Also fly-ash and other cementitious materials are discussed as alternatives for soil stabilization method.

Introduction to Soil Cement Terms and Sustainability 9:00 am
Wayne S. Adaska, Director of Pavements, Portland Cement Association, Skokie, IL

Soil Stabilization with Fly Ash and Other Cementitious Material 9:25 am
James Rosenmerkel, President, Rosenmerkel Engineering, Waukesha, WI; and Charles Pierce, University of South Carolina

Cement Slurry Applications for Soil-Cement 9:50 am
Barrett Reese, Vice President of Marketing, Texas Industries, Dallas, TX; and Dan Richwine, Texas Industries

Slope Protection of Large Reservoirs: Stair-Stepping and Plating Methods 10:15 am
Katie J. Bartojay, Civil Engineer, United States Bureau of Reclamation, Denver, CO

Soil Cement Applications in River Engineering for the Southwestern United States 10:40 am
Dennis Richards, Vice President, PACE, Phoenix, AZ
Wednesday, March 18, 2009
9:00 am – 12:00 pm

Application of Soil Cement Technologies (cont.) SALON D

NRCS Long-Term Performance Study—Soil-Cement  11:05 am
Plating in the Texas Panhandle
Dennis Clute, Construction Engineer, USDA Natural Resources
Conservation Service, Fort Worth, TX

Long-Term Performance of Full-Depth Reclamation (FDR)  11:30 pm
Wayne S. Adaska, Director of Pavements, Portland Cement Association,
Skokie, IL
Green Building is revolutionizing the practice of architecture and engineering, forcing all design professions to look at the broader effects of their work. This two-part session will provide industry professionals with guidance to make better material selection decisions that reduce environmental and health impacts. Part 2 will focus on the concrete design strategies and application examples that leverage concrete’s inherent strength, thermal mass, durability, and versatility.

Concrete and Cementitious Materials Contribution to Sustainable Rating Systems
Julie K. Buffenbarger, Engineering & Architectural Specialist, Lafarge, Medina, OH

Achieving Sustainable Goals with Architectural Concrete
Larry Rowland, Manager of Marketing and Technical Services, Lehigh Cement Company, Allentown, PA

Masdar City—The World’s First Emission-Free City
Khaled W. Awad, President, Advanced Construction Technology Services, Beirut, Lebanon

Sustainable Bridges—Otay River Bridge Case Study
Emily B. Lorenz, Director of Sustainability, Precast Prestressed Concrete Institute, Chicago, IL

Chemical Admixtures: Essential Components to Sustainable Concrete
Aimee Pergalsky, Technical Support Representative, Euclid Chemical, Cleveland, OH
Curing concrete is critical to obtaining quality concrete that owners expect. This session will cover several different aspects to curing concrete. Topics include ACI 308’s current status of updates to the Guide to Curing Concrete, updates to the Standard Specification for Curing Concrete, accelerated curing, curing SCC, decorative concrete curing, internal curing, and more.

Guiding You Through the Updates: Updating the Concrete Curing Spec and Guide
Richard E. Van Horn, Engineering Manager, Terracon, Las Vegas, NV; and Larry H. Taber, Black & Veatch

Effect of Accelerated Heat Curing on the Strength Development of Self Consolidating Concrete for Precast Applications
Liberato Ferrara, Professor, Politecnico di Milan, Milan, Italy

Decorative Concrete and Curing: What You Should Know
Mike Murray, Owner, Murray Concrete Company, Shawnee, KS

High Temperature Accelerated Curing and DEF
Michael D. Thomas, Professor, University of New Brunswick, Fredericton, NB, Canada

Effect of Curing Conditions on Durability of Concrete Specimens Exposed to Marine Conditions
Naseer Haque, Associate Professor, Kuwait University, Safat, Kuwait

A New Performance Based Approach to Assure Quality Curing During Pavement Construction
Dan G. Zollinger, Assistant Professor, Texas A&M University, Bryan, TX
Curing Concrete (cont.)

Internal Curing of Concrete  11:00 am
John W. Roberts, Chairman, Northeast Solite Corporation, Richmond, VA; and Bruce W. Jones, Northeast Solite Corporation

Internal Curing of High-Performance Concrete by Using  11:20 am
Super Absorbent Polymers
Daniel Cusson, Senior Research Officer, National Research Council of Canada, Ottawa, ON, Canada
Wednesday, March 18, 2009
9:00 am – 12:00 pm

Tech Notes: Applications for Silica Fume Concrete
SALON M
Sponsored by ACI Committee 234, Silica Fume in Concrete

Session Moderator: Robert C. Lewis
Technical Marketing Manager
Elkem Materials
Reading Bershire, United Kingdom

This session is intended to showcase a new format of ACI document, the Tech Note, which is a brief way to communicate practical information to engineers and contractors. We will present six topics related to applications of silica fume concrete in current construction practice from around the world.

Silica Fume in Marine Concrete —A Review of a Key Application  9:00 am
Per Fidjestol, Technical Manager, Elkem AS Materials, Kristiansand, Norway

The Challenges of Pumping and Placing Concrete in 9:30 am
Super Tall Towers
James M. Aldred, Principal Professional GHD Global Party, Dubai, United Arab Emirates

Industrial Applications: High Percentage Silica Fume 10:00 am
Eckart R. Buhler, Manager, Engineering, Norchem Inc., Jupiter, FL

Sustainable Parking Garages with Silica Fume High-Performance Concrete 10:30 am
Anthony N. Kojundic, Business Manager, Elkem, Pittsburgh, PA

Silica Fume Concrete's Contribution to Sustainability 11:00 am
Julie K. Buffenbarger, Engineering and Architectural Specialist, Lafarge, Medina, OH

Silica Fume Applications in Bridges 11:30 am
Tarif M. Jaber, President, Jaber Engineering Consulting, Scottsdale, AZ
Wednesday, March 18, 2009
12:00 pm – 2:00 pm

✓ International Lunch
Salon F

$30 U.S. per person
Hosted by the International Committee

Speaker: José M. Izquierdo-Encarnación
Topic: Influence of Materials and Engineering Knowledge in the Constructed Patrimony: A Comparison of Four Continents

Featured speaker, José M. Izquierdo-Encarnación, ACI Past President and Principal Engineer, will give a presentation on the Influence of Materials and Engineering Knowledge in the Constructed Patrimony: A Comparison of Four Continents during the International Lunch.

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
Thursday, March 19, 2009
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.  

7:30 am Registration, coffee and pastries available

Speakers:  
Julio A. Ramirez  
Professor  
Purdue University  
West Lafayette, IN

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.
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