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American Concrete Institute Board of Direction

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ACI President's Welcome

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



STATE OF TEXAS OFFICE OF THE GOVERNOR

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.

KICK PERRY

Rick Perry Governor

Mayor's Welcome



CITY OF SAN ANTONIO PHIL HARDBERGER MAYOR

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.

Phil Hardberger

Sincerely,

Mayor

ACI Fall 2009 Convention



November 8-12, 2009 • Marriott

New Orleans, LA



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!



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





CHRYSO-ProMix Technologies



Commercial Contracting Corporation

Concrete
Engineering
Specialists

Concrete Engineering Specialists



Concrete Reinforcing
Steel Institute



CTL Group



Dayton Superior

e.construct

e-construct



EUCLID CHEMICAL

The Euclid Chemical Co.





Expanded Shale, Clay & Slate Institute

FGC, Inc.



Fibercon International, Inc.

Francis Harvey & Sons



FUTURE TECH CONSULTANTS Construction Materials Engineering, Inspection & Testing Services

Future Tech Consultants



W.R. Grace & Co.



Headwaters Resources, Inc.



Holcim (US) Inc.



ICS Penetron



IDRA SA



Keystone Structural Concrete, Ltd.



Kleinfelder



Lafarge North America



Lehigh Portland Cement Co.



Lithko Contracting, Inc.



Meadow Burke



W. R. Meadows, Inc.



Metromont Corporation



Municipal Testing Lab



chemical solutions to concrete problems

Nox-Crete Products Group



OMYA Canada, Inc.

Operating Engineers Training Trust



Oztec



Portland Cement Association



PNA Construction Technologies, Inc.



Precast/Prestressed Concrete
Institute



CONCRETE SYSTEMS

Propex Concrete Systems



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Seretta Construction, Inc.



Sika Corp.



S. K. Ghosh Associates, Inc.



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.



Want to connect with thousands of other ACI Members?

Ioin 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 (\$5000)

BASF Construction Chemicals
Boral Material Technologies, Inc.
Capitol Cement
Cement Council of Texas
Lattimore Materials Company
Martin Marietta Materials
The Euclid Chemical Co.

Jalapeno (\$2500)

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 (\$1000)

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.I. 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 Illinois Chapter
ACI Intermountain Chapter
ACI Louisiana Chapter
ACI Maryland Chapter
ACI Missouri Chapter
ACI Missouri 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.

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

ACI San Antonio Chapter 2009 Officers and Board of Directors

President

Toby O. Martinez, Burge-Martinez Consulting, Inc.

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ACI San Antonio Chapter Convention Committee

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Chuck A. Gregory, Terracon Consultants Inc. 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



Concrete Legacy Society



"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.



www.ACIFoundation.org - 248-848-3778

ACI Registration

SALONS G-I

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

SALONS G-I

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

SALONS G-I

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

 Saturday
 Soda:
 2:00 pm - 5:00 pm

 Sunday - Tuesday
 Coffee:
 7:00 am - 10:00 am

Soda: 12:00 pm – 3:00 pm

Wednesday Coffee: 7:00 am - 10:00 am

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

SALONS G-I

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:

 Saturday
 2:00 pm - 6:00 pm

 Sunday - Tuesday
 8:00 am - 5:00 pm

 Wednesday
 8:00 am - 2:00 pm

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

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 SALONS G-I

Visit the ACI Bookstore during the following hours:

 Saturday
 2:00 pm - 6:00 pm

 Sunday - Tuesday
 8:00 am - 5:00 pm

 Wednesday
 8:00 am - 12:00 pm

Career Center SALONS G-I

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.

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 Bookstore—SALONS G-I

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

SALONS G-I

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.

Speaker Ready Room

MEDIA PARLOR

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 ChapterOutside SALONS G-I
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

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

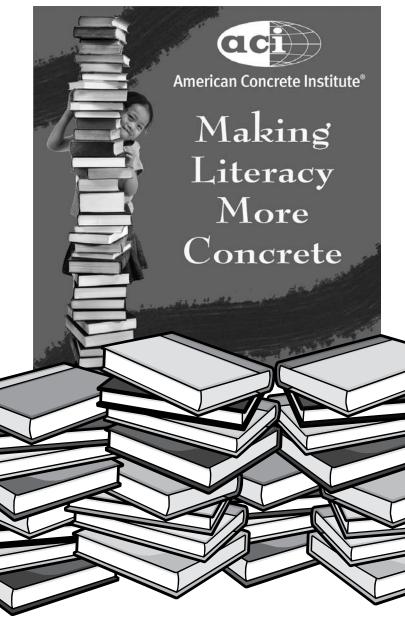


The ACI Louisiana Chapter will be available Saturday through Tuesday to answer your questions about New Orleans and activities at the fall convention. Mark your calendars for November 8-12, 2009! Registration opens July 1, 2009!

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?

Room Name	Location
ATRIUM	2 nd floor
CONFERENCE ROOM 1	3 rd floor
CONFERENCE ROOM 2	3 rd floor
CONFERENCE ROOM 3	3 rd floor
CONFERENCE ROOM 4	3 rd floor
CONFERENCE ROOM 5	3 rd floor
CONFERENCE ROOM 6	3 rd floor
CONFERENCE ROOM 7	3 rd floor
CONFERENCE ROOM 8	3 rd floor
CONFERENCE ROOM 9	3 rd floor
CONFERENCE ROOM 10	3 rd floor
CONFERENCE ROOM 11	3 rd floor
CONFERENCE ROOM 12	3 rd floor
CONFERENCE ROOM 13	3 rd floor
CONFERENCE ROOM 14	3 rd floor
CONFERENCE ROOM 15	3 rd floor
CONFERENCE ROOM 16	3 rd floor
CONFERENCE ROOM 17	3 rd floor
CONFERENCE ROOM 18	3 rd floor
MEDIA PARLOR – Speaker Ready Room	3 rd floor
SALON A	3 rd floor
SALON B	3 rd floor
SALON C	3 rd floor
SALON D	3 rd floor
SALON E	3 rd floor
SALON F	3 rd floor
SALON G	3 rd floor
SALON H	3 rd floor
SALON I	3 rd floor
SALON J	3 rd floor
SALON K	3 rd floor
SALON L	3 rd floor
SALON M	3 rd floor
SAZO'S	2 nd floor
SUITE 514	5 th floor
SUITE 529	5 th floor
SUITE 530	5 th floor
SUITE 544	5 th floor
SUITE 618	6 th floor
SUITE 642	6 th floor
SUITE 1905	19 th floor
SUITE 1906	19 th floor
SUITE 1951	19 th floor
SUITE 1952	19 th floor
24	

Exhibitor listing as of 2/19/09

Exhibits SALONS G-I

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

Carolina Stalite Company manufactures high-performance rotary kiln expanded-slate lightweight aggregate for use in structural concrete, prestressed/precast concrete, concrete masonry, manufactured stone veneer, geotechnical lightweight fill, bituminous surface treatment, and horticulture applications. Visit www.stalite.com.

Exhibitor listing as of 2/19/09

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.com, 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 informarion.

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.

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

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

Exhibitor listing as of 2/19/09

Grace Construction Products

Booth #14&17

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

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

Exhibitor listing as of 2/19/09

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.

Exhibitor listing as of 2/19/09

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.

Exhibitor listing as of 2/19/09

Superior Gunite Co.

Booth #36

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

Booth #19

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 Booth #10

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 highdensity 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

Booth #15

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

Booth #20

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!

Visit www.concrete.org.



American Concrete Institute® Advancing concrete knowledge

Special Events

Saturday, March 14, 2009

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

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.

Sunday, March 15, 2009

First-Time Convention Attendee Breakfast

SALONS K&L

8:00 am - 9:00 am

Sponsored by the ACI Convention Committee

Session Co-Moderators: Debrethann R. Orsak

> Vice-President/Manager of **Business Develpoment** 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

SALONS G-I

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 openended question. Stop by and cheer for your favorite team!

Opening Session & Awards Program

SALONS E&F

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.

Sunday, March 15, 2009

Opening Reception

SALONS G-I

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

SALON I

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

SAZO'S

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.

Monday, March 16, 2009

✓ Student Lunch

SALON F

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 **CONFERENCE ROOM 6**

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.

Tuesday, March 17, 2009

✓ Contractors' Day Lunch 12:00 pm – 2:00 pm \$53 U.S. per person SALON F

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 Seguin, 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.

Tuesday, March 17, 2009

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.



Wednesday, March 18, 2009

✓International Lunch

12:00 pm - 2:00 pm

\$30 U.S. per person

Hosted by the International Committee

SALON F



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.

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**

Atrium 10:00 am - 4:00 pm

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.

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.



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

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.

Salon F



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

 \checkmark 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.

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.

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 CONFRM 12

Saturday, March 14, 2009

7:00 am - 6:00 pm

Technical Activities M2 TAC CONFRM 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

CONF RM 13 EAC Educational Activities M1 Specifications M₁ **CONF RMS 17&18** 301 RLG Containment Structures M1 CONFRM 14 376

7:30 pm - 10:00 pm

347-A Formwork-Specification CONFRM 11

Sunday, March 15, 2009

7:00 am - 8:00 am

Spec-Steering Committee CONFRM 11 301-SC

7:00 am - 9:30 am

Env Str-Reinf & Devel CONFRM 10 350-C

7:00 am - 2:00 pm

SALON B Technical Activities M₃

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

Equake Res Brdgs-Columns CONFRMS 1&2 341-A

8:00 am - 10:00 am

E706 **Repair Application Procedures** SUITE 642 E801 **Student Activities** CONFRM 9

8:00 am - 11:00 am

Shear & Torsn-Seismic Shear SUITE 529 445-B

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-RG ₃	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-l	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	
	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	
•	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	
	Repair-Material Selection Guide	CONF RM 15
9:30 am -	11:00 am	

CONFRMS 1&2

CONF RM 10

Equake Res Brdgs-Pier Walls

Shotcreting-Evaluation

341-B

506-A

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
10.00	u	11.50	uiii

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

M 15
V

10:30 am - 1:30 pm

445-A Siledi & IOISII-Stiut & HE CONFRINTS	445-A	Shear & Torsn-Strut & Tie	CONF RM 13
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10:30 am - 2:00 pm

549	Thin Reinforced	SALONS K&L

11:00 am - 12:30 pm

341-C	Equake Res Brdgs-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
502	Eval, kepali & keliab	CONF KINI /

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

√ = Separate fee required TG = Task Group

Sunday, March 15, 2009 (cont.)

12:00 pm -	2:00 pm	
562-A	Eval, Repair & Rehab-Life Safety	CONF RM 8
562-B	Eval, Repair & Rehab-Loads	CONF RM 10
562-C	Eval, Repair & Rehab-Structural Analysis	s CONF RM 15
562-D	Eval, Repair & Rehab-Structural Repair De	sign SUITE 1906
562-E	Eval, Repair & Rehab-Durability Quality	
	Assurance	SUITE 1952
40.00		
12:00 pm –	Student Concrete FRP Composites and	
	Concrete Construction Competition	SALONS G-I
	Concrete Construction Competition	SALUNS G-I
1:00 pm – 2	2:30 pm	
ISO-TC 71	ISO/TC 71 Advisory	SUITE 642
4:00 pm - 5	nico nm	
1:00 pm - 3	Spec-Tilt-Up Constr & Arch Conc	CONF RM 3
-	Bridge Construction	CONF RM 6
345	Shear & Torsn-Punching Shear	SUITE 529
445-C	Sileal & loish-ruilching Sileal	30112 529
1:00 pm - 3		
301-D	Spec-Lightweight & Massive Concrete	CONF RM 11
1:00 pm – 2	1:00 pm	
BAC-SD	Board Advisory Committee on	
	Sustainable Development	CONF RMS 17&18
301-A	Spec-Gen Reg. Definitions	
J .	& Tolerances	CONF RM 4
1:00 pm - 5	5:00 pm	,
301-C	Spec-Placing Consolidating & Curing	CONF RM 16
305	Hot Weather	CONF RM 9
336	Footings	SUITE 514
355	Anchorage	CONF RM 12
1:30 pm – 3	oroo nm	
341-D	Perf Based Seismic Design	CONF RMS 1&2
506-B	Shotcreting-Fiber Reinforced	SUITE 1951
500 D	Shoteleting riber Kelmorteu	30111 1951
1:30 pm - 3	3:30 pm	0.4475

SUITE 1905

Dynamic & Vibratory Effects

370

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
250 B	Material Science Transport Meenanisms	30112 1900
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	CONFRM 8
315	Detailing	SUITE 1952
	Joints	CONF RM 14
352	junts	CONF KW 14
Sessions		
2:00 pm -		
	Improving the Infrastructure with Roller-	
	Compacted Concrete Pavements	SALON J
	Methodology for Live Load Distribution for	
	Bridge Evaluation	SALON A
	Baridantial Community Foundations - Colons	1
	Residential Concrete Foundations—Science	
	Practice Can Coexist, Part 1	SALON M
	Seismic Design of Punching Shear Reinford	ement
	in Flat Plates	SALON D
	Transition from Fluid to Solid: Reexamining	r th o
	_	
	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
33	,	
2:30 pm -		
224	Cracking	CONF RM 15
3:00 pm -	- 4:30 pm	
441-E	Columns with Multi-Spiral Reinforcement	CONF RM 3
	- p	,

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 – E601	Seminar Oversight Committee	SUITE 1951
	Earthquake Resistant Bridges	CONF RMS 182
341		
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
/.00 pm	5.00 pm	
4:00 pm – CLGE	College Concrete Council	CONE DMC 47040
	_	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 Sla	bs SUITE 618
-	,	
5:15 pm – 6		
	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 Minimiz	e
	Pavement Cracking	SALON J
	=	

Student and Young Professional Networking Event SAZO's

9:00 pm - 10:30 pm

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 -				
	Workshop for Technical Committee Ch	airs SALON F		
7:00 am –	8:30 am			
•	International-Conferences	SUITE 529		
524	Plastering	CONF RM 6		
,	Speaker Skills Training Breakfast	CONF RMS 13&14		
7:30 am –	R·20 am			
7.30 um	Chapter Forum	CONF RM 11		
	chapter roram	COM KW II		
8:00 am -	· 12:00 pm			
350-D	Env Str-Structural	CONF RM 4		
_	• 10:00 am			
E802	Teaching Methods and Educational	CONF DM		
0	Materials	CONFRM 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 -	_			
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				
_	Anchorage TG	CONF RM 9		
	Parking Str-Standard	SALON B		
Q. a.a. a.m.	40.00 mm			

CONFRM₇

8:30 am - 12:30 pm

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Seismic Design

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

 $\label{thm:constraint} \mbox{Transition from Fluid to Solid: Reexamining the} \\$

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

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	
_	RLG Containment Structures TG M1	CONF RM 5
12:00 pm -	· 1:30 pm	
225	Hydraulic Cements	SUITE 642
	.,	
12:00 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	
	C: I'C D : D ! I'	CONFRA

CONFRM₇

Simplified Design Buildings

314

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	n SUITE 1905		
506-F	Shotcreting-Underground	CONF RM 10		
1:00 pm – 2	2:30 pm			
C631	Conc Transportation Const Insp	SUITE 618		
548-B	Polymers-Sulfur Concrete	SUITE 1952		
1:00 pm - 3	3:00 pm			
C660	Shotcrete Nozzleman Cert	CONF RM 18		
440-K	FRP-Material Characteristics	CONF RM 11		
1:00 pm - 3	3:30 pm			
375	Design for Wind Loads	SUITE 544		
1:00 pm – 2	4:00 pm			
237	Self-Consolidating Concrete	CONF RM 12		
1:00 pm – 5	5:00 pm			
362	Parking Structures	CONF RM 8		
2:00 pm - ;	3:00 pm			
SCO	Scholarship Council M2	SUITE 3629		
2:00 pm - ;	3:30 pm			
ACI 318/	ACI 318/ASCE7 Coordination	SUITE 514		
ASCE ₇				
231	Early Age	CONF RM 6		
318-S	Spanish Translation	SALONS K&L		
2:00 pm – 5:00 pm				
MKTC	Marketing	SUITE 642		
232	Fly Ash & Natural Pozzolans	CONF RMS 1&2		
307	Chimneys	SUITE 529		
349-C	Nuclear Str-Anchorage	CONF RM 10		

CONF RMS 13&14

364

Rehabilitation

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

√ = Separate fee required TG = Task Group

Monday, March 16, 2009 (cont.)

_		•		
•	ess	10	'n	c

2:00	pm -	- 5:00	pm
2.00	PIII	7.00	PII

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

CONFDM

2:00 pm - 6:00 pm

116-6	High-Strength Steel Reinforcement	CONFRM 9
369	Seismic Rehab	CONF RM 16
445	Shear & Torsion	CONF RM 15

High Changeth Charl Dainfanaanant

2:00 pm - 6:30 pm

212	Chemical Admixtures	SUITE 1905
301	Specifications M ₃	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

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

√ = Separate fee required TG = Task Group

Monday, March 16, 2009 (cont.)

	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 –	-			
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	,	SUITE 642		
E702	Designing Concrete Structures	SUITE 1951		
TSTTTC		SUITE 514		
318-TG	Task Group Foundation	CONF RM 10		
334	Shells	CONF RM 8		
555	Recycled	CONF RM 11		
5:00 pm –				
, ,	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				

123 Forum: Are We Investing Enough in Research and Utilizing Research Funding Smartly?

SALON J

7:30 pm - 10:00 pm

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 SAZO'S

Tuesday, March 17, 2009

7:00 am - 8:30 am

TTTC TAC Technology Transfer CONF RM 16

8:00 am - 9:00 am

440-M FRP-Repair of Masonry Str M1 CONF RM 10

8:00 am - 10:00 am

230 Soil Cement CONF RM 4

8:00 am - 11:00 am

332-B&C Residential Concrete Sub B & C CONF RM 9
332-D&E Residential Concrete Sub D & E CONF RM 12

8:00 am - 12:00 pm

EAC Educational Activities M2 CONF RM 3

8:30 am - 10:00 am

C620Laboratory Tech CertSUITE 1952325-APavements-DesignSUITE 544348SafetySUITE 529548PolymersSALON B

8:30 am - 11:30 am

SALONS K&L 201 Durability **Cold Weather SUITE 1906** 306 Building Code M1 SALON E 318 Offshore & Marine **SUITE 1951** 357 Shotcreting **CONF RMS 13&14** 506 **Pervious Concrete** CONFRMS 17&18 522

8:30 am - 12:00 pm

117 Tolerances SUITE 642

8:30 am - 12:30 pm

349-A&B Nuclear Structures-Design & Materials CONF RM 16

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

√ = Separate fee required TG = Task Group

Tuesday, March 17, 2009 (cont.)

8:30 am –		
350-F	Env Str-Seismic	CONF RM 11
9:00 am -	10:00 am	
•	Env Str-Tightness Testing/Haz Mat	SUITE 514
))° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° °		00 <u>_</u>
9:00 am -	11:30 am	
IC	International Committee	CONF RM 6
9:00 am -		
TRRC	TAC Repair & Rehab	CONFRM 8
376-TG2	RLG Containment Structures TG M2	CONF RM 10
Sessions		
9:00 am -	12:00 nm	
9.00 am -	Constructibility of SCC	SALON C
	constructionity of occ	SALONE
	Contractors' Day Session, Part 1	SALON M
	,	
	Design Methods for Nontraditional ICFs	SALON A
	Early Age Test Methods for Performance	
	Specifications	SALON J
	Coming hility of Company Mouse and Deinford	ملئانين أم م
	Serviceability of Concrete Members Reinford Internal/External FRP Reinforcement, Part 2	SALON D
	internat/Externat FRP Remitorcement, Part 2	SALUN D
9:00 am –	1:00 pm	
ITG-8	ITG-8 Perform Criteria for Conc Matrls	CONF RM 7
		,
9:00 am -	4:00 pm	
	✓Texas Hill Country & Wine Tasting	CONF RM 10
10:00 am -		
C630	Construction Inspector Cert	SUITE 1952
325-C	Pavements-Prestressed and Precast	CONF RM 4

SUITE 544

440-G

FRP-Student

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		
3 3				
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 –				
544-F	FRC-Durability	CONF RMS 1&2		
11:00 am -		CONFIDM		
332-F	Residential Concrete-Slabs	CONF RM 12		
44.00.000	4.00 000			
11:30 am -	-	CONFINAC		
CRC	Concrete Research Council	CONF RMS 13&14		
	Proportioning-Evaluation	SUITE 544		
-	Lightweight-Editorial TG	SUITE 618		
325-D	Proportioning for Pavements	SUITE 1951		
11:30 am –	-			
515	Protective Systems	CONF RM 4		
11:30 am –		CHITE		
350-A	Env Str-General & Concrete	SUITE 1952		
12:00 pm -		CONFRA		
440-M	FRP-Repair of Masonry Str M2	CONF RM 10		
12:00 pm -	- ·	CUITE		
238	Workability of Fresh Concrete	SUITE 1905		
12:00 pm –	-	CALCNE		
	✓ Contractors' Day Lunch	SALON F		
40.00	2.00 pm			
12:30 pm -	Cooffee Cooffee	CALONE		

SALON E

C640

Craftsman Cert

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 –	1:00 pm – 2:00 pm					
223-C	Shr Compensating-Constr	CONF RM 6				
1:00 pm -	R:00 DM					
201-C	Durability-Condition Report	SUITE 514				
1:00 pm -		CLUTE (
550	Precast Structures	SUITE 642				
1:00 pm –	4:00 pm					
440	Fiber Reinforced Polymer	CONF RMS 17&18				
1:30 pm – j	3:00 pm					
120	History	SUITE 1951				
213	Lightweight	SUITE 544				
,		311				
2:00 pm –						
-27	Silica Fume	CONF RM 15				
	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 -	E:00 nm					
2.00 piii -	Concrete—The Sustainable Material Ch	nnice				
	in Practice, Part 1	SALON I				
	iii i idelice, i dit i	JALON)				

SALON C

Concrete Thixotropy and Implication on

Performance of SCC

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

√ = Separate fee required TG = Task Group

Tuesday, March 17, 2009 (cont.)

2:00 pm –	5:00 pm Contractors' Day Session, Part 2	SALON M				
	Open Paper Session	SALON A				
	Overlays for Bridges	SALON D				
	Overlays for Bridges	SALON D				
2:00 pm -	6:00 pm					
233	Slag Cement	SALON E				
2:00 pm –	6:30 pm					
	General Concrete Constr M1	CONF RM 4				
-	Serviceability/Safety M1	CONF RM 3				
-	Seismic Provision M1	CONF RM 10				
-	Code Reorganization M2	CONF RM 9				
3:00 pm –	5:00 pm					
	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 –	4:30 pm – 6:00 pm					
	Guide on Internal Curing	CONF RM 15				
5:00 pm –	6:00 pm					
- ,	Faculty Network Reception	CONF RMS 17&18				

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 – 0 350-H		SUITE 514
6:30 pm –	9:30 pm Concrete Mixer—A Night in Old San Antonio See page 135 for details	La Villita
7:00 am – 8	3:30 am	
ACI/ASCE	ACI/ASCE Coordination	CONF RM 15
ACYM	Advisory Committee for Young Members	CONF RM 8
7:00 am – 1	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
	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
_	Prestressed Precast	CONF RM 9
8:30 am -	6:30 pm	
350	Environmental Structures	SALONS K&L
	12:00 pm	
9:00 am - :	12:00 pm	

SUITE 514

ACIFdn

ACI Foundation

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

√ = Separate fee required TG = Task Group

Wednesday, March 18, 2009 (cont.)

_	•
•	essions
•	COOLULIO

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

CONFRM 13

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

318-C Serviceability/Safety M2 CONF RM 4
318-H Seismic Provisions M2 CONF RM 11

General Concrete Constr M2

318-R Code Reorganization M3 CONF RM 3

4:00 pm - 6:30 pm

318 Building Code M2 SALON E

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

Code	Committee	Day	Time	Room Name
ACI 318/ ASCE7	ACI 318/ASCE Coordination	Mon	2:00 pm-3:30 pm	SUITE 514
ACI/ ASCE	ACI/ASCE Coordination	Wed	7:00 am-8:30 am	CONF RM 15
ACIFdn	ACI Foundation	Wed	9:00 am-12:00 pm	SUITE 514
ACYM	Advisory Committee for Young Members	Wed	7:00 am-8:30 am	CONF RM 8
BAC-SD	Board Advisory Committee on Sustainable Development	Sun	1:00 pm-4:00 pm	CONF RMS 17&18
BOD	Board of Direction	Thu	10:00 am-5:00 pm	SALON D
C601-B	Certified Quality Technical Mgr	Wed	10:00 am-12:30 pm	CONF RM 14
C601-C	Masonry Testing Technician	Mon	5:00 pm-6:30 pm	SUITE 642
C601-D	Decorative Concrete Finisher	Wed	11:30 am-1:00 pm	CONF RM 2
C610	Field Technician Cert	Mon	8:30 am-11:30 am	CONF RMS 13&14
C620	Laboratory Tech Cert	Tue	8:30 am-10:00 am	SUITE 1952
C630	Construction Inspector Cert	Tue	10:00 am-11:30 am	SUITE 1952
C631	Conc Transportation Const Insp	Mon	1:00 pm-2:30 pm	SUITE 618
C640	Craftsman Cert	Tue	12:30 pm-2:00 pm	SALON E
C660	Shotcrete Nozzleman Cert	Mon	1:00 pm-3:00 pm	CONF RM 18
CAC	Chapter Activities	Mon	2:30 pm-5:00 pm	SUITE 618
СС	Convention Committee	Tue	3:00 pm-5:00 pm	SUITE 1906
CLC	Construction Liaison	Sun	8:30 am-11:30 am	CONF RM 17
CLGE	Collegiate Concrete Council	Sun	4:00 pm-5:00 pm	CONF RMS 17&18
СРС	Certification Programs	Tue	2:00 pm-5:00 pm	CONF RM 6
CRC	Concrete Research Council	Tue	11:30 am-1:00 pm	CONF RMS 13&14
E601	Seminar Oversight Committee	Sun	3:00 pm-5:00 pm	SUITE 1951
E701	Materials for Concrete Construction	Sun	10:00 am-11:30 am	CONF RM 6

Code	Committee	Day	Time	Room Name
E702	Designing Concrete Structures	Mon	5:00 pm-6:30 pm	SUITE 1951
E703	Concrete Construction Practices	Mon	5:00 pm-7:00 pm	SUITE 529
E706	Repair Application Procedures	Sun	8:00 am-10:00 am	SUITE 642
E801	Student Activities	Sun	8:00 am-10:00 am	CONF RM 9
E802	Teaching Methods and Educational Materials	Mon	8:30 am-10:00 am	CONF RM 17
E 803	Faculty Network Coordinating	Tue	4:00 pm-5:00 pm	SUITE 529
E804	Educational Awards Nomination Committee	Mon	10:00 am-11:30 am	SUITE 529
EAC	Educational Activities M1	Sat	1:00 pm-5:00 pm	CONF RM 13
EAC	Educational Activities M2	Tue	8:00 am-12:00 pm	CONF RM 3
НТС	Hot Topic	Sun	11:30 am-1:00 pm	SUITE 514
IC	International Committee	Tue	9:00 am-11:30 am	CONF RM 6
IC-Cert	International-Certification	Sun	3:30 pm-5:00 pm	SUITE 544
IC-Conf	International-Conferences	Mon	7:00 am-8:30 am	SUITE 529
IC-Part	International-Partnerships & Publications	Sun	10:00 am-11:30 am	CONF RM 16
ISO/ TC 71	ISO/TC 71 Advisory	Sun	1:00 pm-2:30 pm	SUITE 642
ITG-6	High-Strength Steel Reinforcement	Mon	2:00 pm-6:00 pm	CONF RM 9
ITG-8	ITG-8 Perform Criteria for Conc Matrls	Tue	9:00 am-1:00 pm	CONF RM 7
MEMC	Membership	Sun	8:30 am-11:30 am	CONF RM 14
MKTC	Marketing	Mon	2:00 pm-5:00 pm	SUITE 642
PUBC	Publications	Mon	8:30 am-10:30 am	SUITE 642
RCC	Responsibility	Sun	2:00 pm-5:00 pm	CONF RM 13
SCO	Scholarship Council M2	Mon	2:00 pm-3:00 pm	SUITE 3629
TAC	Technical Activities M1	Fri	6:30 pm-9:00 pm	CONF RM 12

Code	Committee	Day	Time	Room Name
TAC	Technical Activities M2	Sat	7:00 am-6:00 pm	CONF RM 12
TAC	Technical Activities M ₃	Sun	7:00 am-2:00 pm	SALON B
TAC- Code	Code Relationship	Mon	6:00 pm-7:30 pm	SUITE 1906
TAC-RG1	TAC Review Group 1	Sun	8:00 am-12:00 pm	SUITE 1905
TAC-RG2	TAC Review Group 2	Sun	8:00 am-12:00 pm	SUITE 1951
TAC-RG ₃	TAC Review Group 3	Sun	8:00 am-12:00 pm	SUITE 1952
TAC-RG4	TAC Review Group 4	Sun	8:00 am-12:00 pm	SUITE 1906
TRRC	TAC Repair & Rehab	Tue	9:00 am-12:00 pm	CONF RM 8
TSC	TAC Specifications	Wed	7:00 am-10:00 am	CONF RM 14
тѕтттс	TAC-SDC-TTTC Coordination Meeting	Mon	5:00 pm-6:30 pm	SUITE 514
ттс	TAC Technology Transfer	Tue	7:00 am-8:30 am	CONF RM 16
117	Tolerances	Tue	8:30 am-12:00 pm	SUITE 642
118	Computers	Mon	8:30 am-10:00 am	CONF RM 16
120	History	Tue	1:30 pm-3:00 pm	SUITE 1951
121	Quality Assurance	Sun	3:30 pm-5:00 pm	CONF RM 11
122	Thermal Properties	Mon	3:30 pm-5:00 pm	SUITE 514
123	Research	Sun	4:00 pm-5:00 pm	SALON B
124	Aesthetics	Mon	8:30 am-10:00 am	SUITE 1905
130	Sustainability	Mon	3:00 pm-5:00 pm	CONF RM 11
201	Durability	Tue	8:30 am-11:30 am	SALONS K&L
201-A	Durability-Sulfate Attack	Sun	3:30 pm-5:00 pm	SUITE 1905
201-C	Durability-Condition Report	Tue	1:00 pm-3:00 pm	SUITE 514
201-D	Durability-Oversight Committee	Mon	11:30 am-1:00 pm	CONF RM 15

Code	Committee	Day	Time	Room Name
207	Mass Concrete	Mon	10:00 am-1:00 pm	SUITE 1905
209	Creep & Shrinkage	Mon	8:30 am-11:30 am	CONF RM 3
209-A	Statistic Procedures	Sun	2:00 pm-3:30 pm	SUITE 544
211	Proportioning	Wed	8:30 am-11:30 am	SALON E
211-A	Proportioning-Editorial	Tue	10:00 am-12:00 pm	SUITE 529
211-E	Proportioning-Evaluation	Tue	11:30 am-1:00 pm	SUITE 544
211-F	Proportioning-Submittal	Tue	2:00 pm-4:00 pm	SUITE 529
212	Chemical Admixtures	Mon	2:00 pm-6:30 pm	SUITE 1905
213	Lightweight	Tue	1:30 pm-3:00 pm	SUITE 544
213-TG	Lightweight-Editorial TG	Tue	11:30 am-1:00 pm	SUITE 618
214	Strength Tests	Mon	12:30 pm-2:00 pm	CONF RM 16
215	Fatigue	Sun	2:00 pm-4:00 pm	SALON B
216	Fire Resistance	Mon	10:00 am-1:00 pm	CONF RMS 1&2
221	Aggregates	Sun	11:30 am-1:00 pm	CONF RM 6
222	Corrosion	Tue	2:00 pm-5:00 pm	SALON B
223	Shrinkage Compensating	Tue	2:00 pm-5:00 pm	CONF RMS 1&2
223-C	Shr Compensating-Constr	Tue	1:00 pm-2:00 pm	CONF RM 6
224	Cracking	Sun	2:30 pm-5:00 pm	CONF RM 15
225	Hydraulic Cements	Mon	12:00 pm-1:30 pm	SUITE 642
228	Nondestructive Testing	Sun	10:00 am-1:00 pm	CONF RM 9
229	Controlled Low Strength	Tue	2:00 pm-5:00 pm	CONF RM 8
230	Soil Cement	Tue	8:00 am-10:00 am	CONF RM 4
231	Early Age	Mon	2:00 pm-3:30 pm	CONF RM 6

Code	Committee	Day	Time	Room Name
232	Fly Ash & Natural Pozzolans	Mon	2:00 pm-5:00 pm	CONF RMS 1&2
232-A	Fly Ash-Use of Nat Pozzolans	Mon	10:00 am-1:00 pm	CONF RM 17
233	Slag Cement	Tue	2:00 pm-6:00 pm	SALON E
234	Silica Fume	Tue	2:00 pm-3:30 pm	CONF RM 15
235	Electronic Data Exchange	Tue	2:00 pm-5:00 pm	SUITE 618
236	Material Science	Mon	4:00 pm-6:00 pm	CONF RM 12
236-B	Material Science-Transport Mechanisms	Sun	2:00 pm-3:30 pm	SUITE 1906
236-D	Material Science- Nanotechnology of Concrete M1	Sun	3:30 pm-5:00 pm	SUITE 1906
236-D	Material Science- Nanotechnology of Concrete M2	Tue	10:00 am-12:00 pm	SUITE 1905
237	Self-Consolidating Concrete	Mon	1:00 pm-4:00 pm	CONF RM 12
238	Workability of Fresh Concrete	Tue	12:00 pm-1:30 pm	SUITE 1905
301	Specifications M1	Sat	1:00 pm-5:00 pm	CONF RM 17&18
301	Specifications M2	Sun	8:30 am-12:00 pm	CONF RMS 3&4
301	Specifications M ₃	Mon	2:00 pm-6:30 pm	CONF RMS 3&4
301-A	Spec-Gen Reg. Definitions & Tolerances	Sun	1:00 pm-4:00 pm	CONF RM 4
301-B	Spec-Formwork & Reinforcement	Mon	8:30 am-1:00 pm	Contact Chair
301-C	Spec-Placing Consolidating & Curing	Sun	1:00 pm-5:00 pm	CONF RM 16
301-D	Spec-Lightweight & Massive Concrete	Sun	1:00 pm-3:30 pm	CONF RM 11
301-E	Spec-Prestressed Concrete	Sun	4:30 pm-6:30 pm	CONF RM 3
301-F	Spec-Precast Concrete Panels	Sun	4:00 pm-6:00 pm	CONF RM 4
301-G	Spec-Shrink Comp Conc & Ind Floor Slabs	Sun	4:30 pm-6:30 pm	SUITE 618
301-H	Spec-Tilt-Up Constr & Arch Conc	Sun	1:00 pm-3:00 pm	CONF RM 3

Code	Committee	Day	Time	Room Name
301-SC	Spec-Steering Committee	Sun	7:00 am-8:00 am	CONF RM 11
302	Floor Construction	Mon	8:30 am-1:00 pm	SALON E
303	Architectural CIP	Wed	8:30 am-11:30 am	CONF RM 3
304	Measuring/Mix/Trans/Placing	Mon	11:30 am-1:00 pm	CONF RM 18
305	Hot Weather	Sun	1:00 pm-5:00 pm	CONF RM 9
306	Cold Weather	Tue	8:30 am-11:30 am	SUITE 1906
307	Chimneys	Mon	2:00 pm-5:00 pm	SUITE 529
308	Curing	Wed	2:00 pm-5:00 pm	CONF RM 14
308/ 213	Guide on Internal Curing	Tue	4:30 pm-6:00 pm	CONF RM 15
308-A	Curing-Guide	Wed	10:30 am-1:00 pm	CONF RM 4
308-B	Curing-Specifications	Wed	8:00 am-10:30 am	CONF RM 4
309	Consolidation	Sun	2:00 pm-5:00 pm	CONF RM 8
310	Decorative Concrete	Tue	2:00 pm-5:00 pm	SUITE 1905
311	Inspection	Mon	8:30 am-11:30 am	CONF RM 6
313	Bins & Silos	Mon	8:30 am-5:00 pm	SUITE 1906
314	Simplified Design Buildings	Mon	12:30 pm-3:00 pm	CONF RM 7
315	Detailing	Sun	2:00 pm-5:00 pm	SUITE 1952
315-B	Detailing-Constructibility	Sun	8:30 am-11:30 am	SUITE 618
318	Building Code M1	Tue	8:30 am-11:30 am	SALON E
318	Building Code M2	Wed	4:00 pm-6:30 pm	SALON E
318-A	General Concrete Constr M1	Tue	2:00 pm-6:30 pm	CONF RM 4
318-A	General Concrete Constr M2	Wed	2:30 pm-4:00 pm	CONF RM 13
318-B	Reinforcement & Development	Wed	8:00 am-1:30 pm	CONF RM 11

Code	Committee	Day	Time	Room Name
318-C	Serviceability/Safety M1	Tue	2:00 pm-6:30 pm	CONF RM 3
318-C	Serviceability/Safety M2	Wed	2:30 pm-4:00 pm	CONF RM 4
318-D	Flexure & Axial Loads	Wed	8:00 am-1:30 pm	CONF RM 13
318-E	Shear & Torsion	Wed	8:00 am-1:30 pm	CONF RM 7
318-G	Prestressed Precast	Wed	8:00 am-1:30 pm	CONF RM 9
318-H	Seismic Provisions M1	Tue	2:00 pm-6:30 pm	CONF RM 10
318-H	Seismic Provisions M2	Wed	2:30 pm-4:00 pm	CONF RM 11
318-L	International Liaison	Mon	3:30 pm-5:00 pm	CONF RM 6
318-R	Code Reorganization M1	Mon	8:30 am-11:30 am	CONF RM 11
318-R	Code Reorganization M2	Tue	2:00 pm-6:30 pm	CONF RM 9
318-R	Code Reorganization M ₃	Wed	2:30 pm-4:00 pm	CONF RM 3
318-S	Spanish Translation	Mon	2:00 pm-3:30 pm	SALONS K&L
318-TG	Task Group Foundation	Mon	5:00 pm-6:30 pm	CONF RM 10
325	Pavements	Tue	3:30 pm-5:30 pm	CONF RM 7
325-A	Pavements-Design	Tue	8:30 am-10:00 am	SUITE 544
325-C	Pavements-Prestressed and Precast	Tue	10:00 am-11:30 am	CONF RM 4
325-D	Proportioning for Pavements	Tue	11:30 am-1:00 pm	SUITE 1951
325-E	Accelerated Paving	Tue	2:00 pm-3:30 pm	CONF RM 7
327	RCC Pavements	Mon	2:30 pm-3:30 pm	SUITE 1952
330	Parking Lots & Site Paving	Wed	1:00 pm-4:00 pm	CONF RM 2
330-TG	Parking Lots & Site Paving TG	Wed	8:30 am-11:30 am	CONF RM 2
332	Residential Concrete	Tue	2:00 pm-5:00 pm	CONF RM 16
332 B&C	Residential Concrete Sub B & C	Tue	8:00 am-11:00 am	CONF RM 9

Code	Committee	Day	Time	Room Name
332 D&E	Residential Concrete Sub D & E	Tue	8:00 am-11:00 am	CONF RM 12
332-F	Residential Concrete-Slabs	Tue	11:00 am-2:00 pm	CONF RM 12
334	Shells	Mon	5:00 pm-6:30 pm	CONF RM 8
335	Composite Hybrid	Sun	11:30 am-1:00 pm	CONF RM 14
336	Footings	Sun	1:00 pm-5:00 pm	SUITE 514
341	Earthquake-Resistant Bridges	Sun	3:00 pm-5:00 pm	CONF RMS 1&2
341-A	Equake Res Brdgs-Columns	Sun	8:00 am-9:30 am	CONF RMS 1&2
341-B	Equake Res Brdgs-Pier Walls	Sun	9:30 am-11:00 am	CONF RMS 1&2
341-C	Equake Res Brdgs-Retrofit	Sun	11:00 am-12:30 pm	CONF RMS 1&2
341-D	Perf Based Seismic Design	Sun	1:30 pm-3:00 pm	CONF RMS 1&2
342	Bridge Evaluation	Sun	8:30 am-10:00 am	CONF RM 16
343	Bridge Design	Mon	10:00 am-1:00 pm	CONF RM 10
345	Bridge Construction	Sun	1:00 pm-3:00 pm	CONF RM 6
346	CIP Pipe	Mon	11:30 am-1:00 pm	SUITE 544
347	Formwork	Sun	8:30 am-12:30 pm	CONF RM 12
347-A	Formwork-Specification	Sat	7:30 pm-10:00 pm	CONF RM 11
348	Safety	Tue	8:30 am-10:00 am	SUITE 529
349	Nuclear Structures	Tue	2:00 pm-5:00 pm	CONF RM 12
349- A&B	Nuclear Structures-Design & Materials	Tue	8:30 am-12:30 pm	CONF RM 16
349-C	Nuclear Str-Anchorage	Mon	2:00 pm-5:00 pm	CONF RM 10
350	Environmental Structures	Wed	8:30 am-6:30 pm	SALONS K&L
350-A	Env Str-General & Concrete	Tue	11:30 am-3:30 pm	SUITE 1952
350-B	Env Str-Durability	Mon	8:30 am-1:00 pm	SUITE 618

Code	Committee	Day	Time	Room Name
350-C	Env Str-Reinf & Devel	Sun	7:00 am-9:30 am	CONF RM 10
350-D	Env Str-Structural	Mon	8:00 am-12:00 pm	CONF RM 4
350-E	Env Str-Precast/Prestressed	Sun	2:00 pm-6:30 pm	CONF RM 10
350-F	Env Str-Seismic	Tue	8:30 am-3:30 pm	CONF RM 11
350- G&K	Env Str-Tightness Testing/ Haz Mat	Tue	9:00 am-10:00 am	SUITE 514
350-H	Env Str-Editorial	Tue	5:00 pm-6:30 pm	SUITE 514
350-J	Env Str-Education	Mon	3:30 pm-6:30 pm	SUITE 544
350-L	Env Str-Specification	Tue	3:30 pm-6:30 pm	SUITE 1952
350-SC	Env Str-Steering Comm	Sun	11:30 am-1:00 pm	SUITE 642
351	Equip Foundations	Mon	12:00 pm-2:00 pm	CONF RM 9
351-B	Grtng Fndns-Equip Machnry	Mon	5:00 pm-7:00 pm	SUITE 618
352	Joints	Sun	2:00 pm-5:00 pm	CONF RM 14
355	Anchorage	Sun	1:00 pm-5:00 pm	CONF RM 12
355-TG	Anchorage TG	Mon	8:30 am-12:00 pm	CONF RM 9
357	Offshore & Marine	Tue	8:30 am-11:30 am	SUITE 1951
360	Slabs on Ground	Mon	2:00 pm-6:30 pm	SALON E
362	Parking Structures	Mon	1:00 pm-5:00 pm	CONF RM 8
362-A	Parking Str-Standard	Mon	8:30 am-12:00 pm	SALON B
363	High-Strength	Wed	8:30 am-11:30 am	CONF RM 15
363-A	High-Strength—Lightweight Concrete	Tue	3:30 pm-5:00 pm	SUITE 1951
364	Rehabilitation	Mon	2:00 pm-5:00 pm	CONF RMS 13&14
365	Service Life	Mon	9:00 am-1:00 pm	CONF RM 8
369	Seismic Rehab	Mon	2:00 pm-6:00 pm	CONF RM 16

Code	Committee	Day	Time	Room Name
370	Dynamic & Vibratory Effects	Sun	1:30 pm-3:30 pm	SUITE 1905
371	Elevated Tanks with Concrete Pedestals	Tue	10:00 am-1:00 pm	SUITE 514
372	Prestressed/Wire Wrapped	Tue	3:00 pm-5:00 pm	SUITE 514
373	Prestressed/Tendons	Sun	8:30 am-10:00 am	CONF RM 11
374	Seismic Design	Mon	8:30 am-12:30 pm	CONF RM 7
374-TG2	Protocol For Testing RC Structural Elements	Sun	11:30 am-1:00 pm	SUITE 618
375	Design for Wind Loads	Mon	1:00 pm-3:30 pm	SUITE 544
376	RLG Containment Structures M1	Sat	3:00 pm-6:00 pm	CONF RM 14
376	RLG Containment Structures M2	Sun	9:00 am-5:00 pm	CONF RM 5
376-TG1	RLG Containment Structures TG M1	Mon	11:30 am-5:00 pm	CONF RM 5
376-TG2	RLG Containment Structures TG M2	Tue	9:00 am-12:00 pm	CONF RM 10
376-TG3	RLG Containment Structures TG M ₃	Wed	9:00 am-5:00 pm	SALON B
408	Development and Splicing	Sun	8:30 am-11:30 am	CONF RM 7
421	Reinf Slabs	Sun	10:00 am-1:00 pm	CONF RM 11
423	Prestressed	Mon	9:00 am-1:00 pm	CONF RM 12
423/ 445	Adhoc Grp on Shear in Prestress Conc	Sun	3:00 pm-5:00 pm	SUITE 642
435	Deflection	Mon	3:30 pm-6:30 pm	SUITE 1952
437	Strength Evaluation	Mon	8:30 am-11:30 am	CONF RM 15
439	Steel Reinforcement	Mon	8:30 am-10:00 am	CONF RM 10
439-A	Steel Reinf-Wire	Sun	3:30 pm-5:00 pm	CONF RM 6
440	Fiber Reinforced Polymer	Tue	1:00 pm-4:00 pm	CONF RMS 17&18
440-D	FRP-Research Development & Applications	Sun	10:00 am-11:30 am	SUITE 642
440-E	FRP-Prof Education	Mon	10:30 am-12:00 pm	SUITE 642

Code	Committee	Day	Time	Room Name
440-F	FRP-Repair Strengthening	Mon	12:00 pm-3:00 pm	SALON B
440-G	FRP-Student	Tue	10:00 am-11:30 am	SUITE 544
440-H	FRP-Reinforced Concrete	Mon	3:00 pm-6:00 pm	SALON B
440-l	FRP-Prestressed Concrete	Sun	8:30 am-10:00 am	CONF RM 6
440-J	FRP Stay in Place Forms	Sun	4:00 pm-5:15 pm	SALONS K&L
440-K	FRP-Material Characteristics	Mon	1:00 pm-3:00 pm	CONF RM 11
440-L	FRP-Durability	Sun	2:00 pm-4:00 pm	SALONS K&L
440-M	FRP-Repair of Masonry Str M1	Tue	8:00 am-9:00 am	CONF RM 10
440-M	FRP-Repair of Masonry Str M2	Tue	12:00 pm-1:00 pm	CONF RM 10
441	Columns	Mon	11:30 am-2:00 pm	CONF RMS 13&14
441-E	Columns with Multi-Spiral Reinforcement	Sun	3:00 pm-4:30 pm	CONF RM 3
444	Experimental Analysis	Mon	12:00 pm-2:00 pm	SUITE 514
445	Shear & Torsion	Mon	2:00 pm-6:00 pm	CONF RM 15
445-A	Shear & Torsn-Strut & Tie	Sun	10:30 am-1:30 pm	CONF RM 13
445-B	Shear & Torsn-Seismic Shear	Sun	8:00 am-11:00 am	SUITE 529
445-C	Shear & Torsn-Punching Shear	Sun	1:00 pm-3:00 pm	SUITE 529
445-D	Shear & Torsn-Database	Mon	10:00 am-12:00 pm	SUITE 514
445-E	Shear & Torsn-SOA Torsion	Sun	3:30 pm-5:00 pm	SUITE 529
446	Fracture Mechanics	Mon	3:30 pm-5:30 pm	CONF RM 7
447	Finite Element Analysis	Mon	11:30 am-2:00 pm	CONF RM 6
503	Adhesives	Tue	10:00 am-12:00 pm	SALON B
506	Shotcreting	Tue	8:30 am-11:30 am	CONF RMS 13&14
506-A	Shotcreting-Evaluation	Sun	9:30 am-11:00 am	CONF RM 10

Code	Committee	Day	Time	Room Name
506-B	Shotcreting-Fiber Reinforced	Sun	1:30 pm-3:00 pm	SUITE 1951
506-C	Shotcreting-Guide	Mon	8:30 am-10:00 am	SUITE 529
506-E	Shotcreting-Specifications	Mon	10:00 am-12:30 pm	CONF RM 16
506-F	Shotcreting-Underground	Mon	1:00 pm-2:00 pm	CONF RM 10
506-G	Qualifications for Projects	Sun	11:00 am-12:30 pm	SUITE 529
515	Protective Systems	Tue	11:30 am-2:00 pm	CONF RM 4
522	Pervious Concrete	Tue	8:30 am-11:30 am	CONF RMS 17& 18
523	Cellular Concrete	Mon	10:00 am-1:00 pm	SUITE 1952
523-A	Cellular-Autoclaved Aerated	Mon	8:30 am-10:00 am	SUITE 1952
524	Plastering	Mon	7:00 am-8:30 am	CONF RM 6
533	Precast Panels	Mon	2:30 pm-4:00 pm	CONF RM 17
543	Piles	Mon	8:30 am-11:30 am	SUITE 544
544	Fiber Reinforced Concrete	Tue	3:30 pm-6:00 pm	SALONS K&L
544-A	FRC-Production & Applications	Mon	11:30 am-1:00 pm	SALONS K&L
544-B	FRC-Education	Mon	8:30 am-10:00 am	CONF RMS 1&2
544-C	FRC-Testing	Tue	2:00 pm-3:30 pm	SALONS K&L
544-D	FRC-Structural Uses	Mon	3:30 pm-6:00 pm	SALONS K&L
544-F	FRC-Durability	Tue	10:30 am-12:00 pm	CONF RMS 1&2
546	Repair	Mon	8:30 am-11:30 am	CONF RM 18
546-A	Repair-Underwater	Sun	8:30 am-9:30 am	CONF RM 15
546-B	Repair-Material Selection Guide	Sun	9:30 am-10:30 am	CONF RM 15
546-C	Repair-Guide	Sun	10:30 am-11:30 am	CONF RM 15
548	Polymers	Tue	8:30 am-10:00 am	SALON B

Code	Committee	Day	Time	Room Name
548-A	Polymers-Overlays	Mon	10:00 am-11:30 am	SALONS K&L
548-B	Polymers-Sulfur Concrete	Mon	1:00 pm-2:30 pm	SUITE 1952
548-C	Polymers-Str Design & Analysis	Mon	11:30 am-1:00 pm	CONF RM 11
548-TG	Polymers-TG	Sun	2:00 pm-3:00 pm	SUITE 618
549	Thin Reinforced	Sun	10:30 am-2:00 pm	SALONS K&L
549-A	Thin Reinforced-Premix GFRC	Sun	8:30 am-10:30 am	CONF RM 13
550	Precast Structures	Tue	1:00 pm-3:30 pm	SUITE 642
551	Tilt-Up	Sun	8:30 am-11:00 am	CONF RM 8
552	Cementitious Grouting	Mon	11:30 am-2:00 pm	SUITE 529
555	Recycled	Mon	5:00 pm-6:30 pm	CONF RM 11
560	Design & Constr ICFs	Wed	8:30 am-11:30 am	CONF RM 8
562	Eval, Repair & Rehab	Sun	11:30 am-5:00 pm	CONF RM 7
562-A	Eval, Repair & Rehab- Life Safety	Sun	12:00 pm-2:00 pm	CONF RM 8
562-B	Eval, Repair & Rehab-Loads	Sun	12:00 pm-2:00 pm	CONF RM 10
562-C	Eval, Repair & Rehab- Structural Analysis	Sun	12:00 pm-2:00 pm	CONF RM 15
562-CO	Eval, Repair & Rehab- Coordination Meeting	Sun	8:00 am-9:00 am	CONF RM 18
562-D	Eval, Repair & Rehab- Structural Repair Design	Sun	12:00 pm-2:00 pm	SUITE 1906
562-E	Eval, Repair & Rehab- Durability Quality Assurance	Sun	12:00 pm-2:00 pm	SUITE 1952
562-F	Eval, Repair & Rehab-General	Sun	9:00 am-12:00 pm	CONF RM 18
563	Specs for Repair of Struct Conc in Bldgs	Tue	2:00 pm-5:00 pm	CONF RMS 13&14

Notes

Saturday, March 14, 2009 8:30 am — 5:00 pm

✓ LEED for New Construction and Major Renovations Technical Review Workshop \$365 U.S. per person; pre-registration required SALON J

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.

Sunday, March 15, 2009 8:00 am - 9:00 am

First-Time Convention Attendee BreakfastSponsored by the ACI Convention Committee

SALONS K&L

Session Co-Moderators:

Debrethann R. Orsak Vice-President/Manager of Business Develpoment 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

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 openended question. Stop by and cheer for your favorite team!



Improving the Infrastructure with Roller-Compacted Concrete Pavements

SALON J

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 2:25 pm
Pavement

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

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

SALON J

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

Methodology for Live Load Distribution for Bridge Evaluation SALON A Sponsored by ACI Committee 342, Evaluation of Concrete Bridges and Bridge Elements

Session Co-Moderators: Om Dixit

Engineering Director Fenstermaker New Orleans, LA

Lisa R. Feldman Assistant Professor

University of Saskatchewan Saskatoon, SK, Canada

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

Residential Concrete Foundations—Science and Practice Can Coexist, Part 1

SALON M

Sponsored by ACI Committee 332, Residential Concrete Work

Session Moderator:

James Baty

Technical Director

Concrete Foundation Association

Mount Vernon, IA

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

Seismic Design of Punching Shear Reinforcement in SALON D Flat Plates

Sponsored by Joint ACI ASCE Committee 421, Design of Reinforced Concrete Slabs

Session Co-Moderators: Mahmoud Kamara

Senior Structural Engineer Portland Cement Association

Skokie, IL

James Lai

Structural Engineer LAI Associates La Canada, 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 PlateColumn Frames Under Lateral Loading
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 SA Flat Plates (cont.)

SALON D

4:30 pm

A Historical Review of Shear Failures in Flat Plate Slabs— 4:00 pm 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

Transition from Fluid to Solid: Reexamining the Behavior SALON C 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 2:00 pm Cracking of Concrete Using Acoustic Emission

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 2:30 pm 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 3:00 pm
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

Continuous Ultrasonic Assessment of Elastic Modules of 3:30 pm
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 SALON C of Concrete at Early Ages, Part 1 (cont.)

Early-Age Stiffening of Cement Paste Using Ultrasonic 4:00 pm 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 4:30 pm 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

Sunday, March 15, 2009 5:15 pm – 6:30 pm

Opening Session & Awards Program

SALONS E&F

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

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

Neeraj Buch

FELLOW

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

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

Sunday, March 15, 2009 5:15 pm - 6:30 pm

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 Iason 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

Sunday, March 15, 2009 5:15 pm – 6:30 pm

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!



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
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.

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

10:50 am

Celik Ozyildirim, Principal Research Scientist, Virginia Transportation Research Council, Charlottesville, VA

Building Sustainably with Slag Cement (cont.)

SALON J

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

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 9:15 am 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 9:30 am 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 9:45 am 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 10:00 am 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

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
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 10:45 am of Concrete

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
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
Seong-Hoon Kee, Graduate Student, University of Texas at Austin,
Austin, TX; and Jinying Zhu, University of Texas at Austin

Residential Concrete Foundations—Science and Practice SALON M Can Coexist, Part 2

Sponsored by ACI Committee 332, Residential Concrete Work

Session Moderator: James R. Baty

Technical Director

Concrete Foundation Association

Mount Vernon, IA

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 9:30 am Multi-Family Housing

Brent D. Anderson, President, BDA Associates, LCC, Minneapolis, MN

Concrete Foundation Wall Use, Basis of Design and 10:30 am Use of Software

Raj K. Jalla, President and Chief Engineer, CEC Structures, Reston, VA

Concrete Foundation Wall Problems and Remedial 11:00 am
Measures

Robert T. Bartley, President, The Bartley Corporation, Ashton, MD

How Cold is Too Cold? Residential Foundations for 11:30 am
Northern Climates

James R. Baty, Technical Director, Concrete Foundation Association, Mount Vernon, IA

Serviceability of Concrete Members Reinforced with Internal/External FRP Reinforcement, Part 1

SALON D

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 9:25 am Concrete Members Reinforced with Internal FRP Reinforcement 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 9:50 am
Garage Structural Slabs Reinforced with FRP Bars
Brahim Benmokrane, Professor, University of Sherbrooke,
Sherbrooke, QC, Canada; and Sherif El Gamal, University of
Sherbrooke

The Story Behind Proposed Changes to ACI 440 10:15 am Deflection Requirements for FRP-Reinforced Concrete

Peter H. Bischoff, Professor, University of New Brunswick, Fredericton, NB, Canada; Shawn P. Gross, Villanova University; and Carlos E. Ospina, Berger/ABAM Engineers Inc.

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

SALON D

Moment of Inertia for Beams Reinforced with Deformed 10:40 am GFRP Reinforcing Bar

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
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 11:30 am
Reinforced with FRP Reinforcement
Dagmar Svecova, Associate Professor, University of Manitoba,
Winnipeg, MB, Canada; Hugues Vogel, University of Manitoba

Transition from Fluid to Solid: Reexamining the Behavior SALON C 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 9:00 am Different Slag Contents

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 9:30 am and Fly Ash

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 10:00 am of Laser Microscopy

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

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

Monitoring the Liquid-to-Solid Transition in Concrete 11:00 am 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 11:30 am 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

✓ Student Lunch SALON F

\$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.

Convention Session Moderator Question and Answer Session **SUITE 1905**

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.

Behavior of Concrete Transportation Structures Under Blast and Impact

SALON D

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 2:00 pm **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**

2:30 pm

James Ray, Research Structural Engineer, Engineering Research Development Center, Army Corps of Engineers, Vicksburg, MS

Response of a Concrete Tunnel to Blast Loads

3:00 pm

Darrell D. Barker, Vice President, ABS Consulting Inc., San Antonio, TX

Damage Metrics for RC Column Models

3:30 pm

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**

4:00 pm

Richard Klingner, Professor, University of Texas at Austin, Austin, TX; Eric Williamson, University of Texas at Austin

Concrete Barriers Under Impact Loading: Testing

4:30 pm

and Simulation

Akram Abu-Odeh, Associate Research Scientist, Texas A & M University, College Station, TX

Consolidation: Back to the Basics in the 21st CenturySALON C

Sponsored by ACI Committee 309, Consolidation of Concrete

Session Co-Moderators: Chiara F. Ferraris

Physicist

National Institute of Standards

and Technology Gaithersburg, MD

Celik Ozyildirim

Principal Research Scientist

Virginia Transportation Research Council

Charlottesville, VA

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.) SALON C

Consolidation Without Vibration for Concrete Pavements 4:00 pm Surendra P. Shah, Professor, Northwestern University, Evanston, IL; and Nathan A. Tregger, Northwestern University

Consolidation of Self-Consolidating Concrete 4:30 pm Joseph A. Daczko, Product Line Manager, BASF Admixtures Inc., Cleveland, OH

Developing Innovative Solutions for Design and
Construction of Precast/Prestressed Concrete Structures
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 2:25 pm
Through Introduction of Precast Walls with End Columns (PreWEC)
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, 3:15 pm Prestressed Concrete Spandrel Beams

Sami H. Rizkalla, Distinguished Professor, North Carolina State University, Raleigh, NC; and **Greg W. Lucier**, North Carolina State University

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

Shake-Table Tests of a Quarter-Scale Three-Story 3:40 pm
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 4:05 pm 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 SALON A 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 2:30 pm Memorial Cable-Stayed Bridge

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 3:30 pm by Replacing Lateral Steel with FRP Shells

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 4:30 pm Memory Alloys

Bassem Andrawes, Assistant Professor, University of Illinois at Urbana Champaign, Urbana, IL; and **Moochul Shin**, University of Illinois at Urbana Champaign

What's This Report For? Using Engineering Reports to SALON M 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 2:00 pm Frank A. Kozeliski, Materials Engineer and Consultant, Gallup Sand and Gravel, Gallup, NM

Interpreting a Petrographic Report

2:18 pm

Richard D. Stehly, Principal, American Engineering Testing, Saint Paul, MN

Interpreting NDT Reports

2:36 pm

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

What the Designer Needs to Know from the Geotechnical Report

2:54 pm

Joseph A. Amon, Senior Consultant, Ardaman and Associates Inc., Tampa, FL

Cement Mill Test Reports—Why Doesn't My Sample Match the Report?

3:12 pm

David M. Suchorski, Technical Services Manager, Ashgrove, Overland Park, KS

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

Understanding Special Inspectors Reports 3:30 pm Bryan Castle, Senior Materials Engineer, Western Technologies Inc., Phoenix, AZ

How to Read a Concrete Cylinder Report 3:48 pm Luke M. Snell, Visiting Eminent Scholar, Del E. Webb School of Construction, Arizona State University, Tempe, AZ

Deciphering Post-Tensioning Reports 4:06 pm James Rogers, Managing Director, Evaluation and Certification
Services, LLC, Phoenix, AZ

Engineers and Reports: A Crazy Combination 4:24 pm Lawrence H. Taber, Structural Engineer, Black & Veatch, Kansas City, MO

Women in ACI Reception

CONFERENCE ROOMS 17&18

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

CONFERENCE ROOM 6

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.

123 Forum: Are We Investing Enough in Research and SALON J
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 7:30 pm

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

Panelist Presentations

7:35 pm

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

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 Quattrociocchil, Ellis Don Construction

Contractors' Day Session, Part 1

SALON M

Coordinated by the ACI San Antonio Chapter

Sponsored by Boral Material Techologies, 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

SALON A

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 10:30 am of ICFs

Thomas L. Klemens, Owner, Wordwright, Chicago, IL

Panel Discussion on Design

11:00 am

Early-Age Test Methods for Performance SpecificationsSALON 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 9:00 am Distribution in Fresh Concrete

Tyler Ley, Assistant Professor, Oklahoma State University, Stillwater, OK

Measurement of Early-Age Autogenous Deformation of 9:20 am 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; Peitro Lura, EMPA Material Science and Technology; and Jason Weiss, Purdue University

Measuring Autogenous Deformation of Innovative 9:40 am
Cementitious Materials

Jason H. Ideker, Assistant Professor, Oregon State University, Corvallis, OR

Electrical Conductivity-Based Strength Predictions at 10:00 am Early Ages

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

Early-Age Test Methods for Performance Specifications (cont.) SALON J

Use of Early-Age Changes in Electrical Conductivity to 10:20 am 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 10:40 am Kyle A. Riding, Assistant Professor, Kansas State University, Manhattan, KS; and Anton K. Schindler, Auburn University

Shrinkage-Based Design of Concrete 11:00 am Aleksandra Radlinska, Assistant Professor, Villanova University, Villanova, PA; and Jason Weiss, Purdue University

Serviceability of Concrete Members Reinforced with
Internal/External FRP Reinforcement, Part 2

SALON D

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

Stijin 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 9:50 am SRP Sheets

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 10:15 am with CFRP Laminates

Bruno Massicotte, Professor, Ecole Polytechnique de Montreal, Montreal, QC, Canada; and **Viacheslav Koval**, Ecole Polytechnique de Montreal

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

SALON D

Deflection Control of Concrete Beams and Slabs

10:40 am
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 11:05 am
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 11:30 am 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.

✓ Contractors' Day Lunch \$53 U.S. per person **SALON F**

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 Seguin, 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.

Concrete—The Sustainable Material Choice in Practice, Part 1 SALON J Sponsored by the Board Advisory Committee for Sustainable Development and ACI Committee 130, Sustainability of Concrete

Session Co-Moderators: Larry Rowland

Manager, Marketing Technical Services

Lehigh Cement Company

Allentown, PA

Julie K. Buffenbarger

Engineering & Architectural Specialist

Lafarge Medina, OH

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 3:15 pm
Construction

Bruce Blair, Vice President of Product Performance and Marketing, Lafarge, Herndon, VA

Pervious Concrete-ACI 522.1 Breaking New Ground 3:45 pm for Sustainability

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 2:30 pm Consequences

Nicolas Roussel, Senior Researcher, Laboratoire Central des Ponts et Chaussées, Paris, France

Scientific and Empirical Methods to Capture the Structural 3:00 pm Build-Up of SCC at Rest

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 SALON C (cont.)

Positive and Negative Aspects of Thixotrophy for Self-Consolidating Concrete 3:30 pm

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 4:00 pm Concrete?

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

Thixotrophy and Cement Paste 4:30 pm Chiara F. Ferraris, Physicist, National Institute of Science and Technology, Gaithersburg, MD

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. Szecsy, 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

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 2:02 pm
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 2:23 pm 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 2:45 pm 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 3:07 pm 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 3:29 pm Gilson Lomboy, Doctoral Student, Iowa State University, Ames, IA; and Kejin Wang, Iowa State University

Open Paper Session (cont.)

SALON A

Pervious Concrete Mixture Proportioning Methodology 3:51 pm 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 4:13 pm 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 4:35 pm Elias I. Saqan, Assistant Professor of Civil Engineering, American University in Dubai, Dubai, United Arab Emirates; and Rami A. Hawileh, American University in Sharjah

Overlays for Bridges

SALON D

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- 2:50 pm Compensating Concrete

Edward H. Rubin, Consultant, CTS Cement, Alhambra, CA

Restrained Shrinkage Stresses in Rehabilitated Bridge 3:15 pm Decks with Overlays

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 3:55 pm Thin Polymer Overlays and Concrete Overlays in Terms of Life Cycle Costs 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 Network Reception

CONFERENCE ROOMS 17&18

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.



Tuesday, March 17, 2009 6:30 pm - 9:30 pm

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. 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.



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 9:25 am
Material

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 10:15 am Plating Methods

Katie J. Bartojay, Civil Engineer, United States Bureau of Reclamation, Denver, CO

Soil Cement Applications in River Engineering for the
Southwestern United States
Dennis Richards, Vice President, PACE, Phoenix, AZ

Application of Soil Cement Technologies (cont.)

SALON D

NRCS Long-Term Performance Study—Soil-Cement
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

Concrete—The Sustainable Material Choice in Practice, Part 2 SALON J Sponsored by the ACI Board Advisory Committee for Sustainable Development and ACI Committee 130, Sustainability of Concrete

Session Co-Moderators: Larry Rowland

Manager, Marketing Technical Services

Lehigh Cement Company

Allentown, PA

Emily B. Lorenz

Director of Sustainability

Precast Prestressed Concrete Institute

Chicago, 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 9:00 am Sustainable Rating Systems

Julie K. Buffenbarger, Engineering & Architectural Specialist, Lafarge, Medina, OH

Achieving Sustainable Goals with Architectural Concrete 9:45 am Larry Rowland, Manager of Marketing and Technical Services, Lehigh Cement Company, Allentown, PA

Masdar City—The World's First Emission-Free City 10:15 am Khaled W. Awad, President, Advanced Construction Technology Services, Beirut, Lebanon

Sustainable Bridges—Otay River Bridge Case Study 11:00 am
Emily B. Lorenz, Director of Sustainability, Precast Prestressed
Concrete Institute, Chicago, IL

Chemical Admixtures: Essential Components to 11:30 am Sustainable Concrete

Aimee Pergalsky, Technical Support Representative, Euclid Chemical, Cleveland, OH

Curing Concrete SALON A

Sponsored by ACI Committee 308, Curing Concrete

Session Co-Moderators: Lawrence H. Taber

Structural Engineer Black & Veatch Kansas City, MO

Jody Wall

Director of Research and Development

Carolina Stalite Company

Kannapolis, NC

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 9:00 am 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 9:20 am
Development of Self Consolidating Concrete for Precast Applications
Liberato Ferrara, Professor, Politecnico di Milan, Milan, Italy

Decorative Concrete and Curing: What You Should Know 9:40 am Mike Murray, Owner, Murray Concrete Company, Shawnee, KS

High Temperature Accelerated Curing and DEF 10:00 am Michael D. Thomas, Professor, University of New Brunswick, Fredericton, NB, Canada

Effect of Curing Conditions on Durability of Concrete 10:20 am Specimens Exposed to Marine Conditions

Naseer Haque, Associate Professor, Kuwait University, Safat, Kuwait

A New Performance Based Approach to Assure 10:40 am Quality Curing During Pavement Construction

Dan G. Zollinger, Assistant Professor, Texas A&M University, Bryan, TX

Curing Concrete (cont.)

SALON A

Internal Curing of Concrete

John W. Roberts, Chairman, Northeast Solite Corporation, Richmond, VA; and Bruce W. Jones, Northeast Solite Corporation

Internal Curing of High-Performance Concrete by Using Super Absorbent Polymers

Daniel Cusson, Senior Research Officer, National Research Council of Canada, Ottawa, ON, Canada

Tech Notes: Applications for Silica Fume ConcreteSponsored 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 High10:30 am
Performance Concrete
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

✓ International Lunch \$30 U.S. per person **SALON F**

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.

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. **SALON A**

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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