ACI Fall 2005 Convention

Kansas City, MO

Convention Program Book

Kansas City
Marriott Downtown
and Convention Center
November 6-10, 2005

A convention co-hosted by the
ACI Missouri Chapter and
the ACI Kansas Chapter
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American Concrete Institute
Board of Direction

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ACI Members and Guests

Due to Hurricane Katrina and the resulting damage, we have had to relocate our Fall 2005 Convention. We would like to offer our best wishes to the ACI Louisiana Chapter and offer them our prayers for their successful recovery both personally and professionally. We also want to thank the New Orleans Convention Committee for all of their efforts preceding the relocated convention.

I also want to personally thank the ACI Staff for their unparalleled efforts in relocating the convention to Kansas City, Missouri. They have done the "impossible." They have moved a convention for over 1200 people without having to reschedule a single activity, which is amazing. Take the time to thank our staff. They deserve not only our thanks, but also our support.

Welcome to Kansas City—the City of Fountains—and ACI's Fall 2005 Convention. The ACI Kansas Chapter and the ACI Missouri Chapter have stepped up to help sponsor this event. Our hotel, the Kansas City Marriott Downtown is centrally located and close to the Kansas City Convention Center.

The ACI Events Staff, led by Renee Lewis, has done an excellent job rescheduling our exceptional technical and social programs. There will be over 40 technical and educational sessions as well as over 300 meetings. Sunday includes the Opening Session with the Lewis H. Tuthill Lecture by Past President George Hoff, as well as the Student Concrete Cube Competition.

Monday features the Ned H. Burns Symposium honoring one of our great pioneers in the field of prestressed concrete. Monday is also Students' Day, which features a superb luncheon speaker, Cornell University's Ken Hover. Tuesday night will feature the Concrete Mixer, and there will be some wonderful guest tours available as well. We have all of this plus the International Lunch on Wednesday with William F. Baker of Skidmore Owings and Merrill as the featured speaker. Throughout the week, the FRPRCS-7 Symposium will feature 12 sessions highlighted by an Opening Reception and Poster Session on Sunday.

Sharon and I look forward to seeing all of you. Enjoy the convention and thanks for participating in ACI.

Sincerely,
Charlotte, NC
March 25-30, 2006
Westin, Hilton & Charlotte Convention Center

ACI Spring 2006 Convention

Guest Tours and Special Events Include:

- Honorary Dinner for Paul Zia
- A Day with the Queen—City Tour
- Historic Homes and Gardens Tour
- Levine & Mint Museums
- Latta Plantation
- Biltmore Estate
- Concrete Mixer - Kick it Into Gear
Sustaining Members

Municipal Testing Lab
Municipal Testing

Sika Corp.

Oztec Industries, Inc.
Oztec

Spurlino Materials
Spurlino

Portland Cement Assoc.
Portland Cement Assoc.

St. Lawrence Cement Co.
St. Lawrence Cement

Structural Preservation Systems
Structural Preservation Systems

Precast/Prestressed Concrete Institute
Precast/Prestressed Concrete Institute

Structural Services, Inc.
Structural Services

Promix Technologies
Promix Technologies

Seretta Construction, Inc.
Seretta Construction

Tru Wall Concrete, Inc.
Tru Wall Concrete

Wextroc
Wextroc

SI Concrete Systems
SI Concrete Systems

Sustaining Members listed as of 9/28/05
The ACI Louisiana Chapter would like to thank the following organizations who committed to sponsoring the Fall 2005 convention in New Orleans and look forward to recognizing their support again when the New Orleans Convention is rescheduled.

**Mardi Gras**
ACI Louisiana Chapter

**Rex**
Degussa Admixtures, Inc.
Lehigh Cement Company
W.R. Grace & Co.

**Bacchus**
ACI Louisiana Chapter Certification Committee

**Zulu**
ACI Carolinas Chapter
ACI Greater Michigan Chapter
BOH Brothers Construction
Concrete and Aggregates Association of Louisiana
Waldemar S. Nelson & Co., Inc.

**Endymion**
ACI Arizona Chapter
ACI British Columbia Chapter
ACI Florida Suncoast Chapter
ACI Georgia Chapter
ACI Greater Miami Valley Chapter
ACI Houston Chapter

Convention Sponsors listed as of 10/13/05.
Convention Sponsors

ACI Illinois Chapter
ACI Las Vegas Chapter
ACI Mid-South Chapter
ACI Missouri Chapter
ACI National Capital Chapter
ACI New Jersey Chapter
ACI New Mexico Chapter
ACI Pittsburgh Chapter
ACI Rocky Mountain Chapter
ACI San Diego International Chapter
ACI Southern California Chapter
ACI Western Michigan Chapter
Badeaux Engineers, Inc.
DMJM Harris, Inc.
Headwaters Resources
Professional Services, Inc.
P.S.I., Inc.

Orpheus
Bernie P. Gaten
Carlo Ditta, Inc.
Delta Testing & Inspection, Inc.
Jeffery, Thomas, Avegno, Inc.
Kulkarni Consultants, APC
Modjeski & Masters
N-Y Associates, Inc.

Centurians
Python Corp.

Convention Sponsors listed as of 10/13/05.
ACI Louisiana Chapter

President
Ryan C. Koenig, URS Consultants, Inc.

Past President
Bernie P. Gaten, Degussa Admixtures, Inc./Master Builders, Inc.

Vice President
Mariano D. Mata, Evans Graves Engineers

Treasurer
Michael A. Devillier, Alpha Testing

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Stephen C. Bourg, URS Greiner Woodward Clyde
Joseph C. Ditta, Carlo Ditta, Inc.
Stephen W. Dortch, Buchart-Horn, Inc.
Jonathan Andrew Sofranko, Morphy Makofsky, Inc.
Hurricane Katrina may have destroyed many things in New Orleans, but it could not destroy the enthusiasm and dedication shown by the ACI Louisiana Chapter Convention Committee. Thank you for all of your efforts! ACI looks forward to returning to New Orleans for a future convention!

General Chair
William E. Rushing, Jr., Waldemar S. Nelson & Co., Inc.

Co-Chair
Mark A. Cheek, Beta Testing & Inspection

Contractors' Day
Barry D. Fehr, URS Consultants, Inc.
Bernard J. Eckholdt, III, LaFarge Construction Materials

Exhibits
Debbie Reynolds, Concrete & Aggregates Association of Louisiana
Bernie P. Gaten, Degussa Admixtures, Inc./Master Builders, Inc.

Fundraising
Om P. Dixit, DMJM Harris, Inc.

Guest Program
Angela L. Desoto, New Orleans District, Corps of Engineers

Publicity
Thomas Smith, Design Engineering, Inc.

Social Events
Joanne Zanetti, Waldemar S. Nelson & Co., Inc.

Student Program
Norma J. Mattei, University of New Orleans

Technical
Darrell F. Elliot, Buzzi Unicem USA
Subhash V. Kulkarni, Kulkarni Consultants, APC

Treasurer
Donald F. Meyn, Delta Testing & Inspection
ACI Kansas and Missouri Chapters

Thank you to the ACI Kansas and Missouri Chapters! Your support and assistance in relocating the ACI Fall 2005 Convention is appreciated!

ACI Kansas Chapter
Rosemary Copeland, Salina Concrete Sales
Joe Hug, Monarch Cement
John C. Hukey, Dayton Superior
Steven R. Kueffer, Penny's Concrete
Todd LaTorella, American Concrete Paving Association
Christy Martin, Concrete Promotional Group
Michael E. Murray, Murray Decorative Concrete
William E. Odell, Terracon
Richard R. Pikul, Pikul Engineering
Kelly Rotert, PSI
Dave M. Suchorski, Ash Grove
Clifford C. Thummel, Salina Concrete Sales
Randall J. Timi, Pittsburg State University
Brad W. Weiss, Salina Concrete Sales
Eric Wieters, Dudley Williams & Associates

ACI Missouri Chapter
Joe Clendenen
T. Patrick Earney, University of Missouri-Columbia
Michael G. Eilers, Coreslab Structures (Kansas), Inc.
Thiagarajan Ganesh, University of Missouri-Kansas City
Joseph S. Garza, Kienstra Material Service
Mark D. Luther, Holcim US, Inc.
Eric K. Marlinghaus, Quality Testing and Engineering, Inc.
Ronald L. O'Kane, Leigh & O'Kane LLC
David Richardson, University of Missouri-Rolla
Billie Snell, Southern Illinois University Edwardsville
Luke Snell, Southern Illinois University Edwardsville
Lawrence H. Taber, Black & Veatch
Timothy S. Vaughan, SM Wilson

Listing as of 9/28/05
Save 10% at the ACI Bookstore
Located in Convention Center Room 4100

318-05/318R-05
Building Code Requirements for Structural Concrete and Commentary

Concrete: A Pictorial Celebration

The Contractor's Guide to Quality Concrete Construction, Third Edition

SP-4 — Formwork for Concrete, Seventh Edition

All ACI publications are 10% off the regular price when purchased at the ACI bookstore. Here's a sample of publications that will be available:

- 301-05 — Specifications for Structural Concrete
- 318-05/318M-05/318S-05 — Building Code Requirements for Structural Concrete and Commentary
- 332-04 — Requirements for Residential Concrete Construction and Commentary
- 423-3R-05 — Recommendations for Concrete Members Prestressed with Unbonded Tendons
- 551.1R-05 — Tilt-Up Concrete Construction Guide
- Concrete: A Pictorial Celebration
- SP-4 — Formwork for Concrete, Seventh Edition
- PCA Notes on ACI 318-05/318R-05
- The Contractor's Guide to Quality Concrete Construction, Third Edition

American Concrete Institute
Advancing Concrete Knowledge
General Information

Convention Registration
The 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 - Tuesday 8:00 am - 5:00 pm
Wednesday 8:00 am - 12:00 pm

Name Badges
ACI attaches ribbons to name badges to identify attendees. Ribbons
are color-coded for identification as follows:

Member: Navy  Guest: Tan
Student: Green  Staff: Maroon

Attention ACI Members!
First-time convention attendees have a ★ on their badge. Please
welcome them to the convention.

Emergencies
In the event of an emergency, please contact security by dialing
"9" from any house phone at the Marriott or dial 3•5•1•1 at the
Convention Center.

Beverage Breaks
Beverages will be available at the following times. Quantities are limited.

Saturday 2:00 pm - 5:00 pm
Sunday 8:00 am - 10:30 am
1:00 pm - 4:00 pm sponsored by Holcim (US), Inc.

Holcim
Monday 8:00 am - 10:30 am
1:00 pm - 4:00 pm sponsored by Dayton Superior

Tuesday 8:00 am - 10:30 am
1:00 pm - 4:00 pm sponsored by Dayton Superior

DAYTON SUPERIOR

Wednesday 8:00 am - 10:30 am

Alcohol Policy
Nonalcoholic beer and soft drinks are available at all ACI-sponsored
receptions. Alcohol will not be served to anyone under the age of 21.
General Information

ACI Bookstore
Visit the ACI Bookstore during the following hours:

Sunday - Tuesday  8:00 am - 5:00 pm
Wednesday        8:00 am - 12:00 pm

Stay Connected to Home & Work!
Cyber Café and Internet Access
Bring your laptop to utilize the wireless hot spot in C-4100 during posted registration hours. A limited number of Cyber Stations will also be available in the Cyber Café.

At the Kansas City Marriott Downtown, wireless Internet access is available in the hotel restaurants and the meeting rooms for $9.95 for a 24 hour period. High-speed Internet access is also available in your guest room.

Local Information
The ACI Kansas and Missouri Chapters will have an information desk in the Marriott Tower Main Lobby.

Saturday          2:00 pm - 6:00 pm
Sunday - Tuesday  8:00 am - 5:00 pm

The Marriott Guest Services Desk is available to answer your questions regarding the local area and to make restaurant reservations from 6:00 am - 11:00 pm daily and is located in the Marriott Tower Main Lobby.

The Kansas City Convention and Visitors Bureau will also have an information desk to answer questions and to make restaurant reservations in Room 4100 at the Convention Center.

Saturday          2:00 pm - 6:00 pm
Sunday - Tuesday  8:00 am - 5:00 pm

Restaurants
Kansas City Marriott Downtown
Seattle Roast, located in the Marriott Tower Main Lobby—serves coffee, specialty coffees, juices, bottled water, and Krispy Kreme doughnuts, Monday through Friday, 6:00 am to approximately 10:00 am and Saturday and Sunday, beginning at 7:00 am.

12th Street Lounge, located in the Marriott Tower Main Lobby—Open for cocktails and light dinner fare.
Lilly’s Restaurant, located in the Marriott Tower Main Lobby—Traditional American favorites, open for breakfast, lunch, and dinner.

Pam-Pam Restaurant, located in the Muehlebach Tower—Casual atmosphere with counter service—serves traditional American food. Hours based on occupancy.

Muehlebach Lobby Bar, located in the Muehlebach Tower—serves beverages. Open at 4:30 p.m. daily, based on occupancy.

Room Service, 6:00 am to midnight.

For further information on local restaurants, go to http://www.opentable.com.

Concession Stand
Outside C-4100
Breakfast and lunch items will be available for purchase at the Concession Stand Sunday - Tuesday, 8:00 am - 2:00 pm.

Courtesy Shuttles
Courtesy Shuttles for those who have difficulty walking will be available approximately every 15 minutes from the Wyandotte Street Exit of the Muehlebach Tower Lobby at the Marriott, Lobby 400, and Lobby 200 at the Convention Center during the following hours:

Saturday 1:30 pm - 6:30 pm
Sunday 6:30 am - 8:00 pm
Monday 6:00 am - 7:00 pm
Tuesday 6:30 am - 9:00 pm
Wednesday 6:30 am - 7:00 pm

Transportation Around Town
Transportation information cards will be available at the ACI Registration Desk in Room 4100 at the Convention Center and at the ACI Kansas and Missouri Chapters Desk in the Marriott Tower Main Lobby. Be sure to pick one up and carry it with you during the convention!

Taxis are available to any location requested. Be sure to arrange for your taxi in advance! Ask the doorman at the Marriott to assist you or call one of the taxi companies listed on the transportation information cards.

The Metro Area Express (MAX) shuttles visitors to the City Market, Brookside Plaza, Liberty Memorial, Union Station, Country Club Plaza, and Crown Center. A $1 fee allows you to ride as many times as you
like within two hours. Day passes are available for $3 and are valid until midnight the day of purchase. For schedules, frequency, and stop locations, please go to www.kcata.org or call 816-221-0660 Monday through Friday 6:00 am - 7:00 pm and Saturday 8:00 am - 5:00 pm.

Airport Transportation
Schedule your return transportation through KCI Shuttle in advance by going to www.kctg.com. You must use the group code 511ACI to receive the group discount. Note: Reservations cannot be accepted over the phone.

Schedule Changes
Cancellations, additions, and location changes in the convention schedule will be posted daily outside Room C-4100 and at the ACI Missouri and Kansas Chapters Desk in the Marriott Tower Main Lobby.

Speaker Ready Room C-4202B
The Speaker Ready Room will be open to moderators, speakers, and Committee Chairs during the following hours for your presentation and copying needs.

- Friday: 12:00 pm - 7:00 pm
- Saturday - Tuesday: 7:00 am - 7:00 pm
- Wednesday: 7:00 am - 5:00 pm

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

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

Walkway to Convention Center
The Marriott and Convention Center are connected via an underground walkway. From the Marriott Tower Main Lobby, cross the hotel driveway and take the elevator down to Level 2. From the Muehlebach Tower Lobby, take the stairs or elevator down to the underground walkway. Follow the signs to the Convention Center.

Future Convention Information
Stop by the ACI Carolinas Chapter Desk located in the Marriott Tower Main Lobby for information about the Spring 2006 Convention in Charlotte, NC.

If you would like to receive information for future ACI conventions via e-mail, please e-mail your name to conventions@concrete.org.
ACI Certification 1980-2005

Celebrating 25 years

Since 1980, with the goal to improve the quality of concrete construction, ACI Certification has tested over 250,000 technicians, inspectors, and craftsmen.

Thank you to all of the local sponsoring groups, examiners, committee members and volunteers, past and present, who have made this possible.
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<td>M-Harvest</td>
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<td><strong>Marriott Tower, Level 2</strong></td>
<td></td>
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<td>Count Basie Ballroom</td>
<td>M-Basie Blrn</td>
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<tr>
<td>Basie A</td>
<td>M-Basie A</td>
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<tr>
<td>Basie A1</td>
<td>M-Basie A1</td>
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<tr>
<td>Basie B</td>
<td>M-Basie B</td>
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<tr>
<td>Basie B1</td>
<td>M-Basie B1</td>
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<tr>
<td>Basie B&amp;B1</td>
<td>M-Basie BB1</td>
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<td>Basie C</td>
<td>M-Basie C</td>
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<tr>
<td>Basie C1</td>
<td>M-Basie C1</td>
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<td>M-Basie CC1</td>
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<td>Big Joe Turner B</td>
<td>M-Turner B</td>
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<td>Lester Young A</td>
<td>M-Young A</td>
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<tr>
<td>Lester Young B</td>
<td>M-Young B</td>
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<tr>
<td>Jay McShann A</td>
<td>M-McShann A</td>
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<tr>
<td>Jay McShann B</td>
<td>M-McShann B</td>
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<tr>
<td>Andy Kirk A</td>
<td>M-Kirk A</td>
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<tr>
<td>Andy Kirk B</td>
<td>M-Kirk B</td>
</tr>
<tr>
<td>Julia Lee A</td>
<td>M-Lee A</td>
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<tr>
<td>Julia Lee B</td>
<td>M-Lee B</td>
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<tr>
<td>Bernie Moten A</td>
<td>M-Moten A</td>
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<tr>
<td>Bernie Moten B</td>
<td>M-Moten B</td>
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<tr>
<td>Mary Lou Williams A</td>
<td>M-Williams A</td>
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<tr>
<td>Mary Lou Williams B</td>
<td>M-Williams B</td>
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<td><strong>Muehlebach Tower, Lobby Level</strong></td>
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<td>M-Truman</td>
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<tr>
<td>Truman A&amp;B</td>
<td>M-Truman A</td>
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<tr>
<td>Truman A</td>
<td>M-Truman B</td>
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<tr>
<td>Truman B</td>
<td>M-Colonial</td>
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<td>Colonial Ballroom</td>
<td>M-Colonial</td>
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<td>Imperial Ballroom</td>
<td>M-Imperial</td>
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<tr>
<td><strong>Muehlebach Tower, Lower Level</strong></td>
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<tr>
<td>Barney Allis Lobby</td>
<td>M-Barney Allis</td>
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<tr>
<td>Tea Room</td>
<td>M-Tea</td>
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Kansas City Marriott Downtown—Muehlebach Tower

Muehlebach Lobby

Lobby Bar

Prefunction Area

Truman Room

Colonial Ballroom

Imperial Ballroom

Lower Level

Pam Pam Restaurant

Barney Allis Lobby

Tea Room

Royal Exhibit Hall
Where's That Meeting Room?

C=Convention Center

**Convention Center, Level 1**

Lobby 400
4100

**Convention Center, Level 2**

Lobby 200
2101
2102A
2102B
2103A
2103B
2103C
2104A
2104B
2105
2201
2202
2203
2204
2205
2206
2207
2208
2209
2210
2211
2212
2213
2214
2215A
2215B
2215C
4201A
4201B
4202A
4202B
4203A
4203B
4204A
4204B

**Abbreviated Name**

C-Lobby 400
C-2100

C-Lobby 200
C-2101
C-2102A
C-2102B
C-2103A
C-2103B
C-2103C
C-2104A
C-2104B
C-2105
C-2201
C-2202
C-2203
C-2204
C-2205
C-2206
C-2207
C-2208
C-2209
C-2210
C-2211
C-2212
C-2213
C-2214
C-2215A
C-2215B
C-2215C
C-4201A
C-4201B
C-4202A
C-4202B
C-4203A
C-4203B
C-4204A
C-4204B
Where's That Meeting Room?

C=Convention Center—continued

Convention Center, Level 3

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<tr>
<th>Room</th>
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<td>4300A</td>
<td>C-4300A</td>
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<td>4300B</td>
<td>C-4300B</td>
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<tr>
<td>4300C</td>
<td>C-4300C</td>
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<tr>
<td>4300D</td>
<td>C-4300D</td>
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<tr>
<td>4300E</td>
<td>C-4300E</td>
</tr>
<tr>
<td>4300F</td>
<td>C-4300F</td>
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<tr>
<td>4300G</td>
<td>C-4300G</td>
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<tr>
<td>4300H</td>
<td>C-4300H</td>
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</tbody>
</table>
Kansas City Convention Center—Conference Center
Level 1

Central Street

Stairs
Restrooms
Stairs

Elevator

C-4100
ACI Registration
Exhibits
Bookstore
Cyber Cafe
Concession Stand
Coffee Breaks

Lobby 400

Escalators

14th Street

Restrooms
Stairs

Stairs

Wyandotte Street
Kansas City Convention Center—Conference Center
Level 3
The American Concrete Institute thanks all exhibitors for their participation and willingness to relocate to Kansas City!

**Exhibit Hours**

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<th>Day</th>
<th>Hours</th>
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<td>Saturday</td>
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<td>Sunday</td>
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<td>Monday - Tuesday</td>
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<td>Wednesday</td>
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**American Shotcrete Association**

Booth #39

The American Shotcrete Association (ASA) represents parties interested in the promotion and advancement of the shotcrete method for concrete construction. The ASA offers training for nozzlemen preparing to take the ACI nozzleman certification examination. Its mission is to expand the awareness and use of the shotcrete method of concrete construction.

**AMERISAFE**

Booth #10

AMERISAFE is an “A-rated” provider of Workers’ Comp coverage. We specialize in the logging, transportation, construction, oil & gas, excavation, and agri-business industries. Please visit our website at [www.amerisafe.com](http://www.amerisafe.com) or contact us by e-mail at aiic-mktg@amerisafe.com.

**Boral Materials Technology**

Booth #14

Boral Material Technologies is a major processor and marketer of coal combustion products in the United States. With over 40 years of marketing experience, Boral is committed to supplying quality products broadly supported with skilled technical sales professionals. To meet both our customers’ present and future needs with coal combustion products, Boral continues its commitment to customer-based research and development and broad-based marketing programs.

**Burgess Pigment Co.**

Booth #36

Introducing OPTIPOZZ, a flash calcined specialty pozzolan, or supplementary cementing material, for increased early compressive strength, flexural strength, reduced cracking & shrinkage, and reduced permeability for improved resistance to chemical and environmental attacks. With a particle size smaller than cement, but larger than silica fume, OPTIPOZZ’s creamy texture gives easier free-form finishing and improved trowelability. Please request literature or samples through our website at [www.burgesspigment.com](http://www.burgesspigment.com), or contact us by e-mail at info@burgesspigment.com.

Exhibitor listing as of 10/14/05
Exhibitors

Construction Materials Engineering Council, Inc.  Booth #15
Construction Materials Engineering Council, Inc., is a not-for-profit organization whose goal is to improve the quality of the production, inspection, and testing of construction materials through the accreditation, education, and certification programs it provides. CMEC was founded in June 1983, and is now recognized both nationally and internationally for its accreditation and education programs.

Dayton Superior Corp.  Booth #21
Dayton Superior Corp. is a leader in the business of construction solutions. Under our family of trusted brands, Dayton provides pioneering products and dependable customer service for the concrete, masonry, and paving industry. Through integration of innovative and reliable products under unique brands such as Dayton, AHT, Symons, Dur-O-Wal, Conspec, Burke by Edoco, and Superior Decorative, Dayton Superior is a business built upon solutions.

Decon USA, Inc.  Booth #13
Decon USA, Inc.'s studrails are commonly used in post-tensioned slabs with direct coating on columns. They are a proven cost-effective solution to punching shear. Other products are Macalloy Tension Rod System and Quaketie.

Degussa Admixtures, Inc.  Booth #16
Degussa Admixtures, Inc., provides industry-leading admixtures for use in improving the aesthetics, placeability, workability, durability, performance, and overall benefits of value-added concrete. Examples of Master Builders brand admixtures and programs that offer great contractor benefits include CHROMIX color-conditioned concrete, rheodynamic self-consolidating concrete (SCC), 4x4 concrete, and liquid sand.

EnergyEdge LLC  Booth #1
EnergyEdge forms, insulates, and finishes slab-on-grade construction. The EnergyEdge rail is an extruded PVC “E” channel that protects reclaimed insulation and provides a finished surface at the perimeter. The EnergyEdge brace provides support for the EnergyEdge rail and steel reinforcing. EnergyEdge satisfies current Energy Codes and helps qualify for LEEDs.

Exhibitor listing as of 10/14/05
24
Engius/Spa Steel, Inc.          Booth #18 & #19
Engius develops and distributes state-of-the-art concrete testing equipment. The company's flagship product, the intelliRock maturity and temperature profiling system, allows concrete strength and temperature gradients to be monitored in real-time. Engius also provides ThermoCure II and EZ Cure specimen curing boxes, and LOK/CAPO pullout systems.

Epro Services, Inc.            Booth #30
Our waterproofing and moisture protection systems offer comprehensive and unique systemized solutions for the commercial and residential construction industries for both below grade and above grade. The systems feature innovative, high-performance products and high-productivity application methods.

Essroc Italceimenti Group       Booth #6
At Your Service... Essroc Italceimenti Group and its subsidiary AXIM Concrete Technologies are proud to participate in the American Concrete Institute's Fall Convention. Essroc is a leading North American cement producer. As another integral component of the ESSROC family, Axim Concrete Technologies helps lead the way toward total customer satisfaction. Axim is Essroc’s Chemical Admixtures manufacturing business that enhances cement and concrete performance. Essroc Italceimenti Group provides innovative solutions for today's customer needs. Please visit us at www.Essroc.com and www.aximconcrete.com.

Euclid Chemical Co.            Booth #28
The Euclid Chemical Co. provides concrete specialty products throughout the United States and worldwide. They include admixtures, curing compounds, floor and slab hardeners, treatments, repair materials, corrosion inhibitors, and solutions.

FORTA Corp.                   Booth #25
FORTA continues to be the most respected name in the synthetic fiber industry. From its revolutionary beginning in Grove City, Pennsylvania, FORTA Corp. has grown to become a worldwide leader in synthetic fiber research and development. From a single grade of fiber, FORTA has expanded their product line to include an entire family of fibers—tailored to specific applications and demands of the international concrete community. Coupled with a dedicated and knowledgeable management team, staff, and workforce, FORTA Corp. will continue to lead the way in building a better concrete future.

Exhibitor listing as of 10/14/05
Exhibitors

Germann Instruments, Inc.  Booth #37 & #38
Germann Instruments, Inc., are developers and manufacturers of nondestructive testing equipment for durability of new structures, service life estimation, structural integrity fast-track construction, corrosion investigation, repair quality, and monitoring of reinforced concrete structures.

Grace Construction Products  Booth #17

ISIS Canada Research Network  Booth #7
ISIS Canada Research Network was established in 1995 to provide civil engineers with smarter ways to build, repair and monitor structures using high-strength, non-corroding, fiber reinforced polymers (FRPs) and fiber optic sensors (FOSs). It was created by the federal Networks of Centres of Excellence (NCE) program and encompasses 14 Canadian universities.

Lafarge North America  Booth #5
Lafarge North America is the U.S. and Canada’s largest diversified supplier of construction materials such as cement and cement-related products, ready mixed concrete, gypsum wallboard, aggregates, asphalt, and concrete products. The company’s materials are used in residential, commercial, institutional, and public works construction across the U.S. and Canada.

Lehigh Cement Co.  Booth #20
Lehigh Cement Co. has served the construction industry in North America for more than 100 years as a producer of high quality portland, blended, and specialty cements and construction materials. The White Cement Division of Lehigh and its affiliates supply white cement to customers throughout the United States and Canada.

Exhibitor listing as of 10/14/05

26
Exhibitors

Nox-Crete Products Group
Booth #29
Nox-Crete Products Group is celebrating its 50th anniversary as a worldwide manufacturer of concrete construction chemicals. Selected key product lines include tilt-up bondbreakers, floor hardeners, sealers and polishes, crack control joint fillers, exterior water repellent coatings, decorative sealers and stains, architectural form release agents, and patching materials.

Olson Engineering, Inc.
Booth #9
Olson Engineering, Inc., provides nondestructive testing and evaluation for the construction and industrial communities. Specializing in internal condition assessment, geophysical and vibration engineering, Olson Engineering develops and manufactures NDT&E instrumentation for the construction and industrial communities. Visit us at our booth for more details.

Omya Canada, Inc.
Booth #11
Omya is the worldwide leader in high quality calcium carbonate. We promote the usage of fine calcium carbonate fillers (new mineral admixture) to optimize the particle packing of a concrete mix design. It improves green strength, finishes, fluidity, and workability of the mix, and it reduces excessive bleeding and segregation. Savings can be achieved through cementitious content reduction.

Operative Plasterers’ and Cement Masons’ International Association
Booth #4
Union plasterers and cement masons are highly regarded for their proud tradition, superior training, skilled craftsmanship, and job safety. In 1864, plasterers and cement masons founded the first Building Trades Union. Today’s OPCMIA proudly represents men and women working in the plastering and cement mason trades throughout the U.S. and Canada.

Prism Pigments
Booth #27
Our world is colorful, and we would like to color your world too. With 14 years of solid service in the iron oxide pigment business, we know our color. We pride ourselves on “color that’s made to order,” giving you unlimited options and unmatched possibilities.

Exhibitor listing as of 10/14/05
Exhibitors

PROCEQ USA, Inc.  Booth #8
PROCEQ’s concrete testing instruments have long been recognized for their high quality and precision. From their beginnings as the original marketer of the Schmidt concrete test hammer, PROCEQ has broadened its line into the most extensive offering of nondestructive concrete testing instruments available today. Products on display at this year’s exhibit will include instruments for concrete strength determination, rebar location, corrosion analysis, void/crack detection, permeability, and bond/pull-out strengths.

QuakeWrap, Inc.  Booth #26
QuakeWrap, Inc., is a global supplier of fiber reinforced polymer (FRP) products for the repair and strengthening of structures. We offer turnkey solutions, including design supply of materials, and installations, with a strengthening power twice that of steel. Our retrofit products have been featured on the History Channel.

Rampart Hydro Services, Inc.  Booth #23
Rampart Hydro Services operates the largest fleet of ultra-high pressure (UHP) hydrodemolition and hydrocleaning units in the world. Our units operate at 36,000 psi and 32 gpm. Ultra-high pressure hydrodemolition uses less water, is environmentally friendly, provides a superior bond, and is fast and cost effective. Rampart has used hydrodemolition and hydrocleaning on bridge surfaces and substructures, dams, tunnels, and parking garages. Rampart now offers complete vacuum cleanup of the water and debris creating dry hydrodemolition. We look forward to helping you with your demanding projects.

SI Concrete Systems  Booth #24
SI Concrete Systems is the global leader in fiber reinforced concrete solutions offering the leading brands of Fibermesh® synthetic fibers, Novocon® steel fibers, and Novomesh® engineered fiber blended systems. We envision fiber reinforced concrete becoming the standard solution to the engineering and design community for concrete challenges in targeted applications. Our primary markets of emphasis are residential, commercial, industrial floors, underground, precast, and transportation.
Sika Corp.  
Sika Corp. Construction Products Division of 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, specialty mortars, epoxy resins, structural strengthening systems, grouts, anchoring adhesives, overlays, and protective coatings. Full service sales and technical offices support customers nationwide. Visit the Sika Corp. Construction Products Division website at [www.sikausa.com](http://www.sikausa.com).

Silica Fume Association  
The Silica Fume Association, through a cooperative agreement with the Federal Highway Administration, provides technology transfer for implementing the use of high-performance concrete in our nation's transportation infrastructure.

Slag Cement Association  
The Slag Cement Association represents producers of slag cement, a recovered industrial product that can partially replace portland cement in concrete. Slag cement improves concrete strength and durability. It also reduces the embodied energy and greenhouse gas associated with a concrete mixture.

TNO Diana  
DIANA is a well proven and tested software with a reputation for handling the most difficult technical problems relating to design and assessment activities in concrete, steel, soil, rock, and structure-soil interaction. The use of DIANA will minimize project risks and reduce the cost of conservatism by providing reliable, accurate, and relevant results.

Vector Corrosion Technologies  
Vector Corrosion Technologies specializes in products and services for extending the service life of concrete structures subject to deterioration caused by corrosion of the reinforcing steel and alkali-silica reaction. Vector's services include concrete condition/corrosion testing, and the supply and installation of the appropriate concrete repair and corrosion protection system.

Exhibitor listing as of 10/14/05

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Exhibitors

Vitro Minerals  
Vitro Minerals specializes in advanced pozzolans for high-performance concrete applications including white cement concrete and building products used for architectural panels, cast stones, synthetic stone veneers, roofing tiles, mortars, stucco, grouts, and other white and tinted concrete decorative products. These high-performance white pozzolans are especially desirable in white and colored concrete to add long-term strength and improve durability.
Special Events
Sunday, November 6, 2005

First-Time Attendee Orientation  M-Lee B
8:00 am - 9:00 am
Sponsored by the Convention Committee

First-time convention attendees are invited to join Rita Oglesby, Past Chair of the Convention Committee, to get acquainted with committee representatives and learn what an ACI convention has to offer. A continental breakfast will be served.

Student Concrete Cube Competition  C-4300B
1:00 pm - 5:00 pm
Hosted by Committee E 801, and the ACI Missouri and Kansas Chapters

Program Coordinator: John J. Myers

The objective of this competition is to design, construct, and test a concrete structure reinforced with fiber-reinforced polymer (FRP) bars to achieve the optimal load-to-weight ratio, predict the ultimate load, and predict the load that will result in a piston deflection of 2.5 mm (0.1 inch). Come cheer for your favorite team!

During the competition ACI Concrete Projects Competition First Place Winner 2LT Eileen Stiffey, United States Military Academy, will present “Lightweight Concrete Modulus of Elasticity.”

Opening Session & The Lewis H. Tuthill Lecture Series  C-4300E-H
5:15 pm - 6:30 pm

The Opening Session officially kicks off the convention. The Lewis H. Tuthill Lecture Series will be presented by George C. Hoff, who will present: “Pushing the Envelope—An Overview of the New Technology Throughout the Industry.” ACI Chapter officers and various special guests will be recognized during the evening. The ACI Distinguished Achievement Award will be presented to the Concrete and Aggregate Association of Louisiana (CAAL) for their outstanding contributions to the concrete industry.
Special Events
Sunday, November 6, 2005

Opening Reception C-4100
following the Opening Session—approximately 6:30 pm - 7:30 pm
Sponsored by ACI

Meet your colleagues, ACI friends, and exhibitors for a beverage from the cash bar and a light snack before heading out to dinner at one of Kansas City’s fantastic restaurants. Please note: Beverage tickets for events with cash bars must be paid for with cash and cannot be charged to a credit card.

FRPRCS-7 Symposium Opening Reception and Poster Session
M-Truman
7:30 pm - 9:00 pm
Sponsored by Committee 440

FRPRCS-7 welcomes a global concrete community and conference attendees to an opening reception. This event provides attendees with the opportunity to network with colleagues while viewing the latest advances using FRP composites and concrete in a special Poster Session. Attendees can meet with the presenters as well as other researchers and practitioners and exchange professional viewpoints in a casual atmosphere.

Hot Topic Session—Can Concrete Survive Blast and Fire? M-Basie CC1
7:30 pm - 10:00 pm
Session Moderator: H.S. Lew

Due to the terrorist acts of 9-11-01, many existing structures are being retrofitted and new structures designed to be better able to resist blast and fire through the use of concrete. This Hot Topic Session, sponsored by the Hot Topic Committee, will present: 1) how to quantify blast and fire loads on concrete structures; 2) factors that should be considered in the design and detailing of new structures and retrofit of existing structures; and 3) modeling of concrete structures under blast and fire loading.
Special Events
Monday, November 7, 2005

✓ Student Lunch
$46 U.S. per person
12:00 pm - 2:00 pm
Hosted by Committee E 801

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

Topic: The Scope of the Concrete Industry

Much of the excitement and fascination of our industry originates in its mind-boggling scope. We convert earth materials that were formed millions of years ago into a versatile building material that begins to react in seconds, can set in minutes, gains strength in hours, carries design loads in days (or less), and can perform its intended function for centuries. We measure the physical dimensions of concrete projects in kilometers, individual members in tons of meters, the human dimension in meters, coarse aggregates and rebar in centimeters, sand in millimeters, and features of hardened cement paste in nanometers. As ACI membership proves, there is time and space and a unique scale for all of us.

Following lunch, awards will be given to the first, second, and third place winners of the Student Concrete Cube Competition.

Tickets may be purchased at the ACI Registration Desk until 24 hours prior to the event. Please notify the ACI Registration Desk if you have any dietary restrictions.

Women in ACI Reception
5:00 pm-6:00 pm

Gather with friends and colleagues to enjoy light refreshments and good conversation. All are invited to attend this reception sponsored by Hanley Wood.
Special Events  
Monday, November 7, 2005

✓ Ned H. Burns Reception  
M-Basie BB1
5:00 pm - 6:30 pm  
Advance registration required (150 people maximum)
Sponsored by ACI Committee 423

A member of the National Academy of Engineering, Burns has been a true pioneer in prestressed concrete and has made significant contributions as an engineer, researcher, and educator. As a professor at the University of Texas at Austin and an ACI Fellow, Burns has also played a significant role in shaping the careers of many current and past ACI members. Please join in this celebration honoring his extensive contributions to advancements in the design and construction of prestressed concrete structures over the past five decades.

123 Forum—Should the Concrete Materials Specifications be Rewritten?  
M-Basie CC1
7:30 pm - 10:00 pm  
Session Moderator: Mohammad S. Khan

The debate, sponsored by Committee 123, is whether we should rewrite concrete materials specifications. In this forum, we will examine whether it is non-compliance to specifications that has lead to concrete quality problems or whether the specifications themselves are the problem. Our panelists in Kansas City will address these and many other questions and, after discussing the subject with them, you should be able to make an assessment whether the concrete materials specifications should be rewritten.

✓ Registration required
Special Events  
Tuesday, November 8, 2005

✓ Contractors' Day Lunch  
12:00 pm - 2:00 pm  
$48 U.S. per person

Hosted by the ACI Kansas and Missouri Chapters and the Construction Liaison Committee

Speaker: Neal Burnett  
Operations Manager  
Baker Concrete Construction, Inc.  
Indianapolis, IN

Topic: Conrad: A Five Star Concrete Structure

The discussion will consist of exploring construction difficulties encountered, as well as a systems approach with regard to site logistics, with the construction of the Conrad Indianapolis Hotel.

Tickets may be purchased at the ACI Registration Desk until 24 hours prior to the event. Please notify the ACI Registration Desk if you have any dietary restrictions.

✓ Separate fee required
Special Events
Tuesday, November 8, 2005

Faculty Network Reception  M-Harvest
5:00 pm - 6:00 pm

Hosted by Committee E 803, this reception offers informal networking and idea exchange for all faculty members and students attending the ACI Convention. A cash bar and light hors d'oeuvres will be available.

Concrete Mixer  C-2103
6:30 pm - 8:00 pm

Sponsored by ACI

Welcome to Kansas City! Enjoy a taste of Kansas City including some terrific barbecue while networking and conversing with your friends and colleagues.

Please use your drink tickets in your registration packet or cash to purchase beverages.
Special Events
Wednesday, November 9, 2005

✓ International Luncheon
12:00 pm - 2:00 pm
$54 U.S. per person

Hosted by the International Committee

Speaker: William F. Baker
Partner, Structural and Civil Engineering
Skidmore, Owings & Merrill LLP
Chicago, IL

Topic: Uniqueness of the Burj Dubai—Design to Construction

At over 2000 feet high and located in the United Arab Emirates, the Burj Dubai (Tower Dubai) will be the world’s tallest structure when completed. The final height of this super skyscraper will certainly exceed the current record holder—the 1671 ft. tall Taipei 101 building. Construction of the tower commenced in the fall of 2003, and is scheduled to be completed in 2008. The 3,000,000 sq. ft. building will include residential, commercial, hotel, entertainment, and retail facilities.

The reinforced concrete tower has a “Y” shape to dramatically reduce the wind forces on the tower, keeping the structure simple and fostering constructibility. The Y-shaped floor plan also maximizes views of the Arabian Gulf. As the principal structural designer, Mr. Baker will discuss many unique challenges of the design and construction of the Burj Dubai.

Tickets may be purchased at the ACI Registration Desk until 24 hours prior to the event. Please notify the ACI Registration Desk if you have any dietary restrictions.

✓ Separate fee required
Guest Events and Tours
Sunday, November 6, 2005

Tours
Tickets for tours may be purchased at the ACI Registration Desk in Room 4100 of the Convention Center during posted registration hours.

Guest Overview

M-Harvest
8:30 am - 9:30 am

Acquaint yourself with the week ahead. Also, get a sneak peek at the guest programs for the ACI Spring 2006 Convention in Charlotte, NC, and the ACI Fall 2006 Convention in Denver, CO.

✔ Benton House & Nelson-Atkins Museum
9:30 am - 2:30 pm
$68 U.S. per person
Includes lunch, guided tour, and transportation
22 people minimum, 44 people maximum

The first stop of the day will be the Victorian-style house of the late Thomas Hart Benton, Missouri’s most renowned 20th century artist. The house, which is on the National Register of Historic Places, was his home from 1939 until his death in 1975 and contains many of Benton’s personal belongings.

Next, it’s off to the famous Nelson-Atkins Museum of Art, considered the most distinguished of museums between the Great Lakes and the Pacific Ocean. A private, docent-guided tour will highlight the museum’s prestigious collection of American Art.

You will enjoy lunch in the Museum’s beautiful Rozzelle Court Restaurant. Fashioned after an open-air Italian courtyard, the Rozzelle Court offers a light and relaxing setting for a midday repast.

✔ Separate fee required
All tours will depart from the Marriott Tower Main Lobby of the Kansas City Marriott Downtown.
Guest Events and Tours
Monday, November 7, 2005

✓ Steamboat Arabia Museum & Country Club Plaza
9:00 am - 2:00 pm
$52 U.S. per person
Includes guided tour, transportation, and admission fees
22 people minimum, 44 people maximum

Throughout this tour, various attractions and monuments will be highlighted, including: the Lewis & Clark point overlooking the Missouri River; Union Station; Liberty Memorial; Westport, where the California, Santa Fe, and Oregon Trails intersected; and the Country Club Plaza with its beautiful J.C. Nichols Fountain. Next, you'll take a journey back through time—to 1856 and the Steamboat "Arabia" Museum.

Recovered in 1989, her cargo, which was preserved by river mud through the years, included china, jewelry, clothing, tools, firearms, spirits, bottled fruits, boots and shoes, plus hundreds of other items—all still in pristine condition and beautifully displayed.

Lunch (on your own) and the remainder of the tour will be spent at the famous Country Club Plaza. Modeled after Seville, Spain, by developer J.C. Nichols, the Country Club Plaza was constructed in the late 1920s. Encompassing over 55 acres, the Plaza is home to more than 180 upscale shops and restaurants, including Saks Fifth Avenue, Mark Shale, Polo, J. Crew, Barnes & Noble, The Sharper Image, Betsey Johnson, and Brooks Brothers. Wonderful dining is available at Capitol Grill, Ruth's Chris Steakhouse, the Cheesecake Factory, George Brett's, PF Chang's, McCormick & Schmicks, Brio Tuscan Grille, Figlio and Buca di Beppo. Guests will have ample time to visit their choice of the many specialty and upscale stores, boutiques, and restaurants before the conclusion of the tour.

Guest Tea and Open House
Muehlebach Tower M-1856
3:00 pm - 5:00 pm

Please join Mrs. Sharon Cagley for tea between the hours of 3:00 pm and 5:00 pm in the Truman Suite, Room 1856, located in the Muehlebach Tower.

✓ Separate fee required
All tours will depart from the Marriott Tower Main Lobby of the Kansas City Marriott Downtown.
Guest Events and Tours
Tuesday, November 8, 2005

✓ Harry S. Truman Presidential Library & Hometown
9:00 am - 3:00 pm
$84 U.S. per person
Includes lunch, guided tour, transportation, and admission fees
22 people minimum, 44 people maximum

We begin our tour with a short drive to the Harry S. Truman Presidential Library in Independence, Missouri, the home of our 33rd President of the United States. The Truman Library is one of only eight Presidential libraries in the U.S. administered by the National Archives and Records Administration. In addition to visiting the Truman Library, we’ll also have the opportunity to view not only the Old Independence Square and Courthouse where Harry's office as county judge in 1933 was located, but also the “Summer White House” of Harry and Bess Truman.

From there it is a short drive to lunch at the Webster House. The Webster House is a lovingly restored former schoolhouse that was built in 1885. In the striking Romanesque Revival Style, it is believed to be the oldest standing Kansas City Public School structure and is listed on the National Register of Historic Places. Since its closing in 1932, Proprietor Shirley Bush Helzberg has now restored the building to its current beauty, having received numerous awards for the restoration and design. In 2002 it reopened its doors to the Webster House Antiques and Restaurant.

✓ Separate fee required
All tours will depart from the Marriott Tower Main Lobby of the Kansas City Marriott Downtown.
Guest Events and Tours
Wednesday, November 9, 2005

✓ Toy & Miniature Museum and Kemper Museum of Contemporary Art
9:00 am - 2:00 pm
$82 U.S. per person
Includes lunch, guided tour, transportation, and admission fees
22 people minimum, 44 people maximum

Our excursion today begins with views of Country Club Plaza and the many fountains throughout downtown. The first stop will be the Toy & Miniature Museum where you will find miniatures, toys, dolls, and dollhouses from every generation, dating from the 19th century to the present. The antique toys offer a nostalgic look at craftsmanship from years gone by – ranging from the very simple to the very complex. You also won’t want to miss the always-changing temporary exhibit. Take a trip back to your childhood and enjoy all the wonders of youth.

Enjoy lunch at Café Sebastian and the balance of the afternoon at the Kemper Museum of Contemporary Art where annual programs of temporary exhibitions feature site-specific installations, performance work and artwork using contemporary technologies such as solar power, lasers, and computers by international artists working in all media.

The museum’s permanent collection includes works by such artists as Jasper Johns, Helen Frankenthaler, Frank Stella, Robert Rauschenberg, David Hockney, Robert Motherwell, Nancy Graves, Wayne Thiebaud, Grace Hartigan, William Wegman, Red Grooms, Georgia O’Keeffe, Christopher Brown, Willem de Kooning, and Robert Mapplethorpe.

✓ Separate fee required
All tours will depart from the Marriott Tower Main Lobby of the Kansas City Marriott Downtown.
Program at a Glance

All schedule and location changes will be posted daily outside Room C-4100.

C=Convention Center  M=Marriott

Friday, November 4, 2005

6:00 pm - 9:00 pm
TAC   Technical Activities M1  C-4203B

Saturday, November 5, 2005

7:00 am - 6:00 pm
TAC   Technical Activities M2  C-4300A

8:00 am - 9:00 am
TAC-RG1  TAC Review Group 1 M1  C-4300A
TAC-RG2  TAC Review Group 2 M1  C-2205
TAC-RG3  TAC Review Group 3 M1  C-2204

8:00 am - 5:00 pm
EAC   Educational Activities M1  M-McShann A

7:30 pm - 10:00 pm
347-A  Formwork-Specification  M-McShann A

Sunday, November 6, 2005

7:00 am - 9:00 am
TAC-TG on ATA  TAC Task Group on ATA Review  C-2207

7:00 am - 1:00 pm
TAC   Technical Activities-M3  C-4300C

8:00 am - 9:00 am
TAC-RG1  TAC Review Group 1 M2  C-4300C
TAC-RG2  TAC Review Group 2 M2  C-2209
TAC-RG3  TAC Review Group 3 M2  C-2210
First-Time Attendee Orientation  M-Lee B

8:00 am - 10:00 am
E 801  Student Activities  M-Kirk B
440-C  FRP-State of the Art  C-4300A

8:30 am - 10:00 am
IC-Pub  International-Publications/Website  M-Young B
301   Specifications M1  C-2215A
341-A  Equate Res Brdgs-Columns  C-2213
373   Prestressed/Tendons  C-2203
546-B  Repair-Material Selection Guide  C-2202
Program at a Glance

All schedule and location changes will be posted daily outside Room C-4100.

C=Convention Center M=Marriott

Sunday, November 6, 2005—continued

8:30 am - 10:30 am
201-C Durability-Condition Survey C-2206

8:30 am - 11:30 am
CLC Construction Liaison M-Young A
MEMC Membership M-Williams A&B
315-B Detailing-Conductibility C-2204
369 Seismic Rehab C-2201
408 Bond & Development C-2215B

8:30 am - 12:30 pm
551 Tilt-Up C-2205

8:30 am - 1:00 pm
347 Formwork C-2215C

8:30 am - 2:00 pm
376 RLG Containment Structures C-4202B

8:30 am - 5:00 pm
355 Anchorage C-2208

9:00 am - 11:00 am
IC-Conf International-Conferences M-Kirk A

Sessions
9:00 am - 12:00 pm
Innovations in Mass Concrete C-4203
Introducing Concrete Aggregates C-4204A
Recommendations for Load Test Magnitude C-4203B
and Acceptance Criteria for Strength Evaluation
of Existing Concrete Buildings
★ The Architect and Concrete—From Aesthetic C-4204B
Vision to Concrete Reality
Punching Shear in Reinforced Concrete Slabs, Part I C-4202A

10:00 am - 11:30 am
IC-Part International Partnerships Committee M-Young B
341-C Equake Res Brdgs-Retrofit C-2213
342 Bridge Evaluation C-2207
350-C Env Str-Reinf & Devel C-2215A

★ Denotes theme session
### Program at a Glance

All schedule and location changes will be posted daily outside Room C-4100.

C=Convention Center  M=Marriott

**Sunday, November 6, 2005—continued**

<table>
<thead>
<tr>
<th>Time</th>
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<td><strong>10:00 am - 11:30 am—continued</strong></td>
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<tr>
<td>439-B</td>
<td>Steel Reinf-Mechanical Splices</td>
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<tr>
<td>546-A</td>
<td>Repair-Underwater</td>
</tr>
<tr>
<td><strong>10:00 am - 12:00 pm</strong></td>
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</tr>
<tr>
<td>440-H</td>
<td>FRP-Reinforced Concrete</td>
</tr>
<tr>
<td>506-G</td>
<td>Shotcreting-Nozzleman Training</td>
</tr>
<tr>
<td>549-A</td>
<td>Thin Reinforced-Premix GFRC</td>
</tr>
<tr>
<td><strong>10:00 am - 1:00 pm</strong></td>
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<tr>
<td>SCO</td>
<td>Scholarship Council (ConRef)</td>
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<tr>
<td>421</td>
<td>Reinf Slabs</td>
</tr>
<tr>
<td>445-A</td>
<td>Shear &amp; Torsn-Strut &amp; Tie</td>
</tr>
<tr>
<td><strong>10:00 am - 2:00 pm</strong></td>
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<tr>
<td>423</td>
<td>Prestressed</td>
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<tr>
<td><strong>10:00 am - 4:00 pm</strong></td>
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<tr>
<td>ITG-5</td>
<td>Precast Shear Walls for High Seismic Applications</td>
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<tr>
<td><strong>11:00 am - 1:30 pm</strong></td>
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<tr>
<td>335</td>
<td>Composite-Hybrid</td>
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<tr>
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<tr>
<td>C 630-T</td>
<td>Transportation Inspector Cert</td>
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<tr>
<td>E 706</td>
<td>Repair Application Procedures</td>
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<td>HTC</td>
<td>Hot Topic</td>
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<td>221</td>
<td>Aggregates</td>
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<tr>
<td>341-B</td>
<td>Earthquake Res Brdgs-Pier Walls</td>
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<td>345</td>
<td>Bridge Construction</td>
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<tr>
<td>350-SC</td>
<td>Env Str-Steering Comm</td>
</tr>
<tr>
<td>439-C</td>
<td>Steel Reinf-Mech Bar Develop</td>
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<tr>
<td><strong>11:30 am - 2:00 pm</strong></td>
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<tr>
<td>302-TG</td>
<td>Floor Construction Task Group</td>
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<tr>
<td><strong>11:30 am - 2:30 pm</strong></td>
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<tr>
<td>445-B</td>
<td>Shear &amp; Torsn-Seismic Shear</td>
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<td><strong>12:00 pm - 2:00 pm</strong></td>
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<td>440-L</td>
<td>FRP-Durability</td>
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### Program at a Glance

All schedule and location changes will be posted daily outside Room C-4100.

C = Convention Center  
M = Marriott

#### Sunday, November 6, 2005—continued

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Location</th>
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<tbody>
<tr>
<td>12:30 pm - 2:00 pm</td>
<td>343-A Bridge Design</td>
<td>C-2205</td>
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<tr>
<td>12:00 pm - 3:30 pm</td>
<td>549 Thin Reinforced</td>
<td>C-4300D</td>
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<tr>
<td>1:00 pm - 2:30 pm</td>
<td>341-D Equake Res Brdgs-Performance Based Seismic Design</td>
<td>C-2213</td>
</tr>
<tr>
<td>1:00 pm - 3:00 pm</td>
<td>AC-SD Board Advisory Committee on Sustainable Development</td>
<td>M-Moten A &amp; B</td>
</tr>
<tr>
<td></td>
<td>IC-Mem International-Membership</td>
<td>M-Kirk A</td>
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<tr>
<td></td>
<td>445-C Shear &amp; Torsn-Punching Shear</td>
<td>C-2210</td>
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<tr>
<td>1:00 pm - 5:00 pm</td>
<td>ACI/AISC Coordination</td>
<td>C-4300C</td>
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<td>301-A Spec-General Requirements</td>
<td>C-2214</td>
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<td>301-C Spec.-Mixtures, Place, Constr.</td>
<td>C-2201</td>
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<td>301-E Spec-Prestressed</td>
<td>C-2215A</td>
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<td>301-G Spec-Precast Concrete &amp; Tilt-Up Constr</td>
<td>C-2215C</td>
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<td>364-A Rehabilitation-Evaluation</td>
<td>C-2203</td>
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<tr>
<td><strong>Special Event</strong></td>
<td><strong>1:00 pm - 5:00 pm</strong> Student Concrete Cube Competition</td>
<td>C-4300B</td>
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<tr>
<td><strong>1:30 pm - 3:30 pm</strong></td>
<td>506-B Shotcreting-Fiber-Reinforced</td>
<td>C-2206</td>
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<tr>
<td><strong>2:00 pm - 3:30 pm</strong></td>
<td>IC-Cert International-Certification</td>
<td>M-Kirk B</td>
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<td>215 Fatigue</td>
<td>C-4300A</td>
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<tr>
<td><strong>2:00 pm - 5:00 pm</strong></td>
<td>RCC Responsibility</td>
<td>M-Young B</td>
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<td>121 Quality Assurance</td>
<td>C-2201</td>
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<td>305 Hot Weather</td>
<td>C-2101</td>
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<td></td>
<td>315 Detailing</td>
<td>C-2204</td>
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<td></td>
<td>336 Footings</td>
<td>C-2102B</td>
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Program at a Glance

All schedule and location changes will be posted daily outside Room C-4100.

C=Convention Center  M=Marriott

Sunday, November 6, 2005—continued

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<tr>
<th>Time</th>
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<th>Location</th>
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<tbody>
<tr>
<td>2:00 pm</td>
<td>Bridge Design</td>
<td>C-2205</td>
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<tr>
<td>2:00 pm</td>
<td>Joints</td>
<td>C-2102A</td>
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<tr>
<td>2:00 pm</td>
<td>Design for Wind Loads</td>
<td>C-4202B</td>
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<tr>
<td>2:00 pm</td>
<td>Steel Reinf-Wire</td>
<td>C-2212</td>
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<tr>
<td>2:00 pm</td>
<td>Shear &amp; Torsn-SOA Torsion</td>
<td>C-2209</td>
</tr>
</tbody>
</table>

**Sessions**

2:00 pm - 5:00 pm

Emerging Technologies in Civil Infrastructure Applications

State-of-the-Art Practice in Health Monitoring Systems and Data Management for Infrastructure

★ Spice Up Your Concrete with FRP Composites

Innovations in FRP Material Testing and Characterization

Punching Shear in Reinforced Concrete Slabs, Part II

2:30 pm - 5:00 pm

370 Dynamic & Vibratory Effects M1

3:00 pm - 4:30 pm

236-C Material Science-Virtual Concrete

506-D Shotcreting-Swimming Pools

3:00 pm - 5:00 pm

E 601 Seminar Oversight Committee M-Moten A&B

341 Earthquake-Resistant Bridges C-2207

3:30 pm - 5:00 pm

E 701 Materials for Concrete Construction M-Kirk A

IC International Committee M-Williams A&B

232-A Fly Ash-Use of Nat Pozzolans C-4300D

236-B Material Science-Permeation Methods C-4300A

309 Consolidation C-2206

4:00 pm - 5:00 pm

201-A Durability-Sulfate Attack M1 C-2211

★ Denotes theme session
Program at a Glance

All schedule and location changes will be posted daily outside Room C-4100.

C=Convention Center
M=Marriott

Sunday, November 6, 2005—continued

Special Events
5:15 pm - 6:30 pm
Opening Session and The Lewis H. Tuthill Lecture Series
C-4300E-H

6:30 pm (approximately)
Opening Reception
C-4100

6:30 pm - 10:00 pm
ITG-4 High-Strength Concrete for Seismic Applications M1
M-Kirk A

7:00 pm - 9:00 pm
370 Dynamic & Vibratory Effects M2
C-2202

Special Event
7:30 pm - 9:00 pm
FRPRCS-7 Symposium Opening Reception & Poster Session
M-Truman

Session
7:30 pm - 10:00 pm
Hot Topic Session—Can Concrete Survive Blast and Fire?
M-Basie CCI

Monday, November 7, 2005

6:30 am - 8:15 am
Workshop for Technical Committee Chairs (invitation only)
C-4300D

8:00 am - 10:00 am
PUBC Publications
M-Moten A&B

8:30 am - 10:00 am
C 650 Tilt-Up Cert
C-2102A
E 802 Teaching Methods and Educational Materials M-Young B
118 Computers
C-2205
124 Aesthetics
C-4300C
201-A Durability—Sulfate Attack M2
C-4300H
304 Measuring/Mix/Trans/Placing
C-2215A
506-A Shotcreting-Evaluation
C-2206
544-B FRC-Education
C-2214
Program at a Glance

All schedule and location changes will be posted daily outside Room C-4100.

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Monday, November 7, 2005—continued

8:30 am - 10:30 am
ACI 318/ASCE7  ACI 318/ASCE7 Coordination Meeting  C-2212

8:30 am - 11:30 am
C 610  Field Technician Cert  C-2102B
MKTC  Marketing
209  Creep & Shrinkage  M-Williams A&B
237  Self-Consolidating Concrete  C-4202B
311  Inspection  C-2215B
351-A  Equip Fdns-Static Fdns  C-2215C
437  Strength Evaluation  C-2213
524  Plastering  C-2207
546  Repair  C-2208
548-A  Polymers-Overlays  C-4300A

8:30 am - 12:30 pm
374  Seismic Design  C-2209

8:30 am - 1:00 pm
301-B  Spec-Formwork & Rein  C-2202
301-C  Spec-Mixtures, Place, Constr  C-2201
301-D  Spec-Arc, LWC, Mass, Shrinkage  C-2201
301-F  Spec-Industrial Floors  C-2203
301-H  Spec-Architectural Concrete  C-2204
302  Floor Construction  C-4300F

8:30 am - 2:00 pm
307  Chimneys  C-4300G

8:30 am - 6:30 pm
350-D  Env Str-Structural  C-2210
350-E  Env Str-Precast/Prestressed  C-2211

9:00 am - 12:00 pm
362-B  Parking Str-Editorial  C-4300B

Sessions
9:00 am - 12:00 pm

Research in Progress  C-4204B
Ned H. Burns Symposium—Historic Innovations in Prestressed Concrete, Part I  C-4204A
**Program at a Glance**

All schedule and location changes will be posted daily outside Room C-4100.

C=Convention Center  M=Marriott

**Monday, November 7, 2005—continued**

### Sessions—continued

<table>
<thead>
<tr>
<th>Time</th>
<th>Room</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 am - 12:00 pm</td>
<td></td>
<td>* Silica Fume in Concrete—A Spice for Many Purposes, Part I</td>
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<tr>
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<td>Strengthening of Existing Masonry Structures with FRP Systems</td>
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<td>Bond of FRP Bars, Sheets, Laminates, and Anchorages to Concrete</td>
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<tr>
<td>10:00 am - 11:30 am</td>
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<td>E 804 Educational Awards Nomination Committee</td>
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<td>318-S 318 Spanish Translation</td>
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<td>346    CIP Pipe</td>
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<td>10:00 am - 12:00 pm</td>
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<td>365    Service Life</td>
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<td>376-TG RLG Containment Structures-Task Group</td>
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<tr>
<td>10:00 am - 1:00 pm</td>
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<td>207    Mass Concrete</td>
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<td>216    Fire Resistance</td>
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<td>10:00 am - 4:30 pm</td>
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<td>355-TG Anchorage-Task Group</td>
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<tr>
<td>10:30 am - 1:30 pm</td>
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<td>350-B  Env Str-Durability</td>
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<tr>
<td>11:30 am - 1:00 pm</td>
<td></td>
<td>201-D  Durability—Oversight Committee</td>
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<td>334    Shells</td>
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<td></td>
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<td>423/445 Adhoc Grp on Shear in Prestress Conc</td>
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<td></td>
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<td>444    Experimental Analysis</td>
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<td>506-E  Shotcreting-Specifications</td>
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<td>533    Precast Panels</td>
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<td>544-A  FRC-Production &amp; Applications</td>
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<td>552    Cement Grouting</td>
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<tr>
<td>11:30 am - 1:30 pm</td>
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<td>439    Steel Reinforcement</td>
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</table>

* Denotes theme session
Program at a Glance

All schedule and location changes will be posted daily outside Room C-4100.

C=Convention Center  M=Marriott

Monday, November 7, 2005—continued

11:30 am - 2:00 pm
441  Columns  C-4300E

11:30 am - 2:30 pm
447  Finite Element Analysis  C-4300A

12:00 pm - 1:30 pm
201-B  Durability-Sulfate In Soil  C-2214

12:00 pm - 2:00 pm
C 660  Shotcrete Nozzleman Cert  C-2104A
362-A  Parking Str-Standard  C-4300H

Special Event
12:00 pm - 2:00 pm
✓ Student Lunch  C-4300D

12:30 pm - 2:00 pm
548-B  Polymers-Sulfur Concrete  C-2209

1:00 pm - 2:30 pm
E 602  Electronic Delivery Oversight Committee  M-Young B

1:30 pm - 3:30 pm
211-G  Proportioning-Shrinkage  C-2212

2:00 pm - 3:00 pm
Convention Moderator Question & Answer  C-2207

2:00 pm - 3:30 pm
IntAC  Information Technology Advisory Committee  M-Kirk B
122  Energy Conservation  C-2205
231  Early-Age  C-4202B
548-C  Polymers-Str Design & Analysis  C-2203

2:00 pm - 5:00 pm
232  Fly Ash & Natural Pozzolans  C-2209
318-L  International Subcommittee  C-4300B
327  RCC Pavements  C-2102A
349-A&B  Nuclear Str-Design & Materials  C-2215C

✓ Separate fee required

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Program at a Glance

All schedule and location changes will be posted daily outside Room C-4100.

C=Convention Center   M=Marriott

Monday, November 7, 2005—continued

2:00 pm - 5:00 pm—continued

351  Equip Foundations C-2215A
362  Parking Structures C-2204
364  Rehabilitation C-2201
365-A Service Life-Std Model Development C-2213
543  Piles C-2208
544-E FRC-Mechanical Properties C-2214

Sessions

2:00 pm - 5:00 pm

★ Silica Fume in Concrete—A Spice for Many Purposes, Part II C-4202A
History of Concrete C-4204B
Ned H. Burns Symposium—Historic Innovations in Prestressed Concrete, Part II C-4204A
Strengthening of Existing Concrete Structures C-4203A
Using FRP Systems, Part I
Serviceability of FRP Reinforced Concrete Structures C-4203B

2:00 pm - 6:00 pm

445  Shear & Torsion C-2202

2:00 pm - 6:30 pm

212  Chemical Admixtures C-2215B
301  Specifications M2 C-4300E
360  Slabs on Ground C-4300H

2:30 pm - 6:00 pm

506-F Shotcrete-Underground C-2206

3:00 pm - 5:00 pm

211-D Proportioning—High Strength C-2207

Special Event

3:00 pm - 5:00 pm

Guest Tea and Open House M-1856

★ Denotes theme session
## Program at a Glance

All schedule and location changes will be posted daily outside Room C-4100.

**C=Convention Center**  
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### Monday, November 7, 2005—continued

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<th>Session</th>
<th>Location</th>
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<tbody>
<tr>
<td>3:00 pm - 6:00 pm</td>
<td>318-B Code-Reinf/Development M1</td>
<td>C-4300G</td>
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<tr>
<td>3:30 pm - 5:00 pm</td>
<td>214 Strength Tests</td>
<td>C-2205</td>
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<td></td>
<td>224 Cracking</td>
<td>C-4202B</td>
</tr>
<tr>
<td>3:30 pm - 5:30 pm</td>
<td>446 Fracture Mechanics</td>
<td>C-4300A</td>
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<tr>
<td>3:30 pm - 6:30 pm</td>
<td>211-H Proportioning-Self Consolidating</td>
<td>C-2212</td>
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<tr>
<td>4:00 pm - 5:00 pm</td>
<td>548-TG Polymers-TG</td>
<td>C-2203</td>
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<tr>
<td>4:30 pm - 6:30 pm</td>
<td>314 Simplified Design—Buildings</td>
<td>C-4300C</td>
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<tr>
<td>5:00 pm - 6:00 pm</td>
<td>236 Material Science</td>
<td>C-2204</td>
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**Special Event**

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<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
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<tbody>
<tr>
<td>5:00 pm - 6:00 pm</td>
<td>Women in ACI Reception</td>
<td>M-Basie A1</td>
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<tr>
<td>5:00 pm - 6:30 pm</td>
<td>Cert-TG Pervious Concrete Cert-TG</td>
<td>C-2205</td>
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<td>123 Research</td>
<td>C-2208</td>
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<td>350-I Env Str-Education</td>
<td>C-2203</td>
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<td>435 Deflection</td>
<td>C-2213</td>
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<td>440-F FRP-Repair-Strengthening</td>
<td>C-2209</td>
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<td>544-D FRC-Structural Uses</td>
<td>C-2214</td>
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<td>555 Recycled</td>
<td>C-2207</td>
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<tbody>
<tr>
<td>5:00 pm - 6:30 pm</td>
<td>Ned H. Burns Reception</td>
<td>M-Basie BB1</td>
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<tr>
<td>5:00 pm - 7:00 pm</td>
<td>Concrete Construction Practices</td>
<td>M-Young A</td>
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Program at a Glance

All schedule and location changes will be posted daily outside Room C-4100.

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Monday, November 7, 2005—continued

6:30 pm - 10:00 pm
ITG-4  High-Strength Concrete for Seismic Applications M2

Session

7:30 pm - 10:00 pm
123 Forum—Should the Concrete Materials Specifications be Rewritten?

Tuesday, November 8, 2005

7:00 am - 8:30 am
TTCC  TAC Tolerances Coordination Committee C-2202

7:00 am - 9:00 am
TTTC  TAC Technology Transfer C-2203

7:00 am - 12:00 pm
EAC  Educational Activities M2 M-Moten A&B

8:00 am - 10:00 am
230  Soil Cement C-2212
236-A  Material Science-Workability C-2209

8:00 am - 11:00 am
522  Pervious Concrete C-4300E

8:00 am - 11:30 am
515  Protective Systems C-2210

8:30 am - 10:00 am
C 620  Laboratory Tech Cert C-4202B
225  Hydraulic Cements C-2213
318  Building Code M1 C-4300F
325-A  Pavements-Design C-2208

8:30 am - 10:30 am
E 702-TG  Designing Reinforced Concrete Structures-Task Group M-Kirk B
506  Shotcreting C-2205
## Program at a Glance

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**Tuesday, November 8, 2005—continued**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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</thead>
</table>
| 8:30 am - 11:30 am | CAC  Chapter Activities  M-Kirk A  
201  Durability  C-4300B  
306  Cold Weather  C-4300A  
349-C  Nuclear Str-Anchorage  C-2206  
357  Offshore & Marine  C-2215B  
548  Polymers  C-2215A |
| 8:30 am - 2:00 pm   | 117  Tolerances  C-4300C |
| 8:30 am - 6:30 pm   | 350-F  Env Str-Seismic  C-2201 |
| 9:00 am - 12:00 pm  | TRRC  TAC Repair & Rehab  C-2211 |

### Sessions

**9:00 am - 12:00 pm**

- Contractors' Day, Part I  C-4204A  
- Impact of Rebar Constructibility on Project Performance  C-4202A  
- Strengthening of Existing Concrete Structures using FRP Systems, Part II  C-4203A  
- Design and Behavior of Concrete Members Internally Reinforced with FRP  C-4203B  

**9:30 am - 12:30 pm**

- 332-TG1  Residential-Guide  C-2214  

**10:00 am - 11:30 am**

- C 630  Construction Inspector Cert  C-4202B  
- 318-TG1  Code-TG-Min Torsional Reinf  C-2202  
- 325-B  Pavements-Overlays  C-2208  
- 350-H  Env Str-Editorial  C-2209  
- 371  Water Towers  C-2215C  
- 544-F  FRC-Durability  C-2213
Program at a Glance

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Tuesday, November 8, 2005—continued

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<th>Location</th>
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<tbody>
<tr>
<td>10:00 am - 1:00 pm</td>
<td>211-A Proportioning-Editorial</td>
<td>C-2212</td>
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<tr>
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<td>318-TG2 Code-TG-Notation &amp; Editorial</td>
<td>C-2203</td>
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<td>318-TG3 Code-TG-Slender Columns</td>
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<td>318-TG5 Code-TG-Stress Block</td>
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<tr>
<td></td>
<td>318-TG6 Code-TG-Piles</td>
<td>C-4300F</td>
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<tr>
<td>10:30 am - 12:30 pm</td>
<td>332-TG2 Residential-Standard</td>
<td>C-2205</td>
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<tr>
<td>11:30 am - 1:00 pm</td>
<td>CRC Concrete Research Council</td>
<td>M-Kirk A</td>
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<tr>
<td></td>
<td>211-B Proportioning-Lightweight</td>
<td>C-2206</td>
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<tr>
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<td>211-E Proportioning-Evaluation</td>
<td>C-2208</td>
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<td>348 Safety</td>
<td>C-2213</td>
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<tr>
<td>11:30 am - 2:00 pm</td>
<td>550 Precast Structures</td>
<td>C-4300A</td>
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<tr>
<td>11:30 am - 3:30 pm</td>
<td>350-A Env Str-General &amp; Concrete</td>
<td>C-2210</td>
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Special Event

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:00 pm - 2:00 pm</td>
<td>✔ Contractors' Day Lunch</td>
<td>C-4300D</td>
</tr>
<tr>
<td>12:30 pm - 2:00 pm</td>
<td>C 640 Craftsman Cert</td>
<td>C-4202B</td>
</tr>
<tr>
<td>1:00 pm - 2:00 pm</td>
<td>E 803 Faculty Network Coordinating</td>
<td>M-Kirk B</td>
</tr>
<tr>
<td>2:00 pm - 3:00 pm</td>
<td>211-C Proportioning-No Slump</td>
<td>C-2207</td>
</tr>
<tr>
<td>2:00 pm - 3:30 pm</td>
<td>120 History</td>
<td>C-2215C</td>
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<td></td>
<td>213 Lightweight</td>
<td>C-2212</td>
</tr>
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<td></td>
<td>503 Adhesives</td>
<td>C-4300F</td>
</tr>
<tr>
<td></td>
<td>544-C FRC-Testing</td>
<td>C-4300E</td>
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</table>

✔ Separate fee required

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# Program at a Glance

All schedule and location changes will be posted daily outside Room C-4100.

C=Convention Center  M=Marriott

## Tuesday, November 8, 2005—continued

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:00 pm - 4:00 pm</td>
<td>CC Convention Committee  M-Williams A&amp;B  372 Prestressed/Wire-Wrapped</td>
</tr>
<tr>
<td>2:00 pm - 5:00 pm</td>
<td>CPC Certification Programs  C-4202B  222 Corrosion  C-4300B  223 Shrinkage-Compensating  C-2203  228 Nondestructive Testing  C-4300A  229 Controlled Low-Strength  C-2211  233 Ground Slag  C-2215A  235 Knowledge-Based Systems  C-2213  332 Residential Concrete  C-4300C  349 Nuclear Structures  C-2214  350-G&amp;K Env Str-Tightness Testing/Haz Mat  C-2208</td>
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### Sessions

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tbody>
<tr>
<td>2:00 pm - 5:00 pm</td>
<td>Contractors' Day, Part II  C-4204A  Open Paper Session  C-4202A  Behavior of FRP Reinforced Concrete Columns  C-4204B  Field Applications of FRP Reinforced Concrete Structures  C-4203A  Full-Scale In-Situ Load Testing—Case Studies  C-4203B</td>
</tr>
<tr>
<td>2:00 pm - 6:00 pm</td>
<td>234 Silica Fume  C-2202</td>
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<tr>
<td>2:00 pm - 6:30 pm</td>
<td>318-A Code-General Concrete Constr  C-2203  318-E Code-Shear &amp; Torsion  C-2204  318-F New Mat Products &amp; Ideas  C-2206  318-H Code-Seismic Provisions  C-2205</td>
</tr>
<tr>
<td>3:30 pm - 5:00 pm</td>
<td>116 Terminology &amp; Notation  C-2215C  308-C Curing-Accelerated  C-2210  363-A High Strength—State-of-Art Report  C-2212</td>
</tr>
</tbody>
</table>
Program at a Glance

All schedule and location changes will be posted daily outside Room C-4100.

C=Convention Center M=Marriott

Tuesday, November 8, 2005—continued

3:30 pm - 6:00 pm
544 Fiber Reinforced Concrete C-4300F

3:30 pm - 6:30 pm
325 Pavements C-4300E
350-L Env Str-Specification C-2207

Special Event
5:00 pm - 6:00 pm
Faculty Network Reception M-Harvest

5:00 pm - 6:30 pm
E 702 Designing Concrete Structures M-Kirk B
308-D Curing-HPC C-2210
440-IIIF Int'l Institute for FRP in Construction C-2208

Special Event
6:30 pm - 8:00 pm
Concrete Mixer C-2103

Wednesday, November 9, 2005

7:00 am - 10:00 am
ACI/ASCE ACI/ASCE Coordination C-2212
TSC TAC Specifications C-2213

8:30 am - 10:00 am
523-A Cellular-Autoclaved Aerated C-2208

8:30 am - 11:30 am
211 Proportioning C-2205
303 Architectural CIP C-2203
308-B Curing-Specifications C-2204
330 Parking Lots & Site Paving C-2206
363 High-Strength C-4300B
560 Design & Constr-ICFs C-2207

Special Event
8:30 am - 11:30 am
Chapter Operations Forum C-4300C
Program at a Glance

All schedule and location changes will be posted daily outside Room C-4100.

C=Convention Center  M=Marriott

Wednesday, November 9, 2005—continued

8:30 am - 1:00 pm
318-B  Code-Reinif/Development M2  C-2201
318-C  Code-Serviceability/Safety  C-2202
318-D  Code-Flexure & Axial Loads  C-2209
318-G  Code-Prestressed Precast  C-2210

8:30 am - 4:30 pm
359  Nuclear Containment Str  C-2211

8:30 am - 6:30 pm
350  Environmental Structures  C-4300A

9:00 am - 12:00 pm
ConRef  Concrete Res & Educ  M-Young A

Sessions
9:00 am - 12:00 pm
International Session: Textile-Reinforced Concrete (TRC)—The German Experience  C-4204A
Effects of Extreme Events on FRP Reinforced Concrete Structures  C-4203A
Durability of FRP for Reinforced Concrete Structures  C-4203B
★Implementation of High-Performance Concrete in Bridge Design  C-4204B
Innovative Practical Applications and Automation Systems, Part II  C-4202A

10:00 am - 11:30 am
TG-Cert  Task Group on Technologist Certification  C-4202B

10:00 am - 12:00 pm
IC-SC  Intl Conference Steering Committee  M-Young B

10:00 am - 1:00 pm
523  Cellular Concrete  C-2208

11:30 am - 1:00 pm
308-A  Curing-Guide  C-2204

★ Denotes theme session
Program at a Glance

All schedule and location changes will be posted daily outside Room C-4100.

C=Convention Center     M=Marriott

Wednesday, November 9, 2005—continued

Special Event
12:00 pm - 2:00 pm
✓ International Luncheon

12:30 pm - 2:30 pm
440 Fiber Reinforced Polymers

2:00 pm - 5:00 pm
308 Curing

Sessions
2:00 pm - 5:00 pm
Advances in Concrete Using Slag Cement
International Session: Textile Reinforced Concrete (TRO)—The International Experience
Self-Consolidating Concrete Applications and Reviewing the Emerging Technologies
Advances in Offshore and Marine Concrete
Design and Construction of Hybrid Structures

2:00 pm - 6:30 pm
318 Building Code M2

Thursday, November 10, 2005

10:00 am - 5:00 pm
BOD Board of Direction

✓ Separate fee required
### Numerical Committee Meeting Listing

(M) = Meeting  
(TG) = Task Group  
(WG) = Work Group  
C = Convention Center  
M = Marriott

<table>
<thead>
<tr>
<th>ACI 318/ASCE7 Co</th>
<th>Mon 8:30 am-10:30 am</th>
<th>C-2212</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACI/AISC Coordination</td>
<td>Sun 1:00 pm-5:00 pm</td>
<td>C-4300C</td>
</tr>
<tr>
<td>ACI/ASCE Coordination</td>
<td>Wed 7:00 am-10:00 am</td>
<td>C-2212</td>
</tr>
<tr>
<td>AC-SD Board Advisory Committee on Sustainable Development</td>
<td>Sun 1:00 pm-3:00 pm</td>
<td>M-Moten A&amp;B</td>
</tr>
<tr>
<td>BOD Board of Direction</td>
<td>Thurs 10:00 am-5:00 pm</td>
<td>M-Moten A&amp;B</td>
</tr>
<tr>
<td>C 610 Field Technician Cert</td>
<td>Mon 8:30 am-11:30 am</td>
<td>C-2102B</td>
</tr>
<tr>
<td>C 620 Laboratory Tech Cert</td>
<td>Tues 8:30 am-10:00 am</td>
<td>C-4202B</td>
</tr>
<tr>
<td>C 630 Construction Inspector Cert</td>
<td>Tues 10:00 am-11:30 am</td>
<td>C-4202B</td>
</tr>
<tr>
<td>C 630-T Transportation Inspector Cert</td>
<td>Sun 11:30 am-1:00 pm</td>
<td>C-2202</td>
</tr>
<tr>
<td>C 640 Craftsman Cert</td>
<td>Tues 12:30 pm-2:00 pm</td>
<td>C-4202B</td>
</tr>
<tr>
<td>C 650 Tilt-Up Cert</td>
<td>Mon 8:30 am-10:00 am</td>
<td>C-2102A</td>
</tr>
<tr>
<td>C 660 Shotcrete Nozzleman Cert</td>
<td>Mon 12:00 pm-2:00 pm</td>
<td>C-2104A</td>
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<tr>
<td>CAC Chapter Activities</td>
<td>Tues 8:30 am-11:30 am</td>
<td>M-Kirk A</td>
</tr>
<tr>
<td>CC Convention Committee</td>
<td>Tues 2:00 pm-4:00 pm</td>
<td>M-Williams A&amp;B</td>
</tr>
<tr>
<td>Cert-TG Pervious Concrete Cert-TG</td>
<td>Mon 5:00 pm-6:30 pm</td>
<td>C-2205</td>
</tr>
<tr>
<td>CLC Construction Liaison</td>
<td>Sun 8:30 am-11:30 am</td>
<td>M-Young A</td>
</tr>
<tr>
<td>ConRef Concrete Res &amp; Educ</td>
<td>Wed 9:00 am-12:00 pm</td>
<td>M-Young A</td>
</tr>
<tr>
<td>CPC Certification Programs</td>
<td>Tues 2:00 pm-5:00 pm</td>
<td>C-4202B</td>
</tr>
<tr>
<td>CRC Concrete Research Council</td>
<td>Tues 11:30 am-1:00 pm</td>
<td>M-Kirk A</td>
</tr>
<tr>
<td>E 601 Seminar Oversight Committee</td>
<td>Sun 3:00 pm-5:00 pm</td>
<td>M-Moten A&amp;B</td>
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<tr>
<td>E 602 Electronic Delivery Oversight Committee</td>
<td>Mon 1:00 pm-2:30 pm</td>
<td>M-Young B</td>
</tr>
<tr>
<td>E 701 Materials for Concrete Construction</td>
<td>Sun 3:30 pm-5:00 pm</td>
<td>M-Kirk A</td>
</tr>
<tr>
<td>E 702 Designing Concrete Structures</td>
<td>Tues 5:00 pm-6:30 pm</td>
<td>M-Kirk B</td>
</tr>
<tr>
<td>E 702-TG Designing Reinforced Concrete Structures-Task Group</td>
<td>Tues 8:30 am-10:30 am</td>
<td>M-Kirk B</td>
</tr>
<tr>
<td>E 703 Concrete Construction Practices</td>
<td>Mon 5:00 pm-7:00 pm</td>
<td>M-Young A</td>
</tr>
<tr>
<td>E 706 Repair Application Procedures</td>
<td>Sun 11:30 am-1:00 pm</td>
<td>M-Kirk A</td>
</tr>
<tr>
<td>E 801 Student Activities</td>
<td>Sun 8:00 am-10:00 am</td>
<td>M-Kirk B</td>
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<tr>
<td>E 802 Teaching Methods and Educational Materials</td>
<td>Mon 8:30 am-10:00 am</td>
<td>M-Young B</td>
</tr>
<tr>
<td>E 803 Faculty Network Coordinating</td>
<td>Tues 1:00 pm-2:00 pm</td>
<td>M-Kirk B</td>
</tr>
<tr>
<td>(M) = Meeting</td>
<td>(TG) = Task Group</td>
<td>(WG) = Work Group</td>
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<tr>
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<tr>
<td><strong>C=Convention Center</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>E 804</strong> Educational Awards Nomination Committee</td>
<td>Mon 10:00 am-11:30 am</td>
<td>M-Young B</td>
</tr>
<tr>
<td><strong>EAC</strong> Educational Activities M1</td>
<td>Sat 8:00 am-5:00 pm</td>
<td>M-McShann A</td>
</tr>
<tr>
<td><strong>EAC</strong> Educational Activities M2</td>
<td>Tues 7:00 am-12:00 pm</td>
<td>M-Moten A&amp;B</td>
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<tr>
<td><strong>HTC</strong> Hot Topic</td>
<td>Sun 11:30 am-1:00 pm</td>
<td>M-Young B</td>
</tr>
<tr>
<td><strong>IC</strong> International Committee</td>
<td>Sun 3:30 pm-5:00 pm</td>
<td>M-Williams A&amp;B</td>
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<tr>
<td><strong>IC-Cert</strong> International-Certification</td>
<td>Sun 2:00 pm-3:30 pm</td>
<td>M-Kirk B</td>
</tr>
<tr>
<td><strong>IC-Conf</strong> International-Conferences</td>
<td>Sun 9:00 am-11:00 am</td>
<td>M-Kirk A</td>
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<tr>
<td><strong>IC-Mem</strong> International-Membership</td>
<td>Sun 1:00 pm-3:00 pm</td>
<td>M-Kirk A</td>
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<tr>
<td><strong>IC-Part</strong> International Partnerships Committee</td>
<td>Sun 10:00 am-11:30 am</td>
<td>M-Young B</td>
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<tr>
<td><strong>IC-Pub</strong> Intl Conference Steering Committee</td>
<td>Sun 8:30 am-10:00 am</td>
<td>M-Young B</td>
</tr>
<tr>
<td><strong>IC-SC</strong></td>
<td>Wed 10:00 am-12:00 pm</td>
<td>M-Young B</td>
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<tr>
<td><strong>IntAC</strong> Information Technology Advisory Committee</td>
<td>Mon 2:00 pm-3:30 pm</td>
<td>M-Kirk B</td>
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<tr>
<td><strong>ITG-1</strong> High-Strength Concrete for Seismic Applications M1</td>
<td>Sun 6:30 pm-10:00 pm</td>
<td>M-Kirk A</td>
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<td><strong>ITG-4</strong> High-Strength Concrete for Seismic Applications M2</td>
<td>Mon 6:30 pm-10:00 pm</td>
<td>M-Kirk A</td>
</tr>
<tr>
<td><strong>ITG-5</strong> Precast Shear Walls for High Seismic Applications</td>
<td>Sun 10:00 am-4:00 pm</td>
<td>C-2211</td>
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<tr>
<td><strong>MEMC</strong> Membership</td>
<td>Sun 8:30 am-11:30 am</td>
<td>M-Williams A&amp;B</td>
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<td><strong>MKTC</strong> Marketing</td>
<td>Mon 8:30 am-11:30 am</td>
<td>M-Williams A&amp;B</td>
</tr>
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<td><strong>PUBC</strong> Publications</td>
<td>Mon 8:00 am-10:00 am</td>
<td>M-Moten A&amp;B</td>
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<td><strong>RCC</strong> Responsibility</td>
<td>Sun 2:00 pm-5:00 pm</td>
<td>M-Young B</td>
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<tr>
<td><strong>SCO</strong> Scholarship Council (ConRef)</td>
<td>Sun 10:00 am-1:00 pm</td>
<td>M-Kirk B</td>
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<td><strong>TAC</strong> Technical Activities-M1</td>
<td>Fri 6:00 pm-9:00 pm</td>
<td>C-4203B</td>
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<td><strong>TAC</strong> Technical Activities-M2</td>
<td>Sat 7:00 am-6:00 pm</td>
<td>C-4300A</td>
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<tr>
<td><strong>TAC</strong> Technical Activities-M3</td>
<td>Sun 7:00 am-1:00 pm</td>
<td>C-4300C</td>
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<td><strong>TAC-RG1</strong> TAC Review Group 1-M1</td>
<td>Sat 8:00 am-9:00 am</td>
<td>C-4300A</td>
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<tr>
<td><strong>TAC-RG1</strong> TAC Review Group 1-M2</td>
<td>Sun 8:00 am-9:00 am</td>
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<td>Sat 8:00 am-9:00 am</td>
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<td><strong>TAC-RG2</strong> TAC Review Group 2-M2</td>
<td>Sun 8:00 am-9:00 am</td>
<td>C-2209</td>
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<td><strong>TAC-RG3</strong> TAC Review Group 3-M1</td>
<td>Sat 8:00 am-9:00 am</td>
<td>C-2204</td>
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<tr>
<td><strong>TAC-RG3</strong> TAC Review Group 3-M2</td>
<td>Sun 8:00 am-9:00 am</td>
<td>C-2210</td>
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</table>
### Numerical Committee Meeting Listing

<table>
<thead>
<tr>
<th>(M) = Meeting</th>
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<th>(WG) = Work Group</th>
</tr>
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<tbody>
<tr>
<td>C = Convention Center</td>
<td>M = Marriott</td>
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<table>
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<tr>
<th>Code</th>
<th>Description</th>
<th>Day</th>
<th>Time</th>
<th>Location</th>
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<tbody>
<tr>
<td>TAC-TG on ATA</td>
<td>TAC Task Group on ATA Review</td>
<td>Sun</td>
<td>7:00 am-9:00 am</td>
<td>C-2207</td>
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<tr>
<td>TG-Cert</td>
<td>Task Group on Technologist Certification</td>
<td>Wed</td>
<td>10:00 am-11:30 am</td>
<td>C-4202B</td>
</tr>
<tr>
<td>TRRC</td>
<td>TAC Repair &amp; Rehab</td>
<td>Tues</td>
<td>9:00 am-12:00 pm</td>
<td>C-2211</td>
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<tr>
<td>TSC</td>
<td>TAC Specifications</td>
<td>Wed</td>
<td>7:00 am-10:00 am</td>
<td>C-2213</td>
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<tr>
<td>TTCC</td>
<td>TAC Tolerances Coordination Committee</td>
<td>Tues</td>
<td>7:00 am-8:30 am</td>
<td>C-2202</td>
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<tr>
<td>TTTCC</td>
<td>TAC Technology Transfer</td>
<td>Tues</td>
<td>7:00 am-9:00 am</td>
<td>C-2203</td>
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<tr>
<td>116</td>
<td>Terminology &amp; Notation</td>
<td>Tues</td>
<td>3:30 pm-5:00 pm</td>
<td>C-2215C</td>
</tr>
<tr>
<td>117</td>
<td>Tolerances</td>
<td>Tues</td>
<td>8:30 am-2:00 pm</td>
<td>C-4300C</td>
</tr>
<tr>
<td>118</td>
<td>Computers</td>
<td>Mon</td>
<td>8:30 am-10:00 am</td>
<td>C-2205</td>
</tr>
<tr>
<td>120</td>
<td>History</td>
<td>Tues</td>
<td>2:00 pm-3:30 pm</td>
<td>C-2215C</td>
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<tr>
<td>121</td>
<td>Quality Assurance</td>
<td>Sun</td>
<td>2:00 pm-5:00 pm</td>
<td>C-2201</td>
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<td>122</td>
<td>Energy Conservation</td>
<td>Mon</td>
<td>2:00 pm-3:30 pm</td>
<td>C-2205</td>
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<tr>
<td>123</td>
<td>Research</td>
<td>Mon</td>
<td>5:00 pm-6:30 pm</td>
<td>C-2208</td>
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<tr>
<td>124</td>
<td>Aesthetics</td>
<td>Mon</td>
<td>8:30 am-10:00 am</td>
<td>C-4300C</td>
</tr>
<tr>
<td>201</td>
<td>Durability</td>
<td>Tues</td>
<td>8:30 am-11:30 am</td>
<td>C-4300B</td>
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<tr>
<td>201-A</td>
<td>Durability-Sulfate Attack M 1</td>
<td>Sun</td>
<td>4:00 pm-5:00 pm</td>
<td>C-2211</td>
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<tr>
<td>201-A</td>
<td>Durability-Sulfate Attack M 2</td>
<td>Mon</td>
<td>8:30 am-10:00 am</td>
<td>C-4300H</td>
</tr>
<tr>
<td>201-B</td>
<td>Durability-Sulfate in Soil</td>
<td>Mon</td>
<td>12:00 pm-1:30 pm</td>
<td>C-2214</td>
</tr>
<tr>
<td>201-C</td>
<td>Durability-Condition Survey</td>
<td>Sun</td>
<td>8:30 am-10:30 am</td>
<td>C-2206</td>
</tr>
<tr>
<td>201-D</td>
<td>Durability-Oversight Committee</td>
<td>Mon</td>
<td>11:30 am-1:00 pm</td>
<td>C-2208</td>
</tr>
<tr>
<td>207</td>
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<td>209</td>
<td>Creep &amp; Shrinkage</td>
<td>Mon</td>
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<td>C-4202B</td>
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<td>211</td>
<td>Proportioning</td>
<td>Wed</td>
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<td>(WG) = Work Group</td>
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<td>Silica Fume</td>
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## Numerical Committee Meeting Listing

(M) = Meeting  
(TG) = Task Group  
(WG) = Work Group  
C = Convention Center  
M = Marriott

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<td>Residential Concrete</td>
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<td>Residential-Guide</td>
<td>Tues</td>
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<td>Residential-Standard</td>
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<td>Composite-Hybrid</td>
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### Numerical Committee Meeting Listing

(M) = Meeting  
(TG) = Task Group  
(WG) = Work Group  

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<th>Meeting Name</th>
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Sunday, November 6, 2005
8:00 am – 9:00 am

First-Time Attendee Orientation

Sponsored by the Convention Committee

First-time convention attendees are invited to join Rita Oglesby, past Chair of the ACI Convention Committee, to get acquainted with committee representatives and learn what an ACI convention has to offer. A continental breakfast will be served.
Sunday, November 6, 2005
9:00 am – 12:00 pm

Innovations in Mass Concrete

Sponsored by Committee 207

Session Co-Moderators: Randall P. Bass
Senior Associate
Schnabel Engineering
Alpharetta, GA

Wayne S. Adaska
Director of Public Works
Portland Cement Association
Skokie, IL

Introduction
Randall P. Bass, Senior Associate, Schnabel Engineering, Alpharetta, GA

Underwater Repairs of Spillway Structures
Stephen B. Tatro, Civil Engineer, U.S. Army Corps of Engineers, Walla Walla, WA

Innovated Use of Roller-Compacted Concrete for Lock Walls
David E. Kiefer, Civil Engineer, U.S. Army Corps of Engineers, Louisville, KY

Dam and Lock Replacement with Float-In or Lift-In Construction
Samuel X. Yao, Project Manager, Ben C. Gerwick Inc., San Francisco, CA

Alkali-Silica Reaction—Is it a Major Problem?
Ernie K. Schrader, Consultant, Schrader Consulting, Walla Walla, WA

Saluda Dam—Roller-Compacted Concrete and Mass Concrete Put to Work
Sunday, November 6, 2005
9:00 am – 12:00 pm

Introducing Concrete Aggregates

Sponsored by Committee E 701

Session Moderator: Darrell F. Elliot
Technical Service Manager
Buzzi Unicem USA
New Orleans, LA

Introduction

Darrell F. Elliot, Technical Service Manager, Buzzi Unicem USA,
New Orleans, LA

Introduction and Classification of Aggregates

Paul J. Tikalsky, Deputy Director, Pennsylvania Transportation
Institute, University Park, PA

Aggregate Sampling and Gradations

Frank A. Kozeliski, President, Gallup Sand & Gravel Co., Gallup, NM

Surface Moisture on Aggregates

Darrell F. Elliot, Technical Service Manager, Buzzi Unicem USA,
New Orleans, LA

Aggregate Density, Texture, and Soundness

David M. Suchorski, Technical Services Manager, Ash Grove Cement
Company, Overland Park, KS

Chemical Stability of Aggregates

Clifford N. MacDonald, Director of Engineering, Forta Corporation,
Inver Grove Heights, MN

Blast-Furnace Slag and Lightweight Aggregates

Jere H. Rose, Director of Technical Services Southeast Region,
Lafarge North America, Alpharetta, GA
Sunday, November 6, 2005
9:00 am – 12:00 pm

Recommendations for Load Test Magnitude and Acceptance Criteria for Strength Evaluation of Existing Concrete Buildings

C-4203B

Sponsored by Committee 437

Session Co-Moderators:

Thomas E. Nehil
Principal
Nehil-Sivak, Consulting Structural Engineers
Kalamazoo, MI

Antonio Nanni
Vernon and Maralee Jones Professor of Civil Engineering
Department of Civil Engineering
University of Missouri-Rolla
Rolla, MO

Introduction

9:00 am
Thomas E. Nehil, Principal, Nehil-Sivak, Consulting Structural Engineers, Kalamazoo, MI

History of the Load Test, Load Factors, and Acceptance Criteria

9:15 am
Thomas L. Rewerts, Structural Engineer, Thomas Rewerts & Co., Overland Park, KS

Selection of Load Factors to Determine Test Load Magnitude

9:45 am
Joseph A. Amon, Vice President, Ardaman and Associates, Inc., Tampa, FL

Selection of Load Test Protocol and Acceptance Criteria

10:15 am
Antonio Nanni, Vernon and Maralee Jones Professor of Civil Engineering, Department of Civil Engineering, University of Missouri-Rolla, Rolla, MO

Conclusions and Recommendations

10:45 am
Thomas E. Nehil, Principal, Nehil-Sivak, Consulting Structural Engineers, Kalamazoo, MI

Discussion—Speakers, Committee 437, 318-C Members, and Audience

11:00 am
Sunday, November 6, 2005
9:00 am – 12:00 pm

★ The Architect and Concrete—From Aesthetic Vision to Concrete Reality

C-4204B

Sponsored by Committee 124 and the American Institute of Architects

Session Moderator: Michael J. Paul
Senior Vice President
Thornton-Tomasetti Group
Philadelphia, PA

Introduction 9:00 am

Michael J. Paul, Senior Vice President, Thornton-Tomasetti Group,
Philadelphia, PA

Innovation of Architectural Precast in the New Millennium
Brian D. Miller, Engineer, National Precast Concrete Association,
Indianapolis, IN

White Concrete Heightens Architectural Expression 9:30 am

Jamie Farny, Program Manager, Masonry & Special Products,
Portland Cement Association, Skokie, IL

Self-Cleaning Concrete—Photo-Catalysts in the Mix 10:00 am

Michael Chusid, RA, FCSI, Principal, Chusid Associates, Tarzana, CA

Decorative Concrete Walls—What the Architect/Engineer Needs to Know 10:30 am

Daniel P. Dorfmueller, President, D.P. Dorfmueller Co., Inc., Lebanon, OH

Specifying Beautiful Concrete Using the New CSI Master Format 11:00 am

Michael Chusid, RA, FCSI, Principal, Chusid Associates, Tarzana, CA

The Emergence of Architectural Concrete 11:25 am

James M. Shilstone, Sr., Chairman, The Shilstone Companies, Inc.,
Dallas, TX

★ Denotes theme session

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Punching Shear in Reinforced Concrete Slabs, Part I

Sponsored by Committee 445

Session Co-Moderators: Maria Anna Polak
Professor
Department of Civil Engineering
University of Waterloo
Waterloo, Ontario, Canada

Scott D.B. Alexander
Senior Structural Engineer
UMA Engineering, Ltd.
Edmonton, Alberta, Canada

Introduction

9:00 am

Maria Anna Polak, Professor, Department of Civil Engineering,
University of Waterloo, Waterloo, Ontario, Canada

ACI 318-05, CSA A23.3-04, Eurocode 2 (2003), DIN 1045-1
Provisions for Punching Shear of Reinforced Concrete Flat Slabs

N. John Gardner, Professor, Department of Civil Engineering,
University of Ottawa, Ottawa, Ontario, Canada

ACI 318 Moment Transfer Strength and Stiffness
Considerations

Neil M. Hawkins, Professor Emeritus, Department of Civil and
Environmental Engineering, University of Illinois at Urbana-
Champaign, Urbana, IL

Effects of Size, Geometry, and Material Properties on Punching Shear Resistance

Denis Mitchell, Professor, Department of Civil Engineering, McGill
University, Montreal, Quebec, Canada, and Walter Dilger, University
of Calgary

Effects of Flexural Reinforcement on Punching Shear Resistance

Gerd Birkle, Structural Engineer, Stantec Consulting, Calgary,
Alberta, Canada; Walter Dilger, University of Calgary; and Denis
Mitchell, McGill University

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Punching Shear in Reinforced Concrete Slabs,
Part I—continued

Shear Reinforcement for Concrete Flat Slabs  
Maria Anna Polak, Professor, Department of Civil Engineering, 
University of Waterloo, Waterloo, Ontario, Canada; Ehab El-Salakawy, 
University of Sherbrook; and Neil L. Hammill, Decon, USA

A Design Perspective on Punching Shear  
Scott D.B. Alexander, Senior Structural Engineer, UMA Engineering, Ltd., Edmonton, Alberta, Canada; and Neil M. Hawkins, University of Illinois at Urbana-Champaign

Reinforced Concrete Slabs Subjected to Localized Impact  
Theodore Krauthammer, Professor, Protective Technology Center, Pennsylvania State University, State College, PA
Sunday, November 6, 2005  
1:00 pm – 5:00 pm

Student Concrete Cube Competition

C-4300B

Sponsored by Committee E 801 and the ACI Missouri and Kansas Chapters

Program Coordinator: John J. Myers
Associate Professor
Department of Civil, Architectural, and Environmental Engineering
University of Missouri-Rolla
Rolla, MO

Introduction 1:00 pm
John J. Myers, Associate Professor, Department of Civil, Architectural, and Environmental Engineering, University of Missouri-Rolla, Rolla, MO

Student Concrete Cube Competition 1:05 pm
The objective of this competition is to produce a concrete cube that achieves, as closely as possible, a target design strength of 35 MPa and a target mass of 205 grams per cube (moderately lightweight concrete).

Lightweight Concrete Modulus of Elasticity
2005 Concrete Projects Competition First Place Winner 2LT Eileen Stiffey, United States Military Academy, West Point, New York

Committee E 801 and the ACI Missouri and Kansas Chapters would like to extend a thank you to PSI for providing the testing device.
Sunday, November 6, 2005
2:00 pm – 5:00 pm

Emerging Technologies in Civil Infrastructure Applications

Sponsored by the TAC Technology Transfer Committee

Session Moderator: Emmanuel K. Attigbe
Director of Technical Services
Degussa Admixtures, Inc.
Beachwood, OH

Introduction 2:00 pm
Emmanuel K. Attigbe, Director of Technical Services, Degussa Admixtures, Inc., Beachwood, OH

Strategic Development Council ATA Program to Identify Critical Technology Issues Facing the Concrete Industry
Peter H. Emmons, President, Structural Group, Inc., Baltimore, MD

Autoclaved Aerated Concrete: Red, White, Blue, and Green All Over
Gene C. Abbate, Director of Market Development, International Masonry Institute, Albany, NY

Infrastructure Applications of Carbon Fiber Grids 3:15 pm
Gregg J. Blaszak, Technical Marketing Manager, TechFab, Anderson, SC

The Hillman-Composite Beam 3:45 pm
John Hillman, Principal Bridge Designer, TENG & Associates, Chicago, IL

TecEco Cement Concretes for Enhanced Durability 4:15 pm
John Harrison, Managing Director, TecEco Pty., Ltd., Tasmania, Australia
Sunday, November 6, 2005
2:00 pm – 5:00 pm

State-of-the-Art Practice in Health Monitoring Systems  C-4203B
and Data Management for Infrastructure

Sponsored by Committee 444

Session Moderator: K. Nam Shiu
Principal
Walker Restoration Consultants
Elgin, IL

Introduction 2:00 pm
K. Nam Shiu, Principal, Walker Restoration Consultants, Elgin, IL

Economic Benefits of Structural Health Monitoring 2:05 pm
Systems with Case Studies
Thomas L. Weinmann, Senior and Structural Diagnostic Group
Manager, CTLGroup, Inc., Skokie, IL

Corrosion Monitoring of FRP Wrapped Piles 2:35 pm
Rajan Sen, Professor, Department of Civil Engineering, University
of South Florida, Tampa, FL; and Gary Mullins, Kwang Suk Suh, and
Danny Winters, University of South Florida

Condition Assessment and Monitoring of Unbonded 3:05 pm
Post-Tensioning Systems in Floor Slabs of Parking Structures
Dan Moser, Senior Restoration Engineer, Walker Restoration
Consultants, Elgin, IL; and Sunil Puri, Walker Restoration Consultants

Force Transfer in Grouted Soil Nails 3:35 pm
Andrew M. Budek, Professor, Department of Civil Engineering, Texas
Technological University, Lubbock, TX

Health Monitoring of an Elevated Roadway 4:05 pm
John Pearson, Senior Engineer, Wiss, Janney, Elstner Associates,
Inc., Northbrook, IL; and Rich Lindenberg and Gary Klein, Wiss,
Janney, Elstner Associates, Inc.

Laboratory and Field Performance of CFRP 4:35 pm
Retrofit Structures
Mohsen A. Issa, Professor, Department of Civil and Materials
Engineering, University of Illinois at Chicago, Chicago, IL; and
Hameed Shabila, University of Illinois at Chicago
Sunday, November 6, 2005
2:00 pm – 5:00 pm

FRPRCS-7 Symposium Session
★ Spice Up Your Concrete with FRP Composites

Sponsored by Committee 440

Session Co-Moderators: John P. Busel
Director, Composites Growth Initiative
American Composites Manufacturers’ Association
Arlington, VA

Luc R. Taerwe
Professor
Magnel Laboratory for Concrete Research
Ghent University
Ghent, Belgium

Introduction
2:00 pm
John P. Busel, Director, Composites Growth Initiative, American Composites Manufacturers’ Association, Arlington, VA

An Innovative Hybrid FRP-Concrete Bridge System
2:05 pm
Mamdouh M. El-Badry, Professor of Civil Engineering, Department of Civil Engineering, University of Calgary, Calgary, Alberta, Canada;
Kyle Schonknect, University of Calgary; and Hiroyuki Abe and Tamio Yoshioka, Oriental Construction, Co., Ltd.

Proposed GFRP Connectors in Sandwich Panels
2:30 pm
Maher K. Tadros, Charles J. Vranek Professor, Department of Civil Engineering, University of Nebraska-Lincoln, Omaha, NE; and Wilast
A. Pong, and Amgad F. Morgan Girgis, University of Nebraska-Lincoln

Tensile Capacities of CFRP Anchors
2:55 pm
Ugurhan Akyuz, Associate Professor, Department of Civil Engineering, Earthquake Engineering Research Center, Middle East Technical University, Ankara, Turkey; and Gokhan Ozdemir, Middle East Technical University

An Exploratory Study of FRP Seismic Restrainers
3:20 pm
Subjected to Dynamic Loads
M. Saiid Sali, Professor, Department of Civil Engineering, University of Nevada-Reno, Reno, NV; Rita Johnson, Forbes and Dunagan Structural Engineers; and E. Manos Maragakis, University of Nevada-Reno

★ Denotes theme session
FRPRCS-7 Symposium Session

★ Spice Up Your Concrete with FRP Composites—continued  C-4204B

Manufacturing, Durability, and Bond Behavior of FRP Bars with Nanoclay
P.V. Vijay, Assistant Professor, Department of Civil Engineering, Constructed Facilities Center, West Virginia University, Morgantown, WV; and Hota V.S. GangaRao and V. Krishnaswamy, West Virginia University

Textile Reinforced Mortars (TRMs) versus Fiber-Reinforced Polymers (FRPs) as Strengthening Materials for Concrete Structures
Thanasis C. Triantafillou, Professor of Civil Engineering, Department of Civil Engineering, University of Patras-Greece, Patras, Greece; and Catherine G. Paniconalou, University of Patras-Greece

Innovative Triaxially Braided Ductile FRP Fabric for Strengthening Concrete Structures
Nabil F. Grace, Professor and Chairman, Department of Civil Engineering, Lawrence Technological University, Southfield, MI; Wael F. Ragheb, Alexandria University; and George Abdel-Sayed, University of Windsor

★ Denotes theme session
Sunday, November 6, 2005
2:00 pm – 5:00 pm

FRPRCS-7 Symposium Session
Innovations in FRP Material Testing and Characterization  C-4203A

Sponsored by Committee 440

Session Co-Moderators: Carol K. Shield
Associate Professor
Department of Civil Engineering
University of Minnesota
Minneapolis, MN

Brahim Benmokrane
NSERC Research Chair Professor in FRP Reinforcement for Concrete Structures
Department of Civil Engineering
Faculty of Engineering
University of Sherbrooke
Sherbrooke, Quebec, Canada

Introduction  2:00 pm
Carol K. Shield, Associate Professor, Department of Civil Engineering,
University of Minnesota, Minneapolis, MN

Material Characterization of FRP Pre-Cured Laminates Used in Mechanically Fastened FRP Strengthening of RC Structures  2:05 pm
Andrea Rizzo, Doctoral Student, Department of Civil Engineering,
University of Lecce-Italy, Lecce, Italy; and Nestore Galati, Antonio
Nanni, and Lokeswarappa Dharani, University of Missouri-Rolla

Method for Screening Durability and Constituent Materials in FRP Bars  2:35 pm
Doug D. Gremel, Director, Non-Metallic Reinforcing, Hughes Brothers,
Inc., & Aslan Pacific Ltd., Seward, NE; Jim Stull, Hughes Brothers, Inc.,
& Aslan Pacific Ltd.; and Nestore Galati, University of Missouri-Rolla

A New Set-Up for FRP Concrete Stable Delamination Test  3:05 pm
Claudio Mazzotti, Assistant Professor, Department of Structural
Engineering, University of Bologna, Bologna, Italy; and Marco Savoia
and Barbara Ferracuti, University of Bologna
FRPRCS-7 Symposium Session
Innovations in FRP Material Testing and Characterization—C-4203A continued

Stepped Isothermal Method for Creep Rupture Studies 3:35 pm
of Aramid Fibers
Chris J. Burgoyne, Professor, Department of Engineering, University
of Cambridge, Cambridge, United Kingdom; and Nadun Alwis,
Kellogg Brown and Root

Fiber Optics Technique for Quality Control and Monitoring 4:05 pm
of FRP Wet Lay-Up Installations
Andrea Prota, Assistant Professor, Department of Structural Analysis
and Design, University of Naples, Federico II, Naples, Italy; and
Vincenza Antonucci and Michele Giordano, Institute for Composites
and Biomedical Materials of Italian National Research Council

Gripping Behavior of CFRP Prestressing Rods for 4:35 pm
Novel Anchor Design
Adil Al-Mayah, Research Assistant Professor, Department of Civil
Engineering, University of Waterloo, Waterloo, Ontario, Canada; and
Khaled A. Soudki and Alan Plumtree, University of Waterloo
Sunday, November 6, 2005
2:00 pm – 5:00 pm

Punching Shear in Reinforced Concrete Slabs, Part II  C-4202A

Sponsored by Committee 445

Session Co-Moderators: Maria Anna Polak
Professor
Department of Civil Engineering
University of Waterloo
Waterloo, Ontario, Canada

Scott D.B. Alexander
Senior Structural Engineer
UMA Engineering, Ltd.
Edmonton, Alberta, Canada

Introduction 2:00 pm
Maria Anna Polak, Professor, Department of Civil Engineering
University of Waterloo, Waterloo, Ontario, Canada

Slab-Column Connections under Seismic Actions 2:05 pm
David Dechka, Structural Engineer, D.C. Dechka Engineers, Ltd.,
Calgary, Alberta, Canada; Simon Brown, Read Jones Christofferson;
and Walter Dilger, University of Calgary

Interior Slab-Rectangular Column Connections under 2:30 pm
Biaxial Lateral Loading
Susanto Teng, Associate Professor, School of Civil and Environmental
Engineering, Nanyang Technological University, Singapore; and
Yiliang Tan, Nanyang Technological University

Effect of Column Dimensions on Punching Shear Strength 2:55 pm
of Column-Slab Connections
Alaa Sherif, Associate Professor, Civil Engineering Department,
Helwan University, Matara-Cairo, Egypt; and Mohamed Basil Emara,
Amal Hassanein, and Sherif Abol-Magd, Helwan University

Punching Shear Strength of Post-Tensioned Concrete 3:20 pm
Flat Plates
N. John Gardner, Professor, Department of Civil Engineering, University
of Ottawa, Ottawa, Ontario, Canada
Punching Shear in Reinforced Concrete Slabs, Part II—continued

Punching of Reinforced Concrete Flat Slabs—3:45 pm
ACI and German Guidelines
Josef Hegger, Professor, Institute of Structural Concrete, Technical University of Aachen, Aachen, Germany; Alaa Sherif, Helwan University; and Rudiger Beutel, Hegger + Partner

Punching Shear at the Royal Institute of Technology (KTH) 4:10 pm in Stockholm
Hakan Sundquist, Professor, Structural Design and Bridges, Department of Architectural and Civil Engineering, Royal Institute of Technology, Stockholm, Sweden

Eurocodes and North American Codes Predictions of 4:35 pm
Punching Shear Capacity in View of Experimental Evidence
Avraham Pisanty, D.Sc. Technion, Israel Institute of Technology, Haifa, Israel
Opening Session and The Lewis H. Tuthill Lecture Series  C-4300 E-H

The Opening Session officially kicks off the convention. The Lewis H. Tuthill Lecture Series will be presented by George C. Hoff who will present: *Pushing the Envelope, An Overview of the New Technology Throughout the Industry*. ACI Chapter officers and various special guests will be recognized during the evening. The ACI Distinguished Achievement Award will be presented to the Concrete and Aggregate Association of Louisiana (CAAL) for its outstanding contributions to the concrete industry.
Sunday, November 6, 2005
approximately 6:30 pm – 7:30 pm
follows the Opening Session

Opening Reception

Sponsored by ACI

Welcome to Kansas City! Meet your colleagues, ACI friends, and exhibitors for a beverage from the cash bar and a light snack before heading out to dinner at one of Kansas City’s fantastic restaurants.

Please note: Beverages for events with cash bars must be paid for with cash and cannot be charged to your credit card.
Sunday, November 6, 2005
7:30 pm – 9:00 pm

FRPRCS-7 Symposium
Opening Reception and Poster Session  M-Truman

Sponsored by Committee 440

FRPRCS-7 welcomes a global concrete community and conference attendees to an opening reception. This event provides attendees with the opportunity to network with colleagues while viewing the latest advances using FRP composites and concrete in a special Poster Session. Attendees can meet with the presenters as well as other researchers and practitioners and exchange professional viewpoints in a casual atmosphere.

Program Coordinator: Carol K. Shield
Associate Professor
Department of Civil Engineering
University of Minnesota
Minneapolis, MN

Local Bond Slip Characteristics of GFRP Bars
Stavroula J. Pantazopoulou, Professor, Demokritos University of Thrace, Thrace, Greece; and S.P. Tastani and P. Karvounis, Demokritos University of Thrace

Static and Fatigue Bond Characteristics of Interfaces between CFRP Sheets and Frost Damaged Concrete
Jianguo Dai, Research Fellow, Center of Excellence Program, Hokkaido University, Japan; and Yuki Saito, Tamon Ueda, and Yasuhiro Sato, Hokkaido University

Significance of Stress-Block Parameters on Moment Capacity of Concrete Sections Under-Reinforced with FRP
Girum Urgessa, Research Assistant, University of New Mexico, Albuquerque, NM; and Scott Horton, Arup Maji, and Mahmoud Reda Taha, University of New Mexico

Influence of Temperature on Debonding of Externally Bonded CFRP

Effect of Environmental Conditions on Bond Strength Between CFRP Laminate and Concrete Substrate
Mahmut Ekenel, Post-Doctoral Research Fellow, Department of Civil Engineering, University of Missouri-Rolla, Rolla, MO; and Anand Khatakar and John J. Myers, University of Missouri-Rolla
FRPRCS-7 Symposium
Opening Reception and Poster Session—continued

FRP Stay-in-Place Formwork for Seismic-Resistant
High-Strength Concrete Columns
Togay Ozbakkaloglu, Post-Doctoral Candidate, Department of Civil
Engineering, University of Ottawa, Ottawa, Ontario, Canada; and
M. Saatioglu, University of Ottawa

Closed Form Design Equations for FRP-Strengthened Concrete
Beams: Rupture Failure Mode
Hayder A. Rasheed, Assistant Professor, Department of Civil
Engineering, Kansas State University, Manhattan, KS; and Naghme
Hatami, Lund Institute of Technology

External Prestressing Concrete Columns with Fibrous Composite Belts
Kourosh Nasrollahzadeh Nesheli, Post-Doctoral Research Fellow,
University of Tokyo, Tokyo, Japan and Assistant Professor, University
of Tehran, Iran and Consultant, Building and Housing Research
Center, Iran; and Kimiro Meguro, University of Tokyo

Flexural Strengthening of RC Beams Using Steel-Reinforced Polymer
(SRP) Composites
Amir Fam, Assistant Professor and Canada Research Chair, Department
of Civil Engineering, Queen’s University, Kingston, Ontario, Canada;
Yail J. Kim and Andrew Kong, Queen’s University; and Raafat El-Hacha,
University of Calgary

Shear-Strengthening Effects with Varying Types of FRP Materials
and Strengthening Methods
Cheolwoo Park, Research Professor, Department of Civil and
Environmental Engineering, Hanyang University, Sangnok-gu Ansan,
Korea; Jongsung Sim and Minkwan Ju, Hanyang University; and
Gyuseon Kim, Korea Infrastructure Safety and Technology Corp.

Modeling of Reinforced Concrete Flexural Members Strengthened
with Near-Surface Mounted FRP Reinforcement
Raafat El-Hacha, Assistant Professor, Department of Civil Engineering,
University of Calgary, Calgary, Alberta, Canada; Sami H. Rizkalla,
North Carolina State University; and Renata Kotynia, Technical
University of Lodz

Bond Performance of Deformed GFRP Rebar with Milled Fibers to Concrete
Doyoung Moon, Department of Civil and Environmental Engineering,
Hanyang University, Sangnok-gu Ansan, Korea; Jongsung Sim,
Hanyang University; and Hongseob Oh, Jinju National University
Sunday, November 6, 2005
7:30 pm – 10:00 pm

Hot Topic Session—Can Concrete Survive Blast and Fire?

Sponsored by the Hot Topic Committee

Session Moderator: H.S. Lew
Senior Research Engineer
Building and Fire Research Laboratory
National Institute of Standards and Technology
Gaithersburg, MD

Introduction 7:30 pm
H.S. Lew, Senior Research Engineer, Building and Fire Research Laboratory, National Institute of Standards and Technology, Gaithersburg, MD

U.S. Department of Defense Approach to Design of Structures for Blast Loading 7:35 pm
Edward Conrath, Structural Engineer, U.S. Army Corps of Engineers, Protective Design Center, Omaha, NE

General Services Administration Approach to Design of Structures for Blast Loading 7:55 pm
Bruce E. Hall, Structural Engineer, U.S. General Services Administration, Washington, DC

Modeling and Computational Tools for Blast-Resistant Design 8:15 pm
Robert Smilowitz, Principal, Weidlinger Associates, New York, NY

Blast Loading for Design and Detailing Considerations for New and Retrofit Structures 8:45 pm
Donald O. Dusenberry, Principal, Simpson Gumpertz & Heger, Inc., Boston, MA

Extreme Fire Event—Analysis and Design Considerations 9:15 pm
Brian Meacham, Principal Risk Consultant, ARUP, Boston, MA
Monday, November 7, 2005
6:30 am – 8:15 am

Workshop for Technical Committee Chairs
(invitation only)

Sponsored by the Technical Activities Committee

Session Moderator: Steven H. Kosmatka
Vice President of Research and
Technical Services
Portland Cement Association
Skokie, IL

Technical committee chairs are invited to attend this breakfast workshop for an opportunity to meet with fellow chairs, TAC members, and staff. There will be table discussions and short presentations on recent developments of interest to ACI technical committee chairs. A buffet breakfast will be served.
Monday, November 7, 2005
9:00 am - 12:00 pm

Research in Progress

Sponsored by Committee 123

Session Co-Moderators: Michelle R. Nokken
                        Assistant Professor
                        Building, Civil, and Environmental Engineering
                        Concordia University
                        Montreal, Quebec, Canada

                        Wilasa Vichit-Vadakan
                        Luce Assistant Professor
                        Department of Civil Engineering
                        and Geological Sciences
                        University of Notre Dame
                        Notre Dame, IN

Introduction 9:00 am
Michelle R. Nokken, Assistant Professor, Building, Civil, and
Environmental Engineering, Concordia University, Montreal,
Quebec, Canada

Design of Translucent Concrete 9:01 am
Joel Sosa Gutiérrez, Universidad Autónoma Metropolitana, Tamaulipas,
Mexico; and Sergio Omar Galvan Cazares and Guillermo Landa
Aviles, Universidad Autónoma Metropolitana

Influence of Alkali-Formate Based Deicers in Causing
Deleterious Expansions in Mortar Bars Containing
Reactive Aggregates 9:15 am
Ketan Sompura, Graduate Student, Department of Civil Engineering,
Clemson University, Clemson, SC; and Prasad Rangaraju, Clemson
University

Investigation into Causes of Bridge Deck Cracking 9:30 am
Chris I. Sanders, Research Assistant, University of Arkansas,
Fayetteville, AR; and Steven W. Peyton and W. Micah Hale,
University of Arkansas

First HPC Bridge Deck in Oklahoma 9:45 am
Seamus Freyne, Assistant Professor, Manhattan College, New York, NY;
Jason Geibler, University of Oklahoma; Walt Peters, Oklahoma
Department of Transportation; and Chris Ramseyer, University of
Oklahoma
Research in Progress—continued

Feasibility Study of Thermoplastic Wrap for Bridge Protection
Nasim Uddin, Associate Professor, University of Alabama at Birmingham, Birmingham, AL

Fatigue Strength of Corroded Prestressing Strand
Jeffrey S. Volz, Instructor and Post-Doctoral Candidate, Department of Civil Engineering, Pennsylvania State University, University Park, PA; and Andrea J. Schokker, Pennsylvania State University

Moving Load Tests of Full-Scale CRC Deck Girders to Failure
Christopher Higgins, Associate Professor, Oregon State University, Corvallis, OR; Brian S. Nicholas, David Evans and Associates, Inc.; and Tanarat Potisuk, H.W. Lochner, Inc.

Shear Behavior of Prestressed Concrete Panels
Jun Wang, Post-Doctoral Student, University of Houston, Houston TX; and Thomas T.C. Hsu and Y.L. Mo, University of Houston

Nonlinear Finite Element Analysis for Reinforced Concrete Flat Plate Structure
Wang Wenyuan, Nanyang Technological University, Singapore; and Susanto Teng, Nanyang Technological University

Full Scale Tests of Headed Bars with Small Head in Beam-Column Joints
Sung Chul Chun, Senior Researcher, Daewoo Institute of Construction Technology, Korea; and Sung Ho Lee and Bohwan Oh, Daewoo Institute of Construction Technology

Field Repair of RC Bridge Using Different Methods
J. Ashley Warren, Graduate Research Assistant, Tulane University, New Orleans, LA; and Anthony J. Lamanna, Tulane University

Fatigue Behavior of RC Beams Strengthened with FRP and Concrete Screws
Jeremy A. Martin, Tulane University, New Orleans, LA; and Anthony J. Lamanna, Tulane University
Monday, November 7, 2005
9:00 am – 12:00 pm

Ned H. Burns Symposium—Historic Innovations in Prestressed Concrete, Part I

Sponsored by Committee 423

Session Co-Moderators: Andrea J. Schokker
Associate Professor and Henderson Chair
Department of Civil and Environmental Engineering
Pennsylvania State University
University Park, PA

Robert W. Barnes
Assistant Professor
Department of Civil Engineering
Auburn University
Auburn, AL

Introduction 9:00 am
Andrea J. Schokker, Associate Professor and Henderson Chair,
Department of Civil and Environmental Engineering, Pennsylvania State University, University Park, PA

Contributions of Gustave Magnel to Development of Prestressed Concrete 9:05 am
Luc R. Taerwe, Professor, Magnel Laboratory for Concrete Research,
Department of Structural Engineering, Ghent University, Ghent, Belgium

Early Applications of Prestressed Concrete in the United Kingdom 9:30 am
Chris J. Burgoyne, Reader in Concrete Structures, Department of Engineering, University of Cambridge, Cambridge, United Kingdom

Historical Review of Prestressed Concrete through Patents 9:55 am
Andrea J. Schokker, Associate Professor and Henderson Chair,
Department of Civil and Environmental Engineering, Pennsylvania State University, University Park, PA

They Wrote the Book on Prestressed Concrete 10:20 am
Ward N. Marianos, Jr., Consulting Engineer, Webster Groves, MO
Monday, November 7, 2005
9:00 am – 12:00 pm

Ned H. Burns Symposium—Historic Innovations in Prestressed Concrete, Part I—continued

History and Development of Prestressed/Post-Tensioned 10:45 am
Folded Plate Shells for Roof Structures in the United States
Kimberly W. Kramer, Assistant Professor, Department of Architectural Engineering and Construction Science, Kansas State University, Manhattan, KS

Development of Unbonded Post-Tensioning Tendons 11:10 am
Used in Parking Structures in Deicing Salt Regions
H. Carl Walker, President, CW Consulting, LLC, Kalamazoo, MI

Evolution in Analysis and Design of Prestressed Concrete 11:35 am
Beams with Unbonded Tendons
Antoine E. Naaman, Professor, Department of Civil and Environmental Engineering, University of Michigan, Ann Arbor, MI
Monday, November 7, 2005
9:00 am – 12:00 pm

★ Silica Fume in Concrete—A Spice for Many Purposes, Part I   C-4202A

Sponsored by Committee 234

Session Co-Moderators:  Tony N. Kojundic
                        Business Manager
                        Elkem Materials, Inc.
                        Pittsburgh, PA

                          Robert J. Hoopes
                          Senior Technical Services Engineer
                          W.R. Grace
                          Cambridge, MA

Introduction  9:00 am
Tony N. Kojundic, Business Manager, Elkem Materials, Inc., Pittsburgh, PA

Revised Guide to Silica Fume in Concrete—What is New:  9:05 am
Where Do We Go from Here?
Per Fidjestol, Senior Technical Manager, Elkem ASA Materials,
Kristiansand, Norway

Advances and Trends in Implementing Silica Fume/High-Performance Concrete in the Western States  9:35 am
Tarif M. Jaber, President, Jaber Engineering, Scottsdale, AZ

Fundamental Mechanisms of Silica Fume in Concrete—The Significant Additions to Chapter 3  10:05 am
Rachel J. Detwiler, Senior Materials Engineer, Braun Intertec Corp.,
Minneapolis, MN

Cost Analysis and Investigation of Effect of Micro and Nano Silica on Self-Compacting Concrete  10:35 am
Ali Akbar Maghsoudi, Assistant Professor, Department of Civil Engineering, Shahid Bahonar University, Kerman, Iran; Hooman Hoornahad, Shahid Bahonar University; and F. Arappour Dahoori, Hormozgan University

The Dubai Airport Extension—The Largest Silica Fume Concrete Project Ever  11:05 am
Robert Lewis, Technical Manager, Elkem Ltd., Berkshire, United Kingdom

Silica Fume User Manual  11:35 am
Terence C. Holland, Consulting Engineer, Mantua, OH

★ Denotes theme session
Monday, November 7, 2005
9:00 am – 12:00 pm

FRPRCS-7 Symposium Session
Strengthening of Existing Masonry Structures with FRP Systems

Sponsored by Committee 440

Session Co-Moderators: Antonio Nanni
Vernon and Maralee Jones Professor of Civil Engineering
Department of Civil Engineering
University of Missouri-Rolla
Rolla, MO

Thanasis C. Triantafillou
Professor of Civil Engineering
Department of Civil Engineering
University of Patras-Greece
Patras, Greece

Introduction 9:00 am
Antonio Nanni, Vernon and Maralee Jones Professor of Civil Engineering,
Department of Civil Engineering, University of Missouri-Rolla, Rolla, MO

Out-of-Plane Static and Blast Resistance of Unreinforced Masonry Wall Connections Strengthened with FRP 9:05 am
John J. Myers, Associate Professor, Department of Civil, Architectural,
and Environmental Engineering, University of Missouri-Rolla, Rolla, MO;
and Preston W. Carney, Wallace Engineering

Out-of-Plane Bending Behavior of Unreinforced Masonry Walls Strengthened with Composite Materials—Modeling and Analysis 9:30 am
Oded Rabinovitch, Senior Lecturer, Institute of Technology, Technion-
Israel, Haifa, Israel; and Ehab Hamed, Technion-Israel

Design Guidelines for Masonry Structures: Out of Plane Loads 9:55 am
Nestore Galati, Research Engineer, Department of Civil Engineering,
University of Missouri-Rolla, Rolla, MO; Enrico Garbin, University
of Padua; J. Gustavo Tumialan, Simpson Gumpertz & Heger; and
Antonio Nanni, University of Missouri-Rolla
FRPRCS-7 Symposium Session

Strengthening of Existing Masonry Structures with FRP Systems—continued

FRP Repair Methods for Unreinforced Masonry Structures Subjected to Cyclic Loading

Peter B. Foster, Doctoral Research Assistant, Department of Civil Engineering, University of North Carolina at Charlotte, Charlotte, NC; Janos Gergely and David T. Young, University of North Carolina at Charlotte; and W. Mark McGinley and Anna Corzo, North Carolina Agricultural and Technical University

In-Plane Strengthening of Unreinforced Masonry Wall with Prestressed GFRP Bars

Piyong Yu, Graduate Student, Center for Infrastructure Engineering Studies, University of Missouri-Rolla, Rolla, MO; and Pedro Franco Silva and Antonio Nanni, University of Missouri-Rolla

Cyclic In-Plane Shear of Concrete Masonry Walls Strengthened by FRP Laminates

Medhat A. Haroun, Dean and AGIP Professor of Engineering, School of Sciences and Engineering, American University in Cairo, Cairo, Egypt; and Ayman S. Mosallam and Khaled H. Allam, University of California-Irvine

Seismic Performance of Masonry Infill Walls Retrofitted with CFRP Sheets

Murat Saatcioglu, Professor and University Research Chair, Department of Civil Engineering, University of Ottawa, Ottawa, Ontario, Canada; Fabio Serrato, Carl Walker, Inc.; and Simon Foo, Public Works and Government Services Canada
Monday, November 7, 2005
9:00 am - 12:00 pm

FRPRCS-7 Symposium Session
Bond of FRP Bars, Sheets, Laminates, and Anchorages to Concrete

Sponsored by Committee 440

Session Co-Moderators:
Sami H. Rizkalla
Distinguished Professor of Civil Engineering
Department of Civil Engineering
North Carolina State University
Raleigh, NC

Kypros Pilakoutas
Professor
Department of Civil and Structural Engineering
University of Sheffield
Sheffield, England

Introduction

9:00 am
Sami H. Rizkalla, Distinguished Professor of Civil Engineering,
Department of Civil Engineering, North Carolina State University,
Raleigh, NC

Effect of Adhesive Type on Bond of NSM Tape to Concrete

9:05 am
Carol K. Shield, Associate Professor, Department of Civil Engineering,
University of Minnesota, Minneapolis, MN; Catherine E. French,
University of Minnesota; and Emily Milde, Opus

Modeling of FRP Concrete Bond Using Nonlinear Damage Mechanics

9:30 am
Carlos A. Coronado, Doctoral Candidate and Research Assistant,
Department of Civil Engineering, Pennsylvania State University, State College, PA; and Maria Lopez de Murphy, Pennsylvania State University

Experimental Study of Short NSM-FRP Bar Anchorages

9:55 am
Dimitris G. Novidis, Doctoral Candidate, Department of Civil Engineering,
Demokritos University of Thrace, Thrace, Greece; and Stavroula J. Pantazopoulou, Demokritos University of Thrace

Intermediate Crack-Induced Debonding in FRP-Strengthened Flexural Members with Different Shear-Span Ratios

10:20 am
Zishen Wu, Professor, Department of Urban and Civil Engineering,
Ibaraki University, Hitachi, Japan; and Hemand Said, Ibaraki University
FRPRCS-7 Symposium Session
Bond of FRP Bars, Sheets, Laminates, and Anchorages to Concrete—continued

Enhancing End Anchorage of Bonded FRP Repairs  10:45 am
Michael J. Chajes, Professor and Chair, Department of Civil and Environmental Engineering, University of Delaware, Newark, DE; Harry Shenton, University of Delaware; and William Finch, Structural Testing, Inc.

FRP-Concrete Bond Behavior: A Parametric Study  11:10 am
Through Pull-Off Testing
Brian M. McSweeney, Structural Engineer, Linton Engineering, Vienna, VA; and María Lopez de Murphy, Pennsylvania State University

Modeling of Debonding Failures in FRP-Strengthened Two-Way Slabs  11:35 am
Walid A. Elsayed, Doctoral Candidate, Department of Civil Engineering, University of Sherbrooke, Sherbrooke, Quebec, Canada; and Usama A. Ebead and Kenneth W. Neale, University of Sherbrooke
Monday, November 7, 2005
12:00 pm – 2:00 pm

✓ Student Lunch
$46 U.S. per person

Hosted by Committee E 801

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

Title: The Scope of the Concrete Industry

Much of the excitement and fascination of our industry originates in its mind-boggling scope. We convert earth materials that were formed millions of years ago into a versatile building material that begins to react in seconds, can set in minutes, gains strength in hours, carries design loads in days (or less) and can perform its intended function for centuries. We measure the physical dimensions of concrete projects in kilometers, individual members in 10s of meters, the human dimension in meters, coarse aggregates and rebar in centimeters, sand in millimeters, and features of hardened cement paste in nanometers. As ACI membership proves, there is time and space, and a unique scale for all of us.

Following lunch, awards will be given to the first, second, and third place winners of the Student Concrete Cube Competition.

Tickets may be purchased at the ACI Registration Desk until 24 hours prior to the event. Please notify the ACI Registration Desk if you have any dietary restrictions.

✓ Separate fee required
Monday, November 7, 2005
2:00 pm – 3:00 pm

Convention Moderator Question and Answer

C-2207

Sponsored by ACI

ACI Staff will be available to answer your questions regarding moderating at an upcoming session. Possible topics include what forms to complete, deadlines, speaker replacements, moderator training, etc.

All session moderators must complete Session Moderator Training prior to final approval for their session. Session Moderator Training may be found on the ACI website at http://www.concrete.org/EVENTS/EV_CONVENTIONS.HTM.
Monday, November 7, 2005
2:00 pm – 5:00 pm

★ Silica Fume in Concrete—A Spice for Many Purposes, C-4202A
Part II

Sponsored by Committee 234

Session Co-Moderators:
Rachel J. Detwiler
Senior Materials Engineer
Braun Intertec Corp.
Minneapolis, MN

Robert Lewis
Technical Manager
Elkem, Ltd.
Berkshire, United Kingdom

Silica Fume Concrete in the Field—Documentation of 2:00 pm
Performance After More Than 20 Years Exposure in Real Structures
Per A. Jaren, P J Consult A/S, Hvalstad, Norway

High-Performance Silica Fume Concrete in Marine 2:30 pm
Bridge System in Mumbai, India
Kshemendra Nath, Regional Manager, Elkem India Pty, Ltd.,
Mumbai, India

Verification of Prediction Models for Creep and Shrinkage 3:00 pm
of High-Strength Concrete Containing Pozzolans
Hani H. Nassif, Associate Professor, Department of Civil Engineering,
Rutgers, The State University of New Jersey, Piscataway, NJ; and
Nakin Suksawang, Rutgers, The State University of New Jersey

New Frontiers in High-Strength Concrete—The World’s 3:30 pm
Tallest Towers in Asia
James M. Aldred, GHD Global Pty, Ltd., Dubai, United Arab Emirates

High Modulus of Elasticity, High-Strength Concrete in Chicago 4:00 pm
Mike F. Pistoili, Technical Manager, Prairie Materials, Bridgeview, IL

The Future of Silica Fume Concrete—and Research Needs 4:30 pm
Terence C. Holland, Consulting Engineer, Mantua, OH; and
Per Fidjestol, Elkem ASA Materials

★ Denotes Theme Session
104
Monday, November 7, 2005
2:00 pm – 5:00 pm

History of Concrete

Sponsored by Committee 120

Session Moderator: Luke M. Snell
Professor of Construction Management
Director, Concrete Construction
Resource Unit
Southern Illinois University Edwardsville
Edwardsville, IL

Introduction 2:00 pm
Luke M. Snell, Professor of Construction Management, Director,
Concrete Construction Resource Unit, Southern Illinois University
Edwardsville, Edwardsville, IL

Grave Yard Concrete 2:01 pm
Billie G. Snell, Educational Research Consultant, Southern Illinois
University Edwardsville, Edwardsville, IL; and Debbie Amon,
Ardamon and Associates, Inc.

Concrete Skeletons in Death Valley 2:20 pm
Laurel M. Dovich, Professor of Civil Engineering, Department of Civil
Engineering, Walla Walla College, College Place, WA

Concrete Kicks on Route 66 2:40 pm
Kurt D. Smith, Program Director, Applied Pavement Technology, Inc.,
Champaign, IL

Historical Development of Monolithic Flat Slab 3:00 pm
Concrete Systems
Thomas L. Rewerts, Structural Engineer, Thomas Rewerts & Co.,
Overland Park, KS

Design Aid for Working with Existing Concrete Construction 3:20 pm
Lionel E. Dayton, Project Engineer, BKBM Engineers, Minneapolis, MN

The Temple of Unique Design 3:40 pm
Kimberly W. Kramer, Assistant Professor, Department of Civil
Engineering, Kansas State University, Manhattan, KS; and Erin
Mulcahy, Kansas State University

105
Monday, November 7, 2005
2:00 pm – 5:00 pm

History of Concrete—continued

Historical Development of Durable Concrete in Dams for the Bureau of Reclamation
Timothy P. Dolen, Research Civil Engineer and Senior Technical Specialist, U.S. Department of the Interior, Bureau of Reclamation, Denver, CO

History of Concrete in Algeria
Abdeldjelil Belarbi, Distinguished Professor, Department of Civil, Architectural, and Environmental Engineering, University of Missouri-Rolla, Rolla, MO; Abdellatif F. Baghli, University of Tlemcen; and Luke M. Snell, Southern Illinois University Edwardsville

Lake Pontchartrain Seawall: WPA Project Serves Well
Tom Smith, Senior Structural Engineer, Design Engineers, Metairie, LA
Monday, November 7, 2005
2:00 pm – 5:00 pm

Ned H. Burns Symposium—Historic Innovations in
Prestressed Concrete, Part II

Sponsored by Committee 423

Session Co-Moderators: Bruce W. Russell
Associate Professor
School of Civil and Environmental
Engineering
Oklahoma State University
Stillwater, OK

H.R. "Trey" Hamilton, III
Associate Professor
Department of Civil and Coastal Engineering
University of Florida
Gainesville, FL

Comparison of Methods for Experimentally Determining
Prestress Losses in Pretensioned Prestressed Concrete Girders
Carol K. Shield, Associate Professor, Department of Civil Engineering,
University of Minnesota, Minneapolis, MN; and Eray Baran and
Catherine E. French, University of Minnesota

Innovations in Prestressed Concrete Pavement
David K. Merritt, Project Manager, The Transtec Group, Inc., Austin,
TX; and B. Frank McCullough, The University of Texas at Austin

Advances in Post-Tensioned Concrete Parking Facilities
Seismic Design
Mohammad Iqbal, Senior Vice President and General Counsel,
Walker Parking Consultants, Elgin, IL

Overview of ACI 440.4R-04 Document on Prestressing
Concrete with FRP Tendons
Raafat El-Hacha, Assistant Professor, Department of Civil Engineering,
University of Calgary, Calgary, Alberta, Canada; T.I. Campbell,
Queen’s University; and Charles Dolan, University of Wyoming

Variable Thickness Barrel Anchor for CFRP Prestressing Rods
Adil Al-Mayah, Research Assistant Professor, Department of Civil
Engineering, University of Waterloo, Waterloo, Ontario, Canada; and
Khaled A. Soudki and Alan Plumtree, University of Waterloo
Monday, November 7, 2005
2:00 pm – 5:00 pm

Ned H. Burns Symposium—Historic Innovations in Prestressed Concrete, Part II—continued

Behavior of Pretensioned Type II AASHTO Girders Constructed with Self-Consolidating Concrete
H.R. “Trey” Hamilton, III, Associate Professor, Department of Civil and Coastal Engineering, University of Florida, Gainesville, FL; Ted Labonte, Botkin Parassi & Associates, Inc.; and Marcus H. Ansley, Florida Department of Transportation

4:05 pm

A Pioneer in Precast Segmental Box Girders in the USA
John E. Breen, Al-Rashid Chair in Civil Engineering, Department of Civil, Architectural, and Environmental Engineering, The University of Texas at Austin, Austin, TX

4:30 pm

Ned Burns—Scholar, Educator, and Engineer
Richard W. Furlong, Professor Emeritus, Department of Civil, Architectural, and Environmental Engineering, The University of Texas at Austin, Austin, TX

4:45 pm
FRPRCS-7 Symposium Session
Strengthening of Existing Concrete Structures Using FRP Systems, Part I

Sponsored by Committee 440

Session Co-Moderators: Tarek Alkhrdaji
Structural Engineer
Strengthening Division
Structural Preservation Systems, Inc.
Hanover, MD

Mamdouh M. El-Badry
Professor of Civil Engineering
Department of Civil Engineering
University of Calgary
Calgary, Alberta, Canada

Introduction 2:00 pm
Tarek Alkhrdaji, Structural Engineer, Strengthening Division,
Structural Preservation Systems, Inc., Hanover, MD

Design Guidelines for Strengthening of Existing Structures with FRP in Italy 2:05 pm
Gaetano Manfredi, Professor, Department of Civil Engineering,
University of Naples Federico II, Naples, Italy; Luigi Asclione, University
of Salerno; Andrea Benedetti, University of Bologna; Roberto
Frassine and Carlo Poggi, Politecnico of Milan; Giorgio Monti,
University of Rome La Sapienza; Antonio Nanni, University of
Missouri-Rolla; and Elio Sacco, University of Cassino

Finite Element Modeling of RC Beams Retrofitted with CFRP Fabrics 2:30 pm
Huy Binh Pham, Doctoral Candidate, Department of Civil Engineering,
Monash University, Australia; and Riadh Al-Mahaidi, Monash University

Behavior of RC Beams Strengthened with Externally Post-Tensioning CFRP Strips 2:55 pm
K.S. Choi, Researcher, Korea Institute of Construction Technology,
Republic of Korea; and Y.C. You, Y.H. Park, J.S. Park, and K.H. Kim,
Korea Institute of Construction Technology
Monday, November 7, 2005
2:00 pm – 5:00 pm

FRPRCS-7 Symposium Session
Strengthening of Existing Concrete Structures Using C-4203A
FRP Systems, Part I—continued

Influence of Bond Behavior on Cross-Sectional Forces in 3:20 pm
Flexural RC Members Strengthened with FRC
Gerhard M. Zehetmaier, Co-Chair of Concrete Structures, Technical
University of Munich, Munich, Germany; and Konrad Zilch, Technical
University of Munich

FRP Strengthening in Shear: Tests and Design Equations 3:45 pm
Marc'Antonio Liotta, Doctoral Student, Structural Department of
Engineering and Geotechnica, University La Sapienza of Rome, Rome,
Italy; and Giorgio Monti, University La Sapienza of Rome

Post-Repair Performance of Bond Critical Corrosion 4:10 pm
Damaged Concrete Beams
Brent Craig, Civil Designer, Acres International, Niagara Falls,
Ontario, Canada; and Khaled A. Soudki, University of Waterloo

Bond Strengthening of Steel Bars Using External FRP 4:35 pm
Confinement: Implications on the Static and Cyclic
Response of R/C Members Repaired with FRP
Mohamed H. Harajli, Professor, Department of Civil and Environmental
Engineering, American University of Beirut, Beirut, Lebanon
Monday, November 7, 2005
2:00 pm – 5:00 pm

FRPRCS-7 Symposium Session
Serviceability of FRP Reinforced Concrete Structures C-4203B

Sponsored by Committee 440

Session Co-Moderators: Kent A. Harries
Assistant Professor
Department of Civil and Environmental Engineering
University of Pittsburgh
Pittsburgh, PA

Zishen Wu
Professor
Department of Urban and Civil Engineering
Ibaraki University
Hitachi, Japan

Introduction 2:00 pm
Kent A. Harries, Assistant Professor, Department of Civil and Environmental Engineering, University of Pittsburgh, Pittsburgh, PA

Fatigue Behavior of Prestressed Concrete Bridge Girders 2:05 pm
Strengthened with Various CFRP Systems
Sami H. Rizkalla, Distinguished Professor of Civil Engineering, Department of Civil Engineering, North Carolina State University, Raleigh, NC; and Owen Arthur Rosenboom, North Carolina State University

Fatigue Behavior of Reinforced Concrete Beams 2:30 pm
Strengthened with Different FRP Laminate Configurations
Richard Gussenhoven, Instructor, Department of Mathematical Sciences, U.S. Military Academy, West Point, NY; and Sergio F. Brenan, University of Massachusetts-Amherst

Steel-Free Hybrid FRP Stiffened Panel-Concrete Deck System 2:55 pm
Lijuan (Dawn) Cheng, Graduate Researcher, Department of Structural Engineering, University of California-San Diego, La Jolla, CA; and Vistasp M. Karbhari, University of California-San Diego

Rationale for the ACI 440.1R-06 Indirect Deflection 3:20 pm
Control Design Provisions
Carlos E. Ospina, Senior Engineer, Berger/ABAM Engineers, Inc., Federal Way, WA; and Shawn P. Gross, Villanova University
Monday, November 7, 2005
2:00 pm – 5:00 pm

FRPRCS-7 Symposium Session
Serviceability of FRP Reinforced Concrete Structures—continued

Time Depending Thermo Mechanical Bond Behavior of Epoxy-Bonded Prestressed FRP Reinforcement
Kurt Borchert, Chair of Concrete Structures, Institute of Building Materials and Construction, Technical University of Munich, Munich, Germany; and Konrad Zilch, Technical University of Munich

Long-Term Performance of CFRP Strap Shear Retrofitting System
Neil Hoult, Doctoral Candidate, Department of Engineering, Cambridge University, Cambridge, United Kingdom; and Janet Lees, Cambridge University

Freeze-Thaw Behavior of FRP-Confined Concrete when Simultaneously Subjected to Sustained Loads
Amir Z. Fam, Assistant Professor, Department of Civil Engineering, Queen’s University, Kingston, Ontario, Canada; and Andrew Kong and Mark F. Green, Queen’s University
Monday, November 7, 2005
5:00 pm – 6:00 pm

Women in ACI Reception

Gather with friends and colleagues to enjoy light refreshments and good conversation. All are invited to attend this reception sponsored by Hanley Wood.

[Logo]
Monday, November 7, 2005
5:00 pm – 6:30 pm

Ned H. Burns Reception
(150 people maximum)

Sponsored by Committee 423

A member of the National Academy of Engineering, Burns has been a true pioneer in prestressed concrete and has made significant contributions as an engineer, researcher, and educator. As a professor at the University of Texas at Austin and an ACI Fellow, Burns has also played a significant role in shaping the careers of many current and past ACI members. Please join in this celebration honoring his extensive contributions to advancements in the design and construction of prestressed concrete structures over the past five decades.
Monday, November 7, 2005
7:30 pm – 10:00 pm

123 Forum—Should the Concrete Materials Specifications be Rewritten?  M-Basie CC1
Sponsored by Committee 123

Session Moderator: Mohammad S. Khan
Vice President
Professional Services Industries, Inc.
Fairfax, VA

Introduction 7:30 pm
Mohammad S. Khan, Vice President, Professional Services Industries, Inc., Fairfax, VA

Should the Concrete Materials Specifications be Rewritten—Not Necessarily!  7:35 pm
Kenneth C. Hover, Professor, Department of Civil and Environmental Engineering, Cornell University, Ithaca, NY

Redefining Boiler Plate Project Specifications 7:55 pm
Steven H. Kosmatka, Vice President of Research and Technical Services, Portland Cement Association, Skokie, IL

What is Important to Good Concrete 8:05 pm
F. Al Innis, Vice President, Quality, Holcim (US) Inc., Ann Arbor, MI

Specifying Concrete That May Have Alkali-Reactive Aggregates 8:15 pm
Rachel J. Detwiler, Senior Materials Engineer, Braun Intertec Corp., Minneapolis, MN

Striking a Good Match Between the Owner and the Contractor 8:25 pm
Bryce P. Simons, State Concrete Engineer, New Mexico Department of Transportation, Santa Fe, NM

Questions, Answers, and Discussion 8:45 pm
Tuesday, November 8, 2005
9:00 am – 12:00 pm

Contractors' Day, Part I

Sponsored by the ACI Kansas and Missouri Chapters and the
Construction Liaison Committee

Session Moderator: Steven R. Kueffer
Director of Project Marketing
Penny's Concrete, Inc.
Shawnee, KS

Introduction 9:00 am
Steven R. Kueffer, Director of Project Marketing, Penny's Concrete,
Inc., Shawnee, KS

Self-Consolidating Concrete Acceptance—Where Are We? 9:05 am
Joseph A. Daczko, Product Line Manager, Degussa Admixtures, Inc.,
Cleveland, OH

Advances in Non-Conventional Reinforcement 9:40 am
Russell W. Collins, Area Manager, SI Concrete Systems, Round Rock, TX

Concrete Repair—Repair of Construction Deficiencies 10:15 am
Jay Thomas, Vice President, Structural Group, Inc., Hanover, MD

Practical Design Criteria for Shoring/Reshoring 10:50 am
Operations in Multi-Story Buildings
Pericles C. Stivaros, Associate, Feld, Kamienetzky, and Cohen, PC,
Roslyn Heights, NY

Specifications—Performance Versus Prescriptive 11:25 am
Kevin MacDonald, Vice President of Engineering, Cemstone Products
Co., Mendota Heights, MN
Tuesday, November 8, 2005
9:00 am – 12:00 pm

Impact of Rebar Constructibility on Project Performance  C-4202A

Sponsored by Committees E 702 and 315-B

Session Co-Moderators: Richard H. Birley
President
Condor Rebar Consultants, Inc.
Vancouver, British Columbia, Canada

Roy H. Reiterman
Consulting Engineer
Roy H. Reiterman and Associates
Consulting Engineers
Troy, MI

Introduction  9:00 am
Richard H. Birley, President, Condor Rebar Consultants, Inc.,
Vancouver, British Columbia, Canada

Illeure of Rebar Detailing  9:05 am
Jay A. Hetherington, Manager of Estimating-Steel Group, SMI-Texas,
Seguin, TX

Bending Limitations in Concrete and Masonry  9:35 am
Dennis L. Hunter, Engineering Manager, Gerdau Ameristeel, Plant City, FL

Details—Shear Walls and Boundary Elements  10:05 am
Dale Rinehart, Engineering Manager, Fontana Steel, Rancho
Cucamonga, CA

Drawing Details and Constructibility  10:35 am
Gregory P. Birley, Vice President, Technical Development and Training,
Condor Rebar Consultants, Inc., Vancouver, British Columbia, Canada

Constructibility Simplified  11:05 am
Harrison Rolfe Jennings, SW Regional Manager, CRSI, Dallas, TX

WWW—A ‘Decongestant’ for Reinforced Concrete Construction  11:35 am
Theodore A. Mize, Sales, Structural Products, Ivy Steel & Wire,
Concord, CA
FRPRCS-7 Symposium Session
Strengthening of Existing Concrete Structures Using FRP Systems, Part II

Sponsored by Committee 440

Session Co-Moderators: Khalid Soudki
Canada Research Chair in Innovative Structural Rehabilitation
Department of Civil Engineering
University of Waterloo
Waterloo, Ontario, Canada

Jay Thomas
Vice President
Structural Preservation Systems
Hanover, MD

Introduction 9:00 am

Khalid Soudki, Canada Research Chair in Innovative Structural Rehabilitation, Department of Civil Engineering, University of Waterloo, Waterloo, Ontario, Canada

Development of Probabilistic-Based Design for FRP 9:05 am
Strengthening of Reinforced Concrete
Rebecca Atadero, Graduate Research Assistant, Department of Structural Engineering, University of California-San Diego, La Jolla, CA; and Vistasp M. Karbhari, University of California

Strengthening of Concrete Structures Using Steel Wire 9:30 am
Reinforced Polymer
Wine Figeys, ir-arch, K.U.Leuven, Department of Civil Engineering, Building Materials and Building Technology Division, Heverlee, Belgium; Luc Schueremans and Dionys Van Gemert, Building Materials and Building Technology Division; and Kris Brosens, Triconsult NV

Performance of Double-T Prestressed Concrete Beams 9:55 am
Strengthened with Steel Reinforced Polymer
Paolo Casadei, Lecturer of Civil Engineering, Department of Architecture and Civil Engineering, University of Bath, Bath, United Kingdom; Antonio Nanni, University of Missouri-Rolla; and Tarek Alkhrdaji and Jay Thomas, Structural Preservation Systems
Tuesday, November 8, 2005
9:00 am – 12:00 pm

FRPRCS-7 Symposium Session

Strengthening of Existing Concrete Structures Using FRP Systems, Part II—continued

Analytical Evaluation of RC Beams Strengthened with Near-Surface-Mounted CFRP Laminates
Jae-Yoon Kang, Senior Researcher, Structure Research Department, Korea Institute of Construction Technology, Republic of Korea; and Young-Hwan Park, Jong-Sup Park, Young-Jun You, and Woo-Tai Jung, Korea Institute of Construction Technology

10:20 am

Experimental Investigation on Flexural Behavior of Reinforced Concrete Beams Strengthened by Near-Surface-Mounted CFRP Reinforcements
Woo-Tai Jung, Researcher, Structure Research Department, Korea Institute of Construction Technology, Republic of Korea; and Young-Hwan Park, Jong-Sup Park, Jae-Yoon Kang, and Young-Jun You, Korea Institute of Construction Technology

10:45 am

Shear Strengthening of Rectangular Section RC Beams with Near-Surface-Mounted CFRP Laminates
Joaquim A.O. Barros, Associate Professor, Department of Civil Engineering, University of Minho, Guimaraes, Portugal; and Salvador J.E. Dias, University of Minho

11:10 am

Shear Assessment and Strengthening of Contiguous-Beam Concrete Bridges Using FRP Bars
Pierfrancesco Valerio, Doctoral Student, Department of Architecture and Civil Engineering, University of Bath, Bath, United Kingdom; and Timothy Ibell and Anthony Peter Darby, University of Bath

11:35 am
Tuesday, November 8, 2005
9:00 am – 12:00 pm

FRPRCS-7 Symposium Session
Design and Behavior of Concrete Members Internally Reinforced with FRP

Sponsored by Committee 440

Session Co-Moderators:
Kenneth W. Neale
Canada Research Chair in Advanced Engineered Material Systems
Department of Civil Engineering
University of Sherbrooke
Sherbrooke, Quebec, Canada

T. J. Ibell
Director of the Centre for Structural and Architectural Engineering
Department of Architecture and Civil Engineering
University of Bath
Bath, United Kingdom

Introduction
Kenneth W. Neale, Canada Research Chair in Advanced Engineered Material Systems, Department of Civil Engineering, University of Sherbrooke, Sherbrooke, Quebec, Canada

Punching Shear Capacity of Double Layer FRP Grid Reinforced Slabs
Lawrence C. Bank, Professor, Department of Civil Engineering, University of Wisconsin-Madison, Madison, WI; Michael G. Oliva and Jeffrey S. Russell, University of Wisconsin-Madison; and David A. Jacobson, KPFF

New Punching Shear Equation for Concrete Two-Way Slabs Reinforced with FRP Bars
Sherif El-Gamal, Post-Doctoral Fellow, Department of Civil Engineering, University of Sherbrooke, Sherbrooke, Quebec, Canada; and Ehab F. El-Salakawy and Brahim Benmokrane, University of Sherbrooke

Flexural Behavior of Fiber-Reinforced Concrete Beams Reinforced with FRP Rebars
Abdeldjelil Belarbi, Distinguished Professor, Department of Civil, Architectural, and Environmental Engineering, University of Missouri-Rolla, Rolla, MO; and Huanzi Wang, University of Missouri-Rolla
FRPRCS-7 Symposium Session
Design and Behavior of Concrete Members Internally Reinforced with FRP—continued

Finite Element Modeling of Concrete Bridge Deck Slabs 10:20 am Reinforced with FRP Bars
Ehab F. El-Salakawy, Research Associate Professor, Department of Civil Engineering, University of Sherbrooke, Sherbrooke, Quebec, Canada; and Amr El Ragaby and Brahim Benmokrane, University of Sherbrooke

Guide Examples for Design of Concrete Reinforced 10:45 am with Fiber-Reinforced Polymer Bars
Vicki L. Brown, Associate Professor and Chairman of Civil Engineering, Department of Civil Engineering, Widener University, Chester, PA; and William K. Feeser, T.N. Ward Co.

Concrete Shear Strength of Concrete Beams Reinforced 11:10 am with FRP Bars: Design Method
Brahim Benmokrane, NSERC Research Chair in FRP Reinforcement for Concrete Structures, Department of Civil Engineering, University of Sherbrooke, Sherbrooke, Quebec, Canada; and Ahmed K. El-Sayed and Ehab F. El-Salakawy, University of Sherbrooke

Tension Stiffening Behavior of GFRP-Reinforced Concrete 11:35 am
Kypros Pilakoutas, Professor, Department of Civil and Structural Engineering, University of Sheffield, Sheffield, United Kingdom; and Harsha Sooriyaarachchi and Ewan Byars, University of Sheffield
Tuesday, November 8, 2005
12:00 pm – 2:00 pm

✓ Contractors' Day Lunch
$48 U.S. per person

Hosted by the ACI Kansas and Missouri Chapters and the
Construction Liaison Committee

Speaker: Neal Burnette
Operations Manager
Baker Concrete Construction, Inc.
Indianapolis, IN

Topic: Conrad: A Five Star Concrete Structure

The discussion will consist of exploring
construction difficulties encountered, as
well as a systems approach with regard to site logistics, with the
construction of the Conrad Indianapolis Hotel.

Tickets may be purchased at the ACI Registration Desk
until 24 hours prior to the event. Please notify the ACI
Registration Desk if you have any dietary restrictions.

✓ Separate fee required

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Tuesday, November 8, 2005
2:00 pm – 5:00 pm

Contractors’ Day, Part II

Sponsored by the ACI Kansas and Missouri Chapters and the
Construction Liaison Committee

Session Moderator: T. Patrick Earney
Research Assistant
Department of Civil Engineering
University of Missouri–Columbia
Columbia, MO

Introduction 2:00 pm
T. Patrick Earney, Research Assistant, Department of Civil Engineering,
University of Missouri–Columbia, Columbia, MO

Maturity Testing—How Can it Benefit the Contractor? 2:05 pm
Mark A. Cheek, Vice President, Beta Testing & Inspection, LLC,
Gretna, LA

Design Features and Construction Procedures of 2:40 pm
Wire-Wound Prestressed Concrete Tanks
Andrew Minogue, Senior Design Engineer, NATGUN Co., Inc.,
Wakefield, MA

Fundamentals of Jointing Concrete Flatwork 3:15 pm
Kelly Rauckman, Director of Field Marketing, Penny’s Concrete, Inc.,
Shawnee, KS

Old and New Technologies in Concrete That Can Aid in 3:50 pm
the Contractor Being More Profitable
Richard D. Follette, Product Specialist, W.R. Grace & Co., Kenner, LA

Performance Specifications for Concrete— 4:25 pm
A Contractor’s Perspective
Sam Carter, President and Owner, Carter Concrete Structures, Stone
Mountain, GA
Tuesday, November 8, 2005
2:00 pm – 5:00 pm

Open Paper Session

Sponsored by Committee 123

Session Co-Moderators: Prasad R. Rangaraju
Assistant Professor
Department of Civil Engineering
Clemson University
Clemson, SC

Narayanan Neithalath
Assistant Professor
Department of Civil and
Environmental Engineering
Clarkson University
Potsdam, NY

Introduction 2:00 pm
Prasad R. Rangaraju, Assistant Professor, Department of Civil
Engineering, Clemson University, Clemson, SC

Transfer Length in Prestressed SCC Members 2:01 pm
Robert W. Barnes, Assistant Professor, Department of Civil Engineering,
Auburn University, Auburn, AL; and J. Shane Swords and Anton K.
Schindler, Auburn University

Identify and Secure Key Concrete Bridges Against Manmade Hazards 2:20 pm
Zhenyu Zhu, Visiting Research Faculty, Department of Civil and
Environmental Engineering, Florida International University, Miami,
FL; and Amir Mirmiran, Florida International University

Safe Shear Design of Large, Lightly-Reinforced Concrete Beams and One-Way Slabs 2:40 pm
Edward G. Sherwood, Post-Doctoral Candidate, Department of Civil Engineering, University of Toronto, Toronto, Ontario, Canada; and
Evan C. Bentz and Michael P. Collins, University of Toronto

Hysteretic Behavior of R/C Columns Confined with Opposing Spirals 3:00 pm
Riyadh A. Hindi, Assistant Professor, Department of Civil Engineering
and Construction, Bradley University, Peoria, IL; and Wesley Turechek,
Bradley University
Tuesday, November 8, 2005
2:00 pm – 5:00 pm

Open Paper Session—continued

Relaxation of Confinement Reinforcement Requirements in Structural Walls Through the Use of High-Performance Fiber-Reinforced Cement Composites
Gustavo J. Parra-Montesinos, Assistant Professor, Department of Civil and Environmental Engineering, University of Michigan, Ann Arbor, MI; Bekir Afsin Canbolat, University of Michigan; and Ganesh Jeyaraman, Biggs Cardosa Associates, Inc.

Behavior of High-Strength Concrete Square Short Columns Subjected to Biaxial Bending Moments and Strengthened by FRP Laminates
W.M. Hassan, Associate Lecturer, Structural Engineering Department, Faculty of Engineering, Cairo University, Egypt; and Heba Hamed Bahnasawy, O.A. Hodhod, and M. Sameh Hilal, Hilal Structural Design and Consultants

Durability Issues of High-Strength Concrete Exposed to Elevated Temperatures
Elizabeth Kerr, Graduate Student, Department of Civil Engineering and Geological Sciences, University of Notre Dame, Notre Dame, IN; and Wilasa Vichit-Vadakan, University of Notre Dame

Real Scale Fire Test on Industrial Hall: Assessment of Pretensioned Concrete Girder After Fire
Luc R. Taerwe, Professor, Magnel Laboratory for Concrete Research, Ghent University, Ghent, Belgium; and Ir.A.M. Poppe, Ghent University

Feasibility Study of Oriented Straw Cable-Cement Composites
Anthony J. Lamanna, Assistant Professor, Department of Civil and Environmental Engineering, Tulane University, New Orleans, LA; and Seda Seluck, Tulane University
Tuesday, November 8, 2005
2:00 pm – 5:00 pm

FRPRCS-7 Symposium Session
Behavior of FRP Reinforced Concrete Columns  
C-4204B

Sponsored by Committee 440

Session Co-Moderators: Amir Z. Fam
Assistant Professor
Department of Civil Engineering
Queen's University
Kingston, Ontario, Canada

Chris J. Burgoyne
Professor
Department of Engineering
University of Cambridge
Cambridge, United Kingdom

Introduction  
2:00 pm
Amir Z. Fam, Assistant Professor, Department of Civil Engineering, 
Queen's University, Kingston, Ontario, Canada

Concrete Confinement Using a Carbon Fiber Reinforced  
2:05 pm
Polymer Grid
Antonis P. Michael, Graduate Research Assistant, Department of 
Civil and Coastal Engineering, University of Florida, Gainesville FL;  
H.R. "Trey" Hamilton, III, University of Florida; and Marcus H.  
Amsley, Florida Department of Transportation

Strain-Based Design Model for FRP-Confined Concrete Columns  
2:30 pm
Nicolas Saenz, Graduate Engineer, Walter P. Moore, Las Vegas, NV;  
and Chris P. Pantelides, University of Utah

FRP-Confinement of Hollow Concrete Cylinders and Prisms  
2:55 pm
Rossella Modarelli, Engineer, CETMA Consortium, Brindisi, Italy;  
Orazio Manni, CETMA Consortium; and Francesco Micelli, University  
of Lecce-Italy

Shape Modification with Expansive Cement Concrete for  
3:20 pm
Confinement with FRP Composites
Chris P. Pantelides, Professor, Department of Civil Engineering,  
University of Utah, Salt Lake City, UT; and Zihan Yan and Lawrence  
Reaveley, University of Utah

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Tuesday, November 8, 2005
2:00 pm – 5:00 pm

FRPRCS-7 Symposium Session
Behavior of FRP Reinforced Concrete Columns—continued C-4204B

Design Equations for FRP Strengthening of Columns 3:45 pm
Giorgio Monti, Professor, Department of Civil Engineering, University
La Sapienza of Rome, Rome, Italy; and Silvia Alessandri, University
La Sapienza of Rome

Shear Strength Prediction of Deep CFFT Beams 4:10 pm
Amir Mirmiran, Professor and Chair, Department of Civil and
Environmental Engineering, Florida International University, Miami
FL; Iftekhar Ahmad, ONM&J, Inc.; Zhenyu Zhu, Florida International
University; and Amir Z. Fam, Queen's University

Field Installation, Splicing, and Flexural Testing of Hybrid 4:35 pm
FRP/Concrete Piles
Karim Helmi, ISIS Canada, University of Manitoba, Winnipeg, Manitoba,
Canada; Aftab Mufti, University of Manitoba, ISIS Canada; and Amir
Z. Fam, Queen's University
Tuesday, November 8, 2005
2:00 pm – 5:00 pm

FRPRCS-7 Symposium Session
Field Applications of FRP Reinforced Concrete Structures

C-4203A

Sponsored by Committee 440

Session Co-Moderators: Stephanie L. Walkup
Senior Associate
Wiss, Janney, Elstner Associates, Inc.
Princeton Junction, NJ

Baidar Bakht
President
Scarborough, Ontario, Canada

Introduction

Stephanie L. Walkup, Senior Associate, Wiss, Janney, Elstner

Design and Construction of Bridge Deck Using FRP as Mild and Post-Tensioned Reinforcement
Raffaello Fico, Doctoral Student, Department of Structural Analysis and Design, University of Naples Federico II, Naples, Italy; Nestore Galati, University of Missouri-Rolla; Andrea Prota, University of Naples; and Antonio Nanni, University of Missouri-Rolla

FRP Application for Underwater Repair of Corroded Piles
Rajan Sen, Professor, Department of Civil and Environmental Engineering, University of South Florida, Gainesville, FL; and Gary Mullins, Kwang Suk Suh, and Danny Winters, University of South Florida

Strengthening of Off-System Bridges with Mechanically Fastened Pre-Cured FRP Laminates
Antonio Nanni, Vernon and Maralene Jones Professor of Civil Engineering, University of Missouri-Rolla, Rolla MO; Andrea Rizzo, University of Lecce; and Nestore Galati, University of Missouri-Rolla

Application of Tensioned CFRP Strip Method to an Existing Bridge
Akira Tatelshi, Nippon Steel Composite, Co., Ltd, Tokyo, Japan; Akira Kobayashi, Nippon Steel Composite, Co., Ltd; and Yuzuru Hamada, Terumitsu Takahashi, and Hiroshi Yasumori, DPS Bridge Works Co., Ltd.

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Tuesday, November 8, 2005
2:00 pm – 5:00 pm

**FRPRCS-7 Symposium Session**
Field Applications of FRP Reinforced Concrete Structures — continued

**Performance Evaluation of Short-Span Bridge Built with FRP Reinforced Concrete**
Ursula Deza, Graduate Research Assistant, Bridge Engineering Center at the Center for Transportation Research Education (CTRE), Iowa State University, Ames, Iowa; and **Antonio Nanni**, University of Missouri-Rolla

3:45 pm

**Rehabilitation of Plaza de Diego Building in San Juan, Puerto Rico, Using CFRP**
Mo Ehsani, President, QuakeWrap, Inc., Tucson, AZ

4:10 pm

**Bonded and Mechanically Fastened FRP Strengthening System: A Case Study**
Alexis Lopez, Doctoral Student, Department of Civil Engineering, University of Missouri-Rolla, Rolla, MO; **Andrea Rizzo**, University of Lecce; and Nestore Galati and **Antonio Nanni**, University of Missouri-Rolla

4:35 pm
Full-Scale In-Situ Load Testing—Case Studies

Sponsored by Committee 437

Session Moderator: Jay Thomas
Vice President
Structural Preservation Systems
Hanover, MD

Introduction  2:00 pm
Jay Thomas, Vice President, Structural Preservation Systems,
Hanover, MD

Full-Scale Load Test of Precast Concrete Roof Structure  2:05 pm
Phillip J. Lykosh, Senior Associate, Wiss, Janney, Elstner
Associates, Inc., Lakewood, CO

Load Testing and Analysis of Three Superloads on the
Bonnet Care Overpass (Louisiana)
Jesse Grimson, Structural Engineer, Bridge Diagnostics, Inc., Boulder,
CO; Jennifer Fu, Louisiana Department of Transportation and
Development; and Paul H. Ziehl, University of South Carolina

Static and Dynamic Load Testing of Post-Tensioned
Precast Segmental Reaction Wall
Keith E. Kesner, Project Director, LZA Technology Division,
Thornton-Tomasetti Group, Inc., New York, NY; Gregory McClaskey,
University of California Berkeley; and Mary Sansalone, Cornell
University

Full-Scale Testing of Repaired Post-Tensioned Beams  3:35 pm
Using Cyclic and ACI Load Testing Methods
Tarek Alkhrdaji, Structural Engineer, Strengthening Division,
Structural Group, Inc., Hanover, MD

Field Tests on RC Buildings of HSIN-TSENG Junior High  4:05 pm
School in Taiwan for Seismic Resistance
Shyh-Jiann Hwang, Professor, Department of Construction
Engineering, National Taiwan University of Science and Technology,
Taipei, Taiwan

Full-Scale Load Testing of Reinforced Concrete Flat Plate  4:35 pm
Structure Retrofitted with Drop Panels
Adam Abbas Yala, Engineer, Thornton-Tomasetti Group, Inc., Chicago, IL
Tuesday, November 8, 2005
5:00 pm – 6:00 pm

Faculty Network Reception

Hosted by Committee E 803

This reception offers informal networking and idea exchange for all faculty members and students attending the ACI Convention. Light hors d’oeuvres will be available.
Tuesday, November 8, 2005
6:30 pm – 8:00 pm

Concrete Mixer

Sponsored by ACI

Welcome to Kansas City! Enjoy a taste of Kansas City including some terrific barbecue while networking and conversing with your friends and colleagues.

Please use your drink tickets in your registration packet or cash to purchase beverages.
Wednesday, November 9, 2005
8:30 am – 11:30 am

Chapter Operations Forum

Sponsored by the ACI Chapter Activities Committee and
the International Committee

Session Co-Moderators: Andrea J. Schokker
Associate Professor and Henderson Chair
Department of Civil and Environmental
Engineering
Pennsylvania State University
University Park, PA

Luke M. Snell
Professor of Construction Management
Director, Concrete Construction
Resource Unit
Southern Illinois University Edwardsville
Edwardsville, IL

Welcome and Introduction 8:30 am
Andrea J. Schokker, Associate Professor and Henderson Chair,
Department of Civil and Environmental Engineering, Pennsylvania
State University, University Park, PA

Planning Chapter Activities—Using the Long Form as a 8:35 am
Guide to Plan Chapter Activities
LaGrit “Sam” F. Morris, Director of Administration, Georgia
Concrete & Products Association, Tucker, GA

Membership Recruitment and Retention—Techniques to 8:55 am
Recruit and Retain Members
Alain Belanger, Product Manager, National Concrete Accessories,
Toronto, Ontario, Canada; and Mostapha A. Vand, Vand Chemie, Co.

Programs and Seminars—How to Develop Successful 9:15 am
Programs and Seminars
Luke M. Snell, Professor of Construction Management, Director,
Concrete Construction Resource Unit, Southern Illinois University
Edwardsville, Edwardsville, IL; and Enrique Pasquel, Los Alamos De
Monterrico
Wednesday, November 9, 2005
8:30 am – 11:30 am

Chapter Operations Forum—continued

University Relations—How to Get Involved with Professors
  9:35 am
  and Students

Andrea J. Schokker, Associate Professor and Henderson Chair,
Department of Civil and Environmental Engineering, Pennsylvania
State University, University Park, PA

Website Tools—Resources Available Through the ACI Website
  9:55 am
John C. Glumb, Managing Director, Information, Production, and
Event Services, American Concrete Institute, Farmington Hills, MI

Break
  10:15 am - 10:30 am

Panel Discussion—All Speakers
  10:30 am
There will be an open discussion about chapter operation issues
along with questions and comments from the panelists and audience.
Wednesday, November 9, 2005
9:00 am – 12:00 pm

International Session: Textile-Reinforced Concrete (TRC) – C-4204A
The German Experience

Sponsored by Committee 549

Session Moderator: Ashish Dubey
Senior Member Technical Staff
United States Gypsum Corp.
Libertyville, IL

Introduction 9:00 am
Ashish Dubey, Senior Member Technical Staff, United States
Gypsum Corp., Libertyville, IL

Technical Fabrics for Reinforcing Cementitious Composites 9:05 am
Peter Offerman, Professor, Technical University of Dresden,
Dresden Germany; and Thomas Gries, RWTH Aachen

Concrete Technology and Mixture Design for Textile-
Reinforced Concrete 9:35 am
Wolfgang Brameshubey, Professor, RWTH Aachen, Aachen, Germany;
and Harold Schorn, Technical University of Dresden

Load-Bearing Behavior of Textile-Reinforced Concrete 10:05 am
Manfred H. Curbach, Professor, Technical University of Dresden,
Dresden, Germany; and Josef Hegger, RWTH Aachen

Numerical Modeling of Textile-Reinforced Concrete 10:35 am
R. Chudoba, Professor, RWTH Aachen, Aachen, Germany; Bernd
Moller, Technical University of Dresden; Konstantin Meskouris,
RWTH Aachen; and Bernd W. Zastra, W. Graf, and I. Lepenies,
Technical University of Dresden

Dimensioning and Applications of 11:05 am
Textile-Reinforced Concrete
Josef Hegger, Professor, RWTH Aachen, Aachen, Germany

Strengthening of RC Structures with 11:35 am
Textile-Reinforced Concrete
Manfred H. Curbach, Professor, Technical University of Dresden,
Dresden, Germany
Wednesday, November 9, 2005
9:00 am – 12:00 pm

FRPRCS-7 Symposium Session
Effects of Extreme Events on FRP Reinforced Concrete Structures

Sponsored by Committee 440

Session Co-Moderators: Mark F. Green
Professor
Department of Civil Engineering
Queen’s University
Kingston, Ontario, Canada

Tamon Ueda
Professor
Division of Structural and Geotechnical Engineering
Hokkaido University
Sapporo, Japan

Introduction
Mark F. Green, Professor, Department of Civil Engineering, Queen’s University, Kingston, Ontario, Canada

High Temperature Residual Properties of Externally-Bonded FRP Systems
Sarah Foster, Graduate Student, Department of Civil Engineering, Queen’s University, Kingston, Ontario, Canada; and Luke A. Bisby, Queen’s University

Evaluating Fire Endurance of FRP-Strengthened Square Reinforced Concrete Columns
Mark F. Green, Professor, Department of Civil Engineering, Queen’s University, Kingston, Ontario, Canada

Innovative Application of FRPs for Seismic Strengthening of RC Shearwall
Katsumi Kobayashi, Professor, University of Fukui, Fukui, Japan

Innovative Technique for Seismic Upgrade of RC Square Columns
Edoardo Cosenza, Professor, Department of Structural Analysis and Design, University of Naples Federico II, Naples, Italy; Andrea Prota, Gaetano Manfredi, and Alberto Balsamo, University of Naples Federico II; and Antonio Nanni, University of Missouri-Rolla

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Wednesday, November 9, 2005
2:00 pm – 5:00 pm

International Session: Textile-Reinforced Concrete (TRC)—The International Experience—continued

Effects of Processing Parameters on Mechanical Properties of Textile-Reinforced Concrete
Barzin Mobasher, Professor, Department of Civil and Environmental Engineering, Arizona State University, Tempe, AZ; and Alva Peled, Ben-Gurion University

Size Effect in Tensile and Flexural Performance of Fine-Grained Concrete Used as Matrix for Textile-Reinforced Concrete
Wolfgang Bramshubey, Professor, RWTH Aachen, Aachen, Germany; and Tanja Brockmann, RWTH Aachen
Wednesday, November 9, 2005
2:00 pm – 5:00 pm

Self-Consolidating Concrete Applications and C-4203A
Reviewing the Emerging Technologies

Sponsored by Committee 237

Session Co-Moderators: Gary F. Knight
Technical Service Engineer
Holcim, Inc. (US)
Duluth, GA

Charles R. Cornman
Director of Research
W.R. Grace & Co.
Cambridge, MA

Introduction 2:00 pm
Gary F. Knight, Technical Service Engineer, Holcim, Inc. (US), Duluth, GA

ASTM Update on Approval of SCC Testing Methods 2:05 pm
Martin Vachon, Director of Technology, Axim Italcementi Group,
Middlebranch, OH

Reviewing the Emerging Technologies Document on SCC 2:35 pm
Joseph A. Daczko, Research Manager, Degussa Admixtures, Inc.,
Cleveland, OH

SCC at the Citadel 3:05 pm
Godwin O. Amekeudi, Director, Corporate Quality/Technology,
Ready Mixed Concrete Co., Raleigh, NC

SCC and the New Atlanta Aquarium 3:35 pm
Kirk K. Deadrick, Director of Quality Assurance, Lafarge North
America, Alpharetta, GA

SCC Use in Lightweight Precast Concrete Projects 4:05 pm
Jody Wall, Director of Technical Services, Carolina Stalite Co.,
Gold Hill, NC

Fine Aggregate Options for SCC 4:35 pm
Don Powell, Technical Director, Vulcan Materials Co., Birmingham, AL
FRPRCS-7 Symposium Session

Durability of FRP for Reinforced Concrete Structures—continued

10:20 am
Durability of CFRP Sheet Reinforcement Through Exposure Tests
Itaru Nishizaki, Public Works Research Institute, Ibaraki, Japan; and Pierre Labossiere and Bodgan Sarsaniuc, University of Sherbrooke

10:45 am
Residual Tensile Strength of GFRP Bars Subjected to Sustained Loading in Concrete Beams
Charles E. Bakis, Professor, Department of Engineering Science and Mechanics, Pennsylvania State University, University Park, PA; and Thomas E. Boothby, R. A. Schaut, and C. G. Pantano, Pennsylvania State University

11:10 am
Performance of Corrosion-Damaged RC Columns Repaired by CFRP Sheets
Sang-Wook Bae, Post-Doctoral Research Fellow, Department of Civil, Architectural, and Environmental Engineering, University of Missouri-Rolla, Rolla, MO; and Abdeldjelil Belarbi and John J. Myers, University of Missouri-Rolla

11:35 am
Fracture Mechanics Approach for Interface Durability Evaluation of Surface Bonded FRP to Concrete
Julio F. Davalos, Benedum Distinguished Teaching Professor, Department of Civil and Environmental Engineering, West Virginia University, Morgantown, WV; Shilpa Kodkani, Rummel Klepper, and Kahl Indrajit Ray, West Virginia University; and David M. Boyajian, University of North Carolina at Charlotte
Wednesday, November 9, 2005
9:00 am – 12:00 pm

★ Implementation of High-Performance Concrete in Bridge Design

Sponsored by Committee 343

Session Co-Moderators: Om P. Dixit
Vice President
DMJM Harris, Inc.
New Orleans, LA

Bruce C. Kates
Structural Section Manager
Jacobs Civil, Inc.
St. Louis, MO

Introduction
Om P. Dixit, Vice President, DMJM Harris, Inc., New Orleans, LA

9:05 am

HPC for Bridges—An Overview
Shrinivas B. Bhide, Bridge Program Manager, Portland Cement Association, Skokie, IL

Specifying and Constructing HPC Bridge Decks on the I-99 Corridor and Beyond
Paul J. Tikalsky, Deputy Director, Pennsylvania Transportation Institute, University Park, PA

Implementation of HPC in Bridge Structures in Virginia
H. Celik Ozyildirim, Principal Research Scientist, Virginia Transportation Research Council, Charlottesville, VA

10:35 am

HPC Design Implementation in Bridges
Maher H. Tadros, Charles J. Vranek Professor of Civil Engineering, Department of Civil Engineering, University of Nebraska-Lincoln, Lincoln, NE; and Amgar M. Girgis, University of Nebraska-Lincoln

Implementation of HPC in Louisiana Bridge Structures
John J. Roller, Principal Structural Engineer, CTLGroup, Chicago, IL

11:05 am

Practical Application of High-Performance/Low Permeability Concrete on Bridges in Pennsylvania
David G. Tepke, Graduate Assistant, Pennsylvania Transportation Institute, University Park, PA

11:35 am

★ Denotes theme session
Wednesday, November 9, 2005
9:00 am – 12:00 pm

Innovative Practical Applications and Automation

C-4202A

Sponsored by Committee 118

Session Co-Moderators: Larry D. Church
Senior Project Manager
Walker Parking Consultants
Elgin, IL

Waseem DeKelbab
Project Engineer
TNO-DIANA North America
Livonia, MI

Introduction
Larry D. Church, Senior Project Manager, Walker Parking Consultants, Elgin, IL

Automation of Data Collection
Ryan Riehle, President, BuildWays Corp., Pittsburgh, PA

Advanced Concrete Modeling for Structural Design and Assessment
Waseem DeKelbab, Project Engineer, TNO-DIANA North America, Livonia, MI

Concrete in the Age of Google
Richard Wiles, Information Solutions Consultant, Cemex, Houston, TX

Optimizing Concrete for Structural Applications
Jeffrey Bullard, Materials and Construction Research Division, Building and Fire Research Laboratory, National Institute of Standards and Technology, Gaithersburg, MD

Computerized Process Control for Concrete Materials
James Shilstone, Jr., President, Shilstone Companies, Inc., Dallas, TX

Predicting Shear Cracking Using Neural and Fuzzy Systems
R. El Tahawy, MSc Student, Department of Civil Engineering, University of New Mexico, Albuquerque, NM; Mahmoud M. Reda Taha, University of New Mexico; and Alaa G. Sherif, Helwan University

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Wednesday, November 9, 2005
12:00 pm – 2:00 pm

✓ International Luncheon
$54 U.S. per person

Hosted by the International Committee

Speaker: William F. Baker
Partner, Structural and Civil Engineering
Skidmore, Owings & Merrill LLP
Chicago, IL

Topic: Uniqueness of the Burj Dubai—Design to Construction

At over 2000 feet high and located in the United Arab Emirates, the Burj Dubai (Tower Dubai) will be the world’s tallest structure when completed. The final height of this super skyscraper will certainly exceed the current record holder—the 1671 ft. tall Taipei 101 building. Construction of the tower commenced in the fall of 2003, and is scheduled to be completed in 2008. The 3,000,000 sq. ft. building will include residential, commercial, hotel, entertainment, and retail facilities.

The reinforced concrete tower has a “Y” shape to dramatically reduce the wind forces on the tower, keeping the structure simple and fostering constructibility. The Y-shaped floor plan also maximizes views of the Arabian Gulf. As the principal structural designer, Mr. Baker will discuss many unique challenges of the design and construction of the Burj Dubai.

Tickets may be purchased at the ACI Registration Desk until 24 hours prior to the event. Please notify the ACI Registration Desk if you have any dietary restrictions.

✓ Separate fee required
Wednesday, November 9, 2005
2:00 pm – 5:00 pm

Advances in Concrete Using Slag Cement  C-4202A

Sponsored by Committee 233

Session Co-Moderators: Russell T. Flynn
Director of Technical and Marketing Services
Florida Rock Industries
Palmetto, FL

Darrell F. Elliot
Technical Services Manager
Buzzi Unicem USA
New Orleans, LA

Introduction  2:00 pm
Russell T. Flynn, Director of Technical and Marketing Services,
Florida Rock Industries, Palmetto, FL

Optimization of Slag Cement Mixtures for Sulfate Resistance  2:05 pm
R. Doug Hooton, Professor, Department of Civil Engineering,
University of Toronto, Toronto, Ontario, Canada; and Guy Detwiler
and Robert F. Pugh, Lehigh Cement Co.

Mechanical Properties of Concrete Containing Slag Cement and Fly Ash  2:35 pm
W. Micah Hale, Assistant Professor, Department of Civil Engineering,
University of Arkansas, Fayetteville, AR; and Natalie K. Peterson,
University of Arkansas

Laboratory Study on Evaluating Properties of Slag Cement-Based Ternary Cements for Use as High-Performance Concrete in Bridges  3:05 pm
Frasad R. Rangaraju, Assistant Professor, Department of Civil Engineering,
Clemson University, Clemson, SC; and Jan Olek, Purdue University

Stabilization/Solidification of Hazardous Waste with Alkali-Activated Slag Cement  3:35 pm
Caijun Shi, President, CJS Technology, Inc., Burlington, Ontario, Canada

Feasibility of Slag Cement in Soil Stabilization  4:05 pm
Tim Cost, Senior Technical Service Engineer, Holcim (US), Inc., Canton, MS

Very High Water-Cement Ratio Slag Cement Suspensions  4:35 pm
in Geotechnical Construction and Environmental Remedial Applications
Wednesday, November 9, 2005
2:00 pm – 5:00 pm

International Session: Textile-Reinforced Concrete (TRC)—The International Experience

Sponsored by Committee 549

Session Moderator: Ashish Dubey
Senior Member Technical Staff
United States Gypsum Corp.
Libertyville, IL

Introduction
2:00 pm
Ashish Dubey, Senior Member Technical Staff, United States Gypsum Corp., Libertyville, IL

Development of Fabric-Reinforced Cement Composites for Repair and Retrofit Applications
2:05 pm
Barzin Mobasher, Professor, Department of Civil and Environmental Engineering, Arizona State University, Tempe, AZ; N. Singla, Arizona State University; and Corina Aldea, Saint Gobain Technical Fabrics

Ferrocerement Versus Thin Textile-Reinforced Cementitious Systems
2:30 pm
Antoine E. Naaman, Professor, Department of Civil and Environmental Engineering, University of Michigan, Ann Arbor, MI

Integrated Formwork Elements Made of Textile-Reinforced Concrete
2:55 pm
Wolfgang Bramshubey, Professor, RWTH Aachen, Aachen, Germany; and M. Koster, RWTH Aachen

Fire Resistance of Textile-Reinforced Concrete
3:25 pm
Hans W. Reinhardt, Professor, Chair and Director, Department of Construction Materials, University of Stuttgart, Stuttgart, Germany

Mechanical Behavior of Textile-Reinforced Concrete
3:50 pm
Jan Wastiels, Professor, Department of Mechanics of Materials and Construction, Vrije University Brussels, Brussels, Belgium
Wednesday, November 9, 2005
2:00 pm – 5:00 pm

International Session: Textile-Reinforced Concrete (TRC)—The International Experience—continued

Effects of Processing Parameters on Mechanical Properties of Textile-Reinforced Concrete
4:15 pm
Barzin Mobasher, Professor, Department of Civil and Environmental Engineering, Arizona State University, Tempe, AZ; and Alva Peled, Ben-Gurion University

Size Effect in Tensile and Flexural Performance of Fine-Grained Concrete Used as Matrix for Textile-Reinforced Concrete
4:40 pm
Wolfgang Bramshubey, Professor, RWTH Aachen, Aachen, Germany; and Tanja Brockmann, RWTH Aachen
Wednesday, November 9, 2005
2:00 pm – 5:00 pm

Self-Consolidating Concrete Applications and Reviewing the Emerging Technologies

Sponsored by Committee 237

Session Co-Moderators: Gary F. Knight
Technical Service Engineer
Holcim, Inc. (US)
Duluth, GA

Charles R. Cornman
Director of Research
W.R. Grace & Co.
Cambridge, MA

Introduction

Gary F. Knight, Technical Service Engineer, Holcim, Inc. (US), Duluth, GA

ASTM Update on Approval of SCC Testing Methods

Martin Vachon, Director of Technology, Axim Italcementi Group,
Middlebranch, OH

Reviewing the Emerging Technologies Document on SCC

Joseph A. Daczko, Research Manager, Degussa Admixtures, Inc.,
Cleveland, OH

SCC at the Citadel

Godwin Q. Amekuedi, Director, Corporate Quality/Technology,
Ready Mixed Concrete Co., Raleigh, NC

SCC and the New Atlanta Aquarium

Kirk K. Deadrick, Director of Quality Assurance, Lafarge North America, Alpharetta, GA

SCC Use in Lightweight Precast Concrete Projects

Jody Wall, Director of Technical Services, Carolina Stalite Co.,
Gold Hill, NC

Fine Aggregate Options for SCC

Don Powell, Technical Director, Vulcan Materials Co., Birmingham, AL
Wednesday, November 9, 2005  
2:00 pm – 5:00 pm

Advances in Offshore and Marine Concrete  
C-4203B

Sponsored by Committee 357

Session Moderator: George C. Hoff  
President  
Hoff Consulting, Inc.  
Clinton, MS

Introduction  
2:00 pm

George C. Hoff, President, Hoff Consulting, Inc., Clinton, MS

ACI Committee 357, Offshore and Marine Concrete  
2:05 pm

State-of-the-Art Report

Michael Garlich, Vice President, Collins Engineers, Inc., Chicago, IL

Durability of Marine Concrete  
2:35 pm

Thomas E. Spencer, Structural Engineer, Blaylock Engineering  
Group, San Diego, CA

Strut-and-Tie Models Applied to D-Regions of Concrete  
3:05 pm

Marine Structures

Karl-Heinz Reineck, Professor, Institute for Lightweight Structures  
Conceptual and Structural Design, University of Stuttgart, Stuttgart,  
Germany

Innovative Applications for Float-In Technologies in  
3:35 pm

Marine Structures

Samuel X. Yao, Project Manager, Ben C. Gerwick, Inc., San Francisco, CA

Floating, Modular, Concrete Pier—Testing of New Pier  
4:05 pm

Type that Could be the Future Wave of Navy Piers

Markus Wernli, Project Engineer, Berger/ABAM Engineers, Inc.,  
Federal Way, WA; and Kare Hjorteset, Mike Lanier, and Manfred H.  
Zinserling, Berger/ABAM Engineers, Inc.

Floating Concrete Barge for Liquefied Natural Gas (LNG)  
4:35 pm

Storage and Re-Gasification

Kare Hjorteset, Project Manager, Berger/ABAM Engineers, Inc.,  
Federal Way, WA; Mike Lanier, Manfred H. Zinserling, and  
Markus Wernli, Berger/ABAM Engineers, Inc.; and Brad Hubbard,  
Mustang Engineering
Wednesday, November 9, 2005
2:00 pm – 5:00 pm

Design and Construction of Hybrid Structures  C-4204B

Sponsored by Committee 335

Session Co-Moderators:  Guillermo Ramirez
                        Assistant Professor
                        Department of Civil and Environmental Engineering
                        University of Texas at Arlington
                        Arlington, TX

                        Paul H. Ziehl
                        Assistant Professor
                        Department of Civil and Environmental Engineering
                        University of South Carolina
                        Columbia, SC

Introduction  2:00 pm
Guillermo Ramirez, Assistant Professor, Department of Civil and Environmental Engineering, University of Texas at Arlington, Arlington, TX

Seismic Behavior and Design of High-Strength CFT MRFs  2:05 pm
Amit H. Varma, Assistant Professor, School of Civil Engineering, Purdue University, West Lafayette, IN

Prestressed Concrete Box Girders with Corrugated Steel Webs  2:40 pm
Yi-Lung Mo, Professor, Department of Civil and Environmental Engineering, University of Houston, Houston, TX

Overview of Design of Coupled Core Walls with Conventional or Innovative Systems  3:15 pm
Patrick J. Fortney, Project Structural Engineer, Dekker/Perich/Sabatini, Ltd., Albuquerque, NM; Kent A. Harries, University of Pittsburgh; and Bahram M. Shahrooz, University of Cincinnati

Evaluation of Effective Width in Hybrid RCS Connections  3:50 pm
Gustavo J. Parra-Montesinos, Assistant Professor, Department of Civil and Environmental Engineering, University of Michigan, Ann Arbor, MI
Wednesday, November 9, 2005
2:00 pm – 5:00 pm

Design and Construction of Hybrid Structures—continued C-4204B

Innovative Prefabricated Steel Reinforcement for Concrete Structural Members
4:25 pm

Hall Sezen, Assistant Professor, Department of Civil and Environmental Engineering, and Geodetic Science, Ohio State University, Columbus, OH; and M. Shamsai, Ohio State University
PDH Form for Sessions at the ACI Fall 2005 Convention

Professional Development Hours (PDHs) – If you registered for the convention and attended selected sessions, you can earn Professional Development Hours. For your records, use this convenient form between pages 150 and 151 to keep track of the activities you completed and the amount of credit you may have earned. Please do not return this form to ACI.

It is recommended that individuals contact their state boards of registration for detailed information regarding continuing education.

Instructions: Check off each session you attended and write in the number of PDH credits you may have earned for each day.

Remember that 1 PDH is equal to one contact hour of instruction or presentation, rounded down to the nearest half-hour.
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<tr>
<th>Date</th>
<th>Time</th>
<th>Session Name</th>
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<tr>
<td>Monday, November 7</td>
<td>9:00 a.m.-noon</td>
<td>3 PHDs</td>
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<tr>
<td>Wednesday, November 9</td>
<td>9:00 a.m.-noon</td>
<td>3 PHDs</td>
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<tr>
<td>Sunday, November 6</td>
<td>9:00 a.m.-noon</td>
<td>3 PHDs</td>
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**PDH Form for Sessions at the ACI Fall 2005 Convention**
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Future Conventions

Spring 2006
Bridging the Carolinas—Fast Track Innovations
March 26-30, 2006
Westin, Hilton & Charlotte Convention Center
Charlotte, NC

Fall 2006
Colorful Colorado Concrete
November 5-9, 2006
Adams Mark
Denver, CO

Spring 2007
Hardscape
April 22-26, 2007
Hilton
Atlanta, GA

Thank you for attending the ACI Fall 2005 Convention!
See you in Charlotte!