

24 HOURS OF CONCRETE KNOWLEDGE

TUESDAY, JULY 8, 2025

Welcome from ACI Global Moderators Maria Juenger and Scott Anderson

9:00 PM-10:00 PM Local Time / 2:00 PM-3:00 PM EDT (New York Time)

Co-Host Organization: ACI Iraq Chapter

- Paving Iraq's Sustainable Future: Local Solutions for Greener Concrete
- Ways to Delay the Development of Reflection Cracks into Composite Pavement

2:00 PM-3:00 PM Local Time / 3:00 PM-4:00 PM EDT (New York Time)

Co-Host Organization: ACI Colombia Chapter

- Bond Behavior of GFRP Bars in Conventional and Ultra-High-Performance Concretes
- From Design Drift to Damage: Return Periods for Repairability Loss in Special Moment Frames

5:00 PM-6:00 PM Local Time / 4:00 PM-5:00 PM EDT (New York Time)

Co-Host Organization: Instituto Brasileiro do Concreto (IBRACON)

- Museum of Tomorrow Structural Design
- Brazilian Innovation in Concrete: Disruptive Technologies Shaping the Future of Construction

3:00 PM-4:00 PM Local Time / 5:00 PM-6:00 PM EDT (New York Time)

Co-Host Organization: ACI Guatemala Chapter & Instituto Cemento y Concreto Guat. (ICCG)

- Largest 3-D Printed Building in Latin America
- Electrical Resistivity in Reinforced Concrete Structures

4:00 PM-5:00 PM Local Time / 6:00 PM-7:00 PM EDT (New York Time)

Co-Host Organization: Fundación ISCYC, El Salvador

- Performance-Based Seismic Design for Post-Tensioned Concrete Bridges: Innovations and Challenges in Latin America
- Industrialized Housing in El Salvador: A Concrete-Based Approach by Nabra

5:00 PM-6:00 PM Local Time / 7:00 PM-8:00 PM EDT (New York Time)

Co-Host Organization: ALCONPAT International

- ALCONPAT International—Past, Present, and Future
- Characterization of Sustainable Nano- and Bio-materials for the Durability of Construction Materials in Yucatán, México

6:00 PM-7:00 PM Local Time / 8:00 PM-9:00 PM EDT (New York Time)

Co-Host Organization: ACI Central & Southern Mexico Chapter

- Concrete Technology: A Science Beyond the Knowledge
- Driving Sustainability through Decarbonization in Construction Materials

WEDNESDAY, JULY 9, 2025

1:00 PM-2:00 PM Local Time / 9:00 PM-10:00 PM EDT (New York Time)

Co-Host Organization: Concrete New Zealand Learned Society

- City Rail Link Te Waihorotiu Station – Sustainability in Design and Construction
- Assessing the Seismic Performance of Earthquake-Damaged and Repaired Reinforced-Concrete Walls

12:00 PM-1:00 PM Local Time / 10:00 PM-11:00 PM EDT (New York Time)

Co-Host Organization: Concrete Institute of Australia (CIA)

- Pathways to Sustainability
- Walking the Pathway to Decarbonization

12:00 PM-1:00 PM Local Time / 11:00 PM-12:00 AM EDT (New York Time)

Co-Host Organization: Korea Concrete Institute (KCI)

- Performance-Based Wind Design of Tall Concrete Buildings
- Surface Strain Analysis of Transverse Cracks on Bridge Decks Detected by Deep CNNs

1:00 PM-2:00 PM Local Time / 12:00 AM-1:00 AM EDT (New York Time)

Co-Host Organization: Japan Concrete Institute (JCI)

- Comparison of Performance-Based Seismic Design Methods for Concrete Structures between the United States and Japan
- From Research to Reality: 3-D Printing Concrete Developments in Japan

12:00 PM-1:00 PM Local Time / 1:00 AM-2:00 AM EDT (New York Time)

Co-Host Organization: Thailand Concrete Association (TCA)

- Sustainable Concrete Innovation through Waste Utilization and Local Resources
- Monitoring and Analysis of Formwork Pressure in Self-Compacting Concrete with Variable Fresh Mix Temperatures

2:00 PM-3:00 PM Local Time / 2:00 AM-3:00 AM EDT (New York Time)

Co-Host Organization: ACI Singapore Chapter

- Recent Applications of SFRC for Underground Infrastructure Construction in Singapore
- Carbon Capture by Waste Cement Slurry and Its Usage as a Sustainable Binding Material

12:30 PM-1:30 PM Local Time / 3:00 AM-4:00 AM EDT (New York Time)

Co-Host Organization: ACI India Chapter

- Voided Slabs for Large Spans and as a Transfer Medium
- Structural Repairs and Rehabilitation of Bridges and Flyovers

12:00 PM-1:00 PM Local Time / 4:00 AM-5:00 AM EDT (New York Time)

Co-Host Organization: ACI UAE Chapter

- Advancing Concrete Performance and Sustainability through Metal-Organic Frameworks
- Innovating for a Greener Future: Steel Fiber-Reinforcement as a Key to Low-Carbon Concrete Construction

12:00 PM-1:00 PM Local Time / 5:00 AM-6:00 AM EDT (New York Time)

Co-Host Organization: ACI Lebanon Chapter

- Effect of Polyethylene Terephthalate, Rubber, and Glass Based on Concrete Properties
- Enhancing Shear Capacity of Recycled Aggregates Concrete Beams

1:00 PM-2:00 PM Local Time / 6:00 AM-7:00 AM EDT (New York Time)

Co-Host Organization: ACI Egypt Chapter

- Top-Down Construction for an Underground Parking Structure
- Boundary Element Method for Analysis and Design of Tall Buildings
- Staged Construction Analysis of Reinforced-Concrete Buildings

2:00 PM-3:00 PM Local Time / 7:00 AM-8:00 AM EDT (New York Time)

Co-Host Organization: Jordan Concrete Association (JCA)

- Concrete Breakout in Steel Fiber-Reinforced Concrete: Database, Evaluation, and Design Recommendations
- The Repairs and Rehabilitation of Old Concrete Floors: Restoring Strength, Safety, and Service Life

3:00 PM-4:00 PM Local Time / 8:00 AM-9:00 AM EDT (New York Time)

Co-Host Organization: ACI Kurdistan Chapter

- Novel Exploration of Chemical Compounds in Mono-Variate, Bi-Variate, and Multi-Variate Scenarios of Waste Glass Powder as a Cement Replacement in Concrete
- The Role of Waste Glass Powder in Alkali-Silica Reaction Mitigation: Transforming Glasscrete Durability through Chemical Composition Dynamics

3:00 PM-4:00 PM Local Time / 9:00 AM-10:00 AM EDT (New York Time)

Co-Host Organization: ACI Italy Chapter

- Bond Behavior Between Metallic and Nonmetallic Bars and Sustainable Concrete—Preliminary Experimental Results
- Retrofitting Reinforced-Concrete Buildings—Exploring the Critical Role of Floor Diaphragms

4:00 PM-5:00 PM Local Time / 10:00 AM-11:00 AM EDT (New York Time)

Co-Host Organization: *fib*

- Polymer Ducts for Improved Durability of Post-Tensioning Tendons (*fib* Bulletin 113)
- BIM in Construction (*fib* Bulletin 115)

4:00 PM-5:00 PM Local Time / 11:00 AM-12:00 PM EDT (New York Time)

Co-Host Organization: Institute of Concrete Technology (ICT)

- Challenges and Considerations when using Calcined Clay as Supplementary Cementitious Material
- Calcined Clays from UK Sources: More Reactive Than We Thought?

6:00 PM-7:00 PM Local Time / 12:00 PM-1:00 PM EDT (New York Time)

Co-Host Organization: RILEM

- Long-Term Performance of Structural Concretes in Marine Exposure Conditions: Report from RILEM TC 289-DCM
- Calcined Clays for Sustainable Concrete

12:00 PM-1:00 PM Local Time / 1:00 PM-2:00 PM EDT (New York Time)

Co-Host Organization: ACI Peru Chapter

- Assessing Residual Energy of Recycled Aggregate Concrete Under Severe Conditions: Insights from Peru
- Seismic and Structural Evaluation of a 70-Year-Old Reinforced Concrete and Masonry Building Structure

Closing remarks