ACI COMMITTEE 239: ULTRA-HIGH PERFORMANCE CONCRETE

2019 ACI Fall Convention, Cincinnati
Monday, October 21, 2019 3:30 pm – 6:00 pm
Room: Convention Center, C-233

NOTE: Meeting will be chaired by Tess Ahlborn. Ben Graybeal must depart Cincinnati on 10/21 in relation to other assigned responsibilities.

MEETING AGENDA

1. Welcome and Attendee Introductions
2. Approval of Agenda
3. Approval of March 2019 meeting minutes from Quebec City
4. TAC Report – Michael Brown
5. Membership update – Kennan Crane

6. Upcoming symposia and conferences
   a. HiPerMat, Kassel, Germany, March 11-13, 2020
   b. BEI International Symposium on UHPC and Emerging Concrete (BEI-UHPC), Singapore, June 22-25, 2020

7. CRC Research Proposal Vetting – Carin Roberts-Wollmann
   a. CRC Research Proposals – [5 minutes presentations plus 3 minutes for Q&A]
      • Srinivas Allena – Improving Sustainability of UHPC Using Rubber Particles and High Volume SCMs
      • Weina Meng – Developing Self-Cooling with Robust Workability for Field Applications
      • Nathalie Roy – Seismic Behavior of Reinforced Concrete Columns Repaired with UHPFRC
      • Fatmir Menkulasi – Punching Shear Strength of Unbonded Posttensioned UHPC Flat Plates
   b. ACI544 topic (Sorelli: UHPFRC Fiber Distribution and Related Response) – Ferrara
   c. Committee discussion of process between 10/21 and 12/1

8. Committee Priorities / Reports
   a. 239-C ETR on the Structural Design of UHPC – Vic Perry
   b. 239-D Materials & Methods of Construction with UHPC – Dominique Corvez
   c. 239-E Educational Outreach – Tess Ahlborn
   d. 239 UHPC Strategic Direction – Jimm Milligan

9. Test Methods for UHPC - Vic Perry

    b. Spring 2020 Rosemont – Unlocking UHPC Workability
    c. Fall 2020 Raleigh – UHPC: Making Connections

11. CRC Funded Research – Structural Response and Buckling Behavior of Slender UHPC Columns – Moustafa

12. Key External UHPC-related Efforts
    a. CSA Bridge Design Standard – Katrin Habel and Vic Perry
    b. FHWA Development of Guide Specification for AASHTO – Zach Haber
    c. FHWA Research on Long-Span Pretensioned Girders – Rafic El Helou
    d. Other...

13. Collaborations
    a. International updates
    b. ACI Committee Liaison Reports

14. New business – (please inform chair prior to start of the meeting if you wish to add new business)

15. Adjourn – next F2F meeting March 30, 2019 @ 3:30 pm, Rosemont Illinois

PARKING LOT: Student Competition (Milligan), Compilation of Research (El Helou), 239-A ETR (Crane)
### Committee Meetings:

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<tr>
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<th>Title</th>
<th>Day</th>
<th>Time</th>
<th>Location</th>
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<tbody>
<tr>
<td>239</td>
<td>Ultra-High Performance Concrete</td>
<td>Monday</td>
<td>3:30p - 6:00p</td>
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<td>239-C</td>
<td>Structural Design on UHPC</td>
<td>Monday</td>
<td>10:30a - 12:30p</td>
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<td>Materials &amp; Methods of Construction with UHPC</td>
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<td>239-E</td>
<td>Educational Outreach</td>
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### Sessions:

**SUN, 10:30a to 12:30p  C-JR Ballroom D**
- Employing Ultra High Performance and Ultra High Durability Concrete for a Novel Durability-based Concept and Design of Structures Exposed to Extremely Aggressive Environments: The Approach of the Horizon 2020 Project ReSHEALience – Liberato Ferrara
- Long Span Ultra High Performance Concrete Voided Slab – Maher Tadros
- Achieving High Strength, Ductility, and Durability in Flexural Members Reinforced with Fiber-Reinforced Polymer Rebars by Using UHP-FRC – Shih-Ho Chao
- UHPC as an Alternative to Control End-zone Cracking in Prestressed Bridge Girders – Eduardo Torres
- Behavior of UHPC Encasing Steel H-pile Bridge Columns: Experimental Study – Mohamed ElGawady
- UHPC Link Slabs and Overlays – A Robust Combination – Gregory Nault

#### UHPC – Innovations and Changes in Structural Design, Part 2 of 3  
**SUN, 1:00 to 3:00p  C-JR Ballroom D**
- Design and Implementation of a UHPC Vehicular Bridge in Canada – Don Gardonio
- Seismic Behavior of UHPC Segmental Column – Mohamed ElGawady
- UHPC Creep and Shrinkage Models to Estimate Long-Term Losses of Prestressed Girders – Alireza Mohebbi
- Low Shrinkage Architectural UHPC – Larry Rowland
- Framework for Structural Design with UHPC-Class Materials: Flexural Behavior and Design Methodology – Rafic El-Helou

#### UHPC – Innovations and Changes in Structural Design, Part 3 of 3  
**SUN, 3:30 to 5:30p  C-JR Ballroom D**
- Reinforcement Anchorage and Bond-Slip Laws for UHPC Structures – Stavroula Pantazopoulou
- Effect of Fiber Reinforcement on the Tensile Behavior of Rebar Reinforced UHPC – Kay Wille
- Transitioning from Shear to Bending Failure of UHPC Beams: Fibers as the Key Factor – Tathagata Bhaduri
- Shear Performance of Pretensioned UHPC Girders – Gary Greene
- Experimental Evaluation of UHPFRC Beams with Longitudinal Reinforcement Designed at Balanced Strain Condition – Jorge Torres-Alamo
- Mechanical Properties and Failure Characterization of UHPC – Aashay Arora

#### 123 Forum: Is Ultra-High Performance Concrete Necessary?  
**MON, 6:30 to 8:30p  C-JR Ballroom B**
- UHPC: A Compelling Solution to a Wide Variety of Challenges – Zach Haber (for Ben Graybeal)
- UHPC: An Opportunity to reinvent Steel and Reimagine Concrete – JP Binard
- Taking Advantage of UHPC Properties: Role of Specifications – Kyle Riding
- Challenges in Performance Evaluation and Characterization of UHPC – Jan Vasahlik
- Advanced Concrete (UHPC) Pedestrian Bridges in Columbia – Byron Velasquez