Objective:
Ultra-high performance concrete (UHPC) is rapidly entering the construction market, yet there is no commonly accepted definition of the material, or nationally accepted test methods for material performance or production standards. The purpose of this symposium is to provide a forum to discuss where current ASTM material specifications and test methods for concrete are inadequate for UHPC, proposed new tests for UHPC, and to exchange ideas as to where new specifications and methods need to be developed.

SUNDAY, DECEMBER 8, 2013

3:00 PM Overview and Symposium Purpose
Larry Sutter and Tess Ahlborn, Michigan Technological University

HIGH IMPACT APPLICATIONS

3:10 PM
UHPC Advancements & Industrialization - The NEED for Standard Testing
Vic Perry, Lafarge North America
**GAPS IN KNOWLEDGE RELATED TO ASTM MATERIAL SPECIFICATIONS**

3:30 PM  
**Material Specification Needs for Future Development of UHPC**  
Craig Newton, New Mexico State University, and Srinivas Allena, Washington State University Tri-Cities

3:50 PM  
**Can we make UHPC with off-the-shelf ASTM Materials?**  
Kevin MacDonald, Beton Consulting Engineers LLC

4:10 PM  
**Gaps in Material Specifications – A Manufacturer’s Perspective**  
James K. Hicks, CeraTech, Inc.

4:30 PM  
BREAK

**GAPS IN KNOWLEDGE RELATED TO ASTM TESTING METHODS**

4:45 PM  
**Tensile Mechanical Response of UHPC**  
Benjamin A. Graybeal, FHWA

5:05 PM  
**The Challenges Related to Interface Bond Characterization of UHPC**  
Devin Harris, University of Virginia

5:25 PM  
**Compression Testing of UHPC**  
Benjamin A. Graybeal, FHWA

5:45 PM  
**ASTM Standard Test Requirements to Advance the Design of UHPC Structural Members**  
Sri Srithanan, Iowa State University

**EUROPEAN PERSPECTIVE**

6:05 PM  
**UHPC from Research to Standardization - European Approaches**  
Michael Schmidt, University of Kassel, Germany

6:30-7:00 PM  
**Group Discussion**  
An open discussion will be held to exchange ideas as to where new specifications and methods need to be developed, and the best approach for ASTM to move forward.
For Publication Only

“U.S. Army Corps of Engineers Experience with Ultra-High Performance: Concretes and Example Applications in Civil Works Infrastructure”

“Compressive Creep of UHPC under Thermal Treatment”
T.M. Ahlborn, C.H. Mullen, D.K. Harris, and J.C. Flietstra

“A Service Life of 150 Years - How Can We Get It? Ultra High Performance Concrete for the Port of Miami Tunnel Project”
Chengqing Qi, Hugh Wang, and Hamid Farzam, CEMEX Inc.