

**Infrastructure, Energy, Geotechnical, Flooding and Sustainability
Issues Related to Houston & Other Major Cities
Final Program –CIGMAT 2015 (March 6, 2015)**

Session I: (8:40 a.m. to 9:50 a.m.) General Session

Moderator: C. Vipulanandan, Ph.D., P.E., Professor of Civil Engineering, University of Houston, Houston, Texas

Dale Rudick, "Review of City of Houston Projects, Plans and Technical Needs,"
Director, Public Works and Engineering Department, City of Houston, Houston, Texas,
Keynote Speaker;

Bill Brudnick, "TxDOT Projects and Plans," Director Planning - TxDOT, Houston, Houston,
Texas, Keynote Speaker;

Jason Pettrey, "Energy Needs – Energy Needs - Current and Future", Department Head
for Beaumont Refinery, ExxonMobil, Beaumont, Texas, Keynote Speaker.

9:50 – 10:15 a.m. Coffee Break (Exhibit Area)

Session II: (10:15 a.m. to 12:00 noon)

Panel 1: Water and Wastewater Issues

Moderator: Rafael Ortega, P.E. Lockwood, Andrew and Newnam, Houston, Texas.
Panelist (25 min. presentations)

Jeffrey Haby, "SAWS SSO Reduction Program and Consent Decree: Lessons Learned,"
Director Sewer System Improvement, SAWS, San Antonio, Texas

Ivan Langford, "Potable Reuse as a New Source of Supply for the GCWA," Director,
Gulf Coast Water Authority, Texas City, Texas

Tommy McClung, "Smart Meters for Water Distribution," Assistant Director, Resource
Management Division, City of Houston, Houston, Texas.

Panel Discussion: Challenges Related to Water and Waste Water Treatment

Panel 2: Flooding, Infrastructure and Geotechnical Issues

Moderator: Stanley Yin, P.E., TxDOT, Houston, Texas.
Panelist (25 min. presentations)

Michael Talbott, " Harris County Flood Control District Programs and Projects,"
Director, Harris County Flood Control District, Houston, Texas.

Diane Lowery-Binnie, "Pavement Condition Data Sets & Improvements," Assistant
Director, Street & Drainage Division, City of Houston, Houston, Texas.

**Foundations for Offshore Structures – An Overview of Geotechnical Design, Kalai
Vembu,** Project Engineer, Fugro GeoConsultng Inc., Houston, Texas.

Panel Discussion: Challenges in Maintaining Civil Infrastructure Facilities

Lunch Break, Exhibition & Research Posters

Posters on research at University of Houston. **Companies** participate in the **Exhibition**. Vote for the Research Posters.

12:30 to 1:00 p.m. Honoring Late Mr. David Magill, President Avanti International and Founder of CIGMAT

Session III: (1:00 p.m. to 2:30 p.m.)

Panel 3: New Technologies for Energy, Maintenance and Monitoring

Moderator: David Peters, P.E., Senior Project Manager, CDM, Oklahoma City, Oklahoma.
Panelist (20-25 min. presentations)

Mark Loethen, “Context Sensitive Design, Pre-Engineering and Enhanced Data: Coming Together under ReBuild Houston”, Deputy Director, Planning & Development Services Division City of Houston, Houston, Texas

“Evaluation of the Mechanical Properties of Self-compacting Concrete Containing Nano-particles in Elevated Temperatures,” **Mohammad Jafari,** CDM-Smith Engineering, Providence, Rhode Island

"Alkali Activated Cements and CBPC based coatings for Geotechnical and Structural Applications," **Shiva Sunder,** Research Manager Prime Resin, Atlanta, Georgia

Panel Discussion: Challenges in Adopting New Technologies.

Panel 4: Geosynthetics and Oil Well Construction Issues.

Moderator: C. Vipulanandan, P.E., University of Houston, Houston, Texas.

Tenth Mike O’Neill Lecture

Geosynthetic Reinforced Soil: From the Experimental to the Familiar, **Robert D. Holtz,** Professor Emeritus, University of Washington, Seattle, Washington.

Smart Cement Modified with Nanoparticles for Sensing Contamination Resistance for Real-Time Monitoring of Oil Well Cementing, **Professor C. Vipulanandan,** University of Houston, Houston, Texas

Panel Discussion: Issues Related to Geosynthetics and Offshore Oil Wells.

RECEPTION: (2:30 - 3:30 p.m.)

Reception will be held in the Exhibit area (food and drinks). In addition to conference participants, number of city, county and industrial leaders will be invited to participate. This is a good opportunity to network and number of door prizes is waiting for you.

Professional Development Hours (PDH)

Earn up to 5 hours of PDH by attending the conference. Certificates will be emailed to you.