Infrastructure, Energy, Geotechnical, Flooding and Sustainability Issues Related to Houston & Other Major Cities Final Program –CIGMAT 2023 (March 3, 2023)

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

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

Varuna Singh, "TxDOT Projects and Plans," <u>Deputy Director of Houston District—TxDOT</u>, Houston, Texas, Keynote Speaker;

Michael Ereti, "Houston Public Work CIP Update," <u>Director Capital Projects – Houston</u> <u>Public Works, City of Houston</u>, Houston, Texas, Keynote Speaker;

Sid Mebarkia "Infrastructure Issues Related to Subsea Pipelines", <u>Chevron Fellows</u>, Chevron, Houston, 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: Flooding, Construction and Subsidence Issues

Moderator: Rafael Ortega, P.E. <u>Aurora Technical Services,</u> Houston, Texas. Panelist (25 min. presentations)

Ataul Hannan, "Communication Effort for MAAPnext," <u>Director Planning Division,</u> Harris County Flood Control District, Houston, Texas.

Eric Garza, L. Nguyen and Paul Walker, "Northeast Water Purification Plant (NEWPP) facilities and On-going Expansion Work, <u>City of Houston</u> and <u>Carollo</u> Engineering Houston, Texas.

Michael J. Turco, "Review and Update on the Subsidence Issues," <u>General Manager</u>, Harris/Galveston Subsidence District, Friendswood, Texas.

Panel Discussion: Challenges Related to Flooding, Construction and Subsidence Issues

Panel 2: Transportation Projects and Helical Piles

Moderator: Daniel Wong, **P.E.**, <u>Tolunay-Wong Engineers</u>, <u>Inc.</u>, Houston, Texas. Panelist (25 min. presentations)

Brain Alcott, "HCTRA Projects and Plans," <u>Assistant Director – Harris County Toll</u> <u>Road Authority</u>, Houston, Texas.

Shri Reddy, "METRO Projects and Plans", <u>Executive Vice President for Planning Engineering and Construction-METRO,</u> Houston, Texas.

"Helical Piles: Overview of Design Theory and Applications", Moncef Souissi, Senior Geotechnical Engineer, Cantsink, Winder, Georgia.

Panel Discussion: Challenges Related Transportation and Helical Piles

Lunch Break, Exhibition, Research Posters & Presentation

Posters on research done at University of Houston.

Companies participate in the Exhibition. Vote for the Research Posters.

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

Panel 3: Water and Wastewater Issues

Moderator: Mackrena Ramos, P.E., Vice President, <u>Lockwood, Andrews and Newnam Inc.</u>, Houston, Texas.

Panelist (25 min. presentations)

Jeffrey Haby, "San Antonio Path to Water Resiliency," <u>Vice President – Production and Treatment,</u>" <u>San Antonio Water System (SAWS)</u>, San Antonio, Texas

James Golab, "Alternative Water Supplies," <u>Conservation and Innovative Water Technologies, Texas Water Development Board</u>, Austin, Texas

"High Build Solid Epoxy Case Studies and New Applications", Jan B. Conant and

L. Secrest, Manufacturer's Representative, Warren Environmental, Frisco, Texas

Panel Discussion: Challenges Related to Water and Wastewater Issues.

Panel 4: Infrastructures and Smart Materials.

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

Seventeenth Mike O'Neill Lecture

Eliza Paul, "Past Experiences and Management of Highway Transportation Projects", Director-TxDOT Houston District, Houston, Texas.

"Smart Foam Cement Behavior Characterization Using Artificial Neural Network (ANN) and Vipulanandan Models",

Professor C. Vipulanandan, University of Houston, Houston, Texas.

Panel Discussion: Issues Related to Infrastructures and Smart Materials.

RECEPTION: (2:30 - 3:00 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.