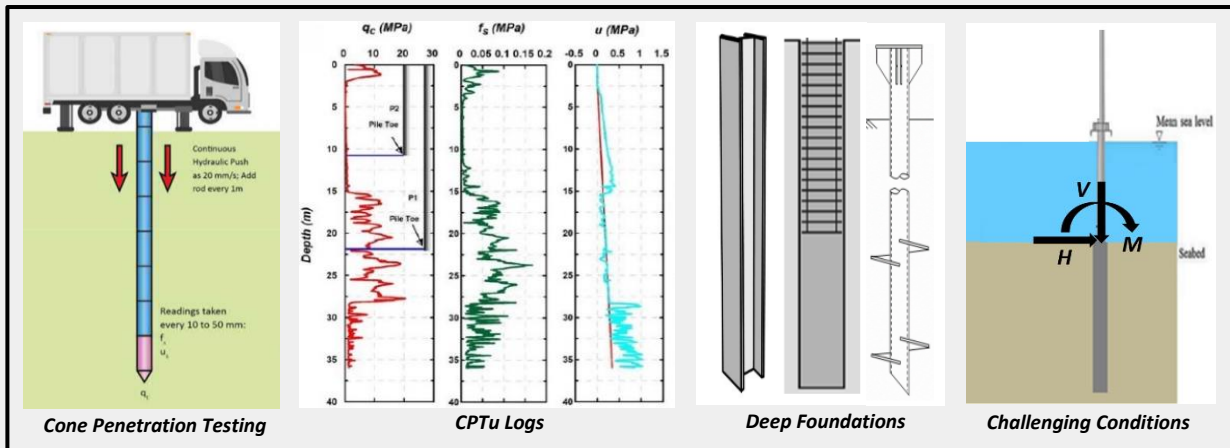


## Cone Penetration Tests (CPT & CPTu) Records for Deep Foundations Geotechnical Design

**Date: June 6, 2023, 8:00am – 12:00pm**  
**Location: UCSD, SME 448**

**Abstract:** In-situ tests play a significant role in overcoming uncertainty in Geotechnical and Foundation Engineering practice. Among various tools, Cone and Piezocone Penetration Tests (CPT & CPTu) provide fast, continuous and reliable records ( $q_c$ ,  $f_s$  &  $u_2$ ) for characterization, correlations and soil behavior classification (SBC) especially for soft to medium deposits. Cone penetrometer, recognized as a model pile, has been implemented for installation, bearing capacity, load distribution and load-displacement. These issues are addressed through case studies in challenging, i.e., structure, subsurface and circumferential conditions. Experiences accomplished through more than three decades in research, teaching, and consulting in the field of deep foundations and in-situ testing, would have been compiled, reviewed and presented in the current short course. The highlights will be addressed as follows:

- *CPT & CPTu Applications in Foundation Engineering*
- *Scale Effects & CPT-Based Methods*
- *Relevant Data-Based Approach (RDBD)*
- *Case Histories and Challenging Conditions*



### Professor Abolfazl Eslami

Ph.D., M. ASCE., Professor in AUT & Professional Engineer, Visiting Scholar at UC San Diego

**Bio:** Professor Abolfazl Eslami received a PhD degree from the University of Ottawa, Canada followed up research through a fellowship at the University of British Columbia (UBC), Vancouver in the mid-1990s. He is an internationally recognized authority on in-situ testing and foundation systems as both a researcher and practitioner. The Unicone method (Eslami & Fellenius, 1997) has been implemented worldwide for pile design using CPT and CPTu records. Prof. Eslami has gained a wealth of practical experience during more than three decades of work at home in Iran and overseas as founder and chairman of Sham-e Consulting Engineering Co. through a variety of assignments including both inland and marine projects. He published over 110 peer-reviewed journal papers and was invited as a keynote lecturer at several international professional events. Among a few published books, the latest is "Piezocone and Cone Penetration Test (CPTu & CPT) Applications in Foundation Engineering", Elsevier Pub., 2020.

