



## 2019 Summer CGS-SOS Workshop Geo-characterization Using the Cone Penetration Test

**Date: Wednesday July 17, 2019**  
**Location: Pearson Convention Center**  
**2638 Steeles Avenue East, Brampton, Ontario L6T 4L7**

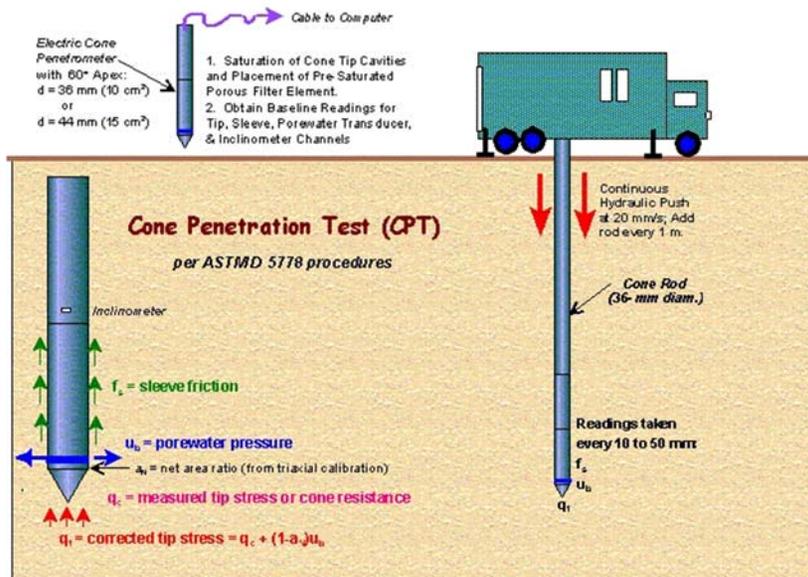
### Workshop Overview

Geotechnical site exploration is a necessary and paramount initial task for projects that interface with the ground. Cone Penetration Testing (CPT) is a fast and reliable means of conducting site explorations in soft and loose soils and provides continuous readings of point load, friction, porewater pressures. The readings ( $q_t$ ,  $f_s$ ,  $u_2$ ,  $t_{50}$ , and  $V_s$ ) can be used to evaluate soil stratigraphy, soil types, water table and engineering parameters. The CPT is less disruptive than conventional rotary drilling and the continuous nature of CPT readings permit clear delineations of various soil data, their depths, thickness, and extent.

The workshop will introduce CPT technology and provide an overview of CPT interpretation and its applications. Case histories will be presented with an emphasis on site characterization and the evaluation of geo-parameters for analysis and design as inputs for conventional and finite element analyses. In addition, the application of CPT in design of shallow and deep foundations and seismic geotechnics, including the evaluation of soil liquefaction potential will be covered.

This technical workshop is suitable for engineers and scientists who like to advance their understanding of the CPT method. A set of reference notes and supporting technical documents will be provided to participants.

Attendance at this workshop qualifies for CPD.



### Ticket Prices:

Early Bird	\$130
Regular	\$160
Students	\$ 60
Workshop Sponsor	\$ 1,750

Marquis and unique sponsorship for the event with prominent logo placement at the venue waiting hall (up to four roll up tradeshow displays), ability to have an advertising booth at the venue waiting hall to engage with the attendees and handover promotional items. Plus, sponsor's logo in the slide show during the breaks and one (1) complimentary registration. The roll up displays and booth to be provided by the sponsor and the text to be confirmed by CGS-SOS.



## SPEAKER BIOGRAPHIES:

### **Mr. James Sharp, CEO, ConeTec Group**

Mr. Sharp is a geotechnical engineer with over 20 years of experience conducting and managing small to large site investigation projects around the world for ConeTec. Jamie currently leads the ConeTec group of companies. ConeTec is a full service geotechnical, geoenvironmental, and mining site investigation contractor with offices throughout the America's, and projects worldwide.



### **Dr. Peter K. Robertson, Technical Advisor, Gregg Drilling LLC and Gregg Drilling Canada**

Dr. Peter Robertson brings more than 40 years of experience as an educator, researcher, consultant and practitioner specializing in the areas of in-situ testing and site investigation, earthquake design of geotechnical structures, and soil liquefaction. Peter is recognized as an expert both nationally and internationally in the areas of in-situ testing and soil liquefaction. He has been a consultant to various industrial clients and insurance companies in North America, Asia and Europe for projects involving liquefaction evaluation for major structures, stability of on-shore and off-shore structures, landslides, stability of natural slopes and tailings dams, and use and interpretation of in-situ tests. He is the co-author of the primary reference book on Cone Penetration Testing (CPT). He has also authored or co-authored over 250 publications as well a popular CPT Guide that is freely available on several websites. Peter has also assisted in the development of several inexpensive CPT-based interpretation software programs and has presented a series of free webinars in an effort to enhance education and practice. Peter continues to provide private consulting to a wide range of clients.



### **Dr. Paul Mayne, Professor, Georgia Institute of Technology**

Dr. Paul W. Mayne, P.E., is a professor of Civil & Environmental Engineering at the Georgia Institute of Technology. With more than 40 years of experience in geotechnical engineering, Paul's expertise is in the areas of geotechnical site characterization, including cone, piezocone, dilatometer, and seismic tests with applications to foundation systems and ground modification. He has given invited lectures internationally and provides CPT workshops & short courses around the world. Of recent, he completed the 2007 Manual on Cone Penetration Testing (Synthesis 368: [www.trb.org](http://www.trb.org)), SOA-1: Geomaterial Behavior & Testing at the 17th ICSMGE in Egypt in 2009, ASCE SOA lecture on in-situ testing (GeoOakland 2012), the 2013 Jennings Lecture in South Africa, 16th Sowers Lecture (2013), James Hoover Distinguished Lecture at Iowa State Univ. (2014), invited keynote lecture at CPT'14, 2014 Hal Hunt Lecture at the 39th Annual DFI Conference, invited keynote lecture at ISC-5 Brisbane (2016), the Nonveiller Lecture in Zagreb (2016), and the 34th Manuel Rocha Lecture in Lisbon (2017). Dr. Mayne is an active member of ASCE, TRB, DFI, ADSC, CGS, USUCGER, and ISSMGE and served as the chair of the international committee on in-situ testing (TC 102) from 2000-2013 and as the ISSMGE Vice President for North America from 2013-2017.





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Outline	Start Time	End Time	Duration (hours:min)	Speaker
Registration and Breakfast	7:30	8:00	0:30	
CGS Introduction	8:00	8:15	0:15	Pouya Pishgah Event Coordinator, CGS-SOS
<b>CPT (CPTu, SCPTu) Equipment and Procedures</b>	8:15	9:00	0:45	James Sharp, CEO, ConeTec Group
<b>CPT Interpretation – Soil stratigraphy and Unit Weight</b>	9:00	9:45	0.45	Dr. Peter Robertson Technical Advisor, Gregg Drilling LLC.
<b>Effective Friction Angle of Soils</b>	9:45	10:15	0.30	Dr. Paul Mayne, Professor - Georgia Tech
Break	10:15	10:30	0:15	
<b>Pre-consolidation Stress and OCR</b>	10:30	11:15	0.45	Dr. Paul Mayne, Professor - Georgia Tech
<b>Undrained Shear Strength, Stiffness, and Moduli</b>	11:15	12:00	0.45	Dr. Paul Mayne, Professor - Georgia Tech
Networking and Lunch	12:00	13:00	1:00	
<b>Shallow Foundation Design Using CPT</b>	13:00	13:45	0.45	Dr. Paul Mayne, Professor - Georgia Tech
<b>Deep Foundation Design Using CPT</b>	13:45	14:30	0.45	Dr. Paul Mayne, Professor - Georgia Tech
Break	14:30	14:45	0:15	
<b>Liquefaction &amp; Case Studies</b>	14:45	15:30	0.45	Dr. Peter Robertson Technical Advisor, Gregg Drilling LLC.
<b>Worked Examples</b>	15:30	16:15	0.45	Dr. Peter Robertson Technical Advisor, Gregg Drilling LLC.
Questions and Closing	16:15	17:00	0:45	All Speakers