Geo-Institute
Pittsburgh Chapter

is hosting:

The 55th Terzaghi Lecture - November 21st, 2019

RESPONSE OF SOIL SITES DURING EARTHQUAKES
A 60-YEAR PERSPECTIVE

by:

Izzat M. Idriss, Professor Emeritus, Univ. of California at Davis
Consulting Geotechnical Engineer, Santa Fe, NM

1.0 PDH available

The talk will cover the following topics:

1. Why site response?
2. Recorded earthquake ground motion data
3. Comparison with empirical earthquake ground motion models (GMMs)
4. Need for analytical procedures
5. Historical perspective
6. Currently available analytical procedures (equivalent linear and nonlinear)
7. Comparisons of calculated and recorded earthquake ground motions at selected sites
8. Concluding Remarks/Recommendations

The earthquake ground motions at the Treasure Island site are calculated using two equivalent linear and two nonlinear procedures. The calculated values are compared to those recorded during the 1989 Loma Prieta earthquake at the Treasure Island site. These comparisons, and similar comparisons at other sites during the Loma Prieta and other earthquakes, offer the means to assess the accuracy and usefulness of each procedure. Finally, a number of recommendations are offered.

Prof. Idriss is an internationally-recognized leader in the field of geotechnical earthquake engineering. He developed or co-developed many of the currently-used procedures for evaluating the behavior of sites and soil structures during earthquakes. He has been involved in post-earthquake investigations of ten major earthquakes throughout the world, beginning with the 1964 Great Alaska earthquake. He has been a consultant on many projects in the US and other countries and serves on several consulting or review boards for US and international companies and for State and US Federal Agencies. Through this body of work over the past 55 years, he has played a major role in the development of the state-of-knowledge and state-of-practice in modern geotechnical earthquake engineering. His education includes: BCE, Rensselaer Polytechnic Institute in 1958; MS, Caltech in 1959; PhD, U.C. Berkeley in 1966. The awards and honors received by Prof. Idriss include: election to the US National Academy of Engineering (1989), the first H. Bolton Seed Medal from ASCE (1995), the distinguished scholarly public service award from U.C. Davis (1999), honorary member of the Japanese Geotechnical Society (2005), Distinguished Member of ASCE (2008), Ralph Peck Award from ASCE (2010), Casagrande Memorial Lecture from the Boston Society of Civil Engineers (2010), election as an Honorary Member of the Earthquake Engineering Research Institute (EERI) (2012), the George W. Housner Medal from EERI (2018), and the Terzaghi Lecture (2019).

WHERE

Engineers' Society of Western Pennsylvania (ESWP)
337 Fourth Ave, Pittsburgh, PA 15222

TIMES

6:00 – 7:00 PM	Socializing and cash bar
7:00 – 8:00 PM	Buffet dinner
8:00 – 9:00 PM	Presentation

RESERVATIONS

	until Mon. 11/11	between Tue. 11/12 - Mon.11/18
Students	FREE	$15
ASCE Members	$40	$45
Government Employees	$40	$45
Non-members	$50	$55

Register online at www.asce-pgh.org

Pay online or at the door (through the "invoice me" option. Only cash or checks received at the door)

Questions? Email Maria Jaime (mjaime@agesinc.com)