Visit to University of California, San Diego: May 21st, 2018

This report summarizes the visit of Dr. Jorge Meneses to the Structural Engineering and Material Department, University of California, San Diego on May 21st, 2018.

AGENDA

<table>
<thead>
<tr>
<th>Time:</th>
<th>Activity:</th>
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</thead>
<tbody>
<tr>
<td>2:45 PM – 3:00 PM</td>
<td>Student Chapter President welcomes Visiting Professional to campus</td>
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<tr>
<td>3:00 PM – 4:30 PM</td>
<td>Tour of Powell and SRMD Labs</td>
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<tr>
<td>4:30 PM – 6:00 PM</td>
<td>Meeting with Geotechnical Engineering Students, SME 248</td>
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<tr>
<td>6:00 PM – 6:30 PM</td>
<td>Reception (Food and drinks were served)</td>
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<tr>
<td>6:00 PM – 8:00 PM</td>
<td>Guest Lecture</td>
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STUDENT CHAPTER VISIT PLANNING COMMITTEE

- Ismaail Ghaaowd, President (ighaaowd@ucsd.edu)
- Muhammad Zayed, Vice-president (mzayed@ucsd.edu)
- Radhavi Samarakoon, Secretary (rabeysir@ucsd.edu)
- Lan Luo, Treasurer (l1luo@ucsd.edu)
- John McCartney, Advisor (mccartney@eng.ucsd.edu)

VISITING PROFESSIONAL LECTURE OVERVIEW

The president of GI at UCSD student chapter introduced the Friedman Family Visiting Professional Program and the visiting professional. During the presentation, Dr. Meneses talked about "Seismic Ground Motions for Evaluation of Liquefaction Triggering and Settlement." The lecture was followed by discussion and questions.

Lecture Abstract

Include an abstract of the topic(s) covered during lecture/seminar.

Simplified liquefaction evaluation procedures typically use the peak ground acceleration (PGA) and magnitude (M) as parameters representing the seismic ground motions at a site. The values of PGA and M at a site can vary depending upon the return period in a probabilistic approach or associated expected level of performance. Evaluation of liquefaction triggering and associated consequences (settlements and lateral spread) may significantly change depending upon the level of the ground motions selected.

Dr. Meneses presented and discussed different existing approaches and guidelines dealing with the level of ground motions, liquefaction triggering evaluation, and seismic settlements. These guidelines include the recently
approved ASCE 7-16 (basis for the 2019 California Building Code), the 2016 National Academies of Sciences, Engineering, and Medicine report, NAVFAC, Caltrans, POLA, California High Speed Train, CGS Note 48, and Los Angeles City. Also some insights to the changes that ASCE 7-22 were briefly discussed. Finally, some clarifying conclusions were proposed.

Professional Bio

**Jorge Meneses** is a Principal Geotechnical Engineer with RMA Group, Inc., California Seismic Safety Commissioner, and President of the Earthquake Engineering Research Institute (EERI) San Diego. He is an expert in geotechnical, foundation and earthquake engineering. Areas of expertise include probabilistic and deterministic seismic hazard analysis, seismic deaggregation, selection and modification of earthquake ground motions, site response and characterization, liquefaction and lateral spread evaluation and mitigation, seismic stability of earthworks, post-earthquake reconnaissance, numerical modeling and advanced geotechnical testing. Dr. Meneses specializes in seismic soil-structure interaction analysis, and analysis and design of pile foundations subjected to liquefaction and lateral spread. He has experience with seismic hazard evaluation and ground motions development in different seismo-tectonic environments, and is very knowledgeable with seismic regulations for dams, buildings, bridges, nuclear facilities, ports and others.

**Dr. Meneses** has professional experience in US, Japan, Peru, India, and Mexico. He has been involved in numerous projects serving as a technical lead in earthquake geotechnical engineering and foundation engineering across the country. Dr. Meneses frequently acts as a peer reviewer for technical conferences and technical journal publications, is a guest speaker for domestic and international conferences, and has published more than 60 technical publications. He is currently a part-time instructor in the graduate school of San Diego State University, and University of California San Diego Extension. He is also the President and Founder of the Earthquake Engineering Research Institute (EERI) San Diego Chapter, past Member of the ASCE 7-16 (Minimum Design Loads for Buildings and Other Structures) and ASCE 1 (Geotechnical Analysis, Design, Construction, Inspection and Monitoring of Nuclear Safety-Related Structures) Committees, Honorary Chair of the ASCE Geo-Institute San Diego Chapter, member of the Academy of Geo-Professionals, and a Fellow of the American Society of Civil Engineers (ASCE).
SUPPLEMENTAL ACTIVITIES

Welcoming the speaker and lab tour

The president (Ismaail Ghaaowd) welcomed the visiting professional at Structural and Material Engineering Department at 2:30 pm, gave a quick tour of experimental facilities (Powell labs, Centrifuge, SRMD, and SME labs) at UC San Diego and talked about different past and on-going project in the labs.

Reception

The GI at UCSD student chapter provided snacks and drinks to the attendees.
RESULTS, FEEDBACK AND LESSONS LEARNED

The professional visit was a successful event and benefited the geotechnical students at UCSD and the geotechnical professionals in San Diego area. In the seminar, Dr. Meneses provided a great visionary talk about “Seismic Ground Motions for Evaluation of Liquefaction Triggering and Settlement”.

ACKNOWLEDGEMENTS

The University of California, San Diego GI Student Chapter gratefully acknowledges Friedman Family for supporting this professional program.

LIST OF ATTACHMENTS

Included at the end of this report are various attachments to supplement the information included above. A list of the attachments is included below:

- Item 1: flier for event at UC San Diego
- Item 2: Event Poster
May 21st, Monday - UC San Diego Geotechnical Presentation

1 message

ASCE Geo-Institute at UC San Diego <asce-gi@ucsd.edu>  
Mon, May 21, 2018 at 8:48 AM

Reply-To: asce-gi@ucsd.edu  
To: ighaaowd@eng.ucsd.edu

Dear Colleagues,

Geo-Institute at UC San Diego is pleased to invite you to join us on **Monday, May 21st**, for the Spring 2018 technical presentation. The event will be held at **UC San Diego** from 6:00 PM to 8:00 PM.

Our guest speaker is **Jorge Meneses**, Ph.D., P.E., G.E., D. GE., F.ASCE, Principal Geotechnical Engineer with RMA Group, California Seismic Safety Commissioner and President of EERI San Diego Chapter.

**Speaker**  
**Jorge Meneses**, PhD, PE, GE, D.GE., F. ASCE, Principal Geotechnical Engineer with RMA Group, California Seismic Safety Commissioner and President of EERI San Diego Chapter.

**Date & Time**  
Monday, May 21, 2018 from 6:00 PM to 8:00 PM PDT  
Add to Calendar

**Location**  
ASML (Cymer) Conference Room  
Structural and Material Engineering Building  
UC San Diego  
Matthews Ln  
La Jolla, CA 92093

**Driving Directions**

**Parking**

**Agenda:**
6:00 pm - 6:30 pm: Reception with snacks & drinks  
6:30 pm - 7:30 pm: Technical presentation  
7:30 pm - 8:00 pm: Discussion and event closure
Guests can park their cars in one of the following parking lots for $2/Hr.

Gilman Parking Structure
Parking Lot P510

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*This event is held as a part of EERI Friedman Family Visiting Professionals Program.*

*Check out the event page on [Facebook](#)*

**ABSTRACT**

Simplified liquefaction evaluation procedures typically use the peak ground acceleration \((PGA)\) and magnitude \((M)\) as parameters representing the seismic ground motions at a site. The values of \(PGA\) and \(M\) at a site can vary depending upon the return period in a probabilistic approach or associated expected level of performance. Evaluation of liquefaction triggering and associated consequences (settlements and lateral spread) may significantly change depending upon the level of the ground motions selected.

Dr. Meneses will present and discuss different existing approaches and guidelines dealing with the level of ground motions, liquefaction triggering evaluation, and seismic settlements. These guidelines include the recently approved ASCE 7-16 (basis for the 2019 California Building Code), the 2016 National Academies of Sciences, Engineering, and Medicine report, NAVFAC, Caltrans, POLA, California High Speed Train, CGS Note 48, and Los Angeles City. Also, some insights to the changes that ASCE 7-22 may incorporate will briefly be discussed. Finally, some clarifying conclusions will be proposed.

**SPEAKER**

Jorge Meneses is a Principal Geotechnical Engineer with RMA Group, Inc., California Seismic Safety Commissioner, and President of the Earthquake Engineering Research Institute (EERI) San Diego. He is an expert in geotechnical, foundation and earthquake engineering. Areas of expertise include probabilistic and deterministic seismic hazard analysis, seismic deaggregation, selection and modification of earthquake ground motions, site response and characterization, liquefaction and lateral spread evaluation and mitigation, seismic stability of earthworks, post-earthquake reconnaissance, numerical modeling and advanced geotechnical testing. Dr. Meneses specializes in seismic soil-structure interaction analysis, and analysis and design of pile foundations subjected to liquefaction and lateral spread. He has experience with seismic hazard evaluation and ground motions development in different seismo-tectonic environments, and is very knowledgeable with seismic regulations for dams, buildings, bridges, nuclear facilities, ports and others.

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earthquake geotechnical engineering and foundation engineering across the country. Dr. Meneses frequently acts as a peer reviewer for technical conferences and technical journal publications, is a guest speaker for domestic and international conferences, and has published more than 60 technical publications. He is currently a part-time instructor in the graduate school of San Diego State University, and University of California San Diego Extension. He is also the President and Founder of the Earthquake Engineering Research Institute (EERI) San Diego Chapter, past Member of the ASCE 7-16 (Minimum Design Loads for Buildings and Other Structures) and ASCE 1 (Geotechnical Analysis, Design, Construction, Inspection and Monitoring of Nuclear Safety-Related Structures) Committees, Honorary Chair of the ASCE Geo-Institute San Diego Chapter, member of the Academy of Geo-Professionals, and a Fellow of the American Society of Civil Engineers (ASCE).

Register Now!

If you have any questions about the event, please contact us at (858) 262-1947 or via email (asce-gi@ucsd.edu).

Thank you for your attention and response. We look forward to seeing you at our event.

Sincerely,

Geo-Institute at UC San Diego
asce-gi@ucsd.edu
(858) 262-1947

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Spring 2018 Geotechnical Presentation

Principal Geotechnical Engineer with RMA Group, Inc.
California Seismic Safety Commissioner
President of EERI San Diego Chapter

Presentation topic:

“Seismic Ground Motions For Evaluation of Liquefaction Triggering and Settlement”

Monday, May 21\textsuperscript{st}, 2018, 6:00 PM to 8:00 PM
UC San Diego, SME Building, 2\textsuperscript{nd} Floor, ASML (Cymer) Conference Room

This event is part of EERI Friedman Family Visiting Professionals Program

This event is sponsored by: