

FRIEDMAN FAMILY VISITING PROFESIONALS PROGRAM

Visit to Virginia Tech: April 26, 2024



This report summarizes the visit of **Dr Jorge Meneses** from The Worley Group that took place at Virginia Tech on April 26, 2024.

ITINERARY OR AGENDA

TIME:	ACTIVITY:
8:00 AM – 9:00 AM	Breakfast with faculty
9:30 AM – 11:15 AM	Research roundtable discussion with graduate students
11:30 AM – 12:30 PM	Lunch
1:00 PM – 2:15 PM	Lecture with Q&A
2:30 PM – 4:30 PM	Lab Visit

STUDENT CHAPTER VISIT PLANNING COMMITTEE

LEAD ORGANIZER(S): Tat Shing Thum, President, tat2@vt.edu

With guidance from faculty advisor Dr Rodriguez-Marek

VISITING PROFESSIONAL LECTURE OVERVIEW

Lecture Abstract

The procedures employed to perform a site-specific seismic hazard analysis for a near-fault site and site response at different locations within the footprint of the structure will be presented. Probabilistic and deterministic seismic hazard evaluations, selection of time histories, spectral matching, site response at different locations to evaluate differential movements of the supports of the structure will be discussed. This is an almost 5-billion-dollar project that involved the largest excavation ever in the west coast of North America.

Professional Bio

Jorge Meneses is an expert in geotechnical and earthquake engineering. 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 earthquake environments. Dr. Meneses was the lead member of one of the GEER (Geotechnical Extreme Events Reconnaissance) missions to evaluate damage and seismic performance after the M9.0 Great East Japan Earthquake in April 2011. He has been involved in numerous projects worldwide serving as a technical lead in earthquake geotechnical engineering and foundation engineering for various markets including nuclear, energy, transportation, high rise buildings, commercial and industrial.

He is currently a part-time faculty in the graduate school of San Diego State University and part-time instructor at the University of California San Diego Extension. He is the President and Founder of the Earthquake Engineering Research Institute (EERI) San Diego Chapter, Honorary Chair of the ASCE Geo-Institute San Diego Chapter, and a Fellow of the American Society of Civil Engineers (ASCE). He was also a member of the California Seismic Safety Commission appointed by the state governor and confirmed by the state senate (2017-2021).

SUPPLEMENTAL ACTIVITIES

Research Roundtable Discussion

The goal of the roundtable discussion is to encourage information sharing between the attendees and the speaker with emphasis on inciting new ideas for research and practice. During this session, three PhD students discussed their research work within the geotechnical engineering field and answered questions from Dr Meneses. After each have covered their topics, the discussion shifted into state of practice in earthquake engineering and sustainability practices.

Lunch

Food was shared between Dr Meneses and fellow attendees of the lecture. During this session, topics of home and family were touched on, among other light-hearted topics.

Lab Visit

Dr Meneses was brought to the various geotechnical engineering laboratories across campus, including the English and Prices Fork labs. Here, the lab test equipment and ongoing research testing were described by various students present at the lab.

RESULTS, FEEDBACK AND LESSONS LEARNED

This event was well received by most attendees across the sessions on the agenda. During the lecture, there were roughly 20 attendees spanning across the various civil engineering disciplines. The main challenge in planning and executing this event is in attracting undergraduate student attendees. For future lectures, the chapter would greatly benefit from the following topics:

- Sustainably practices in earthquake engineering design and construction
- Risk-informed earthquake engineering design

ACKNOWLEDGEMENTS

The Virginia Tech EERI Student Chapter gratefully acknowledges the support of the Friedman Family for sponsoring the travel of Jorge Meneses through their Friedman Family Visiting Professional Program endowment.

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, i.e. event flier
- Item 2, photo during lunch
- Item 3, photo during lecture



FRIEDMAN FAMILY LECTURE

EARTHQUAKE GROUND MOTIONS FOR THE SEISMIC DESIGN OF WORLD'S LARGEST FOOTBALL STADIUM



DR. JORGE MENESES

ADVISIAN,
THE WORLEY GROUP

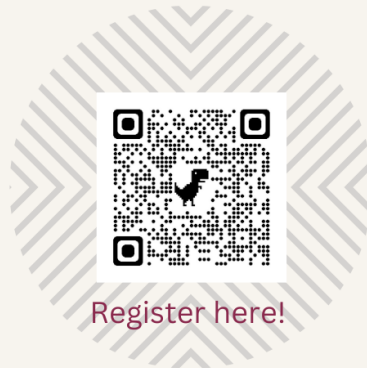


FRIDAY

26 APR, 2024

1:00PM

Newman Library, RM 207A



Register here!





