

FRIEDMAN FAMILY VISITING. PROFESIONALS PROGRAM

Visit to University of Nevada Reno: March 30th, 2018



This report summarizes the visit of **Dr. Ramin Golesorkhi** from Ph.D., PE, GE, F.ASCE, Principal/Vice President and Director, Langan Treadwell Rollo, San Fransisco, CA, that took place at the University of Nevada Reno on May 30th, 2018,

ITINERARY OR AGENDA

Provide the itinerary of the visit.

TIME:	ACTIVITY:
9:00 AM – 9:30 AM	Student Chapter Faculty Advisor and President meet & welcome Visiting Professional to campus
9:30 AM – 11:00 AM	Meeting with undergrad and graduate students for career guidance
11:00 AM – 12:00 PM	Lunch with EERI-UNR student Chapter leading officers
12:00 PM – 1:30 PM	Lecture by Dr. Golesorkhi
1:30 PM – 2:00 PM	Meeting with selected Faculty members
2:00 PM – 2:30 PM	Tour of the Earthquake Engineering Laboratory, Large-Scale Structural Laboratory, Geotechnical Laboratory

STUDENT CHAPTER VISIT PLANNING COMMITTEE

LEAD ORGANIZERS:

- Dr. Ramin Motamed, Ph.D. PE, Faculty Advisor, motamed@unr.edu
- Elmira Shoushtari, President, rezvani@nevada.unr.edu
- Swasti Saxena, Secretary, swasti@nevada.unr.edu
- Negar Naeimi, Historian, negar.naeimi@gmail.com
- Mohammad Abbasi, Treasurer, mabbasi@nevada.unr.edu

VISITING PROFESSIONAL LECTURE OVERVIEW

A brief introduction to the goals and programs within EERI was presented, followed by a presentation on the effect of Soil-Structure Interaction on Site-Specific ground Motions. In his presentation he specifically focused the development of Site-Specific Ground Motions, Response Spectra, and Time Series. A Case example of a 60-story building located in Downtown San Francisco was discussed in the presentation. Many undergraduate and graduate students, faculty members, and local engineers participated in this presentation. The presentation was followed by short discussions and questions from the audience.

Lecture Abstract

Title: Effect of Soil-Structure Interaction on Site-Specific ground Motions – A Case History Perspective

Abstract: The talk will present a case history from a high-profile project in San Francisco. It will discuss the development of site-specific ground motions (response spectra and time series) for a 60-story high-rise structure for the purpose of performance based seismic design. The effect of soil-foundation-structure interaction (SSI) on the site-specific response spectra will be presented. These effects were evaluated using non-linear SSI computer program FLAC for three levels of ground shaking. The selection and development of ground motion time series using the concept of Conditional Mean Spectra will be discussed and presented.

Professional Bio

Dr. Golesorkhi is a registered civil (California and New York) and geotechnical engineer (California) he is principal/vice president and director of earthquake engineering services at an over 1000-person geotechnical, environmental, and site civil engineering firm with more than 29 years of experience in seismic analysis and foundation engineering. He received his Bachelor of Science and Master of Science degrees from Tufts University and his PhD from the University of California, Berkeley. Dr. Golesorkhi directs the development of seismic and geotechnical/foundation design criteria appropriate for industrial, residential, private and government office buildings, hospitals and healthcare facilities, bridges, elevated freeways and viaducts, base isolated structures, tunnels, and seismic strengthening of existing structures. His experience stretches throughout the United States, South America, Southeast Asia, India and the Middle East.

SUPPLEMENTAL ACTIVITIES

{Meeting with undergrad and grad students regarding career guidance}

Many graduate and undergraduate students participated in this meeting and had the opportunity to discuss their questions or concerns regarding their future career. Several topics such as academia vs. industry, what employers are looking for in the applications, how to build a strong resume, etc. were discussed in the meeting. Dr. Golesorkhi kindly shared his valuable information and experiences with students.

{Lunch with student chapter officers}

In this activity, officers had the chance to discuss their activities of student chapter and their research projects.

{Tour of laboratories}

Dr. Motamed gave our Visiting Professional a tour of the UNR Earthquake Engineering Laboratory, the largest Structural laboratory in the United States and the second in the world. Dr. Golesorkhi also went on a tour of Geotechnical Earthquake and Large-Scale Structural Laboratory with Dr. Motamed.

RESULTS, FEEDBACK AND LESSONS LEARNED

Visiting Professional Program at UNR was truly successful. Dr. Golesorkhi kindly shared his valuable knowledge and experiences from his several years of research and engineering. His talk at the career guidance session seemed to provide the much-needed help for students exploring different career options. Some of the topics that are of interest and would be good for future visits are:

- Wind Engineering
- Performance-based seismic design and risk assessment
- Seismic protection of non-structural components

ACKNOWLEDGEMENTS

The University of Nevada Reno EERI Student Chapter gratefully acknowledges the support of the Friedman Family for sponsoring the travel of Dr. Ramin Golesorkhi 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. flier for event
- Item 2, i.e. flier for the lecture
- Item 3, i.e. photos

Itinerary for Friedman Family Visiting Professional Program 2017-2018

Date: **March 30th, 2018**

09:30 am – 11:00 am: Meeting with undergrad and graduate students for career guidance
(Venue: EEL Auditorium)

11:00 am – 12:00 pm: Lunch with EERI-UNR Chapter leading officers
(Venue: On campus)

12:00 pm – 01:30 pm: Lecture by Dr. Golesorkhi
(Venue: EEL Auditorium)

01:30 pm – 02:30 pm: Tour of the Earthquake and Geotechnical laboratories
(Venue: Labs on campus)

Visiting Professional:

Dr. Ramin Golesorkhi

EERI- UNR Chapter officers:

Elmira Shoushtari (President)

Swasti Saxena (Secretary)

Mohammad Abbasi (Treasurer)

Negar Naeimi (Historian)

EERI- UNR Chapter Advising Faculty: **Dr. Ramin Motamed**



**Earthquake Engineering
Research Institute**



EERI@UNR Student Chapter Seminar Series

Guest Speaker:

**Ramin Golesorkhi, Ph.D., P.E., G.E., F. ASCE
Principal/Vice President and Director
Langan Treadwell Rollo, San Francisco, CA**

**"Effect of Soil-Structure Interaction on Site-Specific ground Motions – A Case
History Perspective"
Friday, March 30th, 2018 12:00 PM
EEL auditorium**

Abstract:

The talk will present a case history from a high profile project in San Francisco. It will discuss the development of site-specific ground motions (response spectra and time series) for a 60-story high-rise structure for the purpose of performance based seismic design. The effect of soil-foundation-structure interaction (SSI) on the site-specific response spectra will be presented. These effects were evaluated using non-linear SSI computer program FLAC for three levels of ground shaking. The selection and development of ground motion time series using the concept of Conditional Mean Spectra will be discussed and presented.

For More Information Contact: President, Elmira Shoushtari
Department of Civil and Environmental Engineering
Office: SEM 256c, Phone: 775-233-5471, E-mail: rezvani@Nevada.unr.edu



