

FRIEDMAN FAMILY VISITING PROFESIONALS PROGRAM

Visit to Portland State University: March 5, 2021



This report summarizes the visit of Dr. Christine Beyzaei from Exponent, Inc. that took place at the Portland State University on March 5, 2021.

ITINERARY OR AGENDA

Provide the itinerary of the visit.

TIME:	ACTIVITY:
2:00 PM – 3:00 PM	Guest lecture by Visiting Professional
3:30 PM – 4:30 PM	Informal meeting with EERI members and additional undergraduate students

STUDENT CHAPTER VISIT PLANNING COMMITTEE

LEAD ORGANIZER(S): Kayla Sorenson, Chapter President, sorenson@pdx.edu

- Dr. Diane Moug, Faculty Advisor, dmoug@pdx.edu

VISITING PROFESSIONAL LECTURE OVERVIEW

Briefly describe the Visiting Professional's presentation, and attendee response. Include photos if applicable.

Lecture Abstract

Liquefaction damage from the 2010-2011 Canterbury earthquake sequence devastated over 30% of the built environment in Christchurch, New Zealand. State-of-practice liquefaction assessment procedures have been shown to work generally well across much of Christchurch, when compared with post-earthquake damage observations. However, there are important case history sites where the state-of-practice liquefaction assessment procedures indicate that significant liquefaction-induced ground failure would be expected to occur, but no surface manifestations of liquefaction were observed during post-earthquake reconnaissance. These sites are located predominantly in the southwest part of the city, an area known among local engineers for its silty soil conditions. This presentation will explore investigations of the apparent discrepancy between state-of-practice liquefaction estimations and post-earthquake liquefaction observations at silty soil sites in southwest Christchurch. The issues highlighted in this presentation will demonstrate the need for a more holistic approach to liquefaction assessment and consideration of system response at silty soil sites, with a focus on liquefaction manifestations.

Professional Bio

Christine Z. Beyzaei, Ph.D., P.E. is a Senior Engineer in the Civil Engineering Practice at Exponent, Inc. in Oakland, CA, USA. She received her B.S. degree from George Washington University and her M.S. and Ph.D. degrees from the University of California, Berkeley. Christine specializes in geotechnical earthquake engineering, performing research and post-earthquake reconnaissance in the U.S. and internationally. Christine is active in the Earthquake Engineering Research Institute (EERI), American Society of Civil Engineers (ASCE), and the Geotechnical Extreme Events Reconnaissance Association (GEER). She received the 2016-2017 EERI/FEMA-NEHRP Graduate Fellowship in Earthquake Hazard Reduction and was selected as a 2021 Visiting Professional for the EERI Friedman Family Visiting Professionals Program.

SUPPLEMENTAL ACTIVITIES

Meeting with undergraduate and graduate students

Several of the EERI chapter members, as well as members from the general student population met with Dr. Beyzaei. We discussed ways to improve chapter membership (our chapter is less than 10 people), such as appealing to juniors and seniors about the networking opportunities that EERI offers. Discussions were also held about the benefits of continuing on to obtain one's doctorate versus entering the professional field directly after a master's degree, and for making sure that you advocate for yourself when you need to.

RESULTS, FEEDBACK AND LESSONS LEARNED

Brief description of challenges during the process, general reception of the program and Visiting Professional. Also, a description of other topics or disciplines the Student Chapter would like to cover in future visits, and related goals.

- The visiting professional process went smoothly. Dr. Beyzaei was available prior to the lecture to refine the presentation to make sure it would work in a virtual format without difficulties.
- Both the lecture and following interaction with Dr. Beyzaei were received well. Her lecture served as a valuable promotion for our EERI student chapter. Several students who were not part of the EERI chapter attended, and at least one of those students decided to become a student member. Unlike previous years, local professionals did not attend the lecture despite several announcements during other local geotechnical lectures. This was likely due to a combination of the virtual format and the time the lecture was presented.
- In the past 5 years, we have been fortunate to have four guest lecturers as part of the Friedman Family Visiting Professional program. We would like to expand on the topics being presented to include a structural engineering lecture, so that students at PSU can see that EERI is not a solely geotechnical-based organization.

ACKNOWLEDGEMENTS

The Portland State University EERI Student Chapter gratefully acknowledges the support of the Friedman Family for sponsoring the travel of Dr. Christine Beyzaei through their Friedman Family Visiting Professional Program endowment. The PSU EERI Student Chapter also gratefully acknowledges the support of the Portland State University Civil Engineering Department in helping to communicate this lecture within the community.

LIST OF ATTACHMENTS

Included at the end of this report is a flyer for Dr. Beyzaei's lecture to supplement the information included above.

Portland State's EERI Student Chapter is proud to present the 2021 Friedman Family Visiting Professional

Dr. Christine Beyzaei

Silty Soil Liquefaction Effects in Christchurch, New Zealand

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MARCH 5 FROM 2:00 - 3:00 PM

MAXIMUM 100 ATTENDEES
REGISTER AT

[HTTPS://EERI.SWOOGO.COM/2021FFVP](https://eeri.swoogo.com/2021ffvp)



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Dr. Christine Beyzaei



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