

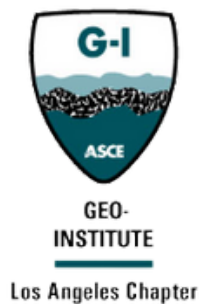
SPRING SEMINAR 2025

May 1, 2025



Where & When

May 1, 2025
1pm-8:30pm
Queen Mary
1126 Queen's Highway
Long Beach, CA 90802



26th LA Geo Expo, 46th Spring Seminar & 19th Kenneth L. Lee Lecture Award

Businesses in the geo-industry have been invited to exhibit their products and services concurrent with the Spring Seminar of the Los Angeles Geo-Institute Chapter. If you would like to exhibit, please contact Beatrice Torres, GeoExpo Coordinator.

P : (909) 684-6802

E : btorres@verdantas.com

W : lageoinstitute.org/events/

46TH SPRING SEMINAR & 19TH KENNETH L. LEE LECTURE

The ASCE Los Angeles Geo-Institute Chapter established the Kenneth L. Lee Lecture Award to recognize outstanding achievements in earthquake engineering, earth structures design, and geotechnical engineering.

2025 Award Recipient



Dr. Ellen Rathje

University of Texas at Austin

Dr. Ellen Rathje, Ph.D, P.E., NAE

Dr. Ellen M. Rathje is the Janet S. Cockrell Centennial Chair in Engineering in the Fariborz Maseeh Department of Civil, Architectural, and Environmental Engineering at the University of Texas at Austin (UT), and a Senior Research Scientist at the UT Bureau of Economic Geology.

Application of AI and Machine Learning in Geotechnical Engineering

The excitement about AI and machine learning (ML) is all around us, and we are just starting to explore how AI/ML can directly impact our work as geotechnical engineers. To date, the most common applications of AI/ML have been in statistical regression or classification problems. These applications have shown great promise, but the pitfalls of AI/ML predictive models remain (e.g., poor extrapolation, violating physics, etc.). This presentation will introduce different AI/ML approaches and their specific application to geotechnical earthquake engineering. These applications include earthquake-induced lateral spreading, seismic slope displacements, and earthquake-induced landslides. For each of these applications, the AI/ML method, the training dataset, and the approach to model training will be described, as well as the performance of the model. The presentation will also highlight new geotechnical applications of AI/ML, including ML-accelerated simulations, and the need for large-scale, publicly available, community-driven datasets for use in model training.

SCHEDULE

MAY 1, 2025

1:00-2:00pm Registration & GeoExpo

2:00-3:00pm Presentation by Dr. Farshid Vahedifar

3:00-3:30pm Coffee Break & GeoExpo

3:30-4:30pm Presentation by Dr. Pooneh Maghoul

4:30-6:00pm Social Hour & Geo Expo

6:00-8:30pm Banquet & Kenneth L. Lee Lecture by Dr. Ellen Rathje

Spring Seminar Speakers



Dr. Farshid Vahedifar

Professor and Louis Berger Chair in Civil and Environmental Engineering
Civil and Environmental Engineering, Tufts University

The Effect of Climate Change on
Geo-Structures



Dr. Pooneh Maghoul

Professor Department of Civil, Geological and Mining Engineering,
Polytechnique Montreal

Lunar Geotechnics

Register Online @ [LAGEoinstitute.org](https://www.lageoinstitute.org)

Book and register now as space is limited. Attendee and exhibitor registration will be through the website: [lageoinstitute.org](https://www.lageoinstitute.org)

Early registration (by March 15, 2025): \$210 standard, \$105 public employees, \$35 students

Regular registration (March 16-April 30): \$250, \$125 public employee, \$65 students

On-site registration (limited on availability): \$300 only

*No refunds after April 9, 2025. Proof of full-time student status and employment for public employees required on-site.

Questions? asce.lagi@gmail.com

46TH SPRING SEMINAR



GEO-
INSTITUTE

Los Angeles Chapter

MAY 1, 2025

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2:00–3:00pm Presentation by Dr. Farshid Vahedifar on *The Effect of Climate Change on Geo-Structures*

3:00–3:30pm Coffee Break & GeoExpo

3:30–4:30pm Presentation by Dr. Pooneh Maghoul on *Lunar Geotechnics*

4:30–6:00pm Social Hour & GeoExpo

6:00–8:30pm Banquet & Kenneth L. Lee Lecture by Dr. Ellen Rathje on *Application of AI and Machine Learning in Geotechnical Engineering*

Spring Seminar Speakers



Dr. Farshid Vahedifar

Professor Tufts University



Dr. Pooneh Maghoul

Professor Polytechnique Montreal



Dr. Ellen Rathje

Professor University of Texas at Austin &
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