



**GEO-
INSTITUTE**

Los Angeles Chapter

American Society of Civil Engineers
Los Angeles Geo-Institute Chapter
Presents:

FORTY-FIRST SPRING SEMINAR

TWENTY-FIRST LA GEO EXPO

FOURTEENTH KENNETH L. LEE
LECTURE AWARD

Wednesday April 18th, 2018

Queen Mary
1126 Queen's Highway
Long Beach, CA 90802
Phone: (562) 435-3511

SEMINAR SCHEDULE

Wednesday, April 18, 2018

- 1:00 – 2:00 PM Registration (Geo Expo)
- 2:00 – 3:00 PM Presentation by
Richard Clarke
- 3:00 – 3:30 PM Coffee Break (Geo Expo)
- 3:30 – 4:30 PM Presentation by
Prof. Paul Mayne
- 4:30 – 6:00 PM Social hour (Geo Expo)
- 6:00 – 8:30 PM Banquet
Kenneth L. Lee Lecture
Prof. Ricardo Dobry



Richard Clarke

Chief Program Management Officer at LA Metro



Professor Paul Mayne
Georgia Institute of Technology



Professor Ricardo Dobry
Rensselaer Polytechnic Institute

21th LA GEO EXPO
Wednesday, April 18, 2018
1:00 - 6:00 p.m.

**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 your company would like to
exhibit, or if you know of a
company that would like to, please
contact the Vice-Chair.
Limited space is available:

Dr. Ahmadreza Mortezaie
ALBUS-KEEFE & ASSOCIATES, INC.

1011 N. Armando Street
Anaheim, CA 92806
Phone: (714) 630-1626
Fax: (714) 630-1916
Email: rmortezaie@albus-keefe.net

ASCE Los Angeles
Geo-Institute Chapter
Presents

FORTY-FIRST SPRING SEMINAR &
FOURTEENTH KENNETH L. LEE
LECTURE

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

The 2018 recipient of the Kenneth L. Lee Lecture Award is **Professor Ricardo Dobry**. Prof. Dobry will deliver the **Fourteenth Kenneth Lee Lecture** during the evening Banquet titled **"New Findings on Liquefaction Triggering of Sands during Earthquakes."**

There are two afternoon presentations, the first of which will be given by **Richard Clarke**, the **Chief Program Management Officer at LA Metro**, and the second afternoon presentation will be given by **Professor Paul Mayne**, of **Georgia Institute of Technology**, on **"Geocharacterization using the seismic piezocone."**

FOURTEENTH KENNETH L. LEE
LECTURE
Wednesday April 18th, 2018

**New Findings on Liquefaction
Triggering of Sands during
Earthquakes**

Professor Ricardo Dobry
Rensselaer Polytechnic Institute

Abstract

The presentation discusses recent findings on liquefaction triggering of clean and silty sands during earthquakes. Tools ranging from case history analysis to centrifuge tests were used in the studies. The findings are: (i) pore pressure ratio during earthquakes is more uniquely correlated to cyclic shear strain, γ_c , than to Cyclic Stress Ratio, CSR; (ii) current penetration and shear wave velocity (V_s) charts are associated with small cyclic strains that range from $\gamma_c \approx 0.03\%$ to $\gamma_c \approx 0.3-0.5\%$ depending on soil type and earthquake magnitude; (iii) for recent uncompacted fills which have not been significantly preshaken such as those in the San Francisco Bay Area of California and a magnitude, $M_w = 7.5$, triggering occurs at $\gamma_c \approx 0.03\%$; (iv) for the heavily preshaken, geologically recent natural silty sands in the Imperial Valley of California, $\gamma_c \approx 0.1-0.2\%$ with a liquefaction resistance which is twice as big despite the fact that some of these sands were deposited as recently as the uncompacted fills in San Francisco; and (v) the soil CPT tip penetration resistance is significantly more sensitive to preshaking than V_s , with the CPT capturing better the increased liquefaction resistance due to preshaking.

Reference: Dobry, R. and Abdoun, T. (2017). "Recent Findings on Liquefaction Triggering in Clean and Silty Sands during Earthquakes," Journal of Geotechnical and Geoenvironmental Engineering, ASCE, Vol. 143, Issue 10

REGISTRATION

Please complete your registration on our website (www.lageoinstitute.com) with PayPal/credit card payment option or use the form below. Use one form per registrant and duplicate the form for additional registrants. Determine payment from the Registration Fee Schedule shown below. Send completed form(s) and payment in the form of a check payable to **ASCE LA Geotechnical Group** to the Treasurer:

Mr. David Albus
Albus-Keefe & Associates, Inc.
1011 N. Armando Street
Anaheim, CA 92806
dalbus@albus-keefe.net

Registration Form

Name (Mr./Ms./Dr.) _____
Organization _____
Address _____
City _____
State _____ Zip _____
Phone _____ Fax _____
E-mail _____
Check # _____

Registration Fee¹

Early registration (*registration and payment received on or before 4/4/18*).....\$150
Regular registration (*registration and payment received after 4/4/18 or on-site²*).....\$190
Early Public Employee registration (*registration and payment received on or before 4/4/18*) ... \$100
Full-time student registration.....\$50

¹No refunds for cancellations requested after 4/11/2018.

²Due to limited seating, on-site registrations will be accepted only until event is full.

³Proof of full-time student status required on-site.