EARTHQUAKE ENGINEERING RESEARCH INSTITUTE

Founded in 1948, EERI's mission is to reduce earthquake risk by (1) advancing the science and practice of earthquake engineering, (2) improving understanding of the impact of earthquakes on the physical, social, economic, political, and cultural environment, and (3) advocating comprehensive and realistic measures for reducing the harmful effects of earthquakes.

NEWS OF THE INSTITUTE

› 2016 EERI Board Election Nominees

The following candidates have been nominated for the 2016 EERI Board of Directors. EERI members will vote for their candidates from October 1 to November 1, 2015.

President-Elect:
David A. Friedman, Senior Principal, Forell/Elsesser Engineers, San Francisco, CA (M. EERI, 1988)

Director A:
Gregory G. Deierlein, Professor, Civil and Environmental Engineering, Stanford University, CA (M. EERI, 1989)
Sri Sritharan, Professor, Department of Civil, Construction and Environmental Engineering, Iowa State University, IA (M. EERI, 1994)

Director B:
Ross Boulanger, Professor, Department of Civil and Environmental Engineering, UC Davis, CA (M. EERI, 1992)
Youssef Hashash, Professor, Civil and Environmental Engineering, University of Illinois at Urbana-Champaign, IL (M. EERI, 1999)
Additional nominations may be made by the membership in accordance with Article VII of the EERI Bylaws (Section 5), upon submission of a petition with signatures of at least 25 members for each elected Director’s office and at least 50 voting members for the office of President-elect. See the Bylaws for full details. Petitions must be received before September 1, 2015. Biographies of the candidates and short vision statements will be published in a future issue of the Pulse and posted on the EERI website.

EERI thanks the Nominating Committee: Joe Maffei (chair), Ian Buckle, David Frost, Jorge Meneses, and Susan Tubbesing.

EERI Strategic Plan Updated

During 2014 and 2015, the EERI Board of Directors reviewed and updated the Institute's strategic plan, which was created in 2007 to aid EERI in pursuing its mission, vision, and role.

Four strategic initiatives comprise the essence of the updated plan, designed to meet the challenges and opportunities now facing the Institute. Each initiative is founded upon existing successful programs and projects, and includes measurable objectives and tangible strategies to achieve them.


The entire plan, including a summary of EERI's Mission, Vision, and Role, can be downloaded from the Institute website: Earthquake Engineering Research Institute Strategic Plan (PDF)

EERI/FEMA NEHRP Graduate Fellowship Awarded to Brett Maurer

Brett Maurer (M. EERI, 2014) a Ph.D. student working in the geotechnical engineering program in the department of civil engineering at Virginia Tech University, has been selected as the 2015-2016 EERI/FEMA NEHRP Graduate Fellow in Earthquake Hazard Reduction.

EERI awards the graduate fellowship each year in a cooperative program with the Federal Emergency Management Agency's National Earthquake Hazards Reduction Program. The award is given to foster the participation of capable individuals in furthering the goals and practice of earthquake hazard mitigation. The fellowship provides a nine-month stipend of $12,000 and an allocation of up to $8,000 for university tuition, fees, and other related research expenses.

Maurer was selected from a group of highly qualified applicants studying civil, environmental, mechanical, structural, and geotechnical engineering, as well as geomechanics, public policy, and sustainable design and construction, at universities across the nation. A subcommittee of EERI's Student Activities Committee reviewed the application packages and made the final selection.
Maurer’s doctoral research focuses on the development of a revised Liquefaction Potential Index (LPI) for evaluating risk due to earthquake-induced liquefaction, a phenomenon that occurs in loose, saturated sandy soils subjected to dynamic loading. His research advisor at Virginia Tech is Professor Russell Green (M. EERI, 1983), and he has worked closely with Misko Cubrinovski and Brendon Bradley (M. EERI, 2012) of the University of Canterbury, New Zealand. Employing a transformative approach with an unprecedentedly large and high-quality dataset, Maurer aims to develop an improved, practice-oriented framework for assessing liquefaction hazard. Accounting for and respecting the fundamental differences between the occurrence and consequence of liquefaction, Maurer seeks to significantly improve the accuracy of hazard assessments. Preliminary findings from his research have received several awards, including 1st place in the ASCE Geo-Congress Student Poster Competition and 1st place in the 2014 EERI Graduate Student Paper Competition.

The Institute looks forward to highlighting Maurer’s research through a presentation at the 2016 EERI Annual Meeting.

Benjamin Turner (M. EERI, 2013) Ph.D. student in Civil Engineering at University of California, Los Angeles, received honorable mention from the selection committee. Turner’s work is focused on the reduction of seismic hazard by advancing understanding of soil-structure interaction of deep foundations, in particular, the demands imposed by ground movement and the transfer of these demands to the superstructure. Specifically, Turner seeks to develop tools to modify foundation input motions for structural design to properly account for kinematic soil-structure interaction effects. President of the UCLA student chapters of both EERI and the ASCE Geo-Institute Graduate Student Organization, Turner is a recognized young leader with an interest in increasing cooperation and understanding between the disciplines of structural and geotechnical engineering.

EERI thanks the selection committee for their work: Terri Norton (chair, M. EERI, 2004), Patricia Clayton (M. EERI, 2012), James Kaklamanos (M. EERI, 2009), Anne Lemnitzer (M. EERI, 2006), Ben Mason (M. EERI, 2008), Andreas Stavridis (M. EERI, 2004), and Nima Tafazzoli.

To learn more about the EERI/FEMA NEHRP Graduate Fellowship, visit the EERI website at https://www.eeri.org/about-eeri/honors-awards/graduate-fellowship/
EERI coordinated with nearly 30 international and US-based groups in responding to the April 25, 2015, earthquake in Gorkha, Nepal. As part of the EERI Learning from Earthquakes program, a 13-member reconnaissance team visited the region in early June. With the help of 25 young professional and graduate students acting as Virtual Team Collaborators (VTCs) and Earthquake Clearinghouse curators, reconnaissance team members are finalizing presentations on initial observations from the trip.
In the next month, presentation briefings from individual EERI team members will be available to the public in a series of online videos. A live briefing presented in conjunction with partner organizations is also planned. Details on both will be posted and emailed to members as soon as dates, times, and locations are confirmed.

Data collection has been a key focus of the EERI response to this earthquake, with team members geolocating and captioning images while in the field, resulting in over 11,000 geotagged photos. With the help of the VTCs, over the coming months the images will also be tagged with damage state and discipline information. The result will be a comprehensive collection of images that can be filtered, searched, and viewed by members and follow-up research teams. This will be the first time EERI reconnaissance teams have successfully created an image database that supports improved data visualization through an online data map, and will set a new standard for earthquake reconnaissance data collection and archiving.

Data, images, maps, and updates on the EERI response to the April 25, 2015, earthquake can be found on the [Nepal Earthquake Clearinghouse website](#).

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**NEWS OF THE PROFESSION**

- **Haresh C. Shah Honored in Singapore**


The degree will be given in recognition of Professor Shah's exceptional and outstanding contributions to the academic development of the university and his role in the transformation of NTU into a highly-ranked international multi-disciplinary research university.

Shah is the Obayashi Professor of Engineering, Emeritus, at Stanford University, and founder of Risk Management Solutions. A pioneer in the fields of risk analysis, earthquake engineering, and probabilistic methods, Professor Shah has been the recipient of EERI's Alfred E. Alquist Special Recognition Medal, and, for his extraordinary and lasting contributions to earthquake safety worldwide, the George W. Housner medal.
EERI Post-Graduation Interns: Summer 2015

Two new post-graduation interns have joined EERI. The Institute would like to introduce Karen Izumoto and Kelsey Wittels, who join intern Alianora Walker (M. EERI, 2015) at the EERI office in Oakland, California.

Karen Izumoto (M. EERI, 2015) is a recent graduate of Western Washington University with a B.A. in Urban Planning and Sustainable Development and a minor in Disaster Risk Reduction. First exposed to disaster risk reduction in planning courses, Karen quickly realized that the long term sustainability of communities required an interdisciplinary focus in natural hazard mitigation. As an EERI intern, she is excited to help launch the School Earthquake Safety Initiative and expand her capacity to help make people's lives safer.

Kelsey Wittels (M. EERI, 2014) studied Civil and Environmental Engineering with an emphasis in Structural Engineering at University of California, Los Angeles (UCLA). Kelsey became passionate about earthquake engineering after studying at Tohoku University, Japan, where she conducted research at the International Research Institute of Disaster Science. She is highly involved with UCLA's student chapter of Engineers Without Borders, where she is project lead of the Thailand Schoolhouse Team. Kelsey is enthusiastic about this opportunity to work at EERI and plans to continue work in the international civil engineering community after pursuing a graduate degree in Structural Engineering next fall.

The EERI post-graduate interns will work on projects of the Institute including the new School Earthquake Safety Initiative, The Concrete Coalition, World Housing Encyclopedia, and Learning from Earthquakes. These projects offer the interns professional experience, exposure to the multidisciplinary aspects of earthquake engineering, and the opportunity to network with others in the profession. Their work benefits EERI’s mission — to gather and disseminate information about earthquake risk reduction and to advocate for realistic measures to reduce the harmful effects of earthquakes.

Earthquake Dynamics of Structures Now Available in Digital Form
Anil K. Chopra’s monograph, *Earthquake Dynamics of Structures, A Primer*, is now available from the EERI Knowledge Center as a downloadable PDF.

The second edition of the monograph was updated and expanded in 2005 from Chopra’s classic primer. It provides the nonspecialist in dynamics of structures with the basic concepts and knowledge needed to understand the response of structures to earthquake excitation. It presents structural dynamics concepts and analysis procedures in elastic and inelastic response of structures that in one form or the other are utilized in design codes and seismic evaluations guidelines.

Available for download for $30 USD, with EERI members receiving an additional 15% discount at checkout. Hard copy editions of *Earthquake Dynamics of Structures, A Primer*, are also available for $45 USD.

Browse the EERI Knowledge Center

**ANNOUNCEMENTS**

› Take a Survey to Help Create a New ASCE/SEI 41 Guide

Are you a user of ASCE/SEI 41-13, *Seismic Evaluation and Retrofit of Existing Buildings*? Help with the creation of a guidance document for the profession’s state-of-the-art standard for seismic evaluation and retrofit of existing buildings by taking a short ten-minute survey to assist an ongoing project by the Applied Technology Council (ATC) in developing an Example Applications document.

The need for such a document was identified by the Structural Engineers Association of California’s (SEAONC) Existing Buildings Committee. SEAOC and ATC need your input on how you use the standard, and which areas you wish provided more clarity or worked examples.

The survey is open to all users of ASCE/SEI 41, so please feel free to share it with your colleagues. However, in order to not skew the results, please only take the survey once! The survey will be closed on Friday, **July 31, 2015**.

Take the survey here: [https://www.surveymonkey.com/s/NV3WMS8](https://www.surveymonkey.com/s/NV3WMS8)

› DFI Seminar in Los Angeles, August 5–6, 2015
EERI is a cooperating organization for a Deep Foundations Institute seminar, *Practical Deep Foundation Design and Construction for Seismic and Lateral Loads*, in Los Angeles, CA, **August 5-6, 2015**.

The seminar will present state of the practice in analysis, design, construction and testing of deep foundations subject to seismic and lateral loads. Industry leaders will overview the design approaches and challenges of seismic and lateral load design, address performance-based design for foundations in liquefiable and non-liquefiable soils, discuss practical soil-structure interaction solutions, and present case histories that highlight the use of conventional software packages and emphasize constructability issues for deep foundations subject to lateral and seismic loads.

View the event brochure (PDF)
Preview the technical program (PDF)
Register here

More information at Deep Foundations Institute website

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**DFI 40th Annual Conference in Oakland, CA, in October**


DFI's Annual Conference on Deep Foundations is the event for industry professionals from across the globe to gather and share experiences, exchange ideas and learn the current state-of-the-practice from various disciplines on deep foundation technology.

Details and registration information on conference website.

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**MEMBER SPOTLIGHT**

Welcome New EERI Members

EERI welcomes the members who have recently joined the Institute. If you wish to connect with your fellow members, you can locate their contact information in the EERI online membership directory, which requires logging in to the Member Resources Area of the EERI website.
SUBSCRIBING MEMBERS
New Silver Subscribing Member Farzad Naeim, Inc. is a professional engineering services firm providing advice and peer review services on the seismic design of tall buildings and the performance-based design of structures, as well as training and management services.
Visit the Farzad Naeim, Inc. website

REGULAR MEMBERS
Alissa Beck, Werner Sobek Stuttgart, Structural
Elizabeth Kenyon, Jezerinac Group, Structural

STUDENT MEMBERS
Mohanad Abdulazeez, Missouri University of Science & Technology, Civil
Sujith Anumolu, Missouri University of Science & Technology, Structural
Kevin Boulerice, Universite de Sherbrooke, Civil
Cagatay Demirci, Imperial College London, Structural
Mathew Mathew, University of British Columbia, Structural
Max O’Krepki, Virginia Tech, Structural
Manisha Rai, Virginia Tech, Geotechnical
Mitesh Surana, IIT Roorkee, Structural

E-AFFILIATE MEMBERS
Edwin Obando, Nicaragua, Civil
Ismail Safkan, Turkey, Structural
Nishant Suthar, India, Structural

25 WAYS TO GET INVOLVED

Get Involved with EERI
Looking to be more involved with EERI? We've come up with a list of opportunities for members. Each edition of The Pulse will highlight a way to do more.
Download the 25 Ways flyer (PDF)

#6: Test and further develop data gathering and visualization tools for reconnaissance.
Help EERI improve the visualization of reconnaissance data from the Nepal Earthquake. Mapping increases the timely sharing of data, creates a long-term archive, and acts as a publicly-available resource for researchers. View the [Reconnaissance Data Map](https://eqclearinghouse.eeri.org) on the Nepal Earthquake Virtual Clearinghouse website and send your feedback and suggestions to eqclearinghouse@eeri.org

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**CALENDAR**

Follow these steps to add EERI Calendar to your own Google calendar.

1. Open [Google Calendar](https://calendar.google.com)
2. On the left, above "My Calendars," click Add + and then From URL.
3. Enter the EERI calendar's address in the field provided. EERI Calendar ics link
   ```
   https://calendar.google.com/calendar/ical/eeri.org_s9151tit0ab26dnf2epn25d7rg%40group.calendar.google.com/public/basic.ics
   ```
4. Click Add Calendar. The calendar will appear on the left side under "Other calendars."

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**Monday, April 27, 2020 - April 30**

**SSA 2020 Annual Meeting**

SSA 2020 Annual Meeting
27-30 April 2020 — Albuquerque, New Mexico
The 2020 Annual Meeting will be held in Albuquerque, New Mexico.
[Check back later for more information.](https://eqclearinghouse.eeri.org)

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**Friday, May 15 2020 5:00 PM - May 16 2:00 AM**

**2020 Los Angeles Tall Buildings Conference**

The 2020 Los Angeles Tall Buildings StructuralDesign Council conference will cover a variety of topics related to recent advances in structural design of tall and special buildings. Learn more: [www.latallbuildings.org](http://www.latallbuildings.org)

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**Monday, September 14, 2020 - September 18**

**17th WCEE**

The 17th WCEE will be hosted in Sendai, Japan, from September 14th to 18th 2020. Check [http://www.iaee.or.jp/](http://www.iaee.or.jp/) for more information.