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

New EERI Directors Appointed

Please welcome new EERI Directors, Erica Fischer and Jorge Meneses. Both were appointed to the Board in accordance with Article III of the Institute’s Bylaws.

Erica Fischer, Ph.D., P.E. (M.EERI, 2010), is an assistant professor of structural engineering at Oregon State University. She received a B.S. from Cornell University and a Ph.D. from Purdue University. Prior to Oregon State, she worked as a structural engineer in New York and Seattle where she focused mainly on renovations and retrofits of existing buildings. Her technical capabilities revolve around innovative approaches to improve the resilience and robustness of structural systems affected by natural and man-made hazards. This includes performance-based design approaches of structural systems to decrease the environmental impact of the built environment on the natural environment. Erica’s focus is on steel, composite systems, mass timber construction, and connections. These research interests are implemented through both large-scale experimental testing and numerical modeling approaches. She has been a member of a number of post-earthquake reconnaissance team missions including Haiti (2010), Napa (2014), and Italy (2016), and Mexico City (2017) in addition to post-wildland fire investigations after the California Camp Fire.

Erica has served in a number of positions throughout EERI. As a graduate student, she was president of the Purdue EERI student chapter and co-chair of the Student Leadership Council. Erica is one of the founding members of the EERI Younger Members Committee and Virtual Earthquake Reconnaissance Team. She is a member of the LFE Executive Committee and she is currently the academic advisor for the Oregon State University EERI student chapter. Read Erica Fischer’s bio and vision statement.
Jorge F. Meneses, Ph.D., P.E., G.E., D. GE, F.ASCE, (M.EERI,2006), has more than 30 years of consultancy, project management, research, and teaching experience, in both private industry and research institutions in the field of geotechnical and earthquake engineering. He has been involved in numerous projects serving as a technical lead in geotechnical earthquake engineering and foundation engineering across the country and various markets including water, nuclear, transportation, high rise buildings, energy, schools, hospitals, commercial and industrial. Dr. Meneses frequently acts as a peer reviewer for technical conferences and technical journal publications, is a guest speaker for domestic and international conferences, and has published more than 60 technical publications. He is currently a part-time faculty member in the graduate school of San Diego State University. He is the President and Founder of the Earthquake Engineering Research Institute (EERI) San Diego Chapter, California Seismic Safety Commissioner, Honorary Chair of the ASCE Geo-Institute San Diego Chapter, Member of the ASCE 7-16 (Minimum Design Loads for Buildings and Other Structures) and ASCE 1 (Geotechnical Analysis, Design, Construction, Inspection and Monitoring of Nuclear Safety-Related Structures) Committees, member of the Industry Advisory Board, Department of Structural Engineering (University of California San Diego), member of the Academy of Geo-Professionals, and a Fellow of the American Society of Civil Engineers (ASCE).

The Board extends appreciation to Directors Danielle Hutchings Mieler (M. EERI, 2009) and Sissy Nikolaou (M. EERI, 2004), whose terms end this month, for their outstanding service to the Institute.

EERI 2018 Graduate Student Paper Award

The EERI Board of Directors will present Maryia Markhvida (M.EERI,2017), PhD Candidate, Stanford University, with the 2018 Graduate Student Paper Award on Thursday, March 7, 2019 at the EERI Honors Ceremony and Annual Business Meeting in Vancouver, British Columbia.

"Unification of seismic performance estimation and real estate investment analysis to model post-earthquake building repair decisions"

Maryia Markhvida (M.EERI,2017) and Jack W. Baker (M.EERI,2004)
Earthquake Spectra, Vol. 34, No. 4 (November 2018) pp. 1787-1808

Many committee members who reviewed the paper noted that this paper’s novel approach in relating structural engineering loss estimates with real estate market values will have many broader impacts to fields beyond engineering, including policy mitigation efforts and post-earthquake decision making.

Maryia Markhvida is a PhD candidate at Stanford University and is one of the first members of the Stanford Urban Resilience Initiative. Her research and professional interests center around computational techniques for regional seismic risk modeling, post-disaster economic
impact analysis and socio-economic household recovery modeling, infrastructure resilience, and application of machine learning in risk quantification.

Honorable Mention

EERI 2018 Undergraduate Student Paper Competition

Nancy Ingabire Abayo (M.EERI,2018) will be presented with the EERI 2018 Undergraduate Student Paper Award on Thursday, March 7, 2019, at the EERI Honors Ceremony and Annual Business Meeting in Vancouver, British Columbia.

Nancy Ingabire Abayo's paper entitled, “Assessment of Sources of Aleatory Variability in Lateral Spreading Estimations and Measurements," received the highest scores from the Committee, who noted that the ability to concisely convey research within the 4-page limit demonstrates a mastery of writing skills.

Nancy Ingabire Abayo, from Rwanda, is a senior at Bucknell University, where she double majors in Civil Engineering and Geology. Nancy's passion for research developed while working on a Montandon Bentonite-Slurry Wall ongoing project at Bucknell University as a first-year student, and taking part in an intensive research program in Geotechnical Earthquake Engineering at North Carolina State University in the summer of 2018 on the assessment of liquefaction-induced lateral spreading case histories from recent seismic events. After graduation, Nancy would like to continue on to graduate school. As a Grand Challenges Scholar, she aspires to participate in improving the infrastructure in Rwanda through academia and to ultimately work internationally in natural-disaster-prone regions.

Honorable Mention
Tara Nye of Brigham Young University received an honorable mention for this award for her paper, "Evaluation of horizontal-acceleration combination for use in Arias intensity and CAV calculations."
Charles Kircher Elected to the National Academy of Engineering

The Board of Directors is honored to congratulate longtime member, Charles A. Kircher (M.EERI,1974), for election to the National Academy of Engineering (NAE). Charles (Charlie) Kircher, principal, Kircher & Associates, Palo Alto, California, was recognized for advancing structural engineering practice in earthquake engineering and loss prevention in building design.

Dr. Kircher holds B.S., M.S., Engineer and Ph.D. degrees from Stanford University and is a Fellow of the Structural Engineers Association of California and an Honorary Member of the Structural Engineers Association of Northern California. He is active in seismic code development committees of the Structural Engineers Association of California (SEAOC), the American Society of Civil Engineers (ASCE) and the Building Seismic Safety Board (BSSC). Dr. Kircher chaired the Seismic Design Procedures Reassessment Group of the BSSC, which worked with the United States Geological Survey (USGS) as part of Project 07 to update the ground motion maps of the 2009 NEHRP Recommended Provisions and ASCE/SEI 7-10. Previously, Dr. Kircher chaired a number of SEAOC and BSSC “emerging technology” seismic code committees, including the SEAOC Base Isolation committee (1986 – 1992) that developed the original design requirements for base isolation systems (Chapter 23, Division III, 1991 Uniform Building Code) and the BSSC Technical Subcommittee (TS-12, 1995 - 2000) that developed the first set of design provisions for structures with damping systems (Chapter 13, 2000 NEHRP Recommended Provisions).

Election to the National Academy of Engineering is among the highest professional distinctions accorded to an engineer. Academy membership honors those who have made outstanding contributions to "engineering research, practice, or education, including, where appropriate, significant contributions to the engineering literature" and to "the pioneering of new and developing fields of technology, making major advancements in traditional fields of engineering, or developing/implementing innovative approaches to engineering education."

On February 7, 2019, The National Academy of Engineering (NAE) President C. D. (Dan) Mote, Jr. announced that 86 new members and 18 new foreign members had been elected to the NAE. This brings the total U.S. membership to 2,297 and the number of foreign members to 272. Individuals in the newly elected class will be formally inducted during a ceremony at the NAE’s annual meeting in Washington, D.C., on Oct. 6, 2019. A list of the newly elected members and foreign members can be viewed on the NAE website, including their primary affiliations at the time of election and a brief statement of their principal engineering accomplishments.
Jonathan Bray: ASCE 2019 Karl Terzaghi Award Honoree

Congratulations Jonathan D. Bray (M.EERI, 1990), Ph.D., P.E., F.ASCE, NAE, Faculty Chair in Earthquake Engineering Excellence and Professor in the Department of Civil and Environmental Engineering at UC Berkeley, for being honored by ASCE with the 2019 Karl Terzaghi Award. The award is presented for outstanding contributions to knowledge in the fields of soil mechanics, subsurface and earthwork engineering, and subsurface and earthwork construction.

Dr. Bray helped pioneer major innovations in earthquake reconnaissance, including GPS-oriented use of coordinated aerial, ground, and subsurface investigations of earthquake effects on soils and foundation performance, and has exercised leadership in organizing, coordinating, and participating in geotechnical reconnaissance not only of earthquakes, but of other natural hazards such as hurricanes. Read the announcement.


EERI congratulates Farhang Ostadan (M.EERI, 1990), the 2019 recipient of the American Society of Civil Engineers' (ASCE) Stephen D. Bechtel Jr. Energy Award. Dr. Ostadan is being recognized for advancing the protection of nuclear power plants against earthquakes.

The award recognizes outstanding achievements in the energy industry. The American Society of Civil Engineers (ASCE) says Ostadan was chosen as this year's awardee because of his "significant contributions to practice, research, and codification activities for advancing soil-structure-interaction analysis and seismic analysis in the energy industry, in particular, the nuclear power industry." Read the press release.
IN MEMORIAM - MIHRAN AGBABIAN

Remembering Mihran "Mike" Agbabian

EERI is sad to share news that Mihran Agbabian (M.EERI,1969) passed away on February 12, 2019. Dr. Agbabian was an influential, longtime member of the Earthquake Engineering Research Institute, former President, and Honorary Member.

Mihran S. Agbabian received his Ph.D. (1951) degree in Civil (Structural) Engineering, from the University of California, Berkeley. He also received a B.S. (1944) in Physics and a B.S. in Engineering (1947) from the American University of Beirut and an M.S. (1948) in Civil (Structural) Engineering from the California Institute of Technology. He is Professor Emeritus of Engineering at the University of Southern California (USC) and President Emeritus of the American University of Armenia. Dr. Agbabian has the distinction of being the first Ph.D. student in the structural engineering program at Cal, with Professor Egor Popov as his advisor. He founded the engineering firm Agbabian Jacobsen Associates in 1963, and in 1984 he joined the University of Southern California (USC) faculty, as the Fred Champion Professor of Engineering and Chair of the Sonny Astani Department of Civil and Environmental Engineering.

During his career, Dr. Agbabian worked as a practicing structural engineer, first at Bechtel Corporation in San Francisco (1951-1955), then at Parsons Corporation (1955-1962) in Los Angeles. At Agbabian Jacobsen Associates (1963-1983), he worked on the effects of nuclear weapons on civilian and military installations and on earthquake engineering design and analysis. After the disastrous earthquake of 1988 in Armenia, Dr. Agbabian joined two colleagues to found the American University of Armenia (AUA) where he served as founding President (1991-1997) while continuing his position at USC. The Board of Regents of the University of California (U.C.) agreed in 1991 to have AUA as an affiliate of the U.C. system. Through this affiliation, U.C. was able to provide technical assistance to AUA and help further its development as an American model educational institution. This affiliation has been continuing for more than 20 years.

Among the honors Dr. Agbabian has received are the U.C. Berkeley College of Engineering Distinguished Engineering Alumnus Award in 1987, and the California Institute of Technology Distinguished Alumnus Award in 2000. In 1982, he was elected to the U.S. National Academy of Engineering (NAE). In 1990, he was elected to the Armenian National Academy of Sciences. He is the recipient of the Ellis Island Medal of Honor in 1995, and in 2001, the President of the Republic of Armenia awarded him the Movses Khorenatsi Medal for exceptional achievement in educational development. He was inducted to Academy of Distinguished Alumni November 8, 2012.

We extend our deepest condolences to Dr. Agabian's family, friends, and former students. Dr. Agbabian is survived by his wife, Elizabeth Apkarian, three sons and four grandchildren.
EERI - American Samoa Project Opportunity

The Earthquake Engineering Research Institute (EERI), on behalf of the American Samoa Department of Homeland Security (ASDHS), is seeking a consultant specializing in seismic assessment of structures to complete a seismic assessment of the Port of Pago Pago in American Samoa. This project would include one site visit to American Samoa and would need to be completed by June 30, 2019.

For more information about the project, please see the project's RFP.

Proposal materials should be directed to EERI Project Manager Zoe Yin at zoe@eeri.org no later than March 18, 2019.

USGS recruiting Senior Science Advisor to coordinate earthquake and geologic hazards activities - applications due March 18

The U.S. Geological Survey (USGS) is seeking to fill one of its most critical leadership positions for carrying out our natural hazards mission. The Senior Science Advisor for Earthquake and Geologic Hazards is a Senior Level (SL) position reporting to the USGS Associate Director for Natural Hazards. The position serves as coordinator of the Earthquake Hazards Program (EHP),Geomagnetism Program, and the USGS portion of the Global Seismographic Network (GSN). These three programs collectively had an appropriated budget of about $92 million in fiscal year 2018, funding work at regionally managed USGS science centers as well as by university and state partners. The EHP and GSN represent the USGS contributions to the four-agency National Earthquake Hazards Reduction Program (NEHRP), which was recently reauthorized by Congress. The USGS Geomagnetism Program is the USGS contribution to the multi-agency National Space Weather Program.

This position also has broad responsibility within our Natural Hazards Mission Area to guide the breadth of USGS geologic hazards work, ensuring strong coordination with the activities supported by our volcano, landslide and coastal/marine programs along with the many other hazard-related activities supported throughout the Survey. In addition to internal program management responsibilities, the Senior Science Advisor is an ambassador for the USGS to our many partners and stakeholders in the US and around the world.

A description of the position and details on how to apply can be found on USAJOBS. There are two separate announcements, one open to current and former Federal employees (SL-2019-0002 MP), and the other open to all U.S. citizens (SL-2019-0001 DE).
Applications will be accepted until March 18.

EERI Employment Opportunity: Membership and Communications Manager

The Earthquake Engineering Research Institute (EERI) is seeking a proactive, creative, experienced, and technology-aware Membership and Communications Manager. This person will be a primary liaison with our approximately 3,000 members with lead responsibility to design, implement, and assess our membership retention and recruitment campaigns. The Membership and Communications Manager will also be responsible for developing and deploying an integrated communications plan to increase the overall branding, visibility and reach of the Institute to its members, other stakeholders, and the public.

The Membership and Communications Manager must be self-motivated, flexible, an excellent communicator, and an outstanding team player. This position requires someone eager to use our data and their knowledge of industry trends to develop innovative strategies then deliver on that vision by completing necessary tasks from simple to complex. Strong planning and organizational skills are essential because activities will vary in scope, timeline, and team size. Experience with membership development and retention is necessary, preferably with a nonprofit association.

To view the full job description including job duties, desired qualifications, compensation and benefits, please click here.

Application Instructions: Candidates should send a letter of interest and resume with supporting qualifications to jobs@eeri.org. All applications will be kept in strictest confidence. No calls please. Application Deadline: March 10, 2019 or until filled.

OSU Research Fellowships for Undergraduates

Applications due March 31, 2019
Oregon State University is excited to announce summer internships for undergraduate students interested in research experience. The Engineering for Bouncing Back (EBB) program will award approximately 10 fellowships of $5,000 per student, along with travel and subsistence support, to support participation in hands-on research in the interdisciplinary area of Resilience. During the ten-week program, students will work with a faculty mentor and graduate student on a specific project and will develop research skills to increase graduate school opportunities. To learn more or apply please visit the webpage.
Seismic Warning to India: A Shock Strikes Just North of Delhi (Temblor) India is one of the countries with the most earthquake-related deaths. On 20 February 2019, a magnitude 4 earthquake struck 50 km (30 mi) north from the megacity, Delhi. This earthquake is not large, so, what is interesting about it? Actually, there is a lot to be learned from small, seemingly unimportant events like this. Read more

California Earthquake Early-Warning System Will Mean False Alarms. Still Worth It, Experts Say (Los Angeles Times) The key finding from research detailed in the journal Scientific Reports, is: An early-warning system that gives you an excellent chance of being alerted to those twice-in-a-decade earthquakes will probably deliver four warnings that turn out to be false within that same time period. Read more

Earthquake Tally Near Bluffdale (Utah) Keeps Rising; 139 in 12 days (Salt Lake Tribune) There’s been a whole lotta shakin’ goin’ on in Utah according to the University of Utah Seismograph Stations. Seismologist James Pechmann (M.EERI,2015) says, "While small quakes do not necessarily portend the big one is about to strike, they also don’t act as a 'safety valve' to 'relieve pressure' and lessen the chances of a much larger earthquake." Read more

A Single Earthquake Can Move Millions of Tons of Carbon into Earth’s Deepest Trenches (Live Science) In a new study published in Scientific Reports, a team from the University of Innsbruck in Austria visited the Japan Trench — a Pacific subduction zone that plunges more than 26,000 feet (8,000 m) at its deepest point — to determine how much organic matter had been dumped there by the history-making 2011 Tohoku, Japan quake. The team found that roughly one teragram — or 1 million tons — of carbon had been dumped into the trench following the Tohoku earthquake and subsequent aftershocks. Read more
7.5 Magnitude Earthquake Strikes Near Ecuador's Border With Peru (NPR) A powerful earthquake struck eastern Ecuador early Friday, February 22, sending tremors for miles through a sparsely populated area and into neighboring Peru and Colombia. The quake hit at an intermediate depth of about 82 miles, the U.S. Geological Survey said. Read more

Researchers Reflect on an 'Ominous Quiet' in Pacific Northwest Seismic Behavior (Seattle PI) Though there have been rumbles, tremors, and even swarms of quakes, there have only been nine earthquakes at magnitude 4 or greater since 2009 in the Pacific Northwest, outside of those at Mount St. Helens or on the Cascadia Subduction Zone. As for what it means, scientists at the Pacific Northwest Seismic Network say more research is needed. Read more

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

1. Open Google Calendar
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."

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.

Friday, May 15 2020 5:00 PM - May 16 2:00 AM
2020 Los Angeles Tall Buildings Conference
The 2020 Los Angeles Tall Buildings Structural Design 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

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/ for more information.

Sunday, February 07, 2021 - February 10

**ASCE/UCLA San Fernando Earthquake Conference**
For more information: http://lifelines2021.ucla.edu/

Wednesday, March 17, 2021 - March 19

**EERI Annual Meeting**