

EARTHQUAKE ENGINEERING RESEARCH INSTITUTE

NEWSLETTER

Earthquake Engineering Research Institute 499 14th Street, Suite 220 Oakland, California 94612-1934 phone: 510-451-0905 fax: 510-451-5411 email: eeri@eeri.org website: www.eeri.org

Editor LFE Insert Editor Associate Editor Editorial Manager Mark Yashinsky Sarah Nathe Gerald Brady My Davidson

ISSN 0270-8337 Reproduction with attribution is permitted.

EARTHQUAKE ENGINEERING RESEARCH INSTITUTE

PRESIDENT lan G. Buckle

PAST PRESIDENT L. Thomas Tobin

VICE PRESIDENT David A. Friedman

SECRETARY-TREASURER Janiele Maffei

BOARD OF DIRECTORS

Scott Ashford

Ian G. Buckle

Kenneth Elwood

David A. Friedman

Roberto Leon

Janiele Maffei Kathleen Tierney

L. Thomas Tobin

Ivan Wong

EXECUTIVE DIRECTOR Jay Berger

NEWS OF THE INSTITUTE

Earthquake Spectra Leadership

After almost six successful years, Polat Gülkan and Mary Comerio will transition out of their roles as editor and associate editor, respectively, of the Earthquake Spectra journal starting July 1. Polat Gülkan, the first Spectra editor to reside outside the United States, is professor in the Department of Civil Engineering at the Çankaya University, Ankara, Turkey. During his tenure, the Spectra Editorial Board increased its international representation. Mary Comerio is professor of the Department of Architecture at UC Berkeley. Comerio, a major contributor to the EERI Learning from Earthquakes program, was selected as the 2013 EERI Distinguished Lecturer.





Outgoing Spectra Editor Polat Gülkan and Associate Editor Mary Comerio





Incoming Spectra Editor Jonathan Stewart and Associate Editor Yousef Bozorgnia

Incoming Leadership

EERI is pleased to welcome the incoming editor and associate editor of Earthquake Spectra, Jonathan Stewart and Yousef Bozorgnia starting July 1.

continued on page 2

10NCEE: Conference Updates



Portage Lake with Bard Peak in the distance, and Shakespeare and Burns Glaciers to the left and right, respectively (Photo by Eric Cannon)

The Tenth U.S. National Conference on Earthquake Engineering (10NCEE) will be held during the 50th anniversary year of the Great Alaska Earthquake and Tsunami in Anchorage, Alaska, July 21–25, 2014. The theme for the conference is "Frontiers of Earthquake Engineering."

continued on page 3

Earthquake Spectra Leadership

continued from cover page

Jonathan Stewart, *Spectra*Editor, is professor and chair of the Department of Civil and Environmental Engineering at the University of California, Los Angeles. Stewart's primary interests are in geotechnical engineering, and he maintains an active consulting practice. Stewart is also actively involved on committees responsible for developing guidelines for engineering practice.

Yousef Bozorgnia, *Spectra* Associate Editor, is executive director of the Pacific Earthquake Engineering Research (PEER) Center at the University of California, Berkeley and adjunct professor of the Structural Engineering, Mechanics, and Materials (SEMM) program. Bozorgnia is an active researcher and consultant on ground motion hazard and earthquake engineering.

Stewart and Bozorgnia will work with the 30-member *Spectra* Editorial Board and *Spectra* Managing Editor Liz Hogan Stalnaker to ensure the timely publication of peer-reviewed articles on earthquake hazards mitigation, preparedness, and recovery. *Spectra* serves as the publication of record on the development of earthquake engineering practice, earthquake codes and regulations, earthquake public policy, and earthquake investigation reports. For *Spectra* related questions, contact Managing Editor Stalnaker at *liz@eeri.org*.

Earthquake Spectra Non-Member Author Fee

Non-member Author Fee

As of July 1, 2013, the first and corresponding authors for a manuscript published in *Earthquake Spectra* who are not EERI members must pay a non-member author fee of \$550 (or \$275 if only one of these authors is not an EERI member). The non-member author fee will be assessed upon a paper's acceptance for publication.

Non-member authors who are interested in becoming EERI members are referred to https://www.eeri.org/member-center/get-involved/become-a-member/ for information regarding the different membership levels and to access the online membership submission form.

Under special hardship circumstances, the non-member author fee can be waived upon appeal, at the discretion of the journal's Editor-in-Chief.

Length Requirements and Overage Fee

The page limit for manuscripts

submitted to *Earthquake Spectra* is 18 journal pages, and this includes the text, references, and any figures or tables. For papers longer than 18 pages, authors must include a statement in the cover letter explaining the need for the added length.

Papers longer than an estimated 24 journal pages will not be reviewed and must be shortened before being resubmitted for review. (Please note that in special cases, this page limit can be appealed and waived at the discretion of the journal's Editor-in-Chief.)

Upon acceptance, if a paper has not been sufficiently shortened in the revision process and remains longer than 18 pages and no more than 24 pages, a page overage charge of \$250 will be invoiced and collected before the paper is posted in its Preprint form on the *Earthquake Spectra* website and submitted for copyediting. Rare papers longer than 24 pages incur additional charges.

EERI Technical Seminar Series: PEER NGA-West2 Project

Presenters

Seminar presenters include:
Norm Abrahamson, Pacific Gas
& Electric; Tim Ancheta, Risk
Management Solutions; Yousef
Bozorgnia and Emel Seyhan, Pacific
Earthquake Engineering Research
Center; Nico Luco and Mark
Petersen, U.S. Geological Survey;
Silvia Mazzoni, Degenkolb Engineers;
and Nick Gregor, Bechtel.

Save the Dates and Locations

Nov. 7 Salt Lake City, UT Nov. 8 Long Beach, CA Nov. 14 Seattle, WA Nov. 15 San Francisco, CA

More Info

Registration for the 2013 Technical Seminar Series will open this August. If you have questions about the seminar series, email the Institute at *eeri@eeri.org*.

ANNOUNCEMENT

Iwan Receives ASCE Theodore von Karman Medal



Prof. Wilfred D. Iwan

Wilfred D.
Iwan, Emeritus
Professor
of Applied
Mechanics
and Emeritus
Director of the
Earthquake
Engineering
Research

Laboratory at the California Institute of Technology, was awarded the Theodore von Karman Medal by the American Society of Civil Engineers (ASCE). The von Karman Medal recognizes distinguished achievements in engineering

mechanics that are applicable to any branch of civil engineering.

Professor Iwan joined the Caltech faculty in 1964. His research deals with fundamental areas of mechanics, understanding and characterization of strong earthquake ground motion, analysis and monitoring of the response of structural systems subjected to extreme events, and public policy regarding disasters.

Professor Iwan is a Distinguished Member of the American Society of Civil Engineers, a Fellow of the American Society of Mechanical Engineers, and a member of the Earthquake **Engineering Research Institute** (EERI). He is a recipient of the George W. Housner Medal awarded by EERI, both the William H. Wisely American Civil Engineer Award and the Nathan M. Newmark Medal awarded by ASCE, the Alfred Alquist Medal awarded by the Earthquake Safety Foundation, and a Lifetime Achievement Award presented by the Consortium of Strong Motion Observation Systems (COSMOS). He was the inaugural recipient of the Bruce A. Bolt Medal awarded jointly by EERI, the Seismological Society of America, and COSMOS.

10NCEE: Conference Updates

continued from cover page

The 10NCEE will provide opportunities for researchers and practitioners to share knowledge and inquiries for mitigating the damaging effects of earthquakes and tsunamis.

The 10NCEE is organized by the Earthquake Engineering Research Institute (EERI) with support from the George E. Brown, Jr. Network for Earthquake Engineering Simulation (NEES). The Federal Emergency Management Agency is the first major sponsor of the conference.

Provisional Acceptance of Paper Abstracts: August 15

Over 1,200 paper abstracts were submitted for 10NCEE in June. Abstract authors will be notified of provisional acceptance by August 15, 2013. Authors should plan on submitting their papers by November 1, 2013. For more information about 10NCEE papers, visit the conference website at *www.10ncee.org/*.

New Sponsors

Computers and Structures, Inc. (CSI) is a new Sponsor of 10NCEE. CSI is recognized globally as the pioneering leader in software tools for structural and earthquake engineering, backed by more than three decades of research and development.

Hayward Baker is a new Silver Sponsor of 10NCEE. Hayward Baker is a geotechnical construction company that provides the full range of pre and post construction services for foundation rehabilitation, settlement control, liquefaction mitigation, soil stabilization, groundwater control, slope stability, excavation support and underpinning.

Golder Associates and Northern Geotechnical Engineering have also provided financial support for 10NCEE.

Cooperating Organizations

The following cooperating organizations have agreed to promote the 10NCEE conference to their extensive organizational networks:

- Alaska Seismic Hazards Safety Commission (ASHSC), State of Alaska:
- Central United States Earthquake Consortium (CUSEC), Memphis, Tennessee;
- Natural Hazards Center (NHC), University of Colorado at Boulder;
- Southern California Earthquake Center (SCEC), University of Southern California; and
- Western States Seismic Policy Council (WSSPC), Sacramento, California.

NEWS OF THE INSTITUTE

EERI Student Chapter Activities

EERI Student Chapters are engaging in a plethora of technical sessions and social events, including hosting EERI Distinguished Lecturers and practitioners as part of the Friedman Family Visiting Professionals Program. Many also enter the annual Undergraduate Seismic Design Competition. Described below are some of the student chapters' most creative organizational and outreach efforts:

Oregon State University

The Oregon State University seismic team, sponsored by EERI and ASCE student chapters and the School of Civil and Construction Engineering, sent three students, Ben Sundberg, Jakob Walter, and Thanh Hyunh, to the 2013 EERI Undergraduate Seismic Design Competition in Seattle, February 13. The team placed second for the second year in a row and was one of the few teams to survive all three earthquake simulations (El Centro, Northridge, and Davis).



The proposed design was first developed by the team members using AutoCAD, and then uploaded into SAP 2000 for analysis with the three contest ground motions. After the design was tested and deemed sound, a large construction effort was made using balsa wood, super glue, and various hand tools. In addition to the tower itself, the team also created

a poster describing the design and architectural aspects.

The EERI and ASCE student chapters also combined efforts to organize and conduct the Order of the Engineer ceremony for the entire OSU College of Engineering, as a special project, to encourage professionalism and ethics among the graduating seniors.

On June 15, 2012, 51 new members of the Order of the Engineer were inducted, from seven different majors in the college. Ceremony speakers and participants included Tim Link, ASCE student chapter; Dr. Kate Hunter-Zaworski and Dr. Tom Miller, CCE faculty; Dr. Marvin Pyles, soonto-be Emeritus Professor of Forest Engineering; and Josh Goodall, CCE alum and Vice President of the Capitol Branch of ASCE.



Sean O'Connor, Adam Lobbestael, Professor Tom O'Rourke, Clinton Carlson, and Julie Fogarty

University of Michigan

Professor Tom O'Rourke of Cornell University, recent EERI Distinguished Lecturer and honorary member, visited the University of Michigan's Geotechnical Department. Professor O'Rourke's presentation was titled "The New Normal for Natural Disasters." The EERI Student Chapter at the University of Michigan publicized the event as an EERI seminar for students.

University of Minnesota

The EERI-UMN student chapter helped promote understanding of earthquake engineering at the University of Minnesota, Department of Civil Engineering Booth at the Minnesota State Fair, August 27, 2012. The booth was run by volunteers from the student chapter who conducted demonstrations covering soil liquefaction, shake-table testing of K'nex buildings, and "make-yourown-earthquake" seismographs.

On November 17, 2012, the student chapter also volunteered to run exhibits and activities at the Math and Science Family Fun Fair, an event aimed at promoting the sciences to grade school students. Activities included those from the Minnesota State Fair exhibit but with a strong emphasis toward shake-table testing of structures constructed by the grade-school attendees.



The EERI-UMN student chapter entered a team in the Seismic Design Competition held at the 2013 EERI Annual Meeting in Seattle, February 13. The team placed 25th. Sponsorship of the team was provided by MBJ, HGA, MTS, and the UMN Department of Civil Engineering. Seismic Design Competition team members include Chris Young, Christine Swisher, Andrew Morgan, Matt Bonnema, Gwyn Perry, Erin Kayser, and Matt McOlash.

Student Chapter Activity Reports

Annual reports from EERI Student Chapters are available at www.eeri. org/about-eeri/student-chapters/.

Friedman Family Visiting Professionals at EERI Student Chapters

The Friedman Family Visiting Professionals Program, a program endowed by the Friedman family, fosters better understanding and communication between and among earthquake professionals, practitioners and academics. EERI matches visiting professionals with EERI student chapters at host universities for a two-to-three-day workshop of current topics related to earthquake engineering and earthquake risk reduction.

This exchange is meant to be part lecture and part informal discussion with faculty and students, providing a glimpse of their professional futures. The visiting professionals come from a wide range of disciplines, including engineering, earth science,

seismology, architecture, planning, public policy, and the social sciences.



Professor Jason McCormick, Adam Lobbestael, Dr. Ramin Golesorkhi, Clinton Carlson, and Julie Fogarty

Student Chapter at the University of Michigan, Ann Arbor

EERI member Dr. Ramin Golesorkhi of Treadwell & Rollo in San Francisco visited the EERI Student Chapter at the University of Michigan, Ann Arbor. Dr. Golesorkhi gave a presentation on "The Development of Site-Specific Ground Motions — A Practitioner's Approach." The students appreciated Dr. Golesorkhi's perspective on the

industry as they near the completion of their degrees.



Alireza Nojavan, Davide Giannuzzi, Ben Dymond, Cathy French, Andrew Gastineau, David Friedman, Qingzhi "Andy" Liu, and Brock Hedegaard

Student Chapter at the University of Minnesota

On April 19, 2013, the EERI Student Chapter at the University of Minnesota hosted EERI member David Friedman of Forell/Elsesser Engineers in San Francisco. Friedman gave a presentation on the retrofit of the California Memorial Stadium at UC Berkeley.

Welcome EERI Post-Graduate Interns



Brijhette Farmer, Charles Mendoza, and Hayley Dickson

EERI selected three post-graduate interns from a strong pool of applicants for its successful internship program. The Institute would like to introduce Brijhette Farmer, Charles Mendoza, and Hayley Dickson:

Brijhette Farmer comes to EERI from SUNY at Buffalo, where she is pursuing degrees in architecture and structural and earthquake engineering. Alongside her work at EERI, Brijhette is working on her Master's architectural thesis, entitled, "Life, Limb, and the Pursuit

of Architecture," which investigates poverty, aesthetics, and the design of transitional disaster housing by utilizing methodologies native to industrial engineering and product design.

Charles Mendoza is a recent Bachelor of Science graduate of UC Berkeley's Civil Engineering program where he has raised earthquake engineering dialogue within the UC Berkeley undergraduate community. In the fall, Charles will return to UC Berkeley to pursue his Master of Science degree in structural engineering, with an emphasis in earthquake engineering and nonlinear dynamic response of structures.

Hayley Dickson graduated from Santa Clara University with a Bachelor of Science in civil engineering this past June. At Santa Clara, Hayley performed research in the development of engineered bamboo structural components and received a fellowship to intern abroad in Nicaragua with the Community Agroecology Network. This fall, Hayley returns to Santa Clara to complete her Master of Science degree in civil engineering with a structural emphasis.

The interns will work on projects of the Institute including the Concrete Coalition and World Housing Encyclopedia. Working on these projects offers 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.

NEWS OF THE INSTITUTE

Turn Exciting Ideas into EERI Projects

In 2012, EERI's Board of Directors established the Initiatives
Development Committee (IDC) to nurture project ideas that (1) make the Institute more vital as an organization; (2) establish a proactive process for good ideas that will engage and energize the membership; (3) ensure that projects keep the Institute on the cutting edge of the field; and (4) assist members in developing project proposals to the committee for funding with endowment resources.

IDC Committee Members

The newly established EERI Initiatives Development Committee members are: Lucy Arendt, *University of Wisconsin*; David Cocke, *Structural Focus*; Craig Comartin (Committee Chair), CDComartin Inc.; David Friedman (Board Contact), Forell/Elsesser Engineers, Inc.; Sissy Nikolaou, Mueser Rutledge Consulting Engineers; and Heidi Tremayne, Pacific Earthquake Engineering Research (PEER) Center, UC Berkeley.

Project Principles

On May 31, the EERI Initiatives Development Committee met and discussed the guiding principles it will use to select projects. Major principles require that future projects must serve member interests, strengthen the Institute, and reinforce existing valuable EERI programs and committees. The full charter with all the principles is available here: https://www.eeri.org/wp-content/uploads/Initial_Charter_IDC.pdf.

Selection of Projects

Over the next few months the IDC will approach existing EERI committees, regional and student chapters, and members to discuss this new initiative, and to solicit ideas. The Committee is tentatively planning on accepting ideas in several thematic areas, including school safety, and disasters and sustainability.

Members who have ideas about a project concept or who are interested in learning more should contact Committee chair Craig Comartin (ccomartin@comartin. net) or EERI staff member Marjorie Greene (mgreene@eeri. org). The IDC will also send a survey to EERI members later this summer to bring project interests and directions to the surface.

EERI Online Membership Directory Update

Last month, EERI launched its new and secure Online Membership Directory at https://www.eeri.org/cohost/member-resources/. This online directory, which requires member login and password, is accessible to all EERI members who want to reach out to their colleagues around the world. The online directory is searchable by first name, last name, member type, discipline, state, and country.

Next Phase

In the newest phase of the project, the directory includes additional lists of information: EERI Committees, Board of Directors, Subscribing Members, Student Chapters, Regional Chapters, Institutional Members, Award Recipients, Bylaws, and Staff. EERI members will find the new online directory replicates the information in the printed rosters of previous years.

Opt In for Printed Roster

Members interested in receiving the printed roster this year should submit a request by July 15 at https://eeri.org/cohost/registration/request-a-printed-roster. For more information about the new EERI Online Membership Directory or the printed roster, please contact the Institute at eeri@eeri.org.

2013 EERI Membership Survey

EERI would like to know how to serve its membership best. To hone this understanding, the Institute will conduct an online membership survey. Past member surveys were conducted in 2003 and 2007.

EERI encourages all members to participate in the online membership survey, coming this August. Over the next few years, the EERI Board will utilize the survey results as they develop short- and long-term strategic plans for the Institute.

Calendar

The issues containing the first and subsequent appearances are indicated at the entry's end. Items listed for the first time are shown in bold.

2013 JULY

July 13 U.S-N.Z. Science & Risk Communications Workshop, Broomfield, CO. rsmith@eqc.govt.nz (5/13)

AUGUST

Aug. 18-23 22nd Int'l Conference on Structural Mechanics in Reactor Technology (SMiRT-22), San Francisco. www.smirt22.org (2/12, 4/12, 10/12, 2/13)

Aug. 28-30

Vienna Congress on Recent Advances in Earthquake Engineering and Structural Dynamics (VEESD2013), Vienna, Austria. http://veesd2013.conf.tuwien.ac.at (8/12)

SEPTEMBER

Sept. 5-7 4th EUGEO Congress, Rome, Italy. *www.eugeo2013.com* (3/13)

Sept. 8-12 Int'l Conference on Earthquakes & Structures (ICEAS-2013), Jeju, Korea (part of the World Congress on Advances in Structural Engineering & Mechanics [ASEM13]).

http://asem.cti3.com/asem13.htm (1/13)

Sept. 17-21 2013 SEAOC Convention, San Diego, CA. (1/13)

Sept. 25-28
38th DFI Annual Conference
on Deep Foundations, Phoenix,
Arizona. http://www.dfi.org/
conferencedetail.asp?id=226 (12/12)

Sept. 26-27

International Conference on Seismic Design of Facilities, Aachen, Germany. www.SeDIF-Conference.de (2/13)

OCTOBER

Oct. 25-27 2nd IACGE Int'l Conference on Geotechnical & Earthquake Engineering, Chengdu, China. www.iacge2013.org (12/12)

NOVEMBER

Nov. 7-15 PEER NGA-West2 Seminar Series: Salt Lake City, Nov. 7; Long Beach, Nov. 8; Seattle, Nov. 14; and San Francisco, Nov. 15. (6/13, 7/13), see page 2

Nov. 8-9 5th Int'l Conf. on Advances in Experimental Structural Engineering (5AESE), Taipei, Taiwan. http://aese5.ncree.narl.org.tw (11/12)

2014 APRIL

April 30-May 2 Annual Meeting, Seismological Society of America, Anchorage, Alaska. http://www.seismosoc.org/meetings/ (7/12)

JULY

July 7-9 9th Int'l Masonry Conf, Guimarães, Portugal.

http://www.9imc.civil.uminho.pt (4/13, 6/13)

July 11-14
7th Int'l Conf on Bridge Maintenance,
Safety, and Management (IABMAS
2014), Shanghai, China.
http://www.iabmas2014.org (11/12)

July 13-16 2nd Int'l Conference on Vulnerability and Risk Analysis and Management (ICVRAM2014) & 6th Int'l Symposium on Uncertainty Modeling and Analysis (ISUMA2014), Liverpool, UK. http://www. icvram2014.org (1/13)

July 21-25 10th Nat'l Conference on Earthquake Engineering, EERI Annual Meeting, & NEES Quake Summit 2014, Anchorage, Alaska. http://10ncee.org (9/12, 1/13, 2/13, 6/13, 7/13)

AUGUST

Aug. 24-29 Second European Conference on Earthquake Engineering and Seismology, Istanbul, Turkey. http:// www.2eceesistanbul.org/ (2/13)

NOVEMBER

Nov. 16-19 3rd International Symposium on Life-Cycle Civil Engineering (IALCCE), Tokyo, Japan. http://www.ialcce2014.org (11/12)

Northern California Chapter's Day Event

On June 8, over 60 people participated in the Albany Inventory Day as part of the EERI Northern California Chapter's Adopt-a-City Project. After an hour of training, volunteers spent five hours conducting a walking survey around the city and completing FEMA-154 (Rapid Visual Screening of Buildings for Potential Seismic Hazards) forms for over 300 of the city's buildings. The data collected will be used for an Albany-specific HAZUS run to help identify the city's seismic vulnerabilities as a first step in crafting mitigation policies. The Chapter worked closely with Albany's Planning and Building Manager Jeff Bond to organize the inventory day.



EARTHQUAKE ENGINEERING RESEARCH INSTITUTE

499 14th Street, Suite 220 Oakland, CA 94612-1934 ADDRESS SERVICE REQUESTED

EERI Newsletter, July 2013 Vol. 47, Num. 7

NEWS OF THE INSTITUTE

Seeking Awards Nominations

EERI's Honors Committee is charged with developing recommendations for several awards. The committee greatly depends on nominations submitted by the members of the Institute and seeks help in identifying worthy members whose contributions should be recognized.

Please consider possible candidates for the George W. Housner Medal, the Alfred Alquist Special Recognition Award, and Honorary Membership, as well as authors who deserve the 2012 Outstanding Paper award for *Earthquake Spectra*.

Submit Your Nominations

All nominations should be accompanied by a brief justification, and must be received by **August 15, 2013**, in order for the Honors Committee to complete deliberations and forward its recommendations to the Board of Directors. Send your nominations to the EERI office at *eeri@eeri.org*. A list of all past awardees and complete descriptions of each award are accessible from http://www.eeri.org/about-eeri/honors-awards/.

All awards will be presented at EERI's Awards Luncheon at the Tenth U.S. National Conference on Earthquake Engineering (10NCEE) in Anchorage, Alaska, July 2014.

Nominations for Bruce A. Bolt Medal

The Bruce A. Bolt Medal is awarded jointly by the Consortium of Strong Motion Observation Systems (COSMOS), the Seismological Society of America (SSA), and the Earthquake Engineering Research Institute (EERI) to recognize individuals worldwide whose accomplishments involve the promotion and use of strong-motion earthquake data and whose leadership in the transfer of scientific and engineering knowledge into practice or policy has led to improved seismic safety.

Members of COSMOS, SSA, and EERI are encouraged to submit nomination packages for this distinguished award by **August 31, 2013**. Nominations will be reviewed in confidence by a six-person Joint Nomination Panel formed by two representatives from each of the three sponsoring organizations. The recommended nominee will be considered in confidence by the three organizations' board for their approval and joint selection of the medalist.

More Information

For information about the medal criteria, nomination letter, nomination package, and how to submit your nomination, visit the EERI website at https://www.eeri.org/about-eeri/honors-awards/the-bruce-a-bolt-medal/.