



EARTHQUAKE ENGINEERING RESEARCH INSTITUTE NEWSLETTER

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ISSN 0270-8337

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News of the Institute

GEO-CAN Christchurch to Seek Volunteers

EERI and its partners — the World Bank, the Global Earthquake Model (GEM) Foundation, and ImageCat (www.imagecatinc.com) — are engaged in a new GEO-CAN (Global Earth Observation-Catastrophe Assessment Network) opportunity to analyze the impacts of the M_w 6.3 Christchurch, New Zealand, earthquake of February 22, 2011. The GEO-CAN network, launched after the 2010 Haiti earthquake by ImageCat and EERI with support from the World Bank and the Global Facility for Disaster Reduction and Recovery (GFDRR), will be seeking volunteers to estimate and classify building damage, based on high-resolution aerial and satellite imagery, in areas severely affected by the earthquake, including the central business district of Christchurch. The purpose of this round of GEO-CAN assessment will be to test a new platform using the Christchurch earthquake as a case study, and to offer professional development opportunities in the field of earthquake engineering and remote-sensing technologies.

A newly designed version of the GEO-CAN platform is scheduled to go live for users in early June 2011. More information on this effort and final launch date will be available through EERI's website. A call for volunteers will be published shortly before the platform goes live.

This new platform is powered by technology developed by Tomnod (www.tomnod.com), a crowd-sourcing company based in San Diego, California. The platform utilizes a cloud-based architecture and provides a motivating interface, a training module, and an easy-to-use design to engage users while providing accurate assessment of damage. Tomnod will continue to assist GEO-CAN by providing the crowd-sourcing platform to engage the global community in disaster recovery and relief.

Participants in the upcoming round of GEO-CAN activities can expect to be involved in one of several types of assessment and analysis of different data sets, including analyzing aerial or satellite imagery for building damage. A separate group of geotechnical experts will analyze imagery for liquefaction damage.



Obituaries

David Leeds, 1917–2011



David Leeds

EERI Honorary Member David J. Leeds passed away April 18 in Santa Barbara at the age of 94. He served a nearly 14-year term as the *EERI Newsletter* editor, 1970-1984, during which time the *Newsletter* went from being published quarterly to six times per year.

After earning a degree in geology from the University of Texas, David worked as a geophysicist for the Seismological Field Survey of the U.S. Coast and Geodetic Survey, where he was introduced to the field of strong-motion seismology. His assignment was “at large” in the 11 western states and included investigating earthquakes, conducting forced vibration experiments, and helping maintain the strong-motion network in southern California.

Subsequently, he became a research engineer working in soil dynamics at the University of California at Los Angeles, where he was mentored by EERI’s 6th president, C.

Martin Duke, professor of engineering. David became interested in the measurement of the shear wave velocity of soils. Some new field techniques were developed at this time. David, Martin, and Fritz Matthiesen — the previous *EERI Newsletter* editor — developed simplified methods for the computation of theoretical site amplification spectra.

David moved on to Dames & Moore, where Bill Moore and others had confidence in his belief in the contribution of site soils and rock to earthquake ground motion. His title of “engineering seismologist” may have been the first use of the term. His first site-dependent response spectra was for the 1962 preliminary safety analysis report for the San Onofre Nuclear Power Plant, Unit #1. Following his stint at Dames & Moore, David became an independent consultant for the remainder of his career.

During his years as editor, the *Newsletter* was “assembled” rather than “edited,” and included copies of newspaper clippings about earthquakes. As part of his need to extricate himself from being editor, he

was involved in the plans to make the layout more professional. In the March 1984 issue, his last as editor, he wrote: “We have not found the pigeon to take the editorship on yet, so the ad hoc committee (now formalized) is stuck with the job. It has a lot of talent and resources, and I am certain will do a fine job...I wish the new editor well and will continue to serve EERI in any way I can. It has been a pleasant, interesting, and exciting 14 years working with the best there is in the earthquake business. I am grateful for this exposure, and wish to thank everyone (present as well as past Presidents, Directors, and Staff, as well as the many other contributors) for the success of the *Newsletter*. It has been a privilege to serve you.”

On page 6 of the May 1986 *Newsletter*, in an article expressing heartfelt thanks for the “great honor” of being named an Honorary Member, David wrote about his wife Arline: “...much of the effort was her skill in technical writing/editing and in making sure I met my deadlines. I am confident that her 14 years of dedication to EERI are included in the Board’s action.”

Pierre Saint-Amand, 1920-2011

Geophysicist and geologist Pierre Saint-Amand, an EERI member since 1961, died April 15 at the Stanford Medical Center at age 91. A native of Tacoma, Washington, he earned a B.S. in electrical engineering from the University of Alaska at Fairbanks. While there, Pierre identified and named Alaska’s Denali fault. After earning a Ph.D. in geophysics from the California Institute of Technology, he served as a Navy scientist for more than 38 years until his retirement in 1988. During that time, he was detached to the State Department for two years while he helped establish the graduate school of geology at the University of Santiago in Chile.

His early work in geology included

formulating the theory of the rotation of the Pacific Ocean Basin and studying the Tehachapi earthquake of 1952. A fellow of the Geological Society of America, he contributed to reports on the Chilean earthquake of 1960 and the Alaskan earthquake of 1964.

Perry Hopkins, 1956-2010

EERI was recently notified of the unexpected death following surgery of EERI member Perry W. Hopkins on May 17, 2010, in Gresham, Oregon, at age 54. Perry had been the emergency manager for the City of Portland Water Bureau (PWB) from 1997 until his death. A native of Rhode Island, he had previously served for 12 years as deputy director at the Emergency Management

Agency of York County, Maine.

As of the late 1990s, Perry was one of the few people in the nation certified by FEMA as an emergency services trainer. Dedicated to improving the ability of agencies across the nation to respond to emergencies, Perry led the PWB’s relief response efforts in New Orleans following Hurricane Katrina; this task force set up a “base camp” there near the water treatment plant. Local response crews surprised him with a St. Christopher Medal in an emotional recognition ceremony just before the group returned home. David Shaff, PWB administrator, stated that this effort “continues to resound and pay dividends in our own preparedness to this day.”

Perry attended the Annual Meeting in New Orleans in 2008 and became an EERI member at that time.

Learning from Earthquakes

Lorca, Spain, Earthquakes of May 11, 2011

This report was prepared by Janira Irizarry, Tanit Frontera, and Xavier Goula of the Institut Geologic de Catalunya, Barcelona, and EERI member Alex H. Barbat of the Technical University of Catalonia. They will be conducting a more in-depth reconnaissance in late May.

On May 11, 2011, at 16:47 GMT (18:47 local time), a shallow M_w 5.1 earthquake occurred less than 5 km northeast of the city of Lorca, in southeast Spain. A maximum intensity of VII (European Macroseismic Scale, EMS) was assigned to this event by the Spanish Geographical Institute (Instituto Geográfico Nacional, IGN). It was preceded by an M_w 4.5 earthquake, which occurred at 15:05 GMT the same day, with an assigned maximum intensity of VI. The intensity estimation for the second event is much more complex

because of the short time interval between the two earthquakes.

Lorca is located over a system of faults that generated the earthquakes. The damage in the center of the city is worse than would be expected from the earthquake's magnitude, as nine lives were lost and many buildings have been declared uninhabitable. Due to the proximity of the epicenter to the city and the shallowness of the source, the building stock suffered significant accelerations — 0.37g was recorded in IGN's Lorca accelerometer station. In addition, the presence of soft soils in Lorca could have caused an amplification of the seismic waves. Its building stock includes a large number of buildings constructed before seismic construction codes were officially implemented in the 70s, increasing its seismic



Damaged church bell tower in Lorca (photo: Reuters/Francisco Bonilla).

vulnerability.

From a preliminary look, it seems that the majority of the damage occurred to unreinforced masonry (URM) buildings, with cracked walls and loss of connection between walls. Many nonstructural masonry elements such as eaves and cornices were damaged; their fall to the street was the main cause of the majority of deaths. Many URM monuments, such as a castle and a monastery, have been heavily damaged, including fallen belfries. Some damage has been observed in reinforced concrete buildings, mainly to nonstructural elements, but no results from specific damage surveys are available at this moment. One three-story reinforced concrete frame collapsed during the second earthquake; the cause is still being investigated.

The local and regional authorities of Murcia deployed 26 teams of experts that completed an initial inspection of the damaged buildings in the center of Lorca in 48 hours. This inspection resulted in more than 1,000 buildings declared uninhabitable. The Spanish Association of Seismic Engineering (AEIS) is coordinating a field survey in which inspections will validate the vulnerability functions that are currently applied in simulations of seismic risk scenarios.

News of the Institute

EERI Endowment Fund Donors

EERI would like to thank the donors to the Endowment Fund shown below and acknowledge their recent contributions. EERI's Endowment supports those innovative projects that ensure the Institute's continuing leadership in the earthquake engineering professions.

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Computers & Structures, Inc.

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NEES News

E-Defense Blind Prediction Contest

The Center for Urban Earthquake Engineering (CUEE) at the Tokyo Institute of Technology, Japan, has announced a blind prediction contest for a full-scale five-story steel building to be subjected to extreme earthquake loading at the E-Defense

shake table in Miki City. Four days of shaking are anticipated during a three-week time frame in August 2011. Details of contest rules and building data will be posted by May 31 at <http://www.cuee.titech.ac.jp/contest>. The tests will be led by

News of the Institute

New Subscribing Member: RenaissanceRe Risk Sciences Foundation

The RenaissanceRe Risk Sciences Foundation has become the newest EERI Bronze Subscribing Member. RenaissanceRe (www.renre.com), a global provider of property catastrophe and specialty reinsurance and other insurance coverages, created the foundation to support advanced scientific research in atmospheric risks, the development of risk mitigation techniques to safeguard communities, efforts that reduce the economic turmoil following disasters, and organizations that preserve coastal habitats. The foundation promotes education, preparation, adaptation and mitigation of natural catastrophe risks.

One of its programs is the Risk Mitigation Leadership Forum series, which convenes leading stakeholders to advance risk mitigation efforts and awareness. The foundation was recently honored with the Outstanding Achievement Award for Mitigation by the 2011 National Hurricane Conference in recognition of the forum series as "an outstanding and innovative achievement, worthy of emulation by others around the country."

The 6th forum in the series, held May 2-3 in San Francisco, focused on seismic risk mitigation. For more information and to download, in PDF format, the PowerPoint presentations of many speakers, visit www.mitigationleadership.com.

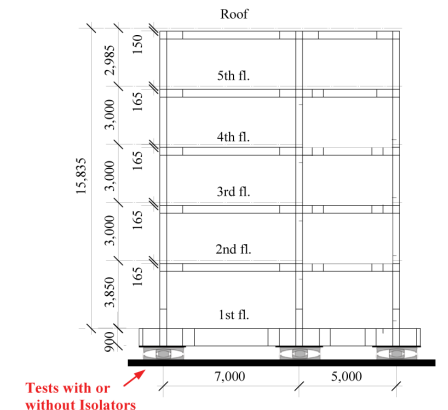
News of the Profession

Oregon Passes Resilience Plan Resolution

On April 18, 2011, the state of Oregon's House of Representatives unanimously passed HR 3, 58-0 (with two absent). Sponsored by Rep. Deborah Boone of Cannon Beach, the resolution directs the Oregon Seismic Safety Policy Advisory Commission (OSSPAC) to deliver an Oregon Resilience Plan to the legislative assembly by February 28, 2013, with the goal of protecting lives and keeping commerce flowing during and after a Cascadia megathrust earthquake and tsunami.

The hope is that HR 3 will put safety bonds on the agenda for the 2013 budget cycle. The measure also resolves that the strengthening of collapse-prone public structures be recognized as top investment priorities, that the state invest in additional evacuation options for coastal communities, that the state establish critical transportation and energy infrastructures, and that seismic resilience be viewed as a necessary complement to environmental sustainability. To view the complete resolution, visit <http://www.leg.state.or.us/11reg/measures/hr1.dir/hr0003.en.html>.

EERI member Keri Ryan of the University of Nevada, Reno, and supported jointly by the NEES TIPS project, NEES Nonstructural, and NIED in Japan. The seismic performance of the building in the conventional configuration and with EPS triple friction pendulum isolators will be compared.



Nonstructural components will be installed at the building's 4th and 5th floors. The building was used for tests with and without dampers in 2008, led by Kazuhiko Kasai of Tokyo Tech. Papers on test results by Kasai et al. and papers on analysis of the damped building by the previous blind analysis contest winners will be posted on the CUEE website.

Participants are expected to predict the responses before and after the test, and the closest predictions to the test results will receive awards. Because the actual loading will be determined during the course of the testing, the contest has two parts: pre-test analysis based on anticipated earthquake loading, and post-test analysis using the actual loading. The building analytical model for the post-test analysis must be identical with that for the pre-test analysis.

The contest is divided into two categories: prediction of response of both isolated and conventional configurations. Thus, two winners will be recognized. Results will be presented anonymously, except for those of the winners, who will be announced and awarded during the 9th International Conference on Urban Earth-

continued on next page

Blind Prediction Contest

continued from page 4

quake Engineering, hosted by CUEE in Tokyo in March 2012. The winners' travel expenses, accommodations, and registration will be covered by the contest sponsor.

Due dates for submitting results of pre-test analysis and post-test analysis are August 20 and October 31.

NEES TIPS Workshop

The NEES TIPS project team will hold a participant workshop in Japan during the seismic isolation tests, and will sponsor approximately 10 attendees from the U.S. The workshop will take place during the third or fourth week of August, final dates to be decided. The application deadline is June 20, and attendees will be selected by July 1. Details and application information will be posted by May 31 at <http://www.unr.edu/engineering/cee/faculty/klryan/NEESTIPS/E-Defense.htm>.

Publication

Putting Down Roots for Central U.S.

Putting Down Roots in Earthquake Country: Your Handbook for the Central United States was recently published by the U.S. Geological Survey in cooperation with the Central U.S. Earthquake Consortium (CUSEC), the Association of CUSEC State Geologists, the University of Memphis Center for Earthquake Research and Information, and the Southern California Earthquake Center (SCEC). The handbook provides information to residents of the central U.S. about the threat of earthquakes in that area, particularly along the New Madrid seismic zone, and explains how to prepare for, survive, and recover from such events.

All versions of the popular handbook, first published for southern California in 1995 by SCEC, are downloadable free from <http://www.earthquakecountry.info/roots/>.

NEES News

NEEShub Project Warehouse Data

The Project Warehouse on the NEEShub is the centralized data repository (NSF CMMI Award# 0927178) for sharing and publishing earthquake engineering research data from experimental and numerical studies. The data in the Project Warehouse are associated with research projects funded by the National Science Foundation and a variety of agencies and include experiments performed at NEES and non-NEES equipment sites. New data are constantly becoming publically available within the Project Warehouse. To keep the community aware of new datasets, NEEScomm will be highlighting projects and experiments that have been recently completed and curated. Three highlighted projects that use the tool inDEED are summarized below.

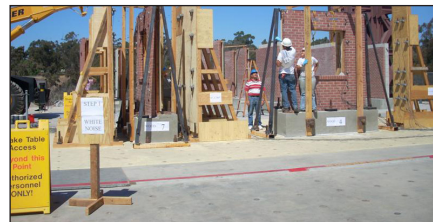
Pile Pinning Effects on a Bridge Abutment in Laterally Spreading

Ground (<https://nees.org/warehouse/project/205>): PI: Ross Boulanger, University of California Davis (UCD).



Three centrifuge tests were conducted at UCD to study pile pinning effects on bridge abutments over liquefied and laterally spreading ground. The tests focused on the comparison of two identical embankments with and without pile restraining forces during liquefaction and lateral spreading. Pore pressure, acceleration, and deformation data are available, along with bending moment and shear force data for the piles.

Performance-Based Design of New Masonry (<https://nees.org/warehouse/project/679>) — University of California San Diego [UCSD]: PIs: Richard Klingner (University of Texas at Austin [UT]), W. M. McGinley (University of Louisville), D. McLean (Washington State University), Benson Shing (UCSD).



A full-scale reinforced concrete masonry structure with clay masonry veneer was tested at the UCSD shaking table. A similar wood-frame structure with clay masonry veneer was also tested. Acceleration and displacement data are available for these tests, as well as for a series of

component specimens tested on the shaking table. Data from quasi-static testing of similar component specimens at UT (<https://nees.org/warehouse/project/680>) and North Carolina A&T University are also available (<https://nees.org/warehouse/project/681>).

SASW Measurements at Stanford University (<https://nees.org/warehouse/project/736>): PIs: Ivan Wong (URS Corporation), Kenneth Stokoe (UT).



Spectral-analysis-of-surface-waves (SASW) surveys were performed to generate shear wave velocity profiles at 15 locations on the Stanford campus using the UT NEES shakers. The unprocessed data, processed dispersion curves, and derived shear

wave velocities are available for each test location. Shear wave velocity information for these sites, as well as other sites, is viewable through inDEED within the Shear Wave Velocity Profiles Database (<http://nees.org/resources/2262>).

News of the Membership

Green Star Award for Mary Comerio

Former EERI Director Mary Comerio, M.EERI, professor of architecture at the University of California, Berkeley, was one of six recipients of this year's Green Star Awards (GSAs) honored during a ceremony on May 18 in Bern, Switzerland. Comerio was recognized for her work in post-disaster reconstruction following the earthquakes in China (2008) and Haiti (2010), and for her 25-year focus on seismic safety for housing. Her research on post-disaster recovery and on the costs and benefits of seismic rehabilitation for existing buildings has been widely published.

The Green Star Awards are a joint initiative between the United Nations Environment Programme (UNEP), the UN Office for the Coordination of

Humanitarian Affairs, and Green Cross International to recognize individuals, organizations, government, and private enterprises that have made remarkable efforts to prevent, prepare for, respond to, or reduce the environmental impacts of disasters and conflicts around the world.

Comerio provided invaluable advice on UNEP's post-disaster engagement in China, specifically regarding the evaluation of new sustainable building prototypes developed by the UK-based private enterprise Broad Air. In Haiti, she advised UN early recovery teams on the challenges related to damaged structures.

Mary Comerio receives Green Star Award from Ibrahim Thiaw of UNEP.



Sergio Alcocer Named to Energy Post

Former EERI Director Sergio Alcocer, M.EERI, has been designated by Mexican President Felipe Calderon as Undersecretary for Energy Planning and Technology Development within the Ministry of Energy of Mexico. As Undersecretary, Alcocer will work closely with the minister in developing and implementing the long-term national strategy on energy, as well as in establishing and coordinating policies aimed at research, technology development, and capacity building in the energy sector. Prior to his appointment, Alcocer was the secretary general (provost) of the Universidad Nacional Autónoma de México (UNAM).

Lemelson-MIT Award for Elizabeth Hausler

EERI member Elizabeth Hausler, founder and CEO of the nonprofit social enterprise Build Change, was selected as the recipient of the 2011 \$100,000 Lemelson-Massachusetts Institute of Technology Award for Sustainability. Hausler was recognized for her engineering accomplishments and creation of the Build Change model that establishes culturally accepted, sustainable earthquake-resistant housing programs in the developing world. The award will be presented during the Lemelson-MIT Program's fifth annual EurekaFest, a multiday celebration of the inventive spirit, June 15-18, 2011.

Build Change helps community members work with locally available materials and labor to rebuild after earthquakes. The outcome is a cost-effective and easily modified construction method the homeowner adopts and understands. Build Change homes cost anywhere from \$3,000 to \$17,000 less than similar structures built in donor-driven environments. Build Change educates and trains anyone who will play

a role in the rebuilding process, including homeowners themselves, materials vendors, engineers, and builders. The nonprofit also works with local governments to instruct officials on the technology, helping to enforce the reconstruction model as a new building standard, reducing community resistance and leading to further implementation.

Hausler hopes that the media's interest in Build Change will help convince governments to enforce building codes and systems that are easy to implement and more sustainable. Joshua Schuler, executive director of the Lemelson-MIT Program, stated that Hausler "has transformed the standard donor-driven model of post-earthquake reconstruction." Currently, Build Change has improved the design and construction of nearly 20,000 homes, impacting more than 73,000 people in China, Haiti, and Indonesia.

For more information, visit www.buildchange.org/.

Announcement

Disaster Management Conference

Sponsored by the Canadian Centre for Emergency Preparedness, the 21st World Conference on Disaster Management (WCDM) will be held in Toronto, Canada, June 19-22, 2011. Its theme is "Learn. Network. Solve." The program offers 74 sessions. Up to 32 CEU credits can be earned. For more information and to register, visit <http://www.wcdm.org/Landing-Pages/DRG.html>. There are seven "flexible pass" options in addition to the full fee of \$1,099.

CALENDAR

The issue containing the first appearance is indicated at the entry's end. Items listed for the first time are shown in bold.

2011

JUNE

5-7. ASDSO NE Regional Conf., Lake Placid, NY. www.damsafety.org/ (4/11)

Announcements

SEAOC Webinars

The Structural Engineers Association of California (SEAOC) is offering the following 2011 webinars, based on the SEAOC Blue Book, a guide for seismic engineering.

Understanding and Designing Steel Concentric Braced Frames, Friday, June 10, 11:30 a.m. to 1 p.m. PDT: Covers past performance, ongoing research, design assumptions, fundamental behavior, influence of analytical methods, and recommendations for designers.

Recommendations for Design: Reinforced Concrete Structures, Friday July 8, 11:30 a.m. to 1 p.m. PDT: Seismic issues of special moment frames, shear walls, compatibility requirements for gravity system elements, and high-strength concrete.

For more information and to register for both webinars, visit <http://a3.acteva.com/orderbooking/go/SEAOCwebinar>. Fees: \$75 per hook-up for SEAOC members, \$100 other SEA members, \$150 non-SEA members.

Symposium in Japan

The International Symposium on Disaster Simulation & Structural Safety in the Next Generation will be held September 17-18, 2011, hosted by Hyogo University in Kobe, Japan, and supported by Osaka University and Kobe University. To view the topics and tentative schedule, visit <http://www.u-hyogo.ac.jp/sim/events/ds11/>.

10. SEAOC Webinar. See this page. (6/11)

9-11. NEES & MCEER Joint Annual Meeting, Buffalo, NY. <http://www.quakesummit.org/>. (4/11, 5/11)

19-22. WCDM Conf., Toronto, Canada. See page 6. (6/11)

22-23. Tech. Seminar: Emergency Planning for Dam Safety, Madison, WI. www.damsafety.org/ (4/11)

26-28. GeoRisk 2011, Atlanta, GA. www.georisk2011.org. (8/10, 5/11)

27-July 8. 25th Int'l Union Geodesy & Geophys. Assembly, Melbourne, AU. www.iugg2011.com/ (6/09)

JULY

4-6. 8th European Conf. on Structural Dynamics (EURODYN 2011), Leuven, Belgium. Info: www.eurodyn2011.org (6/10)

8. SEAOC Webinar. See this page. (6/11)

AUGUST

23-26. 4th Int'l IASPEI/IAEE Symp. on Effects of Surface Geology on Seismic Motion (ESG4), UC Santa Barbara. esg4.eri.ucsb.edu/ (2/11)

30-Sept. 1. 3rd Int'l Workshop on Perf., Protect'n. & Strengthening of Structures under Extreme Loading (Protect 2011), Lugano, Switzerland. www.protect2011.supsi.ch (8/10)

SEPTEMBER

7-9. 8th Int'l Conf on EQ-Resistant Engineering Structures (ERES 2011), Chianciano Terme, Italy. <http://www.wessex.ac.uk/eres2011news5.htm> (5/11)

17-18. Int'l Symp. on Disaster Simulation and Structural Safety, Kobe, Japan. See this page. (6/11).

18-23. 1st Int'l Conf. on EQs & Structures (ICEAS-2011), Seoul, S. Korea. asem11.cti3.com/ (12/10, 1/11)

19-24. AEG Annual Meeting, Anchorage Alaska, www.aegweb.org (5/11)

21-24. SEAOC Convention, Las Vegas, NV. convention.seaoc.org/ (2/11)

25-29. Dam Safety 2011, Washington, D.C. www.damsafety.org/ (4/11)

OCTOBER

2-6. 7th World Cong. Joints, Bearings, & Seis. Sys./Conc. Structs, Las Vegas, NV. www.ijbrc.org/ (8/10)

10-12. CTBUH 2011, Seoul, S. Korea. <http://www.ctbuh2011.org/ctbuh/ctbuh.asp> (3/11)

11-14. Turkish EQ Eng./Seis. Conf., Ankara. www.tdmd.org.tr (3/11)

18-21. Deep Foundations Inst. (DFI) Annual Conference, Boston, MA. www.dfi.org/conferencedetail.asp?id=172 (12/10, 2/11)

DECEMBER

1-3. Int'l Conf. on EQ Analysis & Design of Structures, Coimbatore, India. http://www.psgtech.edu/eqads2011/ (6/11)

11-15. 5th Int'l Conf. Structural Health Monitoring of Intelligent Infrastructure (SHMII-5), Cancun, Mexico. www.shmii.unam.mx (4/11)

2012

JANUARY

9-11. Behavior of Steel Structures in Seismic Areas (STESSA 2012), Santiago, Chile. www.ingcivil.uchile.cl/stessa2012 (11/10)

FEBRUARY

15-18. 4th Int'l Conf. Grout/Deep Mix, New Orleans, LA. www.dfi.org/conferencedetail.asp?id=163 (5/10)

APRIL

10-14. EERI Annual Meeting/FEMA Nat'l EQ Conf., Memphis, TN. www.eeri.org (5/11)

MAY

28-30. 2nd Int' Conf. on PBD in EQ Geotech Eng., Taormina, Italy. <http://addon.webforum.com/issmg/view.asp?EventID=2160> (5/11)

JULY

8-12. 6th Int'l Conf. on Bridge Maintenance, Safety and Management (IABMAS 2012), Lake Como, Italy. www.iabmas2012.org (12/10, 1/11)

SEPTEMBER

24-28. 15th World Conf. on EQ Eng. (15WCEE), Lisbon, Portugal. www.15wcee.org (8/10)

OCTOBER

3-6. Symp. on Life-Cycle Civil Eng. (IALCCE), Vienna, Austria. www.ialcce2012.org (12/10, 1/11)



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EERI Newsletter, June 2011 Volume 45, Number 6

News of the Institute

EERI's 1st Diamond Subscribing Member: CSI

The EERI Board of Directors has established a new Diamond level of Subscribing Membership with annual dues of \$25,000. Computers and Structures, Inc. (CSI), is the first and only member at that level.

For the last three years, CSI has made the largest corporate monetary contribution to EERI and has maintained the highest membership level. CSI provides financial support for the EERI Student Leadership Council's annual retreat and the Undergraduate Seismic Design Competition, and last year generously purchased the largest ad for the national conference program.

Recently the Board of Directors recognized CSI and its president and founder, Ashraf Habibullah, with an award for the firm's sustained, generous support of EERI through donations and sponsorship of student activities. In accepting the award, Habibullah said, "CSI believes deeply in EERI and its work. We are proud to support an organization that has made such vast contributions to the field of earthquake engineering, and we hope that our support inspires other private companies to give at a similar level. EERI needs all of us to join forces and give generously."

EERI benefits from the generous support from many individuals, companies, and agencies to carry out its activities. Many members give their time tirelessly to help EERI. The value of these contributions of

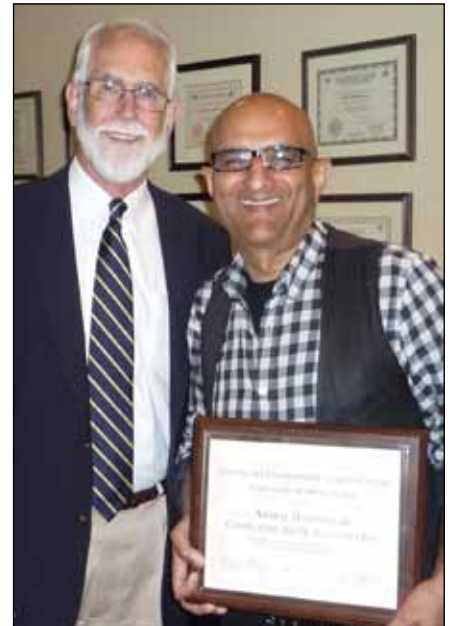
time and knowledge is incalculable. However, the reality is that the Institute also needs funding for its programs. EERI benefits greatly from having more than 50 Subscribing Members. Besides the new Diamond category, Subscribing Member contribution levels are \$15,000 for Platinum, \$10,000 for Gold, \$5,000 for Silver, and \$3,000 for Bronze.

For more information about Subscribing Membership, visit <http://www.eeri.org/site/membership/subscribing-members>.

CSI Offers Benefit for EERI Young Professionals

To encourage students to stay involved and move up into the ranks of EERI Young Professional members, CSI will give a coupon good for an 80% discount on any CSI software products to each Student Member who, within 12 months of graduation, joins EERI as a Young Professional—up to a limit of \$10,000. The coupon may be redeemed anytime within two years of enrollment as an EERI Young Professional Member. The coupon is not transferable and may be redeemed only by Young Professional Members and their employers.

To request the discount, contact Miriam Leigh, CSI Director of Marketing & Communications (510/649-2200, miriam@csiberkeley.com). She will contact the EERI office to confirm your eligibility.



EERI President Tom Tobin gives award to CSI CEO Ashraf Habibullah.

ICC Sale for EERI

As part of its partnership with EERI, the International Code Council (ICC) has added several new titles to those available at discounted prices to EERI members. To access the discounts, visit www.iccsafe.org/EERI and enter the promotional code "EERI" upon checkout.

There are 33 publications available at a 20% discount, including the *2012 International Building Code*; 11 titles at a 15% discount, and ten titles at 10% off.

If you are not signed in as an ICC user before you add items to your cart, you will not see your discount until the very end of your transaction, after you enter the credit card information but before you hit accept.