News of the Institute

Election Results: Naeim Endorsed as President-Elect, Moehle and Nakashima Elected to Board of Directors

Farzad Naeim of John A. Martin & Associates in Los Angeles received the endorsement of the voters to be president-elect of the Institute. Jack Moehle of the Pacific Earthquake Engineering Research Center in Berkeley and Masayoshi Nakashima of Kyoto University in Japan were elected the newest members of the Board of Directors in the 2008 election. This was the first online election in EERI’s history.

Naeim, Moehle, and Nakashima will be formally welcomed to their new posts at the Board Meeting in New Orleans on February 6. Naeim will serve one year as president-elect, followed by two years as president and one additional year as past president. He will take up the position vacated by past president Craig D. Comartin of CDComartin, Inc., who is leaving the Board after four years of service. Current President Thalia Anagnos will remain president in 2008 for the second year of her two-year term, and will become past president next year. Moehle and Nakashima will each serve three years as directors, replacing Richard Eisner and Polat Gülkan, whose terms have expired. EERI extends thanks to Comartin, Eisner, and Gülkan for their years of outstanding service and dedication to the Institute.

Concrete Coalition Seeks Participation

EERI and its Concrete Coalition have been awarded funds from FEMA’s Hazard Mitigation Grant Program through the California Office of Emergency Services to help the state of California identify and assess the risk posed by nonductile concrete buildings. Poor seismic performance of such buildings has been demonstrated repeatedly in recent earthquakes, including those in Turkey, Taiwan, Indonesia, Pakistan, and in California’s moderate 1994 Northridge earthquake. These buildings are widespread. They were a prevalent construction type in the western United States prior to enforcement of codes for ductile concrete in the mid-1970s. Los Angeles County assessor rolls suggest that about 14,000 of them exist in LA County alone, and the California Seismic Safety Commission estimates there are 40,000 throughout California.
**Honorary Member: Christopher Arnold**

Christopher Arnold

The EERI Board of Directors has voted to name Christopher Arnold an honorary member of the Institute. Honorary membership is awarded to recognize members who have made sustained and outstanding contributions either in the field of earthquake engineering or to EERI and the pursuit of its objectives. Chris has been a member of EERI since 1978, was elected to the Board of Directors in 1992, and served a term as president 1999-2000. Each year he creates the highly prized watercolor paintings that are printed and given to those who donate $100 or more to the EERI Endowment Fund. Chris put his vision “to further the alliance between technology and humanism that is the essence of a multidisciplinary organization” into practice in initiating the World Housing Encyclopedia, which links volunteer engineers and architects from all over the world and provides them and the public with information to improve vulnerable housing.


Chris was a founding principal of Building Systems Development, Inc., (BSD) in 1964. The firm emphasized research and development rather than conventional design. BSD created a number of building systems for a variety of institutional building types in the 1960s and 1970s. BSD led the way in programming and the social aspects of architecture and housing; by early 1970, the firm had over 80 employees, including planners, housing specialists, economists, and sociologists. After the firm split into a number of centers in the late 70s, Chris began focusing on architectural aspects of the earthquake problem, using the combined technological and socioeconomic approaches that the firm had pioneered.

Chris studied politics, philosophy, and economics at Cambridge University and received degrees in architecture at London University (BA) and Stanford University (MA). He was elected a Fellow of the American Institute of Architects in 1990 and is a member of the Royal Institute of British Architects. He has served on many state and national boards and committees that have influenced seismic design, and in 1990 was the recipient of the Alfred E. Alquist Award bestowed by the California Earthquake Safety Foundation.

**Concrete Coalition continued from page 1**

A scenario based on a repeat of the San Francisco 1906 event in the San Francisco Bay Area today confirms that a large proportion of the deaths and serious injuries would be attributable to the collapse of nonductile concrete buildings.

Funds will be used to support the development of a web-based database of information on inventories, retrofits, local ordinances, and other aspects. EERI is seeking volunteers willing to be local community representatives to help gather this information. In addition, honorarium funds are available for a project director and a five-member steering committee that will work closely with EERI’s project manager. If you are interested in being considered for one of these positions, please contact Marjorie Greene at the EERI office before February 20, or visit [www.concretecoalition.org](http://www.concretecoalition.org) to fill out the volunteer form.

EERI will conduct this project in collaboration with the Pacific Earthquake Engineering Research Center (PEER) and the Applied Technology Council. PEER has received a National Science Foundation Grand Challenge to determine how widespread the collapse hazard is in the existing nonductile concrete building stock and to develop engineering and policy tools to identify and reduce the risk of damage and injury from hazardous buildings.

Once the database is created and EERI is collecting information in California, the intent is to expand to other areas domestically and internationally. Visit [www.concretecoalition.org](http://www.concretecoalition.org) to register your interest and check back frequently to see what’s new.

**Board Election continued from page 1**

It is not too early to start thinking about next year’s election of directors. The Nominating Committee welcomes suggestions from the membership, including self-nominations. Nominees for director must have been active (or honorary) members of EERI for at least five years, and must not have been nominated to the Board in the last two years. To submit a name for consideration, send a brief note giving the name and qualifications of the potential candidate to the Nominating Committee in care of the EERI office. All submissions are confidential.
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.

$7,250
Degenkolb Engineers

$1,200
Thomas D. O’Rourke

$500
Robert E. Bachman
Forrest T. Braun
John M. Coil

Cynthia L. Perry
Chris D. Poland
Pane Stojanovski

$200-$499
Ronald T. Eguchi
William T. Holmes
ImageCat, Inc.
R. Jay Love
Douglas J. Nyman

Simpson Gumpertz & Heger, Inc.

100-$199
Donald G. Anderson
Patricia A. Bolton
Omar D. Cardona
Robert Chittenden
Lori Dengler
Charles Eadie

Sigmund A. Freeman
Jesus Iglesias
Vsevolod Levchitch
Ben L. Schmid
Yi-Ben Tsai
Donald L. Wells

Other Amounts
Nesrin Basoz
David M. Bergman

James H. Cullen
Mathew Francis
Houman Ghalibafian
Larry C. Hultengren
Geoffrey R. Martin
Michael J. O’Rourke
Chuck R. Real
Manuel A. G. Silva
Stan Zagajeski

News of the Profession
Blind Analysis Contest Winners
A full-scale, four-story welded steel moment frame building was shaken to collapse in September 2007 using the E-Defense shake table as part of a NEES/E-Defense Collaborative Research Program funded by the Japanese Ministry of Education, Culture, Sports, Science and Technology. Results are now available for a blind analysis contest held to promote enhancement of analytical methods for earthquake response simulation. See previous EERI Newsletter issues: May 2007 (page 12) and November 2007 (page 3).

There was outstanding participation with a total of 47 teams from seven countries: Japan (17), the United States (15), Taiwan (8), China (4), Italy (1), New Zealand (1), and the United Kingdom (1). The results provide valuable insight into the expected variability inherent in computer-based earthquake response simulation, and it can be surprisingly large.

For a summary, visit the E-Defense website (www.bosai.go.jp/hyogo/ehyogo/).

A detailed study of the contest statistics will be presented at the 14WCEE in Beijing, China, in October later this year. The award for each winning team is a travel expenses-paid trip to the 14WCEE for one member to describe the team’s analysis.

Following are the first-place teams:

3D Analysis by Researchers (a tie)
• G. Thiagarajan, R. Mitra, and S. Jagtap, University of Missouri, Kansas City, USA
• Y. Yang, M. Lin, and Z. Lee, National Center for Research on Earthquake Engineering, Taiwan

3D Analysis by Practicing Engineers
Y. Komiya, T. Fujinami, and Y. Nose, Maeda Corporation, Japan

2D Analysis by Researchers
T. Sone, M. Yamamoto, Y. Ohmiya and 7 others, Takenaka Technical Research Institute, Japan

2D Analysis by Practicing Engineers
S. Kiriyama, S. Nakata, A. Washizu, and 2 others, Asahi Kasei Homes Corp. and Ebisu Building Laboratory, Japan

The team of B. Maison, K. Kasai, and G. Deierlein (all EERI members) had the best predictions for the 4th category, but they declined the award because of their close association with the NEES/E-Defense Research Program responsible for the test.

NEES/E-Defense warmly congratulates and thanks all contest participants for their efforts to improve methods for numerical simulation of earthquake response. Future tests of steel structures having energy dissipative devices are planned; it is anticipated that blind analysis contests will be held for these. Look for future announcements in the EERI Newsletter.
EERI Newsletter, February 2008 Volume 42, Number 2

News of the Membership

USGS Award to Arabasz

The U.S. Geological Survey has given its John Wesley Powell Award to EERI member Walter Arabasz, director of the University of Utah Seismograph Stations, for more than three decades of leadership in helping the public and elected officials understand and reduce the impact of earthquakes. The award is named after scientist-explorer John Wesley Powell, who served as the second director of the USGS, from 1881 to 1894. The award recognizes an individual or group, not employed by the federal government, whose contributions to the USGS’s objectives and mission are noteworthy. Arabasz has directed the Seismograph Stations since 1985 and served as a member of the Utah Seismic Safety Commission since it was founded in 1994. He took the lead in implementing a real-time quake-reporting system during the 2002 Winter Olympics in the Salt Lake City area, both to enhance public safety during the games and to meet the long-term needs of Utah’s Wasatch Front urban corridor. He has worked for 20 years to develop an integrated system of national earthquake monitoring. He has promoted a cooperative, national approach to earthquake monitoring in which regional and national interests and state and federal programs work together for increased public safety nationwide. Arabasz has been a leader at every stage of the Advanced National Seismic System.

On a broader scale, Arabasz has been a champion of the USGS Earthquake Hazards Program. He was recently appointed to serve on the Advisory Committee on Earthquake Hazard Reduction, established by Congress to provide oversight and guidance to the four-agency National Earthquake Hazards Reduction Program. He is one of only two seismologists appointed to the committee.

Cheng: ASCE Honorary Member

EERI member Franklin Y. Cheng, Curator’s Professor Emeritus of Civil Engineering at the University of Missouri-Rolla, has been awarded honorary membership in the American Society of Civil Engineers in recognition of his significant contributions to earthquake structural engineering on optimization, control, and structural dynamics, and for his distinguished leadership and service in the international engineering community as a respected educator, consultant, author, editor, and member of numerous professional committees and delegations. The induction ceremony took place in November at the ASCE’s Annual Conference in Orlando, Florida.

Cheng has twice previously received ASCE’s State-of-the-Art of Civil Engineering Award. He was a pioneer in allying computing expertise to the design of large and complex structures against dynamic loads. His research expanded over the years to include structural optimization and the design of smart structures. He has been instrumental in helping the National Science Foundation develop collaborative research programs with Europe, China, Japan, and Korea.

EAEE Ambraseys Lecture

The European Association for Earthquake Engineering has established the EAEE Nicholas N. Ambraseys Lecture. It recognizes Ambraseys’ pioneering work in Europe. The lecture will be presented biennially, at every European Conference on Earthquake Engineering.

In 2001, Ambraseys became the first EERI honorary member who was not an American citizen. As a professor for nearly four decades at Imperial College of Science (ICS), London, he has had a distinguished career in the field of engineering seismology. His main research areas are soil dynamics, strong motion, long-term hazard assessment, and historical seismicity and tectonics. He is co-editor of the Journal of Earthquake Engineering and was the founder and first chairman of the British National Committee for Earthquake Engineering. He was also a founder of the European Association for Earthquake Engineering and served as its vice president for two decades.
New Post for Alcocer

Former EERI Director Sergio M. Alcocer has been appointed Secretary General of the Universidad Nacional Autónoma de México, UNAM. Chartered in 1551, UNAM is the leading and largest public university in the country, with almost 300,000 students, over 30,000 academic staff, and locations throughout Mexico, three in the United States (San Antonio, Los Angeles, and Chicago), and one in Quebec.

As Secretary General (equivalent to Vice-President in a U.S. university), Alcocer will closely work with the university rector designing, implementing, and coordinating academic policies. Prior to his appointment, Alcocer was the director of the Institute of Engineering at UNAM.

News of the Membership

New Tsunami Alerts

The West Coast and Alaska Tsunami Warning Center (WCATWC) has changed its alert bulletin definitions. The old definitions had three alert levels: Warning, Watch, and Advisory. The alert depended mainly on magnitude and tsunami travel time from the source. Typically, for earthquakes of magnitude 7.5 or larger, areas within three hours’ travel time from the tsunami would get a Warning, three to six hours from the tsunami would get a Watch, and greater than six hours would get an Advisory.

For earthquakes off the California and Alaska coast there was another set of criteria for earthquakes in the magnitude 7-7.5 range.

Warning and Watch zones were large areas, and all coastal regions within them were at the same level of threat. If the warning center deemed no basin-wide threat existed, the Warning and Watch were cancelled, but not the Advisory.

On November 15, 2006, the first significant damaging tsunami event on U.S. territory since the 1964 tsunami occurred five-and-a-half hours after the alerts had been cancelled. Interim procedures will now be in place (hopefully by February 2008) that will allow for a special localized alert.

The new criteria will be based on threat level, not just travel time from the source, and the Advisory will mean a localized threat in a small area. Advisories can be cancelled just like Warnings and Watches.

On the morning of December 19, 2007, a magnitude 7.3 earthquake occurred in Amchitka, Alaska, and there was a Warning, but no Watch or Advisory zone. The DART (deep-ocean assessment and reporting of tsunamis) system worked well, and it was clear within an hour that no tsunami had been generated.

Request for Qualifications

CSMIP Data Project

The California Strong Motion Instrumentation Program (CSMIP) of the California Geological Survey in the Department of Conservation is funding data interpretation projects focusing on the analysis and interpretation of the extensive strong-motion data sets recorded from recent earthquakes. The goal of these projects is to improve understanding of strong ground shaking and the response of buildings and other structures, and to increase the utilization of strong-motion data in improving post-earthquake response, seismic code provision, and seismic design practices.

To receive a copy of the request for qualifications, e-mail Shirley Rowley@conservation.ca.gov (phone 916/322-3105, fax 916/323-7778). The deadline is February 7, 2008.

Publications

Disaster Advances

A new quarterly journal entitled Disaster Advances is being published by Shankar Lal Gargh, director of the Environmental Disasters Research Institute in India, on the topics of natural disasters, man-made disasters, earth sciences, atmospheric sciences, geosciences, marine sciences, and engineering. Manuscripts are invited. All authors should be members of the journal, annual dues for which are US $70 (Rs. 700 for residents of India). For more information, visit www.managein.org.

Tsunami Guidebook

GeoHazards International recently issued the Tsunami Preparedness Guidebook for community tsunami preparedness planning. It provides a step-by-step approach that enables anyone to be an advocate for tsunami safety: government officials, business leaders, members of community organizations, or concerned citizens. It describes what to do to prepare a community for tsunamis and how to do it so that people pay attention. Although intended for developing countries, there is much useful information for any coastal community at risk from a tsunami. It can be downloaded at no charge from http://www.geohaz.org/contents/projects/tsunamiguide.html. This web site also has links to a number of other tsunami resources.

This guidebook is a working draft. The authors welcome feedback and suggested improvements. Send comments to samant@geohaz.org. The project received funding from the employees of the National Academy of Sciences (NAS), the National Academy of Engineering (NAE), the Institute of Medicine (IOM), and the National Research Council (NRC), with matching contributions from the presidents of the NAS, NAE, and IOM.
NEES News

NEES Workshop on Seismic Isolation

EERI member Keri Ryan at the Utah State University is leading a team of researchers and practitioners who will create and promote tools to facilitate the widespread adoption of seismic isolation and protective systems. The project, known by the acronym NEES TIPS, or Tools for Isolation and Protective Systems, is part of the National Science Foundation’s George Brown Jr. Network for Earthquake Engineering Simulation program. A project kickoff workshop, entitled “Addressing Challenges to the Implementation of Seismic Isolation,” was held in Burlingame, California, on November 30, 2007. Workshop participants included structural engineers, architects, owners, developers, and others from throughout the United States and Japan. Brainstorming sessions were held on issues ranging from business practices, research and education needs, cost and constructability barriers, and improved design practices. Discussions brought forward several new initiatives. Workshop participants placed a high value on developing a building rating system that motivates the selection of high-performance structural systems, quantifying and disseminating information on both the initial and life cycle costs of conventional and seismic isolated buildings, developing and documenting techniques to reduce initial costs of designing and implementing seismic isolation systems, and forming a U.S. association to promote seismic isolation and protective systems.

For more information about the NEES TIPS project, including a detailed workshop summary, visit http://www.neng.usu.edu/cee/faculty/kryan/NEESTIPS/.

Research Assistantship

A graduate student researcher for a four-year assistantship is sought to work on the TIPS project under the guidance of Professor Ryan at USU in Logan, 80 miles northeast of Salt Lake City. Responsibilities include

• analyzing experimental component data for protective systems devices,
• developing improved analytical models for protective systems devices,
• performing numerical and/or hybrid simulations of buildings equipped with protective systems,
• developing and demonstrating performance-based analysis procedure applicable to base-isolated buildings,
• assisting in the development of a worldwide database of information on protective systems,
• participating in shake table testing of a full-scale base-isolated building in Japan.

Desired background: an M.S. degree in earthquake engineering or related field. The position is open until filled. For more information, visit http://www.neng.usu.edu/cee/faculty/kryan/NEESTIPS/index.html.

NEES Annual Meeting

NEES’s Annual Meeting offers an opportunity for researchers and practitioners to share and discuss the newest earthquake engineering research and its implication for practice. This year’s conference, with the theme “The Value of Earthquake Engineering Research,” will be held June 18-20, 2008, in Portland, Oregon, at the Red Lion Hotel on the River, Jantzen Beach. If you register by March 17, registration is only $250 for NEES members and $300 for non-members.

Call for Presentations: NEES is seeking presentations and posters that discuss findings and the potential or actual impact of original research, laboratory innovations, and issues related to practice. Abstracts are due by March 1, 2008.

Abstracts may be submitted in the following tracks:

• implementing research innovations in code, in practice, and beyond
• innovations in structural research
• innovations in geotechnical research
• next-generation research and experimental techniques
• information technology and cyberinfrastructure applications

To submit your abstract and to register, visit http://www.nees.org/.

NEESR FY08 Solicitation: Proposals are due March 18, 2008, for NEES research (NEESR) awards. An anticipated $9 million will be awarded (see page 9 of the January EERI Newsletter).

For more information, visit: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=6192.

Location of NEES Annual Meeting in Portland, Oregon.
CALENDAR

Items that have appeared previously are severely abbreviated. The issue containing the first appearance, or the most informative, is indicated at the entry’s end. Items listed for the first time are shown in bold.

2008

FEBRUARY
6-9. EERI Annual Meeting, Astor Crowne Plaza Hotel, French Quarter, New Orleans, LA. Info: www.eeri.org (2/07, 3/07, 7/07, 8/07, 9/07, 10/07, 11/07, 12/07, 1/08)


17-20. 14th Int'l Brick and Block Masonry Conf., Sydney, Australia. Info: http://www.ibmac.org/ (3/07 [venue changed])

MARCH


APRIL

14-15. Int’l Conf. on Earthquake Eng. and Disaster Mitigation (ICEEDM08), Jakarta, Indonesia. Info: http://www.si.itb.ac.id/iceedm08 (9/07)


24-26. 1st Int’l Conf. on Transport Infrastructure, Beijing, China. Info: http://www.jttx.net.cn/icti/ (7/07)

MAY


JUNE


11-14. 1st Int’l Symp. on Life-Cycle Civil Engineering (IALC-CE’08), Varenna, Lake Como, Italy. Info: http://www.ialcce.org (2/08)

15-18. World Conf. on Disaster Management (WCDM), Toronto, Ont. Info: www.wcdm.org/ (10/07, 11/07)


JULY

8-11. Int’l Seismic Eng. Conf. Commemorating the 1908 Messina and Reggio Calabria Earthquake (MERCEA’08), Reggio Calabria, Italy. Info: http://www.mercea08.org (9/07, 10/07 [date changed])


9-13. 10th Int’l Symp. on Earthquake Engineering and Complex Structures (5EWICS), Catania, Italy. Info: http://www.5ewics.dica.unict.it/ (12/07)

13-17. 4th Int’l Conf. on Bridge Maintenance, Safety and Management (IABMAS’08), Seoul, Korea. Info: www.iabmas08.org (2/08)

27-30. 6th Nat’l Seismic Conf. on Bridges and Highways, Charleston, SC. Info: www.scdot.org/events/6NSC (7/07)

AUGUST

11-16. 6th Int’l Conf. on Case Histories in Geotechnical Engineering (6ICCHGE), Washington, D.C. Info: http://www.6icchge2008.org (4/06, 9/06, 2/07, 6/07, 10/07)

25-29. Int’l Disaster and Risk Conf. (IDRC), Davos, Switzerland. Info: www.idrc.info. (1/08)

SEPTEMBER

16-17. 5th European Workshop on the Seismic Behavior of Irregular and Complex Structures (5EWICS), Catania, Italy. Info: http://www.5ewics.dica.unict.it/ (12/07)


OCTOBER

12-17. 14th World Conf. on Earthquake Eng., Beijing, China. Info: www.14wcee.org (12/05, 6/07, 7/07, 9/07)

22-24. 3rd Conf. on Earthquake Hazards in the Eastern SF Bay, Hayward, Cal. State University East Bay. Info: www.consrv.ca.gov/cgs/news/eastbayconference.htm (1/08)


2009

SEPTEMBER

13-17. 10th Int’l Conf. on Structural Safety and Reliability (ICOSAR2009), Kansai University, Osaka, Japan. Info: http://www.sc.kutc.kansai-u.ac.jp/icosar2009 (2/08)

23-27. SEAOC Convention, Kohala Coast, Big Island, Hawaii. Info: http://www.seaoc.org/events.html (2/08)

2010

JULY

25-29. CAEE/EERI Joint National Conference on Earthquake Engineering, Westin Harbour Castle Hotel, Toronto, Ontario, CANADA (2/08)
Announcements

Engineers, Scientists, and Emergency Managers to Meet in Seattle

Hundreds of geoscientists, engineers, insurance regulators, building officials, emergency managers, and policy makers will take part in the National Earthquake Conference (NEC), April 22-26, 2008, at The Westin Hotel in downtown Seattle. The conference is hosted by EERI, the Cascadia Region Earthquake Workgroup (CREW), Western States Seismic Policy Council (WSSPC), Central United States Earthquake Consortium, Northeast States Emergency Consortium, and the Emergency Preparedness for Industry and Commerce Council of Canada. Sponsors include FEMA, USGS, NSF and NIST. With the theme of “Understanding Earthquakes, from Research to Resilience,” this year’s NEC (held every three or four years) will focus on facilitating dialogue among all stakeholders to mitigate losses and increase resiliency.

“This year’s program will focus on partnerships, risk analysis, pooled resources, and aggressive pre-disaster mitigation, and reflects FEMA’s commitment to improving the way America deals with disasters,” said Susan Reinertson, FEMA Regional Administrator for Alaska, Idaho, Oregon and Washington. Optional field trips include tours of historical tsunami sites, Seattle fault lines, and seismic retrofit projects designed to complement the plenary and panel discussions.

Visit [www.earthquakeconference.org](http://www.earthquakeconference.org) to view the program and register. Pre-registration discounts are available through March 2.

Nominations Sought for Awards in Excellence and Achievement

Nominations are now being accepted for the 2008 National Awards in Excellence and the National Lifetime Achievement Awards in Earthquake Risk Reduction to be given at the NEC. For eligibility and nomination information, go to [http://www.earthquakeconference.org/Awards_2008/awards.html](http://www.earthquakeconference.org/Awards_2008/awards.html). The deadline for all materials to be received by the WSSPC office is February 29, 2008.

The 2008 NEC Awards in Excellence are given to persons, organizations, or agencies that have contributed significantly to addressing earthquake risk reduction within the United States through their programs, products, or projects. Special emphasis will be placed on those who have demonstrated leadership as part of a collaborative effort in addressing earthquake hazards.

WSSPC will present the Lifetime Achievement Award in Earthquake Risk Reduction that recognizes an outstanding leader in earthquake risk reduction. This person will have demonstrated throughout his or her career an extraordinary commitment, level of service, and contribution to the application of earthquake risk reduction to public policy.