



EARTHQUAKE ENGINEERING RESEARCH INSTITUTE NEWSLETTER

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ISSN 0270-8337

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EARTHQUAKE ENGINEERING RESEARCH INSTITUTE

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News of the Institute

2005 Annual Meeting Will Reflect on the 1985 Mexico Earthquake

Annual Meeting Planning Committee members Paul Flores, Anna Lang, Ron Mayes, Kim Shoaf, Susan Tubbesing, and Carlos Ventura and co-chairs Richard Klingner and James Jirsa have announced the 2005 meeting theme: *20 Years after Mexico City*. The meeting will provide opportunities to reflect on this important earthquake and to discuss the following issues:



- What technical, social, and institutional lessons have been learned in the United States and Mexico as a result of the 1985 Mexico City earthquake?
- How has the knowledge gained been implemented in each country and how effective (or ineffective) has this

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The Las Brisas Hotel in Ixtapa, Mexico.

Northern California Chapter Commemorates 1906 San Francisco Earthquake

On April 16, the EERI Northern California Chapter (EERI-NC) hosted a tour of a section of the Bay Area Rapid Transit (BART) transbay tube. It was organized jointly by the chapter's Media Committee and BART staff for media representatives so that they could learn about the potential risk to the BART system in future large earthquakes. The event was widely covered by the press, with stories reported by at least five local television stations, three radio stations, and six local papers. The tour began at 1:00 a.m. so that the collection of BART, EERI, and media representatives would be able to enter the tube without having to worry about a chance encounter with fast-moving mass transit vehicles. All attending and reading or viewing the media cover-

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EERI-NC members Alan Kropp (left) and Peter Yanev (middle) address Bay Area media on the BART platform (*photo: Bill Bruin*).

News of the Institute

New Publication Procedures for *Spectra*

Online publication of *Earthquake Spectra*, begun in November of 2001, has made possible a number of enhancements: HTML-formatted abstract displays and tables of contents, reference links to cited articles and to abstracts indexed in many sources, inclusion in the *Science Citation Index Expanded* and *Web of Science Current Contents/Engineering*, electronic availability of back issues, and color images.

These improvements have increased the desirability of publishing in *Spectra*, and contributors have responded by submitting more papers in the last two years than at any other time in *Spectra* history. That's the good news!

Unfortunately, the unprecedented number of papers has led to longer delays in peer review and eventual publication, and to increased costs for publication. After considering a number of alternative solutions, including the universally disliked op-

tion of changing page format and reducing font size, the *Spectra* editor and the Board of Directors have adopted new policies and practices for streamlining the review process and for encouraging more concise papers.

Issues published after January 1, 2005, will be limited to 250 pages in order to control publication costs. Therefore, papers submitted to *Spectra* after September 1, 2004, should be no more than 18 pages long. In the opinion of the Board, most of the papers currently submitted that are longer than 18 pages could be shortened without any material harm to their content. Shorter papers will not only reduce overall issue length, but they will also make *Spectra* more readable.

For papers longer than 18 pages, a charge of \$50 per page will be imposed. When a paper cannot be shortened easily and has been tentatively accepted, an estimate of total costs will be given to authors and the fee collected. The article then will be scheduled for publication.

Spectra Editor Farzad Naeim has taken steps to speed up the peer

review process and bring papers to publication more quickly. There will be no page charges for manuscripts that stay in the review process for more than 12 months from the date of submittal on the EQS-PXP online review system, if the author has submitted a revised manuscript within 30 days of notification of needed changes after each of two review rounds.

The automated peer review system has already shown promising results, and increased familiarity with it on the part of responsible editors and peer reviewers will only improve its effectiveness. The editor and the Board will pay close attention to all the consequences of these new policies, and should there be any unanticipated or negative results, the practices will be reviewed and changed again in the interests of maintaining *Spectra's* viability and influence.

To read the new policies in their entirety, visit the EERI web site: www.eeri.org/cd_publications/spectra/. If you have any questions about the new policies, contact *Spectra* Editor Farzad Naeim or Publications Policy Committee Chair Sarah Nathe.

Obituary

Niaz Nazir Succumbs Unexpectedly



Niaz Nazir

EERI member Dr. Niaz A. Nazir, a highly respected structural engineer with a distinguished 17-year ca-

reer, passed away unexpectedly of a heart attack at his home on May 10, 2004. Most recently, Nazir was a managing principal with De Simone Consulting Engineers in San Francisco. He had received his Ph.D. in structural and earthquake engineering from the University of California, Los Angeles (UCLA), and had previously worked with many firms, including Robert Englekirk Consulting Engineers, John Kariotis & Associates, Pistorino & Alam Consulting Engineers, and ABS Consulting/EQE International.

Nazir was a member of many industry organizations, including the Structural Engineers Association of California, the American Concrete Institute, and the Masonry Society.

He also lectured on a regular basis at the University of California, Berkeley, Extension and at the UCLA Extension. He was the recipient of several honors, including the Outstanding Civil Engineering Achievement Award from the American Society of Civil Engineers. He co-authored the "Earthquake Engineering Handbook" and wrote numerous papers on the design and analysis of structures.

He is survived by his wife, Sherry, who is 5 months pregnant, an 8-year-old son, and a 3-year-old daughter. DeSimone Consulting Engineers has established a trust fund for his children. For further information, call the DeSimone office at 415/398-5740.

News of the Membership

Yousef Bozorgnia Named PEER Associate Director



Yousef Bozorgnia

The Pacific Earthquake Engineering Research (PEER) Center recently named Dr. Yousef Bozorgnia as new associate director for sponsored projects and technology transfer. Bozorgnia will manage PEER's Lifelines Research Program and also will serve as liaison to PEER's business and industry partners.

Bozorgnia received his Ph.D. degree in civil engineering from the University of California, Berkeley. He has 25 years of experience in research and consulting in earthquake engineering, encompassing two areas: structural earthquake engineering and engineering characterization of strong ground motion. He is author and co-author of numerous research publications on various issues in earthquake engineering. Bozorgnia and Professor Vitelmo V. Bertero have recently edited a comprehensive earthquake engineering book that is discussed on page 5 of this *Newsletter*.

In 1995, EERI awarded Bozorgnia the U.S. National Earthquake Hazard Reduction Program (NEHRP) Professional Fellowship. He is a member of many scientific and professional organizations, and a Fellow of the American Society of Civil Engineers (ASCE). For more information, visit peer.berkeley.edu.

News of the Institute

EERI/FEMA Graduate Fellowship Awarded

Brady Cox, a Ph.D. candidate in Civil Engineering at the University of Texas at Austin (UTA), has been selected as the 2004-2005 NEHRP Graduate Fellow in Earthquake Hazard Reduction. EERI awards this fellowship each year in a cooperative program with the Federal Emergency Management Agency's National Earthquake Hazards Reduction Program. The award is given to foster the participation of capable individuals in furthering the goals and practice of earthquake hazard mitigation. The fellowship provides \$12,000 for a nine-month stipend and \$8,000 for tuition, fees, and research expenses.



Brady Cox

Brady Cox was chosen from a group of 14 applicants from 11 universities in California, Indiana, Minnesota, Missouri, New York, Texas, and Washington. They represent the fields of public administration and policy, and structural, civil, geotechnical, and environmental engineering. The applications were reviewed by Eric Williamson, UTA; James LaFave, University of Illinois; Gustavo Parra-Montesinos, University of Michigan; and Nadim Wehbe, South Dakota State University.

The focus of Cox's research is the development of an in-situ test to determine directly the liquefaction resistance of soil deposits. He has designed a new liquefaction sensor that, when perfected, will provide the earthquake engineering community with a powerful, direct new tool for liquefaction hazard assessment.

According to Kenneth Stokoe, professor of civil engineering at UTA, "Up to now, characterization of the nonlinear properties of geotechnical materials has only been performed with small test specimens in the laboratory." UTA is developing large-scale field equipment for dynamic loading of geotechnical structural systems as part of the George E. Brown, Jr., Network for Earthquake Engineering Simulation (NEES). Cox will use this unique equipment for his specialized field research. Stokoe expects this work to provide "an enormous step forward in reducing a significant geotechnical earthquake hazard."

Job Opportunity

Deputy Director MAE Center

The Mid-America Earthquake (MAE) Center, one of three centers for earthquake engineering research funded by the National Science Foundation, is seeking a deputy director. The MAE Center operates on an annual research budget of more than \$4 million and coordinates research among approximately 60

researchers at eight universities.

The deputy director supports the director in coordination and execution of the center's research, education, and outreach plans. The department seeks to appoint at the full professor level, although applications from exceptionally qualified individuals at the associate professor level will be considered. Applications must be received by August 1, 2004. The preferred starting date is August 16, 2004. For more information, visit mae.ce.uiuc.edu/.

News of the Institute

EERI Student Chapter Activities

University at Buffalo

David Friedman, president of Forell/Elsesser Engineers, visited the University at Buffalo EERI student chapter in February. After a tour of the Structural Engineering and Earthquake Simulation Laboratory and the newly completed NEES facility at the Department of Civil, Structural, and Environmental Engineering, Friedman made a presentation to the students on "Today's Structural Engineer as the Classic Master Builder." After discussing his professional experience of more than 28 years as a structural engineer, Friedman provided his perspective on the process of structural design and presented examples of recent design work, including a number of base-isolated structures, a sculpture, and a unique residence. Friedman's lecture was the fifth in a series of seminars at UB on topics related to earthquake engineering. The purpose of the seminar series is to widen accessibility to timely, technical presentations by students, researchers, visitors and affiliates of MCEER. Upcoming as well as past archived seminars can be viewed at the following web site: civil.eng.buffalo.edu/webcast/.



L-R: Prof. A. Whittaker, David Friedman, and EERI-UB President Gordon Warn.

Oregon State University

The EERI-OSU student chapter sponsored two informative programs and hosted Les Robertson, who provided this year's Friedman Family Visiting Professional lecture. The

first event featured Matthew Donahue, past president of the student chapter, who related his experiences as a participant in 2003 in the National Science Foundation's East Asia Summer Institute in Hokkaido, Japan. He had the opportunity to assist earthquake researchers at Hokkaido University in projects involving physical modeling of lateral pile-loading and landslide simulations.

Jerry Abdie, a principal with KPFF's Portland office, presented two lectures on the proposed expansion of the Reser Stadium facilities and the seismic retrofit design of the historic Pioneer Courthouse in downtown Portland. The final event was a visit from Les Robertson, who not only presented lectures to a senior capstone design class and to a junior-level steel design course, but also gave a very informative lecture on "The World Trade Center—Design, Construction, and Performance of a (then) Advanced Building System." An estimated 400–500 people attended, including members of the general public. Discussion focused on the structural design of the Twin Towers, wind modeling, redundant inner and outer macrostructure tubes, the innovative floor support system, and their collapse. The student chapter appreciates Robertson's sharing his knowledge and expertise with them so generously.

Graduate student Bill Kirkham represented the OSU student chapter at EERI's Annual Meeting and presented a poster outlining his proposed project to develop

an analysis method to predict efficiently the performance of wood residential construction in an earthquake. The chapter continued its outreach program with presentations designed for third-grade through fifth-grade elementary school stu-

dents. Student chapter members explained what causes earthquakes and conducted demonstrations using a liquefaction simulation model and portable structural frame shake table. This activity has proven very successful in providing an exciting science lesson and stimulating elementary school children's interest in science and math.

Georgia Tech

As part of its community outreach program this year, representatives from Georgia Tech's student chapter visited a local elementary school and a middle school to demonstrate



Georgia Tech shake table demonstration.

the damage that earthquakes can cause and to talk to students about earthquake preparedness. The students were involved in a "hands-on" activity and built a three-story building with K'nex toys that was subjected to the Kobe and Northridge ground motions on a small shake table. This activity generated a lot of interest from the young participants.

Dr. Jerome Lynch, from the University of Michigan's Civil and Environmental Engineering Department, presented a seminar on the "Decentralization of Wireless Monitoring and Control Technologies for Smart Civil Systems," which focused on the development of structural health monitoring applications.

Kevin Mackie, a graduate student from the University of California, Berkeley, provided an overview of PEER's methodology for per-

formance evaluation and decision-making models. An afternoon of recreational bowling provided an opportunity for students to relax and socialize.

University of Puerto Rico

This was another active year for the UPR student chapter. Members organized a one-day field trip the construction site of Puerto Rico's first cable-stayed bridge, which is being built across La Plata River. Supervising engineers guided the student group and two accompanying professors. A visit is planned next semester to observe the installation of the cables.

Two students participated in the 2004 EERI Annual Meeting and presented posters depicting their research and some of the chapter's activities. Both students felt that exposure to state-of-the-art scientific research and technology as well as the opportunity to interact with members of the profession was a valuable experience.

The student chapter again organized a series of technical conferences and seminars, which were attended by undergraduates, graduate students, faculty, and practitioners. Academics and professionals from both Puerto Rico and the United States presented the lectures, and graduate students from the Structural Engineering Department explained the results of their research.

More than 80 people attended the two-hour lecture, "Base Isolation: Why, Where, How?" delivered by David Friedman, president of Forell/Elsesser Engineers of San Francisco. Friedman also met with graduate students and offered his insights on their research projects. The student chapter is very appreciative of the support it receives from EERI and the Friedman Family Visiting Professional Program.

The chapter's web site is www.civil.uprm.edu/chapters/eeri.

Publications

Two New Earthquake Engineering Books

From Seismology to Design

EERI members Vitelmo Bertero and Yousef Bozorgnia are editors of a recently released book entitled *Earthquake Engineering: From Engineering Seismology to Performance-Based Engineering*. Published by CRC Press, the book explores a wide variety of topics and recent advances in earthquake engineering, including:

- historical development of earthquake engineering,
- geoscience principles needed to define seismic hazards,
- geotechnical hazards and engineering characterization of ground motion,
- deterministic and probabilistic methods of analysis,
- performance-based earthquake engineering, its applications, and future direction,
- innovative strategies and techniques, including seismic isolation and energy dissipation devices,
- seismic behavior and earthquake-resistant design of building structural systems using different structural materials,
- seismic analysis and design of non-structural elements.

The book has many contributors who are also EERI members, including Bruce Bolt, Robert Yeats, Steven Kramer, Jonathan Stewart, Ken Campbell, Mete Sozen, Helmut Krawinkler, Chia-Ming Uang, James Kelly, and Roberto Villaverde.

For more information or to order the book, visit www.crcpress.com.

Quakes in the Pacific Northwest

Oregon State University Press recently published the second edition of *Living with Earthquakes in the Pacific Northwest: A Survivor's Guide*, by EERI member Robert S.

Yeats. The book was written for the general public and will be used in outreach courses at Oregon State University and the University of Washington.

The incentive for the second edition was the Nisqually earthquake of February 28, 2001: the damage done, the effects on earthquake insurance and public policy, and how losses were reduced by earthquake preparedness, including the upgrading of building codes and the designation of Seattle as a Project Impact community.

The book discusses the scientific advances made since the first edition appeared in 1998, such as Global Positioning System networks, the Pacific Northwest Geodetic Array, and the Western Canada Deformation Array, which are approaching maturity and are producing useful data. A copy of the Nisqually Shake-Map is included, as is the Community Internet Intensity Map, which was generated by online response to the question, "Did You Feel It?" and displayed by zip code. The Gutenberg-Richter relationship is explained and illustrated based on crustal seismicity of Puget Sound and southern Georgia Strait. A table of 164 Northwest earthquakes is included as an appendix.

The book includes a detailed discussion of home retrofits, including access to companies that focus on earthquake repairs and home preparedness kits. The engineering chapter discusses, in layperson terms, such concepts as shear walls, soft stories, vibrational frequency of buildings, moment-resistant frames, base isolation, and special problems with bridges and overpasses.

Living with Earthquakes in the Pacific Northwest is available by calling 1-800-426-3797 in the U.S. or 1-877-864-8477 in Canada. For more information, visit oregonstate.edu/dept/press.

News of the Institute

Summary Minutes of the February 4, 2004, Board of Directors Meeting

Call to order: President Thomas O'Rourke called the meeting to order at 8:35 a.m. Also present were President-Elect Craig Comartin; Secretary/Treasurer Ron Mayes; Directors John Aho, Donald Ballantyne, Bruce Clark, Mary Comerio, Farzad Naeim, and Sarah Nathe; Executive Director Susan Tubbesing; and Administrative Assistant Valarie Austin. Chris Poland, Chris Arnold, and Peter Yanev were present during portions of the meeting. O'Rourke welcomed the three new directors, Aho, Comartin, and Naeim, to the Board. Comerio and Mayes were unanimously elected to serve as Vice President and Secretary/Treasurer, respectively.

Board member responsibilities and expectations: O'Rourke outlined the duties of Board members relating to the governance of EERI and oversight of its various programs. O'Rourke requested that the new members become familiar with the Five-Year Plan. Board members also are responsible for promoting development activities that will establish financial independence for the Institute. O'Rourke also briefed the new members about EERI advocacy activities at the national level during the past year and emphasized how critically important it is for the Institute to be proactive in advocating for earthquake risk reduction programs. Comartin urged the Board to take time to get to know the staff and to recognize the staff's role in successfully carrying out the Institute's mission.

The Board established a new Membership Committee that will consider the broader issues relating to the needs of potential members and will develop a comprehensive strategy

to guide the Board's decision-making. The committee will consist of three Board members who are not on the Executive Committee and who will serve for one three-year term. The committee will be chaired by the member serving the final year of that member's term. Ballantyne will chair the committee, with Clark and Aho serving as committee members.

JAEE signing and Kobe invitation: O'Rourke discussed the JAEE Signing Ceremony conducted on January 8, 2004. All JAEE officers attended the ceremony and they expressed a keen interest in cooperating with EERI in a commemoration of the 1995 Kobe earthquake disaster. A jointly held conference between the United States and ISSS entitled the First International Conference on Urban Disaster Reduction (see page 10) will also occur during the same time period.

Revenue and Expense Report: Mayes reviewed the Report of Revenue and Expenses as of December 31, 2003. The combined balance sheet showed an opening fund balance of \$141,958, which was augmented by \$15,304 in excess revenues over expenses. EERI's total liabilities of \$499,380, combined with the total fund balance of \$126,654, equaled \$626,034. The Endowment Program's opening balance of \$552,753 was augmented by \$127,971 in excess revenues over expenses, for a total fund balance of \$680,723. Total liabilities in the amount of \$343,621 combined with the total fund balance of \$680,723 equaled \$1,024,345. The balance of the combined association, endowment, and technical programs equaled \$1,650,378.

The Investment Funds Report showed a balance of \$232,260 in the General Administrative Short-Term Investment Fund and \$36,222 in the Long-Term Investment Fund. The Endowment Fund balance totaled \$680,723; the Friedman Fam-

ily Investment Fund totaled \$137,677; and the Shah Family Innovation Prize Fund totaled \$180,944. The balance in the interest-bearing checking account was \$184,363. The combined funds in the General Administrative checking and investment accounts totaled \$504,845.

The Grants Status Summary showed that of \$3,450,366 in active grants, \$2,208,585 has been expended, leaving a balance of \$1,241,781 as of December 31, 2003.

Spectra Editorial Board recommendations: The Board considered recommended revisions of the responsibilities of the *Spectra* editor and editorial board and approved the following: "The Editorial Board of the journal is nominated by the editor and, with the approval of the Board of Directors, serves for a maximum term of three years, which may be renewed once by the editor. The Editorial Board members serve at the discretion of the editor. The editor may unilaterally terminate the term of Editorial Board members, who, in the editor's judgment, are unresponsive or unproductive. The editor shall keep the Board of Directors informed regarding operational procedures of the Editorial Board. The size of the Editorial Board and its specific activities are determined by the editor."

NEHRP earthquake response exercises: Tubbesing informed the Board that EERI participated in the first two USGS-conducted NEHRP earthquake response exercises. The third exercise is scheduled to take place in February. She stated that EERI has learned some valuable lessons about its procedures, and based upon this, will make changes to ensure greater efficiency.

2006 National Conference: Chris Poland informed the Board about planning for the 100th Anniversary Conference to be held in 2006 at the Moscone Convention Center

in San Francisco, in collaboration with OES and SSA. The budget for the conference will be in the range of \$870,000 to \$1,000,000, but \$300,000 to \$500,000 will probably come from sponsorships. Poland stated that a commitment can be made without putting the Institute at risk, because as the planning progresses and momentum builds, it will become obvious whether or not cosponsorships are developing, and EERI will be able to pull back if sufficient support is not coalescing.

NEES will also be approached to participate and demonstrate activities on the large exhibition screen inside the convention hall that would be of interest to young people. EERI will advertise the meeting broadly to ensure an international presence.

Poland reported that the sponsoring organizations (SSA and OES) are close to agreement about their respective roles and obligations and should be ready to sign the Memorandum of Understanding shortly.

Capturing opportunities for promotion and fund raising: Peter Yanev discussed steps that could be taken to be more proactive in promotion and fund raising activities and to develop greater media coverage of earthquake risk and mitigation issues. The first step in building a greater media presence is to script a professional message and identify speakers who will be prepared to talk knowledgeably about the issues, in a manner that will communicate effectively with the public. This should occur after an earthquake to take advantage of increased media attention and during commemorative events, such as the anniversaries of the Loma Prieta or San Francisco earthquakes.

Yanev also advised that EERI should conduct one or two training seminars about how to deal with the media. Yanev expressed an interest in working with a group representing a cross-section of disciplines to devise ways of improving EERI out-

reach activities.

Update on FEMA Design-Related Projects: Chris Arnold discussed progress of the Multihazard Risk Management series, which includes EERI's Designing for Earthquakes project. FEMA has produced a series of primers for architects on how to mitigate physical damage to buildings resulting from terrorist attacks and natural hazards. EERI's *Designing for Earthquakes* manual should be completed in 2004 with assistance from a team of writers. A future publication is planned on incorporating building security components into architectural design. These publications illustrate the synergy between security and earthquake risk issues and the extraordinary impact of the transfer of technology.

The meeting adjourned at 5:20 p.m.

Call for Abstracts

ERES 2005

The Fifth International Conference on Earthquake-Resistant Engineering Structures (ERES 2005) will take place May 30-June 1, 2005, in Skiathos, Greece. The meeting provides a forum for the discussion of basic and applied research in the various fields of earthquake engineering relevant to the design of structures. Conference topics include:

- earthquake-resistant design,
- bridges,
- seismic behavior and vulnerability analysis,
- seismic isolation and control,
- monitoring and testing,
- passive and active control,
- ground conditions and site effects,
- building safety,
- heritage buildings,
- retrofitting,
- underground structures and lifeline systems,
- risk reduction,
- geophysical aspects,

- seismic codes and regulations.

Papers are invited on these topics and others falling within the scope of the meeting. Abstracts not exceeding 300 words should be submitted as soon as possible. More details are available at www.wessex.ac.uk/conferences/2005/eres05/.

ConMat'05

The Third International Conference on Construction Materials: Performance, Innovations, and Structural Implications (ConMat'05) will be held August 22-24, 2005, in Vancouver, Canada. The primary purpose of the conference is to bring together experts in materials and structures to exchange cross-disciplinary ideas and to learn from recent advances.

Papers are sought in the following areas related to concrete, wood, steel, and fiber-reinforced polymers (FRPs):

- **Performance of materials**, including physical properties and constitutive response; long-term exposure tests and deterioration mechanisms; performance under severe environment and loading; seismic loading, fatigue loading, and impact loading; and test methods for performance criteria.
- **New design concepts.**
- **Specialized materials**, such as high-performance concrete; fiber-reinforced concrete; manufactured wood products; and specialized steels.
- **Operation, Maintenance, and Repairs**, including assessment of structural condition; strengthening and repair methods; retrofitting for seismic loads; structural health monitoring, and advanced sensing.

July 15, 2004, is the deadline for submission of 200-word abstracts. For more information, visit www.civil.ubc.ca/conmat05/.

Annual Meeting

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implementation been?

- How have institutions and key people in those institutions changed in each country as a result of, or since, the 1985 Mexico City earthquake?

As the first Annual Meeting to be held outside of the United States, this meeting is a cooperative venture with our Mexican colleagues, with some of the technical sessions explicitly inviting a Mexican perspective. Throughout the planning process,

the committee is obtaining much-valued advice from Sergio Alcocer (director of the Engineering Institute of the National Autonomous University of Mexico, and president of the Mexican Society of Structural Engineering) and Arturo Tena-Colunga (president of the Mexican Society for Earthquake Engineering).

Members of the Mexican earthquake engineering and structural engineering associations will receive the same preferential member registration rate as EERI members, and their students will be eligible for the EERI student member rate (50% of full registration).

The schedule for this meeting is a day longer than regular Annual Meetings to free up the afternoons (after 1:30 p.m. or so) for visiting the local environs. The meeting will begin in the early evening of Wednesday, February 2, 2005, and end early in the afternoon on Sunday, February 6.

The meeting will be held at the picturesque Las Brisas ("The Breezes") Hotel (formerly the Westin Ixtapa). Watch for additional details in future newsletters and on the EERI web site (www.eeri.org).

Announcement

ICC Conference

A variety of education programs highlight the International Code Council (ICC) Annual Conference and Expo Sept. 26-29, 2004, in Salt Lake City. It will feature more than 35 education sessions and showcase the latest building and construction products and services. The

conference's comprehensive education program allows participants to develop their code knowledge while earning CEUs and LUs.

The ICC is offering sessions in two tracks: education and professional interest. Education sessions include "Making Our Hometowns Safe" and "WFCM Workshop: Design of Wood Frame Buildings for High Wind, Snow, and Seismic Loadings."

Professional interest sessions do not offer continuing education units, but rather explore methods of enhancing organizational efforts and improving the effectiveness of code enforcement staff. Professional interest sessions include "Accreditation of Building Departments," "Chapter Leadership Program," and "The International Forum." For more information, visit www.iccsafe.org/news/annual/Forum2004/index.html.

News of the Profession

EQ Engineering Abstracts Relocated

The National Information Service for Earthquake Engineering (NISEE) at the University of California, Berkeley (UCB), has reached an agreement whereby the *Earthquake Engineering Abstracts (EEA)* database is now licensed to CSA and distributed through the Internet Database Service (IDS). CSA, a Cambridge Information Group company, is a publisher of bibliographic databases and print journals.

EEA provides comprehensive coverage of the research literature in relevant disciplines, including engineering seismology, soil dynamics,

geotechnical earthquake engineering, structural dynamics, earthquake-resistant design and analysis, performance-based seismic engineering, risk and reliability seismic engineering, and disaster planning. It contains more than 106,000 abstracts and citations of journal, conference, and monographic literature published throughout the world since 1971, growing at a rate of more than 5,500 records a year.

Established in 1971 at UCB's Earthquake Engineering Research Center (EERC), NISEE provides timely access to technical research and development information in earthquake engineering and related fields. The NISEE project has received support from the National Science Foundation (NSF) and UCB and direction from a voluntary advisory committee

comprised of representatives of the earthquake engineering community. Licensing of the database to CSA ensures continued worldwide access to *Earthquake Engineering Abstracts* and adds valuable search, save, e-mail, and text and citation linking features.

Researchers and engineering libraries wishing to search *EEA* should go to info.csa.com/earthquake/ for details concerning access to the database. CSA offers a free trial period for new subscribers.

Related databases available through IDS include *ANTE: Abstracts in New Technologies and Engineering*, *CSA Civil Engineering Abstracts*, *Environmental Engineering Abstracts*, and *CSA Mechanical & Transportation Engineering Abstracts*.

Northern California Chapter

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age thought the media did a fine job in depicting the risk to BART's facilities. To learn more, visit www.quake06.org or visit BART's earthquake safety web page at www.bart.gov/about/projects/earthquakesafety.asp.

On April 13, approximately 70 people attended the EERI NC annual meeting at Bechtel Corporation's San Francisco office, commemorating the 1906 earthquake. The 1906 San Francisco Earthquake Commemorative Lecture was given by Brian Tucker of GeoHazards International. He discussed his journeys around the world the last several years and presented a compelling story for why we should be concerned about the seismic risks faced by millions of people in developing countries.

During the evening's festivities, the chapter presented its annual *Innovation and Exemplary Practice in Earthquake Risk Reduction* awards to two recipients. The first was given to Zan Turner. As an inspection coordinator and, later, the emergency response coordinator for the San Francisco Department of Building Inspection, she has been described as "the ideal EERI member." She absorbs the lessons of research from a range of disciplines and applies them to her work in earthquake preparedness, response, and risk reduction for a major public agency. As a volunteer for EERI, SEAONC, ICBO, and others, she has brought her devotion to the public interest to technical committees. Among Turner's many lasting contributions is the development of San Francisco's Building Occupancy Resumption Program (BORP), which allows owners to recertify their buildings for quick inspection and return-to-service following an earthquake. BORP (an EERI-NC Best Practice) raises awareness, encourages instrumentation and retrofit, conserves post-earthquake

resources, minimizes disruption, and speeds recovery.

The second recipient of the award, the Association of Bay Area Governments' (ABAG) Earthquake Program, has been managed by Jeanne Perkins since its inception in 1977. ABAG's work crosses disciplinary lines, linking technical experts with decision makers in both the public and private sectors. ABAG has been mapping hazards in the Bay Area for 35 years. In the 1960s, ABAG worked with the U.S. Geological Survey to meld local geology with land use planning. By the 1980s, the Earthquake Program was using seismic hazard maps to illustrate vital public policy issues. Today, the program's web page offers interactive tools to explain community-specific earthquake risks as diverse as dam failure, housing loss, and traffic disruption. In addition, the Earthquake Program makes use of ABAG's resources to survey Bay Area jurisdictions, adding to the knowledge base of local engineers and planners. The program's web page (www.abag.ca.gov/) also offers a wealth of practical advice for nonprofessionals, as well as multiple links to technical references and supplemental data.

As another activity, the EERI-NC chapter has been developing "fact sheets" that each summarize a particular earthquake issue in a non-technical format. These fact sheets help experts communicate more effectively with stakeholders who are not earthquake professionals, and also help identify where real information is missing. They emphasize quantitative information needed to make rational decisions, since better data help stakeholders fully understand their choices. Each fact sheet (see quake06.org/quake06/fact_sheets.html) was compiled by Quake '06 volunteers using publicly available documents and, where necessary, the knowledge of local experts, all of whom are chapter

members. Sources and references are listed on the back of each sheet, and notes explain all approximations.

Finally, the chapter reminds you to put the earthquake conference of the millennium on your calendar, to be held in San Francisco April 18-22, 2006. For more information, see page 1 of the May *Newsletter* and visit www.1906eqconf.org.

Announcement

VIII Mexican Symposium on EQ Engineering

The VIII Mexican Symposium on Earthquake Engineering (VIII SNIS), organized by the Mexican Society for Earthquake Engineering (SMIS), will explore the theme "Seismic Retrofit of Structures: Traditional Techniques and Modern Technologies." The VIII SNIS will be held September 3-4, 2004, at the Calinda Hotel in Tlaxcala, Mexico, 100 km southeast of Mexico City. The nearest international airports that serve Tlaxcala are the Mexico City and Puebla airports. Tlaxcala is accessible to Mexico City and Puebla by modern highways. Typical driving time is one hour.

The principal objective of this event is to present the state of the art in the seismic retrofit of structures. The program will consist of 14 keynote lectures by outstanding members of the earthquake engineering community worldwide, who have extensive experience in the seismic retrofit of structures, bridges and foundations. Eight sessions will be presented in Spanish and six in English. Simultaneous translation from Spanish to English may be provided during the conference if a minimum of 50 native English speakers are registered by August 13, 2004. For more information (in both English and Spanish), visit www.smis.org.mx.

Call for Abstracts

Conference on Urban Disaster Reduction

The EERI Committee on Urban Earthquake Hazard Reduction is working collaboratively with the Japan Institute of Social Safety Science (ISSS) to plan and convene the First International Conference on Urban Disaster Reduction (1ICDR), to be held January 18–20, 2005, in Kobe, Japan, on the occasion of the tenth anniversary of the Great Hanshin (Kobe) earthquake.

The 1ICDR is strategically placed between two other major anniversary conferences in Kobe. During the prior week, from January 10–14, 2005, EERI's sister association, JAEE, together with the Japan Society of Civil Engineers (JSCE), the Architectural Institute of Japan (AIJ), the Japan Society for Geotechnical Engineering, and the Seismological Society of Japan, will be holding a five-day seminar series assessing the lessons and technical advances that have been made in fields ranging from seismology to geotechnical engineering, to structural engineering, to risk management. Convening in Tokyo, the session will shift to Kobe for the last three days for an international portion, which will be held in English. The third conference, Yokohama Plus 10, is designed to attract participants from the highest levels of the U.S. and Japanese governments, and is sponsored by the United Nations. It will run concurrently in Kobe with the 1ICDR conference plus an additional two days, and will evaluate the status of recommendations made nearly ten years ago by a congress of international experts in disaster research and management.

EERI is submitting a proposal to the National Science Foundation to underwrite travel and per diem expenses for a U.S. delegation to participate in the 1ICDR. Departing from the exclusive focus on earth-

quake hazards that characterized previous U.S.-Japan workshops, the 1ICDR will address challenges posed by a range of natural and technological hazards, as well as by agents of mass destruction. Conference organizers hope this first international event will attract participants from all the disciplines involved in disaster preparedness, response, mitigation, and recovery throughout the world.

The conference format is a mixture of plenary presentations and small, focused working groups, cochaired by representatives of both countries. Those interested in participating in the 1ICDR should submit a 200- to 300-word abstract on one of the following topics as it pertains to strategies or lessons that have been stimulated by recent urban disasters:

Education and risk communication: information management; geographic information systems; risk assessment; remote sensing; risk communication and education; visualization of disaster communications; real-time damage assessment tools and techniques.

Information technology: information technology for disaster reduction; interoperability issues related to technical information tools.

Toward a comprehensive theory of disaster recovery: This topic will be covered in both plenary and small group papers, and will form a major theme of the conference.

Framework for risk management: generic framework for crisis and risk management (ICS, SEMS, NEMS); government organization for preparedness, mitigation and response; long-term recovery of the physical, social and economic environment; interoperability.

Tsunami: tsunami warning, mitigation, preparedness, and public information.

Business continuity planning and recovery: business and institutional

preparedness; business and resumption planning in the private and institutional sectors.

Multihazard risk assessment: risk assessment for natural and technological hazards; scenarios; models, impact of new information technologies.

Urban disaster reduction: urban disaster reduction through retrofit of existing structures; incentives and market forces; insurance; land use regulation, high-technology countermeasures; smart cities.

Planning for disaster reduction: planning for disaster reduction; transferring knowledge to developing countries; scenario planning.

Abstracts are due at EERI by **September 10, 2004**, and should be submitted electronically to valarie@eeri.org. Authors will be notified of acceptance by **October 4, 2004**, and final papers (four to six pages) will be due **November 15, 2004**. EERI's provision of travel support is contingent upon NSF funding. Interested participants will be notified of the status of this request as soon as information is available. For more information on the project or the topics contact Susan Tubbesing at EERI.

Publication

Proceedings of Case Histories in Geotechnical Engineering

The *Proceedings of the Fifth International Conference on Case Histories in Geotechnical Engineering*, held April 13-17, 2004, are now available. They consist of an abstract volume and two CD-ROMs containing 331 papers from 52 countries and 12 general reports. For more information, visit web.umr.edu/~eqconf/5thCHConf.

CALENDAR

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

JULY

6-9. Int'l Symp. Network & Center-Based Research for Smart Structures Tech. & EQ Eng., Osaka, Japan. Info: mahua@rch.eng.osaka-u.ac.jp (12/03)

12-15. 3rd European Conf. on Structural Control, Vienna, Austria. Info: www.samco.org/3ecsc (10/03)

18-23. Composite Construction in Steel and Concrete V, Kruger National Park, South Africa. Info: www.engconfintl.org/4ab.html (12/02)

26-28. ASCE Specialty Conf. on Probabilistic Mechanics and Structural Reliability, Albuquerque, NM. Info: www.esc.sandia.gov/PMCconferenceinfo.html (12/03)

AUGUST

1-6. 13th World Conference on EQ Eng. (13WCEE), Vancouver, British Columbia, Canada. Info: www.13wcee.com (7/02, 3/03, 4/04)

8-11. MOVIC 04 Motion and Vibration Control Conf., St. Louis, MO. Info: www.seas.wustl.edu/movic04/ (11/02)

25-28 SEAOC Annual Convention, Monterey, CA. Info: www.seaoc.org (5/04)

SEPTEMBER

3-4. VIII Mexican Symposium on EQ Eng., Tlaxcala, Mexico. See page 9. (7/04)

14-17. NDE/NDT for Highways and Bridges 2004, Buffalo NY. Info: www.asnt.org/events/events.htm (12/03)

26-29. Int'l Code Council Annual Conf., Salt Lake City, UT. See page 8. (7/04)

26-30. 2004 National EQ Conf., St. Louis, MO. Info: www.earthquakeconference.org/ (4/04, 6/04).

[earthquakeconference.org/](http://www.earthquakeconference.org/) (4/04, 6/04).

29-Oct. 1. Annual Conf. on Deep Foundations, Vancouver, B.C., Canada. Info: www.dfi.org (12/03)

OCTOBER

18-20. 3rd Int'l Conf. EQ Eng., Nanjing, China. Info: 3icee.njut.edu.cn/ (5/04)

25-Nov. 5. 7th Workshop on 3-D Modelling of Seismic Waves, Trieste, Italy. Info: agenda.ictp.trieste.it/smr.php?1586 (2/04)

NOVEMBER

15-19. Committee on Safety of Nuclear Installations Workshop on Seismic Input Motions, Tsukuba, Japan. Info: www.nea.fr/html/nsd/workshops/SEIS2004/index.html (4/04)

DECEMBER

8-20. 4th Int'l Conf. on Dam Engr., Nanjing, China. Info: www.dam04.com (1/04)

2005

JANUARY

13-16. Int'l Symp. on EQ Eng., Japan. (2/04)

18-20. 1st Int'l Conf. on Urban Disaster Reduction, Kobe, Japan. See page 10. (7/04)

31-Feb 3. IMAC XXIII, Orlando, FL. Info: www.sem.org (6/04)

FEBRUARY

2-6. EERI Annual Meeting, Ixtapa, Mexico. Info: www.eeri.org. See page 1. (4/04, 7/04)

19-22. Int'l Assoc. for Bridge Struct. Eng. Conf., New Delhi, India. Info: www.iabse.org (11/03)

MAY

30-June 1. ERES 2005, Skiathos, Greece. See page 7. (7/04)

AUGUST

22-24. ConMat'05, Vancouver, BC, Canada. See page 7. (7/04)

SEPTEMBER

14-16. IABSE Structures and

Extreme Events, Lisbon, Portugal. See page 11. (7/04)

20-23. 3rd Int'l Structural Eng. and Const. Conf., Shunan, Japan. Info: www.tokuyama.ac.jp/tcss1/ISEC_03/ (4/04)

2006

APRIL

18-22. 8th U.S. Nat'l Conf. on EQ Eng. (8NCEE), EERI Annual Meeting, SSA Annual Meeting, Disaster-Resistant California, San Francisco, CA. Info: www.eeri.org (5/04)

Call for Papers

IABSE Symposium

The International Association for Bridge and Structural Engineering (IABSE) has issued a call for papers for a symposium on "Structures and Extreme Events," to be held in Lisbon, Portugal, September 14-16, 2005.

The symposium will cover the following themes: natural disasters, such as earthquakes, volcanic eruptions, wildfires, hurricanes, tornados, tsunamis, floods, ice storms, landslides, avalanches, and environmental changes; man-made events, such as fire, explosions, impacts, nuclear reactor accidents; and human errors, such as mismanagement, design mistakes, defective material, and equipment malfunction.

Contributions should deal with case studies and measures taken in the design phase, construction phase, service phase, and rehabilitation, as well as with general policies.

Abstracts of 200 to 300 words in English, without any photographs or figures, should be submitted in Word and e-mailed as an attachment to: iabse.lisbon2005@Inec.pt before July 31, 2004.

For more information, visit www.iabse.org/lisbon.

News of the Institute

World Housing Encyclopedia First Annual Farzad Naeim Prizes

The Farzad Naeim Prize Selection Committee has awarded the following prizes for the best report contributions to the EERI/AEE (International Association for Earthquake Engineering) World Housing Encyclopedia:

1. A \$1,500 prize to V. Levtchitch of Cyprus for his report on reinforced concrete frame buildings with unreinforced masonry infill walls.
2. A \$1,000 prize to Dina D'Ayala, Elena Speranza, and Francesco D'Ercole of Italy for their report on single-family historic brick masonry houses.
3. A \$500 prize to Cesar Loaiza F., Marcial Blondet, and Gianfranco Ottazzi of Peru for their report on adobe houses.

Contributions to the encyclopedia in

general are of a high standard and meet the intents of the information base (see the web site at www.world-housing.net). About ten reports were especially close competitors for the awards; all provided excellent information and were well presented. This made the final choice of only three awards difficult, but also emphasized the excellence of the work that has been done by all the encyclopedia contributors.

Because this is the first award of an annual program, the selection committee emphasized commonly found housing types, built in large numbers, that have experienced strong shaking in the past. The documentation should highlight the causes of failure if performance has not been good and the features that resulted in good performance where that applies. In addition, the selection committee wished to provide a

broad geographical representation. In future years, there will be many opportunities for a wider range of housing types and locations to be strong competitors for the award.

The selection committee members were Chris Arnold (chair) of the United States, C. V. R. Murty of India, L. Teresa Guevara of Venezuela, and Vanja Alendar of Serbia/Montenegro. They were separate from the editors and did not include any prize winners; members of the committee who submitted reports withdrew them from competition prior to the judging. The committee would like to thank Marjorie Greene and Svetlana Brzev, *ex officio* members of the committee, for their valuable assistance and, of course, to Farzad Naeim for following up his idea to offer incentives for contributors by generously providing the prize.



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