



EARTHQUAKE ENGINEERING RESEARCH INSTITUTE NEWSLETTER

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EARTHQUAKE ENGINEERING RESEARCH INSTITUTE

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News of the Institute

100th Anniversary Conference: Itinerary Planner Online

An online itinerary planner is now operational at <http://submissions.miracd.com/8ncee/ltinerary> to help attendees plan their schedules for the 100th Anniversary Earthquake Conference being held April 17-22 in San Francisco. The planner is searchable by keyword in title, author name, author institution, review category, session day, session time, and session title. A search will present a table that displays full titles (with links to abstracts), all authors and affiliations, type of presentation (oral, poster, plenary, tutorial, or field trip), location, date, and time. After checking which presentations you wish to attend, you have a printable itinerary. You can save it and return later to make changes.

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New EERI Strategic Plan Posted for Comments

The EERI Board of Directors has developed a draft of a new Strategic Plan to help guide EERI in the next five years (2006-2010). The Board has been assisted in this effort by regional chapter presidents, future and past officers, and student activities representatives. The draft plan has been posted at <http://www.eeri.org/home/5yearplan.html> for review by all members before being finalized. We hope you will take the time to review it, and we encourage you to send your comments to Susan Tubbesing, Executive Director, by March 31, 2006, at skt@eeri.org.

Earthquake Spectra: Call for Papers on Earthquake Engineering Practice

EERI's Board of Directors has adopted a policy to make *Earthquake Spectra* more useful for the practicing engineer. A new category called "Earthquake Engineering Practice" has been created to expedite the publication of articles by practicing engineers. Papers submitted under this category can be technical notes or full-length papers. *Earthquake Spectra* intends to publish at least one paper in this category in each issue of the journal. Because this is a new category with no backlog, papers submitted and accepted for publication in this category will receive priority for publication. *Earthquake Spectra* guarantees a first decision on papers submitted in this category within 60 days.

A variety of papers of a practical nature can be submitted under this category. Topics include but are not limited to the following:

- Engineering and construction case studies
- Simplified techniques and design tips
- State-of-the-practice reports
- Novel and practical applications of performance-based engineering methods
- Comparative or critical reviews of various seismic code provisions
- Issues and tips related to application of commonly used engineering software
- Proper and improper engineering details and assumptions

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Earthquake Spectra

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- Comparative study of various seismic analysis techniques and the impact of selected methods on the final product
- Committee and organization reports and summaries that may substantially affect engineering practice
- Legal and ethical issues affecting engineering practice.

Earthquake engineering practice papers must be clearly marked as such on the cover letter accompanying the paper. While the originality of these papers is important, their usefulness to the practicing engineer will be given priority during the selection process. Papers should be submitted using *Earthquake Spectra's* online manuscript submission and peer review system at <http://eqs.peerx-press.org>.

New Policy on EERI Reconnaissance Publications

At its February meeting, the EERI Board of Directors approved the following new policy on earthquake reconnaissance publications: When a reconnaissance team has been dispatched following an earthquake, a Reconnaissance Reports Review Group (RRRG), consisting of the executive director, LFE manager, publications policy chair, *Earthquake Spectra* editor and LFE Committee chair, will recommend to the Board which type(s) of publications are appropriate for that earthquake: a *Newsletter* insert, an 8.5" x 11" reconnaissance report, and/or a special issue of *Earthquake Spectra*.

At a minimum, every team is expected to produce a *Newsletter* insert. Special issues of *Earthquake Spectra* are reserved for earthquakes of major significance. The RRRG, in consultation with the reconnaissance team leader, will decide if the earthquake meets criteria for a special issue. The RRRG will consider the significance of the earthquake in all areas including, but not limited to, seismology, geotechnical aspects, structural damage, lifelines, and societal impacts. Significance in one or two areas may not be deemed sufficient for publication as a special issue. The Board maintains the sole discretion to decide about the type of report(s) that will be generated upon the completion of field research.

Special issues will be written as reports with chapters that reflect observations from different disciplines. Each chapter will have a coordinator and may have many contributors, all of whom will be listed as co-authors of the chapter. This procedure does not preclude individual authors from submitting separate articles on the earthquake to *Earthquake Spectra* for publication in a regular issue (through the regular review process).

All team members will be required to sign a publications policy cover statement indicating that they have been given the guidelines for the various types of reconnaissance publication, and that they agree to follow the guidelines.

Because of the recent cuts in the LFE budget, special issues of *Earthquake Spectra* will be made available electronically as PDFs, downloadable at no charge for EERI members and subscribing libraries. (There is a charge for non-members.) They will also be available for purchase, either in hard copy or on CD-ROM.

Anniversary Conference

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If you have not already done so, be sure to register for the conference without delay at <http://www.1906eqconf.org>! There is an abundant smorgasbord of events: technical sessions, tutorials, field trips, and social events. Some of the field trips are already filling up. Early registration will save you money; after March 18, fees will increase by \$50. The web site also has information about hotel accommodations. Conference hotel room blocks will be released on March 15.

Authors should have received e-mail messages of instructions regarding registration and preparation of oral and poster presentations. If your paper was accepted for the conference, but you have not received instructions, please e-mail eloise@eeri.org.

Student/Industry Reception: The EERI Student Activities Committee, chaired by Ellen Rathje of the University of Texas, is planning a Student/Industry Reception for EERI students to meet with Subscribing Members and exhibitors at the 100th Anniversary Conference. It will be held at the Westin St. Francis Hotel, San Francisco, 5:00-6:30 p.m. on Monday, April 17, prior to EERI's Gala Opening Reception and Poster Session.

Quake '06 Study: As part of the EERI Northern California Chapter's Quake '06 Campaign, its Local Government Committee conducted a study of the earthquake risk to fire stations in the nine-county San Francisco Bay Area. Hazard exposure for each fire station in the Bay Area was characterized using available vulnerability information. More than 100 fire stations were assessed. Results of the study will be presented at the 100th Anniversary Conference during the Wednesday afternoon (April 19) oral technical session on Fire Following Earthquakes — the Fire and Water Services.

Learning from Earthquakes

January 8, 2006, Kythira Island (Greece) 6.8 Earthquake

On January 8, 2006, at 13:34 local time (11:34:55 UTC) a strong earthquake with a moment magnitude of 6.8 occurred in southern Greece. The earthquake was felt throughout Greece and in nine countries along the eastern Mediterranean from Italy to Egypt. Following the earthquake, EERI members Professor G. Danamos and Dr. E. Lekkas of the National University of Athens conducted a field investigation.

The earthquake epicenter was located on the island of Kythira (36°20' N, 23°20' E), with focal depth of 66 km (USGS). The earthquake was followed by 16 aftershocks during the next three days with a maximum magnitude of Mw 5.5. No casualties were reported during the earthquake or the aftershocks, and the only damage was to infrastructure in the area of Kythira, Antikythira, and the city of Hania in western Crete.

The main earthquake and the aftershocks were caused by the active subduction zone located in the Hellenic Arc region along the Aegean Sea Plate. This plate is moving to the southwest at 40-60 mm/yr and is colliding with the African plate.

Most of the damage on the island of Kythira was in the central part of

the island at Mitata village. However, modern buildings that included reinforced concrete columns underwent no damage, not even to wall surfaces. Serious damage was only found in stone masonry structures. The most characteristic damage was recorded at the church in the center of the village. The church was constructed of porous limestone blocks cemented with lime wash without reinforced concrete columns. Damage occurred at the two bell towers because (1) they represent construction that was added to the main building at a later date, and (2) the different height and mass led to out-of-phase vibration that caused the detachment of the two sections.

Secondary geodynamic effects triggered by the earthquake included rockfalls and landslides along the local network of roads. The most impressive landslide was located at the Mitata village square with a collapsed volume estimated to be 5,000 m³. The event caused the detachment of large masses of rock with an approximate volume up to 500 m³ each along the road between Mitata village and Viaradika village. As a consequence of the landslide on the upper section of the slope, a section of the Mitata village square was detached. At the base of the slope a section of the road from Mitata to Biaradika was damaged.

No surface fault ruptures were found

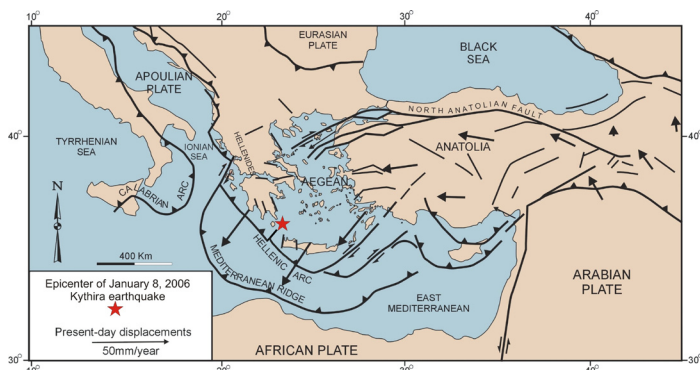
as a result of this earthquake. The only ground ruptures were caused by the lateral instability of the formations near morphological discontinuities. Unconsolidated formations dominate along the coastal area of the island, and no evidence of liquefaction was found as a result of this earthquake.

The full report by this investigation team as well as another report from the Institute of Engineering Seismology and Earthquake Engineering in Thessaloniki can be found at <http://www.eeri.org/lfe/greece.htm>. A USGS report can be found at http://neic.usgs.gov/neis/eq_depot/2006/eq_060108_hrak/neic_hrak_ts.html.



Landslide at Mitata (Photo: E. Lekkas).

Mitata village church
(Photo: E. Lekkas).



Location and tectonic setting of the 1-8-06 earthquake.

News of the Institute

Summary Minutes of the December 7, 2005, Board of Directors Meeting

President Craig Comartin called the meeting to order at 8:30 a.m. Present were Directors John Aho, Bruce Clark, Richard Eisner, Polat Gulkan, Ron Mayes, Farzad Naeim, Sarah Nathe, Thomas O'Rourke, Executive Director Susan Tubbesing, and Administrative Assistant Valarie Austin. Also present was Secretary/Treasurer nominee Marshall Lew.

President's Report: Comartin reported on developments in the formation of the Coalition for Safe Concrete Buildings. The coalition is composed of organizations that wish to examine safety issues connected with nonductile concrete buildings, mainly on the west coast, and develop recommendations and solutions for officials and decision-makers emphasizing positive actions that incorporate new technical developments. Planning meetings will be scheduled in conjunction with the EERI technical seminar on Seismic Performance of Concrete Buildings. A small planning group will attend and issue a summary report on plans for further action.

International involvement in '06 Conference: Organizations from China, Japan, Turkey, and New Zealand will be conducting sessions during the 2006 100th Anniversary Conference. The conference steering committee will waive a portion of the fees for participants from developing countries, with priority given to those presenting papers.

Comartin and Andrew Whittaker will coordinate the selection process in collaboration with knowledgeable individuals in each country.

Secretary/Treasurer's Report:

Mayes reviewed the Report of Revenue and Expenses as of October 31, 2005. The combined balance sheet showed an opening fund balance of \$127,033, which was augmented by \$121,096 in excess revenues over expenses. EERI's total liabilities of \$313,140 combined with the total fund balance of \$248,129 equaled \$561,269. The Endowment Program's opening balance of \$716,011 was decreased by \$1,346 in excess expenses over revenues, for a total fund balance of \$714,665. Total liabilities in the amount of \$358,734 combined with the total fund balance of \$714,665 equaled \$1,073,400.

The balance of the combined association, endowment, and technical programs equaled \$1,550,636.

The Investment Funds Report showed a balance of \$237,222; the Endowment Fund balance totaled \$716,790; the Friedman Family Investment Fund totaled \$188,152; and the Shah Family Innovation Prize totaled \$168,458. The balance in the interest-bearing checking account was \$78,123. The combined funds in both the General Administrative checking and investment accounts totaled \$315,345.

At present, the 2006 budget projects a deficit of \$35,000 (the LFE budget has been cut back to \$400,000), which will require a number of difficult decisions. The 2006 Anniversary Conference will generate additional revenues if it is very successful. The Board adopted the 2006 budget unanimously.

Executive Director's Report: Tubbesing reported that the \$250,000 reduction in EERI's LFE's budget will force difficult decisions regarding publication of ongoing reconnaissance investigations, and may have implications for maintaining current staffing levels. All agreed that publishing reports in the *Newsletter* can meet the goal of disseminating information expeditiously. Concise and readable reports can be made into CDs and placed on the

Spectra AIP website, which will allow for indexing. EERI will arrange to print a limited number of hard copies for sale through a print-on-demand service. A subcommittee, consisting of the LFE chair, Naeim, Nathe, Tubbesing, and Marjorie Greene, will meet and discuss the existing reconnaissance report policies that need to be reinforced and the Board's desire to improve the efficiency of publication by issuing future LFE reconnaissance reports as summaries, rather than as individually authored papers.

Development Committee: The committee has secured \$125,000 in Subscribing Member pledges. This represents a 25% increase in the amount raised in recent years. The advantages offered to Subscribing Members for the 2006 Conference are encouraging organizations to become Subscribing Members or to raise their level of membership.

Honors Committee: The Board reviewed and accepted the Honors Committee nominations for Honorary Membership and the Housner Medal, which will be presented during the EERI Honors Luncheon during the 100th Anniversary Conference.

Special Projects and Initiatives Committee: Eisner described funding requests received by the SPI Committee for web site development of the World Adobe Forum, student travel to the 2006 Anniversary Conference, and development of the World Housing Encyclopedia web site. The Board approved Endowment funding of a \$6,000 grant for the Adobe Forum, \$20,000 for student travel to the 2006 Conference, and \$6,000 for the Small Grants Program (see below), to develop the WHE web site. Money from donors to the tsu-

nami relief effort will help to support the Small Grants in Developing Countries Program.

Small Grants Report: Eight grants currently support local community-based mitigation projects in several countries (Peru, India, Istanbul, Colombia, Nepal, Serbia, and Bangladesh). The scope of the projects is small, but it is hoped that the materials developed will be used in other regions of the world and thus increase the program's impact.

Membership Report: The total number of members has increased since 2004, as has the number of *Spectra* subscribers. Final membership renewal notices will be mailed in January.

Mitigation Center web site demonstration: The Board watched a demonstration of the Mitigation Center and the LFE web sites by the EERI staff and expressed enthusiasm for the progress on both. Tubbesing will work with the staff to get both sites open to the membership as soon as possible.

100th Anniversary Conference update: The social activities and final technical program have still to be finalized. More than 1,000 papers have been submitted for the 8NCEE portion of the program. The EERI banquet and Subscribing Member/Endowment Donor reception will be held at the Westin St. Francis on Wednesday and Thursday evenings, respectively. Anchor Brewing/RMS/Harper Collins will sponsor a reception and book signing with Simon Winchester on Wednesday evening and furnish beer for the reception. The exhibitor and sponsor packages have been mailed and the information placed on the web site.

Student and regional chapters and Subscribing Members: Board members reported that their conversations with student chapter advisors, regional chapter presidents, and Subscribing Members were pos-

itive and that the chapters appreciated the Board's interest and outreach. The Board believes that the student chapters need leadership, new energy, and vision. The Board will invite Ellen Rathje, new chair of the Student Activities Committee, to the February Board meeting to discuss the plans of the committee to respond to these challenges. The Board is also interested in exploring with Rathje ways to involve non-engineering students who have an interest in seismic safety issues.

The Board wishes to encourage student chapters to participate in regional chapter programs, to take advantage of the Friedman Professional Program, and to invite the Distinguished Lecturer to their universities. Conversations with Subscribing Members revealed that the members wished to be in closer contact with the Board. In response, the Board created a new policy to meet annually with Subscribing Members before the December Board meeting.

Obituary

Neville C. Donovan 1932–2006



Neville C. Donovan

The following is excerpted from a remembrance by Ahmed Nisar of MMI Engineering.

Neville C. Donovan died at his home in San Rafael, California, from Parkinson's disease, on January 30, 2006. He is survived by his wife, Judie, brother George, three children, and five grandchildren.

The first in his family to attend a university, Neville earned his bachelor's degree in civil engineering with honors in 1954 at Auckland University, a master's in 1956 from

Princeton University, and a Ph.D. from Ohio State University in 1959. He began his career as a pioneer in earthquake engineering and soil dynamics, a subject so new the faculty was learning it at the same time as the students.

He joined the engineering firm of Dames and Moore in 1963. He was one of the first engineers to use probabilistic seismic hazard analysis procedures. Throughout his career he did research to improve seismic design codes. He chaired the section that developed seismic zoning maps and soil effects criteria for the ATC-3-06 report. Many of the report's recommendations became the basis for seismic design codes worldwide.

Neville worked on major design projects on every continent except Antarctica. Several designs for San Francisco structures were successfully tested in the 1989 Loma Prieta earthquake. He was Dames and Moore's geotechnical consultant responsible for the development of design ground-motion levels and liquefaction assessment for the 800-mile-long Trans-Alaska pipeline.

Neville enjoyed a good laugh and a bad pun. He produced excellent engineering work while diplomatically avoiding political and administrative entanglements with his soft-spoken humor, beard, and bow-tie. He lived with determination, grace, humor, and enthusiasm.

News of the Institute

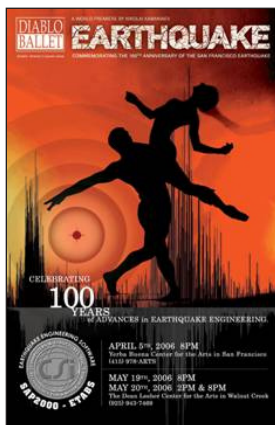
2007 Annual Meeting

Mark your calendar! The 2007 EERI Annual Meeting will be held February 7-10, 2007, at the Universal City Hilton in Los Angeles, California. Look for more information in future issues of the *Newsletter*.

Subscribing Member News

CSI Sponsors Earthquake Ballet

To commemorate the 100th anniversary of the 1906 San Francisco earthquake, a new ballet will be performed that celebrates the advances in earthquake engineering technology that have occurred during the last century. Called "EARTHQUAKE," the piece was commissioned by the Berkeley-based Computers & Structures, Inc., an EERI subscribing member. For tickets to the world premiere at 8:00 p.m. on Wednesday, April 5, 2006, at the Yerba Buena Center for the Arts in San Francisco, call 415/978-ARTS. Three additional performances of "EARTHQUAKE" will be held on May 19-20, 2006, at the Dean Leshner Regional Center for the Arts in Walnut Creek. To purchase tickets, call 925/943-SHOW. For more information, visit www.DiabloBallet.org.



News of the Membership

Adeli Honorary Member of ASCE



Hojjat Adeli

EERI member Hojjat Adeli, Lichtenstein Professor at Ohio State University (OSU), has been elected an honorary member by the American Society of Civil Engineers (ASCE) Board of Direction.

The Board chose to recognize Adeli "for wide-ranging, exceptional, and pioneering contributions to computing in civil engineering and extraordinary leadership in advancing the use of emerging computing and information technologies in civil engineering throughout the world."

In 1998, Adeli received OSU's highest research award, the Distinguished Scholar Award, "in recognition of extraordinary accomplishment in research and scholarship". Adeli has authored or co-authored ten books and edited 12 books. His research has been published in scores of journals.

Adeli is the editor-in-chief of the research journals *Computer-Aided Civil and Infrastructure Engineering*, which he founded in 1986, and *Integrated Computer-Aided Engineering*, which he founded in 1993.

EERI Members Receive ASCE Awards

The following EERI members received awards from the American Society of Civil Engineers (ASCE) in 2005.

Douglas Nyman: the Stephen D. Bechtel Pipeline Engineering Award

Jeffrey Berman and Michel Bruneau: the J. James R. Croes Medal

Stuart Werner: the C. Martin Duke Lifeline Earthquake Engineering Award

Henri P. Gavin: the Walter L. Huber Civil Engineering Prize

Bahram M. Shahrooz: the Moisseiff Award

Dan Frangopol: the Nathan M. Newmark Medal

We previously noted ASCE awards to Tom O'Rourke and Bill Elliott. The awards are described at: <http://www.asce.org/pressroom/honors/awards.cfm?prmid=1>.

Announcement

John Mitchell Lecture

Professor Harry Poulos will present the John Mitchell Lecture during the 10th International Conference on Piling and Deep Foundations taking place May 31-June 2, 2006, in Amsterdam, the Netherlands. Poulos, an emeritus professor at the University of Sydney and senior principal of Coffey Geosciences, is internationally renowned for his work on piled foundations.

The lecture is named in honor of John Michael Mitchell, an early organizer of the Deep Foundation Institute's international conferences and a pioneering supporter of DFI's role as a leader in the global industry. Mitchell was killed on 14 September 1990 while observing piling works at a site in central London. For more information, visit www.pilinganddeepfoundations.com.

PLEASE POST IMMEDIATELY



EARTHQUAKE ENGINEERING RESEARCH INSTITUTE
2006-2007 EERI/FEMA
GRADUATE FELLOWSHIP IN
EARTHQUAKE HAZARD REDUCTION

EERI is pleased to announce the availability of a Graduate Fellowship for the 2006-2007 academic year to support one full-time student in a discipline contributing to the science and practice of earthquake hazard mitigation.

The one-year fellowship, underwritten with funds provided by the Federal Emergency Management Agency, is designed to foster the participation of capable individuals in working toward goals and activities of the National Earthquake Hazards Reduction Program.

AWARD

The EERI/FEMA fellowship provides a nine-month stipend of \$12,000 with an additional \$8,000 for tuition, fees, and research expenses.

CRITERIA

Applicants must be enrolled in a graduate degree program at an accredited U.S. college or university and must hold U.S. citizenship or permanent resident status. All applications must include an academic transcript and a statement of educational and career goals.

Applications, together with a letter of nomination, shall be submitted to EERI by a faculty sponsor at the host institution. Two additional reference letters should be submitted directly to EERI. They should evaluate the applicant's recent academic performance and the candidate's potential to contribute to the field.

TO APPLY

Candidates may download application forms from from EERI's web site (http://www.eeri.org/home/Grad_Fell_application.pdf), or obtain them upon request from:

Earthquake Engineering Research Institute
499 14th Street, Suite 320
Oakland, California 94612-1934
(510) 451-0905 fax: (510) 451-5411 e-mail: eeeri@eeeri.org

Deadline for receipt of all application materials at EERI is MAY 15, 2006.
Announcement of the award will be made on JUNE 19, 2006.

Calls for Abstracts

Tenth North American Masonry Conference

Organized quadrennially by the Masonry Society, the 10th North American Masonry Conference will be held June 3-6, 2007, in St. Louis, Missouri.

Abstracts are invited on the following topics: innovations in materials, systems, analysis, design, rehabilitation, and construction; performance of masonry related to fire, sound, movement control, air flow, vapor and moisture transmission, thermal conductivity, and structural integrity; architectural topics including history, performance, details, life-cycle costs, sustainability, and preservation; award-winning designs and other successful projects; and recent developments on topics including additives, codes and standards, software, test methods, non-destructive testing, prestressing, bracing, veneer, manufacturing, and prefabrication. The deadline is May 15, 2006. For additional information, visit <http://www.masonrysociety.org/NAMC/index.html>.

Seismic Risk Workshop for Central Asia

The North Atlantic Treaty Organization (NATO) will hold an Advanced Research Workshop (ARW) on "Management of Urban Earthquake Risk in Central Asian and Caucasus Countries" in Istanbul, Turkey, May 14-19, 2006. The ARW's main objective is to provide a forum to discuss and elaborate on the innovative and applicable means of disaster risk management and reduction in cities, focusing particularly on large cities in the Caucasus and Central Asian countries. Abstracts are due by April 3, 2006. For more information, visit <http://www.koeri.boun.edu.tr/depremmuh/natoconference/nato.htm>.

Conference on Public Health and Disasters

The 5th UCLA Conference on Public Health and Disasters will be held May 21-24, 2006, at the University of California at Los Angeles. The conference is for public health professionals, individuals, and organizations involved in emergency public health preparedness and response. The topics will be of interest to public health and medical practitioners, emergency medical services professionals, researchers, and managers involved in the wide range of emergency public health issues resulting from natural and human-generated disasters.

UCLA invites abstracts from students for a poster session to be held on May 21. Poster abstracts are to be authored solely by students and must be submitted either electronically or by fax no later than April 21, 2006. For more information, visit <http://www.cphd.ucla.edu/conf2006.html>.

Modeling and Simulation Minisymposium

A Minisymposium on Modeling and Simulation of Earthquake Phenomena will be part of the 7th World Congress on Computational Mechanics July 16-22, 2006, in Los Angeles, California.

The minisymposium will bring together researchers in the earthquake physics and computational mechanics communities to present and exchange cutting-edge results and techniques. Presentations are invited on all aspects of earthquake modeling. Of particular interest are (1) studies of how complexities and heterogeneities in fault geometry and friction affect earthquake nucleation and dynamics over single and multiple seismic cycles; (2) models that incorporate constitutive relations derived from experiments

or theory and studies that attempt to constrain earthquake physics by comparison with observations of earthquake phenomena; (3) new computational methods with potential applications to earthquake studies; and (4) experimental investigations of constitutive properties and behavior of fault materials, including rock friction and stress wave propagation.

In addition to the minisymposium, the congress will cover a number of other topics relevant to earthquake science, including fracture processes, dynamic behavior of heterogeneous materials, contact mechanics, and recent advances in multiscale, finite element, meshless, and other computational techniques.

One-page abstracts are due by March 15, 2005. The abstracts should be submitted electronically at the congress web site, <http://www.wccm2006.northwestern.edu>.

Workshop on Base-Isolated High-Rise Buildings

An International Workshop will be held on Base-Isolated High-Rise Buildings June 15-17, 2006, in Yerevan, Armenia. The organizers of the workshop are the American University of Armenia (AUA), the Anti-Seismic Systems International Society (ASSiSi), and the Armenian Association for Earthquake Engineering (AAEE).

Abstracts may be submitted by e-mail as an attachment to the attention of Kristina Avanesova (ka-vaneso@aua.am). The deadline is April 15, 2006.



Academic Opportunities

UC San Diego

The Structural Engineering Department in the Jacobs School of Engineering at the University of California, San Diego, seeks candidates for one or more positions at the assistant, associate, or full project scientist level who have experience in one or more of the following fields: earthquake engineering, mitigation of blast loading, health monitoring and condition assessment, composite materials and lightweight structural systems, hydrodynamics and fluid-structure interaction, reliability and risk engineering, renewal engineering, mechanics, computational mechanics, and structural design. Review of applications began on February 27, 2006, and will continue until positions are filled. For the full announcement (job # 4-677 C), visit http://structures.ucsd.edu/?page=structural_engineering/employment/other.

University of Memphis

The Center for Earthquake Research and Information (CERI) at the University of Memphis invites applications for the position of assistant or associate research professor. A 12-month salary commensurate with experience will be offered and the position is available starting September 1, 2006. CERI seeks a colleague with expertise in engineering geology, geotechnical engineering, lithospheric geophysics, or earthquake source science. Visit the CERI web site for information on qualifications, application procedures, and deadlines (<http://www.ceri.memphis.edu>).

Job Announcement

NSF Opportunity

The National Science Foundation (NSF) in Arlington, Virginia, seeks

candidates for the position of director of the Division of Engineering Education Centers (EEC), Directorate for Engineering (ENG). The successful applicant will serve as a member of the Engineering Directorate leadership team and as NSF's principal spokesperson in the area of engineering education. The director provides leadership and direction to the NSF division responsible for funding research and education that supports interdisciplinary teams of faculty and students to produce next-generation advances in knowledge and technology, as well as new generations of engineers capable of leading innovation. The director assesses needs and trends involving the engineering research and education communities. For the full announcement (S20060044-C), visit http://www.nsf.gov/about/career_opps/vacancies/executive.jsp. The deadline is March 15, 2006.

Announcements

ACEE 2006

The 2nd Asia Conference on Earthquake Engineering (ACEE 2006) will be held in Manila, the Philippines, March 10-11, 2006, with the theme "Seismic Hazards and Damage Mitigation in the Asian Region." The conference is being organized by the Asia Council for Earthquake Engineering and the Association of Structural Engineers of the Philippines, Inc. ACEE 2006 will cover the broad fields of seismology, earthquake engineering, seismic risk, and disaster mitigation. For more information, visit <http://acee.dlsu.edu.ph>.

Structural Control Conference

The Fourth World Conference on Structural Control and Monitoring (4WCSCM) will be held July 11-13, 2006, at the University of California

at San Diego (UCSD). This conference will bring together those interested in the general field of passive, active, semi-active or hybrid vibration control and health monitoring of structural systems. The conference will focus on topics related to structures, including adaptive structures, intelligent or smart materials and systems, sensor networks, structural system identification, health monitoring and damage detection, actuators, vibration isolation, and hybrid vibration control of structures, including civil infrastructure components under the action of earthquakes, wind, and man-made loads.

The conference will include (1) keynote lectures presented by world authorities in structural control and monitoring, (2) state-of-the-art reports prepared by well-known specialists in specific topics, and (3) sessions consisting of conventional oral presentations and discussion of papers. For more information, visit www.usc.edu/4wcscm.

Implementation of NIST's Recommendations for the WTC

A link titled "Implementation of NIST's Recommendations" is on the NIST World Trade Center web site (<http://wtc.nist.gov>) and provides recommendations following the disaster that are being written into the National Institute of Building Sciences (NIBS) code. Many of these recommendations have an impact on how tall buildings are designed for earthquakes and other extreme events.

The collapse of New York City's World Trade Center was the worst building disaster in recorded history, killing some 2,800 people. More than 350 fire and emergency responders were among those killed, the largest loss of life for this group in a single incident.

Announcement

PEER Summer REUs and Internships

The Pacific Earthquake Engineering Research Center (PEER) has announced the availability of “research experience for undergraduates” (REU) positions and PEER Summer Internship Program positions for the summer of 2006. Funding for the REU Program comes directly from the National Science Foundation.

Both programs target upper-division students who have completed junior-level courses in engineering or a related field. Both programs provide research opportunities for undergraduates who have shown an interest in earthquake engineering and have demonstrated a high level of academic performance, and whose presence would enhance the diversity of PEER. Interns will receive a \$5,000 stipend.

Interns will compile technical and anecdotal information throughout the summer and submit a final report by October 1. They are required to present their summer research results by PowerPoint or poster presentation at a professional gathering, such as the EERI Annual Meeting.

Participants will work 400 hours (10 weeks) between May 15 and September 15 with a faculty mentor on a PEER research project related to the PEER mission of performance-based earthquake engineering.

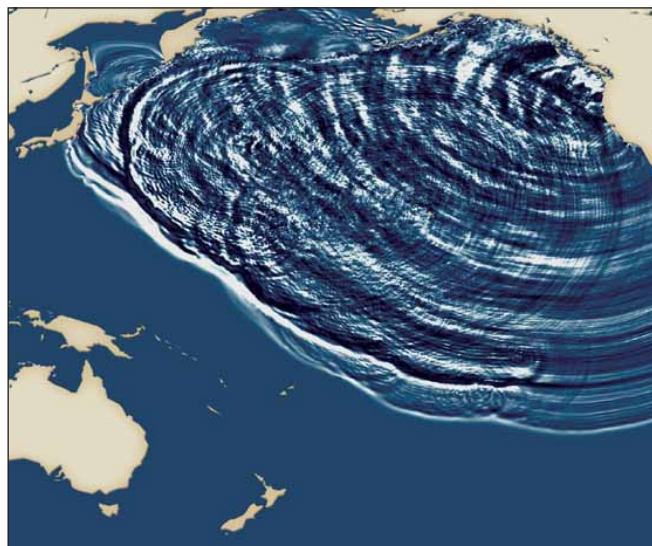
The application deadline is April 1. However, applicants are encouraged to apply early, as review is ongoing and selections are made on a rolling basis.

For a complete description of the programs, eligibility requirements, and application instructions, visit peer.ucsd.edu/internshipmenu_2006.htm.

Publications

The Orphan Tsunami of 1700

The 2005 U.S. Geological Survey Professional Paper 1707 entitled *The Orphan Tsunami of 1700—Japanese Clues to a Parent Earthquake*, by Brian F. Atwater et al., was prepared in cooperation with the Geological Survey of



A tsunami reaches Japan ten hours after the earthquake occurs in the United States.

Japan, the University of Tokyo, and the University of Washington. It describes how the 1700 tsunami that struck Japan was discovered to have been caused by a North American earthquake.

The paper is available online at <http://pubs.usgs.gov/pp/pp1707/> or as a book from the University of Washington Press for \$24.95.

On Risk and Disaster: Lessons from Katrina

Hurricane Katrina raised fundamental questions about how the nation can, and should, deal with the inevitable problems of economic risk and social responsibility. A recent book published by the University of Pennsylvania Press entitled *On Risk and Disaster: Lessons from Hurricane Katrina*, edited by Ronald J. Daniels, Donald F. Kettl, and Howard Kunreuther, gathers contributions from leading experts to examine lessons that Hurricane Katrina teaches us about improving the assessment, perception, and management of risk from future disasters. The authors address questions of public and private roles in assessing, managing, and dealing with risk in American society, and suggest strategies for moving ahead in rebuilding the Gulf coast. The 304-page book can be ordered from <http://www.upenn.edu/pennpress/book/14002.html> for \$27.50 plus shipping.

Goce Delčev Award Goes to GCI Book

The book *Conservation and Seismic Strengthening of Byzantine Churches in Macedonia*, by P. Gavrilovi, W. S. Ginell, V. Sendova, and L. Šumanov, published by the Getty Conservation Institute (GCI), received Macedonia's 2005 Goce Delčev Award for significant achievement in the field of science. The book summarizes the results of a five-year study to develop and test seismic retrofitting techniques for the repair and strengthening of medieval Byzantine churches. It is hoped that this book will become a valuable tool for conservation specialists charged with protecting the cultural heritage in earthquake-prone regions around the world. It may be purchased for \$45 plus shipping from GCI's online bookstore at www.getty.edu/bookstore/.

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**.

MARCH

6-8. Int'l Conf. on Seismology, Islamabad, Pakistan. Info: www.pakmet.com.pk/WebConference/abstract_guide.htm (1/06)

10-11 The 2nd Asia Conference on Earthquake Engineering (ACEE 2006), Manila, the Philippines. See page 9. (3/06)

30-31. EQ-Induced Ground Motions Sem., Secaucus, NJ. Info: www.asce.org/conted/seminars (12/05)

APRIL

5-7. Midwest Regional Tech. Sem. on Safety Evaluation of Existing Dams, Indianapolis, IN. Info: www.damsafety.org (2/06)

17-22. 100th Anniversary EQ Conf., San Francisco, CA. Info: www.1906eqconf.org. See page 1. (5/04, 5/05, 6/05, 7/05, 8/05, 9/05, 10/05, 12/05, 1/06, 2/06, 3/06)

MAY

14-19. Management of Urban Earthquake Risk in Central Asia and the Caucasus Countries, Istanbul, Turkey. See page 8. (3/06)

15-19. Seismic Hazard Analyses for Critical Facilities Workshop, Miramare, Italy. Info: agenda.ictp.it/smr.php?1747 (1/06)

16-17. Restoration 2006: Community & Economic Recovery after a Disaster, New Orleans, LA. Info: www.restoration2006.org (2/06)

19-21. SECTAM XXIII, Mayagüez, Puerto Rico. Info: civil.uprm.edu/sectam (10/05)

21-24. 5th UCLA Conf. on Public Health and Disasters, Long Beach, CA. Info: www.cphd.ucla.edu/. See page 8. (9/05, 3/06)

31-June 2. 10th Int'l Conf. on Piling & Deep Fdn., Amsterdam, Netherlands. Info: www.pilinganddeep-foundations.com (12/05, 3/06)

JUNE

8-10. Int'l Sym. on Technology & Society, New York, NY. Info: www.ieee.org/ssit (12/05)

11-13. 4th World Conference on Structural Control and Monitoring (4WCSCM), University of California at San Diego. See page 9. (3/06)

15-17. International Workshop on Base-Isolated High-Rise Buildings, Yerevan, Armenia. See page 8. (3/06)

18-21. ECI Geohazards Conf., Lillehammer, Norway. Info: www.engconfintl.org/6ag.html (9/05)

18-21. 16th World Conf. on Disaster Management, Toronto, Canada. Info: www.wcdm.org (11/05)

19-21. Risk Analysis 2006, Malta. Info: www.wessex.ac.uk/conferences/2006/risk06/index.html (12/05)

19-22. NEES Annual Meeting, Washington, D.C. Info: www.nees.org (11/05)

JULY

16-22. Minisymposium on Modeling and Simulation of EQ Phenomena, 7th World Congress on Computational Mechanics, Los Angeles, CA. See page 8. (3/06)

AUGUST

14-17. 5th Int'l Conf. on Behavior of Steel Structs. in Seismic Areas (ST-ESSA), Tokyo, Japan. Info: www.serc.titech.ac.jp/stessa2006 (2/05)

27-Sep. 1. Int'l Disaster Reduction Conference (IDRC), Davos, Switzerland. Info: www.davos2006.ch (2/06)

SEPTEMBER

3-8. 1st European Conf. on EQ Eng. & Seismology, Geneva, Switzerland. Info: www.ecees.org (1/05, 1/06)

10-14. 23rd Ann'l Ass'n of State Dam Safety Officials (ASDSO) Conf., Boston, MA. Info: www.dam-safety.org (2/06)

10-15. Int'l Conf. on Infrastructure Development and the Environment (ICIDEN), Abuja, Nigeria. Info: www.iseg.giees.uncc.edu/abuja2006/callabstracts.cfm (2/06)

18-20. 5th Nat'l Seismic Conf. on Bridges and Highways, San Francisco, CA. Info: mceer.buffalo.edu/meetings/5nsc/default.asp (1/06)

25-Oct. 7. 8th Wkshp. on 3-D Modeling of Seismic Wave Generation, Propagation, and Inversion, Miramare, Italy. Info: agenda.ictp.it/smr.php?1775 (1/06)

OCTOBER

4-6. Deep Fdn. Inst. Annual Conf., Washington, D.C. Info: www.deep-foundations06.org (12/05)

11-13. 7th Int'l Cong. on Advances Civil Eng., Istanbul, Turkey. Info: www.ace2006.yildiz.edu.tr/ (12/05)

12-13. 4th Int'l Conf. on EQ Eng. (4ICEE), Taipei, Taiwan. Info: icee2006.ncrec.org.tw/ (10/05)

2007

FEBRUARY

7-10. EERI Annual Meeting, Los Angeles, CA. See page 6. (3/06)

JUNE

1-3. 10th North American Masonry Conference, University of Missouri at Rolla. See page 8. (3/06)

25-28. 4th Int'l Conf. on EQ Geotech. Eng. (4ICEGE), Thessaloniki, Greece. Info: www.secreteriat@4icege.org (2/06)

27-29. 9th Canadian Conf. on EQ Eng. (9CCEE), Ottawa, Canada. Info: www.9ccee.ca (2/06)

2008

OCTOBER

12-17. 14th World Conf. on EQ Eng., Beijing, China. Info: www.14wcee.org (12/05)

Announcements

New USGS Web Site

Based on public feedback, the USGS earthquake web site has been entirely redesigned to make it easier for Internet users to find the information they need. The "Earthquake Center" section has information on the latest earthquakes, past earthquakes, and earthquake lists and statistics. ShakeMaps, RSS feeds, seismogram displays and other real-time products can also be found here. The "Regional" link covers earthquake information in specific states or areas. The "Learning and Education" section includes FAQs and a new Earthquake Topics portion. The "Earthquakes for Kids" portion has a new look and includes a collection of Learning Links. The "Research and Monitoring" section covers research being conducted by USGS earthquake scientists, as well as information about the Advanced National Seismic System (ANSS) and other seismic networks around the U.S. and the world.

Users of the updated Earthquake Notification Service will be able to define their own multiple regions of interest, enter various notification addresses, set magnitude thresholds for day and night, and opt for "Aftershock Exclusion," among many

other options. The system can be found on the "Earthquake Center" section of the site.

The USGS provides reliable scientific information to describe and understand the earth; minimize loss of life and property from natural disasters; manage water, biological, energy, and mineral resources; and enhance and protect our quality of life. To receive USGS news releases, go to www.usgs.gov/public/list_server.html to subscribe.

USGS 3-D Model of San Francisco Bay

The USGS has released a 3-D computer model of the upper 20 miles of the earth's crust of the San Francisco Bay Area to improve predictions of ground shaking during earthquakes. Construction of this model has been a joint effort of the USGS Earthquake Hazards Program and the USGS National Cooperative Geologic Mapping Program. Previous work has shown that the 3-D structure of the earth has a significant impact on how strongly an earthquake is felt and on the duration of the shaking. More information about this model can be obtained at <http://quake.wr.usgs.gov/research/3dgeologic/>.

The 1906 San Francisco Earthquake at The Bancroft Library

The Bancroft Library at the University of California, Berkeley, has created a wonderful web site at <http://bancroft.berkeley.edu/collections/earthquakeandfire/index2.html> that tells the story of the Great San Francisco earthquake and the disastrous fire that followed.

Users of the site can learn about San Francisco before, during, and after the disaster either by typing in a subject, by using the interactive map, or by wandering through an online exhibit that includes five virtual rooms of artifacts related to the earthquake. The web site also includes a 360-degree panoramic view of the city from the vantage point of the roof of the Fairmont Hotel.



Burning city as seen from Nob Hill.



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