



**EARTHQUAKE ENGINEERING  
RESEARCH INSTITUTE  
NEWSLETTER**

Editor Mark Yashinsky  
Associate Editors Sarah Nathe  
Gerald Brady  
Editorial Assistant Eloise Gilland

Earthquake Engineering  
Research Institute  
499 14th Street, Suite 320  
Oakland, California 94612-1934  
Phone: 510/451-0905  
Fax: 510/451-5411  
E-mail: eeri@eeri.org  
Web site: <http://www.eeri.org>

ISSN 0270-8337  
Reproduction with attribution is permitted.

**EARTHQUAKE ENGINEERING  
RESEARCH INSTITUTE**

**PRESIDENT**  
Thalia Anagnos

**PAST PRESIDENT**  
Craig D. Comartin

**SECRETARY-TREASURER**  
Marshall Lew

**BOARD OF DIRECTORS**  
Thalia Anagnos  
Jonathan D. Bray  
Craig D. Comartin  
Richard K. Eisner  
S. K. Ghosh  
Polat Gülkan  
Laurie A. Johnson  
Marshall Lew  
Andrew S. Whittaker

**EXECUTIVE DIRECTOR**  
Susan K. Tubbesing

**News of the Institute**

**Annual Meeting Kickoff Speaker Blakely to Direct New Orleans Recovery**

On February 8, 2007, the first full day of EERI's Annual Meeting in Los Angeles, urban planner Ed Blakely will be the kickoff speaker, on the topic of "The New Urban Environment: Changing Demographics, Wealth, Real Estate Values, and Recovery Resources." Currently a professor at the Planning Research Centre at the University of Sydney, Australia, he was recently named executive director of recovery for the city of the New Orleans. He will coordinate the rebuilding of the city in the aftermath of Hurricane Katrina.



*Ed Blakely*

In 1989, as a special assistant to Mayor Elihu Harris in Oakland, California, Blakely led the city's recovery after the Loma Prieta earthquake. In 1991, while a professor at the University of Southern California, he helped plan the rebuilding of Los Angeles after the Northridge earthquake. After the September 11, 2001, terrorist attacks, Blakely, who was living in New York at the time, was tapped by a regional planning association to coordinate a downtown response plan.

*continued on page 7*

**Election Results: Ghosh and Whittaker Elected to Board; Bylaws Changes Approved**

S. K. Ghosh of S. K. Ghosh Associates, Illinois, and Andrew Whittaker of SUNY Buffalo were elected the newest members of the Board of Directors in the 2007 election. Many thanks go to the members of this year's Tellers Committee: Mary Goodson of CH2M Hill, Inc., Turel Gur of MMI Engineering, and Finn T. Halbo (retired).

Ghosh and Whittaker will be formally welcomed to their new posts at the Board Meeting in Los Angeles on February 7. They will each serve three years as directors, replacing John Aho and Farzad Naeim, whose terms have expired.



*S. K. Ghosh*



*Andrew S. Whittaker*

EERI extends thanks to Aho and Naeim for their years of outstanding service and dedication to the Institute.

Another significant transition will be the installation of Thalia Anagnos of San Jose State University as EERI President.

*continued on page 7*

## News of the Institute

### Honorary Members: Holmes and Preece

EERI Board of Directors voted to name William T. Holmes and F. Robert Preece as honorary members of the Institute. Honorary membership is awarded to recognize members who have made sustained and outstanding contributions either in the field of earthquake engineering or to EERI in the pursuit of its objectives.

**Bill Holmes** is an internationally recognized expert in the field of seismic design. He earned B.S. and M.S. degrees from Stanford University. In 1965, Bill joined Rutherford & Chekene, where he is now a vice president. Bill has been responsible for the structural design of many buildings, including the 600-bed VA hospital in Loma Linda, California, and the seismic retrofit of many others, including several buildings at Stanford University and the Shakespearean Pavilion in Ashland, Oregon. He has concentrated his efforts in recent years on the development of seismic strengthening techniques for existing buildings and structural design standards for hospital facilities. In 1992, he co-authored the "Milestone 4 Report," which formed the basis for the development of California's SB 1953



William T. Holmes

legislation that requires improvements in seismic preparedness for all of the state's hospitals by the year 2008. He served on the California Hospital Building Safety Board for ten years.

Bill has served on numerous national and international committees devoted to improving seismic safety and building codes, beginning with his service on the SEAOC Seismology Committee in the mid-1970s. He played a key role in the conceptual development of the NEHRP *Guidelines for the Seismic Rehabilitation of Buildings* (FEMA 273/356). He also served as chair of the Provisions Update Committee, responsible for updating the NEHRP *Recommended Provisions for Seismic Regulations for New Buildings*, 1997 and 2000 editions. For these accomplishments, he was given the Building Seismic Safety Council's Exceptional Service Award in 2001.

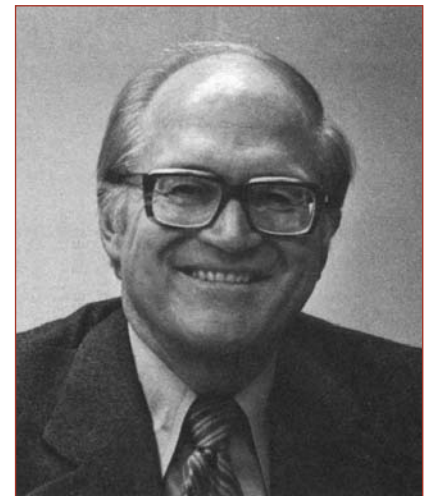
He has been active in many organizations in the earthquake engineering community, having served on the boards of EERI, SEAOC, ATC, and CUREE. For decades he has been a frequent speaker at EERI meetings, conferences, and workshops. He is currently the Monograph Committee chair, and was co-technical editor, along with Robert Reitherman, of the April 2006 special issue of *Earthquake Spectra*, subtitled *The 1906 San Francisco Earthquake: An Earthquake Engineering Retrospective 100 Years Later*.

One of the high points of Bill's career occurred in 1998, when he served as the ebullient master of ceremonies for EERI's 50<sup>th</sup> anniversary banquet cabaret act, "Your Structural Hit Parade," playing the ubiquitous but hard-to-nail-down Ruffe Diaframme. He was brought back by popular demand last year at EERI's banquet during the 100<sup>th</sup> Anniversary Earthquake Conference, when the act was updated to "That Was Then; This Is Now!" thereby ensuring his enshrinement as an EERI Honorary Member.

Bill is a Fellow of both SEAONC and SEAOC. He was awarded the 1999 Alfred E. Alquist Award for Achievement in Earthquake Safety and the 2005 H. J. Brunnier Lifetime Achievement Award for Excellence in Structural Engineering.

**Bob Preece** earned B.S. and M.S. degrees in civil engineering from the University of Nevada and Stanford University, respectively. He went on his first earthquake reconnaissance investigation in 1952 after the Kern County earthquake, while working as the northern California district engineer for Bethlehem Steel Company. Over a 37-year period, he went on nine earthquake investigations, working alongside other giants of the field such as EERI past presidents Henry Degenkolb and Frank McClure.

After working 18 years for Testing Engineers, Inc., where he became executive vice president, he founded his own firm of Preece/Goudie & Associates in 1978. He was responsible for all company operations, including structural design, seismic analysis, special studies, administration, and material and forensic investigations. Among his major projects were San Francisco's Transamerica Pyramid, the Hyatt Regency, and the Embarcadero Center. The firm became Preece, Goudie, and Issa in 1997.



F. Robert Preece

The public has benefited from Bob's building materials expertise, particularly in steel and concrete. He has devoted himself to increasing seismic safety through his participation in building code development and in professional associations. He has written and published extensively on the design and performance of materials. He served terms as vice president of EERI and as president of the Structural Engineers Association of California (SEAOC), the Consulting Engineers Association, and the Applied Technology Council.

During the 1980s he served on the SEAOC Seismology Committee, which, since 1959, has continually updated *Recommended Lateral Force Requirements and Commentary*, also known as the SEAOC Blue Book, whose recommendations are the basis of most seismic code provisions in the United States and around the world.

In the 1990s, Bob was EERI's liaison to the Building Seismic Safety Council (BSSC) Board of Direction for six years and served on the BSSC Seismic Rehabilitation Project Committee during that decade. He was a member of the Technical Advisory Panel for Materials and Fracture of the SAC Phase II Project that resulted in the publication of FEMA-350, *Recommended Seismic Design Criteria for New Steel Moment-Frame Buildings*.

Bob is still active in the earthquake field as a consultant and as a member of the Caltrans Seismic Advisory Board. In 2003, the board published a report entitled *The Race to Seismic Safety: Protecting California's Transportation System*, calling on the state to continuously investigate and improve the seismic safety of bridges. Bob suggests that "the report should be studied by all structural and bridge engineers as well as by administrators of public works." It is available online at <http://www.dot.ca.gov/RaceToSeismicSafetyfinal.pdf>.

## News of the Institute

### Endowment Fund Donors

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

#### \$5,000

David A. Friedman & Paulette J. Meyers

#### \$2,000-\$3,000

I. M. Idriss  
Peter I. Yanev

#### \$1,000

Clarence R. Allen  
Forrest T. Braun  
John M. Coil  
John A. Martin, Sr.  
Thomas D. O'Rourke  
Conrad Paulson

#### \$500

Cynthia L. Perry  
James E. Russell

#### \$200-\$499

Robert E. Bachman  
Bechtel Infrastructure Corp.

Vitelmo V. Bertero

Bruce R. Clark

Forell/Elsesser

Engineers, Inc.

Ruth V. Gordon

Paul C. Jennings

Kenneth A. Luttrell

Faiz I. Makdisi

Joseph P. Nicoletti

Douglas J. Nyman

William J. Petak

Shamsher Prakash

Roland L. Sharpe

Susan K. Tubbesing

LeVal Lund

Mark R. Pierepiekarz

Charles Scawthorn

Anthony F. Shakal

Craig W. Tillman

Frank R. Vollert

Akira Wada

T. Leslie Youd

#### Other Amounts

Edmund Booth

David R. Brunson

Teresa Elliott

Richard C. Hepworth

Larry C. Hultengren

Michael E. Kreger

James LaFave

Neven Matasovic

Irving J. Oppenheim

Michael J. O'Rourke

Stan Zagajeski

## Request for Qualifications

### CSMIP Data Project

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

To receive a copy of the request for qualifications, e-mail to Judith Are-

balos at [Judith.Arebalos@conservation.ca.gov](mailto:Judith.Arebalos@conservation.ca.gov) (phone 916/324-8771, fax 916/323-7778), The deadline is February 20, 2007.

## News of the Profession

### Time History Software Available

EERI member Vinay K. Gupta has written a program to generate synthetic accelerograms. This program, called WAVGEN, works via modification of a recorded time history. Engineers who need to analyze their structures with a spectrum-compatible ground motion may find this program useful. The program can be downloaded from <http://home.iitk.ac.in/~vinaykg/wavgen.htm>. (EERI has not checked its accuracy.)

## Obituaries

### John B. (Jack) Scalzi, 1915-2006

John B. (Jack) Scalzi, a retired program officer with the National Science Foundation, passed away after a short illness on December 20, 2006. An authoritative and charismatic public speaker, he provided international leadership for the U.S. earthquake program and had a huge influence on the earthquake research community.

While in the Earthquake Engineering Section of NSF, he perceived the need for research on structural masonry, and initiated such work in the 1970s. He stimulated research on masonry through workshops and through funding numerous research projects.

In addition, because he recognized the deterioration of the nation's infrastructure in the late 1970s, he encouraged the development of evaluation and retrofit technologies. He also stimulated research in nondestructive evaluation (NDE) of masonry in the 1980s.

Recognizing his leadership in innovative and creative masonry research, The Masonry Society (of America) created the "John B. Scalzi Research Award," now a prestigious international award.

Scalzi was born in Milford, Massachusetts, and earned B.S. and Ph.D. degrees in civil engineering from Worcester Polytechnic Institute and the Massachusetts Institute of Technology, respectively. He published many papers on the design of structures and results of research projects on steel and concrete. He co-authored four books: *Design of Welded Connections, Analysis and Design of Cable-Supported Buildings, Design of Steel Structures,* and *Analysis and Design of Cable-Supported Bridges.*

### Robert E. Wallace, 1916-2007

Robert E. Wallace, a geologist whose decades of research along the San Andreas fault made him one of the world's leading earthquake experts, died of kidney failure at his Reno home on January 8 at the age of 90. A veteran of 53 years of service with the U.S. Geological Survey, Wallace was honored numerous times for his contributions to earth science, and won the Distinguished Service award from the Department of the Interior, the federal agency's highest honor, in 1978.

Wallace was the first to understand the significance of the hundreds of miles of surface displacement that mark the trace of the San Andreas fault. He was known among his colleagues for his depth of scientific knowledge, his research, his leadership, and his political savvy. His career leaves a legacy for both science and public policy. He created the USGS Earthquake Hazards Program and was among the first to understand that the behavior and damage potential of earthquakes required multidisciplinary collaboration. He played a major role in the implementation of the Earthquake Hazards Reduction Act of 1977. He studied earthquake phenomena and seismic hazards in Alaska, China, Japan, Turkey, Russia, the Philippines, and the Middle East. He became known as "the father of paleoseismology," defined as the history of earthquake faulting as inferred from geologic evidence.

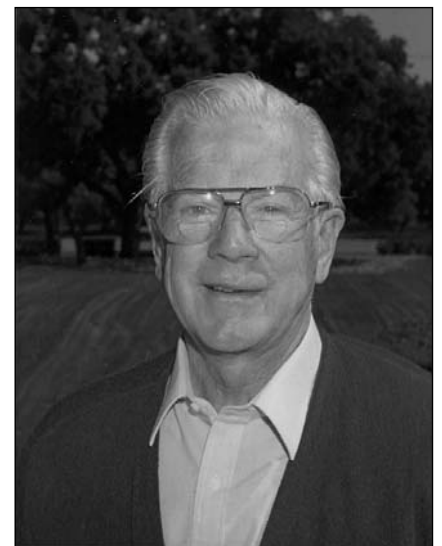
Wallace became an active EERI member in 1969. He was made an honorary member in 1998 and was the subject of a 1999 oral history published by EERI. It can be accessed online at [http://www.eeri.org/cds\\_publications/oral\\_histories/0-943198-99-2\\_Wallace.pdf](http://www.eeri.org/cds_publications/oral_histories/0-943198-99-2_Wallace.pdf).

Wallace was the editor and principal author of the 1990 classic book *The San Andreas Fault System, Califor-*

*nia*, a lavishly illustrated exploration of California's earthquake country. His work in California and his pioneering studies of seismic faulting in the Basin and Range province of Nevada earned him honors, awards, and fellowships from many organizations. Two natural features bear his name—Wallace Creek in the Carrizo Plain National Monument (San Luis Obispo County) and Wallace Ridge in southwest Alaska. In 2000, the USGS dedicated the Robert E. Wallace Earthquake Center in his honor at Menlo Park.

Wallace earned his bachelor's degree in geology from Northwestern University and his doctorate from Caltech. At the USGS, he served as regional geologist for the western region and then as the first chief scientist of the Office of Earthquake Studies. He retired officially in 1987 but continued active research there until 1998, when he moved to Reno and became an adjunct professor in the University of Nevada's Seismological Laboratory. Wallace is survived by his son, Alan, and his sister, Harriett. His wife of 60 years, Trudy, died in 2005.

*This article is partially excerpted from "Robert Wallace—quake expert" by David Perlman, San Francisco Chronicle, Sunday, January 14, 2007.*



Robert E. Wallace

## News of the Profession

### Tsunami Bill Signed

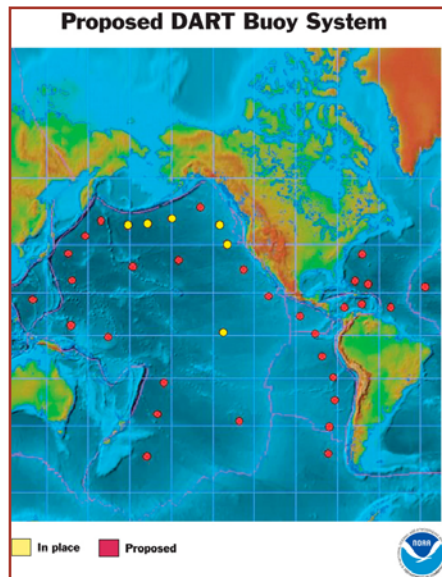
On December 20, 2006, close to the second anniversary of the great Sumatra earthquake and Indian Ocean tsunami, President Bush signed into law H.R. 1674, the "Tsunami Warning and Education Act," which will strengthen the nation's ability to forecast tsunamis and provide warning information to those in harm's way. It will also provide dedicated funding and a greater emphasis on community outreach and education programs, a key recommendation of expert witnesses who testified at a January 26, 2005 Science Committee hearing. At that hearing, witnesses provided feedback on a proposal by the Bush Administration to expand and upgrade the nation's network of tsunami detection buoys. The witnesses supported this plan, but urged a greater focus on educating the public on how to respond in the event that a tsunami warning is issued.

The act authorizes the Department of Commerce's National Oceanic and Atmospheric Administration (NOAA) to (1) operate a program to provide tsunami detection, forecasts, and warnings, (2) conduct a tsunami hazard mitigation program, and (3) maintain a tsunami research program. The legislation, approved by Congress earlier in the month, is intended to bolster a tsunami detection and warning system in the Pacific Ocean, as well as expand it to any area in the Atlantic and Caribbean considered at risk by federal officials.

The law authorizes \$135 million over five years to increase the number of deep-ocean buoys used to detect potentially devastating waves, requires certification of detection and monitoring equipment, codifies the existing federal-state coordinating committee (the National Tsunami Hazard Mitigation Program) for tsunami detection and

preparedness, directs the National Academy of Sciences to review NOAA's tsunami programs and provide recommendations to improve them within two years of enactment, requires a Government Accountability Office report due in 2010 on the status and performance of NOAA's tsunami programs, and increases oversight of contractor performance on NOAA's tsunami programs.

The 680-mile-long Cascadia subduction zone lies off the coasts of Washington and Oregon and is similar in size and geologic character to the fault that caused the 2004 Indian Ocean tsunami. The last major Cascadia quake occurred 300 years ago and hit the west coast with an estimated 30-foot high ocean surge. The U.S. Geological Survey estimates a 10 percent to 14 percent chance of another major Cascadia quake within the next 50 years. A tsunami generated in the subduction zone or in Washington's Puget Sound would allow for a warning of less than 20 minutes.



*The Deep-Ocean Assessment and Reporting of Tsunami (DART) buoy system will have a final array of approximately 24 buoys in the Pacific Ocean, Atlantic Ocean, and Caribbean Sea by 2012 (map courtesy of NOAA).*

## Publications

### Tsunami Information Sources

Robert L. Wiegel, professor emeritus in the Department of Civil and Environmental Engineering at the University of California, Berkeley, has compiled a three-part series of lists entitled *Tsunami Information Sources* that is available online at <http://www.lib.berkeley.edu/WRCA/tsunamis.html#wiegel>. This site is part of UC's Water Resources Center Archives, a unique library that collects contemporary and historic materials on all aspects of water resources.

### EERI Tsunami Report

A printed version of the special issue of *Earthquake Spectra* dated June 2006, subtitled *The Great Sumatra Earthquakes and Indian Ocean Tsunamis of 26 December 2004 and 28 March 2005 Reconnaissance Report*, is now available from EERI to members only for \$60 plus shipping (plus tax to California residents). (Nonmembers must order it from UNESCO.) It was edited by Wilfred D. Iwan and jointly published with UNESCO. The 900+ page issue contains 44 full reports by members of several reconnaissance teams of scientists and engineers from many of the affected countries as well as the United States, Canada, New Zealand, and Japan. To place an order online, visit [http://www.eeri.org/cds\\_publications/catalog/](http://www.eeri.org/cds_publications/catalog/). This report is listed under "New Products."

In 2006, as a benefit of membership, EERI members received the 108-page summary report on the above events, also edited by Iwan, written by the editorial board for the special issue. It included a DVD containing the contents of the above-described full reconnaissance report, with most images in color.

## Publications

### *The Indian Ocean Tsunami*

A new book entitled *The Indian Ocean Tsunami* explores the development of methodologies for predicting and preparing for tsunamis and provides a basis for a cost-effective warning and preparedness strategy. It addresses the fundamentals of tsunami science, identifying potential areas where tsunamis might be generated, predicting their anticipated course, and considering how the geophysical, ecological, and socio-economic location of a community may determine the severity of tsunami damage.

The contributors suggest how precursors can be used to enhance the advance warning time, how tsunamis can be detected at the time of the generating rupture's occurrence, and the manner in which warnings should be communicated to the populations likely to be affected. Some useful related technologies are identified as pivotal aids in allowing coastal communities to be better prepared.

This book is edited by oceanographer Tad S. Murty, former president of the Tsunami Society and an adjunct professor at the University of Ottawa; U. Aswathanarayana, director of the Mahadevan International Centre for Water Resources Management in Hyderabad, India; and N. Nirupama of York University's Emergency Management Program in Toronto, Canada.

The book is an outcome of a session organized by the Departments of Science and Technology, and Ocean Development, of the government of India, under the aegis of the Indian National Science Academy.

This full-color 526-page volume can be ordered online from [www.crc-press.com](http://www.crc-press.com) for \$187.00.

### Critical Excitation Methods Book

EERI member Izuru Takewaki of Kyoto University's Department of Urban and Environmental Engineering, Japan, has recently completed the hardcover book *Critical Excitation Methods in Earthquake Engineering*, published by Elsevier. This book introduces a new probabilistic and energy-based critical excitation approach to overcome several problems in the scientific and rational modeling of ground motion. The author hopes that the book will help the development of new seismic resistant design methods of buildings for unpredicted or unpredictable ground motions. The 296-page book can be ordered for \$133 online at <http://www.elsevier.com/>.

---

## Subscribing Member News

### New Products by Kinometrics

EERI Subscribing Member Kinometrics, Inc., of Pasadena, California, introduced Slate and Marmot products at the American Geophysical Union meeting in San Francisco in December. Slate is the next generation of high-performance, low-power field computers for portable and real-time monitoring applications, with features suitable for harsh field operations. Its design uses super-capacitor technology, instead of internal batteries, with a power back-up system, ensuring that the user's application continues to run, even when problems develop in the external power systems.

The Marmot Field Processor is also designed for field work in extreme-environment conditions. The Marmot embedded version of Antelope environmental-monitoring software provides reliability for long-term, unattended remote data acquisition, processing, buffering, and distribution to downstream data processing

centers. For more information, visit [http://www.kinometrics.com/news\\_content.asp?newsid=160](http://www.kinometrics.com/news_content.asp?newsid=160).

### RMS Position

The Newark, California, office of EERI Subscribing Member Risk Management Solutions is seeking a product manager in earthquake modeling to join the management team that will be involved with models for North and South America. This role will involve regular travel and communication within RMS's U.S. and global client base. Essential job functions are conducting market research, ranking new models and upgrades, defining market requirements, and managing client communications. Required: experience in a product management or consulting field; an advanced degree in an earth science discipline, engineering, or related field; strong presentation skills; proficiency in project management, data analysis and data manipulation software tools (Excel, Access, VBA, and SQL), and a working knowledge of GIS software applications. Spanish language skills are desirable. For application information, visit [www.rms.com](http://www.rms.com) (click "about RMS" then "Career Opportunities").

---

## Call for Abstracts

### 6ICCGE's New Site

The abstract submission deadline is March 15, 2007, for the 6th International Conference on Case Histories in Geotechnical Engineering, to be held August 11-16, 2008, in Arlington, Virginia. The conference has a new web site home address: <http://www.6icchge2008.org>. It has information about the call, state-of-the-art speakers, other oral session presentations, speakers at the symposium in honor of James K. Mitchell, and the short course on Soil Dynamics in Engineering Practice that will be offered before the conference.

## Election Results

*continued from page 1*

Outgoing President Craig D. Comartin of CDComartin, Inc., will continue to serve on the Board for one year as past president.

The voters also approved several amendments to the Institute's By-laws; the most important are that EERI will have electronic balloting for all future Board of Directors elections; all students, not just those with full-time status, can become student members; retired members can vote in elections; and regional chapter members are not required to be members of EERI, but rather must be eligible for membership.

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

## Blakely

*continued from page 1*

Blakely hopes to assemble a team of 12 to 15 people and start working immediately.

The city has appropriated nearly \$500,000 in the coming year for the project. Blakely said his office will develop a master plan for the city, which currently is home to about 200,000 residents. His work will focus on rebuilding the city's core.

He said a bill before Congress would provide funding to modernize the levee system in the Gulf Coast region to avert another such disaster. "We are very far behind the Japanese and the Dutch in putting in the types of flood-control systems that we need down here," he said.

Blakely ran for election in the 1998 Oakland mayor's race and finished a distant second to Jerry Brown. One of his ideas was a plan for an efficient monorail to transport cargo and freight from the Port of Oakland to rail and truck connections.

*Some of this article was excerpted from Chip Johnson's column in the San Francisco Chronicle of December 5, 2006: "Oakland urban planner who sought leadership will head New Orleans recovery team."*

## Calls for Abstracts

### Conference on Sustainable Urban Areas

The European Network for Housing Research (ENHR) and the Delft Centre for Sustainable Urban Areas at the Delft University of Technology invite proposals for papers to be presented at the ENHR Conference on Sustainable Urban Areas in Rotterdam, The Netherlands, June 25-28, 2007. For details on ENHR working groups, conference themes, workshop topics, online registration, abstract submission, and other information, visit <http://www.enhr-2007rotterdam.nl>. The deadline for submission of abstracts is March 1, 2007.

### SEAOC 2007 Convention

The Structural Engineers Association of California (SEAOC) has issued a call for papers for its 2007 Annual Convention, to be held September 26-29 in the Lake Tahoe area of northern California. The theme is "Emerging Trends in Structural Engineering." For more information about topics and abstract submission procedures, visit <http://www.seaocc.org/2007convention>. The deadline for receipt of abstracts is March 16, 2007.

### 8PCEE

A call for papers has been issued for the 8th Pacific Conference on Earthquake Engineering to be held in Singapore December 5-7, 2007, organized by the New Zealand Society for Earthquake Engineering and Nanyang Technical University. The deadline for abstract submission is February 1, 2007. The conference brings together professionals and researchers from Pacific Rim countries and beyond.

For submission details and other information, visit <http://www.ntu.edu.sg/cee/8PCEE/>.



*(l-r) Outgoing board member Farzad Naeim, soon-to-be past president Craig D. Comartin, and outgoing board member John Aho (photo: Marshall Lew).*

## News of the Profession

# Seismic Upgrades at Universities Funded in Oregon

With its oldest campus founded in 1856, it's not surprising that many buildings in Oregon's universities were built to seismic standards far short of today's building codes.

Since 2002, Robert Simonton, director of Capital Construction, Planning and Budgeting of the Oregon University System (OUS), and Yumei Wang, Geohazards Section

supervisor for the Oregon Department of Geology and Mineral Industries (DOGAMI), have made significant strides towards getting prepared for the next Cascadia megaquake. By 2003, all major buildings had rapid visual screening (RVS) scores using FEMA 154 methods.

By early 2004, three new seismic upgrade projects were funded by FEMA predisaster mitigation grant funds as "demonstration" projects to increase awareness. The projects successfully caught the attention of top state leaders, and helped to initiate an effort to obtain state funds for seismic upgrades of educational

facilities. Project briefs are on [www.oregongeology.com/sub/projects/rvs/default.htm](http://www.oregongeology.com/sub/projects/rvs/default.htm).

In late 2004, seismic upgrade needs based on RVS scores were proposed into the OUS state budget request along with deferred maintenance and energy efficiency scores. In the 2005-07 legislature, \$8 million was appropriated for seismic upgrades for the seven universities.

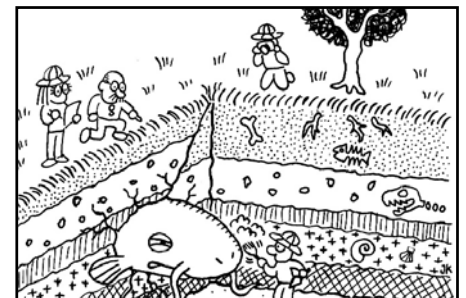
For the past two years, DOGAMI and Goettel & Associates, Inc., have been codeveloping an enhanced RVS (E-RVS) method. This new method helps to rank seismic risk and provides clear seismic deficiency scores in the OUS state budget requests. The E-RVS method improves the 2002 FEMA RVS method with respect to seismic hazards, soil effects, and clarity of the final score, so that decision makers can easily understand the results.

In November 2006, Governor Ted Kulongoski recommended \$26 million in his budget for seismic upgrades of six high-risk university buildings. These buildings were integrated in the OUS 2007-09 budget request, with a needs matrix showing E-RVS scores alongside deferred maintenance and energy efficiency scores.

Starting in 2007, the six nonductile buildings will be mitigated, embracing today's seismic technology and practices on sustainability.



Construction of cross bracing on the first and second stories along the west elevation. (A) Installed cross bracing. (B) Cross bracing installation in progress. (C) Close-up of welded plate at floor level. (D) Close-up of weld used to connect new cross bracing to steel plates.



A namazu discovered underground.



## Publications

### *Journal of Architectural Heritage*

Taylor & Francis publishers have announced a new quarterly journal entitled *Journal of Architectural Heritage: Conservation, Analysis, and Restoration*. It will provide a multidisciplinary scientific overview of existing resources and modern technologies useful for the study and repair of historical buildings and other structures.

The journal will include information on the history of construction and architectural technology; general criteria and methodology for intervention; historical and traditional building techniques; survey techniques; nondestructive testing, inspection, and monitoring; experimental results and laboratory testing; analytical and numerical approaches; innovative and traditional materials for repair and restoration; innovative strategies and techniques for repair and restoration; general remedial measures; repair and strengthening of structures; seismic behavior and retrofitting; and detailed and state-of-the-art case studies.

The journal can be viewed online at <http://www.tandf.co.uk/journals/titles/15583058.asp>.

## 1ECEES Downloads

A number of free downloads are available from the web page [www.ecees.org](http://www.ecees.org) of the First European Conference on Earthquake Engineering and Seismology (1ECEES) that took place in Geneva, Switzerland, in September 2006. The main documents are (1) 2000 abstracts at [http://www.ecees.org/abstracts\\_book.pdf](http://www.ecees.org/abstracts_book.pdf); (2) PowerPoint presentations of the ten keynote lectures, videos of presentations and pdf files of keynote papers at <http://www.ecees.org/index2.html> (press "keynotes" in the menu); and (3) other documents, including the order form for the CD with the proceedings.

## Announcements

### Workshops in Trieste, Italy

#### *Workshop on the Physics of Tsunami Hazard Assessment Methods and Disaster Risk Management*

The Abdus Salam International Centre for Theoretical Physics (ICTP), will host a Workshop on the Physics of Tsunami Hazard Assessment Methods and Disaster Risk Management in Trieste, Italy, May 14-18, 2007. The workshop will emphasize the synergies between the evaluation of flood hazards in relation to the protection of nuclear installations and the evaluation of vulnerabilities and risks to other critical infrastructure and facilities.

The approach used in the 2003 safety guide, published by the International Atomic Energy Agency, entitled *Flood Hazards for Nuclear Power Plants on Coastal and River Sites*, will be discussed in order to reach an understanding of how the Japanese Society of Civil Engineering methodology was applied in case studies currently underway in India and Pakistan. The safety guide will be subjected in the near future to a revision process.

For an application to participate, visit <http://agenda.ictp.it/smr.php?1839>. The application deadline is January 31, 2007.

#### *Nonlinear Dynamics and Earthquake Prediction Workshop*

The ICTP, in collaboration with the Department of Earth Sciences of the University of Trieste, will host the Ninth Workshop on Nonlinear Dynamics and Earthquake Prediction, in Trieste, Italy, October 1-13, 2007.

The workshop is dedicated to training in advanced methodologies of R&D in fundamental studies of the evolution and dynamics of the

Earth's lithosphere, and in applied problems, such as earthquake prediction and estimation and mitigation of possible seismic hazards. The format includes lectures and practical exercises. For an application to participate, visit <http://agenda.ictp.it/smr.php?1864>. The application deadline is May 28, 2007.

Scientists and students from all countries that are members of the UN, UNESCO, or IAEA can attend these workshops, which will be conducted in English. Although the main purpose of the ICTP is to help research workers from developing countries, a limited number of students and post-doctoral scientists from developed countries are also welcome to attend.

Required: a degree in physics, mathematics, geophysics (theoretical or computational), computer science, or a similar discipline.

There is no registration fee for either workshop. A limited number of travel grants are available for researchers from developing countries under age 45.

---

## IMAC-XXV

Celebrating 25 years of IMACs (International Modal Analysis conferences), the Society for Experimental Mechanics (SEM) will host IMAC-XXV: A Conference and Exposition on Structural Dynamics, in Orlando, Florida, February 19-22, 2007. Six pre-conference courses will be given February 15-18.

To view the advance program and for more information, visit [www.sem.org](http://www.sem.org).



## News of the Profession

### Khan Lecture Series

EERI member Dan M. Frangopol, the first holder of the Fazlur Rahman Khan Endowed Chair in Structural Engineering and Architecture at Lehigh University in Bethlehem, Pennsylvania, is organizing the Khan Lecture Series honoring Khan's legacy of excellence in structural engineering and architecture.

Khan brought forth a series of progressive ideas for efficient high-rise construction in the 1960s and '70s that were validated in his own work, notably his designs for Chicago's 100-story John Hancock Center and 110-story Sears Tower (the tallest building in the United States since its completion in 1974). Khan epitomized both structural engineering achievement and creative collaborative effort between architect and engineer.

The first three lectures are as follows, all beginning at 4:10 p.m. in the Sinclair Lab Auditorium at Lehigh University:

1. February 9, 2007: Mark Sarkisian, partner, Skidmore, Owings & Merrill, San Francisco, California, on "Khan's Vision."
2. March 16, 2007: Man-Chung Tang, chairman of the board, T. Y. Lin International, San Francisco, California, on "Why? Why Not? What If?"
3. April 20, 2007: EERI member W. Gene Corley, senior vice president, CTL Group, Skokie, Illinois, on "Learning from the Attacks on an American Icon—the World Trade Center Building Performance Study."

For additional information about the series, visit <http://www.lehigh.edu/frkseries>.



## Distance Education by NICEE

A number of EERI members have participated in creating CD-ROMs of audio-video lectures for the distance education program offered by the National Information Center of Earthquake Engineering at IIT Kanpur, India.

They include the following:

- "Earthquake-Resistant Design" by Sudhir K. Jain (37 minutes)
- "Seismic Retrofit Techniques for Masonry Buildings—An Overview" (62 minutes)
- "Buildings on Rollers—Use of Passive Control Devices for Seismic Protection of Structures" and "Seismic Design and Retrofit of Nonstructural Building Components" by Svetlana N. Brzev (105 minutes)
- "The History of Earthquake Engineering from an International Perspective" by Robert Reitherman (66 minutes)
- "Seismic Hazard and Its Quantification," a series of three lectures (each approximately 60 minutes) by the late Bruce A. Bolt
- "Earthquake-Resistant Design of Steel Buildings in the United States" by Janise E. Rodgers (33 minutes)
- "Seismic Design of Liquid Storage Tanks" by Jain and Durgesh C. Rai (an e-course covering eight lectures)
- "Architectural Teaching Resource Material on Earthquake Design Concepts for Teachers of Architecture Colleges" by C. V. R. Murty and Andrew W. Charleson (an e-course covering 27 lectures).

Prices range from US\$7 to \$27 plus shipping. For more information and to place an order, visit <http://www.nicee.org/Products.php>.

## 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**.

### FEBRUARY

3. EERI New Madrid Chapter Student Poster Competition, St. Louis, MO. Info: <http://sema.dps.mo.gov/EQ07AW.pdf> (10/06)

7-10. EERI Annual Meeting, Los Angeles, CA. Info: [www.eeri.org](http://www.eeri.org). **See page 1.** (3/06, 9/06, 10/06, 11/06, 12/06, 1/07, 2/07)

**9. Khan Lecture Series, Bethlehem, PA. See this page. (2/07)**

19-21. 3rd Annual Geographic Information Systems Conf., Kuwait. Info: [www.gulfgis.com](http://www.gulfgis.com) (8/06)

**19-22. IMAC-XXV (International Modal Analysis Conference), Orlando, Florida. See page 9. (2/07)**

22. 1st SMIS-EERI Workshop on Safe Hospitals under Natural Hazards, Ixtapan de la Sal, Estado de Mexico. Info: [www.eeri.org](http://www.eeri.org) (1/07)

### MARCH

12. EERI Seminar for Structural and Geotechnical Engineers on Practical Applications to Shallow Foundations, Seattle, WA. Info: [www.eeri.org](http://www.eeri.org) (12/06)

14. EERI Seminar for Structural and Geotechnical Engineers on Practical Applications to Shallow Foundations, Los Angeles, CA. Info: [www.eeri.org](http://www.eeri.org) (12/06)

**16. Khan Lecture Series, Bethlehem, PA. See this page. (2/07)**

21. EERI Seminar for Structural and Geotechnical Engineers on Practical Applications to Shallow Foundations, San Francisco, CA. Info: [www.eeri.org](http://www.eeri.org) (12/06)

25-28. Ports 2007, San Diego, CA. Info: [www.portsconference.org](http://www.portsconference.org) (6/06)

30-April 1. New Zealand Society for Earthquake Engineering Annual Conf., Palmerston North, NZ. Info: <http://www.nzsee.org.nz/EVENTS/tcon07.shtml> (11/06)

#### APRIL

15-20. 3rd General Assembly of European Geosciences Union, Vienna, Austria. Info: [www.copernicus.org/EGU/meeting\\_overview.html](http://www.copernicus.org/EGU/meeting_overview.html) (1/07)

**20. Khan Lecture Series, Bethlehem, PA. See page 10. (2/07)**

26-27. International Symposium on Seismic Risk Reduction, Bucharest, Romania. Info: <http://cnrrs.utcb.ro/issrr2007/issrr2007.html> (12/06)

30-May 2. 2nd International Modal Analysis Conf., Copenhagen, Denmark. Info: [www.iomac.dk](http://www.iomac.dk) (10/06)

30-May 4. Short Course on Grouting Fundamentals and Current Practice, Golden, CO. Info: [www.mines.edu/outreach/cont\\_ed/grouting/grouting1.html](http://www.mines.edu/outreach/cont_ed/grouting/grouting1.html) (1/07)

#### MAY

13-20. Coastal Sediments 07, New Orleans, LA. Info: [www.asce.org/conferences/cs07/abstract.cfm](http://www.asce.org/conferences/cs07/abstract.cfm) (5/06)

14-16. SEE5 on Earthquake Risk Reduction in Developing Countries, Tehran, Iran. Info: [www.iiees.ac.ir/SEE5](http://www.iiees.ac.ir/SEE5) (7/06)

**14-17. Workshop on the Physics of Tsunami Hazard Assessment Methods and Disaster Risk Management. Trieste, Italy. See page 9. (2/07)**

28-31. 10th World Conf. on Seismic Isolation, Energy Dissipation, & Active Vibration Control of Structures, Istanbul, Turkey. Info: [www.did-tasi.org/seminar/default.asp](http://www.did-tasi.org/seminar/default.asp) (12/06)

#### JUNE

1-3. 10th North American Masonry Conf., University of Missouri at Rolla. Info: <http://www.masonrysociety.org/NAMC/index.html> (3/06)

4-6. 24th International Bridge Conf., Pittsburgh, PA. Info: [www.eswp.com/bridge](http://www.eswp.com/bridge) (11/06)

13-15. COMPADYN 2007 Conf., Rethymno, Crete, Greece. Info: <http://www.eng.ucy.ac.cy/comp-dyn2007> (8/06)

19-21. NEES Annual Meeting, Snowbird, UT. Info: [www.nees.org/About\\_NEES/Announcements/announcement.php?news\\_id=41](http://www.nees.org/About_NEES/Announcements/announcement.php?news_id=41) (9/06, 1/07)

**25-27. ENHR Conference on Sustainable Urban Areas, Rotterdam, The Netherlands. See page 7. (2/07)**

25-28. 4th International Conference on Earthquake Geotechnical Engineering (4ICEGE), Thessaloniki, Greece. Info: [www.4icege.org](http://www.4icege.org) (2/06)

26-29. 9th Canadian Conference on Earthquake Engineering (9CCEE), Ottawa, Canada. Info: [www.9ccee.ca](http://www.9ccee.ca) (2/06)

#### JULY

8-11. 17th World Conference on Disaster Management, Toronto, ON, Canada. Info: <http://www.wcdm.org/> (11/06)

#### AUGUST

20-22. 1st International Workshop on Performance, Protection, and Strengthening of Structures under Extreme Loading (Protect 2007), Whistler, BC, Canada. Info: [www.civil.ubc.ca/protect2007/](http://www.civil.ubc.ca/protect2007/) (12/06)

#### SEPTEMBER

3-7. International Conference on Engineering Education (ICEE-2007), Coimbra, Portugal. Info: [www.ineer.org/Events/ICEE2007Info/Welcome.htm](http://www.ineer.org/Events/ICEE2007Info/Welcome.htm) (1/07)

**26-29. SEAOC 2007 Convention, Lake Tahoe, California. See page 7. (2/07)**

#### OCTOBER

**1-13. Ninth Workshop on Non-linear Dynamics and Earthquake Prediction, Trieste, Italy. See page**

#### 9. (2/07)

8-11. Modern Trends in Structural Engineering for Seismic Design, Ariel, Israel. Info: [ribakov@yosh.ac.il](mailto:ribakov@yosh.ac.il) (8/06)

11-13. Deep Foundations Institute 2007 Annual Conf., Colorado Springs, CO. Info: [www.dfi.org/conferencedetail.asp?id=80](http://www.dfi.org/conferencedetail.asp?id=80). (12/06)

#### NOVEMBER

27-29. 2nd International Conference on Urban Disaster Reduction (ICUDR), Taipei, Taiwan. Info: <http://www.ncdr.nat.gov.tw/2ICUDR> (10/06)

#### DECEMBER

**5-7. 8th Pacific Conference on Earthquake Engineering, Singapore. See page 7. (2/07)**

#### 2008

#### FEBRUARY

**6-9. EERI Annual Meeting, Astor Crowne Plaza Hotel, French Quarter, New Orleans, LA. (2/07)**

#### MAY

18-22. Geotechnical Earthquake Engineering and Soil Dynamics Conf. IV, Sacramento, CA. Info: [www.geesd.org](http://www.geesd.org) (10/06)

#### AUGUST

11-16. 6th International Conf. on Case Histories in Geotechnical Engineering (6ICCHGE), Washington, D.C. Info: <http://www.6icchge2008.org>. See page 6. (4/06, 9/06, 2/07)

#### OCTOBER

12-17. 14th World Conference on Earthquake Engineering, Beijing, China. Info: [www.14wcee.org](http://www.14wcee.org) (12/05)



*St. Emidius, patron saint of earthquakes, from the Book of Saints.*

## News of the Institute

# Student Chapters Organize Confined Masonry Symposium

From November 22 to 24, the EERI UNAM (Universidad Nacional Autónoma de México) Student Chapter hosted the Symposium on Guidelines and Recommendations for Design of Confined Masonry in Mexico City. The symposium was held at the UNAM Institute of Engineering. Attendees included the student chapter, numerous confined masonry researchers from Mexico City, four members of the EERI University of British Columbia Student Chapter from Vancouver, Canada, and the UBC Chapter's faculty advisor, Ken Elwood. The symposium was centered around the report *Confined Masonry Housing Guidelines* that the two student chapters have been developing for over a year with support from EERI.

The symposium was comprised of workshops, presentations, a roundtable discussion, and a visit to the Structures Laboratory at the National Centre for Disaster Prevention (CENAPRED). During the workshops, students critiqued and improved upon the guidelines. Presentations were given by Leonardo

Flores of CENAPRED, Ken Elwood of UBC, Roberto Meli of UNAM, Francisco Platas of UNAM, and Sergio Alcocer of UNAM. They focused primarily on masonry behavior, design and research; reinforced concrete columns, and Mexican architectural history. At the roundtable discussion, students presented the improved guidelines to a panel of experts. This panel, which included Arturo Tena of UAM (Universidad Autónoma Metro), Juan José Pérez-

Gavilan of UNAM, and Leonardo Flores, provided the students with feedback and suggestions on how to improve the report.

Members of both student chapters agreed that the symposium was productive and rewarding. A revised draft of the guidelines will be issued for external review and then released in the second quarter. Plans are underway to hold a second symposium on the same topic in Vancouver this year.



*Members of the UNAM and UBC student chapters at the Teotihuacán Archaeological Site.*



**EARTHQUAKE ENGINEERING  
RESEARCH INSTITUTE**  
499 14th Street, Suite 320  
Oakland, CA 94612-1934  
**ADDRESS SERVICE REQUESTED**

PRSRT FIRST CLASS  
U.S. POSTAGE PAID  
Sundance Press  
85719