



**EARTHQUAKE ENGINEERING
RESEARCH INSTITUTE**

NEWSLETTER

Editor Stephanie King
Associate Editors Sarah Nathe
Gerald Brady
Editorial Assistant Eloise Gilland

ISSN 0270-8337

Reproduction with attribution is permitted.

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>

News of the Institute

Nominations Solicited for EERI President-Elect and Board of Directors

The Nominating Committee is identifying candidates to stand for election to the EERI Board. Suggestions from the membership are welcome, including self-nominations. Nominees must have been Active (or Honorary) Members of the Institute for at least five years, and must not have been nominated 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 Susan Tubbesing, Executive Director, at the EERI office. All submissions are confidential.

News of the Institute

Kelly Presents the 2001 Distinguished Lecture on Structural Control in Developing Countries

James M. Kelly, Professor in the Graduate School at the University of California at Berkeley, presented the 2001 Distinguished Lecture at the EERI Annual Meeting in Monterey, California, in February. His topic was "Structural Control in Developing Countries."

Kelly observed that countries that suffer the greatest loss of life in earthquakes rebuild their communities using the same types of construction that proved so deadly in the past. In recent years, new methods of dynamic structural design referred to as structural control have been developed, and could be adapted to provide better seismic resistance to housing and other structures in seismically active but economically disadvantaged countries. To date, the most widely accepted of these new techniques is seismic isolation; another is the use of passive energy-dissipation devices.

Kelly said that to extend seismic isolation technology to housing in developing countries, the cost and weight of the isolators must be reduced by eliminating the steel reinforcing plates and replacing them with a fiber reinforcement. A reduction in cost may be possible if the use of fiber allows a simpler, less labor-intensive manufacturing process. Fiber reinforcement would make it possible to build the isolators in long rectangular strips, which could be cut to the required size. They would have distinct advantages over square or circular isolators when applied to buildings for which the lateral resisting system is made up of walls.

Kelly remarked that researchers have begun work on the concept of a roof isolation system in which the top floor or roof of a structure acts as a mass damper. This concept has



James M. Kelly

been applied to housing in eastern Russia and Armenia.

According to Kelly, a means of reducing seismic damage to structures that is currently being tested but not yet implemented is the shape memory alloy (SMA). SMA's could provide energy-dissipation devices with very attractive characteristics and could be acceptable for preserving and protecting monuments or historical buildings. They are highly ductile, resistant to fatigue, and dissipate large amounts of energy.

Kelly observed that although a large proportion of research funding has been devoted in recent years to developing active structural control technologies, this active control cannot influence seismic-resistant design in those parts of the world where the loss of life in earthquakes is greatest. He pointed out that the future direction of structural control research should be toward the improvement of seismic resistance of housing, schools, and hospitals in highly seismic areas of the developing world. Technology and research should be directed toward providing better building materials, better structural morphologies, and better ways of construction within the constraints of local geography, customs, and resources.



National Earthquake
Hazards Reduction
Program

Announcements

NEES Experimental Infrastructure Workshop

A two-day workshop on the George E. Brown, Jr., Network for Earthquake Engineering Simulation (NEES), sponsored by NSF, will be held May 14–15, 2001, on the campus of the University of California, San Diego.

The workshop objectives are to (1) summarize the first group of NEES equipment and facilities awarded by NSF in fiscal year 2000, (2) assess the other existing earthquake engineering facilities and equipment currently available in the United States, (3) identify the possible missing components of the NEES experimental infrastructure, and (4) recommend strategies to complete the NEES experimental infrastructure.

These objectives can only be accomplished through broad-based input from the earthquake engineering research and practicing community. Though presentations will be made on the NEES Phase 1 awards, most of the workshop will consist of discussion sessions to identify the critical experimental components of the NEES experimental infrastructure portfolio, and to develop recommendations for the Phase 2 solicitation.

If you are interested in attending the workshop or would like more infor-

mation, please contact nees2workshop@ucsd.edu or phone the Workshop Coordinator, Dana Barre, at 858/534-7585. The intention is to fund all participants, although the level of support is limited and will be determined by the number of interested participants. Special efforts will be made to support the participation of junior faculty members. More information on the workshop is available at the web site monitoring.ucsd.edu/ucsdnees.

News of the Profession

USGS Reports on Deaths Due to Recent Earthquakes

With more than 35,000 estimated deaths from earthquakes in the first two months of 2001, it may seem like the earth is more restless than usual. Not so, according to scientists at the U.S. Geological Survey's National Earthquake Information Center (NEIC) in Golden, Colorado.

"While it's true that more people have died from earthquakes during the first two months of this year than in the last two years put together, the average number of earthquakes per month has stayed about the same," said USGS scientist Waverly Person. "Overall, earthquake activity isn't on the rise," said Person.

In January 2000, there were six "significant" earthquakes that were responsible for seven deaths. Significant earthquakes are defined by NEIC as "earthquakes with a magnitude of 6.5 or larger, or ones that caused fatalities, injuries or substantial damage." In January 2001 there were also six significant earthquakes, but the combined death toll from both the January 13 and February 13 earthquakes in El Salvador, and the January 26 quake in southern India, is estimated at 30,000 to 40,000. In February 2000 there were five significant earthquakes, with one

death, whereas in February 2001, there were three significant quakes, with 325 deaths. The annual, long-term average is 10,000 deaths worldwide, but the annual number varies greatly from year to year.

The USGS estimates, without specifying the minimum magnitude, that several million earthquakes occur in the world each year. Many go undetected because they hit remote areas or have very small magnitudes. The USGS now locates about 50 earthquakes each day, or about 20,000 a year, with an average of 20 earthquakes per day in California. Real-time information about earthquakes can be found at the web site quake.wr.usgs.gov.

Announcements

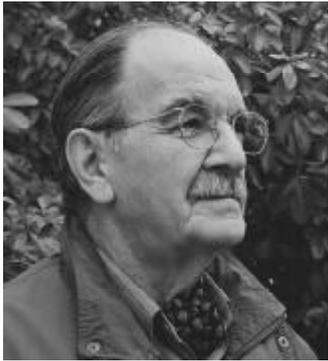
USGS NEHRP Research Grants Available

The National Earthquake Hazards Reduction Program (NEHRP) at the United States Geological Survey (USGS) invites applications for research projects that support its purposes: (1) providing products for earthquake loss reduction in the public and private sectors, and (2) carrying out research on earthquake occurrence and effects. Educational institutions, private firms, private foundations, individuals, and agencies of state and local governments are eligible to submit applications. It is anticipated that \$6 million will be available for fiscal year 2002; \$900,000 has been set aside to fund the second year of grants awarded in FY 2001. The remaining \$5.1 million will be used to fund approximately 80–90 new grants.

The closing date is May 8, 2001. For a copy of Program Announcement 02HQPA0001, see the USGS Contracts and Grants Information web site at www.usgs.gov/contracts/nehrp.

News of the Institute

Ambraseys, Hanson, and Nicoletti Named EERI Honorary Members



Nicholas Ambraseys

The EERI Board of Directors voted to name Nicholas N. Ambraseys, Robert D. Hanson, and Joseph P. Nicoletti 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 and the pursuit of its objectives.

Nicholas N. Ambraseys received the award for his distinguished career in the field of engineering seismology. He has served as Professor at Imperial College of Science (ICS), London, since 1970, and is currently Senior Research Professor. His main research areas, on which he has published about 300 papers and four books, are in soil dynamics, strong motion, long-term hazard assessment, and historical seismicity and tectonics. His design and field experience include the design of earth dams and foundations of large engineering structures, and the conservation and preservation of historical monuments in seismic regions. Ambraseys is co-editor of the *Journal of Earthquake Engineering*, and was founder and first chairman of the British National Committee for Earthquake Engineering. He was also a founder of the European Association for Earthquake Engineering and its Vice President for two decades. He has been Director of the International Association for Earthquake Engi-



Robert Hanson

neering and has chaired or served on various international UN and UNESCO advisory committees and commissions. A native of Greece, he has received many honors and awards from British and European scientific organizations. In his thanks to EERI, he was particularly appreciative of being the first honorary member who is not an American citizen.

Robert (Bob) D. Hanson was awarded honorary membership for his extensive contributions to EERI, including serving as President, as well as for his government service and his notable career as a researcher and teacher. His service as EERI President included his authorship in 1990 of the Institute's Long-Range Plan, which had first been established in 1981. He chaired the first U.S. National Conference on Earthquake Engineering in 1975. Over the years, he has been active on the following EERI committees: Bylaws, Development, Endowment, Executive Director Search, Experimental Research, Nominating, Publications, Shah Family Prize, and Technical Seminars. For the National Science Foundation, he was Biological and Critical Systems Division Director (1989–91) and worked in the U.S./Japan Research Program (1979–84). For FEMA, he was Senior Earthquake Engineer (1994–2000). He has been on the University of



Joseph Nicoletti

Michigan Department of Civil Engineering faculty since 1966.

Joseph P. Nicoletti received honorary membership for his remarkable career in structural engineering. He was hired by John Blume in 1947 and became an officer of the firm when it incorporated in 1957. He was Chief Engineer from 1971 to 1983, when he retired as President of URS/John Blume & Associates. He was an independent consultant for several years, but after the Loma Prieta earthquake, he rejoined the URS/Blume firm as a Senior Consultant. The firm's projects were diverse, including a commercial port for the government of Guam, rehabilitation of the state capitol in Sacramento, the Embarcadero Center buildings and the Hyatt Regency in San Francisco, and the Diablo Canyon Nuclear Power Plant. He served on several peer review panels for the repair or replacement of damaged double-deck viaducts in the Bay Area. He was appointed to the Caltrans Seismic Advisory Board. He chaired the Engineering and Design Advisory Panel for the replacement bridge of the east crossing of the San Francisco Bay Bridge, and later was appointed to chair the design peer review panel. He has chaired or served as director of several professional associations, committees, and government advisory groups.

Subscribing Member News

S.K. Ghosh Associates, Inc.

S.K. Ghosh Associates, Inc., a new EERI Subscribing Member, was founded in February 1998 by S. K. Ghosh, who until then had served as Director of Engineering Services, Codes and Standards for the Portland Cement Association.

S.K. Ghosh Associates provides structural, seismic, and code-related consulting services to engineers, businesses, trade associations, code-writing bodies, and governmental agencies involved in the design and construction of buildings and other structures, and impacted by the provisions of building codes.

Susan Dowty, formerly of the International Conference of Building Officials, and Secretariat of the International Building Code (IBC) Structural Subcommittee for the 2000 IBC, joined the organization at the start of this year. The staff's now extensive background helps clients with interpretation and implementation of building and seismic code provisions in the design of buildings and other structures.

S.K. Ghosh Associates has a subsidiary, the Structures and Codes Institute (SCI), set up for the sole purpose of providing quality continuing education to the buildings and structures community — architects, engineers, building officials, structural plan reviewers — anyone interested in the design and construction of buildings and other structures. This is done through seminars offered by the Institute (more often than not, jointly with other organizations) and through publications. The Institute's activities are guided by an advisory panel of leaders in the structural engineering profession.

More information on S.K. Ghosh Associates is on their web site: www.skghoshassociates.com.

Publications

Seismic Design Handbook

The second edition of the *Seismic Design Handbook*, edited by EERI member Farzad Naeim, was recently released. Sponsored by the International Conference of Building Officials (ICBO) and the National Council of Structural Engineers Associations (NCSEA) in cooperation with Kluwer Academic Publishers, the handbook reflects the latest concepts in seismic design.

This updated edition has been extensively revised and now includes three new chapters: Seismic Upgrading of Existing Structures, Performance-Based Seismic Engineering, and Computer Applications in Seismic Design.

The first edition of this handbook was published in 1989. The new edition is a resource for civil, structural, and geotechnical engineers; code officials; architects; seismologists; and students. The substantial increase in size (now more than 800 pages) reflects the many lessons learned from the damaging effects of worldwide earthquakes over the last decade.

Developed by a panel of 22 experts from industry and academia, the handbook contains the most current information on planning, analysis, and design of earthquake-resistant buildings. It bridges the gap between advances in the theories of earthquake-resistant design and their practical implementation. Where applicable, the provisions of seismic design standards such as the *2000 International Building Code (IBC)*, *1997 Uniform Building Code (UBC)*, and the *NEHRP Guidelines for the Seismic Rehabilitation of Buildings (FEMA 273/274)* are explained and their differences highlighted.

A valuable feature of the new edition is its companion CD-ROM containing the complete text of the book along

with the *UBC-IBC Structural Comparison & Cross Reference* published by ICBO, and *FEMA 273/274* and *FEMA 302/303*.

The *Seismic Design Handbook* can be ordered through ICBO by calling 800/284-4406 or visiting www.icbo.org.

European Strong-Motion Database

A CD-ROM is now available that contains a compilation of strong-motion records from earthquakes in the European and adjacent regions. The CD contains a database of 1,070 uncorrected and uniformly corrected strong-motion records, including corresponding spectra and reappraised associated seismological parameters, generated by earthquakes of all magnitudes up to 7.4 in the region from the Azores Islands to Iran and from Iceland to Algeria. Browser software is also provided so that the user may search the database for the selection of design input data.

The CD-ROM was created with the support of the European Commission, DGXII, Environment and Climate Research Programme, contract ENV4-CT97-0397, "Dissemination of European Strong-Motion Data." It is available free of charge from Director, Environment and Climate Research Programme, DGXII, European Commission, Rue de la Loi 200, Bruxelles 1049, Belgium. A limited number of free copies are also available from: N. Ambraseys, Dept. of Civil Engineering, Imperial College of Science, Exhibition Rd., London, SW7 2BU, UK, e-mail n.ambraseys@ic.ac.uk; F. Cotton, Institut de Protection et de Surete Nucleaire, Fontenay-aux-Roses, France; D. Rinaldis, Ente per le Nuove Tecnologie, l'Energia e l'Ambiente, via Anguillarese 301, 00100 Rome, Italy; and R. Berardi, Ente Nazionale per l'Energia Elettrica, Rome, Italy.

Announcements

AEG/SCEC Short Course on Seismic Hazard Analysis

A one-day short course, jointly sponsored by the Association of Engineering Geologists (AEG) and the Southern California Earthquake Center (SCEC), will be offered on Friday, May 18, 2001, at the University of Southern California in Los Angeles.

The course has been designed to provide greater understanding of probabilistic seismic hazard analysis (PSHA) and its applications.

The course is suitable for engineers; geologists, seismologists, geophysicists, and other earth scientists; or any earthquake professional who is involved with, or has interest in, any of the following: (1) understanding the development, quantification, or utilization of estimates of ground motions; (2) performing a study for seismic hazard or risk; (3) implementing the provisions for development of site-specific ground-motion design criteria according to applicable building standards; (4) reviewing studies that are based on investigation, assessment, or use of seismic hazard; or (5) understanding the role of PSHA in decision-making.

The course instructors are Robert T. Sewell of R.T. Sewell Associates and Thomas F. Blake of Fugro West. Chuck Real of CDMG will give a keynote lecture at noon on "Implementation of the Seismic Hazard Mapping Act at CDMG."

The deadline for registration is April 25. The registration form can be downloaded from the web site: www.scec.org/instanet/01news/news010313c_reg.html.

For more information, contact the SCEC office by phone: 213/740-5843, fax: 213/740-0011, or e-mail: SCECinfo@usc.edu.

News of the Institute

Robert A. Olson Receives Alquist Medal

The California Earthquake Safety Foundation awarded EERI member Robert A. Olson the 2001 Alfred E. Alquist Medal for Outstanding Achievement in Earthquake Mitigation at EERI's Annual Meeting in Monterey in February. The citation accompanying the award stated that Olson has been a major force both in California and nationally in working towards achieving increased levels of seismic safety. Over the past 35 years, he has guided decision-making bodies in a wide variety of risk-reduction endeavors due to his skill in dealing with people and facilitating consensus.



Robert A. Olson

Olson's professional career began in 1964 when he became a planning officer and regional representative for the predecessor of FEMA, the U.S. Office of Emergency Preparedness, where he was instrumental in the publication of the first earthquake vulnerability study, *A Study of Earthquake Losses in the San Francisco Bay Area*. During the 1970s, he chaired the Advisory Group to the California Joint Legislative Committee on Seismic Safety while he was Assistant Director of the Bay Area's Metropolitan Transportation Commission. In 1975, he became the first Executive Director of the California Seismic Safety Commission (CSSC), where he served until 1982. He was influential in the successful establishment of the CSSC as a viable force in state government. Following this CSSC tenure, Olson established his own consulting practice, Robert A. Olson Associates, Inc. His firm has undertaken numerous research and consulting assignments in the earthquake hazards field for a variety of governmental agencies and private companies.

When Olson joined EERI in 1973, he was the first member to have a social science and emergency management background.

Deadline for 7NCEE Abstracts: May 1

May 1, 2001, is the deadline for submitting abstracts for consideration for the Seventh National Conference on Earthquake Engineering. Authors are required to submit abstracts online. The submittal site, which has complete submission instructions, is at www.eeri.org/7nceesubmit. The abstract title and abstract body combined should not exceed 500 words.

Last Chance to Renew and Be Included in the 2001 Roster

All address changes and renewals must be received by the EERI office by April 30, 2001, to ensure that they will be included in the 2001 Roster. You may renew on EERI's web site (www.eeri.org), by fax (510/451-411), or e-mail (eeri@eeri.org) with a Visa or Mastercard. Look for the Roster in your mail in June or early July.

Announcements

Seminar on Controversial Issues in Earthquake Engineering

The European School for Advanced Studies in Reduction of Seismic Risk (ROSE) is holding its first international seminar in Pavia, Italy, June 25–26, 2001.

The ROSE School was established last year to offer a high-level educational environment in earthquake engineering to top-level graduate students from all over the world (see page 5 of the September 2000 *Newsletter*). The teaching system is based on short courses, offered in series by highly qualified international faculty.

As part of the school program, an international seminar will be organized every year to present and discuss Ph.D. theses that are in an advanced stage of development.

Although no Ph.D. thesis has yet been started, the First International ROSE Seminar has been organized to establish a tradition and to allow a forum for discussing some of the more controversial current issues in earthquake engineering. Only eight presentations will be given, allowing an in-depth discussion of each. The eight contributions to the seminar will be published in a special issue of the *Journal of Earthquake Engineering*.

In addition to the ROSE School students and scientific board members, up to 40 additional participants may be accepted.

Those who wish to attend should contact the ROSE School Secretariat at Collegio Alessandro Volta, Via Ferrata, 27100, Pavia, Italy; phone: +39 0382 548735; fax: +39 0382 528422; e-mail: rose@unipv.it; web site: spadino.unipv.it/rose.html.

News of the Profession

Major Earthquake Hits Seattle Area

The strong earthquake that occurred about 20 km northeast of Olympia, Washington, at 10:54 a.m. local time on February 28, 2001, is officially known as the Nisqually earthquake, named for a river delta in the epicentral area. It had a magnitude of 6.8 and caused one death and hundreds of injuries, most of them minor, in the Seattle-Tacoma region. City and state officials have estimated damage in excess of \$1 billion in lost property and economic activity. At the request of Governor Gary Locke, President Bush declared the state of Washington a disaster area, clearing the way for federal relief. The earthquake occurred at a depth of approximately 50 km and was caused by normal faulting in the subducting Juan de Fuca Plate. It was located in the same general area as a magnitude 7.1 earthquake on April 13, 1949. An Earthquake Clearinghouse was established as a collaborative effort between EERI, the Pacific Earthquake Engineering Research Center, and the University of Washington, Seattle. Extensive information on the Nisqually earthquake is located on the EERI web site at www.eeri.org. The available information includes a preliminary reconnaissance report; details of seismological, geotechnical, structural, lifelines, and socioeconomic observations; and links to other sources of information such as government and newspaper web sites. EERI members will receive a preliminary report soon.

News of the Institute

López García Wins Grad Student Paper Competition, Ranf Wins Undergrad Category

Diego López García, a graduate research assistant in the Department of Structural Engineering at the State University of New York at Buffalo, captured the top prize in the graduate student paper category in EERI's competition with his paper, "A Simple Method for the Design of Optimal Damper Configurations in MDOF Structures." López García presented his paper at the Annual Meeting in Monterey in February. In the undergraduate category, Richard Tyler Ranf, of the Department of Civil Engineering at Washington University in St. Louis, submitted the winning paper entitled "The Possibility of Damage to the Melvin Price Lock Due to Soil Liquefaction." Both students received travel grants to attend the Annual Meeting. EERI extends appreciation to the members of the Student Paper Review Panel who worked under the leadership of Student Activities Committee Chair Eric Williamson of the Civil Engineering Department at the University of Texas, Austin.

López García's paper proposes a "simplified sequential search algorithm" procedure as a method of designing optimal configurations of supplemental dampers that is simple enough to be used routinely. It would not require the use of any technique that structural engineers are not familiar with. The applicability of the method is limited to those cases where the response of the structure with added dampers remains linear. In Ranf's paper, he analyzes the data from borings in the soil around the Mississippi River's Melvin Price Lock. This soil has a low possibility of liquefaction. The lock is comprised of monoliths supported by 80-foot long piles that could possibly fail from buckling due to the weight of the monoliths. The disruption in the transportation of goods from closure of the lock would result in financial losses of up to \$3.5 million per day.

CALENDAR

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

2001

APRIL

16-20. Conf. on Civil Engineering in Asia, Tokyo, Japan. Info: www02.unicodepage.so-net.jp/tg7/cecar (12/00)

17. Bay Area HAZUS User Applications Forum, Fremont, CA. Info: www.hazus.org (4/01)

18-20. SSA Annual Meeting, San Francisco, CA. Info: www.seismosoc.org/meetings/ (1/01)

26. Southern California HAZUS User Group Meeting, Los Angeles, CA. Info: www.hazus.org (4/01)

MAY

4. Los Angeles Tall Buildings Structural Design Council Annual Meeting, Los Angeles, CA. Info: bj@bjase.com (3/01)

10-11. 2nd ATC-35 National Earthquake Ground Motion Mapping Workshop, San Francisco, CA. Info: www.atccouncil.org (3/01)

14-15. NEES Workshop, San Diego, CA. See page 2. (4/01)

18. AEG/SCEC Short Course, Los Angeles, CA. See page 5. (4/01)

21-23. ASCE Structures Congress 2001, Washington DC. Info: www.asce.org/conferences/structures-2001 (5/99, 8/99)

JUNE

4-6. SEM Annual Conference, Portland, OR. Info: www.sem.org (9/00)

12-14. IABSE Conference on Cable-Supported Bridges, Seoul, Korea. Info: secretariat@iabse.ethz.ch (5/00)

17-22. ICOSSAR 2001, Newport Beach, CA. Info: www.colorado.edu/engineering/ICOSSAR (6/00)

25-26. ROSE School Seminar, Pavia, Italy. See page 6. (4/01)

AUGUST

7-10. International Tsunami Symposium, Seattle, WA. Info: www.pmel.noaa.gov/its2001 (7/00)

12-17. SMiRT Conference, Washington, DC. Info: www.engr.ncsu.edu/SMiRT_16 (7/00)

16-19. International Conference on Engineering Materials, San Jose, CA. Info: mcmullin@email.sjsu.edu (3/00)

29-31. IABSE Conference on Wooden Structures, Lahti, Finland. Info: www.iabse.ethz.ch (8/00)

SEPTEMBER

4-6. ERES 2001, Malaga, Spain. Info: www.wessex.ac.uk/conferences/2001/eres01/ (11/00)

OCTOBER

3-5. Modelling and Simulation in Civil Engineering, Paris, France. Info: www.enpc.fr/caquot/ (9/00)

7-10. SDEE'2001, Philadelphia, PA. Info: www.drexel.edu/sdee2001 (9/00)

DECEMBER

9-11. CTBUH International Conference, London, UK. See page 7. (4/01)

2002

FEBRUARY

6-9. 2002 EERI Annual Meeting, Westin Hotel, Long Beach, CA.

JUNE

10-12. 3rd International Conference on Composites in Infrastructure, San Francisco, CA. Info: www.az-icci.org (3/01)

JULY

21-25. 7th National Conference on Earthquake Engineering, Boston, MA. Info: www.eeri.org (9/99)

SEPTEMBER

9-13. 12th European Conf. on Earthquake Engineering, London, UK. Info: 12ECE@ice.org.uk (9/00, 12/00)

Announcements

CRSI Scholarships Available for Civil and Architectural Engineering Students

The Concrete Reinforcing Steel Institute (CRSI) Foundation has announced its scholarships programs for the 2001–2002 academic year. The aim of the scholarship programs is to foster the development of practicing engineers in the field of site-cast reinforced concrete construction. CRSI plans to award scholarships of \$2,500 each to senior students who are majoring in civil or architectural engineering, and of \$3,000 each to incoming graduate students (Master's degree) in civil, structural, or architectural engineering. Preference will be given to applicants who have shown an interest, either through their educational program or by work experience, in some phase of the reinforced concrete industry.

The deadline for receipt of applications is June 1, 2001. Additional information and application forms for the 2001–2002 scholarships programs are available from David P. Gustafson, Assistant Secretary of CRSI Foundation, Concrete Reinforcing Steel Institute, 933 N. Plum Grove Road, Schaumburg, IL 60173; phone: 847/517-1200 ext.13; fax: 847/517-1206; e-mail: dgustafson@crsi.org.

Tall Buildings and Urban Habitat

The Council on Tall Buildings and Urban Habitat (CTBUH) will hold an international conference with the theme "Building for the 21st Century" on December 9–11, 2001 in London, UK. The purpose of the conference is to bring a select group of inter-

continued on page 8

Tall Buildings ...

continued from page 7

ested professionals together to share knowledge, experience, and ideas. The conference will assess the state of the art, provide a vision for the future, and help disseminate the information to a wide audience. The technical program will be centered around the themes of Technology, Livability, and Productivity.

The CTBUH, an international organization sponsored by engineering, architectural, and planning professionals, was established to study and report on all aspects of planning, design, construction, and operation of tall buildings.

For more information on the upcoming conference, contact Rahim Abdussalam, Conference Coordinator, by phone: 610-758-3515 or e-mail: inctbuh@lehigh.edu, or see the Council's web site at www.ctbuh.org.

News of the Institute

Earthquake Spectra Outstanding Paper for 1999 Awarded

During EERI's Annual Meeting in Monterey in February, the 1999 *Earthquake Spectra* Outstanding Paper award went to "Spectral Ratios for Mexico City from Free-Field Recordings," by Eduardo Reinoso and Mario Ordaz. The paper was published in the May 1999 issue of Volume 15. The reviewers commented that "the authors have contributed insight into the ground-motion amplification characteristics of Mexico City soil deposits. The paper is a valuable contribution to our knowledge of this important subject and site amplification in general... This is an excellent paper containing important data and will be of interest to the entire community of earthquake engineers and engineering seismologists."

News of the Profession

Employment Opportunities

Multidisciplinary Center for Earthquake Engineering Research (MCEER), Buffalo, New York. Full-time position for Senior Program Officer to provide administrative and technical management of the MCEER Highway Project. Minimum qualifications include research program or project management experience, with an emphasis on bridge engineering; BS in civil or structural engineering; and knowledge of the operations of AASHTO and its committees, State Departments of Transportation, and the Federal Highway Administration. Contact: Ms. Connie Beroza, Administrative Assistant to the Director, MCEER, University at Buffalo, 109 Red Jacket Quadrangle, Buffalo, NY 14261-0025; e-mail: apply@mceermail.buffalo.edu.



EARTHQUAKE ENGINEERING RESEARCH INSTITUTE

PRESIDENT
Chris D. Poland

PAST PRESIDENT
Christopher Arnold

VICE PRESIDENT
Thalia Anagnos

SECRETARY-TREASURER
Ronald L. Mayes

BOARD OF DIRECTORS
Sergio M. Alcocer
Thalia Anagnos
Christopher Arnold
Svetlana Brzev
Melvyn Green
Ronald L. Mayes
Dennis Mileti
Chris D. Poland
Paul G. Somerville

EXECUTIVE DIRECTOR
Susan K. Tubbesing

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

PRESORT
FIRST CLASS
Postage Paid at
Tucson, AZ
Permit No. 541