



EARTHQUAKE ENGINEERING RESEARCH INSTITUTE NEWSLETTER

Editor Stephanie King
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.

Announcements

Fulbright Grants

The Fulbright Scholar Program is offering 99 lecturing and research awards in engineering for the 2002-2003 academic year. Awards for both faculty and professionals range from two months to an academic year or longer. While foreign language skills are needed in some countries, most Fulbright lecturing assignments are in English. The application deadline for 2002-2003 awards is August 1, 2001, for Fulbright traditional lecturing and research grants worldwide.

For information, visit the web site: www.cies.org, or contact the Council for International Exchange of Scholars, 3007 Tilden St. N.W., Suite 5-L, Washington, D.C. 20008; phone: 202/686-7877; e-mail: apprequest@cies.iie.org.

News of the Institute

EERI Receives EIF Grant

The Earthquake Engineering Research Institute was recently awarded a two-year, \$100,000 grant from the Engineering Information Foundation (EIF) in New York. This grant will be used to develop further the web-based encyclopedia of housing construction types in seismically prone areas of the world, an EERI project that is making innovative and effective use of the web to share engineering information globally.

This current groundbreaking effort links more than 120 engineers and architects from 45 countries, helping them develop and share data, and providing them with the tools to improve housing vulnerable to earthquakes, thereby reducing future economic losses and saving lives.

Participants are asked to provide detailed information on the different structural systems used in their countries. There are 30 different structural systems in the encyclopedia, including non-wood systems like adobe, reinforced concrete, unreinforced masonry, confined masonry, and steel. Critical structural details, vulnerabilities of the various systems to earthquakes, and strengthening technologies that have already

been tried are all described. Examples that have come in to date from various countries can be viewed at www.johnmartin.com/EERI.

The first goal of the project is to make a searchable database of the technical information. Ultimately the encyclopedia will not only provide information that will be helpful in improving housing construction, but it will also create a community of knowledgeable workers in the field of housing design and construction, drawn together by this worldwide cooperative effort. Once the information is collected, the next step is to organize this community so that it can spread its knowledge to those actively engaged in planning, designing, constructing, and renovating housing in their respective countries, through activities such as training materials, courses, and demonstration projects.

The project is using technology to build this global community, through the use of e-mail and the Internet, to connect experts around the world as they generate the information, and by ultimately placing all this information in a searchable format on the Internet. The project database will be completed in December 2002.

News of the Profession

Earthquake Loss Reduction Act of 2001

Over the past two years, U.S. Senator Diane Feinstein (D-CA) and her staff have been preparing a bill that would provide, from a national platform, a variety of incentives to stimulate seismic risk reduction activities. Her bill was introduced in March of this year as S 424. Congressmen Jerry Lewis (R-Redlands, CA) and Mike Thompson (D-Napa/Sonoma, CA) introduced a companion bill in the House, HR 1669. The bills are essentially the same, and, if enacted, will provide significant tax and action incentives. (To read the bill, go to www.congress.gov and type in S 424.) These bills include a billion-dollar trust fund that will be used to support state and local activities, including cost-sharing grants for seismic retrofit of public and nonprofit

continued on page 3



National Earthquake
Hazards Reduction
Program

New USGS Earth- quake Hazards Map for Northeastern US

More than 1,000 earthquakes have hit the northeastern United States over the last 360 years, according to a new earthquake map released by the U.S. Geological Survey (USGS) and the Northeast States Emergency Consortium (NESEC). Many of the earthquakes, including two in Boston and two in New York City, have caused noteworthy damage.

The map and companion fact sheet target public awareness of northeastern earthquake hazards and will serve as valuable tools for public officials, citizens, engineers, and scientists who are working to minimize the effects of future northeastern earthquakes. Copies of the map and fact sheet are available by mail and telephone, and from the web.

For a paper copy of the large-format map, "Earthquakes in and near the Northeastern U.S., 1638-1998," call 888/ASK-USGS and request USGS map I-2737. The price is \$7 plus \$5 shipping and handling. The digital version of the map is also available for free download from the web site: greenwood.cr.usgs.gov/pub/i-maps/i-2737/. The fact sheet with the same title as the map is available free by calling 888/ASK-USGS and requesting USGS Fact Sheet FS-06-001. A digital version can also be downloaded as a PDF from the web site: greenwood.cr.usgs.gov/pub/fact-sheets/fs-0006-01/.

FEMA 356 and FEMA 357 Available

The American Society of Civil Engineers (ASCE), under a cooperative agreement with the Federal Emergency Management Agency (FEMA), has completed a project to update and convert FEMA 273, *NEHRP Guidelines for the Seismic Rehabilitation of Buildings*, and the related FEMA 274, *NEHRP Commentary*, into a mandatory language pre-standard, FEMA 356, *Pre-Standard and Commentary for the Seismic Rehabilitation of Buildings*.

The completion of the pre-standard is the first step in turning FEMA 356 into an ASCE/American National Standards Institute (ANSI) approved national consensus standard. In the process, recent research results and technical advancements have been incorporated into the pre-standard when deemed appropriate by the project team and approved by the ASCE Standards Committee on Seismic Rehabilitation of Buildings.

This ASCE Standards Committee has voted to accept the pre-standard as the basis of a voluntary consensus standard. The Standards Committee will soon begin committee balloting on the document, to be followed by an open public ballot. To participate in the formal standard development process, either as a member of the Standards Committee or as part of the Public Ballot process, interested parties are encouraged to contact ASCE's Standards Coordinator, Kim Brubaker, ASCE, 1801 Alexander Bell Drive, Reston, VA 20191.

Additionally, FEMA 357, *Global Topics Report on the Pre-Standard and Commentary for the Seismic Rehabilitation of Buildings*, is now available. This report documents the nature and rationale for the technical changes made in the conversion of the *Guidelines* into the *Pre-Standard*.

Free copies of both FEMA 356 and FEMA 357 are now available from the FEMA Distribution Center at 800/480-2520.

Steel-Frame Building Guidelines

The Federal Emergency Management Agency (FEMA) recently issued *A Policy Guide to Steel Moment-Frame Construction* and four related technical manuals (FEMA 350–353) containing new design and construction guidelines for steel-frame buildings in earthquake-prone areas. The series is the result of a six-year, \$12 million study (the SAC Project) started after cracks were found in the welded connections of several steel-frame buildings after the 1994 Northridge earthquake. Thousands of welded steel moment-frame buildings, designed to resist earthquakes, have been built throughout the United States and the world in the last 30 years. Until the Northridge earthquake, this type of construction was considered an effective seismic-resistant structural system.

The study found that this damage, discovered after the earthquake, was not the result of any one particular factor. Among the contributing factors cited were construction defects such as welds that had not bonded well with steel columns, welds that were placed too quickly and with too much heat, and a design whose connection configurations were problematic and unreliable.

The guidelines provide seismic design criteria for new steel-frame buildings, seismic evaluation and upgrade criteria for existing steel-frame buildings, post-earthquake evaluation and repair criteria, and quality assurance criteria for steel-frame construction for seismic applications. The guidelines documents can be ordered from the FEMA Distribution Center at 800/480-2520.

Loss Reduction ...

continued from page 1

buildings. First estimates indicate that the proposed incentives could provide up to \$10 billion over the next 10 years, and a return on the investment in terms of damage avoided at a rate of two to one.

For years, the earthquake community has been discussing how to motivate people to take action to reduce the seismic risks posed by the stock of existing, non-code-complying buildings. Each year new tools and new techniques are developed for use on new and existing buildings, but each year it is disappointing that few projects are actually carried out. In 1998, with support from FEMA and the California Governor's Office of Emergency Services, EERI published a white paper entitled *Incentives and Impediments to Improving the Seismic Performance of Buildings*. This paper indicated that the decision to improve the seismic performance of buildings is a complex process with many acceptable outcomes, and suggested that new and better incentives are needed. This legislation is an important step in providing such incentives.

The earthquake community has an exceptional opportunity to see that this legislation gets a fair hearing and is appropriately considered for enactment. The first step is to find as many cosponsors as possible to join with Senator Feinstein and Congressmen Lewis and Thompson. At least one Republican senator is needed to signal bipartisan support in the Senate, and it is important to attract as many cosponsors outside of California as possible to indicate the geographic range of the earthquake risk. If enough cosponsors are found, the bill will move to hearings and have a fair chance at enactment. At that time, there will be an opportunity to help refine the details of the bill so that it

serves seismic safety needs as the earthquake community understands them.

EERI is asking members to review the material on these bills and to call or write their representatives and senators asking that they cosponsor this legislation. A copy of the letter EERI sent to Senator Feinstein can be found on the EERI web site at: www.eeri.org/Timely/feinstein.html. It would be best if you explained, from your own experience, why this legislation should be given serious, bipartisan, nationwide consideration and enacted, and how it would help your district or state. A list of mailing addresses and phone numbers for members of Congress is available at: www.house.gov and www.senate.gov. Legislators with further questions or who wish to cosponsor this legislation should contact Ann Hurst (202/224-9638) in Senator Feinstein's office, or Jennifer Pharaoh (202/226-7369) in Congressman Thompson's office.

Publications

Seismic Test Video

Copies of the documentary video "PRESS III - Five Stories for the Future," by R. Wargo and EERI member Sri Sritharan, are now available. The documentary, originally produced for UCSD-TV's Science Horizon program, includes time-lapse recording of several seismic tests on a five-story building model. With a floor area of 900 square feet at each level and a total height exceeding 40 feet, this is the largest structural test model in U.S. history. The documentary is aimed at educating the public, students, and engineers on the development of precast seismic structural systems.

Copies of the video are available from the UCSD Bookstore by phone: 800/520-5778 or e-mail: bookorder@ucsd.edu. Refer to UCSD-TV show #5269 PRESS.

Announcements

Request for Earthquake Artifacts

The Ventura County Museum of History and Art is requesting the loan of earthquake artifacts for an exhibit that will be open to the public from September 14 to November 25, 2001. Entitled "Days the Earth Shook, Earthquakes of Ventura County and Beyond," this exhibit will feature original images from the Jan Kozak collection of historical earthquakes (www.eerc.berkeley.edu/kozak).

Seismologists, earthquake engineers, and other members of the earthquake community are invited to lend artifacts in their possession that would be suitable for display at this exhibit. Such artifacts might include commemorative medals or coins, strong motion records or seismograms, or any physical artifact of an earthquake nature, particularly as it pertains to Southern California.

The Kozak Collection consists of pre-photographic images (prints, drawings, engravings, woodcuts, etc.) of historic earthquakes. The scope of the collection is worldwide. Images will focus on California earthquakes but will also include other seismic areas of interest.

Please contact Richard Welch, Curator, at curator@vcma.org or by phone at 805/653-0323, ext. 19. Lenders of artifacts used in the exhibit will be acknowledged. The Ventura County Museum of History and Art is located at 100 East Main Street in downtown Ventura, California.

Obituary

Egor P. Popov (1913-2001)



Pioneering civil engineer Egor Paul Popov, professor emeritus at the University of California at Berkeley, died April 19 after suffering a heart attack while at Alta Bates Hospital in Berkeley. He was 88.

Popov was a leading researcher on the seismic response of both reinforced concrete and steel structures. He contributed to many of the innovations of the last 30 years in the seismic design of steel structures, according to one of his former students, EERI member Filip Filipopou. Popov's strong theoretical and experimental work was applied to such structures as the San Francisco-Oakland Bay Bridge, the San Francisco Museum of Modern Art, and the Alaskan pipeline. He was also called upon by NASA for his engineering expertise.

Popov's research interests covered a wide spectrum of topics in earthquake engineering, including cyclic testing and modeling, development of the eccentrically braced frame concept, seismic resistance of steel connections, and development of friction devices to retrofit existing structures. He was active in teaching and research for well over 50 years, having joined UC Berkeley's Department of Civil Engineering in 1946. In 1952 he wrote *Mechanics of Materials*, which is considered an engineering classic. He was the author

or co-author of more than 300 technical papers. Although he retired in 1983, he was active in research and lecturing up until his death. In addition, he was a faculty participant of both the Earthquake Engineering Research Center and the Pacific Earthquake Engineering Research Center. Since 1996, he had held the title of professor in UC's graduate school, which is reserved for a select group of retired faculty members who are still active in research at Berkeley.

Born in Kiev, Russia, in 1913, Popov and his family escaped to Manchuria during the Bolshevik Revolution and eventually sailed to America. He began studying engineering at UC Berkeley, continued with graduate work at Caltech and MIT, and earned his doctorate from Stanford University. Elected to the National Academy of Engineering in 1976, Popov was honored with a Distinguished Teaching Award in 1977, the Berkeley Citation in 1983, a Distinguished Engineering Alumnus Award from UC Berkeley in 1985, and EERI's highest honor, the George W. Housner Medal, in 1999.

Popov is survived by his brother Dr. Nicholas Popov, his daughter Katherine Crabtree, his son Alexander Popov, six grandchildren, and eleven great-grandchildren.

Announcements

Disaster Recovery for Sustainability

The Natural Hazards Research and Applications Information Center, University of Colorado, announces a new training course entitled "Holistic Disaster Recovery: Ideas for Building Local Sustainability after a Natural Disaster," to be held in Boulder, Colorado, August 27-30, 2001. The course is intended for local, state, federal, and private-sector decision

makers, planners, emergency managers, building officials, economic development directors, environmental specialists, and others who may be involved in the recovery of a disaster-stricken community. By juxtaposing the components of sustainability (economic vitality, livability, environmental quality, disaster resilience, social equity, and participatory decision making) with likely post-disaster problems (damaged infrastructure, inadequate housing, ecosystem degradation, business disruption, etc.), participants will explore opportunities to enhance a town, city, or county during disaster recovery. For each opportunity, the course will consider various options for planning and taking action, funding strategies, and sources of expertise. The fee for the training course is \$985.

More information is available from Jacki Monday, Program Manager, Natural Hazards Center, 482 UCB, University of Colorado, Boulder, CO 80309-0482; phone: 303/492-2149; fax: 303/492-2151; e-mail: jacque.monday@colorado.edu.

News of the Profession

Job Opportunities

Pacific Earthquake Engineering Research Center (PEER), UC Berkeley, Richmond Field Station. Director of Industrial Relations position.

Requires executive and/or applied research experience and advanced academic preparation in earthquake engineering. The incumbent will assist in developing a sponsor program that will combine research with the needs of industry, and must have experience in project management and marketing.

For more information, see peer.berkeley.edu/employment.

News of the Institute

Post-Earthquake Team Positions Open

The Learning from Earthquakes (LFE) Program has been central to EERI's activities for more than 50 years. Field investigations have made enormous contributions to the earthquake profession, providing critical information that has stimulated research and modified professional practices in many fields. If you would like to be considered for participation on a future post-earthquake reconnaissance team, please fill out the application found at www.eeri.org/LFE/investigators.html.

While opportunities have never been greater for gathering information from major events, effective reconnaissance must take into account the need for better on-site coordination and utilization of new technologies to gather and disseminate information. In order to reduce the burden on local experts and improve field coordination, EERI will establish an on-site clearinghouse. The clearinghouse concept was most recently put into practice after the Nisqually earthquake, and provided a central location from which numerous earthquake organizations operated to improve field coordination and communication between researchers and government agencies. The success of the clearinghouse in future earthquakes rests on its use by researchers, who will be attracted by its proximity to damage sites, adequate lodging, facilities for daily briefings, and easy access to the Internet and the web to process and transmit data and information from the field.

In order to make sure the clearinghouse meets these needs, the LFE Advisory Committee has created two new volunteer LFE positions: Logistics Coordinator for international events, and Information Technology Specialist. The Logistics Coordinator serves the needs of the EERI post-earthquake investigation team. This person will also perform a key role in overall coordination, helping other teams gain access to damage sites and the briefings. The Logistics Coordinator is expected to locate an appropriate hotel for lodging and space to accommodate daily briefings, obtain local maps, arrange transportation, and negotiate access with local officials, thereby reducing the burden on the team leader. Familiarity with local customs and language is critical to this position. For a full description of the Logistics Coordinator position and to download an application form, see the URL indicated above.

Every EERI team will include several Information Technology Specialists; they must be well-informed "techies," who can help EERI take full advantage of the latest technological tools for information gathering and dissemination. They will have expertise in all information and field technology, and will train members of the EERI team as well as individuals on other teams in the proper use of equipment. The IT Specialists will work alternatively from the clearinghouse and in the field for the first several weeks after the team has returned. For a full description of the Information Technology Specialist position and to download an application form, see the URL indicated above.



Call for Papers

Structural Engineers World Congress

The Second Structural Engineers World Congress (SEWC 2002) will be held in Yokohama, Japan, October 9-12, 2002. The primary purpose of the congress is to focus on the overall practice of structural engineering for both technical and professional practice matters. The congress will cover the following topics:

- Building and Bridge Design, Analysis and Construction
- International Codes
- Innovative Structures and Materials
- Space Structures
- Foundation Engineering
- Education, Licensing, Research
- Design Consulting Business
- Design and Build, Construction Management, Risk Management
- Information Technology
- Environmental Impact and Management, Social Factors
- Sustainability, Life-Cycle Design, Maintenance, Renovation
- Inspection and Testing

Those interested in organizing a session should submit a session proposal, including a title for the session, a short abstract describing the purpose of the session, and issues to be covered. The deadline for session proposals is August 1, 2001. Those interested in presenting a paper should submit an abstract of approximately 500 words by October 1, 2001.

For more information, contact:
SEWC2002 Association, c/o EC House, Inc., Takakyu Bldg. 4F, 19, Kanda-Matsunaga-cho, Chiyoda-ku, Tokyo, 101-0023, Japan; phone: +81-3-3255-7358; fax: +81-3-3255-7377; e-mail: sewc2002@gp.knt.co.jp; web site: sewc2002.gr.jp.

PLEASE POST IMMEDIATELY



Earthquake Hazards Reduction Fellowship Announced

Under a cooperative agreement established with FEMA, the Earthquake Engineering Research Institute is pleased to offer the **2002 Professional Fellowship** to provide an opportunity for a practicing professional to gain greater skills and broader expertise in earthquake hazards reduction, either by enhancing knowledge in the applicant's own field, or by broadening his or her knowledge in a related but unfamiliar discipline.

Who Should Apply?

This unique fellowship is aimed at the career professional and is designed to bring together an experienced practitioner with professionals conducting significant research, providing an opportunity to enrich the applicant's knowledge and skills and broaden the research base with challenges faced in practice. The Professional Fellowship is *not* intended to fund work towards a degree.

The Award

The fellowship provides a stipend of \$30,000, commencing in January 2002, to cover tuition, fees, relocation and living expenses. The fellowship will be awarded on a project basis, with the proposed work or course of study to be carried out over a period of up to one year. The recipient will have the flexibility to work less than full time with the host institution and academic sponsor, with the understanding that the effort will result in a deliverable by the end of twelve months.

Criteria

Applicants must provide a detailed work plan for a research project that would be carried out in the twelve-month period. The fellow will be expected to produce a written report upon completion of the project. All applications must be accompanied by a professional resume and letter of nomination from the faculty host(s) at the cooperating educational institution(s). Faculty members should also indicate the institution's ability to provide research facilities, including library, work space, telephone, and computer access. Applicants must hold U.S. citizenship or permanent resident status.

To Apply

Candidates may obtain an application form from the Earthquake Engineering Research Institute, 499 14th Street, Suite 320, Oakland, California 94612-1934, tel: (510) 451-0905, fax: (510) 451-5411, e-mail: eeri@eeri.org, or from EERI's web site at <http://www.eeri.org/Timely/>.

**Deadline for receipt of all application materials at EERI is September 10, 2001.
Announcement of the award will be made October 19, 2001.**

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

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. Info: spadino.unipv.it/rose.html (4/01)

JULY

24-27. Seismic Risk in Caribbean Region, Santiago, Dominican Republic. Info: codia.santiago@codotel.net.do (5/01)

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)

27-30. Disaster Recovery for Sustainability, Boulder, CO. See page 4. (6/01)

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)

26-29. SEAOC Annual Convention, San Diego, CA. Info: 619/521-8500. (5/01)

OCTOBER

2-5. International Seismic Seminar, Assisi, Italy. Info: 192.107.65.2/glis (5/01)

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)

7-11. Seismic Systems for Concrete Structures, Rome, Italy. Info: www.ega.it/jbss5_2001 (5/01)

21-24. WSSPC Annual Meeting, Sacramento, CA. Info: www.wsspc.org (5/01)

DECEMBER

9-11. CTBUH International Conference, London, UK. Info: www.ctbuh.org (4/01)

2002

FEBRUARY

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

APRIL

7-12. World Conference on Structural Control, Como, Italy. See page 6. (6/01)

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: 12ECEE@ice.org.uk (9/00,12/00)

OCTOBER

9-12. Structural Engineers World Congress, Yokohama, Japan. See page 5. (6/01)

Announcements

Seminars on IBC Structural Provisions

The International Conference of Building Officials (ICBO) and the National Council of Structural Engineers Associations, in cooperation with S.K. Ghosh Associates, Inc., are presenting a seminar on the "Overview of the 2000 IBC Structural Provisions."

It will be held at the following locations in 2001: August 21 in Los Angeles, CA; August 23 in Las Vegas, NV; August 28 in Minneapolis, MN; September 12 in San Diego, CA; and September 26 in Phoenix, AZ.

This one-day seminar will provide an overview of the following code provisions: seismic, wind, and other design loads; quality assurance, special inspection, and testing programs; soils and foundations; and concrete, masonry, steel, and wood design requirements.

The registration fee is \$235 for SEAOC or ICBO members, and \$285 for nonmembers. Registrations received 30 days before the scheduled seminar receive a \$25 discount.

For more information and to register for these seminars, visit ICBO's web site at www.icbo.org or call 800/423-6587 ext. 3418.

Publications

Applications Guide for 2000 IBC

The International Conference of Building Officials (ICBO) has released the first question-and-answer guide covering the structural provisions of the 2000 *International Building Code (IBC)*. Entitled *2000 IBC Structural Q & A: Application Guide*, it contains answers to the most frequently asked questions regarding the application of structural provisions that arise during design, plan review, construction, and daily code enforcement.

Cosponsored by the National Council of Structural Engineers Associations (NCSEA), the *Guide* is a good reference for civil and structural engineers, code officials, architects, and students that reflects the ICBO staff's years of experience in providing code options.

The *Guide* can be purchased for \$33.50 through ICBO by calling 800/284-4406 or visiting www.icbo.org. Members of ICBO and NCSEA affiliates can receive it for the discounted price of \$30.50.

Structural Steel Selection Guide

The American Institute of Steel Construction (AISC), the Structural Engineering Institute, and the American Society of Civil Engineers have collaborated on a new publication entitled *Structural Steel Selection Considerations: A Guide for Students, Educators, Designers, and Builders*. It provides a current understanding of properties of steel and the criteria used for selection. The *Guide* presents an evaluation of issues related to steel production, steel materials, design considerations, fabrication considerations, and service issues for structures whose major compo-

nents are made from structural steel. Recommendations are made for how to deal with the factors that will affect the eventual performance of the completed structure. For more information on the *Guide*, visit the AISC web site at www.aisc.org/selectionguide.html.

News of the Profession

Job Opportunities

National Science Foundation, Civil and Mechanical Systems Div. within the Directorate for Engineering. Program Director for Structural Systems and Engineering. Will focus on the Infrastructure Materials Applications and Structural Mechanics program. Requires a Ph.D. or equivalent professional experience; a successful career in academe, industry, or government; and management expertise. See www.nsf.gov/cgi-bin/getpub?cmseng200101.



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

PRSRRT FIRST CLASS
U.S. POSTAGE PAID
Sundance Press