



**EARTHQUAKE ENGINEERING
RESEARCH INSTITUTE
NEWSLETTER**

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**EARTHQUAKE ENGINEERING
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News of the Institute

9USN/10CCEE: Joint Conference Highlights

Nearly 900 of the world's foremost earthquake experts gathered July 25-29 in Canada's largest city, Toronto, at the Westin Harbour Castle Hotel for the 9th U.S. National and 10th Canadian Conference on Earthquake Engineering. It was the first time a conference of this scale had been organized jointly by EERI and the Canadian Association for Earthquake Engineering. The conference fulfilled its theme of "Reaching Beyond Borders," as it generated much international interest with attendees from 48 countries all over the world.

There is no question the technical content of the conference was exceptional, thanks to the efforts of the Technical Program Committee, co-chaired by professors Shamim Sheikh of the University of Toronto and Catherine French of the University of Minnesota, and assisted by EERI staff. They developed 109 state-of-the-art concurrent sessions, including several panel discussions, representing a broad range of disciplines. These were augmented by four excellent plenary sessions with invited speakers. In all, more than 600 oral

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2011 Annual Meeting: EQs without Borders

The 2011 EERI Annual Meeting will address the extent and effects of earthquakes on the built environment with an emphasis on cross-border issues. In addition to dealing with international EERI involvement and promoting international collaboration, the meeting will discuss reducing the gap between research and practice and will stimulate discussions of current issues in the practice of earthquake engineering. The meeting will be held February 9-12 at the Hyatt Regency La Jolla, just north of San Diego, California. La Jolla is affectionately known as "the jewel" of the Pacific shoreline, surrounded on three sides by the sea and backed by the steep slopes of Mt. Soledad. La Jolla has a Mediterranean feel and enjoys a unique microclimate, with February daytime temperatures averaging in the 60s. Save the dates and watch for information to come in the program brochure, in future newsletters, and on EERI's website <http://www.eeri.org/site/2011-annual-meeting-home>.

See page 6 for more Annual Meeting News.



*La Jolla shores from Mt. Soledad
(photo: Peggy Goodwin, <http://www.flickr.com/photos/>)*

9USN/10CCEE Highlights

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presentations and nearly 150 poster presentations were scheduled during the four-day program. The 4th International Tsunami Symposium was part of the conference, with four sessions organized by The Tsunami Society. For a list of all presentations, visit <http://2010eqconf.org/program/>.

Videos of the plenary session on the Haiti and Chile earthquakes are posted online in the members-only area of the EERI website (accessible from www.eeri.org). For this session, in which the latest information was presented, paper submissions were not required because of the short time between the earthquakes and the conference. Videos of the closing session, in which the plenary speakers provided reviews

and critical assessments of the conference technical contributions, will be posted by September 10. All plenary session speakers' abstracts are posted on <http://2010eqconf.org/program/plenary-sessions/>.

On Sunday, the first day of the conference, a Workshop for Young Researchers, Professionals, and Faculty, organized by the EERI Student Leadership Council (SLC), encouraged interaction among the three groups through a blend of events that technical sessions, lunch, and a technical tour of the Structural Testing Laboratories at the University of Toronto. The workshop was free to participants, thanks to the generous support of sponsors FEMA, Computers & Structures, Degenkolb Engineers, Digitexx, Kinometrics, and PEER.

A gala welcoming reception in the Exhibit Hall followed Sunday evening's opening session. Speakers at Tuesday's Conference Luncheon were Mike Allen of Adjeleian Allen Rubeli Limited, on the Skydome's retractable roof, and Jamil Mardukhi

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View of Toronto from the CN Tower's Observation Skypod (photo: Chelsea Hollenbeck).

News of the Institute

E-mail Addresses Needed for Renewals

At its May meeting, the Board of Directors initiated a new plan for 2011 EERI membership renewal to make the process easier for both members and staff. Members will be able to automatically renew online. Renewal notices will be e-mailed, with a link that takes members to an online form.

To implement this plan, the EERI office needs to have the e-mail address of every member. At the present time, the office does not have e-mail addresses for 156 members. If you are one of them, please e-mail juliane@eeri.org and include your member ID number.

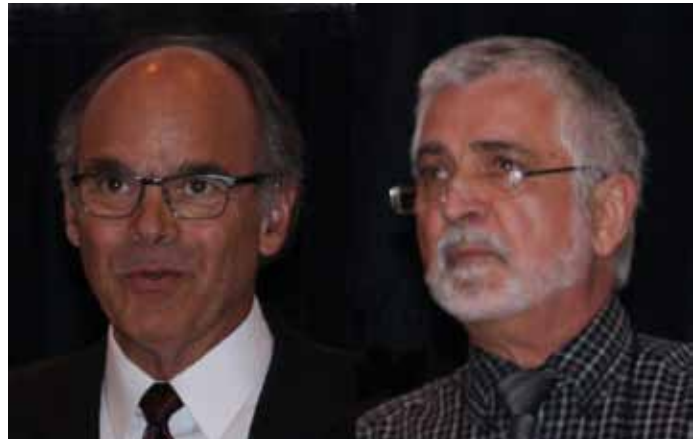
Dates & Venues for EERI FEMA 547 Seminars

Dates and venues have been established for the new EERI-FEMA technical seminar series on FEMA 547, *Techniques for the Seismic Rehabilitation of Existing Buildings*. The seminar will provide an overview and examples of practical and effective seismic rehabilitation techniques as well as guidance on commonly used techniques for mitigating specific seismic deficiencies on a range of model building types. Seminar presenters are EERI members and the lead authors of FEMA 547, published in 2006: Bill Holmes (Rutherford & Chekene), Bret Lizundia (Rutherford and Chekene), Jim Malley (Degenkolb Engineers) and Kelly Cobeen (Wiss Janney Elstner).

2010 dates and venues are as follows:

- **October 28** (Thursday), Sir Francis Drake Hotel (Union Sq.), 450 Powell St., San Francisco, CA 94102
- **October 29** (Friday), Los Angeles Airport Marriott Hotel, 5855 West Century Blvd., Los Angeles, CA 90045
- **November 4** (Thursday), Red Lion Hotel, 1415 5th Ave., Seattle, WA 98101
- **November 5** (Friday), Hilton Salt Lake City Center, 255 S. West Temple, Salt Lake City, UT 84101

Registration fees will be \$225 for EERI and cosponsor members, \$300 for nonmembers, and \$125 for EERI student and young professional members. More information will soon be forthcoming via the EERI website, a brochure, and e-mail.



Conference Co-Chairs (l-r) Ahmed Ghobarah and Andre Filiatrault welcome attendees during the Opening Session (photos: Siva Sivathasan).

Opening Session keynote speakers Chris Poland and Ron DeVall (photos: Siva Sivathasan).

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of NCK Engineering Limited, on the CN Tower. Both structures were also field trip destinations. Wednesday evening's banquet at the majestic Liberty Grand featured speakers Colin and Julie Angus, recipients of National Geographic's 2007 Adventurer of the Year Award. The final field trip was a day-long visit to the Niagara Falls and its power plant, a 90-minute bus ride from Toronto.

Conference media liaisons Svetlana Brzev of the British Columbia Institute of Technology and Don Goralski of MCEER ensured that coverage was extensive in print media, radio, and TV in Canada as well as other countries. At the time of the conference, just one month had passed since the June 23 magnitude 5.0 earthquake had struck the Ontario-Quebec border region of Canada (see page 4 of the August *Newsletter*). Ahmed Ghobarah of McMaster University told the press that Toronto was an ideal place for the conference because of its location in the most heavily populated part of Canada. It symbolizes problems for large cities in eastern North America that may experience a major earthquake relatively rarely, but cannot ignore the need for earthquake-resistant buildings and infrastructure.

Technical Program Co-Chairs Catherine French and Shamim Sheikh (photos: S. Sivathasan).



Thanks go to the hard-working and long-serving conference co-chairs Andre Filiatrault of MCEER and Ahmed Ghobarah, as well as all organizing committee members. They worked for more than two years on preparations for the con-

ference. The EERI staff did an outstanding job in all conference arrangements, assisted by MCEER staff on site.

Particular thanks are extended to

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ICC Blowout Sale for EERI Members

As part of the International Code Council's partnership with EERI and our ongoing effort to bring value to our membership, ICC is offering EERI members discounts up to 40% on selected publications. To access the discounts, visit www.iccsafe.org/EERI and enter the promotional code "EERI" upon checkout. There is a limited supply of the 51 publications available at the blowout 40% discount, which will last through November 30. (Your price will be lower than those shown in red as you review the titles.)

EERI members will also receive the following special savings on orders placed by **September 15th**:

- FREE SHIPPING on your entire order
- a 20% discount off the regular price of ASCE 7-10.

There are NO expiration dates for additional discounts of up to 20% on another 45 titles that should be of interest to many EERI members.

If you are not signed in as an ICC user before you add items to your cart, you will not see your discount until the very end of your transaction, after you enter the credit card information but before you click on accept.



Monday plenary session speakers Norman Abrahamson, Ross Boulanger, Carlos Ventura, and Kathleen Tierney (photos: S. Sivathasan).

Field trip destinations:

- (top) CN Tower looms over Toronto's waterfront boardwalk on Lake Ontario;*
- (middle) Rogers Centre (Skydome) adjacent to the CN Tower (photos: Marshall Lew);*
- (bottom) Niagara Falls (photo: C. Hollenbeck).*



9USN/10CCEE Highlights

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financial sponsors without whom the conference would not have been possible: FEMA, the U.S. Geological Survey, the U.S. Department of Energy, the U.S. Nuclear Regulatory Commission, Degenkolb Engineers, Pall Dynamics, and Kinometrics.

The names of additional sponsors, exhibitors, and everyone involved in organizing all aspects of the conference can be found at <http://2010eqconf.org/>. This site also has a link to purchase the Conference Proceedings DVD (see insert flyer).

News of the Profession

China/USA Technical Symposium

Several Chinese scientific, engineering, and architectural institutes and agencies are organizing the first China/USA Symposium for the Advancement of Earthquake Sciences and Hazard Mitigation Practices. It will take place October 17-22, 2010, in Beijing and Wenchuan County, the location of the devastating May 12, 2008, M8.0 Sichuan earthquake.

EERI has been invited to participate and is helping coordinate workshop participation and outcomes from the U.S. side. This first meeting is intended to facilitate long-term relationships.

Participants will identify the ap-

proaches taken by both countries to address common issues in seismic hazard

mitigation. The following areas have been proposed for collaboration: hazard assessment and mapping, geotechnical hazards and siting, building codes and multihazard design, hazard mitigation of critical and important facilities, and pre-disaster planning and mitigation and emergency response.

Expected outcomes include a list of common issues, a technical summary of approaches, areas for research collaboration, identification of organizations and individuals in both countries working on common issues, an agenda for future exchanges, and a summary report of the proceedings.

The Chinese Chamber of Commerce of Hawaii, EERI, the East-West Center, and the University of Hawaii are the U.S. organizing co-sponsors. The U.S. Embassy will also be a participating agency via their offices in Beijing and Chengdu.

Participating U.S. agencies include the Federal Emergency Management Agency, the U.S. Geological Survey, and the U.S. National Science Foundation.

The U.S. organizing committee is assembling a diverse group of U.S. experts. EERI members on the U.S. organizing committee include Ivan Wong and Gary Chock.

News of the Profession

Future of Earthquake Engineering Research

Through National Science Foundation support, the George E. Brown, Jr. Network for Earthquake Engineering Simulation (NEES — www.nees.org) has been serving as a multi-user research infrastructure since its completion in 2004, consisting of 14 experimental facilities located at universities around the U.S. To assist with future planning, NSF is encouraging community input and participation in two studies that will assess future research and research infrastructure needs.

First, NSF is providing support to the National Academy of Sciences, under award CMMI-1047519, to convene a National Research Council (NRC) committee, under the NRC's Division on Earth and Life Studies, Board on Earth Sciences and Resources, to organize a community Workshop on the Grand Challenges for Earthquake Engineering Research. This workshop will bring together experts to identify: (1) the high-priority Grand Challenges in basic research that require a network of experimental facilities and cyberinfrastructure, and (2) the networked experimental capabilities and cyberinfrastructure tools required to address these Grand Challenges. Workshop attendees will be asked to describe the experimental infrastructure capabilities and cyberinfrastructure tools in terms of requirements, rather than by reference to any existing or anticipated specific facilities. The workshop will be held in the 4th quarter of 2010 at the National Academies Beckman Center in Irvine, California. In early 2011, the NRC committee will complete a summary report.

The second study, to be completed in the 2nd quarter of 2012, will be conducted by the Science and Technology Policy Institute (STPI) and will build upon and complement the study described above. STPI will

NGA East: Requests for Proposals

The Pacific Earthquake Engineering Research Center (PEER) has announced two new requests for proposals for the NGA East Project on the following topics:

1. The validation of existing earthquake rupture simulation models for the central and eastern U.S. regions.
2. The development of magnitude-area relationships applicable to the central and eastern U.S. regions.

The deadline for both technical proposal submissions is September 8, 2010. For more information about the NGA East project, visit <http://peer.berkeley.edu/ngaeast/index.html>. For a detailed description of each RFP, including submission instructions, visit http://peer.berkeley.edu/ngaeast/request_for_proposals.html. E-mail questions to peer_center@berkeley.edu.

Concrete Column Blind Prediction Contest

PEER and NEES have announced a blind prediction contest for a full-scale reinforced concrete bridge column to be tested on the NEES Large High-Performance Outdoor Shake Table located at UCSD's Englekirk Structural Engineering Center. The bridge column will be subjected to increasing intensity of uniaxial earthquake ground motions; the test will run from September 9 to 13, 2010. Details regarding the contest rules, the test specimen, and the ground motions can be found at http://nisee2.berkeley.edu/peer/prediction_contest/.

The contest is open to teams from both the practicing structural engineering and the academic research communities. One winning submission from each community will be recognized and awarded.

The prediction contest will be "blind" and will compare analytical response "predictions" with those measured during experimental testing. Because the actual loadings will be determined during the course of the testing based on observed response, the contest has two parts: pre-test analysis and prediction based on anticipated earthquake loadings, and post-test analysis and prediction using the actual loadings from the experimental test. The analytical column model for the post-test analysis must be identical with that for the pre-test analysis. The closest predictions to the test results will be awarded, based on the posted rules.

Results will be presented anonymously except for those of the "winning" entries, which will be announced and awarded October 8-9, 2010, at Quake Summit 2010 in San Francisco. PEER will reimburse allowable travel expenses for a representative from each of the two winning teams.

Due dates for submitting results of pre-test analysis and post-test analysis are September 6 and September 20.

identify potential scenarios for the future of NSF-supported earthquake engineering facilities (NSF contract AST-1045173) and will solicit input from the community to identify the priorities for integrated experimental and cyber facilities that are most critical in addressing the Grand Challenges. The web site (<https://collab.ida.org/eeforum>) is current-

ly under construction; the forum is scheduled to occur in the 4th quarter of 2010. If you would like to be notified when the site becomes active, please email STPI at EEForum@ida.org.

Questions or comments should be directed to Joy Pauschke, NEES Program Director, 703-292-7024, jpauschk@nsf.gov.

News of the Institute

2011 Annual Meeting News

Call for Poster Abstracts

Individuals interested in participating in one of the 2011 Annual Meeting poster sessions are invited to e-mail abstracts, not exceeding two pages in length, to the organizing committee by **December 1, 2010**, in care of Juliane Lane, juliane@eeri.org. Presenters will be notified in early January of acceptance.

The accepted abstracts will be reproduced as submitted in the Annual Meeting notebook and therefore must be in final form. They should have one-inch margins on all sides and be single-spaced in 11-point Times Roman or equivalent font. Text should be flush left. The title, in upper case, should be centered at the top, with presenters identified by name, title, and organizational affiliation.

Travel Scholarships

Several scholarships are available to assist student members and younger EERI members (out of school no more than three years) to attend the 2011 Annual Meeting, thanks to support from FEMA. The financial support will be contingent upon participation in one of the poster sessions (see above), either through the applicant's own research project, or as a representative of a student chapter depicting the chapter's activities. Each scholarship will be for a finite amount and can be used to cover registration, three nights' lodging, and round-trip economy airfare.

To apply, e-mail a letter of request by **December 1, 2010**, to the Student Activities Committee in care of Juliane Lane at juliane@eeri.org. Applicants should describe their current involvement in EERI and in earthquake engineering or a related field, as well as their status as students or professionals.

Publication

O'Rourke Rankine Lecture on Geohazards



Thomas D. O'Rourke

The Rankine Lecture of the British Geotechnical Association is the highest British honor in geotechnical engineering. The 49th Rankine Lecture was given at Imperial College London on 18 March 2009 by EERI Past President Thomas D. O'Rourke, professor of civil engineering at Cornell University, on the topic of "Geohazards and Large Geographically Distributed Systems." This 39-page lecture was published in July 2010 in the journal *Geotechnique*.

In the paper, O'Rourke applies a general classification for scale in geotechnical engineering to explore the modeling of large, geographically distributed systems and their response to geohazards. It reviews both component and network performance. With respect to networks, O'Rourke describes the modeling of liquefaction effects on the San Francisco water supply and presents a case history that shows successful application of the modeling during the Loma Prieta earthquake. He uses the systematic analysis of pipeline repair records after the Northridge earthquake to identify zones of potential ground failure, and correlates pipeline damage rates with the magnitude of peak ground velocity. Hydraulic network analyses are described for the seismic performance of the Los Angeles water supply, with practical applications for emergency response. Also reviewed are the effects of Hurricane Katrina with respect to the New Orleans hurricane protection system, Gulf of Mexico oil and gas production, and the interaction between electric power and liquid fuel delivery systems. The paper addresses the sustainability of the Mississippi delta with regard to flood control, maintenance of wetlands and barrier islands, and catastrophic change in the course of the Mississippi River.

The paper can be downloaded for £15.00 (US\$23.28) from <http://www.icevirtuallibrary.com/content/article/10.1680/geot.2010.60.7.505>.

Announcement

DFI Early Bird Registration Fee

The 35th Annual Conference on Deep Foundations is scheduled for October 12-15, 2010, in Hollywood, California. Registration fees will increase by \$100 after September 8, from \$795 to \$895 for DFI members and \$895 to \$995 for nonmembers. EERI is a cooperating organization for the conference.

The program includes three concurrent short courses on October 12, for which attendees will receive a certificate verifying six professional development hours, on the following topics: Sustainability: Save Money and Save the Planet, Ground Improvement Technology and Applications, and Practical Deep Foundation Design and Construction for Seismic and Lateral Loads.

The topics of the four technical sessions on October 13 and 14 are: Deep Foundations; Ground Improvement and Earth Retention; Infrastructure and Local Projects; and Innovative Design, Sustainable Design, and Modeling.

To register online, visit www.deepfoundations2010.org.

Publications

Seismic Retrofitting of Structures

The 84-page publication *Seismic Retrofitting of Structures: Strategies and Collection of Examples in Switzerland* has been translated into English. Originally issued in German and French in 2008 by Switzerland's Federal Office for the Environment, the publication explains the philosophy of *Swiss Pre-Standard SIA 2018* for existing buildings (2005). Its application to 24 examples provides an overview on decision criteria, solutions, and costs. The publication is primarily aimed at structural engineers, but architects, building owners, and homeowners will also find valuable information.

It can be downloaded at no charge from: <http://www.bafu.admin.ch/publikationen/publikation/01013/index.html?lang=en>.

GEESD Proceedings

The abstract volume and CD of the *Proceedings of the Fifth International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics and Symposium in Honor of Professor I. M. Idriss* can be ordered for \$250, plus shipping and handling. To download an order form, visit <http://5geoeqconf2010.mst.edu> and click on [Proceedings Available](#). Past proceedings of 1984-2008 conferences are also being offered with discounts using the same order form.

News of the Institute

Paper Competition Correction

The announcement of the EERI Annual Student Paper Competition on page 5 of the August *Newsletter* erroneously stated that applicants must be U.S. citizens. They must be U.S. residents, not necessarily U.S. citizens. EERI apologizes for the error.

CALENDAR

The issue containing the first appearance is indicated at the entry's end. Items listed for the first time are shown in bold.

2010

SEPTEMBER

5-9. 32nd Gen'l Assembly of Eur. Seis. Com. (ESC 2010), Montpellier, France. www.esc2010.eu (5/09)

16-18. Int'l Conf. on Urban Habitat Construction under Catastrophic Events, Naples, Italy. Info: www.civ.uth.gr/cost-c26/ (2/10)

17-18. Displacement-Based Seismic Design Short Course, Vancouver, BC, Canada, and live webcast. www.seabc.ca/displacement (8/10)

22-25. SEAOC Convention, Indian Wells, CA. Info: <http://convention.seaoc.org/> (2/10)

OCTOBER

6-8. Workshop on SSI for Nuclear Power Plants, Ottawa, Canada. Info: <http://www.nea.fr/nsd/workshops/SSI> (5/10)

8-9. Quake Summit 2010, San Francisco, CA. Info: www.earthquake-summit2010.org (7/10)

12-15. Deep Foundations Inst. 35th Annual Conf., Hollywood, CA. Info: www.deepfoundations2010.org. See page 6. (1/10, 9/10)

17-22. China/USA Symposium, Beijing, China. See page 5.

28. EERI Seminar on FEMA 547, San Francisco, CA. See page 2.

29. EERI Seminar on FEMA 547, Los Angeles, CA. See page 2.

NOVEMBER

4. Young Engineers Conference, London, United Kingdom. Info: www.cege.uci.ac.uk/events/yec (5/10)

4. EERI Seminar on FEMA 547, Seattle, WA. See page 2.

5. EERI Seminar on FEMA 547, Salt Lake City, UT. See page 2.

DECEMBER

1-3. 3rd Asia Conf. on EQ. Eng.

(ACEE 2010) Bangkok, Thailand. Info: <http://acee2010.com/> (7/10)

18-20. 11th Int'l Symp. on Structural Eng. (ISSE-11), Guangzhou, China. Info: <http://www.isse-11.org> (2/10)

2011

JANUARY

10-13. 5th Int'l Geotech. EQ Eng. Conf. (5-ICEGE), Santiago, Chile. Info: www.5icege.cl (11/09)

26-28. 12th East Asia-Pacific Conf. on Structural Eng. and Construction (EASEC-12), Hong Kong. Info: http://bccw.cityu.edu.hk/easec12/wp_special_session.asp (5/10)

FEBRUARY

9-12. EERI Annual Meeting, La Jolla, CA. Info: www.eeri.org/site/2011-annual-meeting. See pages 1 and 6. (4/10, 9/10)

MAY

16-18. SEE6, Tehran, Iran. Info: www.see6.ir (8/10)

JUNE

26-28. GeoRisk 2011, Atlanta, GA. Info: www.georisk2011.org (8/10)

27-July 8. 25th IUGG Assembly, Melbourne, Australia. Info: <http://www.iugg2011.com/> (6/09)

JULY

4-6. 8th European Conf. on Structural Dynamics (EURODYN 2011), Leuven, Belgium. Info: www.eurodyn2011.org (6/10)

AUGUST

30-Sept. 1. Protect 2011, Lugano, Switzerland. Info: www.protect2011.supsi.ch (8/10)

OCTOBER

2-6. 7th World Cong. on Joints, Bearings, Seis. Sys. for Concr. Structs, Las Vegas, NV. www.ijbr.org/ (8/10)

2012

FEBRUARY

15-18. 4th Int'l Conf. on Grouting & Deep Mixing, New Orleans, LA. Info: www.dfi.org/conferencedetail.asp?id=163 (5/10)

SEPTEMBER

24-28. 15WCEE, Lisbon, Portugal. Info: www.15wcee.org (8/10)



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EERI Newsletter, September 2010 Volume 44, Number 9

News of the Institute

Call for Innovative Project Proposals

The EERI Special Projects and Initiatives (SPI) Committee is currently soliciting ideas for one or two new projects to be supported in 2011 from EERI's Endowment Fund. The committee recommends to the EERI Board of Directors projects that recognize the multidisciplinary challenge of earthquake risk reduction and the broad geographic and professional composition of EERI's membership.

Funding is used to stimulate new or unique ventures. It is hoped that Endowment projects will be seed projects that will grow into larger ventures, supported in part by EERI's partner organizations in promoting earthquake risk reduction. The committee is particularly interested in projects that fall outside the scope of other sponsors of earthquake engineering research.

Proposals should identify gaps in research, improve application and practice, and facilitate public policy that leads to effective reduction of earthquake risks. The following timely areas are encouraged:

- strategies to heighten the priority given to earthquake risk reduction among policy makers, building owners, the technical community and the general public;
- studies of reconstruction practices, including policy or structural

al systems, that have been used successfully following recent earthquakes, and recommendations for future implementation;

- collection of performance data from buildings or lifeline systems in a recent earthquake, to enhance ongoing activities;
- documentation of lessons learned about economic recovery following an earthquake;
- development of low-cost educational tools for enhanced understanding of structural response during earthquakes.

To submit an idea, please prepare a proposal of one to two pages using the following format:

- title
- name of person submitting idea and contact information
- name of recommended Principal Investigator and contact information if different from person submitting idea
- objective
- product(s) and audience
- approach and schedule
- budget (*The SPI Committee has \$40,000 available for projects in 2011, and expects to support up to two projects.*)
- suggested person to chair project committee (*Each SPI project has an oversight committee to provide direction and, in some cases, to produce the products.*)
- suggested committee members
- possible funding sources to leverage Endowment funds

The committee will work with the proposer to develop the most promising ideas into projects. To see descriptions of previous projects supported with Endowment funds, visit <http://www.eeri.org/site/projects/endowment-fund>. Send proposals by **15 October 2010** to juliane@eeri.org.

If you have questions, contact SPI Committee members (Sharon Wood, chair; Thalia Anagnos, Ken Elwood, Elizabeth Hausler, Marshall Lew, Trailer Martin, Charles Scawthorn) or the EERI staff. Remember that you have the opportunity to make the EERI Endowment Fund work by submitting your ideas!

Announcement

FEMA Position

The Federal Emergency Management Agency (FEMA) seeks candidates for the following opening:

Physical Scientist, GS-1301-13, Washington, D.C. area, Job Announcement #MG-2010-T0108-DBV-368789D/M. Located within the Mitigation Directorate, Risk Reduction Division, Building Science Branch, this position is responsible for implementing FEMA's loss reduction responsibilities as designated under the National Earthquake Re-Authorization of 2004, (PL 108-360), as amended. Closing date: Thursday, September 16, 2010. For more information, visit <http://jobview.usajobs.gov/GetJob.aspx?JobID=89512758>.