



# THE NEWSLETTER OF THE EUROPEAN ASSOCIATION FOR EARTHQUAKE ENGINEERING

January 2006

Volume 24, Number 1

*Dear Colleagues,*

*We wish you all a prosperous 2006. We look forward to sharing news on earthquake engineering with you this year. In this third issue of the EAGE Newsletter, the recent developments during the last six months are summarised.*

*This issue begins with the summary report concerning research topics and support actions on earthquake engineering research in Europe under FP7. This report was written by EAGE President Robin Spence following the Workshop on "Earthquake Risk Reduction in Europe" held in Lisbon on 31.10.2005.*

*The second item in the Newsletter is the Minutes of the Executive Committee Meeting held in Lisbon, Portugal on October 30, 2005.*

*The third item is the Report of the Central Office Activities for the period of September 2004 - November 2005. Second announcement of the first joint EAGE and ESC conference, the First European Conference on Earthquake Engineering and Seismology and the final invitation to 100th Anniversary Earthquake Conference Commemorating the 1906 San Francisco Earthquake are presented.*

*The fourth item is the table of contents of the third volume of BEE that has been completed and of the forthcoming two issues of fourth volume. This item is followed by a short report received from Russian Association for Earthquake Engineering (RAEE).*

*The last item is the list of important forthcoming events and the announcement of the new book that is published by Springer in the book series titled as "Geotechnical, Geological and Earthquake Engineering".*

## **PRIORITY THEMES AND TOPICS FOR EARTHQUAKE ENGINEERING RESEARCH IN EUROPE UNDER FP7**

The following summary of research topics was formulated by the European Association for Earthquake Engineering following the Workshop "Earthquake Risk Reduction in Europe" held in Lisbon on 31.10.05. The emphasis is on improving understanding of the earthquake hazard, and the assessment and reduction of risk for Europe's unique building stock and infrastructure. There are two components, namely research topics and support actions.

### **A. Research Topics**

#### **1 Earthquake hazard.**

Evaluation of position and probability of occurrence of future large earthquakes

The following themes of research should be encouraged: (a) the modelling of seismic activity; (b) the earthquake cycle on active faults; (c) the relationship between strong or large historical earthquakes and active faults; (d) the mapping of capable and active faults at the European scale. Part of the tools has been developed in previous projects. The existing capabilities to monitor earthquakes should be enhanced (see support actions).

Development of a common methodology to evaluate hazard in Europe

Methods for evaluation and characterization of ground-shaking hazard, working at a regional scale. Selection of most appropriate return period for design purposes for ultimate and damage-limitation limit states. Evaluation of tsunami hazard in Mediterranean and Atlantic.

Influence of local geology in large cities

Methodologies to understand and map local hazards including the influence of local geology and subsoil, active faults and zones with potential for landslides, subsidence and liquefaction, with application to large population concentrations.

Real time observation and warning systems for earthquakes and related hazards

Monitoring and real-time reporting and impact analysis of earthquakes, and systems for automatic response to earthquake warnings. Tsunami warning systems.

#### **2 Seismic risk assessment and mitigation for existing buildings and infrastructure.**

Simplified probabilistic methods for seismic risk analysis

Development of displacement-based methods suitable for European building typologies. Definition of unified approach for seismic risk evaluation using GIS tools. Mapping tools for proposed intervention to the buildings.

Development of a unified approach to rapid screening.

Common definition of rapid screening approaches to assess vulnerability of single buildings or groups of buildings. Rapid screening procedures for bridges.

Methods for evaluation of the vulnerability of the existing built environment

Defining vulnerability relationships for national building typologies/materials, notably for masonry structures, lifelines and industrial plant and equipment and for monuments and historical buildings. Evaluation of non-structural and economic losses and human casualties.

Emphasis on evaluation techniques for public buildings especially schools and hospitals. Development of inventory databases; monitoring of the dynamic response of existing structures; post-event damage surveys and data-gathering.

#### Evaluation of risk protection measures

Improvements in understanding of public perception of earthquake risk; evaluation and case-studies of risk-reduction and risk-transfer measures, including non-structural actions; cost-benefit studies for risk-reduction measures.

### **3. Design of new facilities and strengthening of existing facilities**

#### Innovative approaches to the design of rational earthquake-resistant structures

Analytical and experimental studies on new materials and building typologies and techniques such as: validation of partial plastic mechanisms as seismic design objective; energy dissipation systems and base isolation methods; non-continuous frames stabilised by relative rocking of structural components.

#### Development of strengthening techniques for existing buildings and infrastructure

Strengthening techniques for old buildings and low ductility reinforced concrete buildings, with emphasis on low-cost techniques for large scale interventions; emphasis on schools, hospitals and multi-storey multi-occupancy buildings; development of strengthening techniques of low intrusive effect for application in monuments, historical buildings and other structures; seismic design and upgrading of mechanical, electric and other types of equipment used in the lifelines and industry; cost-benefit studies.

### **B. Support actions**

#### Support for networks to monitor earthquakes

Development of Europe-wide networks for seismic monitoring, including sea-floor monitoring, and with emphasis on the seismically-active but poorly instrumented areas of South and South-Eastern Europe.

#### Support for existing earthquake test facilities

Facilities at both JRC and national laboratories will need continued support to enable them to be available to carry out necessary experimental studies.

#### Support for international meetings and exchanges

Support for meetings, exchanges and collaborative projects to facilitate transfer of knowledge and experience with researchers in countries with a highly developed earthquake protection culture, notably USA, but also Japan and New Zealand. Also support for knowledge transfer to and data acquisition from developing countries in high-risk zones.

#### Support for training workshops for young scientists and engineers

Support, under Marie Curie funding, for international workshops to transfer research results and good practice to young scientists and design practitioners, with emphasis on the new accession countries.

#### Development of educational tools.

Simplified explanations of research outcomes and design codes, suitable for design practitioners and the general public.

Robin Spence, President  
European Association for Earthquake Engineering  
Dec 2nd, 2005

## **MINUTES OF THE EXECUTIVE COMMITTEE MEETING**

**Number: 5**

**Date: October 30, 2005**

**Place: Lisbon, Portugal**

#### Attendance:

Robin Spence, President  
Panayotis Carydis, Vice President  
Atilla Ansal, Secretary General  
Mauro Dolce, Secretary  
Rainer Flesch, Treasurer  
Peter Fajfar, Slovenia  
Carlos Oliveira, Portugal

#### Absentee:

Martin Koller, Vice President  
Rafael Blasquez, Spain  
Pierre-Alain Nazé, France  
Roger Musson, ESC Representative

*Prologue:* The fifth Meeting of the Executive Committee of the European Association for Earthquake Engineering was held in Lisbon, Portugal before the International Conference on 250th Anniversary of the 1755 Lisbon Earthquake on Sunday October 30, 2005 between 10:00 and 17:00 hours. The Executive Committee meeting was chaired by the President.

**Item 1 Approval of the Agenda:** The Agenda of the Meeting was approved by all the members present.

**Item 2 Report by the President:** The President summarised the activities concerning the organisation of the EAEE-EU Workshop on Earthquake Risk Reduction in Europe. He stressed the importance of the earthquake risk reduction in Europe and mentioned the names of the possible lecturers that will take part in the Workshop. He mentioned the preferences of EU that appears to be inclined toward multi-hazard approach. The Committee discussed the possibilities of establishing links with related organisations and basically with European Council of Civil Engineers to find out if collaboration can be established with respect to multi-hazard risk reduction issues.

Rainer Flesch summarised their activities within the LessLoss project concerning the earthquake response assessment of some hospitals.

The Secretary General mentioned about the participation of EAEE and Robin Spence in the Global initiative started Brian Tucker that is basically aiming to determine how earth science and earthquake engineering professional societies can jointly influence public policy and advocate seismic safety to reduce global earthquake losses. This initiative had their first meeting in USA during the SSA Conference in 2004 and is planning to have the second meeting in China in 2006.

Upon the proposal of Prof.Carydis, the possibility of forming a Natural Hazard Union was discussed briefly and it was decided to make some efforts to establish the initial contacts with the related associations and NGOs to investigate the possibilities of joint future actions.

**Item 3 Report on ECEES in 2006:** The Secretary General presented the progress report concerning the organisation of the First European Conference on Earthquake

Engineering and Seismology (1ST ECEAS), the first joint EAEE and ESC conference in 2006, provided by Dr.Olivier Lateltin, the Executive Secretary of the Organising Committee of the 1ST ECEES. The progress report summarised the details of the conference program, invited keynote speakers, abstract and paper submission deadlines, the estimated budget of the conference and expected number of participants. Secretary General also informed the EC that the second announcement will be distributed by the web site in the near future and the EAEE General Assembly will be held on Tuesday evening, September 5, 2006 since the Conference Banquet is going to be on Wednesday evening, September 6, 2006 and ESC General Assembly will be held on Thursday evening, September 7, 2006.

The EC discussed the possible contributions of the EAEE Task Groups to 1ST ECEES. One possibility for the Task Group Coordinators is to prepare a state-of-the-art report concerning the major topics of their Task Groups jointly with their committee members and submit this manuscript through the standard paper submission procedure specified by the organising committee. These manuscripts can be presented as special TG presentations during one of the related sessions according to the program. It was decided that the Secretary General should write to all Task Group Coordinators to inform them about the decision of the EC and to encourage them to prepare the state-of-the-art reports related to their Task Groups.

The Secretary General informed the EC concerning an informal inquiry that he received from Greece and Italy to organise the 14th ECEE to be held in 2010. The possibility of organising the second joint conference with ESC was discussed briefly but it was decided to leave this matter to a future joint meeting with ESC if it could be arranged before or otherwise during 1ST ECEAS.

**Item 4 Report of the Central Office Activities:** Secretary General introduced to the participating members of EC Mrs.Gökçe Tönük, who has been part time assistant of the Secretary General in Central Office for almost one year.

He summarised the Report of the Central Office Activities for the term Sep. 2004 – Oct. 2005 concerning the Memberships, Bulletin of Earthquake Engineering, EAEE Newsletter and Marie Curie proposal.

He informed the Committee about the number of individual and organizational members, and explained the ongoing efforts to increase the number of individual membership by sending invitation letters via e-mail to the participants of recently held conferences and to the members of EAEE National Associations. He mentioned that most of the EAEE National Member Associations have paid their National membership dues for 2003 and 2004, however; there are still 10 EAEE National Associations (from Algeria, Bulgaria, Cyprus, Egypt, Greece, Iran, Kazakhstan, Romania, Turkey and Ukraine) that have not paid at all. It was decided to inform the Delegates of these National Associations to encourage them to submit their membership dues in the near future.

He explained the new electronic manuscript submission and review procedure that became effective as of June 1, 2005 for Bulletin of Earthquake Engineering. He mentioned that all the manuscripts for the third issue of volume 3 were forwarded to Springer and after 3rd Volume is published completely, Bulletin of Earthquake Engineering will get a citation index review. Starting from 2006, BEE will be published as four issues per year. Arrangements were made to have 4 special issues during 2006 and 2007. The Secretary General explained his proposal to establish a secure server in Central Office to support the electronic subscription of EAEE individual members. The new EAEE server will be connected to the internet via the national ADSL system and will be the main location for the EAEE

web pages as well as for the BEE secure site for individual EAEE members with electronic subscription to connect using specially designated passwords to download BEE articles. The EC approved all the preparations for the establishment of the EAEE server and BEE secure site within the Central Office in Kandilli Observatory and Earthquake Research Institute of Bogaziçi University. Secretary General also informed the Committee concerning his efforts jointly with Mrs. Petra van Steenberg from Springer in drafting a protocol specifying the mutual commitments and responsibilities of both parties regarding the publication and subscription to BEE.

The Secretary General summarised his proposal to get a legal registration in Istanbul for the EAEE Central Office as an NGO with international members starting from the year 2006. An application will be filed with the Istanbul City Governorship for establishing EAEE as an international society in Turkey under the auspices of Bogaziçi University, Kandilli Observatory and Earthquake Research Institute. Once the legal registration of EAEE is finalised, an EAEE bank account will be opened most likely in HSBC Bank to give Central Office the advantage to control money transfers and to keep books which will be still under the control of Treasurer. The Executive Committee approved the proposal to establish legal registration in Istanbul and the opening of the EAEE bank account.

The EC discussed the representation of the Individual Members in the EAEE General Assembly during the forthcoming conference. According to the EAEE Statutes for each 50 Individual Members there will be one representative participating to the EAEE General Assembly. The suggestion of the President for the selection of representatives of individual members by postal balloting was approved and Central Office was given the responsibility of preparing and sending the mail asking the members to vote for their nominees.

Secretary General summarised the efforts to publish and distribute the electronic EAEE Newsletter regularly twice per year. The Newsletter is distributed electronically to all members and is also inserted in the EAEE web pages. The delegates of National Member Associations were asked each time to distribute the Newsletter among their members. Central Office is planning to produce printed copies of the Newsletter to be distributed if the forthcoming conferences.

As the last item, Secretary General informed EC about the reviews and suggestions received for the FP6 Marie Curie training course project proposal (ETCEE) that was turned down in the evaluation process. The Executive Committee discussed different alternatives and decided to prepare a revised proposal to be resubmitted in 2006. It was agreed to decrease the number of training courses and to supply more detailed information for each training course as suggested by the reviewers. The Secretary General was given the responsibility to communicate with the related officers of EU about the problematic points on the proposal to find out how improvements can be implemented and to communicate with the Task Group Coordinators to prepare the first draft to be discussed in the next EC meeting.

**Item 5 Budget:** The Treasurer Prof. Rainer Flesch informed the Executive Committee about the present situation concerning the budget. He summarised his approach in connection with the book keeping and related to the invoices received from the Springer. He presented the latest budget for the term of 2004-2005. The budget was approved by the Executive Committee.

It was decided to keep the present financial arrangements until the official bank account is established by the Central Office in Istanbul and once the EAEE bank account is established, all the accounting and book keeping will be transferred to the Central Office. The Treasurer

Prof.Flesch will review and audit the accounting and book keeping conducted by the Central Office.

It was also decided to send an apology to all individual members for the delays encountered related to the distribution of BEE.

**Item 6 Task Groups:** The activities of the Task Groups were discussed briefly and it was decided to inquire from all TG Coordinators brief TG Reports summarising their views and suggestions concerning; (1) the future activities of their TG for the period of 2006-2010; (2) their decisions for participating to the new project proposal to be submitted for the Marie Curie training courses, and (3) their decisions regarding the preparation of the TG state-of-the-art report to be submitted to 1st ECEES.

**Item 7 Statutes:** The EC discussed briefly possible improvements concerning EAAE Statutes, and it was agreed that some updates and clarifications are needed.

Atilla Ansal, Rainer Flesch and Robin Spence were given responsibility of bringing a proposal of changes in the Statutes to the next EC meeting in order to be able to submit the changes to the EAAE General Assembly in September, 2006.

**Item 8:** It was decided to have the next EC meeting in Geneva, Switzerland on 25 February 2006, depending on the availability of all EC members.

Epilogue: The fifth Meeting of the Executive Committee of the EAAE held in Lisbon was finalized. The meeting ended with the thanks of the President to all participating members to especially to Carlos Oliveira for hosting the meeting.

Atilla Ansal  
Secretary General

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## **REPORT OF THE CENTRAL OFFICE ACTIVITIES**

**SEPTEMBER 2004 – NOVEMBER 2005**

### **GENERAL**

Most likely for the first time in EAAE history in accordance with the Executive Committee decision taken at the 4th Executive Committee Meeting (Item #7), Mrs. Gökçe Tönük was hired as a part time Secretary for the Central Office starting as of October 2004, using the available EAAE budget.

The main activities of the Central Office during this one-year term were:

- Organising the Executive Committee Meetings, drafting and dissemination of the Minutes,
- Drafting and submitting one Marie Curie Training Course Proposal to FP6,
- Conducting individual membership campaigns,
- Drafting and dissemination of the EAAE Newsletters,
- Correspondence with members, monitoring and updating membership records monthly,
- Updating of EAAE Internet web pages.

The Secretary General participated to:

- International Conference on 250th Anniversary of the 1755 Lisbon Earthquake, 1-4 November, 2005, Lisbon, Portugal;
- EAAE Workshop on Reducing Earthquake Risks in Europe, 31 October 2005, Lisbon, Portugal;
- General Assembly of International Association of Seismology and Physics of the Earth's Interior, 2-8 October, 2005, Santiago, Chile;
- 16th International Conference on Soil Mechanics and Geotechnical Engineering, 12-16 September, 2005, Osaka, Japan;
- TC4 Satellite Conference on Recent Developments in Earthquake Geotechnical Engineering, 10 September, 2005, Osaka, Japan;
- Workshop on the Progress of the EuroSeisrisk Experiments, 21-22 June, 2005, Thessaloniki, Greece;
- International Conference on Problematic Soils, 25-27 May, 2005, Magosa, North Cyprus;
- General Assembly of the European Geosciences Union, 24-29 April, 2005, Wien, Austria;
- Invited Lecture in Institut Cartogràfic de Catalunya, 28 February 2005, Barcelona, Spain;
- International Symposium of Earthquake Engineering (ISEE2005), 13-15 January, 2005, Awaji Island, Japan;
- 2004 Taiwan Post-Disaster Reconstruction School, 21-23 September 2004, Mingdao University, ChangHua 523, Taiwan, R.O.C.

to represent EAAE and to attend Task Group meetings and technical sessions. He made brief presentations about the EAAE and about Task Group activities in some of these meetings.

### **EXECUTIVE COMMITTEE**

The Central Office organised with the support of Executive Committee Member, Prof. Oliveira, the Fifth Executive Committee Meeting on October 30, 2005 in Lisbon, Portugal.

The minutes of the Fourth Executive Committee Meeting held on September 15, 2004, in Potsdam, Germany during the 29th General Assembly of European Seismological Commission was drafted and forwarded to all the Executive Committee Members, National Delegates, Honorary Members, the representatives of ESC. They were also inserted in EAAE web pages.

### **MEMBER ORGANISATIONS OF EAAE**

The Central Office sent out e-mail letters to Member Organisations every six months informing them about their membership dues. Most of the EAAE National Member Associations have paid their National membership dues for 2003 and 2004, however; there are still 10 EAAE National Associations (from Algeria, Bulgaria, Cyprus, Egypt, Greece, Iran, Kazakhstan, Romania, Turkey and Ukraine) that have not paid at all.

The Central Office have been continuously making efforts (campaigns) to increase the number of individual membership by sending invitation letters via e-mail to the participants of recently held conferences and to the members of EAAE National Associations. The number of individual membership has increased to 70 by the end of October 2005.

## **EUROPEAN SEISMOLOGICAL COMMISSION**

The Secretary General has participated to the Meeting of ESC Council held on September 16, 2004 in Potsdam, Germany and ESC Executive Committee Meeting on October 5, 2005 in Santiago, Chile. He communicated with the ESC Secretary General and Executive Committee on different issue concerning the organisation of the joint conference in 2006.

### **WORKING GROUPS AND TASK GROUPS**

During the past year as decided in the previous Executive Committee Meeting, Secretary General corresponded with Prof. Kyriasiz Pitolakis (Greece) concerning the future of the Task Group TG6 on "Earthquake Geotechnical Engineering and Microzonation". Prof.Pitolakis kindly accepted to act as the Coordinator of TG6. The EC approved the appointment of Prof. Pitolakis by postal balloting during 2005.

The TG8 on "Seismic Behaviour of Irregular and Complex Structures" has organised their fourth workshop during 26-27 August 2005 in Thessaloniki, GREECE with the support of Prof.Andreas Kappos.

The complete report is report of the meeting is available at <http://www.eaee.org> and will be included in the first issue of the EAEE Newsletter for 2006.

### **BULLETIN OF EARTHQUAKE ENGINEERING**

There has been a change in the manuscript submission procedure for the Bulletin of Earthquake Engineering, as of May 1, 2005, manuscript submissions and the review process is being monitored by the Springer Editorial Manager online peer review system.

The first two issues of Volume 3 are already printed and all the manuscripts for Volume 3 were forwarded to Springer in July, 2005. Springer will submit Bulletin of Earthquake Engineering to ISI for the science citation index once the third issue is printed. Starting from 2006, it was decided based on mutual agreement with Springer that Volume 4 of BEE will consist of 4 issues.

Agreements have been finalized to have three special issues during 2006 and 2007; 2 from the Risk-EU project with Guest Editors Benoît Le Brun and Robin Spence and one from the special sessions held during the EGU General Assembly on "Natural Hazards' Impact on Urban Areas and Infrastructure" with the Guest Editor Maria Bostenaru Dan.

Up to present 83 manuscripts were submitted to BEE for publication. Almost all of the papers were reviewed by two referees. 40 manuscripts have already been published. 18 manuscripts are under review and 23 manuscripts were declined and 2 manuscripts were withdrawn by the authors.

Plans are in progress to establish a secure server in the Central Office to support the electronic subscription of EAEE individual members. The new EAEE server will be connected to the internet via the national ADSL system and will be the main location for the EAEE web pages as well as for the BEE secure site for individual EAEE members with electronic subscription to connect using specially designated passwords to download BEE articles.

### **MARIE CURRIE TRAINING COURSE PROPOSAL TO FP6**

The Secretary General with the collaboration of EAEE Task Group Coordinators and Executive Committee members (Professors N.Ambraseys, R.Spence, R.Flesch, M.Dolce, C.Syrmekezis, K.Pitolakis, A.Castellani, A.Martelli A.Rutenberg, N.Aydinoglu, and M.Erdik) has drafted a FP6 Project Proposal to Marie Currie program (European Training Courses on Earthquake Engineering, ETCEE) for conducting training courses on eleven topics as listed below:

A proposal was submitted to 6th Framework Programme for Marie Curie Actions in May 2005 to organise 11 training courses on: (TC1) Performance Based Seismic Evaluation and Design; (TC2) Strong Ground Motion Simulation; (TC3) Structural Vulnerability and Earthquake Scenario; (TC4) Earthquake Scenarios, Early Warning and Rapid Response Applications; (TC5) The Evaluation and Strengthening of Existing Buildings; (TC6) Seismic Isolation of Structures and Innovative Antiseismic Techniques; (TC7) Site Effects and Seismic Microzonation; (TC8) Seismic Design and Retrofitting of Irregular and Complex Structures; (TC9) Dynamic Response of Structures to Seismic Loading; (TC10) Repair and Strengthening in Seismic Regions; (TC11) Earthquake Protection of the Cultural Heritage. The partners and organisers of the training course were: 1.Bogaziçi University, Kandilli Observatory and Earthquake Research Institute, Turkey;

2.University of Basilicata - Department of Structures, Geotechnics, Engineering Geology, Italy; 3.University of Cambridge, Cambridge Uni. Department of Architecture, United Kingdom; 4.ENEA, Italy; 5.Aristotle University of Thessaloniki (Auth), Laboratory of Soil Mechanics, Foundation and Earthquake Engineering, Greece; 6.The University of Florence, Italy; 7.Arsenal Research, Austria; 8.University of Trento, Italy; 9.National Technical Uni. of Athens, School of Civil Engineering, Institute of Structural Analysis and Aseismic Research, Greece. The Central Office was informed by the related EU Project Officer on August 25, 2005 that the submitted proposal has failed to pass the threshold levels and was declined.

### **NEWSLETTER**

The Central Office drafted and disseminated the first two issues of the EAEE Newsletter. In these two issues brief information were given concerning the member Associations from Germany, Austria, Croatia, Georgia, and Italy. There were also articles concerning the EAEE Earthquake Protection Policy Statement, International Partnership Advocating Global Earthquake Safety, Progress Report For the Bulletin of Earthquake Engineering for the Period of 2002-2005, and concerning the FP6 project proposal on European Training Courses on Earthquake Engineering (ETCEE).

### **INTERNET - WEB**

The Internet-EAEE web pages created in 1995 were updated continuously.

Atila Ansal  
Secretary General



A joint event of the  
 13th European Conference on  
Earthquake Engineering  
&  
 30th General Assembly of the  
European Seismological Commission

First European Conference on Earthquake Engineering and Seismology  
September 3-8, 2006 - Geneva, Switzerland

www.ecees.org

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DIREKTION FÜR ENTWICKLUNG UND ZUSAMMENARBEIT  
DIRECTION DU DÉVELOPPEMENT ET DE LA COOPÉRATION  
DIREZIONE DELLO SVILUPPO E DELLA COOPERAZIONE  
SWISS AGENCY FOR DEVELOPMENT AND COOPERATION  
AGENZIA SUZZA PER IL SVILUPPO E LA COOPERAZIONE



## 100th Anniversary Earthquake Conference

MANAGING RISK IN EARTHQUAKE COUNTRY

*The anniversary of the 1906 Earthquake is a valuable opportunity for earth scientists, engineers, policy makers, emergency responders and businesses to take stock of how well we are protecting our communities and mitigating the dangers associated with earthquakes. Please join us for the premier disaster mitigation conference in 2006.*

**April 18 - 22, 2006**  
**San Francisco, California**  
**Moscone Center**

The conference is co-convened by:



[www.1906eqconf.org](http://www.1906eqconf.org)

### VOLUME 3 NUMBER 1 February 2005

<i>Equations for the estimation of strong ground motions from shallow crustal earthquakes using data from Europe and the Middle East: Horizontal peak ground acceleration and spectral acceleration</i>	N. N. Ambraseys, J. Douglas, S. K. Sarma and P. M. Smit
<i>Equations for the estimation of strong ground motions from shallow crustal earthquakes using data from Europe and the Middle East: Vertical peak ground acceleration and spectral acceleration</i>	N. N. Ambraseys, J. Douglas, S. K. Sarma and P. M. Smit
<i>Frictional behaviour of steel-PTFE interfaces for seismic isolation</i>	M. Dolce, D. Cardone, and F. Croatto
<i>New developments in seismic risk assessment in Italy</i>	Giacomo Di Pasquale, Giampiero Orsini, and Roberto W. Romeo
<b>TECHNICAL NOTE:</b> <i>Experimental investigations on laminated rubber bearings</i>	Sarvesh Kumar Jain and Shashi Kant Thakkar

### VOLUME 3 NUMBER 2 The Tenth Mallet-Milne Lecture, April 2005

<i>The Tenth Mallet-Milne Lecture</i>	Zygmunt Lubkowski
<i>A Study of Piles during Earthquakes: Issues of Design and Analysis</i>	W. D. Liam Finn

### VOLUME 3 NUMBER 3 December 2005

<i>Force and Displacement Based Vulnerability Assessment for Traditional Buildings</i>	Dina F. D'Ayala
<i>Experimental and Numerical Studies on the Seismic Response of R.C. Hollow Bridge Piers</i>	Gian Michele Calvi, Alberto Pavese, Alessandro Rasulo, and Davide Bolognini
<i>A modified cyclic cracking model for RC structural walls behaviour under dynamic excitation</i>	Tsai-Fu Chuang, Andrew H. C. Chan, and Les A. Clark
<i>Nonlinear dynamic response of HDRB and Hybrid HDRB-Friction Sliders base isolation systems</i>	Franco Braga, Marco Faggella, Rosario Gigliotti, and Michelangelo Laterza
<i>Site Response from Ambient Vibrations in the Towns of Lod and Ramle (Israel) and Earthquake Hazard Assessment</i>	Y. Zaslavsky, A. Shapira, M. Gorstein, M. Kalmanovich, V. Giller, N. Perelman, I. Livshits, D. Giller, and I. Dan

### VOLUME 4 NUMBER 1 Forthcoming

<i>The Seismic Shear Demand in Ductile Cantilever Wall Systems and the EC8 Provisions</i>	A. Rutenberg and E. Nsieri
<i>Effect of overstrength on the seismic behaviour of multi-storey regularly asymmetric buildings</i>	Mario De Stefano, Edoardo Michele Marino, and Pier Paolo Rossi
<i>Seismic response of adjacent buildings connected with friction dampers</i>	A.V. Bhaskararao and R.S. Jangid
<i>S-wave velocity profiles for earthquake engineering purposes for the Cologne area (Germany)</i>	S. Parolai, S.M. Richwalski, C. Milkereit and D. Fäh

### VOLUME 4 NUMBER 2 Forthcoming Special Issue "Impact of Natural Hazards on Urban Areas and Infrastructure" Guest Editor: Maria Bostenaru Dan

<i>Preface</i>	Maria Bostenaru Dan
<i>Retrospective Prediction of Macroseismic Intensities Using Strong Ground Motion Simulation: The Case of the 1978 Thessaloniki (Greece) Earthquake (M6.5)</i>	Nikolaos Theodulidis, Zafeiria Roumelioti, Areti Panou, Alexandros Savvaids, Anastasia Kiratzi, Vassilios Grigoriadis, Petros Dimitriu and Theodoros Chatzigogos
<i>The Event of 26th of December 2004 - the Biggest Earthquake in the World in the Last 40 Years</i>	Cvetan Sinadinovski
<i>Simplified Method for Vulnerability Assessment of Dwelling Buildings and Estimation of Damage Scenarios in Catalonia, Spain</i>	A. Roca, X. Goula, T. Susagna, J. Chávez, M. González and E. Reinoso
<i>Road Network and Damaged Buildings in Urban Area: Short and Long Term Interaction</i>	A. Goretti and V. Sarli
<i>Classification of Collapsed Buildings for Fast Damage and Loss Assessment</i>	Christine Schweier and Michael Markus
<i>Rescue Operations and Demolition Works: Automating the Pneumatic Removal of Small Pieces of Rubble and Combination of Suction Plants with Demolition Machines</i>	Sascha Gentes
<i>Book review of "World Housing Encyclopaedia - summary publication 2004"</i>	Maria Bostenaru Dan

## Russian Association for Earthquake Engineering (RAEE)

A journal "Earthquake Engineering. Structural Safety" is edited every 2 months.

September, 19-26, 2005 the Russian National Conference in Earthquake Engineering and Engineering Seismology was held in Sochi-city (North Caucasus): 10 plenary presentations and 130 oral presentations on 16 sessions were given. More than 300 scientists, designers, builders, investors from Russia and former USSR countries took part in the Conference. The most popular sessions were: seismic risk reduction, high-rise buildings design and construction an earthquake hazardous sites, new computer design technologies, seismoisolation and others. The development of the Seismic Design Code for all former USSR countries was discussed.

8 teaching seminars for designers and builders dedicated to different scientific aspects of Earthquake Engineering were held in Krasnodar, Irkutsk, Novokuznetsk and other cities in earthquake hazardous areas.

## FORTHCOMING EVENTS

- 10-11.3.2006 2<sup>nd</sup> Asia Conference on Earthquake Engineering. Manila, Philippines** Organizer: Asia Council for Earthquake Engineering (ACEE).; Information from: Association of Structural Engineers of the Philippines Secretariat; Phone: (+632)411-8603; e-mail: [aseponline61@yahoo.com](mailto:aseponline61@yahoo.com); web site: <http://www.aseponline.org/>
- 27-29.3.2006 The Third International Conference on Early Warning: From Concept to Action. Bonn, Germany** Sponsor: International Strategy for Disaster Reduction. e-mail: [ewc3@un.org](mailto:ewc3@un.org); web site: <http://www.ewc3.org/>
- 18-21.4.2006 100<sup>th</sup> Anniversary Earthquake Conference Commemorating the 1906 San Francisco Earthquake, San Francisco, USA**, Conveners: Earthquake Engineering Research Institute (EERI), The Seismological Society of America (SSA), Disaster Resistant California (DRC), web site: <http://www.1906eqconf.org>
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- 26.8-1.9.2006 International Disaster Reduction Conference, Davos, Switzerland**, Conference Organizers: IDRC Davos 2006, SLF, Flüelstrasse 11 CH-7260 Davos, Switzerland; e-mail: [davos2006@slf.ch](mailto:davos2006@slf.ch) web site: [www.Davos2006.ch](http://www.Davos2006.ch)
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- 25-28.6.2007 4<sup>th</sup> International Conference on Earthquake Geotechnical Engineering. Thessaloniki, Greece**, Contact: Prof. Kyriazis Pitilakis, Mrs. Anastasia Argyroudi (secretariat) Aristotle University of Thessaloniki Univ. Box. 450 Thessaloniki 54124, Greece; Phone / Fax: 30-2310-995842; e-mail: [kpitilak@civil.auth.gr](mailto:kpitilak@civil.auth.gr) or [anastarg@civil.auth.gr](mailto:anastarg@civil.auth.gr); Web Site: [www.4icege.org](http://www.4icege.org)

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