24 May 2010, 7:00 am - 1:00 pm

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Multiple Authors

Keynote Lecture

W. D. Liam Finn A. Wightman (Canada)	**Some Recent Developments in the Selection of Ground Motions for Design Keynote**

STATE OF THE ART AND PRACTICE (SOAP) SPECIAL LECTURE

I.M. Idriss (USA)	**Most Memorable Project and Lessons for the Geotechnical Engineering Students and Fresh Practitioners (paper not received)**

STATE OF THE ART AND PRACTICE (SOAP) SPEAKERS

George Gazetas Andriani I. Panagiotidou Nikos Gerolymos (Greece)	**Pushover and Inelastic-Seismic Response of Shallow Foundations Supporting a Slender Structure SOAP1**
Pedro S. Seco e Pinto (Portugal)	**Understanding Seismic Embankment Dam Behavior Through Case Histories SOAP2**
Ricardo Dobry Tarek Abdoun (USA)	**Seismic Response of Deep Foundations Subjected to Liquefaction-Induced Lateral Spreading: Integrated Research and Practical Implications SOAP3 (abstract only)**
Susumu Iai Tetsuo Tobita (Japan)	**Performance-Based Design of Geotechnical Structures: Recent Advances SOAP4**
Ahmed Elgamal (USA)	**Calibrated 3-D Computational Modeling of Soil-Structure Systems and Liquefaction Scenarios SOAP5**
Takaji Kokusho Tomohiro Ishizawa (Japan)	**Case Histories and Energy-Based Evaluation on Travel Distance of Slope Failures During Recent Earthquakes SOAP6**
Michael Pender (New Zealand)	**Integrated Earthquake Resistant Design of Structure-Foundation Systems SOAP7**

SESSION 2 "Wave Propagation, Engineering Vibrations and Solutions, Vibrations of Machine Foundations, Blast, Traffic and Construction Vibrations, Vibration Absorption"

SESSION 3a "Engineering Seismology: Near Fault and Directivity Effects, Geologic Indicators of Rupture Direction, Geometric Effects on Ground Motions, Motion Parameters for Design, Borehole Arrays, Interpretation of Field Array Data, Site Amplification"

SESSION 3b "Local Site Effects: One Dimensional Wave Propagation Predictions and Measurements, Nonlinear versus Equivalent Linear Analysis, Effective Stress versus Total Stress Analysis"

SESSION 4a "Liquefaction and Seismically-Induced Settlement, Ground Failures, Seismic Studies of Kobe, Lima Peru, Chile, Pakistan, China, U.S. and other Recent Earthquakes, Spatial Liquefaction"

Tom O'Rourke (USA)	**Lessons Learned from Large Scale Experiments of Ground Rupture Effects on Underground Lifelines SOAP8 (withdrawn)**
J. David Rogers Deniz Karadeniz (USA)	**Overview of the Seismic Threat in the Central United States SOAP9**
Attila Ansal Gökçe Tönük Aslı Kurtuluş Mustafa Erdik Stefano Parolai (Turkey)	**Modeling the Observed Site Response from Istanbul Strong Motion Network SOAP10**
Bruce Kutter Lijun Deng Sashi Kunnath (USA)	**Estimation of Displacement Demand for Seismic Design of Bridges with Rocking Shallow Foundations SOAP11**
J.P. Singh (USA)	**TBA (paper not received)**

SYMPOSIUM IN HONOR OF PROFESSOR I.M. IDRISS (SPEAKERS)

Nadania Idriss (Germany)	**Architecture as an Expression of Identity: Abbas Hilmi II and the Neo-Mamluk Style IMI1**
W.D. Liam Finn (Canada)	**I.M. Idriss, A Pioneer in Geotechnical Earthquake Engineering IMI3**
Russell A. Green James K. Mitchell (USA)	**Comparison of Energies Required to Densify Liquefiable Soil IMI2**
Ricardo Dobry (USA)	**Comparison Between Clean Sand Liquefaction Charts Based on Penetration Resistance and Shear Wave Velocity IMI4**
Kenji Ishihara (Japan)	**Performances of Rockfill Dams during Recent Large Earthquakes IMI5**
Ross Boulanger (USA)	**Sand Plasticity Model for Nonlinear Seismic Deformation Analyses IMI6**
Raymond B. Seed (USA)	**California's New Seismic Levee Engineering Programs IMI7 (paper not received)**

SESSION 4b "Stability and Displacement Performance of Slopes, Landfills and Earth Dams Under Earthquakes"

SESSION 5a "Soil-Structure Interaction under Dynamic Loading, for both Shallow and Deep Foundations"

OTHER SPECIAL PRESENTATIONS

Karina R. Dahl Jason T. DeJong Ross Boulanger Michael W. Driller (USA)	**Effects of Sample Disturbance and Consolidation Procedures on Cyclic Strengths of Intermediate Soils OSP1**
Jonathan D. Bray Shideh Dashti (USA)	**Liquefaction-Induced Movements of Buildings with Shallow Foundations OSP2**
Ikuo Towhata Trinh Thi Lan Anh Suguru Yamada Ramin Motamed Yoshikazu Kobayashi (Japan)	**Zero-Gravity Triaxial Shear Tests on Mechanical Properties of Liquefied Sand and Performance Assessment of Mitigations Against Large Ground Deformation OSP3**
Youssef Hashash David R. Groholski Camilo Phillips (USA)	**Recent Advances in Nonlinear Site Response Analysis OSP4**
Sabanayagam Thevanayagam (USA)	**Liquefaction, Screening, and Remediation of Silty Soils OSP5**
Neven Matasovic (USA)	**Recent Advances in Seismic Design of Geosynthetically-Lined Waste Containment Facilities OSP6**
Robert Kayen Jonathan P. Stewart Brian D. Collins (USA)	**Recent Advances in Terrestrial LIDAR Applications in Geotechnical Earthquake Engineering OSP7**
Gopal Madabhushi Stuart K. Haigh (United Kingdom)	**Liquefaction Induced Settlement of Structures OSP8**
Kyle Rollins Matthew E. Adsero Mark A. Herbst Nathan Lemme (USA)	**Ground Improvement for Increasing Lateral Pile Group Resistance OSP9**
T.G. Sitharam P. Anbazhagan K.S. Vipin (India)	**Principles and Practices of Seismic Microzonation: Case Studies in India OSP10**
Lanmin Wang Zhongxia Yuan Haimei Sun Jin Deng (China)	**Criterions, Prediction and Prevention of Loess Liquefaction OSP11**

SESSION 5b "Soil-Foundation Interaction Triggered by Seismic Faulting"

SESSION 6a "Seismic Analysis and Design of Retaining and Marine Structures, Field Studies on Retaining Walls in California, Japan and around the World"

Francesco Leuzzi
Sebastiano Foti
Renato Lancellotta
(Italy)
George Mylonakis
(Greece)

Dynamic Response of Cantilever Retaining Walls Considering Soil Non-Linearity 6.08a

Anitha Nelson
P.K. Jayasree
(India)

Seismic Response of Reinforced Soil Retaining Walls with Block Facings 6.09a

Aditya Parihar
Navjeev Saxena
D.K. Paul
(India)

Effects of Wall-Soil-Structure Interaction on Seismic Response of Retaining Wall 6.15a

J. Matos e Silva
(Portugal)

Diaphragm Walls Seismic Design According to the Eurocodes 6.16a

Zhiqiang Li
Jinbei Li
Yaping Kong
(China)

Analysis of Aseismic Reliability Considering the Uncertainties Both Structural Parameters and Earthquake Loadings for the Gravity Type Earth-Retaining Wall 6.18a

Guoxi Wu
(Canada)

Seismic Soil Pressures on Rigid Walls with Sloped Backfills 6.20a

Omar Al-Farouk Salem Al-Damluji
Akram Younis Thannon Al-Sa'aty
Rafi Mahmoud Sulaiman Al-Nu'aimi
(Iraq)

Effects of Internal Gas Explosion on an Underwater Tunnel Roof 6.22a

Binod Shrestha
Hadi Khabbaz
(Australia)

Application of Vertical Reinforcement for Performance Enhancement of Reinforced Soil Under Seismic Loading 6.24a

A. Murali Krishna
(India)

Seismic Lateral Earth Pressures on Retaining Structures 6.25a

Alberto Pettiti
(Italy)
Dominic Assimaki
(USA)
Sebastiano Foti
(Italy)

Numerical Simulation of the Performance of Cantilever Walls Subjected to Seismic Loading 6.27a

SESSION 6b "Seismic Zonation: Earthquake Risk Assessment with Earthquake Risk Management, Microzonation Projects in California and Worldwide, Use of Building Codes to Reduce Earthquake Hazards"

Kaveh Andisheh

Preparation the Site Specific Spectrum for Civil Regions of

SESSION 7a "Seismic Analysis and Retrofit of Foundations of Bridges and Other Sub-Structures, Seismic Retrofit Projects and Procedures in California"

S.A.Kryuchkov
(Russia)

SESSION 7b "Case Histories of Geotechnical Earthquake Engineering, Failures and Geotechnical Analysis of Recent Earthquakes"

Abouzar Sadrekarimi
(Canada)
Timothy D. Starke
(USA)

Earthquake Induced Excess Pore Water Pressures in the Upper San Fernando Dam during the 1971 San Fernando Earthquake 7.01b

Hamed Niroumand
(Iran)

Performance of Solid Waste Soil in Earthquake of Boroujerd and Silakhor Earthquake 7.04b

Dimitra Manou
Maria Manakou
Maria Alexoudi
Anastasios Anastasiadis
Kyriazis Pitilakis
(Greece)

Microzonation Study of Duzce, Turkey 7.12b

Howard Plewes
Bob Chambers
Rick Friedel
Terence Jibiki
Alex Sy
(Canada)

Ground Improvement by Dynamic Compaction at a Tailings Disposal Facility 7.14b

SESSION 7c "Geotechnical Earthquake Engineering Issues in San Diego Region: Seismic Hazard, Onshore and Offshore Faulting, Near Fault and Directivity Effects, Liquefaction and Lateral Spread, Seismic Retrofit Projects, Seismic Design of Large Projects, De

Leo Handfelt
Ivan Wong
Patricia Thomas
Timothy Dawson
Jim Zhou
Nicola Kavanagh
(USA)

Seismic Hazard Evaluation for Design of San Vicente Dam Raise 7.01c

James R. Gingery
Scott H. Rugg
Thomas K. Rockwell
Bruce R. Hilton
(USA)

Fault Hazard Characterization for a Transportation Tunnel Project in Coronado, California 7.02c

Lisheng Shao

Vibro Replacement and Soil Mixing Ground Improvements at a

SESSION 8 "Model and Full-Scale Tests of Geotechnical Structures Including Centrifuge Tests, Recent Advances from Earthquake Simulation Facilities such as NEES, E-Defense, NCREE"

SESSION 9 "Performance Based Design in Geotechnical Earthquake Engineering"

Sissy Nikolaou James Go TC Michael Law James L. Kaufman (USA)	**Seismic Design Criteria for Critical Water Supply Facilities Incorporating Performance-Based Concepts OSP12**
George Mylonakis (Greece)	**Incorporating Kinematic Pile Bending into Seismic Codes: Experience from a European National Project OSP13**

EARTHQUAKE SPEAKERS

Lanmin Wang (China)	**Geotechnical Aspects of the 2008 China Earthquake EQ1**
Susumu Yasuda Tomohiro Tanaka (Japan)	**Geotechnical Aspects of Recent Japan Earthquakes EQ2**
Sarfraz Ali Liaqat Ali Muhammad Ammar (Pakistan)	**Geotechnical Aspects of Recent Pakistan Earthquakes EQ3**
Roberto Paolucci Chiara Smerzini (Italy)	**Strong Ground Motion in the Epicentral Region of the Mw 6.3, Apr 6 2009 L'Aquila Earthquake, Italy EQ4**
Tom Rockwell (USA)	**The Non-Regularity of Earthquake Recurrence in California: Lessons from Long Paleoseismic Records from the San Andreas and San Jacinto Faults in Southern California, and the North Anatolian Fault in Turkey EQ5**
Ronaldo Luna (USA)	**Reconnaissance Report of the May 28, 2009 Honduras Earthquake, M 7.3 EQ6**
Jennifer Donahue (USA)	**September 2009 American Samoa Tsunami EQ7 (presentation only)**
TBA	**2010 Haiti Earthquake (presentation only)**

SPECIAL LECTURES

Jost Studer (Switzerland)	**Site Amplification Studies for NPP Sites in Switzerland within the Project PEGASOS and PRP SPL1**
Yingcai Han	**Practical Seismic Design Considering Non-Linear Soil-Pile-**

(Canada) Shin-Tower Wang (USA)	**Structure Interaction SPL2**
Sanjeev Kumar Tim Holcomb Shahram Pezeshk (USA)	**Ground Improvement to Reduce Liquefaction Potential Using Vibrocompaction and Stone Columns SPL3**
Hesham El Naggar (Canada)	**A Structural Engineer's Approach to Efficient SFSI: Towards Performance Based Design SPL4**
Ion Vlad (Romania)	**Machine Foundations and Blast Engineering Vibrations Case Studies SPL5**
Vlad Perlea Michael H. Beaty (USA)	**Corps of Engineers Practice in the Evaluation of Seismic Deformation of Embankment Dams SPL6**
Barnali Ghosh Zygmunt Lubkowski (United Kingdom) Jack Pappin (Hong Kong)	**The Importance of Creating Value and Safety in Seismic Design SPL7**
Jorge Meneses (USA)	**Dealing in Practice with Selecting and Modifying Earthquake Ground Motions for Nonlinear Analysis SPL8**
Rodrigo Salgado (USA)	**Liquefaction Resistance SPL10**
Ellen Rathje George Antonakos (USA)	**Recent Advances in Predicting Earthquake-Induced Sliding Displacements of Slopes SPL12**
Kyriazis Pitilakis Anastasios Anastasiadis Kalliopi Kakderi Maria Alexoudi Sotiris Argyroudis (Greece)	**The Role of Soil and Site Conditions in the Vulnerability and Risk Assessment of Lifelines and Infrastructures. The Case of Thessaloniki (Greece) SPL13**
C. Guney Olgun (USA)	**Seismic Response of Columnar Reinforced Ground SPL14**
Anoosh Shamsabadi Hubert K. Law (USA)	**Current Seismic Soil-Foundation-Structure Interaction State of the Art and Practice on California Toll Bridge Program SPL15**
Filippo Ciuffi (Italy)	**An Innovative Procedure for the Rapid Mapping of Urban Earthquake Vulnerability SPL16**

GEER SESSION (SPEAKERS ONLY – no papers received)

Jonathan Bray (USA)	**GEER Overview & Accomplishments**
Brady Cox (USA)	**Recent GEER Post-Event Reconnaissance**
Jonathan Stewart (USA) Francesco Silvestri (Italy)	**2007 Ica-Pisco, Peru Earthquake Reconnaissance**
Jonathan Stewart (USA) Francesco Silvestri (Italy)	**2009 L'Aquila, Italy Earthquake Reconnaissance**
Rob Kayen (USA)	**Emerging Reconnaissance Technologies& Practices**
Kazuo Konagai (Japan)	**Reconnaissance Tools & Google Earth**
David Frost (USA)	**Use of New Technologies**
William Holmes (USA)	**Data Collection and Protocols**
Ellen Rathje (USA)	**Impacts from Learning from Earthquakes**
TBA	**Remote Sensing**
Jonathan Brady Brady Cox Jonathan Stewart (USA) Francesco Silvestri (Italy) Rob Kayen (USA) Kazuo Konagai (Japan) David Frost William Holmes Ellen Rathje (USA)	**Panel Discussion**

SESSION 1a "Dynamic Properties of Soils and Soil-Like Materials, Engineering Soil Parameters and Constitutive Relations"

SESSION 1b "New Field and Laboratory Methods and Results, Data Base, Large Scale Field Tests, Centrifuge Tests"