

24 May 2010 - 29 May 2010

## Past Proceedings: Fifth International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics (2010)

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### Recommended Citation

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**FIFTH INTERNATIONAL CONFERENCE ON RECENT ADVANCES IN  
GEOTECHNICAL EARTHQUAKE ENGINEERING AND SOIL DYNAMICS AND  
SYMPOSIUM IN HONOR OF PROFESSOR I. M. IDRIS  
SAN DIEGO, CA – MAY 24-29, 2010  
<http://5geoeqconf2010.mst.edu>**

**March 24, 2010**

**List of Papers**

**KEYNOTE LECTURE**

W. D. Liam Finn A. Wightman (Canada)	Some Recent Developments in the Selection of Ground Motions for Design
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**STATE OF THE ART AND PRACTICE (SOAP) LECTURES**

**SPECIAL SOAP LECTURE**

I.M. Idriss (USA)	Most Memorable Project and Lessons for the Geotechnical Engineering Students and Fresh Practitioners (paper not received)
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**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 SOAP 1
---	--

Pedro S. Seco e Pinto (Portugal)	Understanding Seismic Embankment Dam Behavior Through Case Histories SOAP 2
-------------------------------------	---

Ricardo Dobry Tarek Abdoun (USA)	Seismic Response of Deep Foundations Subjected to Liquefaction-Induced Lateral Spreading: Integrated Research and Practical Implications SOAP 3 (Abstract only)
--	---

Susumu Iai Tetsuo Tobita (Japan)	Performance-Based Design of Geotechnical Structures: Recent Advances SOAP 4
--	---

Ahmed Elgamal (USA)	Calibrated 3-D Computational Modeling of Soil-Structure Systems and Liquefaction Scenarios SOAP 5
------------------------	---

Takaji Kokusho Tomohiro Ishizawa (Japan)	Case Histories and Energy-Based Evaluation on Travel Distance of Slope Failures During Recent Earthquakes SOAP 6
--	--

Michael Pender (New Zealand)	Integrated Design of Structure-Foundation Systems SOAP 7
---------------------------------	--

Tom O'Rourke (USA)	Lessons Learned from Large Scale Experiments of Ground Rupture Effects on Underground Lifelines SOAP 8 (withdrawn)
J. David Rogers Deniz Karadeniz (USA)	Overview of the Seismic Threat in the Central United States SOAP 9
Attila Ansal Gökçe Tönük Aslı Kurtuluş Mustafa Erdik Stefano Parolai (Turkey)	Modeling the Observed Site Response from Istanbul Strong Motion Network SOAP 10
Bruce Kutter Lijun Deng Sashi Kunnath (USA)	Estimation of Displacement Demand for Seismic Design of Bridges with Rocking Shallow Foundations SOAP 11
J.P. Singh (USA)	SOAP 12 - TBA (paper not received)
<b>SYMPOSIUM IN HONOR OF PROFESSOR I.M. IDRIS (SPEAKERS)</b>	
Nadania Idriss (Germany)	Architecture as an Expression of Identity: Abbas Hilmi II and the Neo-Mamluk Style IMI 1
W.D. Liam Finn (Canada)	I.M. Idriss, A Pioneer in Geotechnical Earthquake Engineering IMI 3
Russell A. Green James K. Mitchell (USA)	Comparison of Energies Required to Densify Liquefiable Soil IMI 2
Ricardo Dobry (USA)	Comparison Between Clean Sand Liquefaction Charts Based on Penetration Resistance and Shear Wave Velocity IMI 4
Kenji Ishihara (Japan)	Performances of Rockfill Dams during Recent Large Earthquakes IMI 5
Ross Boulanger (USA)	Sand Plasticity Model for Nonlinear Seismic Deformation Analyses IMI 6
Raymond B. Seed (USA)	California's New Seismic Levee Engineering Programs IMI 7 (paper not received)
<b>OTHER SPECIAL PRESENTATIONS</b>	
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 OSP 1

Jonathan D. Bray Shideh Dashti (USA)	Liquefaction-Induced Movements of Buildings with Shallow Foundations OSP 2
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 OSP 3
Youssef Hashash David R. Groholski Camilo Phillips (USA)	Recent Advances in Nonlinear Site Response Analysis OSP 4
Sabanayagam Thevanayagam (USA)	Liquefaction, Screening, and Remediation of Silty Soils OSP 5
Neven Matasovic (USA)	Recent Advances in Seismic Design of Geosynthetically-Lined Waste Containment Facilities OSP 6
Robert Kayen Jonathan P. Stewart Brian D. Collins (USA)	Recent Advances in Terrestrial LIDAR Applications in Geotechnical Earthquake Engineering OSP 7
Gopal Madabhushi Stuart K. Haigh (United Kingdom)	Liquefaction Induced Settlement of Structures OSP 8
Kyle Rollins Matthew E. Adsero Mark A. Herbst Nathan Lemme (USA)	Ground Improvement for Increasing Lateral Pile Group Resistance OSP 9
T.G. Sitharam P. Anbazhagan K.S. Vipin (India)	Principles and Practices of Seismic Microzonation: Case Studies in India OSP 10
Lanmin Wang Zhongxia Yuan Haimei Sun Jin Deng (China)	Criteria, Prediction and Prevention of Loess Liquefaction OSP 11
Sissy Nikolaou James Go TC Michael Law James L. Kaufman (USA)	Seismic Design Criteria for Critical Water Supply Facilities Incorporating Performance-Based Concepts OSP 12 (paper not received)
George Mylonakis (Greece)	Incorporating Kinematic Pile Bending into Seismic Codes: Experience from a European National Project OSP 13 (paper not received)

<b>EARTHQUAKE SPEAKERS</b>	
Lanmin Wang (China)	Geotechnical Aspects of the 2008 China Earthquake EQ 1 (paper not received)
Susumu Yasuda Tomohiro Tanaka (Japan)	Geotechnical Aspects of Recent Japan Earthquakes EQ 2
Sarfraz Ali Liaqat Ali Muhammad Ammar (Pakistan)	Geotechnical Aspects of Recent Pakistan Earthquakes EQ 3
Roberto Paolucci Chiara Smerzini (Italy)	Strong Ground Motion in the Epicentral Region of the Mw 6.3, Apr 6 2009 L'Aquila Earthquake, Italy EQ 4
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 EQ 5
Ronaldo Luna (USA)	Reconnaissance Report of the May 28, 2009 Honduras Earthquake, M 7.3 EQ 6
Jennifer Donahue (USA)	September 2009 American Samoa Tsunami EQ 7 (presentation only)
TBA	2010 Haiti Earthquake (presentation only)
<b>SPECIAL LECTURES</b>	
Jost Studer (Switzerland)	Site Amplification Studies for NPP Sites in Switzerland within the Project PEGASOS and PRP SPL 1 (Session 3)
Yingcai Han (Canada) Shin-Tower Wang (USA)	Practical Seismic Design Considering Non-Linear Soil-Pile-Structure Interaction SPL 2 (Session 5)
Sanjeev Kumar Tim Holcomb Shahram Pezeshk (USA)	Ground Improvement to Reduce Liquefaction Potential Using Vibrocompaction and Stone Columns SPL 3 (Session 4)
Hesham El Naggar (Canada)	A Structural Engineer's Approach to Efficient SFSI: Towards Performance Based Design SPL 4 (Session 5)
Ion Vlad (Romania)	Machine Foundations and Blast Engineering Vibrations Case Studies SPL 5 (Session 2)
Vlad Perlea Michael H. Beaty (USA)	Corps of Engineers Practice in the Evaluation of Seismic Deformation of Embankment Dams SPL 6

Barnali Ghosh Zygmunt Lubkowski (United Kingdom) Jack Pappin (Hong Kong)	The Importance of Creating Value and Safety in Seismic Design SPL 7
Jorge Meneses (USA)	Dealing in Practice with Selecting and Modifying Earthquake Ground Motions for Nonlinear Analysis SPL 8 (Session 3)
Rodrigo Salgado (USA)	Liquefaction Resistance SPL 10 (Session 4) (paper not received)
Ellen Rathje George Antonakos (USA)	Recent Advances in Predicting Earthquake-Induced Sliding Displacements of Slopes SPL 12 (Session 4)
Kyriazis Pitilakis Anastasios Anastasiadis Kalliopi Kakderi Maria Alexoudi Sotiris Argyroudīs (Greece)	The Role of Soil and Site Conditions in the Vulnerability and Risk Assessment of Lifelines and Infrastructures. The Case of Thessaloniki (Greece) SPL 13 (Session 8)
C. Guney Olgun (USA)	Seismic Response of Columnar Reinforced Ground SPL 14 (Session 5)
Anoosh Shamsabadi Hubert K. Law (USA)	Current Seismic Soil-Foundation-Structure Interaction State of the Art and Practice on California Toll Bridge Program SPL 15 (Session 7)
Filippo Ciuffi (Italy)	An Innovative Procedure for the Rapid Mapping of Urban Earthquake Vulnerability SPL 16 (Session 6)
<b>GEER SESSION</b>	
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

<b>SESSION 1a</b>	
<b>“Dynamic Properties of Soils and Soil-Like Materials, Engineering Soil Parameters and Constitutive Relations”</b>	
Constantine A. Stamatopoulos (Greece)	Constitutive Models Predicting the Response of Clays along Slip Surfaces 1.03a
Luling Yang Lynn Salvati (USA)	Small Strain Properties of Sands with Different Cement Types 1.05a
Jafar Naji Hamodi Ramin Sadeghi (Iran)	InSAR Technique to Allocate Land Subsidence in Karaj, and Tehran (Shehriar-Waramin and Djadjroud) Areas 1.06a
Mahdi Taiebat (Canada) Amir M. Kaynia (Norway)	A Practical Model for Advanced Nonlinear Analysis of Earthquake Effects in Clay Slopes 1.09a
Fardin Jafarzadeh Hamed Sadeghi (Iran)	Dynamic Properties of Sand in Constant-Volume and Constant-Load Tests 1.11a
Mladen Vucetic Macan Doroudian David Sykora (USA)	Cyclic Compression of Compacted Clayey Sand at Small Cyclic Strains 1.14a
Kentaro Tabata (Japan) Mladen Vucetic (USA)	Threshold Shear Strain for Cyclic Degradation of Three Clays 1.15a
Swami Saran B. K. Maheshwari H. P. Singh (India)	Liquefaction Studies of the Solani Sand Reinforced with Geogrid 1.18a
Erin Leung Jack Pappin Raymond Koo (Hong Kong)	Determination of Small Strain Modulus and Degradation for In-Situ Weathered Rock and Old Alluvium Deposits 1.20a
Muge Akin (Turkey) Steven L. Kramer (USA) Tamer Topal (Turkey)	Comparison of Measured and Estimated Shear Wave Velocities in a Seismically Active Area (Erbaa, Turkey) 1.21a
M. Murat Monkul Jerry A. Yamamuro (USA)	The Effect of Nonplastic Silt Gradation on the Liquefaction Behavior of Sand 1.23a



Man T. Bui C.R.I. Clayton Jeffrey A. Priest (United Kingdom)	The Universal Void Ratio Function for Small Strain Shear Modulus 1.24a
J. Yang H.Y. Sze (Hong Kong)	Failure of Saturated Sand in Non-Symmetrical Cyclic Loading 1.25a
Giuseppe Modoni Anna Gazzellone (Italy)	Simplified Theoretical Analysis of the Seismic Response of Artificially Compacted Gravels 1.28a
Noriaki Sako Masashi Kawamura Yukio Shimomura Yoshio Ikeda (Japan)	Development of a New Geomaterial for Base Isolation Foundations 1.29a
A. Cavallaro Salvatore Grasso Michele Maugeri (Italy)	Dynamic Site Characterization by the Seismic Dilatometer Marchetti Test in Central Italy 1.31a
B.N. Madhusudhan Jyant Kumar (India)	Dynamic Properties of Rubber Specimens 1.33a
Aaron J. Geiger Ronald C. Boller Ronald D. Andrus Hossein Hayati Tahereh Heidari William M. Camp, III (USA)	Estimating Liquefaction Potential of a 200,000-Year-Old Sand Deposit Near Georgetown, South Carolina 1.34a
Mark J. Carlson (USA) Kwangkyun Kim Duhee Park (Korea)	An Evaluation of Ground Vibrations Induced by Heavy Free-falling Structural Elements 1.35a
Sumit Ghose Ambarish Ghosh (India)	Evaluation of Liquefaction Potential of Soil by Down Borehole Method 1.36a
H.N. Ramesh M.T. Prathap Kumar (India)	Resonant Frequency of Model Footings Resting on Finite Saturated Sand Stratum 1.38a

Nader Shariatmadari (Iran) Sandro Lemos Machado (Brazil) Ali Noorzad Mehran Karimpour-Fard Mohsen Keramati Seyyed Hossein Jafari Kalarijani (Iran)	Evaluation of Loading Rate on the Mechanical Behavior of Saturated MSW Materials in Undrained Condition 1.41a
Selman Sağlam B. Sadık Bakır (Turkey)	Cyclic Response of Reconstituted Low Plasticity Silt 1.47a
R.P. Sharma (India)	Soil Improvement Techniques for Mitigation of Seismic Hazards: An Overview 1.49a
Omer Faruk Capar (Turkey) Isao Ishihashi (USA)	Recovery of Elastic Parameters for Cross-Anisotropic Sandy Soil via Elastic Wave Measurements 1.51a
V.A. Barvashov Ch.A. Dzhantimirov I.M. Iovlev P.V. Kharlamov S.A. Rytov (Russia)	Seismic Behavior of Nailed Soil Massifs 1.54a
T. Wichtmann Th. Triantafyllidis (Germany)	On the Influence of the Grain Size Distribution Curve on Dynamic Soil Properties of Quartz Sand 1.55a
Fred (Feng) Yi (USA)	Procedure to Evaluate Liquefaction-Induced Lateral Spreading Based on Shear Wave Velocity 1.57a
Huriye Bilsel Göknur Erhan (N. Cyprus) Turan Durgunoglu (Turkey)	Assessment of Liquefaction/Cyclic Failure Potential of Alluvial Deposits on the Eastern Coast of Cyprus 1.58a
Woong-Jong Park (Korea)	Effect of Degree of Weathering on Dynamic Properties of Weathered Granite Soils 1.59a

<b>SESSION 1b</b> <b>“New Field and Laboratory Methods and Results, Data Base, Large Scale Field Tests, Centrifuge Tests”</b>	
Neelima Satyam K.S. Rao (India)	Multi Channel Analysis of Surface Wave (MASW) Testing for Dynamic Site Characterization of Delhi Region 1.01b
Kayhan Aykin Onder Akckal H. Turan Durgunoğlu Ozer Akbal (Turkey)	Comparison of Dynamic Soil Modelling Using SCPT, SDMT and SASW 1.02b
Julian Sandoval Pedro de Alba Thomas P. Ballesterro Barry K. Fussell (USA)	Residual Strength of Liquefied Sand: Laboratory Vs. Field Measurements 1.05b
Luljeta Bozo Skender Allkja Lorena Harizaj (Albania)	Field and Laboratory Tests in Seman Deposits 1.06b
Leo Matesic (Croatia) Marco D’Elia (Italy) Hsu-Chung Hsu Mladen Vucetic (USA)	Development of Database of Cyclic Soil Properties from 94 Tests on 47 Soils 1.07b
S. Mohsen Haeri Mehdi Pouragha (Iran)	An Insight to the Effect of Initial Static Shear Stress on the Liquefaction of Sands 1.08b
Wen-Jong Chang Hsing-Chuan Ho Jyh-Fang Chen (Taiwan R.O.C.)	Large Scale Model Test for Pile-Supported Wharf in Liquefied Sand 1.09b
Javier Moreno Robles Vicente Cuéllar Mirasol (Spain)	Reproduction, by Means of True Scale Testing, of the Effects Caused on a Track by High Speed Railway Traffic 1.11b
Leonid Stavnitser Galina Nikitaeva (Russia)	Resonant-Frequency Method of Soil Damping Characteristics Determination 1.12b
P. Anbazhagan T.G. Sitharam Aditya P. Sitharam (India)	Correlation between Low Strain Shear Modulus and Standard Penetration Test ‘N’ Values 1.13b

Christopher R. I. Clayton Amit K. Sultaniya Jeffrey A. Priest (United Kingdom)	Assessing Cross Anisotropy of Small-Strain Stiffness Using the Resonant Column Apparatus 1.14b
Tejas G. Murthy Monica Prezzi Rodrigo Salgado (USA) Dimitrios Loukidis (Cyprus)	Undrained Response of Clean and Silty Sands 1.15b
P. Hu G.Y. Luo Q.P. Cai Y.H. Ding Y.J. Hou C.W.W. Ng (China)	Centrifuge Modeling of the Influence of Pre-Existing fractures in Multilayered Soils on Ground Deformation 1.16b
Valérie Whenham Alain Holeyman (Belgium)	Vibrodriving Prediction Models Vs. Experimental Results 1.17b
John L. Maier Ali M. Oskoorouchi (USA)	Increasing Lateral Capacity of Helical Piles with Lateral Restraint Devices 1.18b
Nicolas Denies (Belgium) Jean Canou Jean-Noël Roux (France) Alain Holeyman (Belgium)	Sphere Penetration Experiments in Vertically Vibrated Sand 1.19b
Lou Areias (Belgium)	Method to Reduce Variability of S-Wave Profiles in Seismic Cone Penetration Tests 1.20b
Scott Brandenburg Joseph Coe (USA)	P-wave Reflection Imaging of Laboratory Soil Models 1.21b
Zhihua Li (USA)	A New Method for Evaluating Spatial Variability of Soil Strains Developed During Earthquakes Based on Electrical Resistivity Concepts using Green's Function 1.23b
Patrick Wilson Ahmed Elgamal (USA)	Passive Earth Pressure Force-Displacement Relationships 1.24b
Koichi Nagao Naoaki Suemasa Tatsuo Akashi Mikio Futaki (Japan)	Applicability Test of Soil Improvement Using Micro-Bubbles Against Soil Liquefaction 1.26b

Robb Eric S. Moss Vic Crosariol Steven Kuo (USA)	Shake Table Testing to Quantify Seismic Soil-Structure-Interaction of Underground Structures 1.27b
Salvador Lazcano (Mexico)	Experiences in Pumice Soil Characterization by Surface Wave Analysis 1.28b
Zamri Chik Susy K. Ariestianty (Malaysia) Sri Atmaja P. Rosyidi (Indonesia) Khairul Anuar Mohd. Nauyan Mohd. Raihan Taha (Malaysia)	Field Measurement of Dynamic Soil Properties of Tropical Meta-Sediment Residual Soils 1.29b
Diego Lo Presti Nunziante Squeglia Oronzo Pallara (Italy)	An Innovative Triaxial/Resonant Column Equipment 1.30b
Jeremy C. Ashlock Ronald Y. S. Pak (USA)	Multi-Modal Synthesis and Variable Modulus Effects in Resonant Column Tests by Random Excitations 1.31b
Osama Abuhajar M. Hesham El Naggar Tim Newson (Canada)	Review of Available Methods for Evaluation of Soil Sensitivity for Seismic Design 1.32b
Jamison H. Steidl Sandra Seale (USA)	Observations and Analysis of Ground Motion and Pore Pressure at the NEES Instrumented Geotechnical Field Sites 1.33b
M. Murat Monkul Jerry A. Yamamuro (USA)	Influence of Densification Method on Some Aspects of Undrained Silty Sand Behavior 1.34b
R.N. Khare (India)	New Methods to Remove Arsenic from Soils 1.36b

<b>SESSION 2</b> <b>“Wave Propagation, Engineering Vibrations and Solutions, Vibrations of Machine Foundations, Blast, Traffic and Construction Vibrations, Vibration Absorption”</b>	
Stefan Van Baars (Netherlands)	Near Field Wave Transformation in Clay and Peat 2.01
Petr P. Prochazka (Czech Republic)	Influence of Dislocations on Bumps Occurrence in Deep Mines 2.03
Dirk Wegener Ivo Herle (Germany)	Investigation of Shear Strain Amplitude Induced by Railroad Traffic in Soils 2.06
Hing-Ho Tsang (Hong Kong) S. Yaghmaei Sabegh (Iran) Nelson T.K. Lam M. Neaz Sheikh Buddhima Indraratna (Australia)	Geotechnical Seismic Isolation by Scrap Tire-Soil Mixtures 2.07
Sri Atmaja P. Rosyidi (Indonesia) Mohd. Raihan Taha Zamri Chik (Malaysia)	Couple CWT Spectrogram Analysis and Filtering: New Approach for Surface Wave Analysis (A Case Study on Soft Clay Sites) 2.10
C.B. Crouse Ethan Dawson Pedro Amaya Prabir Sen (USA)	Vibration Analysis of Rotating Fans Mounted on Adjacent Rectangular Foundation Blocks 2.11
Marc Ittershagen (Germany)	Ground Improvement Under Dynamic Loading 2.13
Ion Vlad (Romania)	Mechanical and Acoustical Vibrations of a Building Generated by Weaving Looms 2.14
Nien-Yin Chang (USA) Hien Manh Nghiem (Vietnam)	Viscous Damping for Time Domain Finite Element Analysis 2.15
Hiroto Nakagawa Shoichi Nakai (Japan)	Propagation of Surface Waves in an Irregular Ground Based on the Thin Layered Element and Finite Element Method 2.17
Ahmed Hussain Ramancharla Pradeep Kumar (India)	Large Variation in PGA Due to Presence of Heterogeneities in the Surface Soil 2.18

Abdul Hayir (Turkey)	Dynamic Behavior of an Elastic Beam on a Winkler Foundation Under a Moving Load 2.20
Faruk Karadoğan M. Aysen Lav Ercan Yüksel (Turkey)	Vibrations Due to Dynamic Compaction 2.22
Ozgur L. Ertugrul Deniz Ulgen (Turkey)	Attenuation of Traffic Induced Ground Borne Vibrations due to Heavy Vehicles 2.27
Torsten Wichtmann Benjamin Rojas Andrzej Niemunis Theodor Triantafyllidis (Germany)	Stress- And Strain-Controlled Undrained Cyclic Triaxial Tests on a Fine Sand for a High-Cycle Accumulation Model 2.28
Mahmoud Ghazavi Ahmad Dehghanpour (Iran)	Dynamic Analysis of Piles Under Lateral Harmonic Vibration 2.29

<b>SESSION 3a</b>	
<b>“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”</b>	
Chavdar Kolev Martina G. Perikliyska (Bulgaria)	Example for Risk Estimation of Fault Appearance under the Place of Designed Skyscraper in Sofia 3.01a
Kaveh Andisheh Gholamreza Ghodrati Amiri (Iran)	Evolution of Iranian Standard No.2800 for Seismic Resistant Design of Near Source Buildings Based on Real Record of Iran 3.02a
Arun Bapat (India)	Development of Seismic Safety during Pre- and Co-Seismic Periods 3.04a
James Kaklamanos Laurie G. Baise (USA)	Model Validation of Recent Ground Motion Prediction Relations for Shallow Crustal Earthquakes in Active Tectonic Regions 3.05a
Luca Lenti (France) Salvatore Martino (Italy)	The Leveled-Energy Multifrequencial Analysis for Deriving Dynamic Equivalent Signals (LEMA-DES): Application for an Earthquake Scenario 3.06a
Mohammad Khandan Bakavoli Ebrahim Haghshenas (Iran)	Experimental and Numerical Study of Topographic Site Effect on a Hill Near Tehran 3.07a
Kenji Yamasaki Andy Vessely Chris Carpenter (USA)	Selection of Ground Motion Records for Two Dam Sites in Oregon 3.10a
King H. Chin Braydan Duree Whitney Trent Gustavo Ordonez (USA)	Evaluation of Seismic Response of a Site Class F Site Using Equivalent Linear and Nonlinear Computer Codes 3.11a
Anton Zaicenco Sharlie Huffman Iain Weir-Jones (Canada)	Seismic P-Wave Polarization in the Context of On-Site Early Warning System 3.12a
Rabia Z. Sarica (USA)	Selection of an Appropriate $a_{max}$ for Liquefaction Analyses from One-Dimensional Site Response Analyses 3.13a
Hamed Khodadadi Tirkolaei Morteza Jiryaei Sharahi (Iran)	Effect of Topographical Irregularities on Seismic Earthquake Response of Construction Site – 2D Numerical Analysis on Trapezoidal Valley Under Real Motion 3.14a
Timothy D. Ancheta Jonathan P. Stewart (USA)	A Validation Study of a Seismically Induced Ground Strain Model using Strong Motion Array Data 3.16a



Norman Abrahamson A. Anil Yunatci (Turkey)	Ground Motion Occurrence Rates for Scenario Spectra 3.18a
Adda Athanasopoulos-Zekkos (USA)	Variability in Earthen Levee Seismic Response due to Time-History Selection 3.19a
Dong-Yeop Kwak (USA) Duhee Park Bang Woong Shin Kwangkyun Kim (Korea)	Uniform Hazard Response Spectra of Korea Considering Uncertainties in Ground Properties 3.20a
Tetsuo Tobita Susumu Iai Tomotaka Iwata (Japan)	Numerical Analysis of Trampoline Effect in Extreme Ground Motion 3.22a
Xiaodan Sun Xiabin Tao Lijun Yin Dongli Zhang (China)	3-D Modeling of Shear-Wave Velocity for Numerical Green's Function in Near-Field Ground Motion Simulation 3.24a
Achilleas G. Papadimitriou Yannis Chaloulos (Greece)	Aggravation of the Peak Seismic Acceleration in the Vicinity of 2D Hills, Canyons and Slopes 3.26a

<b>SESSION 3b</b>	
<b>“Local Site Effects: One Dimensional Wave Propagation Predictions and Measurements, Nonlinear versus Equivalent Linear Analysis, Effective Stress versus Total Stress Analysis”</b>	
Wei Zheng Youssef Hashash Mark M. Peterson Andrew S. Whittaker (USA)	Site Specific Response Analysis in the New Madrid Seismic Zone 3.01b
S. M. Mir Mohammad Hosseini Mojde Asadolahi Pajouh F. Mir Mohammad Hosseini (Iran)	The Limitations of Equivalent Linear Site Response Analysis Considering Soil Nonlinearity Properties 3.02b
Geraldo R. Iglesia James L. Stiady (USA)	Seismic Site Response Analysis Using Spreadsheets 3.03b
Hing-Ho Tsang (Hong Kong) M. Neaz Sheikh Srikanth Venkatesan Nelson T. K. Lam (Australia)	Displacement Design Spectrum Model Accounting for Non-Linear Site Effects 3.05b
Chang-Gyun Jeong (Korea) Dong-Yeop Kwak (USA) Duhee Park Bang Woong Shin (Korea)	Evaluation of Frequency Dependent Equivalent Linear Analysis 3.07b
S. Krishna Kumar A. Boominathan (India)	Site Specific Seismic Analysis of a Deep Stiff Soil Site 3.08b
Fabian Bonilla (France) Francesca Bozzano (Italy) Celine Gélis (France) Annachiara Giacomi (Italy) Luca Lenti (France) Salvatore Martino (Italy) Jean-François Semblat (France)	Multidisciplinary Study of Seismic Amplification in the Historical Center of Rome, Italy 3.09b

Maria Paola Santisi d'Avila Ali Gandomzadeh Luca Lenti Jean-François Semblat Fabian Bonilla (France) Salvatore Martino (Italy)	Non Linear Site Effects: Interest of One Dimensional - Three Component (1D – 3C) Formulation 3.12b
Mustafa K. Koçkar Haluk Akgün (Turkey)	Evaluation of Local Site Conditions Using Ambient Seismic Noise Recordings: A Case Study from Ankara, Turkey 3.15b
R. Uma Maheswari A. Boominathan G.R. Dodagoudar (India)	Effective Stress Vs Total Stress Ground Response Analyses for a Typical Site in Chennai (India) 3.18b
Claudio di Prisco Federico Pisanò (Italy)	1D Dynamic Non-Linear Numerical Analysis of Earth Slopes: The Role of Soil Ductility and Time-Sensitiveness 3.19b
M'hammed Badaoui (France) Mounir Khaled Berrah (Algeria) Ahmed Mebarki (France)	Layers Heights Randomness Effect on Seismic Response of a Site in Algiers (Algeria) 3.20b
P. Anbazhagan Abhishek Kumar T.G. Sitharam (India)	Site Response Study of Deep Soil Column in Lucknow, India 3.21b
A. Ferraro Salvatore Grasso Michele Maugeri (Italy)	Topographic Site Effects Evaluation for the Monte Po Hill in the City of Catania (Italy) 3.22b
Olga-Joan Ktenidou Dimitris Raptakis Kyriazis Pitilakis (Greece)	Weak Motion Linear Soil Amplification at Aegion, Greece, and Comparison with Seismic Design Codes 3.24b
L. Govindaraju C.A. Madhusudan S.S. Quadri (India)	A Study on the Seismic Response of Ground and Reinforced Concrete Buildings in Belgaum Region, India 3.25b

<b>SESSION 4a</b>	
<b>“Liquefaction and Seismically-Induced Settlement, Ground Failures, Seismic Studies of Kobe, Lima Peru, Chile, Pakistan, China, U.S. and other Recent Earthquakes, Spatial Liquefaction”</b>	
Raghvendra Singh Debasis Roy (India)	Residual Shear Strengths of Cohesionless Soils from Energy Approach 4.01a
T.G. Sitharam B.V. Ravishankar (India) J.S. Vinod (Australia)	A Note on the Effect of Non-Plastic Fines on the Liquefaction and Reconsolidation Volumetric Strain Behaviour of Sands 4.02a
Mitchell W. Weber Alexandre J. Bredikhin (USA)	Static Load Induced Liquefaction, Steels Corners Road Embankment Failure 4.03a
Peter K. Robertson Lisheng Shao (USA)	Estimation of Seismic Compression in Dry Soils using the CPT 4.05a
Chihping Kuo Muhsiung Chang (Taiwan R.O.C.)	Verification of Potential Flaws in Computing Liquefaction Potential Index by 1999 Chi-Chi Earthquake in Taiwan 4.07a
Omid Naeemifar S. Shahaboddin Yasrobi (Iran)	A Study of Effective Factors on the Behavioural Characteristics of Clayey Sands 4.08a
George Papathanassiou Pavrides Spyros Valkaniotis Sotiris (Greece)	Assessment of Liquefaction Susceptibility of Geological Units in the Area of Gulf of Corinth, Greece 4.09a
Tianfei Liao Paul W. Mayne (USA)	Estimating Seismic Parameters Associated with Previous Earthquakes by SCPTU Soundings in the NMSZ 4.11a
Sarat Kumar Das (India)	Prediction of Lateral Displacement of Liquefaction Induced Ground Using Extreme Learning 4.12a
Mahmood Seid-Karbasi Peter Byrne (Canada)	Optimum Depth of Seismic Drains for Mitigating Large Deformations in Liquefied Ground with Hydraulic Barrier 4.13a
Gordon Tung-Chin Kung Der-Her Lee Pai-Hsiang Tsai (Taiwan R.O.C.)	Examination of Existing DMT-Based Liquefaction Evaluation Methods by Side-by-Side DMT and CPT Tests 4.14a
Daniela Porcino Vincenzo Marciànò (Italy)	Evaluating Liquefaction Resistance of a Calcareous Sand Using the Cone Penetration Test 4.15a

S. R. Pathak R. S. Dalvi A. D. Katdare (India)	Earthquake Induced Liquefaction Using Shake Table Test 4.16a
Shamsher Prakash Vijay K. Puri (USA)	Recent Advances in Liquefaction of Fine Grained Soils 4.17a
Suzan S. Salem K. M. El-Zahaby (Egypt)	Application of General Regression Neural Networks (GRNNs) in Assessing Liquefaction Susceptibility 4.18a
P. Bhattacharya S. P. Mukherjee Biswajit Das (India)	Prediction of Liquefaction Potential for Kolkata Region by Semi-Empirical Method 4.19a
Roger L. Torres (USA)	Ground Motions and Liquefaction Potential 4.20a
Kodi Ranga Swamy A. Boominathan K. Rajagopal (India)	Undrained Response and Liquefaction Behaviour of Non-Plastic Silty Sands under Cyclic Loading 4.21a
Johann Facciorusso Marco Uzielli Giovanni Vannucchi (Italy)	CPT-based Comparative Mapping of Liquefaction Hazard for Large Areas 4.23a
K. Onder Cetin Berna Unutmaz H. Tolga Bilge (Turkey)	Assessment of Liquefaction-Induced Foundation Soil Deformations 4.25a
Francesco Castelli Valentina Lentini (Italy)	SPT-Based Evaluation of Soil Liquefaction Risk 4.26a
Pelin Tohumcu Özener Kutay Özaydın (Turkey)	Numerical Modelling of Liquefaction in Layered and Silt Inter Layered Sands 4.27a
Tom Farrell Kyle Wallace John Ho (USA)	Liquefaction Mitigation of Three Projects in California 4.28a
Usama El Shamy Mourad Zeghal Ricardo Dobry Tarek Abdoun Sabanayagam Thevanayagam Ahmed Elgamal (USA)	DEM Simulation of Liquefaction-Induced Lateral Spreading 4.30a

Usama El Shamy Christina Denissen (USA)	Microscale Characterization of Energy Dissipation Mechanisms During Liquefaction 4.31a
Masaho Yoshida Masakatsu Miyajima Atsunori Numata (Japan)	Liquefaction Countermeasure Technique by Using Logs for Carbon Storage Against Global Warming 4.33a
Sevinc Unsal Oral Kemal Önder Çetin (Turkey)	Effective Stress Based Numerical Assessment of Liquefaction-Induced Landslide at Degirmendere Cape, Izmit Bay During Kocaeli (Izmit)-Turkey Earthquake 4.34a
Syed Kazim Mahdi (Pakistan)	Seismotectonic Contours of Kashmir-Hazara Region and Seismological Aspects of October 08, 2005 Earthquake 4.36a
Yaser Jafarian Mohammad H. Baziar Alireza Sadeghi Rouzbeh Vakili (Iran)	Probabilistic Evaluation of Field Liquefaction Potential Using Relative State Parameter Index ( $\xi_R$ ) 4.37a
Hadi Bahadori Gholi Asadzadeh (Iran)	Evaluation of Gravel Drains Effectiveness Against Liquefaction in Shaking Table Utilizing Energy Method 4.38a
William M. Camp, III Hugh C. Camp Ronald D. Andrus (USA)	Liquefaction Mitigation Using Air Injection 4.39a
C. Guney Olgun James R. Martin II Atila Sezen (USA)	Field Evidence and Laboratory Testing of the Cyclic Vulnerability of Fine-Grained Soils during the 1999 Kocaeli Earthquake 4.41a
Jorge Meneses (USA) J. Alva (Peru) B. Cox (USA) V. Moreno M. Olcese (Peru) R. Sancio J. Wartman (USA)	Case Histories of Widespread Liquefaction and Lateral Spread Induced by the 2007 Pisco, Peru Earthquake 4.43a
Alexandros Valsamis George D. Bouckovalas Vasiliki Dimitriadi (Greece)	Parametric Investigation of Lateral Spreading in Free-Face Ground Formations 4.45a
Farzad Farrokhzad A. J. Choobbasti A. Barari (Iran)	Artificial Neural Network Model for Prediction of Liquefaction Potential in Soil Deposits 4.46a

Gordana D. Hadži-Niković Ilija D. Perkovic Biljana Abolmasov (Serbia)	Assessment of Liquefaction Potential Relevant to Choice of Type and Depth of Foundations in Seismically Active Areas 4.47a
John Liao Jorge Meneses Emre Ortakci Zia Zafir (USA)	Comparison of Three Procedures for Evaluating Earthquake-Induced Soil Liquefaction 4.48a
Syed Kazim Mahdi (Pakistan)	Some Seismological Characteristics of Mw 6.5 Pishin-Ziarat October 29, 2008 Double Earthquake 4.50a
Md. Abdul Lahil Baki Sik-Cheung Robert Lo (Australia) Md. Mizanur Rahman (New Zealand)	Cyclic Instability Behaviour of Sand-Silt Mixture Under Partial Cyclic Reversal Loading 4.52a
Md. Mizanur Rahman (New Zealand) Sik-Cheung Robert Lo (Australia) Misko Cubrinovski (New Zealand)	Equivalent Granular Void Ratio and Behaviour of Loose Sand with Fines 4.53a
Murat Tonaroglu Kutay Ozaydin S.U. Dikmen (Turkey)	Seismic Analysis of Saturated Sand Deposits with Silt Layers 4.54a
S. M. Mir Mohammad Hesseini Y. Pashang Pisheh K. Shakiba Nia N. Ganjian (Iran)	Effect of Density on Critical Depth of Liquefaction in a Soil Deposit Containing Double Loose Sand Lenses 4.55a

<b>SESSION 4b</b> <b>“Stability and Displacement Performance of Slopes, Landfills and Earth Dams Under Earthquakes”</b>	
Aniruddha Sengupta Debabrata Giri (India)	Behavior of Nailed Steep Slopes in Laboratory Shake Table Tests 4.01b
Mohammad Hossein Tavakol Ali Komak Panah (Iran)	Assessing Horizontal Seismic Coefficients in Earth Dams with Regards to Expected Deformation 4.02b
Tryfon Thomaidis Constantine A. Stamatopoulos (Greece)	Accuracy of Empirical Equations Predicting Sliding-Block Displacement 4.03b
Constantine A. Stamatopoulos Kostas Mavromihalis (Greece) Sarada Sarma (United Kingdom)	The Effect of the Geometry Changes on Sliding-Block Predictions 4.04b
Amit Srivastava G.L. Sivakumar Babu (India)	Numerical Analysis of Failure of Rudramatha Dam Section During 26th January, 2001 Bhuj Earthquake 4.05b
Mohamed Arab Edward Kavazanjian, Jr. Neven Matasovic (USA)	Nonlinear Time-Domain Analysis of a Sliding Block on a Plane 4.08b
Ivan Gratchev Ikuo Towhata (Japan)	Geotechnical Characteristics of Seismically-Induced Aratozawa Landslide, Japan 4.10b
David C. Serafini Vlad Perlea (USA)	Comparison of Liquefaction Triggering Analysis Approaches for an Embankment Dam and Foundation 4.12b
Rajib Kumar Goswami Baleshwar Singh (India)	Stability Analysis of Flood Protection Embankments and Riverbank Protection Works 4.13b
Yanhui Han Roger Hart (USA)	Seismic Analysis of the Reservoir-Earth Dam-Pore Fluid System Using an Integrated Numerical Approach 4.15b
Wolfgang Roth C.B. Crouse Ethan M. Dawson Bei Su (USA)	Seismic Performance Evaluation of a Submarine Gas Pipeline 4.16b



A.Ghosh S.Sarkar D.P.Kanungo P.K.S. Chauhan Zamir Ahmad (India)	Stability Assessment and Suggestion for Control Measures of a Potential Landslide Slope on NH 94, Uttarakhand Himalaya, India 4.17b
Anton Chirica Dragos Vintila Diana Tenea (Romania)	The Stability and Deformation Limit State Corresponding to the High Road Embankments Close to a Bridge 4.19b
Indrajit Roy (India)	Design of an External Waste Rock Dump in an Opencast Coal Mine Standing Against a Hill in Seismic Prone Area of India 4.22b
Roxane Foulser-Piggott Peter J. Stafford (United Kingdom)	Incorporation of the Spatial Correlation of Arias Intensity within Earthquake Loss Estimation 4.23b
Michelle Theron Fritz Wagener (South Africa) Phillip Steenkamp (Ghana)	Seismic Stability Assessment the Raising of the Geita Tailings Storage Facility, Tanzania 4.24b
Francesca Bozzano Eliana Esposito (Italy) Luca Lenti (France) Salvatore Martino Alfredo Montagna Antonella Paciello Sabina Porfido (Italy)	Numerical Modelling of Earthquake-Induced Rock Landslides: The 1783 Scilla Case-History (Southern Italy) 4.25b
David Rees Gillette (USA)	On the Use of Empirical Correlations for Estimating the Residual Undrained Shear Strength of Liquefied Soils in Dam Foundations 4.26b
P. K. Basudhar Mothilal Bhookya (India) N.S.V. Kameswara Rao (Malaysia) Arindam Dey (India)	2D FEM Analysis of Earth and Rockfill Dams Under Seismic Condition 4.28b
Tensay G. Berhe Wu Wei (Austria)	Effect of Canyon Geometry and Ground Conditions on the Seismic Performance of Tendaho Earthfill Dam in Ethiopia 4.29b
Keiichi Ota Keiichi Itoh Yuichi Ueno Koji Takeya Senro Kuraoka Takaya Hiroshima (Japan)	Centrifuge Model Tests of Tieback Anchors and Drainage Pipes for Stabilization of Slopes Under Earthquake Loads 4.30b

Simone Barani (Italy) Paolo Bazzurro (USA) Fabrizio Pelli (Italy)	A Probabilistic Method for the Prediction of Earthquake-Induced Slope Displacements 4.31b
Mehdi M. Waseem (USA) Agarwal Pratibh (India)	Seismic Stability of the Nailed Slopes 4.32b
Govardhan Bhat Navjeev Saxena S.K. Prasad (India)	Static and Dynamic Behavior of Earthen Slopes in the Region of Uttarkashi, India 4.37b
Jongwon Lee Russell A. Green Rachel Finch (USA)	An Empirical Predictive Relationship for Assessing the Seismic Stability of Slopes 4.39b
Shoichi Nakai Yoko Nagata Toru Sekiguchi (Japan)	Effect of a Slope on the Dynamic Properties of Diluvial Terrace 4.40b
Binod Tiwari Keyur Ajmera Mike Hillman Beena Ajmera (USA)	Seismic Slope Stability of Reactivated Landslides – A Performance Based Analysis 4.41b
Masoud Amel Sakhi Mohammad Davoodi M.K. Jafari (Iran)	Using Recorded Earthquake Signals for Dynamic Analysis of Masjed Soleiman Embankment Dam 4.43b
Achilleas G. Papadimitriou Konstantinos I. Andrianopoulos George D. Bouckovalas Kostas Anastasopoulos (Greece)	Improved Methodology for the Estimation of Seismic Coefficients for the Pseudo-Static Stability Analysis of Earthdams 4.44b
Lelio Mejia Ethan Dawson (USA)	3D Analysis of the Seismic Response of Seven Oaks Dam 4.46b
Ali Ghanbari Mohsen Mojezi Meysam Fadaee (Iran)	Seismic Behavior of Asphaltic Concrete Core Dams 4.47b
Ali Komak Panah Sina Majidian (Iran)	Assessment of Soil-Nailed Excavations Seismic Failure Under Cyclic Loading and Pseudo-Static Forces 4.48b

Dalia S. Youssef Abdel Massih (Lebanon) Abdul-Hamid Soubra (France) Jacques Harb (Lebanon) Mohamed Rouainia (United Kingdom)	Dynamic Slope Stability Analysis by Reliability-Based Approach 4.51b
Maryam Malekian Amirata Taghavi Mohammad Hassan Baziar Shirin Salemi (Iran)	The Effects of Canyon Topography on Dynamic Stress Distribution in Earth Dams 4.52b
Ha H. Bui R. Fukagawa K. Sako Y. Okamura (Japan)	Earthquake Induced Slope Failure Simulation by SPH 4.53b
Susumu Yasuda Takafumi Tsuruda (Japan)	Cyclic Torsional Shear Tests to Obtain Dynamic Soil Properties for Seismic Design of Road Embankments 4.57b
Hamid Karimian Somasundaram Sriskandakumar Adrian Wightman Li Yan (Canada)	The Effect of Earthquake Record Scaling Technique on Embankment Dam Response 4.58b
Huynh Dat Vu Khoa Hans Petter Jostad (Norway)	Finite Element Modeling of the Las Colinas Landslide Under Earthquake Shaking 4.61b
Radhakanta Koner Debashish Chakravarty (India)	Evaluation of Seismic Response of External Mine Overburden Dumps 4.63b
A.K. Pachauri (India)	Landslide Hazard Mapping and Assessment in Himalayas 4.65b
Vlatko Sesov (Macedonia) Zeljko Zugic (Serbia)	Repair of Landslide “Umka-Duboko” – Seismic Performance Assessment 4.66b

<b>SESSION 5a</b> <b>“Soil-Structure Interaction under Dynamic Loading, for both Shallow and Deep Foundations”</b>	
Pranesh Chatterjee (Netherlands) Biswajit Basu (Ireland)	Non-Stationary Soil-Structure Interaction Analysis of a SDOF System Subjected to Joint Horizontal and Vertical Seismic Excitations 5.01a
H. Elahi M. Moradi (Iran) H. Poulos (Australia) A. Ghalandarzadeh (Iran)	Seismic Analysis of Pile Group Using Pseudostatic Approach 5.02a
Bappaditya Manna Dilip Kumar Baidya (India)	Nonlinear Soil-Pile Interaction Under Vertical and Coupled Motion 5.05a
Shuwang Yan (China) Jian Chu (Singapore) Qijin Fan (China)	Wave-Induced Strength Weakening of Soft Clay Below a Prefabricated Caisson Dike 5.06a
Indrajit Chowdhury Shambhu P.Dasgupta (India)	Estimation of Lateral Load Capacity of Short Piles Under Earthquake Forces 5.08a
Ian Prowell Ahmed Elgamal Jinchi Lu (USA)	Modeling the Influence of Soil Structure Interaction on the Seismic Response of a 5 MW Wind Turbine 5.09a
Aurelian C. Trandafir Steven F. Bartlett (USA)	Seismic Performance of Double EPS Geofoam Buffer Systems 5.10a
Eui-Kyu Yang Sun-Yong Kwon Jung-In Choi Myoung Mo Kim (Korea)	Natural Frequency Calculation of a Pile-Soil System in Dry Sand under an Earthquake Loading 5.11a
Liam Wotherspoon Michael Pender (New Zealand)	Effect of Uplift Modelling on the Seismic Response of Shallow Foundations 5.12a
Endi Zhai (USA)	Numerical Modeling of Soil-Pile Interaction in Liquefying Soils for a Water Crossing Bridge 5.13a
M.E.Stringer S.P.G.Madabhushi (United Kingdom)	Effect of Liquefaction on Pile Shaft Friction Capacity 5.15a

J.M. Eisenberg (Russia)	Pile-In-Tube Foundations with Reserve Switch-Off Elements and Other Systems for Seismic Response Adaptive Control 5.16a
Sanjeev Malhotra (USA)	Seismic Soil-Pile-Structure Interaction: Physical Processes and Analytical Models 5.17a
Dragos Vintila Diana Tenea Anton Chirica (Romania)	Designing Optimization for Some Eolian Power Unit Taking Into Account the Seismic Loads Influence 5.18a
George Anoyatis George Mylonakis (Greece)	Dynamic Winkler Modulus for Axially Loaded End-Bearing Piles 5.22a
Stefano Renzi Giovanni Vannucchi Claudia Madaï (Italy) George Mylonakis (Greece)	Influence of Soil-Structure Interaction on Seismic Response of Shear Buildings 5.23a
Francesco Castelli Valentina Lentini Michele Maugeri (Italy)	A Simplified Approach for the Evaluation of Kinematic Pile Bending 5.24a
Behzad Ghadimi (Iran)	Dynamic Response of Pile Groups Embedded in Transversely Isotropic Media Using Hybrid Numerical Method 5.26a
Ioannis Anastasopoulos Takis Georgarakos Vasilis Drosos George Gazetas (Greece)	Experimental Soil–Foundation–Bridge Pier Interaction: Towards a Reversal of Capacity Design 5.27a
Shuji Tamura Keisuke Adachi Kohji Tokimatsu (Japan)	Centrifuge Tests and Simple Analyses for Seismic Soil-Structure Interaction 5.30a
Gordana D. Hadži-Niković Stanko B. Ćorić (Serbia)	Investigation of Vibration Caused by Traffic and Railway Load 5.31a
Kumar Venkatesh D. Pandey N. K. Samadhiya (India)	Seismic Response of Barrage Raft Floor Under Heterogeneous Soil Medium 5.32a
Daniela Ardita Michele Maugeri Ernesto Motta Erminia Raciti (Italy)	A Parametric Study on Soil-Pile Kinematic Interaction in Layered Soils 5.33a

Esteban Saez Fernando Lopez-Caballero Arezou Modaresi- Farahmand Razavi (France)	Effect of Elastic and Inelastic DSSI on Seismic Demands of SDOFS Structures 5.37a
Domenico Lombardi (United Kingdom) Maria Giovanna Durante (Italy) Suresh R. Dash Subhamoy Bhattacharya (United Kingdom)	Fixity of Piles in Liquefiable Soils 5.39a
S.Vijaya S. Gangadhara (India)	Experimental Study on the Performance of Reinforced Sand Beds Under Repeated Loads in Presence of Water 5.40a
Konstantinos Giannakos (Greece)	Interaction Between Superstructure and Substructure in Railways 5.41a
Konstantinos Giannakos (Greece)	Stiffness Coefficient in the Transition Zone Between Ballasted and Ballastless Track and its Influence on Formation Stressing 5.42a
Hamed Saeidi Mansour Nikkhah-Bahrami (Iran)	The Effect of Step Load Moving on the Surface of a Cylindrical Cavity Using Neural Networks 5.43a
Ali Gandomzadeh Maria Paola Santisi d'Avila Jean-François Semblat Luca Lenti Fabian Bonilla (France)	Influence of Soil Nonlinearities on Dynamic Soil-Structure Interaction 5.44a
Fereidoun Amini Masoud Shadlou (Iran)	Effects of Recorded Free-Field Motion on the Response of Buildings Considering Soil-Structure Interaction Effects 5.46a
C. Guney Olgun James R. Martin II (USA)	Seismic Performance of Soil-Mix Panel Reinforced Ground 5.47a
Henry B. Mason Jonathan D. Bray Katherine C. Jones ZhiQiang Chen Tara C. Hutchinson Nicholas Trombetta Benjamin Choy Bruce L. Kutter Gregg Fiegel Jack Montgomery Roshani J. Patel Robert Reitherman Chandrakanth Boliseti Andrew Whittaker (USA)	Earthquake Input Motions and Seismic Site Response in a Centrifuge Test Examining SFSI Effects 5.48a

ZhiQiang Chen Tara C. Hutchinson Nicholas Trombetta Henry B. Mason Jonathan D. Bray Katherine C. Jones Chandrakanth Bolisetti Andrew Whittaker Benjamin Choy Bruce L. Kutter Gregg Fiegel Jack Montgomery Roshani J. Patel Robert Reitherman (USA)	Seismic Performance Assessment in Dense Urban Environments: Evaluation of Nonlinear Building-Foundation Systems Using Centrifuge Tests 5.49a
Hiroko Suzuki Kohji Tokimatsu (Japan)	Effects of Soil-Structure Interaction on Stress Distribution Within a Pile Group Under Multi-Dimensional Loading 5.50a
Manish V. Shah A.V. Shroff (India)	Soil-Structure Interaction of Soft Clay Using Prefabricated Vertical Geodrains Under Seismic Stresses 5.53a
Jinchi Lu Ahmed Elgamal Charles Sikorsky Thomas Shantz (USA)	Computational Modeling of a Large Pile Group Under Lateral Load 5.54a
Zhao Cheng Hubert Law Yang Jiang (USA)	Soil-Structure Interaction Analysis for Bridge Caisson Foundation 5.55a
Lisa M. Anderson Tarek Elkhoraibi (USA)	Structure-To-Soil-Structure Interaction Analysis: A Case Study 5.56a
Francesco Grassi Maria Rossella Massimino (Italy)	FEM Modelling of a 3D Soil-Pile System Under Earthquakes 5.57a
Pulikanti Sushma Ramancharla Pradeep Kumar (India)	Dynamic Soil Structure Interaction Analysis of Pile Supported High Rise Structures 5.58a
A.M. Sheikhabaei A.M. Halabian S.H. Hashemolhosseini (Iran)	Analysis of Soil Nailed Walls Under Harmonic Dynamic Excitations Using Finite Difference Method 5.59a

Sascha Richter Roberto O. Cudmani (Germany)	Numerical Analysis of Disconnected Spread Footing on Soft Soil during Strong Earthquake 5.61a
Tang Liang Ling Xianzhang Xu Pengju Gao Xia (China)	Lateral Response of Bridge Pile Groups in Liquefiable Soil with Surface Non-Liquefiable Layer Using Shaking Table Test 5.62a
Masoomeh Khodabakhshi Mohammad Hassan Baziar (Iran)	Evaluation of Deformation Behavior of Quay Walls Under Earthquake Loading 5.64a
Nikos Gerolymos V. Drosos George Gazetas (Greece)	Seismic Response of Inelastic Pile Foundations: A New Performance Based Design Philosophy 5.65a
Raffaele Figini (Italy) C. T. Chatzigogos (France) Roberto Paolucci (Italy)	A Simple Numerical Tool for Dynamic Soil-Structure Interaction Analyses Including Nonlinear Behaviour of Both Structure and Foundation 5.69a
Mahmoud Ghazavi Amid Madhoushi (Iran)	Influence of Concentrated Mass on Pile Response Under Vertical Earthquake Excitation 5.75a
Javad Nazari Afshar Mahmoud Ghazavi Khashayar Hemmati (Iran)	Analytical Method for Seismic Bearing Capacity of Stone-Column Reinforced Shallow Foundations 5.76a
Mahmoud Ghazavi Pedram Ravanshenas (Iran)	An Analytical Solution for Pile-Soil-Pile Interaction with Unequal Length Under Vertical Harmonic Vibrations 5.77a
Mahmoud Ghazavi Mobin Afzalirad (Iran)	Investigation of Non-Uniform Pile Behaviour Under Torsional Harmonic Vibration 5.78a
Pirooz Barar Qing Liu (USA)	Times-History Finite Element Dynamic Analysis - Soil Nail Wall - San Manuel Casino - Highland, California 5.79a
Daniela Boldini Angelo Amorosi Fabrizio Palmisano (Italy)	Analysis of Tunnel Behaviour Under Seismic Loads by Means of Simple and Advanced Numerical Approaches 5.80a
Takashi Tazoh Masayoshi Sato Jiho Jang Yoichi Taji (Japan) George Gazetas (Greece)	Seismic Behavior of Batter Pile Foundation: Kinematic Response 5.81a



<b>SESSION 5b</b> <b>“Soil-Foundation Interaction Triggered by Seismic Faulting”</b>	
Chaudhari Vasudeo Govind Ramancharla Pradeep Kumar (India)	Numerical Modeling of Buried Pipeline Crossing a Fault 5.02b
Ioannis Anastasopoulos Takis Georgarakos Rallis Kourkoulis George Gazetas (Greece)	Design of Bridges Against Seismic Faulting: Methodology and Applications 5.03b
Tahmeed M. Al-Hussaini Kamruzzaman Khan (Bangladesh)	Soft Soil Effect on Soft Storey Response 5.04b
Mark Svinkin (USA)	The Variable Damping Concept in Pile Capacity Prediction by Wave Equation Analysis 5.05b
Jale Tezcan Qiang Cheng Lincoln Hill (USA)	Response Spectrum Estimation Using Support Vector Machines 5.06b

<b>SESSION 6a</b>	
<b>“Seismic Analysis and Design of Retaining and Marine Structures, Field Studies on Retaining Walls in California, Japan and around the World”</b>	
Fransiscus S. Hardianto John E. Sankey Kim M. Truong (USA)	A Review of Seismic LRFD (Load-And-Resistance Factor Design) Method for MSE (Mechanically Stabilized Earth) Walls 6.01a
Kalliopi Kakderi Kyriazis Pitilakis (Greece)	Seismic Analysis and Fragility Curves of Gravity Waterfront Structures 6.04a
Yung-Yen Ko Ho-Hsiung Yang Cheng-Hsing Chen (Taiwan R.O.C.)	Seismic Fragility Analysis for Sheet-Pile Wharves - Case Study of the Hualien Harbor in Taiwan 6.05a
Mohammadreza Abbasi Garavand Alireza Saberi Mona Salimi Ghezelbash (Iran)	Seismic Analysis of Retaining Wall Structures 6.06a
Yohsuke Kawamata Scott A. Ashford (USA)	Discussions on Dynamic Interaction Between Piles and Large Particle Rockfill 6.07a
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

<p>Omar Al-Farouk Salem Al-Damluji Akram Younis Thannon Al-Sa'aty Rafi Mahmoud Sulaiman Al-Nu'aيمي (Iraq)</p>	<p>Effects of Internal Gas Explosion on an Underwater Tunnel Roof 6.22a</p>
<p>Binod Shrestha Hadi Khabbaz (Australia)</p>	<p>Application of Vertical Reinforcement for Performance Enhancement of Reinforced Soil Under Seismic Loading 6.24a</p>
<p>A. Murali Krishna (India)</p>	<p>Seismic Lateral Earth Pressures on Retaining Structures 6.25a</p>
<p>Alberto Pettiti (Italy) Dominic Assimaki (USA) Sebastiano Foti (Italy)</p>	<p>Numerical Simulation of the Performance of Cantilever Walls Subjected to Seismic Loading 6.27a</p>

<b>SESSION 6b</b> <b>“Seismic Zonation: Earthquake Risk Assessment with Earthquake Risk Management, Microzonation Projects in California and Worldwide, Use of Building Codes to Reduce Earthquake Hazards”</b>	
Kaveh Andisheh Seydeh Sara Hossini Motaza Taghizadeh (Iran)	Preparation the Site Specific Spectrum for Civil Regions of Zagross Mountains 6.02b
Kaveh Andisheh Gholamreza Ghodrati Amiri Motaza Taghizadeh (Iran)	Evaluating Seismicity Parameters of Sanandaj, Iran Based On Instrumental Earthquakes 6.03b
Kaveh Andisheh Gholamreza Ghodrati Amiri Seyed Ali Razavyain Amrei (Iran)	Uniform Seismic Hazard Spectra of Sanandaj, Iran 6.04b
Llambro Duni Luljeta Bozo Neki Kuka Enkela Begu (Albania)	An Upgrade of the Microzonation Study of the Centre of Tirana City 6.05b
Ivanka Paskaleva Mihaela Kouteva (Bulgaria) Franco Vaccari Giuliano F. Panza (Italy)	Characterization of the Elastic Displacement Demand: Case Study - Sofia City 6.06b
Hing-Ho Tsang (Hong Kong) S. Yaghmaei Sabegh (Iran) P. Anbazhagan (India) M. Neaz Sheikh (Australia) T. G. Sitharam (India) J. S. Vinod (Australia)	An Alternative Method for Site-Specific Probabilistic Seismic-Hazard Assessment: A Case Study of Three Cities 6.07b
Simone Barani Roberto De Ferrari Gabriele Ferretti Daniele Spallarossa (Italy)	Calibration of Soil Amplification Factors for Real Time Ground Motion Scenarios in Italy 6.09b
Luis Osorio Flores Juan M. Mayoral Villa Miguel P. Romo (Mexico)	Seismic Microzonation of the Texcoco Lake Area, Mexico 6.10b

Arif M. Eker Haluk Akgün Mustafa K. Koçkar (Turkey)	A Comparison of Local Site Conditions with Passive and Active Surface Wave Methods 6.12b
Piera Paola Capilleri Michele Maugeri Erminia Raciti (Italy)	Geotechnical and Seismic Risk Evaluation in Urban Areas 6.13b
Jan Willem Roelof Brouwer Torild Van Eck Femke Goutbeek A.C.W.M. Vrouwenvelder (Netherlands)	The Meaning of Eurocode 8 and Induced Seismicity for Earthquake Engineering in the Netherlands 6.14b
Gloria M. Estrada (Colombia)	Analysis of Earthquake Site Response and Site Classification for Seismic Design Practices 6.16b
Syed M. Ali Jawaaid (India)	Comparison of Liquefaction Potential Evaluation Based on Different Field Tests 6.17b
Vera Pessina Emilia Fiorini Roberto Paolucci (Italy)	GIS-Based Identification of Topographic Sites in Italy with Significant Ground Motion Amplification Effects 6.20b
Chavdar Kolev Martina G. Perikliyska (Bulgaria)	Geotechnical Preconditions for Skyscrapers Construction in Bulgaria and Seismic Risk Aspect 6.23b

<b>SESSION 7a</b>	
<b>“Seismic Analysis and Retrofit of Foundations of Bridges and Other Sub-Structures, Seismic Retrofit Projects and Procedures in California”</b>	
M.R. Malek Mohammad (Iran)	The Influence of Irregularity on the Values of Demand Modifier Factor in ASCE 41-06 7.02a
S.C. Chian S.P. G. Madabhushi (United Kingdom)	Floatation of Tunnel in Liquefiable Soil 7.04a
Te-Chih Ke Hubert Law Po Lam Brian Maroney Saba Mohan Jason Weinstein (USA)	Ground Motion Study on Dumbarton Toll Bridge 7.05a
Juan M. Mayoral Francisco A. Flores Miguel P. Romo Manuel J. Mendoza (Mexico)	Numerical Study of the Seismic Response of an Urban Overpass Support System 7.06a
Ch. A. Dzhantimirov S.A. Rytov S.A.Kryuchkov (Russia)	Application of High-Power Electrical Sparks for Dynamic Compaction of Soil 7.10a

<b>SESSION 7b</b>	
<b>“Case Histories of Geotechnical Earthquake Engineering, Failures and Geotechnical Analysis of Recent Earthquakes”</b>	
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

<b>SESSION 7c</b>	
<b>“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, Deep Canyon Fills, Landslides, Tsunamis.”</b>	
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 Jack Kinley (USA)	Vibro Replacement and Soil Mixing Ground Improvements at a Shopping Mall Site in San Diego, California, USA 7.03c
Garry W. Cannon Joseph J. Vettel Shawn Weedon (USA)	San Diego Seismic Study – Lane Field 7.04c
Sunil Arora Lisheng Shao (USA)	Vibro Replacement for Liquefaction Hazard Mitigation for Operational Storage Facility in Coronado, California, USA 7.05c
Thomas K. Rockwell (USA)	The Rose Canyon Fault Zone in San Diego 7.06c
B.K. Pal M.K. Panda (India)	Comparison of Erosional Features by Tsunami and Wind Waves 7.08c



<b>SESSION 8</b>	
<b>“Model and Full-Scale Tests of Geotechnical Structures Including Centrifuge Tests, Recent Advances from Earthquake Simulation Facilities such as NEES, E-Defense, NCREE”</b>	
Sayed Hemeda (Egypt) Kyriazis Pitilakis Elias Bakasis (Greece)	Three Dimensional Stability Analysis of the Central Rotunda of the Catacombs of Kom El-Shoqafa, Alexandria, Egypt 8.01
Ashwini Kumar Dube (India)	Assessment of Rock Pressure for Tunnels in the Himalayan Region - A Case History 8.02
Chia-Han Chen Tzou-Shin Ueng (Taiwan R.O.C.)	Behavior of Model Piles in a Liquefiable Soil in Shaking Table Tests 8.04
Yasir Ramzan Khokher Gopal Madabhushi (United Kingdom)	Dynamic Earth Pressures and Earth Pressure Cell Measurements 8.05
Kentaro Tabata Masayoshi Sato (Japan)	E-Defense Shaking Table Test on the Behavior of Liquefaction-Induced Lateral Spreading of Large-Scale Model Ground with a Pile-Foundation Structure Behind Quay Wall 8.07
Jui-Ching Chou Bruce L. Kutter Thaleia Travarasou (USA)	Numerical Analyses of Centrifuge Models of the BART Transbay Tube 8.08
Scott Olson Youssef M.A. Hashash Mark Muszynski Camilo Phillips Carmine Polito (USA)	Using Tactile Pressure Sensors to Measure Lateral Spreading-induced Earth Pressures Against a Large, Rigid Foundation 8.09
Masayoshi Sato Kentaro Tabata Akio Abe (Japan)	Large-Scale Shake Table Test on Lateral Spreading of a Sheet-Pile Wall Model and its Centrifuge Simulation 8.10
K.S. Beena (India)	Ground Improvement using Stone Column 8.11
Saman Zarnani Richard J. Bathurst W. Andy Take (Canada)	Shaking Table Methodology and Instrumentation for Reinforced Soil Retaining Walls 8.13
Barbara J. Chang Tara C. Hutchinson (USA)	Experimental Investigation of Plastic Demands in Piles During Lateral Spread-Induced Loads 8.14

<p>Ozgur Ozcelik (Turkey) J. Enrique Luco Joel P. Conte (USA) Luis H. Mendoza (Mexico)</p>	<p>Experimental Study of the Dynamic Interaction Between the Foundation of the NEES/UCSD Shake Table and the Surrounding Soil 8.17</p>
<p>Hiroshi Nakazawa Takahiro Sugano Takashi Shinsaka Masaki Adachi Kazuhiro Yamada (Japan)</p>	<p>Investigation of the Coefficient of Earth Pressure for Improved Ground by Compaction Grouting in the Full-Scale Field Liquefaction Experiment 8.18</p>
<p>Holger Wienbroer Daniel Rebstock Gerhard Huber (Germany)</p>	<p>Numerical and Experimental Investigation of Soil Behavior Under Stationary Excitation 8.20</p>

<b>SESSION 9</b> <b>“Performance Based Design in Geotechnical Earthquake Engineering”</b>	
J. Tanner Blackburn Joseph A. Pastore Richard C. Wakeman Thomas J. Morgan Alan T. Evenson (USA)	Compaction Grouting for Seismic Mitigation of Sensitive Urban Sites 9.02
Mohammad Hassan Baziar Amir Hossein Ghaderinia (Iran)	Evaluation of Seismic Demand of Pile Foundation for Performance Based Design 9.04
Thomas Oommen Laurie G. Baise (USA)	A Practical Approach for Implementing the Probability of Liquefaction in Performance Based Design 9.06
Scott J. Brandenburg Pirooz Kashighandi (USA)	Application of Concave-Up P-Y Elements in Static Analysis of Piles in Laterally Spreading Ground 9.07
Yasser Abdelghany Hesham El Naggar (Canada)	Monotonic and Cyclic Behaviour of Helical Screw Piles Under Axial and Lateral Loading 9.08
T.G. Sitharam K.S. Vipin (India)	Liquefaction Potential Evaluation Based on Site Classes – A Performance Based Approach 9.09
Jiunn-Shyang Chiou Cheng-Hsing Chen (Taiwan R.O.C.)	Displacement Ductility Capacity of Fixed-Head Piles 9.10
Ramez Alchamaa Mitutoshi Yoshimine (Japan)	Determination of the Proper Thickness of Sublayers for Analyzing Post-Liquefaction Deformation Associated with Seepage of Pore Water After Earthquake 9.11