

Missouri University of Science and Technology Scholars' Mine

in Geotechnical Earthquake Engineering and Soil Dynamics

International Conferences on Recent Advances 2010 - Fifth International Conference on Recent Advances in Geotechnical Earthquake **Engineering and Soil Dynamics**

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

Table of Contents

Multiple Authors

Follow this and additional works at: https://scholarsmine.mst.edu/icrageesd



Part of the Geotechnical Engineering Commons

Recommended Citation

Authors, Multiple, "Table of Contents" (2010). International Conferences on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics. 1.

https://scholarsmine.mst.edu/icrageesd/05icrageesd/session00e/1

This Article - Conference proceedings is brought to you for free and open access by Scholars' Mine. It has been accepted for inclusion in International Conferences on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics by an authorized administrator of Scholars' Mine. This work is protected by U. S. Copyright Law. Unauthorized use including reproduction for redistribution requires the permission of the copyright holder. For more information, please contact scholarsmine@mst.edu.

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 Most Memorable Project and Lessons for the Geotechnical (USA) 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

Skender Allkja Lorena Harizaj (Albania)	
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 Q.P. Cai G.Y. Luo Y.H. Ding C.W.W. Ng Y.J. Hou (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

Increasing Lateral Capacity of Helical Piles with Lateral Restraint Devices 1.18b	John L. Maier Ali M. Oskoorouchi (USA)
Sphere Penetration Experiments in Vertically Vibrated Sand 1.19b	Nicolas Denies (Belgium) Jean Canou Jean-Noël Roux (France) Alain Holeyman (Belgium)
Method to Reduce Variability of S-Wave Profiles in Seismic Cone Penetration Tests 1.20b	Lou Areias (Belgium)
P-wave Reflection Imaging of Laboratory Soil Models 1.21b	Scott Brandenberg Joseph Coe (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	Zhihua Li (USA)
Passive Earth Pressure Force-Displacement Relationships 1.24b	Patrick Wilson Ahmed Elgamal (USA)
Applicability Test of Soil Improvement Using Micro-Bubbles Against Soil Liquefaction 1.26b	Koichi Nagao Naoaki Suemasa Tatsuo Akashi Mikio Futaki (Japan)
Shake Table Testing to Quantify Seismic Soil-Structure- Interaction of Underground Structures 1.27b	Robb Eric S. Moss Vic Crosariol Steven Kuo (USA)
Experiences in Pumice Soil Characterization by Surface Wave Analysis 1.28b	Salvador Lazcano (Mexico)
Field Measurement of Dynamic Soil Properties of Tropical Meta-Sediment Residual Soils 1.29b	Zamri Chik Susy K. Ariestianty (Malaysia) Sri Atmaja P. Rosyidi (Indonesia) Khairul Anuar Mohd. Nauyan Mohd. Raihan Taha (Malaysia)
An Innovative Triaxial/Resonant Column Equipment 1.30b	Diego Lo Presti Nunziante Squeglia Oronzo Pallara (Italy)

Jeramy 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

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

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	Vibration Analysis of Rotating Fans Mounted on Adjacent Rectangular Foundation Blocks 2.11

Prabir Sen (USA) Marc Ittershagen Ground Improvement Under Dynamic Loading 2.13 (Germany) Mechanical and Acoustical Vibrations of a Building Generated Ion Vlad (Romania) by Weaving Looms 2.14 Viscous Damping for Time Domain Finite Element Analysis Nien-Yin Chang (USA) 2.15 Hien Manh Nghiem (Vietnam) Hiroto Nakagawa Propagation of Surface Waves in an Irregular Ground Based on Shoichi Nakai the Thin Layered Element and Finite Element Method 2.17 (Japan) Ahmed Hussain Large Variation in PGA Due to Presence of Heterogeneities in Ramancharla Pradeep Kumar the Surface Soil 2.18 (India) Abdul Hayir Dynamic Behavior of an Elastic Beam on a Winkler Foundation (Turkey) Under a Moving Load 2.20 Faruk Karadoğan Vibrations Due to Dynamic Compaction 2.22 M. Aysen Lav Ercan Yüksel (Turkey) Ozgur L. Ertugrul Attenuation of Traffic Induced Ground Borne Vibrations due to Deniz Ulgen **Heavy Vehicles 2.27** (Turkey) Torsten Wichtmann Stress- And Strain-Controlled Undrained Cyclic Triaxial Tests Benjamin Rojas on a Fine Sand for a High-Cycle Accumulation Model 2.28 Andrzej Niemunis Theodor Triantafyllidis (Germany) Mahmoud Ghazavi Dynamic Analysis of Piles Under Lateral Harmonic Vibration Ahmad Dehghanpour 2.29

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"

(Iran)

Chavdar Kolev Example for Risk Estimation of Fault Appearance under the Martina G. Perikliyska Place of Designed Skyscraper in Sofia 3.01a

(Bulgaria)	
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 amax 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	Ground Motion Occurrence Rates for Scenario Spectra 3.18a

(Turkey)

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 Xiaxin 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

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

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	Evaluation of Frequency Dependent Equivalent Linear Analysis

3.07b

(Korea)

Dong-Yeop Kwak (USA) Duhee Park Bang Woong Shin (Korea) S. Krishna Kumar Site Specific Seismic Analysis of a Deep Stiff Soil Site 3.08b A. Boominathan (India) Fabian Bonilla Multidisciplinary Study of Seismic Amplification in the (France) Historical Center of Rome, Italy 3.09b Francesca Bozzano (Italy) Celine Gélis (France) Annachiara Giacomi (Italy) Luca Lenti (France) Salvatore Martino (Italy) Jean-François Semblat (France) Maria Paola Santisi d'Avila Non Linear Site Effects: Interest of One Dimensional - Three Ali Gandomzadeh Component (1D - 3C) Formulation 3.12b Luca Lenti Jean-Francois Semblat Fabian Bonilla (France) Salvatore Martino (Italy) Mustafa K. Koçkar **Evaluation of Local Site Conditions Using Ambient Seismic** Haluk Akgün Noise Recordings: A Case Study from Ankara, Turkey 3.15b (Turkey) R. Uma Maheswari Effective Stress v/s Total Stress Ground Response Analyses for a Typical Site in Chennai (India) 3.18b A. Boominathan G.R. Dodagoudar (India) Claudio di Prisco 1D Dynamic Non-Linear Numerical Analysis of Earth Slopes: Federico Pisanò The Role of Soil Ductility and Time-Sensitiveness 3.19b (Italy) M'hammed Badaoui Layers Heights Randomness Effect on Seismic Response of a (France) Site in Algiers (Algeria) 3.20b Mounir Khaled Berrah (Algeria) Ahmed Mebarki (France) P. Anbazhagan Site Response Study of Deep Soil Column in Lucknow, India Abhishek Kumar 3.21b T.G. Sitharam

(India)	
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

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"

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 Pavlides 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	Estimating Seismic Parameters Associated with Previous Earthquakes by SCPTU Soundings in the NMSZ 4.11a

		-	
/ 1	JS	Λ	1
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1	$\boldsymbol{\mu}$	

(*****)	
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 Marcianò (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 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	Case Histories of Widespread Liquefaction and Lateral Spread Induced by the 2007 Pisco, Peru Earthquake 4.43a

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)

B. Cox (USA) V. Moreno M. Olcese (Peru) R. Sancio J. Wartman (USA) Alexandros Valsamis Parametric Investigation of Lateral Spreading in Free-Face George D. Bouckovalas **Ground Formations 4.45a** Vasiliki Dimitriadi (Greece) **Artificial Neural Network Model for Prediction of Liquefaction** Farzad Farrokhzad A. J. Choobbasti Potential in Soil Deposits 4.46a A. Barari (Iran) Gordana D. Hadži-Niković Assessment of Liquefaction Potential Relevant to Choice of Ilija D. Perkovic Type and Depth of Foundations in Seismically Active Areas Biljana Abolmasov 4.47a (Serbia) John Liao Comparison of Three Procedures for Evaluating Earthquake-Jorge Meneses Induced Soil Liquefaction 4.48a Emre Ortakci Zia Zafir (USA) Syed Kazim Mahdi Some Seismological Characteristics of Mw 4.50a (Pakistan) Md. Abdul Lahil Baki Cyclic Instability Behaviour of Sand-Silt Mixture Under Partial Sik-Cheung Robert Lo Cyclic Reversal Loading 4.52a (Australia) Md. Mizanur Rahman (New Zealand) Md. Mizanur Rahman Equivalent Granular Void Ratio and Behaviour of Loose Sand with Fines 4.53a (New Zealand) Sik-Cheung Robert Lo (Australia) Misko Cubrinovski (New Zealand) Murat Tonaroglu Seismic Analysis of Saturated Sand Deposits with Silt Layers Kutay Ozaydin 4.54a S.U. Dikmen (Turkey) S. M. Mir Mohammad Hesseini Effect of Density on Critical Depth of Liquefaction in a Soil Y. Pashang Pisheh **Deposit Containing Double Loose Sand Lenses 4.55a** K. Shakiba Nia N. Ganjian

(Peru)

(Iran)

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

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	Stability Assessment and Suggestion for Control Measures of a

S.Sarkar

Potential Landslide Slope on NH 94, Uttarakhand Himalaya,

D.P.Kanungo P.K.S. Chauhan Zamir Ahmad (India)	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	Centrifuge Model Tests of Tieback Anchors and Drainage Pipes for Stabilization of Slopes Under Earthquake Loads 4.30b

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

Sina Majidian Cyclic Loading and Pseudo-Static Forces 4.48b (Iran) Dalia S. Youssef Abdel Massih Dynamic Slope Stability Analysis by Reliability-Based (Lebanon) Approach 4.51b Abdul-Hamid Soubra (France) Jacques Harb (Lebanon) Mohamed Rouainia (United Kingdom) Maryam Malekian The Effects of Canyon Topography on Dynamic Stress Amirata Taghavi Distribution in Earth Dams 4.52b Mohammad Hassan Baziar Shirin Salemi (Iran) Ha H. Bui Earthquake Induced Slope Failure Simulation by SPH 4.53b R. Fukagawa K. Sako Y. Okamura (Japan) Susumu Yasuda Cyclic Torsional Shear Tests to Obtain Dynamic Soil Properties Takafumi Tsuruda for Seismic Design of Road Embankments 4.57b (Japan) Hamid Karimian The Effect of Earthquake Record Scaling Technique on Somasundaram Sriskandakumar **Embankment Dam Response 4.58b** Adrian Wightman Li Yan (Canada) Huynh Dat Vu Khoa Finite Element Modeling of the Las Colinas Landslide Under Hans Petter Jostad Earthquake Shaking 4.61b (Norway) Radhakanta Koner **Evaluation of Seismic Response of External Mine Overburden** Debashish Chakravarty Dumps 4.63b (India) A.K. Pachauri Landslide Hazard Mapping and Assessment in Himalayas 4.65b (India) Vlatko Sesov Repair of Landslide "Umka-Duboko" - Seismic Performance (Macedonia) Assessment 4.66b

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

Zeljko Zugic (Serbia)

(Netherlands) Biswajit Basu (Ireland)	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 Madiai (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 Modaressi-Farahmand	Effect of Elastic and Inelastic DSSI on Seismic Demands of SDOFS Structures 5.37a

Razavi (France) Domenico Lombardi Fixity of Piles in Liquefiable Soils 5.39a (United Kingdom) Maria Giovanna Durante (Italy) Suresh R. Dash Subhamoy Bhattacharya (United Kingdom) S.Vijaya **Experimental Study on the Performance of Reinforced Sand** S. Gangadhara Beds Under Repeated Loads in Presence of Water 5.40a (India) Konstantinos Giannakos Interaction Between Superstructure and Substructure in (Greece) Railways 5.41a Konstantinos Giannakos Stiffness Coefficient in the Transition Zone Between Ballasted and Ballastless Track and its Influence on Formation (Greece) Stressing 5.42a Hamed Saeidi The Effect of Step Load Moving on the Surface of a Cylindrical Mansour Nikkhah-Bahrami Cavity Using Neural Networks 5.43a (Iran) Ali Gandomzadeh Influence of Soil Nonlinearities on Dynamic Soil-Structure Maria Paola Santisi d'Avila Interaction 5.44a Jean-François Semblat Luca Lenti Fabian Bonilla (France) Fereidoun Amini Effects of Recorded Free-Field Motion on the Response of Masoud Shadlou **Buildings Considering Soil-Structure Interaction Effects 5.46a** (Iran) C. Guney Olgun Seismic Performance of Soil-Mix Panel Reinforced Ground James R. Martin II 5.47a (USA) Henry B. Mason Earthquake Input Motions and Seismic Site Response in a Jonathan D. Bray Centrifuge Test Examining SFSI Effects 5.48a 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 Bolisetti Andrew Whittaker

(USA)

(Germany)

ZhiQiang Chen Seismic Performance Assessment in Dense Urban Tara C. Hutchinson **Environments: Evaluation of Nonlinear Building-Foundation** Nicholas Trombetta Systems Using Centrifuge Tests 5.49a 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) Hiroko Suzuki Effects of Soil-Structure Interaction on Stress Distribution Kohji Tokimatsu Within a Pile Group Under Multi-Dimensional Loading 5.50a (Japan) Manish V. Shah Soil-Structure Interaction of Soft Clay Using Prefabricated A.V. Shroff **Vertical Geodrains Under Seismic Stresses 5.53a** (India) Jinchi Lu Computational Modeling of a Large Pile Group Under Lateral Ahmed Elgamal Load 5.54a Charles Sikorsky Thomas Shantz (USA) Zhao Cheng Soil-Structure Interaction Analysis for Bridge Caisson **Hubert Law** Foundation 5.55a Yang Jiang (USA) Lisa M. Anderson Structure-To-Soil-Structure Interaction Analysis: A Case Study Tarek Elkhoraibi 5.56a (USA) Francesco Grassi FEM Modelling of a 3D Soil-Pile System Under Earthquakes Maria Rossella Massimino 5.57a (Italy) Pulikanti Sushma Ramancharla Dynamic Soil Structure Interaction Analysis of Pile Supported Pradeep Kumar High Rise Structures 5.58a (India) A.M. Sheikhbahaei Analysis of Soil Nailed Walls Under Harmonic Dynamic A.M. Halabian **Excitations Using Finite Difference Method 5.59a** S.H. Hashemolhosseini (Iran) Sascha Richter Numerical Analysis of Disconnected Spread Footing on Soft Roberto O. Cudmani 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

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"

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

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

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
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"

Seydeh Sara Hossini **Zagross Mountains 6.02b** Motaza Taghizadeh (Iran) Kaveh Andisheh Evaluating Seismicity Parameters of Sanandaj, Iran Based On Gholamreza Ghodrati Amiri Instrumental Earthquakes 6.03b Motaza Taghizadeh (Iran) Kaveh Andisheh Uniform Seismic Hazard Spectra of Sanandaj, Iran 6.04b Gholamreza Ghodrati Amiri Seyed Ali Razavyain Amrei (Iran) Llambro Duni An Upgrade of the Microzonation Study of the Centre of Tirana Luljeta Bozo City 6.05b Neki Kuka Enkela Begu (Albania) Ivanka Paskaleva Characterization of the Elastic Displacement Demand: Case Mihaela Kouteva Study - Sofia City 6.06b (Bulgaria) Franco Vaccari Giuliano F. Panza (Italy) Hing-Ho Tsang An Alternative Method for Site-Specific Probabilistic Seismic-(Hong Kong) Hazard Assessment: A Case Study of Three Cities 6.07b S. Yaghmaei Sabegh (Iran) P. Anbazhagan (India) M. Neaz Sheikh (Australia) T. G. Sitharam (India) J. S. Vinod (Australia) Simone Barani Calibration of Soil Amplification Factors for Real Time Ground Roberto De Ferrari Motion Scenarios in Italy 6.09b Gabriele Ferretti Daniele Spallarossa (Italy) Luis Osorio Flores Seismic Microzonation of the Texcoco Lake Area, Mexico 6.10b Juan M. Mayoral Villa Miguel P. Romo (Mexico) Arif M. Eker A Comparison of Local Site Conditions with Passive and Active Haluk Akgün Surface Wave Methods 6.12b Mustafa K. Koçkar (Turkey) Piera Paola Capilleri Geotechnical and Seismic Risk Evaluation in Urban Areas

Michele Maugeri

6.13b

	Erminia Raciti
The Meaning of Eurocode 8 and Induced Seismicity for Earthquake Engineering in the Netherlands 6.14b	(Italy) Jan Willem Roelof Brouwer Torild Van Eck Femke Goutbeek A.C.W.M. Vrouwenvelder (Netherlands)
Analysis of Earthquake Site Response and Site Classificatio for Seismic Design Practices 6.16b	Gloria M. Estrada (Colombia)
Comparison of Liquefaction Potential Evaluation Based on Different Field Tests 6.17b	Syed M. Ali Jawaid (India)
GIS-Based Identification of Topographic Sites in Italy with Significant Ground Motion Amplification Effects 6.20b	Vera Pessina Emilia Fiorini Roberto Paolucci (Italy)
Geotechnical Preconditions for Skyscrapers Construction in	Chavdar Kolev

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

Bulgaria and Seismic Risk Aspect 6.23b

Martina G. Perikliyska

(Bulgaria)

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	Application of High-Power Electrical Sparks for Dynamic Compaction of Soil 7.10a

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

Abouzar Sadrekarimi (Canada) Earthquake Induced Excess Pore Water Pressures in the Upper San Fernando Dam during the 1971 San Fernando Earthquake

Timothy D. Starke

7.01b

(USA)

Hamed Niroumand Performance of Solid Waste Soil in Earthquake of Boroujerd

Microzonation Study of Duzce, Turkey 7.12b

(Iran) and Silakhor Earthquake 7.04b

Dimitra Manou Maria Manakou

Maria Manakou Maria Alexoudi

Anastasios Anastasiadis

Kyriazis Pitilakis

(Greece)

Howard Plewes Bob Chambers Rick Friedel Terence Jibiki Ground Improvement by Dynamic Compaction at a Tailings

Disposal Facility 7.14b

Alex Sy (Canada)

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

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

Patricia Thomas

Timothy Dawson

Jim Zhou

Nicola Kavanagh

(USA)

James R. Gingery Scott H. Rugg

Thomas K. Rockwell

Bruce R. Hilton (USA)

Lisheng Shao

(USA

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

Vibro Replacement and Soil Mixing Ground Improvements at a

Jack Kinley (USA)	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

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"

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 Travasarou (USA)	Numerical Analyses of Centrifuge Models of the BART Transbay Tube 8.08
Scott Olson Youssef M.A. Hashash	Using Tactile Pressure Sensors to Measure Lateral Spreading- induced Earth Pressures Against a Large, Rigid Foundation

ips ito	Mark Muszynski Camilo Phillips Carmine Polito (USA)
Pile Wall Model and its Centrifuge Simulation 8.10 be	Masayoshi Sato Kentaro Tabata Akio Abe (Japan)
	K.S. Beena (India)
rst Reinforced Soil Retaining Walls 8.13 ke	Saman Zarnani Richard J. Bathurst W. Andy Take (Canada)
on Lateral Spread-Induced Loads 8.14	Barbara J. Chang Tara C. Hutchinson (USA)
Foundation of the NEES/UCSD Shake Table and the Surrounding Soil 8.17 SA) Salara	Ozgur Ozcelik (Turkey) J. Enrique Luco Joel P. Conte (USA) Luis H. Mendoza (Mexico)
no Ground by Compaction Grouting in the Full-Scale Field ka Liquefaction Experiment 8.18 chi da	Hiroshi Nakazawa Takahiro Sugano Takashi Shinsaka Masaki Adachi Kazuhiro Yamada (Japan)
ock Under Stationary Excitation 8.20 per	Holger Wienbroer Daniel Rebstock Gerhard Huber (Germany)

SESSION 9 "Performance Based Design in Geotechnical Earthquake Engineering"

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
ohammad Hassan Baziar	Evaluation of Seismic Demand of Pile Foundation for

Mohammad Hassan Baziar Evaluation of Seismic Demand of Pile Foundation for Amir Hossein Ghaderinia Performance Based Design 9.04

(Iran)	
Thomas Oommen Laurie G. Baise (USA)	A Practical Approach for Implementing the Probability of Liquefaction in Performance Based Design 9.06
Scott J. Brandenberg 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

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	Incorporating Kinematic Pile Bending into Seismic Codes:
(Greece)	Experience from a European National Project OSP13

EARTHQUAKE SPEAKERS

	Lanmin Wang (China)
	Susumu Yasuda Tomohiro Tanaka (Japan)
i	Sarfraz Ali Liaqat Ali Muhammad Ammar (Pakistan)
Apr 6 2009 L'Aquila Earthquake, Italy EQ4	Roberto Paolucci Chiara Smerzini (Italy)
	Tom Rockwell (USA)
	Ronaldo Luna (USA)
	Jennifer Donahue (USA)
2010 Haiti Earthquake (presentation only)	TBA

SPECIAL LECTURES

Jost Studer	Site Amplification Studies for NPP Sites in Switzerland within
(Switzerland)	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

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

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

(USA)

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	Failure of Saturated Sand in Non-Symmetrical Cyclic Loading

H.Y. Sze 1.25a (Hong Kong) Giuseppe Modoni Simplified Theoretical Analysis of the Seismic Response of Anna Gazzellone **Artificially Compacted Gravels 1.28a** (Italy) Noriaki Sako Development of a New Geomaterial for Base Isolation Foundations 1.29a Masashi Kawamura Yukio Shimomura Yoshio Ikeda (Japan) A. Cavallaro Dynamic Site Characterization by the Seismic Dilatometer Salvatore Grasso Marchetti Test in Central Italy 1.31a Michele Maugeri (Italy) B.N. Madhusudhan Dynamic Properties of Rubber Specimens 1.33a Jyant Kumar (India) Aaron J. Geiger Estimating Liquefaction Potential of a 200,000-Year-Old Sand Ronald C. Boller Deposit Near Georgetown, South Carolina 1.34a Ronald D. Andrus Hossein Hayati Tahereh Heidari William M. Camp, III (USA) An Evaluation of Ground Vibrations Induced by Heavy Free-Mark J. Carlson (USA) falling Structural Elements 1.35a Kwangkyun Kim Duhee Park (Korea) Sumit Ghose **Evaluation of Liquefaction Potential of Soil by Down Borehole** Ambarish Ghosh Method 1.36a (India) H.N. Ramesh Resonant Frequency of Model Footings Resting on Finite Saturated Sand Stratum 1.38a M.T. Prathap Kumar (India) Nader Shariatmadari Evaluation of Loading Rate on the Mechanical Behavior of (Iran) Saturated MSW Materials in Undrained Condition 1.41a Sandro Lemos Machado (Brazil) Ali Noorzad Mehran Karimpour-Fard Mohsen Keramati Seyyed Hossein Jafari Kalarijani (Iran)

Cyclic Response of Reconstituted Low Plasticity Silt 1.47a

Selman Sağlam

B. Sadık Bakır (Turkey)

R.P. Sharma	Soil Improvement Techniques for Mitigation of Seismic
(India)	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

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

Neelima Satyam K.S. Rao (India)	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. Ballestero Barry K. Fussell (USA)	Residual Strength of Liquefied Sand: Laboratory Vs. Field Measurements 1.05b
Luljeta Bozo	Field and Laboratory Tests in Seman Deposits 1.06b