

# XVIIth International Conference on Soil Mechanics & Geotechnical Engineering

## Earthquake Geotechnical Engineering

### Satellite Conference

#### TC4 of ISSMGE

2-3 October 2009

Second Announcement

Alexandria, Egypt

#### INVITATION

The Egyptian National Society of Soil Mechanics and Geotechnical Engineering and the Technical Committee (TC<sub>4</sub>) on Earthquake Geotechnical Engineering of the International Society for Soil Mechanics and Geotechnical Engineering take great pleasure in their cordial invitation to attend the Satellite Conference on Earthquake Geotechnical Engineering to be held in Alexandria prior to the XVIIth ICSSMGE.

#### SCIENTIFIC PROGRAMME

##### Friday 2 October 2009

##### Opening Session: 8:00-9:00

**Mohamed Sakr and Ibrahim Darwish** "Egyptian Historical Earthquakes and under water Archaeology"

##### Technical Session 1: 9:00-10:30

**9:00-9:30 W.D.L. Finn** "Developments in performance based Design:

Incremental Dynamic Analysis and the Conditional Mean Spectrum"

**9:30-10:00 A. Elgamal** "Static and Dynamic Earth Pressure: Full-scale Testing and Analysis"

**10:00-10:30 A. Ansal** "Site Specific Earthquake Characteristics"

##### **Coffee Break 10:30-11:00**

##### Technical Session 2: 11:00-12:30

**11:00-11:30 G. Gazetas** "Dynamics of Batter Piles"

**11:30-12:00 A. Pecker** "Non linear Soil Structure Analysis Through Macro Element Modeling"

**12:00-12:30 M. Pender** "Macro element for Pile Head Cyclic Lateral Loading"

##### **Lunch 12:30-14:00**

##### Technical Session 3: 14:00-16:00

**14:00-14:30 I. Towhata** "Geotechnical Aspects of 2008 Wenchuan Earthquake, China"

**14:30-15:00 S.Yasuda** "Study on the Method for the Seismic Design of Expressway Embankments"

##### **15:00-16:00 Oral presentations (10min each)**

**Satoshi Nishimoto & Shigeru Miwa** "Seismic Behavior of Soft Ground and A Road Embankment in the 2003 Tokachi-Oki Earthquake"

**Ömer Aydan** "Characteristics Of Ground Liquefaction And Lateral Spreading Caused By Great Off-Sumatra Earthquakes"

**Tetsuo Tobita, Gi-Chun Kang, Susumu Iai, & Yasuhiko Konishi** "Observed Manhole Uplift During the 2004 Niigata-Ken Chuetsu, Japan, Earthquake"

**Barnali Ghosh, Subhamoy Bhattacharya & Zygmunt Lubkowski** "Seismic Design Of LNG Tanks In Liquefiable Soils"

**Sevinc Unsal, K.Onder Cetin, & A.Anil Yunatci** "Assessment Of Seismic Soil Liquefaction Triggering And Induced Deformation Potentials Of Dam Foundation Soils: An Integrated Seismic Hazard Framework"

**Coffee Break 16:00-16:30**

**Technical Session 4: 16:30-18:30**

**16:30-17:00 K. Pitilakis** "Experimental and theoretical SSI studies in a model structure in Euroseistest"

**17:00-17:30 M. Maugeri** "Soil-Structure Interaction for Seismic Improvement of Noto Cathedral (Italy)"

**17:30-18:30 Oral presentations (10min each)**

**Kouichi Tomisawa & Seiichi Miura** "Evaluation of Seismic Resistance of Pile Foundation in Composite Ground"

**Mahmoud N. Hussien, Tetsuo Tobita, Susumu Iai & Kyle M. Rollins** "Soil-Pile Gap Effect on the Static Behavior Of Full-Scale Pile Group"

**Dimitris Pitilakis** "Equivalent Linear Soil-Foundation-Structure Interaction and Performance Based Design"

**Asterios Liolios, George Michaltsos, & Konstantinos Liolios** "A Numerical Approach to the Seismic Problem of Steel Pile-Soil Interaction under Environmental and Second-Order Geometric Effects"

**George Papazafeiropoulos, Prodromos N. Psarropoulos, & Yiannis Tsompanakis** "Retaining Wall-Soil-Structure Interaction Effects Due To Seismic Excitation"

**Saturday 3 October 2009**

**Technical Session 5: 8:00-10:00**

**8:00-8:30 K. Ishihara** "Deep-Seated Massive Landslides and Performances of Rock-Fill Dams during Large Earthquakes"

**8:30-9:00 H.El-Naggar** "Bridging the Gap Between Structural and Geotechnical Engineers In SSI For Performance-Based Design"

**9:00-10:00 Oral presentations (10min each)**

**Hiroko Suzuki, Kohji Tokimatsu, Masayoshi Sato and Kentaro Tabata** "Kinematic and Inertial Effects on Deformation Modes of Piles during Liquefaction in Shaking Table Tests Using E-Defense Facilities"

**Mohsin Usman Qureshi, Ikuo Towhata, Suguru Yamada, & Mubashir Aziz** "Using Field Tests For Slope Failure Risk Assessment In Highly Weathered Areas Due To Seismic Activity"

**Spyros Pavlides, Theodoros Tsapanos, Nikos Zouros, Sotiris Sboras, George Koravos, & Alexandros Chatzipetros** "Using Active Fault Data For Assessing Seismic Hazard: A Case Study From NE Aegean Sea, Greece"

**Ulas Cilingir & S.P. Gopal Madabhushi** "Numerical Analysis Of Dynamic Centrifuge Tests On Square Tunnels"

**Emilios Comodromos, Mello Papadopoulou, & Ioannis Rentzeperis** "Degradation Of Pile Foundations' Response Due To Cracking: Advanced And Simplified Numerical Approach"

**Coffee Break 10:00-10:30**

**Technical Session 6: 10:30-12:30**

**10:30-11:00 R. Verdugo** "Singular Soils of Seismic Regions"

**11:00-11:30 I. Shahrouh** "Soil reinforcement in seismic areas"

**11:30-12:30 Oral presentations (10min each)**

**Gabriele Chiaro, Takashi Kiyota, Laddu Indika, Nalin De Silva, Takeshi Sato, & Junichi Koseki** "Extremely Large Post-Liquefaction Deformations Of Saturated Sand Under Cyclic Torsional Shear Loading"

**Way Way Sim, Ikuo Towhata & Mohamed A. Sakr** "Model Tests on Behavior of Embedded Pipeline Crossing A Fault"

**Takashi Kiyota, Junichi Koseki, & Takeshi Sato** "Evaluation Of Liquefaction Induced Ground Deformation By Large Strain Torsional Shear Tests"

**Maria V. Sanin & Dharma Wijewickreme** "Influence of Initial Static Shear Stress on the Cyclic Shear Response of Natural Low-Plastic Silt"

**Ruta Ireng Wicaksono & Reiko Kuwano** "Small Strain Stiffness of Toyoura Sand Obtained From Various Techniques In Laboratory Measurement"

**Lunch 12:30-13:30**

**Technical Session 7: 13:30-16:00**

**13:30-14:00 K. Stokoe II** "Field and Laboratory Measurements of Uncemented and Cemented Alluvial Materials"

**14:00-14:30 T. Kokusho** "Effect of Fines and Aging on Liquefaction Strength and Cone Resistance of Sand in Triaxial Apparatus"

**14:30-15:00 M. Maugeri et al.** "Geotechnical Aspects on the Abruzzo 2009 Earthquake"

**15:00-16:00 Oral presentations (10min each)**

**Anastasios Anastasiadis, Kyriazis Pitilakis & Kostas Senetakis** "Dynamic Shear Modulus and Damping Ratio Curves of Sand/Rubber Mixtures"

**Ayfer Erken, Aytac Yaşargün, Ahmet Şener, & Gürsel Demir** "The Cyclic Behavior of Undisturbed Low Plasticity Clays By Polluted Leachate In Sanitary Landfill Sites"

**Shun-Ichi Fukumoto & Nozomu Yoshida** "Dynamic Deformation Characteristics Of Soft Rock"

**C. Guney Olgun, James R. Martin II, Atila Sezen, Huseyin Yildirim, & Sanem Kayali** "Field and Laboratory Evidence of Cyclic Vulnerability of Fine-Grained Soils"

**Nunziante Squegla, Oronzo Pallara, Savino Russo, & Diego Lo Presti** "Innovative Use of Bender Elements in Triaxial Cell for the Measurement of Go"

**Coffee Break 16:00-16:30**

**Technical Session 8: 16:30-18:30**

**16:30-17:00 K. Tokimatsu** "Lessons learned from geotechnical problems in the 2007 Niigata-ken Chuetsu-Oki earthquakes"

**17:00-17:30 18. M. Cubrinovski** "Analysis of Piles in Liquefying Soils by the Pseudo-Static Approach"

**17:30: 18:30 Oral presentations (10min each)**

**Silvia Garcia & Miguel Romo** "Seismic Data Processing Using Hilbert-Huang Transform"

**Raafat Fat-Helbary, Dragi Dojcinovski, Hussein El Khashab, Karrar El Faragawy, & Abdel-Nasser Abdel-Motaal** "Study Of Seismic Site Response At The Proposed Tushka New City Site, Egypt"

**Julie Regnier, Etienne Bertrand, Anne-Marie Duval, & Heloise Cadet** "Geotechnical Model To Seismic Microzonation: Three Approaches On The Test Bench"

**I Wayan Sengara** "Development of Earthquake Scenario for Three Different Sites within City of Jakarta"

**Varvara Zania, Ioanna Tzavara, Yiannis Tsompanakis, & Prodromos N. Psarropoulos** "Geosynthetics As Mitigation Measure For Seismic Hazard on Geotechnical Structures"

## Date and Place

The Earthquake Geotechnical Engineering Satellite Conference will be held on 2-3 October 2009 at Sheraton Al-Montazah Hotel, Alexandria, Egypt.

## Conference Expenses

To meet the expenses of lunch, coffee breaks, abstract volume, CD, name cards, and etc. for the two days of the conference, the participants are kindly required to pay 150 USD until August 31 to **Wings Tours (walx.mgr@wingsegypt.com)**. Late payment will be 175 USD after August 31.

## Social Activities by Wings Tours (walx.mgr@wingsegypt.com)

Recommended: Sheraton Al Montazah Hotel, Alexandria 5\* Special Price for TC4 Conference, Gala dinner will be on Friday night at Sheraton and will cost USD 65.0 per person Sunday 04.10.2009 Cairo full day Tour Pyramids + Egyptian Museum + Lunch Nile Cruises and Sound & Light show at evening for 95 U.S.D

## International Advisory Committee

A. Ansal and T. Kokusho (Co-Chairman)

J.P. Bardet, USA

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S. Zlatovic, Croatia

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K. Tokimatsu, Japan

M. Vucetic, USA

L. Wang, China

## Proceedings

An abstract volume and CD containing all the papers reviewed and accepted by the International Advisory Committee will be published before the conference.

## Conference Organiser

A./Prof. Dr. Mohamed A. Sakr

Director, Geotechnical Engineering Research Laboratory  
Faculty of Engineering, Tanta University, Tanta, EGYPT

Fax: +2040-3420330 Mobile: +2012-3168002 E-mail: mamsakr@yahoo.com