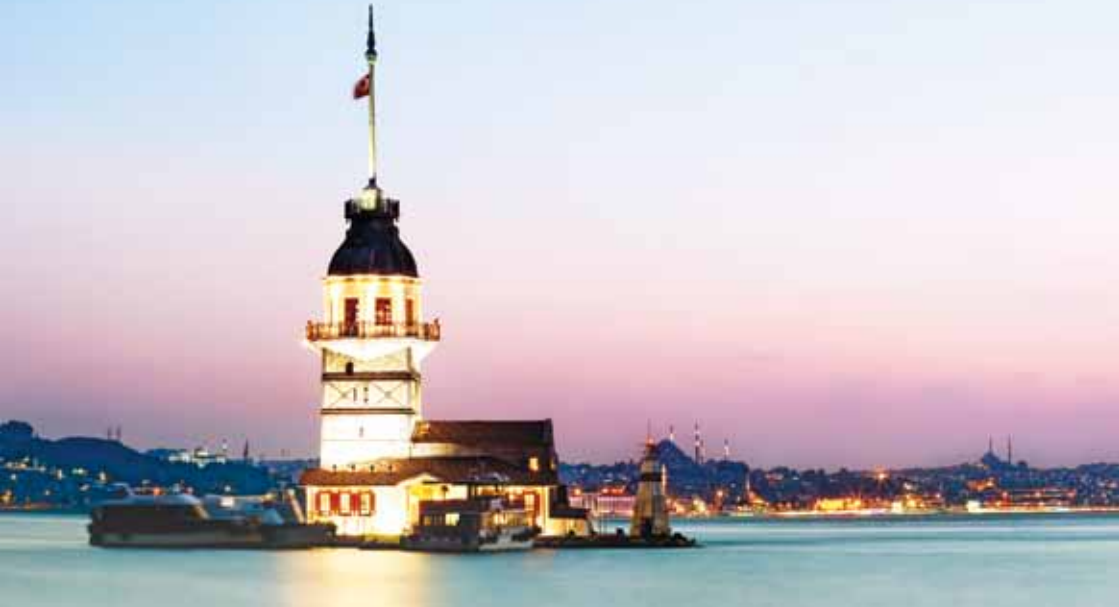
ICEGE ISTANBUL 2013

From Case History to Practice
In honour of Prof. Kenji Ishihara

INTERNATIONAL CONFERENCE ON EARTHQUAKE GEOTECHNICAL ENGINEERING

From Case History to Practice • *In honour of Prof. Kenji Ishihara*

17-19 June 2013, Istanbul, TURKEY • Boğaziçi University • Albert Long Conference Hall



On behalf of ISSMGE Technical Committee (TC 203) on "Earthquake Geotechnical Engineering and Associated Problems" we take great pleasure in inviting you to the International Conference on Earthquake Geotechnical Engineering From Case History to Practice in honor of Prof. Kenji Ishihara to be organized in Istanbul, Turkey during 17-19 June, 2013.

Prof. Dr. Atilla ANSAL
Conference Chairmen
Özyeğin University,Turkey

Prof. Dr. Mohamed SAKR
Conference Chairmen
Tanta University, Egypt

IMPORTANT DATES

Abstract Submission Deadline:
31 March 2013

Notice of Acceptance:
15 April 2013

Early bird Registration Deadline:
1 May 2013

ABSTRACT SUBMISSIONS

Registration is required for each accepted abstract by 31 March, 2013. Abstract Submissions are available on Conference web site at

www.icege2013.org

REGISTRATION

Prices are VAT included.

Registration	
Before May 1:	€ 300
Before June 1:	€ 350
On Site:	€ 400

ACCOMMODATION

Hotels in the near vicinity

Le Meridien, Etiler
Mövenpick Hotel, Levent
The Plaza Hotel, Balmumcu
The Point Hotel, Balmumcu
Cheya Residence, Rumelihisarı
Please contact the organizer at ***info@icege2013.org*** for more information.

ORGANISATION

Single Session for the major part of the conference with mostly invited lectures by renowned members of TC203. There will be poster presentations and selected oral presentations. Full paper submission is not required. It is sufficient to submit only extended abstracts.

The official language of the Conference will be English.

SCOPE and TOPICS

- Case histories on ground motion and site effects
- Soil investigation with field and laboratory testing
- Dynamic Characterisation and modelling
- Performance based design methodologies; Soil-structure interaction
- Physical modelling by shaking table and centrifuge tests
- Liquefaction; Lateral spreading
- Slope stability; Embankments, landfills and dams
- Shallow foundations; Pile foundations
- Retaining wall; Reinforced earth; Underground structures

HONORARY ADVISORY Committee

Kenji Ishihara
Liam Finn
Izzat Idriss
Pedro Seco Pinto

LOCAL ORGANISING COMMITTEE

Kemal Önder Çetin
Feyza Çinicioğlu
Turan Durgunoğlu
Mustafa Erdik
Ayfer Erken
Zeynep Gülerce
Aslı Kurtuluş
Kutay Özaydın
Gökçe Tönük

INTERNATIONAL SCIENTIFIC COMMITTEE

Kyriazis Pitilakis
Ross Boulanger
Anastasios Anastasiadis
Scott Ashford
George Bouckovalas
Johnathan Bray
Misko Cubrinovski
Ahmed Elgamal
George Gazetas
Amir M. Kaynia
Takaji Kokusho
Steven Kramer
Wei F. Lee
Michele Maugeri
Roberto Paolucci
Alain Pecker
Michael Pender
Ellen M Rathje
Raymond B. Seed
Jonathan P. Stewart
Francesco Silvestri
Kenneth H Stokoe
Kohji Tokimatsu
Ikuo Towhata
Ramon Verdugo
Susumu Yasuda
Lanmin Wang

INVITED LECTURERS

Professor Kenji Ishihara
(Chuo University, Tokyo, Japan):
New Features of Liquefaction-associated Damage in 2011 East Japan Earthquake

Professor W. Liam Finn
(University of British Columbia, Vancouver, Canada):
Amplification Effects of Thin Soft Surface Layers: A Study for NBCC 2015

Professor Izzat M Idriss
(University of California, Davis, USA)
Evaluation of the Seismic Performance of the Aswan High Dam

Professor Kenneth H Stokoe
(University of Texas, Austin, USA):
Field Seismic Testing: Quantitative and Qualitative Evaluations in the Linear and Nonlinear Strain Range

Professor George Gazetas
(National Technical University, Athens, Greece):
Simplified Nonlinear Stiffness and Damping For Rocking Foundations

Professor Kohji Tokimatsu
(Tokyo Institute of Technology, Japan):
Effects of the largest M7.6 aftershock occurring 30 min after the M9.0 main shock on liquefaction-induced damage

Professor Yoshimichi Tsukamoto
(Tokyo University of Science, Japan):
Integrating use of Swedish weight sounding tests for earthquake reconnaissance investigations

Professor Elen M Rathje
(University of Texas, Austin, USA),
Incorporating Site Response into Seismic Hazard Assessments for Critical Facilities

Professor Kyriazis Pitilakis
(Aristotle University of Thessaloniki, Greece):
New design spectra in Eurocode 8 and application to the seismic risk of Thessaloniki, Greece

Professor Jonathan D. Bray
(University of California, Berkeley, USA):
Liquefaction Effects On Buildings in the Central Business District of Christchurch

Professor Takaji Kokusho
(Chuo University, Tokyo, Japan):
Site amplification formula using Average Vs in equivalent surface layer based on vertical array strong motion records

Professor Misko Cubrinovski
(University of Canterbury, Christchurch, New Zealand):
Liquefaction Characteristics in the 2010-2011 Christchurch (New Zealand) Earthquakes

Professor Ross W. Boulanger
(University of California, Davis, USA):
Nonlinear dynamic analyses of liquefaction effects on dam

Professor Steven Kramer
(University of Washington, Seattle, USA):
The Effects of Liquefaction on Earthquake Ground Motions

Professor George Bouckovalas
(National Technical University, Athens, Greece):
Single pile in laterally spreading ground: Numerical against Centrifuge simulation

Professor Pedro Seco Pinto
(National Civil Engineering Laboratories, Portugal):
Lessons Learned From Dams Behavior Under Recent Earthquakes

Professor Ahmed Elgamal
(University of California, San Diego, USA),
Liquefaction and Post-Liquefaction Considerations for Sites with Inhomogenous Soil Strata

Professor Ikuo Towhata
(University of Tokyo, Japan):
Shaking model tests on liquefaction mitigation of embedded lifelines

Professor Michele Maugeri
(University of Catania, Italy):
Post-earthquake analysis for a seismic retrofitting: *the case history of a piled foundation in Augusta (Italy)*

Professor Susumi Iai
(Kyoto University, Japan):
Combined failure mechanism of a breakwater subject to Tsunami during 2011 East Japan Earthquake

Professor Wei F Lee
(National Taiwan University of Science and Technology):
A Case Study of Silty Sand Liquefaction-2010 Hsin Hwa Liquefaction in Taiwan

Professor Loukas F. Kallivokas
(University of Texas, Austin, USA):
Full-wave form inversion for site characterization

Professor Susumu Yasuda
(Tokyo Denki University, Japan):
Effect of long duration of the main shock and a big aftershock on the liquefaction-induced damage during the 2011 Great East Japan Earthquake

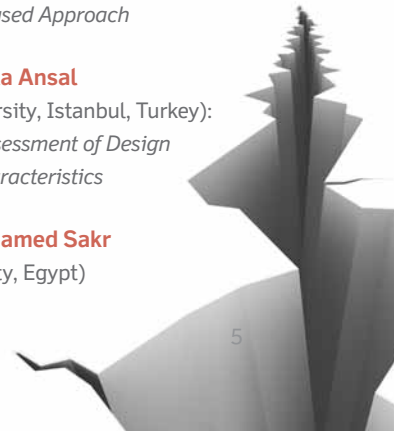
Professor Michael Pender
(University of Auckland, New Zealand):
Inferred beneficial effects of SFSI for multi-storey buildings with shallow foundations on gravels

Professor Ramon Verdugo
(CMGI, Santiago, Chile):
Liquefaction Observed During The 2010 Chile Earthquake

Professor Kemal Onder Çetin
(Middle East Technical University, Ankara, Turkey):
Assessment of Scaling Factors for Seismic Soil Liquefaction Triggering Problems: A Performance-based Approach

Professor Atilla Ansal
(Ozyegin University, Istanbul, Turkey):
Site Specific Assessment of Design Earthquake Characteristics

Professor Mohamed Sakr
(Tanta University, Egypt)



www.icege2013.org ICEGE ISTANBUL 2013

PROGRAMME

TIME	MONDAY 17 JUNE 2013	TUESDAY 18 JUNE 2013		WEDNESDAY 19 JUNE 2013
9:00-9:30	OPENING CEREMONY	**Steven Kramer**: The Effects of Liquefaction on Earthquake Ground Motions		**Pedro Seco Pinto**: Lessons Learned From Dams Behavior Under Recent Earthquakes
9:30-10:00	**Liam Finn**: Amplification Effects of Thin Soft Surface Layers: A Study for NBCC 2015	**Jonathan Bray**: Liquefaction Effects On Buildings in the Central Business District of Christchurch		**Ahmed Elgamal**: Liquefaction and Post-Liquefaction Considerations for Sites with Inhomogenous Soil Strata
10:30-11:00	Coffee Break	Coffee Break		Coffee Break
11:00-11:30	**Izzat M Idriss:** Evaluation of the Seismic Performance of the Aswan High Dam	**Takaji Kokusho**: Site amplification formula using Average Vs in equivalent surface layer based on vertical array strong motion records		**Ikuo Towhata**: Shaking model tests on liquefaction mitigation of embedded lifelines
11:00-11:30	**Kenneth H Stokoe**: Field Seismic Testing: Quantitative and Qualitative Evaluations in the Linear and Nonlinear Strain Range	**Susumı Iai**: Combined failure mechanism of a breakwater subject to Tsunami during 2011 East Japan Earthquake		**Michele Maugeri**: Post-earthquake analysis for a seismic retrofitting: the case history of a piled foundation in Augusta (Italy)
11:30-12:00	**George Gazetas:** Simplified Nonlinear Stiffness And Damping For Rocking Foundations	**George Bouckovalas:** Single pile in laterally spreading ground: Numerical against Centrifuge simulation		**Yoshimichi Tsukamoto**: Integrating use of Swedish weight sounding tests for earthquake reconnaissance investigations
12:00-14:00	Lunch	Lunch		Lunch
		Oral Presentations		
14:00-14:30	**Ross Boulanger**: Nonlinear dynamic analyses of liquefaction effects on dam	**A.Benmarce**: Natural Risk Prevention: Seismic Risk Of Constantine City Case	**M.Pehlivan**: Influence Of Spatial Variability On Site Response Analysis	**Kemal Önder Çetin:** Assessment of Scaling Factors for Seismic Soil Liquefaction Triggering Problems: A Performance-based Approach
		Y.Tomida: Centrifuge tests and numerical analysis on effects of desaturation as a liquefaction countermeasure for existing embankments	**P. Anbazhagan:** Right Peak Ground Acceleration Estimation For Geotechnical Hazard Evaluation	
14:30-15:00	**Kohji Tokimatsu**: Effects of the largest M7.6 aftershock occurring 30 min after the M9.0 main shock on liquefaction-induced damage	**F.M. Abdrabbo**: Seismic Response Of Aswan High Dam-Reservoir System Problems And Remediation	**D.K.Karamitros**: Experimental Verification Of Shallow Foundation Performance In An Earthquake-Induced Liquefaction Regime	**Wei F. Lee**: A Case Study of Silty Sand Liquefaction- 2010 Hsin Hwa Liquefaction in Taiwan
		T.Yamamoto: Design And Construction For Liquefaction Under The Bosphorus Strait In Marmaray Project	**B.W.Maurer**: An Ishihara-Inspired Liquefaction Potential Index (LPI) for Assessing Liquefaction Hazard	
15:00-15:30	**Misko Cubrinovski:** Liquefaction Characteristics in the 2010-2011 Christchurch (New Zealand) Earthquakes	**M.H.Baziar:** Strength and Post Liquefaction Settlement Of Sand-Silt Mixtures During Undrained Cyclic Torsional Loading	**D.Rayamajhi**: Non-Linear Analysis Of Shear Stress Redistribution For Stone Columns In Liquefiable Silty Sand	**Susumu Yasuda**: Effect of long duration of the main shock and a big aftershock on the liquefaction-induced damage during the 2011 Great East Japan Earthquake
		Z.Gülerce: Assessing The Probabilistic Earthquake Induced Landslide Hazard: Bakacak Landslide During 1999 Düzce Earthquake	**D.Wijewickreme:** Characterization Of Liquefaction-Induced Lateral Spread Dimensions Based On Past Earthquake Data	

www.icege2013.org ICEGE ISTANBUL 2013

15:30-16:00	Coffee Break	Coffee Break		Coffee Break
16:00-16:30	**Kyriazis Pitilakis**: New design spectra in Eurocode 8 and application to the seismic risk of Thessaloniki, Greece	**B.Bradley**: Ground motion analysis of the Canterbury earthquakes: Results to date and on-going work	**A.Bradshaw**: Influence of Initial Effective Confining Stress on the Dissipated Energy at Initial Liquefaction	**Michael Pender**: Inferred beneficial effects of SFSI for multi-storey buildings with shallow foundations on gravels.
		E.Garini: Canterbury Earthquakes: The Resthaven Records And Soil Amplification Response	**M.Morici:** A Model for the Dynamic Analysis of Pile Groups with Inclined Piles	
16:30-17:00	**Loukas F. Kallivokas**: Total wavefield approach to geotechnical site characterization: theory, computations, and field experiments	**A.Giannakou**: Izmit Bridge South Approach Viaduct: Foundation Design Against Fault Rupture	**S.Carbonari**: Lumped Parameter Model for the Time-domain Soil-Structure Interaction Analysis of Structures on Pile Groups	**Ramon Verdugo**: Liquefaction Observed During The 2010 Chile Earthquake
		T.Travasarou: Development Of Design Ground Motions For The Izmit Bay Bridge	**A.Sextos**: Asynchronous excitation of long bridges considering soil-structure interaction: evidence, ongoing research and design implications	
17:00-17:30	**Ellen M Rathje**: Incorporating Site Response into Seismic Hazard Assessments for Critical Facilities	**G.Andreotti**: Hazard-Dependent Soil Amplification Factors Derived from 1D Fully Stochastic Ground Response Analyses	**A.A.Correia**: Shallow foundation macro-element model for the seismic soil-structure interaction analysis: formulation and validation	**Kenji Ishihara:** New Features of Liquefaction-associated Damage in 2011 East Japan Earthquake
		A.Rodriguez-Marek: Investigating the Effect of Site Response on the Correlation Structure of Ground Motion Residuals	**J.Alam**: Physical and Numerical Modeling of Sheet Pile Quay Wall Subjected to Seismic Liquefaction	
17:30-18:00	**Atilla Ansal:** Site Specific Assessment of Design Earthquake Characteristics	**B.R.Cox**: Deep Vs Profiling for Dynamic Characterization of Christchurch, New Zealand: Towards Reliably Merging Large Active-Source and Ambient-Wavefield Surface Wave Methods	**F.M.Soccodato**: Seismic Behaviour Of Propped Retaining Structures	**CLOSING CEREMONY**
		J.H.Steidl: Ground Motion Thresholds for Nonlinear Site Response and Excess Pore Pressure Generation: Observations from the NEES@UCSB Permanently Instrumented Field Sites in California	**K.Ishikawa**: Liquefaction Strength Characteristic Concerning The Observation Seismic Wave Of The 2011 Off The Pacific Coast Of Tohoku Earthquake	

SUPPORTING ORGANIZATIONS

Turkish Earthquake Foundation, Earthquake Engineering Committee

European Association for Earthquake Engineering

Chamber of Civil Engineers İstanbul Section

Boğaziçi University

İstanbul Technical University

Özyeğin University

Yıldız Technical University

ZED
Etkinlik Yönetimi ve Danışmanlığı
Event Management & Consultancy

CONGRESS ORGANIZER EVENT MANAGEMENT & CONSULTANCY

Address : Mustafa Kemal Mah. 2132. Sokak No:2 Çankaya Ankara - TURKEY
Tel : +90 312 219 57 00 **Fax :** +90 312 219 57 01
Web : www.zed.com.tr **E-mail :** info@zed.com.tr

CONTACT PERSON

MS. MERVE TUNA

Phone : +90 312 219 57 00 / 301
Fax : +90 312 219 57 01 **E-mail :** info@icege2013.org