

2nd International Conference on New Developments in Soil Mechanics and Geotechnical Engineering

Atatürk Cultural and Congress Center
Near East University, Lefkoşa, North Cyprus
May 28 – 30, 2009

Conference Programme

28 May 2009 Thursday

8.30 – 9.30 Registration

9.30 -10.15 Opening Ceremony

10.15 – 10.30 **Opening Lecture: Prof.Dr. Ergün Toğrol**

*Honorary President of the Turkish Society on Soil Mechanics and Geotechnical Engineering
İstanbul Technical University & İstanbul University, İstanbul, TURKEY*

Creeping shores of the Golden Horn

Toğrol, E., Eyigün, Y. & Küman, S.

10.30 – 11.00 Coffee Break

11.00 – 11.45 **Keynote Lecture:**

Chairperson: Prof.Dr. Mehmet T. Tümay

Prof.Dr. Braja M. Das

Dean Emeritus, California State University, Sacramento, California, USA

Developments in elastic settlement estimation procedures for shallow foundations on granular soil

Das, B. M., Atalar, C. & Shin, E.C.

11.45 – 13.00 **SESSION 1: Foundation and slope stability**

Chairperson: Prof.Dr. Turan Durgunoğlu

Pile foundations of the Zine El Abidine Ben Ali airport in Tunisia

Sağlamer, A. & Özalp, H.K.

Earth structures in transport engineering – selected problems

Vaniček, I.

Friction between facing elements and geotextiles in geosynthetic reinforced soil retaining structures

Güler, E. & Astarci, B.

Characterization of shallow foundations on loose sand reinforced with geotextile

Yasrobi, S.S., Rahmaninezhad, S.M. & Eftekharzadeh, S.F.

Determination of soil nails capacity in greywacke formation

Çınar, A., Pekarun, O., Berk, B. & Doğanışık, K.

Foundation size effect on modulus of sub grade reaction rested on clayey soil

Janbaz, M. & Ziaie Moayed, R.

Three dimensional analysis of solid concrete piles in clayey soils under lateral loading

Judi, A. & Ziaie Moayed R.

A first version software programme for designing improved soils by vertical drains

Hazzar, L. & Bouassida, M.

Questions and answers

13.00 – 14.30 Lunch (Near East University Guest House Restaurant)

14.30 – 15.15 **Keynote Lecture:**

Chairperson: Prof.Dr. Braja M. Das

Prof.Dr. Mehmet T. Tümay

Georgia Gulf Distinguished Professor Emeritus

Louisiana State University, LA, USA & Boğaziçi University, İstanbul, TURKEY

Advances from Theory to Implementation of CPT-Based Probabilistic and Fuzzy Soil Characterization and Modeling

Tümay, M. T., Abu-Farsakh M. Y. & Zhang Z.

15.15 – 16.15 **SESSION 2: Foundation and slope stability**

Chairperson: Prof.Dr. Kutay Özaydın

Prediction of the settlement of reinforced soft clay by a group of stone columns

Ellouze, S. & Bouassida M.

Soil stiffness degradation in the design of passive piles

Keleşoğlu, M.K. & Çinicioğlu, S.F.

Uplift capacity of model piles under different percentages of compressive loads

Al-Mhaidib, A.

Analytical solutions of average pressure increments for primary consolidation settlement computations

Algm, H.M.

Primary and secondary settlements in normally consolidated organic soils

Algm, H.M.

Field investigations of highly weathered slopes for geotechnical risk assessment

Qureshi, M.U., Towhata, I., Yamada, S., Aziz, M. & Kubo, Y.

Assessment of lateral load-transfer methods of piles by full scale in-situ tests

Fakher, A., Sadeghi-Hokmabadi, A. & Saeedi-Azizkandi, A.

A numerical study on the effect of uneven settlements of oil storage tank

Akhavan-Zanjani, A., Fakher, A. & Maddah-Sadatieh, S.R.

Superiority of jute & coir geotextiles to synthetic ones

Yilmaz, H.R. & Yurtcan, U.E.

Questions and answers

16.15 - 16.30 Coffee Break

16.15 – 17.15 Meeting Professor Sêco e Pinto, Pedro Simão, President ISSMGE & Turkish National Committee of SMGE

16.30 - 18.00 **SESSION 3: Earthquake geotechnical engineering**
Chairperson: Prof.Dr. Pedro Simão Sêco e Pinto

Importance of seismic loading on reinforced earth walls

Şahin, A., Ekli, O., Durgunoğlu, T. & Özbatur, M.

Mechanical properties of granular rubber – sand mixtures determined by triaxial tests

Güler, E. & Enünlü, A.K.

Analysis of the mechanism of embankment failure during the 2007 Chuetsu Oki Earthquake, Japan

Gratchev, I. & Towhata, I.

Measurements and numerical modeling of ground-borne vibrations caused by heavy vehicle traffic

Ertuğrul, Ö.L., Ülgen, D. & Özkan, Y.

When can we rely on a pseudo-static approach for pile group seismic analysis

Elahi, H., Moradi, M., Poulos, H. & Ghalandarzade, A.

Seismic Slope Stability Assessment of a Construction Site at Bandırma, Turkey

Üçer, S., Sağlam, S. & Bakır, S.

Seismic stability assessment of an existent countermeasure against landslide in an urban area

Ülgen, D. & Sağlam, S.

A new attenuation model for peak ground acceleration in soil sites using genetic programming

Kermani, E., Jafarian, Y. & Baziar, M.H.

Questions and answers

19.30 – 21.00 Welcome Reception Dorana Hotel Kyrenia

29 May 2009 Friday

9.00 – 10.15 **SESSION 4: Soil characterization**
Chairperson: Prof.Dr. William F. Van Impe

Effect of fine gravel content on the shear strength characteristics of highly plasticity clay

Mollamahmutoglu, M. & Yilmaz, Y.

A microstructural study of the behaviour of large displacement interfacial shearing

Hammoud, F.

Effect of fibers on swelling characteristics of bentonite

Ikizler, S. B., Aytekin, M., Türker E. & Yavuz, H.İ.

Swell-Shrinkage Behaviour of Expansive Clays

Tawfiq, S. & Nalbantoglu, Z.

The influence of polymer inclusion and plasticity index on the unconfined compression strength of clays

Naderi nia, B. & Naeini, S. A.

Effect of waste polymer materials on shear strength of unsaturated clays

Naeini, S.A. & Sadjadi, S. M.

Geotechnical properties of Nicosia soils, Cyprus

Atalar, C. & Das, B.M.

Automated soil categorization using the CPT and DMT investigations

Bilski, P. & Rabarijoely, S.

Soil properties of Tuzla , North Cyprus

Kaşer, H. & Necdet. M

Questions and answers

10.15 – 11.00 **Special Lecture:**

Chairperson: Prof.Dr. Mounir Bouassida

Prof.Dr. William F. Van Impe

President of the Federation of the Geo-Engineering Societies

Faculty of Engineering, Laboratory of Geotechnics, Zwijnaarde, BELGIUM

Geotechnical research and monitoring data linked to an underwater dam on soft Soils

Van Impe, W.F.

11.00 – 11.15 Coffee Break

11.15 - 12.00 **Keynote Lecture:**

Chairperson: Prof.Dr. Ahmet Sağlamer

Prof.Dr. Pedro Simão Sêco e Pinto

President of the International Society for Soil Mechanics and Geotechnical Engineering

Professor of Geotechnical Engineering, University of Coimbra, PORTUGAL

Landslides analysis under static and seismic conditions

Sêco e Pinto, Pedro Simão

12.00 - 13.00 **SESSION 5: Soil characterization**

Chairperson: Prof.Dr. Murat Mollamahmutoğlu

Effects of fine content of soil and water/solids ratio of grout on behavior of compensation grouting

Tunçdemir, F. & Ergun, U.

An overview of soil heterogeneity: geotechnical implications in ground movements

Chrétien, M. & Fabre, R.

Effect of water phase on the consistency limits of fine-grained soils

Zaimoğlu, A. Ş. & Yetimoğlu, T.

Consolidation characteristics of waste lime landfill construction

Shin, E. C., Kim S. H. & Kim G. H.

Estimation of compaction parameters of fine-grained soils using artificial neural networks

Sivrikaya, O. & Soycan, Y.T.

Comparison between behaviour of undisturbed and reconstituted Tunis soft clay

Klai, M & Bouassida, M.

Effect of geotextiles on the compaction properties of soils

Keskin S.N., Çimen, Ö., Göksan T.S., Uzundurukan, S. & Karpuzcu, M.

Effect of Disturbance and Gypsum Content on Soil Water Characteristic Curve

Khatab, S.A.A. & Alomary, A.M.A.

Modeling Effects of Fines Content on the Behavior of a Sand

Çabalar, A. F. & Çevik, A.

Stabilization of saline soils with lime and silica fume

(Case study hashtgerd – Taleghan road)

Ziaie_Moayed, R., Heidari, S. & Sayadi, M.

Liquefaction analysis of fine sand reinforced with carpet waste fibers under triaxial tests

Ghiassian, H. & Ghazi, F.

An axisymmetric elasto-plastic modeling for unsaturated soils

Gatmiri, B. & Salehnia, F.

Questions and answers

13.00 – 14.00 Lunch (Near East University Guest House Restaurant)

14.00 – 14.45 **Keynote Lecture:**

Chairperson: Prof.Dr. Ivan Vaníček

Prof.Dr. Ahmet Sağlamer

*President of the Turkish Society on Soil Mechanics and Geotechnical Engineering
Chairman, Geotechnical Group, İstanbul Technical University, İstanbul, TURKEY*

Deep excavations in urban environment

Sağlamer, A.

14.45 – 16.00 **SESSION 6: New methods in geotechnical engineering**

Chairperson: Prof.Dr.Ufuk Ergun

Recent Developments in Foundation and Geothermal Engineering

Katzenbach, R., Ramm, H. & Waberseck, T.

Characterization of compacted sand- bentonite proportions as landfill barriers in North Cyprus

Iravanian, A. & Bilsel, H.

Design and construction of shoring at Uskudar Station, Marmaray Project

Groh, W. & Savaskan, E.

Relative soil/wall stiffness effects on retaining walls propped at the crest

Diakoumi, M. & Powrie, W.

River dike improvement and refurbishment • New developments and methods

Schmitt, A.

Geotechnical consideration on TBM tunneling in rock mass
Yağız, S.

Characterization of 3-phase porous media using electrical properties
Yeung, A.T. & Mak, M.S.W.

Some biotechnological considerations in geotechnical engineering
Çabalar, A.F., Garbulewski, K. & Winiarska, M.

Questions and answers

16.00 - 16.15 Coffee Break

16.15 – 16.45 **Special Lecture:**
Chairperson: Prof.Dr.Feyza Çinicioğlu

Prof.Dr. Tuncer B. Edil

Chair, Department of Civil and Environmental Engineering, University of Wisconsin-Madison, Madison, Wisconsin, USA

Geotechnics of sustainable construction

Edil, T.B.

16.45 – 18.00 **SESSION 7: New methods in geotechnical engineering**

Chairperson: Prof.Dr.Erol Güler

Use of paper mill sludge for absorption of hydrophobic substances
Likon, M., Černec, F., Saarela, J., Zimmie, T.F. & Zule, J.

Zone of influence during installation of preload piers
Biringen, E., Berilgen, M. & Edil, T.B.

Non linear analysis of soil pile interaction for laterally loaded piles
Boumekik, A., Maouche, H. & Sbartai, B.

Long term performance of cut-off walls in sulphate solutions
Fratalocchi, E. & Pasqualini, E.

Statistical analyses of geotechnical engineering properties of Hong Kong marine clays
Cheung, C. & Yeung, A.T.

Usage of superabsorbent geocomposite in erosion protection
Pawloski, A., Lejcuś, K., Garlikowski, D. & Orzeszyna, H.

Simplified Method of Prediction of Compaction Characteristics of Soils
Gürtüğ, Y.

Effect of combination of lime and natural pozzolana on the plasticity of soft clayey soils
Harichane, K. & Ghrici, M.

Settlements of two high embankments founded on soft soil
Žvanut, P.

Observed and Predicted Settlement of Shallow Foundation
Düzceer, R.

Questions and answers

18.00 – 18.30 **Closing Ceremony**
Assoc. Prof Dr. Cavit Atalar,
Prof.Dr. Ahmet Sağlamer,
Prof.Dr. Pedro Simão Sêco e Pinto,
Prof.Dr. William F. Van Impe,
Prof.Dr. Braja M. Das,
Prof.Dr. Ivan Vaniček,
Prof.Dr. Mounir Bouassida,

19.30 – 21.30 Gala Dinner (Kybele Restaurant, Bellapais)

30 May 2009 Saturday

9.00 – 18.00 Technical Visit Kyrenia – Nicosia - Famagusta