# SIXTH INTERNATIONAL CONFERENCE ON CASE HISTORIES IN GEOTECHNICAL ENGINEERING AND SYMPOSIUM IN HONOR OF PROFESSOR JAMES K. MITCHELL ARLINGTON, VA (USA) AUGUST 11-16, 2008

### List of Accepted Papers

### STATE OF THE ART AND PRACTICE (SOAP) LECTURES

W. D. Liam Finn (Canada)	Keynote: The Impact of Low Probability Ground Motions on Canadian Geotechnical Engineering Practice
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Ed Kavazanjian (USA)	The Indispensable Role of Case Histories in Landfill Engineering SOAP 7
William Van Impe (Belgium)	Evaluation of the Experiences in Underwater Dam Construction on Soft Soils SOAP 8
Scott Steedman (UK)	Modelling the Performance of Flood Protection Levees on Soft Soils SOAP 9 (withdrawn)
J. P. Singh (USA)	Use of Case Histories in Designing and Conducting Full Scale Load Test for Developing and Validating Numerical Methods SOAP 10 (not yet received)
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George E. Leventis Kostis Syngros Ricardo Dobry (USA) Chacao Channel Bridge - The Design Challenges OSP 3

Tony D. Canale Joel Moskowitz James L. Kaufman (USA) New York City High-rises on Rock: Uncovering the Unknown Leads to Variable

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Rolf Katzenbach Gregor Bachmann Christian Gutberlet (Germany) Soil-Structure Interaction and ULS Design of Complex Deep Foundations  $\ OSP\ 5$ 

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Evaluation and Long-term Performance Monitoring of Landfill Containment and Control Systems JKM 1 (not yet received)

James M. Duncan Failures of Floodwalls in New Orleans During Hurricane Katrina JKM 2 (not yet (USA) received)

Ed Kavazanjian Jr. Microbiological Improvement of the Physical Properties of Soil JKM 3 Ismail Karatas (USA)

Rudolph Bonaparte Design, Construction, and Performance of Low-Level Radioactive Waste Disposal Facility JKM 4

John F. Beech Leslie M. Griffin David K. Phillips Uday Kumthekar Johnny Reising (USA)

H. Turan Durgunoglu Performance of Deep Soil Nailed Walls JKM 5 (Turkey)

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Peter J. Bennett (United Kingdom)

### **SESSION 1**

"Case Histories of Unexpected Behavior and Failure of Shallow, Deep and other Foundations, including Soil Structure Interaction, Foundations in Expansive, Collapsible and Sulphative Rich Soils, Foundations in Arid, Semi-Arid Zones; Case Histories Involving Rapid Load Testing (Statnamic, Fundex, Drop Weight) for Deep Foundations, Pile Driving and Evaluation"

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Takahiko Kashimoto

(Japan)

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### **SESSION 5**

### "Case Histories and Failure of Retaining Structures, Slurry Walls, and Deep Excavations, Dewatering Stability"

Kumars Zand-Parsa The Simplified KZP5 Method for Soil Nail Design in Granular Soils 5.01

(USA)

Kamran Zand-Parsa

(Iran)

Kumars Zand-Parsa

(USA)

Kamran Zand-Parsa

(Iran)

Stability of a MSE Wall Under Bridge Falsework Bent Surcharge 5.02

Raj. V. Siddharthan

Ali Porbaha (USA)

Seismic Response Validation of DM Treated Liquefiable Soils 5.03

Javad Safadoust Gholam Moradi

(Iran)

Numerical Analysis of Algonquin Geogrid Reinforced Soil Retaining Wall under

Construction and Earthquake Loading 5.04

Shaw-Shong Liew

Chee-Min Khoo (Malaysia)

Lessons Learned from Two Investigation Cases of Ground Distresses due to Deep

Excavation in Filled Ground 5.07

Shahriyar Mojahed The Selection of an Earth Retention System at the Boston's Central Artery/Tunnel Mark French Project 5.08 (USA) Reconstruction of Pier Foundations of the Charles Bridge in Prague 5.10 Jan Masopust (Czech Republic) José Matos e Silva Behaviour Monitorization of a 13M High Gabions Wall 5.11 (Portugal) J.Jai Behavior of an Excavation Adjacent to a Historical Building and Metro Tunnels in J.H. Wang Shanghai Soft Clays 5.12 C.P. Liu L. L. Zhang X.L. Xie (China) Design and Construction of Anchored Flexible Facing Excavation Support and Bon Lien Jésus Gómez Soldier Pile Wall 5.13 Chris Bailey (USA) H.Bora Keskin Harmony of Retaining Systems to Various Local Subsoil Conditions - A Case Study H.Turan Durgunoglu 5.15 Selim Ikiz (Istanbul) Dimitrios Konstantakos Online Database of Deep Excavation Performance and Prediction 5.16 (USA) Patrick Becker Back Analysis of a Deep Excavation in Soft Lacustrine Clay 5.17 Berhane Gebreselassie Hans-Georg Kempfert (Germany) Xiaohai Wang Slurry Trench Stability Analysis - Constructing Cement-Bentonite Slurry Trench François G. Bernardeau Adjacent to Existing Soil-Bentonite Backfill 5.19 Jean-Claude Younan (USA) Abdolreza Osouli Learning of Soil Behavior from Measured Response of a Full Scale Test Wall in Youssef M.A. Hashash Sandy Soil 5.20 (USA) Jeffrey C. Evans Alamitos Gap: A Case Study using the Trench Remixing and Deep Wall Method (USA) 5.21 Salah Sadek Failure of a Hybrid Flexible Shoring System for a 30M Excavation: Exploration of Causes and Remedial Measures 5.22 (Lebanon) Analysis of a Group of Failing Retaining Walls and Remediation Measures 5.23 Sami Arsoy (Turkey) Wolfgang Roth Effect of High In-Situ Stress on Braced Excavations 5.25 Bei Su Jake Vanbaarsel Eric Lindquist (USA)

Construction of a Plastic Concrete Seepage Cutoff Wall for the New Coquitlam L. Yan D.A. Trapp Dam 5.26 A. Sy (Canada) Ravinrda Gill Anchored RCC Diaphragm Wall Coffer Dam for Bisalpur Dam (A Case - Study) Mahavir Bidasaria 5.29 (India) Failure of Retaining Structures in Town Lezha and their Consequence in Luljeta Bozo (Albania) Neighbouring Building 5.30 Fabio Matta Structural Response of FRP Reinforced Concrete Softeyes for Tunnel Excavation Antonio Nanni 5.31 (USA) Hadi Suroor Design and Construction of Circular Secant Pile Walls in Soft Clays 5.33 Mahi Galagoda Chris McGhee (USA) Deep Excavation in Hard Sandy Clays for Stations and Shafts of the Athens Metro Richard Kulesza (USA) Stavros Extension 5.34 Nikos Boussoulas (Greece) W. Allen Marr (USA) Granular Mass Behaviour under Passive Pressure 5.35 Petr Koudelka (Czech Republic) P. Jagannatha Rao Practical Lessons from the Failure of a Reinforced Soil Retaining Wall on a Major (India) Highway 5.36 Groundwater Lowering in Deep Excavation (Case Study: Foundation Excavation of A.H. Sadeghpour A. Ghanbari Shahid Madani Dam) 5.37 M. Fadaee (Iran) Meenal Gosavi Stabilization of Gantry Column Foundation by Soil Nailing 5.40

### **SESSION 6a**

## "Case Histories and Failure of Geological, Rock and Mining Engineering, Including Underground Structures and Excavations, and Subsidence of Deltas"

Satyendra Mittal Swami Saran (India)

D. Lo Presti M. Cravero G. Iabichino (Italy)	An "Unexpected" Rock Failure in a Limestone Open Pit Mine 6.01a
F. E. Volkov L. N. Gera (Russia)	Use of Strengthening Cementation when Civil Structures on Karsted Territory Construction 6.02a
R.K. Goel Anil Swarup (India)	Case History of Tunnelling Through Claystone 6.03a

S.Y. Mhaiskar Columnar Basalt - Vibration Study and Preservation Methods at Mumbai, India R.A. Hegde 6.04a C.R. Tata (India) Dimitrios Zekkos Characterization of a Weak Rock Mass and Geoengineering Analyses for a Canyon Julien Cohen-Waeber Landfill in Northern California 6.05a Edmund Medlev Chris Hunt Krzysztof Jesionek (USA) Eric M. Klein Characterization of Piedmont Residual Soil and Saprolite in Maryland 6.07a Jennifer L. Trimble (USA) Gennaro G. Marino Empirical Correlations of Longwall Subsidence Data for the Illinois Coal Basin Mohamed Gamal 6.08a Nagesh Malvala (USA) M.S. Mundhe Case History Compilation of Engineering Properties of Common Rocks in V.B. Pandhare Maharashtra, India, for Database (1982-2002) 6.09a N.M. Methekar Shriram R. Vaijapurkar (India) M.S. Ranadive Shape Optimization of Tunnel by Finite Element Method 6.10a (India) Verya Nasri Rehabilitation of La Nerthe Tunnel on Paris-Marseille High-Speed Railway Line (USA) 6.11a Christian Winum Pierre Magnien (France) Verya Nasri Construction of Express Subway Line EOLE in Paris 6.12a (USA) Philippe Fauvel (France) J. Sturman Support of Rock Cuts at Washington-Dulles International Airport 6.13a E.B. Rehwoldt (USA) C.D. Martin (Canada) Fabrice Emeriault Movements Induced by Tunnelling with an EPB Machine in Overconsolidated Soils: Richard Kastner Compans Monitoring Section of Toulouse Subway Line B 6.14a Emilie Vanoudheusden

### SESSION 6b

(France)

(Iran)

S. Taghipoor

in East 1 Main Gate of Tabas Coal Mine 6.17a

Application of Numerical Modelling to Study the Efficiency of Roof Bolting Pattern

<sup>&</sup>quot;Anticipation, Characterization, Design and Construction in the Geological Complexity of Mélanges, Fault Rocks, Weathered Rocks, Boulder Colluviam, Lahars, and Similar Bimrocks (Block-in-Matrix Rocks) and Rock/Soil Mixtures"

Koichi Nakagawa Shigenobu Yamada Isamu Tsuka (Japan) Characterization of the Shear-Induced Potential (SIP) in Clay and the Application to Landslide Sites 6.01b

Amy L. Guisinger Ching L. Kuo Teresa Puckett (USA) Design and Construction of Drilled Shafts in Karst Environments of Florida 6.02b

Said Ghorbanbeigi Jafar Najihamodi (Iran) Land Subsidence in Tehran District, Iran 6.07b

### **SESSION 7a**

"Case Histories of Soil Property Improvement, Expansive and Collapsible Soils; for Earthquake Mitigation, Use of Lightweight Materials, Application of Geo-Synthetics; Freshly Loaded Filled Ancient Marshy Lands – The Effects and Risks of Foundation, (Vanished Ports such as Alexandria and Other Unknown, (Also from India-Puri-Mahabalipuram), Site Characterization"

S. Shababoddin Yasrobi Ali Reza Zandieh Mehrzad Mortezaiy (Iran) The Laboratory Test Effects of Polyvinyl Acetate and Polyvinyl Acrylate on Compressive Strength of Dune Sand 7.01a (final copy not yet received)

Runglawan Rachan Suksun Horpibulsuk (Thailand) Compressive Strength of Repaired Road by Recycling Technique of Pavement

Materials 7.02a

Byung-Sik Chun Duk-Hum Park Jong-Nam Do Yong-Goo Jang (Korea) Improvement Characteristics of Ground using C.G.S. through Field Case Study

7.03a

San-Shyan Lin Chih-Jung Chien (China) Use of Sand Compaction Piles for Improvement of a Coal Ash Pond 7.06a

Matthew J. DeMarco (USA)

Polyurethane Resin (PUR) Injection for Rock Mass and Structure Stabilization

7.07a

Muawia A. Dafalla (Saudi Arabia)

Improvement of Thermal Resistivity of Desert Sand for use in High Voltage Cable

Beddings and Foundation in Arid Zones 7.09a

Jonathan Wu (USA) Kanop Ketchart (Thailand) Investigating Failure of a Geosynthetic-Reinforced Soil Wall in Black Hawk,

Colorado 7.11a

J. M. Kate (India)

(Iraq)

A Case Study on Rectification of Damaged Structures on Expansive Soil Deposits

7.12a

B.M. Al-Khailany R.R. Al-Omari W.F. Sagman Geological Alterations and Chemical Treatment of a Polluted Limestone Foundation

7.14a

F.E. Volkov Strengthening of Clay Soils of Buildings Bases under Reconstruction by Means of L.N. Gera Alkalization 7.15a (Russia) The Design and Construction of a Reinforced Embankment on Soft Compressible Gareth Swift Russell Jones Soil 7.16a (United Kingdom) Stavros A. Savidis Design and Construction of Granular Soil Columns for Ground Improvement of Frank Rackwitz Very Soft Soils for Road Embankments 7.17a Maik Schüßler (Germany) Mounir Bouassida Comparison Between Stone Columns and Vertical Geodrains with Preloading Lassaad Hazzar Embankment Techniques 7.18a (Tunisia) Jose L. M. Clemente Geogrid-Reinforced Soil Mat for Temporary Support of Heavy Equipment 7.19a Tianfei Liao Thomas Nixon (USA) A Combination of Artificial Ground Freezing and Grouting for the Excavation of a Vittorio Manassero Giuseppe Di Salvo Large Size Tunnel Below Groundwater 7.20a Fabio Giannelli Giuseppe Colombo (Italy) A. Stanciu Case Study of a Water Tank Behaviour on an Improved Collapsible Soil 7.21a N. Boti I. Lungu O. Donciu (Romania) Omar S. B. Al-Amoudi Testing and Stabilization of Saline Sabkha Soils: A Review 7.22a (Saudi Arabia) Enhancement of Bearing Capacity by Dynamic Compaction – A Case History 7.25a Liagat Ali Sarfraz Ali (Pakistan) Settlement Analysis of Chek Lap Kok Trial Embankments with Probabilistic Bak Kong Low (Singapore) Extensions 7.26a Adel M. El-Kelesh Effectiveness of Compaction Grout Piles in Improving Foundation Soils of Existing Tamotsu Matsui Runway 7.27a Ken-ichi Tokida (Japan) Antonio Cavallaro Dynamic Geotechnical Characterization of San Giuliano Di Puglia Seismic Area Salvatore Grasso 7.28a Michele Maugeri (Italy) Antonio Cavallaro Geotechnical Characterization of a Soft Clay Soil Subjected to a Preloading Salvatore Grasso Embankment 7.29a Valentina Lentini Michele Maugeri (Italy)

R. D. Verastegui Flores Performance of Deep Mixing Improvement of Alluvial Soft Soil 7.30a W.F. Van Impe P. Afschrift W. Cromheeke (Belgium) Case History - Settlement Mitigation for Mat Foundation using Lean Concrete Franklin Fong Chad M. Davis Columns 7.31a (USA) Hamid Reza Nouri Evaluation of Empirical Relationships for Dynamic Compaction in Liquefiable Reclaimed Silty Sand Layers using Pre/Post Cone Penetration Tests 7.32a (USA) Hamid Ali-Elahi Mehdi Jalili Ehsan Seyedi Hosseininia (Iran) Syed Faiz Ahmad Ground Improvement of a Beach Structure Complex by Means of Stone Columns -(Saudi Arabia) A Saudi Arabian Case History 7.33a M.L. Rainone Seismic Characterisation of Soils with Spt: Comparison of Calculated Vs Values P. Torrese and Measured Vs Values 7.34a P. Signanini F. Pizzica (Italy) Sao-Jeng Chao Performance Study on Geosynthetic Reinforced Shallow Foundations 7.35a (Taiwan R.O.C.) Ulrich La Fosse Earthquake Mitigation by Blast Densification 7.36a Theodore von Rosenvinge, IV (USA) A.K.L. Kwong A Field Test Study on Under Water Vacuum Preloading Method 7.39a X.F. Han L.G. Tham P.K.K. Lee (Hong Kong) W.B. Zhao (China) Chee-Ming Chan Settlement Behaviour of a Cement-stabilised Malaysian Clay 7.41a Siti Hajarahani Abdullah (Malaysia) Hossein Nowamooz Swelling Soils Behavior in Cyclic Suction-Controlled Drying and Wetting 7.42a F. Masrouri (France) Sanjeev Kumar Load-Deformation Behavior of Bentonite Amended Bottom Ash In Bending 7.43a Miton Adhikari (USA) Timothy J. Myers Improvement of Soil and Rock Properties for Foundation Support for Missouri Hristo K. Dobrev Interchange Project 7.45a John Szturo Wayne Duryee (USA)

David Rees Gillette

(USA)

Review of In Situ Measurements as Indications of Liquefaction Potential at

Numerous Sites 7.46a

Dimitar Antonov

(Bulgaria)

Laboratory Seismic Wave Investigations on Improved Loess Soils as Engineered

Barriers in the Radioactive Waste Repository Case 7.47a

Behzad Fatahi

Buddhima Indraratna Hadi Khabbaz

(Australia)

Case Study on the Influence of Transpiration on the Ground Behaviour 7.48a

Jan Najser

Jan Bohac

(Czech Republic) Emma Pooley Sarah Springman Jan Laue (Switzerland)

Construction of Motorway on Double Porosity Clay Fill 7.50a

Dimcho Evstatiev Yordan Evlogiev (Bulgaria)

Underground Facilities in Loess 7.52a

Dimcho Evstatiev Mariana Nedelcheva Yordan Evlogiev

(Bulgaria)

Foundation Work of High TV Tower in Collapsible Loess 7.53a

Fernando da Casa Martín F. Celis D'Amico

E. Echeverria Valíente

P. Chías Navarro

A. García Bodega

(Spain)

Excavation for Underground Parking in Seville (Spain). Treatment with Reinforced

Injections. 7.54a

F. Di Credico P. Signanini P. Torrese

(Italy)

Some Interesting Results about Behaviour of Granular Media 7.55a

Dong K. Chang Hugh S. Lacy

(USA)

Artificial Ground Freezing in Geotechnical Engineering 7.56a

Sven Hansbo (Sweden)

Soil Improvement by Means of Electro-Osmosis 7.58a

M. Nunez

Soft Ground Improved by Rigid Vertical Piles. Experimental and Numerical Study

of Two Real Cases in France 7.59a

D. Dias C. Poilpre R. Kastner (France)

Hide Yasuhara Takamasa Morito Yoshinori Kochi Mitsu Okamura

(Japan)

Evolution of Soil Desaturation by Air-injection Technique and Its Evaluation via

Multiphase Flow Simulation 7.60a

M. J. Hossain M. Alamgir M.A. Mahamud (Bangladesh) Field Investigation on the Performance of Rammed Aggregate Pier in a Soft Ground

of Bangladesh 7.66a

D.S.V. Prasad G.V.R. Prasada Raju Utilisation of Waste Plastics in Flexible Pavement Construction Laid on Expansive Soil Subgrade 7.68a

(Ladia)

(India)

Jet Grouting for Mass Treatment to Support an Aggregate Stockpile Building over

Ken Ivanetich Lisheng Shao

Very Soft Clays 7.69a

(USA)

Adil Godiwalla Advanced, Modern and Innovative Technologies Used at The Houston Airport

(USA)

System (Stabilized Subgrades and Stabilized Bases) 7.70a

### **SESSION 7b**

"Case Histories of Environmental Contamination and Problems including, Geotechnical and Hydrological Management and Remediation of Solid, Hazardous and Low-Level Radioactive Wastes, including Liner Cover Systems and Landfill Closure for Brownfield Development"

Sanjay Das Indra Prakash (India) Assessment of Groundwater Hazards in a Costal District of Gujarat, India 7.01b

R. Jeffrey Dunn

Lessons Learned from Closing Three Major Landfills – The Devil Really is in the

Details 7.03b

(USA)

B.N. Moolchandani (India)

Subject Areas of Geotechnological Engineering (GE) with Case Studies W.R.T. Indian Scenario. Case Study of Recharging Surface Ground Water at Source.

Ensuring No Contamination of Water (A GE Subject) 7.09b

Derrick A. Shelton David A. Schoenwolf Nisha P. Mohanan Redevelopment of a Municipal Solid Waste Landfill: Engineering Design

Challenges 7.10b

(USA)

### **SESSION 8a**

"Case Histories of Projects of District of Columbia, Maryland and Virginia; DC Monuments; Washington Monument, WWII Memorial, Lincoln Memorial, and Reflecting Pool; DC Convention Center, New I-95 Woodrow Bridge over the Potomac D. C. Metro, Springfield Interchange, The Dulles Light Rail Project."

David Rothenberg Mamoud Hosseini

Hiren J. Shah

Hugh S. Lacy

Case History of the Temporary Support of an 11-Story Historic Building in

Downtown Washington, DC 8.01a

(USA)

Mechanically Reinforced Earth for Steep Surcharge Slopes in Proximity of Adjacent

Structures to Improve Compressible Soils 8.02a

Matthew B. Van Rensler

(USA)

Cory Surber Excavation and Shoring Support for the National Institutes of Health East
Mamoud Hosseini Redundancy Loop Project at Building 10 on N.I.H. Campus in Bethesda Maryland

(USA) 8.03a

Eric M. Klein Jennifer L. Trimble Bibek B. Shrestha Tied-Back Top-Down Wall to Support I-295 Ramp 8.04a

(USA)

Douglas W. Christie

(USA)

Foundations for Memorials and Monuments on the National Mall 8.05a

Roderic A. Ellman, Jr.

(USA)

New I-95 Woodrow Wilson Bridge Foundations 8.07a

Victor Omelchenko

Mamoud Hosseini

(USA)

Excavation Support for the Newseum Development at 555 Pennsylvania Avenue in

Washington, D.C., USA 8.09a

Irvin Ragsdale Keki Wadia (USA)

Temporary Support of Excavation System for 300 New Jersey Avenue 8.10a

### **SESSION 8b**

"Case Histories of Forensic Geotechnical Engineering, Where Things Went Wrong; Reliability of Codes; Risk Analysis Pertaining to Public Structures, Non-Destructive Evaluation and Load Testing of Drilled Shafts, Auger Cast Piles and Driven Piles; and Damage Evaluation" and "Advance Information, Systems in the Geotechnical Risk Predication and Assessment"

So-ngo Clifford Teme

O.D. Ngerebara Essien Ubong (Nigeria)

Need for Prior Geotechnical Engineering Studies for Foundation Design: Cases of

Collapsed Buildings in Port Harcourt and Environs, Nigeria 8.01b

Mary Perlea Scott Loehr

Geotechnical Risk Analysis of the Local Flood Control Projects on the Kansas River in

Topeka, Kansas 8.02b

(USA)

E.T. Arshba Two History Cases of Innovations 8.04b

V.A. Barvashov G.V. Vasyukov (Russia)

Debasis Roy Failure of Two High Embankments at Soft Soil Sites 8.06b

Raghvendra Singh

(India)

M. B. Mgangira P. Paige-Green (South Africa)

Evaluation of Damage to a Road and a Sports Complex on Expansive Clays 8.08b

Xiong (Bill) Yu

(USA)

Yuewen Huang

(China)

Forensic on Construction Induced Failure of Pipe Pile Foundations 8.13b

### **SESSION 8c**

"Case Histories of Health Monitoring and Retrofit of Infrastructure, including Bridges, Tunnels, and other Transportation and Geotechnical Structures"

So-ngo Clifford Teme Essien Ubong

(Nigeria)

An Evaluation of the Geotechnical Characteristics of the Abutments of a Proposed Bridge Across a 400-Meter River Channel in the Lower Niger Delta, Nigeria 8.01c

So-ngo Clifford Teme Essien Ubong

(Nigeria)

Subsurface Geotechnical Engineering Investigations for a 9.833-KM Long Road and 130-Meter Wide Bridge in a Karst Topography in South-South Nigeria 8.02c António Topa Gomes António Silva Cardoso Jorge Almeida e Sousa (Portugal) José Carlos Andrade Carlos Augusto

Design and Behavior of Salgueiros Station for Porto Metro 8.04c

Jésus E. Gómez Carlos J. Rodriguez Helen D. Robinson Johanna Mikitka Larry Keough

Campanhã (Brazil)

Bond Strength of Hollow-Core Bar Micropiles 8.05c

Luis Fargier-Gabaldon Daniel A. Salcedo

Rosendo Camargo-

Rosendo Camargo-

Mora (Venezuela)

(USA)

Ancient Landslide Reactivation at the Viaduct No. 1 Located on the Caraca-La-Guaira Highway in Venezuela 8.08c

Konstantinos Giannakos (Greece) Damage of Railway Sleepers under Dynamic Loads: A Case History from the Greek

Railway Network 8.09c

Hoe-Chian Yeow Ian Feltham (United Kingdom) Case Histories Back Analyses for the Application of the Observational Method under

Eurocodes for the SCOUT Project 8.12c

Spyros Tsoukantas Konstantinos Tzanakakis Danai Spyropoulou

Danai Spyropoulou Petros Panopoulos Manto Mintzia (Greece) Investigation on the Causes of Longitudinal Cracks on Prestressed Monoblock Railway Sleepers of Metric Gauge of the Greek Railway Network 8.13c

### **SESSION 9**

# "Case Histories of Offshore Geotechnics; Effects of Soft Clay on Off-shore Foundations; and Gas Production on Soils and Foundation and Stability"

Wolfgang G. Brunner Manfred Beyer New BAUER Flydrill System Drilling Monopiles at Barrow Offshore Wind Farm, UK 9.01

(Germany)

A. Arulrajah Case Study of the Changi East Land Reclamation Project, Singapore 9.03

(Australia) M.W. Bo (Canada) H. Nikraz (Australia)

Paul Doherty Kenneth Gavin (Ireland) Degradation of Axial Shaft Capacity of Piles in Soft Clay Due to Cyclic Loading 9.04

Alp Gökalp Rasin Düzceer (Turkey) Ice Protection Barrier Construction in Caspian Sea 9.07

Gareth Swift (United Kingdom) Geotechnical Design of an Offshore Gravity Base Structure 9.08

Francesco Mirabelli Lorenzo Paoletti Eric J. Parker (Italy)

Jackup Rig Spud Can Penetration: A 6,000 Ton Load Test 9.09

Masaru Fujimoto Takechiho Tabata Tsuvoshi Emura Masato Nakamichi

Construction of Mass Concrete Structure Utilizing Ground Settlement from Underpass

Construction in the 2nd Phase Kansai International Airport Project 9.10

(Japan)

### **SESSION 10**

"Application of Geotechnical Engineering in Outer Space, including Granular Material Behavior in Lunar and Martian Environments; Granular Material Behavior in Asteroidal and Cometary Environments; Extra-terrestrial Mining, Construction, and Transportation Infrastructure Development; R&D and **Technology Trial Results"** 

Philip T. Metzger John E. Lane

Christopher D. Immer Sandra Clements

(USA)

Cratering and Blowing Soil by Rocket Engines during Lunar Landings 10.01

Review of Lunar Regolith Properties for Design of Low Power Lunar Excavators

Leslie Gertsch Jamal Rostami

Robert Gustafson

(USA)

### **SESSION 11a**

"Application of Case Histories in Education; How Case Histories have been Incorporated in Coursework; How to Conduct Search for Case Histories, and what are the Major Sources, Examples of Specific use/s: Importance of Teaching Case Histories; From Case Histories to Conceptual Models; Importance of Practical Experience of Professors, Use of Case Histories in Teaching Process, Is it Possible to Involve Students in Case Histories (i.e. in Engineering Practice)?"

J. David Rogers

A Historical Perspective on Geotechnical Case Histories Courses (Distinguished

Speaker)

Peter Scharle (Hungary)

Streamlining Case Studies for Education 11.01a

Sanjeev Kumar

(USA)

(USA)

Geotechnical Failures: An Excellent Tool to Teach Geotechnical Engineering 11.02a

Arun Bapat (India)

Monitoring Seismic and Geophysical Parameters with the Help of College Instruments

and Staff 11.03a

Waddah Akili

(USA)

Case Histories in Geotechnical Engineering: Enhancing the Practice in an Interactive

Learning Environment 11.04a

William D. Lawson

(USA)

Soil Sampling at Sword Beach – Luc-sur-Mer, France, 1943: How Geotechnical

Engineering Influenced the D-Day Invasion and Directed the Course of Modern

History 11.06a

Matthew Mauldon Kristin Brennan

(USA)

Exploring Case Histories: Chocolatetown PA 11.07a

Liagat Ali From Case Histories to Conceptual Models 11.10a Sarfraz Ali (Pakistan) Chavdar V. Kolev One Hundred Years Settlement of the Verna's Breakwater - Construction on Soft Clay (Bulgaria) Like a Typical Example from University Program of Port Construction in Bulgaria 11.11a Case Histories Oriented Teaching of Geotechnical Engineering 11.12a Sukhmander Singh (USA) Addressing the Geotechnical Case Histories of Beirut 11.13a Jacques Harb (Lebanon) Declan Phillips Benefits of Case Based Instruction in Undergraduate Geotechnical Education 11.14a (Ireland) K.S. Babu Narayan Use of Case Histories to Enhance Practical Geotechnical Engineering 11.15a B.M. Sunil (India) Maj Goril Baverfjord The Verdal and Rissa Landslides – Application of Case Histories in Education 11.17a Vikas Thakur (Norway) Mohamed Djebbi Educating Students through Understanding the Pathology of Geotechnical Projects Mounir Bouassida 11.18a (Tunis) Carsten H. Floess Use of Case Histories in the Classroom 11.19a (USA) Jiri Slovak Josef Exploration Drift - From Exploration of Gold to Unique Facility for Jiri Svoboda Geotechnical Research, Education and Training 11.20a Radek Vasicek Pavla Bauerova

Peter Scharle (Hungary)

(Czech Republic)

Application of Case Studies in Education 11.21a

### **SESSION 11b**

"Application of Case Histories to Practice; Use of Case Histories to Enhance Practical Geotechnical Engineering; Practice in Different Offices to Achieve this Objective with Examples; Importance of Lifelong Learning; Use of Case Histories in Life Long Learning; Establishing an International data base for Case Histories."

Fabrice Emeriault Richard Kastner Rodolphe Louis-Sidney Elöd Egyed-Zsigmond (France) A New International Database on Case Histories of Monitored Construction of

Tunnels and Deep Excavations 11.02b

Scott Shuler (USA)

Implications of Swelling Clays on Asphalt Pavement Performance in Colorado 11.03b

Ahmed Mohammed Incorporating Case Study and Site Visit for Teaching of Earth and Hydraulic Thamer Structures at Universiti Putra Malaysia 11.04b A.A. Aziz B.B.K. Huat (Malaysia) Chavdar V. Kolev Landslides in Balchik – the Biggest Nature Experiment for Shore Protection in (Bulgaria) Bulgaria 11.05b Liagat Ali Use of Case Histories to Enhance Practical Geotechnical Engineering 11.06b Sarfraz Ali (Pakistan) Lizè Groenewald Foundations of the Nation: The Hillbrow and Brixton Towers as Figurations of National Identity in South Africa 11.07b Francis Legge (South Africa) Geobrain: Dutch Feasibility Database for Installing Sheet Pile Walls 11.08b A.R. Koelewijn A.M.J. Mens (Netherlands) Using Experience and Case History Data to Enhance the Design of Piled Foundations David J. Baxter Neil Dixon and Predict Behaviour Characteristics 11.09b Paul R. Fleming Ken A. Cromwell (United Kingdom) Shubhada S. Jagtap Emerging Innovative Solutions Enhancing Practical Geotechnical Engineering 11.10b Annapurni Iyer Minimol Korulla (India) V.T. Ganpule Deterioration of Bored Cast In Situ Piles due to Aggressive Water 11.11b S.Y. Mhaiskar (India) Recent Experience on Design, Construction and Performance of CFRD Dams 11.14b Camilo Marulanda Escobar Alberto Marulanda Posada (Colombia)