

第十七屆東南亞大地工程研討會

# 17 SEAGC

The Seventeenth Southeast Asian Geotechnical Conference

May 10~13, 2010, Taipei, Taiwan

Geo-engineering for Natural Hazard  
Mitigation and Sustainable Development

## PROCEEDINGS Vol. I

Theme Sessions


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Organized by

 Southeast Asian Geotechnical Society (SEAGS)

 Taiwan Geotechnical Society (TGS)

Co-Organized by

 National Taiwan University (NTU)

Association of Geotechnical Societies in Southeast Asia (AGSSEA)



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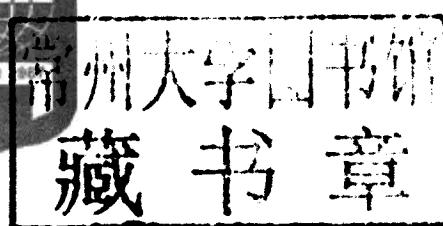
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- Geo-engineering for Natural Hazard Mitigation  
and Sustainable Development

### Vol. I. Theme Sessions



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# **Proceedings of the Seventeenth Southeast Asian Geotechnical Conference Vol. I. Theme Sessions**

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**Editors:**

Dr. John Chien Chung Li (CECI)

Prof. Meei-Ling Lin (NTU)

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## Foreword

The Southeast Asian Geotechnical Society (SEAGS) mainly consists of the members from SEA countries. When SEA country societies became the members of the International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE), the SEAGS retains its role in providing the platform for exchange and sharing of the knowledge among its members and the ally with other SEA societies. Since 1967, sixteen SEAGC conference have been held in the major cities in Southeast Asia, i.e., Bangkok (1967, 1977, 1987, 2004), Singapore (1970, 1993), Hong Kong (1972, 1982, 2001), Kuala Lumpur (1975, 1985, 1996, 2007) and Taipei (1980, 1990, 1998). After the 16th SEAGC, the Association for Geotechnical Societies of Southeast Asia (AGSSEA) was founded to enhance the connections between the SEAGS and other SEA societies. This is the forth time Taipei hosts the SEAGS conference. The Conf. is organized by SEAGS with the major help from Taiwan Geotechnical Society (TGS).

The main theme of 17SEAGC is Geo-engineering for Natural Hazard Mitigation and Sustainable Development. Nine theme topics are covered as follows,

1. Site characterization and laboratory testing
2. Ground improvement and reinforcement
3. Design, construction and performance of foundations
4. Ground excavations and tunneling
5. Landslide and debris flow hazard mitigation and rehabilitation
6. Geotechnical earthquake engineering
7. Geo-environmental engineering
8. New generation design code developments
9. Geo-information and land reclamation technologies

As a result, two keynote lectures, two guest lectures, one special guest lecture and a Forum as well as the theme sessions are scheduled. The special sessions are organized by TGS, ATC3, ATC10, JWG-DMR/TC39 and GEOSNet/TC304, respectively. More than 130 papers are contributed by more than 200 delegates from 21 countries in the 17SEAGC program. The Conf. Proceedings have two volumes. The Vol. I collects the papers presented in the Theme Sessions; Vol. II presents the articles collected for plenary sessions and special sessions. The minutes of the discussions, Q&A, Forum and GC/Member Meeting of SEAGS and Council Meeting of AGSSEA as well as other activities during the Conf. shall be prepared as e-copies and retained by CD ROM after the Conf.

Special thanks are due at this stage to all the delegates, the members and referees of the technical committee. The supports given by the members of the Organizing Committee and Conference Committee are gratefully acknowledged. Thanks are also due to those individuals and organizations who have supported and assisted either financially or in other manner. Without all these supports, a successful 17SEAGC cannot be reached.



Dr. John Chien-Chung Li  
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Chairperson, Conference Committee, 17SEAGC

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# Content

## ***Theme Session 1A - Site characterization and laboratory testing (I)***

- Mon-T1.1-01** Drained Behaviour of Cemented Sand at High Pressures **17**  
**Dariusz Wanatowski**, Hai-Sui Yu, Amanullah Marri, University of Nottingham (UK)
- Mon-T1.1-02** Compression Characteristics and Bulk Modulus of Expansive Soil in HC Stress **21**  
 Path  
**Syed Abdul Mofiz**, Mohammad Nurul Islam, Rajshahi University of Engineering & Technology (Banglades)
- Mon-T1.1-03** Effects of Major Principal Stress Direction and Intermediate Principal Stress on Undrained Shear Strength of Bangkok Clay **25**  
**Wanwarang Ratananikom**, Suched Likitlersuang, Chulalongkorn University (Thailand), Siam Yimsiri, Burapha University (Thailand), Fumihiko Fukuda, Hokkaido University (Japan)
- Mon-T1.1-04** Undrained Behaviour of Cemented Sand at High Pressures **29**  
**Ming-Ta Tsai**, Dariusz Wanatowski, Amanullah Marri, Salah Ud-Din, University of Nottingham (UK)
- Mon-T1.1-05** Tunis soft soil sensitivity **33**  
**Lamia Touiti**, Mounir Bouassida, Tunis-El Manar University (Tunisia), William Van Impe, Laboratory of Geotechnics, Faculty of Engineering (Belgium)

## ***Theme Session 1B - Ground improvement and reinforcement (I)***

- Mon-T2.1-01** Instrumented Trial Embankment on Soft Ground at Tokai, State of Kedah, Malaysia **39**  
**Peir-Tien Lee**, Yean-Chin Tan, Kuan-Seng Koo, G&P Geotechnics Sdn Bhd (Malaysia), Lean-Hock Ooi, Andrew Yeow, Gamuda Engineering Sdn Bhd (Malaysia)
- Mon-T2.1-02** Effects of Spatial Variability on Consolidation of Soft Soil Stabilized by Prefabricated Vertical Drains **43**  
**Md. Wasiul Bari**, Mohamed A. Shahin, Hamid R. Nikraz, Curtin University of Technology (Australia)
- Mon-T2.1-03** Experiment Analysis Of Unsaturated Zone Of Foundation Consolidated By Vacuum Preloading **47**  
**Jing Yin**, Shu-guang Liu, Tongji University (China), Zhi-liang Dong, Qing-chang Qiu, 2Engineering Technology Research Co. Ltd of China Communications Construction Co.Ltd. Fourth Harbor Engineering Co. Ltd (China)
- Mon-T2.1-04** Design and Performance of Deep Soil Mixing Ground Improvement for Reid Highway Extension, Perth Australia **51**  
**David Gu**, Andrea Xanthis, Doug Stewart, Golder Associates Pty Ltd (Australia)
- Mon-T2.1-05** The Efficiency of Prefabricated Vertical Drain (PVD) with Combined Vacuum and Heat Preloading **55**  
**Dennes T. Bergado**, Jaturonk Saowapakpiboon, S. Artidteang, S. T. Montalbo, Asian



Institute of Technology (*Thailand*), N. Teerachaikulpanich, Maruyama Industry Co., Ltd (*Thailand*), P. Voottipruex, King Mongkut's University of Technology North Bangkok (*Thailand*)

- Mon-T2.1-06** Chemical Stabilisation of Organic Soil Using Fly ash **61**  
**Hadi Khabbaz**, Behnam Fatahi, University of Technology (*Australia*)

### ***Theme Session 2A - Site characterization and laboratory testing (II)***

- Mon-T1.2-01** Determination of Interfaces in Soil Layers by Sound Wave Analysis **67**  
**Huei-wen Chang**, Tseng-Hung Chang, Chih-Wei Wang, National Central University (*Taiwan*)
- Mon-T1.2-02** Permanent deformation evaluation of Unbound Granular Materials (UGMs) layer **71**  
**Komsun Siripun**, P. Jitsangiam, H. Nikraz, Curtin University of Technology (*Australia*)
- Mon-T1.2-03** Determination of Stiffness Properties of Lightly Stabilised Granular Materials from IDT Testing using numerical analysis **75**  
**Dalim K. Paul**, Carthigesu T. Gnanendran, P. Jegatheesan, University of New South Wales at Australian Defence Force Academy (*Australia*)
- Mon-T1.2-04** Disc Rotation for Improving Loose Sands **79**  
**Tao-Wei Feng**, Chian-Sung Tzeng, Yan-Hsang Huang, S. C. Li, Chung Yuan Christian University (*Taiwan*)
- Mon-T1.2-05** Constant-Volume Direct Box-Shear Test on Clay Seam Materials **83**  
**Sokbil Heng**, Thirapong Pipatpongsa, Tokyo Institute of Technology (*Japan*), Hideki Ohta, Chuo University (*Japan*), Masaru Takemoto, Seiya Yokota, Nippon Expressway Research Institute (*Japan*)
- Mon-T1.2-06** Earth Pressure and Stress Path during Vibratory Compaction **88**  
**Yung-Show Fang**, Yi-Jen Jiang, National Chiao Tung University (*Taiwan*)
- Mon-T1.2-07** Regional Field Measurement of Soil Moisture Content with Neutron Probe **92**  
**Derek Chan**, P. Rajeev, J. Kodikara, Monash University (*Australia*), C. Gallage, Queensland University of Technology (*Australia*)
- Mon-T1.2-08** CPTU Versus SU Correlation – Local or Global? **96**  
**Jianye Ching**, National Taiwan University (*Taiwan*), Kok-Kwang Phoon, National University of Singapore (*Singapore*)

### ***Theme Session 2B - Ground improvement and reinforcement (II)***

- Mon-T2.2-01** A Case Study of Settlement Behavior of Dynamic Compacted High Rock Embankment with Construction Path **103**  
**Kyung-Tae Bae**, Tae-Hoon Kim, Young-Jin Kim, Institute of Construction Technology, DAEWOO Engineering & Construction Co. Ltd (*Korea, Republic Of*)
- Mon-T2.2-02** Improvement of Bearing Capacity of Soil at Slope: Comparison between Geojutes and Geotextiles **107**  
**Mohammad Nurul Islam**, M. M. Younus Ali, N. H. M. Kamrujjaman Serker, Syed Abdul Mofiz, Rajshahi University of Engineering & Technology (*Bangladesh*), Ayesha Siddika, Rajshahi Polytechnic Institute (*Bangladesh*)

- Mon-T2.2-03** Investigation of Soil Nailed Slope Distress at Fill Ground & Remedial Solutions **112**  
**Shaw-Shong Liew**, Wei Lim, Lih-Shiong Lau, G&P Geotechnics Sdn Bhd (*Malaysia*)
- Mon-T2.2-04** Port of Brisbane (PoB) Clay Characteristics and Use of Wick Drains to Improve Deep Soft Clay Deposits **116**  
**Jay Ameratunga**, C. De Bok, C. Bamunawita, Coffey Geotechnics (*Australia*), P. Boyle, Port of Brisbane Corporation (*Australia*)
- Mon-T2.2-05** Failure Investigation of Crib Wall, Piled Reinforced Concrete Wall And Geosynthetic Reinforced Soil Wall **120**  
**Peir-Tien Lee**, Shaw-Shong Liew, Fang-Liang Lim, G&P Geotechnics Sdn Bhd (*Malaysia*)
- Mon-T2.2-06** Electrokinetic Consolidation of Soft Clay using the Electric Vertical Drains (EVD) **124**  
**Eng Choy Lee**, LEC Geo Consult (*Malaysia*), R. S. Douglas, Kiaratex Exports Pte. Ltd (*Singapore*), F. I. Md. Saberi, A. S. A.Razak, Straits Consulting Engineers Sdn Bhd (*Malaysia*)
- Mon-T2.2-07** The Manufacturing Process Effects on the Tensile and Creep Behavior of High Strength Polyester Yarns **128**  
**Chiwan Wayne Hsieh**, Bei-Fu Chuang, Jaw-Cher Liu, National Pingtung University of Science and Technology (*Taiwan*)
- Mon-T2.2-08** Effect of Fibre Reinforcement on Drained Behaviour of Cemented Sand **134**  
**Dariusz Wanatowski**, Salah Ud-Din, Amanullah Marri, David J. Reddish, University of Nottingham (*UK*)

### ***Theme Session 3A - Site characterization and laboratory testing (III)***

- Tue-T1.3-01** In-situ Measurement of Shear Modulus of Weak Rocks **141**  
**Lup Wong Wong**, Hong Kong Island and Islands Development Office, Civil Engineering and Development Department, Government of HKSAR (*Hong Kong*)
- Tue-T1.3-02** Some Mechanical Properties of Reconstituted Kaolin Clay **145**  
**Bashir Ahmed Mir**, Ashish Juneja, Indian Institute of Technology Bombay (*India*)
- Tue-T1.3-03** Simulation of Advanced Soil Models by Using User Defined Model Feature in PLAXIS **149**  
**Horn-Da Lin**, Huu-Phuoc Dang, Yo-Ming Hsieh, Taiwan University of Science and Technology (*Taiwan*)
- Tue-T1.3-04** Effect of Stress Path on the Strength Properties of Expansive Soil **153**  
**Syed Abdul Mofiz**, Mohammad Nurul Islam, Rajshahi University of Engineering & Technology (*Bangladesh*)
- Tue-T1.3-05** A Compression Model for Structured Soils **157**  
**Jiping Pan**, Parsons Brinckerhoff (*Australia*), Martin Dingfu Liu, the University of Wollongong (*Australia*), Suksun Horpibulsuk, J. Suebsuk, Suranaree University of Technology (*Thailand*)
- Tue-T1.3-07** Drained Strength Properties and Dilatancy Characteristics of Cohesionless Gravelly Soils **161**  
**Jie-Ru Chen**, National Chi Nan University (*Taiwan*), Fred H. Kulhawy, Cornell



University (USA)

- Tue-T1.3-08** Determination of Shear Wave Velocity and Shear Modulus out of Bender Element Test **165**  
**Keeratikan Piriyakul**, King Mongkut's University of Technology North Bangkok (Thailand)

**Theme Session 3B - Design, construction and performance of foundations (I)**

- Tue-T3.1-01** Pile construction and load testing in sloping Jurong Formation **171**  
**Christopher Daniel**, Arup (Singapore) Pte Ltd (Singapore)
- Tue-T3.1-02** Performance of Jack-in Pile Foundation in Weathered Granite **176**  
**Chee-Meng Chow**, Yean-Chin Tan, G&P Geotechnics Sdn Bhd (Malaysia)
- Tue-T3.1-03** Piling Foundation Design & Construction Problems of Tank Farm in Reclaimed Land over Untreated Soft Marine Clay in Malaysia **180**  
**Deng-Ing Ting**, Shaw-Shong Liew, Yew-Hup Low, G&P Geotechnics Sdn Bhd (Malaysia)
- Tue-T3.1-04** Depth of Investigation for Foundation Soils **184**  
**John D. Nelson**, Kuo Chieh Chao, Engineering Analytics, Inc. (USA)
- Tue-T3.1-05** Model Testing and Numerical Simulations on Injection Mechanism of Drilled Shaft Base Grouting **188**  
**Muhsung Chang**, L. H. Chen, C. C. Chiang, National Yunlin University of Science & Technology (Taiwan), J. Jang, Diffisoi Geotechnical Engineering Co. (Taiwan), H. S. Hsieh, Trinity Foundation Engineering Consultants (Taiwan)
- Tue-T3.1-06** Field performance of a hybrid reinforced earth embankment built in limited fill space **192**  
**Chia-Cheng Fan**, Chin-Fu Hsiao, National Kaohsiung First University of Science & Technology (Taiwan), Kuo-Wei Huang, Kaohsiung County Government (Taiwan)
- Tue-T3.1-07** Load Transfer Characteristics of Micropile **196**  
**Changho Choi**, Jeongmin Goo, Sam-Deok Cho, Hobon Koo, Korea Institute of Construction Technology (Korea, Republic Of)
- Tue-T3.1-08** Experimental and Numerical Study on the Behaviour of Pile Group of Piled Raft **200**  
**Balakumar Venkatraman**, Simplex Infrastructures Limited (India), K. Ilamparuthi, Anna University (India)

**Theme Session 3C - Ground excavations and tunneling (I)**

- Tue-T4.1-01** An Investigation into a Shoring Method to Support Buildings Adjacent to Excavations **207**  
**Somaye Sadeghian**, Ali Fakher, Tehran University (Iran (Islamic Republic Of))
- Tue-T4.1-02** Development of Plane-type Electrical Resistivity Probe for Porosity Estimation of Saturated Soils **211**  
**Jong-Sub Lee**, Joon Han Kim, Hyung-Koo Yoon, Soon-Hyuck Jung, Korea University (Korea, Republic Of)
- Tue-T4.1-03** Modelling of Tunnelling Beneath a Building Supported by Friction Bored Piles **215**

**Siew-Wei Lee**, C. K. M. Choy, Geotechnical Consulting Group (Asia) Ltd (*Hong Kong*), W. W. L. Cheang, Plaxis (Asia) (*Singapore*), W. Swolfs, Plaxis BV (*Netherlands*), R. Brinkgreve, Plaxis BV & Delft University of Technology (*Netherlands*)

- Tue-T4.1-04** Bearing Capacity Analysis of Cohesive-frictional Soils with a Shallow Square Tunnel **219**  
**Kentaro Yamamoto**, Kagoshima University (*Japan*), A. V. Lyamin, D. W. Wilson, A. J. Abbo, S. W. Sloan, University of Newcastle (*Australia*)
- Tue-T4.1-06** Experimental Study on Tunnelling Induced Ground Deformation In Reinforced Soil **223**  
**R. N. Surendran**, Indian Institute of Technology Bombay (*India*), N. Aggarwal, Tebodin Middle East (*Abu Dhabi*)
- Tue-T4.1-07** Use of the Total Stress Undrained Model to the Analysis of Deep Excavation **227**  
**Chang-Yu Ou**, A. Lim, National Taiwan University of Science and Technology (*Taiwan*), Pio-Go Hsieh, Hwa Hsia Institute of Technology (*Taiwan*)
- Tue-T4.1-08** Cases Study Relating to Support Design and Reinforcement in Highway Tunnel Intersection **231**  
**Po-Hsiang Chang**, P. C. Hou, C. T. Chen, W. C. Lian, Sinotech Eng. Consultants Ltd (*Taiwan*), D. J. Tseng, Hsi-Kung Wang, Taiwan Area National Expressway Engineering Bureau, MOTC (*Taiwan*)

#### ***Theme Session 4A - Site characterization and laboratory testing (IV) & Ground improvement and reinforcement (III)***

- Tue-T1.4-01** Study on Cement Grout Quality of Model Soil Nails Measured Using Long Gage FBG Sensing Technology **237**  
**Chengyu Hong**, Jian-Hua Yin, Hua-Fu Pei, Er-Mao Xu, The Hong Kong Polytechnic University (*Hong Kong*), Wan-Huan Zhou, University of Macau (*Macau*)
- Tue-T1.4-02** Effect of infill thickness and moisture content on shear behavior of planar joints **241**  
**Shuh-gi Chern**, Tsu-Chiang Cheng, Shin-Ru Wu, National Taiwan Ocean University (*Taiwan*)
- Tue-T1.4-03** Slope Instability Associated with Rock Weakening and Softening Caused by Weathering—The Shuilien Conglomerate Slope **244**  
**Pei-Chen Chan**, Tai-Tien Wang, Wei Lo, Tzuu-Hsing Ueng, National Taipei University of Technology (*Taiwan*)
- Tue-T2.3-04** Effects of Overburden Stress and Grouting Pressure on Soil Nail Pullout Resistance **248**  
**Wanhuan Zhou**, University of Macau (*Macau*), Jian-Hua Yin, Chengyu Hong, The Hong Kong Polytechnic University (*Hong Kong*)
- Tue-T2.3-05** The Test Results and analyses of the Load Distributive Tensile Friction Anchor removed by man **252**  
**Jeong Ryeol Kim**, Dae Woong Park, Seo Jun Hee, Jong Ki Jeong, SAMWOO G&C Co., Ltd (*Korea, Republic Of*), Tae-Seon Yang, Kimpo College (*Korea, Republic Of*)
- Tue-T2.3-06** Stability and failure prediction of roadway at shaft bottom based on geomechanical characterization and interpretation **256**  
**Tingkan Lu**, Lei Zhao, Henan polytecnic University (*China*), Wenqiang Wang, Daliu

Colliery, Huating Coal Group, (China)

- Tue-T2.3-07** Numerical Simulation of three-dimensional Dewatering for Pressure Releasing in a Confined Aquifer **260**  
**Jerry Jwo-Ran Chen**, Kung-Tai Chou, CECI Engineering Consultants, Inc. (Taiwan)

**Theme Session 4B - Design, construction and performance of foundations (II) & Geo-information and land reclamation technologies (I)**

- Tue-T3.2-01** Bearing Capacity and Failure Mechanisms of Shell Foundations on Sand **267**  
**Kentaro Yamamoto**, M. Hira, Kagoshima University (Japan), A. V. Lyamin, A. J. Abbo, S. W. Sloan, University of Newcastle (Australia)
- Tue-T3.2-02** Failure Investigation of Piled Reinforcement Soil Wall & Excessive Movements of Piled Embankment at Soft Ground, Malaysia **271**  
**Shaw-Shong Liew**, Seong-Tat Lee, Kuan-Seng Koo, G&P Geotechnics Sdn Bhd (Malaysia)
- Tue-T3.2-03** Design of Disconnected Piled Foundation for 6.0m High Inlet Structure **275**  
**Chee Meng Chow**, Fei-Seong Fong, Yean-Chin Tan, G&P Geotechnics Sdn Bhd (Malaysia)
- Tue-T3.2-04** Effect of Pile Length and Diameter on the Behaviour of the Piled Raft on Sand **279**  
**Balakumar Venkatraman**, Simplex Infrastructures Limited (India), Min Huang, Arup Geotechnics (Australia), A. S. Balasubramaniam, Griffith University (Australia)
- Tue-T3.2-05** Hyperbolic Load-Transfer Curves for Bored Piles in Weak Rocks **284**  
**Lup Wong Wong**, Hong Kong Island and Islands Development Office, Civil Engineering and Development Department, Government of HKSAR (Hong Kong)
- Tue-T3.2-06** Introduction on Foundation Engineering of Taipei 101 **289**  
**Ching-Han Yu**, Sino Geotechnology, Inc. (Taiwan)
- Tue-T9.1-07** The Effects of Geogrids to Prevent the Penetration of Aggregates into Soft Seabeds **293**  
**Hadi Kazemiroodsari**, Ali Fakher, University Of Tehran (Iran (Islamic Republic Of))
- Tue-T9.1-08** Development of Real-Time Soil Deformation Monitoring System **297**  
**M. A. Mohd Din**, Kang Wei Lam, Z. Harun, University of Malaya (Malaysia)
- Tue-T9.1-09** Monitoring and Analysis of A Deep-Seated Landslide With Ground Based LiDAR and Close Range Photogrammetry **301**  
**Linus K.-L Wang**, Meei-Ling Lin, C.-H. Lin, National Taiwan University (Taiwan)

**Theme Session 5A - Land-slide and debris-flow hazard mitigation and rehabilitation (I)**

- Tue-T5.1-01** Analysis of Groundwater Influence and Destabilized Mechanisms of the Guinsaugon Rockslide **307**  
**Thirapong Pipatpongsa**, Sokbil Heng, Tomohide Takeyama, Tokyo Institute of Technology (Japan), Hideki Ohta, Chuo University (Japan)
- Tue-T5.1-02** Rupture Surfaces of Granular Soils linear shaped Slope Stability **311**  
**Ampeglio Diego Garini**, Consulting Engineer (Italy)
- Tue-T5.1-03** Systematic Investigation of Landslides Triggered by the Severe 7 June 2008 Rainstorm in Hong Kong **314**

**Alex Chi-On Li**, Jonathan W. C. Lau, Loretta L. K. Cheung, Government of the Hong Kong SAR (*Hong Kong*)

- Tue-T5.1-04** Seepage and Slope Stability Analysis on the Occurrence of Debris Flow at Jinbu, Korea **318**

**Chan-Young Yune**, Kyoung-Jea Jun, Gangnung-Wonju National University (*Korea, Republic Of*), Heung-Seok Seo, Gangneung Yeongdong College (*Korea, Republic Of*)

- Tue-T5.1-05** Regional Scale Natural Terrain Landslide Risk Assessment: An Example from West Lantau, Hong Kong **322**

**S.W. Millis**, Ove Arup & Partners Hong Kong Limited (*Hong Kong*), K. B. Clahan, Fugro (Hong Kong) Limited / William Lettis & Associates (*Hong Kong*), S. Parry, Georisk Solutions (*Hong Kong*)

- Tue-T5.1-06** Engineering Geology of Rock Slopes - Some Recent Case Studies in Malaysia **326**  
**Boon-Kong Tan**, Petaling Jaya (*Malaysia*)

- Tue-T5.1-07** The Relationship of Displacement Rate and Factor of Safety for Lu-Shan Landslide during Torrential Rainfall **331**

**Der-Guey Lin**, Jian-Ting Lu, National Chung-Hsing University (*Taiwan*), Huang Jen-Kai, Liming Engineering Consultant Company, Ltd (*Taiwan*)

- Tue-T5.1-08** A Case study of debris flow mitigation of No.3 valley at Sitou Nature Education Area **336**

**Kelvin K. S. Chou**, Wen-Long Wu, Kung-Tai Chou, CECI Engineering Consultants, Inc., Taiwan (*Taiwan*), Cheng-Sheng Chang, 1Experimental Forest of Bio-Resources and Agriculture Collage NTU (*Taiwan*)

### ***Theme Session 5B - Geotechnical earthquake engineering (I)***

- Tue-T6.1-01** Artificial Neural Network in CPT Base Liquefaction Prediction **343**

**Sik-Cheung Robert Lo**, University of New South Wales at Australian Defence Force Academy (*Australia*), Mizanur Rahman, University of Canterbury (*New Zealand*), Sayed Abdul Mofiz, Rajshahi University of Engineering & Technology (*Bangladesh*)

- Tue-T6.1-02** Dynamic Evaluation of Diaphragm Wall Anchor Position in Clay Considering Soil-Structure Interaction **347**

**Ali Derakhshani**, University of Tokyo (*Iran (Islamic Republic Of)*), Mohammad Sajjad Fayyazi, Khosrow Bargi, University of Tehran (*Iran (Islamic Republic Of)*)

- Tue-T6.1-03** Degradation of Shear Modulus During Liquefaction Modeled in 1-D Centrifuge Shaker **351**

**Chung-Jung Lee**, Yu-Chen Wei, Wen-Yi Hung, Huei-Tsyr Chen, National Central University (*Taiwan*), K. T. Chou, CECI Engineering Consultants, Inc. (*Taiwan*)

- Tue-T6.1-04** Analyses of Embankment Failures Associated with 2007 Noto Peninsula Earthquake **355**

**Tatsunori Matsumoto**, Yusuke Nishiki, Shun-ichi Kobayashi, Takashi Shimominami, Kanazawa University (*Japan*)

- Tue-T6.1-05** Development and Verification of New Site Classification System and Site Coefficients for the Regions of Shallow Bedrock in Korea **359**

**Dong-Soo Kim**, Sei-Hyun Lee, KAIST (*Korea, Republic Of*)

<b>Tue-T6.1-06</b>	Seismic Performance of Piles from PBEE and EQWEAP Analyses <b>Der-Wen Chang</b> , Tzu-Yi Yang, Chih-Lin Yang, Tamkang University ( <i>Taiwan</i> )	<b>363</b>
<b>Tue-T6.1-07</b>	Liquefaction Potential Post-Earthquake in Yogyakarta <b>Agus Setyo Muntohar</b> , Universitas Muhammadiyah Yogyakarta ( <i>Indonesia</i> ), S. P. R. Wardani, Diponegoro University ( <i>Indonesia</i> )	<b>367</b>
<b>Tue-T6.1-08</b>	Undrained Monotonic and Cyclic Behaviour of Sand-Tyre Chip Mixtures <b>Panu Promptthangkoon</b> , Rajamangala University of Technology Srivijaya ( <i>Thailand</i> ), AFL. Hyde, University of Sheffield ( <i>UK</i> )	<b>371</b>

#### ***Theme Session 6A - Ground excavations and tunneling (II)***

<b>Wed-T4.2-01</b>	Earth-retaining and foundation system design in sloping Jurong Formation <b>Christopher Daniel</b> , J.Tan, Arup Singapore Ptd Ltd ( <i>Singapore</i> )	<b>377</b>
<b>Wed-T4.2-02</b>	Design and Analyses of Proper Pillar Width in Downtown Road Tunnels, Korea <b>Yeon-Soo Jang</b> , Dongguk University ( <i>Korea, Republic Of</i> ), Jae Kyoung Kim, Kyongdong Engineering Co., Ltd ( <i>Korea, Republic Of</i> ), Kywang Ho You, Suwon University ( <i>Korea, Republic Of</i> ), Tae Seon Yang, KIMPO College ( <i>Korea, Republic Of</i> )	<b>382</b>
<b>Wed-T4.2-03</b>	Influences from partial factors on analyses of deep excavations <b>Bin-Chen Benson Hsiung</b> , National Kaohsiung University of Applied Sciences ( <i>Taiwan</i> ), Mahendra Meena, Indian Institute of Technology ( <i>India</i> )	<b>386</b>
<b>Wed-T4.2-04</b>	Evaluation of Performance of Diaphragm Walls in Deep Excavations by Using Deflection Path Method <b>Hsiao-chou Chao</b> , J. F. Chang, R. H. Huang, Moh and Associates, Inc. ( <i>Taiwan</i> )	<b>390</b>
<b>Wed-T4.2-05</b>	Effect of Excavation and Backfilling on the Behavior of Cemented Sands <b>Nabil Ismael</b> , R. Al-Fares, Kuwait University ( <i>Kuwait</i> ), A. Al-Ajmi, Ministry of Public Works ( <i>Kuwait</i> )	<b>394</b>

#### ***Theme Session 6B - Geo-environmental engineering (I) & New generation design code developments (I)***

<b>Wed-T7.1-01</b>	Internal and Interfacial Shear Strength of Incinerator Bottom Ash <b>Hsin-Yu Shan</b> , National Chiao Tung University ( <i>Taiwan</i> ), Pei-Hsuan Wu, Gold-Joint Industry Co., Ltd ( <i>Taiwan</i> )	<b>401</b>
<b>Wed-T7.1-02</b>	Modeling of Organic Contaminant Migration through Soil Cement Barrier Using TMVOC <b>Chusak Kererat</b> , Rajamangala University of Technology Rattanakosin ( <i>Thailand</i> ), S. Soralump, Kasetsart University ( <i>Thailand</i> )	<b>405</b>
<b>Wed-T7.1-03</b>	Using Circulating Groundwater as the Cooling Medium for Air Conditioners at NTUST <b>Hungjiun Liao</b> , Chihping Kuo, National Taiwan University of Science and Technology ( <i>Taiwan</i> )	<b>409</b>
<b>Wed-T8.1-04</b>	Characteristic compressive resistance of piles – case study <b>Andrew Galbraith</b> , E. R. Farrell, Trevor L. L. Orr, Trinity College Dublin ( <i>Ireland</i> )	<b>413</b>
<b>Wed-T8.1-05</b>	Rationalisation of Conventional Geotechnical Practice to EC7 On The Design of Pile Foundations Under Axial Compression Load	<b>417</b>

**Yean-Chin Tan**, See-Sew Gue, Chee-Meng Chow, G&P Geotechnics Sdn Bhd  
(*Malaysia*)

**Wed-T8.1-06** Reliability of spread foundations on clay designed using the Eurocode 7 Design Approaches **421**

**William S. Forrest**, Trevor L. L. Orr, Trinity College Dublin (*Ireland*)

### ***Theme Session 7A - Geotechnical earthquake engineering (II) & Geo-information and land reclamation technologies (II)***

**Wed-T6.2-01** Cyclic Undrained Behaviour of Silty Sand under Partial Cyclic Reversal Loading **427**

**Sik-Cheung Robert Lo**, Md. Abdul Lahil Baki, University of New South Wales at Australian Defence Force Academy (*Australia*), Md. Mizanur Rahman, University of Canterbury (*New Zealand*)

**Wed-T6.2-02** A Unified Correlation for Shear Wave Velocity of Bangkok Subsoil **431**

**Suched Likitlersuang**, Kyaw Kyaw, Chulalongkorn University (*Thailand*)

**Wed-T6.2-03** Modification of a Generalized Plasticity Constitutive Model Using State Parameter **436**

**Somaye Sadeghian**, Manouchehr Latifi, University of Tehran (*Iran (Islamic Republic Of)*)

**Wed-T6.2-04** Local Soil Properties and Amplification Effects on Seismic Ground Response in Macao **440**

**Thomas Man Hoi Lok**, University of Macau (*Macau*)

**Wed-T6.2-05** Dynamic Responses of Earth Structure Sitting on Liquefiable Soils Using an Effective Stress Analysis **444**

**Bing Yang Chang**, National Kaohsiung First University of Science and Technology (*Taiwan*), S. R. Guo, DA HO GROUP Engineering Organization (*Taiwan*), C. Y. Hung, Rong-Fong Chang, Architect office (*Taiwan*), C. S. Peng, Seventh River Management Office Wra. MOEA (*Taiwan*)

**Wed-T9.2-06** Detecting Tunnel Lining Cracks and Characterizing the Associated Distribution Patterns using Image Processing Technology **448**

**Sin-Hong Lin**, Chia-Han Lee, Tai-Tien Wang, National Taipei University of Technology (*Taiwan*)

**Wed-T9.2-07** Assessment and Planning for Multi-treatment of Shihmen Reservoir's Fine Sediment **452**

**Hong-Shiang Liu**, Chong-Ren Huang, Ping-Cheng Hou, Sinotech Engineering Consultants, Ltd (*Taiwan*), Hsiu-Chen Hsu, Bor-Hsun Lai, Northern Region Water Resources Office (*Taiwan*)

### ***Theme Session 8A - Land-slide and debris-flow hazard mitigation and rehabilitation (II) & Design, construction and performance of foundations (III)***

**Wed-T5.2-01** Model Tests on Dry Granular Soil Slopes **459**

**Kwo Jane Kuo**, Rong-Her Chen, Yi-Nung Chen, Chia-Wei Ku, National Taiwan University (*Taiwan*)

**Wed-T5.2-02** Mobility of the 7 June 2008 Natural Hillside Landslides above the North Lantau



	Highway and Yu Tung Road, Tung Chung, Lantau, Hong Kong	<b>463</b>
	<b>Alex Chi On Li</b> , Carie L. H. Lam, The Government of the Hong Kong Special Administrative Region ( <i>Hong Kong</i> ), Martin Devonald, AECOM ( <i>Hong Kong</i> )	
<b>Wed-T3.3-03</b>	A Case Study on Bearing Capacity of Large Diameter Bored Piles in Soft Rock Stratum	<b>468</b>
	<b>Chung Ren Huang</b> , L. Luo, Y. P. Lin, Sinotech Eng. Consultants Ltd ( <i>Taiwan</i> ), Yeou-Herng Lee, D. J. Tseng, Taiwan Area National Expressway Engineering Bureau, MOTC ( <i>Taiwan</i> )	
<b>Wed-T3.3-04</b>	Influence of pile group spacing on the p-y method accuracy in seismic soil pile interaction analysis	<b>472</b>
	<b>Mohammad Sajjad Fayyazi</b> , K. Bargi, University of Tehran ( <i>Iran (Islamic Republic Of)</i> ), A. Derakhshani, University of Tokyo ( <i>Japan</i> )	
<b>Wed-T3.3-05</b>	Rationalisation of Conventional Geotechnical Practice to EC7 on the Stability of Embankment on Soft Fine Grained Subsoil	<b>475</b>
	<b>Yean-Chin Tan</b> , See-Sew Gue, Peir-Tien Lee, Shafina Sabaruddin, G&P Geotechnics Sdn Bhd, Malaysia ( <i>Malaysia</i> )	
<b>Wed-T3.3-06</b>	FEM Excavations with Anchor Grouting In Cohesion Soils	<b>479</b>
	<b>A. Hamed Niroumand</b> , B. Khairul Anuar Kassim, University Technology Malaysia ( <i>Malaysia</i> )	
<b>Wed-T3.3-07</b>	3D Modelling of Pile Construction and Loading Effects on Adjacent Shield Tunnels –A Case Study	<b>483</b>
	<b>Jung-Feng Chang</b> , Ting-Chiun Su, I-Chou Hu, Moh and Associates, Inc. ( <i>Taiwan</i> )	

### ***Absence from Presentation***

<b>1P-140</b>	Comparison between measured and PTF estimated SWCC of lateritic soil	<b>489</b>
	<b>Meen-Wah Gui</b> , Y. J. Cheng, National Taipei University of Technology ( <i>Taiwan</i> )	
<b>2P-275</b>	Simulation of a Full-scale Subsoil Pre-consolidated by Embankment Combined with Vacuum-preloading	<b>493</b>
	<b>Tuan-Anh Tran</b> , Trong-Man Mai, Ho Chi Minh City University of Technology ( <i>Vietnam</i> ), Toshiyuki Mitachi, Nihon University ( <i>Japan</i> )	
<b>2P-310</b>	Influence of Diameter and Geometry of Vertical Sand Drain on Consolidation Characteristics of Kaolinitic Clay through Radial Drainage	<b>497</b>
<b>4P-148</b>	An Evaluating Model for Base Stability of Braced Excavations in Anisotropic Soft Clay	<b>502</b>
	<b>Shi-Fon Su</b> , Tungnan University ( <i>Taiwan</i> ), Hung-Jiun Liao, National	
<b>7P-029</b>	A Case Study of Ground Penetrating Radar for Non-Destructive Testing Applied to Underground Geological Structures	<b>506</b>
	<b>Kun-Fa Lee</b> , A. Ming-Chih Lin, B.Yu-Ming Kang, D. Hui-Chi Hsu, Feng Chia University ( <i>Taiwan</i> ) <b>Manish Shah</b> , Arvind V. Shroff, The M.S University of Baroda ( <i>India</i> ) Taiwan University of Science and Technology ( <i>Taiwan</i> )	

# **Theme Session**

## **1A**

### **Site characterization and laboratory testing (I)**

***Chairs: Prof. Kwet Yew Yong***  
***National University of Singapore***  
***(Singapore)***

***&***

***Prof. Huei Wen Chang***  
***National Central University (Taiwan)***

