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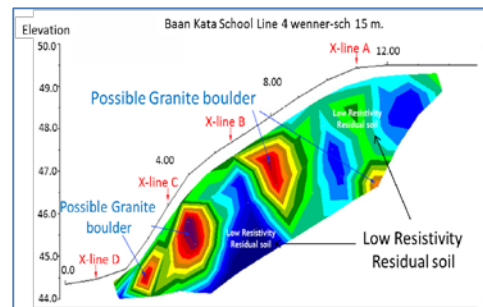
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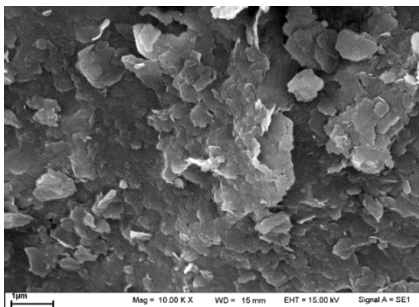
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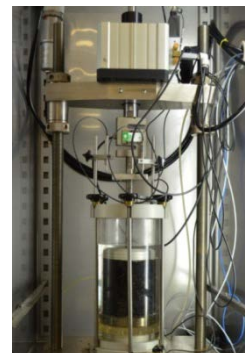
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SEM photograph of Bangkok clay (After Por et al., 2015)



Dynamic creep test setup in wet condition (After Chompoorat and Likitlersuang, 2015)

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PREFACE

Welcome to Geotechnical Engineering Journal of the Southeast Asian Geotechnical Society (SEAGS) and the Association of Geotechnical Societies in Southeast Asia (AGSSEA). It is our great pleasure to serve as the editors for the first issue of 2015 and also the special country issue of Thailand. Our editorial team consists of Prof. Suched Likitlersuang from Chulalongkorn University, Prof. Suksun Horpibulsuk from Suranaree University of Technology, Dr. Suttisak Soralump – President of Thai Geotechnical Society, Dr. Tirawat Boonyatee – Vice president of Thai Geotechnical Society, Prof. Suchatvee Suwansawat – President of Engineering Institute of Thailand, and Dr. Thanakorn Chompoorat from University of Phayao. We are also supported by Prof. A.S. Balasubramaniam as the editor-in-chief and Dr. Teik Aun Ooi as the president of SEAGS to launch this special issue. The rigorous blind peer-review process has been carried out by international reviewers, while every effort was carefully made to ensure the technical quality of the journal. We highly appreciate our reviewers for their time and effort.

The theme of this special issue is *Advances in Geotechnical Engineering for Infrastructure Developments in Thailand*. The articles cover a wide range of topics from theoretical soil mechanics to geotechnical applications for Thailand's infrastructure developments. This special issue of Geotechnical Engineering Journal of the SEAGS & AGSSEA is comprised of fourteen articles with a selection of authors from four countries including Australia, China, Japan and Thailand.

The first invited paper by Ohta (2015) presents consolidation settlement due to the embankment construction on soft Bangkok clay. The paper also acknowledges the technical communication with Dr. Surachat Sambhandaraksa related to consolidation settlement. Two papers (Ohtsu et al., 2015 and Jotisankasa et al., 2015) present field studies of slope stability due to rainfall in Thailand. The topics related to ground improvement for soft soil are still interested in this issue such as using chemical stabilisation (Horpibulsuk, et al., 2015, Fan, et al., 2015 and Julphunthong, 2015) and vacuum consolidation technique (Shibata et al., 2015). Two papers (Ukritchon and Boonyatee, 2015 and Horpibulsuk and Liu, 2015) related to soil modelling and its parameter calibration are included in this issue as well. Chompoorat and Likitlersuang (2015) summaries mechanical properties of hot mix asphalt for pavement design. Undrained shear strength of Bangkok clays from various laboratory techniques are discussed by Ratananikom et al. (2015). A review of pile foundation design on Bangkok subsoils is presented by Boonyatee et al. (2015). 3D finite element analysis of the potential use of piled raft foundation on Bangkok subsoils is proposed by Watcharasawe et al. (2015). Lastly, Por et al. (2015) presents a laboratory investigation of expansive soil behaviour.

We consider that this special issue summaries some recent advances in geotechnical engineering for infrastructure developments in Thailand. We also hope that it could make an important contribution to other countries in the Southeast Asia.

**Suched Likitlersuang
Thanakorn Chompoorat**

ACKNOWLEDGEMENT

At the very outset, we would like to acknowledge the skill of Prof. Suched Likitlersuang, who headed the team of Guest Editors in producing this excellent issue. This issue honours the late Dr. Surachat Sambhandaraksa a very long time friend of ours and a past president of the SEAGS. This is also the Thai country issue produced in such a short time, while some other country issues will only appear in 2016. The topics and the authors are adequately described in the Preface. The SEAGS and the AGSSEA as well as the Thai Geotechnical Society (TGS) are very grateful to the Editors, authors and reviewers for their excellent work.

A good teacher is often measured by the quality of his students. Dr. Surachat had graduated from Chulalongkorn University going to almost all the good universities to do doctoral studies. It is appropriate to have a brief biodata of Dr. Surachat.

Dr. Surachat Sambhandaraksa, a past president of the Southeast Asian Geotechnical Society (SEAGS) from 1996 to 1999. A modest and clever achiever, Surachat was the earlier colleague of late Dr. Chai Muktabhant and Prof. Vichien Tengamnuey at Chulalongkorn University. Surachat always had an international outlook with his early education at the University of New South Wales in Australia in 1967; then his master degree from the Asian Institute of Technology (AIT) in 1970; later Surachat went to the Northwestern University and finally obtained his Sc.D. degree from the Massachusetts Institute of Technology (MIT), the United States of America in 1977. When he returned to Chulalongkorn University, Surachat was also a lecturer much in demand at the AIT. He was actively involved in most of the major projects in Bangkok and Thailand. He has real world experience in geotechnical engineering practice with sound knowledge on the fundamentals of soil behaviour. His practice is in embankments and piled foundations. He was a much sort out consultant in Bangkok. At AIT, we needed a person like Surachat to teach our design courses. Surachat also taught a popular course for non-soil engineers and this is really popular. Surachat, received the Outstanding Award of the Teaching from Chulalongkorn University and was voted as the best Geotechnical Engineer in Thailand in 2006. He was also, the chairman of the organizing committee of the 15th Southeast Asian Geotechnical Conference held in Bangkok in November 2004. Popularly called as Sam at MIT, Surachat has a charming personality always joyful and friendly in nature. Surachat hails from a good family with his father as the professor of surgery at the Faculty of Medicine in Chulalongkorn University. We all miss him a lot and his premature death is a great loss to his family and friends.

Finally, Dr. Surachat is highly respected internationally, Prof. Harry Poulos made the comment as follows:

“Dr Surachat was a leading figure in Geotechnical engineering in Thailand for many years, and a person who was vastly experiencing in identifying and solving problems related to foundations in the often-challenging ground conditions in Bangkok. I first met him at one of the early Southeast Asian Geotechnical conferences, and it was quite clear that his knowledge of the characteristics of Bangkok soils was second to none, and that he was well-placed to advise clients on foundation design in these soils. He was also was a congenial host and dinner companion at a number of conferences held in Bangkok. Apart from his practical geotechnical skills, he was able to pass on his knowledge to many students who had the privilege of studying under him at Chulalongkorn University and at AIT. He was very proud of his educational background, first in Australia, and then at MIT, where he studied with some of the pioneers of soil mechanics such as Lambe, Ladd and Whitman. He achieved recognition for his expertise both in Thailand and in Southeast Asia more generally, and with his passing, the Southeast Asian region has lost one of its elder statesmen in the geotechnical profession.”

Finally, We thank the Guest Editors, the authors of the papers and the reviewers , who made the most valued contribution in making this Issue feasible.

**K. Y. Yong
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A. S. Balasubramaniam**

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March 2015 Issue: Special Country Issue of Thailand

– Dr. Surachat Sambhadharaksa Memorial Issue

Advances in Geotechnical Engineering for Infrastructure Developments in Thailand

**Edited by : Suched Likitlersuang, Suksun Horpibulsuk, Suttisak Soralump,
Tirawat Boonyatee Suchatvee Suwansawat, and Thanakorn Chompoorat**

Suched Likitlersuang

Suched Likitlersuang graduated with a bachelor degree in civil engineering from Chulalongkorn University in 1998 and received a master in geotechnical engineering from Asian Institute of Technology in 2000. He attained a doctorate in civil engineering from the University of Oxford in 2004. Suched is currently a full professor at the Department of Civil Engineering, Chulalongkorn University. He is members of the Thai Geotechnical Society and the Engineering Institute of Thailand. He is also an Editorial Board member of Geotechnical Research and serves as a Guest Editor of the Southeast Asian Geotechnical Society Journal special issue for Thailand. Suched has published over 70 articles in international conference proceedings and international journals. His research interests include constitutive modelling for geomaterial and asphaltic concrete, stress-strain characteristic of soils, numerical analysis in geomechanics, geo-environments, geotechnical earthquake engineering and soil bioengineering.

Thanakorn Chompoorat

Thanakorn Chompoorat was born in Thailand in 1980. He graduated the Bachelor degree in Civil Engineering from Srinakharinwirot University in 2003. He also received the Master and the Doctoral degrees in Geotechnical Engineering from Chulalongkorn University in 2005 and 2009 respectively. He is currently an Assistant Professor and Assistant Dean for Research and Academic Service of the Department of Civil Engineering, University of Phayao. Thanakorn is a member of the Thai Geotechnical Society as well as the Engineering Institute of Thailand and presently also serves as an Editorial Secretary of the Southeast Asian Geotechnical Society Journal special issue for Thailand. His main research interests are soil behaviour and pavement material behaviour, numerical analysis for soil and pavement material, and constitutive modelling and plasticity.

GEOTECHNICAL ENGINEERING

March 2015 Issue: Special Country Issue of Thailand

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**Edited by : Suched Likitlersuang, Suksun Horpibulsuk, Suttisak Soralump,
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Paper Contribution, Technical notes and Discussions

SEAGS & AGSSEA encourage the submission of scholarly and practice-oriented articles to its journal. The journal is published quarterly. Both sponsors of the journal, the Southeast Asian Geotechnical Society and the Association of Geotechnical Societies in Southeast Asia, promote the ideals and goals of the International Society of Soil Mechanics and Geotechnical Engineering in fostering communications, developing insights and enabling the advancement of the geotechnical engineering discipline. Thus the publishing ethics followed is similar to other leading geotechnical journals. Standard ethical behaviour of the authors, the editor and his editorial panel, the reviewers and the publishers is followed.

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11. Journal papers submitted are subject to peer review before acceptance for publication.
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14. REFERENCES

- American Petroleum Institute (API) (1993). Recommended Practice for Planning, Designing and Constructing Fixed Offshore Platforms – Working Stress Design, API Recommended Practice 2AWS (RP 2A-WSD), 20th edition, 1993, p191
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- Finn WDL and Fujita N. (2002). “Piles in liquefiable soils: seismic analysis and design issues,” Soil Dynamics and Earthquake Engineering, 22, Issues 9-12, pp731-742
15. Discussions on a published paper shall be made in the same format and submitted within six months of its appearance and closing discussion will be published within twelve months.

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