Biographical Data

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ผู้ช่วยศาสตราจารย์ ดร.สุขสันติ์ หอพิบูลสุข

Asst. Prof. Suksun Horpibulsuk, Ph.D.

Education and Competence:

1996 B. Eng. (Civil Engineering), Khon Kaen University, Thailand
1998 M. Eng. (Soil Engineering), Asian Institute of Technology, Thailand
2001 Ph.D. (Geotechnical Engineering), Saga University, Japan.
2003 Certificate on Computer Aided Design (CAD) of City Planning, Architecture Design and Interior, MOST, China

Work Experiences:

2002 - 2004 Lecturer, Suranaree University of Technology, Thailand
2004 - present Assistant Professor, Suranaree University of Technology, Thailand

Awards and Scholarships:

1996 B.Eng. with Honor awards
1996 RTG scholarship for M. Eng. study at AIT
1998 JIRCAS scholarship for research in Japan
1998 MONBUSHO scholarship for Ph.D. study at Saga University

Academic Works:

(1) 7 national journal papers.
(2) 12 international journal papers.
(3) 4 technical reports
(4) 16 national conference papers
(5) 29 international conference papers
(6) 2 books

Thesis Supervisor:

5 master thesis

Selected Publications:

International Journal papers

1) **Horpibulsuk, S.**, Katkan, W., Sirilerdwattna, W., and Rachan, R. (2006), "Strength Development in Cement Stabilized Low Plasticity and Coarse Grained Soils : Laboratory and field study", *Soils and Foundations*, Vol.6, No.3.
2) **Horpibulsuk, S.** (2005), "Mechanism controlling undrained shear characteristics of induced cemented clays", *Lowland Technology International*. Vol.7, No.2, pp.9-18.
3) **Horpibulsuk, S.**, Miura, N., Nagaraj, T.S. (2004), "Clay-water/cement ratio Identity of cement admixed soft clay", *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol.131, No.2, pp.187-192.
4) **Horpibulsuk, S.**, Miura, N., and Bergado, D.T. (2004), "Undrained shear behavior of cement admixed clay at high water content", *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol.130, No.10, pp.1096-1105.
5) **Horpibulsuk, S.**, Miura, N., Nagaraj, T.S. (2004), "Analysis of strength development in in-situ cement admixed columnar inclusion – A field study", *Ground Improvement Journal*, Vol.8, No.2, pp.59-68.
6) **Horpibulsuk, S.**, Bergado, D.T., and Lorenzo, G.A. (2004), "Compressibility of Cement Admixed Clays at High Water Content", *Geotechnique*, Vol.54, No.2, pp.151-154.
7) **Horpibulsuk, S.** and Rachan, R. (2004), "Modified hyperbolic model for capturing undrained shear behavior", *Lowland Technology International*, Vol.6, No.2, pp.11-20.
8) **Horpibulsuk, S**., Miura, N., and Nagaraj, T.S. (2003), "Assessment of strength development in cement-admixed high water content clays with Abrams' law as a basis", *Geotechnique*, Vol.53, No.4, pp.439-444.
9) Bergado, D.T., Sasanakal, I., and **Horpibulsuk, S.** (2003) "Electro-Osmotic Consolidation of Soft Bangkok Clay Using Cooper and Carbon Electrodes with PVD", *Geotechnical Testing Journal*, ASTM, Vol.26, No.3, pp.1-12.
10) Miura, N., **Horpibulsuk, S.**, and Nagaraj, T.S. (2001) "Engineering behavior of cement stabilized clay at high water content", *Soils and Foundations*, Japan Geotechnical Society (JGS), Vol.41, No.5, pp. 33-45.
11) **Horpibulsuk, S.**, Rachan, R. and Katkan, W. (2005), "An approach for assessment of compaction curve at various energies using a one point test", *Geotechnical Testing Journal, ASTM*. (Under review).
12) **Horpibulsuk, S.**, Shibuya, S., and Fuenkajorn, K. (2005), "Assessment of Engineering Properties of Bangkok clays", *Canadian Geotechnical Journal* (Under review).

International Conference, Symposium and Seminar Papers

1) **Horpibulsuk, S.**, Rachan, R., Papattanotai, S., Nagaraj, T.S. (2006), "Analysis of strength development of cement stabilized clay from microstructural considerations", *Proc. International Symposium on Lowland Technology*.
2) **Horpibulsuk. S.**, Rachan, R. and Katkan, W. (2006), "Prediction of compaction curve at various compaction energies using one point test", *Proc. International Symposium on Lowland Technology*.
3) Rachan, R., and **Horpibulsuk, S.** (2006), "Effect of chemistry and mineralogy on geotechnical properties of Bangkok clay", *Proc. International Symposium on Lowland Technology*.
4) **Horpibulsuk, S.**, Rachan, R., Katkan, W. and Nagaraj, T.S. (2006) "Strength development in cement stabilized coarse grained soils" Geo-Shanghai 2006.
5) Liu M. D., Carter, J.P., **Horpibulsuk, S.** and Liyanapathirana, D.S. (2006), "Modelling the behaviour of cemented clay", Geo-Shanghai 2006.
6) **Horpibulsuk, S.** and Rachan, R. (2005), "On the classification of Bangkok clay deposits and their compressiobility", *International Symposium on Frontiers in Offshore Geotechnics*, Perth, pp.1071-1077.
7) **Horpibulsuk, S.**, and Rachan, R. (2004), "Novel approach for analyzing compressibility and permeability characteristics of Bangkok clayey soils", *Proc. 15th Southeast Asian Geotechnical Engineering Conference*, Bangkok, Thailand, pp.3-8.
8) **Horpibulsuk, S.** (2004), "Phenomenological model for predicting strength of cement admixed clays", *Proc. 5th International Symposium on Ground Improvement and Geosynthetics*, Bangkok, Thailand, pp.138-144.
9) **Horpibulsuk, S.**, Rachan, R. and Katkan, W. (2004), "Phenomenological modeling of compaction curve", *Proc. 5th International Symposium on Ground Improvement and Geosynthetics*, Bangkok, Thailand, pp.131-137.
10) **Horpibulsuk, S.**, Katkan, W., Rachan, R., and Nagaraj, T.S. (2004), "Underpinning technique for repairing cracked building in northeast Thailand", *Proc. International Symposium on Lowland Technology*.
11) **Horpibulsuk, S.**, and Rachan, R. (2004), "Novel approach for analyzing compressibility and permeability characteristics of Bangkok clayey soils", *Proc. 15th Southeast Asian Geotechnical Engineering Conference*, pp.3-8.
12) **Horpibulsuk, S.** and Rachan, R. (2003), "Undrained strength characteristics of cement admixed clay", *Proc. 56th Canadian Geotechnical Conference*, Canada.
13) Rachan, R. and **Horpibulsuk, S.** (2003), "Prediction of strength of cement admixed clays", *Proc. 56th Canadian Geotechnical Conference*, Canada.
14) Nagaraj, T.S., Miura, N., and **Horpibulsuk, S.** (2003), "Composite soft ground with columnar inclusions of required strength", *Proc. Symposium on Advances in Geotechnical Engineering*, Indian Institute of Technology, India, pp.89-99.

15) **Horpibuksuk, S.** and Rachan, R. (2002), "Strength development in cement admixed clays at high water content", *Proc. Ground Improvement and Geosynthetics*, Bangkok, Thailand, pp.232-250.
16) **Horpibulsuk, S.** (2002), "Analysis of compressibility of cement admixed clays", *International Symposium on Lowland Technology*, Saga, Japan, pp.73-78.
17) **Horpibulsuk, S.**, Miura, N., Nagaraj, T.S., and Koga, H. (2002), "Improvement of soft marine clays by deep mixing technique", *Proc. 12th International Conference on Offshore and Polar Engineering*, Kitakyushu, Japan, pp.584-591.
18) **Horpibulsuk, S.**, Bergado, D.T., and Bunchai, W. (2002), "Evaluation of recharge and ground improvement using prefabricated vertical drain (PVD) for the Second Bangkok International Airport (SBIA) project", *Proc. 7th Conference on Geosynthetics*, Paris, France, pp.1035-1038.
19) Bergado, D.T., **Horpibulsuk, S.**, and Ngouchaurieng, P. (2002), "Innovative use of geosynthetics for repair of slope failures along irrigation/drainage canals on soft ground", *International Conference on Geotextile and Geosynthetics*, Paris, France, pp.147-150.
20) **Horpibulsuk, S.**, and Miura, N. (2001) "A new approach for studying behavior of cement stabilized clays" *15th International Conference on Soil Mechanics and Geotechnical Engineering (ISSMGE)*, Istanbul, Turkey, Vol.3, pp.1759-1762.
21) Bergado, D.T., and **Horpibulsuk, S.** (2001), "Ground Improvement by PVD", *Short Course on Ground Improvement using Prefabricated Vertical Drain (PVD)*, pp.1-21.
22) Bergado, D.T., **Horpibulsuk, S.**, and Teerawattanasuk, C. (2001), "Soil Improvement by MSE – Theoretical background", *Short Course on Mechanically Stabilized Earth (MSE)*, Asian Institute of Technology, Bangkok, Thailand, pp.1-26.
23) **Horpibulsuk, S.**, Miura N. and Nagaraj, T.S. (2001), "Analysis and Assessment of strength development in cement admixed clays" *International Conference on Civil Engineering*, Department of Civil Engineering, Indian Institute of Science, India, Vol.2, pp.156-163.
24) **Horpibulsuk, S.**, Miura, N. and Nishida, K. (2000), "Factors influencing field strength of soil-cement column" Year 2000 Geotechnics, *Geotechnical Engineering Conference*, Asian Institute of Technology, Bangkok, Thailand, pp.623-634.
25) **Horpibulsuk, S.**, Miura, N. and Nagaraj, T.S. (2000), "The prime parameter governing the stress~strain characteristics of cement stabilized clay" 2nd *Proceedings of the International Symposium on Lowland Technology*, Institute of Lowland Technology, Saga University, Saga, Japan, pp.153-160.
26) **Horpibulsuk, S.**, Miura, N. and Nagaraj, T.S. (2000)**,** "A new method for predicting strength of cement stabilized clays" International Symposium on Coastal Geotechnical Engineering in Practice, *IS-Yokohama 2000*, Yokohama National University, Yokohama, Japan, pp.605-610.
27) Kohgo, Y. and **Horpibulsuk, S.** (1999), "Estimation of volume change behavior of yellow soil" Highlight of Collaborative Research Activity between Thai Research Organizations and JIRCAS, *JIRCAS Seminar*, Bangkok, Thailand, pp.87-90.

28) Kohgo, Y and **Horpibulsuk, S.** (1999), "Simulation of volume change behavior of yellow soil sampled from Khon Kaen City in Northeast Thailand" *11th Asian Regional Conference on Soil Mechanics and Geotechical Engineering*, Soul, Korea, pp.141-144.

29) Kohgo, Y. and **Horpibulsuk, S.** (1999), "Deformation analysis of a fill-type dam by using FEM consolidation analysis method" Civil and Environmental Engineering Conference, Asian Institute of Technology, Bangkok, Thailand, pp.I77-I86.