

Chapter 9

9.0. REFERENCES

Arya, L.M. and Paris, J.F., (1981), "A physic-empirical model to predict the soil moisture characteristic from particle size distribution and bulk density data", *Soil Sci. Soc. Am. J.* 45: pp. 1023-1030.

Barbour, S.L., (1998), Nineteenth Canadian Geotechnical Colloquium: "The soil water characteristic curve - A historical perspective", *Canadian Geotechnical Journal* 35: pp. 873-894.

Chen, H, Lee, C.F. and Law, K.T., (2004), "Causative mechanisms and rainfall induced fill slope failures", *Journal of Geotechnical and Geo-environmental Engineering. ASCE.* Vol. 130, No. 6, June 1, pp. 593-602.

Collins, B.D. and Znidarcic, D., (2004), "Stability analyses of rainfall induced landslides", *Journal of Geotechnical and Geo-environmental Engineering. ASCE.* April 2004, Vol. 130, No. 4, pp. 362-372.

Cooray, P.G., (1994), "An introduction to the geology of Sri Lanka", National museums of Sri Lanka Publication, Colombo, Sri Lanka.

Dennis E. Rorie and Roy H. Borden, (2006), "Investigation of soil suction in a compacted low plasticity clay", Thesis submitted in partial fulfillment of the requirements for the degree of Master of Science, State University of North Carolina.

Dregne, H.E., (1976), "Soil of arid regions", *Developments in soil science* 6, Elsevier, New York, pp 237.

Escario, V. and Juca, J., (1989), "Shear strength and deformation of partly saturated soils", *Proceedings of the 12th International Conference on Soil Mechanics and Foundation Engineering, Rio de Janerio, 2:* pp. 43-46.

- Fredlund, D.G., Morgenstern, N.R. and Widger, R.A., (1978), “The shear strength of unsaturated soils”, *Canadian Geotechnical Journal*, 15: pp. 313-321.
- Fredlund, D.G. and Morgenstern, N.R., (1977), “Stress state variables for unsaturated soils”. *Journal of Geotechnical and Geo-environmental Engineering*, Volume 103, pp. 447-466.
- Fredlund, D.G., (2000), “The implementation of unsaturated soil mechanics into geotechnical engineering”, *Canadian Geotechnical Journal*, volume 37(5): pp. 963-986.
- Fredlund, D.G., (2002), “Use of the soil water characteristic curve in the implementation of unsaturated soil mechanics”, *Third international conference on unsaturated soils*, Recife, Brazil.
- Fredlund, D.G., (2006) “Unsaturated soil mechanics in engineering practice”, *Journal of Geotechnical and Geoenvironmental Engineering* (132) pp. 286-321.
- Fredlund, D.G., Anqing Xing and Shangyan Huang, (1994) “Predicting the permeability function for unsaturated soils using soil water characteristic curve”, *Canadian Geotechnical Journal*, volume 31(3): pp. 521-532.
- Fredlund, D. G. and Rahardjo, H., (1993), “Soil mechanics for unsaturated soils”. New York: Wiley.
- Gan, J.K.M. and Fredlund, D.G., (1988), “Multistage direct shear testing of unsaturated soils”, *American Society for Testing Materials, Geotechnical Testing Journal*, 11(2): pp. 132-138.
- Gitirana, de F.N.G. and Fredlund, D. G., (2004), “Soil water characteristic curve equation with independent properties”, *Journal of Geotechnical and Geo-environmental Engineering*, 130(2), pp. 209-212.

- Godt, J.W., Baum, R.L. and Lu, N., (2009), "Land sliding in partially saturated materials", *Geophysical Research Letters*, Vol. 36, pp. 1-5, L02403, doi:10.1029/2008GL035996
- Gupta, S.C. and Larson, W.E., (1979), "Estimating soil water retention characteristics from particle size distribution, organic matter present, and bulk density", *Water Resour. Res.* 15: pp. 1633-1635.
- Huang, S.Y., Fredlund, D.G. and Barbour, S.L., (1995), "Measurement for the coefficient of the permeability of an unsaturated soil", 1st int. conf. on Unsaturated Soils, Paris, Paper No. 99.
- Johnson, K.A. and Sitar, N., (1990), "Hydrological conditions leading to debris flow initiation", *Canadian Geotechnical Journal*, 27: pp. 789-801.
- Jotisankasa, A., (2010), "Manual for user of KU tensiometer", 2nd edition. Geotechnical Innovation Laboratory, Geotechnical Engineering Research and Development Center, GERD, Kasetsart University.
- Jotisankasa, A., Kulsuwan, B., Toll, D. and Rahardjo, H., (2008), "Studies of rainfall induced landslide in Thailand and Singapore", *The First European Conference on Unsaturated Soils (E-UNSAT)*, 2-4 July, 2008, Durham, UK, pp. 901-907.
- Jotisankasa, A. and Mairaing, W., (2010), "Suction monitored direct shear testing of residual soils from landslide prone areas", *Journal of Geotechnical and Geo-environmental Engineering*, ASCE, Vol. 136, No. 3, March 1, 2010.
- Jotisankasa, A., Takahashi, A., Takeyama, T. and Mairaing, W., (2009), "A study of deformation behaviour of an instrumented slope subjected to rainfall near Thadan dam in Thailand", *Proceedings of the 14th National Convention in Civil Engineering*, Nakornrachasrima, Thailand.

Jotisankasa, A., Tapparnich, J., Booncharoenpanich, P., Hunsachainan, N. and Soralump, S., (2010), “Unsaturated soil testing for slope studies”, Proc. International conference on Slope, Thailand 2010, Geotechnique and Geosynthetics for Slope, Chiangmai, Thailand.

Jotisankasa, A. and Vathananukij, H., (2008), “Investigation of soil moisture characteristics of landslide prone slopes in Thailand”, Proc. of the International Conference on Management of Landslide Hazard in the Asia-Pacific Region, Sendai, Japan, November 11-15.

Jotisankasa, A., Vathananukij, H. and Coop, M.R., (2010), “Soil water retention curves of some silty soils and their relations to fabrics”, Unsaturated Soils – Buzzi, Fityus & Sheng (eds), © 2010 Taylor & Francis Group, London, ISBN 978-0-415-80480-6, pp. 263-268.

Kulathilaka, S.A.S. and Sujeevan, V. (2011), “Rain triggered slope failures in unsaturated residual soils”, Published in the Journal of the Sri Lankan Geotechnical Society, Sri Lanka.

Kulathilaka, S.A.S. and Kumara, L.M., (2011), “Effectiveness of surface drainage in enhancing the stability of cut slopes during the periods of heavy rain”, Published in the Journal of the Institution of Engineers, Sri Lanka.

Lu, N. and Likos, W.J., (2004), “Unsaturated soil mechanics”, Wiley.

Megis, P., (1953), “World distribution of arid and semi-arid homo-climates”, In: UNESCO Reviews of research on arid zones hydrology, arid zones res. I. pp. 203-210.

Rahardjo, H., Leong, E.C., Deutscher, M.S., Gasmu, J.M. and Tang, S.K., (2000), “Rain induced slope failures”, Geotechnical Engineering Monograph 3 - Published by the Nanyang Technological University, Singapore.

Rahardjo, H., Leong, E.C. and Rezaur, R.B., (2009), "Laboratory characterization of unsaturated soils for slope stability studies", Proc. 4th Asia-Pacific Conference on Unsaturated Soils: Theoretical and numerical advances in unsaturated soil mechanics, 23-25 November 2009, Newcastle, Australia, pp. 565-578.

Springman, S.M., Jommi, C. and Teyssere, P., (2003), "Instabilities on moraine slopes induced by loss of suction: a case history", *Geotechnique* 53, No. 1, pp. 3-10.

Sujeewan, V. and Kulathilaka, S.A.S., (2011), "Rainfall infiltration analysis in unsaturated residual soil slopes", Published in the Journal of the Sri Lankan Geotechnical Society, Sri Lanka.

Tharanganie, B.G.N., (2004). "Engineering characteristics of some unsaturated residual soils of Sri Lanka", Thesis submitted in partial fulfillment of the requirements for the degree of Master in Engineering, University of Moratuwa.

Vanapalli, S.K., Fredlund, D.G. and Pufahl, D.E., (1999) "The influence of soil structure and stress history on the soil water characteristics of a compacted till", *Geotechnique* Vol. 49, No. 2, pp. 143-159.

Vanapalli, S.K., Fredlund, D.G. Pufahl, D.E. and Clifton, A.W., (1996) "Model for the prediction of shear strength with respect to soil suction", *Canadian Geotechnical Journal*, Vol. 33, pp. 379-392.

Vaughan, P.R., (1985), "Pore pressures due to infiltration into partly saturated slopes", Proc. 1st International Conference on Geomechanics in Tropical Lateritic and Saprolitic soils, Brazil, Vol 2, pp. 61-71.

Vaughan, P.R., (1994), "Assumption, prediction and reality in geotechnical engineering", The 34th Rankine Lecture. *Geotechnique* 44, No. 4, pp. 573-609.

Annex 1

Particle size distribution test results