

# **CURRICULUM VITAE**

## DR. YOUVENTHARAN DURAISAMY

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GoogleScholar:

https://scholar.google.com/citations?user=0rwJKDsAAAAJ&hl=en

## ACADEMIC QUALIFICATION

Ph.D. Civil Engineering, The University of Sydney, Australia, 2016

M.Sc. Geotechnical and Geological Engineering, Universiti Putra Malaysia, Malaysia, 2008

B.Eng. (Hons) Civil Engineering, Universiti Tun Hussein Onn Malaysia, Malaysia, 2005

## **EXPERTISE**

- 1. Geomechanics and Foundation Engineering
- 2. Ground Improvement and Modification
- 3. Bio-Geo-Engineering and Bio-cementation
- 4. Energy Geotechnics

## **WORKING EXPERIENCES / APPOINTMENT**

- 1. August 2016 Present, Senior Lecturer Faculty of Civil Engineering & Earth Resources, UMP
- 2. May 2009 -August 2016, Lecturer Faculty of Civil Engineering & Earth Resources, UMP
- 3. June 2005 May 2009, Tutor Kolej Universiti Kejuruteraan dan Teknologi Malaysia, KUKTEM

## PROFESSIONAL QUALIFICATIONS / MEMBERSHIP OF PROFESSIONAL BODY

## Membership of Professional Body & Professional Experience

- 1. Member of Board of Engineer Malaysia
- 2. Member of Institution of Engineers, Malaysia
- 3. Member of Geological Society Malaysia
- 4. Member of Australian Geomechanics Society
- 5. Member of Deep Foundations Institute
- 6. Member of International Society for Soil Mechanics and Geotechnical Engineering

## RESEARCH PROJECT / GRANT

- Cement Column Stabilization for Peat and Organic Soil.(RDU 070350) Amount RM 19340, 2007-2008 (Project Leader)
- 2. Performance of Light Weight Foamed Concrete Block as a Compression Elements.(RDU 090386) Amount RM 39800,2009-2010 (**Co-researcher**)
- 3. Development of Heat Resistant Polymer Based Ceramic Filled Roof Coating for Construction Industries.( RDU 090387) Amount RM 37800, 2009-2010(**Co-researcher**)
- 4. Preliminary Design Chart of Cement columns for deep Soil Mixing Method in Tropical Peat.(RDU 090382) Amount RM 38000, 2009-2010(**Project Leader**)
- 5. Properties of Foamed Concrete Containing Eco Process Pozzolan as partial cement replacement. (RDU 150383) Amount RM 27000, 2015-2017 (**Co-researcher**)
- 6. The Potential of Coconut Coir as a Slope Protection Method. (RDU 0903138) Amount RM 40000, 2009-2011 (**Co-researcher**)

#### **RESEARCH SUPERVISION**

## **UNDERGRADUATE**

- Lois Shi Jun (2016) Thesis Title: Ultimate Bearing Capacity of Cement Column for Peat Soil Using Physical Model
- 2. Marlene Insin Anak Jack (2016) Thesis Title: Strength stabilization of Peat Soil Using Ordinary Portland Cement
- 3. Cecelia Anak Linggang (2016) Thesis Title: Performance of Modified Sampling Technique in Reducing Disturbance of Peat Soil Sample
- 4. Lau Lik Yun (2016) Thesis Title: Application of Palm Oil Fuel Ash (POFA) as Stabilizer in Tropical Peat Soil
- 5. Tey Tze Siang (2016) Thesis Title: Peat Soil Stabilization with Fly Ash Ordinary Portland Cement
- 6. Hazrim Abdul Karim (2016) Thesis Tile: Improved Strength of Peat Soil by Using Kaolin and Lime Stabilizer
- 7. Jessie Tiong Kung Yen (2016) Thesis Title: Peat Soil Treatment Using Transformed Egg Shells (TES) as Chemical Stabilizer (Co-Supervisor)
- 8. Tharushini Thiagarajan (2017) Thesis Title: Influencing Factors of Crushable Sand Soil on Liquefaction
- 9. Amelia Victor Dass (2017) Thesis Title: Crushing Impact on Liquefaction of Various Sand Soil Kuantan
- 10. Ahmad Fauzan Bin Soberi (2017) Thesis Title: Crushed Induced Liquefaction Potential of Sandy Soils in Kuantan

## **PUBLICATIONS**

## International and National Conference Proceedings:

- 1. Duraisamy, Y. & Huat, B. B. K. (2006). Effect of Cement Column on the Compression of Tropical Peat Soil. IEM-GSM Forum. Kuala Lumpur, 31 October 2006.
- 2. Duraisamy, Y., Huat, B. B. K., Muniandy, R. & Azlan, A. A. (2006). Compressibility Behavior of Tropical Peat Soil. 2<sup>nd</sup> International Conference on Problematic Soils. Kuala Lumpur, 3-5 December 2006.
- 3. Huat, B. B. K. & Duraisamy, Y. (2006). Chemical Stabilization for Tropical Peat Soils. 2<sup>nd</sup> International Conference on Problematic Soils. Kuala Lumpur, 3-5 December 2006.
- 4. Abdullah, M., Huat, B. B. K., Kamaruddin, R., Ali, A. K. & Duraisamy, Y. (2006). EPS Footing for Lightweight Farm Structure on Peat Soil. 2<sup>nd</sup> International Conference on Problematic Soils. Kuala Lumpur, 3-5 December 2006.
- 5. Duraisamy, Y., Huat, B. B. K., Muniandy, R. & Azlan, A. A. (2006). Laboratory Study on Compressibility Behavior of Tropical Peat Reinforced with Cement Column. The 16<sup>th</sup> Southeast Asian Geotechnical Conference. Kuala Lumpur, 7-11 May 2007.
- 6. Ali, F.H., Huat, B.B.K., Choong, F.H. & Duraisamy, Y. (2007). Collapsibility and Volume Change Behavior of Unsaturated Residual Soil. The 16<sup>th</sup> Southeast Asian Geotechnical Conference. Kuala Lumpur, 7-11 May 2007.
- 7. Y. Duraisamy & Huat, B. B. K., (2007). Method of Utilizing Cheap Land for Housing Scheme. World Housing Congress 2007. Terengganu, Malaysia, 1-5 July 2007.
- 8. Y. Duraisamy (2007). Compressibility Behavior of Tropical Peat Reinforced with Cement Column. DFI 32<sup>nd</sup> Annual Conference on Deep Foundations, Colorado, USA, 11-13 October, 2007.
- 9. Duraisamy, Y. & Huat, B.B.K. (2008). Method of Stabilizing Tropical Peat Soil to Withstand Flood. International Conference on Civil Engineering 2008. Pahang, Malaysia, 12-14 May 2008.
- 10. Y. Duraisamy, B.B.K. Huat, R. Muniandy and A.A Aziz, (2008). Compressibility Behavior of Fibrous Peat Reinforced with Cement Columns. International Conference on Construction and Building Technology 2008. Kuala Lumpur, Malaysia, 16-20 June 2008.

- 11. Y. Duraisamy and B.B.K. Huat, (2008). Method of Utilizing Cheap Land for Infrastructure Development. International Conference on Construction and Building Technology 2008. Kuala Lumpur, Malaysia, 16-20 June 2008.
- 12. Y. Duraisamy, (2008). Preliminary Design Chart of Cement Columns for Deep Soil Mixing Method in Tropical Peat. International Conference on Construction and Building Technology 2008. Kuala Lumpur, Malaysia, 16-20 June 2008.
- 13. Duraisamy, Y. & Subramaniam, P. (2008). Ground Improvement on Tropical Peat of East Coast of Peninsular Malaysia using Lime Cement Columns. 2<sup>nd</sup> Engineering Conference: Sustainable Engineering Infrastructure Development & Management (EnCon2008), Kuching, Sarawak, Malaysia, 18-19 December 2008.
- 14. Duraisamy, Y., Arsat, K.A., & Gindal, T. (2008). Enginering Properties of East Coast Peat of Peninsular Malaysia Stabilized with Lime and Cement. 2<sup>nd</sup> Engineering Conference: Sustainable Engineering Infrastructure Development & Management (EnCon2008), Kuching, Sarawak, Malaysia, 18-19 December 2008.
- 15. Duraisamy, Y. & Zurani, Z. (2008). Settlement Analysis on Stabilized Tropical Peat using Cement Columns. 2<sup>nd</sup> Engineering Conference: Sustainable Engineering Infrastructure Development & Management (EnCon2008), Kuching, Sarawak, Malaysia, 18-19 December 2008.
- 16. Duraisamy, Y. & Zurani, Z. (2009). Settlement Analysis on Stabilized Tropical Peat using (Sigma/W). 8<sup>th</sup> International Congress on Civil Engineering, Shiraz, Iran,11-13 May 2009.
- 17. Duraisamy, Y., Arsat, K.A., & Gindal, T. (2009). Laboratory Study on Mass Stabilization using Lime and Cement Binders on Tropical Peat. 8<sup>th</sup> International Congress on Civil Engineering, Shiraz, Iran,11-13 May 2009.
- 18. Duraisamy, Y. & Subramaniam, P. (2009). Effects of Lime Cement Columns in Tropical Peat of East Coast of Peninsular Malaysia. 8<sup>th</sup> International Congress on Civil Engineering, Shiraz, Iran,11-13 May 2009.
- 19. Duraisamy, Y., Othman, R., Sulaiman M.A., & Abdullah A. (2009). Effectiveness of Peer Rating System in Evaluating Students' Group Assignments. International Conference on Human Capital Development (ICONHCD2009), Kuantan, Pahang, Malaysia, 25-27 May 2009.
- 20. Rokiah Othman, Nasly Mohamed Ali, Khairunisa Muthusamy, Mohd arif Sulaiman, Youventharan Duraisamy (2012), *Effect of Foaming agent and Chemical Admixture on Development of High Performance Lightweight Concrete'*, National Conference For Postgraduate Research, NCON-PGR 2012.
- 21. Duraisamy, Y., Airey, D. (2012). Strength and stiffness of biocemented liquefiable sand soil. Ground Improvement & Ground Control: Transport Infrastructure Development and Natural Hazards Mitigation ICGI-2012, Chennai: Research Publishing.
- 22. Duraisamy, Y., Airey, D., Maggi, F. (2014). Urea hydrolysis rate of 'B. Megaterium' for soil bio-cementation. 7ICEG 2014 7th International Congress on Environmental Geotechnics, Barton, ACT: Engineers Australia.
- 23. Duraisamy, Y., Airey, D. (2014). Resilient foundations: Building in repair capability. 2014 AGS Symposium: Resilient Geotechnics, Sydney: Australian Geomechanics Society.
- 24. Duraisamy, Y., Airey, D. (2015). Small Strain Modulus of Bio-Cemented Sand. 6th International Symposium on Deformation Characteristics of Geomaterials, Amsterdam, The Netherlands: IOS Press.
- 25. Airey, D.W., Duraisamy, Y. (2016). Bio-cementation for ground improvement. 4<sup>th</sup> International Conference on Soil Bio- and Eco- Engineering: The use of vegetation to Improve Slope Stability, The University of Sydney, Australia.
- 26. Rokiah Othman, Khairunisa Muthusamy, Mohd Arif Sulaiman, Youventharan Duraisamy (2017), Durability Concrete of Foamed Concrete Containing Processed Spent Bleaching Earth in Acidic Environment, International conference on Fluids & Chemical Engineering, FLUIDSCHE2017.

## Journal articles:

- 1. Abdullah, M., Huat, B. B. K., Kamaruddin, R., Ali, A. K. & Duraisamy, Y. (2007). Design and Performance of EPS Footing for Lightweight Farm Structure on Peat Soil. American Journal of Applied Science 4(7): 484-490, 2007.
- 2. Duraisamy, Y., Huat, B. B. K., Muniandy, R. & Aziz, A. A. (2007). Compressibility Behavior of Tropical Peat Reinforced with Cement Column. American Journal of Applied Science 4(10): 784-789, 2007.
- 3. Duraisamy, Y., Huat, B. B. K., Muniandy, R. & Aziz, A. A. (2007). Engineering Properties and Compressibility Behavior of Tropical Peat Soil. American Journal of Applied Science 4(10): 765-770, 2007.
- 4. Duraisamy, Y., Huat, B. B. K., Muniandy, R. & Aziz, A.A. (2007). Methods of Utilizing Tropical Peat Land for Housing Scheme. American Journal of Environmental Science. 3(4): 258-263, 2007.
- 5. Duraisamy, Y., Huat, B. B. K., Muniandy, R. & Aziz, A.A. (2008). Compressibility Behavior of Fibrous Peat Soils Reinforced with Cement Columns. Geotechnical and Geological Engineering Journal, Springer, 27:619-629.
- 6. Duraisamy, Y., Airey, D. (2015). Performance of biocemented Sydney sand using ex situ mixing technique. Journal of the Deep Foundations Institute, 9(1), 48-56.

## **CONSULTATIONS**

1. Consultancy service for ABSI ABADI Sdn. Bhd, Testing and Consultation of Brick Manufacturing.

## **AWARDS**

- 1. STUDENT PAPER COMPETITON (FIRST RUNNER-UP) DFI USA 2007
- 2. MTE (GOLD) 2009
- 3. PENCIPTA (SILVER) 2009
- 4. ITEX (SILVER) 2010
- 5. I-ENVEX (SILVER & BRONZE) 2011
- 6. CITREX (GOLD) 2011
- 7. Anugerah Perkhidmatan Cemerlang (APC) 2011
- 8. STUDENT PAPER COMPETITON (FIRST RUNNER-UP) DFI USA 20014
- 9. THE BEST THEME PAPER AWARD-ICGE 2014
- 10. ANNIE B WILSON 1ST PRIZE AWARD 2014
- 11. CENDIKIA BITARA 2016