Professor Arumugam Balasubramaniam: Biodata updated March 2017



Affiliation: Adjunct Professor, Griffith School of Engineering

Born: 8 April 1941, Malaysia

Nationality: Australian, previously Sri Lankan

Marital Status: Married, two sons, one daughter

Education:

B.Sc (Engineering) Part I & II, June 1963, First Class HonorsPh.D. (Cambridge), March 1969Post-Doctorate Research Fellow, Royal Norwegian Council for Scientific & IndustrialResearch, March 1969 - March 1970

Research Expertise:

Prof. Bala has active experience in Geotechnical Civil Engineering in Deep Foundations, Earth and Earth Retaining Structures, Ground Improvement and Stability of Embankments and Excavations.

Teaching Area:

- Soil Mechanics
- Geotechnical Engineering
- Advanced Foundation Engineering

Teaching and Research Experience:

June 1963 to March 1964

• Instructor in Civil Engineering, University of Ceylon.

March 1964 to October 1965

• Engineer, Public Works Dept., Ceylon.

Worked under Chief Research Engineer, Chief Construction Engineer, and Chief Engineer-Bridges.

October 1965 to March 1969

• Research Student in Soil Mechanics, University of Cambridge. Worked on the stress-strain behaviour of soils leading to Ph.D. degree.

March 1969 to March 1970

• Post Doctorate Research Fellow, Norwegian Geotechnical Institute. Worked on large scaled in-situ tests and instrumented full scale tests on piled foundations and slurry trench excavations.

March 1970 to October 1973

• Lecturer in Civil Engineering, University of Ceylon, Engaged in under -graduate and post-graduate teaching and research in soil mechanics and foundation engineering and other civil engineering subjects.

November 1973 to June 2001

• Assistant Professor (1973-1975), Associate Professor (1975-1978), Professor (1979-1994), Chair Professor in Geotechnical Engineering (1994 to 2001), Emeritus Professor (2001- to date), Asian Institute of Technology. Engaged in graduate teaching, research, consultancy and other professional activities. Courses taught include mechanics of soils, foundations and advanced theories in soil mechanics. Research and consultancy works are concentrated on the stress-strain behaviour and strength characteristics of soils; stability of natural and man-made slopes; finite element analysis and applications of statistics and probability theories; performance of embankments, excavations and piled foundations; geotechnical problems related to harbours, highways, dams and building foundations; ground improvement schemes. Numerical analysis of soil-structure interaction problems and case studies.

July 2001 -June 2002

• Visiting Professor, Nanyang Technological University, conducted lectures for M.Eng students and gave research seminars and public lectures. Visited many major construction sites in sewerage treatment plants, tunnelling and tall building foundations and excavations of basements.

July 2002

• 45 pc appointment as Professor

July 2008 - Dec 2009

• 60 pc Appointment as Professor

Jan 2010 to Dec 2018

Adjunct Professor

Administrative Experience:

September 1964 to June 1965

Resident Engineer, Chief Construction Engineer's Office (Colombo), Sri Lanka.

March 1970 to October 1973

Head, Soil Mechanics Division, University of Sri Lanka, Peradeniya Campus.

November 1973 to 2001

- (i) Associate Chairman, Division of Geotechnical & Transportation Engineering, AIT. (1978-1981)
- (ii) Chairman, Division of Geotechnical & Transportation Engineering, AIT. (1981-1985)
- (iii) School of Civil Engineering, Forum Chairman (1994 to 2001)
- (iv) Program Co-ordinator, Geotechnical Engineering (1994 to 2001)
- (v) Field Co-ordinator, Soil Engineering (1978 to 2001)
- (vi) Membership in Institute Committee, Since 1994:

Institute Senate

Policy and Planning Committee

Academic Committee

Resource Committee

Chairman, Establishment Working Group

Doctoral Program Review Committee (1993-1996)

Honorary Degree Committee

Member of Professional Organizations and Learned Societies

- Vice President, International Society for Soil Mechanics and Foundation Engineering (1994 to 1997)
- Vice President, International Association of Engineering Geology Societies: (1986-1990)
- President, Southeast Asian Geotechnical Society (March 1985 December 1987)
- Hon. Secretary, Southeast Asian Geotechnical Society, (November 1973 to 2001)
- Associate Editor, Geotechnical Engineering Journal (1974 1977)
- Editorial Adviser, International Journal of Numerical Methods in Geomechanics.
- Fellow, Institution of Civil Engineers, London
- Fellow, American Society of Civil Engineers
- Fellow, Institution of Engineers, Hong Kong (Resigned 1994) and Malaysia
- Member, Institution of Engineers, Singapore, India, Sri Lanka and Canada.
- Fellow, Geological Society of London (Resigned 1990)
- Member, British Geotechnical Society (Resigned in 2001)
- Member, British Tunnelling Society (Resigned 1990) and British Section of the International Commission on Large Dams (Resigned 1990)
- Member, Road Engineering Association of Asia and Australia
- Member, Southeast Asian Geotechnical Society

Honours and Awards:

- University of Ceylon, First among Engineering Scholars (1959 1963)
- Ceylon Government University Scholar to Cambridge University (1965-1969)
- Post Doctorate Fellow of the Royal Norwegian Council for Scientific and Industrial Research (1969 - 1970)
- Kevin Nash Gold Medal Award of the International Society for Soil Mechanics and Geotechnical Engineering in 1997 for outstanding contribution in Geotechnical Engineering research and practice

Activities of Relevance:

Sponsored Projects

• Subsoil Evaluation for the Naval Dockyard at Pom Prachul, Thailand (1975) Sponsor - Peter Fraenkel & Partners, London, Electro Consult S.P.A., Milan and

- Consulting Architects and Structural Engineers Assoc. Ltd., Bangkok
- Test Embankment with Sand Drains at Naval Dockyard Site, Pom Prachul, Thailand (1977), Sponsor Christiani & Nielsen (Thai) Ltd.
- Geotechnical Properties of Subsoil from Changi Airport Site, Singapore (1978)
 Sponsor -Singapore Airlines Ltd.
- Soil Parameters Evaluation for Finite Element Analysis of an Embankment Dam for San Roque Multipurpose Project, Philippines (1978), Sponsor Electro-Consult, S.P.A., Milan, Italy
- Pile Testing at the Naval Dockyard Site, Pom Prachul, Thailand (1978), Sponsor
 -Thai-German Dockyard Constructors
- Skin Friction Evaluation on Driven Piles at the Naval Dockyard Site, Pom Prachul, Thailand (1978), Sponsor Thai-German Dockyard Constructors
- Effect of Pre Boring on the Pore Pressure Development During Pile Driving, Pom Prachul, Thailand (1978), Sponsor Thai-German Dockyard Constructors
- Engineering Properties of Shale Related to Foundation Design of a Cement Factory, Thailand (1978), Sponsor The Siam City Cement Co. Ltd.
- Effective Stress Strength Parameters of Soil Samples from Multistory Hotel Cum Shopping Complex, North Bridge, Coleman Street, Singapore (1980), Sponsor Fondisa Far East Ltd., Bangkok
- Slope Stability Analysis of the Mae Moh Lignite Deposits, Thailand (1980) Sponsor Universal Exploration Co. Ltd.
- Construction Materials for Clay Core Kud Project, Thailand (1980)
 Sponsor Royal Irrigation Department & SEATEC, Thailand
- Geotechnical Properties of Soils from Ban Tha Si Project, Mae Chang, Thailand
 (1980)
 - Sponsor Electricity Generating Authority of Thailand
- Geotechnical Properties of Soils for Upper Quai Yai Dam, Thailand Phase III (1980)
 - Sponsor Electricity Generating Authority of Thailand
- Performance of a Proposed Reservoir at Bang Pakong Thermal Plant, Thailand (1980)
 - Sponsor Electricity Generating Authority of Thailand
- In-situ Investigation for Power House Site at Chao Phraya Project (1980) Sponsor - Electricity Generating Authority of Thailand
- Geotechnical Aspects of Ban Tha Si Project, Thailand Stage II (1980)
 Sponsor Electricity Generating Authority of Thailand
- Construction Materials for Upper Quai Yai Project, Thailand Phase III (1981) Sponsor - Electricity Generating Authority of Thailand

- Impervious Core Material for Chiew Larn Project, Thailand (1981)
 Sponsor Electricity Generating Authority of Thailand
- Settlement Studies on Two Storey Bank and Eleven Storey Office Building, Northern Road, Penang, Malaysia (1981)
 Sponsor - United Engineers, Malaysia
- Investigation of Bank Failure, Main Canal of Lam Pao Irrigation Project,
 Northeastern Thailand Hazama-Gumi, Bangkok (1982)
 Sponsor Royal Irrigation Department, Thailand
- Partial Site Investigation of the Second Bangkok International Airport at Nong Ngu Hao, Thailand (1984)
 - $Sponsor\ \hbox{-} Royal\ Engineering\ Consultants\ Co.\ Ltd.$
- Measurements and Monitoring of the Vibration due to Pile Driving at the Silom Palace Condominium, Thailand (1984)
 Sponsor - Concrete Products and Aggregates Co. Ltd.
- Development of Under-reamed Piling Techniques for Foundations in Low-lying Marshy Areas, Colombo, Sri Lanka (1986)
 - Sponsor UNDP through UNHCR
- Pile Foundation for Malcom Tower Project, Bangkok, Thailand (1986)
 Sponsor ANT Tower Constructions, Bangkok
- Approach Road to Bridge No.9 at Bander Tutong to Kampong Jerudong Highway, Brunei Darussalam (1987)
 Sponsor - Bolton Hennessey, Brunei
- Direct Shear Strength and Deformation Characteristics of Stone Column Materials (1988)
 - Sponsor Bilfinger and Berger GMBH, Singapore
- Laboratory Tests on Soil Samples from the Muar Flats Test Embankment, Johore, Malaysia (1988)
 - Sponsor Malaysian Highway Authority
- Site Investigation and Laboratory Soil Test for Tung Wat Sing Drainage Project Chainat, Thailand (1988)
 - Sponsor Hazama Gumi, Thailand
- Foundations for Mooring Dolphins and Breasting Dolphins at the Jetty at Map Ta Phut, Rayong, Thailand (1988)
 - Sponsor National Petro-Chemicals Corporation
- Evaluation of Pile Foundation Works for Don Muang Tollway Project, Bangkok, Thailand (1991)
 - Sponsor Diwidag Consortium
- Ground Improvement with Prefabricated Vertical Drains (PVD) for Second

- Bangkok International Airport with monthly Progress Reports and Final Reports Vol. 1 to 3 (1993-1996) (with Drs. Bergado and Noppadol) Sponsor Airports Authority of Thailand
- Lime-Cement Column on Soft Bangkok Clay (1995 to date) (with Dr. Bergado) Sponsor Bilfinger and Berger Co.Ltd.
- Prefabricated Vertical Drains (PVD) Tests for Specifications (with Dr. Bergado)
- Honorary Advisor: Alstom Asia and Malaysian Road Builders

Other Professional Activities

- Secretary, Southeast Asian Geotechnical Society (1973- 2001)
- Associate Editor, Geotechnical Engineering Journal (1973- 1975)
- Chairman, Teaching Program Committee of the Asian Information Center for Geotechnical Engineering (1973-1977)
- Participated in a workshop on Geotechnical Information Systems, Asian Information Centre for Geotechnical Engineering (1975)
- Editorial Adviser International Journal of Numerical Methods in Geomechanics (1975- 1990)
- Organizing Secretary, 5th Southeast Asian Conference on Soil Engineering, July 1977, Bangkok
- Member, Organizing Committee, 6th Asian Regional Conference on Soil Mechanics and Foundation Engineering (1975-1979)
- External Examiner for Undergraduates, University of Peradeniya, Sri Lanka
- External Examiner for Doctoral Dissertations, University of Wollongong, Australia, IIT Kanpur, India, University of Malaya
- External Assessor for Appointments of Associate Professors and Professors, University of Malaysia

Organization of Conferences, Symposia and Workshops

- Fifth Southeast Asian Conference and International Symposium on Soft Clay (1977)
- Engineering for Protection from Natural Disasters (1978)
- Geotechnical Aspects of Highway Engineering (1979)
- Problems and Practice of Dam Engineering (1980)
- Coastal and Offshore Structures (1981)
- Ground Improvements (1982)
- Laboratory and Field Tests and Analysis of Geotechnical Problems (1983)

- Mass and Material Transportation (1984)
- Environmental Geotechnics and Problematic Soils and Rocks (1985)
- Computer Aided Design and Physical Modelling Using Centrifuge (1986)
- Ninth Southeast Asian Geotechnical Conference (1987)
- Restoration and Maintenance of Infrastructures and Historical Monuments (1988)
- Developments in Laboratory and Field Tests in Geotechnical Engineering Practice (1989)
- Embankments, Excavations and Buried Structures (1990)
- Ninth Asian Regional Conference on Soil Mechanics and Foundation Engineering (1991)
- Symposium on Prediction Versus Performance and Workshops on Computer Applications and Ground Improvements (1992)
- International Short Course on Evaluation of Design Parameters from Laboratory Tests (1993)
- Training Course on Construction Quality Control for Sea Dykes (1993)
- Symposium on Developments in Geotechnical Engineering (From Harvard to New Delhi 1936 1994
- Training and Workshop for Vietnamese Engineers for one month, UNDP,
 February 1994
- International Short Course on Slope Failures, 25-29 July 1994
- International Short Course on Geotextiles and Geosynthetics, 12-16 September 1994
- International Conference on Deep Foundations and Ground Improvements, 21-24 November 1994
- Southeast Asian Symposium on Tunnelling and Underground Space
 Development, Sponsored by International Tunnelling Association, 18-19
 January 1995
- International Course on Geotechnical Aspects of Earthquake Engineering, 8-11 May 1995
- International Course on Soft and Hard Rocks, 7-11 August 1995
- International Course on Natural Hazards and Environmental Geotechnics, 30
 October 3 November 1995
- International Course on Numerical Analysis in Geotechnical Engineering, 12-16
 February 1996
- International Course on Estimation of Design Parameters for Soils and Rocks,
 10-14 June 1996
- International Course on Problematic Soils and Ground Improvement

- Techniques, 5-9 August 1996
- International Course on Soil-Structure Interaction, 4-8 November 1996
- International Course on Advanced Geotechnical Analysis, 3-6 Feb. 1997
- International Course on Site Investigation with Geophysical Methods, 19-23
 May 1997
- Geotechnical Hazards and Dam Construction, 28-31 July 1997
- 40th Anniversary AIT conference in Civil Engineering, 1997-1999
- International Conference on Information Technology, 2000
- Geotechnics Year 2000

Organization of Workshops at Griffith University

- Short Course on Critical State Soil Mechanics at Griffith University, 2002
- Workshop on Piled foundations for Tall Buildings, June 2005
- Workshop on Pavements Engineering, July 2005
- Workshop on Geo-copier and Ground Improvements, Sep. 2005
- Workshop on Geo-Environment Engineering, Oct. 2005
- Workshop on Ground Improvement, Feb. 2006
- Workshop on Rock Engineering, Feb. 2006
- Workshop on Deep Excavation, Feb. 2006
- Workshop on Numerical Analysis & Plaxis Course, Jul. 2006
- Workshop on Piled & Piled Raft Foundations, Sep. 2006
- Workshop on Reinforced Earth, Sep. 2006
- Workshop on Pavements and Pavements Maintenance, Sep. 2006
- Workshop on Soft Clay Engineering, Dec. 2006
- Workshop on Ground Improvement, Feb. 2007
- Workshop on Rock Socketed Piles and Dynamic Pile Testing, Feb. 2007
- Workshop on Unsaturated Soils and Slope Stability, Feb. 2007
- Workshop on Soft Ground Tunnelling, Feb. 2007
- Workshop on Laboratory & Field Testing, Jul. 2007
- Workshop on Engineering Geology & Engineering Geophysics, Jul. 2007
- Workshop on Soft Ground Tunnelling, Jul. 2007
- Workshop & Lectures on Pavement Maintenance and Management, Nov. 2007
- Workshop & Lectures on Bridge Maintenance and Management Systems, Nov. 2007
- Workshop & Lectures on Deep Excavations, Nov. 2007
- Workshop & Lectures on Strength & Compressibility of Soft Soils in settlement and stability of structures for highways and motorways, Nov. 2007

- Workshop & Lectures on Slope Stability and Landslides, Dec. 2007
- Workshop & Lectures on Shield Tunnelling Technology, Dec. 2007
- Workshop & Lectures on Observational Methods in Tunnelling Practice, Dec. 2007
- Workshop & Lectures on Engineering Geology and Engineering Geophysics in tunnelling & Mining Works, Dec. 2007
- Workshop & Lectures on Dams: March 2008
- Workshop & Lectures on Dilatometer: April 2008
- Workshop & Lectures on Tunnels: July 2008
- Workshop & Lectures on Geotextiles: September 2008
- Workshop & Lectures on Deep Excavations: November 2008
- Workshop & Lectures on Piled Foundations: November 2008
- Workshop & Lectures on Soil Dynamics, Machine foundation & Geotechnical Earthquake Engineering; December 2008
- Workshop & Lectures on Risk Analyses: February 2009
- Workshop & Lectures on Pavement Engineering, maintenance and Management: April 2009
- Workshop & Lectures on Engineering Geology & Engineering Geophysics: July 2009
- Workshop & Lectures on Foundation Engineering Practice: July 2009
- Workshop & Lectures on Collapsible, Expansive and Residual soils: Unsaturated and saturated behaviour (September 2009)
- Workshop & Lectures on Plaxis Course: November 2009
- Workshop & Lectures on Soil Behaviour: February 2010
- Workshop & Lectures on Geotechnics & Mega Projects: April 2010
- Workshop & Lectures on Eurocode & Geosynthetic Courses: July 2010
- Workshop & Lectures on Deep Excavation & Tunnelling: September 2010
- Workshop & Lectures on Slope Stability, Residual Soils & Landslides: November 2010
- Workshop & Lectures on Sustainable Multimodal Transport & Urban Development: with Evaluation of Transport Projects, Land Use Mix and Supply Controls
- Workshop & Lectures on Advanced Plaxis Course: November 2011

Conference Participation

(1) Fourth Southeast Asian Conference on Soil Engineering in Kuala Lumpur, Malaysia, April 1975.

- (2) Symposium on Recent Developments in the Analysis of Soil Behaviour and their Application to Geotechnical Structures, University of New South Wales, Sydney, Australia, July 1975.
- (3) Second Australia-New Zealand Conference on Geomechanics held in Brisbane, Australia in July 1975.
- (4) Fifth Asian Regional Conference on Soil Mechanics and Foundation Engineering, held in Bangalore, India, December 1975.
- (5) Second International Conference on Numerical Methods in Geomechanics, ASCE, in Blacksburg, U.S.A., June 1976.
- (6) Chairman, Technical Session on Stability of Slopes, 5th Southeast Asian Conference on Soil Engineering, Bangkok, July 1977.
- (7) State-of-the-Art Reporter on Compressibility and Settlement Characteristics of Soft Clays International Symposium on Soft Clay, Bangkok, July 1977.
- (8) Panel Member Main Session on Stress-Strain Behaviour of Soils 9th International Conference on Soil Mechanics and Foundation Engineering, Tokyo, July 1977.
- (9) Guest Lecturer Stability and Settlement of Embankments, 3rd International Conference on Numerical Methods in Geomechanics in Aachen, Germany, April 1979.
- (10) Panel Member Main Session on Stress Deformation of Soils, Sixth Asian Regional Conference on Soil Mechanics and Foundation Engineering, Singapore, July 1979.
- (11) General Reporter Practice and Problems of Foundations in Thailand, Sixth Asian Regional Conference on Soil Mechanics and Foundation Engineering, Singapore, July 1979.
- (12) State-of-the-Art Reporter In-situ Tests and Instrumentation in Soft Clay Deposits Sixth Southeast Asian Conference on Soil Engineering, Taipei, May 1980.
- (13) Panel Member Main Session on Laboratory Testing of Soils, Tenth International Conference on Soil Mechanics and Foundation Engineering, Stockholm, July 1981.
- (14) General Reporter Waterfront and Offshore Structure, Seventh Asian Regional Conference on Soil Mechanics and Foundation Engineering, Haifa, August 1983.
- (15) Special Lecturer Geotechnical Aspects of Resources Development in Thailand, Eighth Southeast Asian Geotechnical Conference, Kuala Lumpur, March 1985.
- (16) Tenth International Conference on Soil Mechanics and Foundation Engineering, San Francisco, August 1985.

- (17) Eighth Asian Regional Conference on Soil Mechanics and Foundation Engineering, Kyoto, July 1987.
- (18) International Symposium on Landslides, Beijing, March 1987.
- (19) Ninth Southeast Asian Geotechnical Conference, Bangkok, December 1987.
- (20) Developments in Centrifuge Model Tests, Cambridge, September 1988.
- (21) Underground Excavations and Power Plants, Madrid, September 1988.
- (22) Restoration and Maintenance of Historical Monuments and Ancient Cities, Athens, September 1988.
- (23) Symposium on Ground Improvements, Fukuoka, October 1988.
- (24) Symposium on Prediction Versus Performance of Embankments, Kuala Lumpur, Malaysia, 1989
- (25) International Conference on Soil Mechanics and Foundation Engineering, Rio de Janerio, Brazil, 1989
- (26) Tenth Southeast Asian Geotechnical Conference, Taipei, 1990
- (27) Fourth Indonesian Geotechnical Conference, Bandung, 1990
- (28) Conference of ASEAN Federation of Engineering Association, Penang, Malaysia, 1990
- (29) First Young Asian Geotechnical Conference, Bangkok, 1991
- (30) Ninth Asian Regional Conference on Soil Mechanics and Foundation Engineering, Bangkok, 1991
- (31) Eleventh Southeast Asian Conference, Singapore, 1993
- (32) Twelfth Southeast Asian Conference, Kuala Lumpur, 1996
- (33) Thirteenth Southeast Asian Conference, Taipei, 1998
- (34) Eleventh Asian Regional Conference, Seoul, Korea, 1999
- (35) Geotechnics Year 2000--- Bangkok, 2001
- (36) 2004 Malaysian Geotechnical Engineering Conference, Kuala Lumpur, Malaysia, March 2004.
- (37) Sixteenth Southeast Asian Geotechnical Conference, Kuala Lumpur, Malaysia, May 2007.
- (38) 10th Australia New Zealand Conference on Geomechanics, Brisbane, Australia, October 2007.

Council Meeting of the Regional and International Societies

Southeast Asian Geotechnical Society Council Meetings (Kuala Lumpur, 1975;
 Bangkok, 1977; Singapore, 1979; Taipei, 1980; Kuala Lumpur, 1985; Bangkok,
 1987; Taipei, 1990; Singapore, 1993 and Kuala Lumpur 1996, Taipei, 1998,
 Seoul 1999, Bangkok 2001, Kuala Lumpur, 2007).

- Executive Committee Meetings of the International Society for Soil Mechanics and Foundation Engineering (Tokyo, 1977; Stockholm, 1981; San Francisco, 1985; Rio de Janerio, 1989; Hamburg, 1997; Brisbane 2007)
- Council Meetings of the International Association of Engineering Geology (Madrid, 1978; Beijing, 1987; Athens, 1988)
- Council Meetings of the International Society for Rock Mechanics (Montreux, 1979; Madrid, 1988)
- Council Meeting of the International Committee on Numerical Methods in Geomechanics (Edmonton, 1983)
- Council Meetings of the Road Engineering Association of Asia and Australia (Kuala Lumpur, 1979; Jakarta, 1980)

Doctoral Research at Griffith University

Doctoral thesis completed

 Student: Captain Chanaton Surarak Supervisor: A.S.Balasubramaniam

Co-Supervisor: Dr. Hong Guan

Year of completion: 2011

2. Student: Hong-Yu Qin

Supervisor: Wei Dong Guo

Co-Supervisor: A.S.Balasubramaniam

Year of completion: 2010

3. Student: Dong Hyun Kim

Supervisors: A.S. Balasubramaniam

Ivan Gratchev

Year of completion: 2016

External Doctoral Research Examination:

1. Australian Defence Force Academy: UNSW (2014)

Thesis: Monotonic behaviour of Pond Ash

Candidate: Jiajun Zhang

2. VIT University, Vellore, India (2014)

Thesis: Swell - Shrink Behaviour of Granular Pile Anchors in Expansive Soils

Candidate: MUTHUKUMAR M

3. University of Wollongong, NSW, Australia (2012)

Thesis: Application of Geosynthetic Vertical drains under Cyclic Loads in

Stabilizing Tracks

Candidate: By: Jing Ni

4. Australian Defence Force Academy: UNSW (2011)

Thesis titled: Behaviour of Unsaturated Silty Sand under Cyclic Loading

Candidate: Dejin Hu

5. Australian Defence Force Academy: UNSW (2011)

Thesis titled: Cyclic Liquefaction Behaviour of Granular Materials with Fines

Candidate: Md Abdul Lahil Baki

6. Wollongong University (2011)

Thesis titled: Analytical and Numerical Study of soil Disturbance associated with

the Installation of Mandrel- Driven Prefabricated Vertical Drains

Candidate: Ali Ghandeharioon

Keynote Address in Taipei: May 2010

Prof. Chin Fung Kee Lecture in Seventeenth Southeast Asian Geotechnical Conference on Settlement of Embankments in Soft Soils

Review of Papers

- 1. Arabian Journal of Geosciences
- 2. Clay Mineralogy
- 3. Engineering Geology Journal
- 4. Geotechnical & Geological Engineering
- 5. Geotechnical & Geo-environmental Journal
- 6. Geotechnical Testing Journal
- 7. Geotechnique Letters
- 8. Ground Improvement Journal
- 9. International Journal of Geomechanics

- 10. Soils & Foundations
- 11. Natural Hazards
- 12. Canadian Geotechnical Journal
- 13. Korean Society of Civil Engineers (Korea)
- 14. Kasetsart University Journal (Thailand)

Editor in Chief: Geotechnical Engineering Journal of South East Asian Geotechnical Society (SEAGS)-Association of Geotechnical Societies of Southeast Asia (AGSSEA)

See Web: http://www.seags.ait.ac.th/

EDITOR-IN-CHIEF: A.S. Balasubramaniam EDITORS: Teik Aun Ooi; Noppodol Phienwej

CO-EDITORS: Der Wen Chang; D.T.Bergado; Jian Chu

Publications

Book Chapters:

Indraratna, B., Sathananthan, I., Bamunawita, C., and Balasubramaniam, A. S. (2005). Chapter 2 - Theoretical and numerical perspectives and field observations for the design and performance evaluation of embankments constructed on soft marine clay. Ground Improvement-Case Histories (ISBN 0-080-44633-7), edited by Indraratna and Chu, 51-90.

Indraratna, B., Rujikiatkamjorn C., Balasubramaniam, A. S. and Wijeyakulasuriya, V. (2005). Chapter 7 - Predictions and observations of soft clay foundations stabilized with geosynthetic drains and vacuum surcharge. Ground Improvement-Case Histories (ISBN 0-080-44633-7), edited by Indraratna and Chu, 199-230.

Edited Books:

- 1. Balasubramaniam, A.S. et al (2000), "Year 2000 Geotechnics", AIT, Bangkok
- 2. Balasubramaniam A.S. et al (1999), "Proceedings fortieth year anniversary conference of AIT", AIT, Bangkok
- 3. Bergado, D.T., Anderson, L.R. Miura, N. and Balasubramaniam, A.S. (1996), "Soft Ground Improvement", American Society of Civil Engineers, 427 pages.
- 4. Balasubramaniam, A.S., Bergado, D.T., Phien-wej N., Hong S.W. Ashford, S.A. and Nutulaya, P.(1995), "Developments in Deep Foundations and Ground

- Improvement Schemes", Balkema Printers, 293 pages.
- 5. Balasubramaniam, A.S., Yudhbir, Bergado, D.T., Phien-wej, N., Seah, T.H. and Nutalaya, P. (1994), "Prediction versus Performance in Geotechnical Engineering", A.A. Balkema Publishers.
- 6. Balasubramaniam, A.S., Hong, S.W., Bergado, D.T., Phien-wej, N. and Nutalaya, P. (1994), "Developments in Geotechnical Engineering", (From Harvard to New Delhi, 1936-1994), Balkema Printers 583 pages.
- 7. Balasubramaniam, A.S., Yudhbir, Bergado, D.T., Phien-wej, N., Seah, T.H. and Nutalaya, P. (1994), "Prediction Versus Performance in Geotechnical Engineering", Balkema Printers, 341 pages.
- 8. Balasubramaniam, A.S., Honjo, Y., Bergado, D.T., Indraratna, B., Phien-wej, N. and Nutalaya, P. (1991), "Proceedings of the Ninth Asian Regional Conference on Soil Mechanics and Foundation Engineering", Bangkok, Thailand.
- 9. Balasubramaniam, A.S., Honjo, Y., Rantucci, G., Bergado, D.T., Phien-wej, N., Indraratna, B., and Nutalaya, P. (1990), "Geotechnical Aspects of Restoration Work on Infrastructures and Monuments", A.A. Balkema Publishers, 365 p.
- 10. Balasubramaniam, A.S., Honjo, Y., Bergado, D.T., Phien-wej, N., Indraratna, B., and Nutalaya, P. (1990), "Developments in Laboratory and Field Tests in Geotechnical Engineering Practice", Proceedings of the Symposium held in Bangkok, 508 p.
- 11. Balasubramaniam, A.S., Honjo, Y., Bergado, D.T., Indraratna, B., Phien-wej, N. and Nutalaya, P. (1990), "Developments in Geotechnical Aspects of Embankments, Excavations and Buried Structures", A.A. Balkema Publishers.
- 12. Balasubramaniam, A.S., Rantucci, G., Chandra, S., Bergado, D.T., Phien-wej, N., Saran, S., and Nutalaya, P. (1989), "Computer and Physical Modelling in Geotechnical Engineering", A.A. Balkema Publishers, Netherlands, 544 p.
- 13. Balasubramaniam, A.S., Chandra, S., and Bergado, D.T. (1988), "Environmental Geotechniques and Problematic Soils and Rocks", A.A. Balkema Publishers, The Netherlands, 564p.
- 14. Balasubramaniam, A.S., Chandra, S., Bergado, D.T., and Rantucci, G. (1987), "Geotechnical Aspects of Mass and Material Transportation", A.A. Balkema Publishers, The Netherlands.
- 15. Balasubramaniam, A.S., Phien-wej, N., Kuwano, J., Rantucci, G. and Nutalaya, P. (1987), "Ninth Southeast Asian Geotechnical Conference", Bangkok, Thailand.
- 16. Balasubramaniam, A.S., and Bergado, D.T. (1985), "Geotechnical Engineering in Southeast Asia", A Commemorative Volume for the 1985 Golden Jubilee International Conference, Southeast Asian Geotechnical Society, A.A. Balkema Publishers, The Netherlands.

- 17. Balasubramaniam, A.S., Chandra, S., and Bergado, D.T. (1984), "Recent Developments in Ground Improvement Techniques", A.A. Balkema Publishers, The Netherlands, 587 p.
- 18. Balasubramaniam, A.S., Chandra, S., and Bergado, D.T. (1984), "Recent Developments on Laboratory and Field Tests and Analysis of Geotechnical Problems", A.A. Balkema Publishers, The Netherlands, 587p.
- 19. Yudhbir, and Balasubramaniam, A.S. (1983), "Geotechnical Aspects of Coastal and Offshore Structures", A.A. Balkema Publishers, The Netherlands, 280 p.
- 20. Balasubramaniam, A.S., Yudhbir, Tomiolo, A. and Younger, J.S. (1981), "Geotechnical Problems and Practice of Dam Engineering", A.A. Balkema Publishers, The Netherlands, 392 p.
- 21. Balasubramaniam, A.S. and Brand, E.W. (1977), "Fifth Southeast Asian Conference on Soil Mechanics", Bangkok, Thailand.
- 22. Karasudhi, P., Balasubramaniam, A.S. and Nukulchai, W.K. "Proceedings of the International Conference on Engineering for Protection from Natural Disasters", AIT, Bangkok, Thailand.

Journals:

- 01: Long, P.V., Nguyen, L.V. and A.S. Balasubramaniam (2016): Performance and Analyses of Thick Soft Clay Deposit Improved by PVD with Surcharge Preloading and Vacuum Consolidation A Case Study at CMIT. Geotechnical Engineering, Journal of Southeast Asian Geotechnical Society, Volume 47, No.3, page 61 -70.
- 02: D. H. Kim, I. Gratchev, M. Hein, A. S. Balasubramaniam (2016) The application of normal stress function in tilt tests for different block shapes, Rock Mechanics and Rock Engineering, 49(8), 3041-3054.
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