

**Name:** Yong Kwet Yew

**Current Position:**

Professor, Department of Civil Engineering,  
National University of Singapore,  
1 Engineering Drive 2, E1A 07-03  
Singapore 117576

**Email:** [uciyky@nus.edu.sg](mailto:uciyky@nus.edu.sg)

**Biography:**

Professor K Y Yong joined NUS in October 1979 and has served in almost every Department committees and several Faculty Committees; more recently as Founding Director, Centre for Soft Ground Engineering (1991-1994), Sub-Dean of Engineering (1992-1995), Head of Civil Engineering (1995-2000) and Chairman, NUS-MINDEF Centre for Protective Technology (1998-present). Currently, he is the Vice President of NUS with oversight on Campus Infrastructure and chairs several University-level committees.

Professor Yong presented keynote/invited lectures in 10 international and 15 Regional Conferences, and has published more than 150 technical papers in journals and conferences, and contributed a chapter in a book. He is a co-recipient of a Merit Award of the Inaugural IES Innovation Award (1990) for Land Reclamation Techniques. He also served as reviewer for local and international journal papers. His current research interest is in soft ground engineering and includes the control of ground movements related to deep excavation and tunneling, deep foundation problems, and innovative land reclamation and ground improvement techniques. Over the past decade, he has received, as a Principal Investigator or Collaborator, over \$8.6 million of research funding from external bodies and NUS. He has supervised/is supervising 15 Masters and 15 Doctoral students.

Prof Yong has served as Consultant to several government agencies (MINDEF, LTA, PSA, HDB, URA), major developers (City Developments, Far East Organisation, Keppel Land, Hong Kong Land), and over 20 International Consulting and Construction firms (eg. CH2M Hill, Camp Dresser & McKee, Parsons Brinckerhoff, Maunsell, Meinhardt, Shimizu, Kajima, Obayashi, Toa Corporation, Penta Ocean, Hyundai, SamSung, Fletcher) on more than 100 construction projects in Singapore, ASEAN and China.

Prof Yong is married with a son and a daughter. He enjoys swimming, cycling, jogging and outdoor games with his family and is an 'irregular' golfer!

**Qualifications:**

- BEng (1st Class Hons), University of Sheffield, UK1976
- PhD, University of Sheffield, UK1979
- Registered Professional Engineer, Singapore, PEng(S)1983
- Chartered Civil Engineer, London, CEng1984
- Registered Professional Engineer, Malaysia, PEng(M)1989
- Fellow, Institution of Engineers, Singapore2001
- Accredited Adjudicator, Singapore Mediation Centre2005

**Honours & Awards:**

- Public Administration Medal (Silver), National Day Awards 2000
- Certificate of Commendation (Individual), Ministry of Manpower, Singapore (2000)
- Public Service Medal (recommended by MOM), National Day Awards 2004
- Grouped Scholarship in Engineering, University of Sheffield, UK (1976-1979)
- Visiting Scientist, Kyoto University (1981)
- Institution of Engineers, Singapore, Inaugural Innovation Award (Merit) for land reclamation techniques (1990)
- Faculty of Engineering Teaching Excellence Award (1993,1994 & 1996)
- Faculty Hall of Fame for Teaching Excellence (1997)
- Certificate of Teaching Commendation (2001/02)

**Professional Activities:**

- President, Southeast Asian Geotechnical Society
- Chairman, Committee for Fundamental Examination (Civil & Structural), Professional Engineers Board, Singapore
- Chairman, Independent Investigation Panel on Nicoll Highway Collapse, LTA (completed)
- Chairman, Advisory Committee on Occupational Safety & Health for the Construction Industry, Ministry of Manpower
- Independent Director of 2 public listed company/subsidiary
- Chairman, Accredited Checkers Selection Panel, Building and Construction Authority, MND
- Chairman, Engineering Advisory Panel, Land Transport Authority
- Council Member and Chairman of Projects & Development Committee, Town Council of Sembawang
- Board and Exco Member, Land Transport Authority, Singapore

**Teaching Areas:**

- Geotechnical Engineering
- Foundation Engineering

**Research Interest:**

- Soft Ground Engineering
- Deep Excavations and Tunneling
- Land reclamation and Ground Improvement
- Integrated Infrastructure Systems

**Selected Publications:**

- Selected Publications in Land Reclamation:
- Lee, S L, G P Karunaratne, K Y Yong and V Ganeshan, Layered clay-sand scheme of land reclamation. *Journal of Geotechnical Engineering*, 113, no. 9 (1987): 984-996 (United States).
- Lee, S L, G P Karunaratne, K Y Yong, Y K Chow and S H Chew, Consolidation of dredged clay in reclamations. *Soils and Foundations*, 28, no. 2(1988): 13-25 (Japan).
- Tan, T S, K Y Yong, E C Leong and S L Lee, Sedimentation of clayey slurry. *Journal of Geotechnical Engineering*, 116, no. 6 (June 1990): 885-898 (United States).
- Yong, K Y, G P Karunaratne and S L Lee, Recent developments in soft clay engineering in Singapore. In *Proceedings of the Kansai International Geotechnical Forum, 11-12 October 1990, Osaka, Japan*, pp. 3-10. Japan: Japanese Society of Soil Mechanics and Foundation Engineering (Kansai Branch), 1990 (Guest Lecture).
- Yong, K Y, S L Lee and G P Karunaratne, Coastal reclamation in Singapore: a review. In *Proceedings, Urban Coastal Area Management: The experience of Singapore, November 1987*, edited by L S Chia and L M Chou, compiled by ICLARM Philippines, pp. 59-67. Singapore, 1991.

**Selected Publications in Ground Improvement:**

- Chow, Y K, D M Yong, K Y Yong and S L Lee, Dynamic compaction analysis. *Journal of Geotechnical Engineering, ASCE*, 118, No. 8 (August 1992): 11s41-1157 (United States).
- Yong, K Y, Control of ground movements in deep excavation in soft clay by grouting. Invited Lecture. *Proceedings of International Seminar on Soft Ground and Environmental Geotechnology*, 22 March 1995, Port and Harbour Research Institute, Yokosuka, Japan, pp. 1-24.
- Yong, K Y and S L Lee, Time-dependent behaviour and grouting of deep excavation in soft clay. *Proceedings of Regional Symposium on Infra-structure development in Civil Engineering*, 19-20

December 1995, Bangkok, Thailand, edited by Kasetsart University and Tokyo Institute of Technology, pp. 314-336.

- Yong, K Y and S L Lee, Improvement of soft ground by vertical drains, surcharge and high energy impact in highway embankment construction. In Proceedings of International Conference on Ground Improvement Techniques, 6-8 May 1997, Macau. Macau, 1997 (Keynote Lecture).

#### **Selected Publications in Deep Excavation:**

- Yong, K Y, F H Lee, U Parnploy and S L Lee, Elasto-plastic consolidation analysis for strutted excavation in clay. Computers and Geotechnics, 8 (1989): 311-328.
- Yong, K Y, S L Lee and U Parnploy, Time-dependent behaviour of excavation in soft clay. In Proceedings of the Ninth Asian Regional Conference on Soil Mechanics and Foundation Engineering, 9-13 December 1991, Imperial Hotel, Bangkok, Thailand, Vol. 2, pp. 15-18. The Netherlands: A A Balkema Publishers, 1991 (Panelist Paper on Theme 4).
- Lee, S L and K Y Yong, Grouting in substructure construction. In Proceedings of the Ninth Asian Regional Conference on Soil Mechanics and Foundation Engineering, Vol. 2, pp. 41-49, The Netherlands: A A Balkema Publishers, 1991 (paper presented at Ninth Asian Regional Conference on Soil Mechanics and Foundation Engineering (9 SEAGC), 9-13 December 1991, Imperial Hotel, Bangkok, Thailand). (Guest Lecture).
- Yong, K Y, Control of ground movements in deep excavation in soft clay by grouting - Invited Lecture. In Proceedings of International Seminar on Soft Ground and Environmental Geotechnology, 22 March 1995, Port and Harbour Research Institute, Yokosuka, Yokohama City, Japan, compiled by Port and Harbour Research Institute, pp. 1-24. Yokohama: Port and Harbour Research Institute, Yokosuka, 1995.
- Yong, K Y, F H Lee and K X Liu, Three-dimensional finite element analysis of deep excavation in marine clay. In Proceedings of the 12th Southeast Asian Geotechnical Conference, May 1996, Kuala Lumpur, Malaysia, compiled by Institution of Engineers, Malaysia, p. 435-440. Kuala Lumpur: IEM and Southeast Asian Geotechnical Society, May 1996.
- Lee, F H, K Y Yong, K C N Quan and K T Chee, Effects of corners in strutted excavations - field monitoring and case histories. Journal of Geotechnical and Geoenvironmental Engineering, 124, No. 4 pp 339 - 349 (April 1998) (United States).