CV of ANDREW MALONE Adjunct Professor,Department of Earth Sciences, Hong Kong University

**Educational and professional qualifications**

BSc Civil Engineering, Leeds University (1964)

MSc & PhD Engineering Geology, London University (1965, 1969)

Fellow of the Geological Society (1968), the Institution of Civil Engineers (1989, member 1972) and the Hong Kong Institution of Engineers (1990, member 1978)

Registered Geotechnical Engineer, Hong Kong (2005-2020)

**Working experience**

1965-1968 Geology Department, Imperial College, PhD student working on the application of seismic methods in rock engineering under Dr John Knill

1968-1973 Soil Mechanics Ltd UK, graduate trainee then engineer; John Mowlem Ltd, UK site engineer

1973-1977 Ove Arup & Partners UK, senior engineer and head of the Geotechnical Group Scotland

1978-1982 Head, Geotechnical Control Branch, Buildings Ordinance Office, Public Works Department, Hong Kong

1983-1986 & 1987-1989 Head, Development Branch of the Geotechnical Control Office Hong Kong

1986-1987 Deputy Secretary for Lands and Works, Government Secretariat Hong Kong

1989-1998 Head, Geotechnical Engineering Office Hong Kong

1998- MSc in Applied Geosciences programme, Hong Kong University; 1998-2016 Director, 2017-2019 Associate Director, 2019-2024 admissions tutor; Adjunct Professor

2004-2010 Director, Applied Geoscience Centre, Hong Kong University

1998- Geotechnical consultant and expert witness; assignments in Hong Kong, Korea, Malaysia, Singapore and Taiwan associated with landslides, deep excavations, slopes, retaining walls and foundations.

**Professional contribution**

Chairman, Scottish Geotechnical Group, ICE (1976-1978). Founder Hon. Secretary, HKIE Geotechnical Group (1979-1983). Founder Chairman, Marine Studies Group, HK Geological Society (1984-1988). Member, HKIE Council (1987-1991). Founder Chairman, HKIE Geotechnical Discipline Advisory Panel (1988-1995). Member, Hong Kong Engineers Registration Board (1990-1991 and 1996-2000). Member, Laboratory Accreditation Board (1991-1998). General Committee Member South East Asian Geotechnical Society (1991-1996). Member, Qualification and Membership Board, HKIE (1992-1995). Member, Technical Committee on Landslides, International Society for Soil Mechanics and Geotechnical Engineering (1998-2001). Founder Chairman, Hong Kong Geotechnical Engineers Registration Committee (2004-2007). Committee member Hong Kong Regional Group Geological Society of London (2015). Member International Advisory Committee of the Centre for Slope Safety (University Grants Committee Area of Excellence) (2019-).

**Editorial boards and technical review**

Reviewer of books and manuscripts for *Engineering Geology* (Elsevier), *Forensic Engineering* (ICE), *Geotechnical Engineering* (ICE), *Geotechnique*, *Hong Kong Engineer,* *Bulletin of Engineering Geology and the Environment and Quarterly Journal of Engineering Geology & Hydrogeology*. Assessor, Hong Kong Research Grants Council; referee, Research Council of Norway. Member, *HKIE Transactions* Review Panel (1992 to 2000). Member, Editorial Board of *Engineering Geology* (Elsevier) (1993 to 2001). PhD Examiner, Hong Kong University and Hong Kong University of Science & Technology. Member of the investigation committee for the landslide disaster at Ch3+100 National Highway No. 3, Taiwan 25 April 2010.

**Current teaching**

MSc in Applied Geosciences: GEOS8003 Seminars on unforeseen ground conditions, geotechnical and environmental failures; GEOS7022 Course of directed studies.

**Honours and Awards**

Official Justice of the Peace (1992-1998)

Hong Kong SAR Bronze Bauhinia Star, 1998

Workman-Malpas Medal (Geological Society of London Hong Kong Regional Branch and Geological Society of Hong Kong), 2023

Honorary Membership of the Association of Geotechnical and Geoenvironmental Specialists Hong Kong, 2024

**Recent large consulting assignments and legal work**

Works at West Coast Station LTA Contract C856 Singapore

Expert witness appointed by Sembawang Engineers and Constructors Pte Ltd Singapore in an Arbitration between Sembawang and the Land Transport Authority of Singapore, 2010.

Landslide at Ch 23+800 Pos Selim Kg Raja Highway Project Cameron Highlands Malaysia

Expert witness appointed by MTD Construction Sdn Bhd in a civil action between MTD and AXA Affin Assurance Berhad. Trial: High Court of Malaya at Kuala Lumpur, 2011.

Landslide at Ch 3+100 National Highway No. 3 Taiwan on 25 April 2010

Overseas member of the Taiwan Geotechnical Society’s Investigation Committee for the landslide disaster at Ch 3+100 National Highway No. 3, reporting to the Taiwan Ministry of Transport and Communications, 2010-11.

Landslide at Bukit Antarabangsa Kuala Lumpur Malaysia 6 December 2008

Expert witness appointed by Superview Development Sdn. Bhd. in a civil action between Thanarajah a/l Kanagaratnam and 4 others v Superview Development Sdn. Bhd. and Syarikat Bekalan Air Selangor Sdn. Bhd., 2012.

Landslides at Umyeon Mountain Seoul Korea on 27 July 2011

International expert adviser to the investigating team of the Korean Society of Civil Engineers, 2012.

Landslide at Ch 26+000 Pos Selim Kg Raja Highway Cameron Highlands Malaysia

Expert witness appointed by MTD Construction Sdn Bhd in an Arbitration between MTD Construction Sdn Bhd and the Government of Malaysia. Hearing: Kuala Lumpur Regional Centre for Arbitration, 2016.

Technical advisor to the mediator, Stephen Ruttle QC, for mediation of a dispute between a developer and a consulting firm involving site formation in Mainland China. Meetings: Hong Kong International Arbitration Centre, 2017.

**Publications**

Knill, J.L., Franklin, J.A. and A.W. Malone (l967). A study of acoustic emission from stressed rock*. Int. J. Rock Mech. Min. Sci.* 5, 87-l2l.

Malone, A.W. (l969). *Elastic wave methods in rock engineering.*  Imperial College, London University PhD Thesis (unpublished).

Price, D.G., Malone, A.W. and J.L. Knill (l970). The application of seismic methods in the design of rock bolt systems*. Proc. Int. Geol. Cong.* Paris, 740-752.

Malone, A.W. (1977). Contribution to discussion. *Proceedings of the Symposium-in-Print on Piles in Weak Rock*, Institution of Civil Engineers, London, pp 201-202.

Ridley, T., & A.W. Malone (1977). Minimum weight concrete platforms. *Proc Conf. Offshore Europe 77*. Soc. Pet. Engrs. AIME. OE 77. 11. SPE 8.6690.

Ridley, T., Malone, A.W. and R.D. McLeod (l977). Rapid design for concrete gravity platforms*. The Consulting Engineer* Sept., 39-4l.

Malone, A.W. (1981). Timing of landslides in Hong Kong in relation to rainfall. *Proceedings of the Tenth International Conference on Soil Mechanics and Foundation Engineering,* Stockholm, vol. 4, pp 915-916.

Malone, A.W. (l982). Moderator’s Report on Retaining Walls and Basements*. Proc. 7th SE Asian Geot. Conf.,* Hong Kong, vol 2, 249-27l. Discussion, vol 2, 275-280.

Malone, A.W. & J.C. Shelton (l982). Landslides in Hong Kong (l978 - l980). *Proc. ASCE Speciality Conf. Engineering and Construction in Tropical and Residual Soils,* Honolulu. 425-442.

Malone, A.W. (1983). Introduction to the session ‘Probes, Corers and Pore Pressure Measurement’. *Proceedings of the IUTAM Symposium on Seabed Mechanics*, Newcastle-upon-Tyne, pp 103-105. Published under the title *Seabed Mechanics*, edited by B. Denness, Graham & Trotman Ltd, London, 1984.

Malone, A.W. (1985a). Hong Kong practice on driven piles. *Proceedings of the International Symposium on the Penetrability and Drivability of Piles,* San Francisco, vol. 2, pp 32-34. Discussion, vol. 2, pp 77-79.

Malone, A.W. (1985b). Factor of safety and reliability of design of cuttings in Hong Kong. *Proceedings of the 11th International Conference on Soil Mechanics and Foundation Engineering*, San Francisco, vol. 5, pp 2647.

Malone, A.W. (1985c). *The reliability of the design of cuttings in Hong Kong.* GCO Discussion Note 5/85.

Malone, A.W. (1987a). Landslide disaster prevention in Hong Kong and Indonesia. *Proceedings Seminar-Workshop on Preparedness for Geologic Disasters in Southeast Asia and the Pacific,* National Committee on Geological Sciences and Southeast Asia Association of Seismology and Earthquake Engineering, Manila (1984), 49-62.

Malone, A.W. (l987b). A note on the design of large diameter excavated piles in Hong Kong. *Hong Kong Engineer* **l5**, 9, l5-l7.

Malone, A.W. (l988) The role of Government in landslide disaster prevention in Hong Kong and Indonesia. *Geotechnical Engineering*, **l9**, 2, 227-252.

Malone, A.W. and P.G.D. Whiteside (l989) eds *Rock Cavern Hong Kong,* Institution of Mining and Metallurgy, 362 p.

Malone, A.W. and J. Premchitt (l990) Geotechnical considerations in the design of Chek Lap Kok Airport, Hong Kong. *In: Proc. Conf. Airports into the 2lst Century,* Hong Kong Institution of Engineers, 3l9-330.

Malone, A.W. (l990). Geotechnical phenomena associated with piling in Hong Kong. *Quart. J. Eng. Geol.,* 23, 289-305.

Malone, A.W., Chan, R.K.S. and U.K. Li (1992). New measures to increase professional input into blasting*. Proc. Conf. Quarrying the Rim.* Institute of Quarrying, 197-199.

Malone, A.W., Ho K.K.S. and T.S.K. Lam (1992). Piling in tropically weathered granite. Keynote Paper *Proc. Int. Conf. Geot. Eng. GEOTROPIKA '92,* Malaysian University of Technology, 411-458.

Malone, A.W. (1993a). Prospects for rock caverns in Hong Kong*. Tunnels & Tunnelling*, vol. 25, no. 2, 25-28.

Malone, A.W. and D.E. Oakervee (1993). The Hong Kong Port and Airport Projects. *Quarry Management* November 1993, 11-17.

Malone, A.W. and T.C.F. Chan (1993). Rock Cavern Development in Hong Kong. *In : Proc. NTU-PWD Seminar on Rock Caverns for Underground Space Utilization,* Nanyang Technological University, Singapore, 23-32.

Malone, A.W. (1994). The landslip disaster prevention functions of the Geotechnical Engineering Office in Hong Kong. In: *Proc Seminar on Geotechnical Aspects of Hillside Development*, IKRAM, Malaysia.

Malone, A.W. (1994). Book Review. Engineering Geology, by F.G. Bell. *Engineering Geology*, vol. 36 nos. 3&4, 316-7.

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Malone, A.W. & T.C.F. Chan (1996). A public education campaign on slope maintenance in Hong Kong. *Asia Engineer*, February 1996, 16-18.

Malone, A.W. (1996). The use of underground space in Hong Kong*. Tunnelling and Underground Space Technology* **11**,1, 57-64.

Malone, A.W. & T.S.K. Lam (1996). An Account of Human Resources in the Geotechnical Profession in Hong Kong. *Proceedings of the Workshop on Human Resources in Geotechnical Engineering.* Geotechnical Engineering Office and the Hong Kong Institution of Engineers, 9-23.

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Malone, A.W. (1997). Managing Slope Safety in a High Density City Prone to Landslips. *Proceedings of the Engineering for Public Safety Conference.* Hong Kong Institution of Engineers, 21-29.

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Malone, A.W., Ng, C.W.W. & J.W. Pappin (1997). Country report for Hong Kong on deep excavations. Collapses and displacements of deep excavations in Hong Kong. *Proceedings of the 30th Year Anniversary Symposium of the Southeast Asian Geotechnical Society,* Bangkok 5-124 to 5-129.

Malone A.W. (1998). Special Lecture. Slope movement and failure: evidence from field observations of landslides associated with hillside cuttings in saprolites in Hong Kong. *Proceedings 13th Southeast Asian Geotechnical Conference,* Taipei, eds SM Woo and YT Chung, Southeast Asian Geotechnical Society, v2, pages 81-90.

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Malone A.W. (2007). Session chair's report on discussion session on landslide risk management practice. *Proceedings of the 2007 International Forum on Landslide Disaster Management*, Hong Kong, editors Ken Ho & Victor Li, volume 1, p387-9

Hencher SR Lee SG & Malone AW 2008 Back analysis of landslides to allow the design of cost-effective remedial measures *1st World Landslide Forum Tokyo 251-254 Parallel Session Volume*

Malone A.W., Hansen A., Hencher S.R. & Fletcher C.J.N (2008). Movements of a large slow-moving landslide in schist near Pos Selim Malaysia. In *Landslides and Engineered Slopes,* eds Chen et al, Taylor & Francisv1 457-461.

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eds Clague & Stead, Cambridge University Press 373-382.