Preene groundwater consulting

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Curriculum Vitae

Dr Martin Preene BEng PhD CEng FICE CGeol FGS CEnv CSci C.WEM FCIWEM
UK Registered Ground Engineering Adviser

Professional Summary

Dr Martin Preene is a dewatering specialist and groundwater engineer with more than 30 years' experience in the management, control and exploitation of groundwater. He has worked for contractors and consultants on civil engineering, mining, oil & gas and infrastructure projects worldwide, including Europe, West Africa, Russia, North and South America, Central Asia, East Asia and the Middle East.

He has expertise in the design and construction of groundwater control by pumping (such as wellpoints, deep wells, eductors, relief wells, etc), groundwater depressurisation and cut-off walls to exclude groundwater. He has worked on the design and construction of open pit and underground mines, as well as other engineering projects such as tunnels, basements, metro systems, power stations and dry docks for construction of oil production platforms.

Dr Preene is a UK Registered Ground Engineering Advisor, Chartered Engineer, Chartered Geologist, Chartered Water and Environmental Manager and Chartered Environmentalist. He has wide professional interests in hydrogeology and is the author of more than 50 papers, including a dewatering textbook and several industry guidance documents on the investigation and control of groundwater.

Employment History

2014 to Date: *Preene Groundwater Consulting Limited, Principal*
Providing expert advice, consultancy and design services in the fields of dewatering, groundwater control and geothermal systems.

2017 to 2019: *British Geotechnical Association, Chairman*

2015 to 2017: *British Geotechnical Association, Vice Chairman*

2005–2014: *Golder Associates (UK) Limited, Principal (2011 to 2014); Associate (2008 to 2011); Technical Development Director (2005 to 2008)*

1999–2005: *Ove Arup & Partners Limited, Associate Director (2003–2005), previously Associate (2001–3), Groundwater Team Leader (1999–2001)*

2003–2005: *Nottingham-Trent University, Visiting Professor of Groundwater Engineering*

1992–1999: *WJ Groundwater Limited, Technical Director (1997–9), previously Chief Engineer (1992–7)*

1992–1999: *WJ Associates Limited, Director*

1989–1992: *Queen Mary and Westfield College, Research Assistant (part time)*

1987–1992: *WJ Groundwater Limited, Geotechnical Engineer*

1986–1987: *Soil Mechanics Limited, Assistant Engineer*

Supplementary Information

Academic Qualifications

1983–1986 BEng Civil Engineering (First Class Honours), University of Bristol
1989–1992 PhD Geotechnical Engineering, University of London, Queen Mary College.

Professional Qualifications and Affiliations

UK Registered Ground Engineering Adviser (2011)
Chartered Engineer, CEng (1993)
Fellow of the Institution of Civil Engineers, FICE (2002)
Chartered Geologist, CGeol (1997)
Fellow of the Geological Society, FGS (1992)
Chartered Scientist, CSci (2004)
Chartered Environmentalist CEnv (2005)
Fellow of the Chartered Institution of Water and Environmental Management, FCIWEM (2004)
Chartered Water and Environmental Manager, C.WEM (1999)
Member of the British Geotechnical Association (1992)
Member of the International Association of Hydrogeologists (1999)
Construction Skills Certification Scheme (CSCS) Civil and Structural Engineering Design Industry Accreditation (2005).

Professional Activities

Chairman of the British Geotechnical Association (2017 to 2019)
Vice Chairman of the British Geotechnical Association (2015 to 2017)
Member of Executive Committee of British Geotechnical Association (2014 to 2015)
Member of Editorial Advisory Panel *Géotechnique Letters* (2013 to 2015)
Member of Ground Engineering Advisory Panel for CIRIA (Construction Industry Research and Information Association) (2008 to 2012)
UK Nominated Expert on European Union CEN Technical Committee TC341, Working Group WG1, *Permeability Testing* (2006 to 2007)
UK Nominated Expert on European Union CEN Technical Committee TC288, Working Group WG11, *Vertical Drainage* (2002 to 2004)
Member EPSRC Civil Engineering College of Peers (1998 to 2001)
Member Editorial Advisory Panel *ICE Proceedings, Geotechnical Engineering* (1996 to 1998)
Assessor of papers for ICE Awards Committee
Scrutineer of Chartered Geologist candidates for the Geological Society
Referee of papers for *Ground Engineering*, *Géotechnique, Géotechnique Letters, Quarterly Journal of Engineering Geology and Hydrogeology, Geothermics, ASTM Geotechnical Testing Journal* and *ICE Proceedings*
Lecturer at ICE, Geological Society, Canadian Geotechnical Society meetings and on university MSc courses
External examiner for PhD and DEng Degrees for the University of Southampton.

Prizes and Awards

Halcrow Prize, Institution of Civil Engineers (2003)
Robert Alfred Carr Premium, Institution of Civil Engineers (1995)
British Geotechnical Society Prize (1994).

Selected publications

Preene, M. (2019). Design and interpretation of packer permeability tests for geotechnical purposes. *Quarterly Journal of Engineering Geology and Hydrogeology*, 52, 2, May, 182–200.

Preene, M, Roberts, T O L and Hartwell, D J (2018). Pumping tests for construction dewatering in chalk, *Engineering in Chalk: Proceedings of the Chalk 2018 Conference* (Lawrence, J A, Preene, M, Lawrence, U L and Buckley, R (eds)). ICE Publishing, London 631–636.

Lawrence, J A, Preene, M, Lawrence, U L and Buckley, R (eds) (2018). *Engineering in Chalk: Proceedings of the Chalk 2018 Conference.* ICE Publishing, London.

Preene, M (2017). Dewatering. Encyclopedia of Engineering Geology (Bobrowsky, P T and Marker, M, eds). Springer International Publishing, Cham, Switzerland.

Preene, M and Roberts, T O L (2017). Construction dewatering in Chalk. *Proceedings of the Institution of Civil Engineers, Geotechnical Engineering* 170, 4, August, 367–390.

Preene, M, Roberts, T O L and Powrie, W (2016). *Groundwater Control – Design and Practice, 2nd Edition*. Construction Industry Research and Information Association, CIRIA Report C750, London.

Preene, M and Loots, E (2015). Optimisation of dewatering systems. *Proceedings of the XVI ECSMFGE, Geotechnical Engineering for Infrastructure and Development.* ICE Publishing, London, 2841 –2846.

Deed, M E R and Preene, M (2013). Groundwater asset management in the mining industry.*13th Groundwater Division Conference*, Geological Society of South Africa, Durban, September 2013.

Yungwirth, G, Preene, M, Dobr, M and Forero Garcia, F (2013). Practical application and design considerations for fully grouted vibrating wire piezometers in minewater investigations. *International Mine Water Association Conference – Reliable Mine Water Technology*, Denver, Colorado, August 2013, Vol I, 229–237.

Cashman, P M and Preene, M (2012). *Groundwater Lowering in Construction: A Practical Guide to Dewatering, 2nd edition*. CRC Press, Boca Raton, 645pp.

Preene, M (2012). Groundwater control. *ICE Manual of Geotechnical Engineering Volume 2: Geotechnical Design, Construction and Verification* (J Burland, T Chapman, H Skinner and M Brown, Eds). ICE Publishing, London, 1173–1190.

Preene, M (2008). Groundwater control for construction. *Proceedings of the Institution of Civil Engineers, Water Management* 161, WM6, December, 323–331.

Brassington, F C and Preene, M (2003). The design, construction and testing of a horizontal wellpoint in a dune sands aquifer as a water source. *Quarterly Journal of Engineering Geology and Hydrogeology* 36, Part 4, November, 355–366.

Preene, M and Roberts, T O L (2002). Groundwater control for construction in the Lambeth Group. *Proceedings of the Institution of Civil Engineers, Geotechnical Engineering* 155, Oct., 221–227. (ICE Halcrow Prize 2003).

Preene, M and Brassington, F C (2001). The inter-relationship between civil engineering works and groundwater protection. *Protecting Groundwater.* Environment Agency, National Groundwater and Contaminated Land Centre Project NC/00/10, Solihull, 313–320.

Preene, M (2000). Assessment of settlements caused by groundwater control. *Proceedings of the Institution of Civil Engineers, Geotechnical Engineering* 143, Oct., 177–190.

Roberts, T O L and Preene, M (1994). The design of groundwater control systems using the observational method. *Géotechnique* 44, No. 4, Dec., 727–734.

Powrie, W, and Preene, M (1994). Performance of ejectors in construction dewatering systems. *Proceedings of the Institution of Civil Engineers, Geotechnical Engineering* 107, July, 143–154. (BGS Prize 1994).