



Professor Lord Mair
CBE MA PhD FREng FRS FICE
Senior Partner

Areas of expertise

Tunnelling, deep excavations, earth-retaining structures, foundations, ground treatment, innovative sensing techniques.

Recent experience

Robert Mair is the Sir Kirby Laing Professor of Civil Engineering at Cambridge University. He took up this appointment in 1998, having been in industry since graduating from Cambridge in 1971, and he remains a Senior Partner of GCG. He was Master of Jesus College 2001-11. As one of the founding directors of GCG he has been responsible for specialist advice to consulting firms, contractors and public authorities on numerous projects involving soft ground tunnelling, deep excavations, retaining walls and foundations, both in the UK and overseas. He has been closely involved with the design and construction of the Jubilee Line Extension for the London Underground, and with the Channel Tunnel Rail Link (now HS1) and Crossrail projects, for each of which GCG were appointed Specialist Geotechnical Advisors. He has also been responsible for geotechnical aspects of the design and construction of many London Underground tunnelling projects. Recent international projects have included the Singapore Mass Rapid Transit (for the past 7 years he was co-Chair of the Singapore Government's International Advisory Board), railway tunnels in the cities of Barcelona, Bologna, Florence, Rome and Warsaw, motorway tunnels in Bolu, Turkey and the Westerschelde Tunnel in Holland. He has been a member of many Expert Review Panels, including Crossrail, and he was a member of the French Government Commission of Enquiry into the collapse of a road tunnel in Toulon.

Since his appointment at Cambridge University his principal research interests have been in geotechnical aspects of underground construction. He is Principal Investigator and Head of the Centre on Smart Infrastructure and Construction, funded by EPSRC/Innovate UK and industry to a total value of £22m. He has delivered many keynote and named lectures, including the Unwin Memorial Lecture in 1992, the Sir Harold Harding Memorial Lecture in 1998, the Terzaghi Lecture in Vienna and Szechy Memorial Lecture in Budapest in 2001, the Jiminez Salas Lecture in Madrid in 2003, the Paviers Lecture in 2004, the Jennings Lecture in Johannesburg in 2005, the Rankine Lecture in 2006, the Muir Wood Lecture, World Tunnel Congress, Helsinki, 2011, the Casagrande Lecture, Boston Society of Civil Engineers, USA, 2014, and the Royal Academy of Engineering Hinton Lecture in 2016. He was Chairman of the Royal Society/Royal Academy of Engineering Report on Review of Shale Gas and Hydraulic Fracturing, published in 2012. He is Chairman of the Science Advisory Council of the Department of Transport.

Robert Mair was appointed an independent crossbench peer in the House of Lords in 2015.



GEOTECHNICAL CONSULTING GROUP

52A Cromwell Road London SW7 5BE United Kingdom
Tel: +44 (0)20-7581-8348 Fax: +44 (0)20-7584-0157 Email:admin@gcg.co.uk

Areas worked

UK, Belgium, France, Hong Kong, India, Italy, Poland, Singapore, Spain, Thailand, Turkey, United States.

Previous experience

On graduating from Cambridge in 1971, Robert Mair worked for 11 years for Scott Wilson Kirkpatrick and Partners (SWK), spending the first few years in the geotechnical and structural divisions before moving to their Hong Kong office. In Hong Kong he was engaged on design and construction of sea walls, reclamation projects and foundations for various industrial structures, including a major container terminal.

In 1976 he was seconded to Cambridge University to undertake research on the behaviour of tunnels in soft ground. On gaining his PhD in 1979 he returned to SWK's UK design office where he was responsible for geotechnical aspects of a wide variety of projects, involving highway schemes, tunnelling projects and foundations for industrial structures. He became one of the founding directors of GCG in 1983.

Education/Research

Sir Kirby Laing Professor of Civil Engineering, Head of Civil Engineering, Cambridge University, Fellow of St John's College, 1998 – 2001, Master of Jesus College, 2001 - 11
Royal Academy of Engineering Visiting Professor, Cambridge University, 1997-1998
Visiting Professor, Nottingham University, 1994-1997
PhD, Cambridge University, 1979
MA, Cambridge University, 1975
BA, Cambridge University, 1971 (Clare College)

Awards

Institution of Civil Engineers Crampton Prize 2015
Institution of Civil Engineers President's Medal 2013
Singapore Public Service Medal 2011
Honorary DSc University of Nottingham, 2011
Institution of Civil Engineers Crampton Prize 2008
Institution of Civil Engineers Crampton Prize 2007
South African Institution of Civil Engineers Jennings Award 2006
South African Institution of Civil Engineers Jennings Award, 2004
Institution of Civil Engineers Gold Medal 2004
Institution of Civil Engineers Geotechnical Research Medal, 1994
British Geotechnical Society Prize, 1980 (for work on tunnels)

Professional Qualifications

Fellow of the Royal Society (elected 2007)
Fellow of the Royal Academy of Engineering (elected 1992)
Fellow of the Institution of Civil Engineers (1990-present)
Member of the Institution of Civil Engineers (1976-1990)

Service on Technical/Professional Bodies

Member of the Quality Assurance Group advising the UK Committee for Radioactive Waste Management (DEFRA), 2006
Member of Royal Academy of Engineering Industrial Secondment Committee, 1999-2002
Member of UK Civil Engineering Panel for HEFCE Research Assessment Exercise 2001
Member of the Board of the International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE) 1997 - 2001
Chairman of the ISSMGE Technical Committee on Underground Construction in Soft Ground, 1996-2005
Chairman of the Institution of Civil Engineers Ground Board, 1993-1995
Chairman of CIRIA's Earthworks and Foundations Committee, 1985-1987
Member of Institution of Civil Engineers Commission on the Use of Sprayed Concrete Linings (NATM) for Tunnels in Soft Ground, 1995-1996
Member of SERC Geotechnics Steering Group, 1983-1988
Member of Editorial Advisory Board of Tunnels and Tunnelling, 1983-1986
Member of Géotechnique Advisory Panel, 1981-1984