



### Professional summary

Dr David Hight is a geotechnical engineer with more than 50 years of experience in research and practice in the UK and around the world. He is a Fellow of the Royal Society and of the Royal Academy of Engineering. David specialises in forensic geotechnical engineering, drawing on his background in and knowledge of site characterisation and the behaviour of soils and rocks. He has been called on to investigate the stability and performance of reclamations, tailings dams, excavated and natural slopes, tunnels, road pavements, ore cargoes, retaining structures, and foundations to onshore and offshore structures.

### Education and Career

Since 1983: GCG, London.

1993-2012: Visiting Professor, Imperial College London.

2000: Distinguished Visiting Professor, National University of Singapore.

1999: Visiting Professor, Nanyang Technological University, Singapore.

1997-98: Royal Society Industry Fellowship.

1988-89: Visiting Research Fellow, Nottingham University.

1985-87: Visiting Research Fellow, Imperial College London.

1983: PhD, Imperial College London.

1978-83: Lecturer in Soil Mechanics, Imperial College London.

1975-78: Research Fellow, Imperial College London

1971: MSc (Distinction), Imperial College London.

1965: BSc (1st Class), Imperial College London.

### Professional Qualifications and Memberships

Since 2016: Fellow of the Royal Society (FRS).

Since 2001: Fellow of the Royal Academy of Engineering (FEng).

### Experience with GCG

Dr Hight is one of the founding directors of GCG and has been responsible for specialist advice to consulting firms, contractors, public authorities, solicitors, insurers and oil and power companies on a large number of UK and overseas projects. He has been instrumental in establishing GCG since its formation in 1983 as one of the leading geotechnical consultancies, focussing on technical excellence.

### Technical Audits

Dr Hight has carried out technical audits of the geotechnical aspects of major projects, including the Gullfaks "C" gravity platform, Chek Lap Kok Airport (Hong Kong), the Rio-Antirrio Fixed Link (Greece), the London-Birmingham High Speed Railway (HS2), and the Punta Catalina Power Station in the Dominican Republic.

### Legal Assignments

Dr Hight has served as expert witness in litigation in the UK, Hong Kong, Singapore, USA, Australia and the Middle East. Cases have involved onshore and offshore site investigations, retaining wall failures, offshore foundations, breakwaters, piling, pipelines, ground improvement, reclamations, tunnel collapses, and landslides.

He served as an expert witness in the Committee of Inquiry into the Nicoll Highway Collapse in Singapore.

### Forensic Investigations

Forensic investigations carried out by Dr Hight include tunnel collapses in the UK (Gerrards Cross and Datchet) and overseas (Singapore, Brazil and Chile), a quay wall collapse in Barcelona, flow slide failures during construction of two major projects in

Since 1997: Fellow of the Institution of Civil Engineers (FICE).

Member of the British Geotechnical Association

### Scholarships / Awards

2015: British Geotechnical Association Medal (for best reviewed paper).

2008: Geotechnical Research Medal, UK Institution of Civil Engineers.

2006: Spirit of Telford Award (for contributions to engineering knowledge), ICE.

2003: Telford Gold Medal, UK Institution of Civil Engineers.

1993: British Geotechnical Society Prize (for work on sampling and testing of soft clay).

Bangladesh, landslides in the UK, Brazil and Mauritius, and reclamation failures in the UK and Hong Kong.

### External Advisor

Dr Hight has served as external advisor on the design and construction of a new port development in Egypt, on geotechnical aspects of design and construction of Terminal 5 at Heathrow Airport, and on the investigation and interpretation of ground conditions at the Port of Miami Tunnel. He has been advisor to the Arriyadh Development Authority on their rising groundwater problems and was a member of the International Consulting Board advising on construction of the Teles Pires Hydropower Project in the Brazilian Amazon. Dr Hight was a member of an Advisory Group set up by Nuclear Electric and Magnox to review the static and dynamic properties of the soils and rocks supporting the nuclear reactors at each of their sites in the UK. Most recently he has served on the Global Bauxite Working Group, investigating and reporting on moisture-controlled instability of bauxite cargoes for the International Maritime Organisation.

### Current Assignments

Current assignments include advising on: earthworks at Hinkley Point C Nuclear Power Station; interpretation of ground conditions at the proposed wind farm on Dogger Bank; stabilisation of the Gongo Soco Tailings Dam in Brazil; the reclamation for extension to Chek Lap Kok Airport; ground conditions at the Tuen Mun Chep Lap Kok Link Project Southern Outfall; construction delays on the Hong Kong Section of the Express Rail Link; the use of dry stacking for mine waste disposal in Brazil; review for Network Rail of their management of earthworks.

### Publications, Presentations and Research

Dr Hight has published widely on the subjects of soil behaviour, offshore geotechnics, soil sampling, laboratory testing, stability problems, earthworks and foundations. He is the lead author of the CIRIA guide on "Engineering in the Lambeth Group" and has published a number of state-of-the-art reports on the properties of the London Clay. Dr Hight delivered the 38<sup>th</sup> Rankine Lecture in 1998 and the theme lecture on soil characterisation at the XV<sup>th</sup> International Conference on Soil Mechanics and Geotechnical Engineering in 2001. More recently, David was invited to give the biennial 3<sup>rd</sup> Charles C. Ladd Memorial Lecture by the Boston Society of Civil Engineers in 2019.