



Professional summary

Dr Menkiti has 36 years world-wide experience in geotechnical engineering. He has worked on all sides of the construction supply chain in the UK and abroad. Dr Menkiti has expertise in tunnelling, slopes, earthworks, deep excavations, retaining walls, foundation systems, laboratory & field testing, characterisation of granular materials, instrumentation & monitoring, liquefaction risk, bulk cargo instability, seismic design and construction impact mitigation. He has undertaken forensic investigations, provided expert evidence at international hearings and served as Chairman of the British Geotechnical Association.

Education and Career

Since 1992: GCG, London

1995: PhD, Imperial College London

1986-87: MSc (Distinction), Imperial College London

1983-86: BSc (1st Class), Imperial College London

Scholarships / Awards

2018: Ground Engineering Technical Excellence Award – Finalist for "Strategy and Guidance for Scoping of Ground investigations, Crossrail 2"

2013-17: ISSMGE Prize for "Outstanding Society" over this four-year period was won by the BGA, covering the period the society was chaired by Dr Menkiti

2014: ICE London Civil Engineering "Greatest Contribution Award" for the Baker Street to Bond Street project

2013: ICE John Mitchell Medal Award

2009: British Geotechnical Association Medal

2004: Fleming Award

1995: Research Fellowship, EEC Human Capital Mobility Program

1989-91: Fellowship of the Royal Exhibition of 1851

1986: Governor's Prize, Imperial College (for top student in entry scholarship exam)

Experience with GCG

Dr Menkiti joined GCG in 1992. He became a Director in 2008 and a Senior Partner when the company became an LLP in 2011. He has had wide experience in the UK and abroad. Dr Menkiti has been involved in and has provided specialist advice on the geotechnical aspects of design, construction and operation of a very wide range of structures and their foundations. His experience was gained from all components of the supply-chain – working for owners, operators, consultants, contractors and subcontractors. Dr Menkiti has undertaken recognised, project-based research work on tunnels, pipe-jacked structures, retaining walls and slopes, for which he received the BGA John Mitchell Award in 2013. As a member of the Global Bauxite Working Group, he co-authored an international report on the stability of bauxite cargoes, which was adopted by the IMO in 2017.

From 1998 to 2001, Dr Menkiti was seconded to Bolu, Turkey, for construction of deep highway tunnels and viaducts through complex ground. As Chief Design Engineer, he was responsible for review and coordination of design submissions, as well as planning and interpretation of instrumentation and geotechnical investigations. Dr Menkiti was involved in evaluating the effects of the two large 1999 earthquakes on the tunnels, viaducts and surrounding ground. He worked to develop suitable remedial measures to meet the substantially upgraded seismic criteria from the Owner after the earthquakes. Research arising from this experience was recognised by the BGA Medal award in 2009.

Dr Menkiti has also worked on a range of local and international infrastructure projects. These include the Jubilee Line Extension Project London, Dublin Port Tunnel Ireland, Rome Metro C extension, Amsterdam North-South Metro, Warsaw Metro Line 2, North Kettering Business Park embankment construction, the Crossrail Project and the Forrestfield to Airport Link Tunnel, Perth, Australia, Expressway S-3 in Poland, East-West Highway Algeria, Dungeness A Power Station decommissioning and HDD drilling for utility cables and offshore windfarms. Some of these included assessment of foundation systems for infrastructure and high-rise buildings on karstic limestone in Malaysia and Saudi Arabia. For

1983-86: Holligrave Scholarship, Imperial College London (for top student in exams)

Service on technical / professional bodies

Since 2020: Member TC206 – The Observational Method/ Interactive Design Method

2016-18: Author and member Global Bauxite Working Group (GBWG) investigating and reporting on moisture-controlled instability of bauxite cargoes to the IMO

2016-17: Working Party on Engineering Geology of Groundwater in Design & Construction

2013-15: Chairman of the BGA

2011-13: Vice Chairman of the BGA

2009-15: British Geotechnical Association (BGA) Executive Committee

2011-15: Conference Organising Committee, ECSMGE, Edinburgh 2015

Since 2010: ISSMGE Technical Committee TC204 (Underground Construction in Soft Ground)

2009-11: Task Group that wrote IStructE Manual for Eurocode 7

Memberships

Institution of Civil Engineers

British Geotechnical Association

British Tunnelling Society

UK Society for Trenchless Technology

Countries worked

UK, Italy, Malaysia, Netherlands, Singapore, Turkey, India, Ireland, Poland, USA, Nigeria, Australia, Algeria, Dubai, Brazil, Philippines, Slovakia, Japan, Hong Kong, Algeria, Poland, Netherlands, UAE

Crossrail, Dr Menkiti led the GCG team that served as the Geotechnical Adviser to the Owner from project inception through to post-construction. As part of this, he reviewed grouting works for tunnel backfilling at Bond Street Station and oversaw extensive site trials for cement-bentonite grouting of monitoring instrumentation. For the Dublin Port Tunnel, Dr Menkiti was the named Geotechnical Engineer on site and later was the Design Team Leader for the DART Railway Crossing. For the Forrestfield-Airport Link, Dr Menkiti provided expert advice on tunnelling in sands/ gravels beneath live runways at Perth International Airport. This included advice on use of bentonite slurry for TBM tunnel works. He provided expert advice to a Contractor for large scale slope failures in a motorway in Slovakia. Currently, he is providing advice on the Hong Kong XRL High Speed Project and large scale motorway slope failures in Turkey. Following recent failures in Brazil, he advised on stability of tailings dams and dry stacking options for mine waste disposal.

Chris Menkiti has given technical advice to barristers and solicitors in legal and insurance cases. He has provided expert reports and presentations, and faced direct and cross-examinations in hearings/ settings of International Dispute Arbitration Boards, a House of Commons Select Committee, Development Consent Order and Hybrid Bill process hearings, as well as equivalent hearings in UK, Ireland and internationally. The legal and insurance cases have involved ground engineering and ground risk as well as instability of granular cargo during shipping. Dr Menkiti has also been invited to make training lectures/ videos for solicitors on these topics. He is the author of some 50 published papers and has given international lectures on large infrastructure projects and ground risk. He has organized, led and chaired technical sessions in Pan-European conferences.

Previous experience

Dr Menkiti attended the Civil Engineering course at Imperial College of Science Technology and Medicine from 1983 to 1986. He was awarded the Holligrave Scholarship as the top student on entry and the Governor's Prize for excellence on graduation. He completed the Soil Mechanics MSc course at Imperial College in 1987 with distinction.

Dr Menkiti undertook research in Soil Mechanics at Imperial College from 1988 to 1992, being awarded the Fellowship of the Exhibition of 1851. While there he developed and taught practical classes on the behaviour of footings on clay. His research was on experimental investigation of soil behaviour using a sophisticated state-of-the-art Apparatus. Following this work, Dr Menkiti has retained an interest in fundamental soil behaviour and the interpretation of laboratory and field tests to derive appropriate parameters for practical problems.

In 1995, Dr Menkiti worked in Italy under the auspices of the EEC, assisting in the development of soil mechanics research facilities at Politecnico di Bari in southern Italy. In 1997-8, he was seconded to a Civil Engineering Consultant in Malaysia and to a specialist Contractor in Singapore.