



Professional summary

Dr Skipper is a chartered geologist with 29 years' experience in ground risk, investigation and interpretation of complex soils and rocks, and peer review and forensic work. She works in a wide range of projects within tunnelling, foundation design of large/tall structures, large infrastructure projects, slopes and collapse features. Her geological expertise includes Tertiary soils of the UK, periglacial soils of UK and Ireland, and complex soils and rocks worldwide.

Education and Career

Since 2007: GCG, London
2003-07: Natural History Museum, London
2002-03: Dublin Port Tunnel Project
2000-02: Natural History Museum, London
1995-2000: PhD, Imperial College London
1993: BSc (1st Class), University of Greenwich

Memberships and Professional qualifications

Since 2011: Chartered Geologist with the Geological Society of London
Member of the Geological Club of the Geological Society of London
Member of the British Geotechnical Association
Member of the British Tunnelling Society
Member of the Geologists' Association
Member of the Royal Geological Society of Cornwall

Scholarships / Awards

2017: 18th Glossop Lecture and Medal, the Geological Society Engineering Group
2020: Geologists' Association Richardson Award

Experience with GCG

Dr Skipper is a specialist consultant geologist and is the 18th Geological Society Engineering Group Glossop Medallist. She joined the Geotechnical Consulting Group in July 2007 and became a Senior Partner in 2017. Her experience encompasses work on the ground investigation and construction of many major projects including Crossrail, Crossrail 2, the Thames Water Tideway Project, the Lee Tunnel, and the Northern Line Extension. She is on both Geotechnical Review and Formation Expert panels for High Speed 2. Recent projects include investigations of very large Quaternary collapse and solution features, tunnel lining deformation and sand ingress for London Underground, landslip projects throughout the UK, and major construction projects in the UK, Europe and the Middle East.

Previous experience

Following a first career in the field of medical crisis resource management. Dr. Skipper gained a degree in Geology with Engineering Geology at the University of Greenwich (1st Class Hons, 1993). After university lecturing experience she joined an overland expedition to Algeria and Niger with the University of Chicago, where she experienced the geology of the Atlas Mountains, Saharan and sub-Saharan desert environments.

From 1995 to 2000, she undertook a PhD at Imperial College, London studying the stratigraphy of the Lambeth Group throughout SE England and sites in NW Europe. During this period she worked with engineers on a wide range of tunnelling and other infrastructure projects including the Jubilee Line Extension, Channel Tunnel Rail Link (HS1), M11 Link Road, and Newbury Bypass, using this experience to produce a model which can predict these formerly poorly understood deposits. She co-authored a landmark paper on the lithologies of the Lambeth Group in 2000.

From 2000 to 2002, Dr Skipper worked as a geological consultant whilst undertaking research into stratigraphy and mineralogy at the Natural History Museum, London. She was involved in providing expert input into a range of ground investigations including Stratford Box (Channel Tunnel Rail Link/HS1), and Crossrail. During this period she first developed and led her range

2012: Geological Society Shell Lecture

2010: The Geological Society
Engineering Group Award

1993: ERASMUS scholarship for
Structural Geology

Service on technical / professional bodies

2002-05: Committee Member of the
Engineering Group for the Geological
Society of London

1993-96: Council Member for the
Geologists' Association

Countries worked

UK, Ireland, Spain, North and West
Africa

of Continuous Professional Development (CPD) and field training programmes in stratigraphy for the Geological Society, Ove Arup, Crossrail, Skanska Cementation, Norwest Holst, and Soil Mechanics.

In 2002 Dr Skipper joined the Dublin Port Tunnel Project as senior geologist and Designer Site Supervisor for Haswell. She introduced a system of rigorous logging, recording and interpretation techniques for all open cut and tunnelled sections in the faulted and rafted Carboniferous limestone and glacial tills of this 5.6km long project. This work led to the publication of a paper revising the Quaternary stratigraphy of the Dublin area.

Between 2003 and 2007 Dr Skipper was Consultancy Leader in Earth Sciences at the Natural History Museum, London, where she set up an Engineering Geology consultancy offering specialist stratigraphical and mineralogical services. She worked as a geological advisor on a wide range of projects including analysis of coral limestone in Mexico for shipping insurers, and advised on a wide range of infrastructure projects in the UK. During this period she also lectured at Imperial College (Engineering Geology MSc) and set up the very successful CPD training programme in stratigraphy, which she is continuing with GCG, and which are now a requirement for many major projects. At the NHM she undertook the Geological Society CPD training in acting as an Expert Witness, and has provided expert advice for a number of legal cases in engineering and shipping.

In December 2010 Dr Skipper received the Geological Society Engineering Group Award. In January 2012 she was invited to give one of the prestigious Geological Society Shell Lectures on the subject of 'Reconciling Past and Future Worlds: Geology and Ground Engineering', and in 2017 she was awarded the Geological Society Engineering Group 18th Glossop Medal. She was co-awarded the Richardson Award of the Geologists' Association for the best publication of 2020. Dr. Skipper has lectured in a number of countries world-wide and has appeared widely in the media as a geological authority.