



Glossop Medal:

Jackie Skipper

Specialist Consultant
Geologist at
Geotechnical
Consulting Group

Glossop Award:

Gemma Sherwood

Atkins

Date:

8th November 2017

Free attendance of
Glossop Medal
and Award
lectures.

Glossop

Reception:

**Delegate Fee
Fellows £30 / Non
Fellows £35**

Venue:

Royal institution,
Theatre
21 Albemarle
Street, London
W1S 4BS

Corporate
sponsorship
opportunities
available – Contact
Event Convenor for
details.

The 18th Glossop Medal

8th November 2017

presented by the Engineering Group of the Geological Society
at the premises of the Royal Institution, London.

Jackie Skipper

(BSc, PhD, DIC, CGeol, Specialist Consultant Geologist at Geotechnical Consulting Group)

**‘Variability and ground hazards: how does the ground get to be
'unexpected'?’**

Preceded by the 21st Glossop Award presentation:

Gemma Sherwood – The Construction of Hinkley Point C Nuclear Power Station

Programme:

Pre-lecture Tea/Coffee in the ground floor Atrium/Café (Royal Institution) from **17:15**;

Prompt start for Glossop Award/Glossop Lecture in the Faraday Theatre (Royal Institution) at **18:00**;

Glossop Reception in the Lower Library (Geological Society, Burlington House) at **20:00**.

Synopsis

When something goes wrong in a civil engineering project, ‘unexpected ground conditions’ are often blamed. Natural variability of the ground can indeed be the cause of engineering hazards - but what are the causes of this variability? The systems in which sediments are laid down, weathered, eroded, faulted, frozen, transported, all make soils (and their behaviour) more complex. Engineering itself represents a type of assault on the ground, and variable sediments respond variably - leading to a wide range of potential hazards. Understanding why the ground is variable therefore leads to a better understanding of this response, allowing improved prediction and management of risks.

Using case histories, the 18th Glossop Lecture will explore the relationship between ground variability and engineering risk, in particular how training can increase the level of understanding of the ground at every level of a project.

For further information and registration, please contact:

Event Convenor: Thomas D Hall email: tom.hall@mottmac.com





The 18th Glossop Lecture

Jackie Skipper BSc, PhD, DIC, CGeol



Dr Skipper is a specialist consultant geologist and a Senior Partner of the Geotechnical Consulting Group, which she was invited to join in July 2007. She is, and has been, very active as a geological advisor on the ground investigation and construction for many major tunnel projects including Crossrail, Crossrail 2, the Thames Water Tideway Project, the Lee Tunnel, the Northern Line Extension and is on both Geotechnical Review and Formation Expert panels for HS2. Recent projects include investigations of very large Drift Filled Hollow features, tunnel lining deformation and sand ingress for London Underground, landslip projects throughout the UK, and major construction projects throughout the UK, Europe and the Middle East.

She is a strong advocate of Project Specific Geological Training as a tool in project ground risk identification and reduction, and teaches a wide range of courses on aspects of engineering geology. She co-founded the Lyme Regis Fossil and Coastal Science Festival and continues to work on its science committee, and is passionate about the communication of science to the following generations of engineers and geologists.

Following a first career with the NHS, working in operating theatres and crisis resource management, Dr. Skipper changed careers, gaining a first in Geology in 1993 at the University of Greenwich. After university lecturing experience she joined an overland expedition to Algeria and Niger with the University of Chicago, where she gained hands-on experience of the geology of the Atlas Mountains, Saharan and sub-Saharan environments.

In 1995, she began a PhD at Imperial College studying stratigraphy and sediments of the Lambeth Group, which were at that time poorly understood. For this she worked with engineers on a wide range of tunnelling and infrastructure projects including the Jubilee Line Extension, Channel Tunnel Rail Link (HS1), M11 Link Road, and Newbury Bypass, using this experience to produce a new interpretation and model for the Group. On completion of her PhD 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 in engineering whilst pursuing research in 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 the developing Crossrail and Tideway projects.

Since joining GCG, in December 2010 Dr Skipper received the Geological Society Engineering Group Award for 'Her research work on the stratigraphy of the Lambeth Group in the south-east of England and on the stratigraphy of Dublin, her contributions to the training of engineering geologists and her ability to communicate the importance of the geology in an engineering geological context'. In January 2012 she presented one of the prestigious Geological Society Shell Lectures on the subject of 'Reconciling Past and Future Worlds: Geology and Ground Engineering'. Dr. Skipper has lectured in a number of countries around the world and has contributed to radio and television programmes as a geological authority.

