The Engineering Group



of the **Geological Society**













The 23rd Glossop Lecture: 23rd November 2023

From Mud to Rock and Back

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

Date: Thursday 23rd November 2023 Time: Tea/coffee at 18:00 followed by 18:30 start Venue: Royal Institution, Faraday Theatre, 21 Albemarle Street, London W1S 4BS

Speaker: John C Cripps

The Glossop Lecture will be preceded by the 26th Glossop Award presentation by Luke Johnstone: Differentiating Fill and Natural Soft Clays — The Value of Desktop Studies in Building a Geological Model.

Glossop Lecture Synopsis

As fine grained muddy sediments underlie large areas of the UK, including major urban areas and infrastructure routes, such mudrocks frequently form the bedrock at construction sites and slope and tunnel engineering works. They may also be used as fill or construction materials.

A review of the performance of mudrocks in engineering situations including slopes, tunnels and in embankment and foundation construction highlights the importance of durability and chemical weathering processes, especially the oxidation of pyrite. Advances in the understanding of the durability properties of mudrocks are also described.

It is argued that understanding controls on the properties of mudrocks underlies ways of avoiding the problems that can arise in civil engineering works involving these materials. It is apparent that there is much to be gained from the publication of case histories of past engineering projects, particularly those in which problems have occurred.

Attendance to both the Glossop Medal and Award lecture is free (with no booking required)

To celebrate the 60th Anniversary of the Engineering Group, a ticketed evening dinner and drinks reception will be held at Burlington House after the lecture. Tickets should be bought through Billeto, using the following link - https://tinyurl.com/2wn48rjy
For further information please contact James Todd (james.todd@arup.com)