The John Mitchell Award Lecture 2019

Wednesday 23rd January at 6.30pm

TELFORD THEATRE, INSTITUTION OF CIVIL ENGINEERS,
ONE GREAT GEORGE STREET, WESTMINSTER, LONDON SW1P 3AA

Ground Treatment
40 years from Black Art to Fully Engineered Solution

Clif Kettle
Clif Kettle Consulting Ltd

This lecture will trace the development of soil and rock injection over the past 45 years - from pocket-book empirical practice to a fully engineered process.

A very broad spectrum of improving technologies have taken the development of the process from one of field observation and pocketbook recording to a fully engineered process.

Technological improvements have taken place in the fields of:

- Advances in theoretical design concepts
- Evolution of specialist plant and equipment
- Development of new and improved injection materials
- Improvements and codification of injection and drilling processes
- Improved control measures
- Improved analytical tools and presentation of data
- Improved understanding of soil and rock properties
- Greater understanding and emphasis on safety from design to construction.

The result of all this activity, driven by contractors, equipment and materials manufacturers, and designers, has been to establish robust and quantifiable engineering processes with wide applications across the tunnelling, construction, and infrastructure industries.

The lecture will add a cautionary note, highlighting the need to protect and develop existing skills and experience, and the commercial and contractual pressures which are making this increasingly difficult. As a consequence of these constraints, there is an increasing shortage right across the construction industry of practical capability based on hands-on practical experience and observation in the field, with a real risk of a disconnect between designers, engineers, and operatives which is not addressed might lead to a reduction in specialist skills, confidence, and capability on the work site.

Please join us in the ICE Café Bar afterwards for drinks sponsored by

whiteford *explore the possibilities*

The BGA is a member of the Ground Forum

Advance registration required for personal attendance
https://www.ice.org.uk/events/john-mitchell-lecture-2019
Not a BGA member? Join today at http://www.britishgeotech.org.uk
In case of any query please contact BGA Co-ordinator
020 7665 2007 or email: bga@britishgeotech.org.uk
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http://www.linkedin.com/groups?gid=5061912

The John Mitchell Award Lecture 2019

The John Mitchell Award is presented annually by the ICE, based on a nomination from the BGA, for significant contributions in the field of geotechnical engineering. The award was instituted in 2008 in memory of the prominent geotechnical engineer John Mitchell of Arup, who was killed while observing piling works at a central London site in 1990.

The award criteria considered by the BGA include the following:

- In reflection of John Mitchell's career, selection will favour practical applications of up to date geotechnical concepts or models (rather than advanced theoretical academic practice).
- The BGA will consider individuals, like John, who in the course of their careers via incremental works have made significant contribution to geotechnical practice.
- Notwithstanding the above, the BGA will in addition consider any contemporary practitioner who has instigated a major advance in the geotechnical field, thus opening the award up to the innovative, regardless of age or incremental contribution count.

Clif Kettle

Clif Kettle has 45 years' of specialist geotechnical contracting experience, including 7 years with Colcrete-Keller, 6 years with Rodio Milan and 29 years with Bachy Soletanche. His experience includes 12 years of site-based working experience overseas, on projects in Pakistan, Iran, Egypt, Honduras, Turkey, Cyprus, Australia, and the USA, and he has also supported many projects through short term technical missions to over 20 countries.

Clif has played a key role in developing grout injection technologies and processes over the last three decades. He is internationally recognised as a leader in both fields, having worked on major UK infrastructure projects such as the Thames Barrier, Jubilee Line extension, Channel Tunnel Rail Link, Crossrail, Lee Tunnel, and currently, Thames Tideway. In addition he has worked on more than 25 dams world-wide in the roles of technical manager and/or contractual/planning manager.