



The  
Geological  
Society

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**Speakers:**

**Mike Winter**  
TRL

**Ian Nettleton**  
Coffey Geotechnics

**Oliver Pritchard**  
Arup

**Date:**

**Wednesday 6<sup>th</sup>  
February 2019**

**Tea / coffee: 17:30  
Lecture: 18:00**

**Drinks reception  
at Burlington  
House follows  
lecture**

**Location:**

**Burlington House**

The lecture will also be  
livestreamed at the  
following web address:  
<http://geolsoc.adobeconnect.com/eggs1902/>

**Free to attend.  
Registration not  
required.**

For further information  
please contact:

Event Convenor:  
Richard Brown

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# Innovative Geotechnical Slope Repair Techniques: Part of Highways England's Geotechnical Resilience Programme

**An evening meeting by the Engineering Group of the Geological  
Society (EGGS) and British Geotechnical Association (BGA)**

A brief overview of Highways England's Geotechnical Resilience Research Programme will be presented by Arup, Highways England's Programme Managers, followed by a more detailed session describing recently published work on the evaluation of Innovative Geotechnical Slope Repair Techniques.



The techniques evaluated are the planting of live willow poles, Fibre Reinforced Soil (FRS) and Electrokinetic Geosynthetics (EKG). These techniques were used in place of conventional approaches in order to reduce the overall impact of various challenges including environmental constraints (habitat and visual), access and utility constraints, and the need to reduce the scale and/or cost of traffic management and traffic delays. Trials of the techniques have been undertaken over 20 years. The available data and information has been assessed, detailed site visits undertaken to determine the effectiveness of each technique with the objective of recommended future use and where appropriate, developing design and specification guidance. Life Cycle Assessment has also been undertaken of the three techniques and conventional rock fill replacement to provide an intriguing comparison.

Monitoring was generally limited to just a few years post-construction. Longer term evaluation has not generally been undertaken and this and other generic lessons regarding the planning, design and execution of future trials will also be presented.



[www.geolsoc.org.uk/engineeringgroup](http://www.geolsoc.org.uk/engineeringgroup)