

UNIVERSITY OF  
BIRMINGHAM

# Midland Geotechnical Society Meeting Notice

[www.midlandgeotechnicalsociety.org.uk](http://www.midlandgeotechnicalsociety.org.uk)

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## Contact Us

Honorary Secretary:  
Scott O'Neill-Gwilliams  
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Tel: 0121 2148194

## Meeting Venue

Lectures start 7pm

Lecture Theatre G31, Dept of  
Mechanical and Civil  
Engineering, University of  
Birmingham B15 2TT

Refreshments are available  
prior to the meeting in the  
Shell lounge, Department of  
Mechanical and Civil  
Engineering, from 6:15  
onwards.

This lecture has been supported by sponsorship from:



## Monday 3<sup>rd</sup> February 2020

**Prof. David Chapman & Prof. Nigel Cassidy,  
Univeristy of Birmingham**

### **The National Buried Infrastructure Facility (NBIF)**

#### **Synopsis:**

The National Buried Infrastructure Facility (NBIF), which will open in mid-2020, is part of the £138m Government investment in UKCRIC (UK Collaboratorium for Research in Infrastructure and Cities) aimed at providing the UK with world-leading facilities (laboratories, urban observatories and computational facilities) to research infrastructure and cities. NBIF has been designed to provide a unique facility for researching buried infrastructure in its broadest sense. The main focus of the facility is a pit 25 m long x 10 m wide and 5 m deep offering the ability to test innovative construction techniques, sensing and monitoring methods and apply realistic loading regimes at large scale under controlled conditions.

This talk will present the construction of the facility to date and the capabilities on offer in the facility. The talk will also explore how industry can get involved with the facility and so please come along prepared to engage in a discussion on potential uses of this facility.

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### About the Speakers:



David Chapman is Professor of Geotechnical and Underground Engineering at the University of Birmingham and Technical Director of the National Buried Infrastructure Facility. After graduating from Loughborough University he spent a period in industry before returning to Loughborough University to do a PhD in Geotechnical Engineering. He then spent six years as a lecturer at Nottingham University before moving to Birmingham in 1998. His research has focused on underground construction, including pipelines and tunnels, and particularly soil-structure interaction problems. He has published over 150 papers and is the lead author on the successful book 'Introduction to Tunnel Construction', now in its second edition. He is a Chartered Civil Engineer.



Nigel Cassidy is Professor of Geotechnical Infrastructure Engineering at the University of Birmingham and Deputy Director of the National Buried Infrastructure Facility (NBIF). He has over 30 years' academic and industrial experience in near-surface geophysics, hydrological & geotechnical engineering and numerical modelling research. He is a member of the Natural and Environmental Research Council Strategic Advisory Board and until recently, was a Trustee and Council member of the Geological Society. Nigel's current work is focused on the development of sensing technologies for infrastructure and environmental monitoring applications and the development of machine learning processes for the autonomous interpretation of sensor data. He has published over 100 scientific papers, book chapters and research articles.

### Upcoming lectures..

Monday 3<sup>rd</sup> February 2020

#### **National Buried Infrastructure Facility**

Prof. David Chapman, *University of Birmingham*

Monday 2<sup>nd</sup> March 2020

#### **CIRIA Abandoned mine workings manual**

Scott O'Neill, *Aecom*

Monday 6<sup>th</sup> April 2020

#### **John Mitchell Award Lecture**

Speaker TBC

Monday 4<sup>th</sup> May 2020

#### **AGM & Environmental Lecture – Challenges of Redeveloping Historic Landfills**

Yolande Macklin & Kate Canning, *Arup*