

UNDERSTANDING AND MANAGING THE RISKS OF UNFORESEEN GROUND CONDITIONS

Keele University is delighted to invite RSK's award-winning ground investigation experts to give a seminar on the latest developments in ground investigation technologies and techniques.

All delegates are invited to tour the Keele Sustainability Hub and learn more about Keele's research in this area.

DATE

19 March 2013

VENUE

Keele University Sustainability Hub,
Home Farm, Keele University, Keele, ST5 5AA

AGENDA

12:30-14:00: Complimentary lunch with networking

14:00-16:00: Seminar sessions

16:00: Tour of the Keele Hub

CPD SEMINAR ON GROUND INVESTIGATION

Encountering unforeseen ground conditions mid-project can be an expensive problem.

Buried obstructions, waste and contamination, mineshafts, solution features, soft ground, landfills, storage tanks, unexploded ordnance, archaeological features and difficult geology may variously lie in wait.

Often of early concern are buried services. Managing the health and safety risks means getting the right information at the right time. A well-designed investigation can pick up much more than just services at the same cost.

Each project is different. This seminar will demonstrate how the latest developments in surveying and geophysics can be tailored to understand and reduce the specific risks encountered at any particular stage in a project.

A graphical approach to visualising information and risk will be used to discuss the value and usefulness of different types of intrusive and geophysical site investigation data. Interactive sessions will illustrate when and when not to use geophysics, and, if it is used, how best to integrate it into a site investigation approach. Detailed case studies will illustrate the lessons and objectives.

OBJECTIVES

- Provide an understanding of how to use information from historical data, maps and previous site investigations to develop a conceptual model of the risk or the need for information in the ground to be investigated
- Provide an appreciation of the relative value of intrusive and geophysical site investigation techniques in delivering information about ground conditions at a site
- Describe a rationale for deciding whether to use geophysics as part of a site investigation
- Provide an overview of the most commonly used geophysical techniques and best practice in using them as part of an integrated site investigation
- Provide awareness of the importance of integrating all the available information into the interpretation of the geophysical data, which is just one part of the site investigation data for producing the interpretative ground model

WHO SHOULD ATTEND

Professional, technical and management staff in the following areas: infrastructure asset management; utilities; airports, road and rail; civil engineering; construction management and contracting; conventional, nuclear and renewable power generation and distribution; environmental management. Undergraduate and postgraduate students in geosciences and engineering.



How much is hidden underground? Ground conductivity data reveals the complex legacy of brownfield sites.

Keele has been at the forefront of high-resolution geophysics for many years. Led by Professor Peter Styles, the geophysics team provides consultancy services for the UK government, National Grid, United Nations and international governments including Qatar and Western Australia.

Places are strictly limited. For further information and to book, please contact

Collette Smallwood,
Keele University Sustainability Hub
Tel: +44 (0)1782 733555
Email : c.a.smallwood@keele.ac.uk

COURSE LEADERS

Dr George Tuckwell PhD CGeol CSci, Director of RSK
Prof. Peter Styles CGeol FRES CSci FIMMM

COURSE RESOURCES

*Environmental Geophysics:
Everything you ever wanted (needed!) to know but were afraid to ask!*

A reference for geophysical techniques and applications.



Ground Investigation
Specialist of the Year 2012