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Editorial

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I am delighted to welcome you to the August 2010 issue of *Geotechnical Engineering*. My editorial for this issue covers improvements to the review process that have been made in the past year, the Geotechnical Engineering Lecture and introduces the papers in this issue.

During my time on the editorial advisory panel, the response time to authors submitting papers to *Geotechnical Engineering* has been a target for improvement. Our last panel meeting brought the news that streamlining of the review process has led to a fourfold reduction in the time for first response to authors. This in turn should lead to a reduction in the time taken to publish completed papers. Thanks are due to both the members of the panel and to the editorial coordinator for making this happen.

The Geotechnical Engineering Lecture is a joint meeting between the Institution of Civil Engineers (ICE) and the British Geotechnical Association (BGA) on Wednesday 22nd September 2010. This evening lecture at One Great George Street is held every other year, with the lecture topic based on exceptional papers published in *Geotechnical Engineering* over the intervening period, as voted by the advisory panel. This year's lecture is a double-header, as it was felt that two papers warranted inclusion.

Benoit Jones will explain the process involved in using LaserShell – an innovative method of SCL tunnelling, first used on the front-shunt tunnel at Terminal 5 Heathrow. This is described in detail in 'Evaluation of innovative sprayed-concrete-lined tunnelling' (Jones *et al.*, 2008). The presentation will also describe the sophisticated 3D numerical modelling used to verify the method both before and during construction.

Chris Mundell's presentation, based on the paper 'Limited equilibrium assessment of drystone retaining structures' (Mundell *et al.*, 2009) will detail the programme developed at the University of Bath to test the structural stability of dry stone walls. Chris will present his research in practical applications of the assessment techniques and discuss ongoing and future research into the subject.

Advanced booking is required for this lecture, at www.ice.org.uk/geotechnical.

The papers in the August issue of *Geotechnical Engineering* are

largely taken from academia. Sivakumar *et al.* (2010) investigate the use of granular columns in compacted fills in the laboratory. The paper provides useful insight into the use of ground improvement in both engineered and non-engineered fills. With the current emphasis on sustainability in the industry, these data on the use of granular columns are to be welcomed.

The installation of long pipelines using horizontal directional drilling has been considered by Royal *et al.* (2010). A numerical study was carried out to consider the feasibility of installing pipelines of up to 10 km in length in this manner. They show that tight control of the borepath is critical if pipelines of this length are to be achieved using currently available equipment and techniques.

The third paper by Bryson and Zapata-Medina (2010) tackles the persistent problem of modelling installation effects for secant-piled retaining walls. They compare their 3D finite-element modelling to detailed case history data to highlight areas that influence ground movements caused by wall installation.

Liu *et al.* (2010) consider a novel approach to founding buildings on thick deposits of soft soils using a mixture of flexible and rigid foundation elements. Field testing was used to demonstrate the performance characteristics of this type of foundation.

In the final paper in this issue, Yukselen-Aksoy and Kaya (2010) outline a new approach to the prediction of swelling potential of soils. They suggest a correlation between specific surface area and swelling behaviour as being more reliable than current methods.

This issue marks the 'half-term' of my three years on the editorial advisory panel. I hope that you enjoy this issue as much as I have enjoyed being involved in its production.

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