Editorial

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As chairman of the *Geotechnical Engineering* advisory panel I would like to welcome you to the last issue of 2012. At the beginning of the year (and my term as the new chairman) myself and the panel set ourselves several goals. The first was to clarify the identity of the journal and define a distinct niche in content for both our readers and authors. Thus, the journal aims to publish high quality content of a practical and applied nature from both industrial and academic geotechnical engineers alike. The journal welcomes papers that highlight new or novel approaches (including case studies) but feels that papers should demonstrate how the findings may change current approaches and be included in geotechnical practice. The ‘acid test’ used on papers is that they are of immediate use or value to a practicing geotechnical engineer. In order to maintain this identity I would ask authors to use this test and to check that their papers are best suited to this title. For instance the ICE proceedings contain other relevant geotechnical journals such as; *Géotechnique*, *International Journal of Physical Modelling in Geotechnics*, *Ground Improvement* and *Geosynthetics International*.

One of the on-going goals of the panel is to reduce the time between submission and availability of accepted papers. I would like to thank the panel and reviewers for all of their hard work over the last 12 months. This has resulted in a 50% reduction in the number of papers the panel is handling at any one time, even with increasing annual paper submissions. Papers are also available in the public domain several months before print as a result of the journals Ahead of Print (AOP) system. At the time of writing 45 papers were available AOP with five papers added since the 1st October 2012. The immediacy that AOP allows is demonstrated through the current themes of available papers. For instance the paper by Loveridge and Powrie (2012), ‘Pile heat exchangers: thermal behaviour and interactions’, identifies the key factors which influence the heat transfer and thermal–mechanical interactions of thermal piles. The journal team also appreciate that readers and authors would like to see articles in press as quickly as possible. To achieve this, the journal will be moving to a new thicker issue for 2013 with an increase from 64 to 96 pages allowing the publication of two to three additional articles per issue. To view or access the AOP papers use the link from the journal’s website homepage or visit www.icevirtuallibrary.com/content/serial/geng/fasttrack.

At the close of the year it is usual to acknowledge the contribution of panel members who are standing down after 3–4 years of

valued input to the journal. I would like to express my thanks to eight members who are leaving the editorial panel at the end of 2012. We are grateful for the support and hard work provided by Matthew Baldwin, Stephen Fort, Nebojsa Kovacevic and David Shohet. We also very much appreciate the service provided by our international panel members, Elisabeth Bowman, Graham Elliott, Susan Gourvenec and Trevor Orr who are retiring from the panel this year. During the last 12 months we have been lucky enough to be joined by international panel members from Brazil, China and India. We have also had a very good response to our call for new members who I will introduce in the New Year.

In October I was lucky enough to attend the annual ICE awards ceremony. In the case of the journal, the occasion recognises papers published in the previous year; once again the panel was pleased to submit a number of *Geotechnical Engineering* papers for consideration. Two *Geotechnical Engineering* papers were selected to receive awards. The John Mitchell Medal, awarded for the best paper in geotechnical practice, site-based innovation or geotechnical safety, was awarded to Czerewko *et al.* (2011) for their paper entitled ‘Assessment of pyritic Lower Lias mudrocks for earthworks’. This paper will be presented at a British Geotechnical Association (BGA) event on Wednesday, 16 January 2013 at the ICE, London. The Crampton Prize, awarded annually for the best paper on practical geotechnical engineering, went to Steedman and Sharp (2011) for their paper ‘Physical modelling analysis of the New Orleans levee breaches’. It was very rewarding to help celebrate the authors’ success; a brief report of the awards will be included in the February 2013 issue.

This issue contains four papers, a discussion piece and a book review. The first paper, by Orr (2012) continues discussion on the application of Eurocode 7 begun by Markham (2012). This issue also contains a discussion piece on the Markham (2012) paper (Markham *et al.*, 2012). The paper by Orr (2012) constitutes a review of how Eurocode 7 has affected geotechnical design. The paper is based upon the authors own experience of working with and drafting standards. It also pulls together recently published experience and commentary from national and international authors. For example it considers new publications on finite element and numerical analyses for design to Eurocode 7. The paper identifies the status of standards for geotechnical investigation and testing (current at the time of writing), an area that is currently evolving with new standards being published regularly. As well as discussing the experience of users the paper also mentions some of the problems with implementation and future

plans to change and improve the standard (in 2020!). I think this paper, that by Markham (2012) and the discussion piece at the end of the issue are a must read for practioner's using Eurocode 7 and associated standards. The journal is keen to publish similar review type papers whether they are on standardisation or a more specific theme of interest to you.

The second paper in the issue by Long *et al.* (2012c) draws together the geotechnical data and construction experience from nine sites concerned with the installation of propped, anchored and cantilever retaining wall systems. All of the sites are located in Dublin, Ireland and encounter significant deposits of estuarine soils where basement construction may not have previously undertaken due to perceived difficulties in these ground conditions. The paper focuses on three case histories that are well documented with detailed construction monitoring and as-built information of the final construction solutions. This paper and those previously published by Long *et al.* (2012b) and Long *et al.* (2012a) form a useful knowledge data base for future excavations and tunnelling in Dublin.

The third paper in the issue is concerned with the use of a cluster analysis and its application to data obtained from pressuremeter testing in difficult soil conditions for the Grenoble North transversal tunnel development (Monnet and Brouke, 2012). Pressuremeter testing was adopted due to difficulties in sampling the sandy and silty soils encountered. In such conditions it may be difficult to identify the different horizons encountered and sample without destroying the in situ soil fabric. The statistically based cluster analysis presented was then used to group data of similar mathematical characteristics. This allowed determination of the mean values of mechanical behaviour for each soil layer as well as the positions of interfaces and the thickness of the layers on the site. The final paper (Naeemifar and Yasrobi, 2012) is a triaxial based soil element study looking at the collapse and instability behaviour of loose sand resulting in liquefaction. The study focuses on clay-sand mixtures, with clays of different plasticity indices, which have previously been recognised as problematic during earthquakes (Chi Chi 1999 and Niigata 2004). The study shows that increasing the clay content up to 15% increased the potential for liquefaction with the percentage of fines having greater influence than the particular plasticity of the clay added.

I hope you find this issue interesting and stimulating. If you would like to raise any particular points regarding the papers published in the issue please consider contributing to the journal in the form of a discussion piece. Instructions on the preparation and submission of a discussion are included at the end of each paper.

For up to date information on Geotechnical Engineering please visit <http://www.icevirtuallibrary.com/content/serial/geng>.

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