Editorial

Trevor Orr PhD, Eur. Ing, CEng, FICE, FIEI

Associate Professor, Department of Civil, Structural & Environmental Engineering, Trinity College, Dublin, Ireland

As honorary editor of *Geotechnical Engineering* and chairman of its Editorial Advisory Panel, I am very pleased to welcome you to this first issue of 2017. The beginning of a new year is an appropriate time to outline the Panel's aims for the next 12 months. These include enhancing the journal's international standing and improving its reader and author satisfaction. The present high standing of the journal is reflected in the 15% increase in the number of submissions received in 2016. This should be reflected by an increase in the quality, novelty and relevance of the papers published this year.

Looking ahead, the themed issue that will be published later this year is on 'geotechnics of energy provision' and is being championed by Anthony Leung and Minh Nguyen. There has been a great response to the call for papers with a high number of good technical papers submitted, so I am confident this issue will be a valuable reference in the future for those involved in energy provision projects.

My attention was drawn recently to an article in *The Economist* (Anon, 2016) entitled 'Why research papers have so many authors', which reported that the number of authors of research papers, particularly in science and medicine, has increased significantly in recent years. This is partly because advancement in academia is dependent on the quantity and quality of one's publication record. From a survey of research papers published by the RELX Group, the average number of authors per paper grew from 3.2 in 1996 to 4.4 in 2015. I have investigated if there has been a similar trend in the case of papers in *Geotechnical Engineering*. Examining the number of authors on papers published in *Geotechnical Engineering* over the past 20 years, the average number of authors per paper was 3.0 in 1996, 2.8 in 2006 and 3.0 in 2016, so there has been no trend in this journal towards papers with more authors. I was interested to discover that there has been no increase in the number of authors of papers published in *Géotechnique* either, as its average number of authors per paper in 2016 was also 3.0.

This issue contains eight good papers, all of which have practical relevance and should be of interest to the readers of this

journal. If you would like to raise any points regarding these papers, please consider contributing a discussion or briefing note. Instructions on the preparation and submission of discussions, briefing notes and papers are included at the end of each paper. For up-to-date information on *Geotechnical Engineering* and to see articles that have already been published online Ahead of Print, please visit <http://www.icevirtuallibrary.com/content/serial/geng>. At the end of this issue, a note about the award of the Crampton Prize for the best paper in *Geotechnical Engineering* in 2016 is provided, plus a list of those who kindly undertook the important role of refereeing papers for the journal in 2016.

In the first paper of this issue, Yeow and Coop (2017) show how relatively simple modifications of advanced soil models for London Clay, which capture the anisotropy of small strain stiffness, can significantly improve settlement predictions. This is of particular relevance for serviceability limit state design, which is becoming increasingly important. Another paper involving London Clay recently published in this journal is the paper by Martin *et al.* (2016), who examined the adhesion factors for piles in London Clay. The paper by Pugh (2017) is also concerned with serviceability as it investigates settlement failures of building floor slabs supported by stone columns in very soft clay. The author's important conclusion is that the range of loadings and thicknesses of very soft soil – for which the current design and construction methods for stone columns would be viable – is quite limited. The paper by Alipour *et al.* (2017) is again concerned with settlement as it examines, through laboratory experiments and numerical analyses, how the addition of various amounts of cement and changing the water content of clay soils can control the settlement of a structure supported by deep soil mixed columns.

The paper by Alzabeebee *et al.* (2017) presents the results of a study of the soil pressure due to traffic on buried pipes. The authors conclude there are significant issues with the maximum soil pressure equation in the current British Standard and offer a new equation to predict the maximum pressure on buried pipes. The next paper by Qian *et al.* (2017)

Figure 1. (a) Dimensions of model piles; (b) shape of the finished piles

describes the results of laboratory tests on model helical ribbed piles (Figure 1) and finite-element analyses to investigate the soil–pile interaction mechanism and how the pull-out resistance of piles is increased by the ribs and varies with rib spacing. Gorasia and McNamara (2016) have also published a paper in this journal on ribbed piles, but investigated their bearing capacity rather than tensile resistance.

The common problem of lining cracks in highway tunnels in loess soils is investigated in the paper by Liu *et al.* (2017), who conclude that lining cracking is caused by flooding of the surrounding rock, causing the loess around the lining to soften and the stresses in the lining to increase and generate the cracking. Zhou *et al.* (2017) examine three commonly used methods to assess the internal stability of 34 granular soil specimens subjected to seepage. Based on secant slope curves obtained from particle size distribution curves they propose a new synthetic chart for assessing the internal stability of granular soils. In the final paper, Wong (2017) investigates the very low c_v values obtained from oedometer tests on granitic soils in Hong Kong and justifies the validity of obtaining c_v values for the more permeable soils in Hong Kong from isotropic consolidation tests in a triaxial cell.

Finally, I would first like to thank the retiring Panel members: Christopher Barker, Stephen Buttling, Peter Day, James Doherty, Christopher Bambridge, Xian Feng Ma, Heleni Pantelidou, Christopher Parks, Mike Sweeney and Stefano Utili. The Panel has benefitted considerably from their guidance and expertise. I am pleased to welcome their replacements: Dipanjan Basu (University of Waterloo, Canada),

Apollonia Gasparre (GCG, London, UK), Xueye Geng (University of Warwick, UK), Sarah Glover (Arup, London, UK), James Go (Arup, London, UK), Mark Jaksa (University of Adelaide, Australia), Stefan Larsson (KTH Stockholm, Sweden), Clare Pailing (United Utilities, Warrington, USA), Margarida Pinho Lopes (University of Southampton, UK) and Andrew Smith (Coffey, Harrogate, UK). I am also happy to report that Minh Nguyen is continuing as Deputy Chairman.

I hope you enjoy reading the articles in this issue and wish you a happy and productive year in 2017.

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