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Editorial

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Editorial

Jonathan Knappett MA, MEng, PhD
Immediate Past Chairman, Editorial Advisory Panel; Professor of Civil Engineering, University of Dundee, Dundee, UK

Luc Thorel PhD
Chairman of the Organising Committee, EUROFUGE 2016; Directeur du Laboratoire Géomatériaux et Modèles Géotechniques, IFSTTAR, Nantes, France

The editorial in this second issue of 2019 serves two purposes: firstly, to introduce this 'in-focus' issue, including themed content from the 3rd European Conference on Physical Modelling in Geotechnics (EUROFUGE 2016), and secondly, to say a big thank you to the community for the support received over the past 5 years (2014–2018 inclusive) as the journal changes its Chair.

Issue 2 includes two papers which are extended versions of outstanding work presented at EUROFUGE 2016, as identified from peer-review of the conference submissions. The conference, held over 1st–3rd June 2016 at IFSTTAR in Nantes, was hugely successful with some 56 communications and 85 participants from 20 countries, building on the previous EUROFUGE conference held in the Netherlands at TU Delft in 2012. Five major themes were selected for the conference: natural risks, infrastructure, renewable energy, physical modelling equipment and back to basics.

The paper by Madabhushi and Haigh (2019) investigates the use of tactile pressure sensors to measure dynamic lateral earth pressures in retaining structures subject to earthquake ground motions, and therefore covers both the natural risks and the physical modelling equipment themes. A new calibration and data-processing scheme is introduced which can mitigate the effects of sensitivity on sensing elements using centrifuge spin-up data, which is commonly collected 'for free' but often little used. Such pressure sensors are becoming increasingly popular in physical model testing, such that the new procedure is timely.

Schiavon *et al*. (2019) investigate the performance of helical (screw) anchors under cyclic uplift loads. Such anchors are commonly used for supporting infrastructure such as transmission towers and highway and rail infrastructure where installation can be rapid and low-impact. They are increasingly being proposed for renewable energy systems, and this paper therefore covers the infrastructure and renewable energy themes. The results define loading conditions which induce a cyclically stable response, uplift accumulation and post-cyclic monotonic capacity degradation, and define future directions for research work in this area.

The full conference proceedings are available for free from the ISSMGE online library, and can be accessed at https://www.issmge.org/publications/online-library by selecting 'European Conference on Physical Modelling in Geotechnics (EUROFUGE)' in the Database field of the search filter, and searched by theme using the Category filter.

In addition to the two aforementioned themed papers, issue 2 also includes a paper by Houda *et al*. (2019) on 1***g*** modelling of conventional piles, also under vertical cyclic loading (but compressive, rather than tensile), which similarly highlights the interaction between cyclic loading and subsequent monotonic capacity, and the accumulation of settlement. A final paper using centrifuge modelling (Antonaki *et al*., 2019) relates to the stability of sloping mine tailings. Although the paper is focussed on stability under earthquake ground motions, the recent catastrophic collapses of tailings dams in South America indicate just how big the impacts of failure of this type of material can be and therefore the value of physical modelling in addressing such problems.

I would like to finish by thanking the Editorial Advisory Panel (EAP), staff at ICE Publishing, the journal readership and the wider physical modelling community for all of the support I have received over the 5 years I have acted as Chair of the EAP (2014–2018). During this period the journal has received its impact factor and indexing, increasing submissions by a factor of around three. Along with the introduction of popular themed issues, this has allowed the journal to grow significantly, most notably from four to six issues per year, with a very healthy amount of content also available 'Ahead of Print' (and fully citable) on the ICE Virtual Library. I would like to thank all of the EAP members and reviewers for their dedication in managing such an increase in workload while minimising the impact on the duration of the review process. As I 'hand over the reins' to the new Chair, who many of you will know – Dr Conleth O'Loughlin, Associate Professor at University of Western Australia and Manager of the National Geotechnical Centrifuge Facility there – I believe the journal is in very safe and capable hands and has a bright and sustainable future. I very much look forward to seeing how the journal continues to develop.

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