

Editorial

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Welcome to volume 2 of *Geotechnical Research*, the first gold open-access journal offered by the *Institution of Civil Engineers*. While 2015 is underway, I would like to take this opportunity and look back on 2014, the very first year of the journal. This has been an exciting and hard-working time for me, as Editor-in-Chief, and for all Editorial Board members. We consider our editorial work not only as a great honour but also as a great responsibility. Together with ICE Publishing, we have made a huge effort in launching the journal and promoting it to an international audience. As a result of our efforts, the *Geotechnical Research* homepage had approximately 16 000 visits in 2014, which, in my opinion, is an excellent start!

It is my great pleasure to report that last year, ten research articles were published in *Geotechnical Research*, covering 152 pages of volume 1. Our commitment to a rapid publication process was achieved. The average submission-to-decision time was 25 days, and the average submission-to-acceptance time for the papers published in 2014 was 51 days. All the papers were published online within 4 weeks of the final acceptance. I believe such a time frame for peer review fits very well with the modern era of electronic publishing.

I would also like to report that the manuscripts submitted to *Geotechnical Research* in 2014 came from 19 different countries, and the acceptance rate was about 40%. Such data prove that the journal is finding its place in geotechnical communities around the world. At the same time, a robust peer-review process for the journal ensures that only high-quality research or engineering work is published in *Geotechnical Research*.

The main aim of gold open-access journals, such as *Geotechnical Research*, is to make research outputs more widely read, cited and used. The full text articles published in volume 1 of *Geotechnical Research* were downloaded approximately 6000 times, with the most popular paper, by Jardine (2014), being downloaded almost 1100 times. Although such a metric should not be used to measure the direct impact of open-access publications, it shows that open-access material, free to download and view, significantly increases the potential readership of published articles, which is one of the main aims of this journal. It is also worth mentioning that open-access papers published in *Geotechnical Research* contributed to more than 50% of open-access articles published by ICE in 2014.

Looking back at open-access publishing developments in science and engineering in 2014, I am also extremely happy to see that publishing research work as open access is becoming increasingly

important in many countries around the world. For example, the two top scientific departments in India, the Department of Biotechnology and the Department of Science and Technology under the Ministry of Science and Technology, have just announced jointly a new open-access policy (Open Access India, 2014). Although this initiative does not yet directly support gold open access, it is hoped that Open Access India will develop more awareness on opening up access to publicly funded research in India. I have no doubt that many other countries will join in this trend in the future.

The first issue of *Geotechnical Research* in 2015 includes two original research articles. The first article, written by Dean (2015), proposes a new particle mechanics approach to continuum constitutive modelling of soils, which is based on three foundations. The first one involves a new approach to Cauchy's concept of stress, based on a way of organising particle mechanical information. The second foundation involves the load-spreading and displacement-spreading effects of particles in an aggregate. The third foundation takes account of recent proposals in the thermomechanics of granular media. The article presents validation calculations demonstrating realistic predictions for monotonic and cyclic plasticity, critical states, dilation, induced anisotropy and non-coaxiality as a result of principal axis rotation.

The second article, by Chu *et al.* (2015), reviews the experimental work on instability behaviour of dilative sand carried out by Prof. Jian Chu and his collaborators in the last 15 years. The authors demonstrate that pre-failure instability may occur for medium loose to dense sand under various drainage conditions. The experimental data presented in the paper show that the pre-failure instability can occur under a dilatancy rate-controlled condition – that is, when the soil dilates. Nonetheless, regardless of type of drainage, the conditions for the occurrence of pre-failure instability of dilative sand can be defined based on the yielding conditions, which is very useful for analysing the failure mechanisms of granular soil slopes under various drainage conditions.

On behalf of the Editorial Board and ICE Publishing, I would like to extend my invitation to geotechnical engineers from all over the world to consider *Geotechnical Research* as a platform for disseminating their research, design and construction accomplishments. I hope readers have found volume 1 of this journal interesting and useful for their careers in academia or engineering industry. I am looking forward to publishing more outstanding contributions in volume 2. In particular, I would like to invite state-of-the-art review papers and outstanding case histories from leading scientists and geotechnical engineers. Full publication fee

waivers are available for outstanding contributions to 2015 issues. I would also like to encourage our readers to submit discussions on articles published in *Geotechnical Research* last year. Constructive discussions are extremely valuable for all technical publications and are always welcome for open-access articles such as those published in *Geotechnical Research*.

Despite slightly different publication criteria compared to other ICE journals, *Geotechnical Research* is committed to maintain ICE's reputation of publishing high-quality work. All articles submitted to the journal undergo rigorous peer review, based on initial editor screening and blind peer review by independent reviewers. The review process is closely monitored by an international Editorial Board, minimising the time from submission to acceptance.

I would like to emphasise that *Geotechnical Research* aims in the coming future to earn its reputation as one of the leading gold open-access journals in geotechnical engineering. The Editorial Board together with the ICE Publishing team are fully committed to following up the success of *Géotechnique Letters* and being indexed by Thomson Reuters Journal Citation Report in the Web of Science in the next 2 years.

Taking this opportunity, I would like to thank the Editorial Board for their hard work in promoting the journal as well as for their timely reviews and assessments of submitted papers. Last but not least, I would like to thank Ben Ramster, Rebecca Ratty and Alison McAnena from ICE Publishing for their continued support. Without their help and enormous publishing experience, the successful launch of *Geotechnical Research* in 2014 would not have been possible.

REFERENCES

- Chu J, Wanatowski D, Leong WK, Loke WL and He J (2015) Instability of dilative sand. *Geotechnical Research* **2(1)**: 35–48, <http://dx.doi.org/10.1680/gr.14.00015>.
- Dean ETR (2015) Particle mechanics approach to continuum constitutive modelling. *Geotechnical Research* **2(1)**: 3–34, <http://dx.doi.org/10.1680/gr.14.00018>.
- Jardine RJ (2014) Advanced laboratory testing in research and practice: the 2nd Bishop Lecture. *Geotechnical Research* **1(1)**: 2–31, <http://dx.doi.org/10.1680/geores.14.00003>.
- Open Access India (2014) <http://openaccessindia.org/indias-top-scientific-departments-announces-oa-policy> (accessed 10/01/2015).