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Editorial

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Editorial

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On behalf of the Editorial Board of *Geotechnical Research*, we acknowledge the recent contributions to the two themed issues currently being championed by the journal, namely 'Remote sensing and GIS applications in geotechnical engineering' and 'Recent advances in biogeoscience applications in geotechnical and geoenvironmental engineering'. In the latter themed issue, accepted contributions by Omoregie *et al*. (2023a, 2023b) are now accessible by way of the 'Ahead of Print' link on our journal webpage. Submissions for both themed issues are welcome before 31 August 2023.

Being the Institution of Civil Engineers' first gold Open Access (OA) journal, *Geotechnical Research* maximises the impact of research articles and case studies across a wide range of geotechnical topics. Even though *Geotechnical Research* charges authors a publication fee similar to the majority of other open-access journals, it does provide disadvantaged researchers a range of discounts, especially to those from countries who are part of the International Network for the Availability of Scientific Publications (INASP). This discount programme intends to reduce the price of disseminating key scientific findings from developing nations.

ICE Publishing is committed to adding keywords and symbols of the UN Sustainable Development Goals (SDGs) to published contents as a meaningful way to encourage the practice of sustainability. One of the three papers found in this issue has started this presentation style on the front page of the paper.

The themes of field investigation and forensic engineering on case studies are being emphasised in this issue.

Daag *et al*. (2023) utilised the compact and non-destructive in situ screw driving sounding (SDS) method to investigate the equivalent ground resistance data (e.g. standard penetration test blow count (SPT N)) for liquefaction analyses. The field data for calibration was obtained by performing SDS tests in school compounds near the coast of the Greater Metro Manila Area (GMMA) in the Philippines. The SDS equipment consists of a loaded hole-drilling probe (typically with dead weights between 125 N and 1000 N) that uses a screw-tip mechanism for advancement into the ground. Each penetration cycle advances the rod by a maximum depth of 25 cm and the rod rotates at a constant rate of 25 revolutions per min. The rod is then lifted by 1 cm for every 25 cm penetration and this process is repeated until the screw tip reaches ground refusal. The raw data was processed and compared against SPT data using regression analyses. The outcome shows that the majority of the calculated SDS data resulted in very high liquefaction potential risks at schools located near the coast of the GMMA and that the SDS test can be an effective alternative in situ testing method.

Troncone *et al*. (2023) investigated the deformation processes as a result of the failure and post-failure stages of the 2010 Saint-Jude landslide in Canada, using the large-strain deformation material point method (MPM), which comprises a continuum-based description of motion through an Eulerian–Lagrangian approach. This advanced numerical method has been successfully deployed to back-analyse the development of the failure surfaces within the slope body and to simulate the landslide run-out distances, the deposition zones and the depletion zones under undrained condition. The final profiles of the landslide body analysed using MPM show good agreement with those observed in the field, thus providing much confidence to the soil parameters adopted.

Dean (2023) studied traditional general solutions for the displacements, strains and changes in stress of a transversely isotropic linear elastic (TILE) half-space subject to load applications that were published in 1998. Even though at that time they represented massive advances on the classical Boussinesq and Ceruti equations, they were also criticised for being too difficult. In this empirical method-styled paper, vertical and lateral loadings of TILE materials have been simplified to make the equations more accessible to be readily applied to calculations involving settlements and other ground movements.

We thank the authors, reviewers and Editorial Board members for their contributions to our journal.

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