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Editorial

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This issue of *Ground Improvement* covers several interesting themes with papers from Asia, Europe, Australia and South America. The papers cover various aspects of interest for researchers and industry alike, in the practice of various ground improvement techniques. Topics of particular focus in this issue are on ground inclusions (sand columns, deep soil mixing, jet grouting, vertical drains), stabilisation of expansive clays and field testing of lateral loaded piles.

The paper by Xu *et al*. (2018) evaluates the strength and consolidation characteristics of clay improved with geotextile-encased sand columns. Comparisons were made with ordinary sand columns, under both lateral and vertical loadings. The shear strength and geotechnical properties of the clay were found to be significantly improved with both types of sand columns.

The paper by Takahashi *et al*. (2018) analyses two columns of quicklime-treated soil which were kept in a soil tank for 37 years, through laboratory testing. Changes in the geotechnical properties and deterioration properties were analysed and discussed at various curing periods. The strength of the in situ soil was found to be maintained, while the treated soil was found to have deterioration from the surface.

The paper by Kimpritis *et al*. (2018) proposes an empirical approach for evaluating the diameter of jet-grouted columns, based on data from case studies by the inclined core drilling method and a new thermic approach. Correlation of data indicated that the thermic approach could accurately predict the jet-grouted column diameters. New relationships relevant to jet-grouting design were also developed.

The paper by Gangaputhiran *et al*. (2018) focuses on the determination of horizontal coefficient of consolidation for soft soils when used for vertical drain design, by means of inward and outward flow tests using a Rowe consolidation cell. Comparisons were made for the inward and outward flow tests and influence of diameter were also studied. The radially outward consolidation test was found to give a lower horizontal coefficient of consolidation value.

The paper by Phanikumar and Nagaraju (2018) analyses the engineering behaviour of expansive clays when blended with cement and ground granulated blast furnace slag. Laboratory tests, including strength and characterisation tests, were undertaken to evaluate the properties of the improved expansive clays. Cement and ground granulated blast furnace slag were both found to be suitable stabilising agents for the improvement of expansive clays.

The paper by Faro *et al*. (2018) evaluates the main aspect of pile mobilisation under lateral loading, by means of lateral load tests on various configurations of flexible piles inserted in bonded residual soil. A significant increase in lateral load performance was observed when the top soil was treated with cement. In addition, a notable reduction of displacement was also measured at the pile head.

The technical papers in this issue, each focused on a specific technique, provide an excellent mix of practical topics relevant for the implementation of ground improvement projects. I am sure readers will find these papers interesting and thank the authors for their valuable contributions.

I would like to thank the honorary editor, the editorial board members and staff for inviting me to write this editorial and for all their support to this journal.

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