Editorial

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This is my first editorial as chairman and honorary editor of *Ground Improvement* and I sincerely hope my previous experience as associate editor for the journal and also the collective wisdom and experience of the editorial panel will help me in my new role. I would like to start by thanking Professor Michael Davies for 4 years of dedicated service as former chairman and honorary editor of *Ground Improvement*. Professor Davies started several initiatives and implemented processes that worked very well for the journal.

I would also like to congratulate and welcome five new members to the editorial panel: Dr. Chu, Mr Corbett, Dr. Kelly, Mr Phear and Dr. Serridge. Together they bring practical and research knowledge of ground improvement topics which will greatly benefit the journal. I also look forward to working with Mrs Margaret Tomlinson and Mr Ben Ramster of ICE; their help is invaluable.

The February 2012 issue of *Ground Improvement* contains five papers that focus on various ground improvement topics. The first paper on ‘experiences of dry soil mixing in highly organic soils’ by Timoney *et al.* (2012) studies the use of dry powder mixing with compressed air into peats and demonstrates how this method has enhanced strength and compressibility properties of organic soils. Binders including cement and ground granulated blast-furnace slag were studied. Strength enhancements ranging from 100 to 1200 kPa were achieved in a timeframe of 28 days. A stabilised strength database is also presented and possibilities of development of design equations for strengths of treated soils are discussed.

The paper on ‘strength variability in lime-cement columns based on cone penetration test data’ by Al-Naqshabandy *et al.* (2012) studies the spatial variability of lime-cement columns. Cone penetration test studies performed at one field site were analysed statistically, with the focus being on cone tip resistance measured on lime-cement columns. Fluctuations were assessed in both horizontal and vertical directions. The analyses of the test results indicated that the scale of fluctuation ranged from 2 to 3 m and 0.2 to 0.7 m in the horizontal and vertical directions, respectively. The authors suggest a minimum horizontal spacing of 3 m between individual soil samples in order to fulfill the requirements of independent/uncorrelated tests in design.

The paper on ‘novel tool for optimised design of reinforced soils by columns’ by Bouassida and Hazzar (2012) focuses on the design principles of reinforced columns. The authors

discuss the use of installation of column techniques and area ratio details extensively. They also report a reduction of settlement with the use of a stone column foundation system. The design methodology used provides optimised reinforcement configuration. A case study is used to illustrate the design methodology.

The paper on ‘strength and stiffness of a cement-stabilised lateritic soil with granulated rubber addition’ by Chan (2012) focuses on utilisation of both cement and rubber chip treatment of soft soils. This is primarily a laboratory study and focuses on *P*- and *S*-wave velocity measurements of the treated soils. The addition of rubber was shown to induce ductility behaviour in the treated soils. The author cautions against the excessive use of rubber dosage, as this resulted in strength and stiffness loss in the treated soil.

The final paper on ‘model studies on woven coir geotextile-reinforced sand bed’ by Vinod and Bhaskar (2012) describes an experimental model study on square footings underlain by woven coir geotextile-reinforced sand. A threefold strength increase was noted when the sand was reinforced with one layer of coir geotextile. The optimum depth of placement of geotextile lies between 0.33 *B* and 0.50 *B* where *B* is the size of the footing. The authors also introduce an empirical equation for determining the strength increase for the coir geotextile-reinforced sand layers.

I enjoyed reading all of the above papers, which focus on treatment of peats, lightweight soils, stone column design, spatial variabilities of lime-cement columns and coir geotextile reinforcement. I hope you will enjoy reading them also. If any practitioners are interested in submitting an innovative case study on a ground improvement topic, I would strongly urge them to consider submitting the paper to our journal. Details on paper submission can be found at www.groundimprovement.com.

REFERENCES

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