

INDEX TO GÉOTECHNIQUE VOLUME LIII

February, March, April, May, June, August, September, October, November, December 2003

No. 1, 1–141, No. 2, 143–298, No. 3, 299–375, No. 4, 377–454, No. 5 455–532, No. 6, 533–609, No. 7, 611–688, No. 8, 689–766, No. 9, 767–844, No. 10, 845–928

AUTHOR INDEX

Agus S. S., Leong E. C. & Schanz T.

Technical note: Assessment of statistical models for indirect determination of permeability functions from soil–water characteristic curves, 279–282

Alonso E. E. *see* Lloret A. *et al.*

Alonso E. E. *see* Oldecop L. A. & Alonso E. E.

Arroyo M., Muir Wood D. & Greening P. D.

Source near-field effects and pulse tests in soil samples, 337–345

Alzoghbi P. Suction effects on a compacted clay under non-isothermal conditions. Romero E., Gens A. & Lloret A., 65–81

Askari F. & Farzaneh O.

Upper-bound solution for seismic bearing capacity of shallow foundations near slopes, 697–702

Atkinson J. & Nocilla A.

Technical note: Suction and strength in heavily compressed carbonate sand, 831–832

Baldry J. A. S. *see* Palmer A. C. *et al.*

Bandini P. *see* Loukidis D. *et al.*

Bao C. G. *see* Ng C. W. W. *et al.*

Barbour S. L. *see* Pham H. Q. *et al.*

Barefoot A. J. *see* Palmer A. C. *et al.*

Baumgard A. J. *see* Palmer A. C. *et al.*

Blatz J. A. & Graham J.

Elastic-plastic modelling of unsaturated soil using results from a new triaxial test with controlled suction, 113–122

Blight G. E.

The vadose zone soil-water balance and transpiration rates of vegetation, 55–64

Blewett J., McCarter W. J., Chrisp T. M. & Starrs G.

Discussion: Monitoring sedimentation of a clay slurry, 370–372

Bolton M. D. *see* Take W. A. & Bolton M. D.

Bolton M. D. *see* Komiya K. *et al.*

Bolton M. D. *see* White D. J. *et al.*

Bolton M. D. *see* Cheng Y. P. *et al.*

Bolton M. D. *see* Palmer A. C. *et al.*

Buisson M. S. R. *see* Wheeler S. J. *et al.*

Burland J. B. *see* Cunningham M. R. *et al.*

Burland J. B. *see* Ridley A. M. *et al.*

Burton C. J., Waltham A. C. & McLaren S. J.

Discussion: Strength variation in young reef limestones, 764–766

Chan A. H. C.

Technical note: Determination of the coefficient of consolidation using a least squares method, 673–678

Chandler N. *see* Thomas H. R. *et al.*

Cheng Y. P., Nakata Y. & Bolton M. D.

Discrete element simulation of crushable soil, 633–641

Chiu C. F. & Ng C. W. W.

A state-dependent elasto-plastic model for saturated and unsaturated soils, 809–829

Choudhury D. *see* Sridharan A. & Choudhury D.

Chrisp T. M. *see* Blewett J. *et al.*

Chung S. G. *see* Nagaraj T. S. *et al.*

Clayton C. R. I. *see* Van der Berg J. P. *et al.*

Cleall P. J. *see* Thomas H. R. *et al.*

Collins I. F. & Kelly P. A.

Discussion: A thermomechanical analysis of a family of soil models, 606–609

Collins I. F. & Muhunthan B.

On the relationship between stress–dilatancy, anisotropy, and plastic dissipation for granular materials, 611–618

Consoli N. C. *see* Rotta G. V. *et al.*

Coop M. R. *see* Rotta G. V. *et al.*

Cui Y. J., Delage P. & Alzoghbi P.

Retention and transport of a hydrocarbon in a silt, 83–91

Cuéllar V. *see* Olalla C. & Cuéllar V.

Cunningham M. R., Ridley A. M., Dineen K. & Burland J. B.

The mechanical behaviour of a reconstituted unsaturated silty clay, 183–194

Da Pratt M. *see* Rocchi G. *et al.*

Deeks A. J. *see* Doherty J. P. & Deeks A. J.

Delage P. *see* Cui Y. J. *et al.*

Dineen K. *see* Cunningham M. R. *et al.*

Dineen K. *see* Ridley A. M. *et al.*

Dixon D. *see* Thomas H. R. *et al.*

Doherty J. P. & Deeks A. J.

Elastic response of circular footings embedded in an on-homogeneous half-space, 703–714

Dominijanni A. *see* Manassero M. & Dominijanni A.

Doran I. G. *see* Sivakumar V. *et al.*

Einav I. & Puzrin A. M.

Evaluation of continuous hyperplastic critical state (CHCS) model, 901–913

Fahey M. *see* Mao X. & Fahey M.

Fang H. L.

A state-dependent multi-mechanism model for sands, 407–420

Faranski A. S. *see* Palmer A. C. *et al.*

Farzaneh O. *see* Askari F. & Farzaneh O.

Finch M. *see* Palmer A. C. *et al.*

Fontana M. *see* Rocchi G. *et al.*

Foti S.

Small-strain stiffness and damping ratio of Pisa clay from surface wave tests, 455–461

Fredlund D. G. *see* Ng C. W. W. *et al.*

Fredlund D. G. *see* Pham H. Q. *et al.*

Gallipoli D., Wheeler S. J. & Karstunen M.

Modelling the variation of degree of saturation in a deformable unsaturated soil, 105–112

Gallipoli D., Gens A., Sharma R. & Vaunat J.

An elasto-plasto model for unsaturated soil incorporating the effects of suction and degree of saturation on mechanical behaviour, 123–135

Gens A. *see* Lloret A. *et al.*

Gens A. *see* Romero E. *et al.*

Gens A. *see* Gallipoli D. *et al.*

Georgiadis K., Potts D. M. & Zdravkovic L.

The influence of partial soil saturation on pile behaviour, 11–25

Gong B. W. *see* Ng C. W. W. *et al.*

Gourvenec S. & Randolph M.

Effect of strength non-homogeneity on the shape of failure envelopes for combined loading of strip and circular foundations on clay, 575–586

Graham J. *see* Blatz J. A. & Graham J.

Graham J. *see* Sivakumar V. *et al.*

Graham J. *see* Rotta G. V. *et al.*

Greening P. D. *see* Arroyo M. *et al.*

Hajiabdolmajid V., Kaiser P. & Martin C. D.

Mobilised strength components in brittle failure of rock, 327–336

Hansbo S.

Technical note: Deviation from Darcy's law observed in one-dimensional consolidation, 601–605

Hao H. *see* Wu C. *et al.*

Hau K. W. *see* McDowell G. R. & Hau K. W.

Hird C. C., Johnson P. & Sills G. C.

Performance of miniature piezocones in thinly layered soils, 885–900

Horpibulsuk S., Miura N. & Nagaraj T. S.

Technical note: Assessment of strength development in cement-admixed high water content clays with Abrams' law as a basis, 439–444

Houlsby G. T.

Editorial, 299

Houlsby G. T. & Martin C. M.

Technical note: Undrained bearing capacity factors for conical footings on clay, 513–520

Jafari M. R. *see* Komiya K. *et al.*

Jardine R. J. *see* Lehane B. M. & Jardine R. J.

Jiang H. D. *see* Zhu D. Y. *et al.*

- Johnson P.** *see* Hird C. C. *et al.*
Jommi C. *see* Springman S. M. *et al.*
- Kaiser P.** *see* Hajiabdolmajid V. *et al.*
Karstunen M. *see* Gallipoli D. *et al.*
Kelly P. A. *see* Collins I. F. & Kelly P. A.
Kemp S. J., Pearce J. M. & Oates D.
 Technical note: *in situ* sampling of sediment-filled fractures, 665–668
Komiya K., Soga K., Agaki H., Jafari M. R. & Bolton M. D.
 Discussion: Soil consolidation associated with grouting during shield tunnelling in soft clayey ground, 447–448
Kumar J. & Kumar N.
 Technical note: Seismic bearing capacity of rough footings on slopes using limit equilibrium, 363–369
Kumar J. & Mohan Rao V. B. K.
 Seismic bearing capacity of foundations on slopes, 347–361
Kumar J. & Mohan Rao V. B. K.
 Discussion: Seismic bearing capacity factors for spread foundation, 445–446
Kumar N. *see* Kumar J. & Kumar N.
- Lee C. F.** *see* Zhu D. Y. *et al.*
Lehane B. M. & Jardine R. J.
 Effects of long-term pre-loading on the performance of a footing on clay, 689–695
Leong E. –C., Tripathy S. & Rahardjo H.
 Total suction measurement of unsaturated soils with a device using the chilled-mirror dew-point technique, 173–182
Leong E. C. *see* Agus S. S. *et al.*
Ledesma A. *see* Mata C. & Ledesma A.
Li X. S.
 Technical note: Effective stress in unsaturated soil: a microstructural analysis, 273–277
Lloret A., Villar M. V., Sánchez M., Gens A., Pintado X. & Alonso E. E.
 Mechanical behaviour of heavily compacted bentonite under high suction changes, 27–40
Lloret A. *see* Romero E. *et al.*
Loukidis D., Bandini P. & Salgado R.
 Stability of seismically loaded slopes using limit analysis, 463–479
Lu Y. *see* Wu C. *et al.*
- Madabhushi S. P. G.** *see* Teymur B. & Madabhushi S. P. G.
Manassero M. & Dominijanni A.
 Modelling the osmosis effect on solute migration through porous media, 481–492
Mántaras F. M. *see* Schnaid F. & Mántaras F. M.
Mao X. & Fahey M.
 Behaviour of calcereous soils in undrained cyclic simple shear, 715–727
Martin C. D. *see* Hajiabdolmajid V. *et al.*
Martin C. M. *see* Houslsby G. T. & Martin C. M.
Mata C. & Ledesma A.
 Permeability of a bentonite–crushed granite rock mixture using different experimental techniques, 747–758
McCarter W. J. *see* Blewett J. *et al.*
McDowell G. R. & Hau K. W.
 Technical note: A simple non-associated three surface kinematic hardening model, 433–437
McDowell G. R.
 Technical note: Micromechanics of creep of granular materials, 915–916
McLaren *see* Burton C. J. *et al.*
Meng J. & Rix G. J.
 Reduction of equipment-generated damping in resonant column measurements, 503–512
Miura N. *see* Horpibulsuk S. *et al.*
Miura N. *see* Nagaraj T. S. *et al.*
Mitchell H. P. *see* Thomas H. R. *et al.*
Mohamed M. H. A. *see* Sharma R. S. & Mohamed M. H. A.
Mohan Rao V. B. K. *see* Kumar J. & Mohan Rao V. B. K.
Mohan Rao V. B. K. *see* Kumar J. & Mohan Rao V. B. K.
Molenkamp F. & Nazemi A. H.
 Micromechanical considerations of unsaturated pyramidal packing, 195–206
Molenkamp F. & Nazemi A. H.
 Interactions between two rough spheres, water bridge and water vapour, 255–264
Mongiovi L. *see* Tarantino A. & Mongiovi L.
Muhunthan B. *see* Collins I. F. & Muhunthan B.
Muir Wood D. *see* Arroyo M. *et al.*
- Muraleetharan K. K.** *see* Yang Y. & Muraleetharan K. K.
- Nagaraj T. S.** *see* Horpibulsuk S. *et al.*
Nagaraj T. S., Miura N., Chung S. G. & Nagendra Prasad K.
 Technical note: Analysis and assessment of sampling disturbance of soft sensitive clays, 679–683
Nagendra Prasad K. *see* Nagaraj T. S. *et al.*
Nakata Y. *see* Cheng Y. P. *et al.*
Navaneethan T. *see* Sivakumar V. *et al.*
Nazemi A. H. *see* Molenkamp F. & Nazemi A. H.
Nazemi A. H. *see* Molenkamp F. & Nazemi A. H.
Ng C. W. W., Zhan L. T., Bao C. G., Fredlund D. G. & Gong B. W.
 Performance of an unsaturated expansive soil slope subjected to artificial rainfall infiltration, 143–157
Ng C. W. W. *see* Chiu C. F. & Ng C. W. W.
Nocilla A. *see* Atkinson J. & Nocilla A.
- Oates D.** *see* Kemp S. J. *et al.*
Olalla C. & Cuéllar V.
 Discussion: Failure mechanism of the Aznalcóllar Dam, Seville, Spain, 521–522
Oldecop L. A. & Alonso E. E.
 Technical note: Suction effects on rockfill compressibility, 289–292
Olivares L. & Picarelli L.
 Technical note: Shallow flowslides triggered by intense rainfalls on natural slopes covered by loose unsaturated pyroclastic soils, 283–287
Ong B. H. *see* Toll D. G. & Ong B. H.
Oulapour M. *see* Pietruszczak S. *et al.*
- Paik K. H. & Salgado R.**
 Estimation of active earth pressure against rigid retaining walls considering arching effects, 643–653
Palmer A. C., White D. J., Baumgard A. J., Bolton M. D., Barefoot A. J., Finch M., Powell T., Faranski A. S. & Baldry J. A. S.
 Uplift resistance of buried submarine pipelines: comparison between centrifuge modelling and full-scale tests, 877–883
Pande G. N. *see* Pietruszczak S. *et al.*
Pearce J. M. *see* Kemp S. J. *et al.*
Pham H. Q., Fredlund D. G. & Barbour S. L.
 Technical note: A practical hysteresis model for the soil–water characteristic curve for soils with negligible volume change, 293–298
Picarelli L. *see* Olivares L. & Picarelli L.
Pietruszczak S., Pande G. N. & Oulapour M.
 Technical note: A hypothesis for mitigation of risk of liquefaction, 833–838
Pintado X. *see* Lloret A. *et al.*
Polidori E.
 Proposal for a new plasticity chart, 397–406
Powell D. B. *see* Van der Berg J. P. *et al.*
Powell T. *see* Palmer A. C. *et al.*
Potts D. M. *see* Georgiadis K. *et al.*
Potts D. M.
 Numerical analysis: a virtual dream or practical reality, 535–573
Potts D. M. *see* Shin J. H. *et al.*
Prietto P. D. M. *see* Rotta G. V. *et al.*
Puzrin A. M. *see* Randolph M. F. & Puzrin A. M.
Puzrin A. M. *see* Einav I. & Puzrin A. M.
- Rahardjo H.** *see* Leong E. –C *et al.*
Randolph M. F. *see* Reul O. & Randolph M. F.
Randolph M. *see* Gourvenec S. & Randolph M.
Randolph M. F. & Puzrin A. M.
 Upper bound limit analysis of circular foundations on clay under general loading, 785–796
Randolph M. F.
 Science and empiricism in pile foundation design, 847–875
Reul O. & Randolph M. F.
 Piled rafts in overconsolidated clay: comparison of *in situ* measurements and numerical analyses, 301–315
Ridley A. M. *see* Cunningham M. R. *et al.*
Ridley A. M., Dineen K., Burland J. B. & Vaughan P. R.
 Soil matrix suction: some examples of its measurement and application in geotechnical engineering, 241–253
Rix G. J. *see* Meng J. & Rix G. J.
Rocchi G., Fontana M. & Da Prat M.
 Modelling of natural soft clay destruction processes using viscoplasticity theory, 729–745
Romero E., Gens A. & Lloret A.
 Suction effects on a compacted clay under non-isothermal conditions, 65–81

- Rotta G. V., Consoli N. C., Prietto P. D. M., Coop M. R. & Graham J.**
Isotropic yielding in an artificially cemented soil cured under stress, 493–501
- Salgado R.** *see* Loukidis D. *et al.*
- Salgado R.** *see* Paik K. H. & Salgado R.
- Sánchez M.** *see* Lloret A. *et al.*
- Schanz T.** *see* Agus S. S. *et al.*
- Schnaid F. & Mántaras F. M.**
Cavity expansion in cemented materials: structure degradation effects, 797–807
- Sharma R. S.** *see* Wheeler S. J. *et al.*
- Sharma R.** Gallipoli D. *et al.*
- Sharma R. S. & Mohamed M. H. A.**
Patterns and mechanisms of migration of light non-aqueous phase liquid in an unsaturated sand, 225–239
- Shen W. Y. & Teh C. I.**
Discussion: Analysis of laterally loaded pile groups using a variational approach, 525–526
- Shin J. H., Potts D. M. & Zdravkovic L.**
Discussion: Three-dimensional modelling of NATM tunnelling in decomposed granite soil, 685–687
- Sills G. C.** *see* Hird C. C. *et al.*
- Sivakumar V., Doran I. G., Graham J. & Navaneethan T.**
Discussion: Relationship between K_0 and overconsolidation ratio: a theoretical approach, 450–454
- Sivakumar V. & Wheeler S. J.**
Discussion: Influence of compaction procedure on the mechanical behaviour of an unsaturated compacted clay, Parts 1 and 2, 842–843
- Springman S. M., Jommi C. & Teyssie P.**
Instabilities on moraine slopes induced by loss of suction: a case history, 3–10
- Soga K.** *see* Komiya K. *et al.*
- Sridharan A. & Choudhury D.**
Discussion: Swelling pressure of sodium montmorillonites, 449
- Srinivasa Murthy B. R.** *see* Vatsala A. & Srinivasa Murthy B. R.
- Starrs G.** *see* Blewett J. *et al.*
- Su J. Q. & Wang Z.**
Technical note: The two-dimensional consolidation theory of electro-osmosis, 759–763
- Take W. A. & Bolton M. D.**
Tensiometer saturation and the reliable measurement of soil suction, 159–172
- Take W. A.** *see* White D. J. *et al.*
- Tarantino A. & Mongiovi L.**
Technical note: Calibration of tensiometer for direct measurement of matric suction, 137–141
- Teh C. I.** *see* Shen W. Y. & Teh C. I.
- Teymur B. & Madabhushi S. P. G.**
Experimental study of boundary effects in dynamic centrifuge modelling, 655–663
- Teyssie P.** *see* Springman S. M. *et al.*
- Thomas H. R.**
Editorial, 1
- Thomas H. R., Cleall P. J., Chandler N., Dixon D. & Mitchell H. P.**
Water infiltration into a large-scale *in situ* experiment in an underground research laboratory, 207–224
- Toll D. G. & Ong B. H.**
Critical-state parameters for an unsaturated residual sandy clay, 93–103
- Triantafyllidis T.**
Discussion: On the application of the Hiley formula in driving long piles, 373–375
- Tripathy S.** *see* Leong E. –C *et al.*
- Van der Berg J. P., Clayton C. R. I. & Powell D. B.**
Displacements ahead of an advancing NATM tunnel in the London clay, 767–784
- Vardoulakis I.**
Discussion: Dynamic thermo-poro-mechanical analysis of catastrophic landslides, 523–524
- Vatsala A. & Srinivasa Murthy B. R.**
Discussion: Suction in compacted states, 839–841
- Vaughan P. R.** *see* Ridley A. M. *et al.*
- Vaughan P. R.**
Observations on the behaviour of clay fill containing occluded air bubbles, 265–272
- Vaunat J.** Gallipoli D. *et al.*
- Villar M. V.** *see* Lloret A. *et al.*
- Waltham A. C.** *see* Burton C. J. *et al.*
- Wang Z.** *see* Su J. Q. & Wang Z.
- Wesley L. D.**
Technical note: Residual strength of clays and correlations using Atterberg limits, 669–672
- Wheeler S. J., Sharma R. S. & Buisson M. S. R.**
Coupling of hydraulic hysteresis and stress–strain behaviour in unsaturated soils, 41–54
- Wheeler S. J.** *see* Gallipoli D. *et al.*
- Wheeler S. J.** *see* Sivakumar V. & Wheeler S. J.
- White D. J.**
PSD measurement using the single particle optical sizing (SPOS) method, 317–326
- White D. J., Take W. A. & Bolton M. D.**
Soil deformation measurement using particle image velocimetry (PIV) and photogrammetry, 619–631
- White D. J.** *see* Palmer A. C. *et al.*
- Wu C., Hao H., Lu Y. & Zhou Y.**
Characteristics of stress waves recorded in small-scale field blast tests on a layered rock–soil site, 587–599
- Yang Y. & Muraleetharan K. K.**
The middle surface concept and its application to the elasto-plastic behaviour of saturated sands, 421–431
- Zdravkovic L.** *see* Georgiadis K. *et al.*
- Zdravkovic L.** *see* Shin J. H. *et al.*
- Zhan L. T.** *see* Ng C. W. W. *et al.*
- Zhou Y.** *see* Wu C. *et al.*
- Zhu D. Y., Lee C. F. & Jiang H. D.**
Generalised framework of limit equilibrium methods for slope stability analysis, 377–395

SUBJECT INDEX

Anisotropy

- Micromechanical considerations of unsaturated pyramidal packing. Molenkamp F. & Nazemi A. H., 195–206
- Technical note: Effective stress in unsaturated soil: a microstructural analysis. Li X. S., 273–277
- On the relationship between stress–dilatancy, anisotropy, and plastic dissipation for granular materials. Collins I. F. & Muhunthan B., 611–618

Axial capacity

- Science and empiricism in pile foundation design. Randolph M. F., 847–875

Bearing capacity

- Seismic bearing capacity of foundations on slopes. Kumar J. & Mohan Rao V. B. K., 347–361
- Technical note: Undrained bearing capacity factors for conical footings on clay. Houlsby G. T. & Martin C. M., 513–520
- Effect of strength non-homogeneity on the shape of failure envelopes for

- combined loading of strip and circular foundations on clay. Gourvenec S. & Randolph M., 575–586
- Upper-bound solution for seismic bearing capacity of shallow foundations near slopes. Askari F. & Farzaneh O., 697–702
- Upper bound limit analysis of circular foundations on clay under general loading. Randolph M. F. & Puzrin A. M., 785–796

Buried structures

- Uplift resistance of buried submarine pipelines: comparison between centrifuge modelling and full-scale tests. Palmer A. C., White D. J., Baumgard A. J., Bolton M. D., Barefoot A. J., Finch M., Powell T., Faranski A. S. & Baldry J. A. S., 875–881

Calcerous soils

- Behaviour of calcerous soils in undrained cyclic simple shear. Mao X. & Fahey M., 715–727
- Technical note: Suction and strength in heavily compressed carbonate sand. Atkinson J. & Nocilla A., 831–832

Case history

- Piled rafts in overconsolidated clay: comparison of *in situ* measurements and numerical analyses. Reul O. & Randolph M. F., 301–315
- Technical note: Deviation from Darcy's law observed in one-dimensional consolidation. Hansbo S., 601–605
- Effects of long-term pre-loading on the performance of a footing on clay. Lehane B. M. & Jardine R. J., 689–695
- Displacements ahead of an advancing NATM tunnel in the London clay. Van der Berg J. P., Clayton C. R. I. & Powell D. B., 767–784

Centrifuge modelling

- Soil deformation measurement using particle image velocimetry (PIV) and photogrammetry. White D. J., Take W. A. & Bolton M. D., 619–631
- Experimental study of boundary effects in dynamic centrifuge modelling. Teymur B. & Madabhushi S. P. G., 655–663
- Uplift resistance of buried submarine pipelines: comparison between centrifuge modelling and full-scale tests. Palmer A. C., White D. J., Baumgard A. J., Bolton M. D., Barefoot A. J., Finch M., Powell T., Faranski A. S. & Baldry J. A. S., 875–881

Chemical properties

- Modelling the osmosis effect on solute migration through porous media. Manassero M. & Dominijanni A., 481–492

Clays

- Soil effects on a compacted clay under non-isothermal conditions. Romero E., Gens A. & Lloret A., 65–81
- Elastic-plastic modelling of unsaturated soil using results from a new triaxial test with controlled suction. Blatz J. A. & Graham J., 113–122
- An elasto-plasto model for unsaturated soil incorporating the effects of suction and degree of saturation on mechanical behaviour. Gallipoli D., Gens A., Sharma R. & Vaunat J., 123–135
- The mechanical behaviour of a reconstituted unsaturated silty clay. Cunningham M. R., Ridley A. M., Dineen K. & Burland J. B., 183–194
- Proposal for a new plasticity chart. Polidori E., 397–406
- Technical note: A simple non-associated three surface kinematic hardening model. McDowell G. R. & Hau K. W., 433–437
- Technical note: Assessment of strength development in cement-admixed high water content clays with Abrams' law as a basis. Horpibulsuk S., Miura N. & Nagaraj T. S., 439–444
- Modelling the osmosis effect on solute migration through porous media. Manassero M. & Dominijanni A., 481–492
- Technical note: Undrained bearing capacity factors for conical footings on clay. Houlsby G. T. & Martin C. M., 513–520
- Technical note: Residual strength of clays and correlations using Atterberg limits. Wesley L. D., 669–672
- Technical note: Analysis and assessment of sampling disturbance of soft sensitive clays. Nagaraj T. S., Miura N., Chung S. G. & Nagendra Prasad K., 679–683
- Modelling of natural soft clay destruction processes using viscoplasticity theory. Rocchi G., Fontana M. & Da Prat M., 729–745
- Upper bound limit analysis of circular foundations on clay under general loading. Randolph M. F. & Puzrin A. M., 785–796
- Performance of miniature piezocones in thinly layered soils. Hird C. C., Johnson P. & Sills G. C., 883–898
- Evaluation of continuous hyperplastic critical state (CHCS) model. Einav I. & Puzrin A. M., 899–911

Compaction

- Total suction measurement of unsaturated soils with a device using the chilled-mirror dew-point technique. Leong E. -C., Tripathy S. & Rahardjo H., 173–182

Compressibility

- Critical-state parameters for an unsaturated residual sandy clay. Toll D. G. & Ong B. H., 93–103
- Isotropic yielding in an artificially cemented soil cured under stress. Rotta G. V., Consoli N. C., Prietto P. D. M., Coop M. R. & Graham J., 493–501
- Discrete element simulation of crushable soil. Cheng Y. P., Nakata Y. & Bolton M. D., 633–641
- Technical note: Micro mechanics of creep of granular materials. McDowell G. R., 913–914

Consolidation

- Technical note: Deviation from Darcy's law observed in one-dimensional consolidation. Hansbo S., 601–605

- Technical note: Determination of the coefficient of consolidation using a least squares method. Chan A. H. C., 673–678
- Technical note: The two-dimensional consolidation theory of electro-osmosis. Su J. Q. & Wang Z., 759–763
- Performance of miniature piezocones in thinly layered soils. Hird C. C., Johnson P. & Sills G. C., 883–898

Constitutive model

- Technical note: Suction effects on rockfill compressibility. Oldecop L. A. & Alonso E. E., 289–292

Constitutive relations

- The influence of partial soil saturation on pile behaviour. Georgiadis K., Potts D. M. & Zdravkovic L., 11–25
- Mechanical behaviour of heavily compacted bentonite under high suction changes. Lloret A., Villar M. V., Sánchez M., Gens A., Pintado X. & Alonso E. E., 27–40
- Coupling of hydraulic hysteresis and stress-strain behaviour in unsaturated soils. Wheeler S. J., Sharma R. S. & Buisson M. S. R., 41–54
- Modelling the variation of degree of saturation in a deformable unsaturated soil. Gallipoli D., Wheeler S. J. & Karstunen M., 105–112
- Elastic-plastic modelling of unsaturated soil using results from a new triaxial test with controlled suction. Blatz J. A. & Graham J., 113–122
- An elasto-plasto model for unsaturated soil incorporating the effects of suction and degree of saturation on mechanical behaviour. Gallipoli D., Gens A., Sharma R. & Vaunat J., 123–135
- Technical note: A practical hysteresis model for the soil-water characteristic curve for soils with negligible volume change. Pham H. Q., Fredlund D. G. & Barbour S. L., 293–298
- A state-dependent multi-mechanism model for sands. Fang H. L., 407–420
- The middle surface concept and its application to the elasto-plastic behaviour of saturated sands. Yang Y. & Muralettharan K. K., 421–431
- Technical note: A simple non-associated three surface kinematic hardening model. McDowell G. R. & Hau K. W., 433–437
- Cavity expansion in cemented materials: structure degradation effects. Schnaid F. & Mántaras F. M., 797–807
- A state-dependent elasto-plastic model for saturated and unsaturated soils. Chiu C. F. & Ng C. W. W., 809–829
- Evaluation of continuous hyperplastic critical state (CHCS) model. Einav I. & Puzrin A. M., 899–911

Creep

- Effects of long-term pre-loading on the performance of a footing on clay. Lehane B. M. & Jardine R. J., 689–695
- Modelling of natural soft clay destruction processes using viscoplasticity theory. Rocchi G., Fontana M. & Da Prat M., 729–745

Crushing/crushability

- Discrete element simulation of crushable soil. Cheng Y. P., Nakata Y. & Bolton M. D., 633–641

Deformation

- Performance of an unsaturated expansive soil slope subjected to artificial rainfall infiltration. Ng C. W. W., Zhan L. T., Bao C. G., Fredlund D. G. & Gong B. W., 143–157
- A state-dependent multi-mechanism model for sands. Fang H. L., 407–420
- Soil deformation measurement using particle image velocimetry (PIV) and photogrammetry. White D. J., Take W. A. & Bolton M. D., 619–631
- Uplift resistance of buried submarine pipelines: comparison between centrifuge modelling and full-scale tests. Palmer A. C., White D. J., Baumgard A. J., Bolton M. D., Barefoot A. J., Finch M., Powell T., Faranski A. S. & Baldry J. A. S., 875–881

Dynamics

- Source near-field effects and pulse tests in soil samples. Arroyo M., Muir Wood D. & Greening P. D., 337–345
- Small-strain stiffness and damping ratio of Pisa clay from surface wave tests. Foti S., 455–461
- Reduction of equipment-generated damping in resonant column measurements. Meng J. & Rix G. J., 503–512

Dynamic testing

- Science and empiricism in pile foundation design. Randolph M. F., 847–875

Earth pressure

- Performance of an unsaturated expansive soil slope subjected to artificial rainfall infiltration. Ng C. W. W., Zhan L. T., Bao C. G., Fredlund D. G. & Gong B. W., 143–157
- Estimation of active earth pressure against rigid retaining walls considering arching effects. Paik K. H. & Salgado R., 643–653

Earthquakes

- Seismic bearing capacity of foundations on slopes. Kumar J. & Mohan Rao V. B. K., 347–361
- Technical note: Seismic bearing capacity of rough footings on slopes using limit equilibrium. Kumar J. & Kumar N., 363–369
- Stability of seismically loaded slopes using limit analysis. Loukidis D., Bandini P. & Salgado R., 463–479
- Experimental study of boundary effects in dynamic centrifuge modelling. Teymur B. & Madabhushi S. P. G., 655–663
- Technical note: A hypothesis for mitigation of risk of liquefaction. Pietruszczak S., Pande G. N. & Oulapour M., 833–838

Elasticity

- Source near-field effects and pulse tests in soil samples. Arroyo M., Muir Wood D. & Greening P. D., 337–345
- On the relationship between stress–dilatancy, anisotropy, and plastic dissipation for granular materials. Collins I. F. & Muhunthan B., 611–618
- Technical note: Determination of the coefficient of consolidation using a least squares method. Chan A. H. C., 673–678
- Elastic response of circular footings embedded in an on-homogeneous half-space. Doherty J. P. & Deeks A. J., 703–714

Excavation

- Mobilised strength components in brittle failure of rock. Hajiabdolmajid V., Kaiser P. & Martin C. D., 327–336

Expansive soils

- Mechanical behaviour of heavily compacted bentonite under high suction changes. Lloret A., Villar M. V., Sánchez M., Gens A., Pintado X. & Alonso E. E., 27–40
- Elastic-plastic modelling of unsaturated soil using results from a new triaxial test with controlled suction. Blatz J. A. & Graham J., 113–122
- Performance of an unsaturated expansive soil slope subjected to artificial rainfall infiltration. Ng C. W. W., Zhan L. T., Bao C. G., Fredlund D. G. & Gong B. W., 143–157
- Water infiltration into a large-scale *in situ* experiment in an underground research laboratory. Thomas H. R., Cleall P. J., Chandler N., Dixon D. & Mitchell H. P., 207–224

Fabric/structure of soils

- Mechanical behaviour of heavily compacted bentonite under high suction changes. Lloret A., Villar M. V., Sánchez M., Gens A., Pintado X. & Alonso E. E., 27–40
- Critical-state parameters for an unsaturated residual sandy clay. Toll D. G. & Ong B. H., 93–103
- Micromechanical considerations of unsaturated pyramidal packing. Molenkamp F. & Nazemi A. H., 195–206
- Technical note: Effective stress in unsaturated soil: a microstructural analysis. Li X. S., 273–277
- Technical note: *In situ* sampling of sediment-filled fractures. Kemp S. J., Pearce J. M. & Oates D., 665–668
- Cavity expansion in cemented materials: structure degradation effects. Schnaid F. & Mántaras F. M., 797–807
- Performance of miniature piezocones in thinly layered soils. Hird C. C., Johnson P. & Sills G. C., 883–898

Failure

- Instabilities on moraine slopes induced by loss of suction: a case history. Springman S. M., Jommi C. & Teyssie P., 3–10
- Generalised framework of limit equilibrium methods for slope stability analysis. Zhu D. Y., Lee C. F., & Jiang H. D., 377–395

Field instrumentation

- Tensiometer saturation and the reliable measurement of soil suction. Take W. A. & Bolton M. D., 159–172
- Soil matrix suction: some examples of its measurement and application in geotechnical engineering. Ridley A. M., Dineen K., Burland J. B. & Vaughan P. R., 241–253
- Characteristics of stress waves recorded in small-scale field blast tests on a layered rock–soil site. Wu C., Hao H., Lu Y. & Zhou Y., 587–599
- Effects of long-term pre-loading on the performance of a footing on clay. Lehan B. M. & Jardine R. J., 689–695

- Displacements ahead of an advancing NATM tunnel in the London clay. Van der Berg J. P., Clayton C. R. I. & Powell D. B., 767–784

Footings/foundations

- Seismic bearing capacity of foundations on slopes. Kumar J. & Mohan Rao V. B. K., 347–361
- Effect of strength non-homogeneity on the shape of failure envelopes for combined loading of strip and circular foundations on clay. Gourvenec S. & Randolph M., 575–586
- Effects of long-term pre-loading on the performance of a footing on clay. Lehan B. M. & Jardine R. J., 689–695
- Upper-bound solution for seismic bearing capacity of shallow foundations near slopes. Askari F. & Farzaneh O., 697–702
- Elastic response of circular footings embedded in an on-homogeneous half-space. Doherty J. P. & Deeks A. J., 703–714
- Upper bound limit analysis of circular foundations on clay under general loading. Randolph M. F. & Puzrin A. M., 785–796
- Evaluation of continuous hyperplastic critical state (CHCS) model. Einav I. & Puzrin A. M., 899–911

Friction

- Micromechanical considerations of unsaturated pyramidal packing. Molenkamp F. & Nazemi A. H., 195–206
- On the relationship between stress–dilatancy, anisotropy, and plastic dissipation for granular materials. Collins I. F. & Muhunthan B., 611–618

Full-scale tests

- Instabilities on moraine slopes induced by loss of suction: a case history. Springman S. M., Jommi C. & Teyssie P., 3–10
- Water infiltration into a large-scale *in situ* experiment in an underground research laboratory. Thomas H. R., Cleall P. J., Chandler N., Dixon D. & Mitchell H. P., 207–224
- Technical note: Deviation from Darcy's law observed in one-dimensional consolidation. Hansbo S., 601–605

Geology

- Technical note: *in situ* sampling of sediment-filled fractures. Kemp S. J., Pearce J. M. & Oates D., 665–668

Geosynthetics

- Modelling the osmosis effect on solute migration through porous media. Manassero M. & Dominijanni A., 481–492

Glacial soils

- Instabilities on moraine slopes induced by loss of suction: a case history. Springman S. M., Jommi C. & Teyssie P., 3–10

Gravels

- Interactions between two rough spheres, water bridge and water vapour. Molenkamp F. & Nazemi A. H., 255–264

Ground improvement

- Technical note: Assessment of strength development in cement-admixed high water content clays with Abrams' law as a basis. Horpibulsuk S., Miura N. & Nagaraj T. S., 439–444

Ground movements

- Soil deformation measurement using particle image velocimetry (PIV) and photogrammetry. White D. J., Take W. A. & Bolton M. D., 619–631
- Displacements ahead of an advancing NATM tunnel in the London clay. Van der Berg J. P., Clayton C. R. I. & Powell D. B., 767–784

Groundwater

- Technical note: *In situ* sampling of sediment-filled fractures. Kemp S. J., Pearce J. M. & Oates D., 665–668

Grouting

- Characteristics of stress waves recorded in small-scale field blast tests on a layered rock–soil site. Wu C., Hao H., Lu Y. & Zhou Y., 587–599

***In situ* testing**

- The vadose zone soil-water balance and transpiration rates of vegetation. Blight G. E., 55–64
- Small-strain stiffness and damping ratio of Pisa clay from surface wave tests. Foti S., 455–461
- Characteristics of stress waves recorded in small-scale field blast tests on a layered rock–soil site. Wu C., Hao H., Lu Y. & Zhou Y., 587–599

- Technical note: *In situ* sampling of sediment-filled fractures. Kemp S. J., Pearce J. M. & Oates D., 665–668
- Performance of miniature piezocones in thinly layered soils. Hird C. C., Johnson P. & Sills G. C., 883–898

Laboratory equipment

- Technical note: Calibration of tensiometer for direct measurement of matric suction. Tarantino A. & Mongiovi L., 137–141
- Soil matrix suction: some examples of its measurement and application in geotechnical engineering. Ridley A. M., Dineen K., Burland J. B. & Vaughan P. R., 241–253
- PSD measurement using the single particle optical sizing (SPOS) method. White D. J., 317–326
- Reduction of equipment-generated damping in resonant column measurements. Meng J. & Rix G. J., 503–512
- Soil deformation measurement using particle image velocimetry (PIV) and photogrammetry. White D. J., Take W. A. & Bolton M. D., 619–631
- Experimental study of boundary effects in dynamic centrifuge modelling. Teymur B. & Madabhushi S. P. G., 655–663

Laboratory tests

- Mechanical behaviour of heavily compacted bentonite under high suction changes. Lloret A., Villar M. V., Sánchez M., Gens A., Pintado X. & Alonso E. E., 27–40
- Suction effects on a compacted clay under non-isothermal conditions. Romero E., Gens A. & Lloret A., 65–81
- Elastic-plastic modelling of unsaturated soil using results from a new triaxial test with controlled suction. Blatz J. A. & Graham J., 113–122
- Technical note: Calibration of tensiometer for direct measurement of matric suction. Tarantino A. & Mongiovi L., 137–141
- Total suction measurement of unsaturated soils with a device using the chilled-mirror dew-point technique. Leong E.-C., Tripathy S. & Rahardjo H., 173–182
- The mechanical behaviour of a reconstituted unsaturated silty clay. Cunningham M. R., Ridley A. M., Dineen K. & Burland J. B., 183–194
- Technical note: A practical hysteresis model for the soil–water characteristic curve for soils with negligible volume change. Pham H. Q., Fredlund D. G. & Barbour S. L., 293–298
- PSD measurement using the single particle optical sizing (SPOS) method. White D. J., 317–326
- Source near-field effects and pulse tests in soil samples. Arroyo M., Muir Wood D. & Greening P. D., 337–345
- Proposal for a new plasticity chart. Polidori E., 397–406
- Isotropic yielding in an artificially cemented soil cured under stress. Rotta G. V., Consoli N. C., Prietto P. D. M., Coop M. R. & Graham J., 493–501
- Reduction of equipment-generated damping in resonant column measurements. Meng J. & Rix G. J., 503–512
- Soil deformation measurement using particle image velocimetry (PIV) and photogrammetry. White D. J., Take W. A. & Bolton M. D., 619–631
- Technical note: Residual strength of clays and correlations using Atterberg limits. Wesley L. D., 669–672
- Permeability of a bentonite–crushed granite rock mixture using different experimental techniques. Mata C. & Ledesma A., 747–758
- Technical note: Suction and strength in heavily compressed carbonate sand. Atkinson J. & Nocilla A., 831–832

Landslides

- Technical note: Shallow flowslides triggered by intense rainfalls on natural slopes covered by loose unsaturated pyroclastic soils. Olivares L. & Picarelli L., 283–287
- Generalised framework of limit equilibrium methods for slope stability analysis. Zhu D. Y., Lee C. F. & Jiang H. D., 377–395

Limit equilibrium methods

- Generalised framework of limit equilibrium methods for slope stability analysis. Zhu D. Y., Lee C. F. & Jiang H. D., 377–395

Limit state design/analysis

- Stability of seismically loaded slopes using limit analysis. Loukidis D., Bandini P. & Salgado R., 463–479
- Upper-bound solution for seismic bearing capacity of shallow foundations near slopes. Askari F. & Farzaneh O., 697–702
- Upper bound limit analysis of circular foundations on clay under general loading. Randolph M. F. & Puzrin A. M., 785–796

Liquefaction

- A state-dependent multi-mechanism model for sands. Fang H. L., 407–420
- Technical note: A hypothesis for mitigation of risk of liquefaction. Pietruszczak S., Pande G. N. & Oulapour M., 833–838

Model tests

- Soil deformation measurement using particle image velocimetry (PIV) and photogrammetry. White D. J., Take W. A. & Bolton M. D., 619–631
- Experimental study of boundary effects in dynamic centrifuge modelling. Teymur B. & Madabhushi S. P. G., 655–663

Monitoring

- Performance of an unsaturated expansive soil slope subjected to artificial rainfall infiltration. Ng C. W. W., Zhan L. T., Bao C. G., Fredlund D. G. & Gong B. W., 143–157
- Total suction measurement of unsaturated soils with a device using the chilled-mirror dew-point technique. Leong E.-C., Tripathy S. & Rahardjo H., 173–182
- Displacements ahead of an advancing NATM tunnel in the London clay. Van der Berg J. P., Clayton C. R. I. & Powell D. B., 767–784

Numerical modelling and analysis

- The influence of partial soil saturation on pile behaviour. Georgiadis K., Potts D. M. & Zdravkovic L., 11–25
- Water infiltration into a large-scale *in situ* experiment in an underground research laboratory. Thomas H. R., Cleall P. J., Chandler N., Dixon D. & Mitchell H. P., 207–224
- Piled rafts in overconsolidated clay: comparison of *in situ* measurements and numerical analyses. Reul O. & Randolph M. F., 301–315
- Source near-field effects and pulse tests in soil samples. Arroyo M., Muir Wood D. & Greening P. D., 337–345
- Generalised framework of limit equilibrium methods for slope stability analysis. Zhu D. Y., Lee C. F. & Jiang H. D., 377–395
- Technical note: A simple non-associated three surface kinematic hardening model. McDowell G. R. & Hau K. W., 433–437
- Stability of seismically loaded slopes using limit analysis. Loukidis D., Bandini P. & Salgado R., 463–479
- Effect of strength non-homogeneity on the shape of failure envelopes for combined loading of strip and circular foundations on clay. Gourvenec S. & Randolph M., 575–586
- Discrete element simulation of crushable soil. Cheng Y. P., Nakata Y. & Bolton M. D., 633–641
- Estimation of active earth pressure against rigid retaining walls considering arching effects. Paik K. H. & Salgado R., 643–653
- Modelling of natural soft clay destruction processes using viscoplasticity theory. Rocchi G., Fontana M. & Da Prat M., 729–745
- Technical note: A hypothesis for mitigation of risk of liquefaction. Pietruszczak S., Pande G. N. & Oulapour M., 833–838
- Evaluation of continuous hyperplastic critical state (CHCS) model. Einav I. & Puzrin A. M., 899–911

Oedometer

- Technical note: Suction effects on rockfill compressibility. Oldecop L. A. & Alonso E. E., 289–292

Offshore engineering

- Elastic response of circular footings embedded in an on-homogeneous half-space. Doherty J. P. & Deeks A. J., 703–714
- Uplift resistance of buried submarine pipelines: comparison between centrifuge modelling and full-scale tests. Palmer A. C., White D. J., Baumgard A. J., Bolton M. D., Barefoot A. J., Finch M., Powell T., Faranski A. S. & Baldry J. A. S., 875–881

Partial saturation

- The influence of partial soil saturation on pile behaviour. Georgiadis K., Potts D. M. & Zdravkovic L., 11–25
- Coupling of hydraulic hysteresis and stress–strain behaviour in unsaturated soils. Wheeler S. J., Sharma R. S. & Buisson M. S. R., 41–54
- The vadose zone soil–water balance and transpiration rates of vegetation. Blight G. E., 55–64
- Suction effects on a compacted clay under non-isothermal conditions. Romero E., Gens A. & Lloret A., 65–81
- Retention and transport of a hydrocarbon in a silt. Cui Y. J., Delage P. & Alzoghbi P., 83–91
- Critical-state parameters for an unsaturated residual sandy clay. Toll D. G. & Ong B. H., 93–103

- Modelling the variation of degree of saturation in a deformable unsaturated soil. Gallipoli D., Wheeler S. J. & Karstunen M., 105–112
- An elasto-plasto model for unsaturated soil incorporating the effects of suction and degree of saturation on mechanical behaviour. Gallipoli D., Gens A., Sharma R. & Vaunat J., 123–135
- Technical note: Calibration of tensiometer for direct measurement of matric suction. Tarantino A. & Mongiovì L., 137–141
- Tensiometer saturation and the reliable measurement of soil suction. Take W. A. & Bolton M. D., 159–172
- Total suction measurement of unsaturated soils with a device using the chilled-mirror dew-point technique. Leong E. -C., Tripathy S. & Rahardjo H., 173–182
- The mechanical behaviour of a reconstituted unsaturated silty clay. Cunningham M. R., Ridley A. M., Dineen K. & Burland J. B., 183–194
- Micromechanical considerations of unsaturated pyramidal packing. Molenkamp F. & Nazemi A. H., 195–206
- Water infiltration into a large-scale *in situ* experiment in an underground research laboratory. Thomas H. R., Cleall P. J., Chandler N., Dixon D. & Mitchell H. P., 207–224
- Soil matrix suction: some examples of its measurement and application in geotechnical engineering. Ridley A. M., Dineen K., Burland J. B. & Vaughan P. R., 241–253
- Interactions between two rough spheres, water bridge and water vapour. Molenkamp F. & Nazemi A. H., 255–264
- Technical note: Effective stress in unsaturated soil: a microstructural analysis. Li X. S., 273–277
- Technical note: Shallow flowslides triggered by intense rainfalls on natural slopes covered by loose unsaturated pyroclastic soils. Olivares L. & Picarelli L., 283–287
- Technical note: A practical hysteresis model for the soil–water characteristic curve for soils with negligible volume change. Pham H. Q., Fredlund D. G. & Barbour S. L., 293–298
- A state-dependent elasto-plastic model for saturated and unsaturated soils. Chiu C. F. & Ng C. W. W., 809–829
- Particle crushing/crushability**
- PSD measurement using the single particle optical sizing (SPOS) method. White D. J., 317–326
- Technical note: Micro mechanics of creep of granular materials. McDowell G. R., 913–914
- Permeability**
- Retention and transport of a hydrocarbon in a silt. Cui Y. J., Delage P. & Alzoghbi P., 83–91
- Technical note: Assessment of statistical models for indirect determination of permeability functions from soil–water characteristic curves. Agus S. S., Leong E. C. & Schanz T., 279–282
- Technical note: Determination of the coefficient of consolidation using a least squares method. Chan A. H. C., 673–678
- Permeability of a bentonite–crushed granite rock mixture using different experimental techniques. Mata C. & Ledesma A., 747–758
- Piles**
- The influence of partial soil saturation on pile behaviour. Georgiadis K., Potts D. M. & Zdravkovic L., 11–25
- Piled rafts in overconsolidated clay: comparison of *in situ* measurements and numerical analyses. Reul O. & Randolph M. F., 301–315
- Science and empiricism in pile foundation design. Randolph M. F., 847–874
- Plasticity**
- Coupling of hydraulic hysteresis and stress–strain behaviour in unsaturated soils. Wheeler S. J., Sharma R. S. & Buisson M. S. R., 41–54
- An elasto-plasto model for unsaturated soil incorporating the effects of suction and degree of saturation on mechanical behaviour. Gallipoli D., Gens A., Sharma R. & Vaunat J., 123–135
- Seismic bearing capacity of foundations on slopes. Kumar J. & Mohan Rao V. B. K., 347–361
- Proposal for a new plasticity chart. Polidori E., 397–406
- A state-dependent multi-mechanism model for sands. Fang H. L., 407–420
- A state-dependent multi-mechanism model for sands. Fang H. L., 407–420
- The middle surface concept and its application to the elasto-plastic behaviour of saturated sands. Yang Y. & Muraleetharan K. K., 421–431
- Technical note: A simple non-associated three surface kinematic hardening model. McDowell G. R. & Hau K. W., 433–437
- Stability of seismically loaded slopes using limit analysis. Loukidis D., Bandini P. & Salgado R., 463–479
- Technical note: Undrained bearing capacity factors for conical footings on clay. Houlsby G. T. & Martin C. M., 513–520
- On the relationship between stress–dilatancy, anisotropy, and plastic dissipation for granular materials. Collins I. F. & Muhunthan B., 611–618
- Technical note: Residual strength of clays and correlations using Atterberg limits. Wesley L. D., 669–672
- Cavity expansion in cemented materials: structure degradation effects. Schnaid F. & Mántaras F. M., 797–807
- Evaluation of continuous hyperplastic critical state (CHCS) model. Einav I. & Puzrin A. M., 899–911
- Pollution migration/control**
- Retention and transport of a hydrocarbon in a silt. Cui Y. J., Delage P. & Alzoghbi P., 83–91
- Patterns and mechanisms of migration of light non-aqueous phase liquid in an unsaturated sand. Sharma R. S. & Mohamed M. H. A., 225–239
- Modelling the osmosis effect on solute migration through porous media. Manassero M. & Dominijanni A., 481–492
- Pore pressures**
- Tensiometer saturation and the reliable measurement of soil suction. Take W. A. & Bolton M. D., 159–172
- Soil matrix suction: some examples of its measurement and application in geotechnical engineering. Ridley A. M., Dineen K., Burland J. B. & Vaughan P. R., 241–253
- Technical note: Effective stress in unsaturated soil: a microstructural analysis. Li X. S., 273–277
- Technical note: Deviation from Darcy's law observed in one-dimensional consolidation. Hansbo S., 601–605
- Technical note: Determination of the coefficient of consolidation using a least squares method. Chan A. H. C., 673–678
- Technical note: The two-dimensional consolidation theory of electro-osmosis. Su J. Q. & Wang Z., 759–763
- Technical note: A hypothesis for mitigation of risk of liquefaction. Pietruszczak S., Pande G. N. & Oulapour M., 833–838
- Radioactive waste disposal**
- Mechanical behaviour of heavily compacted bentonite under high suction changes. Lloret A., Villar M. V., Sánchez M., Gens A., Pintado X. & Alonso E. E., 27–40
- Water infiltration into a large-scale *in situ* experiment in an underground research laboratory. Thomas H. R., Cleall P. J., Chandler N., Dixon D. & Mitchell H. P., 207–224
- Rafts**
- Piled rafts in overconsolidated clay: comparison of *in situ* measurements and numerical analyses. Reul O. & Randolph M. F., 301–315
- Rankine Lecture**
- Numerical analysis: a virtual dream or practical reality. Potts D. M., 535–573
- Science and empiricism in pile foundation design. Randolph M. F., 847–875
- Remediation structure of soils**
- Retention and transport of a hydrocarbon in a silt. Cui Y. J., Delage P. & Alzoghbi P., 83–91
- Residual soils**
- Critical-state parameters for an unsaturated residual sandy clay. Toll D. G. & Ong B. H., 93–103
- Technical note: Residual strength of clays and correlations using Atterberg limits. Wesley L. D., 669–672
- Cavity expansion in cemented materials: structure degradation effects. Schnaid F. & Mántaras F. M., 797–807
- Retaining walls**
- Estimation of active earth pressure against rigid retaining walls considering arching effects. Paik K. H. & Salgado R., 643–653
- Rocks/rock mechanics**
- Mobilised strength components in brittle failure of rock. Hajiabdolmajid V., Kaiser P. & Martin C. D., 327–336
- Characteristics of stress waves recorded in small-scale field blast tests on a layered rock–soil site. Wu C., Hao H., Lu Y. & Zhou Y., 587–599

Rockfill

Technical note: Suction effects on rockfill compressibility. Oldecop L. A. & Alonso E. E., 289–292

Sampling

Technical note: *In situ* sampling of sediment-filled fractures. Kemp S. J., Pearce J. M. & Oates D., 665–668

Technical note: Analysis and assessment of sampling disturbance of soft sensitive clays. Nagaraj T. S., Miura N., Chung S. G. & Nagendra Prasad K., 679–683

Sands

Patterns and mechanisms of migration of light non-aqueous phase liquid in an unsaturated sand. Sharma R. S. & Mohamed M. H. A., 225–239

Interactions between two rough spheres, water bridge and water vapour. Molenkamp F. & Nazemi A. H., 255–264

Technical note: Shallow flowslides triggered by intense rainfalls on natural slopes covered by loose unsaturated pyroclastic soils. Olivares L. & Picarelli L., 283–287

PSD measurement using the single particle optical sizing (SPOS) method. White D. J., 317–326

A state-dependent multi-mechanism model for sands. Fang H. L., 407–420

A state-dependent multi-mechanism model for sands. Fang H. L., 407–420

The middle surface concept and its application to the elasto-plastic behaviour of saturated sands. Yang Y. & Muraleetharan K. K., 421–431

Discrete element simulation of crushable soil. Cheng Y. P., Nakata Y. & Bolton M. D., 633–641

Technical note: *In situ* sampling of sediment-filled fractures. Kemp S. J., Pearce J. M. & Oates D., 665–668

A state-dependent elasto-plastic model for saturated and unsaturated soils. Chiu C. F. & Ng C. W. W., 809–829

Technical note: Suction and strength in heavily compressed carbonate sand. Atkinson J. & Nocilla A., 831–832

Technical note: Micro mechanics of creep of granular materials. McDowell G. R., 913–914

Sedimentation

Behaviour of calcareous soils in undrained cyclic simple shear. Mao X. & Fahey M., 715–727

Settlement

Piled rafts in overconsolidated clay: comparison of *in situ* measurements and numerical analyses. Reul O. & Randolph M. F., 301–315

Technical note: Deviation from Darcy's law observed in one-dimensional consolidation. Hansbo S., 601–605

Shear strength

Instabilities on moraine slopes induced by loss of suction: a case history. Springman S. M., Jommi C. & Teyssie P., 3–10

Critical-state parameters for an unsaturated residual sandy clay. Toll D. G. & Ong B. H., 93–103

Micromechanical considerations of unsaturated pyramidal packing. Molenkamp F. & Nazemi A. H., 195–206

Technical note: Shallow flowslides triggered by intense rainfalls on natural slopes covered by loose unsaturated pyroclastic soils. Olivares L. & Picarelli L., 283–287

A state-dependent multi-mechanism model for sands. Fang H. L., 407–420

Discrete element simulation of crushable soil. Cheng Y. P., Nakata Y. & Bolton M. D., 633–641

Technical note: Residual strength of clays and correlations using Atterberg limits. Wesley L. D., 669–672

Behaviour of calcareous soils in undrained cyclic simple shear. Mao X. & Fahey M., 715–727

Technical note: Suction and strength in heavily compressed carbonate sand. Atkinson J. & Nocilla A., 831–832

Silts

Interactions between two rough spheres, water bridge and water vapour. Molenkamp F. & Nazemi A. H., 255–264

PSD measurement using the single particle optical sizing (SPOS) method. White D. J., 317–326

A state-dependent elasto-plastic model for saturated and unsaturated soils. Chiu C. F. & Ng C. W. W., 809–829

Simple shear

Behaviour of calcareous soils in undrained cyclic simple shear. Mao X. & Fahey M., 715–727

Site investigation

The vadose zone soil-water balance and transpiration rates of vegetation. Blight G. E., 55–64

Soil matrix suction: some examples of its measurement and application in geotechnical engineering. Ridley A. M., Dineen K., Burland J. B. & Vaughan P. R., 241–253

Small-strain stiffness and damping ratio of Pisa clay from surface wave tests. Foti S., 455–461

Cavity expansion in cemented materials: structure degradation effects. Schnaid F. & Mántaras F. M., 797–807

Performance of miniature piezocones in thinly layered soils. Hird C. C., Johnson P. & Sills G. C., 883–898

Slopes

Instabilities on moraine slopes induced by loss of suction: a case history. Springman S. M., Jommi C. & Teyssie P., 3–10

Performance of an unsaturated expansive soil slope subjected to artificial rainfall infiltration. Ng C. W. W., Zhan L. T., Bao C. G., Fredlund D. G. & Gong B. W., 143–157

Technical note: Seismic bearing capacity of rough footings on slopes using limit equilibrium. Kumar J. & Kumar N., 363–369

Generalised framework of limit equilibrium methods for slope stability analysis. Zhu D. Y., Lee C. F. & Jiang H. D., 377–395

Stability of seismically loaded slopes using limit analysis. Loukidis D., Bandini P. & Salgado R., 463–479

Upper-bound solution for seismic bearing capacity of shallow foundations near slopes. Askari F. & Farzaneh O., 697–702

Soil

Characteristics of stress waves recorded in small-scale field blast tests on a layered rock–soil site. Wu C., Hao H., Lu Y. & Zhou Y., 587–599

Soil classification

PSD measurement using the single particle optical sizing (SPOS) method. White D. J., 317–326

Seismic bearing capacity of foundations on slopes. Kumar J. & Mohan Rao V. B. K., 347–361

Proposal for a new plasticity chart. Polidori E., 397–406

Technical note: Residual strength of clays and correlations using Atterberg limits. Wesley L. D., 669–672

Soil–structure interaction

Piled rafts in overconsolidated clay: comparison of *in situ* measurements and numerical analyses. Reul O. & Randolph M. F., 301–315

Experimental study of boundary effects in dynamic centrifuge modelling. Teymur B. & Madabhushi S. P. G., 655–663

Elastic response of circular footings embedded in an on-homogeneous half-space. Doherty J. P. & Deeks A. J., 703–714

Modelling of natural soft clay destruction processes using viscoplasticity theory. Rocchi G., Fontana M. & Da Prat M., 729–745

Uplift resistance of buried submarine pipelines: comparison between centrifuge modelling and full-scale tests. Palmer A. C., White D. J., Baumgard A. J., Bolton M. D., Barefoot A. J., Finch M., Powell T., Faranski A. S. & Baldry J. A. S., 875–881

Statistical analysis

Technical note: Assessment of statistical models for indirect determination of permeability functions from soil–water characteristic curves. Agus S. S., Leong E. C. & Schanz T., 279–282

Discrete element simulation of crushable soil. Cheng Y. P., Nakata Y. & Bolton M. D., 633–641

Stiffness

Source near-field effects and pulse tests in soil samples. Arroyo M., Muir Wood D. & Greening P. D., 337–345

Small-strain stiffness and damping ratio of Pisa clay from surface wave tests. Foti S., 455–461

Isotropic yielding in an artificially cemented soil cured under stress. Rotta G. V., Consoli N. C., Prietto P. D. M., Coop M. R. & Graham J., 493–501

Technical note: Determination of the coefficient of consolidation using a least squares method. Chan A. H. C., 673–678

Strain localisation

Behaviour of calcareous soils in undrained cyclic simple shear. Mao X. & Fahey M., 715–727

Stress analysis

- Technical note: Seismic bearing capacity of rough footings on slopes using limit equilibrium. Kumar J. & Kumar N., 363–369
- Technical note: Analysis and assessment of sampling disturbance of soft sensitive clays. Nagaraj T. S., Miura N., Chung S. G. & Nagendra Prasad K., 679–683

Structure of soils

- Isotropic yielding in an artificially cemented soil cured under stress. Rotta G. V., Consoli N. C., Prietto P. D. M., Coop M. R. & Graham J., 493–501

Suction

- Instabilities on moraine slopes induced by loss of suction: a case history. Springman S. M., Jommi C. & Teyssie P., 3–10
- The influence of partial soil saturation on pile behaviour. Georgiadis K., Potts D. M. & Zdravkovic L., 11–25
- Mechanical behaviour of heavily compacted bentonite under high suction changes. Lloret A., Villar M. V., Sánchez M., Gens A., Pintado X. & Alonso E. E., 27–40
- Coupling of hydraulic hysteresis and stress–strain behaviour in unsaturated soils. Wheeler S. J., Sharma R. S. & Buisson M. S. R., 41–54
- The vadose zone soil–water balance and transpiration rates of vegetation. Blight G. E., 55–64
- Suction effects on a compacted clay under non-isothermal conditions. Romero E., Gens A. & Lloret A., 65–81
- Retention and transport of a hydrocarbon in a silt. Cui Y. J., Delage P. & Alzoghbi P., 83–91
- Critical-state parameters for an unsaturated residual sandy clay. Toll D. G. & Ong B. H., 93–103
- Modelling the variation of degree of saturation in a deformable unsaturated soil. Gallipoli D., Wheeler S. J. & Karstunen M., 105–112
- An elasto-plasto model for unsaturated soil incorporating the effects of suction and degree of saturation on mechanical behaviour. Gallipoli D., Gens A., Sharma R. & Vaunat J., 123–135
- Technical note: Calibration of tensiometer for direct measurement of matric suction. Tarantino A. & Mongiovi L., 137–141
- Performance of an unsaturated expansive soil slope subjected to artificial rainfall infiltration. Ng C. W. W., Zhan L. T., Bao C. G., Fredlund D. G. & Gong B. W., 143–157
- Tensiometer saturation and the reliable measurement of soil suction. Take W. A. & Bolton M. D., 159–172
- Total suction measurement of unsaturated soils with a device using the chilled-mirror dew-point technique. Leong E. –C., Tripathy S. & Rahardjo H., 173–182
- The mechanical behaviour of a reconstituted unsaturated silty clay. Cunningham M. R., Ridley A. M., Dineen K. & Burland J. B., 183–194
- Micromechanical considerations of unsaturated pyramidal packing. Molenkamp F. & Nazemi A. H., 195–206
- Water infiltration into a large-scale *in situ* experiment in an underground research laboratory. Thomas H. R., Cleall P. J., Chandler N., Dixon D. & Mitchell H. P., 207–224
- Patterns and mechanisms of migration of light non-aqueous phase liquid in an unsaturated sand. Sharma R. S. & Mohamed M. H. A., 225–239
- Soil matrix suction: some examples of its measurement and application in geotechnical engineering. Ridley A. M., Dineen K., Burland J. B. & Vaughan P. R., 241–253
- Interactions between two rough spheres, water bridge and water vapour. Molenkamp F. & Nazemi A. H., 255–264
- Observations on the behaviour of clay fill containing occluded air bubbles. Vaughan P. R., 265–272
- Technical note: Effective stress in unsaturated soil: a microstructural analysis. Li X. S., 273–277
- Technical note: Assessment of statistical models for indirect determina-

tion of permeability functions from soil–water characteristic curves. Agus S. S., Leong E. C. & Schanz T., 279–282

Technical note: Shallow flowslides triggered by intense rainfalls on natural slopes covered by loose unsaturated pyroclastic soils. Olivares L. & Picarelli L., 283–287

Technical note: Suction effects on rockfill compressibility. Oldecop L. A. & Alonso E. E., 289–292

Technical note: A practical hysteresis model for the soil–water characteristic curve for soils with negligible volume change. Pham H. Q., Fredlund D. G. & Barbour S. L., 293–298

A state-dependent elasto-plastic model for saturated and unsaturated soils. Chiu C. F. & Ng C. W. W., 809–829

Technical note: Suction and strength in heavily compressed carbonate sand. Atkinson J. & Nocilla A., 831–832

Temperature effects

Suction effects on a compacted clay under non-isothermal conditions. Romero E., Gens A. & Lloret A., 65–81

Theoretical analysis

Interactions between two rough spheres, water bridge and water vapour. Molenkamp F. & Nazemi A. H., 255–264

Modelling the osmosis effect on solute migration through porous media. Manassero M. & Dominijanni A., 481–492

Technical note: Undrained bearing capacity factors for conical footings on clay. Houlsby G. T. & Martin C. M., 513–520

Technical note: Deviation from Darcy's law observed in one-dimensional consolidation. Hansbo S., 601–605

Estimation of active earth pressure against rigid retaining walls considering arching effects. Paik K. H. & Salgado R., 643–653

Technical note: Determination of the coefficient of consolidation using a least squares method. Chan A. H. C., 673–678

Time dependence

Total suction measurement of unsaturated soils with a device using the chilled-mirror dew-point technique. Leong E. –C., Tripathy S. & Rahardjo H., 173–182

Modelling of natural soft clay destruction processes using viscoplasticity theory. Rocchi G., Fontana M. & Da Prat M., 729–745

Torsion

Reduction of equipment-generated damping in resonant column measurements. Meng J. & Rix G. J., 503–512

Elastic response of circular footings embedded in an on-homogeneous half-space. Doherty J. P. & Deeks A. J., 703–714

Trenches

Uplift resistance of buried submarine pipelines: comparison between centrifuge modelling and full-scale tests. Palmer A. C., White D. J., Baumgard A. J., Bolton M. D., Barefoot A. J., Finch M., Powell T., Faranski A. S. & Baldry J. A. S., 875–881

Tunnels

Displacements ahead of an advancing NATM tunnel in the London clay. Van der Berg J. P., Clayton C. R. I. & Powell D. B., 767–784

Vibration

Reduction of equipment-generated damping in resonant column measurements. Meng J. & Rix G. J., 503–512

Characteristics of stress waves recorded in small-scale field blast tests on a layered rock–soil site. Wu C., Hao H., Lu Y. & Zhou Y., 587–599

Waves and wave loading

Small-strain stiffness and damping ratio of Pisa clay from surface wave tests. Foti S., 455–461