

REFERENCES

- Aas, G., S. Lacasse, T. Lunne, and K. Hoeg. 1986. "Use of In Situ Tests for Foundation Design on Clay." In *Proceedings of In Situ '86, Use of In Situ Tests in Geotechnical Engineering*, 1–30. Blacksburg, VA: ASCE GSP 6.
- AASHTO (American Association of State Highway and Transportation Officials). 2007. "SI Units." In *LRFD Bridge Design Specifications*, 5th ed. Washington, DC: Transportation Research Board, Academy of Sciences.
- Abdelmalak, R. 2007. "Soil Structure Interaction for Shrink-Swell Soils: A New Design Procedure for Foundation Slabs on Shrink-Swell Soils." PhD dissertation, Department of Civil Engineering, Texas A&M University.
- Abramson, L. W., T. S. Lee, S. Sharma, G. M. Boyce. 1996. *Slope Stability and Stabilization Methods* (1st ed.). New York: John Wiley & Sons.
- Abramson, L. W., T. S. Lee, S. Sharma, and G. M. Boyce. 2002. *Slope Stability and Stabilization Methods*. New York: John Wiley & Sons.
- ADSC-DFI. 2004. *Drilled Shaft Inspector's Manual*, 2nd ed. Dallas, TX: International Association of Foundation Drilling.
- Akbulut, S., and A. Saglamer. 2002. "Estimating the Groutability of Granular Soils: A New Approach." *Tunneling and Underground Space Technology* 7(4): 371–80.
- Al-Alusi, H. R. 1997. "Compaction Grouting: From Practice to Theory." *Geo-Logan 1997, GSP-66: Grouting: Compaction, Remediation, and Testing*. (July): 43–54.
- Alexiew, D., G. J. Horgan, and D. Brokemper. 2003. "Geotextile Encased Columns (GEC): Load Capacity and Geotextile Selection." In *BGA International Conference on Foundations: Innovations, Observations, Design and Practice* 81–90.
- Alonso, E. E., A. Gens, and A. Josa. 1990. "A Constitutive Model for Partially Saturated Soils." *Géotechnique* 40(3): 405–30.
- Al-Thawadi, S. M. 2008. "High Strength In-Situ Biocementation of Soil by Calcite Precipitating Locally Isolated Ureolytic Bacteria." PhD diss., Murdoch University, Western Australia.
- Anderegg, R. 1997. "Nichtlineare schwingungen bei dynamischen bodenverdichtern." Diss. 12419, Eidgenössische Technische Hochschule Zürich, Schweiz, Switzerland.
- Andersen, K. H., H. P. Jostad, and R. Dyvik. 2008. "Penetration Resistance of Offshore Skirted Foundations and Anchors in Dense Sand." *Journal of Geotechnical & Geoenvironmental Engineering* 134(1): 106–16.
- Andrus, R. D., and K. H. Ii Stokoe. 2000. "Liquefaction Resistance of Soils from Shear-Wave Velocity." *ASCE Journal of Geotechnical & Environmental Engineering* 126(11): 1015–22.
- Annandale, G. W. 1995. "Erodibility." *Journal of Hydraulic Research* 33(4): 471–94.
- API (American Petroleum Institute). 2000. *Recommended Practice for Planning, Designing and Constructing Fixed Offshore Platforms: Working Stresses Design* (Recommended Practice 2A). Washington, DC: Author.
- _____. 2012. *Design and Analysis of Station Keeping Systems for Floating Structures* (Recommended Practice 2SK). Washington, DC: Author.
- ARA-ERES. 2000. "Appendix DD-1: Resilient Modulus as Function of Soil Moisture—Summary of Predictive Models." In *Guide for Mechanistic-Empirical Design of New and Rehabilitated Pavement Structures* (NCHRP Report on Project 1-37a). Washington, DC: Transportation Research Board.
- ASCE (American Society of Civil Engineers) 7. 2011. *Minimum Design Loads for Buildings and Other Structures*. Washington, DC: Author.
- ASTM (American Society for Testing and Materials). 1995. *Standard Guide for Risk-Based Corrective Action Applied at Petroleum Release Sites* (E1739). West Conshohocken, PA: Author.
- ASTM (American Society for Testing and Materials) International. 2013. "Section 04 Construction." In *Annual Book of ASTM Standards*. Philadelphia, PA: ASTM.
- Athanasopoulos, C. A. 2007. "Reducing the Seismic Earth Pressures on Retaining Walls by EPS Geofoam Buffers: Numerical Parametric Analyses." In *Proceedings of Geosynthetics 2007*. Washington, DC: IFAI Publication.
- Aubeny, C. P., and R. L. Lytton. 2004. "Shallow Slides in High Plasticity Clay Slopes." *ASCE Journal of Geotechnical & Environmental Engineering* 130(7): 717–27.
- Austin, D. N., K. J. Wu, and D. F. White. 1993. "The Influence of Test Parameters and Procedures on the Tensile Modulus of Stiff Geogrids." In *Geosynthetic Soil Reinforcement Testing Procedures* (ASTM STP 1190). Philadelphia, PA: ASTM.
- Australian Standard. 1996. *Residential Slabs and Footings* (AS 2870). Sydney, Australia: Standard House.
- Averjanov, S. F. 1950. "About Permeability of Subsurface Soils in Case of Incomplete Saturation." *Engineering College* vol. 7.

- Baguelin, F., R. Frank, and J.-F. Jezequel. 1982. "Parameters for Friction Piles in Marine Soils." Second International Conference in Numerical Methods in Offshore Piling, Department of Civil Engineering, University of Texas, Austin, TX.
- Baguelin, F., J.-F. Jezequel, and D. H. Shields. 1978. *The Pressuremeter and Foundation Engineering*. Clausthal-Zellerfeld, West Germany: Trans Tech Publications.
- Baker, C. N., E. E. Drumright, J.-L. Briaud, F. D. Mensah, and G. Parikh. 1993. *Drilled Shafts for Bridge Foundations* (Publication No. FHWA-RD-92-004). Washington, DC: Federal Highway Administration.
- Baligh, M. M., V. Vivatrat, and C. C. Ladd. 1980. "Cone Penetration in Soil Profiling." *Journal of the Geotechnical Engineering Division* 106(4): 447–61.
- Barker, R. M., J. M. Duncan, K. B. Rojiani, P. S. K. Ooi, C. K. Tan, and S. G. Kim. 1991. *Manuals for the Design of Bridge Foundations* (NCHRP Report 343). Washington, DC: Transportation Research Board, National Research Council.
- Barron, R. A. 1948. "Consolidation of Fine-Grained Soils by Drain Wells." *Transactions ASCE* 113 (Paper 2346): 718–24.
- Bath, M. 1966. "Earthquake Energy and Magnitude." In *Physics and Chemistry of the Earth*, vol. 7, edited by L. H. Ahrens, F. Press, S. K. Runcorn, and H. C. Urey, 117–65. New York: Pergamon Press.
- Bell, F. G. 2000. *Engineering Properties of Soils and Rocks* (4th ed.). Malden, MA: Blackwell Science Inc.
- _____. 2007. *Engineering Geology*, 2nd ed. Burlington, UK: Elsevier.
- Birmingham, P., and M. Janes. 1989. "An Innovative Approach to Load Testing of High Capacity Piles." In *Proceedings of the International Conference on Piling and Deep Foundations*, vol. 1, 409–13. Rotterdam: A.A. Balkema Publishers.
- Bieniawski, Z. T. 1989. *Engineering Rock Mass Classifications*. New York: John Wiley & Sons.
- Bishop, A. W. 1955. "The Use of the Slip Circle in the Stability Analysis of Slopes." *Géotechnique* 5(1): 7–17.
- Bishop, A. W., and D. J. Henkel. 1962. *The Measurement of Soil Properties in the Triaxial Test*, 2nd ed. London: Edward Arnold.
- Bjerrum, L. 1972. "Embankments on Soft Ground." In *Proceedings of the ASCE Conference on Performance of Earth-Supported Structures*, vol. 2, 1–54. Purdue University.
- Bjerrum, L., and A. Landva. 1966. "Direct Simple-Shear Test on a Norwegian Quick Clay." *Géotechnique* 16(1): 1–20.
- Blight, G. E. 1971. "Flow of Air through Soils." *ASCE Journal of the Soil Mechanics and Foundations Division* 97 (Sm4): 607–24.
- Bobet, A. 2010. "Numerical Methods in Geomechanics." *Arabian Journal for Science & Engineering* 35 (1B 2).
- Bolduc, L. C., P. Gardoni, and J.-L. Briaud. 2008, February. "Probability of Exceedance Estimates for Scour Depth around Bridge Piers." *Journal of Geotechnical & Geoenvironmental Engineering* 134(2):.
- Bollaert, E. 2002. *Transient Water Pressures in Joints and Formation of Rock Scour Due to High-Velocity Jet Impact* (Communication No. 13). Lausanne, Switzerland: Laboratory of Hydraulic Constructions, École Polytechnique Federale de Lausanne.
- Bonaparte, R., D. E. Daniel, and R. M. Koerner. 2002. *Assessment and Recommendations for Improving the Performance of Waste Containment Systems (EPA/600/R-02/099)*. Washington, DC: U.S. Environmental Protection Agency.
- Boore, D. M., W. B. Joyner, and T. E. Fumal. 1997. "Equations for Estimating Horizontal Response Spectra and Peak Acceleration from Western North American Earthquakes: A Summary of Recent Work." *Seismic Research Letters* 68: 128–53.
- Boutwell, G. P., and R. K. Derick. 1986. *Groundwater Protection for Sanitary Landfills in the Saturated Zone*. Paper presented at Waste Tech '86, National Solid Waste Management Association, Chicago, IL.
- Bowders, J. J., and D. E. Daniel. 1987. "Hydraulic Conductivity of Compacted Clay to Dilute Organic Chemicals." *Journal of Geotechnical Engineering* 113(12): 1432–48.
- Bowles, J. E. 1996. *Foundation Analysis and Design*. New York: McGraw-Hill.
- Brandimarte, L., A. Montanari, J.-L. Briaud, and P. D'Odorico. 2006. "Stochastic Flow Analysis for Predicting Scour of Cohesive Soils." *Journal of Hydraulic Engineering* 132(5):
- Bray, J. D., R. B. Sancio, L. F. Youd, C. Christensen, O. Cetin, A. Onalp, T. Durgunoglu, J. P. C. Stewart, R. B. Seed, M. B. Baturay, T. Karadayilar, and C. Oge. 2001, February. "Documenting Incidents of Ground Failure Resulting from the August 17, 1999 Kocaeli, Turkey Earthquake." Available at Pacific Earthquake Engineering Research Center, <http://peer.berkeley.edu/turkey/adapazari/index.html>.
- Brebbia, C. A., J. C. F. Telles, and L. C. Wrobel. 1984. *Boundary Element Techniques*. Berlin, Germany: Springer-Verlag.
- Briaud, J.-L. 1992. *The Pressuremeter*. Oxford: Taylor and Francis.
- _____. 1997. "SALLOP: Simple Approach for Lateral Loads on Piles." *Journal of Geotechnical & Geoenvironmental Engineering* 123(10): 958–64.
- _____. 2006a. "Bridge Scour." *Geotechnical News* 24 (3, September):
- _____. 2006b. *Erosion Tests on New Orleans Levee Samples* (Internal Report). College Station, TX: Zachry Department of Civil Engineering, Texas A&M University.
- _____. 2007. "Spread Footings in Sand: Load Settlement Curve Approach." *Journal of Geotechnical & Geoenvironmental Engineering* 133 (8, August).
- _____. 2008. "Case Histories in Soil and Rock Erosion: Woodrow Wilson Bridge, Brazos River Meander, Normandy Cliffs, and New Orleans Levees" (The 9th Ralph B. Peck Lecture). *Journal of Geotechnical & Geoenvironmental Engineering* 134(10).
- _____. 2012. *Summary Report*. Available at <http://ceprofs.tamu.edu/briaud/>, under "research," then under "scour."
- Briaud, J.-L., R. Abdelmalak, and X. Zhang. 2010. "Design of Stiffened Slabs on Grade on Shrink Swell Soils" (Keynote Lecture). In *Proceedings of the International Conference on Unsaturated Soils [UNSAT 2010]*, Barcelona, Spain. : CRC Press-Balkema-Taylor and Francis Group.
- Briaud, J.-L., M. Ballouz, and G. Nasr. 2000. "Static Capacity Prediction by Dynamic Methods for Three Bored Piles." *Journal of Geotechnical & Geoenvironmental Engineering* 126(7): 640–49.
- _____. 2002. "Defect and Length Prediction by NDT Methods for Nine Bored Piles." In *Proceedings of the International Deep Foundation Congress (GSP 116)*, Orlando, Florida, February 14–16, 2002.
- Briaud, J.-L., M. Bernhardt, and M. Leclair. 2011. "The Pocket Erodrometer: A Simple Device to Estimate Soil Erodibility." *ASTM Geotechnical Testing Journal* .

- _____. 2012. "The Pocket Erodrometer Test: Development and Preliminary Results." *ASTM Geotechnical Testing Journal*, March 2012, ASTM
- Briaud, J.-L., L. Brandimarte, J. Wang, and P. D'Odorico. 2007. "Probability of Scour Depth Exceedance due to Hydrologic Uncertainty." *Georisk Journal for Assessment and Management of Risk for Engineered Systems and Geohazards* 1 (2, March): 77–88.
- Briaud, J.-L., and A. Chaouch. 1997. "Hydrate Melting around Hot Conductor." *Journal of Geotechnical & Geoenvironmental Engineering* 123(7): 645–53.
- Briaud, J.-L., H.-C. Chen, K.-A. Chang, Y.-A. Chung, N. Park, W. Wang, and P.-H. Yeh. 2007. *Establish Guidance for Soil Properties-Based Prediction of Meander Migration Rate* (Report FHWA/TX-07/0-4378-1). College Station, TX: Zachry Department of Civil Engineering, Texas A&M University.
- Briaud, J.-L., H.-C. Chen, P. Nurtjahyo, and J. Wang. 2004. *Pier and Contraction Scour in Cohesive Soils* (NCHRP Report 516). Washington, DC: Transportation Research Board.
- Briaud, J.-L., H. C. Chen, K. Kwak, S.-W. Han, and F. Ting, 2001. "Multiflood and Multilayer Method for Scour Rate Prediction at Bridge Piers." *Journal of Geotechnical & Geoenvironmental Engineering* 127(2): 114–23.
- Briaud, J.-L., H. M. Coyle, and H. M. Tucker. 1990. "Axial Response of 3 Vibratory and 3 Impact Driven H Piles in Sand." *Transportation Research Record* (January).
- Briaud, J.-L., and G. Y. Felio. 1986. "Cyclic Axial Loads on Piles: Analysis of Existing Data." *Canadian Geotechnical Journal* 23(3): 362–71.
- Briaud, J.-L., and E. E. Garland. 1985. "Loading Rate Method for Pile Response in Clay." *Geotechnical Engineering Journal* 111(3): 319–35.
- Briaud, J.-L., and R. M. Gibbens. (1994). "Test and Prediction Results for Five Large Spread Footings on Sand." In *FHWA Prediction Symposium* (ASCE Geotechnology Special Publication No. 41), 92–128. New York: ASCE.
- _____. 1999. "Behavior of Five Large Spread Footings in Sand." *Journal of Geotechnical & Geoenvironmental Engineering* 125(9): 787–97.
- Briaud, J.-L., L. G. Huff, L. M. Tucker, and H. M. Coyle. 1984. *Evaluation of In Situ Test Design Methods for Vertically Loaded H Piles at Lock & Dam No. 26 Replacement Site* (Research Report 4690, USAE, Waterways Experiment Station).
- Briaud, J.-L., and N. K. Kim. 1998. "Beam Column Method for Tieback Walls." *Journal of Geotechnical & Geoenvironmental Engineering* 124(1): 67–69
- Briaud, J.-L., Y. Li, and K. Rhee. 2006. "BCD: A Soil Modulus Device for Compaction Control." *Journal of Geotechnical & Geoenvironmental Engineering* 132(1): 108–115.
- Briaud, J.-L., and Y. Lim. 1997. "Soil-Nailed Wall under Piled Bridge Abutment: Simulation and Guidelines." *Journal of Geotechnical & Geoenvironmental Engineering* 123(11): 1043–50.
- _____. 1999. "Tieback Walls in Sand: Numerical Simulation and Design Implications." *Journal of Geotechnical & Geoenvironmental Engineering* 125(2): 101–10.
- Briaud, J.-L., M. Meriwether, and H. Porwol. 1983. *Pressuremeter Design of Retaining Walls* (Texas Department of Transportation Report No. FHWA/TX-84/54+340-4f).
- Briaud, J.-L., and J. Miran. 1992a. *The Cone Penetrometer Test* (Publication No. FHWA-SA-91-043). Washington, DC: U.S. Department of Transportation.
- _____. 1992b. *The Flat Dilatometer Test* (Publication No. FHWA-SA-91-044). Washington, DC: Federal Highway Administration, Office of Technology Applications.
- Briaud, J.-L., J. Nicks, K. Rhee, and G. Stieben. 2007. "The San Jacinto Monument Case History." *Journal of Geotechnical & Geoenvironmental Engineering* 133(11): 1337–51.
- Briaud, J.-L., and C. J. Rutherford. 2010. "Excavation Support Using Deep Mixing Technology" (Keynote Lecture). In *Proceedings of the International Geotechnical Conference on Geotechnical Challenges in Megacities, Moscow, Russia, 7–10 June 2010*. St Petersburg, Russia: GRF.
- Briaud, J.-L., B. Smith, K.-Y. Rhee, H. Lacy, and J. Nicks. 2009. "The Washington Monument Case History." *International Journal of Geoenvironmental Case Histories* 1(3): 170–88. Available at <http://casehistories.geoengineer.org>
- Briaud, J.-L., F. Ting, H. C. Chen, Y. Cao, S.-W. Han, and K. Kwak. 2001. "Erosion Function Apparatus for Scour Rate Predictions." *Journal of Geotechnical & Geoenvironmental Engineering* 127(2): 105–13.
- Briaud, J.-L., F. C. K. Ting, H. C. Chen, R. Gudavalli, S. Perugu, and G. Wei. 1999. "SRICOS: Prediction of Scour Rate in Cohesive Soils at Bridge Piers." *Journal of Geotechnical & Geoenvironmental Engineering* 123(4): 237–46.
- Briaud J.-L., and L. M. Tucker. 1984a. "Piles in Sand: A Method Including Residual Stresses." *Journal of Geotechnical Engineering* 110(11): 1666–1680.
- _____. 1984b. "Residual Stresses in Piles and the Wave Equation." Presented at ASCE Symposium on Deep Foundations, San Francisco, October.
- _____. 1987. "Horizontally Loaded Piles Next to a Trench." In *Proceedings of an ASCE Session on Foundations for Transmission Towers*, Atlantic City, NJ, April 1987.
- _____. 1988. "Measured and Predicted Axial Response of 98 Piles." *Journal of Geotechnical Engineering* 114(9): 984–1001.
- _____. 1997. *Design and Construction Guidelines for Downdrag on Uncoated and Bitumen-Coated Piles* (NCHRP Report 393). Washington, DC: Transportation Research Board, National Academy Press.
- Briaud, J.-L., L. M. Tucker, R. L. Lytton, and H. M. Coyle. (1985). *Behavior of Piles and Pile Groups in Cohesionless Soils* (FHWA-IRD-831038). Washington, DC: Federal Highway Administration.
- Briaud, J.-L., L. M. Tucker, and E. Ng. 1989. "Axially Loaded 5 Pile Group and Single Pile in Sand." In *Proceedings of the 12th International Conference on Soil Mechanics and Foundation Engineering* (Rio de Janeiro), vol. 2, 1121–24. Rotterdam: A. A. Balkema.
- Briaud, J.-L., B. Smith, K.-Y. Rhee, H. Lacy, and J. Nicks. 2009. "The Washington Monument Case History." *International Journal of Geoenvironmental Case Histories* 1(3): 170–188. Available at <http://casehistories.geoengineer.org>.
- Briaud J.-L., X. Zhang, and S. Moon. 2003. "Shrink Test: Water Content Method for Shrink and Swell Predictions." *Journal of Geotechnical & Geoenvironmental Engineering* 129(7): 590–600.
- Brice, J. C. 1974. "Evolution of Meander Loops." *Geological Society of America Bulletin* 85: 581–86.

- Brooks, R. H., and A. T. Corey. 1964. *Hydraulic Properties of Porous Media* (Hydrology Paper 3). Fort Collins, CO: Colorado State University.
- Brown, D. A., J. P. Turner, and R. J. Castelli. 2010. *Drilled Shafts: Construction Procedures and LRFD Design Methods* (NHI Course 132014, Geotechnical Engineering Circular no. 10, Federal Highway Administration Report no. FHWA NHI-10-016). Washington, DC:
- Brunner, G. W. 2002. *HEC-RAS River Analysis System Hydraulic Reference Manual* (Version 3.1) (Report No. CPD-69). Davis, CA: U.S. Army Corps of Engineers, Institute for Water Resources, Hydrologic Engineering Research Center.
- Building Research Advisory Board (BRAB). 1968. *National Research Council Criteria for Selection and Design of Residential Slabs-on-Ground* (U.S. National Academy of Sciences Publication 1571). Washington, DC: National Academy Press.
- Bulut, R. 2003. "Measurement of Soil Suction." Presentation at the Foundation Performance Association, Houston, TX, August 20.
- Bulut, R., S. M. Hineidi, and B. Bailey. 2002. "Suction Measurements: Filter Paper and Chilled Mirror Psychrometer." In *Proceedings of the Texas ASCE 2002 Fall Meeting*, Waco, TX.
- Bulut, R., R. L. Lytton, and W. K. Wray. 2001. "Soil Suction Measurements by Filter Paper." In *Expansive Clay Soils and Vegetative Influence on Shallow Foundations* (ASCE Geotechnical Special Publication no. 115), 243–261.
- Bulut, R., and W. K. Wray. (2005). "Free Energy of Water—Suction—in Filter Papers." *ASTM Geotechnical Testing Journal* 28(4): 355–64.
- Burenkova, V. V. 1993. "Assessment of Suffusion in Noncohesive and Graded Soils." In *Proceedings of the First International Conference on Geo-Filters, Karlsruhe, Germany*, 357–60. Rotterdam: Balkema.
- Burns, S. E., and P. W. Mayne. 1998. "Monotonic and Dilatory Pore Pressure Decay during Piezocone Tests." *Canadian Geotechnical Journal* 35(6): 1063–73.
- Byrne, R. J., D. Cotton, J. Porterfield, C. Wolschlag, and G. Uebler. 1998. *Manual for Design and Construction Monitoring of Soil Nail Walls* (Report FHWA-SA-96-69R). Washington, DC: Federal Highway Administration.
- CALTRANS. 1991. *A User's Manual for the SNAIL Program, Version 2.02—Updated PC Version*. Sacramento, CA: California Department of Transportation, Division of New Technology, Material and Research, Office of Geotechnical Engineering.
- Canadian Foundation Engineering Manual (4th ed.). 2007. Richmond, BC: Canadian Geotechnical Society/BiTech.
- Cao, Y., J. Wang, J.-L. Briaud, H. C. Chen, Y. Li, and P. Nurtjahyo. 2002. "EFA Tests and the Influence of Various Factors on the Erodibility of Cohesive Soils." In *Proceedings of the First International Conference on Scour of Foundations*. College Station, TX: Texas A&M University, Department of Civil Engineering.
- Cardimona, S. 1993. *Electrical Resistivity Techniques for Subsurface Investigation* (Internal Document). Rolla, MO: Department of Geology and Geophysics, University of Missouri-Rolla.
- Carman, P. C. 1938. "The Determination of the Specific Surface of Powders." *Journal of the Society for Chemical Industrial Transport* 57: 225.
- Carrier, D. W., III. 2003. "Goodbye, Hazen; Hello, Kozeny-Carman." *Journal of Geotechnical & Geoenvironmental Engineering* 129(11): 1054–1056.
- Carrier, W. D., and J. F. Beckman. 1984. "Correlations between Index Tests and the Properties of Remolded Clays." *Géotechnique* 34(2): 211–28.
- Carroll, R. G., Jr. 1983. "Geotextile Filter Criteria." In TRR 916, *Engineering Fabrics in Transportation Construction*, 46–63. Washington, DC.
- Carslaw, H. S., and J. C. Jaeger. 1947. *Conduction of Heat in Solids*, 2nd ed. Oxford, UK: Oxford University Press.
- Cassagrande, A. 1938. "Notes on Soil Mechanics—First Semester." Cambridge, MA: Harvard University (unpublished).
- Cazzuffi, D., and S. Venesia. 1986. "The Mechanical Properties of Geotextiles: Italian Standard and Interlaboratory Test Comparison." In *Proceeding of the Third Conference on Geotextiles*, IFAI.
- Cedergren, H. 1967. *Seepage, Drainage, and Flownets*. New York: McGraw-Hill.
- Chapuis, R. P., and T. Gatién. 1986. "An Improved Rotating Cylinder Technique for Quantitative Measurements of the Scour Resistance of Clays." *Canadian Geotechnical Journal* 23: 83–87.
- Chen, H.-C. 2002. "Numerical Simulation of Scour around Complex Piers in Cohesive Soil." In *Proceedings of First International Conference on Scour of Foundations* (November 17-20, 2002, College Station, TX), 14–33.
- Chen H.-C., V. C. Patel, and S. Ju. 1990. "Solution of Reynolds-Averaged Navier Stokes Equations for Three-Dimensional Incompressible Flows." *Journal of Computational Physics* 88(2): 305–36.
- Chen, T., and Y. Fang. 2008. "Earth Pressure due to Vibratory Compaction." *Journal of Geotechnical & Geoenvironmental Engineering* 134(4): 437–44.
- Chow, V. T., D. R. Maidment, and L. W. Mays. 1988. *Applied Hydrology*. New York: McGraw-Hill.
- Christian, J. T., and W. D. Carrier III. 1978. "Janbu, Bjerrum, and Kjaernsli's Chart Reinterpreted." *Canadian Geotechnical Journal* 15: 127.
- Chu, J., S. Varaksin, U. Klotz, and P. Menge. 2009. "Construction Processes." In *Proceedings of the International Conference on Soil Mechanics and Geotechnical Engineering*, Alexandria, Egypt: IOS Press.
- Chua, K. M., S. Gardner, and L. L. Lowery. 1987. "Wave Equation Analysis of a Vibratory Hammer-Driven Pile." Presented at Offshore Technology Conference, 27-30 April 1987, Houston, TX.
- Clayton, C. R. I., N. E. Simons, and M. C. Matthews. 1982. *Site Investigation: A Handbook for Engineers*. Halsted Press.—a Division of John Wiley & Sons Inc.
- Clough, G. W., and T. D. O'Rourke. 1990. *Construction Induced Movements of In Situ Walls: Design and Performance of Retaining Structures* (Geotechnical Special Publications No. GSP 25), 439–70. : ASCE.
- Clough, R. W. 1960. "The Finite Element in Plane Stress Analysis." In *Proceedings of the Second ASCE Conference on Electronic Computation*, Pittsburgh, PA, 345–78.
- Cornell, C. A., H. Banon, and A. F. Shakal. 1979. "Seismic Motion and Response Prediction Alternatives." *Earthquake Engineering & Structural Dynamics* 7(4): 295–315.

- Couroyer, C. 2000. *Attrition of Alumina Catalyst Carrier Beads*. PhD thesis, University of Surrey, Guildford, Surrey, UK. Available at www.engineering.leeds.ac.uk/ipse.old/research/ghadiri/ghadiri009.shtml
- Cox, W. R., D. A. Dixon, and B. S. Murphy. 1983. *Lateral Load Tests on 25.4 mm Diameter Piles in Very Soft Clay in Side by Side and In Line Groups* (ASTM Special Technical Publication no. STP 835), 122–40.
- Coyle, H. M., R. E. Bartoskewitz, and W. J. Berger. 1973. *Bearing Capacity by Wave Equation Analysis—State of the Art*. College Stations, TX: Texas Transportation Institute, Texas A&M University.
- Coyle, H. M., and G. C. Gibbson. 1970. “Empirical Damping Constants for Sand and Clay.” *Journal of the Soil Mechanics & Foundation Division, ASCE* . .
- Crank, J. 1956. *The Mathematics of Diffusion*. New York: Oxford University Press.
- Croad, R. N. 1981. *Physics of Erosion of Cohesive Soils*. PhD thesis, Department of Civil Engineering, University of Auckland, Auckland, New Zealand.
- Crouch, S. L., and A. M. Starfield, 1983. *Boundary Element Methods in Solid Mechanics*. London: Allen and Unwin.
- Cundall, P. A., and O. D. L. Strack. 1979. “A Discrete Numerical Model for Granular Assemblies.” *Géotechnique* 29(1): 47–65.
- Dalrymple, G. B. 1994. *The Age of the Earth*. Palo Alto, CA: Stanford University Press.
- Daniel, D. E. 1989. “In Situ Hydraulic Conductivity Tests for Compacted Clay.” *Journal of Geotechnical Engineering* 115(9): 1205–1226.
- Daniel, D. E., J. J. Bowders, and R. B. Gilbert. 1997. “Laboratory Hydraulic Conductivity Testing of GCLs in Flexible Wall Permeameters.” In *Testing and Acceptance Criteria for Geosynthetic Clay Liners* (ASTM STP 1308), edited by Larry W. Well, 208–28. ASTM.
- Davis, R. O., and A. P. S. Selvadurai. 2002. *Plasticity in Geomechanics*. Cambridge, UK: Cambridge University Press.
- De Alba, P., H. B. Seed, and C. K. Chan. 1976. “Sand Liquefaction in Large Scale Simple Shear Tests.” *Journal of the Geotechnical Engineering Division, ASCE* 102 (GT9): 909–27.
- Dejong, J., and R. W. Boulanger. 2000. *An Introduction to Drilling and Sampling in Geotechnical Practice—2nd ed.* [instructional video]. Department of Civil and Environmental Engineering, University of California-Davis.
- De Moor, J. J., R. T. Van Balen, and C. Kasse. 2007. “Simulating Meander Evolution of the Geul River (the Netherlands) Using a Topographic Steering Model.” *Earth Surface Processes and Landforms* 32(7): 1077–1093.
- Den Hoedt, G. 1986. “Creep and Relaxation of Geotextile Fabrics.” *Journal of Geotextiles & Geomembranes* 4(2): 83–92.
- Denk, E. W., W. A. Dunlap, W. R. Bryant, L. J. Milberger, and T. J. Whelan. 1981. “A Pressurized Core Barrel for Sampling Gas Charged Sediments.” In *Proceedings of the 13th Offshore Technology Conference*, 43–52, Richardson, TX
- Desai, C. S., and J. F. Abel. 1972. *Introduction to the Finite Element Method: A Numerical Method for Engineering Analysis* (10th reprint). New York: Van Nostrand Reinhold.
- De Wilde, P. 1996. *Neural Network Models: An Analysis*. London, UK: Springer-Verlag.
- Donald, I. B. 1961. *The Mechanical Properties of Saturated and Partly Saturated Soils with Special Reference to Negative Pore Water Pressure*. PhD diss., University of London.
- Drucker, D. C., and W. Prager. 1952. “Soil Mechanics and Plastic Analysis or Limit Design.” *Quarterly Journal of Applied Mathematics* 10(2): 157–65.
- Duncan, J. M., and C. Y. Chang. 1970. “Non-Linear Analysis of Stress and Strain in Soils.” *Journal of Soil Mechanics* 96 (Sm5): 1629–53.
- Duncan, J. M., and R. B. Seed. 1986. “Compaction-Induced Earth Pressures under Ko-Conditions.” *Journal of Geotechnical Engineering* 112(1): 1–21.
- Duncan, J. M., and S. P. Wright. 2005. *Soil Strength and Slope Stability*. Hoboken, NJ: John Wiley & Sons.
- Elias, V., and I. Juran. 1991. *Soil Nailing for Stabilization of Highway Slopes and Excavations* (Publication FHWA-RD-89-198). Washington, DC: Federal Highway Administration.
- Elias, V., J. Welsh, J. Warren, R. Lukas, J. G. Collin, and R. R. Berg. 2006. *Ground Improvement Methods* (NHI-06-020). Washington, DC: Federal Highway Administration.
- Elton, D. J. 1999. *Soils Magic* (Geotechnical Special Publication no. 114). Reston, VA: American Society of Civil Engineers.
- Escarío, V., J. Juca, and M. S. Coppe. 1989. “Strength and Deformation of Partly Saturated Soils.” In *Proceedings of the 12th International Conference on Soil Mechanics and Foundation Engineering*, Rio de Janeiro, vol. 3, 43–46.
- Eurocode 7. 2011. *Geotechnical Design. Part 1: General Rules, Part 2: Ground Investigation and Testing* (European Standard EN-1997). Brussels, Belgium: European Committee for Standardization.
- European Committee for Standardization. 2004. *Geotechnical Investigation and Testing—Laboratory Testing of Soil Part 6: Fall Cone Test (ISO/TS 17892-6:2004)*. Paris, France: Author.
- Fang, H. Y., ed. 1991. *Foundation Engineering Handbook*. New York: Van Nostrand Reinhold.
- Fascicule 62. 1993. *Regles techniques de conception et de calcul des fondations des ouvrages de genie civil* (Ministere de l’équipement, du logement, et des transports). Paris, France: Publications Eyrolles.
- Feda, J. 1966. “Structural Stability of Subsident Loess Soil from Prahadejuice.” *Engineering Geology* 1: 201–19. [Available from Elsevier Science Publishers B. V., Box 211, 1000 AE, Amsterdam, The Netherlands.]
- Federal Highway Administration. XXXX See FHWA.
- Fell, R., and J.-J. Fry. 2005. “The State of the Art of Assessing the Likelihood of Internal Erosion of Embankment Dams, Water Retaining Structures and Their Foundations.” In *Internal Erosion of Dams and their Foundations*, edited by R. Fell and J.-J. Fry., London, UK: Taylor and Francis Group.
- Fell, R., P. MacGregor, D. Stapledon, and G. Bell. 2005. *Geotechnical Engineering of Dams*. Leiden, Germany: Balkema.
- Fell, R., and C. F. Wan. 2005. “Investigation of Internal Erosion by the Process of Suffusion in Embankment Dams and Their Foundations.” In *Internal Erosion of Dams and their Foundations*, edited by R. Fell and J.-J. Fry, 219–34. London, UK: Taylor and Francis Group.
- Fellenius, W. 1927. *Erdstatische berechnungen mit reibung and kohaesion*. Berlin: Ernst.
- FERUM. 2001. “Finite Element Reliability Using Matlab.” Available at <http://www.ce.berkeley.edu/projects/ferum/index.html>.

- Fetter, C. W. 1992. *Contaminant Hydrogeology*. New York: Macmillan.
- FHWA (Federal Highway Administration). 1984. *Permanent Ground Anchors* (Report FHWA-DP-68-1R). Washington, DC: Author.
- _____. 1998. *Geotechnical Earthquake Engineering* (FHWA HI-99-012). Washington, DC: Author.
- _____. 2006. "Geotechnical Inputs for Pavement Design." In *Geotechnical Aspects of Pavements Reference Manual* (U.S. Department of Transportation Publication No. FHWA NHI-05-037, NHI Course No. 132040), ch. 5. Washington, DC: Author.
- _____. 2010. *Drilled Shaft Manual* (Publication No. FHWA-NHI-10-016). Washington, DC: Author.
- Filz, G., J. Sloan, M. P. McGuire, J. Collin, and M. Smith. 2012. "Column-Supported Embankments: Settlement and Load Transfer." In *Geotechnical Engineering State of the Art and Practice: Proceedings of the Geo-Institute Congress*, Oakland, CA.
- Finno, R. J., and S. L. Gassman. 1998. "Impulse Response Evaluation of Drilled Shafts." *Journal of Geotechnical & Geoenvironmental Engineering* 124(10): 965–75.
- Floss, R., and H.-J. Kloubert. 2000. "Newest Innovations in Soil and Asphalt Compaction Technology." Presented at International Workshop on Compaction of Soil, Granulates and Powders, Innsbruck, February 2000. Rotterdam: A.A. Balkema-Verlag.
- Focht, J. A., Jr., F. R. Khan, and J. P. Gemeinhardt. 1978. "Performance of One Shell Plaza Deep Mat Foundation." *Journal of the Geotechnical Engineering Division* 104 (GT5): 593–608.
- Foster, M., R. Fell, and M. Spannagle. 2000a. "The Statistics of Embankment Dam Failures and Accidents." *Canadian Geotechnical Journal* 37(5): 1000–24.
- _____. 2000b. "A Method for Assessing the Relative Likelihood of Failure of Embankment Dams by Piping." *Canadian Geotechnical Journal* 37(5), 1025–61.
- Foster, R. J. 1988. *Physical Geology*, 5th ed. New York: Prentice Hall.
- Fourier, J. B. 1822. *Théorie Analytique de la Chaleur*. Translated by A. Freeman. New York: Dover.
- Fredlund, D. G., and H. Rahardjo. 1993. *Soil Mechanics for Unsaturated Soils*. New York: John Wiley & Sons.
- Fredlund, D. G., and Xing Anqing. 1994. "Equations for the Soil-Water Characteristic Curve." *Canadian Geotechnical Journal* 31: 521–32.
- Fredlund, D. G., A. Xing, and S. Huang. 1994. "Predicting the Permeability Function for Unsaturated Soils Using the Soil-Water Characteristic Curve." *Canadian Geotechnical Journal* 31: 533–46.
- Gardner, W. R. 1958. "Some Steady State Solutions of the Unsaturated Moisture Flow Equation with Application to Evaporation from a Water Table." *Soil Science* 85(4): 228–232.
- Garner, D. 2002. "Comparison of Suction and Water Content Determination." Personal communication.
- Ghaboussi, J., and R. Barbosa. 1990. "Three-Dimensional Discrete Element Method for Granular Materials." *International Journal of Numerical & Analytical Methods in Geomechanics* 14: 451–472.
- Gibbs, H. J., and Bara, J. P. 1962. *Predicting Surface Subsidence from Basic Soil Tests* (Field Testing of Soils, Special Technical Publication No. 322), 231–247. Available from American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.
- Giroud, J.-P. 1981. "Designing with Geotextiles." *Materiaux et Construction (Paris)* 14(82): 257–252.
- _____. 2010. "Development of Criteria for Geotextiles and Granular Filters" (Prestigious Lecture). In *Proceedings of the 9th International Conference on Geosynthetics, Guarujá, Brazil* 1, 45–64.
- Giroud, J.-P., and R. Bonaparte. 1989. "Leakage through Liners Constructed with Geomembranes: Geomembrane Liners." *Geotextiles & Geomembranes* 8(1):.
- Goble, G. G., F. Rausche, and G. E. Likins. 1993. *Case Pile Wave Analysis Program—CAPWAP Manual*. Cleveland, OH: GRL. Golder Associates. 1993. *GOLDNAIL Soil Nailing Design Program*. Seattle, WA: Author.
- Goodman, R. E. 1989. *Rock Mechanics*, 2nd ed. New York: John Wiley & Sons.
- Griffiths, D. V., and P. A. Lane. 1999. "Slope Stability Analysis by Finite Elements." *Géotechnique* 49(3): 387–403.
- GRLWEAP. 2012. *Goble Rausche Likins Wave Equation Analysis Program—User's Manual*. Cleveland, OH: Pile Dynamics Inc.
- Gutenberg, B., and C. F. Richter. 1944. "Frequency of Earthquakes in California." *Bulletin of the Seismological Society of America* 34(4): 1985–1988.
- Haberfield, C. 2010. "Engineering the Foundations for the Nakheel Tower." In *Piling and Deep Foundations Middle East 2010*. Dubai, UAE: Deep Foundation Institute.
- Hall, W. J., and N. M. Newmark. 1977. "Seismic Design Criteria for Pipelines and Facilities." In *The Current State of Knowledge of Lifeline Earthquake Engineering, Proceedings of the ASCE*, 18–34. New York: ASCE.
- Handy, R. L. 1975. "Measurement of In-Situ Shear Strength." In *Proceedings of the Conference on In Situ Measurement of Soil Properties* 2, 143–149. New York: ASCE.
- _____. 1986. "Borehole Shear Test and Slope Stability." In *Use of In Situ Tests in Geotechnical Engineering*, edited by Samuel P. Clemence, 161–175. New York: ASCE.
- Hannigan, P. J. 1990. "Dynamic Monitoring and Analysis of Pile Foundation Installations." In *Deep Foundations Institute short-course text*, 1st ed., 69.
- Hannigan, P. J., G. G. Goble, G. Thendean, G. E. Likins, and F. Rausche. 1998. *Design and Construction of Driven Pile Foundations*, Vols. 1 and 2 (FHWA Publication HI 97-014, NHI course nos 13221 and 13222). Washington DC: FHWA.
- Hansbo, S. 1981. "Consolidation of Fine-Grained Soils by Prefabricated Drains." In *Proceedings of the 10th International Conference on Soil Mechanics and Foundation Engineering*, Vol. 3, Stockholm:
- Hanson, G. J. (1991). "Development of a Jet Index to Characterize Erosion Resistance of Soils in Earthen Spillways." *Transactions of ASAE* 34(5): 2015–2020.
- Hardin, B. O. (1978) "The Nature of Stress-Strain Behavior for Soils." In *Proceedings of the ASCE Geotechnical Engineering Division Specialty Conference on Earthquake Engineering and Soil Dynamics*, Vol. 1, 3–89.
- Hardin, B. O., and V. P. Drnevich. 1972. "Shear Modulus and Damping in Soils: Design Equations and Curves." *Journal of Soil Mechanics, Foundations Division* 98 (SM7): 667–692.

- Harland, W. B., A. V. Cox, P. G. Llewellyn, C. A. Pickton, A. G. Smith, and R. Walters. 1990. *A Geologic Time Scale*. New York: Cambridge University Press.
- Hart, R., P. A. Cundall, and J. Lemos. 1998. "Formulation of a Three-Dimensional Distinct Element Model—Part II. Mechanical Calculations for Motion and Interaction of a System Composed of Many Polyhedral Blocks." *International Journal of Rock Mechanics & Mining Sciences* 25(3): 117–125.
- Hazen, A., 1892. *Some Physical Properties of Sands and Gravels, with Special Reference to Their Use in Filtration* (24th Annual Report, Massachusetts State Board of Health, Pub. Doc. No. 34), 539–556.
- Heibaum, M. W. 2004. "Geotechnical Filters: The Important Link in Scour Protection." In *Proceedings of the 2nd International Conference on Scour and Erosion*, edited by Y. M. Chiew et al., 13–28. Singapore: Nanyang Technology University, Maritime Research Center.
- Hemond, H. F., and E. J. Fechner-Levy. 2000. *Chemical Fate and Transport in the Environment* (2nd ed.). San Diego, CA: Academic Press.
- Hermana, R. 2001. "An Introduction to Electrical Resistivity in Geophysics." *American Journal of Physics* 69(9).
- Hertlein, B. H. 2009. "Analysis Collateral: Information Needed for Foundation Integrity Test Data Analysis." In *2009 International Foundation Congress and Equipment Expo*, Orlando, Florida, 528–535. : ASCE.
- Hickin, E. J., and G. C. Nanson. 1984. "Lateral Migration Rates of River Bends." *Journal of Hydraulic Engineering* (ASCE) 110: 1557–1567.
- Hjulström, F. 1935. "The Morphological Activity of Rivers as Illustrated by River Fyris." *Bulletin of the Geological Institute Uppsala ch.* 3(23): 221.
- Hoffmans, G. J. C. M., and H. J. Verheij. 1997. *Scour Manual*. Rotterdam: Balkema.
- Hofland, B., J. A. Battjes, and R. Booij. 2005. "Measurement of Fluctuating Pressures on Coarse Bed Material." *Journal of Hydraulic Engineering* 131(9): 770–781.
- Hoek, E. 1994. "Strength of Rock and Rock Masses." *ISRM News Journal* 2: 4–16.
- Hoit, M., C. Hays, and M. Mcvay. 1997. "The Florida Pier Analysis Program: Methods and Models for Pier Ananalysis and Design." *Journal of the Transportation Research Board* 1569: 1–7.
- Hollema, D. A., and L. D. Olson. 2002. "Crosshole Sonic Logging ND Tomography Velocity Imaging of a New Bridge Foundation." Paper presented at Structural Materials Technology Conference, American Society for Non-Destructive Testing, Cincinnati, OH, 10-13 September 2012.
- Holtz, R. D., W. D. Kovacs, and T. C. Sheahan. 2011. *An Introduction to Geotechnical Engineering*, 2nd ed. Upper Saddle River, NJ: Pearson-Prentice Hall.
- Hong, G. T., C. P. Aubeny, and R. L. Lytton. 2010. "Lateral Earth Pressure on a Wall in Expansive Soils." In *Proceedings of the International Conference on Unsaturated Soils (UNSAT 2010)*, September 2010, Spain.: CRC Press-Balkema-Taylorand Francis Group.
- Hooke, J. M. 1984. "Changes in River Meanders: A Review of Techniques and Results of Analysis." *Progress in Physical Geography* 8: 473–508.
- Horvath, J. S. 1991. "Using Geosynthetics to Reduce Earth Loads on Rigid Retaining Structures." In *Proceedings Geosynthetics '91*, 409–423. Washington, DC: IFAI Publications.
- Horvath, J. S., ed. 1994. "Polystyrene Foam in Below Grade Applications." In *Proceedings of International Symposium*, New York: Manhattan College.
- Hossain, K. M. 1996. *Load Settlement Curve Method for Footings in Sand at Various Depths, under Eccentric or Inclined Loads, and Near Slopes*. PhD diss., Texas A&M University, Department of Civil Engineering, College Station, TX.
- Houlsby, G., 1991. "How the Dilatancy of Soils Affects Their Behavior." Invited Lecture, 10th European Conference on Soil Mechanics and Foundation Engineering, Florence, Italy.
- Hughes, J. M. O., and N. J. Withers. 1974. "Reinforcing of Soft Cohesive Soils with Stone Columns." *Ground Engineering* (May): 42–49.
- Hunt, B. 2001. "Measured Scour Depths and Velocities at the Old Woodrow Wilson Bridge in Washington DC." Personal communication.
- Hunt, R. 1984. *Geotechnical Engineering Investigation Manual*. New York: McGraw Hill.
- _____. 1986. *Geotechnical Engineering Techniques and Practices*. New York: McGraw Hill.
- _____. 2005. *Geotechnical Investigations Methods: A Field Guide for Geotechnical Engineers*. Boca Raton, FL: CRC Press/Taylor and Francis.
- Hvorslev, M. J. 1949. Subsurface Exploration and Sampling of Soils for Civil Engineering Purposes (Waterways Experimental Station, Vicksburg, MS).
- _____. 1951. "Time Lag in the Observation of Ground-Water Levels and Pressures (U.S. Army Engineers Waterways Experiment Station, Vicksburg, Miss.)." In *International Congress of Soil Science* 2: 37–48.
- Idriss, I. M. 1990. "Response of Soft Soil Sites During Earthquakes." In *Proceedings of the H. Bolton Seed Memorial Symposium*, J. M. Duncan (ed.), *BiTech Publ.*, vol. 2, 273–290.
- Idriss, I. M., and R. W. Boulanger. 2008. *Soil Liquefaction during Earthquakes* (Monograph MNO-12). Oakland, CA: Earthquake Engineering Research Institute.
- Idriss, I. M., and Sun, J. I. 1992. *SHAKE91: A Computer Program for Conducting Equivalent Linear Seismic Response Analyses of Horizontally Layered Soil Deposits*. Davis, CA: Center for Geotechnical Modeling, Department of Civil and Environmental Engineering, University of California at Davis.
- Iskander, M., S. Kelley, C. Ealy, and D. Roy. 2001. *Class-A Prediction of Construction Defects in Drilled Shafts* (TRB ID No. 01-0308). Washington, DC: Transportation Research Board.
- ISSMGE Technical Committee on Offshore Geotechnics. 2005. "Geotechnical and Geophysical Investigations for Offshore and Nearshore Developments." Retrieved from <http://www.ISSMGE.org/>
- Jaky, J. 1944. "A nyugalmi nyomas tenyezoje (The coefficient of earth pressure at rest)." *Magyar Mernok es Epitez-Egylet Kozlonye, Hungary*: 355–358 [in Hungarian].
- Jamiolkowski, M. 2001. "The Leaning Tower of Pisa, End of an Odyssey." In *Proceedings of the 15th International Conference on Soil Mechanics and Geotechnical Engineering*, Vol. 4, 2979–2996. Rotterdam: Balkema.

- Jamiolkowski, M., S. Leroueil, and D. C. F. Lo Presti. (1991). "Design Parameters from Theory to Practice" (Theme Lecture). In *Proceedings of Geo-Coast '91*, 1–41.
- Janbu, N. 1954. *Stability Analysis for Slopes with Dimensionless Parameters* (Harvard University Soil Mechanics Series No. 46). Doctor of Sciences thesis in the Field of Civil Engineering.
- _____. 1968. *Slope Stability Computations* (Soil Mechanics and Foundation Engineering Report). Trondheim, Norway: Technical University of Norway.
- _____. 1973. "Slope Stability Computations in Embankment-Dam Engineering." In , edited by R. C. Hirshfeld and R. J. Poulos, 47–86. New York: John Wiley & Sons.
- Jeanjean, P. 1995. Load Settlement Curve Method for Spread Footings on Sand from the Pressuremeter Test. PhD diss., Texas A&M University, Department of Civil Engineering, College Station, TX.
- Jeanjean, P. 2012. "State of Practice: Offshore Geotechnics Throughout the Life of an Oil and Gas Field." In *Proceedings of the Geo-Institute Congress* (Oakland, March 2012), . Reston, VA: ASCE.
- Jefferis, D. 2008. *Exploring Our Solar System: The Earth, Our Home Planet*. New York: Crabtree Publishing.
- Jennings, J. E., and K. Knight. 1975. "A Guide to Construction on or with Materials Exhibiting Additional Settlement Due to Collapse of Grain Structure." In *Sixth Regional Conference for Africa and Soil Mechanics and Foundation Engineering*, 99–105.
- Jeong, S., and Briaud J.-L. 1994. "Nonlinear Three-Dimensional Analysis of Downdrag on Pile Groups." Paper presented at ASCE Specialty Conference, "Settlement 94," Texas A&M University, June 1994.
- Jing, L., and J. A. Hudson. 2002. "Numerical Methods in Rock Mechanics." *International Journal of Rock Mechanics & Mining Sciences* 39: 409–427.
- Jumikis, A. R. 1977. *Thermal Geotechnics*. New Brunswick, NJ: Rutgers University Press.
- Kanamori, H. 1977. "The Energy Release in Great Earthquakes." *Journal of Geophysical Research* 82: 2981–2987.
- Karlsrud, K., R. Nadim, and T. Haugen. 1986. "Piles in Clay under Cyclic Axial Load: Field Tests and Computational Modeling." In *Proceedings of the Third International Conference on Numerical Methods in Offshore Piling, Nantes, France*, 165–190.
- Karol, R. H. 2003. *Chemical Grouting and Soil Stabilization* (3rd ed.). Boca Raton, FL: CRC Press.
- Karzenbach, R. 2012. *International CPRF Draft Guidelines* (ISSMGE Technical Committee on Deep Foundations). London: ISSMGE.
- Kavazanjian, E. 1999. "Seismic Design of Solid Waste Containment Facilities." In *Proceedings of the 8th Canadian Conference on Earthquake Engineering*, Vancouver, B.C., Canada, (June): 51–89.
- Kavazanjian, E., N. Matasovic, T. Hadj-Hamou, and P. J. Sabatini. 1997. *Geotechnical Earthquake Engineering for Highways: Vol 1—Design Principles and Vol 2—Design Example* (Geotechnical Engineering Circular No. 3, FHWA SA-97-076). Washington, DC: FHWA.
- Kavazanjian, E., J.-N. J. Wang, G. R. Martin., A. Shamsabadi, I. P. Lam, S. E. Dickenson, and C. J. Hung. 2011. *LRFD Seismic Analysis and Design of Transportation Geotechnical Features and Structural Foundations* (NHI Course no. 130094 reference manual, Geotechnical Engineering Circular no. 3, FHWA-NHI-11-032). Washington, DC: FHWA.
- Keller . 2012. "Range of Application of Grouting Techniques." Retrieved from http://www.kellergrundbau.com/download/pdf/en/Keller_66-01E.pdf
- Kenney, T. C., and D. Lau. 1986. "Internal Stability of Granular Filters." *Canadian Geotechnical Journal* 22(2): 215–223.
- Kerisel, J. (1985). "The History of Geotechnical Engineering up until 1700." In *Proceedings of the Eleventh International Conference on Soil Mechanics and Foundation Engineering* (San Francisco, Golden Jubilee Volume), 3–93. Rotterdam: A. A. Balkema.
- Khalili, N., and M. H. Khabbaz. 1998. "Unique Relationship for the Determination of the Shear Strength of Unsaturated Soils." *Géotechnique* 48(5): 681–687.
- Kim, D.-S., W.-S. Seo, and S.-H. Lee. 2006. "Development of Modulus-Soil Moisture Model for Subgrade Soils Using Soil Suction Control Testing System." In *Pavement Mechanics and Performance* (GSP 154), 256–263. Washington, DC: ASCE.
- Kim, K. 2010. *Numerical Simulation of Impact Roller for Estimating the Influence Depth on Soil Compaction*. Master's thesis, Department of Civil Engineering, Texas A&M University, College Station, TX.
- Kirsten, H. A. D., J. S. Moore, L. H. Kirsten, and D. M. Temple. 1996. "Erodibility Criterion for Auxiliary Spillways of Dams." Paper presented at ASAE International Meeting, Phoenix, AZ (Paper No. 962099).
- Koerner, R. M. 2012. *Designing with Geosynthetics* (6th ed.), vols. 1 and 2. Bloomington, IN: Xlibris Corp.
- Koerner, R. M., and T.-Y. Soong. 2001. "Geosynthetic Reinforced Segmental Retaining Walls." *Geotextiles & Geomembranes* 19(6): 359–386.
- Komine, H., and N. Ogata. 2004. "Predicting Swelling Characteristics of Bentonites." *Journal of Geotechnical & Geoenvironmental Engineering* 130(8): 818–829.
- Kozeny, J. 1927, "Ueber kapillare Leitung des Wassers im Boden." *Wien Akademie Wiss.* 136(2a): 271.
- Kramer, S. L. 1996. *Geotechnical Earthquake Engineering*. New York: Prentice Hall.
- Kulhawy, F. H., and J.-R. Chen. 2007. "Discussion of 'Drilled Shaft Side Resistance in Gravelly Soils' by Rollins K. M., Clayton R. J., Mikesell R. C., Blaise B. C." *Journal of Geotechnical & Geoenvironmental Engineering* 133(10): 1325–1328.
- Kulhawy, F. H., and C. S. Jackson. 1989. "Some Observations on Undrained Side Resistance of CIDH Piles." In *Proceedings, Foundation Engineering: Current Principles and Practices*, Vol. 2, 1011–1025. Washington, DC: ASCE.
- Kulhawy, F. H., and P. W. Mayne. 1990. *Manual on Estimating Soil Properties for Foundation Design* (Electric Power Research Institute Report EL-6800). Palo Alto, CA: Electric Power Research Institute.
- Kwak, K., J.-L. Briaud, Y. Cao, M.-K. Chung, B. Hunt, and S. Davis. 2002. "Pier Scour at Woodrow Wilson Bridge and SRICOS Method." In *Proceedings of the First International Conference on Scour of Foundations*, Department of Civil Engineering, Texas A&M University, College Station, TX.
- Kwak, K., J.-L. Briaud, and H.-C. Chen. 2001. "SRICOS: Computer Program for Bridge Pier Scour." In *Proceedings of the 15th*

- International Conference on Soil Mechanics and Geotechnical Engineering*, Vol. 3, 2235–2238 Rotterdam: A.A. Balkema.
- Ladd, C. C. 1991. “Stability Evaluation during Staged Construction: 22nd Terzaghi Lecture.” *Journal of Geotechnical Engineering* 117(4): 537–615.
- Ladd, C. C., and R. Foott. 1974. “New Design Procedure for Stability of Soft Clays.” *Journal of Geotechnical Engineering* 100 (GT7): 763–786.
- Ladd C. C., R. Foott, K. Ishihara, F. Schlosser, and H. Poulos. 1977. “Stress-Deformation and Strength Characteristics”(State of the Art Report). In *Proceedings of the 9th International Conference on Soil Mechanics and Foundation Engineering, Tokyo*, vol. 2, 421–494.
- Lagasse, P. F., P. E. Clopper, J. E. Pagán-Ortiz, L. W. Zevenbergen, L. A. Arneson, J. D. Schall, and L. G. Girard. 2009. *Bridge Scour and Stream Instability Countermeasures: Experience, Selection and Design Guidance* (Hydraulic Engineering Circular no. 23, 3rd ed., vols. 1 and 2). Washington, DC: Federal Highway Administration.
- Lagasse, P. F., J. D. Schall, and E. V. Richardson. 2001. *Stream Stability at Highway Bridges* (Hydraulic Engineering Circular no. 20, 3rd ed.). Washington, DC: Federal Highway Administration.
- Laliberte, G. E., and A. T. Corey. 1966. *Hydraulic Properties of Disturbed and Undisturbed Clays* (ASTM STP No. 417). West Conshohocken, PA: ASTM.
- Lambe, T. W., and R. V. Whitman. 1979. *Soil Mechanics—SI Version*. New York: John Wiley & Sons.
- Landva, A. O., and J. L. Clark. 1990. *Geotechnics of Waste-fills: Theory and Practice* (ASTM STP 1070), 86–103. West Conshohocken, PA: ASTM.
- Lawson, W. D., P. W. Jayawickrama, T. A. Wood, and J. G. Surles. 2011. *MSE Pullout Testing for RECO HA Ladder and HA Strip Reinforcements* (Research Report for The Reinforced Earth Company, Vienna, VA). Texas Tech University, Department of Civil Engineering.
- Lay, T., H. Kanamori, C. J. Ammon, M. Nettles, S. N. Ward, R. C. Aster, . . . and S. Sipkin. 2005. “The Great Sumatra-Andaman Earthquake of 26 December 2004.” *Science* 308: 1127–1133.
- Lazarte, C. A., V. Elias, R. D. Espinoza, and P. J. Sabatini. 2003. *Geotechnical Engineering Circular No. 7: Soil Nail Walls* (Report No. FHWA0-IF-03-017). Washington, DC: Federal Highway Administration.
- Lemoine, B. 2006. *La Tour de 300 Metres*. Paris: Societe des Imprimeurs Lemerrier.
- Li, X., L. M. Zhang, and D. G. Fredlund. 2009. “Wetting Front Advancing Column Test for Measuring Unsaturated Hydraulic Conductivity.” *Canadian Geotechnical Journal* 46(December 2009): 1431–1445.
- Likins, G. E., and M. Hussein. 1988. “A Summary of the Pile Driving Analyzer Capacity Methods: Past and Present.” Paper presented at the 11th Pile Driving Analyzer’s Seminar, Cleveland, OH.
- Lisyuk, M., and V. Ulitsky. 2012. “Soil Structure Interaction.” In *Proceedings of the Russia-USA Geotechnical Summit* (March) Oakland, CA.
- Little, D. N. 1999. “Evaluation of Structural Properties of Lime Stabilized Soils and Aggregates.” Retrieved from www.lime.org/documents/publications/free_downloads/soils-aggregates-voll.pdf.
- Lowe, J., and L. Karafiath. 1960. “Stability of Earth Dams upon Drawdown.” In *Proceedings of the First Pan American Conference on Soil Mechanics and Foundation Engineering*, Mexico City, 537–552.
- Lowery, L. L. 1993. *Pile Driving Analysis by the Wave Equation—Microwave Manual*. Bryan, TX: Wild West Software.
- Lowery, L. L., T. J. Hirsch, and C. H. Samson, Jr. 1967. *Pile Driving Analysis: Simulation of Hammers, Pile and Soils* (Research Report 33-9, Project 2-5-62-33, Piling Behavior). College Station, TX: Texas Transportation Institute, Texas A&M University.
- Lu, N., and W. J. Likos. 2004. *Unsaturated Soil Mechanics*. Hoboken, NJ: John Wiley & Sons.
- Luettich, S. M., J. P. Giroud, and R. C. Bachus. 1992. “Geotextile Filter Design Guide.” *Journal of Geotextiles & Geomembranes* 11(4-6): 19–34.
- Lukas, R. G. 1995. *Dynamic Compaction* (Geotechnical Engineering Circular No.1, FHWA-SA-95-037). Washington, DC: Federal Highway Administration.
- Lundberg, G. 1939. “Elastische beruehrung zweier halbraeume.” *Forsch. Geb. Ingenieurwes.*, 10–5: 201–211.
- Lunne, T., and A. Kleven. 1981. “Role of CPT in North Sea Foundation Engineering.” In *Symposium on Cone Penetration Engineering Division*, 49–75. ASCE.
- Lupini, J. F., A. E. Skinner, and P. R. Vaughan. 1981. “The Drained Residual Strength of Cohesive Soils.” *Géotechnique* 31(2): 181–213.
- Lytton, R. L. 1994. “Prediction of Movement in Expansive Clays.” In *Proceedings of the Settlement Conference at Texas A&M University* (ASCE Geotechnical Special Publication no. 40), vol. 2, 1827–1845.
- Machan, G., and V. Bennett. 2008. *Use of Inclinometers for Geotechnical Instrumentation on Transportation Projects: State of the Practice* (Transportation Research Circular No. E-C129, October 2008).
- Makdisi, F. I., and H. B. Seed. 1978. “Simplified Procedure for Evaluating Dam and Embankment Earthquake Induced Deformation.” *Journal of the Geotechnical Engineering Division* 104 (GT7): 849–867.
- Manso, P. F. 2006. *The Influence of Pool Geometry and Induced Flow Patterns in Rock Scour by High-Velocity Plunging Jets*. PhD thesis, Laboratory of Hydraulic Constructions, École Polytechnique Federale de Lausanne, Switzerland.
- Mansur, C. I., and R. I. Kaufman. 1962. “Dewatering.” In *Foundation Engineering*, edited by G. A. Leonards, ch. 3. New York: McGraw-Hill.
- Marchetti, S. 1975. “A New In Situ Test for the Measurement of Horizontal Soil Deformability.” In *Proceedings of the Conference on In Situ Measurement of Soil Properties* (ASCE Special Conference, Raleigh, NC), vol. 2, 255–259.
- Marcuson, W. F., III. 2001. “Construction of the Panama Canal.” In *Proceedings of the 15th International Conference on Soil Mechanics and Geotechnical Engineering*, vol. 3, 2375–2390. Rotterdam: Balkema.
- Marcuson, W. F., and A. G. Franklin. 1983. “Seismic Design, Analysis, and Remedial Measures to Improve the Stability of Existing Earth Dams—Corps of Engineers Approach.” In *Seismic Design of Embankments and Caverns*, T. R. Howard (ed.). New York: ASCE.

- Marinos, P., and E. Hoek. 2000. "GSI—A Geologically Friendly Tool for Rock Mass Strength Estimation." In *Proceedings of the GeoEng2000 Conference*, Melbourne, Australia, 1422–1442.
- Massarsch, K. R. 1991. "Deep Soil Compaction Using Vibratory Probes." In *Proceedings of Symposium on Design, Construction, and Testing of Deep Foundation Improvement: Stone Columns and Related Techniques* (ASTM Special Technical Publication, STP 1089), edited by R. C. Bachus, 297–319. Philadelphia: ASTM.
- Matasovic, N. 1993. *Seismic Response of Composite Horizontally-Layered Soil Deposits*. PhD diss., Civil Engineering Department, University of California-Los Angeles.
- Mayne, P. W. 1985. "Ground Vibrations During Dynamic Compaction." In *Vibration Problems in Geotechnical Engineering*, 247–265. New York: ASCE.
- _____. 2007a. *Cone Penetration Testing State-of-Practice* (NCHRP Project 20-05; Task 37-14: Synthesis on Cone Penetration Test). Washington, DC: National Cooperative Highway Research Program, National Academy of Sciences.
- _____. 2007b. *Cone Penetration Testing* (NCHRP Synthesis 368). Washington, DC: Transportation Research Board, National Research Council.
- Mayne, P. W., B. Christopher, R. Berg, and J. DeJong. 2002. *Subsurface Investigations—Geotechnical Site Characterization* (Publication No. FHWA-NH-01-031). Washington, DC: National Highway Institute, Federal Highway Administration.
- Mayne, P. W., M. R. Coop, S. M. Springman, A. Huang, and J. G. Zornberg. 2009. "Geomaterial Behavior and Testing." In *Proceedings of the 17th International Conference on Soil Mechanics and Geotechnical Engineering*, 2777–2872. London: ISSMGE.
- Mayne, P. W., and G. J. Rix. 1993. "G_{max}—q_c Relationships for Clays." *Geotechnical Testing Journal* 16(1): 54–60.
- McDowell, C. 1956. "Interrelationships of Loads, Volume Change, and Layer Thickness of Soils to the Behavior of Engineering Structures." In *Highway Research Board, Proceedings of the Thirty Fifth Annual Meetings* (Publication No. 426), 754–772. Washington, DC: Transportation Research Board.
- Menard, L. 1963a. "Calcul de la force portante des fondations sur la base des resultats des essais pressiometriques." *Sols-Soils* 2(5 & 6), Techniques Louis Menard.
- _____. 1963b. "Calcul de la force portante des fondations sur la base des resultats des essais pressiometriques: seconde partie, resultats experimentaux et conclusions." *Sols-Soils* 2(6), Techniques Louis Menard.
- Menard, L., and Y. Broise. 1975. "Theoretical and Practical Aspects of Dynamic Consolidation." *Géotechnique* 25(1): 3–18.
- Mercalli, G. 1883. "Vulcani e fenomeni vulcanici in Italia" In *Geologia d'Italia*, edited by G. Negri, A. Stoppani, and G. Mercalli, 217–218. : Vallardi.
- Mesri, G., and M. Abdelghafar. 1993. "Cohesion Intercept in Effective Stress Stability Analysis." *Journal of Geotechnical Engineering* 99(119): 1229–1249.
- Meyerhof, G. G. 1951. "The Ultimate Bearing Capacity of Foundations." *Géotechnique* 2(4): 301–332.
- _____. 1953. "The Bearing Capacity of Foundations under Eccentric and Inclined Loads." In *Proceedings of the 3rd International Conference on Soil Mechanics and Foundation Engineering, Zurich*, vol. 1, 440–445.
- _____. 1955. "Influence of Roughness of Base and Ground Water Conditions on the Ultimate Bearing Capacity of Foundations." *Géotechnique* 5: 227–242.
- Mindlin, R. D. 1936. "Force at a Point in the Interior of a Semi-Infinite Solid." *Physics* 7: 195.
- Mitchell, J. K. 1976. *Fundamentals of Soil Behavior*. New York: John Wiley & Sons.
- Mitchell, J. K., and R. K. Katti. 1981. "Soil Improvement—State of the Art Report." 10th ICSMFE, Stockholm, 4: 509–565.
- Mitchell, J. K., and F. T. Madsen. 1987. "Chemical Effects on Clay Hydraulic Conductivity." In *Geotechnical Practice for Waste Disposal '87* (Geotechnical Special Publication No. 13), 87–116. Reston, VA: ASCE.
- Mitchell, J. K., and K. Soga. 2005. *Fundamentals of Soil Behavior*, 3rd ed. Hoboken, NJ: John Wiley & Sons.
- Mitchell, J. M., and F. M. Jardine. 2002. *A Guide to Ground Treatment*. London: CIRIA.
- Monaco, P., S. Marchetti, G. Totani, and M. Calabrese. 2005. "Sand Liquefiability Assessment by Flat Dilatometer Test (DMT)." In *Proceedings of XVI ICSMGE, Osaka*, 4, 2693–2697.
- Mononobe, N., and H. Matsuo. 1929. "On the Deformation of Earth Pressure During Earthquakes." In *Proceedings of the World Engineering Conference*, vol. 9, 177.
- Moody, L. F. 1944. "Friction Factors for Pipe Flow." *Transaction of the American Society of Civil Engineers* 66: 671–684.
- Mooney, M. A., and P. K. Miller. 2009. "Analysis of Lightweight Deflectometer Test Based on In Situ Stress and Strain Response." *Journal of Geotechnical & Geoenvironmental Engineering* 135(2): 199–208.
- Morgenstern, N. R. 1963. "Stability Charts for Earth Slopes During Rapid Drawdown." *Géotechnique* 13(1): 121–131.
- Morgenstern, N. R., and V. E. Price. 1965. "The Analysis of the Stability of General Slip Surfaces." *Géotechnique* 15(1): 77–93.
- Moseley, M. P., and K. Kirsch. 2004. *Ground Improvement*. Oxford: Spon Press.
- Moulton L. K., V. S. G. Hota, and G. T. Halvorsen. 1985. *Tolerable Movement Criteria for Highway Bridges* (FHWA/RD-85/107). Washington, DC: Federal Highway Administration.
- National Cooperative Highway Research Program (NCHRP). 2008. *NCHRP Project 12-70: Seismic Analysis and Design of Retaining Walls, Buried Structures, Slopes and Embankments, Recommended Specifications, Commentaries and Example Problems* (NCHRP Report 611). Washington, DC: Transportation Research Board.
- Negussey, D. 1997. "Properties and Applications of Geofoam." Washington, DC: Society of the Plastics Industry.
- Nenad Bicanic. 2007. "Discrete Element Methods." *Encyclopedia of Computational Mechanics*, Vol. 1: Fundamentals, edited by Erwin Stein, Rene de Borst, and Thomas J. R. Hughes, ch. 11. London: John Wiley & Sons, Ltd.
- Newmark, N. M. 1965. "Effects of Earthquakes on Dams and Embankments." *Géotechnique* 15(2): 129–160.
- Ng, E., J.-L. Briaud, and L. M. Tucker. 1988. *Field Study of Pile Group Action in Sand* (Research Report FHWA-RD-88-QB2). Washington, DC: FHWA.
- Ng, W.-S., M.-L. Lee, and S.-L. Hii. 2012. "An Overview of the Factors Affecting Microbial-Induced Calcite Precipitation and Its Potential Application in Soil Improvement." *World Academy of Science, Engineering and Technology* 62: 723–729.

- Nurtjahyo, P. Y. 2003. *Chimera RANS Simulations of Pier Scour and Contraction Scour in Cohesive Soils*. PhD diss., Zachry Department of Civil Engineering, Texas A&M University, College Station, TX.
- Ohta, Y., and N. Goto. 1976. "Estimation of S-Wave Velocity in Terms of Characteristic Indices of Soil." *Butsuri-Tanko* 29(4): 34–41.
- Okabe, S. 1926. "General Theory of Earth Pressure." *Journal of the Japanese Society of Civil Engineers* 12(1): 123–134.
- Okabe, T. 1977. "Large Negative Friction and Friction-Free Pile Methods." In *Proceedings of the 9th International Conference on Soil Mechanics and Foundation Engineering*, 679–682. Tokyo:
- Olson, S. M., and T. D. Stark. 2002. "Liquefied Strength Ratio from Liquefaction Flow Failure Case Histories." *Canadian Geotechnical Journal* 39: 629–647.
- O'Neill, M. W. 1983. "Group Action in Offshore Piles." Presented at ASCE Specialty Conference on Geotechnical Engineering in Offshore Engineering, Austin, TX.
- O'Neill, M. W., and L. C. Reese. 1999. *Drilled Shafts: Construction Procedures and Design Methods* (Publication FHWA-If-99-025). Washington, DC: Federal Highway Administration.
- Osterberg, J. O. 1984. "A New Simplified Method for Load Testing of Drilled Shafts." *Foundation Drilling Magazine* 23(6): 9–11.
- Othman, M. A., R. Bonaparte, and B. A. Gross. 1997. "Preliminary Results of Study of Composite Liner Field Performance." In *Proceedings of the Gri-10 Conference*, 115–142. Folsom, PA: GII Publishing.
- Paikowsky, S. G. 2004. *Load and Resistance Factor Design (LRFD) for Deep Foundations* (NCHRP Report 507). Washington, DC: Transportation Research Board, National Academy of Sciences.
- Paikowsky, S. G., M. C. Canniff, N. Chelmsford, K. Lesny, A. Kisse, S. Amatya, and R. Muganga. 2010. *LRFD Design and Construction of Shallow Foundations for Highway Bridge Structures* (NCHRP Report 651). Washington, DC: Transportation Research Board, National Academy of Sciences.
- Parez, L., and R. Fauriel. 1988. "Le piezocone: Améliorations apportées à la reconnaissance de sols." *Révue Française de Géotechnique* 44: 13–27.
- Park, N. 2007. *A Prediction of Meander Migration Based on Large-Scale Flume Tests in Clay*. PhD diss., Zachry Department of Civil Engineering, Texas A&M University, College Station, TX.
- PDI. 2012. *CAPWAP (Case Pile Wave Analysis Program)*. Cleveland, OH: Pile Dynamics Inc.
- Peck, R. B. 1969. "Deep Excavations and Tunneling in Soft Ground" (State of the Art Report). In *Proceedings of the 7th International Conference on Soil Mechanics and Foundation Engineering*, Mexico City, 215–290.
- _____. 1985. "The Last Sixty Years." In *Proceedings of the XI International Conference on Soil Mechanics and Foundation Engineering, San Francisco* (Golden Jubilee Volume), 123–133. Rotterdam: A. A. Balkema.
- Pereira, J. H. F., and D. G. Fredlund. 2000. "Volume Change Behavior of Collapsible Compacted Gneiss Soil." *Journal of Geotechnical & Geoenvironmental Engineering*, 126(10): 907–916.
- Perzmaier, S. 2005. "Hydraulic Criteria for Internal Erosion in Cohesionless Soils." In *Internal Erosion of Dams and Their Foundations*, edited by R. Fell and J.-J. Fry, 179–190. London: Taylor and Francis Group.
- Philipponnat, G. 1986. "Le Phicomètre: Essai de cisaillement direct in situ." *Révue Française de Géotechnique* 35: 43–60.
- Philipponnat, G., and M. Zerhouni. 1993. "Interprétation de l'essai au Phicomètre." *Révue Française de Géotechnique* 65: 3–28.
- Polshin, D. E., and R. A. Tokar. 1957. "Maximum Allowable Nonuniform Settlement of Structures." In *Proceedings of the 4th International Conference, Soil Mechanics and Foundation Engineering*, 402–406. London: Butterworth Heinemann.
- Post-Tensioning Institute (PTI). 2004. *Design and Construction of Post-Tensioned Slabs-on-Ground* (3rd ed.). Phoenix, AZ: Post-Tensioning Institute.
- Potts, D. M., and L. Zdravkovic. 1999. *Finite Element Analysis in Geotechnical Engineering*. London: Thomas Telford Ltd.
- Poulos, H. G. 1988. *Marine Geotechnics*. London: Unwin Hyman Ltd.
- _____. 2012. *User's Guide to DEFPIG: Deformation Analysis of Pile Groups*. Sydney, Australia: Civil Engineering Department, University of Sydney.
- Poulos, H. G., and E. H. Davis. 1980. *Pile Foundation Analysis and Design*. New York: John Wiley & Sons.
- Priest, S. D. (1993). *Discontinuity Analysis for Rock Engineering*. New York: Chapman & Hall.
- Raithel, M., A. Kirchner, C. Schade, and E. Leusink. 2005. "Foundation of Constructions on Very Soft Soils with Geotextile Encased Columns—State of the art." *Geotechnical Special Publication: Innovations in Grouting and Soil Improvement* 136: 1867–1877.
- Randolph, M. F. 1980. *PIGLET: A Computer Program for the Analysis and Design of Pile Groups under General Loading Conditions* (Soil Report TR91, CUED/D). Cambridge, UK: University of Cambridge.
- Randolph, M. F., and B. S. Murphy. 1985. "Shaft Capacity of Driven Piles in Clay." In *Proceedings of the Offshore Technology Conference*, Houston, TX. Paper 4883, vol. 1, pp. 371–378.
- Randolph, M. F., and C. P. Wroth. 1978. "Analysis of Deformation on Vertically Loaded Piles." *Journal of Soil Mechanics & Foundation Engineering* 2 (GT12): 1465–1488.
- Raudkivi, A. J. 1998. *Loose Boundary Hydraulics*. Rotterdam: Balkema.
- Rausche, F. 2002. "Modeling of Vibratory Pile Driving." In *Proceedings of the International Conference on Vibratory Pile Driving and Deep Soil Compaction, Transvib 2002*, 21–32.
- Reese, L. C., and M. W. O'Neill. 1988. *Drilled Shafts: Construction and Design* (FHWA Publication No. HI-88-042). Washington, DC: Federal Highway Administration.
- Reese, L. C., F. Touma, and M. W. O'Neill. 1976. "Behavior of Drilled Piers under Axial Loading." *Journal of the Geotechnical Engineering Division, ASCE* 102 (GT5): 493–510.
- Richards, A. 1988. *Vane Shear Strength Testing of Soils: Field and Laboratory Studies* (ASTM STP 1014). Philadelphia, PA: American Society for Testing and Materials.
- Richards, A. F., and H. M. Zuidberg. 1985. "In Situ Determination of the Strength of Marine Soils." In *Strength Testing of Marine Sediments: Laboratory and In-Situ Measurements* (ASTM STP 883), 11–40. West Conshohocken, PA: American Society for Testing & Materials.
- Richardson, E. V., and S. M. Davis. 2001. *Evaluating Scour at Bridges* (Publication No. FHWA-IP-90-017, Hydraulic

- Engineering Circular No. 18). Washington, DC: Federal Highway Administration.
- Richter, C. F. 1935. "An Instrumental Earthquake Magnitude Scale." *Bulletin of the Seismological Society of America* 25(1): 1–32.
- Riessner, H. 1924. "Zum Erdruck Problem" (Concerning the earth pressure problem). In *Proceedings of the First International Congress of Applied Mechanics*, 295–311. Delft, The Netherlands:
- Rix, G. J., and K. H. Stokoe. 1991. "Correlation of Initial Tangent Modulus and Cone Resistance." In *International Symposium on Calibration Chamber Testing*, 351–362. New York: Elsevier.
- Robertson, P. K., and R. G. Campanella. 1983. "Interpretation of Cone Penetration Tests: Sands." *Canadian Geotechnical Journal* 20(4): 719–733.
- Robertson, P. K., R. G. Campanella, D. Gillespie, and J. Greig. 1986. "Use of Piezometer Cone Data." In *Use of In-Situ Tests in Geotechnical Engineering* (GSP 6), 1263–1280. Reston, VA: American Society of Civil Engineers.
- Robertson, P. K., and C. E. Wride. 1998. "Evaluating Cyclic Liquefaction Potential Using the Cone Penetration Test." *Canadian Geotechnical Journal* 35: 442–459.
- Roscoe, K. H., and J. B. Burland. 1968. "On the Generalized Behaviour of 'Wet' Clay." *Engineering Plasticity* 48: 535–609.
- Roscoe, K. H., A. N. Schofield, and C. P. Wroth. 1958. "On the Yielding of Soils." *Géotechnique* 8(1): 22–52.
- Rutherford, C., G. Biscontin, and J.-L. Briaud. 2005. *Design Manual for Excavation Support Using Deep Mixing Technology* (Internal Report). Department of Civil Engineering, Texas A&M University, College Station, TX.
- Sadek, S., and G. Khoury. 2000. "Soil and Site Improvement Guide: An Educational Tool for Engineered Ground Modification." *International Journal of Engineering Education* 16(6): 499–508.
- Safir, L., and W. Safire. 1982. *Good Advice*. New York: Times Books.
- Samson, C. H., T. J. Hirsch, and L. L. Lowery. 1963. "Computer Study of Dynamic Behavior of Pilings." *Journal of the Structural Division, ASCE* 89 (ST4): Proceedings Paper 3608.
- Sandström, Å. (1994). *Numerical Simulation of a Vibratory Roller on Cohesionless Soil* (Internal Report). Stockholm, Sweden: Geodynamik.
- Sarma, S. K. 1973. "Stability Analysis of Embankments and Slopes." *Géotechnique* 23(3): 423–433.
- Sarsby, R. W. 1985. "The Influence of Aperture Size and Particle Size on the Efficiency of Grid Reinforcement." In *Proceedings of the 2nd Canadian Symposium on Geotextiles and Geomembranes*, 7–12. Edmonton, Canada: The Geotechnical Society of Edmonton.
- Saye, S. R., J. C. Volk, and P. C. Gerhart. 2000. "Design-Built I-95 Highway Reconstruction." : GeoStrata, Geo-Institute, ASCE.
- Schaefer, V. R., and R. R. Berg. 2013. "SHRP 2 R02: Geotechnical Solutions for Soil Improvement, Rapid Embankment Construction, and Stabilization of the Pavement Working Platform—Final Phase 2 Summary Report" (The Strategic Highway Research Program 2). Transportation Research Board of The National Academies. Web-based system available at www.GeoTechTools.org
- Schalkoff, R. J. 1997. *Artificial Neural Networks*. New York: McGraw-Hill.
- Schmertmann, J. H. 1970. "Static Cone to Compute Static Settlement over Sand." *Journal of Soil Mechanics & Foundations Division* 96(3): 1011–1043.
- _____. 1975. "Measurements of In Situ Strength." In *Proceedings of the ASCE Specialty Conference on In Situ Measurements of Soil Properties*, vol. 2, 57–138.
- Schmertmann, J. M., J. P. Hartman, and P. R. Brown. 1978. "Improved Strain Influence Factor Diagram." *Journal of the Geotechnical Engineering Division* 104: 1134.
- Schnabel, P. B., J. Lysmer, and H. B. Seed. 1972. *SHAKE: A Computer Program for Earthquake Response Analysis of Horizontally Layered Sites* (Report No. EERC 72-12). Berkeley: Earthquake Engineering Research Center, University of California.
- Schofield, A. N., and C. P. Wroth. 1968. *Critical State Soil Mechanics*. New York: McGraw-Hill.
- Schofield, R. K. 1935. "The pF of the Water in Soil." In *Transactions, 3rd International Congress of Soil Science*, vol. 2, pp. 37–48.
- Schwartz, D. P., and K. J. Coppersmith. 1984. "Fault Behavior and Characteristic Earthquakes: Examples from the Wasatch and San Andreas Fault Zones." *Journal of Geophysical Research* 89(B7): 5681–5698.
- Seed, B., R. T. Wong, I. M. Idriss, and K. Tokimatsu. 1986. "Moduli and Damping Factors for Dynamic Analyses of Cohesionless Soils." *Journal of Geotechnical Engineering* 112 (GT11): 1016–1032.
- Seed, H. B., and I. M. Idriss. 1970. *Soil Moduli and Damping Factors for Dynamic Response Analyses* (Earthquake Engineering Research Center, Report No. EERC 70-10). Berkeley: University of California.
- _____. 1971. "Simplified Procedure for Evaluating Soil Liquefaction Potential." *Journal of the Soil Mechanics & Foundation Division, ASCE* 107 (SM9): 1229–1274.
- Seed, R. B., and L. F. Harder. 1990. "SPT-Based Analysis of Cyclic Pore Pressure Generation and Undrained Residual Strength." In *H. B. Seed Memorial Symposium*, vol. 2, 351–376. Berkeley, CA: BiTech Publishing, Ltd.
- Shackelford, C. D. 1994. "Waste-Soil Interactions That Alter Hydraulic Conductivity." In *Hydraulic Conductivity and Waste Contaminant Transport in Soil* (ASTM STP 1142), edited by S. J. Trautwein and E. D. Daniel, . Philadelphia, PA: ASTM.
- Shackelford, C. D., C. H. Benson, T. Katsumi, T. B. Edil, and L. Lin. 2000. "Evaluating the Hydraulic Conductivity of Gcls Permeated with Non-Standard Liquids." *Geotextiles & Geomembranes* 18: 133–161.
- Sharma, H. D. 2000. "Solid Waste Landfills: Settlements and Post-Closure Perspectives." In *Proceedings of the ASCE National Conference on Environmental and Pipeline Engineering*, edited by R. Y. Surampali, 447–455.
- Sharma, H. D., D. E. Hullings, and F. R. Greguras. 1997. "Interface Strength Tests and Application to Landfill Design." In *Proceedings of the Conference on Geosynthetics '97*, 913–924. Longbeach, CA: IFAI.
- Sharma, H. D., and K. R. Reddy. 2004. *Geoenvironmental Engineering*. Hoboken, NJ: John Wiley & Sons.
- Sherard, J. L. 1979. "Sinkholes in Dams of Coarse, Broadly Graded Soils." In *Proceedings of the 13th International Congress on Large Dams, New Delhi*, vol. 2, 23–35. Paris: International Commission on Large Dams.

- Shields, A. 1936. "Anwendung der Aehnlichkeitsmechanik und der Turbulenzforschung auf die Geschiebebewegung." Doktor-Ingenieurs diss., Technischen Hochschule, Berlin [in German].
- Sjoberg, J. 1997. *Estimating Rock Mass Strength Using the Hoek-Brown Failure Criterion and Rock Mass Classification: A Review and Application to the Aznalcollar Open Pit* (Internal Report BM 1997-02). Lulea, Sweden: Lulea University of Technology.
- Skempton, A. W. 1951. "The Bearing Capacity of Clays." In *Proceedings of the Building Research Congress*, vol. 1, 180–189.
- _____. 1954. "The Pore Pressure Coefficients A and B." *Géotechnique* 4(4): 143–147.
- _____. 1985. "A History of Soil Properties, 1717–1927." In *Proceedings, XI International Conference on Soil Mechanics and Foundation Engineering*, San Francisco (Golden Jubilee Volume), 95–121. Rotterdam: A. A. Balkema.
- Skempton, A. W., and D. H. MacDonald. 1956. "The Allowable Settlement of Buildings." *Proceeding of the Institution of Civil Engineers* 3(5): 727–768.
- Smith, E. A. L. 1960. "Pile Driving Analysis by the Wave Equation." *Journal of Soil Mechanics & Foundation Engineering, ASCE*, 86 (SM4): 35–61. (Discussions in 87 (SM1): 63–75.)
- Smith, M. E. 2005. *Design of Bridging Layers in Geosynthetic Reinforced Column Supported Embankments*. PhD diss., Virginia Tech.
- Sorrell, C. A., and G. F. Sandström. 2001. *Rocks and Minerals: A Guide to Field Identification*. New York: Macmillan.
- Sowers, G. F. 1979. *Introductory Soil Mechanics and Foundations: Geotechnical Engineering*, 4th ed. New York: Macmillan.
- Spencer, E. 1967. "A Method of Analysis of the Stability of Embankments Assuming Parallel Inter-Slice Forces." *Géotechnique* 17: 11–26.
- Stark, T. D. 2003. "Three-Dimensional Slope Stability Methods in Geotechnical Practice." In *Proceedings of the 51st Annual Geotechnical Engineering Conference*, University of Minnesota, St. Paul.
- Stark, T. D., and H. T. Eid. 1994. "Drained Residual Strength of Cohesive Soils." *Journal of Geotechnical Engineering* 120(5): 856–871.
- Stokoe, K. H., S. J. Joh, and R. D. Woods. 2004. "Some Contributions of In Situ Geophysical Measurements to Solving Geotechnical Engineering Problems." Presented at International Conference on Site Characterization (ISC-2), Porto, Portugal, September 19–22.
- Styropor. 1993. "Construction, Highway Construction, and Ground Insulation" (Technical Information Bulletin No. 1-800e). Ludwigshafe, Germany: BASF AG.
- Tand, K. E., E. G. Funegard, and J.-L. Briaud. 1986. "Bearing Capacity of Footings on Clay: CPT Method." Presented at ASCE Specialty Conference, Use of In Situ Tests in Geotechnical Engineering, Vicksburg, MS.
- Taylor, D. W. 1948. *Fundamentals of Soil Mechanics*. New York: John Wiley & Sons.
- Temple, D. M., and J. S. Moore. 1994. "Headcut Advance Prediction for Earth Spillways." In *Proceedings of the ASAE International Winter Meeting*, Atlanta, Georgia, Paper No. 942340.
- Terzaghi, K. 1943. *Theoretical Soil Mechanics*. New York: John Wiley & Sons.
- Terzaghi, K., and R. B. Peck. 1963. *Soil Mechanics in Engineering Practice*. New York: John Wiley & Sons.
- _____. 1967. *Soil Mechanics in Engineering Practice* (2nd ed.). New York: John Wiley & Sons.
- Terzaghi, K., R. B. Peck, and G. Mesri. 1996. *Soil Mechanics in Engineering Practice* (3rd ed.). New York: John Wiley & Sons.
- Tetens, O. 1930. "Über einige meteorologische Begriffe." *Zeitschrift Geophysic* 6: 297–309.
- Theisen, M. S. 1992. "The Role of Geosynthetics in Erosion and Sediment Control: An Overview." *Journal of Geotextiles & Geomembranes* 11(4-6): 199–214.
- Thompson, M. J., and D. J. White. 2008. "Estimating Compaction of Cohesive Soils from Machine Drive Power." *Journal of Geotechnical & Geoenvironmental Engineering* 134(12): 1771–1777.
- Thurner, H., and A. Sandstrom. 1980. "Continuous Compaction Control, CCC." In *Proceedings of the International Conference on Compaction*, 237–245. Paris:
- TNO. 2012. *DLTWAVE—Dynamic Load Testing WAVE Program*. The Hague: Toegepast Natuurwetenschappelijk Onderzoek.
- TNOWAVE. 2012. *Toegepast Natuurwetenschappelijk Onderzoek Wave Equation Analysis Program*. The Hague: TNO.
- Towhata, I. 2008. *Geotechnical Earthquake Engineering*. Berlin/Heidelberg: Springer.
- Trautwein, S. J., and E. D. Daniel. 1994. *Hydraulic Conductivity and Waste Contaminant Transport in Soil* (ASTM STP 1142). Philadelphia, PA: American Society for Testing and Materials.
- Tucker, L. M., and J.-L. Briaud. 1988. "Analysis of the Behavior of a 5 Pile Group and a Single Pile in Sand at Hunter's Point" (Research Report 7065 2 to GeoResource Consultants and FHWA, Civil Engineering). College Station: Texas A&M University.
- U.S. Army Corps of Engineers (USACE). 1970, 1982. *Slope Stability Manual* (EM-1110-2-1902). Washington, DC: Department of the Army, Office of the Chief Engineer.
- _____. 1990. *Engineering and Design: Settlement Analysis* (EM 1110-1-1904). Washington, DC: Department of the Army, Office of the Chief Engineer.
- _____. 1991. *Hydraulic Design of Flood Control Channels* (EM 1110-2-1601). Washington, DC: Department of the Army, Office of the Chief Engineer.
- _____. 2003. "Recommendations for Seepage Design Criteria, Evaluation, and Design Practice" (Report prepared by the Corps of Engineers, Sacramento District). Washington, DC: Department of the Army.
- U.S. Environmental Protection Agency (USEPA). 1991. *Subsurface Contamination Reference Guide* (Publication EPA/540/2-90/011). Washington, DC: US Environmental Protection Agency.
- _____. 2001. *Risk Assessment Guidance for Superfund*, Vol. II, Part A: "Process for Conducting Probabilistic Risk Assessment" (Publication EPA/540/R-02/002). Washington, DC: Office of Emergency and Remedial Response.
- U.S. Navy. 1982. *Foundations and Earth Structures* (NAVFAC Design Manual DM-7.2). Washington, DC: US Government Printing Office.
- Vanapalli, S. K., W. S. Sillers, and M. D. Fredlund. 1998. "The Meaning and Relevance of Residual State to Unsaturated Soils." In *Proceedings of the 51st Canadian Geotechnical Conference*, Edmonton, Alberta: Canadian Geotechnical Society.

- Van Genuchten, M. (1980). "A Closed-Form Equation for Predicting the Hydraulic Conductivity of Unsaturated Soils." *Soil Science Society of America Journal* 44: 892–898.
- Van Schalkwyk, A., J. M. Jordaan, and N. Dooge. 1995. *The Erodibility of Different Rock Formations* (Water Research Commission Report No. 302/1/95). Pretoria, South Africa:
- Van Susante, P. J., and M. A. Mooney. 2008. "Capturing Nonlinear Vibratory Roller Compactor Behavior through Lumped Parameter Modeling." *Journal of Engineering Mechanics* 134(8): 684–693.
- Vucetic, M., and R. Dobry. 1991. "Effect of Soils Plasticity on Cyclic Response." *Journal of Geotechnical Engineering* 117(1): 898–907.
- Wahls, H. E. 1994. "Tolerable Deformations." In *Geotechnical Special Publication No. 40*, edited by A. T. Yeung and G. Y. Félio, 1611–1628. New York: ASCE.
- Waltham, A. C. 1994. *Foundations of Engineering Geology*. New York: E&FN SPON.
- Wan, C. F., and R. Fell. 2004. "Investigation of Rate of Erosion of Soils in Embankment Dams." *Journal of Geotechnical & Geoenvironmental Engineering* 130(4): 373–380.
- Wang, W. 2006. *A Hydrograph-Based Prediction of Meander Migration*. PhD diss., Zachry Department of Civil Engineering, Texas A&M University, College Station, TX.
- Warner, J. 2004. *Practical Handbook of Grouting: Soil, Rock and Structures*. New York: John Wiley & Sons.
- Warrington, D. C. 1992. "Vibratory and Impact-Vibration Pile Driving Equipment." (October) *Pile Buck* magazine, 2A-28A.
- Watts, K. S., and J. A. Charles. 1993. "Initial Assessment of a New Rapid Impact Ground Compactor." In *Proceedings of the Conference on Engineered Fills '93*, 399–412.
- Welsh, J. P., and G. K. Burke. 2000. "Advances in Grouting Technology." In *Proceedings of Geoengineering 2000*. Melbourne, Australia:
- Westergaard, H. 1931. "Water Pressure on Dams During Earthquakes." *Transactions of ASE*, (Paper No. 1835): 418–433.
- White, D., and M. Thompson. 2008. "Relationships between In Situ and Roller-Integrated Compaction Measurements for Granular Soils." *Journal of Geotechnical & Geoenvironmental Engineering* 134(12): 1763–1770.
- White, D. J., E. J. Jaselskis, V. R. Schaefer, and E. T. Cackler. 2005. "Real-Time Compaction Monitoring in Cohesive Soils from Machine Response." *Transportation Resources Record* 1936: 171–180.
- Whittle, A. J. 1993. "Evaluation of a Constitutive Model for Overconsolidated Clays." *Géotechnique* 43(2): 289–313.
- Williamson, D. A. 1984. "Unified Rock Classification System." *Bulletin of the Association for Engineering Geology* 21: 345–354.
- Winter, T. C., J. W. Harvey, O. L. Franke, and W. M. Alley. 1999. *Ground Water and Surface Water: A Single Resource* (U.S. Geological Survey Circular 1139). Reston, VA: US Geological Survey (available at <http://pubs.usgs.gov/circ/circ1139/#pdf>).
- Wire Reinforcement Institute (WRI). 1981. *Design of Slab-on-Ground Foundations*. Hartford, CT: Wire Reinforcement Institute.
- Wischmeier, W. H., and D. D. Smith. 1960. "A Universal Soil-Loss Equation to Guide Conservation Farm Planning." In *Proceedings of the 7th International Conference on Soil Science*. Soil Science Society of America.
- Wood, D. M. 1990. *Soil Behaviour and Critical State Soil Mechanics*. Cambridge: Cambridge University Press.
- Yao, C. 2013. *LRFD Calibration and Risk Analysis for Bridge Foundations Subjected to Scour*. PhD diss., Zachry Department of Civil Engineering, Texas A&M University, College Station, TX.
- Yeh, P.-H. 2008. *Physical Models of Meander Channel Migration*. PhD diss., Zachry Department of Civil Engineering, Texas A&M University, College Station, TX.
- Youd, T. L., and I. M. Idriss. 1997. *Proceedings of the NCEER Workshop on Evaluation of Liquefaction Resistance of Soils, Salt Lake City, UT, January 5-6, 1996* (Technical Report NCEER-97-0022). Buffalo, NY: National Center for Earthquake Engineering Research, University at Buffalo.
- Zhang, L., and A. M. Y. Ng. 2007. *Limiting Tolerable Settlement and Angular Distortion for Building Foundations* (GSP 170, Probabilistic Applications in Geotechnical Engineering). ASCE.
- Zienkiewicz, O. C., R. L. Taylor, and J. Z. Zhu. 2005. *The Finite Element Method* (6th ed.). Oxford: Butterworth-Heinemann.