

Publications

Full articles in refereed journals

1. Fretti, C., Lo Presti, D., and Salgado, R. (1993). "The Research Dilatometer: In-situ and Calibration Test Results." *Rivista Italiana di Geotecnica*, XXVI(4), 237-243.
2. Sitar, N. and Salgado, R. (1994). "Behavior of Young Bay Mud from the Marina District of San Francisco Under Static and Cyclic Simple Shear." Loma Prieta Professional Paper 1551-A, *U.S. Geological Survey*, A145-A153.
3. Salgado, R., Mitchell, J.K., and Jamiolkowski, M. (1997). "Cavity Expansion and Penetration Resistance in Sand." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 123(4), 344-354.
4. Salgado, R., Drnevich, V.P., Ashmawy, A., Grant, P., and Vallenias, P. (1997). "Interpretation of Large-Strain Crosshole Tests." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 123(4), 382-388.
5. Salgado, R., Boulanger, R. and Mitchell, J.K. (1997). "Lateral Stress Effects on CPT Liquefaction Resistance Correlations." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 123(8), 726-735.
6. Park, T., Lee, K.H., Salgado, R., Lovell, C.W. and Coree, B. (1997). "Use of Pyrolyzed Carbon Black as an Additive in Hot-Mix Asphalt." *Journal of Transportation Engineering*, ASCE, 123(6), 489-494.
7. Bernal, A., Salgado, R., Swan, R., Jr. and Lovell, C.W. (1997). "Interaction Between Tire Shreds, Rubber-Sand and Geosynthetics." *Geosynthetics International*, 4(6), 623-643.
8. Yu, H.S., Salgado, R., Sloan, S. and Kim, J. (1998). "Limit Analysis vs. Limit Equilibrium for Slope Stability Assessment." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 124(1), 1-11.
9. Salgado, R., Mitchell, J.K., and Jamiolkowski, M. (1998). "Calibration Chamber Size Effects on Penetration Resistance in Sand." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 124 (9), 878-888.
10. Salgado, R., Jamiolkowski, M. and Mitchell, J.K. (1998). "Penetration Resistance in Sands: Analysis and Applications to Liquefaction Potential Assessment and Estimation of Pile Base Resistance." *Rivista Italiana di Geotecnica*, XXXII(4), 5-17.
11. Kim, J., Salgado, R. and Yu, H.S. (1999). "Limit Analysis of Soil Slopes Subjected to Porewater Pressures." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 125(1), 49-58.
12. Lee, J., Salgado, R., Bernal, A., and Lovell, C.W. (1999). "Tire Shreds and Rubber Sand as Lightweight Backfill Material." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 125(2), 132-141.
13. Lee, J. and Salgado, R. (1999). "Determination of Pile Base Resistance in Sands." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 125(8), 673-683.
14. Salgado, R., Bandini, P. and Karim, A. (2000). "Shear Strength and Stiffness of Silty Sands." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 126(5), 451-462.
15. Lee, J. and Salgado, R. (2000). "Analysis of Calibration Chamber Plate Load Testing." *Canadian Geotechnical Journal*, 37(1), 14-25.
16. Salgado, R. and Randolph, M.F. (2001). "Analysis of Cavity Expansion in Sand." *International Journal of Geomechanics*, 1(2), 175-192.
17. Lee, J., Salgado, R., Karim, A. and Lovell, C.W. (2001). "Compaction and Shear Strength of Fly and Bottom Ash Mixtures." *Journal of Solid Waste Technology and Management*, 27(3), 137-145.

18. Lee, K., Cho, J., Salgado, R. and Lee, I. (2001). "Retaining Wall Model Test with Foundry Sand Mixture Backfill." *Geotechnical Testing Journal*, ASTM, 24(4), 401-408.
19. Kim, J., Salgado, R. and Lee, J. (2002). "Limit Analysis of Complex Soil Slopes." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 128(7), 546-557.
20. Lee, J. and Salgado, R. (2002). "The Estimation of the Settlement of Footings in Sand." *International Journal of Geomechanics*, 1(2), 175-192.
21. Lee, K., Salgado, R., Jeon, W. and Kim, N. (2002). "Engineering Properties of Wastewater Treatment Sludge Modified by Hydrated Lime and Fly Ash." *Journal of Solid Waste Technology and Management*, 28(3), 145-153.
22. Paik, K. and Salgado, R. (2003). "Determination of Bearing Capacity of Open-Ended Piles in Sand." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 129(1), 46-57.
23. Lee, K., Yoon, Y., Cho, J., Salgado, R., Lee, I., and Kim, N. (2002). "Engineering Properties of Waste Foundry Sand Mixtures as Controlled Low Strength Materials." *Journal of Solid Waste Technology and Management*, 28(4), 190-199.
24. Scott, B., Kim, B. and Salgado, R. (2003). "Evaluation of Load Factors for Use in Geotechnical Design." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 129(4), 287-295.
25. Paik, K., Salgado, R. Lee, J and Kim, B. (2003). "Behavior of Open- and Closed-ended Piles Driven into Sands." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 129(4), 296-306.
26. Lee, J., Salgado, R. and Paik, K. (2003). "Estimation of Load Capacity of Pipe Piles in Sand Based on CPT Results." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 129(5), 391-403.
27. Carraro, J. A., Bandini, P. and Salgado, R. (2003). "Evaluation of Liquefaction Resistance of Clean and Silty Sands Based on CPT Cone Penetration Resistance." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 129(12), 965-976.
28. Loukidis, D., Bandini, P. and Salgado, R. (2003). "Comparative Study of Limit Equilibrium, Limit Analysis and Finite Element Analysis of the Seismic Stability of Slopes." *Geotechnique* 53(5), 463-479.
29. Paik, K. and Salgado, R. (2003). "Estimation of Active Earth Pressure Against Rigid Retaining Walls Considering Arching Effects." *Geotechnique*, 53(7), 643-653.
30. Paik, K. and Salgado, R. (2004). "Effect of Pile Installation Method on Pipe Pile Behavior in Sands." *Geotechnical Testing Journal*, ASTM, 27(1), 11-22.
31. Lee, J., Salgado, R. and Carraro, J.A.H. (2004). "Stiffness Degradation and Shear Strength of Silty Sands." *Canadian Geotechnical Journal*, NRC Research Press, 41(5), 831-843.

32. Lee, Woojin, Lee, Won-Je, Lee, Sang-Bae and Salgado, R. (2004). "Measurement of Pile Load Transfer using Fiber Bragg Grating Sensor System." *Canadian Geotechnical Journal*, 41(6), 1222-1232.
33. Zia, N., Kim, D. and Salgado, R. (2004). "Use of Recycled and Waste Materials in Indiana." *Transportation Research Record, Journal of the Transportation Research Board*, Vol. 1874, TRB, December, 2004, 78-95.
34. Salgado, R., Lyamin, A., Sloan, S. and Yu, H.S. (2004). "Two- and Three-dimensional Bearing Capacity of Footings in Clay." *Geotechnique* 54(5), 297-306.
35. Kim, B., Prezzi, M. and Salgado, R. (2005). "Geotechnical Properties of Fly and Bottom Ash Mixtures for Use in Highway Embankments." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 131(7), 914-924.
36. Kim, D., Salgado, R. and Altschaeffl, A.G. (2005). "Effects of Super-Single Tire Loadings on Pavements." *Journal of Transportation Engineering*, ASCE, 131(10), 732-743.
37. Lee, J. H. and Salgado, R. (2005). "Estimation of Footing Bearing Capacity in Sands based on CPT." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 131(4), 442-452.
38. Lee, J. H., Salgado, R. and Kim, S. I. (2005). "Normalized Bearing Capacity of Footings using State-Dependent Finite Element Analysis." *Computers and Geotechnics*, 32(7), 445-457.
39. Foye, K., Scott, B. and Salgado, R. (2006). "Assessment of Variable Uncertainties for Reliability-Based Design of Foundations." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 132(9), 1197-1207.
40. Foye, K., Scott, B. and Salgado, R. (2006). "Resistance Factors for Use in Shallow Foundation LRFD." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 132(9), 1208-1218.
41. Murthy, T., Loukidis, D., Carraro, A., Prezzi, M. and Salgado, R. (2007), "Undrained Monotonic Response of Clean and Silty Sands." *Geotechnique*, 57(3), 273-288.
42. Salgado, R. and Prezzi, M. (2007), "Computation of Cavity Expansion Pressure and Penetration Resistance in Sands." *International Journal of Geomechanics*, ASCE, 7(4), 251-265.
43. Lyamin, A., Salgado, R., Sloan, S.W. and Prezzi, M. (2007), "Two- and Three-Dimensional Bearing Capacity of Footings in Sand." *Geotechnique*, 57(8), 647-662.
44. Basu, D. and Salgado, R. (2007). "Elastic Analysis of Laterally Loaded Pile in Multi-Layered soil." *Geomechanics and Geoengineering: An International Journal*, 2(3), 183-196.
45. Basu, D. and Salgado, R. (2008). "Method of Initial Parameters for Piles Embedded in Layered Soils." *Geomechanics and Geoengineering: An International Journal*, 2(3), 183-196.
46. Basu, D. and Salgado, R. (2008). "Analysis of Laterally Loaded Piles with Rectangular Cross Sections Embedded in Layered Soil." *International Journal for Numerical and Analytical Methods in Geomechanics*, 32(7), 721-744.

47. Basu, D., Prezzi, M., Salgado, R. And Chakraborty, T. (2008). "Settlement Analysis of Piles with Rectangular Cross Section in Multi-layered Soil." *Computers and Geotechnics*, 35, 563-575.
48. Lee, J., Eun, J., Prezzi, M. and Salgado, R. (2008), "Strain Influence Diagrams for Settlement Estimation of both Isolated and Multiple Footings." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 134(4), 417-427.
49. Kim, K., Prezzi, M., Salgado, R. and Lee, W. (2008), "Effect of Penetration Rate on Cone Penetration Resistance in Saturated Clayey Soils." *Journal of Geotechnical and Geoenvironmental Engineering*, 134(8), 1142-1153.
50. Loukidis, D. and Salgado, R. (2008). "Modeling sand response using two-surface plasticity." *Computers and Geotechnics*, Vol. 36, No. 1-2, pp. 166-186.
51. Loukidis, D. and Salgado, R. (2008). "Effect of Relative Density and Stress Level on the Bearing Capacity of Footings on Sand." *Geotechnique*, accepted for publication.
52. Loukidis, D., Chakraborty, T. and Salgado, R. (2008). "Bearing Capacity of Strip Footings on purely frictional soil under Eccentric and Inclined Loads." *Canadian Geotechnical Journal*, 45(6), 768-787.
53. Loukidis, D. and Salgado, R. (2008). "Analysis of the Shaft Resistance of Nondisplacement Piles in Sand." *Geotechnique*, 58, No. 4, 283–296.
54. Salgado, R., Houlsby G.T. and Cathie, D. (2008). "Contributions to Foundation Engineering in Géotechnique: 1948 to 2007" – Invited paper to the 60th Anniversary issue of *Geotechnique* – *Geotechnique*, 58(5), 369-375.
55. Foye, K.C., Abou Jaoude, G., Prezzi, M. and Salgado, R. (2009). "Resistance Factors for Use in Load and Resistance Factor Design of Driven Pipe Piles in Sands." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 135(1), 1-13.
56. Seo, H., Basu, D., Prezzi, M. and Salgado, R. (2009). "Load-Settlement Response of Rectangular and Circular Piles in Multi-layered Soils." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 135(3), 420-430.
57. Kim, D., Bica, A.V.D., Salgado, R., Prezzi, M. and Lee, W. (2009). "Behavior of a Closed-Ended Pipe Pile Driven in Mixed Soil." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 135(4), 463-473.
58. Basu, D., Salgado, R. and Prezzi, M. (2009), "A Continuum-Based Model for Analysis of Laterally Loaded Piles in Layered Soils." *Geotechnique*, 59(2), 127-140.
59. Loukidis, D. & Salgado, R. (2009). "Bearing capacity of strip and circular footings in sand using finite elements." *Computers and Geotechnics*, Vol. 36, No. 6, pp. 871-879.

60. Carraro, A., Prezzi, M. and Salgado, R. (2009), "Shear Strength and Stiffness of Sands Containing Plastic and Non-Plastic Fines." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, scheduled for publication in 2009.
61. Zhang, J. and Salgado, R. (2009) "Stress-Dilatancy Relation for Mohr-Coulomb Soils Following a Non-Associated Flow Rule." *Geotechnique*, in press.
62. Kim, D., Lee, W.J, Salgado, R. and Zaheer, M. (2009). "Setup of Driven Piles in Mixed Soil." *Soils and Foundations*, accepted for publication.
63. Chakraborty, T. and Salgado, R. (2009). "Dilatancy of Sand at Very Low Confining Stresses". *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, accepted for publication.
64. Basu, P., Loukidis, D., Prezzi, M. and Salgado, R. (2009). "Shaft Numerical prediction of shaft capacity for jacked piles in sands." *International Journal for Analytical and Numerical Methods in Geomechanics*, accepted for publication.
65. Seo, H., Prezzi, M and Salgado, R. (2010). "Rigorous Elastic Solution for Axially Loaded Piles in Multilayered Soil." *International Journal for Numerical and Analytical Methods in Geomechanics*, accepted for publication.

Shorter communications in refereed journals

66. Yu, H.S., Salgado, R., Sloan, S. and Kim, J. (1999). "Limit Analysis vs. Limit Equilibrium for Slope Stability Assessment." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 125(10), 915-918 (closure).
67. Salgado, R., Mitchell, J.K., and Jamiolkowski, M. (2001). "Calibration Chamber Size Effects on Penetration Resistance in Sand." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 127(7), 629-630 (closure).
68. Paik, K. and Salgado, R. (2004). "Determination of Bearing Capacity of Open-Ended Piles in Sand." *Journal of Geotechnical and Geoenvironmental Engineering*, 130(6), 658-660 (closure).
69. Salgado, R. and Prezzi, M., (2004). "Construction of a tire-shred test embankment.", *Engineering Sustainability Journal*, Proceedings of the Institution of Civil Engineers, Vol. 157, Issue ES2, pp. 65-66.
70. Lee, J. H. and Salgado, R. (2006). "Estimation of Footing Bearing Capacity in Sands based on CPT." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 132(11) (closure).
71. Kim, B., Prezzi, M. and Salgado, R. (2006). "Geotechnical Properties of Fly and Bottom Ash Mixtures for Use in Highway Embankments." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 133, No. 7, pp. 903 (closure).
72. Murthy, T. G., Loukidis, D., Carraro, J. A. H., Prezzi, M. and Salgado, R. (2008). "Undrained Monotonic Response of Clean and Silty Sands." *Geotechnique*, 58(6), 536-538 (closure).

Working papers (including papers in review and in preparation)

73. Bica, A.V.D., Prezzi, M., Seo, H., Salgado, R., and Kim, D. (2009). "Instrumentation and Full-Scale Axial Load Testing of Steel H and Pipe Piles".
74. Kim, D.W. and Salgado, R. (2009). "Load and Resistance Factor Design for Mechanically Stabilized Earth Walls."
75. Yoon, S., Balunaini, U., Prezzi, M. and Salgado, R. (2009). "Experimental Study on the Pull-out Behavior of Geogrids Embedded in Tire Shred-Sand Mixtures." Submitted to *Geotechnical and Geological Engineering: An International Journal*.
76. Loukidis, D. & Salgado, R. (2009). "Active pressure on gravity walls supporting purely frictional soils." (submitted to the *Canadian Geotechnical Journal*)
77. Basu, D. and Salgado, R. "LRFD of Drilled Shafts" (submitted to ASCE Journal of Geotechnical and Geoenvironmental Engineering).

Refereed conference or symposium proceedings

1. Salgado, R. and Mitchell, J.K. (1994). "Extra-terrestrial Soil Property Determination by CPT." *Eighth International Conference on Computer Methods and Advances in Geomechanics*, Morgantown, May 22-28, H. Siriwardane and M. M. Zaman (eds.), Vol. 2, 1781-1788.
2. Ghionna, V.N., Jamiolkowski, M., Pedroni, S. and Salgado, R. (1994). "The Tip Displacement of Drilled Shafts in Sands." *Settlement '94*, A. T. Yeung. and G. Félío (eds.), Vol. 2, June, 1039-1057, Geotechnical Engineering Division, ASCE, Texas A&M University, College Station, TX.
3. Bernal, A., Ahmed, I., Lovell, C.W., and Salgado, R. (1994), "Rubber Sand as Lightweight Geomaterial." *X Brazilian Conference of Soil Mechanics and Foundation Engineering*, Vol. 2, November, 593-600, Iguassu Falls.
4. Ashmawy, A., Salgado, R., Guha, S., and Drnevich, V. P. (1995). "Soil Damping and its Use in Dynamic Analysis." *Third International Conference on Recent Advances in Geotechnical Engineering and Soil Dynamics*, Paper 1.13, April, 35-41, St. Louis, MO.
5. Salgado, R. (1995). "Design of Deep Foundations in Sands Based on CPT Results." *X Panamerican Conference on Soil Mechanics and Foundation Engineering*, Vol. 3, November, 1261-1274, Guadalajara, Mexico.
6. Bernal, A., Swan, R., Salgado, R. and Lovell, C.W. (1995). "Pullout Testing of Geogrids in Tire Shreds and Rubber Sand." *Proc. 3rd Annual Great Lakes Geotechnical and Geoenvironmental Conference*, Cleveland, OH, May, 219-231.
7. Korayem, A., Salgado, R., Lovell, C. W. (1996). "Compaction of Fly and Bottom Ash Mixtures." *Proceedings of the 51st Industrial Waste Conference*, May 6-8, 251-255.
8. Bernal, A., Swan, R., Salgado, R. and Lovell, C.W. (1997). "Pullout Testing of Geogrids in Tire Shreds and Rubber Sand." *Testing Soil Mixed with Waste or Recycled Materials, ASTM STP 1275*, Mark A. Wasemiller, Keith B. Hoddinott (Eds.), ASTM, 109-121.
9. Karim, A., Salgado, R. and Lovell, C.W. (1997). "Building Embankments of Coal Combustion Fly Ash-Bottom Ash Mixtures." *Proc. 48th Highway Geology Symposium*, Knoxville, TN, May, 66-74.
10. Bandini, P. and Salgado, R. (1998). "Pile Design Based on Penetration Test Results." *First International Conference on Site Characterization*, Vol. 2, April, 967-976, Atlanta.

11. Karim, A., Lovell, C.W., and Salgado, R. (1998). "Mixtures of Coal Combustion Ashes for Highway Embankments." *Fourth Symposium on Environmental Geotechnics and Global Sustainable Development*, Boston, August, 431-440.
12. Lee, J. and Salgado, R. (1999). "Pre-Failure Loading Response of Foundations on Sand." *Second International Symposium on Pre-Failure Deformation Characterization of Geomaterials*, Turin, Italy, September 28-30, Vol. 1, 667-674.
13. Lee, J. H. and Salgado, R. (2000). "Application of Shredded Tires as Lightweight Backfill." *Proceedings of International Symposium on Coastal Geotechnical Engineering in Practice*, Yokohama, Japan, Sept. 20-22, Vol. 1, 623-628.
14. Lee, J. H. and Salgado, R. (2001). "Non-linear Finite Element Analysis of Calibration Chamber Plate Load Tests for Sands." *Proceedings of the 10th International Conference on Computer Methods and Advances in Geomechanics*, Tucson, January, Balkema, 941-946.
15. Loukidis, D., Salgado, R. and Bobet, A. (2001). "Seismic Design of Pile Foundations in Southern Indiana." *Proceedings of the Fourth International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics*, San Diego, California, March 2001. CD-ROM, Univ. of Missouri-Rolla, Rolla, MO, S. Prakash (ed.), Paper No. 8-09, 6 pages.
16. Bandini, P., Salgado, R., and Harb, J. A. (2001). "Análise Limite para Taludes com Perfis Complexos de Solos." *Conferência Brasileira sobre Estabilidade de Encostas, III COBRAE*, Rio de Janeiro, Brazil, Vol. 1, 3rd Session "Análise de Estabilidade", 397-402.
17. Lee, K., Cho, J., Salgado, R., Lee, I. and Kim, N. (2001). "Retaining Wall Model Test with Waste Foundry Sand Mixture as Controlled Low Strength Materials." *17th International Conf. on Solid Waste Technology and Management*, Oct. 21-24, Philadelphia, USA, Section 3B Waste Materials in Construction, 204-210.
18. Lee, J. H. and Salgado, R. (2002). "Mechanical properties of fly and bottom ash mixtures for embankment application." *Proceedings of the International Workshop on Light-Weight Geomaterials (IW-LGM2001)*, Tokyo, Japan, March, 83-89.
19. Lee, J.H., Salgado, R., Prezzi, M. and Paik, K. (2003). "Instrumented Load Tests on Closed- and Open-Ended Piles." *Deep Foundations Institute 28th Annual Conference on Deep Foundations*, Miami, October, pp. 233-242.
20. Basu, D., Salgado, R., Prezzi, M., Lee, J.H., and Paik, K., (2005), "Recent Advances in the Design of Axially-Loaded Piles in Sandy Soils." *Geo-Frontiers*, Austin, TX, pp. 1-13.
21. Lee, J. H., Salgado, R., and Paik, K. H. (2004). "CPT-based Load Capacity of Closed- and Open-ended Pipe Piles." *Proceedings of International Site Characterization, ICS 2*, Porto, Portugal, Vol. 2, September, 1499-1505.
22. Paik, K., Salgado, R. and Lee, J. (2004). "Design Lessons from Load Tests on Open- and Closed-Ended Pipe Piles." *Proceedings of the Fifth International Conference on Case Histories in Geotechnical Engineering*, New York, April, Paper No. 1.11.
23. Carraro, J.A.H.; P. Bandini; R. Salgado (2005). "Liquefaction Resistance of Clean and Silty Sands from Cone Penetration." *Geotechnical Special Publication No. 133*; Rathje E.M. (ed.); *Proc. Geo-Frontiers 2005 Conference (Geo-Institute of the ASCE)*, Austin, TX, January 2005.
24. Foye, K. C. and R. Salgado (2005). "Soil Characterization for Consistent Reliability in the Load and Resistance Factor Design of Pile Foundations." *International Symposium on Frontiers in Offshore Geotechnics*. Perth, Western Australia, Australia.
25. Bandini, P., Loukidis, D. and Salgado, R. (2005). "Limit Analysis of Seismically Loaded Slopes." *Proc. 16th International Conference of the IACMAG (Int. Assoc. of Computer Methods and Advances in Geomechanics)*, Torino, Italy, June 2005.

26. Loukidis, D., Bandini, P., Salgado, R. (2005) "Critical Seismic Coefficient using Limit Analysis and Finite Elements." Proc. 11th International Conference on Soil Mechanics and Geotechnical Engineering, ISMGE, Osaka, Japan, September 2005.
27. Salgado, R. (2006). "The Role of Analysis in Pile Design." In *Modern Trends in Geomechanics*, Springer Proc. in Physics, Vol. 106 (Wu, Wei; Yu, H.-S., Eds.).
28. Salgado, R. (2006). "Analysis of the Axial Response of Non-Displacement Piles in Sand." *Geomechanics II: Testing, Modeling and Simulation. Proc. of the 2nd Japan- U.S. Workshop, Geotechnical Special Publication No. 143, ASCE, 427-439.*
29. Lee, Woojin, Lee, Won-Je, and Salgado, R. (2004). "Measurement of Pile Load Transfer using Fiber Bragg Grating Sensor System." *Geo-Congress, Atlanta.*
30. Kim, B. J., Prezzi, M., Salgado, R., Lee, J. H. (2005). "Mechanical Properties of Class F Fly and Bottom Ash Mixtures for Embankment Applications." Proc. of IGC 2005, Geotechnical Practices for Environmental Management, Disaster Mitigation and Foundation Engineering, Ahmedabad, India, Dec, pp.239-242.
31. Lee, J. H. and Salgado, R. (2006), "Application of CPT cone resistance for footing bearing capacity estimation." Proc. of GeoShanghai International Conference, Shanghai, China.
32. Salgado, R., Prezzi, M. and Seo, H. (2007). "Advanced Modeling Tools for the Analysis of Axially Loaded Piles." Keynote paper and lecture, The Japanese Geotechnical Society, International Workshop on Pile Foundation Analysis and Design, Tokyo, Japan.
33. Seo, H., Prezzi, M. and Salgado, R. (2008), "Settlement Analysis of Axially Loaded Piles." 6th International Conference on Case Histories in Geotechnical Engineering, Arlington, VA, August 2008.
34. Basu, D. and Salgado, R. (2008). "An Alternative Method for Determining Ground Strains for Soil-Structure Interaction Problems." *Geo-Congress 2008, CD-ROM.*
35. Salgado, R. (2008). "Analysis of Single Piles: Challenges and Solutions." 12th International Conference of the International Association for Computer Methods and Advances in Geomechanics, Goa, India, October 1-6, 2008.
36. Basu, D. and Salgado, R. (2008). "Method of initial parameters for laterally loaded piles." Proceedings of the 12th International Conference of IACMAG, October 2008, Goa, India.
37. Salgado, R., Basu, D., Gavin, K., Kumar, S., Alvarez, G. M. E. and Ahmad, S. F. (2008). "Analysis, design, testing and performance of foundations." General Report for Session 1, Proceedings of the 6th International Conference on Case Histories in Geotechnical Engineering, Arlington, VA, U.S.A., August 2008.
38. Chakraborty, T. and Salgado, R. (2009). "Dilatancy of Sand at Very Low Confining Stresses." 17th ICSMGE, accepted.
39. Salgado, R. and Basu, D. (2009). "Application of the Method of Initial Parameters to the Laterally Loaded Pile Problem". 17th ICSMGE, Alexandria, Egypt.
40. Murthy, T. G., Prezzi, M., Salgado R. & Loukidis, D. (2010). "Undrained response of clean and silty sands." (submitted to the Fifth International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics, San Diego, California).
41. Basu, D. Salgado, R and Prezzi, M. (2010). "A New Model for Analysis of Laterally Loaded Piles." *GeoFlorida, West Palm Beach, FL, February 2010.*
42. Lee, J., Eun, J., Prezzi, M. and Salgado, R. (2010). "Settlement Estimation of Multiple Footings." 2nd International Symposium on Cone Penetration Testing, Huntington Beach, CA, May 2010.
43. Kim, K., Prezzi, M., Salgado, R. and Lee, W. (2010). "Penetration Rate Effects on Cone Resistance Measured in a Calibration Chamber." 2nd International Symposium on Cone Penetration Testing, Huntington Beach, CA, May 2010.

44. Basu, D. and Salgado, R. (2010). "Elastic Analysis of Laterally Loaded Rectangular Piles." GeoFlorida, West Palm Beach, FL, February 2010.
45. Salgado, R. (2010). "Analysis of Axially Loaded Piles." Clyde Baker Symposium, GeoFlorida (invited paper).

Books

1. Salgado, R. (2008). *The Engineering of Foundations*. McGraw-Hill, 888pp.

Chapters in books

1. Salgado, R. (1995). "In-Situ Tests and Field Instrumentation." *The Civil Engineering Handbook*, W. F. Chen, (ed.), 921-943.
2. Salgado, R. and Santagata, M. (2002). "In-Situ Tests and Field Instrumentation." *The Civil Engineering Handbook*, 2nd Ed., W. F. Chen, (ed.), 28-1 to 28-23.
3. Salgado, R. "Design of Pile Foundations". *The Encyclopedia of Life*, UNESCO.

Government, university, or industrial reports (non-refereed)

1. Bernal, A., Lovell, C., Salgado, R. (1996). Laboratory Study on the Use of tire Shreds and Rubber-Sand in Backfilled and Reinforced Soil Applications, FHWA/IN/JHRP-96/12, HPR- 2087, Joint Transportation Research Program, Purdue University.
2. Lee, K., Lovell, C., Salgado, R. (1996). The Use of Pyrolyzed Carbon Black as an Additive (Part 3: Air Cooled Furnace Slag), FHWA/IN/JHRP-96/19, SPR-2096, Joint Transportation Research Program, Purdue University.
3. Karim, A., Lovell, C., Salgado, R. (1997). Building Embankments of Fly/Bottom Ash Mixtures, FHWA/IN/JTRP-97/01, SPR-2115, Joint Transportation Research Program, Purdue University.
4. Luo, X., Salgado, R., Altschaeffl, A. (1998). Cone Penetration Test to Assess the Mechanical Properties of Subgrade Soils, FHWA/IN/JTRP-98/13, SPR-2133, Joint Transportation Research Program, Purdue University.
5. Salgado, R. and Lee, J. (1999). Pile Design Based on Cone Penetration Test Results FHWA/IN/JTRP-99/08, SPR-2142, Joint Transportation Research Program, Purdue University.
6. ACI Committee 336 (2001). **Reference Specifications for the Construction of Drilled Piers (336.1) & Commentary (336.1R-98), 25pp.**
7. Bobet, A., Salgado, R., Loukidis, D. (2001). Seismic Design of Deep Foundations, FHWA/IN/JTRP-2000/22, SPR-2410, Joint Transportation Research Program, Purdue University.
8. Kim, K., Salgado, R., Lee, J. and Paik, K. (2002). Load Tests on Pipe Piles for Development of CPT-Based Design Method, FHWA/IN/JYRP-2002/4, SPR-2361, Joint Transportation Research Program, Purdue University.

9. Carraro, J. and Salgado, R. (2004). Mechanical Behavior of Non-Textbook Soils, FHWA/IN/JTRP-2004/05, Joint Transportation Research Program, Purdue University.
10. Salgado, R. and Yoon, S. (2003). Construction of Tire Shreds Test Embankment, FHWA/IN/JTRP-2002/35, Joint Transportation Research Program, Purdue University.
11. Salgado, R. and Yoon, S. (2003). Dynamic Cone Penetration Test (DCPT) for Subgrade Assessment, FHWA/IN/JTRP-2002/30, Joint Transportation Research Program, Purdue University.
12. Kim, K., Salgado, R., Lee, J. and Paik, K. (2002). Load Tests on Pipe Piles for Development of CPT-Based Design Method, FHWA/IN/JTRP-2002/04, Joint Transportation Research Program, Purdue University.
13. Salgado, R. and Kim, D. (2002). Effects of Heavier Truck Loadings and Super-Single Tires on Subgrades, FHWA/IN/JTRP-2002/20 Joint Transportation Research Program, Purdue University, Joint Transportation Research Program, Purdue University.
14. Kim, B., Yoon, S., Balunaini, U., Prezzi, M. and Salgado, R. (2006), "Determination of Ash Mixture Properties and Construction of Test Embankment - Part A", Report No. FHWA/IN/JTRP-2006/24-1, SPR-2591, Joint Transportation Research Program, Purdue University.
15. Yoon, S., Balunaini, U., Prezzi, M., Salgado, R. and Siddiki N. Z. (2006), "Determination of Ash Mixture Properties and Construction of Test Embankment - Part B", Report No. FHWA/IN/JTRP-2006/24-2, SPR-2591, Joint Transportation Research Program, Purdue University.
16. Kim, K., Prezzi, M. and Salgado, R. (2007). "Interpretation of Cone Penetration Tests in Clayey Soils." FHWA/IN/JTRP-2007/22, SPR-0622, Joint Transportation Research Program, Purdue University.
17. Basu, D., Salgado, R. and Prezzi, M. "Analysis of Laterally Loaded Piles in Multilayered Soil Deposits." FHWA/IN/JTRP-2007/23, Joint Transportation Research Program, Purdue University.
18. Balunaini, U., Yoon, S., Prezzi, M., Salgado, R. and McCullough, B. (2008). "Research and Development of More Economical Mixtures of Tire Shreds and Sands", IDEM report for project A305-4-115.
19. Balunaini, U., Yoon, S., Prezzi, M., Salgado, R. and McCullough, B. (2008), "Design, Planning, and Implementation of Civil Engineering Applications for Tire Shreds", IDEM report for project A305-4-112.
20. Loukidis, D., Salgado, R. and Abou-Jaoude, G. (2009), "Assessment of Axially Loaded Pile Dynamic Design Methods and Review of INDOT Axially Loaded Pile Dynamic Design Methods." FHWA/IN/JTRP-2009/xx, Joint Transportation Research Program, Purdue University.

21. Kim, D.W. and Salgado, R. (2009). "Limit States and Load and Resistance Factor Design of Slopes and Retaining Structures." FHWA/IN/JTRP-2009/xx, Joint Transportation Research Program, Purdue University.
22. Salgado, R. and Chakraborty, T. (2009). "Analysis of Pile Setup in Clay." FHWA/IN/JTRP-2009/xx, Joint Transportation Research Program, Purdue University.

Invited publications and presentations

Keynote Lecture - "Reutilization of Materials in Civil Engineering Constructions." Brazilian Conference on Sustainable Development, Florianópolis, Brazil, June 1996.

Keynote Lecture - "Advances in Non-Displacement Pile Design." Deep Foundation Symposium, Porto Alegre, Brazil, October 4-5, 2004:

Keynote Lecture - "Advanced Modeling Tools for the Analysis of Axially Loaded Piles." International Workshop on Pile Foundation Analysis and Design, Tokyo, Japan, February 2007:

Keynote Lecture - "Modern Methods of Pile Foundation Analysis" – Daegu Annual Geotechnical Conference, Daegu, South Korea, February 2007.

Invited Lecture (General Report) - "Analysis, design, testing and performance of foundations." - 6th International Conference on Case Histories in Geotechnical Engineering, Arlington, VA, August 2008.

Theme Lecture - "Analysis of Single Piles: Challenges and Solutions." 12th International Conference of the International Association for Computer Methods and Advances in Geomechanics, Goa, India, October 1-6, 2008.

Invited Lecture - "Limit Analysis of Slopes Subjected to Seismic Loadings." 11th International Conference of the International Association for Computer Methods and Advances in Geomechanics, Turin, Italy, June 2005.

Invited Lecture - "Advances in Deep Foundation Design." Modern Trends in Geomechanics, Vienna, Austria, June 27-29, 2005:

Invited Lecture: "Size Effects in Calibration Chamber Cone Penetration Tests." Calibration Chamber Workshop, X Brazilian Conference of Soil Mechanics and Foundation Engineering, November 1994.

Invited Lecture: "Upper and Lower Bound Analysis for Slope Stability Assessment." Lecture given as part of panel session on slope stability analysis, San Diego ASCE convention, November 1995.

Invited Lecture: "Future Role of Computers in Pile Design and Construction." Lecture given as part of a panel session on advanced modeling of deep foundations, Orlando, FL, February 2002.

Invited Lecture: "Liquefaction of Silty and Clay Sands." EERI, Purdue Student Chapter, November 2002.

Invited Lecture: "Limit States Design of Shallow Foundations." ACI Convention, September 2003, Boston.

Invited Lecture: "Instrumented Load Tests on Closed- and Open-Ended Piles." Deep Foundations Institute 28th Annual Conference on Deep Foundations, Miami, October 2003.

Invited Lecture: "Modern Trends in Foundation Design and Construction." Association of Developers – Sinduscon, Porto Alegre, Brazil, October 2004.

Invited Lecture: "Recent Advances in the Design of Axially-Loaded Piles in Sandy Soils." Geo-Frontiers, Austin, January 2005.

Invited Lecture: "Mechanical Properties of CCBP's." Seminar on Recycling Opportunities for Fly Ash and Other Coal Combustion Products in Concrete and Construction Materials. Sponsored by U.S. Environmental Protection Agency - Region 5, Chicago, IL, UWM Center for By-Products Utilization American Coal Ash Association, Headwaters, Inc., Lafarge North America, May 24, 2005, Indianapolis, Indiana.

Invited Lecture: "Analysis of the Axial Response of Non-Displacement Piles in Sand." - Short presentation given as part of the Second Japan-U.S. Workshop on Testing, Modeling and Simulation in Geomechanics, September 8-10, 2005, Japan.

Panelist, Deep Foundations major panel discussion, GeoFlorida, 2010.

Invited Seminar: "Penetration Resistance in Sands": Georgia Tech, April 1992; Carnegie Mellon University, April 1993; Universidade de Brasília, May 1993; University of California, Berkeley, April 1994.

Invited Seminar: "Liquefaction Potential Assessment in Sands from CPT Results": University of California, Los Angeles, June 1994.

Invited Seminar: "The Design of Drilled Shafts Using CPT Results": Universidade de Brasília, May 1995.

Invited Seminar: "Soil Liquefaction Susceptibility": Universidade Federal de Minas Gerais", May 1995.

Invited Seminar: "Interpretation of the Cone Penetration Test": Univ. Federal do Rio Grande do Sul, May 1995.

Invited Seminar: "Calibration Chamber Cone Penetration Tests": U.S. Army WES, June 1995.

Invited Seminar: "Penetration Resistance in Sands: Analysis and Applications": ASCE Indianapolis Chapter, Soil Mechanics Group, April 1997; Columbia University, May 1998.

Invited Seminar: "Graduate Studies at Purdue University": UFRGS, Porto Alegre, Brazil, July 1997.

Invited Seminar: "Foundations in Rock": Department of Transportation of Rio Grande do Sul (DAER), July 1998; Association of Construction Professionals of Bento (ASCON), July 1998.

Invited Seminar: "Interpretation of CPT Tests in Granular Soils": UFRGS, Porto Alegre, Brazil, January 1999.

Invited Seminar: "Shear Strength and Stiffness of Silty Sands": University of Western Australia, Perth, March, 2000; University of Newcastle, May 2000, ASCE Chicago Group, May 2001.

Invited Seminar: "Base Resistance of Non-Displacement Piles in Sand": University of Western Australia, Perth, April, 2000.

Invited Seminar: "Design of Pipe Piles": ASCE Indianapolis section, April, 2002.

Invited Seminar: "Modern Analysis of Pile Foundations": Korea Railway Research Institute, Seoul, February, 2007.

Invited Seminar: "Modern Analysis of Pile Foundations": University of California, San Diego, 2008.

Invited Seminar: "Modern Foundation Practices in North America." Geyer Estaqueamento, Ltda., Porto Alegre, Brazil, 2009.

Invited Seminar: "Advances in the Mechanics of Soils and their Use in the Solution of Foundation Engineering Problems", Case Western Reserve University, September, 2009.

Invited Seminar: "Advances in the Mechanics of Soils and their Use in the Solution of Foundation Engineering Problems", University of Michigan, October, 2009.