

JORGE G. ZORNBERG, Ph.D., P.E., BC.GE, F. ASCE

Professor and Joe J. King Chair in Engineering

The University of Texas at Austin

Maseeh Department of Civil, Architectural and Environmental Engineering
301 E. Dean Keeton St., Stop C1792, Room ECJ9.227G
Austin, TX 78712-1174

Telephone: (512) 232 3595

Fax: (512) 471 6548

E-mail: zornberg@mail.utexas.edu

<https://sites.utexas.edu/zornberg/>

EDUCATION

B.S. in Civil Engineering, with honors, National University of Córdoba, Argentina, March 1987.

M.S. in Civil Engineering, Pontifical Catholic University of Rio de Janeiro (PUC-Rio), Brazil, August 1989.

Ph.D. in Civil Engineering, University of California at Berkeley, December 1994.

PROFESSIONAL REGISTRATION

Registered Professional Engineer, Texas, No. 149473

Registered Professional Engineer, California, No. C 056325

Board-Certified Geotechnical Engineer, Academy of Geo-Professionals, No. 01463

CURRENT AND PREVIOUS ACADEMIC POSITIONS

09/98 - 08/03	Assistant Professor , Department of Civil, Environmental, and Architectural Engineering, University of Colorado at Boulder.
08/03 – 08/07	Associate Adjunct Professor , Department of Civil, Environmental, and Architectural Engineering, University of Colorado at Boulder.
09/03 – 08/06	Assistant Professor , Department of Civil, Architectural, and Environmental Engineering, The University of Texas, Austin.
09/06 – 08/11	Associate Professor , Department of Civil, Architectural, and Environmental Engineering, The University of Texas, Austin.
09/11 – 08/23	Professor , Department of Civil, Architectural, and Environmental Engineering, The University of Texas, Austin.
09/23 – present	Professor and Joe J. King Chair in Engineering , Department of Civil, Architectural, and Environmental Engineering, The University of Texas, Austin.

OTHER PROFESSIONAL EXPERIENCE

03/87 - 08/89	Graduate Research Assistant , Civil Engineering Department, PUC-Rio, Brazil.
08/89 - 08/90	Research Engineer , Civil Engineering Department, PUC-Rio, Brazil.
08/90 - 12/94	Graduate Student Assistant , Civil Engineering Department, University of California, Berkeley.
01/95 - 07/95	Assistant Research Engineer , Civil Engineering Department, University of California, Berkeley.

08/95 - 08/98 **Project Engineer**, GeoSyntec Consultants, Huntington Beach, California.

HONORS AND AWARDS

First place in the University Admission Exam. College of Engineering and Natural Sciences, *National University of Córdoba*, Argentina, 1981.

HORMIX S.A. Award. Awarded for achievements in concrete technology. Córdoba, Argentina, 1986.

Premio Universidad (University Prize), *National University of Córdoba*. Córdoba, Argentina, 1987.

Young IGS Member Award 1996, *International Geosynthetics Society* (IGS). Awarded in recognition of “outstanding contributions to the development and use of geotextiles, geomembranes, related products or associated technologies.” Maastricht, The Netherlands, October 1996.

Junior Faculty Development Award, Council on Research and Creative Work, *University of Colorado*, 1999.

Collingwood Prize, *American Society of Civil Engineers* (ASCE). For the paper “Performance of Geosynthetic Reinforced Slopes at Failure,” by Zornberg, Sitar, and Mitchell, published in the *Journal of Geotechnical and Geoenvironmental Engineering*. October 2000.

Young Researcher Award, Department of Civil, Environmental and Architectural Engineering, *University of Colorado*, Boulder, April 2001.

CAREER Award, *National Science Foundation* (NSF). For the project “Alternatives in Waste Cover Systems and in Engineering Education.” July 2001.

Presidential Early Career Award for Scientists and Engineers (**PECASE**). Awarded by the *President of the United States*. The White House, Washington DC, July 12, 2002. Period 2002-2007. This Presidential Award is “the highest honor bestowed by the United States Government on outstanding scientists and engineers beginning their independent careers.”

Research Development Award, Department of Civil, Environmental and Architectural Engineering, *University of Colorado*, Boulder, April 2003.

Award of Excellence, *North American Geosynthetics Society* (NAGS). For the paper “Validation of Discrete Framework for Fiber Reinforcement,” by Li and Zornberg, Winnipeg, Canada, October 1, 2003.

IGS Award 2004, *International Geosynthetics Society* (IGS), awarded in recognition of “Advances in geosynthetic reinforced soil design.” Seoul, South Korea, June 21, 2004.

SHPE Student Chapter Special Recognition 2006, awarded by the Student Chapter of the Society of Hispanic Professional Engineers, University of Texas, Austin, March 29, 2006.

IGS Achievement Award 2008, awarded by the Mexican Chapter of the International Geosynthetics Society, Cancún, Mexico, March 4, 2008.

Best Paper Award 2010, *Geosynthetics International* journal, awarded for the paper “Geosynthetic Capillary Barriers: Current State of Knowledge.” Vol. 17, No. 5, pp. 273-300.

Best Paper Award 2011, *Journal of GeoEngineering*, awarded for the paper “Location of Failure Plane and Design Considerations for Narrow GRS Wall Systems.” Vol. 6, No. 1, pp.27-40.

J. James R. Croes Medal 2012, *American Society of Civil Engineers* (ASCE). For the paper “Centrifuge Permeameter for Unsaturated Soils I: Theoretical Basis and Experimental Developments,” published in the *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 136, No. 8, pp. 1051-1063.

Invitational Lecture 2013, British Geotechnical Association (BGA), Institution of Civil Engineers, London, UK, October 09, 2013.

Best Paper on Stabilization Techniques, *6th Brazilian Conference on Slopes (COBRAE 2013)*, for the paper “Behavior of a Wall Reinforced with Nonwoven Geotextiles under Heavy Precipitation and Surcharge,” October 2013.

Distinguished Lecturer 2015, *33rd Annual Distinguished Lecture Series*, University of California at Berkeley, Berkeley, CA, May 01, 2015.

Mercer Lecture Award, 2015-16, International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE) and International Geosynthetics Society (IGS).

Elected Fellow of the American Society of Civil Engineers (ASCE), February 15, 2017.

IGS Service Award, *International Geosynthetics Society* (IGS), awarded “In recognition of his outstanding commitment and dedication to the IGS, and in acknowledgment of the significant growth of the Society under his leadership,” Seoul, South Korea, 19 September 2018.

Recognized with the “Zornberg Lecture,” an honorary lecture established in 2019 by the *International Geosynthetics Society* (IGS) in recognition of Dr. Zornberg’s “major contributions to the geosynthetics discipline.”

Best Paper Award 2019, *Geotextiles and Geomembranes* Journal, Elsevier. Awarded for the paper “A New Generation of Soil-geosynthetic Interaction Experimentation.” *Geotextiles and Geomembranes*, Elsevier.

Recognized during the presentation of the first “Zornberg Lecture,” awarded to Prof. Richard Brachman of Queens University, GeoAmericas 2020, *4th Pan-American Conference on Geosynthetics*, Rio de Janeiro, Brazil, 26 October 2020.

Special Keynote Lecturer, *4th International Conference of Transportation Geotechnics*, ISSMGE, Chicago, IL, 25 May 2021.

Opening Keynote Lecturer, *First Australasian Conference on Geosynthetics*, Australasian Society of Geosynthetics, Brisbane, Australia, 08 June 2022.

Best Paper Award 2021, Honorable Mention, *Geosynthetics International* journal, awarded for the paper “Use of Geosynthetics to Mitigate Problems Associated with Expansive Clay Subgrades.” Vol. 28, No. 3, pp. 279-302.

Keynote Lecturer, *Eighth National Conference on Geosynthetic-reinforced Soil*, Chinese Geosynthetics Society (CCIGS), 27 November 2022.

Keynote Lecturer, *Fourth African Regional Conference on Geosynthetics*, GeoAfrica 2023, International Geosynthetics Society (IGS), Cairo, Egypt, 21 February 2023.

Keynote Lecturer, *Fifth Moroccan Conference on Geosynthetics*, Marrakesh, Morocco, 07 June 2023.

Keynote Lecturer, *Tenth Brazilian Conference on Geosynthetics*, Geossintéticos 2023, Salvador, Bahia, Brazil, 19 July 2023.

IGS Paper Competition Award, coauthor and supervisor of graduate student Subu Subramanian. Awarded for the paper “Predicted Performance of Geogrid-stabilized Unbound Aggregate Layers Using Confined Soil-Geosynthetic Composite Stiffness,” Rome, Italy, 20 September 2023.

Keynote Lecturer, *76th Canadian Geotechnical Conference, GeoSaskatoon 2023*, Saskatoon, Canada, 02 October 2023.

Keynote Lecturer, *9th Hellenic Conference on Geotechnical Engineering*, Athens, Greece, 05 October 2023.

Elected *Board-Certified Geotechnical Engineer* (BC.GE.) of the Academy of Geo-Professionals and Civil Engineering Certification Inc. (ASCE), 21 November 2023.

Elected *Honorary Member of the North American Geosynthetics Society*, IGS-NA, January 01, 2024.

Twenty-fifth Ralph B. Peck Award (2024), *American Society of Civil Engineers* (ASCE). For “Lessons learned from case histories on roadways founded on expansive clay subgrades: failures and innovative solutions involving geosynthetics.” Vancouver, Canada, 28 February 2024.

Recognized during the presentation of *the second “Zornberg Lecture,”* awarded to Dr. Vinicius Benjamin and Mr. Victor Pimentel, GeoAmericas 2024, *5th Pan-American Conference on Geosynthetics*, Toronto, Canada, 29 April 2024.

IGS Student Paper Award, awarded by the International Geosynthetics Society for the paper coauthored with supervised student Etienne Gonzalez, “Use of Transparent Soils to Model Geosynthetic Encased Columns for Soft Soil Improvement,” Toronto, Canada, 01 May 2024.

Distinguished Lecturer 2024, “Advances in Geosynthetics for Roadway Applications.” *42nd Annual Distinguished Lecture Series*, University of California at Berkeley, Berkeley, CA, 03 May 2024.

Keynote Lecturer, “Expansive Clays: Characterizing the Problem and Solving it Using Geosynthetics,” *COBRAMSEG 2024, XXI Brazilian Congress on Soil Mechanics and Geotechnical Engineering*, Balneario Camboriu, Santa Catarina, Brazil, 26 September 2024.

Keynote Lecturer, “Sustainable Practices for Roadway Infrastructure Using Geosynthetics,” *International Conference on GeoPractices towards Sustainable Infrastructure*, Hyderabad, India, 04 October 2024.

Keynote Lecturer, “Roadways on Expansive Clays: Characterizing the Problem and Solving it with Geosynthetics,” *56th Annual Geotechnical Engineering Conference*, Lawrence, Kansas, 07 November 2024.

Bright Spark Lecture Award, granted by the International Society of Soil Mechanics and Geotechnical Engineering, with supervised researchers Shakeel Abid and Ashray Saxena, “Optimizing Ground Improvement through Unsaturated Soil Mechanics and Geosynthetics,” Ottawa, Canada, 23 June 2025.

Keynote Lecturer, “Geosynthetics in the classroom: Educating future engineers and their instructors.” *Sixth International Conference on Geotechnical Engineering Education*, GEE2025, Nancy, France, 02 July 2025.

Keynote Lecturer, “Advances in the Use of Geosynthetics for Roadway Applications.” *Fourth Spanish Conference on Geosynthetics*, Geosintec 4, Madrid, Spain, 22 October 2025.

Keynote Lecturer, “Ingenuity in Geotechnical Design using Geosynthetics.” *XXVII Argentine Congress of Soil Mechanics and Geotechnical Engineering*, XXVII CAMSIG, Resistencia, Argentina, 06 November 2025.

PUBLICATIONS

Refereed Archival Journal Publications

- 1) Zornberg, J.G., and Azevedo, R.F. (1989). “Finite Element Analysis of Potential Failure Surfaces in Open-Cut Excavations using a Non-Associated Elasto-Plastic Model.” *Computational Mechanics*, Argentinean Society of Computational Mechanics, AMCA, June, Vol. 7, pp. 361-374.
- 2) Zornberg, J.G., and Mitchell, J.K. (1994). “Reinforced Soil Structures with Poorly Draining Backfills. Part I: Reinforcement Interactions and Functions.” *Geosynthetics International*, ICE Publishing, Vol. 1, No. 2, pp. 103-148.
- 3) Mitchell, J.K., and Zornberg, J.G. (1995). “Reinforced Soil Structures with Poorly Draining Backfills. Part II: Case Histories and Applications.” *Geosynthetics International*, ICE Publishing, Vol. 2, No. 1, pp. 265-307.
- 4) Zornberg, J.G., and Giroud, J.P. (1997). “Uplift of Geomembranes by Wind - Extension of Equations.” *Geosynthetics International*, ICE Publishing, Vol. 4, No. 2, pp. 187-207.
- 5) Zornberg, J.G., Mitchell, J.K., and Sitar, N. (1997). “Testing of Reinforced Soil Slopes in a Geotechnical Centrifuge.” *ASTM Geotechnical Testing Journal*, Vol. 20, No. 4, December, pp. 470-480.

- 6) Zornberg, J.G., Sitar, N., and Mitchell, J.K. (1998). "Performance of Geosynthetic Reinforced Slopes at Failure." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 124, No. 8, pp. 670-683.
- 7) Zornberg, J.G., Sitar, N., and Mitchell, J.K. (1998). "Limit Equilibrium as Basis for Design of Geosynthetic Reinforced Slopes." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 124, No. 8, pp. 684-698.
- 8) Zornberg, J.G., Jernigan, B.L., Sanglerat, T.R., and Cooley, B.H. (1999). "Retention of Free Liquids in Landfills Undergoing Vertical Expansion." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 125, No. 7, pp. 583-594.
- 9) Giroud, J.P., Gleason, M.H., and Zornberg, J.G. (1999). "Design of Geomembrane Anchorage Against Wind Action." *Geosynthetics International*, ICE Publishing, Vol. 6, No. 6, pp. 481-507.
- 10) Zornberg, J.G., Sitar, N., and Mitchell, J.K. (2000). "Performance of Geosynthetic Reinforced Slopes at Failure, Closure." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 126, No. 3, pp. 281-286.
- 11) Zornberg, J.G., Sitar, N., and Mitchell, J.K. (2000). "Limit Equilibrium as Basis for Design of Geosynthetic Reinforced Slopes," Closure. *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 126, No. 3, pp. 286-288.
- 12) Giroud, J.P., Zornberg, J.G., and Zhao, A. (2000). "Hydraulic Design of Geosynthetic and Granular Liquid Collection Layers." *Geosynthetics International*, ICE Publishing, Special Issue on Liquid Collection Systems, Vol. 7, Nos. 4-6, pp. 285-380.
- 13) Giroud, J.P., Zornberg, J.G., and Beech, J.F. (2000). "Hydraulic Design of Geosynthetic and Granular Liquid Collection Layers Comprising Two Different Slopes." *Geosynthetics International*, ICE Publishing, Special Issue on Liquid Collection Systems, Vol. 7, Nos. 4-6, pp. 453-489.
- 14) Zornberg, J.G., and Kavazanjian, E. (2001). "Prediction of the Performance of a Geogrid-Reinforced Slope Founded on Solid Waste." *Soils and Foundations*, Japanese Geotechnical Society, Vol. 41, No. 6, pp. 1-16.
- 15) Azevedo, R.F., Parreira, A.B., and Zornberg, J.G. (2002). "Numerical Analysis of a Tunnel in Residual Soils." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 128, No. 3, pp. 227-236.
- 16) Abu-Hejleh, N., Zornberg, J.G., Wang, T., and Watcharamonthein, J. (2002). "Monitored Displacements of Unique Geosynthetic-Reinforced Soil Bridge Abutment." *Geosynthetics International*, ICE Publishing, Vol. 9, No. 1, pp. 71-95.
- 17) Zornberg, J.G. (2002). "Discrete Framework for Limit Equilibrium Analysis of Fibre-Reinforced Soil." *Géotechnique*, Vol. 52, No. 8, pp. 593-604.
- 18) Zornberg, J.G., and Kavazanjian, E. (2002). "Prediction of the Performance of a Geogrid-Reinforced Slope Founded on Solid Waste," Closure. *Soils and Foundations*, Vol. 42, No. 5, pp. 129-130.
- 19) Zornberg, J.G. (2002). "Peak versus Residual Shear Strength in Geosynthetic-Reinforced Soil Design." *Geosynthetics International*, ICE Publishing, Vol. 9, No. 4, pp. 301-318.
- 20) Zornberg, J.G. (2002). "Peak versus Residual Shear Strength in Geosynthetic-Reinforced Soil Design," Discussion and Response 1. *Geosynthetics International*, ICE Publishing, Vol. 9, No. 4, pp. 381-386.
- 21) Zornberg, J.G. (2002). "Peak versus Residual Shear Strength in Geosynthetic-Reinforced Soil Design," Discussion and Response 2. *Geosynthetics International*, ICE Publishing, Vol. 9, No. 4, pp. 387-390.
- 22) Zornberg, J.G. (2002). "Peak versus Residual Shear Strength in Geosynthetic-Reinforced Soil Design," Discussion and Response 3. *Geosynthetics International*, ICE Publishing, Vol. 9, No. 4, pp. 391-393.
- 23) Zornberg, J.G., and Arriaga, F. (2003). "Strain Distribution within Geosynthetic-Reinforced Slopes." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 129, No. 1, pp. 32-45.
- 24) Zornberg, J.G., LaFountain, L., and Caldwell, J.A. (2003). "Analysis and Design of Evapotranspirative Cover for Hazardous Waste Landfill." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 129, No. 5, pp. 427-438.

- 25) Costa, Y.D., Cintra, J.C., and Zornberg, J.G. (2003). "Influence of Matric Suction on the Results of Plate Load Tests Performed on a Lateritic Soil Deposit." *ASTM Geotechnical Testing Journal*, March, Vol. 26, No. 2, pp. 219-227.
- 26) Costanzi, M.A., Bueno, B.S., Baras, L.C., and Zornberg, J.G. (2003). "Evaluation of Creep of Non-Woven Geotextiles using Accelerated Tests." *Soils and Rocks*, Latin-American Geotechnical Journal, December, Vol. 26, No. 3, pp. 217-228.
- 27) Zornberg, J.G. (2003). "Peak versus Residual Shear Strength in Geosynthetic-Reinforced Soil Design," Discussion and Response 4. *Geosynthetics International*, ICE Publishing, December, Vol. 10, No. 6, pp. 234-237.
- 28) Zornberg, J.G. (2004). "Discrete Framework for Limit Equilibrium Analysis of Fibre-Reinforced Soil," Closure. *Géotechnique*, February, Vol. 54, No. 1, pp. 72-73.
- 29) Giroud, J.P., Zhao, A., Tomlinson, H.M., and Zornberg, J.G. (2004). "Liquid Flow Equations for Drainage Systems Composed of Two Layers Including a Geocomposite." *Geosynthetics International*, ICE Publishing, February, Vol. 11, No. 1, pp. 43-58.
- 30) Zornberg, J.G., Cabral, A.R., and Viratjandr, C. (2004). "Behaviour of Tire Shred-Sand Mixtures." *Canadian Geotechnical Journal*, April, Vol. 41, No. 2, pp. 227-241.
- 31) Dell'Avanzi, E., Zornberg, J.G., and Cabral, A.R. (2004). "Suction Profiles and Scale Factors for Unsaturated Flow under Increased Gravitational Field." *Soils and Foundations*, June, Vol. 44, No. 3, pp. 79-89.
- 32) McCartney, J.S., Zornberg, J.G., Swan, R.H., and Gilbert, R.B. (2004). "Reliability-Based Stability Analysis Considering GCL Shear Strength Variability." *Geosynthetics International*, ICE Publishing, June, Vol. 11, No. 3, pp. 212-232.
- 33) Zornberg, J.G., Byler, B.R., and Knudsen, J. (2004). "Creep of Geotextiles using Time-Temperature Superposition Methods." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, November, Vol. 130, No. 11, pp. 1158-1168.
- 34) Parent, S.-E., Cabral, A.R., Dell'Avanzi, E., and Zornberg, J.G. (2004). "Determination of the Hydraulic Conductivity Function of a Highly Compressible Material Based on Tests with Saturated Samples." *ASTM Geotechnical Testing Journal*, November, Vol. 27, No. 6, pp. 614-618.
- 35) Zornberg, J.G., Costa, Y.D., and Vollenweider, B. (2004). "Performance of Prototype Embankment Built with Tire Shreds and Nongranular Soil." *Transportation Research Record: Journal of the Transportation Research Board*, December, No. 1874, TRB, National Research Council, Washington, D.C. pp. 70-77.
- 36) Zornberg, J.G., Friedrichsen, J., and Dell'Avanzi, E. (2005). "Performance of Centrifuge Data Acquisition Systems Using Wireless Transmission." *ASTM Geotechnical Testing Journal*, March, Vol. 28, No. 2, pp. 144-150.
- 37) Zornberg, J.G., McCartney, J.S., and Swan, R.H. (2005). "Analysis of a Large Database of GCL Internal Shear Strength Results." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, March, Vol. 131, No. 3, pp. 367-380.
- 38) Bueno, B.S., Costanzi, M.A., and Zornberg, J.G. (2005). "Conventional and Accelerated Creep Tests on Nonwoven Needle-punched Geotextiles." *Geosynthetics International*, ICE Publishing, December, Vol. 12, No. 6, pp. 276-287.
- 39) McCartney, J.S., and Zornberg, J.G. (2006). "Correction of Lightning Effects on Wave Content Reflectometer Soil Moisture Data." *Vadose Zone Journal*, Vol. 5, No. 2, May, pp. 673-683.
- 40) Kakuda, F.M., Bueno, B.S., Teixeira, S.H.C., and Zornberg, J.G. (2006). "Pullout Tests on Geogrids using Reduced-scale Equipment." (in Portuguese), *Soils and Rocks*, Vol. 29, May, No. 2, pp. 161-176.
- 41) Bouazza, A., Zornberg, J.G., McCartney, J.S., and Nahlawi, H. (2006). "Significance of Unsaturated Behaviour of Geotextiles in Earthen Structures." *Australian Geomechanics Journal*, September, Vol. 41, No. 3, pp. 133-142.

42) Zornberg, J.G., McCartney, J.S., and Swan, R.H. (2006). "Analysis of a Large Database of GCL Internal Shear Strength Results, Closure." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 132, October, No. 10, pp. 1376-1379.

43) Teixeira, S.H.C., Bueno, B.S., and Zornberg, J.G. (2007). "Pullout Resistance of Individual Longitudinal and Transverse Geogrid Ribs." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, January, Vol. 133, No. 1, pp. 37-50.

44) Benjamim, C.V.S., Bueno, B., Zornberg, J.G. (2007). "Field Monitoring Evaluation of Geotextile-Reinforced Soil Retaining Walls." *Geosynthetics International*, ICE Publishing, April, Vol. 14, No. 2, pp. 100-118.

45) Parent, S.E., Cabral, A.R., Dell' Avanzi, E., and Zornberg, J.G. (2007). "Determination of the Hydraulic Conductivity Function of a Highly Compressible Material Based on Tests with Saturated Samples - Closure." *ASTM Geotechnical Testing Journal*, Vol. 30, No.3, May, pp. 242-243.

46) Parent, S.E., Cabral, A.R., and Zornberg, J.G. (2007). "Water Retention Curve and Hydraulic Conductivity Function of Highly Compressible Materials." *Canadian Geotechnical Journal*, Vol. 44, No. 10, October, pp. 1200-1214.

47) Cui, Y.J., and Zornberg, J.G. (2008). "Water Balance and Evapotranspiration Monitoring in Geotechnical and Geoenvironmental Engineering." Keynote paper, *Journal of Geotechnical and Geological Engineering*, Springer publishing, June, Vol. 26, No. 6, pp. 783-798.

48) Ferreira, J.A.Z., Bueno, B.S., and Zornberg, J.G. (2008). "Small Pullout Tests for Pavement Reinforcement Study" (in Portuguese). *Geotecnica*, Lisbon, Vol. 113, July, pp. 109-124.

49) Palmeira, E.M., Tatsuoka, F., Bathurst, R.B., Stevenson, P.E., and Zornberg, J.G. (2008). "Advances in Geosynthetics Materials and Applications for Soil Reinforcement and Environmental Protection Works." *Electronic Journal of Geotechnical Engineering*, Vol. 13, Special Issue State of the Art in Geotechnical Engineering, December, pp. 1-38.

50) McCartney, J.S., Zornberg, J.G., and Swan, R.H. (2009). "Analysis of a Large Database of GCL-Geomembrane Interface Shear Strength Results." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 134, No. 2, February, pp. 209-223.

51) Lodi, P.C., Bueno, B.S., and Zornberg, J.G. (2009). "Evaluation of the Degradation of HDPE and PVC Geomembranes using Thermogravimetric Analyses." *Ibero-American Journal of Polymers*, Vol. 10, No. 2, March, pp. 110-118.

52) Nogueira, C.L., Azevedo, R.F., and Zornberg, J.G. (2009). "Coupled Analysis of Excavations in Saturated Soil." *International Journal of Geotechnical Engineering*, ASCE, Vol. 9, No 2, April, pp. 73-81.

53) Costa, Y.D., Zornberg, J.G., Bueno, B.S., and Costa, C.L. (2009). "Failure Mechanisms in Sand over a Deep Active Trapdoor." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 135, No. 11, November, pp. 1741-1753.

54) Liu, C., Zornberg, J.G., Chen, T-C., Ho, Y., and Lin, B. (2009). "Behavior of Geogrid-Sand Interfaces in Direct Shear Mode." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 135, No. 12, December, pp. 1863-1871.

55) Lodi, P.C., Zornberg, J.G., and Bueno, B.S. (2009). "A Brief Overview on the Use of Geosynthetics on Landfills." (in Portuguese) *Tecnologia*, Vol. 30, No. 2, December, pp. 188-197.

56) McCartney, J.S., Zornberg, J.G., and Swan, R.H. (2010). "Analysis of a Large Database of GCL-Geomembrane Interface Shear Strength Results, Closure." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 136, No. 1, January, pp. 276-277.

57) Lodi, P.C., Zornberg, J.G., and Bueno, B.S. (2010). "Degradation of HDPE Geomembranes due to Exposure to Weather and Leachate." (in Portuguese) *Ibero-American Journal of Polymers*, Vol. 11, No. 3, May, pp. 145-158.

58) Zornberg, J.G., and McCartney, J.S. (2010). "Centrifuge Permeameter for Unsaturated Soils I: Theoretical Basis and Experimental Developments." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 136, No. 8, August, pp. 1051-1063.

59) McCartney, J.S., and Zornberg, J.G. (2010). "Centrifuge Permeameter for Unsaturated Soils II: Measurement of the Hydraulic Characteristics of an Unsaturated Clay." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 136, No. 8, August, pp. 1064-1076.

60) Zornberg, J.G., Bouazza, A., and McCartney, J.S. (2010). "Geosynthetic Capillary Barriers: Current State of Knowledge." *Geosynthetics International*, ICE Publishing, Vol. 17, No. 5, October, pp. 273-300.

61) McCartney, J.S., and Zornberg, J.G. (2010). "Effects of Infiltration and Evaporation on Geosynthetic Capillary Barrier Performance." *Canadian Geotechnical Journal*, Vol. 47, No. 11, November, pp. 1201-1213.

62) Williams, L., Dwyer, S., Zornberg, J.G., Hoyt, D., and Hargreaves, G. (2011). "Covering it All," *Civil Engineering*, ASCE, January, Vol. 81, No. 1, pp. 64-71.

63) Yang, K.H., Ching, J-Y., and Zornberg, J.G. (2011). "Reliability-Based Design for External Stability of Narrow Mechanically Stabilized Walls: Calibration from Centrifuge Tests." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 137, No.3, March, pp. 239-253.

64) Yang, K.H., Zornberg, J.G., Hung, W.Y., and Lawson, C.R. (2011). "Location of Failure Plane and Design Considerations for Narrow GRS Wall Systems." *Journal of GeoEngineering*, Vol. 6, No. 1, April, pp.27-40.

65) Nogueira, C.L., Azevedo, R.F., and Zornberg, J.G. (2011). "Validation of Coupled Simulation of Excavations in Saturated Clay: Camboinhas Case History." *International Journal of Geomechanics*, ASCE, Vol. 11, No. 3, June, pp. 202-210.

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59) Sheridan, T.M., Zornberg, J.G., and Gilbert, R.B. (2012). *Evaluation of Settlements at the Conquista Tailings Impoundment*. Geotechnical Engineering Center, The University of Texas at Austin, presented to the Texas Commission of Environmental Quality (TCEQ), Austin, Texas, August, 56 pp.

60) Zornberg, J.G., Ferreira, J.A.Z., and Roodi, G.H. (2012). *Experimental Results on Soil-Geosynthetic Interaction Stiffness*. Center for Transportation Research (CTR), Report No. FHWA/TX-12/5-4829-01-3, Austin, Texas, September 2012, 232 pp.

61) Zornberg, J.G., Armstrong, C.P., Plaisted, M.D., and Walker, T.M. (2013). *Swelling of Highly Plastic Clays under Centrifuge Loading*. Center for Transportation Research (CTR), Product Report No. 5-6048-01-P2, Austin, Texas, May, 8 pp.

62) Zornberg, J.G., Plaisted, M.D., Armstrong, C.P., and Walker, T.M. (2013). *Implementation of Centrifuge Testing for Swelling Properties of Highly Plastic Clays*. Center for Transportation Research (CTR), Report No. FHWA/TX-13/5-6048-01-1, Austin, Texas, August, 90 pp.

63) Zornberg, J.G., Ferreira, J.A.Z., and Roodi, G.H. (2013). *Geosynthetic-reinforced Unbound Base Courses: Quantification of the Reinforcement Benefits*. Center for Transportation Research (CTR), Report No. FHWA/TX-12/5-4829-01-2, Austin, Texas, August 2013, 757 pp.

64) Brown, A.C., Dellinger, G.F., Zornberg, J.G., El-Mohtar, C., and Gilbert, R.B. (2013). *The Long-term Performance of a Drilled Shaft Retaining Wall in an Expansive Clay*. Center for Transportation Research (CTR), Report No. FHWA/TX-13/0-6603-02, Austin, Texas, October 2013, 182 pp.

65) Zornberg, J.G., and Armstrong, C.P. (2014). *Materials for PVR Short Course and Training*. Center for Transportation Research (CTR), Product Report No. 5-6048-03-P2, Austin, Texas, October, 63 pp.

66) Zornberg, J.G., Plaisted, M.D., Armstrong, C.P., and Walker, T.M. (2016). *Spreadsheet with Swelling Curves for Clays in Texas*. Center for Transportation Research (CTR), Product Report No. 5-6048-01-P1, Austin, Texas, June, 30 pp.

67) Izzo, R., and Zornberg, J.G. (2016). *Best Practice: Geosynthetics in Paved Roads*. Texas Department of Transportation, Best Practices Video Summary Report, Product RTI VSR 5-4829-03, Austin, Texas, July, https://youtu.be/Q_ONiywDxGI

68) Arellano, M., and Zornberg, J.G. (2016). *Best Practice: Expansive Clay Soils*. Texas Department of Transportation, Best Practices Video Summary Report, Product RTI VSR 5-6048-03, Austin, Texas, July, <https://youtu.be/Mo6JUNk1bj4>

69) Zornberg, J.G., Armstrong, C.P., and Potkay, A. (2017). *Implementation of Centrifuge Testing of Expansive Soils for Pavement Design*. Center for Transportation Research (CTR), Report No. FHWA/TX-17/5-6048-03-1, Austin, Texas, March, 222 pp.

70) Zornberg, J.G., Blake, C., Roodi, G.H., and Zheng, L. (2018). *Summary of Recent Activities and Site Locations in TxDOT San Antonio District*. Center for Transportation Research (CTR), Austin, Texas, March, 32 pp.

71) Roodi, G.H., Zornberg, J.G., Aboelwafa, M.M., Phillips, J.R., Zheng, L., and Martinez, J. (2018). *Soil-geosynthetic Interaction Test to Develop Specifications for Geosynthetic-stabilized Roadways*. Center for Transportation Research (CTR), Product Report No. FHWA/TX-18/5-4829-03-1, Austin, Texas, May, 112 pp.

72) Zornberg, J.G., Morsy, A.M., and Mofarraj, B., Christopher, B.R., Leshchinsky, D., Han, J., Tanyu, B.F., Gebremariam, F.T., Shen, P., Jiang, Y. (2018). *Defining the Boundary Conditions for Composite Behavior of Geosynthetic Reinforced Soil (GRS) Structures*. National Cooperative Highway Research Program (NCHRP), Project 24-41, Transportation Research Board, Washington DC, October, 986 pp.

73) Zornberg, J.G., Morsy, A.M., Mofarraj, B., Christopher, B.R., Leshchinsky, D., Han, J., Tanyu, B.F., Gebremariam, F.T., Shen, P., Jiang, Y. (2019). *Proposed Refinements to Design Procedures for Geosynthetic Reinforced Soil (GRS) Structures in AASHTO LRFD Bridge Design Specifications*. National Cooperative Highway Research Program (NCHRP), Project 24-41, Transportation Research Board, Washington DC, March, 64 pp.

74) Blake, C., Summerlin, K., and Zornberg, J.G. (2019). *Swelling Characterization of Natural and Chemically Stabilized Clays using Centrifuge Technology*. Center for Transportation Research (CTR), Product Report No. FHWA/TX-19/5-6048-05-1, Austin, Texas, December, 218 pp.

75) Roodi, G.H., Zornberg, J.G., Phillips, J.R., Yang, L., Morsy, A.M., and Prozzi, J.A. (2021). *Geosynthetic-reinforced Overlays as Preventive Maintenance Strategy*. Center for Highway Pavement Preservation (CHPP), Product Report No. CHPP Report-UTA#9-2021, Okemos, Michigan, September, 112 pp.

76) Chen, C., Malviya, J., Mofarraj, B., Ge, X., Helwig, T., Murcia-Delso, J., and Zornberg, J.G. (2023). *Design and Behavior of Seamless Bridge-pavement Systems*. Center for Transportation Research (CTR), Report No. FHWA/TX-23/0-7911-1, Austin, Texas, September, 208 pp.

77) Helwig, T., Chen, C., Malviya, J., Mofarraj, B., Ge, X., Murcia-Delso, J., and Zornberg, J.G. (2023). *Project Summary: Evaluation of Seamless Bridges*. Center for Transportation Research (CTR), Austin, Texas, September, 2 pp.

78) Zornberg, J.G., Mofarraj, B., Helwig, T., and Walter, J. (2023a). *Development of Semi-integral Bridge Abutment Details for Texas Conditions*. Center for Transportation Research (CTR), Report No. FHWA/TX-23/06936, Austin, Texas, December, 511 pp.

79) Zornberg, J.G., Mofarraj, B., Helwig, T., and Walter, J. (2023b). *Project Summary: Development of Integral/Semi-integral Abutments for TxDOT Bridges*. Center for Transportation Research (CTR), Austin, Texas, December, 2 pp.

80) Kumar, V.V., Roodi, G.H., Sankaranarayanan, S., Saxena, A., Blake, K., and Zornberg, J.G. (2024). *Geosynthetic Reinforcement in Asphalt Overlays for Increased Roadway Structural Capacity*. Center for Transportation Research (CTR), Report No. FHWA/TX-25/0-7002-1, Austin, Texas, November, 288 pp.

81) Zornberg, J.G., Kumar, V.V., Roodi, G.H., Sankaranarayanan, S., Saxena, A., and Blake, K. (2024). *Project Summary: Geosynthetic Reinforcement in Asphalt Overlays for Increased Roadway Structural Capacity*. Center for Transportation Research (CTR), Austin, Texas, November, 2 pp.

82) Zornberg, J.G., Sankaranarayanan, S., Roodi, G.H., S., Kumar, V.V., Blake, K., Mikati, A., and Yalcin, Y. (2025a). *Project Summary: Implementation of Geosynthetic-Stabilized Roadways for Base Course Reduction: Field Monitoring and Design Recommendations*. Center for Transportation Research (CTR), Austin, Texas, January, 2 pp.

83) Zornberg, J.G., Sankaranarayanan, S., Roodi, G.H., S., Kumar, V.V., Blake, K., Mikati, A., and Yalcin, Y. (2025b). *Geosynthetic-stabilized Roadways for Base Course Reduction*. Center for Transportation Research (CTR), Report No. FHWA/TX-24/5-4829-05-1, Austin, Texas, January, 222 pp.

84) Zornberg, J.G., Sankaranarayanan, S., and Roodi, G.H. (2025a). *Project Summary: Optimization of the Design of Flexible Pavements with Unbound Bases Reinforced with Geogrids using APT*. Center for Transportation Research (CTR), Austin, Texas, March, 2 pp.

85) Sankaranarayanan, S., Zornberg, J.G., and Roodi, G.H. (2025b). *Optimization of the Design of Flexible Pavements with Unbound Bases Reinforced with Geogrids using APT*. Center for Transportation Research (CTR), Report No. FHWA/TX-23/0-6834-1, Austin, Texas, March, 142 pp.

86) Zornberg, J.G., and Morsy, A.M. (2025). *Project Summary: Synthesis: Develop Design Guidelines for Applications of Light Weight Aggregate in Embankments and Mechanically Stabilized Earth (MSE) Walls*. Center for Transportation Research (CTR), Austin, Texas, September, 2 pp.

87) Morsy, A.M., and Zornberg, J.G. (2025). *Guidelines for Using Lightweight Fill in Transportation Infrastructure Applications*. Center for Transportation Research (CTR), Report No. FHWA/TX-26/0-7237-1, Austin, Texas, September, 143 pp.

ORAL PRESENTATIONS

- 1) Presentation of “On the Use of an Elasto-Plastic Model on the Analysis of Excavations.” *Canada-Brazil ISSMF Workshop for Young Researchers in South America* (Sponsored by CIDA and UNESCO), Rio de Janeiro, Brazil, December 1988.
- 2) Presentation of “Finite Element Analysis of Surface Failure in Open-Cut Excavations Using a Non-Associated Elasto-Plastic Model.” *Ninth Latin-American and Iberian Conference on Computational Methods in Engineering (MECOM '88)*, Córdoba, Argentina, November 1988.
- 3) Invited lecture, “Geotextile-Reinforced Soil Structures.” Geotechnical Research Seminar, University of California, Berkeley, California, March 1994.
- 4) Presentation of “Finite Element Prediction of the Performance of an Instrumented Geotextile-Reinforced Wall.” *Eight International Conference of the International Association for Computer Methods and Advances in Geomechanics (IACMAG '94)*, Morgantown, West Virginia, May 1994.
- 5) Invited lecture, “Design of Reinforced Embankments.” California State Department of Transportation, Sacramento, California, July 1994.
- 6) Invited lecture, “Performance of Geotextile-Reinforced Embankments at Failure: a Centrifuge Study.” University of California, Berkeley, California, January 1995.
- 7) Presentation of “Construction and Instrumentation of a Highway Slope Reinforced with High Strength Geotextiles.” *Geosynthetics '95*, Nashville, Tennessee, February 1995.
- 8) Invited lecture, “Performance of Reinforced Soil Structures with Decomposed Granite as Backfill Material.” California State Department of Transportation, Redding, California, May 1995.
- 9) Invited lecture, “Limit Equilibrium Design of Reinforced Soil Structures.” Geotechnical Group, Woodward Clyde Consultants, Oakland, California, February 1995.

- 10) Invited lecture, "Performance of Geotextile-Reinforced Soil Structures at Failure." GeoSyntec Consultants, Huntington Beach, California, March 1995.
- 11) Invited lecture, "Performance of Geotextile-Reinforced Soil Structures at Failure." GeoSyntec Consultants, Atlanta, Georgia, March 1995.
- 12) Invited lecture, "Performance of Geotextile-Reinforced Soil Structures at Failure." Sacramento Chapter of the American Society of Civil Engineers (ASCE), Sacramento, California, June 14, 1995.
- 13) Invited lecture, "Limit Equilibrium Design of Reinforced Soil Structures." Geotechnical Group, Pontifical Catholic University of Rio de Janeiro (PUC-Rio), Rio de Janeiro, Brazil, June 23, 1995.
- 14) Presentation of "Performance of a Geotextile-Reinforced Slope using Decomposed Granite as Backfill Material." *2nd Brazilian Symposium on Geosynthetics*, São Paulo, Brazil, June 27, 1995.
- 15) Invited lecture, "Performance of Geotextile-Reinforced Soil Structures at Failure." Brazilian Society of Soil Mechanics and Foundation Engineering, São Paulo, Brazil, June 29, 1995.
- 16) Invited lecture, "Limit Equilibrium Design of Reinforced Soil Structures." First Argentine Workshop on Geosynthetics, Buenos Aires, Argentina, July 5, 1995.
- 17) Invited lecture, "Performance of Geotextile-Reinforced Soil Structures at Failure." Geotechnical Group, National University of Cordoba, Cordoba, Argentina, July 7, 1995.
- 18) Invited lecture, "Construction and Instrumentation of a Geotextile-Reinforced Embankment." Second Latin American Conference for Young Geotechnical Engineers, International Society of Soil Mechanics and Foundation Engineering, Rio de Janeiro, Brazil, July 21, 1995.
- 19) Presentation of "Failure of Steep Reinforced Soil Slopes." *Geosynthetics '97 Conference*, Long Beach, California, March 12, 1997.
- 20) Invited lecture, "Failure of Geosynthetic-Reinforced Systems." Failure Analysis Associates, Menlo Park, California, August 29, 1997.
- 21) Invited presentation, "Percolation Control by Monocover Systems." Board of Directors OII Superfund Site, New Cure, Los Angeles, October 20, 1997.
- 22) Invited lecture, "Design of Geotextile-Reinforced Soil Structures." Synthetic Industries, Chattanooga, Tennessee, November 17, 1997.
- 23) Invited lecture, "The Role of Geotechnical Modeling in the Closure Design of a Superfund Site." Geotechnical Seminar, Department of Civil and Environmental Engineering, University of California, Berkeley, California, March 04, 1998.
- 24) Invited lecture, "Design of the Cover System at the OII Superfund Site." Geotechnical Seminar, GeoSyntec Consultants, Huntington Beach, California, March 5, 1998.
- 25) Invited lecture, "The Role of Geotechnical Modeling in the Closure Design of a Superfund Site." Geotechnical Program, University of Colorado at Boulder, Boulder, Colorado, March 16, 1998.
- 26) Invited lecture, "The Role of Geotechnical Modeling in the Closure Design of a Superfund Site." Civil Engineering Department, Columbia University, New York, New York, March 23, 1998.
- 27) Presentation of "Evaluation of a Geogrid-Reinforced Slope Subjected to Differential Settlements." *Sixth International Conference on Geosynthetics*, Atlanta, Georgia, March 28, 1998.
- 28) Invited lecture, "The Role of Geotechnical Modeling in the Closure Design of a Superfund Site." Geotechnical Group, Pontifical Catholic University of Rio de Janeiro (PUC-Rio), Rio de Janeiro, Brazil, April 24, 1998.
- 29) Interview by *Erosion Control Magazine*'s Editor. April, 1998. Interview published in: "Vegetating Steep Reinforced Slopes" (1998) by D. Sawvel, Vol. 5, No. 3, pp. 72-79.
- 30) Keynote lecture, "Numerical Simulation of Differential Settlements of a Structure Founded on Waste." Third International Workshop on *Applications of Computational Mechanics in Geotechnical Engineering*, Porto, Portugal, September 4, 1998.

- 31) Invited lecture, "Development of a Discrete Design Methodology for Fiber Reinforcement." Synthetic Industries, Chattanooga, TN, September 25, 1998.
- 32) Invited lecture, "Performance of Geotextile-Reinforced Soil Structures at Failure." Geotechnical Group, University of Colorado at Boulder, Boulder, Colorado, September 28, 1998.
- 33) Invited seminar, "The use of Fiber Reinforcement in Slope Stabilization Applications." Presentation to Synthetic Industries, Boston, April 29, 1999.
- 34) Invited lecture, "Use of Tire Shreds in Highway Embankments." Colorado Advanced Materials Institute, Golden, Colorado, June 1, 1999.
- 35) Presentation of "Selection of Backfill Shear Strength in Reinforced Soil Design." *XI Panamerican Conference on Soil Mechanics and Geotechnical Engineering* (PCSMGE), Foz do Iguaçu, Brazil, August 9, 1999.
- 36) Presentation of General Report, Special Session on Soil Improvement and Reinforcement. *XI Panamerican Conference on Soil Mechanics and Geotechnical Engineering* (PCSMGE), Foz do Iguaçu, Brazil, August 9, 1999.
- 37) Invited lecture, "Geotechnical Modeling in Geoenvironmental Engineering Projects." Geotechnical Group, National University of Cordoba, Cordoba, Argentina, August 17, 1999.
- 38) Presentation of General Report, Session on "Case Histories Involving Geosynthetics." *First Panamerican Conference on Geosynthetics*, Rio de Janeiro, Brazil, October 22, 1999.
- 39) Invited lecture, "Use of Tire Shreds in Highway Embankments." Colorado Advanced Materials Institute, Golden, Colorado, February 17, 2000.
- 40) Invited lecture, "Analysis and Design of an Evapotranspirative Cover for a Hazardous Waste Landfill." Environmental Protection Agency, Region 8, Denver, Colorado, May 18, 2000.
- 41) Invited lecture, "Performance of Geosynthetic-Reinforced Soil Structures." Colorado Department of Transportation, Denver, Colorado, June 1, 2000.
- 42) Invited lecture, "Rescuing the Leaning Tower of Pisa." Success Institute, Integrated Teaching and Learning Laboratory, University of Colorado, Boulder, Colorado, June 24, 2000.
- 43) Invited lecture, "Tire Shred-Reinforced Embankments." Colorado Advanced Materials Institute, Golden, Colorado, June 27, 2000.
- 44) Interview by *Geosynthetics News* Magazine. October 2000. Interview published in: "Industry Initiatives Applauded by Conference Organizer of GeoDenver 2000" by Sam Garrett, Vol. 5, No. 10, pp.18-20.
- 45) Invited lecture, "Optimization and Performance of Tire Shred-Reinforced Embankments." Colorado Advanced Materials Institute, Golden, Colorado, January 30, 2001.
- 46) Invited lecture, "Analysis and Design of an Evapotranspirative Cover System for a Hazardous Waste Landfill." American Society of Civil Engineers (ASCE), Colorado Section, Joint meeting, Environmental and Geotechnical groups, Denver, Colorado, February 15, 2001.
- 47) Invited lecture, "Role of Numerical Modeling in the Design of a Hazardous Waste Containment Facility." URS Greiner, Denver, Colorado, March 15, 2001.
- 48) Invited lecture, "Rescuing the Leaning Tower of Pisa." Success Institute, Multicultural Engineering Program (MEP), Integrated Teaching and Learning Laboratory, University of Colorado, Boulder, Colorado, July 27, 2001.
- 49) Invited lecture, "Tire Shred-Reinforced Embankments." Colorado Advanced Materials Institute, Golden, Colorado, August 31, 2001.
- 50) Invited lecture, "Evapotranspirative Cover System for a Hazardous Waste Landfill." Colorado School of Mines, Environmental Science and Engineering Division, Golden, Colorado, September 6, 2001.
- 51) Invited lecture, "Rocky Mountain Arsenal Demonstration Project." Interstate Technology Regulatory Council Symposium, Austin, Texas, September 11, 2001.

- 52) Invited lecture, "Discrete Design Methodology for Fiber Reinforcement." Synthetic Industries, Soil Reinforcement Group, Chattanooga, Tennessee, October 5, 2001.
- 53) Invited lecture, "Comparison of International Design Criteria for Geosynthetic-Reinforced Soil Structures." International Symposium on Earth Reinforcement, Fukuoka, Japan, November 16, 2001.
- 54) Invited lecture, "Selection of Soil Shear Strength Parameters in Geosynthetic-Reinforced Soil Design," Fifteenth Geosynthetic Research Institute Conference, Houston, Texas, December 14, 2001.
- 55) Invited lecture, "Advances on Reinforced Soil Technology." American Society of Civil Engineers (ASCE), Geotechnical Group, Los Angeles Section, Los Angeles, California, January 23, 2002.
- 56) Invited lecture, "Evapotranspirative Cover System at a Superfund Site." Interstate Technology Regulatory Cooperation, Alternative Landfill Technologies Team Meeting, Salt Lake City, Utah, March 5, 2002.
- 57) Invited lecture, "Alternatives in Waste Cover Systems." College of Engineering and Applied Sciences, University of Colorado, Boulder, March 6, 2002.
- 58) Presentation of General Report, Session on Applied Unsaturated Soil Mechanics. *Third International Conference on Unsaturated Soils*, UNSAT 2002, Recife, Brazil, March 11, 2002.
- 59) Presentation of "Scale Factors for Centrifuge Modeling of Unsaturated Flow." *Third International Conference on Unsaturated Soils*, UNSAT 2002, Recife, Brazil, March 13, 2002.
- 60) Invited lecture, "Advances in Reinforced Soil Technology." School of Civil Engineering, Technical University of Catalonia, Barcelona, Spain, June 21, 2002.
- 61) Invited presentation, "Alternatives in Waste Cover Systems and in Engineering Education." National Science Foundation, Arlington, Virginia, July 11, 2002.
- 62) Invited lecture, "Rescuing the Leaning Tower of Pisa." *Success Institute*, Multicultural Engineering Program (MEP), Integrated Teaching and Learning Laboratory, University of Colorado, Boulder, Colorado, July 26, 2002.
- 63) Invited lecture, "New Composite Systems: Should We Represent them using Discrete or Homogenized Frameworks?" NSF Workshop on Geotechnical Composite Systems, Roanoke, Virginia, July 28, 2002.
- 64) Invited keynote lecture, "Geosynthetics in Waste Containment Facilities: Recent Advances" *International Conference on Geosynthetics*, International Geosynthetics Society, Nice, France, September 23, 2002.
- 65) Invited lecture, "Role of Centrifuge Modeling in the Design of an Evapotranspirative Cover for a Hazardous Waste Landfill" *INEEL Geocentrifuge Workshop*, Idaho Falls, Idaho, March 28, 2003.
- 66) Presentation of General Report, Session on Geosynthetics in Environmental Applications. *Fourth Brazilian Symposium on Geosynthetics*, Porto Alegre, Brazil, May 21, 2003.
- 67) Invited keynote lecture, "New Trends in the Use of Geosynthetics in Environmental Applications." *Fourth Brazilian Symposium on Geosynthetics*, Porto Alegre, Brazil, May 21, 2003.
- 68) Invited lecture, "Geosynthetics Education via the University." Geosynthetic Institute Meeting, Denver, Colorado, June 19, 2003.
- 69) Presentation of "Design of Fiber-Reinforced Soil." *Twelfth Panamerican Conference of Soil Mechanics and Geotechnical Engineering*, Cambridge, Massachusetts, June 23, 2003.
- 70) Invited lecture, "Comparison of International Design Criteria for Geosynthetic-Reinforced Soil Structures." TC9 Earth Reinforcement Committee Meeting, Cambridge, Massachusetts, June 25, 2003.
- 71) Invited keynote lecture, "Assessment of Evapotranspirative Cover Performance using Field Data and Numerical Modeling" *Fourth International Workshop on Applications of Computational Methods in Geotechnical Engineering*, Ouro Preto, Brazil, August 18, 2003.
- 72) Presentation of "Validation of Discrete Framework for Fiber Reinforcement." *2003 North American Conference on Geosynthetics*, Winnipeg, Canada, October 1, 2003.
- 73) Invited lecture, "Rescuing the Leaning Tower of Pisa." Introduction to Civil Engineering CE 301, University of Texas, Austin, November 17, 2003.

- 74) Presentation of "Needs in Geosynthetics Research for Hydraulic Structures." *Seventeenth Geosynthetic Research Institute Conference*, Hot Topics in Geosynthetics IV, Las Vegas, Nevada, December 17, 2003.
- 75) Invited lecture, "Fiber-Reinforced Soil." Tenax Corporation, Technical Support Group, Baltimore, MD, January 12, 2004.
- 76) Presentation of "Mechanical Performance of a Prototype Embankment Backfill Built with Tire Shreds and Cohesive Soil." *83rd Annual Meeting*, Transportation Research Board, Washington D.C., January 13, 2004.
- 77) Presentation of "The Quest for Consistency among Regulatory, Design, and Post-Closure Monitoring Frameworks." *Designing, Building, & Regulating Evapotranspiration (ET) Landfill Covers*, USEPA Remediation Technology Development Forum Program, Denver, Colorado, March 10, 2004.
- 78) Presentation of "Effect of Specimen Conditioning on Geosynthetic Clay Liner Shear Strength." *Third Asian Regional Conference on Geosynthetics, GeoAsia 2004*, Seoul, Korea, June 23, 2004.
- 79) Invited lecture, "Discrete Framework for Analysis of Fiber-Reinforced Soil." Geotechnical Engineering Program, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil, July 13, 2004.
- 80) Invited lecture, "ET Covers: The Quest for Consistency among Regulatory, Design, and Post-closure Monitoring Frameworks." Brazilian Institute of Agricultural Research (EMBRAPA), Rio de Janeiro, Brazil, July 14, 2004.
- 81) Invited lecture, "New Trends in the Use of Geosynthetics in Environmental Applications." Geotechnical Engineering Program, National University of Cordoba, Cordoba, Argentina, July 20, 2004.
- 82) Invited lecture, "Discrete Framework for Analysis of Fiber-Reinforced Soil." Geotechnical Engineering Department, University of São Paulo, São Carlos, Brazil, December 16, 2004.
- 83) Presentation of "Geosynthetic Reinforcement in Landfill Design: US Perspectives." *Geo-Frontiers 2005*, Geo-Institute Congress, Austin, Texas, January 25, 2005.
- 84) Presentation of "Pullout of Geosynthetic Reinforcement with In-plane Drainage Capability." *Eighteenth Geosynthetic Research Institute Conference*, Geosynthetics Research and Development in Progress, Austin, Texas, January 26, 2005.
- 85) Invited lecture, "ET Covers: The Quest for Consistency among Regulatory, Design, and Post-closure Monitoring Frameworks." Geotechnical Engineering Department, University of São Paulo, São Carlos, Brazil, May 25, 2005.
- 86) Invited lecture, "Evapotranspirative Cover Systems for Municipal and Hazardous Waste Containment Systems." Civil Engineering Department, Federal University of Pernambuco, Recife, Brazil, May 30, 2005.
- 87) Invited lecture, "US Trends in the Use of Geosynthetics in Environmental Applications." São Paulo Institute of Technology, São Paulo, Brazil, June 1, 2005.
- 88) Invited lecture, "Determination of Field Suction Values in High PI Clays for Various Surface Conditions and Drain Installations." Structures Research Management Committee (RMC 5), Lion Red Hotel, Austin, June 6, 2005.
- 89) Invited lecture, "Rescuing the Leaning Tower." Minority Introduction to Engineering program (MITE), College of Engineering, University of Texas, Austin, June 23, 2005.
- 90) Presentation of "The Centrifuge Permeameter for Unsaturated Soils (CPUS)." *International Symposium on Advanced Experimental Unsaturated Soil Mechanics, Experus 2005*, Trento, Italy, June 28, 2005
- 91) Presentation of "Evaluation of Evapotranspiration from Alternative Landfill Covers at the Rocky Mountain Arsenal." *International Symposium on Advanced Experimental Unsaturated Soil Mechanics, Experus 2005*, Trento, Italy, June 29, 2005.
- 92) Invited keynote lecture, "Energy Balance and Evapotranspiration Measurement." State-of-the-art paper, *International Symposium on Advanced Experimental Unsaturated Soil Mechanics, Experus 2005*, Trento, Italy, June 29, 2005.

- 93) Invited lecture, "Advances in Reinforced Soil Technology." *International Symposium on Geosynthetic Applications for Ground Reinforcement and Improvement*, Busan, South Korea, July 6, 2005.
- 94) Presentation of "Comparison between Field Monitoring and Numerical Results of a Woven Geotextile-Reinforced Soil Retaining Wall." *Sixteenth International Conference of Soil Mechanics and Geotechnical Engineering (ISSMGE)*, Osaka, Japan, September 15, 2005.
- 95) Presentation of "Interface Shear Strength in Fiber-Reinforced Soil." *Sixteenth International Conference of Soil Mechanics and Geotechnical Engineering (ISSMGE)*, Osaka, Japan, September 15, 2005.
- 96) Presentation of "Geosynthetic Drainage Layers in Contact with Unsaturated Soils." *Sixteenth International Conference of Soil Mechanics and Geotechnical Engineering (ISSMGE)*, Osaka, Japan, September 15, 2005.
- 97) Invited lecture, "Geosynthetics in Dams: Current Research and Applications." *Dam Safety 2005 Conference*, Association of State Dam Safety Officials, Orlando, Florida, September 26, 2005.
- 98) Invited lecture, "Geosynthetic Performance in Dams." International Standards Organization, TC221 / ASTM D 35 – *Workshop on Geosynthetics in Hydraulic Applications*, Philadelphia, Pennsylvania, November 2, 2005.
- 99) Invited lecture, "Quantify the Benefits of Using Geosynthetics for Unbound Base Courses." RMC 1 Meeting, Construction, Pavements, Maintenance TxDOT Research Group, Corpus Christi, Texas, November 9, 2005.
- 100) Presentation of "Advances on the Use of Geosynthetics in Hydraulic Systems." *Nineteenth Geosynthetic Research Institute Conference (GRI-19)*, Geosynthetics Institute, Las Vegas, Nevada, December 16, 2005.
- 101) Presentation of "Use of Geosynthetics in Hydraulic Systems." *Geosynthetics Workshop*, Geosynthetics Research Center, University of São Paulo, São Carlos, June 10, 2006.
- 102) Presentation of "Advances in Remediation Technologies." *Fifth International Conference on Environmental Geotechnics*, International Society of Soil Mechanics and Geotechnical Engineering, Cardiff, U.K., June 29, 2006.
- 103) Invited lecture, "Advances in Reinforced Soil Technology." Australasian Chapter of the International Geosynthetics Society, Melbourne, Australia, August 17, 2006.
- 104) Invited lecture, "ET Covers: The Quest for Consistency among Regulatory, Design, and Post-closure Monitoring Frameworks." Geotechnical Engineering Program, Monash University, Melbourne, Australia, August 18, 2006.
- 105) Invited lecture, "Geosynthetic-Reinforced Pavements over Expansive Soil Subgrades." International Tensar meeting, Lima, Peru, October 18, 2006.
- 106) Invited lecture, "Reinforcement Applications in Environmental and Mining Projects." International Tensar meeting, Lima, Peru, October 18, 2006.
- 107) Invited lecture, "Advances in Reinforced Soil Technology." Peruvian Chapter of the International Geosynthetics Society, Lima, Peru, October 18, 2006.
- 108) Invited lecture, "Geosynthetic-Reinforced Structures: Advances in their Design under Conventional and Unconventional Loads." Texas A&M University, College Station, November 30, 2006.
- 109) Presentation of "Use of Fiber-Reinforced Soil for Blast Protection." *Twentieth Geosynthetic Research Institute Conference (GRI-208)*, Washington, DC, January 18, 2007.
- 110) Invited lecture, "The Texas Experience in Civil Engineering Applications of Waste Tires." Cross-Border Environmental Management Conference, LBJ School of Public Affairs, University of Texas, Austin, February 27, 2007.
- 111) Keynote lecture. "New Concepts in Geosynthetic-Reinforced Soil." *Fifth Brazilian Symposium on Geosynthetics*, Geosintéticos 2007, and *Sixth Brazilian Congress on Environmental Geotechnics*, REGEO '2007, Recife, Brazil, June 18, 2007.

- 112) Invited lecture, "Reinforced Soil Walls: Advances in their Design under Conventional and Non-conventional Loads." Geotechnical Group, National University of Cordoba, Cordoba, Argentina, July 13, 2007.
- 113) Invited lecture, "Use of Geosynthetic Reinforcement in Cover Systems for Environmental Protection." *International Workshop on Geoenvironmental Engineering*, Argentine Society of Geotechnical Engineering, Cordoba, Argentina, October 19, 2007.
- 114) Invited lecture, "Use of Geosynthetic Reinforcement in Landfill Design." *Workshop on the Geotechnical Stability of Landfills*, Brazilian Society of Soil Mechanics, Sao Paulo, Brazil, October 22, 2007.
- 115) Invited lecture, "Use of Geosynthetic Reinforcement in Landfill Design." *Workshop on the Use of Geosynthetics in Environmental Protection*, Brazilian Society of Soil Mechanics, Rio de Janeiro, Brazil, October 25, 2007.
- 116) Keynote lecture, "New Horizons in Reinforced Soil Technology." Proceedings of the *Fifth International Symposium on Earth Reinforcement* (IS Kyushu 2007), Fukuoka, Japan, November 15, 2007.
- 117) Invited lecture, "New Trends on the Use of Geosynthetics for Environmental Protection." Mexican Chapter of the International Geosynthetics Society, Mexico City, November 29, 2007.
- 118) Presentation of "Time-Dependent Deformations of Geotextile-Reinforced Walls in Reduced-Scale Models." *GeoAmericas 2008*, the First PanAmerican Geosynthetics Conference and Exhibition, March 5, 2008.
- 119) Invited lecture, "US Regulations for Containment of Municipal and Hazardous Solid Waste." *Geosynthetics Asia 2008*, the Fourth Asian Conference on Geosynthetics, Shanghai, China, June 19, 2008.
- 120) Invited lecture, "Advances in Reinforced Soil Technology." Geotechnical Engineering Program, Shanghai University, Shanghai, China, June 20, 2008.
- 121) Invited lecture, "Use of Geosynthetic Reinforcement in Landfill Design." *Workshop on Soil Reinforcement Applications*, Department of Geotechnical Engineering, University of Sao Paulo, Sao Carlos, August 1, 2008.
- 122) Invited lecture, "Design of Geocomposite Drainage Layers." *Structure, Testing, Performance and Application of Drainage Geocomposites in Landfills*, Texas Research International (TRI), Austin, Texas, November 5, 2008.
- 123) Invited lecture, "Use of Geosynthetic Reinforcement in Landfill Design." Civil Engineering Department, Sungkyunkwan University, Seoul, Korea, November 20, 2008.
- 124) Keynote lecture, "Advances in Soil Reinforcement Technology." *Korean Geosynthetics Conference*, Seoul, Korea, November 21, 2008.
- 125) Keynote lecture, "Advances in the Use of Geosynthetics for Environmental Projects." *24th National Conference on Soil Mechanics*, Mexican Society of Soil Mechanics (SMIG), Aguascalientes, Mexico, November 27, 2008.
- 126) Invited lecture, "Design of Drainage Systems for Landfill Applications." Texas Commission for Environmental Quality (TCEQ), Austin, Texas, December 7, 2008.
- 127) Invited lecture, "ET Covers: The Quest for Consistency among Regulatory, Design, and Post-closure Monitoring Frameworks." Geo-Engineering Centre, Queen's University, Kingston, Ontario, Canada, December 17, 2008.
- 128) Invited presentation, "Evaluation of Moisture Monitoring Data at the Rocky Mountain Arsenal." Environmental Protection Agency, Region 5, Denver, Colorado, March 3, 2009.
- 129) Invited lecture, "ET Covers: The Quest for Consistency among Regulatory, Design, and Post-closure Monitoring Frameworks." Geoenvironmental Engineering Action Group Conference, Geosyntec Consultants, Austin, Texas, April 04, 2009.
- 130) Keynote lecture, "Design of Drainage Systems for Waste Containment." *Environmental Trade Fair and Conference*, Texas Commission on Environmental Quality, Austin, Texas, May 14, 2009.

- 131) Invited lecture, "Advances in Soil Reinforcement Technology." Brazilian Society of Geotechnical Engineering, PUC-Rio, Rio de Janeiro, Brazil, June 22, 2009.
- 132) Keynote lecture, "Geosynthetic Capillary Barriers: Principles and Applications." *First African Conference on Geosynthetics*, GeoAfrica 2009, Cape Town, South Africa, September 24, 2009.
- 133) Presentation of "A Model for the Characterization of Scrap the Scrap Tire Bale Interface." *GeoFlorida 2010*, Geo-Institute, ASCE, West Palm Beach, Florida February 24, 2010.
- 134) Keynote lecture, "Reinforced Walls: Advances in their Design." *First Mexican Conference on Geosynthetics*, Mexican Society of Geotechnical Engineering (SMIG), Colegio de Ingenieros, Mexico City, Mexico, March 11, 2010.
- 135) Invited lecture, "US Regulations on Waste Containment." *First Mexican Conference on Geosynthetics*, Mexican Society of Geotechnical Engineering (SMIG), Colegio de Ingenieros, Mexico City, Mexico, March 12, 2010.
- 136) Invited lecture, "Implications on the Adoption of a Design Criterion for Unsaturated Soil Covers." *Water Balance Covers Workshop*, US Environmental Protection Agency and Texas Commission on Environmental Quality, Austin, Texas, April 1, 2010.
- 137) Presentation of "Field Monitoring of Reinforced Pavements over Expansive Clays." *9th International Conference on Geosynthetics*, 9ICG, Guarujá, Brazil, May 26, 2010.
- 138) Presentation of "Geosynthetics in Pavements: North American Contributions." Theme Speaker Lecture, *9th International Conference on Geosynthetics*, 9ICG, Guarujá, Brazil, May 26, 2010.
- 139) Presentation of "Effective Shear Strength of Fiber-Reinforced Clays." *9th International Conference on Geosynthetics*, 9ICG, Guarujá, Brazil, May 27, 2010.
- 140) Invited lecture, "Studying at the University of Texas at Austin." Ecole Central de Lille, International Exchange Program, Lille, France, June 17, 2010.
- 141) Invited lecture, "New Trends in the Use of Geosynthetics for Environmental Protection." University Lille 1, Lille, France, June 23, 2010.
- 142) Invited lecture, "Geosynthetics in Capillary Barriers." Ecole Central de Lille, Laboratory of Engineering Mechanics, Lille, France, June 24, 2010.
- 143) Presentation of "Testing of an Expansive Clay in a Centrifuge Permeameter." *7th International Conference on Physical Modelling in Geotechnics* (ICPMG 2010), Zurich, Switzerland, June 29, 2010.
- 144) Invited lecture, "Geosynthetics in the Design of Basal Reinforcement for Flexible Pavements." Technion, Israel Institute of Technology, Haifa, Israel, July 04, 2010.
- 145) Invited lecture, "Use of Geosynthetics in Landfill Design." CEDEX, Center of Studies and Testing for Public Works, Madrid, Spain, September 14, 2010.
- 146) Invited lecture, "Demonstration, Design and Construction of Unsaturated Soil Covers at the Rocky Mountain Arsenal." Texas Commission for Environmental Quality (TCEQ), Austin, Texas, October 05, 2010.
- 147) Invited lecture, "Lessons Learned from Monitoring of Water Balance Covers at the Rocky Mountain Arsenal." Texas Commission for Environmental Quality (TCEQ), Austin, Texas, October 26, 2010.
- 148) Keynote Lecture, "Advances on the Use of Geosynthetics in Reinforced Soil Structures." *Second Peruvian Conference on Geosynthetics, GEOSPERU 2010*, Lima, Peru, November 04, 2010.
- 149) Presentation of "Perspectives on Global Geoenvironmental Engineering Challenges and Opportunities: Geosynthetics in Waste Containment Facilities." *US-India Workshop on Global Geoenvironmental Engineering Challenges*, New Delhi, India, November 07, 2010.
- 150) Presentation of "Analysis, Modeling, Design, and Evaluation Monitoring of Alternative Covers at the Rocky Mountain Arsenal." *Sixth International Conference on Environmental Geotechnics*, 6ICEG, New Delhi, India, November 08, 2010.

- 151) Keynote lecture, "Advances in Landfill Design Practice in the US." *International Seminar on Geosynthetic Applications*, Central Board of Irrigation and Power, New Delhi, India, November 12, 2010.
- 152) Keynote lecture, "Geosynthetic Capillary Barriers." *First International GSI-Asia Geosynthetics Conference*, Taichung, Taiwan, November 18, 2010.
- 153) Invited lecture, "Geosynthetic Capillary Barriers." Geotechnical Engineering Department, University of Sao Paulo, Sao Carlos, Brazil, December 10, 2010.
- 154) Invited lecture, "Lessons Learned from Monitoring of Water Balance Covers at the Rocky Mountain Arsenal." Geotechnical Engineering Program, National University of Cordoba, Cordoba, Argentina, December 13, 2010.
- 155) Invited lecture, "Moisture Monitoring of Water Balance Cover Test Plots." Texas Commission for Environmental Quality (TCEQ), Austin, Texas, January 05, 2011.
- 156) Invited lecture, "Characterization of Soil-Geosynthetic Interfaces for Reinforced Pavement Applications." American Society of Testing and Materials (ASTM) Annual Meeting, Baltimore, Maryland, February 03, 2011.
- 157) Presentation of "Design Criteria and Construction of a Capillary Barrier Cover System: The Rocky Mountain Arsenal Experience," *GeoFrontiers 2011 Conference*, Geo-Institute of ASCE, Dallas, Texas, March 14, 2011.
- 158) Invited lecture, "Design of Drainage Systems." *Structure and Drainage Design with Geosynthetic Drains*, Texas Research International (TRI), Austin, Texas, May 02, 2011.
- 159) Invited lecture, "Geosynthetics in Hydraulic Projects." *Hydraulic Resources Agency, Argentine Government*, Ministry of Public Works, Buenos Aires, Argentina, June 15, 2011.
- 160) Keynote lecture, "Advances in the Use of Geosynthetic for Waste Containment." *Fifteenth African Regional Conference on Soil Mechanics and Geotechnical Engineering*, Maputo, Mozambique, July 17, 2011.
- 161) Invited lecture, "Innovation in Geotechnical Engineering: Geosynthetics." *Fifteenth African Regional Conference on Soil Mechanics and Geotechnical Engineering*, Maputo, Mozambique, July 19, 2011.
- 162) Invited lecture, "Advances in Geoenvironmental Engineering." Texas Commission for Environmental Quality (TCEQ), Texas-Nuevo Leon Cooperation Program, Austin, Texas, July 28, 2011.
- 163) Keynote lecture, "Advances in the Use of Geosynthetic in Pavement Reinforcement." *Geosynthetics India '11*, Indian Institute of Technology Madras, Chennai, India, September 23, 2011.
- 164) Presentation of "Testing of Expansive Clays in a Centrifuge Permeameter." *XIV Pan-American Conference on Soil Mechanics and Geotechnical Engineering*, Toronto, Canada, October 03, 2011.
- 165) Invited lecture, "Teaching Geotechnical Engineering in the US: Some Opportunities and Constraints." *XIV Pan-American Conference on Soil Mechanics and Geotechnical Engineering*, Toronto, Canada, October 05, 2011.
- 166) Invited lecture, "Reinforcement of Pavements over Expansive Clays." *2nd Workshop of Latin Professors in Geotechnical Engineering*, Atlanta, GA, October 07, 2011.
- 167) Invited lecture, "Research Initiatives in Geotechnical Engineering." *2nd Workshop of Latin Professors in Geotechnical Engineering*, Atlanta, GA, October 08, 2011.
- 168) Keynote lecture, "US Perspectives on Geosynthetics in Road Pavement Applications." *Belgian Road Research Centre*, Brussels, Belgium, December 07, 2011.
- 169) Invited lecture, "Ingenuity in Geotechnical Engineering: Geosynthetics." *Jubilee 150 Years of HUESKER*, Dusseldorf, Germany, January 20, 2012.
- 170) Invited lecture, "The Unsaturated Soil Covers at the Rocky Mountain Arsenal: Important Lessons Learned from their Monitored Performance." Geotechnical Engineering Program, *University of Michigan*, Ann Arbor, Michigan, February 22, 2012.
- 171) Invited lecture, "Advances in the Use of Geosynthetics in Reinforced Pavement Design." *Capital Area Pavement Engineers Council (CAPEC)*, Austin, Texas, February 23, 2012.

- 172) Keynote Lecture, "Ingenuity in Geotechnical Design using Geosynthetics." *State-of-the-Art Keynote Lecture*, Geo-Congress 2012, Oakland, CA March 28, 2012.
- 173) Keynote Lecture, "Geosynthetics in Reinforced Soil Applications." *US-Russia Geotechnical Engineering Workshop*, Oakland, California, March 30, 2012.
- 174) Invited lecture, "Unsaturated Soils and Geosynthetics: The covers at the Rocky Mountain Arsenal." *California Institute of Technology, Caltech*, Pasadena, California, April 12, 2012.
- 175) Keynote State-of-the-Art Lecture, "Geosynthetics and Unsaturated Soils." *The 15th Annual George F. Sowers Symposium*, Atlanta, Georgia, May 08, 2012.
- 176) Invited Lecture, "Geosynthetic-reinforced Pavements for Mitigation of Cracks Induced by Expansive Clays." *First Ankara Geosynthetics Seminar*, Ankara, Turkey, June 05, 2012.
- 177) Keynote Lecture, "US Perspectives in the Design of Geosynthetic-reinforced Soil Structures." *First Ankara Geosynthetics Conference*, Ankara, Turkey, June 06, 2012.
- 178) Invited lecture, "Geosynthetic-Reinforced Pavements." *Ministry of Infrastructure*, Cordoba, Argentina, June 26, 2012.
- 179) Invited Presentation, "Introduction to Cover Systems." *Yamana Gold*, Mineração Fazenda Brasileiro, Bahia, Brazil, July 05, 2012.
- 180) Invited lecture, "Unsaturated Soils and Geosynthetics - Or the Mysterious Response of the Covers at the Rocky Mountain Arsenal." Geotechnical Engineering Program, *Federal University of Rio de Janeiro*, Rio de Janeiro, Brazil, July 09, 2012.
- 181) Invited lecture, "Ingenuity in Geotechnical Design using Geosynthetics." Geotechnical Engineering Program, *Universidad de los Andes*, Bogota, Colombia, July 25, 2012.
- 182) Invited lecture, "Advances in the Use of Geosynthetics for Reinforced Pavements." International Tensar Conference, Cancun, Mexico, August 21, 2012.
- 183) Invited lecture, "Geosynthetic-reinforced Cover Systems." International Tensar Conference, Cancun, Mexico, August 21, 2012.
- 184) Keynote Lecture, "Geosynthetic-reinforced Pavement Systems." *Fifth European Geosynthetics Conference*, EuroGeo5, Valencia, Spain, September 19, 2012.
- 185) Keynote Lecture, "Ingenuity in Geotechnical Engineering: Geosynthetics." *Second Mexican Geosynthetics Conference*, Mexico City, Mexico, October 11, 2012.
- 186) Invited lecture, "Ingenuity in Geotechnical and Geoenvironmental Design using Geosynthetics." Civil Engineering Graduate Seminar Series, The University of Texas at San Antonio, San Antonio, Texas, October 26, 2012.
- 187) Invited lecture, "Geosynthetic-reinforced Pavement System." Mirafi Geosynthetics Seminar, San Antonio, Texas, October 30, 2012.
- 188) Invited lecture, "Ingenuity in Geotechnical Design using Geosynthetics." San Diego Geo-Institute Chapter, ASCE, San Diego, California, November 28, 2012.
- 189) Invited Lecture, "Advances on the Use of Geosynthetics in Reinforced Soil Structures." Kleinfelder Technical Presentation, Webinar, San Diego, CA, January 29, 2013.
- 190) Invited lecture, "Characterization of Swelling Clays using Centrifuge Technology." *Capital Area Pavement Engineers Council (CAPEC)*, City of Austin Learning & Research Center, Austin, Texas, March 28, 2013.
- 191) Presentation of "The International Geosynthetics Society (IGS): No Borders for the Good Use of Geosynthetics." *25-Year Retrospectives on the Geosynthetic Industry and Glimpses Into the Future*, Twenty-fifth Geosynthetic Research Institute Conference (GRI-25), Long Beach, California, April 02, 2013.
- 192) Presentation of "Confined-Accelerated Creep Tests on Geosynthetics." *Geosynthetics 2013 Conference*, Long Beach, California, April 03, 2013.

- 193) Invited lecture, “*Geosynthetics in Geotechnical Engineering.*” Educate the Educators Program, Carlos Paz, Argentina, May 26, 2013.
- 194) Keynote lecture, “*Ingenuity in Geotechnical Design using Geosynthetics.*” Engineers Centre, *Ghanaian Institution of Engineers*, Accra, Ghana, July 09, 2013.
- 195) Invited lecture, “*Ingenuity in Geotechnical Design using Geosynthetics.*” Catholic University of Chile, Department of Structural and Geotechnical Engineering, Santiago, Chile, August 06, 2013.
- 196) Keynote Lecture, “*Advances in the Design of Geosynthetic-reinforced Soil Structures.*” Chilean Chamber of Commerce, Santiago, Chile, August 07, 2013.
- 197) Presentation of “*Characterization of Soil-geosynthetic Interaction under Small Displacement Conditions.*” *18th International Conference on Soil Mechanics and Geotechnical Engineering*, Paris, France, September 05, 2013.
- 198) Keynote Lecture, “*Ingenuity in Geotechnical Design using Geosynthetics.*” *18th International Conference on Soil Mechanics and Geotechnical Engineering*, Geosynthetics Workshop, Paris, France, September 05, 2013.
- 199) Presentation of “*International Geosynthetics Society Activities in the Geo-Profession.*” *18th International Conference on Soil Mechanics and Geotechnical Engineering*, FedIGS Workshop, Paris, France, September 05, 2013.
- 200) Keynote lecture, “*Advances in the Use of Geosynthetics for Paved Roads.*” *The British Geotechnical Association*, Institution of Civil Engineers, London, U.K., October 09 2013.
- 201) Keynote Lecture, “*Recent Examples of Innovation in Projects using Geosynthetics.*” *1st Iberic Conference on Geosynthetics*, Geosintec Iberia 1, Seville, Spain, 06 November 2013.
- 202) Keynote lecture, “*Geosynthetics in Roadway Applications.*” *2nd African Regional Conference on Geosynthetics*, GeoAfrica 2013, Accra, Ghana, 18 November 2013.
- 203) Presentation of “*Advantages and Applications of Enhanced Lateral Drainage in Pavement Systems.*” *2nd African Regional Conference on Geosynthetics*, GeoAfrica 2013, Accra, Ghana, November 20, 2013.
- 204) Invited lecture, “*Education on Geosynthetics.*” *Geotechnical Professors Workshop, GeoLatina III*, Atlanta, Georgia, February 27, 2014.
- 205) Invited lecture, “*Generation of Alternative Energy involving Exposed Geomembrane Covers.*” Geo-San Antonio 2014, Geotechnical Topics in the Energy Sector, San Antonio, Texas, March 14, 2014.
- 206) Keynote Lecture, “*Advances in the Use of Geosynthetic-Reinforced Soil Structures.*” *Fourteenth National Conference on Geotechnics*, Portuguese Geotechnical Society, Covilha, Portugal, April 07, 2014.
- 207) Keynote Lecture, “*Ingenuity in Geotechnical Design using Geosynthetics.*” *First National Conference on Geosynthetics, Honduras 2014*, Tegucigalpa, Honduras, 16 June 2014.
- 208) Invited Lecture, “*Advances in the Use of Geosynthetic Reinforcements for Paved Roads.*” *First National Conference on Geosynthetics, Honduras 2014*, Tegucigalpa, Honduras, 18 June 2014.
- 209) Invited lecture, “*Geosynthetics in Geotechnical Engineering.*” Educating Educators Program, Cieszyn, Poland, June 23, 2014.
- 210) Invited lecture, “*Use of Geosynthetics for Enhanced Lateral Drainage in Pavement Systems.*” *Geosynthetics in Roadway Design Session*, TRB Geosynthetics Committee, Laramie, WY, 07 July, 2014.
- 211) Invited lecture, “*Properties Governing the Performance of Geosynthetic-reinforced Pavements.*” *International Tensar Conference*, Bogota, Colombia, August 19, 2014.
- 212) Invited lecture, “*Geosynthetic-reinforced Bridge Abutments.*” *International Tensar Conference*, Bogota, Colombia, August 20, 2014.
- 213) Invited presentation, “*Geosynthetic-reinforced Pavements.*” *Texas Department of Transportation*, San Antonio District, San Antonio, Texas, September 12, 2014.

214) Presentation of “Pullout Characterization of Geogrids Embedded in Dredged Material and Steel Slag Fines (DM-SSF) Blends.” *10th International Conference on Geosynthetics*, 10ICG, Berlin, Germany, 25 September 2014.

215) Invited lecture, “Geosynthetics for Enhanced Lateral Drainage in Pavement Systems.” TenCate Pavements Seminar, Austin, TX, 23 October 2014.

216) Invited lecture, “Geosynthetic Reinforcements for Paved Roads.” TenCate Pavements Seminar, Austin, TX, 23 October 2014.

217) Invited lecture, “Properties Governing the Performance of Geosynthetic-reinforced Pavements.” TenCate Pavements Seminar, Austin, TX, 23 October 2014.

218) Invited lecture, “Stiffness of the Soil-geosynthetic Composite.” George Mason University, NCHRP Research Team, Fairfax, VA, October 27, 2014.

219) Invited lecture, “Properties Governing the Performance of Geosynthetic-reinforced Pavements.” *ICT Kent Seminar*, University of Illinois at Urbana-Champaign, Urbana, IL, November 06, 2014.

220) Invited presentation, “Recent Educate the Educator Events.” *Geosynthetics 2015 Conference*, Portland, Oregon, 17 February 2015.

221) Presentation of “We Will See a Significant Growth in Geosynthetic Use if...” *Geosynthetics 2015 Conference*, Portland, Oregon, 18 February 2015.

222) Keynote lecture, “Geosynthetics in Capillary Barriers: The covers at the Rocky Mountain Arsenal.” *Third National Congress on Geosynthetics*, Lima, Peru, March 04, 2015.

223) Keynote lecture, “New Frontiers for Geosynthetics in Pavement Engineering.” *Geosynthetics in Pavement Engineering: Working towards 2025*, Fourth National Geosynthetics Symposium, Loughborough University, U.K., April 22, 2015.

224) Distinguished Lecture, “Ingenuity in Geotechnical Design using Geosynthetics.” *33rd Annual Distinguished Lecture Series*, University of California at Berkeley, Berkeley, CA, May 01, 2015.

225) Distinguished Lecture, “Ingenuity in Geotechnical Design using Geosynthetics.” 50th Year Anniversary Celebration, Civil Engineering Department, Pontifical Catholic University of Rio de Janeiro (PUC-Rio), Rio de Janeiro, Brazil, May 27, 2015.

226) Keynote lecture, “US Experience on the Performance of Geosynthetic-Reinforced Integrated Bridge Abutments.” *Second GSI-Asia Geosynthetics Conference*, Seoul, Korea, June 24, 2015.

227) Keynote lecture, “Geosynthetic Reinforcements for Paved Roads,” *VII Brazilian Congress on Geosynthetics*, Brasilia, Brazil, July 19, 2015.

228) Invited Lecture, “US Experience on the Performance of Geosynthetic-Reinforced Bridge Abutments.” Civil Engineering Department, University of Brasilia, Brasilia, Brazil, July 21, 2015.

229) Invited Lecture, “Evaluation of Soil-geogrid Interaction using Transparent Soil.” Workshop on Research on Soil-Geosynthetic Interaction, Edinburgh, UK, September 13, 2015.

230) Keynote lecture, “Advances in the Use of Geosynthetics in Pavement Structures,” *II Spanish Congress on Geosynthetics*, Madrid, Spain, October 08, 2015.

231) Keynote lecture, “Stabilization of Pavements using Geosynthetics,” Mercer Lecture, *15th Asian Regional Conference on Soil Mechanics and Geotechnical Engineering*, Fukuoka, Japan, November 09, 2015.

232) Keynote lecture, “Stabilization of Pavements using Geosynthetics,” Mercer Lecture, *15th PanAmerican Conference on Soil Mechanics and Geotechnical Engineering*, Buenos Aires, Argentina, November 17, 2015.

233) Invited lecture, “Geosynthetics for Pavement Systems,” *Construction Division*, Texas Department of Transportation (TxDOT), Austin, Texas, 03 December 2015.

234) Invited lecture, “Swelling Clays in Pavement Applications: Their Characterization and Stabilization using Geosynthetics for Pavement Systems,” Southern Planes Transportation Center, Norman, Oklahoma, 09 December 2015.

235) Invited lecture, "Evaluation of Soil-geogrid Interaction using Transparent Soil." NCHRP Research Group, Denver, CO, March 06, 2016.

236) Invited lecture, "Stabilization of Pavements using Geosynthetics" Geo-San Antonio 2016, Geotechnical Advances in the Transportation Sector, San Antonio, Texas, March 18, 2016.

237) Invited lecture, "Geosynthetics in Pavement Systems (in Spanish)," 3rd Pan-American Conference on Geosynthetics, *GeoAmericas 2016*, Miami, FL, April 11, 2016.

238) Invited lecture, "Geosynthetics in Pavement Systems," 3rd Pan-American Conference on Geosynthetics, *GeoAmericas 2016*, Miami, FL, April 12, 2016.

239) Presentation of "Geosynthetics in the Americas: What is Holding Back their Growth?" 3rd Pan-American Conference on Geosynthetics, *GeoAmericas 2016*, Miami Beach, Florida, 12 April 2016.

240) Keynote lecture, "Stabilization of Pavements using Geosynthetics," Mercer Lecture, 3rd Pan-American Conference on Geosynthetics, *GeoAmericas 2016*, Miami Beach, Florida, 13 April 2016.

241) Keynote Lecture, "Ingenuity in Geotechnical Design using Geosynthetics." 2016 Annual Kansas City Geotechnical Conference, ASCE, Kansas City, MO, 21 April 2016.

242) Invited Lecture, "Ingenuity in Geotechnical Design using Geosynthetics." Geotechnical Engineering Program, Tsinghua University, Beijing, China, 08 July 2016.

243) Invited lecture, "Evaluation of Soil-Geogrid Interaction Using Transparent Soil." International Tensar Conference, Lima, Peru, July 22, 2016.

244) Keynote lecture, "Geosynthetics with Enhanced Lateral Drainage Capabilities in Roadway Systems," Workshop 1: Geosynthetics in Transportation Geotechnics, International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE), Guimaraes, Portugal, 04 September 2016.

245) Invited lecture, "Contact Pressure Distribution on Weak Subgrades due to Repeated Traffic on Geocell Reinforced Base Layers," Workshop 1: Geosynthetics in Transportation Geotechnics, International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE), Guimaraes, Portugal, 04 September 2016.

246) Honor Keynote lecture, "Stabilization of Pavements using Geosynthetics," Mercer Lecture, 3rd International Conference on Transportation Geotechnics, International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE), Guimaraes, Portugal, 07 September 2016.

247) Invited lecture, "Geosynthetics for Enhanced Lateral Drainage in Roadways," Specialty Session 7A: Geosynthetics in Road Construction, 6th European Conference on Geosynthetics, *EuroGeo6*, International Society of Geosynthetics (IGS), Ljubljana, Slovenia, 28 September 2016.

248) Invited lecture, "Geosynthetic-Reinforced Bridge Abutments: Seismic Considerations," Specialty Session 6: Geosynthetics under Earthquake Shaking, 6th European Conference on Geosynthetics, *EuroGeo6*, International Society of Geosynthetics (IGS), Ljubljana, Slovenia, 28 September 2016.

249) Invited lecture, "Prediction of Clay Swelling and PVR Using Centrifuge Testing," Texas Department of Transportation, College Station, Texas, October 11, 2016.

250) Keynote lecture, "Use of Geosynthetics in Roadways," 2nd Mexican Conference on Geosynthetics, Mexico City, Mexico, 28 October 2016.

251) Keynote lecture, "Stabilization of Pavements using Geosynthetics," Mercer Lecture, 6th Asian Regional Conference on Geosynthetics, International Geosynthetics Society (IGS), New Delhi, India, 09 November 2016.

252) Keynote lecture, "Experimental determination of geosynthetic parameters for stabilisation projects," 7th International Geogrid Expert Panel Meeting, Krakow, Poland, December 16, 2016.

253) Keynote lecture, "Stabilization of Pavements using Geosynthetics," Mercer Lecture, *Geotechnical Frontiers 2017*, Geo-Institute of ASCE, Orlando, FL, 12 March 2017.

254) Keynote lecture, "Stabilization of Pavements using Geosynthetics," Mercer Lecture, *Fourth National Congress on Geosynthetics*, Peruvian Geosynthetics Society, Lima, Peru, 29 March 2017.

255) Invited lecture, "Pavements over Highly Expansive Clays: Quantification of the Problem and Identification of Design Alternatives," CINTRA Technical Office, Austin, Texas, 18 April 2017.

256) Keynote lecture, "Geosynthetics in Roadway Infrastructure," International Conference on *Transportation Geotechnics and Geoecology*, TGG 2017, Saint Petersburg, Russia, 17 May 2017.

257) Presentation of "Evaluation of load transfer in geogrids for base stabilization using transparent soil," International Conference on *Transportation Geotechnics and Geoecology*, TGG 2017, Saint Petersburg, Russia, 17 May 2017.

258) Keynote lecture, "Exposed Geomembrane Covers," *Geosynthetic Technology in Water, Waste & Tunneling*, Australasians Chapter of the International Geosynthetics Society, Auckland, New Zealand, 26 June 2017.

259) Keynote lecture, "Exposed Geomembrane Covers," *Geosynthetic Technology in Water, Waste & Tunneling*, Australasians Chapter of the International Geosynthetics Society, Melbourne, Australia, 28 June 2017.

260) Presentation of "Experimental Approach to Characterize Soil-reinforcement Composite Interaction," *19th International Conference on Soil Mechanics and Geotechnical Engineering*, Seoul, Korea, 21 September 2017.

261) Presentation of "The Choice of Geosynthetics for Hydraulic Applications in Roadway Systems." *Third African Conference on Geosynthetics, GeoAfrica 2017*, Marrakesh, Morocco, 10 October 2017.

262) Presentation of "A Tale of Two Bridges: Comparison between the Seismic Performance of Flexible and Rigid Abut." *Third African Conference on Geosynthetics, GeoAfrica 2017*, Marrakesh, Morocco, 10 October 2017.

263) Invited lecture, "Ingenuity in Geotechnical Design using Geosynthetics." Geotechnical Engineering program, Texas A&M University, College Station, Texas, 24 October 2017.

264) Invited lecture, "Ingenuity in Geotechnical Design using Geosynthetics." Geotechnical Engineering program, University of Texas at El Paso, El Paso, Texas, 08 February 2018.

265) Keynote lecture, "Load-carrying MSE Bridge Abutments," Iowa ASCE Geotechnical Engineering Conference, Ames, Iowa, 22 March 2018.

266) Invited lecture, "Geogrid for Base Reinforcement," *2018 Construction, Pavements & Materials Conference*, Texas Department of Transportation, Austin, Texas, 24 May 2018.

267) Invited lecture, "Distribution with Height of Reinforcement Connection Loads," *IGS TC-R GeoReinforcement Workshop*, Reinforcement Technical Committee, International Geosynthetics Society, Munich, Germany, 04 June 2018.

268) Invited lecture, "Reinforcement of Marginal Soils using Geosynthetics with In-plane Drainage Capabilities," *IGS TC-R GeoReinforcement Workshop*, Reinforcement Technical Committee, International Geosynthetics Society, Munich, Germany, 04 June 2018.

269) Keynote lecture, "Growing Worldwide Emphasis on Load-carrying MSE Bridge Abutments," *IGS TC-R GeoReinforcement Workshop*, Reinforcement Technical Committee, International Geosynthetics Society, Munich, Germany, 05 June 2018.

270) Invited lecture, "Selection of design alternatives for water and seismic actions on reinforced veneer stability," *IGS TC-R GeoReinforcement Workshop*, Reinforcement Technical Committee, International Geosynthetics Society, Munich, Germany, 05 June 2018.

271) Invited lecture, "Identification and Quantification of a Property Suitable for Stabilization of Base Layers using Geosynthetics," Federal Highway Administration Geotechnical Team Meeting, Austin, Texas, 20 June 2018.

272) Keynote lecture, "Geosynthetics in Roadway Applications." *National Workshop on Geosynthetics*, Mexico City, Mexico, 09 July 2018.

273) Invited lecture, "Identification and Quantification of a Property Suitable for Stabilization of Base Layers using Geosynthetics," *International Tensar Conference*, Roatan, Honduras, 26 July, 2018.

274) Keynote lecture, "Ingenuity in Geotechnical Design using Geosynthetics." *XII National Costa Rican Congress on Geotechnics*, San Jose, Costa Rica, 05 September 2018.

275) Keynote lecture, "Geosynthetics in Roadway Applications." *XII National Costa Rican Congress on Geotechnics*, San Jose, Costa Rica, 06 September 2018.

276) Keynote lecture, "Geosynthetics in roadways: Impact in sustainable development," *11th International Conference on Geosynthetics*, 11ICG, Seoul, South Korea, 17 September 2018.

277) Invited lecture, "Identification and Quantification of a Property Suitable for Stabilization of Base Layers using Geosynthetics," *11th International Conference on Geosynthetics*, 11ICG, Seoul, South Korea, 18 September 2018.

278) Presentation of "Effect of Soil-reinforcement Interface Shear Band," *11th International Conference on Geosynthetics*, 11ICG, Seoul, South Korea, 19 September 2018.

279) Presentation of "A Study on the Effect of Scale and Testing Method on Soil-geosynthetic Interaction," *11th International Conference on Geosynthetics*, 11ICG, Seoul, South Korea, 19 September 2018.

280) Invited lecture, "Sustainability Benefits of Geosynthetics in Roadway Applications," *GeoForum: Linking Practitioners and Geosynthetics*, Charlotte, North Carolina, 18 October 2018.

281) Invited lecture, "Road Base Stabilization using Geosynthetics," *Peruvian Ministry of Transportation and Communications*, Lima, Peru, 15 November 2018.

282) Invited lecture, "Road Base Stabilization using Geosynthetics," *Peruvian Geosynthetics Society*, Lima, Peru, 16 November 2018.

283) Keynote lecture, "Road Base Stabilization using Geosynthetics: Design Properties," *XXIX National Conference on Geotechnical Engineering*, Mexican Society of Geotechnical Engineering, Leon, Mexico, 22 November 2018.

284) Keynote lecture, "Growing Worldwide Emphasis on Load-carrying GMSE Bridge Abutments," *XXIX National Conference on Geotechnical Engineering*, Mexican Society of Geotechnical Engineering, Leon, Mexico, 23 November 2018.

285) Invited lecture, "Load-carrying GMSE Bridge Abutments," *Geotechnical Engineering Program*, Hunan University, Changsha, China, 23 December 2018.

286) Invited lecture, "Geosynthetics in Roadway Applications," *Geotechnical Engineering Program*, Hunan University of Science and Technology, Changsha, China, 24 December 2018.

287) Invited presentation "Educate the Educator Program by the International Geosynthetics Society," *Geosynthetics 2019 Conference*, Industrial Fabrics Association International, Houston, 12 February 2019.

288) Keynote lecture, "Base Stabilization using Geosynthetics to Confront TxDOT's Roadway Challenges," *Geosynthetics 2019 Conference*, Industrial Fabrics Association International, Houston, TX, 12 February 2019.

289) Keynote lecture, "Geosynthetics in Roads built on Expansive Soils," *2019 International Speakers Program*, Australasian Chapter of the International Geosynthetics Society, ACIGS, Melbourne, Australia, 19 February 2019.

290) Invited lecture, "Load-carrying Geosynthetic-reinforced Bridge Abutments," *2019 International Speakers Program*, Australasian Chapter of the International Geosynthetics Society, ACIGS, Melbourne, Australia, 19 February 2019.

291) Invited lecture, "Base Stabilization using Geosynthetics," *Educate the Educator Program*, Australasian Chapter of the International Geosynthetics Society, ACIGS, Gold Coast, Australia, 21 February 2019.

292) Keynote lecture, "Geosynthetics in Mine Closures," *2019 International Speakers Program*, Australasian Chapter of the International Geosynthetics Society, ACIGS, Brisbane, Australia, 22 February 2019.

293) Presentation of "Case History of a Geosynthetic-stabilized Base Roadway Founded over Expansive Clay Subgrade," *ASCE Geo-Congress 2019*, Philadelphia, Pennsylvania, 26 March 2019.

294) Invited lecture, "Base Stabilization using Geosynthetics," *Center for Transportation Research (CTR) Symposium*, Austin, Texas, 10 April 2019.

295) Invited lecture, "Geosynthetics in Roadways over Expansive Clays," *Central Texas Infrastructure Design and Construction Symposium*, ACEA, Austin, Texas, 24 April 2019.

296) Invited lecture, "Evaluation of Soil Geogrid Interaction using Transparent Soil," *James K. Mitchell Symposium, 37th Annual Geo-Engineering Distinguished Lecture Series*, University of California at Berkeley, Berkeley, California, 26 April 2019.

297) Invited lecture, "Geosynthetics for Roadways over Expansive and Collapsible Soils," *Geotechnical Engineering Program*, National University of Cordoba, Cordoba, Argentina, 24 May 2019.

298) Invited lecture, "Elements in the Design of Roadways using Geosynthetics," *Geosynthetics in Roadway Infrastructure*, Mexican Society of Geotechnical Engineering, Mexican Society of Geosynthetics, Mexico City, Mexico, 03 July 2019.

299) Keynote lecture, "Base Stabilization of Pavements using Geosynthetics," Mercer Lecture, *Geosynthetics in Roadway Infrastructure*, Mexican Society of Geotechnical Engineering, Mexican Society of Geosynthetics, Mexico City, Mexico, 03 July 2019.

300) Invited lecture, "Load-carrying Geosynthetic-reinforced Bridge Abutments," *Federal University of Sao Carlos, Civil Engineering Department*, Sao Carlos, Brazil, 13 August 2019.

301) Keynote lecture, "The Hidden Benefits of Close-spaced Geosynthetic Reinforcement," *VIII Brazilian Conference on Geosynthetics*, Geossintéticos 2019, Sao Carlos, Brazil, 14 August 2019.

302) Keynote lecture, "Stabilization of Roadways using Geosynthetics," The Mercer Lecture, *XVII European Conference on Soil Mechanics and Geotechnical Engineering*, ECSMGE-2019, International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE), Reykjavik, Iceland, 04 September 2019.

303) Invited presentation, "NCHRP 24-41 Defining the Boundary Conditions for Composite Behavior of Geosynthetic Reinforced Soil (GRS) Structures," *T15 Committee of AASHTO*, Denver, CO, 08 October 2019.

304) Invited presentation "Load-carrying Geosynthetic-reinforced Bridge Abutments," *Linking Practitioners and Geosynthetics*, GeoForum 2019, Philadelphia, PA, 17 October 2019.

305) Invited presentation "Stabilization Terminology." Technical Committee on Stabilization Workshop, International Geosynthetics Society, Prague, Czech Republic, 17 November 2019.

306) Invited presentation "Relevant Geosynthetic Properties for Base Stabilization." Technical Committee on Stabilization Workshop, International Geosynthetics Society, Prague, Czech Republic, 18 November 2019.

307) Keynote lecture, "Centrifuge Technology for Characterization of Expansive Clays," *Analytical and Physical Modeling in Geotechnics*, XVI PanAmerican Conference on Soil Mechanics and Geotechnical Engineering, Cancun, Mexico, 18 November 2019.

308) Invited lecture, "Geosynthetics in Roadway Applications," *2019 Arizona Pavements/Materials Conference*, Arizona Department of Transportation, Phoenix, Arizona, 21 November 2019.

309) Invited lecture, "Characterization and Mitigation of Distress in Roadways Founded on Expansive Clays," *Civil Engineering Department Lecture Series*, Arizona State University, Temple, Arizona, 22 November 2019.

310) Invited lecture, "Characterization of Expansive Clays for Roadway Design," *MLA Geotechnical*, Austin, Texas, 18 December 2019.

311) Invited lecture, "Geosynthetics in Roadway Applications," *57th Annual Paving and Transportation Conference, 2020 Vision toward the future of transportation*, Albuquerque, New Mexico, 09 January 2020.

312) Invited presentation, "Proposed AASHTO Modifications for Closely-spaced Reinforcement," *Geo-Congress 2020*, Geo-Institute of ASCE, Minneapolis, Minnesota, 28 February 2020.

313) Keynote lecture, "Ingenuity in Geotechnical Design using Geosynthetics," *XXXV National Engineering Congress*, Cartagena, Colombia, 13 March 2020.

314) Invited Lecture, "Principles and Advances in the Design of Geosynthetic-reinforced Soil Structures." (Delivered online), *Mexican Chamber of Civil Engineers*, Mexico City, Mexico, 30 April 2020.

315) Invited lecture, "Geosynthetics in Roadway Applications," (Delivered Online) Huesker Technical Program, Charlotte, North Carolina, 19 June 2020.

316) Invited lecture, "Educate the Educators: An International Initiative on Geosynthetics Education." (Delivered Online) *International Conference on Geotechnical Engineering Education*, GEE2020, Athens, Greece, 25 June 2020.

317) Invited lecture, "Ingenuity in Geotechnical Design using Geosynthetics," (Delivered Online) Brazilian Society of Geosynthetics (IGS-Brazil), Sao Paulo, Brazil, 01 July 2020.

318) Invited lecture, "Base Stabilization of Pavements using Geosynthetics," (Delivered Online) Chilean Society of Geosynthetics (IGS-Chile), Santiago, Chile, 02 July 2020.

319) Invited Lecture, "Principles and Advances in the Design of Geosynthetic-reinforced Soil Structures." (Delivered online), *Mexican Chamber of Civil Engineers*, Mexico City, Mexico, 17 July 2020.

320) Invited Lecture, "Roadways Founded on Expansive Clays: Characterization of the Problem and Mitigation using Geosynthetics." (Delivered online), *Australian Society of Geosynthetics (ACIGS)*, Brisbane, Australian, 18 August 2020.

321) Keynote lecture, "Closure of Mining Facilities using Geosynthetics," (Delivered online), *Workshop on Geotechnics and Environmental Protection for Mining and Waste Containment*, Sao Paulo, Brazil, 10 September 2020.

322) Keynote lecture, "Roadways over Expansive Clays: Characterization and Mitigation of the Problem using Geosynthetics." (Delivered online), *Workshop on Geosynthetic Applications*, Oklahoma, 22 September 2020.

323) Keynote lecture, "Geosynthetics in Roadway Applications," (Delivered online), GeoAmericas 2020, 4th Pan-American Conference on Geosynthetics, Rio de Janeiro, Brazil, 27 October 2020.

324) Invited Lecture, "Ingenuity in the Built Environment Using Geosynthetics: Sustainable Redevelopment of Closed Landfills." (Delivered online) *University of Brasilia, Webinar CAPES-PrInt*, Brasilia, Brazil, 25 November 2020.

325) Invited Lecture, "Interlayer systems to Control Reflective Cracking: TxDOT Test Sections." (Delivered Online), Transportation Research Board Meeting, Washington D.C., 11 January 2021.

326) Invited Lecture, "Geosynthetics in Roadway Applications," (Delivered Online), Peruvian Geosynthetics Society, Lima, Perú, 19 January 2021.

327) Invited Presentation, "Research on Geosynthetic-reinforced Bridge Abutments," (Delivered Online), Geosynthetics 2021, Kansas City, Kansas, 25 February 2021.

328) Invited Presentation, "NCHRP 24-41 Recommended AASHTO Modifications," (Delivered Online), Geosynthetics 2021, Kansas City, Kansas, 25 February 2021.

329) Invited Lecture, "Geosynthetics in Roadway Applications," (Delivered Online), Department of Civil and Infrastructure Engineering, George Mason University, Fairfax, VA, 18 March 2021.

330) Invited lecture, "Ingenuity in Geotechnical Design using Geosynthetics," (Delivered Online) Pan-American Committee of the International Geosynthetics Society (IGS-Pan Am) and Fabricated Geomembranes Institute (FGI), University of Illinois, Urbana Champaign, IL, 18 May 2021.

331) Keynote Lecture, "Properties Governing the Design of Geosynthetic-stabilized Roadway Bases." (Delivered Online), *4th International Conference of Transportation Geotechnics*, ISSMGE, Chicago, IL, 25 May 2021.

332) Invited Lecture, "Base Stabilization of Roadways using Geosynthetics." (Delivered Online), Southwest Geotechnical Engineering Conference, Federal Highway Administration, 24 June 2021.

333) Invited Podcast, Questions on lecture "Ingenuity in Geotechnical Design using Geosynthetics," (Delivered Online) Pan-American Committee of the International Geosynthetics Society (IGS-Pan Am) and Fabricated Geomembranes Institute (FGI), University of Illinois, Urbana Champaign, IL, 29 June 2021.

334) Invited lecture, "Geosynthetics in Roadway Applications." (Delivered Online), North American Geosynthetics Society (IGS-NA), 01 July 2021.

335) Invited lecture, "Ingenuity in the Design of Geotechnical Projects using Geosynthetics," (Delivered Online) Peruvian Geotechnical Conference, *GeoIngenieria 2021*, Lima, Peru, 13 July 2021.

336) Invited lecture, "Summary of Research on Asphalt Reinforcement." (Delivered Online), Research Development Program, Gescher, Germany, 11 August 2021.

337) Invited lecture, "Use of Geosynthetics in Roadways Founded on Expansive Soils." (Delivered Online), Indonesian Geosynthetics Society (INA-IGS), Jakarta, Indonesia, 19 August 2021.

338) Invited lecture, "Cros-shear testing of Asphalt Reinforcement." (Delivered Online), Huesker Inc., Technical Team Program, Charlotte, NC, 10 September 2021.

339) Invited lecture, "Stabilization of Unbound Aggregates using Geosynthetics." (Delivered Online), Ministry of Transportation and Communications, Lima, Peru, 17 September 2021.

340) Keynote Lecture, "Load-carrying Geosynthetic-reinforced Bridge Abutments," (Delivered Online), GeoWeek 2021, International Conference on Geotechnical Engineering, Lima, Peru, 27 October 2021.

341) Invited lecture, "Public Work Experiences Involving Stabilization of Unbound Aggregates using Geosynthetics." (Delivered Online), Architecture and Engineering Council of Costa Rica, San Jose, Costa Rica, 11 November 2021.

342) Invited Presentation "Development of Integral/Semi-Integral Abutments for Texas Bridges." Structures & Hydraulics Research Overview Workshop, Texas Department of Transportation, Austin, Texas, 30 November 2021.

343) Invited Presentation, "Test Method to Quantify the Stiffness of the Soil Geosynthetic Composite." (Delivered Online), Technical Committee D35 Meeting, ASTM, 27 January 2022.

344) Opening Keynote Lecture, "The Resourcefulness of Geotechnical Design when Adopting Geosynthetics." GeoANZ#1, *First Australasian Conference on Geosynthetics*, Australasian Society of Geosynthetics, Brisbane, Australia, 08 June 2022.

345) Invited Presentation, "Semi-Integral Abutments for Texas Bridges." Infrastructure Advancement Institute Summit 2022, Infrastructure Advancement Institute, Houston, Texas, 03 August 2022.

346) Invited Presentation, "Load-carrying Geosynthetic Reinforced Bridge Abutments." (Delivered Online), Australian Geomechanics Society, Queensland Chapter, Brisbane, Australia, 11 August 2022.

347) Invited Lecture, "Geosynthetics for Roadway Founded on Expansive Clays." (Delivered Online), North American Geosynthetics Society (IGS-NA), 15 November 2022.

348) Keynote Lecture, "Advances on the Use of Geosynthetics for Roadways Founded on Expansive Clays." (Delivered Online), *Eighth National Conference on Geosynthetic-reinforced Soil*, Chinese Geosynthetics Society (CCIGS), 27 November 2022.

349) Invited Presentation "Semi-Integral Abutments for Texas Bridges." Structures & Hydraulics Research Overview Workshop, Texas Department of Transportation, Austin, Texas, 06 December 2022.

350) Invited Presentation, "Potential New Standard: Confined Soil-geosynthetic Composite Stiffness." Technical Committee D35 Meeting, ASTM, San Antonio, Texas, 25 January 2023.

351) Invited Presentation, "Quantification of Stabilization Using the Confined Soil-geosynthetic Composite Stiffness." Workshop on *Geosynthetic Stabilization of Granular Layers in Paved Roads*, Geosynthetics 2023 Conference, Kansas City, MO, 06 February 2023.

352) Keynote Lecture, "Advances in the Use of Geosynthetics for Stabilization of Unbound Aggregate Layers." GeoAfrica 2023, *Fourth African Regional Conference on Geosynthetics*, International Geosynthetics Society (IGS), Cairo, Egypt, 21 February 2023.

353) Invited presentation, "Load-carrying Geosynthetic-reinforced Bridge Abutments." GeoAfrica 2023, *Fourth African Regional Conference on Geosynthetics*, International Geosynthetics Society (IGS), Cairo, Egypt, 21 February 2023.

354) Invited presentation, "Quantification of the Confined Stiffness of the Soil-geosynthetic Composite for Stabilization of Unbound Aggregates." GeoAfrica 2023, *Fourth African Regional Conference on Geosynthetics*, International Geosynthetics Society (IGS), Cairo, Egypt, 22 February 2023.

355) Invited lecture, "Geomembrane Damage During Oil and Gas Operations: Part II." (Delivered Online) Fabricated Geomembranes Institute (FGI), University of Illinois, Urbana Champaign, IL, 25 April 2023.

356) Invited Podcast, Questions on the lecture "Geomembrane Damage During Oil and Gas Operations: Part II." (Delivered Online) Fabricated Geomembranes Institute (FGI), University of Illinois, Urbana Champaign, IL, 16 May 2023.

357) Invited presentation, "Potential New Standard: Confined Soil-geosynthetic Composite Stiffness." Technical Committee D35 Meeting, ASTM, Denver, Colorado, 08 June 2023.

358) Keynote lecture, "Advances in Geosynthetics for Roadway Applications." *5th Moroccan Conference on Geosynthetics*, Marrakesh, Morocco, 07 June 2023.

359) Invited lecture, "Geosynthetics in Water Resources and Dam Engineering Systems." *Freese and Nichols*, Austin, Texas, 21 June 2023.

360) Invited presentation, "Load-carrying Geosynthetic-reinforced Bridge Abutments: Why? Will they Last?" (Delivered Online), *International Interactive Technical Talk*, International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE), 08 July 2023.

361) Keynote lecture, "Roadways over Expansive Clays: Characterization of the Problem and Mitigation using Geosynthetics," *10th Brazilian Conference on Geosynthetics*, Geossintéticos 2023, Salvador, Bahia, Brazil, 19 July 2023.

362) Keynote lecture, "The Quest for Properties Governing the Geosynthetic Stabilization of Roadway Bases," *76th Canadian Geotechnical Conference, GeoSaskatoon 2023*, Saskatoon, Canada, 02 October 2023.

363) Keynote lecture, "Geosynthetic Applications in Railways and Roadways," *9th Hellenic Conference on Geotechnical Engineering*, Athens, Greece, 05 October 2023.

364) Invited lecture, "Geosynthetics in Roadways: Challenges and Opportunities," (Delivered Online, in Portuguese) Brazilian Society of Soil Mechanics (ABMS) and PUC-Rio, Rio de Janeiro, Brazil, 24 October 2023.

365) Keynote lecture, "The Power Behind Learning Geosynthetics," (Delivered Online), *IGS 40th Anniversary Lecture Series*, International Geosynthetics Society (IGS), 06 November 2023.

366) Invited lecture, "The Third Engineering Requirement: Sustainability," Sustainable Infrastructure Summit, Austin, Texas, 07 November 2023.

367) Invited presentation, "Considerations on the "Educate the Educator" Program," (Delivered Online) GeoForum GeoReforços, São Paulo, Brazil, 29 November 2023.

368) Invited lecture, "Advances in Geosynthetics for Roadway Applications," (Delivered Online) Iranian Geosynthetics Society (IGS-Iran), 18 December 2023.

369) Invited presentation, "Potential New Standard: Confined Soil-geosynthetic Composite Stiffness." Technical Committee D35 Meeting, ASTM, Houston, Texas, 29 January 2024.

370) Ralph B. Peck Keynote Lecture, "Roadways on Expansive Clays: Characterizing the Problem and Solving it using Geosynthetics," *Geo-Congress 2024*, Geo-Institute of ASCE, Vancouver, Canada, 28 February 2024.

371) Invited presentation, "Expansive Clays: Characterizing the Problem and Solving it using Geosynthetics," *ASCE Austin Chapter*, Austin, Texas, 20 March 2024.

372) Invited presentation, "Ingenuity in Civil Infrastructure Designed Using Geosynthetics," (Delivered online), *Second International Conference on Geosynthetics and Environmental Engineering*, Busan, South Korea, 20 April 2024.

373) Special presentation, "Geomembrane Damage During Oil and Gas Operations: Another Perspective on a Dispute," *Fifth Pan-American Conference on Geosynthetics, GeoAmericas 2024*, 01 May 2024.

374) Distinguished lecture, "Advances in Geosynthetics for Roadway Applications." *42nd Annual Distinguished Lecture Series*, University of California at Berkeley, Berkeley, CA, 03 May 2024.

375) Invited presentation, "Sustainability Benefits of Geosynthetics in Roadway Applications," *International Symposium on Geosynthetics and Sustainability*, Technical University of Delft (TU Delft), Delft, The Netherlands, 14 May 2024.

376) Invited presentation, "Advances in Geosynthetics for Roadway Applications." *Geotechnical Engineering Program*, National University of Cordoba, Cordoba, Argentina, 07 June 2024.

377) Invited presentation, "Load-carrying MSE Bridge Abutments." (Delivered Online), *Technical Committee on Reinforced Fill Structures (TC218)*, International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE), 18 June 2024.

378) Invited presentation, "Load-carrying Geosynthetic-reinforced Bridge Abutments." *Technical Workshop on Reinforcement and Drainage of Soil Structures*, Polytechnic University of Catalunya, Barcelona, Spain, 26 June 2024.

379) Invited lecture, "The Quest for Properties Governing the Geosynthetic Stabilization of Roadway Bases – Part (a): Background." *Geosynthetics Workshop 2024*, South African Society on Geosynthetics, Irene, Pretoria, South Africa, 03 July 2024.

380) Invited lecture, "The Quest for Properties Governing the Geosynthetic Stabilization of Roadway Bases – Part (b): Recent Advances." *Geosynthetics Workshop 2024*, South African Society on Geosynthetics, Irene, Pretoria, South Africa, 03 July 2024.

381) Keynote lecture, "Exposed Geomembrane Covers: Design and Sustainable Energy Considerations." *Geosynthetics Workshop 2024*, South African Society on Geosynthetics, Irene, Pretoria, South Africa, 03 July 2024.

382) Keynote lecture, "Ingenuity in Geotechnical Design using Geosynthetics." *Geosynthetics Conference for Young Professionals*, South African Society on Geosynthetics, Irene, Pretoria, South Africa, 04 July 2024.

383) Keynote lecture, "The Multiple Facets of a Career in Geosynthetics." *Geosynthetics Conference for Young Professionals*, South African Society on Geosynthetics, Irene, Pretoria, South Africa, 05 July 2024.

384) Invited presentation, "Geosynthetics for Roadway Applications," (Delivered Online) *Forum on the Design of Roadways in Paraguay*, Asunción, Paraguay, 17 July 2024.

385) Invited presentation, "Geosynthetics for Roadway Design in the Amazon Region," (Delivered Online) *Workshop on the Uses of Geosynthetics in the Amazon Region*, GEOSSAM 2024, Manaus, Brazil, 27 August 2024.

386) Keynote lecture, "Expansive Clays: Characterizing the Problem and Solving it using Geosynthetics," *COBRAMSEG 2024, XXI Brazilian Congress on Soil Mechanics and Geotechnical Engineering*, Balneario Camboriú, Santa Catarina, Brazil, 26 September 2024.

387) Keynote Lecture, "Advances in Roadway and Railway Applications Using Geosynthetics," *International Workshop on Advances in Pavement Stabilization Using Geosynthetics*, Hyderabad, India, 03 October 2024.

388) Keynote Lecture, "Sustainable Practices for Roadway Infrastructure Using Geosynthetics," *International Conference on GeoPractices towards Sustainable Infrastructure*, Hyderabad, India, 04 October 2024.

389) Invited presentation, "Ingenuity in Geotechnical Design using Geosynthetics." *Democritus University of Thrace (DUTH)*, Department of Civil Engineering 50th Anniversary Celebration, Xanthi, Greece, 17 October 2024.

390) Invited presentation, "Ingenuity in Geotechnical Design using Geosynthetics." *Geotechnical Engineering Conference (GeoWeek 2024)*, Catholic University of Peru, Lima, Peru, 25 October 2024.

391) Invited presentation, "Ingenuity in Geotechnical Design using Geosynthetics." *University of California at San Diego*, Department of Civil Engineering, San Diego, CA, 30 October 2024.

392) Keynote Lecture, "Roadways on Expansive Clays: Characterizing the Problem and Solving it with Geosynthetics," *56th Annual Geotechnical Engineering Conference*, Lawrence, Kansas, 07 November 2024.

393) Invited presentation, "Research on Geosynthetic-reinforced Asphalt Overlays." *TRB Pavements Section Subcommittee*, Interlayer Systems to Control Reflective Cracking - AKP00(1), Washington, DC, 07 January 2025.

394) Invited presentation, "Addressing the Reactive Nature of the Geotechnical Discipline Using Geosynthetics." *Memorial Event for Professor James K. Mitchell*, University of California at Berkeley, Berkeley, CA, 24 January 2025.

395) Invited presentation, "Test to Quantify the Confined Soil-Geosynthetic Composite Stiffness." Technical Committee D35 Meeting, ASTM, Houston, Texas, 29 January 2025.

396) Invited presentation, "Recent Advances in Geosynthetics for Sustainable Asphalt Reinforcement." (Delivered Online), *Engineers Australia*, Sydney, Australia, 14 March 2025.

397) Invited presentation, "Roadways on Expansive Clays: Characterizing the Problem and Solving it with Geosynthetics," *Texas Council of Engineering Laboratories (TCEL)*, San Antonio, Texas, 24 April 2025.

398) Invited presentation, "Ingenuity in Geotechnical Design using Geosynthetics" (Delivered online), *Civil Engineering Workshop*, University of Ibagué, Colombia, 25 April 2025.

399) Invited presentation, "Geosynthetics for Stabilization and Reinforcement, and their Contribution to Sustainability," Argentine Construction Council, Cordoba, Argentina, 16 May 2025.

400) Keynote Lecture, "Geosynthetics in the classroom: Educating future engineers and their instructors." *Sixth International Conference on Geotechnical Engineering Education*, GEE2025, Nancy, France, 02 July 2025.

401) Invited presentation, "Roadways on Expansive Clays: Characterizing the Problem and Solving it using Geosynthetics." *2024 Ralph B. Peck Lecture in Spanish* (Delivered Online), Geo-Institute of ASCE, Reston, VA, 25 September 2025.

402) Keynote Lecture, "Geosynthetics in Roadway Projects." *Second National Congress on Roadway Systems*, (Delivered Online), Chiapas Autonomous University, Chiapas, Mexico, 09 October 2025.

403) Invited presentation, "Design of Roadways on Expansive Clays." *Austin Geo-Institute Chapter*, ASCE Texas Section, Austin Branch, Austin, Texas, 10 October 2025.

404) Keynote Lecture, "Advances in the Use of Geosynthetics for Roadway Applications." *Fourth Spanish Conference on Geosynthetics*, Geosintec 4, Madrid, Spain, 22 October 2025.

405) Invited Lecture, "Geosynthetics in Sustainable Roadways." *Fourth Spanish Conference on Geosynthetics*, Geosintec 4, Madrid, Spain, 22 October 2025.

406) Keynote Lecture, "Ingenuity in Geotechnical Design using Geosynthetics." *XXVII Argentine Congress of Soil Mechanics and Geotechnical Engineering*, XXVII CAMSIG, Resistencia, Argentina, 06 November 2025.

407) Invited Lecture, "The Power Behind – Designing Roadways with Geosynthetics." (Delivered Online), *TerraFix*, Toronto, ON, Canada, 25 November 2025.

BROADCAST LECTURES AND INTERVIEWS

Zornberg, J.G. (2014). *Geosynthetics in Pavements*. Illinois Center for Transportation, Kent Seminar Series, University of Illinois at Urbana-Champaign, Illinois, 06 November. [\[Link\]](#)

Izzo, R., and Zornberg, J.G. (2016). *Best Practice: Geosynthetics in Paved Roads*. Texas Department of Transportation, Best Practices Video Summary Report, Austin, Texas, 19 May. [\[Link\]](#)

Arellano, M., and Zornberg, J.G. (2016). *Best Practice: Expansive Clay Soils*. Texas Department of Transportation, Best Practices Video Summary Report, Austin, Texas, 19 May. [\[Link\]](#)

Zornberg, J.G. (2016). *Prediction of Clay Swelling and PVR Using Centrifuge Testing*. 2016 Transportation Short Course, Texas A&M, College Station, Texas, 11 October. [\[Link\]](#)

Zornberg, J.G. (2017). *Podcast: Zornberg on Differing MSE Design Frameworks*. Interview by Geosynthetica.net during Geotechnical Frontiers Conference, Orlando, Florida, 15 March. [\[Link\]](#)

Zornberg, J.G. (2018). *Use of Geosynthetics in Mine Closures*. Interview by Peruvian Activos Mineros. Lima, Peru, 17 November. [\[Link\]](#)

Zornberg, J.G. (2019). *Geosynthetics in Roads Built on Expansive Soils*. 2019 International Speakers Program, Australasian Chapter of the International Geosynthetics Society, ACIGS, Melbourne, Australia, 19 February. [\[Link\]](#)

Zornberg, J.G. (2019). *Load-carrying Geosynthetic-reinforced Bridge Abutments*. 2019 International Speakers Program, Australasian Chapter of the International Geosynthetics Society, ACIGS, Melbourne, Australia, 19 February. [\[Link\]](#)

Zornberg, J.G. (2019). *Geosynthetics in Mine Closures*. 2019 International Speakers Program, Australasian Chapter of the International Geosynthetics Society, ACIGS, Brisbane, Australia, 22 February. [\[Link\]](#)

Zornberg, J.G. (2020). *Ingenuity in Geotechnical Design using Geosynthetics*. (In Spanish). XXXV National Engineering Congress, Cartagena, Colombia, 13 March 2020. [\[Link\]](#)

Zornberg, J.G. (2020). *Educate the Educators: An International Initiative on Geosynthetics Education*. International Conference on Geotechnical Engineering Education, GEE2020, Athens, Greece, 25 June 2020. [\[Link\]](#)

Zornberg, J.G. (2020). *Ingenuity in Geotechnical Design using Geosynthetics*, (In Portuguese) Brazilian Society of Geosynthetics (IGS-Brazil), Sao Paulo, Brazil, 01 July 2020. [\[Link\]](#)

Zornberg, J.G. (2020). Siamak's Geosynthetics Podcast. Interview with Siamak Paulson, Brisbane, Australia, 11 August 2020. [\[Link\]](#)

Zornberg, J.G. (2020). Roadways Founded on Expansive Clays: Characterization of the Problem and Mitigation using Geosynthetics, *Australian Society of Geosynthetics (ACIGS)*, Brisbane, Australia, 18 August 2020. [\[Link\]](#)

Keynote lecture, “Closure of Mining Facilities using Geosynthetics,” (Delivered online), *Workshop on Geotechnics and Environmental Protection for Mining and Waste Containment*, Sao Paulo, Brazil, 10 September 2020. [\[Link\]](#)

Invited Podcast, Siamak's Geosynthetics Podcast with Jorge Zornberg, Brisbane, Australia, 12 September 2020. [\[Link\]](#)

Zornberg, J.G. (2021). Invited Presentation, “Research on Geosynthetic-reinforced Bridge Abutments,” (Delivered Online), Geosynthetics 2021, Kansas City, Kansas, 25 February 2021. [\[Link\]](#)

Zornberg, J.G. (2021). Invited Presentation, “NCHRP 24-41 Recommended AASHTO Modifications,” (Delivered Online), Geosynthetics 2021, Kansas City, Kansas, 25 February 2021. [\[Link\]](#)

Zornberg, J.G. (2021). Invited Presentation, “Geosynthetics in Roadway Applications,” North American Chapter of the International Geosynthetics Society, IGS – North America, 01 July 2021. [\[Link\]](#)

Zornberg, J.G. (2021). “Geosynthetics in Roadway Applications.” Part of Short course on *Geosynthetics*, ISSMGE Virtual University, International Society of Soil Mechanics and Geotechnical Engineering, 11 July 2021. [\[Link\]](#)

Zornberg, J.G. (2021). Invited lecture, “Use of Geosynthetics in Roadway Founded on Expansive Soils.” (Delivered Online), Indonesian Geosynthetics Society (INA-IGS), Jakarta, Indonesia, 19 August 2021. [\[Link\]](#)

KXAN Investigation Interview (2022). “Fixing Foundations – What’s under YOUR Home?,” Interview, Austin, Texas, 04 February 2022. [\[Link\]](#)

Zornberg, J.G. (2022). IGS – International Geosynthetics Society Online Lecture, Educate the Educators (Student Version), “An Introduction to Geosynthetics,” 21 January 2022. [\[Link\]](#)

Zornberg, J.G. (2022). IGS – International Geosynthetics Society Online Lecture, Zornberg, J.G., Educate the Educators (Student Version), “Types of Geosynthetics,” 21 January 2022. [\[Link\]](#)

Zornberg, J.G. (2022). IGS – International Geosynthetics Society Online Lecture, Zornberg, J.G., Educate the Educators (Student Version), “Functions of Geosynthetics,” 21 January 2022. [\[Link\]](#)

Zornberg, J.G. (2022). IGS – International Geosynthetics Society Online Lecture, Zornberg, J.G., Educate the Educators (Student Version), “Summary on Geosynthetics,” 21 January 2022. [\[Link\]](#)

Zornberg, J.G. (2022). IGS – International Geosynthetics Society Online Lecture, Zornberg, J.G., Educate the Educators (Educator Version), “An Introduction to Geosynthetics,” 21 January 2022. [\[Link\]](#)

Zornberg, J.G. (2023). Invited lecture, “Geomembrane Damage During Oil and Gas Operations: Part II.” (Delivered Online) Fabricated Geomembranes Institute (FGI), University of Illinois, Urbana Champaign, IL, 25 April 2023. [\[Link\]](#)

Zornberg, J.G. (2023). Invited Presentation, “Load-carrying Geosynthetic-reinforced Bridge Abutments: Why? Will they Last?” *International Interactive Technical Talk*, International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE), 08 July 2023. [\[Link\]](#)

Zornberg, J.G. (2023). Keynote lecture, “Geosynthetic Applications in Railways and Roadways,” *9th Hellenic Conference on Geotechnical Engineering*, Athens, Greece, 05 October 2023. [\[Link\]](#)

Zornberg, J.G. (2023). Invited lecture, “Geosynthetics in Roadways: Challenges and Opportunities,” (Delivered Online, in Portuguese) Brazilian Society of Soil Mechanics (ABMS) and PUC-Rio, Rio de Janeiro, Brazil, 24 October 2023. [\[Link\]](#)

Zornberg, J.G. (2023) Keynote lecture, “The Power Behind Learning Geosynthetics,” (Delivered Online), *IGS 40th Anniversary Lecture Series*, International Geosynthetics Society (IGS), 06 November 2023. [\[Link\]](#)

Zornberg, J.G., and Smit, A. (2024). *Field Monitoring and Design Recommendations for Geosynthetic-stabilized Roadways*. Texas Department of Transportation, Video Summary Report, Project 5-4829-05, Austin, Texas, 10 January 2024. [\[Link\]](#)

Zornberg, J.G., and Arowojolu, N. (2024). *Development of Integral/Semi-integral Abutments for TxDOT Bridges*. Texas Department of Transportation, Video Summary Report, Project 0-6936, Austin, Texas, 29 January 2024. [\[Link\]](#)

Zornberg, J.G. (2024) Ralph B. Peck Keynote Lecture, *Roadways on Expansive Clays: Characterizing the Problem and Solving it using Geosynthetics*. Geo-Congress 2024, Geo-Institute of ASCE, Vancouver, Canada 28 February 2024. [\[Link\]](#)

Zornberg, J.G. (2024). *Expansive Clays: Characterizing the Problem and Solving it using Geosynthetics*. ASCE Austin Chapter, Austin, Texas, 20 March 2024. [\[Link\]](#)

Zornberg, J.G. (2024). *Sustainability Benefits of Geosynthetics in Roadway Applications*, International Symposium on Geosynthetics and Sustainability, Technical University of Delft (TU Delft), Delft, The Netherlands, 14 May 2024. [\[Link\]](#)

Zornberg, J.G. (with Freitag, N., and Dalwadi, M.) (2024)/ “Load-carrying MSE Bridge Abutments.” *Technical Committee on Reinforced Fill Structures (TC218)*, International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE), 18 June 2024. [\[Link\]](#)

Zornberg, J.G. (2024) Keynote Lecture, “Load-carrying Geosynthetic-reinforced Bridge Abutments,” *Geo-Structures 2024*, Geo-Institute of ASCE, Pittsburgh, Pennsylvania, 17 November. [\[Link\]](#)

Zornberg, J.G. (2025). *Addressing the Reactive Nature of the Geotechnical Discipline Using Geosynthetics. Memorial Event for Professor James K. Mitchell*, University of California at Berkeley, Berkeley, CA, 24 January 2025. [\[Link\]](#)

Carrasco, G., and Zornberg, J.G. (2025). *Evaluation of Geogrids for Asphalt Pavement Construction*. Texas Department of Transportation, Best Practices Video Summary Report, Austin, Texas, 04 March. [\[Link\]](#)

Zornberg, J.G. (2025). *Geosynthetics in the Classroom: Educating Future Engineers and their Instructors*, Keynote lecture, *Sixth International Conference on Geotechnical Engineering Education*, GEE2025, Nancy, France, 02 July. [\[Link\]](#)

Zornberg, J.G. (2025). *Roadways on Expansive Clays: Characterizing the Problem and Solving it using Geosynthetics (in Spanish)*. *2024 Ralph B. Peck Lecture in Spanish*, Geo-Institute of ASCE, Reston, VA, 25 September. [\[Link\]](#)

GRANTS AND CONTRACTS

Colorado Advanced Materials Institute (CAMI), "Use of Tire Shreds in Highway Embankments," Jorge G. Zornberg (PI), \$45,000 (Additional matching funds in equivalent amount provided by Front Range Recycle, Inc., Sedalia, Colorado), July 1999 – June 2000.

Colorado Advanced Software Institute (CASI), "Reinforced Soil Design: Integration of Digital Image Analysis, Numerical Modeling, and Limit Equilibrium," Jorge G. Zornberg (PI), \$66,500 (20% of these funds provided in cash by Bowman Construction, Inc., Denver, Colorado), July 1999 – June 2001.

Research Council of the State of Sao Paulo, "Study of Soil-Geogrid Interaction using Pullout Tests," sponsored student GRA costs and international travel expenses (U. of Sao Paulo student, international exchange at UT Austin), March 2002-January 2003.

Council on Research and Creative Work, Junior Faculty Development Award (JFDA), "Evapotranspirative Cover Systems in Waste Containment Applications," Jorge G. Zornberg (PI), \$5,000, August 1999 – July 2000.

Engineering Excellence Fund (EEF), College of Engineering and Applied Science, CU Boulder, "Environmental Geotechnics: Towards an Enhanced Class Design Experience," Jorge G. Zornberg (PI), \$7,370, August 1999 – July 2000.

Undergraduate Research Opportunity Program (UROP), complement to JFDA award, CU Boulder, "Evapotranspirative Cover Systems in Waste Containment Applications," \$1,500, August 1999 – December 1999.

Synthetic Industries, Geosynthetic Products Division, Gift through CU Foundation in support of research in the area of geosynthetics at the University of Colorado at Boulder. Jorge G. Zornberg (recipient), \$120,000 donation for years 1999-2001.

College of Engineering, University of Colorado, "Digital Image Technology in CEAE Classrooms," Jorge G. Zornberg (with Hearn, Muehleisen, Rajaram, Silverstein, and Songer), \$14,600, 1999.

Colorado Advance Materials Institute (CAMI), "Optimization and Performance of Tire Shred-Reinforced Embankments," Jorge G. Zornberg (PI), \$45,000 (Additional matching funds in equivalent amount provided by Front Range Recycle, Inc., Sedalia, Colorado), July 2000 – June 2001.

National Science Foundation (NSF), "Strain Distribution within Geosynthetic Reinforced Soil Slopes," Jorge G. Zornberg (PI), Grant CMS 0401494, \$198,040, August 2000 – August 2003.

National Science Foundation (NSF), "Environmentally Benign Reuse of Waste Tires," Jorge G. Zornberg (PI), Cross-cutting initiative on *Environmentally Benign Manufacturing/Processing and Materials*, Grant CMS 0086927, \$100,000, September 2000 – August 2004.

Brazilian research council, "Scale factors for unsaturated flow in a geotechnical centrifuge," sponsored student GRA costs and international travel expenses (U. of Colorado student), January 2001-December 2004.

National Science Foundation (NSF), "Research Experiences for Undergraduates (REU)," Jorge G. Zornberg (PI), Grant CMS 0086927, \$12,000, January 2001 – December 2001.

National Science Foundation (NSF), "PECASE: Alternatives in Waste Cover Systems and in Engineering Education," Jorge G. Zornberg (PI), Grant CMS 0401488, \$365,000, July 2001 – August 2003.

Engineering Excellence Fund (EEF), College of Engineering and Applied Science, CU Boulder, "Geosynthetics Laboratory: Integrating Material Characterization into Design Experiences," Jorge G. Zornberg (PI), \$16,400, August 2001 – July 2002.

Research Council of the State of Sao Paulo, "Performance of Buried Pipes Overlying a Void," sponsored student GRA costs and international travel expenses (U. of Sao Paulo student, international exchange at U. of Colorado), March 2001-August 2005.

Brazilian Department of Education, "Creep and Stress Relaxation in Reinforced Soil Walls," sponsored student GRA costs and international travel expenses (U. of Sao Paulo student, international exchange at U. of Colorado), March 2001-December 2004.

Private donation, donor: Kal Zeff. Gift through CU Foundation in support of geotechnical research equipment, University of Colorado at Boulder (with Amadei, Ko, Pak, Pfeffer, Sture, and Znidarcic), \$50,000 donation for the period 2002-2003.

Geosynthetics workshop, Organized by the Geosynthetic Institute, "Geosynthetics in Hydraulic Systems," \$3,450, January 2003 – May 2003.

Undergraduate Research Opportunity Program (UROP), CU Boulder, "A Feasibility Study of the Integration of Waste Tire-Shreds in Civil Engineering Applications," \$1,200, August 2002 – December 2002.

Federal Highway Administration (FHWA), "Mechanically Stabilized Earth (MSE) Shoring Systems," (with Ko, Znidarcic, Golder Associates, and Yeh & Associates), \$260,272, October 2002 – September 2004.

National Science Foundation (NSF), "Strain Distribution within Geosynthetic Reinforced Soil Slopes," Jorge G. Zornberg (PI), Grant CMS 0401494, UT acct: 26-1123-60, \$146,548 (including \$21,000 equipment share), September 2003 – July 2006.

Research Council of the State of Sao Paulo, "Field Performance of a Full-scale Retaining Wall Reinforced with Nonwoven Geotextiles," sponsored student GRA costs and international travel expenses (U. of Sao Paulo student, international exchange at UT Austin), March 2002 – December 2005.

National Science Foundation (NSF), "PECASE: Alternatives in Waste Cover Systems and in Engineering Education," Jorge G. Zornberg (PI), Grant CMS 0401488, UT acct: 26-1124-09, \$368,922 (including \$29,000 equipment share), September 2003 – June 2008.

Center for Polymers in Hydraulic Structures (CPHyS) of the Geosynthetic Institute (GSI), "Geosynthetics for Hydraulic Structures," Graduate student fellowship (GSI Fellow) to the University of Texas at Austin, UT acct: 30-2113-00, \$21,000 fellowship for the period September 2003 – August 2004.

Texas Department of Transportation (TxDOT), "Validate the Effectiveness of Tire Bale Use in Slope Repairs and Embankment Construction," Jorge G. Zornberg (PI), Project 5-9023, UT accts: 26-4212-78 & 26-4213-71, \$59,587, March 2004 – August 2005.

Recycled Materials Resource Center (RMRC) of the Federal Highway Administration (FHWA), "Full-scale Monitoring of Mechanical and Exothermal Response of Tire-Soil Embankments," Jorge G. Zornberg (PI), UT accts: 26-3955-36 & 20-3030-42, 4213-36, \$137,672, September 2003 – December 2005.

US Department of Education, Fund for the Improvement of Postsecondary Education (FIPSE), US-Brazil Higher Education Consortia Program, "Consortium for Cooperation in Civil & Environmental Engineering Technologies," Jorge G. Zornberg (PI, US Partner with U. Missouri), UT acct: 26-3956-13, \$204,000, September 2003 – August 2008.

Texas Department of Transportation (TxDOT), "Quantify the Benefits of Using Geosynthetics for Unbound Base Courses," Jorge G. Zornberg (PI), Jorge A. Prozzi and Kenneth Stokoe (Co-PIs), Project 0-4829, UT acct: 26-4213-36, \$266,628, September 2004 – August 2006.

Texas Department of Transportation (TxDOT), "Determination of Field Suction Values in High PI Clays for Various Surface Conditions and Drain Installations," Jorge G. Zornberg (PI), Stephen Wright (Co-PI), Project 0-5202, UT acct: 26-4213-64, \$205,674, September 2004 – August 2006.

Center for Polymers in Hydraulic Structures (CPHyS) of the Geosynthetic Institute (GSI), "Geosynthetics for Hydraulic Structures," Graduate student fellowship (GSI Fellow) to the University of Texas at Austin, UT acct: 30-2113-00, \$10,000 fellowship for the period September 2005 – August 2006.

Brazilian Department of Education/University of Texas Consortium (CAPES-UT Program), "Geosynthetics and other Recent Advances in Municipal and Hazardous Waste Containment Facilities," Benedito S. Bueno (Co-PI), Two graduate student fellowship and two post-doctoral

fellowships to the University of Texas at Austin, fellowships for the period September 2005 – May 2011.

Texas Department of Transportation (TxDOT), “Design of MSE Retaining Walls Placed in Front of a Stable Face,” Stephen Wright (PI), Jorge G. Zornberg (Co-PI), Project 0-5506, \$229,733, September 2005 – August 2007.

Texas Department of Transportation (TxDOT), “Monitoring of Tire Bale Slope Repairs on IH30,” Jorge G. Zornberg (PI), Project IAC 6XXIA002, \$58,126, September 2005 – August 2006.

National Science Foundation (NSF), “Research Experiences for Undergraduates (REU) – PECASE Project,” Jorge G. Zornberg (PI), Grant CMS 0401488, \$6,250, January 2006 – August 2007.

Texas Department of Transportation (TxDOT), “Quantify the Benefits of Using Geosynthetics for Unbound Base Courses - Modification,” Jorge G. Zornberg (PI), Jorge A. Prozzi and Kenneth Stokoe (Co-PIs), Project 0-4829, UT acct: 26-4213-36, \$107,383, September 2006 – August 2007.

Center for Polymers in Hydraulic Structures (CPHyS) of the Geosynthetic Institute (GSI), “Geosynthetics for Hydraulic Structures,” Graduate student fellowship (GSI Fellow) to the University of Texas at Austin, UT acct: 30-2113-00, \$10,000 fellowship for the period September 2006 – August 2007.

Texas Department of Transportation (TxDOT), “Correlation of Shallow, Low Blow Count Texas Cone Penetrometer Values and Shear Strength for Texas Soils,” Stephen Wright (PI), Jorge G. Zornberg (Co-PI), Project 0-5824, \$310,110, September 2006 – August 2008.

Texas Research International (TRI), “GCL Testing Program,” Jorge G. Zornberg (PI), \$3,135, September 2006 – August 2007.

Texas Department of Transportation (TxDOT), “Beneficial Use of Scrap Tire Bales in Highway Projects,” Jorge G. Zornberg (PI), Project 0-5517, \$238,571, September 2006 – August 2008.

Texas Department of Transportation (TxDOT), “Soil Testing using Centrifuge Technology,” Jorge G. Zornberg (PI), Project 0-6048, \$139,736, September 2007 – August 2008.

Texas Department of Transportation (TxDOT), “Development of Application Guide and Specifications for Geotextiles in Soil and Base,” Jorge G. Zornberg (PI), Jorge A. Prozzi (co-PI), Project 0-5812, \$175,005, September 2007 – August 2008.

Center for Polymers in Hydraulic Structures (CPHyS) of the Geosynthetic Institute (GSI), “Geosynthetics for Hydraulic Structures,” Graduate student fellowship (GSI Fellow) to the University of Texas at Austin, UT acct: 30-2113-00, \$5,000 fellowship for the period September 2007 – August 2008.

Texas Department of Transportation (TxDOT), “Pilot Implementation to Quantify the Benefits of Using Geosynthetics for Unbound Base Courses,” Jorge G. Zornberg (PI), Project 5-4829, \$239,822, September 2007 – December 2009.

Texas Department of Transportation (TxDOT), “Development of Application Guide and Specifications for Geotextiles in Soil and Base - Modification,” Jorge G. Zornberg (PI), Project 0-5812, \$93,284, September 2008 – August 2009.

NordMack Corporation, “Fund for Geosynthetics Research of Tire Bales,” Fellowship for the period September 2008 – August 2010, UT acct: 26-6250-22, \$11,920.

Center for Polymers in Hydraulic Structures (CPHyS) of the Geosynthetic Institute (GSI), “Geosynthetics for Hydraulic Structures,” Graduate student fellowship (GSI Fellow) to the University of Texas at Austin, UT acct: 30-2113-00, \$5,000 fellowship for the period September 2008 – August 2009.

Texas Department of Transportation (TxDOT), “Validate Item 132 Draft Specification Using Tire Bales,” Jorge G. Zornberg (PI), Project 5-5517, \$171,932, September 2008 – December 2010.

Brazilian Department of Education/University of Texas Consortium (CAPES), “Confined Creep of Geosynthetics,” Graduate student fellowship for the period January 2010 – December 2010.

Texas Research International (TRI), "Analysis of Slope Stability for Landfill Cover Systems," Robert Gilbert (PI), Jorge G. Zornberg (co-PI), Fellowship for graduate student, \$50,000, September 2009 – August 2011.

Texas Department of Transportation (TxDOT), "Long-Term Performance of Drilled Shaft Retaining Walls," Robert Gilbert (PI), Jorge G. Zornberg (co-PI), Chadi El Mohtar (co-PI), Project 0-6603, \$578,444, September 2009 – August 2012.

Geosynthetics Research Institute, Graduate student fellowship to the University of Texas at Austin, UT acct: 30-2113-00, \$1,920 fellowship for the period September 2009 – August 2010.

Texas Department of Transportation (TxDOT), "Pilot Implementation to Quantify the Benefits of Using Geosynthetics for Unbound Base Courses – Modification," Jorge G. Zornberg (PI), Project 5-4829, \$148,066, October 2009 – August 2011.

Fugro, "Long-Term Performance of Drilled Shaft Retaining Walls," Robert Gilbert (PI), Jorge G. Zornberg (co-PI), Chadi El Mohtar (co-PI), \$60,000, September 2009 – August 2011.

Geosynthetics Consortium, "Unsaturated Characterization of Geotextiles," UT acct: 30-2113-00, \$50,000 fellowship for the period January 2011 – December 2011.

Texas Department of Transportation (TxDOT), "Pilot Implementation to Benefit from Centrifuge Technology for Characterization of Expansive Clays in the Austin District," Jorge G. Zornberg (PI), Project 5-6048, \$194,842, September 2010 – December 2012.

Geosynthetics Consortium, "Reinforcement of Pavement Asphaltic Layers," UT acct: 30-2113-00, \$27,392 fellowship for the period January 2011 – December 2011.

Texas Department of Transportation (TxDOT), "Technical Assistance to the Austin District of the Texas Department of Transportation," Interagency Cooperation Contract, multiple co-PIs, Jorge G. Zornberg (Co-PI), \$1,450,000, (Zornberg share: \$263,852), September 2011 – August 2013.

Texas Department of Transportation (TxDOT), "Long-Term Performance of Drilled Shaft Retaining Walls (Modification)," Robert Gilbert (PI), Jorge G. Zornberg (co-PI), Chadi El Mohtar (co-PI), Project 0-6603, \$153,310, September 2011 – August 2012.

Geosynthetics Consortium, "Pullout Resistance of Geogrids using Industrial Byproducts as Fill Material," UT acct: 30-2113-00, \$40,000 fellowship for the period September 2011 – August 2012.

Fluor Foundation, "Adaptable Geotechnical Laboratory," \$75,000 contribution to the Cockrell School of Engineering from Fluor's budget for Engineering Higher Education, December 2011.

Geosynthetic Institute, "Confined Soil-Geosynthetic Interaction Stiffness under Small Displacements," UT acct: 30-2113-00, \$12,182 fellowship for the period September 2011 – August 2012.

Geosynthetics Consortium, "Soil-Geogrid Interaction Mechanisms," UT acct: 30-2113-00, \$50,000 fellowship for the period January 2012 – December 2012.

Geosynthetics Consortium, "Unsaturated Properties of Geotextiles," UT acct: 30-2113-00, \$100,000 fellowship for the period January 2012 – December 2012.

Texas Department of Transportation (TxDOT), "Pilot Implementation to Quantify the Benefits of Using Geosynthetics for Unbound Base Courses – Modification 2," Jorge G. Zornberg (PI), Project 5-4829, \$110,836, September 2011 – August 2012.

Texas Commission on Environmental Quality (TCEQ), "Closure of Uranium Tailings Impoundment," \$20,000, Jorge G. Zornberg, Robert Gilbert, Randall Charbeneau (Co-PIs), January 2012 – August 2012.

Geosynthetics Consortium, "Monitoring of Roads on Expansive Clays," UT acct: 30-2113-00, \$11,997 fellowship for the period September 2012 – August 2013.

Texas Department of Transportation (TxDOT), "Pilot Implementation to Quantify the Benefits of Using Geosynthetics for Unbound Base Courses – Modification 3," Jorge G. Zornberg (PI), Project 5-4829, \$34,445, September 2012 – December 2012.

Geosynthetics Consortium, "Soil-Geogrid Interaction Mechanisms," UT acct: 30-2113-00, \$50,000 fellowship for the period January 2013 – December 2013.

Geosynthetics Consortium, "Unsaturated Properties of Geotextiles," UT acct: 30-2113-00, \$75,000 fellowship for the period January 2013 – December 2013.

Texas Department of Transportation (TxDOT), "Support to the San Antonio District in Expansive Clay Characterization and PVR Calculation," Interagency Cooperation Contract, Jorge G. Zornberg (PI), \$240,000, June 2013 – August 2015.

Geosynthetics Consortium, "Geosynthetic Reinforcement of Asphaltic Layers," UT acct: 30-2113-00, \$26,998 fellowship for the period January 2013 – December 2013.

National Science Foundation (NSF), "Unsaturated Hydraulic Characterization of Expansive Clays," Jorge G. Zornberg (PI), Grant CMMI 1335456, \$341,259, September 2013 – August 2017.

Texas Department of Transportation (TxDOT), "Technical Assistance to the Austin District of the Texas Department of Transportation FY 2014-15," Interagency Cooperation Contract, multiple co-PIs, Jorge G. Zornberg (Co-PI), \$1,801,532 (Zornberg share: \$255,000), October 2013 – August 2015.

Texas Department of Transportation (TxDOT), "Implementation of Centrifuge Technology for Pavement Design on Expansive Clays," Jorge G. Zornberg (PI), Project 5-6048-03, \$426,446, October 2013 – August 2016.

Geosynthetics Consortium, "Geosynthetic Reinforcement of Asphaltic Layers," UT acct: 30-2113-00, \$50,000 fellowship for the period January 2014 – December 2014.

Geosynthetics Consortium, "Unsaturated Properties of Geotextiles," UT acct: 30-2113-00, \$75,000 fellowship for the period January 2014 – December 2014.

Geosynthetics Consortium, "Soil-Geogrid Interaction Mechanisms," UT acct: 30-2113-00, \$50,000 fellowship for the period January 2014 – December 2014.

Texas Department of Transportation (TxDOT), "Implementation of Geosynthetic-reinforced Unbound Base Courses," Jorge G. Zornberg (PI), Project 5-4829-03, \$496,976, September 2014 – August 2017.

Transportation Research Board (TRB), National Academies, Project NCHRP 24-41 "Defining the Boundary Conditions for Composite Behavior of Geosynthetic Reinforced Soil (GRS) Structures," Jorge G. Zornberg (PI), \$500,000, September 2014 – December 2017.

Consortium on Petroleum Engineering, "Oil and Gas Gravity Drainage Experiments using Centrifuge Technology," Jorge G. Zornberg (PI), \$50,000, September 2014 – August 2015.

Geosynthetics Consortium, "Geosynthetic Reinforcement of Asphaltic Layers," UT acct: 30-2113-00, \$50,000 fellowship for the period January 2015 – December 2015.

Geosynthetics Consortium, "Unsaturated Properties of Geotextiles," UT acct: 30-2113-00, \$65,000 fellowship for the period January 2015 – December 2015.

Geosynthetics Consortium, "Soil-Geogrid Interaction Mechanisms," UT acct: 30-2113-00, \$50,000 fellowship for the period January 2015 – December 2015.

Texas Department of Transportation (TxDOT), "Optimization of the Design of Flexible Pavements with Unbound Bases Reinforced with Geogrids using APT," Jorge G. Zornberg (PI), Jorge A. Prozzi (Co-PI), Project 0-6834, \$468,937, September 2015 – December 2017.

Texas Department of Transportation (TxDOT), "Technical Assistance to the Austin District of the Texas Department of Transportation FY 2016-17," Interagency Cooperation Contract, multiple co-PIs, Jorge G. Zornberg (Co-PI), \$1,709,000 (Zornberg share: \$305,000), December 2015 – August 2017.

Texas Department of Transportation (TxDOT), "Geotechnical Support to the San Antonio District," Interagency Cooperation Contract, Jorge G. Zornberg (PI), \$390,000, November 2015 – August 2018.

Geosynthetics Consortium, "Geosynthetic Reinforcement of Asphaltic Layers," UT acct: 30-2113-00, \$50,000 fellowship for the period January 2016 – December 2016.

Geosynthetics Consortium, "Unsaturated Properties of Geotextiles," UT acct: 30-2113-00, \$65,000 fellowship for the period January 2016 – December 2016.

Geosynthetics Consortium, "Soil-Geogrid Interaction Mechanisms," UT acct: 30-2113-00, \$50,000 fellowship for the period January 2016 – December 2016.

Texas Department of Transportation (TxDOT), "Implementation of Centrifuge Technology for Clay Stabilization and Equipment Deployment," Jorge G. Zornberg (PI), Project 5-6048-05, \$489,782, September 2016 – August 2019.

Geosynthetics Consortium, "Evaluation of Composite Behavior of Geosynthetic-reinforced Soil (GRS) Structures," UT acct: 30-2113-00, \$5,000 fellowship for the period September 2016 – August 2017.

Geosynthetics Consortium, "Design Method for Cellular Confinement Systems," UT acct: 30-2113-00, \$50,000 fellowship for the period September 2016 – August 2017.

Texas Department of Transportation (TxDOT), "Development of Integral/Semi-integral Abutments for Texas Bridges," Jorge G. Zornberg (PI), Todd Helwig (Co-PI), Project 0-6936, \$1,049,627, September 2016 – December 2023.

Geosynthetics Consortium, "Geosynthetic Reinforcement of Asphaltic Layers," UT acct: 30-2113-00, \$50,000 fellowship for the period January 2017 – December 2017.

Geosynthetics Consortium, "Unsaturated Properties of Geotextiles," UT acct: 30-2113-00, \$65,000 fellowship for the period January 2017 – December 2017.

Geosynthetics Consortium, "Soil-Geogrid Interaction Mechanisms," UT acct: 30-2113-00, \$50,000 fellowship for the period January 2017 – December 2017.

University Transportation Center, Center for Highway Pavement Preservation (CHPP), "Geosynthetic-reinforced Overlays as Preventive Maintenance Strategy," Jorge A. Prozzi (PI), Jorge G. Zornberg (Co-PI), Project 0-6878, \$300,000 (Zornberg share: \$101,587), September 2017 – September 2018.

Texas Department of Transportation (TxDOT), "Technical Assistance to the Austin District of the Texas Department of Transportation FY 2018-20," Interagency Cooperation Contract, multiple co-PIs, Jorge G. Zornberg (Co-PI), \$3,925,500 (Zornberg share: \$465,000), September 2017 – August 2020.

Geosynthetics Consortium, "Geosynthetic Reinforcement of Asphaltic Layers," UT acct: 30-2113-00, \$50,000 fellowship for the period January 2018 – December 2018.

Geosynthetics Consortium, "Unsaturated Properties of Geotextiles," UT acct: 30-2113-00, \$65,000 fellowship for the period January 2018 – December 2018.

Geosynthetics Consortium, "Soil-Geogrid Interaction Mechanisms," UT acct: 30-2113-00, \$50,000 fellowship for the period January 2018 – December 2018.

Texas Department of Transportation (TxDOT), "Implementation of Geosynthetic-stabilized Roadways for Base Course Reduction: Field Monitoring and Design Recommendations," Jorge G. Zornberg (PI), Project 5-4829-05, \$873,370, May 2018 - August 2023.

Texas Department of Transportation (TxDOT), "Field Monitoring, Specification Development, and Implementation of Geosynthetic-stabilized Roadways and Centrifuge Technology for Potential Vertical Rise," Jorge G. Zornberg (PI), Interagency Cooperation Contract, TxDOT Materials Division, \$819,373, September 2018 – August 2021.

Geosynthetics Consortium, "Geosynthetic Reinforcement of Asphaltic Layers," UT acct: 30-2113-00, \$75,000 fellowship for the period January 2019 – December 2019.

Geosynthetics Consortium, "Unsaturated Properties of Geotextiles," UT acct: 30-2113-00, \$65,000 fellowship for the period January 2019 – December 2019.

Geosynthetics Consortium, "Soil-Geogrid Interaction Mechanisms," UT acct: 30-2113-00, \$50,000 fellowship for the period January 2019 – December 2019.

Texas Department of Transportation (TxDOT), "Evaluation of Geogrids for Asphalt Pavement Construction," Jorge G. Zornberg (PI), Project 0-7002, \$1,194,503, April 2019 – August 2024.

Texas Department of Transportation (TxDOT), "Evaluation of Seamless Bridges," Juan Murcia-Delso (PI), Todd Helwig and Jorge G. Zornberg (Co-PIs), Project 0-7011, \$810,497, May 2019 – August 2023.

Texas Department of Transportation (TxDOT), "Field Monitoring, Specification Development, and Implementation of Geosynthetic-reinforced Asphaltic Layers," Jorge G. Zornberg (PI), Interagency Cooperation Contract, TxDOT Lubbock District, \$875,332, December 2019 – August 2023.

Geosynthetics Consortium, "Geosynthetic Reinforcement of Asphaltic Layers," UT acct: 30-2113-00, \$50,000 fellowship for the period January 2020 – December 2020.

Geosynthetics Consortium, "Unsaturated Properties of Geotextiles," UT acct: 30-2113-00, \$65,000 fellowship for the period January 2020 – December 2020.

Geosynthetics Consortium, "Soil-Geogrid Interaction Mechanisms," UT acct: 30-2113-00, \$75,000 fellowship for the period January 2020 – December 2020.

Texas Department of Transportation (TxDOT), "Technical Assistance to the Austin District of the Texas Department of Transportation FY 2021-24," Interagency Cooperation Contract, multiple co-PIs, Jorge G. Zornberg (Co-PI), \$7,672,319 (Zornberg share: \$992,170), September 2020 – August 2024.

Geosynthetics Consortium, "Geosynthetic Reinforcement of Asphaltic Layers," UT acct: 30-2113-00, \$50,000 fellowship for the period January 2021 – December 2021.

Geosynthetics Consortium, "Unsaturated Properties of Geotextiles," UT acct: 30-2113-00, \$65,000 fellowship for the period January 2021 – December 2021.

Geosynthetics Consortium, "Soil-Geogrid Interaction Mechanisms," UT acct: 30-2113-00, \$50,000 fellowship for the period January 2021 – December 2021.

Geosynthetics Consortium, "Accelerated Pavement Testing for Geosynthetic-stabilized Roadways," UT acct: 30-2113-00, \$5,000 fellowship for the period September 2021 – August 2022.

Geosynthetics Consortium, "Geosynthetic Reinforcement of Asphaltic Layers," UT acct: 30-2113-00, \$75,000 fellowship for the period January 2022 – December 2022.

Geosynthetics Consortium, "Unsaturated Properties of Geotextiles," UT acct: 30-2113-00, \$65,000 fellowship for the period January 2022 – December 2022.

Geosynthetics Consortium, "Soil-Geogrid Interaction Mechanisms," UT acct: 30-2113-00, \$75,000 fellowship for the period January 2022 – December 2022.

Geosynthetics Consortium, "Geosynthetic Reinforcement of Asphaltic Layers," UT acct: 30-2113-00, \$75,000 fellowship for the period January 2023 – December 2023.

Geosynthetics Consortium, "Unsaturated Properties of Geotextiles," UT acct: 30-2113-00, \$65,000 fellowship for the period January 2023 – December 2023.

Geosynthetics Consortium, "Soil-Geogrid Interaction Mechanisms," UT acct: 30-2113-00, \$75,000 fellowship for the period January 2023 – December 2023.

Geosynthetics Consortium, "Geosynthetics for Soft Subgrade Stabilization," UT acct: 30-2113-00, \$85,000 fellowship for the period May 2023 – April 2024.

Texas Department of Transportation (TxDOT), "Field Monitoring, Specification Development, and Implementation of Geosynthetic-reinforced Asphaltic Layers," Jorge G. Zornberg (PI), Interagency Cooperation Contract, TxDOT Lubbock District, \$995,495, September 2023 – August 2027.

Texas Department of Transportation (TxDOT), "Implementation of Centrifuge Technology for Pavement Design on Expansive Clays – Phase 2," Jorge G. Zornberg (PI), Project 5-6048-07, \$939,433.17, September 2023 – August 2027.

Texas Department of Transportation (TxDOT), "Implementation of Semi-integral Bridges in Texas," Jorge G. Zornberg (PI), Project 5-6936-01, \$780,032.31, January 2024 – December 2026.

Geosynthetics Consortium, "Geosynthetic Reinforcement of Asphaltic Layers," UT acct: 30-2113-00, \$50,000 fellowship for the period January 2024 – December 2024.

Geosynthetics Consortium, "Unsaturated Properties of Geotextiles," UT acct: 30-2113-00, \$75,000 fellowship for the period January 2024 – December 2024.

Geosynthetics Consortium, "Soil-Geogrid Interaction Mechanisms," UT acct: 30-2113-00, \$75,000 fellowship for the period January 2024 – December 2024.

Texas Department of Transportation (TxDOT), "Field Monitoring, Testing, and Analysis of Data Collected at TxDOT's Geosynthetic-stabilized Pavement Facility (GSPF). Geosynthetic- and PVR-related Support to TxDOT," Jorge G. Zornberg (PI), Interagency Cooperation Contract, TxDOT Maintenance Division, \$385,735, May 2024 – August 2026.

Geosynthetics Consortium, "Geosynthetics for Soft Subgrade Stabilization," UT acct: 30-2113-00, \$85,000 fellowship for the period May 2024 – April 2025.

Texas Department of Transportation (TxDOT), "Technical Assistance to the Austin District FY 2025-28," Interagency Cooperation Contract, multiple co-PIs, Jorge G. Zornberg (Co-PI), \$16,882,550 (Zornberg share: \$2,069,683), September 2024 – August 2028.

Texas Department of Transportation (TxDOT), "Synthesis: Develop Design Guidelines for Applications of Light Weight Aggregate in Embankments and Mechanically Stabilized Earth (MSE) Walls – Evaluate Cost Benefit & Performance," Jorge G. Zornberg (PI), Project 0-7237, \$65,000, September 2024 – August 2025.

CONSULTING AND EXPERT WITNESS

Representative consulting and expert witness activities are listed below. Emphasis has been on forensic evaluations and on characterizing the adequacy of geosynthetic products, the stability of earth-retaining structures, the performance of liquid and waste containment systems, and the design of transportation systems.

Pennsville Warehouses: Provided technical support on litigation associated with the characterization of soft foundation soils subjected to unexpected increased moisture content (2025 – present).

Texas Research International: Provided technical support on the evaluation of methods and experimental data needed for the design of geosynthetic-stabilized unbound aggregates (2025 – present).

IKO Coletanche, France: Provided technical support for evaluating the creep and stress relaxation of geosynthetic products used in water and waste containment systems (2025 – present).

Besalco-Stracon Consortium, Peru: Provided technical support for evaluating the UV degradation of exposed geotextiles in hydraulic systems (2025 – present).

Phillips Chevron Chemicals: Provided technical support for product development of soil stabilization compounds (2021 - present).

EPCE, Paraguay: Provided technical support on the selection of geosynthetics for roadway applications (2024 – 2025).

Milicic Perú SAC: Provided technical support for the evaluation of geotextiles for river revetments (2024 – 2025).

H2O Construction Services: Provided technical support on litigation associated with constructability problems of a geotextile-reinforced MSE wall in Texas (2023 - 2024).

Albemarle Corporation: Provided technical support for litigation related to the characterization of materials used in liner systems at a mining facility (2019 - 2024).

Diamond Back Solid Waste Facility and Recycling Center: Provided technical support for litigation associated with the permit application for a new waste containment facility (2020 - 2023).

Thomas Springs Road Improvement Project: Provided technical support on the evaluation of design criteria and their implementation (2021 - 2022).

State Highway 130: Provided technical support on litigation associated with the distress of Texas SH 130 triggered by the presence of highly expansive, sulfate-rich subgrades (2021 - 2022).

Rocky Mountain Arsenal: Provided evaluation of post-construction monitoring data on the capillary barrier, moisture sensors, and leakage monitoring at the RMA hazardous waste facility, Commerce City, Colorado (2008 - 2020).

Dos Republicas Coal Partnership: Provided technical support for litigation associated with the revision of a permit for a surface coal mining facility (2020 - 2021).

Rancho Viejo Waste Management: Provided technical support for litigation associated with a permit for a municipal and industrial waste containment facility (2018 - 2019).

Altair Disposal Services: Provided technical support for litigation associated with a permit for a hazardous waste containment facility (2018 - 2019).

Knight Piésold Consultants: Provided technical support for the design of the vertical expansion of a mining waste disposal facility, involving reinforced soil structures for enhanced stability (2017 - 2018).

Tecnología de Reciclaje: Provided technical support for the development of new geosynthetic technologies (2016 - 2018).

Terra Services: Provided technical support for litigation related to a liner system for liquid impoundment in the energy sector (2016 - 2018).

Virginia Soil and Water Conservation Board: Provided technical support for evaluating geosynthetics in overtopping considerations for earth dam design (2017 - 2018).

TechFab India Industries: Provided technical support for the development of new geosynthetic reinforcement technologies (2017 - 2018).

Cintra, a subsidiary of Ferrovial: Provided technical support on technologies to mitigate the impact of expansive clays on roadway systems (2017).

Schertz-Seguin Local Government Corporation: Provided technical support for litigation related to the design of a liner system for a waste containment facility (2015 - 2017).

Guadalupe County, Texas: Provided technical support in litigation involving transportation issues related to the siting of a proposed waste containment facility (2015-2016).

California Gulch Superfund Site: Provided technical support for the feasibility study of cover systems for mining waste piles of historical significance (2009 - 2012).

UTE Vertedero de Bailin: Provided technical support for litigation involving assessment of leakage through the lining system of a hazardous waste containment facility involving thirteen geosynthetic layers in Huesca, Spain (2013 - 2014).

Yamana Gold Inc: Provided technical support in the assessment of closure systems, using alternative approaches, of tailings dams for a gold mine facility in Bahia, Brazil (2012 - 2013).

Vulcan Construction Materials, LP: Participated in the forensic evaluation of the collapse of an anchored bulkhead that failed during the discharge of construction materials (2011 - 2013).

US Environmental Protection Agency: Evaluation of leak detection system and stability of triple-lined landfill for hazardous waste containment system (2008 - 2010).

Texas Commission on Environmental Quality (TCEQ): Provided peer review services for guidance document on unsaturated soil cover systems and closure of mining sites (2011-12)

T.J. Lambrecht Construction: Participated in field forensic reconnaissance of pavement failure characterized by the presence of expansive clays in the subgrade (2011).

Rocky Mountain Arsenal, Colorado: Provided technical support to the U.S. Environmental Protection Agency, Region 8, on evaluation of the suitability of alternative cover systems for final closure of hazardous waste site (2000 - 2007).

Tensar Corporation, Roswell, Georgia: Provided technical support as expert witness in forensic investigation involving the collapse of a reinforced soil wall (US case) (2005 - 2007).

Tensar Corporation, Roswell, Georgia: Provided technical support as expert witness in forensic investigation involving the collapse of a reinforced soil wall (overseas case) (2004 - 2007).

US Environmental Protection Agency: Provided technical support for the review of technical guidance on the design of final cover systems (2006 - 2007).

Colorado Department of Transportation: Provided technical support to the Colorado Department of Transportation on the use of tire bales for highway construction (2002 - 2004).

Founders/Meadows Bridge Abutment, Colorado: Provided technical support to the Colorado Department of Transportation on evaluation of the performance of the first reinforced bridge abutment constructed in the US highway system (1999 - 2001).

Synthetic Industries, Tennessee: Provided technical support on research and development for geosynthetic products (1999 - 2001).

Operating Industries Inc. (OII) Superfund Site, California: Post-closure evaluation of evapotranspirative cover system (2000).

Del Amo Superfund Site, California: Unsaturated flow modeling to assess liquid infiltration through the evapotranspirative component of the cover system (1998).

Operating Industries Inc. (OII) Superfund Site, California: Developed design methodology for uniaxial reinforcement of steep soil cover veneers anchored into solid waste (1997 - 1998).

OII Superfund Site, California: Performed unsaturated flow modeling to assess liquid infiltration through an evapotranspirative cover. Demonstrated regulatory compliance of evapotranspirative cover. OII constitutes the first evapotranspirative cover approved by the US Environmental Protection Agency for a Superfund site (1997 - 1998).

OII Superfund Site, California: Evaluated cover alternatives for final closure of the site, including exposed geomembrane cover, prescriptive "resistive" cover, and evapotranspirative cover (1996 – 1997).

McColl Superfund Site, California: Designed containment system to isolate high-octane aviation fuel wastes disposed of after World War II. Major hurdles in the design included the very low bearing capacity of the waste, seismic stability, and potential chemical incompatibility between the waste and the closure system components (1996 – 1997).

Azusa Superfund Site, California: Evaluated potential release of contaminants from the existing waste into the groundwater due to a landfill vertical expansion. Developed a method for the evaluation of the effect of confinement on the available moisture-holding capacity of waste (1995 – 1996).

OII Superfund Site, California: Performed nonlinear, large-strain finite element analyses to evaluate the seismic stability and long-term performance of landfill structures (1995 – 1996).

Beirolas Landfill, Lisbon, Portugal: Forensic investigation of a catastrophic slope failure in a landfill, which occurred during placement of waste in a former harbor facility. After closure, the landfill became an open space area for the Lisbon EXPO '98 International Fair (1995).

Eagle Mountain Landfill, California: Produced the seismic information summary report. After construction, this facility will constitute the largest municipal solid waste landfill in the United States (1995).

Highway reinforced embankments, Redding, California: Developed design guidelines for the California Department of Transportation regarding geosynthetic-reinforced embankments using decomposed granite as backfill material (1995).

PATENTS

U.S. Patent No. 7,367,218, "Centrifuge Permeameter for Unsaturated Soils System, Parent." UT Reference: UTAU 1142. Issued on May 6, 2008.

U.S. Patent No. 7,412,875, "Centrifuge Permeameter for Unsaturated Soils System, Division 1." UT Reference: UTAU 1092. Issued on September 19, 2008.

U.S. Patent No. 7,509,840, "Centrifuge Permeameter for Unsaturated Soils System, Division 2." UT Reference: UTAU 1143. Issued on March 31, 2009.

RESEARCH. SUPERVISION

Ph.D. Supervision Completed

- 1) Arriaga, Fabiana (Spring 2003). Ph.D. dissertation: "Response of Geosynthetic-Reinforced Structures under Working Stress and Failure Conditions." University of Colorado at Boulder.
- 2) Teixeira, Sidnei (Spring 2003). Co-supervised with Prof. B. S. Bueno. Ph.D. dissertation: "Study of Soil-Geogrid Interaction using Pullout Tests." University of Sao Paulo, Brazil.
- 3) Dell'Avanzi, Eduardo (Summer 2004). Ph.D. dissertation: "Unsaturated Flow under Increased Gravitational Field." University of Colorado at Boulder.
- 4) Costa, Carina M.L. (Fall 2004). Co-supervised with Prof. B. S. Bueno. Ph.D. dissertation: "Time-dependent Deformations of Geotextile-Reinforced Soil Walls." University of Sao Paulo, Brazil.
- 5) Li, Chunling (Spring 2005). Ph.D. dissertation: "Mechanical Response of Fiber-Reinforced Soil." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 6) Costa, Yuri (Spring 2005). Co-supervised with Prof. B. S. Bueno. Ph.D. dissertation: "Performance of Buried Pipes Overlying a Void." University of Sao Paulo, Brazil.
- 7) Benjamin, C. Vinicius (Spring 2006). Co-supervised with Prof. B. S. Bueno. Ph.D. dissertation: "Experimental Evaluation of Prototype Geotextile-Reinforced Retaining Walls." University of Sao Paulo, Brazil.
- 8) McCartney, John S. (Summer 2007). Ph.D. dissertation: "Determination of the Hydraulic Characteristics of Unsaturated Soils Using a Centrifuge Permeameter." Department of Civil, Architectural and Environmental Engineering, The University of Texas at Austin.
- 9) Weber, Christine T. (Summer 2008). Ph.D. dissertation: "Leakage through Defects in Geomembrane Liners under High Hydraulic Heads." Department of Civil, Architectural and Environmental Engineering, The University of Texas at Austin.
- 10) Yang, Kuo-Hsin (Summer 2009). Ph.D. dissertation: "Stress Distribution within Geosynthetic Reinforced Structures." Department of Civil, Architectural and Environmental Engineering, The University of Texas at Austin.
- 11) Gupta, Ranjiv (Fall 2009). Ph.D. dissertation: "A Study of Geosynthetic Reinforced Flexible Pavement System." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 12) Freilich, Brian (Fall 2009). Ph.D. dissertation: "Mechanical and Physical Characterization Of Tire Bales." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 13) Kuhn, Jeffrey A. (Spring 2010). Ph.D. dissertation: "Characterization of the Swelling Potential of Expansive Clays using Centrifuge Technology." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.

- 14) Franca, Fagner (Spring 2011). Co-supervised with Prof. B. S. Bueno. Ph.D. dissertation: "New equipment to conduct confined-accelerated creep tests on geosynthetics." University of Sao Paulo, Brazil (visiting scholar at UT Austin).
- 15) Portelinha, Fernando (Fall 2012). Co-supervised with Prof. B. S. Bueno. Ph.D. dissertation: "Experimental Assessment of the Effect of Infiltration on the Behavior of Fine-Grained Soils Reinforced with Nonwoven Geotextiles." University of Sao Paulo, Brazil (visiting scholar at UT Austin).
- 16) Ferreira, Julio Zambrano (Summer 2013). Ph.D. dissertation: "Evaluation of Soil-geogrid Interaction at Different Load Levels Using Pullout Tests and Transparent Soil." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 17) Plaisted, Michael (Fall 2014). Ph.D. dissertation: "Characterization of Soil Unsaturated Flow Properties Using Steady State Centrifuge Methods." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 18) Correia, Natalia (Fall 2014). Co-supervised with Prof. B. S. Bueno. Ph.D. dissertation: "Performance of Flexible Pavements Enhanced using Geogrid-reinforced Asphalt Overlays." University of Sao Paulo, Brazil (visiting scholar at UT Austin).
- 19) Belchior, Ingrid M.R.M. (Summer 2016). Co-supervised with Prof. M. Casagrande. Ph.D. dissertation: "Behavior of a Lime-Treated Expansive Soil." Pontifical Catholic University of Rio de Janeiro (PUC-Rio), Brazil (visiting scholar at UT Austin).
- 20) Roodi, G. Hossein (Summer 2016). Ph.D. dissertation: "Analytical, Experimental, and Field Evaluations of Soil-Geosynthetic Interaction under Small Displacements." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 21) Azevedo, Marcelo M. (Fall 2016). Ph.D. dissertation: "Performance of Geotextiles with Enhanced Drainage." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 22) Quaglia, Gaston (Fall 2017). Ph.D. dissertation: "Hydro-mechanical Characterization of Unsaturated Clays using Centrifuge Technology." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 23) Morsy, Amr M. (Fall 2017). Ph.D. dissertation: "Evaluation of Soil-reinforcement Composite Interaction in Geosynthetic-reinforced Soil Structures." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 24) Peng, Xin (Fall 2017). Ph.D. dissertation: "Evaluation of Load Transfer Mechanisms Between Soil and Geogrid using Transparent Soil." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 25) Armstrong, Christian, P. (Spring 2018). Ph.D. dissertation; "Characterization of Expansive Clay Behavior using Centrifuge and Field Evaluations." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 26) Zhang, Genbao (Fall 2018). Supervised US research component (Co-supervised with Prof. Changfu Chen); Ph.D. dissertation: "Interface Characterization and Load Transfer Analyses for Anchored Systems." Hunan University, People's Republic of China (visiting scholar at UT Austin).
- 27) Blake, Calvin R. (Fall 2022). Ph.D. dissertation: "Free Energy in Expansive Clays: A Practical Exploration of the Role of Suction in Clay Swelling and Temperature-Dependent Permittivity Measurements." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 28) Mofarraj, Behdad (Fall 2022). Ph.D. dissertation: "Field Study of Thermally-induced Soil-structure Interactions in Semi-integral Bridge Structures." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 29) Subramanian, S. (Spring 2023). Ph.D. dissertation: "Evaluation of Mechanisms Governing the Stabilization of Unbound Aggregate Bases by Geogrids in Flexible Pavements." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.

- 30) Sicha, Gino (Spring 2024). Ph.D. dissertation: "Evaluation of Pavement Performance Improvement with Geotextiles using Accelerated Pavement Testing." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 31) Gonzalez, Etienne (Spring 2024). Ph.D. dissertation: "Geosynthetic Encased Columns for Soft Soil Improvement Modelling with Laponite." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 32) Marx, David H. (Spring 2024). Ph.D. dissertation: "A Particle-Level Study of Soil-Geogrid Interaction Using Transparent Sand." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 33) Acosta Buelvas, Carlos A. (Spring 2024). Ph.D. dissertation: "Advances in the Use of Geocells in Hydraulic Applications." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 34) Sousa, Patricia Figueiredo de (Summer 2024). Ph.D. dissertation: "A Constitutive Model for Predicting Unsaturated Shear Strength Using the Soil Water Retention Curve of Unimodal and Multimodal Soils." Co-advised with Prof. Andre Luis Brasil Cavalcante, Department of Civil and Environmental Engineering, University of Brasilia, Brazil.
- 35) Petisco de Souza, Henrique (Fall 2025). Ph.D. dissertation: "Experimental Evaluation of Geotextile-Encased Granular Columns using Transparent Soil." Co-supervised with Prof. Gregorio L.S. Araujo, Department of Civil and Environmental Engineering, University of Brasilia, Brazil.

M.S. Supervision Completed

- 1) Blanco, Fabiana (Fall 1999). M.S. thesis: "Study of Strain Distribution in Geosynthetic-Reinforced Slopes using Digital Image Analysis." University of Colorado at Boulder.
- 2) Viratjandr, Chardphoom (Summer 2000). M.S. thesis: "Shear Strength of Tire Shred-Sand Mixtures." University of Colorado at Boulder.
- 3) Takata, Satoshi (Summer 2000). M.S. thesis: "Upgrade of a Large Scale True Triaxial Apparatus for Shear Strength Characterization." University of Colorado at Boulder.
- 4) Kroll, Erich (Spring 2000). M.S. report: "Construction of a Prototype Embankment using Tire Shreds." University of Colorado at Boulder.
- 5) Onsugksun, Bunpot (Fall 2000). M.S. Report: "Experimental Research on Seismic Behavior of Geosynthetics."
- 6) Knudsen, Justin (Spring 2002). M.S. thesis: "Characterization of the Long-Term Behavior of Geosynthetics using Time-Temperature Superposition Methods." University of Colorado at Boulder.
- 7) McCartney, John S. (Spring 2002). M.S. thesis: "Internal and Interface Shear Strength of Geosynthetic Clay Liners (GCLs)." University of Colorado at Boulder.
- 8) Watcharamonthein, Jakraphob (Spring 2002). M.S. Report: "Geosynthetic-Reinforced Bridge Abutments." University of Colorado at Boulder.
- 9) Byler, Brett (Spring 2003). M.S. thesis: "Characterization of Creep, Stress Relaxation and Residual Strength of a Woven Polypropylene Geotextile." University of Colorado at Boulder.
- 10) Mathis, Curtis (Spring 2003). M.S. thesis: "A Study of the Residual Shear Strength of Clay Soils." University of Colorado at Boulder.
- 11) Woodruff, Ryan (Fall 2003). M.S. thesis: "Centrifuge Modeling for MSE-Shoring Composite Walls." University of Colorado at Boulder.
- 12) Fitzgerald, Timothy (Fall 2003). M.S. report: "Investigation of the Thermal Response of Tire Shred Fills." University of Colorado at Boulder.
- 13) Wappett, Hailey (Fall 2004). M.S. thesis: "Investigation of the Thermal Response of a Tire Shred-Soil Embankment." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.

- 14) Kang, Young Cheol (Spring 2005). M.S. thesis: "Pullout of Geosynthetic Reinforcement with in-Plane Drainage Capacity in Cohesive Soil." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 15) Kuhn, Jeffrey A. (Fall 2005). M.S. thesis: "Effect of Cracking on the Unsaturated Hydraulic Properties of Highly Plastic Clays." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 16) LaRocque, Christopher J. (Fall 2005). M.S. thesis: "Mechanical Properties of Tire Bales." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 17) Freilich, Brian (Summer 2006). M.S. thesis: "Behavior of Fiber-Reinforced Highly Plastic Clay." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 18) Homes, Daniel (Summer 2007). M.S. thesis: "Passive Grouting with Colloidal Silica for Secondary Containment Systems." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 19) Plaisted, Michael (Summer 2009). M.S. thesis: "Centrifuge Testing of an Expansive Clay." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 20) Thompson, Nathan (Summer 2009). M.S. thesis: "Small Soil Column Investigation of Soil-Geotextile Capillary Barrier System." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 21) Tang, Yucao (Summer 2009). M.S. thesis: "Calibration of Water Content Reflectometer." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 22) Trevino, Artemio (Summer 2009). M.S. report: "Subgrade Restraint Using Geotextiles." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 23) Na, Suk Joon (Fall 2009). M.S. Thesis: "Evaluation of Synergism between Creep and Defects in a Low Linear Density Polyethylene (LLDPE) Geomembrane." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 24) Pickles, Christopher B. (Fall 2009). M.S. Thesis: "Hydraulic Classification of Unsaturated Nonwoven Geotextiles for use in Soil Structures." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 25) Joshi, Rutuparna (Spring 2010). M.S. Thesis: "Field Performance of Geogrid Reinforced Low-Volume Pavements." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 26) Eun, Jongwan (Spring 2010). M.S. Report: "Effect of Geogrid Characteristics on Confined Stiffness." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 27) Guzman, Carlos (Summer 2010). M.S. Thesis: "Effect of Deformability of Ridges on Interface Shear Strength." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 28) Muhlenkort, Craig (Summer 2010). M.S. Report: "Monitoring of Time-dependent Deformations in a Geotextile-Reinforced Slope." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 29) Yates, Trevor B. (Summer 2011). M.S. Thesis: "Hydraulic Performance and Stability of Geosynthetic Landfill Cover Systems with Constrained Drainage at the Outlet." Co-supervised with Dr. Gilbert. Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 30) Walker, Trevor M. (Spring 2012). M.S. Thesis: "Quantification using Centrifuge of Variables Governing the Swelling of Clays." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 31) Azevedo, Marcelo M. (Summer 2012). M.S. Thesis: "Anti-capillary Barrier Performance of Wicking Geotextiles." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.

- 32) Hutcherson, Shawn C. (Summer 2012). M.S. Thesis: "Analysis of a Database of Uniaxial Geogrid Pullout Resistance Results." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 33) Sheridan, Todd (Summer 2012). M.S. Thesis: "Closure of a Uranium Mills Tailings Dam." Co-supervised with Dr. Gilbert. Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 34) Marcotulli, Fabrizio (Spring 2013). M.S. Thesis: "Evaluation of Pullout Results using Crushed Glass and Dredged Materials." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 35) Kondo, Jacob (Spring 2013). M.S. Thesis: "Pullout Evaluation of Uniaxial Geogrids Embedded in Dredged Material." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 36) Hanumasagar, Sangameshwar S. (Summer 2013). M.S. Thesis: "Pullout Evaluation of Steel Slag Fines and Dredged Material Blends with Uniaxial Geogrids." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 37) Lewis, Kemp S. (Fall 2013). M.S. Thesis: "Analysis of Dredge Material and Crushed Glass Blends with Uniaxial Geogrids in Pullout Tests." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 38) Rebuck, Jonathan T. (Fall 2013). M.S. Thesis: "Performance of Anchored Bulkheads." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 39) Fransoli, Douglas P. (Fall 2013). M.S. Thesis: "Performance of Geotextile Capillary Barriers." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 40) Armstrong, Christian, P. (Spring 2014). M.S. Thesis: "Effect of Fabric on the Swelling of Highly Plastic Clays." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 41) Das, Jasaswee T. (Fall 2014). M.S. Thesis: "Evaluation of the Rate of Secondary Swelling in Expansive Clays using Centrifuge Technology." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 42) Garcia Delgado, Ivan E. (Spring 2015). M.S. Thesis: "Use of Geotextiles with Enhanced Lateral Drainage in Roads over Expansive Clays." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 43) Snyder, Larson M. (Summer 2015). M.S. Thesis: "Determination of the Potential Vertical Rise in Expansive Soils Using Centrifuge Technology." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 44) Blake, Calvin (Summer 2016). M.S. Thesis: "Centrifuge Measurements of Two-Phase Transient Flow in Rigid Porous Media." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 45) Martinez, Jose A. (Fall 2016). M.S. Thesis: "Parametric Evaluation of Relevant Parameters Affecting the Soil-Geosynthetic Interaction under Small Displacements." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 46) Imamoglu, Sevket (Summer 2017). M.S. Thesis: "Investigation of Shear Band Mechanism in Reinforced Soil Retaining Wall using Pullout Tests." Co-supervised with Prof. Erol Guler, Bogazici University, Turkey.
- 47) Phillips, James Ryan (Fall 2017). M.S. Thesis: "Field Evaluation of Reinforced Asphalt Overlays using Strain Measurements." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 48) Walter, Jakob R. (Spring 2018). M.S. Thesis: "Experimental and Numerical Investigation of Integral/Semi-Integral Bridge Abutments for Texas Conditions." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.

- 49) Ahmed, Mahmoud M. (Spring 2018). M.S. Thesis: "Effect of Orientation on In-isolation and In-soil Geosynthetic Properties." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 50) Nelsen, Christopher R. (Summer 2018). M.S. Thesis: "Experimental Evaluation of Geocell Reinforcement Behavior using Transparent Soil Techniques." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 51) El Hachem, Anthony G. (Summer 2018). M.S. Thesis: "Moisture Drainage under Unsaturated Soil Conditions with the Aid of Enhanced Lateral Drainage (ELD) Geotextiles." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 52) Summerlin, Karly A. (Summer 2018). M.S. Thesis: "Potential Vertical Rise of Lime-Treated Expansive Clays Using Centrifuge Technology." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 53) Liu, Ziye (Summer 2018). M.S. Thesis: "An Analytical Model for Quantification of Geosynthetic Benefits in Roadway Base Stabilization." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 54) Yang, Luming (Summer 2018). M.S. Thesis: "A Study on Geosynthetic-Reinforced Asphalt Systems." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 55) Zheng, Liming (Summer 2018). M.S. Thesis: "Environmental Loads on Control and Geosynthetic Stabilized Pavements over Expansive Clay Subgrades." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 56) Jain, Shivangi (Spring 2019). M.S. Report: "Lab Characterization of Near-surface Soils from Farm to Market Road 2." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 57) Hernandez-Uribe, Luis A. (Summer 2019). M.S. Thesis: "Advances in Cross-plane and In-plane Geosynthetic Drainage." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 58) Peve, Lorenzo (Summer 2020). M.S. Thesis: "Sources of Variability in Small-scale Soil-geosynthetic Interaction Testing." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 59) Rivas, Nicolas (Summer 2021). Topic: "Characterization of the Swelling Behavior of Expansive Clays using Centrifuge Technology." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 60) Orellana, Susana E. (Summer 2021). M.S. Thesis: "Monitoring and Prediction of Transient Unsaturated Flow in Clay Materials." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 61) Sicha, Gino (Fall 2021). M.S. Thesis: "Evaluation of the Separation Function of Geotextiles Using Accelerated Pavement Testing Conditions." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 62) vonDeak, Amelia C. (Fall 2021). M.S. Departmental Report: "A Monography on Asphalt Recycling." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 63) Weaver, Benjamin K. (Fall 2021). M.S. Thesis: "Evaluation of Multilayered Elastostatic Backcalculation using In-situ Measurements in Geosynthetic-reinforced Asphalt Pavement." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 64) Song, Jenna (Fall 2021). M.S. Departmental Report: "Characterization of Expansive Soils from Farm to Market 1979 and 2924 using Centrifuge Technology." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 65) Brikalski, Miqueias P. (Fall 2022). M.S. Thesis: "Impact of Angularity, Particle Size and Particle Size Distribution on the Stiffness of the Soil-geosynthetic Composite." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.

- 66) Abuzeid, Tarig (Fall 2022). M.S. Departmental Report: "Field Performance of Geosynthetic-stabilized Roadways Founded over Expansive Clays." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 67) Paudyal, Abhigya (Spring 2023). M.S. Departmental Report: "Centrifuge Tests on Expansive Soils to Analyze Potential Vertical Rise for FM973." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 68) Moreira Santos, Dhionata W. (Summer 2023). M.S. Thesis: "Physical Modeling of Geosynthetic-reinforced Load Transfer Platforms Using a Stratified System of Transparent Soils." Co-supervised with Prof. Fernando Portelinha, Federal University of São Carlos, São Paulo, Brazil.
- 69) Alam, Mahfooz (Fall 2023). M.S. Thesis: "Effect of Soil Type and Compaction Methods on the Confined Stiffness of Soil-geogrid Composites." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 70) Pliska, William (Spring 2024). M.S. Departmental Report: "Confined Stiffness Characterization of Woven Geotextiles." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 71) De la Cruz Reyes, Ángel (Summer 2024). M.S. Departmental Report: "Field Instrumentation of a Semi-integral Bridge." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.
- 72) Trujillo Valenzuela, Héctor Danilo. (Spring 2025). M.S. Thesis: "Evaluation of the Parameters Affecting the Modulus Improvement Factor of Geocell-Reinforced Granular Soils Based on Plate Load Testing and Supervised Machine Learning." Co-supervised with Prof. Jose O. Avesani Neto, University of São Paulo, São Paulo, Brazil.
- 73) Amaddio, Christopher (Summer 2025). M.S. Thesis: "Evaluation of Geosynthetic-Reinforced Flexible Pavement using Static Plate Load Testing." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.

Post-doctoral Fellows and Visiting Scholars Supervised (Completed)

- 1) Pugliese, Paula, (Ph.D. from U. of São Paulo, Brazil). Research topic: "Experimental Validation of the Discrete Framework for Fiber Reinforcement." University of Colorado at Boulder (1999 – 2000).
- 2) Cabral, Alexandre, (Ph.D. from McGill University, Canada). Visiting scholar on sabbatical leave from the University of Sherbrooke, Quebec, Canada. University of Colorado at Boulder (2001 – 2002).
- 3) Lins, Amaro H.P. (Ph.D. from Coppe/Oxford). Visiting scholar on sabbatical leave from the Federal University of Pernambuco, Recife, Brazil. University of Colorado at Boulder (2002).
- 4) Liu, Chia-Nan (Ph.D. from University of Texas at Austin). Visiting scholar on sabbatical leave from the Department of Civil Engineering, National Chi-Nan University, Taiwan. University of Texas at Austin (2006).
- 5) Villar, Lucio F. S. (Ph.D. from Pontifical Catholic University of Rio de Janeiro, PUC-Rio, Brazil). Visiting scholar on sabbatical leave from the Federal University of Minas Gerais, Belo Horizonte, Brazil. University of Texas at Austin (Fall 2006-Fall 2007).
- 6) Nogueira, Christianne (Ph.D. from Pontifical Catholic University of Rio de Janeiro, PUC-Rio, Brazil). Visiting scholar on sabbatical leave from the Federal University of Ouro Preto, Minas Gerais, Brazil. University of Texas at Austin (Fall 2006-Spring 2007).
- 7) Pozzato, Annarita (Ph.D. student from University of Trento, Trento, Italy). Visiting scholar in graduate student exchange program from the University of Trento. University of Texas at Austin (Spring 2007).
- 8) Lodi, Paulo (Ph.D. from University of São Paulo, São Carlos, Brazil). Visiting scholar on sabbatical leave from State University of São Paulo at Ilha Solteira, São Paulo, Brazil. University of Texas at Austin (2008 - 2009).
- 9) Li, Ming (Ph.D. student from Tsinghua University, China). Visiting scholar in graduate student exchange program from Tsinghua University, Beijing, China (2010 - 2011).

- 10) Liu, Feiyu (Ph.D. from Zhejiang University, China). Visiting scholar on sabbatical leave from Shanghai University, Shanghai, China. University of Texas at Austin (2011 - 2012).
- 11) Lima, Marlon J. (Ph.D. student from University of Brasilia, Brazil). Visiting scholar from National Council for Scientific and Technological Development (CNPq), University of Texas at Austin (2012-2013).
- 12) Castro, Carmen D. (Ph.D. from Federal University of Rio Grande do Sul, Brazil). Visiting scholar from Center of Mineral Technologies (CETEM), Rio de Janeiro, Brazil (2012 - 2013).
- 13) Saride, Sireesh (Ph.D. from Indian Institute of Science, Bangalore, India). Visiting scholar from Indian Institute of Technology Hyderabad, India (2013).
- 14) Plaisted, Michael (Ph.D. from The University of Texas at Austin. Post-doctoral fellow. University of Texas at Austin (Spring 2015 – Summer 2015).
- 15) Brasil Cavalcante, Andre C. (Ph.D. from Federal University of Brasilia, Brazil). Visiting scholar on sabbatical leave from the Federal University of Brasilia, Brazil. University of Texas at Austin (Fall 2014 – Summer 2015).
- 16) Zhang, Chunlei C. (Ph.D. from Hohai University, China). Visiting scholar on sabbatical leave from HoHai University, China. University of Texas at Austin (Summer 2015 – Summer 2016).
- 17) Zhang, Genbao (Ph.D. Student from Hunan University, China). Visiting scholar in graduate student exchange program. University of Texas at Austin (Fall 2015 - Spring 2016).
- 18) Costa Carina (Ph.D. from University of Sao Paulo at Sao Carlos, Brazil). Visiting scholar from the Federal University of Rio Grande do Norte, Brazil. University of Texas at Austin (Summer 2017).
- 19) Costa Yuri (Ph.D. from University of Sao Paulo at Sao Carlos, Brazil). Visiting scholar from the Federal University of Rio Grande do Norte, Brazil. University of Texas at Austin (Summer 2017).
- 20) Gurbuz, Ayhan (Ph.D. from the University of Massachusetts at Lowell). Visiting scholar on sabbatical leave from Gazi University, Turkey. University of Texas at Austin (Spring 2016 – Fall 2017).
- 21) Morsy, Amr M. (Ph.D. from The University of Texas at Austin). Post-doctoral fellow. University of Texas at Austin (Spring 2018 – Summer 2018).
- 22) Peng, Xin (Ph.D. from The University of Texas at Austin). Post-doctoral fellow. University of Texas at Austin (Spring 2018 – Summer 2018).
- 23) Araujo, Gregorio (Ph.D. from Federal University of Brasilia, Brazil). Visiting scholar on sabbatical leave from the Federal University of Brasilia, Brazil. University of Texas at Austin (Summer 2017 - Summer 2018).
- 24) Costa, Carina (Ph.D. from University of Sao Paulo at Sao Carlos, Brazil). Visiting scholar from the Federal University of Rio Grande do Norte, Brazil. University of Texas at Austin (Summer 2018 – Spring 2019).
- 25) Costa, Yuri (Ph.D. from University of Sao Paulo at Sao Carlos, Brazil). Visiting scholar from the Federal University of Rio Grande do Norte, Brazil. University of Texas at Austin (Summer 2018 – Spring 2019).
- 26) Ahmadi, Hamzeh (Ph.D. student from Ghent University, Belgium). Visiting scholar. University of Texas at Austin (Spring 2019 – Summer 2019).
- 27) Almikati, Abdurrahman (Ph.D. student from American University of Beirut, Lebanon). Visiting scholar. University of Texas at Austin (Fall 2019 – Fall 2020).
- 28) Pierozan, Rodrigo (Ph.D. from University of Brasilia, Brazil). Post-doctoral fellow. University of Texas at Austin (Spring 2019 – Fall 2020).
- 29) Roodi, G. Hossein (Ph.D. from The University of Texas at Austin). Post-doctoral fellow. University of Texas at Austin (Fall 2016 – Summer 2021).
- 30) Chiang, Jung (Ph.D. student from National Taiwan University). Visiting scholar. University of Texas at Austin (Summer 2021 – Spring 2022).
- 31) Correia, Natalia (Ph.D. from University of Sao Paulo at Sao Carlos, Brazil). Visiting scholar from the Federal University of Sao Carlos, Brazil. University of Texas at Austin (Fall 2021 – Summer 2022).
- 32) Portelinha, Fernando (Ph.D. from University of Sao Paulo at Sao Carlos, Brazil). Visiting scholar from the Federal University of Sao Carlos, Brazil. University of Texas at Austin (Fall 2021 – summer 2022).

- 33) Chen, Kangwei (Ph.D. student from Tongji University, China). Visiting scholar. University of Texas at Austin (Fall 2019 – Spring 2022).
- 34) Costa Jr., Sergio Luiz (M.S. Sao Paulo State University). Intern researcher from Nortene Plasticos (Brazil). University of Texas at Austin (Spring 2023).
- 35) Pena da Silva e Silva, Matheus (Ph.D. Student from Federal Universit of São Carlos). Visiting scholar in graduate Student Exchange program with the Federal University of Sao Carlos, Brazil. University of Texas at Austin (Spring 2023 - Summer 2023).
- 36) Kumar, Vinay (Ph.D. from Indian Institute of Technology, Hyderabad). Post-doctoral fellow. University of Texas at Austin (Spring 2019 – Fall 2023).
- 37) Almikati, Abdurrahman (Ph.D. from American University of Beirut, Lebanon). Post-doctoral fellow. University of Texas at Austin (Spring 2022 – Spring 2024).
- 38) Avesani Neto, Jose (Ph.D. from University of Sao Paulo at Sao Carlos, Brazil). Visiting scholar from the University of Sao Paulo, Brazil. University of Texas at Austin (Fall 2023 – Summer 2024).
- 39) Tanga, Abenezer T. (Ph.D. in progress from the University of Brasilia, Brazil). Visiting scholar from the University of Brasilia, Brazil. University of Texas at Austin (Fall 2023 – Summer 2024).
- 40) Jia, Yafei (Ph.D. in progress from Wuhan University, China). Visiting scholar from Wuhan University, China. University of Texas at Austin (Spring 2024 – Summer 2024).
- 41) Acosta, Carlos A. (Ph.D. from The University of Texas at Austin). Post-doctoral fellow. University of Texas at Austin (Summer 2024).
- 42) Marx, David (Ph.D. from The University of Texas at Austin). Post-doctoral fellow. University of Texas at Austin (Summer 2024).
- 43) Andrade Freitas, Bruno. (Ph.D. in progress from the Federal University of Campina Grande, Brazil). Visiting scholar from the Federal University of Campina Grande, Brazil. University of Texas at Austin (Spring 2024 – Summer 2024).

Undergraduate Research Students Supervised (Completed)

- Ashworth, Lindsay (1998 – 1999). Graduated Spring 2000. Undergraduate report: “Solid Waste Landfills in the Boulder Area.” University of Colorado at Boulder.
- Knudsen, Justin (1998 – 2000). Graduated Spring 2000. Undergraduate report: “Large Scale Triaxial Testing Apparatus.” University of Colorado at Boulder.
- Douglas, Preston (2000). Graduated Spring 2000. Undergraduate report: “Tensile Testing of Geosynthetics.” University of Colorado at Boulder.
- McCartney, John (1999 – 2000). Graduated Spring 2002. Undergraduate report: “Evapotranspirative Covers: Bibliography.” University of Colorado at Boulder.
- Argentati, Angela (2001 – 2002). Graduated Spring 2002. Topic: “Performance of a Prototype Embankment Reinforced with Tire Shreds.” University of Colorado at Boulder.
- Vollenweider, Brent (2001 – 2002). Graduated Fall 2002. Topic: “Exothermic Reactions in Tire Shred Embankments.” University of Colorado at Boulder.
- Friedrichsen, Joseph M. (2001 – 2003). Graduated Spring 2003. Topic: “Data Acquisition System for Geotechnical and Centrifuge Testing.” University of Colorado at Boulder.
- Sanchez, Sean (2002 – 2003). Graduated Spring 2003. Topic: “Pullout Testing of Geogrid Reinforcements.” University of Colorado at Boulder.
- Leung, Chun Pong (2004). Topic: “Fiber-reinforced Clay.” The University of Texas at Austin.
- Lopez Holdorf, Rafael (2004). Topic: “Pullout Testing of Geogrids.” The University of Texas at Austin.

Da Costa Leite, Gustavo (2004). Topic: "Mechanical Properties of Tire Bales." The University of Texas at Austin.

Silveira Gomes, Lamartini (2004). Topic: "Engineering Properties of Monterey Sand." The University of Texas at Austin.

Kern, Kristi (Fall 2005). Topic: "Centrifuge Modeling of Unsaturated Soil Properties." The University of Texas at Austin.

Silveira, Bruna (Fall 2005). Topic: "Hydraulic Conductivity of Sands." The University of Texas at Austin.

Lemos, Flavia (Spring 2006). Topic: "Unsaturated Soils." The University of Texas at Austin.

Lazarus, Ernesto (Spring 2006). Topic: "Tensile Testing of Geogrids." The University of Texas at Austin.

Lima, Leonardo (Fall 2006). Topic: "Pullout Testing of Geosynthetics." The University of Texas at Austin.

Kluver, Karl (Spring 2007). Topic: "Tensile Testing of Geogrids." The University of Texas at Austin.

Bosley, Daniel (Summer 2008). Topic: "Testing on Large Scale Pullout Testing Device." The University of Texas at Austin.

Rodrigo, Sashan (Summer 2009). Topic: "Testing on Reduced Scale Pullout Testing Device." The University of Texas at Austin.

Wong, Edward (2008 - 2010). Topic: "Testing on Reduced Scale Pullout Testing Device." The University of Texas at Austin.

Martinez, Alejandro (2010). Topic: "Unsaturated Hydraulic Properties of Highly Plastic Clays." The University of Texas at Austin.

Agarwal, Neil (2010 - 2011). Topic: "Determination of the Moisture Retention Properties of Soils." The University of Texas at Austin.

Knight, Vanessa (2011). Topic: "Swell Testing of High Plasticity Clays." The University of Texas at Austin.

Armstrong, Christian P. (2011-2012). Topic: "Testing on Reduced Scale Pullout Testing Device." The University of Texas at Austin.

Martinez, Jose (2012). Topic: "Pullout Testing of Geogrids under Low Displacements." The University of Texas at Austin.

Tam, Chun Pong (2011 - 2012). Topic: "Testing on Reduced Scale Pullout Testing Device." The University of Texas at Austin.

Lewis, Kemp (2011 - 2012). Topic: "Field Monitoring of Geosynthetic-Reinforced Pavements." The University of Texas at Austin.

Rodriguez, Matthew J. (2012). Topic: "Characterization of Swelling of High Plasticity Clays." The University of Texas at Austin.

Juhl, Jordan (2012). Topic: "One-g Swelling Tests." The University of Texas at Austin.

Smith, Sarah (2012). Topic: "Evaluation of Capillary Barriers." The University of Texas at Austin.

Natale, Steven M. (2013). Topic: "Evaluation of Geosynthetic Capillary Barriers." The University of Texas at Austin.

Snyder, Larson M. (2013). Topic: "Characterization of Swelling Clays." The University of Texas at Austin.

Lawrence, Cameron D. (2013). Topic: "Characterization of Swelling of Highly Plastic Clays." The University of Texas at Austin.

Corte, Diego C. (2014). Topic: "Evaluation of Capillary Barriers." The University of Texas at Austin.

Phillips, James Ryan (2014 - 2015). Topic: "Centrifuge Testing of Expansive Clays." The University of Texas at Austin.

Born, Katie (2014). Topic: "Characterization of Highly Plastic Clays in Texas." The University of Texas at Austin.

Slattery, Doug (2014 - 2015). Topic: "Pullout Testing of Geogrids under Low Displacements." The University of Texas at Austin.

Desai, Jigar (2014 - 2015). Topic: "Stiffness of Soil-Geosynthetic Interaction under Low Displacements." The University of Texas at Austin.

Martins, Ivan C. (2015). Topic: "Database of High Plasticity Clays in Central Texas." The University of Texas at Austin.

Lyra, Marcus M. de C. (2015). Topic: "Soil-Geosynthetic Interaction Characterization." The University of Texas at Austin.

Domingos, Leandro G. C. (2015). Topic: "Swelling Characterization of Soils in Central Texas." The University of Texas at Austin.

Dantas, Mateus M.V. (2015). Topic: "Geosynthetic Capillary Barriers." The University of Texas at Austin.

Veloso, Priscilla (2015). Topic: "Characterization of Soil Hydraulic Properties using Pressure Plate Devices." The University of Texas at Austin.

Angevine, James (2015 - 2016). Topic: "Pullout Testing of Geogrids under Low Displacements." The University of Texas at Austin.

Wait, Christina (2015 - 2016). Topic: "Characterization of Soil Hydraulic Properties using Pressure Plate Devices." The University of Texas at Austin.

Van Hoosier, Kristen J. (2015). Topic: "Swelling Characterization of Soils in Central Texas." The University of Texas at Austin.

Yeates, Elissa (2015). Topic: "Swelling Characterization of Soils in Central Texas." The University of Texas at Austin.

Lewis, Joel (2015). Topic: "Pullout Testing of Geogrids under Low Displacements." The University of Texas at Austin.

Salinas, Daniel (2015 - 2016). Topic: "Characterization of Clays from Central Texas." The University of Texas at Austin.

Neri, Diego (2015 - 2017). Topic: "Stiffness of Soil-Geosynthetic Interaction under Low Displacements." The University of Texas at Austin.

Monteiro, Lucas Melo (2016). Topic: "Characterization of Geosynthetics for Asphalt Reinforcement." The University of Texas at Austin.

Resende, Andre Matoso (2016). Topic: "Pullout Testing of Geogrids under Low Displacements." The University of Texas at Austin.

Gomes da Silva, Bruno Willian (2016). Topic: "Characterization of Interfaces using Direct Shear." The University of Texas at Austin.

Medeiros, Leonardo Souza (2016). Topic: "Soil-geosynthetic Interaction Mechanisms." The University of Texas at Austin.

Araujo, Hudson (2016). Topic: "Characterization of Clays from Central Texas." The University of Texas at Austin.

Pontes, Yan (2016). Topic: "Hydraulic Conductivity of Highly Plastic Clays." The University of Texas at Austin.

Andrade, Isabel (2016). Topic: "Swelling Characterization of Soils in Central Texas." The University of Texas at Austin.

Rossi, Paulo Henrique (2016). Topic: "Field Condition Survey of Pavements over Expansive Clays." The University of Texas at Austin.

Bosa, Augusto Macarini (2016). Topic: "Accelerated Pavement Testing of Geosynthetic-stabilized Bases." The University of Texas at Austin.

Deo, Isha P. (2016 - 2017). Topic: "Swelling Characterization of Soils in Central Texas." The University of Texas at Austin.

Vu, Quyen (2016 - 2017). Topic: "Swelling Characterization of Soils in Central Texas." The University of Texas at Austin.

Aasnes, Cassie (2017). Topic: "Evaluation of the stiffness of soil-geosynthetic interaction under small displacements." The University of Texas at Austin.

Mahal, Amanraj (2016 - 2017). Topic: "Accelerated Pavement Testing of Geosynthetic-stabilized Bases." The University of Texas at Austin.

Wilson, Brooke (2016). Topic: "Characterization of Clays from Central Texas." The University of Texas at Austin.

Garfias, Bryan (2016 - 2017). Topic: "Characterization of Clays from Central Texas." The University of Texas at Austin.

Veatch, Samuel J. (2015 - 2017). Topic: "Pullout Testing of Geogrids under Low Displacements." The University of Texas at Austin.

Pourghaed, Mohammed (2016 - 2017). Topic: "Characterization of Clays from Central Texas." The University of Texas at Austin.

Gonzalez, Jose (2017). Topic: "Evaluation of the stiffness of soil-geosynthetic interaction under small displacements." The University of Texas at Austin.

Regalado, Luis (2017 - present). Topic: "Evaluation of the stiffness of soil-geosynthetic interaction under small displacements." The University of Texas at Austin.

Knott, Alexander (2017). Topic: "Accelerated Pavement Testing of Geosynthetic-stabilized Bases." The University of Texas at Austin.

Sargent, John Paul (2017). Topic: "Accelerated Pavement Testing of Geosynthetic-stabilized Bases." The University of Texas at Austin.

Dang, Shannon (2017). Topic: "Characterization of Clays from Central Texas." The University of Texas at Austin.

Varela, Luis (2017 - 2018). Topic: "Evaluation of the stiffness of soil-geosynthetic interaction under small displacements." The University of Texas at Austin.

Escobedo, Julio (2017 - 2018). Topic: "Swelling Characterization of Soils in Central Texas." The University of Texas at Austin.

Ramirez, Michael (2017 - present). Topic: "Accelerated Pavement Testing of Geosynthetic-stabilized Bases." The University of Texas at Austin.

Jovel, Bryan A. (2017). Topic: "Accelerated Pavement Testing of Geosynthetic-stabilized Bases." The University of Texas at Austin.

Tran, Quoc Co (2018). Topic: "Characterization of Clays from Central Texas." The University of Texas at Austin.

Alvarez, Cristina (2018). Topic: "Accelerated Pavement Testing of Geosynthetic-stabilized Bases." The University of Texas at Austin.

Lamas, Jose J. (2018). Topic: "Characterization of Clays from Central Texas." The University of Texas at Austin.

Guajardo Clark, Mario (2018). Topic: "Evaluation of the stiffness of soil-geosynthetic interaction under small displacements." The University of Texas at Austin.

Rodriguez, Carlos M. (2018). Topic: "Evaluation of the stiffness of soil-geosynthetic interaction under small displacements." The University of Texas at Austin.

Ehioghae, Edesuwa (2018). Topic: "Characterization of Clays from Central Texas." The University of Texas at Austin.

Yip, Pak Lam (2018). Topic: "Accelerated Pavement Testing of Geosynthetic-stabilized Bases." The University of Texas at Austin.

Tam, Chian (2018 - 2019). Topic: "Evaluation of the stiffness of soil-geosynthetic interaction under small displacements." The University of Texas at Austin.

Thomas, Samuel P. (2018 - 2019). Topic: "Accelerated Pavement Testing of Geosynthetic-stabilized Bases." The University of Texas at Austin.

Heye, Van (2018 - 2019). Topic: "Time-dependent Response of Geosynthetics under Soil Confinement." The University of Texas at Austin.

Song, Ji Hyeon (2018 - 2019). Topic: "Characterization of Clays from Central Texas." The University of Texas at Austin.

Lentini, Anthony (2019). Topic: "Evaluation of the stiffness of soil-geosynthetic interaction under small displacements." The University of Texas at Austin.

Robison, Flynn (2019). Topic: "Accelerated Pavement Testing of Geosynthetic-stabilized Bases." The University of Texas at Austin.

Dimas, Ruben (2019). Topic: "Characterization of Clays from Central Texas." The University of Texas at Austin.

Espey, Will (2019). Topic: "Evaluation of the stiffness of soil-geosynthetic interaction under small displacements." The University of Texas at Austin.

Dalton, Maria (2019). Topic: "Characterization of Clays from Central Texas." The University of Texas at Austin.

Bernal, Heraclio (2019). Topic: "Accelerated Pavement Testing of Geosynthetic-stabilized Bases." The University of Texas at Austin.

Chen, Peter (2019). Topic: "Time-dependent Response of Geosynthetics under Soil Confinement." The University of Texas at Austin.

Nguyen, Khanh (2019). Topic: "Evaluation of the stiffness of soil-geosynthetic interaction under small displacements." The University of Texas at Austin.

Viteri, Alexander (2018 - 2020). Topic: "Evaluation of the stiffness of soil-geosynthetic interaction under small displacements." The University of Texas at Austin.

Flores, Sergio (2019 - 2020). Topic: "Characterization of Clays from Central Texas." The University of Texas at Austin.

Pastor, Samuel (2019). Topic: "Accelerated Pavement Testing of Geosynthetic-stabilized Bases." The University of Texas at Austin.

Harris, Sydney (2019 - 2020). Topic: "Evaluation of the unconfined stiffness of geosynthetics." The University of Texas at Austin.

Kim, Alex (2019 - 2020). Topic: "Evaluation of the stiffness of soil-geosynthetic interaction under small displacements." The University of Texas at Austin.

Wang, Xiaohaobo (Eric) (2020 - 2021). Topic: "Evaluation of the stiffness of soil-geosynthetic interaction under small displacements." The University of Texas at Austin.

Rios Trevino, Gerardo (2021 - 2022). Topic: "Evaluation of the stiffness of soil-geosynthetic interaction under small displacements." The University of Texas at Austin.

Ho, Julia (2021 - 2022). Topic: "Characterization of Clays from Central Texas." The University of Texas at Austin.

Lee, Richard (2022). Topic: "Characterization of Clays from Central Texas." The University of Texas at Austin.

Nazar-Arocena, Azucena (2022). Topic: "Characterization of Clays from Central Texas." The University of Texas at Austin.

Parker, Curtis (2022). Topic: "Stiffness of Soil-geosynthetic Composite." The University of Texas at Austin.

Galaviz, Dalila (2022 - 2023). Topic: "Characterization of Clays from Central Texas." The University of Texas at Austin.

Ngo, Anh (2022 - 2023). Topic: "Characterization of Clays from Central Texas." The University of Texas at Austin.

Velasquez, Amy (2023). Topic: "Characterization of Clays from Central Texas." The University of Texas at Austin.

Cuevas, Gabriela (2023 - 2024). Topic: "Characterization of Clays from Central Texas." The University of Texas at Austin.

Gikunda, Victor (2023 - 2024). Topic: "Stiffness of Soil-geosynthetic Composite." The University of Texas at Austin.

Nguyen, Ny (2022 - 2024). Topic: "Accelerated Pavement Testing of Geosynthetic-stabilized Roadways." The University of Texas at Austin.

Lukic, Severin (2024). Topic: "Geotextile-encased Columns." The University of Texas at Austin.

Soliz, Aaron (2023 - 2024). Topic: "Stiffness of Soil-geosynthetic Composite." The University of Texas at Austin.

Ph.D. Supervision in Progress

Yalcin, Yagizer (2020 - present). Topic: "Stiffening of Roadway Unbound Aggregates using Geosynthetics." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.

Saxena, Ashray (2021 - present). Topic: "Advances in Asphalt Reinforcement with Geosynthetics." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.

Turkezer, Mehmet (2023 - present). Topic: "Stabilization Mechanisms of Roadways over Soft Subgrades in Asphalt Reinforcement with Geosynthetics." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.

Zhang, Shuyi (2023 - present). Topic: "Performance of Roadways Founded on Expansive Clays." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.

Tanga, Abenezer T. (2023 - present). Topic: Characterization of Rugosity Parameters in Textured Geomembranes." Co-supervised with Prof. Gregorio Araujo, University of Brasilia, Brazil.

Andrade Freitas, Bruno. (2024 - present). Topic: Interface Shear Characterization of Geosynthetic-reinforced Asphalt Layers." Co-supervised with Prof. Aureliano E. F. L. Lucena, Federal University of Campina Grande, Brazil.

Stinson, Gregory Taylor (2024 - present). Topic: "Distress in Roadways Founded on Expansive Clays: Prediction and Remediation using Geosynthetics." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.

Drazkowski, Miles A. (2024 - present). Topic: "Performance of Semi-Integral Bridge Abutments." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.

Zaid, Mohammad (2024 - present). Topic: "Design Method for Roadways with Unbound Aggregate Layers Stabilized using Geosynthetics." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.

Ali Panahi, Pouya (2025 - present). Topic: "Stabilization of Expansive Clays." Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin.

M.S. Supervision in Progress

Ortega Guzman, Juan J.D. (2024 - present). Topic: "Centrifuge Characterization of Expansive Clays." The University of Texas at Austin.

Cepeda Ochoa, Mirtha Maria (2025 - present). Topic: "Geosynthetic Characterization for Roadway Applications." The University of Texas at Austin.

Post-Doctoral and Visiting Scholar Supervision in Progress

Abid, Mohammed Shakeel (Ph.D. from IIT Hyderabad, India). Post-doctoral fellow. University of Texas at Austin (Summer 2024 - present).

Jallu, Maheshbabu (Ph.D. from NIT Trichy, India). Post-doctoral fellow. University of Texas at Austin (Summer 2024 - present).

Altay, Gokhan (Ph.D. from Osmaniye Korkut Ata University, Turkey). Visiting scholar from Osmaniye Korkut Ata University, Turkey. University of Texas at Austin (Spring 2025 - present).

Undergraduate Research Student Supervision in Progress

Zamora, Mai-Lynn (2022 - present). Topic: "Characterization of Clays from Central Texas." The University of Texas at Austin.

Garza, Savannah (2024 - present). Topic: "Characterization of Clays from Central Texas." The University of Texas at Austin.

Guzman, Pedro X. (2025 - present). Topic: "Flow Through Wicking Geotextiles." The University of Texas at Austin.

Participation in Students' Examination Committees

External member of Christianne Nogueira's Ph.D. examination committee, Pontifical Catholic U. of Rio de Janeiro (PUC-Rio), Brazil (April 24, 1998).

Member of Yong-II Kim's Ph.D. examination committee, U. of Colorado at Boulder (November 19, 1998).

Member of Fu-Jen Chi's M.S. examination committee, U. of Colorado at Boulder (November 11, 1999).

Member of James Kiernan's M.S. examination committee, U. of Colorado at Boulder (April 18, 2000).

Member of Charles Bishop's M.S. examination committee, U. of Colorado at Boulder (April 20, 2000).

Member of Fawzi A. Alkandari's Ph.D. examination committee, U. of Colorado at Boulder (August 2, 2000).

Member of Gordan Gjerapic's Ph.D. examination committee, U. of Colorado at Boulder (January 12, 2001).

Member of Christina Winckler's M.S. examination committee, U. of Colorado at Boulder (April 16, 2001).

Member of Jeremy Whener's M.S. examination committee, U. of Colorado at Boulder (April 17, 2001).

Member of Philip Metzler's M.S. examination committee, U. of Colorado at Boulder (April 18, 2001).

Member of Christopher Slaven's M.S. examination committee, U. of Colorado at Boulder (April 19, 2001).

Member of Lijian Gong's Ph.D. examination committee, U. of Colorado at Boulder (June 15, 2001).

Member of Tae-Hyung Kim's Ph.D. examination committee, U. of Colorado at Boulder (June 22, 2001).

External member of Luiz C. S. Baras' M.S. examination committee, U. of Sao Paulo, Brazil (July 04, 2001).

Member of Susan Batiste's Ph.D. examination committee, U. of Colorado at Boulder (August 20, 2001).

Member of Bryan Hoffman's M.S. examination committee, U. of Colorado at Boulder (November 5, 2001).

Member of Wanja Lee's Ph.D. examination committee, U. of Colorado at Boulder (December 17, 2001).

Member of Young Jae Choi's M.S. examination committee, U. of Colorado at Boulder (April 5, 2002).

Member of Kiung Park's M.S. examination committee, U. of Colorado at Boulder (April 9, 2002).

Member of Kitidech Santichianant's Ph.D. examination committee, U. of Colorado at Boulder (April 19, 2002).

Member of Changsoo Hwang's Ph.D. examination committee, U. of Colorado at Boulder (May 23, 2002).

Member of Taehoon Kim's Ph.D. examination committee, U. of Colorado at Boulder (May 29, 2002).

Member of Seung-Cheol Lee's Ph.D. examination committee, U. of Colorado at Boulder (May 30, 2002).

Member of Louis Ge's Ph.D. examination committee, U. of Colorado at Boulder (May 30, 2002).

External member of Lucio Flavio de Souza Villar's Ph.D. examination committee, Pontifical Catholic U. of Rio de Janeiro (PUC-Rio), Brazil (August 2, 2002).

Member of Jeff Taylor's M.S. examination committee, U. of Colorado at Boulder (November 11, 2002).

External member of Thaveesak Vangpaisal's Ph.D. examination committee, Monash U., Melbourne, Australia (November 19, 2002).

Member of Taehoon Kim's Ph.D. examination committee, U. of Colorado at Boulder (February 13, 2003).

Member of Jeff Wormer's M.S. examination committee, U. of Colorado at Boulder (March 18, 2003).

External member of Paulo M. F. Viana's Ph.D. examination committee, U. of Sao Paulo, Brazil (May 27, 2003).

External member of Leong Kam Weng's Ph.D. examination committee, National U. of Singapore, Singapore, (March 30, 2004).

External member of Leonardo Meneses' M.S. examination committee, U. of Sao Paulo, Brazil (July 9, 2004).

Member of Abhishek Jain's M.S. examination committee, The U. of Texas at Austin (May 2004).

Member of Yong Woo Lee's M.S. examination committee, The U. of Texas at Austin (Fall 2004).

Member of Shadi Sam Najjar's Ph.D. examination committee, The U. of Texas at Austin (May 2005).

Member of Lei Wang's M.S. examination committee, The U. of Texas at Austin (May 2005).

Member of Josiele Patias' M.S. examination committee, U. of Sao Paulo, Brazil (May 2005).

Member of Francis Kakuda's M.S. examination committee, U. of Sao Paulo, Brazil (May 2005).

Member of Celestino Valle-Molina's Ph.D. examination committee, The U. of Texas at Austin (January 2006).

Member of Jennifer Aguettant's M.S. examination committee, The U. of Texas at Austin (May 2006).

Member of Aiman Abusaid's M.S. examination committee, The U. of Texas at Austin (May 2006).

Member of Thelma Kamiji's M.S. examination committee, U. of Sao Paulo, Brazil (June 2006).

Member of Carlos Vinicius Benjamim's Ph.D. examination committee, U. of Sao Paulo, Brazil (June 9, 2006).

Member of Yin-Cheng Lin's Ph.D. examination committee, The U. of Texas at Austin (May 2007).

Member of Kenneth Kniss' M.S. examination committee, The U. of Texas at Austin (July 2007).

Member of Young Jae Choi's Ph.D. examination committee, The U. of Texas at Austin (July 2007).

Member of Jung Jae Lee's Ph.D. examination committee, The U. of Texas at Austin (July 2007).

Member of Rong Luo's Ph.D. examination committee, The U. of Texas at Austin (July 2007).

Member of Yonghoon Lee' M.S. examination committee, The U. of Texas at Austin (July 2007).

Member of Lance Finnefrock's M.S. examination committee, The U. of Texas at Austin (July 2008).

Member of Heejun Youn's Ph.D. examination committee, The U. of Texas at Austin (Fall 2008).

External member of Satosh Rimal's Ph.D. examination committee, Geoengineering Program, Queen's University, Kingston, Ontario, Canada (Fall 2008).

External member of Joel R. Gniel's Ph.D. examination committee, Geotechnical Engineering, Monash University, Melbourne, Australia (Spring 2009).

Member of Rachelle Howell's M.S. examination committee, The U. of Texas at Austin (Summer 2009).

Member of Seong Wan Bae's M.S. examination committee, The U. of Texas at Austin (Summer 2009).

Member of Antonio Marinucci's Ph.D. examination committee, The U. of Texas at Austin (Spring 2010).

Member of Hansic Hwang's M.S. examination committee, The U. of Texas at Austin (Spring 2010).

Member of Nicholas Johnny's M.S. examination committee, The U. of Texas at Austin (Spring 2010).

External member of Matthew R. Sentry's Ph.D. examination committee, Geotechnical Engineering, Monash University, Melbourne, Australia (July 2010).

Member of Karan Ganjoo's M.S. examination committee, The U. of Texas at Austin (Summer 2010).

Member of Ran Chen's Ph.D. examination committee, The U. of Texas at Austin (Summer 2010).

Member of Sang Yeon Seo's Ph.D. examination committee, The U. of Texas at Austin (Summer 2010).

Member of Seung Han Kim's Ph.D. examination committee, The U. of Texas at Austin (Summer 2010).

Member of David Saldana's M.S. examination committee, The U. of Texas at Austin (Summer 2010).

Member of Jeong Yeon Cheon's Ph.D. examination committee, The U. of Texas at Austin (Fall 2010).

Member of Byoung Hooi Cho's Ph.D. examination committee, The U. of Texas at Austin (Spring 2010).

External member of Vinicius Gomes Pereira's M.S. examination committee, U. of Sao Paulo, Brazil (December 08, 2010).

Member of Gergory F. Dellinger's M.S. examination committee, The U. of Texas at Austin (Summer 2011).

Member of Jisuk Yoon's Ph.D. examination committee, The U. of Texas at Austin (Fall 2011).

Member of Rachelle Howell's Ph.D. examination committee, The U. of Texas at Austin (Spring 2013).

Member of Andrew Brown's Ph.D. examination committee, The U. of Texas at Austin (Summer 2013).

Member of Mahdi Heidari Moghadam's Ph.D. examination committee, The U. of Texas at Austin (Summer 2013).

Member of Ching-Hsiang Chen's Ph.D. examination committee, The U. of Texas at Austin (Fall 2013).

Member of James W. West's M.S. examination committee, The U. of Texas at Austin (Spring 2013).

Member of Ghadi Mechleb's M.S. examination committee, The U. of Texas at Austin (Spring 2013).

Member of Amber Spears' M.S. examination committee, The U. of Texas at Austin (Spring 2014).

Member of Andrew J. Jouben's M.S. examination committee, The U. of Texas at Austin (Fall 2014).

Member of Alexander Brewster's M.S. examination committee, The U. of Texas at Austin (Spring 2015).

External member of Hamed Mirmoradii's Ph.D. examination committee, Geotechnical Engineering, Federal University of Rio de Janeiro, COPPE, Rio de Janeiro, Brazil (May 2015).

External member of Iman Hosseinpour 's Ph.D. examination committee, Geotechnical Engineering, Federal University of Rio de Janeiro, COPPE, Rio de Janeiro, Brazil (May 2015).

Member of Matthew Gore's Ph.D. examination committee, The U. of Texas at Austin (Summer 2015).

Member of Ali M. Helwa's Ph.D. examination committee, The U. of Texas at Austin (Spring 2016).

Member of Lucas Borges' M.S. examination committee, University of Brasilia, Brazil (Summer 2016).

Member of Ritika Sagoya's Ph.D. examination committee, The U. of Texas at Austin (Spring 2017).

Member of Hussein Hachem's M.S. examination committee, The U. of Texas at Austin (Spring 2017).

Member of Mateus B.A. Costa's M.S. examination committee, University of Brasilia, Brazil (Summer 2017).

Member of Rodrigo Pierozan's Ph.D. examination committee, University of Brasilia, Brazil (Summer 2018).

Member of Genbao Zhang's Ph.D. examination committee, Hunan University, People's Republic of China (Fall 2018).

Member of Lucas Melo Monteiro's M.S. examination committee, The U. of Texas at Austin (Spring 2019).

Member of Ahmet A. Mert's M.S. examination committee, The U. of Texas at Austin (Spring 2019).

Member of Ghilherme de Avila Mafia's M.S. examination committee, Federal U. of Sao Paulo, Sao Carlos, Brazil (01 September 2020).

Member of Bruna Thays Uhde's M.S. examination committee, University of Passo Fundo, Brazil (19 August 2020).

Member of Jose W. Batista da Silva's M.S. examination committee, Federal University of Sao Carlos, Sao Paulo, Brazil (06 April 2021).

Member of Katie Ward's M.S. examination committee, The University of Texas at Austin (Summer 2021).

Member of Ramin Raeisi's Ph.D. examination committee, Melbourne University, Australia (May 2022).

Member of Larissa L. R. Zipoli's M.S. examination committee, University of São Paulo, São Paulo, Brazil (31 May 2022).

Member of Mateus B. A. da Costa's Ph.D. examination committee, University of Brasilia, Brasilia, Brazil (05 July 2022).

Member of Xiaoyi Chen's Ph.D. examination committee, The U. of Texas at Austin (09 November 2022).

External member of Mohammed Shakeel Abid's Ph.D. examination committee, Geotechnical Engineering, National Institute of Technology Tiruchirappalli, Tamilnadu, India (Summer 2023).

Member of Qiuyu Wang's Ph.D. examination committee, The U. of Texas at Austin (Summer 2023).

Member of Tiago Rodrigues Souza's MS examination committee, Federal University of São Carlos, São Carlos, Brazil (14 June 2024)

Member of Lin Feng's M.S. examination committee, University of Sao Paulo, Sao Paulo, Brazil (09 December 2024)

Member of Anibal Moncada Ramirez's Ph.D. examination committee, Polytechnic University of Catalunya, Barcelona, Spain (October 2025).

Member of Matheus Cardoso dos Santos' Ph.D. examination committee, Federal University of Sao Carlos, Sao Paulo, Brazil (November 2025).

Member of Vitor Borges Ferreira Leite's MS examination committee, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil (November 2025).

Member of Andrea Viera's MS examination committee, Federal University of São Carlos, São Paulo (in progress).

Member of Leandro Gomes da Anunciacao's Ph.D. examination committee, University of Brasilia, Brazil (in progress).

TEACHING

Courses Taught

CE 387R.4 - *Earth Retaining Structures* (Graduate level, The University of Texas at Austin). Types of earth retaining systems, Earth pressure theory, Design of externally stabilized fill walls, Reinforcing

elements, Design of internally stabilized fill walls, Design of internally stabilized cut walls, Design of externally stabilized cut walls, Advances in earth retention systems, Advances in soil reinforcement.

CE 387C - *Geoenvironmental Engineering* (Graduate level, The University of Texas at Austin). The environmental geotechnics field, Compacted clay barriers, Unsaturated soil barriers, Geosynthetic barriers, Contaminants and solid waste, Contaminant transport through barrier systems, Liquid drainage layers, Stability and settlement of landfills, Emerging aspects in geoenvironmental engineering, Remediation of contaminated ground.

CE 357 - *Geotechnical Engineering* (Undergraduate level, The University of Texas at Austin). Basic characteristics of geological materials; soil classifications; physical, mechanical, and hydraulic properties; the effective stress principle; seepage, consolidation; stress distribution; settlement analysis; shear strength.

CE 375 - *Earth Slopes and Retaining Structures* (Undergraduate level, The University of Texas at Austin). Soil compaction: laboratory compaction tests, properties of compacted soils, compaction specifications; Seepage and drainage: principles of water flow through soils, water pressures and stresses in soil, flow net solutions; Slope stability: principles of soil shear strength, fundamentals of limit equilibrium analyses, ordinary method of slices; Earth pressures and retaining structures: at-rest earth pressures, Rankine active and passive pressures, retaining structures, modes of instability.

CE 397 - *Geotechnical Engineering Seminar* (Graduate level, The University of Texas at Austin). Compilation of effective summary reports and abstracts; Evaluation of motivations and objectives in geotechnical research; Scope and organization of research reports; Critical evaluation of the literature; Presentation of research results; Analysis of results; Compilation of conclusions.

CVEN 3708 - *Geotechnical Engineering I* (Undergraduate level, University of Colorado at Boulder). Basic characteristics of geological materials; soil and rock classifications; physical, mechanical, and hydraulic properties; the effective stress principle; soil and rock improvement; seepage, consolidation; stress distribution; settlement analysis.

CVEN 4728/5728 - *Foundation Engineering* (Undergraduate level, University of Colorado at Boulder). Geotechnical design of shallow and deep foundation, including spread footings, mats, driven piles, and drilled piers. Coverage includes bearing capacity, settlement, group effects, and lateral load capacity of the various foundation types. Analysis of pile behavior using wave equation and dynamic monitoring methods.

CVEN 5688 - *Environmental Geotechnics* (Graduate level, University of Colorado at Boulder). Regulatory framework. Solid waste. Soils in waste containment. Geosynthetics in waste containment. Waste containment systems. Stability of landfills. Contaminant transport through barrier systems. Mining geotechnics. Remediation of contaminated ground.

CVEN 5678 - *Soil Improvement and Reinforcement* (Graduate level, University of Colorado at Boulder). Principles of in-situ soil improvement: vibrocompaction, heavy tamping and blasting, consolidation by pre-loading, electro-osmosis, injection and grouting, admixture stabilization, thermal stabilization. Geosynthetics in reinforcement applications. Retaining structures: design overview, external and internal stability. Reinforced soil retaining walls, reinforced soil slopes, reinforced embankments on soft foundations, new concepts in soil reinforcement.

Short Courses Taught

Short course on *Geosynthetics in the Design of Geoenvironmental Systems*. Geotechnical Program, Federal University of Ouro Preto, Ouro Preto, Minas Gerais, Brazil, April 27 – 28, 1998.

Short course on *Constructing with PVC Geomembranes*, PVC Geomembrane Institute. Component taught: “Design of Exposed Geomembrane to Wind Action,” Table Mountain Inn, Golden, Colorado, March 17, 2000.

Short course on *Environmental Geotechnics*, Geotechnical Engineering Department, University of Sao Paulo, Sao Carlos, Brazil, June 12 – 16, 2000.

Short course on *Geosynthetic-Reinforced Soil Structures*. Component taught: “New Advances in Soil Reinforcement,” GeoDenver 2000 Congress, Denver, Colorado, August 3, 2000.

Short course on *Environmental Geotechnics*, Civil Engineering Department, University of Cordoba, Cordoba, Argentina, July 12 – 14, 2001.

Short course on *Environmental Geotechnics*, Doctoral Program in Civil Engineering, School of Civil Engineering, Technical University of Catalonia, Barcelona, Spain, June 17 – 21, 2002.

Short course on *Waste Containment Drainage Systems and Drainage Geocomposite Design*, Technology Transfer Seminar, Four Points Sheraton, Austin, TX, November 11, 2003.

Short course on *Geosynthetics in Environmental Applications*, Sao Paulo Institute of Technology, Sao Paulo, Brazil, June 1, 2005.

Short course on *Geosynthetics in Hydraulic Applications*. Yokohama, Japan, September 18, 2006.

Short course on *Geosynthetics in Pavement Applications*. Mexican Society of Transportation, Mexico City, November 28, 2007.

Short course on *Geosynthetic-Reinforced Pavement*. *GeoAmericas 2008*, the First PanAmerican Geosynthetics Conference and Exhibition, Cancún, Mexico, March 03, 2008.

Short course on *Geosynthetic-Reinforced Pavement* (in Spanish). *GeoAmericas 2008*, the First PanAmerican Geosynthetics Conference and Exhibition, Cancún, Mexico, March 03, 2008.

Short course on *Geosynthetics in Waste Containment Applications*. *Geosynthetics Asia 2008*, the Fourth Asian Conference on Geosynthetics, Shanghai, China, June 16, 2008.

Short course on *Earth Retaining Structures*. Geotechnical Engineering Program, University of Sao Paulo, Sao Carlos, August 5, 2008.

Short course on *Use of Geosynthetics to Reinforce Unbound Base Courses*. Texas Department of Transportation, Bryan District, Bryan, Texas, September 8, 2008.

Short course on *Beneficial Use of Scrap Tire Bales in Highway Projects*. Texas Department of Transportation, Riverside Campus, Austin, Texas, September 18, 2008.

Short course on *Design of Geocomposite Drainage Layers*. Structure, Testing, Performance and Application of Drainage Geocomposites in Landfills, Texas Research International (TRI), Austin, Texas, November 5, 2008.

Short course on *Design and Construction of Cover Systems*. Geosynthetics 2009 Conference, Salt Lake City, Utah, February 26, 2009.

Short course on *Design of Transportation Systems using Geosynthetics*. Mexican Institute of Transportation, Querétaro, Mexico, August 10-11, 2010.

Short course on *Design of Drainage Systems*. Structure and Drainage Design with Geosynthetic Drains, Texas Research International (TRI), Austin, Texas, May 02, 2011.

Short course on *Geosynthetic Applications*. Borges Cultural Center, Buenos Aires, Argentina, June 13-14, 2011.

Short course on *Introduction to Geosynthetics*. Engineering Laboratory, Maputo, Mozambique, July 21, 2011.

Short course on *Design of Geosynthetic-reinforced Cover Systems for Waste Containment*. *GeoAmericas 2012*, the Second Pan-American Geosynthetics Conference and Exhibition, Lima, Peru, 02 May, 2012.

Short course on *Introduction to Geosynthetics*. Ministry of Infrastructure, Cordoba, Argentina, June 26, 2012.

Short course on *Geosynthetics for Earth Retaining Structures*. Department of Civil Engineering, Universidad de los Andes, Bogotá, Colombia, July 23-27, 2012.

Short course on *Design of Waste Containment Facilities using Geosynthetics*. 5th European Geosynthetics Congress, EuroGeo5, Valencia, Spain, September 16, 2012.

Short course on *Geosynthetics. Educate the Educators* Program, International Geosynthetics Society, Carlos Paz, Argentina, May 26-27, 2013.

Short course on *Geosynthetics in Roadway Applications*, Second African Regional Conference on Geosynthetics, GeoAfrica 2013, Accra, Ghana, 18 November 2013.

Short course on *Geosynthetics. Educate the Educators* Program, International Geosynthetics Society, Cieszyn, Poland, June 23-24, 2014.

Short course on *Geosynthetics. Educate the Educators* Program, International Geosynthetics Society, Lisbon, Portugal, June 29-30, 2015.

Short course on *Geosynthetics. Educate the Educators* Program, International Geosynthetics Society, Austin, Texas, July 28-29, 2015.

Short course on *Geosynthetics for Soil Reinforcement*, XV Pan-American Conference on Soil Mechanics and Geotechnical Engineering, Buenos Aires, Argentina, November 15, 2015.

Short course on *Design and Construction of MSEW and RSS*, NHI Course No. 132042, Austin, TX, February 23-25, 2016.

Short course on *Geosynthetics in Pavement Systems* (in Spanish), 3rd Pan-American Conference on Geosynthetics, GeoAmericas 2016, Miami, FL, April 11, 2016.

Short course on *Geosynthetics in Pavement Systems*, 3rd Pan-American Conference on Geosynthetics, GeoAmericas 2016, Miami, FL, April 12, 2016.

Short course on *Geosynthetics. Educate the Educators* Program, International Geosynthetics Society, Belo Horizonte, Brazil, July 27-29, 2016.

Short course on *Prediction of Clay Swelling and PVR Using Centrifuge Testing*, 90th Annual Transportation Short Course, Texas Department of Transportation, College Station, Texas, October 11, 2016.

Short course on *Pavement Distress and Repair Alternatives over Highly Expansive Soils*, 1st Global CINTRA'S Technical Webinar Series, CINTRA Technical Office, Austin, Texas, 18 April 2017.

Short course on *Geosynthetics. Educate the Educators* Program, International Geosynthetics Society, Kingston, Ontario, Canada, December 4-5, 2017.

Short course on *Hydraulic Behavior of Unsaturated Soils*, Geotechnical Engineering Program, Hunan University, Changsha, People's Republic of China, 25 December 2018.

Short course on *Geosynthetics. Educate the Educators* Program, International Geosynthetics Society, Lima, Peru, January 14-16, 2019.

Short course on *Geosynthetics. Educate the Educators* Program, International Geosynthetics Society, Gold Coast, Australia, February 20-21, 2019.

Short course on *Geosynthetics. Educate the Educators* Program, International Geosynthetics Society, Puebla, Mexico, July 04-05, 2019.

Short course on *Design of Walls, Earth Slopes, and Roadways using Geosynthetics*, Costa Rican Geotechnical Society, San Jose, Costa Rica, September 24-25, 2019.

Short course on *Geosynthetics for the Design of Pavements, Railways and Airfields*, Geo-Structural Aspects of Pavements, Railways and Airfields 2019, Colorado Springs, CO, November 04, 2019.

Short course on *Mechanically Stabilized Soil Walls*, (Delivered online), Mexican Secretary of Transportation and Communications, Mexico City, Mexico, 27-30 April 2020.

Short course on *Reinforced Soil Walls*, (Delivered online), Mexican Association of Highways (AMIVTAC), Mexico, 15-17 July 2020.

Short course on *Geosynthetics. Educate the Educators* Program (Online Brazilian edition), International Geosynthetics Society, Sao Paulo, Brazil, August 24-27, 2020.

Short course on *Geosynthetics for the Design of Pavements, Railways and Airfields* (Delivered online), GeoAmericas 2020, the 4th Pan American Conference on Geosynthetics, streaming from Rio de Janeiro, Brazil, 29 October 2020.

Short course on *Geosynthetics. Educate the Educators Program* (Online worldwide edition), International Geosynthetics Society, International Program, April 2021.

Short course on *Geosynthetics in Transportation Geotechnics* (Delivered online), ICTG 2021, 4th International Conference on Transportation Geotechnics, streaming from Chicago, IL, 24 May 2021.

Short course on *Geosynthetics* (Delivered online), ISSMGE Virtual University, International Society of Soil Mechanics and Geotechnical Engineering, 11 July 2021.

Short course on *Geosynthetics. Educate the Educators Program* (Online Brazilian edition), International Geosynthetics Society, Sao Paulo, Brazil, August 15-26, 2021.

Short course on *Geosynthetics. Educate the Educators Program* (Delivered online), International Geosynthetics Society, Santiago, Chile, October 04-15, 2021.

Short course on *Geosynthetic Reinforced Soil Structure Design and Construction: Slopes, Walls and Roads*, Geo-University 2022, Texas Research International, Austin, Texas, April 06-07, 2022.

Short course on “Advances in Design and Construction with Geosynthetics for Retaining Structures, Slopes, and Roadways.” GeoANZ#1 Conference on Advances in Geosynthetics, Australian Society of Geosynthetics, Brisbane, Australia, 07 June 2022.

Short course on *Geosynthetics. Educate the Educators Program*, International Geosynthetics Society, Bogotá, Colombia, July 28-29, 2022.

Short course on *Geosynthetic Design for Roadways, Railways and Airfields*, EuroGeo7, Seventh International Conference on Geosynthetics, Warsaw, Poland, 04 September 2022.

Short course on *Geosynthetics. Educate the Educators Program*, International Geosynthetics Society, Sao Paulo, Brazil, November 17-19, 2022.

Workshop on *Geosynthetic Stabilization of Granular Layers in Paved Roads*, Geosynthetics 2023 Conference, Kansas City, MO, 06 February 2023.

Short course on *Geosynthetics. Educate the Educators Program*, International Geosynthetics Society, Marrakesh, Morocco, 07 June 2023.

Short course on *Geosynthetic Design for Roadways and Railways*, Australasian Society of Geosynthetics, Auckland, New Zealand, 26 June 2023.

Short course on *Geosynthetic Design for Roadways and Railways*, Australasian Society of Geosynthetics, Melbourne, Australia, 28 June 2023.

Short course on *Geosynthetic Design for Roadways and Railways*, Australasian Society of Geosynthetics, Brisbane, Australia, 30 June 2023.

Short course on *Development of Integral/Semi-integral Abutments for Texas Bridges*. Texas Department of Transportation, Austin, Texas, 26 September 2023.

Short course on *Geosynthetics and Other Solutions for Weak Subgrades*, Canadian Geotechnical Conference, GeoSaskatoon 2023, Saskatoon, Canada, 01 October 2023.

Short course on *Geosynthetic Design for Roadways - and Implications for Railways and Airfields – GeoAmericas 2024*, Toronto, Canada, 28 April 2024.

Short course on *Evaluation of Geogrids for Asphalt Pavement Construction*. Texas Department of Transportation, Austin, Texas, 12 August 2024.

Short course on *Geotechnical Design using Geosynthetics*, Department of Civil Engineering, University of Chile, Santiago, Chile, 11-26 October 2024.

Short course on *Geosynthetics. Educate the Educators Program*, International Geosynthetics Society, Xanthi, Greece, 18-19 October 2024.

Short course on *Geosynthetic in Roadway Design – Geotechnical Frontiers 2025*, Louisville, KY, 02 March 2025.

Short course on *Geosynthetic in Roadway Design*, Maintenance Division, Texas Department of Transportation (TxDOT), Austin, TX, 07 May 2025.

Short course on *Geosynthetics. Educate the Educators Program*, International Geosynthetics Society, Bogotá, Colombia, June 12-13, 2025.

Short course on *Geotechnical Design using Geosynthetics*, Department of Civil Engineering, University of Chile, Santiago, Chile, 22 August-05 September 2025.

Short course on *Geosynthetic in Roadway Design, XXVII Argentine Congress of Soil Mechanics and Geotechnical Engineering*, XXVII CAMSIG, Resistencia, Argentina, 05 November 2025.

Participation in Activities of the National Academies

National Academy of Science's Fifth Japanese-American *Frontiers of Science Symposium*, Beckman Center, Irvine, California, December 6 – 8, 2002.

National Academy of Engineering's Ninth Annual Symposium on *Frontiers of Engineering*, Beckman Center, Irvine, California, September 18 – 20, 2003.

National Research Council of the National Academies, Workshop of the *Committee on Geological and Geotechnical Engineering in the New Millennium: Opportunities for Research and Technological Innovation*, Beckman Center, Irvine, California, February 4 – 5, 2004.

Participation in Teaching Development Programs

Faculty Teaching Excellence Program, The University of Colorado at Boulder, Office of the Vice Chancellor for Academic Affairs, *The Summer Institute on Technology, Scholarship, and New Media Pedagogy*, Boulder, Colorado, May 24 – June 4, 1999.

New Century Scholars: Teaching, Learning, and Academic Career, sponsored by the National Science Foundation, Stanford University, California, August 1 – 7, 1999.

International Association of Foundation Drilling, *Workshop for Civil Engineering Faculty*, Colorado State University, Fort Collins, Colorado, July 9 – 15, 2000.

Workshop on Role of Geotechnical Physical Modeling in Education, sponsored by the National Science Foundation, Memorial University of Newfoundland, St. John's, Canada, July 9, 2002.

MEMBERSHIP IN PROFESSIONAL AND HONORARY SOCIETIES

Member, International Geosynthetics Society (IGS)

Member, International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE)

Fellow, American Society of Civil Engineers (ASCE)

Member, North American Geosynthetics Society (IGS-NA)

Member, International Association of Foundation Drilling (ADSC)

Member, American Society for Testing and Materials International (ASTM)

SERVICE ACTIVITIES

Services in National Professional Organizations

Chair, *Awards Committee*, Geo-Institute of the American Society of Civil Engineers (ASCE) (2025 – present).

Past-Chair and member of the Council, *International Activities Council*, Geo-Institute of the American Society of Civil Engineers (ASCE) (2015 – present).

Member, *Environmental Geosynthetics Technical Committee*, Geo-Institute of the American Society of Civil Engineers (ASCE) (2015 – present).

Member, *Unsaturated Soils Technical Committee*, Geo-Institute of the American Society of Civil Engineers (ASCE) (2008 – present).

Member, *Environmental Geotechnics Technical Committee*, Geo-Institute of the American Society of Civil Engineers (ASCE) (1998 – present).

Member, *Awards Committee*, Geo-Institute of the American Society of Civil Engineers (ASCE) (2024 – 2025).

Member, Advisory Board, *Southern Plains Regional Transportation Center* (SPTC) (2013 - 2022).

Liaison Board Member, *North American Geosynthetics Society*, IGS North America (2019 – 2021).

Chair, *Geosynthetics Technical Committee*, Geo-Institute of the American Society of Civil Engineers (ASCE) (2015 – 2020).

Co-Chair of the 2017 Geo-Congress, *Geotechnical Frontiers 2017*, held in Orlando, Florida, in March 2017, Geo-Institute of the American Society of Civil Engineers (ASCE) (2015 – 2017).

Chair, *International Activities Council*, Geo-Institute of the American Society of Civil Engineers (ASCE) (2008 – 2015).

Vice-Chair, *Geosynthetics Committee*, Geo-Institute of the American Society of Civil Engineers (ASCE) (2004 – 2015).

Corresponding Member, *International Activities Committee*, American Society of Civil Engineers (ASCE) (2009 – 2015).

Member, *Transportation Research Board (TRB) Subcommittee on Latin American Activities*, Committee A0010, *International Activities* (2005 – 2012).

Member, Transportation Research Board (TRB) Committee AFP40, *Physicochemical Phenomena in Soils* (2004 – 2011).

Vice-President, *North American Geosynthetics Society (NAGS)* (2005 – 2011).

Member, *International Activities Council*, Geo-Institute of the American Society of Civil Engineers (ASCE) (2006 – 2008).

Co-Chair, *Center for Polymers in Hydraulic Structures (CPHyS)*, *Geosynthetic Institute (GSI)*, Folsom, Philadelphia (2003 – 2008).

Member, *Alternative Landfill Technologies Team*, Interstate Technology Regulatory Council (ITRC) (2002 – 2007).

Secretary of the 2005 Geo-Congress (*Geo-Frontiers 2005*), held in Austin, Texas, in January 2005, Geo-Institute of the American Society of Civil Engineers (ASCE) and the Geosynthetics Manufacturers Association (GMA).

Member, *Task Force for Geotechnical Student Competition*, Geo-Institute of the American Society of Civil Engineers (ASCE) (2002 – 2005).

Chair, Sub-committee on *Reinforced Soil Slope Design*, Los Angeles Committee on Soil Reinforcement, American Society of Civil Engineers (1999 – 2003).

Member, *Task Force for Geo-Activity*, Geo-Institute of the American Society of Civil Engineers (ASCE) (2002 – 2003).

Member, *Task Force on Education*, Geo-Institute of the American Society of Civil Engineers (ASCE). (2000 – 2001).

Member of the Steering Committee, *GeoDenver 2000 Congress*, held in Denver, Colorado, in August 2000 Geo-Institute of the American Society of Civil Engineers (ASCE).

Chair, Student Activities Committee, 2000 Geo-Congress (*GeoDenver 2000*), held in Denver, Colorado, in August 2000, Geo-Institute of the American Society of Civil Engineers (ASCE).

Services in International Professional Organizations

Vice-Chair, Technical Committee on Stabilization, *International Geosynthetics Society* (IGS) (2017 – present).

Trustee, Member of the Executive Board, *International Geosynthetics Society Foundation* (2019 – present).

Member, American Society for Testing and Materials International (ASTM) Committee *D35 on Geosynthetics* (2010 – present).

Member, American Society for Testing and Materials International (ASTM) Committee *D18 on Soil and Rock* (2022 – present).

Member, Technical Committee TC218, Reinforced Fill Structures, *International Society of Soil Mechanics and Geotechnical Engineering* (ISSMGE) (2016 – present).

Chair, Advisory Committee, *Fifth Pan-American Conference on Geosynthetics*, *GeoAmericas 2024*, to be held in Toronto, Canada, in April 2024, International Geosynthetics Society (2022 – 2024).

Member of the International Advisory Board, *Fourth African Conference on Geosynthetics*, *GeoAfrica 2023*, held in Cairo, Egypt, in February 2023, International Geosynthetics Society (2021 – 2023).

Member of the International Advisory Committee, *Twelfth International Conference on Geosynthetics*, *12 ICG*, held in Rome, Italy, in September 2023, International Geosynthetics Society (2020 – 2023).

Member of the International Advisory Committee, *Seventh Asian Regional Conference on Geosynthetics*, *GeoAsia 2022*, held in Taipei, Taiwan, October 31-November 04, 2022, International Geosynthetics Society (2019 – 2022).

Member of the Scientific Committee, *Seventh European Conference on Geosynthetics*, *EuroGeo*, held in Warsaw, Poland, in September 2022, International Geosynthetics Society (2019 – 2022).

Member of the Advisory Committee, *Third Pan-American Conference on Unsaturated Soils*, *PanAm UNSAT 2021*, held in Rio de Janeiro, Brazil, in July 2021, International Society of Soil Mechanics and Geotechnical Engineering (2019 – 2021).

Member of the Scientific Committee, *4th International Conference on Transportation Geotechnics*, *ICTG 2021*, held in Chicago, IL, May 2021, International Society of Soil Mechanics and Geotechnical Engineering (2019 – 2021).

Chair, Task Force on Outreach, *Fourth Pan-American Conference on Geosynthetics*, *GeoAmericas 2020*, held in Rio de Janeiro, Brazil, in October 2020, International Geosynthetics Society (2019 – 2020).

Member of the International Advisory Committee, *Fourth Pan-American Conference on Geosynthetics*, *GeoAmericas 2020*, held in Rio de Janeiro, Brazil, in October 2020, International Geosynthetics Society (2018 – 2020).

Member of the International Advisory Committee, *Transportation Soil Engineering in Cold Regions*, *TransSoilCold 2019*, held in St. Petersburg, Russia, in May 2019, International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE) (2018 – 2019).

Chair, Mercer Lecture Selection Committee, *International Geosynthetics Society* (IGS) and *International Society of Soil Mechanics and Geotechnical Engineering* (ISSMGE) (2017 – 2019).

Member of the International Advisory Committee, *8th International Congress on Environmental Geotechnics*, Hangzhou, China, October 2018, International Society of Soil Mechanics and Geotechnical Engineering (2016 – 2018).

Officer, Immediate Past-president and member of the IGS Executive Board, *International Geosynthetics Society* (IGS) (2014 – 2018).

Chair, Technical Committees Coordination Board, *International Geosynthetics Society* (IGS) (2014 – 2018).

Council Member, *Federation of International Geo-Societies* (FedIGS) (2014 – 2018).

Member, Pan-American Activity Committee, *International Geosynthetics Society* (IGS) (2010 – 2018).

Member, Education Committee, *International Geosynthetics Society* (IGS) (2004 – 2018).

Member of the Council, *International Geosynthetics Society* (IGS) (2004 – 2018).

Member of the Organizing Committee, *4th International Symposium on Geo-mechanics from Micro to Macro in Research and Practice*, IS-Atlanta, held in Atlanta, Georgia, in September 2018, International Society of Soil Mechanics and Geotechnical Engineering (2017 – 2018).

Member of the International Advisory Committee, *11th International Conference on Geosynthetics*, held in Seoul, Korea, in September 2018, International Geosynthetics Society (2016 – 2018).

Member of the International Promotions Committee, *11th International Conference on Geosynthetics*, held in Seoul, Korea, in September 2018, International Geosynthetics Society (2016 – 2018).

Member of the Technical Committee, PanAm-UNSAT 2017, the *2nd Pan American Conference on Unsaturated Soils*, held in Dallas, Texas, November 2017, International Society of Soil Mechanics and Geotechnical Engineering (2016 – 2017).

Member of the International Advisory Committee, *International Conference on Transportation Geotechnics and Geoecology*, held in St. Petersburg, Russia, in May 2017, International Society of Soil Mechanics and Geotechnical Engineering (2016 – 2017).

Member of the Technical Committee, EuroGeo6, the *6th European Geosynthetics Congress*, held in Ljubljana, Slovenia, September 2016, International Geosynthetics Society (2013 – 2016).

Member of the International Advisory Committee, *3rd International Conference on Transportation Geotechnics*, *3rd ICTG*, held in Guimaraes, Portugal, September 2016, International Society of Soil Mechanics and Geotechnical Engineering (2014 – 2016).

Member of the Advisory Committee, GeoAmericas 2016, the *3rd Pan-American Geosynthetics Conference*, held in Miami, Florida, April 2016, International Geosynthetics Society (2013 – 2016).

President of the *International Geosynthetics Society* (IGS) (2010 – 2014).

Chair, International Advisory Committee, *10th International Conference on Geosynthetics*, held in Berlin, Germany, in September 2014, International Geosynthetics Society and the German Geotechnical Society (2011 – 2014).

Member of the International Advisory Committee, *8th International Conference on Physical Modeling in Geotechnics*, ICPMG 2014, held in Perth, Australia, January 2014, International Society of Soil Mechanics and Geotechnical Engineering (2012 – 2014).

Member of the International Advisory Committee, *XV Pan American Conference on Soil Mechanics and Geotechnical Engineering*, held in Buenos Aires, Argentina, November 2015, International Society of Soil Mechanics and Geotechnical Engineering (2012 – 2015).

Member of the International Advisory Committee, *8th International Conference on Physical Modeling in Geotechnics*, ICPMG 2014, held in Perth, Australia, January 2014, International Society of Soil Mechanics and Geotechnical Engineering (2012 – 2014).

Member of the International Advisory Committee, *3rd International Conference on Geotechnical Engineering*, ICGE'13, held in Tunis, Tunisia, January 2013 (2012 – 2013).

Honorary Member of the Advisory Committee, GeoAmericas 2012, the *2nd Pan-American Geosynthetics Conference*, held in Lima, Peru, May 2012, International Geosynthetics Society (2010 – 2012).

Member of the Technical Committee, *XIV Pan-American Conference on Soil Mechanics and Geotechnical Engineering*, held in Toronto, Canada, October 2011, International Society of Soil Mechanics and Geotechnical Engineering (2009 – 2011).

Member of the International Advisory Committee, UNSAT 2010, the *5th International Conference on Unsaturated Soils*, held in Barcelona, Spain, September 2010, International Society of Soil Mechanics and Geotechnical Engineering (2008 – 2010).

Vice-President of the *International Geosynthetics Society* (IGS) (2006 – 2010).

Chair, North American Activities Committee, *International Geosynthetics Society* (IGS) (2004 – 2010).

Chair, International Promotions Committee, *9th International Conference on Geosynthetics*, held in Guarujá, Brazil, May 2010, International Geosynthetics Society (2009 – 2010).

Member, South American Activity Committee, *International Geosynthetics Society* (IGS) (2004 – 2010).

Member of the International Advisory Committee, *International Symposium on New Techniques for Design and Construction in Soft Clays*, held in Guarujá, Brazil, May 2010, International Geosynthetics Society and the International Society of Soil Mechanics and Geotechnical Engineering (2009 – 2010).

Member of the International Advisory Committee, *7th International Conference on Physical Modeling in Geotechnics*, ICPMG 2010, held in Zurich, Switzerland, June 2010, International Society of Soil Mechanics and Geotechnical Engineering (2009 – 2010).

Member of the International Advisory Committee, *GeoAfrica 2009*, the 1st African Conference on Geosynthetics, held in Cape Town, South Africa, October 2009, International Geosynthetics Society (2008 – 2009).

Member of the International Advisory Committee, 12th IACMAG Conference, *International Association of Computer Methods and Advances in Geomechanics*, held in Goa, India, October 2008 (2005 – 2008).

Conference Chair, *GeoAmericas 2008: The First Pan-American Geosynthetics Conference and Exhibition*, held in Cancún, Mexico, March 2008, International Geosynthetics Society (IGS) (2005 – 2008).

Member of the International Advisory Committee, *Geosynthetics Asia 2008*, the 4th Asian Conference on Geosynthetics, held in Shanghai, China, June 2008, International Geosynthetics Society (2006 – 2008).

Member of the Technical Committee, *Experus 2005, International Symposium on Advanced Experimental Unsaturated Soil Mechanics*, held in Trento, Italy, June 2005 (2004 – 2005).

Member of the Technical Committee, *UNSAT2006: Third International Conference on Unsaturated Soils*, held in Carefree, Arizona, June 2006, International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE) (2005 – 2006).

Core member, *Earth Reinforcement Committee* (TC9), International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE) (2000 – 2006).

Member, Task Force 1 (Design Basics and Performance Criteria), *Environmental Geotechnics Committee* (TC 5), International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE) (2000 – 2006).

Member, Task Force 3 (Innovative Barrier and Barrier Materials), *Environmental Geotechnics Committee* (TC 5), International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE) (2000 – 2006).

Services in Editorial Board of Technical Journals

Member of the Editorial Board, *Geosynthetics International*, Institution of Civil Engineers Publishing, an official journal of the International Geosynthetics Society (IGS) (2003-present).

Member of the Editorial Board, *Geotextiles and Geomembranes*, Elsevier, an official journal of the International Geosynthetics Society (IGS) (2007-present).

Member of the Editorial Board, *International Journal of Geosynthetics and Ground Engineering*, Springer (2017-present).

Member of the Advisory Board, *Journal of GeoEngineering*, Taiwan Society of Geotechnical Engineering (2011-present).

Member of the Editorial Board, *Geotecnia*, Portuguese, Brazilian and Spanish Geotechnical Societies (2016-present).

Member of the Editorial Board, *Transportation Geotechnics*, Elsevier (2021-2024).

Member of the Editorial Board, *Soils and Rocks*, Brazilian and Portuguese Geotechnical and Engineering Geology Societies (2006-2020).

Member of the Editorial Board, *Environmental Geotechnics*, Institution of Civil Engineers Publishing, UK (2012-2016).

Guest Editor, *Geosynthetics International*, Special Issue on Unsaturated Geosynthetics, Vol. 17, No. 5, October 2010.

Member of the Editorial Board, *Journal of Geotechnical and Geoenvironmental Engineering*, American Society of Civil Engineers (ASCE) (1995-2007).

Services in the Organization of Technical Events

Chair, *International Workshop on Advances in Pavement Stabilization Using Geosynthetics*, Hyderabad, India, 03 October 2024.

Panelist in Session “Earthwork and Roadways,” (Online Participation) *Workshop on the Uses of Geosynthetics in the Amazon Region*, GEOSSAM 2024, Manaus, Brazil, 27 August 2024.

Conference Godfather (Mentor), *Geosynthetics Conference for Young Professionals*, South African Society on Geosynthetics, Irene, Pretoria, South Africa, 04-05 July 2024.

Chair of Session “Panel Discussion: Geomembrane Quality Control.” *Geosynthetics Conference for Young Professionals*, South African Society on Geosynthetics, Irene, Pretoria, South Africa, 04 July 2024.

Panelist in Session “Geomembrane Damage During Oil and Gas Operations: Another Perspective on a Dispute,” *Fifth Pan-American Conference on Geosynthetics, GeoAmericas 2024*, 01 May 2024.

Chair of Session “Roads and Railways 1.” Fifth Pan-American Conference on Geosynthetics, *GeoAmericas 2024*, Toronto, Canada, 29 April 2024.

Panelist and Presenter “Diversity in the International Geosynthetics Society (IGS)” *Twelfth International Conference on Geosynthetics*, Rome, Italy, 19 September 2023.

Chair of Session “Geosynthetics Properties and Testing,” *Twelfth International Conference on Geosynthetics*, Rome, Italy, 19 September 2023.

Chair of Session “Geosynthetics,” *Geo-Congress 2023*, Los Angeles, California, March 26-29, 2023.

Co-organizer of Sessions *Geosynthetic Stabilization*, *GeoAfrica 2023, Fourth African Regional Conference on Geosynthetics*, International Geosynthetics Society (IGS), Cairo, Egypt, 22 February 2023.

Co-chair of Session, Workshop on *Geosynthetic Stabilization of Granular Layers in Paved Roads*, Geosynthetics 2023 Conference, Kansas City, MO, 06 February 2023.

Panelist in Round Table Discussion “Chin-wagging with Esteemed Geosynthetics,” Geosynthetics 2023 Conference, Kansas City, MO, 07 February 2023.

Chair of Session, “Pavements,” EuroGeo7, Seventh International Conference on Geosynthetics, Warsaw, Poland, 06 September 2022.

Chair of Session, “Pavements,” EuroGeo7, Seventh International Conference on Geosynthetics, Warsaw, Poland, 06 September 2022.

Panelist and Presenter “Load-carrying Geosynthetic Reinforced Bridge Abutments.” (Delivered Online), Australian Geomechanics Society, Queensland Chapter, Brisbane, Australia, 11 August 2022.

Chair of Session, “Geosynthetics,” *Geo-Congress 2022*, Charlotte, North Carolina, March 20-23, 2022.

Chair of Session, “Slopes, embankments, roads and foundations,” (Delivered Online), Third Pan-American Conference on Unsaturated Soils, Rio de Janeiro, Brazil, 27 July 2021.

Chair of Session, “IGS Keynote Lecture,” (Delivered Online), ICTG 2021, *4th International Conference on Transportation Geotechnics*, Chicago, IL, 27 May 2021.

Panelist in Round Table Discussion, “Geosynthetic-reinforced Bridged Abutments 2 - Recommendations,” (Delivered Online), Geosynthetics 2021, Kansas City, Kansas, 25 February 2021.

Chair of Session, “Geosynthetic-reinforced Bridged Abutments 1 – Research Outcomes,” (Delivered Online), Geosynthetics 2021, Kansas City, Kansas, 25 February 2021.

Panelist in Round Table Discussion “Education on Geosynthetics,” GeoAmericas 2020, 4th Pan-American Conference on Geosynthetics, Rio de Janeiro, Brazil (online participation), 31 October 2020.

Co-chair in Round Table Discussion “Geosynthetics in Roadway Applications,” GeoAmericas 2020, 4th Pan-American Conference on Geosynthetics, Rio de Janeiro, Brazil (online participation), 27 October 2020.

Chair of Session “Mercer Lecture: Reinforced Embankments on Soft Soils,” GeoAmericas 2020, 4th Pan-American Conference on Geosynthetics, Rio de Janeiro, Brazil (online participation), 27 October 2020.

Member of Round Table Discussion “Classic Old and Promising New Education Topics,” *International Conference on Geotechnical Engineering Education*, GEE2020, Athens, Greece, 25 June 2020.

Chair of Session “Geosynthetics,” Geo-Congress 2020, Geo-Institute of ASCE, Minneapolis, Minnesota, 27 February 2020.

Chair of Session “Base Stabilization: Approaches for Design and Selection of Geosynthetics,” *First Technical Committee Workshop on Stabilization*, International Geosynthetics Society, Prague, Czech Republic, 11 November 2019.

Member of Round Table Discussion “Reinforcement using Geosynthetics” *VIII Brazilian Conference on Geosynthetics*, Geossintéticos 2019, São Carlos, Brazil, 16 August 2019.

Chair of Session “The Benedito Bueno Lecture from the Brazilian Society of Geosynthetics,” *VIII Brazilian Conference on Geosynthetics*, Geossintéticos 2019, São Carlos, Brazil, 15 August 2019.

Chair of Round Table Discussion “Incorporating Geosynthetics in Civil Engineering Education” *Geosynthetics 2019 Conference*, 12 February 2019, Houston, Texas.

Chair of Session “Barrier Systems 2” *11th International Conference of Geosynthetics*, 11ICG, 19 September 2018, Seoul, South Korea.

Chair of Session “Keynote Lectures, Geotechnical Infrastructure for Megacities and New Capitals.” *The Second Geo-Institute-Kazakhstan Geotechnical Society Joint Workshop*, 07 March 2018, Orlando, Florida.

Chair of Session “Transportation Infrastructure,” *Third African Conference on Geosynthetics, GeoAfrica 2017*, 10 October 2017, Marrakesh, Morocco.

Chair of Session “Stabilization of Roadways using Geosynthetics,” International Conference on *Transportation Geotechnics and Geoecology*, TGG 2017, 17 May 2017, Saint Petersburg, Russia.

Chair of Session “Terzaghi Lecture.” Geotechnical Frontiers 2017, Geo-Institute of ASCE, Orlando, Florida, 14 March 2017.

Chair of Session “Geosynthetics in Foundations.” Geotechnical Frontiers 2017, Geo-Institute of ASCE, Orlando, Florida, 14 March 2017.

Chair of Session “Student Paper Award.” 6th Asian Regional Conference on Geosynthetics, New Delhi, India, 10 November 2016.

Chair of Keynote Session, “Geosynthetic Reinforced Applications,” 6th European Conference on Geosynthetics, EuroGeo6, International Society of Geosynthetics (IGS), Ljubljana, Slovenia, 27 September 2016.

Co-Chair of International Workshop on “Geosynthetics in Transportation Geotechnics.” 3rd International Conference on Transportation Geotechnics (3rd ICTG), Guimaraes, Portugal, 04 September 2016.

Panelist in Discussion Session “Geosynthetics in the Americas: What is Holding Back their Growth?” 3rd Pan-American Conference on Geosynthetics, GeoAmericas 2016, Miami Beach, Florida, 12 April 2016.

Panelist in Discussion Session “Transportation Geotechnics.” XV Pan-American Conference on Soil Mechanics and Geotechnical Engineering, Buenos Aires, Argentina, November 16, 2015.

Panelist in Discussion Session, “Advances in Geosynthetic Applications.” 2nd Iberic Conference on Geosynthetics, Madrid, Spain, October 07, 2015.

Chair of Technical Session, Geosynthetic Applications Lecture, 2nd Iberic Conference on Geosynthetics, Madrid, Spain, October 07, 2015.

Chair of Keynote Session, Welcome Lecture, 2nd Iberic Conference on Geosynthetics, Madrid, Spain, October 07, 2015.

Panelist in Discussion Session “We Will See a Significant Growth in Geosynthetic Use if...” Geosynthetics 2015 Conference, Portland, Oregon, 18 February 2015.

Panelist in Discussion Session, “Recent Educate The Educator Events.” Geosynthetics 2015 Conference, Portland, Oregon, 17 February 2015.

Chair of Keynote Session, Welcome Lecture, of the International Geosynthetics Society. Tenth International Conference on Geosynthetics, Berlin, Germany, September 22, 2014.

Chair of Keynote Session, Giroud Lecture, of the International Geosynthetics Society. Tenth International Conference on Geosynthetics, Berlin, Germany, September 22, 2014.

Panelist of Specialty Session “Geosynthetics in Roads over Challenging Subgrades.” 2nd African Regional Conference on Geosynthetics, GeoAfrica 2013, Accra, Ghana, 20 November 2013.

Panelist in Discussion Session “Federation of International Geo-Societies.” 18th International Conference on Soil Mechanics and Geotechnical Engineering, FedIGS Workshop, Paris, France, September 05, 2013.

Keynote Speaker of Session, “Geosynthetic Innovations in Geotechnical Engineering.” 18th International Conference on Soil Mechanics and Geotechnical Engineering, Geosynthetics Workshop, Paris, France, September 05, 2013.

Chair of Awards Session of the International Geosynthetics Society. Fourth Asian Conference on Geosynthetics, Geosynthetics Asia 2012, Bangkok, Thailand, December 14, 2012.

Chair of Awards Session of the International Geosynthetics Society. Fifth European Conference on Geosynthetics, EuroGeo5, Valencia, Spain, September 18, 2012.

Panelist in Discussion Session “Teaching and Learning Geotechnical Engineering in the Americas.” Fourteenth Panamerican Conference of Soil Mechanics and Geotechnical Engineering, Toronto, Canada, October 05, 2011.

Chair of Session “Environmental Geotechnics 3.” Fourteenth Panamerican Conference of Soil Mechanics and Geotechnical Engineering, Toronto, Canada, October 04, 2011.

Panelist in Discussion Session “Innovation in Geotechnical Engineering.” Fifteenth African Regional Conference on Soil Mechanics and Geotechnical Engineering, Maputo, Mozambique, July 19, 2011.

Chair of Session “Mercer Lecture.” Fifteenth African Regional Conference on Soil Mechanics and Geotechnical Engineering, Maputo, Mozambique, July 18, 2011.

Chair of Session "Mercer Lecture." *GeoFrontiers 2011 Conference*, Geo-Institute of ASCE, Dallas, Texas, March 16, 2011.

Chair of Session "Mercer Lecture." *Sixth International Conference on Environmental Geotechnics*, 6ICEG, New Delhi, India, November 09, 2010.

Chair of Session "Shear and Mechanical Behaviour of GCLs." *Third International Symposium on Geosynthetic Clay Liners*, GBR-C 2k10, Fortress Marienberg, Wuerzburg, Germany, September 16, 2010.

Chair of Session "Engineering Applications and Case Histories: Soil-atmosphere Interaction, Geoenvironmental Applications." *Fifth International Conference on Unsaturated Soils*, UNSAT 2010, Barcelona, Spain, September 8, 2010.

Chair of Session "Scaling Laws." *7th International Conference on Physical Modelling in Geotechnics* (ICPMG 2010), Zurich, Switzerland, June 30, 2010.

Chair of Keynote Lecture Session "Geosynthetics in Pavement Reinforcement Applications" *9th International Conference on Geosynthetics*, 9ICG, Guarujá, Brazil, May 26, 2010.

Chair of Opening Session, *First Mexican Conference on Geosynthetics*, Mexican Society of Geotechnical Engineering (SMIG), Colegio de Ingenieros, Mexico City, Mexico, March 11, 2010.

State of the Art Lecture (with Mayne, Coop, Springman and Huang) "Material Behavior and Testing." *XVII International Conference on Soil Mechanics and Geotechnical Engineering*, Alexandria, Egypt, 5 October 2009.

Panelist in discussion session "Municipal Solid Waste Updates." *Environmental Trade Fair and Conference*, Texas Commission on Environmental Quality, Austin, Texas, May 14, 2009.

Chair of Keynote Lecture Session "30 Years of Geosynthetics Use – What May Be in Store for the Next 30 Years?" *Geosynthetics 2009*, Salt Lake City, Utah, February 25, 2009.

Panelist in Keynote Lecture Session, "Geosynthetic-Reinforced Soil Structures: A Cost-Effective Solution Combining Two Engineering Disciplines." Nabor Carrillo Lecture, *24th National Conference on Soil Mechanics*, Mexican Society of Soil Mechanics, Aguascalientes, Mexico, November 29, 2008.

Chair of Session "Geoenvironmental Engineering." *Twenty-fourth Mexican Conference on Soil Mechanics*, Aguascalientes, Mexico, November 27, 2008.

Panelist in Discussion Session "Geosynthetics in Environmental Engineering." *Geosynthetics Asia 2008*, the Fourth Asian Conference on Geosynthetics, Shanghai, China, June 19, 2008.

Chair of Keynote Lecture Session "Geosynthetics Engineering: Combining Two Disciplines." *Geosynthetics Asia 2008*, the Fourth Asian Conference on Geosynthetics, Shanghai, China, June 17, 2008.

Organizer of Series of Sessions "Track 9: Pavements." *GeoAmericas 2008*, the First PanAmerican Geosynthetics Conference and Exhibition, Cancún, Mexico, 2-5 March 2008.

Chair of Session "Geosynthetics for Crack Mitigation of Pavements." *GeoAmericas 2008*, the First PanAmerican Geosynthetics Conference and Exhibition, Cancún, Mexico, 3 March 2008.

Chair of Session "Tensile Loading of Geosynthetics and their Creep Behavior." *Eighth International Conference on Geosynthetics*, Yokohama, Japan, September 21, 2006.

Discussion Leader of "Workshop 8: Remediation." *Fifth International Conference on Environmental Geotechnics*, International Society of Soil Mechanics and Geotechnical Engineering, Cardiff, U.K., June 26-29, 2006.

Chair of Session "Modeling of Waste Repositories and Laboratory Testing: Temperature Effects." *Fourth International Conference on Unsaturated Soils*, Carefree, Arizona, April 3, 2006.

Chair of Session "International Perspectives on Soil Reinforcement Applications." State-of-the-art session, *Geo-Frontiers 2005 Conference*, Austin, Texas, January 25, 2005.

Organizer of Session "Advances in Soil Reinforcement Applications II." *Geo-Frontiers Conference*, Austin, Texas, January 25, 2005.

Organizer of Session "Innovative Barriers and Barrier Materials." *Geo-Frontiers 2005 Conference*, Austin, Texas, January 24, 2005.

Organizer of Session "Advances in Soil Reinforcement Applications I." *Geo-Frontiers Conference*, Austin, Texas, January 24, 2005.

Co-chair of Session "Advances in Erosion Mitigation: Processes, Geosynthetic Products, and Applications." *Geo-Frontiers 2005 Conference*, Austin, Texas, January 24, 2005.

Co-chair of Session "Outlook, Opportunities, and Research Needs." *Designing, Building, & Regulating Evapotranspiration (ET) Landfill Covers*, USEPA Remediation Technology Development Forum Program, Denver, Colorado, March 10, 2004.

Co-chair of Session "Geoenvironmental Projects." *2003 North American Conference on Geosynthetic*, Winnipeg, Canada, September 30, 2003.

Discussion Leader of Session "Ground Reinforcement." *Fourth International Workshop on Applications of Computational Methods in Geotechnical Engineering*, Ouro Preto, Brazil, August 19, 2003.

Co-chair of Session "Ground Improvement." *Twelfth PanAmerican Conference on Soil Mechanics and Geotechnical Engineering and 39th US Rock Mechanics Symposium*, Cambridge, Massachusetts, June 23, 2003.

Keynote Speaker of Session "Geosynthetics in Geoenvironmental Applications." *Fifth Brazilian Conference on Geosynthetics*, Porto Alegre, Brazil, May 21, 2003.

General Reporter of Session "Geosynthetics in Geoenvironmental Applications." *Fifth Brazilian Conference on Geosynthetics*, Porto Alegre, Brazil, May 21, 2003.

Keynote Speaker of Session "Geosynthetics in Waste Containment Facilities: Recent Advances." *Seventh International on Geosynthetics*, Nice, France, September 23, 2002.

General Reporter of Session "Applied Unsaturated Soil Mechanics," *Third International Congress on Unsaturated Soils*, UNSAT 2002, International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE), TC6, Recife, Brazil, March 11, 2002.

Co-chair of Session "Design Methods for Soil Reinforcement," and member of the Scientific Committee, *International Congress on Earth Reinforcement*, IS Kyushu 2001, International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE), TC9, Fukuoka, Japan, November 16, 2001.

Chair of Session "Walls, Slopes, and Embankments." *Geosynthetics 2001 Conference*, North American Geosynthetics Society (NAGS), Portland, Oregon, February 12, 2001.

Moderator of Panel Discussion "Views of the 21st Century: Geosynthetics in Geotechnical Engineering." *GeoDenver 2000 Congress*, Geo-Institute of the American Society of Civil Engineers (ASCE), Denver, Colorado, August 7, 2000.

Chair of Session "Advances in Monitoring of Systems Reinforced using Geosynthetics." *GeoDenver 2000 Congress*, Geo-Institute of the American Society of Civil Engineers (ASCE), Denver, Colorado, August 6, 2000.

Chair of Session "Advances in Geoenvironmental Systems using Geosynthetics." *GeoDenver 2000 Congress*, Geo-Institute of the American Society of Civil Engineers (ASCE), Denver, Colorado, August 5, 2000.

General Reporter of Session "Case Histories Involving Geosynthetics." *First Panamerican Conference on Geosynthetics*, International Geosynthetics Society (ISSMGE), Rio de Janeiro, Brazil, October 22, 1999.

General Reporter of Special Session "Soil Improvement and Reinforcement." *XI Panamerican Conference on Soil Mechanics and Geotechnical Engineering* (PCSMGE), International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE), Foz do Iguassu, Brazil, August 9, 1999.

Chair of Session "Reinforced Soil Slopes." *Geosynthetics'99 Conference*, North American Society of Geosynthetics (NAGS), Boston, Massachusetts, April 28, 1999.

Chair of Session “Numerical Modeling.” Third International Workshop on *Applications of Computational Mechanics in Geotechnical Engineering*, Porto, Portugal, September 5, 1998.

Chair of Session “Numerical Modeling.” Third International Workshop on *Applications of Computational Mechanics in Geotechnical Engineering*, Porto, Portugal, September 5, 1998.

Services in Professional Reviews

Review of proposals submitted to the *National Science Foundation* (NSF), Natural Sciences and Engineering Research Council of Canada (NSERC), Qatar National Research Fund, Academic Research Program (ARP) of the Department of National Defense (DND) of Canada, and U.S. Civilian Research & Development Foundation.

Review of papers submitted to *Journal of Geotechnical and Geoenvironmental Engineering* (ASCE), *Soils and Foundations* (Japanese Society of Geotechnical Engineering), *Geosynthetics International* (ICE Publishing, International Geosynthetics Society), *Geotextiles and Geomembranes* (Elsevier, International Geosynthetics Society), *Transportation Geotechnics* (Elsevier), *Geotechnical Testing Journal* (ASTM), *Canadian Geotechnical Journal*, *Géotechnique*, *Geotechnical Fabrics Report* (IFAI), *Journal of Geotechnical and Geological Engineering* (Kluwer AP), *Transportation Research Board* (TRB), *Waste Management*, *Water Resources Research*, *Advances in Water Resources*.

Review of papers submitted to conferences organized by the American Society of Civil Engineers (ASCE), International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE), International Geosynthetics Society (IGS), Transportation Research Board (TRB), and North American Geosynthetics Society (NAGS).

Review of book manuscripts submitted for possible publication by *Prentice Hall* and *Wiley Interscience*.

Services to the Department of Civil, Architectural and Environmental Engineering, The University of Texas at Austin

Member, Curriculum and Accreditation Committee, Department of Civil, Architectural, and Environmental Engineering, University of Texas at Austin (2025 – present).

Member, Faculty Evaluation Committee, Department of Civil, Architectural, and Environmental Engineering, University of Texas at Austin (2025 – present).

Member, Awards and Recognitions Committee, Department of Civil, Architectural, and Environmental Engineering, University of Texas at Austin (2023 – present).

Member, Facilities Committee, Department of Civil, Architectural, and Environmental Engineering, University of Texas at Austin (2021 – 2025).

Graduate Student Coordinator, Geotechnical Engineering Program, Department of Civil, Architectural, and Environmental Engineering, The University of Texas at Austin (2020 – 2024).

Member, Graduate Policies and Recruiting Committee, Department of Civil, Architectural, and Environmental Engineering, University of Texas at Austin (2020 – 2024).

Member, Faculty Search Committee, Environmental Engineering position, Department of Civil, Architectural, and Environmental Engineering, University of Texas at Austin (2022 – 2023).

Chair, Faculty Search Committee, Geotechnical position, Department of Civil, Architectural, and Environmental Engineering, University of Texas at Austin (2020 – 2021).

Member, Curriculum and Accreditation Committee, Department of Civil, Architectural, and Environmental Engineering, University of Texas at Austin (2019 – 2020).

Area Coordinator and member of the Advisory Committee, Geotechnical Engineering, Department of Civil, Architectural, and Environmental Engineering, University of Texas at Austin (2013 – 2020).

Chair, Faculty Evaluation Committee, Department of Civil, Architectural, and Environmental Engineering, University of Texas at Austin (2018 – 2019).

Member, Faculty Evaluation Committee, Department of Civil, Architectural, and Environmental Engineering, University of Texas at Austin (2017 – 2018).

Member, Faculty Search Committee, Geotechnical Engineering position, Department of Civil, Architectural, and Environmental Engineering, University of Texas at Austin (2017 – 2018).

Chair, Curriculum Committee, Department of Civil, Architectural, and Environmental Engineering, University of Texas at Austin (2016 – 2017).

Member, Undergraduate Recruiting and Retention Committee, Department of Civil, Architectural, and Environmental Engineering, University of Texas at Austin (2016 – 2017).

Member, Graduate Curricula and Policies Committee, Department of Civil, Architectural, and Environmental Engineering, University of Texas at Austin (2014 – 2016).

Chair, Undergraduate Recruiting and Retention Committee, Department of Civil, Architectural, and Environmental Engineering, University of Texas at Austin (2014 – 2015).

Member, Advisory Committee, Department of Civil, Architectural, and Environmental Engineering, University of Texas at Austin (2013 – present).

Budget Council, Department of Civil, Architectural, and Environmental Engineering, University of Texas at Austin (2011–present)

Member, Faculty Evaluation Committee, Department of Civil, Architectural, and Environmental Engineering, University of Texas at Austin (2011 – 2013).

Member, Graduate Fellowships, Financial Aid and Recruiting Committee, Department of Civil, Architectural, and Environmental Engineering, University of Texas at Austin (2010 – 2013).

Graduate Student Advisor, Geotechnical Group, Department of Civil, Architectural, and Environmental Engineering. The University of Texas at Austin (2010 – 2011).

Member, Outreach Committee, Department of Civil, Architectural, and Environmental Engineering, University of Texas at Austin (2009 – 2011).

Member, Graduate Curricula and Policies Committee, Department of Civil, Architectural, and Environmental Engineering, University of Texas at Austin (2009 – 2010).

Coordinator, Geotechnical website, Department of Civil, Environmental and Architectural Engineering, Chair, ABET Subcommittee for Program Objective 11, Department of Civil, Architectural, and Environmental Engineering, University of Texas at Austin (2009 – 2010).

Member, Curriculum Committee, Department of Civil, Architectural, and Environmental Engineering, University of Texas at Austin (2008 – 2009).

Member, Graduate Fellowships, Financial Aid and Recruiting Committee, Department of Civil, Architectural, and Environmental Engineering, University of Texas at Austin (2005 – 2008).

Coordinator, Graduate student recruiting, Geotechnical Engineering Group, Department of Civil, Environmental and Architectural Engineering, University of Texas at Austin (2004 – 2008).

Member, Graduate Curricula and Policies Committee, Department of Civil, Architectural and Environmental Engineering (2007 – 2008).

Member, External Advisory Committee Liaison, Department of Civil, Architectural and Environmental Engineering (2006 – 2007).

Member, CE and ARE Curriculum Committee, Department of Civil, Architectural, and Environmental Engineering, University of Texas at Austin (2005 – 2006).

Member, Graduate Curricula and Policies, Department of Civil, Architectural, and Environmental Engineering, University of Texas at Austin (2003 – 2005).

Member, Undergraduate Recruiting and Retention Committee, Department of Civil, Architectural, and Environmental Engineering, University of Texas at Austin (2003 – 2005).

Study abroad advisor, Department of Civil, Architectural, and Environmental Engineering, University of Texas at Austin (2003 – 2004).

Services to the Cockrell School of Engineering, The University of Texas at Austin

Chair, Faculty Research Assignment (FRA) 2013-14 Engineering Selection Committee, Cockrell School of Engineering (2012).

Member, Faculty Research Assignment (FRA) 2012-13 Engineering Selection Committee, Cockrell School of Engineering (2011).

Member, Faculty Advisory Committee, 2005 Graduate Engineering Student Research Conference, UT Austin.

Faculty instructor, Minority Introduction to Engineering (MITE), Equal Opportunity in Engineering (EOE) Program, College of Engineering (2005 – 2007).

Member, Global Engineering Education Committee (2003 – 2009).

Services to the University of Texas at Austin

Faculty Associate, Brazil Center, The Teresa Lozano Long Institute of Latin American Studies, University of Texas at Austin (2003 – present).

Services to the Department of Civil Environmental and Architectural Engineering, University of Colorado at Boulder

Member, Computer Committee, Department of Civil, Environmental and Architectural Engineering, University of Colorado at Boulder (1999 – 2003).

Member, Facilities Committee, Department of Civil, Environmental and Architectural Engineering, University of Colorado at Boulder (2001 – 2003).

Coordinator, Departmental website, Department of Civil, Environmental and Architectural Engineering, University of Colorado at Boulder (1999 – 2003).

Coordinator, Digital Image Laboratory (DIL), Department of Civil, Environmental and Architectural Engineering, University of Colorado at Boulder (1999 – 2003).

Member, Faculty Search Committee, Construction Engineering and Management group, Department of Civil, Environmental and Architectural Engineering, University of Colorado at Boulder (2000 – 2001).

Coordinator, Laboratory of Geosynthetics and Geoenvironmental Engineering, Department of Civil, Environmental and Architectural Engineering, University of Colorado at Boulder (2000 – 2003).

Services to the College of Engineering, University of Colorado at Boulder

Presenter, *Success Institute*, a pre-engineering outreach minority program coordinated by the Multicultural Engineering Program (MEP), College of Engineering and Applied Sciences (1999 – 2003).

Member, web task force, College of Engineering and Applied Sciences (2000 – 2003).

Affiliated faculty member, Environmental Engineering Program, College of Engineering and Applied Sciences (1999 – 2003).

Member, Faculty Leadership Advancement Group (FLAG), College of Engineering and Applied Sciences (2002 – 2003).

Services to the University of Colorado at Boulder

Member, Faculty Affairs Committee, Boulder Faculty Assembly (BFA), University of Colorado (2001 – 2003).

Mentor, Summer Multicultural Access to Research Training (S.M.A.R.T.) program, University of Colorado (2002 – 2003).