CHRISTOPHER L. MEEHAN, PH.D., P.E., F.ASCE

Department of Civil & Environmental Engineering University of Delaware Newark, DE 19716

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EDUCATION

Doctor of Philosophy, Civil Engineering, January 2006

Virginia Tech, Blacksburg, VA – Specialization in Geotechnical Engineering
 Dissertation: An Experimental Study of the Dynamic Behavior of Slickensided Surfaces (URN:etd-01302006-101603)
 Advisor: J. Michael Duncan

Master of Science, Civil Engineering, August 2000

Virginia Tech, Blacksburg, VA – Specialization in Geotechnical Engineering

Bachelor of Science, Civil Engineering, May 1999

University of New Hampshire, Durham, NH

Additional Training:

Schnabel Engineering 2010 Training Workshop, Gaithersburg, MD, 4/16/10-4/17/10 USSD 2009 Workshop on Levees, Sacramento, CA, 10/13/09-10/14/09

Schnabel Engineering 2009 Training Workshop, Gaithersburg, MD, 1/23/09-1/24/09

- American Society of Civil Engineers (ASCE) Excellence in Civil Engineering Education (ExCEEd) Teaching Workshop, University of Arkansas, Fayetteville, AK, 7/12/08-7/18/08 (program mentor)
- ADSC 2008 Civil Engineering Faculty Workshop, Chattanooga, TN, 6/8/08-6/14/08
- ASCE Mini-ExCEEd Teaching Workshop, University of Delaware, Newark, DE, 12/6/07-12/7/07
- ASCE ExCEEd Teaching Workshop, Northern Arizona University, Flagstaff, AZ, 7/15/07-7/20/07
- FERC Seismic Design Training Workshop, Virginia Tech, Blacksburg, VA, 8/8/05-8/12/05
- NEES Research and Training Workshop, University of California, Davis, CA, 11/18/04-11/20/04
- CGPR Short Course: "Settlement of Structures and Embankments", Virginia Tech, Blacksburg, VA, 7/04
- USACE Course: "Seepage, Piping, and Remedial Measures", Huntsville, AL, 6/21/04-6/25/04

PROFESSIONAL CERTIFICATIONS & LICENSURE

Professional Engineer (**P.E.**) Registration, Delaware, No. 17857 40-hour HAZWOPER Course, CA, 2/01 8-hour HAZWOPER Supervisor Course, CA, 4/01 License for use of Nuclear Testing Equipment, NH, 5/98

ACADEMIC POSITIONS HELD

Professor, University of Delaware, Newark, DE, 9/19 – Present Department of Civil and Environmental Engineering, Geotechnical Engineering Group

Bentley Systems Incorporated Chair of Civil Engineering, University of Delaware, Newark, DE, 9/12 - 8/17Department of Civil and Environmental Engineering, Geotechnical Engineering Group

Fulbright Scholar & Visiting Professor, (on sabbatical leave from the University of Delaware). Tampere University of Technology, Tampere, Finland, 2012-2013 2012-2013 Fulbright U.S. Scholar Grant, Fulbright-Tampere University of Technology Scholar Award

Associate Professor, University of Delaware, Newark, DE, 9/12 – 8/19 Department of Civil and Environmental Engineering, Geotechnical Engineering Group

Assistant Professor, University of Delaware, Newark, DE, 9/06 – 8/12 Department of Civil and Environmental Engineering, Geotechnical Engineering Group

Post-Doctoral Associate, Virginia Tech, Blacksburg, VA, 1/06 – 7/06 Department of Civil and Environmental Engineering, Geotechnical Engineering Group

Instructor and Graduate Researcher, Virginia Tech, Blacksburg, VA, 1/02 – 1/06 Department of Civil and Environmental Engineering, Geotechnical Engineering Group

Visiting Researcher, University of California, Davis, CA, 2/05 – 8/05 Research conducted at the Center for Geotechnical Modeling Centrifuge Facility

Via Fellow and Teaching Assistant, Virginia Tech, Blacksburg, VA, 8/99 – 1/01 Department of Civil and Environmental Engineering, Geotechnical Engineering Group

Student Researcher, University of New Hampshire, Durham, NH, 9/98 - 5/99

PROFESSIONAL POSITIONS HELD

Independent Consultant, Blacksburg, VA, 3/02 – 7/06 Working with Mike Duncan. Notable projects include:

- <u>Bridgewater Project</u>, Lake James, North Carolina Design review and evaluation of seismic stability improvements for Paddy Creek Dam, Linville Dam, and Catawba Dam.
- <u>Hoist Dam Project</u>, Dead River, Michigan Design review and evaluation of embankment modifications for seepage control at Hoist Dam.
- Webster and Posey Tubes Exterior Retrofit, Oakland, CA

Assessed potential for hydrofracturing of in-situ soils during installation of jet grouted columns.

Staff Engineer, GeoSyntec Consultants, Inc., Walnut Creek, CA, 2/01 – 12/01

- Conducted analyses and created design reports on numerous topics related to landfill design.
- Conducted QA/QC inspections during landfill construction.

Field Engineer, GZA GeoEnvironmental, Inc., Manchester, NH, 5/99 – 8/99

- Assisted in producing geotechnical engineering reports.
- Performed QA/QC inspections for various commercial and public projects.
- Monitored on-site geotechnical explorations for various projects.

Field Engineer, Haley & Aldrich, Inc., Manchester, NH, 5/98 – 8/98

- Performed QA/QC inspections for various commercial projects.
- Monitored on-site geotechnical explorations for various commercial projects.

HONORS & AWARDS

2019 University of New Hampshire Alumni Honors Program Award 2018 Iraq Fulbright Program Recipient, Engineering Cohort American Society of Civil Engineers (ASCE): "Top Downloaded Article in Geotechnical Engineering", 8/15/17 American Society of Civil Engineers (ASCE): Fellow, 6/28/17 Research on Rapid Bridge Replacement featured in ASCE SmartBrief, 5/25/17 2017 Iraq Fulbright Program Recipient, Engineering Cohort 2016 Iraq Fulbright Program Recipient, Engineering Cohort ASTM Geotechnical Testing Journal: 2012 Award for Outstanding Article on the Practice of Geotechnical Testing, 1/26/15 2014 Iraq Fulbright Program Recipient, Engineering Cohort 2014 "Rapid Replacement": GRS-IBS research project featured in ASCE's Civil Engineering magazine American Society of Civil Engineers (Delaware Section): 2012 Young Engineer of the Year. 11/27/12 University of Delaware: Bentley Systems Incorporated Chair of Civil Engineering American Society of Civil Engineers: 2012 ASCE ExCEEd New Faculty Excellence in Teaching Award 2012-2013 Fulbright U.S. Scholar Grant: Fulbright-Tampere University of Technology **Scholar Award** Nominated for best paper award, Landslides journal (Journal paper #13) **National Science Foundation CAREER Award, 2009** Research on Intelligent Compaction featured in "Materials Performance" magazine, 4/09 Research on Intelligent Compaction featured in ASCE SmartBrief, 2/2/09 ExCEEd 2008 Teaching Mentor, Fayetteville, AR Selected to Attend ADSC 2008 Civil Engineering Faculty Workshop, Chattanooga, TN ExCEEd 2007 Teaching Fellow, Flagstaff, AZ

Summa Cum Laude for Doctoral Degree, Virginia Tech, 2006 United States Society on Dams Scholarship, 2003 Summa Cum Laude for Master's Degree, Virginia Tech, 2000 Via Master's Fellowship Award Winner, 1999-2000 Chi Epsilon, Civil Engineering Honor Society, 1999 – present Summa Cum Laude for Bachelor's Degree, University of New Hampshire, 1999 Tau Beta Pi Engineering Honor Society, 1998 – present University of New Hampshire Honors Program, Civil Engineering, 1995-1999 Granite State Scholarship Winner - Governor's Success Grant, 1995-1999

HONORS & AWARDS (NATIONAL STUDENT AWARDS)

2021 ASCE Geo-Institute Feature Interview. "Director's Cut Season 2 Episode 1", William J.
Baker III, https://www.youtube.com/watch?v=0bSu8tnoDcc&feature=youtu.be
2020 Delaware Valley Geo-Institute Student Scholarship, Raphael Affinito
2020 Delaware Valley Geo-Institute Student Scholarship, Samuel Saxton
2019 Delaware Valley Geo-Institute Student Scholarship, Kyle Horsham
Mid-Atlantic Transportation Sustainability Center – Region 3 University Transportation Center
(MATS-UTC): 2017 UTC Outstanding Student of the Year Award, William J. Baker III
The International Association of Foundation Drilling (ADSC): 2015-2016 ADSC Women's
Association, Teri Dres Scholar, William J. Baker III
The International Association of Foundation Drilling (ADSC): 2015-2016 IAF Scholarship,
Michael W. O'Neill Scholar, Brian T. Lowe
The International Association of Foundation Drilling (ADSC): 2013-2014 ADSC Women's
Association, Teri Dres Scholar, Olivia Dalton
Association of State Dam Safety Officials (ASDSO): ASDSO 2012 Award Winner, Student
Paper Competition, 9-18-12, Sittinan Benjasupattananan
The International Association of Foundation Drilling (ADSC): 2011-2012 IAF Scholarship,
Michael W. O'Neill Scholar, Daniel V. Cacciola
American Society of Civil Engineers (ASCE) Geo-Institute: 2012 Mohr's Circle Award, ASCE
GeoPrediction, 3-28-12, James Bailey and Matthew Dove
American Society of Civil Engineers (ASCE) Geo-Institute: ASCE MSE Wall Team 2010
National Champions – Faculty Advisor for Student Team
Earthquake Engineering Research Institute (EERI): 2011 Student Travel Grant Recipient,
Farshid Vahedifard
The Association of Laird Fellows: 2008 George W. Laird Merit Fellowship, Nicole A. Walsh

PROFESSIONAL AFFILIATIONS

Vice-Chair, ASCE Geo-Institute Committee on Embankments, Dams, and Slopes, 2018 – present Fellow, American Society of Civil Engineers (ASCE), 2017 – present Member, Delaware Environmental Institute (DENIN), 2017 – present Director, Delaware Center for Transportation (DCT), 2016 – 2021
Board of Directors, United States Universities Council on Geotechnical Education and Research (USUCGER), 2010 – 2015
Member, Transportation Research Board Committee AFP30 – Soil and Rock Properties, 2009 – 2018

- Member, American Society of Civil Engineers (ASCE) Geo-Institute Committee on Embankments, Dams, and Slopes, 2009 – present
- Technical Affiliate, ADSC International Association of Foundation Drilling (IAFD), 2008 present
- Member, International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE), 2007 present

Member, Geo-Engineering Earthquake Reconnaissance (GEER) Association, 2007 – present Member, Delaware Valley Geo-Institute (DVGI), 2006 – present

Member, United States Universities Council on Geotechnical Education and Research (USUCGER), 2006 – present

Member, American Society for Engineering Education (ASEE), 2003 – present Member, United States Society on Dams (USSD), 2003 – present

Member, Onited States Society of Danis (USSD), 2005 – present

Member, American Society of Civil Engineers (ASCE), 1996 - present

RESEARCH & PUBLICATIONS

Books & Book Chapters:

 D'Ignazio, M., Jostad, H. P., Länsivaara, T., Lehtonen, V., Mansikkamäki, J., and Meehan, C. L. (2017). "Effects of Sample Disturbance in the Determination of Soil Parameters for Advanced Finite Element Modelling of Sensitive Clays." *Landslides in Sensitive Clays: From Research to Implementation*, Chapter 13, Vol. 46 of the series Advances in Natural and Technological Hazards Research, edited by Thakur, V., L'Heureux, J.-S., and Locat, A., pp. 145-154, Springer International Publishing, Cham.
 (JSPN:078 2 310 56487 6 doi:10.1007/078 2 310 56487 6 13)

(ISBN:978-3-319-56487-6, doi:10.1007/978-3-319-56487-6_13)

Edited Proceedings:

- Meehan, C. L., Pando, M. A., Leshchinsky, B. A., and Jafari, N. H. (2021). "Geo-Extreme 2021: Infrastructure Resilience, Big Data, and Risk." *Selected Papers from Geo-Extreme 2021*, Geotechnical Special Publication No. 330, Savannah, GA, November 7-10, 2021, ASCE, Reston, VA, 403 pp. (Published online, ISBN:978-0-7844-8370-1, <u>doi:10.1061/9780784483701</u>)
- Meehan, C. L., Pando, M. A., Leshchinsky, B. A., and Jafari, N. H. (2021). "Geo-Extreme 2021: Climatic Extremes and Earthquake Modeling." *Selected Papers from Geo-Extreme 2021*, Geotechnical Special Publication No. 329, Savannah, GA, November 7-10, 2021, ASCE, Reston, VA, 495 pp. (Published online, ISBN:978-0-7844-8369-5, doi:10.1061/9780784483695)
- Meehan, C. L., Pando, M. A., Leshchinsky, B. A., and Jafari, N. H. (2021). "Geo-Extreme 2021: Case Histories and Best Practices." *Selected Papers from Geo-Extreme 2021*, Geotechnical Special Publication No. 328, Savannah, GA, November 7-10, 2021, ASCE, Reston, VA, 525 pp. (Published online, ISBN:978-0-7844-8368-8, doi:10.1061/9780784483688)

- 12. Meehan, C. L., Kumar, S., Pando, M. A., and Coe, J. T. (2019). "Geo-Congress 2019: Data, Software, Education, and a Tribute to Ralph Peck." Papers from Sessions of the Eighth International Conference on Case Histories in Geotechnical Engineering, Proceedings of the ASCE Geo-Institute's 2019 Geo-Congress, Geotechnical Special Publication No. 314, Philadelphia, PA, March 24-27, 2019, ASCE, Reston, VA, 173 pp. (Published online, ISBN:978-0-7844-8216-2, doi:10.1061/9780784482162)
- 11. Meehan, C. L., Kumar, S., Pando, M. A., and Coe, J. T. (2019). "Geo-Congress 2019: Soil Erosion, Underground Engineering, and Risk Assessment." Papers from Sessions of the Eighth International Conference on Case Histories in Geotechnical Engineering, Proceedings of the ASCE Geo-Institute's 2019 Geo-Congress, Geotechnical Special Publication No. 313, Philadelphia, PA, March 24-27, 2019, ASCE, Reston, VA, 349 pp. (Published online, ISBN:978-0-7844-8215-5, doi:10.1061/9780784482155)
- 10. Meehan, C. L., Kumar, S., Pando, M. A., and Coe, J. T. (2019). "Geo-Congress 2019: Geoenvironmental Engineering and Sustainability." Papers from Sessions of the Eighth International Conference on Case Histories in Geotechnical Engineering, Proceedings of the ASCE Geo-Institute's 2019 Geo-Congress, Geotechnical Special Publication No. 312, Philadelphia, PA, March 24-27, 2019, ASCE, Reston, VA, 352 pp.

(Published online, ISBN:978-0-7844-8214-8, doi:10.1061/9780784482148)

9. Meehan, C. L., Kumar, S., Pando, M. A., and Coe, J. T. (2019). "Geo-Congress 2019: Engineering Geology, Site Characterization, and Geophysics." Papers from Sessions of the Eighth International Conference on Case Histories in Geotechnical Engineering, Proceedings of the ASCE Geo-Institute's 2019 Geo-Congress, Geotechnical Special Publication No. 311, Philadelphia, PA, March 24-27, 2019, ASCE, Reston, VA, 417 pp.

(Published online, ISBN:978-0-7844-8213-1, doi:10.1061/9780784482131)

Meehan, C. L., Kumar, S., Pando, M. A., and Coe, J. T. (2019). "Geo-Congress 8. 2019: Geotechnical Materials, Modeling, and Testing." Papers from Sessions of the Eighth International Conference on Case Histories in Geotechnical Engineering, Proceedings of the ASCE Geo-Institute's 2019 Geo-Congress, Geotechnical Special Publication No. 310, Philadelphia, PA, March 24-27, 2019, ASCE, Reston, VA, 884 pp.

(Published online, ISBN:978-0-7844-8212-4 doi:10.1061/9780784482124)

Meehan, C. L., Kumar, S., Pando, M. A., and Coe, J. T. (2019). "Geo-Congress 7. 2019: Soil Improvement." Papers from Sessions of the Eighth International Conference on Case Histories in Geotechnical Engineering, Proceedings of the ASCE Geo-Institute's 2019 Geo-Congress, Geotechnical Special Publication No. 309, Philadelphia, PA, March 24-27, 2019, ASCE, Reston, VA, 390 pp. (Published online, ISBN:978-0-7844-8211-7, doi:10.1061/9780784482117)

- Meehan, C. L., Kumar, S., Pando, M. A., and Coe, J. T. (2019). "Geo-Congress 2019: Earthquake Engineering and Soil Dynamics." *Papers from Sessions of the Eighth International Conference on Case Histories in Geotechnical Engineering*, Proceedings of the ASCE Geo-Institute's 2019 Geo-Congress, Geotechnical Special Publication No. 308, Philadelphia, PA, March 24-27, 2019, ASCE, Reston, VA, 517 pp. (Published online, ISBN:978-0-7844-8210-0, doi:10.1061/9780784482100)
- Meehan, C. L., Kumar, S., Pando, M. A., and Coe, J. T. (2019). "Geo-Congress 2019: Foundations." *Papers from Sessions of the Eighth International Conference on Case Histories in Geotechnical Engineering*, Proceedings of the ASCE Geo-Institute's 2019 Geo-Congress, Geotechnical Special Publication No. 307, Philadelphia, PA, March 24-27, 2019, ASCE, Reston, VA, 539 pp. (Published online, ISBN:978-0-7844-8209-4, doi:10.1061/9780784482094)
- Meehan, C. L., Kumar, S., Pando, M. A., and Coe, J. T. (2019). "Geo-Congress 2019: Earth Retaining Structures and Geosynthetics." *Papers from Sessions of the Eighth International Conference on Case Histories in Geotechnical Engineering*, Proceedings of the ASCE Geo-Institute's 2019 Geo-Congress, Geotechnical Special Publication No. 306, Philadelphia, PA, March 24-27, 2019, ASCE, Reston, VA, 400 pp.
 (Publiched online, ISPN:078.0.7844.8208.7, doi:10.1061/0780784482087)

(Published online, ISBN:978-0-7844-8208-7, doi:10.1061/9780784482087)

 Meehan, C. L., Kumar, S., Pando, M. A., and Coe, J. T. (2019). "Geo-Congress 2019: Embankments, Dams, and Slopes." *Papers from Sessions of the Eighth International Conference on Case Histories in Geotechnical Engineering*, Proceedings of the ASCE Geo-Institute's 2019 Geo-Congress, Geotechnical Special Publication No. 305, Philadelphia, PA, March 24-27, 2019, ASCE, Reston, VA, 341 pp.
 (Publiched and ing. JSDN:078.0, 7844, 8207.0, doi:10.1061/0780784482070)

(Published online, ISBN:978-0-7844-8207-0, doi:10.1061/9780784482070)

Meehan, C. L., VanBriesen, J. M., Vahedifard, F., Yu, X., and Quiroga, C. (2014). "Shale Energy Engineering 2014: Technical Challenges, Environmental Issues, and Public Policy." *Proceedings of the ASCE Energy Division's 2014 Shale Energy Engineering Conference*, Pittsburgh, PA, July 21-23, 2014, ASCE, Reston, VA, 733 pp.

(Published on CD-ROM, ISBN:978-0-7844-1365-4, doi:10.1061/9780784413654)

 Meehan, C. L., Pradel, D., Pando, M. A., and Labuz, J. F. (2013). "Geo-Congress 2013: Stability and Performance of Slopes and Embankments III." *Proceedings of the ASCE Geo-Institute's 2013 Geo-Congress*, Geotechnical Special Publication No. 231, San Diego, CA, March 3-7, 2013, ASCE, Reston, VA, 2280 pp. (Published on CD-ROM, ISBN:978-0-7844-1278-7, <u>doi:10.1061/9780784412787</u>)

Refereed Journal Publications: (* indicates published with student)

40. *Poggiogalle, T. M., Meehan, C. L., Clarke-Sather, A. R., Talebi, M. (2021). "A

Digital Image Analysis Technique for Improved Strain Measurement in Geosynthetic Tensile Testing." *Geotechnical Testing Journal*, ASTM. 45(3). (Accepted In Press, doi:10.1520/GTJ20210047)

- Mashayekhi, M., Kaliakin, V. N., Meehan, C. L., Adams, M. T., and Nicks, J. E. (2020). "Simulation of Aggregate Behavior in Low Confinement Geotechnical Applications." *Computers and Geotechnics*, Elsevier, 125, 103678, 1-17. (doi:10.1016/j.compgeo.2020.103678)
- Tabarsa, A., Latifi, N., Meehan, C. L., and Manahiloh, K. N. (2018). "Laboratory Investigation and Field Evaluation of Loess Improvement Using Nanoclay – A Sustainable Material for Construction." *Construction and Building Materials*, Elsevier, 158, 454-463. (doi:10.1016/j.conbuildmat.2017.09.096)
- Rashid, A. S. A., Latifi, N., Meehan, C. L., and Manahiloh, K. N. (2017).
 "Sustainable Improvement of Tropical Residual Soil Using an Environmentally Friendly Additive." *Geotechnical and Geological Engineering*, Springer, 35(6), 2613-2623. (doi:10.1007/s10706-017-0265-1)
- *Talebi, M., Meehan, C. L., and Leshchinsky, D. (2017). "Applied Bearing Pressure Beneath a Reinforced Soil Foundation Used in a Geosynthetic Reinforced Soil Integrated Bridge System." *Geotextiles and Geomembranes*, Elsevier, 45(6), 580-591. (doi:10.1016/j.geotexmem.2017.07.008)
- 35. Latifi, N., Eisazadeh, A., Marto, A., and **Meehan, C. L.** (2017). "Tropical Residual Soil Stabilization: A Powder Form Material for Increasing Soil Strength." *Construction and Building Materials*, Elsevier, 147, 827-836.

(doi:10.1016/j.conbuildmat.2017.04.115)

- 34. *Meehan, C. L. and Talebi, M. (2017). "A Method for Correcting Field Strain Measurements to Account for Temperature Effects." *Geotextiles and Geomembranes*, Elsevier, 45(4), 250-260. (doi:10.1016/j.geotexmem.2017.02.005)
- 33. Manahiloh, K. N. and Meehan, C. L. (2017). "Determining the Soil Water Characteristic Curve and Interfacial Contact Angle from Microstructural Analysis of X-Ray CT Images." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 143(8), 04017034.1-04017034.11. (doi:10.1061/(ASCE)GT.1943-5606.0001677)
- 32. Latifi, N., Horpibulsuk, S., **Meehan, C. L.**, Abd Majid, M. Z., Tahir, M., and Mohamad, E. T. (2017). "Improvement of Problematic Soils with Biopolymer An Environmentally Friendly Soil Stabilizer." *Journal of Materials in Civil Engineering*, ASCE, 29(2), 04016204.1-04016204.11.

(doi:10.1061/(ASCE)MT.1943-5533.0001706)

- *Meehan, C. L., Cacciola, D. V., Tehrani, F. S., and Baker, W. J. (2017). "Assessing Soil Compaction Using Continuous Compaction Control and Location-Specific In Situ Tests." *Automation in Construction*, Elsevier, 73, 31-44. (doi:10.1016/j.autcon.2016.08.017)
- Latifi, N., Meehan, C. L., Abd Majid, M. Z., and Horpibulsuk, S. (2016). "Strengthening Montmorillonitic and Kaolinitic Clays Using a Calcium-Based Non-Traditional Additive: A Micro-Level Study." *Applied Clay Science*, Elsevier, 132-133, 182-193. (doi:10.1016/j.clay.2016.06.004)
- Latifi, N., Horpibulsuk, S., Meehan, C. L., Abd Majid, M. Z., and Rashid, A. S. A. (2016). "Xanthan Gum Biopolymer: An Eco-Friendly Additive for Stabilization of Tropical Organic Peat." *Environmental Earth Sciences*, Springer, 75(9), 1-10. (doi:10.1007/s12665-016-5643-0)
- Lehtonen, V. J., Meehan, C. L., Länsivaara, T. T., and Mansikkamäki, J. N. (2015). "Full-Scale Embankment Failure Test Under Simulated Train Loading." *Géotechnique*, The Institution of Civil Engineers, 65(12), 961-974. (doi:10.1680/geot.14.P.100)
- *Khabbazian, M., Kaliakin, V. N., and Meehan, C. L. (2015). "Column Supported Embankments with Geosynthetic Encased Columns: Validity of the Unit Cell Concept." *Geotechnical and Geological Engineering*, Springer, 33(3), 425-442. (doi:10.1007/s10706-014-9826-8)
- *Khabbazian, M., Meehan, C. L., and Kaliakin, V. N. (2014). "Column Supported Embankments with Geosynthetic Encased Columns: Parametric Study." *Transportation Infrastructure Geotechnology*, Springer, 1(3-4), 301-325. (doi:10.1007/s40515-014-0010-7)
- *Meehan, C. L. and Benjasupattananan, S. (2014). "Analytical Approach for Modeling Axisymmetric Levee Underseepage." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 140(4), 04013037.1-04013037.12. (doi:10.1061/(ASCE)GT.1943-5606.0000952)
- Haeri, S. M., Garakani, A. A., Khosravi, A., and Meehan, C. L. (2014). "Assessing the Hydro-Mechanical Behavior of Collapsible Soils Using a Modified Triaxial Test Device." *Geotechnical Testing Journal*, ASTM, 37(2), 190-204. (doi:10.1520/GTJ20130034)
- 23. *Meehan, C. L., Khosravi, M., and Cacciola, D. V. (2013). "Monitoring Field Lift Thickness Using Compaction Equipment Instrumented with Global Positioning System (GPS) Technology." *Geotechnical Testing Journal*, ASTM, 36(5), 755-767.

(doi:10.1520/GTJ20120124)

- *Khosravi, A., Sadaghiani, M. H., Khosravi, M., and Meehan, C. L. (2013). "The Effect of Asperity Inclination and Orientation on the Shear Behavior of Rock Joints." *Geotechnical Testing Journal*, ASTM, 36(3), 404-417. (doi:10.1520/GTJ20120060)
- *Vahedifard, F., Leshchinsky, D., and Meehan, C. L. (2013). "Displacement-Based Internal Design of Geosynthetic-Reinforced Earth Structures Subjected to Seismic Loading Conditions." *Géotechnique*, The Institution of Civil Engineers, 63(6), 451-462. (doi:10.1680/geot.11.P.130)
- *Meehan, C. L. and Hertz, J. S. (2013). "Using a Complex-Impedance Measuring Instrument to Determine In Situ Soil Unit Weight and Moisture Content." *Geotechnical Testing Journal*, ASTM, 36(1), 119-137. (doi:10.1520/GTJ20120005)
- *Meehan, C. L. and Vahedifard, F. (2013). "Evaluation of Simplified Methods for Predicting Earthquake-Induced Slope Displacements in Earth Dams and Embankments." *Engineering Geology*, Elsevier, 152(1), 180-193. (doi:10.1016/j.enggeo.2012.10.016)
- *Meehan, C. L. and Benjasupattananan, S. (2012). "An Analytical Approach for Levee Underseepage Analysis." *Journal of Hydrology*, Elsevier, 470-471, 201-211. (doi:10.1016/j.jhydrol.2012.08.050)
- *Vahedifard, F., Leshchinsky, D., and Meehan, C. L. (2012). "Relationship Between the Seismic Coefficient and the Unfactored Geosynthetic Force in Reinforced Earth Structures." *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 138(10), 1209-1221. (doi:10.1061/(ASCE)GT.1943-5606.0000701)
- *Kaliakin, V. N., Khabbazian, M., and Meehan, C. L. (2012). "Modeling the Behavior of Geosynthetic Encased Columns: Influence of Granular Soil Constitutive Model." *International Journal of Geomechanics*, ASCE, 12(4), 357-369. (doi:10.1061/(ASCE)GM.1943-5622.0000084)
- *Leshchinsky, D., Vahedifard, F., and Meehan, C. L. (2012). "Application of a Hydraulic Gradient Technique for Modeling the Uplift Behavior of Piles in Sand." *Geotechnical Testing Journal*, ASTM, 35(3), 400-408. (doi:10.1520/GTJ103850)
- 14. *Meehan, C. L., Tehrani, F. S., and Vahedifard, F. (2012). "A Comparison of Density-Based and Modulus-Based In Situ Test Measurements for Compaction

Control." *Geotechnical Testing Journal*, ASTM, 35(3), 387-399. (doi:10.1520/GTJ103479)

- Meehan, C. L., Tiwari, B., Brandon, T. L., and Duncan, J. M. (2011). "Triaxial Shear Testing of Polished Slickensided Surfaces." *Landslides*, Journal of the International Consortium on Landslides, Springer, 8(4), 449-458. (doi:10.1007/s10346-011-0263-y)
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- 9. *Khabbazian, M., Kaliakin, V. N., and **Meehan, C. L.** (2010). "Geosynthetic Reinforced Stone Columns & Column Supported Embankments: A Numerical Parametric Study" *Report of the Department of Civil & Environmental Engineering*, University of Delaware, Newark, DE, June 2010, 8 pp.
- *Meehan, C. L. and Tehrani, F. S. (2009). "An Investigation of Continuous Compaction Control Systems." *Report of the Delaware Center for Transportation*, No. DCT 204, University of Delaware, Newark, DE, July 2009, 433 pp. (Link to <u>Report</u>)
- *Leshchinsky, D., Meehan, C. L., and Imamoglu, B. (2009). "Case History: Strain and Force Distribution in HDPE Reinforced Wall." *Report of the Delaware Center for Transportation*, No. DCT 203, University of Delaware, Newark, DE, July 2009, 149 pp. (Link to Report)
- 6. *Walsh, N. A., Leshchinsky, D., and **Meehan, C. L.** (2009). "High Strength Geotextile: Strain Monitoring at Cherry Island Landfill." *Report of the Department of Civil & Environmental Engineering*, University of Delaware, Newark, DE, June 2009, 412 pp.
- *Khabbazian, M., Kaliakin, V. N., and Meehan, C. L. (2008). "Geosynthetic Supported Base Reinforcement over Deep Foundations: A Numerical Parametric Study of Geosynthetic-Encased Stone Columns." *Report of the Department of Civil & Environmental Engineering*, University of Delaware, Newark, DE, October 2008, 32 pp.
- 4. *Leshchinsky, D., Berkheimer, S. A., and **Meehan, C. L.** (2007). "Instrumented Geogrid Reinforced Mechanically Stabilized Earth Wall Undergoing Large Settlement." *Report of the Center for Innovative Bridge Engineering*, University of Delaware, Newark, DE, May 2007, 144 pp. (Link to Report)
- Meehan, C. L., Duncan, J. M., Brandon, T. L., and Boulanger, R. W. (2006). "An Experimental Study of the Dynamic Behavior of Slickensided Surfaces." *Report of the Center for Geotechnical Practice and Research*, Virginia Tech, Blacksburg, VA, April 2006, 292 pp. (Link to Report Download Site)

- Meehan, C. L., Duncan, J. M., and Boulanger, R. W. (2005). "Collaborative Research: Dynamic Behavior of Slickensided Surfaces – Centrifuge Data Report for CLM02." *Report UCD/CGMDR-05/04, Center for Geotechnical Modeling*, University of California, Davis, CA, 93 pp. (Link to Report)
- 1. **Meehan, C. L.**, Duncan, J. M., and Boulanger, R. W. (2005). "Collaborative Research: Dynamic Behavior of Slickensided Surfaces Centrifuge Data Report for CLM01." *Report UCD/CGMDR-05/03, Center for Geotechnical Modeling*, University of California, Davis, CA, 134 pp. (Link to Report)

Magazine Articles:

- 2. *Talebi, M., **Meehan, C. L.**, Cacciola, D. V., and Becker, M. L. (2014). "Rapid Replacement." *Civil Engineering*, ASCE, April 2014, 64-69 and 81.
- 1. **Meehan, C. L.** (2003). "A New Approach for Seismic Analyses of Dams on Clays: Cyclic Shear Strength of Slickensided Slip Surfaces." *United States Society on Dams Newsletter*, July 2003, 4-5.

Invited Lectures: (* indicates with student)

- 48. **Meehan, C. L.** (2021). "Panel Discussion: Intelligent Compaction Theory and State-of-the-Art." *SPARC International Workshop on Intelligent Compaction*, Monash University, Notting Hill, Victoria, Australia, 9/29/21, (online presentation).
- 47. *Meehan, C. L. and Baker, W. J. (2021). "Assessing Soil Compaction Using Continuous Compaction Control and Location-Specific In Situ Tests." *SPARC International Workshop on Intelligent Compaction*, Monash University, Notting Hill, Victoria, Australia, 9/29/21, (online presentation).
- 46. *Baker, W. J. and **Meehan, C. L.** (2020). "Results from Lift Thickness Study Conducted During the Construction of US 301, Section 3." *Delaware Department of Transportation*, Dover, DE, 12/3/20, (online presentation).
- 45. *Al Saadi, A. N., **Meehan, C. L.**, and Kaliakin, V. N. (2020). "Performance of a Geosynthetic-Encased Stone Column Bearing on a Non-Rigid Layer: Numerical Study." *Delaware Valley Geo-Institute Meeting*, Villanova University, Villanova, PA, 3/5/20.
- 44. *Baker, W. J. and **Meehan, C. L.** (2019). "Preliminary Results from a Continuous Compaction Control Data Set Collected During Active Earthwork Construction." *Delaware Valley Geo-Institute Meeting*, Villanova University, Villanova, PA, 3/18/19.
- 43. Meehan, C. L. (2018). "Rapid Bridge Replacement: Construction and Performance Monitoring of a Geosynthetic Reinforced Soil Integrated Bridge

System." ASME & ASCE DE Sections – Joint Meeting, University of Delaware, Newark, DE, 4/4/18.

- 42. *Meehan, C. L., Poggiogalle, T. M., and Talebi, M. (2018). "Construction and Performance Monitoring of a Geosynthetic Reinforced Soil Integrated Bridge System." *Delaware Department of Transportation*, Dover, DE, 3/13/18.
- 41. *Mashayekhi, M., Adams, M. T., Nicks, J. E., Kaliakin, V. N., and **Meehan, C. L.** (2017). "Numerical Modeling of Performance Test in Geosynthetic Reinforced Structures: Building Blocks for the Next Generation of GRS Design." *Turner-Fairbank Highway Research Center, Federal Highway Administration*, McLean, VA, 8/22/17.
- 40. *Mashayekhi, M., Kaliakin, V. N., **Meehan, C. L.**, Nicks, J. E., and Adams, M. T. (2017). "Numerical Modeling of Performance Tests for Geosynthetic Reinforced Structures." *Delaware Valley Geo-Institute Meeting*, Villanova University, Villanova, PA, 3/23/17.
- 39. Clarke-Sather, A. R. and **Meehan, C. L.** (2017). "Sustainable Geotextiles for Transportation Applications from Recycled Textiles." *Center for Advanced Infrastructure and Transportation (CAIT) Seminar*, Newark, DE, 2/28/17.
- Meehan, C. L. (2017). "Keynote: Construction and Performance Monitoring of a Geosynthetic Reinforced Soil Integrated Bridge System." *Delaware Valley Geo-Institute Meeting*, King of Prussia, PA, 2/21/17.
- 37. *Mashayekhi, M., Kaliakin, V. N., Meehan, C. L., Adams, M. T., and Nicks, J. E. (2017). "Implications of Numerical Modeling of Geosynthetic Reinforced Soil Structures." *AFS20, Geotechnical Instrumentation and Modeling Committee Meeting*, Transportation Research Board 96th Annual Meeting, Washignton, D.C., 1/11/17.
- 36. **Meehan, C. L.** (2016). "Field Behavior of a Geosynthetic Reinforced Soil Integrated Bridge System (GRS-IBS)." *Temple University*, Philadelphia, PA, 12/9/16.
- 35. Meehan, C. L. (2016). "Soils and Their Role in Infrastructure." *Soils: The Foundation of Life*, National Academy of Sciences, Washington, D.C., 12/5/16.
- 34. *Meehan, C. L. and Poggiogalle, T. M. (2016). "Performance of Geosynthetic Reinforced Soil Integrated Bridge System (GRS IBS)." *Center for Advanced Infrastructure and Transportation (CAIT) Seminar*, Newark, DE, 11/30/16.
- 33. Nicks, J., **Meehan, C. L.,** Dasenbrock, D., Connors, P., and Alzamora, D. (2016). "Performance of Geosynthetic Reinforced Soil Integrated Bridge System (GRS IBS)." *TRB Webinar Co-Sponsored by Geosynthetic Committee (AFS70) and Transportation Earthworks Committee (AFS10)*, 10/24/16.

- 32. **Meehan, C. L.** (2015). "Geotechnical Engineering at the University of Delaware." *Department of Geological Sciences, University of Delaware*, Newark, DE, 5/14/15.
- *Meehan, C. L., Talebi, M., Baker, W. J., Boyce, T. J., and Pereira, H. T. S. (2015). "Design, Construction, and Monitoring of a Geosynthetic Reinforced Soil Integrated Bridge System (GRS-IBS)." *Delaware Department of Transportation*, Dover, DE, 3/27/15.
- 30. **Meehan, C. L.** (2014). "Monitoring an Undrained Stability Failure in a Soft Clay Foundation: A Case History." *University of Delaware*, Newark, DE, 6/5/14.
- *Talebi, M., Meehan, C. L., Cacciola, D. V., and Becker, M. L. (2014). "Design and Construction of a Geosynthetic Reinforced Soil Integrated Bridge System (GRS-IBS): BR. 1-366 in Delaware." *Delaware Valley Geo-Institute Meeting*, Villanova University, Villanova, PA, 2/18/14.
- *Cacciola, D. V. and Meehan, C. L. (2013). "Quality Assurance Procedures for Use with Continuous Compaction Control Equipment." *Delaware Department of Transportation*, Dover, DE, 5/21/13.
- 27. Meehan, C. L. (2013). "Designing Safer Flood Protection Systems." *University of Tampere*, Tampere, Finland, 3/14/13.
- *Cacciola, D. V. and Meehan, C. L. (2013). "A Quality Assurance Procedure for Use with Continuous Compaction Control Equipment." *Delaware Valley Geo-Institute Meeting*, Villanova University, Villanova, PA, 2/19/13.
- 25. Meehan, C. L. (2012). "Freedom of Knowledge in the Digital Age: One American's Perspective." *University of Turku*, Turku, Finland, 10/12/12.
- 24. Meehan, C. L. (2012). "What Do Academic Departments Look for in an Applicant? The Student-Mentor Relationship." *Fulbright Center*, Helsinki, Finland, 9/24/12, (panel presentation).
- 23. Meehan, C. L. (2012). "An Overview of Recent Geotechnical Engineering Research at the University of Delaware." *Tampere University of Technology*, Tampere, Finland, 8/24/12.
- 22. *Benjasupattananan, S. and **Meehan, C. L.** (2012). "Levee Underseepage: Three Dimensional Configuration Effects." *Delaware Valley Geo-Institute Meeting*, Villanova University, Villanova, PA, 2/22/12.
- 21. Meehan, C. L. (2011). "An Introduction to Continuous Compaction Control Systems." *DuPont, Inc.: Facilities, Construction, and Services Division*, Newark, DE, 5/12/11, (e-presentation).

- 20. *Vahedifard, F. and **Meehan, C. L.** (2011). "Regional Hazard Assessment of Earthquake-Triggered Landslides using GIS." *Delaware Valley Geo-Institute Meeting*, Villanova University, Villanova, PA, 2/22/11.
- 19. *Khabbazian, M., Kaliakin, V. N., and **Meehan, C. L.** (2010). "Geosynthetic-Reinforced Pile-Supported Embankments with Emphasis on Geosynthetic Encased Columns." *Huesker, Inc.*, Charlotte, NC, 9/28/10.
- 18. *Khabbazian, M., Kaliakin, V. N., and **Meehan, C. L.** (2010). "Geosynthetic-Reinforced Pile-Supported Embankments with Emphasis on Geosynthetic Encased Columns." *GeoPier Foundation Company*, Charlotte, NC, 9/27/10.
- 17. **Meehan, C. L.** (2010). "An Introduction to the Geosynthetic Reinforced Soil Integrated Bridge System." *Delaware Department of Transportation*, Dover, DE, 8/19/10.
- 16. **Meehan, C. L.** (2010). "An Introduction to Continuous Compaction Control Systems." *Schnabel Engineering*, Gaithersburg, MD, 4/16/10.
- 15. **Meehan, C. L.** (2010). "A Comparison of In Situ Testing Methods for Control of Soil Compaction." *Schnabel Engineering*, Gaithersburg, MD, 4/16/10.
- 14. **Meehan, C. L.** (2010). "Emerging Technologies of Interest in Geotechnical Engineering." *Schnabel Engineering*, Gaithersburg, MD, 4/15/10.
- 13. Meehan, C. L. (2010). "Electrical Density Gauge Data Analysis: Data from a Delaware Case Study." U.S. Army Engineer Research and Development Center, Vicksburg, MS, 3/31/10.
- 12. Meehan, C. L. (2010). "A Comparison of In Situ Testing Methods for Control of Soil Compaction." U.S. Army Engineer Research and Development Center, Vicksburg, MS, 3/31/10.
- 11. **Meehan, C. L.** (2010). "An Introduction to Continuous Compaction Control Systems." *Delaware Department of Transportation Winter Workshop*, Dover, DE, 2/18/10.
- *Khabbazian, M., Kaliakin, V. N., and Meehan, C. L. (2010). "Numerical Study of Effect of Geosynthetic Encasement on the Behavior of Granular Columns." *Delaware Valley Geo-Institute Meeting*, Villanova University, Villanova, PA, 2/15/10.
- 9. **Meehan, C. L.** (2010). "Keynote: Civil Engineering Education: Challenges & Opportunities for the Future." *Delaware Valley Geo-Institute Meeting*, Villanova University, Villanova, PA, 2/15/10.

- 8. Meehan, C. L. (2010). "The Seismic Behavior of Slickensided Surfaces." *University of Colorado at Boulder*, Boulder, CO, 2/11/10.
- 7. Meehan, C. L. (2009). "An Investigation of Continuous Compaction Control Systems." *Duffield Associates, Inc.*, Wilmington, DE, 12/16/09.
- 6. **Meehan, C. L.** (2009). "An Investigation of Continuous Compaction Control Systems." *Delaware Department of Transportation*, Dover, DE, 7/29/09.
- 5. **Meehan, C. L.** (2009). "Electrical Density Gauge Data Analysis: Data from a Delaware Case Study." *Duffield Associates, Inc.*, Wilmington, DE, 5/13/09.
- 4. *Tehrani, F. S. and Meehan, C. L. (2009). "Continuous Compaction Control Systems A Delaware Case Study." *Delaware Valley Geo-Institute Meeting*, Villanova University, Villanova, PA, 2/17/09.
- 3. *Walsh, N. A., Leshchinsky, D., and **Meehan, C. L.** (2008). "Cherry Island Landfill Expansion." *Delaware Valley Geo-Institute Meeting*, Villanova University, Villanova, PA, 2/19/08.
- 2. **Meehan, C. L.** (2006). "Slope Stability and the Dynamic Behavior of Slickensided Slip Surfaces." *Iowa State University*, Ames, IA, 3/20/06.
- 1. **Meehan, C. L.** (2006). "An Experimental Study of the Dynamic Behavior of Slickensided Slip Surfaces." *University of Delaware*, Newark, DE, 2/13/06.

Research Conference Presentations: (* indicates with student)

- *Bashir, A., Clarke-Sather, A. R., Poggiogalle, T. M., and Meehan, C. L. (2021).
 "Material Properties of Discarded Textiles for Manufacturing Feedstocks." ASME 2021 16th International Manufacturing Science and Engineering Conference (MSEC2021), Virtual, Online, 6/21/21-6/25/21.
- 152. *Al Saadi, A. N., Meehan, C. L., and Kaliakin, V. N. (2021). "Numerical Study of the Load Transfer Mechanism for Encased Stone Columns of Varying Lengths Bearing on Rigid and Non-Rigid Layers." *Geo-Congress 2021: International Foundations Congress and Equipment Expo 2021 (IFCEE 2021)*, ASCE Geo-Institute 2021 GeoCongress, Dallas, TX, 5/14/21.
- 151. *Baker, W. J. and **Meehan, C. L.** (2021). "Monitoring the Compaction Process Utilizing Custom Fabricated Accelerometers: A Preliminary Study." *Delaware Valley Geo-Institute Meeting*, 3/11/21, (online presentation).
- 150. *Kaya, C. A. and **Meehan, C. L.** (2020). "Avoiding One of the Most Critical Problem from the Nuclear Power Plants By Using Barrier Materials." *Delaware Valley Geo-Institute Meeting*, Villanova University, Villanova, PA, 3/5/20, (poster presentation).

- 149. *Affinito, R. A., Baker, W. J., and Meehan, C. L. (2020). "Development and Calibration of a Moisture Content Model for an Electric Density Gauge." *Delaware Valley Geo-Institute Meeting*, Villanova University, Villanova, PA, 3/5/20, (poster presentation).
- 148. *Saxon, S. S., Baker, W. J., and Meehan, C. L. (2020). "A Comparison of In-Place Unit Weight and Moisture Content Measurements Made Using Nuclear-Based and Drive Cylinder Methods – Preliminary Results." *Delaware Valley Geo-Institute Meeting*, Villanova University, Villanova, PA, 3/5/20, (poster presentation).
- 147. *Baker, W. J. and **Meehan, C. L.** (2020). "Two Non-Destructive Approaches for Assessment of Field Lift Thickness ." *Delaware Valley Geo-Institute Meeting*, Villanova University, Villanova, PA, 3/5/20, (poster presentation).
- 146. *Baker, W. J. and Meehan, C. L. (2020). "Continuous Compaction Control Measurements for Quality Assurance in Conjunction with Light Weight Deflectometer Target Modulus Values." *Delaware Valley Geo-Institute Meeting*, Villanova University, Villanova, PA, 3/5/20, (poster presentation).
- 145. *Baker, W. J. and **Meehan, C. L.** (2020). "Continuous Compaction Control Measurements for Quality Assurance in Conjunction with Light Weight Deflectometer Target Modulus Values." *Geo-Congress 2020: Vision, Insight, Outlook, ASCE Geo-Institute 2020 GeoCongress, Minneapolis, MN, 2/27/20, (poster presentation).*
- 144. *Baker, W. J. and **Meehan, C. L.** (2020). "Two Non-Destructive Approaches for Assessment of Field Lift Thickness." *Geo-Congress 2020: Vision, Insight, Outlook, ASCE Geo-Institute 2020 GeoCongress, Minneapolis, MN, 2/26/20, (poster presentation).*
- 143. *Baker, W. J. and Meehan, C. L. (2019). "Monitoring Continuous Compaction Control Data during the Construction of U.S. 301 Section 3." *Delaware Center for Transportation 2019 Research Showcase*, Dover, DE, 5/16/19.
- 142. *Meehan, C. L., Poggiogalle, T. M., and Talebi, M. (2019). "Long-Term Monitoring of a Geosynthetic Reinforced Soil Integrated Bridge System (GRS-IBS)." *Delaware Center for Transportation 2019 Research Showcase*, Dover, DE, 5/16/19, (poster presentation).
- 141. *Meehan, C. L., Poggiogalle, T. M., and Clarke-Sather, A. R. (2019).
 "Sustainable Geotextiles for Transportation Applications from Recycled Textiles." *Delaware Center for Transportation 2019 Research Showcase*, Dover, DE, 5/16/19, (poster presentation).
- 140. *Baker, W. J. and Meehan, C. L. (2019). "Monitoring of Pile Downdrag through

Instrumentation of Two Piles in New Castle County, DE." *Delaware Center for Transportation 2019 Research Showcase*, Dover, DE, 5/16/19, (poster presentation).

- 139. *Baker, W. J. and Meehan, C. L. (2019). "Monitoring of Continuous Compaction Control Data During Active Construction of U.S. 301 Section 3." *Delaware Center for Transportation 2019 Research Showcase*, Dover, DE, 5/16/19, (poster presentation).
- 138. *Baker, W. J. and **Meehan, C. L.** (2019). "Monitoring Pile Downdrag Through Instrumentation of a Pile on U.S. 301 in Middletown, DE." *External Advisory Council Reception*, University of Delaware, Newark, DE, 5/3/19, (poster presentation).
- 137. *Mashayekhi, M., Kaliakin, V. N., Meehan, C. L., Adams, M. T., and Nicks, J. E. (2019). "Numerical Modeling of Structural Backfills for Transportation Infrastructure." *Geo-Congress 2019: The Eighth International Conference on Case Histories in Geotechnical Engineering*, ASCE Geo-Institute 2019 GeoCongress, Philadelphia, PA, 3/26/19, (poster presentation).
- 136. *Talebi, M. and Meehan, C. L. (2019). "Numerical Simulation of Stress Distribution beneath the Foundation of a Geosynthetic Reinforced Soil Bridge Abutment Using Parametric Studies." *Geo-Congress 2019: The Eighth International Conference on Case Histories in Geotechnical Engineering*, ASCE Geo-Institute 2019 GeoCongress, Philadelphia, PA, 3/26/19.
- 135. *Baker, W. J. and Meehan, C. L. (2019). "Preliminary Results from a Continuous Compaction Control Data Set Recorded during Active Earthwork Construction." *Geo-Congress 2019: The Eighth International Conference on Case Histories in Geotechnical Engineering*, ASCE Geo-Institute 2019 GeoCongress, Philadelphia, PA, 3/25/19.
- 134. *Hertz, J. S. and **Meehan, C. L.** (2019). "Influence of Temperature Variation on Complex-Impedance Measuring Instrument Test Results." *Geo-Congress 2019: The Eighth International Conference on Case Histories in Geotechnical Engineering*, ASCE Geo-Institute 2019 GeoCongress, Philadelphia, PA, 3/25/19
- 133. *Al Saadi, A. N., Meehan, C. L., and Kaliakin, V. N. (2019). "Numerical Study of the Behavior of a Fully Encased Stone Column Bearing on a Non-Rigid Layer." *Geo-Congress 2019: The Eighth International Conference on Case Histories in Geotechnical Engineering*, ASCE Geo-Institute 2019 GeoCongress, Philadelphia, PA, 3/25/19.
- 132. *Baker, W. J. and **Meehan, C. L.** (2019). "Developing a Calibration Model for Moisture Content Determination Utilizing a Hybrid Nuclear-Electric Gauge." *Geo-Congress 2019: The Eighth International Conference on Case Histories in Geotechnical Engineering*, ASCE Geo-Institute 2019 GeoCongress, Philadelphia,

PA, 3/25/19.

- 131. *Baker, W. J. and Meehan, C. L. (2019). "Developing a Calibration Model for Moisture Content Determination Utilizing a Hybrid Nuclear-Electric Gauge." *Delaware Valley Geo-Institute Meeting*, Villanova University, Villanova, PA, 3/18/19, (poster presentation).
- 130. *Baker, W. J. and **Meehan, C. L.** (2019). "Monitoring Pile Downdrag Through Instrumentation of a Pile on U.S. 301 in Middletown, DE." *Delaware Valley Geo-Institute Meeting*, Villanova University, Villanova, PA, 3/18/19, (poster presentation).
- 129. *Al Saadi, A. N., **Meehan, C. L.**, and Kaliakin, V. N. (2019). "Numerical Study of the Effect of Soft Soil Type and the Stiffness of the Encasement for a Fully Encased Stone Column Sitting on a Non-Rigid Layer." *Delaware Valley Geo-Institute Meeting*, Villanova University, Villanova, PA, 3/18/19, (poster presentation).
- 128. *Baker, W. J. and **Meehan, C. L.** (2018). "Utilizing Smart Equipment During Active Construction." *Delaware Department of Transportation Innovation Fair*, Dover, DE, 10/4/18, (poster presentation).
- 127. *Baker, W. J. and **Meehan, C. L.** (2018). "Utilizing Compactometer Value to Detect Underlying Soft Soils During Active Construction." *Delaware Center for Transportation 2018 Research Showcase*, Dover, DE, 5/9/18, (poster presentation).
- *Poggiogalle, T. M., Meehan, C. L., and Clarke-Sather, A. R. (2018).
 "Sustainable Geotextiles for Transportation Applications from Recycled Textiles." *Delaware Center for Transportation 2018 Research Showcase*, Dover, DE, 5/9/18, (poster presentation).
- 125. *Baker, W. J., Poggiogalle, T. M., and **Meehan, C. L.** (2018). "Monitoring Pile Downdrag through Instrumentation of a Pile on U.S. 301." *Delaware Center for Transportation 2018 Research Showcase*, Dover, DE, 5/9/18, (poster presentation).
- 124. *Al Saadi, A. N., Meehan, C. L., and Kaliakin, V. N. (2018). "Numerical Study of the Effect of Dilation Angle and Column Diameter on the Behavior of a Fully Encased Stone Column Bearing on a Non-Rigid Layer." *Eighth Annual University* of Delaware Graduate Research Forum, University of Delaware, Newark, DE, 4/20/18, (poster presentation).
- 123. *Baker, W. J. and Meehan, C. L. (2018). "Low-Radiation Nuclear Gauge Measurements Compared Against Conventional In Situ Test Measurements for Unit Weight and Moisture." *Eighth Annual University of Delaware Graduate Research Forum*, University of Delaware, Newark, DE, 4/20/18, (poster

presentation).

- 122. *Poggiogalle, T. M., **Meehan, C. L.**, and Talebi, M. (2018). "Live Load Testing of a Geosynthetic Reinforced Soil Bridge Abutment." *Eighth Annual University of Delaware Graduate Research Forum*, University of Delaware, Newark, DE, 4/20/18, (poster presentation).
- 121. *Al Saadi, A. N., Meehan, C. L., and Kaliakin, V. N. (2018). "Numerical Study of the Effect of Dilation Angle and Column Diameter on the Behavior of a Fully Encased Stone Column Bearing on a Non-Rigid Layer." *Delaware Valley Geo-Institute Meeting*, Villanova University, Villanova, PA, 3/15/18, (poster presentation).
- 120. *Baker, W. J. and **Meehan, C. L.** (2018). "Low-Radiation Nuclear Gauge Measurements Compared Against Conventional In Situ Test Measurements for Unit Weight and Moisture." *Delaware Valley Geo-Institute Meeting*, Villanova University, Villanova, PA, 3/15/18, (poster presentation).
- 119. *Baker, W. J. and **Meehan, C. L.** (2018). "Earthwork Quality Assurance and Quality Control: Relating Continuous Compaction Control Measurements to Traditional In Situ Measurements." *Delaware Valley Geo-Institute Meeting*, Villanova University, Villanova, PA, 3/15/18, (poster presentation).
- 118. *Sagnak, M. and **Meehan, C. L.** (2018). "Soil Stabilization of Kaolinite and Bentonite Clays Using Recycled Gypsum and Sodium Silicate." *Delaware Valley Geo-Institute Meeting*, Villanova University, Villanova, PA, 3/15/18, (poster presentation).
- 117. *Poggiogalle, T. M., **Meehan, C. L.**, and Talebi, M. (2018). "Live Load Testing of a Geosynthetic Reinforced Soil Bridge Abutment." *Delaware Valley Geo-Institute Meeting*, Villanova University, Villanova, PA, 3/15/18, (poster presentation).
- 116. *Poggiogalle, T. M., Meehan, C. L., and Talebi, M. (2018). "Changes in Temperature Distribution in a Geosynthetic Reinforced Soil Bridge Abutment." *Delaware Valley Geo-Institute Meeting*, Villanova University, Villanova, PA, 3/15/18, (poster presentation).
- 115. *Cacciola, D. V., Meehan, C. L., Baker, W. J., and Tehrani, F. S. (2018). "A Comparison of Continuous Compaction Control Measurements with Localized In Situ Test Results." *International Foundations Congress and Equipment Expo 2018* (*IFCEE 2018*), ASCE Geo-Institute 2018 GeoCongress, Orlando, FL, 3/9/18.
- 114. *Baker, W. J. and Meehan, C. L. (2018). "A Comparison of In-Place Unit Weight and Moisture Content Measurements Made Using Nuclear Based Methods and the Drive Cylinder Method." *International Foundations Congress and Equipment Expo 2018 (IFCEE 2018)*, ASCE Geo-Institute 2018 GeoCongress, Orlando, FL, 3/9/18.

- 113. D'Ignazio, M., Jostad, H. P., Länsivaara, T., Lehtonen, V., Mansikkamäki, J., and Meehan, C. L. (2017). "Effects of Sample Disturbance in the Determination of Soil Parameters for Advanced Finite Element Modelling of Sensitive Clays." Second International Workshop on Landslides in Sensitive Clays (2017 IWLSC), Norwegian University of Science and Technology, Trondheim, Norway, 6/12/17.
- 112. *Aldawwas, A. and **Meehan, C. L.** (2017). "An Approach for Field Assessment of Pile Downdrag." *Delaware Center for Transportation 2017 Research Showcase*, Dover, DE, 5/3/17, (poster presentation).
- 111. *Baker, W. J. and Meehan, C. L. (2017). "Preliminary Continuous Compaction Control Data During US 301 Construction." *Delaware Center for Transportation* 2017 Research Showcase, Dover, DE, 5/3/17, (poster presentation).
- 110. *Poggiogalle, T. M., Talebi, M., and Meehan, C. L. (2017). "Performance of a Geosynthetic Reinforced Soil Integrated Bridge System." *Delaware Center for Transportation 2017 Research Showcase*, Dover, DE, 5/3/17, (poster presentation).
- 109. *Baker, W. J. and **Meehan, C. L.** (2017). "Preliminary Continuous Compaction Control Data During US 301 Construction." *External Advisory Council Reception*, University of Delaware, Newark, DE, 5/2/17, (poster presentation).
- 108. *Poggiogalle, T. M., Talebi, M., and Meehan, C. L. (2017). "Performance of a Geosynthetic Reinforced Soil Integrated Bridge System." *External Advisory Council Reception*, University of Delaware, Newark, DE, 5/2/17, (poster presentation).
- 107. *Sagnak, M. and Meehan, C. L. (2017). "Strength Behavior and Microstructural Characterization of Kaolinite and Bentonite Clays Treated with a Sodium Silicate-Based Liquid Stabilizer and Recycled Gypsum." Seventh Annual University of Delaware Graduate Research Forum, University of Delaware, Newark, DE, 4/13/17, (poster presentation).
- 106. *Aldawwas, A. and Meehan, C. L. (2017). "An Approach for Field Assessment of Pile Downdrag." Seventh Annual University of Delaware Graduate Research Forum, University of Delaware, Newark, DE, 4/13/17, (poster presentation).
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- 15. *Meehan, C. L. and Vahedifard, F. (2010). "Examination of Simplified Displacement-Based Methods for Dynamic Analyses of Slopes." *GeoFlorida* 2010: Advances in Analysis, Modeling & Design, ASCE Geo-Institute 2010 GeoCongress, West Palm Beach, FL, 2/22/10.
- *Tehrani, F. S. and Meehan, C. L. (2010). "The Effect of Water Content on Light Weight Deflectometer Measurements." *GeoFlorida 2010: Advances in Analysis, Modeling & Design*, ASCE Geo-Institute 2010 GeoCongress, West Palm Beach, FL, 2/21/10.
- *Khabbazian, M., Meehan, C. L., and Kaliakin, V. N. (2010). "Numerical Study of Effect of Encasement on Stone Column Performance." *GeoFlorida 2010: Advances in Analysis, Modeling & Design*, ASCE Geo-Institute 2010 GeoCongress, West Palm Beach, FL, 2/21/10.
- 12. *Lobo, L. E., Vahedifard, F., and **Meehan, C. L.** (2009). "Landslide Hazard Mapping of Earthquake Prone Areas." *University of Delaware Geospatial Research Day*, Newark, DE, 11/19/09, (poster presentation).
- 11. *Valentino, E. J. and **Meehan, C. L.** (2009). "Designing Safer Levee Systems." *University of Delaware Research Foundation Symposium*, Newark, DE, 11/3/09, (poster presentation).
- Han, B., Imhoff, P. T., O'Neal, M. A., Puleo, J. A., and Meehan, C. L. (2009). "Airship-Based Measurements for Quantifying Methane Emissions from Landfills." *University of Delaware Research Foundation Symposium*, Newark, DE, 11/3/09, (poster presentation).
- 9. *Tehrani, F. S. and **Meehan, C. L.** (2009). "Continuous Compaction Control: Preliminary Data from a Delaware Case Study." *Eighth International Conference on the Bearing Capacity of Roads, Railways and Airfields*, Champaign, IL, 7/1/09.

- 8. *Miner, T. and **Meehan, C. L.** (2009). "Establishment of a Geotechnical Information Database." *Delaware Center for Transportation 2009 Research Showcase*, Dover, DE, 5/4/09, (poster presentation).
- 7. *Tehrani, F. S. and **Meehan, C. L.** (2009). "Investigation of Intelligent Compaction Technology." *Delaware Center for Transportation 2009 Research Showcase*, Dover, DE, 5/4/09, (poster presentation).
- 6. *Khabbazian, M., Kaliakin, V. N., and **Meehan, C. L.** (2009). "3D Numerical Analyses of Geosynthetic Encased Stone Columns." *International Foundation Congress and Equipment Expo 2009*, ASCE Geo-Institute 2009 GeoCongress, Orlando, FL, 3/19/09.
- *Walsh, N. A., Meehan, C. L., and Leshchinsky, D. (2009). "Lessons Learned: Field Installation of Strain Gages on High Strength Geotextile." *International Foundation Congress and Equipment Expo 2009*, ASCE Geo-Institute 2009 GeoCongress, Orlando, FL, 3/18/09.
- 4. *Brendza, C., Miner, T., and **Meehan, C. L.** (2008). "Establishment of a Geotechnical Information Database." *Delaware Center for Transportation 2008 Research Showcase*, Dover, DE, 5/6/08, (poster presentation).
- 3. *Imamoglu, B., **Meehan, C. L.**, and Leshchinsky, D. (2008). "Construction of Approach MSE Walls to IRIB: Reduction of Geotechnical Field Data." *Delaware Center for Transportation 2008 Research Showcase*, Dover, DE, 5/6/08, (poster presentation).
- 2. *Tehrani, F. S. and **Meehan, C. L.** (2008). "Investigation of Intelligent Compaction Technology." *Delaware Center for Transportation 2008 Research Showcase*, Dover, DE, 5/6/08, (poster presentation).
- Meehan, C. L. (2003). "Determining the Cyclic Shear Strength of Slickensided Slip Surfaces." *The 23rd USSD Annual Meeting and Conference*, Charleston, SC, 4/15/03

Funded Research Projects: (In Reverse Chronological Order)

In total, there are 40 projects, with a total funding award amount of \$11,695,519

40.	Title:	Anticipating Threats to Natural Systems (ACTIONS)
	PI(s):	Donald L. Sparks, Yan Jin, Christopher L. Meehan
	Sponsor:	U.S. Army Engineer Research & Development Center (ERDC), U.S.
		Department of Defense
	Amount:	\$7,867,379
	Duration:	9/1/20 - 8/31/24

39. Title: FY21 Delaware Center for Transportation Administration

	PI(s): Sponsor: Amount: Duration:	Christopher L. Meehan Delaware Department of Transportation \$210,623 7/1/20 – 6/30/21
38.	Title: PI(s): Sponsor: Amount: Duration:	FY20 Delaware Center for Transportation Administration Christopher L. Meehan Delaware Department of Transportation \$217,272 7/1/19 – 6/30/20
37.	Title: PI(s): Sponsor: Amount: Duration:	Assessing Emerging Nuclear Technologies for Effective "Spot Testing" of Compaction Christopher L. Meehan Delaware Department of Transportation \$101,189 7/1/19 = 6/30/21
36.	Title: PI(s): Sponsor: Amount: Duration:	Effective Deployment of Continuous Compaction Control (CCC) Technology for Construction of Delaware's Roads Christopher L. Meehan Delaware Department of Transportation \$108,191 7/1/19 – 6/30/21
35.	Title: PI(s): Sponsor: Amount: Duration:	FY19 Delaware Center for Transportation Administration Christopher L. Meehan Delaware Department of Transportation \$196,622 11/20/18 – 6/30/19
34.	Title: PI(s): Sponsor: Amount: Duration:	2018 Fulbright Visiting Scholar Program for Iraq – Engineering Cohort Christopher L. Meehan Fulbright Program, Institute of International Education, U.S. Department of State \$115,500 (\$107,100 from sponsor + \$8,400 match) 4/1/18 – 11/30/18
33.	Title: PI(s): Sponsor: Amount: Duration:	FY18 Delaware Center for Transportation Administration Christopher L. Meehan Delaware Department of Transportation \$185,636 9/5/17 – 6/30/18
32.	Title:	2017 Fulbright Visiting Scholar Program for Iraq – Engineering

	PI(s): Sponsor: Amount: Duration:	Cohort Christopher L. Meehan Fulbright Program, Institute of International Education, U.S. Department of State \$110,000 (\$101,500 from sponsor + \$8,500 match) 4/1/17 - 12/31/17
31.	Title: PI(s): Sponsor: Amount: Duration:	Exploratory Field Monitoring of Pile Downdrag Christopher L. Meehan Delaware Department of Transportation \$26,615 (\$25,000 from sponsor + \$1,615 match) 1/1/17 – 12/31/18
30.	Title: PI(s): Sponsor: Amount: Duration:	Sustainable Geotextiles for Transportation Applications from Recycled Textiles Christopher L. Meehan , Abigail R. Clarke-Sather United States Department of Transportation \$118,750 (\$59,349 from sponsor + \$59,401 match) 9/1/16 – 8/31/18
29.	Title: PI(s): Sponsor: Amount: Duration:	FY17 Delaware Center for Transportation Administration Christopher L. Meehan Delaware Department of Transportation \$169,078 8/1/16 – 12/31/17
28.	Title: PI(s): Sponsor: Amount: Duration:	2016 Fulbright Visiting Scholar Program for Iraq – Engineering Cohort Christopher L. Meehan Fulbright Program, Institute of International Education, U.S. Department of State \$64,520 (\$58,000 from sponsor + \$6,520 match) 4/1/16 – 9/30/16
27.	Title: PI(s): Sponsor: Amount: Duration:	Long-Term Monitoring of a Geosynthetic Reinforced Soil Integrated Bridge System (GRS-IBS) Christopher L. Meehan United States Department of Transportation \$119,552 (\$59,776 from sponsor + \$59,776 match) 9/1/15 - 8/31/17
26.	Title: PI(s): Sponsor: Amount: Duration:	Implementation of "Smart Equipment" in Field Construction Christopher L. Meehan United States Department of Transportation \$316,916 (\$158,370 from sponsor + \$158,546 match) 6/1/15 - 8/31/18

25.	Title: PI(s): Sponsor: Amount: Duration:	Collaborative Research: Assessing the Reliability of Levees in Changing Geologic Conditions John D. Rice, Christopher L. Meehan National Science Foundation \$289,947 (Meehan portion \$85,000) 7/1/14 – 6/30/18
24.	Title:	2014 Fulbright Visiting Scholar Program for Iraq – Engineering
	PI(s): Sponsor:	Christopher L. Meehan Fulbright Program, Institute of International Education, U.S. Department of State
	Amount: Duration:	\$129,040 (\$104,000 from sponsor + \$25,040 match) 2/15/14 – 9/30/14
23.	Title:	AASHTO LRFD Bridge Design Specifications – Pile Downdrag Design Provisions
	PI(s): Sponsor: Amount: Duration:	Christopher L. Meehan Delaware Department of Transportation \$57,135 10/25/13 – 8/31/17
22.	Title:	Design, Construction, and Monitoring of a Geosynthetic Reinforced Soil (GRS) Integrated Bridge System (IBS) in the State of Delaware: A Continuation of Project Letter 11A01477
	PI(s):	Christopher L. Meehan
	Sponsor: Amount:	Delaware Department of Transportation \$93,095
	Duration:	9/1/11 - 8/31/16
21.	Title:	Design and Construction of a Geosynthetic Reinforced Soil (GRS) Integrated Bridge System (IBS) in the State of Delaware
	PI(s):	Christopher L. Meehan
	Amount:	\$52,084
	Duration:	9/1/11 - 8/31/13
20.	Title:	Mapping of Landslides Induced by Earthquakes: UDUTC Research Experience for Undergraduates (Elisa Kropat)
	PI(s):	Christopher L. Meehan
	Amount:	\$4,500
	Duration:	6/7/10 - 8/6/10
19.	Title:	Development of Specifications for the Use of Continuous Compaction Control Systems
	PI(s):	Christopher L. Meehan

	Sponsor: Amount: Duration:	Delaware Department of Transportation \$50,000 9/1/10 – 8/31/13
18.	Title: PI(s): Sponsor: Amount: Duration:	Characterizing Riverine Environments through Remote Sensing Jack A. Puleo, Thomas E. McKenna, Christopher L. Meehan Naval Research Laboratory, Department of Defense \$25,612 6/1/10 - 5/31/11
17.	Title: PI(s): Sponsor: Amount: Duration:	Temporal Imaging of the Intertidal Critical Zone – Field Application Thomas E. McKenna, Jack A. Puleo, Christopher L. Meehan Delaware NASA/EPSCoR Seed Grant Program: 2009-2010 \$27,930 2/1/10 – 5/31/11
16.	Title: PI(s): Sponsor: Amount: Duration:	Geosynthetic Reinforced Stone Columns & Column Supported Embankments: A Numerical Parametric Study Victor N. Kaliakin, Christopher L. Meehan Geosynthetic Institute \$20,000 9/1/09 – 6/1/12
15.	Title: PI(s): Sponsor: Amount: Duration:	Landslide Hazard Mapping of Earthquake Prone Transportation Areas-Case study: Oat Mountain Area along Route 5 in the State of California: UDUTC Research Experience for Undergraduates (Lauren Lobo) Christopher L. Meehan University of Delaware University Transportation Center \$4,500 6/8/09 – 8/7/09
14.	Title: PI(s): Sponsor: Amount: Duration:	Using Electrical Density Gauges for Field Compaction Control Christopher L. Meehan Delaware Department of Transportation \$50,000 9/1/09 – 8/31/11
13.	Title: PI(s): Sponsor: Amount: Duration:	Designing Safer Levee Systems: UDRF Research Experience for Undergraduates (Emily Valentino) Christopher L. Meehan University of Delaware Research Foundation \$3,500 6/1/09 – 8/31/09
12.	Title: PI(s):	CAREER: The Seismic Behavior of Slickensided Surfaces Christopher L. Meehan

	Sponsor: Amount: Duration:	National Science Foundation \$404,821 3/15/09 – 9/30/15					
11.	Title: PI(s): Sponsor: Amount: Duration:	Temporal Imaging of the Intertidal Critical Zone Thomas E. McKenna, Jack A. Puleo, Christopher L. Meehan Delaware NSF EPSCoR Seed Grant Program: 2008-2009 \$49,459 2/1/09 – 11/30/10					
10.	Title:	Quantifying Reductions in Greenhouse Gas Emissions with Airship-					
	PI(s):	Paul T. Imhoff, Jack A. Puleo, Christopher L. Meehan , Michael A. O'Neal Steven K Dentel					
	Sponsor: Amount: Duration:	University of Delaware Research Foundation \$45,000 12/1/08 – 1/31/10					
9.	Title:	Investigation of Intelligent Compaction Technology: Phase 2 – A					
	PI(s):	Field Study Christopher L. Meehan					
	Sponsor:	Delaware Department of Transportation					
	Amount: Duration:	\$40,729 7/1/08 - 6/30/09					
8.	Title:	Long-Term Performance Monitoring of a Recycled Tire Embankment					
	PI(s):	Victor N. Kaliakin, Christopher L. Meehan , Nii O. Attoh-Okine, Paul T. Imhoff					
	Sponsor:	Delaware Department of Transportation					
	Amount: Duration:	\$79,499 7/1/08 - 6/30/12					
7.	Title:	Designing Safer Levee Systems					
	PI(s):	Christopher L. Meehan					
	Sponsor: Amount:	University of Delaware Research Foundation \$25,000					
	Duration:	6/1/08 - 5/31/10					
6.	Title:	Geosynthetic Supported Base Reinforcement over Deep Foundations: A Numerical Parametric Study					
	PI(s):	Victor N. Kaliakin, Dov Leshchinsky, Christopher L. Meehan					
	Sponsor:	Geosynthetic Institute \$10,000					
	Duration:	10/15/07 - 9/30/08					
5.	Title:	Construction of Approach MSE Walls to IRIB: Reduction of					

	PI(s): Sponsor: Amount: Duration:	Geotechnical Field Data Dov Leshchinsky, Christopher L. Meehan Delaware Department of Transportation \$62,158 7/1/07 – 6/30/09
4.	Title: PI(s): Sponsor: Amount: Duration:	Establishment of a Geotechnical Information Database Christopher L. Meehan Delaware Department of Transportation \$42,000 7/1/07 – 6/30/10
3.	Title: PI(s): Sponsor: Amount: Duration:	Characterizing Morphology and Geotechnical Properties of a Macrotidal Muddy Coast using Multi-Spectral Ground-Based Remote Sensing (Gyeonggi Bay Tidal Flat, South Korea) Jack A. Puleo, Christopher L. Meehan , Thomas E. McKenna Office of Naval Research, Department of Defense \$23,733 2/15/07 – 12/31/07
2.	Title: PI(s): Sponsor: Amount: Duration:	Investigation of Intelligent Compaction Technology Christopher L. Meehan Delaware Department of Transportation \$60,000 2/1/07 – 8/31/08
1.	Title: PI(s): Sponsor: Amount: Duration:	Monitoring Strains in High-Strength Geotextiles at Cherry Island Landfill Dov Leshchinsky, Christopher L. Meehan Delaware Solid Waste Authority \$117,934 9/1/06 – 8/31/08

Pending Research Projects: (In Reverse Chronological Order)

1.	Title:	Effective Deployment of UAV Technology for Improved Project
		Delivery and Enhanced Asset Management
	PI(s):	Christopher L. Meehan
	Sponsor:	Delaware Department of Transportation
	Amount:	\$117,049
	Duration:	7/1/22 - 6/30/23

Visiting Scholars / Post-Docs Advised:

No.	Student	Project(s)
4.	Nima Latifi	Visiting from April 2016 to January 2017. Visiting Post-

		Doc	from	both	Malaysia	and	Iran.	Worked
		collab	orativel	y on a	number of p	apers.		
3.	Lie E. Yan	Visiti	ng from	Septe	mber 2015	to Au	gust 2016.	Visiting
		Ph.D.	Studen	t from	Guangxi Ur	niversi	ty, China.	Worked
		indep	endently	on he	r own resear	ch.		
2.	Ali Khosravi	Visiti	ng in S	Spring	2012. Wo	orked	on NSF (CAREER
1	Vivek Kannan	Visiti	ng from	Iune	2009 to Jul	v 2009) BS M	av 2011
1.	VIVER IXamian	NI-4	15 11011 	1 June	2007 to Jul	y 2002	V. D.S. W	ay 2011,
		Natio	nal Ins	titute	of Techno	logy,	Karnataka	a, India.
		Work	ed as si	ummer	intern on 1	Projec	t: "Evalu	ating the
		Streng	gth and	d Cor	mpressibility	y of	Compact	ed Soil
		Mixtu	ires".					

Doctoral Students Advised:

No.	<u>Student</u>	Status / Dissertation
6.	William J. Baker III	Current Ph.D. student.
5.	Ali Al-Saadi	Ph.D. August 2021. Dissertation: "Numerical Simulation
		of Geosynthetic Encased Stone Columns Bearing on a
		Compressible Soil Layer Used Individually and in Group
		Configurations". 244 pp. (Link to Dissertation)
4.	Majid Talebi	Ph.D. December 2016. Dissertation: "Analysis of the
		Field Behavior of a Geosynthetic Reinforced Soil
		Integrated Bridge System During Construction and
		Operation". 506 pp. (Link to Dissertation)
3.	Sittinan	Ph.D. January 2014. Dissertation: "Deterministic and
	Benjasupattananan	Probabilistic Approaches for Modeling Levee
		Underseepage". 631 pp. (Link to Dissertation)
2.	Majid Khabbazian	Ph.D. January 2012. Dissertation: "Numerical
		Simulation of Geosynthetic Encased Columns Used
		Individually and in Group Configurations". Co-advised
		with Victor Kaliakin. 333 pp. (Link to Dissertation)
1.	Farshid Vahedifard	Ph.D. August 2011. Dissertation: "Seismic
		Displacement of Unreinforced and Reinforced Earth
		Structures". 214 pp. Dov Leshchinsky served as Co-
		advisor. (<u>Link to Dissertation</u>)

Master's Students Advised:

<u>No.</u>	<u>Student</u>	<u>Status / Thesis</u>
11.	Matthew L. Becker	Current M.C.E. student.
10.	Celal Alperen Kaya	M.C.E. December 2021. Thesis: "Reducing Excessive
		Deformations of Buried High Density Polyethylene Pipes
		Under Dynamic Loading Using Expanded Polystyrene
		Geofoam: A Numerical Study". 186 pp. (Link to Thesis)
9.	Oguzhan Duzoglu	M.C.E. December 2021. Thesis: "Spatial Data Analysis
		for Preliminary Site Selection of Nuclear Power Plants in

		the Thrace Region of Turkey". 194 pp. (Link to Thesis)			
8.	Mehmet Sagnak	M.C.E. January 2018. Thesis: "Stabilization of			
		Bentonite and Kaolinite Clays Using Recycled Gypsum			
		and Liquid Sodium Silicate". (Link to Thesis)			
7.	Jason S. Hertz	M.C.E. August 2015. Thesis: "Evaluation of Electrical			
		Density Gauge for Field Compaction Control". (Link to			
		Thesis)			
6.	Daniel V. Cacciola	M.C.E. August 2013. Thesis: "Using Continuous			
		Compaction Control Systems within an Earthwork			
		Compaction Specification Framework". (Link to Thesis)			
5.	Yueru Chen	M.C.E. January 2011. Thesis: "An Experimental			
		Investigation of the Behavior of Compacted Clay/Sand			
		Mixtures". (Link to Thesis)			
4.	Ayse Ozdogan	M.C.E. August 2010. Thesis: "A Study on the Triaxial			
		Shear Behavior and Microstructure of Biologically			
		Treated Sand Specimens". (Link to Thesis)			
3.	Faraz S. Tehrani	M.C.E. August 2009. Thesis: "An Investigation of			
		Continuous Compaction Control Systems". (Link to			
		Thesis)			
2.	Baris Imamoglu	M.C.E. August 2009. Thesis: "Case History: Strain and			
	Force Distribution in HDPE Reinforced Wall". Co-				
		advised with Dov Leshchinsky (Link to Thesis)			
1.	Nicole A. Walsh	M.C.E. August 2009. Thesis: "High Strength			
		Geotextile: Strain Monitoring at Cherry Island Landfill".			
		Co-advised with Dov Leshchinsky (Link to Thesis)			

Master's Students Advised, Non-Thesis:

No.	<u>Student</u>	Status / Thesis
9.	Tyler M. Poggiogalle	M.C.E. May 2017. Non-Thesis Masters.
8.	Anas (Suliman M)	M.C.E. May 2017. Non-Thesis Masters.
	Aldawwas	
7.	Brian T. Lowe	M.C.E. December 2016. Non-Thesis Masters.
6.	Ryan M. Miller	M.C.E. December 2014. Non-Thesis Masters.
5.	Majid Talebi	M.C.E. May 2013. Non-Thesis Masters.
4.	Matthew J. Leone	M.C.E. May 2012. Non-Thesis Masters.
3.	Mohammad Khosravi	M.C.E. May 2012. Non-Thesis Masters.
2.	Sittinan	M.C.E. May 2011. Non-Thesis Masters.
	Benjasupattananan	
1.	Farshid Vahedifard	M.C.E. August 2009. Non-Thesis Masters.

Undergraduate Students Advised: (* indicates Undergraduate Senior Thesis):

<u>No.</u>	<u>Student</u>	Status / Undergraduate Thesis / Project(s) Worked On		
46.	Jack Linko	B.C.E. May 2024. Worked on Project: "Anticipating		
		Threats to Natural Systems (ACTIONS)".		

45.	Delaney Doran	B.C.E. May 2023. Worked on Project: "Anticipating
		Threats to Natural Systems (ACTIONS)".
44.	Jack Palevich	B.C.E. May 2023. Worked on Project: "Anticipating
		Threats to Natural Systems (ACTIONS)".
43.	Lillian Gilardi	B.C.E. May 2023. Worked on Project: "Anticipating
10		Infeats to Natural Systems (ACTIONS).
42.	Maria Pittsinger	B.C.E. May 2021. Worked on Project: "Anticipating Threats to Natural Systems (ACTIONS)"
11	Malvin Mattam	BCE May 2021 Worked on Project: "Anticipating
41.		Threats to Natural Systems (ACTIONS)".
40.	Dylan Rolando	B.C.E. May 2021. Worked on Project: "Anticipating
		Threats to Natural Systems (ACTIONS)".
39.	Brendan Green	B.C.E. May 2021. Worked on Project: "Effective
		Deployment of Continuous Compaction Control (CCC)
		Technology for Construction of Delaware's Roads". Also
		Worked on Project: "Anticipating Threats to Natural
		Systems (ACTIONS)".
38.	Samuel Saxon	B.C.E. May 2020. Worked on Project: "Effective
		Deployment of Continuous Compaction Control (CCC)
		Technology for Construction of Delaware's Roads". Also
		Worked on Project: "Assessing Emerging Nuclear
		Technologies for Effective "Spot Testing" of
		Compaction"
37	Tucker I Merritt	BCE May 2019 Worked on Project: "Implementing
57.	I UCKEI J. MEIIIII	Smart Equipment in Construction" Also Worked on
		Droiget: "Exploratory Field Monitoring of Dila
		Down drog"
26	Vala M. Hansham	DOWINITING . D.C.E. Mary 2010 Worked or Designet, "Implementing
30.	Kyle M. Horsnam	B.C.E. May 2019. Worked on Project: Implementing
		Smart Equipment in Construction . Also worked on
		Project: "Exploratory Field Monitoring of Pile
		Downdrag".
35.	Travis Plystak	B.M.E. May 2018. Worked on Project: "Sustainable
		Geotextiles for Transportation Applications from
		Recycled Textiles".
34.	Andrew J. Yurish	B.C.E. May 2019. Worked on Project: "Sustainable
		Geotextiles for Transportation Applications from
		Recycled Textiles". Also Worked on Project:
		"Implementing Smart Equipment in Construction". Also
		Worked on Project: "Exploratory Field Monitoring of
		Pile Downdrag". Also Worked on Project: "2018
		Fulbright Visiting Scholar Program for Iraq –
		Engineering Cohort".
33.	Jesse C. Green	B.M.E. May 2019. Worked on Project: "Implementing
		Smart Equipment in Construction". Also Worked on
		Project: "Exploratory Field Monitoring of Pile
		Downdrag". Also Worked on Project: "2018 Fulbright
		Visiting Scholar Program for Irag – Engineering Cohort"
		, istang senotar i togram for hug - Engineering Conort .

32.	Raphael A. Affinito	B.S. (Geology) May 2020. Worked on Project: "Sustainable Geotextiles for Transportation Applications				
		from Recycled Textiles". Also Worked on Project:				
		"2018 Fulbright Visiting Scholar Program for Iraq -				
		Engineering Cohort".				
31.	Miao Wang	B.S. May 2019. Worked on Project: "Sustainable				
	C	Geotextiles for Transportation Applications fr				
		Recycled Textiles".				
30.	Jesse Green	B.S. May 2019 (Mech. Eng.). Worked on Project:				
		"Implementation of "Smart Equipment" in Field				
		Construction". Also Worked on Project: "Exploratory				
		Field Monitoring of Pile Downdrag".				
29.	Joya A. Mitrano	B.M.E. May 2019. Worked on Project: "Implementation				
		of "Smart Equipment" in Field Construction". Also				
		Worked on Project: "Exploratory Field Monitoring of				
		Pile Downdrag".				
28.	Anthony M. Donatelli	B.S. May 2018. Worked on Project: "Implementation of				
		"Smart Equipment" in Field Construction". Also				
		Worked on Project: "Exploratory Field Monitoring of				
		Pile Downdrag".				
27.	Keith A. Heckler	B.S. May 2018. Worked on Project: "Implementation of				
		"Smart Equipment" in Field Construction".				
26.	Alec C. L'Amoreaux	B.S. May 2017. Worked on Project: "Implementation of				
		"Smart Equipment" in Field Construction".				
25.	Marc (Gus) Toussaint	B.S. May 2017. Worked on Project: "Design,				
		Construction, and Monitoring of a Geosynthetic				
		Reinforced Soil (GRS) Integrated Bridge System (IBS) in				
		the State of Delaware: A Continuation of Project Letter				
		11A014/7". Also worked on Project: "Implementation				
24		Of "Smart Equipment" in Field Construction"				
24.	Rachel H. Bruckel	B.S. May 2016. Worked on Project: "CAREER: The				
22	Tular M. Dessisselle	Seismic Benavior of Slickensided Surfaces".				
23.	Tyler M. Pogglogalle	B.S. May 2010. Worked on Project: Design,				
		Construction, and Monitoring of a Geosynthetic Deinforced Soil (CDS) Integrated Pridge System (IDS) in				
		the State of Delewere: A Continuation of Project Latter				
		11A01477"				
$\gamma\gamma$	Christy I Bugher	BS May 2016 Worked on Project: "Implementation of				
22.	Chilisty L. Dughei	"Smart Equipment" in Field Construction"				
21	Brigid Deely	BS May 2016 Worked on Project: "CARFER: The				
21.	Blight Deery	Seismic Behavior of Slickensided Surfaces"				
20	Scott M. Forsythe	B.S. May 2016 Worked on Project: "Design				
_0.	~	Construction, and Monitoring of a Geosynthetic				
		Reinforced Soil (GRS) Integrated Bridge System (IBS) in				
		the State of Delaware: A Continuation of Project Letter				
		11A01477".				
19.	Lucas F. Buonanno	Brazil Scientific Mobility Program, Department of Civil				

		and Environmental Engineering. Worked on Project:
		"Design, Construction, and Monitoring of a Geosynthetic
		Reinforced Soil (GRS) Integrated Bridge System (IBS) in
		the State of Delaware: A Continuation of Project Letter 11A01477".
18.	Matthew T. Kereszi	B.S. December 2015. Worked on Project: "Design,
		Construction, and Monitoring of a Geosynthetic
		Reinforced Soil (GRS) Integrated Bridge System (IBS) in
		the State of Delaware: A Continuation of Project Letter 11A01477"
17	*James Young	B.S. May 2015. Senior Thesis Center for Energy and
	• • • • • • • • • • • • • • • •	Environmental Policy: "Energy Auditing Brings
		Environmental and Financial Benefits to the U.S.
		Commercial Sector". Co-advised with Ismat Shah (who
		was the first reader).
16.	Andrew W. Wright	B.S. May 2015. Worked on Project: "AASHTO LRFD
		Bridge Design Specifications – Pile Downdrag Design
		Provisions".
15.	Truxton J. Boyce	B.S. May 2015. Worked on Project: "Design,
		Construction, and Monitoring of a Geosynthetic
		Reinforced Soil (GRS) Integrated Bridge System (IBS) in
		the State of Delaware: A Continuation of Project Letter 11A01477".
14.	Hugo Tefili S. Pereira	Brazil Scientific Mobility Program, Department of Civil
	C	and Environmental Engineering. Worked on Project:
		"Design, Construction, and Monitoring of a Geosynthetic
		Reinforced Soil (GRS) Integrated Bridge System (IBS) in
		the State of Delaware: A Continuation of Project Letter
		11A01477".
13.	William J. Baker III	B.S. May 2015. Worked on Project: "Design,
		Construction, and Monitoring of a Geosynthetic
		Reinforced Soil (GRS) Integrated Bridge System (IBS) in
		the State of Delaware: A Continuation of Project Letter 11A01477".
12.	Olivia M. Dalton	B.S. May 2013. Worked on Project: "Using Electrical
		Density Gauges for Field Compaction Control".
11.	Emma S. Gretina	B.S. May 2012. Worked on Project: "Development of
		Specifications for the Use of Continuous Compaction
10		Control Systems".
10.	Daniel V. Cacciola	B.S. May 2011. Worked on Project: "Using Electrical
0	Jamas M. Dailay	Density Gauges for Field Compaction Control . P.S. May 2011 Worked on Project: "Using Electrical
9.	James M. Daney	B.S. May 2011. Wolked on Project. Using Electrical
8	Fliss C Kropst	B S May 2011 Worked on Project: "Manning of
0.	Liisa C. Mopai	Landslides Induced by Earthquakes. LIDUTC Research
		Experience for Undergraduates"
7.	Lauren E. Lobo	B.S. May 2011. Worked on Project: "Landslide Hazard
	L. 1000	

		Mapping of Earthquake Prone Transportation Areas-Case		
		study: Oat Mountain Area along Route 5 in the State of		
		California: UDUTC Research Experience for		
		Undergraduates".		
6.	Mindy J. Laybourne	B.S. May 2011. Worked on Project: "Investigation of		
		Intelligent Compaction Technology: Phase 2 – A Field		
		Study".		
5.	Emily Valentino	B.S. May 2010. Worked on Project: "Designing Safer		
		Levee Systems".		
4.	Alexandra E. Patrone	B.S. May 2010. Worked on Project: "Testing the		
		Accuracy and Reliability of the Electrical Density		
		Gauge".		
3.	*Melissa A. Stewart	B.S. May 2010. Senior Thesis: "Variations in Apparent		
		Surface Temperature as a Function of Imager Viewing		
		Angle". Co-advised with Jack Puleo and Thomas		
		McKenna.		
2.	Thomas M. Miner	B.S. December 2009. Worked on Project:		
		"Establishment of a Geotechnical Information Database".		
		Also worked on Project: "Long-Term Performance		
		Monitoring of a Recycled Tire Embankment in		
		Wilmington, Delaware".		
1.	Christopher R.	B.S. May 2008. Worked on Project: "Establishment of a		
	Brendza	Geotechnical Information Database".		

TEACHING EXPERIENCE

Courses Taught: (*New course introduced, or course not taught in last 5 yr)

Term	Course	<u>Title</u>	Credit	Students
22 Spring	CIEG 321	Geotechnical Engineering	3	65
21 Fall	CIEG 626	Soil Behavior	3	7
21 Fall	CIEG 211	Statics	3	115
21 Spring	CIEG 321	Geotechnical Engineering	3	65
21 Winter	CIEG	Earth Structures Engineering	3	3/9
	422/622			
20 Fall	CIEG 211	Statics	3	88
20 Spring	CIEG 321	Geotechnical Engineering	3	60
19 Fall	CIEG 626	Soil Behavior	3	4
19 Spring	CIEG 321	Geotechnical Engineering	3	79
18 Fall	CIEG	Earth Structures Engineering	3	9/6
	422/622			
18 Spring	CIEG 321	Geotechnical Engineering	3	76
17 Fall	CIEG 626	Soil Behavior	3	3
17 Spring	CIEG 321	Geotechnical Engineering	3	83
16 Fall	CIEG	Earth Structures Engineering	3	5/10
	422/622			
16 Spring	CIEG 321	Geotechnical Engineering	3	88

15 Fall	CIEG 626	Soil Behavior	3	13
15 Spring	CIEG 321	Geotechnical Engineering	3	118
14 Fall	CIEG	Earth Structures Engineering	3	15/7
	422/622*			
14 Spring	CIEG 321	Geotechnical Engineering	3	111
13 Fall	CIEG 626	Soil Behavior	3	5
13 Spring	MPR 5350	Soil Behavior (TUT, sabbatical)	3	6
12 Fall	-	(sabbatical)	-	-
12 Spring	CIEG 321	Geotechnical Engineering	3	98
11 Fall	CIEG 626	Soil Behavior	3	11
11 Spring	CIEG 321	Geotechnical Engineering	3	68
10 Fall	CIEG 623	Soil Mechanics Lab	3	6
10 Spring	CIEG 321	Geotechnical Engineering	3	91
09 Fall	CIEG 626*	Soil Behavior*	3	8
09 Spring	CIEG 321	Geotechnical Engineering	3	72
08 Fall	CIEG 623*	Soil Mechanics Lab*	3	10
08 Spring	CIEG 321	Geotechnical Engineering	3	73
07 Fall	CIEG 667*	Soil Behavior*	3	7
07 Fall	CIEG 865	Civil Engineering Seminar	1	16
07 Spring	CIEG 321	Geotechnical Engineering	3	84
06 Fall	CIEG 323	Soil Mechanics Laboratory	1	92

SERVICE

Department, College, and University Service:

Chair, Faculty Search Committee, 2021-2022 academic year (Geotechnical Engineering) Member, 2021-2022 UD CEE P&T Subcommittee Chair, Civil & Environmental Engineering Awards Committee, Fall 2020 - present Mentor, Civil & Environmental Engineering Faculty: Mark Nejad and Jovan Tatar Member, 2019-2020, Remediation Search Committee Position (2 faculty positions, cluster search) Member, 2019 "Red Team", UD College if Engineering Strategic Planning Team Member, 2018-2019 UD CEE P&T Subcommittee, for Dr. Kalehiwot Manahiloh Member, 2017-2018 College of Engineering Dean Search Committee Member, CEE Leadership Committee, August 2017-present Member, 2017 College of Engineering Entrepreneurship Committee Member, 2016-2017 UD CEE P&T Subcommittee, for Dr. Kalehiwot Manahiloh Director, Delaware Center for Transportation (DCT), 2016 – 2021 Mentor, 2016-2017 Fulbright at UD Program, Advised Mark White and Kaitlyn Engler, UD **Undergraduate Students** Member, Faculty Search Committee, 2015-2016 academic year (Structural Engineering) Mentor, 2015-2016 Fulbright at UD Program, Advised Paula-Marie Ferrara, UD Undergraduate Student

Member, 2014-2015 College of Engineering Educational Activities Committee Member, 2014-2015 UD CEE P&T Subcommittee, for Dr. Kalehiwot Manahiloh Member, "Models for the New American Research University", Working Group for the University of Delaware Strategic Planning Initiative, May 2014 – March 2015 Participant, 2014 College of Engineering Electronic Receipt Pilot Program Member, Adjunct Faculty Search Committee, 2011-2012 academic year Member, Staff Search Committee, 2011-2012 academic year Member, Department Ad-Hoc Strategic Planning Committee, 2011-2012 academic year Member, Graduate Committee, 2010-2011 academic year, Spring 2011 Member, Department Ad-Hoc Strategic Planning Committee, 2010-2011 academic year Member, College of Engineering Cluster Hiring Committee (Energy), 2010-2011 academic year Advisor, Geo-Institute at the University of Delaware (student organization), 3/24/10 – present Member, College of Engineering Cluster Hiring Committee (Energy), 2009-2010 academic year Speaker, Blue & Gold Saturday, 10/24/09 Member, Faculty Search Committee, 2008-2009 academic year (2 positions) Member, Undergraduate Committee, 3/9/07 – 8/31/17 Member, ABET Accreditation Committee, 3/9/07 – present Undergraduate Advisor, 9/1/07 – present Graduate Advisor, 9/1/07 – present Member, Department Direction Committee, 11/9/07 – 2/28/08 Presentation at "Engineering Concepts" workshop (w/ Nicole Walsh), 6/25/08 Moderator, DCT Transportation Education, Research and Security Forum, 11/14/07 Organized civil engineering demonstration tours for visiting high school calculus students: 11/9/07 & 11/13/07 Took group of students to GeoProbe Field Day: 10/30/07

Engineering Community Service:

- Technical Publication Committee Chair and Chief Editor, Geo-Extreme 2021: Geotechnical Engineering for Extreme Events, Savannah, GA, August 15-18, 2021.
- Technical Program Co-Chair, Geo-Congress 2019: The Eighth International Conference on Case Histories in Geotechnical Engineering, ASCE 2019 GeoCongress, Philadelphia, PA, March 24-27, 2019.
- Technical Publication Committee Chair and Chief Editor, Geo-Congress 2019: The Eighth International Conference on Case Histories in Geotechnical Engineering, ASCE 2019 GeoCongress, Philadelphia, PA, March 24-27, 2019.
- Session Co-Chair: "Mechanically Stabilized Earth Retaining Walls 2", Geotechnical Frontiers 2017: Innovation and Collaboration in Technology and Practice, ASCE 2017 GeoCongress, Orlando, FL, March 12-15, 2017.
- Session Co-Chair: "Mechanically Stabilized Earth Retaining Walls 1", Geotechnical Frontiers 2017: Innovation and Collaboration in Technology and Practice, ASCE 2017 GeoCongress, Orlando, FL, March 12-15, 2017.
- Conference Co-Chair, Shale Energy Engineering 2014: Technical Challenges, Environmental Issues, and Public Policy, ASCE Energy Division's 2014 Shale Energy Engineering Conference, Pittsburgh, PA, July 21-23, 2014.

- Technical Publication Committee Chair and Chief Editor, Shale Energy Engineering 2014: Technical Challenges, Environmental Issues, and Public Policy, ASCE Energy Division's 2014 Shale Energy Engineering Conference, Pittsburgh, PA, July 21-23, 2014.
- Technical Publication Committee Chair and Chief Editor, 2013 Geo-Congress: Stability and Performance of Slopes and Embankments III, ASCE 2013 GeoCongress, San Diego, CA, March 3-7, 2013.
- Core Organizing Committee, 2013 Geo-Congress: Stability and Performance of Slopes and Embankments III, ASCE 2013 GeoCongress, San Diego, CA, March 3-7, 2013.
- Session Co-Chair: "Seismic Design of Reinforced Earth Structures", 2013 Geo-Congress: Stability and Performance of Slopes and Embankments III, ASCE 2013 GeoCongress, San Diego, CA, March 6, 2013.
- Session Co-Chair: "Column Supported Embankments", 2013 Geo-Congress: Stability and Performance of Slopes and Embankments III, ASCE 2013 GeoCongress, San Diego, CA, March 5, 2013.
- Session Co-Chair: "Earth Structures", *Geo-Frontiers 2011: Advances in Geotechnical Engineering*, ASCE 2011 GeoCongress, Dallas, TX, March 14, 2011.
- Session Co-Chair: "Embankments", *Geo-Frontiers 2011: Advances in Geotechnical Engineering*, ASCE 2011 GeoCongress, Dallas, TX, March 14, 2011.
- Mentor, ASCE ExCEEd Teaching Workshop, Northern Arizona University, Flagstaff, AZ, 7/12/08-7/18/08
- NEES Centrifuge Research and Training Workshop, Panel Discussion Presenter, University of California, Davis, 11/7/06

National, State, and Local Professional Committees:

- Vice-Chair, ASCE Geo-Institute Committee on Embankments, Dams, and Slopes, 3/7/18-present Treasurer and Ex-Officio Board of Directors Member, United States Universities Council on Geotechnical Education and Research (USUCGER), 2015-2016
- Member, Fully Softened Strength Subcommittee, ASCE Geo-Institute Committee on Embankments, Dams, and Slopes, 5/1/14-present
- Member, Levee Subcommittee, ASCE Geo-Institute Committee on Embankments, Dams, and Slopes, 7/30/13-present
- Treasurer, United States Universities Council on Geotechnical Education and Research (USUCGER), 3/1/12-12/31/14
- Board of Directors, United States Universities Council on Geotechnical Education and Research (USUCGER), 5/6/10-12/31/14
- Member, Transportation Research Board Committee AFP30 Soil and Rock Properties, 4/15/09-4/14/15, 4/15/15-3/31/18
- Member, ASCE Geo-Institute Committee on Embankments, Dams, and Slopes, 3/16/09-present