

# TIMOTHY D. STARK

**TITLE:** Professor and Excellence Faculty Scholar of Civil and Environmental Engineering

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**REGISTRATIONS:** Professional Civil Engineer: Illinois, 1994, Colorado, 2011, Louisiana, 2011; Washington, 2013; Missouri, 2015; Ohio, 2017

## EDUCATION:

- Ph.D., Virginia Polytechnic Institute & State University, Geotechnical Engineering, July, 1987  
Thesis Title: "Mechanisms of Strength Loss in Stiff Clays," advisor J. Michael Duncan
- M. Engineering, University of California at Berkeley, Geotechnical Engineering, June, 1984  
Thesis Title: "Methods of Regressive Analysis of Slope Stability," advisor J. Michael Duncan
- B.S., University of Delaware (with Honors), Civil Engineering, June, 1981

## CHRONOLOGICAL AWARDS AND RECOGNITIONS:

### Research

*Editor's Choice for ASCE SmartBrief* promotion to appeal to practitioners: "Case Study: Vertical Drain and Stability Analyses for a Compacted Embankment of Soft Soils", J. Geotech. and Geoenvironmental Eng, ASCE, February, 2018.

Spotlight Project at Illinois Transportation and Highway Engineering Conference, Illinois Center for Transportation, "Drilled Shaft Design in Weak Rocks," February 28, 2018.

*Editor's Choice for ASCE SmartBrief* promotion to appeal to practitioners: "Progression of Elevated Temperatures in Municipal Solid Waste Landfills", Journal of Geotechnical and Geoenvironmental Engineering, ASCE, August, 2017.

Best Paper Award, "I-5 Skagit River Bridge Collapse Review," Journal of Performance of Constructed Facilities, ASCE, with R. Benekohal, L.A. Fahenstock, J.M. LaFave, J. He, and C Wittenkeller, July, 2017

Best Research Paper Award, 14<sup>th</sup> International Railway Engineering Conference, Edinburgh, Scotland, ("Monitoring Changes in Tie-Ballast Interaction in Disturbed Track") with S.T. Wilk, J.G. Rose, and Q. Liu, June, 2017.

"Best Geosynthetics International Paper for 2015," Geosynthetics International Journal, "State-of-the-art report: GCL shear strength and its measurement – ten-year update", 22(1), 3-47, International Geosynthetics Society, Thomas Telford, Ltd., 2016.

Excellence Faculty Scholar, Civil and Environmental Engrg. Dept., University of Illinois at Urbana-Champaign, 2016-date

Best Research Paper Award, 13<sup>th</sup> International Railway Engineering Conference, Edinburgh, Scotland, ("Use of Seismic Surface Wave Testing to Assess Track Substructure") with S.T. Wilk, H.B. Thompson, and T.R. Sussmann, June, 2015.

2015 James M. Hoover Lecturer, "IHNC Floodwall Failures during Hurricane Katrina: Recent Ruling (April 12, 2013)", Iowa State University, Ames, IA, March, 2015.

**(Chronological Awards and Recognitions - Research, continued)**

Selected "High Value Research Project", "Improvement for Determining Axial Capacity of Drilled Shafts in Illinois Shales," AASHTO (American Assoc. of State Highway and Transportation Officials) Research Advisory Committee, June, 2014, [http://research.transportation.org/Documents/Task%20Forces/Value%20of%20Research%20Task%20Force/Document%20Library%20Materials/hvr\\_structures\\_brochure\\_2015.pdf](http://research.transportation.org/Documents/Task%20Forces/Value%20of%20Research%20Task%20Force/Document%20Library%20Materials/hvr_structures_brochure_2015.pdf).

Thomas A. Middlebrooks Award for "best" paper in the Journal of Geotechnical and Geoenvironmental Engineering, "Shear Strength in Preexisting Landslides", ASCE, 2013.

Best Scholarly, Feature, Case Study Paper, "Is Construction Blasting Still Abnormally Dangerous," Journal of Legal Affairs and Dispute Resolution in Engineering and Construction, ASCE, 2011

Classic Paper in Geosynthetics, (Stark and Poeppel, 1994, ASCE Journal of Geotechnical and Geoenvironmental Engineering, "Landfill Liner Interface Strengths from Torsional Ring Shear Tests"), Geo-Americas Conference, 2008

R.M. Quigley Award, for "best" paper in the Canadian Geotechnical Journal in 2002, "Liquefied Strength Ratio from Liquefaction Flow Failure Case Histories", Canadian Geotechnical Society, September, 2003

Walter L. Huber Civil Engineering Research Prize, "advancing the basic understanding of natural slopes, the stability of man-made slopes, and the evaluation of the strength/stability of soils subjected to earthquake loadings", ASCE, 1999

University Scholar, University Scholars Program, University of Illinois at Urbana-Champaign, 1998-2001

Thomas A. Middlebrooks Award for "best" paper in the Journal of Geotechnical and Geoenvironmental Engineering, "Slope Stability Analyses in Stiff Fissured Clays", ASCE, 1998

William J. and Elaine F. Hall Scholar (First Recipient), Dept. of Civil Engrg., UIUC, 1994-1996.

DOW Outstanding New Faculty Award, American Society for Engineering Education, 1994.

Xerox Award for Faculty Research, College of Engineering, UIUC, 1993

Presidential Citation for Outstanding Alumni Achievement, University of Delaware, 1993

Arthur Casagrande Professional Development Award, "residual strength of cohesive and liquefiable soils and the seismic stability of slopes", ASCE, 1992

Edmund Friedman Young Engineer Award for Professional Achievement, ASCE, 1991

Meritorious Performance and Professional Promise Award by President of SDSU, 1990

1989 Shaw Lecture, North Carolina State University presented by J.M. Duncan, "The Causes of the 1981 Slide in San Luis Dam" by Duncan, J.M. and Stark, T.D., April, 1989

**Teaching**

Honorary Faculty Member, Universidad Nacional del Altiplano, Puno, Peru, 2015.

List of Teachers Ranked as Excellent by Their Students, Univ. of Illinois, 1995, 1997, 1998, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2015, 2016.

Timeos Award, Outstanding Assistant Professor at San Diego State Univ. (SDSU), Phi Eta Sigma Honor Society, 1990

Outstanding Civil Engineering Professor Award, San Diego St. Univ.(SDSU), Chi Epsilon Honor Society, 1990

Outstanding College of Engineering Professor, SDSU, Tau Beta Pi Honor Society, 1989

Chi Epsilon Honor Society, SDSU, Tau Beta Pi Honor Society, 1988

**Professional Service**

Selected Outstanding Reviewer, J. of Legal Affairs and Dispute Resolution in Engineering and Construction, ASCE, 2017

Selected to teach Educate the Educators (EtE) on Geosynthetics, International Geosynthetics Society, Johannesburg, South Africa, July, 2018

Elected Vice President, International Geosynthetics Society – North American Chapter, 2017 - 2021

**(Chronological Awards and Recognitions - Research, continued)**

Elected Chair, Embankments, Dams, and Slopes Committee, ASCE, 2018 - 2021

Elected Vice Chair, Embankments, Dams, and Slopes Committee, ASCE, 2015 - 2018

Lectureships at Universidad Nacional Agraria La Molina, Lima, Cusco, and Puno, Peru, 2013, 2014, and 2015

R.S. Ladd D18 Standards Development Award, Standard Designation D6467-13: Revised Standard Test Method for Torsional Ring Shear Test to Determine Drained Residual Shear Strength of Cohesive Soils, American Society for Testing and Materials, 2014

Selected Editor, Journal of Geotechnical and Geoenvironmental Engineering, ASCE, 2012 - date

Order of the Engineer, ASCE Geo Institute, 2012

Associate Editor of the Year Award, Journal of Geotechnical and Geoenvironmental Engineering, ASCE, 2011 - 2012

R.S. Ladd D18 Standards Development Award, Standard Designation D7608-11: Standard Test Method for Torsional Ring Shear Test to Determine Drained Fully Softened Shear Strength and Nonlinear Strength Envelope of Cohesive Soils, American Society for Testing and Materials, 2011

Standards Development Award, Standard Designation D6467-02: Standard Test Method for Torsional Ring Shear Test to Determine Drained Residual Shear Strength of Cohesive Soils, American Society for Testing and Materials, 2002

Outstanding Section Campus Representative Award, IL/IN Section, American Society for Engrg. Education, 1998.

News Correspondent Award, ASCE, 1995

**Professional**

Elected Diplomate, Geotechnical Engineering, Academy of Geo-Professionals, ASCE, 2010

Elected Fellow, American Society of Civil Engineers (ASCE), 2005

U.S. Army Corps of Engineers Summer Research Fellow, Waterways Experiment Station, 1988 & 1991

**Consulting**

Nominee, 2009 U.S. Army Corps of Engrs. Dam Safety Award, Seismic Retrofit of Tuttle Creek Dam, Northwest Division.

**EMPLOYMENT RECORD**

*Professor of Civil and Environmental Engineering:* University of Illinois at Urbana-Champaign (UIUC), 8/99 - date.

*Technical Director,* Fabricated Geomembrane Institute-Technology Program, UIUC, 5/10 - date.

*Technical Director,* PVC Geomembrane Institute-Technology Program, UIUC, 1/98 – 5/10.

*Program Coordinator,* Transportation Networks Program, Mid-America Earthquake Center at UIUC, 10/97 – 8/00.

*Associate Professor of Civil Engineering:* UIUC, 8/94 – 8/99.

*Assistant Professor of Civil Engineering:* UIUC, 1/91 - 8/94.

*Assistant Professor of Civil Engineering:* San Diego State University, 1/87-1/91.

*Teaching and Research Assistant:* Virginia Polytechnic Institute -- Instruction in graduate geotechnical enrg. courses; research on strength loss in stiff clays and probabilistic settlement analyses with J. Michael Duncan, 9/84-1/87.

*Research Assistant:* University of California, Berkeley -- Laboratory investigation on the formation of borehole breakouts in rock with Richard E. Goodman, 11/83-6/84.

*Staff Engineer.* Woodward-Clyde Consultants, Walnut Creek, CA -- Subsurface investigations and design of remedial measures for landslides in Contra Costa County, geotechnical and structural design of retaining walls, and lateral load behavior of drilled shaft foundations, 6/83-9/83.

*Staff Engineer.* Woodward-Clyde Consultants, San Francisco, CA -- Liquefaction analyses, probabilistic seismicity evaluations, and seismic response analysis of power plants and earth dams, 6/81-9/82.

**RECENT CONSULTING EXPERIENCE (last five years)**

- Ohio Department of Transportation, Columbus, OH: Chair, Dispute Resolution Board for large state route widening project near Northridgeville, Ohio, 2018 - date.
- American Electric Power, Columbus, OH: Expert for landslide cause and repair in West Virginia, 2017 - 2018.
- Manko, Gold, Katcher, and Fox Law Offices, Bala Cynwyd, PA: Expert for landfill expansion in PA, 2017 - date.
- de la Pena & McDonald, LLP, San Francisco, CA: Expert for building settlement cause and repair, LA, CA, 2017 - 2018.
- Ohio Department of Transportation, Columbus, OH: Expert for retaining wall failure near Waverly, OH, 2017 - date.
- Norton, Rose & Fulbright Law Offices, Montreal, Quebec: Expert for claims related to port failure in Quebec, 2017 - date.
- Skeo Solutions, Inc., Charlottesville, VA: Expert for Clearview Landfill Superfund Site near Philadelphia, 2016 - date.
- Norton, Rose & Fulbright Law Offices, Toronto, Ontario: Expert for claims related to Highway 11 construction near Burk's Fall, Ontario, 2016 - date.
- Manganese Metal Company, Nelspruit, South Africa: Expert for stability analysis of Kingston Vale Landfill, 2016 - date.
- Seyfarth Shaw, LLP, Washington, D.C.: Expert for design failure of Port of Anchorage Expansion, 2016 - date.
- Ohio Department of Transportation, Columbus, OH: Dispute Resolution Board Member for large Interstate construction project near Portsmouth, Ohio using public-private partnership contract, 2015 - date.
- Tensor Corporation, Atlanta, GA: Expert for geosynthetic subgrade stabilization in unpaved road applications, 2015-date.
- Meyer, Unkovic, and Scott, Pittsburg, PA: Expert for geosynthetic liner system failure for containment pond, 2015 - date.
- Taylor, Warren & Weidner, P.A., Pensacola, FL: Expert for dam failure and flood near Pensacola, FL, 2015 - date.
- Norton, Rose & Fulbright Law Offices, Toronto, Ontario: Expert for cutoff wall and jet grouting claims related to Toronto Subway, 2015 - date.
- Advanced Earth Sciences, Los Angeles, CA: Expert for geosynthetic interface testing Foothills Landfill, Sacramento, California, 2015 - 2016.
- de la Pena & Holiday, LLP, San Francisco, CA: Expert for housing distress, Lafayette, CA, 2015 - date.
- Holley, Albertson, & Polk, P.C., Golden, CO: Expert for housing development distress near Dacono, CO, 2015 - 2016.
- Taylor, Warren & Weidner, P.A., Pensacola, FL: Expert for MSE wall failure near Pensacola, FL, 2015 - date.
- Shook, Hardy & Bacon, LLP, Kansas City, MO: Expert for airport runway fill movement near Branson, MO, 2014 - 2015.
- McConaughy & Sarkissian, P.C., Denver, CO: Expert for commercial building distress near Denver, CO, 2014 - 2015.
- Greenberg & Traurig, Houston, TX: Expert for distress in petroleum processing facilities near Evanston, WY, 2014- 2015.
- Yates, McLamb & Weyher, LLP, Raleigh, NC: Expert for dam failure in Hope Mills, NC, 2014 - 2015.
- Layfield Group, Edmonton, Alberta, Canada: Expert for geomembrane failure in Alberta, 2013 - 2015.
- de la Pena & McDonald, LLP, San Francisco, CA: Expert for building distress, Napa, CA, 2013 - 2014.
- Dianne Saxe Law Offices, Toronto, Ontario: Expert for construction claims related to Highway 11 construction near Burk's Fall, Ontario, 2013 - 2014.
- Law Offices of Mark A. Wasser, P.C., Sacramento, CA: Expert for Klamath River dam removals in CA, 2013 - 2014.
- Land Air Water Legal Solutions, LLC, Berwyn, PA: Expert for landfill slope failure near Easton, PA, 2013 - date.
- Greenberg & Traurig, P.C., Houston, TX: Expert for Fox River sediment processing and landfill slope failure near Green Bay, WI, 2013 - 2014.
- U.S. Dept. of Justice, Washington, D.C.: Expert for Hurricane Katrina levee failures in New Orleans, LA, 2011 - date.
- Norris & Keplinger, P.C., Overland Park, KS: Expert for MSE wall and embankment failure near Omaha, NE, 2012- 2014.
- McConaughy & Sarkissian, P.C., Denver, CO: Expert for housing development distress near Erie, Colorado, 2012 - 2014.
- CH<sub>2</sub>M-Hill Consultants, Chantilly, VA: Independent Technical Review for I-95/Route 630 Interchange, 2012 - 2014.

(Recent Consulting Experience, continued)

McConaughy & Sarkissian, P.C., Denver, CO: Expert for condominium distress near Ft. Collins, Colorado, 2012 - 2013.

CH<sub>2</sub>M-Hill Consultants, Seattle, WA: Measurement and use of undrained residual strength in seismic slope stability and permanent deformation analyses of Port of Alaska Expansion, 2012 - 2013.

State of Washington, Olympia, WA: Expert for SR 520 Design-Build Project in Seattle, 2012 - 2014.

Missouri Department of Natural Resources, Jefferson City, MO: Expert for elevated temperatures in landfill, 2012 - date.

Los Angeles Department of Water and Power, Los Angeles, CA: Expert for landslide cause and repair in Bel Air, California, 2006 - date.

McConaughy & Sarkissian, P.C., Denver, CO: Expert for school complex distress near Fremont, Colorado, 2011 - 2013.

**WEBINAR INSTRUCTION**

- Stark, T.D.: Organized and conducted a one-hour webinar titled "*Geomembrane Wrinkles: Development, Impacts, and Mitigation*," Geosynthetics Manufacturers Association, Minneapolis, MN, August, 2018 (??? registered).
- Stark, T.D.: Organized and conducted a one-hour webinar titled "*Stability of Geosynthetic Lined Slopes - II*," Geosynthetics Manufacturers Association, Minneapolis, MN, May, 2018 (??? registered).
- Stark, T.D.: Organized and conducted a one-hour webinar titled "*Stability of Geosynthetic Lined Slopes - I*," Geosynthetics Manufacturers Association, Minneapolis, MN, February 27, 2018 (189 registered).
- Stark, T.D.: Organized and conducted a one-hour webinar titled "*Fabricated Geomembranes: Fabrication, Installation, and Testing*," Geosynthetics Manufacturers Association, Minneapolis, MN, November 7, 2017 (121 registered).
- Stark, T.D. and Jafari, N.H.: Organized and conducted a one-hour webinar titled "*Development, Detection, and Containment of Elevated Temperatures in Landfills*," ASCE, Reston, VA, July 23, 2015 (36 registered).
- Stark, T.D. and Jafari, N.H.: Organized and conducted a one-hour webinar titled "*Development, Detection, and Containment of Elevated Temperatures in Landfills*," ASCE, Reston, VA, February 2, 2015 (85 registered).

**SHORT COURSE INSTRUCTION**

1. Organized and conducted a one-day short course titled "*Stability of Natural and Man-Made Slopes: Analyses, Shear Strengths, Testing, Stability Methods, and Stabilization*," Mexico Society of Civil Engineers, Mexico City, Mexico, August 10, 2018 (?? attendees).
2. Organized and conducted a two-day short course with Professor M. Ziegler (Aachen University, Germany) titled "*Educate the University Educators on Geosynthetics*," International Geosynthetics Society, Pretoria, South Africa, July 2-3, 2018 (?? attendees).
3. Organized and conducted a one-day short course titled "*Stability of Geosynthetic Lined Slopes*," International Geosynthetics Society, Pretoria, South Africa, July 4, 2018 (?? attendees).
4. Organized and conducted a one-day short course titled "*Stability and Stabilization of Natural and Man-Made Slopes with Climate Change*," ASCE 2018 IFCEE Conference, Orlando, FL, March 11, 2017 (23 attendees).
5. Organized and conducted a one-day short course titled "*Stability of Natural and Man-Made Slopes: Analyses, Shear Strengths, Testing, Stability Methods, and Stabilization*," ASCE Portland, OR Geo-Institute Section, Portland, OR, October 27, 2017 (52 attendees).
6. Organized and conducted a one-half day short course titled "*Analysis of Landslides: Analyses, Shear Strengths, Testing, and Stability Analyses*," 3<sup>rd</sup> North American Symposium on Landslides, Roanoke, VA, June 4, 2017 (21 attendees).
7. Assisted with one-day symposium titled "*Geotechnical Symposium on Slope Stability*," ASCE Washington, National Capital Section, Tysons Corner, VA, April 19, 2017 (74 attendees-sold out).
8. Organized and conducted a one-day short course titled "*Stability of Natural and Man-Made Slopes: Analyses, Shear Strengths, Testing, Stability Methods, and Stabilization*," ASCE 2017 Geo-Frontiers Conference, Orlando, FL, March 12, 2017 (25 attendees; tied for highest attendance of eight (8) short courses).
9. Organized and conducted a one-day short course titled "*Levee Seepage and Slope Stability Issues*," ASCE Nebraska Section-Geo-Omaha 2017 Conference, Omaha, NB, February 9, 2017 (66 attendees).
10. Organized and conducted a one-day short course titled "*Stability of Natural and Man-Made Slopes: Analyses, Shear Strengths, Testing, Stability Methods, and Stabilization*," ASCE Los Angeles Geo-Institute Section, Los Angeles, CA, October 14, 2016 (76 attendees).
11. Organized and conducted a one-day short course titled "*Stability of Natural and Man-Made Slopes: Analyses, Shear Strengths, Testing, Stability Methods, and Stabilization*," ASCE Pittsburgh Geo-Institute Section, Pittsburgh, PA, April 2, 2016 (73 attendees).

## (Short Course Instruction, continued)

12. Organized and conducted a one-day short course titled "*Stability of Natural and Man-Made Slopes: Analyses, Shear Strengths, Testing, Stability Methods, and Stabilization*," ASCE Nebraska Section-Geo-Omaha 2016 Conference, Omaha, NB, February 11, 2016 (68 attendees).
13. Organized and conducted a one-day short course titled "*Design, Construction, and Performance of Earth and Tailings Dams*," Puno Peru, May, 2015.
14. Organized and conducted a four-day short course titled "*Design, Construction, and Performance of Earth and Tailings Dams*," Universidad Nacional Agraria La Molina, Lima Peru, May, 2015.
15. Organized and conducted a two-day short course titled "*Design, Construction, and Performance of Earth and Tailings Dams*," Guayaquil Ecuador, May, 2015.
16. Organized and conducted a one-day short course titled "*Analysis of Landslides: Shear Strengths, Testing, and Stability Analyses*," Colorado Association of Geotechnical Engineers (CAGE), Denver, CO, February, 2015 (81 attendees).
17. Organized and conducted a one-day short course titled "*Static and Seismic Slope Stability of Geosynthetic Lined Slopes*," Geosynthetics 2015, Portland, OR, February, 2015.
18. Layfield Group, Edmonton, Alberta: Participated in one-day short course titled "*High Performance Geomembranes and Geosynthetics for Oil and Gas*," at Saskatoon Convention Centre, Saskatoon, Canada, October 16, 2014.
19. Organized and conducted a four-day short course titled "*Design, Construction, and Performance of Earth and Tailings Dams*," at Universidad Nacional Agraria La Molina, Lima Peru, June, 2014.
20. Layfield Group, Edmonton, Alberta: Participated in one-day short course titled "*High Performance Geomembranes and Geosynthetics for Oil and Gas*," at Calgary Telus Convention Centre, Calgary, Canada, March 6, 2014.
21. Organized and conducted a four-day short course titled "*Design, Construction, and Performance of Earth and Tailings Dams*," at Universidad Nacional Agraria La Molina, Lima Peru, December, 2013.
22. Organized and conducted a one-day short course titled "*Static and Seismic Slope Stability for Heap Leach Pads*," in Vancouver, Canada, September, 2013.
23. Fabricated Geomembrane Institute: Organized and participated in one day short course titled " Environmental Protection in Shale Oil and Gas Development," Corsicana, TX, 2013.
24. Fabricated Geomembrane Institute: Organized and participated in one day short course titled " Environmental Protection in Shale Oil and Gas Development," Dallas, TX, 2013.
25. Fabricated Geomembrane Institute: Organized and participated in one day short course titled " Environmental Protection in Shale Oil and Gas Development," Williamsport, PA, 2013.
26. Organized and conducted a one-day short course titled "Static and Seismic Slope Stability of Waste Containment Facilities," Jefferson City, MO, June, 2012.
27. Organized and conducted a one-day short course titled "*Waste Fires: Detection, Evaluation, and Suppression*," in Jefferson City, MO, May, 2011.
28. Fabricated Geomembrane Institute: Organized and participated in one day short course titled "Constructing with Fabricated Geomembranes," two to three times per year, 2009-present.
29. Indiana Department of Environmental Management, Organized and conducted a one-day short course titled "*Waste Fires: Detection, Evaluation, and Suppression*," in Indianapolis, IN, November, 2009.
30. Ohio Environmental Protection Agency, Columbus, OH: Organizer of and presenter in one day short course titled "Landfills with Elevated Temperatures," June, 2009.
31. Organized and conducted a one-day short course titled "*Waste Fires: Detection, Evaluation, and Suppression*," in Chicago, IL, January, 2009.



## (Short Course Instruction, continued)

32. Missouri Department of Natural Resources, Jefferson City, MO: Organized and conducted in two-day short course titled "Design, Construction, Protection, and Performance of Compacted Soil Liners," January, 2009.
33. Pennsylvania Department of Environmental Protection, Harrisburg, PA: Organized and conducted a one-day short course titled "*Waste Fires: Detection, Evaluation, and Suppression*," in Harrisburg, PA, October, 2008.
34. Industrial Fabrics Association International: Organized and conducted a one-day short course titled "*Advanced Interface Strengths and Slope Stability Analyses*," in Atlanta, GA, June, 2008.
35. Industrial Fabrics Association International: Organized and conducted a one-day short course titled "*Advanced Interface Strengths and Slope Stability Analyses*," in Cancun, Mexico, March, 2008.
36. Organized and conducted a one-day short course titled "*Landslides: Shear Strengths and Stability Analyses*," ASCE San Diego Section, San Diego, CA, March, 2006.
37. Stark Consultants, Inc., Urbana, IL: Organized and conducted a one-day short course titled "*Landslides: Shear Strengths and Stability Analyses*," ASCE Cincinnati Section, Cincinnati, March, 2005.
38. Illinois Environmental Protection Agency, Springfield, IL: Organized and conducted in one day short course titled "Landfill Leachate Recirculation and Vertical Expansions," May, 2005.
39. Illinois Environmental Protection Agency, Springfield, IL: Organized and conducted three one-day short courses titled "Introduction to Geotechnical Engineering," January, 2005 - December, 2005.
40. Ohio Environmental Protection Agency, Columbus, OH: Organizer and sole presenter of two-day short course on Landfill Slope Failures, Site Characterization, and Laboratory Testing for Geotechnical Design, September, 2004.
41. Stark Consultants, Inc., Urbana, IL: Organized and conducted a one-day short course titled "*Landslides: Shear Strengths and Stability Analyses*," ASCE Seattle Section, Seattle, March 25, 2004.
42. Organized and conducted a one-day short course titled "*Landslides: Shear Strengths and Stability Analyses*," ASCE Los Angeles Section, Los Angeles, CA, March 25, 2003.
43. Stark Consultants, Inc., Urbana, IL: Organized and conducted a one-day short course titled "*Landslides: Shear Strengths and Stability Analyses*," ASCE San Francisco Section, San Francisco, CA, March 27, 2003.
44. University of Wisconsin at Madison, WI: Organized annual three day short course titled "Static and Seismic Slope Stability of Waste Containment Facilities," Los Angeles, CA, 1993 - August, 2003.
45. University of Wisconsin at Madison, WI: Participated in one day short course titled "Designing and Operating Bioreactor Landfills," 2002-2006.
46. PVC Geomembrane Institute-Technology Program: Video-taped web-based short course module titled "Geomembrane Interface Strengths and Slope Stability" for Constructing with PVC Geomembranes" short course, 2002.
47. Illinois Environmental Protection Agency, Springfield, IL: Organized and conducted six one-day short courses titled "Geotechnics for Landfill Design," January – July, 2002.
48. Illinois Environmental Protection Agency, Springfield, IL: Organized and participated in two day short course titled "Geosynthetic Clay Liners for Waste Containment Facilities," August, 2001.
49. California Water Control Board, Sacramento, CA: Participated in three day short course for University of Wisconsin at Madison titled "Static and Seismic Slope Stability of Waste Containment Facilities," June, 2001.
50. PVC Geomembrane Institute-Technology Program: Participated in one day short course titled "Constructing with PVC Geomembranes," three to four times per year, 1998-2009.
51. University of Illinois at Urbana-Champaign, IL: Participated in two day short course titled "Geosynthetic Clay Liners for Waste Containment," St. Louis, MO, June, 2000.

## (Short Course Instruction, continued)

52. GSE Lining Technology, Houston, TX: Invited seminar titled "Geosynthetics for Advanced Solutions," March, 2000.
53. GSE Lining Technology, Houston, TX: Invited workshop titled "Designing with Geosynthetic Clay Liners," May, 1999.
54. University of Texas, Austin, TX: Participated in two day short course titled "Geosynthetic Clay Liners for Waste Containment," Austin, Texas, 1999.
55. University of Wisconsin at Madison, WI: Participated in annual to annual three day short course titled "Sanitary Landfill Design," 1998-date.
56. Ohio Environmental Protection Agency, Columbus, OH: Organizer and sole presenter of two day short course titled "Module IV: Special Topics in Stability of Waste Containment Systems," 1999.
57. Ohio Environmental Protection Agency, Columbus, OH: Organizer and sole presenter of two day short course titled "Module III: Advanced Material Behavior and Laboratory Testing," 1999.
58. Ohio Environmental Protection Agency, Columbus, OH: Organizer and sole presenter of two day short course titled "Module I: Geotechnical Basics," 1998.
59. Arkansas Environmental Protection Agency, Little Rock, AR: Organizer and sole presenter of one day short course titled "Seismic Slope Stability of Waste Containment Facilities," 1998.
60. Pennsylvania Environmental Protection Agency, Harrisburg, PA: Participated in two day short course titled "Geosynthetic Clay Liners for Waste Containment," 1997.
61. Ohio Environmental Protection Agency, Columbus, OH: Organizer and sole presenter of one day short course titled "Seismic Slope Stability of Waste Containment Facilities," 1998.
62. Ohio Environmental Protection Agency, Columbus, OH: Organizer and sole presenter of two day short course titled "Static Slope Stability of Waste Containment Facilities," 1995.
63. National Seal Company, Galesburg, IL: Invited workshop "Designing Landfill Lining Systems on Slopes," March, 1994.
64. Hanson Engineers, Inc., Springfield, IL: Organizer and sole presenter one day short course "Soil Liquefaction," 1993.
65. Assoc. of American Railroads: Invited three-day short course titled "Soil Mechanics & Foundation Engrg.," 1993.
66. U.S. Army Corps of Engineers, Waterways Experiment Station, Vicksburg, MS: Organizer and sole presenter of annual one-day short course on microcomputer program Prietary Consolidation and Desiccation in Dredged Fill (PCDDF), 1988 - 2005.

**PROFESSIONAL AFFILIATIONS**

Member, American Railway Engineering and Maintenance-of-Way Association (AREMA), 2017 - date  
Main Member, Transportation Research Board Technical Committee AR060 (Railway Maintenance), 2017-2020.  
Friend, Transportation Research Board Technical Committee AR050 (Track Structure System Design), 2017-date.  
Member and Vice President, International Geosynthetics Society – North American Chapter, 2017 - 2021  
Member and Vice Chair, Embankments, Dams, and Slopes Committee, ASCE – 2015 - date  
Member, Editorial Board, Geotextiles and Geomembranes Journal, International Geosynthetics Society – 2015 - date  
Chair, Fully Softened Strength Subcommittee, Embankments, Dams, and Slopes Committee, ASCE – 2014 - date  
Member, Editorial Board, Geosynthetics International Journal, International Geosynthetics Society – 2013 - date  
Member, Editorial Board, Journal of Legal Affairs and Dispute Resolution in Engineering, ASCE – 2013 - date  
Member, Embankments, Dams, and Slopes Committee, ASCE – 2012 - date  
Member, Editorial Board, Journal of Geotechnical and Geoenvironmental Engineering, ASCE – 2009 - date  
Member, Geoenvironmental Engineering Committee, ASCE – 2009 - date  
Member, GeoEngineering Earthquake Reconnaissance (GEER) Association – 2007 - date  
Faculty Member, American Society of Foundation Engineers (ASFE) – 2003 - 2010  
Member, American Society for Testing and Materials (ASTM) Committees : – 1989 - date  
    D-18 - Soil and Rock  
    D-35 - Geotextiles, Geomembranes, and Related Products  
Fellow, American Society of Civil Engineers, Geotechnical Engineering Division – 2006 – date  
Member, American Society of Civil Engineers, Geotechnical Engineering Division – 1985 – 2005  
Member, American Society of Mechanical Engineers, Central Illinois Section – 2013 – Present  
Member, International Society of Soil Mechanics and Foundation Engineering – 1989 - date  
Member, International Society of Explosives Engineers – 2001 - 2007

**PROFESSIONAL SERVICE**

Member Proposal Review Panel: **National Science Foundation**, 2018.

Reviewer for Landslide related Proposals: **National Science Foundation**, 2018.

Elected Chair, Embankments, Dams, and Slopes Committee, **ASCE, Geo-Institute**, 2017 - 2020

Elected Vice President, **International Geosynthetics Society – North American Chapter**, 2017 - 2021.

Session Organizer, Lessons Learned from Embankments, Dams, and Slopes (EDS) Case Histories, **IFCEE 2017**, Orlando, Florida – 2017 - 2018.

Selected Main Member, Transportation Research Board Technical Committee AR060 (Railway Maintenance), 2017-2020.

Friend, Transportation Research Board Technical Committee AR050 (Track Structure System Design), 2017-date.

Member Proposal Review Panel: National Science Foundation, 2017.

Symposium Organizer, Railroad Ballast Testing and Properties, ASTM International, Philadelphia, PA – 2016 - 2018.

Workshop Organizer, Managing Impacts in the Track Structure, 96<sup>th</sup> Annual TRB Meeting, Washington, D.C., 2016 - 2017.

Session Organizer, Geomembrane Barrier Systems, **GeoAmericas 2016**, Miami, Florida – 2015 - 2016.

Editorial Board Member, Geotextiles and Geomembranes Journal, International Geosynthetics Society – 2015 - date

Elected Vice Chair, Embankments, Dams, and Slopes Committee, **ASCE, Geo-Institute**, 2014 - 2017

Co-Editor, Special Issue on Geosynthetic Clay Liners, Geosynthetics International Journal, 2013 - date.

Chair, Fully Softened Shear Strength Subcommittee, Embankments, Dams, & Slopes Committee, ASCE – 2014 - date

Session Organizer, Hydraulic Fracturing & Geoenvironmental Issues, **Geo-Structures Joint Congress 2016**, Phoenix, AZ.

Session Organizer, Geo-Structural Solutions in Railroad Applications, **Geo-Structures Joint Congress 2016**, Phoenix, AZ.

Technical Organizing Committee, **Geo-Structures Joint Congress 2016**, Phoenix, AZ, 2014 - 2016.

Session Organizer, Geosynthetics for Shale Oil and Gas Development, **Geosynthetics 2015**, Portland, Oregon.

Session Organizer, Geosynthetics for Potable Water, **Geosynthetics 2015**, Portland, Oregon.

Editor, ASCE Journal of Geotechnical and Geoenvironmental Engineering, 2012 - date.

Editorial Board Member, ASCE Journal of Legal Affairs and Dispute Resolution in Engrg and Construction, 2013 - date.

Editorial Board Member, Geosynthetics International Journal, International Geosynthetics Society – 2013 - date

International Advisory Committee, **12<sup>th</sup> Intl. Symposium on Geo-Disaster Reduction**, Fullerton, CA, 2014 - 2015.

Associate Editor, Journal of Geotechnical and Geoenvironmental Engineering, ASCE – 2009 - 2012

Session Organizer, Geomembranes for Oil and Gas Applications, **Geo-Congress 2012 Conf.**, Oakland, 2011 - 2012.

Session Organizer, Geomembrane Floating Covers Systems, **Geo-Frontiers 2011** Conference, Dallas, 2010 - 2011.

Session Organizer, Elevated Temperatures in Landfills, **Geo-Frontiers 2011** Conference, Dallas, 2010 - 2011.

Technical Program Committee, **Geosynthetics Conference 2007**, North American Geosynthetics Society and Industrial Fabrics Association International, 2005 - 2007.

Session Organizer, Slope Stability Research, **Geosynthetics 2007**, 2006 - 2007.

Session Organizer, Legal and Liability Issues in Geotechnical Engrg., ASCE **Geo-Frontiers 2005** Conference, 2004 - 2005.

Member, Embankment Dams and Slopes Committee, ASCE Geotechnical Engineering Division, 1995 - 2005.

Chair (1996) and Vice Chair (1994 & 1995), Illinois/Indiana Section, American Soc. for Engrg. Education.

News-Correspondent, ASCE Geotechnical Engineering Division, 1992 - 1995.

Associate Editor, ASCE Journal of Geotechnical and Geoenvironmental Engineering, 1991 - 1997.

Member, Environmental Geotechnics Committee, ASCE Geotechnical Engineering Division, 1992 - date.

Member, News-Correspondent Subcommittee, ASCE Geotechnical Engineering Division, 1991 - 1992.

(Professional Service, continued)

Chair, (1989), Vice Chair, (1988), and Secretary, (1987), San Diego ASCE Geotechnical Division.

Member, Soil and Rock Properties Committee, A2LO2, Transportation Research Board, 1989 - 1996.

Paper Reviewer: ASCE, ASTM, TRB, Earthquake Engineering Research Institute, 1988 - date.

Proposal Reviewer: National Science Foundation, U.S. Geological Survey, 1989 - date.

**RESEARCH GRANTS AND CONTRACTS**

- Estimating the Variability of Settlements on Clay*, First SDSU Engineering Faculty Summer Research Fellowship, 6/87-9/87; \$3,000 (0% overhead).
- Use of Cone Penetration Tests for Evaluating the Strength and Compressibility of Canyon Alluvium*, Geocon, Inc., San Diego, CA; 12/87-12/88; \$15,000 (0% overhead).
- Stability of Perimeter Dikes at Craney Island, Norfolk, Virginia*, Intergovernmental Personnel Agreement (IPA), U.S. Army Corps of Engineers Waterways Experiment Station, (WES), Vicksburg, MS; 50% time, 10/88-6/89; \$19,000.
- Microcomputer Model of Primary Consolidation and Desiccation Processes in Dredged Fill (PCDDF)*, WES, Vicksburg, MS; Phase I: 1/89-11/89, \$30,000; Phase II: 11/89-8/91; \$35,000.
- Finite Element Analysis of Transient Seepage through Compacted Fills*, Geocon, Inc., San Diego, CA; 1/89-6/90; \$10,000 (0% overhead).
- Feasibility of an Expert System for Dredging*, IPA, WES, Vicksburg, MS; 50% time, 6/89-12/89; \$12,000.
- Soil-Structure Interaction Parameters for Silts*, WES, Vicksburg, MS; 10/89-6/90; \$25,000.
- Database of Dredged Material Compressibility and Desiccation Properties for PCDDF*, WES, Vicksburg, MS; 10/89-4/90; \$25,000.
- Drained Residual Shear Strength of Cohesive Soils for Landslides*, CH<sub>2</sub>M-Hill; Woodward-Clyde Consultants; Petra Geotechnical; Univ. of Calif. at Los Angeles; Dragados, Manta, Ecuador; Shannon and Wilson; Golder Associates; 10/89 - date, \$25,000 (5% overhead).
- Long-Term Stability of Natural Slopes*, National Science Foundation (NSF), 3/90-9/93, \$100,000.
- Undrained Residual Strength of Cohesive Soils and Landslides During Earthquakes*, U.S. Geological Survey, Reston, VA, 3/91-9/93; \$50,000.
- Startup Equipment*, University of Illinois Research Board, 12/90-10/91: \$48,000.
- Static Soil-Geosynthetic Interface Strengths Using a Torsional Ring Shear Apparatus*, NSF, 9/91-8/93, \$30,000.
- Dynamic Soil-Geosynthetic Interface Strengths of Soil-Geosynthetic Liner Systems for Solid Waste Landfills*, Illinois Office of Solid Waste Research, 1/92-1/94, \$49,000.
- Physical Modeling of Landslides During Earthquakes in Cohesive Soils*, U.S. Geological Survey, Reston, VA, 9/92-12/95; \$81,000.
- Microcomputer Model of Primary Consolidation, Secondary Compression, and Desiccation Processes in Dredged Fill (PSDDF)*, WES, Vicksburg, MS; Phase III: 4/92-4/94; \$60,000.
- Microcomputer Model of Vertical Strip Drains in Dredged Fill*, WES, Vicksburg, MS; 5/93-7/94; \$40,000.
- Microcomputer Model of Vertical Strip Drains in Dredged Fill*, U.S. Army Research Office, Student Supplement Program, Research Triangle Park, North Carolina; 5/94-7/96; \$43,000.
- Chemical Immersion Effects on Interface Strengths of Solid Waste Landfill Liner Systems*, Illinois Office of Solid Waste Research, 8/93-8/95, \$48,000.
- Effect of Chemical Immersion on Interface Strengths of Hazardous Waste Landfill Liner Systems*, Illinois Hazardous Waste Research and Information Center, 6/93-7/95, \$20,000 (Matching Funds).
- Differential Movement at Bridge/Embankment Interface*, with Dr. J.H. Long of U. of Illinois, Illinois Dept. of Transportation; 6/94-8/95; \$87,000.
- Geosynthetic Interface Strengths of Soil-Geosynthetic Liner Systems for Solid Waste Landfills*, Golder Associates, San Francisco, 4/93-9/93, \$5,000 (5% overhead).
- Geosynthetic Interface Strengths of Soil-Geosynthetic Liner Systems for Solid Waste Landfills*, National Seal Corporation, Galesburg, IL, 6/93-6/95, \$10,000 (5% overhead).
- Stress-Strain Behavior of Undisturbed Silts*, WES, Vicksburg, MS; 8/93-2/95; \$25,000.
- Performance of Three-Dimensional Slope Stability Analyses*, National Science Foundation, 11/93-11/96, \$140,000.

## (Research Grants and Contracts, continued)

- Excavation and Evaluation of the Engineering Properties of ISGS Soil Liner*, Illinois Office of Solid Waste Research, 4/96-4/98, \$63,000.
- Post-Liquefaction Behavior of Soils*, National Science Foundation, 10/96-10/98, \$58,000.
- PVC Geomembrane Institute – Technology Program*, with Drs. David E. Daniel and Krishna R. Reddy, PVC Geomembrane Institute, Traverse City, MI, 12/97 – 5/10, \$50,000-100,000/year for ten years (5% overhead).
- Guidelines for Geofoam Applications in Embankment Projects*, National Cooperative Highway Research Program, 24-11(01), Transportation Research Board, Washington, D.C., 3/98 - 3/00, \$200,000.
- Liquefaction Response of Soils in Mid-America*, Mid-America Earthquake Center, National Science Foundation, 1/98-1/01, \$120,000.
- Paleoseismology & Paleoliquefaction*, Mid-America Earthquake Center, National Science Found., 1/98-1/01, \$160,000.
- Seismic Performance of Waterfront Structures*, with G. Mesri and W.J. Hall of U. of Illinois and R.M. Ebeling of WES, Vicksburg, MS; Mid-America Earthquake Center, National Science Foundation, 1/98-1/01, \$140,000.
- Liquefaction Induced Permanent Deformations*, Mid-America Earthquake Center, National Science Foundation, 1/99-1/02, \$240,000.
- Beneficial Uses of Shredded Tires in Covering Abandoned Landfills*, with Drs. David E. Daniel and Krishna R. Reddy, Illinois Department of Commerce and Community Affairs, 9/99 - 9/02, \$169,000.
- Coordination of Transportation Networks Research Program*, Mid-America Earthquake Center, National Science Foundation, 1/98-1/01, \$200,000.
- Contaminant Transport Through a Field-Scale Earthen Liner*, with Drs. David E. Daniel, Albert J. Valocchi, and Charles J. Werth of Univ. of Illinois and Mr. Ivan G. Krapac of the Illinois State Geological Survey, National Science Foundation, 10/98 - 10/01, \$252,000.
- Stability of Colluvial Slopes*, National Science Foundation, 6/99 - 6/02, \$215,000.
- Interpretation of Ground Shaking from Paleoliquefaction Features*, U.S. Geological Survey, Reston, VA, 1/00-1/02; \$143,000.
- Post-Liquefaction Behavior of Soils*, National Science Foundation, 10/96-10/98, \$58,000.
- Guidelines for Geofoam Applications in Slope Stability Projects*, National Cooperative Highway Research Program, 24-11(02), Transportation Research Board, Washington, D.C., 10/06 – 10/10, \$300,000.
- Fabricated Geomembrane Institute – Technology Program*, Fabricated Geomembrane Institute, Urbana, IL, MI, 5/10 - present, \$25,000/year for ten years (5% overhead).
- Development of Procedures for Determining the Axial Capacity of Drilled Shafts Founded in Illinois Shales*, with Dr. J.H. Long of U. of Illinois, Illinois Center for Transportation; Phase 1, 11/11-5/13; \$172,500.
- Geosynthetic Materials for Applications at ORD*, O'Hare Modernization Project, Chicago, IL, 2/11 - 12/11, \$15,000 (10% overhead).
- Mitigation of Differential Movement at US High Speed Passenger Rail and Joint Passenger/Freight Railway Transitions*, with Dr. E. Tutumluer of U. of Illinois, wrote proposal based on prior IDOT project, Federal Railroad Administration; 9/11-12/16; \$1,630,000.
- Seismic Testing for Track Substructure (Ballast and Subgrade) Assessment*, with E. Tutumluer of U. of Illinois, S. Nazarian of U. of Texas at El-Paso, and C. Ho of U. of Mass. at Amherst, Federal Railroad Administration; 9/12-9/14; \$480,000.
- I-5 Bridge Collapse, Mount Vernon, WA*, CEE Department, UIUC, Urbana, IL, 10/13 - 6/15, \$13,000 (0% overhead).
- Identification of High Speed Rail Ballast Flight Risk Factors and Risk Mitigation*, with R. Saat, T.C. Kao, and E. Tutumluer of U. of Illinois, Federal Railroad Administration; 2/13-2/15; \$299,000.
- Use of Geocells for Railways*, Coral Group, Minneapolis, MN, 12/12 - 6/13, \$12,000 (5% overhead).

## (Research Grants and Contracts, continued)

- Modified Standard Penetration Test-based Drilled Shafts Design Methods for Weak Rocks*, with Dr. J.H. Long of U. of Illinois, Illinois Center for Transportation; 11/13-11/16; \$669,000.
- Oso Landslide*, Oso, WA, CEE Department, UIUC, Urbana, IL, 3/14 - 12/15, \$13,000 (0% overhead).
- Effective Post-Construction Best Management Practices (BMPs) to Infiltrate and Retain Storm Water Run-Off*, with Dr. A. Osouli of Southern Illinois University at Edwardsville, Illinois Center for Transportation; 1/14-1/16; \$299,000..
- Ballast Waiver Study Data Collection to Define "Reduced-Performance Ballast" for Track Performance Assessment*, Federal Railroad Administration; 6/15-6/19; \$1,440,000 (\$520,000 at UIUC).
- Expansion of Modified Standard Penetration Test-based Drilled Shafts Design Methods for Weak Rocks*, with Dr. J.H. Long of U. of Illinois, Illinois Center for Transportation; 12/16-6/17; \$52,000.
- Multi-Dimensional and Multi-Physics Analysis of Rainfall-Induced Landslides and Runout*, with Dr. Ning Lu of Colorado School of Mines, National Science Foundation, 8/16 - 8/19, \$602,000.
- Geosynthetic Reinforced Railway Transitions to Mitigate Differential Movements*, American Association of Railroads, 6/16-6/18; \$39,000, (5% overhead).
- Geo-Thermal Energy: Deep Direct Use at a University Campus and Military Facility in the Illinois Basin (Topic Area 1— Feasibility Studies)*, Department of Energy with Illinois State Geologic Survey, 11/17 - 11/19, \$720,000.
- Evaluating the Accuracy and Use of Drilled Shaft Integrity Testing Methods in Illinois*, with Dr. A. Osouli of Southern Illinois U. at Edwardsville, Illinois Center for Transportation; 1/1-6/18; \$452,000.
- Differential Movement at Ohio Highway Transitions*, Ohio Center for Transportation; 3/18-3/20; \$152,000, **PROPOSED**
- Infrastructure Serviceability and Impact of Extreme Events*, National Science Foundation; 9/17-7/20; \$250,000, **TO BE PROPOSED.**
- Use of Multi-Purpose Unmanned Aerial Vehicles (UAVs) for Drilled Shaft and Bridge Inspections*, Illinois Center for Transportation; 7/16-7/18; \$178,000, **PROPOSED**
- Wireless Sensing for Evaluating Track Component Performance and Safety*, Federal Railroad Administration; 7/17-7/18; \$445,000, **PROPOSED.**
- Liquefied Shear Strength for Mudslide Runout Analyses*, National Science Foundation, 8/17 - 8/20, \$375,000, **TO BE PROPOSED.**
- Critical State Concept to Assess Ballast Performance*, Federal Railroad Administration, 5/18 - 5/20, \$390,000, **TO BE PROPOSED.**

**RECENT RESEARCH PROPOSALS – NOT FUNDED**

- Seismic Surface Wave Testing for Railway Substructure Assessments*, Dr. John Popovics of UIUC and Larry D. Olson of Olson Instruments, National Science Foundation, 8/16 - 8/19, \$203,000.
- Evaluating the Accuracy of Thermal Imaging Testing for Drilled Shafts*, Wisconsin Center for Transportation; 7/16-7/18; \$444,000.
- Allowable Bearing Pressure of Wet Fouled Ballast*, with S. Nazarian of U. of Texas at El-Paso, C. Ho of U. of Mass. at Amherst, and G. Fischer of Shannon and Wilson, Federal Railroad Administration; 8/15 - 8/17; \$940,000.
- Laser Based Detection System for U.S. High Speed Rail*, with Dr. R. Benekohal and L. Goddard of U. of Illinois, Federal Railroad Administration.
- Use of Geothermal Resources at ORD, O'Hare Modernization Project*, Chicago, IL, 12/14 - 12/15, \$30,000.



**TEXT OR REFERENCE BOOK:** (underlined names are current or former students)

- Stark, T.D.** "Fully Softened Strength for Slope Stability Analyses", First Draft Complete for review by Springer Publishing, December, 2017 - date.
- Stark, T.D. and M. Hernandez**, "Geotechnical Foundation Design: Importance and Methodologies", First Draft Complete for use in CEE480-Foundation Engineering at University of Illinois at Urbana-Champaign, December, 2012 - date.

**BOOK/PROCEEDINGS EDITED or Co-EDITED:** (underlined names are current or former students)

- Stark, T.D., Swan, R.H., Jr., and Szecsy, R.** Railroad Ballast Testing and Properties, Proceedings of ASTM Symposium on Railroad Ballast Testing and Properties, ASTM STP 1605, March, 2018, 236 p.

**REFEREED AND ARCHIVAL JOURNAL PUBLICATIONS:** (underlined names are current or former students)

1. **Stark, T.D. and J.E. Delashaw**, "Correlations Between Unconsolidated-Undrained Triaxial Tests and Cone Penetrometer Tests," 1990 *Trans. Research Record 1278*, National Res. Council, Washington, D.C., 96-102.
2. **Stark, T.D. and J.M. Duncan**, "Mechanisms of Strength Loss in Stiff Clays," *Journal of Geotechnical Engineering*, ASCE, Vol. 117, No. 1, January, 1991, pp. 139-154.
3. **Stark, T.D. and J.J. Vettel**, "Effective Stress Hyperbolic Stress-Strain Parameters for Clays," *Geotechnical Testing Journal*, ASTM, Vol. 14, No. 2, June, 1991, pp. 146-156.
4. **Stark, T.D. and W.G. Bixby**, "Finite Element Analysis of Partially Saturated Seepage through Compacted Fills," 1991 *Transportation Research Record 1309*, National Research Council, Washington, D.C., pp. 25-34.
5. **Duncan J.M., D.F. Javete, and T.D. Stark**, "Importance of a Desiccated Crust on Clay Settlement," *Journal of Soils and Foundations*, Japanese Society of SMFE, Vol. 31, No.3, September, 1991, pp. 31-44.
6. **Stark, T.D. and J.J. Vettel**, "Bromhead Ring Shear Test Procedure," *Geotechnical Testing Journal*, ASTM, Vol. 15, No. 1, March, 1992, pp. 24-32.
7. **Stark, T.D. and J.M. Duncan**, Closure to "Mechanisms of Strength Loss in Stiff Clays," *Journal of Geotechnical Engineering*, ASCE, Vol. 118, No. 6, June, 1992, pp. 54-55.
8. **Stark, T.D. and J.J. Vettel**, "Effective Stress Hyperbolic Stress-Strain Parameters for Clays," *Geotechnical Testing Journal*, ASTM, Vol. 14, No. 2, June, 1991, pp. 146-156.
9. **Stark, T.D. and G. Mesri**, "Undrained Shear Strength of Liquefied Sands for Stability Analyses," *Journal of Geotechnical Engineering*, ASCE, Vol. 118, No. 11, November, 1992, pp. 1727-1747.
10. **Stark, T.D. and H.T. Eid**, "Modified Bromhead Ring Shear Apparatus," *Geotechnical Testing Journal*, ASTM, Vol. 16, No. 1, March, 1993, pp. 100-107.
11. **Stark, T.D., R.M. Ebeling, and J.J. Vettel**, "Hyperbolic Stress-Strain Parameters for Silts," *Journal of Geotechnical Engineering*, ASCE, Vol. 120, No. 2, February, 1994, pp. 420-441.
12. **Stark, T.D. and A.R. Poeppel**, "Landfill Liner Interface Strengths from Torsional Ring Shear Tests," *Journal of Geotechnical Engineering*, ASCE, Vol. 120, No. 3, March, 1994, pp. 597-615.
13. **Mesri, G., T.D. Stark, and C.S. Chen**, Discussion of "C<sub>v</sub>/C<sub>c</sub> Concept Applied to Compression of Peats," by Fox, P.J., Edil, T.B., and Lan, L.T., *Journal of Geotechnical Engrg.* ASCE, Vol. 120, No. 4, April, 1994, pp. 764-767.
14. **Stark, T.D. and H.T. Eid**, "Drained Residual Strength of Cohesive Soils," *Journal of Geotechnical Engineering*, ASCE, Vol. 120, No. 5, May, 1994, pp. 856-871.
15. **Stark, T.D. and G. Mesri**, Closure to "Undrained Shear Strength of Liquefied Sands for Stability Analyses," *Journal of Geotechnical Engineering*, ASCE, Vol. 120, No. 7, July, 1994, pp. 1284-1287.

(Refereed Journal Publications, continued)

16. **Stark, T.D.**, "Measurement of Drained Residual Strength of Overconsolidated Clays," invited contribution to 1995 *Transportation Research Record* 1479 titled "Engineering Properties and Practice in Overconsolidated Clays," National Research Council, Washington, D.C., January, 1995, pp. 26-34.
17. **Stark, T.D. and A.R. Poepfel**, Closure to "Landfill Liner Interface Strengths from Torsional Ring Shear Tests," *Journal of Geotechnical Engineering*, ASCE, Vol. 121, No. 6, June, 1995, pp. 509-510.
18. **Stark, T.D. and H.T. Eid**, Closure to "Drained Residual Strength of Cohesive Soils," *Journal of Geotechnical Engineering*, ASCE, Vol. 121, No. 9, September, 1995, pp. 670-673.
19. **Stark, T.D. and S.M. Olson**, "Liquefaction Resistance Using CPT and Field Case Histories," *Journal of Geotechnical Engineering*, ASCE, Vol. 121, No. 12, December, 1995, pp. 856-869.
20. **Stark, T.D. and I.A. Contreras**, "Constant Volume Ring Shear Apparatus," *Geotechnical Testing Journal*, ASTM, Vol. 19, No. 1, March, 1996, pp. 3-11.
21. **Stark, T.D., T. A. Williamson, and H.T. Eid**, "HDPE Geomembrane/Geotextile Interface Shear Strength," *Journal of Geotechnical Engineering*, ASCE, Vol. 122, No. 3, March, 1996, pp. 197-203.
22. **Stark, T.D. and H.T. Eid**, "Slope Stability Analyses in Stiff Fissured Clays," *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 123, No. 4, April, 1997, pp. 335-343.
23. **Mesri, G., T.D. Stark, C.S. Chen, and M. Ajlouni**, "Secondary Compression of Peats With or Without Surcharging," *Journal of Geotechnical Engineering*, ASCE, Vol. 123, No. 5, May, 1997, pp. 411-421.
24. **Stark, T.D. and H.T. Eid**, "Shear Behavior of Reinforced Geosynthetic Clay Liners," *Geosynthetics International Journal*, Vol. 3, No. 6, January, 1997, pp. 771-786.
25. **Eid, H.T. and T.D. Stark**, "Shear Behavior of an Unreinforced Geosynthetic Clay Liner," *Geosynthetics International Journal*, Vol. 4, No. 6, December, 1997, pp. 645-659.
26. **Stark, T.D. and I.A. Contreras**, "Fourth Avenue Landslide During 1964 Alaskan Earthquake," *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 124, No. 2, February, 1998, pp. 99-109.
27. **Stark, T.D. and H.T. Eid**, "Performance of Three-Dimensional Slope Stability Methods in Practice," *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 124, No. 11, November, 1998, pp. 1049-1060.
28. **Stark, T.D., D. Arellano, D. Evans, V. Wilson, and J. Gonda**, "Unreinforced Geosynthetic Clay Liner Case History," *Geosynthetics International Journal*, Vol. 5, No. 5, December, 1998, pp. 521-544.
29. **Long, J.H., S.M. Olson, T.D. Stark, and E.A. Samara**, "Differential Movement at Embankment/Bridge Structure Interface," 1999 *Trans. Research Record* 1633, National Research Council, Washington, D.C., pp. 53-60 pp.
30. **Stark, T.D., T.A. Williamson, J. Fowler, D. Pezza, and Y. Gibbons**, "Prefabricated Vertical Drain Test Section in Craney Island Dredged Material Management Area," *Journal of Performance of Constructed Facilities*, ASCE, V. 13, No. 1, February, 1999, pp. 8-16.
31. **Mesri, G., T.D. Stark, C.S. Chen, and M. Ajlouni**, Closure to "Secondary Compression of Peats With or Without Surcharging," *J. of Geotech. and Geoenvironmental Engrg*, ASCE, Vol. 125, No. 2, February, 1999, pp. 164-165.
32. **Stark, T.D.**, "GCL in Caps and Liners," *Management: The Journal for Solid Waste Professionals*, September, 1999, pp. 86.
33. **Tang, W.H., T.D. Stark, and M. Angulo**, "Reliability in Back Analysis of Slope Failures," *Soils and Foundations Journal*, Japanese Society of SMFE, Vol. 39, NO. 5, October, 1999, pp. 73-80.
34. **Eid, H.T., T.D. Stark, and Doerfler, C.K.**, "Effect of Shear Displacement Rate on Internal Shear Strength of a Reinforced Geosynthetic Clay Liner," *Geosynthetics International Journal*, Vol. 6, No. 3, August, 1999, pp. 219-239.
35. **Stark, T.D., H.T. Eid, W.D. Evans, and P. Sherry**, "Municipal Solid Waste Landfill Slope Failure I: Foundation and Waste Properties," *J. of Geotechnical and Geoenvironmental Engrg.*, ASCE, V. 126, No. 5, May, 2000, pp. 397-407.
36. **Stark, T.D., H.T. Eid, W.D. Evans, and P. Sherry**, "Municipal Solid Waste Landfill Slope Failure II: Stability Analyses," *J. of Geotechnical and Geoenvironmental Engrg.*, ASCE, Vol. 126, No. 5, May, 2000, pp. 408-419.

(Refereed Journal Publications, continued)

37. **Stark, T.D., S.M. Olson, W.H. Walton, and G. Castro**, "1907 Static Liquefaction Flow Failure of the North Dike of Wachusett Dam," *Journal of Geotechnical and Geoenvironmental Engrg.*, ASCE, Vol. 126, No. 12, December, 2000, pp. 1184-1193.
38. **Hillman, R.P. and T.D. Stark**, "Shear Behavior of PVC Geomembrane/Geosynthetic Interfaces," *Geosynthetics International Journal*, Vol. 8, No. 2, June, 2001, pp. 135 - 162.
39. **Olson, S.M., S.F. Obermeier, and T.D. Stark**, "Interpretation of Penetration Resistance for Back-analysis at Sites of Previous Liquefaction," *Seismological Research Letters*, Vol. 72, No. 1, January, 2001, pp. 46-59.
40. **Stark, T.D., H.T. Eid, W.D. Evans, and P. Sherry**, Closure to "Municipal Solid Waste Landfill Slope Failure I: Foundation and Waste Properties," *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 127, No. 9, September, 2001, pp. 812-815.
41. **Stark, T.D. and S.M. Olson**, "Liquefied Strength Ratio from Liquefaction Flow Failure Case Histories," *Canadian Geotechnical Journal*, Vol. 39, No. 3, June, 2002, pp. 629-647.
42. **Stark, T.D., S.M. Olson, W.H. Walton, and G. Castro**, Closure to "1907 Static Liquefaction Flow Failure of the North Dike of Wachusett Dam," *Journal of Geotechnical and Geoenvironmental Engrg.*, ASCE, Vol. 128, No. 9, September, 2002, pp. 800-801.
43. **Toupiol, C., T. Willingham, A.J. Valocchi, C.J. Werth, I.G. Krapac, T.D. Stark, and D.E. Daniel**, "Long-Term Tritium Transport Through a Field-Scale Compacted Soil Liner," *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 126, No. 8, August, 2002, pp. 640-650.
44. **Thomas, R.W., T.D. Stark, and H. Choi**, "Air Channel Testing of Thermally Bonded PVC Seams," *Geosynthetics International Journal*, Vol. 10, No. 3, October, 2003, pp. 56-69.
45. **Olson, S.M. and T.D. Stark**, "Yield Strength Ratio and Liquefaction Analysis of Slopes and Embankments," *Journal of Geotechnical and Geoenvironmental Engrg.*, ASCE, Vol. 129, No. 8, August, 2003, pp. 727-737.
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**RECENT CONSULTING REPORTS**

1. **Stark, T.D.**, "Expert Report: Yeager Airport Reinforced Slope Failure – 3D Slope Stability Analysis using SLIDE3." prepared for The Collin Group, Ltd., 7445 Arlington Road, Bethesda, MD 2018, 19 p.
2. **Stark, T.D.**, "Expert Report: Evaluation of Evaluation of Slope Movement – Bim-Hopkins 69v line near Van, West Virginia." prepared for American Electric Power Services Corporation, 1 Riverside Plaza, Columbus, Ohio, 2018, 12 p.
3. **Stark, T.D.**, "Expert Report: Port of Anchorage Intermodal Expansion: Bootlegger Cove Clay Shear Strength Testing and Permanent Seismic Deformations," Anchorage, Alaska," prepared for Seyfarth Shaw LLP, Washington, D.C. September, 2018, 69 p.
4. **Stark, T.D.**, "Expert Report: Evaluation of Causeway Failure During Construction, Nunavik Nickel Project, Deception Bay, Quebec, Canada: Expert Report." prepared for Norton Rose Fulbright Canada LLP, 1 Place Ville Marie, Montréal, Quebec, 2017, 72 p.
5. **Stark, T.D.**, "Final Expert Causation Report: Slope Failure in Chrin Brothers Solid Waste Landfill, Easton, PA," prepared for Land Air Water Legal Solutions, LLC, Berwyn, PA, July, 2017, 4 p.
6. **Stark, T.D.**, "Expert Report: Evaluation of Retaining Wall Failure: County Road 50: Jackson Township, Pike County, Ohio: Expert Report." prepared for Ohio Dept of Transportation, 1980 W. Broad Street, Columbus, Ohio, 2017, 61 p.
7. **Stark, T.D.**, "Expert Report: Field Reconnaissance: May 16, 2017-Bridgeton Landfill-Permit No. 0118912." prepared for Attorney General, State of Missouri, Jefferson City, MO, 2017, 5 p.
8. **Stark, T.D.**, "Expert Report: Evaluation of Retaining Wall Failure: County Road 50: Jackson Township, Pike County, Ohio: Expert Report." prepared for Ohio Dept of Transportation, 1980 W. Broad Street, Columbus, Ohio, 2017, 38 p.
9. **Stark, T.D.**, "Expert Report: Erosion Control Measures for Highway 11, Burk's Falls to Sunridge, Ontario, Township of Strong, Ontario," prepared for Norton, Rose, Fulbright, LLC, Toronto, Ontario, Canada, December, 2016, 124 p.
10. **Stark, T.D.** "Carillion Construction, Inc. - Vaughan Corporate Center Station Evaluation of Cut-Off Wall System," prepared for Norton, Rose, Fulbright, LLC, Toronto, Ontario, Canada, October, 2016, 266 p.
11. **Stark, T.D.** "Geomembrane Damage Evaluation: EQT Corporation, Pittsburgh, Pennsylvania, Tioga County, Pennsylvania: Expert Report." prepared for Meyer, Unkovic, & Scott LLP, Pittsburgh, PA, November, 2016, 52 p.
12. **Stark, T.D.**, "Amended Expert Causation Report: Slope Failure in Chrin Brothers Solid Waste Landfill, Easton, PA," prepared for Land Air Water Legal Solutions, LLC, Berwyn, PA, November, 2016, 64 p.
13. **Stark, T.D.**, "Revised REBUTTAL REPORT: Port of Anchorage Intermodal Expansion: Bootlegger Cove Clay Shear Strength Testing and Permanent Seismic Deformations," Anchorage, Alaska," prepared for Seyfarth Shaw LLP, Washington, D.C. September, 2016, 68 p.
14. **Stark, T.D.**, "REBUTTAL REPORT: Port of Anchorage Intermodal Expansion: Bootlegger Cove Clay Shear Strength Testing and Permanent Seismic Deformations," Anchorage, Alaska," prepared for Seyfarth Shaw LLP, Washington, D.C. September, 2016, 122 p.
15. **Stark, T.D. and Swan, R.H.**, "Evaluation of Geosynthetics Subgrade Stabilization Field Tests," prepared for Holley, Tensar International Corporation, Alpharetta, GA, January, 2016, 63 p.
16. **Stark, T.D.**, "Geotechnical Evaluation for Foundation Movement at four residences, Dacono, Colorado," prepared for Holley, Albertson, & Polk, Golden, CO, July, 2015, 36 p.
17. **Stark, T.D.**, "Geotechnical Evaluation of Foundation Movement at commercial building, Westminster, Colorado," prepared for McConaughy and Sarkissian, Denver, CO, January, 2015, 52 p.
18. **Stark, T.D.**, "Expert Report: Geotechnical Evaluation of Ground Subsidence at Oil and Gas Processing Facilities: Evanston, Wyoming," prepared for GreenbergTraurig, LLP, Houston, TX, January, 2015, 106 p.
19. **Stark, T.D.**, "Geotechnical Evaluation of Distress in 2458 Reserve Street, Erie, Colorado," prepared for McConaughy and Sarkissian, Denver, CO, September, 2014, 24 p.
20. **Stark, T.D.**, "Geotechnical Evaluation of Distress in 2464 Reserve Street, Erie, Colorado," prepared for McConaughy and Sarkissian, Denver, CO, September, 2014, 24 p.

## (Recent Consulting Reports, continued)

21. **Stark, T.D.**, "Expert Report: Geotechnical Evaluation of Lower Fox River Sediment Testing and Disposal," prepared for GreenbergTraurig, LLP, Houston, TX, June, 2014, 47 p.
22. **Stark, T.D.**, "Causation Report: West Slope and MSE Wall Failure, US Highway 75/34 Connector Platteview Intersection, Sarpy County, Nebraska," prepared for Hall & Evans, LLC, Denver, CO, April, 2014, 164 p.
23. **Stark, T.D.**, "Expert Causation Report: Slope Failure in Chrin Brothers Solid Waste Landfill, Easton, PA," prepared for Land Air Water Legal Solutions, LLC, Berwyn, PA, July, 2013, 52 p.
24. **Stark, T.D.**, "Expert Report: Repair Recommendations for Highway 11, Burk's Falls to Sunridge, Ontario, Township of Strong, Ontario," prepared for Saxe Law Office, Toronto, Ontario, November, 2013, 24 p.
25. **Stark, T.D.**, "Expert Report: Geotechnical Evaluation of Exfiltration Beds for Village at Aspen Park Retail Center, Aspen Park, CO," prepared for Wood, Smith, Henning & Berman, LLP, Highlands Ranch, CO, May, 2013, 37 p.
26. **Stark, T.D.**, "Expert Report: Geotechnical Evaluation of Quaternary Pre-Vashon/Glaciolacustrine (QPGL) Clay – SR-520 Bridge Replacement, Bellevue, Washington," prepared for Washington DOT, Olympia, WA, January, 2013, 104 p.
27. **Stark, T.D.**, "Expert Report: Geotechnical Evaluation for Florence High School, Florence, Colorado, Fremont County, Colorado," prepared for McConaughy and Sarkissian, Denver, CO, August, 2012, 98 p.
28. **Stark, T.D.**, "Effect of WGI Excavations on Floodwall Breaches in USACE IHNC East Bank Industrial Area and Inundation of Lower 9th Ward During Hurricane Katrina in 2005," prepared for U.S. Department of Justice, Washington, D.C., March, 2012, 337 p.
29. **Stark, T.D.**, "Geotechnical Evaluation of Flatwork Distress in Public Rights of Way Repair Areas, Glenwood Meadows Retail Development," prepared for McConaughy and Sarkissian, Denver, CO, August, 2012, 76 p.
30. **Stark, T.D.**, "Investigation of Slope Movement in Landfill Cell 1-B," prepared for American Electric Power, Columbus, Ohio, December, 2011, 36 p.
31. **Stark, T.D.**, "Geotechnical Evaluation of Flatwork Distress and pavement Distress, Glenwood Meadows Retail Development," prepared for McConaughy and Sarkissian, Denver, CO, February, 2011, 58 p.
32. **Stark, T.D.**, "Dallas Floodway System – Fully Softened Strength Testing and Analysis," prepared for HNTB, Baton Rouge, Louisiana, December, 2011, 22 p.
33. **Stark, T.D., Arellano, D.**, and S. Bartlett, S. "Expanded Polystyrene (EPS) Geofoam Application and Technical Data," EPS Industry Alliance, August, 2011, 46 pp., Available at <http://www.epsmolders.org>.

**STUDENT SUPERVISION*****Undergraduate Research Advisees:***

|     |                        |      |             |
|-----|------------------------|------|-------------|
| 1.  | John E. Juhrend        | SDSU | 1987        |
| 2.  | Joseph J. Vettel       | SDSU | 1988        |
| 3.  | William G. Bixby       | SDSU | 1987        |
| 4.  | John E. Delashaw       | SDSU | 1987        |
| 5.  | George R. Briest       | SDSU | 1988        |
| 6.  | Roger Berger           | SDSU | 1989        |
| 7.  | Garin Tentschert       | SDSU | 1989        |
| 8.  | Gregory R. Richards    | SDSU | 1989        |
| 9.  | Raun Connely           | SDSU | 1989        |
| 10. | Thomas J. O'Meara      | SDSU | 1990        |
| 11. | Chris Jepsen           | SDSU | 1990        |
| 12. | Steven M. Fitzwilliam  | SDSU | 1990        |
| 13. | Thomas A. Williamson   | UIUC | 1992        |
| 14. | Joseph M. Lukas        | UIUC | 1993        |
| 15. | Scott M. Olson         | UIUC | 1994        |
| 16. | Jesse A. Wallace       | UIUC | 1994        |
| 17. | William R. Monson      | UIUC | 1994        |
| 18. | Kenneth R. Daly        | UIUC | 1995        |
| 19. | Andres Guhl            | UIUC | 1995        |
| 20. | Sylvia B. Warnick      | UIUC | 1996        |
| 21. | Matthew J. Niermann    | UIUC | 1996        |
| 22. | Brent A. Kunz          | UIUC | 1996        |
| 23. | Morgan B. Finch        | UIUC | 1998        |
| 24. | Elizabeth J. Murphy    | UIUC | 1998        |
| 25. | Jason FitzSimmons      | UIUC | 1998        |
| 26. | Dan Randolph           | UIUC | 1998        |
| 27. | Erik Newman            | UIUC | 1999        |
| 28. | Andy Garza             | UIUC | 2000 - 2004 |
| 29. | Ben Parli              | UIUC | 2003 - 2004 |
| 30. | Justin Lewis           | UIUC | 2006 - 2007 |
| 31. | Tom Boersma            | UIUC | 2006 - 2007 |
| 32. | Chase Connor           | UIUC | 2006 - 2007 |
| 33. | Luis Pazmino           | UIUC | 2009        |
| 34. | Austin Dodson          | UIUC | 2009        |
| 35. | Jordan Christenson     | UIUC | 2010        |
| 36. | Ali Shahabi Sirjani    | UIUC | 2010        |
| 37. | Ziyue Yang             | UIUC | 2011-2012   |
| 38. | Eric Aguilar           | UIUC | 2011        |
| 39. | Aaron L. Leopold       | UIUC | 2011-2012   |
| 40. | David Nauheimer        | UIUC | 2011-2012   |
| 41. | Anek Kanittanon        | UIUC | 2011-2012   |
| 42. | Julie Fry              | UIUC | 2012        |
| 43. | Nathan Liggitt         | UIUC | 2012        |
| 44. | Ryan Wong              | UIUC | 2012-2013   |
| 45. | Aaron Leopold          | UIUC | 2012-2013   |
| 46. | Cesar Rojas            | UIUC | 2013        |
| 47. | Andony Landivar-Macias | UIUC | 2013-2016   |
| 48. | Cassandra Dumoulin     | UIUC | 2013-2014   |
| 49. | Kelly Samara           | UIUC | 2013-2014   |
| 50. | Mario Hernandez        | UIUC | 2014-2016   |

***Undergraduate Research Advisees: (continued)***

|     |                            |      |           |
|-----|----------------------------|------|-----------|
| 51. | Rodrigo Fernandez-Santiago | UIUC | 2014-2016 |
| 52. | Lardner Gadelha Chaves     | UIUC | 2015-2016 |
| 53. | Wenjing Li                 | UIUC | 2015-2016 |
| 54. | Shuo Zhang                 | UIUC | 2016-2017 |
| 55. | Kenya Mercado              | UIUC | 2016-2017 |
| 56. | Hannah Bloomberg           | UIUC | 2016-2017 |
| 57. | Michael Guedes             | UIUC | 2016-2017 |
| 58. | Enok Cheon                 | UIUC | 2016-2017 |
| 59. | Hsiang-Chung Cheng         | UIUC | 2016-2017 |
| 60. | Ralph Abano                | UIUC | 2016-2017 |
| 61. | Yixiong Ren                | UIUC | 2016-2017 |
| 62. | Mingjia Zhong              | UIUC | 2016-2017 |
| 63. | Kent Eng                   | UIUC | 2017-2018 |
| 64. | Ashwini Shetty             | UIUC | 2017-2018 |
| 65. | Morris Wang                | UIUC | 2017-2018 |
| 66. | Yiao Ding                  | UIUC | 2017-2018 |
| 67. | Billy Hernawan             | UIUC | 2017-2018 |
| 68. | Sir Lathan Wynn            | UIUC | 2017-2018 |
| 69. | Melanie Milewski           | UIUC | 2018-2019 |
| 70. | Jinglin Duan               | UIUC | 2018-2019 |
| 71. | Haneen Jaber               | UIUC | 2018-2019 |
| 72. | Stephanie Cash             | UIUC | 2018-2019 |
| 73. | Yilin Ma                   | UIUC | 2018-2019 |
| 74. | Kevin Nguyen               | UIUC | 2018-2019 |
| 75. | Rachel Yuan                | UIUC | 2018-2019 |

***Masters Research Advisees:***

|     |                       |      |                         |      |
|-----|-----------------------|------|-------------------------|------|
| 1.  | John E. Juhrend       | SDSU | M.S. Special Study      | 1988 |
| 2.  | Joseph J. Vettel      | SDSU | M.S. Special Study      | 1988 |
| 3.  | William G. Bixby      | SDSU | M.S. Special Study      | 1988 |
| 4.  | George R. Briest      | SDSU | M.S. Special Study      | 1989 |
| 5.  | Daniel Diehr          | SDSU | M.S. Research Assistant | 1990 |
| 6.  | Doug R. Schwarm       | SDSU | Visiting Scholar        | 1990 |
| 7.  | Alan R. Poeppel       | UIUC | M.S. Research Assistant | 1993 |
| 8.  | Steven M. Fitzwilliam | UIUC | M.S. Research Assistant | 1993 |
| 9.  | Kimberly M. Deason    | UIUC | M.S. Special Study      | 1993 |
| 10. | Thomas A. Williamson  | UIUC | M.S. Research Assistant | 1994 |
| 11. | Joseph M. Lukas       | UIUC | M.S. Research Assistant | 1994 |
| 12. | Chenan-Sin Chen       | UIUC | M.S. Research Assistant | 1994 |
| 13. | Melissa Dorado        | UIUC | M.S. Special Study      | 1994 |
| 14. | Jesse Wallace         | UIUC | M.S. Research Assistant | 1994 |
| 15. | William R. Monson     | UIUC | M.S. Research Assistant | 1995 |
| 16. | Edgar Black           | UIUC | M.S. Research Assistant | 1995 |
| 17. | Scott M. Olson        | UIUC | M.S. Research Assistant | 1995 |
| 18. | Pasquale Dibari, Jr.  | UIUC | M.S. Special Study      | 1996 |
| 19. | Kenneth R. Daly       | UIUC | M.S. Research Assistant | 1996 |
| 20. | Juan M. Imery         | UIUC | M.S. Research Assistant | 1996 |
| 21. | Jose Sananes-Sangros  | UIUC | M.S. Thesis             | 1996 |
| 22. | Sylvia B. Warnick     | UIUC | M.S. Research Assistant | 1996 |
| 23. | Massimo Maniaca       | UIUC | M.S. Research Assistant | 1997 |

***Masters Research Advisees: (continued)***

|     |                           |      |                         |           |
|-----|---------------------------|------|-------------------------|-----------|
| 24. | Paul T. Eickenberg        | UIUC | M.S. Research Assistant | 1997      |
| 25. | Cameron C. Oskvig         | UIUC | M.S. Research Assistant | 1997      |
| 26. | Yazen Khasawneh           | UIUC | M.S. Research Assistant | 1997      |
| 27. | Matthew J. Niermann       | UIUC | M.S. Research Assistant | 1997      |
| 28. | Brent A. Kunz             | UIUC | M.S. Research Assistant | 1997      |
| 29. | Carl Doerfler             | UIUC | M.S. Research Assistant | 1998      |
| 30. | Morgan B. Finch           | UIUC | M.S. Research Assistant | 1998      |
| 31. | Jason FitzSimmons         | UIUC | M.S. Research Assistant | 1998      |
| 32. | Ryan Hillman              | UIUC | M.S. Research Assistant | 1998      |
| 33. | Greg Lamb                 | UIUC | M.S. Research Assistant | 2000      |
| 34. | Erik Newman               | UIUC | M.S. Research Assistant | 2000      |
| 35. | Geoffrey Strack           | UIUC | M.S. Research Assistant | 2001-2003 |
| 36. | Perry Stover              | UIUC | M.S. Research Assistant | 2001      |
| 37. | Carlos Jimenez-Rodriguez  | UIUC | M.S. Research Assistant | 2003      |
| 38. | Fernando Sarabia          | UIUC | M.S. Research Assistant | 2003      |
| 39. | Diana Sitze               | UIUC | M.S. Research Assistant | 2004      |
| 40. | Justin Lewis              | UIUC | M.S. Research Assistant | 2006-2008 |
| 41. | John Hynes                | UIUC | M.S. Research Assistant | 2006-2008 |
| 42. | Mike Dreyer               | UIUC | M.S. Research Assistant | 2008      |
| 43. | Melissa Berena            | UIUC | M.S. Research Assistant | 2009-2010 |
| 44. | Luis Pazmino              | UIUC | M.S. Research Assistant | 2010-2011 |
| 45. | Jordan Christensen        | UIUC | M.S. Research Assistant | 2010-2011 |
| 46. | Kyle Bochte               | UIUC | M.S. Research Assistant | 2010-2011 |
| 47. | Aditya Zutshi             | UIUC | M.S. Research Assistant | 2010-2011 |
| 48. | Adolfo Caieda             | UIUC | M.S. Research Assistant | 2010-2012 |
| 49. | David Paiko               | UIUC | M.S. Research Assistant | 2011-2012 |
| 50. | Joseph A. Gamez           | UIUC | M.S. Research Assistant | 2011-2012 |
| 51. | Navid Jafari              | UIUC | M.S. Research Assistant | 2011-2012 |
| 52. | Pouyan Assem              | UIUC | M.S. Research Assistant | 2011-2012 |
| 53. | Ryan Wong                 | UIUC | M.S. Research Assistant | 2013      |
| 54. | Stephen T. Wilk           | UIUC | M.S. Research Assistant | 2012-2013 |
| 55. | Thomas Dehlin             | UIUC | M.S. Research Assistant | 2012-2013 |
| 56. | Ziyue Yang                | UIUC | M.S. Research Assistant | 2012-2013 |
| 57. | Jonathan Herra            | UIUC | M.S. Research Assistant | 2012-2014 |
| 58. | Gokul Pathikonda          | UIUC | M.S. Research Assistant | 2012-2014 |
| 59. | Dylan Brancato            | UIUC | M.S. Research Assistant | 2013-2014 |
| 60. | Ryan Sisk                 | UIUC | M.S. Research Assistant | 2013-2014 |
| 61. | Rafael Villarreal Barrios | UIUC | M.S. Research Assistant | 2012-2014 |
| 62. | Rod Betanzo               | UIUC | M.S. Research Assistant | 2013-2015 |
| 63. | Cassandra Dumoulin        | UIUC | M.S. Research Assistant | 2013-2015 |
| 64. | Jorge Avalos              | UIUC | M.S. Research Assistant | 2014-2015 |
| 65. | Jagrat Jariwala           | UIUC | M.S. Research Assistant | 2014-2015 |
| 66. | Sebastian Lopez-Zhinda    | UIUC | M.S. Research Assistant | 2014-2015 |
| 67. | Ahmed Baghdady            | UIUC | M.S. Research Assistant | 2014-2015 |
| 68. | Daniel P. O'Donnell       | UIUC | M.S. Research Assistant | 2015-2016 |
| 69. | Yifei Hong                | UIUC | M.S. Research Assistant | 2016-2017 |
| 70. | Wenjing Li                | UIUC | M.S. Research Assistant | 2016-2017 |
| 71. | Jiarui Chen               | UIUC | M.S. Research Assistant | 2016-2017 |
| 72. | Guo Cheng                 | UIUC | M.S. Research Assistant | 2016-2017 |
| 73. | Sean Hayter               | UIUC | M.S. Research Assistant | 2016-2017 |
| 74. | Pablo Espinoza-Giron      | UIUC | M.S. Research Assistant | 2016-2017 |
| 75. | Enok Cheon                | UIUC | M.S. Research Assistant | 2017-2018 |
| 76. | Yixiong Ren               | UIUC | M.S. Research Assistant | 2017-2018 |



***Masters Research Advisees: (continued)***

|     |               |      |                         |           |
|-----|---------------|------|-------------------------|-----------|
| 77. | Mingjia Zhong | UIUC | M.S. Research Assistant | 2017-2018 |
| 78. | Wendi Zhao    | UIUC | M.S. Research Assistant | 2017-2018 |
| 79. | Zhaowang Lin  | UIUC | M.S. Research Assistant | 2017-2018 |
| 80. | Jiale Lin     | UIUC | M.S. Research Assistant | 2017-2018 |
| 81. | Ana M. Alzate | UIUC | M.S. Research Assistant | 2017-2018 |
| 82. | Zach Boucias  | UIUC | M.S. Research Assistant | 2018-2019 |

***Doctoral Research Advisees:***

|     |                     |           |  |           |
|-----|---------------------|-----------|--|-----------|
| 1.  | Hisham T. Eid       | UIUC      | Ph.D. Dissertation (completed)             | 1996      |
| 2.  | Ivan Contreras      | UIUC      | Ph.D. Dissertation (completed)             | 1996      |
| 3.  | Mohammed Aljouni    | UIUC      | Ph.D. Dissertation (co-advised w/G. Mesri) | 2000      |
| 4.  | Scott M. Olson      | UIUC      | Ph.D. Dissertation (completed)             | 2001      |
| 5.  | David Arellano      | UIUC      | Ph.D. Dissertation (completed)             | 1998-2002 |
| 6.  | Erik Newman         | UIUC      | Ph.D. Dissertation (completed)             | 2002-2006 |
| 7.  | Manzoor Hussain     | UIUC      | Ph.D. Dissertation (completed)             | 2006-2010 |
| 8.  | Kamran Akhtar       | UIUC      | Ph.D. Dissertation (completed)             | 2007-2011 |
| 9.  | Navid Jafari        | UIUC      | Ph.D. Dissertation (completed)             | 2010-2015 |
| 10. | Stephen T. Wilk     | UIUC      | Ph.D. Dissertation                         | 2012-2017 |
| 11. | Ahmed Baghdady      | UIUC      | Ph.D. Dissertation                         | 2014-2017 |
| 12. | Sean Hayter         | UIUC      | Ph.D. Dissertation                         | 2017-2019 |
| 13. | Robert H. Swan, Jr. | Drexel U. | Ph.D. Dissertation                         | 2015-date |
| 14. | Enok Cheon          | UIUC      | Ph.D. Dissertation                         | 2017-2019 |
| 15. | Yixiong Ren         | UIUC      | Ph.D. Dissertation                         | 2017-2019 |
| 16. | Jiale Lin           | UIUC      | Ph.D. Dissertation                         | 2018-2020 |
| 17. | Zhaowang Lin        | UIUC      | Ph.D. Dissertation                         | 2018-2020 |

**Post-Doctoral Research Advisees:**

|                       |      |                                |           |
|-----------------------|------|--------------------------------|-----------|
| Arsalan G. Ghahramani | SDSU | Post-Doctoral Visiting Scholar | 1989      |
| Hisham T. Eid         | UIUC | Post-Doctoral Candidate        | 1996-1999 |
| Marwan Shahein        | UIUC | Post-Doctoral Candidate        | 1998-1999 |
| Hangseok Choi         | UIUC | Post-Doctoral Candidate        | 2002-2003 |
| Guocheng Li           | UIUC | Post-Doctoral Visiting Scholar | 2006-2007 |
| Hangseok Choi         | UIUC | Post-Doctoral Candidate        | 2011-2012 |
| Deb Mishra            | UIUC | Post-Doctoral Candidate        | 2011-2014 |

**Recent Doctoral Committee Service:**

|                     |      |  |      |
|---------------------|------|--|------|
| Marwan Shahein      | UIUC | Ph.D. Dissertation (G. Mesri advisor)      | 1999 |
| David Bennett       | UIUC | Ph.D. Dissertation (E.J. Cording advisor)  | 1999 |
| Michael J Wysockey  | UIUC | Ph.D. Dissertation (J. H. Long advisor)    | 1999 |
| Gordon W. McMahon   | UIUC | Ph.D. Dissertation (W.J. Hall advisor)     | 2000 |
| Malek M. Smadi      | UIUC | Ph.D. Dissertation (G. Mesri advisor)      | 1999 |
| Gordon W. McMahon   | UIUC | Ph.D. Dissertation (W.J. Hall advisor)     | 1999 |
| Vito Schifano       | UIUC | Ph.D. Dissertation (G. Mesri advisor)      | 2001 |
| Jayhyun Kwon        | UIUC | Ph.D. Dissertation (E. Tututumler advisor) | 2006 |
| Nejan Huvaj         | UIUC | Ph.D. Dissertation (G. Mesri advisor)      | 2009 |
| Kashif Mohammed     | UIUC | Ph.D. Dissertation (S. Olson advisor)      | 2010 |
| Jeb Tingle          | UIUC | Ph.D. Dissertation (S. Carpenter advisor)  | 2012 |
| Rosa L. Santoni     | UIUC | Ph.D. Dissertation (S. Carpenter advisor)  | 2013 |
| Mohammad Moridzadeh | UIUC | Ph.D. Dissertation (G. Mesri advisor)      | 2014 |
| Thierno Kane        | UIUC | Ph.D. Dissertation (G. Mesri advisor)      | 2017 |

**FORMER STUDENTS IN FACULTY OR RESEARCH POSITIONS**

|                   |   |
|-------------------|---|
| Scott M. Olson    | UIUC - NSF CAREER Awardee, ASCE Casagrande Awardee                  |
| David M. Arellano | University of Memphis   |
| Manzoor Hussain   | National University of Sciences and Technology, Lahore, Pakistan    |
| Kamran Akhtar     | National University of Sciences and Technology, Islamabad, Pakistan |
| Abdolreza Osouli  | Southern Illinois University at Edwardsville                        |
| Navid H. Jafari   | Louisiana State University - NSF CAREER Awardee                     |
| Steven T. Wilk    | Transportation Technology Corporation, Pueblo, Colorado             |

**FORMER STUDENTS IN DISTINGUISHED POSITIONS**

|                 |                    |   |
|-----------------|--------------------|---|
| Alan R. Poeppel | Langan Engineering | Named a Top 25 Newsmaker in 2015 by Engineering News Record for designing foundation for world's tallest building |
|-----------------|--------------------|---|

**INVITED LECTURE PRESENTATIONS**

1. *"The 1981 Slide and Repair of San Luis Dam,"* U.S. Army Corps of Engineers, Waterways Experiment Station (WES), Vicksburg, MS, 3/29/88.
2. *"The Benefits of Graduate School,"* Chi Epsilon Student Chapter, SDSU, 5/3/88.
3. *"Teton Dam Failure,"* ASCE Student Chapter, SDSU, 5/5/88.
4. *"Correlations Between Cone Penetration Tests and Undrained Shear Strength for Soft Clays,"* Geocon, Inc., San Diego, CA, 5/20/88.
5. *"Transient Seepage and Stress-Deformation Finite Element Analyses,"* Naval Ocean Research and Development Activity Laboratory, NSTL, MS, 7/15/88.
6. *"The 1981 Slide and Repair of San Luis Dam,"* Third Lecture in Distinguished Lecturer Program, GeoServices, Inc., Norcross, GA, 8/5/88.
7. *"The 1981 Slide and Repair of San Luis Dam,"* Purdue Univ., West Lafayette, IN, 3/3/89.
8. *"Computer Model of Consolidation Processes in Confined Dredged Material,"* U.S. Army Corps of Engineers, WES, Vicksburg, MS, 4/27/89.
9. *"Causes of 1981 Slide in San Luis Dam,"* ASCE Geotechnical Division, San Diego, CA, 5/24/89.
10. *"Finite Element Analysis of Transient Seepage Through Compacted Fills,"* Geocon, Inc., San Diego, CA, 6/20/89.
11. *"Undrained Shear Strength from Cone Penetration Tests,"* Woodward-Clyde Consultants, San Diego, CA, 8/2/89.
12. *"Workshop on PCDDF89: Computer model of Primary Consolidation and Desiccation in Confined Dredged Material,"* U.S. Army Corps of Engineers, WES, Vicksburg, MS, 9/15/89.
13. *"Correlations Between Unconsolidated-Undrained Triaxial Tests and Cone Penetrometer Tests,"* 1990 Transportation Research Board, Washington, D.C., 1/8/89.
14. *"Specifications for Construction and Load Testing of Stone Columns in Clays,"* ASTM Symposium on Deep Foundation Improvement: Stone Columns and Other Related Techniques, Las Vegas, NV, 1/25/89.
15. *"Interpretation of Cone Penetration Tests,"* LeRoy Crandall & Assoc., San Diego, 2/14/90.
16. *"Measurement of Residual Strength Using Torsional Ring Shear Devices,"* Woodward-Clyde Consultants, Santa Ana, CA, 4/4/90.
17. *"Construction of Civil Engineering Microcomputer Laboratory,"* Associated General Contractors' Student Chapter, SDSU, 4/26/90.
18. *"The 1981 Slide and Repair of San Luis Dam,"* Univ. of Illinois at Urbana-Champaign, Urbana, IL, 6/18/90.
19. *"Residual Strength of Cohesive Soils: New Developments,"* U.S. Army Corps of Engineers, WES, Vicksburg, MS, 9/12/90.
20. *"Workshop on PCDDF90: Computer model of Primary Consolidation and Desiccation in Confined Dredged Material,"* U.S. Army Corps of Engineers, WES, Vicksburg, MS, 9/13/90.
21. *"Soil-Structure Interaction Parameters for Silts,"* U.S. Army Corps of Engineers, WES, Vicksburg, MS, 9/13/90.
22. *"Fabric Reinforced Embankments,"* Associated General Contractors' Student Chapter, SDSU, 11/8/90.
23. *"Residual Strength and Slope Stability Analyses,"* ASCE Geotechnical Division, San Diego, CA, 12/11/90.
24. *"Vertical Strip Drain Test Section at Capacity of Craney Island Dredged Material Management Area,"* Chi Epsilon Meeting, University of Illinois, Urbana, IL, 3/16/91.
25. *"Installation of Vertical Strip Drains to Increase Storage Capacity of Dredge Disposal Areas,"* U.S. Army Corps of Engineers, WES, Vicksburg, MS, 6/14/91.
26. *"Workshop on PCDDF91: Computer model of Primary Consolidation and Desiccation in Confined Dredged Material,"* U.S. Army Corps of Engineers, WES, Vicksburg, MS, 9/24/91.

## (Invited Lecture Presentations, continued)

27. "Workshop on PCDDF92: Computer model of Primary Consolidation and Desiccation in Confined Dredged Material," U.S. Army Corps of Engineers, WES, Vicksburg, MS, 3/6/92.
28. "Using Vertical Strip Drains to Increase the Storage Capacity of Craney Island Dredged Material Management Area," WEDA XIII (Annual Meeting of Western Dredging Association), Mobile, AL, 5/28/92.
29. "Update on Measurement of Residual Shear Strength and Slope Stability Analyses," ASCE Geotechnical Division, San Diego, CA, 6/25/92.
30. "Comparison of Field and Laboratory Residual Shear Strengths," ASCE Specialty Conference PERFORMANCE OF SLOPES AND EMBANKMENTS-II, Berkeley, CA, 6/30/92.
31. "Service Life of Craney Island Dredged Material Management Area Under Proposed Restricted Use Program," U.S. Army Corps of Engineers, WES, Vicksburg, MS, 8/20/92.
32. "Soil-Geosynthetic Interface Strengths Using a Torsional Ring Shear Apparatus," ASCE National Convention, New York, NY, 9/17/92.
33. "Soil-Geosynthetic Interface Strengths and Stability Analyses," Virginia Tech, Blacksburg, VA, 11/10/92.
34. "Interface Strengths of Soil-Geosynthetic Liner Systems for Solid Waste Landfills," Illinois Office of Solid Waste Research Workshop, Urbana, IL, 12/9/92.
35. "Vertical Strip Drain Test Section at Craney Island Dredged Material Management Area," Chi Epsilon Honor Society Meeting, University of Illinois, 3/16/93.
36. "Soil-Geosynthetic Interface Strengths and Stability Analyses," ASCE Geotechnical Division, Chicago, IL, 4/13/93.
37. "The 1981 Slide and Repair of San Luis Dam," Illinois Institute of Technology, West Chicago, IL, 4/13/93.
38. "Using Vertical Strip Drains to Increase Storage Capacity of Confined Dredged Material Disposal Areas," WEDA XIV (Annual Meeting of Western Dredging Association), Atlantic City, NJ, 5/27/93.
39. "Stability Analyses for Landfills," NSF Workshop on Seismic Design of Landfills, Los Angeles, CA, 8/26/93.
40. "Workshop on PCDDF93: Computer model of Primary Consolidation and Desiccation in Confined Dredged Material," U.S. Army Corps of Engineers, WES, Vicksburg, MS, 9/12/93.
41. "Role of News Correspondent," 1993 ASCE National Convention, Dallas, TX, 10/24/93.
42. "Landfill Liner Interface Strengths and Slope Stability Analyses," ASCE Geotechnical Division, Sacramento, CA, 1/11/94.
43. "Landfill Liner Interface Strengths and Slope Stability Analyses," ASCE Geotechnical Division, San Diego, CA, 1/13/94.
44. "Vertical Strip Drain Test Sections at Craney Island Dredged Material Management Area," WEDA XV (Annual Meeting of Western Dredging Association), San Diego, CA, 5/18/94.
45. "Management of Dredged Material Placement Operations," ASCE Specialty Conference SETTLEMENT '94, College Station, TX, 6/18/94.
46. "Role of News Correspondent," ASCE Specialty Conference SETTLEMENT '94, College Station, TX, 6/18/94.
47. "Seismic Stability of Natural Slopes," 4th U.S./TAIWAN Multiple Hazard Mitigation Symposium/Workshop, National Science Foundation, Chicago, IL, 7/15/94.
48. "Strip Drains in Dredged Material Placement Areas," ASCE Specialty Conference DREDGING '94, Orlando, FL, 11/14/94.
49. "Measurement of Drained Residual Strength of Overconsolidated Clays," 1995 Transportation Research Board, Washington, D.C., 1/23/95.
50. "Three-Dimensional Slope Stability," NSF Grantees Meeting, National Science Foundation (NSF), Reno, Nevada, 4/27/95.

(Invited Lecture Presentations, continued).

51. "Static and Seismic Stability of Solid Waste Landfills," Illinois Office of Solid Waste Research Workshop, Urbana, IL, 4/28/95.
52. "Workshop on PSDDF: Computer model of Primary Consolidation, Secondary Compression, and Desiccation in Confined Dredged Material," U.S. Army Corps of Engineers, WES, Vicksburg, MS, 9/14/95.
53. "The 1981 Slide and Repair of San Luis Dam," University of Illinois at Chicago, Chicago, IL, 9/27/95.
54. "Stability of GCL Covers," ASTM Symposium titled "Testing and Acceptance Criteria for Geosynthetic Clay Liners, Atlanta, GA, 1/29/96.
55. "Geotechnical Earthquake Engineering," Earthquake Engineering Research Institute Student Chapter, University of Illinois, Urbana, IL 4/26/96.
56. "Landfill Slope Stability Case Histories in Southern Ohio," Engineering Society of Michigan, Emerging Issues in Landfill Design, Construction, and Operations, Ypsilanti, MI 3/5/97.
57. "Landfill Slope Stability," Woodward-Clyde Consultants, Santa Ana, CA, 3/12/97.
58. "Seismic Design of a Failed Landfill Slope," Keynote Speaker, Ohio River Valley Society Seminar (ORVSS) XXVII, Annual Conference of ASCE Kentucky Geotechnical Engineering Group, Lexington, KY, 10/10/97.
59. "Stability of Waste Containment Facilities," ASCE Geotechnical Division and AEG Meeting, Chicago, IL, 1/13/98.
60. "Bentonite Migration in Geosynthetic Clay Liners," invited presentation, Sixth International Conference on Geosynthetics, Atlanta, GA, 3/27/98.
61. "Stability of Waste Containment Facilities," Arkansas Environmental Protection Agency, Nashville, TN, 4/13/98.
62. "Stability of Waste Containment Facilities," Arkansas Environmental Protection Agency, Little Rock, AR, 4/17/98 and 6/4/98.
63. "Shear Strength of Liquefied Soil," ASCE Specialty Conference *SOIL DYNAMICS AND EARTHQUAKE ENGINEERING*, Seattle, WA, 8/3/98.
64. "CPT Based Liquefaction Resistance of Sandy Soils," ASCE Specialty Conference *SOIL DYNAMICS AND EARTHQUAKE ENGINEERING*, Seattle, WA, 8/3/98.
65. "Instability of Waste Containment Facilities," Keynote Speaker, ASCE Geotechnical Engineering Division, Portland, OR, 9/3/98.
66. "PVC Geomembrane Interface Strengths," PVC Geomembrane Institute Workshop, Chicago, IL, 9/18/98.
67. "Slope Stability Issues," ASCE Geotechnical Division, Dayton, OH, 11/4/98.
68. "New Developments for Geosynthetic Clay Liners in Waste Containment Systems," Keynote Speaker, Slope Stability in Waste Systems, Fall Seminar, ASCE of Central Ohio, Toledo, and Cincinnati Sections, Columbus, OH 11/6/98.
69. "The Hughes Road Wasteslide: An Analysis," Keynote Speaker, Slope Stability in Waste Systems, Fall Seminar, ASCE of Central Ohio, Toledo, and Cincinnati Sections, Columbus, OH, 11/6/98.
70. "Stability of Waste Containment Facilities," Keynote Speaker, WASTE TECH'99, New Orleans, LA, 2/1/99.
71. "Estimating Liquefaction Potential in Mid-America," Mid-America Highway Seismic Conference, St. Louis, MO, February 28, 1999.
72. "Transportation Networks Program of the Mid-America Earthquake Center," Mid-America Highway Seismic Conference, St. Louis, MO, February 28, 1999..
73. "Stability of Waste Containment Systems," Illinois EPA, Springfield, IL, 3/8/99.
74. "Mid-America Earthquake Center," Invited Civil Engineering Lecture Program, University of Dayton, Dayton, OH, 3/11/99.
75. "Three-Dimensional Slope Stability Analyses," Distinguished Practitioners in the Field of Geotechnical Engineering Lecture, Distinguished Lecture, Kentucky Geotechnical Engineering Group, Louisville, KY, April 8, 1999.

## (Invited Lecture Presentations, continued)

76. "Slope Stability and Seismic Concerns for Waste Containment Facilities," Invited Lecture for University of Wisconsin at Madison, Arlington, TX, 6/16/99.
77. "Legal Issues Associated with Landfill Slopes," Seminar on Legal Aspects of Geotechnical Engineering, ASCE National Capitol Section, Washington, D.C., 1/26/00.
78. "Slope Stability and Seismic Concerns for Waste Containment Facilities," Invited Lecture, University of Wisconsin at Madison, Madison, WI, 2/25/00.
79. "Stability of Waste Containment Systems," GSE Lining Technology, Inc. Seminar titled "Geosynthetics for Advanced Solutions, Chicago, IL, March, 9, 2000.
80. "Interim Slope Failure Involving Leachate Recirculation," WASTE TECH '00, Orlando, FL, March 6, 2000.
81. "Landslides: Shear Strength and Stability Analyses," ASCE Geotechnical Division, Los Angeles, CA, January 16, 2001.
82. "Slope Stability and Seismic Concerns for Waste Containment Facilities," Invited Lecture, University of Wisconsin at Madison, Madison, WI, 2/16/01.
83. "Interim Slope Failure Involving Leachate Recirculation," Mid-Atlantic States/EPA Solid Waste Summit, Sheperdstown, WV, December 14, 2001.
84. "Blasting: Strict Liability or Negligence," 28<sup>th</sup> Annual Conference Invited Lecture, Intl. Society of Explosives Engineering, Las Vegas, NV, 2/11/02.
85. "Slope Stability and Seismic Concerns for Waste Containment Facilities," Invited Lecture, University of Wisconsin at Madison, Madison, WI, 2/15/02.
86. "Standard of Care for Negligence in Blasting," Proceedings of 29<sup>th</sup> Annual Conference on Explosives and Blasting Technique, International Society of Explosives Engineers, Vol. 1, Nashville, TN, February, 2003, pp. 124 – 142.
87. "Overview of NCHRP Project 24-11: guidelines for Geofoam Application in Embankment Projects," Past President's Seminar, North American Geosynthetics Society, Geosynthetics 2003, Atlanta, GA, February 11, 2003.
88. "Three-Dimensional Slope Stability Analyses in Practice," University of Minnesota 51<sup>st</sup> Annual Geotechnical engineering Conference, Minnesota Geotechnical Engineering Group, Minneapolis, MN, February 21, 2003.
89. "Three-Dimensional Slope Stability Analyses in Geotechnical Practice," ASCE Geotechnical Engineering Group, San Francisco, CA, March 27, 2003.
90. "Use of Geofoam in Embankment Projects," Keynote Speaker, Ohio River Valley Society Seminar (ORVSS) XXVII, Annual Conference of ASCE Kentucky Geotechnical Engineering Group, Lexington, KY, September 19, 2003.
91. "Application of Strict Liability and Negligence to Blasting Claims," 30<sup>th</sup> Annual Conference Invited Lecture, Intl. Society of Explosives Engineering, New Orleans, LA, February 2, 2004.
92. "Landslides: Shear Strengths and Stability Analyses," ASCE Geotechnical Engineering Group, San Diego, CA, March 23, 2004.
93. "Use of Geofoam in Roadway Embankment Projects," ASCE Geotechnical Engineering Group, Seattle, WA, March 25, 2004.
94. "Buck Center Landslide," Bell, Rosenburg, & Hughes, Oakland, CA, 8/9/04.
95. "Buck Center Landslide," XL Corporation, San Francisco, CA, 8/11/04.
96. "Three-Dimensional Slope Stability Analyses in Geotechnical Practice," U.S. Bureau of Reclamation, Denver, CO, October 12, 2004.
97. "Effect of Bentonite Migration in Geosynthetic Clay Liners," ASCE Proceedings of Specialty Conf. GEO-FRONTIERS, Austin, TX, January, 24, 2005.
98. "Effect of Fill Placement in Hillside Development," ASCE Geotechnical Engineering Group, Cincinnati, OH, March 17, 2005.

## (Invited Lecture Presentations, continued)

99. *"Impact of Cut and Fill Operation on Hillside Development,"* Keynote Lecture, ASCE Geotechnical Engineering Group, 28<sup>th</sup> Spring Seminar & Eighth Geo-Expo, Queen Mary, Los Angeles, CA, April 27, 2005.
100. *"Three-Dimensional Slope Stability Analyses in Geotechnical Practice,"* University of California at Los Angeles, Westwood, CA, April 28, 2005.
101. *"Landslide Mechanisms and Investigation,"* Los Angeles Department of Water and Power, Los Angeles CA, June 21, 2005.
102. *"Designing and Specifying with PVC Geomembranes,"* Annual Wisconsin SWANA Conference, Stevens Point, WI, March 2, 2006.
103. *"Impact of Cut and Fill Operation on Hillside Development,"* Keynote Lecture, ASCE Geotechnical Engineering Group, San Diego, CA, March 21, 2006.
104. *"MSW Landfill Stability Issues,"* Keynote Speaker and Panelist, American Public Works Association, National Annual Conference, Kansas City, MO 9/13/06.
105. *"Landfill Stability: Leachate Recirculation and Other Emerging Issues,"* Keynote Speaker, SWANA-Wisconsin Chapter, Annual Conference, Milwaukee, WI, November 1, 2006.
106. *"Failure Modes and Analysis Techniques for Waste Containment Facilities,"* ASCE Geotechnical Division and AEG Meeting, Chicago, IL, 1/10/07.
107. *"Constructing Landfill Covers with GCLs and PVC Geomembranes,"* Geosynthetics 2007, Washington, D.C., January 17, 2007.
108. *"Increase in Shear Modulus Using Jet Grout and Deep Mix Method Ground Improvement Techniques,"* U.S. Army Corps of Engineers Infrastructure Systems Conference, Detroit, Michigan, June 25-27, 2007.
109. *"Seismic Deformation Analysis of Dams,"* U.S. Army Corps of Engineers Infrastructure Systems Conference, Detroit, Michigan, June 25-27, 2007.
110. *"Landfill Liner Interface Strengths from Torsional-Ring-Shear Tests,"* Keynote Speaker, Geo-Americas Conference, Cancun, Mexico, March 2008.
111. *"Landslides in an Urban Environment,"* Keynote Speaker, Ohio River Valley Society Seminar (ORVSS) XXXII, Annual Conference of ASCE Kentucky Geotechnical Engineering Group, Lexington, KY, October 17, 2008.
112. *"Lateral and Subjacent Support and Subsidence,"* Speaker and Panel Member, Annual California Bar Meeting, Monterey, California, September 2008.
113. *"Landfill Slope Stability and Elevated Temperatures,"* Annual Illinois Recycling and Waste Management Conference, Bloomington, Illinois, June 2009.
114. *"Current Research on Drained Residual Strength for Landslides,"* ASCE Geotechnical Engineering Group, Los Angeles, CA, June 17, 2009.
115. *"Landslides,"* Speaker and Panel Member, Contra Costa County Bar Association, Real Estate Section, Walnut Creek, California, June 18, 2009.
116. *"Intelligent Compaction Research and Activities,"* Illinois DOT Annual Geotechnical Engineers Meeting, Springfield, Illinois, January 19, 2010.
117. *"Evaluating Ground Settlement Above a Mined Area,"* ASCE Proceedings of Specialty Conf. GEO-FLORIDA-2010, West Palm Beach, FL, February, 2010.
118. *"Stability Analysis for Landfill with Elevated Temperatures,"* ASCE Proceedings of Specialty Conf. GEO-FLORIDA-2010, West Palm Beach, FL, February, 2010.
119. *"Drained Residual Strength for Landslides,"* ASCE Proceedings of Specialty Conf. GEO-FLORIDA-2010, West Palm Beach, FL, February, 2010.
120. *"Current Geofoam Research and Activities,"* EPS Expo, Nashville, TN, March 8, 2010.

## (Invited Lecture Presentations, continued)

121. "Constructing with Fabricated Geomembranes," 39<sup>th</sup> Tennessee Solid Waste Conference, Gatlinburg, TN, 4/28/10.
122. "Aluminum Waste Reactions in MSW Landfills," Invited Lecture for 2010 Chicago Lecture Series, 4/30/10.
123. "Effect of Elevated Temperatures in MSW Landfills," Invited Lecture for 2010 American Engineering Geologists Meeting, Chicago, IL, 9/15/10.
124. "Aluminum Waste Reactions in MSW Landfills," Invited Lecture for 2011 Illinois State Geological Survey Spring Seminar Series, Champaign, Illinois, 2/7/11.
125. "Current Research on Drained Residual Strength in Landslides," Keynote Speaker, Geo-Omaha 2011, ASCE Geo Institute, Omaha, Nebraska, February 18, 2011.
126. "Reaction and Combustion Indicators in MSW Landfills," ASCE Proceedings of Specialty Conf. GEO-FRONTIERS-2011, Dallas, TX, March, 2011.
127. "Back-Analysis of Preexisting Landslides," ASCE Proceedings of Specialty Conf. GEO-FRONTIERS-2011, Dallas, TX, March, 2011.
128. "Safe Disposal of Secondary Aluminum Wastes," 2011 EREF Regional Summit on Solid Waste Practice and Research, Indianapolis, Indiana, 4/28/11.
129. "Equipment Pressure Applied to Geomembrane in Composite Liner System," Invited Lecture for 2011 New York Solid Waste Conference, Lake George, New York, 5/3/11.
130. "Overview of Detection, Evaluation, and Suppression of Waste Fires," Invited Lecture for 2011 New York Solid Waste Conference, Lake George, New York, 5/3/11.
131. "Current Trends in Elevated Temperatures in Landfills," Invited Lecture for 2011 Midwest Environmental Enforcement Association, Springfield, Illinois, 5/12/11.
132. "Use of Geosynthetics in Airport Applications," Invited Lecture for **Center of Excellence for Airport Technology** Brown Bag Lunch Seminars, O'Hare Airport, Chicago, Illinois, 6/2/11.
133. "Current Trends in Elevated Temperatures in Landfills," Invited Lecture, Queens University, Kingston, Ontario, Canada, 7/13/11.
134. "Use of Fully Softened Shear Strengths in Levee Stability Analyses," Invited Lecture for Two-Day Workshop on Evaluating Shear Strengths for Levee Stability Analyses, Blacksburg, VA, 8/18/11.
135. "Jet Grouting Dams and Levees - Critical Considerations," Invited Lecture for Dam Safety 2011, Assoc. of State Dam Safety Officials (ASDSO), Washington, D.C., 9/27/11.
136. "Mitigation of Differential Movement at Railway Transitions," 2012 Transportation Research Board, Washington, D.C., 1/25/12.
137. "Investigation and Mitigation of Differential Movement at Railway Transitions for US High Speed Passenger Rail and Joint Passenger/Freight Corridors," 2012 Joint Rail Conference, Philadelphia, PA, 4/18/12.
138. "Fabricated Geomembranes—Design and Applications," Intertape Polymer Group Corporate Meeting, Dallas, TX, 6/20/12.
139. "Geothermal Applications at O'Hare Airport," Invited Lecture for **Center of Excellence for Airport Technology** Brown Bag Lunch Seminars, O'Hare Airport, Chicago, Illinois, 8/8/12.
140. "Reliability of Landfill Liner Systems," 20<sup>th</sup> annual Illinois Counties Solid Waste Management Association Conference, Champaign, IL, 10/4/12.
141. "Current Research on Drained Residual Strength in Landslides," Invited Lecture, University of Washington, Seattle, WA, 11/30/12.
142. "Current Research on Drained Residual Strength in Landslides," Invited Lecture, University of Michigan, Ann Arbor, MI, 11/7/12.



## (Invited Lecture Presentations, continued)

143. "Seismic Retrofit of Tuttle Creek Dam," ASCE Specialty Conf. GEO-Congress-2013, San Diego, CA, March, 2013.
144. "Seismic Testing for Track Substructure (Ballast and Subgrade) Assessment for Passenger/Freight Corridors," ASME 2013 Joint Rail Conference (JRC2013), Knoxville, TN, 4/18/13.
145. "Current Trends in Elevated Temperatures in Landfills," Invited Lecture, University of Washington, Seattle, WA, 5/20/13.
146. "Landslide in Complex Geology," Invited Lecture, Drexel University, Philadelphia, PA, 8/7/13.
147. "Detection and Movement of Landfill Fires," Invited Lecture, Queens University, Kingston, Ontario, Canada, 10/18/13.
148. "I-71/I-76 Interchange Slope Failure and Dispute Resolution," Invited Lecture, Ohio Transportation Engineering Conference, Columbus (OTEC), OH, 10/22/13.
149. "Drilled Shaft Design in Weak Rocks," ASCE Geoconfluence 2013 Conference, St. Louis, MO, 11/7/13.
150. "Detection and Movement of Landfill Fires," ASCE Geoconfluence 2013 Conference, St. Louis, MO, 11/7/13.
151. "Landslide in an Urban Environment," ASCE Oklahoma Geo Institute, Oklahoma City, OK, November 13, 2013.
152. "Landslide Inverse Analyses," Invited Lecture, University of Delaware, Newark, DE, 11/25/13.
153. "Fabricated Geomembranes for Oil Field Applications," Ohio Oil and Gas Expo, Cleveland, OH, 12/4/13.
154. "IHNC Floodwall Breaches during Hurricane Katrina and Recent Ruling (April 12, 2013)," at Universidad Nacional de Ingenieria, Lima Peru, 1/8/14.
155. "Drilled Shaft Design in Weak Shales," Illinois DOT Annual Geotechnical Engineers Meeting, Springfield, Illinois, 1/24/14.
156. "Housing Development Challenge," Invited Lecture, Northwestern University, Evanston, IL, 1/27/14.
157. "IHNC Floodwall Breaches during Hurricane Katrina and Recent Ruling (April 12, 2013)," Dinner Keynote Speaker, Geo-Omaha 2014, ASCE Geo Institute, Omaha, Nebraska, 2/6/14.
158. "Seismic Retrofit of Tuttle Creek Dam in Manhattan, Kansas," Keynote Speaker, Geo-Omaha 2014, ASCE Geo Institute, Omaha, Nebraska, 2/7/14.
159. "Use of Jet Grouting for Seepage Control," DFI Workshop – Levee and Coastal Rehabilitation, Miami, FL, 2/13/14.
160. "Aluminum Waste Reactivity Test," ASCE Specialty Conf. GEO-Congress-2014, Atlanta, GA, February, 2014.
161. "Seismic Testing and Tie-Ballast Interaction," ASME 2014 Joint Rail Conf. (JRC2014), Colorado Springs, CO, 4/3/14.
162. "Ballast Direct Shear Testing," ASME 2014 Joint Rail Conference (JRC2014), Colorado Springs, CO, 4/3/14.
163. "Seismic Wave Modeling for Track Substructure Assessments," ASME 2014 Joint Rail Conference (JRC2014), Colorado Springs, CO, 4/3/14.
164. "Seismic Testing for Track Substructure Modulus Values," ASME 2014 Joint Rail Conference (JRC2014), Colorado Springs, CO, 4/2/14.
165. "Recent Research on Drained and Undrained Strengths for Slope Stability Analyses," Keynote Speaker, ASCE 27<sup>th</sup> Central Pennsylvania Regional Conf. Hershey, PA, April 24, 2014.
166. "IHNC Floodwall Failures During Hurricane Katrina," Proceedings of 12<sup>th</sup> International Conference on Geo-Disaster Reduction-ICGdR, Fullerton, CA, September 5, 2014.
167. "Primary Consolidation, Secondary Compression, and Desiccation Model for Dredged Fill, Coastal Restoration, and Marsh Creation Projects," Keynote Speaker, 2014 ASCE/ACI Louisiana Civil Engineering Conference, New Orleans, LA, September, 2014.
168. "Development and Detection of Elevated Temperatures in Landfills," Illinois Water Conference, Urbana, IL, October 15, 2014.
169. "Fabricated Geomembranes for a Variety of Applications," VinylTec 2014, Indianapolis, IN, 10/22/14.

## (Invited Lecture Presentations, continued)

170. "Embankment on Soft Clay Case History: Prefabricated Vertical Drains and Stability Analyses," Invited Lecture, Ohio Transportation Engineering Conference (OTEC), Columbus, OH, 10/28/14.
171. "Development and Detection of Elevated Temperatures in Landfills," Illinois EPA, Springfield, IL, November 5, 2014.
172. "Fully Softened Shear Strength for Levee and Clay Embankment Design," Slope Stability Analysis & Slope Stabilization in Engineering Practice, ASCE Geo Institute, Oklahoma City, Oklahoma, November 12, 2014.
173. "Evaluation of Tie Support at Track Transitions," 2015 Transportation Research Board, Washington, D.C., 1/13/15.
174. "On-Going Study of Oso Landslide," Invited Lecture, USGS and Colorado School of Mines, Golden, CO, 2/5/15.
175. "Soil Compressibility in Transient and Unsaturated Seepage Analyses," IFCEE 2015, ASCE, San Antonio, TX, March 17, 2015.
176. "Monitoring and Repair of Bridge Transitions," ASME 2015 Joint Rail Conference (JRC2015), Colorado Springs, CO, 3/24/15.
177. "Design and Monitoring of Well-Performing Bridge Transitions," ASME 2015 Joint Rail Conf. (JRC2015), San Jose, CA, 3/24/15.
178. "Air Channel Testing of Thermally Bonded PVC Geomembrane Seams," ANTEC 2015, Society of Plastics Engineers (SPE), Orlando, FL, 3/25/15.
179. "Thirty Year Durability of a 20-mil PVC Geomembrane," ANTEC 2015, Society of Plastics Engineers (SPE), Orlando, FL, 3/25/15.
180. "Uncertainty of Soil Compressibility in Transient and Unsaturated Seepage Analyses," 2015 Annual USSD Meeting, U.S. Society on Dams (USSD), Louisville, KY, 4/14/15.
181. "On-Going Study of Oso Landslide," Invited Lecture, Vancouver Geotechnical Section, Vancouver, British Columbia, 4/15/15.
182. "On-Going Study of Oso Landslide," Invited Lecture, Seattle ASCE Geotechnical Section, Seattle, WA, 4/16/15.
183. "Fully Softened Strength for Levee and Clay Embankment Design," Invited Lecture, Shannon and Wilson, Inc. Seattle, WA, 4/16/15.
184. "Detection of Elevated Temperatures in Landfills," 44<sup>th</sup> Tennessee Solid Waste Conference, Gatlinburg, TN, 4/23/15.
185. "Disposal of Aluminum Production Waste," 44<sup>th</sup> Tennessee Solid Waste Conference, Gatlinburg, TN, 4/23/15.
186. "Shear Strengths and Testing for Stability Analyses," Invited Lecture, Terracon, Inc. Kansas City, KS, 4/24/15.
187. "Landfill Seismic Slope Stability Case History," Invited Lecture, Knight Piesold, Lima, Peru, 5/25/15.
188. "3D Slope Stability Analyses," Invited Lecture, Grana y Montero, Lima, Peru, 5/26/15.
189. "On-Going Study of Oso Landslide," Invited Lecture, Lima, Peru ASCE Section, Lima, Peru, 5/27/15.
190. "Recent Ruling on IHNC Floodwall Failures During Hurricane Katrina," Campus Speaker, Drexel University, Philadelphia, PA, 7/7/15.
191. "PSDDF Numerical Model for Dredged Fill and Coastal or Marsh Restoration Projects," PIANC USA annual conference, Savannah, Georgia, 10/20/15.
192. "Recent Ruling on IHNC Floodwall Failures During Hurricane Katrina," 28<sup>th</sup> Central Pennsylvania Regional Geotechnical Conference, ASCE Geo Institute, Hershey, PA, 11/4/15.
193. "On-Going Study of Oso Landslide," GeoConfluence 2015, ASCE Geo Institute, St. Louis, Missouri, 11/6/15.
194. "Drilled Shaft Design in Weak Cohesive Sedimentary Rocks," Invited Lecture, Bechtel Power Corporation, Inc. Reston, VA, 1/11/16.
195. "Use of SASW for Prediction of Substructure Performance," 2016 Transportation Research Board, Washington, D.C., 1/12/16.
196. "Design and Performance of Well-Performing Railway Transitions," 2016 Transportation Research Board, Washington, D.C., 1/12/16.

## (Invited Lecture Presentations, continued)

197. "*Expansive Soil Design, Case Histories, and Unsaturated Soil Measurements*," Keynote Speaker, Geo-Omaha 2016, ASCE Geo Institute, Omaha, Nebraska, 2/6/16.
198. "*2014 Oso Landslide*," Invited Lecture, Pittsburgh ASCE Geotechnical Section, Pittsburgh, PA, 9/23/16.
199. "*Non-invasive measurement of impact loads at transition zones*," 2017 Transportation Research Board, Washington, D.C., 1/8/17.
200. "*Under-Tie Pads to Improve Track Resiliency in Railroad Transitions*," 2017 Transportation Research Board, Washington, D.C., 1/8/17.
201. "*Use of SASW for Prediction of Substructure Performance*," 2017 Transportation Research Board, Washington, D.C., 1/12/17.
202. "*Design and Performance of Well-Performing Railway Transitions*," 2017 Transportation Research Board, Washington, D.C., 1/12/17.
203. "*Non-Invasive Monitoring of Railway Track and Transitions*," Keynote Speaker, Geo-Omaha 2017, ASCE Geo Institute, Omaha, Nebraska, 2/9/16.
204. "*Landfill Operational Techniques in Presence of Elevated Temperatures*," ASCE Specialty Conf. GEO-Frontiers-2017, Orlando, FL, March 13, 2017.
205. "*Importance of Side Resistance in 3D Stability Analyses*," ASCE Specialty Conf. GEO-Frontiers-2017, Orlando, FL, March 13, 2017.
206. "*Soil/Geosynthetic Interface Strengths from Torsional Ring Shear Tests*," ASCE Specialty Conf. GEO-Frontiers-2017, Orlando, FL, March 13, 2017.
207. "*Comparison of Single and Multi-Layer Interface Tests and Strengths*," ASCE Specialty Conf. GEO-Frontiers-2017, Orlando, FL, March 14, 2017.
208. "*Post-Construction Deformation of Compacted Fills Caused by Wetting*," ASCE Specialty Conf. GEO-Frontiers-2017, Orlando, FL, March 15, 2017.
209. "*Oso, Washington Landslide Analysis*," ASCE National Capital Section, Slope Stability Symposium, Tysons Corner, VA, 4/19/17.
210. "*Highway Embankment on Soft Soils Case Study*," ASCE National Capital Section, Slope Stability Symposium, Tysons Corner, VA, 4/19/17.
211. "*Impact on Climate Change on Coastal Protection and Resilience*," Purdue Geotechnical Society, West Lafayette, IN, 4/21/17.
212. "*Development, Progression, and Containment of Elevated Temperatures in Landfills*," Invited Lecture, Illinois State Geological Survey, Champaign, IL, 5/22/17.
213. "*Oso, Washington Landslide Analysis*," Invited Lecture, ASCE Geo-Institute Carolinas' Chapter, Geo-Carolinas 2017, Charlotte, NC, 10/9/17.
214. "*Case Study: Vertical Drain and Stability Analyses for Embankments on Soft Soils*," Invited Lecture, Ohio Transportation Engineering Conference (OTEC), Columbus, OH, 10/28/17.
215. "*Modeling Progressive Settlement of a Railway Bridge Transition Zone*," Presentation Number: 18-03447, 2018 Transportation Research Board, Washington, D.C., 1/8/18.
216. "*Drilled Shaft Design in Weak Cohesive Sedimentary Rocks*," Project Spotlight Presentation, 104<sup>th</sup> Illinois Transportation and Highway Engineering Conference, Illinois Center for Transportation, Urbana, IL, 2/28/18.
217. "*Oso, Washington Landslide Analysis*," Invited Lecture, Western University, London, Ontario, CANADA, 4/3/18.
218. "*Drilled Shaft Design in Weak Cohesive Sedimentary Rocks*," Invited Lecture, ASCE Geo-Institute Virginia Chapter, Geo-Virginia 2018, Williamsburg, VA, 4/9/18.

(Invited Lecture Presentations, continued)

219. "*Fill Placement on Slopes Underlain by Franciscan Melange*," ASCE National Capital Section, Engineering Geology Symposium, Tysons Corner, VA, 4/18/18.
220. "*Oso Landslide Failure Mechanism and Runout*," Invited Lecture, Bechtel Power Corporation, Inc. Reston, VA, 6/5/18.
221. "*Stability Considerations for Tied-Back Retaining Walls*," Invited Lecture, Ohio Transportation Engineering Conference (OTEC), Columbus, OH, 10/2/18.

**KEYNOTE AND DISTINGUISHED LECTURE PRESENTATIONS**

1. "*Instability of Waste Containment Facilities*," Keynote Lecture, ASCE Geotechnical Engineering Division, Portland, OR, September 3, 1998.
2. "*Stability of Waste Containment Facilities*," Keynote Speaker, WASTE TECH '99, New Orleans, LA, February 1, 1999.
3. "*Estimating Liquefaction Potential in Mid-America*," Mid-America Highway Seismic Conference, St. Louis, MO, February 28, 1999.
4. "*Transportation Networks Program of the Mid-America Earthquake Center*," Mid-America Highway Seismic Conference, St. Louis, MO, February 28, 1999.
5. "*Three-Dimensional Slope Stability Analyses*," Distinguished Practitioners in the Field of Geotechnical Engineering Lecture, Distinguished Lecture, Kentucky Geotechnical Engineering Group, Louisville, KY, April 8, 1999.
6. "*Landslides: Shear Strengths and Stability Analyses*," Keynote Lecture, ASCE Geotechnical Engineering Group, Los Angeles, CA, January 16, 2001.
7. "*Interim Slope Failure Involving Leachate Recirculation*," Invited Lecture, Mid-Atlantic States/ EPA Solid Waste Summit, Sheperdstown, West Virginia, December, 13-14, 2001.
8. "*Three-Dimensional Slope Stability Analyses in Practice*," University of Minnesota 51<sup>st</sup> Annual Geotechnical engineering Conference, Minnesota Geotechnical Engineering Group, Minneapolis, MN, February 21, 2003.
9. "*Use of Geofoam in Embankment Projects*," Keynote Speaker, Ohio River Valley Society Seminar (ORVSS) XXVII, Annual Conference of ASCE Kentucky Geotechnical Engineering Group, Lexington, KY, September 19, 2003.
10. "*Impact of Cut and Fill Operation on Hillside Development*," Keynote Lecture, ASCE Geotechnical Engineering Group, 28<sup>th</sup> Spring Seminar & Eighth Geo-Expo, Queen Mary, Los Angeles, CA, April 27, 2005.
11. "*Impact of Cut and Fill Operation on Hillside Development*," Keynote Lecture, ASCE Geotechnical Engineering Group, San Diego, CA, March 21, 2006.
12. "*Stability of Waste Containment Facilities: Emerging Issues*," Keynote Speaker, American Public Works Association, Annual Conference, Kansas City, MO, September 13, 2006.
13. "*Landfill Stability: Leachate Recirculation and Other Emerging Issues*," Keynote Speaker, SWANA-Wisconsin Chapter, Annual Conference, Milwaukee, WI, November 1, 2006.
14. "*Seismic Deformation Analysis of Dams*," U.S. Army Corps of Engineers Infrastructure Systems Conference, Detroit, Michigan, June 25-27, 2007.
15. "*Landfill Liner Interface Strengths from Torsional-Ring-Shear Tests*," Keynote Speaker, Geo-Americas Conference, Cancun, Mexico, March 2008.
16. "*Landslides in an Urban Environment*," Keynote Speaker, Ohio River Valley Society Seminar (ORVSS) XXXII, Annual Conference of ASCE Kentucky Geotechnical Engineering Group, Lexington, KY, October 17, 2008.
17. "*Current Research on Drained Residual Strength in Landslides*," Keynote Speaker, Geo-San Antonio 2010, ASCE Geo Institute, February 5, 2010.
18. "*Elevated Temperatures in Landfills*," Keynote Speaker, Chicago ASCE Lecture Series, April 30, 2010.
19. "*Drained Residual and Fully Softened Strengths for Slope Stability Analyses*," Keynote Speaker, Geo-Omaha 2011, ASCE Geo Institute, February 18, 2011.
20. "*Shear Strengths for Stability of Levee Slopes*," Keynote Speaker, Workshop on Shear Strengths for Stability of Slopes in Highly Plastic Clays, Virginia Tech, Blacksburg, VA, July, 2011.
21. "*Detection and Movement of Landfill Fires*," Keynote Speaker, GeoConfluence 2013, ASCE Geo Institute, St. Louis, Missouri, November 7, 2013.
22. "*Drilled Shaft Design in Weak Rocks*," Keynote Speaker, GeoConfluence 2013, ASCE Geo Institute, St. Louis, Missouri, November 7, 2013.
23. "*Seismic Retrofit of Tuttle Creek Dam*," Keynote Speaker, Geo-Omaha 2014, ASCE Geo Institute, Omaha, Nebraska, February 14, 2014.

## (Keynote and Distinguished Lecture Presentations, continued)

24. "Three-Dimensional Slope Stability Analyses," Keynote Speaker *12<sup>th</sup> International Conference on Geo-Disaster Reduction-ICGdR*, Fullerton, CA, September 6, 2014.
25. "IHNC Floodwall Failures During Hurricane Katrina," Keynote Speaker, 2014 Midwest Levees and Rivers Technical Exchange, St. Louis, MO, October 28, 2014.
26. "IHNC Floodwall Failures During Hurricane Katrina," 2015 James M Hoover Lecturer, Iowa State University, March 12 2015.
27. "Floodwall Failures During Hurricane Katrina: Court Ruling," *IFCEE 2015*, ASCE, San Antonio, TX, March 21, 2015.
28. "*Recent Ruling on IHNC Floodwall Failures During Hurricane Katrina*," Keynote Speaker, ASCE 28<sup>th</sup> Central Pennsylvania Regional Conf., Hershey, PA, 11/5/15.
29. "On-Going Study of Oso Landslide," Keynote Speaker, GeoConfluence 2015, ASCE Geo Institute, St. Louis, Missouri, November 6, 2015.
30. "Hurricane Katrina Floodwall Failures and Resulting Litigation," Distinguished Lecture, Lafayette College, Easton, PA, October 2 2015.
31. "*Expansive Soils Design, Case Histories, and Unsaturated Soil Measurements*," Keynote Speaker, ASCE Nebraska Section 33<sup>rd</sup> Geo-Omaha Conference-2016, Omaha, NB, 2/12/16.
32. "*Non-Invasive Monitoring and Performance of Railway Transitions*," Keynote Speaker, ASCE Nebraska Section 34<sup>th</sup> Geo-Omaha Conference-2017, Omaha, NB, 2/10/17.
33. "*Three-Dimensional Slope Stability Analyses in Practice*," Keynote Speaker, CalGeo (California Geotechnical Engineering Association) Conference, Hapuna Beach Prince Resort, Hawaii, April 26-28, 2017.
34. "*2D and 3D Unsaturated and Transient Seepage Analyses for Landside Excavations near Levees and Floodwalls*," Keynote Speaker, Ohio River Valley Society Seminar (ORVSS) XLVIII, Cincinnati, OH, November 17, 2017 (193 attended).

**UNIVERSITY COURSES TAUGHT**

- Undergraduate:
  - UIUC C.E. 284 - "Geotechnical Engineering," 1992 - date
  - UIUC C.E. 280 - "Soil Mechanics & Foundation Engrg.," 1991 - date
  - UIUC C.E. 195 - "Introduction to Civil Engineering," 1992 - date
  - SDSU C.E. 462 - "Soil Mechanics," 1987-1991
  - SDSU C.E. 463 - "Soil Mechanics Laboratory," 1987-1991
  - SDSU Eng. 120 - "Engineering Problem Analysis-FORTRAN," 1990 (new course)
- Graduate Courses Developed:
  - UIUC C.E. 598 - "Geoenvironmental Engineering/Landfill Design," Spring, 1994 – 1999 (new course)
  - UIUC C.E. 581 - "Earth Dams and Related Problems," Fall, 2001 – date
  - UIUC C.E. 524 - "Construction and Engineering Law," Fall, 2005 – 2011 (new course)
  - UIUC C.E. 498 - "Introduction to Geosynthetics," Fall, 1996 – 2000 (new course)
  - SDSU C.E. 642 - "Seepage and Earth Dams," 1988 - 1991 (new course)
  - SDSU C.E. 643 - "Soil and Site Improvement," 1989 - 1991 (new course)

**UNIVERSITY SERVICE**

- \* Chair, Rafael Tinoco 3<sup>rd</sup> Year Promotion and Tenure Review, UIUC, Civil Engineering, 2018
- \* Member, CEE Associate Head Search, UIUC, Civil Engineering, 2018
- \* Chair, Campus Purchasing, Waste, and Recycling Sustainability Working Advisory Team (SWAT), UIUC, 2017-date
- \* Second Alternate, College of Engineering Executive Committee, UIUC, Civil Engineering, 2016-date
- \* Chair, Ad Hoc Subcommittee Course Proposal Review for ENG 401, College of Engineering, UIUC, 2015
- \* Chair, Ad Hoc Subcommittee Course Proposal Review for ENG 450, College of Engineering, UIUC, 2015
- \* Chair, Mani Golparvar-Fard Promotion and Tenure Committee, UIUC, Civil Engineering, 2015
- \* Member, John Popovics Promotion and Tenure Committee, UIUC, Civil Engineering, 2014
- \* Member, Civil Engineering Curriculum Committee, UIUC, Civil Engineering, 2014 - date
- \* Member, CEE Modernization Committee, UIUC, Civil Engineering, 2013-date
- \* Member, Graduate Student Affairs Committee, UIUC, Civil Engineering, 2010-2013
- \* Member, Advisory Committee, UIUC, Civil Engineering, 2010-2014.
- \* Member, Civil Engineering Curriculum Committee, UIUC, 2009 - 2012
- \* Member, Advisory Committee, UIUC, Civil Engineering, 2002-2004
- \* Chair, Advisory Committee, UIUC, Civil Engineering, 2003-2004
- \* Member, Awards Committee, UIUC, Civil Engineering, 2002-2003
- \* Member, Geotechnical Faculty Search Committee, UIUC, Civil Engineering, 2002-2003
- \* Member, Transportation Faculty Search Committee, UIUC, Civil Engineering, 1998-1999
- \* Member, Teaching Evaluation and Improvement Committee, UIUC, College of Engineering, 1998-2000
- \* Member, Administrative Committee, UIUC, Civil Engineering, 1997-2000
- \* Member, Advisory Committee, UIUC, Civil Engineering, 1997-2000
- \* Member, Earthquake Engineering Research Center Proposal Committee, UIUC, Civil Engineering, 1997
- \* Chair, Geotechnical Faculty Search Committee, UIUC, Civil Engineering, 1996-1998

(University Service, continued)

- \* Member, Department Head Search Committee, UIUC, Civil Engineering, 1996
- \* Member, Geotechnical Faculty Search Committee, UIUC, Civil Engineering, 1995-1996
- \* Member, Design Council, UIUC, College of Engineering, 1993
- \* Member, Chester P. Seiss Award for Graduate Research Committee, UIUC, 1993 - 1996
- \* Poster Session Presenter, Advisory Board Meeting, UIUC, College of Engineering, 1993
- \* Member, ASCE Practitioner in Residence Program Committee, UIUC, 1993
- \* Chair, Civil Engineering Curriculum Committee, UIUC, 1994 - 1995
- \* Member, Civil Engineering Curriculum Committee, UIUC, 1991 - 1996

### **GEOTECHNICAL ENGINEERING RESEARCH AREAS**

1. Static and Seismic Stability of Natural and Man-Made Slopes
2. Forensic Geotechnical and Foundation Engineering
3. Design of Earth Dams, Levees, Floodwalls, Landfills, and other Earth Structures
4. Behavior and Design of Waste Containment Facilities
5. Behavior of Railroad Track Systems and Transitions
6. Performance of Compacted Structural Fills and Slopes
7. Earthquake-Induced Liquefaction and Post-Liquefaction Strength of Cohesionless Soils
8. Behavior and Improvement of Confined Dredged Material
9. Drained and Undrained Residual Strength of Cohesive Soils for Landslides