

DR. ALAN J. LUTENEGGER, P.E., F. ASCE

ADDRESS:

Department of Civil and Environmental Engineering
27 Marston Hall
University of Massachusetts
Amherst, Ma 01003
Telephone: (413) 545-2872
Fax: (413) 545-4525
email: lutenegg@ecs.umass.edu



BIRTH:

24 August 1952 Burlington, Iowa

CITIZENSHIP:

United States

DEGREES:

Ph.D.	1979	Iowa State University – Ames, Iowa <u>Geotechnical Engineering</u>
M.S.	1977	Iowa State University – Ames, Iowa <u>Geotechnical Engineering</u>
B.S.	1975	Iowa State University – Ames, Iowa <u>Construction Engineering</u>

CAREER:

April 2000 - July 2006 Department Head, Department of Civil and Environmental Engineering
University of Massachusetts, Amherst, Massachusetts

Sept. 1997- Aug. 1998 Interim Department Head, Department of Civil and Environmental Engineering,
University of Massachusetts, Amherst, Massachusetts

Sept. 1995 – present Professor, Department of Civil and Environmental Engineering, University
of Massachusetts, Amherst, Massachusetts

Area Coordinator - Geotechnical Engineering Program (1992-1997)

Site Manager - U.S. National Geotechnical Experimentation Site (1992-Present)

Jan. 1989 - Aug. 1995 Associate Professor, Department of Civil and Environmental Engineering, University of
Massachusetts, Amherst, Massachusetts

Jan. 1984 - Dec. 1988 Associate Professor, Department of Civil and Environmental Engineering, Clarkson University, Potsdam, New York

Area Coordinator - Geotechnical Engineering (1984-1988)

Jan. 1980 - Dec. 1983 Principal, Geotechnical Test Systems, Inc., Ames, Iowa

Nov. 1979 - Dec. 1980 Postdoctoral Research Fellow, Iowa State University, Ames, Iowa

OTHER WORK EXPERIENCE:

Geotechnical Engineer, Patzig Testing Laboratories, Des Moines, Iowa, (part-time 1979-1982).

Heavy Equipment Operator (scapers, crawler dozers), Jack A. Schroder Construction, Burlington, Iowa, (summers 1970-1975).

VISITING POSITIONS:

1982 Visiting Scientist, Geotechnical Laboratory, Bulgarian Academy of Sciences, Russe, Bulgaria (5 months)

AWARDS:

1991 University of Massachusetts, College of Engineering, Outstanding Junior Faculty Award

1998 Canadian Geotechnical Journal Honorable Mention Best Paper Award

2009 Tighe Teaching Award, Department of Civil & Environmental Engineering, University of Massachusetts

COURSES TAUGHT IN CAREER:

UNIVERSITY OF MASSACHUSETTS

Undergraduate

Engin 111	Introduction to Civil & Environmental Engineering
CEE 121	Civil & Environmental Engineering Measurements (Initiated)
CEE 320	Soil Mechanics
CEE 421	Foundation Engineering
CEE 485	Civil Engineering Construction Materials and Methods
CEE 486	Civil & Environmental Engineering Design Project
CEE 496	Independent Study
HON 391D	Engineering the Ancient World (Initiated)

Graduate

CEE 523	Ground Improvement and Geo-Construction
CEE 525	Environmental Geotechnology (Initiated)

CEE 623 Foundation Engineering
CEE 625 In Situ Testing Techniques in Geotechnical Engineering (Initiated)
CEE 697 Special Projects in Geotechnical Engineering
EDUC 791L Civil & Environmental Engineering in Our World (Initiated)

CLARKSON UNIVERSITY

Undergraduate

IE 305 Engineering for Non-Engineers
CE 310 Geotechnical Engineering
CE 403 Civil Engineering Laboratory
CE 414 Engineering Geology and Geomorphology
CE 415 Foundation Engineering
CE 495 Special Problems in Geotechnical Engineering

Graduate

CE 516 Advanced Soil Mechanics
CE 517 Engineering Properties of Soils
CE 691 Advanced Foundation Engineering
CE 620 Special Topics in Geotechnical Engineering

CONSULTING:

Allender-Butzke Engineers, Des Moines, Ia
Applied Research Associates, South Royalton, Vt
Association of American Railroads, Chicago, Ill
Atlantic Testing Laboratories, Canton, NY
C & H Engineers, P.C., Syracuse, NY
Clough-Harbor Associates, Albany, NY
Converse Consultant, Parsippany, NJ
Ecotec Environmental Assoc., E. Longmeadow, Ma
Federal Highway Administration, Washington, D.C.
Gannett-Fleming Geotechnical Engineers, Harrisburg, Pa
General Motors Corporation, Messena, NY
Geotechnical Engineers Inc., Winchester, Ma
Gifford Engineering, Schenectady, NY
Goldberg-Zoino Associates, Bridgeport, Ct
Goldberg-Zoino Associates, Newton Falls, Ma
Groundwater and Environmental Services, Palmer, Ma
Haley & Aldrich Engineers, Cambridge, Ma
Iowa Geological Survey Bureau, Iowa City, Ia
Jaworski Geotech Inc., Manchester, NH
John P. Stopen Engineers, Syracuse, NY
Patzig Testing Laboratories, Des Moines, Ia
SEA Consultants, Inc., Cambridge, Ma
St. Lawrence Seaway Development Corporation, Massena, NY

PROFESSIONAL SOCIETY MEMBERSHIP:

American Society of Civil Engineers - Member
ASCE Shallow Foundations Committee - Chairman (2001 - 2005)
Deep Foundations Institute - Member
DFI Helical Pile Committee - Member
International Society of Soil Mechanics and Foundation Engineering - Member
Society for Industrial Archeology – Member
Construction History Society - Member

PROFESSIONAL REGISTRATION:

Registered Professional Engineer, State of Iowa, No. 10338
OSHA 40 hour Hazardous Materials Safety Training 1993
(8 Hour Refresher Course 1994,1995,1996, 2009)

REVIEWER FOR PROFESSIONAL JOURNALS:

ASTM Special Technical Publications
ASCE Geotechnical Specialty Publications
Transportation Research Record
Canadian Geotechnical Journal
Geotechnical and Geological Engineering
Proceedings of the ICE: Geotechnical Engineering
Engineering Geology
Geotechnical Testing Journal, ASTM
Journal of Geotechnical & Geoenvironmental Engineering, ASCE

SPONSORED RESEARCH - EXTERNAL SOURCES:

“Adaptive Use of Historic Truss Bridges for Civil Engineering Instruction”, 6/1/08 – 6/1/10, National Science Foundation, \$149,771 (Co-PI with Sanjay Arwade)

“Civil and Environmental Engineering in Our World” – Summer Instruction Course for Massachusetts Middle School Science Teachers, 6/1/07 – 8/31/09, Massachusetts Board of Higher Education, \$126,032.

“Full-Scale Pilot Study to Reduce Lateral Stresses in Retaining Structures Using GeoFoam”, 1/1/06 – 12/31/07, Vermont Agency of Transportation, \$84,624.

“Development and Implementation of Early Detection Systems for Ground Movement”, 7/1/05 – 6/30/07, Vermont Agency of Transportation, \$104,953 (Co-PI with D.J. DeGroot).

“In Situ Testing”, 5/20/05 – 12/31/07, Massachusetts Highway Department, \$169,360 (Co-PI with D.J. DeGroot).

“Highway Deicing Agents Impact on Soil and Groundwater Quality”, 2002 – 2005, Massachusetts Highway Department, \$1,374,355 (Co PI with D.W. Ostendorf, D.J. DeGroot and C.J. DeMoranville).

“Evaluation of Highway Deicing Agents”, 2001 - 2003, Massachusetts Highway Department, \$535,000 (Co PI with D. W. Ostendorf and D.J. DeGroot).

“Salt/Premix Storage Practices and Groundwater Quality”, 1996 – 2003, Massachusetts Highway Department, \$4,062,570. (Co PI with D.W. Ostendorf and D.J. DeGroot).

“Compression and Uplift Load Testing of Geopier Foundations in Clay”, Sept. 2001 – May 2003, Federal

Highway Administration, \$38,500

“Behavior of Geosynthetic Reinforced Block Bridge Piers”, Jan. 2000 - Dec. 2000, Federal Highway Administration, \$100,000.

“Fate and Transport of Highway Deicing Agents in Groundwater”, June 30, 1999 - July 1, 2002, Massachusetts Highway Department, \$588,500 (Co PI with D. W. Ostendorf).

“Bearing Capacity of Shallow Foundations on a Sand Layer”, August 10, 1999 - May 1, 2000, Federal Highway Administration, \$19,100.

“Tension Tests on Driven Pipe Piles at the National Geotechnical Experimentation Site”, April 1, 1998 - July 1, 1998, Federal Highway Administration, \$10,000

“Behavior of Reinforced Soil Foundations”, May 30, 1997 - Aug. 31, 1998, Federal Highway Administration, \$49,950.

“Passive Earth Pressures Behind Integral Bridge Abutments” (Year Three), Jan. 1, 1997 - Dec. 31, 1997, Mass. Highway Dept., \$107,000.

“Air Sparging to Remediate Jet Fuel Contaminated Soils- Plattsburgh AFB” Aug. 31, 1995- Aug. 31, 1996, Air Force Office of Advanced Technology, \$325,000. (Co PI with D. Ostendorf and S. Ergas).

“Passive Earth Pressures Behind Integral Bridge Abutments” (Year Two), Oct. 27, 1995 - Dec. 31, 1996, Mass. Highway Dept., \$219,000.

“Hazardous Waste Site Remediation - Fellowships and Training”, Oct. 1, 1994 - Sept. 30, 1997, U.S. Department of Defense, \$1,300,000 (Co PI with D. Ostendorf and J. Male).

"Passive Earth Pressures Behind Integral Bridge Abutments" (Year One), Oct. 1, 1994 - Oct. 27, 1995, Mass. Highway Dept., \$93,800.

"Leaking Underground Storage Tank Site Assessment Protocol - Phase II", Oct. 1, 1994 - June 30, 1995. Mass. Highway Dept., \$225,000 (Co PI with D. Ostendorf and S. Long).

"National Geotechnical Experimentation Site Equipment Grant", Sept. 15, 1994 - Sept. 15, 1995, Federal Highway Administration, \$33,000.

"Development of In Situ Testing Program", May 1, 1994 - April 30, 1995, Federal Highway Administration, \$24,700.

"Use of Electrical Resistivity to Verify Grouting with Tremie Pipes", March 1, 1994 - April 1, 1995, Federal Highway Administration, \$23,500.

"Settlement of Shallow Foundations on Granular Soils", April 1, 1993 - June 30, 1994, Mass. Highway Dept., \$80,350 (Co PI with D.J. DeGroot).

"Field Tests of Bearing Capacity of Shallow Footings on Layered Soils; Sept. 1, 1993 - Aug. 31, 1994, Federal Highway Administration, \$23,500.

"Field Investigation of CMA Degradation in the Unsaturated Zone," April 1, 1992 - May 31, 1995, Mass Highway Department, \$300,000 (Co PI with D.W. Ostendorf and D.J. DeGroot).

"Leaking Underground Storage Tank Site Assessment Protocol - Phase 1", April 1, 1992 - May 31, 1993, Mass. Highway Department, \$125,000 (Co PI with D.W. Ostendorf and D.J. DeGroot).

"The Use of Electrical Resistivity to Verify Grouting of Cone Penetrometer Holes", Federal Highway Administration, Jan. 1 1993 - Dec. 31, 1994, \$13,000.

"Pile Load Test Data Base", August 1, 1992 - Nov. 1, 1992, Federal Highway Administration, \$17,000.

"U.S. National Geotechnical Experimentation Site", Sept. 1, 1992 - Jan. 1, 1996, National Science Foundation, \$89,000.

"Geotechnical Site Investigation of Solar Heat Storage Site," September 1, 1991 -September 1, 1992, U.S. Department of Energy, \$24,500.

"Sealing Exploratory Geotechnical Boreholes to Protect the Subsurface Environment," March 1, 1991 - June 1, 1993, National Cooperative Highway Research Program, \$183,000 (Co PI with D.J. DeGroot).

"In Situ Characterization of Railroad Track Subgrade," June 1, 1990 - August 30, 1990, Burlington Northern Railroad, \$14,162.

"Stability of Existing Granite Block Bridge Abutments," November 27, 1989 - June 30, 1991, Mass. Department of Public Works, \$97,300 (Co PI with C.S. Chang and E.T. Selig).

"Hydrogeologic/Groundwater Protection - Iowa Geological Survey Bureau," January 1, 1989 - June 30, 1990, The Esker Corp. (Iowa Dept. of Nat. Resources), \$70,000.

"Soil Response to the Penetration of a Flat-Plate in Saturated Clays" March 1, 1988 - September 1, 1989, National Science Foundation, \$60,000 (Co PI with A. Huang).

"Fundamental Penetration Mechanics of Flat Plates in Saturated Clays," February 15, 1988 - February 15, 1990, Air Force office of Scientific Research, \$148,155 (Co PI with A. Huang).

"In Situ Shear Strength of Foundation Bedrock - Snell Lock," January 1, 1988 - June 30, 1988, Gannett-Fleming Geotechnical Engineers, \$22,582.

"Cyclic Shear Behavior and Flow Failure of Silty Soils - Phase I," September 1, 1987 - August 31, 1988, National Center for Earthquake Engineering Research, \$65,000.

"Research Experience for Undergraduates," April 1, 1987 - October 31, 1987, National Science Foundation, \$8,000.

"Cyclic Shear Behavior and Flow Failure of Silty Soils - Phase II," September 1, 1986 - August 31, 1987, National Center for Earthquake Engineering Research, (Co PI with M. Vucetic), \$68,000.

"In Situ Testing for Full Scale Transmission Tower Foundation Pullout Tests," August 1, 1986 - December 31, 1986, Cornell University, \$10,000.

"A Fundamental Investigation of the Collapse Mechanism in Loess Soils," May 15, 1985 - October 1, 1987, National Science Foundation, Initiation Grant, \$60,000.

GRADUATE STUDENT THESIS ADVISOR:

CLARKSON UNIVERSITY

- Timian, David A. "Application of the Stepped Blade in Sensitive Marine Clay," M.S. Thesis, Jan. 1986.
- Saber, Robert T. "Investigation of the Pore-Size Distribution and Collapse Potential of Friable Loess Soils," M.S. Thesis, Dec. 1986
- Tierney, Kevin F. "Investigation of the Borehole Shear Test in a Marine (Leda) Clay," M.S. Thesis, Jan. 1987.
- Perkins, Steven "In Situ Investigation of Crustal Leda Clay in Massena, New York with the Pressuremeter and Borehole Earth Settlement Apparatus," M.S. Thesis, May 1987.
- Cooke, Raymond* "Contact Stress Distributions Beneath a Rigid Circular Plate Resting on Cohesionless Mass," M.S. Thesis, April 1988.
- Mithwani, M.K.* "Deformation Characteristics of Rectangular Plates Resting on Unilateral Edge Supports," M.S. Thesis, April 1988.
- Khadr, Wael, M. "Shear Strength Behavior and Pore Pressure Response of Natural and Reconstituted Silts," M.S. Thesis, April 1988.
- Kabir, M.G. "Interpretation of Piezocone and Piezoblade Tests in Clay," M.S. Thesis, Feb. 1988.
- Miller, Gerald A. "Undrained Shear Strength Anisotropy and Normalized Behavior from Field Vane Measurements," M.S. Thesis, Oct. 1988.

* Coadvised with Dr. J.P. Dempsey, Clarkson University

UNIVERSITY OF MASSACHUSETTS

- Blanchard, Jonathan D. "Interpretation of Hydraulic Fracture Tests in Clay Using a Push-in Type Piezometer," M.S. Project, April 1989.
- Opiatowski, Anthony J. "The Determination of the Anisotropy of Hydraulic Conductivity in Geologic Sediments," M.S. Project, Dec. 1989.
- Farley, Neil A. "Microscopic and Macroscopic Aspects of Soil Fabric and Their Effects on Hydraulic Conductivity," M.S. Project, Jan. 1990.
- Eley, David "Stability of Existing Granite Block Bridge Abutments," M.S. Project, Jan. 1991.
- Tonzi, Christopher "In Situ Hydraulic Conductivity from Piezocone and Dilatometer Tests," M.S. Project, Sept. 1991.
- Artura, Celeste "Hydraulic Conductivity of Selected Borehole Sealants," M.S. Project, June 1992.
- Lally, Michael "A Field and Laboratory Investigation of Geotechnical Properties for Design of

a Seasonal Heat Storage Facility," M.S. Project, Jan. 1993.

Difini, John "The Influence of Placement Technique on the Effectiveness of Borehole Sealants for Geotechnical Exploratory Boreholes," M.S. Project, May 1993.

Brown, Lizette "The Use of Electrical Resistivity to Verify Grout Placement in Cone Penetrometer Holes", M.S. Project, Dec. 1993.

Miller, Gerald A. "Behavior of Displacement Piles in an Overconsolidated Clay," Ph.D. Dissertation, May 1994.

Jordan, Jennifer "A Comparison of Different Ground Water Sampling Techniques at the National Geotechnical Experimentation Site", M.S. Project, Dec. 1994.

Windoloski, David "Load-Displacement Behavior of Shallow Foundations on Granular Soil", M.S. Project, Sept., 1995.

McClusky, Mark "Bearing Capacity of Shallow Foundations on Granular Soils Using In Situ Tests", M.S. Project, May 1996.

Riccardi, Charles "Factors Affecting Contact Earth Pressure Cell Calibration", M.S. Project, Aug. 1996.

Cheever, Paul "Methods of Determining Soil Gas Profiles in the Vadose Zone of Leaking Underground Storage Tanks", M.S. Project, Aug. 1996.

Costa, George "Uplift Behavior of Grouted Anchor Groups in Stiff Clay", M.S. Project, March, 1997.

Kelley, Shawn "A Comparison of In Situ Test Results for Obtaining Deep Foundation Design Parameters in Sand", M.S. Project, Sept., 1997.

Hazelwood, Jeffrey "Residual Strength of Clays", M.S. Project, Dec., 1997.

Thomson, Theodore "Passive Earth Pressures Behind Integral Bridge Abutments", PhD Dissertation, Dec., 1998.

Mitchell, Mike "Behavior of Reinforced Soil Foundations", M.S. Project, June, 1999.

Drury, Patrick "Bearing Capacity and Settlement of Footings on a Finite Thickness Sand Layer", M.S. Project, June, 1999.

Smith, Scott "Behavior of Compacted Grouted Anchors", M.S. Project, August, 1999.

Cerato, Amy "Influence of Surface Area on Geotechnical Characteristics of Fine-Grained Soils", M.S. Project, May, 2001.

Ball, Jennifer "Scale Effects of Skin Friction on Grouted Anchors", M.S. Project, Jan., 2002.

Mitchell, Jon "Behavior of Geosynthetically Reinforced Soil Bridge Piers", M.S. Project, Feb., 2002.

Dearth, Amy "Scale Effects of Laterally Loaded Drilled Shafts", M.S. Project, May, 2002.

Kelley, Shawn	“Electrical Conductivity in a Salt Contaminated Unconfined Aquifer”, PhD Dissertation, August, 2003.
Lillis, Christopher	“Uplift and Compression Load Tests on Geopier Foundations in Clay”, M.S. Project, December, 2003.
Cerato, Amy	“Scale Effects of Shallow Foundation Bearing Capacity in Granular Soils”, PhD Dissertation, December, 2004.
Tooley, Jennifer	“Dissolved Oxygen in an Unconfined Aquifer”, M.S. Project, December, 2004.
Fabri, Ricardo	“Behavior of Helical Screw Piles in Clay and Sand”, M.S. Project, May, 2005.
Rubin, Aaron	“Tensile Strength of Some Compacted Fine-Grained Soils”, M.S. Project, May, 2007
Ciuffetti, Mathew	“Performance of Bridge Abutments with Geofoam Backfill”, M.S. Project, May, 2008.
Toombs, Brian	“Frost Heave and Uplift Behavior of Instant Helical Foundations”, M.S. Project, December, 2011.
Orszulak, Thomas	“Uplift Behavior of Shallow Solar Panel Foundations” M.S. Project, August, 2012.
Khalili, Jahan	“Aging Effects on the Uplift Capacity of Driven Pipe Piles in Sand, Silt and Clay.” M.S. Project, August, 2013.

UNDERGRADUATE STUDENT PROJECTS ADVISOR

Artura, Celeste	“Analysis and Verification of the Bearing Capacity of Shallow Foundations on Non-Uniform Soil Conditions”, 1991.
Kudaruskas, Peter	“Confined Compression of Solid Waste”, May, 1997.
Mitchell, Mike	“Influence of Grain Size and Grain-Size Distribution on Minimum and Maximum Density of Sands”, December, 1998.
Dearth, Amy	“Swelling Pressure of Bentonite”, May, 2000.
Mitchell, Jon	“Load Settlement Behavior of Circular Footings on Granular Soil of Limited Thickness”, May, 1999.
Goodridge, Luke	“Effect of Shaft Diameter on the Lateral Load Behavior of Drilled Shafts”, May, 2000.
Fairbanks, Brian	“Stability of Granite Block Bridge Abutments”, May, 2001.
Stover, Perry	“The Effects of Grain-Size Distribution, Grain Size and Angularity on the Shear Strength of Sands at Constant Relative Density”, December, 2001.

Harrington, Ninfa	“Some Physical and Chemical Properties of Residual Soils of the Piedmont Province”, December, 2003.
Mones, Jarett	“Compaction and Strength Characteristics of Fine-Grained Soils”, December, 2003.
Major, Steve	“Structural Integrity of Two Iron Pony Bridges”, December, 2003.
Roy, Nathan	“Influence of Specimen Geometry on Compressive Strength of Portland Cement Concrete”, May, 2004.
Murphy, Kyle Burch, Casey Goodman, Michael	“Historic Iron/Steel Bridge Preservation”, May, 2004.
Silvestri, Simone	“Dispersion Characteristics of Fine-Grained Soils”, May, 2005.
Skelley, Mathew	“Fabrication of Lenticular Truss Pedestrian Bridge”, May, 2005.
Halpern, Yonah	“Behavior of Multi-Helix Screw-Piles in Clay”, May, 2008.
James Smith	“Evaluation of Harvard Miniature Compaction for Fine-Grained Soils”, May, 2009.
Helie, Derek	“Design of Grouted Shaft Helical Micropiles and Influence of Construction Procedures”, May 2009.
Toombs, Brian	“Installation Torque Method for Predicting Capacity of Grouted Shaft Helical Micropiles”, May, 2010.
Eastman, Brian & Brandt, Benjamin	“Rapid Field Testing Methods for Predicting Capacity of Helical Anchors”, May, 2010.
Davis, Nathan	“Dispersion Characteristics of London Clay and Evaluation of Initial Lime Consumption of Clays”, May, 2010.
Swei, Omar	“Grout Bond Strength on Galvanized Square Shaft Helical Anchor Shafts”, May, 2010.
Toombs, Brian	“Installation Disturbance Effects of Helical Screw Anchors in Clay”, December 2010.
Dzidek, Chris	“Reevaluation of Hilt & Davidson Lime Fixation Point and Initial Consumption of Lime”, May, 2011.
Humphrey, Dennis	“Undrained Shear Strength of Lime Treated Clays”, May, 2011.
Orszulak, Tom	“Free-Swell of Lime-Treated Clays”, May, 2011.
Loughlin, Kate	“Influence on Particle Shape and Fines Content on Minimum and Maximum

Index Density of Sand”, May, 2012.

Zapata, Hasain “Influence of Soil Composition on Atterberg Limits of Fine-Grained Soils”, May, 2013

GRADUATE INDEPENDENT STUDY PROJECTS ADVISOR

Hazelwood, Jeffrey “Residual Shear Strength of Clays”, Dec., 1997.

Borecki, Scott, Dunga, A. & Pause, Stephen “Uplift Tests on Cast-in-Place Concrete-Pedestal Foundations”, May 2009

Toombs, Brian “Disturbance Effects on the Load Capacity of Helical Anchors in Clay”, December, 2010.

Chancy, Mark “Evaluating the Uniformity of Soils from Field and Laboratory Tests” December, 2012

Kalili, Jahan “Thixotropic Behavior of Clays from Fall Cone Tests”, May, 2012.

Toombs, Keith “Comparison Between Convection Oven, Microwave Oven and Speedy Moisture Meter”, May, 2013.

Hellyar, Zach “Load-Displacement Behavior and Displacement at Servicibility Limit for Single-Helix and Multi-Helix Screw-Piles and Helical Anchors”, May, 2013.

Rubin, Aaron “Enhancing the Thermal Conductivity of Bentonite Grouts with Flyash”, May 2014.

Ruberti, Mark “Influence of Mineralogy on Water Content-Remolded Undrained Shear Strength Relationship of Clays Using Fall Cone Test and Lab Vane Test”, May, 2014.

Williams, Nick & Erikson, J. “Influence of Surface Coating on Installation Torque and Uplift Capacity of Round Shaft Helical Anchors”, May 2014.

Zapata, Hasian “Influence of Mineralogy on the Thixotropic Behavior of Clays”, Dec., 2014.

PATENTS:

4,122,704 Portable Variable Expansion Testing Device
4,411,160 Vane Modulus Soil Tester
4,458,525 Borehole Plate Test
4,474,066 Portable Variable Expansion Testing Device
4,539,851 Soil and Rock Shear Tester
4,543,820 Tapered Blade In Situ Testing Device

BOOKS:

Lutenegger, A.J., 2008. In Situ Testing Techniques in Geotechnical Engineering (In press by John Wiley and Sons, New York)

PUBLICATIONS: (* indicates refereed):

1978

***Lutenegger**, A.J., Remmes, B.D., and Handy, R.L., 1978. "Borehole Shear Tests for Stiff Soils," Journal of the Geotechnical Engineering Division, ASCE, Vol. 104, pp. 1403-1407.

Hallberg, G.R., Fenton, T.E., Miller, G.A. and **Lutenegger**, A.J., 1978. "The Iowan Erosion Surface: an old story, and important lesson and some new wrinkles," in Anderson, R.R., ed., Geology of East-Central Iowa, Iowa Geological Survey Guidebook No. 2.

1979

***Lutenegger**, A.J., Wollenhaupt, N.C., and Handy R.L., 1979. "Laboratory simulation of shale expansion by induced gypsum growth," Canadian Geotechnical Journal, Vol. 16, pp.405-409.

*Handy, R.L., **Lutenegger**, A.J. and Hoover, J.M., 1979. "The Iowa K-Test," Transportation Research Record, No. 678, pp.42-49.

Lutenegger, A.J., Hallberg, G.R. and Handy, R.L., 1979. "Review of Geotechnical Investigations of Loess in North America," Iowa Geological Survey Open File Report.

1980

Lutenegger, A.J., 1980. "Some Observations of the Loess in the Southeast Iowa Study Area," in Hallberg, et al., Yarmouth Revisited, Iowa Geological Survey Guidebook No. 3.

1981

Lutenegger, A.J., 1981. "Stability of loess in light of the inactive particle theory," Nature, 291, p. 360.

***Lutenegger**, A.J. and Hallberg, G.R., 1981. "Borehole Shear Test in Geotechnical Investigations," ASTM STP 740, pp. 566-578.

Kemmis, T. J., Hallberg, G.R., and **Lutenegger**, A.J., 1981. Depositional Environmental of Glacial Sediments and Landforms on the Des Moines Lobe, Iowa, Iowa Geological Survey Guidebook No. 6, Iowa Geological Survey.

1982

*Handy, R.L., Remmes, B.D., Moldt, S., **Lutenegger**, A.J., and Trott, G., 1982. "In Situ Stress Determination by Iowa Stepped Blade," Journal of the Geotechnical Engineering Division, ASCE, Vol. 108, pp. 1405-1422.

1983

***Lutenegger**, A.J. and Donchev, P., 1983. "Flat Dilatometer Testing in Some Meta-Stable Loess Soils," Proceedings of the International Symposium on In-Situ Testing for Soil and Rock Properties, Vol. 2, pp. 337-340.

1984

***Lutenegger**, A.J., Remmes, B.D., and Handfelt, L.D., 1984. Settlement Performance of a Mat Foundation on Unsaturated Loess," Proceedings of the International Conference on Case Histories in Geotechnical Engineering, Vol. 3, pp. 1053-1058.

Lutenegger, A.J. and Dickson, J.R., 1984. "Experiences with Drilled Lime Stabilization in the Midwest, USA," Proceedings of the 4th International Conference on Landslides, pp. 289-293.

Lutenegger, A.J., Donchev, P., and Evlogiev, J., 1984. "Determination of the Shear Strength of Loess Soils in a Borehole," Stroitelstvo (Bulgarian), Vol. 31, No. 10, pp. 23-26.

Donchev, P. and **Lutenegger**, A.J., 1984. "In Situ Shear Strength of North-Bulgaria Loess by Borehole Shear Test," Proceedings of the 6th Budapest Conference on Soil Mechanics and Foundation Engineering, pp.45-50.

1985

*Handy, R.L. Schmertmann, J.H., and **Lutenegger**, A.J., 1985. "Borehole Shear Tests in a Shallow Marine Environment," ASTM STP No. 883, pp. 140-153.

Hammamdshiev, K.B. and **Lutenegger**, A.J., 1985. "Study of OCR of Loess by Flat Dilatometer," Proceedings of the 12th International Conference on Soil Mechanics and Foundation Engineering Vol. 4, pp. 2409-2414.

1986

***Lutenegger**, A.J., 1986. "Application of Dynamic Compaction in Friable Loess," Journal of Geotechnical Engineering, ASCE, Vol. 112, pp. 663-667.

***Lutenegger**, A.J. and Timian, D., 1986. "In Situ Tests with K_0 Stepped Blade," Use of In Situ Tests in Geotechnical Engineering, ASCE, pp. 730-751.

***Lutenegger**, A.J. and Tierney, K., 1986. "Pore Pressure Effects in Borehole Shear Testing," Use of In Situ Tests in Geotechnical Engineering, ASCE, pp.752-764.

Lutenegger, A.J., and Timian, D., 1986. "Flat-Plate Penetrometer Tests in Marine Clays," Proceedings of the 39th Canadian Geotechnical Conference, pp. 301-309.

1987

***Lutenegger**, A.J., 1987. "Shear Strength of Prestressed Cohesive Soils," Journal of Geotechnical Engineering, ASCE, Vol. 113, pp. 163-168.

***Lutenegger**, A.J. and Timian, D., 1987. "Reproducibility of Borehole Shear Test Results in Marine Clays," Geotechnical Testing Journal, ASTM, Vol. 10, pp. 13-18.

***Lutenegger**, A.J., 1987. "Recommended Method for Performing the Borehole Shear Test," Geotechnical Testing Journal, ASTM, Vol. 10, pp. 19-25.

***Lutenegger**, A.J. and Saber, R.T., 1987. "Pore Structure of Loess Using Mercury Intrusion Porosimetry," Engineering Aspects of Soil Erosion, Dispersive Clays and Loess, ASCE, pp. 115-128.

Lutenegger, A.J., 1987. "In Situ Shear Strength of Friable Loess," CATENA Supplement No. 9, pp. 27-34.

Lutenegger, A.J., 1987. "Use of In Situ Tests to Determine Design Parameters for Drilled Shaft Foundations," ADSC Faculty Workshop Handbook.

1988

***Lutenegger**, A.J., Smith, B.L., and Kabir, M.G., 1988. "Use of In Situ Tests to Predict Uplift Performance of Multihelix Anchors," Special Topics in Shallow Foundations, ASCE, pp. 93-109.

*Saye, S.R. and **Lutenegger**, A.J., 1988. "Performance of Two Metal Grain Tanks Founded on Compressible Alluvium in Western Iowa," Measured Performance of Shallow Foundations, ASCE, pp. 27-45.

Lutenegger, A.J. and Kabir, M.G., 1988. "Interpretation of Piezocone Results in Overconsolidated Clays," Proc. of the Conference on Penetration Testing in the U.K., pp. 43-46.

***Lutenegger**, A.J. and Hallberg, G.R., 1988. "Stability of Loess," Engineering Geology, Vol 22. pp. 247-261.

***Lutenegger**, A.J., 1988. "Current Status of the Marchetti Dilatometer Test - State-of-the-Art," Proceedings of the International Symposium on Penetration Testing, Vol. 1, pp. 137-156.

***Lutenegger**, A.J. and Kabir, M.G., 1988. "Use of the Dilatometer C-Reading for Site Stratigraphy," Proceedings of the International Symposium on Penetration Testing, Vol. 1, pp. 549-554.

***Lutenegger**, A.J., Saye, S.R., and Kabir, M.G., 1988. "Use of Penetration Tests to Predict Wick Drain Performance in Soft Clays," Proceedings of the International Symposium on Penetration Testing, Vol. 2, pp. 656-660.

*Saye, S.R. and **Lutenegger**, A.J., 1988. "Site Assessment and Stress History of Stiff Alluvium with the Marchetti Dilatometer," Proceedings of the International Symposium on Penetration Testing, Vol. 1, pp. 589-593.

***Lutenegger**, A.J. and Saber, R.T., 1988. "Determination of Collapse Potential of Soils," Geotechnical Testing Journal, ASTM, Vol. 11, No. 4, pp. 173-178.

Lutenegger, A.J., 1988. "In Situ Testing to Evaluate Soil Liquefaction Potential," Proceedings of the U.S.-Japan Workshop on Liquefaction, Large Deformations and Their Effects on Lifeline Facilities, pp. 69-90.

1989

*Huang, A.B., **Lutenegger**, A.J., Islam, M.Z., and Miller, G.A., 1989. "Analysis of Laterally Loaded Drilled Shafts Using In Situ Tests Results," Transportation Research Record, No. 1235, pp. 60-68.

1990

Lutenegger, A.J. and Blanchard, J.D., 1990. "A Comparison Between Full-Displacement Pressuremeter Tests and Dilatometer Tests in Clay," Proceedings of the 3rd International Symposium on Pressuremeters, Oxford, U.K., pp. 309-320.

*Kabir, M.G. and **Lutenegger**, A.J., 1990. "In Situ Estimation of the Coefficient of Consolidation in Clays,"

Canadian Geotechnical Journal, Vol. 27, pp. 58-67.

***Lutenegger**, A.J., 1990. "Determination of In Situ Lateral Stresses in a Dense Glacial Till," Transportation Research Record No. 1278, pp. 194-203.

1991

***Lutenegger**, A.J. and DeGroot, D.J., 1991. "Measurement of Hydraulic Conductivity in Clay Using Push-In Piezometers," ASTM STP 1118, pp.362-374.

DeGroot, D.J., **Lutenegger**, A.J. and Mirza, C., 1991. "Sealing Geotechnical Exploratory Holes to Protect the Subsurface Environment", Geotechnical News, Vol. 9, No. 3, pp. 40-42.

1992

Benoit, J. and **Lutenegger**, A.J., 1992. "Measurement of Lateral Stresses in Soft Clay," Wroth Memorial Symposium on Predictive Soil Mechanics, pp. 56-74.

Breger, D.S., Lally, M.J., El-Hasnaoui, H., Hubbel, J.E., Gaasch, W.H., **Lutenegger**, A.J., and Sunderland, J.E., 1992. "Development of the University of Massachusetts Central Solar Heating Plant with Seasonal Storage: Geotechnical and Engineering Design Status," Proceedings of the Solar '92 Conference, Cocoa Beach Fla., Vol. 1, pp. 160-168.

1993

***Lutenegger**, A.J. and Miller, G.A., 1993. "Behavior of Laterally Loaded Drilled Shafts in Stiff Soil", Proceedings of the 3rd International Conference on Case Histories in Geotechnical Engineering, Vol. 1, pp. 147-153.

*Miller, G.A. and **Lutenegger**, A.J., 1993. "Analysis of Small Diameter Pipe Piles Using the Field Vane", Proceedings of the 3rd International Conference on Case Histories in Geotechnical Engineering, Vol. 1, pp. 154-160.

Christian, J.T., Soydemir, C., and **Lutenegger**, A.J., 1993. "Case Histories of Retaining Structures and Deep Excavations", Proceedings of the 3rd International Conference on Case Histories in Geotechnical Engineering, Vol. 3, pp. 1595-1603.

***Lutenegger**, A.J. and Miller, G.A., 1993. "Evaluation of Dilatometer Method to Determine Axial Capacity of Driven Pipe Piles in Clays", Use of In Situ Tests for Design of Deep Foundations, ASCE, pp. 40-63.

1994

Woods, R.D., ed., Benoit, J., deAlba, P.A., Faris, J.R., Briaud, J.L., O'Neill, M.W., **Lutenegger**, A.J. and Finno, R.J., 1994. "National Geotechnical Experimentation Sites (NGES)", Geotechnical News, Vol. 12, No. 1, pp. 39-44.

***Lutenegger**, A.J. and Miller, G.A., 1994. "Uplift Capacity of Small Diameter Drilled Shafts in Stiff Clay," Journal of Geotechnical Engineering, ASCE, Vol. 120, No. 8, pp. 1362-1380.

*DeGroot, D.J. and **Lutenegger**, A.J., 1994. "A Comparison Between Field and Laboratory Measurements of Hydraulic Conductivity in a Varved Clay," ASTM STP 1142, pp. 300-317.

***Lutenegger**, A.J. and DeGroot, D.J., 1994. "Hydraulic Conductivity of Borehole Sealants," ASTM STP 1142,

pp. 439-460.

*Bruner, D.R. and **Lutenegger**, A.J., 1994. "Field and Laboratory Hydraulic Conductivity Measurements in a Fractured Clay Till", ASTM STP 1142, pp. 318-329.

Lutenegger, A.J. and DeGroot, D.J., 1994. "Development of a Curriculum in Environmental Geotechnics at the University of Massachusetts-Amherst", Proceedings of the 47th Canadian Geotechnical Conference, pp. 39-49.

***Lutenegger** A.J. and Miller, G.A., 1994. "Influence of Pile Plugging on Capacity of Pipe Piles in Stiff Clay", Proceedings of the International Conference on Deep Foundations, Vol. 2, pp. 525-540.

1995

***Lutenegger**, A.J. and DeGroot, D.J., 1995. "Sealing Cone Penetrometer Holes to Protect the Subsurface Environment." Canadian Geotechnical Journal, Vol. 32, No. 5, pp. 880-891.

DeGroot, D.J., Raymond, M., and **Lutenegger**, A.J., 1995. "Windows Software for Settlement of Shallow Foundations on Granular Soils," Computing in Civil Engineering, ASCE, Vol. 1, pp. 115-122.

*Hamouche, K.K., Leroueil, S., Roy, M., and **Lutenegger**, A.J., 1995. "In Situ Evaluation of K_0 in Eastern Canada Clays," Canadian Geotechnical Journal, Vol. 32, No. 4, pp. 677-688.

*Ostendorf, D.W., **Lutenegger**, A.J. and Pollock, S., 1995. "Soil Gas Sampling and Analysis in a Petroleum Contaminated DOT Right-of-Way.", Transportation Research Record No. 1475, pp. 110-122.

***Lutenegger**, A.J., 1995. "Geotechnical Behavior of Overconsolidated Clay Crusts." Transportation Research Record No. 1479, pp. 61-74.

*DeGroot, D.J., **Lutenegger**, A.J., Panton, J.G., Ostendorf, D.W. and Pollock, S.J., 1995. "Methods of Determining In Situ Oxygen Profiles in the Vadose Zone of Granular Soils", ASTM Symposium on Sampling Environmental Media, pp. 271-288.

Lutenegger, A.J., DeGroot, D.J., Mirza, C., and Bozozuk, M., 1995. "Recommended Guidelines for Sealing Geotechnical Exploratory Holes", NCHRP Report No. 378, Transportation Research Board, 52 pp.

1996

Ostendorf, D.W., **Lutenegger**, A.J., Suchana, R.J., Cheever, P.S., and Pollock, S.J., 1996. "LNAPL Detection, Measurement, and Distribution in the Subsurface Environment." NAPLs in the Subsurface Environment: Assessment and Remediation, ASCE, pp. 91-102.

Ostendorf, D.W., **Lutenegger**, A.J. and Hinlein, E., 1996. "Sampling and Analysis of Soil Gas at LNAPL Spill Sites." International Symposium on Environmental Biotechnology.

1997

Miller, G.A., and **Lutenegger**, A.J., 1997. "Predicting Pile Skin Friction in Overconsolidated Clay." Proceedings of the 15th International Conference on Soil Mechanics and Foundation Engineering, Vol. , pp.

*Boone, S.J. and **Lutenegger**, A.J. , 1997. "Carbonates and Cementation of Glacially Derived Cohesive Soils in New York State and Southern Ontario". Canadian Geotechnical Journal, Vol. 34, No. 4, pp.534-550.

*Miller, G.A. and **Lutenegger**, A.J., 1997. "Influence of Pile Plugging on Skin Friction in Overconsolidated

Clay". Journal of Geotechnical Engineering, ASCE, Vol.123, No. 6, pp. 525-533.

Adams, M.T., **Lutenegger**, A.J., and Collin, J.G., 1997. "Design Implications of Reinforced Soil Foundations Using Soil Strain Signatures and Normalized Settlement Criteria". Proceedings of the 1st International Symposium on Mechanically Stabilized Backfill, pp. 149-156.

1998

Lutenegger, A.J. and Kelley, S.P., 1998. "Standard Penetration Tests with Torque Measurement". Proceedings of the International Symposium on Site Characterization, Vol. 2, pp. 939-945.

DeGroot, D.J. and **Lutenegger**, A.J., 1998. "Reliability of Soil Gas Sampling and Characterization Techniques". Proceedings of the International Symposium on Site Characterization, Vol. 1, pp. 629-634.

***Lutenegger**, A. J. and Adams, M.T., 1998. "Bearing Capacity of Footings on Compacted Sand". Proceedings of the 4th International Conference on Case Histories in Geotechnical Engineering, pp. 1216-1224.

*Thomson, T.A. Jr. and **Lutenegger**, A.J., 1998. "Passive Earth Pressures Behind a Prototype Integral Abutment". Proceedings of the 4th International Conference on Case Histories in Geotechnical Engineering, pp. 733-739.

***Lutenegger**, A.J. and Miller, G.A., 1998. "Tension Tests on Drilled Micropiles in a Stiff Clay". Proceedings of the 4th International Conference on Case Histories in Geotechnical Engineering, pp. 901-906.

Lutenegger, A.J. and Mitchell, C.L.B., 1998. "General Report - Case Histories of Foundations". Proceedings of the 4th International Conference on Case Histories in Geotechnical Engineering, pp. 1283-1287.

DeGroot, D.J., **Lutenegger**, A.J., and March, R., 1998. "Evaluation of Dispersion Characteristics of Bentonite with Application to Design of Contaminant Transport Barriers". Proceedings of the 4th International Symposium on Environmental Geotechnology and Global Sustainable Development.

1999

Mitchell, T., DeGroot, D.J., **Lutenegger**, A. J., Ernst, H., and McGrath, V., 1999. "Comparison of CPTU and Laboratory Soil Properties for Bridge Foundation Design on Fine-Grained Soils: A Case Study in Massachusetts", Transportation Research Record No. 1675, pp. 24-39.

Kelley, S.P. and **Lutenegger**, A.J., 1999. "Enhanced Site Characterization in Residual Soils Using the SPT-T and Drive Cone Tests", Behavioral Characteristics of Residual Soils, ASCE, pp. 88-100.

Lutenegger, A. J. and Adams, M.T., 1999. "Tension Tests on Bored Piles in Residual Soil", Behavioral Characteristics of Residual Soils, ASCE, pp.43-53.

2000

Lutenegger, A.J., 2000. "National Geotechnical Experimentation Site - University of Massachusetts", National Geotechnical Experimentation Sites, ASCE, pp. 102-129.

Lutenegger, A.J. and Mitchell, M.T., 2000. "Pullout Tests on Inclined Grouted Anchors in the Clay Crust at the University of Massachusetts National Geotechnical Experimentation Site", National Geotechnical Experimentation Sites, ASCE, pp. 321-335.

*Ostendorf, D.W., Hinlein, E.S., **Lutenegger**, A.J., and Kelley, S.P., 2000. "Soil Gas Transport Above Jet

Fuel/Solvent Spill at Plattsburgh Air Force Base”, Water Resources Research, Vol.36, No. 9, pp. 2531-2547.

Lutenegger, A.J. and Kelley, S.P., “Tension Tests on Driven Piles in Sand”, Proceedings of the 8th International Conference on Deep Foundations, pp. 219-225.

Lutenegger, A.J. and Degroot, D.J., 2000. “Field Techniques for Sampling and Measurement of Soil Gas Constituents at Contaminated Sites”, Chapter 23 in Remediation Engineering of Contaminated Sites, Dekker, New York.

2001

Lutenegger, A.J. and Cerato, A., 2001. “Surface Area and Engineering Properties of Fine-Grained Soils”, Proceedings of the 15th International Conference on Soil Mechanics and Foundation Engineering, Vol. 1, pp. 603-606.

Lutenegger, A.J. and Lally, M.J., 2001. “In Situ Measurement of Thermal Conductivity in a Soft Clay”, Proceedings of the International Conference on In Situ Measurement of Soil Properties and Case Histories, Bali, pp. 391-396.

Lutenegger, A.J. and Kelley, S.P., 2001. “Estimating Pile Skin Friction in Clay and Sand Using SPT-Torque Tests”, Proceedings of the International Conference on In Situ Measurement of Soil Properties and Case Histories, Bali, pp. 495-500.

***Lutenegger**, A.J. and Dearth, A., 2001. “Scale Effects of Laterally Loaded Drilled Shafts in Clay”. Foundations and Ground Improvement, ASCE, pp. 554-564.

2002

*Cerato, A.B. and **Lutenegger**, A. J., 2002. “Recommended Method for Determining Surface Area of Fine-Grained Soils”, Geotechnical Testing Journal, ASTM, Vol. 25, No. 3, pp. 315-321.

Lutenegger, A.J., 2002. NGES Site – University of Massachusetts, Amherst. Fulcrum: The Newsletter of the Deep Foundations Institute, Spring, 2002.

2003

*DeGroot, D.J. and **Lutenegger**, A.J., 2002. “Geology and Engineering Properties of Connecticut Valley Varved Clay”, Proceedings of the International Workshop on Characterization and Engineering Properties of Natural Soils. Vol. 1, pp. 695-724.

*Ostendorf, D.W., Hinlein, E.S., **Lutenegger**, A.J., and Tehrany, P.S., 2003. “A Simple Model of Soil Gas Concentration Sparged Into an Unlined Unsaturated Zone”. Ground Water Monitoring and Remediation, Vol. 23, No. 2, pp. 73-83.

Lutenegger, A.J., 2003. “Compacted Grout Bored Micropiles in Clay”. Proceedings of the 4th International Seminar on Bored and Augered Piles, Ghent, Belgium, pp. 197-202.

Mitchell, T.J., DeGroot, D.J., **Lutenegger**, A.J., and Ostendorf, D.W., 2003. “Direct Push Electrical Conductivity for Detection of Groundwater Contamination from Deicing Agents”. Proceedings of the 12th Pan American Conference of Soil Mechanics and Geotechnical Engineering, Vol. 1, pp. 269-274.

Lutenegger, A.J., Cerato, A.B., and Harrington, N., 2003. “Some Physical and Chemical Properties of

Piedmont Residual Soils”. Proceedings of the 12th Pan American Conference of Soil Mechanics and Geotechnical Engineering, Vol. 1, pp. 775-782.

Cerato, A.B. and **Lutenegger**, A.J., 2003. “Scale Effects of Shallow Foundation Bearing Capacity on Granular Material”, Proceedings of the BGA International Conference on Foundations, Dundee, Scotland, pp. 217-226.

Cerato, A.B. and **Lutenegger**, A.J., 2003. “Bearing Capacity of Shallow Foundations on a Finite Layer of Sand”, Proceedings of the International Conference on Shallow Foundations, Paris, France, Vol. 1, pp. 155-162.

Lutenegger, A and Adams, M.T., 2003. “Characteristic Load-Displacement Curves of Shallow Foundations”. Proceedings of the International Conference on Shallow Foundations, Paris, France, Vol. 2, pp. 381-393.

2004

Lutenegger, A.J., “Low Energy Compacted Grout Micropiles”, GeoSupport 2004, Orlando, Fla., Feb., 2004, pp. 146-157.

Lillis, C., **Lutenegger**, A.J., and Adams, M., 2004. “Uplift and Compression Tests on Rammed Aggregate Piers in Clay”, Geosupport 2004, ASCE, Orlando, Fla., pp. 497-507.

Lutenegger, A.J. and Dearth, A., 2004. “Influence of Ground Water Table Fluctuation on Lateral Load Behavior of Rigid Drilled Shafts in Clay Crust”, GeoSupport 2004, ASCE, Orlando, Fla., pp. 395-404.

*Ostendorf, D.W., Rees, P.L., Kelley, S.P., and **Lutenegger**, A.J., 2004. “Steady, Annual, and Monthly Recharge Implied by Deep Unconfined Aquifer Flow”, Journal of Hydrology, Vol. 290, pp. 259-274.

*Kelley, S.P. and **Lutenegger**, A.J., 2004. “Unit Skin Friction from the Standard Penetration Test Supplemented with the Measurement of Torque”, Journal of Geotechnical and Geoenvironmental Engineering, ASCE, Vol. 130, No. 4, pp. 540-543.

*Cerato, A.B. and **Lutenegger**, A.J., 2004. “On Determining the Intrinsic Compressibility of Fine-Grained Soils”. Journal of Geotechnical and Geoenvironmental Engineering, ASCE, Vol. 130, No. 8, pp. 872-877.

Cerato, A.B. and **Lutenegger**, A.J., 2004. “Disturbance Effects of Field Vane Tests in a Varved Clay” Proceedings of the 2nd International Symposium on Geotechnical Site Characterization, Porto, Portugal, Vol. 1, pp. 861-867.

Kelley, S.P. and **Lutenegger**, A.J., 2004. “Determination of Unit Pile Skin Friction in a Sand Deposit Using In Situ Tests”, Proceedings of the 2nd International Symposium on Geotechnical Site Characterization”, Porto, Portugal, Vol. 2, pp. 1489-1497.

Kelley, S.P. and **Lutenegger**, A.J., 2004. “Comparison of In Situ Tests to Determine Properties of a Deltaic Sand”, Proceedings of the 2nd International Symposium on Geotechnical Site Characterization, Porto, Portugal, Vol. 2, pp. 1662-1671.

2005

DeGroot, D.J. and **Lutenegger**, A.J., 2005. “Characterization by Sampling and In Situ Testing – Connecticut Valley Varved Clay”. Journal of Marine Engineering and Geotechnics, Polish Geotechnical Society, Vol. 27, No. 3-4, pp. 107-120.

Lutenegger, A.J. and Cerato, A.B., 2005. “Lenticular Iron Truss Bridges in Massachusetts”. Civil Engineering

Practice: Journal of the Boston Society of Civil Engineers, Vol. 20, No. 1, pp. 53-72.

Cerato, A. B. and **Lutenegger**, A.J., 2005. “Activity, Relative Activity and Specific Surface Area of Fine-Grained Soils”. Proceedings of the 16th International Conference on Soil Mechanics and Foundation Engineering, Vol. 2, pp. 325-328.

Lutenegger, A. J., 2005. “Iron Pipe Bridges of Charles H. Ball”, Society for Industrial Archeology Newsletter, Vol. 14, No. 4, pp. 18-19.

2006

Lutenegger, A. J., 2006. “Cavity Expansion Model to Estimate Undrained Shear Strength in Clay from Dilatometer”. Proceedings of the 2nd International Conference on the Flat Dilatometer, pp.319-326.

Lutenegger, A. J., 2006. “Consolidation Lateral Stress Ratios in Clay from Flat Dilatometer”. Proceedings of the 2nd International Conference on the Flat Dilatometer, pp.327-333.

Lutenegger, A. J., 2006. “Flat Dilatometer Method for Estimating Bearing Capacity of Shallow Foundations on Sand”, Proceedings of the 2nd International Conference on the Flat Dilatometer, pp.334-340.

Cerato, A.B and **Lutenegger**, A.J. 2006. “Shrinkage of Clays”. Proceedings of the 4th International Conference on Unsaturated Soils, ASCE, Vol. 1, pp. 1097-1108.

*Cerato, A.B. and **Lutenegger**, A.J., 2006. “Bearing Capacity of Square and Circular Shallow Foundations on a Finite Layer of Granular Soil Underlain by a Rigid Base”. Journal of Geotechnical and Geoenvironmental Engineering, ASCE, Vol. 132, No. 11, pp. 1496-1501.

*Cerato, A.B. and **Lutenegger**, A.J., 2006. “Specimen Size and Scale Effects of Direct Shear Box Tests of Sands”. Geotechnical Testing Journal, ASTM, Vol. 29, No. 6, pp. 1-10.

*Nagaraj, T.S., **Lutenegger**, A.J., Pandian, N.S., and Manoj, M., 2006. “Phenomenological Model for Rapid Field Compaction Control”. Geotechnical Testing Journal. ASTM, Vol. 29, No. 6, pp. 1-10.

2007

*Cerato, A.B. and **Lutenegger**, A.J., 2007. “Scale Effects of Shallow Foundations Bearing Capacity on Granular Material”. Journal of Geotechnical and Geoenvironmental Engineering, ASCE, Vol. 133, No. 10, pp. 1192-1202.

2008

Lutenegger, A.J., 2008. “Schmertmann’s Swell Sensitivity – Revisited”. From Research to Practice in Geotechnical Engineering, GSP 180, ASCE, pp. 193-205.

Lutenegger, A.J., 2008. “Extant Lenticular Iron Truss Bridges from the Berlin Iron Bridge Company”, Chapter 7 in Historic Bridges: Preservation, Rehabilitation, and Maintenance, Taylor & Francis Publishers, pp. 125-144.

Lutenegger, A.J., 2008. “Preservation of Historic Iron Bridges – Adaptive Use Bridge Project, University of Massachusetts” Chapter 11 in Historic Bridges: Preservation, Rehabilitation, and Maintenance, Taylor & Francis Publishers, pp. 205-218.

Lutenegger, A.J., 2008. “Tension Tests on Single-Helix Screw-Piles in Clay” Proceedings of the 2nd British Geotechnical Association International Conference on Foundations, pp. 201-212.

Lutenegger, A.J. and Kempker, J. H., 2008. Preservation of Historic Structures Using Screw-Pile Foundations” Proceedings of the 6th International Conference on Structural Analysis of Historical Constructions, Vol. 2, pp. 1079-1086.

Lutenegger, A.J. and Rubin, A., 2008. “Tensile Strength of Some Compacted Fine-Grained Soils”, Proceedings of the 1st European Conference on Unsaturated Soils.

Lutenegger, A.J., 2008. “The Standard Penetration Test – More Than Just a One Number Test”, Proceedings of the 3rd International Symposium on Site Characterization, pp. 481-485.

Lutenegger, A.J. and Powell, J.J.M., 2008. “Borehole Shear Tests in Stiff London and Gault Clay”, Proceedings of the 3rd International Symposium on Site Characterization, pp. 714-723.

2009

Lutenegger, A.J., 2009. “Cylindrical Shear or Plate Bearing? – Uplift Behavior of Multi-Helix Screw Anchors in Clay”. Contemporary Issues in Deep Foundations, ASCE, GSP 185, pp. 456-463.

Lutenegger, A.J., 2009. “Estimating Shaft Resistance of Driven Piles from SPT-Torque Tests”. Contemporary Topics in In Situ Testing, Analysis, and Reliability of Foundations, ASCE GSP 186, pp. 9-17.

Lutenegger, A.J. and Kempker, J., 2009. “Screw Piles Come of Age – Again”. Structural Engineer, April, pp. 26-29.

DeGroot, D.J. and **Lutenegger, A. J., 2009.** “Geology and Engineering Behavior of Connecticut Valley Varved Clay”. Geo-Strata, Vol. 13, No. 4, pp. 16-19.

2010

Lutenegger, A.J., 2010. “Using Helical Screw-Piles for Upgrading Existing Foundations for Urban Revitalization”. Proceedings of the International Symposium on Geotechnical Issues in Urban Regeneration, London, England.

*Chang, C.S., Cerato, A.B. and **Lutenegger, A.J., 2010.** “Modeling the Scale Effect of Granular Media for Strength and Bearing Capacity”. Journal of Pavement Engineering, Vol. 11, No.5, pp. 343-353.

Lutenegger, A.J., 2010. “Shaft Resistance of Grouted Helical Micropiles in Clay”, Proceedings of the International Conference on Micropiles, Washington, D.C.

2011

Arwade, S., Kelton, S. and **Lutenegger, A., 2010.** “Variability of the Mechanical Properties of Wrought Iron from Historic American Truss Bridges”. Journal of Materials in Civil Engineering, ASCE. Vol. 23, No. 5, pp. 638-647.

Lutenegger, A.J., 2011. “Behavior of Multi-Helix Screw Anchors in Sand”. Proceedings of the 14th Pan-American Conference on Geotechnical Engineering, Toronto, Canada.

Lutenegger, A.J., 2011. “Behavior of Grouted Shaft Helical Anchors in Clay”. Journal of the Deep Foundations

Institute, Vol. 5, No. 1, pp. 63-74.

***Lutenegger**, A.J., 2011. “Historical Use of Underexcavation for Stabilizing Leaning Structures”. Proceedings of the International Journal of Geotechnical Engineering, Vol. 5, No. 3, pp. 329-342.

***Lutenegger**, A.J., 2011. “Historical Development of Iron Screw-Pile Foundations: 1836 – 1900”. International Journal for the History of Engineering and Technology, Vol. 81, No. 1, pp. 108-128.

2012

Lutenegger, A.J., 2012. “Collapse “Sensitivity” of Midcontinent and Lower Mississippi Valley Loess”. Proceedings of GeoCongress 2012, ASCE, Oakland, Ca.

Lutenegger, A.J., 2012. “Tension Tests on Driven Fin Piles for Support of Solar Panel Arrays”. Proceedings of GeoCongress 2012, ASCE, Oakland, Ca.

Lutenegger, A.J., 2012. “Immediate Modification of Clays with Quicklime: Alteration of Grain-Size Distribution”. Proceedings of the International Symposium on Ground Improvement, Brussels, Belgium.

Lutenegger, A.J., 2012. “A Push-In Earth Pressure Cell for Estimating Soil Properties”, Proceedings of the 4th International Geotechnical Symposium on Site Characterization, Recife, Brazil.

Lutenegger, A.J. and Seider, G.L., 2012. “Profiling Subsurface Stratigraphy Using Torque Measurements from Installation of a Helical Plate”. Proceedings of the 4th International Geotechnical Symposium on Site Characterization, Recife, Brazil.

2013

Lutenegger, A.J., 2013. “Helical Screw-Piles: Alternative Support for Post-Frame Buildings”. Frame Building News, January, pp.

Lutenegger, A.J., 2013. “Field Response of Push-In Earth Pressure Cells for Instrumentation and Site Characterization of Soils”. Geotechnical Engineering Journal of the Southeast Asian Geotechnical Society, Vol. 43, pp.

Lutenegger, A.J., Robson, D. and Mohan, P., 2013. “Preservation of Historic Structures and Monuments Using Minimally Invasive Screw-Piles and Helical Anchors”. Proceedings of the 2nd International Symposium on Geotechnical Engineering for the Preservation of Monuments and Historic Sites, Naples, Italy, pp.515-522 .

Lutenegger, A.J. and Adams, M.T., 2013. “Axial Load Response of Full-Scale GRS Bridge Piers”. Proceedings of the International Symposium on Design and Practice of Geosynthetic-Reinforced Soil Structures, Bologna, Italy, pp. .

Lutenegger, A.J., 2013. “Historical Application of Screw-Piles and Screw-Cylinder Foundations for 19th Century Ocean Piers”. Proceedings of the 7th International Conference on Case Histories in Geotechnical Engineering, Chicago, Illinois.

Lutenegger, A.J., 2013. “Underpinning a Residential Structure on Uncontrolled Fill with Helical Screw-Piles”. Proceedings of the 7th International Conference on Case Histories in Geotechnical Engineering, Chicago, Illinois.

Saye, S.R., **Lutenegger, A.J.**, Santos, J. and Kumm, B.P., 2013. “Assessing the OCR in Soil with the Pezocone: Referencing Soil Index Properties”, Journal of Geotechnical & Geoenvironmental Engineering, ASCE, Vol. 139, No. 7, pp.1075-1085.

Saye, S.R., Brown, D.A. and **Lutenegger, A.J.**, 2013. “Assessing the Adhesion of Driven Pipe Piles in Clay Using an Adaptation of the SHANSEP Concept”, Journal of Geotechnical & Geoenvironmental Engineering, ASCE, Vol. 139, No. 7, pp. 1062-1074.

Lutenegger, A.J., 2013. “Review of Large-Scale Field Tests on Screw-Piles and Helical Anchors”. Proceedings of the 1st International Geotechnical Symposium on Helical Foundations, pp. 46-66.

Lutenegger, A.J., 2013. “Factors Affecting Torque Correlations for Screw-Piles and Helical Anchors”. Proceedings of the 1st International Geotechnical Symposium on Helical Foundations, pp. 211-224.

Lutenegger, A.J., 2013. “Uplift of Shallow Screw-Piles in Sand and Clay”. Proceedings of the 1st International Geotechnical Symposium on Helical Foundations, pp. 200-210.

2014

Lutenegger, A.J., Erikson, J. and Williams, N., “Evaluating Installation Disturbance of Helical Anchors in Clay from Field Vane Tests”. Proceedings of the 39th Annual Deep Foundations Institute Conference, pp.

Lutenegger, A.J., 2014. “Geochemistry and Geotechnical Characteristics of London Clay from Heathrow Airport”. Proceedings of the TC105 ISSMGE International Symposium on Geomechanics from Micro to Macro, Vol. 2, pp. 1261-1266.

Lutenegger, A.J., 2014. “Aging Mechanism of Driven and Jacked Pipe Piles in Clays”. Proceedings of the TC105 ISSMGE International Symposium on Geomechanics from Micro to Macro, Vol. 2, pp. 1605-1610.

2015

Lutenegger, A.J. and Clemence, S.P., 2015. “Screw-Piles and Helical Anchors – 180 Years of Use in Geotechnical Engineering”. GeoStrata, January, pp. 40-44.

Clemence, S.P. and **Lutenegger, A.J.**, 2015. “Current State-of-Practice for Helical Piles and Tiebacks”. Journal of the Deep Foundations Institute, Vol. ??, No. ??, pp.

Lutenegger, A.J., 2015. “Uplift Tests on Shallow Cast-in-Place Enlarged Base Pedestal Foundations in Clay”. Proceedings of the IFCEE, pp.

Lutenegger, A.J., Khalili, J. and Orszulak, T., 2015. “Tension Tests on Driven H-Piles in Sand and Clay”. Proceedings of the IFCEE, pp.

Lutenegger, A.J. and Khalili, J., 2015. “Uplift Resistance of Coated Driven Steel Piles”. Proceedings of the IFCEE, pp.

Lutenegger, A.J., 2015. “Load Tests on Grouted Shaft Helical Micropiles in Some U.K. Soils”. Proceedings of the 16th European Conference on Geotechnical Engineering, pp.

Lutenegger, A.J., 2015. “Dilatometer Tests in Sensitive Champlain Sea Clay: Stress History and Shear Strength”. Proceedings of the 3rd International Conference on the Dilatometer.

Lutenegger, A.J. and Tsuha, C., 2015. “Evaluating Installation Disturbance from Helical Piles and Anchors Using Compression and Tension Tests”. Proceedings of the 11th Pan American Conference on Soil Mechanics and Geotechnical Engineering.

Saye, S.R., **Lutenegger, A.J., Brown, D. and Kumm, B., 2015.** “The Influence of Sample Disturbance on Empirical Driven Pile Side Resistance Correlations Based on Laboratory Strength Testing in Cohesive Soils”. submitted to ASCE Journal of Geotechnical and Geoenvironmental Engineering.

Saye, S.R., Kumm, B. and **Lutenegger, A.J., 2015.** “Estimating the OCR in Cohesive Soil with Field Vane Tests Using Normalized Soil Properties: an Updated Approach Including Sensitive Cemented Soils”. submitted to ASCE Journal of Geotechnical and Geoenvironmental Engineering.

Lutenegger, A.J., 2015. “Uplift of Single-Helix Screw-Piles in Sand and Clay for Solar Panel Foundations”. submitted to Canadian Geotechnical Conference.

Lutenegger, A.J. and Ruberti, M., 2015. “Installation Torque Study of Helical Piles in Clay and Sand”. submitted to Canadian Geotechnical Conference.

EDITOR OF SPECIAL PUBLICATIONS:

Lutenegger, A.J., invited editor, 1988, Geotechnology of Loess, Engineering Geology, Vol. 25, No. 2-4, 367 pp.

Lutenegger, A.J. and DeGroot, D.J., editors, 2000. Performance Confirmation of Constructed Geotechnical Facilities, ASCE GSP No. 94, 568 pp.

Benoit, J. and **Lutenegger, A.J.** editors, 2000. National Geotechnical Experimentation Sites, ASCE GSP No. 93, 347 pp.

White, D.H. and **Lutenegger, A.J., editors, 2008.** The Papers of R.L. Handy – A Geotechnical Legacy of Iowa State University, EERC – Iowa State Press, 370 pp.

DISCUSSIONS:

Lutenegger, A.J., 1983. discussion of "The Modified Borehole Shear Device," Geotechnical Testing Journal, ASTM, Vol. 6, p. 161.

Lutenegger, A.J., 1983. discussion of "Engineering Properties and Zoning of Loess and Loess-like Soils in

China" Canadian Geotechnical Journal, Vol. 20, pp.192-193.

Kabir, M.G. and **Lutenegger**, A.J., 1987. discussion of "Piezoprobe Determined Coefficient of Consolidation," Soils and Foundations, Vol. 27, pp. 70-72.

Lutenegger, A.J. and Kabir, M.G., 1988. discussion of "Consolidation After Undrained Piezocone Penetration. II: Interpretation," Journal of Geotechnical Engineering, ASCE, Vol. 113, pp. 128-130.

Kabir, M.G. and **Lutenegger**, A.J., 1988. discussion of "Preconsolidation Pressure from Piezocone Tests in Marine Clays," Geotechnique, Vol. 38, No. 3, pp. 455-459.

Lutenegger, A.J. and DeGroot, D.J., 1992. discussion of "Smear Effects of Vertical Drains on Soft Bangkok Clay," Journal of Geotechnical Engineering, ASCE, Vol.119, No.1, pp.181-184.

DeGroot, D.J., and **Lutenegger**, A.J., 1993. discussion of "Characteristics of Bentonite Slurry as a Sealant", Geotechnical Testing Journal, ASTM, Vol. 16, No. 1, pp. 135-137.

Miller, G.A., and **Lutenegger**, A.J., 1993. discussion of "Interpretation of Field Vane Strength of an Anisotropic Soil", Canadian Geotechnical Journal, Vol. 30, No. 4, pp. 1047-1050.

Lutenegger, A.J. and Adams, M., 1996. discussion of "Bearing Capacity of Shallow Footings on Cohesionless Soils." Journal of Geotechnical Engineering, ASCE, Vol. 122, No. 2, pp. 168-170.

Lutenegger, A.J. and Kelley, S.P., 1997. discussion of "Influence of Hammer Type on SPT Results", Journal of Geotechnical Engineering, ASCE, Vol. 123, No. 9, pp. 890-891.

Boone, S.J. and **Lutenegger**, A.J., 2000. discussion of "Physical, Chemical, and Mineralogical Properties of Mexico City Clays", Canadian Geotechnical Journal, Vol. 37, No. 1, pp. 274-275.

Lutenegger, A.J., 2012. discussion of "Ultimate Uplift Capacity of Multiplate Helical Type Anchors in Clay" by R.S. Merifield. Journal of Geotechnical and Geoenvironmental Engineering, ASCE,

TECHNICAL RESEARCH REPORTS:

Handy, R.L., Lamb, R.O., and Lutenegger, A.J., Grouting Control by Electrical Geophysics: Final Report of Model and Prototype Studies. U.S. D.O.T. Rept. No. DOT-RSPA-DMA-50/83/2, 1981, 105 pp.

Lutenegger, A.J. and Timian, D.A., Variability of Borehole Shear Test Results. Report No. 85-2, Dept. of CEE, Clarkson Univ., 1985.

Lutenegger, A.J., Use of In Situ Tests to Determine Design Parameters for Drilled Shaft Foundations. Report No. 87-4, Dept. of CEE, Clarkson Univ., 1987.

Selig, E.T. and Lutenegger, A.J., Assessing Railroad Track Subgrade Performance Using In Situ Tests. Report No. AAR91-369F, Dept. of Civil Engineering, University of Massachusetts, 1991.

El Shakarwi, A., Lutenegger, A.J., and Selig, E.T., Subgrade Testing at Broken Bow, Nebraska. Report No. MBN91-380R, Dept. of Civil Engineering, University of Massachusetts, 1991.

Lutenegger, A.J., Chang, C.S., and Selig, E.T., Stability of Existing Granite Block Bridge Abutments. Final Report submitted to Massachusetts Department of Public Works, 3 vols., 1991.

Lutenegger, A.J. and DeGroot, D.J., Settlement of Shallow Foundations on Granular Soils. Final Report submitted to Massachusetts Highway Department, 1995.

Ostendorf, D.W., Lutenegger, A.J., DeGroot, D.J., Hunt, E.S., Cheever, P.S., Hinlein, E.S., Suchanna, R., and Jordan, J., Fate and Transport of Petroleum Hydrocarbons at a Leaking Storage Tank Site. Final Report submitted to Massachusetts Highway Department, 1995.

Lutenegger, A.J., DeGroot, D.J., Mirza, C., and Bozozuk, M., Sealing Geotechnical Exploratory Holes to Protect the Subsurface Environment. Final Report submitted to Transportation Research Board, 1995.

Ostendorf, D.W., DeGroot, D.J., Lutenegger, A.J., Gagnon, P.J., Panton, J.G., VanDewalker, H.M., Bonus, M.P., Long, L.J., Howell, C.S., and Glass, R.C., Fate and Transport of Calcium Magnesium Acetate in the Unsaturated Zone of a Roadside Soil. Final Report submitted to Massachusetts Highway Department., 1997.

Ostendorf, D.W., Lutenegger, A.J., Ergas, S.J., Hinlein, E.S., Suchana, R.J., Tehrany, J.P., Reyes, P.O., Glass, R.C., Charkow, B., Meyer, M.M., Kelley, S.P., and Mitchell, T.J., Natural Attenuation of Hydrocarbon and Trichloroethylene Vapors in the Subsurface Environment at Plattsburgh Air Force Base. Final Report submitted to U.S. Air Force.

Lutenegger, A.J., and Thomson, T.A. Jr., Passive Earth Pressures in Integral Bridge Abutments. Final Report submitted to Massachusetts Highway Department, 1998.

INVITED LECTURES/SEMINARS:

“In Situ Testing with Flat-Plate Penetrometers,” Carleton University, Ottawa, Canada, October 1983.

“In Situ Soil Testing,” Syracuse University, Syracuse, New York, April 1985.

“In Situ Testing Techniques,” Cornell University, Ithaca, New York, July 1985.

“Application of In Situ Tests in Loess,” Omaha Section ASCE Annual Geotechnical Conference, Omaha, Nebraska, February 1986.

“In Situ Tests with Flat Dilatometer,” Rensselaer Polytechnic Institute, Troy, New York, February 1987.

“Current Status of the Marchetti Dilatometer,” 1st International Symposium on Penetration Testing, Orlando, Florida, March 1988.

“Field Tests vs. Calibration Chamber Tests: An Alternative Perspective,” 1st International Conference on Calibration Chamber Testing, Potsdam, New York, August 1991.

“Applications and Limitations of In Situ Testing in Structured Soils”, US/Brazil NSF Geotechnical Workshop, Belo Horizonte, Brazil, November 1992.

“Borehole Shear Tests in Stiff Clay Soils”, Building Research Establishment, Garston, England, January 1994.

“Dynamic Penetration Tests”, Discussion Presentation, International Conference on Site Characterization, Atlanta, Georgia, April, 1998.

“The Standard Penetration Test Revisited”, Boston Society of Civil Engineers, Boston, Ma., April, 1998.

“Full Scale Passive Load Tests on an Integral Bridge Abutment”, Boston Society of Civil Engineers, Boston,

Ma., May, 1999.

“Characterization of a Shallow Sand & Gravel Aquifer - Plymouth, Ma.”, Meeting of the Association of Engineering Geologists, Malden, Ma., Jan., 2000.

“Helical Pile Foundations”, Connecticut Section ASCE Annual Foundations Seminar, Meriden, Ct., Oct., 2002.

“Load-Settlement Behavior of Shallow Foundations”, Iowa Section ASCE 27th Annual Geotechnical Conference, Williamsburg, Iowa, March 6, 2003.

“Historical Development of Screw Piles and Screw Anchors”, DFI Helical Pile Conference, Cincinnati, Oh., Aug., 8, 2003.

“Field Exploration for Analysis, Design and Construction of Deep Foundations”, Boston Society of Civil Engineers Deep Foundations Seminar, Waltham, Ma., Nov. 15, 2003.

“A New Look at the Standard Penetration Test”, Nebraska Section ASCE Geotechnical Seminar, Omaha, Ne., Feb. 24, 2004.

“Historical Development of Screw Piles and Screw Anchors”, Helical Foundation Seminar, Chance Anchor Co. Centralia, Mo; June, 10 - 12, 2004.

“Partnership Between ASCE Student Chapters and CEE Departments”, ASCE National Convention, Baltimore, Md., Nov. 16, 2004.

“Standard Penetration Test with Torque”, GeoFrontiers, ASCE Geotechnical Conference, Austin, Texas, Jan. 28, 2005.

“Historical Development of Screw Piles and Screw Anchors”, Helical Foundation Seminar, Helitech, Springfield, Illinois, May, 2005.

“Historical Development of Screw Piles and Screw Anchors”, Helical Foundation Seminar, Chance Anchor Co. Columbia, Mo., October 19-21, 2005.

“Historical Development of Screw Piles and Screw Anchors”, Helical Foundation Seminar, Helitech, Inc, Indianapolis, Indiana, Sept. 28. 2006

“Historical Development of Screw-Pile Foundations”, Bicester and Leighton Buzzard, U.K., May 2007.

“Design of Screw-Pile Foundations and Helical Anchors”, Wootton and Ongar, U.K., May, 2007.

“Lenticular Truss Bridges of the Berlin Iron Bridge Company” 20th Annual Symposium on Industrial Archeology in the New England Area – Society of Industrial Archeology, Worcester, Ma., Feb. 24, 2007.

“Does the Clay Fraction Really Influence the Engineering Behavior of Loess? – Southwestern Iowa Revisited”, Handy Symposium, Iowa State University, Ames, Iowa, May 30, 2008.

“The Standard Penetration Test – Revisited”, National Drillers Association National Meeting, Newark, Ohio, October, 9, 2009.

“Design of Screw-Piles and Helical Anchors”, Chance Civil Construction Helical Foundation Seminar, Redondo Beach, Ca., November 10, 2009.

“Standard Penetration Test with Oversized Equipment”, National Drillers Association National Meeting, St. Louis, Mo. September 30, 2010.

“Historical Development of Screw-Pile Foundations”, Chance Helical Foundations Academy, Foundation Technologies, Inc., Atlanta, Ga., December 9, 2011.

“Field Studies on the Behavior of Screw-Piles and Helical Anchors”, Syracuse University, April 13, 2012.

SHORT COURSES/WORKSHOPS PRESENTED:

“Use of In Situ Tests for Design of Drilled Foundations,” Association of Drilled Shaft Contractors Engineering Faculty Workshop, Ft. Collins, Colorado, July 1987.

“Flat Dilatometer Testing,” University of Wisconsin - Milwaukee, Milwaukee, Ws. June 1988.

“Flat Dilatometer Testing,” University of Wisconsin - Milwaukee, Milwaukee, Ws., June 1989.

“Flat Dilatometer Testing,” University of Wisconsin - Milwaukee, Milwaukee, Ws., June 1990.

“Geoenvironmental Drilling and Sampling for Geotechnical Engineers”, Atlanta, Ga., April, 1998.

“Geoenvironmental Drilling and Sampling for Geotechnical Engineers”, Amherst, Ma., April, 2000.

“Geotechnical Test Drilling Inspection” June 15, 2000, Amherst, Ma.

“Geotechnical Test Drilling Inspection” June 12, 2001, Amherst, Ma.

“In Situ Testing For Geotechnical Engineers”, June, 2001, Wellsley, Ma.

“Laboratory Testing of Soil and Rock”, June, 2002, Worcester, Ma.

Since 2005 Dr. Lutenecker has been an Instructor for the U.S. Federal Highway Administration National Highway Institute (NHI) courses, 132031 “Subsurface Investigations”; 132037 “LRFD Design of Shallow Foundations”. He is the Lead Instructor for NHI Course 132079 “Subsurface Investigation Specialist Qualification” and was a co-developer of the course. He has taught courses for NHI at state highway departments around the U.S. in Anchorage, Ak., Baltimore, Md., Baton Rouge, La., Chicago, Ill., Columbus, Oh., Dover, De., Fairbanks, Ak., Topeka, Ks., Harrisburg, Pa., Helena, Mt., Jefferson City, Mo., Minneapolis, Mn., Montgomery, Al., Orlando, Fl., Pierre, S.D., Phoenix, Az., Reno, Nv., Sacramento, Ca., Seattle, Wa., West Lebanon, N.H., Lansing, Mi. and Worcester, Ma.

He has also taught the NHI “Subsurface Investigation Specialist Qualification” course for the National Drillers Association (NDA) in Baltimore, Md., Cleveland, Oh., Columbus, Oh., Dayton, Oh., St. Louis, Mo., Seven Springs, Pa. and Orlando, Fl.

Dr. Lutenecker has presented technical seminars on the history, design and behavior of helical anchors and screw-pile foundations at a number of professional meetings by invitation in Centralia, Mo., Columbia, Mo., Columbus, Oh., Indianapolis, In., Los Angeles, Ca., St. Louis, Mo., Omaha, Ne., Springfield, Ill. and Leighton-Buzzard, England.