

## Curriculum Vita

SAMUEL P. CLEMENCE

Laura J. and L. Douglas Meredith Professor for Teaching Excellence  
L.C. Smith College of Engineering and Computer Science  
Department of Civil and Environmental Engineering  
Syracuse University  
Syracuse, New York 13244-1190

### EDUCATION:

Ph.D.	Civil Engineering, Georgia Institute of Technology	1973
M.S.	Civil Engineering, Georgia Institute of Technology	1964
B.S.	Civil Engineering, Georgia Institute of Technology	1962

### THESIS TITLES:

The Effect of Mica Content of the Compressibility of Saprolites (M.S.)

The Development of Instrumentation and Model Testing for the Load Distribution in a Drilled Pier (Ph.D.)

### EMPLOYMENT HISTORY:

Hydrologic Field Assistant, US Geological Survey (Cooperative Student)	1957-1962
Research Assistant in Civil Engineering, Georgia Institute of Technology	1963-1964
Officer, US Navy, Civil Engineer Corps; supervised construction in Vietnam, Thailand and Spain	1964-1969
Graduate Assistant (Research and Teaching) Georgia Institute of Technology	1969-1973
Assistant Professor of Civil Engineering, University of Missouri at Rolla, Rolla, Missouri	1973-1977
Associate Professor of Civil Engineering, Syracuse University	1977-1983
Chairman of Civil Engineering Department, Syracuse University	1982-1991
Professor of Civil Engineering, Syracuse University	1983-Present
Senior Associate Dean, College of Engineering and Computer Science, Syracuse University	1991-1996
Laura J. and L. Douglas Meredith Professor for Teaching Excellence	1996-Present

### EXPERIENCE SUMMARY:

Conducted research in the area of high pressure triaxial testing of rocks, instrumentation of buildings and foundations, skin friction resistance of concrete piers and slope stability of strip mine wastes. Served as consultant for site selection projects, design of small earth dams and slope stability analysis for railway embankments. Conducted research on morphological characteristics of the Mississippi River. Served as consultant to McClelland Engineers for a power plant foundation.

Consultant to Dames and Moore for evaluation of slope stability for nuclear power plant site.  
Consultant for: Golder Associates, US Army Corps of Engineers, Parratt-Wolff Inc., Crucible Steel, Navy Civil Engineering Laboratory, Black and Veatch, Mobil Oil Company, O'Brien and Gere, Blasland, Bouck and Lee Engineers, and NOVA Gas Transmission Ltd., Alberta, Canada.. Served as Expert Witness for Civil Suit Trials in Syracuse, Utica, Binghamton, NY and Colorado Springs, CO. Senior Design Consultant for O'Brien and Gere Engineers, Inc., Syracuse, NY.

#### **AFFILIATIONS:**

Fellow, American Society of Civil Engineers  
Member, Transmission Structures Foundation Design Standard Committee  
U.S. Universities Council for Geotechnical Engineering Research  
International Society of Soil Mechanics and Foundation Engineering  
Society of American Military Engineers  
American Society for Engineering Education  
Chi Epsilon  
The Society of Sigma Xi  
Tau Beta Pi

#### **AWARDS:**

Recipient, Robert & Company Associates Graduate Fellowship, 1962-1963.  
Recipient, Shell Oil Grant, 1971-1972.  
Received Outstanding Teaching Award at the University of Missouri at Rolla, Rolla, Missouri, 1974-1975 and 1976-1977.  
Elected to Tau Beta Pi as an Eminent Engineer, 1977.  
Recipient, Outstanding Teacher Award in Civil and Environmental Engineering Department, Syracuse University, 1988-1989.  
Recipient, Outstanding Teacher Award in the L.C. Smith College of Engineering, Syracuse University, 1988-1989.  
Selected 1990 Syracuse University Scholar/Teacher of the Year  
Elected to Kappa Theta Epsilon, Iota Chapter, National Cooperative Education Honor Society, Syracuse University, 1994.  
Selected as a member of the Gateway Fellowship, Syracuse University, 1995  
Selected as Laura J. and L. Douglas Meredith Professor of Teaching Excellence, 1996  
Received Outstanding Educator Award from the St. Lawrence Section of the American Society for Engineering Education, 1998.  
Received Lifetime Achievement Award for furthering the goals of technology education in Central New York, Central New York Technology Club, 2000  
Bronze Award for Industrial Designers Society of America (IDSA) in 2003 IDEA Competition for Synergy Laboratory Design for enhancement of the Carrier Dome, 2003

**BOOKS:**

Samuel P. Clemence, Editor, Uplift Behavior of Anchor Foundations in Soil, American Society of Civil Engineers, New York, NY, October 1985, ISBN 0-87262-496-X, 126 pages.

Samuel P. Clemence, Editor, Use of In-Situ Tests in Geotechnical Engineering, American Society of Civil Engineers, New York, NY, 1986, ISBN 0-87262-541-9, 1284 pages.

Samuel P. Clemence, et al., Editors, Risk-Based Corrective Action and Brownfields Restorations, American Society of Civil Engineers, Geotechnical Special Publications 82, October, 1998.

**BOOK CHAPTER:**

S.P. Clemence, S. Kohlstedt et al., "The Varieties of Collaborative Experience," Chapter in Contesting the Boundaries of Liberal and Professional Education - The Syracuse Experiment, Editor, P.T. Marsh, Syracuse University Press, Syracuse, NY, 1988.

**REFEREED PUBLICATIONS:**

S.P. Clemence and W.F. Brumund, "Large-Scale Model Test of Drilled Pier in Sand," Journal of the Geotechnical Engineering Division, American Society of Civil Engineers, June , 1975, GT6, pp. 537-550.

V.A. Silver, S.P. Clemence and R.W. Stephenson, "Predicting Deformations in the Fort Union Formation," ASCE Geotechnical Specialty Conference, Rock Engineering for Foundations and Slopes, Boulder, Colorado, August 1976, pp. 13-33.

S.P. Clemence and J.M. Pool, "Model Studies of Induced Slope Failures in Strip Mines Waste," Proceedings of the Conference on Geotechnical Practice for Disposal of Solid Waste Materials, ASCE, Ann Arbor, Michigan, June 1977, pp. 680-696.

S.P. Clemence and C.J. Veesaert, "Dynamic Pullout Resistance of Anchors," International Soil Symposium on Soil Structure Interaction, Roorkee, India, January 1977.

S.P. Clemence and J.M. Pool, "Model Studies of Induced Slope Failures for Strip Mine Reclamation," Third International Congress of the International Association of Engineering Geology, Special Session 3, pp. 43-53, September 1978.

S.P. Clemence and J.W. Westphal, "The Response of the Middle Mississippi River to Human Presence: 1821-1974," Third International Congress, International Association of Engineering Geology, Section 1, Volume 2, pp. 201-211, September 1978.

S.P. Clemence and D.J. Barr, "Aerial Imagery for Mapping Morphological Changes and Surficial Soils in the Lower Mississippi River Valley," Bulletin of the Association of Engineering Geologists, Volume XVI, No. 4, 1979.

**REFEREED PUBLICATIONS:** (continued)

A. Ghahramani and S.P. Clemence, "Zero Extension Line Theory of Dynamic Passive Pressures," Journal of the Geotechnical Engineering Division, American Society of Civil Engineers, March 1981, GT3, pp. 631-644.

S.P. Clemence and A.O. Finbarr, "Design Considerations and Evaluation Methods for Collapsible Soil," Journal of the Geotechnical Engineering Division, American Society of Civil Engineers, March 1981, GT3, pp. 305-317.

S.P. Clemence, Chairman, Committee on Shallow Foundations, "Shallow Foundations on Frozen Soil: A Bibliography." Journal of the Geotechnical Engineering Division, American Society of Civil Engineers, February 1982, GT2, 285-291.

S.P. Clemence and A.P. Smithling, "Dynamic Uplift Capacity of Helical Anchors in Sand," Civil Engineering for Practicing and Design Engineers, Vol. 2, No. 3, May/June 1982, pp. 345-367.

S.P. Clemence and F.D. Pepe, Jr., "Measurement of Lateral Stress Around Multihelix Anchors in Sand," Geotechnical Testing Journal, American Society for Testing and Materials, Vol. 7, No. 3, September 1984, pp. 145-152.

E.D. Gilligan and S.P. Clemence, "Fabric and Engineering Behavior of Organic-Saturated Clays," Bulletin of the Association of Engineering Geologists, Vol. XXI, No. 4, November 1984, pp. 515-529.

M.P. Mitsch and S.P. Clemence, "The Uplift Capacity of Helix Anchors in Sand," Uplift Behavior of Anchor Foundations in Soil, Editor, S.P. Clemence, American Society of Civil Engineers, New York, NY, October 1985, pp. 26-47.

J.S. Mooney, S. Adamczak and S.P. Clemence, "Uplift Capacity of Helical Anchors in Clay and Silt," Uplift Behavior of Anchor Foundations in Soil, Editor, S.P. Clemence, American Society of Civil Engineers, New York, NY, October 1985, pp. 48-72.

R.M. Teeter and S.P. Clemence, "In-place Permeability of Slurry Trench Cutoff Walls," Use of In-Situ Tests in Geotechnical Engineering, Editor, S.P. Clemence, American Society of Civil Engineers, New York, NY, 1986, pp. 1049-1061.

A.M. Weikart and S.P. Clemence, "Helix Anchor Foundations - Two Case Histories," Foundations for Transmission Structures, Editor, J.L. Briaud, American Society of Civil Engineers, New York, NY, 1987.

R.M. Hoyt and S.P. Clemence, "Uplift Capacity of Helical Anchors in Soil," Twelfth International Conference on Soil Mechanics and Foundation Engineering, Rio de Janeiro, Brazil, Vol. I, 1989, pp. 243-246.

**REFEREED PUBLICATIONS:** (continued)

W.H. Hightler, W.H. and S.P. Clemence, "Relative Performance of Civil Engineering and Mechanical Engineering Students," Education and Continuing Development for the Civil Engineer, American Society of Civil Engineers, New York, NY, 1990, pp. 456-462

B.A. Smith, S.P. Clemence and D.H. Doh, "Engineering Properties of Crushable/Collapsible Granitic Soil," Thirteenth International Conference on Soil Mechanics and Foundation Engineering, New Delhi, India, January 1994, Vol. I, pp. 251-254.

S.P. Clemence, L.K. Crouch and R.W. Stephenson, "Prediction of Uplift Capacity for Helical Anchors in Sand," Second International Geotechnical Conference, Cairo, Egypt, January, 1994, Vol. I, pp. 332-343.

G. Chinniah, S.P. Clemence and A. Thurairajah, "Slope Stability in Residual Soils: An Overview," International Conference on Landscapes, Slope Stability and the Safety of Infrastructures, Kuala Lumpur, Malaysia, 1994, pp. 105-112.

A.M. Ghaly and S.P. Clemence, "Pullout Performance of Inclined Helical Screw Anchors in Sand," Journal of Geotechnical and Geoenvironmental Engineering, American Society of Civil Engineers, New York, 1998, Vol. 124, No. 7, pp. 617-627.

R.A. Vickers and S.P. Clemence, "Performance of Helical Piles with Grouted Shafts," New Technological and Design Developments in Deep Foundation, Geotechnical Special Publication 100, American Society of Civil Engineers, August 2000, pp. 327-341.

**FOUNDATION GRANTS:**

Mellon Foundation Grant for Integration of Liberal and Professional Education through the University Honors Program, \$300,000.00, 1984-1987, Co-Investigator.

**OTHER PUBLICATIONS:**

S.P. Clemence and W.F. Brumund, "Development of a Column Load Sensor," Proceedings of the 20th Annual International Instrumentation Symposium, Albuquerque, New Mexico, May 1974.

S.P. Clemence and D.J. Barr, "Aerial Imagery for Mapping Morphological Changes in the Mississippi River Valley," Annual Meeting of the Association of Engineering Geologists, October 1976.

V.A. Silver and S.P. Clemence, "Foundation Design Parameters for the Fort Union Group Soils," Preprint No. 2984, ASCE Annual Convention, San Francisco, CA, October 1977.

S.P. Clemence and J.A. Westphal, "On Response of the Mississippi River to Human Presence: 1800-1974," Mississippi Basin Symposium, Geological Society of America, Carbondale, IL, April 1977.

**OTHER PUBLICATIONS:** (continued)

S.P. Clemence and T.L. Michnimer, "Study of the Modulus of Elasticity for a Compacted Soil," Proceedings of the Sixth Panamerican Conference on Soil Mechanics and Foundation Engineering, Vol. II, December 1979, pp. 353-363.

R.A. Decker and S.P. Clemence, "Laboratory Study of Hydraulic Fracturing in Clay," X International Conference on Soil Mechanics and Foundation Engineering, Stockholm, Sweden, June 1981, Vol. 1, pp. 573-575.

R.F. Oleck and S.P. Clemence, "Soil Structure Interaction in Dynamic Analysis of Structures," preprint and presentation, American Society of Civil Engineers, National Convention, Portland, OR, April 1980, Preprint No. 80-037.

R.M. Lowenstein and S.P. Clemence, "Study of Impact Loads on Retaining Walls," Fourth Australia-New Zealand Conference on Geomechanics, Perth, Western Australia, May 1984, Vol. 1, pp. 39-43.

S.K. Bhatia, S.P. Clemence, R.J. Oleck and R. Baker, "Effect of Soil Embedment on Dynamic Performance of Structure Founded in Rock," Fourth Australia-New Zealand Conference on Geomechanics, Perth, Western Australia, May 1984, Vol. 1, pp. 139-143.

G.W. Lee, S.P. Clemence, S.K. Bhatia and S. Anagnost, "Subsidence Effects due to Gypsum Solution in Syracuse," International Conference on Case Histories in Geotechnical Engineering, St. Louis, MO, May 1984.

G.W. Lee, S.P. Clemence, S.K. Bhatia and G. Swenson, "Post Construction Ground Water Hydraulics at Loeffel Site in Southern Rensselaer County, NY," International Conference on Case Histories in Geotechnical Engineering, St. Louis, MO, May 1984.

S.P. Clemence, "History of Anchor Foundations," Seminar on Foundations in Tension, American Society of Civil Engineers, University of Missouri, Kansas City, MO, October 1986.

D.E. Bobbit and S.P. Clemence, "Helical Anchors: Application and Design Criteria," Proceedings of the Ninth Southeast Asian Geotechnical Conference, December 1987, Bangkok, Thailand, Vol. II, pp. 6-105-6-121.

S.J. Nix, S.P. Clemence and W. Meyer, "An Academic Program for Experience-Based Seismic Evaluation", American Nuclear Society Transactions, November 1990, pp. 404-408.

A.W. Al-Khafaji, S.P. Clemence, V.P. Drnevich, et al., "The Scholarship Landscape in Civil Engineering: A Bridge Between Rhetoric and Reality," Report of American Society of Civil Engineers Task Force on Redefining Scholarly Work, Reston, VA, April, 1998.

G.L. Seider, R. Thorston and S.P. Clemence, "Helical Piles with Grouted Shafts – Practical Overview", Deep Foundations Institute, Proceedings, Annual Conference, October 2003, pg. 219-232.

**EXTENSION DIVISION PUBLICATIONS:**

Contributor and Lecturer in the Following Short Courses:

Fundamentals of Shallow Foundations  
Geotechnical Technology  
Quality Geotechnical Laboratory Testing  
Embankment Dams -- Soils Aspects  
Retaining Walls  
Deep Foundations  
Instrumentation of Soil and Rock

**RESEARCH CONTRACTS:**

US Corps of Engineers, "Lower Mississippi Valley Division Potamology Study T-1," \$398,570. Investigator. Status: Completed, Project received certificate of appreciation for patriotic civilian service.

US Corps of Engineers, "Modification of LMVD Potamology Study," \$32,995. Co-director. Status: Completed.

US Corps of Engineers, "St. Louis District Potamology Study, S-9," \$21,969. Investigator. Status: Completed.

Office of Water Research and Technology, "The Evaluation of a Synthetic Material for Use as a Wave Protection Agency on Irrigation Dams," \$40,514. Principal Investigator. Status: Transferred to another investigator due to acceptance of position at Syracuse University, and completed.

National Science Foundation, "Improvement of Remote Sensing Technology Research Applied to Land Resource Analysis," \$188,628. Co-director. Status: Transferred to another investigator due to acceptance of position at Syracuse University and completed.

Niagara Mohawk Power Corporation, "The Uplift and Bearing Capacity of Helix Anchors in Soil," \$197,728. Principal Investigator, Status: Completed.

Niagara Mohawk Power Corporation, "The Effect of Soil Embedment on the Seismic Analysis of Structures Founded on Rock," \$130,315. Status: Completed.

New York State Electric and Gas Corporation, "Field and Laboratory Investigation of the Permeability of Slurry Walls," \$116,494. Status: Completed.

Korean Science Foundation and US National Science Foundation, "Evaluation of Collapse Mechanism of Metastable Soils from South Korea," support for Visiting Professor, Dr. D.H. Doh, Kon Kuk University, Seoul, South Korea. Status: Completed.

**RESEARCH CONTRACTS:** (continued)

National Institute of Environmental Health Sciences, "Transport and Fate of Organic Contaminants through Soil/Rock Systems," \$98,000. Status: Completed.

New York State, "Transport and Fate of Organic Contaminants through Soil/Rock Systems", \$300,000. Jointly with Dr. L.T. Tavlarides, Status: Completed.

Niagara Mohawk Power Corporation, "Assessment of an Expert System Approach to the Seismic Evaluation of Nuclear Plant Equipment," \$95,505. Status: Completed.

Syracuse University Assessment Program, "Assessment of Math Placement Program on Calculus Course Performance for ECS Students," \$5,000. Status: Completed.

National Science Foundation, "Syracuse University's Engineering Education Scholars Workshop, 2000-2002," \$322,000. Status: Completed.

National Science Foundation, "GK-12: The Syracuse University/Onondaga County Schools Partnership for Improvement of Science Education," co-PI with Marvin Druger, Tiffany Koszalka and Peter Plumley, \$1,486,422. Status: Active.

**TECHNICAL REPORTS:**

Lower Mississippi Valley Division Potamology Study (T-1) for the US Army Corps of Engineers, June 1976.

St. Louis District Potamology Study (S-7) for the US Army Corps of Engineers, December 1975.

St. Louis District Potamology Study (S-9) for the US Army Corps of Engineers, January 1978.

"Direct Embedment Anchors on Sloping Seafloors - State of the Art," F.H. Kulhawy, D.A. Sangrey and S.P. Clemence, US Naval Civil Engineering Laboratory, Report P.O. No. M-R510, 1978.

"The Uplift and Bearing Capacity of Helix Anchors in Soil, Vol. I: Field and Laboratory Test Results," Niagara Mohawk Research Contract TT 112-1, September 1982.

"The Uplift and Bearing Capacity of Helix Anchors in Soil, Vol. II: Field Test Data," Niagara Mohawk Research Contract, TT 112-1, September 1982.

"The Effect of Soil Embedment on the Seismic Analysis of Structures Founded on Rock," Niagara Mohawk Research Contract, GN 411-A, June 1982.

"In-Place Permeability Measurement of Slurry Trench Cutoff Walls," New York State Electric and Gas Corporation Research Contract, September 1985.

"Investigation of Slurry Trench Cutoff Walls - Plattsburgh, NY," New York State Electric and Gas Corporation, Research Contract, December 1985.

**TECHNICAL REPORTS:** (continued)

"An Expert System Approach to the Seismic Evaluation of Nuclear Power Plant Equipment,"  
Niagara Mohawk Power Corporation Research Contract, December, 1989.

"Future Trends in Engineering for New York State Public Training Service Program", Public Service  
Training Program, Albany, New York, 1989.

"Predicting Installation Torque for Helical Anchors Using Measured Soil Properties", A.B. Chance  
Company and State of Missouri, February, 1991.

"Transport and Fate of Organic Contaminants Through Soil/Rock Systems", with Eileen Gilligan,  
Report 353 8205, New York State Education Department, 1992.

"Report on Helical Anchor Evaluation - Field Testing Program for NOVA Gas Transmission Ltd,"  
NOVA Gas Transmission Ltd., Calgary, Alberta, Canada, 1994.

**THESES SUPERVISED:**

"Dynamic Testing of Anchors Buried in Dry Sand," J. Hillhouse (M.S.), 1975.

"Dynamic Pullout Resistance of Anchors," C.J. Veesaert (M.S.), 1977.

"Feasibility of Strip Mine Reclamation by Inducing Slope Stability Failure,"  
J. Pool (M.S.), 1977.

"A Study of the Modulus of Elasticity for a Remolded Clay," T. Michhimer (M.S.), 1977.

"Frost Heave Resistance of Silt using Waste Lime," P. France (M.S.), 1978.

"Laboratory Study of Hydraulic Fracturing of Soils," R.A. Decker (M.S.), 1979.

"Frost Heave Studies on Stabilized Soils," L.A. Feldman (M.S.), 1979.

"Model Study of Impact Loads on Retaining Wall," R.M. Lowenstein (M.S.), 1980.

"Model Study of the Uplift Capacity of Helical Anchors in Marine Clay," S. Adamczak (M.S.), 1980.

"The Uplift Capacity of Helical Anchors in a Lacustrine Silt," J.S. Mooney, (M.S.), 1981.

"Uplift Capacity of Multi-Helix Anchors in Sand," M.P. Mitsch (M.S.), 1981.

"Dynamic Uplift Capacity of Model Helical Anchors in Sand," A. Smithling (M.S.), 1982.

**THESES SUPERVISED: (Continued)**

"The Development of Nonlinear Soil Element using a Modified Endochronic Model," R.F. Oleck, Jr. (Ph.D.), 1982.

"Study of Lateral Stress Induced by Anchor Installation in Cohesionless Soils," F. Pepe, Jr. (M.S.), 1983.

"Stabilization of a Lacustrine Silt using Solvay Process Wastes," R.W. Clement (M.S.), 1983.

"The Effect of Organic Pore Fluids on the Fabric and Geotechnical Behavior of Clays," E. Gilligan (Ph.D.), 1983.

"Laboratory Testing of an In-Situ Permeability Probe in Marine Clay," M. Lapin (M.S.), 1985.

"The Effect of Cyclic Consolidation on Weathered Granitic Soil from South Korea," J. F. Baltz, (M.S.), 1988.

"Three Dimensional Finite-Difference Groundwater Flow Model of an Industrial Contamination Site-Massena, NY," Eric Reggensberger (M.S., Hydrogeology), 1989.

"Installation Torque Prediction and Distribution for Multi-Helix Anchors in Dry Sand," P.J. Sullivan (M.S.), 1990.

"The Use of Fly Ash in Self-Hardening Slurry Trench Cutoff Walls", R.M. Teeter, (Ph.D.) 1990.

"The Minerology and Engineering Properties of a Crushable/Collapsible South Korean Weathered Granitic Soil", B.A. Smith, M.S. (1991).

"Effect of Hydraulic Gradient and Organic Contaminants on Hydraulic Conductivity of Clay-Rich Soils", D. Farber, M.S. (1991).

**SCHOLARLY PAPERS AND ADDRESSES:**

"The Morphology of the Mississippi River," presented to the Society of Sigma Xi, University of Missouri at Rolla, February 1976, invited address.

"Mark Twain and the Mississippi River," presented to the Art and History in Missouri Lecture Series, University of Missouri at Rolla, October 1976, invited address.

"Strip Mine Reclamation by Induced Slope Failures," presented to the Civil Engineering Department of the Clarkson College of Technology, Potsdam, NY, October 1977, invited address.

**SCHOLARLY PAPERS AND ADDRESSES:** (continued)

"Dynamic Uplift Capacity of Soil Anchors," presented to the Civil Engineering Department of Cornell University, Ithaca, NY, October 1977, invited address.

"Design and Evaluation of Metastable Soils," presented to the Shallow Foundations Committee of the ASCE, Annual Convention in Chicago, IL, October 1978, invited address.

"Uplift Capacity of Helix Anchors in Soil," Symposium on Geotechnical and Transportation Engineering Continuing Education Center, University of Texas at El Paso, TX, October 15, 1981, invited address.

"Ancient and Modern Engineering in Peru," presented to the Syracuse Section of the American Society of Civil Engineers, Syracuse, NY, October 1, 1980, invited address.

"Collapsible Soils," Seminar Series at Cornell University, Ithaca, NY, February 17, 1982, invited address.

"Collapsible Soils - Engineering and Design," College of Engineering, University of Houston, TX, October 1983, invited address.

"Helical Anchor, Design and Performance," Annual Meeting, Committee on Shallow Foundations, American Society of Civil Engineers, San Francisco, CA, October 1984.

"Ethics and Professional Engineering," Panel Discussion, National Society of Professional Engineers Meeting, January 1985, Syracuse, NY, invited presentation.

"Uplift and Bearing Capacity of Helix Anchors," Cornell University, February 1986, invited seminar.

Invited speaker for lecture series in Peoples Republic of China, August 1986, lecture topics: "Uplift and Bearing Capacity of Helix Anchors in Soil, Recent Advances In-Situ Testing in Geotechnical Engineering and Disposal of Hazardous Wastes." Lectures given at Northern Jiaotong University, Beijing, Tangzi Petrochemical Corporation, Nanjing and Zhejiang University, Hangzhou.

Co-director and lecturer in two seminars "Foundations in Tension and Tie Back Application," Northeastern University, Boston, MA, June 8-10, 1987 and Georgia Institute of Technology, October 29-31, 1987.

"Design of Helical Anchors," presented to the Civil Engineering Department at Concordia University, Montreal, Quebec, December, 1988, invited address.

"Design and Performance of Helical Anchors," short course on Anchors and Tieback Performance and Design, Deep Foundations Institute, Baltimore, MD, October, 1989.

**SCHOLARLY PAPERS AND ADDRESSES:** (continued)

"Technology, Past and Present", Frontiers of Science Program, University College, Syracuse, N.Y., October, 1991.

"Helical Anchors: Design, Construction and Performance", Short Course, Specialist Construction Techniques for Slope and Excavation Stability, University of Wisconsin, Milwaukee, March, 1991.

"Low Gradient Laboratory Hydraulic Gradient Testing of a Low-Plasticity Clay", ASTM Symposium on Hydraulic Conductivity, San Antonio, TX, January, 1993.

"Use of Demolished Concrete, Excavated Pavement and Steel Slag as Alternative Aggregates", with D. Negussey and F. Ballard, TRB Annual Meeting, January, 1993.

"Professional Practice Issues in Senior Design Courses", ASCE National Meeting, San Diego, CA, October, 1995.

"The Engineering History of the Erie Canal", Erie Canal Museum, sponsored by the Technology Club of Syracuse, Syracuse Section, ASCE, December, 1995.

"Issues in Professional Practice and their Implementation in Engineering Curricula", Proceedings of the ASEE Annual Meeting, Milwaukee, WI, June, 1997.

"Technical Literacy - Its Importance to Society in the Next Century: An Engineering Approach to Educating Students", ASEE St. Lawrence Section Meeting, Montreal, Quebec, May, 1999.

**UNIVERSITY SERVICE:**

Syracuse University:

Director of Geotechnical Engineering Laboratory (1977-1984)

Department Equipment Committee

Department Tenure Committee

Chairman, College Research Committee (1979)

College Promotions Committee (1980)

Faculty Advisor, Student Chapter ASCE (1977-1982)

Senate Research Committee (1980-1982)

Representative Board of Graduate Studies (1983-1985)

Member, Committee on Student Affairs (1983-1985)

Member, Chancellors Panel on the Future of the University (1984-1986)

Member, Hendricks Chapel Advisory Board (1984-1986)

Chairman, Hendricks Chapel Advisory Board (1985-1986)

Academic Coordinating Council (1995-1996)

College Awards Committee (1995-1996)

Vice Chancellor for Academic Affairs Search Committee (1998-1999)

Dean of Architecture Search Committee (2003-2004)

**Courses Taught:**

Soil Mechanics and Foundation Engineering  
Georgia Institute of Technology

Soil Mechanics and Foundation Engineering I, II  
University of Missouri at Rolla  
Syracuse University

Advanced Soil Mechanics I, II  
University of Missouri at Rolla  
Syracuse University

Engineering Properties of Earth and Rock Materials  
Syracuse University

Soil Stabilization  
University of Missouri at Rolla  
Syracuse University

Advanced Testing of Soils  
Syracuse University

Earth Dam Design  
Syracuse University

Civil Engineering Design  
Syracuse University

Technology: Past and Present - Honors Course - Mellon Foundation  
Syracuse University

Introduction to Engineering and Computer Science for Undecided Students  
Syracuse University

Leonardo da Vinci: Artist and Engineer—Course jointly taught with Fine Arts faculty member  
Syracuse University

Synergy Laboratory –Interdisciplinary course taught with faculty from VPA Design, Architecture  
and Engineering  
Syracuse University

Mechanics of Materials – Sophomore Engineering Course  
Syracuse University

Honors Seminar

Thesis/Project Planning Seminar

**TECHNICAL REVIEWER:**

McGraw-Hill Publishing Company

PWS Publishing Company

Addison-Wesley Publishing Company

Journal of Geotechnical Engineering

International Journal of Practicing and Design Engineers

National Science Foundation, Engineering Division

**TECHNICAL ACTIVITIES:**

Session Chairman, Shallow Foundation Committee Technical Session on Foundations in Cold Regions, ASCE National Meeting, St. Louis, MO, October 1981.

Session Chairman, Advanced Technology Committee Technical Session, ASCE National Meeting, New York, NY, May 1981.

Moderator and Session Chairman, "Geologic Faults and their Effect on Shallow Foundations," ASCE National Meeting, Houston, TX, October 1983.

Chairman, Onondaga Citizens League Study Group, "Onondaga County Infrastructure: Status, Funding and Responsibilities," January-June 1985.

Moderator and Session Chairman, "Uplift Behavior of Anchor Foundations in Soil," ASCE National Meeting, Detroit, MI, October 1985.

Moderator and Session Chairman, "In-Situ 86," ASCE Specialty Conference, Virginia Polytechnic Institute, Blacksburg, VA, June 1986.

Program Evaluator, Accreditation Board for Engineering and Technology, (ABET).

Panelist for Teleconference, "Engineering Issues and Trends in Engineering and Technology," sponsored by the Public Service Training Program, Albany, NY, November, 1989.

Member, ASCE Committee on Curriculum and Accreditation.

President, Syracuse Section of Sigma Xi, 1993-1994.

Moderator and Session Chair, "Desired Competencies of Civil Engineering Graduates", ASEE Annual Meeting, Milwaukee, WI, June, 1997.

Board of Directors, Institute for Professional Practice, 1996-present.

**TECHNICAL ACTIVITIES:** (continued)

Board of Directors, Civil Engineering Division, ASEE, 1997-present.

Moderator and Session Chair, "Brownfield Restoration and Design", ASCE National Conference, Boston, MA, October 1998.

Commission Member, Engineering Accreditation Commission, ABET, 1999-2003

Chair, Committee on Helical Foundations and Tiebacks, Deep Foundations Institute, 2001-2004

**Outside Activities:**

Member, Syracuse Chargers

Vice President, 1982-1983, Syracuse Masters Swimming Club

Completed ten marathons in St. Louis, MO, Columbia, MO, Montreal, Quebec, Canada, Burlington, VT and New York City.

Completed twenty triathlons over the last four years.

Empire State Games Masters Swimming participant - Silver and Bronze medal winner in Freestyle and Breaststroke events, 1982 and 1983.