

General Biographical Information

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BIRTHDATE: December 1, 1938
CITIZENSHIP: United States of America
SPOUSE: Cricket Morgan
DAUGHTER: Jillian Patricia Holtz

Academic Background

Doctor of Philosophy (Soil Mechanics)	Northwestern University	June, 1970
Special Program in Soil Mechanics	Harvard University	January-June, 1966
Master of Science in Civil Engineering	University of Minnesota	June, 1962
Bachelor of Science (Civil Engineering)	University of Minnesota	March, 1960

Languages

English (speaking, reading)
Swedish (speaking, reading)
French (reading)
Italian (reading)
Norwegian (reading)
Spanish (some reading)

Professional History

Academic Experience

Professor, Department of Civil and Environmental Engineering, University of Washington, Seattle, 1988-present. Geotechnical Program Leader, 2002-03

J. S. Braun/Braun Intertec Visiting Professor, Department of Civil Engineering, University of Minnesota, Minneapolis, 2002

Director, Structural and Geotechnical Engineering and Mechanics Program, Department of Civil Engineering, University of Washington, Seattle, 1990-94.

Professor of Geotechnical Engineering, School of Civil Engineering, Purdue University, West Lafayette, Indiana, 1985-88.

Visiting Professor, École Nationale des Ponts et Chaussées, Paris, France, Summer 1984 (half time).

Associate Professor of Geotechnical Engineering, School of Civil Engineering, Purdue University, West

Lafayette, Indiana, 1977-85.

Assistant Professor of Geotechnical Engineering, School of Civil Engineering, Purdue University, West Lafayette, Indiana, 1973-77.

Teaching Assistant and Graduate Research Engineer, Department of Civil Engineering, Northwestern University, Evanston, Illinois, 1967-68 (half time).

Assistant Professor of Civil Engineering, California State University, Sacramento, 1964 to January 1966.

Teaching Assistant, Department of Civil Engineering, University of Minnesota, Minneapolis, academic years 1960-61 and 1961-62 (half time).

Professional Experience

Research and Consulting Geotechnical Engineer, Studio Geotecnico Italiano, Milan, Italy; September 1984 to August 1985; Summer 1986.

Consulting Geotechnical Engineer, Terrasol, Puteaux, France; Summer 1984 (half time).

Visiting Scientist, National Research Council of Canada, Division of Building Research, Ottawa, Ontario; Summer 1976.

Research Engineer, Royal Institute of Technology (KTH), Stockholm, Sweden; Summer 1975.

Research Engineer, Swedish Geotechnical Institute, Stockholm, Sweden, October 1970-August 1973; Summer 1974.

Civil Engineer, Soil Testing Services, Inc., Northbrook, Illinois; June 1970-October 1970.

Assistant Civil Engineer, State of California, Department of Water Resources, Bryte Soils Laboratory, Sacramento, February 1963-September 1964; Summer 1965.

Assistant Civil Engineer, State of California, Department of Water Resources, Oroville Dam, July 1962-February 1963.

Civil Engineer, Bureau of Engineers, City of Milwaukee, Wisconsin; Summer 1961.

Civil Engineer, Department of Highways, State of Minnesota; Summer 1960.

Refereed Journal Publications

Papers

Holtz, R. D. and Krizek, R. J. (1970) "Properties of Slightly Organic Topsoils", *Journal of the Construction Division*, ASCE, Vol. 96, No. Col, pp. 29-43.

Krizek, R. J., Holtz, R. D. and Sheeran, D. E. (1970) "Evaluation of Methods of Inspection and Quality Control of Compacted Earth Embankments", *The Construction Specifier*, Parts I and II, June, pp. 47-53, and July, pp. 23-28.

Holtz, R. D. and Boman, P. (1974) "A New Technique for Reduction of Excess Pore Pressures During Pile Driving", *Canadian Geotechnical Journal*, Vol. 11, No. 3, pp. 423-430.

- Holtz, R. D. (1975) "Caissons in Chicago—A State of the Art Review of Large Diameter Bored Piles", *Ground Engineering*, Vol. 8, No. 1, pp. 19-23.
- Holtz, R. D. and Wager, O. (1975) "Preloading by Vacuum—Current Prospects", *Transportation Research Record 548*, pp. 26-29.
- Holtz, R. D. (1975) "Civil Engineers and Unions in Sweden", *Civil Engineering*, ASCE, Vol. 45, No. 11, Nov., pp. 53-55. (Voted the top interest article of this issue by a poll of the readers.)
- Law, K. T. and Holtz, R. D. (1978) "A Note on Skempton's A Parameter with Rotation of Principal Stresses", *Géotechnique*, Vol. XXVIII, No. 1, pp. 57-64.
- Leonards, G. A., Cutter, W. A. and Holtz, R. D. (1980) "Dynamic Compaction of Granular Soil", *Journal of the Geotechnical Engineering Division*, ASCE, Vol. 106, No. GT1, pp. 35-44. (Also published as an abridgement in *Transportation Research Record 749*, pp. 10-13).
- Holtz, R. D. (1980) "SI Units in Geotechnical Engineering", *Geotechnical Testing Journal*, ASTM, Vol. 3, No. 2, pp. 75-88.
- DeGroff, W. L., Holtz, R. D., Johnson, A. I. and Silver, M. L. (1983) "SI Units for Geotechnical Engineering", Report of the Committee on Definitions and Standards of the Geotechnical Engineering Division, *Journal of Geotechnical Engineering*, ASCE, Vol. 109, No. 12, pp. 1534-1538.
- Juang, C. H. and Holtz, R. D. (1986) "A Probabilistic Permeability Model and the Pore-sized Density Function", *International Journal for Numerical and Analytical Methods in Geomechanics*, Vol. 10, pp. 543-553.
- Schneider, H. R. and Holtz, R. D. (1986) "Design of Slopes Reinforced with Geotextiles and Geogrids", *Geotextiles and Geomembranes*, Vol. 3, No. 1, pp. 29-51.
- Holtz, R. D., Jamiolkowski, M. B. and Lancellotta, R. (1986) "Lessons from Oedometer Tests on High-Quality Samples", *Journal of Geotechnical Engineering*, ASCE Vol. 112, No. 8, pp. 768-776.
- Juang, C. H. and Holtz, R. D. (1986) "A Note on Preparation of Specimens of Non-Cohesive Material for Mercury Intrusion Porosimetry", *Geotechnical Testing Journal*, ASTM, Vol. 9, No. 3, pp. 154-155.
- Juang, C. H. and Holtz, R. D. (1986) "Fabric, Pore Distribution, and Permeability of Sandy Soils", *Journal of Geotechnical Engineering*, ASCE, Vol. 112, No. 9, pp. 855-868. (On the GED Awards Committee list of 10 best geotechnical papers, 7/86-6/87.)
- Holtz, R. D. (1986) "References and Suggestions for Additional Reading on Wick Drains", Shared Experience in Geotechnical Engineering, *Transportation Research Circular*, No. 309, pp. 14-15.
- Huang, A. B., Chameau, J. L. and Holtz, R. D. (1986) "Interpretation of Pressuremeter Data in Cohesive Soils by Simplex Algorithm", *Géotechnique*, Vol. XXXVI, No. 4, pp. 599-603. Discussion and Closure, Vol. XXXVII, No. 4, pp. 537-538.
- Nearing, M. A., Bradford, J. M. and Holtz, R. D. (1986) "Measurement of Waterdrop Impact Forces: Force vs. Time Relationships", *Journal of the Soil Science Society of America*, Vol. 50, No. 6, pp. 1532-1536.
- Humphrey, D. N. and Holtz, R. D. (1986) "Reinforced Embankments—A Review of Case Histories", *Geotextiles and Geomembranes*, Vol. 4, No. 2, pp. 129-144.

- Bonaparte, R., Holtz, R. D. and Giroud, J. P. (1987) "Soil Reinforcement Design Using Geotextiles and Geogrids", in *Geotextile Testing and the Design Engineer*, ASTM, Special Technical Publication 952, J. E. Fluet, editor, American Society for Testing and Materials, pp. 69-116.
- Holtz, R. D. and Sivakugan, N. (1987) "Design Charts for Roads with Geotextiles", *Geotextiles and Geomembranes*, Vol. 5, No. 3, pp. 191-199.
- Nearing, M. A., Bradford, J. M. and Holtz, R. D. (1987) "Measurement of Waterdrop Impact Pressures on Soil Surfaces", *Journal of the Soil Science Society of America*, Vol. 51, No. 5, pp. 1302-1306.
- Holtz, R. D., (1987) "Preloading with Prefabricated Vertical Strip Drains", *Geotextiles and Geomembranes*, Vol. 6, Nos. 1-3, pp. 109-131. (Also published in *Proceedings of the First Geosynthetic Research Institute Seminar on Very Soft Soil Stabilization Using High Strength Geosynthetics*, Drexel University, Philadelphia, Pennsylvania, pp. 104-129.)
- Huang, A. B., Holtz, R. D. and Chameau, J. L. (1988) "A Calibration Chamber for Cohesive Soils", *Geotechnical Testing Journal*, ASTM, Vol. 11, No. 1, pp. 30-35.
- Mayne, P. W. and Holtz, R. D. (1988) "Profiling Stress History from Piezocone Soundings", *Soils and Foundations*, Vol. 28, No. 1, pp. 16-28.
- Sivakugan, N., Holtz, R. D. and Chameau, J. L. (1988) "CK₀ UC Shear Strength of Normally Consolidated Clays from CIUC Tests", *Journal of Geotechnical Engineering*, ASCE, Vol. 114, No. 3, pp. 284-295.
- Sivakugan, N., Chameau, J. L. Holtz, R. D. and Altschaeffl, A. G. (1988) "Servo-Controlled Cuboidal Shear Device", *Geotechnical Testing Journal*, ASTM, Vol. 11, No. 2, pp. 119-124.
- Bourdeau, P. L., Holtz, R. D. and Chapuis, J. (1988) "A Note on the Effect of Anchorage and Modulus in Geotextile Reinforced Unpaved Roads", *Geotextiles and Geomembranes*, Vol. 7, No. 3, pp. 221-230.
- Albert, L., Holtz, R. D., and Magris, E. (1989) "Superpile System: A Feasible Alternate Foundation for Tension Leg Platform in Deep Water", *Marine Geotechnology*, Vol. 8, No. 2, pp. 133-158.
- Holtz, R. D. (1989) "Treatment of Problem Foundations for Highway Embankments", *Synthesis of Highway Practice 147*, National Cooperative Highway Research Program, Transportation Research Board, 72 pp.
- Prapaharan, S., Holtz, R. D. and Luna, J. D. (1989) "Pore Size Distribution of Nonwoven Geotextiles", *Geotechnical Testing Journal*, ASTM, Vol. 12, No. 4, pp. 261-268.
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- Sivakugan, N., Chameau, J. L., and Holtz, R. D. (1993) "Anisotropy Studies on Cuboidal Shear Device", *Journal of Geotechnical Engineering*, ASCE, vol. 119, No. 6, pp. 973-983. Closure, Vol. 120, No. 10, p. 1916.
- Holtz, R. D., Viberg, L., and Hartlén, J. (1994) "Oleg Wager, 1915-92", Obituary, *Géotechnique*, Vol. XLIV, No. 2, pp. 375-378.
- Stauffer, S. D. and Holtz, R. D. (1995), "Stress-Strain and Strength Behavior of Staple Fiber and Continuous Filament Reinforced Sands", *Transportation Research Record 1474*, pp. 82-95.
- Mayne, P. W., Holtz, R. D., and Tumay, M. T. (1995) "U.S. State-of-Practice in Sampling and Strength Testing of Overconsolidated Clays", *Transportation Research Record 1479*, pp. 1-6.
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- Fischer, G. R., Holtz, R. D., and Christopher, B. R., (1996) "Evaluating of Geotextile Pore Structure", *Recent Developments in Geotextile Filters and Prefabricated Drainage Geocomposites*, ASTM STP 1281, S. K. Bhatia and L. D. Suits, editors, American Society for Testing and Materials, pp. 3-18.
- Boyle, S. R., Holtz, R. D., and Gallagher, M. (1996) "Influence of Strain Rate, Specimen Length, and Confinement on Measured Geotextile Strength Properties", *Geosynthetics International*, Vol. 3, No. 2, pp. 205-225.
- Yoo, N. J., Holtz, R. D., and Kang, I. J. (1988) "Behavior of Footings on Sand Layers Overlying Soft Clay" (in Korean), *Journal of the Korean Society of Civil Engineers*, Vol. 18, No. III-4, pp. 567-582.
- Tsai, W.-S. and Holtz, R. D. (1998) "Evaluation of Geotextiles as Separators in Roadways" (in Chinese) *Sino-Geotechnics*, No. 71, pp. 47-56.
- Fischer, G. R., Maré, A. D., and Holtz, R. D. (1999) "Influence of Procedural Variables on the Gradient Ratio Test", *Geotechnical Testing Journal*, ASTM, Vol. 22, No. 1, pp. 22-31.
- Black, P. J. and Holtz, R. D. (1999) "Performance of Geotextile Separators Five Years after Installation", *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 125, No. 5, pp. 404-412.
- Henry, K. S. and Holtz, R. D. (2001) "Geocomposite Capillary Barriers Reduce Frost Heave in Soils", *Canadian Geotechnical Journal*, Vol. 38, No. 4, pp. 678-694.
- Finley, C. A. and Holtz, R. D. (2001) "Investigation and Modeling of Two Composite Landfill Covers", *Geosynthetics International*, Vol. 8, No. 2, pp. 97-112.
- Holtz, R. D. (2001) "Introduction of Evert Hoek, Thirty-Sixth Karl Terzaghi Lecturer, 2000, Seattle, Washington", *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 127, No. 9, p. 725.

- Bergado, D. T., Balasubramaniam, A. S., Fannin, R. J., and Holtz, R. D. (2002) "Prefabricated Vertical Drains (PVDs) in Soft Bangkok Clay: A Case of the New Bangkok International Airport Project", *Canadian Geotechnical Journal*, Vol. 39, No. 2, pp. 304-315 (received Honorable Mention for the R.M.Quigley Award for Best Paper in the Canadian Geotechnical Journal, 2002).
- Allen, T. M., Bathurst, R. J., Holtz, R. D., Walters, D., and Lee, W. F. (2003) "A New Working Stress Method for Prediction of Reinforcement Loads in Geosynthetic Walls", *Canadian Geotechnical Journal*, Vol. 40, No. 5, pp. 976-994 (received Honorable Mention for the 2003 Sir Casimir Gzowski Medal. The medal is awarded annually for the best technical paper on a civil engineering subject in the areas of surveying, structural engineering and heavy construction. This is the highest medal of the Canadian Society of Civil Engineering for a Technical Paper, and there is one winner and one honorable mention given annually.)
- Fang, Y.-S., Chen, T.-J., Holtz, R. D., and Lee, W.-F. (2004) "Reduction of Boundary Friction in Model Tests", *Geotechnical Testing Journal*, ASTM, Vol 27, No. 1, pp 1-10.
- Allen, T. M., Bathurst, R. J., Holtz, R. D., Lee, W. F., and Walters, D. (2004) "A New Working Stress Method for Prediction of Reinforcement Loads in Steel Reinforced MSE Walls", *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 130, No. 11, pp 1109-1120.
- Harney, M. D., Bailey, T. D., and Holtz, R. D. (2006) "Clogging Potential of Geotextile Filters Using the Flexible Wall Gradient Ratio Test", *Geotechnical Testing Journal*, ASTM (in press).
- Haxton, W. C., Holtz, R. D., Long, P, and Wilkerson, J. F. (2006) "Arguments for a 'U.S. Kamioka': SNOlab and its Implications for North American Underground Science Planning," Los Alamos National Laboratories Archives, Nucl-ex/0604004 (URL:http://lanl.arxiv.org/find/grp_q-bio,grp_cs,grp_physics,grp_math,grp_nlin/1/all:+Haxton/0/1/0/all/0/1), 23 pp
- Ahmet H. Aydilek, A. H., D'Hondt, D., and Holtz, R. D. (2006) "Comparative Evaluation of Geotextile Pore Sizes Using Bubble Point Test and Image Analysis," *Geotechnical Testing Journal*, ASTM, (in press).
- Ghiassian, H. and Holtz, R. D. (2006) "Geosynthetic Cellular Systems (GCS) for Coastal Protection," *Coastal Engineering Journal* (submitted)

Discussions and Reviews

- Holtz, R. D. (1972) Discussion of "Use of Servo Mechanisms for Volume Change Measurements and K_0 Consolidation", by P. I. Lewin, *Géotechnique*, Vol. 22, No. 2, pp. 371-373.
- Holtz, R. D. (1975) Discussion of "The Making of a Pro—A Faculty Viewpoint", by Dan H. Pletta, *Engineering Issues*, ASCE, Vol. 101, No. EI2, pp. 299-300.
- Holtz, R. D. (1976) Discussion of "Anisotropy in Heavily Overconsolidated Kaolin", by S. F. Amerasinghe and R. H. G. Parry, *Journal of the Geotechnical Engineering Division*, ASCE, Vol. 102, No. GT12, pp. 1284-1286.
- Holtz, R. D. (1977) Discussion of "Integrated Study of Reinforced Earth—II: Behavior and Design", by C. K. Shen, K. M. Romstad, and L. R. Herrmann, *Journal of the Geotechnical Engineering Division*, ASCE, Vol. 103, No. GT7, pp. 815-817.
- Holtz, R. D. (1978) Discussion of "It's Time to Look at the Unionization of Engineers", by Robert E. Warren, *Engineering Issues*, ASCE, Vol. 104, No. EI1, pp. 93-94.

- Holtz, R. D. (1978) Discussion of "Sand Drain Theory and Practice", by R. E. Landau, *Transportation Research Record* 678, pp. 31-36.
- Harr, M. E. and Holtz, R. D. (1980) Discussion of "A Discrete Numerical Model for Granular Assemblies", by P. A. Cundall and O. D. L. Strack, *Géotechnique*, Vol. 30, No. 3, pp. 334-335.
- Holtz, R. D. (1981) Discussion of "Particle Contacts in Discrete Material", by D. A. Grivas and M. E. Harr, *Journal of the Geotechnical Engineering Division*, ASCE, Vol. 107, No. GT10, pp. 1437-1439.
- Humphrey, D. N. and Holtz, R. D. (1985) Discussion of "Reinforced Embankments: Analysis and Design", by R. K. Rowe, *Journal of Geotechnical Engineering*, ASCE, Vol. 111, No. 1, pp. 151-152.
- Holtz, R. D. and Jamiolkowski, M. B. (1985) Discussion of "Time Dependence of Lateral Earth Pressure", by E. Kavazanjian and J. K. Mitchell, *Journal of Geotechnical Engineering*, ASCE, Vol. 111, No. 10, pp. 1239-1242.
- Sivakugan, N. and Holtz, R. D. (1986) Discussion of "Anisotropy of Undrained Shear Strength of Clays Under Axi-Symmetric Loading Conditions", by H. Ohta and A. Nishihara, *Soils and Foundations*, Vol. 26, No. 1, pp. 132-133.
- Holtz, R. D. (1989) Review of book "Pressuremeter Testing: Methods and Interpretation", by R. J. Mair and D. M. Wood, *Applied Mechanics Reviews*, Vol. 42, No. 5, p. B82.
- Fischer, G. R. and Holtz, R. D. (1991) Discussion of "Comparative Studies of Different Porometry Determination Methods for Geotextiles", by L. Van der Sluys and W. Dierickx, *Geotextiles and Geomembranes*, Vol. 10, No. 4, pp. 379-381.
- Bourdeau, P. L. and Holtz, R. D. (1992) Discussion of "Anchorage and Modulus in Geotextile-Reinforced Unpaved Roads", by R. A. Douglas, *Geotextiles and Geomembranes*, Vol. 11, No. 1, pp. 99-106.
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- Holtz, R. D. (1993) Review of book "Stresses and Displacements for Shallow Foundations", by D. Milovic', *Applied Mechanics Reviews*, Vol. 46, No. 7, p. B102.
- Boyle, S. R. and Holtz, R. D. (1996) Discussion of "A Performance Test for Assessment of Long-Term Creep Behavior of Soil-Geosynthetic Composites", by Wu, J. T. H. and Helwany, S. M. B., *Geosynthetics International*, Vol. 3, No. 4, pp. 551-557.
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- Holtz, R. D. (2001) Review of book "Mechanics of Reinforced Soil" by A. Sawicki, *Applied Mechanics Reviews*, Vol. 54, No. 3, pp B45-46.
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Refereed Conference Proceedings

- Holtz, R. D. and Lindskog, G. (1972) "Soil Movements Below a Test Embankment", *Proceedings of the ASCE Specialty Conference on Performance of Earth and Earth-Supported Structures*, West Lafayette,

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- Holtz, R. D. and Baker, C. N., Jr. (1972) "Some Load Transfer Data on Caissons in Hard Chicago Clay", *Proceedings of the ASCE Specialty Conference on Performance of Earth and Earth-Supported Structures*, West Lafayette, Indiana, Vol. I, Part 2, pp. 1223-1242.
- Holtz, R. D. and Broms, B. B. (1972) "Long Term Loading Tests at Skå-Edeby, Sweden", *Proceedings of the ASCE Specialty Conference on Performance of Earth and Earth-Supported Structures*, West Lafayette, Indiana, Vol. I, Part 1, pp. 435-464. (Also in *Reprints and Preliminary Reports No. 51*, Swedish Geotechnical Institute, and in *Publications of the Centenary Celebration of the Hochschule für Bodenkultur in Vienna, Lectures of the Faculty of Kulturtechnik und Wasserwirtschaft, Vienna, Austria*, Vol. V, Part 2, 1973, pp. 151-180.)
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- Holtz, R. D. (1977) "Laboratory Studies of Reinforced Earth Using a Woven Polyester Fabric", *Proceedings of the International Conference on the Use of Fabrics in Geotechnics*, Paris, France, Vol. III, pp. 149-154.
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1. *Chinese* by J.-M. Ma and J.-L. Wang (1985), Sheau Yuan Press, Inc. Taipei, Taiwan, 691 pp.
2. *Bahasa Malaysian* by R. Mohamad and M. R. Taha (1990), Kementerian Pendidikan Malaysia, Kuala Lumpur, Malaysia, 682 pp.
3. *French* by Jean Lafleur n (1991), Editions de l'École Polytechnique de Montréal, Montréal, Québec, Canada, 808 pp.
4. *Turkish* by Kamil Kayabali (2002), Gazi Kitabevi, Ankara, Turkey, 723 pp.

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- Holtz, R. D. (2003) “Geosynthetics” Chapter 24 in *Civil Engineering Handbook*, Second Edition, W. F. Chen and J. Y. R. Liew, editors, CRC Press, Boca Raton, Florida, pp. 24-1-24-14.

Books Edited, Editing Activities, and Other Scholarly Papers

- Norris, G. N. and Holtz, R. D., editors (1981) *Cone Penetration—Testing and Experience*, Proceedings of a session sponsored by the Geotechnical Engineering Division, ASCE National Convention, St. Louis, 496 pages.

Holtz, R. D., editor (1988) *Geosynthetics for Soil Improvement*, Proceedings of a Symposium sponsored by the Geotechnical Engineering Division and the North American Geosynthetics Society, ASCE Spring Convention, Nashville, Geotechnical Special Publication No. 18, ASCE, 213 pp.

Holtz, R. D., editor (1990) *Guide to Earthwork Construction*, State of the Art Report 8, Transportation Research Board, Washington, D.C., 107 pp.

Borden, R. H., Holtz, R. D. and Juran, I., editors (1992) *Grouting, Soil Improvement and Geosynthetics*, Proceedings of the ASCE Specialty Conference sponsored by the Geotechnical Engineering Division, New Orleans, Geotechnical Special Publication No. 30, ASCE, 1453 pp.

Dakoulas, P., Yegian, M., and Holtz, R. D., editors (1998) *Geotechnical Earthquake Engineering and Soil Dynamics III*, Proceedings of a specialty conference sponsored by the Geo-Institute of the ASCE, Geotechnical Special Publication No. 75, ASCE, 1582 pp.

Associate Editor (Geotechnics), *International Civil Engineering Journal for Practicing and Design Engineers*, Pergamon Press, 1981-1984.

Editor, *Journal of Geotechnical Engineering*, ASCE, 1982-1984.

Editor of Discussions and Closures, *Journal of Geotechnical Engineering*, ASCE, 1992-1994.

Co-Editor, Geosynthetics Section, *Geotechnical News*, published by BiTech Publishers, Vancouver, British Columbia, for the Canadian Geotechnical Society, U.S. National Society of the International Society for Soil Mechanics and Foundation Engineering, and the Mexican National Society for Soil Mechanics, 1988-1992.

Member, Editorial Board, *Geotextiles and Geomembranes*, Elsevier, London, 1986-1997.

Member, Editorial Board, *Geosynthetics International*, IFAI, St. Paul, 1994-present.

Sponsored Research

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| 1972 | Test Embankment on an Organic Clay, National Swedish Road Board, \$55,000, Principal Investigator. |
| 1973-74 | Reinforced Earth Using Woven Materials, AB Fodervävnader, Borås, Sweden, \$19,600, Principal Investigator. |
| 1973 | Evaluation of Fabrics as Filters and Reinforcing, Swedish Contractors Association, \$2,500, Principal Investigator. |
| 1973 | Stability of Sensitive Clay Slopes during Blasting, Swedish Power Board, \$20,000, Co-Principal Investigator (with O.Wager). |
| 1974 | Reinforced Earth Retaining Walls—Model Tests, AB Fodervävnader, Borås, Sweden, \$12,000, Principal Investigator. |
| 1975 | Fundamental Design of Fabrics and Fibrous Materials for Selected Transportation Engineering Applications, Purdue Transportation Engineering Center, \$1,659, Principal Investigator. |
| 1975-78 | Reinforced Earthworks Mechanics, National Science Foundation, \$49,700, Principal Investigator. |

- 1976 Development and Testing of an Instrumented Probe for Detecting Potential Failure Zones During Geotechnical Site Investigations, Purdue Research Foundation Summer Faculty XL Grant, \$2,500, Co-Principal Investigator with G. A. Leonards.
- 1977-82 Fabric Reinforced Embankments Constructed on Weak Foundations, Joint Highway Research Project, Indiana State Highway Commission and Federal Highway Administration, \$37,700, Co-Principal Investigator with C. W. Lovell.
- 1979 Fundamental Aspects of Filters and Filter Criteria as Applied to Nonwoven Fabrics, Purdue Research Foundation Summer Faculty XL Grant, \$2,850, Principal Investigator.
- 1981-82 Laboratory and Analytical Investigations of Soil Reinforcing, U.S. Air Force Engineering and Services Center, \$97,412, Co-Principal Investigator with M. E. Harr.
- 1982-83 Pressuremeter Testing, Fukada Geological Institute, Tokyo, Japan, \$15,500, Principal Investigator.
- 1982-84 Dynamic Compaction for Highway Construction, Federal Highway Administration, \$191,500, Advisor and Peer Reviewer.
- 1982-85 Engineering Fabrics Training Course, Federal Highway Administration, \$235,000, Co-Principal Investigator with B. R. Christopher.
- 1983-84 Data Acquisition and Control System for Geotechnical Engineering Research Laboratories, National Science Foundation, \$25,437, Co-Principal Investigator with J.-L. Chameau.
- 1983-84 Pressuremeter Testing, Phase II, Fukada Geological Institute, Tokyo, Japan, \$17100, Principal Investigator.
- 1984-86 Design of Reinforced Embankments, \$92,286, Joint Highway Research Project, Indiana State Department of Highways and Federal Highway Administration, Co-Principal Investigator with W. F. Chen.
- 1984-86 Fundamental Aspects of Pressuremeter Testing, U.S. Air Force Office of Scientific Research, \$203,000, Co-Principal Investigator with J.-L. Chameau.
- 1984-86 Research on the Pressuremeter and Soil Nailing, National Science Foundation (Division of International Programs) \$20,000, Principal Investigator.
- 1984-87 Laboratory Pressuremeter Experiments on Clay Soils, National Science Foundation, \$94,463, Principal Investigator.
- 1984-87 Behavior of Reinforced Soil, Federal Highway Administration, \$660,000, Research Advisor.
- 1987-89 Rational Design of Geotextile Reinforced Retaining Walls, Colorado Department of Highways and Federal Highway Administration, \$40,000, Research Advisor.
- 1986-87 Treatment of Problem Soils for Highway Embankments, NCHRP Synthesis of Highway Practice No. 29, National Cooperative Highway Research Project, \$10,000, Principal Investigator.
- 1987-88 Strength Anisotropy, Stress Paths, and Pore Pressures in Cohesive Soils, U.S. Air Force Office of Scientific Research, \$44,039, Co-Principal Investigator with J.-L. Chameau.
- 1987 Generic Specifications for Prefabricated Highway Pavement Edge Drains, International Construction Equipment, Inc., Charlotte, North Carolina, \$8,356, Principal Investigator.

- 1987 Pore Size Distribution of Nonwoven Geotextiles, Phase I: Pilot Study, Hoechst-Celanese, Inc., Greenville, South Carolina, \$8,769, Principal Investigator.
- 1987-88 Development of the IDOH Classification System for Geotextiles, Joint Highway Research Project, Indiana Department of Highways, \$23,000, Principal Investigator.
- 1988 Development of a Computerized Analysis Method of Synthetically Reinforced Slopes, ITW Enterprises and National Science Foundation, \$26,246, Co-Principal Investigator with J.-L. Chameau.
- 1988-91 Pavement Drainage and Pavement-Shoulder Joint Evaluation and Rehabilitation, Joint Highway Research Project, Indiana Department of Highways and Federal Highway Administration, \$148,306, Co-Principal Investigator with T. L. White.
- 1989 Analytical and Experimental Investigation of Seismically-Induced Particle Migration”, Westinghouse ESD, Richland, Washington, \$28,367, Co-Principal Investigator with S. L. Kramer.
- 1989-91 In Situ Vitrification of Soils, GeoSafe Corp., Kirkland, Washington, \$128,000, Principal Investigator.
- 1989-91 Performance of Geotextile Separators, Washington State Department of Transportation, \$72,903, Principal Investigator.
- 1990-91 Flexible S.M.W. Wall, SMW Seiko Corp., Redwood City, California \$28,500, Principal Investigator.
- 1990-91 Appropriate Testing of Expansive Cements, National Science Foundation, \$40,000, Co-Principal Investigator with J. W. Hinze.
- 1990-91 Workshop on Soil Improvement and Foundation Remediation with Emphasis on Seismic Hazards, National Science Foundation, \$49,592, Co-Principal Investigator with S. L. Kramer.
- 1990-92 Equipment for Dynamic Experiments, National Science Foundation, \$85,000 (not including matching funds provided by the College of Engineering and the Department of Civil Engineering), Co-Principal Investigator with J. F. Stanton, D. A. Reed, A. Harralddottir, S. L. Kramer, G. R. Miller, S. Banerjee, M. O. Eberhard, and C. W. Roeder.
- 1991-93 A New Approach for Determining Design Soil Parameters from In-situ Tests, National Science Foundation, \$80,175, Co-Principal Investigator with C.-H. Juang, Clemson University.
- 1991 Geotextile Road Test, Polyfelt, Inc., Atlanta, Georgia, \$12,000, Principal Investigator.
- 1991-94 Geosynthetic Reinforced Wall Analysis: Phase I, Washington State Department of Transportation, \$116,603, Principal Investigator
- 1991-94 Performance of Geotextile Separators Phase II, Washington State Department of Transportation, \$73,975, Principal Investigator.
- 1991-94 Geotextile Filtration Research, funded by various geotextile manufacturers, \$22,500 (Exxon, Inc. \$2,500; Hoechst Celanese Corp., \$5,000; Nicolon Corp. \$5,000; Polyfelt, Inc., \$10,000), Principal Investigator.
- 1991-95 A Fundamental Study of the Field Compressometer Test, U.S. Air Force Research Office of Scientific Research, \$258,788, Co-Principal Investigator with S. Banerjee.

- 1992-93 Roadway Stabilization Using Geotextiles, Polyfelt, Inc., Atlanta, Georgia, \$11,500, Principal Investigator.
- 1993-97 Geosynthetic Engineering Workshop, Federal Highway Administration-NHI, \$512, 945, Co-Principal Investigator with R.R. Berg & Associates and B. R. Christopher.
- 1993-94 Influence of Sewage Contamination on Soil Properties, Egyptian Cultural and Education Bureau, \$14, 605, Principal Investigator.
- 1993-94 Laboratory Studies of Geotextile Separators, Polyfelt, Inc., Atlanta, Georgia, \$8,500, Principal Investigator.
- 1994-99 Performance of Geosynthetics in Landfill Caps and Covers, North American Geosynthetics Society Awards of Excellence Program, \$10,000, Principal Investigator.
- 1994-95 Performance of Existing Geosynthetic Reinforced Slopes during the Northridge-LA Earthquake of 17 January 1994, National Science Foundation, \$7,373, Principal Investigator.
- 1994-98 Geosynthetic Reinforced Wall Analysis: Phase II, Washington State Department of Transportation, \$196,500, Principal Investigator.
- 1994-99 Seismic Design of Geosynthetic Reinforced Slopes, National Science Foundation, \$457,103, Co-Principal Investigator with S. L. Kramer and T. A. Taylor.
- 1996-99 Updating Geosynthetic Design and Construction Guidelines, Federal Highway Administration, \$34,671, Co-Principal Investigator with R. R. Berg & Associates and B. R. Christopher.
- 1997-98 Bucoda Test Section Phase II, Washington State Department of Transportation, \$44,800, Principal Investigator.
- 1997-00 Instrumentation for Structural and Geotechnical Experiments, National Science Foundation, \$799,770 including University, College, and Departmental matching, Co-Principal Investigator with J. F. Stanton, S. L. Kramer, M. O. Eberhard, G. Turkiyyah, C. R. Roeder, and G. MacRae.
- 1997-00 Geosynthetic Reinforced Wall Analysis Phase III, Principal Investigator, Washington State Department of Transportation, \$155,550 (UW share \$134,550), Principal Investigator.
- 2000-01 Analysis of Anomalies in Drilled Shaft Foundations, Federal Highway Administration to AMEC Corp, \$39,200, Co-Principal Investigator with Dr. Conrad Felice. (The project included a \$5000 donation to the research by the West Coast Chapter, ADSC: The International Foundation Drilling Association.)
- 2000-01 Engineering Properties and Environmental Characteristics of Destructed/Converted Hazardous Wastes, Washington Technology Center and ARI Technologies Inc., \$32,968, Principal Investigator.
- 2003-04 Bucoda Test Section Phase III, Washington State Department of Transportation, \$70,300, Principal Investigator.
- 2002-04 Analysis of Anomalies in Drilled Shaft Foundations, Phase II, Federal Highway Administration to C. F. Felice and Associates, Co-Principal Investigator with Dr. Conrad Felice, \$60,000. (Interim grant from FHWA of \$40,000 plus a \$20 000 donation from ADSC: The International Foundation Drilling Association, Dallas, Texas.)
- 2002-04 Research on "Spiralnail" Reinforcement System, Hilficker Corporation, \$50,000, Principal Investigator.

- 2004-05 Capacity Analysis of Large Diameter Drilled Shafts with Defects, Washington State Department of Transportation, \$44,700, Principal Investigator. (This is a request for additional funding to supplement a pending proposal to FHWA. This WSDOT proposal has been programed but is not yet funded awaiting approval for the FHWA funding.)
- 2005-06 Conceptual Design Proposal: The Deep Underground Science and Engineering Laboratory – Cascades, A Horizontal Access Facility, National Science Foundation, \$500,000, Co-Principal Investigator.

Project Reports (Reports to Sponsors)

- Boutrup, E. and Holtz, R. D. (1982) “Fabric Reinforced Embankments Constructed on Weak Foundations”, Final Report to Indiana Department of Highways and Federal Highway Administration, JHRP-82-21, 462 pages.
- Holtz, R. D. and Harr, M. E. (1983) “Analytical and Experimental Investigations of Soil Reinforcing”, Report to U.S. Air Force Engineering and Services Center, Tyndall AFB, Report No. 32L-TR-82-31, 128 pages.
- Humphrey, D. N., McCarron, W. D., Holtz, R. D. and Chen, W. F. (1986) “Finite Element Analysis of Plain Strain Problems with PS-NFAP and the Cap Model—User’s Manual”, Implementation Report to Indiana Department of Highways and Federal Highway Administration, FHWA/IN/JHRP-86-17, 184 pp.
- Humphrey, D. N. and Holtz, R. D. (1986) “STABL6 with Reinforcing Layer Option—User’s Manual”, Implementation Report to Indiana Department of Highways and Federal Highway Administration, FHWA/IN/JHRP-86/18, 33 pp.
- Chameau, J. L., Holtz, R. D., Sivakugan, N. and Prapaharan, S. (1987) “Fundamental Aspects of Pressuremeter Testing”, Final Report to U.S. Air Force Office of Scientific Research, Bolling AFB, D.C., Report No. AFOSR-TR-87-0777, 186 pp.
- Kramer, S. L. and Holtz, R. D., (1989), “Experimental Investigation of Seismically-Induced Particle Migration”, Report to Westinghouse ESD, Richland, Washington, 31 pp.
- Holtz, R. D. and Page, M. W. (1991) “Performance of Geotextile Separators—Phase 1”, Final Technical Report, Washington State Department of Transportation, Report No. WA-RD 280.1, Olympia, 136 pp.
- Kramer, S. L. and Holtz, R. D. (1992) “Soil Improvement and Foundation Remediation with Emphasis on Seismic Hazards”, report of a workshop sponsored by the National Science Foundation, University of Washington, Department of Civil Engineering, Seattle, 106 pp.
- Allen, T. N., Christopher, B. R. and Holtz, R. D. (1992) “Performance of a 41-foot High Geotextile Wall”, final report, Washington State Department of Transportation, Report No. WA-RD 257.1, Olympia, 72 pp.
- Banerjee, S. and Holtz, R. D. (1992) “A Fundamental Study of the Field Compressometer Test”, First Annual Technical Report, Grant No. AFOSR-91-0424, University of Washington, Department of Civil Engineering, 137 pp.
- Metcalfe, R. C. and Holtz, R. D. (1994) “Performance of Geotextile Separation in Washington State”, Final Technical report, Washington State Department of Transportation, Report No. WA-RD 321.1, 262 pp.
- Boyle, S. R. and Holtz, R. D. (1994) “Geosynthetic Reinforced Wall Analysis, Phase I”, Interim Report, Washington State Department of Transportation, 155 pp.

- Moore, C. J., Holtz, R. D., and Wagenblast, G. R. (1995) "Soil Structural Analysis Tools and Properties for Hanford Site Waste Tank Evaluation", Report WHC-SD-WM-DA-208 by IFC Kaiser Hanford Company for Westinghouse Hanford Co., 100 pp.
- Banerjee, S. And Holtz, R. D. (1995) "A Fundamental Study of the Field Compressometer", Final Technical Report to the U.S. Air Force Office of Scientific Research, Grant No. AFOSR 91-0424, 132 pp.
- Holtz, R. D. (1996) "Performance of Geotextile Separators", Final Summary Report, Washington State Department of Transportation, Report No. WA-RD 321.2, 60 pp.
- Black, P. J. and Holtz, R. D. (1997) "Performance of Geotextile Separators: Bucoda Test Site--Phase II", Final Summary Report, Washington State Department of Transportation, Report No. WA-RD 440.1, 210 pp.
- Holtz, R. D. and Lee, W.-F. (1998) "Geosynthetic Reinforced Wall Analysis Phase II: Use of in-Soil Geosynthetic Behavior to Predict Deformations - Vol. I: Research Program and Results" Final Research Report, Washington State Department of Transportation, Report No. WA-RD 452.1, 32 pp.
- Holtz, R. D. and Lee, W-F. (1998) "Geosynthetic Reinforced Wall Analysis Phase II: Use of In-Soil Geosynthetic Behavior to Predict Deformation - Vol. II: Computer Codes and Files", Washington State Department of Transportation, Report No. WA-RD 452.2, pp. 41.
- Moore, C. J. and Holtz, R. D. (1999) "AX Tank Farm Closure Settlement Estimates and Soil Testing", Report HNF-3438 by Fluor Daniel Northwest, Inc. for U. S. Department of Energy, 105 pp.
- Holtz, R. D. and Lee, W-F. (2001) "Internal Stability Analysis of Geosynthetic Reinforced Retaining Walls", Final Research Report, Washington State Department of Transportation, Report No. WA-RD 532.1, 458 pp.
- Holtz, R. D. and Shin, H.-S. (2001) "Engineering Properties and Environmental Characteristics of Destructed/Converted Hazardous Wastes", Final Report to ARI Technologies and Washington Technology Center, 62 pp.
- Holtz, R. D., F. Saidin, and M. Robinson (2003) "Instrumentation of Back-to-Back Wall Ramp—Third Street SW Separation, Auburn, Washington", Report to City of Auburn, WSDOT, et al., 22 pp.

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Other Research Related Activities

International Symposium on Soil Structure, Gothenburg, Sweden, August 1-2, 1973.

European Symposium on Penetration Testing, Stockholm, Sweden, June 5-7, 1974. (One of eight from USA invited to attend. Travel Grant to attend obtained from Office of the Chief of Research and Development (Europe) Department of the Army).

Sixth European Conference on Soil Mechanics and Foundation Engineering, Vienna, Austria, March 14-26, 1976. (Purdue Research Foundation and MUCIA International Travel Grant).

Research Seminar on Consolidation and Settlement, Queen's University, Kingston, Ontario, Canada, May 27-28, 1976. (Only US participant).

Soil and Plasticity Workshop, McGill University, Montreal, Québec, Canada, May 28-30, 1980. (Invited participant).

Research Workshop on Ground Reinforcement, Ground Strengthening Committee of the Underground Technology Research Council, Berkeley, California, January 9, 1981; Chair and Organizer.

Research Workshop on Deep Compaction, Ground Strengthening Committee of the Underground Technology Research Council, New Orleans, Louisiana, October 25, 1982; Chair and Organizer.

Research Seminar on Cone Penetration Testing in the Laboratory, Department of Civil Engineering, University of Southampton, England, November 15-16, 1984, sponsored by the Science and Engineering Research Council, UK. (Attendance limited to 16 researchers from King's College, London; Oxford University; Sheffield University; Norwegian Geotechnical Institute; Technical University of Turin, ENEL, Italy; ISMES, Italy; Delft Soil Mechanics Laboratory; University of Southampton; and Purdue University.)

First International Geotechnical Seminar on Deep Foundations on Bored and Auger Piles, Ghent, Belgium, June 6-10, 1988. (Purdue Research Foundation Travel Grant).

Workshop on *Selection of National Test Sites for Geotechnical Research*, sponsored by the National Science Foundation, University of New Hampshire, September 26-28, 1988; member of Steering Committee.

Collaborating Scientist for two research proposals, Asian Institute of Technology, Bangkok, to the U.S. Agency for International Development, 1989.

Workshop on *Soil Improvement and Foundation Remediation with Emphasis on Seismic Hazards*, sponsored by the National Science Foundation, University of Washington, Seattle, Washington, August 19-21, 1991; Co-Principal Investigator and Discussion Leader on "Drainage".

Workshop on *Selection and Management of US Geotechnical Experimentation Sites*, sponsored by National Science Foundation and Federal Highway Administration, October 18-19, 1991, Orlando, Florida. (One of 14 invited participants from US and Canada).

Workshop on *Reliability Methods for Risk Mitigation in Geotechnical Engineering*, National Academy of Engineering, July 14-16, 1992, Irvine California.

US-Canadian *Workshop on Recent Accomplishments and Future Trends in Geomechanics in the 21st Century*, University of Oklahoma, Norman, Oklahoma, October 20-23, 1992, sponsored by National Science Foundation and National Science and Engineering Research Council of Canada; member of Executive Committee, Co-chair of Plenary Session No. 1, member of working groups on Topic No. 1: "Soil Mechanics including Dams, Slopes, and Retaining Structures" and Topic No. 7: "New Materials".

US-Brazil Geotechnical Engineering Workshop, sponsored by the National Science Foundation, November 23-25, 1992, Belo Horizonte, MG, Brazil; member of Working Group III on "Ground Improvement".

First Filtration Workshop, sponsored by Polyfelt, Inc. January 15, 1993, Washington, D.C.

Second Filtration Workshop, sponsored by Polyfelt, Inc., January 14, 1994, Washington, D.C.

Workshop on Defining Geo-Engineering for the 21st Century, sponsored by American Society of Civil Engineers, Civil Engineering Research Foundation, and National Science Foundation, Leesburg, Virginia, May 19-21, 1994.

National Geotechnical Experimentation Sites, sponsored by the National Science Foundation and Federal Highway Administration; member of Board of Directors, 1992-1994. Board meetings attended in New York, NY (September 15, 1993); Houston and College Station, Texas (February 12-13, 1993); Amherst, Massachusetts (August 20, 1993); San Francisco and San Bruno, California (January 28-29, 1994); College Station, Texas (June 15, 1994).

Workshop on Geotechnical Composite Systems, sponsored by National Science Foundation, Roanoke, Virginia, July 28-29, 2002; member of Organizing Committee and Co-Chair, Session on Research Needs.

Patents submitted and/or awarded

“A Construction Method of Retaining Wall using Waste Tires” by Y. W. Yoon and R. D. Holtz (submitted February 5, 2001)

Invited Lectures and Seminars

“Oroville Dam”, Geotechnical Section, American Society of Civil Engineers, Chicago, Illinois, July, 1968

“Results of Long-Term Full-Scale Load Tests at Skå-Edeby, Sweden”
 Polish Geotechnical Society, Gdansk, Poland, May 24, 1972
 Technical University of Pozan, Poland, May 26, 1972
 Northwestern University, Evanston, Illinois, June 16, 1972
 Hochschule für Bodenkultur, Vienna, Austria, October 18, 1972.

“Reinforced Earth”
 Cornell University, Ithaca, New York, February 3, 1976
 Massachusetts Institute of Technology, Cambridge, Massachusetts, February 9, 1976;
 Rensselaer Polytechnic Institute, Troy, New York, February 10, 1976.

“Reinforced Earth with Fabrics”, and “Full Scale Loading Test on an Unusual Organic Clay”,
 Laboratoire Central des Ponts et Chaussées, Paris, France, March 16, 1976.

“Reinforced Earth with Fabrics”, Department of Civil Engineering, Strathclyde University,
 Glasgow, Scotland, March 29, 1976.

“Reinforced Earth”, Department of Civil Engineering, Northwestern University, Evanston, Illinois,
 October 21, 1976.

“Reinforced Earth”, Soil Testing Services, Inc. Northbrook, Illinois, October 22, 1976.

“Recent Developments in Earth Reinforcing”, Groupe Géotechnique de Montréal, Montréal,
 Québec, Canada, March 14, 1977.

“Recent Developments in Reinforced Earth”, North Central Branch, Indiana Section, American
 Society of Civil Engineers, South Bend, Indiana, January 24, 1978.

“Reinforced Earth”, Civil Engineering Seminar, Cleveland State University, Cleveland, Ohio, April
 28, 1978.

“Earth Reinforcing for Walls and Embankments”, Geotechnical Engineering Seminar, University of
 Wisconsin, Madison, Wisconsin, October 9, 1978.

“Research on Fabric Reinforced Earth Structures”, Department of Civil and Mineral Engineering
 Seminar, University of Minnesota, Minneapolis, Minnesota, March 15, 1979.

Principal Lecturer, Research Seminar on Civil Engineering Fabrics, AB Fodervävnader, Borås,
 Sweden, and Swedish Geotechnical Institute, Linköping, Sweden, September 18-20, 1979.

- “Reinforced Earth” Central Branch, Indiana Section, American Society of Civil Engineers, West Lafayette, Indiana, November 13, 1979.
- “Reinforced Earth as Related to Retaining Structures and Highway Embankments”, Geotechnical Engineering Seminar, Michigan State University, East Lansing, Michigan, February 20, 1980.
- “Geotextiles in Cold Regions”, University of Illinois at Chicago Circle, Chicago, Illinois, May 24, 1982.
- “Reinforced Earth”, Second Annual Road Supervisors Meeting, Winemac, Indiana, May 26, 1982.
- “Reinforced Earth for County Road Improvement”, Starke County Commissioners, Knox, Indiana, August 16, 1982.
- “Earth Reinforcing with Geotextiles”, Civil Engineering Seminar, Illinois Institute of Technology, Chicago, Illinois, October 4, 1982.
- “In Situ Testing to Determine Soil Properties”, Civil Engineering Seminar, Case Western Reserve University, Cleveland, Ohio, October 6, 1983.
- “Soil Improvement”, University of Illinois at Chicago Circle, Chicago, Illinois, February 7, 1984.
- “Applications of Geotextiles in Geotechnics”, Department of Geotechnics, Faculty of Land Reclamation, Warsaw Agricultural University, Warsaw, Poland, June 4, 1984.
- “Geotextiles: Introduction, Testing, and Use in Earth Reinforcement”, Department of Geotechnical Engineering, University of Lille, Lille, France, June 13, 1984.
- “Laboratory Testing Purposes”, “Choice of Test Type”, and “Evaluation of Triaxial Test Data”, Seminars for Doctoral Students in Geotechnical Engineering, Department of Structural Engineering, Technical University of Turin, Turin, Italy, February 14, 1985.
- “Geotextiles for Earth Reinforcing”, Department of Structural Engineering, Politecnico di Milano, Milan, Italy, March 7, 1985.
- “Applications of Geotextiles in Geotechnical Engineering”, Gruppo Lombardo, Associazione Geotecnica Italiana, Milan, Italy, March 14, 1985.
- “Design of Geotextiles in Geotechnics”, Hellenic Geotechnical Society and Department of Geotechnical Engineering, National Technical University of Athens, Athens, Greece, May 6, 1985.
- “Geotextiles: Applications and Design”, Department of Geotechnical Engineering, Aristotle University of Thessaloniki, Thessaloniki, Greece, May 8, 1985.
- “Reinforcement with Geotextiles”, Schnabel Engineering Co., Bethesda, Maryland, January 13, 1986.
- “Soil Reinforcement with Geotextiles”, Department of Civil Engineering, University of Washington, Seattle, Washington, February 10, 1986.
- “Offshore Geotechnical Engineering”, “Geotextiles--An Overview”, and “Geotextiles as Reinforcement”, Department of Civil and Environmental Engineering, Washington State University, Pullman, Washington, February 11, 1986.
- “Geotextiles: Introduction, Filtration and Drainage Reinforcement”, Technical University of Gdansk, Gdansk, Poland, April 3, 1986.

- “Use of Geotextiles in Civil Engineering”, Geotechnical Engineering Seminar, Cornell University, Ithaca, New York, October 21, 1987.
- “Reinforcement with Geotextiles--An Introduction to Design”, ATEC Associates, Columbia, Maryland, January 14, 1988.
- “Geotextiles in Civil Engineering Construction”, Geotechnical Engineering Seminar, Department of Civil Engineering, Northwestern University, Evanston, Illinois, November 18, 1988.
- “Geotextiles in Geotechnical Engineering” Minnesota Geotechnical Society, Minneapolis, Minnesota, March 2, 1989.
- “Soil Improvement Using Geosynthetics”, *1989 Distinguished Lecture*, Department of Civil Engineering, Cullen College of Engineering, University of Houston, Houston, Texas, April 14, 1989.
- “Prefabricated Vertical (‘Wick’) Drains”, Geotechnical Group, Seattle Section, American Society of Civil Engineers, Seattle, Washington, May 25, 1989.
- “Research on Geotextile Filters and Earth Reinforcing”, Geotechnical Engineering Seminar, University of British Columbia, Vancouver, British Columbia, Canada, September 19, 1989.
- “Design and Construction of Geosynthetic-Reinforced Embankments on Very Soft Soils”, Vancouver Geotechnical Society, Vancouver, British Columbia, Canada, September 19, 1989.
- “Prefabricated Vertical (‘Wick’) Drains”, Geotechnical Engineering Division, San Diego Section, American Society of Civil Engineers, San Diego, California, November 2, 1989.
- “Geosynthetics”, Civil Engineering Seminar, University of California, Irvine, California, November 3, 1989.
- “Retaining Walls Reinforced with Geosynthetics”, 1990 Chicago Geotechnical Lecture Series, Chicago, Illinois, March 13, 1990.
- “Design and Construction of the Rainier Avenue Geotextile Wall”, Geotechnical Group, Seattle Section, American Society of Civil Engineers, Bellevue, Washington, April 26, 1990 (with T. M. Allen, Washington State Department of Transportation).
- “Reinforced Embankments of Soft Soil”, Conwed Design Group, Ithaca, New York, June 22, 1990.
- “The Role of Geotextiles in Lining Design”, CH2M Hill Lining Design Seminar, Denver, Colorado, July 21, 1990.
- “Geosynthetics in Environmental and Hydraulic Engineering”, CEWA 520 Seminar, Department of Civil Engineering, University of Washington, November 7, 1990.
- “Introduction to Geosynthetics”, and “Case History: Rainier Avenue Geosynthetic Wall”, Geotechnical Engineering Seminar, Georgia Institute of Technology, Atlanta, Georgia, February 25, 1991.
- “Geotextiles in Embankment Construction on Soft Clays”, Department of Civil and Environmental Engineering, Polytechnic University, Brooklyn, New York, April 29, 1991.
- “Introduction to Geosynthetics” and “Design and Construction of Reinforced Embankments”, Department of Geology, University of Perugia, Perugia, Italy, June 4, 1991.

- “Geosynthetic Reinforced Retaining Structures: Design, Construction and Performance”, Civil Seminar Series, University of Western Ontario, London, Ontario, Canada, August 22, 1991.
- “Design, Construction and Performance of Geosynthetic Reinforced Retaining Structures”, Geotechnical Engineering Division, San Diego Section, American Society of Civil Engineers, San Diego, California, September 10, 1991.
- “Prefabricated Vertical Drains”, Montréal Geotechnical Society, Montréal, Québec, Canada, October 23, 1991.
- “Pore Size Distribution in Geotextile Structures”, Geotechnical Engineering Seminar, École Polytechnique, Montréal, Québec, Canada, October 24, 1991.
- “Ground Improvement and Geo-Environment Technology”, Joint US-France Workshop on Recent Advances in Geomechanical, Geotechnical, and Geo-Environmental Engineering, Rueil-Malmaison, France, June 1, 1992.
- “Geosynthetics for Soil Improvement”, US-Brazil Geotechnical Engineering Workshop, Belo Horizonte, MG, Brazil, November 24, 1992.
- “Research on Filtration and Separation at the University of Washington”, First Polyfelt Filtration Workshop, Washington, D.C., January 15, 1993.
- “Geosynthetic Reinforced Retaining Structures--The Standard Wall of the Future?”, Geotechnical Engineering Seminar, Department of Civil, Environmental and Architectural Engineering, University of Colorado, Boulder, Colorado, February 22, 1993.
- “Prefabricated Vertical Drains”, Geotechnical Engineering Seminar Series, School of Civil Engineering, Purdue University, West Lafayette, Indiana, September 9, 1993.
- “Design and Construction of Geotextile-Reinforced Embankments on Very Soft Soils”, Geotechnical Group, Oregon Section, American Society of Civil Engineers, Portland, Oregon, October 6, 1993.
- “Design, Construction, and Performance of Geosynthetic Reinforced Retaining Walls”, Department of Civil Engineering, National Chung Hsein University, Taichung, Taiwan, December 21, 1993.
- “Design, Construction, and Performance of Geosynthetic Reinforced Retaining Walls”, Chinese Society of Civil and Hydraulic Engineers, Taipei, Taiwan, December 23, 1993.
- “Recent Research on Geotextile Separators”, Federal Highway Administration-Washington State Department of Transportation Research Review, University of Washington, Seattle, Washington, June 21, 1994.
- “Overview of Geosynthetics and their Applications” and “Design, Construction, and Performance of Geosynthetic Reinforced Walls”, Department of Civil and Systems Engineering, James Cook University of North Queensland, Townsville, Queensland, Australia, September 20, 1994.
- “Soil Reinforcement and Ground Improvement”: Introductory Presentation for Topics 5 and 6, *U.S.-Taiwan Geotechnical Engineering Workshop*, sponsored by the U.S. National Science Foundation and the National Science Council of Taiwan, Taipei, Taiwan, January 9, 1995; Summary Report on Topic 5, January 11, 1995.
- “Geosynthetic Reinforced Walls: An Overview” and “Design and Performance of Geosynthetic Reinforced Walls”, Department of Civil Engineering, University of California, Berkeley, California, September 20, 1995.

- “Geosynthetics in Civil Engineering Practice”, Department of Civil Engineering, University of Louisville, Louisville, Kentucky, March 27, 1996.
- “Geosynthetic Reinforced Slopes and Retaining Walls”, *1996 KGEK Distinguished Lecture*, Kentucky Geotechnical Engineering Group, Louisville, Kentucky, March 27, 1996.
- “Soil Reinforcement with Geosynthetics”, University of Ottawa, Ottawa, Ontario, Canada, January 31, 1997.
- “Geosynthetic Reinforced Retaining Structures—The Wall of the Future?”, *Distinguished Speaker*, Department of Civil and Environmental Engineering, Washington State University, Pullman, Washington, February 13, 1997.
- “Reinforced Embankments on Soft Foundations”, Keynote Lecture, *Indo-US Workshop on Ground Improvement Using Geosynthetics*, Central Road Research Institute and National Science Foundation, New Delhi, India, March 27, 1997.
- “Geosynthetic Reinforced Retaining Walls and Abutments”, Department of Civil Engineering and Indian Geotechnical Society Seminar, Indian Institute of Technology, Kanpur, India, April 1, 1997.
- “Soil Improvement”, Department of Civil Engineering, University of California at Los Angeles, Los Angeles, California, January 19, 1998.
- “Geosynthetic Reinforced Retaining Walls and Abutments”, Geotechnical Committee, American Society of Civil Engineers, Los Angeles, California, January 19, 1998.
- Cross-Canada Lecture Tour 1999* (sponsored by the Canadian Geotechnical Society and local CGS geotechnical societies and chapters):
- “Geosynthetic Reinforced Retaining Structures—the Standard Wall of the Future”
 - Vancouver, British Columbia, February 18, 1999
 - St. Johns, Newfoundland, April 13, 1999
 - Halifax, Nova Scotia, April 13, 1999
 - “Geosynthetics in Roads”
 - Quebec City, Quebec, April 14, 1999
 - Montreal, Quebec, April 15, 1999
 - Ottawa, Ontario, April 16, 1999
 - Prince George, British Columbia, April 21, 1999
 - “Prefabricated Vertical (“Wick”) Drains”
 - Toronto, Ontario, April 16, 1999
 - “Reinforced Embankments on Soft Foundations”
 - Winnipeg, Manitoba, April 19, 1999
 - Saskatoon, Saskatchewan, April 19, 1999
 - Edmonton, Alberta, April 20, 1999
- “Geosynthetics in Roads and Highways”, *38th Ardaman Lecture*, University of Florida, Gainesville, Florida, October 14, 1999.
- “Geosynthetics and Soil Improvement”, Research Committee for Ground Improvement of the Japanese Geotechnical Society, University of Kyoto, Kyoto, Japan, September 27, 2000.
- “Seismic Design of Geosynthetic Reinforced Slopes”, *International Workshop on Seismic Performance of Geosynthetic-Reinforced Soil Structures (From Kobe to Ji-Ji and Ismit Earthquakes)*, Columbia

- University, New York, New York, October 30-31, 2000.
- “Geosynthetics for Soil Reinforcement”, Japanese Geotechnical Society, Kansai Branch, Osaka, Japan, May 23, 2001.
- “Geosynthetics for Soil Reinforcement”, *Ninth Spencer J. Buchanan Lecture*, College Station, Texas, November 9, 2001.
- “Retaining Walls”, *Braun Intertec Geotechnical Conference*, Minnetonka, Minnesota, January 24, 2002.
- “Geosynthetics for Soil Reinforcement”, Departmental Seminar, Department of Civil Engineering, University of Minnesota, Minneapolis, Minnesota, February 1, 2002.
- “Geosynthetics for Soil Reinforcement”, Minnesota Geotechnical Society, St Paul, Minnesota, February 7, 2002.
- “Geosynthetics for Soil Reinforcement”, Society of American Military Engineers, St Paul, Minnesota, February 21, 2002.
- Geosynthetic Reinforced Retaining Structures--the Standard Wall of the Future?, Geomechanics Seminar, University of Minnesota, Minneapolis, Minnesota, March 8, 2002.
- “Geosynthetics in Roads and Highways”, Geotechnical Seminar, University of Wisconsin, Madison, Wisconsin, March 13, 2002.
- “Prefabricated Vertical Geocomposite Drains”, Delaware Valley Geo-Institute, American Society of Civil Engineers, May 16, 2002.
- “Geosynthetics in Geotechnical Composite Systems”, Overview Presentation, Workshop on Geotechnical Composite Systems, Roanoke, Virginia, July 28, 2002.
- “Geosynthetics for Roads and Highways”, Geotechnical Engineering Technical Group, Oregon Section, American Society of Civil Engineers, Beaverton, Oregon, September 4, 2002.
- “Geosynthetics” Departamento de Ingeniería Civil, Universidad de Chile, Santiago, Chile, April 22, 2003.
- “Geosynthetic-Reinforced Retaining Structures--The Future “Standard” Retaining Wall?”, 8th Robert L. Schiffman '44 Geotechnical Colloquium, Cornell University, Ithaca, New York, October 28, 2003.
- “Geosynthetic-Reinforced Retaining Structures--The Future “Standard” Retaining Wall?”, Civil Engineering Seminar, University of Colorado-Denver, Denver, Colorado, April 30, 2004.
- “Geosynthetic-Reinforced Retaining Structures—The Future Standard”, Department of Civil Engineering, University of Texas, Austin, June 3, 2004.
- “Geosynthetics for Soil Reinforcement” University of Incheon, Incheon, Korea, December 3, 2004.
- “Geosynthetics in Roads and Highways” Kobe University, Kobe, Japan, April 7, 2006

Presentations Given at Conferences

- “Excavation and Sampling Around Some Sand Drains at Skå-Edeby, Sweden”, *Sixth Scandinavian Geotechnical Meeting*, Trondheim, Norway, August 24, 1972.

- “Pre-loading by Vacuum—Current Prospects”, Committee on Embankments and Earth Slopes (A2K02), *53rd Annual Meeting*, Transportation Research Board, January 22, 1974.
- “Reinforced Earth with Fabrics”, Committee on Embankments and Earth Slopes (A2K02), *54th Annual Meeting*, Transportation Research Board, January 14, 1975.
- “Recent Developments in Reinforced Earth”, *Seventh Scandinavian Geotechnical Meeting*, Copenhagen, Denmark, May 22, 1975.
- “Applications of Fabrics to Soils and Highway Engineering”, *International Exposition and Conference*, International Nonwovens and Disposables Association, Chicago, Illinois, October 21, 1976.
- “Reinforcing Embankments by Sort Sheet Piles and Tie Rods” and “Modern Corduroy and Fascines for Vehicle and Construction Mats”, *International Symposium on New Horizons in Construction Materials*, Lehigh University, November 1-2, 1976.
- “Reinforcement of Embankments on Soft Foundations Using Fabrics”, Committee on Embankments and Earth Slopes, *56th Annual Meeting*, Transportation Research Board, January 25, 1977.
- “Fabrics in Soils and Highway Engineering”, Opening Lecture, *Canadian Symposium on Nonwovens and Disposables*, Montréal, Québec, Canada, March 15, 1977.
- “Walls Reinforced by Fabrics--Results of Model Tests”, *International Conference on the Use of Fabrics in Geotechnics*, Paris, France, April 21, 1977.
- “Large Diameter Piston Samplers”, Panelist discussion, Specialty Session No. 2 on Soil Sampling, *Ninth International Conference on Soil Mechanics and Foundation Engineering*, Tokyo, Japan, July 12, 1977.
- “Special Applications”, State of the Art and General Report, *Symposium on Earth Reinforcing*, Annual Convention, American Society of Civil Engineers, Pittsburgh, Pennsylvania, April 27, 1978.
- “Dynamic Compaction” Discussion Session No. 8, *Seventh European Conference on Soil Mechanics and Foundation Engineering*, Brighton, England, September 13, 1979.
- “Creep Characteristics and Stress Strain Behavior of a Geotextile-Reinforced Sand”, Session 7C on Properties and Tests, *Second International Conference on Geotextiles*, Las Vegas, Nevada, August 6, 1982 (with W. R. Tobin and W. W. Burke).
- “Soil-Fabric Interaction—An Analytical Model”, Session 4B on Unpaved Roads II, *Second International Conference on Geotextiles*, Las Vegas, Nevada, August 3, 1982 (with M. E. Harr and P. Bourdeau).
- “Walls and Foundations, Slopes and Embankments”, General Report on Sessions 2C, 3C, 4C, and 5C, *Second International Conference on Geotextiles*, Las Vegas, Nevada, August 6, 1982.
- “Geotextiles in Geotechnical Engineering”, *30th Annual Minnesota Soils Conference*, St. Paul, Minnesota, January 28, 1982.
- “Wick Drains--Design Considerations”, Lead Speaker, Session D-3 on Wick Drains, *Geotech III Specialty Conference*, Spring Convention, American Society of Civil Engineers, Atlanta, Georgia, May 16, 1984.
- “Bearing Capacity of Piles in Sand from Cavity Expansion Theory”, Discussion to Session 4a on Pile Foundation Design, *Eleventh International Conference on Soil Mechanics and Foundation Engineering*, San Francisco, California, August 15, 1985 (co-authored with M. Jamiolkowski and R. Lancellotta).

- “Soil Reinforcement with Geotextiles”, *Third International Geotechnical Seminar on Soil Improvement Methods*, Nanyang Technological Institute, Singapore, November 29, 1985.
- “Design of Geotextile Filters”, *Symposium on Environmental Geotechnics and Problematic Soils and Rocks*, Asian Institute of Technology, Bangkok, Thailand, December 3, 1985.
- “Geotextiles--New Materials in Waste Containment”, Session GT-14, *Geotech IV*, National Meeting, American Society of Civil Engineers, Boston, Massachusetts, October 29, 1986.
- “The Third International Conference on Geotextiles, Vienna: Foundations, Embankments, Slopes, and Retaining Walls”, Committee on Engineering Fabrics (A2K07), *66th Annual Meeting*, Transportation Research Board, Washington, D.C., January 12, 1987.
- “Activities of Committee A2K02 Related to Reinforced Earth Systems”, Committee on Mechanics of Earth Masses and Layered Systems (A2K05), *66th Annual Meeting*, Transportation Research Board, Washington, D.C., January 12, 1987.
- “Geotextile Filters”, Discussion Session No. 9, *Ninth European Conference on Soil Mechanics and Foundation Engineering*, Dublin, Ireland, September 2, 1987.
- “Fundamental Aspects of Pressuremeter Testing”, *Soil Mechanics Seminar*, sponsored by U.S. Air Force Office of Scientific Research, Massachusetts Institute of Technology, Cambridge, Massachusetts, September 15, 1987 (with J. L. Chameau).
- “Vertical Strip Drains”, *First GRI Seminar on Very Soft Soil Stabilization Using High Strength Geosynthetics*, Geosynthetics Research Institute, Drexel University, Philadelphia, Pennsylvania, October 22, 1987.
- “Introduction to Designing with Geotextiles”, Technical Session No. 2, *Second Annual Civil Engineering Professional Development Seminar*, Indiana Section, American Society of Civil Engineers, Purdue University, West Lafayette, Indiana, November 10, 1987.
- “Applications of the AASHTO-AGC-ARTBA Task Force 25 Geotextile Specifications: User’s Viewpoint and Experiences”, Session 71, *67th Annual Meeting*, Transportation Research Board, Washington, D.C., January 12, 1988.
- “Design and Construction Using Geotextiles”, Principal Lecturer, *Geotextiles*, Spring Seminar, ASCE Geotechnical Group, Seattle Section, American Society of Civil Engineers, Sea-Tac, Washington, April 9, 1988.
- “Bored Piles in the Northern USA”, Keynote Lecture, *First International Geotechnical Seminar on Deep Foundations on Bored and Auger Piles*, Ghent, Belgium, June 7, 1988.
- “Geosynthetics in Civil Engineering Construction”, Session 13 on *New Horizons in Construction Materials*, National Convention, American Society of Civil Engineers, St. Louis, Missouri, October 26, 1988.
- “Design and Construction of Embankments on Very Soft Soils”, 1989 Miles S. Kersten Lecture, *37th Annual Minnesota Geotechnical Conference*, University of Minnesota, St. Paul, Minnesota, March 3, 1989.
- “Geosynthetic Reinforced Walls”, Keynote Lecturer, *1989 ASCE Technical Seminar*, Maine Section, American Society of Civil Engineers, Augusta, Maine, March 14, 1989.
- “Failure of Two Walls Reinforced with Geosynthetics”, *Geosynthetics Forum*, University of Colorado at Denver, sponsored by the Colorado Department of Highways, Denver, Colorado, April 13, 1989.

- “Construction of a 40-ft High Geotextile-Reinforced Wall”, Committees on Geosynthetics (A2K07) and Transportation Earthworks (A2K02), *69th Annual Meeting*, Transportation Research Board, Washington D.C., January 9, 1990.
- “Successful Failure of a Full Scale Geosynthetic Reinforced Soil Model Wall”, Session 156, *69th Annual Meeting*, Transportation Research Board Washington, D.C. January 10, 1990 (co-authored and presented by B. R. Christopher).
- “Why Use Geosynthetics?”, Keynote Lecture, *1990 Conwed Geogrid Symposium*, Minneapolis, Minnesota, February 23, 1990.
- “Filter Criteria Based on Pore Size Distribution”, Discussion Session on Filtration, Panel Member, Co-Chair of Drainage Session, *Fourth International Conference on Geotextiles, Geomembranes, and Related Products*, The Hague, The Netherlands, May 30, 1990.
- “Design and Construction of Geosynthetically Reinforced Embankments on Very Soft Soils”, State of the Art Paper, Session 5, *International Reinforced Soil Conference*, Glasgow, Scotland, September 12, 1990.
- “Embankments on Soft Soils”, *Polymer Reinforced Soil Structures Regional Symposium*, Louisiana State University, Baton Rouge, Louisiana, October 24, 1990.
- “Geosynthetic Reinforced Soil Walls”, Session 222, *70th Annual Meeting*, Transportation Research Board, Washington, D. C., January 17, 1991.
- “Geosynthetics in Civil Engineering”, *Eleventh Annual USCOLD Lecture Series*, U.S. Committee on Large Dams, White Plains, New York, April 20, 1991.
- “A 12.6 m High Geosynthetic Reinforced Wall”, Discussion Session 4b, *Tenth European Conference on Soil Mechanics and Foundation Engineering*, Florence, Italy, May 30, 1991 (with T. M. Allen and B. R. Christopher).
- “Reinforced Soil Walls: An Overview”, *Soil Nailing and Reinforced Soil Walls*, Spring Seminar, ASCE Geotechnical Group, Seattle Section, American Society of Civil Engineers, University of Washington, Seattle, Washington, March 28, 1992.
- “Footings on Slopes: A Review”, Session 3G on Spread Footings on Slopes and Footings with Inclined/Eccentric Loads, *International Convention and Exposition*, American Society of Civil Engineers, New York, New York, September 16, 1992 (with D. M. White).
- “Geotechnical Engineering Education in North America”, Panel Discussion, Session 2.3 on Engineering Education, *13th International Conference on Soil Mechanics and Foundation Engineering*, New Delhi, India, January 7, 1994.
- “Stabilization of Soil Slopes”, Session 101 on Landslides: Investigation and Mitigation, *73rd Annual Meeting*, Transportation Research Board, Washington, D.C., January 11, 1994.
- “Filtration Behavior of Broadly Graded Cohesionless Tills”, Session H4, *Fifth International Conference on Geotextiles, Geomembranes, and Related Products*, Singapore, September 6, 1994 (with G. R. Fisher).
- “Performance of Geotextile Separators in Laboratory Models Tests”, Session H5, *Fifth International Conference on Geotextiles, Geomembranes, and Related Products*, Singapore, September 7, 1994 (with W.-S. Tsai).

- “Deformation Characteristics of Geosynthetic-Reinforced Soil”, Session R11, *Fifth International Conference on Geotextiles, Geomembranes, and Related Products*, Singapore, September 8, 1994 (with S. R. Boyle).
- “Geosynthetics in Drainage Systems”, Keynote Lecturer No. 3, *Ground Modification Seminar*, University of Technology, Sydney, New South Wales, Australia, September 12, 1994.
- “Design, Construction, and Performance of the Rainier Avenue Geosynthetic Reinforced Wall”, Session 49 on Geosynthetic Reinforced Soil Structures: Case Histories II, *Annual Convention & Exposition*, American Society of Civil Engineers, Atlanta, October 13, 1994.
- “U. S. State of Practice in Sampling and Testing of Overconsolidated Clays”, Session 33, *74th Annual Meeting*, Transportation Research Board, Washington, D.C., January 23, 1995 (with P. L. Mayne and M. T. Tumay; presentation by Mayne).
- “Stress-Strain and Strength Behavior of Staple Fiber and Continuous Filament Reinforced Sands”, Session 85, *74th Annual Meeting*, Transportation Research Board, Washington, D.C., January 24, 1995 (with S. D. Stauffer).
- “Introductory Remarks”, Panel I: Geotechnology: The Next Generation, *Third International Symposium on Environmental Geotechnology*, San Diego, California, June 12, 1995.
- “Retaining Walls Reinforced with Fabrics—From Broms (1977 and 1978) to the Present”, *Bengt. B. Broms Symposium on Geotechnical Engineering*, Singapore, December 14, 1995.
- “A Critical Review of Granular Soil Filter Retention Criteria”, *Geofilters '96* conference, Montreal, Quebec, Canada, May 30, 1996 (with G. R. Fischer).
- “Evaluating Geotextile Flow Reduction Potential Using Pore Size Distribution”, *Geofilters '96* conference, Montreal, Quebec, Canada, May 31, 1996. (with G. R. Fischer and B. R. Christopher)
- “Performance of Geosynthetic-Reinforced Slopes and Walls during the Northridge, California Earthquake”, Special Report to the Session on Performance of Earth Reinforcement Structures Under Earthquakes, *International Symposium on Earth Reinforcement (IS Kyushu 96)*, Fukuoka, Japan, October, 1996 (co-authored and presented by D. M. White).
- “Introduction to Ground Improvement Techniques and Prefabricated Vertical (“Wick”) Drains”, Keynote/Lead Speaker, *Seminar on Ground Stabilization and Seismic Remediation*, Oregon Section, ASCE, Portland, Oregon, November 6, 1996.
- “Performance of Geotextiles in Landfill Covers”, *Geosynthetics '97 Conference*, Long Beach, California, March 11, 1997 (co-authored and presented by L. J. Reitz)
- “Laboratory Model Tests to Evaluate Geotextile Separators In-Service”, *Geosynthetics '97 Conference*, Long Beach, California, March 13, 1997 (with W.-S. Tsai).
- “Recent Research on Geotextile Separators”, Discussion Session 5.2, *XIV International Conference on Soil Mechanics and Foundation Engineering*, Hamburg, Germany, September 10, 1997.
- “Reinforced Retaining Walls and Abutments”, *IX Jornadas Geotecnicas*, Sociedad Colombiana de Geotecnica, Bogota, Columbia, October 16, 1997.
- “Some Results from a Full Scale Field Test of Geotextile Separators”, Subcommittee on Geotextiles in Pavement Systems (A2K07-2), *77th Annual Meeting*, Transportation Research Board, Washington, D.C., January 11, 1998.

- “Research Versus Practice in Transportation Geotechnics: Can we Bridge the Gap? An Academic’s Perspective...” Session 241, *77th Annual Meeting*, Transportation Research Board, Washington, D.C., January 13, 1998 (presentation and panel member).
- “Rut Prediction for Roadways with Geosynthetic Separators”, Session 3B, *Sixth International Conference on Geosynthetics*, Atlanta, Georgia, March 26, 1998 (with W.-S. Tsai).
- “Retaining Walls Reinforced with Geosynthetics: The Non-Structural Solution to an Old Structural Problem”, Keynote Lecture, *8th International Colloquium on Structural and Geotechnical Engineering*, Ain Shams University, Cairo, Egypt, December 17, 1998.
- “Performance of Two Municipal Solid Waste Landfill Covers”, *Geosynthetics ’99 Conference*, Boston, Massachusetts, April 28, 1999 (co-authored and presented by C. A. Finley).
- “Geotextiles to Stabilize Thawing, Low-Bearing-Capacity Soils: A Comparison of Two Design Methods for Use by the U. S. Army”, *Geosynthetics ’99 Conference*, Boston, Massachusetts, April 28, 1999 (co-authored and presented by K. S. Henry).
- “Full Scale Geosynthetic Reinforced Retaining Walls: A Numerical Parametric Study”, *Geosynthetics ’99 Conference*, Boston, Massachusetts, April 30, 1999 (co-authored with W. F. Lee and T. M. Allen; presented by W. F. Lee).
- “Instrumentation for Geosynthetics”, *Geotechnical Field Instrumentation*, Spring Seminar, ASCE Geotechnical Group, Seattle Section, American Society of Civil Engineers, University of Washington, Seattle, Washington, April, 1, 2000.
- “Geosynthetic Capillary Barriers in Pavements”, ASCE Geo-Institute *Specialty Conference on Performance Confirmation of Constructed Geotechnical Facilities*, Amherst, Massachusetts, April 10, 2000 (co-authored with K. S. Henry and J. C. Stormont; presented by K. S. Henry).
- “Geotechnical Engineering Education in the United States”, *First International Conference on Geotechnical Engineering Education and Training*, Sinaia, Romania, June 12-14, 2000 (co-authored and presented by T. F. Zimmie).
- “Prefabricated Vertical Geocomposite Drains”, Special Lecture 1-2, *International Symposium on Geotechnics Kochi (ISGK2000)*, Kochi, Japan, September 24, 2000.
- “Status Report on Design Parameters for PVDs”, Panel Discussion on Standardization of Prefabricated Vertical Drain (PVD) Technology, *International Symposium on Geotechnics Kochi (ISGK2000)*, Kochi, Japan, September 25, 2000.
- “Prefabricated Vertical Geocomposite Drains”, *Proceedings of the 18th Central Pennsylvania Geotechnical Conference*, ASCE/PennDOT, Hershey, Pennsylvania. November 2, 2000.
- “Geosynthetic-Reinforced Retaining Walls—the Wall of the Future”, Key Note Lecture 4, *10th International Conference on Computer Methods and Advances in Geomechanics (10 IACMAG)*, Tucson, Arizona, January 9, 2001.
- “Flexible Wall Gradient Ratio Test”, *Geosynthetics 2001 Conference*, Portland, Oregon, February 12, 2001 (co-authored and presented by M. Harney).
- “Stress Distribution and Deformations Modular block Faced GRS Walls Subjected to Increasing Surcharge”, *Geosynthetics 2001 Conference*, Portland, Oregon, February 13, 2001 (co-authored with F. Saidin and R. Race; presented by F. Saidin).
- “Prefabricated Vertical Geocomposite Drains” and “Design and Construction of Geosynthetic Reinforced Embankments on Very Soft Soils”, *First ISSMGE International Lecture Tour*, Lagos, Nigeria, April

- 18-19, 2001.
- “The Geo-Institute at 4 1/2” and “Geosynthetics for Soil Reinforcement”, *24th Spring Seminar and 4th Geo Expo*, Los Angeles Section Geotechnical Group, American Society of Civil Engineers, Long Beach, California, April 25, 2001.
- “Geosynthetics for Soil Reinforcement”, Invited Lecture 2, Recent Developments of Ground Improvement, Symposium F (ISRDCI 2001), *International Symposia on Materials Science for the 21st Century (ISMS-21)*, 50th Anniversary Meeting of the Society of Materials Science Japan, Osaka, Japan, May 22, 2001.
- “Ultimate Bearing Capacity of Small Diameter Steel Pipe Piles”, *Geo-Odyssey 2001*, Blacksburg, Virginia, June 13, 2001, (co-authored with K. K. Haggard and G. Mann).
- “Results of Stone Column Tests near Seattle”, Discussion Session 4.3 on Recent Developments in Ground Improving, *XV International Conference on Soil Mechanics and Geotechnical Engineering*, Istanbul, Turkey, August 30, 2001.
- “Welcome--on Behalf of the Geo-Institute” *The Ladd Symposium*, Cambridge, Massachusetts, October 5, 2001.
- “Capacity Analysis of Large Diameter Drilled Shafts with Defects”, *International Deep Foundations Congress 2002*, Orlando, Florida, February 15, 2002 (co-authored with K. Petek, and C. Felice; presented by C. Felice).
- “Prefabricated Vertical Geocomposite Drains”, *50th Minnesota Geotechnical Conference*, St. Paul, Minnesota, February 22, 2002.
- “Geosynthetic-Reinforced Retaining Structures--the Standard Wall of the Future?”, *2002 Spring Technical Conference*, Wisconsin Section, ASCE, Oconomowoc, Wisconsin, March 14, 2002.
- “Geosynthetic-Reinforced Retaining Structures: The Standard Wall of the Future?”, *Proceedings of the 19th Central Pennsylvania Geotechnical Conference*, ASCE/PennDoT, Hershey, Pennsylvania, May 14, 2002.
- “Teaching Research—The Successful legacy of RJK,” Raymond J. Krizek Commemorative Symposium, Northwestern University, Evanston, Illinois, August 3, 2002.
- “Influence of Earthquake Characteristics on Seismic Performance of Geosynthetics Reinforced Retaining Walls”, Symposium on Soil/Ground Improvement and Geosynthetic Applications, Bangkok, Thailand, 12-13 December 2002 (co-authored with S.-S. Lin and W.-F. Lee; presented by W. F. Lee).
- “Geosynthetics Organizations”, 16th GSI/GRI Conference, Philadelphia, Pennsylvania, December 17, 2002.
- “Geosynthetics for Soil Reinforcement”, Applications of Earth retaining Systems and Geosynthetic Materials, Ohio River Valley Soils Seminar, Lexington, Kentucky, September 19, 2003.
- “Long Term Gradient Ratio Tests”, Session 3E, 56th Canadian Geotechnical Conference and 2003 Nags Conference, Winnipeg, Manitoba, Canada, September 29, 2003, (Co-Authored with K. S. Henry and presented by K. S. Henry)
- “Behavior of a Geosynthetic-Reinforced Back-to-Back Wall”, Session 7E, 56th Canadian Geotechnical Conference, 4th Joint IAH-CNC/CGS Conference, and 2003 NAGS Conference, Winnipeg, Manitoba, Canada, September 30, 2003, (Co-Authored with F. Saidin; presented by F. Saidin). (This paper won first place in the NAGS Student Paper competition.)

- “Geosynthetics R&D--The “Early” Days (1960s to Circa 1985)”, Koerner Research Symposium, Drexel University, Philadelphia, Pennsylvania, September 13, 2004.
- “Geosynthetics for Soil Reinforcement” Keynote Lecture, International Conference on Geotechnical Engineering, University of Sharjah, UAE, October 6, 2004.
- “Geosynthetics in Roads and Highways” Fall 2004 Geosynthetics Conference, Korea Geosynthetics Society, Seoul, Korea, December 1, 2004.
- “Geosynthetic-Reinforced Retaining Structures: The Standard Wall Of The Future?” Keynote Lecture, Fifth International Geotechnical Conference, Cairo University, Cairo, Egypt, January 12, 2005.
- “FWD Analysis of Pavement Sections with Geotextile Separators”, Geo-Frontiers 2005 Conference, Austin, Texas, January 26, 2005 (Co-authored with B. M. Collins, and J. P. Mahoney; presented in a poster session by R. D. Holtz).
- “Rapid Assessment of Geotextile Clogging Potential Using the Flexible Wall Gradient Ratio Test” GRI-18 Conference, Austin, Texas, January 26, 2005 (Co-authored with T. D. Bailey, and M. D. Harney; presented by T D. Bailey).
- “Geosynthetics in Transportation Engineering – New Solutions to Old Problems”, Third G. A. Leonards Lecture, Purdue Geotechnical Society Workshop, Purdue University, West Lafayette, Indiana, May 16, 2005.
- “Penetration Resistance and the Bearing Capacity of Small-diameter Steel Piles”, Technical Session 2g Pile Foundations (I), 16th International Conference on Soil Mechanics and Geotechnical Engineering, Osaka, Japan, September 14, 2005 (Co-authored with G. Vestberg and G. Mann; presented by G. Vestberg).
- “Case History: Failure of the Geotextile Turbidity Curtain”, NAGS2005/GRI-19 Cooperative Conference, Las Vegas, Nevada, December 15, 2005 (Co-authored with M. D. Harney; presented by M. D. Harney).
- “Mechanical Properties of Geotextile Reinforcement, 30 Years After Installation”, Committee AFS70 on Geosynthetics, 85th Annual Meeting of the Transportation Research Board, January 23, 2006 (Co-authored with M. D. Harney; presented by M. D. Harney).
- “Geosynthetics for Soil Reinforcement”, 23rd Annual Geotechnical Seminar GEO-Omaha 2006, February 17, 2006, Omaha, Nebraska.

Professional Licenses

Registered Civil Engineer, California, No. CE 15070 (by examination, 1964)

Professional Engineer, Indiana, No. PE17973 (by comity, 1978)

Professional Society Memberships

American Society of Civil Engineers (Associate Member, 1964; Member, 1975; Fellow, 1988; Life Member, 2003-present)

Geo-Institute of the American Society of Civil Engineers (1996-present)

International Society for Soil Mechanics and Foundation Engineering (1966-present)

Transportation Research Board (Student Member, 1966-1973; Individual Associate, 1974-present)

American Society for Testing and Materials (Student Member, 1968-1970; Personal Member, 1978-

present)
 Association of Engineering Geologists (Affiliate Member, 1988-present)
 American Society for Engineering Education (1979-present)
 U.S. Universities Council on Geotechnical Engineering Research (1985-present)
 International Geosynthetics Society (1986-present)
 North American Geosynthetics Society (1986-present)
 International Association of Drilled Shaft Contractors (Technical Affiliate, 1987-92; 1994-present)
 Professional Firms Practicing in the Geosciences (Faculty Member, 1993-present)
 Underground Technology Research Council (1981-90)
 International Association of the Study of Clays (AIPEA) (1968-present)
 Swedish Geotechnical Society (1972-present; Attaché for the USA, 1996-1998)
 British Geotechnical Society (1977-present)
 Vancouver Geotechnical Society (1991-present)
 CUREE, Consortium of Universities of Research in Earthquake Engineering, Faculty of Admitted Universities
 (2001-present)
 International Association for Computer Methods and Geomechanics (2001-present)

Professional Society and Other Service

American Society of Civil Engineers (ASCE):

Society Committees:

Committee on Metrification, 1982-1995
 Member of Control Group, 1990-1995
 Book Selection Committee, 1988-1996
 Council of Institute Leaders, 2000-2001
 Task Committee on the Institutes, 2000-2001

Geo-Institute of ASCE:

Board of Governors, 1996-present
 Treasurer, 1998-1999
 Vice President, 1999-2000
 President, 2000-2001
 International Secretary, 2001-

Technical Coordination Council, Chair, 1996-1998
 International Activities Task Force and Council, Chair, 1998-2000; 2001-
 Desai-Prakash Task Force, Chair, 1998
 Magazine Task Force, 1998-1999
 Nominations and Elections Committee
 Member, 1999
 Chair, 2000
 NAGS/Geo-Institute Task Force, 2001-
 Task Force to Investigate Establishing a Trust Fund, 2003.
 G-I Investment Committee (Ex-Officio), 2003-
 Task Force on Possible National Workshop on Geo-Mega Issues and Challenges, 2005-
 Task Force on MSE Wall Design, 2005-

Geotechnical Engineering Division:

Publications Committee, 1976-1991; 1992-1994
 Member of Control Group, 1980-1988

Chair and Editor, *Journal of Geotechnical Engineering*, 1982-1984
 Editor for Discussions and Closures, 1992-1994

Committee on Awards, 1982-1984; 1994-1998
 Member of Control Group, 1982-1984

Committee on Definitions and Standards, 1982-1986
 Member of Control Group, 1982-1986
 Secretary, 1985-1986

Committee on Soil Improvement and Geosynthetics, 1986-
 Member of Control Group, 1988-93; 1996-1997

Ad hoc Committee on Rescuing Technical Materials, 1990-.

Materials Engineering Division:

Materials Application Committee, 1987-1993.

Indiana Section, Central Branch:

Treasurer, 1979-1981
 Vice President, 1981-1982
 President, 1982-1983

Seattle Section, Geotechnical Group:

Vice Chair, 1989-1990
 Chair, 1990-1991
 Spring Seminar Planning Committee, 1989-94, 1996-present
 Coordinating Committee, 1989-present
 Education Committee, 2005-

Service to Specific ASCE Activities and Events:

State of the Art and General Reporter and Chair of session on "Special Applications", *Symposium on Earth Reinforcing*, Annual Convention, ASCE, Pittsburgh, Pennsylvania. April 27, 1978.

Panel Moderator, Session A-4 on "Soil Reinforcement and Improvement", *Geotechnical Design and Construction Conference*, ASCE, San Francisco, California, January 8, 1981.

Chair of Review Task Force and Co-Editor of Proceedings, *Symposium on Cone Penetration Testing*, ASCE, St Louis, Missouri, October 27, 1981.

Session Organizer, Proceedings Editor, and Co-chair of one-day session on "Geosynthetics for Soil Improvement", Spring Convention, ASCE, Nashville, Tennessee, May 9, 1988.

Member of Organizing Committee and Chair of Session 11b on "Soil Reinforcing", ASCE Specialty Conference on *Grouting, Soil Improvement, and Geosynthetics*, New Orleans, February 27, 1992.

Organizer, Sub-Editor, and Moderator for Session 8A on "Earth Reinforcement Systems", *Geotechnical Engineering Congress 1991*, ASCE Specialty Conference, Boulder, Colorado, 1991.

Session Moderator, ASCE Geotechnical Group Spring Seminar on "*Geology of Puget Sound and Landslide Hazards*", University of Washington, Seattle, Washington, April 6, 1991.

Moderator, Session 4.7 “Settlement of Shallow Foundations II”, *Settlement '94*, ASCE Specialty Conference, College Station, Texas, June 16, 1994.

Moderator of session on Case Histories (B), “*Uncertainty '96*”, ASCE Specialty Conference, Madison, Wisconsin, August 3, 1996.

Chair of workshop session on “Geomembrane Installation”, “*Geo-Logan*”, First Conference of the Geo-Institute of the American Society of Civil Engineers, Logan, Utah, July 19, 1997.

Member of Organizing Committee and Chair of Session on Soil Improvement I, 1998 Specialty Conference on Geotechnical Earthquake Engineering and Soil Dynamics (Geo-Institute), Seattle, Washington, August 5, 1998.

Presided at Plenary Session on Presentation of the Ralph. B. Peck Medal to Don U. Deere, Third National Conference of the Geo-Institute of ASCE, Geo-Engineering for Underground Construction, Urbana, Illinois, June 14, 1999.

Chair of session on Geosynthetics and Member of Panel on “Geosynthetics: Past, Present, and Future”, Fourth National Conference of the Geo-Institute of ASCE, Geo-Denver 2000, Denver, Colorado, August 5-8, 2000.

Member of Organizing Committee for the geotechnical sessions, Annual Convention, American Society of Civil Engineers, Seattle, Washington, October 19-21, 2000.

Member, Organizing Committee for Geo-Frontiers 2005 (Geo-Institute 2005 Congress and Geosynthetics '05 Conference), Austin, Texas, January 24-26, 2005.

Member, Organizing Committee for Field Measurements in GeoMechanics (FMGM 2007), Boston, Massachusetts, September 23-26, 2007.

International Society for Soil Mechanics and Geotechnical Engineering (ISSMGE):

(Formerly: International Society for Soil Mechanics and Foundation Engineering--ISSMFE)

Committee on Soil Sampling, Advisor, 1977-1981

Special Committee on “Model Library of Geotechnical Engineering Literature”, 1986-present

Technical Committee (TC 31) on Geotechnical Education, 1994-present

U.S. National Society of the ISSMGE, Librarian, 1988-present

U.S. National Society of the ISSMGE, Secretary, 2001-

Panel Member, Session 2.3 on Engineering Education, *13th International Conference on Soil Mechanics and Foundation Engineering*, New Delhi, India, January 7, 1994.

Panel Member, Discussion Session 5.2 on “Geosynthetics”, *XIV International Conference on Soil Mechanics and Foundation Engineering*, Hamburg, Germany. September 10, 1997.

Chair, Invited Lecture on Geophysics, GeoEng 2000—An International Conference on Geotechnical and Geological Engineering, Melbourne, Australia, November 24, 2000.

Co-lecturer, First ISSMGE International Lecture Tour, Lagos, Nigeria, April 18-19, 2001; Session Chair, April 19, 2001.

Discussion Leader, Session 4.3 on Recent Developments in Ground Improving, XV International Conference on Soil Mechanics and Geotechnical Engineering, Istanbul, Turkey, August 30, 2001.

Member, Review Panel for abstracts and papers for “Soil & Rock America”, the 12th PanAmerican. Conf.

on Soil Mechanics and Geotechnical Engineering, Cambridge, Massachusetts, June 2003.

Chair, iYGEC session (3rd International Young Geotechnical Engineer Conference), 16th International Conference on Soil Mechanics and Geotechnical Engineering, Osaka, Japan, September 15, 2005.

American Society for Testing and Materials:

Committee D18 on Soil and Rock, 1978-present
 Sub-Committee D18.02, Sampling and Field Testing, 1978-present
 Sub-Committee D18.03, Texture, Plasticity and Density of Soils, 1978-present
 Sub-Committee D18.05, Structural Properties of Soils, 1978-present
 Committee D35 on Geosynthetics, 1978-present
 Sub-Committee D35.01, Task Group on Geotextile Stiffness, 1983-1990
 Sub-Committee D35.03, Task Group on Porimetry, 1984-present
 Sub-Committee D35.91, Editorial, 1983-1988

U.S. Universities Council on Geotechnical Engineering Research:

Member, Interim Steering Committee, 1985-1987
 Member, Executive Committee, 1987-1989
 Member, Nominating Committee, 1992, 1994, and 1996.

Member of Organizing Committee and Chair of Research Summary Sessions II and IV and Session on Opportunities for Geotechnical Engineering Research, Session II, Workshop on *Geotechnical Engineering Research at U.S. Universities*, University of Houston, Houston, Texas, March 1-4, 1987.

Transportation Research Board:

Group 2 Council, 1991-1996
 Committee on Scope, Organization, and Function, 1991-6, Chair, 1994-1996
 Task Force on Technical Liaison with Other Organizations, 1991-1994

Section L, Geology and Properties of Earth Materials
 Chair, 1991-1996

Committee A2K02, Transportation Earthworks, 1976-94
 Chair, 1981-1988
 Committee A2K01, Soil and Rock Instrumentation, 1977-1988
 Committee A2L02, Soil and Rock Properties, 1982-1998
 Member Emeritus, 1999-
 Committee A2K07, Geosynthetics, 1981-1995
 Chair, Subcommittee on Alternate Research and Technology Transfer Resources, 1986-1995
 Task Force A2T61, Landslides, 1990-1995

Liaison to the Geotechnical Board, National Research Council, 1990-1994

Organizer and Chair of Session 202 on “Properties of Overconsolidated and Stiff Soils”, 66th *Annual Meeting*, Transportation Research Board, Washington, D.C., January 15, 1987.

Co-Organizer of Session 71 on “Applications of the AASHTO-AGC-ARTBA Task Force 25 Geotextile Specifications: User’s Viewpoint and Experiences”, 67th *Annual Meeting*, Transportation Research Board, Washington, D.C., January 12, 1988.

Co-organizer and Co-Chair of Session 90 on “Design and Application of Prefabricated Vertical Drains” and Session 194, “The Effects of Geosynthetics on Soil Properties”, *67th Annual Meeting*, Transportation Research Board, Washington, D.C. January 13-14, 1988

Chair of Session 55 on “Mechanically Stabilized Backfill (MSB), Part 2: Ownership Roles in Design and Construction Support”, *74th Annual Meeting*, Transportation Research Board, Washington, D.C., January 23, 1995.

Panel Member, Session 241 on “Research vs. Practice in Transportation Geotechnics: Can we Bridge the Chasm?”, *77th Annual Meeting*, Transportation Research Board, Washington, D.C., January 13, 1998.

International Association for Computer Methods and Geomechanics:

Board Member, 2005-

Association of Engineering Geologists:

Washington State Section, Education Committee, Co-Chair, 1989-93

International Geosynthetics Society:

IGS Council, Member, 1994-1998

Education Committee, 1994-present

Chair, 1994-1996

Mercer Lecturer Selection Committee, 1997-98

Second International Conference on Geotextiles, Las Vegas, Nevada, August 2-6, 1982

Member of Program Selection Committee

State of the Art Reporter on “Walls and Foundations; Slopes and Embankments”

Fourth International Conference on Geotextiles, Geomembranes, and Related Products, The Hague, The Netherlands, May 28-June 1, 1990

Panel Member, Discussion Session on Filtration, May 31, 1990

Co-Chair of Session on Drainage, May 31, 1990

Fifth International Conference on Geotextiles, Geomembranes, and Related Products, Singapore, September 5-9, 1994.

Member, Abstract Review Panel

Co-Chair of Session 3 on Dams and Dikes, September 6

Co-Chair of Session R12 on Seismic Design of Walls and Slopes, September 8.

Panel Member, Discussion Session on Filtration and Drainage, September 9.

Sixth International Conference on Geosynthetics, Atlanta, March 25-29, 1998:

Member, International Advisory Board

Member, Abstract Review Panel

Co-Chair and Sub-Editor of Workshop 6 on “Triaxial Testing of Reinforced Soil”, March 27, 1998

Panelist, Panel Session on “Geotechnical/Hydraulic Applications: Users’ Questions—Industry’s Response”, March 28, 1998

Seventh International Conference on Geosynthetics, 22-27 September 2002, Nice, France:

Member, International Advisory Board

Member, Abstract and Paper Review Panel

Eighth International Conference on Geosynthetics, September 18-22, 2006, Yokohama, Japan:
Member, International Paper Selection and Program Committee

North American Geosynthetics Society:

Executive Vice President, 1986-1989
Inter-Society Liaison, Chair, 1987-1989
President-Elect, 1989-1991
Chair, Nominations Committee, 1990
Chair, Ad hoc Bylaws Committee, 1990
President, 1991-1993
Immediate Past President, 1993-1995
Chair, Awards Committee, 1993-1996
Past Presidents Committee, 1993-present
Chair, 1993-1995

Co-Chair of Session 6A on “Foundations and Railways”, *Geosynthetics '89* Conference, San Diego, California, February 23, 1989.

Panel Member of Session on “Failures and Solutions”, *Geosynthetics '91* Conference, Atlanta Georgia, February 27, 1991.

Co-leader of session on “Pavement Systems I”, *Geosynthetics '97* Conference, March 13, 1997.

Member of Organizing Committee, *Geosynthetics '01* Conference, Portland, Oregon, February 12-14, 2001.

Member, NAGS/Geo-Institute Task Force, 2001-4.

Chair, Education Committee, and member of Advisory Committee, *Geosynthetics '07 Conference*, Washington, DC, January 16-19, 2007.

Underground Technology Research Council

Chair, Ground Strengthening Committee, 1981-1985

Service to Other Conferences, Workshops, Etc.

Member, Steering Committee, *First Indian Geotextile Conference*, Bombay, India, 1987-1988.

International Advisory Group, *International Symposium on Theory and Practice of Soil Reinforcement*, Kyushu, Japan 1987-1988.

Panel Member of Discussion Session on “Integrity Testing”, *First International Geotechnical Seminar on Deep Foundations on Bored and Auger Piles*, Ghent, Belgium, June 9, 1988.

Chair, Session 3 on “Foundation, Excavations and Retaining Structures”, *International Symposium on Hard Soils and Soft Rocks*, Athens, Greece, September 21, 1993.

Chair, Session 10, *Geofilters '96* Conference, Montreal, Québec, Canada, May 31, 1996.

Session Co-Chair and Panelist, *Indo-US Workshop on Ground Improvement Using Geosynthetics*, Central Road Research Institute and NSF (through the University of New Orleans), New Delhi, India, March 27, 1997.

Member of Scientific Committee, *Geofilters 2000*, Warsaw, Poland, 5-7 June 2000.

Member of Organizing Committee, *Soft Ground Technology*, United Engineering Foundation Conference, Noordwijkerhout, The Netherlands, May 28-June 2, 2000.

Member, International Advisory Board, *International Conference on New Developments in Soil Mechanics and Geotechnical Engineering*, Lefkoşa, TRNC, 29 -31 May 2003.

Member, Steering Committee, *Fifth International Conference on Case Histories in Geotechnical Engineering*, New York New York, 13-17 April 2004.

Reviews made

BOOKS

	Number
ASCE Book Selection Committee	19
ASCE Book Selection Committee (book proposals)	3
Chapman & Hall, Inc.	1
North American Geosynthetics Case Studies Book	11 case histories
John Wiley & Sons	3
Three chapters of "Consolidation", by R. E. Gibson and R. L. Schiffman, 1990-1991	1
McGraw-Hill	1
CRC Press	1

JOURNALS

ASCE <i>Journal of Geotechnical Engineering</i>	132
As Editor of discussions, Oct. 92-Oct.94	167 discussions and closures
ASCE <i>Journal of Transportation Engineering</i>	1
ASCE <i>Journal of Engineering Mechanics</i>	2
ASCE <i>Journal of Infrastructure Systems</i>	1
ASCE <i>International Journal of Geomechanics</i>	1
ASTM <i>Geotechnical Testing Journal</i>	38
<i>Soil and Foundations</i> (Japan)	2
<i>Engineering Geology</i>	1
<i>Journal of the Soil Science Society of America</i>	3
<i>Geotextiles and Geomembranes</i> (UK)	19
<i>Geosynthetics International</i>	12
<i>Journal of Marine Resources and Geotechnology</i>	2
<i>International Journal of Numerical and Analytical Methods in Geomechanics</i>	3
<i>Textile Research Journal</i>	2
<i>Transportation Research Record</i>	43
<i>Canadian Geotechnical Journal</i>	6
<i>Environmental and Engineering Geology</i>	2
<i>Iranian Journal of Science & Technology</i>	1

CONFERENCE PAPERS

ASCE Specialty Conferences & National Conventions	66
Second International Congress on Environmental Geotechnics	5
Fifth International Conference on Geosynthetics, Singapore	37 Abstracts in two rounds...
Geo-Institute Conference on Geotechnical Earthquake Engineering and Soil Dynamics	35
Geosynthetics '91 Conference	2
Geosynthetics '93 Conference	1
Geosynthetics '95 Conference	3
Geosynthetics '97 Conference	72
6 th Intl conf on Geosynthetics, Atlanta	?? abstracts + ?? papers??
7 th Intl conf on Geosynthetics, Nice	?? abstracts + 7 papers
8 th Intl Conf on Low Volume Roads	1
“Soil & Rock America”, the 12 th PanAmerican. Conf. on Soil Mechanics and Geotechnical Engineering, MIT	18 abstracts + 3 papers
International Conference on New Developments in Soil Mechanics and Geotechnical Engineering, Lefkoşa, TRNC	2 abstracts 8 + 2 papers
Geofilters '04 Conference, Johannesburg, South Africa	3 papers
11 th International Conference of IACMAG, Torino, Italy	7 papers
8 th International Conference on Geosynthetics, Yokohama, Japan	43 abstracts + 5 papers

PROPOSALS

Hong Kong Research Grants Council	16
University of Hong Kong	1
National Science Foundation 22 betw 76-90	65
National Science Foundation-EPSCoR, S. Dakota	3
US Environmental Protection Agency	2
Oregon State University--Sea Grant Program	2
Natural Sciences and Engineering Research Council of Canada	6
UW Royalty Research Fund	1

PROMOTION REVIEWS

		Rank
Thomas F. Zimmie, Rensselaer Polytechnic Institute	1975 and 1976	Associate with tenure
C. K. Shen, University of California, Davis	1978	Full
Charles W. Schwartz, University of Maryland	1983	Associate with tenure
Bengt H. Fellenius, University of Ottawa, Ontario	1983	Full
Richard Fragaszy, Washington State University	1985	Tenure
William Wolfe, Ohio State University	1985	Associate with tenure
T. H. Wu, University of Colorado, Denver	1986	Associate with tenure
Sunirmal Banerjee, University of Washington	1986	Associate with tenure

Peter J. Bosscher, University of Wisconsin-Madison	1986 and 1987	Associate with tenure
Ilan Juran, Louisiana State University	1986	Tenure
H. A. Al-Sanad, Kuwait University	1987	Associate
Robert C. Bachus, Georgia Institute of Technology	1987	Associate with tenure
Charles R. Ullrich, University of Louisville	1987	Associate with tenure
Thomas C. Kinney, University of Alaska-Fairbanks	1988	Full
Jean-Lou Chameau, Purdue University	1988	Full
Richard J. Finno, Northwestern University	1988	Associate
Ilan Juran, Louisiana State University	1989	Full
C. Vipulandan, University of Houston	1989	Associate with tenure
Wayne A. Charlie, Colorado State University	1989	Full
Harry E. Stewart, Cornell University	1989	Associate with tenure
Jerry D. Higgins, Colorado School of Mines	1989	Associate with tenure
Thomas F. Wolf, Michigan State University	1991	Associate with tenure
J. Ludwig Figueroa, Case Western University	1991	Tenure
Richard J. Bathurst, Royal Military College of Canada	1991	Full
Carlton Ho, Washington State University	1991	Associate with tenure
An-Bin Huang, Clarkson University	1991	Associate with tenure
Dana N. Humphrey, University of Maine	1991	Associate with tenure
Roman D. Hryciw, University of Michigan	1991	Associate with tenure
Sunil Sharma, University of Idaho	1991 and 1992	Associate with tenure
Takaaki Kagawa, Wayne State University	1991	Full
C. H. Juang, Clemson University	1991	Full
Thomas F. Zimmie, Rensselaer Polytechnic Inst.	1991	Full
Adnan A. Basma, Jordan University of Science and Technology	1992	Associate
Nagaratnam Sivakugan, Sultan Qaboos University	1992	Assistant
Dov Leshchinsky, University of Delaware	1992	Full
Phillippe L. Bourdeau, Purdue University	1992	Associate with tenure
Robert L. Liang, University of Arkansas	1992	Full
Vinod K. Garga, University of Ottawa, Canada	1992	Full
Timothy D. Stark, University of Illinois	1993	Associate with tenure
Jonathan T. H. Wu, Univ. of Colorado at Denver	1993	Full
R. Jonathan Fannin, University of British Columbia	1993	Associate with tenure
Evert Lawton, University of Utah	1993	Associate with tenure
Manjriker Gunaratne, University of South Florida	1994	Associate with tenure
J. N. Mandal, IIT Bombay, India	1994	Full
Don J. DeGroot, University of Massachusetts	1994	Associate with tenure
Manfred R. Hausman, Univ. of Technology, Sydney, Australia	1994	Full
Dennes T. Bergado, Asian Institute of Technology, Bangkok, Thailand	1995	Full
Jonathan D. Bray, Univ. of California, Berkeley	1995	Associate with tenure
Y. Grace Hsuan, Drexel University	1996 and 1997	Associate with tenure
Paul W. Mayne, Georgia Institute of Technology	1995	Tenure
Jean Benoit, University of New Hampshire	1995	Full
Mario Manassero, Technical University of Turin, Italy	1996	Associate Professor
B. Muhunthan, Washington State University	1996	Associate with tenure
Shobha Bhatia, Syracuse University	1996	Full
Dana N. Humphrey, University of Maine	1996	Full
Imad Al-Qadi, Virginia Polytechnic and St. Univ.	1997	Full
Roman Hryciw, University of Michigan	1997	Full

Deborah Goodings, University of Maryland	1998	Full
Robert Gilbert, University of Texas, Austin	1998	Associate with Tenure
T. Thevanayagam, State University of New York at Buffalo	1998	Associate with Tenure
Scott Merry, University of Utah	1998	Contract renewal
Timothy D. Starke, University of Illinois	1998	Full
Paul W. Mayne, Georgia Institute of Technology	1999	Full
Sibel Pamucku, Lehigh University	1999	Full
Craig Benson, University of Wisconsin	2000	Full
Manjriker Gunaratne, University of South Florida	2000	Full
Mohammad Gabr, North Carolina State University	2000	Full
Radoslaw Michaelowski, University of Michigan	2001	Tenure
Jorge Zornberg, University of Colorado	2001	Contract renewal
John Bowders, University of Missouri-Columbia	2002	Full
George Filz, Virginia Tech	2002	Full
J. Erik Loehr, University of Missouri-Columbia	2003	Associate with tenure
James Martin, Virginia Tech	2003	Full
Charles W. W. Ng, Hong Kong University of Science and Technology	2003	Full
Robert Gilbert, University of Texas, Austin	2004	Full
Sibel Pamucku, Lehigh University	2004	Full
Jorge Zornberg, University of Texas, Austin	2005	Associate with tenure

AWARDS (Candidates reviewed)

A. B. Huang, Clarkson University	1989	NSF Presidential Young Investigator
Sunil Sharma, University of Idaho	1989	NSF Presidential Young Investigator
Teresa Taylor, Virginia Polytechnic Institute	1990	NSF Presidential Young Investigator
Mark A. Nearing, University of Georgia	1990	NSF Presidential Young Investigator
Paul W. Mayne, Georgia Institute of Technology	1990	NSF Presidential Young Investigator
Carlos Santamarina, Polytechnic University	1990	NSF Presidential Young Investigator
C. Vipulanandan, University of Houston	1991	U of H Research Excellence Award
Phillippe L. Bourdeau, Purdue University	1992	NSF Presidential Young Investigator
Glenn J. Rix, Georgia Institute of Technology	1992	NSF Presidential Young Investigator
R. D. Hryciw, University of Michigan	1992	Research Excellence Award
Patrick J. Fox, Purdue University	1994	NSF Presidential Young Investigator
Steven L. Kramer, University of Washington	1995	ASCE Huber Research Prize
C. Vipulanandan, University of Houston (x4)	95, 97, 98, 99	ASCE Huber Research Prize
Patrick J. Fox, Purdue University	1997	ASCE Arthur Casagrande Award
T. D. Stark, University of Illinois (x2)	97,98	ASCE Huber Research Prize
D. N. Humphrey, University of Maine	1997	Distinguished Professor
B. Muhunthan, Washington State University	1998	NSF Int'l Research Fellowship
C. Vipulanandan, University of Houston	1998	Excellence in Research and Scholarship
N. R. Morgenstern	2000	Gerhard Herzberg Canada Gold Medal for Science and Engineering
R. Bathurst, Royal Military College of Canada	2001, 2002	RMC Prize for Excellence in Research
M. W. O'Neill, University of Houston	2001, 2002	Excellence in Research and Scholarship
J. F. Labuz, University of Minnesota	2003	George W. Taylor/IT Alumni Society

R. K. Rowe, Queens University	2004	Service Award. Gerhard Herzberg Canada Gold Medal for Science and Engineering
R. K. Rowe, Queens University	2005	Gerhard Herzberg Canada Gold Medal for Science and Engineering
M. B. Jamiolkowski, Technical University of Turin	2005	2006 R. B. Peck Award, Geo-Institute of ASCE

Review Panels

Review Panel Member, NSF Research Equipment Proposals for Geotechnical Engineering, April 30, 1980.

Member of Expert Task Group for Innovations Deserving Exploratory Analysis (IDEA) program of the Strategic Highway Research Program (SHRP), Washington, D. C., October 20, 1987 (11 proposals).

Member of review panel for Unsolicited Individual Investigator Awards, Geomechanics Program, NSF, Washington, DC, January 16-17, 1992 (28 proposals).

Member of review panel for Earthquake Hazards Mitigation Program, NSF, Arlington, VA, September 5-6, 1996 (16 proposals).

Member of review panel for CAREER awards, NSF, Arlington, VA, November 15-16, 2001, (23 proposals).

Member, Graduate Program Review Team, Department of Civil and Environmental Engineering, Virginia Polytechnic Institute and State University, Blacksburg, Virginia, May 5-6, 2003.

Awards and Honors

Walter P. Murphy Scholarship, Northwestern University, 1966-67; 1968; 1969-70

Royal E. Cabell Fellowship, Northwestern University, 1968-71

Chi Epsilon, Member, 1959

Sigma Xi, Associate Member, 1969-76; Member, 1977

Order of the Engineer, 1980

High Level Scholarship from Ministry of Foreign Affairs, Government of France, for "Research in Soil Mechanics", Summer 1984

M. S. Kersten Lecturer, Minnesota Geotechnical Conference, University of Minnesota, St. Paul, Minnesota, 1989

Distinguished Lecturer, Department of Civil Engineering, Cullen College of Engineering, University of Houston, Houston, Texas, 1989

Distinguished Lecturer, Kentucky Geotechnical Engineering Group, Louisville, Kentucky, 1996

Elected Member Emeritus, Committee A2L02, Soil and Rock Properties, 1999

Cross-Canada Lecturer, Canadian Geotechnical Society, 1999

38th Ardaman Lecturer, University of Florida, 1999

Excellent Contributions Award (USA), International Association for Computer Methods and Advances in Geomechanics, 2001

9th Spencer J. Buchanan Lecture, Texas A & M University, 2001.

J. S. Braun/Braun Intertec Visiting Professor, Department of Civil Engineering, University of Minnesota, Minneapolis, 2002

R.M. Quigley Award for Best Paper in the Canadian Geotechnical Journal (Honorable Mention, with D.T. Bergado, A.S. Balasubramaniam, R.J. Fannin, and R.D. Holtz) 2003

8th R. L. Schiffman '44 Lecturer, Cornell University, 2003.

Sir Casimir Gzowski Medal, 2003 (Honorable Mention, with T. M. Allen, R. J. Bathurst, D. Walters, and W. F. Lee). (The medal is awarded annually for the best technical paper on a civil engineering subject

in the areas of surveying, structural engineering and heavy construction. This is the highest medal of the Canadian Society of Civil Engineering for a Technical Paper, and there is one winner and one honorable mention each year.)

3rd G. A. Leonards Lecture, Purdue University, May 16, 2005

Teaching

Courses taught at California State University, Sacramento, California (1964-1966) all undergraduate:

Course	Semester	No of Students	Course Title	Avg of Items 1-4
			Soil Mechanics	
			Soil Mechanics Laboratory	
			Concrete Laboratory	
			Strength of Materials Laboratory	
			Highway Engineering	
			Surveying Laboratory	

Courses taught at Purdue University, West Lafayette, Indiana (1973-1988):

* indicates new courses developed by R. D. Holtz

Course	Semester	No of Students	Course Title	Avg of Items 1-4
CE 380	A73	23	Soil Mechanics (UG)	
CE 481	A73	60	Foundations and Earth Structures (UG)	
		(shared)		
CE 499A	S74	43	Geotechnical Engineering I (UG)	
CE 499D	S74	14	Geotechnical Engineering II (UG)	
CE 499A	A74	55	Geotechnical Engineering I (UG)	
CE 681	A74	14	Engineering Properties of Soils (G)	
		(shared)		
CE 383	S75	58	Geotechnical Engineering I (UG)	
CE 383	A75	49	Geotechnical Engineering I (UG)	
		(shared)		
CE 681	A75	13	Engineering Properties of Soils (G)	
CE 383	S76	65	Geotechnical Engineering I (UG)	
		(shared)		
CE 498	S76	114	Civil Engineering Design Project (UG)	
		(shared)		
CE 383	A76	58	Geotechnical Engineering I (UG)	
		(shared)		
CE 681	A76	20	Engineering Properties of Soils (G)	
CE 383	S77	75	Geotechnical Engineering I (UG)	
CE 689	S77	15	Selected Topics in Soil Mechanics (G):	
		(shared)	Deep Foundations and In Situ Testing*	
CE 383	A77	74	Geotechnical Engineering I (UG)	
CE 681	A77	11	Engineering Properties of Soils (G)	
CE 383	S78	104	Geotechnical Engineering I (UG)	
CE 498	S78	126	Civil Engineering Design Project (UG)	
		(shared)		
CE 383	A78	83	Geotechnical Engineering I (UG)	
		(shared)		
CE 681	A78	20	Engineering Properties of Soils (G)	

CE 383	S79	101	Geotechnical Engineering I (UG)
CE 498	S79	120	Civil Engineering Design Project (UG)
		(shared)	
CE 383	A79	81	Geotechnical Engineering I (UG)
CE 681	A79	13	Engineering Properties of Soils (G)
		(shared)	
CE 383	S80	82	Geotechnical Engineering I (UG)
CE 498	S80	132	Civil Engineering Design Project (UG)
		(shared)	
CE 681	A80	19	Engineering Properties of Soils (G)
CE 689	A80	7	Selected Topics in Soil Mechanics (G): In Situ Testing and Instrumentation*
CE 383	S81	74	Geotechnical Engineering I (UG)
		(shared)	
CE 498	S81	82	Civil Engineering Design Project (UG)
		(shared)	
CE 483	A81	35	Geotechnical Engineering II (UG)
CE 681	A81	14	Engineering Properties of Soils (G)
CE 383	S82	108	Geotechnical Engineering I (UG)
CE 483	S82	45	Geotechnical Engineering II (UG)
CE 697O	S82	6	Geotextiles as Filters and Reinforcement (G)*
CE 681	A82	11	Engineering Properties of Soils (G)
CE 697I	A82	10	In Situ Testing and Instrumentation (G)
CE 383	S83	88	Geotechnical Engineering I (UG)
CE 697A	S83	5 + 5	Critical State Soil Mechanics (G)*
		audit	
CE 697O	S83	7 + 3	Geotextiles as Filters and Reinforcement (G)*
		audit	
CE 680	A83	12	Theoretical Soil Mechanics (G)
CE 697I	A83	3 + 2	In Situ Testing and Instrumentation (G)
		audit	
CE 383	S84	79	Geotechnical Engineering I (UG)
CE 483	S84	39	Geotechnical Engineering II (UG)
	A84		On sabbatical leave
	S85		On sabbatical leave
CE 697I	A85	9	In Situ Testing and Instrumentation (G)
CE 294	S86	53	Civil Engineering Case Studies (UG)
		(shared)	
CE 498	S86	35	Civil Engineering Design Project (UG)
		(shared)	
CE 294	A86	35	Civil Engineering Case Studies (UG)
		(shared)	
CE 681	A86	12	Engineering Properties of Soils (G)
CE 483	S87	34	
CE 697O	S87	11+ 12	Geotextiles and Geomembranes (G)*
		audit	
CE 383	A88	53	Geotechnical Engineering I (UG)
CE 483	S88	28	Geotechnical Engineering II (UG)

Courses taught at the University of Washington, Seattle, Washington present): (1998-

* indicates new courses developed by R. D. Holtz

Course	Quarter	No of Students	Course Title	Avg of Items 1-4
CESM 467	A88	23	Soil Mechanics	3.41
CESM 562	A88	4	Advanced Geotechnical Engineering II	
CESM 564	W89		Seepage and Slope Stability	
CESM 599C	W89	13	Geotextiles*	
CESM 499	W89	1	Special Projects	
CESM 366	Spr89	62	Basic Soil Mechanics	
CESM 466	A89	36	Foundation Design	3.16
CESM 366	W90	48	Basic Soil Mechanics	3.32
CESM 563	W90	11	Advanced Geotechnical Engineering III	
CESM 599D	S90		Foundation Soil Improvement*	
CESM 562	A90		Advanced Geotechnical Engineering II	
CESM 366	W91	68	Basic Soil Mechanics	Evals avail.
CESM 563	W91	9	Advanced Geotechnical Engineering III	
CESM 599	W91	1	Special Topics	N/A
CESM 599C	S91		Geosynthetics*	
CESM 466	A91	38	Foundation Design	3.34
CESM 599	A91	1	Special Topics	N/A
CIVE 366	W92	57	Basic Soil Mechanics	3.52
CESM 563	W92	11	Advanced Geotechnical Engineering III	3.13
CESM 599	W92	1	Special Topics	N/A
CESM 599D	S92	12	Foundation Soil Improvement	N/A
CESM 562	A92	10	Shear Strength and Slope Stability	3.32
CESM 599C	A92	9	Advanced Geotechnical Laboratory	3.91
CESM 563	W93	9	Advanced Foundation Engineering	3.17
CIVE 366	S93	81	Basic Soil Mechanics	2.61
CESM 599C	S93	11	Geosynthetics Engineering	N/A
CESM 599C	A93	6	Advanced Geotechnical laboratory	N/A
CIVE 436	A93	36	Foundation Design	4.45
CESM 563	W94	8	Advanced Foundation Design	N/A
CIVE 366	S94	76	Basic Soil Mechanics	2.93
CIVE 499	S94	1	Special Projects	N/A
CIVE 599D	S94	6	Foundation Soil Improvement, 3	N/A
CIVE 366AB	S94	19	Basic Soil Mechanics	
CIVE 366AA	S94	78	Basic Soil Mechanics	2.82
CESM 599	S94	6	Foundation Soil improvement	
CIVE 366AC	S94	19	Basic Soil Mechanics	
CIVE 436	A94	35	Foundation Design	3.95
CESM 562	A94	12	Shear Strength and Slope Stability	3.45
CIVE 456	W95	6	Structural Geotechnical Design Project (shared w/ C. W. Roeder)	N/A
CESM 561	A95	8	Seepage and Consolidation	4.1
CESM 567	A95	8	Advanced Geotechnical Laboratory	3.4
CIVE 456	W96	7	Structural Geotechnical Design Project(shared w/ C. W. Roeder)	--
CESM 563	W96	10	Advanced Foundation Engineering	3.8
CIVE 456	S96	6	Structural Geotechnical Design Project(shared w/ C. W. Roeder)	
CESM 568	S96	10	Geosynthetics Engineering	3.5
CESM 561	A96	10	Seepage and Consolidation	3.9
CESM 567	A96	7	Advanced Geotechnical Laboratory	4.55
CIVE 442	W97	7	Structural/Geotechnical Design Project (shared with C. W. Roeder)	--
CESM 564	W97	13	Earth Pressures and Retaining Structures	3.56
CIVE 442	S97	10	Structural/Geotechnical Design Project (shared with C. W. Roeder)	N/A

ENGR 220	S97	99	Introduction to Mechanics of Materials	N/A
CESM 568	Sum97	11	Geosynthetics Engineering	N/A
CESM 562	A97	16	Shear Strength and Slope Stability	3.92
CESM 567	A97	8	Advanced Geotechnical Lab	4.13
CIVE 442	W98	26	Structural/Geotechnical Design Project (shared with J. S. Stanton)	N/A
CIVE 449	W98	1	Special Projects	
CESM 564	S98	12	Earth Pressures and Retaining Structures	
CESM 569	S98	6	Foundation Soil Improvement	
CESM 562	A98		Shear Strength and Slope Stability	
CESM 567	A98	9	Advanced Geotechnical Laboratory	
CIVE 366	W99	24	Basic Soil Mechanics	
CIVE 499	S99	1	Special Projects	
CESM 564	S99		Earth Pressures and Retaining Structures	
CESM 568	S99		Geosynthetics Engineering	
CESM 567	A99		Advanced Geotechnical Laboratory	
CIVE 599	A99	2	Special Topics	
CIVE 366	W00	35	Basic Soil Mechanics	
CESM563	W00	6 + 5 audit	Advanced Foundation Engineering	
CIVE 599	W00	1	Special Topics	
CESM 569	S00	7 + 1 audit	Foundation Soil Improvement	
CIVE 442	S00	11	Structural/Geotechnical Design Project (shared with C. W. Roeder)	
CIVE 499	S00	2	Special Projects	
CEE 527	A00	6	Advanced Geotechnical Laboratory	
CEE 523	W01	8	Advanced Foundation Engineering	
CEE 528	S01	8	Geosynthetics Engineering	
CEE 442	S01	30	Structural/Geotechnical Design Project (shared with C. W. Roeder)	
CEE 521	A01	4	Seepage and Consolidation	
CEE 527	A01	5	Advanced Geotechnical Laboratory	
CEE 521	A02	5	Seepage and Consolidation	
CEE 527	A02	5	Advanced Geotechnical Laboratory	
CEE 500B	W03	6	Geotechnical Seminar	
CEE 500B	S03	6	Geotechnical Seminar	
CEE 442	S03	21	Structural/Geotechnical Design Project (shared with C. W. Roeder)	
CEE 366	S03	94	Basic Soil Mechanics	
CEE 528	S03	4	Geosynthetics Engineering	
CEE 522	F03	13	Shear Strength and Slope Stability	
CEE 527	F03	5	Advanced Geotechnical Laboratory	
CEE 500B	W04	9	Geotechnical Seminar	
CEE 500B	S04	10	Geotechnical Seminar	
CEE 524	S04	12	Earth Retaining Structures	
CEE 529	S04	11	Foundation Soil Improvement	
CEE 442	S04	32	Structural/Geotechnical Design Project (shared with C. W. Roeder)	
CEE 499	S04	2	Special Projects	
CEE 527	F04	8	Advanced Geotechnical Laboratory	
CEE 366	W05	60	Basic Soil Mechanics	
CEE 523	W05	8	Advanced Foundation Engineering	
CEE 500B	W05	9	Geotechnical Seminar	
CEE 500B	S05	7	Geotechnical Seminar	
CEE 528	S05	4 + 4 audit	Geosynthetics Engineering	
CEE 442	S05	58	Structural/Geotechnical Design Project (shared with J. S. Stanton)	
CEE 527	F05	3	Advanced Geotechnical Laboratory	

CEE 436	W06	15	Foundation Design
CEE 500B	W06	4	Geotechnical Seminar
CEE 500B	S06	3	Geotechnical Seminar
CEE524	S06	4	Earth Retaining Structures
CEE 529	S05	3	Foundation Soil Improvement
CEE 442	S05	37	Structural/Geotechnical Design Project (shared with C. R. Roeder and M. Eberhard)

Other Service to Teaching

At Purdue University:

Laboratory development and modernization program, 1976-1983 (proposed, planned and supervised by R. D. Holtz): In response to a detailed written proposal \$55,000 was obtained from the Dean of Engineering in 1978-79 to upgrade the soil mechanics teaching laboratories. A separate 450 sq ft room was developed as a dedicated undergraduate teaching laboratory for engineering properties testing. Five test stations were set up and sufficient new equipment was obtained so that permeability, consolidation, direct shear, and triaxial compression tests could be conducted in small groups of four students, rather than as large group-demonstrations. The value of the experiments to the students was significantly enhanced by the hands-on experience.

In addition, and part of the same grant, some in situ testing equipment was purchased so that most of the common in situ soils tests (SPT, pressuremeter, vane shear, etc.) could be conducted in the field by students. For this purpose, a dedicated test field was established the west edge of the Purdue campus.

In 1977-78, upgrading of the triaxial testing equipment in the graduate teaching laboratory was carried out under the supervision of R. D. Holtz. (School of Civil Engineering funds). New pore pressure panels, modern air piston bushings for the triaxial cells, load cells, and pressure transducers were obtained.

Geotechnical Engineering Seminars, 1976-81: R. D. Holtz was responsible for virtually all aspects of the seminar program, including invitations, honoraria, scheduling, entertainment, and practical details associated with making our guests feel welcome. The program flourished during these years:

1976-77: 19 speakers - 20 lectures
 1977-78: 23 speakers - 27 lectures
 1978-79: 27 speakers - 31 lectures
 1979-80: 25 speakers - 32 lectures
 1981-81: 21 speakers - 28 lectures

The majority of the speakers were visitors. They included "name" professors and researchers, outstanding practitioners, and a few faculty from other Purdue departments, and some graduate students.

Modest honoraria were provided from contributions obtained from mostly consulting engineering firms. For example, a contribution of \$500 was obtained by R. D. Holtz from STS Consultants Ltd., Northbrook, Illinois, for the expressed purpose of supporting outside seminar speakers.

At the University of Washington:

Prepared a proposal for Improvement of Laboratory Equipment for CIVE 366 *Basic Soil Mechanics*, submitted to the College of Engineering, Autumn Quarter, 1989; partially funded.

Planned (with S. L. Kramer) and supervised the remodeling of the Undergraduate Soils Laboratories (Rooms 122 and 124 in More Hall), 1990-1991.

Arranged for CESM 599C, Introduction to Rock Mechanics, to be taught by visiting Professor B. Amadei (on sabbatical leave from University of Colorado), Autumn Quarter, 1990.

Arranged for CESM 499C/599D Engineering Geology, to be taught by Affiliate Lecturer Mr. Richard Galster, Winter Quarter, 1990, and Spring Quarters 1991 and 1992. Mr. Galster was supported by funds donated to the Department by the Geotechnical Group, Seattle Section, ASCE (1990, 1991, and 1992), Washington State Section of the Association of Engineering Geologists (1991), and by honoraria generated by R. D. Holtz by teaching two short courses (one in Vancouver B. C. and one at the UW) in 1992.

After Prof. T. Taylor resigned in 1997, arranged for subsequent teaching by outside instructors of CEE 437 Engineering Geology in most subsequent years.

Developed (and taught as an overload) CESM 599C, Advanced Geotechnical Laboratory, Autumn 1992. It has been offered again every Autumn since 1993 (except 1994), and is now a regular graduate course, CESM 567. This course is taught as an overload and has no technical or TA support provided by the Department.

Arranged for Professor F. H. Kulhawy of Cornell University to come here and present two 1-day short-courses for our graduate students and the local geotechnical engineering community.

1. "Soil Property Estimation for Static Geotechnical Design", 5 Nov. 1994, 83 participants.
2. "Drilled Shaft Foundations", 4 May 1996, 65 participants.

Note: After all travel, printing, and departmental expenses were reimbursed, all surplus funds were deposited in the Geotechnical Development Fund account.

We have received almost annual donations from the Geotechnical Group, Seattle Section, ASCE, largely because of our participation in the local activities of these groups.

With input from P. Arduino and S. L. Kramer, I prepared a proposal to the College of Engineering Infrastructure to Transform Research and Education, Autumn '03, for equipment to improve our research and teaching laboratories. Funding awarded was \$78,000.

Short Courses, Workshops, and other Educational Programs

As a Lecturer

Technical Seminar on "Fabrics for Reinforcement, Separation and Filtration", Engineering and Research Center, U.S. Bureau of Reclamation, Denver, July 11, 1979.

Lecture No. 2, "Soil Properties and Soil Sampling Related to Engineering Geology", at the short course on *Selected Geotechnical Design Principles for Practicing Engineering Geologists*, Annual Meeting, Association of Engineering Geologists, Chicago, October 2, 1979.

"Testing Geotextile Fabrics" and Applications of Geotextiles—A Case History", short course on *Application of Fabrics and Geotextiles in Civil Engineering*, Clemson University, held in Charlotte, North Carolina, June 25-26, 1980.

One-day short course on *Geotextiles*, École Nationale des Ponts et Chaussées, Paris, France, May 15, 1981.

Lecture on "Reinforced Earth with Fabrics", short course on *Geotextiles and Geomembranes*, University of Wisconsin, Madison, October 15, 1982.

Lecture on "Reinforcing Earth with Fabrics", short course on *Soil Reinforcement and Improvement*, University of Wisconsin, Madison, November 8, 1982.

Lecture on "Fabric Applications", short course on *Construction Excavations*, University of Wisconsin, Madison, September 22, 1983.

Three-day *Geotextile Engineering Workshop*, sponsored by National Highway Institute, Federal Highway Administration, Course NHI 13110 (all shared with B. R. Christopher, unless otherwise noted):

- Pilot presentation, Georgia Department of Transportation, Atlanta, March 6-8, 1984.
- Texas State Department of Highways and Public Transportation, Austin, Texas, November 27-29, 1984
- Utah Department of Transportation, Salt Lake City, Utah, December 3-6, 1984.
- Montana Department of Transportation, Helena, Montana, December 10-13, 1984.
- Virginia Department of Transportation, Colonial Heights, Virginia, January 8-11, 1985.
- Wisconsin Department of Transportation, Madison, Wisconsin, September, 17-20, 1985.
- Colorado Department of Highways, Denver, Colorado, October 22-25, 1985.
- Tennessee Department of Highways, Nashville, Tennessee, November 4-7, 1985.
- U.S. Forest Service, Portland, Oregon, February 4-7, 1986.
- California Department of Transportation, Sacramento, California, March 11-14, 1986.
- Idaho Transportation Department, Boise, Idaho, April 15-18, 1986.
- Colorado Department of Highways, Denver, Colorado, April 22-25, 1986.
- New Mexico State Highway Department, Santa Fe, New Mexico, May 13-16, 1986.
- Texas State Department of Highways and Public Transportation, Austin, Texas, September 2-5, 1986.
- Utah Department of Transportation, Salt Lake City, Utah, September 23-26, 1986.
- Oregon Department of Transportation and FHWA, Portland, Oregon, December 16-19, 1986.
- Arizona Department of Transportation, Phoenix, Arizona, February 10-12, 1988 (with J. E. Fluet)
- Illinois Department of Transportation, Springfield, Illinois, May 24-26, 1988.
- Washington State Department of Transportation, Lacey, Washington, October 7-9, 1988.

One-day workshop on *Geotextiles: Properties and Testing; Reinforcement of Walls and Embankments; Use in Road Construction; Filters and Erosion Protection*, Technical University of Turin, Italy, Department of Structural Engineering, Seminars for Doctoral Students in Geotechnical Engineering, February 22, 1985.

Three-day *Geotextile Engineering Workshop*, Department of Civil Engineering, National Taiwan University, Taipei, December 9-13, 1985 (shared with B. R. Christopher).

One-day "Technology Up-date Symposium" on *Geotextile Materials in Construction*, U.S. Bureau of Reclamation, Denver, Colorado, April 21, 1986 (shared with B. R. Christopher).

One-day minicourse on *Geotextiles in Waste Management* in connection with the Ninth Annual Symposium on Geo-Aspects of Waste Management, Colorado State University, Ft. Collins, February 2, 1987 (shared with B. R. Christopher).

One-day short course on *Applications of Geosynthetics in Soil Reinforcement*, Laboratoire de Mécanique des Sols, Ecole Polytechnique Fédérale de Lausanne, Switzerland, August 28, 1987.

Three-day *Geotextile Engineering Workshop*, Purdue University, January 19-22, 1988. (shared with B. R. Christopher).

One-day *Geotextile Workshop--Construction*, Idaho Department of Highways, Boise, Idaho, December 6, 1988.

One-day workshop on *Geosynthetics*, Leighton & Associates, Irvine, California, November 4, 1989.

Three-day *Geosynthetic Engineering Workshop*, sponsored by BiTech Publishers, Vancouver, British Columbia, Canada, April 15-18, 1991 (shared with B. R. Christopher).

Three-day *Designing with Geosynthetics*, U.S. Department of Agriculture, Soil Conservation Service, Ft. Worth, Texas, June 17-20, 1991 (shared with B. R. Christopher).

“In Situ Vitrification”, Short Course on Hazardous Waste Incineration, US Environmental Protection Agency, University of Washington, Seattle, Washington, September 19, 1991.

“Geosynthetics Engineering Workshop” (with B. R. Christopher), through ECE/PEPL, University of Washington, Seattle, Washington, 47 students, November 13-16, 1991.

FHWA “Geosynthetics Engineering Workshop” (with B. R. Christopher), Kansas Department of Transportation, Topeka, Kansas, 42 students, July 12-15, 1993.

“Engineering Properties and Laboratory Testing”, short course, Washington State Department of Transportation, Materials Laboratory, Olympia, Washington, 15 students, August 3-4, 10-11, 17-18, 1993.

“Geosynthetics Engineering Workshop” (with B. R. Christopher), through ECE/PEPL, University of Washington, Seattle, Washington, 28 students, Part I: November 8-9; Part II: November 10-11, 1993.

Professor Training Course on Geosynthetics, Lectures on “Geosynthetics in Roads and Highways” and “Reinforced Embankments on Soft Foundations”, Auburn University, Alabama, Georgia, June 27-July 1, 1994.

FHWA Geosynthetics Workshop (with B. R. Christopher), pilot course of revised course materials we developed in 1993-94, FHWA - Region 8, Denver Colorado, 42 students, October 17-20, 1994.

“Geosynthetics in Drainage, Erosion Control and Pavement Design” (with B. R. Christopher), short course, Department of Civil and Structural Engineering, University of Hong Kong, 45 students, December 21-23, 1994.

“Geosynthetics of Earth Reinforcement and in Landfill and Waste Containment Applications” (with B. R. Christopher), Department of Civil and Structural Engineering, University of Hong Kong, 47 students, December 28-30, 1994.

“New Trends on the Applications of Soil Reinforcing Techniques”, short course; presented lectures on “Geosynthetics for Reinforced Embankments on Soft Foundations” (with Prof. F. Tatsuoka and Prof. Dov Leshchinsky), National Cheng Kung University, Tainan, Taiwan, 125 students, January 5-6, 1995.

FHWA “Geosynthetics Engineering Workshop” (with R. R. Berg), Indiana Department of Transportation, Indianapolis, Indiana, 24 students, March 13-16, 1995.

Lectures on “Shallow Foundations”, Department of Geotechnics and Applied Geology, Politecnico di Bari, Italy, 25 students and several faculty, April 24, 26-27, 1995.

“Geosynthetic Engineering”, one day short course, Royal Institute of Technology, Stockholm, Sweden, 16 students, May 24, 1995.

FHWA “Geosynthetics Engineering Workshop” (with B. R. Christopher), Washington State Department of Transportation, Seattle, Washington, 51 students, June 13-16, 1995.

Professor Training Course on Geosynthetics, Lectures on “Geosynthetics in Roads” and “Highways and Reinforced Embankments on Soft Foundations”, 22 students, Auburn University, Auburn, Alabama, July 31 - August 4, 1995.

“Soil and Ground Improvements” short course, lecture on “Geosynthetic Engineering”, Asian Institute of Technology, Bangkok, Thailand, December 6 - 12, 1995.

“Design of Geosynthetic Reinforced Soil Structures” short course, NTU-PWD Geotechnical Research Centre, Nanyang Technological University, Singapore, 66 students, December 18 - 19, 1995.

FHWA “Geosynthetics Engineering Workshop” (with B. R. Christopher), Utah Department of Transportation, Salt Lake City, Utah, 24 students, February 5 - 8, 1996.

Professor Training Course on Geosynthetics, Lectures on “Geosynthetics in Roads and Highways”, and “Reinforced Embankments on Soft Foundations”, Auburn University, Auburn, Alabama, 22 students (CE faculty from US and Canada), July 22, 1997.

FHWA “Geosynthetics Engineering Workshop” (with R. R. Berg), Washington State Department of Transportation, Auburn Washington, 37 students, December 2 - 5, 1996.

“Geosynthetics and Slope Stability”, Short Course on *Managing for Slope Stability*, Center for Urban Horticulture, University of Washington, Seattle, March 5, 1998.

State of the Practice/Lead Lecture on “The Use of Geosynthetics for Slopes and Stabilization, *Past Presidents Seminar*, North American Geosynthetics Society, University of Washington, Seattle, April 28, 1998.

One-day short course on “Soil Reinforcement with Geosynthetics”, held as part of the Geo-Institute Conference on Geotechnical Earthquake Engineering and Soil Dynamics, University of Washington, August 7, 1998.

FHWA “Geosynthetics Engineering Workshop” (with B. R. Christopher), U. S. Forest Service, Eastern Regional Conference, St Louis, Missouri, February 8-10, 1999.

FHWA “Geosynthetics Engineering Workshop” (with B. R. Christopher), California Department of Transportation (CALTRANS) and Sacramento Section of ASCE, Sacramento, California, May 3-6, 1999.

FHWA “Geosynthetics Engineering Workshop” (with B. R. Christopher), Michigan Department of Transportation, Lansing, Michigan, November 28-December 2, 1999.

FHWA “Geosynthetics Engineering Workshop” (with B. R. Christopher), Connecticut Department of Transportation, Newington, Connecticut, March 21-23, 2000.

One-day seminar on “Geosynthetics in Highway Engineering,” National Taiwan University, Taipei, Taiwan, September 22, 2000.

FHWA “Geosynthetics Engineering Workshop” (with B. R. Christopher), Washington State Department of Transportation, Auburn, Washington, March 6-8, 2001.

“Geosynthetics Engineering”, University of Minnesota, Minneapolis, Minnesota, February 28, March 7, April 11, 18, and 23, 2002.

FHWA “Geosynthetics Engineering Workshop” (with B. R. Christopher), California Department of Transportation (CALTRANS), Sacramento, California, April 30-May2, 2002.

FHWA-NHI workshop “Soils and Foundations” (with R. Cheney and R. Bachus), PennDOT, Harrisburg, Pennsylvania, October 28 – November 1, 2002.

FHWA-NHI workshop “Soils and Foundations” (with R. Bachus), Michigan DoT, Lansing, Michigan, January 6-10, 2003.

FHWA-NHI workshop “Soils and Foundations” (with S. Nichols), New York State DoT, Albany, New York, February 24-28, 2003.

“Design, Construction, and Monitoring of Reinforced Soil Structures”, 1 day of a 3 day short course on *Estabilización de Masas de Suelo*, Universidad de Chile, Departamento de Ingeniería Civil, Santiago, Chile, April 25, 2003.

FHWA “Geosynthetics Engineering Workshop” (with B. R. Christopher), Georgia Department of Transportation, Atlanta, Georgia, January 20-22, 2004.

“Geosynthetic Reinforced Soil” (with R. Jonathan Fannin), 1 day short course, University of British Columbia, Vancouver, February 20-21, 2004.

FHWA “Geosynthetics Engineering Workshop” (with B. R. Christopher), Washington State Department of Transportation, Shoreline, Washington, March 30-April 1, 2004.

FHWA “Geosynthetics Engineering Workshop” (with B. R. Christopher), New York State Department of Transportation, Rochester, New York, July 7-9, 2004.

“Geosynthetic Reinforced Soil” (with R. Jonathan Fannin), 1 day short course, University of Washington, Seattle, February 18-19, 2005.

FHWA “Geosynthetics Engineering Workshop” (with B. R. Christopher), Montana Department of Transportation, Helena, Montana, April 25-27, 2005.

As a Student (attended to improve teaching)

Drilled Foundation Workshop for Civil Engineering Faculty, Fort Collins, Colorado, July 12-18, 1987, sponsored by the Association of Drilled Shaft Contractors.

The Use of Geosynthetics in Waste Containment, Seattle, Washington, April 20, 1990, sponsored by the Geotextile and Geomembrane Division, Industrial Fabrics Association International.

Design and Construction of RCRA/CERCLA Final Covers, Seattle, Washington, August 15, 1990, sponsored by the U.S. Environmental Protection Agency.

Design, Operation, and Closure of Municipal Solid Waste Landfills, Bellevue, Washington, August 20-21, 1992, sponsored by the U.S. Environmental Protection Agency.

Geosynthetic Aspects of Landfill Liners and Closures, October 9, 1992, Sea-Tac, Washington, sponsored by Parametrix, Inc.

Construction Quality Assurance/Quality Control for Waste Containment Facilities and Hydrologic Evaluation of Landfill Performance Model, Seattle, Washington, July 27-28, 1994, sponsored by the U.S. Environmental Protection Agency.

Seattle Area Anchored Earth Retention Seminar, Renton, Washington, September 12, 1995, sponsored by the International Association of Foundation Drilling.

Workshop on New Approaches to Liquefaction Analysis, Transportation Research Board, January 10, 1999.

Interface Friction/Direct Shear Testing and Slope Issues, Geosynthetics '99 Conference, April 27, 1999, Boston, Massachusetts.

Geosynthetic Reinforced Soils, Geo-Denver 2000 Conference, Denver, Colorado, August 3, 2000.

Catalyst Toolkit, Teaching with Technology Workshop, University of Washington, Seattle, Washington, February 21, 2001.

Introduction to Powerpoint, Teaching with Technology Workshop, University of Washington, Seattle, Washington, February 27, 2001.

Cooperative Learning and the New Paradigm for Engineering Education, Faculty Teaching Workshop, Department of Civil and Environmental Engineering, University of Washington, Seattle, Washington, March 30, 2001.

Driven Pile Design by LRFD, GeoOdyssey 2001, Blacksburg, Virginia, June 10, 2001.

ExCEED Student-Educator-Practitioner Teaching and Learning Workshop, ASCE National Convention, Washington, DC, November 2, 2003.

Construction Monitoring and Acceptance of Deep Foundations, GeoFrontiers 2005 Conference, Austin, Texas, January 23, 2005.

Chaired Doctoral Degrees

At Purdue University:

<i>Name</i>	<i>Title</i>	<i>Year of completion</i>	<i>Current employer</i>
William L. Salomone	A New Soil Reinforcement Interaction Model (Co-chair: W. D. Kovacs)	June 1978	Practicing attorney
C. –H. Juang	Pore Size Distribution of Sandy Soils and Prediction of Permeability	Aug. 1981	Professor of Civil Engineering, Clemson University, Clemson, SC
Eva Boutrup	Fabric Reinforced Embankments Constructed on Weak Foundations	--	Deceased (prior to defense)
A. –B. Huang	Laboratory Pressuremeter Experiments in Clay Soils	Dec. 1986	Professor of Civil Engineering, National Chao Tung University, Hsinchu, Taiwan
D. N. Humphrey	Design of Reinforced Embankments	Dec. 1986	Professor of Civil Engineering, University of Maine, Orono
M. A. Nearing	Soil Erosion by Water Drop Impact	Dec. 1986	Formerly Assistant Professor of Agricultural Engineering, University of Georgia, Athens
B. R. Christopher	Reinforced Earth Retaining Walls	Dec. 1993	Consulting Geotechnical Engineer, Roswell, Georgia

At the University of Washington:

Gregory R. Fischer	The Influence of Fabric Pore Structure on the Behavior of Geotextile Filters	December 1994	Managing Principal, Shannon & Wilson, Inc, Denver, Colorado
Stanley R. Boyle	Deformation Prediction of Geosynthetic Reinforced Soil	June 1995	Senior Associate, Shannon & Wilson,

	Retaining Walls		Inc., Seattle, Washington
Wen-Sen Tsai	Evaluation of Geotextiles as Separators in Roadways	June 1995	Survey Technical Coordinator, Taiwan Shinkansen Trackwork Joint Venture, Taichung, Taiwan
Karen S. Henry	Geosynthetics to Mitigate Frost Effects in Subgrade Soils	December 1998	Research Civil Engineer, U. S Army Cold Regions Research and Engineering Laboratory, Hanover, New Hampshire
Wei-Feng Lee	Internal Stability Analysis of Geosynthetic Reinforced Retaining Walls	June 2000	Chief, Geotechnical & Hazard Mitigation Technology Division, Taiwan Construction Research Institute, Taipei, Taiwan

Current:

<i>Name</i>	<i>Title</i>	<i>Anticipated completion</i>
Fadzilah Saidin	GRS Walls: Models, Performance Predictions and Design	? (currently on leave)
Michael Harney	Plane Strain Behavior of Dilative Sand	December 2005?
Kathryn Petek	Analysis of Lateral Load Capacity of Large Diameter Drilled Shafts with Defects	March 2006?
Armin Stuedlein	Performance of Foundations on Stone Columns	August 2006?

Chaired Masters Degrees

Name/thesis/project/coursework only/thesis/paper title if appropriate/yr of completion

At Purdue University:

Student	Thesis or Nonthesis?	Thesis or Project Title	Year Completed
Douglas J. Hermann	Non-Thesis		May, 1976
Douglas W. Lovell	Non-Thesis		May, 1978
Robert P. Ringholz	Non-Thesis		May, 1978
Joseph M. Cibor	Non-Thesis		May, 1978

Alexander Custin	Non- Thesis		May, 1978
Robert L. Evans	Non- Thesis		May, 1978
S. Trent Parkhill	Non- Thesis	Project: Development of Laboratory Test Equipment	May, 1979
Wayne C. Bryan	Non- Thesis	Project: Development of a Data Acquisition System for Geotechnical Laboratories (draft proposal, eventually funded by an NSF Research Equipment grant)	December, 1979
Walter W. Burke	Non- Thesis	Project: Creep properties of a fabric-reinforced sand (paper published)	December, 1979
William R. Tobin	Non- Thesis	Project: Creep properties of a fabric-reinforced sand (paper published)	August, 1981
Robert A. McMillion	Non- Thesis	Project: Experimental studies of reinforced sands	August, 1981
Pamela R. Moore	Non- Thesis	Project: Feasibility of Railroad Vibration Isolation at the New Monon Depot Theatre	August, 1982
Michael W. Buis	Non- Thesis	Project: Development of a geotextile Strain Gage	May, 1983
Mark D. Decker	Non- Thesis	Energy Transfer Characteristics of SPT Hammers	August, 1983
Firas Mishu	Non- Thesis	Evaluation of the Single-Step Determination of the Preconsolidation Pressure	May, 1984
C. Scott Thomas	Non- Thesis	Development of an In-Plane Permeameter for Geotextiles	August, 1984
Namasivayam Vasantharaja	Non- Thesis	Model Pressuremeter Tests on Clay Soils	August, 1987
Chun-Huang Wang	Non- Thesis	Geotextile-Reinforced Embankment on a Sludge Lagoon	August, 1987
Dean A. Karcz	Thesis	Development of the IDOH Classification System for Geotextiles	December, 1988

At the University of Washington:

Student	Thesis or Nonthesis	Thesis or Project Title	Year Completed
Karen Billica	Thesis	The Application of Geotechnical Stabilization Techniques to Contaminated Soils	March 1990
Deanne Takasumi	Non- Thesis	Interface Shear Characteristics Between Soil and Geosynthetics: A State of the Art Review	March 1990
Siew Lan Tan	Thesis	Stress-Deflection Characteristics of Soft Soil Overlain with Geosynthetics	March 1990
Thomas S. McFarlane	Thesis	Selection and Laboratory Evaluation of Modifying Additives for the Flexible SMW Wall	December 1990
Martin W. Page	Thesis	Performance of Geotextile Separators	December 1990
Darrell M. Setser	Non- Thesis	Slope Reinforced Design Using Geotextiles and Geogrids	August 1990
Michael G. Byers	Thesis	In Situ Vitrification	June 1991
John P. Starceovich	Thesis	The Appropriate Testing of Soundless Chemical	December

		Demolition Agents	1990
Jun Xu	Non- Thesis	X-Rays in Soil Mechanics	August 1990
Kim Wargo-Levine	Thesis	The Effect of Static and Cyclic Loading on the Stress-Strain Behavior of Randomly Distributed Staple Fiber and Filament Reinforced Sand	August 1991
Mark A. Wicklund	Non- Thesis	Constant-Head Permeameter Testing for Geotextiles	December 1991
Dennis R. Ward	Non- Thesis	Study of In-Situ Properties on Stability Analyses of Constructed Rockeries	March 1992
Robert C. Metcalfe	Thesis	Performance of Geotextile Separators in Western Washington	March 1993
Shaun D. Stauffer	Thesis	The Stress-Strain Behavior of Sands Reinforced with Randomly Distributed Staple Fibers and Continuous Filaments	December 1992
James M. Strout	Thesis	Sensitivity Analysis of the Correlations for the Dilatometer Test in Cohesionless Soil	June 1993
Tamara N. Thomas	Thesis	Boundary Effects, Isotherm Definition, and Volatile Organic Movement in Engineering Scale Testing of the In-Situ Vitrification of Soils	August 1993
Matthew D. Gallagher	Non- Thesis	In-Isolation Wide-Width Tests on Geotextiles	June 1995
Andre D. Mare	Thesis	The Influence of Gradient Ratio Testing Procedures on the Filtration Behavior of Geotextiles	December 1994
Lloyd J. Reitz	Non- Thesis	Performance of Geosynthetics in Landfill Covers	March 1995
Phillip R. Donovan	Non- Thesis	Seismic Table Construction	December 1996
P. Jason Black	Thesis	Performance of Geotextile Separators: Bucoda Test Site--Phase II	February 1997
Cynthia A. Finley	Thesis	Performance of Municipal Solid Waste Landfill Covers	June 1997
James McElroy	Thesis	Seismic Stability of Geosynthetic-Reinforced Steep Slopes: A Shaking Table Study	December 1997
Adam Perez	Thesis	Seismic Response of Geosynthetic Reinforced Steep Slopes	March 1999
Alan Findlay	Non- Thesis	Pore size distribution of geotextiles using the bubble point method	December 1999
Jeff Fowler	Non- Thesis	Development of a Website for Geosynthetic Engineering	May 2000
Gregory Landau	Non- Thesis	Analysis of a 7.1 Meter High Mechanically Stabilized Earth Wall Using the Finite Element Program Plaxis (with P. Arduino)	June 2000
Jeffrey Johnson	Non-	Ultimate Capacity of Soil Nailing	

	Thesis		
Fu-Jen Ho	Non- Thesis	Eccentrically and Inclined Footings (with P. Arduino)	Nov 2000
Kristina Haggard	Non- Thesis	Ultimate Bearing Capacity of Small Diameter Steel Pipe Piles	Dec 2000
Kathryn Petek	Thesis	Capacity Analysis of Large Diameter Drilled Shafts with Defects	Feb 2001
Michael Harney	Thesis	Flexible Wall Gradient Ratio Test	March 2001
Hans Gunnar Vestberg	Thesis	Ultimate Bearing Capacity of Pin (Pipe) Piles	June 2002
Su-Kiet Lieu	Non- Thesis	Comparison of a Conventional and Plaxis Consolidation Analysis to Field Readings at the Columbia Boulevard Wastewater Treatment Plant in Portland, Oregon.	June 2002
Throstur Hrafnkelsson	Thesis	Effect Of Grain Size Distribution On Compressive Strength Of Horizontally Fiber Reinforced Soil	March 2004
Timothy D. Bailey	Thesis	Measurement of Geotextile Filtration Behavior Using the Gradient Ratio Test, the Hydraulic Conductivity Ratio Test and the Flexible Wall Gradient Ratio Test	March 2004
Benjamin M. Upsall	Thesis	A Study on the Pullout Capacity of the Spiralnail Groutless Soil Nailing System	June 2004
Brian M. Collins	Thesis	Long-Term Performance of Geotextile Separators, Bucoda Test Site—Phase III	August 2004
Bearrach McMonagle	Non- Thesis	Investigation and Slope Stabilization of The Alta Vista Trail, Mr. Rainier National Park	August 2004
Bret N. Martin	Non- Thesis	Case History: Soldier Pile Wall at Howard Hansen Dam Fish Passage Facility Project	March 2005
Douglas D'Hondt	Thesis	An Investigation of the Pore Size Distribution of Geotextiles and Other Materials by the Bubble Point Method	June 2005
Andrea J. Morse	Non- Thesis	An Investigation of Additives for Compacting Wet Soils	August 2005
Donald Huling	Non- Thesis	Construction of Tieback Anchored Soldier Pile Walls—A Web-based Primer	August 2006?
David Maloney	Thesis?	Static and Dynamic Analysis of Pin Piles?	December 2006?

**Membership on degree committees
Ph.D. Committees**

Purdue University

5

University of Washington

7 + 3 current students

As Graduate School Representative: 5

M. S. Committees

Purdue University

33 (9 thesis/24 non-thesis)

University of Washington

39 (28 thesis/11 non-thesis)

Other Student Supervision (service on graduate degree committees)

External Examiner for Ph.D. Thesis by J. N. Mandal: "Triaxial Behavior of Reinforced Earth", I. I. T., Khragpur, West Bengal, India, November 1981.

Member, Ph.D. Thesis Examination Board for Z. Ambrozewski, "Method of Testing the More Important Features of Polymer Membranes Used for Sealing of Dams", Faculty of Land Reclamation, Warsaw Agricultural University, Warsaw, Poland, June 6, 1984.

Member of the Jury for two MSCE Theses at the Ecole Nationale des Ponts et Chaussees, Paris, France, 1. "Comportment a la Rupture des Murs en Terre Armee et Clouee", by Abdelaziz Ben Assila and Mustapha El Armi. 2. Comportement avant Rupture des Murs en Terre Armee et Cluee", by Amar Dhoubi and Kaled Meftah, June 25, 1984.

Member of Examination Commission for the Docteur-Ingenieur Thesis by E. Rojas-Gonzales: "Contribution a l'Etude du Comportement des Argiles sous Sollicitations Cycliques", Institut de M(canique, Université de Grenoble, France, July 13, 1984.

External Examiner, Ph.D. Thesis by D. G. Gillispe, University of British Columbia, Dec. 1989.

External Examiner, Ph.D. Thesis by N. Chandrasekaran, Nanyang Technological University, Singapore, both MS (1988) and PhD (1992).

External Examiner, Ph.D. thesis by R. Shivashankar, Asian Institute of Technology, Bangkok, Thailand, Jul.-Aug. 1991.

External Examiner, Ph.D. thesis by B. Mylleville, University of Western Ontario, London, Aug. 1991.

External Examiner, M. Eng. Thesis, Paul A. Maisano, Victoria University of Technology, Melbourne.dates??

External Examiner, D. P. Parashar, Nanyang Technological University, Singapore, PhD, 1995.

External Examiner, Ph.D. Thesis, Na Yung Mook, Nanyang Technological University, Singapore, June 2002.

External Examiner, Ph.D. Thesis, Kirralee J. Rankine, James Cook University, Townsville, QLD, Australia, July, 2005

Visiting Professors, Engineers, Post-Doctoral Fellows, Etc.

Professor Cheng-Lim Khoo, Faculty of Architecture and Building, National University of Singapore, Singapore; April-June 1986. Geotextiles and related systems; engineering education; foundation engineering.

Mr. Parth Sarthi, Division Chief Engineer (construction), Indian Central Railways, Bombay, India; January-May 1986. In-plane permeability of geotextiles; geotextile design, particularly applied to railroads.

Dr. S. Prapaharan, Purdue University; May-October 1987. Pore size distribution of nonwoven geotextiles.

Professor Thodoros N. Hatzigogos, Assistant Professor of Geotechnical Engineering, Aristotle University of Thessaloniki, Thessaloniki, Greece; September 1987-February 1988. Bearing capacity of geosynthetic- reinforced embankments on very soft foundations.

Branko Zadnik

Nam-Jae Yoo

Yeo Won Yoon

Yung-Show Fang,

An-Bin Huang

Hossein Ghassian

Departmental Service

At California State University, Sacramento:

At Purdue University, School of Civil Engineering

Curriculum Study Committee, 1974-79

Chair, 1977-78

Committee on Metrication, 1974-75

Program Review Committee, 1976-77

Chair, 1978-79

Library Committee, 1976-76

Awards Committee, 1979-81

Chair, 1980-81

Committee on Design, 1980-81

Ad Hoc Committee on Computer Needs, 1979-80

Committee on Interactive Research, 1980-83

Chairman, 1982-83 (Led the development of a 5-year plan for research in the School)

Committee on Computer Equipment, 1981-84

Ad Hoc Committee for Facility Planning—New Addition to Civil Engineering Building, 1981-82 (This activity involved 5-10 hrs/week of itemizing needs and developing plans for the geotechnical engineering laboratories and office space in the new building addition.)

Teaching Committee, 1982-94

Civil Engineering Seminars Committee, 1965-1987

Program Review Committee, 1985-88

Area Primary Committee, 1985-88

Opportunity Day and Parents Day Committees, 1986-88

External Awards Committee, 1986-88

Chair, 1987--88

Enrollment Committee, 1986-88

Road School Planning Committee, 1987

At the University of Washington:

Ad hoc Committee to Review the PhD Qualifying Examination, SGEM, 1988-89
 Review of Structures Program (Chair), 1988-89
 Boeing Gift Advisory Committee, 1988-94
 Janssen Mentor Committee, 1988-90
 Ph.D. Qualifying Examination Committee, SGEM, 1989
 Hazardous Materials Engineering Committee, 1988-90
 Ad hoc Committee for Determining New Faculty Positions, 1989
 Laboratory Supervisor, Geotechnical Materials and Geotechnical Dynamics Laboratories, 1989-95
 GIS Search Committee (Chair), 1990-91
 Executive Committee, 1990-95
 Peer Review Committees for J. W. Hinze and J. W. Massmann, 1991-92
 Resource Review Committee, 1992-94
 Committee on Engineering Design, 1994-95
 Resource Allocation Committee, 1995
 Valle Scholarship Committee, 1993-1994; 1996-present
 Ad hoc Visiting Committee (Chair), 1996-1997
 Ad hoc Committee on CIVE 366 and CIVE 306/316, 1996
 Arduino Search Committee, 1996
 Arduino Mentor Committee (Chair), 1997-
 Centennial Planning Committee, 1997-1998
 Laboratory Manager Search Committee, 2000-2001
 Promotion and Tenure Committee, 2002- ; Chair, 2002-3
 Safety Committee, 2002-
 Continuing Education/Distance Learning Committee, 2002-
 Space Committee (Chair), 2003-4
 Structures Search Committee, 2006-

College Service*Purdue University*

Academic Personnel Grievance Committee, 1980-1982
 Academic Personnel Grievance Committee, 1985-1988

University of Washington

Education Policy Committee, 1996-1999
 Space Council, 2002-2004

University Service*Purdue University*

Advisory Committee on Police Policy and Practices, 1980-1982
 Faculty Senate, 1985-1987
 Student Affairs Committee, 1985-1987

University of Washington

Chair, Graduate School Review Committee, Department of Landscape Architecture, 1991.
 East Campus Task Force, Office of the Physical Plant (to provide recommendations for the future development of the East Campus), 1992-1994.

Student Service

Chi Epsilon, Chapter Advisor; Winter and Spring Quarters, 1992; 1996-2001; 2003-2004.

Chi Epsilon, Rocky Mountain District Councillor, National Council, 2004-

Instrumental in obtaining an annual donation of \$10,000 by Shannon & Wilson, Inc. for the Shannon Fellowship for geotechnical graduate students that supplements a gift to the College by Mr. William Shannon.

Instrumental in obtaining an annual donation of \$5000 from HWA Associates for a geotechnical graduate student scholarship and later for use as by HWA for support of Dr. Thomas Kinney and Mr. Ralph Boirum to teach annually a graduate-level course on Geotechnical Case Histories and Professional Practice.

Community Service

Judge and Chief Judge, Physical Sciences, High School Science Fair, West Lafayette, Indiana, 1978-1984

Provide occasional advice to homeowners in the Seattle area especially concerning landslides and slope stability issues.

State Service

Member, Highway Extension and Research Project for Indiana Counties and Cities, Advisory Board, 1982-1984.

Provide occasional advice to Division of Dam Safety, Department of Ecology. Olympia, on various aspects of dam stability, mine tailings dams, and containment of contaminated dredged materials.

National Service

Member, Project Panel E24-1 on revision of "AASHTO Manual on Subsurface Investigations", National Cooperative Highway Research Program, Transportation Research Board, 1978-1982.

Member, Expert Task Group, Innovations Deserving Exploring Analysis (IDEA), Strategic Highway Research Program (SHRP), 1987.

Member, Task Force M288 on Geotextile Specifications, Technical Section 4E, AASHTO Subcommittee on Materials, 1994-1996.

All other service

Member, Review Panel for the Graduate Program at Virginia Polytechnic Institute and State University, Blacksburg, Virginia, 2003.

Consulting Experience

Westinhoff & Novick, Inc., Chicago; Illinois; evaluation and plan for modernization of triaxial testing apparatus and procedures calibration and service on controlled-gradient consolidometer, 1968-70.

Seelec, Inc., Brookfield; Illinois; advice and evaluation of test apparatus and marketing potential for laboratory test equipment manufacture and import, 1968.

- D. R. Jones, Evanston, Illinois; inspection and advice on repair of foundation distress in an apartment building, 1969.
- Nilcon Geoteknik, AB, Kallered, Sweden; advice on marketing field vane shear apparatus and other related developments, 1973-74.
- Columbusmattan, AB, Ronninge, Sweden; advice on applications of plastic vehicle and blasting mats to geotechnical engineering, 1973-1979.
- AB Fodervävnader, Borås, Sweden; advice on the use of woven geotextiles for reinforced earth applications, 1973-76; 1979-80.
- Hawkins and Associates, Lafayette, Indiana; design of foundations for a new water tower in Battle Ground, Indiana, 1975.
- Tall Timbers Marinaes, Monticello, Indiana; inspection and advice on an unstable slope, 1976.
- Owens-Corning Fiberglas, Granville: Ohio; discussion of laboratory research and the development potential of nonwoven fabrics for reinforcing and as filters, 1976; 1978.
- Lamb Guay, Inc., Montreal, Québec, Canada; seminar on fabrics in civil engineering applications, 1977.
- Oregon State University, Corvallis, Oregon; board of advisors and consultant for the FHWA research project on "Test Methods and Use Criteria for Filter Fabrics", 1977-1982.
- Robert W. Crooks, Consulting Engineer, Indianapolis, Indiana; dynamic compaction of a deposit of loose granular soil, 1977.
- Michigan Testing Engineers, Inc., Detroit, Michigan; strength testing and evaluation of a compacted marine clay, 1977.
- Monsanto Textiles Co., St. Louis, Missouri; discussion of the importance of thickness of nonwoven fabrics as a replacement for granular filters, 1978.
- Monsanto Triangle Park Development Center, Research Triangle Park, North Carolina; discussion of the uses of civil engineering fabrics for reinforcement and soil stabilization, 1978.
- Stiney's Restaurant, West Lafayette, Indiana; advice on riverbank slope erosion problem, 1979.
- U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi; technical assistance in the development of design criteria for membrane-encapsulated sands for expedient construction of bridge piers, abutments, and approaches, 1980.
- American Testing and Engineering Company, Indianapolis, Indiana; development of a technical manual for professional staff, 1980.
- Malcolm Crocker, West Lafayette, Indiana; advice on correction of water problem in basement of residence, 1980.
- Soil Testing Services Inc., Green Bay, Wisconsin and Northbrook, Illinois; development of a design manual for geotextiles and staff professional development seminars, 1981.
- AMAX Coal Co., Indianapolis, Indiana; review of two consultants reports on the design and construction of geotextile-reinforced slurry retention dams on very soft foundations, 1982.
- Gulf Canada, Ltd., Toronto, Ontario, Canada; demonstration project using Tensar geogrids for highway embankment reinforcing, 1982.

- American Testing and Engineering Company, Indianapolis, Indiana; advice on the design of a geotextile-reinforced retaining wall at the Hoosier Dome, 1983.
- Golder Associates, Calgary, Alberta: Canada; potential use of vertical drainage to stabilize foundations for arctic offshore drilling platforms in the Beaufort Sea, 1983.
- American Electric Power Services Corp., Columbus, Ohio; advice on strength and permeability testing of embankment and foundation materials for Cardinal Dam No. 2, 1983-84.
- Standard Oil Co. (Indiana), AMOCO Research Center, Naperville, Illinois; study of stress path and yield surface behavior of Beaufort Sea clays to support offshore gravity platforms, 1984.
- Mirafi, Inc., Charlotte, North Carolina; creep response of Miradrain geocomposites, 1984.
- J. V. Lowney and Assoc., Palo Alto, California; review of instrumentation for a surcharge fill of a 20-acre site and possible use of prefabricated vertical drains, 1984.
- Hagerman Construction Co., Ft. Wayne, Indiana; design of a temporary sheet pile support system for an excavation in loose sand, 1985.
- Lankhorst Pancabumi Contractors SDN BHD, Selangor, West Malaysia; stability analysis and construction of geotextile-reinforced dikes on mining tailings slimes, 1986-87.
- University of Colorado at Denver and Colorado Department of Highways; advice and peer review of research on geosynthetic-reinforced retaining walls, 1986-90.
- Pathfinder Mine Corp., Riverton, Wyoming; review of the geotextile filter design for the 2A Pond Drain System (drainage wells and trenches), Lucky Mc Uranium Mine, Gas Hills, Fremont County, Wyoming, 1987.
- Nicolon Corp., Norcross, Georgia; preparation of practical generic design guidelines for the use of geotextiles in road stabilization and erosion control applications, 1987-89.
- Williamsburg Apartments, West Lafayette, Indiana; investigation of causes and planning of remedial action for excessive settlements of an apartment building, 1987-88.
- Harding-Lawson and Assoc., Concord, California; advice on the use of an alternate geogrid for a reinforced slope, 1987.
- Exxon Chemical Corp., Atlanta, Georgia; advice on the construction of geotextile-reinforced access roads and construction pads for the I-629 Wando bridge, Charleston, South Carolina, 1987.
- Washington State Department of Transportation, Olympia, Washington through STS Consultants Ltd., Northbrook, Illinois; instrumentation of a 40 ft high geotextile-reinforced retaining wall, Rainier Avenue interchange, Seattle, Washington, 1987-90.
- GeoServices, Inc., Boynton Beach: Florida under contract to Federal Highway Administration; preparation of Geotextile Engineering Implementation Manual and teaching workshops, 1987-88.
- W. R. Grace & Co., Columbia, Maryland; application of soil mechanics principles in concrete technology, 1988.
- State of Maryland, Office of the Attorney General, Baltimore, Maryland; analysis of geotechnical information, specifications, and project construction records for the installation of prefabricated vertical drains at the Seagirt Marine Terminal, Baltimore, Maryland, 1988-89.

- Woodward-Clyde Consultants, Inc., Wayne, New Jersey; Member of the Technical Review Board for the Hudson County (New Jersey) Resource Recovery Facility, 1988-89.
- L. A. Wahlstrom, Attorney at Law, Bellevue, Washington, and DBM Corporation, Federal Way, Washington; technical review and expert testimony in a lawsuit alleging damage to a nearby apartment building due to installation of soldier piles and tie-back anchors, 1988.
- Victor Golka, Kent, Washington; review of plans for construction of a bridge deck over a septic tank drain field, 1989.
- Lane, Powell, Moss, and Miller, Seattle, Washington; discussion regarding the failure of a sheet pile wall at the Gig Harbor Marina, 1989.
- Leighton and Associates, Santa Ana, California; workshop on geosynthetics, 1989.
- Conwed Plastics, St. Paul and Roseville, Minnesota; member of design group for Design of Polymer Grid Reinforced Soil Structures, 1990-91.
- Golder Associates Inc., Redmond, Washington; study of liner design life for Non-Drag Off Landfill, Hanford Site, 1991.
- E2SI Inc., Baltimore, Maryland; peer review of various aspects of the FHWA-sponsored research project on "Durability of Geosynthetics in Highway Applications", 1991-95.
- AETNA Insurance Co., Bellevue, Washington; review of the alleged failure of a soldier pile wall in Renton, Washington, 1993-94.
- Lucas, Bowker, and White, attorneys, Edmondton, Alberta, Canada; provided expert opinion regarding the failure of three large diameter pipes at the Edmonton Water Treatment Plant, 1993-94.
- GeoTesting Express, Concord, Massachusetts, and BFI, Inc., Acton, Massachusetts; peer review of the liner design for a vertical landfill expansion and East Bridgewater, Massachusetts, 1993-94.
- Asian Institute of Technology, Bangkok, Thailand; advise and peer review of specifications, instrumentation, and results of a test embankment utilizing prefabricated vertical drains at the Second Bangkok International Airport site, 1994-95.
- Applied Geotechnology, Inc., Bellevue, Washington; consultant on reinforced slopes for the Third Runway, Sea-Tac International Airport, 1994-1998.
- Ling-Jie Construction Co., Taipei, Taiwan; review of the design of vertical drainage for the Keelung River Reclamation Project, Taipei, 1994.
- Hintze & Wright, attorneys, Seattle, Washington; review of design and expert testimony regarding the possible effect of groundwater lowering and other activities during the construction of the Fred Hutchinson Cancer Research Center, Seattle, 1995.
- R.R. Berg & Assoc., Wayland, Minnesota under contract to the FHWA; rewrite of the FHWA Geosynthetics Engineering Guidelines and team-teach workshops for highway engineers, 1994-present.
- Westinghouse Hanford Co., Richland, Washington; analysis of the interaction of backfill soils and single-walled nuclear waste storage tanks, 1995.
- VSL Corp., Raleigh, North Carolina; review of case histories and evaluation of the stiffness approach for the design of reinforced wall systems, 1995.

- SDS Drilling, Vancouver, British Columbia, Canada; review of a patent application for a new dynamic cone penetrometer, 1996.
- Robert Coldwell, Seattle, WA; investigation of a retaining wall failure and review of plans for its reconstruction; occasional inspection of the completed wall, 1997-00.
- E2SI, Inc., Baltimore, Maryland; peer review of a task report on confined extension testing of geosynthetics as part of the FHWA-sponsored research project on "Durability of Geosynthetics in Highway Applications", 1997-00.
- Woodward Clyde Consultants, Inc., Seattle, Washington; advice and review of plans for test sections utilizing geosynthetic stabilization for haul roads at the Centralia Mine, Centralia, Washington, 1997.
- Geotechnical Engineering Office, Government of Hong Kong through B. R. Christopher; critical review of Hong Kong's procurement procedures for proprietary reinforced retaining wall systems, 1997-98.
- Fluor Daniel Northwest, Richland, Washington; review of laboratory and in situ testing procedures and settlement analyses for the design of the cover system for the single wall waste tanks, Hanford reservation, 1997-8
- Shannon and Wilson, Inc. Seattle, Washington and City of Grand Forks, North Dakota; review of US Army Corps of Engineers plans for slope and levee stabilization of the Grand Forks floodway, 1998.
- Wasatch Constructors and Sverdrup/De Leuw, Salt Lake City, Utah; review of face movements and possible failures of high reinforced retaining walls, reconstruction of I-15 through Salt Lake City, 1998.
- The Belles Group, Seattle, Washington; analysis of pile installation specifications for Pier 17 Replacement Project, U. S. Navy port in New London, Connecticut, 1988.
- Shannon and Wilson, Inc., Seattle, Washington; investigation of the failure of the liner for a runoff retention pond at the Newcastle Golf Club, Newcastle, Washington, 1998.
- Shannon and Wilson, Inc. Seattle, Washington; discussion of the laboratory testing procedures for the design of deep tunnels for the Sound Transit, Seattle, 1998.
- Hart-Crowser, Inc., Seattle, Washington; peer review and advice on the reinforced walls and slopes for the Third Runway, SeaTac International Airport, 1999-2004.
- Stafford Frey Cooper, attorneys, Seattle, Washington; review of the engineering reports depositions, and declarations associated with a landslide and subsequent reconstruction at a housing development in Tacoma, Washington, 1999.
- Messina Law Firm and Messina-Bulzomi, attorneys, Tacoma, Washington; investigation of the possible cause of the failure of an abandoned railroad embankment near Buckley, Washington, 1999-2000.
- Royal Military College of Canada and Washington State Department of Transportation; technical review of research on geosynthetic-reinforced retaining walls performed by RMCC and others, 2000-2001.
- Hunton & Williams, Patent Attorneys, Washington, DC; advice on a patent infringement suit involving earth reinforcing systems, 2000.
- AMEC Earth and Environmental, Kirkland, Washington; research on drilled shafts with defects (sponsored by FHWA and ADSC), 2000-2001.
- Utah Department of Transportation, Salt Lake City, Utah; investigation of deformations of two MSE Retaining Walls, Silver Creek Junction interchange, I-80 and US40, 2001.

- RCI Construction, Inc., Kent, Washington; instrumentation of two geosynthetic-reinforced retaining walls in Auburn, Washington, 2001-2002.
- Owens Davies, attorneys, and the Port of Olympia, Olympia, Washington; investigation of the failure of a silt contamination curtain, Northwest Pole site, Budd Inlet, Port of Olympia, 2001-3.
- Gregory Geotechnical, Fort Worth, Texas; review of geotechnical report on two problem foundation areas of the President George Bush Turnpike, Dallas, Texas, 2001.
- Pavements Branch, Roads and Traffic Authority, Blacktown, New South Wales, Australia; independent review of RTA Specification R63: Geotextiles (Separation and Filtration), 2001- 2002.
- Braun Intertec, St. Paul, Minnesota; review of proposed foundation stabilization program using dynamic compaction of mine spoils for the site of a Wal-Mart distribution center near Steubenville, Ohio, 2002.
- Michael Dennison, Civil Engineer; review of the proposed design of a geosynthetic reinforced wall, Corte Madera, California, 2002.
- C. Felice and Associates, Kirkland, Washington; research on drilled shafts with defects (sponsored by FHWA, ADSC, and Salute, Inc.), 2002- .
- Sandberg, Phoenix & Von Gontard, St. Louis, Missouri; expert advice on a failure of a modular block-faced reinforced wall, 2002-2004.
- Richard Maloney et al., Seattle and Burien, Washington; investigation of a landslide and water main failure; provide expert testimony, 2003-2004.
- Associated Earth Sciences, Inc., Kirkland, Washington; review of laboratory testing, settlement analyses, and construction instrumentation program for the reclamation of a tailings pit, 2003.
- Bureau of Land Management, Boise, Idaho; review of geologic and survey information and other documentation; provide recommendations for treatment of a landslide dam caused by the Bluegill Landslide, 2003-2004.
- CH2M-Hill, Bellevue, Washington; consulting and peer review for the NCHRP Project 12-70 on Seismic Analysis and Design of Retaining Walls, Buried Structures, Slopes and Embankments, 2004-
- Taiwan Construction Research Institute and National Freeway Bureau, Taipei, Taiwan; investigation of excessive movements of overpass bridge structures, Freeway No. 3 C386 interchange, Taiwan, 2004-
- Manfred Henne, Bremerton, Washington; advice on slope instability and beach erosion of a large storm water outfall in Silverdale, 2005.
- Lachel Felice & Associates, Kirkland, Washington and Ohio Department of Transportation, Toledo, Ohio; stability and long-term performance of a reinforced soil retaining wall on I-280, 2005.
- Greenworks Development Group, LLC, Seattle, Washington; peer review of slope stability and drainage design for a steep slope, Newcastle, Washington, 2005.
- Bureau of Land Management, Coeur d'Alene, Idaho; review of geologic and geotechnical reports and documentation, and provide recommendations for increasing the static and seismic stability of two tailings dams at the Rex Mine and Mill site, Wallace, Idaho, 2005-
- Christiansen & Jensen, Salt Lake City, Utah, and Foster Geotechnical Inc., San Diego, California; expert advice on the construction performance of a steel-reinforced precast concrete panel wall in Clearfield, Utah, 2006-

| Kristina Knickmeyer, Seattle, Washington; inspection of distress in a residence near the Beacon Hill Sound Transit Tunnel construction, 2006.