

CARLTON LOUIS HO
CURRICULUM VITAE

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Registration: Professional Engineer, Massachusetts, 1998, #40566

Education:

1/85 Ph.D. Civil Engineering, Geotechnical Engineering, Stanford University, Stanford, California. **Dissertation:** "Probabilistic Evaluation of Seismic Pore Pressure Development from Uniform Cyclic Laboratory Tests," E. Kavazanjian, Jr., Advisor.
6/80 M.S., Civil Engineering, Geotechnical Engineering, Stanford University.
6/76 B.S., Civil Engineering, Stanford University.

Professional Experience:

6/96-present Associate Professor, Department of Civil and Environmental Engineering, University of Massachusetts, Amherst, MA.
8/92-6/96 Associate Professor, Department of Civil and Environmental Engineering, Washington State University, Pullman, WA
8/87-8/92 Assistant Professor, Department of Civil and Environmental Engineering, Washington State University, Pullman, WA
8/84-8/87 Assistant Professor, Department of Civil Engineering, the Illinois Institute of Technology, Chicago, IL
6/81-6/84 Research Assistant, Department of Civil Engineering, Stanford University, Stanford, CA
9/80-6/81 Teaching Assistant, Department of Civil Engineering, Stanford University, Stanford, CA
6/80-9/80 Associate Engineer, Dames and Moore, San Francisco, CA
2/79-9/79 Junior Civil Engineer, City of Milpitas, CA
8/76-2/78 Research Engineer, Okubo Instruments, Colorado Springs, CO

Professional Affiliation:

ASCE, Member
Engineering Geology Committee of the Geo-Institute, Chairman 1993-1997, Control Group Member 1989-2000, Member 1988-present
Geotechnical Institute Temporary Technical Coordinators Committee 1996-1997

Earth Retention Structures Committee of the Geo-Institute, Member 1998-
 Committee on Scour and Erosion of the Geo-Institute, Chairman 2002-2003, Member 2003-
 Organizing Committee, Performance Confirmation of Constructed Geotechnical Systems,
 Geo-Institute Specialty Conference, 9-12 April 2000, Chairman 1998-
 Continuing Education Committee of the Geo-Institute, Chairman 2009-
 ASEE, Associate Member
 Professional Practices Committee of the Civil Engineering Section, Chairman 1988-89
 EERI, Member
 ISGE, Member
 Committee on Scour and Erosion, Member, 2002-
 Seismological Society of America, Member
 Sigma Xi, Associate Member
 Transportation Research Board, Ad Hoc Member
 Member 1989-2002, Committee on Engineering Geology (A2L05)
 Member 1999-2002, Subcommittee of the Committee on Engineering Geology on Bridge
 Scour (A2L05-2)
 University Representative 1992-1994
 USUCGER, Representative for Member University 1990-1993, 1998-

Professional Service:

1/12/10 Co-chair, Session 410, 89th Annual Meeting of TRB, Washington, DC.
 6/26-27/07 Panelist, NSF review panel for Geotechnical Engineering of CMS.
 5/25/05 Panelist, NSF review panel for NEECR.
 6/2-29/04 Panelist, NSF review panel for NEESR.
 4/4-5/04 Panelist, NSF review panel for CMS.
 4/15-16/02 Panelist, NSF review panel for NEES.
 10/18/98 Organizer, Session, Geo Congress at ASCE National Convention, Boston, MA.
 10/25-26/96 Participant (guest), Planning Committee, GeoLogan 1997, Geo-Institute/ASCE.
 6/17/96 Panelist, NSF review panel for Earthquake Hazard Mitigation proposals, Arlington, VA.
 7/13/95 Moderator, Session T4, 7th Int. Conf. Application of Statistics and Probability., Paris, France.
 2/21/95 Participant, Comité Scientifique, Projet FOREVER, Paris, France.
 10/28/93 Moderator, Session 4C, "Advances in Site Characterization II - Data Management and Interpretation," ASCE National Convention, Dallas.
 9/28/92 Panelist, NSF review panel for Small Business Innovation Research, Phase I proposals, Washington, DC.
 2/27-28/92 Participant, NSF/USGS Workshop on Hazardous Mass-Flow, Rolla, Missouri.
 8/19-21/91 Participant, NSF Workshop on Soil Improvement and Foundation Remediation with Emphasis on Seismic Hazard, Seattle, Washington.
 10/19/90 Participant, Washington State Department of Construction and Materials Research Workshop, Olympia, Washington.
 11/7/90 Presiding Chair, Session W3, "Landslide Hazard Identification, Monitoring, and Warning," ASCE National Convention, San Francisco.
 6/15-16/89 Participant, TransNOW, annual meeting and Board of Directors meeting, Seattle, Washington.
 11/17/88 Participant, Washington State Department of Transportation, Pavement and Material,

- Geotechnical and Construction Research Workshop, Tumwater, Washington.
- 5/23/88 Moderator, Technical Session, Hazardous Waste Conference, Spokane, Washington.
- 3/1/88 Chairman, Technical Session VI, "Slope Stability Analysis," 24th Symp. Engrg. Geo. and Soils Engrg., Coeur d'Alene, Idaho.
- 8/4-5/86 Participant, NSF workshop on Earthquake Hazard Mitigation: Siting and Geotechnical Systems, Chicago, Illinois.

Research Grants:

- 8/09-7/11 Principal Investigator, "RAPID: Spectral Analysis of Sub-Track Accelerations Subjected to Long Term Heavy Axle Load Conditions," National Science Foundation Grant No. CMMI-0956960 (\$119,188).
- 6/05-6/07 Principal Investigator, "Evaluation of Compost for Erosion Control," Massachusetts Highway Department (\$172,133).
- 10/03-1/04 Principal Investigator, "Strategy for Implementing Bridge Scour Management," Korean Institute of Construction Technology (\$1,500).
- 9/99-3/01 Principal Investigator, "Development of Priority Based Statewide Scour Monitoring Systems in New England," New England Transportation Consortium (\$80,000).
- 5/99-12/99 Co-principal Investigator, "Subsurface Evaluation of Railway Track Using Ground Penetrating Radar," Federal Railroad Administration (\$126,999).
- 6/99-6/00 Co-principal Investigator, "Fractal Analysis of Geometry Data for Railway Track Condition Assessment," Federal Railroad Administration (\$95,882).
- 1/99-4/00 Principal Investigator, "Phase 2: Long-term Drainage Demonstration of a Retaining Wall Constructed with Recycled Plastic Landscaping Timbers," Chelsea Center for Recycling and Economic Development, Commonwealth of Massachusetts (\$20,985).
- 9/98-12/98 Principal Investigator, "Phase 1: Material Testing of Recycled Plastic Landscaping Timbers," Chelsea Center for Recycling and Economic Development, Commonwealth of Massachusetts (\$3,000).
- 6/98-5/99 Principal Investigator, "Prediction of Seismically Induced Landslides Motion Using GIS-based Analysis," Faculty Research Grant, University of Massachusetts Amherst (\$5,000).
- 7/94-7/97 Principal Investigator, "Collaborative Research: Unstable Behavior of the Southern Margin of the Laurentide Ice Sheet and Implications for Ice-sheet Dynamics and Climate Change," National Science Foundation Grant No. EAR-9410262 (\$99,000), transferred portion EAR-9796083 (\$39,700).
- 6/94-5/95 Principal Investigator, "Reconnaissance Trip After the Northridge, California Earthquake of January 17, 1994 to Inspect Retaining Walls and Slopes," National Science Foundation Grant No. CMS-9413277 (\$4,790).
- 8/93-8/96 Principal Investigator, "Instrumentation of Permanent Reinforced Earth Structures and Tied-back Walls for Seismic Response," National Science Foundation Grant No. BCS-9222669 (\$195,295), REU Supplements (+\$10,000), transferred portion with \$15,000 supplement CMS-9796226 (\$78,201).
- 11/92-5/93 Principal Investigator, "Blast Densification at South Coldwater Creek Bridge No. 12, SR-504," Washington State Department of Transportation (\$5,000).
- 7/92-12/94 Principal Investigator, "Subglacial Till Genesis and Ice Sheet Dynamics, Lake Michigan Lobe Area: Subcontract," subcontract from Oregon State University, National Science Foundation Grant No. EAR-9205274 (\$11,665).

- 1/92-3/94 Co-principal Investigator, "Development of Rheological Parameters for the Modeling of Pile Foundations for Seismic Analysis," Washington State Department of Transportation Agreement No. T9234-7 (\$75,000).
- 8/91-6/93 Principal Investigator, "Update of Design Seismic Response Spectra for Washington State Bridges," Washington State Department of Transportation Agreement No. T9234-4 (\$39,224), modification 5/27/92 (+\$4,971).
- 8/91-12/91 Principal Investigator, "Field Study of Copalis Beach Liquefaction Deposits," United States Geological Survey Service Order 602483-91 (\$2,500).
- 5/91-12/92 Principal Investigator, "Pilot Study of an Unstable Slope Management System," Washington State Department of Transportation Agreement No. GC8720-16 (\$63,253).
- 7/89-6/91 Principal Investigator, "Development of an Unstable Slope Management System," Washington State Department of Transportation Agreement No. GC8720-02 (\$74,999).
- 1/89-12/90 Principal Investigator, "Test of a Rheological Slope Stability Model," National Science Foundation Grant No. BCS-8815704 (\$56,162), REU Supplement awarded 4/10/89 (+\$5,000).
- 7/88-8/89 Principal Investigator, "Effect of Construction Techniques on the Diffusion of Solutes Through Compacted Clay Liners," New Faculty Grant-in-Aid Program, Washington State University (\$9,160).
- 6/88-10/88 Principal Investigator, "Determination of Strength Parameters for Palouse Loess," funded by Schnabel Foundation Company, Bethesda, Maryland (\$3,000).
- 9/87-4/88 Co-principal Investigator, "Performance of Soil Nailing in Loess Soil," funded by Schnabel Foundation Company, Bethesda, Maryland (\$5,000).
- 3/88-9/89 Co-principal Investigator, "Response of Tied-Back Walls During the Whittier Narrows Earthquake of October 1, 1987," grant awarded to GeoEngineers, Bellevue, Washington, Washington State University awarded subcontract, National Science Foundation Grant No. CES-8804304 (\$29,999).
- 11/86-8/88 Principal Director, "Engineering Research Equipment: Computer-Controlled Soil Testing System," equipment currently in place at the Illinois Institute of Technology, National Science Foundation Grant No. ECE-8604929 (\$93,333).
- 4/86-12/86 Co-principal Investigator, "Characterization of Diffusion of Solutes through Compacted Clays," Milligan Venture Fund for Faculty Research, awarded by the Illinois Institute of Technology (\$10,000).
- 6/85-10/87 Principal Investigator, "Research Initiation: Strain Controlled Tests for Liquefaction Potential Analysis," National Science Foundation Grant No. ECE-8504904 (\$60,000).

Research Appointments:

- 6/92 Faculty Appointment, Research Civil Engineer, Branch of Geologic Risk Assessment, United States Geological Survey, Menlo Park, CA (GS-14).
- 1/95-7/95 Visiting Faculty (sabbatical leave), Centre d'Enseignement et Recherche de la Mécanique de Sol (CERMES), École Nationale des Ponts et Chaussées (ENPC), Noisy-le-Grand, France. Supported by a Bourse de Haut Niveau (High Level Fellowship) from the Ministère de l'Enseignement Supérieur et de la Recherche (MESR) (14,000 FF/mo.)

Teaching Grants:

- 7/87-6/88 Principal Investigator, " Grant for Professional Development in Teaching: Technology to Improve Graduate Program Recruitment and Teaching," UMass PMYR Grant (\$3,000).
- 7/87-6/88 Co-principal Investigator, "Incorporation of Field Testing in Geotechnical Classes," WSU College of Engineering Teaching Grant (\$4,000).

Classes Taught:***At the Illinois Institute of Technology:***

- CE 185 Statics for Architects
CE 285 Strength of Material for Architects
CE 413 Engineering Geology
CE 457 Foundation Engineering
CE 486 Site and Soil Improvement
CE 552 Soil Dynamics
CE 583 Advanced Soil Mechanics

At Washington State University:

- CE 215 Strength of Materials (previously number CE 314)
CE 317 Geotechnical Engineering
CE 410/510 Experimental Soil Mechanics
CE 425/525 Soil and Site Improvement
CE 435 Foundation Engineering
CE 511 In Situ Testing and Field Instrumentation
CE 527 Advanced Soil Mechanics

At the École Nationale des Ponts et Chaussées

- T5 Enseignement de Mécanique des Sols et des Roches (Soil and Rock Mechanics, English language class)

At the University of Massachusetts:

- CEE 121 Civil Engineering Measurements
CEE 260A Probability and Statistics
CEE 320 Soil Mechanics
CEE 320H Honors Colloquium on Soil Mechanics
CEE 365 Civil and Environmental Engineering Laboratory
CEE 421 Foundation Engineering
CEE 423 Engineering Geology
CEE 486 Civil and Environmental Engineering Design
CEE 623 Advanced Foundation Design
CEE 624 Earth Retaining Structures
ENGIN 297 Engineering in a Global Economy

Project, Thesis, Dissertation Advising:

Bachelors of Science Honor Students Advised:

- Vanderheiden, Amy, *Effects of Water Content on the Diffusion Coefficient of Clay Soils*, BSCE Honors Program thesis, May 1991, Washington State University.
- Snyder, Jerrod, *Liquefaction and Pore Pressure Development Mechanisms*, BSCE Honors Program thesis, May 1992, Washington State University.
- Tooley, Jennifer, *Sediment Properties and Strengths Sampled from the Canadian Shelf*, BSCE Honors Thesis, Commonwealth College, January 2003, University of Massachusetts Amherst

Masters of Science Students Advised:

- Salvatore, Antonino Riccobono Longo, *Void Ratio Effect on the Diffusion Prediction of Non-reactive Solutes*, MSCE, May 1987, Illinois Institute of Technology.
- Wong, Wylie, *Strain Controlled Cyclic Triaxial Test for Liquefaction Potential Analysis*, MSCE, August 1987, Illinois Institute of Technology.
- Hovind, Cynthia L., *Determination of Time-Dependent Soil Parameters by Triaxial Tests*, MSCE, May 1990, Washington State University.
- Shebl, Maher Abdel-Aal, *Effect of Compaction Technique on the Diffusion Characteristics in Clay Liners*, MSCE, May 1990, Washington State University.
- Norton, Sonja S., *Development of an Unstable Slope Management System*, MSCE, December 1990, Washington State University.
- Shawish, Khaled, *Update of Seismic Response Spectra for Bridge Design*, MSCE, August 1992, Washington State University.
- Vela, Julio, C., *Rheological Testing of Subglacial Till Material*, MSCE, May 1994, Washington State University.
- Herbel, Wayne, A., *Development of a GIS Based Landslide Hazard Map*, MSCE, May 1994, Washington State University.
- Rodriguez, Adrian, *Discrete Element Method for Slope Stability Analysis*, MSCE, December 1995, Washington State University.
- Coyne, Anthony, *Direct Shear Modeling of Micropile Networks*, MSCE candidate, degree expected August 1999, Washington State University.
- Miles, Scott, *Rigorous Landslide Hazard Zonation using Newmark's and Stochastic Ground Motion Simulation*, MSCE, May 1997, University of Massachusetts Amherst.
- Jozwicki, Katie, *GIS Based Risk Assessment for Seismically Induced Landslides*, MSCE candidate, degree expected August 1999, University of Massachusetts Amherst.
- Skeels, Jason, *Long-term Rheological Testing of Glacial Till Material*, MSCE candidate, degree expected December 2003, University of Massachusetts Amherst.
- Frankl, Raymond, *Material Testing of Coarse-grained Material for Dynamic Properties*, MSCE candidate, degree not completed, University of Massachusetts Amherst (co-chair with E. Selig)
- O'Hara, Katherine, *Substructure Maintenance Management Approach For The Condition Assessment Of Railway Track*, MSCE, August 2002, University of Massachusetts Amherst.
- Amidon, Kurt, *Geotechnical Engineering Report, Amherst, Wastewater Treatment Facility Upgrade*, MSCE, January 2003, University of Massachusetts Amherst.
- Wong, Kelvin C, *Suitability of Compost for Erosion Control: Evaluation and Analysis*, MSCE August 2008, University of Massachusetts Amherst.

Tupper, Michael, *Geotechnical Engineering Report, Evaluation of Unquomok Reservoir Dams*, MSCE candidate, degree expected May 2008, University of Massachusetts Amherst.

Doctoral Students Advised:

Gausseres, Richard, *Generalized Time-Dependent Behavior of Clays Consolidated Under Different Stress Ratios*, Ph.D. CE, May 1988, Illinois Institute of Technology, (co-chair with R. Finno).

Alwail, Tahir Ahmed, *The Mechanisms and Effects of Fines on Compacted Sandy Soil*, Ph.D. CE, December 1990, Washington State University, (co-chair with R. Fragasz).

Wong, Wylie W.-H., *Evaluation of Time-rate Slope Movement Based on Laboratory Tests*, December 1992, Washington State University.

Shebl, Maher Abdel-Aal, *In Situ Treatment of Contaminated Soil Using Catalyzed Hydrogen Peroxide*, December 1993, Washington State University.

Vela, Julio, C., *Instrumentation of a Tied-back or PRES Wall to Measure Seismic Response*, Ph.D. CE, expected August 1999, Washington State University.

Miles, Scott, *Risk analysis and infrastructure damage for the East Bay Hills*, Ph.D. candidate, degree expected May 2001, University of Massachusetts Amherst.

Heyns, François, *Track Drainage Design Techniques and Subballast Design Criteria*, Ph.D. candidate, degree expected May 2001, University of Massachusetts Amherst (co-chair with E. Selig).

University Service:

At the University of Massachusetts:

2002- Member, Baden-Württemberg Committee, University International Program Office.
2000- Participant, NEAGEP program.
2000- Graduate Program Director, Civil and Environmental Engineering
2000 Member, College of Engineering/School of Management Undergraduate Initiative Committee, College of Engineering.
1999- Member, Committee and Initiatives in the International Program
1999 Member, ABET Concerns Committee, College of Engineering.
1999 Chair, Capstone Design Course Committee, Department of Civil and Environmental Engineering.
1999-2000 Member, Structural Engineering Faculty Search Committee, Department of Civil and Environmental Engineering.
1999 Member, Geotechnical Engineering Faculty Search Committee, Department of Civil and Environmental Engineering.
1999-2000 Department Representative, Minority Engineering Program, College of Engineering.
1998-99 Member, Geotechnical Engineering Faculty Search Committee, Department of Civil and Environmental Engineering.
1998- Mentor, Minority Engineering Program, College of Engineering.
1997 Participant, College of Engineering Open House, October 18, 1997.
1997-2000 Area Coordinator, Geotechnical Engineering, Department of Civil and Environmental Engineering.
1997- Member, Civil and Environmental Department Head Search Committee.
1996 Member, University Fulbright Fellowship Screening Committee, October 9, 1996.
1 Member, Alumni Relations Committee, Department of Civil and Environmental Engineering.

1996 Participant, College of Engineering Open House, October 5, 1996.

At Washington State University:

1995-96 Member Scholarship Committee, Honors Council.
1995-96 Undergraduate Curriculum Committee, Department of Civil and Environmental Engineering.
1995 Chairman, Committee to Review the Teaching of T. Papagiannakis, Department of Civil and Environmental Engineering.
1994 Participant, Focus Group for WSU Foundation Fund Raising Campaign, 9/22/94.
1994 Chairman, Committee to Review the Teaching of R. Taha, Department of Civil and Environmental Engineering.
1993 Committee to Review the Teaching of T. Papagiannakis, Department of Civil and Environmental Engineering.
1993 Member, Undergraduate Environmental Task Group, Department of Civil and Environmental Engineering.
1992-94 Chairman, Faculty Committee for Distinguished Lecture Series, College of Engineering.
1992-93 Member, Search Committee for Assistant/Associate Professors of Civil and Environmental Engineering in the areas of Structural Engineering and Geotechnical Engineering.
1992-94 Senator, University Faculty Senate.
1992-96 Member, Honors Council, University President's Standing Committee.
1992 Committee to Review the Teaching of Dr. R. Nakib, Department of Civil and Environmental Engineering.
1992 Committee to Review the Teaching of Dr. B. Muhunthan, Department of Civil and Environmental Engineering.
1992-94 Program Coordinator, Geotechnical and Pavement Engineering, Department of Civil and Environmental Engineering.
1991-92 Member, Faculty Committee for Distinguished Lecture Series, College of Engineering.
1991 Participant, Faculty Panel Discussion, 1991 Fall College of Engineering and Architecture Advisory Board Meeting, October 11, 1991.
1991 Participant, Graduate Education Workshop, September 19, 1991
1991-92 Member, Search Committee for Assistant/Associate Professor of Civil and Environmental Engineering in the area of Geohydrology, Department of Civil and Environmental Engineering.
1991-92 Chairman, Search Committee for Assistant/Associate Professor of Civil and Environmental Engineering in the area of Pavement Design/Geotechnical Engineering, Department of Civil and Environmental Engineering.
1990 Participant, workshop sponsored by the President's Commission on the Status of Minorities, November 27, 1990.
1990-95 Official, NCAA intercollegiate track and field competition.
1990-92 Program Coordinator, Geotechnical Engineering, Department of Civil and Environmental Engineering.
1990-91 Member, Search Committee for Assistant/Associate Professors of Civil and Environmental Engineering in the areas of Geotechnical Engineering, Environmental

- Engineering, Hydraulic Engineering, and Structural Engineering, Department of Civil and Environmental Engineering.
- 1990 Member, Ad Hoc Committee for Computing Facilities, Department of Civil and Environmental Engineering.
- 1990 Member, Ad Hoc Committee for a 4-Year Curriculum in Civil Engineering, Civil Engineering Department.
- 1990 Participant, NSF Young Scholars Program, Summer 1990.
- 1989- Member, Graduate Studies Committee, Department of Civil and Environmental Engineering.
- 1989- Member, Committee on Computing, Department of Civil and Environmental Engineering.
- 1988-89 Member, Search Committee for Chairman of the Department of Civil and Environmental Engineering.
- 1988-92 Lecturer, MESA minority recruitment program, at WSU 11/10/88, at Sunnyside High School, Sunnyside, WA, 2/25/89, 2/24/90, and 2/22/92.
- 1987-88 Member, Search Committee for Assistant Professor of Civil and Environmental Engineering in the area of Transportation Engineering, Department of Civil and Environmental Engineering.

At the Illinois Institute of Technology:

- 1986-87 Member, Institute Curriculum Committee.
- 2/25/86 Invited presentation on the engineering curriculum for architects for the College of Architecture accreditation review board.
- 1985-86 Instructor, Women in Science and Engineering Summer Program.
- 1985-87 Faculty Advisor, Student Chapter of the ASCE.

Honors:

- 5/87 Honorary Member, Chi Epsilon, IIT Chapter.
- 12/89 Most Admired Faculty Member, ASCE Student Chapter WSU.
- 1994 Fulbright Fellowship First Alternate for France Program.
- 1995 Bourse de Haut Niveau (High Level Fellowship) from the Ministère de l'Enseignement Supérieur et de la Recherche (MESR).

Presentations:

- 4/13/74 "Probabilistic Analysis of Pore Pressure Development," Ill. Inst. Tech., Chicago, IL.
- 11/21/86 "Probabilistic Approach to Liquefaction Potential," Wash. St. Univ., Pullman, WA.
- 7/26/91 "Evaluation of Landslide Movements Using Laboratory Tests," Northwestern University, Evanston, IL.
- 2/27/92 "Rheological Slope Stability Model Based Upon Laboratory Tests," NSF/USGS Workshop on Hazardous Mass-Flow, University of Missouri, Rolla, MO.
- 11/19/92 "Characteristics of Seismically Induced Landslides," combined meeting of the Geotech. Tech. Group, Seattle Sect., ASCE and Wash. St. Sect., AEG, Seattle WA.
- 11/20/92 "Evaluation of Time-rate Slope Movement Based on Laboratory Tests," Univ. of Wash., Seattle, WA.
- 6/3/94 "Seismically Triggered Landslides Resulting from the Northridge, California Earthquake of January 17, 1994," SIMECSOL, Le Plessis Robinson, France.
- 7/28/94 "Seismically Triggered Landslides Resulting from the Northridge, California Earthquake of January 17, 1994," the Illinois Institute of Technology, Chicago, IL.

- 5/22/95 "GIS Based Zonation of Infrastructure Damage Related to Seismically Triggered Landslides," Univ. of Mass., Amherst, MA.
- 6/19/95 "GIS Based Zonation of Infrastructure Damage Related to Seismically Triggered Landslides," CERMES/ENPC, Noisy-le-Grand, France.
- 5/4/00 Carlton L. Ho, "Understanding Seismic Landslide Hazard Remediation," Presentation at the ASCE Geotechnical Meeting of the Portland, Oregon Section.

Publications:

Journal Publications:

- Ho, C. L., Sarmiento, J. S., and Kavazanjian, E., Jr. (1988). "Stabilization of Liquefiable Samples During Transport," tech. note, *Geotech. Testing J.*, ASTM, **11**(1), pp. 72-74.
- Ho, C. L. and Kavazanjian, E., Jr. (1990), "Reduction Factor for Liquefaction Potential Analysis," *Int. J. Soil Dyn. and Earthquake Engrg.*, **9**(6), pp. 313-324.
- Taylor, T., Fragaszy, R. J., and Ho, C. L. (1991), "Projectile Penetration in Granular Soils," *J. Geotech. Engrg.*, ASCE, **117**(4), pp. 658-672.
- Ho, C. L., Kornher, K., and Tsiatas, G. (1991), "Ground Motion Model for Puget Sound Cohesionless Soil Sites," *Earthquake Spectra*, EERI, **7**(2), pp. 237-266.
- Tsiatas, G., Kornher, K., and Ho, C. (1992), "Seismic Spectra for Highway Bridges in Washington State," *Trans. Res. Rec.*, 1309, Trans. Res. Brd.
- Fragaszy, R. J., Su, W., Siddiqi, F. H., and Ho, C. L. (1992), "Modeling Strength of Sandy Gravel," *J. Geotech. Engrg.*, ASCE, **118**(6), pp. 920-935.
- Ho, C. L. and Tsiatas, G. (1992), "Seismic Highway Bridge Design Using Spectra Specific to Washington State," *Trans. Res. Rec.*, 1336, Trans. Res. Brd., pp. 43-49.
- Alwail, T., Ho, C. L., and Fragaszy, R. J. (1992), "Collapse Mechanisms of Low Cohesion Compacted Soils," *Bull. Assoc. Engrg. Geologist*, **29**(4), pp. 345-353.
- Wong, W. W.-H., Ho, C. L., Iverson, R. M., and Hovind, C. L. (1995), "Viscoplastic Soil Parameters from Triaxial Tests," *GSA Reviews in Engineering Geology*, **X**, pp. 39-50.
- Jenson, J. W., Clark, P. U., MacAyeal, D. R., Ho, C. L., and Vela, J. C., (1995), "Numerical Modeling of Advective Transport of Saturated Deforming Sediment Beneath the Lake Michigan Lobe, Laurentide Ice Sheet," *Geomorphology*, **14**, pp. 157-166.
- Saunders, T. D., Cahill, J. A., McLean, D. I., Marsh, M. L., and Ho, C., (1995), "Seismic Retrofitting of Bridge Substructures," *Trans. Res. Rec.*, 1476, Trans. Res. Brd., pp. 37-47.
- Ho, C. L., Shebl, M. A.-A., and Watts, R. M. (1995), "Development of an In Situ Treatment of Hydrocarbon Contaminated Soil," *Hazardous Waste Hazardous Materials*, **12**(1), pp. 15-25.
- Masad, E. Taha, R. Ho, C., and Papagiannakis, T. (1996), "Engineering Properties of Shredded Tires as a Lightweight Fill Material," *Geotechnical Testing Journal*, ASTM, **19**(3), pp. 297-304.
- Jenson, J., W., MacAyeal, D. R., Clark, P. U., Ho, C. L., Vela, J. C., "Numerical Modeling of Subglacial Sediment Deformation: Implications for the Behavior of the Lake Michigan Lobe, Laurentide Ice Sheet," in press, *J. Geo. Res.*
- Miles, S.B. and Ho, C.L. (1999) "Rigorous landslide hazard zonation using Newark's method and stochastic ground motion simulation," *Int. J. Soil Dyn. and Earthquake Engrg.*, **18**(4), pp. 305-323.
- Miles, S.B. and Ho, C.L. (1999) "Applications and issues of GIS for Civil Engineering Modeling," *ASCE J. Computing in Civil Engineering*, **13**(3), pp. 144-152.
- Sheahan, T. and Ho, C. L. (2003), "Simplified trial wedge method for soil nailed wall analysis," *J. of Geotechnical and Geoenvironmental Engrg.*, **129**(2) pp. 117-124.

- Ho, C. Wong, K., and Reckhow, D. A. (2008), "An Evaluation of the Methodology in Analyzing Compost for Erosion Control," *Trans. Res. Rec.*, 2044, Trans. Res. Brd., pp. 107-115.
- Ho, C. L., Hyslip, J.P., Li, D. (2009), "Spectral Analysis of Ground-Acceleration-Based Testing," *Trans. Res. Rec.*, 2117, Trans. Res. Brd., pp. 50-56.
- Bennett, K. C., Ho C. L. and Nguyen, H. (2010), "Verification of Box Test Model and Calibration of Finite Element Model for Evaluation of Railroad Ballast," submitted for *Trans. Res. Rec.*, Trans. Res. Brd.
- Ho, C. L., Lambert, R. S. and Hyslip, J. P. (2010), "Fractal Analysis of Rail Ballast," submitted for *J. of Trans. Engrg.*, Trans. and Dev. Inst., ASCE.

Refereed Conference Publications:

- Ho, C. L. and Kavazanjian, E., Jr. (1986). "Probabilistic Study of SPT Liquefaction Analysis," *Use of In Situ Tests in Geotechnical Engineering*, Geotech. Spec. Pub. No. 6, *Proc. INSITU '86*, ASCE Spec. Conf. Virg. Polytech. Inst. and St. Univ., Blacksburg, VA, pp. 602-616.
- Ho, C.L., Ludwig, H., Fragaszy, R. J., and Chapman, R. (1989). "Field Performance of a Soil Nail System in Loess," *Foundation Engineering: Current Principles and Practices*, ASCE *Foundation Engrg. Congr.*, Northwestern Univ., Evanston, IL, **2**, pp. 1281-1292.
- Ho, C. L., Denby, G. M., and Fragaszy, R. J. (1990), "Seismic Performance of Tied-back Walls," *Design and Performance of Earth Retaining Structures*, ASCE Spec. Conf., Cornell Univ., Ithaca, NY, pp. 843-853.
- Alwail, T., Ho, C. L., and Fragaszy, R. J., "Collapse Mechanism of Compacted Clayey and Silty Sands," *Vertical and Horizontal Deformations for Foundations and Embankments*, Settlements '94, ASCE Spec. Conf., Texas A & M, College Station, Tex., **2**, pp. 1435-1446.
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