CIVIL AND CONSTRUCTION ENGINEERING

O R E G O N S T A T E U N I V E R S I T Y

College of Engineering

YAMAMURO, Jerry A. **BIRTH DATE**
Associate Professor August 26, 1954

DEGREES

B.S. Civil Engineering, Oregon State University, Corvallis, Oregon, June 1976
M.S. Civil Engineering, University of California, Los Angeles, Los Angeles, CA, June 1990
Ph.D. Civil Engineering, University of California, Los Angeles, Los Angeles, CA, June 1993

ACADEMIC POSITIONS

Associate Professor, Oregon State University, Department of Civil, Construction and Environmental Engineering. 2004-Present

Associate Professor, University of Delaware, Department of Civil and Environmental Engineering. 2003-2004.

Assistant Professor, University of Delaware, Department of Civil and Environmental Engineering, 1999-2003.

Adjunct Assistant Professor, Clarkson University, Department of Civil and Environmental Engineering, 1999-2003

Assistant Professor, Clarkson University, Department of Civil and Environmental Engineering, 1995-1999

Post-Doctoral Fellow, The Johns Hopkins University, Department of Civil Engineering, 1993-1995. Developed research laboratory equipment, performed experimental research and analytical modeling of liquefaction of very loose sands, performed experimental research on cemented sands, performed experimental research in kinematic hardening of sands.

NON-ACADEMIC POSITIONS

Geotechnical Project Engineer, Lockwood-Singh and Associates, Los Angeles, California, 1990-1991. Perform and supervise all work associated with investigating geotechnical failures. Projects included slope failures in deep fills or residual soils, excessive structural settlement in deep fills, liquefaction under earthquake loading, failure in earth dams, and excessive deformation of earth retaining structures.

Civil Engineer, U.S.D.A.- Forest Service in the State of Oregon, 1983-1987. Project manager responsible for performing feasibility analysis, design, and construction contract administration on various types of public works civil engineering facilities.

FIELDS OF SPECIALIZATION

Experimental and theoretical mechanics of frictional materials
Soil instability and liquefaction
Cold regions engineering
Strain rate effects in soils
Elasto-plastic constitutive modeling frictional materials
Non-destructive testing of fiber-reinforced concrete

PROFESSIONAL ACTIVITIES

Professional Registration

Geotechnical Engineer, State of Oregon, Registration Number 11156
Professional Engineer, State of Oregon, Registration Number 11156
Professional Engineer, State of California, Registration Number 48010
Professional Engineer, State of New York, Registration Number 075040
Professional Engineer, State of Delaware, Registration Number 12966

Professional Societies

Member of the American Society of Civil Engineers, 1993-present
- Member of Geo-Institute Committee on Soil Properties and Modeling, 1997 to present
- Member of Geo-Institute Committee on Earthquake Engineering & Soil Dynamics, 2005 to present
- Member of Geo-Institute Editorial Board Committee, 2002-2005
- Member of Engineering Mechanics Division - Committee on Properties of Materials, 1997-2000

Member of the American Society for Testing and Material, 1997-present
- Member of ASTM Committee D-18 on Soil and Rock, 1997-present

Member of the International Society of Soil Mechanics and Geotechnical Engineering, 2002-present
- Member of Technical Committee 29 – Laboratory Stress-Strain Testing of Geomaterials, 2002-present

Member of the American Society for Engineering Education, 2002-present

Professional Recognition

Air Force Summer Faculty Fellowship, Summer 2005
Japan Society for the Promotion of Science (JSPS) Fellowship, University of Tokyo, Summer 2002
Nominated for College of Engineering Excellence in Teaching Award, 2001, University of Delaware
Albert D. Merrill Award as the Outstanding Civil and Environmental Engineering Faculty, 1997-1998, Clarkson University
National Science Foundation CAREER Award, 1997
Nominated for the Outstanding New Teacher Award, 1997, Clarkson University
Three Certificates of Merit from the U.S. Government
UCLA School of Engineering Fellowship and two UCLA SOE Dean's Special Fellowships
Tau Beta Pi, 1976
Chi Epsilon, 1995, Faculty advisor: Clarkson University, 1996-99; University of Delaware, 2000-04.
Listed in *Who's Who in Engineering Education*
Listed in *Who's Who in Science and Engineering*

Conference, Workshop and Committee Activities

Co-organizer of Mini-Symposium "Advances in Geotechnics: Testing, Modeling and Simulation," *Geo-Denver Conference*, February 18-21, 2007, ASCE.
Chairman of Session entitled Advances in Geotechnics: Testing, *Geo-Denver Conference*, February 18-21, 2007, ASCE.

Member of Scientific Committee for *Geotechnical Symposium in Roma: A Symposium to Celebrate Prof. Tatsuoka's 60th Birthday*, March 16-17, 2006, University of Rome, La Sapienza, Italy

U.S. Organizer and Co-Chair of the *Second Japan-U.S. Workshop on Testing, Modeling and Simulation in Geomechanics*, September 8-10, 2005, Kyoto, Japan.

Chairman of session entitled Highly Nonlinear Stress-Strain Behavior and Strength, *Second Japan-U.S. Workshop on Testing, Modeling and Simulation in Geomechanics*, September 8-10, 2005, Kyoto, Japan.

Co-organizer for Sessions on "Calibration of Soil Constitutive Models," The *11th International Conference of IACMAG*, June 19-24, 2005, Turin, Italy

Co-organizer and Panel Discussion Moderator for Session on "Calibration of Constitutive Models," *Geo-Frontiers Conference*, Austin, TX, January 24-26, 2005

Co-organizer for Sessions on "Advanced Laboratory Testing for Soil Property Characterization," *Geo-Frontiers Conference*, Austin, TX, January 24-26, 2005

Session Moderator for Discussion Session 3, *Third International Conference on the Deformation Characteristics of Geomaterials*, Lyon, France, Sept. 22-24, 2003

Session Chair for Session on "Finite Element Applications in Structural Mechanics: Metallic Structures," *The 17th Engineering Mechanics Conference*, ASCE, Newark, Delaware, June 13-16, 2004

Co-organizer for *The 17th Engineering Mechanics Conference*, ASCE, Newark, Delaware, June 13-16, 2004

Discussion Leader for sessions on "Characterization of Geomaterials," at the *13th International Symposium on Deformation Characteristics of Geomaterials*, Lyon, France, September 22-24, 2003

U.S. Organizer and Co-Chair of the *First Japan-U.S. Workshop on Testing, Modeling and Simulation in Geomechanics*, Boston, Massachusetts, June 27-29, 2003

Organizer of the *Mini-Geomechanics Symposium*, University of Delaware, Newark, Delaware, March 31, 2003

Co-organizer of sessions on "Soil Dynamics and Earthquake Engineering" at *GeoDenver 2000*, ASCE Geo-Institute, Denver Colorado, August 5-8, 2000

Organizer of sessions on "Liquefaction," at the *14th Engineering Mechanics Conference*, ASCE, Austin, Texas, May 21-24, 2000

Session Chairman of "Analytical Modeling of Clay and Rock," at *The 13th Engineering Mechanics Conference*, ASCE, Baltimore, Maryland, June 13-16, 1999

Co-organizer and Steering Committee Member at the *International Workshop on the Physics and Mechanics of Liquefaction*, Baltimore, Maryland, September 10-11, 1998

Session Chairman at the *International Workshop on the Physics and Mechanics of Liquefaction*, Baltimore, Maryland, September 10-11, 1998

Editing Responsibilities

Editorial Board Member, *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 2001-2005.

Editorial Board Member, *Geotechnical Testing Journal*, ASTM, 2002-present

Book Editor, *Journal of Cold Regions Engineering*, ASCE, 1997-present

Reviewer

Journal of Geotechnical (and Geoenvironmental) Engineering, ASCE

Journal of Engineering Mechanics, ASCE

Journal of Environmental Engineering, ASCE

Journal of Cold Regions Engineering, ASCE

Journal of Materials in Civil Engineering, ASCE
Canadian Geotechnical Journal, National Research Council of Canada
Engineering Geology, Elsevier
International Journal of Geomechanics and Geoengineering, Taylor and Francis Group
Geotechnique, The Institution of Civil Engineers, London, England
Geotechnical Testing Journal, ASTM
International Journal for Numerical and Analytical Methods in Geomechanics, John Wiley & Sons
International Journal of Plasticity, Elsevier
Mechatronics, The Science of Intelligent Machines, Elsevier
Soils and Foundations, JSSMFE
Transportation Research Record, Transportation Research Board
Textbooks for Prentice-Hall Publishers, Upper Saddle River, New Jersey 07458
Proposals for National Science Foundation

PUBLICATIONS

Books and Edited Proceedings

1. DeGroot, D.J., Vipulanandan, C., Yamamuro, J.A., Kaliakin, V.N., Lade, P.V., Zeghal, M., El Shamy, U., Lu, N., Song, C.R. (Eds.), Advances in Measurement and Modeling of Soil Behavior, ASCE, Proceedings of sessions of Geo-Denver, Denver, CO, USA, February 18-21, Geotechnical Special Publication No. 173, 2007, CD-ROM.
2. Yamamuro, J.A. and Koseki, J., (Eds.), Geomechanics: Testing, Modeling and Simulation Proceedings of the First Japan-U.S. Workshop on Testing, Modeling and Simulation in Geomechanics, Boston, Massachusetts, June 27-29, 2003, Geotechnical Special Publication No. 143, ASCE, 2005, 726 pp.
3. Yamamuro, J.A. and Kaliakin, V.N., (Eds.), Soil Constitutive Models: Evaluation, Selection and Calibration, ASCE, Geotechnical Special Publication No. 128, 2005, 512 pp.
4. Yamamuro, J.A. and Kaliakin, V.N., (Eds.), Calibration of Constitutive Models, ASCE, Proceedings of sessions of Geo-Frontiers Congress, ASCE, Austin, Texas, January 24-26, 2005, Geotechnical Special Publication No. 139, 2005, CD-ROM.
5. Kaliakin, V.N., Kirby, J.T., Yamamuro, J.A., Bhattacharya, B., and Shenton, H.W (Eds.). Proceedings of the ASCE 17th Engineering Mechanics Conference, Newark, Delaware, USA, June 13-16, 2004, CD-ROM.
6. Pak, R.Y.S. and Yamamuro, J.A., (Eds.), Soil Dynamics and Earthquake Engineering, ASCE, Geotechnical Special Publication No. 107, Proceedings of Sessions of *GeoDenver 2000*, Denver, Colorado, August 5-8, 2000, 208 pp.
7. Lade, P.V. and Yamamuro, J.A., (Eds.), Physics and Mechanics of Soil Liquefaction, Proceedings for the *International Workshop on the Physics and Mechanics of Liquefaction*, A. A. Balkema, P.O. Box 1675, 3000 BR Rotterdam, Netherlands, 1999, 361 pp.

Publication Citations

The Web of Science citation index indicates that **332** total citations have been listed for various publications as of Mayl 2008.

Technical Journals

1. Abelev, A.V., Gutta, S.K., Lade, P.V., and Yamamuro, J.A., "Rotational Kinematic Hardening Model for 3-D Stress Reversals in Sand," *International Journal for Numerical and Analytical Methods in Geomechanics*, accepted.
2. Yamamuro, J.A. and Lade, P.V., "Large Stress Reversals in True Triaxial Tests on Cross-Anisotropic Sand," *International Journal for Numerical and Analytical Methods in Geomechanics*, accepted.
3. Gutta, S.K., Yamamuro, J.A. and Lade, P.V., "Predictions of Large Stress Reversals in True Triaxial Tests on Cross-Anisotropic Sand," *International Journal for Numerical and Analytical Methods in Geomechanics*, accepted.
4. Wood, F.M, Yamamuro, J.A., and Lade, P.V., "Effect of Depositional Method on the Undrained Response of Silty Sand," *Canadian Geotechnical Journal*, accepted.
5. Yamamuro, J.A., Wood, F.M., and Lade, P.V., "Effect of Depositional Method on the Microstructure of Silty Sand," *Canadian Geotechnical Journal*, accepted.
6. Yamamuro, J.A. and Abrantes, A.E., "Effect of Strain Rate on the Stress-Strain Behavior of Granular Materials," *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, accepted.
7. Abelev, A.B., Gutta, S.K, Lade, P.V. and Yamamuro, J.A., "Modeling Cross-Anisotropy in Granular Materials," *Journal of Engineering Mechanics*, ASCE, accepted.
8. Yamamuro, J.A. and Liu, Y., "Strain Localization in Triaxial Compression and Extension Tests on Clay Specimens," the *Geotechnical Testing Journal*, ASTM, accepted.
9. Yamamuro, J.A. and Wood, F.M., 2004, "Effect of Depositional Method on the Undrained Behavior and Microstructure of Sand with Silt," *Soil Dynamics and Earthquake Engineering*, Elsevier, Vol. 24, pp. 751-760.
10. Reza, F., Yamamuro, J.A. and Batson, G.B., 2004, "Electrical Resistance Change in Compact Tension Specimens of Carbon Fiber Cement Composites," *Cement and Concrete Composites*, Elsevier, Vol. 26, No. 7, pp. 873-881.
11. Reza, F., Batson, G.B., Yamamuro, J.A. and Lee, J.S. 2003, "Resistance Changes During Compression of Carbon Fiber Cement Composites," *Journal of Materials in Civil Engineering*, ASCE, Vol. 15, No. 5, pp. 476-483.
12. Shapiro, S. and Yamamuro, J.A., 2003, "Effects of Silt on the Three-Dimensional Stress-Strain Behavior of Loose Sand," *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 129, No. 1, pp. 1-11.
13. Abrantes, A.E. and Yamamuro, J.A., 2002, "Experimental and Data Analysis Techniques Used for High Strain Rate Tests on Cohesionless Soil," *Geotechnical Testing Journal*, ASTM, Vol. 25, No. 2, pp. 128-141.
14. Yamamuro, J.A. and Covert, K.M., 2001, "Monotonic and Cyclic Liquefaction of Very Loose Sands with High Silt Content," *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 127, No. 4, pp. 314-324.
15. Reza, F., Batson, G.B., Yamamuro, J.A., Lee, J.S., 2001, "Volume Electrical Resistivity of Carbon Fiber Cement Composites," *ACI Materials Journal*, American Concrete Institute, Vol. 98, No. 1, pp. 25-35.
16. Yamamuro, J.A. and Lade, P.V., 1999, "The Behavior and Modeling of Silty Sands Susceptible to Static Liquefaction," *Mechanics of Cohesive-Frictional Materials*, Vol. 4, No. 6, pp. 545-564.
17. Penumadu, D., Yamamuro, J.A., Abrantes, A. E., and Campbell, G.A., 1998, "Stress-Strain and Volume Change Characteristics of an Assemblage of Polymer Pellets," *International Polymer Processing*, Polymer Processing Society, Vol. 8, No. 4, pp. 347-357.

18. Lade, P.V., Liggio, C., and Yamamuro, J.A., 1998, "The Effect of Fines on the Maximum and Minimum Void Ratio of Sand," *Geotechnical Testing Journal*, ASTM, Vol. 21, No. 4, pp. 336-347.
19. Yamamuro, J.A. and Lade, P.V., 1998, "Steady State Concepts and Static Liquefaction of Silty Sands," *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 124, No. 9, pp. 868-877.
20. Yamamuro, J.A., Penumadu, D., and Campbell, G.A., 1998, "Modeling Solids Conveying in Polymer Extruders," *International Polymer Processing*, Polymer Processing Society, Vol. 8, No. 1, March, pp. 3-8.
21. Lade, P.V. and Yamamuro, J.A., 1997, "Effects of Non-Plastic Fines on Static Liquefaction of Sands," *Canadian Geotechnical Journal*, Vol. 34, No. 6, December, pp. 918-928.
22. Yamamuro, J.A. and Lade, P.V., 1997, "Static Liquefaction of Very Loose Sands," *Canadian Geotechnical Journal*, Vol. 34, No. 6, December, pp. 905-917.
23. Lade, P.V., Yamamuro, J.A., and Bopp, P.A., 1997, "Influence of Time Effects on Instability of Granular Materials," *Computers and Geotechnics*, Vol. 20, No. 3/4, pp. 179-193.
24. Yamamuro, J.A., and Lade, P.V., 1997, "Instability of Granular Materials at High Pressures," *Soils and Foundations*, JSSMFE, Vol. 37, No. 1, March, pp. 41-52.
25. Lade, P.V., Yamamuro, J.A., and Skyers, B.D., 1996, "Effects of Shear Band Formation in Triaxial Extension Tests," *Geotechnical Testing Journal*, ASTM, Vol. 19, No. 4, December, pp. 398-410.
26. Lade, P.V., Yamamuro, J.A., Bopp, P. A., 1996, "Significance of Particle Crushing in Granular Materials," *Journal of Geotechnical Engineering*, ASCE, Vol. 122, No. 4, April, pp. 309-316.
27. Yamamuro, J.A., Bopp, P.A., and Lade, P.V., 1996, "One-Dimensional Compression of Sand at High Pressures," *Journal of Geotechnical Engineering*, ASCE, Vol. 122, No. 2, February, pp. 147-154.
28. Lade, P.V., and Yamamuro, J.A., 1996, "Undrained Sand Behavior in Axisymmetric Tests at High Pressures," *Journal of Geotechnical Engineering*, ASCE, Vol. 122, No. 2, February, pp. 120-129.
29. Yamamuro, J.A., and Lade, P.V., 1996, "Drained Sand Behavior in Axisymmetric Tests at High Pressures," *Journal of Geotechnical Engineering*, ASCE, Vol. 122, No. 2, February, pp. 109-119.
30. Yamamuro, J.A., and Lade, P.V., 1995, "Strain Localization in Extension Tests on Granular Materials," *Journal of Engineering Mechanics*, ASCE, Vol. 121, No. 7, July, pp. 826-836.
31. Yamamuro, J.A. and Lade, P.V., 1993, "Effects of Strain Rate on Instability of Granular Soils," *Geotechnical Testing Journal*, ASTM, GTJODJ, Vol. 16, No. 3, September, pp. 304-313.
32. Yamamuro, J.A. and Lade, P.V., 1993, "B-Value Measurements for Granular Materials at High Confining Pressures," *Geotechnical Testing Journal*, ASTM, GTJODJ, Vol. 16, No. 2, June, pp. 165-171.
33. Lade, P.V. and Yamamuro J.A., 1993, "Stability of Granular Materials in Postpeak Softening Regime," *Journal of Engineering Mechanics*, ASCE, Vol. 119, No. 1, January pp. 128-144.

Technical Journal Papers Currently Under Review

1. Yamamuro, J.A. and Liu, Y., "Drained and Undrained Clay Behavior in Compression Tests at Elevated Stresses," *Canadian Geotechnical Journal*, under review.

2. Yamamuro, J.A. and Liu, Y., "Drained and Undrained Clay Behavior in Extension Tests at Elevated Stresses, *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, under review.
3. Yamamuro, J.A. and Liu, Y., "Radial Drainage Issues in Axisymmetric Testing of Clays at High Confining Pressures," the *Geotechnical Testing Journal*, ASTM, in review.

Conference Proceedings

1. Yamamuro, J.A. and Liu, Y. 2007. "Vertical load corrections for two side drainage materials in laboratory testing of clays," Geo-Denver Conference, Denver, CO, Feb. 18-21, 2007.
2. Lade, P.V., Yamamuro, J.A. and Bopp, P.A. 2006. "Drained and Undrained Strengths of Sand In Axisymmetric Tests at High Pressures," *Second Japan-U.S Workshop on Testing, Modeling and Simulation*, Kyoto, Japan, September 17-20.
3. Yamamuro, J.A. and Lade, P.V. 2006. "Mechanics of Instabilty of Sand at High Pressures," *Second Japan-U.S Workshop on Testing, Modeling and Simulation*, Kyoto, Japan, September 17-20.
3. Yamamuro, J.A. and Liu, Y. 2005. "Effects of Necking and Its Suppression in Axisymmetric Extension Tests on Clay," Proceedings of the *16th International Conference on Soil Mechanics and Geotechnical Engineering* (16ICSMGE), Osaka, Japan, September 12-16, 2005.
4. Lade, P.V., Yamamuro, J.A., and Bopp, P.A. 2005. "Relative Density Effects on Drained and Undrained Strengths of Sand at High Pressures," Proceedings of the *16th International Conference on Soil Mechanics and Geotechnical Engineering* (16ICSMGE), Osaka, Japan, September 12-16, 2005.
5. Gutta, S.K., Yamamuro, J.A. and Lade, P.V. 2004. "Kinematic Hardening Model Predictions of Sand Behavior Under Large Three-Dimensional Stress Reversals." NUMOG IX, Numerical Models in Geomechanics, Ottawa, Canada, August 25-27, 2004.
6. Yamamuro, J.A. and Liu, Y., 2004. "Necking in Extension Tests on Clay," Proceedings of the *17th Engineering Mechanics Conference*, ASCE, University of Delaware, Newark, Delaware, June 13-16, CD-ROM.
7. Gutta, S.K. and Yamamuro, J.A., 2004, "Predictions of Large Three-Dimensional Stress Reversals in Cross-Anisotropic Sand, Proceedings of the *17th Engineering Mechanics Conference*, ASCE, University of Delaware, Newark, Delaware, June 13-16, CD-ROM.
8. Yamamuro, J.A. and Abrantes, A.E., 2004, "Behavior of Medium Sands Under Very High Strain Rates," Proceedings of First Japan-U.S. Workshop on Testing, Modeling and Simulation in Geomechanics, *Geomechanics: Testing, Modeling and Simulation*, Boston, Massachusetts, June 27-29, 2003.
9. Yamamuro, J.A. and Wood, F.M., "Effect of Depositional Method on the Undrained Behavior and Microstructure of Sand with Silt," Proceedings of the *U.S.-Taiwan Workshop on Soil Liquefaction*, Hsinchu, Taiwan, November 2, 2003, CD-ROM.
10. Tatsuoka, F., Yamamuro, J.A., and Kiyota, T., 2003, "Comparisons between Drained and Undrained Creep Characteristics of Loose Sand by Triaxial Compression Tests," Proceedings of the Japanese Geotechnical Society Annual Conference, July, Akita, Japan.
11. Yamamuro, J.A. and Abrantes, A.E., 2003, "Behavior of Loose Sand at Very High Strain Rates," Paper to appear in proceedings of the *3rd International Symposium on Deformation Characteristics of Geomaterials*, Lyon, France, September 22-24.
12. Reza, F., Yamamuro, J.A., Batson, G.B., and Lee, J., 2003, "Smart Behavior of Carbon Fiber Cement Composites in Compact Tension," Proceedings of the *16th Engineering Mechanics Conference*, ASCE, University of Washington, Seattle, Washington, July 16-18, CD-ROM.

13. Gutta, S., Yamamuro, J.A. and Lade, P.V., 2003, "Predictions of Large Three-dimensional Stress Reversals in Sands," Proceedings of the *16th Engineering Mechanics Conference*, ASCE, University of Washington, Seattle, Washington, July 16-18, CD-ROM.
14. Abrantes, A.E. and Yamamuro, J.A., 2003, "High Strain Rate Experiments on Granular Materials," Proceedings of the *Frank L. DiMaggio Symposium on Constitutive Modeling of Geomaterials*, Columbia University, New York, New York, June 3-5, CRC Press, 2000 NW Corporate Blvd., Boca Raton, FL, 33431.
15. Yamamuro, J.A. and Shapiro, S., 2003, "Failure and Shear Banding in Three-Dimensional Experiments on Loose Silty Sands," Proceedings of the *Frank L. DiMaggio Symposium on Constitutive Modeling of Geomaterials*, Columbia University, New York, New York, June 3-5, CRC Press, 2000 NW Corporate Blvd., Boca Raton, FL, 33431.
16. Abrantes, A.E. and Yamamuro, J.A., 2002, "High Strain Rate Experiments on Granular Materials," Proceedings of the *15th Engineering Mechanics Conference*, ASCE, Columbia University, New York, New York, June 3-5, CD-ROM.
17. Reza, F., Yamamuro, J.A. and Batson, G.B., 2002, "Smart Behavior of Carbon Fiber Cement Composites in Compression," Proceedings of the *15th Engineering Mechanics Conference*, ASCE, Columbia University, New York, New York, June 3-5, CD-ROM.
18. Yamamuro, J.A. and Shapiro, S., 2002, "Failure and Shear Banding in Three-Dimensional Experiments on Loose Silty Sands," Proceedings of the *15th Engineering Mechanics Conference*, ASCE, Columbia University, New York, New York, June 2-5, CD-ROM.
19. Reza, F., Batson, G.B., Yamamuro, J.A., and Lee, J.S., 2002, "Electrical Resistance of Carbon Fiber Cement Composites Under Compression," *Concrete: Material Science to Application: A Tribute to Surendra P. Shah, American Concrete Institute Spring Convention*, ACI SP-206, Editors P. Balaguru, A. Naaman and W. Weiss, Detroit, MI, pp. 427-439.
20. Reza, F., Yamamuro, J.A., Batson, G.B., and Brownell B.M., 2000, "Sensitivity of Electrical Resistance of Cement Composites to Temperature and Relative Humidity Changes," Proceedings of the *14th Engineering Mechanics Conference*, ASCE, May 21-24, CD-ROM.
21. Wood, F.M. and Yamamuro, J.A., 2000, "Quantification of Soil Fabric of Liquefiable Silty Sands," Proceedings of the *14th Engineering Mechanics Conference*, ASCE, May 21-24, CD-ROM.
22. Abrantes, A.E. and Yamamuro, J. A., 2000, "Image Processing of Strains for High Strain Rate Experiments," Proceedings of the *14th Engineering Mechanics Conference*, ASCE, May 21-24, CD-ROM.
23. Reza, F., Yamamuro, J.A., and Batson, G.B., 1999, "Electrode Configuration and Scale Effect Issues in Nondestructive Evaluation of Cement Composites," Proceedings of the *13th Engineering Mechanics Conference*, ASCE, Baltimore, Maryland, USA, June 13-16, pp. 6, CD-ROM.
24. Wood, F.M., and Yamamuro, J.A., 1999, "The Effect of Depositional Method on the Liquefaction Behavior of Silty Sand," Proceedings of the *13th Engineering Mechanics Conference*, ASCE, Baltimore, Maryland, USA, June 13-16, pp. 6, CD-ROM.
25. Jeremic, B. and Yamamuro, J.A., 1999, "Anisotropic Plasticity in Geomechanics," to be included in Proceedings of the *4th International Conference on Constitutive Laws for Engineering Materials: Experiment, Theory, Computation and Applications*, Rensselaer Polytechnic Institute, Troy, New York, USA, July 27-30.
26. Reza, F., Batson, G.B., Yamamuro, J.A., and Lee, J.S., 1999, "Electrical Properties of Carbon Fiber Reinforced Concrete," Proceedings *3rd International Workshop on High Performance Fiber Reinforced Cement Composites*, RILEM, May 16-19, Mainz, Germany, pp. 467-476.
27. Yamamuro, J.A. and Covert, K.M., 1998, "Static and Cyclic Liquefaction of Silty Sands," Proceedings of the *International Workshop on the Physics and Mechanics of Liquefaction*, Baltimore, Maryland, September 10-11, 1998, Balkema, Rotterdam, pp. 55-66.

28. Wood, F.M. and Yamamuro, J.A., 1998, "Silty Sands and Static Liquefaction" Proceedings of the *Twelfth Engineering Mechanics Conference*, ASCE, La Jolla, California, May 17-20.
29. Reza, F., Batson, G. B., Yamamuro, J.A., Lee, J.S., 1998, 'Electrical Tagging of Cement Composites for Nondestructive Integrity Monitoring,' Proceedings of *Nondestructive Evaluation of Materials and Composites*, March 31 to April 2, 1998, San Antonio, Texas, pp. 196-206.
30. Yamamuro, J.A. and Lade, P.V., 1997, "Prediction of Instability," Proceedings of *the XIV International Conference on Soil Mechanics and Foundation Engineering*, Hamburg, Germany.
31. Covert, K.M. and Yamamuro, J.A., 1997, "Static Liquefaction of Silty Sands," Proceedings of the *Fifth Great Lakes Geotechnical/Geoenvironmental Conference*, Ann Arbor, Michigan, pp. 1-20.
32. Yamamuro, J.A. and Lade, P.V., 1997, "The Behavior and Modeling of Static Liquefaction of Silty-Sands," *International Symposium on Numerical Models in Geomechanics*, NUMOG VI, Montreal, Canada, July 2-4.
33. Yamamuro, J.A., Penumadu, D., and Campbell, G.A., 1997, "Solids Conveying in Polymer Extruders," The Polymer Processing Society *13th* Annual Meeting.
34. Penumadu, D., Yamamuro, J.A., Abrantes, A.E., and Campbell, G.A., 1997, "Stress-Strain Behavior of Polymer Pellets," Society of Polymer Engineering-ANTEC.
35. Lade, P.V., Yamamuro, J.A., and Skyers, B.D., 1995, "Effects of Strain Localization in Triaxial Extension Tests," Proceedings of the *9th International Conference of IACMAG*.
36. Lade, P.V., Ghaboussi, J., Inel, S., and Yamamuro, J.A., 1994, " Experimental Determination of Constitutive Behavior of Soils," Proceedings of the *8th International Conference of the IACMAG*, Morgantown, W. Va., May.
37. Yamamuro, J.A. and Lade, P.V., 1992 "The Effective Stress Path for Soil at High Pressure," Proceedings of the *9th Engineering Mechanics Conference*, ASCE, College Station, Texas, May, pp. 729-732.

Reports and Other Publications

1. Shapiro, S. and Yamamuro, J.A., 2000, "The Effects of Nonplastic Fines on the Three-Dimensional Behavior of Sand," CEE Report No. 99-17, pp. 281.
2. Yamamuro, J.A., 2000, "High Strain Rate Experiments on Sands," Final Report to the Air Force Office of Scientific Research, Grant No. F49620-98-1-0166.
3. Wood, F.M. and Yamamuro, J.A., 1999, "Influence of Specimen Reconstitution Method on the Undrained Response and Microstructure of Silty Sand," CEE Report No. 99-11, pp. 91.
4. Yamamuro, J.A. and Lade, P.V., 1999, Reply to discussion "Static Liquefaction of Very Loose Sands," *Canadian Geotechnical Journal*, Vol. 35, No. 2.
5. Yamamuro, J.A. and Lade, P.V., 1999, Reply to discussion "Static Liquefaction of Very Loose Sands," *Canadian Geotechnical Journal*, Vol. 35, No. 1.
6. Covert, K.M. and Yamamuro, J.A., 1998, "Behavior of Silty Sands Under Monotonic and Cyclic Triaxial Compression," July, CEE Report No. 98-16, pp. 213.
7. Book review, 1997, Geotechnical Engineering Principles and Practice by Donald Coduto, Prentice-Hall Publishers, Upper Saddle River, N.J. 07458.
8. Lade, P.V., Yamamuro, J.A., Bopp, P. A., 1997, Closure of discussions "Significance of Particle Crushing in Granular Materials," *Journal of Geotechnical and Geoenvironmental Engineering*, Vol. 123, No. 9, pp. 889-890.
9. Yamamuro, J.A. and Lade, P.V., 1997, Closure of discussions on "Drained Sand Behavior in Axisymmetric Tests at High Pressures," *Journal of Geotechnical and Geoenvironmental Engineering*, Vol. 123, No. 9, pp. 887.

10. Yamamuro, J.A., Bopp, P.A. and Lade, P.V., 1997, Closure of discussions on "One-Dimensional Compression of Sand at High Pressures," *Journal of Geotechnical and Geoenvironmental Engineering*, Vol. 123, No. 8, August, pp. 788-789.
11. Yamamuro, J.A. and Lade, P.V. 1994, Closure of discussion on "B-Value Measurements for Granular Materials at High Confining Pressures," *Geotechnical Testing Journal*, ASTM, GTJODJ, Vol. 17, No. 1, March, pp. 119-121.
12. Lade, P.V. and Yamamuro, J.A., 1993, "Experimental Study of Nonassociated Flow and Instability of Frictional Materials," Final Report Prepared for the Air Force Office of Scientific Research, Department of Civil Engineering, University of California, Los Angeles, May.
13. Yamamuro, J.A. and Lade, P.V., 1993, "Instability and Behavior of Granular Materials at High Pressures," Report Prepared for the Air Force Office of Scientific Research, Department of Civil Engineering, University of California, Los Angeles, April.
14. Nelson R.B., Lade, P.V., Issa, J., Chamieh, N., and Yamamuro, J., 1988, "Micromechanical Behavior of Frictional Geologic Materials," Final Report Prepared for the Air Force Office of Scientific Research, Civil Engineering Department, University of California, Los Angeles, November.

Invited Lectures and Presentations

1. "New Observations from the Testing of Clays," TC29 Workshop, *16th International Conference on Soil Mechanics and Geotechnical Engineering* (16ICSMGE), Osaka, Japan, September 12-16, 2005 (invited).
2. "Overview of Projectile Penetration into Geo-Materials," Air Force Research Laboratory, Eglin Air Force Base, Florida, August 8, 2005 (invited).
3. "Corrosive Loss of Steel in Metallic Reinforcements and Facing Connections Used in MSE Retaining Walls," Oregon Department of Transportation, Salem, OR, February 24, 2005 (invited).
4. "Effect of Depositional Method on the Undrained Behavior and Microstructure of Sand with Silt," ASCE Oregon Section - Geotechnical Engineering Technical Group, Beaverton, Oregon, November 3, 2004 (invited).
5. "Effect of Deposition Method and Silt Content on the Undrained Behavior of Sands," Structures/Geotechnical Engineering Seminar, University of Delaware, Newark, Delaware, November 18, 2003.
6. "Effect of Depositional Method on the Undrained Behavior and Microstructure of Sand with Silt," *U.S.-Taiwan Workshop on Soil Liquefaction*, Hsinchu, Taiwan, November 2, 2003, (invited).
7. "Effect of Deposition Method and Silt Content on the Undrained Behavior of Sands," Oregon State University, Corvallis Oregon, October 24, 2003, (invited).
8. "Session Moderator Report," Discussion Session 3 Papers, *Third International Conference on the Deformation Characteristics of Geomaterials*, Lyon, France, Sept. 23, 2003.
9. "Predictions of Large Three-Dimensional Stress Reversals in Sands," *16th Engineering Mechanics Conference*, ASCE, Seattle, Washington, July 16-18, 2003.
10. "Effect of High Strain Rate on the Stress-Strain Behavior of Granular Materials," First Japan-U.S. Workshop on Testing, Modeling and Simulation in Geomechanics, Boston, Massachusetts, June 27-29, 2003, (invited).
11. "Behavior of Granular Materials at Very High Strain Rates," Structures/Geotechnical Engineering Seminar, University of Delaware, Newark, Delaware, March 28, 2003.
12. "Stress-Strain Behavior of Granular Materials at Very High Strain Rates," Hokkaido University, Sapporo, Japan, August 23, 2002, (invited).

13. “Behavior of Granular Materials at Very High Strain Rates,” Hong Kong University of Science and Technology, Kowloon, Hong Kong, August 12, 2002, (invited).
14. “Behavior of Granular Materials at Very High Strain Rates,” University of Tokyo, Tokyo, Japan, August 2, 2002, (invited).
15. “The Effects of Silt Content and Deposition Method on the Macroscopic and Microscopic Behavior of Sands,” Airport and Port Research Institute, Yokosuka, Japan, July 31, 2002, (invited).
16. “The Effects of Silt Content and Deposition Method on the Macroscopic and Microscopic Behavior of Sands,” Japanese Geotechnical Society Meeting, Tokyo, Japan, July 29, 2002, (invited).
17. “Effects of Silt Content and Deposition Method on the Macroscopic and Microscopic Behavior of Sands,” Public Works Research Institute, Ibaraki-ken, Japan, July 25, 2002, (invited).
18. “The Behavior of Granular Materials at High Pressures,” University of Tokyo, Tokyo, Japan, July 3, 2002 (invited).
19. “Effect of High Strain Rates on Failure and Shear Band Formation in Granular Materials,” International Workshop on Bifurcations and Instabilities in Geomechanics, ” St. Johns University, Minnesota, June 3, 2002.
20. “Effects of Depositional Method and Silt Content on the Undrained Behavior and Microstructure of Sands,” Stanford University, Palo Alto, California, January 14, 2002 (invited).
21. “The Effects of Depositional Method and Silt Content on the Undrained Behavior and Microstructure of Sands,” The Johns Hopkins University, Baltimore, Maryland, November 6, 2001 (invited).
22. “The Effects of Non-Plastic Silt on the Behavior of Loose Sands,” University of Tokyo, Tokyo, Japan, July 2, 2001 (invited).
23. “The Effect of Non-Plastic Silt on the Behavior of Sands,” Kyoto University, Kyoto, Japan, June 29, 2001 (invited).
24. “The Effects of Depositional Method and Silt Content on the Undrained Behavior and Microstructure of Sands,” University of Tokyo, Tokyo, Japan, June 25, 2001 (invited).
25. “The Effects of Depositional Method and Silt Content on the Undrained Behavior and Microstructure of Sands,” Aalborg University, Aalborg, Denmark, April 19, 2001 (invited).
26. “The Effect of Non-Plastic Silt on the Behavior of Sands,” Aalborg University, Aalborg, Denmark, April 19, 2001 (invited).
27. "The Behavior and Modeling of Granular Materials," Polymer Extrusion and Mixing Research Consortium, Center for Advanced Processing of Materials, Clarkson University, April 29, 1999 (invited).
28. "The Effect of Silt Content and Depositional Methods on the Liquefaction Behavior of Sands," University of Michigan, Ann Arbor, April 22, 1999 (invited).
29. "The Effect of Silt on the Liquefaction Behavior of Sands," University of Delaware, Newark, January 29, 1999 (invited).
30. "Behavior and Modeling of Static Liquefaction of Silty Sands," Clarkson University, Department of Mechanical and Aeronautical Engineering, Seminar Series, October 30, 1998 (invited).
31. "Static and Cyclic Liquefaction of Silty Sands," Keynote presentation at the *International Workshop on the Physics and Mechanics of Liquefaction*, Baltimore, Maryland, September 10-11, 1998 (invited).
32. "Similarities and Differences Between Instability and Liquefaction," Invited presentation at *13th U.S. National Congress of Applied Mechanics*, Gainesville, Florida June 21-26, 1998, (invited).

33. "Silty Sands and Static Liquefaction" Proceedings of *12th Engineering Mechanics Conference*, La Jolla, California, May 17-20, 1998.
34. "Behavior and Modeling Static Liquefaction of Silty Sands," University of Colorado, Boulder, March 20, 1998 (invited).
35. "Behavior and Modeling Static Liquefaction of Silty Sands," University of California, Los Angeles, March 12, 1998 (invited).
36. "Electrical Tagging of Cement Composites for Nondestructive Integrity Monitoring," Proceedings *of Nondestructive Evaluation Techniques for Aging Infrastructure and Manufacturing*, March 31 to April 2, 1998, San Antonio, Texas.
37. "Experiments and Modeling of High Strain Rate Effects in Sands and Clays," Air Force Office of Scientific Research Contractors Meeting, Panama City Florida, January 17-19, 1998.
38. "The Behavior and Modeling of Static Liquefaction of Silty-Sands," *International Symposium on Numerical Models in Geomechanics, NUMOG VI*, Montreal, Canada, July, 1997.
39. "Modeling Solids Conveying in Polymer Extruders," *The 13th Annual Meeting of the Polymer Processing Society*, June, 1997, Meadowlands, New Jersey.
40. "Static Liquefaction of Silty Sands," *The 5th Great Lakes Geotechnical/ Geoenvironmental Conference*, Ann Arbor, Michigan, May, 1997.
41. "Instability of Granular Materials at High Pressures," George Washington University, Washington, D.C., June 1995 (invited).
42. "Behavior of Granular Materials at High Pressures," University of California, Los Angeles, Los Angeles, California, March, 1993.

RESEARCH

Current Research

Evaluation of Corrosion of Metallic Reinforcements and Connections in MSE Retaining Walls Oregon Department of Transportation, $240,000, 2006-2008. PI: J.A. Yamamuro.

Investigation of Clays Undergoing Very Large Strains or Possible Shear Banding, National Science Foundation, $299,651, 2003-2006, PI: J.A. Yamamuro, Co-PI: Victor Kaliakin.

Digital Image Correlation System for Measurements of High Resolution Displacements, Research Equipment Reserve Fund, OSU, 2005, PI: Lech Muszynski and Co-PI: J.A. Yamamuro, $83,678.

Prior Research

Time Dependent Behavior of Powders, Center for Advanced Materials Processing (New York State),$10,000, 1995-1996, PI: J.A. Yamamuro, Co-PI D. Penumadu.

Fines Induced Liquefaction in Alluvial Sands and Geotechnical Engineering Education, National Science Foundation CAREER Award, $260,000, 1997- 2001, PI: J.A. Yamamuro.

Electrical Fracto-Emission and Resistivity Change in Carbon Fiber Cement Composites for Nondestructive Integrity Monitoring, National Science Foundation, $177,647, 1995-1999, PI: Jong Lee, Co-PIs: Gordon Batson and J. A. Yamamuro.

Experiments and Modeling of High Strain Rate Effects in Sands and Clays, Air Force Office of Scientific Research, $225,000, 1998-2000, PI: J.A. Yamamuro, Co-PI: D. Penumadu.

High Speed Image Acquisition and Motion Analysis for Research and Education, National Science Foundation, $119,860 (with matching funds), 1998-2001, PI: J. A. Yamamuro, Co-PI's: John Dempsey, Mark Glauser, Sung Lin, Thomas Theis.

Three-Dimensional Stress-Strain Behavior of Cohesionless Materials Subjected to High Strain Rate, National Defense Science and Engineering Graduate Fellowship, $116,000, 1999-2002.

First Japan-U.S. Workshop on Testing, Modeling and Simulation in Geomechanics, National Science Foundation, $58,000, 2002-2003, PI: J.A. Yamamuro.

TEACHING

Undergraduate Courses

Strength of Materials, The Johns Hopkins University, 1994
Foundation Engineering, Clarkson University, 1995-98
Foundations and Substructures (CIEG 421), University of Delaware, 2001-03
Soil Mechanics Laboratory: (CIEG 323), University of Delaware, 2001-03
Solid Mechanics (CIEG 212), University of Delaware, 2003
Soil Mechanics (CIEG 321), University of Delaware, 2003
Soil Mechanics Laboratory (CIEG 323), University of Delaware, 2003
Foundations for Structures (CE 471/571), OSU, 2005
Geotechnical Engineering II (CE 373), OSU, 2005

Graduate Courses

Advanced Soil Mechanics, Clarkson University, 1996-99
Behavior and Modeling of Frictional Materials, Clarkson University, 1999
Structural and Soil Dynamics - Clarkson University, 1999
Geotechnical Earthquake Engineering (CIEG 667) - University of Delaware, 2000
Soil Mechanics II (CIEG 620) - University of Delaware, 1999, 2000, 2004
Engineering Properties of Soil (CE 574), OSU, 2005
Earth Structures (CE573), OSU, 2006
Constitutive Modeling of Soils (CE505), OSU, 2006
Finite Element Analysis for Geotechnical Engineering (CE505), OSU 2007

Thesis Supervsion

Former Students

Master of Science	Doctor of Philosophy
Kelly M. Covert, 1998	Prof. Farhad Reza, 2001 (Ohio Northern University)
Fletcher M. Wood, 1999	Dr. Antonio E. Abrantes, 2003
Saul Shapiro, 2000	Dr. Suresh K. Gutta, 2003
Benjamin Haines, 2007	Dr. Yigang Liu, 2004

Current Students

Master of Science	Doctor of Philosophy
None	Pongpipat Anantanasakal
	M. Murat Monkul

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