
CURRICULUM VITAE

Bruce L. Kutter

Personal Information

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Education

1979-1983 Cambridge University, Cambridge, UK, Ph.D, Soil Mechanics
(R.G. James)
1978-1979 Cambridge University, Cambridge, UK, M.Phil, Soil Mechanics
(R.G. James)
1977-1978 University of California, Davis, MS, Civil Engineering
(K. Arulanandan)
1975-1977 University of California, Davis, BS, Civil Engineering
1974-1975 American River College, Placerville and Sacramento
1973-1974 California State University, Sacramento

Employment

1995-2017 University of California, Davis
Professor of Civil and Environmental Engineering
1986-1995 University of California, Davis
Associate Professor of Civil and Environmental Engineering
1983-1989 University of California, Davis
Assistant Professor of Civil Engineering

Honors & Awards

2014 Schofield Lecture, Selected by International Society of Soil Mechanics and Geotechnical Engineering, Technical Committee TC104. Lecture delivered in November 2015 at the ICEGE in Christchurch, NZ.
2013 2013 ASCE Wellington Prize for papers on transportation on land, on the water, in the air, or on foundations and closely-related subjects. Chou, J. C., Kutter, B. L., Travasarou, T and Chacko, J.M. "Centrifuge Modeling of Seismically Induced Uplift for the BART Transbay Tube" J. Geotechnical Geoenvironmental Eng., 137(8): 754-765.
2010 Overseas Fellow Churchill College Cambridge. Overseas Fellowships are offered to senior academics from abroad. They are intended for distinguished visitors that are world class in their discipline.
2010 Distinguished Visiting Fellowship Award from the Royal Academy of

- 2010 Engineering in London, 15 March, 2010.
State of the Art Lecture to plenary session of 5th International Conference on Recent Advances in Geotechnical Engineering and Soil Dynamics. May 24 - 29, San Diego, CA, 2010.
- 2008 Keynote Lecture: 4th decennial Geotechnical Earthquake Engineering and Soil Dynamics (GEESD) conference, sponsored by ASCE's Geoinstitute, May 2008
- 2008 Most Effective Education and Outreach Activity for the NEES Consortium (shared with Dan Wilson, other staff of the Center for Geotechnical Modeling and other co-organizers of NEES Demonstration Day on May 20, 2008)
- 2006 ASCE Norman Medal: for a paper worthy of special commendation for its merit as a contribution to engineering science, Kulasingam, R., Malvick, E.J., Boulanger, R.W., and Kutter, B.L. Strength Loss and Localization of Silt Interlayers in Slopes of Liquefied Sand. Journal of Geotechnical and Geoenvironmental Engineering, ASCE, 130(11): 1192-1202.
- 2006 Most Effective Training Activity of the NEES Consortium, June 2006 for UCD-RPI Centrifuge Research and Training Workshop. (Award shared by Dan Wilson, and the Center for Geotechnical Modeling at UC Davis, and our co-organizers at RPI.)
- 2006 Keynote Lecture: Int. Conf. On Physical Modeling In Geotechnics, Hong Kong
- 1998 Keynote Lecture: Int. Conf. On Centrifuge Modeling, Centrifuge 98, Tokyo
- 1995 State-Of-The-Art Lecture: 3rd Int. Conf. On Recent Advances In Geotechnical Earthquake Engineering And Soil Dynamics, St. Louis, MO, April
- 1995 Technical Editors Award: Dynamic Geotechnical Testing II, ASTM STP 1213
- 1992 ASTM Hogentogler Award for outstanding paper on Soil or Rock, B.L. Kutter, N. Sathialingam, and L.R. Herrmann. Effects of Arching on Response Time of Miniature Pore Pressure Transducer in Clay. Geotechnical Testing Journal, ASTM, 13(3): 164-178.

Service

Administrative Activities

- 1983-1989 Managing Director, Center for Geotechnical Modeling, UC Davis.
1989-1996 Associate Director, Center for Geotechnical Modeling, UC Davis.
1996-2009 Director, Center for Geotechnical Modeling, UC Davis.
2001-2002 Vice Chair, Civil and Environmental Engineering, UC Davis.
2011-2012 Vice Chair, Dept of Civil and Environmental Engineering, UC Davis.

Committees

University

- 2010/2017 Faculty Advisor UCD ASCE GeoWall Geochallenge Team - Provide

- guidance and advice to student team at several phases of the project: analysis and design, a paper to qualify for nationals, poster for regionals, testing practice, etc.
- 2011/2013 Personnel Committee - Helped Chair in preparation of letters for faculty merit and promotion actions.
- 2013/2017 Graduate Program Committee - Responsible for recruitment and admission of graduate students in geotechnical engineering. Participate in other policy decisions related to graduate program administration.
- 2011/2012 Graduate Program Review Committee for Materials Science Engineering - 2 days of meetings with department personnel and other committee members. Additional meetings to prepare and edit report(s).

Non-University

- 1991-2017 Core Member of ISSMGE TC-2 and TC-104 - Technical Committee on Physical Modeling in Geotechnics. This is a committee of the International Society of Soil Mechanics and Geotechnical Engineering.
- 1996-1998 Member of Ad Hoc Committee - Ad Hoc Committee to establish a strategy for establishing an NSF Earthquake Center (now known as PEER) among CUREe Universities.
- 1997 Proposal Writing Committee for Earthquake Centers Proposal to Establish PEER - Committee that developed successful proposal to NSF to establish PEER.
- 1998 Chair of NSF sponsored workshop on NHPS (now known as NEES) - Final report title: "Geotechnical Earthquake Engineering Experimental Facilities: Establishing a National Network with Structural, Seismological, and Coastal Earthquake Engineering Seismic Simulation Facilities, May 1998.
- 1998-2000 PEER Research Committee - Led geotechnical aspects of research program.
- 1998-2000 Chair of Ad Hoc Committee - Served as chair of Ad Hoc committee that determined how CUREE would respond to the NSF solicitations for NEES System Integration and Consortium Development Projects.
- 2006 Co-chair of steering committee - NEES 4th Annual Meeting in Washington DC, June 2006.
- 2011-2013 ASCE 41 Analysis Task Group, Revision of ASCE/SEI 41-06 code for seismic rehabilitation of existing buildings. Re-wrote several sections of Chapter 8 relevant to rocking foundations.
- 2016-2017 FEMA-NIBS BSSC PROVISIONS UPDATE COMMITTEE ISSUE TEAM 7 - Review Chapter 19 of ASCE 7-10, Review proposed changes to ASCE 41-17, and consider development of new provisions for soil-structure interaction including seismic earth pressures and rocking foundations.

Editorial and Advisory Boards

1995-2002	CUREE (Consortium of Universities for Research in Earthquake Engineering) Board of Directors.
2001-2003	External Advisory Board of NEESgrid.
2001-2014	Editorial Board, International J. of Physical Modeling in Geotechnics.
2002-2006	Vice President, NEESinc Board of Directors.
2002-2007	Member of NEESinc Board of Directors.
2002-2008	External Advisory Boards of NEES equipment sites at Oregon State, U. Minnesota, and RPI.
2005-2017	PEER Institutional Advisory Board.
2009-2017	Chair, PEER Institutional Advisory Board 2009-present.
2010-2017	Editorial Board, Journal of Soil Dynamics and Earthquake Engineering.

Grants and Contracts

Grants Active

07/20/2016	Grant #1635307, \$436,135, Principal Investigator, Collaborative Research: Validation of Constitutive and Numerical Modeling Techniques for Soil Liquefaction Analysis, National Science Foundation
12/02/2014	Grant #1520581, \$4,934,967, Principal Investigator, Natural Hazards Engineering Research Infrastructure: Experimental Facility with Geotechnical Centrifuges, National Science Foundation

Grants Completed

9/1/2014 - 12/30/2015	\$97,955, Principal Investigator, Model Testing to Evaluate Degradation of Axial Capacity from Cyclic Loading, DOI - BSEE via subcontract from MMI Consulting Engineers
10/1/2013 - 9/30/2015	\$159,100, Principal Investigator, NEESR Planning: Collaborative Research: Liquefaction Experiments and Analysis Projects (LEAP) for Validation, NSF
8/1/2013 - 9/30/2015	Grant #CMMI-1327233, \$99,691, Principal Investigator, Effect of dimensionless particle weight on maximum, minimum, and critical state void ratios, NSF
2/1/2013 - 7/31/2015	\$86,000, Principal Investigator, Experimental Response and Analytical Modeling of Rocking Foundations under Seismic Loading, Caltrans via subcontract from Berkeley
3/1/2012 - 9/30/2014	\$130,000, Principal Investigator, Phase 2 Steel Pile Jacket Seismic Soil Structure Interaction Study, BP America

- 10/1/2009 - \$4,596,690, Co-Principal Investigator, NEES Site Operations,
9/30/2014 Boulanger (Principal Investigator), NSF
- 8/1/2013 - \$188,357, Principal Investigator, Phase 3: Centrifuge testing to evaluate
9/30/2014 seismic displacements of subsea manifolds on deep clay deposits, BP
America
- 10/01/2009 - \$260,000, Principal Investigator, NEESR-SG: Seismic Performance
9/30/2013 Assessment in Dense Urban Environments, NSF
- 10/1/2009 - \$768,733, Principal Investigator, NEESR-CR: Design of soil and
9/30/2013 structure compatible yielding to improve system performance, NSF
- 10/01/2009 - \$230,000, Principal Investigator, Last Hurdles for Implementation of
9/30/2011 Rocking Foundations for Bridges, PEER
- 6/1/2007 - \$250,000, Principal Investigator, Innovative bridge foundations with
9/30/2009 improved performance less sensitive to site conditions, Caltrans
- 7/1/2007 - \$250,000, Principal Investigator, BART Transbay Tube Retrofit, BART;
6/30/2008 Fugro West Inc.
- 10/1/2004 - Grant #2004 v3.1, \$5,088,903, Principal Investigator, Operations &
9/30/2009 Maintenance Subaward Agreement, NEES NSF
- 6/30/2004 - \$250,000, Co-Principal Investigator, Inertial and Kinematic Load
8/30/2006 Combinations on Pile Foundations in Liquefying and Laterally Spreading
Ground, Ross Boulanger (Principal Investigator), PEER Lifelines
- 3/4/2004 - Grant #STAP 13, \$370,020, Principal Investigator, Design Guidelines for
3/3/2006 Foundations Rocking of Bridge Piers, Caltrans
- 10/31/2001 - Grant #SA3496, \$253,000, Principal Investigator, Performance of
8/1/2005 Shallow Foundation, PEER
- 09/25/2000 Grant # 0086566, \$4,614,294, Principal Investigator, A NEES
Geotechnical Centrifuge Facility, National Science Foundation
- 10/01/1999 Grant # 0070111, \$441,631, Principal Investigator, Effects of Void
Redistribution on Liquefaction Flow of Layered Soils, National Science
Foundation
- 8/21/1996 Grant # 59A0162, \$294,880, Co-Principal Investigator, Behavior of Piles
in Laterally Spreading Ground During Earthquakes, Ross
Boulanger (Principal Investigator), Caltrans
- 8/21/1996 Grant #99HQGR0019, \$105,000, Principal Investigator, Comprehensive
Investigation of Nonlinear Site Response: Collaborative Research with
UC San Diego, and UC Davis, USGS

Publications

- 1978 K. Arulanandan and B.L. Kutter. A Directional Structure Index Related to Sand Liquefaction. Proceedings, ASCE Conference on Earthquake Engineering and Soil Dynamics, 213-230.
- 1978 B.L. Kutter. Electrical Properties in Relation to Structure of Cohesionless Soils. M.S. Thesis, University of California, Davis, 1-99.
- 1979 B.L. Kutter, K. Arulanandan, and Y.F. Dafalias. A Comparison of Electrical and Penetration Methods of Site Investigation. Proceedings, Offshore Technology Conference, 1105-1115.
- 1979 B.L. Kutter. Behavior of Embankments Under Dynamic Loading. M. Phil. Thesis, Cambridge University, 1-87.
- 1981 B.L. Kutter. Discussion on Centrifuge Modeling of the Effects of Earthquakes on Embankments. Proceedings, Dams and Earthquake, Institution of Civil Engineers, 151-152.
- 1981 R.V. Whitman, P.C. Lambe, and B.L. Kutter. Initial Results from a Stacked Ring Apparatus for Simulation of a Soil Profile. Proceedings, International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics, 1105-1110.
- 1982 B.L. Kutter. Deformation of Centrifuge Models of Clay Embankments due to 'Bumpy Road' Earthquakes. Proceedings, International Conference on Soil Dynamics and Earthquake Engineering, 331-349.
- 1983 B.L. Kutter. Centrifuge Modeling of the Response of Clay Embankments to Earthquakes. Ph.D. Thesis, Cambridge University, 1-291.
- 1983 B.L. Kutter. Geotechnical Centrifuges and Earthquake Simulator. Proceedings, 4th Engineering Mechanics Division Specialty Conference on Recent Advances in Engineering Mechanics and Their Impact on Civil Engineering Practice, ASCE, 621-625.
- 1983 B.L. Kutter. Deformation of Centrifuge Models of Clay Embankments due to 'Bumpy Road' Earthquakes. Proceedings, 1st International Conference and Exhibition on Soil Dynamics and Earthquake Engineering, 2(4): 199-205.
- 1984 B.L. Kutter. NGC Facility and Trends in Cost of Centrifuges. Proceedings, Symposium on Recent Advances in Geotechnical Centrifuge Modeling, 30-39.
- 1984 B.L. Kutter. Earthquake Deformation of Centrifuge Model Banks. Journal of Geotechnical Engineering Division, ASCE, 110(12): 1697-1714.

- 1985 B.L. Kutter. Model Tests for Design of Centrifuge Safety Barrier. Proceedings, 2nd Symposium on the Interaction of Non-Nuclear Munitions with Structures, 430-434.
- 1985 B.L. Kutter, L.M. O'Leary, and P.Y. Thompson. Centrifugal Modeling of the Effect of Blast Loading on Tunnels. Proceedings, 2nd Symposium on the Interaction of Non-Nuclear Munitions with Structures, 1-6.
- 1985 K. Arulanandan, P.Y. Thompson, N.J. Meegoda, B.L. Kutter, and R.B. Krone. Centrifuge Modeling of Advection and Dispersion Processes During Pollutant Travel in Soil. Proceedings, 2nd Symposium on the Interaction of Non-Nuclear Munitions with Structures, 418-423.
- 1987 B.L. Kutter. Earthquake Deformation of Centrifuge Model Banks. Journal of Geotechnical Engineering Division, ASCE, 113(1): 72-73.
- 1987 B.C. Davis, B.L. Kutter, and L. Chang. Development of Centrifuge Modeling for Evaluating the Mechanisms of Collapse of Underground Openings. Engineering Research Annual Report, Mechanical Engineering Department, Lawrence Livermore National Laboratory, 127-139.
- 1987 B.L. Kutter and C. Yogachandran. Bounding Surface Predictions of Dynamic Pore Pressures in a Soil Layer. Proceedings, 2nd International Conference on Constitutive Laws for Engineering Materials: Theory and Application, 605-613.
- 1987 A. Abghari, B.L. Kutter, and J.A. Cheney. Centrifuge Modeling of Bearing Capacity of Sand Under Concentric and Eccentric Loading. Proceedings, International Symposium on Prediction and Performance in Geotechnical Engineering, 397-405.
- 1988 B.L. Kutter. Liquefaction Evaluation Procedure - Discussion. Journal of Geotechnical Engineering Division, ASCE, 114(2): 243-246.
- 1988 K. Arulanandan, P.Y. Thompson, B.L. Kutter, N.J. Meegoda, K.K. Muraleetharan, and C. Yogachandran. Centrifuge Modeling of Transport Processes for Pollutants in Soils. Journal of Geotechnical Engineering Division, ASCE, 114(2): 185-205.
- 1988 B.L. Kutter, L.M. O'Leary, P.Y. Thompson, and R. Lather. Gravity Scaled Tests on Blast-Induced Soil-Structure Interaction. Journal of Geotechnical Engineering Division, ASCE, 114(4): 431-447.
- 1988 B.L. Kutter, A. Abghari, and J.A. Cheney. Strength Parameters for Bearing Capacity in Sand. Journal of Geotechnical Engineering Division, ASCE, 114(4): 491-500.
- 1988 J.A. Cheney and B.L. Kutter. Update on the U.S. National Geotechnical

- Centrifuge. Proceedings, International Conference on Geotechnical Centrifuge Modelling, 61-66.
- 1988 A. Abghari, J.A. Cheney, and B.L. Kutter. Leaning Stability of Tall Towers. Proceedings, International Conference on Geotechnical Centrifuge Modelling, 435-442.
- 1988 B.L. Kutter, N. Sathialingam, and L.R. Herrmann. The Effects of Local Arching and Consolidation on Pore Pressure Measurements in Clay. Proceedings, International Conference on Geotechnical Centrifuge Modelling, 115-344.
- 1988 B.L. Kutter, A. Abghari, and S.B. Shinde. Modeling of Circular Foundations on Relatively Thin Clay Layers. Proceedings, International Conference on Geotechnical Centrifuge Modelling.
- 1988 K. Arulanandan, C. Yogachandran, K.K. Muraleetharan, B.L. Kutter, and G.S. Chang. Laboratory Flow Slide During Earthquake Simulation. Proceedings, International Conference on Geotechnical Centrifuge Modelling, 539-544.
- 1988 K. Arulanandan, C. Yogachandran, K.K. Muraleetharan, B.L. Kutter, and G.S. Chang. Seismically Induced Flow Slide on Centrifuge. Journal of Geotechnical Engineering Division, ASCE, 114(12): 1442-1449.
- 1989 B.L. Kutter and R.G. James. Dynamic Centrifuge Model Tests on Clay Embankments. Geotechnique, 39(1): 91-106.
- 1989 G.S. Chang and B.L. Kutter. Centrifugal Modeling of Soil-Pile-Structure Interaction. Proceedings, 25th Symposium on Engineering Geology and Geotechnical Engineering.
- 1989 B.L. Kutter, A. Abghari, and J.A. Cheney. Strength Parameters for Bearing Capacity of Sand. Journal of Geotechnical Engineering Division, ASCE, 1818-1819.
- 1990 B.L. Kutter, J.A. Casey, and K.M. Romstad. Centrifuge Modeling and Field Observations of Dynamic Behavior of Reinforced Soil and Concrete Cantilever Retaining Walls. Proceedings, 4th US National Conference on Earthquake Engineering, 663-672.
- 1990 G.S. Chang, B.L. Kutter, and K.M. Romstad. Centrifuge Modeling of Soil-Pile-Structure Interaction During Simulated Earthquake Loading. Proceedings, 4th US National Conference on Earthquake Engineering, 805-814.
- 1990 M. Jaber, J.K. Mitchell, B.R. Christopher, and B.L. Kutter. Large Centrifuge Modeling of Full Scale Reinforced Soil Walls. Proceedings, ASCE Specialty Conference on Design and Performance of Earth

Retaining Structures.

- 1990 B.L. Kutter, N. Sathialingam, and L.R. Herrmann. Effects of Arching on Response Time of Miniature Pore Pressure Transducer in Clay. *Geotechnical Testing Journal*, ASTM, 13(3): 164-178.
- 1991 J.A. Cheney, A. Abghari, and B.L. Kutter. Stability of Leaning Towers. *Journal of Geotechnical Engineering Division*, ASCE, 117(2): 297-318.
- 1991 B.L. Kutter and G.L. Fiegel. Mechanism of Sand Boil Formation in Layered Soils as Observed in Centrifuge Tests. *Proceedings, 3rd US-Japan Workshop on Earthquake Resistant Design of Lifeline Facilities and Countermeasures of Soil Liquefaction*, 279-285.
- 1991 J. Casey, D. Soon, B.L. Kutter, and K.M. Romstad. Modeling of Mechanically Stabilized Earth Systems: A Seismic Centrifuge Study. *Proceedings, Geotechnical Engineering Congress*, 839-850.
- 1991 B.L. Kutter, X.S. Li, W. Sluis, and J.A. Cheney. Performance and Instrumentation of the Large Centrifuge at Davis. *Proceedings, International Conference Centrifuge*, 19-26.
- 1991 D.J. Campbell, J.A. Cheney, and B.L. Kutter. Boundary Effects in Dynamic Centrifuge Model Tests. *Proceedings, International Conference Centrifuge*, 441-448.
- 1991 K.M. Romstad, B.L. Kutter, B. Maroney, M. Griggs, E. Kasper, X-S. Li, and E. Vanderbilt. Experimental Measurements of Bridge Abutment Behavior. *Proceedings, 1st Annual Seismic Research Conference (Caltrans)*.
- 1991 I.M. Idriss, B.L. Kutter, X-S. Li, and G.L. Fiegel. Response of Soft Soil Sites During Earthquakes. *Proceedings, 1st Annual Seismic Research Conference (Caltrans)*.
- 1992 B.L. Kutter, and N. Sathialingam. Elastic-Viscoplastic Modelling of the Rate-Dependent Behavior of Clays. *Geotechnique*, 42(3): 427-441.
- 1992 B.L. Kutter. Dynamic Centrifuge Modeling of Geotechnical Structures. *Transportation Research Record, TRB, National Research Council*, 1336: 24-30.
- 1992 D. Soon, J.A. Casey, B.L. Kutter, and K.M. Romstad. Dynamic Centrifuge Modeling of Sound Walls Supported on Concrete and Mechanically Stabilized Earth Retaining Structures. *Transportation Research Record, TRB, National Research Council*, 9-16.
- 1993 B.L. Kutter and R.W. Boulanger. Case Histories of New Solutions to Traditional Geotechnical Problems. *Proceedings, 3rd International*

- Conference on Case Histories in Geotechnical Engineering, 1695-1697.
- 1993 I.M. Idriss, G.L. Fiegel, B.L. Kutter, and X-S. Li. Centrifuge Tests for Response of Soil Deposits. Proceedings, 2nd Annual Seismic Research Workshop (Caltrans).
- 1993 B. Maroney, M. Griggs, E. Vanderbilt, B.L. Kutter, Y.H. Chai, and K.M. Romstad. Experimental Measurements of Bridge Abutment Behavior. Proceedings, 2nd Annual Seismic Research Workshop (Caltrans).
- 1993 B. Maroney, K.M. Romstad, and B.L. Kutter. Experimental Testing of Laterally Loaded Large Scale Bridge Abutments. Proceedings, Structural Engineering in Natural Hazards Mitigation, Structures Congress, ASCE, 1: 1065-1070.
- 1993 T.M. Farrel and B.L. Kutter. Experimental Results of Model No 3. Proceedings, Conference on the Verification of Numerical Procedures for the Analysis of Soil Liquefaction Problems, 1: 463-469.
- 1993 D. Wilson and B.L. Kutter. Experimental Results of Model No 7. Proceedings, Conference on the Verification of Numerical Procedures for the Analysis of Soil Liquefaction Problems, 1: 809-816.
- 1993 T.M. Farrell and B.L. Kutter. Experimental Results of Model No 12. Proceedings, Conference on the Verification of Numerical Procedures for the Analysis of Soil Liquefaction Problems, 1: 1027-1034.
- 1993 D.W. Wilson, T.M. Farrell, and B.L. Kutter. An Overview and Relevance of Experimental Data from VELACS Project Model Nos. 7, 11, and 12. Proceedings, Conference on the Verification of Numerical Procedures for the Analysis of Soil Liquefaction Problems, 2.
- 1994 G.L. Fiegel and B.L. Kutter. Liquefaction Mechanism for Layered Soils. Journal of Geotechnical Engineering Division, ASCE, 120(4): 733-755.
- 1994 I.M. Idriss, G.L. Fiegel, and B.L. Kutter. Seismic Response of Soft Clay Layers Using the Centrifuge. Proceedings, 3rd Annual Seismic Research Workshop (Caltrans).
- 1994 B. Maroney, B.L. Kutter, K.M. Romstad, Y.H. Chai, and E. Vanderbilt. Interpretation of Large Scale Bridge Abutment Test Results. Proceedings, 3rd Annual Seismic Research Workshop (Caltrans).
- 1994 N. Sathialingam and B.L. Kutter. Scaling Laws for Rate Dependent Shear and Consolidation of Clay. American Society for Testing and Materials, Dynamic Geotechnical Testing II, ASTM, 1213: 330-345.
- 1994 K. Arulanandan, R. Dobry, A-W. Elgamal, H.Y. Ko, B.L. Kutter, J. Prevost, M.F. Riemer, A.N. Schofield, R.F. Scott, R.B. Seed, R.V.

- Whitman, and X. Zeng. Interlaboratory Studies to Evaluate the Repeatability of Dynamic Centrifuge Model Tests. American Society for Testing and Materials, Dynamic Geotechnical Testing II, ASTM, 1213: 400-422.
- 1994 B.L. Kutter, J-D. Chang, and B.C. Davis. Collapse of Cavities in Sand and Particle Size Effects. Proceedings, International Conference Centrifuge, 809-815.
- 1994 B.L. Kutter, I.M. Idriss, T. Kohnke, J. Lakeland, X-S. Li, W. Sluis, X. Zeng, R.C. Tauscher, Y. Goto, and I. Kubodera. Design of a Large Earthquake Simulator at UC Davis. Proceedings, International Conference Centrifuge, 169-175.
- 1994 G.L. Fiegel, M. Hudson, I.M. Idriss, B.L. Kutter, and X. Zeng. Effect of Model Containers on Dynamic Soil Response. Proceedings, International Conference Centrifuge, 145-150.
- 1994 G.L. Fiegel and B.L. Kutter. Liquefaction Induced Lateral Spreading of Mildly Sloping Ground. Journal of Geotechnical Engineering Division, ASCE, 120(12).
- 1995 G.L. Fiegel, I.M. Idriss, and B.L. Kutter. Earthquake Time Histories in Centrifuge Experiments. Proceedings, 3rd International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics, 1: 149-154.
- 1995 B.L. Kutter. Recent Advances in Centrifuge Modeling of Seismic Shaking (State-of-the-Art Paper). Proceedings, 3rd International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics, 2: 927-942.
- 1995 D.W. Wilson, R.W. Boulanger, B.L. Kutter, and A. Abghari. Dynamic Centrifuge Tests of Pile Supported Structures in Liquefiable Sand. Proceedings, National Seismic Conference on Bridges and Highways - Progress in Research and Practice.
- 1996 D.W. Wilson, R.W. Boulanger, B.L. Kutter, and A. Abghari. Soil-Pile-Superstructure Interaction Experiments with Liquefiable Sand in the Centrifuge. Proceedings, 4th Seismic Research Workshop (Caltrans).
- 1996 C.J. Divis, B.L. Kutter, and I.M. Idriss. Uniformity of Specimen and Response of Liquefiable Sand Model in a Large Centrifuge Shaker. Proceedings, 6th Japan-US Workshop on Earthquake Resistant Design of Lifeline Facilities and Countermeasures against Soil Liquefaction, National Center for Earthquake Engineering Research, 259-274.
- 1997 R.W. Boulanger, D.W. Wilson, B.L. Kutter, and A. Abghari. Soil-Pile-Superstructure Interaction in Liquefiable Sand. Transportation Research

- Record, TRB, National Research Council, 55-64.
- 1997 D.W. Wilson, R.W. Boulanger, B.L. Kutter, and A. Abghari. Aspects of Dynamic Centrifuge Testing of Soil-Pile-Superstructure Interaction. Proceedings, Observation and Modeling in Numerical Analysis and Model Tests in Dynamic Soil Structure Interaction Problems, 64: 47-63.
- 1997 B.L. Kutter and Y-R. Chen. Constant p' and Constant Volume Friction Angles are Different. Geotechnical Testing Journal, ASTM, 20(3): 304-316.
- 1998 A. Balakrishnan, B.L. Kutter, and I.M. Idriss. Centrifuge Testing of Remediation of Liquefaction at Bridge Sites. Transportation Research Record, Liquefaction, Differential Settlement and Foundation Engineering, 1633: 26-37.
- 1998 S. Wang, B.L. Kutter, M. Jacob Chacko, D.W. Wilson, R.W. Boulanger, and A. Abghari. Nonlinear Seismic Soil-Pile-Structure Interaction. EERI Earthquake Spectra, 377-396.
- 1998 A. Balakrishnan, B.L. Kutter, and I.M Idriss. Remediation and Apparent Shear Strength of Lateral Spreading Centrifuge Models. Proceedings, 5th Seismic Research Workshop (Caltrans), 10 pages.
- 1998 R.W. A. Howard, B.L. Kutter, and R. Siddharthan. Seismic Deformation of Reinforced Soil Centrifuge Models. Proceedings, Geotechnical Earthquake Engineering & Soil Dynamics Conference, 446-468.
- 1998 B.L. Kutter and S. Wang. A Bounding Surface Model for Dynamic Soil-Pile Interaction. Proceedings, Structural Engineers World Congress, T143-3: 8 pages.
- 1998 B.L. Kutter and A. Balakrishnan. Dynamic Model Test Data from Electronics to Knowledge (Keynote Lecture). Proceedings, Centrifuge '98, 2: 931-943.
- 1998 D.W. Wilson, R.W. Boulanger, and B.L. Kutter. Signal Processing for an Analysis of Dynamic Soil-Pile Interaction Experiments. Proceedings, Centrifuge '98, 1: 135-140.
- 1998 G.L. Fiegel, B.L. Kutter, and I.M. Idriss. Earthquake-Induced Settlement of Soft Clay. Proceedings, Centrifuge '98, 1: 231-236.
- 1998 T. Kawai, Y. Tanaka, M. Kanatani, D.P. Stewart, B.L. Kutter, R.R. Settgast, H. Ishikawa, T. Takeda, S. Higuchi, and Y. Goto. Seismic Performance of a Caisson Type Seawall with an Armored Embankment. Proceedings, Centrifuge '98, 1: 351-358.
- 1998 C.K. Shen, X-S. Li, C.W.W. Ng, P.A. Van Laak, B.L. Kutter, K. Cappel,

- R.C. Tauscher. Development of a Geotechnical Centrifuge in Hong Kong. Proceedings, Centrifuge '98, 1: 13-18.
- 1998 Y-R. Chen and B.L. Kutter. Undrained Rotational Shear Tests on Sand. Proceedings, Engineering Mechanics Conference.
- 1998 D.P. Stewart, Y.R. Chen, and B.L. Kutter. Experience with the Use of Methylcellulose as a Viscous Pore Fluid in Centrifuge Models. Geotechnical Testing Journal, ASTM, 21(4): 365-369.
- 1999 B.L. Kutter and A. Balakrishnan. Visualization of Soil Behavior from Dynamic Centrifuge Model Tests. Proceedings, 2nd International Conference on Earthquake Geotechnical Engineering, 3: 857-862.
- 1999 C.J. Curras, R.W. Boulanger, B.L. Kutter, D.W. Wilson. Seismic Soil-Pile-Structure Interaction in Soft Clay. Proceedings, 2nd International Conference on Earthquake Geotechnical Engineering, 3: 965-970.
- 1999 S. Higuchi, T. Mori, T. Matsuda, Y. Goto, B.L. Kutter, H. Akiyama, T. Chiba. Centrifuge Tests on Seismic Response of LNG Facilities during Very Large Earthquakes. Proceedings, 2nd International Conference on Earthquake Geotechnical Engineering, 1: 371-376.
- 1999 R.W. Boulanger, C.J. Curras, B.L. Kutter, D.W. Wilson, and A. Abghari. Seismic Soil-Pile Structure Interaction Experiments and Analysis. Journal of Geotechnical and Geoenvironmental Engineering, ASCE, 125(9): 750-759.
- 1999 A. Balakrishnan and B.L. Kutter. Settlement, Sliding, and Liquefaction Remediation of Layered Soil. Journal of Geotechnical and Geoenvironmental Engineering, ASCE, 125(11): 968-978.
- 1999 Wilson, D.W., Boulanger, R.W., and Kutter, B.L. Lateral Resistance of Piles in Liquefying Sand. Proceedings, OTRC '99 Conference on Analysis, Design, Construction and Testing of Deep Foundations, 88: 165-179.
- 1999 R. Siddharthan, V. Ganeshwara, and B.L. Kutter. Development of a Seismic Deformation Model for Mechanically Stabilized Earth Walls. Proceedings, 8th Canadian Conference on Earthquake Engineering, 353-359.
- 1999 B.L. Kutter and D.W. Wilson. De-Liquefaction Shock Waves. Proceedings, 7th US-Japan Workshop on Earthquake Resistant Design of Lifeline Facilities and Countermeasures Against Soil Liquefaction, MCEER-99-0019: 295-310.
- 1999 W.D.L. Finn, T. Thavaraj, D.W. Wilson, R.W. Boulanger, and B.L. Kutter. Seismic Response Analysis of Pile Foundations at Liquefiable Sites.

- Proceedings, 7th US-Japan Workshop on Earthquake Resistant Design of Lifeline Facilities and Countermeasures Against Soil Liquefaction, MCEER-99-0019: 579-586.
- 2000 D.P. Stewart, R.R. Settgast, B.L. Kutter, T. Kawai, and S. Higuchi. Cyclic Settlement and Sliding of Caisson Seawalls. Proceedings, 12th World Conference on Earthquake Engineering.
- 2000 Wilson, D.W., Boulanger, R.W., Kutter, B.L. Observed Seismic Lateral Resistance of Liquefying Sand. Journal of Geotechnical and Geoenvironmental Engineering, ASCE, 898-906.
- 2000 R. Arulnathan, R.W. Boulanger, B.L. Kutter, and B. Sluis. New Tool for Shear Wave Velocity Measurements in Model Tests. Geotechnical Testing Journal, ASTM, 23(4): 444-453.
- 2000 D.P. Stewart, R.R. Settgast, Bruce L. Kutter, T. Kawai, S. Higuchi, H. Ishikawa, and T. Takeda. Experimental Performance of a Seawall Model under Seismic Conditions. Soils and Foundations, 40(12): 77-91.
- 2001 S.J. Brandenberg, P. Singh, R.W. Boulanger, and B.L. Kutter. Behavior of Piles in Laterally Spreading Ground During Earthquakes. Proceedings, 6th Seismic Research Workshop (Caltrans), 02-106: 12-13.
- 2001 C.J. Curras, R.W. Boulanger, B.L. Kutter, and D.W. Wilson. Dynamic Experiments and Analyses of a Pile-Group-Supported Structure. Journal of Geotechnical and Geoenvironmental Engineering, ASCE, 127(7): 585-596.
- 2001 R. Kulasingam, E.J. Malvick, R.W. Boulanger, and B.L. Kutter. Void Redistribution and Localization of Shear Strains in Model Sand Slopes with Silt Seams: Report on First Year Activities. Proceedings, US-Japan Cooperative Research in Urban Earthquake Disaster Mitigation Workshop, 117-128.
- 2001 A. Elgamal, T. Lai, D. Wilson and B. Kutter. Identification of Small Strain Dynamic Properties of Dense Sand. Proceedings, 4th International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics in Honor of Professor W.D. Liam Finn, 1.67.
- 2001 K. Rosebrook, D. Wilson, B. Jeremic, B.L. Kutter, A. Smith, D. Humphrey, S. Panenau. Centrifuge Characterization and Numerical Modeling of the Dynamic Properties of Tire Shreds for Use as A Bridge Abutment Backfill. Proceedings, 4th International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics in Honor of Professor W.D. Liam Finn, 8.07.
- 2001 D. Stevens, D. Wilson, B. Kutter, B. Kim, and A. Elgamal. Centrifuge

- Model Tests to Identify Dynamic Properties of Dense Sand for Site Response Calculations. Proceedings, 4th International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics in Honor of Professor W.D. Liam Finn, 1.66.
- 2001 B.L. Kutter and S.P.G. Madabhushi. General Report on Session 9: Model and Full Scale Tests of Geotechnical Structures Including Centrifuge Tests. Proceedings, 4th International Conference on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics in Honor of Professor W.d. Liam Finn, GR-9.
- 2001 T. Lai, A. Elgamal, D. Wilson, B. Kutter. Numerical Modelling of Site Seismic Response in Laminated Centrifuge Container. Proceedings, 1st Albert Caquot International Conference on Modelling and Simulation in Civil Engineering, From Practice to Theory.
- 2002 S.J. Brandenberg, R.W. Boulanger, B.L. Kutter. p-y Behavior in Liquefied & Laterally Spreading Ground in Centrifuge Tests. Proceedings, US-Japan Seminar on Seismic Disaster Mitigation in Urban Area by Geotechnical Engineering.
- 2002 D.W. Wilson, and B.L. Kutter. Dense Instrumentation Arrays. Proceedings, International Conference on Physical Modelling in Geotechnics, St. Johns, Canada, 131-136.
- 2002 B.L. Kutter, D.W. Wilson, and J.P. Bardet. Metadata Structure for Geotechnical Physical Model Tests. Proceedings, International Conference on Physical Modelling in Geotechnics, St. Johns, Canada, 137-142.
- 2002 T. Lai, A. Elgamal, B.L. Kutter, and D.W. Wilson. Three Dimensional Modeling for Site Seismic Response in Laminated and Rigid Centrifuge Containers. Proceedings, International Conference on Physical Modelling in Geotechnics, 189-194.
- 2002 E.J. Malvick, R. Kulasingam, B.L. Kutter, and R.W. Boulanger. Void Redistribution and Localized Shear Strains in Slopes During Liquefaction. Proceedings, International Conference on Physical Modelling in Geotechnics, St. Johns, Canada, 495-500.
- 2002 R. Reitherman, W. Holmes, B. Kutter, S. Mahin, T. Prudhomme, A. Reinhorn, B. Stojadinovic, K. Stokoe, S. Yim. Use of Experimental Facilities in NEES Collaboratory Research. Proceedings, EERI 7th National Conference on Earthquake Engineering, CD.
- 2002 R.V. Siddharthan, V. Ganeshwara, B.L. Kutter, M. El-Devouky, and R.V. Whitman. Seismic MSE Wall Behavior: Centrifuge Tests and Analytical Studies. Proceedings, EERI 7th National Conference on Earthquake Engineering, CD.

- 2002 Kutter, B.L., Wilson, D.W., Boulanger, R., Jeremic, B., Velinsky, S., Hamann, B., Ma, K-L, Yoo, B. A NEES Geotechnical Centrifuge at UC Davis. Proceedings, International Symposium on Geotechnical Centrifuge Modelling and Networking, 36.
- 2003 Kutter, B.L., Malvick, E.J., Kulasingam, R. and Boulanger, R.W. Interpretation and Visualization of Model Test Data for Slope Failure in Liquefying Soil. Proceedings, 8th US-Japan Workshop on Earthquake Resistant Design of Lifeline Facilities and Countermeasures Against Liquefaction, MCEER-03-0003: 359-370.
- 2003 Malvick, E.J., Kulasingam, R., Boulanger, R.W., and Kutter, B.L. Analysis of a Void Redistribution Mechanism in Liquefied Soil. Proceedings, 12th Panamerican Conference on Soil Mechanics and Geotechnical Engineering, 955-961.
- 2003 Weber, G.H., Schneider, M., Wilson, D.W., Hagen, H., Hamann, B., and Kutter, B.L. Visualization of Experimental Earthquake Data. Proceedings, SPIE Visualization and Data Analysis, 5009.
- 2004 Malvick, E.J., Kutter, B.L., Boulanger, R.W., and Feigenbaum, H.P. Post-shaking Failure of Sand Slope in Centrifuge Test. Proceedings, 11th International Conference on Soil Dynamics and Earthquake Engineering, and 3rd International Conference on Earthquake Geotechnical Engineering, 2: 447-455.
- 2004 Gajan, S., Phalen, J.D., Kutter, B.L., Hutchinson, T.C., and Martin, G. Centrifuge Modeling of Nonlinear Cyclic Load-Deformation Behavior of Shallow Foundations. Proceedings, 11th International Conference on Soil Dynamics and Earthquake Engineering, and 3rd International Conference on Earthquake Geotechnical Engineering, 2: 742-749.
- 2004 Siddharthan, R.V., V. Ganeshwara, B.L. Kutter, M. El-Desouky, and R.V. Whitman. Seismic Deformation of Bar Mat Mechanically Stabilized Earth Walls. I: Centrifuge Tests. Journal of Geotechnical and Geoenvironmental Engineering, ASCE, 130(1): 14-25.
- 2004 Siddharthan, R.V., V. Ganeshwara, B.L. Kutter, M. El-Desouky, and R.V. Whitman. Seismic Deformation of Bar Mat Mechanically Stabilized Earth Walls. II: A MultiBlock Model. Journal of Geotechnical and Geoenvironmental Engineering, ASCE, 130(1): 26-35.
- 2004 Kutter, B.L., Gajan, S., Balakrishnan, A., and Manda, K.K. Effects of Layer Thickness and Density on Settlement and Lateral Spreading. Journal of Geotechnical and Geoenvironmental Engineering, ASCE, 130(6): 603-614.
- 2004 Wilson, D.W., Boulanger, R.W., Feng, X., Hamann, B., Jeremic, B.,

- Kutter, B.L., Ma, K-L, Santamarina, C., Sprott, K.S., Velinsky, S.A., Weber, G., Yoo, S.J.B. The NEES Geotechnical Centrifuge at UC Davis. Proceedings, 13th World Conference on Earthquake Engineering, 2497: 14.
- 2004 Brandenberg, S.J., Boulanger, R.W., Kutter, B.L., Wilson, D.W. and Chang, D. Load Transfer Between Pile Groups and Laterally Spreading Ground during Earthquakes. Proceedings, 13th World Conference on Earthquake Engineering, 1516.
- 2004 Boulanger, R.W., Wilson, D.W., Kutter, B.L., Brandenberg, S.J. and Chang, D. Nonlinear FE Analyses of Soil-Pile Interaction in Liquefying Sand. Proceedings, Geotechnical Engineering for Transportation Projects, ASCE, 126: 470-478.
- 2004 Kulasingam, R., Malvick, E.J., Boulanger, R.W., and Kutter, B.L. Strength Loss and Localization of Silt Interlayers in Slopes of Liquefied Sand. Journal of Geotechnical and Geoenvironmental Engineering, ASCE, 130(11): 1192-1202.
- 2004 Lai, T., Elgamal, A., Yang, Z., Wilson, D.W., and Kutter, B.L. Numerical Modeling of Dynamic Centrifuge Experiments on a Saturated Dense Sand Stratum. Proceedings, 3rd International Conference on Earthquake Geotechnical Engineering.
- 2004 Bastani, S.A., and Kutter, B.L. Post Earthquake Embankment Failure, Seepage-Induced Liquefaction, and Void Ratio Distribution. Proceedings, 3rd International Conference on Earthquake Geotechnical Engineering.
- 2005 Versteeg, R., LaBrecque, D., Kutter, B.W., Mattson, E., Richardson, A., Sharpe, R., Li, Z., Wilson, D.W., and Stadler, A. A High Speed Resistivity System for Investigation of Processes on Geocentrifuges. Proceedings, ASCE Geofrontiers 2005, 10.
- 2005 Li, Z., Kutter, B.L., Wilson, D.W., Sprott, K., Lee, J-S, and Santamarina, J.C. Needle Probe Application for High-Resolution Assessment of Soil Spatial Variability in the Centrifuge. Proceedings, ASCE Geofrontiers 2005, 15.
- 2005 Chang, D., Boulanger, R.W., Kutter, B.L., and Brandenberg, S.J. Experimental Observations of Inertial and Lateral Spreading Loads on Pile Groups during Earthquakes. Proceedings, ASCE Geofrontiers 2005, 15.
- 2005 Gajan, S., Thomas, J.M, and Kutter, B.L. Physical and Analytical Modeling of Cyclic Load-Deformation Behavior of Shallow Foundations. Proceedings, 57th Annual Meeting of Earthquake Engineering Research Institute, extended abstract.

- 2005 Brandenburg, S.J., Boulanger, R.W., and Kutter, B.L. Discussion of Single Piles in Lateral Spreads: Field Bending Moment Evaluation. *Journal of Geotechnical and Geoenvironmental Engineering, ASCE*, 131(4): 529-531.
- 2005 Elgamal, A., Yang, Z., Lai, T., Kutter, B.L., and Wilson, D.W. Dynamic Response of Saturated Dense Sand in Laminated Centrifuge Container. *Journal of Geotechnical and Geoenvironmental Engineering, ASCE*, 131(5): 598-609.
- 2005 Gajan, S., Phalen, J.D., Kutter, B.L., Hutchinson, T.C. and Martin, G. Centrifuge Modeling of Load-Deformation Behavior of Rocking Shallow Foundations. *Journal of Soil Dynamics and Earthquake Engineering*, 25(7-10): 773-783.
- 2005 Boulanger, R.W., Chang, D., Gulerce, U, Brandenburg, S.J., and Kutter, B.L. Evaluating Pile Pinning Effects on Abutments over Liquefied Ground. *Proceedings, Simulation and Performance of Pile Foundations in Liquefied and Laterally Spreading Ground, Geotechnical Special Publication, ASCE*.
- 2005 Gajan, S., Kutter, B.L., and Thomas, J. Physical and Numerical Modeling of Cyclic Moment-Rotation Behavior of Shallow Foundations. *Proceedings, 16th International Conference on Soil Mechanics and Geotechnical Engineering*, 2: 795-798.
- 2005 Nakajima, H., Kutter, B.L., Ginn, T.R., Chang, D.P., and Marino, M.A. An Experimental Study of LNAPL Lens Formation using a Centrifuge. *Proceedings, 16th International Conference on Soil Mechanics and Geotechnical Engineering*, 4: 2425-2428.
- 2005 Malvick, E.J., Kutter, B.L., Boulanger, R.W., Kabasawa, K., and Kokusho, T. Void Redistribution Research with 1-g and Centrifuge Modeling. *Proceedings, 16th International Conference on Soil Mechanics and Geotechnical Engineering*, 4: 2543-2546.
- 2005 Lee, J.-S., Santamarina, JC, Li, Z., and Kutter, B.L. Geophysical Process Monitoring in Scaled Models. *Proceedings, 16th International Conference on Soil Mechanics and Geotechnical Engineering*, 2: 711-716.
- 2005 Brandenburg, S.J., Boulanger, R.W., Kutter, B.L., Chang, D. Behavior of Pile Foundations in Laterally Spreading Ground during Centrifuge Tests. *Journal of Geotechnical and Geoenvironmental Engineering, ASCE*, 131(11): 1378-1391.
- 2005 Boulanger, R.W., Wilson, D.W., Kutter, B.L., Brandenburg, S.J., Chang, D., and Gulerce, U. Identifying Interaction Mechanisms for Pile Foundations in Laterally Spreading Ground. *Proceedings, 1st Greece-*

- Japan Workshop on Seismic Design, Observation, and Retrofit of Foundations, 69-76.
- 2005 Brandenberg, S.J., Boulanger, R.W., Kutter, B.L., and Chang, D. Observations and Analysis of Pile Groups in Liquefied and Laterally Spreading Ground in Centrifuge Tests. Proceedings, Simulation and Performance of Pile Foundations in Liquefied and Laterally Spreading Ground, Geotechnical Special Publication, ASCE, 145: 161-172.
- 2005 Brandenberg, S.J., Boulanger, R.W., Chang, D., and Kutter, B.L. Mechanisms of Load Transfer between Pile Groups and Laterally Spreading Nonliquefied Crust Layers. Proceedings, International Symposium on Earthquake Engineering, Commemorating 10th Anniversary of the 1995 Kobe Earthquake, Japan Association for Earthquake Engineering, B153-B162.
- 2005 Chang, D., Boulanger, R.W., Kutter, B.L., and Brandenberg, S.J. Inertial and Spreading of Load Combinations of Soil-Pile-Structure System During Liquefaction-Induced Lateral Spreading in Centrifuge Tests. Proceedings, 16th International Conference on Soil Mechanics and Geotechnical Engineering, 4: 1967-1970.
- 2005 Shin, H., Arduino, P., Kramer, S., Ilankathanran, I., and Kutter, B.L. Numerical Analysis of Seismic Pile-Soil-Structure Interaction Problem Using OpenSEES. Proceedings, McMat 2005, Joint ASME/ASCE/SES Conference on Mechanic and Materials.
- 2005 A. Espinoza, S. Mahin, B. Jeremic, B. Kutter, and J. Ugalde. Rocking of Bridge Piers Subjected to Multi-Directional Earthquake Loading. Proceedings, Caltrans Seismic Research Workshop.
- 2006 Brandenberg, S.J., Boulanger, R.W., Kutter, B.L., and Chang, D. Monotonic and Cyclic Pushover Analyses of Pile Foundations in Laterally Spreading Ground. Proceedings, 8th US National Conference on Earthquake Engineering, 8NCEE: 001480.
- 2006 Brandenberg, S.J., Choi, S., Kutter, B.L., Wilson, D.W., and Santamarina, J.C. A Bender Element System for Measuring Shear Wave Velocities in Centrifuge Models. Proceedings, 6th International Conference on Physical Modeling in Geotechnics, 1: 165-170.
- 2006 Chang, B., Raychowdhury, P., Hutchinson, T.C., Thomas, J.M., Gajan, S. and Kutter, B.L. Centrifuge Testing of Combined Frame-Wall-Foundation Structural Systems. Proceedings, 8th National Conference on Earthquake Engineering.
- 2006 Chang, D., Boulanger, R.W., Brandenberg, S.J., and Kutter, B.L. Dynamic Analyses of Soil-Pile-Structure Interaction in Laterally Spreading Ground During Earthquake Shaking. Proceedings, Seismic

- Performance and Simulation of Pile Foundations in Liquefied and Laterally Spreading Ground, Geotechnical Special Publication, 145: 218-229.
- 2006 Ilankatharan, M., Kutter, B.L., Shin, H., Arduino, P., Kramer, S.L., Johnson, N., and Sasaki, T. Comparison of Centrifuge and 1g Shaking Table Models of Pile Supported Bridge Structure. Proceedings, 6th International Conference on Physical Modeling in Geotechnics, 1: 165-170.
- 2006 Kutter, B.L. Phenomena Associated with Undrained and Partly Drained Dilatant Soil. Proceedings, 6th International Conference on Physical Modeling in Geotechnics, 1: 165-170.
- 2006 Kutter, B.L., Jeremic, B., Mahin, S., Ugalde, J., Gajan, S., and Hu, G. Seismic Energy Dissipation by Foundation Rocking for Bridge SFS Systems. Proceedings, 5th National Seismic Conference on Bridges and Highways, B14.
- 2006 Kutter, B.L., and Wilson, D.W. Physical Modeling of Dynamic Behavior of Soil-Foundation-Superstructure Systems. International Journal for Physical Modeling in Geotechnics, 6(1): 1-12.
- 2006 Li, Z., Kutter, B.L., LaBrecque, D., and Versteeg, R. A New Electrode Switching System (ESS) and a Scheme for Measurement of the Movement of Buried Objects. Proceedings, 6th International Conference on Physical Modeling in Geotechnics, 1: 165-170.
- 2006 Madabhushi, S.P.G., Ghosh, B., and Kutter, B.L. Role of Input Motion in Excess Pore Pressure Generation in Dynamic Centrifuge Modeling. International Journal for Physical Modeling in Geotechnics, 6(3): 25.
- 2006 Malvick, E.J., Kutter, B.L., Boulanger, R.W., and Kulasingam, R. Shear Localization Due to Liquefaction-Induced Void Redistribution in a Layered Infinite Slope. Journal of Geotechnical and Geoenvironmental Engineering, ASCE, 132(10): 1293-1303.
- 2006 Shin, H., Ilankathanran, M., Arduino, P., Kramer, S.L., and Kutter, B.L. Seismic Soil-Foundation-Structure Interaction of Oriented Bridge Bents. Proceedings, 8th National Conference on Earthquake Engineering.
- 2006 Shin, H., Ilankathanran, M., Arduino, P., Kutter, B.L., and Kramer, S.L. Experimental and Numerical Analysis of Seismic Soil-Pile-Structure Interaction of a Two-Span Bridge. Proceedings, 8th National Conference on Earthquake Engineering.
- 2007 Boulanger, R.W., Chang, D., Brandenberg, S.J., Armstrong, R.J., and Kutter, B.L. Seismic Design of Pile Foundations for Liquefaction Effects. Proceedings, 4th International Conference on Earthquake Geotechnical

Engineering.

- 2007 Brandenburg, S.J., Boulanger, R.W., Kutter, B.L., and Chang, D. Liquefaction-Induced Softening of Load Transfer Between Pile Groups and Laterally Spreading Crusts. *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 133(1): 91-103.
- 2007 Brandenburg, S.J., Boulanger, R.W., Kutter, B.L., Chang, D. Static Pushover Analyses of Pile Groups in Liquefied and Laterally Spreading Ground in Centrifuge Tests. *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 133(9): 1055-1066.
- 2007 Chang, B., Raychowdhury, P., Hutchinson, T.C., Thomas, J.M., Gajan, S., and Kutter, B.L. Evaluation of the Seismic Performance of Combined Frame-Wall Foundation Structural Systems through Centrifuge Testing. *Proceedings, 4th International Conference on Earthquake Geotechnical Engineering*.
- 2007 Gajan, S., and Kutter, B.L. Contact Interface Model for Nonlinear Cyclic Moment-Rotation Behavior of Shallow Foundations. *Proceedings, 4th International Conference on Earthquake Geotechnical Engineering*.
- 2007 Ugalde, J.A., Kutter, B.L., Jeremic, B., and Gajan, S. Centrifuge Modeling of Rocking Behavior of Bridges on Shallow Foundations. *Proceedings, 4th International Conference on Earthquake Geotechnical Engineering*.
- 2007 Wilson, D.W., Kutter, B.L., Ilankatharan, M., Robidart, C. The UC Davis High-Speed Wireless Data Acquisition System. *Field Measurements in Geomechanics (GSP 175)*. *Proceedings, 7th International Symposium on Field Measurements in Geomechanics*, doi: 10.1061(40940): (307)89.
- 2007 J. Garnier; C. Gaudin; S. M. Springman; P. J. Culligan; D. J. Goodings; D. Konig; B. L. Kutter; R Phillips; L. Thorel. Catalogue of scaling laws and similitude questions in geotechnical centrifuge modelling. *International Journal of Physical Modelling in Geotechnics*, 7(3): 1-23.
- 2008 Malvick, E.J., Kutter, B.L., Boulanger, R.W. Postshaking Shear Strain Localization in a Centrifuge Model of a Saturated Sand Slope. *Journal of Geotechnical and Geoenvironmental Engineering*, ASCE, 134(2): 164-174.
- 2008 Ugalde, J.A., Kutter, B.L., Jeremic, B.J., Gajan, S., and Deng, L. Centrifuge Modeling of Rocking of Shallow Foundations for Bridges. *Proceedings, 5th International Conference on Urban Earthquake Engineering*, 301-306.
- 2008 Gajan, S., and Kutter, B.L. Effect of Critical Contact Area Ratio on Moment Capacity of Rocking Shallow Foundations. *Proceedings*,

Geotechnical Earthquake Engineering and Soil Dynamics IV.

- 2008 Deng, L., Erduran, E., Ugalde, J., Gajan, S., Kunnath, S., and Kutter, B.L. Development of Innovative Foundation Systems to Optimize Seismic Behavior of Bridge Structures. Proceedings, Geotechnical Earthquake Engineering and Soil Dynamics IV.
- 2008 Ilankatharan, M., and Kutter, B.L. Numerical Simulation of a Soil Model-Model Container-Centrifuge Shaking Table System. Proceedings, Geotechnical Earthquake Engineering and Soil Dynamics IV.
- 2008 Kutter, B.L., Chou, J-C, and Travasarou, T. Centrifuge Testing of the Seismic Performance of a Submerged Cut-and-Cover Tunnel in Liquefiable Soil. Proceedings, Geotechnical Earthquake Engineering and Soil Dynamics IV.
- 2008 Chou, J-C and B. Kutter. "Nonlinear Shear Wave propagation in Strain Stiffening and Strain Softening Soil" ASCE Geotechnical Earthquake Engineering and Soil Dynamics IV.
- 2008 Armstrong, R.J., R.W. Boulanger, U. Gulerce, B.L. Kutter, D. Wilson. "Centrifuge Modeling of Pile Pinning Effects" ASCE Geotechnical Earthquake Engineering and Soil Dynamics IV.
- 2008 Li, Z., and Kutter, B.L. "A new technique for monitoring movement of buried objects using an electrode switching system". ASTM Geotechnical Testing Journal, 31(5).
- 2008 Brandenberg, S.J., Kutter, B.L., and Wilson, D.W. "Fast stacking and phase corrections for shear wave velocity measurement in a noisy environment". Journal of Geotechnical and Geoenvironmental Engineering, 134, 1154.
- 2008 Gajan, S. and Kutter, B.L. "Capacity, settlement, and energy dissipation of rocking shallow foundations". Journal of Geotechnical and Geoenvironmental Engineering, ASCE, 134, 1129.
- 2008 Gajan, S. and Kutter, B.L. "Numerical simulations of rocking behavior of shallow footings and comparisons with experiments" Proc. British Geotechnical Association (BGA) International Conference on Foundations, Dundee, Scotland, 24-27 June.
- 2008 Algie, T.B., Deng, L., Erduran, E., Kutter, B.L., Kunnath, S. "Centrifuge modeling of innovative foundation systems to optimize seismic behavior of bridge structures." Proc. 14th World Conference on Earthquake Engineering, Oct. 12-17, Beijing, China.
- 2009 Chen, Y.-R. and Kutter, B.L. "Contraction, dilation and failure of sand in triaxial, torsional and rotational shear tests". ASCE J. Eng. Mechanics,

135, 1155.

- 2009 Gajan S, Kutter BL. "Effects of moment-to-shear ratio on combined cyclic load-displacement behavior of shallow foundations from centrifuge experiments." ASCE Journal of Geotechnical and Geoenvironmental Engineering, 135(8).
- 2009 Gajan, S. and Kutter, B.L. Contact interface model for shallow foundations subjected to combined cyclic loading. J. Geotech and Geoenv. Engr., ASCE, 135(3): 407-419.
- 2009 Park, D., Kutter, B.L. "Seismic Softening and Deformation of Sandy Slopes", The 2009 US-Korea Conference on Science, Technology and Entrepreneurship, July 16-19, Raleigh, NC.
- 2009 Park, D., Kutter, B.L. "Discussion of "Analyzing liquefaction-induced lateral spreads using strength ratios" by Olson, S.M., and Johnson, C.I. (2008)." J. Geotech. Geoenv. Engr., ASCE, 135(12).
- 2010 Chen, Z., T. C. Hutchinson, N. Trombetta, H. B. Mason, J. D. Bray, K. C. Jones, C. Bolisetti, A. S. Whittaker, B. Y. Choy, B. L. Kutter, G. L. Fiegel, J. Montgomery, R. J. Patel, and R. D. Reitherman. "Seismic performance assessment in dense urban environments: evaluation of closely spaced nonlinear building-foundation systems using centrifuge tests". Proceedings: 5th International Conference on Recent Advances in Geotechnical Engineering and Soil Dynamics. May 24 - 29, San Diego, CA.
- 2010 Chou, J-C., Kutter, B.L., Travasarou, T. "Numerical Analysis of Centrifuge Models of the BART Transbay Tube". Proceedings: 5th International Conference on Recent Advances in Geotechnical Engineering and Soil Dynamics. May 24 - 29, San Diego, CA.
- 2010 Chou, J-C., Kutter, B.L. "Methods of measurement of displacement of model tunnel in centrifuge tests". Proceedings: 7th International Conference on Physical Modelling in Geotechnics. June 28 - July 1, Zurich, Switzerland. A.A. Balkema Publishers, Rotterdam, Netherlands.
- 2010 Deng, L. Kutter, B.L., and Kunnath, S. "Introduction to a new design procedure for ordinary bridges with rocking foundations". Proceedings, Ninth U.S. National and Tenth Canadian Conference on Earthquake Engineering, Toronto, July 25-29.
- 2010 Deng, L., Kutter, B.L., Kunnath, S.K., Algie, T. "Performance of bridge systems with nonlinear soil-footing-structure interactions". Workshop on Soil-Foundation-Structure Interaction, University of Auckland, New Zealand, 26-27 November 2009, paper published in 2010, Balkema.
- 2010 Deng, L., Kutter, B. L., Kunnath, S., and Algie, T. "Centrifuge modeling of

- bridge system with rocking footings." Proceedings: 7th International Conference on Physical Modelling in Geotechnics. June 28 - July 1, Zurich, Switzerland. A.A. Balkema Publishers, Rotterdam, Netherlands.
- 2010 Gajan, S., Raychowdhury, P., Hutchinson, T.C., Kutter, B.L., and Stewart, J.P. "Application and Validation of Practical Tools for Nonlinear Soil-Foundation Interaction Analysis". Earthquake Spectra, 26(1): 111–129.
- 2010 Kutter, B. L., Deng, L., Kunnath, S. "Estimation of displacement demand for seismic design of bridges with rocking shallow foundations". Proc. 5th Intl. Conf. on Recent Advances in Geotech. Earthq. Engrg and Soil Dyn. San Diego, Calif., March 24-29, Paper No: SOAP 11.
- 2010 Mason, H. B., J. D. Bray, K. C. Jones, Z. Chen, T. C. Hutchinson, N. W. Trombetta, B. Y. Choy, B. L. Kutter, G. L. Fiegel, J. Montgomery, R. J. Patel, R. D. Reitherman, C. Bolisetti, and A. S. Whittaker. "Earthquake input motions and seismic site response in centrifuge tests examining SFSI effects" Proceedings: 5th International Conference on Recent Advances in Proc. 5th Intl. Conf. on Recent Advances in Geotech. Earthq. Engrg and Soil Dyn. San Diego, Calif., March 24-29.
- 2010 Mason, H. B., Z. Chen, K. C. Jones, N.W. Trombetta, J. D. Bray, T. C. Hutchinson, C. Bolisetti, A. S. Whittaker, B. Y. Choy, B. L. Kutter, and G. L. Fiegel. "Soil-foundation-structure-interaction effects on model buildings within a geotechnical centrifuge" Proceedings: 9th US National and 10th Canadian Conference on Earthquake Engineering. July 25 - 29, Toronto, Canada.
- 2010 Mason, H. B., B. L. Kutter, J. D. Bray, D. W. Wilson, and B. Y. Choy. "Earthquake motion selection for use in a geotechnical centrifuge". Proceedings: 7th International Conference on Physical Modelling in Geotechnics. June 28 - July 1, Zurich, Switzerland. A.A. Balkema Publishers, Rotterdam, Netherlands.
- 2010 Park, D., Kutter, B.L., DeJong, J., Liu, Y.-C. "Seismic Triggering of Instability by Strain Softening and Localization in Clay" Proceedings: 7th International Conference on Physical Modelling in Geotechnics. June 28 - July 1, Zurich, Switzerland. A.A. Balkema Publishers, Rotterdam, Netherlands.
- 2010 Wilson, D.W., Kutter, B.L., Boulanger, R.W. "NEES @ UC Davis". Proceedings: 7th International Conference on Physical Modelling in Geotechnics. June 28 - July 1, Zurich, Switzerland. A.A. Balkema Publishers, Rotterdam, Netherlands.
- 2011 Allmond, J. D., Deng, L., and Kutter, B. L. "Centrifuge Testing of Rocking Foundations on Saturated and Submerged Sand" Proc. 8th Intl. Conf. Urban Earthquake Engineering, CUEE, Tokyo.

- 2011 Chou, J. C., Kutter, B. L., Travasarou, T and Chacko, J.M. "Centrifuge Modeling of Seismically Induced Uplift for the BART Transbay Tube" J. Geotechnical Geoenvironmental Eng., 137(8): 754-765.
- 2011 Kutter, B.L., Hakhamaneshi, M., Hutchinson, T., Liu, W., Aschheim, M., Deng, L., and Kunnath, S. "Design of Soil and Structure Compatible Yielding to Improve System Performance". Proc. 2011 NSF Engineering Research and Innovation Conference, Atlanta. January. .
- 2012 Jacquelyn Allmond and Bruce L. Kutter. Centrifuge Testing of Rocking Foundations on Saturated Sand and Unconnected Piles: The Fluid Response. Proceedings: GeoCongress 2012, 1760-1769.
- 2012 Deng, L., Kutter, B. L., and Kunnath, S. K. "Centrifuge modeling of bridge systems designed for rocking foundations". Journal of Geotechnical and Geoenvironmental Engineering, 138(3): 335-344.
- 2012 Deng, L., and Kutter, B. L. "Characterization of rocking shallow foundation using centrifuge model tests". Earthquake Engineering and Structural Dynamics, 41(5): 1043–1060.
- 2012 Lijun Deng, Bruce L. Kutter, and Sashi K. Kunnath. Probabilistic Seismic Performance of Rocking-Foundation and Hinging-Column Bridges. Earthquake Spectra, 28(4): 1423-1446.
- 2012 Lijun Deng, Bruce L. Kutter, and Sashi K. Kunnath. Effects of Ground Motion Characteristics on Seismic Response of Rocking-Foundation Bridges. Proceedings: GeoCongress 2012, 1750-1759.
- 2012 M. Hakhamaneshi, B. L. Kutter, L. Deng, T.C. Hutchinson, and W. Liu. New Findings from Centrifuge Modeling of Rocking Shallow Foundations in Clayey Ground. Proceedings: GeoCongress 2012, 195-204.
- 2012 Bruce L. Kutter, Tara C. Hutchinson, Mark A. Moore, Sashi Kunnath, and Lijun Deng. Influence of Physical Modeling on Adoption of Rocking Foundations in Practice. Proceedings: GeoCongress 2012, 2017-2026.
- 2012 B. Kutter. Factors affecting the degree of saturation obtained by infiltration of sand. Proceedings: Third International Workshop on Modern Trends in Geomechanics IW-MTG3.
- 2012 W. Liu, T. C. Hutchinson, M. Hakhamaneshi, and B. L. Kutter. Centrifuge Testing of Systems with Combined Structural Hinging and Rocking Foundations. Proceedings: Structures Congress 2012, 1637-1648.
- 2012 W. Liu and T.C. Hutchinson and L. Deng and B. L. Kutter and M. Hakhamaneshi. New Findings from Centrifuge Modeling of Rocking Shallow Foundations in Clayey Ground. Proceedings: Geocongress

- 2012.
- 2012 D. S. Park and B. L. Kutter. Centrifuge Tests for Artificially Cemented Clay Slopes. Proceedings: GeoCongress 2012, 2027-2036.
- 2012 H. Puangnak, B. Choy, H. B. Mason, B. L. Kutter, and J. Bray. Constructive and Destructive Footing-Soil-Footing Interaction for Vertically Vibrating Footings. Proceedings: GeoCongress 2012.
- 2013 Dongdong Chang, Ross Boulanger, Scott Brandenberg, and Bruce Kutter. FEM Analysis of Dynamic Soil-Pile-Structure Interaction in Liquefied and Laterally Spreading Ground. *Earthquake Spectra*, 29(3): 733-755.
- 2013 Chen, Z; Trombetta, NW; Hutchinson, TC; Mason, HB; Bray, JD; Kutter, BL; . Seismic System Identification Using Centrifuge-based Soil-Structure Interaction Test Data. *Journal of Earthquake Engineering*, 17(4): 469-496.
- 2013 Hakhamaneshi, M. Kutter, B., Tamura, S., Gavras, A.G., Liu, W., Deng, L. Rocking foundations with different shapes on different soils. Proceedings: 10th International Conference on Urban Earthquake Engineering.
- 2013 N.W. Trombetta, H.B. Mason, Z. Chen, T.C. Hutchinson, J.D. Bray, B.L. Kutter. Nonlinear dynamic foundation and frame structure response observed in geotechnical centrifuge experiments. *Soil Dynamics and Earthquake Engineering*, 50(July): 117-133.
- 2013 Kutter, Bruce L. Effects of capillary number, Bond number, and gas solubility on water saturation of sand specimens. *Canadian Geotechnical Journal*, 50(2): 133-144.
- 2013 W. Liu, T.C. Hutchinson, B.L. Kutter, M. Hakhamaneshi, and A.G. Gavras. Balancing the beneficial contributions of foundation rocking and structural yielding to improve structural seismic resilience. Proceedings: COMPDYN 2013 4th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering.
- 2013 Liu, W., Hutchinson, T., Kutter, B., Hakhamaneshi, M., Aschheim, M., and Kunnath, S. Demonstration of Compatible Yielding between Soil-Foundation and Superstructure Components. *Journal of Structural Engineering*, 139(8): 1408-1420.
- 2013 H.B. Mason, N.W. Trombetta, Z. Chen, J.D. Bray, T.C. Hutchinson, B.L. Kutter. Seismic soil–foundation–structure interaction observed in geotechnical centrifuge. *Soil Dynamics and Earthquake Engineering*, 48(May): 162-174.

- 2014 Allmond, J. and Kutter, B. Design Considerations for Rocking Foundations on Unattached Piles. *Journal of Geotechnical and Geoenvironmental Engineering*.
- 2014 Allmond, JD; Hakhamaneshi, M; Wilson, DW; Kutter, BL. Advances in measuring rotation with MEMS accelerometers. Proceedings: International Conference on Physical Modeling in Geotechnics, Perth, 1: 353-360.
- 2014 Antonellis, G., Gavras, A.G., Panagiotou, M., Kutter, B.L., Sander, G., Guerrini, G., and Fox, P.J. Shake table test response of large-scale bridge columns supported on rocking shallow foundations. Proceedings: Tenth U.S. National Conference on Earthquake Engineering.
- 2014 Chen, JY; Kutter, Bruce L; Litton, Richard W; Zhou, Yan-Gou; Stringer, Mark E; Wilson, Daniel W; Zheng, Bao-Li; Clukey, Edward C;. Centrifuge Study of Offshore Platform Response to Earthquake Excitations. Proceedings: Offshore Technology Conference.
- 2014 Deng, L., Kutter, B., and Kunnath, S. Seismic Design of Rocking Shallow Foundations: Displacement-Based Methodology. *Journal of Bridge Engineering*.
- 2014 Hakhamaneshi, M.; Gavras, A.G.; Wilson, D.W.; Kutter, B.L.; Liu, W.; Hutchinson, T.C. Effect of footing shape on the settlement of rectangular and I-shaped rocking shallow foundations. Proceedings: International Conference on Physical Modeling in Geotechnics, Perth, 1: 605-612.
- 2014 Kutter, BL; Manzari, MT; Zeghal, M; Zhou, YG; Armstrong, RJ. Proposed outline for LEAP verification and validation processes. Proceedings: Fourth International Conference on Geotechnical Engineering for Disaster mitigation and Rehabilitation (4th GEDMAR), Kyoto.
- 2014 Manzari, MT; Kutter, BL; Zeghal, M; lai, S; Tobita, T; Madabhushi, SPG; Haigh, SK; Mejia, L; Gutierrez, DA; Armstrong, RJ; . LEAP projects: Concept and challenges. Proceedings: Fourth International Conference on Geotechnical Engineering for Disaster mitigation and Rehabilitation (4th GEDMAR).
- 2014 Trombetta, N., Mason, H., Hutchinson, T., Zupan, J., Bray, J., and Kutter, B. Nonlinear Soil–Foundation–Structure and Structure–Soil–Structure Interaction: Centrifuge Test Observations. *Journal of Geotechnical and Geoenvironmental Engineering*, 140(5): 04013057.
- 2014 Trombetta, N., Benjamin Mason, H., Hutchinson, T., Zupan, J., Bray, J., and Kutter, B. Nonlinear Soil–Foundation–Structure and Structure–Soil–Structure Interaction: Engineering Demands. *Journal of Structural Engineering*, 141(7).

- 2014 Stringer, ME; Allmond, JD; Proto, CJ; Wilson, DW; Kutter, BL;. Evaluating the response of new pore pressure transducers for use in dynamic centrifuge tests. Proceedings: International Conference on Physical Modeling in Geotechnics, Perth, 1: 345-352.
- 2014 Zeghal, M; Manzari, MT; Kutter, BL; Abdoun, T. LEAP: Selected data for class C calibrations and class A validations. Proceedings: Fourth International Conference on Geotechnical Engineering for Disaster mitigation and Rehabilitation (4th GEDMAR), Kyoto.
- 2014 B.L. Zheng, B.L. Kutter, G.S. Hirt, Y.G. Zhou, D.W. Wilson, E.C. Clukey. Centrifuge Modeling of Seismic Behavior of Caisson-Supported Subsea Manifold on Soft Clay. Proc. Int. Conf. on Physical Modelling in Geotechnics, Perth, Australia.
- 2015 Weian Liu, Tara C. Hutchinson, Andreas G. Gavras, Bruce L. Kutter, and Manouchehr Hakhamaneshi. Seismic Behavior of Frame-Wall-Rocking Foundation Systems. I: Test Program and Slow Cyclic Results. Journal of Structural Engineering, 141(12).
- 2015 Weian Liu, Tara C. Hutchinson, Andreas G. Gavras, Bruce L. Kutter, and Manouchehr Hakhamaneshi. Seismic Behavior of Frame-Wall-Rocking Foundation Systems. II: Dynamic Test Phase. 141(12).
- 2015 B. L. Kutter, T. J. Carey, T. Hashimoto, M. T. Manzari, A. Vasko, M. Zeghal, R. J. Armstrong. LEAP databases for verification, validation, and calibration of codes for simulation of liquefaction. Proc. 6th International Conference on Earthquake Geotechnical Engineering.
- 2015 Jacquelyn Allmond, Bruce L. Kutter, Jonathan Bray, and Connor Hayden. A New Database for Foundation and Ground Performance in Liquefaction Experiments. Journal of Geotechnical and Geoenvironmental Engineering, 31(4): 1-25.
- 2015 Grigorios Antonellis, Andreas G. Gavras, Marios Panagiotou, Bruce L. Kutter, Gabriele Guerrini, Andrew C. Sander, and Patrick J. Fox. Shake Table Test of Large-Scale Bridge Columns Supported on Rocking Shallow Foundations. Journal of Geotechnical and Geoenvironmental Engineering, 141(5).
- 2015 Dong Soon Park and Bruce L. Kutter. Static and seismic stability of sensitive clay slopes. Soil Dynamics and Earthquake Engineering, 79: 118-129.
- 2015 M. Zeghal, M.T. Manzari, B.L. Kutter, and T. Abdoun. LEAP: Data, Calibration and Validation of Soil Liquefaction Models. Proc. 6th International Conference on Earthquake Geotechnical Engineering.

- 2015 Park, D. and Kutter, B. and DeJong, J. Effects of Thixotropy and Cement Content on the Sensitivity of Soft Remolded Clay. *Journal of Geotechnical and Geoenvironmental Engineering*, 141(2).
- 2015 Connor P. Hayden; Joshua D. Zupan; Jonathan D. Bray, Jacquelyn D. Allmond; Bruce L. Kutter. Centrifuge tests of adjacent mat-supported buildings affected by liquefaction. *Journal of Geotechnical and Geoenvironmental Engineering*, 141(3).
- 2016 Bruce L. Kutter, Mark Moore, Manouchehr Hakhamaneshi, and Casey Champion. Rationale for Shallow Foundation Rocking Provisions in ASCE 41-13. *Earthquake Spectra*, 32(2): 1097-1119.
- 2016 Manouchehr Hakhamaneshi, Bruce L. Kutter, Mark Moore, and Casey Champion. Validation of ASCE 41-13 Modeling Parameters and Acceptance Criteria for Rocking Shallow Foundations. *Earthquake Spectra*, 32(2): 1121-1140.
- 2016 Manouchehr Hakhamaneshi and Bruce L. Kutter. Effect of Footing Shape and Embedment on the Settlement, Recentering, and Energy Dissipation of Shallow Footings Subjected to Rocking. *Journal of Geotechnical and Geoenvironmental Engineering*, 142(12).
- 2016 D. S. Park and B. L. Kutter. Sensitive bounding surface constitutive model for structured clay. *Int. J. Numer. Anal. Meth. Geomech.*, 40: 1968-1987.
- 2017 Yan-Guo Zhou, Jie Chen, Yun-Min Chen, Bruce L. Kutter, Bao-Li Zheng, Daniel W. Wilson, Mark E. Stringer, Edward C. Clukey. Centrifuge modeling and numerical analysis on seismic site response of deep offshore clay deposits. *Engineering Geology*.

Submitted

- 2017 Andreas G. Gavras, Bruce L. Kutter, Manouchehr Hakhamaneshi, Sivapalan Gajan, Angelos Tsatsis, Keshab Sharma, Tetsuya Kouno, Lijun Deng, Ioannis Anastasopoulos, and George Gazetas. Database of Rocking Shallow Foundation Performance – Dynamic Shaking. *Earthquake Spectra*. ** SUBMITTED **
- 2017 Manouchehr Hakhamaneshi, Bruce L. Kutter, Andreas G. Gavras, Sivapalan Gajan, Angelos Tsatsis, Weian Liu, Keshab Sharma, Giovanna Pianese, Tetsuya Kouno, Lijun Deng, Roberto Paolucci, Ioannis Anastasopoulos, and George Gazetas. Database of Rocking Shallow Foundation Performance – Slow Cyclic and Monotonic Loading. *Earthquake Spectra*. ** SUBMITTED **

Books Authored

- 1994 R.J. Ebelhar, V.P. Drnevich, and B.L. Kutter (eds): Dynamic Geotechnical Testing II, American Society for Testing and Materials, ASTM STP 1213, 427.

Alternative Media

- 2013 Bruce Kutter, Manouchehr Hakhamaneshi, Tara Hutchinson, Weian Liu: Rocking Foundations on Clayey Environment-MAH01, Network for Earthquake Engineering Simulation (distributor), Dataset, Network for Earthquake Engineering Simulation, DOI:10.4231/D3GT5FF2.
- 2013 Weian Liu, Manny Hakhamaneshi, Bruce Kutter, Tara Hutchinson: Testing of frame-wall systems with rocking foundations (second system test), Network for Earthquake Engineering Simulation (distributor), Dataset, Network for Earthquake Engineering Simulation, DOI:10.4231/D3NG4GR9.
- 2013 Henry Mason, Nick Trombetta, Stefanie Gille, Jonathan Lund, Joshua Zupan, Hamilton Puangnak, Benjamin Choy, ZhiQiang Chen, Chandrakanth Bolisetti, Jonathan Bray, Tara Hutchinson, Gregg Fiegel, Bruce Kutter, Andrew Whittaker: Test-1: Two Isolated Structures on Dense, Dry Sand, Network for Earthquake Engineering Simulation (distributor), Dataset, Network for Earthquake Engineering Simulation, DOI:10.4231/D3TX3562R.
- 2013 Henry Mason, Nick Trombetta, Chandrakanth Bolisetti, ZhiQiang Chen, Benjamin Choy, Jack Montgomery, Roshani Patel, Jonathan Bray, Gregg Fiegel, Tara Hutchinson, Bruce Kutter, Robert Reitherman, Andrew Whittaker: Test-2: Two Adjacent Structures on Dense, Dry Sand (in-Plane SSSI), Network for Earthquake Engineering Simulation (distributor), Dataset, Network for Earthquake Engineering Simulation, DOI:10.4231/D3Q52FC89.
- 2013 Henry Mason, Nick Trombetta, Stefanie Gille, Jonathan Lund, Joshua Zupan, Katherine Jones, Hamilton Puangnak, Chandrakanth Bolisetti, Jonathan Bray, Tara Hutchinson, Gregg Fiegel, Bruce Kutter, Andrew Whittaker: Test-3: Three structures on Dense, Dry Sand (in-Plane SSSI), Network for Earthquake Engineering Simulation (distributor), Dataset, Network for Earthquake Engineering Simulation, DOI:10.4231/D3KD1QK45.
- 2013 Nick Trombetta, Joshua Zupan, Chandrakanth Bolisetti, Hamilton Puangnak, Katherine Jones, Jeannie Tran, Patrick Bassal, Jonathan Bray, Tara Hutchinson, Gregg Fiegel, Bruce Kutter, Andrew Whittaker: Test-4: Five Structures on Dense, Dry Sand (anti-Plane SSSI and iSSSI+aSSSI Superposition), Network for Earthquake Engineering Simulation (distributor), Dataset, Network for Earthquake Engineering Simulation, DOI:10.4231/D3FN10S0D.

- 2013 Joshua Zupan, Nick Trombetta, Hamilton Puangnak, D. Paez, Jonathan Bray, Bruce Kutter, Tara Hutchinson, Gregg Fiegel, Chandrakanth Bolisetti, Andrew Whittaker: Test-5: Seven Elastic Model Structures on a Layered, Saturated Soil Profile, Network for Earthquake Engineering Simulation (distributor), Dataset, Network for Earthquake Engineering Simulation, DOI:10.4231/D39W08Z6N.
- 2014 Manouchehr Hakhamaneshi, Bruce Kutter: Effect of footing shape on the deformation of rocking foundations, Network for Earthquake Engineering Simulation (distributor), Dataset, Network for Earthquake Engineering Simulation, DOI:10.4231/D3222R68V.
- 2014 Manny Hakhamaneshi, Bruce Kutter: Effect of footing shape on the deformation of rocking foundations-Phase 2, Network for Earthquake Engineering Simulation (distributor), Dataset, Network for Earthquake Engineering Simulation, DOI:10.4231/D3222R68V.
- 2014 Jacquelyn Allmond, Bruce Kutter: Centrifuge Testing of Rocking Foundations on Saturated and Submerged Sand, Network for Earthquake Engineering Simulation (distributor), Dataset, Network for Earthquake Engineering Simulation, DOI:10.4231/D3C53F17M.
- 2014 Jacquelyn Allmond, Bruce Kutter: JDA01: Centrifuge Testing of Rocking Foundations on Saturated and Submerged Sand, Network for Earthquake Engineering Simulation (distributor), Dataset, Network for Earthquake Engineering Simulation (distributor), DOI:10.4231/D37D2Q74Z.
- 2014 Connor Hayden, Jacquelyn Allmond, Isabelle Rawlings, Bruce Kutter, Jonathan Bray, Tara Hutchinson, Gregg Fiegel, Joshua Zupan, Andrew Whittaker: Test-6: Six Elastic Model Structures on a Layered, Saturated Soil Profile, Network for Earthquake Engineering Simulation (distributor), Dataset, Network for Earthquake Engineering Simulation, DOI:10.4231/D3QF8JJ99.
- 2014 Jacquelyn Allmond; Bruce Lloyd Kutter; Jonathan Bray; Connor Hayden: Foundation and Ground Performance in Liquefaction Experiments, Network for Earthquake Engineering Simulation (NEES) (distributor), Database, Network for Earthquake Engineering Simulation (NEES), DOI:10.4231/D3M61BQ73.