

# Robb Eric S. Moss, Ph.D., P.E., F.ASCE

<b>EDUCATION</b>	<b>Ph.D.</b> Geotechnical Earthquake Engineering, UC Berkeley, 2003 <b>M.S.</b> Geotechnical Engineering, Utah State University, 1997 <b>B.S.</b> Civil Engineering, North Carolina State University, 1995
<b>LICENSE</b>	Professional Engineer No. 67261, California, June 2004
<b>ACADEMIC EXPERIENCE</b>	<u>Fullbright Specialist - Chile (2017-2020)</u> <ul style="list-style-type: none"> <li>PUC and UAI</li> </ul> <u>Professor – Cal Poly San Luis Obispo (Spring 2016 – present)</u> <ul style="list-style-type: none"> <li>CE465/466/467 Senior Design Coordinator</li> <li>CE486 Geological Engineering</li> <li>+ all previous Cal Poly courses listed below</li> </ul> <u>Visiting Professor – Universidad de Concepcion (Spring 2013)</u> <ul style="list-style-type: none"> <li>Guest Lectures on Liquefaction and Shear Wave Velocity</li> </ul> <u>Visiting Professor – Montana State University (Fall 2012)</u> <ul style="list-style-type: none"> <li>ECIV491 Engineering Risk Analysis</li> </ul> <u>Associate Professor – Cal Poly San Luis Obispo (Fall 2011-Spring 2016)</u> <ul style="list-style-type: none"> <li>Early Tenure and promotion to Associate Professor</li> <li>CE466-467 Senior Design Geotechnical Specialist</li> <li>Graduate Program Coordinator</li> </ul> <u>Assistant Professor – Cal Poly San Luis Obispo (Winter 2006 – Fall 2011)</u> <ul style="list-style-type: none"> <li>CE381 Intro. Geotechnical Engineering</li> <li>CE382 Intro. Geotechnical Engineering Lab</li> <li>CE481 Design and Analysis of Shallow Foundations</li> <li>CE488 Engineering Risk Analysis</li> <li>CE583 Geotechnical Earthquake Engineering</li> <li>CE585 Slope Stability Analysis</li> <li>CE586 Deep Foundation Design and Analysis</li> </ul> <u>Lecturer – San Francisco State University (Spring 2000)</u> <ul style="list-style-type: none"> <li>Intro. Geotechnical Engineering + Lab</li> </ul>
<b>AFFILIATIONS</b>	American Society of Civil Engineers (ASCE) Earthquake Engineering Research Institute (EERI) Seismological Society of America (SSA)
<b>AWARDS, HONORS, AND DISTINCTIONS</b>	Board of Directors, NHR3 (Natural Hazards Risk and Resiliency Research) Center, 2021 to present GEER Steering Committee, 2021 to present ASCE JGGE Editor, 2019-present Distinguished Lecturer, UC Berkeley GeoEngineering 35 <sup>th</sup> Annual, May 2017 Fulbright Specialist, Chile 2017-2020 Elected Fellow of ASCE (F.ASCE) Feb 2017 Associate Editor of the Year 2015 – ASCE JGGE Early Tenure and Promotion, Cal Poly, 2011 ASCE JGGE Associate Editor, 2011-2019 ASCE Middlebrooks Award 2006 Member Phi Kappa Phi President's Graduate Fellowship Magna Cum Laude Member Tau Beta Pi Member Chi Epsilon

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<p><b>CONSULTING EXPERIENCE</b></p>	<p><b>Synopsis</b> Consulting experience includes; probabilistic seismic hazard and fault displacement hazard analysis, time and frequency domain spectral matching, performing 1-D and 2-D equivalent linear and nonlinear seismic site response analysis, dynamic pile analysis and design, soil-structure-interaction analysis, seismic “racking” analysis, liquefaction and lateral spreading analysis, seismic slope stability analysis, seismic hazard analysis, and seismic hazard mitigation. Selected projects:</p> <ul style="list-style-type: none"> <li>•Founding member of LMMG Geotecnia Limitada, a Cone Penetration Testing company based out of Santiago Chile specializing in detailed subsurface investigations. <a href="http://www.lmmg.cl/">http://www.lmmg.cl/</a></li> <li>•BART People Mover and Warm Springs Extension. PSHA and seismic design considerations of ground motions for near-fault transportation corridor. Time domain spectral matching for site specific ground motions to be used in dynamic structural analysis. Racking analysis of tunnel section using FLUSH and FLAC.</li> <li>•LNG Seismic Analysis (undisclosed locations). Preliminary and design level PSHA for onshore and offshore LNG facilities incorporating decision tree methodology, Monte Carlo simulations, directivity effects, and variance analysis.</li> <li>•Global PSHA and PFDHA. Seismic analysis in various locations around the world including; various locations along the Pacific Coast, Texas and Louisiana Gulf Coast, Caribbean, Venezuela, Mexico, Turkmenistan, Qatar, Dubai, Indonesia, West Africa, France, and Far East Russia.</li> <li>•Fault Hazard Studies. Faults identification and fault hazard analysis using the cone penetration test in and around the Los Angeles area.</li> <li>•State Hazard Mitigation Plan. Contributed to the California 2007, 2010, and 2013 State Hazard Mitigation Plan (SHMP) by reviewing, revising, and writing sections on hazards due to liquefaction, ground shaking fault rupture, seismic slope stability, tsunamis, and levee failures. Lifelines Annex written for 2013 Plan.</li> </ul>
<p><b>RESEARCH EXPERIENCE</b></p>	<p><b>Research topics investigated</b></p> <ol style="list-style-type: none"> <li>flow failures, residual strength, and sensitive soils</li> <li>risk and reliability within seismic design and earthquake effects</li> <li>dynamic earth pressures for basements and retaining walls</li> <li>seismic hazard analysis in poorly studied areas</li> <li>probabilistic fault displacement hazard analysis</li> <li>soil-structure-interaction of underground structures</li> <li>probabilistic assessment of attenuation relationships</li> <li>levee risk and seismic levee failure analysis</li> <li>probabilistic tsunamigenic fault rupture</li> <li>influence of aging on liquefaction resistance</li> <li>probabilistic liquefaction triggering</li> <li>acquisition of liquefaction field case histories</li> <li>pile design for dynamic lateral loading</li> <li>environmental impact of chemical grout</li> </ol> <p><b>Funding</b> for research has been provided by; IAEA, NRC, DHS, NEHRP, NSF, ONR, DOD, PEER, NEES, CalTrans, CEC, PG&amp;E, EERI, and UDOT.</p> <p>In addition to the above research projects I have been fortunate to participate in <b>post-earthquake reconnaissance</b> of the following earthquakes (through NSF, EERI, PEER, and GEER):</p> <ol style="list-style-type: none"> <li>1999 Tehuacan, Mexico</li> <li>2001 Bhuj, India</li> <li>2002 Sultan Dağ, Turkey</li> <li>2002 Denali, Alaska</li> <li>2003 San Simeon, California</li> <li>2004 Parkfield, California</li> <li>2010 Maule, Chile</li> <li>2011 Tohoku, Japan</li> <li>2015 Gorkha, Nepal</li> </ol>

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CHRONOLOGY OF WORK EXPERIENCE	
2014 - present	LMMG Geotecnia Limitada, Santiago, Chile – Founding member: <a href="http://www.lmmg.cl/">http://www.lmmg.cl/</a>
2006 - present	California Polytechnic State University –Professor of Geotechnical, Earthquake, and Risk Engineering – Dept. Civil and Environmental Engineering
2002 - present	Fugro West Inc., Ventura, CA, Project Engineer/Manager - Geotechnical Earthquake Engineering and Engineering Seismology – on-call services employee.
2001	San Francisco State University, San Francisco, CA, Lecturer –Instructor of soil mechanics and soil mechanics lab..
1998 - 2003	University of California, Berkeley, Graduate Student Researcher - Research into probabilistic CPT-based liquefaction triggering.
1997 – 1998	Golder Associates Inc., Seattle, WA, Staff Engineer – Staff Engineer working on Geotechnical and earthquake engineering.
1995 – 1997	Utah State University, Logan, UT, Graduate Student Researcher – Research into cyclic lateral loading of model piles in clay.
1993 – 1995	North Carolina State University, Raleigh, NC, Research Assistant – Research on the environmental impact of chemical grouting.
1991 – 1992	The City of Mill Creek, Mill Creek, WA, Assistant to the City Engineer, Erosion and storm water analysis.
<b>PUBLICATIONS</b>	<p>Publications in reverse chronological order. Many can accessed at <a href="http://works.bepress.com/rmoss/">http://works.bepress.com/rmoss/</a>. Peer reviewed journal publications are <b>red</b>, books are <b>bold</b>, conference and workshop publications <b>blue</b>, and technical reports, magazine articles, book chapters, and other are black.</p> <p>Moss, R.E.S. &amp; Lyman, N. (2022) Incorporating Shear Stiffness into Post-Fire Debris Flow Statistical Triggering Models. Natural Hazards. J. No. 11069; Article No. 5330)</p> <p>Valentini, A., Fukushima, Y., Contri, P., Ono, M., Sakai, T., Thompson, S., Viallet, E., Annaka, T., Chen, R., Moss, R., Petersen, M., Visini, F., Youngs, R. (2021). Fault Displacement Hazard Assessment for Nuclear Installations According to IAEA Safety Standards. BSSA.</p> <p>Schmidt, J., and Moss, R.E.S. (2021). “Bayesian Hierarchical and Measurement Uncertainty Model Building for Liquefaction Triggering Assessment” Computers and Geotechnics. Volume 132, April 2021, 103963.<a href="https://authors.elsevier.com/sd/article/S0266-352X(20)30526-7">https://authors.elsevier.com/sd/article/S0266-352X(20)30526-7</a></p> <p>Moss, R.E.S. (2020) Liquefied Strength and its Relationship to Effective Stress. Journal of Geotechnical and Geoenvironmental Engineering. 10.1061/(ASCE)GT.1943-5606.0002391</p> <p>Moss, R.E.S., Honnette, T.R., and Jacobs, J.S. (2020) Large-Scale Liquefaction and Post-Liquefaction Shake Table Testing. Journal of Geotechnical and Geoenvironmental Engineering. 10.1061/(ASCE)GT.1943-5606.0002400</p> <p>Moss, R.E.S., and Moffat, R. (2020) Prior and future earthquake effects in Valdivia, Chile. Obras Y Proyectos, Edicion 27, p. 41-49.</p> <p><b>Moss, R.E.S. (2020) Applied Civil Engineering Risk Analysis, 2<sup>nd</sup> Ed. Springer Scientific, Switzerland. <a href="https://www.springer.com/gp/book/9783030226794">https://www.springer.com/gp/book/9783030226794</a></b></p> <p>Brandenberg, S.J., Zimmaro, P., Stewart, J.P., Kwak, D-Y, Franke, Moss, R.E.S., Çetin, K.O., Can, G., Ilgac, M., Stamatakis, J., Juckett, M., Weaver, T., Bozorgnia, Y., Kramer, S.L. (2019). “Next Generation Liquefaction Case History Database.” Earthquake Spectra.</p> <p>Zimmaro P., Brandenberg S.J., Stewart J.P., Kwak D.Y., Franke K.W., Moss R.E.S., Cetin K.O., Can G., Ilgac M., Stamatakis J., Juckett M., Mukherjee J., Murphy Z., Ybarra S., Weaver T., Bozorgnia Y., Kramer S.L. (2019). Next-Generation Liquefaction Database. Next-Generation Liquefaction Consortium. DOI: 10.21222/C2J040.</p> <p>Moss, R.E.S., Gebhart, T.R., Frost, D.J., Ledezma, C. (2019). Flow-Failure Case History of the Las Palmas, Chile, Tailings Dam. PEER Report 2019/01. <a href="https://peer.berkeley.edu/sites/default/files/2019_01_moss.pdf">https://peer.berkeley.edu/sites/default/files/2019_01_moss.pdf</a></p> <p>Zimmaro, P., Kwak, D-Y., Brandenberg, S.J., Stewart, J.P., Cetin, K.O., Franke, K.W., Moss, R.E.S., Kramer, S.L. (2019) “The Next-Generation Liquefaction Case-History Database.” 7<sup>th</sup> ICEGE, Accepted in-press.</p> <p>Moss, R.E.S. (2019). “Commonalities between Debris Flows and Flow Failures.” 7th International Conference on Debris-Flow Hazard Mitigation. Denver, June.</p>

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- Cetin, K.O., Seed, R.B., Kayen, R.E., Moss, R.E.S., bilge, T.H., Ilgac, M., Chowdhury, K. (2018). "SPT-based probabilistic and deterministic assessment of seismic soil liquefaction triggering hazard." *Soil Dynamics and Earthquake Engineering*, 115, Dec, 698-709.
- Cetin, K.O., Seed, R.B., Kayen, R.E., Moss, R.E.S., bilge, T.H., Ilgac, M., Chowdhury, K. (2018). "Examining the differences between three SPT-based seismic soil liquefaction triggering relationships." *Soil Dynamics and Earthquake Engineering*, 113, Oct, 75-86.
- Moss, R.E.S., and Germeraad, M. (2018). Lifelines Annex to the 2018 California State multi-Hazard Mitigation Plan. <http://hazardmitigation.calema.ca.gov/plan>
- Moss, R.E.S., Gebhart, T., Frost, J.D., and Ledezma, C. (2018). "Revisiting two ground failure sites from the 2010 Chile Earthquake." *Proc. Eleventh U.S. National Conference on Earthquake Engineering*, Los Angeles, CA, June 25-29.
- Moss, R.E.S. (2018). Discussion of "Flow Liquefaction Instability as a Mechanism for Lower End of Liquefaction Charts" by U.M. Mital, T. Mohammadnejad, and J. E. Andrade. DOI:10.1061/(ASCE)GT.1943-5606.0001752.
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- Hayati, H., & Moss, R.E.S. (2017). "Strain Compatible Site Period, a New Perspective in Site Response Analysis." *Soil Dynamics and Earthquake Engineering*, 92C, pp. 551-560, DOI: 10.1016/j.soildyn.2016.10.010.
- Moss, R.E.S., and Moffat, R. (2016). "Advances of Cone Penetration Testing in Earthquake Engineering Applications." *IX Congreso Chileno de Ingenieria Geotecnica*, Valdivia, Dec.
- Yazdi, J. and Moss, R. (2016). "Nonparametric Liquefaction Triggering and Postliquefaction Deformations." *J. Geotech. Geoenviron. Eng.*, [10.1061/\(ASCE\)GT.1943-5606.0001605](https://doi.org/10.1061/(ASCE)GT.1943-5606.0001605), 04016105.
- Moss, R.E.S., King, J., and Fiegel, G.L. (2016). "Teaching Consolidation: A Case Study of Ground Improvement using Preloading and Vertical Drains." *International Journal of Geoenvironmental Case Histories*, Dec.
- Hayati, H., & Moss, R.E.S. (2017). "Strain Compatible Site Period, a New Perspective in Site Response Analysis." *Soil Dynamics and Earthquake Engineering*, 92C, pp. 551-560, DOI: 10.1016/j.soildyn.2016.10.010.
- Topping, K. (2017). Creating Resilient Communities: Managing Environmental Risk through Planning and Design. In-preparation. Contributed chapter on lifelines.
- Moss, R.E.S. & Hollenback, J.C. (2015) "The Influence of Spatial Variability on Lifelines Probability of Failure." *15th Pan-American Conference on Soil Mechanics and Geotechnical Engineering*, Buenos Aires, Argentina, Nov.
- Moss, R.E.S., Thompson, E.M., Kieffer, D.S., Tiwari, B., Hashash, Y.M.A., Acharya, I., Adhikari, B., Asimaki, D., Clahan, K.B., Collins, B.D., Dahal, S., Jibson, R.W., Khadka, D., Macdonald, A., Madugo, C.L.M., Mason, H.B., Pehlivan, M., Rayamajhi, D., and Upreti, S. (2015). "Geotechnical Effects of the 2015 Magnitude 7.8 Gorkha, Nepal, Earthquake and Aftershocks." *Seismological Research Letters*, 86(6)
- Hashash, Youssef M.A., Binod Tiwari, Robb E. S. Moss, Domniki Asimaki, Kevin B. Clahan, D. Scott Kieffer, Doug S. Dreger, Amy Macdonald, Chris M. Madugo, H. Benjamin Mason, Menzer Pehlivan, Deepak Rayamajhi, Indra Acharya and Basanta Adhikari. "Geotechnical Field Reconnaissance: Gorkha (Nepal) Earthquake of April 25 2015 and Related Shaking Sequence" *Geotechnical Extreme Event Reconnaissance GEER Association Report No. GEER-040. Version 1.1. August 7, 2015. [www.geerassociation.org](http://www.geerassociation.org)*.
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- Dobry, R., Abdoun, T.M., Stokoe, K.H., Moss, R.E.S., Hatton, M., and Ganainy, H. (2015).

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	<p>"Liquefaction Potential of Recent Fills versus Natural Sands Located in High Seismicity Regions Using Shear Wave Velocity." <i>Journal of Geotechnical and Geoenvironmental Engineering</i>, No. 04014112, e-published Nov 2014, print Mar 2015.</p> <p>Kayen, R. E., Moss, R. E. S., Thompson, E. R., Seed, R. B., Cetin, K. O., Der Kiureghian, A., Tanaka, Y., and Tokimatsu, K. (2014). Closure on Discussion of "Shear Wave Velocity-Based Probabilistic and Deterministic Assessment of Seismic Soil Liquefaction Potential." <i>Journal of Geotechnical and Geoenvironmental Engineering</i>, March, Vol. 140, No. 4.</p> <p>Reinhart, E., Stewart, J.P., Moss, R.E.S., and Brandenburg, S.J. (2014). "Dynamic Response of a Model Levee on Sherman Island Peat: A Curated Dataset." <i>Earthquake Spectra</i>, Vol. 30, No. 2, May.</p> <p>Moss, R.E.S. (2014) "A critical state framework for seismic soil liquefaction triggering using CPT." CPT14, Las Vegas.</p> <p>Moss, R.E.S. and Jacobs, J. (2014). "Discussion of "Problems with Liquefaction Criteria and their Applications in Australia" by R. Semple." <i>Australian Geomechanics Journal</i>, March.</p> <p>Moss, R.E.S. (2014) "Analyst B: Passive Surface Wave Analysis of the UTexas1 Surface Wave Dataset." <i>ASCE GeoCongress</i>, Atlanta, Feb.</p> <p>Guettaya, I., El Ouni, M.R., and Moss, R.E.S. (2013) "Verifying liquefaction remediation beneath an earth dam using SPT and CPT based methods." <i>Soil Dynamics and Earthquake Engineering</i>, 53, Oct., pp. 130-144</p> <p>Moss, R.E.S., and Germeraad, M. (2013). Lifelines Annex to the 2013 California State multi-Hazard Mitigation Plan. <a href="http://hazardmitigation.calema.ca.gov/plan">http://hazardmitigation.calema.ca.gov/plan</a></p> <p><b>Moss, R. E. S. (2013) Applied Civil Engineering Risk Analysis. Shedwick Press. ISBN#0989889602.</b></p> <p>Moss, R. E. S. and Crosariol, V. (2013). "Shake table testing to quantify seismic soil-structure-interaction of underground structures." <i>Earthquake Spectra</i>, 29(4) pp. 1413-1440.</p> <p>Moss, R. E. S., Stanton, K. V., and Buelna, M. (2013). "The impact of material stiffness on the likelihood of fault rupture propagating to the ground surface" <i>Seismological Research Letters</i>, 84(3), 485-488, May/June.</p> <p>Kayen, R. E., Moss, R. E. S., Thompson, E. R., Seed, R. B., Cetin, K. O., Der Kiureghian, A., Tanaka, Y., and Tokimatsu, K. (2013). "Shear Wave Velocity-Based Probabilistic and Deterministic Assessment of Seismic Soil Liquefaction Potential." <i>Journal of Geotechnical and Geoenvironmental Engineering</i>, March, Vol. 139, No. 3, pp. 407-419.</p> <p>Cox, B.R., Bounlanger, R.W., Tokimatsu, K., Wood, C. M., Abe, A., Ashford, S., Donahue, J., Ishihara, K. Kayen, R., Katsumata, K. Kishida, T., Kokusho, T., Mason, H.B., Moss, R.E.S., Stewart, J.P., Tohyama, K., and Zekkos, D. (2013) Liquefaction at Strong Motion Stations and in Urayasu City during the 2011 Tohoku-Oki Earthquake. <i>Earthquake Spectra</i>, 29(S1), p.S55-S80.</p> <p>Moss, R.E.S., and Noche, R. (2012) "Scale Model Shake Table Testing of Seismic Earth Pressures in Soft Clay." <i>ASCE GeoCongress</i>, Oakland, March.</p> <p>Kayen, R.E., K. Ishihara, J. P. Stewart, K. Tokimatsu, B. Cox, Y. Tanaka, R.E.S. Moss, T. Kokusho, D. Zekkos, H. B. Mason, C. Wood, K. Katsumata, I.A. Esteves, S.S. Cullenward (2012). "Geotechnical Deformations at Ground Failure Sites from the March 11, 2011, Great Tohoku Earthquake, Japan: Field Mapping, Lidar Modeling, and Surface Wave Investigation." <i>CUEE-JAEE conference</i>, Tokyo.</p> <p>Kelson, K., Witter, R., Tassara, A., Ryder, I., Ledesma, C., Maontalva, G., Frost, D. Sitar, N., Moss, R., Johnson, L. (2011) "Patterns of Tectonic Surface Deformation During the 2010 Maule Earthquake and Influences on Damage to Engineered Facilities." <i>Earthquake Spectra</i>, June, 28(S1), pp.S39-S54..</p> <p>Moss, R.E.S., Chen, G-X., Tong, L-Y. (2011) "Comparing Liquefaction Procedures in the U.S. and China." <i>Journal of Sichuan University of Science and Engineering (Natural Science Edition)</i>, 24(1), Feb.</p> <p>Schneider, J. A., and Moss, R.E.S. (2011) "Linking cyclic stress and cyclic strain based methods for assessment of cyclic liquefaction triggering in sands." <i>Geotechnique</i>, June.</p> <p>Ledesma, C., Ashford, S., Hutchinson, T., Moss, R., Arduino, P., Kayen, R., and Olson, S. (2011) "Effects of Liquefaction-Induced Ground Failure on Bridges, Roads, Railroads and Lifeline Systems." <i>Earthquake Spectra</i>, June, 28(S1), pp.S119-S143.</p>
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- Hayati, H., Moss, R. E. S. (2011). "Evaluating Methods for Prediction Liquefaction-Induced Settlement." ASCE GeoRisk Conference, Atlanta, June.
- Hollenback, J.C., and Moss, R. E. S. (2011). "'Bounding the Probability of Failure for Levee Systems." ASCE GeoRisk Conference, Atlanta, June.
- Moss, R. E. S., Kuo, S., Crosariol, V. (2011). "Shake Table Testing of Seismic Soil-Foundation-Structure-Interaction." ASCE Geofrontiers Conference, Dallas, March.
- Moss, R. E. S., Hollenback, J. C. (2011). "Seismic Response of Peaty Organic Soils as a Levee Foundation Material." ASCE Geofrontiers Conference, Dallas, March.
- Moss, R. E. S. (2011). "Reduced Sigma of Ground Motion Prediction Equations through Uncertainty Propagation." *Bulletin of Seismological Society of America*, 101(1).
- Moss, R. E. S., Kayen, R. E., Tong, L-Y., Lui, S-Y. Cai, G., and Wu, J. (2011). "Retesting of Liquefaction/ Nonliquefaction Case Histories from the 1976 Tangshan Earthquake." *Journal of Geotechnical and Geoenvironmental Engineering*, 137(4).
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- Moss, R. E. S., Crosariol, V., and Kuo, S. (2010). "Shake table testing to quantify seismic soil-structure-interaction of underground structures." 5<sup>th</sup> Int. Conf. on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics, San Diego, May 24-29.
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- Brandenberg, S.J., Stewart, J.P., and Moss, R.E.S. (2010) "Seismic Deformation Potential of Levees on Peaty Organic Soil in the Sacramento-San Joaquin Delta." *ASCE Geo-Strata Magazine*, March/April.
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- Moss, R. E. S. (2009). "Uncertainty Propagation in Geotechnical Earthquake Engineering." Invited paper for the 6th Intl. Conf. on Urban Earthquake Engineering, Tokyo, March.
- Moss, R. E. S., Hollenback, J. C. (2009). Discussion of "Analyzing Liquefaction-Induced Lateral Spreads using Strength Ratios" by Scott M. Olsen and Cora I. Johnson, Vol. 134, No. 8, pp. 1035-1049." *Journal of Geotechnical and Geoenvironmental Engineering*, December.
- Moss, R. E. S. (2008). "Quantifying Measurement Uncertainty of Thirty Meter Shear Wave Velocity (VS30)." *Bulletin of Seismological Society of America*, 98(3), 1399-1411.
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- Moss, R. E. S., Thornhill, D. M., Nelson, A. I., and Levulett, D. A. (2008) "Influence of Geologic Aging on Liquefaction Potential: Preliminary Results." Conference on Soil Dynamics and Earthquake Engineering, Sacramento, May.
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- Moss, R. E. S., and Eller, M. J. (2007). "Estimating the Probability of Failure and Associated Risk of the California Bay Delta Levee System." *Proc. Geo-Denver*.



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<b>INVITED TALKS</b>	<ul style="list-style-type: none"> <li>• Session moderator/speaker Lifeline Fragility Curves, UCLA Conf, Feb 2, 2022</li> <li>• Berkeley GeoEngineering, Noon Seminar, Oct 20, 2021.</li> <li>• 101<sup>st</sup> Annual Meeting of the Wyoming Engineers Society (keynote)</li> <li>• NGL Meeting Series, Oct, 2020</li> <li>• Geo Institute, Phoenix, Oct, 2019</li> <li>• DFHM7 Conference, Denver, 2019</li> <li>• Geo Institute, Portland, May, 2019</li> <li>• Geo Institute, San Diego, March, 2019</li> <li>• Montana Division of Mines and Geology, Montana Tech, Oct, 2018.</li> <li>• Geo Institute, Irvine, Feb, 2018</li> <li>• UC Berkeley GeoEngineering Distinguished Lecture Series May 2017</li> <li>• USGS Surface Fault Rupture Workshop, Menlo Park, Dec 2016.</li> <li>• US-NZ-JP Liquefaction Workshop, Berkeley, CA, Nov 2016.</li> <li>• UNR, EERI Student Group Invited Presentation, Dec 2014, Reno, NV</li> <li>• USGS Earthquake Science Center Seminar, July 2014, Menlo Park, CA <a href="http://earthquake.usgs.gov/regional/nca/seminars/2014-07-09/">http://earthquake.usgs.gov/regional/nca/seminars/2014-07-09/</a></li> <li>• Seismological Society of America, Anchorage, AK, April, 2014.</li> <li>• CPT14, Las Vegas, March.</li> <li>• Universidad de Concepcion, Civil Engineering, May, 2013.</li> <li>• Maule Earthquake Workshop, Concepcion Chile, Feb 2013.</li> <li>• Montana DOT, Geotech Division, January, 2013.</li> <li>• Montana Division of Mines and Geology, Montana Tech, Jan, 2013.</li> <li>• Seismological Society of America, San Diego, CA, 2012.</li> <li>• APA Conference, LA, Infrastructure and Delta Panels, 2012.</li> <li>• ASCE Geofrontiers Conf., Dallas, TX., March 14-16, 2011.</li> <li>• NRC Seismic Information Workshop, San Luis Obispo, CA, Sept. 8-9, 2010.</li> <li>• CPT Liquefaction Workshop, Huntington Beach, CA, May 12, 2010.</li> <li>• CPT'10, Huntington Beach, CA (co-organizer/speaker), May 9-11, 2010.</li> <li>• Seismological Society of America, Monterey, CA, April 8-10, 2009.</li> <li>• 6<sup>th</sup> Intl. Conf. on Urban Earthquake Engineering, Tokyo, Japan, March 2-4, 2009.</li> <li>• 14<sup>th</sup> World Conf. on Earthquake Engineering, Beijing, China, October 16, 2008.</li> <li>• Seismological Society of America, Santa Fe, NM, April 16, 2008.</li> <li>• Visiting Professor, Southeast University of Nanjing, China, July 26, 2007.</li> <li>• Association of Environmental Professionals, Shell Beach, CA, April 26, 2007.</li> <li>• Association of Engineering Geologists, Goleta, CA, July 27, 2006.</li> <li>• ASCE Geofrontiers Conf., Austin TX, January 23-26, 2005.</li> <li>• 11<sup>th</sup> Int. Conf. Soil Dynamics &amp; Earthquake Engineering and 3rd Int. Conf. Earthquake Geotechnical Engineering, January 7-9, Berkeley, CA, 2004.</li> <li>• ASCE, Bay Area Branch Monthly Meeting, February 12, 2003.</li> <li>• Visiting Scholar and Lecturer, METU, Ankara, Turkey, January - February, 2002.</li> <li>• Geotechnical Earthquake Engineering and Soil Dynamics III, August 3-6, 1998, Seattle</li> <li>• 8th Intl. Conf. Soil Dynamics and Earthquake Engineering, July 20-24, 1997, Istanbul.</li> <li>• 32nd Annual Conf. on Geologic and Geotechnical Engineering, Spring, 1997, Boise, ID.</li> </ul>
<b>ADVISING</b>	<p>Doctoral Students:</p> <ul style="list-style-type: none"> <li>◦ Justin Hollenback, PhD, UC Berkeley, Dec 2013. "Reliability of Levees under Seismic Loading"</li> </ul> <p>Post-Doctoral Students:</p> <ul style="list-style-type: none"> <li>◦ Hossien Hayati, PhD</li> </ul> <p>Pre-Doctoral Students:</p> <ul style="list-style-type: none"> <li>◦ Tolga Bilge, PhD, METU, Turkey;</li> <li>◦ Javad Yazdi, PhD, UWA, Australia;</li> <li>◦ Ikram Guettaya, PhD, INAT, Tunisia.</li> <li>◦ Gizem Can, PhD, METU, Turkey.</li> </ul>

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	<p>Visiting Professors:</p> <ul style="list-style-type: none"><li>○ Wang, PhD, NJUT, China;</li><li>○ Dmitry Maleev, PhD, FESTU, Russia.</li></ul> <p>Master's Students (Thesis):</p> <ul style="list-style-type: none"><li>○ Vic Crosariol, MS, 2010, "Model Shake Table Testing of Underground Structures in Soft Clay"</li><li>○ Steven Kuo, MS, 2012, "Scale Model Shake Table Testing of Shallow Embedded Foundations in Soft Clay"</li><li>○ Ron Noche, MS, 2013, "Scale Model Shake Table Testing of Seismic Earth Pressures in Soft Clay"</li><li>○ Zach Ross, 2011, "Probabilistic Fault Displacement Hazard Analysis for Reverse Faults and Surface Rupture Scale Invariance."</li><li>○ Kevin Stanton, MS, 2013, "Investigation of Parameters Influencing Reverse Fault Rupture Propagation to the Ground Surface"</li><li>○ Daniel Wagstaffe, 2015, "Spatial Variability of Soil Stiffness using Passive Surface Wave Testing."</li><li>○ Jasper Jacobs, MS, 2016, "Full Scale shake table cyclic simple shear testing of liquefiable soil."</li><li>○ Kira Ortiz, MS, 2016, "Dynamic Lab Testing of Manufactured Peaty Organic Soil."</li><li>○ Tristan Gebhart, 2016, "Post-Liquefaction Residual Strength Assessment of the Las Palmas, Chile, Tailings Failure."</li><li>○ Michael Iannelli, 2016, "Determination of Seismic Earth Pressures on Retaining Walls through Finite Element Analysis."</li><li>○ Moises Buelna, 2018, "The Role of Soil Stiffness in Reverse Fault Rupture Propagation."</li><li>○ Michaela Saqui, in progress, "The Influence of Driving Shear Stresses on Liquefaction."</li><li>○ Taylor Honnett, 2018, "Measuring Residual Strength in Large Scale Simple Shear Shake Table Testing."</li><li>○ Jonathan Schmidt, 2019, "Modeling Decision in Liquefaction Triggering."</li><li>○ Yingyi Xu, 2020, "Fremont Hall Slide and Lab-based strength measurements."</li><li>○ Noah Lyman, 2020, "Debris flow triggering models."</li></ul>
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