Dept. of Civil and Environmental Engineering University of California, Berkeley 421 Davis Hall, Berkeley, CA 94720 E-mail: adda.zekkos@berkeley.edu Cell: 510-333-7187

EDUCATION

Ph.D., Civil & Environmental Engineering Dept, University of California at Berkeley, 2008
MSc., Civil & Environmental Engineering Dept, University of California at Berkeley, 2004
Ptychion, Civil Engineering Dept (5-year mandatory program), University of Patras, Greece, 2003

ACADEMIC APPOINTMENTS

- Assistant Professor (effective 1/1/2020), Department of Civil and Environmental Engineering, University of California, Berkeley, CA
- **Graduate Chair** (9/2017 12/2019), Department of Civil and Environmental Engineering, University of Michigan at Ann Arbor, Ann Arbor, MI
- Associate Professor (2015 2019), Department of Civil and Environmental Engineering, University of Michigan at Ann Arbor, Ann Arbor, MI
- Assistant Professor (2008 2015), Department of Civil and Environmental Engineering, University of Michigan at Ann Arbor, Ann Arbor, MI
- Graduate Student Instructor (GSI) and Graduate Student Research Assistant (GSRA) (2003-2008), Department of Civil and Environmental Engineering, University of California at Berkeley, Berkeley, CA

AWARDS AND HONORS

- Invited Speaker at the 35th Annual Geoengineering Distinguished Lecture Series, UC Berkeley, 2017
- Excellence in Teaching Award, Chi Epsilon Great Lakes District, 2016
- Thomas Middlebrooks Award, American Society of Civil Engineers (ASCE), 2015
- Arthur Casagrande Professional Development Award: For "contributions in the seismic risk assessment of levee protection systems against flooding", American Society of Civil Engineers (ASCE), 2015
- Excellence in CEE, Departmental Faculty Award, 2014
- National Science Foundation (NSF) CAREER Award, 2013
- National Science Foundation (NSF) Fellow for NEES ENHANCE, 2012
- Elizabeth C. Crosby Research Award, ADVANCE, University of Michigan, 2010, 2011
- Outstanding Graduate Student Instructor Award, University of California, Berkeley, 2006
- National Science Foundation (NSF), Graduate Research Fellowship (GRF) Award, 2004-2007
- Harry Bolton Seed Outstanding Graduate Student Award, University of California, Berkeley, Geoengineering Group, 2004

PROFESSIONAL CONTRIBUTIONS

Professional Affiliations

Member, Association of State Dam Safety Officials (ASDSO), 2011-pres.

Member, International Society of Soil Mechanics and Geotechnical Engineering (ISSMGE), 2008-pres. *Member*, Geotechnical Earthquake Engineering Reconnaisance (GEER), 2007-pres.

Member, United States Society of Dams (USSD), 2007-pres.

Member, Earthquake Engineering Research Institute (EERI), 2006-pres.

Member, American Society of Civil Engineers (ASCE), Geo-Institute, 2004-pres.

Professional Service

Committees (National/International)

Member, USUCGER Board, Elected position, 01/2019-pres.

Member, ASCE Geo-Institute Awards Committee, 2018-pres.

Member, NHERI User Forum Committee, Elected position, 2017-pres.

Member, Dykes and Levees Technical Committee (ISSMGE), 2012-pres.

Member, Earthq Eng. and Soil Dyn. Geo-Institute Technical Committee (ASCE), 2011-pres.

Member, Committee on Levees (USSD), 2010-pres.

Member, Embankments, Slopes and Dams Geo-Institute Technical Committee (ASCE), 2008-pres.

Member, Earthquake Geotechnical Engineering and Associated Problems (ISSMGE), 2019-pres.

Editorships

Associate Editor, ASCE Journal of Geotechnical and Geoenvironmental Engineering, 2015-pres.

- Guest Editor, "Special Issue: PBD-III Invited Papers", Soil Dynamics and Earthquake Engineering Journal, July 2018
- *Technical Co-Editor*, 3rd International Conference on Performance-Based Design in Earthquake Geotechnical Engineering, Vancouver, BC, July 2017.
- *Technical Co-Editor* and Member of Organizing Committee, 2012 GeoCongress Conference: State of the Art and Practice in Geotechnical Engineering, ASCE, 2009-2012.

Conference/Event Organization

Session Chair, 2019 USSD 39th Annual Conference and Exhibition, Chicago, April 8-12, 2019.

- Session Chair, 2015 International Foundations Congress and Equipment Expo, Session: "Hurricanes and Floods", ASCE Geo-Institute (G-I), International Association of Foundation Drilling, San Antonio, TX, March 18-21 2015.
- *Session Chair*, 2013 GeoCongress Conference: Stability and Performance of Slopes and Embankments III, Session "Seepage and Slope Stability for Earth Dams and Levees", ASCE Geo-Institute (G-I), 2013.

Professional Activities

Member, 2016 Geotechnical Earthquake Engineering Reconnaissance (GEER) in New Zealand Invited presenter and participant, 2016 US-NZ-Japan International Workshop on Liquefaction Effects Member, 2016 Geotechnical Earthquake Engineering Reconnaissance (GEER) in Ecuador Invited panelist, 2015 IFCEE Student Professional Development Workshop, San Antonio TX Invited Participant, 2012 Second US-PRC Young Researcher's Forum MCEER, IEM in China Participant, 2010 USSD Levee Workshop, Memphis TN

Invited participant and speaker, 2010 Innovative teaching methods in Geotechnical Engineering Workshop, Volos, Greece, workshop sponsored by the 6th National Hellenic Conference on Geot. and Geoenvironmental Engineering, in Volos, Greece, Sept. 29-Oct. 1, 2010

- *Participant*, 2010 Research Summit, East Lansign, MI, Michigan Department of Transportation Office of Research and Best Practices
- Invited Participant, 2010 Vision 2020 Workshop, St. Louis, MO, Sponsored by NSF/NEES
- Invited Participant, 2009 7th NEES/E-Defense planning meeting for Collaborative Research, Kobe, Japan
- *Participant*, 2009 Pile Driving Workshop for Professors, Utah State Univ. Logan, UT, Sponsored by Pile Driving Contr. Of America
- *Participant*, 2009 Workshop for the Multiscale Science Based-Modeling and Simulation and Experimental Validation on Enabling Materials, Northwestern University, IL

Student Team Leader, Independent Levee Investigation (August 2005-May 2006)

STUDENT ADVISEES

Doctoral Thesis Advisees (2 in progress)

- Michelle Basham (expected 2023) *Liquefaction assessment of gravelly soils in the field and the laboratory*
- Nina Zabihi (expected 2020) Liquefaction analyses of coarse grained soils using the Discrete Element Method (DEM)

Doctoral Thesis Advisees (4 completed)

- Jonathan Hubler "Monotonic and dynamic response of gravelly soils", May 2017 (currently: Assistant Professor at Villanova University)
- Athina Gkrizi "Characterization of *Pile-driving induced ground motions*", *December 2016* (currently: Assistant Professor at Notingham University, UK)
- Adam Lobbestael "Feasibility Study of High-Performance Cutoff Walls for Levees in Seismic Regions", September 2014 (currently: Assistant Professor at Lawrence Tech University, MI)
- Mustafa Saadi "GIS-based methodology for assessing spatial variability of soil properties in seismic evaluation of levee systems", December 2011 (currently: Project Engineer at Geosyntec Consultants, Atlanta, GA)

Graduate Research Advisees

- Goldie Gunawan (MSE 2018) Seismically induced landslides after the 2016 New Zealand earthquake
- Josh Colley (MSE 2014) Effect of thin soil layers on progressive failure of earthen levees
- Heidi Pence (MSE 2013) Ground motion selection for seismic clope stability analysis of earthen levees
- Mohammad Kabalan (MSE 2012) Pile-driving induced vibration field measurements.
- Kimberly Lamote (MSE 2011) Seismic isolation of earth retaining structures with use of EPS-Geofoam compressible inclusion

COURSES

- CEE 345 Geotechnical Engineering (4-credits, undergraduate)
- CEE 546 Slopes, Dams and Retaining Structures (3-credits, graduate)
- CEE 548 Geotechnical Earthquake Engineering (3-credits, graduate)
- CEE 543 Numerical Modelling in Geotechnical Engineering (3-credits, graduate)

SPONSORED RESEARCH (Total: \$2.6M, as PI: \$1.9M)

• Collaborative Research: Integrated Field and Laboratory Based Assessment of Liquefaction Triggering and Residual Strength of Gravelly Soil (PI, with co-PI D. Zekkos from U. of Michigan and K. Rollins from BYU)

National Science Foundation, 2017-2020 (total: \$521,889, PI share: \$333,533)

• RAPID: Collaborative research: Topographic Change and Cascading Hazards Following the Mw7.8 Kaikoura (New Zealand) Earthquake (co-PI, with PI M. Clark and co-PI D. Zekkos from U. of Michigan)

National Science Foundation, 2016-2018 (\$46,517)

• Asset Management for Retaining Walls (PI, with co-PI J. Lynch and D. Zekkos from U. of Michigan)

Michigan Department of Transportation, 2016-2019 (\$310,675)

• Collaborative Research: Connecting Women Faculty in Geotechnical Engineering: Thriving in a Networked World (UMich PI, Syracuse Univ. lead)

National Science Foundation, 2016-2019 (total: \$513,019, PI share: \$49,749)

• CAREER: Promoting a Fundamental Understanding of Post-Liquefaction Response and Deformations: A Next-Generation Analytical and Experimental Methodology (PI)

National Science Foundation, 2013-2018 (\$400,000)

• Continuation of UM Network for Women in Civil and Environmental Engineering (NEWinCEE) (co-PI)

Rackham School of Graduate Studies (UM), 2013-2015 (\$77,600)

• Dynamic Response of Levees and Ebmankments (PI)

Rackham Graduate School and ADVANCE at Univ. of Michigan, 2012-2013 (\$10,363)

• On-Line International Network for Women in Geotechnical Engineering (PI)

ADVANCE at the Univ.of Michigan, 2012-2013 (\$4,990)

- Effects of pile-driving induced vibrations on nearby structures and other assets (PI) Michigan Department of Transportation, 2011-2013 (\$229,370)
- UM Network for Excellence in Women in Civil Engineering (co-PI, with G. Parra-Montesinos, A. Demond, D. Zekkos and S. Lee from U. of Michigan)

Rackham School of Graduate Studies (UM), 2011-2013 (\$96,736)

- Feasibility Study of High-Performance Cut-off Walls for Levees in Seismic Regions: Dynamic Wall Analyses and Ductile Slurry Development (PI, with V. Li from U. of Michigan) National Science Foundation, 2010-2014 (\$384,406)
- Seismic isolation of earth retaining structures with use of EPS-Geofoam compressible inclusion Centrifuge Testing (PI)

European Manufacturers of EPS, 2010-2012 (\$37,500)

• Seismic isolation of earth retaining structures with use of EPS-Geofoam compressible inclusion – Centrifuge Testing (PI)

ADVANCE at the Univ.of Michigan, 2010-2011 (\$14,647)

PUBLICATIONS AND PRESENTATIONS

Books

1. Taiebat, M., <u>Athanasopoulos-Zekkos, A.,</u> and Wijewickreme, D. eds (2017) "3rd International Conference on Performance-based Design in Earthquake Geotechnical Engineering", Vancouver BC Hryciw, R.D., <u>Athanasopoulos-Zekkos, A</u>. and Yesiller, N. eds. (2012) "GeoCongress 2012 - State of the Art and Practice in Geotechnical Engineering", Geotechnical Special Publication No. 225, Proceedings of the Annual GeoCongress of the Geo-Institute of ASCE, 4504 pages.

Special Issues

1. Boulanger, R., Taiebat, M., Wijewickreme, D. and <u>Athanasopoulos-Zekkos, A</u>. eds (2018) "Special *Issue: PBD-III Invited Papers*", Soil Dynamics and Earthquake Engineering Journal, July 2018

Chapters in Books

 Zekkos, D., Matasovic, N., El-Sherbiny, R., <u>Athanasopoulos-Zekkos, A.</u>, Towhata, I., Maugeri, M. (2011) "Chapter 4: Dynamic Properties of Municipal Solid Waste", "Geotechnical Characterization, Field Measurement, and Laboratory Testing of Municipal Solid Waste", ASCE Geotechnical Special Publication, No 209.

Refereed Journal Publications (published only)

- Zekkos, D., Greenwood, W., Lynch, J., Manousakis, J., <u>Athanasopoulos-Zekkos, A.</u>, Clark, M., Cook, K.L. and Saroglou, C. (2018). Lessons Learned from The Application of UAV-Enabled Structure-From-Motion Photogrammetry in Geotechnical Engineering. *International Journal of Geoengineering Case Histories*, Vol.4, Issue 4, p.254-274. <u>doi: 10.4417/IJGCH-04-04-03</u>
- Hubler, J., <u>Athanasopoulos-Zekkos, A.</u>, and Zekkos, D. (2018) "Monotonic and Cyclic Simple Shear Response of Gravel-Sand Mixtures", *Soil Dynamics and Earthquake Engineering, Vol 115,* pp. 291-304, Dec 2018, <u>https://doi.org/10.1016/j.soildyn.2018.07.016</u>
- Zekkos, D., <u>Athanasopoulos-Zekkos, A.</u>, Hubler, J., Fei, X., Zehtab, K.H., and Marr, A. (2017) "Development Of A Large-Size Cyclic Direct Simple Shear Device For Characterization Of Ground Materials With Oversized Particles", *Geotechnical Testing Journal* <u>https://doi.org/10.1520/GTJ20160271</u>. ISSN 0149-6115
- Hubler, J., <u>Athanasopoulos-Zekkos, A</u>., and Zekkos, D. (2017). "Monotonic, Cyclic and Post-Cyclic Simple Shear Response of Three Uniform Gravels in Constant Volume Conditions", ASCE *Journal of Geotechnical and Geoenvironmental Engineering*, Vol. 143, Issue 9, <u>doi</u> 10.1061/(ASCE)GT.1943-5606.0001723
- Dellow,S., Massey, C., Cox, S., Archibald, G., Begg, J., Bruce, Z., Carey, J., Davidson, J., Della Pasqua, F., Glassey, P., Hill, M., Jones, K., Lyndsell, B., Lukovic, B., McColl, S., Rattenbury, M., Read, S., Rosser, B., Singeisen, C., Townsend, D., Villamor,P., Villeneuve, M., Godt, J., Jibson, R., Allstadt, K., Rengers, F., Wartman, J., Rathje, E., Sitar, N., <u>Athanasopoulos-Zekkos, A.,</u> Manousakis, J., and Little, M. (2017). "Landslides caused by the M_w7.8 Kaikōura earthquake and the immediate response", *Bulletin of the New Zealand Society for Earthquake Engineering, Vol. 50, No. 2, June 2017*
- 6. Stringer, M., Bastin, S., McGann, C.R., Cappellaro, C., El Kortbawi, M., McMahon, R., Wotherspoon, L.M., Green, R.A., Aricheta, J., Davis, R., McGlynn, L., Hargraves, S., van Ballegooy, S., Cubrinovski, M., Bradley, B.A., Bellagamba, X., Foster, K., Lai, C., Ashfield, D., Baki, A., <u>Athanasopoulos-Zekkos, A.</u>, Lee, R. and Ntritsos, N. (2017). "Geotechnical aspects of the 2016 Kaikōura earthquake on the south island of New Zealand", *Bulletin of the New Zealand Society for Earthquake Engineering, Vol. 50, No. 2, June 2017*
- Stahl, T., Clark, M., Zekkos, D., <u>Athanasopoulos-Zekkos, A.</u>, Willis, M., Medwedeff, W., Knoper, L., Townsend, K., and Jin, J. (2017). "Earthquake Science in Resilient Societies: Earthquakes in Resilient Societies", *Tectonics, April 2017*
- 8. Zekkos, D., <u>Athanasopoulos-Zekkos, A.</u>, Grizi, A., and Greenwood, W. (2016). The May 25th 2011 Railroad Embankment Failure in Ann Arbor, Michigan, As a Means for Teaching Geotechnical

Engineering. International Journal of Geoengineering Case histories, Vol.3, Issue 4, p.234-245. doi: 10.4417/IJGCH-03-04-03

- Grizi, A., <u>Athanasopoulos-Zekkos, A.</u>, and Woods, R. (2016). "Ground Vibration Measurements near Impact Pile Driving." *J. Geotech. Geoenviron. Eng.*, 10.1061/(ASCE)GT.1943-5606.0001499, 04016035.
- <u>Athanasopoulos-Zekkos, A.</u>, Pence, H., and Lobbestael, A. (2016.) "Ground Motion Selection for Seismic Slope Displacement Evaluation of Earthen Levees", *Earthquake Spectra, Earthquake Engineering Research Institute*, doi: 10.1193/062513EQS169M, February 2016, Vol. 32, No. 1, pp. 217-237.
- Carlson, C., Zekkos, D., <u>Athanasopoulos-Zekkos, A</u>. (2016). "Predictive Equations to Quantify the Impact of Spectral Matching on Ground Motion Characteristics", *Earthquake Spectra, Earthquake Engineering Research Institute (EERI) Journal*, doi: 10.1193/090914EQS140M February 2016, Vol. 32, No. 1, pp. 125-142.
- 12. Carlson, C., Zekkos, D., <u>Athanasopoulos-Zekkos, A</u>. and J. Hubler (2014). "Statistical assessment of impact of ground motion modification on ground motion characteristics and time histories" *Earthquake Engineering Journal*, DOI: 10.1080/13632469.2014.898602.
- Saadi, M. and <u>Athanasopoulos-Zekkos, A</u>. (2013). "A GIS-enabled approach for assessing damage potential of levee systems based on underlying geology and river morphology", Journal of *Mathematical Problems in Engineering, Special Issue: Structural Damage Modelling and Assessment Volume 2013 (2013), Article ID 936468, Article can be accessed at:* <u>http://dx.doi.org/10.1155/2013/936468</u>.
- Lobbestael, A., <u>Athanasopoulos-Zekkos, A.</u>, and Colley, J. (2013). "Factor of Safety Reduction Factors for Accounting for Progressive Failure for Earthen Levees with Underlying Thin Layers of Sensitive Soils", Journal of *Mathematical Problems in Engineering, Special Issue: Structural Damage Modelling and Assessment Volume 2013 (2013), Article ID 893602. Article can be accessed at: <u>http://dx.doi.org/10.1155/2013/893602.</u>*
- 15. <u>Athanasopoulos-Zekkos, A.</u>, Vlachakis, V.S. and Athanasopoulos, G.A. (2013). "Phasing issues in the seismic response of yielding, gravity-type earth retaining walls overview and results from a FEM study", *Soil Dynamics and Earthquake Engineering, Vol.55, pp. 59-70.*
- 16. Saadi, M. and <u>Athanasopoulos-Zekkos, A</u>. (2013). "A framework for assessing spatial distribution of soil properties in levee systems based on underlying geology and river morphology", Journal of *Geography and Geology, Vol. 5, No.3, pp.22-42.*
- Athanasopoulos-Zekkos, A. and Seed, R.B., (2013). "Simplified Methodology for Consideration of 2D Dynamic Response of Levees in Liquefaction Triggering Evaluation", ASCE Journal of Geotechnical and Geoenvironmental Engineering, Vol. 139, No. 11, pp.1911-1922.
- <u>A. Athanasopoulos-Zekkos</u>, K. Lamote, and G. A. Athanasopoulos, (2012). "Use of EPS geofoam compressible inclusions for reducing the earthquake effects on yielding earth retaining structures", *Soil Dynamics and Earthquake Engineering Journal, Vol.41, pp.59-71.*
- 19. <u>A. Athanasopoulos-Zekkos</u> and M. Saadi, (2012). "Ground Motion Selection for Liquefaction Evaluation Analysis of Earthen Levees", *Earthquake Spectra, Earthquake Engineering Research Institute, Vol. 28 (4), pp. 1331-1351.*
- J.D. Rogers, G.P. Boutwell, D.W. Schmitz, D. Karadeniz, C.M. Watkins, <u>A. Athanasopoulos-Zekkos</u>, and D. Cobos-Roa, (2008). "Geologic Conditions Underlying the 2005 17th Street Canal Levee Failure in New Orleans", *ASCE Journal of Geotechnical and Geoenvironmental Engineering* Vol.134(5), 583-601.
- R. B. Seed, R. G. Bea, R. I. Abdelmalak, <u>A. Athanasopoulos-Zekkos</u>, G. P. Boutwell, J.-L. Briaud, C. Cheung, D. Cobos-Roa, L. Ehrensing, A. V. Govindasamy, L. F. Harder, K. S. Inkabi, J. Nicks, J. M. Pestana, J. Porter, K. Rhee, M. F. Riemer, J. D. Rogers, R. Storesund, X. Vera-Grunauer, J.

Wartman, (2008). "New Orleans & Hurricane Katrina: I - Introduction, Overview, and the East Flank", *ASCE Journal of Geotechnical and Geoenvironmental Engineering*, Vol.134(5), 701-717.

- 22. R. B. Seed, R. G. Bea, <u>A. Athanasopoulos-Zekkos</u>, G. P. Boutwell, J. D. Bray, C. Cheung, D. Cobos-Roa, L. Ehrensing, L. F. Harder, J. M. Pestana, M. F. Riemer, J. D. Rogers, R. Storesund, X. Vera-Grunauer, and J. Wartman, (2008). "New Orleans & Hurricane Katrina: II The Central Region and the Lower Ninth Ward", *ASCE Journal of Geotechnical and Geoenvironmental Engineering* Vol.134(5), 718-739.
- 23. R. B. Seed, R. G. Bea, <u>A. Athanasopoulos-Zekkos</u>, G. P. Boutwell, J. D. Bray, C. Cheung, D. Cobos-Roa, L. F. Harder, R. E. S. Moss, J. M. Pestana, J. Porter, M. F. Riemer, J. D. Rogers, R. Storesund, X. Vera-Grunauer, and J. Wartman, (2008). "New Orleans & Hurricane Katrina: III The 17th Street Drainage Canal", *ASCE Journal of Geotechnical and Geoenvironmental Engineering* Vol.134(5), 740-761.
- 24. R. B. Seed, R. G. Bea, <u>A. Athanasopoulos-Zekkos</u>, G. P. Boutwell, J. D. Bray, C. Cheung, D. Cobos-Roa, J. Cohen-Waeber, B. D. Collins, L. F. Harder, R.E. Kayen, R. E. S. Moss, J. M. Pestana, J. Porter, M. F. Riemer, J. D. Rogers, R. Storesund, X. Vera-Grunauer, and J. Wartman, (2008). "New Orleans & Hurricane Katrina: IV The Orleans East Bank (Metro) Protected Basin", *ASCE Journal of Geotechnical and Geoenvironmental Engineering* Vol.134(5), 762-779.

Invited Conference Publications

 Seed, R.B., <u>Athanasopoulos-Zekkos, A.</u>, Cobos-Roa, D., Pestana, J.M., and Inamine, M. (2012). "State of the Art: U.S. Levee and Flood Protection Engineering in the Wake of Hurricane Katrina", 2012 GeoCongress Conference: State of the Art and Practice in Geotechnical Engineering, ASCE, 25-29 March, Oakland CA

Refereed Conference Publications

- 1. Zabihi, N. and <u>Athanasopoulos-Zekkos, A.</u> (2020). "Discrete Element Modelling of Large Scale Stacked-Ring Simple Shear Test of Steel Spheres", ASCE *GeoCongress 2020*, February 25-28, 2020, Minneapolis, MN (paper accepted)
- Basham, M., and <u>Athanasopoulos-Zekkos, A.</u> (2020). "The Effect of Static Shear Stress on Cyclic Resistance of Uniform Gravels", ASCE *GeoCongress 2020*, February 25-28, 2020, Minneapolis, MN (paper accepted)
- <u>Athanasopoulos-Zekkos, A.</u>, Zekkos, D., Rollins, K., Hubler, J., Higbee, J. and Platis, A. (2019). "Earthquake Performance and Characterization of Gravel-Size Earthfills in the Ports of Cephalonia, Greece, following the 2014 Earthquakes", 7th International Conference on Earthquake Geotechnical Engineering, Rome 17-20 June, 2019
- 4. Basham, M., <u>Athanasopoulos-Zekkos</u>, <u>A</u>. and Zekkos, D. (2019). "The Importance of Vertical Displacement Control During Constant Volume Cyclic Simple Shear Testing", 7th International Conference on Earthquake Geotechnical Engineering, Rome 17-20 June, 2019
- 5. Gkrizi, A., <u>Athanasopoulos-Zekkos, A.</u>, and Woods, R.D. (2019). "Surface Wave Development during Impact Pile Driving" *XVII European Conference on Soil Mechanics and Geotechnical Engineering*, Reykjavik, Iceland, 1-6 September, 2019
- Kidus A. Admassu, Jerome P. Lynch, <u>Adda Athanasopoulos-Zekkos</u>, Dimitrios Zekkos, "Long-term wireless monitoring solution for the risk management of highway retaining walls," *Proc. SPIE* 10971, Nondestructive Characterization and Monitoring of Advanced Materials, Aerospace, Civil Infrastructure, and Transportation XIII, 1097103 (1 April 2019);
- 7. Gallagher, P, Bhatia, S., Alestalo, S., Soundarajan, S., and <u>Athanasopoulos-Zekkos, A.</u> (2019). "Do Seed Grants Increase Collaboration? A Case Study from the "Geotechnical Engineering Women

Faculty: Networked and Thriving" Project", *Geo-Congress 2019: The Eighth International Conference on Case Histories in Geotechnical Engineering*, March 24-27, 2019

- Zekkos, D., Clark, M., Willis, M., <u>Athanasopoulos-Zekkos, A.</u>, Manousakis, J., Knoper, L., Stahl, T., Massey, C., Archibald, G., Greenwood, W., and Medwedeff, W. (2018a). "3D models of the Leader Valley using satellite & UAV imagery following the 2016 Kaikoura earthquake", *Eleventh* U.S. National Conference on Earthquake Engineering, Integrating Science, Engineering & Policy, June 25-29, 2018, Los Angeles, California.
- Zekkos, D., Manousakis, J., <u>Athanasopoulos-Zekkos, A.</u>, Clark, M., Knoper, L., Massey, C., Archibald, G., Greenwood, W., Hemphill-Haley, M., Rathje, E., Litchfield, N., Medwedeff, W., Van Dissen, R.J., Ries, W., Villamor, P., Langridge, R.M., and Kearse, J. (2018b). "Structure-from-Motion based 3D mapping of landslides & fault rupture sites during 2016 Kaikoura earthquake reconnaissance", *Eleventh U.S. National Conference on Earthquake Engineering, Integrating Science, Engineering & Policy, June 25-29, 2018, Los Angeles, California.*
- 10. Hubler, J.F., <u>Athanasopoulos-Zekkos, A.</u> and Zekkos, D. (2018). "Post-Liquefaction Volumetric Strain of Gravel-Sand Mixtures in Constant Volume Simple Shear." *Geotechnical Earthquake Engineering and Soil Dynamics V 2018, June 10-13*
- 11. Grizi, A., <u>Athanasopoulos-Zekkos, A.</u>, and Woods, R.D. (2018). "Pile Driving Vibration Attenuation Relationships: Overview and Calibration Using Field Measurements", *Geotechnical Earthquake Engineering and Soil Dynamics V 2018, June 10-13*.
- 12. Grizi, A., <u>Athanasopoulos-Zekkos, A.</u>, and Woods, R.D. (2018). "Understanding the energy transfer mechanism in the near field of impact driven piles", *10th International Conference on Stress Wave Theory and Testing Methods for Deep Foundations*
- 13. Hubler, J.F., <u>Athanasopoulos-Zekkos, A.</u> and Zekkos, D. (2018) "Evaluation of Post-Liquefaction Shear Strength and Shear Wave Velocity of Uniform Gravels." *International Foundations Congress and Equipment Expo, March 5-10, 2018.*
- Grizi, A., <u>Athanasopoulos-Zekkos, A.</u> and Woods, R. D. (2018). "H-Pile Driving Induced Vibrations: Reduced-Scale Laboratory Testing and Numerical Analysis", *IFCEE 2018, March 5-10, ASCE.*
- Gallagher, P.M., Alestalo, S., Bhatia, S.K., <u>Athanasopoulos-Zekkos, A.</u>, and Soundarajan, S. (2018). "Geotechnical Women Faculty From 1989-2017: A U.S. Case Study Outline", *Submitted to International Foundations Congress and Equipment Expo, March 5-10, 2018.*
- 16. Hubler, J., <u>Athanasopoulos-Zekkos, A.</u>, and Zekkos, D. (2017). "Pore Pressure Generation of Pea Gravel, Sand, and Gravel-Sand Mixtures in Constant Volume Simple Shear", 3rd International Conference on Performance-Based Design for Earthquake Geotechnical Engineering, Vancouver, BC, Canada, July 17-19, 2017
- Hubler, J., <u>Athanasopoulos-Zekkos, A.</u>, and Zekkos, D. (2017.) "Monotonic, Cyclic and Post-Cyclic Shear Response of a Gravelly Sand ", 2017 Geofrontiers ASCE conference, Olrando, FL, March 12-15
- Nikolaou, S., Vera-Grunauer X., Gilsanz, R. Luque, R. Kishida, T. Diaz-Fanas, G. Antonaki, N. Toulkeridis T., Miranda, E. Diaz, V. Alzamora, D. <u>Athanasopoulos-Zekkos, A.</u> Lyvers, G. Morales, E. Lopez, P. Rollins, K. Wood, C. O'Rourke, T. Lopez, S. (2017). "GEER-ATC Mw7.8 ECUADOR 4/16/16 EARTHQUAKE RECONNAISSANCE PART I : SEISMOLOGICAL & GROUND MOTION ASPECTS", 16th World Conference on Earthquake Engineering, 16WCEE 2017 Santiago Chile, January 9th to 13th 2017
- Vera-Grunauer, X., Nikolaou, S., Gilsanz, R., Diaz-Fanas, G., Antonaki, N., Lopez, S., Luque, R., Casares, B., Caicedo, A., Alzamora, D., Rollins, K., Wood, C., <u>Athanasopoulos-Zekkos</u>, A., Lyvers, G., Diaz, V., Toulkeridis, T., Morales, E. (2017). "GEER-ATC Mw7.8 ECUADOR 4/16/16 EARTHQUAKE RECONNAISSANCE PART II: SELECTED GEOTECHNICAL OBSERVATIONS", 16th World Conference on Earthquake Engineering, 16WCEE 2017 Santiago Chile, January 9th to 13th 2017

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- 21. Zekkos, D., <u>Athanasopoulos-Zekkos, A.</u>, Grizi, A., Greenwood, W. (2014). "The Railroad Embankment Failure of the City of Ann Arbor, Michigan, Case history As a Means for Teaching Geotechnical Engineering", 7th Hellenic Conference in Geotechnical Engineering, Athens, 5-7 November 2014 (in greek).
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- 32. <u>Athanasopoulos-Zekkos, A</u>. and Seed, R. (2010). "A Simplified Methodology for the Seismic Vulnerability Assessment of Earthen Levees", 6th National Hellenic Conference on Geotechnical and Geoenvironmental Engineering, Volos, Greece, Sept. 29-Oct. 1, 2010 (in greek).
- 33. Saadi, M. and <u>Athanasopoulos-Zekkos, A</u>. (2010). "A GIS-enabled approach for the risk assessment of levee systems", 9th US National and 10th Canadian Conference on Earthquake Engineering: Reaching beyond Borders, Toronto, Canada, July 25-29, 2010.
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Other Publications

- 1. Gallagher, P.M., Alestalo, S., <u>Athanasopoulos-Zekkos, A.</u>, Bhatia, S.K., and Soundarajan, S. (2017). "Connecting Faculty in Geotechnical Engineering: Thriving in a Networked World", *GeoStrata, March/April Issue, Geo-Institute of ASCE.*
- Lobbestael, A., and <u>Athanasopoulos-Zekkos, A.</u> (2011). "High Performance Cutoff Walls for Levees in Seismic Regions", U.S. Society of Dams Newsletter, Issue No. 154, July 2011
- 3. Zekkos D.P., <u>Athanasopoulos A.G.</u>, (2004). "Milos Island: Working with earth for 9000 years", *AEG News, Association of Engineering Geologists Magazine*, March 2004, Vol.47, Issue 1
- Zekkos, D., <u>Athanasopoulos, A</u>., Manousakis, J., (2003). "Geotechnical Engineering Experiences in the Homeric Poems", *Newsletter of the Technical Chamber of Greece*, Issue 2231, January 20th, 2003.

Technical Reports – Theses

1. Bastin, S., Bradley, B., Bray, J., Capellaro, C., Cubrinovski, M., del la Torre, C., Green, R., McGann, C., Olsen, M., Palermo, A., M., Stringer, Wotherspoon, L., Aricheta, J., <u>Athanasopoulos-</u>

Zekkos, A., et al. (2017). "Geotechnical reconnaissance of the 2016 Mw 7.8 Kaikoura, New Zealand earthquake", GEER report GEER-053, Cubrinovski and Bray eds, Version 1.0, June 2017

- Alvarado, A., Alzamora, D., Antonaki, N., Arteta, C., <u>Athanasopoulos-Zekkos, A.</u>, Bassal, P., Caicedo, A., Casares, B., Davila, D., Diaz, V., Diaz-Fanas, G., Gilsanz, R., González, O., Hernandez, L., Kishida, T., Kokkali, P., López, P., Luque, R., Lyvers, G.M., Maalouf, S., Mezher, J., Miranda, E., Morales Moncayo, E., Nikolaou, S., O'Rourke, T., Ochoa, I., O'Connor, J.S., Ripalda, F., Rodríguez, L.F., Rollins, K., Stavridis, A., Toulkeridis, T., Vaxevanis, E., Vera-Grunauer, X., Villagrán León, N., Wood, C., Yepes, H., Yepez, Y. (2016). "GEER-ATC Earthquake reconnaissance, April 16, 2016 Muisne, Ecuador", GEER report GEER-049, Nikolaou, Grunauer and Gilsanz eds, Version 1.0b, October 2016
- 3. <u>Athanasopoulos-Zekkos, A.</u>, Woods, R.D. and Gkrizi, A. (2014). "Effect of pile-driving induced vibrations on nearby structures and other assets", final report submitted to MDOT, ORBP Number OR10-046, RC-1600
- 4. Cortese, G., Zekkos, D., <u>Athanasopoulos-Zekkos, A</u>. (2012a). "Network for Women in Civil and Environmental Engineering First Annual Report", May 31 2012, University of Michigan
- 5. Cortese, G., Zekkos, D., <u>Athanasopoulos-Zekkos, A</u>. (2012b). "Results of 2011 Undergraduate and Graduate Survey", September 15, 2012, University of Michigan.
- 6. <u>Athanasopoulos, A.G.</u> (2008)., "Select Topics on the Static and Dynamic Response and Performance of Earthen Levees", *Dissertation, Doctor of Philosophy*, Department of Civil and Environmental Engineering, University of California, Berkeley, California, USA.
- 7. <u>Athanasopoulos, A.G.</u> (2006). "Investigation of the performance of the flood-protection systems of New Orleans in Hurricane Katrina, on August 29, 2005", *report for the Technical Chamber of Greece*.
- R. B. Seed, R. G. Bea, R. I. Abdelmalak, <u>A. G. Athanasopoulos</u>, G. P. Boutwell, J. D. Bray, J.-L. Briaud, C. Cheung, D. Cobos-Roa, J. Cohen-Waeber, B. D. Collins, L. Ehrensing, D. Farber, M. Hanemann, L. F. Harder, K. S. Inkabi, A. M. Kammerer, D. Karadeniz, R.E. Kayen, R. E. S. Moss, J. Nicks, S. Nimmala, J. M. Pestana, J. Porter, K. Rhee, M. F. Riemer, K. Roberts, J. D. Rogers, R. Storesund, A. V. Govindasamy, X. Vera-Grunauer, J. E. Wartman, C. M. Watkins, E. Wenk Jr., and S. C. Yim, (2006). "Investigation of the performance of the New Orleans flood protection systems in hurricane Katrina on August 29, 2005", *Report No.UCB/CCRM 06/01*, July 2006, University of California at Berkeley, (http://www.ce.berkeley.edu/~new_orleans/)
- 9. <u>Athanasopoulos, A.</u>, Zekkos D. (2006). "Geoengineering, refereed journals and case histories: A survey", *Geoengineer.org report* GEO/01/06, September 2006.
- 10. <u>Athanasopoulos, A.G.</u> (2003). "Rion Antirion Bridge: The foundation system of the Antirion approach viaduct and results of axial and lateral loading tests on 2m diameter steel pipe piles", *Undergraduate Thesis, Ptychion*, Department of Civil Engineering, University of Patras, Greece.

Invited Lecture Presentations

- 1. "Liquefaction Assessment of Gravelly Soils using the DPT", Impact Testing for Site Characterization Workshop at SuperPile '19, DFI, Seattle, May 1, 2019
- 2. "Liquefaction of Gravelly Soils and Their Impact on Infrastructure", Purdue Geotechnical Society *Workshop on Geotechnics of Natural Hazards*, Lafayette, April 26, 2019
- 3. "Liquefaction of Gravelly Soils and Their Impact on Infrastructure", *Civil and Environmental Engineering Department Seminar*, UC Berkeley, March 1, 2019

- 4. "Laboratory and In-Situ Assessment of Liquefaction of Gravelly Soils", Themed Lecture, Geosystems Session, 3rd International Conference on Performance-based Design in Earthquake Geotechnical Engineering", Vancouver BC, July 18, 2017
- 5. "Liquefaction Triggering and Post-Liquefaction response of Gravelly Soils", 4th Annual ACEC NY Geotechnical Symposium, Syracuse, NY, May 8, 2017
- 6. "Evaluation of Gravelly Soil Liquefaction through Laboratory and Field Testing", 35th Geoengineering Distinguished Lecture Series, UC Berkeley, May 4, 2017
- 7. "Post-Liquefaction Response of Gravelly Soils", US-NZ-Japan International Workshop on Liquefaction-Induced Ground Movement Effects, UC Berkeley, November 3, 2016
- 8. "Characterization of pile-driving induced vibrations", invited by the *Civil Engineering Dept. of the National Technical University of Athens (NTUA) Greece, and the National Scientific Committee of Geotechnical Engineering,* June 1, 2016
- 9. "Pile driving induced vibrations and their effects on nearby structures", *UM, CEE Geotechnical Seminar*, November 4, 2015
- 10. "Pile driving induced vibrations and their effects on nearby structures", UC Davis, CEE Geotechnical Seminar, April 2, 2015
- 11. Keynote presentation: "Assessment of Seismic Vulnerability of Earthen Levees", 22nd Vancouver Geotechnical Society Symposium, Vancouver B.C., June 13, 2014
- 12. "Effect of pile-driving induced vibrations on nearby structures and other assets", 2013 Midwest Geotechnical Conference, Madison, WI, September 24, 2013
- 13. "Levees: Learning from the past Looking to the future", *CEE Department, Syracuse University*, *NY*, April 12, 2013
- 14. "Techniques for reviewing journal articles and the process for getting your work published", UROP/WISE seminar, University of Michigan, October 17, 2012
- 15. "Performance of the flood-protection systems of New Orleans in Hurricane Katrina Lessons Learned", invited by the *Civil Engineering Dept. of the National Technical University of Athens* (NTUA) Greece, the National Scientific Committee of Geotechnical Engineering and the National Committee of Earthquake Engineering, December 17, 2010
- 16. "Investigation of the levee failures in New Orleans after Hurricane Katrina", UROP Research seminar, University of Michigan, October 20, 2010
- "Teaching techniques for increasing female participation and retention in Civil Engineering" at the 6th National Hellenic Conference on Geotechnical and Geoenvironmental Engineering, in Volos, Greece, Sept. 29-Oct. 1, 2010 for the special session titled: "Innovative teaching methods in Geotechnical Engineering", September 30, 2010
- 18. "Lessons learned from the performance of the flood-protection systems after Hurricane Katrina" 2010 CEEFA Spring Technical Session, University of Michigan, April, 2010
- 19. "Levees: Learning from the past Looking to the future", ASCE chapter, University of Michigan, Ann Arbor, MI, February 13, 2009
- 20. "Assessment of Seismic Vulnerability of Levees in Select California Regions", *EERI Student Chapter of the University of Notre Dame*, Notre Dame, IN, January 27, 2009
- 21. "Variability of Levee Response Due to Time History Selection", *COSMOS annual meeting and technical session*, Oakland, CA, November 21, 2008
- 22. "Assessment of Seismic Vulnerability of Levees in Select California Regions", University of California, Berkeley, Geoengineering Wednesday Seminar Series, April 16, 2008

- 23. "Seismic Levee Fragility and Flooding Hazard for Select California Regions", ASCE San Francisco chapter Geotechnical Group Workshop, February 19, 2008
- 24. "Investigation of the performance of the flood-protection systems of New Orleans in Hurricane Katrina, on August 29, 2005", *Technical Chamber of Greece, Special Scientific Committee of Soil Mechanics and Foundations and the Technical Chamber of Greece*, December 19, 2006
- 25. "Overview of the Investigation of the Performance of the New Orleans' Flood Protection Systems in Hurricane Katrina on August 29, 2005", *ASCE-Geo-Institute chapter of Texas A&M University, College Station,* November 16, 2006
- 26. "Performance of the flood-protection systems of New Orleans in hurricane Katrina on August 29, 2005 Lessons Learned", University of California at Berkeley, Civil & Environmental Engineering Graduate Student Societ,. October 24, 2006