

PROMOTION RECOMMENDATION  
The University of Michigan  
College of Engineering  
Department of Civil and Environmental Engineering

**Approved by the  
Regents  
May 21, 2015**

Adda Athanasopoulos-Zekkos, assistant professor of civil and environmental engineering, Department of Civil and Environmental Engineering, College of Engineering, is recommended for promotion to associate professor of civil and environmental engineering, with tenure, Department of Civil and Environmental Engineering, College of Engineering.

Academic Degrees:

Ph.D.	2008	University of California, Civil & Environmental Engineering, Berkeley, CA
M.S.	2004	University of California, Civil & Environmental Engineering, Berkeley, CA
B.S./M.E.	2003	University of Patras (joint five-year degree), Civil Engineering, Patras, Greece

Professional Record:

2008 – present	Assistant Professor, Department of Civil and Environmental Engineering, University of Michigan
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Summary of Evaluation:

Teaching: Professor Athanasopoulos-Zekkos is an excellent teacher. Since joining Michigan, she has taught one undergraduate and three graduate courses (which she developed); her average Q2 score is 4.61, placing her among the better teachers in the college. Students praise her not only for her classroom instruction, but also for her interest in their success. Her educational efforts go beyond teaching courses. She is an excellent mentor to her graduate students; she has already graduated two Ph.D. students. She is also active in advising M.S. students and directing undergraduate major projects.

Professor Athanasopoulos-Zekkos works toward improving the experience of students in the department, and she is a leader in a successful program (NeWinCEE) that focuses on increasing the number of female graduate students in civil engineering. Her outreach activities related to teaching improve both the diversity of the civil engineering student body and their experience in the department. She is a true asset to the educational program of the department.

Research: Professor Athanasopoulos-Zekkos came to Michigan with strong interests in levee protection systems. Soon after, she diversified her research portfolio to liquefaction of soils, effects of foundation pile-driving vibrations on structures, flood risk assessment in levee-protected regions, seismic isolation of retaining walls, and ground motion selection criteria for civil infrastructure design. She has been successful in securing research funds with over \$1M from a combination of federal sources such as the National Science Foundation and the Michigan Department of Transportation. She has recruited Ph.D. students to work on research in the new

directions noted above. She has received the NSF CAREER award, attesting to her research being nationally recognized. She was recently selected by the Geo-Institute to receive the 2015 Arthur Casagrande Professional Development Award. This award recognizes outstanding accomplishments as evidenced by completed works, reports or papers in the field of geotechnical engineering.

#### Recent and Significant Publications:

Athanasopoulos-Zekkos, A., Pence, H. and Lobbestael, A., (2014), "Ground Motion Selection for Seismic Slope Displacement Evaluation Analysis of Earthen Levees," *Earthquake Spectra*, Earthquake Engineering Research Institute, accepted.

Saadi, M. and Athanasopoulos-Zekkos, A. (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.

Athanasopoulos-Zekkos, A. and Seed, R.B., (2013), "Simplified Methodology for Consideration of 2D Dynamic Response of Levees in Liquefaction Triggering Evaluation," *Journal of Geotechnical and Geoenvironmental Engineering*, Vol.139 (11), pp. 1911-1922.

Lobbestael, A., Athanasopoulos-Zekkos, A. 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.

Athanasopoulos-Zekkos, A. and Saadi, M., (2012), "Ground Motion Selection for Liquefaction Evaluation Analysis of Earthen Levees," *Earthquake Spectra*, Earthquake Engineering Research Institute, Vol. 28 (4), pp. 1331-1351.

Service: Professor Athanasopoulos-Zekkos is a very active member of the academic and professional community. She is active at the national level, particularly at ASCE (American Society of Civil Engineers); she leads the program for younger members and diversity within the Slopes, Embankments and Dams committee. She also has served on the organizing committee and was co-editor of the proceedings for the 2012 Geo-Congress, the most important annual event of ASCE Geo-Institute.

Professor Athanasopoulos-Zekkos has been actively working on departmental committees, but her most important service contribution at the department level is spearheading the Network for Women in CEE (NeWinCEE). This program seeks to increase the number and enhance the experiences of women graduate students in civil engineering. The program is in its second round of funding from Rackham, and it has been so successful that it has become a Rackham model program focusing on the graduate student community and improving the climate at the University.

#### External Reviewers:

Reviewer A: "...her record demonstrates a trajectory of continued growth in her research, teaching, and service contributions...There is no doubt that Dr. Athanasopoulos-Zekkos' record would earn her promotion to the rank of Associate Professor with tenure at my university."

Reviewer B: “Her main research topic, levee stability, is very important...I would rate her research contribution as excellent.”

Reviewer C: “The areas in which Dr. Athanasopoulos-Zekkos concentrates her research are critical areas of national need...has made significant contributions to our body of knowledge in this area...”

Reviewer D: “Her work was of very high quality and has had a substantial impact...She has demonstrated excellence in research and teaching, and has been extremely active in a variety of service activities. She is highly regarded by her peers and is widely recognized at the national level for her high-quality work on levees and embankments.”

Reviewer E: “...Prof. Athanosopoulos-Zekkos has shown the ability to identify and tackle challenging problems that face society...The relevance and impact of this work has already been recognized by researchers and practitioners, with her work serving as the primary catalyst for a major reassessment of California’s extensive levee systems...”

Reviewer F: “She is bright and creative. She is developing an excellent reputation ... development to date is consistent with the highest quality academics at a similar stage in their careers at research-intensive universities.”

Reviewer G: “...level of funding is excellent. It is also important to note that the NSF CAREER Award is very competitive, with only one geotechnical engineer in the country generally receiving it each year.”

Summary Recommendation: Professor Athanasopoulos-Zekkos has demonstrated that she is an excellent teacher and mentor. She is a forward-looking researcher working in the areas of national interest, and an exceptional faculty member contributing to the academic community and to the profession overall. It is with the support of the College of Engineering Executive Committee that I recommend Adda Athanasopoulos-Zekkos for promotion to associate professor of civil and environmental engineering, with tenure, Department of Civil and Environmental Engineering, College of Engineering.



David C. Munson, Jr.  
Robert J. Vlasic Dean of Engineering  
College of Engineering

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