AMY DIEKMANN, PH.D., P.E.

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11044 Native Dancer Way
Daphne, Alabama 36526

CURRENT POSITION

Assistant Professor
University of West Florida
Department of Mechanical Engineering
Hal Marcus College of Science and Engineering
Pensacola, Florida 32514

EDUCATION

Doctor of Philosophy in Civil Engineering, Auburn University, Conferred August 2023
Auburn, AL
Dissertation: Laboratory and Field Measurements of Moisture Content and Bulk Electrical Conductivity of Subgrade and Base Course Materials
Co-Advisors: J. Brian Anderson and Benjamin Bowers

Ph.D. Candidate in Civil Engineering, The Ohio State University, August 2016 – April 2020
Columbus, OH
Dissertation Topic: 2D and 3D numerical modeling of a staged construction embankment over ponded fly ash to assess for static liquefaction
Advisor: Tarunjit Butalia

Masters of Civil Engineering with an emphasis in Structural Engineering, North Carolina State University, Conferred May 2012
Raleigh, NC

Bachelor of Science Civil Engineering, University of Evansville, Conferred May 2005
Magna Cum Laude, Chi Epsilon
Evansville, IN

PROFESSIONAL LICENSURE

Professional Engineer (P.E.) – Indiana (PE11011378), Ohio (PE.84873), North Carolina (049367), Tennessee (125361), Alabama (PE51873), Mississippi (33412), Virginia (402065832)

EMPLOYMENT HISTORY

University of West Florida, Pensacola, FL
Hal Marcus College of Science and Engineering, Department of Mechanical Engineering
Assistant Professor, August 2024 - present

Auburn University, Auburn, AL
Samuel Ginn College of Engineering, Department of Civil and Environmental Engineering
Post Doctoral Research Associate, September 2023-July 2024

Auburn University, Auburn, AL
Samuel Ginn College of Engineering, Department of Civil and Environmental Engineering
Graduate Research Assistant, August 2021-August 2023
Graduate Teaching Assistant, Geotechnical Engineering II, January 2021 - August 2021

The Ohio State University, Columbus, OH
College of Engineering, Department of Civil, Environmental and Geodetic Engineering
Graduate Teaching Assistant, August 2017 – April 2018

University of Southern Indiana, Evansville, IN
Potts College of Science, Engineering, and Education, Department of Engineering
Adjunct Instructor, August 2013 – May 2015

Ivy Tech Community College of Indiana, Evansville, IN
School of Advanced Manufacturing, Engineering and Applied Sciences, Departments of
Building Construction Management and Engineering Technology (formerly Pre-Engineering)
Adjunct Instructor, January 2013 – May 2015

PCI Salas O'Brien (formerly PCI Skanska), Evansville, IN
Structural Engineer, September 2008 – December 2012

Terracon Consultants, Inc., Charlotte, NC
Construction Materials Testing & Geotechnical Engineering Departments
Project Manager, April 2007 – August 2008

Intertek-PSI (formerly Professional Service Industries, Inc.), Charlotte, NC
Construction Materials Testing Department
Project Manager, April 2006 – March 2007

HDR (formerly Devine Tarbell & Associates), Charlotte, NC
Associate Engineer, October 2005 – March 2006

RESEARCH EXPERIENCE

Post Doctoral Researcher, ***NOAA Effects of Sea Level Rise 2021: Surface Transportation Resilience; Surface Transportation, Sea Level Rise, and Coastal Storms: A Sustainable Path to Increased Resilience*.** Collaborators: Dr. Benjamin Bowers, PI, Dr. Brian Anderson, Dr. Jose Vasconcelos, Dr. Frances O'Donnell, Rob Holmes, Wendiam Sawadgo, Dr. Brett Webb, and Dr. Daniel Wright. Funding Agency: National Oceanic and Atmospheric Administration and Federal Highway Administration. Project Dates: August 2021 – August 2025

Post Doctoral Researcher, ***Talladega Dirt Track*.** Collaborators: Dr. Benjamin Bowers, Co-PI, Dr. Brian Anderson, Co-PI. Funding Agency: Internally funded. Project Dates: February 2022 – present.

Graduate Research Assistant, ***Evaluation of Alabama Limestone Sources for Use as Pavement Aggregate Base***. Collaborators: Dr. Benjamin Bowers, PI, Dr. Brian Anderson, Co-PI. Funding Agency: Alabama Department of Transportation. Project Dates: July 1, 2021 – July 31, 2024.

STUDENT MENTORING

1. Sam Dunlop, undergraduate student, *Talladega Dirt Track* project, Auburn University
2. Ben Prowell, undergraduate student, *Talladega Dirt Track* project, Auburn University

TEACHING EXPERIENCE

INSTRUCTOR

1. **Geotechnical Engineering II** CIVL 4310 – Spring 2024
2. **Mechanics of Materials,** EML 3011 – Fall 2024

CO-INSTRUCTOR

3. **Geotechnical Engineering I** CIVL 3310 – Fall 2023

ADJUNCT INSTRUCTOR

1. **Introduction to Engineering** ENGR 107 – Fall 2013, Spring 2014, Fall 2014, Fall 2015, University of Southern Indiana
2. **Soil Mechanics** CE 381 - Fall 2014, Fall 2015, University of Southern Indiana
3. **Geotechnical Engineering Design** CE 481 – Spring 2014, Spring 2015, University of Southern Indiana
4. **Technology for Construction** BCOM 100 – Fall 2015, Ivy Tech Community College
5. **Concrete and Soils** BCOM 105 – Spring 2013, Spring 2014, Spring 2015, Ivy Tech Community College
6. **Engineering Software Tools II** ENGR 160 – Spring 2015, Ivy Tech Community College

TEACHING ASSISTANT

1. **Geotechnical Engineering Laboratory** CIVILEN 3541 – Fall 2017 – Spring 2018, The Ohio State University
2. **Geotechnical Engineering II** CIVL 4310 – Spring 2021, Auburn University

PUBLICATIONS

PEER-REVIEWED JOURNALS

1. Diekmann, Amy. (2023) "Soil Moisture Sensing in Saltwater: A Review." *Environmental Earth Sciences.* Accepted. DOI : 10.1007/s12665-023-11188-4.
2. Diekmann, A., Bowers, B., Anderson, J.B. (2024) "Comparison of Two Dielectric Sensors In Coarse-Grained Soils Of Increasing Salinity". *International Journal of Geotechnical Engineering.* Accepted. DOI: 10.1080/19386362.2024.2314896.
3. Diekmann, A, Anderson, J.B., Bowers, B. (2023). "Monitoring of In-Situ Moisture Content and Bulk Electrical Conductivity of Base Course and Subgrade of a Coastal Alabama State Highway." Manuscript under preparation.
4. Diekmann, A, Bowers, B., Anderson, J.B., Grant, J. (2023). "Assessing the Impact of Moisture Content and Bulk Electrical Conductivity on the Condition of Coastal Pavements Through International Roughness Index Testing." Manuscript under preparation.

OTHER PUBLICATIONS

1. Roueche, D., I. Robertson, A. Diekmann, V. Kotzamanis, D. Kalliontzis, A. Kyprioti, K. Alawode, H. Dang, T. Lahna, D. Reed, G. Holtzer, E. Gerczak, (2023) "StEER: Hurricane Otis Annotated Media Repository", in StEER - Hurricane Otis. DesignSafe-CI. https://doi.org/10.17603/ds2-mb7z-xw74
2. Kijewski-Correa, T., D. Roueche, D. Prevatt, S. Garcia, A. Jana, I. Robertson, S. Admin, C. Hung, S. Gunay, M. Marinkovic, J. Carrillo, B. Alhawamdeh, K. Erazo, M. Nobahar, E. Toraman, D. Gho, B. Duran, C. Chou, S. Chou, C. Lin, A. Córdova, H. Lin, G. Yu, Y. Liu, G. Zhou, S. Zaoui, C. Wang, S. Xu, X. Romão, A. Kyprioti, B. Petreski, N. BEKTAS, T. Lahna, A. Diekmann, H. Dang, P. Arora, K. Mosalam, K. Wolohan (2024). "StEER: 2024 Hualien City Earthquake Annotated Media Repository", in StEER- Hualien City, Taiwan Earthquake. DesignSafe-CI. https://doi.org/10.17603/ds2-4xv5-qc41

UNIVERSITY AND PROFESSIONAL SERVICE

FORMAL PEER REVIEWER

1. American Society of Civil Engineers (ASCE) Geo-Frontiers 2025, Louisville, Kentucky, March 2-5, 2025

OUTREACH

1. Judge, VEX Bot Trot on the Plains (VRC MS/HS), Auburn University, November 11, 2023

PROFESSIONAL ORGANIZATIONS

1. American Society of Civil Engineering (ASCE), member
2. American Society for Engineering Education (ASEE), member
3. National Science Foundation (NSF) StEER, member
4. National Science Foundation (NSF) GEER, member

HONORS AND AWARDS

1. **Chi Epsilon Civil Engineering Honor Society**
2. **Terracon Graduate Award** – February 2022