# KENAN HAZIRBABA, PH.D., P.E.

680 W Sam Houston Pkwy S. Apt 1910 Houston, TX 77042 Tel: 510-3857486 Email: khazirbaba@uttyler.edu

### **EDUCATION**

<b>The University of Texas at Austin</b> , Austin, TX Ph.D. in Civil Engineering, 2005	
<b>Bogazici University</b> , Istanbul, Turkey Master of Science in Civil Engineering, 1999	
<b>Istanbul Technical University</b> , Istanbul, Turkey Bachelor of Science in Civil Engineering, 1996 ( <i>Summa Cum Laude</i> )	
ACADEMIC APPOINTMENTS	
The University of Texas at Tyler, Houston, TX Professor of Instruction	Aug 2022- Current
<b>The American University of Ras Al Khaimah,</b> UAE Professor	Jan 2018- Aug 2022
<b>Khalifa University</b> , Abu Dhabi, UAE Associate Professor	Aug 2013- Jan 2018
<b>The American University of Sharjah,</b> Sharjah, UAE Associate Professor	Aug 2011- Aug 2013
<b>King Fahd University of Petroleum and Minerals,</b> KSA Assistant Professor	July 2010 – Aug 2011
<b>University of Alaska,</b> AK, USA Assistant Professor	Aug 2006 - July 2010

The University of Texas at Austin, TX, USA Graduate Research Assistant	Jan 2001- May 2005
<b>Texas A&amp;M University,</b> TX , USA Research Engineer	Jan 2000 - Aug 2000
<b>Bogazici University</b> , Istanbul, Turkey Lecturer, Graduate Student Researcher	Aug 1997 - Jan 2000

### **INDUSTRY EXPERIENCE**

<b>Independent Consultant,</b> Walnut Creek, CA Geotechnical Consultant for various infrastructure projects	Aug 2007 – Present
<b>GeoSyntec Consultants,</b> Oakland, CA Senior Engineer	May 2005 - Aug 2006
<b>Bilyap Construction Co.,</b> Istanbul, Turkey Geotechnical Project Consultant	March 1999 - Jan 2000
Geocons Engineering Co., Istanbul, Turkey Project Engineer	May 1996 - Sept 1997

### **Representative Industry Project Experience**

- *Pipeline Forensic Consultation, Dixon, California.* Consultant Engineer for forensic assessment and evaluation of distress of portions of an 18,000-foot-long, 30 to 42-in diameter VCP sewer line. Tasks included reviewing and evaluating existing data and asbuilt records, discussing the construction history with key participants and stakeholders, touring the pipe manufacturing plant, reviewing newly-acquired video inspection of line, planning and observing excavation of several sections of failed pipe, reviewing design calculations, writing a report to evaluate the most likely causes of the observed failure, assisting the client in developing a pipe repair approach and providing technical services as needed.
- *Illinois Street Sewer Pipeline Project, San Francisco, CA.* Project Engineer for geotechnical and environmental investigation for 2,000 ft of new 54" to 60" sewer line in a filled industrial area overlying bay mud. Used geophysical data, soil borings, and CPTs to evaluate subsurface conditions. Evaluated microtunneling, directional drilling, pipe jacking and cut-and-cover methods of construction. Assessed environmental conditions and provided recommendations for handling and disposal of contaminated soils. Provided geotechnical design recommendations.

- Crystal Springs Pipeline No. 1 Replacement, Brisbane, California Project Engineer for geotechnical engineering and environmental investigation for major large-diameter water pipeline replacement, including routing beneath a state Superfund site. Project involved approximately 2 miles of relocated and new pipeline for San Francisco's Utilities Engineering Bureau.
- *Pipe Jacking Consultation, Vallejo, California.* Consultant Engineer for geotechnical consultation to contractor jacking a 48-in diameter replacement sewer pipe through soft lagoon sediments adjacent to an embankment and state highway. Contractor sought assistance to support "changed site condition" claim. Reviewed existing geotechnical and related information and provided opinion on subsurface conditions.
- Contra Costa Water District Raw Water Seismic Improvement Program, Concord, California Senior Staff Engineer for geotechnical/seismic engineering services on five projects for CCWD. These projects include a new pipeline, a new pipeline intertie, a pipeline fault crossing, liquefaction assessment of a portion of the Contra Costa Canal (including a new bypass pipeline route), and liquefaction evaluation at three locations where petroleum pipeline cross the Contra Costa Canal. Project scope included review of existing geological, environmental and geotechnical data, soil sampling, engineering analyses, preparation of a report and assistance with construction.
- Seismic Review for PG&E Power Plant Tank Farms, Morro Bay, CA. Staff Engineer for geotechnical investigation for two existing large fuel oil tank farms, appurtenant pipelines, and containment dikes. Reviewed existing geotechnical data and tank farm design drawings, conducted field in-situ CPT soil testing program, performed soils characterization, estimated foundation bearing capacity under static and dynamic loads, assessed liquefaction potential and its impacts on tank and pipeline stability, settlement, and lateral restraint, assessed dike slope stability under static and seismic loading, and documented areas for further structural analyses.
- *Pile Driving Vibration Effects on Sewer Line, Millbrae, CA.* Senior Engineer for evaluating potential impacts of ground-induced pile driving vibrations on buried RCP sewer line near Highway 101 and San Francisco International Airport. Sewer line had experienced previous episodes of leakage, and the owner was concerned that nearby pile driving would cause additional problems. Analyses suggested that the pile-driving vibrations would be unlikely to cause damage to a sewer line that was in good shape. However, the differential settlement that apparently caused the previous leakage may have created a condition of incipient failure along other sections. A ground vibration monitoring program and sewer line inspection were recommended.
- *Pipeline Routing Study, Marathon Oil, Gulf of Mexico.* Assisted in the review of bathymetry, side scan sonar, geophysical, and geotechnical data to select alternative routes for a subsea pipeline in mudslide-prone area in the Mississippi River delta area in the Gulf of Mexico.

• Geotechnical Engineering Support for LNG Processing and Export Facility. Consultant Engineer for a major petrochemical client and other project shareholders in the siting, geohazard assessment, targeted ground improvement, and foundation evaluation for a proposed on-shore liquefied natural gas (LNG) processing and marine terminal facility on the western coast of Africa. My team's role on behalf of the overall project operator included feasibility assessments for site foundations and, during construction, provision of geotechnical assurance reviews during dredging and filling operations to improve site conditions during foundation construction.

# **CERTIFICATIONS AND TECHNICAL SKILLS**

- HAZWOPER (40 hour) certified
- Certified experience in Nuclear Density Gage operations
- Extensive experience in laboratory testing of soils (consolidation, direct shear, triaxial, cyclic triaxial, simple shear, cyclic simple shear)
- Experienced in designing and building laboratory soil testing systems
- Experienced with LabVIEW, Mathematica, Mathcad, MATLAB, GeoFEAP, ProShake, Slope/W, UTEXAS4 (slope stability)

# HONORS AND AWARDS

- The American University of Sharjah Professional Development Award, 2012
- King Fahd University Excellence in Research Award, 2011
- Institute of Northern Engineering Travel Award, 2009
- Faculty Development Award (University of Alaska), 2007
- Professional Development Award (University of Texas at Austin), 2004
- Consortium of Universities for Research in Earthquake Engineering Award, 2004
- Turkish Oil Foundation Scholarship, 2003
- Turkish Science Progress Foundation Scholarship, 2001
- Bogazici University Foundation Fellowship, 1999
- Uran Foundation Scholarship, 1998-1999
- The Ministry of Education Scholarship, 1998-1999
- Honor Graduation Award, Istanbul Technical University, 1996
- Istanbul Technical University (ITU) Dean's Honor Student List, 1996
- Turkish Society of Civil Engineers and Architects Graduation Award, 1996
- Turkish Science and Technical Research Council Scholarship, 1996-1998
- ITU Professor Izettin Silier Distinguished Student Award, 1995
- Turkish Education Foundation Scholarship, 1993-1996
- Istanbul Metropolitan Municipality Scholarship, 1993-1996
- Istanbul Technical University Foundation Scholarship, 1993-1995
- Mardin Education Foundation Scholarship, 1993-1997
- Presidential award (by the former president of Turkey, **Turgut Ozal**) for the first place in Mathematics Competition of TUBITAK, 1990

### **PROFESSIONAL CONTRIBUTIONS**

#### **Professional Registration**

Registered Professional Engineer (State of Alaska P.E. License Number: 12062)

#### **Professional Affiliations**

American Society of Civil Engineers (ASCE)	Member
American Society of Engineering Education (ASEE)	Member
American Society of Mechanical Engineers (ASME)	Member
International Society of Soil Mechanics and Geotechnical Engineering	Member
Permafrost Technology Foundation (PTF)	Member
Seismological Society of America (SSA)	Member
Earthquake Engineering Research Institute (EERI)	Member

#### **Professional Service – Reviewer**

Journals:

ASCE Journal of Geotechnical and Geoenvironmental Engineering ASTM Geotechnical Testing Journal Soil Dynamics and Earthquake Engineering Cold Region Science and Technology Arabian Journal for Science and Engineering Engineering Geology Geotechnique Letters

#### Conferences:

IS-TOKYO 2009 International Conference on Performance Based Design, 2009 The 39<sup>th</sup> Annual Frontiers in Education (FIE) Conference, 2009 The Fourth Geotechnical Earthquake and Soil Dynamic Conference, 2008 The 38<sup>th</sup> Annual Frontiers in Education (FIE) Conference, 2008

### **Professional Activities - Research**

89<sup>th</sup> Annual Transportation Research Board (TRB) Annual Meeting (January 2010) Participant and presenter, Washington DC.

17<sup>th</sup> International Conference of Soil Mechanics and Geotechnical Engineering (October 2009)

Participant and presenter, Alexandria, Egypt.

2009 Pacific Earthquake Engineering Research Center (PEER) Annual Meeting (October 2009)

Participant and presenter, San Francisco, CA.

95<sup>th</sup> AASHTO Subcommittee on Materials Meeting (August 2009)

Participant and presenter, Anchorage, AK.

*BCR2A*, 09 8<sup>th</sup> International Conference on Bearing Capacity of Roads and Railways (July 2009)

Participant and presenter, Urbana, IL.

IS-TOKYO 2009 International Conference on Performance Based Design (June 2009)

Participant, presenter, session chair, Tokyo, Japan.

- 4<sup>th</sup> Geotechnical Earthquake Engineering and Soil Dynamics Conference (May 2008) Participant, presenter, Sacramento, CA.
- 4<sup>th</sup> International Conference on Geotechnical Earthquake Engineering (June 2007) Participant, presenter, Thessaloniki, Greece.

### **Public and Community Service**

Fundamental Engineering Exam Review Courses (2008, 2009) Organized, prepared, and delivered lectures to prepare exam takers in Fairbanks

North Pole High School Science/Expo Fair

Actively involved in organizing this event and acted as academic advisor Professional Engineering Exam Preparation Lectures (2007)

Prepared and delivered exam review lectures in cooperation with ASCE-Fairbanks

### University Service

The University of Texas at Tyler Faculty Hiring Committee (2022-2023) The American University of Ras Al Khaimah Faculty Promotion Committee (2018-2022) The American University of Ras Al Khaimah Research Committee (2018-2021) The American University of Ras Al Khaimah Personnel Committee (2018-2021) Khalifa University Civil Engineering Laboratory Coordinator (2013-2018) Khalifa University Civil Engineering ABET Coordinator (2013-2018) Khalifa University Faculty Appointments and Promotion Committee (2013-2018) The American University of Sharjah (AUS) FE/PE Exam Coordinator (2012-2013) King Fahd University of Petroleum and Minerals ABET Committee (2010-2011) King Fahd University of Petroleum and Minerals Faculty Search Committee (2010-2011) King Fahd University of Petroleum and Minerals Graduate Committee (2010-2011) University of Alaska Fairbanks (UAF) Faculty Senate (2008-2010) UAF Faculty Affairs Committee (2008-2010) University of Alaska Fairbanks (UAF) ABET Committee (2007-2010) UAF College of Engineering and Mines Scholarship Committee (2007-2010) UAF EPSCOR Reviewer for Undergraduate and Graduate Research Proposals (2007)

### **STUDENT ADVISEES**

#### **Doctoral Thesis Advisees**

• Yu Zhang (Completed-December 2009) Impact of Freeze-Thaw on Liquefaction Potential and Dynamic Properties of Mabel Creek Silt

### Master's Thesis Advisees

• Maksat Omarow (Completed-May 2010) Liquefaction Potential and Post-Liquefaction Settlement of Saturated Clean Sands; and Effect of Geofiber Reinforcement  Abdalla Shath (Co-advising with Dr. Mughieda at Abu Dhabi University; to be completed in May 2019) Developing Procedures for Lateral Capacity of Piles Subjected to Seismic Loading in Abu Dhabi Sand

### Undergraduate Research Advisees

- Dana Al Muhairi (2014-2016)
- Meera Al Yammahi (2014-2016)
- Hazem Al Sadi (2011-2012)
- Mojtaba Safdary (2011-2012)
- Moussa El-Abed (2011-2012)
- Ahmed Al-Janoubi (2010-2011)
- Peter Jackson (2009-2010)
- Jacob Gorski (2009-2010)
- Rodney Collins (May 2008-December 2009)
- Duane Davis (May 2007-December 2008)

### Graduate Student Committee

- Dorothea Trible (Master's-Graduated June 2011)
- Jacob Horazdovsky (Master's-Graduated May 2010)

## SPONSORED RESEARCH PROJECTS

- An Innovative Approach to Stabilizing Infrastructure Supporting Soils (Co-PI) Abu Dhabi Department of Education and Knowledge (ADEK), 2017-Current (\$40,000)
- Large Direct Shear Testing of Unstable Sands (Co-PI) Abu Dhabi University Office of Research and Sponsored Programs (ORSP), 2016 (\$50,000)
- Developing Procedures for Lateral Capacity of Piles Subjected to Seismic Loading in Abu Dhabi Sand (Co-PI) Abu Dhabi University Office of Research and Sponsored Programs (ORSP), 2015 (\$10,000)
- Stabilization of Dune Sand with Geofibers and Synthetic Fluid (PI) King Fahd University of Petroleum and Minerals, 2011 (\$55,000)
- Evolutionary Intensity Measures for more Accurate and Informative Liquefaction Hazard Evaluation (co-PI with S. Kramer of U. Washington and M. Khun of U. Portland) National Science Foundation, 2009 (\$638,000)

• A Field Study on the Application of Geofiber and Synthetic Fluid to Stabilize Sandy Roads (PI)

Federal Highway Administration, Coordinated Technology Implementation Program 2009 (\$200,000)

- A General Review of Slope Stability Problems and Case Histories in Alaska (PI) Alaska University Transportation Center, 2009 (\$69,000)
- Utilization of Screw Piles in High Seismicity Areas of Cold and Warm Permafrost (PI) Almita Manufacturing Ltd. (Canada) and Alaska University Transportation Center, 2009 (\$380,000)
- Stabilizing Marginal Soils with Geofibers and Synthetic Fluid (PI) Alaska Department of Transportation and Alaska University Transportation Center, 2008 (\$400,000)
- Field CBR Measurements of Runways (PI) Northern Air Cargo 2007 (\$5,000)
- The Use of Geofibers and Synthetic Fluid as Stabilizers for Marginal Soils (PI) Peak Civil Technologies, Inc. 2007 (\$12,252)
- Evaluation of Liquefaction Resistance in Degrading Permafrost and Seasonally Frozen Ground (PI)
  Permafrost Technology Foundation and Alaska University Transportation Center, 2007 (\$45,000)
- Effects of Permafrost and Seasonally Frozen Ground of the Seismic Response of Transportation Infrastructure Sites (PI) Alaska Department of Transportation and Alaska University Transportation Center, 2007 (\$120,000)
- Liquefaction Potential and Post-liquefaction Settlement of Saturated Clean Sands (PI) University of Alaska Fairbanks, Institute of Northern Engineering Start-up Fund 2006 (\$100,000)

### **PUBLICATIONS AND PRESENTATIONS**

### Journal

- Hazirbaba, K. (2019). "Effects of freeze-thaw on settlement of fine grained soil subjected to cyclic loading" *Cold Regions Science and Technology*, Elsevier, Vol. 160, 222-229.
- Hazirbaba, K. (2019). "Stabilization of aeolian sand with combined use of geofiber and synthetic fluid" *Cogent Engineering*, Taylor&Francis, Vol. 6, No. 1, DOI: 10.1080/23311916.2019.1589895
- Hazirbaba, K., and Omarow, M. (2019). "Strain-based assessment of liquefaction and seismic settlement of saturated sand," *Cogent Engineering*, Taylor&Francis, Vol. 6, No. 1, DOI: 10.1080/23311916.2019.1573788
- Hazirbaba, K., and Mughieda, O. (2019). "A comparative study of targeted ground improvement alternatives during site reclamation," *Jordan Journal of Civil Engineering*, 13 (2).
- Hazirbaba, K., Mughieda, O., and Abu-Lebdeh, G. (2019). "A critical review on seismic design of earth retaining structures," *Jordan Journal of Civil Engineering*, 13 (1).
- Abu-Lebdeh, G., **Hazirbaba, K.**, Mughieda, O., and Abdelrahman, B. (2018). "Modeling time complexity of micro-genetic algorithms for online traffic control decisions," *International Journal of Information and Decision Sciences* (In-press).
- Hazirbaba, K. and Omarow, M. (2018). "Excess pore pressure generation and post-cyclic loading settlement of geofiber-reinforced sand," *Gradevinar*, 70 (1), 11-18.
- Hazirbaba, K. (2018). "Large-scale direct shear and CBR performance of geofiber reinforced sand," *Road Materials and Pavement Engineering*, 19 (6), 1350-1371.
- Hazirbaba, K. (2017). "Field and laboratory performance of a cold-region sand reinforced with geofiber and synthetic fluid," *Cold Regions Science and Technology*, Elsevier, 135, 16-27.
- Hazirbaba, K. and Omarow, M. (2015). "Post-cyclic loading settlement of saturated clean sand," *Soil Dynamics and Earthquake Engineering*, Elsevier, Vol. 77, Oct 2015, 337-347.
- Cox, B., Wood, C., and Hazirbaba, K. (2012). "Frozen and Unfrozen Shear Wave Velocity Seismic Site Classification of Fairbanks, Alaska." *Journal of Cold Regions Engineering*, ASCE, Vol. 26, No.3, 118–145.

- Hazirbaba, K., Zhang, Y., and Hulsey. J.L. (2011). "Evaluation of Temperature and Freezethaw Effects on Excess Pore Pressure Generation of Fine-Grained Soils," *Soil Dynamics and Earthquake Engineering*, Elsevier, Vol. 31, No. 3, 372-384.
- Yang, Z., Dutta, U., Xu, G., Hazirbaba, K., and Marx, E. (2011). "Numerical Analysis of Permafrost Effects on the Seismic Site Response," *Soil Dynamics and Earthquake Engineering*, Elsevier, Vol. 31, No. 3, 282-290.
- Hazirbaba, K. and Gullu, H. (2010). "California Bearing Ratio Improvement and Freeze-Thaw Performance of Fine-grained Soils Treated with Geofiber and Synthetic Fluid," *Cold Regions Science and Technology*, Elsevier, Vol. 63, No. 1-2, 50-60.
- Gullu, H. and **Hazirbaba**, K. (2010). "Unconfined Compressive Strength and Post-Freeze-Thaw Behavior of Fine-grained Soils Treated with Geofiber and Synthetic Fluid," *Cold Regions Science and Technology*, Elsevier, Vol. 63, No. 2-3, 142-150.
- Hazirbaba, K. and Rathje, E.M. (2009). "Pore pressure generation of silty sands due to induced cyclic shear strain," *Journal of the Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 135, No. 12, 1892-1905.
- Derakhshandi, M., Rathje, E.M., **Hazirbaba, K.**, Mirhosseini, S.M. (2008). "The effect of plastic fines on the pore pressure generation characteristics of saturated sands," *Soil Dynamics and Earthquake Engineering*, Elsevier, Vol. 28, No. 5, 376-386.
- Chang, W.J., Rathje, E.M., Stokoe II, K.H., and **Hazirbaba**, K. (2007). "In situ pore pressure generation behavior of liquefiable sand," *Journal of the Geotechnical and Geoenvironmental Engineering*, ASCE, Vol. 133, No. 8, 921-931.

### **Refereed Conference Articles**

- Mughieda, O., Hazirbaba, K., Bani-Hani, K., Daoud, W., 2018, "Numerical modeling of dynamic stability of RCC dam," *The 4th International Conference on Rehabilitation and Maintenance in Civil Engineering (ICRMCE 2018), Indonesia, 11-12 July, 2018, MATEC* Web of Conferences 195, 03021, DOI: 10.1051/matecconf/201819503021
- Mughieda, O., Mehana, M.S., Hazirbaba, K., 2017, "Effect of soil subgrade modulus on raft foundation behavior," *The International Conference on Advances in Sustainable Construction Materials and Civil Engineering Systems (ASCMCES-17), UAE, 18-20 April,* 2017, MATEC Web of Conferences 120, 06010, DOI: 10.1051/matecconf/201712006010.
- Mughieda, O., Hazirbaba, K., Bani-Hani, K., Daoud, W., 2017, "Numerical Modeling of Sliding Stability of RCC dam," *The 2nd International Conference on Civil Engineering and Materials Science, South Korea, 26–28 May 2017*, IOP Conf. Ser.: Mater. Sci. Eng. 216 (012023)

- Mughieda, O., Hazirbaba, K., Mohamed, O., 2017, "Scale Effect on Mode of Failure and Strength of Offset Rock Joints," 2016 International Symposium on Civil and Environmental Engineering (ISCEE 2016, Wuhan, China, 20-21 December, MATEC Web of Conferences 103, 07008), DOI: 10.1051/matecconf/201710307008
- Hazirbaba, K., 2015, "Strength and bearing capacity improvement of a poorly graded sand through fiber reinforcement," Proceedings of the 8<sup>th</sup> International Conference FIBRE CONCRETE 2015, Sept 10-11. Prague, Czech Republic.
- Mughieda, O. and **Hazirbaba**, K., 2015, "Expansive clay soil-structure interaction: A case study," Proc. *The 2015 International Conference on Civil Engineering (CIVILENG 2015), Jul. 16-20*, Zakynthos Island, Greece.
- Xu G., Dutta, U., Yang, Z., and Hazirbaba, K., 2010, "Frozen soil effects on the observed ground motion characteristics," Proc. 9th US National and 10th Canadian Conference on Earthquake Engineering: Reaching Beyond Borders, Jul. 25-29, Toronto, Canada. Paper No. 1170. Earthquake Engineering Research Institute (EERI).
- Hazirbaba, K. and Connor, B., 2009, "Utilization of geofibers and synthetic fluid to increase the bearing capacity of marginal soils," Proceedings of the 8<sup>th</sup> International Conference on the Bearing Capacity of Roads, Railways and Airfields (BCR2A), Champaign, Illinois, USA, June 29-July 2, 2009.
- Hazirbaba, K. and Omarow, M., 2009, "Comparison of stress and strain approaches for evaluation of liquefaction potential of sands," Proceedings of the *International Conference* on *Performance-Based Design in Earthquake Geotechnical Engineering* (IS-TOKYO 2009), 15-18 June 2009. Performance Based Design in Earthquake Geotechnical Engineering, CRC Press.
- Dutta, U., Yang, Z., Xu, G., and **Hazirbaba**, K., 2008, "Effect of seasonally frozen soil and permafrost on seismic site response," Proceedings of the 14<sup>th</sup> *World Conference on Earthquake Engineering* (14 WCEE), October 12-17, CD-ROM.
- Hazirbaba, K. and Rathje, E.M., 2006, "Strain-based pore water pressure generation in clean sands," Presented and very well received during the 8<sup>th</sup> US National Conference on Earthquake Engineering (8NCEE), San Francisco-CA, April 18-22.
- Hazirbaba, K. and Rathje, E.M., 2004, "A comparison between in situ and laboratory measurements of pore water pressure generation," Proceedings of the 13<sup>th</sup> World Conference on Earthquake Engineering (13WCEE), August 1-6, CD-ROM.

### Newsletter

Hazirbaba, K. and Hulsey, J.L., 2009. "Earthquakes, permafrost, and seasonal frost: What happens?" Alaska University Transportation Center Newsletter, March 2009, Vol 2.,Num., 2.

Hazirbaba, K. and Connor, B., 2008. "Using geofiber and synthetic fluid to stabilize marginal soils," Alaska University Transportation Center Newsletter, February 2008, Vol 1., Num., 2.

#### Poster

- Hazirbaba, K., 2004, "Strain controlled, cyclic simple shear testing of silty sands," *Career EXPO 2004*, The University of Texas, September.
- Hazirbaba, K. and Rathje, E.M., 2003, "Pore pressure generation characteristics of sands and silty sands under cyclic loading," *Centennial Celebration Program*, The University of Texas at Austin, November.

#### Invited Presentation

- Hazirbaba, K. "Trans-Canada Alaska Pipeline project: Seismic hazards along the pipeline corridor," IARC, UAF, Fairbanks, February 2009.
- Hazirbaba, K. "Soil stabilization in cold regions," ASCE Fairbanks, Westmark Hotel, June 2008.
- Hazirbaba, K. and Connor, B. "The use of geofibers and synthetic fluid as stabilizers for marginal soils," Peak Civil Technologies Co., Anchorage, AK, October 2007.
- Hazirbaba, K. "Pore pressure generation due to cyclic loading," University of Alaska Fairbanks, Fairbanks, AK, June 2006.
- Hazirbaba, K. "Cyclic behavior of liquefiable soils," University of Missouri-Rolla, Rolla, MO, April 2005.
- Hazirbaba, K. "Strain-induced pore pressure generation in non-plastic silts," California Polytechnic State University, San Luis Obispo, CA, April 2005.
- Hazirbaba, K. "Cyclic simple shear testing of silty sands," Bogazici University, Istanbul, December 2003.
- Hazirbaba, K. "Geotechnical aspects of the Dinar Earthquake: Soil amplification," Michigan Technological University, Houghton, August 2000
- Hazirbaba, K. "Clogging of landfill leachate collection and drainage systems," Texas A&M University, College Station, May 2000.

# TEACHING

### The University of Texas at Tyler/Houston Engineering Center

• Fall 2023 CENG 2236 Geomatics

- Fall 2023 CENG 4339 Civil Engineering Construction Management
- Fall 2022 CENG 4381 Foundation Design
- Fall 2022 CMGT 4375 Construction Administration and Economics
- Spring 2023 CENG 3336 Soil Mechanics and Foundation Design w/ Lab
- Spring 2023 CENG 3351 Transportation Engineering
- Spring 2023 CMGT 3320 Soils and Foundations Construction w/Lab
- Fall 2022 CENG 2236 Geomatics
- Fall 2022 CENG 3310 Fluid Mechanics and Hydraulics
- Fall 2022 CENG 4381 Foundation Design
- Fall 2022 CMGT 4375 Construction Administration and Economics

### American University of Ras Al Khaimah, UAE

Jan 2018 – Aug 2022

Aug 2022-Current

- Spring 2022 CIEN 211 Statics
- Spring 2022 CIEN 301 Numerical Analysis
- Spring 2022 CIEN 333 Geotechnical Engineering
- Spring 2022 CIEN 431 Foundation Engineering
- Spring 2022 CIEN 491 Senior Design Project I
- Fall 2021 CIEN 211 Statics
- Fall 2021 CIEN 333 Geotechnical Engineering
- Fall 2021 ECEN 491 Engineering Seminar
- Spring 2021 CIEN 212 Mechanics of Materials
- Spring 2021 CIEN 431 Foundation Engineering
- Fall 2020 CIEN 211 Statics
- Fall 2020 CIEN 333 Geotechnical Engineering
- Fall 2020 CIEN 492 Senior Design Project II
- Spring 2020 CIEN 211 Statics
- Spring 2022 CIEN 301 Numerical Analysis
- Spring 2020 CIEN 333 Geotechnical Engineering
- Spring 2020 CIEN 493 Special Topics in Civil Engineering
- Spring 2020 CIEN 491 Senior Design Project I
- Fall 2019 CIEN 211 Statics
- Fall 2019 CIEN 301 Numerical Analysis
- Fall 2019 CIEN 333 Geotechnical Engineering
- Fall 2019 CIEN 431 Foundation Engineering
- Spring 2019 CIEN 211 Statics
- Spring 2019 CIEN 301 Numerical Analysis

- Spring 2019 CIEN 333 Geotechnical Engineering
- Spring 2019 CIEN 490 Civil Engineering Seminar
- Fall 2018 CIEN 211 Statics
- Fall 2018 CIEN 212 Mechanics of Materials
- Fall 2018 CIEN 333 Geotechnical Engineering
- Fall 2018 CIEN 490 Civil Engineering Seminar
- Spring 2018 CIEN 211 Statics
- Spring 2018 CIEN 301 Numerical Analysis
- Spring 2018 CIEN 333 Geotechnical Engineering
- Spring 2018 CIEN 490 Civil Engineering Seminar

### Khalifa University, Abu Dhabi, UAE

- Fall 2017 CIVE 470 Foundation Engineering with Lab
- Fall 2017 CIVE 336 Civil Engineering Materials with Lab
- Spring 2017 CIVE 338 Geotechnical Engineering with Lab
- Spring 2017 ENGR 200 Statics
- Fall 2016 CIVE 470 Foundation Engineering with Lab
- Fall 2016 CIVE 336 Civil Engineering Materials with Lab
- Spring 2016 CIVE 338 Geotechnical Engineering with Lab
- Spring 2016 CIVE225 Mechanics of Solids
- Fall 2015 CIVE 470 Foundation Engineering
- Fall 2015 CIVE 336 Civil Engineering Materials with Lab
- Spring 2015 CIVE 470 Foundation Engineering
- Spring 2015 CIVE 338 Geotechnical Engineering with Lab
- Fall 2014 CIVE 336 Civil Engineering Materials with Lab
- Fall 2014 ENGR 200 Statics
- Spring 2014 CIVE 338 Engineering Mechanics of Soils with Lab
- Spring 2014 ENGR 200 Statics
- Fall 2013 ENGR 200 Statics

### The American University of Sharjah, Sharjah, UAE

Aug 2011 – Aug 2013

- Spring 2013 CVE 333 Geotechnical Design Engineering
- Spring 2013 CVE 325 Computational Methods
- Fall 2012 CVE 325 Numerical Methods in Engineering
- Fall 2012 CVE 331 Geotechnical Principles
- Spring 2012 CVE 325 Numerical Methods in Engineering
- Spring 2012 CVE 331 Geotechnical Principles

Aug 2013 – Jan 2018

- Fall 2011 CVE 325 Numerical Methods in Engineering
- Fall 2011 CVE 333 Geotechnical Design Engineering

# King Fahd University of Petroleum and Minerals, Dhahran, KSA Aug 2010 – July 2011 • Spring 2012 CE 201 Statics • Spring 2012 CE 353 Geotechnical Engineering • Fall 2010 CE 201 Statics • Fall 2010 CE 353 Geotechnical Engineering University of Alaska, AK, USA Aug 2006 – July 2010 • Spring 2010 CE 209 Statics • Fall 2009 CE 697 Soil Improvement • Fall 2009 CE 422 Foundation Engineering • Spring 2009 CE 627 Geotechnical Earthquake Engineering • Fall 2008 CE 697 Advanced Foundation Engineering • Fall 2008 CE 422 Foundation Engineering • Spring 2008 ES 209 Statics • Fall 2007 CE 422 Foundation Engineering • Spring 2007 CE 627 Earthquakes: Soil Dynamics, Geotechnical Engineering Issues

• Fall 2006 CE 334 Properties of Materials

### The University of Texas at Austin, Austin, TX

- Aug 2004 to May 2005
- Spring 2005 CE 357 Geotechnical Engineering Lab
- Fall 2005 CE 357 Geotechnical Engineering Lab

#### **References**

Dr. Ahmet Aydilek Professor of Civil Engineering The University of Maryland Department of Civil and Environmental Engineering 1163 Glenn L. Martin Hall 4298 Campus Dr. College Park, MD 20742 Phone: +301-693-7808 Email: aydilek@umd.edu

Dr. Ghassan Abu-Lebdeh Professor of Civil Engineering American University of Sharjah University City, Sharjah, UAE Phone: +971-6-515-2979 Email: gabulebdeh@aus.edu

Dr. Eiyad Abu-Nada Professor of Mechanical Engineering Khalifa University PO Box 127788 Abu Dhabi, UAE Phone: +971-2-447-2442 Email: eiyad.abunada@ku.ac.ae

Dr. Ismail Karatas Vice President HNTB Corporation Empire State Building, 57<sup>th</sup> Floor 350 5<sup>th</sup> Ave, New York, NY Phone: +480-643-0294 Email: ikaratas@hntb.com

Dr. Bilal Akash Former Dean, Professor Emeritus American University of Ras Al Khaimah UAE Phone: +346-494-2889 Email: bilalakash@gmail.com