## KAVEH DEHGHANIAN

## Assistant Professor

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#### **Interests**

- Geotechnical Earthquake Engineering
- Soil Improvement Techniques

- Computational Mechanics
- Environmental Geotechnics

#### **ECUCATION INFORMATION**

Doctorate MIDDLE EAST TECHNICAL UNIVERSITY

FACULTY OF ENGINEERING / DEPARTMENT OF ENGINEERING SCIENCES / DEPARTMENT

OF ENGINEERING SCIENCES

Thesis Title: A Semi-Empirical Method for Estimation of Maximum Seismic

Shear Strain in Imperforated Ground Excited by Vertically Propagating Shear Waves (2016) Supervisor:

(MUSTAFA TOLGA YILMAZ)

MASTER Urmia University

2005 Civil Engineering- Geotechnical engineering, Civil Engineering- Geotechnical engineering
9/2008 Thesis title: The Equivalency Assessment of Geosynthetic Clay Liner (GCL) and Compacted

Clay Liner (CCL) in an Engineered Landfill (2008) Supervisor: (Kazem BADV)

BACHELOR

(2000-2004)

Islamic Azad University

#### ACADEMIC TASKS

ISTANBUL AYDIN UNIVERSITY/FACULTY OF ENGINEERING/ CIVIL ENGINEERING DEPARTMENT 2017-

#### Administered Theses

- 1. MOHAMMAD HAROON SAEEDI (2021). Investigation of the relationship between the physical properties of soil and the permeability coefficient in layered coarse and fine grain soils.
- 2. ZAFAR SAYED MANSOOR, (2020). Investigation of shear behavior in coarse-grained soils using direct shear test, Istanbul Aydın University->Graduate Education Institute>Department of Civil Engineering
- 3. AYAR NAJIBULLAH, (2020). Properties of fly ash and silty soil mixture and the effect of curing time, Istanbul Aydın University->Graduate Education Institute->Department of Civil Engineering
- 4. AHMED KALTOUM ABDILLAHI, (2019). Mechanical behavior analysis of stone column, Istanbul Aydın University->Institute of Sciences->Department of Civil Engineering
- 5. MUHAMMAD BABUR OF NAZAROGH, (2019). Improving the properties of soils with fly ash, Istanbul Aydın University->Institute of Sciences->Department of Civil Engineering
- 6. INAN HULYA, (2019). Investigation of mechanical properties of cement-sandy clay mixture ratios, Istanbul Aydın University->Institute of Science->Civil Engineering Department

#### RESEARCH PROJECTS

- CA17133 Implementing nature-based solutions for creating a resourceful circular city, COST, 13/04/2018 (Continued) (INTERNATIONAL)
- 2. Estimation of the appropriate shear strength angle for fillings made with aggregate, Scientific research project supported by Higher Education Institutions, Coordinator:DEHGHANIAN KAVEH,Researcher:çaltıli emrah,Researcher:Dinç beste Koçak,Researcher:soysal hakan murat, 30/04/2018 (Continues) ) (NATIONAL)

#### **COURSES TAUGHT**

BACHELOR: Foundation Engineering (4<sup>th</sup> grade), Soil Mechanics I, Soil Mechanics II, Measurement And Data Analysis, Numerical Analysis, General Geology, Terminology of civil engineering, Graduation Project

MASTER: Advanced Soil Mechanics, Soil Dynamics, Advanced Numerical Methods-I

## Articles published in international peer-reviewed journals

1. Mohammad Salem NOORI, DEHGHANIAN KAVEH (2021). Settlement Analysis of Geosynthetics Reinforced Embankments, Dicle university journal of engineering, 12(4), 699 – 709, Doi: 10.24012/dumf.1002256.

- 2. DEHGHANIAN KAVEH, ORAL HASAN VOLKAN (2021). Validating Circular Performance Indicators: The Interface between Circular Economy and Stakeholders. Water, 13(16), 1-22., Doi: 10.3390/w13162198 (Publication No: 7151826)
- 3. DEHGHANIAN KAVEH (2021). IMPROVEMENT OF THE PROPERTIES OF CLAYED SOILS USING FLY ASH. ALKU, Journal of Science, 3(1), 66-72. (Publication No: 6949115)
- 4. ORAL HASAN VOLKAN, Carvalho Pedro N, finger david ch, Gajewska Magdalena, DEHGHANIAN KAVEH, Ursino Nadia, Masi Fabio, Van Hullebusch Eric, Exposito Alfonso, Cipoletta Giulia, Raaschou Andersen Theis, Simperler Lena, Kazak Jan (2020). A review of nature-based solutions for urban water management in European circular cities: a critical assessment based on case studies and literature. Blue-Green Systems, 2(1), 112-136., Doi: 10.2166/bgs.2020.932 (International) (Reviewed) (Review Article) (Publication No: 6009272)
- 5. DEHGHANIAN KAVEH (2020). Effect of Fly Ash and Its Curing Time On Specification Of Fly Ash –Silty Soil Mixture. ALKU Journal of Science, 2(2), 47-53., Doi: https://doi.org/10.46740/alku.730319 (Publication No: 6383807)
- 6. DEHGHANIAN KAVEH (2020). Investigation of Strength Properties of Sandy Clay-Cement Mixture Ratios. ALKU Journal of Science, 2(1), 1-15. (Publication No: 6083849)
- 7. DEHGHANIAN KAVEH, soysal Hakan Murat (2019). A Case Study on the Correlation between Size and Permeability of the Sands. American Journal of Geosciences and Geomatics, 1(1), 1-8. (Publication No: 5535105)
- 8. DEHGHANIAN KAVEH, ÇALTILI Emrah (2019). A STUDY ON THE RELATION BETWEEN CONSOLIDATION COEFFICIENT AND PLASTICITY INDEX OF FINE-GRADEDSOILS. Istanbul Aydın University Journal, 11(4), 345-354., Doi: 10.17932/IAU.IAUD.m.13091352.2019.4/44.345-354 (Publication No: 5214603)
- 9. DEHGHANIAN KAVEH, babur from nazarogh (2019). Study on the Mechanical Properties of Clay-Fly Ash Mixture. International Journal of Engineering Research Technology (IJERT), 8(6), 633-635. (Publication No: 5094880)
- 10. DEHGHANIAN KAVEH, ABDILLAHI AHMED Kaltoum (2019). Performance Analysis of Stone Columns. ALKU Journal of Science, 1(2), 60-69. (Control Number: 4922747)

# National/International books or chapters

Theory and Practice on Tunnel Engineering: (Analytical Method for Preliminary Seismic Design of Tunnels) (2021)., DEHGHANIAN KAVEH, IntechOpen, Editor: Prof. Hasan Tosun, Number of Edition: 1, Number of Pages 12, ISBN: 978-1-83969-374-8, English (Scientific Book), (Publication Number: 7052128)

# Papers presented at international scientific meetings and published in proceedings books:

- 1. DEHGHANIAN KAVEH, INAN Hulya (2019). A Study on the Mechanical Behavior of Sandy Clay- Cement Mixture. 5th International Conference on Engineering Sciences (ICES 2019) (Full Text Paper/Oral Presentation)(Publication No:5186229)
- 2. DEHGHANIAN KAVEH (2021). Soft Soil Effect on the Formation of Impulsive Signals in Earthquake Ground Motions. 9th Turkish conference on Earthquake Engineering, 1(1), 498-505. (Full Text Paper/Oral Presentation) (Publication No: 7099126)
- 3. DEHGHANIAN KAVEH, Zafar Sayed Mansoor (2019). EXPERIMENTAL ANALYSIS ON GRANULAR SOIL BY DIRECT SHEAR TEST. 8th Geotechnical Symposium (Full Text Paper/Oral Presentation) (Publication No: 5214729)
- 4. Ajlouni Naim, Hameed Alaa Ali, DEHGHANIAN KAVEH, moghimi Saed (2018). Sonar Signals Discrimination Using BPVAM Algorithm. Applied Research International Conferences (Full Text Paper/Oral Presentation) (Publication No:4495273)
- 5. Hameed Alaa Ali, DEHGHANIAN KAVEH, Moghimi saed, Ajlouni Naim (2018). A Comparative Study on Signal processing of Accelerated Time Histories. Applied Research International Conferences, 20-29. (Full Text Paper/Oral Presentation) (Publication No: 4495196)
- 6. DEHGHANIAN KAVEH, YILMAZ MUSTAFA TOLGA (2017). An Approximate Method for Estimating Maximum Unit Shear Deformation in Layered Viscoelastic Media. 4th International Conference on Earthquake Engineering and Seismology (Full Text Paper/Oral Presentation) (Publication No: 4149743)
- 7. DEHGHANIAN KAVEH, YILMAZ MUSTAFA TOLGA (2016). A Comparison between Maximum Shear Strain Distribution in a Uniformly Elastic Half Layer and that in a Layered Viscoelastic Medium Due to the Same Free Field Motion. 12th International Congress on Advances in Civil Engineering (Abstract/Oral Presentation) (Publication No:4149762)
- 8. DEHGHANIAN KAVEH, ZIRAKKAR SOHRAB (2013). The Simplified Method for Estimation of Liquefaction Potential Based on Shear Wave Measurements. International Conference on Civil Engineering, Architecture, and Urban Development (/Poster)(Publication No:4149833)
- 9. YILMAZ MUSTAFA TOLGA, DEHGHANIAN KAVEH, HASSAN ZEHTAB KAVEH (2011). 1D Field Response Model for Adapazari Center Developed by Combining Seismic and Geotechnical Data. 1. Turkey Earthquake Engineering and Seismology Conference (Full Text Paper/Oral Presentation)(Publication No:4149812)

# Computer Skills:

POLLUTE
PLAXIS
DEEPSOIL
MATLAB
Geo 5

# Memberships:

Earthquake Engineering Association of Turkey International Society for Soil Mechanics and Geotechnical Engineering