Asst. Prof. YEŞİM TUSKAN

Personal Information

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International Researcher IDs
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Publons / Web Of Science ResearcherID: LTE-0912-2024
ScopusID: 57193419558
Yoksis Researcher ID: 110520

Education

Doctorate, Turkey 2012 - 2023
Postgraduate, Turkey 2008 - 2012

Foreign Languages

English
French

Dissertations

Doctorate, Geoteknik mühendisliğinde bilgi tabanlı yaklaşımlar: Bir karar destek sistemi uygulaması, 2023
Postgraduate, Yapay sinir ağlarının geoteknik mühendisliğinde kullanımı, 2012

Research Areas

Avesis Research Areas: Civil Engineering
WoS Research Areas: Engineering
Scopus Research Areas: General Engineering

Academic Positions

Assistant Professor, Manisa Celal Bayar University, Mühendislik Ve Doğa Bilimleri Fakültesi, İnşaat Mühendisliği, 2025 - Present

Courses

Postgraduate
Yeraltı Suyunun Kirlenmesi ve Korunması, Postgraduate, 2026 - 2027

Uzmanlık Alanı, Postgraduate, 2026 - 2027
Kaya Mekaniği, Postgraduate, 2026 - 2027
Seminer, Postgraduate, 2026 - 2027

Undergraduate

İnşaat Mühendisliği Tasarımı, Undergraduate, 2026 - 2027
Sosyal Sorumluluk Projesi, Undergraduate, 2026 - 2027
Zemin Mekaniği I, Undergraduate, 2026 - 2027
Sosyal sorumluluk projesi , Undergraduate, 2024 - 2025
İnşaat mühendisliği tasarım, Undergraduate, 2024 - 2025
Jeoloji , Undergraduate, 2024 - 2025
Zemin mekaniği 2, Undergraduate, 2024 - 2025
Jeoloji , Undergraduate, 2023 - 2024
Sosyal sorumluluk projesi , Undergraduate, 2024 - 2025
Zemin mekaniği 1, Undergraduate, 2024 - 2025
Experimental soil mechanics, Undergraduate, 2023 - 2024
İnşaat mühendisliği tasarım, Undergraduate, 2023 - 2024
Zemin mekaniği 1, Undergraduate, 2023 - 2024
Experimental soil mechanics, Undergraduate, 2023 - 2024

Articles

I. **Slope stability assessment of irrigation canal embankments improved with olive stone biochar using the coupled Eulerian-Lagrangian method**
TUSKAN Y., Giden D.
JOURNAL OF EARTH SYSTEM SCIENCE, vol.135, no.4, 2026 (SCI-Expanded, Scopus)

II. **Optimal design of reinforced concrete cantilever retaining walls via simulated annealing**
TUSKAN Y.
Challenge Journal of Structural Mechanics, vol.12, no.3, pp.296-311, 2026 (TRDizin)

III. **Parameter measurement sensitivity in disturbed rock masses: A machine learning framework for slope stability prediction**
TUSKAN Y., ÖZYÜKSEL ÇİFTÇİOĞLU A.
Environmental Earth Sciences, vol.85, no.12, 2026 (SCI-Expanded, Scopus)

IV. **Effectiveness of Stone Columns in Reducing Liquefaction-Induced Settlements: A Highway Embankment Case Study**
TUSKAN Y.
Afyon Kocatepe Üniversitesi Fen ve Mühendislik Bilimleri Dergisi, vol.26, no.3, pp.678-692, 2026 (TRDizin)

V. **Seismic Assessment of the Tuzla Submarine Landslide in the Çınarcık Basin, Marmara Sea (Türkiye)**
TUSKAN Y.
Applied Sciences (Switzerland), vol.16, no.7, 2026 (SCI-Expanded, Scopus)

VI. **Slope stability evaluation and quantitative landslide risk assessment of road cut-slopes on the D400 highway, southwestern Turkey**
TUSKAN Y.
Sadhana - Academy Proceedings in Engineering Sciences, vol.50, no.4, 2025 (SCI-Expanded, Scopus)

VII. **Investigation of earthquake damage and seismic slope displacements in open irrigation channels using the coupled Eulerian-Lagrangian method**
TUSKAN Y., YİĞİT M. E.
QUARTERLY JOURNAL OF ENGINEERING GEOLOGY AND HYDROGEOLOGY, vol.58, no.3, 2025 (SCI-Expanded, Scopus)

VIII. **Shear Capacity Prediction of Extremely-Loaded Box Culvert on Elastic Soil Using Artificial Neural Network**

TUSKAN Y., Uncu D.
Sakarya Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.28, no.5, pp.1103-1114, 2024 (Scopus, TRDizin)

IX. **Application of Monte Carlo Simulation Technique for Slopes Stabilized with Piles**
tuskan y., erzin y.
Afyon Kocatepe Üniversitesi Fen ve Mühendislik Bilimleri Dergisi, vol.24, no.1, pp.117-125, 2024 (TRDizin)

X. **Evaluation of Sustainable Slope Stability with Anti-Slide Piles Using an Integrated AHP-VIKOR Methodology**
TUSKAN Y., BAŞARI E.
Sustainability (Switzerland), vol.15, no.15, 2023 (SCI-Expanded, SSCI, Scopus)

XI. **Dynamic and Static Analysis of Deep Excavation of Poligon Station in İzmir Metro Line**
BAŞARI E., TUSKAN Y.
International Journal of Advanced Natural Sciences and Engineering Researches, vol.7, no.6, pp.440-448, 2023 (Peer-Reviewed Journal)

XII. **Investigation of Fluid-Structure Interaction by Using Solidity Ratio**
DAĞLI B. Y., TUSKAN Y., UNCU D.
Eurasian Journal of Civil Engineering and Architecture, vol.3, no.2, pp.41-47, 2019 (Peer-Reviewed Journal)

XIII. **The use of neural networks for predicting the factor of safety of soil against liquefaction**
ERZİN Y., TUSKAN Y.
SCIENTIA IRANICA, vol.26, no.5, pp.2615-2623, 2019 (SCI-Expanded, Scopus)

XIV. **Analysis of Dynamic Behaviour of Marine Pipelines with Finite Elements Method**
Dağlı B. Y., Uncu D., tuskan y.
Süleyman Demirel Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.23, no.2, pp.404-410, 2019 (TRDizin)

XV. **Evaluation of Offshore Wind Turbine Tower Dynamics with Numerical Analysis**
DAĞLI B. Y., TUSKAN Y., Gökkuş Ü.
ADVANCES IN CIVIL ENGINEERING, vol.2018, 2018 (SCI-Expanded, Scopus)

XVI. **Gokkus, U., Tuskan,Y.,(2017),Design of Anchored-Strengthened Sheet Pile Wall: A Case Study, International Journal of Scientific Research and Innovative Technology-IJSRIT, www.Ijsrit.com, ISSN: 2313-3759 Vol. 4 No. 3 (March),pp.92-98**
GÖKKUŞ Ü., TUSKAN Y.
International Journal of Scientific Research and Innovative Technology-IJSRIT, vol.4, no.3, 2017 (Peer-Reviewed Journal)

XVII. **Prediction of standard penetration test (SPT) value in Izmir, Turkey using radial basis neural network**
ERZİN Y., TUSKAN Y.
Celal Bayar University Journal of Science, vol.13, no.2, pp.433-439, 2017 (TRDizin)

XVIII. **Prediction of Skid Resistance Value of Glass Fiber-Reinforced Tiling Materials**
Yildizel S. A., TUSKAN Y., Kaplan G.
ADVANCES IN CIVIL ENGINEERING, vol.2017, 2017 (SCI-Expanded, Scopus)

XIX. **Investigations into factors influencing the CBR values of some Aegean sands**
ERZİN Y., Türköz D., TUSKAN Y., YILMAZ I.
Scientia Iranica, vol.23, no.2, pp.420-428, 2016 (SCI-Expanded, Scopus)

Books

I. **Recent Advances In Sustainable Geotechnics: A Review On The Use Of Geosynthetics**
TUSKAN Y.
in: Current Debates on Natural and Engineering Sciences 9, , Editor, Bilgin Kültür Sanat Yayınları, Ankara, pp.491-505, 2023

II. **ARTIFICIAL NEURAL NETWORKS FOR HYDRAULIC SYSTEMS**
Dağlı B. Y., Tuskan Y., Yıldırım Uncu D.

in: Research & Reviews in Engineering – Summer, 2019, Dr. Mahmut TURHAN, Editor, Gece Kitaplığı, Ankara, pp.85-110, 2019

III. **THE USE OF ARTIFICIAL NEURAL NETWORKS (ANNS) IN GEOTECHNICS**
Tuskan Y., Dağlı B. Y., Yıldırım Uncu D.
in: Research & Reviews in Engineering – Summer, 2019, Dr. Mahmut TURHAN, Editor, Gece kitaplığı, Ankara, pp.225-246, 2019

Papers Presented at Peer-Reviewed Scientific Conferences

I. **SÜRŞARJ YÜKLERİ ALTINDA DAYANMA DUVARI DAVRANIŞININ SONLU ELEMANLAR YÖNTEMİ İLE ANALİZİ**
TUSKAN Y.
EU 10th INTERNATIONAL CONFERENCE ON HEALTH, ENGINEERING AND APPLIED SCIENCES, Turkey, 3 - 08 September 2026, (Full Text)

II. **Influence of Surcharge Loading on the Deformation and Shear Performance of Retaining Structures**
TUSKAN Y.
5 th International Conference on Recent and Innovative Results in Engineering and Technology, Turkey, 25 - 26 August 2026, (Full Text)

III. **Şev Güçlendirme Yöntemlerinin Şev Stabilitesine Etkisinin Karşılaştırması**
TUSKAN Y.
3rd International Conference on Recent and Innovative Results in Engineering and Technology ICRIRET, Turkey, 15 - 16 November 2025, (Full Text)

IV. **Dinamik Koşullar Altında Karayolu Yarma Şevlerinin Stabilite Analizi**
TUSKAN Y.
3rd International Conference on Recent and Innovative Results in Engineering and Technology ICRIRET, 15 - 16 November 2025, (Full Text)

V. **Devlet Karayolu Boyunca Kritik Kaya Şevi İncelemesi**
TUSKAN Y.
5TH INTERNATIONAL SYMPOSIUM OF SCIENTIFIC RESEARCH AND INNOVATIVE STUDIES, 19 - 22 March 2025, (Full Text)

VI. **Kritik Karayolu Şevinin Statik Koşullar Altında Şev Stabilitesi Analizi**
TUSKAN Y.
5th International Symposium of Scientific Research and Innovative Studies, 19 - 22 March 2025, (Full Text)

VII. **Field Investigation on Road Embankment at Bridge Approach**
TUSKAN Y.
2ND INTERNATIONAL CONFERENCE ON SCIENTIFIC AND INNOVATIVE STUDIES ICSIS 2024, Turkey, 18 - 19 April 2024, pp.604-607, (Full Text)

VIII. **Stability Analysis of Cut Slopes Using Rock Bolt**
TUSKAN Y.
2ND INTERNATIONAL CONFERENCE ON SCIENTIFIC AND INNOVATIVE STUDIES ICSIS 2024, Turkey, 18 - 19 April 2024, pp.608-611, (Full Text)

IX. **STABILITY ASSESSMENT AND SETTLEMENT ANALYSIS OF ROAD EMBANKMENT**
TUSKAN Y.
5th INTERNATIONAL BURSA SCIENTIFIC RESEARCHS CONGRESS, Turkey, 1 - 03 March 2024, pp.324-326, (Full Text)

X. **ROAD CUT SLOPE STABILITY ANALYSIS UNDER STATIC AND DYNAMIC CONDITIONS**
TUSKAN Y.
5th INTERNATIONAL BURSA SCIENTIFIC RESEARCHS CONGRESS, Turkey, 1 - 03 March 2024, pp.327-331, (Full Text)

XI. **NUMERICAL ANALYSIS OF SHALLOW FOUNDATION RESTING ON GRANULAR SOIL USING FINITE**

ELEMENT METHOD
TUSKAN Y.
BURSA 4. INTERNATIONAL CONFERENCE ON SCIENTIFIC RESEARCHES, Bursa, Turkey, 8 - 10 July 2023, (Full Text)

XII. **SELECTION OF ANTI-SLIDE PILE USING MULTI CRITERIA DECISION MAKING METHOD**
TUSKAN Y., BAŞARI E.
BURSA 4. INTERNATIONAL CONFERENCE ON SCIENTIFIC RESEARCHES, Bursa, Turkey, 8 - 10 July 2023, (Full Text)

XIII. **İnce Cidarlı Silindirik Sıvı Depolama Yapılarının Sismik Analizi**
TUSKAN Y., DAĞLI B. Y., UNCU D.
III. Ulusal Mühendislikte Bilimsel ve Mesleki Çalışmalar Kongresi (UMUH BILMES 2020), Turkey, 12 December - 15 November 2020, (Summary Text)

XIV. **Hydrodynamic Analysis of Cylindrical Water Tanks Subjected to Earthquake Induced Sloshing Forces**
DAĞLI B. Y., UNCU D., TUSKAN Y.
International Engineering Symposium IES'20, İzmir, Turkey, 5 - 13 December 2020, (Summary Text)

XV. **Technological And Economic Evaluation of Wave Energy Generation Systems**
DAĞLI B. Y., TUSKAN Y., UNCU D.
4th Eurasian Conference On Civil And Environmental Engineering (ECOCEE), İstanbul, Turkey, 17 - 18 June 2019, (Full Text)

XVI. **Investigation of Fluid-structure Interaction by Using Solidity Ratio**
DAĞLI B. Y., TUSKAN Y., UNCU D.
4th Eurasian Conference On Civil And Environmental Engineering (ECOCEE), İstanbul, Turkey, 17 - 18 June 2019, (Full Text)

XVII. **Comparison of pile design procedures basedon cone penetration test (CPT) data**
TUSKAN Y., ERZİN Y.
4. EURASIAN CONFERENCE ONCIVIL AND ENVIRONMENTAL ENGINEERING(ECOCEE), 17 - 18 June 2019, (Full Text)

XVIII. **Estimation of direct shear parameters ofsoils using soft computing methods**
TUSKAN Y., ERZİN S., ERZİN Y.
4. EURASIAN CONFERENCE ONCIVIL AND ENVIRONMENTAL ENGINEERING(ECOCEE), 17 - 18 June 2019, (Full Text)

XIX. **An Examination on Determination of Suitable Conditions for Production of Modified Bitumens**
UNCU D., DAĞLI B. Y., TUSKAN Y.
2nd International Congress on Engineering and Architecture, Marmaris, Turkey, 22 - 24 April 2019, (Full Text)

XX. **Anchored Diaphragm Wall Application in Deep Excavation Case**
TUSKAN Y., DAĞLI B. Y., UNCU D.
2nd International Congress on Engineering and Architecture, Marmaris, Turkey, 22 - 24 April 2019, (Full Text)

XXI. **Investigatıon of Hydrodynamic Forces According to Solidity Ratıo under Various Wave Heights**
DAĞLI B. Y., UNCU D., TUSKAN Y.
2nd International Congress on Engineering and Architecture, Marmaris, Turkey, 22 - 24 April 2019, (Full Text)

XXII. **Modeling of highway infrastructure with Finite element method (FEM)**
TUSKAN Y., ERZİN Y.
2nd International congress on engineering and architecture(ENAR), 22 - 24 April 2019, (Full Text)

XXIII. **New Australian Tunneling Method (NATM) in Staged Excavation by Using Finite Element Method (FEM)**
TUSKAN Y., ERZİN Y.
2nd International congress on engineering and architecture, 22 - 24 April 2019, (Full Text)

XXIV. **The Stress Analysis of Foundation and Free Headed Pile by Using Plaxis 2D Finite Element Method (FEM)**
TUSKAN Y., ERZİN Y.
2nd International congress on engineering and architecture, 22 - 24 April 2019, (Full Text)

XXV. **Gas. Pressure. Assessment. on. the. Water. Saturation. Effect. of. Compacted. Bentonite-Sand. Layered. Samples**

TUSKAN Y., DAĞLI B. Y., ERZİN Y.
Engineering IT and Artificial Intelligence MAC-EITAI 2018, Prag, Czech Republic, 25 - 27 May 2018, pp.130-134, (Full Text)

XXVI. **Evaluation of Dynamic Behavior of Piles Subjected to Hydrodynamic Forces**
DAĞLI B. Y., TUSKAN Y., SINIR B. G.
Engineering IT and Artificial Intelligence MAC-EITAI 2018, Prag, Czech Republic, 25 - 27 May 2018, (Full Text)

XXVII. **Innovation Project Increasing Concrete Quality of Wind Turbine Construction in Manisa Region**
ÖZTÜRK A. U., KANTAR E., YILDIZEL S. A., ERZİN Y., TUSKAN Y.
1. International University Industry Cooperation, RD and Innovation Congress, 18 - 19 December 2017, (Summary Text)

XXVIII. **Cold Joint Removal of Turbine-8 Construction**
KANTAR E., ÖZTÜRK A. U., YILDIZEL S. A., ERZİN Y., TUSKAN Y.
1. International University Industry Cooperation, RD and Innovation Congress, 18 - 19 December 2017, (Summary Text)

XXIX. **Artificial Neural Network (ANN) Estimation of Direct Shear Parameters of Soils**
TUSKAN Y., ERZİN Y.
ICOCEE, 27 - 29 April 2017, (Summary Text)

XXX. **The Use of Artificial Neural Network (ANN) in Prediction of Compaction Parameters**
TUSKAN Y., ERZİN Y.
ICOCEE, 27 - 29 April 2017, (Summary Text)

XXXI. **APPLICATION OF DECISION TREE LEARNING FOR PREDICTION OF SOIL LIQUEFACTION**
ERZİN Y., TUSKAN Y.
INTERNATIONAL CONFERENCE ON ADVANCES IN SCIENCE AND ARTS, 29 - 31 March 2017, (Full Text)

XXXII. **ESTIMATION OF LIQUEFACTION PROBABILITY BY DIFFERENT SPT BASED PROCEDURES**
ERZİN Y., TUSKAN Y.
INTERNATIONAL CONFERENCE ON ADVANCES IN SCIENCE AND ARTS, 29 - 31 March 2017, (Full Text)

XXXIII. **RESEARCH ON THE USAGE OF NANO CALCIUM CARBONATEAS CEMENT REPLACEMENT MATERIAL**
TUSKAN Y., YILDIZEL S. A., ERZİN Y., DOĞAN E., ÜSTÜNER M. A.
IWA-PPFW 2017, 22 - 24 March 2017, (Summary Text)

XXXIV. **STRENGTHENING OF THE UNDERWATERHISTORICAL ARTIFACTS WITH WHITECEMENT CONTAINING NANO TIO2 AND ITSENVIONMENTAL EFFECT**
YILDIZEL S. A., AKPINAR M. E., TUSKAN Y., ÜSTÜNER M. A.
IWA-PPFW 2017, 22 - 24 March 2017, (Summary Text)

XXXV. **The Use of Support Vector Machine for the Prediction of the Factor of Safety Against Liquefaction**
ERZİN Y., TUSKAN Y.
International Symposium on Multidisciplinary Studies (ISMS), Belgrade, Serbia, 20 - 23 October 2016, (Summary Text)

XXXVI. **Relationship between the standard penetration test and the pressure meter test A case study from Izmir**
ERZİN Y., TUSKAN Y.
ourth International Conference on New Developments in Soil Mechanics and Geotechnical Engineering, Nicosia, Cyprus (Kktc), 2 - 04 June 2016, (Full Text)

XXXVII. **Relationship between standard penetration test and pressuremeter test A case study from Izmir**
ERZİN Y., TUSKAN Y.
Fourth International Conference on New Developments in Soil Mechanics and Geotechnical Engineering, 2 - 04 June 2016, (Full Text)

XXXVIII. **Prediction of standard penetration test SPT value in Izmir Turkey using general regression neural network**
ERZİN Y., TUSKAN Y.
International Conference on Agricultural, Civil and Environmental Engineering (ACEE-16), 18 - 19 April 2016, (Full Text)

XXXIX. **Farklı Ege kumlarının Kaliforniya taşıma oranı CBR ın kolayca belirlenen zemin özelliklerinden tahmini**
ERZİN Y., deniz t., TUSKAN Y.
6. Geoteknik Sempozyumu, Turkey, 26 - 27 November 2015, (Full Text)

XL. **Layer thickness of the rubblemound breakwaters in marine transportation**
TUSKAN Y., DAĞLI B. Y., UNCU D., GÖKKUŞ Ü.
2nd International Symposium Computing in Science and Engineering, 5 - 08 September 2011, (Full Text)

Funded Projects

DAĞLI B. Y., YILDIRIM UNCU D., TUSKAN Y., Project Supported by Higher Education Institutions, İnce Cidarlı Silindirik Sıvı Depolama Yapılarının Statik-Betonarme Analizleri ve Akışkan-Yapı Etkileşimi Açısından İncelenmesi, 2019 - 2020

Peer Reviews in Scientific Publications

JOURNAL OF INFRASTRUCTURE POLICY AND DEVELOPMENT, Journal Indexed in ESCI, October 2024
JOURNAL OF INFRASTRUCTURE POLICY AND DEVELOPMENT, Journal Indexed in ESCI, September 2024
JOURNAL OF INFRASTRUCTURE POLICY AND DEVELOPMENT, Journal Indexed in ESCI, August 2024
Gazi University Journal of Science Part A: Engineering and Innovation, Journal Indexed in SCI-E, July 2024
WATER SCIENCE AND TECHNOLOGY, Journal Indexed in SCI-E, June 2024
WATER SCIENCE AND TECHNOLOGY, Journal Indexed in SCI-E, March 2024
PLOS ONE, Journal Indexed in SCI-E, February 2024
Challenge Journal of Structural Mechanics, Other journals, January 2017

Metrics

Publication: 66
Citation (WoS): 71
Citation (Scopus): 91
H-Index (WoS): 5
H-Index (Scopus): 5

Congress and Symposium Activities

5th INTERNATIONAL BURSA SCIENTIFIC RESEARCHS CONGRESS, Moderator, Bursa, Turkey, 2024
5th INTERNATIONAL BURSA SCIENTIFIC RESEARCHS CONGRESS, Moderator, Bursa, Turkey, 2024
BURSA 4. INTERNATIONAL CONFERENCE ON SCIENTIFIC RESEARCHES, Attendee, Bursa, Turkey, 2023
4. EURASIAN CONFERENCE ONCIVIL AND ENVIRONMENTAL ENGINEERING(ECOCEE, Attendee, İstanbul, Turkey, 2019
2nd International congress on engineering and architecture, Attendee, İstanbul, Turkey, 2019