

Assoc. Prof. Aslı Yalçın Dayıoğlu

Personal Information

Office Phone: [+90 212 285 3739](tel:+902122853739)

Email: yalcinas@itu.edu.tr

Web: <https://avesis.itu.edu.tr/yalcinas>

International Researcher IDs

ScholarID: ePm3GWIAAAJ

ORCID: 0000-0002-4714-7240

Publons / Web Of Science ResearcherID: S-5330-2017

ScopusID: 56246822100

Yoksis Researcher ID: 154464

Education Information

Doctorate, University of Maryland, College Park, A. James Clark School Of Engineering, Department Of Civil And Environmental Engineering, United States Of America 2012 - 2016

Postgraduate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Zemin Mekaniği Ve Geoteknik Mühendisliği (YI), Turkey 2007 - 2010

Foreign Languages

English

German, C1 Advanced

Dissertations

Doctorate, GEOTECHNICAL AND ENVIRONMENTAL IMPACTS OF STEEL SLAG IN EMBANKMENTS, University Of Maryland, College Park, A. James Clark School Of Engineering, Department Of Civil And Environmental Engineering, 2016
Postgraduate, KAZIKLI RADYEJENERAL TEMELLERİN DÜŞEY VE YATAY YÜKLER ALTINDA DAVRANIŞININ SONLU ELEMANLAR YÖNTEMİ İLE İNCELENMESİ, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, İnşaat Mühendisliği, 2010

Research Areas

Technical Sciences, Civil Engineering, Geotechnical, Foundation Engineering, Soil Mechanics, Ground Improvement

Academic Titles / Tasks

Assistant Professor, İstanbul Technical University, İnşaat, İnşaat Mühendisliği, 2019 - Continues

Research Assistant, İstanbul Technical University, İnşaat, İnşaat Mühendisliği, 2009 - 2019

Published journal articles indexed by SCI, SSCI, and AHCI

- I. When roads want to be dams: looking to dam safety to regulate transportation embankments
O'Shaughnessy A., Yalçın Dayioğlu A., Davis A. P., Aydilek A. H.
Natural Hazards, vol.120, no.3, pp.2349-2378, 2024 (SCI-Expanded)
- II. Laboratory Testing of Ferrochrome Slag as an Aggregate in Porous Pavements
Topaloglu S., Cetin A., Yalçın Dayioğlu A., Aydilek A. H.
Geotechnical Testing Journal, vol.47, no.1, 2024 (SCI-Expanded)
- III. pH-Dependent Leaching Characteristics of Steel Slag Mitigated with Water Treatment Residual
Yalçın Dayioğlu A.
Geotechnical Testing Journal, vol.47, no.1, 2024 (SCI-Expanded)
- IV. Long-term hydraulic performance of geotextile filtering recycled materials
Odabasi E., Yalçın Dayioğlu A., Yetis A. D., Aydilek A. H.
GEOSYNTHETICS INTERNATIONAL, vol.30, no.2, pp.137-153, 2023 (SCI-Expanded)
- V. Comparative evaluation of freeze and thaw effect on strength of BEICP-stabilized silty sands and cement- and fly ash-stabilized soils
Tung Hoang T. H., Do H., Alleman J., Cetin B., Yalçın Dayioğlu A.
ACTA GEOTECHNICA, vol.18, no.2, pp.1073-1092, 2023 (SCI-Expanded)
- VI. Mechanical and hydraulic compatibility of RAP with geosynthetics used in MSE walls
Soleimanbeigi A., Ozocak A., Li B., Akmaz E., Yalçın Dayioğlu A., Tanyu B. F., Aydilek A. H., Likos W. J.
GEOSYNTHETICS INTERNATIONAL, vol.29, no.1, pp.1-18, 2022 (SCI-Expanded)
- VII. pHStat testing and geochemical modeling of inorganic compounds in recycled asphalt pavement used in highway shoulders
Seybou-Insa O., Yalçın Dayioğlu A., Houlihan M., Aydilek A. H.
CONSTRUCTION AND BUILDING MATERIALS, vol.313, 2021 (SCI-Expanded)
- VIII. Stiffness Properties of Recycled Concrete Aggregates as Unbound Base and Subbase Materials Under Freeze and Thaw Cycles
Akbaş M., İyisan R., Dayioglu A., Hatipoğlu M.
ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, vol.46, no.11, pp.10569-10584, 2021 (SCI-Expanded)
- IX. Geoenvironmental behavior of lime-treated marine sediments
Deshmukh A. S., Yalçın Dayioğlu A., Aydilek A. H.
MARINE GEORESOURCES & GEOTECHNOLOGY, vol.39, no.6, pp.682-695, 2021 (SCI-Expanded)
- X. Trace metal leaching from quarry by-product-stabilized marine sediments
Singh A., Houlihan M., Yalçın Dayioğlu A., Aydilek A. H.
MARINE GEORESOURCES & GEOTECHNOLOGY, vol.39, no.7, pp.765-777, 2021 (SCI-Expanded)
- XI. Geoenvironmental Evaluation of RCA-Stabilized Dredged Marine Sediments as Embankment Material
Houlihan M., BİLGİN G., Yalçın Dayioğlu A., Aydilek A. H.
JOURNAL OF MATERIALS IN CIVIL ENGINEERING, vol.33, no.1, 2021 (SCI-Expanded)
- XII. Batch leaching testing of stabilized dredged bottom-sea sediments
Singh A., Houlihan M., Yalçın Dayioğlu A., Aydilek A. H.
JOURNAL OF SOILS AND SEDIMENTS, vol.20, no.10, pp.3793-3806, 2020 (SCI-Expanded)
- XIII. Hydraulic and environmental impacts of using recycled asphalt pavement on highway shoulders
Mijic Z., Yalçın Dayioğlu A., Hatipoğlu M., Aydilek A. H.
CONSTRUCTION AND BUILDING MATERIALS, vol.234, 2020 (SCI-Expanded)
- XIV. Effect of cement incorporation on the leaching characteristics of elements from fly ash and slag treated soils
Mahedi M., Cetin B., Yalçın Dayioğlu A.
JOURNAL OF ENVIRONMENTAL MANAGEMENT, vol.253, 2020 (SCI-Expanded)
- XV. Evaluation of recycled concrete aggregate backfill for geosynthetic-reinforced MSE walls
Soleimanbeigi A., Tanyu B. E., Aydilek A. H., Florio P., Abbaspour A., Dayioglu A., Likos W. J.
GEOSYNTHETICS INTERNATIONAL, vol.26, no.4, pp.396-412, 2019 (SCI-Expanded)
- XVI. Effect of pH and Subgrade Type on Trace-Metal Leaching from Steel-Slag Embankments into

Groundwater

Yalçın Dayioğlu A., Aydilek A. H.

JOURNAL OF MATERIALS IN CIVIL ENGINEERING, vol.31, no.8, 2019 (SCI-Expanded)

- XVII. Leaching behavior of aluminum, copper, iron and zinc from cement activated fly ash and slag stabilized soils

Mahedi M., Cetin B., Dayioglu A.

WASTE MANAGEMENT, vol.95, pp.334-355, 2019 (SCI-Expanded)

- XVIII. Trace Metal Leaching from Steel Slag Used in Structural Fills

Yalçın Dayioğlu A., Aydilek A. H., ÇİMEN Ö., ÇİMEN M.

JOURNAL OF GEOTECHNICAL AND GEOENVIRONMENTAL ENGINEERING, vol.144, no.12, 2018 (SCI-Expanded)

- XIX. Methodology to evaluate hydraulic compatibility of geotextile and RCA in underdrain systems

Abbaspour A., Tanyu B. E., Aydilek A. H., Dayioglu A.

GEOSYNTHETICS INTERNATIONAL, vol.25, no.1, pp.67-84, 2018 (SCI-Expanded)

- XX. Preventing Swelling and Decreasing Alkalinity of Steel Slags Used in Highway Infrastructures

Dayioglu A., AYDILEK A. H., CETIN B.

TRANSPORTATION RESEARCH RECORD, no.2401, pp.52-57, 2014 (SCI-Expanded)

Articles Published in Other Journals

- I. Numerical Analysis of the Drainage Performance of Steel Slags Used In Embankment Fills

BAYIN SARIAHMETOĞLU A., KORKMAZ B., Hatipoglu M., Yalcin Dayioglu A.

Uludağ Üniversitesi Mühendislik Fakültesi Dergisi, vol.28, no.2, pp.537-550, 2023 (Peer-Reviewed Journal)

- II. Comparative evaluation of mechanical performance of steel slag and earthen granular aggregates

DAYIOĞLU A. Y., HATİPOĞLU M., A.

Journal of sustainable construction materials and technologies (Online), vol.8, no.1, pp.12-19, 2023 (Scopus)

- III. Long term filtration performance of recycled asphalt pavement material

BAYIN A., İYİSAN R., YALÇIN DAYIOĞLU A., HATİPOĞLU M.

Pamukkale University Journal of Engineering Sciences, vol.27, no.6, pp.683-695, 2021 (ESCI)

Metrics

Publication: 39

Citation (WoS): 250

Citation (Scopus): 278

H-Index (WoS): 9

H-Index (Scopus): 10

Scholarships

Dean's Fellowship, University, 2012 - Continues

Awards

Yalçın Dayioğlu A., Outstanding Graduate Student Award, University of Maryland Graduate School, May 2015

Yalçın Dayioğlu A., Doctoral Fellowship, Geosynthetics Institute, August 2014

Yalçın Dayioğlu A., Distinguished Teaching Assistant Award, University of Maryland Center of Teaching Excellence, June 2014