

## Asst. Prof. ALİ İHSAN KARAKAŞ

### Personal Information

Office Phone: [+90 462 377 2039](tel:+904623772039)

Email: [aliihsan.karakas@ktu.edu.tr](mailto:aliihsan.karakas@ktu.edu.tr)

Web: <https://avesis.ktu.edu.tr/aliihsan.karakas>

### International Researcher IDs

ScholarID: D7utAuMAAAAJ

ORCID: 0000-0001-7790-3345

Publons / Web Of Science ResearcherID: AAR-2117-2020

ScopusID: 56770901100

Yoksis Researcher ID: 188338

### Education Information

Doctorate, Karadeniz Technical University, Mühendislik Fakültesi, İnşaat, Turkey 2012 - 2017

Postgraduate, Karadeniz Technical University, Mühendislik Fakültesi, İnşaat, Turkey 2010 - 2012

Undergraduate, Bogazici University, Faculty Of Engineering, İnşaat, Turkey 2004 - 2009

### Foreign Languages

English, B2 Upper Intermediate

### Certificates, Courses and Trainings

Vocational Training, Eğiticilerin Eğitimi, Karadeniz Teknik Üniversitesi , 2022

### Dissertations

Doctorate, Elastik Zemine Oturan Kule Tipi Yapıların SAP2000-OAPI Kullanılarak Yapısal Analizi ve Optimum Tasarımı, Karadeniz Technical University, Feb Bilimleri Enstitüsü , İnşaat Mühendisliği, 2017

Postgraduate, Static and Dynamic Analysis of Axisymmetric Structures Using Harmonic Solid Ring Finite Element Modeling, Karadeniz Technical University, -, İnşaat Mühendisliği, 2012

### Research Areas

Civil Engineering, Structure, Buildings (industrial, commercial and public), Structural Engineering, Steel Structures, Earthquake Engineering, Concrete Structures, Engineering and Technology

### Academic Titles / Tasks

Assistant Professor, Karadeniz Technical University, Mühendislik Fakültesi, İnşaat Mühendisliği, 2017 - Continues

Research Assistant, Karadeniz Technical University, Mühendislik Fakültesi, İnşaat Mühendisliği, 2010 - 2017

## Academic and Administrative Experience

Deputy Head of Department, Karadeniz Technical University, Mühendislik Fakültesi, İnşaat Mühendisliği, 2020 - 2022

## Courses

Computer Aided Design of Steel Structures, Undergraduate, 2021 - 2022

Steel Structures, Undergraduate, 2020 - 2021

İstatistik, Undergraduate, 2018 - 2019

Çelik Yapılar, Undergraduate, 2018 - 2019

Statistics, Undergraduate, 2018 - 2019

Engineering Drawing, Undergraduate, 2018 - 2019

Introduction to Civil Engineering, Undergraduate, 2018 - 2019

## Advising Theses

Karakaş A. İ., DESIGN OF LEAD RUBBER BEARINGS FOR BRIDGES AND THEIR EFFECTS ON BRIDGE EARTHQUAKE BEHAVIORS, Postgraduate, Y.BEXULTAN(Student), 2021

Karakaş A. İ., PERFORMANCE COMPARISONS OF FRICTION PENDULUM BEARINGS WITH DIFFERENT SLIDING SURFACE CONFIGURATIONS, Postgraduate, M.ZULFAKAR(Student), 2021

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Optimal design of a wind turbine supporting system accounting for soil-structure interaction**  
KARAKAŞ A. İ., DALOĞLU A.  
Structural Engineering and Mechanics, vol.88, no.3, pp.273-285, 2023 (SCI-Expanded)
- II. **Soil-structure interaction effects on seismic behavior of a hyperbolic cooling tower using three-parameter Vlasov foundation model**  
Karakaş A. İ., Özgan K., Daloğlu A.  
EARTHQUAKES AND STRUCTURES, vol.14, no.1, pp.85-94, 2018 (SCI-Expanded)
- III. **Optimum Design of Braced Steel Space Frames including Soil-Structure Interaction via Teaching-Learning-Based Optimization and Harmony Search Algorithms**  
Daloğlu A., Artar M., Özgan K., Karakaş A. İ.  
ADVANCES IN CIVIL ENGINEERING, vol.2018, 2018 (SCI-Expanded)
- IV. **Optimum design of steel space frames including soil-structure interaction**  
Daloğlu A., Artar M., Özgan K., Karakaş A. İ.  
STRUCTURAL AND MULTIDISCIPLINARY OPTIMIZATION, vol.54, no.1, pp.117-131, 2016 (SCI-Expanded)
- V. **A consistent FEM-Vlasov model for hyperbolic cooling towers on layered soil under unsymmetrical wind load**  
KARAKAŞ A. İ., ÖZGAN K., DALOĞLU A.  
WIND AND STRUCTURES, vol.22, no.6, pp.617-633, 2016 (SCI-Expanded)
- VI. **A parametric study for free vibration analysis of hyperbolic cooling towers on elastic foundation using consistent FEM-Vlasov model**  
KARAKAŞ A. İ., ÖZGAN K., DALOĞLU A.  
ARCHIVE OF APPLIED MECHANICS, vol.86, no.5, pp.869-882, 2016 (SCI-Expanded)
- VII. **Application of graded harmonic FE in the analysis of 2D-FGM axisymmetric structures**

KARAKAŞ A. İ., DALOĞLU A.

STRUCTURAL ENGINEERING AND MECHANICS, vol.55, no.3, pp.473-494, 2015 (SCI-Expanded)

VIII. **A parametric study for thick plates resting on elastic foundation with variable soil depth**

ÖZGAN K., DALOĞLU A., KARAKAŞ A. İ.

ARCHIVE OF APPLIED MECHANICS, vol.83, no.4, pp.549-558, 2013 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Effect of friction coefficients and sliding surface radii on seismic behavior of a triple friction pendulum bearing**  
Zulfakar M., Karakaş A. İ.  
SELCUK UNIVERSITY JOURNAL OF ENGINEERING SCIENCES, vol.21, no.02, pp.44-51, 2022 (Peer-Reviewed Journal)
- II. **Effect of Different Friction Pendulum Bearings on Seismic Behavior of Structures**  
Zulfakar M., Karakaş A. İ.  
Düzce Üniversitesi Bilim ve Teknoloji Dergisi, vol.10, no.4, pp.1826-1837, 2022 (Peer-Reviewed Journal)
- III. **Performance comparisons of triple friction pendulum bearings with different sliding surface properties**  
KARAKAŞ A., ZULFAKAR M.  
Journal of Structural Engineering & Applied Mechanics, vol.4, no.3, pp.151-162, 2021 (Peer-Reviewed Journal)
- IV. **A parametric frequency analysis for functionally graded cylinders using graded harmonic FEM**  
Karakaş A. İ., Daloğlu A.  
Journal of Structural Engineering & Applied Mechanics, vol.2, no.4, pp.190-206, 2019 (Peer-Reviewed Journal)
- V. **Optimum Design of Braced Steel Space Frames Using Teaching Learning Based Optimization**  
Daloğlu A., Artar M., Özgan K., Karakaş A. İ.  
International Journal of Engineering Technologies IJET, vol.4, no.1, pp.21-26, 2018 (Peer-Reviewed Journal)
- VI. **Yapı zemin etkileşiminin betonarme yapıların tasarımına etkisi**  
ÖZGAN K., KILIÇER S., DALOĞLU A., KARAKAŞ A. İ.  
DOKUZ EYLÜL ÜNİVERSİTESİ MÜHENDİSLİK FAKÜLTESİ FEN VE MÜHENDİSLİK DERGİSİ, vol.18, no.53, pp.139-152, 2016 (Peer-Reviewed Journal)
- VII. **Earthquake analysis of hyperbolic cooling towers**  
Özgan K., Karakaş A. İ., Daloğlu A.  
Pamukkale Üniversitesi Mühendislik Bilimleri Dergisi, vol.22, no.6, pp.433-441, 2016 (Peer-Reviewed Journal)
- VIII. **Free and Forced Vibration Analyses of Hyperbolic Cooling Tower Shell Using Harmonic Solid Ring Finite Elements**  
KARAKAŞ A. İ., DALOĞLU A.  
Journal of Engineering and Fundamentals, vol.2, no.1, pp.38-53, 2015 (Peer-Reviewed Journal)
- IX. **A Comparative Study on the Behavior of Cooling Towers Under Wind Loads Using Harmonic Solid Ring Finite Elements**  
KARAKAŞ A. İ., DALOĞLU A.  
Kırıkkale Üniversitesi Uluslararası Mühendislik Araştırma ve Geliştirme Dergisi, vol.7, no.2, pp.1-16, 2015 (Peer-Reviewed Journal)
- X. **Shear and volumetric locking effect on the performance of Harmonic Solid Ring Finite Elements**  
KARAKAŞ A. İ., DALOĞLU A.  
International Journal of Engineering & Applied Sciences, vol.7, no.1, pp.68-85, 2015 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Variation of lead-rubber isolator design displacements for unbalanced bridges considering various**

## **ground motion parameters and isolator dimensions**

Karakaş A. İ.

4th International Eurasian Conference on Science, Engineering and Technology (EurasianSciEnTech 2022), Ankara, Turkey, 14 - 16 December 2022, pp.796-803

- II. **Elastomer Mesnetli Karayolu Köprülerinin Farklı Orta Ayak Kolon Yükseklikleri İçin Deprem Davranışları**  
Bexultan Y., Karakaş A. İ.  
4th International Conference on Applied Engineering and Natural Sciences, Konya, Turkey, 10 - 13 November 2022, pp.213-220
- III. **Fundamental Periods of Isolated Bridges with Tall Column Bents and Soil Interaction**  
Karakaş A. İ.  
International Conference on Engineering Technologies (ICENTE'22), Konya, Turkey, 17 - 19 November 2022, pp.363-368
- IV. **Parametric Analysis of a Box Girder Highway Bridge for Different Lead Rubber Bearing Properties Using API**  
Bexultan Y., Karakaş A. İ.  
International Conference on Advances in Engineering, Architecture, Science and Technology (ICA-EAST 2021), Erzurum, Turkey, 15 - 17 December 2021, pp.1-9
- V. **Seismic Behavior Dependence on Geometrical Characteristics of Cooling Towers on Elastic Foundation**  
KARAKAŞ A. İ., DALOĞLU A., ÖZGAN K.  
12th International Congress on Advances in Civil Engineering, İstanbul, Turkey, 21 - 23 September 2016, pp.1-8
- VI. **Free Vibration Behaviors of Wind Turbine Towers for Various Geometrical Parameters**  
KARAKAŞ A. İ., DALOĞLU A.  
International Conference on Engineering and Natural Sciences, 24 - 28 May 2016, pp.1024-1031
- VII. **Optimum design of space truss bridges including soil-structure interaction**  
KARAKAŞ A. İ., ARTAR M., ÖZGAN K., DALOĞLU A.  
ICENS International Conference on Engineering and Natural Sciences, Sarajevo, Bosnia And Herzegovina, 24 - 28 May 2016, vol.5, pp.1032-1040
- VIII. **Winkler Yatak Katsayısının Hiperbolik Soğutma Kulesininin Serbest Titreşim ve Statik Rüzgar Davranışına Etkisi**  
KARAKAŞ A. İ., ÖZGAN K., DALOĞLU A., KILIÇER S.  
XIX. ULUSAL MEKANİK KONGRESİ, Trabzon, Turkey, 24 - 28 August 2015, pp.597-607
- IX. **Elastik Zemine Oturan Uzay Çelik Çerçevelerin GA ile Optimum Tasarımı**  
DALOĞLU A., ARTAR M., ÖZGAN K., KARAKAŞ A. İ.  
XIX. ULUSAL MEKANİK KONGRESİ, Trabzon, Turkey, 24 - 28 August 2015, pp.380-389

## **Metrics**

Publication: 27

Citation (WoS): 49

Citation (Scopus): 53

H-Index (WoS): 4

H-Index (Scopus): 4