

## **Lect. PhD Erol Demirkan**

### **Personal Information**

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### **International Researcher IDs**

ScholarID: Vkh1GAAAAAJ

ORCID: 0000-0002-4338-8549

Publons / Web Of Science ResearcherID: AAW-9155-2020

ScopusID: 57193340917

Yoksis Researcher ID: 214923

### **Education Information**

Doctorate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Civil Engineering, Turkey 2014 - 2020

Postgraduate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Civil Engineering, Turkey 2009 - 2012

Undergraduate, İstanbul University-Cerrahpaşa, Faculty Of Engineering, Department Of Civil Engineering, Turkey 2006 - 2009

Undergraduate, Balıkesir University, Faculty Of Engineering-Architecture, Department Of Civil Engineering, Turkey 2005 - 2006

### **Foreign Languages**

English, C1 Advanced

### **Dissertations**

Doctorate, INVESTIGATION OF BUCKLING ANALYSIS BASED ON NONLOCAL TIMOSHENKO RODS BY THE METHOD OF INITIAL VALUES, Istanbul Technical University, Fen Bilimleri Enstitüsü, Civil Engineering, 2020

Postgraduate, The Vibration of The Structures with Variable Stiffness, Istanbul Technical University, Fen Bilimleri Enstitüsü, Civil Engineering, 2012

### **Research Areas**

Mechanics of Solid Bodies, Civil Engineering, Mechanical, Structural Mechanics, Building Dynamics, Building Stability, Structure, Buildings (industrial, commercial and public), Structural Engineering, Steel Structures, Timber Structures, Earthquake Engineering, Concrete Structures, Engineering and Technology

### **Academic Titles / Tasks**

Lecturer, Istanbul Technical University, İnşaat, İnşaat Mühendisliği, 2021 - Continues

Research Assistant, Istanbul Technical University, İnşaat, İnşaat Mühendisliği, 2015 - 2020

## Academic and Administrative Experience

Member of Departmental Publicity Committee, Istanbul Technical University, İnşaat, İnşaat Mühendisliği, 2021 - Continues

Member of Faculty and Department Scholarship Committee, Istanbul Technical University, İnşaat, İnşaat Mühendisliği, 2015 - 2017

## Courses

Statics, Undergraduate, 2022 - 2023

Engineering Mechanics, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022

Dynamics, Undergraduate, 2022 - 2023, 2021 - 2022

Strength of Materials-I, Undergraduate, 2023 - 2024, 2022 - 2023

Mathematics in Civil Engineer, Undergraduate, 2023 - 2024, 2022 - 2023

Strength of Materials-I, Undergraduate, 2022 - 2023, 2021 - 2022

Strength of Materials-II, Undergraduate, 2023 - 2024

Strength of Materials-II, Undergraduate, 2021 - 2022, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015

Statics, Undergraduate, 2022 - 2023

Dynamics, Undergraduate, 2022 - 2023, 2016 - 2017, 2014 - 2015

Strength of Materials-I, Undergraduate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016

Statics, Undergraduate, 2021 - 2022

Statics, Undergraduate, 2020 - 2021, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016

Statics and Strength of Materials, Undergraduate, 2021 - 2022

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

- I. **Artificial Neural Network (ANN) Validation Research: Free Vibration Analysis of Functionally Graded Beam via Higher-Order Shear Deformation Theory and Artificial Neural Network Method**  
Çelik M., Gündoğdu E., Özdilek E. E., Demirkan E., Artan R.  
APPLIED SCIENCES, vol.14, no.1, pp.1-15, 2023 (SCI-Expanded)
- II. **Slope Deflection Method in Nonlocal Axially Functionally Graded Tapered Beams**  
Demirkan E., Çelik M., Artan R.  
APPLIED SCIENCES, vol.13, no.8, pp.1-21, 2023 (SCI-Expanded)
- III. **Buckling Analysis of Nanobeams Based on Nonlocal Timoshenko Beam Model by the Method of Initial Values**  
Demirkan E., Artan R.  
INTERNATIONAL JOURNAL OF STRUCTURAL STABILITY AND DYNAMICS, vol.19, no.4, 2019 (SCI-Expanded)

## Refereed Congress / Symposium Publications in Proceedings

- I. **YALITIMLI CAM ÜNİTELERİNDE YAYILI YÜKLEME ALTINDA PLAKALAR ARASINDAKİ YÜK PAYLAŞIMININ SONLU ELEMENLAR YÖNTEMİ İLE ANALİZİ**  
Yılmaz M., Kömürcü S., Demirkan E., Çelik M.  
21. ULUSAL MEKANİK KONGRESİ, Niğde, Turkey, 2 - 06 September 2019

## **II. Geometrical Nonlinear Interaction Model of Thin Insulating Glass Units**

Yılmaz M., Kömürcü S., Demirkan E.

13th INTERNATIONAL CONGRESS ON ADVANCES IN CIVIL ENGINEERING, İzmir, Turkey, 12 - 14 September 2018

## **III. Numerical Large Deflection Analysis of Annular Plates**

Demirkan E., Kömürcü S., Yılmaz M.

13th INTERNATIONAL CONGRESS ON ADVANCES IN CIVIL ENGINEERING, İzmir, Turkey, 12 - 14 September 2018

## **IV. Vibration of structures with variable stiffness**

Demirkan E., Kadioglu N.

6th International Conference on Structural Engineering, Mechanics and Computation, SEMC 2016, Cape-Town, South Africa, 5 - 07 September 2016, no.34520, pp.99-102

## **Memberships / Tasks in Scientific Organizations**

UCTEA - Chamber of Civil Engineers, Member, 2009 - Continues

## **Metrics**

Publication: 7

Citation (WoS): 4

Citation (Scopus): 4

H-Index (WoS): 1

H-Index (Scopus): 1

## **Awards**

Demirkan E., Graduated with 2nd Grade Degree, Istanbul Üniversitesi, July 2009

Demirkan E., Undergraduate Transfer Admission (Civil Engineering), İstanbul Üniversitesi, September 2006

## **Non Academic Experience**

Other, Yapı Teknik Proje Müşavirlik ve Mühendislik

Yapı Teknik Proje Müşavirlik ve Mühendislik

Public Corporation, Turkish Armed Forces

MİLLÎ SAVUNMA BAKANLIĞI

Other, self-employed

Other, self-employed

Other, self-employed

Company, Arzık Mühendislik (İnşaat), Trainee

Arzık İnşaat (Mühendislik)

Company, Şua İnşaat, Trainee