

# Journal of Structural Engineering & Applied Mechanics

Volume 1 • Issue 3 • September 2018  
ISSN: 2630-5763

Editor-in-Chief

**Volkan Kahya**

Karadeniz Technical University

Managing Editor

**Ahmet Can Altunışık**

Karadeniz Technical University

[www.dynaaca.com](http://www.dynaaca.com)  
[www.goldenlightpublish.com](http://www.goldenlightpublish.com)



# Journal of Structural Engineering & Applied Mechanics

## *Editor-in-Chief*

### **Volkan Kahya**

Department of Civil Engineering  
Karadeniz Technical University  
61080 Trabzon, Turkey  
E-mail: volkan@ktu.edu.tr

## *Managing Editor*

### **Ahmet Can Altunışık**

Department of Civil Engineering  
Karadeniz Technical University  
61080 Trabzon, Turkey  
E-mail: ahmetcan@ktu.edu.tr

## ***Editorial Board***

### **Abdullah Avey**

Süleyman Demirel University,  
Turkey

### **Ehsan Noroozinejad**

Graduate University of Advanced  
Technology, Iran

### **Metin Hüsem**

Karadeniz Technical University,  
Turkey

### **Adem Doğangün**

Uludağ University,  
Turkey

### **Erol Tutumluer**

University of Illinois, Urbana-  
Champaign, USA

### **Mohammad Reza Eslami**

Amirkabir University of Technology,  
Iran

### **Ahmet Birinci**

Karadeniz Technical University,  
Turkey

### **Halil Karadeniz**

Esenyurt University,  
Turkey

### **Mohammad Shariyat**

K.N. Toosi University of Technology,  
Iran

### **Alp Caner**

Middle East Technical University,  
Turkey

### **Halil Sezen**

Ohio State University,  
USA

### **Murat Emre Kartal**

İzmir Democracy University,  
Turkey

### **Ayman S. Mosallam**

University of California,  
Irvine, USA

### **Hui-Shen Shen**

Shanghai Jiao Tong University,  
China

### **Roland Duduchva**

A. Raznmadze Mathematical Institute,  
Georgia

### **Barış Sevim**

Yıldız Technical University,  
Turkey

### **Kurtuluş Soylook**

Gazi University,  
Turkey

### **Sez Atamturktur**

Clemson University,  
USA

### **Dimitri Georgievskii**

Moscow State University,  
Russia

### **Mehmet Hakkı Omurtag**

İstanbul Technical University,  
Turkey

### **Vagif Hacıyev**

Azerbaijan National Academy of  
Sciences, Azerbaijan

### **Eckart Schnack**

Karlsruhe Institute of Technology,  
Germany

### **Mehmet Ülker**

Fırat University,  
Turkey

*Journal of Structural Engineering & Applied Mechanics* is an international journal quarterly published by the Golden Light Publishing®. Each paper submitted is subject to peer-review, and only papers of highest quality that contain original ideas will be published.

Copyright © Golden Light Publishing®  
ISSN: 2630-5763 (online)

#### Address for correspondence:

Golden Light Publishing®,  
Trabzon Teknoloji Geliştirme Bölgesi, Yönetici A.Ş.,  
Üniversite Mahallesi, Hastane Caddesi, No: 33,  
61081 Trabzon / Turkey

# Journal of Structural Engineering & Applied Mechanics

Volume 1, Issue 3, September 30 2018

## CONTENTS

*K. Senthil, S. Bawa and C.P. Aswin*

Influence of concrete strength and diameter of reinforcing bar on pullout tests using finite element analysis ..... 105  
Research Article

*O. Araz, V. Kahya*

Effects of manufacturing type on control performance of multiple tuned mass dampers under harmonic excitation..... 117  
Research Article

*B.B. Ahmedov, A.M. Najafov and A.I. Abdullayev*

Determination of the kinematic parameters of the new constructive solution of the beamless sucker-rod pump ..... 128  
Research Article

*G. Adiyaman, A. Birinci*

A general solution for the receding contact problem of a functionally graded layer resting on a Winkler foundation ..... 136  
Research Article

*M. Karaton, H.A. Awla*

Numerical investigation of the effect on ultimate loading capacity of different longitudinal reinforcement ratios of a RC portal frame ..... 147  
Research Article