

Journal of Structural Engineering & Applied Mechanics

Volume 3 • Issue 3 • September 2020
ISSN: 2630-5763

Editor-in-Chief

Volkan Kahya

Karadeniz Technical University

Managing Editor

Ahmet Can Altunışık

Karadeniz Technical University

www.dynaaca.com
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

Adem Doğangün

Uludağ University, Turkey

Ahmet Birinci

Karadeniz Technical University,
Turkey

Alp Caner

Middle East Technical University,
Turkey

Barış Sevim

Yıldız Technical University, Turkey

Dimitri Georgievskii

Moscow State University, Russia

Eckart Schnack

Karlsruhe Institute of Technology,
Germany

Ehsan Noroozinejad

Graduate University of Advanced
Technology, Iran

Erol Tutumluer

University of Illinois, Urbana-
Champaign, USA

Halil Karadeniz

Esenyurt University, Turkey

Halil Sezen

Ohio State University, USA

Hui-Shen Shen

Shanghai Jiao Tong University,
China

Kurtuluş Soyluk

Gazi University, Turkey

Mehmet Hakkı Omurtag

İstanbul Medipol University, Turkey

Mehmet Ülker

Turgut Özal University, Turkey

Metin Hüsem

Karadeniz Technical University,
Turkey

Mohammad Reza Eslami

Amirkabir University of
Technology, Iran

Mohammad Shariyat

K.N. Toosi University of
Technology, Iran

Murat Emre Kartal

İzmir Democracy University,
Turkey

Roland Duduchava

A. Razmadze Mathematical
Institute, Georgia

Sez Atamturktur

Pennsylvania State University, USA

Vagif Hacıyev

Azerbaijan National Academy of
Sciences, Azerbaijan

Thuc P. Vo

La Trobe University, Australia

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 3, Issue 3, September 30, 2020

CONTENTS

Vahid Falahi, Hossein Mahbadi, Mohammad Reza Eslami

Ratcheting response of spherical vessels under load-controlled condition based on the Chaboche viscoplastic model..... 136
Research Article

Amr G. Abdellah, Salah E. El-Metwally, Ahmed M. Yousef

Orthotropic homogenized modeling of masonry wall panels retaining walls 153
Research Article

Mustafa Halûk Saraçoğlu, Sefa Uzun

Stability analysis of columns with variable cross-sections..... 169
Review Article

İbrahim Özgür Dedeoğlu, Yusuf Calayır

Effectiveness of outrigger and belt truss systems on the seismic behavior of high-rise buildings 180
Research Article

Fethi Şermet, Muhammet Ensar Yiğit, Sefa Ergun, Emin Hökelekli

Dynamic analysis of different type of wind turbine towers under wind and earthquake effects 204
Research Article