

JOURNAL OF CONSTRUCTION ENGINEERING, MANAGEMENT & INNOVATION

ISSN: 2630-5771

VOLUME 8 • ISSUE 4 • DECEMBER 2025

Editor-in-Chief

VEDAT TOĐAN

KARADENİZ TECHNICAL UNIVERSITY, TÜRKİYE



www.dynaaca.com




www.goldenlightpublish.com

Journal of Construction Engineering, Management & Innovation

ISSN: 2630-5771 (online)

Editor-in-Chief

Vedat Tođan

Karadeniz Technical University  togan@ktu.edu.tr

Honorary Editors-in-Chief

David Arditi


Illinois Institute of Technology

M. Talat Birgönül

Middle East Technical University


Managing Editor

Ahmet Can Altunışık

Karadeniz Technical University  ahmetcan@ktu.edu.tr

Design & Layout Editor

Hasan Basri Başıđa

Karadeniz Technical University  hasanbb@ktu.edu.tr

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

Golden Light Publishing® is a trademark of Dynamic Academy®.

Postal address

Golden Light Publishing®
Trabzon Teknoloji Geliřtirme Bölgesi, Yönetici A.Ş.
Üniversite Mahallesi, Hastane Caddesi, No: 33
61080 Trabzon, Türkiye
E-mail: info@goldenlightpublish.com

EDITORIAL BOARD

Editor-in-Chief

Vedat Tođan

Karadeniz Technical University, Türkiye

Editorial Board (in alphabetical order)

Ahmed Senouci University of Houston, USA

Albert P.C. Chan The Hong Kong Polytechnic University, Hong Kong

Ana Cocho-Bermejo Barcelona TEch, Spain

Assed N. Haddad Universidade Federal do Rio de Janeiro, Brazil

Aynur Kazaz Akdeniz University, Türkiye

Beliz Özorhon Bođaziçi University, Türkiye

Bon-Gang Hwang National University of Singapore, Singapore

Carlos Torres Formoso Federal University of Rio Grande do Sul, Brazil

Chien-Ho Ko National Pingtung University of Science and Technology, Taiwan

Gökhan Arslan İstanbul Aydın University, Türkiye

Gül Polat İstanbul Technical University, Türkiye

Hasan Basri Başıađa Karadeniz Technical University, Türkiye

İrem Dikmen University of Reading, United Kingdom

Johannes I.M. Halman University of Twente, The Netherlands

Low Sui Pheng National University of Singapore, Singapore

Lucio Soibelman University of Southern California, USA

Miklos Hajdu Budapest University of Technology and Economics, Hungary

Mladen Radujkovic Alma Mater Europaea University, Slovenia

M Reza Hosseini The University of Melbourne, Australia

Onur Behzat Tokdemir İstanbul Technical University, Türkiye

Reza Maalek Karlsruhe Institute of Technology, Germany

Salman Azhar Auburn University, USA

Saeed Talebi Birmingham City University, United Kingdom

Serkan Kıvrak Eskişehir Technical University, Türkiye

Sherif Mohamed University of Southern Queensland, Australia

Sibel Maçka Kalfa Karadeniz Technical University, Türkiye

Sparsh Johari Indian Institute of Technology Guwahati, India

Víctor Yepes Universitat Politècnica de València, Spain

Zhen-Song Chen Wuhan University, China

Journal of Construction Engineering, Management & Innovation

Volume 8, Issue 4, December 31, 2025

CONTENTS

- Merve Kuru Erdem, Osman Gökalp and Gulben Calis
Ensemble machine learning algorithms for thermal comfort prediction in HVAC systems of smart buildings 346
Research Article
- Merve Tuna Kayılı and Bahar Sultan Qurraie
Evaluating the potential of passive design measures for energy efficiency in retrofitting an educational building towards net-zero energy goals..... 380
Research Article
- Deribe Assefa Aga, Berhanu Belayneh Beyene and Niels Noorderhaven
Autonomous work motivation and job performance in an infrastructure megaproject: Does internal social responsibility matter? 403
Research Article
- Gizem Can and Sehnaz Cenani
End-user evaluation for human-oriented healthy and sustainable hospital design: Two case studies 424
Research Article
- Ahmet Esat Keser, Şirin Şevval Uçak, Murat Kuruoğlu and Onur Behzat Tokdemir
Construction labor productivity estimation through machine learning: Performance comparison of regression algorithms 438
Research Article
- Beliz Ozorhon and Ugur Ibrahim Yurttutan
Performance assessment in construction project management: Insights from an engineering, procurement, and construction management case study 477
Research Article
- Yasemin Ezgi Akyildiz, Emel Sadikoğlu, Sevilay Demirkesen, Chengyi Zhang, Harun Turkoglu, Atilla Damci, Deniz Besiktepe and Uttam Kumar Pal
Selecting the best dispute resolution method with choosing by advantages approach 501
Research Article

Ebru Kılıç Bakırhan and Merve Tuna Kayılı

Mitigating fit-out waste in rentable offices: The role of flexible design strategies 521

Research Article