

Prof. Ahmet Ergin

Personal Information

Office Phone: [+90 212 285 6474](tel:+902122856474)

Fax Phone: [+90 212 285 6454](tel:+902122856454)

Email: ergina@itu.edu.tr

Address: İTÜ Gemi İnşaatı ve Deniz Bilimleri Fakültesi, Maslak 34469, İstanbul

International Researcher IDs

ORCID: 0000-0002-8154-3132

Publons / Web Of Science ResearcherID: O-5043-2014

ScopusID: 36850209700

Yoksis Researcher ID: 151519

Education Information

Doctorate, University of Southampton, Gemi İnşaatı Mühendisliği, United Kingdom 1988 - 1993

Postgraduate, Istanbul Technical University, Gemi İnşaatı Ve Deniz Bilimleri Fakültesi, Gemi İnşaatı Ve Gemi Makineleri Mühendisliği Bölümü, Turkey 1985 - 1988

Undergraduate, Istanbul Technical University, Gemi İnşaatı Ve Deniz Bilimleri Fakültesi, Gemi İnşaatı Ve Gemi Makineleri Mühendisliği Bölümü, Turkey 1981 - 1985

Foreign Languages

English

Research Areas

Technical Sciences, Naval Architecture and Marine Engineering, Ship Construction

Academic Titles / Tasks

Professor, Istanbul Technical University, Gemi İnşaatı Ve Deniz Bilimleri Fakültesi, Gemi İnşaatı Ve Gemi Makineleri Mühendisliği Bölümü, 2005 - Continues

Associate Professor, Istanbul Technical University, Gemi İnşaatı Ve Deniz Bilimleri Fakültesi, Gemi İnşaatı Ve Gemi Makineleri Mühendisliği Bölümü, 1996 - 2005

Assistant Professor, Istanbul Technical University, Gemi İnşaatı Ve Deniz Bilimleri Fakültesi, Gemi İnşaatı Ve Gemi Makineleri Mühendisliği Bölümü, 1993 - 1996

Academic and Administrative Experience

Dean, Istanbul Technical University, Gemi İnşaatı ve Deniz Bilimleri, Gemi İnşaatı Ve Gemi Makinaları Mühendisliği, 2017 - 2020

İstanbul Teknik Üniversitesi, Gemi İnşaatı Ve Deniz Bilimleri Fakültesi, 2012 - 2016

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Investigation of acoustic radiation from a sphere vibrating on the free surface of a finite depth water using a boundary element method**
Üstündağ B., Uğurlu B., Ergin A.
Proceedings of the Institution of Mechanical Engineers Part M: Journal of Engineering for the Maritime Environment, 2023 (SCI-Expanded)
- II. **Acoustic radiation from a sphere pulsating near an impedance plane using a boundary integral equation method**
Ustundag B., Yıldızdağ M. E., Uğurlu B., Ergin A.
MATHEMATICS AND MECHANICS OF SOLIDS, vol.27, no.10, pp.1913-1929, 2022 (SCI-Expanded)
- III. **An isogeometric FE-BE method to investigate fluid-structure interaction effects for an elastic cylindrical shell vibrating near a free surface**
Yıldızdağ M. E., Ardiç İ. T., Ergin A.
OCEAN ENGINEERING, vol.251, 2022 (SCI-Expanded)
- IV. **Three-dimensional multi-patch isogeometric analysis of composite laminates with a discontinuous Galerkin approach***
Obohat M. A., Tahvilian E., Yıldızdağ M. E., Ergin A.
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART M-JOURNAL OF ENGINEERING FOR THE MARITIME ENVIRONMENT, vol.235, no.4, pp.820-833, 2021 (SCI-Expanded)
- V. **An isogeometric FE-BE method and experimental investigation for the hydroelastic analysis of a horizontal circular cylindrical shell partially filled with fluid**
Yıldızdağ M. E., Ardiç İ. T., Kefal A., Ergin A.
Thin-Walled Structures, vol.151, 2020 (SCI-Expanded)
- VI. **Multipatch discontinuous Galerkin isogeometric analysis of composite laminates**
Yıldızdağ M. E., Demirtas M., Ergin A.
CONTINUUM MECHANICS AND THERMODYNAMICS, vol.32, no.3, pp.607-620, 2020 (SCI-Expanded)
- VII. **Hydroelastic vibration analysis of plates partially submerged in fluid with an isogeometric FE-BE approach**
Yildizdag M. E., Ardiç İ. T., Demirtas M., Ergin A.
Ocean Engineering, vol.172, pp.316-329, 2019 (SCI-Expanded)
- VIII. **A new method to estimate ultimate strength of stiffened panels under longitudinal thrust based on analytical formulas**
Ozdemir M., Ergin A., Yanagihara D., TANAKA S., YAO T.
MARINE STRUCTURES, vol.59, pp.510-535, 2018 (SCI-Expanded)
- IX. **A decomposition method for surrogate models of large scale structures**
Koroglu S. A., Ergin A.
JOURNAL OF MARINE SCIENCE AND TECHNOLOGY, vol.21, no.2, pp.325-333, 2016 (SCI-Expanded)
- X. **Loads for use in the design of ships and offshore structures**
Hirdaris S. E., Bai W., DESSI D., Ergin A., GU X., HERMUNDSTAD O. A., HUIJSMANS R., Iijima K., Nielsen U. D., PARUNOV J., et al.
OCEAN ENGINEERING, vol.78, pp.131-174, 2014 (SCI-Expanded)
- XI. **Dynamic response of Mindlin plates resting on arbitrarily orthotropic Pasternak foundation and partially in contact with fluid**
Kutlu A., Uğurlu B., Omurtag M. H., Ergin A.
OCEAN ENGINEERING, vol.42, pp.112-125, 2012 (SCI-Expanded)
- XII. **The dynamics and stability of circular cylindrical shells containing and submerged in flowing fluid using a higher order boundary element method**
Uğurlu B., Ergin A.
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART M-JOURNAL OF ENGINEERING FOR THE MARITIME ENVIRONMENT, vol.223, pp.489-502, 2009 (SCI-Expanded)

- XIII. A hydroelastic investigation of circular cylindrical shells-containing flowing fluid with different end conditions
 Uğurlu B., Ergin A.
 JOURNAL OF SOUND AND VIBRATION, vol.318, pp.1291-1312, 2008 (SCI-Expanded)
- XIV. Dynamics of a rectangular plate resting on an elastic foundation and partially in contact with a quiescent fluid
 Uğurlu B., Kutlu A., Ergin A., Omurtag M. H.
 JOURNAL OF SOUND AND VIBRATION, vol.317, pp.308-328, 2008 (SCI-Expanded)
- XV. A hydroelasticity method for vibrating structures containing and/or submerged in flowing fluid
 Ugurlu B., Ergin A.
 JOURNAL OF SOUND AND VIBRATION, vol.290, pp.572-596, 2006 (SCI-Expanded)
- XVI. Hydroelastic analysis of fluid storage tanks by using a boundary integral equation method
 Ergin A., UGURLU B.
 JOURNAL OF SOUND AND VIBRATION, vol.275, pp.489-513, 2004 (SCI-Expanded)
- XVII. Linear vibration analysis of cantilever plates partially submerged in fluid
 Ergin A., UGURLU B.
 JOURNAL OF FLUIDS AND STRUCTURES, vol.17, no.7, pp.927-939, 2003 (SCI-Expanded)
- XVIII. Free vibration of a partially liquid-filled and submerged, horizontal cylindrical shell
 Ergin A., TEMAREL P.
 JOURNAL OF SOUND AND VIBRATION, vol.254, no.5, pp.951-965, 2002 (SCI-Expanded)
- XIX. The Response behaviour of a submerged cylindrical shell using the doubly asymptotic approximation method DAA
 Ergin A.
 Computers and Structures, vol.62, no.6, pp.1025-1034, 1997 (SCI-Expanded)
- XX. Dynamic characteristics of a submerged flexible cylinder vibrating in finite water depths
 Ergin A., GERAINT P., RICHARD R., PANDELİ T.
 JOURNAL OF SHIP RESEARCH, vol.36, pp.154-167, 1992 (SCI-Expanded)

Articles Published in Other Journals

- I. Linear Vibration Analysis of Clamped Vertical Rectangular Plates Partially Submerged into Fluid by IGAFEM – IGABEM Approach
 ARDIÇ İ. T., YILDIZDAĞ M. E., ERGIN A.
 Gemi ve Deniz Teknolojisi Dergisi, 2019 (Peer-Reviewed Journal)
- II. An experimental investigation of the dynamic responses of a submerged cylindrical shell excited impulsively
 ERGİN A.
 Bulletin of the Technical University of Istanbul, vol.49, pp.273-283, 1996 (Peer-Reviewed Journal)

Supported Projects

- Ergin A., Project Supported by Defense Industry, Dynamic positioning system development project, 2018 - 2022
- Ergin A., Project Supported by Higher Education Institutions, Kompozit Deniz Araçlarının Dövünme Kaynaklı Yük Altında Hidroelastik Analizi, 2013 - 2021
- Ergin A., Project Supported by Higher Education Institutions, Artık Gerilme ve Başlangıç Defermasyonu Etkisi Altındaki Stifnerli Gemi Panellerinin Burkulma Davranışının İncelenmesi, 2012 - 2021
- Ergin A., Project Supported by Higher Education Institutions, Gemi Yapısal Dizaynında Vekil Model Kullanımı, 2012 - 2021
- Ergin A., YILDIZDAĞ M. E., Project Supported by Higher Education Institutions, Gemi Yapılarının Hidroelastik

Davranışının İzogeometrik Sonlu Elemanlar Sınır Elemanları Metodu ile Sayısal Olarak İncelenmesi, 2019 - 2020
Ergin A., Project Supported by Defense Industry, Prototype development of self-acoustic prediction and acoustic monitoring/warning system in submarines, 2016 - 2020

Ergin A., Project Supported by Higher Education Institutions, Daldırılmış Yapıların Tepkisel Davranışlarını İncelemek için Bir Hidro- ve Akusto - Elastisiti Yaklaşımı, 2016 - 2018

Ergin A., Project Supported by Higher Education Institutions, DİNAMİK TEPKİ, 2015 - 2018

Ergin A., Project Supported by Higher Education Institutions, Yapısal Gemi Panellerinin Nihai Mukavemet analizi, 2013 - 2018

Ergin A., Project Supported by Higher Education Institutions, DÖKME YÜK GEMİLERİNİN DİNAMİK TEPKİ KARAKTERİSTİKLERİ İÇİN HİDRO ELESTİK İNCELENME, 2011 - 2018

Ergin A., Project Supported by Higher Education Institutions, AN INVESTIGATION INTO THE DYNAMIC RESPONSE CHARACTERISTICS OF BULK CARRIERS, 2010 - 2018

Ergin A., Project Supported by Higher Education Institutions, Sonlu Elemanlar ve Sınır Elemanlar Methodları Kullanılarak 1900 TEU'luk Bir Konteyner Gemisinin Hidroelastik Analizi, 2007 - 2018

Ergin A., Project Supported by Defense Industry, WECDIS algorithm development project, 2015 - 2016

Ergin A., Project Supported by Other Official Institutions, WECDIS Algoritma Geliştirme Çalışmaları, 2015 - 2016

Ergin A., Project Supported by Higher Education Institutions, Yatay Eksenli Kısmen Dolu ve Daldırılmış Silindirik Tankların Hidroelastik Analizi, 1997 - 2002

Metrics

Publication: 57
Citation (WoS): 764
Citation (Scopus): 819
H-Index (WoS): 15
H-Index (Scopus): 15

Non Academic Experience

İSTANBUL TEKNİK ÜNİVERSİTESİ
Professional Organization, Turkish Chamber of Naval Architects and Marine Engineers