Assoc. Prof. YAVUZ HAKAN ÖZDEMİR

Personal Information

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Education Information

Doctorate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Gemi İnş. Ve Gemi Mak.Müh. A.B.D, Turkey 2008 - 2014
Postgraduate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Gemi İnş. Ve Gemi Mak.Müh. A.B.D, Turkey 2006 - 2008
Undergraduate Double Major, Yildiz Technical University, Elektrik Elektronik Fakültesi, Elektrik Mühendisliği Böl., Turkey 2003 - 2007
Undergraduate, Yildiz Technical University, Faculty Of Mechanical Engineering, Gemi İnş. Ve Gemi Mak.Müh. Böl. , Turkey 2000 - 2006

Dissertations

Doctorate, Gemi Direncinin ve Hareketlerinin Hesaplamalı Akışkanlar Dinamiği Yöntemi Kullanılarak İncelenmesi, Yildiz Technical University, Fen Bilimleri Enstitüsü, Gemi İnş. Ve Gemi Mak.Müh. A.B.D, 2014
Postgraduate, Gemi Etrafındaki Akışın Hesaplamalı Akışkanlar Dinamiği Yöntemi Kullanılarak İncelenmesi, Yildiz Technical University, Fen Bilimleri Enstitüsü, Gemi İnş. Ve Gemi Mak.Müh. A.B.D., 2008

Research Areas

Naval Architecture and Marine Engineering, Ship Hydromechanics, Ship Construction, Engineering and Technology

Academic Titles / Tasks

Assistant Professor, Canakkale Onsekiz Mart University, Deniz Teknolojileri Meslek Yüksekokulu, Motorlu Araçlar ve Ulaştırma Teknolojileri, 2018 - Continues
Assistant Professor, Canakkale Onsekiz Mart University, Deniz Teknolojileri Meslek Yüksekokulu, Motorlu Araçlar ve Ulaştırma Teknolojileri, 2017 - 2018
Lecturer PhD, Bartin University, Meslek Yüksekokulu, Motorlu Araçlar Ve Ulaştırma Teknolojileri Bölümü, 2016 - 2017
Research Assistant, Yildiz Technical University, Naval Architecture And Maritime Faculty, Gemi İnşaatı Ve Gemi Makineleri Mühendisliği Bölümü, 2006 - 2014

Academic and Administrative Experience

Head of Department, Canakkale Onsekiz Mart University, Deniz Teknolojileri Meslek Yüksekokulu, Motorlu Araçlar Ve Ulaştırma Teknolojileri, 2022 - 2023
Head of Department, Canakkale Onsekiz Mart University, 2017 - 2020

Published journal articles indexed by SCI, SSCI, and AHCI

I. **BEM modelling of a hydrodynamic lifting surface working in ground proximity**
Cosgun T., Özdemir Y. H.
ENGINEERING ANALYSIS WITH BOUNDARY ELEMENTS, vol.159, pp.192-200, 2024 (SCI-Expanded)

II. **Nonlinear roll damping coefficients and natural frequency estimation via augmented extended Kalman filtering for floating body**
Ozdemir Y. H.
Ships and Offshore Structures, 2024 (SCI-Expanded)

III. **Estimation of ship roll damping and natural frequency using an extended Kalman filter applied to URANS output**
Özdemir Y. H.
SADHANA - ACADEMY PROCEEDINGS IN ENGINEERING SCIENCES, vol.48, no.3, pp.1-16, 2023 (SCI-Expanded)

IV. **Investigation of a cross-flow turbine under natural conditions**
KAYA A. M., ÖZDEMİR Y. H., YİĞİT K. S.
SADHANA-ACADEMY PROCEEDINGS IN ENGINEERING SCIENCES, vol.47, no.1, 2022 (SCI-Expanded)

V. **Comparative study on ship wave making resistance via viscous and IBEM solvers**
ÖZDEMİR Y. H., ÇOŞGUN T., Barlas B.
Ocean Engineering, vol.241, 2021 (SCI-Expanded)

VI. **WAVE FIELD GENERATED BY FINITE-SPAN HYDROFOILS OPERATING BENEATH A FREE SURFACE**
ÖZDEMİR Y. H., ÇOŞGUN T., Barlas B.
BRODOGRADNJA, vol.72, no.1, pp.145-167, 2021 (SCI-Expanded)

VII. **FREE SURFACE FLOW SIMULATION AROUND AN APPENDED SHIP HULL**
ÖZDEMİR Y. H., Barlas B.
BRODOGRADNJA, vol.69, no.3, pp.25-41, 2018 (SCI-Expanded)

VIII. **Numerical study of ship motions and added resistance in regular incident waves of KVLCC2 model**
Ozdemir Y. H., Barlas B.
INTERNATIONAL JOURNAL OF NAVAL ARCHITECTURE AND OCEAN ENGINEERING, vol.9, no.2, pp.149-159, 2017 (SCI-Expanded)

IX. **A numerical application to predict the resistance and wave pattern of kriso container ship**
Ozdemir Y. H., ÇOŞGUN T., DOĞRUL A., Barlas B.
Brodogradnja, vol.67, no.2, pp.47-65, 2016 (SCI-Expanded)

X. **Numerical and experimental study of turbulent free surface flow for a fast ship model**
Ozdemir Y. H., Barlas B., YILMAZ T., BAYRAKTAR S.
Brodogradnja, vol.65, no.1, pp.39-54, 2014 (SCI-Expanded)

Articles Published in Other Journals

I. **Investigation of Pitch and Heave Motion by Using CFD**
Özdemir Y. H., Çoşgun T.
Gemi ve Deniz Teknolojisi, no.223, pp.92-116, 2023 (Peer-Reviewed Journal)

II. **The Influence of Turbulence Models on the Numerical Modelling of a 3D Wing in Ground Effect**
Özdemir Y. H., Çoşgun T.

Avrupa Bilim ve Teknoloji Dergisi, vol.43, pp.86-90, 2022 (Peer-Reviewed Journal)

III. **Numerical Investigation of the Effect of Surface Roughness on the Viscous Resistance Components of Surface Ships**
Karabulut U. C., ÖZDEMİR Y. H., Barlas B.
Journal of Marine Science and Application, vol.21, no.3, pp.71-82, 2022 (ESCI)

IV. **Evaluation of Free Surface Interaction of a Submerged Hydrofoil using Boundary Element Method**
ÖZDEMİR Y. H., ÇOŞGUN T.
Avrupa Bilim ve Teknoloji Dergisi, vol.0, no.20, pp.572-580, 2020 (Peer-Reviewed Journal)

V. **Numerical Study on the Hydrodynamic Performance of Antifouling Paints**
KARABULUT U. C., ÖZDEMİR Y. H., Barlas B.
JOURNAL OF MARINE SCIENCE AND APPLICATION, vol.19, no.1, pp.41-52, 2020 (ESCI)

VI. **Türkiye'de Meslek Hastalıkları ve Tersaneler**
Özdemir Y. H.
Journal of Humanities and Tourism Research, vol.10, no.10-1, pp.59-72, 2020 (Peer-Reviewed Journal)

VII. **A CFD Study On the Hydrodynamic Characteristics of the Antifouling Paints**
KARABULUT U. c., ÖZDEMİR Y. h., BARLAS B.
Journal of Eta Maritime Science, vol.7, no.4, pp.318-331, 2019 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

I. **CFD Study on the Hydrodynamics of a Submarine Model Operating Near a Free-Surface**
ÇOŞGUN T., ÖZDEMİR Y. H.
1st International Conference on Recent and Innovative Results in Engineering and Technology, 16 - 18 August 2023

II. **RANS-DES Comparison on the Numerical Modelling of a Downforce Generating Wing Moving over a Solid Surface**
ÖZDEMİR Y. H., ÇOŞGUN T.
5th International Conference on Applied Engineering and Natural Sciences, 10 - 12 July 2023

III. **Potential Flow Solution Around a 3-D Body Using Boundary Element Method**
ÖZTÜRK S., ÖZDEMİR Y. H.
10 th INTERNATIONAL CONGRESS OF ACADEMIC RESEARCH (ICAR10), 6 - 07 February 2023

IV. **Yer Etkisindeki Bir Kanatın Aerodinamik Yapısının HAD ile incelenmesi**
ÖZDEMİR Y. H., ÇOŞGUN T.
4th International Conference on Applied Engineering and Natural Sciences (ICAENS 2022), Turkey, 10 November 2022

V. **The Influence of Turbulence Models on the Numerical Modelling of a 3D Wing in Ground Effect**
ÖZDEMİR Y. H., ÇOŞGUN T.
4th International Conference on Applied Engineering and Natural Sciences (ICAENS 2022), 10 - 13 October 2022

VI. **An URANS CFD Study of Wind Flow Around a Bridge Section**
YONAR F., ÖZDEMİR Y. H., ÇOŞGUN T.
4th Eurasian Conference on Civil and Environmental Engineering (ECOCEE), 17 - 18 June 2019, pp.782-788

VII. **2-D POTENTIAL FLOW AROUND NACA 4412 AIRFOIL**
ÖZDEMİR Y. H., COSGUN T.
ICAME 2018, İstanbul, Turkey, 18 - 20 December 2018

VIII. **Numerical Simulation of the Effect of Surface Roughness on ShipResistance**
KARABULUT U. C., ÖZDEMİR Y. H., BARLAS B.
International Science and Academic Congress'xx18, Konya, Turkey, 8 - 09 December 2018, vol.1, pp.138-151

IX. **Computational fluid dynamics analysis of bladder and urethra**
ÖZDEMİR Y. H., HURİ E., EZER M., BARLAS B.
International 3d Medical Printing Simulation Congress, 6 - 08 September 2018

X. **Uncertainty Assessment and Self-Propulsion Estimation of Duisburg Test Case (DTC)**
DOĞRUL A., ÖZDEMİR Y. H., SEZEN S., BARLAS B.
INT-NAM 2018, İstanbul, Turkey, 23 - 25 April 2018

XI. **Turbulent Flow Computations For Slender Ships With Free Surface**
ÖZDEMİR Y. H., BARLAS B., BAYRAKTAR S.
1st International Symposium on Naval Architecture and Maritime, (INT-NAM 2011), 24 - 25 October 2011

XII. **Modeling of a HVAC Unit in a Room for Performance Analysis**
Dogrul A., ÖZDEMİR Y. H., BAYRAKTAR S.
10th Rehva World Congress on Sustainable Energy Use in Buildings (CLIMA 2010), Antalya, Turkey, 09 May 2010, vol.9, pp.1-7

XIII. **Flowfield Analysis of a Rudder by Using Computational Fluid DynamicsAlıntı yapılan makalelerde ara**
ÖZDEMİR Y. H., BAYRAKTAR S., YILMAZ T.
5th International Advanced Technologies Symposium (IATS'09), Karabük, Turkey, 13 - 15 January 2009

XIV. **Effects of Improvement of Mesh Structure on the Computational Analysis**
BAYRAKTAR S., ÖZDEMİR Y. H., YILMAZ T.
Proceedings of International Journal of ArtsSciences Conference, Germany, 1 - 03 December 2008

XV. **Determining Optimum Geometry for a Bow Thruster Propeller**
ÖZDEMİR Y. H., BAYRAKTAR S., YILMAZ T., GÜNER M.
8th Symposium on High Speed Marine Vehicle (HSMV 2008), 22 - 23 May 2008

XVI. **Computational Investigation of a Hull**
ÖZDEMİR Y. H., BAYRAKTAR S., YILMAZ T.
2th International Conference on Marine Research and Transportation (ICMRT'07), 29 October - 30 June 2007

XVII. **Computational Analysis of Wind Velocity and Direction Effects On a Sail**
BAYRAKTAR S., ÖZDEMİR Y. H., YILMAZ T.
2th International Conference on Marine Research and Transportation (ICMRT'07), 28 - 30 June 2007

Supported Projects

Özdemir Y. H., Alkan S., Özyurt R., Karadurmuş U., EU Supported Other Project, Harnessing complementary curricular preparedness via sustainable management in response to civil and military pollution on the coastline, tributaries and lagoons in Black Sea's North, West, South zone (Black Sea SIERRA), 2023 - 2026

ÖZDEMİR Y. H., COŞGUN T., BARLAS B., Project Supported by Higher Education Institutions, Batmış yarı batmış karmaşık geometriler etrafındaki akışın hesaplamalı akışkanlar dinamiği yöntemleri kullanılarak incelenmesi ve potansiyel akış temelli yeni bir yazılım geliştirilmesi, 2019 - 2020

Özdemir Y. H., Project Supported by Higher Education Institutions, Alti 6 Serbestlik Dereceli Gemi Hareketlerinin Deneysel ve Sayısal Olarak İncelenmesi, 2011 - 2013

Özdemir Y. H., Project Supported by Other Private Institutions, Denizaltı Kurtarma Ana Gemisi (MOSHIP) ve Kurtarma Yedekleme Gemileri (KURYED) projesi, 2012 - 2012

Özdemir Y. H., Project Supported by Higher Education Institutions, Hesaplamalı Akışkanlar Dinamiği Yöntemleriyle Gemi Formu Optimizasyonu, 2010 - 2011

Memberships / Tasks in Scientific Organizations

Gemi Mühendisleri Odası, Member, 2005 - Continues

Scientific Refereeing

OCEAN ENGINEERING, SCI Journal, September 2022

OCEAN ENGINEERING, SCI Journal, November 2021
Brodogradnja, SCI Journal, May 2018
Brodogradnja, SCI Journal, January 2017

Metrics

Publication: 34
Citation (WoS): 75
Citation (Scopus): 96
H-Index (WoS): 4
H-Index (Scopus): 4