

Assoc. Prof. Burak Zincir



Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: A-1496-2016

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Education Information

Doctorate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Deniz Ulaştırma Mühendisliği, Turkey 2014 - 2019

Postgraduate, Istanbul Technical University, Fen Bilimleri Enstitüsü, Deniz Ulaştırma Mühendisliği, Turkey 2012 - 2014

Undergraduate, Istanbul Technical University, Denizcilik Fakültesi, Gemi Makineleri İşletme Mühendisliği Bölümü, Turkey 2005 - 2010

Foreign Languages

English

Dissertations

Doctorate, An alternative fuel assessment model for ships and experiments on the effect of methanol on diesel engines, Istanbul Technical University, Fen Bilimleri Enstitüsü, Deniz Ulaştırma Mühendisliği, 2019

Postgraduate, Hidrojen karışımı yakıtların gemilere uygulanabilirliğinin ve emisyon salınımlarına etkilerinin incelenmesi, İstanbul Teknik Üniversitesi, Fen Bilimleri Enstitüsü, Deniz Ulaştırma Ve İşletme Mühendisliği (Disiplinlerarası) (YI) (Tezli), 2014

Research Areas

Mechanical Engineering, Energy, Ship Machines

Academic Titles / Tasks

Assistant Professor, Istanbul Technical University, Denizcilik, Gemi Makineleri İşletme Mühendisliği, 2020 - Continues

Research Assistant, Istanbul Technical University, Denizcilik, Gemi Makineleri İşletme Mühendisliği, 2013 - 2019

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Investigation of the adverse effects of slow steaming operations for ships**
Dere Ç., Zincir B., Inal Ö. B., Deniz C.
Proceedings of the Institution of Mechanical Engineers Part M: Journal of Engineering for the Maritime Environment, vol.236, no.4, pp.1069-1081, 2022 (SCI-Expanded)
- II. **Investigation on the decarbonization of shipping: An approach to hydrogen and ammonia**
Inal Ö. B., Zincir B., Deniz C.
International Journal of Hydrogen Energy, vol.47, pp.19888-19900, 2022 (SCI-Expanded)
- III. **Environmental and economic evaluation of ammonia as a fuel for short-sea shipping: A case study**
Zincir B.
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.47, no.41, pp.18148-18168, 2022 (SCI-Expanded)
- IV. **Investigation of environmental, operational and economic performance of methanol partially premixed combustion at slow speed operation of a marine engine**
Zincir B., Deniz C., Tuner M.
JOURNAL OF CLEANER PRODUCTION, vol.235, pp.1006-1019, 2019 (SCI-Expanded)
- V. **Investigation of Effects of Intake Temperature on Low Load Limitations of Methanol Partially Premixed Combustion**
Zincir B., Shukla P., Shamun S., Tuner M., Deniz C., Johansson B.
ENERGY & FUELS, vol.33, no.6, pp.5695-5709, 2019 (SCI-Expanded)
- VI. **Environmental and economical assessment of alternative marine fuels**
Deniz C., ZINCİR B.
JOURNAL OF CLEANER PRODUCTION, vol.113, pp.438-449, 2016 (SCI-Expanded)

Articles Published in Other Journals

- I. **Analyzing Marine Engineering Curriculum from the Perspective of the Sustainable Development Goals**
ZİNCİR B.
Marine Science and Technology Bulletin, vol.11, pp.158-168, 2022 (Peer-Reviewed Journal)
- II. **An overview on the readiness level of the Turkish maritime industry for decarbonization in shipping**
ZİNCİR B., İNAL Ö. B., DERE Ç., DENİZ C.
Marine Science and Technology Bulletin, vol.11, no.1, pp.63-75, 2022 (Peer-Reviewed Journal)
- III. **Hybrid propulsion and alternative fuels education in the course of decarbonised shipping**
İnal Ö. B., Dere Ç., Zincir B., Deniz C.
Australian Journal of Maritime and Ocean Affairs, vol.14, no.2, pp.97-113, 2022 (Scopus)

Books & Book Chapters

- I. **Biodiesel and Renewable Diesel as a Drop-in Fuel for Decarbonized Maritime Transportation**
SEVİM Ç., ZİNCİR B.
in: Potential and Challenges of Low Carbon Fuels for Sustainable Transport, Agarwal, Avinash Kumar; Valera, Hardikk, Editor, Springer, Singapore, pp.319-345, 2022
- II. **Ammonia for Decarbonized Maritime Transportation**
ZİNCİR B.
in: Clean Fuels for Mobility, Di Blasio, Gabriele; Agarwal, Avinash Kumar; Belgiorno, Giacomo; Shukla, Pravesh Chandra, Editor, Springer, Singapore, pp.171-199, 2022
- III. **Hydrogen as Maritime Transportation Fuel: A Pathway for Decarbonization**
İNAL Ö. B., ZİNCİR B., DERE Ç.

in: Greener and Scalable E-fuels for Decarbonization of Transport , Editor, Springer, pp.67-110, 2022

IV. Methanol as a Fuel for Marine Diesel Engines

ZİNCİR B., DENİZ C.

in: Alcohol as an Alternative Fuel for Internal Combustion Engines, Pravesch Chandra Shukla, Giacomo Belgiorno, Gabriele Di Blasio, Avinash Kumar Agarwal, Editor, Springer, Singapore, pp.45-85, 2021

Refereed Congress / Symposium Publications in Proceedings

I. Comparison of Biofuels for Decarbonized Maritime Transportation

SEVİM Ç., ZİNCİR B.

International Symposium on Energy Management and Sustainability (ISEMAS) 2022, Turkey, 05 April 2022

II. Using an E-fuel Method to Meet the 2030 Decarbonization Target: A Case Study

ZİNCİR B. A., ZİNCİR B., USLUER H. B., ARSLANOĞLU Y.

International Symposium on Energy Management and Sustainability (ISEMAS) 2022, Turkey, 05 April 2022

III. Necessity of Ecological Efficiency Indicator Modal of Air Pollutants and Emissions from Ships in Maritime Transportation: Policy Perspective

ÇALIŞKAN U. Y., ZİNCİR B.

International Symposium on Energy Management and Sustainability (ISEMAS) 2022, Turkey, 05 April 2022

IV. Hydrogen and Ammonia as Fuel for the Decarbonization of Shipping

İNAL Ö. B., ZİNCİR B., DENİZ C.

5th International Hydrogen Technologies Congress, Turkey, 26 - 28 May 2021

V. A Short Review of Ammonia as an Alternative Marine Fuel for Decarbonised Maritime Transportation

ZİNCİR B.

International Conference on Energy, Environment and Storage of Energy (ICEESEN2020), Kayseri, Turkey, 19 - 21 November 2020

VI. QUANTIFICATION AND ANALYSIS OF THE CHARGE COOLING EFFECT OF METHANOL IN A COMPRESSION IGNITION ENGINE UTILIZING PPC STRATEGY

Shamun S., Zincir B., Shukla P., Valladolid P. G., Verheist S., Tuner M.

ASME Internal Combustion Engine Fall Technical Conference, California, United States Of America, 4 - 07 November 2018

VII. Maritime Industry Developments Related to Alternative Fuels

Zincir B., Deniz C.

INT-NAM 2018, 3rd International Naval Architecture and Maritime Symposium, İstanbul, Turkey, 24 - 25 April 2018, pp.893-905

VIII. Usage of Simulator As an Energy Efficient Operation of Main Engine Practice

Dere Ç., Zincir B., Deniz C.

The 13th International Conference on Engine Room Simulators, Odessa, Ukraine, 20 - 21 September 2017, pp.202-208

IX. Scenario Based Assessment Method for Engine Room Simulator Courses

Zincir B., Dere Ç., Deniz C.

The 13th International Conference on Engine Room Simulators, Odessa, Ukraine, 20 September 2017, pp.165-171

X. Hull fouling effect on propulsion system components

Dere Ç., Deniz C., ZİNCİR B., Kandemir Ç.

The Second Global Conference on Innovation in Marine Technology and The Future of Maritime Transportation, Muğla, Turkey, 24 - 25 October 2016, pp.142-148

XI. Investigation of effect of alternative marine fuels on energy efficiency operational indicator (EEOI)

ZİNCİR B., Deniz C.

The Second Global Conference on Innovation in Marine Technology and The Future of Maritime Transportation, Muğla, Turkey, 24 - 25 October 2016, pp.713-719

- XII. **Comparison of Hydrogen Production Methods for Shipboard Usage**
ZİNCİR B., DENİZ C.
10th Symposium on High-Performance Marine Vehicles, HIPER16, 17 - 19 October 2016
- XIII. **Adaptation of LNG Fuel System Workout to a Simulator for Training Purpose of Engine Officers**
ZİNCİR B., DERE Ç.
The 12th International Conference on Engine Room Simulators, 19 - 20 November 2015
- XIV. **Energy efficiency analysis of pump systems in a ship power plant and a case study of a container ship**
DURMUSOĞLU Y., Koçak G., Deniz C., Zincir B.
16th Annually General Assembly of International Associations of Maritime Universities (IAMU), Opatija, Croatia, 7 - 10 October 2015, pp.57-62
- XV. **An Investigation of Hydrogen Blend Fuels Applicability on Ships**
ZİNCİR B., DENİZ C.
2nd International Symposium on Naval Architecture and Maritime, 23 - 24 October 2014

Activities in Scientific Journals

International Journal of Energy and Power Engineering, Editor, 2020 - Continues

Metrics

Publication: 42
Citation (WoS): 147
Citation (Scopus): 259
H-Index (WoS): 4
H-Index (Scopus): 5

Awards

Zincir B., En Başarılı Doktora Tezi Ödülü 2019, İstanbul Teknik Üniversitesi, October 2020

Non Academic Experience

Company, Seahorse Shipping and Engineering Co. Ltd., Technical Department
Seahorse Denizcilik ve Mühendislik Tic. Ltd. Şti.