

## Assoc. Prof. Görkem KÖKKÜLÜNK

### Personal Information

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### International Researcher IDs

ScholarID: 7ivOSP8AAAAJ

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Publons / Web Of Science ResearcherID: AAT-8789-2020

ScopusID: 55329627200

Yoksis Researcher ID: 33301

### Education Information

Doctorate, Yildiz Technical University, Naval Architecture And Maritime Faculty, Gemi İnşaatı Ve Gemi Makineleri Mühendisliği, Turkey 2012 - 2016

Postgraduate, Yildiz Technical University, Naval Architecture And Maritime Faculty, Gemi İnşaatı Ve Gemi Makineleri Mühendisliği, Turkey 2011 - 2012

Undergraduate, Istanbul Technical University, Denizcilik Fakültesi, Gemi Makineleri İşletme Mühendisliği, Turkey 2004 - 2009

### Foreign Languages

English, C1 Advanced

### Dissertations

Doctorate, İki stroklu gemi dizel motorlarında performans izleme ve değerlendirme uygulaması, Yıldız Teknik Üniversitesi, Gemi İnşaatı Ve Gemi Makineleri Mühendisliği, Gemi İnşaatı Ve Gemi Makineleri Mühendisliği, 2016

Postgraduate, Su buharı enjeksiyonlu bir dizel motorunda egzoz gazları geri dolaşımının (EGR) performans ve emisyonlara etkilerinin incelenmesi, Yıldız Teknik Üniversitesi, Gemi İnşaatı Ve Gemi Makineleri Mühendisliği, Gemi İnşaatı Ve Gemi Makineleri Mühendisliği, 2012

### Research Areas

Naval Architecture and Marine Engineering, Ship Machines, Engineering and Technology

### Academic Titles / Tasks

Associate Professor, Yildiz Technical University, Naval Architecture And Maritime Faculty, Department Of Marine

Engineering Operations, 2021 - Continues

Assistant Professor, Yildiz Technical University, Naval Architecture And Maritime Faculty, Department Of Marine Engineering Operations, 2018 - 2021

Assistant Professor, Yildiz Technical University, Naval Architecture And Maritime Faculty, Department Of Marine Engineering Operations, 2017 - 2018

Research Assistant PhD, Yildiz Technical University, Naval Architecture And Maritime Faculty, Department Of Marine Engineering Operations, 2016 - 2017

Research Assistant, Yildiz Technical University, Naval Architecture And Maritime Faculty, Department Of Marine Engineering Operations, 2011 - 2016

## Academic and Administrative Experience

Rektörlük Akademik Teşvik Değerlendirme Komisyonu Üyesi, Yildiz Technical University, Naval Architecture And Maritime Faculty, 2020 - Continues

Bölüm Tanıtım ve Mezunlarla İlişkiler Komisyonu Üyesi, Yildiz Technical University, Naval Architecture And Maritime Faculty, 2017 - Continues

Eğitim ve Müfredat Kurulu üyesi, Yildiz Technical University, Naval Architecture And Maritime Faculty, Department Of Marine Engineering Operations, 2017 - Continues

Head of Department, Yildiz Technical University, Naval Architecture And Maritime Faculty, Department Of Marine Engineering Operations, 2022 - 2024

Head of Department, Yildiz Technical University, Naval Architecture And Maritime Faculty, Department Of Marine Engineering Operations, 2022 - 2024

Faculty Management Board Member, Yildiz Technical University, Naval Architecture And Maritime Faculty, Department Of Marine Engineering Operations, 2020 - 2024

Faculty Board Member, Yildiz Technical University, Naval Architecture And Maritime Faculty, Department Of Marine Engineering Operations, 2020 - 2024

Vice Dean, Yildiz Technical University, Naval Architecture And Maritime Faculty, 2020 - 2022

## Courses

Gemi Dizel Makineleri II, Undergraduate, 2017 - 2018

Gemilerde Enerji Verimliliği, Postgraduate, 2017 - 2018

Gemi Yardımcı Makineleri II, Undergraduate, 2017 - 2018

Makine Dairesi Simülâtörü II, Undergraduate, 2016 - 2017

Gemi Sistemlerinin Analizi, Undergraduate, 2017 - 2018

Gemi Yardımcı Makineleri I, Undergraduate, 2016 - 2017

Denizde Emniyet ve Güvenlik 2, Undergraduate, 2016 - 2017

Makine Dairesi Simülâtörü I, Undergraduate, 2017 - 2018

## Advising Theses

Kökkülünk G., Dizel motorlarda amonyak ve biyodizelin üçlü yakıt olarak kullanılmasının performans ve emisyonlar üzerindeki etkilerinin deneysel ve sayısal analizi, Doctorate, F.OKUMUŞ(Student), 2024

Kökkülünk G., Hidrojenin sodyum bor hidrürde depolanması ve dizel motorlarda amonyak ile üçlü yakıt olarak kullanılması, Doctorate, C.KAYA(Student), 2024

Kökkülünk G., Denizcilik sektöründe kullanılan esnek kauçuk boruların üretimi ve dayanım analizi, Postgraduate, R.ŞEVKİ(Student), 2024

Kökkülünk G., Farklı Tip Gemilerin 2020 Sülfür Regülasyonu Çerçevesinde Maliyet Açısından Değerlendirilmesi,

Postgraduate, A.BEKDAŞ(Student), 2021

Kökkülünk G., Uluslararası Emisyon Kuralları Çerçevesinde Bir Gemi Filosunun İncelenmesi, Postgraduate, B.KANBEROĞLU(Student), 2020

Kökkülünk G., Biyodizelin Gemi Dizel Motorlarında Alternatif Yakıt Olarak Kullanımının Deneysel Olarak İncelenmesi, Postgraduate, C.KAYA(Student), 2019

Kökkülünk G., Gemi Dizel Motorlarında Emülsife Yakıt Kullanımının Performans ve Emisyonlara Etkilerinin İncelenmesi, Postgraduate, F.OKUMUŞ(Student), 2019

Kökkülünk G., DENİZ YAKITLARININ YAĞLAMA YAĞINA KARIŞMASI DURUMUNDA TALL YAĞI ASİDİ KATKISININ SEGMAN-SİLİNDİR GÖMLEĞİ ARASINDAKİ SÜRTÜNME DAVRANIŞLARINA ETKİSİNİN İNCELENMESİ, Postgraduate, O.SERT(Student), 2019

## Jury Memberships

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, İstanbul Teknik Üniversitesi, July, 2023

Post Graduate, Post Graduate, İstanbul Teknik Üniversitesi, June, 2023

Doctorate, Doctorate, İstanbul Teknik Üniversitesi, June, 2023

Post Graduate, Post Graduate, İstanbul Teknik Üniversitesi, June, 2023

Post Graduate, Post Graduate, İstanbul Teknik Üniversitesi, June, 2023

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, İstanbul Teknik Üniversitesi, January, 2023

Doctorate, Doctorate, İstanbul Teknik Üniversitesi, December, 2022

Doctorate, Doctorate, İstanbul Teknik Üniversitesi, December, 2022

Doctorate, Doctorate, Dokuz Eylül Üniversitesi, August, 2022

Doctorate, Doctorate, Dokuz Eylül Üniversitesi, August, 2022

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, İstanbul Teknik Üniversitesi, July, 2022

Post Graduate, Post Graduate, İstanbul Teknik Üniversitesi, June, 2022

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Yıldız Teknik Üniversitesi, June, 2022

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Yıldız Teknik Üniversitesi, June, 2022

Doctorate, Doctorate, Dokuz Eylül Üniversitesi, February, 2022

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, İstanbul Teknik Üniversitesi, January, 2022

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, İstanbul Teknik Üniversitesi, December, 2021

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, İstanbul Teknik Üniversitesi, August, 2021

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, İstanbul Teknik Üniversitesi, July, 2021

Doctorate, Doctorate, Dokuz Eylül Üniversitesi, July, 2021

Doctorate, Doctorate, Dokuz Eylül Üniversitesi, July, 2021

Doctorate, Doctorate, İstanbul Teknik Üniversitesi, April, 2021

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, İstanbul Teknik Üniversitesi, January, 2021

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, İstanbul Teknik Üniversitesi, January, 2021

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Yıldız Teknik Üniversitesi, December, 2020

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, İstanbul Teknik Üniversitesi, August, 2020  
Post Graduate, Post Graduate, İstanbul Teknik Üniversitesi, June, 2020  
Post Graduate, Post Graduate, İstanbul Teknik Üniversitesi, June, 2020  
Post Graduate, Post Graduate, İstanbul Teknik Üniversitesi, June, 2020  
Doctorate, Doctorate, İstanbul Teknik Üniversitesi, October, 2019  
PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, İstanbul Teknik Üniversitesi, June, 2019  
Post Graduate, Post Graduate, Yıldız Technical University, May, 2019  
PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, İstanbul Teknik Üniversitesi, January, 2019  
Post Graduate, Post Graduate, Yıldız Teknik Üniversitesi, December, 2018  
Post Graduate, Post Graduate, İstanbul Teknik Üniversitesi, December, 2018  
Post Graduate, Post Graduate, Yıldız Teknik Üniversitesi, June, 2018  
Doctoral Examination, Doctoral Examination, İstanbul Teknik Üniversitesi, December, 2017

### **Published journal articles indexed by SCI, SSCI, and AHCI**

- I. **The effects of ammonia addition on the emission and performance characteristics of a diesel engine with variable compression ratio and injection timing**  
OKUMUŞ F., KANBEROĞLU ARSLAN B., GONCA G., KÖKKÜLÜNK G., Aydın Z., Kaya C.  
International Journal of Hydrogen Energy, vol.64, pp.186-195, 2024 (SCI-Expanded)
- II. **Enhancing the efficiency of sodium borohydride hydrolysis with a novel CoB-Triton catalyst**  
Kaya C., ÖZDEMİR J. H., ELÇİÇEK H., ÖZDEMİR O. K., KÖKKÜLÜNK G., ÜNLÜGENÇOĞLU K.  
International Journal of Hydrogen Energy, vol.51, pp.489-503, 2024 (SCI-Expanded)
- III. **Gradient boosting machine for performance and emission investigation of diesel engine fueled with pyrolytic oil-biodiesel and 2-EHN additive**  
Okumuş F., Sönmez H. İ., Safa A., Kaya C., Kökkülünk G.  
Sustainable Energy and Fuels, vol.7, no.16, pp.4002-4018, 2023 (SCI-Expanded)
- IV. **Comprehensive economic analyses in terms of maritime Sulphur 2020 regulation**  
Bekdaş A., Kaya C., Kökkülünk G.  
SHIPS AND OFFSHORE STRUCTURES, vol.18, no.6, pp.798-809, 2023 (SCI-Expanded)
- V. **Renewable energy resources: Combustion and environmental impact of diesel with pyrolytic and biodiesel blends**  
Sönmez H. İ., Okumuş F., Safa A., Aydın Z., Kaya C., Kökkülünk G.  
Energy and Environment, vol.34, no.4, pp.855-872, 2023 (SSCI)
- VI. **NOX based comparative analysis of a CI engine fueled with water in diesel emulsion**  
Okumuş F., Kaya C., Kökkülünk G.  
Energy Sources, Part A: Recovery, Utilization and Environmental Effects, vol.45, no.3, pp.6710-6729, 2023 (SCI-Expanded)
- VII. **THERMODYNAMIC ASSESSMENT OF WATER DIESEL EMULSIFIED FUEL USAGE IN A SINGLE CYLINDER DIESEL ENGINE**  
OKUMUŞ F., KÖKKÜLÜNK G., Kaya C., AYDIN Z.  
Energy Sources, Part A: Recovery, Utilization and Environmental Effects, vol.45, no.2, pp.3708-3721, 2023 (SCI-Expanded)
- VIII. **Biodiesel as alternative additive fuel for diesel engines: An experimental and theoretical investigation on emissions and performance characteristics**  
Kaya C., Kökkülünk G.  
Energy Sources, Part A: Recovery, Utilization and Environmental Effects, vol.45, no.4, pp.10741-10763, 2023 (SCI-Expanded)

- IX. **Exergetic and exergoeconomic analyzes of compressed natural gas as an alternative fuel for a diesel engine**  
Kaya C., AYDIN Z., KÖKKÜLÜNK G., SAFA A.  
Energy Sources, Part A: Recovery, Utilization and Environmental Effects, vol.45, no.2, pp.3722-3741, 2023 (SCI-Expanded)
- X. **NO and performance characteristics of a CI engine operated on emulsified fuel**  
Okumuş F., Kökkülünk G., Gonca G., Kaya İ.  
INTERNATIONAL JOURNAL OF GLOBAL WARMING, vol.30, pp.103-122, 2023 (SCI-Expanded)
- XI. **Waste to energy conversion: Pyrolytic oil and biodiesel as a renewable fuel blends on diesel engine combustion, performance, and emissions**  
Sönmez H. İ., Okumuş F., Kaya C., Aydın Z., Safa A., Kökkülünk G.  
INTERNATIONAL JOURNAL OF GREEN ENERGY, vol.19, no.12, pp.1333-1344, 2022 (SCI-Expanded)
- XII. **Assessment of CO2 emissions for a bulk carrier fleet**  
Kanberoğlu B., Kökkülünk G.  
JOURNAL OF CLEANER PRODUCTION, vol.283, 2021 (SCI-Expanded)
- XIII. **Exergoeconomic and air emission analyses for marine refrigeration with waste heat recovery system: a case study**  
BAŞHAN V., KÖKKÜLÜNK G.  
Journal of Marine Engineering and Technology, vol.19, no.3, pp.147-160, 2020 (SCI-Expanded)
- XIV. **Estimation of shipping emissions via novel developed data collecting and calculation software: a case study for the Region of Ambarli Port**  
ÜNLÜGENÇOĞLU K., KÖKKÜLÜNK G., ALARÇIN F.  
INTERNATIONAL JOURNAL OF GLOBAL WARMING, vol.19, no.3, pp.293-307, 2019 (SCI-Expanded)
- XV. **Comparative Analysis of Ship Lighting Systems in Terms of Economic, Environmental and Material Performance**  
YİĞİT K., KÖKKÜLÜNK G., SAVAŞ Ö.  
ACTA PHYSICA POLONICA A, vol.134, no.1, pp.189-191, 2018 (SCI-Expanded)
- XVI. **Determination of performance degradation of a marine diesel engine by using curve based approach**  
Kökkülünk G., Parlak A., Erdem H. H.  
APPLIED THERMAL ENGINEERING, vol.108, pp.1136-1146, 2016 (SCI-Expanded)
- XVII. **Energy cost assessment of shoreside power supply considering the smart grid concept: a case study for a bulk carrier ship**  
YİĞİT K., KÖKKÜLÜNK G., Parlak A., Karakas A.  
MARITIME POLICY & MANAGEMENT, vol.43, no.4, pp.469-482, 2016 (SSCI)
- XVIII. **Theoretical and experimental investigation of steam injected diesel engine with EGR**  
Kökkülünk G., Parlak A., Ayhan V., Cesur I., Gonca G., Boru B.  
ENERGY, vol.74, pp.331-339, 2014 (SCI-Expanded)
- XIX. **The Effects of Design Parameters on Performance and NO Emissions of Steam-Injected Diesel Engine with Exhaust Gas Recirculation**  
KÖKKÜLÜNK G., GONCA G., Parlak A.  
ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, vol.39, no.5, pp.4119-4129, 2014 (SCI-Expanded)
- XX. **Application of Taguchi Methods for the Optimization of Factors Affecting Engine Performance and Emission of Exhaust Gas Recirculation in Steam-injected Diesel Engines**  
Kökkülünk G., Parlak A., Bağcı E., Aydın Z.  
ACTA POLYTECHNICA HUNGARICA, vol.11, pp.95-107, 2014 (SCI-Expanded)
- XXI. **Investigation of the effects of steam injection on performance and emissions of a diesel engine fuelled with tobacco seed oil methyl ester**  
Parlak A., Ayhan V., Cesur I., KOKKULUNK G.  
FUEL PROCESSING TECHNOLOGY, vol.116, pp.101-109, 2013 (SCI-Expanded)
- XXII. **Theoretical and experimental investigation of diesel engine with steam injection system on performance and emission parameters**

Kökkülünk G., Gonca G., Ayhan V., Cesur I., Parlak A.

APPLIED THERMAL ENGINEERING, vol.54, pp.161-170, 2013 (SCI-Expanded)

XXIII. **Prediction of emissions and exhaust temperature for direct injection diesel engine with emulsified fuel using ANN**

Kökkülünk G., Akdoğan E., Ayhan V.

TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.21, pp.2141-2152, 2013 (SCI-Expanded)

XXIV. **New method to reduce NO<sub>x</sub> emissions of diesel engines: electronically controlled steam injection system**

Parlak A., Ayhan V., ÜST Y., ŞAHİN B., Cesur I., Boru B., KÖKKÜLÜNK G.

JOURNAL OF THE ENERGY INSTITUTE, vol.85, no.3, pp.135-139, 2012 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Review of Nitrogen Oxides (NO<sub>x</sub>) Reduction Methods Used on Marine Diesel Engine**  
Okumuş F., Kökkülünk G.  
Journal of Marine and Engineering Technology, vol.3, no.1, pp.34-44, 2023 (Peer-Reviewed Journal)
- II. **Decarbonization of Maritime Transportation: A Case Study for Turkish Ship Fleet**  
Kanberoğlu Arslan B., Turan E., Kökkülünk G.  
Journal of Marine Science and Application, vol.22, no.4, pp.716-727, 2023 (ESCI)
- III. **Is Existing Maintenance System Adequate for Sulphur 2020 Amendments?**  
Canca A. Y., Kökkülünk G.  
Journal of Eta Maritime Science, vol.8, no.4, pp.302-308, 2020 (ESCI)
- IV. **Energy and Exergy Analyses of a Bulk Carrier Diesel Generator for Different Loads Bir Dökme Yük Gemisi Dizel Jeneratörünün Farklı Yükleri için Enerji ve Ekserji Analizi**  
KÖKKÜLÜNK G.  
Journal of Eta Maritime Science, vol.7, no.1, pp.43-50, 2019 (Scopus)
- V. **Friction Behaviours of Lubrication Oil Contaminated With Cooling Water in Marine Diesel Engines**  
Aydın Z., Elçiçek H., Kökkülünk G., Okumuş F.  
INTERNATIONAL JOURNAL OF ADVANCES ON AUTOMOTIVE AND TECHNOLOGY, vol.1, pp.98-103, 2018 (Peer-Reviewed Journal)
- VI. **An Alternative Energy Efficiency Index Offer to Reduce CO<sub>2</sub> Emissions from Ships: Fleet Energy Efficiency Management Index**  
Kökkülünk G., Parlak A.  
Journal of Earth Sciences and Geotechnical Engineering, vol.7, no.1, pp.127-136, 2017 (Peer-Reviewed Journal)
- VII. **Bir Gemi Dizel Motorunun Performans Ölçümü ve Değerlendirilmesi**  
Parlak A., Kökkülünk G.  
JOURNAL OF ETA MARİTİME SCİENCE, vol.4, no.2, pp.165-173, 2016 (Peer-Reviewed Journal)
- VIII. **Prediction of emissions and performance parameters for steam injected diesel engine with EGR using ANN**  
Kökkülünk G., Parlak A., Ayhan V., Cesur İ.  
Journal of Maritime Transport and Engineering, vol.1, no.2, pp.21-27, 2013 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Denizcilikte Kullanılan Esnek Kauçuk Boruda Sarılan Telin Dayanıma Etkisinin Numerik Olarak İncelenmesi**  
Kökkülünk G., Şevki R.  
6. Uluslararası Mühendislik Bilimleri ve Multidisipliner Yaklaşımlar Kongresi, İstanbul, Turkey, 2 - 03 December

2023, pp.687

- II. **EXPERIMENTAL INVESTIGATION OF THE EFFECTS OF BIODIESEL FUELS ON THE PERFORMANCE AND EMISSIONS OF THE INTERNAL COMBUSTION ENGINE**  
Sarac M., Pamuk A. T., KÖKKÜLÜNK G., ARBAK A., KARAGÖZ Y.  
The 2nd World Energy Storage Conference (WESC-2022), İstanbul, Turkey, 18 December 2022, pp.144-146
- III. **EFFECTIVE HYDROLYSIS OF ALKALINE SODIUM BOROHYDRIDE: CoB-TRITON CATALYST**  
Kaya C., Türkcan J. H., ELÇİÇEK H., ÖZDEMİR O. K., KÖKKÜLÜNK G., ÜNLÜGENÇOĞLU K.  
23rd World Hydrogen Energy Conference: Bridging Continents by H<sub>2</sub>, WHEC 2022, İstanbul, Turkey, 26 - 30 June 2022, pp.580-582
- IV. **An Investigation on Energy Efficiency of Turkish-owned Bulk Carrier Fleet**  
Kanberoğlu B., Turan E., Kökkülünk G.  
4th GLOBAL CONFERENCE ON INNOVATION IN MARINE TECHNOLOGY AND THE FUTURE OF MARITIME TRANSPORTATION (GMC'21), İstanbul, Turkey, 18 - 19 November 2021, pp.23
- V. **Sülfür 2020 kuralı çerçevesinde farklı tonajlardaki konteyner gemileri için bir durum değerlendirmesi**  
Bekdaş A., Kökkülünk G.  
2nd International Eurasian Conference on Science, Engineering and Technology (EurasianSciEnTech 2020), Gaziantep, Turkey, 7 - 09 October 2020, vol.1, no.1, pp.348
- VI. **ASSESSMENT OF ENERGY EFFICIENCY OF A BULK CARRIER SHIP IN ACCORDANCE WITH INTERNATIONAL REGULATIONS**  
Kanberoğlu B., Kökkülünk G.  
IV. INTERNATIONAL SCIENTIFIC AND VOCATIONAL STUDIES CONGRESS - ENGINEERING, Ankara, Turkey, 7 - 10 November 2019, pp.1
- VII. **Experimental Investigation of Using Waste Frying Oil Biodiesel-Diesel Blends on Performance Parameters in a Diesel Engine**  
Kaya C., Kökkülünk G., Aydın Z., Okumuş F.  
International Design and Engineering Symposium, İzmir, Turkey, 10 - 12 October 2019, pp.152
- VIII. **Experimental Investigation of using Emulsified Fuel in a Diesel Engine on Performance and NOx Emissions**  
Okumuş F., Kökkülünk G., Kaya C., Safa A.  
III. GLOBAL CONFERENCE ON INNOVATION IN MARINE TECHNOLOGY AND THE FUTURE OF MARITIME TRANSPORTATION, İzmir, Turkey, 18 - 19 April 2019, pp.15-23
- IX. **The Investigation of Improvement with Tall Oil Fatty Acid of Negative Effects Through Diesel Oil Mixed with Lubricating Oil in Marine Diesel Generators**  
Kaya C., Sert O., Elçiçek H., Aydın Z., Kökkülünk G.  
III. GLOBAL CONFERENCE ON INNOVATION IN MARINE TECHNOLOGY AND THE FUTURE OF MARITIME TRANSPORTATION, İzmir, Turkey, 18 - 19 April 2019, pp.462-472
- X. **Investigation of the Effects of Marine Fuels in Lubrication Oil on The Friction of Piston Ring-Cylinder Liner in Marine Diesel Engines**  
Sert O., Aydın Z., Kökkülünk G.  
III. GLOBAL CONFERENCE ON INNOVATION IN MARINE TECHNOLOGY AND THE FUTURE OF MARITIME TRANSPORTATION, İzmir, Turkey, 18 - 19 April 2019, pp.24-36
- XI. **AMBARLI LİMANI HAVA KALİTESİNİN AVRUPA VE TÜRKİYE SINIRDEĞERLERİ AÇISINDAN DEĞERLENDİRİLMESİ**  
ÜNLÜGENÇOĞLU K., KÖKKÜLÜNK G., ALARÇIN F.  
TRANSİST İstanbul Ulaşım Kongresi, 8 - 10 November 2018
- XII. **Friction Behaviours of Lubrication Oil Contaminated With Cooling Water in Marine Diesel Engines**  
AYDIN Z., ELÇİÇEK H., KÖKKÜLÜNK G., OKUMUŞ F.  
3rd International Conference on Advances in Mechanical Engineering, 19 - 21 December 2017
- XIII. **ANALYSIS OF THE FRICTION FORCES BETWEEN PISTON RING-CYLINDER LINER PAIRS ON MARINE DIESEL ENGINES USING EMULSIFIED FUEL**

OKUMUŞ F., KÖKKÜLÜNK G., AYDIN Z., ELÇİÇEK H.

3rd INTERNATIONAL CONFERENCE ON ADVANCES IN MECHANICAL ENGINEERING, İstanbul, Turkey, 19 December 2017, pp.321-327

**XIV. DESIGN AND CALCULATION OF THE WASTE HEAT RECOVERY POTENTIAL FOR A BULK CARRIER MARINE DIESEL GENERATOR**

KÖKKÜLÜNK G., BAŞHAN V., KAYA A., SÖNMEZ H. İ., Sarıca A.

3rd CONFERENCE ON ADVANCES IN MECHANICAL ENGINEERING ISTANBUL 2017- ICAME2017, İstanbul, Turkey, 19 December 2017, pp.366-374

**XV. Comparative analysis of ship lighting systems in terms of economic, environmental and material performance**

YİĞİT K., KÖKKÜLÜNK G., SAVAŞ Ö.

7th INTERNATIONAL ADVANCES IN APPLIED PHYSICS AND MATERIALS SCIENCE CONGRESS EXHIBITION, 22 - 26 April 2017, pp.83

**XVI. An Alternative Energy Efficiency Index Offer to Reduce CO2 Emissions from Ships Fleet Energy Efficiency Management Index**

KÖKKÜLÜNK G., PARLAK A.

21st International Transport and Air Pollution Conference (TAP 2016), Lyon, France, 24 - 26 May 2016

**XVII. Determination of Performance Degradation of Marine Diesel Engine**

Kökkülünk G., Parlak A., Erdem H. H.

3rd International Multi-Conference on Computer, Electrical, Electronics and Mechanical Engineering (IMCEEME' 15), Dubai, United Arab Emirates, 20 - 21 May 2015, pp.63

**XVIII. Comparison for Performance and Exhaust Emissions of Steam Injected and Thermal Barrier Layer (TBL) Coated Piston Spark Ignition Engine**

Parlak A., Cesur İ., Ayhan V., Boru B., Kökkülünk G.

International Conference on Power Systems, Energy, Environment, Bern, Switzerland, 22 - 24 February 2014, pp.236-239

**XIX. Su Buharı Püskürtülmüş Bir Dizel Motora EGR Uygulamasının Etkileri**

Kökkülünk G., Parlak A., Ayhan V., Cesur İ.

V. Ulusal Denizcilik Kongresi, İstanbul, Turkey, 11 November 2013, pp.61-67

**XX. Prediction of emissions and performance parameters for steam injected diesel engine with EGR using ANN**

Kökkülünk G., Parlak A., Ayhan V., Cesur İ.

15th International Conference Maritime Transport and Infrastructure, Riga, Latvia, 25 - 26 April 2013, pp.1-10

**XXI. Investigation of Steam Injection with Exhaust Gas Recirculation (EGR) on a Diesel Engine**

Kökkülünk G., Parlak A., Ayhan V., Cesur İ.

3rd International Conference on Urban Sustainability, Cultural Sustainability, Green Development, Green Structures and Clean Cars, Barcelona, Spain, 17 - 19 October 2012, pp.41-46

**XXII. Comparison of Marine and Land Transportation Emissions: Turkey Study**

Çoşgun T., Kökkülünk G., Yurtseven A., İnce S. T., Kalyoncu İ., Çelebi U. B.

The 1st International Symposium on Naval Arch. and Maritime, İstanbul, Turkey, 24 - 25 October 2011, pp.137-146

**XXIII. Electrical Electronic and Control Education in Marine Engineering Operations A Novel Educational Model for Turkey**

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1st Int. Symposium. on Naval Architecture and Maritime, İstanbul, Turkey, 2 - 04 October 2011

**XXIV. The Effects of the New Developed Electronic Controlled Steam Injection System on NOx Emissions of a Single Cylinder Diesel Engine**

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## Supported Projects

Kökkülünk G., Özdemir O. K., Elçiçek H., Karagöz Y., TUBITAK Project, Gemilerde Sıfır Karbon Kapsamında Motora Entegre Hidrojen Üretim Sistemi Uygulaması , 2022 - 2025

KÖKKÜLÜNK G., OKUMUŞ F., GONCA G., SÖNMEZ H. İ., KAYA C., ELÇİÇEK H., EKMEKÇİOĞLU A., Project Supported by Higher Education Institutions, Hidrojen-Amonyak-Dizel Yakıt Karışımlarıyla Çalıştırılan Bir Dizel Motorun Emisyon ve Performans Karakteristiklerinin İncelenmesi, 2021 - 2024

ÜNLÜGENÇOĞLU K., ELÇİÇEK H., Kaya C., KÖKKÜLÜNK G., ÖZDEMİR O. K., Project Supported by Higher Education Institutions, Gemilerde hidrojen kullanımı için Amonyum Boran Hidrolizi ve Etkin Katalizör Geliştirilmesi, 2022 - 2023

TURAN E., KÖKKÜLÜNK G., KANBEROĞLU B., Project Supported by Higher Education Institutions, Türk Sahipli Gemi Filosunun Mevcut Enerji Verimliliği İndeks (EEXI) Analizi, 2021 - 2023

Kökkülünk G., Arslan Ö., Akyüz E., Erasmus Project, Development of Training System For Safe Turkish Straits (SafeSTRAITS), 2021 - 2023

GONCA G., ŞAHİN B., KÖKKÜLÜNK G., Project Supported by Higher Education Institutions, Farklı Sıvı ve Gaz Yakıtlarla Çalıştırılan Buji Ateşlemeli Bir Motorun Emisyon ve Performans Karakteristiklerinin Teorik Olarak İncelenmesi, 2021 - 2022

Kökkülünk G., Bayar H., Elçiçek H., Gonca G., Kaya C., Sönmez H. İ., Okumuş F., Project Supported by Higher Education Institutions, Dizel motorlarda atık lastiklerden elde edilen pirolitik yakıt ile atık kızartma yağı biyodizeli karışımlarının performans ve emisyonlara etkilerinin deneysel olarak incelenmesi, 2021 - 2022

Kökkülünk G., Akyüz E., Arslan Ö., Çevik G., Bal Beşikçi E., Erasmus Project, Maritime Health Training for Seafarers and Doctors (MariHealth), 2019 - 2022

Kökkülünk G., Aydın Z., Technopark, Atık Lastiklerin Pirolizinden Elde Edilen Gazlar İle Pirolitik Yağın Jeneratörde Zenginleştirilerek Yakılmasına Dair Metotların Araştırılması, 2020 - 2021

KÖKKÜLÜNK G., ERGENÇ A. T., ELÇİÇEK H., AYDIN Z., SERT O., OKUMUŞ F., KAYA A., SAFA A., Kaya C., Project Supported by Higher Education Institutions, Uluslararası emisyon standartlarına uyum için gezinti ve balıkçı tekne motorlarında emülsife yakıt kullanımının deneysel olarak araştırılması, 2018 - 2020

Kökkülünk G., Dönmez K. K., TUBITAK Project, Gemi buhar kazanları için su analizi ve kimyasal ıslah otomasyon sisteminin geliştirilmesi, 2018 - 2019

Savaş Ö., Ünlügençoğlu K., Aydın Z., Kökkülünk G., Project Supported by Higher Education Institutions, Deniz taşıtlarında kullanılan farklı yağların segman silindir çifti yüzeylerindeki tribolojik özelliklerine etki eden parametrelerin incelenmesi, 2013 - 2016

Şahin B., Üst Y., Gonca G., Elçiçek H., Kökkülünk G., TUBITAK Project, Miller Çevrimiyle Çalışan Bir Dizel motoruna Su Buharı Enjeksiyonu EGR uygulamasının NOx Emisyonlarına ve Performansa Etkilerinin Teorik ve Deneysel Olarak İncelenmesi, 2011 - 2014

Kökkülünk G., Parlak A., Project Supported by Higher Education Institutions, Su Buharı Enjeksiyonlu Bir Dizel Motorunda Egzoz Gazları Geri Dolaşımının EGR NOx Emisyonlarına ve Performansa Etkilerinin Deneysel Olarak İncelenmesi, 2011 - 2013

## Activities in Scientific Journals

Maritime Research and Technology (MRT) journal, Committee Member, 2022 - Continues

Seafic Journal, Committee Member, 2022 - Continues

Journal of Marine and Engineering Technology, Committee Member, 2021 - Continues

GMO Journal of Ship and Marine Technology, Editor, 2020 - Continues

Journal of ETA Maritime Science (JEMS), Editor, 2016 - Continues

## Memberships / Tasks in Scientific Organizations

TMMOB Gemi Makineleri İşletme Mühendisleri Odası (GEMİMO) , Executive Board Member, 2020 - Continues, Turkey

Denizcilik Eğitim Programları Değerlendirme ve Akreditasyon Derneği (DEDEK), Vice President, 2022 - 2024, Turkey  
Denizcilik Eğitim Programları Değerlendirme ve Akreditasyon Derneği (DEDEK), Secretary General, 2019 - 2022, Turkey  
TMMOB Gemi Makineleri İşletme Mühendisleri Odası (GEMİMO), Secretary General, 2018 - 2020, Turkey

## Scientific Refereeing

SUSTAINABILITY, Journal Indexed in SCI-E, November 2024  
JOURNAL OF MARINE SCIENCE AND ENGINEERING, Journal Indexed in SCI-E, November 2024  
TRANSPORTATION RESEARCH PART E-LOGISTICS AND TRANSPORTATION REVIEW, Journal Indexed in SCI-E, October 2024  
Processes, Journal Indexed in SCI-E, October 2024  
JOURNAL OF CLEANER PRODUCTION, Journal Indexed in SCI-E, September 2024  
ENERGIES, Journal Indexed in SCI-E, September 2024  
INTERNATIONAL JOURNAL OF EXERGY, Journal Indexed in SCI-E, September 2024  
Processes, Journal Indexed in SCI-E, September 2024  
ENERGY, Journal Indexed in SCI-E, September 2024  
SUSTAINABLE ENERGY TECHNOLOGIES AND ASSESSMENTS, Journal Indexed in SCI-E, August 2024  
BUILDINGS (BASEL), Journal Indexed in SCI-E, July 2024  
SUSTAINABILITY, Journal Indexed in SCI-E, June 2024  
WATER (SWITZERLAND), Journal Indexed in SCI-E, April 2024  
SHIPS AND OFFSHORE STRUCTURES, Journal Indexed in SCI-E, January 2024  
Nature Cities, Other Indexed Journal, January 2024  
SHIPS AND OFFSHORE STRUCTURES, Journal Indexed in SCI-E, December 2023  
JOURNAL OF SHIP PRODUCTION AND DESIGN, Journal Indexed in SCI-E, December 2023  
ENERGY STORAGE, Journal Indexed in SCI-E, November 2023  
energy, Journal Indexed in SCI-E, October 2023  
ENERGY & ENVIRONMENT, Journal Indexed in SSCI, July 2023  
SUSTAINABILITY, SCI Journal, June 2023  
SUSTAINABILITY, SCI Journal, May 2023  
ENERGIES, SCI Journal, April 2023  
JOURNAL OF MARINE SCIENCE AND TECHNOLOGY, Journal Indexed in SCI-E, April 2023  
MARINE SCIENCE AND TECHNOLOGY BULLETIN, Other Indexed Journal, March 2023  
APPLIED THERMAL ENGINEERING, Journal Indexed in SCI-E, March 2023  
JOURNAL OF MARINE SCIENCE AND ENGINEERING, SCI Journal, March 2023  
ENERGIES, Journal Indexed in SCI-E, February 2023  
JOURNAL OF MARINE SCIENCE AND ENGINEERING, Journal Indexed in SCI-E, February 2023  
WATER (SWITZERLAND), Journal Indexed in SCI-E, January 2023  
JOURNAL OF ETA MARITIME SCIENCE, Journal Indexed in ESCI, December 2022  
MARINE SCIENCE AND TECHNOLOGY BULLETIN, Other Indexed Journal, November 2022  
ENERGY JOURNAL, Journal Indexed in SCI-E, August 2022  
FUEL PROCESSING TECHNOLOGY, Journal Indexed in SCI-E, August 2022  
JOURNAL OF MARINE ENGINEERING AND TECHNOLOGY, Journal Indexed in SCI-E, August 2022  
APPLIED THERMAL ENGINEERING, Journal Indexed in SCI-E, August 2022  
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART E-JOURNAL OF PROCESS MECHANICAL ENGINEERING, Journal Indexed in SCI-E, August 2022  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, Journal Indexed in SCI-E, July 2022  
Project Supported by Higher Education Institutions, University Supported Other Projects, Istanbul Medeniyet University, Turkey, July 2022  
Project Supported by Private Organizations in Other Countries, IAMU 2021 Research Projects: Final Report Evaluation, Turkey, July 2022

Project Supported by Higher Education Institutions, BAP Guided, Istanbul Medeniyet University, Turkey, July 2022

SUSTAINABILITY, Journal Indexed in SCI-E, June 2022

PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART M-JOURNAL OF ENGINEERING FOR THE MARITIME ENVIRONMENT, Journal Indexed in SCI-E, May 2022

JOURNAL OF MARINE SCIENCE AND ENGINEERING, Journal Indexed in SCI-E, May 2022

RENEWABLE & SUSTAINABLE ENERGY REVIEWS, SCI Journal, May 2022

Journal of ETA Maritime Science, Journal Indexed in ESCI, April 2022

GMO Journal of Ship and Marine Technology, Other Indexed Journal, April 2022

Project Supported by Higher Education Institutions, BAP Research Project, Istanbul Medeniyet University, Turkey, March 2022

Marine Science and Technology Bulletin, Other Indexed Journal, February 2022

JOURNAL OF CLEANER PRODUCTION, Journal Indexed in SCI-E, January 2022

POLISH MARITIME RESEARCH, Journal Indexed in SCI-E, December 2021

Seafitic, Other journals, December 2021

APPLIED THERMAL ENGINEERING, Journal Indexed in SCI-E, August 2021

ENERGY, Journal Indexed in SCI-E, July 2021

Civil Society Organizations of Other Countries Supported Project, The International Association of Maritime Universities (IAMU), Turkey, July 2021

Journal of Computational Methods in Sciences and Engineering, Journal Indexed in ESCI, June 2021

FRONTIERS IN ENERGY RESEARCH, Journal Indexed in SCI-E, June 2021

2nd INTERNATIONAL CONGRESS ON SHIP AND MARINE TECHNOLOGY (GMO-SHIPMAR 2021), Conference Paper (Full Text), June 2021

The International Association of Maritime Universities Conference (IAMUC) - AGA'21, Conference Paper (Abstract), June 2021

ENERGY, Journal Indexed in SCI-E, May 2021

ENERGY, Journal Indexed in SCI-E, April 2021

Celal Bayar University Journal of Science, Other Journals, March 2021

ENERGY, Journal Indexed in SCI-E, March 2021

FUEL, Journal Indexed in SCI-E, December 2020

JOURNAL OF CLEANER PRODUCTION, Journal Indexed in SCI-E, December 2020

Energy Conversion And Management, Journal Indexed in SCI-E, October 2020

ENERGY, Journal Indexed in SCI-E, July 2020

FUEL, Journal Indexed in SCI-E, July 2020

ENERGY, SCI Journal, May 2020

Avrupa Bilim ve Teknoloji Dergisi, Other Indexed Journal, April 2020

Journal of Thermal Engineering, Journal Indexed in ESCI, February 2020

Project Supported by Higher Education Institutions, BAP Research Project, Yildiz Technical University, Turkey, January 2020

ENERGY, SCI Journal, December 2019

Journal of Thermal Engineering, Journal Indexed in ESCI, October 2019

GMO Journal of Ship and Marine Technology, Other Indexed Journal, May 2019

Energy Conversion and Management, SCI Journal, April 2019

JOURNAL OF THERMAL ENGINEERING, SCI Journal, February 2019

International Journal of Global Warming, SCI Journal, January 2019

Journal of Cleaner Production, SCI Journal, January 2019

WMU Journal of Maritime Affairs, Other Indexed Journal, October 2018

International Journal Maritime Engineering, SCI Journal, October 2018

Journal of Thermal Engineering, Other Indexed Journal, August 2018

Journal of Thermal Engineering, Other Indexed Journal, July 2018

Journal of Thermal Engineering, Other Indexed Journal, July 2018

International Journal Maritime Engineering, SCI Journal, July 2018

International Journal of Green Energy, SCI Journal, March 2018  
Energy, SCI Journal, February 2018  
Journal of ETA Maritime Science, Other Indexed Journal, January 2018  
Project Supported by Higher Education Institutions, BAP Research Project, Istanbul Technical University, Turkey, January 2018  
Applied Thermal Engineering, SCI Journal, December 2017  
Academic Platform Journal of Engineering and Science, Other Indexed Journal, September 2017  
Energy Conversion and Management, SCI Journal, September 2017  
Journal of Eta Maritime Science (JEMS), Other Indexed Journal, September 2017  
Energy, SCI Journal, July 2017  
Applied Thermal Engineering, SCI Journal, June 2017  
Research Journal of Chemistry and Environment, SCI Journal, May 2017  
Journal of Eta Maritime Science (JEMS), Other Indexed Journal, February 2017  
Applied Thermal Engineering, SCI Journal, February 2017  
Energy, SCI Journal, February 2017  
Journal of Eta Maritime Science (JEMS), SCI Journal, November 2016  
Jurnal Teknologi, SCI Journal, June 2016  
Journal of the Chinese Institute of Engineers, SCI Journal, March 2016  
International Journal of Ambient Energy, SCI Journal, February 2016  
Advances in Mechanical Engineering, SCI Journal, November 2015  
Fuel-Elsevier, SCI Journal, August 2015  
Journal of the Brazilian Society of Mechanical Sciences and Engineering, SCI Journal, April 2015  
Journal of the Brazilian Society of Mechanical Sciences and Engineering, SCI Journal, January 2015

## **Metrics**

Publication: 57  
Citation (WoS): 423  
Citation (Scopus): 473  
H-Index (WoS): 11  
H-Index (Scopus): 12

## **Non Academic Experience**

İnce Denizcilik  
Business Establishment Private, İnce Denizcilik Ve Tic. A.Ş.