

## Res. Asst. Cenk Kaya

### Personal Information

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### International Researcher IDs

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### Education Information

Doctorate, Yildiz Technical University, Naval Architecture And Maritime Faculty, Department Of Naval Architecture And Marine Engineering, Turkey 2020 - Continues

Postgraduate, Yildiz Technical University, Naval Architecture And Maritime Faculty, Turkey 2017 - 2020

Undergraduate, Yildiz Technical University, Naval Architecture And Maritime Faculty, Turkey 2009 - 2015

### Foreign Languages

English, B2 Upper Intermediate

### Research Areas

Ship Machines

### Academic Titles / Tasks

Research Assistant, Istanbul Technical University, Denizcilik, Gemi Makineleri İşletme Mühendisliği, 2018 - Continues

### 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., Özdemir J. H., Elçiçek H., Özdemir O. K., Kökkülünk G., Ünlügençoğlu K.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.1, no.1, pp.1-20, 2023 (SCI-Expanded)
- III. **Gradient Boosting Machine for Performance and Emission Investigation on Diesel Engine fueled with Pyrolytic-Biodiesel and 2-EHN additive**  
Okumuş F., Sönmez H. İ., Safa A., Kaya C., Kökkülünk G.  
SUSTAINABLE ENERGY & FUELS, vol.1, no.1, pp.1-20, 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. **THERMODYNAMIC ASSESSMENT OF WATER DIESEL EMULSIFIED FUEL USAGE IN A SINGLE CYLINDER DIESEL ENGINE**  
OKUMUŞ F., KÖKKÜLÜNK G., Kaya C., Aydın Z.  
Energy Sources, Part A: Recovery, Utilization and Environmental Effects, vol.45, no.2, pp.3708-3721, 2023 (SCI-Expanded)
- VII. **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)
- VIII. **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)
- IX. **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)
- X. **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, 2020 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Türkiye'nin Enerji Ufkunda Gezinmek: Enerji, Yakıtlar ve Hidrojen Konularına Akademik Katkıların Bibliyometrik İncelemesi**  
Kaya C., Başhan V.  
JOURNAL OF POLYTECHNIC-POLİTEKNİK DERGISİ, vol.1, no.1, pp.1-20, 2024 (ESCI)
- II. **Modeling of Diesel Engine Performance and Emission Using Artificial Neural Networks**  
Kaya C., Elçiçek H.  
Journal of Marine and Engineering Technology, no.1, pp.24-33, 2021 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **“Effective Hydrolysis of Alkaline Sodium Borohydride: CoB-Triton Catalyst**  
Kaya C., Türkcan J. H., Elçiçek H., Özdemir O. K., Kökkülünk G., Ünlügençoğlu K.  
World Hydrogen Energy Conference, İstanbul, Turkey, 26 - 30 June 2022, pp.126-129
- II. **Experimental Investigation of Using Waste Frying Oil Biodiesel-Diesel Blends on Performance Parameters in a Diesel Engine**  
KAYA C., KÖKKÜLÜNK G., AYDIN Z., OKUMUŞ F.  
International Design and Engineering Symposium, İzmir, Turkey, 10 - 12 October 2019

**III. 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

**IV. 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

## Supported Projects

Kökkülünk G., Karagöz Y., Elçiçek H., Özdemir O. K., Kaya C., TUBITAK Project, Gemilerde Sıfır Karbon Kapsamında Motora Entegre Hidrojen Üretim Sistemi Uygulaması- Tübitak 1001, 2022 - 2025

Ünlügençoğlu K., Kaya C., Elçiçek H., Özdemir O. K., Kökkülünk G., Project Supported by Higher Education Institutions, Gemilerde Hidrojen Kullanımı İçin Amonyum Boran Hidrolizi ve Etkin Katalizör Geliştirilmesi, 2022 - 2024

Ekmekeçioğlu A., Kökkülünk G., Gonca G., Elçiçek H., Kaya C., Sönmez H. İ., Okumuş F., Project Supported by Higher Education Institutions, Hidrojen-Amonyak-Dizel Yakıt Karışımlarıyla Çalıştırılan Bir Dizel Motorun Emisyon ve Performans Karakteristiklerinin İncelenmesi, 2021 - 2023

Kökkülünk G., Kaya C., Okumuş F., Sönmez H. İ., Gonca G., Bayar H., Elçiçek H., 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., Ergenç A. T., Elçiçek H., Aydın Z., Okumuş F., 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 - 2021

## Scientific Refereeing

JOURNAL OF ALLOYS AND COMPOUNDS, Journal Indexed in SCI-E, January 2024

CLEAN TECHNOLOGIES AND ENVIRONMENTAL POLICY, SCI Journal, September 2023

Journal Of Marine and Engineering Technology, National Scientific Refreed Journal, June 2023

PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS, PART E: JOURNAL OF PROCESS MECHANICAL ENGINEERING, SCI Journal, September 2022

ENERGY, SCI Journal, August 2022

PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART E-JOURNAL OF PROCESS MECHANICAL ENGINEERING, Journal Indexed in SCI-E, June 2022

## Metrics

Publication: 17

Citation (WoS): 21

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