

Assoc. Prof. Mehmet ÇAKIR

Personal Information

Office Phone: [+90 212 383 2936](tel:+902123832936)

Email: mecakir@yildiz.edu.tr

Web: <https://avesis.yildiz.edu.tr/mecakir>

Foreign Languages

English, B2 Upper Intermediate

Research Areas

Energy, Fuels and Combustion, Internal Combustion Engines, Thermal Systems, Ship Machines

Academic Titles / Tasks

Associate Professor, Yildiz Technical University, Naval Architecture And Maritime Faculty, Department Of Marine Engineering Operations, 2020 - Continues

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **Design and development of the PLC based sensor and instrumentation system for self-propelled pruning residue mulcher prototype**
Ünal İ., Çanakcı M., Topakcı M., Karayel D., Çakır M.
Computers And Electronics In Agriculture, vol.186, pp.1-9, 2021 (Journal Indexed in SCI Expanded)
- II. **Performance assessment of a modified power generating cycle based on effective ecological power density and performance coefficient**
GONCA G., ŞAHİN B., ÇAKIR M.
INTERNATIONAL JOURNAL OF EXERGY, vol.33, no.2, pp.153-164, 2020 (Journal Indexed in SCI)
- III. **Experimental Dynamic Analysis of Piston Assembly of Running Single Cylinder Diesel Engine**
Çakır M.
Journal Of Marine Engineering And Technology, pp.1-8, 2019 (Journal Indexed in SCI Expanded)
- IV. **Performance Characteristics and Emission Formations of a Spark Ignition (SI) Engine Fueled with Different Gaseous Fuels**
Gonca G., Çakır M., Şahin B.
ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, vol.43, pp.4487-4499, 2018 (Journal Indexed in SCI)
- V. **Ecological coefficient of performance analysis and optimisation of gas turbines by using exergy analysis approach**
Üst Y., Şahin B., Çakır M.
INTERNATIONAL JOURNAL OF EXERGY, vol.21, pp.39-69, 2016 (Journal Indexed in SCI)
- VI. **THE NUMERICAL THERMODYNAMIC ANALYSIS OF OTTO-MILLER CYCLE**
ÇAKIR M.
THERMAL SCIENCE, vol.20, no.1, pp.363-369, 2016 (Journal Indexed in SCI)
- VII. **Effects of Borided Cylinder Liner on Engine Performance in a Firing Diesel Engine**

Çakir M., Akcay I. H.

ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, vol.40, pp.3329-3335, 2015 (Journal Indexed in SCI)

- VIII. **Thermodynamic performance analysis and optimization of DMC (Dual Miller Cycle) cogeneration system by considering exergetic performance coefficient and total exergy output criteria**

ÜST Y., ARSLAN F., ÖZSARI İ., ÇAKIR M.

ENERGY, vol.90, pp.552-559, 2015 (Journal Indexed in SCI)

- IX. **INVESTIGATION THEORETICALLY AND EMPIRICALLY OF CORRELATION BETWEEN HARDENABILITY AND HEAT TRANSFER FOR JOMINY SAMPLE**

Çakir M., Ozsoy A.

JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.28, pp.251-256, 2013 (Journal Indexed in SCI)

- X. **Investigation of the correlation between thermal properties and hardenability of Jominy bars quenched with air-water mixture for AISI 1050 steel**

Çakir M., Ozsoy A.

MATERIALS & DESIGN, vol.32, pp.3099-3105, 2011 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **Kendi Yürür Bir Budama Artığı Parçalamaya Makinası İşletme Giderlerinin Belirlenmesi**
Canakci M., Topakci M., Karayel D., Unal I., Çakir M., Yigit M., Ozdemir E.
Acta Oceanologica Sinica, vol.14, no.2, pp.127-134, 2018 (Other Refereed National Journals)
- II. **Experimental Performance Analysis of a Partially Loaded Natural Gas Fuelled Research Engine**
Çakir M.
Journal of ETA Maritime Science, vol.6, no.2, pp.85-91, 2018 (Refereed Journals of Other Institutions)
- III. **Cost Efficiency and Emission Analysis of a Bulk Carrier Cranes Operation**
Başhan V., Çakir M., Sönmez H. İ.
JOURNAL OF ETA MARITIME SCIENCE, vol.6, no.1, pp.100-105, 2018 (Refereed Journals of Other Institutions)
- IV. **Frictional Behavior between Piston Ring and Cylinder Liner in Engine Condition with Application of Reciprocating Test**
Çakir M., Akcay İ. H.
International Journal of Materials Engineering and Technology, vol.11, no.1, pp.57-71, 2014 (Refereed Journals of Other Institutions)
- V. **An Investigation on Correlation between Engine Performance and Piston Ring-Cylinder Friction in Internal Combustion Engines**
Çakir M., Akcay İ. H.
C.B.U. Soma Meslek Yüksek Okulu Teknik Bilimler Meslek Yüksek Okulu Dergisi, vol.2, no.16, pp.33-44, 2011 (Other Refereed National Journals)

Refereed Congress / Symposium Publications in Proceedings

- I. **EFFECT OF COMPRESSION RATIO ON THE PERFORMANCE OF A NATURAL GAS FIRED ENGINE**
ÇAKIR M., SÖNMEZ H. İ.
4TH INTERNATIONAL CONFERENCE ON ENGINEERING AND NATURAL SCIENCE, Kiev, Ukraine, 02 May 2018, pp.387
- II. **DESIGN OF COMPRESSED NATURAL GAS-AIR MIXER FOR A SINGLE CYLINDER GAS ENGINE**
ÇAKIR M., Sezer K., Sezer S.
4th International Conference on Engineering and natural Science, Kiev, Ukraine, 02 May 2018, pp.386
- III. **The Wear Behaviour Borided Cast Iron Cylinder Liner on a Running Diesel Engine**
ÇAKIR M., Akçay İ. H.

- III. International Conference on Engineering and Natural Science (ICENS), Budapeşte, Hungary, 03 May 2017, pp.614-618
- IV. **Determination of Pre-combustion Chamber Design for a Stratified Charge Natural Gas Engine**
ÇAKIR M., SÖNMEZ H. İ.
III. International Conference on Engineering and Natural Science (ICENS), Budapeşte, Hungary, 03 May 2017, pp.609-613
- V. **Experimental Assessment of Heat Flux throughout Cylinder Wall in a Compression Ignition Engine**
ÇAKIR M.
2nd International Conference on Engineering and Natural Science, Sarajova, Bosnia And Herzegovina, 24 May 2016, pp.409-414
- VI. **Effects of Piston Motion on Specific Surfaces of the Cylinder Liner in a Compression Ignition Engine**
ÇAKIR M., AKÇAY İ. H.
icens 2015, 15 - 19 May 2015

Supported Projects

- Çakır M., KOSGEB, SABİT HACİMLİ YANMA HIZI ÖLÇÜM CİHAZI PROTOTİP İMALATI PROJESİ, 2020 - 2022
- ÇAKIR M., SÖNMEZ H. İ. , ÜST Y., BAŞHAN V., Project Supported by Higher Education Institutions, Doğal Gaz Yakıtlı Tek Silindirli Bir Motorun İdeal Sıcaklık Çalışma Koşullarının Belirlenmesi, 2018 - 2021
- Çakır M., TUBITAK Project, DOĞAL GAZ YAKITLI TEK SILINDIRLI BİR MOTORUN JET ATEŞLEME YONTEMİ İLE SIMULASYONU VE DENEYSEL PERFORMANS ARASTIRMASI, 2019 - 2020
- Çakır M., TUBITAK Project, Doğal Gaz Yakıtlı Bir Motor İçin Gaz Karıştırıcı Sistem Tasarımı, 2017 - 2018
- Çakır M., Gonca G., Üst Y., Şahin B., TUBITAK Project, Combustion optimisation and divided combustion chamber design for stratified charge formation on an injection natural gas engine, 2015 - 2018
- Çakır M., Çanakçı M., TUBITAK Project, Self-propelled waste bough shredding machine prototype production, 2015 - 2018
- ÇAKIR M., Project Supported by Higher Education Institutions, Tek Silindirli Hava Soğutmalı Bir Motorda Borlanmış Dökme Demir Gömleğin Motor Performans Değerleri Üzerindeki Etkilerinin Deneysel Araştırılması, 2011 - 2013
- Çakır M., Project Supported by Other Official Institutions, Yengeç Yürüyüşlü Plaj Kumu Temizlik Makinesi, 2011 - 2012
- Akçay İ. H. , TUBITAK Project, Buji Ateşlemeli Bir Hidrojen Motorunda Yanma Parametrelerinin Motor Performansına Etkisinin Belirlenmesi ve Buji Ateşlemeli Bir Hidrojen Motorunun Optimizasyonu, 2007 - 2010
- ÇAKIR M., Project Supported by Higher Education Institutions, Su Verme Isıl İşleminde Çelik-Ortam Arasındaki Isı Transferinin İncelenmesi, 2007 - 2008

Patent

- Çakır M., A SELF-PROPELLED PRUNING RESIDUE SHREDDING MACHINE-1, Patent, CHAPTER B Implementation of Operations; Transport, The Invention Recourse Number: 2018/02887 , Initial Registration, 2018
- Çakır M., A SELF-PROPELLED PRUNING RESIDUE SHREDDING MACHINE-2, Patent, CHAPTER B Implementation of Operations; Transport, The Invention Recourse Number: 2018/02883 , Initial Registration, 2018

Activities in Scientific Journals

El-Cezeri Journal of Science and Engineering, Assistant Editor, 2020 - Continues

Memberships / Tasks in Scientific Organizations

Enerji ve Tabii Kaynaklar Bakanlığı Türkiye Kömür İşletmeleri -Mesleki Yeterlilik Eğitim Merkezi, Member, 2019 - 2021,

Turkey

Mobility Activity

Post Doc, Post Doc, The University of Nottingham, England, 2018 - 2020

Erasmus Programme, Lecturing, Universidade da Coruna, Spain, 2014 - 2014

Citations

Total Citations (WOS):56

h-index (WOS):4

Scholarships

2219 - International Postdoctoral Research Fellowship, TUBITAK, 2019 - 2020

Awards

Çakır M., Topakcı M., Çanakcı M., Karayel D., Ünal İ., Tübitak Proje Performans Ödülü, Tübitak, September 2020

Canakci M., Topakci M., Karayel D., Unal I., Çakır M., Yigit M., Ozdemir E., 2018 Year Atso Grow-tech Agriculture Innovation Prize, Antalya Ticaret Odası - Growtech Fuar Organizasyonu, December 2018

Canakci M., Topakci M., Karayel D., Unal I., Çakır M., Mersin University R&D Project Market Second Prize , Mersin Üniversitesi, November 2018

Canakci M., Topakci M., Karayel D., Unal I., Çakır M., Best Oral Presentation Second Prize, 31. Tarımsal Mekanizasyon Ve Enerji Kongresi Organizasyon Komitesi, September 2018

Canakci M., Topakci M., Karayel D., Unal I., Çakır M., 3rd Istanbul International Inventions Fair - Gold Medal, Türk Patent Ve Marka Kurumu, September 2018

Entrepreneurship Activities

Limited, Piren Teknoloji ve Mühendislik Sanayi Ticaret Limited Şirketi, 17 December 2020, Co-Founder