### Assoc. Prof. MERT GÜLÜM

#### **Personal Information**

Office Phone: +90 462 377 2963

Email: gulum@ktu.edu.tr

Web: https://avesis.ktu.edu.tr/gulum

### **International Researcher IDs**

ORCID: 0000-0002-1792-3499

Publons / Web Of Science ResearcherID: AAT-2455-2020

ScopusID: 56548719200 Yoksis Researcher ID: 160362

# Foreign Languages

English, B2 Upper Intermediate

### Research Areas

Mechanical Engineering

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

 Effect of adding dimethyl carbonate and gasoline to diesel fuel + corn oil blend on performance and combustion characteristics of a diesel engine

GÜLÜM M.

Environmental Science and Pollution Research, vol.31, no.27, pp.38926-38939, 2024 (SCI-Expanded)

II. Performance, combustion and emission characteristics of a diesel engine fuelled with diesel fuel + corn oil + alcohol ternary blends

GÜLÜM M.

Environmental Science and Pollution Research, vol.30, no.18, pp.53767-53777, 2023 (SCI-Expanded)

III. Effects of compression ratio, blending ratio and engine speed on fuel cost, performance and exhaust emissions of a diesel engine fueled with bio-derived alternative fuels GÜLÜM M.

Sustainable Energy Technologies and Assessments, vol.53, 2022 (SCI-Expanded)

# Articles Published in Other Journals

I. Mathematical correlations for variation in heat release rate of a diesel engine fuelled with n-octanol blends

Gülüm M.

Niğde Ömer Halisdemir Üniversitesi Mühendislik Bilimleri Dergisi, vol.12, no.4, pp.1452-1480, 2023 (Peer-Reviewed Journal)

II. Estimating cetane numbers of pure biodiesels through multiple non-linear correlations depending on some fuel properties

Gülüm M.

Niğde Ömer Halisdemir Üniversitesi Mühendislik Bilimleri Dergisi, vol.12, no.4, pp.1593-1605, 2023 (Peer-Reviewed Journal)

III. An investigation of effects of diesel fuel-vegetable oil-diethylene glycol dimethyl ether fuel blends on performance, combustion and emission characteristics of a diesel engine GÜLÜM M.

Niğde Ömer Halisdemir Üniversitesi Mühendislik Bilimleri Dergisi, vol.12, no.2, pp.551-565, 2023 (Peer-Reviewed Journal)

## **Books & Book Chapters**

I. Data-Driven Predictive Modeling of Cylinder Pressure: A Comparative Analysis of Gaussian Process Regression, Artificial Neural Networks, and Ensembles of Trees

GÜLÜM M., KARABACAK Y. E.

in: Interdisciplinary studies on contemporary research practices in engineering in the 21st century-IV, Prof. Dr. Kamil Kaygusuz, Editor, Özgür Yayınları, Gaziantep, pp.49-65, 2023

II. MACHINE LEARNING MODELLING OF ISENTROPIC COMPRESSIBILITY OF BINARY BLENDS OF OXYGENATED ADDITIVES AND HYDROCARBONS

GÜLÜM M., KARABACAK Y. E.

in: International Theory, Research and Reviews in Engineering - October 2023, Prof. Dr. Coşkun ÖZALP, Assoc. Prof. Dr. Selahattin BARDAK, Editor, Serüven Yayınevi, Ankara, pp.21-32, 2023

# Refereed Congress / Symposium Publications in Proceedings

I. Prediction of Speed of Sound of Biodiesel-Alcohol Blends using Artificial Neural Networks and Support Vector Machine

KARABACAK Y. E., GÜLÜM M.

International Conference on Innovation in Engineering & Damp; Management: Sustainability Through Creativity & Damp; Innovation (ICIEM'23), Mesra (Ranchi), India, 1 - 02 June 2023, pp.69

II. ESTIMATING SURFACE TENSION AND REFRACTIVE INDEX OF BIODIESEL ALCOHOL BLENDS: A COMPARATIVE STUDY OF LINEAR REGRESSION AND REGRESSION TREES

GÜLÜM M., KARABACAK Y. E.

11th INTERNATIONAL CONFERENCE ON CONTEMPORARY ENGINEERING AND TECHNOLOGY – 2023, Chennai, India, 1 - 02 May 2023, pp.55-64

III. Prediction of Exhaust Gas Temperature of a Diesel Engine Running with Diesel Fuel-biodiesel-1-pentanol Ternary Blends

GÜLÜM M.

2023 International Conference on Chemical, Energy Science and Environmental Engineering, CESEE 2023, Hybrid, Sanya, China, 14 - 16 April 2023, vol.1204

# Scientific Refereeing

ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, SCI Journal, November 2020 ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, SCI Journal, November 2020 ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, SCI Journal, November 2020 ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, SCI Journal, November 2020 ACS OMEGA, Journal Indexed in SCI-E, November 2020

ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, SCI Journal, October 2020

SN Applied Science, Journal Indexed in ESCI, October 2020

Environmental Progress & Sustainable Energy, SCI Journal, October 2020

ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, SCI Journal, October 2020

ACS Sustainable Chemistry & Engineering, Journal Indexed in SCI-E, October 2020

JOURNAL OF KING SAUD UNIVERSITY SCIENCE, Journal Indexed in SCI-E, September 2020

ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, SCI Journal, September 2020

ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, SCI Journal, September 2020

SN Applied Science, Journal Indexed in ESCI, September 2020

ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, SCI Journal, September 2020

ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, SCI Journal, September 2020

ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, SCI Journal, August 2020

ACS Sustainable Chemistry & Engineering, Journal Indexed in SCI-E, August 2020

SN Applied Sciences, Journal Indexed in ESCI, August 2020

ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, SCI Journal, August 2020

ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, SCI Journal, July 2020

Environmental Progress & Sustainable Energy, SCI Journal, July 2020

ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, SCI Journal, July 2020

FUEL, SCI Journal, July 2020

FUEL, SCI Journal, July 2020

ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, SCI Journal, July 2020

ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, SCI Journal, June 2020

FUEL, SCI Journal, June 2020

Journal Of Thermal Analysis And Calorimetry, Journal Indexed in SCI-E, May 2020

FUEL, SCI Journal, April 2020

FUEL, SCI Journal, April 2020

JOURNAL OF KING SAUD UNIVERSITY SCIENCE, Journal Indexed in SCI-E, April 2020

SN Applied Sciences, Journal Indexed in ESCI, April 2020

WASTE AND BIOMASS VALORIZATION, Journal Indexed in SCI-E, April 2020

FUEL, SCI Journal, March 2020

ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, SCI Journal, March 2020

SN Applied Sciences, Journal Indexed in ESCI, March 2020

ENERGY, SCI Journal, March 2020

Brazilian Journal Of Chemical Engineering, Journal Indexed in SCI-E, February 2020

FUEL, SCI Journal, February 2020

ACS OMEGA, SCI Journal, February 2020

FUEL, SCI Journal, January 2020

FUEL, SCI Journal, January 2020

ENVIRONMENTAL PROGRESS & SUSTAINABLE ENERGY, SCI Journal, December 2019

ACS OMEGA, Journal Indexed in SCI-E, December 2019

FUEL, SCI Journal, November 2019

SN APPLIED SCIENCES, Journal Indexed in ESCI, September 2019

ENERGY, SCI Journal, September 2019

GREEN PROCESSING AND SYNTHESIS, SCI Journal, September 2019

Fuel, SCI Journal, September 2019

Periodica Polytechnica Chemical Engineering, Journal Indexed in SCI-E, September 2019

The Open Chemical Engineering Journal, Other Indexed Journal, September 2019

SN Applied Sciences, Journal Indexed in ESCI, August 2019

FUEL, SCI Journal, July 2019

ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, SCI Journal, July 2019

Propulsion and Power Research, Journal Indexed in SCI-E, July 2019

Industrial & Engineering Chemistry Research, Journal Indexed in SCI-E, June 2019

ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, SCI Journal, April 2019

BIOFUELS BIOPRODUCTS & BIOREFINING-BIOFPR, SCI Journal, March 2019

BIOFUELS BIOPRODUCTS & BIOREFINING-BIOFPR, SCI Journal, February 2019

Industrial & Engineering Chemistry Research, Journal Indexed in SCI-E, February 2019

Energy Sources Part A-Recovery Utilization And Environmental Effects, SCI Journal, December 2018

WASTE AND BIOMASS VALORIZATION, Journal Indexed in SCI-E, May 2018

Journal of King Saud University - Science, Journal Indexed in SCI-E, April 2018

Energy Sources Part A-Recovery Utilization And Environmental Effects, SCI Journal, April 2018

ENERGY CONVERSION AND MANAGEMENT, Journal Indexed in SCI-E, March 2018

ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, SCI Journal, August 2017

International Journal of Applied Microbiology and Biotechnology Research, Journal Indexed in SCI-E, July 2017

INTERNATIONAL JOURNAL OF GREEN ENERGY, Journal Indexed in SCI-E, March 2017

ENERGY CONVERSION AND MANAGEMENT, Journal Indexed in SCI-E, November 2016

Journal Of Chemical And Engineering Data, Journal Indexed in SCI-E, November 2016

ENERGY CONVERSION AND MANAGEMENT, Journal Indexed in SCI-E, March 2015

JOURNAL OF KING SAUD UNIVERSITY SCIENCE, Journal Indexed in SCI-E, March 2015

Energy Conversion And Management, Journal Indexed in SCI-E, January 2015

# **Tasks In Event Organizations**

Gülüm M., The 6th International Conference on Composite Materials and Material Engineering (ICCMME2021), Scientific Congress, Thailand, Ocak 2021

Gülüm M., 2021 7th International Conference On Renewable Energy Technologies (ICRET 2021), Scientific Congress, Malaysia, Ocak 2021

Gülüm M., 2021 6th International Conference on Renewable Energy and Conservation (ICREC 2021), Scientific Congress, China, Ocak 2021

Gülüm M., 2020 10th International Conference on Power and Energy Systems (ICPES), Scientific Congress, China, Aralık 2020

 $\label{lem:conference} \mbox{G\"{u}l\'{u}m M., INTERNATIONAL CONFERENCE OF COMPUTER SCIENCE AND RENEWABLE ENERGIES "ICCSRE'2020", respectively. The second conference of the computer science and renewable energies in the conference of the computer science and renewable energies in the conference of the computer science and renewable energies in the conference of the computer science and renewable energies in the conference of the computer science and renewable energies. The computer science are conference of the computer science and renewable energies in the computer science and renewable energies. The computer science are conference of the computer science and renewable energies in the computer science and renewable ener$ 

Scientific Congress, Morocco, Aralık 2020

Gülüm M., The 3rd International conference on Progress in Mechanical and Aerospace Engineering (PMAE) 2020, Scientific Congress, Vietnam, Aralık 2020

Gülüm M., ICPE 2020-The International Conference on Power Engineering, Scientific Congress, China, Aralık 2020

Gülüm M., 6th International Conference on Mechanical and Aeronautical Engineering (ICMAE 2020), Scientific Congress, China, Aralık 2020

Gülüm M., International Conference on Renewable Energy, Scientific Congress, Sri Lanka, Aralık 2020

Gülüm M., International Conference on Power Crisis Management, Scientific Congress, Sri Lanka, Aralık 2020

Gülüm M., 08th International Conference on Engineering and Technology, Scientific Congress, Sri Lanka, Aralık 2020

Gülüm M., 2020 2nd International Conference on Functional Materials and Applied Technologies FMAT 2020, Scientific Congress, Japan, Aralık 2020

Gülüm M., 2nd Asia Conference on Material and Manufacturing Technology ACMMT 2020, Scientific Congress, Tokyo, Japan, Aralık 2020

Gülüm M., 2020 International Conference on Energy, Resource and Environment (ERE 2020), Scientific Congress, China, Aralık 2020

Gülüm M., 2020 2ND INTERNATIONAL CONFERENCE ON POWER, ENERGY AND ELECTRICAL ENGINEERING (PEEE 2020), Scientific Congress, Denmark, Aralık 2020

Gülüm M., 8TH INTERNATIONAL SYMPOSIUM ON ENERGY FROM BIOMASS AND WASTE (VENICE 2020), Scientific Congress, Italy, Kasım 2020

Gülüm M., The 5th International Conference on Materials Engineering and Nanotechnology (ICMEN2020), Scientific Congress, China, Kasım 2020

Gülüm M., The 6th International Conference on Smart Material Research (ICSMR), Scientific Congress, Melbourne, Australia, Kasım 2020

Gülüm M., 5th International Mediterranean Science and Engineering Congress (IMSEC 2020), Scientific Congress, Turkey, Ekim 2020

Gülüm M., 4. ULUSLARARASI ERCİYES BİLİMSEL ARAŞTIRMALAR KONGRESİ , Scientific Congress, Kayseri, Turkey, Ekim 2020

Gülüm M., International Icontech Symposium On Innovative Surveys in Positive Sciences April 3-5, 2020, Bursa, Turkey., Scientific Congress, Bursa, Turkey, Nisan 2020

#### **Metrics**

Publication: 77 Citation (WoS): 562 Citation (Scopus): 606 H-Index (WoS): 15 H-Index (Scopus): 13

## **Congress and Symposium Activities**

8TH INTERNATIONAL SYMPOSIUM ON ENERGY FROM BIOMASS AND WASTE, Session Moderator, Venice, Italy, 2020 8TH INTERNATIONAL SYMPOSIUM ON ENERGY FROM BIOMASS AND WASTE, Session Moderator, Venice, Italy, 2020 The 2nd International Conference on Advances in Civil and Ecological Engineering Research, Attendee, Acheng, China, 2020

4th International Energy & Engineering Congress 2019, Attendee, Gaziantep, Turkey, 2019

3 rd International Conference on Advanced Engineering Technologies (ICADET), Attendee, Bayburt, Turkey, 2019

1st International Symposium on Automotive Science and Technology, Attendee, Ankara, Turkey, 2019

Second International Karadeniz Congress of Applied Sciences, Attendee, Rize, Turkey, 2019

4th International Conference on Advances in Mechanical Engineering, Attendee, İstanbul, Turkey, 2018

1st International Conference on Advances in Mechanical and Mechatronics Engineering ICAMMEN, Attendee, Ankara, Turkey, 2018

4th International Congress of Automotive and Transport Engineering (AMMA 2018), Attendee, Cluj-Napoca, Romania, 2018

CONECT 2018, Attendee, Riga, Latvia, 2018

6th International Conference on Clean and Green Energy, Attendee, Frankfurt, Germany, 2017

ISTANBUL INTERNATIONAL CONFERENCE ON PROGRESS IN APPLIED SCIENCE 2017 - ICPAS 2017, Attendee, İstanbul, Turkey, 2017

2nd International Conference on Renewable Energy and Bioenergy, (ICREB 2016), Attendee, Constanta, Romania, 2016

8th International Exergy, Energy and Environmental Symposium, Attendee, Antalya, Turkey, 2016

World Conference on Technology, Innovation and Entrepreneurship, Attendee, İstanbul, Turkey, 2015

The 7th International Exergy, Energy and Environmental Symposium, Attendee, Valence, France, 2015

The European Conference on Sustainability, Energy & the Environment, Attendee, Brighton, United Kingdom, 2014

7. Otomotiv Teknolojileri Kongresi,, Attendee, Bursa, Turkey, 2014