

## Prof. MUSTAFA ERTUNÇ TAT

### Personal Information

**Email:** metat@ogu.edu.tr

**Web:** <https://avesis.ogu.edu.tr/metat>

### International Researcher IDs

ORCID: 0000-0001-9030-6748

ScopusID: 6602106068

Yoksis Researcher ID: 204032

### Education Information

Post Doctorate, Iowa State University of Science and Technology, College of Engineering, Mechanical Engineering, United States Of America 2004 - 2004

Doctorate, Iowa State University of Science and Technology, Mühendislik , Makine Mühendisliği, United States Of America 1998 - 2003

Postgraduate, Iowa State University of Science and Technology, Mühendislik Fakültesi, Makine Mühendisliği, United States Of America 1996 - 1998

Undergraduate, Gazi University, Teknik Eğitim Fakültesi, Makine Eğitimi Bölümü, Turkey 1990 - 1994

### Foreign Languages

English, C1 Advanced

### Certificates, Courses and Trainings

Occupational Health and Safety, İş Sağlığı ve Güvenliği Eğitimi EĞİTİCİLER, Eskişehir Osmangazi Üniversitesi, 2018

Vocational Training, Bilgilendirme ve Eğitim Semineri, Eskişehir Osmangazi Üniversitesi, 2012

Vocational Training, Katılımcı ve Etkin Öğrenme, Eskişehir Osmangazi Üniversitesi, 2010

Vocational Course, Ekserji ve Uygulamaları Yaz Kursu, Marmara Araştırma Merkezi Enerji Enstitüsü, 2008

Quality Management, ISO 9001 KALİTE YÖNETİM SİSTEMİ (ISO 9001 QMS held by KGS, Katılım ve Başarı Sertifikaları) ,

KGS DANIŞMANLIK (KGS-E01: IKT-026-XXX ve IBS-026-XXXX), 2008

Vocational Course, Uzman Gözüyle Termodinamik ve Uygulamaları, ANADOLU ÜNİVERSİTESİ SİVİL HAVACILIK YÜKSEKOKULU, 2008

Vocational Training, IPG AND SANTOR "CarMaker", Eskişehir Osmangazi Üniversitesi, 2008

Vocational Training, Simulink for Automotive System Design (2 Days), FIGES, Computer Simulation in Physics and Geometry A.S., 2007

### Dissertations

Doctorate, Investigation of oxides of nitrogen emissions from biodiesel-fueled engines (Biyodizel kullanan motorlarda azot oksit emisyonlarının incelenmesi), Iowa State University of Science and Technology, Mühendislik, Makine, 2003

Postgraduate, Temperature dependent physical properties of biodiesel and its blends with diesel fuel (Biyodizel ve biyodizel-dizel yakıt karışımlarının sıcaklığa bağlı fiziksel özelliklerin incelenmesi), Iowa State University of Science and

Technology, 1998

## Research Areas

Mechanical Engineering, Energy, Alternative Energy Resources, Advanced Energy Technologies, Vehicle Systems Dynamics, Thermodynamics, Fuels and Combustion, Internal Combustion Engines, Aeronautical and Space Engineering, Engineering and Technology

## Academic Titles / Tasks

Associate Professor, Eskisehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, MAKİNE MÜHENDİSLİĞİ BÖLÜMÜ, 2014 - Continues

Assistant Professor, Eskisehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, MAKİNE MÜHENDİSLİĞİ BÖLÜMÜ, 2006 - 2014

Research Assistant PhD, Eskisehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, MAKİNE MÜHENDİSLİĞİ BÖLÜMÜ, 2004 - 2005

Research Assistant PhD, Iowa State University, College of Engineering, Mechanical Engineering, 2004 - 2004

Research Assistant, Iowa State University, College of Engineering, Mechanical Engineering, 2002 - 2003

Research Assistant, Kütahya Dumlupınar University, Teknik Eğitim Fakültesi, Makine Eğitimi, 1994 - 1995

## Academic and Administrative Experience

Rectorate Commissioner, Eskisehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, MAKİNE MÜHENDİSLİĞİ BÖLÜMÜ, 2020 - 2020

Rectorate Commissioner, Eskisehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, MAKİNE MÜHENDİSLİĞİ BÖLÜMÜ, 2018 - 2020

Assistant Director of the Institute, Eskisehir Osmangazi University, FEN BİLİMLERİ ENSTİTÜSÜ, 2014 - 2020

Erasmus Coordinator, Eskisehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, MAKİNE MÜHENDİSLİĞİ BÖLÜMÜ, 2005 - 2020

Eskisehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, Makine Mühendisliği Bölümü, 2008 - 2011

## Courses

ENGINEERING THERMODYNAMICS I (B), Undergraduate, 2022 - 2023, 2021 - 2022

ENGINEERING THERMODYNAMICS II (B), Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022

NUMERICAL ANALYSIS (B), Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014

ENGINEERING THERMODYNAMICS I (B), Undergraduate, 2022 - 2023, 2021 - 2022

NUMERICAL ANALYSIS (B), Undergraduate, 2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014

ENGINEERING THERMODYNAMICS II (B), Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022

SEMİNER (J), Postgraduate, 2021 - 2022

MAKİNE MÜHENDİSLİĞİNDE TASARIM II (I), Undergraduate, 2021 - 2022

DOKTORA TEZ ÇALIŞMASI (J), Doctorate, 2021 - 2022, 2020 - 2021, 2019 - 2020

UZMANLIK ALAN DERSİ, Doctorate, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015

UZMANLIK ALAN DERSİ (YL) (J), Postgraduate, 2021 - 2022, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009

YÜKSEK LİSANS TEZ ÇALIŞMASI (J), Postgraduate, 2021 - 2022, 2020 - 2021  
YÜKSEK LİSANS TEZ ÇALIŞMASI(E), Postgraduate, 2021 - 2022, 2020 - 2021  
UZMANLIK ALAN DERSİ, Postgraduate, 2021 - 2022, 2020 - 2021, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015  
MAKİNE MÜHENDİSLİĞİNDE TASARIM II (I), Undergraduate, 2021 - 2022  
FUNDAMENTALS OF COMPUTER PROGRAMING (A), Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016  
FUNDAMENTALS OF COMPUTER PROGRAMING, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016  
MAKİNE MÜHENDİSLİĞİNDE TASARIM I (I), Undergraduate, 2021 - 2022  
MAKİNE MÜHENDİSLİĞİNDE TASARIM I (I), Undergraduate, 2021 - 2022  
DIFFERENTIAL EQUATIONS , Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014  
TAŞIT TEKNOLOJİLERİ ARAŞTIRMALARI(A), Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013  
TECHNICAL ANGLISH, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012  
DIFFERENTIAL EQUATIONS, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014  
TECHNICAL ENGLISH, Undergraduate, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012  
TAŞIT TEKNOLOJİLERİ ARAŞTIRMALARI(A), Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013  
ÖLÇME TEKNİĞİ (B), Undergraduate, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014  
ÖLÇME TEKNİĞİ (B), Undergraduate, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014  
YAKITLAR VE YANMANIN ESASLARI (A), Postgraduate, 2014 - 2015, 2013 - 2014, 2012 - 2013  
ISI TRANSFERİ (A), Undergraduate, 2014 - 2015  
TEKNİK İNGİLİZCE II (A), Undergraduate, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009, 2007 - 2008, 2006 - 2007, 2005 - 2006  
BASIC COMPUTER SCIENCE (A), Undergraduate, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010  
BASIC COMPUTER SCIENCE (A), Undergraduate, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011  
OTOMOTİV MÜHENDİSLİĞİ I (A), Undergraduate, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009, 2007 - 2008, 2006 - 2007, 2005 - 2006  
TEKNİK İNGİLİZCE I (A), Undergraduate, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009, 2007 - 2008, 2006 - 2007, 2005 - 2006  
HEAT TRANSFER (A), Undergraduate, 2012 - 2013  
BİYODİZEL (A), Postgraduate, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010  
OTOMOTİV MÜHENDİSLİĞİ I (A), Undergraduate, 2013 - 2014, 2012 - 2013, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009, 2007 - 2008, 2006 - 2007, 2005 - 2006  
TEMEL BİLGİSAYAR BİLİMLERİ (A), Undergraduate, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009, 2007 - 2008, 2006 - 2007  
TEKNİK İNGİLİZCE II (A), Undergraduate, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009, 2007 - 2008, 2006 - 2007, 2005 - 2006  
MOTORLU TAŞITLAR (A), Undergraduate, 2011 - 2012, 2010 - 2011, 2009 - 2010, 2008 - 2009, 2007 - 2008, 2006 - 2007, 2005 - 2006  
OTOMOTİV MÜHENDİSLİĞİ II (A), Undergraduate, 2010 - 2011, 2009 - 2010, 2008 - 2009, 2007 - 2008, 2006 - 2007, 2005 - 2006  
MOTORLU TAŞITLAR (A), Undergraduate, 2010 - 2011, 2009 - 2010, 2008 - 2009, 2007 - 2008, 2006 - 2007, 2005 - 2006  
İÇTEN YANMALI MOTORLAR (B), Undergraduate, 2009 - 2010, 2008 - 2009, 2007 - 2008, 2006 - 2007  
İÇTEN YANMALI MOTORLAR (B), Undergraduate, 2009 - 2010, 2008 - 2009, 2007 - 2008, 2006 - 2007

OTOMOTİV MÜHENDİSLİĞİ II (A), Undergraduate, 2008 - 2009, 2007 - 2008, 2006 - 2007, 2005 - 2006  
TEMEL BİLGİSAYAR BİLİMLERİ (A), Undergraduate, 2008 - 2009, 2007 - 2008, 2006 - 2007  
TEMEL BİLGİ TEKNOLOJİLERİ KULLANIMI (A), Undergraduate, 2006 - 2007  
MOTOR KONSTRÜKSİYONU (A), Undergraduate, 2006 - 2007, 2005 - 2006  
TEMEL BİLGİ TEKNOLOJİLERİ KULLANIMI (A), Undergraduate, 2006 - 2007  
MOTOR KONSTRÜKSİYONU (A), Undergraduate, 2006 - 2007

## Advising Theses

Tat M. E., Bir Tav Fırınında Merkezi Reküperatör ile Beraber Kendinden-Reküperatörlü Brülörler Kullanılarak Sürdürülebilirliğin Geliştirilmesi, Doctorate, M.ŞEREF(Student), 2023  
Tat M. E., Data Analysis Applications in the Process of Standards Integration and Aviation Regulations Compliance Management, Postgraduate, B.GEÇKİL(Student), 2023  
Tat M. E., Havacılık imalat alanında bilgi ve uygulamaların birlikte yürütülebileceği bir şekilde bir araya getirileceği insan gözetimli, ontoloji tabanlı bir sistem tasarımı, Doctorate, D.YAĞCI(Student), 2023  
Tat M. E., Raylı Sistemlerde Motor Yağı Viskozitesi ile Teşhis, Postgraduate, E.DORU(Student), 2022  
Tat M. E., Hidrodinamik kaymalı yataklara ait tasarım parametrelerinin yatak performansına etkilerinin araştırılması, Postgraduate, M.SAYAR(Student), 2022  
Tat M. E., Fosil yakıtlı araçların elektrikli araçlara dönüştürülmesinde enerji verimliliği değerlendirmesi, Postgraduate, A.H.A.(Student), 2022  
Tat M. E., Alternatif biyoyakıtların motor yağı performansına etkilerinin araştırılması, Postgraduate, S.BEKTAŞ(Student), 2022  
Tat M. E., Motor ve yakıt parametrelerini değiştirerek dizel yanma veriminin ve NOx oluşumunun modellenmesi, Doctorate, R.GÖKBEL(Student), 2019  
Tat M. E., Yeni imal edilecek uçak motor parçaları üretim sürecinin tasarlanması için ontoloji geliştirilmesi, Postgraduate, D.YAĞCI(Student), 2019  
Tat M. E., Bir ağır hizmet dizel motorunun enerji ve ekserji analizleriyle performans değerlendirmesi, Postgraduate, O.HOŞGÖR(Student), 2018  
Tat M. E., Ağır hizmet dizel motoru silindir gömleğine uygulanan farklı kaplamaların aşınma davranışlarının incelenmesi, Postgraduate, O.BIYIKLIOĞLU(Student), 2018  
Tat M. E., Bir uçağın kanat ve sabit iniş takımı aerodinamik ilişkisinin iki boyutlu incelenmesi, Postgraduate, M.ALKAN(Student), 2018  
Tat M. E., Üç bloklu bir sitenin ısıtma ihtiyacının kojenerasyon sistemi ile karşılanması ve enerji-ekserji analizi, Postgraduate, E.HAKAN(Student), 2018  
Tat M. E., İçtan yanmalı motorlarda ekserji analizi, Postgraduate, H.ÇALIŞKAN(Student), 2009

## Jury Memberships

Doctorate, Doctorate, Eskişehir Teknik Üniversitesi, August, 2021  
Post Graduate, Post Graduate, Bilecik Şeyh Edebali Üniversitesi, July, 2019  
Post Graduate, Post Graduate, Eskişehir Osmangazi Üniversitesi, November, 2018  
Post Graduate, Post Graduate, Eskişehir Osmangazi Üniversitesi, December, 2016  
Post Graduate, Post Graduate, Bilecik Şeyh Edebali Üniversitesi, July, 2016  
Post Graduate, Post Graduate, Eskişehir Osmangazi Üniversitesi, February, 2016  
Post Graduate, Post Graduate, Eskişehir Osmangazi Üniversitesi, November, 2015  
Post Graduate, Post Graduate, Eskişehir Osmangazi Üniversitesi, June, 2015  
Post Graduate, Post Graduate, Eskişehir Osmangazi Üniversitesi, June, 2015  
Doctorate, Doctorate, Eskişehir Teknik Üniversitesi, February, 2015  
Award, Mesleki ve Teknik Eğitim Okul/Kurumları Arası Proje Yarışması Jüri Üyesi, Milli Eğitim Müdürlüğü, May, 2008

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

- I. **Energy efficiency and cost assessment of a residential site with a combined heat and power system optimized with cryptocurrency mining**  
TAT M. E., Bestas E. H.  
Environmental Progress and Sustainable Energy, vol.42, no.6, 2023 (SCI-Expanded)
- II. **Sustainability evaluation of a heavy-duty diesel engine used in railways**  
TAT M. E., Hosgor O.  
Energy, vol.270, 2023 (SCI-Expanded)
- III. **Lubricity assessment of ultra-low sulfur diesel fuel (ULSD), biodiesel, and their blends, in conjunction with pure hydrocarbons and biodiesel based compounds**  
Tat M. E., Çelik O. N., Er Ü., Gaşan H., Ulutan M.  
International Journal of Engine Research, vol.23, no.2, pp.214-231, 2022 (SCI-Expanded)
- IV. **Tribological assessment of NiCr, Al<sub>2</sub>O<sub>3</sub>/TiO<sub>2</sub>, and Cr<sub>3</sub>C<sub>2</sub>/NiCr coatings applied on a cylinder liner of a heavy-duty diesel engine**  
Biyiklioglu O., Tat M. E.  
INTERNATIONAL JOURNAL OF ENGINE RESEARCH, vol.22, no.7, pp.2267-2280, 2021 (SCI-Expanded)
- V. **Cetane number effect on the energetic and exergetic efficiency of a diesel engine fuelled with biodiesel**  
Tat M. E.  
FUEL PROCESSING TECHNOLOGY, vol.92, pp.1311-1321, 2011 (SCI-Expanded)
- VI. **Exergy analysis of engines fuelled with biodiesel from high oleic soybeans based on experimental values**  
ÇALIŞKAN H., TAT M. E., Hepbasli A., Van Gerpen J. H.  
INTERNATIONAL JOURNAL OF EXERGY, vol.7, no.1, pp.20-36, 2010 (SCI-Expanded)
- VII. **A review on exergetic analysis and assessment of various types of engines**  
Çalışkan H., Tat M. E., Hepbasli A.  
INTERNATIONAL JOURNAL OF EXERGY, vol.7, pp.287-310, 2010 (SCI-Expanded)
- VIII. **Performance assessment of an internal combustion engine at varying dead (reference) state temperatures**  
ÇALIŞKAN H., TAT M. E., Hepbasli A.  
APPLIED THERMAL ENGINEERING, vol.29, no.16, pp.3431-3436, 2009 (SCI-Expanded)
- IX. **A high-oleic-acid and low-palmitic-acid soybean: agronomic performance and evaluation as a feedstock for biodiesel**  
Graef G., LaVallee B. J., Tenopir P., Tat M. E., Schweiger B., Kinney A. J., Van Gerpen J. H., Clemente T. E.  
PLANT BIOTECHNOLOGY JOURNAL, vol.7, no.5, pp.411-421, 2009 (SCI-Expanded)
- X. **Exhaust emissions from an engine fueled with biodiesel from high-oleic soybeans**  
Tat M. E., Wang P. S., Van Gerpen J. H., Clemente T. E.  
JOURNAL OF THE AMERICAN OIL CHEMISTS SOCIETY, vol.84, pp.865-869, 2007 (SCI-Expanded)
- XI. **Fuel property effects on injection timing, ignition timing, and oxides of nitrogen emissions from biodiesel-fueled engines**  
Tat M. E., Van Gerpen J. H., Wang P. S.  
TRANSACTIONS OF THE ASABE, vol.50, no.4, pp.1123-1128, 2007 (SCI-Expanded)
- XII. **The production of fatty acid isopropyl esters and their use as a diesel engine fuel**  
Wang P., Tat M. E., Van Gerpen J.  
JOURNAL OF THE AMERICAN OIL CHEMISTS SOCIETY, vol.82, no.11, pp.845-849, 2005 (SCI-Expanded)
- XIII. **Spray, ignition, and combustion modeling of biodiesel fuels for investigating NO<sub>x</sub> emissions**  
Yuan W., Hansen A., Tat M. E., Van Gerpen J., Tan Z.  
TRANSACTIONS OF THE ASAE, vol.48, no.3, pp.933-939, 2005 (SCI-Expanded)
- XIV. **Speed of sound and isentropic bulk modulus of alkyl monoesters at elevated temperatures and pressures**

- Tat M. E., Van Gerpen J.  
JOURNAL OF THE AMERICAN OIL CHEMISTS SOCIETY, vol.80, no.12, pp.1249-1256, 2003 (SCI-Expanded)
- XV. **Effect of temperature and pressure on the speed of sound and isentropic bulk modulus of mixtures of biodiesel and diesel fuel**  
Tat M. E., Van Gerpen J.  
JOURNAL OF THE AMERICAN OIL CHEMISTS SOCIETY, vol.80, no.11, pp.1127-1130, 2003 (SCI-Expanded)
- XVI. **Biodiesel blend detection with a fuel composition sensor**  
Tat M. E., Van Gerpen J.  
APPLIED ENGINEERING IN AGRICULTURE, vol.19, no.2, pp.125-131, 2003 (SCI-Expanded)
- XVII. **The speed of sound and isentropic bulk modulus of biodiesel at 21 degrees C from atmospheric pressure to 35 MPa**  
Tat M. E., Van Gerpen J., Soylu S., Canakci M., Monyem A., Wormley S.  
JOURNAL OF THE AMERICAN OIL CHEMISTS SOCIETY, vol.77, no.3, pp.285-289, 2000 (SCI-Expanded)
- XVIII. **The specific gravity of biodiesel and its blends with diesel fuel**  
Tat M. E., Van Gerpen J.  
JOURNAL OF THE AMERICAN OIL CHEMISTS SOCIETY, vol.77, no.2, pp.115-119, 2000 (SCI-Expanded)
- XIX. **The kinematic viscosity of biodiesel and its blends with diesel fuel**  
Tat M. E., Van Gerpen J.  
JOURNAL OF THE AMERICAN OIL CHEMISTS SOCIETY, vol.76, no.12, pp.1511-1513, 1999 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Diagnosing Engine Oil Fuel Dilution by Viscosity Measurement in Heavy-Duty Diesel Engines Used in Railways**  
TAT M. E., DORU E.  
Demiryolu Mühendisliği, no.18, pp.26-35, 2023 (Peer-Reviewed Journal)
- II. -  
Tat M. E., Özenç F.  
Mühendis ve Makina, vol.48, no.572, pp.16-22, 2007 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **PREDICTIVE APPROACH TO ENGINE MAINTENANCE AND DETERMINING THE IMPORTANT CHARACTERISTICS OF ENGINE OIL**  
Bektaş S., Tat M. E.  
14TH INTERNATIONAL ISTANBUL SCIENTIFIC RESEARCH CONGRESSES ON LIFE, SOCIAL, AND HEALTH SCIENCES AUGUST 26-28, 2023|İSTANBUL, TÜRKİYE ONLINE & IN-PERSON PARTICIPATION, İstanbul, Turkey, 26 - 28 August 2023, pp.160-161
- II. **Hidrodinamik Kaymalı Yataklarda Yatak Kanal Tasarımlarının Yağlayıcı Performansına Etkileri**  
Sayar M., Tat M. E.  
Xth INTERNATIONAL MAINTENANCE TECHNOLOGIES CONGRESS AND EXHIBITION (X. Uluslararası Katılımlı Bakım Teknolojileri Kongresi ve Sergisi), Denizli, Turkey, 20 - 22 October 2022, pp.230-237
- III. **Title: BİR HAVA ARACI MOTOR PARÇASININ ONTOLOJİ TABANLI MODELLENMESİ İÇİN BİR ALT MODEL**  
YAĞCI D., TAT M. E.  
1. INTERNATIONAL SYMPOSIUM ON IMPLEMENTATIONS OF DIGITAL INDUSTRY AND MANAGEMENT OF DIGITAL TRANSFORMATION 2019, Konya, Turkey, 25 - 26 June 2019, vol.0
- IV. **Ağır Hizmet Dizel Motorlara Ait Bir Kaymalı Yatağın Çalışma Analizi**  
SAYAR M., TAT M. E.

- 4th International Symposium on Railway Systems Engineering, Karabük, Turkey, 10 - 12 October 2018, pp.433-441
- V. **Bir Ağır Hizmet Dizel Motorunun Enerji ve Ekserji Analizleriyle Performans Değerlendirmesi**  
HOŞGÖR O., TAT M. E.  
4th International Symposium on Railway Engineering, Karabük, Turkey, 10 - 12 October 2018, pp.290-297
- VI. **Raylı Sistemlerde Kullanılan Ağır Hizmet Dizel Motorlarının Kestirimci Bakım ve Motor Yağkirleticileri ile Değerlendirilmesi**  
İPEK Y., TAT M. E.  
4th International Symposium on Railway System Engineering, Karabük, Turkey, 10 - 12 October 2018, pp.400-407
- VII. **Raylı Sistemlerde Kullanılan Bir Ağır Hizmet Dizel Motoru Silindir Gömleği Üzerine Uygulanan Farklı Kaplama Malzemelerinin Aşınma Davranışlarının İncelenmesi**  
BIYIKLIOĞLU O., TAT M. E.  
4th International Symposium on Railway Systems Engineering, Karabük, Turkey, 10 - 12 October 2018, pp.298-304
- VIII. **BİR AĞIR DİZEL MOTORUN HİDRODİNAMİK KAYMALI YATAĞINDA OLUŞAN YAĞ FİLMİ VE DEFORMASYON ETKİSİNİN ARAŞTIRILMASI**  
Sayar M., Tat M. E.  
VIII. Bakım Teknolojileri Kongresi ve Sergisi, Denizli, Turkey, 28 - 30 September 2017, pp.55-62
- IX. **Impact of Industry 4.0 to Aircraft Maintenance, Repair and OverHaul**  
TAT M. E., KUŞHAN M. C.  
VII International Symposium Engineering Management and Competitiveness 2017 (EMC 2017), Zrenjanin, Serbia, 16 - 17 June 2017, pp.101-105
- X. **Investigation of Lubrication and Wear Properties of Biodiesel and Diesel Fuels on Fuel Pump Material**  
TAT M. E., ÇELİK O. N., KNOTHE G., ER Ü., GAŞAN H., ULUTAN M.  
World Conference on Oilseed Processing, Fats & Oils Processing, Biofuels & Applications, İzmir, Turkey, 21 - 23 June 2011
- XI. **Effect of Lubrication and Wear Properties of Biodiesel added Ultra Low Sulfur Diesel (ULSD) Fuel on Common Rail Fuel Injection Pump Material**  
TAT M. E., ÇELİK O. N., KNOTHE G., ER Ü., GAŞAN H., ULUTAN M.  
World Conference on Oilseed Processing, Fats & Oils Processing, Biofuels & Applications, İzmir, Turkey, 21 - 23 June 2011, pp.34
- XII. **Exhaust Emissions from Engines Fueled with Biodiesel from High Oleic Soybeans**  
Tat M. E., Wang P., Van Gerpen J. H., Clemente T.  
World Conference and Exhibition on Oilseed and Vegetable Oil Utilization Processing, By-Products, Biodiesel, Specialty and Functional Oils, and New Applications & Technologies, İstanbul, Turkey, 14 - 16 August 2006, pp.11-12
- XIII. **Fuel Property Effects on Injection Timing, Ignition Timing and Oxides of Nitrogen Emissions from Biodiesel-Fueled Engines**  
Tat M. E., Van Gerpen J. H., Wang P. S.  
2004 ASAE/CSAE Annual International Meeting, Ottawa, Canada, 1 - 04 August 2004, no.46081, pp.1-18
- XIV. **The Effects of Biodiesel Properties on Diesel Injection Timing**  
Tat M. E., Van Gerpen J. H.  
95th AOCS Annual Meeting & Expo, Ohio, United States Of America, 9 - 12 May 2004, pp.75
- XV. **Fuel Property Effects on Biodiesel**  
Tat M. E., Van Gerpen J. H.  
ASABE - American Society of Agricultural and Biological Engineers 2003 ASAE Annual International Meeting, Nevada, United States Of America, 27 - 30 July 2003, no.36034, pp.1-16
- XVI. **Fuel Property Effects on Biodiesel NOx Emission**  
Tat M. E., Van Gerpen J. H.  
94th AOCS Annual Meeting & Expo Kansas City, Missouri, Missouri, United States Of America, 4 - 07 May 2003, pp.80
- XVII. **Fuel Property Effects on Biodiesel NOx Emissions**

Tat M. E., Van Gerpen J. H.

APUF Agricultural Products Utilization Forum Creating Value for Biobased Resources Moving Beyond Petroleum, Missouri, United States Of America, 11 - 13 November 2002, pp.29

**XVIII. The Speed of Sound and Bulk Modulus of Alkyl Esters and Their Blends with Diesel Fuel**

Tat M. E., Van Gerpen J. H.

Biodiesel Potenziale Umweltwirkungen Praxiserfahrungen Zweite Internationale Tagung in Braunschweig, Braunschweig, Germany, 16 - 17 September 2002, pp.33-38

**XIX. Physical and Chemical Property Effects on Biodiesel NOx Emission**

Tat M. E., Van Gerpen J. H.

AOCS World Conference and Exhibition on Oilseed and Edible, Industrial, and Specialty Oils: Sources, Processing, By-Products, Utilization and Feed Formulations, Applications and Functionality, İstanbul, Turkey, 12 - 15 August 2002, pp.6

**XX. Physical Properties and Composition Detection of Biodiesel-diesel Fuel Blends**

Tat M. E., Van Gerpen J. H.

ASABE - American Society of Agricultural and Biological Engineers 2002 ASAE Annual International Meeting / CIGR XVth World Congress, Illinois, United States Of America, 28 - 31 July 2002, no.26084, pp.1-11

**XXI. Speed of Sound and Bulk Modulus of Alkyl Esters**

Tat M. E., Van Gerpen J. H.

93rd AOCS Annual Meeting & Expo Montreal Quebec Canada, Quebec, Canada, 5 - 08 May 2002, pp.105

**XXII. Biodiesel Blend Detection Using a Fuel Composition Sensor**

Tat M. E., Van Gerpen J. H.

ASABE - American Society of Agricultural and Biological Engineers 2001 ASAE Annual International Meeting, California, United States Of America, 30 July - 01 August 2001, no.16052, pp.1-15

**XXIII. Evaluation of the Lubricity of Soybean Oil-Based Additives in Diesel Fuel**

Van Gerpen J. H., Soyly S., Tat M. E.

ASABE - American Society of Agricultural and Biological Engineers 1999 Annual International Meeting, Toronto, Canada, 18 - 21 July 1999, no.996134, pp.1-13

## Supported Projects

Sakarya H. U., Tat M. E., TUBITAK Project, Fotovoltaik Panellerin Hexagon Kanatçıklarla Su Soğutmalı Sistem Tasarımı ve Analizi, 2022 - 2022

TAT M. E., Project Supported by Higher Education Institutions, Raylı Sistemlerde Kullanılan Bir Ağır Hizmet Dizel Motor Silindir Gömleğinin Kaplama Prosesiyle Aşınma Davranışının ve Revizyonda Maliyet Tasarruf İmkanlarının Araştırılması, 2018 - 2019

TAT M. E., Project Supported by Higher Education Institutions, Biyodizel Katkılı Çok Düşük Sülfürlü Dizel Yakıtın Yakıt Pompa (Common Rail) Malzemesi Üzerinde Yağlama ve Aşınma Özelliklerinin İncelenmesi, 2010 - 2013

TAT M. E., ER Ü., ULUTAN M., GAŞAN H., Project Supported by Higher Education Institutions, Biodizel Katkılı Çok Düşük Sülfürlü Dizel Yakıtın Yakıt Pompa Common Rail Malzemesi Üzerinde Yağlama ve Aşınma Özelliklerinin İncelenmesi, 2010 - 2012

## Scientific Refereeing

ENVIRONMENTAL PROGRESS & SUSTAINABLE ENERGY, SCI Journal, April 2022

ENVIRONMENTAL PROGRESS & SUSTAINABLE ENERGY, SCI Journal, April 2022

ENVIRONMENTAL PROGRESS & SUSTAINABLE ENERGY, SCI Journal, January 2022

ENVIRONMENTAL PROGRESS & SUSTAINABLE ENERGY, SCI Journal, October 2021

ENVIRONMENTAL PROGRESS & SUSTAINABLE ENERGY, SCI Journal, February 2021

ENVIRONMENTAL PROGRESS & SUSTAINABLE ENERGY, SCI Journal, January 2021



INTERNATIONAL JOURNAL OF ENGINE RESEARCH, SCI Journal, May 2020  
JOURNAL OF OIL PALM RESEARCH, SCI Journal, April 2020  
ENVIRONMENTAL PROGRESS & SUSTAINABLE ENERGY, SCI Journal, March 2020  
ENERGY CONVERSION AND MANAGEMENT, SCI Journal, November 2018  
ENVIRONMENTAL PROGRESS & SUSTAINABLE ENERGY, SCI Journal, October 2018  
ENVIRONMENTAL PROGRESS & SUSTAINABLE ENERGY, SCI Journal, September 2018  
ENVIRONMENTAL PROGRESS & SUSTAINABLE ENERGY, SCI Journal, July 2018  
TRANSACTIONS OF THE ASABE, SCI Journal, May 2018  
ENVIRONMENTAL PROGRESS & SUSTAINABLE ENERGY, SCI Journal, April 2018

## Metrics

Publication: 45  
Citation (WoS): 1141  
Citation (Scopus): 1349  
H-Index (WoS): 15  
H-Index (Scopus): 15

## Scholarships

1416 ECNEBİ MEMLEKETLERE GÖNDERİLECEK TALEBE HAKKINDA KANUN, Ministry of Education, 1995 - 2003  
Başarılı öğrencileri öğretmenlik mesleğine çekmek için 15 Haziran 1989 tarihinde 3580 sayılı "Öğretmen ve Eğitim Uzmanı Yetiştiren Yükseköğretim Kurumlarında Parasız Yatılı veya Burslu Öğrenci Okutma ve Bunlara Yapılacak Sosyal Yardımlara İlişkin Kanun" , Ministry of Education, 1990 - 1994

## Awards

Tat M. E., Certificate of Appreciation: FOR YOUR VALUABLE CONTRIBUTION AND DEDICATED SERVICE IN THE PEER REVIEW OF MANUSCRIPTS SUBMITTED TO ACS JOURNALS Signed by: Susan King, PhD, Senior Vice President, Journals Publishing Group, Acs Publications, December 2011  
Tat M. E., Kuşhan M. C., Hasılıcı Z., FUTURE ENGINEERS DESIGN PROJECT COMPETITION V ("Unmanned Special Purpose Amphibic Stealth Tactical Vehicle"), Tmmob Makine Mühendisleri Odası Eskişehir, May 2011  
Tat M. E., Van Gerpen J. H., P.S. W., ASABE SUPERIOR PAPER AWARD "Fuel Property Effects On Injection Timing, Ignition Timing, And Oxides Of Nitrogen Emissions From Biodiesel-Fueled Engines, 2007, Transactions of ASABE Vol. 50, no. 4, 1123-1128", Asabe (American Society Of Agricultural And Biological Engineers, <https://www.asabe.org/>) , July 2008  
Tat M. E., Teşekkür Belgesi: Mesleki ve Teknik Eğitim Okul/Kurumları Arası Proje Yarışması Jüri Üyesi, Eskişehir Valiliği Milli Eğitim Müdürlüğü, May 2008  
Tat M. E., Uğurlubilek R., Zülfikar A., Zhanamkulov B., Göksu E., Öztürk K., Asan K. E., Günçikan S., ENGINEERS OF THE FUTURE DESIGN PROJECT COMPETITION ("On-Campus Electro Bike-Car (EBA) Project"), Tmmob Makine Mühendisleri Odası Eskişehir, May 2007  
Yuan W., Hansen A. C., Tat M. E., Van Gerpen J. H., Tan Z., ASABE SUPERIOR PAPER AWARD "Spray, Ignition, And Combustion Modeling Of Biodiesel Fuels for Investigating NOx Emissions, 2005, Transactions of ASABE, Vol. 48, no. 3, 30-36." , Asabe (American Society Of Agricultural And Biological Engineers), July 2006  
Tat M. E., HONORED STUDENT AWARD 2003 (Presented to Mustafa E. TAT In Recognition of Outstanding Preparation for a Career in the Field of Fats and Oils, Including Research, Academic Course Work, Publications, and Personal Experience.), The American Oil Chemists' Society, May 2003  
Tat M. E., CERTIFICATE OF RECOGNITION (International Commission of Agricultural Engineering Presents a Certificate of Recognition to Mustafa E. TAT as a Future Leader in Agricultural Engineering on Occasion of the XV CIGR World

Congress, Chicago, USA, July 28-August1, 2002.), International Commission Of Agricultural Engineering (Cigr,  
<https://www.cigr.org/>), July 2002

## **Non Academic Experience**

Eskişehir Osmangazi Üniversitesi

Eskişehir Osmangazi Üniversitesi

Iowa State Üniversitesi