

## Asst. Prof. ÖMER ÇAM

### Personal Information

**Office Phone:** [+90 446 224 0426](tel:+904462240426) Extension: 41085

**Fax Phone:** [+90 446 224 0427](tel:+904462240427)

**Email:** [ocam@erzincan.edu.tr](mailto:ocam@erzincan.edu.tr)

**Web:** <https://avesis.ebyu.edu.tr/ocam>

**Address:** Erzincan Üniversitesi Ali Cavit Çelebioğlu Sivil Havacılık Yüksekokulu 1.Kat  
Yalnızbağ Yerleşkesi



### International Researcher IDs

ScholarID: [jBBFvQsAAAAJ](https://orcid.org/0000-0003-4391-5609)

ORCID: 0000-0003-4391-5609

Publons / Web Of Science ResearcherID: AAE-7357-2020

Yoksis Researcher ID: 16668

### Education Information

Doctorate, Erciyes University, Fen Bilimleri Enstitüsü, -, Turkey 2014 - 2019

Undergraduate Minor, Erciyes University, Mühendislik Fakültesi, Elektrik- Elektronik

Mühendisliği, Turkey 2009 - 2012

Undergraduate, Erciyes University, Mühendislik Fakültesi, Makine Mühendisliği, Turkey 2007  
- 2012

Undergraduate, Höögskolan i Vaxjö (University College of Vaxjö), Engineering Department,  
Mechanical Engineering, Sweden 2010 - 2011

### Dissertations

Doctorate, Sentetik yakıtların yanma kararsızlığının deneysel incelenmesi, Erciyes University, Fen Bilimleri Enstitüsü, -,  
2019

### Research Areas

Mechanical Engineering, Energy, Engineering and Technology

### Academic Titles / Tasks

Assistant Professor, Erzincan Binali Yıldırım University, Ali Cavit Çelebioğlu Sivil Havacılık Yüksekokulu, Uçak Gövde-  
Motor Bölümü, 2019 - Continues

Research Assistant, Erzincan Binali Yıldırım University, Ali Cavit Çelebioğlu Sivil Havacılık Yüksekokulu, Uçak Gövde-  
Motor Bölümü, 2017 - 2019

Research Assistant, Erciyes University, Havacılık Ve Uzay Bilimleri Fakültesi, Uçak Gövde Motor, 2014 - 2017

Research Assistant, Erzincan Binali Yıldırım University, Ali Cavit Çelebioğlu Sivil Havacılık Yüksekokulu, Uçak Gövde-  
Motor Bölümü, 2012 - 2014

## Courses

Hava Trafik Kuralları ve Hizmetleri, Undergraduate, 2020 - 2021

Matematik, Undergraduate, 2020 - 2021

R/C Model Uçak Tasarımı, Undergraduate, 2021 - 2022

Bilgisayar Donanım, Undergraduate, 2020 - 2021

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

- I. **Machine Learning-Aided Synthetic Air Data System for Commercial Aircraft**  
Kılıç U., Çam Ö., Can E.  
JOURNAL OF AEROSPACE ENGINEERING, vol.37, no.1, pp.1-22, 2024 (SCI-Expanded)
- II. **BSO algorithm and artificial neural network aided emission optimisation for gas turbine engine**  
KONAR M., ÇAM Ö., AKTAŞ M.  
Aeronautical Journal, 2024 (SCI-Expanded)
- III. **Digital twin for Electronic Centralized Aircraft Monitoring by machine learning algorithms**  
Kılıç U., Yalın G., Çam Ö.  
Energy, vol.283, 2023 (SCI-Expanded)
- IV. **Combustion and emission characteristics of premixed biogas mixtures: An experimental study**  
Sivri İ., Yılmaz H., Çam Ö., Yılmaz İ.  
International Journal of Hydrogen Energy, vol.47, no.24, pp.12377-12392, 2022 (SCI-Expanded)
- V. **Experimental Investigation of Flame Characteristics of H-2/CO/CH4/CO2 Synthetic Gas Mixtures**  
Yılmaz H., Çam Ö., Yılmaz İ.  
COMBUSTION SCIENCE AND TECHNOLOGY, vol.193, no.11, pp.1843-1865, 2021 (SCI-Expanded)
- VI. **A comparison study on combustion and emission characteristics of actual synthetic gas mixtures**  
Yılmaz H., Çam Ö., Yılmaz İ.  
FUEL, vol.263, pp.1-6, 2020 (SCI-Expanded)
- VII. **Experimental investigation of flame instability in a premixed combustor**  
Yılmaz H., Çam Ö., Yılmaz İ.  
FUEL, vol.262, 2020 (SCI-Expanded)
- VIII. **Combustion characteristics of premixed hydrogen/air flames in a geometrically modified micro combustor**  
Yılmaz İ., Yılmaz H., Cam O., Ilbas M.  
FUEL, vol.217, pp.536-543, 2018 (SCI-Expanded)
- IX. **Effect of different turbulence models on combustion and emission characteristics of hydrogen/air flames**  
Yılmaz H., Cam O., Tangöz S., Yılmaz İ.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.42, no.40, pp.25744-25755, 2017 (SCI-Expanded)
- X. **A numerical study on combustion and emission characteristics of premixed hydrogen air flames**  
Cam O., Yılmaz H., Tangöz S., Yılmaz İ.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.42, no.40, pp.25801-25811, 2017 (SCI-Expanded)
- XI. **Effect of micro combustor geometry on combustion and emission behavior of premixed hydrogen/air flames**  
Yılmaz H., Cam O., Yılmaz İ.  
ENERGY, vol.135, pp.585-597, 2017 (SCI-Expanded)
- XII. **Experimental investigation of aerodynamic parameters on flapping wing**  
YILMAZ İ., KEİYİNCİ S., CAM Ö., KARCI A.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.32, no.4, pp.1035-1050, 2017 (SCI-Expanded)
- XIII. **Plaklı Bir Damar İle Nitinol Stent Etkileşiminin Sonlu Elemanlar Yöntemiyle İncelenmesi**

## Articles Published in Other Journals

- I. **Travel option-based environmental comparison between passenger aircraft and high-speed rail**  
Kılıç U., Çam Ö.  
International journal of energy studies (Online), vol.8, no.3, pp.331-348, 2023 (Peer-Reviewed Journal)
- II. **Swirler geometry effects (Dh/do ratio) on synthetic gas flames. part 2: Dynamic flame behaviour at externally altered acoustic conditions** Suktuvo geometrijos (Dh/do ) poveikis sintetinių dujų liepsnoms. 2 dalis: dinaminė liepsnos elgsena veikiant išorėje pakeistomis akustinėmis sąlygomis  
YILMAZ H., ÇAM Ö., YILMAZ İ.  
Energetika, vol.67, no.1-2, pp.55-61, 2021 (Scopus)
- III. **Swirler geometry effects (Dh /do ratio) on synthetic gas flames: Part 1: Combustion and emission characteristics** Suktuvo geometrijos (Dh /do ) poveikis sintetinių dujų liepsnoms. 1 dalis: degimo ir emisijų charakteristikos  
YILMAZ H., ÇAM Ö., YILMAZ İ.  
Energetika, vol.67, no.1-2, pp.48-54, 2021 (Scopus)
- IV. **An experimental study on premixed CNG/H-2/CO2 mixture flames**  
YILMAZ İ., YILMAZ H., ÇAM Ö.  
OPEN ENGINEERING, vol.8, no.1, pp.32-40, 2018 (ESCI)
- V. **Farklı rüzgar türbin kanat profillerinin aerodinamik performansının deneysel incelenmesi**  
Yılmaz İ., Çam Ö., Taştan M., Karıcı A.  
JOURNAL OF POLYTECHNIC-POLITEKNİK DERGİSİ, vol.19, no.4, pp.577-584, 2016 (Peer-Reviewed Journal)
- VI. **Investigation Of Interaction Between Nitinol Stent And A Vascular Plaque Using Finite Element Method**  
GÜNEŞ R., ÇAM Ö., APALAK M. K.  
SAÜ Fen Bilimleri Enstitüsü Dergisi, vol.16, no.3, pp.319-329, 2012 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **Investigation of an Optimal Operating Condition for a Micro Combustor Regarding Basic Thermophotovoltaic System Requirements**  
YILMAZ H., ÇAM Ö., YILMAZ İ.  
in: The Role of Exergy in Energy and the Environment, Nizetic Sandro, Papadopoulos Agis, Editor, Springer, London, pp.27-41, 2018

## Refereed Congress / Symposium Publications in Proceedings

- I. **Dynamic Flame Behavior of 30%H<sub>2</sub> 30%CO 20%CO<sub>2</sub> 20%CNG Synthetic Gas Mixture During Acoustic Forcing**  
Çam Ö., Yılmaz H., Yılmaz İ.  
16. Uluslararası Yanma Sempozyumuna (16th International Combustion Symposium – INCOS 2022, Aydın, Turkey, 8 - 11 September 2022, vol.1, no.1, pp.1-7)
- II. **Experimental Investigation of Combustion Characteristics of Premixed Biogas Flames**  
Sivri İ., Yılmaz H., Çam Ö., Yılmaz İ.  
8th International Conference on Renewable Fuels, Combustion and Fire (FCE'21), Ankara, Turkey, 5 - 07 March 2021, pp.1-10

- III. **Experimental Investigation of Effects of The Ratio of Swirler Hub Diameter to Outer Diameter (Dh/Do) on Synthetic Gas Flames: Part 2: Dynamic Flame Behaviour at Externally Altered Acoustic Conditions**  
YILMAZ H., ÇAM Ö., YILMAZ İ.  
The 16th International Conference of Young Scientists on Energy Issues (CYSENI 2019), Kaunas, Lithuania, 23 - 24 May 2019, pp.329
- IV. **Experimental Investigation of Effects of The Ratio of Swirler Hub Diameter to Outer Diameter (Dh/Do) on Synthetic Gas Flames: Part 1: Combustion and Emission Characteristics**  
YILMAZ H., ÇAM Ö., YILMAZ İ.  
The 16th International Conference of Young Scientists on Energy Issues (CYSENI 2019), Kaunas, Lithuania, 23 - 24 May 2019, pp.328
- V. **Comparison of Combustion and Emission Characteristics of Output Synthetic Gas Compositions of Two Different Power Stations**  
Yılmaz H., Çam Ö., Yılmaz İ.  
7th International Conference on Renewable Fuels Combustion and Fire, Antalya, Turkey, 10 - 12 March 2019, vol.1, no.1, pp.1-10
- VI. **SENTETİK GAZ YAKITLARIN YANMA KARARSIZLIKLARININ DENEYSEL İNCELENMESİ**  
YILMAZ İ., YILMAZ H., ÇAM Ö.  
1. ULUSLARARASI MATEMATİK - MÜHENDİSLİK - FEN VE SAĞLIK BİLİMLERİ KONGRESİ, Şanlıurfa, Turkey, 4 - 07 October 2018, pp.33-41
- VII. **YÜKSEK H<sub>2</sub>/CO ORANINA SAHİP SENTETİK GAZ YAKITLARIN YANMA KARAKTERİSTİKLERİNİN DENEYSEL İNCELENMESİ**  
YILMAZ H., ÇAM Ö., YILMAZ İ.  
1. ULUSLARARASI MATEMATİK - MÜHENDİSLİK - FEN VE SAĞLIK BİLİMLERİ KONGRESİ, Şanlıurfa, Turkey, 4 - 07 October 2018, pp.42-49
- VIII. **Yüksek H<sub>2</sub>/CO Oranına Sahip Sentetik Gaz Yakıtların Yanma Karakteristiklerinin Deneysel İncelenmesi**  
YILMAZ H., ÇAM Ö.  
1. Uluslararası GAP Matematik Mühendislik Fen ve Sağlık Bilimleri Kongresi, Şanlıurfa, Turkey, 4 - 07 October 2018, vol.1, no.1, pp.1-10
- IX. **Sentetik Gaz Yakıtların Yanma Kararsızlıklarının Deneysel İncelenmesi**  
YILMAZ H., ÇAM Ö.  
1. Uluslararası GAP Matematik Mühendislik Fen ve Sağlık Bilimleri Kongresi, Şanlıurfa, Turkey, 4 - 07 October 2018, vol.1, no.1, pp.1-10
- X. **Effect of CO<sub>2</sub> Dilution on Premixed H<sub>2</sub>/CO/CNG Blending Synthesis Gas Flames**  
YILMAZ H., ÇAM Ö.  
16th International Conference on Clean Energy (ICCE-2018), Famagusta, Cyprus (Kktc), 9 - 11 May 2018, vol.1, no.1, pp.1-10
- XI. **Effect of CO<sub>2</sub> Dilution on Premixed H<sub>2</sub>/CO/CNG Blending Synthesis Gas Flames**  
YILMAZ İ., YILMAZ H., ÇAM Ö., SOYTÜRK M. A.  
16th International Conference on Clean Energy (ICCE-2018), Famagusta, Cyprus (Kktc), 9 - 11 May 2018
- XII. **An Experimental Study on Effect of Swirl Number and Gas Composition on Combustion and Emission Behavior of Premixed H<sub>2</sub>/CO/CNG Blending Synthetic Gas Flames in a Novel Combustor**  
Yılmaz H., Çam Ö., Yılmaz İ.  
16th International Conference on Clean Energy (ICCE-2018), Gazimagusa, Cyprus (Kktc), 9 - 11 May 2018, vol.1, no.1, pp.1-10
- XIII. **Dynamic and Static Flame Behavior of Premixed H<sub>2</sub>/CO/CNG/CO<sub>2</sub>-Air Mixtures under Externally Modified Acoustic Conditions**  
Yılmaz H., Çam Ö., Yılmaz İ.  
14 th International Conference of Combustion, Karabük, Turkey, 25 - 27 April 2018, pp.1-10
- XIV. **Investigation of an Optimal Operating Condition for a Micro Combustor Regarding Basic**

## **Thermophotovoltaic System Requirements**

YILMAZ H., ÇAM Ö., YILMAZ İ.

9th International Exergy, Energy and Environment Symposium (IEEES), Split, Croatia, 14 - 17 May 2017, pp.27-41

- XV. **Numerical Investigation of Effect of Different Turbulence Models on The Combustion Characteristics by the Probability Density Function (PDF) Model**  
YILMAZ İ., ÇAM Ö.  
International Research Conference on Sustainable Energy, Engineering, Materials and Environment (SEEME), Newcastle Upon Tyne, United Kingdom, 26 - 28 July 2017, pp.151-161
- XVI. **Combustion and Emission Behavior of Premixed CNG/H<sub>2</sub>/CO<sub>2</sub> Mixture Flames: Effect of Swirl Number and Gas Composition**  
YILMAZ İ., YILMAZ H., ÇAM Ö.  
International Research Conference on Sustainable Energy, Engineering, Materials and Environment (SEEME), Newcastle Upon Tyne, United Kingdom, 26 - 28 July 2017, pp.144-150
- XVII. **Numerical Investigation on Combustion Behavior of Premixed Hydrogen/Air Flames in a Micro Combustor with Varying Geometric Properties: Part - II Effect of Multi-Channel Arrangement**  
YILMAZ H., ÇAM Ö., TANGÖZ S., YILMAZ İ.  
6th International Conference on Renewable Fuels, Combustion and Fire (FCE'17), Nevşehir, Turkey, 18 - 21 May 2017, pp.225-236
- XVIII. **Numerical Investigation on Combustion Behavior of Premixed Hydrogen/Air Flames in a Micro Combustor with Varying Geometric Properties: Part - I Effect of Backward Facing Step and Cavity**  
YILMAZ H., ÇAM Ö., İLBAŞ M., YILMAZ İ.  
6th International Conference on Renewable Fuels, Combustion and Fire (FCE'17), Nevşehir, Turkey, 18 - 21 May 2017, pp.212-224
- XIX. **Investigation of Effects of Equivalence Ratio and Thermal Power on Combustion and Emission Behavior of Premixed Hydrogen Air Mixtures in a Micro Combustor**  
YILMAZ H., YILMAZ İ., ÇAM Ö.  
9th International Exergy, Energy and Environment Symposium (IEEES-9), Split, Croatia, 14 - 17 May 2017
- XX. **Investigation of the Effects of Equivalence Ratio and Thermal Power on the Combustion and Emission Behaviour of Premixed Hydrogen Air Mixture in a Micro Combustor**  
YILMAZ H., YILMAZ İ., ÇAM Ö.  
The 9th International Exergy, Energy and Environment Symposium (IEEES-9), Split, Croatia, 14 - 17 May 2017, pp.1-11
- XXI. **Numerical Investigation of NO<sub>x</sub> Emissions in a Micro-Cylindrical Combustor with Premixed Hydrogen-Air Mixture**  
ÇAM Ö., TANGÖZ S., YILMAZ H., YILMAZ İ.  
9th International Conference on Sustainable Energy and Environmental Protection, Kayseri, Turkey, 22 - 25 September 2016, pp.324-330
- XXII. **The Effect of Different Turbulence Models on the Flame and Emissions Characteristics of Hydrogen-Air Flames**  
YILMAZ H., ÇAM Ö., TANGÖZ S., YILMAZ İ.  
9th International Conference on Sustainable Energy and Environmental Protection, Kayseri, Turkey, 22 - 25 September 2016, pp.200-207
- XXIII. **Boundary Layer Flow Separation Control of Two Dimensional NACA 2415 Airfoil**  
YILMAZ İ., ÇAM Ö., TAŞTAN M.  
8th Ankara International Aerospace Conference, Ankara, Turkey, 10 - 12 September 2015, pp.115-124
- XXIV. **Gözenekli Yakıcıda Farklı Denklik Oranları ve Giriş Sıcaklarında Yanma Karakteristiklerinin Araştırılması**  
YILMAZ İ., ÇAM Ö.  
V. Ulusal Havacılık ve Uzay Konferansı, Kayseri, Turkey, 8 - 10 September 2014, vol.1, pp.1-11
- XXV. **Plaklı Bir Damar İle Nitinol Stent Etkileşiminin Sonlu Elemanlar Yöntemiyle İncelenmesi Investigation Of Interaction Between Nitinol Stent And A Vascular Plaque Using Finite Element Method**

GÜNEŞ R., ÇAM Ö., APALAK M. K.

6. Biyomekanik Uluslararası Katılımlı Kongre, Sakarya, Turkey, 28 - 30 September 2012, vol.16, no.3, pp.319-329

## **Supported Projects**

TUBITAK Project, (1001 Projesi) Sentetik Gaz Yakıtların Yanma Kararsızlığı ve Alev Geri Tepmesinin İncelenmesi, 2016 - 2018

TUBITAK Project, (1001 Projesi) Taktik İnsansız Hava Aracı (TİHA) Tasarımı, Üretimi ve Otonom Kontrolü ile Teorik ve Pratik Yeni Otonom Performans İyileştirme Yöntemlerinin Uygulamaları, 2015 - 2018

## **Metrics**

Publication: 47

Citation (WoS): 151

Citation (Scopus): 259

H-Index (WoS): 6

H-Index (Scopus): 7

## **Non Academic Experience**

MERKEZ ÇELİK A.Ş.