

## Prof. SERHAT KARYEYEN

### Personal Information

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### International Researcher IDs

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ScopusID: 55933675700

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### Education Information

Post Doctorate, University of Maryland, College Park, Faculty of Engineering, Department of Mechanical Engineering, United States Of America 2018 - 2019

Doctorate, Gazi University, Fen Bilimleri Enstitüsü, Enerji Sistemleri Mühendisliği (Dr), Turkey 2013 - 2016

Postgraduate, Gazi University, Fen Bilimleri Enstitüsü, Makine Mühendisliği (Yl) (Tezli), Turkey 2012 - 2013

Undergraduate, Gazi University, Mühendislik Fakültesi, Makine Mühendisliği Bölümü, Turkey 2005 - 2011

### Foreign Languages

English, C2 Mastery

### Certificates, Courses and Trainings

Vocational Course, Second International Summer School on Engineering Computer Modeling, NRNU MEPhI, Moscow, 2017

Vocational Course, International Combustion Institute Summer School on Physics of Turbulent Combustion, KTH Royal Institute of Technology, 2016

Vocational Course, International Combustion Institute Summer School on Near-Wall Reactive Flow, Technical University of Darmstadt, 2016

Vocational Course, International Combustion Institute Winter School on Combustion, Eindhoven University of Technology, 2016

Vocational Course, Second International Combustion Institute Summer School: Combustion Fundamentals and New Technologies (2ICISS), University of Naples "Federico II", 2015

### Dissertations

Doctorate, Geliştirilen bir yakıcıda kömür gazlarının yanma karakteristiklerinin deneysel ve sayısal olarak araştırılması, Gazi University, Fen Bilimleri Enstitüsü, Enerji Sistemleri Mühendisliği (Dr), 2016

Postgraduate, Model bir gaz türbini yanma odasında kömür gazları yanma davranışının sayısal analizi, Gazi University, Fen Bilimleri Enstitüsü, Makine Mühendisliği (Yl) (Tezli), 2013

## Research Areas

Mechanical Engineering, Energy, Thermodynamics, Fuels and Combustion, Petroleum And Natural Gas Engineering, Aeronautical and Space Engineering, Composites

## Academic Titles / Tasks

Professor, Gazi University, Teknoloji Fakültesi, Enerji Sistemleri Mühendisliği, 2024 - Continues

Associate Professor, Gazi University, Teknoloji Fakültesi, Enerji Sistemleri Mühendisliği, 2019 - 2024

Research Assistant PhD, Gazi University, Teknoloji Fakültesi, Enerji Sistemleri Mühendisliği, 2016 - 2019

Research Assistant, Gazi University, Teknoloji Fakültesi, Enerji Sistemleri Mühendisliği, 2011 - 2016

## Academic and Administrative Experience

Vice Rector, Gazi University, 2024 - Continues

Deputy Director of the Center, Gazi University, Araştırma Ve Uygulama Merkezleri, Temel Ve Mühendislik Bilimleri Merkez Laboratuvarı Uygulama Ve Araştırma Merkezi, 2022 - 2024

Uygulama ve Araştırma Merkezi Yönetim Kurulu Üyesi, Gazi University, Araştırma Ve Uygulama Merkezleri, Temel Ve Mühendislik Bilimleri Merkez Laboratuvarı Uygulama Ve Araştırma Merkezi, 2021 - 2024

Assistant Manager of Research and Application Center, Gazi University, Araştırma ve Uygulama Merkezleri, Kariyer Planlama Uygulama ve Araştırma Merkezi Müdürlüğü, 2021 - 2022

Deputy Head of Department, Gazi University, Teknoloji Fakültesi, Enerji Sistemleri Mühendisliği Bölümü, 2020 - 2021

## Courses

Computational Heat and Fluid Flow, Undergraduate, 2023 - 2024

Heat Transfer, Undergraduate, 2023 - 2024

Refrigeration Systems, Undergraduate, 2023 - 2024

Calculus I, Undergraduate, 2023 - 2024

Advanced Combustion and Modeling, Postgraduate, 2021 - 2022

Thermodynamics-II, Undergraduate, 2019 - 2020

Thermodynamics-I, Undergraduate, 2020 - 2021, 2019 - 2020

Isı Transferi ve Akışkanlar Mekaniğinde Sayısal Yöntemler, Postgraduate, 2020 - 2021, 2019 - 2020

Yakıtlar ve Yanma, Undergraduate, 2017 - 2018

Isı ve Kütle Transferi, Undergraduate, 2017 - 2018

Enerji Sistemleri Lab.-II, Undergraduate, 2017 - 2018

## Advising Theses

Karyeyen S., Numerical investigation of combustion characteristics in a scramjet combustor, Postgraduate, A.Kılıçarslan(Student), 2023

Karyeyen S., Investigation of energy analysis of a building and transform methods to green building in continental climate, Postgraduate, A.BALO(Student), 2023

Karyeyen S., Özdemir M. B., Yüksek iç resirkülasyonlu bir yanma odası için renksiz dağıtılmış yanma şartlarında yanma karakteristiklerinin araştırılması, Doctorate, A.İLBAŞ(Student), 2023

Karyeyen S., Numerical investigation of colorless distributed combustion effect on premixed methane flame characteristics, Postgraduate, Ç.TÜMER(Student), 2023

Karyeyen S., NUMERICAL INVESTIGATION OF COKE OVEN GAS COLORLESS DISTRIBUTED COMBUSTION

CHARACTERISTICS IN A PREMIXED COMBUSTOR, Postgraduate, S.TAŞDEMİR(Student), 2022

Karyeyen S., Renksiz dağıtılmış yanma şartlarında seyrelticiinin yanma karakteristiklerine etkisinin sayısal olarak incelenmesi, Postgraduate, K.BİLGİN(Student), 2021

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

- I. **Colourless distributed combustion effects on a pre-mixed coke oven gas flame**  
Taşdemir S., Karyeyen S.  
The Canadian Journal of Chemical Engineering, vol.1, pp.1-17, 2024 (SCI-Expanded)
- II. **Hydrogen concentration effects on a swirl-stabilized non-premixed burner using ammonia**  
Kekul O., İLBAŞ M., KARYEYEN S.  
International Journal of Hydrogen Energy, vol.52, pp.1288-1305, 2024 (SCI-Expanded)
- III. **Conventional and distributed combustion regime on a model thermoelectric generator (TEG) performance using a swirl burner/furnace**  
İLBAŞ M., Akyildiz S., KARYEYEN S., AKTAŞ A.  
Fuel, vol.347, 2023 (SCI-Expanded)
- IV. **Colorless distributed combustion characteristics of hydrogen/air mixtures in a micro combustor**  
YILMAZ H., KARYEYEN S., Tepe A. Ü., Brüggemann D.  
Fuel, vol.332, 2023 (SCI-Expanded)
- V. **Numerical investigation of combustion and flame characteristics for a model solid oxide fuel cell performance improvement**  
İlbaş M., Karyeyen S., Çimen F. M.  
FUEL, vol.322, pp.1-8, 2022 (SCI-Expanded)
- VI. **Colorless distributed combustion (CDC) effects on a converted spark-ignition natural gas engine**  
AKTAŞ F., KARYEYEN S.  
Fuel, vol.317, 2022 (SCI-Expanded)
- VII. **Oxidizer effects on ammonia combustion using a generated non-premixed burner**  
İLBAŞ M., Kekul O., Bektas A., KARYEYEN S.  
International Journal of Hydrogen Energy, vol.47, no.24, pp.12317-12337, 2022 (SCI-Expanded)
- VIII. **Investigation into Thermal-Fluid interaction of ammonia turbulent swirling flames under various Non-Premixed burner conditions**  
İLBAŞ M., Kekul O., KARYEYEN S.  
FUEL, vol.312, 2022 (SCI-Expanded)
- IX. **Investigation of colorless distributed combustion regime using a high internal recirculative combustor**  
İlbas A., Özdemir M. B., Karyeyen S.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.47, no.24, pp.12338-12353, 2022 (SCI-Expanded)
- X. **Modelling of the gas-turbine colorless distributed combustion: An application to hydrogen enriched - kerosene fuel**  
İLBAŞ M., Kumuk O., KARYEYEN S.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.47, no.24, pp.12354-12364, 2022 (SCI-Expanded)
- XI. **H-2- CH<sub>4</sub> blending fuels combustion using a cyclonic burner on colorless distributed combustion**  
Kekec K. B., KARYEYEN S.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.47, no.24, pp.12393-12409, 2022 (SCI-Expanded)
- XII. **Numerical study of a swirl gas turbine combustor for turbulent air and oxy-combustion of ammonia/kerosene fuels**  
İLBAŞ M., Kumuk O., KARYEYEN S.  
FUEL, vol.304, 2021 (SCI-Expanded)
- XIII. **Development of distributed combustion index from a swirl-assisted burner**

- Karyeyen S., Feser J. S., Jahoda E., Gupta A. K.  
APPLIED ENERGY, vol.268, 2020 (SCI-Expanded)
- XIV. **Flowfield impact on distributed combustion in a swirl assisted burner**  
Feser J. S., Karyeyen S., Gupta A. K.  
FUEL, vol.263, 2020 (SCI-Expanded)
- XV. **Application of distributed combustion technique to hydrogen-rich coal gases: A numerical investigation**  
KARYEYEN S., İLBAŞ M.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.45, no.5, pp.3641-3650, 2020 (SCI-Expanded)
- XVI. **A new burner for oxy-fuel combustion of hydrogen containing low-calorific value syngases: An experimental and numerical study**  
İLBAŞ M., Bektas A., KARYEYEN S.  
FUEL, vol.256, 2019 (SCI-Expanded)
- XVII. **Swirl assisted distributed combustion behavior using hydrogen-rich gaseous fuels**  
Karyeyen S., Feser J. S., Gupta A. K.  
APPLIED ENERGY, vol.251, 2019 (SCI-Expanded)
- XVIII. **Hydrogen concentration effects on swirl-stabilized oxy-colorless distributed combustion**  
Karyeyen S., Feser J. S., Gupta A. K.  
FUEL, vol.253, pp.772-780, 2019 (SCI-Expanded)
- XIX. **Combustion characteristics of a non-premixed methane flame in a generated burner under distributed combustion conditions: A numerical study**  
KARYEYEN S.  
FUEL, vol.230, pp.163-171, 2018 (SCI-Expanded)
- XX. **Effect of oxy-fuel combustion on flame characteristics of low calorific value coal gases in a small burner and combustor**  
İLBAŞ M., Bektas A., KARYEYEN S.  
FUEL, vol.226, pp.350-364, 2018 (SCI-Expanded)
- XXI. **Experimental and numerical analysis of turbulent premixed combustion of low calorific value coal gases in a generated premixed burner**  
KARYEYEN S., İLBAŞ M.  
FUEL, vol.220, pp.586-598, 2018 (SCI-Expanded)
- XXII. **3D numerical modelling of turbulent biogas combustion in a newly generated 10 KW burner**  
İLBAŞ M., ŞAHİN M., KARYEYEN S.  
JOURNAL OF THE ENERGY INSTITUTE, vol.91, no.1, pp.87-99, 2018 (SCI-Expanded)
- XXIII. **Turbulent diffusion flames of a low-calorific value syngas under varying turbulator angles**  
İLBAŞ M., KARYEYEN S.  
ENERGY, vol.138, pp.383-393, 2017 (SCI-Expanded)
- XXIV. **An experimental and numerical study on turbulent combustion of hydrogen-rich coal gases in a generated non-premixed burner**  
İLBAŞ M., KARYEYEN S.  
FUEL, vol.194, pp.274-290, 2017 (SCI-Expanded)
- XXV. **Turbulent diffusion flames of coal derived-hydrogen supplied low calorific value syngas mixtures in a new type of burner: An experimental study**  
KARYEYEN S., İLBAŞ M.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.42, no.4, pp.2411-2423, 2017 (SCI-Expanded)
- XXVI. **Effect of swirl number on combustion characteristics of hydrogen-containing fuels in a combustor**  
İLBAŞ M., KARYEYEN S., YILMAZ İ.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.41, no.17, pp.7185-7191, 2016 (SCI-Expanded)
- XXVII. **Numerical modelling of effects of hydrogen supply on combustion behaviours of low calorific value coal gases**  
İLBAŞ M., KARYEYEN S.

- INTERNATIONAL JOURNAL OF GLOBAL WARMING, vol.10, pp.16-31, 2016 (SCI-Expanded)
- XXVIII. **A numerical study on combustion behaviours of hydrogen-enriched low calorific value coal gases**  
İLBAŞ M., KARYEYEN S.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.40, no.44, pp.15218-15226, 2015 (SCI-Expanded)
- XXIX. **Investigation of premixed hydrogen flames in confined/unconfined combustors: A numerical study**  
İLBAŞ M., KARYEYEN S., Ozdemir I.  
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, vol.40, no.34, pp.11189-11194, 2015 (SCI-Expanded)
- XXX. **Modelling of combustion performances and emission characteristics of coal gases in a model gas turbine combustor**  
İLBAŞ M., KARYEYEN S.  
INTERNATIONAL JOURNAL OF ENERGY RESEARCH, vol.38, no.9, pp.1171-1180, 2014 (SCI-Expanded)

## Articles Published in Other Journals

- I. **CH<sub>4</sub>-CO<sub>2</sub> Fuel Mixture Combustion and Emission Characteristics in a Combi Boiler Combustor**  
Toslak A. H., VARIYENLİ H. İ., KARYEYEN S.  
JOURNAL OF POLYTECHNIC-POLITEKNIK DERGISI, 2024 (ESCI)
- II. **Distributed regime and swirler effects on methane and coke oven gas combustion characteristics**  
İlbas A., ÖZDEMİR M. B., KARYEYEN S.  
JOURNAL OF POLYTECHNIC-POLITEKNIK DERGISI, 2024 (ESCI)
- III. **Reduced oxygen concentration effects on scramjet engine combustion characteristics**  
Özbek A. K., KARYEYEN S.  
International journal of energy studies (Online), vol.8, no.3, pp.477-489, 2023 (Peer-Reviewed Journal)
- IV. **Numerical Analysis of Air Flow in an Industrial Refrigeration System and Its Effect on Energy Consumption**  
AKTAŞ M., KARYEYEN S., Okur A., Erdogmus F. N.  
Gazi University Journal of Science, vol.36, no.3, pp.1259-1275, 2023 (ESCI)
- V. **Evaluation of energy efficient building envelope alternatives for sustainable cities**  
Balo A., KARYEYEN S.  
International journal of energy studies (Online), vol.8, no.2, pp.131-150, 2023 (Peer-Reviewed Journal)
- VI. **Ön Karışımli Bir Yakıcıda Kok Fırını Gazı Yanma Karakteristiklerinin Sayısal Olarak İncelenmesi**  
Taşdemir S., Karyeyen S., İlbaş M.  
Gazi University Journal of Science Part C: Design and Technology, vol.10, no.1, pp.135-152, 2022 (Peer-Reviewed Journal)
- VII. **COLORLESS DISTRIBUTED COMBUSTION OF DIFFUSION METHANE FLAME USING A TWO CYCLONE INLET BURNER**  
Kekeç K. B., Karyeyen S., İlbaş M.  
International Journal of Energy for a Clean Environment, vol.23, no.1, pp.1-17, 2022 (Scopus)
- VIII. **Combustion Characteristics on Colorless Distributed Combustion (CDC) in a Cyclonic Burner**  
KEKEÇ K. B., KARYEYEN S.  
International Journal of Energy Studies, vol.5, no.1, pp.43-55, 2020 (Peer-Reviewed Journal)
- IX. **Numerical Investigation of Microjet Assisted Diluents Usage on Effect of NOX Emissions in Turbulent Methane Flame**  
KARYEYEN S., İLBAŞ M.  
JOURNAL OF POLYTECHNIC-POLITEKNIK DERGISI, vol.21, no.3, pp.715-721, 2018 (ESCI)
- X. **Oksitleyiciye su buharı ilavesinin kok fırını gazı yanma davranışlarına olan etkisinin sayısal olarak incelenmesi**  
KARYEYEN S., İLBAŞ M.  
Gazi Üniversitesi Fen Bilimleri Dergisi Part C: Tasarım ve Teknoloji, vol.6, no.2, pp.71-87, 2018 (Peer-Reviewed)

Journal)

- XI. **Oxygen Enriched Combustion of Coke Oven Gas and Generator Gas: A Numerical Study**  
İLBAŞ M., Yanik E., KARYEYEN S.  
JOURNAL OF POLYTECHNIC-POLİTEKNİK DERGİSİ, vol.21, no.1, pp.93-100, 2018 (ESCI)
- XII. **Experimental analysis of premixed and non-premixed methane flames by using a new combustion system**  
İLBAŞ M., KARYEYEN S.  
Research on Engineering Structures and Materials, vol.4, no.1, pp.1-14, 2018 (Peer-Reviewed Journal)
- XIII. **Experimental Investigation of Flue Gas Combustion Parameters of Non-Premixed and Premixed Methane Flames**  
İLBAŞ M., KARYEYEN S., Cilingir K.  
JOURNAL OF POLYTECHNIC-POLİTEKNİK DERGİSİ, vol.19, no.3, pp.357-365, 2016 (ESCI)
- XIV. **Combustion Behaviours of Different Biogases in an Existing Conventional Natural Gas Burner: An Experimental Study**  
İLBAŞ M., ŞAHİN M., KARYEYEN S.  
INTERNATIONAL JOURNAL OF RENEWABLE ENERGY RESEARCH, vol.6, no.3, pp.1178-1188, 2016 (ESCI)
- XV. **Kok Fırını Gazının Model Bir Gaz Türbini Yanma Odasındaki Yanma Performansının Sayısal Olarak İncelenmesi**  
İLBAŞ M., KARYEYEN S.  
POLİTEKNİK DERGİSİ, vol.15, no.4, pp.171-176, 2012 (ESCI)

## Books & Book Chapters

- I. **Flameless Combustion of Hydrogen-Enriched Fuels**  
Karyeyen S.  
in: Fundamentals of Low Emission Flameless Combustion and Its Applications, Seyed Ehsan Hosseini, Editor, Academic Press, Massachusetts, pp.553-563, 2022
- II. **Impact of Flowfield on Pollutants' Emission from a Swirl-Assisted Distributed Combustor**  
Feser J. S., KARYEYEN S., Gupta A. K.  
in: Advances in IC Engines and Combustion Technology, , Editor, SPRINGER, pp.3-11, 2020
- III. **Fuels and Combustion**  
İLBAŞ M., zehra g. ö., KARYEYEN S.  
in: Progress in Exergy Energy and the Environment, Ibrahim Dincer, Adnan Midilli, Haydar Kucuk, Editor, Springer, pp.991-1000, 2014

## Refereed Congress / Symposium Publications in Proceedings

- I. **Colorless Distributed Combustion (CDC) Effects on Hydrogen – Methane Composite Fuel Mixture Combustion Characteristics**  
KÜMÜK O., KARYEYEN S.  
8th International HYDROGEN TECHNOLOGIES, Turkey, 12 May 2024
- II. **Swirler Effects On Colorless Distributed Combustion Using Methane Flame**  
İLBAŞ A., ÖZDEMİR M. B., KARYEYEN S.  
INTERNATIONAL COMBUSTION SYMPOSIUM (INCOS), Turkey, 08 September 2022
- III. **Numerical Investigation of Combustion and Flame Characteristics in a Swirl Burner/Furnace for a Model Thermoelectrical Generator(TEG) Performance**  
İLBAŞ M., Akyıldız S., KARYEYEN S., AKTAŞ A.  
INTERNATIONAL COMBUSTION SYMPOSIUM (INCOS), Turkey, 08 September 2022
- IV. **Numerical Study On The Performance Of A Flat-Tubular Solid Oxide Fuel Cell: Describing The Best**

**Furnace/Combustion Chamber Geometry And Combustion Technique**

ÇİMEN F. M., KARYEYEN S., İLBAŞ M.

INTERNATIONAL COMBUSTION SYMPOSIUM (INCOS), Turkey, 08 September 2022

- V. **Numerical Investigations on Thermal Performance and Flame Stability of Hydrogen Diluted Ammonia Fueled Swirl Burner and Furnace**  
KEKÜL O., İLBAŞ M., KARYEYEN S.  
INTERNATIONAL COMBUSTION SYMPOSIUM (INCOS), Turkey, 08 September 2022
- VI. **NUMERICAL ANALYSIS OF AIR CURTAIN DESIGN PARAMETERS FOR OPEN TYPE REFRIGERATED DISPLAY CABINETS**  
Aktaş M., Karyeyen S., Okur A., Erten S., Öder M., Erdoğan F. N.  
2. BASKENT INTERNATIONAL CONFERENCE ON MULTIDISCIPLINARY STUDIES, Ankara, Turkey, 24 - 25 February 2022, pp.403-409
- VII. **Internal Recirculation Effects on Flameless Combustion of a Hydrogen-Rich Gaseous Fuel**  
İLBAŞ A., ÖZDEMİR M. B., KARYEYEN S.  
8th International Conference on Renewable Fuels, Combustion and Fire (FCE'21), Turkey, 5 - 07 March 2021
- VIII. **Air Preheating Effects on Colorless Distributed Combustion Conditions for H<sub>2</sub>- Enriched CH<sub>4</sub> Combustion**  
KEKEÇ K. B., KARYEYEN S.  
8th International Conference on Renewable Fuels, Combustion and Fire (FCE'21), Turkey, 5 - 07 March 2021
- IX. **CFD Simulation of Flowfield and Turbulence Interaction in an Ammonia Fueled Combustor under Different Combustion Conditions**  
İLBAŞ M., KARYEYEN S., KEKÜL O.  
8th International Conference on Renewable Fuels, Combustion and Fire (FCE'21), Turkey, 05 March 2021
- X. **Numerical Analysis of Kerosene Fuelled Colorless Distributed Combustion (CDC) in A Model Swirl Gas Turbine Combustor**  
İLBAŞ M., KÜMÜK O., KARYEYEN S.  
8th International Conference on Renewable Fuels, Combustion and Fire (FCE'21), Turkey, 5 - 07 March 2021
- XI. **Swirl Combustion of Kerosene and Ammonia-Assisted Kerosene Fuels in a Model Gas Turbine Combustor: A Numerical Study**  
İLBAŞ M., KÜMÜK O., KARYEYEN S.  
15th International Combustion Symposium (INCOS), 17 - 19 September 2020
- XII. **Combustion of Methane Using a Cyclonic Burner under Colorless Distributed Combustion Conditions**  
KEKEÇ K. B., KARYEYEN S., İLBAŞ M.  
15th International Combustion Symposium (INCOS), 17 - 19 September 2020
- XIII. **Combustion Characteristics of Oxy-Ammonia Combustion in a Non-Premixed Burner**  
KEKÜL O., İLBAŞ M., KARYEYEN S.  
15th International Combustion Symposium (INCOS), 17 - 19 September 2020
- XIV. **Effect of Fuel Dilution in a Hydrogen-Methane Blended Fuel Under Oxy-Distributed Combustion**  
KARYEYEN S., Feser J. S., Gupta A. K.  
AIAA Propulsion and Energy 2019 Forum, Indianapolis, IN, United States Of America, 19 - 22 August 2019
- XV. **The effect of swirl number on combustion characteristics of biogas fuel in a combustor**  
İLBAŞ M., ŞAHİN M., KARYEYEN S.  
7 th International Conference on Renewable Fuels Combustion and Fire, 10 - 13 March 2019
- XVI. **Impact of Flowfield on Pollutants Emission from a Swirl Assisted Distributed Combustor**  
Joseph S. F., KARYEYEN S., Gupta A. K.  
44th Clearwater Clean Energy Conference, Clearwater, Florida, United States Of America, 16 - 21 June 2019
- XVII. **OXY-FUEL COMBUSTION OF HYDROGEN CONTAINING LOW-CALORIFIC VALUE SYNGASES: AN EXPERIMENTAL AND NUMERICAL STUDY**  
BEKTAŞ A., İLBAŞ M., KARYEYEN S.  
7th INTERNATIONAL FUELS, COMBUSTION AND FIRE CONFERENCE IN ENGINEERING (FCE 19), Antalya, Turkey, 10 - 13 March 2019, pp.4-11

- XVIII. HYDROGEN ENRICHMENT EFFECTS IN GASEOUS FUELS ON DISTRIBUTED COMBUSTION**  
Karyeyen S., Feser J. S., Gupta A. K.  
ASME Power Conference 2019, Utah, United States Of America, 15 - 18 July 2019
- XIX. Effect of Oxidizer Concentration on Combustion Characteristics of Diffusion Flames**  
İLBAŞ M., KARYEYEN S., ŞAHİN M.  
WITAM 2018, 21 - 23 September 2018
- XX. Numerical investigations of hydrogen-rich syngases under distributed combustion conditions**  
KARYEYEN S., İLBAŞ M.  
7th Global Conference on Global Warming (GCGW-2018), 24 - 28 June 2018
- XXI. Oxy-Fuel Combustion of Coke Oven Gas under Distributed Combustion Conditions**  
İLBAŞ M., KARYEYEN S.  
14th International Combustion Symposium (INCOS2018), 25 - 27 April 2018
- XXII. Experimental Analysis of Turbulent Premixed Coal Gas Combustion**  
KARYEYEN S., İLBAŞ M.  
6 th International Conference on Renewable Fuels Combustion and Fire, 18 - 21 May 2017
- XXIII. Oxy-fuel combustion of low calorific value coal gases: burner modifications and flame characteristics**  
İLBAŞ M., BEKTAŞ A., KARYEYEN S.  
6 th International Conference on Renewable Fuels Combustion and Fire, 18 - 21 May 2017
- XXIV. Experimental and Numerical Analysis of Cold Flow in a Combustor**  
İLBAŞ M., KAHRAMAN A., KARYEYEN S.  
2nd International Conference on Viable Energy Trends, 28 - 30 April 2017
- XXV. Turbulent Diffusion Flames of a Low Calorific Value Syngas Under Varying Turbulator Angles**  
İLBAŞ M., KARYEYEN S.  
9th International Conference on Sustainable Energy and Environmental Protection, 22 - 25 September 2016
- XXVI. Premixed Turbulent Combustion of Hydrogen Containing Fuels An Experimental Study**  
İLBAŞ M., KARYEYEN S.  
Belgian Section of the Combustion Institute, 18 - 20 May 2016
- XXVII. Experimental Investigation of Temperature Measurements of Premixed and Diffusion Methane Flames**  
İLBAŞ M., KARYEYEN S.  
8TH EGE ENERGY SYMPOSIUM AND EXHIBITION, 11 - 13 May 2016
- XXVIII. Determination of Emission Characteristics of Premixed and Diffusion Methane Flames An Experimental Study**  
İLBAŞ M., KARYEYEN S.  
8TH EGE ENERGY SYMPOSIUM AND EXHIBITION, 11 - 13 May 2016
- XXIX. Effect of Swirl Number on Temperature Levels of Hydrogen-Containing Fuels in a Combustor**  
Yılmaz İ., İlbaş M., Karyeyen S.  
17th International Conference on Emerging Nuclear Energy Systems (ICENES\_2015), İstanbul, Turkey, 04 October 2015, pp.1-9
- XXX. Model bir yanma odasında N<sub>2</sub> ve CO<sub>2</sub> seyrelticilerinin kok fırını gazı yanma performansına olan etkisinin nümerik olarak incelenmesi**  
İLBAŞ M., KARYEYEN S.  
20. Ulusal Isı Bilimi ve Tekniği Kongresi, Turkey, 2 - 05 September 2015
- XXXI. Combustion behaviours of hydrogen enriched low calorific value coal gases A numerical study**  
İLBAŞ M., KARYEYEN S.  
4. International Conference on Nuclear and Renewable Energy Resources, 26 - 29 October 2014
- XXXII. Energy Analysis of an Infrared Dryer for Different Drying Conditions**  
AKTAŞ M., İLBAŞ M., KARYEYEN S., ŞAHİN M.  
7th International Ege Energy Symposium Exhibition, Uşak, Turkey, 18 - 20 July 2014
- XXXIII. Numerical Investigation of Premixed Hydrogen Flames in Confined Unconfined Combustors**  
İLBAŞ M., ÖZDEMİR İ., KARYEYEN S.

7th International Ege Energy Symposium & Exhibition, Uşak, Turkey, 18 - 20 June 2014

**XXXIV. Numerical Investigation of Effects of Hydrogen Addition on Combustion Characteristics of Low Calorific Value Coal Gases**

İLBAŞ M., KARYEYEN S.

13th International Conference on Clean Energy, 15 - 17 June 2014

**XXXV. Energy and Exergy Analysis of an Existing Gas Turbine**

İLBAŞ M., KARYEYEN S.

II. European Workshop on Renewable Energy Systems, 20 - 22 September 2013

**XXXVI. Three Dimensional Numerical Modelling of Hydrogen Combustion in a Spherical Model Combustor**

İLBAŞ M., ZEHRA G. Ö., KARYEYEN S.

The Sixth International Exergy, Energy and Environment Symposium, Rize, Turkey, 1 - 04 July 2013

**XXXVII. Experimental Analysis of a New Type Solar Energy Dryer**

ŞEVİK S., AKTAŞ M., KARYEYEN S.

The European Workshop and Conference on Renewable Energy Systems, Antalya, Turkey, 17 September - 28 December 2012

**XXXVIII. Effects of the Maintenance Management System on Energy Efficiency of Thermal Power Plants**

İLBAŞ M., SERKAN Ö., KARYEYEN S.

III. International Conference on Nuclear and Renewable Energy Resources, 20 May 2012 - 23 May 2013

**XXXIX. Konya Sanayisinde Enerji Verimliliği**

KARYEYEN S., AKSOY M. H., ÖZGÖREN M., KOÇAK S.

Yeşil Ekonomiler Konferansı, MEVKA, Konya, Turkey, 6 - 08 December 2011

## Supported Projects

KARYEYEN S., TOKSOY M., KALEM U. Y., Project Supported by Higher Education Institutions, Bir Güneş Panelinin Yazılım Destekli-Arduino Kontrollü Soğutulması, 2021 - 2022

İLBAŞ M., KARYEYEN S., KEKÜL O., Project Supported by Higher Education Institutions, Amonyak Gazının Yanma Performansı ve Emisyon Davranışlarının Deneysel Olarak İncelenmesi, 2021 - 2022

Karyeyen S., TUBITAK Project, Dağıtılmış yanma şartları altında yakılan sentetik yakıtların dinamik davranışlarının ve yanma performanslarının araştırılması, 2018 - 2019

İLBAŞ M., KARYEYEN S., Project Supported by Higher Education Institutions, Endüstriyel Simbiyoz Tematik Alanlı Biyogaz Reaktörü ve Yakma Sistemi Tasarımı, 2018 - 2019

KARYEYEN S., İLBAŞ M., Project Supported by Higher Education Institutions, Sentez gazlarının yanma performanslarının oksijen-yanma şartlarında deneysel olarak araştırılması, 2018 - 2019

İLBAŞ M., KARYEYEN S., Project Supported by Higher Education Institutions, BİR YAKMA SİSTEMİNDE BİYOGAZ YANMA KARAKTERİSTİKLERİNİN DENEYSEL OLARAK İNCELENMESİ, 2016 - 2017

İlbaş M., TUBITAK Project, Model Bir Yanma Sisteminde Kömür Gazlarının Yanma Performanslarının Ve Emisyon Parametrelerinin Deneysel Olarak İncelenmesi, 2014 - 2016

## Activities in Scientific Journals

Gazi University Journal of Science, Assistant Editor/Section Editor, 2020 - Continues

International journal of energy studies (Online), Assistant Editor/Section Editor, 2019 - Continues

Journal of Polytechnic-Politeknik Dergisi, Assistant Editor/Section Editor, 2019 - Continues

## Scientific Refereeing

INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, SCI Journal, January 2021

## **Metrics**

Publication: 87

Citation (WoS): 480

Citation (Scopus): 574

H-Index (WoS): 15

H-Index (Scopus): 17

## **Scholarships**

2219-Yurtdışı Doktora Sonrası Araştırma Bursu (ABD), TÜBİTAK, 2018 - 2019

## **Non Academic Experience**

State Economic Organization SEO, Türk Havacılık Uzay Sanayii A.Ş., Sistem Mühendisliği Müdürlüğü  
TUSAŞ

University of Maryland-College Park