

## Lect. PhD BAHADIR ERMAN YÜCE

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: AAH-7816-2021

ScopusID: 57200691193

### Biography

#### Yurt dışı deneyimi:

Postdoctoral Researcher, International Center of Indoor Environment and Energy - Technical University of Denmark, 2021-2022. (TUBITAK -2219-International Postdoctoral Research Fellowship Program for Turkish Citizens-2021)

#### Araştırma alanları:

- I. Thermodynamics
- II. Heat Transfer
- III. Computational Fluid Dynamics
- IV. Droplet Dispersion
- V. Ventilation
- VI. Indoor Air Quality
- VII. Thermal Comfort
- VIII. Cross Infection Risk
- IX. Infection control
- X. Healthy Buildings

### Education Information

Post Doctorate, Technical University of Denmark, Denmark 2021 - 2022

Doctorate, Bursa Uludağ University, Fen Bilimleri Enstitüsü, Mechanical Engineering, Turkey 2015 - 2019

Postgraduate, Bursa Uludağ University, Fen Bilimleri Enstitüsü, Mechanical Engineering, Turkey 2013 - 2015

Undergraduate, Selcuk University, Mechanical Engineering, Turkey 2008 - 2012

## Dissertations

Doctorate, Ofis ortamında türbülanslı akış modellerinin karşılaştırılması ve çeşitli ısıtma sistemlerinin ısı konfor indisleri ve Gagge modeli kullanılarak sayısal simülasyonu, 2019

Postgraduate, Oda havalandırılmasında hava akışı, sıcaklık dağılımı, ısı transferi ve ısı konforun sayısal simülasyonları, 2015

## Research Areas

Mechanical Engineering, Energy, Fluid Mechanics, Conventional Energy Systems and Their Technology, Alternative Energy Resources, Advanced Energy Technologies, Geothermal energy, Heat and Mass Transfer, Heating, Refrigerating and Air Conditioning, Internal Combustion Engines, Computational fluid dynamics, Thermal Systems

## Academic Titles / Tasks

Lecturer, Bursa Uludağ University, Yenişehir İbrahim Orhan Myo, Elektrik Ve Enerji, 2024 - Continues

Assistant Professor, Bitlis Eren University, Faculty of Engineering and Architecture, Mechanical Engineering, 2020 - 2024

Research Assistant, Bitlis Eren University, Institute of Science and Technology, Mechanical Engineering, 2019 - 2020

Research Assistant, Bursa Uludağ University, Fen Bilimleri Enstitüsü, Yenişehir İbrahim Orhan Vocational School, 2013 - 2019

## Academic and Administrative Experience

Vice Dean, Bitlis Eren University, Mühendislik Fakültesi, 2023 - 2024

Deputy Head of Department, Bitlis Eren University, Mühendislik Fakültesi, Makine Mühendisliği, 2021 - 2021

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

- I. **Investigation of infectious droplet dispersion in a hospital examination room cooled by split-type air conditioner**  
Yüce B. E., Kalay O. C., KARPAT F., ALEMDAR A., TEMEL Ş. G., Dilektaşlı A. G., Başkan E. B., ÖZAKIN C., COŞKUN B.  
Journal of Environmental Health Science and Engineering, vol.22, no.2, pp.471-482, 2024 (SCI-Expanded)
- II. **Metaheuristic Optimization of an Organic Rankine Cycle using Advanced Exergy Analysis and Artificial Bee Colony Algorithm**  
Yüce B. E., Eser S., Arslanoğlu N.  
HEAT TRANSFER RESEARCH, vol.00, no.00, 2024 (SCI-Expanded)
- III. **PARAMETER SIGNIFICANCE IN EXERGY DESTRUCTION: COMPARATIVE ANALYSIS OF WORKING FLUID AND TEMPERATURE EFFECTS IN LOW-TEMPERATURE GEOTHERMAL ENERGY CONVERSION**  
Yüce B. E., Arslanoğlu N.  
HEAT TRANSFER RESEARCH, vol.00, no.00, pp.1, 2024 (SCI-Expanded)
- IV. **ENERGY AND EXERGY OPTIMIZATION OF KALINA CYCLE SYSTEM-34 WITH DETAILED ANALYSIS OF CYCLE PARAMETERS**  
Yüce B. E.  
CASE STUDIES IN THERMAL ENGINEERING, vol.61, pp.105066, 2024 (SCI-Expanded)
- V. **Optimization of critical system outputs of the Stirling cycle using Taguchi-based grey relational analysis**  
Yüce B. E.  
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS, PART E: JOURNAL OF PROCESS MECHANICAL

ENGINEERING, vol.0, no.0, 2024 (SCI-Expanded)

- VI. **Multi objective optimization of emission and performance characteristics in a spark ignition engine with a novel hydrogen generator**  
Yuce B. E., Oral F.  
ENERGY, vol.289, 2024 (SCI-Expanded)
- VII. **Analysis of parameters influencing pathogen concentration in a room with displacement ventilation using computational fluid dynamics and Taguchi methods**  
Yuce B. E., Aganovic A., Nielsen P. V., Wargocki P.  
JOURNAL OF BUILDING ENGINEERING, vol.80, 2023 (SCI-Expanded)
- VIII. **A metaheuristic approach for multi-objective optimization of the Stirling cycle with internal irreversibilities and regenerative losses using artificial bee colony algorithm**  
Eser S., Yuce B. E.  
ENERGY CONVERSION AND MANAGEMENT, vol.292, 2023 (SCI-Expanded)
- IX. **PREDICTION OF SKIN TEMPERATURE IN DIFFERENT THERMAL CONDITIONS USING ARTIFICIAL NEURAL NETWORK**  
Yuce B. E.  
HEAT TRANSFER RESEARCH, vol.54, no.10, pp.1-17, 2023 (SCI-Expanded)
- X. **Cooling of Heated Blocks with Triangular Guide Protrusions Simulating Printed Circuit Boards**  
Beyazoglu E., Yuce B. E., Ates M., YALINDAĞ R., Sokmen K. F., PULAT E.  
SUSTAINABILITY, vol.14, no.23, 2022 (SCI-Expanded)
- XI. **The use of Taguchi, ANOVA, and GRA methods to optimize CFD analyses of ventilation performance in buildings**  
Yuce B. E., Nielsen P. V., Wargocki P.  
BUILDING AND ENVIRONMENT, vol.225, 2022 (SCI-Expanded)
- XII. **THE EFFECT OF ELEVATOR CABIN SIZE ON INFECTIOUS DROPLET DISPERSION**  
Yuce B. E.  
HEAT TRANSFER RESEARCH, vol.53, no.11, pp.17-29, 2022 (SCI-Expanded)
- XIII. **A PARAMETRIC STUDY ON THE EFFECT OF BLOWING PARAMETERS OF SPLIT-TYPE AIR CONDITIONERS ON THERMAL COMFORT AND VENTILATION**  
Pulat E., Yuce B. E.  
HEAT TRANSFER RESEARCH, no.15, pp.63-76, 2021 (SCI-Expanded)
- XIV. **Forced, natural and mixed convection benchmark studies for indoor thermal environments**  
Yuce B. E., PULAT E.  
INTERNATIONAL COMMUNICATIONS IN HEAT AND MASS TRANSFER, pp.1-14, 2018 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Investigation of Thermal Insulation Performance at Different Coating Thicknesses by Using Finite Volume Method**  
YUCE B. E., ÖZEL S.  
Yüzüncü Yıl Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.28, no.2, pp.641-650, 2023 (Peer-Reviewed Journal)
- II. **Application of the Taguchi and ANOVA Methods to Optimize Ventilation Parameters for Infection Risk Based on the Wells-Riley Model**  
YUCE B. E.  
Bitlis Eren Üniversitesi Fen Bilimleri Dergisi, vol.12, no.1, pp.199-206, 2023 (Peer-Reviewed Journal)
- III. **Analysis of Optimum Insulation Thickness and Energy Saving for Different Fuels and Wall Components in Bitlis Province**  
YUCE B. E., ACAR M. C.  
Bitlis Eren Üniversitesi Fen Bilimleri Dergisi, vol.10, no.4, pp.1426-1434, 2021 (Peer-Reviewed Journal)
- IV. **Altıtan Isıtma Sisteminin Kullanıldığı Bir Ofis Odasında Isıl Konfor ve İç Hava Kalitesinin Sayısal**

### **Olarak İncelenmesi**

YÜCE B. E., PULAT E.

Tesisat Mühendisliği, vol.2021, no.184, pp.60-65, 2021 (Peer-Reviewed Journal)

V. **Performance prediction of a single-stage refrigeration system using R134a as a refrigerant by artificial intelligence and machine learning method**

YÜCE B. E.

Bitlis Eren University Journal of Science and Technology, vol.10, no.2, pp.84-87, 2020 (Peer-Reviewed Journal)

VI. **Çilek Kurutulmasının Deneysel ve Nümerik Olarak İncelenmesi**

TAN F., CANBOLAT A. S., YUCE B. E., TÜRKAN B.

Uludağ Üniversitesi Mühendislik Fakültesi Dergisi, vol.21, no.1, pp.203-216, 2016 (Peer-Reviewed Journal)

### **Books & Book Chapters**

I. **FARKLI KAPLAMA MALZEMELERİNİN EGZOZ MANİFOLDU ÜZERİNDE OLUŞAN SICAKLIK DAĞILIMINA ETKİSİ**

YÜCE B. E., ÖZEL S.

in: INTERNATIONAL ENERGY RESEARCH AND APPLICATIONS, Yıldız Alim, Ünsal Derya Betül, Editor, Sivas Cumhuriyet University Rectorate Publishing Office, Sivas, pp.151-165, 2022

### **Refereed Congress / Symposium Publications in Proceedings**

I. **CONVENTIONAL AND ADVANCED EXERGY ANALYSIS OF A RANKINE CYCLE**

YÜCE B. E.

II. INTERNATIONAL ENERGY DAYS, Turkey, 27 September 2023

II. **DUVAR TİPİ KLİMALARIN ENFEKTE DAMLACIK DAĞILIMINA ETKİSİ**

YÜCE B. E.

15. ULUSAL TESİSAT MÜHENDİSLİĞİ KONGRESİ, İzmir, Turkey, 26 April 2023

III. **Optimization Of Ventilation Parameters To Minimize The Infection Risk With The Taguchi Method**

YÜCE B. E.

2nd INTERNATIONAL RAHVA TECHNICAL AND SOCIAL RESEARCHES CONGRESS, Bitlis, Turkey, 3 - 04 December 2022, pp.253

IV. **Thermal Analysis of Ceramic Coated Exhaust Manifold**

YÜCE B. E., ÖZEL S.

International Energy Days, Sivas, Turkey, 04 October 2022

V. **Numerical Investigation of Thermal Performance of Diesel Engine Piston Coated with WC and ZrO<sub>2</sub>**

YÜCE B. E., ÖZEL S.

Global Summit on Advanced Materials & Sustainable Energy (G-AMSE22), Van, Turkey, 03 October 2022, pp.75-82

VI. **ARAÇ KABİNİ İÇERİSİNDE HAVANIN ÇIKIŞ KONUMUNUN ISIL KONFORA OLAN ETKİSİ**

YÜCE B. E., PULAT E.

10th Automotive Technologies Congress, Bursa, Turkey, 06 September 2021

VII. **Araç Kabini İçerisinde Havanın Çıkış Konumunun Isıl Konfora Olan Etkisi**

YÜCE B. E., PULAT E.

OTEKON 2020 10th International Automotive Technologies Congress, Bursa, Turkey, 06 September 2021

VIII. **A Numerical Study on Cooling Performance of Various Flow Field Designs of Cooling Plates**

ACAR M. C., YÜCE B. E.

5th International Hydrogen Technologies Congress 26-28 May 2021, Niğde, Turkey, 26 - 28 May 2021, pp.98-100

IX. **ALTTAN ISITMA SİSTEMİNİN KULLANILDIĞI BİR OFİS ODASINDA ISIL KONFOR VE İÇ HAVA KALİTESİNİN SAYISAL OLARAK İNCELENMESİ**

YÜCE B. E., PULAT E.

14. ULUSAL TESİSAT MÜHENDİSLİĞİ KONGRESİ, İzmir, Turkey, 17 April 2019

X. **ISITILAN BİR OFİS ODASINDA HAVA AKIŞI VE KONFORUN SAYISAL SİMÜLASYONU**

YÜCE B. E., PULAT E.

IV. Uluslararası Katılımlı Anadolu Enerji Sempozyumu, Edirne, Turkey, 18 - 20 April 2018, vol.2, pp.1112-1121

XI. **NUMERICAL PREDICTION OF INDOOR AIR DISTRIBUTION AND THERMAL COMFORT FOR AN OFFICE ROOM**

YÜCE B. E., PULAT E.

RoomventVentilation 2018, Aalto-Helsinki, Finland, 2 - 05 June 2018

XII. **Some Natural, Forced and Mixed Convection Benchmark Studies for Indoor Thermal Environments**  
PULAT E., YÜCE B. E.

3rd INTERNATIONAL CONFERENCE ON SUSTAINABLE DEVELOPMENT (ICSD), Saraybosna, Bosnia And Herzegovina, 19 - 23 April 2017, pp.234-241

XIII. **BİR OFİS ODASINDAKİ TERMAL AKIŞIN KIŞ ŞARTLARINDA SAYISAL OLARAK İNCELENMESİ**  
YÜCE B. E., PULAT E.

13. ULUSAL TESİSAT MÜHENDİSLİĞİ KONGRESİ, İzmir, Turkey, 19 - 22 April 2017, vol.1, pp.1231-1240

XIV. **NUMERICAL SIMULATION OF THERMAL FLOW AND COMFORT IN AN OFFICE ROOM**

YÜCE B. E., PULAT E.

12th International Conference on Heat Transfer, Fluid Mechanics and Thermodynamics, Malaga, Spain, 11 June 2016

XV. **ELEKTRONİK CİHAZLARIN SOĞUTULMASININ FARKLI TÜRBÜLANS MODELLERİ VE DUVAR YAKLAŞIMLARI İLE CFD SİMÜLASYONU**

tan f., CANBOLAT A. S., TÜRKAN B., YÜCE B. E.

12. ULUSAL TESİSAT MÜHENDİSLİĞİ KONGRESİ, İzmir, Turkey, 8 - 11 April 2015

XVI. **ÜLKEMİZDEKİ TÜKETİM TİPLİ GIDA ÜRÜNLERİNE VE KURUTMA TEKNİKLERİNE GENEL BİR BAKIŞ**  
YÜCE B. E., TÜRKAN B., TAN F., CANBOLAT A. S.

2. Ulusal İklimlendirme Soğutma Eğitimi Sempozyumu ve Sergisi, Balıkesir, Turkey, 23 - 25 October 2014

XVII. **ODA HAVALANDIRMASINDA ISIL KONFORUN SAYISAL SİMÜLASYONU**

YÜCE B. E., PULAT E.

12. ULUSAL TESİSAT MÜHENDİSLİĞİ KONGRESİ, Turkey, 8 - 11 April 2015

## Supported Projects

Yüce B. E., Project Supported by Higher Education Institutions, İç Ortam Havalandırma, Hava Kalitesi, Isıl Konfor ve Enfeksiyon Riski Çalışmaları İçin Laboratuvar Alt Yapısının Oluşturulması, 2023 - 2024

## Metrics

Publication: 38

Citation (WoS): 84

Citation (Scopus): 94

H-Index (WoS): 4

H-Index (Scopus): 4