



## Assist. Prof. Dr. İBRAHİM KOÇ

Mahmutbey Technology Campus

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Interview Hours: Salı- 13:00 - 14:00

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### EDUCATIONAL INFORMATION

Degree	University	Department	Year(s)
Doctoral Degree	Istanbul Technical University	Mechanical Engineering(Phd)	1999 - 2006
Master's Degree	Istanbul Technical University	Mechanical Engineering(Master's) (tezli)	1991 - 1994
Bachelor's Degree	Istanbul Technical University	Mechanical Engineering	1987 - 1991

### RESEARCH AREAS

Heat Transfer, Thermodynamics, Gas Turbines, Internal Combustion Engines

### ACADEMIC DUTIES

Duty	University	Area	Year(s)
Doctor Faculty Member	Altinbas University	Department of Mechanical Engineering	2018 -
Doctor Faculty Member	Istanbul Gelisim University	Aircraft Maintenance and Repair Department	2016 - 2018
Assistant Professor	Air Force Academy	Department of Aerospace Engineering	2008 - 2016
Lecturer (Phd)	Air Force Academy	Department of Aerospace Engineering	2006 - 2008
Lecturer	Air Force Academy	Department of Aerospace Engineering	2000 - 2006

### ADMINISTRATIVE DUTIES

Duty	University	Year(s)
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### ACADEMIC AND PROFESSIONAL MEMBERSHIPS

Organisation	Membership	Year(s)
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### NON-UNIVERSITY EXPERIENCE

Country	Organisation	Duty	Year(s)
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### BOOKS

### ARTICLES

#### Thermal Performance Improvement of Shell and Helical Coil Heat Exchanger

ABED TAREQ H., KOÇ İBRAHİM

AURUM JOURNAL OF ENGINEERING SYSTEMS AND ARCHITECTURE, 2021

National

#### Phase Change Material (Pcm) Effect on Photovoltaic Performance of Solar Panels

ALI MENA MUAAD ALI, KOÇ İBRAHİM

AURUM JOURNAL OF ENGINEERING SYSTEMS AND ARCHITECTURE, 2021

National

## ARTICLES

### **Modeling And Simulation to Investigate the Thermal Efficiency of a Parabolic Solar Trough Collector with Absorber Tube Inserted Twisted Tape System**

ABBAS Mohammed Faris Abbas, KOÇ İBRAHİM

AURUM JOURNAL OF ENGINEERING SYSTEMS AND ARCHITECTURE, 2021

International

### **Evaluation of The Thermal And Hydraulic Performance of A Double Pipe Heat Exchanger By Use of Various Porous Structures**

ALI Ali Azeez Ali, KOÇ İBRAHİM, ABBAS Ehsan Fadil

International Journal of Scientific & Technology Researc, 2020

International

### **Experimental study the influence of surface shape and roughness of different materials on thermal contact conductance in single and multilayers wall.**

AWAD Laith Yahya, KOÇ İBRAHİM, JAWAD Salah Kareem

AURUM JOURNAL OF ENGINEERING SYSTEMS AND ARCHITECTURE, 2020

National

### **Bina Enerji Tüketiminin Isı Modellenmesi**

KOÇ İBRAHİM,SAYAR ERSİN,PARMAKSIZOĞLU İSMAİL CEM

Tesisat Mühendisliği, 2018

National

### **Experimental Investigation of Velocity and Turbulence Variations in Inclined Jet in Cross-Flow**

KOÇ İBRAHİM

Gazi University Journal of Science, 2017

International

### **Thermal Stresses on a Reginal Cooling Plate**

KOÇ İBRAHİM

International Journal of Engineering Technologies-IJET, 2017

International

### **The use of liquefied petroleum gas lpg and natural gas in gas turbine jet engines**

KOÇ İBRAHİM

Advances in Energy Research, 2015

International | DOI: 10.12989/eri.2015.3.1.031

### **Free Cooling in the Water Cooling Towers: a Case Study for Istanbul, Turkey**

KOÇ İBRAHİM,PARMAKSIZOĞLU İSMAİL CEM

Gazi University Journal of Science, 2013

International

### **Sıvı Kristalin Isı Transferi Uygulamalarında Kullanılması**

KOÇ İBRAHİM

Havacılık ve Uzay Teknolojileri Dergisi, 2012

National

### **Çift Etkili LiBr H<sub>2</sub>O Akışkanlı Absorpsiyonlu Soğutma Sisteminde Termodinamiksel Büyüklüklerin Sistem Performansına Etkileri**

SOLUM CAFER,KOÇ İBRAHİM,ALTUNTAŞ YILMAZ

Havacılık ve Uzay Teknolojileri Dergisi, 2011

National

### **Investigation of film cooling effectiveness and heat transfer coefficient for rectangular holes with two rows**

KOÇ İBRAHİM,İSLAMOĞLU YAŞAR,AKDAĞ ÜNAL

Aircraft Engineering and Aerospace Technology, 2009

International

## ARTICLES

**Experimental study on forced convection heat transfer characteristics in a converging diverging heat exchanger channel**  
TAYMAZ İMDAT, KOÇ İBRAHİM, İSLAMOĞLU YAŞAR

Heat and Mass transfer, 2008

International

**Experimental and numerical investigation of film cooling effectiveness for rectangular injection holes**

KOÇ İBRAHİM

Aircraft Engineering and Aerospace Technology, 2007

International

**Eğrisel Yüzeyler Üzerinde Film Soğutmanın Sayısal İncelenmesi**

KOÇ İBRAHİM, PARMAKSIZOĞLU İSMAİL CEM

İTÜ Dergisi, 2006

National

**Silindirik Enjeksiyon Deliklerinde Film soğutma İncelenmesi**

KOÇ İBRAHİM

Havacılık ve Uzay Teknolojileri Dergisi, 2006

National

**Numerical Investigation of Film Cooling Effectiveness on the Curved Surface**

KOÇ İBRAHİM, PARMAKSIZOĞLU İSMAİL CEM, ÇAKAN MURAT

Energy Conversion and Management, 2006

International

**Dikdörtgen Delikli Düz Levha Üzerinde Film Soğutmanın Deneysel İncelenmesi**

KOÇ İBRAHİM, PARMAKSIZOĞLU İSMAİL CEM, İSLAMOĞLU YAŞAR

Isı Bilimi ve Tekniği Dergisi, 2006

National

**Dikdörtgen Delikli Düz Levha Üzerinde Film Soğutmanın Deneysel İncelenmesi**

KOÇ İBRAHİM, İSLAMOĞLU YAŞAR, PARMAKSIZOĞLU İSMAİL CEM

ISI Bilimi ve Teknigi Dergisi-Journal of Thermal Science and Technology, 2006

International

## PROCEEDINGS

**Temperature Optimization on LED circuit Boards**

DAŞDEMİR Can, KOÇ İBRAHİM

8th International Academic Studies Conference., 2022

International

**BİNA ENERJİ TÜKETİMİNİN İSİL MODELLENMESİ**

KOÇ İBRAHİM, SAYAR ERSİN, PARMAKSIZOĞLU İSMAİL CEM

13. ULUSAL TESİSAT MÜHENDİSLİĞİ KONGRESİ, 2017

National

**Electrothermal Propulsion System Selection for Communication Satellite NSSK Maneuver Using Multi Criteria Decision Making Method**

ÇELİK MURAT, ÖZKAN ÖMER, KOÇ İBRAHİM

7th International Conference on Recent Advances in Space Technologies “Emerging Private Space” RAST 2015, 2015

International

**Hidrojenle Çalışan İHA nin Kavramsal Tasarımı ve İmalatı**

KARABÜK Salih Burak, KÖKALP Emir, KOÇ İbrahim

Havacılıkta İleri teknolojiler Konferansı(HİTEK 2014), 2014

National

## PROCEEDINGS

### Gaz Türbin Kanadı Üzerinde İki Boyutlu Sıcaklık Dağılımının Çıkarılması

KOÇ İbrahim, ALTUNTAŞ Yılmaz, SOLUM Cafer  
IV. Ulusal Havacılık ve Uzay Konferansı(UHUK 2012), 2012  
National

### Possible Applications of Thermal Barrier Coatings in Space Practices

PİRGE GÜRSEV, KOÇ İBRAHİM, BAŞARAN ALİ

3rd International Conference on Recent Advances in Space Technologies “Space for a More Secure World” RAST 2007, 2007  
International

### İki Sıralı Dikdörtgen Deliklerde Film Soğutma Etkenliği İncelemesi

KOÇ İBRAHİM, İSLAMOĞLU YAŞAR  
16. Ulusal İşi Bilimi ve Tekniği Kongresi (ULIBTK'07), 2007  
National

### Düz Bir Plaka Üzerinde Film Soğutmanın Sayısal İncelenmesi

KOÇ İBRAHİM, PARMAKSIZOĞLU İSMAİL CEM  
Havacılıkta İleri Teknolojiler ve Uygulamaları Sempozyumu (HITEK), 2004  
National

### Eğrisel Yüzeyde Film Soğutmanın Sayısal İncelenmesi

KOÇ İBRAHİM, PARMAKSIZOĞLU İSMAİL CEM  
Havacılık Sempozyumu, 2004  
National

## PROJECTS

### Uzay İtki Sistemi Olarak Mikrodalga Elektrotermal Roketin Tasarımı, Üretilimi Ve Testi (Researcher)

Tübitak 1005, 05.09.2014 - 28.12.2018

National Completed

## THESIS SUPERVISION

### NUMERICAL ANALYSIS OF PHOTOVOLTAIC PANEL EFFICIENCY IN THE ARID CLIMATE OF KUWAIT

ABDALAZIZ Z. H. SHEHADA  
2025 Master's Degree

### INVESTIGATION OF HEAT TRANSFER ENHANCEMENT BY COMPILING A HELICAL PIPE EXCHANGER TO THE OUTER SHELL OF SHELL AND TUBE HEAT EXCHANGER

MOHAMMED SALIH JABBAR JABBAR  
2024 Master's Degree

### AN INVESTIGATION ON THE IMPACT OF NATURAL VENTILATION ON THE BUILDING THERMAL PERFORMANCE IN DIFFERENT CLIMATE CONDITIONS USING CFD ANALYSIS

MOHAMMED YOUNUS HUSSEIN AL-HAMDONY  
2024 Master's Degree

### Improving thermal efficiency of photovoltaic thermal systems

MOHAMMED ABBAS FADHIL AL-KHAFAJI  
2023 Master's Degree

### SIMULATION AND NUMERICAL ANALYSIS OF HEAT TRANSFER IN BUILDING COMPONENTS

MAZIN ALI MAHMOOD MAHMOOD  
2023 Master's Degree

### EXPERIMENTAL AND NUMERICAL STUDY FOR ENHANCEMENT HEAT TRANSFER IN CHANNEL BY INSERTED TAPE DIAGONALLY WITH FIXED RIBS

MOHAMMED HUSSEIN RADHI AL-ZUBAYD  
2023 Master's Degree

## THESIS SUPERVISION

**5-function stop lamp thermal analysis**

CAN DAŞDEMİR

2022 | Master's Degree

**A numerical simulation and analysis of indoor thermal environment around an occupant for different air supply and exhaust modes**

DHAFER SAMEER FATHULLAH AMEEN

2022 | Master's Degree

**Experimental and numerical study of solar water heater enhancement integrated with phase change material and heat exchanger**

FAHAD SAADOON FAHAD AL-BEHADILI

2022 | Master's Degree

**Investigation of heat transfer enhancement in a tube with twisted tape by using concentrating solar power**

MOHAMMED FARIS ABBAS ABBAS

2021 | Master's Degree

**Modifying a generator and designing a solar collector**

MARWAH AL-DAYYENI

2021 | Master's Degree

**Numerical analysis of the influence of material and geometric parameters on the thermal efficiency of heat sink**

IDRIS ABDULHADI EMHAMED MUFTAH

2021 | Master's Degree

**Thermal performance improvement of shell and helical coil heat exchanger**

TAREQ H. ABED

2021 | Master's Degree

**Experimental and numerical study of heat transfer in double-pipe helical heat exchanger using nano-liquid**

ALI ZAEEM FEZEA ALDAHLAH

2021 | Master's Degree

**Yeni Vortex Jeneratörü Kullanarak Türbülanslı Akışkan Akışı ve Isı Transferi Geliştirmesi**

BASSAM AMER ABDULAMEER SHLASH

2021 | Master's Degree

**Numerical investigation of heat transfer, pressure drop, and exergy for plate heat exchanger using nanofluids**

HATEM SHABAN MESBAH SHINKADA

2021 | Master's Degree

**EVALUATION OF THERMAL PERFORMANCE AND PRESSURE DROP FOR DOUBLE PIPE HEAT EXCHANGER  
USING DIFFERENT TYPES OF POROUS MEDIA**

ALI AZEEZ ALI ALI

2020 | Master's Degree

**EXPERIMENTAL STUDY THE INFLUENCE OF SURFACE SHAPE AND ROUGHNESS OF DIFFERENT MATERIALS ON THERMAL CONTACT CONDUCTANCE IN SINGLE AND MULTILAYERS WALL**

LAITH YAHYA AWAD AWAD

2020 | Master's Degree

**Enhancement of air cooling in tube fitted with multi-spring wire and study friction factor and exergy efficiency numerically**

MAHMOOD ALI MAHMOOD

2020 | Master's Degree

**Numerical study of thermal performance and pressure drop of particle solar receiver enhancement with helical screw vortex generator**

MUSTAFA H. QASIM

2020 | Master's Degree

## THESIS SUPERVISION

**Effect on photovoltaic performance of solar panels**

MENA MUAAD ALI ALI

2020 | Master's Degree

**Mikrodalga elektrotermal itki sistemi:tasarımı, üretimi ve performans analizi**

MEHMET SERHAN YILDIZ

2016 | Doctorate

**Çeşitli kanat ucu modelleri için sürükleme kuvvetinin azaltılmasının hesaplamalı akışkanlar dinamiği yöntemleri ile incelenmesi**

ERKAN YILDIZ

2015 | Master's Degree

**CN-235 Casa uçağı kivrik kanat tasarımlının hesaplamalı akışkanlar dinamiği ile incelenmesi**

İLYAS KARAOĞLU

2015 | Master's Degree

**Bir haberleşme uydusunu yörüngeye yerleştirecek hibrid yakıtlı roket tasarımı**

İLHAN TURCAN

2013 | Master's Degree

**NANO İHA'ların Kullanım Etkinliği ve Muharebe Ortamlarında Kullanım Alanları**

Aytuğ AKKOR

2011 | Master's Degree

## COURSES

Course Type	Course Code	Course Name
Bachelor's Degree	ME118	THERMODYNAMICS I
Master's Degree	ME508	CONVECTION HEAT TRANSFER
Bachelor's Degree	ME302	HEAT TRANSFER
Bachelor's Degree	ME492	MECHANICAL ENGINEERING DESIGN PROJECT II
Master's Degree	ME509	RADIATION HEAT TRANSFER
Bachelor's Degree	ME203	THERMODYNAMICS II
Bachelor's Degree	MATH317	NUMERICAL ANALYSIS
Master's Degree	ME507	CONDUCTION HEAT TRANSFER
Bachelor's Degree	ME491	MECHANICAL ENGINEERING DESIGN PROJECT I
Bachelor's Degree	ME481	SPECIAL TOPICS IN MECHANICAL ENGINEERING I

## PERSONAL INFORMATION

### CONTACT INFORMATION

Interview Hours: Salı- 13:00 - 14:00

Mahmutbey Technology Campus

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