



## Assist. Prof. Dr. YASER ALAIWI

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Yaser ALAIWI   
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### EDUCATIONAL INFORMATION

Degree	University	Department	Year(s)
Doctoral Degree	Istanbul University	Department of Mechanical Engineering	2015 - 2020

### RESEARCH AREAS

Machine Design, Unmanned Aerial Vehicles Design, Computer Aided Design and Manufacturing

### ACADEMIC DUTIES

Duty	University	Area	Year(s)
Assistant Professor	Altınbaş University	Department of Mechanical Engineering	2021 -
Lecturer	Istanbul University	Department of Mechanical Engineering	2016 - 2019

### 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

#### Design and Analysis of Compound Die to Produce L-Shape Product with 3 Holes

Jundi Ahmad, ALAIWI YASER

Mathematical Modelling of Engineering Problems, 2024

[International](#) DOI: 10.18280/mmep.110513

#### Exploration Of Key Approaches to Enhance Evacuated Tube Solar Collector Efficiency

Al-Abayechi Yasir, ALAIWI YASER, Al-Khafaji Zainab

Journal of Advanced Research in Numerical Heat Transfer, 2024

[International](#) DOI: 10.37934/arnht.19.1.114

#### INVESTIGATING BACK SURFACE COOLING SYSTEM USING PHASE CHANGE MATERIALS AND HEATSINK ON PHOTOVOLTAIC PERFORMANCE

Aljumaili Ahmed, ALAIWI YASER, Al-Khafaji Zainab

Journal of Engineering and Sustainable Development, 2024

[International](#)

#### Thermal performance analysis in a parabolic trough solar collector with a novel design of inserted fins

Al-Aloosi Waleed, ALAIWI YASER, Hamzah Hudhaifa

Case Studies in Thermal Engineering, 2023

[International](#) DOI: 10.1016/j.csite.2023.103378

**ARTICLES****Corrosion Reduction in Steam Turbine Blades Using Nano-Composite Coating**

AL-KHAFAJI SABAA SATTAR RADHI, ALAIWI YASER, Sattar Radhi Nabaa

Journal of King Saud University - Science, 2023

**International** DOI: 10.1016/j.jksus.2023.102861**Heat Transfer Enhancement Using Ferro-Nanofluid with Magnetic Field in Tube Having Inserted Twisted Tube**

Al Zerkani Salim, ALAIWI YASER

International Information and Engineering Technology Association, 2023

**International** DOI: 10.18280/mmep.100408**Effects of Addition Waste Food as Filler on the Tensile Strength, Modulus of Elasticity and Compression Strength of PMMA Composite Based on Taguchi Method**

HASHIM SURA MOHAMMED HASHIM, ALAIWI YASER

Journal of Mines, Metals &amp; Fuels, 2023

**International** DOI: 10.18311/jmmf/2023/34480**Performance of solar stills integrated with PV/Thermal solar collectors: A review**

A. Jasim Maryam, K. Ahmed Omer, ALAIWI YASER

Northern Technical University, 2023

**International** DOI: 10.56286/ntujre.v4i1.456**Study the Effect of Adding Heat Exchanger on the Refrigeration System Performance**

Jasim Maytham Neamah, ALAIWI YASER

University of Diyala, College of Science, 2023

**International** DOI: 10.24237/djes.2023.16201**Design and Analytical Study to Improve the Ingredients of the 2012 Honda Accords Double Wishbone Suspension System**

Albassam Zahraa, ALAIWI YASER

Mathematical Modelling of Engineering Problems, 2023

**International** DOI: 10.18280/mmep.100218**Experimental investigation of thermal performance of single pass solar collector using high porosity metal foams**

Mohammed Mutar Wisam, ALAIWI YASER

Case Studies in Thermal Engineering, 2023

**International** DOI: 10.1016/j.csite.2023.102879**Enhancement of the Polycrystalline Solar Panel Performance Using a Heatsink Cooling System with PCM**

ALjumaili Ahmed Taha Yas, ALAIWI YASER

International Journal of Engineering and Artificial Intelligence, 2023

**International****Simulation and investigation of bioethanol production considering energetic and economic considerations**

ALAIWI YASER, M Abed Azher, Fadhil Smaisim Ghassan, Saad Aly Mohamed Aly, KHadrawi Salema, Morovati Reza

Oxford University Press (OUP), 2023

**International** DOI: 10.1093/ijlct/ctad008**Efficiency Improvement of Double Pipe Heat Exchanger by using TiO<sub>2</sub>/water Nanofluid**

Fatih Hussein Diyar, ALAIWI YASER

Semarak Ilmu Publishing, 2023

**International** DOI: 10.37934/cfdl.16.1.4354**Optimized Adaptive PID Controller Design for Trajectory Tracking of a Quadcopter**

ALTALABANI WALEED RABEEA NAZHAT, ALAIWI YASER

Mathematical Modelling of Engineering Problems, 2022

**International** DOI: 10.18280/mmep.090607**Investigation of the Effective Factors on Solar Powered Fixed-Wing UAV for Extended Flight Endurance**

Alfalari Aws, ALAIWI YASER

2022 International Symposium on Multidisciplinary Studies and Innovative Technologies (ISMSIT), 2022

**International** DOI: 10.1109/ISMSIT56059.2022.9932721

## ARTICLES

### Localization and Identification of UAVs System Using Image Processing

Mukhlif Hamad Amer, ALAIWI YASER

2022 International Congress on Human-Computer Interaction, Optimization and Robotic Applications (HORA), 2022

International DOI: 10.1109/HORA55278.2022.9799827

### Modelling, Simulation and Implementation of Autonomous Unmanned Quadrotor

ALAIWI YASER, MUTLU AŞKIN

International Journal for Science, Techniques and Innovations for the Industry "Machines. Technologies. Materials", 2018

International

### Simulation and Motion Control of Industrial Robot

ALAIWI YASER, MUTLU AŞKIN

INTERNATIONAL SCIENTIFIC JOURNAL INDUSTRY 4.0, 2017

International

## PROCEEDINGS

### Investigation of effective factors on thermal efficiency of steam boiler used in power plants

Alsaedi Hayder, ALAIWI YASER

2nd International Conference on Engineering, and Science to Achieve the Sustainable Development Goals (ICASDG2023), 2024

International

### Numerical Investigation of Nanofluid-based Flow Behavior and Convective Heat Transfer Using Torsional Turbulator

Khlewee Abdulqader Salah, ALAIWI YASER

2nd International Conference on Engineering, and Science to Achieve the Sustainable Development Goals (ICASDG2023), 2023

International

### Fatigue Characterization of Eco-Composites with Natural Fiber for Transtibial Prosthetic Socket

AL-KHAFAJI Falah, ALAIWI YASER

2nd International Conference on Engineering, and Science to Achieve the Sustainable Development Goals (ICASDG2023), 2023

International

### Localization and Identification of UAVs System Using Image Processing

Mukhlif Hamad Amer, ALAIWI YASER

2022 International Congress on Human-Computer Interaction, Optimization and Robotic Applications (HORA), 2022

International

### Investigation of the Effective Factors on Solar Powered Fixed-Wing UAV for Extended Flight Endurance

Alfalari Aws, ALAIWI YASER

2022 International Symposium on Multidisciplinary Studies and Innovative Technologies (ISMSIT), 2022

International

### Modelling, Simulation And Implementation Of Autonomous Unmanned Quadrotor

ALAIWI YASER, MUTLU AŞKIN

XV International Scientific Conference Machines, Technologies, Materials, Varna, BULGARISTAN, 2018

International

### Simulation and Motion Control of Industrial Robot

ALAIWI YASER, MUTLU AŞKIN

SECOND INTERNATIONAL SCIENTIFIC CONFERENCE "INDUSTRY 4.0", 2017

International

## PROJECTS

## THESIS SUPERVISION

### Study and analysis of corrosion protection process for petroleum pipelines by composite coating

SAIF AYAD KAREEM AL-SAFI

2024 Master's Degree

## THESIS SUPERVISION

**Fsi analysis and simulation of a fixed-wing uav using composite materials**

ABDULLAH ALI SAADOON SAADOON

2024 Master's Degree

**Performance evaluation of a compression ignition engine running on diesel,naphtha**

FALAH HASAN NAJM ALMASOODI

2024 Master's Degree

**Improving the performance of the absorption cooling plant operating on concentrated solar power CSP systems**

SAAD HASAN MOHAMMED MOHAMMED

2024 Master's Degree

**Energy space cooling system saving and shaiting with phase change materials**

MOAMIN JAMEEL JUMAAH ALKETHAWI

2024 Master's Degree

**Investigation of the effect of adding nitrogen on the torque generated by a four- cylinder engine**

MUSTAFA RAHEEM JASIM AL-MAMOORI

2024 Master's Degree

**Study of PV solar thermal absorber and collector coupling as a combined PVT model**

MUTHANNA OSAMAH YOUSIF KASHMOOLA

2024 Master's Degree

**Investigation of nano-fluids in shell and tube heat exchangers using cfd simulation**

MOHAMMED HAMZAH ABBOOD ABBOOD

2024 Master's Degree

**Modeling and analysis of a multi dof robotic arm manipulator motion with image processing control**

BAYDAA ABDULLAH QADDOORI QADDOORI

2024 Master's Degree

**Investigation the performance of new designed solar still integrated with solar cells**

AYAD RAMADHAN ATIYAH ATIYAH

2024 Master's Degree

**MODELLING AND SIMULATION OF HIGH SPEED UNMANNED AERIAL VEHICLE**

AAYA SARDAR QADER DALLOO

2024 Master's Degree

**Numerical investigation of two-phase flow characteristics in centrifugal pumps**

OSAMAH NAJAH MUBARK KWESHE

2024 Master's Degree

**Investigation of effective factors of a solar powered fixed-wing UAV for enhanced endurance and efficiency**

WAJEEHA RAJAB

2024 Master's Degree

**INVESTIGATION OF A GAS-TURBINE CYCLE ENVIRONMENTAL EMISSION AND THERMAL EFFICIENCY BY MASS AND HEAT RECIRCULATIONS STRATEGIES**

ABATHAR YASEEN KHUDHAIR AL-AMERI

2024 Master's Degree

**INVESTIGATION OF PERFORMANCE AND DURABILITY OF DRIVE SHAFTS IN HIGH-SPEED VEHICLES USING COMPOSITE MATERIALS**

AHMED MHMOOD ALI AL-GHRAIRI

2024 Master's Degree

**ADVANCED STRUCTURAL ANALYSIS OF UAV PERFORMANCE USING COMPOSITE MATERIALS**

ADIAN WALEED ISMAIL ISMAIL

2024 Master's Degree

## THESIS SUPERVISION

### COMPARATIVE CFD COMPUTATIONAL STUDY ON ENHANCING SHELL AND TUBE HEAT EXCHANGERS WITH NANO FLUIDS

MUIZ ABDUL RAQIB

2024 Master's Degree

### DEVELOPMENT AND EVALUATION OF DRONE BASED SPRAYING SYSTEM FOR PRECISION AGRICULTURE APPLICATIONS

AYOUB EL YOUSFI

2024 Master's Degree

### Modeling and simulating aircraft takeoff performance on aircraft carriers

MİHRİBAN MİRAÇ YILMAZ

2024 Master's Degree

### ADVANCEMENTS IN STRUCTURAL HEALTH MONITORING (SHM) IN AVIATION FOR ENHANCED AIRCRAFT SAFETY

HABIB UR REHMAN

2024 Master's Degree

### Experimental investigation of thermal performance of single pass solar collector using high porosity metal foams

WISAM MOHAMMED MUTAR MUTAR

2023 Master's Degree

### Heat transfer enhancement using ferro-nanofluid with magnetic field in tube having inserted twisted tube

SALIM ABDULZAHRA ABBOODI AL ZERKANI

2023 Master's Degree

### Thermal efficiency analysis of a double pipe heat exchanger using silver nanoparticles suspended in pure water

SOHAIB NAJMALDIN ABDULLAH ALDAMK

2023 Master's Degree

### Thermal effect reduction in electrical vehicle battery using liquid cooling techniques

HASSNAIN F. ABASS

2023 Master's Degree

### Cad integrated design and analysis of compound die

AHMAD T. A. JUNDI

2023 Master's Degree

### Employing innovative energy-saving and optimization techniques for a zero-energy consumption

BARAA MWAFIQ AYESH AYESH

2023 Master's Degree

### Concept design of a greenhouse cooling system using multi-stage nano-filtration for liquid desiccant regeneration

AMEER HAYDER SALMAN LAMI

2023 Master's Degree

### Study and design of an immersion-cooling system for a computer using numerical and experimental analysis

AYAD AWAD ZAIDAN ZAIDAN

2023 Master's Degree

### Experimental investigation of swirl flow and heat transfer in concentric cylinders

QUTAIBA ADIL HASHIM AL-MAMOORI

2023 Master's Degree

### Study and analysis of two-phase flow in an evaporator cooling loop of a telecommunication satellite

FADHIL SHAKIR OUDAH AL-SHARHAN

2023 Master's Degree

## THESIS SUPERVISION

**Hydrogen as storage to generate power and with the help of fuel cell technology**

AMADOU MAMADOU SOW

2023 Master's Degree

**Modeling and analysis of turbine blade's creep using computational fluid dynamics**

ABDULKAREEM YOUSIF NASER AL-OBAIDI

2023 Master's Degree

**Thermal analysis of a V type solar still using ultrasonic humidifier powered by PV**

IMAN FOUAD HANI HANI

2023 Master's Degree

**Comparative investigation for PV modules performance equipped with a back surface cooling system**

AHMED AL-JUMAILI

2023 Master's Degree

**Analysis and evaluation of thermal performance of parabolic trough collectors using swirl generators technique**

WALEED MUWFAQ ABDULWAHID AL-ALOOSI

2023 Master's Degree

**Investigation of the effective factors on solar powered fixed-wing uav for extended flight endurance**

AWS TARIQ SALIH AL-FALAH

2022 Master's Degree

**Quadcopter adaptive trajectory tracking control design and stability analysis**

WALEED RABEEA NAZHAT ALTALABANI

2022 Master's Degree

**Development and characterization of recycled polymers by using natural fibers**

HASAN MAHMOOD KAEDHI KAEDHI

2022 Master's Degree

**Effect of geometrical shape on the crashworthiness performance of composite materials**

FORAT SHAMKHI JABER ALNAHI

2022 Master's Degree

**Effect of using waste food as a filler on the denture mechanical properties**

SURA MOHAMMED HASHIM HASHIM

2022 Master's Degree

**Design and analysis of a prosthetic below-knee socket using composite materials supported by nanomaterials**

FALAH ABDULKADHIM BRAIBER AL-KHAFAJI

2022 Master's Degree

**Analysis of bionic structural design of front car bumper using finite element method**

HAIDER ABDULAMEER ABBAS AL-ATTRI

2022 Master's Degree

**Experimental study of water depth and nanotechnology effects on the productivity of acrylic pyramid solar still**

IBRAHEM HAMD

2022 Master's Degree

**Experimental investigation of the enhancement parameters on the performance of inclined v type solar still using nano coatings**

NOOR ABDULZAHRA HUSSAIN AL-ABBOODI

2022 Master's Degree

**Heat transfer model in a hot/cold food container using peltier**

NAWFAL HASAN WRUOSH

2022 Master's Degree

## THESIS SUPERVISION

**Modelling, simulation and localization of linear control for asymmetric multirotor unmanned aerial vehicles**

AMER MUKHLIF HAMAD

2022 Master's Degree

**Investigation of corrosion reduction in turbine blades of thermal power plant using nanomaterials**

SABAA SATTAR RADHI AL-KHAFAJI

2022 Master's Degree

**Exploration of key approaches to enhance evacuated tube solar collector efficiency**

YASIR M.SALIH ABDULMAHDI AL-ABAYECHI

2022 Master's Degree

**Design, analysis, and optimization of the honda accord 2012 double wishbone suspension system**

ZAHRAA MUAYAD HADI AL-BASSAM

2022 Master's Degree

**Using plasma spray coating to improve the performance of gears for wind turbine**

JASIM AHMED JASIM JASIM

2022 Master's Degree

## COURSES

Course Type	Course Code	Course Name
Master's Degree	ME541	ADVANCED COMPUTER AIDED DESIGN
Other	ME540	FINITE ELEMENT ANALYSIS IN ENGINEERING
Bachelor's Degree	IE258	MANUFACTURING PROCESSES
Bachelor's Degree	ME209	STATICS
Bachelor's Degree	ME341	MANUFACTURING PROCESSES
Bachelor's Degree	ME212	DYNAMICS
Master's Degree	ME599	MASTER THESIS
Bachelor's Degree	END258	İMALAT SÜREÇLERİ
Bachelor's Degree	ME466	UNMANNED AERIAL VEHICLE (UAV) DESIGN
Bachelor's Degree	ME491	MECHANICAL ENGINEERING DESIGN PROJECT I

## PERSONAL INFORMATION

### CONTACT INFORMATION

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