



**Kirkuk Technical
Engineering College**



**Northern Technical
University**



**Department of Power Mechanical
Techniques Engineering**

Curriculum Vitae



Personal Information

Name	Ehsan Fadhil Abbas	Employee ID	
Degree	MSC	Academic title	Professor
Workplace	Northern Technical University	Faculty	Technical Engineering College, Kirkuk
Department	Power Mechanical Techniques Engineering	Position	Lecturar
General specialization	Mechanical Engineering	Specific Specialization	Thermal Engineering
Country	Iraq	Province	Kirkuk
Academic email	ehsanfadhil@ntu.edu.iq	phone number	+964-770-610-2846

Academic Qualifications

Degree	University Name	Date of granting the Degree	Specialization	Granting Country
PhD				
Master's	University of Technology	5/2/1999	Thermal Engineering	Iraq
Bachelor's	University of Mosul	10.07.2006	Mechanical Engineering	Iraq

Research Activity

Published Papers	53	
Conferences and seminars	Yes	
Editorial Board Member	The NTU Journal of Renewable Energy	
Scientific Reviewer in the Journals	Energy Reports, Case studies in thermal Engineering, Applied Energy, Thermal Engineering, Tikrit Journal of Engineering and Sciences	
H-Index in Scopus	6	

Academic Profiles on Research Platforms

Clarivate, Web of Science	 Web of Science	https://www.webofscience.com/wos/author/record/G-9128-2019
Scopus	 Scopus	https://www.scopus.com/authid/detail.uri?authorId=25925726400
Resurgenc e Gate	 ResearchGat e	https://www.researchgate.net/profile/Ehsan-Abbas
Orchid	 ORCID ID	https://orcid.org/my-orcid?orcid=0000-0002-5804-0596
Google Scholar	 Google Scholar	https://scholar.google.com/citations?hl=en&authuser=1&user=IAvak0cAAA_AJ

Awards and Innovations

Granting Body	Title of Awards or Innovation
Patent No. 7177	Central Organization for Standardization and Quality Control/ Iraq

Scientific and Teaching Experiences

Undergraduate Studies	Yes
Postgraduate Studies	yes

Supervision of Master's or Doctoral Dissertation:		
Thesis or Dissertation Title	Program	Year
Study the Heat Transfer Enhancement Methods to Increase Double Pipes Heat Exchanger Efficiency	Masrer	2016
Performance evaluation of a shell and tube heat exchanger by using difference types of materials and flow solutions	Masrer	2017
Heat transfer enhancement in the thermal storages system (Trombe Wall) used for heating purpose	Masrer	2018
Studying the effect of the gap on performance of Trambe wall contains a phase change material	Masrer	2018
Performance improvement of the air conditioner by adding solid nanoparticles to oil	Masrer	2019
Effect of the porous media on the performance of the double pipe heat exchanger	Masrer	2019
Theoretical and experimental study to analysis thermal performance of parabolic trough collector	Masrer	2019
Performance analysis of PV/Solar Chimney	Masrer	2020
Use of hybrid solar collectors as an auxiliary heat source for solar pound	Masrer	2020
Verification of the effects of mechanical vibration on the free convection heat transfer performance of a perforated plate	Masrer	2020
Evaluating the thermal performance of the generation unit (K3) in the Kirkuk gas electric station under actual environmental conditions	Masrer	2021
Energy and availability analysis of a hybrid solar system using phase change material	Masrer	2021
Improvement the thermal performance of the heat exchanger with nanoparticles coated on the surface	Masrer	2021
A comparative study of a hybrid voltaic system using a phase changing material and a nanofluid	Masrer	2022
Evaluation of the thermal efficiency of the parabolic trough solar collector based on the optimal absorber diameter	Masrer	2022
Characterization of heat transfer improvement for an oscillation vertical flat plate fins under the effect of natural convection condition	Masrer	2022

Research Interests

Heat transfer, Renewable energy, solar system, phase change material

Published Papers

Title	Year
Thermal and Hydraulic Evaluation of a Parabolic Trough Collector Using Different Types of Porous Filling in an Absorber Receiver: A Review .	2024
An overview of heat sink technology	2024
Enhancing thermal efficiency of passive solar heating systems through copper chip integration: experimental investigation and analysis	2024
Assessment of thermal performance of PV/T collectors under different enhancement methods: A review study	2023
Using Mechanical Vibration to Enhance Heat Transfer on an Extended Surface: A Review Study	2023
EVALUATING THE HEAT TRANSFER CHARACTERISTICS OF HYBRID NANOFLUID FLOW IN CIRCULAR DUCTS WITH CONSTANT HEAT FLUX	2023
Assessment of the gas turbine unit in Kirkuk gas power station using energy and exergy analysis.: Assessment of the gas turbine unit in Kirkuk gas power station using energy	2022
Evaluation of the gas turbine unit in the Kirkuk gas power plant to analyse the energy and exergy using ChemCad simulation [Review of gas turbine power plant modifications and ...	2022
Effect of air gap depth on Trombe wall system using computational fluid dynamics	2022
High performance evaluation of a PV/T hybrid system connected with a thermal store unit holding paraffin wax	2022
Evaluation of the gas turbine unit in the Kirkuk gas power plant to analyse the energy and exergy using ChemCad simulation	2022
Assessment of the gas turbine unit in Kirkuk gas power station using energy and exergy analysis	2022
A review of the reinforcement performance of the photovoltaic/thermal hybrid system	2021
Determining the Impact of the Environmental Condition on the Production Performance of Photovoltaic in Kirkuk, Iraq	2021
Assessment of the Thermal Performance of Hybrid PVT Collector by Integrating it with a PCM Storage Unit	2021
An Analytical and Experimental Evaluation of a Heat Sink under Constant Heat Flow and Forced Convection Heat Transfer.	2021
The Effect of Adding Paraffin Wax to PVT Collector on Its Efficiency: A Practical Study	2021
Comparison Between Numerical Study and Experimental Work on Heat Transfer from Heat Sink Under Transient Conditions	2021
Experimental Study of Performance of Solar Chimney	2021
Performance of solar pond integrated with photovoltaic/thermal collectors	2021
Performance of solar pond integrated with photovoltaic/thermal collectors	2020
Evaluation Of The Thermal And Hydraulic Performance Of A Double Pipe Heat Exchanger By Use Of Various Porous Structures	2020
Effect the Photovoltaic panelson performance of Solar Chimney	2020
Experimental investigation for a laboratory solar chimney; a practical study in Iraq	2020
The Effect of Vibration on the heat transfer from a vertical plate: A Review	2020
Study the effect of granules type of the porous medium on the heat transfer enhancement for double pipe heat exchanger	2019
Effect of air gap width on the evaluation of the Trombe wall efficiency	2019
Experimental investigation of a small passive solar system	2019

PERFORMANCE EVALUATION OF AIR CONDITIONING SYSTEM USING OIL NANOPARTICLES	2019
Effect of tube material on the fouling resistance in the heat exchanger	2018
Effect of Fluidized Bed Particle Size on Heat Transfer Coefficient at Different Operating Conditions	2018
The impact of width of the air gap channel on the mass flow rate, Rayleigh number, and efficiency of passive solar heating system	2018
Experimental and numerical study of heat transfer enhancement in a shell and tube heat exchanger using helical coiled wire inserts	2018
The impact of air gap width on the free thermal load in the trombe wall contains a phase change material	2018
Impact of Absorbent Surface Type on Thermal Performance of Trombe Wall System	2018
Experimental Investigation of Heat Transfer Enhancement Methods on the Thermal Performance of Double Pipe Heat Exchanger	2017
Experimental investigation of the effect of hot finnedtube position on the heat transfer coefficient	2017
Experimental investigation of Heat Transfer Enhancement methods on the thermal Performance of Double Pipe ?Heat Exchanger	2017
Effect of some factors on the thermal performance of shell and tube heat exchanger	2017
Experimental investigation of the effect of hot finnedtube position on the heat transfer coefficient	2017
The impact of the environmental condition on the performance of the photovoltaic cell	2016
A Comparative Study between Analytical and Numerical Solution of Unsteady State One-Dimensional Heat Transfer for Different Materials	2015
Theoretical study of thermal performance of rock bed storage	2015
The effect of position of heated rod in tube banks on the heat transfer coefficient	2015
Cost optimization of hybrid stand-alone power system for cooled store in Kirkuk	2015
A comparative study between analytical and numerical solution of unsteady state one-dimensional heat transfer for different materials	2015
Simulation of Velocity and Temperature Fields in a Trombe Wall	2014
Experimental investigation of convection heat transfer for laminar flow in an inclined annulus	2014
The effect of using insulation on the energy saving in building	2010
A comparative performance study of some thermal storage materials used for solar space heating	2009
Corrosion of Copper Weldments in Salty and Acidic Solutions	2008
دراسة تأثير طبقات الزجاج على الاداء الحراري لجدار ترومب	2006
تأثير بعض المعاملات الحرارية على خواص الفولاذ المتوسط الكربون	2005
The optimum thickness of some thermal storage materials used for solar space heating	2004