

University of Warith Al-Anbiyaa

College of Engineering

Curriculum Vitae

Personal Information

Name: Mohammed Hassan Abbood Almussawie

Date of Birth:1/7/1957

Material Status: married

Nationality:Iraqi

Permanent Address: Iraq-Karbala

Languages English. **And Russian Scientific**

Status: Assistance prof.

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Academic Qualifications

1. B.Sc. in mechanical engineering, University of Technology, Baghdad , Iraq ,1979.
2. Ph.D. Road and automobile institute,Karkov ,Ukraine, USSR, 1991

Teaching Experience for Undergraduate

Subject	College	Department	Class
Eng. Thermodynamics	Engineering	mechanical	2 nd year
Mechanical Drawing	Engineering	mechanical	2 nd year
Internal Combustion Engine	Engineering	mechanical	3 rd year
Manufacturing Process	Engineering	mechanical	1 st year
Heat Transfer	Engineering	mechanical	3 rd year
Air Conditioning And Refrigeration	Engineering	mechanical	4 th year
Air Conditioning And Refrigeration 1	Engineering	Technical Air conditioning and ref.	2 nd year

Teaching Experience for Postgraduate

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| 1. Advance thermodynamics | Master Graduate |
| 2. Measurements | Master Graduate |
| 3. Advance heat transfer | Master Graduate |
| 4. Solar Engineering Energy | Master Graduate |

Professional Experience (Professional Organization and Activities)

1. Researcher in the field of steam power and solar energy.

2. Researcher in the field of internal combustion engines and heat transfer.

3-Advisory In the design, implementation and maintenance of systems, coolers and air conditioning systems.

4-Advisory in the works of engineering examination for mechanical work.

Publications and Papers

1-Iraqi-soda lime glass annealing study on crystallization at different range of temperature, Tikrit J. of Eng. Sci, Vol.9 No 3, 2002.

2-A theoretical and practical study of the performance of counter –flow cooling tower, Tikrit J. of Eng. Sci, Vol.10 No.1, 2003.

3- An experimental study on forced convection heat transfer from a horizontal cylinders array in cross flow. Tikrit J. of Eng. Sci, Vol.10 No.1, 2003.

4-A study of shell and tube condenser performance in refrigeration system for wax removal unit in lube oil refinery for North refineries Company in Baji, Tikrit J. of Eng. Sci, Vol.12 ,No.1,2005.

5-Study the geometrical shape effect of matrix on the heat exchanger effectiveness, Association of Arab universities J. of eng. Sci., Vol.12,No.2,2005

6-Experimental study the effect of Octane Number on performance of the spark ignition engine. Tikrit J. of Eng. Sci, Vol.3,NO.2, 2006.

7-An experimental study on forced convection heat transfer from an embedded horizontal cylinders array in a porous medium in cross flow. Tikrit J. of Eng. Sci, Vol.14 ,No.2, 2007. Tikrit Eng. College.

8-Numerical study for buoyancy effect on developing in the entrance region of horizontal of eccentric annulus. Tikrit J. of Eng., Vol.14,No.3,2007 .

9-Study of inlet mixture temperature influence on the spark ignition engine performance and exhaust emissions , Al-Taqani Journal, vol.24,No.3,2011, Foundation of Technical Education.

10-Stress Analysis of Centrifugal Fan Impellers, Al-Rafidain Engineering, Vol.20 ,No.6,2012, Mosul Eng. College.

- 11-Experimental investigation on a flat plate solar collector using Nano fluid as a heat transfer agent, int. J. of energy and environment, Vol.6.Issue4, 2015.
- 12- Experimental Investigation for flow rate effect on a flat plate solar collector with the using of Al₂O₃ nanofluids as a heat transfer fluid , International Journal of Mechanical & Mechatronics Engineering, Vol. 16, No. 1,2016.
- 13- An Experimental and Analytical Model of Solar Chimney Power Plant for Holley Kerbala City, ADVANCES in NATURAL and APPLIED SCIENCES, 2016 March 10(3): pages 7-13.
- 14-Experimental Investigation on Flat Plate Solar Collector with Integrated Wickless Heat Pipe,
The Second Conference of Post Graduate Researches (CPGR'2017) College of Engineering, Al-Nahrain Univ., Baghdad, Iraq - 4th Oct. 2017.
- 15- Design, construction, and testing of a parabolic trough solar concentrator system for hot water and moderate temperature steam generation, Kufa Journal of Engineering Vol. 9, No. 1, January 2018, PP. 42-59.
- 16- Experimental study for ground type effect on solar chimney power plant, Kufa Journal of Engineering Vol. 9, No. 2, April 2018, PP. 103-113.
- 17-Studying the effect of a cone inside the collector on the solar chimney performance, Journal University of Kerbala , Vol. 16 No.1 Scientific . 2018.
- 18- The Effect Of Using Magnetic Field On Spark Ignition Engine Performance,
- 19-Experimental Investigation on Flat Plate Solar Collector with Integrated Wickless Heat Pipe , Journal University of Kerbala , Vol. 16 No.1 Scientific . 2018.
- 20- Experimental investigation on integrated wickless heat pipe for solar water heating ,ARPN Journal of Engineering and Applied Sciences , VOL. 13, NO. 3, FEBRUARY 2018.
- 21- Experimental and Theoretical Investigation to Generate Steam by Parabolic Trough Solar Collector with Using Different Heat Transfer Fluids, International Journal of Mechanical & Mechatronics Engineering IJMME-IJENS Vol:18 No:06 December 2018 IJENS.
- 22- Experimental Investigation of the Performance of Photovoltaic Module and Water Cooled Photovoltaic/Thermal System under Middle of Iraqi Climatic Conditions, International Journal of Engineering & Technology, 8 (1.5) (2019) 237-247.
- 23-Experimental characteristic of a solar parabolic trough collector with indirect steam generation system, INTERNATIONAL JOURNAL OF ENERGY AND ENVIRONMENT, Volume 10, Issue 2, 2019 pp.87-96.
- 24-The Effect of Intake Air Temperature on Spark Ignition Engine Performance ,Journal of engineering and applied science 14(10):3295-3302,2019,ISSN:1816-949X. 25-

Investigation of Environmentally-Friendly Alternative Refrigerants for Automotive Air Conditioning Systems. IOP Conf. Series: Materials Science and Engineering **671** (2020) 012139.

26- Improving the Electrical Efficiency of a Photovoltaic/Thermal Panel by Using SiC/Water Nano-fluid as Coolant. Materials Science and Engineering 671 (2020) 012143

27- The energy and exergy analysis of a combined parabolic solar dish – steam power plant

Renewable Energy Focus

Volume 41, June 2022, Pages 55-68

28- The design of a hybrid parabolic solar dish–steam power plant: An experimental study.

Energy Reports Volume8, November2022,Pages 1949-1965

Supervising

Supervision of more than 25 postgraduate students.