

Curriculum vitae

Personal Information:

Name: Prof. Dr. Eng. Mushtaq Ismael Hasan

Place and Date of birth: Iraq, 1976



Academic Information:

Academic Qualifications:

	Certificate	Specialization	Institution	year
1	B.Sc.	Mechanical Engineering	Al- Mustansiriah University, Iraq	1999
2	M.Sc.	Mechanical Engineering (power)	Al-Mustansiriah University, Iraq	2001
3	Ph.D	Mechanical Engineering (Thermal sciences)	University of Basra, Iraq	2009

Academic Rank : professor

Scientific websites:

Personal page on Google scholar :

https://scholar.google.com/citations?hl=ar&user=8Pps-d0AAAAJ&img=Mushtaq+I.+Hasan&view_op=list_works&gmla=AJsN-F5o0oTY1DKXnZfBHY19Z4srdLYlaDzD4soCk37PwJNK06MfV8gSpTldfgioJ_OZSY8sKMUiZanQ3aqow_3lruiut8srWo561yjcP0DnUokbknTIP8WYLZRIn-xsO7xmIixNIIfenbh_1tmeKtBEd_Ryfh4iYg

Personal page on Academia website:

<https://thiqaruni.academia.edu/MushtaqIHasan>

Personal page on Research gate:

https://www.researchgate.net/profile/Mushtaq_Hasan

Personal page on Scopus website

<https://www.mendeley.com/profiles/mushtaq-hasan>

Personal page on publons:

<https://publons.com/author/1341198/prof-dr-mushtaq-ismael-hasan#profile>

Personal page on LinkedIn:

<https://www.linkedin.com/feed/>

Occupations:

- University Lecturer, from the academic year (2001-2002) to now.
- Reporter of Computer science Department, College of Education, (2002 to 2004).
- Head of continuous education unit in the college of Engineering (2004 – 2009).
- Head of Mechanical Engineering Department (2009 to 2015).
- Dean assistant for discrete periods.
- Editing manager for Journal of Thi-Qar University for Engineering Sciences for three years.
- Member of managing Council for Consultant Engineering bureau of Thi-Qar University for four years.
- Member of managing Council for Continuous Education Center of Thi-Qar University for three years.
- Member of editorial board for Journal of Thi-Qar University for four years.
- Head and member for different important committees in Thi-Qar University such as, Head of tenders analysis committee, Scientific, promotion, Examination and other committees.
- Head of Mechanical Engineering Department (Feb., 2018 to now).

General information:

- 1- Member of Iraqi Engineers Union.
- 2- Member of Iraqi Teachers Union
- 3- Member of Iraqi academics Union
- 4- Worked as a consultant and designer in different projects with engineering consulting bureau for Thi-Qar University.
- 5- Worked as a consultant with Al-Nassiriah thermal power station by Consultative contract.
- 6- Worked as a consultant with UR Company for engineering production by Consultative contract.

Experiences:

- 1- Design of air conditioning systems, ducts systems.

- 2- Design of pumping stations and piping.
- 3- Familiar with different Mechanical Engineering systems such as cooling towers, power plants, etc.
- 4- Experiences in the research works, study, and planning to different projects.
- 5- Experience in management.
- 6- Using the computer and working on different softwares and programs.
- 7- Experience in using the Internet.
- 8- Experience in preparation of seminars, training courses, and lectures in different fields and training the staff.

Scientific Activities:

1- Journals Editorial Experiences:

- Managing Editor of Thi-Qar University journal for Engineering Sciences.
- Member of Editorial Board of Thi-Qar University Journal.
- Member of Editorial Board of Alutroha scientific Journal.
- Editor in chief in. NV Publication House

2- Postgraduate studies:

- Supervisor for many Master theses in Mechanical Engineering.
- Member of Examination committees for many PhD and Master Students.
- Scientific reviewer for many PhD and Master Theses.

3- Scientific conferences and seminars:

- Participate as a researcher in many local and international conferences and seminars.

4- Courses and fellowships awards:

- Worked as a lecturer in the training courses hold in many training centers [for different levels of trainees (*Engineers, Technicians and administrators*)].
- Participate in local and international courses and fellowships such as:
 - 1- International course in development of small hydropower plants in Indian Institute of technology IIT, India.
 - 2- Fellowship in the school of Mechanical Engineering, Shiraz University, Iran for six months.
 - 3- Training course for one month in Sharif University of technology, Tehran, Iran.
 - 4 - Training course in computer sciences in Thi-Qar University, Iraq.
 - 5 - Training course in computer sciences in Al- Mustansiriya University, Iraq.
 - 6- Training course in teaching methods in Thi-Qar University, Iraq.

5- Teaching experiences:

- University Lecturer in Thi-Qar University, from the academic year (2001-2002) to now.

- Instructor, Technical Institute in Nassiriah for two years.
- Instructor, Imam Sadiq Private University for four years.
- Supervisor for a lot of undergraduate projects in Mechanical Engineering and Computer sciences.

Following are the courses which I taught.

	Course title	Stage	Institution
1	Advanced Thermodynamics	Master	Mechanical Engineering Department, College of Engineering
2	Advanced Gas dynamics	Master	Mechanical Engineering Department, College of Engineering
3	Advanced Fluid mechanics	Master	Mechanical Engineering Department, College of Engineering
4	Advanced Thermodynamics	Higher Diploma	Mechanical Engineering Department, College of Engineering
5	Air conditioning and Refrigeration	4 th	Mechanical Engineering Department, College of Engineering
6	Thermodynamics	2 nd	Mechanical Engineering Department, College of Engineering
7	Engineering drawing	1 st	Mechanical Engineering Department, College of Engineering
8	Systems analysis	3 rd	Computer science Department, College of Education
9	Systems analysis and design of Data Base	2 nd	Computer science Department, College of Education
10	Software Engineering	3 rd	Computer science Department, College of Education
11	Computers Programming	1 st	English Language Dept., College of Education
12	Computers Programming	2 nd	English Language Dept., College of Education
13	Machine Design	2 nd	Mechanic Department, Technical Institute in Nassiriah
14	Engineering Drawing	1 st	Mechanic Department, Technical Institute in Nassiriah
15	Quality control	2 nd	Mechanic Department, Technical Institute in Nassiriah
16	Computers Programming	1 st	Arabic Language Department, College of Education.
17	Computers Programming	1 st	History Department, College of Education.
18	Software Engineering	3 rd	Software Engineering college, Al-

			Sadiq University
19	Operating systems	4 th	Software Engineering college, Al-Sadiq University
20	Advanced Software Engineering	4 th	Software Engineering college, Al-Sadiq University
21	Information technology	1 st	Software Engineering college, Al-Sadiq University
22	Mechanical Drawing	2 nd	Mechanical Engineering Department, College of Engineering

6- Scientific research:

- Researches Reviewing:

Accredited as reviewer for a lot of researches for local and international conferences, local and international journals such as:

- 1- International journal of thermal sciences, Elsevier, (5-year impact factor = 3.156).
- 2- International Journal of Heat and Mass transfer, Elsevier, (5-year impact factor = 2.809).
- 3- Journal of Energy conversion and management, Elsevier, (5-year impact factor = 4.512).
- 4- Engineering Applications of Computational Fluid Mechanics.
- 5- British Journal of Mathematics & Computer Science.
- 6- International journal for heat transfer engineering.
- 7- Basic Research Journal of Engineering Innovation.
- 8- Online International Journal of Engineering and Technology Research.
- 9- International Journal of Physical Sciences (IJPS).
- 10- Journal of Kufa University for engineering sciences.
- 11- Journal of Thi-Qar University for engineering sciences.
- 12- Journal of Basra University for engineering sciences.
- 13- Journal of Al-Qadisiya for Engineer Sciences.

- Publicized researches:

- 1- Mushtaq I. Hasan, A. A. Rageb, M. Yaghoubi, H. Homayoni, "Influence of channel geometry on the performance of a counter flow microchannel heat exchanger", International journal of thermal sciences, Elsevier, 48 pp. 1607–1618, 2009.
- 2- Mushtaq I. Hasan, "Numerical Investigation of Counter-Flow Microchannel Heat Exchanger with MEPCM Suspension", Journal of Applied thermal Engineering, Elsevier, 2011.
- 3- Ahmed M., Ahmed , Mushtaq I. Hasan, " Numerical investigation of Counter Flow Microchannel Heat Exchanger with Slip", International journal of thermal sciences, Elsevier, 2011.

- 4- Mushtaq I. Hasan, Abdul Muhsin A., M. Yaghoubi, "Investigation of a Counter Flow Microchannel Heat Exchanger Performance with Using Nanofluid as a Coolant ", Journal of Electronics Cooling and Thermal Control, scientific research, USA, 2012, 2, 35-43.
- 5- Mushtaq I. Hasan, Hayder M. Hasan, Ghassan a. Abid, " Study of the Axial Heat Conduction in Parallel Flow Microchannel Heat Exchanger", Journal of King Saud University - Engineering Sciences, Elsevier, 2012.
- 6- Mushtaq I. Hasan, " Numerical Investigation of Hydrodynamic Characteristics of the Micro Irrigation Lateral", Journal of Thi-Qar University for Engineering sciences, 1, 2010
- 7- Mushtaq I. Hasan, "Effect of variable fluid properties on the hydrodynamic and thermal characteristics of parallel flow microchannel heat exchanger" Journal of Thi-Qar University, 2010.
- 8- Mushtaq I. Hassan, Ghassan A., "Study of thermal performance of counter flow microchannel heat exchanger", Journal of Thi-Qar University, 2009.
- 9- Mushtaq I. Hasan, "Study of water hammer in hydro power plants", Journal of Thi-Qar University, 2005.
- 10- Mushtaq I. Hasan, Kadhim H. "A comparison between the counter and cross flow cooling tower for thermal power plants", Journal of Thi-Qar University, 2006.
- 11- Mushtaq I. Hasan, Kadhem A. J., "Numerical analysis of the temperature distribution in internal heated cylinder", Journal of Babylon University, 2006.
- 12- Rafid M. Hanon, Arkan, Mushtaq I. Hasan, " Construction of Central Receiver -Type Field of Solar Power Plant Model", Journal of Thi-Qar University for Engineering sciences, 2, 2010
- 13- Mushtaq I. Hasan, Rafid M. H., Abdulla Kh., " Effect of variation in channels' area on the performance of counter flow microchannel heat exchanger", Journal of Thi-Qar University, 2010.
- 14- Ahmed .J.Shkarah, Mushtaq I. Hasan, Eqbal Kh. Erabee, " ANALYTICAL STUDY OF COMBINED CONVECTION HEAT TRANSFER FOR FLOW IN A HORIZONTAL ANNULUS", Journal of Thi-Qar University for Engineering sciences, 2, 2010.

- 15- Mushtaq I. Hasan, "Influence Of Wall Axial Heat Conduction On The Forced Convection Heat Transfer In Rectangular Channels", Basrah Journal of Engineering Sciences, 2011.
- 16- Mushtaq I. Hasan, Mohammed D. Salman, Ghassan Adnan," Analysis of solar powered air conditioning systems for residential applications", Journal of Thi-Qar University for Engineering sciences, 2011.
- 17- Mohammed D. Salman, Mushtaq I. Hasan, Haider J. Abid, "Fabrication of Mo Nanorods on Silicon Wafer Using Glancing Angle Deposition Technique", Journal of Al-Qadisiya for Engineer Sciences, Vol.6, No. 2, 2013
- 18- Mushtaq Ismael Hasan, Rafid M. Hannun, Talib Ehraize Ehliakh, " Study of the flow and heat transfer in microchannel heat sink with zigzag profile fins" 3rd Scientific International conference, Foundation of technical education/ Najaf, 20-21 Feb. 2013.
- 19- Khudheyer S.M. , Rafid M. H., Qais A. R., Mushtaq I Hasan, "Analysis of Turbulent Free Convection in Enclosure with Conductive Partitions", Journal of Thi-Qar University for Engineering sciences, 2013.
- 20- Khudheyer S.M. , Rafid M. H., Qais A. R., Mushtaq I Hasan, " Turbulent Natural Convection Inside Square Inclined Cavity with Conductive Partitions ", Journal of Thi-Qar University for Engineering sciences, 2013.
- 21- Mushtaq Ismael Hasan , "Investigation of Flow and Heat transfer Characteristics In Micro Pin Fin Heat Sink With Nanofluid", Journal of Applied thermal Engineering, Elsevier, 2014.
- 22- Ali H. Mohammed, Mushtaq Ismael Hasan, " NANO-INDENTATION CHARACTERIZATION OF DEFORMATION OF IMPACT CYLINDRICAL SURFACE OF H13 STEEL" 4th scientific

conference for engineering and technological sciences, Islamic University, 2015.

- 23- Rafid M. Hannun, Mushtaq I.Hasan, Mohammed H. Khalaf, “Effect of collector area and forced circulation on the solar still system at Nasiriya city”, 1st scientific conference for engineering and technological sciences, College of Engineering, Thi-Qar University, 2015
- 24- Alaa Liaq Hashem , Muhanad Hamed Mosa, Mushtaq Ismael, “THE EVALUATION OF A PV-BATTERIES AND INVERTER POWER SYSTEM CONNECTED TO A GRID - SOLUTIONS FOR EMERGING SUSTAINABLE ENERGY IN IRAQ”, INTERNATIONAL JOURNAL OF ENGINEERING SCIENCES & RESEARCH TECHNOLOGY, 4(10): October, 2015.
- 25- Ali H. Mohammed, Mushtaq Ismael Hasan, Alaa L. Hashem, “A study of wear performance of hard coatings with plasma nitride and without plasma nitride of H13 die steel in aluminum casting”, Babylon 1st international Engineering Conference, College of Enigneering, Babylon University, 2015.
- 26- Mushtaq I. Hasan, “Study of microchannel heat sink performance with expanded microchannels and nanofluid”, Journal of Al-Qadisiya for Engineer Sciences, Vol.9, No. 4, 2016.
- 27- Mushtaq Ismael Hasan, Abdul Jabbar F. Ali, Rhan S. Tufah,”Numerical Analysis of the Magnetohydrodynamic Flow and Heat Transfer in Microchannel”, International Journal of Computer Applications (0975 – 8887), 2016.
- 28- Mushtaq Ismael Hasan, “Improving the cooling performance of electrical distribution transformer using transformer oil – Based MEPCM suspension”, International Journal Engineering Science and Technology, paper in press, 2016.

- 29- Mushtaq Ismael Hasan, "Using the transformer oil-based nanofluid for cooling of power distribution transformer", INTERNATIONAL JOURNAL OF ENERGY AND ENVIRONMENT, V.8, No.3, 2017.
- 30- Mushtaq I. Hasan, Alaa M. Lafta, "Study the electroosmosis flow in microchannel with contractions of different geometries", 2nd international scientific confernece for southern technical university, Basrah, Iraq, 1-2 appril, 2017.
- 31- Mushtaq I. Hasan, Abdul Jabar F. A., Rhan Sh. T., "Numerical study of the effect of channel geometry on the performance of Magnetohydrodynamic micro pump", Journal of Engineering Sciences and Technology, Int. J. (2017), <http://dx.doi.org/10.1016/j.jestch.2017.01.008>.
- 32- Mushtaq Ismael Hasan, Mohammed D. Salman, Ayat Lateef Thajeel, "Experimental Investigation of Double Pipe Heat Exchanger Using Al₂O₃ and TiO₂ Nanofluid", J. of Thi-Qar University for Engineering sciences, Vol.8, No. 1, 2017
- 33- Mushtaq Ismael Hasan, Alaa M. Lafta, " Study the electroosmosis flow in microchannel with contractions of different geometries: Part II", J. of Thi-Qar University for Engineering sciences, Vol.8, No. 1, 2017
- 34- Mushtaq Ismael Hasan, Alaa M. Lafta, Ahmed J. shkarah," Numerical investigation of electroosmotic flow in microchannel", International Review of Mechanical Engineering (I.RE.M.E.), Vol. 11, n. 7, 2017
- 35- Mushtaq I. Hasan, Hadi O. Basher, Ahmed O. Shdhan, "Experimental investigation of phase change materials for insulation of residential buildings", Sustainable Cities and Society,36, pp.42-58,2018.
- 36- Hadi B. Obaid, Mushtaq I. Hasan, Ahmed O. Shadhan, "Numerical Investigation of Phase Change Materials for Insulation of Residential

Buildings in Hot Regions”, Journal of Wasit university for engineering sciences, 2017.

37- Mushtaq I. Hasan, Sajad W. Noori, “Numerical Investigation of Earth to Air Heat Exchanger for Cooling and Heating Applications , 3rd International scientific conference for renewable energy (ISCRE2018), Southrene technical university, Basrah, March 14-15,2018.

38- M. I. Hasan and H. L. Tvena, "Enhancing the cooling performance of micro pin fin heat sink by using the phase change materials with different configurations," 2018 International Conference on Advance of Sustainable Engineering and its Application (ICASEA), Wasit - Kut, Iraq, 2018, pp. 205-209. doi: 10.1109/ICASEA.2018.8370982.

39- Mushtaq I. Hasan, Sajad W. Noori,, “Evaluating the Influence of Some Design and Environmental Parameters on the Performance of Earth to Air Heat Exchanger” 4rth scientific enginnering conference and first in sustainable engineering, College of Engineering, Al-Mushtansiria University, March 28-29, 2018.

40- Mushtaq I. Hasan, Mohammed D. Salman, Ayat L. Thajeel, “ENHANCEMENT OF THERMAL PERFPRMANCE OF DOUBLE PIPE HEAT EXCHANGER BY USING NANOFLUID”, 4rth scientific enginnering conference and first in sustainable engineering, College of Engineering, Al-Mushtansiria University, March 28-29, 2018.

41- Mushtaq I. Hasan , Hind L. Tvena, “Using of phase change materials to enhance the thermal performance of micro channel heat sink”, Engineering Science and Technology, an International Journal, V 21, pp (517-526), 2018.

- 42- Mushtaq I. Hasan , Hind L. Tbena, “NUMERICAL INVESTIGATION OF MICROCHANNEL HEAT SINK WITH MEPCM SUSPENSION WITH DIFFERENT TYPES OF PCM”, Al-Qadisiyah Journal For Engineering Science, V11, No1, 2018.
- 43- Ahmed A Ali, Mushtaq I Hasan, Ghassan Adnan, “Study surface roughness on overall performance of parallel flow microchannel heat exchanger”, J. of Thi-Qar University for Engineering sciences, 2018.
- 44- Mushtaq I. Hasan, Dhay M. Muter, “Numerical investigation the performance of micro channel heat sink with different cooling mediums”, J. of Thi-Qar University for Engineering sciences, 2018.
- 45- Mushtaq I. Hasan 1, Dhay M. Muter, “Study the micro heat sink with pin fins and different coolants: a comparative study”, International Journal of Engineering & Technology, 2019.
- 46- Mushtaq I. Hasan, Dhay M. Muter, “ Study The Micro Pin Fin and Micro Channel Heat Sinks With Different Types of Cooling Fluids", 1st scientific conference in Alyen University, ISCAU2019.
- 47- Ahmed A. Ali , Mushtaq I. Hasan and Ghassan Adnan, “ Numerical investigation of the slip flow effect in counter flow microchannel Heat exchanger with different channels geometries", 1st scientific conference in Alyen University, ISCAU2019.
- 48- Mushtaq I. Hasan, Sajad W. Noori, Ahmed J. Shkarah, “Parametric study on the performance of the earth-to-air heat exchanger for cooling and heating applications”, J. of Heat Transfer—Asian Resarch, Wiley Periodicals, Inc., pp 1-25, 2019.
- 49- Ahmed A. Ali , Mushtaq I. Hasan and Ghassan Adnan”
NUMERICAL INVESTIGATION OF ROUGHNESS EFFECTS ON HYDERDYNMIC AND THERMAL PERFORMANCE OF COUNTER FLOW MICROCHANNEL HEAT EXCHANGER”, AL-QADISIYAH JOURNAL FOR ENGINEERING SCIENCES, V11, No8, 2019.

50- Mushtaq I. Hasan, Alaa A. Abduladheem, “Modification the thermal performance of the electrical distribution transformers using phase change materials (Paraffin Wax), J. of Heat Transfer—Asian Research, Wiley Periodicals, Inc., 2019.

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