# Curriculum Vitae

# Dr.Eng.Ahmed Kadhim Hussein

**Assistant Professor** 

Department of Mechanical Engineering
College of Engineering
University of Babylon
Republic of Iraq

# Curriculum Vitae

# Dr.Eng.Ahmed Kadhim Hussein Assistant Professor



#### **Personal and Contact Details**

Date of Birth: 19 May, 1974

Place of Birth: Babylon City, Hilla, Republic of Iraq

Nationality: Iraqian Religion : Muslim

Marital Status: Married With One Children Address: Department of Mechanical Engineering,

College of Engineering, University of Babylon, Babylon City, Hilla Republic of Iraq

Phone: 00964 7813769317

University ID Number: 1000 000 789

My New e-mail: ahmedkadhim7474@gmail.com

#### **Academic Qualifications**

2006 Ph.D. Mechanical Engineering: University of Al-Mustansiriya, Baghdad, Iraq. Ph.D. Thesis Title: Numerical Simulation of Flying Supersonic Body.

1999 M.Sc. Mechanical Engineering: University of Babylon, Babylon, Iraq. M.Sc. Thesis Title: Thermodynamic Analysis of Non - Equilibrium Conduction Heat Transfer.

1996 B.Sc. Mechanical Engineering: University of Babylon, Babylon, Iraq.

#### **Experience in Higher Education.**

(2012-present): Assistant Professor, Babylon University.

(2006-2012): Lecturer, Babylon University.

(2008-2013): External Lecturer, Al-Qadisiya University. (2002 – 2006): Assistant Lecturer, Babylon University. (2000 – 2002): External Lecturer, Babylon University.

(2000 – 2003): External Lecturer, Najaf Technical College.

# **Teaching Experience (Undergraduate Study).**

<u>Subject</u>	<u>Place</u>	<u>Period</u>
1- Machine Drawing	Babylon University - Department of Mechanical Engineering.	2000 – 2001
		2002 – 2005
		2006 – 2010
2- Engineering Mechanics	Najaf Technical College – Department of Automobile Engineering.	2000 – 2003
3- Principles of Mechanical Eng.	Babylon University – Department of Electrical Engineering.	2002 – 2003
4- Air conditioning and Refrigeration	Babylon University – Department of Mechanical Engineering.	2004 – 2005
5- Mathematics I	hematics I Babylon University – Department of Mechanical Engineering	
		2010 – 2014
6- Heat Transfer	Al-Qadisiya University – Department of Mechanical Engineering	2008 – 2009
7- Fluid II	Al-Qadisiya University – Department of Mechanical Engineering	2009 – 2013

# **Teaching Experience ( Postgraduate Study ).**

<u>Subject</u>	<u>Place</u>	<u>Period</u>
1- Advanced Convection Heat Transfer	Babylon University – Department of Mechanical Engineering.	2008 – 2009
2- Boundary Layer Theory	Babylon University – Department of Mechanical Engineering.	2013 – 2014

## **Research Areas of Interest.**

- 1-Supersonic Aerodynamics.
- 2-Non-Equilibrium Conduction Heat transfer.
- 3-Convection Heat Transfer.
- 4-Extended Irreversible Thermodynamics.
- 5-CFD.
- 6-Renewable Energy.
- 7-Nano Fluid Technology.

# **Administrative Experiences.**

- 1-Director of Mechanical Engineering Department Laboratories.
- 2-Member of Clean Energy Center Opening Committee.

- 3- Member of Clean Energy Studying Committee.
- 4-Member of Students Examinations Committee.
- 5-Member of International Bank Grant Running Committee.
- 6-Chairman and Member of Students Projects and Researches Committee.
- 7-Member of Mechanical Engineering Department Council.
- 8-Member of Laboratories Equipments Maintanice Committee.
- 9- Chairman and Member of Students Summar Training Committee.
- 10- Chairman of Data Base Committee.

#### Administrative Experiences (Out Side Babylon University).

1-Member of ScientificCommittee in Al -Qadisiya University - Department of Mechanical Engineering.

# Other Experiences (Inside Iraq).

- 1-Member of Consultative Board of Al -Qadisiya Journal for Engineering Sciences.
- 2-Reviewed many papers for many journals such as :-
  - 1-Scientific Referee of The Iraqi Journal for Mechanical and Materials Engineering.
  - 2-Scientific Referee of The Scientific Kerbala Journal.
  - 3-Scientific Referee of The Babylon University Journal.
  - 4-Scientific Referee of Al -Qadisiya Journal for Engineering Sciences.
  - 5-Scientific Referee of Engineering Kufa Journal.
  - 6-Scientific Referee of Al Nahrain University College of Engineering Journal.

## Other Experiences ( Outside Iraq ).

- 1- Section Editor of <u>Journal of Naval Architecture and Marine Engineering</u> Bangladesh.
- 2- Member of Editorial Board of <u>Fundamental Journal of Thermal Science and Engineering</u> <u>India.</u>
- 3- Member of Editorial Board of <u>Fundamental Journal of Mathematical Physics</u> <u>India.</u>
- 4- Member of Editorial Board of Fundamental Journal of Modern Physics India.
- 5- Member of Editorial Board of Mathematica Aeterna Bulgaria.
- 6- Member of Associate Editors of <u>International Journal of Energy and Technology</u> <u>Italy</u>.
- 7- Editor of International Journal of Advanced Renewable Energy Research United States of America.
- 8- Member of Scientific Committee and Editorial Review Board on Engineering and Physical Sciences World Academy of Science, Engineering and Technology (WASET)
- 9- Member of Editorial Board of <u>Thermal Energy and Power Engineering (TEPE)</u> Hong Kong.
- 10- Member of Editorial Board of <u>American Journal of Advanced Scientific Research</u> (AJASR) Germany.
- 11- Member of Editorial Advisory Board of <u>International Journal of Heat and Technology</u> <u>Italy</u>.

- 12- Member of Editorial Board of Researches and Applications in Mechanical Engineering (RAME) United States of America.
- 13- Member of Editorial Board of ARPN Journal of Science and Technology Pakistan.
- 14- Editor of Prudence Journal of Engineering and Technology Research (PJETR) Nigeria.
- 15- Member of Editorial Board of <u>African Journal of Engineering Research (AJER)</u> Nigeria.
- 16- Member of Editorial Board of Computer Communication and Collaboration(CCC)

   Canada.
- 17- Member of Editorial Board of <u>Journal of Basic and Applied Scientific Research</u> (<u>JBASR</u>) <u>United States of America</u>.
- 18- Member of Editorial Board of Journal of Civil Mechanical Engineering (JCME)
- 19- Member of Editorial Board of World Journal of Advanced Technology and Engineering Sciences (WJATES) United States of America.
- 20- Member of Editorial Board of Canadian Research Publication Canada.
- 21- Member of Editorial Board of Scientia Research Library (SRL) India.
- 22- Member of Editorial Board of World Journal of Civil, Mechanical and Electrical Engineering (WJCMEE) United States of America.

Reviewed many papers for many international journals such as :-

- 1-Scientific Referee of <u>Journal of Naval Architecture and Marine Engineering</u> Bangladesh.
- 2-Scientific Referee of Engineering Applications of Computational Fluid Mechanics Hong Kong.
- 3-Scientific Referee of <u>International Journal of Heat and Mass Transfer</u> <u>United States of America</u>.
- 4-Scientific Referee of <u>Journal of Engineering Science and Technology (JESTEC)</u> <u>Malaysia</u>.
- 5- Scientific Referee of <u>International Journal of Mechanical and Materials</u> Engineering <u>Malaysia</u>.
- 6- Scientific Referee of Numerical Heat Transfer United States of America.
- 7- Scientific Referee of <u>Journal of Electronics Cooling and Thermal Control</u> <u>United States of America</u>.
- 8- Scientific Referee of Computers and Mathematics with Applications United States of America.
- 9- Scientific Referee of <u>Journal of Encapsulation and Adsorption Sciences (JEAS)</u>
   United States of America.
- 10 Scientific Referee of AMSE Journals France.
- 11- Scientific Referee of <u>International Journal of Modeling and Optimization (IJMO)</u>
   Singapore.
- 12- Scientific Referee of <u>Chemical Engineering Communications</u> <u>United States of America</u>.
- 13- Scientific Referee of <u>American Journal of Analytical Chemistry (AJAC)</u> <u>United States of America</u>.
- 14- Scientific Referee of <u>International Journal of Information Engineering (IJIE)</u> <u>United States of America.</u>
- 15- Scientific Referee of Frontiers in Heat and Mass Transfer (FHMT) United States

#### of America.

- 16- Scientific Referee of Scientific Research and Essays (SRE) Nigeria.
- 17- Scientific Referee of <u>Advanced Shipping and Ocean Engineering (ASOE)</u> Hong Kong.
- 18- Scientific Referee of <u>International Journal of Computer Science and Artificial Intelligence (IJCSAI)</u> <u>Hong Kong.</u>
- 19- Scientific Referee of <u>Theory and Applications of Mathematics and Computer Science (TAMCS)</u> -Romania.
- 20- Scientific Referee of <u>Online International Journal of Engineering and Technology</u> Research (OIJETR) Nigeria.
- 21- Scientific Referee of Thermal Science Serbia.
- 22- Scientific Referee of <u>Journal of Thermophysics and Heat Transfer</u> <u>United States of America</u>.
- 23- Scientific Referee of Nuclear Engineering and Design United States of America.
- 24- Scientific Referee of <u>International Journal of Thermal Sciences</u> <u>United States of America</u>.
- 25- Scientific Referee of <u>Journal of Energy</u>, <u>Heat and Mass Transfer</u> <u>India</u>.
- 26- Scientific Referee of <u>Journal of Basic and Applied Scientific Research (JBASR)</u> <u>United States of America.</u>
- 27- Scientific Referee of Computer Communication and Collaboration (CCC) Canada.
- 28- Scientific Referee of <u>Journal of Scientific Research</u> Bangladesh.
- 29- Scientific Referee of Mathematical Problems in Engineering Egypt.
- 30- Scientific Referee of Advances in Mechanical Engineering Egypt.
- 31- Scientific Referee of Researches and Applications in Mechanical Engineering (RAME) United States of America.
- 32- Scientific Referee of Advances in Chemical Engineering and Science (ACES) United States of America.
- 33- Scientific Referee of Advanced Journal of Physical Sciences (AJPS) -
- 34- Scientific Referee of <u>International Journal of Mathematical Modeling and Physical Sciences (IJMMPS)</u> <u>India.</u>
- 35- Scientific Referee of Heat Transfer Asian Research United States of America.
- 36- Scientific Referee of Journal of Thermal Engineering Turkey.
- 37- Scientific Referee of <u>Energy Conversion and Management</u> <u>United States of America.</u>
- 38- Scientific Referee of <u>Journal of Mechanical Engineering and Technology (JMET)</u>
   United States of America.
- 39- Scientific Referee of Ain Shams Engineering Journal Egypt.
- **40-** Scientific Referee of <u>Special Topics and Reviews in Porous Media</u> <u>United States of America.</u>

Also, I reviewed the following papers for many international journals such as:-

1-Scientific Referee of the paper entitled MHD free convection flow along a vertical flat plate with thermal conductivity and viscosity depending on temperature By Rehena Nasrin and M. A. Alim (Dept. of Mathematics, Bangladesh University of Engineering and Technology- Dhaka-1000, Bangladesh ) / Journal of Naval Architecture and Marine Engineering .

- 2-Scientific Referee of the paper entitled Radiation effects on MHD convective mass transfer flow past an accelerated infinite vertical porous plate embedded in a porous medium By P. Bala Anki Reddy and N. Bhaskar Reddy (Department of Mathematics, Sri Venkateswara University, Tirupati 517502, A.P., India) / Journal of Naval Architecture and Marine Engineering.
- 3-Scientific Referee of the paper entitled Natural convection flow in a square cavity with internal heat generation and a flush mounted heater on a side wall By M. A. H. Mamun, M. M. Rahman, M. M. Billah, R. Saidur and S. Nagata / Journal of Naval Architecture and Marine Engineering.
- 4 -Scientific Referee of the paper entitled Combined heat and mass transfer effects on MHD oscillatory flow in a channel filled with porous medium / Journal of Naval Architecture and Marine Engineering.
- 5- Scientific Referee of the paper entitled Finite element analysis of heat transfer of free convection flow of MHD micropolar and viscous fluids in a vertical channel with dissipative effects By B. SURESH BABU, G. SRINIVAS and B. R. K. Reddy (Department of Mathematics, VIMTW, Hyderabad, India) / Journal of Naval Architecture and Marine Engineering.
- 6- Scientific Referee of the paper entitled Joule heating effect on magneto-hydrodynamic natural convection flow along a vertical wavy surface By N. Parveen and M. A. Alim (Department of Mathematics, Bangladesh University of Engineering and Technology, Dakha-1000, Bangladesh) / Journal of Naval Architecture and Marine Engineering.
- 7- Scientific Referee of the paper entitled Finite element analysis of effects of magnetic field in an open channel having a circular heater By M. M. Billah , M.M. Rahman and M. S. Uddin (Department of Arts and Sciences , Ahsanullah University of Science and Technology, Dhaka-1208 , Bangladesh) / Journal of Naval Architecture and Marine Engineering.
- 8- Scientific Referee of the paper entitled Similarity solution for free convection between two parallel porous walls with MHD at different temperatures By K.GANGADHAR and P.K.KAMESWARAN (Department of Mathematics, ANU Ongole Campus Ongole 523001, Andhra Pradesh, India) / Journal of Naval Architecture and Marine Engineering.
- 9- Scientific Referee of the paper entitled Effects of viscous dissipation on natural convection flow along a sphere with radiation and heat generation By Salina Aktar, Mahmuda Binte Mostafa Ruma and M.A.Alim (Department of Natural Science, Stamford University, Bangladesh) / Journal of Naval Architecture and Marine Engineering.
- 10- Scientific Referee of the paper entitled Unsteady MHD chemically reacting fluid through a porous medium bounded by a non-isothermal impulsively-started vertical plate: a numerical technique By Sahin Ahmed and Karabi Kalita (Heat Transfer and Fluid Mechanics Research, Department of Mathematics, Goalpara College, Goalpara 783101, Assam, India)/Journal of Naval Architecture and Marine

#### Engineering.

- 11 Scientific Referee of the paper entitled Comparison between two methods for enhancing heat transfer in separated flows over backward facing step Second law analysis By S. A. Gandjalikhan and Nassab, A. Bahrami (Mechanical Engineering Department, Shahid Bahonar University, Kerman, Iran / Engineering Applications of Computational Fluid Mechanics.
- 12-Scientific Referee of the paper entitled Transient combined heat and mass transfer by natural convection from a semi-infinite plate submited to a magnetic field By J. Zueco , P. Eguia , J. Collazo and L. Ocho (Departamento de Ingenieria Térmica y de Fluidos, UPCT Campus Muralla del Mar, Cartagena 30202, Espana (Spain) / Engineering Applications of Computational Fluid Mechanics.
- 13- Scientific Referee of the paper entitled Three-dimensional MHD simulations of an electromagnetic flow meter By Bo Lu, Liangwang Xu and Xiaozhang Zhang (Institute of Plasma Physics, Chinese Academy of Sciences, Hefei, Anhui 230031, China)/Engineering Applications of Computational Fluid Mechanics.
- 14- Scientific Referee of the paper entitled Numerical analysis of mixed convection through an internally finned tube By Sachindra Kumar Rout and Dipti Prasad Mishra (Institute of Technical Education and Research, S'O'A University, Jagamara, Bhubaneswar-751030, Odisha, India)/Engineering Applications of Computational Fluid Mechanics.
- 15- Scientific Referee of the paper entitled Magnetohydrodynamic developing flows entering the region of a flow channel insert in a duct By Chang Nyung Kim (Department of Mechanical Engineering, College of Engineering, Kyung Hee University, Yong-in, Kyunggi-do, 446-701, Korea) / Engineering Applications of Computational Fluid Mechanics.
- 15- Scientific Referee of the paper entitled Characteristics of heat dissipation from a block heat source module in a three-dimensional cabinet to ambient natural convective air stream By Y. L. Tsay and J. C.Cheng / International Journal of Heat and Mass Transfer.
- 16- Scientific Referee of the paper entitled Natural convection in a square enclosure with two horizontal cylinders By H. S. Yoon , J. H. Jung , Y. G. Park and H. H. Chun ( Global Core Research Center for Ships and Offshore Plants, Pusan National University, Jang Jeon 2-Dong , Geum Jeong Gu , Busan 609 -735, Korea ) / International Journal of Heat and Mass Transfer.
- 17- Scientific Referee of the paper entitled Enhancement of natural convection heat transfer in a square enclosure by utilizing nanofluids and rotating cylinder By R. Roslan , H. Saleh and I. Hashim ( Faculty of Science , Technology and Human Development , Universiti Tun Hussein Onn Malaysia , 86400 Parit Raja , Batu Pahat , Johor , Malaysia ) / International Journal of Heat and Mass Transfer.
- 18- Scientific Referee of the paper entitled Research on the convergence method of oscillation numerical simulation: a case study for fluid flow in Joule-heated cavity

- By X.H.Zhang, Y.Y.Wen and X.Cheng (Department of Thermal Energy Engineering, School of Physics Science and Technology, School of Energy, Soochow University, 215006, Suzhou, China) / International Journal of Heat and Mass Transfer.
- 18- Scientific Referee of the paper entitled Investigation on the wing ground collision / Journal of Engineering Science and Technology.
- 19- Scientific Referee of the paper entitled Flow behind bluff bodies in side-by-side arrangement / Journal of Engineering Science and Technology.
- 20 Scientific Referee of the paper entitled The effect of solar radiation on automobile environment through natural convection and mixed convection / Journal of Engineering Science and Technology.
- 21 Scientific Referee of the paper entitled A numerical study of shock reflection phenomena in shock/turbulence interaction / Journal of Engineering Science and Technology.
- 22 Scientific Referee of the paper entitled Numerical investigation for the heat transfer enhancement in helical cone coils over ordinary helical coils / Journal of Engineering Science and Technology.
- 23 Scientific Referee of the paper entitled Forced convection greenhouse papad drying: an experimental study / Journal of Engineering Science and Technology.
- 24 Scientific Referee of the paper entitled Design and flow velocity simulation of diffuser augmented wind turbine using CFD / Journal of Engineering Science and Technology.
- 25- Scientific Referee of the paper entitled Estimation of aerodynamic parameters of urban building arrays using wind tunnel measurements / Journal of Engineering Science and Technology.
- 26- Scientific Referee of the paper entitled Experimental and numerical study of the swirling flow in conical diffusers / Journal of Engineering Science and Technology.
- 26- Scientific Referee of the paper entitled Numerical investigation of the effects of flow rate and fin geometry on laminar fluid flow and heat transfer in a wavy plate fin passage By M. Piradla and S.M. Pesteeia (Mechanical Engineering Department, Faculty of Engineering, Urmia University, Urmia, Iran) / International Journal of Mechanical and Materials Engineering.
- 27- Scientific Referee of the paper entitled Thermo-visual investigation of a two-phase loop thermosyphon By Aloke K. Mozumder and M. Mustafa Kamal (Department of Mechanical Engineering, Bangladesh University of Engineering and Technology, Dhaka, Bangladesh) / International Journal of Mechanical and Materials Engineering.
- 28 Scientific Referee of the paper entitled Effect of induced magnetic field on peristaltic transport of a Carreau fluid in an inclined channel filled with porous material By R. Hemadri Reddy, A. Kavitha and S.Sreenadh (School of Advanced Sciences,

- VIT University, Vellore, TamilNadu-632 014, India) / International Journal of Mechanical and Materials Engineering.
- 29 Scientific Referee of the paper entitled Joule heating effect on MHD combined convection in a lid driven chamber with a heat conducting cylinder By Rehena Nasrin (Department of Mathematics, Bangladesh University of Engineering and Technology, Dhaka-1000, Bangladesh) / International Journal of Mechanical and Materials Engineering.
- 30- Scientific Referee of the paper entitled Study on the jet nanofluids impingement system for cooling computer processing unit By Paisarn Naphon (Department of Mechanical Engineering, Faculty of Engineering, Srinakharinwirot University, 63 Rangsit-Nakhornnayok Rd., Ongkharak, Nakhorn-Nayok, 26120, Thailand) / Journal of Electronics Cooling and Thermal Control.
- 31- Scientific Referee of the paper entitled Solution of Riccati equation using optimal homotopy asymptotic method By M.Naeem, S.Islam, Javed Ali and M. Idrees (Islamia College Peshawar (Public Sector University), Khyber Pakhtunkhwa, Pakistan) / Computers and Mathematics with Applications.
- 32- Scientific Referee of the paper entitled Cadmium removal from aqueous solution by a Tunisian smectitic natural and activated clay: Thermodynamic study By Khalfa Leila (Applied Thermodynamics and Environnement Unit Research, ENIGabes, 6079 Zrig Gabes, Tunisia) / Journal of Encapsulation and Adsorption Sciences.
- 33- Scientific Referee of the paper entitled Nano-microencapsulation and controlled-release of linoleic acid in biopolymer matrices: effects of the physical state, water activity, and quercetin on oxidative stability By Gilles K. Kouassi, Vinod Teriveedhi, Christopher L. Milby, Tarab Ahmad, Mark Boley, Netkal M. Gowda and Ronald Terry (Department of Chemistry, Department of Physics, Western Illinois University, Macomb, IL, USA) / Journal of Encapsulation and Adsorption Sciences.
- 34- Scientific Referee of the paper entitled Effect of pixellization on efficiency and stability of MEH-PPV based polymer light emitting diodes By Ranbir Singh and Monica Katiyar (Department of Materials and Metallurgical Engineering, Indian Institute of Technology, Kanpur 208016, India) / Journal of Encapsulation and Adsorption Sciences.
- 37- Scientific Referee of the paper entitled Adsorption of phenol and chlorophenol in aqueous solution on a commercial activated carbon in batch sorption systems By O.A. Ekpete, A.I. Spiff, Michael Horsfall Jnr and P. Adowei (Department of Chemistry, Ignatius Ajuru University of Education, Port-Harcourt, Nigeria)/Journal of Encapsulation and Adsorption Sciences.
- 38- Scientific Referee of the paper entitled Three-dimensional MHD flow between a rotating and a stationary highly permeable disk By Dileep Singh Chauhan and Reema Jain (Department of Mathematics, University of Rajasthan, Jaipur-302004, , India) / AMSE Journals.
- 39- Scientific Referee of the paper entitled Fuzzy logic to model the free convection heat

- transfer from horizontal isothermal cylinders arranged in vertical and inclined arrays / International Journal of Modeling and Optimization.
- 40- Scientific Referee of the paper entitled Design and development of a smart vehicle parking system / International Journal of Modeling and Optimization.
- 41- Scientific Referee of the paper entitled Fluidization effect on removal and recovery of palladium (II) from wastewater by chelated ion exchange resin By S.V. Chaudhari and G.M. Deshmukh (Department of Petrochemical Engineering, Dr. Babasaheb Ambedkar Technological University, Lonere, Dist Raigad 402103, India)/Chemical Engineering Communications.
- 42- Scientific Referee of the paper entitled Prediction of semi-fluidization velocity of solid particles in gas-liquid-solid systems by nomograph By Pooja V. Shrivastava, A. B. Soni and H. Kumar (Department of Chemical Engineering, National Institute of Technology, Raipur, India) / Chemical Engineering Communications.
- 43- Scientific Referee of the paper entitled Sem and FTIR study of adsorption characteristics using xanthate (KAX) collectors on galena By Zohir Nedjar and Djamel Barkat (Laboratory of Chemical Molecular and Environnement, Sciences and Technology Faculty, Industrial Chemistry Department, Mouhamed Khider University, Biskra 07000, Algeria)/American Journal of Analytical Chemistry.
- 44- Scientific Referee of the paper entitled Synthesis and characterization of KFeP2O7 nanoparticles implanted in silica By Eduardo Ordóñez Regil, Enrique Ordóñez Regil Nidia García González and Samuel R. Barocio (Instituto Nacional de Investigaciones Nucleares, Departamento de Química. Centro Nuclear de México, Ocoyoacac 52750, México) / American Journal of Analytical Chemistry.
- 45- Scientific Referee of the paper entitled Effect of gaseous environments on decomposition characteristics of expanded polystyrene By Guangdong Xu, Qiang Xu and Renming Pan (School of Chemical Engineering, Nanjing University of Science and Technology, Nanjing, China) / American Journal of Analytical Chemistry.
- 46- Scientific Referee of the paper entitled Physicochemical changes of two mineral based diesel engine oils after their usage By Sahar Peyman, Abolfazl Semnani, Ali Reza Zangeneh and Hamid Shakoori Langeroodi (Department of Chemistry, Shahreza Branch, Islamic Azad University, Shareza, Isfahan, Iran)/American Journal of Analytical Chemistry.
- 47- Scientific Referee of the paper entitled Laminar free and forced convection cooling of a semi porous open cavity / Scientific Research and Essays.
- 48- Scientific Referee of the paper entitled Welding research in shipbuilding An ongoing requirement By N.A. McPherson (BAE Systems Maritime, Naval Ships, 1048 Govan Road, Glasgow, G514XP, Scotland, U. K. / Advanced Shipping and Ocean Engineering.

- 49- Scientific Referee of the paper entitled Numerical solutions for a nanofluid past over a stretching circular cylinder with non-uniform heat source/sink By A. Rasekh and D.D.Ganji (Department of Mechanical Engineering, Shahrood University of Technology, Shahrood, Iran)/Frontiers in Heat and Mass Transfer.
- 50- Scientific Referee of the paper entitled Laminar mixed convection cooling of a heat source embedded on the left side of double lid-driven enclosures filled with Cu-water nanofluid By M.A. Mansour and Sameh E. Ahmed (Department of Mathematics, Assuit University, Faculty of Science, Assuit, Egypt / Journal of Thermophysics and Heat Transfer.
- 51- Scientific Referee of the paper entitled Mixed convection of non-Newtonian fluids including magnetic field effect along a vertical wavy plate By Koroush Javaherdeh, Shoaib Khanmohammdi and Mehdi Moslemi ( Department of Mechanical Engineering, Guilan University, Iran ) / Journal of Thermophysics and Heat Transfer.
- 52- Scientific Referee of the paper entitled Natural convection of a nanofluid in an inclined partially open cavity: effects of different thermal cases By F. M. Hady, Sameh E. Ahmed, Hillal M. El-Shehabey and R. A. Mohamed (Mathematics Department, Faculty of Science, Assiut University, Assiut 71516, Egypt) / Journal of Thermophysics and Heat Transfer.
- 52- Scientific Referee of the paper entitled EFFECT OF MAGNETIC FIELD ON 3D DOUBLE DIFFUSIVE CONVECTION IN A CUBIC CAVITY FILLED WITH A BINARY MIXTURE By Chemseddine Maatki, Kolsi Lioua, Ghachem Kaouther and M. Naceur Borjini (Unité de Métrologie en Mécanique des fluides et Thermique ENIM Monastir, 5030, Tunisie)/Thermal Science.
- 53- Scientific Referee of the paper entitled G-complexity, quantum computation and anticipatory processes By Mihai Nadin and Ashbel Smith (University of Texas at Dallas, U.S.A.) / Computer Communication and Collaboration.
- 54- Scientific Referee of the paper entitled Effect of thermal radiation and temperature dependent conductivity on MHD flows through channel with a sliding wall By Md. S. Alam and M.A.H. Khan (Department of Mathematics, Jagannath University, Dhaka-1100, Bangladesh)/Journal of Scientific Research.
- 55- Scientific Referee of the paper entitled MHD mixed convection in an inclined lid-driven cavity with opposing thermal buoyancy force: effect of non-uniform heating on both side walls By A. Mahdy and Sameh E. Ahmed (Mathematics Department, Faculty of Science, South Valley University, Qena, Egypt)/Nuclear Engineering and Design.
- 56- Scientific Referee of the paper entitled Effects of mass flow rate in terms of pressure drop and heat transfer characteristics / Online International Journal of Engineering and Technology Research.
- 57- Scientific Referee of the paper entitled Natural convection in a lid driven square cavity with partial slip By Muneer A. Ismael, Joan Pop and Ali Chamkha (

- Mechanical Engineering Department, Engineering College, University of Basrah, Basrah, Iraq)/International Journal of Thermal Sciences.
- 58- Scientific Referee of the paper entitled CFD analysis of heat transfer and fluid flow characteristics of impinging swirl jets for electronic cooling application By S.Mohamed Illyas, B.R. Ramesh Bapu and V.Venkata Subba Rao (Department of Mechanical Engineering, University College of Engineering, JNTU Kakinada, India) / Journal of Energy, Heat and Mass Transfer.
- 59- Scientific Referee of the paper entitled Heat transfer augmentation in a nanofluid-filled lid-driven enclosure with heat source embedded on the bottom and variety of thermal boundary conditions By Sameh E. Ahmed and M.A. Mansour (Mathematics Department, Faculty of Sciences 83523, South Valley University, Qena, Egypt) / Journal of Energy, Heat and Mass Transfer.
- 60- Scientific Referee of the paper entitled Hydromagnetic stagnation point flow towards a radially stretching convectively heated disk By O. D. Makinde and S. Shateyi (Institute for Advance Research in Mathematical Modelling and Computations, Cape Peninsula University of Technology, P. O. Box 1906, Bellville 7535, South Africa)/Mathematical Problems in Engineering.
- 61- Scientific Referee of the paper entitled Calculation analysis of pressure wave velocity in gas and drilling mud two-phase fluid in annulus during drilling operations By Yuanhua Lin, Xiangwei Kong and Yijie Qiu (State Key Laboratory of Oil and Gas Reservoir Geology and Exploitation, Southwest Petroleum University, Chengdu, Sichuan 610500, China)/Mathematical Problems in Engineering.
- 62- Scientific Referee of the paper entitled Refrigerator coupling to a water-heater and heating floor to save energy and to reduce carbon emissions By Romdhane Ben Slama (University of Gabes, ISSAT Gabes, Rue Omar Ibn Khattab, 6029 Gabes, Tunisia) / Researches and Applications in Mechanical Engineering.
- 63- Scientific Referee of the paper entitled MHD natural convection flow of fluid with variable viscosity from a porous vertical plate By Amena Ferdousi, M. Mostafizur Rahman, Mohammad Salek Parvez and M. A. Alim (Faculty of Electronics and Electrical Engineering, Eastern University, Dhaka, Bangladesh)/Researches and Applications in Mechanical Engineering.
- 64- Scientific Referee of the paper entitled Quantification of ventilated façade effect due to convection in buildings: buoyancy and wind driven effect By Miguel Mora Pérez ,Gonzalo López Patiño and P. Amparo López Jiménez (Departamento de Ingeniería Hidráulica y Medio Ambiente. Polytechnic, University of Valencia, Valencia, Spain)/Researches and Applications in Mechanical Engineering.
- 65- Scientific Referee of the paper entitled Bio-separation, detection and quantification of E. coli K12 from small volumes using functionalized filters integrated in microchannels / Researches and Applications in Mechanical Engineering.

- 64- Scientific Referee of the paper entitled Modeling asymmetric flow of viscoelastic fluid in symmetric planar sudden expansion geometry based on user-defined function in FLUENT CFD package By Zhi-Ying Zheng, Feng-Chen Li and Juan-Cheng Yang (School of Energy Science and Engineering, Harbin Institute of Technology, Harbin 150001, China)/Advances in Mechanical Engineering.
- 65- Scientific Referee of the paper entitled Mathematical and simulation modelling of moisture diffusion mechanism during plastic IC packages disassembly By Mou Peng, Xiang Dong and Duan Guanghong (Department of Mechanical Engineering, Tsinghua University, Beijing, China)/Advances in Mechanical Engineering.
- 66- Scientific Referee of the paper entitled Fully-developed circular-pipe flow of a non-Newtonian pseudoplastic fluid By Lun-Shin Yao, Md. Mamun Molla and Ghosh Moulic (School for Engineering of Matter, Transport and Energy, Arizona State University, Arizona, 85287, USA) / Theory and Applications of Mathematics and Computer Science.
- 67- Scientific Referee of the paper entitled Steady non-isothermal two-dimensional flow of Newtonian fluid in a stenoised channel / Theory and Applications of Mathematics and Computer Science.
- 68- Scientific Referee of the paper entitled Mathematical modeling in heavy traffic queuing systems: A survey / Advanced Journal of Physical Sciences.
- 69- Scientific Referee of the paper entitled Lattice Boltzmann simulation of natural convection in a differentially heated square enclosure containing heat generating low -Prandtl number fluid By B. Gera and R. K. Singh (Reactor Safety Division , Bhabha Atomic Research Centre , Trombay , Mumbai 400 085, India) / Heat Transfer Asian Research.
- 70- Scientific Referee of the paper entitled Lattice Boltzmann simulation of natural convection heat transfer of SWCNT-nanofluid in an open enclosure / Ain Shams Engineering Journal.
- 71- Scientific Referee of the paper entitled Combined conduction-convection-radiation heat transfer in saturated cellular porous media bounded by an iso-flux channel: HPM vs. numerical analysis By Maziar Dehghan, Yousef Rahmani, Davood Domiri Ganji, Seyfollah Saedodin and Mohammad Sadegh Valipour (Mechanical Engineering Department, Semnan University, 35196-45399 Semnan, Iran) / Energy Conversion and Management.
- 72- Scientific Referee of the paper entitled Thermal instability in a Brinkman porous medium saturated by nanofluid with no nanoparticle flux on boundaries By Ramesh Chand and G. C. Rana (Department of Mathematics, Government College Dhaliara, Himachal Pradesh, India) / Special Topics and Reviews in Porous Media.

- 73- Scientific Referee of the paper entitled Numerical 3-D heat flow simulations on double-pass solar collector with and without porous media By A.N. Korti (ETAP laboratory, University of Tlemcen, FT, Department of Mechanics, BP 230, 13000 Tlemcen, Algeria) / Journal of Thermal Engineering.
- 74- Scientific Referee of the paper entitled Mathematical models and numerical solutions of liquid-solid and solid-liquid phase change By K. S. Surana, A. D. Joy, L. A. Quiros and J. N. Reddy (Mechanical Engineering, University of Kansas, Lawrence, Kansas, USA) / Journal of Thermal Engineering.

#### **Examiner of M.Sc.Thesis.**

Student Name	Thesis Title	University	Date
1- Adnan Khathan	Production and analysis of	<b>Babylon University</b>	17 / 1 / 2013
Ibraheem	Bioethanol from dates syrup.		

## **Professional Memberships.**

- 1- Senior Member of International Association of Computer Science and Information Technology (IACSIT) (Member NO.: 80339292) Singapore.
- 2- Individual Membership of International Society for Engineering Education (IGIP) (MEMBER-ID: 10509) Austria.
- 3- Member of International Society of Applied Sciences (ISAS) United States of America.
- 4- Member of Asian Council of Science Editors (ACSE) United Arab Emirates.
- 5- Member of Science and Engineering Institute (SCIEI) (Membership No. : 20140211002) United States of America.

#### Computer Skills.

Programming skills: Fortran 90, Quick Basic, Computational Fluid Dynamics (CFD)

**Programs** 

Operating systems: Auto Cad, Tecplot, Grapher, Surfer

**Software experience: Fluent, CFX** 

# **Engineering Conferences (Inside Iraq).**

- 1-Scientific Referee of Al -Qadisiya First Scientific Conference, Al -Qadisiya University College of Engineering 22-23 December 2008.
- 2-Scientific Referee of The First Scientific Engineering Conference, Babylon University College of Engineering 17-18 May 2009.
- 3- Reporter of Mechanical and Materials Engineering Researches (Session Three) of

- The Eleventh Scientific Conference, Babylon University 29-30 April 2009.
- 4- Reporter of Mechanical Engineering Researches (Session One) of The First Scientific Engineering Conference, Babylon University-College of Engineering 17-18 May 2009.
- 5- Scientific Referee of Al -Qadisiya Second Scientific Conference, Al -Qadisiya University-College of Engineering 19-20 October 2009.
- 6- Scientific Researcher in The First Engineering Education Conference (EEC 2012), Kurdistan Region University of Duhok, Duhok City, 17-19 April 2012.

# **Engineering Conferences ( Out side Iraq ).**

- 1- Scientific Researcher in 2010 International Conference on Mechanical and Electrical Technology (ICMET 2010) September 10-12, 2010, Singapore.
- 2- Scientific Researcher in 6th International Advanced Technologies Symposium (IATS'11), 16-18 May, 2011, Elazığ, Turkey.
- 3- Member of Technical Committee of 3rd International Conference on Mechanical and Electrical Technology (ICMET 2011), August 26-27, 2011, Dalian, China.
- 4- Scientific Researcher in The Third Asian Symposium on Computational Heat Transfer and Fluid Flow, (ASCHT 2011), 22-26 September, 2011, Kyoto University, Kyoto, Japan.
- 5- Member of Technical Committee of 2011 3rd International Conference on Computer Technology and Development (ICCTD 2011), November 25-27, 2011, Chengdu, China.
- 6- Scientific Researcher of 3rd (2011) CUTSE International Conference, 8-9 November, 2011, Curtin University, Miri, Sarawak, Malaysia.
- 7- Member of Technology Program Committee of 2012 International Conference on Biomedical Engineering and Biotechnology (ICBEB), 28<sup>th</sup> 30<sup>th</sup> May, 2012, Macau, China.
- 8- Member of Technology Program Committee of 2012 International Symposium on Chemistry and Pharmaceutical Science (CPS), 28<sup>th</sup> 30<sup>th</sup> May, 2012, Macau, China.
- 9- Member of Scientific Committee of 15<sup>th</sup> International Conference on Applied Mechanics and Mechanical Engineering (AMME-15), 29-31 May, 2012, Military Technical College, Kobry El-Kobbah, Cairo, Egypt.
- 10- Scientific Researcher of 15<sup>th</sup> International Conference on Applied Mechanics and Mechanical Engineering (AMME-15), 29-31 May, 2012, Military Technical College, Kobry El-Kobbah, Cairo, Egypt.
- 11-Member of Scientific Committee of Session No.17 (Mechanical Power Engineering V) in 15<sup>th</sup> International Conference on Applied Mechanics and Mechanical Engineering (AMME-15), 29-31 May, 2012, Military Technical College, Kobry El-Kobbah, Cairo, Egypt.
- 12- Member of Technical Program Committee of 2nd International Conference on Mechanical Science and Engineering (ICMSE 2012), July 20-22, 2012, Beijing, China.
- 13- Member of Technical Program Committee of 3<sup>rd</sup> International Conference on Mechanical Science and Engineering (ICMSE 2013), March 1-3, 2013, Dorsett Kwun Tong, Hong Kong, China.
- 14- Scientific Researcher of International Conference on Mechanical Engineering and Manufacturing (ICMEM 2013), June 20-21, 2013, Nippon Hotel, Istanbul, Turkey.
- 15- Member of Technical Program Committee of 3rd International Conference on Computer Science and Logistics Engineering (ICCSLE 2013), September 13-15, 2013, Hong Kong, China.

- 16- Member of Technical Program Committee of The International Workshop on Cloud Computing and Information Security (CCIS 2013), November 9-11, 2013, Shanghai China.
- 17- Member of Technical Program Committee of The 1st International Conference of Materials and Mechanical Science (ICMMS 2013), December 13-15, 2013, Sanya, Hainan, China.
- 18- Member of Technical Program Committee of The  $3^{\rm rd}$  International Conference on Computational and Theoretical Nanoscience (ICCTN 2014), January 2-4, 2014, Sanya, China.
- 19- Member of Technical Program Committee of  $4^{th}$  International Conference on Mechanical Science and Engineering (ICMSE 2014), January 2-4 , 2014 , Sanya , Hainan , China.
- 20- Member of Technical Program Committee of The 4th International Conference on Industrial Engineering and Operations Management (IEOM 2014), January 7-9, 2014, Grand Hyatt Bali Hotel, Bali, Indonesia.
- 21- Member of Technical Program Committee of 2014 The International Conference on Mechanical Engineering and Design (MED2014), August 20-22, 2014, Kunming, Yunnan, China.
- 22- Member of Technical Program Committee of 3rd ScienceOne International Conference on Information Technology (ICIT 2015), January 21-23, 2015, Dubai, United Arab Emirates.

#### Reviewed many papers for many international Conferences such as :-

- 1-Scientific Referee of International 2009 AMSE Conference which held in India, in Trivandrum with the College of Engineering of Kerala (1-3 December 2009).
- 2-Scientific Referee of The First TSME International Conference on Mechanical Engineering (TSME ICoME), Sunee Grand Hotel, Ubonratchathani, Thailand, (October 20-22, 2010).
- 3- Scientific Referee of International Conference on Marine Technology, BUET, Dhaka, Bangladesh (11-12 December 2010).
- 4- Scientific Referee of 2011 3rd International Conference on Machine Learning and Computing, Singapore (February 26-28, 2011).
- 5-Scientific Referee of The Second TSME International Conference on Mechanical Engineering (TSME ICoME), Sheraton Krabi Beach Resort, Krabi, Thailand, (October 19-21, 2011).
- 6- Scientific Referee of 2011 3rd International Conference on Computer Technology and Development (ICCTD 2011), November 25-27, 2011, Chengdu, China.
- 7- Scientific Referee of 15<sup>th</sup> International Conference on Applied Mechanics and Mechanical Engineering (AMME-15), 29-31 May 2012, Military Technical College, Kobry Elkobbah, Cairo, Egypt.
- 8- Scientific Referee of 2012 2nd International Conference on Management, Manufacturing and Materials Engineering (ICMMM 2012), September 21-23, 2012, Beijing, China.
- 9- Scientific Referee of The 3rd TSME-International Conference on Mechanical Engineering (TSME-ICoME 2012), Chiang Rai, Thailand, (October 2012).
- 10- Scientific Referee of The 4th International Conference on Computational Methods (ICCM 2012), 25-28 November 2012, Gold Coast, Australia.
- 11- Scientific Referee of 4th International Conference on Mechanical Science and

Engineering (ICMSE 2014), January 2-4, 2014, Sanya, Hainan, China.

Also, I reviewed the following papers for many International Conferences such as:-

- 1-Scientific Referee of the paper entitled Heat transfer in three dimensional MHD fluid flow over a highly porous layer By Dr.Dileep Singh Chauhan (Dept. of Mathematics, University of Rajasthan, Jaipur-302004, India) and Dr.Reema Jain (Dept. of Mathematics, S.K.I.T., Jaipur-302025, India) / International 2009 AMSE Conference which held in India, in Trivandrum with the College of Engineering of Kerala (1-3 December 2009).
- 2-Scientific Referee of the paper entitled Thermal behavior in a solar air heater channel with ribs and rectangular winglets By Teerapat Chompookham, Bumroong Puangkird1, Smith Eiamsa-ard and Pongjet Promvonge (Department of Mechanical Engineering, Faculty of Engineering, King Mongkut's Institute of Technology Ladkrabang, Bangkok 10520, Thailand) / The First TSME International Conference on Mechanical Engineering (TSME ICoME), Sunee Grand Hotel, Ubonratchathani, Thailand (October 20-22, 2010).
- 3-Scientific Referee of the paper entitled Heat Transfer and friction behavior in a channel fitted with triangular and rectangular V-shaped ribs By Chitakorn Khanoknaiyakarn , Phudit Chaidilokpattanakul and Pongjet Promvonge (Department of Mechanical Engineering , Faculty of Engineering , King Mongkut's Institute of Technology Ladkrabang, Bangkok 10520 , Thailand ) / The First TSME International Conferenceon Mechanical Engineering (TSME ICoME ) , Sunee Grand Hotel , Ubonratchathani, Thailand (October 20-22, 2010) .
- 4-Scientific Referee of the paper entitled An experimental study of two-phase looped thermosyphon By A. K. Azad , S. K. Sarkar , C. M. Feroz and M. M. Alam (Department of Mechanical Engineering , Bangladesh University of Engineering and Technology , BUET, Dhaka-1000, Bangladesh / Proceedings of MARTEC 2010 The International Conference on Marine Technology , BUET, Dhaka, Bangladesh (11-12 December 2010).
- 5-Scientific Referee of the paper entitled Effects of temperature dependent thermal conductivity and viscous dissipation on conjugate free convection flow along a vertical flat plate By ATM. M. Rahman, NHM. A. Azim, M. M. Rahman and M. K. Chowdhury (Department of Computer Science and Engineering, Dhaka International University, Dhaka-1205, Bangladesh / Proceedings of MARTEC 2010 The International Conference on Marine Technology, BUET, Dhaka, Bangladesh (11-12 December 2010).
- 6-Scientific Referee of the paper entitled New insights to database security: An effective and integrated approach to applying access control mechanisms and cryptographic concepts in Microsoft access environments By Auday Jamal Fawzi and Marwan Omar (Faculty of Computer & IT, Nawroz University, Duhok, Iraq), 2011 3rd International Conference on Computer Technology and Development (ICCTD 2011), November 25-27, 2011, Chengdu, China.
- 7-Scientific Referee of the paper entitled Effect of axial gap on the aerodynamics 1 and 1.5 stage turbines By Subbarao Rayapati and M.Govardhan (Department of Mechanical Engineering, IIT Madras, Chennai, India), 15<sup>th</sup> International Conference on Applied Mechanics and Mechanical Engineering (AMME-15), 29-31 May 2012, Military Technical College, Kobry Elkobbah, Cairo, Egypt.
- 8-Scientific Referee of the paper entitled CFD analysis of a light aircraft wing By Eimad E.Elhadi, Mahdi M. Abdulla and Omer A. Elsayed (Department of

- Aeronautical Engineering , Karary University, Omdurman , Sudan ), 15<sup>th</sup> International Conference on Applied Mechanics and Mechanical Engineering (AMME-15) , 29-31 May 2012 , Military Technical College, Kobry Elkobbah , Cairo , Egypt.
- 9- Scientific Referee of the paper entitled Characteristics of constant value on the specific pressure drop in dilute phase pneumatic conveying for different plastic particles, The 3rd TSME-International Conference on Mechanical Engineering (TSME- ICoME 2012), Chiang Rai, Thailand, (October 2012).
- 10- Scientific Referee of the paper entitled Thermal performance of the glass windows with a venetian blind , The 3rd TSME-International Conference on Mechanical Engineering (TSME- ICoME 2012) , Chiang Rai , Thailand , (October 2012).
- 11- Scientific Referee of the paper entitled Stator cooling analysis of large turbo generators By H. Ansari and M. Mohammadi (Mapna Generator Engineering and Manufacturing Co. (Pars), Iran), The 4th International Conference on Computational Methods (ICCM 2012), 25-28 November 2012, Gold Coast, Australia.
- 12- Scientific Referee of the paper entitled Using advanced traits of passengers to facilitate route-choice decision-making By Wenbo Ma and Prasad Yarlagadda (School of Chemistry, Physics and Mechanical Engineering, Queensland University of Technology, Brisbane, Queensland, Australia), The 4th International Conference on Computational Methods (ICCM 2012), 25-28 November 2012, Gold Coast, Australia.

#### **International Invitations.**

1-Invitation Letter from Kuwait Institute for Scientific Research (KISR) – Kuwait.

2-Invitation Letter from International Conference on Recent Advances in Fluid Mechanics - (23-24, DEC, 2010) – India.

3-Invitation Letter from World Congress Against Sex Exploitation, Human Trafficking and Forced Labour - (16-25, October, 2012) – U.S.A. & Spain.

4-Invitation Letter from The First Joint Conference (KISR, MEW & KEMCO) - Energy Efficiency and Renewable Energy Collaboration Program -(11-12, March , 2013) – Shuwaikh – Kuwait.

5-Invitation Letter (Keynote Speaker) from The First International Conference in Emerging Trends in Science, Technology and Management ( <code>ICETSTM</code> ) - ( <code>21-22</code> , <code>April</code> , <code>2013</code>) – <code>Singapore</code>.

6-Invitation Letter from 11th International Conference of Numerical Analysis and Applied Mathematics (ICNAAM) - (21-27, September, 2013) – Rodos Palace Hotel , Rhodes – Greece.

7-Invitation Letter (Keynote Speaker) from 2nd International Conference on Mathematical, Computational and Statistical Sciences (MCSS '14) - (May 15-17, 2014), Gdansk – Poland.

8-Invitation Letter from First Asian Council of Science Editors (ACSE) Annual Meeting - (14-15, August , 2014) – Dubai , United Arab Emirates.

#### **Local Certificates.**

1- Certificate from The First Engineering Education Conference (EEC 2012), Kurdistan Region - University of Duhok, Duhok City, 17-19 April 2012.

#### **International Certificates.**

- 1- Certificate from the 1st TSME International Conference on Mechanical Engineering Thailand.
- 2- Certificate from the 2010 International Conference on Mechanical and Electrical Technology (ICMET 2010) Singapore.
- 3- Senior Member Certificate from International Association of Computer Science and Information Technology (IACSIT) Singapore.
- 4- Certificate from the 6th International Advanced Technologies Symposium (IATS'11) Turkey.
- 5- Certificate from 2011 3rd International Conference on Computer Technology and Development (ICCTD 2011) China.
- 6- Certificate from 3rd International Conference on Mechanical and Electrical Technology (ICMET 2011) China.
- 7- Certificate from 2012 International Conference on Biomedical Engineering and Biotechnology (ICBEB) China.
- 8- Certificate from 15<sup>th</sup> International Conference on Applied Mechanics and Mechanical Engineering (AMME-15) Egypt.
- 9- Certificate from 2nd International Conference on Mechanical Science and Engineering (ICMSE 2012) China.
- 10- Certificate from 3rd International Conference on Computer Science and Logistics Engineering (ICCSLE 2013) China.
- 11- Certificate from 4<sup>th</sup> International Conference on Mechanical Science and Engineering (ICMSE 2014) China.
- 12- Certificate from 2014 The International Conference on Mechanical Engineering and Design (MED 2014) China.
- 13- Certificate from Journal of Naval Architecture and Marine Engineering Bangladesh.
- 14- Certificate from International Journal of Mechanical and Materials Engineering (IJMME) Malaysia.
- 15- Certificate from Engineering Applications of Computational Fluid Mechanics Journal Hong Kong.

- 16- Certificate from Journal of Engineering Science and Technology Malaysia.
- 17- Certificate from Fundamental Journal of Thermal Science and Engineering India.
- 18- Certificate from Fundamental Journal of Mathematical Physics India.
- 19- Certificate from Fundamental Journal of Modern Physics India.
- 20- Certificate from Journal of Encapsulation and Adsorption Sciences United States of America.
- 21- Certificate from Journal of Electronics Cooling and Thermal Control United States of America.
- 22- Certificate from International Journal of Modeling and Optimization Singapore.
- 23- Certificate from AMSE Journals France.
- 24- Certificate from Mathematica Aeterna Bulgaria.
- 25- Certificate from American Journal of Analytical Chemistry (AJAC) United States of America.
- 26-Certificate from International Journal of Advanced Renewable Energy Research United States of America.
- 27-Certificate from Thermal Energy and Power Engineering (TEPE) Hong Kong.
- 28-Certificate from International Journal of Information Engineering (IJIE) United States of America.
- 29-Certificate from Scientific Research and Essays (SRE) Nigeria.
- 30-Certificate from Frontiers in Heat and Mass Transfer (FHMT) United States of America.
- 31- Certificate from International Journal of Heat and Technology Italy.
- 32- Certificate from Advanced Shipping and Ocean Engineering (ASOE) Hong Kong.
- 33- Certificate from Researches and Applications in Mechanical Engineering (RAME) United States of America.
- 34- Certificate from American Journal of Advanced Scientific Research (AJASR) Germany.
- 35- Certificate from International Journal of Computer Science and Artificial Intelligence (IJCSAI) Hong Kong.
- 36- Certificate from ARPN Journal of Science and Technology Pakistan.

- 37- Certificate from Theory and Applications of Mathematics and Computer Science (TAMCS) Romania.
- 38- Certificate from Online International Journal of Engineering and Technology Research (OIJETR) Nigeria.
- 39- Certificate from Prudence Journal of Engineering and Technology Research (PJETR) Nigeria.
- 40- Certificate from Thermal Science Serbia.
- 41- Certificate from African Journal of Engineering Research (AJER) Nigeria.
- 42- Certificate from Journal of Energy, Heat and Mass Transfer India.
- 43- Certificate from Journal of Basic and Applied Scientific Research (JBASR) United States of America.
- 44- Certificate from Computer Communication and Collaboration (CCC) Canada.
- 45- Certificate from Journal of Scientific Research Bangladesh.
- 46- Certificate from Mathematical Problems in Engineering Egypt.
- 47- Certificate from Advances in Chemical Engineering and Science (ACES) United States of America.
- **48-** Certificate from Journal of Mechanical Engineering and Technology (JMET) United States of America.
- 49- Certificate from Scientia Research Library (SRL) India.

# **Prizes and Honors**

- 1- Science Day Prize (2011) Ministry of Higher Education and Scientific Research **Iraq.**
- 2- Science Day Prize (2012) Ministry of Higher Education and Scientific Research Iraq.
- 3- Scopus H-Index of 5 United States of America.

#### **International Collaboration.**

- 1- Dr. Waqar Ahmed Khan (Professor of Mechanical Engineering National University of Sciences and Technology Department of Engineering Sciences PN Engineering College PNS Jauhar, Karachi 75350, Pakistan).
- 2- Dr. Hakan F. Oztop (Associate Professor Firat University Department of Mechanical Engineering Technology Faculty Elazig, Turkey ).

- 3- Dr. Hussain H. Al-Kayiem (Associate Professor Universiti Teknologi PETRONAS, (UTP) Department of Mechanical Engineering, Block 17 Bandar Seri Iskandar, 31750 Tronoh, Perak, Malaysia).
- 4-Mr.Sumon Saha (Assistant Professor- Bangladesh University of Engineering and Technology (BUET) -Department of Mechanical Engineering , Dhaka 1000, Bangladesh ).
- 5-Dr.Hussein A. Mohammed (Associate Professor Universiti Teknologi Malaysia (UTM) , Department of Thermofluids, Faculty of Mechanical Engineering , 81310 UTM Skudai , Johor Bahru , Malaysia ).
- 6- Dr. Sameh Elsayed Ahmed (Lecturer South Valley University, Faculty of Sciences, 83523, Department of Mathematics, Qena, Egypt).
- 7- Mr. Goutam Saha (Lecturer University of Dhaka, Department of Mathematics, Dhaka 1000, Bangladesh).
- 8- Dr. Arman Hasanpour (Lecturer Babol Noshirvani University of Technology, Faculty of Mechanical Engineering, Babol, Iran).
- 9- Dr.Lioua Kolsi (Lecturer Unité de Métrologie en Mécanique des Fluides et Thermique, École Nationale d'Ingénieurs de Monastir, Université de Monastir, 5000, Tunisia ).
- 10- Dr.Watit Pakdee (Assistant Professor Department of Mechanical Engineering , Faculty of Engineering , Thammasat University , Rangsit Campus , Klong Luang , Pathumthani , Thailand ).
- 11- Dr. I.K. Adegun (Senior Lecturer Department of Mechanical Engineering, University of Ilorin, Ilorin, Nigeria).
- 12- Dr. S. Sivasankaran (Senior Lecturer Institute of Mathematical Sciences, University of Malaya, Kuala Lumpur 50603, Malaysia).

## **Another Engineering Jobs.**

- 1- Work as a consultant in the thermal design field in a Al-Fourat company for Chemical Industries in Al-Massayiab Hilla-Iraq.
- 2- Work as a consultant in the General Company of Mechanical Industries (Casting Unit) in Al-Askandariaya Hilla-Iraq.
- 3- Work as a member of engineering group which prepare the mechanical engineering designs and tenders for air conditioning systems related to College of Law Babylon University Hilla –Iraq.
- 4- Work as a member of engineering group which prepare the mechanical engineering designs and tenders for Al-Hilla Waste Water Plant—Hilla—Iraq.
- 5- Work as a member of engineering group which prepare the mechanical engineering designs and tenders for Al-Kafal Waste Water Plant– Hilla Iraq.

- 6- Work as a member of engineering group which prepare the mechanical engineering designs and tenders for Al-Shamayia Waste Water Plant—Najaf—Iraq.
- 7 Work as a member of engineering group which prepare the mechanical engineering designs and tenders for air conditioning systems related to several buildings in University of Technology Baghdad –Iraq.
- 8- Work as a member of engineering group which prepare the mechanical engineering designs and tenders for Fire Fighting System and Automatic Gate related to Hilla Baghdad check point project.

#### **Publications.**

# A. Books.

1- Aerodynamics of Supersonic Flying Bodies , Publisher : LAP LAMBERT Academic Publishing GmbH & Co. KG , Heinrich-Böcking-Str. 6-8 , 66121, Saarbrücken , Germany , ISBN 978-3-8484-4447-2 , 187 Pages , 2012.

# B. Papers Published in Local Journals and Conferences.

- 1- Numerical investigations of can combustor with air preheat, *Journal of Engineering and Development*.
- 2- Numerical prediction of primitive variables for two dimensional supersonic flow over a wedge, *Babylon University Journal*, Vol.12, No.5, pp: 1105-1118, 2006.
- 3- Numerical solution of aerodynamic parameters for two-dimensional external supersonic flow over a double wedge, *Supplement Al-Kufa Journal*, Vol.8, No.2, pp: 55-67, 2007.
- 4- The effects of two shaft gas turbine operating conditions on the overall performance, *Al-Qadissiya Journal for Engineering Sciences*, Vol.1, No.1, pp: 60-75, 2008.
- 5- Prediction of shock wave and external flow field parameters in a moderate supersonic flow over a 3-D arc circular bump, *The Iraqi Journal for Mechanical and Materials Engineering*, Vol. 9, No. 1, pp: 1-14, 2009.
- 6- Numerical prediction of free convection phenomena through a rectangular inclined cavity filled with a porous media, *The Iraqi Journal for Mechanical and Materials Engineering*, Vol.10, No.1, pp: 1-21, 2010.
- 7- Finite volume simulation of steady laminer natural convection heat transfer through a mercury filled triangular enclosure with an isothermal cold side walls and an isothermal hot bottom wall, *Kufa Journal of Engineering*, Vol.1, No.1, pp: 59-77, 2009.
- 8 Numerical analysis of mixed convective flow through a lid-driven inclined rectangular cavity filled with mercury, *Babylon University journal*, Vol., No., pp: -, 2010.
- 9 Numerical simulation of natural convection in a laminer two dimensional flow through a vertical rectangular duct, *Al-Qadissiya Journal for Engineering Sciences*, Vol.3, No.1, pp: 51-63, 2010.

- 10- Numerical simulation of buoyancy- driven laminar flow through an air –filled isosceles triangular enclosure with a differentially heated side walls and an adiabatic bottom wall , *Engineering and Technology Journal* , Vol.28 , No.10 , pp: 2054-2069 , 2010.

  مقارنة المناهج الدراسية لبعض الجامعات العراقية بالمناهج القياسية العالمية (ABET) (المرحلة الثالثة -11
  - والرابعة للهندسة الميكانيكية) وأثرها في تطوير التعليم الهندسي في جامعات إقليم كردستان- العراق والرابعة للهندسة الميكانيكية) وأثرها في تطوير التعليم الهندسي في جامعات إقليم كردستان- العراق Presented in The First Engineering Education Conference (EEC 2012), Kurdistan Region University of Duhok, Duhok City, 17-19 April 2012, (in Arabic Language).
- 12- Three dimensional simulation of supersonic flow over missiles of different shapes , *Engineering and Technology Journal* , Vol.30 , No.3 , pp : 325 343 , 2012.
- 13- Combined convection in a TSNFL square cavity under various moving wall directions, *Journal of Kerbala University*, Vol.10, No.4 Scientific, pp: 71-85, 2012.

# C. Papers Published in International Journals and Conferences.

- 1- A thermodynamic analysis of non-equilibrium heat conduction in a semiinfinite medium subjected to a step change in temperature, *Energy* conversion and Management, Vol.44, No.8, pp : 1373-1386, 2003, U.S.A.
- 2- Numerical analysis of steady natural convection of water in inclined square enclosure with internal heat generation 2010 International Conference on Mechanical and Electrical Technology Proceedings (ICMET 2010) Singapore September 10 12, 2010, pp: 502-508, Singapore.
- 3- Numerical investigation of natural convection phenomena in a uniformly heated circular cylinder immersed in square enclosure filled with air at different vertical locations, *International Communications in Heat and Mass Transfer*, Vol.37, No.8, pp: 1115–1126, 2010, U.S.A.
- 4- Mixed convection through a lid-driven air filled square cavity with a hot wavy wall *International Journal of Mechanical and Materials Engineering* (*IJMME*), Vol. 5, No.2, pp: 222-235, 2010, Malaysia.
- 5- Mixed convection heat transfer in a differentially heated square enclosure with a conductive rotating circular cylinder at different vertical locations, *International Communications in Heat and Mass Transfer*, Vol. 38, No.2, pp: 263–274, 2011, U.S.A.
- 6- Natural convection heat transfer in a differentially heated square enclosure with a heat generating-conducting circular cylinder at different diagonal locations 6<sup>th</sup> International Advanced Technologies Symposium Proceedings (IATS'11), 16-18 May, 2011, pp: 13-19, Elazığ, Turkey.
- 7- Natural convection in a square inclined enclosure with vee-corrugated sidewalls subjected to constant flux heating from below, *Nonlinear Analysis: Modelling and Control*, Vol. 16, No. 2, pp: 152–169, 2011, Lithuania.

- 8- Natural convection in a modified square enclosure with an inclined triangular top wall subjected to uniform heat flux in its left vertical wavy side wall *The Third Asian Symposium on Computational Heat Transfer and Fluid Flow (ASCHT 2011)*, 22-26 September, 2011, Paper No.38, pp: 1-10, Kyoto University, Kyoto, Japan.
- 9- Starting up of waxy crude oil pipeline using 'Hot Oiling' technique *Proceedings* of the 3rd (2011) CUTSE International Conference, 8-9 Nov., 2011, pp: (068-917) (075 917), Miri, Sarawak, Malaysia.
- 10 -Mixed convection in a tilted lid-driven square enclosure with adiabatic cylinder at the center, *International Journal of Heat and Technology*, Vol. 29, No.1, pp: 143-156, 2011, Italy.
- 11- Investigation of heat and mass transfer of MHD flow over the movable permeable plumb surface using HAM, *Middle-East Journal of Scientific Research*, Vol. 9, No. 4, pp: 510-515, 2011, Pakistan.
- 12- The application of nanofluids on three-dimensional mixed convection heat transfer in equilateral triangular duct, *International Journal of Heat and Technology*, Vol. 29, No.2, pp: 3-12, 2011, Italy.
- 13- Heat transfer from hollow cylinder using optimal homotopy asymptotic method , *Heat Transfer Asian Research* , Vol. 41 , No.2 , pp : 114 -126 , 2012, U.S.A.
- 14- Numerical computation of buoyancy-driven flow and heat transfer in various aspect ratios cavities filled with water *Proceedings of the 15<sup>th</sup> International Conference on Applied Mechanics and Mechanical Engineering (AMME-15)*, 29-31 May, 2012, pp: MP 146 MP 163, Military Technical College, Cairo, Egypt.
- 15- Effects of diameter ratio of adiabatic circular cylinder and tilt angle on natural convection from a square open tilted cavity, *Heat Transfer Asian Research*, Vol. 41, No.5, pp: 388 401, 2012, U.S.A.
- 16- Numerical simulation of three-dimensional double diffusive free convection flow and irreversibility studies in a solar distiller, *International Communications in Heat and Mass Transfer*, Vol. 39, No.6, pp: 869-876, 2012, U.S.A.
- 17- Studying the effects of a longitudinal magnetic field and discrete isoflux heat source size on natural convection inside a tilted sinusoidal corrugated enclosure, *Computers and Mathematics with Applications*, Vol. 64, No.4, pp: 476-488, 2012, U.S.A.
- 18 MHD natural convection inside an inclined trapezoidal porous enclosure with internal heat generation or absorption subjected to isoflux heating, *Heat Transfer Asian Research*, Vol. 41, No.6, pp: 498-515, 2012, U.S.A.
- 19 Mixed convection of water-based nanofluids in a rectangular inclined lid-driven cavity partially heated from its left side wall, *Journal of Computational and*

- 20- Computational analysis of natural convection in a parallelogrammic cavity with a hot concentric circular cylinder moving at different vertical locations, *International Communications in Heat and Mass Transfer*, Vol. 46, No. , pp: 126-133, 2013, U.S.A.
- 21- Numerical study on mixed convection in an inclined lid-driven cavity with discrete heating, *International Communications in Heat and Mass Transfer*, Vol. 46, No., pp:112-125, 2013, U.S.A.
- 22- Experimental investigation of various solid particle materials on the steady state gas-solid fluidized bed system, *Journal of Basic and Applied Scientific Research*, Vol. 3, No.7, pp: 293-304, 2013, U.S.A.
- 23- Numerical simulation of three-dimensional supersonic flow around an aerodynamic bump, *Journal of Basic and Applied Scientific Research*, Vol. 3, No.7, pp: 656-666, 2013, U.S.A.
- 24- Launching process for variable-mass rockets by series solution , *Journal of Mechanical Engineering and Technology*, Vol. 1, No.1, pp : 13-20, 2013, U.S.A.
- 25- Effect of a contaminant source (CO<sub>2</sub>) inside a ventilated room: Thermal comfortair quality, *Researches and Applications in Mechanical Engineering*, Vol. 2, No.2, pp: 43-48, 2013, U.S.A.
- 26- Natural convection analysis around a hot solid circular cylinder embedded inside an octagonal enclosure at various orientation locations International Conference on Mechanical Engineering and Manufacturing (ICMEM 2013), June 20-21, 2013, World Academy of Science, Engineering and Technology Vol.78, pp: 1238-1243, Istanbul, Turkey.
- 27- Natural convection in a square enclosure filled with a saturated porous matrix under different discrete heat sources locations International Conference on Mechanical Engineering and Manufacturing (ICMEM 2013), June 20-21, 2013, World Academy of Science, Engineering and Technology Vol.78, pp: 1896-1902, Istanbul, Turkey.
- 28- Numerical simulation of forced convective flow and heat transfer in gravitationally inclined circular pipes with equi-spaced internal fins, *Journal of Basic and Applied Scientific Research*, Vol. 3, No.10, pp: 182-193, 2013, U.S.A.
- 29- Mixed convection in cylinders A comprehensive overview and understanding , *Journal of Basic and Applied Scientific Research* ,Vol. 3, No.10, pp : 328-338, 2013 , U.S.A.
- 30- Effects of a longitudinal magnetic field and discrete isoflux heat source size on natural convection inside a tilted sinusoidal corrugated enclosure, *Journal of Basic and Applied Scientific Research*, Vol. 3, No.10, pp: 402-415, 2013, U.S.A.

- 31- Numerical study of natural convection around an adiabatic circular cylinder located inside a square open cavity, *Journal of Basic and Applied Scientific Research*, Vol. 3, No.11, pp: 189-200, 2013, U.S.A.
- 32- Effect of dual-phase-lag in the presence of suction / injection on unsteady free convection micro-channel flow between two vertical porous plates, *Journal of Basic and Applied Scientific Research*, Vol. 3, No.11, pp: 230-250, 2013, U.S.A.
- 33- Numerical analysis of transport phenomenon inside a pulse tube refrigerator coupled with fuzzy logic controller, *Universal Journal of Mechanical Engineering*, Vol. 1, No.3, pp: 69-82, 2013, U.S.A.
- 34- Investigations of natural convective heat transfer in rectangular thermal passages , *International Journal of Mechanical Science and Engineering* ,Vol. 7, No.3 , pp : 830 -835 , 2013.
- 35- Finite volume simulation of natural convection in a trapezoidal cavity filled with various fluids and heated from the top wall, *Universal Journal of Fluid Mechanics*, Vol. 1, No., pp: 24-36, 2013, European Union.
- 36- Mixed convection over a backward-facing step in a vertical duct using nanofluids buoyancy opposing case, *Journal of Computational and Theoretical Nanoscience*, Vol. 11, No.3, pp: 860-872, 2014, U.S.A.
- 37- Mixed convection in a lid-driven two-dimensional square cavity with corner heating and internal heat generation, *Numerical Heat Transfer*, *Part A*, Vol. 65, No.3, pp: 269-286, 2014, United Kingdom.
- 38- Viscous dissipation and radiation effects on MHD natural convection in a square enclosure filled with a porous medium , *Nuclear Engineering and Design* ,Vol. 266, No. ,pp: 34-42, 2014, U.S.A.
- 39- Lattice Boltzmann simulation of natural convection heat transfer in an open enclosure filled with Cu–water nanofluid in a presence of magnetic field, *Nuclear Engineering and Design*, Vol. 268, No., pp: 10-17, 2014, U.S.A.
- 40- Boundary layer flow and heat transfer due to permeable stretching tube in the presence of heat source / sink utilizing nanofluids, *Applied Mathematics and Computation*, Vol. 238, No. , pp: 149-162, 2014, U.S.A.

# **Submitted to Publication.**

1- Natural Convection Visualization by Heatlines in an Inclined Wavy Cavities Filled with Nanofluids and Subjected to a Discrete Isoflux Heating from its Left Sidewall.

- 2 Numerical Simulation of Natural Convection In a Parallelogrammic Enclosure Containing Volumetric Heat Source with Non-Uniformly Heated Left Side Wall
- 3 Natural convection flow of an enclosure with a square solid body in the presence of heat generation.
- 4- Combined Effects of Radiation and Viscous Dissipation on Magnetohydrodynamic Free Convection in a Square Porous Cavity with Localized Isoflux Heating.
- 5- Mixed convection in a parallel motion two-sided lid-driven parallelogrammic cavity containing internal heat source with non-uniform hot left inclined side wall.
- 6- Heat transfer enhancement by utilizing nanofluids in triangular micro channel heat exchanger .
- 7- Applications of nanotechnology in renewable energies A comprehensive overview and understanding.
- 8- Effects of radiation on mixed convection in power- law fluids along vertical cone in porous media.
- 9- Multi-objective optimization of a three-dimensional internally finned tube based on Response Surface Methodology (RSM).
- 10- Magneto-hydrodynamic Laminar Mixed Convection in a Differentially Heated Two-Sided Lid-Driven Parallelogrammic Enclosure.
- 11- Numerical Computation of 3-Dimensional Supersonic Flow Field over a Seamless Missile.
- 12- THERMOFLUIDS FOR SOLAR ENERGY BASED POWER GENERATION
- 13- Magneto-hydrodynamic mixed convection of water-Al<sub>2</sub>O<sub>3</sub> nanofluid in a wavy liddriven cavity.
- 14- Modeling of MHD Natural Convection with Prandtl Number Effect Around an Adiabatic Square Shaped Body Located In a Square Enclosure By Using Lattice Boltzmann Method.
- 15- Effect of blockage shapes on transient mixed convection nanofluid flow at backward facing step.
- 16- MHD mixed convection in a three-dimensional lid-driven cavity.
- 17- Natural convection in a complex rectangular cavity having an adiabatic solid strip and subjected to a uniform heat flux from its left sidewall.

- 18- A 3D finite element analysis of incompressible fluid flow and contaminant transport through a porous landfill.
- 19 CFD Modeling of Mixed Convection In a Two-Sided Non-Facing Lid- Driven Square Cavity Filled with Air Under Various Moving Wall Directions.
- 20- ONSET OF THERMAL INSTABILITY IN A LOW PRANDTL NUMBER NANOFLUID LAYER HEATED FROM BELOW IN A POROUS MEDIUM.
- 21- Effect of suspended particles on the onset of thermal convection in a nanofluid layer with free boundaries.
- 22- Mathematical model in the form of vorticity-stream function for combustion in porous Media.
- 23- A 2-D Numerical Study of Non-linear Dynamics Behavior for Joule-Heated Rectangular Pool.
- 24- Entropy generation minimization of three-dimensional magneto-hydrodynamic mixed convection in a lid-driven cubical cavity.
- 25- A Comprehensive Review of Transient Natural Convection Flow in Enclosures.
- 26- Numerical simulation of mixed convection of copper-water nanofluid in a rectangular inclined lid-driven enclosure with a localized heat source.
- 27- Conjugate natural convection in an inclined square porous enclosure with finite wall thickness and partially heated from its left side wall.
- 28- An experimental investigation of transient natural convection in a two-dimensional differentially heated air-filled elongated cavity: Gradual heating case
- 29- Natural Convection in a Differentially Heated Square Enclosure Filled with Copper-Water Nanofluid and Subjected to an Inclined Magnetic Field.
- 30- Mixed convection heat transfer in a lid-driven trapezoidal enclosure filled with nanofluids.
- 31- The impact of flow arrangements on a trapezoidal shaped microchannel heat exchanger using nanofluids.
- 32- Transient Buoyancy- Driven Laminar Convection in an Inclined Three- Dimensional Trapezoidal Enclosure.
- 33- Computational analysis of three-dimensional unsteady natural convection and entropy generation in a cubical enclosure filled with water-Al<sub>2</sub>O<sub>3</sub> nanofluid.
- 34- Natural convection with viscous dissipation and radiation effects in an inclined square

- porous enclosure using a thermodynamic non-equilibrium model.
- 35- Entropy generation analysis of combined heat and mass transfer for flow of water-based nanofluids over a flat plate.
- 36- Natural Convection Analysis around a Hot Solid Circular Cylinder Embedded Inside an Octagonal Enclosure at Various Orientation Locations.
- 37- Numerical study of three-dimensional unsteady natural convection and entropy generation in a cubical cavity with partially active vertical walls.
- 38- Three-dimensional unsteady natural convection and entropy generation in an inclined cubical trapezoidal cavity subjected to uniformly heated bottom wall.
- 39- ENERGY CONSUMPTION AND SAVINGS IN BUILDINGS.