

WALEED FEKRY FARIS



- KULLIYAH OF ENGINEERING
- IIUM Gombak Campus
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ACADEMIC QUALIFICATION

- Ph.D in Non-linear Dynamics
- Master in Applied Computational Mechanics
- Bachelor in Mechanical Engineering

TEACHING RESPONSIBILITIES

ACOUSTICS AND NOISE CONTROL	2009/2010 2010/2011 2012/2013 2013/2014
ADVANCED VEHICLE DYNAMICS	2006/2007 2008/2009 2011/2012 2012/2013 2014/2015
ADVANCED VIBRATION	2009/2010 2011/2012 2020/2021
AEROELASTICITY	2006/2007
AUTOMOTIVE CONTROL SYSTEM	2011/2012 2014/2015 2015/2016
AUTOMOTIVE CONTROL SYSTEMS	2018/2019
AUTOMOTIVE INTEGRATED DESIGN	2019/2020
AUTOMOTIVE MANUFACTURING PROCESS	2019/2020
AUTOMOTIVE STYLING METHODOLOGIES	2004/2005 2005/2006 2008/2009 2009/2010 2010/2011 2011/2012 2012/2013 2013/2014 2014/2015 2015/2016 2016/2017 2017/2018 2018/2019
Acoustics and Noise Control	2018/2019
CONTROL SYSTEMS	2004/2005 2005/2006 2006/2007 2009/2010
CONTROL SYSTEMS (LAB)	2004/2005
DESIGN OF AUTOMOTIVE TRANSMISSION SYSTEMS	2016/2017
DYNAMICS	2004/2005
FLIGHT DYNAMICS AND CONTROL	2006/2007
HALAQAH 1 (BR)	2005/2006
HALAQAH 1 (BROTHER)	2006/2007
HALAQAH 2 (BR)	2005/2006

HALAQAH 2 (BROTHER)	2005/2006
INTELLIGENT VEHICLE SYSTEM	2019/2020
INTERNAL COMBUSTION ENGINE	2006/2007
KINEMATICS AND DYNAMICS OF MACHINERY	2007/2008 2010/2011
MECHANICAL VIBRATIONS	2015/2016
MODELING AND SIMULATION	2007/2008
POWER TRAIN SYSTEMS	2004/2005 2005/2006 2006/2007 2007/2008 2008/2009 2009/2010 2010/2011 2011/2012 2012/2013 2013/2014 2016/2017 2017/2018
PROJECT I	2020/2021
PROJECT II	2018/2019 2019/2020
RELIABILITY ENGINEERING FOR AUTOMOTIVE APPLIC	2011/2012 2012/2013
SMART STRUCTURES	2012/2013 2013/2014 2015/2016
SPECIAL TOPIC IN AUTOMOTIVE ENGINEERING I	2006/2007
SPECIAL TOPICS IN MECHANICAL ENGINEERING	2010/2011 2018/2019
STRUCTURAL DYNAMICS	2013/2014 2014/2015
TECHNOLOGY MANAGEMENT	2007/2008
VALUES, TECHNOLOGY AND SOCIETY	2020/2021
VALUES, TECHNOLOGY AND SOCIETY (RESEARCH MODE)	2020/2021
VEHICLE DYNAMICS	2008/2009 2009/2010 2010/2011 2011/2012
VEHICLE DYNAMICS & SIMULATIONS	2004/2005 2005/2006 2006/2007 2007/2008 2008/2009
VIBRATION AND AEROLASTICITY	2006/2007

RESEARCH PROJECTS

In Progress

**2018 -
Present**

Construction of Moral Values Education Course Module for Pre-Service Teachers

- 2017 - Present** Constructing and Validating An Islamic Spiritual Enhancement Module For Mental Health In Psychology Stress (International Institute of Islamic Thought (IIIT))
- 2017 - Present** Constructing and Validating An Islamic Spiritual Enhancement Module For Mental Health In Psychology Stress
- 2017 - Present** Dynamic Modeling, Navigation and Control of Micro Aerial Vehicles
- 2014 - Present** Pembangunan Pelaksanaan Indeks Syariah Dalam Pentadbiran Negara
- 2009 - Present** Operations and Quality Management

Completed

- 2017 - 2019** Dynamic Modeling, Navigation and Control of Micro Aerial Vehicles
- 2012 - 2012** Problems Encountered by Scholarships Students on Scholarship Schemes in both the Islamic University Madinah (KSA) and International Islamic University Malaysia: A Comparative Study
- 2012 - 2016** Vibration Isolation Method using Variable Stiffness and Friction Damping
- 2011 - 2012** Systematic Study of University Quality System
- 2009 - 2013** Design and Development of the Mechanical System for Golleq
- 2009 - 2011** Analysis and Modelling of Proton Exchange Membrane (PEM) Fuel Cell System
- 2009 - 2009** Machine Element Design for Engineers
- 2009 - 2011** An Investigation of the Mechanical Behaviour of MEMS-based Microswitch under Thermal and Electrostatic Loading including Cryogenic Effect
- 2009 - 2011** Modeling and Stimulation for Engineers
- 2009 - 2011** Analysis of Stability and Control Strategies for an Autonomous Unmanned Aerial Vehicle (UAV)
- 2008 - 2012** Vibro-Acoustic Analysis of Automotive Vehicles
- 2008 - 2014** Humanized Industrial Design of a Handphone.
- 2008 - 2009** Intelligent Controller of Flexible Manipulator
- 2007 - 2012** Total Vehicle Dynamics Analysis
- 2007 - 2012** Simulation and Device Modeling of Poly-Si Thin Film Solar Cells
- 2007 - 2019** Study of Characteristics and Performance of Active Engine Mounting System Using Artificial Neural Network Based Controller
- 2006 - 2011** Influence of Different Methods of Slaughtering on the Release and/or Retention of Neurotransmitter and Other Biomolecules at Neuromascular Junction

2005 - 2008 Modeling and Analysis of Fluid/Structure Interaction in Micropumps

2004 - 2007 Nonlinear Modeling and Analysis of Mems-Based Diaphragm Devices

PUBLICATIONS

Article

- 2020** [An improved narrowband active noise control system without secondary path modelling based on the time domain.](#) International Journal of Vehicle Noise and Vibration , 15 (2-3) pp.110-132
- 2020** [Modeling and analysis of wastewater heat recovery system in Kuwait.](#) International Journal of Mechanical and Production Engineering Research and Development (IJMPERD) , 10 (3) pp.7895-7910
- 2020** [Development of vibration damper to reduce generated stress due to flow induced vibrations in pipeline.](#) International Journal of Mechanical and Production Engineering Research and Development (IJMPERD) , 10 (3) pp.11657-11668
- 2019** [Computational validation of magnetorheological elastomers for engine mount application.](#) International Journal of Recent Technology and Engineering , 7 (6S) pp.180-184
- 2019** [Control of using robust \$H_{\infty}\$ control with genetic algorithm.](#) International Journal of Advanced Science and Technology , 28 (16) pp.763-782
- 2019** [Analysis of active suspension control policies for vehicle using robust controllers.](#) International Journal of Advanced Science and Technology , 28 (16) pp.836-855
- 2019** [Optimization of robust and LQR control parameters for half car model using genetic algorithm.](#) International Journal of Advanced Science and Technology , 28 (16) pp.792-811
- 2019** [Ride comfort performance of a non-linear full-car using active suspension system with active disturbance rejection control and input decoupling transformation.](#) International Journal of Heavy Vehicle Systems , 26 (2) pp.188-224
- 2018** [Representative Nigerian anthropometric data for automotive applications.](#) Journal of Mechanical Engineering , 5 (Specialissue 4) pp.68-88
- 2018** [Gain scheduled integral linear quadratic control for quadcopter.](#) International Journal of Engineering and Technology , 7 (4.13 (Special issue 13)) pp.81-85
- 2018** [All-pass filtered x least mean square algorithm for narrowband active noise control.](#) Applied Acoustics , 142 pp.1-10
- 2018** [Automotive seat fit parameters based on representative Nigerian anthropometric data.](#) Malaysian Journal of Public Health Medicine , 18 (Special Issue 2) pp.32-40
- 2017** [Validated analytical modelling of supercharging centrifugal compressors with vaneless diffusers for H₂-biodiesel dual-fuel engines with cooled EGR.](#) International Journal of Hydrogen Energy , 42 (43) pp.26771-26786
- 2017** [The true inventor of some early mechanical engineering devices and mechanisms.](#) Al-Shajarah , 22 (1) pp.29-64
- 2016** [Validated analytical modeling of diesel engine regulated exhaust CO emission rate.](#) Advances in Mechanical Engineering , 8 (6) pp.1-15
- 2016** [Experimentally validated analytical modeling of diesel engine power and in-cylinder gas speed dynamics.](#) Journal of Mechanical Science and Technology , 30 (10) pp.4725-4734
- 2016** [Fuel efficient intelligent control of heavy trucks.](#) ARPN Journal of Engineering and Applied Sciences , 11 (6) pp.4164-4171

- 2016 [Thermal performance of fined plate mini-channel heat sink.](#) IOSR Journal of Mechanical & Civil Engineering (IOSR-JMCE) , 18 (6) pp.1-4
- 2016 [The transverse shear deformation behaviour of magneto-electro-elastic shell.](#) Journal of Mechanical Science and Technology , 30 (1) pp.77-87
- 2016 [Characterization of magnetorheological elastomer \(MRE\) engine mounts.](#) Materials Today: Proceedings , 3 (2) pp.411-418
- 2016 [A mixed control system for active suspension for off-road vehicles.](#) International Journal of Vehicle Noise and Vibration , 12 (2) pp.101-137
- 2015 [Dynamic characterization of vehicle structural panels.](#) International Journal of Vehicle Noise and Vibration , 11 (3/4) pp.199-209
- 2015 [Evaluation of elastomeric models for engine mountings applications .](#) International Journal of Vehicle Noise and Vibration , 11 (3/4) pp.210-224
- 2015 [Dynamic characterisation of vehicle structural panels.](#) International Journal of Vehicle Noise and Vibration , 11 (3-4) pp.199-209
- 2015 [Ride comfort performance of a vehicle using active suspension system with active disturbance rejection control .](#) International Journal of Vehicle Noise and Vibration , 11 (1) pp.78-101
- 2014 [Dynamic characterisation of car door and hood panels using FEA and EMA.](#) Applied Mechanics and Materials , 471 pp.89-96
- 2014 [Impact of intelligent transportation systems on vehicle fuel consumption and emission modeling: an overview.](#) SAE International Journal of Materials and Manufacturing , 7 (1) pp.129-146
- 2014 [Optimisation and control of semi-active suspension using genetic algorithm for off-road full vehicle.](#) International Journal of Vehicle Systems Modelling and Testing , 9 (3/4) pp.372-382
- 2014 [Supercharged diesel powertrain intake manifold analytical model.](#) International Journal of Vehicle Systems Modelling and Testing , 9 (1) pp.1-35
- 2014 [Dynamic characterization of car door and hood panels using FEA and EMA.](#) Applied Mechanics and Materials , 471 pp.89-96
- 2014 [A comparative ride performance of passive, semi-active and active suspension systems for off-road vehicles using half car model.](#) International Journal of Heavy Vehicle Systems (IJHVS) , 21 (1) pp.26-41
- 2014 [Experimentally validated analytical modeling of diesel exhaust HC emission rate.](#) Journal of Mechanical Science and Technology , 28 (10) pp.4139-4149
- 2014 [Scientific research dilemma in contemporary Muslim world.](#) International Journal of Muslim Unity , 12 (1&2) pp.1-12
- 2013 [Digital implementation of space vector pulse width modulation technique using 8-bit microcontroller .](#) World Applied Sciences Journal , 21 (1) pp.21-28
- 2013 [Air pollution study of vehicles emission in high volume traffic: Selangor, Malaysia as a case study.](#) WSEAS Transactions on Systems , 12 (2) pp.67-84
- 2012 [Contact-impact problems using a quasi-linear finite element approach.](#) Australian Journal of Basic and Applied Sciences , 6 (1) pp.17-21
- 2012 [Comparative analysis of LQR and robust controller for active suspension.](#) International Journal of Vehicle Noise and Vibration , 8 (4) pp.367-386
- 2012 [Investigation of the performance of a rotor-bearing systems containig composite and non-composite squeeze film dampers.](#) Materials and Design , 34 pp.340-345
- 2012 [Enhancing the efficiency of polymerase chain reaction using graphene nanoflakes.](#) Nanotechnology , 23 (45) pp.1-8

- 2012 [Axisymmetric vibration analysis of isotropic circular plate with attached annular piezoceramic plate.](#) International Journal of Vehicle Noise and Vibration , 8 (4) pp.302-317
- 2012 [Micropump modeling: current status and challenges.](#) Australian Journal of Basic and Applied Sciences , 6 (1) pp.134-142
- 2012 [Contact-impact problems using a quasi-linear finite element approach.](#) Australian Journal of Basic and Applied Sciences , 6 (1) pp.17-21
- 2012 ["وسائل التربية فى رسائل النور" رؤية فى توحيد المفاهيم.](#) International Journal of Muslim Unity , 10 (1-2) pp.47-83
- 2012 [مقابلة مع الدكتور عبد العزيز التوجرى: الأمين العام للمنظمة الإسلامية للتربية والعلوم والثقافة \(الإيسيسكو\).](#) International Journal of Muslim Unity , 10 (1-2) pp.83-95
- 2012 [Vibration investigation of a quarter car with nonlinear shock absorber model.](#) Advanced Materials Research , 576 pp.665-668
- 2011 [Air supply system transient model for proton exchange membrane fuel cell.](#) International Journal of Vehicle systems Modelling and Testing , 6 (3/4) pp.396-407
- 2011 [A study of noise transmission through cylindrical shell using modal truncation approach.](#) International Journal of Vehicle Noise and Vibration , 7 (3) pp.271-284
- 2011 [Influence of chip serration frequency on chatter formation during end milling of Ti6Al4V.](#) Journal of Manufacturing Science and Engineering , 133 (1) pp.011013-1
- 2011 [Vibrational characteristics of piping system in air conditioning outdoor unit.](#) Science China Technological Sciences , 54 (5) pp.1154-1168
- 2011 [A new concept design of a motorbike with 3D model for the Malaysian market.](#) Journal of Design Research , 9 (1) pp.16-43
- 2011 [Random vibrations of a beam on elastic foundation.](#) Australian Journal of Basic and Applied Sciences , 5 (6) pp.456-460
- 2011 [Visual inspection on premature failure of electric motor bearings.](#) Applied Mechanics and Materials , 84-85 pp.557-561
- 2011 [Chip serration frequency-the primary cause of chatter during end milling operation.](#) Advanced Materials Research , 264-26 pp.1174-1179
- 2011 [Analysis and simulation of semi-active suspension control policies for two-axle off-road vehicle using full model.](#) International Journal of Vehicle Systems Modelling and Testing , 6 (3/4) pp.219-231
- 2011 [Optimum KOH wet etching of cantilever tip for better image captured by nanoeducator.](#) Applied Mechanics and Materials , 84-85 pp.392-395
- 2011 [The structural integrity assessment of a partially filled tank pertaining to liquid sloshing upon sudden brake applications.](#) International Journal of Vehicle Systems Modelling and Testing , 6 (3/4) pp.307-317
- 2011 [Vehicle fuel consumption and emission modelling: an in-depth literature review.](#) International Journal of Vehicle Systems Modelling and Testing , 6 (3/4) pp.318-392
- 2011 [Statistical Approach for the Development of Tangential Cutting Force Model in End Milling Of Ti6Al4V.](#) Advanced Materials Research , 264/65 pp.1160-1165
- 2011 [Vibrational characteristics of piping system in air conditioning outdoor unit.](#) Science China Technological Sciences , 54 (5) pp.1154-1168
- 2011 [Review on solution methods for random vibration problems.](#) Australian Journal of Basic and Applied Sciences , 5 (6) pp.355-359
- 2011 [Active engine mounting controller design using linear quadratic regulator and proportional integral derivative.](#) International Journal of Automation and Control , 5 (3) pp.284-297

- 2010 [Modelling manufacturing process using a modified IDEF0 framework a case study of a car door manufacturing plant.](#) International Journal of Engineering Systems Modelling and Simulation , 2 (4) pp.234-241
- 2010 [Development of a mathematical model for the prediction of chip formation instability and its verification by fuzzy logic with genetic algorithm.](#) International Journal of Machining and Machinability of Materials (IJMMM) , 8 (1/2) pp.38-54
- 2010 [An evaluation of LQR and fuzzy logic controllers for active suspension using half car model.](#) International Journal of Vehicle Noise and Vibration , 6 (2/3/4) pp.200-214
- 2010 [The teaching of ethics at KOE, IIUM.](#) Eubios Journal of Asian and International Bioethics , 20 (6 SupB) pp.256
- 2010 [A critical evaluation on the effectiveness of ISO 9001:2000 \(QMS\) implementation in Malaysian and Saudi manufacturing companies.](#) International Journal of Arab Culture, Management and Sustainable Development , 1 (3) pp.302-324
- 2010 [Dynamic characterisation of elastomeric engine mounts of different geometry used in automotive industry: simulation approach.](#) International Journal of Vehicle Noise and Vibration , 6 (1) pp.1-39
- 2010 [Investigations of formation of chatter in a non-wavy surface during thread cutting and turning operations.](#) Advanced Materials Research , 83-86 pp.637-645
- 2010 [Teaching engineering ethics: a necessary measure for engineering capacity building in Arab countries.](#) International Journal of Arab Culture, Management and Sustainable Development , 1 (4) pp.318-325
- 2010 [Role of chip serration frequency in chatter formation during end milling operation of stainless steel.](#) Advanced Materials Research , 97-101 pp.1989-1992
- 2010 [Identification of instabilities of the chip formation and it's prediction model during end milling of medium carbon steel \(S45C\).](#) American Journal of Applied Sciences , 3 (1) pp.193-200
- 2010 [Aerodynamic derivatives identification for ground vehicles in crosswind using neural network and PCA.](#) International Journal of Vehicle Systems Modelling and Testing , 5 (1) pp.59-71
- 2010 [An evaluation of LQR and fuzzy logic controllers for active suspension using half car model.](#) International Journal of Vehicle Noise and Vibration , 6 (2-4) pp.200-214
- 2010 [Assessment of different semi-active control strategies on the performance of off-road vehicle suspension systems.](#) International Journal of Vehicle Systems Modelling and Testing , 5 (2-3) pp.254-271
- 2010 [Identification of instabilities of the chip formation and it's prediction model during end milling of medium carbon steel \(S45C\).](#) American Journal of Applied Sciences , 3 (1) pp.193-200
- 2010 [Aerodynamic derivatives identification for ground vehicles in crosswind using neural network and PCA.](#) International Journal of Vehicle Systems Modelling and Testing , 5 (1) pp.59-71
- 2010 [A study of annular plate buckling problem with tension loaded at inner edge.](#) Analele Universitatii 'Eftimie Murgu' , 17 (1) pp.97-103
- 2009 [Investigation into noise problems in vehicle structure using vibro-acoustic approach.](#) International Journal of Vehicle Noise and Vibration , 5 (3) pp.238-260
- 2009 [Active engine mounting control algorithm using neural network .](#) Shock and Vibration , 16 pp.417-437
- 2009 [Prediction of tangential cutting force in end milling of medium carbon steel by coupling design of experiment and response surface methodology.](#) Journal of Mechanical Engineering , 40 (2) pp.95-103
- 2009 [Dynamic modal analysis of vertical machining centre components.](#) Advances in Acoustics and Vibration , 2009 (508076) pp.1-10
- 2009 [Mathematical model for the prediction of chip serration frequency in end milling of steel AISI1020.](#) Tome VII , 1 pp.89-96

- 2009 [Ride performance analysis of half-car model for semi-active system using RMS as performance criteria.](#) Shock and Vibration , 16 pp.593-605
- 2009 [Fatigue analysis of Package Terminal Air Conditioner motor bracket under dynamic loading.](#) Materials and Design , 30 pp.3206-3216
- 2009 [Analysis of semi-active suspension systems for four-axles off-road vehicle using half model.](#) International Journal of Vehicle Noise and Vibration , 5 (1/2) pp.91-115
- 2009 [Energy minimization approach for a two-link flexible manipulator .](#) Journal of Vibration and Control , 15 (4) pp.497-526
- 2009 [A comparative ride performance and dynamic analysis of passive and semi-active suspension systems based on different vehicle models.](#) International Journal of Vehicle Noise and Vibration , 5 (1/2) pp.116-140
- 2009 [Artificial neural network chip serration frequency model in end milling of medium carbon steel.](#) Research Journal of Applied Sciences , 4 (3) pp.108-112
- 2009 [Characterisation of dynamic behaviour of vertical machining centre components: experimental and simulation approaches.](#) International Journal of Engineering Systems Modelling and Simulation , 1 (4) pp.231-241
- 2009 [A comparative ride performance and dynamic analysis of passive and semi-active suspension systems based on different vehicle models.](#) International Journal of Vehicle Noise and Vibration , 5 (1/2) pp.116-140
- 2009 [Technology transfer: challenges and prospective Arab world as a case study.](#) International Journal of Arab Culture, Management and Sustainable Development , 1 (2) pp.195-207
- 2009 [Analysis of semi-active suspension systems for four-axles off-road vehicle using half-model.](#) International Journal of Vehicle Noise and Vibration , 5 (1/2) pp.91-115
- 2009 [Transient and steady state dynamic analysis of passive and semi-active suspension systems using half-car model.](#) International Journal of Modelling, Identification and Control , 6 (1) pp.62-71
- 2008 [Analysis of control policies and dynamic response of a Q-car 2-DOF semi active system .](#) Shock and Vibration , 15 (5) pp.573-582
- 2008 [Active engine mounting controller using extended minimal resource allocating networks .](#) International Journal of Vehicle Noise and Vibration , 4 (2) pp.150-168
- 2008 [Response surface methodology approach for chip serration Frequency Prediction in milling.](#) International Journal of Advanced Manufacturing Technology pp.1-17
- 2008 [Response surface methodological approach for the prediction of tangential cutting forces in end milling of stainless steel.](#) Journal of Engineering , 6 (3) pp.171-178
- 2007 [Dynamics and control policies analysis of semi-active suspension systems using a full-car model.](#) International Journal of Vehicle Noise & Vibration , 3 (4) pp.370-405
- 2006 [An experimental study on steel and Teflon squeeze film dampers .](#) Shock and Vibration , 13 (1) pp.33-40
- 2006 [Image processing for chatter identification in machining processes.](#) International Journal of Advanced Manufacturing Technology , 31 pp.443-449

Conference or Workshop Item

- 2019 [Fuzzy-based collision avoidance system for autonomous driving in complicated traffic scenarios.](#) In: **2018 IEEE International Conference on Automatic Control and Intelligent Systems (I2CACIS 2018)**
- 2019 [Aerodynamics of a circular planform wing.](#) In: **4th International Conference on Mechanical, Automotive and Aerospace Engineering (ICMAAE 2018)**
- 2019 [Fuzzy based obstacle avoidance system for autonomous mobile robot.](#) In: **2018 IEEE International Conference on Automatic Control and Intelligent Systems (I2CACIS 2018)**

- 2018 [Simulation of disturbance rejection control of half-car active suspension system using ADRC with decoupling transformation.](#) In: **4th International Conference on Mathematical Applications in Engineering (ICMAE '17)**
- 2017 [Numerical study of heat transfer of embossed plate finned heat sink.](#) In: **3rd International Conference on Mechanical, Automotive and Aerospace Engineering, ICMAAE 2016**
- 2017 [An investigation into NVC characteristics of vehicle behaviour using modal analysis.](#) In: **3rd International Conference on Mechanical, Automotive and Aerospace Engineering 2016 (ICMAAE'16)**
- 2016 [Internal determinants of Waqaf in non-Muslim countries .](#) In: **Fifth International Journal of Awqaf 2016**
- 2011 [Analysis and simulation of semi-active suspension control policies for two-axle off-road vehicle using full model.](#) In: **International Conference on Mechanical, Automotive and Aerospace Engineering (ICMAAE' 11)**
- 2011 [Design of robust Hoo, fuzzy and LQR controller for active suspension of a quarter car model.](#) In: **2011 4th International Conference on Mechatronics: Integrated Engineering for Industrial and Societal Development, ICOM'11**
- 2011 [Enhancement of polymerase chain reaction using graphene nano-flakes.](#) In: **2nd International Conference on Biotechnology Engineering (ICBioE 2011)**
- 2011 [The structural integrity assessment of a partially filled tank pertaining to liquid sloshing upon sudden brake applications.](#) In: **International Conference on Mechanical, Automotive and Aerospace Engineering (ICMAAE' 11)**
- 2011 [Air supply system transient model for proton exchange membrane fuel cell.](#) In: **International Conference on Mechanical, Automotive and Aerospace Engineering (ICMAAE' 11)**
- 2010 [A comparative analysis of LQR and fuzzy logic controller for active suspension using half car model .](#) In: **11th International Conference on Control, Automation, Robotics and Vision, ICARC 2010**
- 2010 [A new technique for the investigation of chatter formation during end milling of medium carbon steel \(AISI 45\).](#) In: **International MultiConference of Engineers and Computer Scientists 2010, IMECS 2010**
- 2010 [An investigation of the mechanical behavior of a microswitch beam under thermal and electrostatic loading including cryogenic effect .](#) In: **2010 Symposium on Design Test Integration and Packaging of MEMS/MOEMS (DTIP 2010)**
- 2010 [Artificial nose for alcohol detection.](#) In: **IIUM Research, Innovation & Invention Exhibition (IRIIE 2010)**
- 2009 [Ride comfort assessment in off road vehicles using passive and semi-active suspension.](#) In: **Asia pacific Conference on Defence & Security Technology (DSTC 2009)**
- 2009 [Technology transfer: Challenges and prospective Arab world as a case study.](#) In: **International Engineering Education Conference (IEEC 2009)**
- 2009 [Statistical approach for the development of tangential cutting force model in end milling of Ti6Al4V.](#) In: **International Conference on Advances in Materials and Processing Technologies (AMPT 2009)**
- 2009 [Chip serration frequency-the primary cause of chatter during end milling operation.](#) In: **International Conference on Advances in Materials & Processing Technology (AMPT 2009)**
- 2009 [Finite element and experimental analysis of dynamic behaviour of Vertical Machining Centre Components by Modal Analysis.](#) In: **Advanced Materials for Application in Acoustics and Vibration**
- 2008 [Analysis of semiactive suspension systems using half-car model.](#) In: **FISITA 2008 World Automotive Congress**

- 2008 [Computational analysis for the prediction chip serration frequency in end milling of steel AISI1020.](#) In: **Malaysian Metallurgical Conference, MMC 2008**
- 2008 [Semi-active suspension system for off-road vehicles.](#) In: **3rd International Conference on Mechatronics, ICOM'08**
- 2008 [An assessment of semi-active suspension for passenger cars using full-car model.](#) In: **The 13th International Conference on Applied Mechanics and Mechanical Engineering (AMME)**
- 2008 [Development of an artificial neural network model for the prediction of the chip serration frequency in end milling of medium carbon steel.](#) In: **International Conference of Curtin University of Science and Technology Engineering (CUTSE 2008)**
- 2008 [Prediction model of cutting force by cutting parameters using response surface methodology in end milling of steel AISI 1020.](#) In: **The 2nd International & 23rd All India Manufacturing Technology Design and Research Conference**
- 2008 [A statistical approach for the prediction of cutting forces in end milling of medium carbon steel \(S45C\).](#) In: **International Conference on Science & Technology: Applications in Industry & Education**
- 2008 [Mathematical model of chip serration frequency in end milling of Inconel 718.](#) In: **International Conference on Mechanical Engineering (ICME 2008)**
- 2008 [Investigations of the causes of chatter in computer aided manufacturing process during end milling operation.](#) In: **Third International Conference on Mechatronics (ICOM) 2008**
- 2007 [Engine noise: An overview on current research trends.](#) In: **Conference on Advances in Noise, Vibration and Comfort (NVC) 2007**
- 2007 [Analysis of quarter-car 2 degree-of-freedom semiactive systems.](#) In: **IASTED Asian Conference on Modelling and Simulation**
- 2007 [Artificial neural network based vibration control of active engine mounting isolation system.](#) In: **4th International Symposium on Mechatronics and its Applications (ISMA07)**
- 2005 [Optimal design of an electrostatically actuated microbeam for maximum pull-in voltage.](#) In: **44th AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics, and Materials Conference 2003**
- 2004 [A comparison between two solution approaches for diaphragm-based capacitive pressure microsensor.](#) In: **2004 IEEE International Conference on Semiconductor Electronics**
- 2002 [Mechanical behavior of an electrostatically actuated micropump.](#) In: **43rd AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics, and Materials Conference**

Book

- 2011 [Islamization, ethics and values in science and technology.](#) IIUM Press . ISBN 978-967-022-582-1
- 2011 [Contributions of early muslim scientists to engineering sciences and related studies.](#) IIUM Press . ISBN 978-967-418-157-4
- 2011 [Introduction to machine element design for engineers.](#) IIUM Press . ISBN 9789675272936
- 2009 [A first course in control systems.](#) IIUM Press . ISBN 9789833855650
- 2009 [Fundamentals of fluid mechanics.](#) IIUM Press . ISBN 9789833855889
- 2006 [Islamic engineering ethics: foundation integration and practice.](#) Future Text Publications . ISBN 9833004660

Book Section

- 2019 [The Kulliyah of Architecture and Environmental Design: building on rich heritage.](#) In: **The International Islamic University Malaysia: the garden of knowledge and virtue** IIUM Press . ISBN 978-967-491-035-8 , pp.279-287

- 2019 [The Kulliyah of Engineering: producing Muslim engineers.](#) In: **The International Islamic University Malaysia: the garden of knowledge and virtue** IIUM Press . ISBN 978-967-491-035-8 , pp.289-303
- 2019 [The Kulliyah of Engineering: producing Muslim engineers.](#) In: **The International Islamic University Malaysia: the garden of knowledge and virtue** IIUM Press . ISBN 978-967-491-035-8 , pp.289-303
- 2013 [Kulliyah of Engineering: Producing a Muslim engineer.](#) In: **IIUM: The Premier Global Islamic University** IIUM Press . ISBN 9789674182700 , pp.239-249
- 2013 [Kulliyah of Engineering: Producing a Muslim engineer.](#) In: **IIUM: The Premier Global Islamic University** IIUM Press . ISBN 9789674182700 , pp.239-249
- 2011 [Al-Majusi: the pioner in obstetrics.](#) In: **Contributions of Muslim Scientists to Medicine and Related Sciences** IIUM Press , pp.7-11
- 2011 [Towards an Islamic theory of development based on Qur'anic approach : Surah Quraish as a case study.](#) In: **Islamization, Ethics and Values in Science and Technology** IIUM Press . ISBN 9789670225821 , pp.46-54
- 2011 [Muslim contributions to physics.](#) In: **Islamization, Ethics and Values in Science and Technology** IIUM Press . ISBN 9789670225821 , pp.100-110
- 2011 [E-waste : problems, Islamic perspective and solutions.](#) In: **Islamization, Ethics and Values in Science and Technology** IIUM Press . ISBN 9789670225821 , pp.112-124
- 2011 [Investigations of the causes of chatter in computer aided manufacturing process during end milling operation.](#) In: **Mechatronics book series: Selected papers from ICOM'01, ICOM'05 and ICOM'08** IIUM Press . ISBN 9789670225685 , pp.591-596
- 2011 [Semi-active suspension system for off-road vehicles.](#) In: **Mechatronics book series: selected papers from ICOM '01, ICOM '05, and ICOM '08** IIUM Press . ISBN 9789670225685 , pp.119-128
- 2011 [The contribution of Ibn al-Awwam in botany and agriculture.](#) In: **Contributions of Early Muslim Scientists to Engineering Sciences and related studies** IIUM Press . ISBN 978-967-418-4 , pp.41-44
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