

MD. RAISUDDIN KHAN



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المؤهل العلمي

- Doctor of Philosophy
- Ms.c in Mechanical Engineering
- Bs.c in Mechanical Engineering

مسؤوليات التدريس

Autonomous Robotic Systems	2019/2020 2020/2021
COMPUTER AIDED DESIGN	2001/2002
DESIGN OF MACHINE ELEMENTS	2011/2012 2012/2013
DYNAMICS	2002/2003 2003/2004 2004/2005 2005/2006
DYNAMICS (LAB)	2002/2003 2003/2004 2004/2005
ELECTRICAL MACHINES	2012/2013
ELECTROMECHANICAL SYSTEM	2001/2002 2002/2003 2003/2004
ELECTROMECHANICAL SYSTEM (LAB)	2003/2004
ELECTROMECHANICAL SYSTEMS	2002/2003 2003/2004
ELECTROMECHANICAL SYSTEMS (LAB)	2003/2004
ENGINEERING DESIGN	2017/2018 2018/2019
FLUID POWER SYSTEM	2013/2014 2015/2016 2017/2018
Fluid Power Systems	2017/2018 2019/2020
INDUSTRIAL AUTOMATION	2010/2011 2011/2012 2015/2016
INSTRUMENTATION AND CONTROL	2013/2014
INTERGRATED DESIGN PROJECT	2018/2019 2019/2020 2020/2021
MACHINE DESIGN	2001/2002
MECHANICAL VIBRATION	2001/2002 2005/2006

MECHATRONICS ENGINEERING LAB I	2006/2007 2007/2008 2008/2009 2009/2010 2010/2011 2011/2012 2014/2015 2017/2018
MECHATRONICS WORKSHOP	2006/2007
MICROELECTROMECHANICAL SYSTEM	2003/2004 2004/2005 2005/2006
MICROELECTROMECHANICAL SYSTEMS	2013/2014 2014/2015
MODELING AND SIMULATION	2008/2009 2009/2010 2018/2019 2020/2021
Microelectromechanical Systems	2019/2020
PROJECT 1	2018/2019 2019/2020 2020/2021
Project II	2019/2020 2020/2021
RESEARCH METHODOLOGY & SEMINAR IN MCT ENG	2016/2017 2018/2019
RESEARCH METHODOLOGY & SEMINAR IN MCT ENG (MIXED MODE)	2019/2020 2020/2021
RESEARCH METHODOLOGY & SEMINAR IN MCT ENG (RESEARCH MODE)	2016/2017 2018/2019 2019/2020 2020/2021
RESEARCH METHODOLOGY AND SEMINAR	2018/2019 2019/2020 2020/2021
RESEARCH METHODOLOGY IN MECHATRONICS ENGIN	2010/2011 2011/2012
ROBOTIC HARDWARE SYSTEMS	2018/2019
ROBOTICS	2016/2017
SEMINAR	2009/2010
SYSTEM DYNAMICS	2007/2008 2009/2010
SYSTEMS DYNAMICS	2004/2005 2007/2008 2009/2010
THEORY OF MACHINES AND MECHANISMS	2005/2006 2006/2007 2007/2008 2008/2009 2009/2010 2010/2011 2011/2012 2012/2013 2014/2015 2015/2016
THERMOFLUID ENGINEERING	2015/2016 2017/2018 2018/2019 2019/2020
VIBRATION AND MECHANICS OF MACHINE	2012/2013 2015/2016 2016/2017

المشاريع البحثية

In Progress

2019 - Present Pulsed Eddy Current System Prototype for Assessment of Under-Insulation Corrosion

2019 - Present Study of the efficacy of emotion-based robotic system in early intervention training of ASD children (Project 3)

2019 - Present Safe Single COBOT for Therapist Assistance in Upper Limb Rehabilitation

2019 - Present Investigation of the correlation between thermal pattern from multi-view face images and the affective states of ASD children (Project 1)

2019 - Present Investigation on the energy saving capability of a Variable Inertia Magneto Rheological (MR) Flywheel.

2018 - Present Modeling and Function Approximation-Adaptive Control of Exoskeleton and Actuated-Object Device for Upper Limb Rehabilitation

2018 - Present Robotics collaboration for terrain mapping and motion enhancement.

2018 - Present A New Biometrics Authentication Method Based on Fingertips Epidermis Layer Thickness Measurement

2014 - Present Improving Coefficient of Performance (COP) via Combination of Photovoltaic / Thermal (PVT), Thermoelectric Coolers and Absorption Refrigeration System

2014 - Present AUTONOMOUS SYSTEMS AND ROBOTICS RESEARCH UNIT

Unknown - Present Modeling and Function Approximation-Adaptive Control of Exoskeleton and Actuated-Object Device for Upper Limb Rehabilitation

Completed

2016 - 2018 Investigation of the Effects of Various Defects in Metallic Specimens on the Spatial Distribution of Pulsed Eddy Currents

2014 - 2017 Experimental Investigation of Self-sensing of Vibration Capability of MR Damper

2014 - 2018 Analysis of Human Hand Motion and Force during Eating and Model Formulation based on Neural Network for Robotic ADL Rehabilitation

2013 - 2016 Effect of Snake-Scale Parameters on Motion Dynamics of Snake Robot

2013 - 2016 Prototype Upscaling of Robot-Assisted Rehabilitation Platform for Upper Extremity

2013 - 2015 Development of Multi-Agent Autonomous Surface Vessel (ASV) System Bathymetry Survey

2012 - 2015 Smart Material Actuated Autonomous Snake Robot for Executing Flexible Motion

2012 - 2014 Mapping of Human Arm Impedance Characteristics in Spatial Movements to Control Power Assist Aid for Disable People

2012 - 2015 Modeling of in the loop emotion recognizer for robot assisted rehabilitation control

2011 - 2014 A Novel Mathematical Analysis of Magneto-Rheological (MR) Fluid Damper

- 2011 - 2015** Experimental Investigation on Lower Limbs Motion Dynamics for Designing Jerk Free Rehabilitation Assistive Robot
- 2011 - 2015** Development of a Mapping Robot
- 2011 - 2013** Development of an Electronic Walking Support System for Blind People
- 2011 - 2016** Design and Control of Lower-Limb Power Exoskeleton for Human Motion Enhancement
- 2010 - 2014** Theoretical and Experimental Investigation on New kind of snake motion algorithm
- 2010 - 2013** Development of an Effective Snake Motion Algorithm
- 2010 - 2012** Real-time Affect Detection for Adaptive Control of Robot-Assisted Rehabilitation
- 2008 - 2011** Mechatronic Walking Support Systems for Visually-Impaired People.
- 2007 - 2010** Automated Car Parking System
- 2007 - 2010** RFID- Based Intelligent Book Shelving System
- 2007 - 2012** Decision-theoretic Planning for Human-Robot Interaction via Partially Observable Markov Decision Process (POMDP)
- 2006 - 2011** MEMS Actuated Mesoscale (Order of Centimeter) Active Compliant Mechanism for Executing Motion in 3D Space
- 2006 - 2011** Real Time Path Planning for Legged Robot Navigation via Stochastic Modelling
- 2005 - 2007** Optimal Design and Modelling of Compliant Micro-Linkage Mechanisms
- 2004 - 2011** Design and Fabrication of Transparent Conducting Oxide (TCO) as Surface Layer Thin Film Silicon Solar Cells and Photonic Sensor

المنشورات

Article

- 2019** [Quantitative evaluation of crack depths and angles for pulsed eddy current non-destructive testing.](#) NDT and E International , 102 pp.180-188
- 2019** [Modelling of scanning pulsed eddy current testing of normal and slanted surface cracks.](#) Indonesian Journal of Electrical Engineering and Computer Science , 16 (3) pp.1297-1302
- 2019** [Image-based feature extraction technique for inclined crack quantification using pulsed eddy current.](#) Chinese Journal of Mechanical Engineering (English Edition) , 32 (1) pp.1-9
- 2019** [Modular robotic platform for autonomous machining.](#) International Journal of Advanced Manufacturing Technology

- 2018** [Combination of fused deposition modelling with abrasive milling for attaining higher dimensional accuracy and better surface finish.](#) IIUM Engineering Journal , 19 (2) pp.221-231
- 2018** [Optimization of CO2 production rate for fire-fighting robot applications using response surface methodology.](#) Cogent Engineering , 5 (1) pp.1-17
- 2018** [Optimization of CO2 production rate for firefighting robot applications using response surface methodology.](#) Cogent Engineering , 5 (1) pp.1-17
- 2018** [Motion investigation of a snake robot with different scale geometry and coefficient of friction.](#) Robotics , 7 (2) pp.1-11
- 2017** [Quasi-inverse pendulum model of 12 DoF bipedal walking.](#) International Journal of Automation and Computing , 14 (2) pp.179-190
- 2016** [Representation of human gait trajectory through temporospatial image modelling..](#) ARPN Journal of Engineering and Applied Sciences Open Access , 11 (6) pp.4105-4110
- 2016** [A review on lower appendicular musculoskeletal system of human body.](#) International Islamic University Malaysia Engineering Journal , 17 (1) pp.83-102
- 2016** [Automated threshold detection for object segmentation in colour image.](#) ARPN Journal of Engineering and Applied Sciences , 11 (6) pp.4100-4104
- 2016** [Gait analysis: systems, technologies, and importance.](#) Journal of Mechanics in Medicine and Biology , 16 (7) pp.1-45
- 2016** [Control of particulate matter \(PM\) emissions from industrial plant using ANFIS based controller.](#) ARPN Journal of Engineering and Applied Sciences , 11 (1) pp.404-409
- 2015** [Electro-hydraulic PID force control for nonlinear vehicle suspension system .](#) International Journal of Engineering Research & Technology (IJERT) , 4 (1) pp.517-524
- 2015** [Remote interior temperature control of parked vehicles.](#) Advanced Materials Research , 1115 pp.494-498
- 2015** [Smart tendon actuated flexible actuator.](#) Journal of Robotics , 2015 pp.1-10
- 2015** [Collaboration in multi-robot systems.](#) ARPN Journal of Engineering and Applied Sciences , 10 (22) pp.17225-17231
- 2014** [Collision free control of variable length hyper redundant robot manipulator.](#) Applied Mechanics and Materials , 541/42 pp.1107-1114
- 2014** [Effect of tuber skin on the thermal properties of whole tubers of potato and sweet potato.](#) IOP Conference Series: Materials Science and Engineering , 53 (1) pp.1-7
- 2014** [Small scale parallel manipulator kinematics for flexible snake robot application.](#) Communications in Control Science and Engineering (CCSE) , 2 pp.82-87
- 2014** [Investigation on data extraction trends for snake robot.](#) Procedia Computer Science , 42 (2014) pp.145-152

- 2013** [Development of a novel locomotion algorithm for snake robot.](#) IOP Conference Series: Materials Science and Engineering , 53 (1) pp.012012-1
- 2013** [Reconnaissance mission: Development of an algorithm for indoor localisation system with collaborative multirobot.](#) Lecture Notes in Engineering and Computer Science , 3 pp.2075-2080
- 2013** [Lower-limb rehabilitation robot design.](#) IOP Conference Series: Materials Science and Engineering , 53 (1) pp.012038 (1)-012038 (10)
- 2013** [Position control of a four link hyper redundant robotic manipulator.](#) Asian Journal of Scientific Research , 6 (1) pp.67-77
- 2013** [CFD based parametric analysis of gas flow in a counter-flow wet scrubber system.](#) International Journal of Environmental Protection and Policy , 1 (2) pp.16-23
- 2013** [Optimized neural network model for a potato storage system.](#) ARPN Journal of Engineering and Applied Sciences , 8 (6) pp.449-454
- 2013** [Development of wheel-less snake robot with two distinct gaits and gait transition capability.](#) International Journal of Automation and Computing , 10 (6) pp.534-544
- 2013** [Design and development of mopping robot-'HotBot'.](#) IOP Conference Series: Materials Science and Engineering , 53 (1) pp.1-6
- 2012** [Performance evaluation of wet scrubber system for industrial air pollution control.](#) ARPN Journal of Engineering and Applied Sciences , 7 (12) pp.1669-1677
- 2012** [Artificial neural network model for predicting wet scrubber performance.](#) International Journal of Scientific & Engineering Research , 3 (11) pp.1-10
- 2012** [Design and control of variable length hyper redundant robot.](#) Procedia Engineering , 41 (2012) pp.1105- 1113
- 2012** [A novel algorithm for modeling and mapping of 3D terrain in autonomous reconnaissance.](#) Journal of Applied Sciences Research , 8 (4) pp.2241-2246
- 2011** [Development of vibration suppression devices from smart fluids.](#) Advanced Materials Research , 264-65 pp.548 -553
- 2011** [State of the art review on walking support system for visually impaired people.](#) International Journal of Biomechatronics and Biomedical Robotics , 1 (4) pp.232-251
- 2011** [Design and data analysis for a belt-for-blind for visual impaired people.](#) International Journal of Advanced Mechatronic Systems , 3 (5/6) pp.384-397
- 2011** [HRI for interactive humanoid head Amir-II for visual tracking and servoing of human face..](#) International Journal of Robotics and Automation (IJRA) , 2 (3) pp.220-231
- 2011** [Analysis and implementation for a walking support system for visually impaired people.](#) International Journal of Intelligent Mechatronics and Robotics (IJIMR) , 1 (3) pp.46-62
- 2010** [Advance video analysis system and its applications.](#) European Journal of Scientific Research , 41 (1) pp.72-83

- 2010** [A novel navigation algorithm for collaborative multi robots.](#) European Journal of Scientific Research , 41 (3) pp.472-481
- 2010** [Multi-agent application: a novel algorithm for hexapod robots gait transitions.](#) Australian Journal of Basic and Applied Sciences , 4 (8) pp.2292-2299
- 2010** [Kinematics model of snake robot considering snake scale.](#) American Journal of Applied Sciences , 7 (5) pp.669-674
- 2010** [A novel navigation algorithm for hexagonal hexapod robot.](#) American Journal of Engineering and Applied Sciences , 3 (2) pp.320-327
- 2009** [Development of hybrid control of wheeled robot for mine detection.](#) Proceeding of the 2009 International Conference on Mechanical and Electrical Technology (ICMET'09) pp.171-175
- 2006** [Compensated inverse pid controller for active vibration control with piezoelectric patches : modeling, simulation and implementation..](#) IIUM Engineering Journal , 7 (2)
- 2006** [Compensated inverse pid controller for active vibration control with piezoelectric patches: modeling, simulation and implementation.](#) IIUM Engineering Journal , 7 (2) pp.43-59
- 2003** [Development of mechatronics engineering degree program : challenges and prospects.](#) International . Journal for Engineering Education , 19 (4) pp.537-543
- 2000** [A finite-difference scheme for mixed boundary value problems of arbitrary-shaped elastic bodies.](#) Advances in Engineering Software , 31 pp.173-184
- 1998** [Investigation of stresses at the fixed end of deep cantilever beams.](#) Computers and Structures , 69 pp.329-338
- 1998** [A new approach to instability testing of shells.](#) International Journal of Pressure Vessels and Piping , 75 pp.75-80
- 1997** [Stress analysis of conical pipe-reducers.](#) Journal of Institute of Engineers, India , 78 pp.145-150
- 1997** [Stability analysis of a toroidal pipe-reducers under uniform external pressure.](#) International Journal of Pressure Vessels and Piping , 69 (72) pp.203-218
- 1996** [Analysis of stresses in deep beam using displacement potential function.](#) Journal of Institute of Engineers, India , 77 pp.141-147
- 1995** [The stability of conical end caps with spherical tip as end closures for pressure vessels.](#) International Journal of Pressure Vessels and Piping , 64 pp.11-16
- 1995** [Stability analysis of a parabolic pipe-reducer under uniform external pressure.](#) International Journal of Pressure Vessels and Piping , 64 pp.1-10
- 1995** [Instability of cup-cylinder compound shell under uniform external pressure.](#) Journal of Ship Research , 39 (2) pp.160-165

Conference or Workshop Item

- 2020 [Pneumatic actuation of a firefighting robot: A theoretical foundation and an empirical study.](#) In: **7th International Conference on Mechatronics Engineering (ICOM) 2019**
- 2019 [Hexapod robot for autonomous machining.](#) In: **4th International Conference on Mechanical, Automotive and Aerospace Engineering (ICMAAE 2018)**
- 2017 [Finite element modelling of pulsed eddy current non-destructive testing for different defect natures.](#) In: **the 18th International Symposium on Applied Electromagnetics and Mechanics (ISEM) 2017**
- 2017 [Improvement of dimensional accuracy of 3-D printed parts using an additive/subtractive based hybrid prototyping approach.](#) In: **6th International Conference on Mechatronics - ICOM'17**
- 2017 [An experimental design of bypass Magneto-Rheological \(MR\) damper.](#) In: **6th International Conference on Mechatronics 2017 (ICOM'17)**
- 2017 [Design and development of a hybrid machine combining rapid prototyping and CNC milling operation.](#) In: **Advances in Materials and Processing Technologies, 2016 (AMPT 2016)**
- 2017 [Prediction of dry ice mass for firefighting robot actuation.](#) In: **6th International Conference on Mechatronics - ICOM'17**
- 2016 [SMARS-I: smart material actuated robotic snake \(Ver-1\).](#) In: **International Conference on Advances in Functional Materials (AFM 2015)**
- 2016 [Electroactive polymer actuated tendon driven micro actuator for robotic application.](#) In: **The 6th IEEE International Nanoelectronics Conference**
- 2015 [Off-Road vehicle suspension performance improvement using linear quadratic regulator techniques.](#) In: **International Conference on Mechanical And Industrial Engineering (ICMAIE'2015)**
- 2015 [A novel knee exoskeleton for overweight person.](#) In: **2015 10th Asian Control Conference (ASCC 2015)**
- 2015 [Identification and predictive control of spray tower system using artificial neural network and differential evolution algorithm.](#) In: **2015 10th Asian Control Conference (ASCC 2015)**
- 2015 [Adaptive neuro-fuzzy control of wet scrubbing process.](#) In: **2015 10th Asian Control Conference (ASCC)**
- 2015 [Intelligent temperature control of a tropical post-harvest storage system.](#) In: **2015 10th Asian Control Conference (ASCC 2015)**
- 2015 [Fuzzy Logic Controller \(FLC\) for the control of Particulate Matter \(PM\) emission in wet scrubber system.](#) In: **International Conference on Artificial Intelligence, Electrical & Electronics Engineering (AIEE'15)**
- 2015 [Electro-goniometric system: an instrumentation to capture knee movements for forward walking.](#) In: **2015 10th Asian Control Conference (ASCC 2015)**
- 2015 [Bio-inspired snake robot locomotion: a CPG-based control approach.](#) In: **2015 The 5th IEEE National Symposium on Information Technology: Towards Smart World (NCITNSW)**

- 2014 [CPG-based control system for flexible snake robot locomotion.](#) In: **2014 IEEE International Symposium on Robotics and Manufacturing Automation (ROMA2014)**
- 2014 [Inner ambient control of the parked vehicle in a hot sunny day by remote access.](#) In: **International Research, Invention and Innovation Exhibition 2014 (IRIIE2014)**
- 2014 [Hardware implementation of ANFIS controller for gas-particle separations in wet scrubber system.](#) In: **5th International Conference on Computer & Communication Engineering 2014**
- 2014 [Characteristics of human arm impedances: a study on daily movement.](#) In: **2014 UKSim-AMSS 16th International Conference on Computer Modelling and Simulation**
- 2014 [Smart inertial sensor-based navigation system for flexible snake robot.](#) In: **IEEE International Conference on Smart Instrumentation, Measurement and Applications (ICSIMA)**
- 2013 [Development of a tentacle propulsion technique for underwater application.](#) In: **5th International Conference on Mechatronics (ICOM'13)**
- 2013 [Nonlinear modeling of compliant mechanism.](#) In: **The 5th International Nanoelectronics Conference (INEC 2013)**
- 2013 [Modeling of human arm movement: a study on daily movement.](#) In: **2013 Fifth International Conference on Computational Intelligence, Modelling and Simulation**
- 2013 [Experimental investigation of snake robot locomotion in planar space.](#) In: **2013 IEEE Symposium on Business, Engineering and Industrial Applications (ISBEIA 2013)**
- 2012 [Analysis of engagement factor in trajectory tracking-based experiment.](#) In: **International Conference on Computer and Communication Engineering (ICCCE 2012)**
- 2012 [Reconnaissance mission: development of an algorithm for indoor localisation system with collaborative multi-robot.](#) In: **The World Congress on Engineering 2012**
- 2012 [Design of a profilograph for mapping pavement in virtual environment.](#) In: **International Conference on Computer and Communication Engineering (ICCCE 2012), 3-5 July 2012, Kuala Lumpur, Malaysia**
- 2012 [A snake robot with mixed gaits capability.](#) In: **The 4th KKU International Engineering Conference 2012 (KKU-IENC 2012)**
- 2011 [Recognizing human emotional states by facial expression analysis for humanoid head AMIR-III.](#) In: **4th International Conference on Mechatronics (ICOM'11)**
- 2011 [A review: intelligent controllers for tropical food storage system.](#) In: **2011 4th International Conference on Mechatronics: Integrated Engineering for Industrial and Societal Development (ICOM 2011)**

- 2011 [General Algorithm of n-Multiple Coil Shape for Variable Links Hyper-Redundant Robotic Manipulator.](#) In: **International Conference on Robotic Automation System 2011 (ICORAS2011)**
- 2011 [A novel algorithm for collaborative behavior of multi-robot in autonomous reconnaissance.](#) In: **4th International Conference on Mechatronics (ICOM'11)**
- 2011 [A new geometrical approach to solve inverse kinematics of hyper redundant robots with variable link length.](#) In: **4th International Conference on Mechatronics (ICOM)**
- 2010 [Tracking of pallet in automatic storage and retrieval system.](#) In: **The 2nd International Conference On Engineering cll CT , February 2010, Melaka, Malaysia**
- 2010 [Socially interactive humanoid head.](#) In: **IUM Research, Innovation & Invention Exhibition (IRIIE 2010)**
- 2010 [A collaborative navigation algorithm for multi-agent robots in autonomous reconnaissance mission.](#) In: **International Conference on Computer and Communication Engineering (ICCCE 2010)**
- 2010 [Autonomous reconnaissance mission: development of an algorithm for collaborative multi robot communication.](#) In: **IUM Research, Innovation & Invention Exhibition (IRIIE 2010)**
- 2010 [Visual tracking and servoing of human face for robotic head Amir-II.](#) In: **International Conference on Computer and Communication Engineering (ICCCE 2010)**
- 2009 [Development of hybrid controller of wheeled robot for mine detection .](#) In: **ICMET'09 - Proceedings of the 2009 International Conference on Mechanical and Electrical Technology**
- 2009 [Control of pallets in automatic storage and retrieval system.](#) In: **International Conference Electrical Energy and Industrial Electronic Systems (EEIES 2009)**
- 2009 [Hexagonal structure hexapod robot: developing a method for omni-directional navigation.](#) In: **Proceedings of International Conference on Asian Simulation and Modeling (ASIMMOD '09)**
- 2008 [Semi-active suspension system for off-road vehicles.](#) In: **3rd International Conference on Mechatronics, ICOM'08**
- 2008 [Snake robot: current state of the art and future trend.](#) In: **The 2nd International Symposium on Advanced Mechatronics Engineering**
- 2008 [Comprehensive driving behavior model for intelligent transportation systems.](#) In: **International Conference on Computer and Communication Engineering (ICCCE'08)**
- 2008 [Inverse Kinematics of a Hyper-Redundant Robotic Manipulator.](#) In: **Proceedings of the 3rd International Conference on Mechatronics (ICOM '08)**

- 2008 [Investigation of a novel type of locomotion for a snake robot suited for narrow spaces.](#) In: **Proceedings of the 3rd International Conference on Mechatronics (ICOM '08)**
- 2008 [Cooperative robot and user friendly robot- new challenge in robotics.](#) In: **3rd International Conference on Mechatronics, ICOM'08**
- 2006 [On the development of an intelligent blender for household and commercial food processing.](#) In: **International Conference on Computer and Communication Engineering, ICCCE'06**
- 2006 [Autonomous biomimetic robot based multi-agent system for disaster management and rescue.](#) In: **Disaster Management Through Regional Conference**
- 2006 [Twist analysis of piezoelectric laminated composite plates.](#) In: **1st International Conference & 7th AUN/SEED-Net Fieldwise Seminar on Manufacturing and Material Processing**
- 2006 [Development of intelligent air-conditioning system.](#) In: **International Conference on Energy and Environment 2006 (ICEE 2006)**
- 2005 [Focus control using flexible lens.](#) In: **International Conference on Mechatronics Technology (ICMT 2005)**
- 2004 [Modeling of piezoelectric laminated composite plate using finite element analysis.](#) In: **International Conference on Advanced Manufacturing Technology**
- 2004 [Influence of higher order coupling terms in vibration analysis of anti-symmetric cross-ply composite plates.](#) In: **3rd International Conference on Advanced Manufacturing Technology (ICAMT 2004)**
- 2003 [Active vibration control of a beam with piezoelectric patches: real-time implementation with xPC target.](#) In: **Conference on Control Applications**
- 2003 [Active suppression of vibration modes with piezoelectric patches: modeling, simulation and experimentation.](#) In: **IASTED international conference on Applied Simulation and Modeling (ASM 2003)**
- 2002 [Free vibration analysis of laminated composite plates based on higher order shear deformation theory by using finite element method.](#) In: **Annual Workshop National Science Fellowship**
- 1996 [Stability and imperfection sensitivity of spherical-tip conical shells.](#) In: **International Conference on Advances in Steel Structures**

Book

- 2011 [Mechatronics book series: System design and signal processing \(volume 2\).](#) IIUM Press . ISBN 9789674181321

Book Section

- 2011 [Development of robotic manipulator to assist human using brain signal .](#) In: **Mechatronics Book Series: Robotics and Automation** IIUM Press . ISBN 9789674181529 , pp.198-203
- 2011 [Autonomous goal finding robot .](#) In: **Mechatronics Book Series: Robotics and Automation** IIUM Press . ISBN 9789674181529 , pp.204-209

- 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 [Anti skid control system, a tutorial.](#) In: **Mechatronics book series: System design and signal processing (Volume 2)** IIUM Press . ISBN 9789674181321 , pp.71-74
- 2011 [Intelligent anti skid control system.](#) In: **Mechatronics book series: System design and signal processing (volume 2)** IIUM Press . ISBN 9789674181321 , pp.75-90
- 2011 [Path detection implementation using fuzzy classifier.](#) In: **Mechatronics book series: System design and signal processing** IIUM Press . ISBN 9789674181321 , pp.171-179
- 2011 [Path detection implementation using fuzzy classifier.](#) In: **Mechatronics book series: System design and signal processing** IIUM Press . ISBN 9789674181321 , pp.171-179
- 2011 [Mechanical design of unmanned underwater vehicle.](#) In: **Mechatronics book series: System design and signal processing** IIUM Press . ISBN 9789674181321 , pp.180-186
- 2011 [Design and development of an automated café system.](#) In: **Mechatronics book series: System design and Signal processing (volume 2)** IIUM Press . ISBN 9789674181321 , pp.187-193
- 2011 [Trajectory planning using GPS for Unmanned Aerial Vehicle with microcontroller based system.](#) In: **Mechatronics book series: System design and signal processing (volume 2)** IIUM Press . ISBN 9789674181321 , pp.215-223
- 2011 [Finite element formulation of piezoelectric laminated composite plate.](#) In: **Mechatronics book series: System design and signal processing** IIUM Press . ISBN 9789674181321 , pp.247-256
- 2011 [Structural analysis of an active beam.](#) In: **Advances in aircraft structure** IIUM Press . ISBN 978-967-418-148-2 , pp.125-130
- 2011 [A review on modeling and shape control of piezoelectric laminated composite plate using finite element method.](#) In: **Mechatronics book series: System design and signal processing (volume 2)** IIUM Press . ISBN 9789674181321 , pp.257-266
- 2011 [Development of a jet powered floating platform \(in air\).](#) In: **Mechatronics book series system design and signal processing** IIUM Press . ISBN 9789674181734 , pp.104-108
- 2011 [Development of robotic manipulator to assist human by using brain signal.](#) In: **Mechatronics book series system design and signal processing** IIUM Press . ISBN 9789674181734 , pp.117-122
- 2011 [Inverse kinematics of a hyper-redundant robotic manipulator.](#) In: **Mechatronics book series: selected papers from ICOM '01, ICOM '05, and ICOM '08** IIUM Press . ISBN 9789670225685 , pp.358-363

- 2011 [Natural ventilation of yam storage system.](#) In: **Mechatronics book series system design and signal processing** IIUM Press . ISBN 9789674181734 , pp.199-207
- 2011 [Simulation of airflow and temperature distribution in yam storage system.](#) In: **Mechatronics book series system design and signal processing** IIUM Press . ISBN 9789674181734 , pp.213-218
- 2011 [Development of an intelligent controller for tropical food storage system: a review .](#) In: **Mechatronics book series: Robotics and automation** IIUM Press . ISBN 9789674181529 , pp.227-235
- 2011 [Investigation of a novel type of locomotion for a snake robot suited for narrow spaces.](#) In: **Mechatronics book series: Selected papers from ICOM'01, ICOM'05 and ICOM'08** IIUM Press . ISBN 9789670225685 , pp.346-352
- 2011 [Cooperative robot and user-friendly robot - new challenge in robotics .](#) In: **Mechatronics book series: selected papers from ICOM'01, ICOM'05 and ICOM'08** IIUM Press . ISBN 9789670225685 , pp.353-357
- 2011 [Visual tracking for human face .](#) In: **Mechatronics Book Series: Robotics and Automation** IIUM Press . ISBN 9789674181529 , pp.1-6
- 2011 [Control of unmanned underwater vehicle.](#) In: **Mechatronic book series: Control and intelligent systems** IIUM Press . ISBN 9789674181765 , pp.80-84
- 2011 [Designing human robot interaction for emotionally expressive robotic head AMIR-iii .](#) In: **Mechatronics Book Series: Robotics and Automation** IIUM Press . ISBN 9789674181529 , pp.32-37
- 2011 [Snake robot locomotion in narrow space: a review .](#) In: **Mechatronics Book Series: Robotics and Automation** IIUM Press . ISBN 9789674181529 , pp.79-85
- 2011 [Multiple hexapod robots and collaborative communication: a survey .](#) In: **Mechatronics Book Series: Robotics and Automation** IIUM Press . ISBN 9789674181529 , pp.86-93
- 2011 [Develop an algorithm for goal finding robot using reinforcement learning .](#) In: **Mechatronics Book Series: Robotics and Automation** IIUM Press . ISBN 9789674181529 , pp.118-125
- 2011 [Intelligent air-conditioning system.](#) In: **Mechatronic book series: Control and intelligent systems** IIUM Press . ISBN 9789674181765 , pp.173-178
- 2011 [Development of an intelligent controller for tropical food storage system.](#) In: **Mechatronics book series: Robotics and automation** IIUM Press . ISBN 9789674181529 , pp.236-249
- 2010 [Walking hexapod robot in disaster recovery: developing algorithm for terrain negotiation and navigation.](#) In: **New, Advanced Technologies** In-teh . ISBN 9789533070674 , pp.341-349
- 2010 [Walking hexapod robot in disaster recovery: developing algorithm for terrain negotiation and navigation.](#) In: **New, Advanced Technologies** In-teh . ISBN 9789533070674 , pp.341-349

2009 [Optimal design and modelling of compliant micro-linkage mechanism.](#) In:
Proceedings of the Seminar on Research Findings IIUM Press . ISBN
9789833855780 , pp.405-420