


Ir. Dr. Mohammad Yazdi Harmin
Associate Professor

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 Faculty of Engineering
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EDUCATION

1. PhD (Aeroelastic Modelling & Design) – University of Liverpool
2. Bachelor of Aerospace Engineering (Honours) – University Putra Malaysia

AREA OF INTEREST

1. Aeroelasticity (Modelling, Design & Testing)
2. Aircraft Design
3. Swarm Intelligence
4. Structural Dynamics
5. Experimental Modal Analysis

PROFESSIONAL QUALIFICATION/ MEMBERSHIP/ AFFILIATION

1. Professional Engineer (P.Eng), Board of Engineers Malaysia (BEM)
2. Graduate Member, Board of Engineers Malaysia (BEM)
3. Member, Aerospace Society of Malaysia (M.AEROS) – (Founding member, Former Treasurer)
4. Life Ordinary Member, Malaysian Society for Engineering & Technology, (M.M.SET)

APPOINTMENTS
Academic Appointments

Position	Organization	Duration
1. Associate Professor	Department of Aerospace, UPM	Feb 2020 - Present
2. Senior Lecturer	Department of Aerospace, UPM	Dec 2012 - Feb 2020
3. Tutor	Department of Aerospace, UPM	Dec 2002 - Feb 2008

Administrative Appointments

Position	Organization	Duration
1. Development Coordinator	Department of Aerospace, UPM	Feb 2022 – Current
2. Industry & Community Relations Coordinator	Department of Aerospace, UPM	April 2018 – Feb 2022
3. Lab Coordinator	Department of Aerospace, UPM	Jan 2019 – Dec 2020
4. Academic Coordinator	Department of Aerospace, UPM	July 2014 – June 2016
5. Acting Postgraduate Coordinator	Department of Aerospace, UPM	March 2013 – Aug 2013
6. Student Club Advisor	Department of Aerospace, UPM	Jan 2013 – Dec 2014

TEACHING EXPERIENCE

Undergraduate

Course Code	Course Name	Credit
1. EAS3322	Vibration	3+0
2. EAS3405	Flight Mechanics	3+0
3. EAS3406	Aeroelasticity	2+0
4. EAS3703/EAS3713	Aerospace Vehicle Design I	1+2
5. EAS3704/EAS3714	Aerospace Vehicle Design II	1+2
6. EAS3712	Engineering Design	2+0
7. EAS3921	Aerospace Laboratory I	0+1
8. EAS3922	Aerospace Laboratory II	0+1
9. EAS4405	Aeroelasticity	3+0
10. ECC3005/ENG3202	Computer Programming	2+1
11. EMM3104	Dynamics	3+0
12. EAS4947	Integrated Design Project	0+4

Postgraduate

Course Code	Course Name
1. EAS5702	Optimization and Reliability in Design
2. EAS5703	Computer Aided Design

PUBLICATIONS

Journal Article

No.	Publication	Index
1.	C.C. Chia, S.Y. Lee, M.Y. Harmin , Y. Choi, J.-R. Lee, "Guided ultrasonic waves propagation imaging: a review", Measurement Science and Technology, Volume 34, Issue 5, 2023	JCR-Q2 Scopus
2.	S.D.S. Dawood, M.Y. Harmin , "Structural Responses of a Conceptual Microsatellite Structure Incorporating Perforation Patterns to Dynamic Launch Loads", Aerospace, 9(8), 448, 2022	JCR-Q1 Scopus
3.	Y. N. Chan, A.S.M. Rafie, M.Y. Harmin , "Investigation of Modal Strain Energy for Varying Ribs Orientation Concept of Untapered Wing Box Model", Journal of Aeronautics, Astronautics and Aviation, Vol. 54, No. 3, pp. 307 – 314, 2022	JCI-Q4 Scopus
4.	H.A. Shahrim, M.Y. Harmin , F.I. Romli, C.C. Ciang, J.-R. Lee, "Damage Visualization based on Frequency Shift of Single-Mode Ultrasound-Guided Wavefield", Journal of Aeronautics, Astronautics and Aviation, Vol. 54, No. 3, pp. 297 – 306, 2022	JCI-Q4 Scopus
5.	S.D.S. Dawood, A.S.M. Harithuddin, M.Y. Harmin , "Modal Analysis of Conceptual Microsatellite Design Employing Perforated Structural Components for Mass Reduction", Aerospace, 9(1), 23, 2022	JCR-Q1 Scopus
6.	S.D.S. Dawood, M.Y. Harmin , A.S.M. Harithuddin, C.C. Ciang, A.S.M. Rafie, "Computational Study of Mass Reduction of a Conceptual Microsatellite Structural Subassembly Utilizing Metal Perforations", Journal of Aeronautics, Astronautics and Aviation, 53(1), pp. 57–66, 2021	JCI-Q4 Scopus
7.	J. Jalasabri, F.I. Romli, M.Y. Harmin , "Mathematical modelling for effects of fineness ratio, altitude and velocity on aerodynamic characteristics of an airship design using computational fluid dynamics", CFD Letters, 12(10), pp. 90–110, 2020	Scopus
8.	N.Nordin, T.Chandrasegaran and M.Y. Harmin , "Nonlinear Reduced Order Model of Rectangular High Aspect Ratio Wing with and without Follower Force Effects", Journal of Advanced Research in Fluid Mechanics and Thermal Sciences, vol. 63, issue 1, pp. 117-134, 2019	Scopus
9.	T.Chandrasegaran, M.Y. Harmin and N.A.Rosly, "Nonlinear Reduced Order Model for Aeroelastic Static Deformations of Cantilevered Rectangular High Aspect Ratio Wing Model", International Journal of Engineering and Advanced Technology, vol. 9, issue 1, pp. 924-925, 2019	Scopus
10.	N. A. Rosly, M. Y. Harmin and D. Majid, "Preliminary investigation on experimental modal analysis of high aspect ratio rectangular wing model," International Journal of Engineering and Technology(UAE), vol. 7, no. 4, pp. 151-154, 2018.	Scopus

No.	Publication	Index
11.	Y. N. Chan, M. Y. Harmin and M. S. Othman, "Parametric study of varying ribs orientation and sweep angle of un-tapered wing box model," International Journal of Engineering and Technology(UAE), vol. 7, no. 4, pp. 155-159, 2018.	Scopus
12.	C. Thinesh and M. Y. Harmin , "Nonlinear reduced order model of high aspect ratio rectangular wing plate," International Journal of Engineering and Technology(UAE), vol. 7, no. 4, pp. 195-201, 2018.	Scopus
13.	M. Y. Harmin , M.S. Othman and F.I. Romli. "Parametric Study on the Flutter Characteristics of a Simple Rectangular Wing-Box Model with Varying Ribs Orientation". International Journal of Pure and Applied Mathematics. Vol. 119 (15), pp. 3771-3777, 2018.	Scopus
14.	F. I. Romli, H. Rashid, M. Y. Harmin . "Market Potential for Personal Air Vehicle (PAV) Concept: A Malaysian Case Study". International Journal of Pure and Applied Mathematics. Vol. 119(15), pp. 3755-3760, 2018	Scopus
15.	M. N. Ishak, A. R. A. Talib and M. Y. Harmin , "Material selection and design analysis of multi-purpose disposable safety syringe," International Journal of Engineering and Technology(UAE), vol. 7, no. 4, pp. 214-220, 2018.	Scopus
16.	M. A. Rahman, M. Y. Harmin , M. F. Koslan, M. R. Saad and M. F. Abdul Hamid, "Aerodynamic performance of X-plane with two different types of inboard stores," International Journal of Engineering and Technology(UAE), vol. 7, no. 4, pp. 202-204, 2018.	Scopus
17.	M. A. Abu, H. Harun, M. Y. Harmin , N. I. A. Wahab, M. K. Rahmat, M. F. A. Hamid and A. F. Ramli, "Reconfigurable enhanced path metric updater unit for space time trellis code viterbi decoder," Journal of Telecommunication, Electronic and Computer Engineering, vol. 9, no. 2-7, pp. 49-53, 2017.	Scopus
18.	M. A. Abu, H. Harun, M. Y. Harmin , N. I. A. Wahab and M. K. A. Kadir, "The design of Viterbi decoder for low power consumption space time trellis code without adder architecture using RTL model," World Journal of Engineering, vol. 13, no. 6, pp. 540-546, 2016.	JCI-Q2 Scopus
19.	F. Romli and M. Y. Harmin , "Use of Monte Carlo method to estimate subsystem redesign risk for complex products: Aircraft redesign case study," Aircraft Engineering and Aerospace Technology, vol. 87, no. 6, pp. 563-570, 2015.	JCR-Q3 Scopus
20.	M. A. Abu, H. Harun, M. Y. Harmin and N. I. A. Wahab, "Low Complexity of ACS architecture For Space Time Trellis Code Viterbi Decoder," International Journal of Applied Engineering Research, vol. 10, no. 4, pp. 8927-8939, 2015.	Scopus
21.	M. Y. Harmin and J. E. Cooper, "Aeroelastic behaviour of a wing including geometric nonlinearities," Aeronautical Journal, vol. 115, no. 1174, pp. 767-777, 2011.	JCR-Q4 Scopus
22.	A. Manan, G. A. Vio, M. Y. Harmin and J. E. Cooper, "Optimization of aeroelastic composite structures using evolutionary algorithms," Engineering Optimization, vol. 42, no. 2, pp. 171-184, 2010.	JCR-Q2 Scopus

Conference Proceeding

No.	Publication	Index
1.	M.S. Othman, L. Teh, M.Y. Harmin , "Experimental modal analysis of a simple rectangular wing with varying rib's orientation", Lecture Notes in Mechanical Engineering, Springer Nature, pp. 473-479, 2020	Scopus
2.	N. Nordin, N.S.M. Rafi, M.Y. Harmin , "Nonlinear follower force analysis with ground static test validation of high aspect ratio wing", Lecture Notes in Mechanical Engineering, Springer Nature, pp. 473-479, 2020	Scopus
3.	M. A. Rahman, M. Y. Harmin , M. F. S. Koslan, M. R. Saad, F. I. Romli and M. T. Ahmad, "Size-scale effects of inboard Store-Y on X-plane model: A parametric study using CFD," in IOP Conference Series: Materials Science and Engineering, 2017.	Scopus
4.	J. Jalasabri, F. I. Romli and M. Y. Harmin , "Modelling the effect of changing design fineness ratio of an airship on its aerodynamic lift and drag performance," in IOP Conference Series: Materials Science and Engineering, 2017.	Scopus
5.	N. A. Rosly and M. Y. Harmin , "Finite element analysis of high aspect ratio wind tunnel wing model: A parametric study," in IOP Conference Series: Materials Science and Engineering, 2017.	Scopus

No.	Publication	Index
6.	E. Y. L. Chok, D. Majid and M. Y. Harmin , "Effect of low velocity impact damage on the natural frequency of composite plates," in IOP Conference Series: Materials Science and Engineering, 2017.	Scopus
7.	M. F. A. Hamid, E. Gires, A. S. M. Harithuddin, A. R. A. Talib, A. S. M. Rafie, F. I. Romli and M. Y. Harmin , "Coandă configured aircraft: A preliminary analytical assessment," in IOP Conference Series: Materials Science and Engineering, 2017.	Scopus
8.	Y. N. Chan, M. Y. Harmin and A. S. M. Rafie, "Aeroelastic tailoring via ribs orientation of NASA Common Research Model," in IOP Conference Series: Materials Science and Engineering, 2017.	Scopus
9.	F. I. Romli, N. Dasuki and M. Y. Harmin , "Market Potential Study for Standing Cabin Concept for Domestic Low-Cost Commercial Airlines in Malaysia," in IOP Conference Series: Earth and Environmental Science, 2016.	Scopus
10.	W. N. W. Rohizan, A. S. M. Rafie, M. Y. Harmin and C. C. Ciang, "Effect of surface roughness on helicopter main rotor blade," in IOP Conference Series: Materials Science and Engineering, 2016.	Scopus
11.	M. S. Ramli, A. R. A. Talib, M. Y. Harmin and H. R. M. Saiah, "Effect of multiple jet impingement plate configurations on Reynolds Number in a pipe," in IOP Conference Series: Materials Science and Engineering, 2016.	Scopus
12.	M. S. Othman, O. T. Chun, M. Y. Harmin and F. I. Romli, "Aeroelastic effects of a simple rectangular wing-box model with varying rib orientations," in IOP Conference Series: Materials Science and Engineering, 2016.	Scopus
13.	T.K. Jun, M.Y. Harmin , Romli FI. "Aeroelastic tailoring of composite wing design using bee colony optimisation". Vol. 629, Applied Mechanics and Materials. 2014.	Scopus
14.	N. Yidris, M.T.H. Sultan, M.Y. Harmin and A.S.M. Rafie. "Local-overall flexural interaction of pinned ended thin walled I-section columns". Vol. 564, Applied Mechanics and Materials. 2014.	Scopus
15.	H. Haidzir, D.L. Majid, A.S.M. Rafie, M.Y. Harmin . "Modal Properties of Hybrid Carbon/Kevlar Composite Thin Plate and Hollow Wing Model". Vol. 446-447, Applied Mechanics and Materials. 2014.	Scopus
16.	M. Y. Harmin , A. T. Ahmed, J. E. Cooper and F. Bron, "Aeroelastic tailoring of metallic wing structures," in Collection of Technical Papers - AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics and Materials Conference, 2011.	Scopus
17.	M. Y. Harmin and J. E. Cooper. Efficient prediction of aeroelastic behaviour including geometric non-linearities. In: Collection of Technical Papers - AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics and Materials Conference. 2010.	Scopus
18.	M. Y. Harmin and J. E. Cooper, "Efficient prediction of aeroelastic behaviour including geometric non-linearities," in Proceedings of ISMA 2010 - International Conference on Noise and Vibration Engineering, including USD 2010, 2010.	Scopus
19.	M. Y. Harmin and J. E. Cooper, "Aeroelastic tailoring using ant colony optimization," in Collection of Technical Papers - AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics and Materials Conference, 2009.	Scopus

RESEARCH GRANT

International

	Project Title	Amount (RM)	Year	Source	Role
1.	Development of AERO+ISO GARDE: An Ecological Aerogel-based Thermal Insulating Coating for Industrial Application	500,000	2021-2023	MYSIP	Member
2.	Engineering Knowledge Transfer Units to Increase Student's Employability and Regional Development	511,848	2019 - 2022	Erasmus+ EU	Member

National

	Project Title	Amount (RM)	Year	Source	Role
1.	Nondestructive Inspection of Honeycomb Helicopters Blades Using a Scanning-Laser Ultrasound Wavefield Imaging System	40,000	2020-2022	Weststar (TSSA)	Leader
2.	Nonlinear Reduced Order Aeroelastic Modelling of Highly Flexible Wing	113,600	2015-2018	FRGS	Leader
3.	Geometrically Nonlinear Aeroelastic Analysis and Validation of High Aspect Ratio Wing	69,200	2020-2022	FRGS	Member
4.	Fundamental Study into the Ergonomics of Aircraft Passengers' Comfort and Aircraft Cabin Design Parameters	79,800	2019-2020	FRGS	Member

University

	Project Title	Amount (RM)	Year	Source	Role
1.	Mass Reduction of a Conceptual Small Satellite Structure Implementing Metallic Alloys using Perforation Techniques	16,000	2017-2020	GP-IPS	Leader
2.	Aeroelastic Tailoring of An Efficient Metallic Wing Structures Design	50,000	2014-2015	GP-IPM	Leader
3.	Conceptual Study of Automated In-flight Food Delivery and Waste Collection System	50,000	2018-2020	GP-PUTRA	Member
4.	Smart Composite Structures for Aeroelastic Tailoring	135,000	2017-2019	GP-IMPAK	Member
5.	Evaluation Of Fastener Loosening in Aero-Mechanical Structural Joints Based on Ultrasonic Wavefield Propagation Imaging	50,000	2017-2019	GP-PUTRA	Member
6.	Active Flow Control for Coanda Aircraft	60,000	2017-2019	GP-IPM	Member
7.	Extending Mission Capabilities of Unmanned Aerial Vehicles (UAVs) using Hybrid Airship Design	60,000	2016-2018	GP-IPM	Member
8.	Drag Analysis on Rotating Cylinder as a Lifting Device for Aircraft in Uniform Flow	98,000	2014-2015	GP-IBT	Member
9.	Preliminary Study of Vertical Seat Design for Standing Cabin Concept in Commercial Transport Aircraft	79,000	2013-2015	GP-IBT	Member

PROFESSIONAL SERVICES/CONSULTATION

No.	Role	Project Title	Industry/Organization	Duration
1.	Project Leader	Aircraft Structural Integrity	Caidmark Sdn Bhd	Dec 2022 (5 Years)
2.	Project Leader (RM10,000)	Vibration Analysis & Testing, and Computer Programming	Caidmark Sdn Bhd, TUDM (PUSPEKA)	7-10 Nov 2020
3.	Project Member	Workshop on Aircraft Modification and Certification Procedures	EXP Solution Sdn Bhd TUDM, MINDEF	29 Oct – 1 Nov 2018
4.	Project Leader (RM2,000)	Preliminary study of CFD analysis for offshore Helideck, Prima Tech Solution Sdn Bhd	Prima Tech Solution Sdn Bhd	Mac 2018 - April 2018

5.	Project Leader (RM10,000)	Fundamentals of Strain Measurement Using Strain Gauge Technique Workshop	Aerospace Society Malaysia & Caidmark Sdn Bhd TUDM (PUSPEKA)	16 - 18 July 2018
6.	Project Leader (RM10,000)	Finite Element Analysis & Computational Fluid Dynamics Workshop	Aerospace Society Malaysia, Caidmark Sdn Bhd, TUDM (PUSPEKA)	18-20 July 2017
7.	Project Leader	Industrial Collaboration	AFJETS Sdn Bhd	Nov 2016 – Oct 2018
8.	Project Member	Experimental & Computational Analysis of Composite Structure (Design Sensitivity & Optimisation, Aeroelastic Modelling & Analysis)	Aeronautical Research Centre Sudan (ARC Sudan)	23 Nov – 2 Dec 2015

STUDENT SUPERVISION

Doctor of Philosophy (Completed: Chairman-2, Member-3)

No.	Student (PhD)	Project Title	Category	Status
1.	Sarmad Dawood Salman Dawood (GS46781)	Mass Reduction of a Conceptual Small Satellite Structure using Perforation Techniques	Chairman	Graduated 2023
2.	Norzaima binti Nordin (GS48884)	Nonlinear Reduced Order Modelling of High Aspect Ratio and Flexible Wing Structure with inclusion Force Follower Effect	Chairman	Pass 2023
3.	Ibrahim Hawraa Safaa Ibrahim (GS59786)	Experimental Modal Analysis and Wind Tunnel Testing for Various Wing Box Planform of Variable Ribs Orientation Concept	Chairman	Ongoing
4.	Lee Shi Yn (GS58423)	Damage Discernability and Evaluation Stability of Laser Ultrasound Wavefield Imaging Under Variable Inspection Conditions	Chairman	Ongoing
5.	Mohd Azlan bin Abu (GS34955)	Development of Low Power Viterbi Decoder on Complex Programmable Logic Device Platform	Member	Graduated 2018
6.	Negin Ozve Aminian (GS34666)	Conceptual Development of An Ergonomic Passenger Cabin Design for Potential Commercial Urban Transport Airship in Malaysia	Member	Graduated 2020
7.	Norhafizah binti Mohamad Dasuki (GS39366)	Conceptual Development of Passenger Standing Cabin Design for Commercial Transport Aircraft: A Malaysian Case Study	Member	Graduated 2020
8.	Farah Diana binti Ishak (GS42762)	Conceptual Development of Improved In-Flight Food Delivery and Waste Collection System for Commercial Transport Aircraft	Member	Ongoing
9.	Salim Mkubwa Salim (GS40212)	Design and Development of a New Self-Sustained Aircraft Seat	Member	Ongoing
10.	Mohd Rashdan bin Fauzan (GS47564)	Development of Airline Scheduling Management Strategy	Member	Ongoing
11.	Wan Norhafizan bin Wan Rohizan (GS51058)	Optimisation of Rear Wing for Drag Reduction System (DRS) Applications	Member	Ongoing
12.	Muhammad Fitri bin Mohd Zulkeple	Cooling Enhancement on Gas Turbine Engine Combustion Chamber Liner	Member	Ongoing

Master of Science (Completed: Chairman-5, Member-8)

No.	Student (MSc)	Project Title	Category	Status
1.	Thinesh a/l Chandrasegaran (GS52454)	Load Case Selection Guideline for Combined Modal Finite Element Approach for Static Aeroelastic Deformations of Rectangular HAR Wing Models	Chairman	Graduated 2021
2.	Chan Ying Nee (GS50247)	Impact of Aeroelastic Tailoring on Flutter Performance of Variable Ribs' Orientation for Different Wing Box model planforms	Chairman	Graduated 2021
3.	Mahadhir bin A. Rahman (GS47628)	Analysis of Aerodynamic Performance Through Flow Simulation on X-Plane with Store-X	Chairman	Graduated 2020
4.	Nur Asyikin binti Rosly (GS44182)	Aeroelastic Characteristics on Deformed High Aspect Ratio Wing with Various Tip Deflections	Chairman	Graduated 2020
5.	Mohd Safuan bin Othman @ Ujang (GS39633)	Aeroelastic Tailoring of Variable Rib Orientation for Straight Rectangular Wing	Chairman	Graduated 2018
6.	Muhamad Azim Azhad bin Shahrim (GS62985)	Adaptive Wavenumber-Time Domain Filter for Single-Mode Ultrasound Wavefield Analysis	Chairman	Ongoing
7.	Elmorsi Ramiz Gamal Abdou Ali Elsayed (GS64515)	Aeroelastic Tailoring via Biomimetic Algorithm	Chairman	Ongoing
8.	Nuramirah binti Azid (GS53508)	Optimal Feedback Control of Shape Memory Alloy Actuated Morphing Wing Control System	Member	Graduated 2021
9.	Muhammad Jabir bin Suleiman @ Ahmad (GS37574)	Development of Inconel 718 Parts Produced by Metal Injection Molding (MIM) Technique for Aerospace Application	Member	Graduated 2019
10.	Mohd Nizam bin Hassan (GS41472)	Influence of Stiffener on Aluminum Perforated Plates Subjected to In-Plane Shear Loading	Member	Graduated 2018
11.	Mohd Nasri bin Ishak (GS42540)	Design And Development of a Single-Use Disposable Safety Syringe	Member	Graduated 2018
12.	Jafirdaus bin Jalasabri (GS43643)	Mathematical Modelling of Fineness Ratio Effects on Aerodynamics Characteristics of An Airship Design using Computational Analysis	Member	Graduated 2018
13.	Ellyna Chok Yee Ling (GS47293)	Experimental Modal Analysis of Composite Plates with Low Velocity Impact Damage	Member	Graduated 2018
14.	Wan Norhafizan bin Wan Rohizan (GS36880)	Effect Of Surface Roughness on Helicopter Main Rotor Blade	Member	Graduated 2017
15.	Ahmad Redzman bin Mohamad Nor (GS35995)	Conceptual Design of Vertical Seat in Commercial Transport Aircraft for Static Condition Flight	Member	Graduated 2016

Master by Coursework

Master of Innovation & Engineering Design, MIED (Completed: 4)

Master of Aerospace System and Design, MASDE

No.	Student	Project Title	Program	Status
1.	Anas Bin Safian (GS58580)	Design of Bicycle Wall Mount with Lifting Mechanism	MIED	Completed 2022
2.	Nur Farhana Binti Adnan (GS49229)	Adjustable Fixed Effluent Decanter	MIED	Completed 2019
3.	Naveeyindran Thangarajah (GS45544)	Sure-Clean Dustpan	MIED	Completed 2017

4.	Milad Goshan (GS42203)	Efficient Shower Water Heater System with Multiple Functions	MIED	Completed 2016
5.	Tengku Nurul Nasfatee Tengku Nasrudin (GS61509)	Galaxy Sdn Bhd Design Project	MASDE	On-going

AWARDS

	Awards	Title	Award Authority	Type	Year
1.	Gold Award	MOOC entitled Protein-Protein Interaction	The Virtual International e-Content Development Competition 2022, iCEPS, UiTM	National	2022
2.	Gold Medal	Integrated Design Project: A 4-year Experience of Teaching Aerospace Engineering Design Project	Putra InnoCreative Poster Competition, Centre for Academic Development (CADE), UPM	National	2022
3.	Best Paper Award	Damage Visualization based on Frequency Shift of Single-Mode Ultrasound-Guided Wavefield	AEROS Conference 2021	National	2021
4.	Silver Medal	Action At a Distance: Home Experiment for Remote Active Learning	International Putra InnoCreative Poster Competition, Centre for Academic Development (CADE), UPM	National	2020
5.	Silver Award	Rocket Altitude Tracker	International STEM OLYMPIAD ISTEMO 2018	National	2019
6.	The Most Commercial Project Award	CanSat Design	International STEM OLYMPIAD ISTEMO 2018	National	2018
7.	Silver Award	CanSat Design	International STEM OLYMPIAD ISTEMO 2018	National	2018
8.	Best Paper Award	Parametric Study on the Flutter Characteristics of a Simple Rectangular Wing-Box	International Conference on Aeronautics Astronautics & Aviation (ICAAA 2018)	International	2018
9.	Best Paper Award	Effect of Low Velocity Impact Damage on the Natural Frequency of Composite Plates	AEROS Conference 2017	National	2018
10.	Silver Award	Standing Cabin Concept for Commercial Aircraft Design	International Engineering Invention & Innovation Exhibition (i-Envex) 2014	National	2014

	Awards	Title	Award Authority	Type	Year
11.	Innovative Product Award	A Novel Hybrid Spacecraft Attitude Control System	17 th ITEX 2006, Kuala Lumpur, Malaysia	International	2006
12.	Gold Medal	A Novel Hybrid Spacecraft Attitude Control System	55 TH World Exhibition of Innovation Research and New Technology, Brussel Eureka! 2006	International	2006
13.	Anugerah	Anugerah Perkhidmatan Cemerlang 2019	Universiti Putra Malaysia	University	2019
14.	Anugerah	Anugerah Perkhidmatan Cemerlang 2018	Universiti Putra Malaysia	University	2018
15.	Anugerah	Anugerah Perkhidmatan Cemerlang 2017	Universiti Putra Malaysia	University	2017
16.	Anugerah	Anugerah Perkhidmatan Cemerlang 2016	Majlis Gemilang Putra & Sambutan Hari Pekerja 2017	University	2016
17.	Anugerah	Anugerah Perkhidmatan Cemerlang 2014	Universiti Putra Malaysia	University	2014
18.	Anugerah	Anugerah Kecemerlangan dalam Pengajaran Program Inovasi dan Apresiasi	Fakulti Kejuruteraan, UPM	Faculty	2017
19.	Anugerah	Anugerah Kecemerlangan dalam Pengajaran Program Inovasi dan Apresiasi	Fakulti Kejuruteraan, UPM	Faculty	2016

RECOGNITION & INVOLVEMENT

Expert Reference (International & National)

No.	Role	Title	Organization	Level	Year
1.	Session Chair	2 nd UNITED-SAIG Conference 2022	Southeast Asia Automotive Interest Group (SAIG)	International	2022
2.	Member	MySET Working Group Professional Assessment Examination	MySET	National	2022
3.	Speaker	Bengkel Penulisan dan Penerbitan Saintifik (Data Management)	STRIDE	National	2022
4.	Moderator	Development of Load Segmentation Strategy for Electric Vehicle"	Southeast Asia Automotive Interest Group (SAIG)	International	2021
5.	Speaker	UNITED Workshop: Vehicle's Dynamics	UNITED Erasmus+	International	2020
6.	Presenter	MSC User Conference 2020	Hexagon - MSC Software, Indo Indo-Pacific	International	2020

No.	Role	Title	Organization	Level	Year
7.	Session Chair	International Symposium on Sustainable Aviation (ISSA 2020)	Sustainable Aviation Research Society (SARES) & UPM	International	2020
8.	Conference Judge	International Symposium on Sustainable Aviation (ISSA 2020)	Sustainable Aviation Research Society (SARES) & UPM	International	2020
9.	Panel	Beri Ilmu Kepada Kurang Berilmu (Media Appearance-Live)	Awani Pagi Slot of Astro Awani	National	2019
10.	Speaker	Outcome Based Education Workshop	Aviation Management College, Sepang	National	2019
11.	Facilitator	Bengkel Penggubalan dan Pemurnian Modul STEM Carnival & STEM Low Cost	Pusat STEM Negara & Persatuan Guru STEM Malaysia	National	2019
12.	Facilitator	Global I-Lead STEM Camp 1Malaysia 2018 Program	Persatuan Guru STEM Malaysia	National	2018
13.	Penggubal Soalan	Program Matrikulasi Kursus: Asas Kejuruteraan	Ministry of Education Malaysia	National	2018
14.	Pemeriksa Soalan	Program Matrikulasi. Kursus: Pengajian Kejuruteraan	Ministry of Education Malaysia	National	2017
15.	Certificate Practitioner	Level-1 TRIZ Practitioner	The Malaysia TRIZ innovation Association	International	2017
16.	Working Group Member	Malaysian Standard Development: Electronic Cigarette Device (Safety)	SIRIM	National	2017
17.	External Examiner	Diploma in Aviation Business	ADMAL Aviation College	National	2016

Professional Body

No.	Role	Title	Level	Year
1.	Member	Aerospace Society Malaysia (AEROS)	National	Since 2017
2.	Member	Malaysian Society for Engineering & technology (MySET)	National	Since 2021
3.	Ahli Bersekutu	Majlis Professor Negara	National	Since 2022
4.	AKRAB & AKRAB CARE	Jabatan Perkhidmatan Awam (JPA)	National	Since 2022
5.	Auditor	Aerospace Society Malaysia (AEROS)	National	2022-2023
6.	Treasurer	Aerospace Society Malaysia (AEROS)	National	2017 -2019
7.	Treasurer	Malaysian Society of Structural Health & Monitoring (MSSHM)	National	2013-2015

Article Reviewer

No.	Role	Title	Organization	Year
1.	Journal Reviewer	Aerospace	MDPI	2022
2.	Journal Reviewer	Applied Sciences	MDPI	2022
3.	Journal Reviewer	Material	MDPI	2022
4.	Journal Reviewer	Journal of Science and Technology	Pertanika, UPM	2022
5.	Report Reviewer	Journal of Tropical Agriculture and Food Science	MARDI	2021
6.	Journal Reviewer	International Journal of Sustainable Aviation	Inderscience	2021

7.	Journal Reviewer	CFD Letters	ISSR	2021
8.	Journal Reviewer	Journal of Sandwich Structures and Materials	SAGE Publication	2020-2021
9.	Journal Reviewer	International Journal of Mechanical Sciences	Elsevier Ltd	2020
10.	Proceeding Reviewer	IOP Conference Series: Materials Science and Engineering journal	IOP Publishing SAWAE Conference 2019	2019
11.	Journal Reviewer	International Journal of Automotive and Mechanical Engineering	UMP Publisher	2018
12.	Journal Reviewer	International Journal of Engineering & Technology	Science Publishing Corporation	2018
13.	Proceeding Reviewer	IOP Conference Series: Materials Science and Engineering journal	IOP Publishing AEROTECH VII Conference 2018	2018
14.	Proceeding Reviewer	IOP Conference Series: Materials Science and Engineering journal	AEROS Conference 2017	2017
15.	Proceeding Reviewer	IOP Conference Series: Materials Science and Engineering journal	AEROTECH VI Conference 2016	2016
16.	Proceeding Reviewer	Applied Mechanics and Materials	AEROTECH V Conference 2014	2014

Conference Secretariat (International)

No.	Role	Title	Organization	Year
1.	Organizing Committee	2nd UNITED SAIG Conference 2022	Southeast Asia Automotive Interest Group (SAIG)	2021-2022
2.	Organizing Committee	1st UNITED SAIG Conference 2021	Southeast Asia Automotive Interest Group (SAIG)	2020-2021
3.	Treasurer	International Symposium on Sustainable Aviation (ISSA 2020)	Sustainable Aviation Research Society (SARES)	2019-2020
4.	Secretary	Southeast Asia Workshop on Aerospace Engineering (SAWAE) Conference 2019	Southeast Asia Network in Aerospace Engineering (SANAE)	2018-2019
5.	Head of Promotion & Publicity	International Conference: The Association of Southeast Asian Institution of Higher Learning	The Association of Southeast Asian Institution of Higher Learning (ASAIHL)	2015-2016

Conference Secretariat (National)

No.	Role	Title	Organization	Year
1.	Co-chairman	AEROS Conference 2023	Aerospace Society Malaysia	2023-2024
2.	Publication Team	AEROS Symposium 2023	Aerospace Society Malaysia	2022-2023
3.	Treasurer	AEROTECH VII Conference 2018	Department of Aerospace Engineering, UPM	2017-2018
4.	Treasurer	AEROS Conference 2017	Aerospace Society Malaysia	2016-2017
5.	Secretary	AEROTECH VI Conference 2016	Department of Aerospace Engineering, UPM	2015-2016
6.	Head of Promotion & Publicity	AEROTECH V Conference 2014	Department of Aerospace Engineering, UPM	2013-2014

Community Service

No.	Role	Title	Organization	Community	Year
1.	Timbalan Pengarah Program	Program CSR PRA AKRAB 2022	Rumah Bakti Nur Ain, Bangi	Orphans	2022
2.	Member	Khidmat Masyarakat SK Bukit Tampoi (A)	Faculty of Engineering, UPM	Orang Asli	2020
3.	Program Director & Facilitator	Program Pemindahan Ilmu kepada Masyarakat Orang Asli	Islamic Relief Malaysia & Faculty of Engineering, UPM	Orang Asli	2018
4.	Volunteer	Program Pengukuhan STEM Murid Sekolah Orang Asli	Islamic Relief Malaysia & Faculty of Engineering, UPM	Primary School Student, Orang Asli	2018
5.	Facilitator	Jelajah Minda Sains Gemilang (JMSG 2018)	Faculty of Engineering, UPM & Ministry of Education Malaysia	School Teacher	2018
6.	Volunteer		Pertubuhan Kebajikan Amal Rukaiyah	Orphans	2016
7.	Speaker	Program Motivasi Pelajar UPSR	Sekolah Kebangsaan Jempol, Bahau, Negeri Sembilan	Primary School Student	2014

Involvement (University)

No.	Role	Title	Organization	Level	Year
1.	Facilitator	Klinik Jurutera Professional	Faculty of Engineering, UPM	Faculty	2023
2.	AJK	Penilaian Teknikal bagi perolehan FK	Faculty of Engineering, UPM	Faculty	2022-2023
3.	AJK	Penentuan Teknikal/Spesifikasi bagi perolehan FK	Faculty of Engineering, UPM	Faculty	2022-2023
4.	Moderator	The Requirements of WP Complex Problem Solving (Workshop Series II)	E ² IG, Faculty of Engineering, UPM	Faculty	2022
5.	Evaluator Panel	Bengkel Penilaian LKP & LAP Geran Putra	Faculty of Engineering, UPM	Faculty	2020-2022
6.	Committee	MIED & MASDE (Master Program)	Department of Aerospace, UPM	Department	2021-2024
7.	Committee	Penilaian Permohonan Geran Penyelidikan Peringkat Universiti	Universiti Putra Malaysia	University	2021-2022
8.	Speaker	Engineering Labs, Done Remotely, Part 1	E ² IG, Faculty of Engineering, UPM	University	2021
9.	Speaker	PutraBLAST in the New Norm: Going Hybrid	CADe, UPM	Faculty	2021
10.	Facilitator	Modul STEM: Pelajar Sekolah & Guru	TDPI Faculty of Engineering, UPM	Faculty	2019
11.	Speaker	Teaching Made Easy with Putrablast	TD (Pasca Siswazah), Faculty of Engineering, UPM	Faculty	2019
12.	Facilitator	Outreach to School Programme Penang 2018	BAE SYSTEMS MIGHT-METEOR UPM	Community	2018
13.	Secretary	Engineering Education Interest Group	Faculty of Engineering, UPM	Faculty	2018-2020

No.	Role	Title	Organization	Level	Year
14.	Expert Reference	Task Force EAC	TD (Pasca Siswazah), Faculty of Engineering, UPM	Faculty	2018
15.	Auditor	EAC Mock Audit	Faculty of Engineering, UPM	Faculty	2018
16.	Facilitator	Outreach to School Programme Kuantan 2017	BAE SYSTEMS MIGHT-METEOR UPM	Community	2017
17.	Facilitator	Outreach to School Programme Kuantan 2016	BAE SYSTEMS MIGHT-METEOR UPM	Community	2016
18.	Chairman	Teaching Plan Workshop	Department of Aerospace, UPM	Department	2015
19.	Chairman	Moderation of Final Examination Workshop	Department of Aerospace, UPM	Department	2015
20.	Facilitator	School Outreach Programme LIMA 2015	BAE SYSTEMS MIGHT METEOR UPM	Community	2015
21.	Committee member	LIMA 2015, UPM	Department of Aerospace Engineering, UPM	Department	2015
22.	Committee Member	Minggu Perkasa Putra sesi 2015/2016	Department of Aerospace, UPM	Department	2015
23.	Pegawai Pemantau	Program Majlis Makan Malam BKAA, Mine Wellness Hotel	Department of Aerospace, UPM	Department	2015
24.	Committee	Formation of MASDE (Master Program)	Department of Aerospace, UPM	Department	2015
25.	Pegawai Pemantau	Program Bersama Menabur Bakti, Rumah Kebajikan Baitul Hidayah, Puchong, Selangor	Department of Aerospace, UPM	Student Activity & community	2015
26.	Committee member	Ketua Kumpulan semakan kurikulum: Aerospace design & simulation	Department of Aerospace, UPM	Department	2014
27.	Committee member	Karnival Fakulti & Hari Terbuka FYP	Department of Aerospace, UPM	Department	2014
28.	Pegawai Pemantau	Program Jalinan Kasih Rumah Anak Yatim Baitul Barokah Wal Mahabah, Sepang	Department of Aerospace, UPM	Student Activity & community	2014
29.	Committee member	Three Minute Thesis (3MT) Competition	TD (Penyelidikan & Siswazah), Faculty of Engineering, UPM	Faculty	2013
30.	Chairman	LIMA 2013, UPM	Department of Aerospace, UPM	Department	2013
31.	Committee member	Minggu Perkasa Putra sesi 2013/2014	Department of Aerospace, UPM	Department	2013
32.	Committee member	Karnival Fakulti & Hari Terbuka FYP	Department of Aerospace, UPM	Department	2013