

CURRICULUM VITAE



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Sound and Vibration Research Group

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Education Background

1. Doctor of Philosophy (PhD) in Sound and Vibration, 2015, Institute of Sound and Vibration, University of Southampton, UK
Thesis title: Measuring and predicting the transmission of vibration through gloves to the hand
Keywords: Human vibration, material for vibration isolation, material dynamic response, biodynamics, lumped parameter method, optimization.
2. Bachelor of Engineering (Mechanical), 2010, Universiti Putra Malaysia, Malaysia.
Project title: Improvement on Engine Cooling System Performance of Proton Exora using Computational Fluid Dynamics Software

Areas of Interest

1. Mechanical Vibration
2. Biodynamics, Biomechanics, Ergonomics, Human Vibration
3. Vibration Isolation
4. Energy Harvesting
5. Mechanical Engineering, Fluid Dynamics,
6. Computational Fluid Dynamics, Numerical and Analytical Analysis

Professional Qualification / Membership / Affiliation

1. Graduate Member, Board of Engineers Malaysia (BEM)
2. Member of Society of Automotive Engineers (SAE)
3. Graduate Member of Institute of Engineers Malaysia (IEM)
4. Member of Society of Vibration and Acoustics Malaysia (SVAM)

Appointments

Position	Duration
Secretary General, Society of Vibration and Acoustics Malaysia (SVAM)	February 2016 to date
Deputy Technical Manager and Approved Signatory, Metrology Laboratory, Department of Mechanical and Manufacturing Engineering, UPM	October 2015 to date
Academic coordinator for Undergraduate studies, Bachelor of Mechanical Engineering	October 2017 to date

Senior Lecturer, Department of Mechanical and Manufacturing Engineering, Faculty of Engineering, Universiti Putra Malaysia	September 2015 to date
Tutor, Department of Mechanical and Manufacturing Engineering, Faculty of Engineering, UPM	2010 to 2015
Research Assistant, Human Factors Research Unit, University of Southampton, UK	2011 to 2015

Publications

Journals and Conference Proceedings

1. **KAM Rezali**, MJ Griffin. 2014. The Transmission of Vibration through Gloves to the Hand and to the Fingers: Effects of Material Dynamic Stiffness. Applied Mechanics and Materials, Vol 564, pp 149-154. **(Scopus Indexed)**
2. **KAM Rezali**, A As'arry, ZA Zulkefli, R Samin, and NAA Jalil. 2016. Predicting the Transmissibility of a Glove Material to the Palm Using a Simple Lumped Parameter Model of the Hand and the Glove. Jurnal Teknologi. 78 (6-10), pp 17-22 **(Scopus Indexed)**
3. **KAM Rezali** and MJ Griffin. 2016. Transmission of Vibration through Gloves: Effects of Material Thickness. Ergonomics. 58 (8). pp 1026-1037. **(IF=1.818, Q2)**
4. A As'arry, H Jamaluddin, TAZ Rahman, **KAM Rezali**, Z Zain. Suppression of Parkinson's hand-like tremor using fuzzy-PID controller. 2016. Automatic Control and Intelligent Systems (I2CACIS), IEEE International Conference. **(Scopus Indexed)**
5. A As'arry, **KAM Rezali**, NAA Jalil, R Samin, ZA Zulkefli, MZM Zain. 2017. Tremor suppression for 4-DOFs biodynamic hand model using genetic algorithm. International Journal of Advanced Mechatronic Systems, 7 (3), 151-157. **(Scopus Indexed)**
6. **KAM Rezali** and MJ Griffin. 2017. Transmission of Vibration through Gloves: Effects of Contact Area. Ergonomics 60 (1), 69-81. **(IF=2.019, Q2)**
7. A As'Arry, FM Naseer, TAZ Rahman, **KAM Rezali**, MZM Zain. 2017. Semi-active suspension control for formula SAE car using magneto-rheological fluid. Computer Applications & Industrial Electronics (ISCAIE), 2017 IEEE Symposium. **(Scopus Indexed)**
8. JM Noh, **KAM Rezali**, A As'arry, NAA Jalil. 2017. Transmission of Vibration from Motorcycle Handlebar to the Hand. Journal of the Society of Automotive Engineers Malaysia 1 (3), 191-197. **(Non-Scopus)**
9. R Samin, NC Hao, A As'arry, **KAM Rezali**, MZ Nuawi. 2018. Effect of Disc Brake Squeal with Respect to Thickness Variation: Experimental Modal Analysis. Journal of Mechanical Engineering 6 (1), 33-44. **(Scopus Indexed)**
10. **KAM Rezali** and MJ Griffin. 2018. Transmission of Vibration through Gloves: Effects of Contact Force. Ergonomics. 61(9), pp. 1246-1258. **(IF=2.019, Q2)**
11. PM Sharif, AA Hairuddin, A As'arry, **KAM Rezali**, MM Noor, M Norhafana, SM Shareef. 2019. Nano Gas Bubbles Dissolve in Gasoline Fuel and Its Influence on Engine Combustion Performance. IOP Conference Series: Materials Science and Engineering 469 (1), 012062. **(Scopus Indexed)**
12. PM Sharif, AA Hairuddin, A As'arry, **KAM Rezali**, MM Noor, M Norhafana, MAA Mossa, SM Shareef. 2019. International regulation of vehicle emissions control rules and its influence on academic engine development experimental study and vehicle manufacturing. IOP Conference Series: Materials Science and Engineering 469 (1), 012070. **(Scopus Indexed)**
13. MSM Alias, AA Hairuddin, MK Hassan, **KAM Rezali**. 2019. A review of hydrogen addition in an HCCI engine fueled with biofuels. AIP Conference Proceedings 2059 (1), 020045. **(Scopus Indexed)**

14. SAA Gabasa, **KAM Rezali**, A Asárry, NAA Jalil. 2019. Vibration transmitted to the hand by backpack blowers. International Journal of Automotive and Mechanical Engineering (IJAME) **(Accepted, Scopus Indexed)**
15. OS Attia, NA Adam, A As'arry, and **KAM Rezali**. 2019. Development of a Prediction Model for Output Power Reduction of PV Solar Panels Based on Environmental Parameters using Particle Swarm Optimization Technique. Journal of Engineering and Applied Sciences. **(Accepted. Scopus Indexed)**

Conference Proceedings (non indexed)

16. SA Adam, NAA Jalil, R Samin, ZA Zulkefli, A Asárry, KAM Rezali. Risk Prevalence of Who-body Vibration Exposure in Agriculture Industry. 5th International Conference on Noise, Vibration, and Comfort, 2015, Melaka, Malaysia.
17. R Samin, ZA Zulkefli, NAA Jalil, A Asárry, KAM Rezali, MZ Nuawi. Vibration Control of a Cantilever Beam with Piezoelectric Actuator and Sensor. 5th International Conference on Noise, Vibration, and Comfort, 2015, Melaka, Malaysia.
18. KAM Rezali and MJ Griffin. Transmission of Vibration through Gloves to the hand: Effects of Area of Contact with the Glove. 49th United Kingdom Conference on Human Responses to Vibration, 2014, Buxton England.
19. KAM Rezali and MJ Griffin. An Impedance Model of the Transmissibility of Gloves to the Palm of the Hand and to the Fingers. 48th United Kingdom Conference on Human Responses to Vibration, 2013, Surrey England.
20. KAM Rezali and MJ Griffin. Transmission of Vibration through Gloves to the Hand and Fingers: Effects if Material Thickness. 47th United Kingdom Conference on Human Responses to Vibration, 2012, University of Southampton, England.
21. AM Aizuddin, KAM Rezali, MS Saian. 2018. Dynamic Stiffness Measurement of Viscoelastic Material Used in Anti-Vibration Gloves. 5th Scientific Conference on Occupational Safety and Health. NIOSH. Putrajaya.
22. KAM Rezali, NAA Jalil, A As'arry. 2018. Hand arm vibration exposure from powered tools among Malaysian workers. 5th Scientific Conference on Occupational Safety and Health. NIOSH. Putrajaya.

Research Fund/Consultation			
Year	Title of the Research Project	Amount	Source of Fund
2016	Long exposure to hand-transmitted vibration emitted by powered tools among agriculture workers in Malaysia. (949300)	RM 60 000	Leader, GP-IPM
2016	Semi-Active Suspension Control For Formula Car using Magnetho-Rheological Fluid (MRF). (9484800)	RM 60 000	Member, GP-IPM
2017	The effect of low intake air temperature of internal combustion engine using improved heat exchanger. (9540600)	RM 20 000	Member, GP-IPS
2017	Active Tremor Control Of Human-Like Hand Tremor Using Fuzzy Logic Controller. (9525100)	RM 20 000	Member, GP-IPS
2018	Energy Harvesting From Wind By PZT Using A Rotating Gear	RM 60 000	Member, GP-IPM
2018	Prediction Model of Comfort Level In Vehicle Cabin From Noise And Vibration	RM 20 000	Member, GP-IPS
2018	Nonlinearity In Biodynamic Response Of Human Body Exposed To Whole Body Vibration	RM 20 000	Member, GP-IPS



2019	Study of the Vibration Perception Threshold to Early Detect Diabetes Mellitus (5540066)	RM 88 000	Leader, FRGS
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Awards/Recognition (Current)			
Name of Awards or Recognition	Award Authority	Award Type	Year
Service Award, Perkhidmatan Cemerlang	Universiti Putra Malaysia	Certificate	2010, 2016, 2017, 2018
Best Presenter, NVC2018	Society of Vibration and Acoustics Malaysia,	Certificate	2018
Best Paper, AiGEV2018	Universiti Malaysia Perlis,	Certificate	2018
Academic Award, Anugerah Skim Galakan Akademik	Koperasi Universiti Putra Malaysia Berhad	Certificate	2010
Academic Award, Hadiah Kecemerlangan Intergrative Technology	Faculty of Engineering, Universiti Putra Malaysia	Certificate	2010

Development of Student Personality			
Year	Activities	Position	Organizer
2015 to present	Putra Motorsport Team	Technical Committee	Faculty of Engineering, UPM
2016, 2018	Japan Formula SAE	Advisor	Society of Automotive Engineers, Japan
2016	Program Amal dan Ilmu 2016	Facilitator	Faculty of Engineering, UPM
2016	Kursus Asas Microsoft Word	Speaker	M2EC, Faculty of Engineering, UPM
2017	Short Course of Human Responses to Vibration	Speaker	Faculty of Engineering, UPM and Society of Vibration and Acoustics SVAM
2018	Land Rover 4by4 in Schools	Advisor	Land Rover, UK

Teaching		
Year	Courses	Course Code
2016, 2017, 2018	Mechanical Vibration	EMM3522
2016, 2018, 2019	Dynamics	EMM3104
2016	Engineering Mathematics III	ECC3003
2017	Engineering Design II	EMM3508
2017	Control Engineering	EMM3502
2017	Applied Engineering Mathematics and Statistics	EMM3132
2018	Mechanics of Machines	EMM3524
2017, 2019	Industrial Ergonomics (Master)	EMM5710

Seminar/Workshop/Course Attended	
Year	Courses
2016	Mass Measurement (Procedure for Implementation)
2016	Kursus Transformasi Minda

2016	Kursus Asas Pengajaran
2016	Level 1 Triz Practitioner, Malaysia TRIZ Innovation Association
2016	Kursus "Introduction to MS ISO 17025"
2016	Right way to use statistics in research
2014	Risk assessment training
2017	Short Course on Human Responses to Vibration (Speaker and Organiser)
2018	Troubleshooting CCC Projects for Submission to FRDM
2018	6 th International Conference on Noise Vibration and Comfort 2018 (Speaker and Organiser), Society of Vibration and Acoustics Malaysia (SVAM)
2018	Monitoring Noise Exposure, NIOSH Malaysia

Student Supervision By Research				
Name	Title of Project	Degree	Status	Category
Osam Hassan Attia	An investigation of Wind Induced Vibration around Solar Collector for Passive Cleaning Techniques	PhD	Viva	Member
Mohd Farid bin Alddin	Human Response to Vibration	PhD	On-going	Member
Siti Aisyah binti Adam	Human Response to Vibration	PhD	On-going	Member
Reem Musab Abdulsattar Al-Obaidi	Control and Human Response to Vibration	PhD	On-going	Member
Pshtiwan Mohammad Sharif	The effect of low intake air temperature of internal combustion engine using improved heat exchanger	PhD	On-going	Member
Hafiz bin Jamaludin	Control and Human Response to Vibration	Master	Submitted	Member
Shadab Far Abtin	Modeling and simulating of reduction of pollutant emission in a non-premixed flow using HiCOT (High Temperature Combustion Technology)	PhD	On-going	Chairman
Abo Tabik Sarah Haleem Talib	Computational Fluid Dynamics Analysis of Centrifugal Pump	Master	On-going	Chairman
Muhammad Taufiq Zaliran	Study of Vibration Perception Threshold to Early Detect Diabetes	PhD	On-going	Chairman
Master by Coursework				
Name	Project Title	Degree	Status	Category
Elendu E.S	Level of hand-transmitted vibration exposure among workers in manufacturing industry	EM	Graduated	Chairman
Talha Haroon	Optimization of telecommunication turnkey project implementation process	EM	Graduated	Chairman
Sulaf Saad	Level of hand-arm vibration exposure from powered tools	EM	Graduated	Chairman

Manira Mansor	Material for isolating hand-arm vibration from powered tools	MSE	Graduated	Chairman
Mohd Sani Saian	Dynamic stiffness of material in anti-vibration gloves	MSE	Graduated	Chairman

Bachelor's degree				
Name	Project Title	Degree	Status	Category
Adly Shah bin Abu Seman	Design and development of a suspension system for the formula SAE car	BEng (Mechanical)	Graduated	Chairman
Shadi Abdeladim Elamin Gabasa	Vibration emitted by powered tools commonly used in agricultural industry	BEng (Mechanical)	Graduated	Chairman
Muhammad Aliff bin Rusli	Long exposure to hand vibration among agricultural workers	BEng (Mechanical)	Graduated	Chairman
Jamaiyah binti Mohamad Noh	Vibration transmission to the hand from motorcycle handlebar	BEng (Mechanical)	Graduated	Chairman
Aiman Ismail	Level of hand-arm vibration exposure from grinder	BEng (Mechanical)	Graduated	Chairman
Adnan	Level of hand-arm vibration exposure from mechanised sickle	BEng (Mechanical)	Graduated	Chairman
Dayana Roslan	Design and development of suspension seat for passenger vehicle	BEng (Mechanical)	On-going	Chairman
FYP2018	Design and development of suspension handle for vibration reduction from vibrating machine	BEng (Mechanical)	On-going	Chairman