IR.TS.DR. KAUSALYAH VENKATASON

Faculty of Mechanical Engineering, Universiti Teknologi Mara, 40450, Shah Alam, Selangor, Malaysia.

Tel: 03 – 5543 6275 *Fax:* 03 – 5543 5160

E-MAIL

Email: kausalyah@uitm.edu.my kausalyah@hotmail.com

Faculty Website:

https://engineering.uitm.edu.my/mechanical/index.php

Google Scholar: https://scholar.google.com.my/citations?user="https://scholar.google.com.my/citations?user="https://scholar.google.com.my/citations">https://scholar.google.com.my/citations?user="https://scholar.google.com.my/citations">https://scholar.google.com.my/citations?user="https://scholar.google.com.my/citations">https://scholar.google.com.my/citations?user="https://scholar.google.com.my/citations">https://scholar.google.com.my/citations?user="https://scholar.google.com.my/citations">https://scholar.google.com.my/citations

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UiTM Expert ID: https://expert.uitm.edu.my/expert.php?#

ORCHID ID: https://orcid.org/0000-0001-9707-0782
Web of Science Researcher ID: AAT-9585-2020

Scopus Author ID: 6504129087

Reseach Gate: https://www.researchgate.net/profile/Kausalyah-

Venkatason

OBJECTIVE

To expand expertise in the area of Structural Dynamics with the integration of CAE in its various industrial applications and to successfully translate this experience to the academic environment particularly in the teaching of undergraduates and in the supervision of the postgraduates.

FIELD OF INTEREST AND EXPERTISE

CAD/CAM/CAE, Finite Element Analysis, Manufacturing Processes & Optimization Methods, Vibrations, Statistical Methods in Engineering Design and Processes, Design of Experiments (DoE), Evolutionary Algorithms, Vehicle Crash Dymanics, Biomechanics, Injury Analysis and Prevention, Industrial Management.

STRENGTHS

Able to work under minimal supervision. Worked in multiple research projects and headed and few. Currently having 20 years of academic experience in teaching undergraduate students. Headed and worked under various committees at the faculty level.

Experienced in undertaking industrial projects in the area of structural dynamics of machinery and structures in the oil & gas work environment.



SKILLS

- 3D Solid and surface functional modeling and computer aided design (CAD)
- Assembly design and modeling
- Computer Aided Engineering (CAE) using numerical methods like Finite element method (FEM/FEA)
- Structural Dynamics of Machinery & Structures
- Vibration, Condition Monitoring, Modal Analysis and Spectrum Analysis
- Vehicle Crash Dynamics
- Statistical Methods in Engineering, DoE
- Engineering Optimization
- Industrial Ergonomics and human factors in design
- Design modules (FMECA, House of Quality, DFMA etc)
- Computer Aided Manufacturing (CAM), CNC & NC programming
- C++ Programming
- Product Design
- Knowledge in Microsoft Office

SOFTWARE PROFICIENCY

- CATIA V5 SPECIALIST MECHANICAL DESIGNER
- CAD: Pro Engineer, Solidworks, CATIA v5, Solid Edge, AutoCAD
- CAE: Pro Mechanica, MSC Nastran, CATIA v5, ANSYS
- CAM: MasterCAM, Virtual CNC, MOLDFLOW
- Crash Simulation : LS-DYNA, MADYMO
- Programming Languages: C++, MATLAB
- Vibration : SMS Star, DasyLab
- Satistical Softwares : MINITAB, SPSS
- Others: Microsoft Softwares

EDUCATION

UNIVERSITY MALAYA, MALAYSIA

B.Eng. (CAD/CAM) (Hon. 2nd upper / CGPA : 3.13) - 2000

UNIVERSITY MALAYA, MALAYSIA

Msc.Eng (Masters in Engineering / by research) (FEA, Vibrations) – 2002

INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA (IIUM)

PhD in Mechanical Engineering -2015

PROFESSIONAL QUALIFICATION

- 1. Professional Engineer- 19526 (Manufacturing)
- Member, B.E.M (Board of Engineers Malaysia) 49923R
- 3. Corporate Member, I.E.M (Institute of Engineers Malaysia) 100778
- 4. Graduate Technologist GT20081215 (Manufacturing & Industrial Technology)
- 5. Member, MBOT (Malaysian Board of Technologist) GT20081215
- 6. Profesional Technologist (Malaysian Board of Technologist) PT20110027
- Senior Member, IRED (Institute of Research Engineers and Doctors) -SNM10100056232
- 8. Member, IAENG (International Association of Engineers) 115591
- 9. Member, IAENG Society of Mechanical Engineering
- 10. Member, SAISE (South Asia Institute of Science and Engineering)-20140904001
- 11. Editorial Board Jurnal Teknologi (2015)
- Editorial Board Member in AR Research Publication & Conference World 2017-2020
- 13. Editorial Board Member of International Journal of Mechanical Engineering and Applications Editorial 2017-2019
- 14. Section Editor of International Journal of Mechanical Engineering (JmechE)
- Editorial Review Board, Scientific and Technical Committee Member of World Academy of Science, Engineering and Technology - ONGOING
- 16. Editorial Board of Asian Scholar Network 2020-2022
- 17. Editorial Board Member of International Journal of Advanced Research in Engineering Innovation (IJAREI), E-ISSN:2682-8499, 2020-2022
- 18. Editorial Board Member of International Journal of Advanced Research in Technology and Innovation (IJARTI), E-ISSN:2682-8324, 2020-2022
- Associate Editor, International Journal of Engineering Research and Technology (IJERT) -2017 to 2020
- 20. Editorial Board Member of International Refereed Journal of Engineering Science and Technology (IRJEST), 2021...
- 21. Editorial Board Member of IRO Journals (Journal of Electronics and Informatics)
- Editorial Board Member of International Journal of Industrial and Manufacturing Systems Engineering

OTHER APPOINTMENTS

- 1) Reviewer Scopus Indexed Journal Journal of Mechanical Engineering (JMechE) (2016 till present)
- 2) Reviewer Journal Of Medicine And Medical Sciences (2015)
- 3) Reviewer Journal Of Physical Science And Environmental Studies (2015)
- 4) **Reviewer** 2nd & 3rd International Conference on Advances in Mechanical Engineering (ICAME 2015 & 2017 & 2019)
- 5) Reviewer 3rd International Conference on Science and Social Research 2016
- Reviewer International Conference on Biomechanics and Medical Engineering 2018
- 7) **Reviewer** 2nd International Conference on Computer Science and Application Engineering (CSAE 2018)
- 8) **Reviewer** International Research Conference on Engineering & Science (IRCES2018).
- 9) Reviewer Advances in Mechanical Engineering (ISI Journal)
- Reviewer International Journal of Engineering Research and Technology (IJERT) -2017 to PRESENT

EXPERIENCE

WORKING EXPERIENCE

Aug 2012-till present Senior Lecturer,

Faculty of Mechanical Engineering, UiTM, Shah Alam. Subjects taught include CAD/CAM/CAE, Computer Programming and Application, Engineering Drawing, Dynamics, Intoduction to Engineering, Fluid Mechanics, Manufacturing Processes, Workshop Technology, Industrial/Operations Management.. Also involved in research projects within the university and in national level (4 FRGS projects- 3 member and 1 leader). Published numerous Scopus and ISI indexed journals as well as conferences. Supervision of Undergraduate and Postgraduate degree students

in research dissertations. Also involved actively in administration work within the Faculty of Mechanical Engineering.

Jan 2004–July 2012 Lecturer,

Faculty of Mechanical Engineering, UiTM, Shah Alam. . Subjects taught include CAD/CAM/CAE, Computer Programming and Application, Engineering Drawing, Dynamics , Intoduction to Engineering, Fluid Mechanics. Also involved in research projects within the university. Supervision of Undergraduate degree students in research work. Published in numerous conferences. Actively in administration work within the Faculty of Mechanical Engineering.

Jan 2006 - Oct 2009 Freelance Consultant

Involved as consultant in MDT Sdn Bhd consultancy. Involved in 10 major projects servicing customers which included Petronas and its subsidiaries as well as Proton. Projects undertaken are listed below under Consultancy and Industrial Projects (1-10)

Oct 2003-Dec 2003 Part time lecturing in Technology Park Malaysia. I'm a MLVK Program certified trainer. Subject thought was Manual Drawing. Also responsible for conducting training on Pro-Engineer and AutoCAD software for the industry at Technology Park Malaysia (TPM).

July 2003-Sept 2003 Colabtech Asia Sdn. Bhd, Application Engineer, resposible for installing the Pro-ENGINEER software at client's place, providing technical backup and training for customers. Able to perform demonstrations on the software for marketing purposes. Jobscope invloved assisting engineers from Ingress Technology to design their products. Also performed training on Pro-Engineer for lecturers at KUKTM, Melaka and Ingress Technology.

Jan 2003–June 2003 CSE Cobra, R&D Design Engineer . Responsible for designing and developing further the design of the Honda and Toyota car alarm casings & immobilizers using Solidworks.

Nov 2000-Dec 2002 Tutor, Conducted tutorial classes, Material Science, AutoCAD, Engineering Drawing & C Programming. Also involved as co-consultant in a consultancy firm (MDT Sdn Bhd) owned by my Masters degree supervisor where I was involved in 4 major projects within 18 months servicing customers which included

Petronas and Proton. Consultancy projects with MDT continued till 2009.

PROFESSIONAL WORKING EXPERIENCE

1) An investigation of Structural Vibration Problem in an electric driven and steam driven P6-0201-E and P6-0201-C amine circulation pump

Period: June 2009- Oct 2009

Client: Petronas Gas Berhad, Gas Processing Plant Complex B, Kg. Tok Arun,

Paka, Terengganu

2) An investigation of Structural Vibration Problem in Tail Compressor Motor Unit KD 801

Period: Nov 2008 -Jan 2009

Client: MTBE Malaysia Sdn Bhd, Kuantan, Pahang

3) An Investigation of Structural Vibration problem of G-2482 Johnston Vertical Pump Problem

Period: May 2008- July 2008

Client: Optimal Chemicals (M) Sdn. Bhd. Kerteh, Terengganu Darul Iman

4) An investigation of Structural Vibration Problem of Condensate Transfer Pump (CTP) unit P-3080, P-3055, P-3030

Period: Oct 2007 -Jan 2008

Client: Petronas Carigali Sdn Bhd, Kerteh, Terengganu

5) An investigation of Structural Vibration Problem in ID Fan unit K-103

Period: May 2007- July 2007

Client: Ethylene Malaysia Sdn Bhd Kerteh, Terengganu

6) An investigation of Structural Vibration Problem in Induced Draft Fan unit EA-306

Period: Feb 2007- Apr 2007

Client: MTBE Malaysia Sdn Bhd Kuantan, Pahang

7) An investigation of Structural Vibration Problem on Reciprocating Condensate Transfer Pump unit P-3030,P-3030 & P-3080 at Resak Gas Production Platform.

Period: Nov 2006 – Feb 2007

Client: Petronas Carigali Sdn Bhd, Kerteh, Terengganu

8) An investigation of Structural Vibration Problem on Vertical MOL Pump P-160 A & C at Tiong A Offshore Platform

Period: Aug 2006- Oct 2006

Client: Petronas Carigali Sdn Bhd, Kerteh, Terengganu

9) An investigation of Structural Vibration Problem on Vertical MOL Pump P-160 & P-180 at Pulai A Offshore Platform. Period: May 2006- July 2006

Client: Petronas Carigali Sdn Bhd, Kerteh, Terengganu

10) An investigation of Structural & Thermal Problem on an Oleflex Reactor

Screen

Period: Jan 2006- Mac 2006

Client: MTBE Malaysia Sdn Bhd, Kuantan, Pahang.

11) Lab Instructor for the Provision of Lab Facilities and Trainers for 3D CAD Solid Edge Fundamental Course

Period: 2015

Client: F1 School Programme, MOE.

SEMINARS & WORKSHOPS

- LMS international
- Catia v5
- Vibration & Condition Monitoring at INTAN by MDT Sdn Bhd & Petronas
- Solidworks Training (IME CAD/CAM Training Centre)
- Solid Edge Training (UiTM, CADEM Centre)
- Virtual CNC Software Training (UiTM)

RESEARCH

1. Natural Frequency Analysis of a Light Weight Box Structure - July, 2004 BRC, UiTM grant

Investigator: En. Sharil Khusairi (Leader), Pn. Kausalyah Venkatason

Value: RM20,000.00 Period: July 2004 – Dec 2005

2. Particle Swarm Optimization of Vehicle Front-End Geometry for Pediatric Pedestrian-Crash Protection – FRGS grant (FRGS12-077-0226)

Investigator: Dr Kassim Abdulrahman Abdullah(Leader), Pn Kausalyah

Venkatason, Assoc Prof Dr Wong Shaw Voon

Value: RM 78,020 Period: Feb 2012-Apr 2015

3. Optimization of CRS for lateral-side impact using PSA - FRGS grant (FRGS 13-022-0263)

Investigator: Assoc Prof Dr Qasim H Shah (Leader), Prof Dr Wong Shaw Voon, Dr Shasthri Sivaguru, Pn Kausalyah Venkatason(RA)

Value: RM113 000 Period: April 2013- Nov 2015

4. Investigation on Aerodynamic Performance of Optimized Pedestrian Crash Friendly Sedan Front End Profiles – Lestari Grant UiTM

Investigator :Dr. Kausalyah Venkatason(Leader), Dr Baljit Singh, Dr Azlin Azmi.

Value: RM 20,000 Period: Sept 2016-Aug 2018

5. Coherent Structure In Screen Cylinders Wakes- Lestari Grant UiTM

Investigator: Dr. Kausalyah Venkatason, Dr Baljit Singh, Dr Azlin Azmi

(Leader).

Value: RM 20,000 Period: Aug 2016-July 2018

6. Multi Objective Optimization of Head and Thoracic Injury Criteria in Pedestrian Crash Protection Using Evolutionary Algorithms- FRGS grant (FRGS/1/2018/TK03/UITM/02/14)

Investigator :Ir Dr Kausalyah Venkatason (Leader), Prof Dr Wong Shaw Voon, Assoc Prof Ir Dr Shasthri Sivaguru, Ir Dr Amir Radzi, Ir Hafzi B Mat Isa, Pn Ahsana Aqilah.

Value: RM61 000 Period: Jan 2019 – Dec 2020

7. Mathematical modelling and Parametric Study for improved thermal convection of Heat Pipe Phase Change Material (PCM) with Open-Cell Metal Foam-FRGS grant (FRGS/1/2018/TK03/HWUM/02/1)

Investigator: Assoc Prof Ir Dr Shasthri Sivaguru (Leader), Ir Dr Kausalyah Venkatason(Member), Ir Dr Baljit Singh, Pn Noor Shiela Kalib, Assoc Prof Dr Thomas Ward

Value: RM107 000 Period: Jan 2019 – Dec 2021

PUBLICATION

Book Chapters

- 1. V. Kausalyah, S. Shasthri, K. A. Abdullah, M. M. Idres, Q.H. Shah, S.V. Wong, INJURY ANALYSIS VALIDATION OF A DEFORMABLE VEHICLE, 4th Mechanical and Manufacturing Engineering, *Applied Mechanics and Materials Vols.* 465-466 (2014) pp 1334-1338 © (2014) Trans Tech Publications, Switzerland doi:10.4028/www.scientific.net/AMM.465-466.1334, ISBN: 978-3-03785-933-9
- V. Kausalyah , S. Shasthri, K. A. Abdullah, M. M. Idres, Q.H. Shah, S.V. Wong, THE HEAD INJURY MITIGATION OF AN ADULT AND CHILD PEDESTRIAN IN A FRONTAL VEHICLE IMPACT USING RESPONSE SURFACE METHODOLOGY, Materials Engineering and Automatic Control Ill, Applied Mechanics and Materials Vol. 575 (2014) pp 952-955 © (2014) TransTechPublications, Switzerland doi:10.4028/www. scientific.net/AMM. 575.952, ISBN: 978-3-03835-140-5

- V. Kausalyah , S. Shasthri, K. A. Abdullah, M. M. Idres, Q.H. Shah, S.V. Wong, CRASH KINEMATICS AND INJURY CRITERIAVALIDATIONFOR A DEFORMABLE HYBRID VEHICLE MODEL, Automotive Engineering and Mobility Research, Applied Mechanics and Materials Vol. 663 (2014) pp 627-631 © (2014) TransTechPublications, Switzerland doi:10.4028/www.scientific.net /AMM. 663 .627, ISBN: 978-3-03835-261-7, http://www.ttp.net/978-3-03835-261-7.html.
- 4. S. Shasthri, V. Kausalyah, Q.H. Shah, K.A. Abdullah, M. Idres and S.V. WONG, RESPONSE SURFACE APPROACH FOR SENSITIVITY STUDY OF NECK FORCES IN RESTRAINED CHILD OCCUPANT DURING SIDE-IMPACT CRASH, Materials Engineering and Automatic Control III, Applied Mechanics and Materials Vol. 575 (2014) , pp. 477-480, © (2014) TransTechPublications, Switzerland, DOI: 10.4028 Available at: http://www.scientific.net/AMM.575.477, ISBN: 978-3-03835-140-5
- 5. S. Shasthri, V. Kausalyah, Q.H. Shah, K.A. Abdullah, M. Idres and S.V. Wong, LATERAL SIDE IMPACT CRASH SIMULATION OF RESTRAINED 3 YEAR OLD CHILD, Automotive Engineering and Mobility Research, Applied Mechanics and Materials Vol. 663 (2014) , pp. 590-595. TransTechPublications, Switzerland Available at : http://www.scientific.net/AMM.663.590, ISBN: 978-3-03835-261-7

Journals (International Refereed Journals)

- 1. Kausalyah, V., Athyrah, B.M.F.N., Shasthri, S., MATHEMATICAL MODELLING OF PLASTIC INJECTION MOLDING PROCESS USING CENTRAL COMPOSITE DESIGN (CCD) SAMPLING AND PRSM,(2018) Journal of Mechanical Engineering 5(Special Issue 6), pp. 226-238
- 2. Kausalyah V., S. Shasthri, K. A. Abdullah, M. M. Idres, Q.H. Shah, DEVELOPMENT AND OPTIMIZATION OF PASSENGER CAR FRONT PROFILE USING POLYNOMIAL RESPONSE SURFACE METHOD,(2016) ARPN Journal of Engineering and Applied Sciences, Vol11(8), pp 5161-5166. (SCOPUS indexed –Q3)
- 3. S. Shasthri, Kausalyah V., Q.H. Shah, K.A. Abdullah, M. Idres and S.V. Wong, A PARAMETRIC STUDY OF NECK MOMENT RESPONSE IN A 3 YEAR OLD CHILD SUBJECTED TO OBLIQUE SIDE IMPACT,(2016) ARPN Journal of Engineering and Applied Sciences, Vol11(8), pp 5126-5133. (SCOPUS indexed –Q3)
- 4. Kausalyah V., S. Shasthri, K. A. Abdullah, M. M. Idres, Q.H. Shah, S.V. Wong, (2014), OPTIMIZATION OF VEHICLE FRONT END GEOMETRY FOR ADULT AND PEDIATRIC PEDESTRIAN PROTECTION, International

- Journal of Crashworthiness, DOI: 10.1080/13588265. 2013. 879506, Vol 19(2), pp 153-160, 2014, (ISI/SCOPUS indexed-Q2)
- Kausalyah V., S. Shasthri, K. A. Abdullah, M. M. Idres, Q.H. Shah, S.V. Wong, DEVELOPMENT OF AN OPTIMIZATION FRIENDLY VEHICLE PROFILE FOR PEDESTRIAN PROTECTION International Journal of Simulation Modeling, Vol 13(2014) 4, pp 419-432, DOI:10.2507/IJSIMM13(4)3.270, ISSN: 1726-4529, (ISI/SCOPUS indexed-Q1)
- Kausalyah V., S. Shasthri, K. A. Abdullah, M. M. Idres, Q.H. Shah, S.V. Wong, VEHICLE PROFILE OPTIMIZATION USING CENTRAL COMPOSITE DESIGN FOR PEDESTRIAN INJURY MITIGATION, Applied Mechanics and Information Sciences, Vol 9(1), pp 197-204 (2015) doi:10.12785/amis/090125 (ISI/SCOPUS indexed-Q1) ISSN: 1935-0090
- 7. Kausalyah V., S. Shasthri, K. A. Abdullah, M. M. Idres, Q.H. Shah, S.V. Wong, VALIDATION OF PEDESTRIAN IMPACTOR TESTING UPON HYBRID VEHICLE FRONT END PROFILE, International Journal of Vehicle Simulation, Modeling and Testing, Vol 9, No. 3/4, pp 342-351, (2014) (SCOPUS indexed-Q2)-ISSN: 17456436
- 8. S. Shasthri, Kausalyah V., Qasim H. Shah, K.A. Abdullah, M.M. Idres & S.V. Wong. Parametric study for head injury criteria response of three-year olds in a child restraint system in oblique and lateral intrusive side impact. International Journal of Crashworthiness. DOI:10.1080/13588265.2014.942501, Vol 20(1), pp 1-11, 2015, (ISI/SCOPUS indexed-Q2)
- 9. Shasthri S., Kausalyah V., Q.H. Shah, Abdullah K.A., Idres M.M., Wong S.V., Parameter Study of Neck Force In Restrained 3 Year Old Child Involved In Vehicle Side Impact. Aust. J. Basic & Appl. Sci., 8(6): 145-154, 2014. Available at : http://ajbasweb.com/old/ajbas/2014/June/145-154.pdf (ISI/SCOPUS indexed Q3)
- Shasthri S., Kausalyah V., Shah Q.H., Abdullah K.A., Idres M.M., Wong S.V., Neck Moment Response Characterization of Restrained Child Occupant at Standard Test Impact Speed 24.4 km/h. Research Journal of Applied Sciences, Engineering and Technology, 8(1).pp113-119, (2014), ISSN: 2040-7459
- Shasthri S., Kausalyah V., Q. H. Shah, Abdullah K.A., Idres M.M., Wong S.V., Neck Moment Characterization of Restrained Child Occupant at Realistic Nontest Standard Higher Impact Speed of 32.2 km/h, International Journal of Vehicular Technology, Volume 2014, Article ID 528125, http://dx.doi.org/10.1155/2014/528125.
- 12. Rahman A.G.A, Ramli R, Mohd S.M.S., Yusoff F.A., Venkatason K., Sivaguru S. Incorporating Quality Auditing into Condition Based Maintenance Scheme, International Journal of COMADEM, Vol 7, (2004) 3, pp 2-14, ISSN: 13637681 (Scopus Q3)

<u>Proceedings (International)</u>

- 1. Shasthri Sivaguru., Kausalyah Venkatason .Ghaffar Abdul Rahman, "Finite Element Analysis On A Rotating Catalyst Blender Shaft" The International Conference of Experimental and Theoretical Mechanics (ETM), March 18-19,2002, Sanur, Bali, ISBN: 979-8294-04-1
- Kausalyah Venkatason., Shasthri Sivaguru., Ghaffar Abdul Rahman, "Finite Element Analysis On Main Oil Line Pump" - The International Conference of Experimental and Theoretical Mechanics (ETM), 2002, Bali, ISBN: 979-8294-04-1
- 3. Kausalyah V., Sharil K., Valliappan D.N, Mimi A.A.B, "Natural Frequency Analysis of a Light-Weight Box Structure Using Finite Element Method" International Conference 2006, Science and Technology: Applications in Industry and Education, 2006 (UiTM, Penang), ISBN: 978-983-42204-0-5
- 4. Kausalyah V., Shasthri S., "Thermal Optimization of an Oleflex Reactor Screen" International Conference on Mechanical Engineering 2008 (ICME), Puteri Pacific Jotel Johor Bahru, ISBN: 97-98-2963-59-2
- Shaiful A.A , Kausalyah V. FAizul A.Z., "Structural Optimization of A Racing Bicycle " - 2nd International Conference on Science and Technology : Applications in Industry and Education , 2008 (UiTM , Penang) , ISBN : 978-983-42204-1-9
- 6. Faizul A.Z., Kausalyah V., Shaiful A.A., "Investigation of the Dynamic Structural Failure of the Racing Bicycle" 2nd International Conference on Science and Technology: Applications in Industry and Education, 2008 (UiTM, Penang), ISBN: 978-983-42204-1-9
- Kausalyah V, M.Hafiz, Shasthri S., "CAD/CAE Application in Injection Molding Analysis" - 2nd International Conference on Science and Technology: Applications in Industry and Education, 2008 (UiTM, Penang), ISBN: 978-983-42204-1-9
- 8. Kausalyah V., Shasthri S., "Design Optimization of a KD 801 Tail Compressor Motor Unit" The 2nd International Conference on Engineering and ICT, Feb 18-20, 2010 (UTEM Melaka).
- Kausalyah V., S. Shasthri, K. A. Abdullah, M. M. Idres, Q.H. Shah, S.V. Wong, VALIDATION OF PEDESTRIAN HEAD FORM AND LEGFORM IMPACT TESTING UPON HYBRID VEHICLE FRONT END PROFILE, 2nd International Conference on Mechanical, Automotive and Aerospace Engineering (ICMAAE 2013), 2-4 July 2013, Kuala Lumpur. ISBN: 978-967-418-293-9.

- 10. Kausalyah V., S. Shasthri, K. A. Abdullah, M. M. Idres, Q.H. Shah, S.V. Wong, INJURY ANALYSIS VALIDATION OF A DEFORMABLE VEHICLE FRONT END MODEL, 4TH INTERNATIONAL CONFERENCE ON MECHANICAL AND MANUFACTURING ENGINEERING 2013 (ICME2013), 17-18 December, Bangi, Malaysia.
- 11. Kausalyah V., S. Shasthri, K. A. Abdullah, M. M. Idres, Q.H. Shah, S.V. Wong, Crash Kinematics and Injury Criteria Validation for A Deformable Hybrid Vehicle Model, 2th International Conference on Recent Advances in Automotive Engineering & Mobility Research (RECAR 14), 16-18 December 2103, Kuala Lumpur, Malaysia.
- 12. Kausalyah V., S. Shasthri, K. A. Abdullah, M. M. Idres, Q.H. Shah, S.V. Wong, A Comparison Of The Central Composite Design, Faced And Circumscribed (CCC and CCF) For Vehicle Front End Design Optimization, The 2013 International Conference on Mathematics and Its Applications (ICMA 2013), August 18-21 2013, Kuala Lumpur, Malaysia. article accepted for publication in the AIP(American Institute of Physics) Conference Proceedings, ISSN: 1551-1761, (indexed by ISI/Scopus)
- 13. Kausalyah V., S. Shasthri, K. A. Abdullah, M. M. Idres, Q.H. Shah, S.V. Wong, The Head Injury Mitigation of an Adult and Child Pedestrian in a Frontal Vehicle Impact Using Response Surface Methodology, 2014 2nd International Conference on Mechanical, Automotive and Materials Engineering, (CMAME 2014), May 26-28, Singapore.
- 14. K. A. Abdullah, Kausalyah V., S. Shasthri, M. M. Idres, Q.H. Shah, S.V. Wong, Development and Optimization of A Vehicle Front-End Geometry Model for Improved Pedestrian Safety, Automotive and Vehicle Technology Conference, (AVTECH 2014), Oct 16-18, Istanbul, Turkey, ISBN :978-605-5120-85-6.
- 15. S. Shasthri, Kausalyah V., Q.H. Shah, K.A. Abdullah, M. Idres and S.V. Wong, Lateral Side Impact MVC Simulation of CRS Restrained 3 Year Old Child, , 2th International Conference on Recent Advances in Automotive Engineering & Mobility Research, 16-18 December 2103, Kuala Lumpur, Malaysia.
- 16. S. Shasthri, Kausalyah V., Q.H. Shah, K.A. Abdullah, M. Idres and S.V. Wong, Response Surface Approach For Sensitivity Study Of Neck Forces In Restrained Child Occupant During Side-Impact Crash, 2nd International Conference on Mechanical, Automotive and Materials Engineering, (CMAME 2014), May 26-28, Singapore.
- 17. Kausalyah V., S. Shasthri, K. A. Abdullah, M. M. Idres, Q.H. Shah, Development And Optimization Of Passenger Car Front Profile Using Polynomial Response Surface Method, Malaysian Technical Univesities Conference on Engineering and Technology (MUCET 2015), 11-13, Oct 2015, Johor Bahru, Malaysia.

- 18. S. Shasthri, Kausalyah V., Q.H. Shah, K.A. Abdullah, M. Idres and S.V. Wong, A Parametric Study Of Neck Moment Response In A 3 Year Old Child Subjected To Oblique Side Impact, Malaysian Technical Universities Conference on Engineering and Technology (MUCET 2015), 11-13, Oct 2015, Johor Bahru, Malaysia.
- 19. Abdullah, B., Venkatason, K., Ahmad, M.A., Singh, B., Abdullah, A.H., Saad, N.H. Kasolang, S. Distribution TUA-CDIO element in learning outcome (LO5-LO9) for engineering subjects, 8th IEEE International Conference on Engineering Education, ICEED 2016/2017; Kuala Lumpur; Malaysia., 978-150901595-5
- 20. Kausalyah V., Zulhilmi S., Shasthri S., STRUCTURAL DYNAMIC ANALYSIS OF A CROSS COUNTRY MOUNTAIN BIKE FRAME, International Conference on Engineering Management (ICEM2016), 23-24 Dec, Kuala Lumpur, Malaysia.
- 21. Kausalyah V., Nor Ilya M.R., Nur Azia I., Shasthri S., Baljit S.B.S., EXPERIMENTAL INVESTIGATION ON THE AERODYNAMIC PERFORMANCE OF OPTIMISED PEDESTRIAN CRASH FRIENDLY SEDAN FRONT END PROFILES, 4 th International Conference on Recent Advances in Automotive Engineering & Mobility Research (RECAR 17), 8-10th August 2107, Putrajaya, Malaysia.
- 22. Kausalyah V., Norfiza Athyrah B.M.F., Shasthri S., Mathematical Modelling of Plastic Injection Molding Process Using Central Composite Design (CCD) Sampling Method and Polynomial Response Surface Methodology (RSM), 5th International Conference on Advances in Mechanical Engineering 2017, 16-18th August 2107, Krabi, Thailand.
- 23. Kausalyah V., Nur Azia I., Shasthri S., Nor Ilya M.R, COMPUTATIONAL ANALYSIS ON AERODYNAMIC CHARACTERISTICS OF ADULT PEDESTRIAN CRASH FRIENDLY SEDAN VEHICLES, 3rd Advanced Research in Material Sciences, Manufacturing, Mechanical and Mechatronic Engineering Technology International Conference, 7-9th November 2017, Melaka, Malaysia accepted

Proceedings (National)

 Sharil K., Kausalyah V., "Natural Frequency Analysis of a Light-Weight Box Structure" – Conference on Scientific and Social Research (CSSR) 2007, (IRDC, Selangor)

Technical Report

1. Sharil K., Kausalyah V., "Natural Frequency Analysis of a Light-Weight Box Structure" – UiTM (600-IRDC/ST 5/3/774)

- ❖ Secretary and Program and Events Committee Member for the National Conference On Advances In Mechanical Engineering Applications (NAME '05)
- ❖ Unit Perhubungan Awam FKM UiTM (Publishing Head and committee member)
- ❖ Unit Penerbitan FKM UiTM (Committee Member)
- Jawatankuasa Pemberntukan Program Msc. In Engineering Management , FKM
 UiTM(Committee Member)
- ❖ Jawatankuasa Peperiksaan FKM UiTM (Penolong Pengurus Pengendalian Peperiksaan)
- ❖ Member of Publications and Promotions Committee for the International Conference on Advances in Mechanical Engineering (ICAME 09).
- ❖ Jawatankuasa ICT/ E-Learning FKM In charge of handling the maintanence and operations.
- ❖ Panel for the interview of Masters of Engineering Management students.
- ❖ Panel for the Drafting of the Sylabbus for Masters of Product Design (EM 775)
- **❖** MEC 435 MOOC DEVELOPER 2020

AWARDS

- 1. Scholarship by the Ministry of Higher Education (MOHE) under the Academic Training Scheme (SLAI) Scholarship to pursue Doctorate of Philosophy (PhD) -Awarded from 28-12-2009 till 28-2-2014.
- 2. Bronze Medal for the research project, VALIDATION OF PEDESTRIAN HEAD FORM AND LEGFORM IMPACT TESTING UPON HYBRID VEHICLE FRONT END PROFILE, Kulliyah of Engineering Research and Innovation Exhibition 2013, (KERIE'13), International Islamic University Malaysia.
- 3. Best Presenter 2014 2nd International Conference on Mechanical, Automotive and Materials Engineering, (CMAME 2014), May 26-28, Singapore.
- 4. Best Paper 2015 Malaysian Technical Universities Conference on Engineering & Technology (MUCET 2015), 11-13 Oct, Johor Bahru, Malaysia.
- 5. Publication Award 2014 in Faculty of Mechanical Engineering, UiTM.
- Bronze Medal for the research project, Optimization of Vehicle Front-End Geometry for Adult and Child Pedestrian Protection, Invention, Innovation and Design Expo 2017 (IIDEX 2017), RIBU, Universiti Teknologi MARA, Malaysia.

7. Best Course File Award – MEC435 (Computer Aided Design) in Faculty of Mechanical Engineering, UiTM (2018).

REFERENCES

*AVAILABLE UPON REQUEST

1)*

| Name: Dr Ghaffar Abd | Position : Assoc Professor, | Institution: |
|-------------------------|-----------------------------|-------------------|
| Rahman | Mechanical Department, | University Malaya |
| | Engineering Faculty, UM | |
| Telephone: 03- 79675270 | Email: agar@um.edu.my | Years known: 9 |
| (5204) | | |

2)*

| Name: Dr S. | Position: Assoc Proffesor, | Institution: Jabatan |
|------------------------|----------------------------|----------------------|
| Ramachandran | Department of CAD/CAM | Statistik Negara, |
| | Engineering, UM | Putrajaya. |
| Telephone: 03-79675382 | Email: srama@um.edu.my | Years known: 11 |

3)*

| Name: Kanageswary Ramasamy | Position: Pengarah, Bahagian Akaun | Institution: Jabatan Statistik Negara, |
|-------------------------------|---------------------------------------|---|
| | | Putrajaya. |
| Telephone: 03-77851149 | Email: | Years known: 23 |
| ext 804 | kanageswary@stats.gov.my | |