

JAMALUDDIN MAHMUD PROF IR DR

Current Position:

Professor
School of Mechanical Engineering
College of Engineering
Universiti Teknologi MARA
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ACADEMIC QUALIFICATIONS

PhD (Engineering) Cardiff University, UK Thesis Title: <i>"The Development of a Novel Technique in Measuring Human Skin Deformation In-vivo to Determine its Mechanical Properties"</i>	2010
MSc in Manufacturing Engineering International Islamic University Malaysia Thesis Title: <i>"Failure Analysis of Composite Materials"</i>	2002
B. Eng (Hons) Mechanical Universiti Teknologi MARA Malaysia	1996
Diploma in Mechanical Engineering (Manufacturing) Universiti Teknologi MARA Malaysia	1994

PROFESSIONAL QUALIFICATIONS

Professional Engineer (Mechanical) , Ir Board of Engineers, Malaysia (BEM)	2016
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WORK EXPERIENCE

Organisation 1: Universiti Teknologi MARA (UiTM) Malaysia

At the Office of Industry, Community & Alumni Network (ICAN), UiTM Chancellery

Leadership experience:

- **Head, Industry Linkage** Apr 2011 – Mar 2013

Special Appointment

- **UiTM Research Ethics Committee Member** 2014 – 2019
- **Advisor, Knowledge Transfer Programme (KTP Grant)** 2013 – 2018

Research Leadership/ Appointment

- **Editor-in-chief, Journal of Mechanical Engineering (Scopus indexed)** Jan 2020 – Present
- **Founder and Head of RIG – Biomechanical & Clinical Engineering (BioMeC) Research Group, Research Excellence Entity Tier 5** Oct 2016 – Oct 2021

At the Faculty of Mechanical Engineering,

Administrative experience:

- **Deputy Dean (Student Affairs)** April 2013 – Dec 2015
- **Head of Programme (EM220: BEng (Hons) Mechanical Eng)** July 2010 – Apr 2011
- **Head of Programme (EM110: Diploma Mechanical Eng)** 2003 – 2006

Academia:

- **Professor** Nov 2018 – Present
- **Associate Professor** July 2012 – Nov 2018
- **Senior Lecturer** July 2005 – July 2012
- **Lecturer** May 2001 – July 2005
- **Faculty Academic Board** 2003-2006, 2010, 2013-2015
- **Board of Curriculum Review** 2003/06, 2013/15, 2018/19

Organisation 2:

International Islamic University Malaysia (IIUM), Jalan Gombak, 53100 Kuala Lumpur

Academia:

Part Time Tutor 1999 – 2001

Demonstrating workshops and tutoring numerical methods, while pursuing MSc degree fulltime.

Organisation 3:

UMW Equipment Sdn Bhd, Jalan Utas, Seksyen 15, 40000 Shah Alam, Selangor, Malaysia

Engineering Practice:

Service Executive July 1996 – Oct 1998

Heading the After Sales Service Department (since Jan 1997) to maintain and repair customers' heavy construction equipment (e.g. excavators, bulldozers, shovels etc) at construction/ customers' sites.

In the first 6 months at UMW Equipment Sdn Bhd, I was attached at various departments as a Management Trainee.

RESEARCH/TEACHING AREAS

Taught courses and conducted researches in the area of

- Mechanics of Materials
- Mechanics of Composite Materials
- Biomechanical Engineering (Biomechanics of Skin)
- Mechanical Engineering Design
- Numerical Methods
- Finite Element Method
- Research Methods

using

- Motion Analysis Technique
- Digital Image Correlation Technique
- Finite and Inverse Finite Element Method & FE Programming
- Reverse Engineering Approach

PUBLICATIONS

Refereed Journals

1. RS Ibramsa, MJ Abd Latif, MS Zakaria, MN Harun and **J Mahmud**, Quantitative Study of Articular Cartilage Based on Greyscale Assessment Using Low-Field MRI, International Journal on Advanced Science, Engineering and Information Technology, Vol. 12(1) (2022), pp. 231-236 (2022) {SCOPUS}
2. MAM Norman and **J Mahmud**, Investigation of Natural Frequencies on Kevlar/Glass Hybrid Laminated Composite Plates Using Finite Element Simulation, International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies, Vol. 12(9), 12A9A, pp. 1-9 (2021) {WoS/ Q3}.
3. WNFSW Dagang, NHQN Hamdi, SH Marwan, **J. Mahmud**, NFA Manan, MH Ramlee, AH Abdullah, Effects of pentagonal pore sizes in the zinc hydroxyapatite parietal-temporal implant, International Journal of Emerging Technology and Advanced Engineering, Vol. 11(11), pp. 76–85 (2021){SCOPUS}.
4. ASA Satmi, NH Fadilah, MYPM Yusof, NFA Manan, **J Mahmud**, SA Abdullah, Effectiveness and Comfort Assessment of the Novel Intra-oral Bisecting Angle Bisector© and Paralleling RINN® Digital Imaging Receptor Holders in Low Palatal Height Patients, Archives of Orofacial Sciences, Vol. 15(1), pp. 1–10 (2020){SCOPUS}.
5. CH Le, DT Le, D Arey, P Gheorghe, AM Chu4 XB Duong, TT. Nguyen, TT Truong, Chander Prakash, ST Zhao, **J Mahmud**, J Gao and MS Packianather, Challenges and Conceptual Framework to Develop Heavy-Load Manipulators For Smart Factories, Vol. 11(8), pp. 209-216 (2020){SCOPUS}.

6. WMNWA Rahman, NAB Johari, SN Sarmin, NYM Yunus, Y Japaruni, **J Mahmud** and MN Khairuddin, *Leucaena leucocephala*: A fast-growing tree for the Malaysian particleboard industry, *BioResources*, Vol. 15(4), pp. 7433-7442 (2020) {SCOPUS/ ISI IF: 1.409/Q2}.
7. AFA Ghani and **J Mahmud**, Characterisation of hybrid carbon glass fibre reinforced polymer (C/GFRP) of balanced cross ply and quasi isotropic under tensile and flexural loading, *International Journal of Automotive and Mechanical Engineering*, Vol. 17(1), pp. 7792-7804 (2020) {SCOPUS/ Q2}.
8. NAZ Abidin, MZHM Jailani, AK Hussain, **J Mahmud**, Experimental-Numerical Analysis of Woven Laminates under Tension, *Materials Science (Medžiagotyra)*. Vol. 26, No. 4. , pp 505 - 512, (2020) {SCOPUS/ ISI IF: 0.625/Q3}.
9. FM Rohjoni, MNAA Patar, **J Mahmud**, H Lee and A Hanafusa, Finite element analysis of a transtibial prosthetic during gait cycle, *International Journal of Mechanical Engineering and Robotics Research*, Vol. 9(5), pp. 764-770 (2020) {SCOPUS/Q3}.
10. SHK Bahrain and **J Mahmud**, Swelling behaviour and morphological analysis of *Arenga pinnata*-silicone Biocomposite, *Materials Letters*, Vol. 242, pp. 32-34 (2019) {SCOPUS/ ISI IF: 2.687/Q1}.
11. UR Hashim, A Jumahat and **J Mahmud**, Improved tensile properties of basalt fibre reinforced polymer composites using silica nanoparticles *Materialwissenschaft und Werkstofftechnik*, Vol. 50(9), pp. 1149-1155 (2019) {SCOPUS/ ISI IF: 0.625/Q3}.
12. SAH Roslan, Z Yusof, ZA Rasid, MH Yahaya, MZ Hassan and **J Mahmud**, Dynamic instability response of smart composite material, *Materialwissenschaft und Werkstofftechnik*, Vol. 50 (3) pp. 302-310 (2019) {SCOPUS/ ISI IF: 0.625/Q3}.
13. T Rahayu, D Aprilawati, **J Mahmud**, B Purwanto and L Herawati, Both upper and lower extremity-only video game-based exercises (Exergaming) affect blood glucose serum levels and heart rates but not oxygen saturation in teenagers, *Journal of Physical Education and Sport*, Vol. 19 (114), pp. 802-807, 2019 {SCOPUS/ Q4}.
14. M Mali and **J Mahmud**, Compressive failure behaviour of unidirectional and woven Kevlar/Epoxy composite laminates under various angles of fiber orientation, *International Journal of Engineering and Advanced Technology*, Vol. 9(1), pp. 5868-5872, 2019 {SCOPUS/ Q4}.
15. M Mali, AK Hussain, MZ Zahrullaili, MF Alias and **J Mahmud**, Failure analysis on woven glass/epoxy composite laminates due to the effect of V-Notch and angle of fiber orientation, *Journal of Mechanical Engineering*, Vol. 8 (Special issue 1), pp. 192-199, 2019 {SCOPUS/ Q4}.
16. AZM Adnan, MA Yahaya, **J Mahmud**, MZ Othman, and TK Sheng, Misalignment effect of Split Hopkinson Pressure Bar (SHPB), *Journal of Mechanical Engineering*, Vol. 8 (Special issue 1), pp. 140-152, 2019 {SCOPUS/ Q4}.
17. AFA Ghani, MY Yaakob, MN Salim and **J Mahmud**, Hardness assessment of hybrid composite CFRP and GFRP, *International Journal of Recent Technology and Engineering*, Vol. 8(1), pp. 86-93, 2019 {SCOPUS/ Q4}.
18. SHK Bahrain and **J Mahmud**, *Arenga pinnata* – Silicone biocomposite: Quantifying its tensile properties using neo-hookean model, *International Journal of Recent Technology and Engineering*, Vol. 8(1), pp. 3186-3190, 2019 {SCOPUS/ Q4}.
19. AFA Ghani, AH Samsudin, SDM Sharom, YT Lu and **J Mahmud**, Effects of laminate arrangement on the failure behaviour of hybrid composite plates under transverse sinusoidal load, *International Journal on Advanced Science, Engineering and Information Technology*, Vol. 9(3), pp. 799-803, 2019 {SCOPUS/ Q4}.

20. SBM Yasin, NF Mohd, **J Mahmud**, NS Whashilah and Z Razak, Reduction of protector cover warpage via topology optimization, *International Journal of Advanced Manufacturing Technology*, Vol. 98 (9-12) pp. 2531-2537 (2018) {SCOPUS/ ISI IF: 2.601/Q1}.
21. N Sapiai, A Jumahat and **J Mahmud**, Mechanical properties of functionalised CNT filled kenaf reinforced epoxy composites, *Materials Research Express*, Vol. 5 (4), 045034 (2018), {SCOPUS/ ISI IF: 1.151/Q1}.
22. AF Ab Ghani, G Omar, MZ Sulaiman, A Jumahat and **J Mahmud**, Elasticity deformation and failure modes behavior of hybrid composite CFRP/GFRP under tensile loading, *International Journal of Advanced and Applied Sciences*, Vol. 5 (3), pp. 98-106 (2018), {ISI/ WoS Indexed}
23. AMA Wahab, A Nuh, ZA Rasid, A Abu, Z Tanasta, MZ Hassan and **J Mahmud**, Tensile behaviours of single-walled carbon nanotubes, *Materialwissenschaft und Werkstofftechnik*, Vol. 49(4), pp. 467-471 (2018). {SCOPUS/ ISI IF: 0.524/Q3}.
24. SHK Bahrain, **J Mahmud** and MH Ismail, Arenga Pinnata–Silicone Biocomposite Properties via Experimental and Numerical Analysis, *Materials Science (MEDŽIAGOTYRA)*, Vol. 24 (3), pp. 272-277 (2018) {SCOPUS/ ISI IF: 0.45/Q3}.
25. Z Yusof, ZA Rasid and **J Mahmud**, The Active Strain Energy Tuning On The Parametric Resonance Of Composite Plates Using Finite Element Method, *Journal of Mechanical Engineering*, Vol SI 5(1), pp. 104-119 (2018) {SCOPUS/ Q4}.
26. AF Ab Ghani, MR Mansor, MZ Selamat, A Jumahat and **J Mahmud**, The Novel Digital Image Correlation Technique in Predicting Behaviour and Failure of Hybrid Composite, *Journal of Telecommunication, Electronic and Computer Engineering*, Vol. 10 No. 2-8, pp. 125-129 (2018) {SCOPUS/ Q4}.
27. AF Ab Ghani and **J Mahmud**, Hardness, Tensile and Microstructure Assessment of Carbon/Glass Hybrid Composite Laminate, *Journal of Mechanical Engineering*, Vol. 15(2), pp. 91-105 (2018) {SCOPUS/ Q4}.
28. NFA Manan, AHA Aziz, **J Mahmud** and AH Abdullah, Analysis of Dryness Effect on Skin by Adapting Hyperelastic Constitutive Model, *Journal of Mechanical Engineering*, Vol SI 5(3), pp. 123-140, (2018) {SCOPUS/ Q4}.
29. H Lee, MNA Ab Patar, T Komeda, **J Mahmud** and Y Takahashi, Development of a quantitative evaluation method in occupational therapy exercise for upper limb motor function rehabilitation, *Journal of Mechanical Engineering* Vol. SI 5(2), pp. 258-274 (2018)) {SCOPUS/ Q4}.
30. NFA Manan, MFM Jam, SK Sahu and **J Mahmud**, Failure Analysis of Graphite Epoxy Composite Plate Under Transverse Sinusoidal Load, *International Journal of Engineering & Technology*, Vol. 7 (3.11) pp. 62-66 (2018) {SCOPUS/ Q4}.
31. MAM Norman, MA Zainuddin and **J Mahmud**, The Effect of Various Fiber Orientations and Boundary Conditions on Natural Frequencies of Laminated Composite Beam, *International Journal of Engineering & Technology*, Vol. 7 (3.11) pp. 67-71 (2018) {SCOPUS/ Q4}.
32. H Lee, MNAA Patar, T Komeda, **J Mahmud** and Y Takahashi, Evaluation of four-wheel vehicle driven by lower limb with electric pedalling assistance for elderly people, *Journal of Mechanical Engineering*, Vol SI 5(5), pp. 29-43 (2018) {SCOPUS/ Q4}.
33. H Lee, MNAA Patar, T Komeda, **J Mahmud** and Y Takahashi, Development of a quantitative evaluation method in occupational therapy exercise for upper limb motor function rehabilitation, *Journal of Mechanical Engineering*, Vol SI 5(2), pp. 258-274 (2018) {SCOPUS/ Q4}.

34. ZAM Adnan, MA Yahaya, MNFA Manan and **J Mahmud**, Quantifying and comparing the hyperelastic properties of skin, leather and silicone, *International Journal of Engineering and Technology (UAE)*, Vol. SI 7 (4) pp. 45-59 (2018) {SCOPUS/ Q4}.
35. N Sapiai, A Jumahat and **J Mahmud**, Chapter 6: Wear Properties of Acid and Silane Modified CNT Filled Hybrid Glass/Kenaf Epoxy Composites, Book Title: *Synthesis and Tribological Applications of Hybrid Materials*, 2018 Wiley-VCH Verlag GmbH & Co. KGaA.
36. AF Ab Ghani, **J Mahmud**, S Nazran and N Muhammad, Mechanical properties extraction of composite material using digital image correlation via open source Ncorr, *Defence S and T Technical Bulletin*. Vol. 11(1), pp. 13-24 (2018), {SCOPUS/ Q3}.
37. R Rustam, AFA Nazri, MR Md Tasliman and **J Mahmud**, Finite Element Simulation and Analysis for the Design of a Pressure Vessel with Expansion Joint, *International Journal of Materials, Mechanics and Manufacturing*, Vol. 6(4), pp. 268-272 (2018).
38. AF Ab Ghani and **J Mahmud**, Shear deformation behavior of hybrid composite (GFRP/CFRP), *Materialwissenschaft und Werkstofftechnik*, Vol. 48 (3-4), pp. 273-282 (2017). {SCOPUS/ ISI IF: 0.524/Q3}.
39. SHK Bahrain, NS Radzi and **J Mahmud**, Sealing capability and hyperelastic behaviour of silicone biocomposites via compression test, *Materialwissenschaft und Werkstofftechnik*, Vol. 48, pp. 311-317 (2017). {SCOPUS/ ISI IF: 0.524/Q3}.
40. SHK Bahrain and **J Mahmud**, Tensile properties of silicone rubber via. experimental and analytical method adapting hyperelastic constitutive models, *Journal of Engineering and Applied Sciences*, Vol. 12 (SI 6), pp. 7703-7707, (2017). {SCOPUS/ Q3}.
41. NA Ramdzam and **J Mahmud**, Investigating the shear behaviour of hard points on honeycomb sandwich panels, *Journal of Mechanical Engineering*, Vol. SI 4(4), pp. 197-210, (2017), {SCOPUS}.
42. AF Ab Ghani, N Najwa, Z Selamat, Y Lu, A Jumahat and **J Mahmud**, Numerical study of hybrid composite CFRP/GFRP, *ARNP Journal of Engineering and Applied Sciences*, Vol. 12 (24), pp. 7186-7191, (2017) {SCOPUS/ Q3}.
43. M Mali, AH Samsudin, **J Mahmud**, AK Hussain and MD Alansary, Failure analysis of composite laminates under biaxial tensile load due to variations in lamination scheme, *Journal of Mechanical Engineering*, Vol. SI 4(5), pp. 167-182 (2017), {SCOPUS}.
44. SHK Bahrain, **J Mahmud**, ZA Rasid, and J Madete, Synthesization and microstructural analysis of *Arenga pinnata* fibres and silicone rubber for new silicone biocomposite material, *Journal of Mechanical Engineering*, Vol. SI 4(4), pp. 15-30 (2017), {SCOPUS}.
45. KN Hassan, AK Hussain, **J Mahmud** and AA Khalid, Static stability determination of an exhaust stack structure using finite element analysis, *Journal of Mechanical Engineering*, SI 4(5), pp. 153-166 (2017), {SCOPUS}.
46. **J Mahmud**, SHM Yusop and SNAM Noor, *Leather and Synthetic Leather: A Mechanical Viewpoint for Sustainability, Engineering and Technical Development for a Sustainable Environment*, Chapter 9, pp. 145-166 (2017).
47. NH Hashim, MJA Latif, YL Jaafar, R Ramlan and **J Mahmud**, Computational and Experimental Study of Articular Cartilage Thickness on Biomechanical Behavior, *International Journal of Applied Engineering Research*, Vol. 12, No. 16, pp. 5849-5856 (2017). {SCOPUS/ Q3}.
48. AF Ab Ghani and **J Mahmud**, A description on deformation and failure of hybrid composite under static loading, *Journal of Advanced Research in Materials Science* Vol. 36(1), pp. 21-21 (2017)

49. **J Mahmud**, Keynote Speech in Biomechanics: Analysis and Benchmarking of Indexed Publications in Malaysia and South East Asia, Journal of Medical and Bioengineering Vol. 5, No. 2, pp. 103-107 (2016).
50. G Mustapha , MFA Razak, MSM Hamzah, NHM Yahya and **J Mahmud**, The Development of a Low Cost Motion Analysis System: Cepak Visual 3d V1.0, International Journal of GEOMATE, Vol. 11, Issue 24, pp.2248-2252 (2016) {SCOPUS/ Q3}
51. A. F. Ab Ghani, M. B. Ali, S. DharMalingam and **J Mahmud**, "Digital Image Correlation (DIC) Technique in Measuring Strain Using Opensource Platform *Ncorr*", Journal of Advanced Research in Applied Mechanics, Vol. 26, No. 1. pp. 10-21, (2016).
52. G Mustapha, **J Mahmud**, M Zakaria, WRW Sulaiman, Biomechanics research on martial arts – the importance of defensive study, Archives of Budo, Vol. 11, pp. 187-195 (2015). {SCOPUS/ ISI IF: 1.31/ Q2/Q3}
53. MNA Ab Patar, T Komeda, **J Mahmud** and CY Low, Model Based Design of Finger Exoskeleton for Post Stroke Rehabilitation Using a Slotted Link Cam with Lead Screw Mechanism, Lecture Notes in Electrical Engineering , Vol. 349, pp 95-103 (2015). {SCOPUS/ Q3}
54. N Sapiai, A Jumahat and **J Mahmud**, Flexural and Tensile Properties Of Kenaf/glass Fibres Hybrid Composites Filled With Carbon Nanotubes, Jurnal Teknologi, Vol. 76, No. 3, pp 115-120 (2015). {SCOPUS/ Q3}
55. WW Amir, A Jumahat and **J Mahmud**, Effect of Nanoclay Content On Flexural Properties Of Glass Fiber Reinforced Polymer (GFRP) Composites, Jurnal Teknologi, Vol. 76, No. 3, pp 31-35 (2015). {SCOPUS/ Q3}
56. AH Samsudin, AK Hussain and **J Mahmud**, Deformation and Failure Analysis of Symmetric and Antisymmetric Graphite/epoxy Laminate Due To Variations In Fiber Orientation, ARPN Journal of Engineering And Applied Sciences, Vol . 10, No. 17, pp 7336-7344 (2015). {SCOPUS/ Q3}
57. MNA Ab Patar, T Komeda, CY Low and **J Mahmud**, Model-based Systems Engineering Of A Hand Rehabilitation Device, Jurnal Teknologi, Vol. 76, No. 4, pp 101-106 (2015). {SCOPUS/ Q3}
58. K Bujang, AFA Nazri, AFA Azam and **J Mahmud** , Development of A Motion Capture System Using Kinect, Jurnal Teknologi, Vol. 76, No. 11, pp 75-86 (2015). {SCOPUS/ Q3}
59. NFA Manan, **J Mahmud** and A Jumahat, Biomechanical Behaviour of Bovine Skin: An Experiment-theory Integration And Finite Element Simulation", Jurnal Teknologi, Vol. 76, No. 10, pp 103-111 (2015). {SCOPUS/ Q3}
60. KMST Yusuff, AFA Nazri, G Mustapha and **J Mahmud**, Analysis Of Static And Dynamic Motion Accuracy For Kinect-virtual Sensei System, ARPN Journal of Engineering And Applied Sciences, Vol . 10, No. 17, pp 7328-7335 (2015). {SCOPUS/ Q3}
61. AH Samsudin and **J Mahmud**, The Effect of Lamination Scheme and Angle Variations to the Displacements and Failure Behaviour of Composite Laminate, Jurnal Teknologi, Vol. 76, No. 11, pp 113-121 (2015). {SCOPUS/ Q3}
62. NFA Manan, SNAM Noor, NN Azmi and **J Mahmud**, Numerical Investigation of Ogden and Mooney-Rivlin Material Parameters, ARPN Journal of Engineering And Applied Sciences, Vol. 10, No. 15, pp 6329-6335 (2015). {SCOPUS/ Q3}
63. **J Mahmud**, Keynote Speech on Skin Biomechanics: An Experimental-Numerical Integration, Journal of Medical and Bioengineering Vol. 4, No. 1, pp. 24-30 (2015).
64. SNA Mohd Noor and **J Mahmud**, Skin Prestretch Evaluation Adapting Mooney-Rivlin Model, Journal of Medical and Bioengineering Vol. 4, No. 1, pp. 31-35 (2015).

65. NF Adull Manan, **J Mahmud**, and MH Ismail, Biomechanical testing of bovine skin using various sample specifications, *Materials Research Innovations* Vol. 18, No. S6, pp. 389-394 (2014). {SCOPUS/ ISI IF: 0.830/ Q3/Q4}
66. N Muhammad, A. Jumahat, MH Hamzah, and **J Mahmud**, Design and Fabrication of Compression Test Rig for Fibre-Reinforced Polymer Composites, *Materials Research Innovations* Vol. 18, No. S6, pp. 232-235 (2014). {SCOPUS/ ISI IF: 0.83/ Q3/Q4}
67. **J Mahmud**, CA Holt, SL Evans and NFA Manan. *Quantifying Skin Properties Using a Novel Integration Experiment-Finite Element Simulation and Skin Pre-Stretch Model*. *Advanced Science Letters*, American Scientific Publishers, Vol. 19, pp.3155-3160 (2013). {SCOPUS/ Q2/Q3}
68. **J Mahmud**, AK Hussain, N Rahimi and MA Rahim. *Failure Analysis of Composite Laminate Based on Experiment-Simulation Integration*. *CREAM - Current Research in Malaysia* Vol.2, No. 2, pp. 7-22. (2013)
69. SH Marwan, AH Abdullah and **J Mahmud**. *Frontal Impact Analysis of Human Skull for Accident Reconstruction*. *International Journal of Enhanced Research in Science Technology & Engineering*, Vol. 2 Issue 7, July-2013, pp: 58-64, (2013).
70. NFA Manan, **J Mahmud** and MH Ismail. *Quantifying the Biomechanical Properties of Bovine Skin under Uniaxial Tension*. *Journal of Medical and Bioengineering, Engineering and Technology Publishing (ETP)*, Vol. 2; pp. 45–48. (2013).
71. AH Abdullah, MF Othman, H Rashid, **J Mahmud**, AM Saman and AZ Zolkepli. *Effects of Interference Screw Lengths on the Primary Stability of Anterior Cruciate Ligament Reconstruction*, *Advanced Science Letters*, American Scientific Publishers, Vol. 19: 873-876. (2013). {SCOPUS/ Q2/Q3}
72. M Chizari, M Snow, W Cheung, **J Mahmud** and B Wang. *Relative Motion of Tendon Limbs in a Loop Tendon Graft*. *Biomedical Engineering: Applications, Basis and Communications*, World Scientific Publications, Vol. 24(5): pp 1. (2012). {SCOPUS/ ISI IF: 0.233/ Q4}
73. N Zulkapli, MHM Ramli MNA Ab Patar and **J Mahmud**. *A Robust Active Force Control Algorithm in High Precision Motion Application*. *Advances in Mechanical Engineering*, IERI, USA Publications. Vol. 2(2): pp 102–103. (2012).
74. **J Mahmud**, CA Holt and SL Evans. *An Innovative Tool to Measure Human Skin Strain Distribution In Vivo Using Motion Capture and Delaunay Mesh*. *Journal of Mechanics*, Cambridge University Press. Vol. 28(2): pp 309–317. (2012). {SCOPUS/ ISI IF: 0.333/ Q3}
75. M Snow, W Cheung, **J Mahmud**, SL Evans, CA Holt, B Wang and M Chizari. *Mechanical assessment of two different methods of tripling hamstring tendons when using suspensory fixation*. *Knee Surgery, Sports Traumatology, Arthroscopy*, Springer-Verlag. Vol 20(2): pp 262–267 (2012). {SCOPUS/ ISI IF: 2.676/ Q1}
76. **J Mahmud**, CA Holt and SL Evans. *An innovative application of a small-scale motion analysis technique to quantify human skin deformation in vivo*, *Journal of Biomechanics*, Elsevier. Vol. 43(5): pp 1002–1006. (2010). {SCOPUS/ ISI IF: 2.463/ Q1}
77. S Mat, J Saedon, **J Mahmud** and MA Salim. *The development of computational model through reverse engineering: Side mirror case study*, *Journal of Mechanical Engineering and Technology*, Universiti Teknikal Malaysia Melaka (UTeM). Vol. 1(1), pp. 25–41 (2009)
78. **J Mahmud**, W Kuntjoro and A Jumahat. *Failure Analysis of Fiber Reinforced Composite Materials Used in Malaysian Industries*, *Scientific Research Journal*, UPENA. Vol. 4(2), pp. 41–53 (2007).

79. **J Mahmud**, AF Ismail and T Pervez. *Employing a failure criterion with interaction terms to simulate the progressive failure of carbon-epoxy laminates*, IEM Journal, The Institution of Engineers (IEM) Malaysia. Vol. 66(2), pp 6–14 (2005).
80. W Kuntjoro and **J Mahmud**. *Truss Structural Configuration Optimization using The Extended Interior Penalty Method*, ANZIAM, Austral. Mathematical Society. Vol. 46, pp C1272–C1287. (2005). {SCOPUS/ ISI IF: 0.198/ Q3}

Proceedings/Conferences

1. NIM Tahir, M Mali and **J Mahmud**, The effects of cutout size and fibre orientation to the failure behaviour of glass epoxy and boron epoxy composite laminates, *Materials Today: Proceedings*, Vol. 48(6), pp. 1880-1884 (2022){SCOPUS}.
2. NN Azmi, MAM Shahrum, ANA Redzuan and **J Mahmud**, Compressive failure behaviour of glass epoxy and graphite epoxy composite laminates due to the effects of different cut-out sizes and variations in fibre orientation, *Materials Today: Proceedings* 48, 1936-1940 (2022){SCOPUS}.
3. Z Michael, I Mahisham, MF Mahadi, ANM Amin, SIHS Ahmad and **J Mahmud**, Deformation and failure behavior of hybrid composite laminates made of Glass Epoxy and woven Kevlar Epoxy, *Materials Today: Proceedings* 46 (2021) 1618–1625 {SCOPUS}.
4. MAA Zulkifli, ZIA Halim, NAS Norbani, **J Mahmud**, Failure analysis of boron/epoxy composite laminates with square cutouts in various size under uniaxial tension, *Journal of Physics: Conference Series*, 2051(1), 012062 (2021) {SCOPUS}.
5. NNM Nazali, NFA Manan, **J Mahmud**, AH Abdullah, Integrating hyperelastic constitutive models in natural biopolymer for healing patch technology, *AIP Conference Proceedings*, 2344, 020024, (2021){SCOPUS}.
6. AMA Wahab, ZA Rasid, AK., Makhtar, **J Mahmud**, Assessing the Validity of Torsional Motion on Dynamic Analysis of Rotor Bearing System Using Finite Element, *Lecture Notes in Mechanical Engineering*, 3rd International Conference on Separation Technology, ICoST 2020, pp. 341–352, (2021){SCOPUS}.
7. N Abdullah, SHK Bahrain, NAS Manssor, APPAbdul Majee and, **J Mahmud**, Compressive and viscoelastic behavior of Arenga Pinnata-Silicone Biocomposite, *Materials Today: Proceedings* 41 (2021) 83–87 {SCOPUS}.
8. MAM Norman, IH ZANwar, AY Yaakob, MH Shahabudian and **J Mahmud**, The Effects of Circular Cutout and Hybridization to the Failure Behavior of Graphite Epoxy and Kevlar Epoxy Composite Laminates, *Lecture Notes in Mechanical Engineering*, Vol. 46, pp.229 – 240 (2021){SCOPUS}.
9. IAM Azriyuddin, Y Yusof, AK Hussain and **J Mahmud**, Solar Car (Tigris) Monocoque Design: Structure, Cost and Power Consumption, *Lecture Notes in Mechanical Engineering*, Vol. 46, pp. 241 – 255 (2021){SCOPUS}.
10. NAS Manssor, AMM Ismail, NAZ Abidin, MA Aziz, **J Mahmud**, Numerical-Experimental Approach to Assess the Deflection Behaviour of Carbon Fibre Fishing Rod, *IOP Conference Series: Materials Science and Engineering* 834 (1), 012065, 2020 {SCOPUS/ Q4}.
11. M Mali, AK Hussain, MA Muzafar, AFM Zainol and **J Mahmud**, Failure analysis of woven kevlar/epoxy composite laminates under compression due to variations in fiber orientation, *Journal of Physics: Conference Series*, 1349(1), paper no. 012050, 2019 {SCOPUS/ Q4}.
12. NN Azmi, MFM Nasir, G Ayoub, AK Hussain and **J Mahmud**, The study of hybrid composite plates under transverse sinusoidal load using ANSYS, *Journal of Physics: Conference Series*, 1349(1), paper no. 012030, 2019 {SCOPUS/ Q4}.

13. NM Nor Adnan, MNA Ab Patar, H Lee, S-I Yamamoto, L Jong-Young and **J Mahmud**, Biomechanical analysis using Kinovea for sports application, IOP Conference Series: Materials Science and Engineering, Vol. 342(1), 012097 (2018), {SCOPUS/ Q3}. NN Azmi, AK Hussain and **J Mahmud**, Kenaf Silicone Biocomposites: Synthesis and its Hyperelastic Behaviour, Materials Science Forum, Vol. 900, pp. 12-16 (2017) {SCOPUS/ Q3/Q4}
14. AF Ab Ghani and **J Mahmud**, Material Characterization of Hybrid Composite: Experimental Using Strain Gauge/DIC with Finite Element Modelling Macro/Micro Scale, Key Engineering Materials, Vol. 740, pp. 31-40 (2017) {SCOPUS/ Q3/Q4}
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63. N Rahimi, MA Rahim, AK Hussain and **J Mahmud**. *Evaluation of Failure Criteria for Composite Plates Under Tension*, 2012 IEEE Symposium on Humanities, Science and Engineering Research (SHUSER 2012), 24-27 June 2012, Kuala Lumpur Malaysia. {SCOPUS}
64. MHM Ramli, MNA Ab Patar, CA Holt, SL Evans, M Chizari and **J Mahmud**. *Determining Hyperelastic Parameters of Human Skin Using 2D Finite Element Modelling and Simulation*, In proceedings of 2012 IEEE Symposium on Humanities, Science and Engineering Research (SHUSER 2012), 24-27 June 2012, Kuala Lumpur Malaysia. {SCOPUS}
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79. **J. Mahmud**, A.F. Ismail and T. Pervez. *A Failure Criterion with Interaction Terms to Simulate the Progressive Failure of Composite Laminates*” Proceedings of the International Conference on Composite Materials and nano-Structures (iC2MS’06)
80. MA Yahaya, J Saedon and **J Mahmud**. *Auxetic Behaviour in the Out-of-plane Direction of a Composite Laminate*. Proceedings of Brunei International Conference on Engineering and Technology 2005, (BICET 2005).
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82. W Kuntjoro and **J Mahmud**. *Truss Optimization Through Members Deletion*. Proceedings of National Conference on Advances in Mechanical Engineering 2005, (NAME ’05), Kuala Lumpur Malaysia.
83. SC Abdullah and **J Mahmud**. *Design of Manufacturing Floor Layout for Production Performance*. Proceedings of National Conference on Advances in Mechanical Engineering 2005, (NAME ’05), Kuala Lumpur Malaysia.
84. J Saedon, **J Mahmud** and S. Sapari. *Optimization Process Control in Thermoplastic Injection Moulding Using Design of Experiment (DOE) Method: Side Mirror*. Proceedings of the Conference on Scientific and Social Research, (CSSR 2005) Malaysia.
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90. **J Mahmud**, A Jaffar and J Saedon. *The Development of Mathematical and Computational Model to Solve Engineering Problems*. Malaysian Science and Technology Congress (MSTC 2004), COSTAM Malaysia.
91. J Saedon, **J Mahmud**, and Y Abdalla. *Influence of ICT in Manufacturing Environment: Issue and Challenge*, Malaysian Science and Technology Congress (MSTC 2004), COSTAM Malaysia.
92. A Jumahat, AK Ariffin, and **J Mahmud**. *Simulation Studies on Cold Compaction Process Using Finite Element Method*, Malaysian Science and Technology Congress (MSTC 2004), COSTAM Malaysia.
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94. A Jumahat, **J Mahmud** and M Sani. *Ceramic Powder Compaction Process*. Proceedings of the National Seminar on the Technological and Social Science (STSS 2004), Kuantan Malaysia.
95. **J Mahmud**, H Tamjehi and AZA Latiff. *Mode of Failure Analysis of E-glass-Epoxy*. Proceedings of Technical Postgraduate Symposium (Techpos 2004), University of Malaya.
96. VD Natarajan, WMW Mohamed and **J Mahmud**. *An Effective Approach to the Teaching and Learning of Engineering Mechanics*. Proceedings of International Conference on University's Learning and Teaching (INCULT 2004), Malaysia.
97. J Saedon, **J Mahmud** and NR Abdullah. *Evaluation Dispatching Rules in a Dynamic Scheduling Environment*. Proceedings of Technical Postgraduate Symposium (Techpos 2004), University of Malaya.
98. MH Ismail and **J Mahmud**. *Effect of Temperature and Shear Rate on Flow Properties of Metal Injection Moulding Seedstock*. Proceedings of Technical Postgraduate Symposium (Techpos 2004), University of Malaya.
99. A Jaffar, J Mahmud and N Yusoff. *Process Improvement of Polyurethane Injection Moulding for Car Seat Assembly Line*. International Conference on Product Design and Development (ICPDD 2004), University of Malaysia Sabah.
100. J Saedon, W Kuntjoro and **J Mahmud**. *Computer Aided Reverse Engineering for Solid Model Development of Four Stroke Car Engine*. International Conference on Product Design and Development (ICPDD 2004), University of Malaysia Sabah.
101. **J Mahmud**, J Saedon and VD Natarajan. *The Development of Computational Model in Performing Mode of Failure Analysis on Composite Plates*. The 12th Biennial Computational Techniques and Applications Conference, September 26 – October 1, 2004 (CTAC 2004), Melbourne Australia.

102. J Saedon, **J Mahmud** and MJA Latif. *Developing a Discrete Event Simulation Model of Manufacturing Cell*. Proceeding of the Research and Consultancy Seminar 2003 (Serac 03), Universiti Teknologi MARA Malaysia.
 103. MJA Latif, **J Mahmud** and J Saedon. *Optimal Modelling and Design Using Finite Element Analysis*. Proceeding of the Research and Consultancy Seminar 2003 (Serac 03), Universiti Teknologi MARA Malaysia.
 104. **J Mahmud**, AF Ismail and J Saedon. *Finite Element Analysis of Progressive Failure for Composite Materials Using a Failure Criterion with Interaction Terms*. Proceedings of the International Conference on Advanced Technology of Experimental Mechanics 2003 (ATEM '03), Nagoya, Japan.
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COURSES/ TRAINING ATTENDED (SELECTED)

External Certification

- IEM Refresher Course for Interviewers, 30 March 2022.
- 1 Day IEM Outcome Based Professional Interview Training and Certification Workshop, 24 October 2020.
- WEBINAR - Workshop on Managing Engineering Competency Development (ECD) Logbook, 21 October 2020.
- Realignment Workshop for EAC Panel No.3/2018, Accreditation Department Training Centre, 17 October 2018.
- 9th Good Clinical Practice Workshop 2016, Faculty of Medicine, UiTM Sg. Buloh, 09 – 11 November 2016 (A Pass Certificate from The National Committee for Clinical research, Malaysia)
- EAC New Panel Evaluators Workshop, Hotel Bangi-Putrajaya, 22 – 24 August 2016, (Completed successfully and certificate received from The Engineering Accreditation Council (EAC) Board of Engineers Malaysia, BEM).
- 2nd Mentors Workshop 2016: “Log Book Training Scheme – Guidelines for Mentors”, 05 November 2016, IEM Training Centre PJ, Organised by IEM.
- Awareness Talk on Enhanced PI Process, 27 May 2016, IEM Training Centre PJ, Organised by IEM.
- Safety and Health at Work, 21 – 22 September 2015, IEM Training Centre PJ, (Mandatory PDP for P.Eng, Certificate from the Engineering Accreditation Council (EAC) Board of Engineers Malaysia, BEM).
- Engineering Management Practice, 16 – 17 March 2015, IEM Training Centre PJ, (Mandatory PDP for P. Eng, Certificate from The Engineering Accreditation Council (EAC) Board of Engineers Malaysia, BEM).
- Program Transformasi Negara Siri-2, 23 – 25 April 2015, Kem BTN Balik Pulau, Organised by Biro Tata Negara (BTN).
- Code of Ethics/ Regulation, 9 – 10 March 2015, IEM Training Centre PJ, (Mandatory PDP for P. Eng., Certificate from The Engineering Accreditation Council (EAC) Board of Engineers Malaysia, BEM).
- A-Slead: Blue Ocean Strategies in Higher Education Agenda, AKEPT Bandar Enstek, 16 - 18 July 2014, Organised and Certificate received from AKEPT MOHE.
- Seminar Perkongsian Aktiviti Terpilih PSPTN 2012 (Sharing of Best Practices), 21 June 2012, Dewan Serbaguna KPT, Organised by Ministry of Higher Education (MOHE) Malaysia.
- Industrial PhD Supervisors Training Programme, 13 – 14 February 2012, UiTM Shah Alam. (Requirement to become a supervisor for Industrial PhD candidate, certificate received from UTM)
- 5 Day MBA: Managing with Strategic Vision by Growth, Innovation and Leadership (Gil) University, Hotel Double Tree, Kuala Lumpur, 19 – 13 May 2011. (Certificate of Completion received from Frost and Sullivan).
- Intensive Workshop on Submission to EAC, Marriot Hotel Putrajaya, 2 – 3 November 2010, Anjuran Malaysian Society of Engineering & Technology (MSET). (Completed successfully and received Certificate from The Engineering Accreditation Department (EAD) Board of Engineers Malaysia, BEM).

- ISO9001:2000 Audit Training and Test, 2 - 4 & 7 July 2004, Universiti Teknologi MARA, (A Pass Certificate received from RAMS Management Consultant).

Internal Certification

- Coaching Skills for Leadership Effectiveness, 8 July 2021, organised by Institut Kepimpinan & Pembangunan UiTM.
- Training for PROFESSIONAL EXCELLENCE, 10 February 2021, organised by Institut Kepimpinan & Pembangunan (ILD) UiTM.
- Grooming for Promotion (Grooming for Interview), 7 June 2018, Chancellery Office, Organised by ILD UiTM.
- Grooming for Promotion, 18 April 2018, ILD Bandar Enstek, Organised by ILD UiTM.
- Program Ikrar Bebas Rasuah (Talk on Interity and Pledge), 08 November 2017, FKM, UiTM Integrity Unit Tour.
- Latihan Penilai Dan Sesi Penilaian Anugerah Kualiti Naib Canselor (AKNC) 2017 (2017 AKNC Panels Training Programme and Evaluation), 03 – 05 Oktober 2017, ILD Bandar Enstek, Organised by InQKA UiTM.
- Sesi Latihan Penilaian Laporan AKNC AKNC 2015 (2015 AKNC Panel programmes), 26 – 27 September 2016, Dewan Al-Ghazali, Pejabat Pendaftar, Organised by InQKA UiTM.
- Talent Accelerated Leadership Excellent Series (Tales), 02 – 03 June 2015, Auditorium 1, Aras 4, ILQAM, Organised by ILQAM UiTM.
- Conference of Heads of Academic Departments of UiTM (Chad2014), 23-24 December 2014, Anjung Budiman, UiTM, Organised by HEA UiTM.
- Seminar Pengenalan kepada Akta 174 dan Pengendalian Kes Tatatertib Pelajar (Act 174 Seminar), 02 December 2014, Dewan Annexe UiTM, Organised by HEP UiTM
- Succession Management Series, 15 October 2014, Auditorium 1, ILQAM, Organised by ILQAM UiTM
- Sesi Penaziran Geran Dana Pembudayaan Penyelidikan (RAGS), 19 September 2014, Hotel Grand Bluewave, Shah Alam, Anjuran oleh Panel Penazir KPM.
- Bengkel Perdana HEP (HEP Perdana Workshop), 15 – 17 Jun 2014, Avillion Admiral Cove, Port Dickson, Organised by HEP UiTM.
- Course on Integrity: Pembudayaan Dan Pengukuhan Integriti, 19 February 2013, Dewan Seminar, Kolej Mawar, Organised by ICAN UiTM.
- Grooming for Promotion, 17 – 18 July 2012, Auditorium 1, Level 4 ILQAM, Organised by ILQAM UiTM.
- Professorial Lecture Series (Nobel Laurette), 12 June 2012, Dewan Agung Tuanku Canselor (DATC), Organised by HEA UiTM.
- Seminar: Community Service Vs Community Engagement, 6 July 2011, Auditorium 1, Level 4 ILQAM, Organized by Mr Mechai Foundation, Organised by ICAN UiTM.
- Leadership Symposium, 5 July 2011, Dewan Agong Tuanku Canselor, UiTM Shah Alam, Organised by HEA UiTM.
- Academic Management Series, 7 – 8 March 2011, Auditorium 1, Level 4 ILQAM, Organised by ILQAM UiTM.

- Kursus Penilaian Tahap Kecekapan (TK 5) (Competency Exam, Level 5) Intekma Resort & ILQAM, 13 – 16 December 2010, Anjuran ILQAM.
- T.O.T. Workshop for OBE-SCL Core-Trainers, Dewan Kuliah A & B, Kompleks S & T, 11 – 12 May 2010, Organised by HEA UiTM.

FUNDED RESEARCH (GRANTS)

As the Project Leader

(Nine (9) Research Completed)

Title	Level	Amount Approved	Date Approved/ Completed
“Mathematical Modelling of Skin and Synthetic Skin (Hydrogel-Silicone Biocomposite) Deformation Behaviour Based on Hyperelastic Constitutive Equations” <i>-Project Leader-</i>	National (FRGS-MOHE Grant)	RM 116, 000	Completed: 2019 (Started: 2016)
“Suction-Stretch Theory In Syntesising Composite Membrane Hyperelasticity” <i>- Project Leader</i>	National (ERGS-MOHE Grant)	RM 80,000	Completed: 2015 (Started: 2012)
“Bovine Skin Bio-Mechanical Characterisation” <i>-Project Leader</i>	National (FRGS-MOHE Grant)	RM 52,000	Completed: 2015 (Started: 2012)
“Suction-Stretch Theory In Syntesising Composite Membrane Hyperelasticity Part 2” <i>-Project Leader</i>	University (PSI-UITM)	RM 20,000	Completed: 2015 (Started: 2013)
“Bovine Skin Bio- Mechanical Characterisation Part 2” <i>-Project Leader</i>	University (PSI-UITM)	RM 20,000	Completed: 2015 (Started: 2013)
“Suction-Stretch Theory In Syntesising Composite Membrane Hyperelasticity Part 3” <i>-Project Leader</i>	University (CIFI-UITM)	RM 20,000	Completed: 2015 (Started: 2013)
“Bovine Skin Bio- Mechanical Characterisation Part 3” <i>-Project Leader</i>	University (CIFI-UITM)	RM 20,000	Completed: 2015 (Started: 2013)
“Finite Element Analysis to Determine the Mechanical Properties of Human Skin” <i>- Project Leader</i>	University (Dst-UITM)	RM 6,000	Completed: 2012 (Started: 2010)

<p>“Failure Analysis of Fiber Reinforced Composite Materials Used in Malaysian Industries”</p> <p style="text-align: right;">- <i>Project Leader</i></p>	<p>University (STG-UiTM)</p>	<p>RM 10,000</p>	<p>Completed: Jan 2004 (Started: 2002)</p>
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On-going Research (As a Member)

Title	Level	Amount Approved	Date Approved
Modified Viscous Anand Model to Include Growth Kinetics of Ag3sn Intermetallic Compound in Predicting 95.5sn-4.0ag-0.05cu Solder Joints Failure Mechanism	National (FRGS-MOHE Grant)	RM 67,046	Sep 2021
Bio-inspired algorithm for automatic behavioural characterization of spinal injured rats	National (Brain, Mind and Neuroscience Research Fund. Sponsor: YPOMNM)	RM 5,000	Aug 2020
Hyper-Viscoelastic Modelling Of Palate And Synthetic Palate (Hydrogel-Silicone Biocomposite) Under Biaxial Tension	National (FRGS-MOHE Grant)	RM 97, 200	Sep 2019
Prediction Of Viscoelastic Behaviour Of Skin Using An Artificial Neural Network (ANN)	National (FRGS-MOHE Grant)	RM 82, 200	Sep 2019
Identifying New Hyperelastic Constitutive Model Via Integration Of Multiple Models In Medical Hybrid Biomaterials	National (FRGS-MOHE Grant)	RM 109, 700	Sep 2019
High Adhesive Nanoresin Biobased Basalt Patch Prototype For Internal Defect Pipeline Rehabilitation	National (PRGS-MOHE Grant)	RM 156, 000	Jan 2019
Progressive Failure Behaviour Of Transverse Sinusoidally Loaded Thick Hybrid Composite Laminate Based On 3rd Order Shear-Warp Theory And Interchangeable Failure Criteria	National (FRGS-MOHE Grant)	RM 97, 000	Jan 2019
“Development of Digital Imaging Sensor Holder for Intra-Oral Bisecting Angle Optimization”	National (PRGS-MOHE Grant)	RM 91, 000	Aug 2017

“Prototyping of Porous NiTi Alloy Dental Screw and Abutment by Metal Injection Moulding (MIM)	National (PRGS-MOHE Grant)	RM 198, 500	Aug 2017
“Dynamic Stress Prediction Model of Skin (Bovine) and Synthetic Skin (Silicone) under Low Impact Loading”	National (FRGS-MOHE Grant)	RM 100, 000	Aug 2017
“Characterization of low-frequency electromagnetic field for orthopedic fixation loosening mechanism” (Ref: FRGS/1/2017/TK03/UNIMAP/02/10)	National (FRGS-MOHE Grant)	RM 98, 000	Aug 2017

Completed Research (As a Member) (Twenty five (25) research/technical reports)

Title	Level	Value	Year of Completion
“Failure Prevention of Stents due to Hemodynamic and Arterial Wall Interactions” (Ref: FRGS/1/2016/TK03/UTHM/02/10)	National (FRGS-MOHE Grant)	RM 121, 000	Completed: 2019 (Started: Aug 2016)
“NiTi Shape Memory Alloy With Titanium Hydride Phase Stabilizer”	National (FRGS-MOHE Grant)	RM 117, 200	Completed: 2018 (Started: 2015)
Failure Study Of High Order Warping Defects In Hybrid Composite Laminate For Static Loading(Ref: RAGS/1/2015/TK0/UTEM/03/17)	National (RAGS-MOHE Grant)	RM 78, 000	Completed: 2018 (Started: Nov 2015)
“Characterisation of biomechanical properties of articular cartilage using low-field magnetic resonance imaging (MRI) image (Ref: FRGS/1/2015/TK05/UTEM/02/1)”	National (FRGS-MOHE Grant)	RM 87, 200	Completed: 2018 (Started: Nov 2015)
“Development of non-invasive technique to characterise biomechanical properties of articular cartilage in synovial joint using magnetic resonance imaging (MRI) image” (Leader from UTEM)	National (ScienceFund-MOSTI Grant)	RM 207, 400	Completed: 2017 (Started: 2014)

“Biomechanical Characterisation of Cranio-Maxillofacial Resorption Model”	National (FRGS-MOHE Grant)	RM 79, 200	Completed: 2017 (Started: 2014)
“Characterisation of Advanced Fibre Pultrusion Nanospheres Embedded Polymer Composites”	National (FRGS-MOHE Grant)	RM 117, 200	Completed: 2017 (Started: 2014)
“Characterisation Of High Order Warping Defects In Composite Laminate Progressive Failure”	National (FRGS-MOHE Grant)	RM 140, 200	Completed: 2016 (Started: 2014)
“Bio-Mechanical Characterisation of Fend Off Technique”	National (FRGS-MOHE Grant)	RM 93, 500	Completed: 2016 (Started: 2013)
“Advanced NiTi Intermetallic Compounds Superior Shape Memory Behaviour”	National (FRGS-MOHE Grant)	RM 94,330	Completed: 2015 (Started: 2012)
Pembangunan Sistem Analisis Gerakan Tiga Dimensi Silat Cekak	PSSCM	RM 50,000	Completed: 2015 (Started: 2013)
“Characterisation Of Advanced Carbon Fibre Laminates”	National (RAGS-MOHE Grant)	RM 80,000	Completed: 2014 (Started: 2012)
“Novel Hybrid Nanofiller Characteristic for High Fracture Toughness Ship Hull”	National (FRGS-MOHE Grant)	RM 91,560	Completed: 2014 (Started: 2012)
“Algorithm to Control Ankle Motion Amongst Hemiplegic Patients for Therapeutic Application”	National (Sciencefund)	RM 170,400	Completed: 2014 (Started: 2012)
“A New Robust Active Force Algorithm In High Precision Motion Control”	National (FRGS-MOHE Grant)	RM 40,000	Completed: 2013 (Started: 2011)
“Modelling and Performance Characterisation of A New Dynamic Ankle Foot Orthosis”	National (FRGS-MOHE Grant)	RM 46,440	Completed: 2013 (Started: 2010)
“A New Failure Criterion for Composite Materials”	National (FRGS-MOHE Grant)	RM 44,720	Completed: 2013 (Started: 2010)
“Tensile And In-Plane Shear Properties Of A Novel Fibre Reinforced Polymer Composite Laminates”	University	RM 10,000	Completed: 2012 (Started: 2011)

“Basic Study of Interference Screw Fixation Stability in Anterior Cruciate Ligament Reconstruction”	National (FRGS-MOHE Grant)	RM 50,740	Completed: 2012 (Started: 2010)
“Development of Online Mechanical Engineering Design And Manufacturing Processes “	National (IRPA Grant)	RM 130,000	Completed: 2007 (Started: 2004)
“ The Development and Improvement of the Car Seat Polyurethane Injection Moulding Process”	University (IRDC Grant)	RM 43, 970	Completed: 2006 (Started: 2004)
“Simulation Studies on Cold and Warm Compaction Processes of Iron Powders using Finite Element Method”	University (STG-UiTM)	RM 10,000	Completed: 2005 (Started: 2003)
“Optimization of Truss Structure Based on Member Disposition”	University (STG-UiTM)	RM 20,000	Completed: 2005 (Started: 2004)
“Optimization Process Control In Thermoplastic Injection Moulding Using Design Of Experiment (DOE) Method: Side Mirror”	University (STG-UiTM)	RM 10,000	Completed: 2005 (Started: 2004)
“Optimization Of Structural Configuration Using Mathematical Programming”	University (STG-UiTM)	RM 10,000	Completed: 2004 (Started: 2003) * Won the Best Fundamental Research Award at CSSR 2004

Completed Consultancy Projects

Title	Customer	Value	Year of Completion
“Module Development and Training for GO Time Series” - <i>Founder</i>	PG Students (CADEM Centre)	RM 4,000	Completed: 2013 (Started: 2013)
“DN 50 - FE Modelling Facilitation and Output Analysis” - <i>Project Leader</i>	Tepat Teknik Sdn Bhd	RM 2,200	Completed: 2013 (Started: 2013)
International Judge for CIPTA 2013	Institut Teknologi Brunei	RM 1,500	Completed: 2013 (Started: 2013)
“Finite Element Analysis of Expansion Joints (HE-101 and HE-102)” - <i>Project Leader</i>	Tepat Teknik Sdn Bhd	RM 8,000	Completed: 2011 (Started: 2011)

KNOWLEDGE TRANSFER PROGRAMMES (FUNDED KTP GRANTS)

Management Role related to KTP:

- **KTP Advisor** April 2013 – Mar 2018
Advising and assisting ICAN pertaining to Knowledge Transfer Programme promotion, administration and management.
- **Head of Industry Linkage** Apr 2011 – Mar 2013
(At the Office of Industry, Community & Alumni Network (ICAN), UiTM Chancellery
CAPs Manager (UiTM Person in charge for the MOE Critical Agenda Projects – Knowledge Transfer Programme)
Achievement – For the year 2012 submission, UiTM obtained the highest number and amount of KTP grant (3rd Rolling/2013: **16 projects, RM2.017M**)

Knowledge Transfer Programmes (KTP Grants)

Title	Level	Amount Approved	Date Approved/ Completed
“Transferring Expertise to Bakal Sejati Sdn Bhd in establishing greener injection molding system to increase productivity and produce high Quality Plastic Bottles” Industry: Bakal Sejati Sdn Bhd	National (KTP-MOHE Grant)	RM 144, 935	Completed: 2016 (Started: 2014)
“Green Event Management (GEM) Procedure Manual Development Project With Kumpulan Media Karangkrif” Industry: Kumpulan Media Karangkrif	National (KTP-MOHE Grant)	RM 161, 318	Completed: 2015 (Started: 2013)
“Transfer of Expertise of Engineering Automation Technologies into Rabbit Production Industry” Industry: Rabbit Village d Muar	National (KTP-MOHE Grant)	RM 100, 604	Completed: 2015 (Started: 2013)
“Transferring Expertise To Homestay Operators In Formulating Products Using Available Resources : A Generation Of Idiosyncratic Identity And Income”	National (KTP-MOHE Grant)	RM 126,587.50	Completed: 2014 (Started: 2012)

POSTGRADUATE SUPERVISION

PhD Student (Graduated Student – Main Supervision)

1. Dr Ahmad Fuad Ab Ghani, Graduated in July 2019
Thesis Title: *“Multi Methods Properties Extraction of Hybrid Composite Layups Under Various Loading Conditions”*
2. Dr Siti Humairah Kamarul Bahrain, Graduated in May 2019
Thesis Title: *“Experimental Characterisation and Hyperelastic Modelling of the Mechanical Behaviour of Arenga Pinnata – Silicone Biocomposite”*
3. Dr Azizul Hakim Samsudin, Graduated in March 2019
Thesis Title: *“Failure Prediction of Composite Laminates Based on Multitudinous Combined Lamination and Failure Theories”*
4. Dr Ghazirah Mustapha @ Mustafa, Graduated in June 2018
Thesis Title: *“Biomechanical Characterisation of Seni Silat Cekak Movement using a novel 3D Motion Capture-Analysis System”*
5. Dr Nor Fazli Adull Manan, Graduated in June 2016
Thesis Title: *“Assessing Multiple Approaches and Various Hyperelastic Models for Biomechanical Properties of Animal Skin”*

PhD Student (Graduated Student – Co- Supervision)

1. Dr Mazyan Yahya, Graduated in February 2022
Thesis Title: *“Synthesis and Characterisation of Pulverised Titanium Niobium Alloy for Potential Biomedical Application”*
2. Dr Noriah Yusoff, Graduated in May 2019
Thesis Title: *“Analytical Evaluation, Fabrication and Characterisation of Capacitive Interdigital Micro-Electro-Mechanical System Breath Sensor”*
3. Dr Napisah Sapiai, Graduated in December 2017
Thesis Title: *“Mechanical and Wear Properties of Functionalised Carbon Nanotubes Modified Kenaf Composites”*
4. Dr Mohd Nor Azmi Ab Patar, Shibaura Institute of Technology, Japan,
Graduated in March 2017
Thesis Title: *“Development of Finger Contracture Prevention System for Early Post Stroke Rehabilitation”*

MSc by Research (Graduated Students – Main Supervision)

1. Ahmad Faiz Ahmad Nazri, Graduated in October 2018
Thesis Title: *“Development of Motion Capture-Analysis System using Kinect and Matlab for Modified RULA (mRULA)”*
2. Mohamad Mali, Graduated in February 2018
Thesis Title: *“Deformation and Failure Analysis of Composite Laminates under Various Load and Boundary Conditions”*
3. Nurul Nadiah bt Azmi, Graduated in November 2016
Thesis Title: *“Hyperelastic Constitutive Analysis of Agar Silicone and Kenaf Silicone Biocomposite”*
4. Mastura Abdul Rahim, Graduated in February 2016
Thesis Title: *“Finite Element Implementation to Predict Failure of Composite Laminate”*
5. Siti Hajar Mohd Yusop, Graduated in May 2015
Thesis Title: *“Investigating the Biomechanical Properties of Fresh Goat Skin, Natural dried Skin and Leather”*
6. Siti Noor Azzati Mohd Noor, Graduated in April 2015
Thesis Title: *“Experimental-Numerical Analysis of Silicone Sheet Adapting Hyperelastic Constitutive Equations”*

MSc by Research (Graduated Student – Co Supervision)

1. Noorainol Faiz Noor Haris, Graduated in August 2021
Thesis title: *“Experimental and Numerical Study of Hevea Brasilensis - Silicone Biocomposite”*
2. Shahrul Hisyam Marwan, Graduated in July 2014
Thesis title: *“Human Skull 3D Model Development and Biomechanical Analysis in Full Frontal Crash”*.
3. Noriah binti Yusoff, Graduated in 2008
Thesis title: *“Flexible Line Automation and Industrial Robotic Application of the Polyurethane Injection Moulding Process”*.
4. Abdul Malik Hussein Abd Jalil, Graduated in 2006
Thesis title: *“Finite Element Analysis of Aircraft Structure Using Super Element”*.

Master in Engineering Management (Graduated – Main Supervision)

1. Aziz bin Ambia, Graduated in 2015
Dissertation Title: *“Implementation of Distributed Control System using Profinet Technology in Industrial Food Production”*

PhD Student (On-going – Main Supervision)

1. Abdullah Azmin Abdullah Suhaimi, 2020/2023
Research Team: “Experimental Characterisation and Hyperelastic Modelling of Novel Silicone Biocomposites”
2. Mohd Arif Mat Norman, 2020/2023
Research theme: "The development of a novel technique to predict the natural frequency and failure of composite laminates."
3. Mohamad Mali, 2019/2022
Research theme: *“Progressive Failure Behaviour of Transverse Sinusoidally Thick Hybrid Composite Laminate Based on 3rd Order Shear-Warp Theory and Interchangeable Failure Criteria”*

PhD Student (On-going – Co- Supervision)

1. Ya’akob Yusof, 2021/2024
Research theme: “Biomechanical Elucidation of Spinal Injured Rats Kinematics Behavior Using Deep Neural Networks”
2. Jamaliah Md Said, 2020/2023
Research theme: “Repair and Rehabilitation Behaviour of Damage Surfaces using Granite Dust Filled Arenga Pinnata Fibre Epoxy Composites”
3. Nur Nabila Mohd Nazali, 2020/2023
Research theme: “Identifying New Hyperelastic Constitutive Model via Integration of Multiple Models in Medical Hybrid Biomaterials”

MSc by Research (On-going – Main Supervision)

1. Nurdalilah Noordin, 2020/2022
Research theme: “Failure Prediction of Composite Laminates with Various Cutouts Shapes using ANN”
2. Muhammad Amir Azhan Zulkifli, 2020/2022
Research theme: “Failure Analysis of Hybrid Boron/Glass Composite Laminates with Various Cutouts Shapes and Sizes under Biaxial Tension”
3. Kamarul Nizam Hassan, 2016/2020
Research area: *“Characterisation and Modelling of Bamboo-Silicone Biocomposite Comprehensive Hyperelastic Behaviour Using Extended Mooney-Rivlin Model ”*

MSc by Research (On-going – Co-Supervision)

1. Auni Izzati Jusoh, 2020/2022
Research theme: *“Quantifying and Predicting The Tensile And Compressive Properties Of Moringa Oleifera Barks - Silicone Biocomposites”*
2. Zurri Adam Mohd Adnan, 2017/2020
Research area: *“Dynamic Stress Analysis of Skin (Bovine) and Synthetic Skin (Silicone) under Low Impact Loading ”*

MSc (Mixed Mode) (Graduated – Main Supervision)

1. Muhammad Nadiarulah Nanihar, Graduated in October 2021
Dissertation Title: *“A Comparison Study of Failure Prediction of Composite Laminate using Finite Element Analysis and Artificial Neural Network”*
2. Ahmed Abbas Abed Al Hussein Shnawa, Graduated in May 2021
Dissertation title: *“Multi- Scale Modelling for Failure Analysis of Various Composite Laminates under Biaxal Loading”*
3. Ahmad Faridzal Rosli, Graduated in April 2021
Dissertation Title: *“Experimental-Numerical Analysis Of Kaolin-Silicone Biocomposites”*
4. Abdullah Azmin Abdullah Suhaimi, Graduated in 2020
Dissertation Title: *“The Effect of Different Immersion Medium and Temperature on the Compressive Behaviour of Arenga Pinnata – Silicone Biocomposite”*
5. Nur Shafiueltiywana Mohd Shafie, Graduated in 2020
Dissertation Title: *“Experimental-Numerical Analysis of Sepiolite Incorporated Silicone Biocomposite Material”*

MSc (Mixed Mode) (Graduated – Co Supervision)

1. Muhammad Naim Abdu Salam, Graduated in 2020
Dissertation Title: *“Finger Exoskeleton for Early Acute Stroke Rehabilitation: Control Design and Performance Analysis”*

MSc (Mixed Mode) (On-going – Main Supervision)

1. Khairil Redzwan Mohmad Badari, 2020/2021
Research theme: *“Deformation and Energy Accumulation Analysis of Passenger Lift Buffer Based on Industrial Standards”*

2. Amiro Iqbal Mohd Aminudin, 2020/2021
Research theme: "Performance Analysis Of Earth Switch Springs In Medium Voltage Switchgear Based On Industrial Standards"
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POST GRADUATE VIVA & THESIS EVALUATION

External Examiner - PhD Viva & Thesis Evaluation

1. Thesis Examiner (External - International), for PhD Thesis, *Thermal Modeling and Parametric Optimization of EDM of SiC/CNT Nonconductive Ceramic Matrix Composite (CMC)*, Pallavi Chaudhury, **Siksha 'O' Anusandhan (Deemed to be University), India**, January – February 2022.
2. Thesis Examiner (External), for PhD Thesis, *Design and Evaluation of Synthetic Paediatric Mid-Thoracic Spine Model for Scoliosis Research*, Nor Amalina Muhayudin, **Universiti Malaysia Perlis (UniMAP)**, July – October 2021.
3. Thesis Examiner (External), for PhD Thesis, *Biomimetic Electrospun Scaffolds for Functional Tissue Engineering of Articular Cartilage*, Khoo Weily, **Universiti Tun Hussein Onn Malaysia (UTHM)**, March – May 2021.
4. Thesis Examiner (External), for PhD Thesis, *Structural Design and Analysis of Lightweight Foam-Filled Kraft Paper Honeycomb Structure*, Nurdina Abd Kadir, **International Islamic University Malaysia (IIUM)**, February – May 2021.
5. Thesis Examiner (External - International), for PhD Thesis, *Development, Evaluation and Analysis of Al 5083 Matrix Hybrid Composite Reinforced with MWCNT, Mob and Ni*, Sajeeb Rahiman A H, **Karunya Institute of Technology and Sciences, India**, February – March 2021.
6. Thesis Examiner (External), for PhD Thesis, *Optimization of Machining Parameters and Tool Geometrical Feature for Effectively Trimming CFRP Aero Composite Material*, Syahrul Azwan Sundi, **Universiti Teknikal Malaysia Melaka (UTEM)**, December 2020 – January 2021.
7. Thesis Examiner (External), for PhD Thesis, *Stability Analysis Of Combined Shell Structures*, Mohd Shahrom Ismail, **Universiti Teknikal Malaysia Melaka (UTEM)**, September – November 2020.
8. Thesis Examiner (External), for PhD Thesis, Mohd Syafiq Mohd Suri, **Universiti Teknologi Malaysia (UTM)**, September – November 2020.
9. Thesis Examiner (External), for PhD Thesis, *BioPattern: A Nature's Pattern Biomimicry Design Framework For Novel Idea Generation*, Foo Chin Toong, **Universiti Tun Hussein Onn Malaysia (UTHM)**, March – June 2020.

10. Thesis Examiner (External), for PhD Thesis, *Modelling of Residual Stress Relaxation of Shot-peened ASTM A516 Grade 70 Carbon Steel*, Mohd Rashdan Isa, **Universiti Tenaga Nasional (UNITEN)**, August – October 2019.
11. Thesis Examiner (External), for PhD Thesis, *A Hybrid Haptic Feedback Stimulation Prosthetic Device to Recover the Missing Sensation of the Upper Extremity Amputees*, Mohammed Najeh Nemah, **Universiti Tun Hussein Onn Malaysia (UTHM)**, August – September 2019.
12. Thesis Examiner (External), for PhD Thesis, *Determinants Factors of Operational Excellence: The Moderating Effect of External Environment*, Mohd Hafeez Al-Amin Abdul Wahab, **Universiti Malaysia Kelantan (UMK)**, January – April 2019.
13. Thesis Examiner (External), for PhD, Thesis *Application of the GTF Technique in conjunction with Numerical Modelling of the Human Arterial Network to Improve Cardiovascular Diagnostics*, Ahmed Tamkin Butt, **University of Nottingham Malaysia Campus (UNMC)**, October 2018 – January 2019.
14. Thesis Examiner (External), for PhD Thesis, *The Effect of Chemical Treatment, Fibre Length, Fibre Content and Injection Moulding Parameter to UV Irradiation Resistance of Oil Palm Fibre Reinforced Composites*, Muhamad Fitri, **Universiti Tun Hussein Onn Malaysia (UTHM)**, August 2017 – October 2018.
15. Thesis Examiner (External), for PhD Thesis, *Investigation of Anatomical Interaction of Cortical Bone and Single Edge Crack under Tensile Loading Based on Homogeneity and Heterogeneity Properties*, Nurul Najwa Mansor, **Universiti Malaysia Perlis (UniMAP)**, May 2017 – May 2018.
16. Thesis Examiner (External), for PhD Thesis, *Glenoid Implant with New Artificial Glenoid Labrum using Functionality Graded Polyvinyl Alcohol Hydrogel in Reducing Rocking Horse Phenomena after Shoulder Replacement*, Abdul Hadi Abdul Wahab, **Universiti Teknologi Malaysia (UTM)**, August 2017 – January 2018.
17. Thesis Examiner (External), for PhD Thesis, *Dynamic Degradation of Porous Magnesium Under A Simulated Environment Of Human Cancellous Bone*, Amir Putra Md Saad, **Universiti Teknologi Malaysia (UTM)**, October – December 2016.
18. Thesis Examiner (External), for PhD Thesis, *Modeling and Application of Piezoelectric Actuators in Active Repair of Isotropic and Composite Structures*, Ahmed Abuzaid Ahmed, **International Islamic Universiti Malaysia (IIUM)**, July – September 2016.
19. Thesis Examiner (External), for PhD Thesis, *Deformation Behavior of Cortical Bone Subjected to Quasi Static Loading using Anisotropic Yield Criteria by Finite Element Method*, Ng Theng Pin, **Universiti Teknologi Malaysia (UTM)**, February – May 2016.
20. Thesis Examiner (External), for PhD Thesis, *Investigation in Monotonic and Cyclic Behaviour of Trabecular Bone Under Uniaxial and Multiaxial Loading*, Mohd Al-Fatihhi bin Mohd Szali Januddi, **Universiti Teknologi Malaysia (UTM)**, September – November 2015.

21. Thesis Examiner (External), for PhD Thesis, *Development of Link Elbow Implant and Related Surgical Guide for Total Elbow Arthroplasty*, Milad Heidari, **Universiti Teknologi Malaysia (UTM)**, December 2014 – March 2015.
22. Thesis Examiner (External), for PhD Thesis, *Optimisation of Vehicle Front End Geometry for Adult and Child Pedestrian Protection*, Kausalyah Ventakason, Kulliyah of Engineering, **International Islamic University Malaysia (IIUM)**, December 2014 - February 2015.

External Examiner – MSc (Research Mode) Viva & Thesis Evaluation

1. Thesis Examiner (External), for MSc Thesis, *Analysis of Warpage and Springback of Thick Uni-Directional Carbon-Epoxy Laminates Cured using Autoclave*, Muhammad Mushab Zakaria, **International Islamic University Malaysia (IIUM)**, February – April 2022.
2. Thesis Examiner (External), for MSc Thesis, *Residual Strength Analysis of Corroded Pipeline Subjected to Combined Loadings using Artificial Neural Networks*, Michael Yin Kai Lo, **Universiti Teknologi Petronas (UTP)**, August – October 2021.
3. Thesis Examiner (External), for MSc Thesis, *Predicting The Elastic Behaviour Of Multilayer High Density Interconnect Printed Circuit Board From Its Constituent Materials*, Loon Kuan Teng, **Multimedia University (MMU)**, February 2019 – May 2019.
4. Thesis Examiner (External), for MSc Thesis, *Design, Development and Performance of a Low Cost Three-Dimensional Metal Printer*, Nor Ana Rosli, **Universiti Teknikal Malaysia Melaka (UTEM)**, January - March 2018.
5. Thesis Examiner (External), for MSc Thesis, *Design of the Low-Stiffness-Resilient Shaft (LSRS) for Semi-Active-Steering (SAS) system*, Najaf Hussain, **Universiti Teknologi Petronas (UTP)**, Jan 2017 – Mac 2017.
6. Thesis Examiner (External), for MSc Thesis (Research Mode), *Characterization of Biomechanical Properties of Articular Cartilage Across Synovial Joint*, Yusra Liyana Jaafar, **Universiti Teknikal Malaysia Melaka (UTEM)**, September - October 2016.
7. Thesis Examiner (External), for MSc Thesis (Research Mode), *Micro-Mechanical and Flow Behaviours of Friction Stir Welded Thick Nylon-6 Plates*, Muhammad Adeel Zafar, **Universiti Teknologi Petronas (UTP)**, March 2016 - May 2016.
8. Thesis Examiner (External), for MSc Thesis (Research Mode), *An Accurate Model for Analysis of Composite Laminated Cylindrical Shell under Hygrothermal Loads*, Saleh Naji Mused Al-Subar, **International Islamic University Malaysia (IIUM)**, January 2016 - March 2016.
9. Thesis Examiner (External), for MSc Thesis (Research Mode), *Computational Malaysian Female Anthropometry Test Dummy*, Lina Tam, **Universiti Tun Hussein Onn Malaysia (UTHM)**, January 2015 - March 2015.

10. Thesis Examiner (External), for MSc Thesis (Research Mode), *Robust Position Encoding and Velocity Deduction for Remote Monitoring of Irrigation Water System*, Abdallah S.Z. Alsayed, Faculty of Engineering, **Universiti Putra Melaka (UPM)**, January 2015 - March 2015.
11. Thesis Examiner (External), for MSc Thesis (Research Mode), *Biomechanical Study of Human Lumbar Spine with Total Disc Replacement of Maveric® Prosthesis using Finite Element Method*, Siti Nurfaezah Zahari, Faculty of Mechanical Engineering, **Universiti Teknikal Malaysia Melaka (UTEM)**, December 2014, Viva 11 March 2015.
12. Thesis Examiner (External), for MSc Thesis (Research Mode), *Computer Integrated Design and Manufacturing of Patient Specific Lower Limb Orthoses Through 3D Reconstruction*, Morshed Alam, Faculty of Engineering, **University of Malaya (UM)**, September 2014, Viva 23 December 2014.

Internal Examiner – PhD Viva & Thesis Evaluation

1. Thesis Examiner (Internal), for PhD Thesis, *Damage Resistance and Tolerance of Silica Nanoparticles Kevlar/Glass Fibre Modified Hybrid Composites*, Norazean Shaari@Md, Faculty of Mechanical Engineering, Universiti Teknologi MARA, February 2018 – July 2018.

Internal Examiner – MSc (Research Mode) Viva & Thesis Evaluation

1. Thesis Examiner (Internal), for MSc Thesis (Research Mode), *Design for Modularity of Blended Wing Body (BWB) Baseline II-e2 Unmanned Aerial Vehicle (UAV)*, Mat Zaini Katon, Faculty of Mechanical Engineering, Universiti Teknologi MARA, December 2013.
2. Thesis Examiner (Internal), for MSc Thesis (Research Mode), *Design and Development of a Mouth Spacer for Dental Surgery Applications*, Nurnida Elmira Othman, Faculty of Mechanical Engineering, Universiti Teknologi MARA, November 2013.
3. Thesis Examiner (Internal), for MSc Thesis (Research Mode), *Development of In Vivo Measurement Technique to Predict Biomechanical Properties of Human Tibia*, Hydar Saadi Hasan Al-Wasti, Faculty of Mechanical Engineering, Universiti Teknologi MARA, July 2013. (Viva 25 Feb 2014).

Viva Chair – PhD and MSc (Research Mode)

1. Chair, Viva Session for PhD candidate, Ummu Raihanah Hj Hashim, *Synergistic Effects of Nanographene-Nanosilica on Thermo-mechanical and Thermal Properties of Unidirectional Basalt Fibre Reinforced Polymer Composites*, FKM UiTM, 15 May 2020.
2. Chair, Viva Session for PhD candidate, Armansyah, *Friction Stir Spot Welded Characterization Of Al Alloy 5052- H1112 and Artificial Neural Network Prediction Model*, 31 October 2019.
3. Chair, Viva Session for PhD candidate, Mohd Rozaiman Aziz, *Hydrodynamic Ram Ballistic Limit Analysis of Aluminium Tank*, FKM UiTM, 16 March 2016.
4. Chair, Viva Session for PhD candidate, Rizal Effendy Mohd Nasir, *Stability Augmentation System Using Canard Control Surface for Longitudinal Flight Dynamics of Blended Wing-Body Unmanned Aerial Vehicle*, IPSIS UiTM, Intekma Resort, Selangor, 17 July 2013.
5. Chair, Viva Session for MSc candidate (Research Mode), Khairul Ashraf Kamarudin, *Hydrogen Production from Low-Temperature Catalytic Thermochemical Processing of Palm Oil Empty Fruit Bunches*, FKM UiTM, 29 March 2018.
6. Chair, Viva Session for MSc candidate (Research Mode), Nor Hidayah Mohd Razif, *Heat Transfer Analysis For Ammonia-Water Mixture Heat Exchanger Of An Energy Recovery System*, FKM UiTM, 16 October 2017.
7. Chair, Viva Session for MSc candidate (Research Mode), Khairunnisa Johar, *Classification of Electroencephalogram Data using Electromyography as a Marker for BCI Controlled Hand Prosthesis*, FKM UiTM, 9 May 2017.
8. Chair, Viva Session for MSc candidate (Research Mode), Muhammad Faris Abd Manap, *Prediction Of Epoxy-UHMWPE Acetabular Cup Performance At New Inclination And Anterior Orientation*, FKM UiTM, 29 March 2017.
9. Chair, Viva Session for MSc candidate (Research Mode), Nurhasanah Ismail, *The Effect Of Basic Parameters And The Addition Of Helical Tapes In A Hot Tube On The Performance Of The Ranque-Hirsch Vortex Tube Model A20400*, FKM UiTM, 26 January 2017.
10. Chair, Viva Session for MSc candidate (Research Mode), Norhashidah Manap, *Mechanical Properties of Kenaf Hybrid Composite Laminates*, FKM UiTM, 18 December 2015.
11. Chair, Viva Session for MSc candidate (Research Mode), Nurul Fathiah Mohamed Rosli, *A Real-Time Algorithm of Optical Tactile Sensor for Surface Characterization*, FKM UiTM, 13 August 2015.
12. Chair, Viva Session for MSc candidate (Research Mode), Syarifah Noor Deraman @ Adb Rahman, *Investigation of Binaural Beats And Isochronic Tones on Beta And Gamma Brain Wave Frequencies*, FKM UiTM, 1 July 2015.
13. Chair, Viva Session for MSc candidate (Research Mode), Noorul Wahida Abdul Razak, *The Tensile Behaviour of Polymer Composite with Oil Palm Empty Fruit Bunch and Nanoclay Reinforcement*, Faculty of Mechanical Engineering UiTM, 27 October 2014.
14. Chair, Viva Session for MSc candidate (Research Mode), Haszeme Abu Kasim, *Parametric Study of Nozzle Connections in Eclipsoidal Head Vessel*, IPSIS UiTM, Intekma Resort, Selangor, 8 April 2014.

15. Chair, Viva Session for MSc candidate (Research Mode), Ahsana Aqilah Ahmad, *Resistive Tactile Sensing Using Conductive Rubber Sheet and Quantum Tunnelling Composites Pills for Robotic Hand*, IPSIS UiTM, Intekma Resort, Selangor, 13 December 2013.
16. Chair, Viva Session for MSc candidate (Research Mode), Robert Ngendang Anak Lidam, *Distortion Analysis of Multipass GMAW Process on Ship Panel Application Using FEM and Experimental Validation*, IPSIS UiTM, Intekma Resort, Selangor, 16 April 2013.

Viva & Dissertation Evaluation (Master in Engineering Management):

1. Dissertation Examiner for Master in Engineering Management candidate, Norlisah Saharuddin, *The Effect of Smoke Exposure From Diesel Heavy Duty Engine to The Worker's Lungs*, Faculty of Mechanical Engineering UiTM, 2 December 2015.
 2. Dissertation Examiner for Master in Engineering Management candidate, Saleh Samid, *To establish MOEL for Knowledge Management System to Improve Maintenance Efficiency for Coal Handling Plant in Stesen Janaelektrik Sultan Salahuddin Abdul Aziz (SJSAA)*, Faculty of Mechanical Engineering UiTM, 2 December 2015.
 3. Dissertation Examiner for Master in Engineering Management candidate, Nur Syazana Mohd Nabin, *Stringent Importation of False Declaration on Boron-Added Steel Product Imported From Major Steel Producer in the World into Malaysia*, Faculty of Mechanical Engineering UiTM, 8 January 2015.
 4. Dissertation Examiner for Master in Engineering Management candidate, Mohd Isran Che Mustapha, *Implementation of Condition Based Maintenance (CBM) for Medium Voltage Substations for TNB Distribution Pasir Gudang*, Faculty of Mechanical Engineering UiTM, 26 June 2014.
 5. Dissertation Examiner for Master in Engineering Management candidate, Mohammad Haznor Bin Mohd Hizan, *Emergency Response Management Plan for Pokok Sena City Gate Station using Dispersion and Radiation Analysis Result Parameter*, Faculty of Mechanical Engineering UiTM, 9 January 2013.
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SOCIETAL INVOLVEMENT

Professional Body

- Registered Professional Engineer (Ir) with the Board of Engineers Malaysia since 31 March 2016. (P. Eng. No. 17303)
- Registered Graduate Engineer with the Board of Engineers Malaysia since 23 May 2001. (BEM No. 32709A)

Professional Association/ Society

- Corporate Member, The Institution of Engineers, Malaysia (MIEM No.: 80504)
- Senior Member of IEEE (SMIEEE member #92154121)
- Life Member of Malaysian Invention & Design Society (MINDS – Membership No. 1962)
- Member of Persatuan Industri Komposit (PIK)
- Senior Member of International Association of Computer Science and Information Technology (IACSIT Senior Membership No. 80343528)
- International Association of Engineers (IAENG Member No: 118142)
- Cardiff University Alumni (Membership No. 706538)
- MITASA (Membership No. 6108)
- UTIMAS

Research Community

- i-mechanica since 2008.
- ResearchGate
- Invited member of Centre for Applied Biomechanics (CAB), University of Malaya, Malaysia

Malaysian Post Graduate Society in Cardiff, UK

- President (2007-2008) of the Malaysian Post Graduate Society, Cardiff (known as Cardiff Keluarga and registered with the Malaysian Student Department, UK & Eire)
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SPECIAL INVITATIONS / APPOINTMENTS / EXPERTISE CONTRIBUTIONS

INTERNATIONAL LEVEL

Keynote/ Invited Speaker

- **Keynote Speaker** for Innovative Manufacturing, Mechatronics & Materials Forum 2021 (iM3F 2021), Virtual Platform, Universiti Malaysia Pahang, 20 September 2021.
- **Keynote Speaker** for 1st Colloquium for System and Sports Engineering (COSSE 2019), Universiti Teknologi MARA Shah Alam, 15 July 2019.
- **Keynote Speaker** for National Conference on Multidisciplinary Research and Practise 2018, KUPTM Kuala Lumpur, 24 November 2018.
- **Plenary Speaker** for Seminar Nasional 2018 (Semnastek 2018), Dumai Indonesia, 15 November 2018.
- **Plenary Speaker & Conference Chair** for International Conference on Mechatronics and Electrical Systems (ICMES 2018), Bangkok Thailand, 12 – 14 October 2018.
- **Keynote Speaker & Conference Chair** for 2018 6th International Conference on Nanomaterials and Materials Engineering (ICNME 2018), Langkawi Malaysia, 23 – 25 March 2018.
- **Keynote Speaker** for ICFMS 2016 and ICMES 2016, Hong Kong, 4 – 6 December 2016.
- **Keynote Speaker** for ICEIM 2016, Kuala Lumpur, Malaysia, 10 – 12 September 2016.
- **Keynote Speaker & Conference Chair** for ICEDA 2016 and ICCBB 2016, Langkawi, Malaysia, 30 July 2016.
- **Invited Speaker**, 4th International Conference on Advances in Mechanical Engineering (ICAME 2015) 26-27 August, 2015, Patra Jasa Bali, Indonesia
- **Keynote Speaker** for ICMDE 2015, Jeju Island, Korea, 17 May 2015.
- **Keynote Speaker** for MIMT 2015, Melaka, Malaysia, 6 –7 March 2015.
- **Keynote Speaker** for ICMST 2014, ICCST 2014 and ICNIC 2014, Sarawak Malaysia, 7 – 8 June 2014
- **Keynote Speaker** for MIMT 2014, ICMIB 2014 and ICIIE 2014, Penang, Malaysia, 10-11 March 2014.
- Invited paper (at *IMechE Medicine and Health Division Meeting*: 15 October 2009, pp 43-48). J Mahmud, SL Evans and CA Holt. *Using Motion Capture and Analysis to Explore the Mechanical Properties of Human Skin in-vivo*. Measurement and Sensing in Medicine and Health: Capturing Motion and Musculoskeletal Dynamics.
- Invited speaker (at Cardiff University, *Skin Focus Group 5th Meeting*: 21 January 2009). J Mahmud, SL Evans and CA Holt. *Biomechanics of Skin*.

- Invited speaker (at Scientific Research Colloquium, Cardiff University organized by Malaysian Post Graduate Society, 5 September 2009). J Mahmud. Managing your *PhD research*.

Visiting Professor/ Researcher

- **Visiting Researcher (Associate Professor)**, Shibaura Institute of Technology, **Japan**, 7 – 13 February 2016.

Mentor for In-Bound Post Doc/ Visiting Researcher

- **Mentor** to Mr Guerrah Ayoub, Visiting Researcher (PhD Candidate), from the Faculty of Technology, University of El-Oued, **Algeria**, 11 – 20 December 2017.

International Panel of Judges for Invention & Innovation Competition

- **Official (International) Judge** for The Crown Prince Cipta Award 2013, **Brunei Darussalam**, Institut Teknologi Brunei, 25 – 28 February 2013.
- **International Panel of Judges**, 33rd International Invention, Innovation and Technology Exhibitions (ITEX 2022), Kuala Lumpur Convention Centre 26 – 27 May 2022.
- **International Panel of Judges**, 30th International Invention, Innovation and Technology Exhibitions (ITEX 2019), Kuala Lumpur Convention Centre 2 – 4 May 2019.
- **International Panel of Judges**, 28th International Invention, Innovation and Technology Exhibitions (ITEX 2017), Kuala Lumpur Convention Centre 11 – 13 May 2017.
- **International Panel of Judges**, 27th International Invention, Innovation and Technology Exhibitions (ITEX 2016), Kuala Lumpur Convention Centre 12 – 14 May 2016.
- **Chief Judge**, International Invention, Innovation & Design Competition (IIID Johor 2015), 29 October 2015.
- **International Panel of Judges**, 26th International Invention, Innovation and Technology Exhibitions (ITEX 2015), Kuala Lumpur Convention Centre 21 – 23 May 2015.
- **Chief Judge**, International Invention, Innovation & Design Competition (IIID Johor 2014), 20 August 2014.
- **International Panel of Judges**, 25th International Invention, Innovation and Technology Exhibitions (ITEX 2014), Kuala Lumpur Convention Centre 8 – 10 May 2014.

- **Head Judge**, World Varsity Engineering Challenge (WoVEC) 2014, IIUM Kuala Lumpur 16 –17 April 2014.
- **International Panel of Judges**, 24th International Invention, Innovation and Technology Exhibitions (ITEX 2013), Kuala Lumpur Convention Centre 9 – 11 May 2013.
- **International Panel of Judges**, 23rd International Invention, Innovation and Technology Exhibitions (ITEX 2012), KLCC 17 – 19 May 2012.

International Panel for Career Promotion

- **External Assessor** for Promotion (Associate Professor – Blind Review), Department of Biomedical Technology, College of Applied Medical Sciences, King Saud University, **Kingdom of Saudi Arabia**, February 2022.
- **External Assessor** for Promotion (Professor – Blind Review), Department of Biomedical Technology, College of Applied Medical Sciences, King Saud University, **Kingdom of Saudi Arabia**, September 2021.
- **External Assessor** for Promotion (Associate Professor – Blind Review), Department of Biomedical Technology, College of Applied Medical Sciences, King Saud University, **Kingdom of Saudi Arabia**, December 2018.
- **Evaluator** and External Assessor for Promotion (Associate Professor – Blind Review), Biomedical Department, College of Engineering, Ajman University, **UAE**, March – April 2018.
- **Referee** and External Assessor for Promotion (Associate Professor – Blind Review), College of Technological Studies, Public Authority of Applied Education and Training (PAAET), **Kuwait**, January – February 2015.

International Panel for Evaluation of Research Proposals

- **Reviewer** and Panel of Experts, Evaluation of THREE (3) Research Proposals (Blind Review), Directed Research Projects, The Deanship of Scientific Research, King Saud University, January 2022.
- **Reviewer** and Panel of Experts, Evaluation of Research Proposal (Blind Review), National Centre of Science and Technology Evaluation (NCSTE), Ministry of Education and Science, **Republic of Kazakhstan**, March – April 2019.
- **Evaluator** and External Assessor, Evaluation of Research Proposal (Blind Review), Biomedical Department, Sultan Qaboos University Deanship of Research, **Sultanate of Oman**, November 2017.

Other international appointments/ contributions

- **Mentor** for Participants, British Council – Newton Fund for VU-HEIE Project, UK-ASEAN Workshop 2018 on “Cost-effective solutions and assistive technologies for low-income ageing populations”, 22 – 24 August 2018, Hanoi, Vietnam
- Conference Program Co-Chair, 8th International Conference on Biomedical Engineering and Technology (ICBET 2018), 23 – 25 April 2018, Bali, Indonesia
- Track Chair for Mechanical Engineering Applications, 2014 IEEE Colloquium on Humanities, Science and Engineering Research (CHUSER 2014)
- Track Chair for Mechanical Engineering Science & Applications, First International Postgraduate Colloquium on Science and Technology 2014 (IPCOST 2014)
- Chair of ICMIB 2014 and Conference co-Chair, 5th International Conference on Mechanical, Industrial, and Manufacturing Technologies (MIMT, ICIIE & ICMIB 2014), Penang, Malaysia, 10-11 March 2014.
- Track Chair, Symposium on humanities, science and engineering research (SHUSER 2013)
- Invited Chair, 2nd International Conference on Medical Information and Bioengineering (ICMIB 2013), Bali Island 16 – 17 March, 2013.

NATIONAL LEVEL

External Assessor/ Panel for Career Promotion

- External Assessor for Promotion (Professor – Dr Al Emran Ismail), **Universiti Tun Hussein Onn Malaysia (UTHM)**, July 2021.
- External Assessor for Promotion (Professor – Dr Zuraidah Ahmad), **International Islamic University Malaysia (IIUM)**, November 2020
- External Assessor for Promotion (Associate Professor – Dr Mohd Sultan Ibrahim Shaikh Dawood), **International Islamic University Malaysia (IIUM)**, February 2020.
- External Assessor for Promotion (Associate Professor – Ir Dr Mohd Rizal Alkahari), **Universiti Teknikal Malaysia Melaka (UTeM)**, November 2018.
- External Assessor for Promotion (Associate Professor – Dr Mohd Juzaila Abd Latif), **Universiti Teknikal Malaysia Melaka (UTeM)**, April 2017.
- External Assessor for Promotion (Associate Professor – Dr Jaffar Syed Mohamed Ali), **International Islamic University Malaysia (IIUM)**, April 2017.

External Assessor/ Panel for Evaluation of Research Proposals

- **Evaluator**, Evaluation of Research Proposal (Application no. 047), Yayasan UTP Fundamental Research Grant (YUTP-FRG 1/2021), Universiti Teknologi Petronas, July 2020.
- **Evaluator**, Evaluation of Research Proposal (Application no. 88), Yayasan UTP Fundamental Research Grant (YUTP-FRG 2020), Universiti Teknologi Petronas, August 2019.
- **Evaluator**, Evaluation of Research Proposal (Application no. 32), Yayasan UTP Fundamental Research Grant (YUTP-FRG) 2019, Universiti Teknologi Petronas, December 2018.

Special appointments

- **Board Member**, Institut Sains Negara (ISN), 2019/2021 session, appointed by the **Minister, Ministry of Youth and Sports, Malaysia**.

Other national appointments/ contributions

- Verification Panel for Final Examination Questions (Manufacturing Field) Session 2/2021, Advanced Technology Training Center (ADTEC Shah Alam), 20 – 21 April 2022.
- **Panel Evaluator**, Fundamental Research Grant Scheme (FRGS) 2022, Ministry of Higher Education, March – April 2022.
- Industrial Panel Evaluator, Final Year Project Presentation (PTA), Advanced Technology Training Center (ADTEC Shah Alam), 29 December 2021.
- **EAC Panel**, Interim Accreditation, Universiti Malaysia Perlis (UniMAP), October – November 2021.
- **Panel Evaluator**, Fundamental Research Grant Scheme (FRGS) 2021, Ministry of Higher Education, April 2021.
- **Technical Advisory Committee (TAC)** Member for ILJTM, Manpower Department, **Ministry of Human Resources Malaysia**, 24 September 2020 – 24 September 2022.
- **Technical Advisory Committee (TAC)** Member for ILJTM, Manpower Department, **Ministry of Human Resources Malaysia**, 24 September 2018 – 24 September 2020.
- **External Advisor (Academic)** Panel Member for Engineering Department, Faculty of Engineering and Life Sciences (FSKH), **Universiti Selangor (unisel)**, 01 May 2020 – 30 April 2022.
- **Board of Studies (BOS)** Member for MSc (Automotive Engineering), Mechanical Engineering Department, Kulliyah of Engineering (KOE), **International Islamic University Malaysia (IIUM)**, 03 February 2020 – 02 February 2022.
- **Self-Accreditation Panel** of Assessor for Master of Engineering (Mechanical), **Universiti Kuala Lumpur (UniKL)**, 09 August 2019 – 08 August 2022.
- **Chair**, Technical Evaluation Committee (JK Teknikal Penilaian 4), **Resource and Educational Technology Division (BSTP)**, Ministry of Education Malaysia, De Palma Hotel Ampang, 10 – 15 June 2019.
- **Chair**, Technical Evaluation Committee (JK Teknikal Penilaian 4), **Resource and Educational Technology Division (BSTP)**, Ministry of Education Malaysia, Royal Hotel Kuala Lumpur, 15 – 20 April 2019.
- Technical Advisory Committee (TAC) Member for ILJTM, Manpower Department, **Ministry of Human Resources Malaysia**, 29 August 2016 – 28 August 2018.
- **EAC Panel**, Accreditation Visit, Universiti Malaysia Perlis (UniMAP), 6 – 7 November 2018.

- Verification Panel for Final Examination Questions (Manufacturing Field) Session 2/2018, Advanced Technology Training Center (ADTEC Shah Alam), 28 – 29 August 2018.
- Invited Speaker, “PhD on Time Course (Module: Timeline, Viva Presentation & Managing Supervisor)”, 15 August 2018, Institute of Leadership and Development (ILD UiTM), Bandar Enstek.
- Panel Interviewer for Scholarship (International Candidates), Malaysia International Scholarship; offered by Malaysian Government and managed by the Ministry of Education Malaysia, DVC (R&I) Building UPM 18 July 2018.
- Industrial Panel Evaluator, Final Year Project Presentation (PTA), Advanced Technology Training Center (ADTEC Shah Alam), 17 May 2018.
- Observer, **EAC Accreditation Visit**, Universiti Teknikal Malaysia Melaka (UTeM), 2 – 3 April 2018.
- Verification Panel for Engineering Technology Diploma Syllabus (Manufacturing, Machining), Advanced Technology Training Center (ADTEC Shah Alam), 6 – 7 March 2018.
- Panel Member for PhD Scholarship Interview, The Human Life Advancement Foundation (HLAF), 9 October 2017, Bangunan UMNO PWTC, Kuala Lumpur.
- Verification Panel for Final Examination Questions (Manufacturing Field), Advanced Technology Training Center (ADTEC Shah Alam), 5 September 2017.
- Invited Speaker, “*PhD on Time Course (Module: Timeline, Viva Presentation & Managing Supervisor)*”, 12 July 2017, Institute of Leadership and Development (ILD UiTM), Bandar Enstek.
- Invited Speaker, “*Effective Postgraduate Supervision (EPS) Course – Experience Sharing*”, 27 April 2017, Institute of Leadership and Development (ILD UiTM), Bandar Enstek.
- Invited Speaker, “*One Day Seminar on RADIOSS/ HyperWorks Application in FEA and Biomaterials*” jointly organised by UMP and ORS Technologies Sdn Bhd, 27 March 2017, Universiti Malaysia Pahang (UMP) Pekan.
- Verification Panel for Engineering Technology Diploma Syllabus (Manufacturing, Machining), Advanced Technology Training Center (ADTEC Shah Alam), 28 March 2017.
- Invited Speaker, “*Avoiding and Detecting Plagiarism*” Institute of Graduate Studies (IGS) Research Skills Seminar, 12 March 2017, Anjung Seri Budiman, Universiti Teknologi MARA, Shah Alam.
- Verification Panel for Final Examination Questions (Manufacturing Field), Advanced Technology Training Center (ADTEC Shah Alam), 1 March 2017.

- Invited Speaker, “*PhD on Time Course (Module: Timeline, Viva Presentation & Managing Supervisor)*”, 22 February 2017, Institute of Leadership and Development (ILD UiTM), Bandar Enstek.
- Invited Speaker, “*Avoiding and Detecting Plagiarism*” Institute of Graduate Studies (IGS) Research Skills Seminar, 20 December 2016, Auditorium 1, Institute of Business Excellence (IBE), Universiti Teknologi MARA Shah Alam.
- Advisor II, Organizing Committee for NISCC 2016, National Innovative Smartphone Controller Contest at Universiti Teknologi MARA Shah Alam, 16 November 2016.
- Panel Member for PhD Scholarship Interview, The Human Life Advancement Foundation (HLAF), 24 November 2016, Bangunan UMNO PWTC, Kuala Lumpur.
- Invited Speaker, “*Avoiding and Detecting Plagiarism*” Institute of Graduate Studies (IGS) Research Skills Seminar, 7 October 2016, Dewan Kuliah B, Kompleks Kejuruteraan, Shah Alam, Universiti Teknologi MARA.
- Invited Speaker, “*Mechanical Tests and Biomechanical Characterisation of Soft Tissue*” Seminar on Tissue Engineering in conjunction of MESPIC 2016, 30 September 2016, Dewan Alamanda, Kompleks Kejuruteraan, Shah Alam, Universiti Teknologi MARA.
- Verification Panel for Final Examination Questions (Manufacturing Field), Advanced Technology Training Center (ADTEC Shah Alam), 1 & 2 September 2016.
- Industrial Panel Evaluator, Final Year Project Presentation (PTA), Advanced Technology Training Center (ADTEC Shah Alam), 5 May 2016.
- Invited Speaker & Facilitator, “*Engineering Research and High Impact Publications*” Workshop, 27 March 2016, Universiti Teknologi MARA Johor.
- Verification Panel for Final Examination Questions (Manufacturing Field), Advanced Technology Training Center (ADTEC Shah Alam), 1 & 2 March 2016.
- Invited Speaker & Facilitator, “*Scientific Journal Publication*” Workshop, 16 – 17 February 2016, Universiti Teknologi MARA Terengganu.
- Founder and Invited Speaker, “G.O. Time Series Workshop Malaysia Tour – Northern Region”, Academia Pro Hub Seminar and sponsored by ICOE Construction, 25 October 2015. Location: Universiti Utara Malaysia (UUM), Sintok, Kedah.
- Invited Speaker for International Invention, Innovation & Design Competition (IIID Johor 2015), 30 September 2015, Title “*Tips of Winning: The IIID Success Formulas*”.
- Founder and Invited Speaker, “G.O. Time Series Workshop Malaysia Tour – Southern Region”, Academia Pro Hub Seminar and sponsored by ICOE Construction, 16 August 2015. Location: Universiti Teknologi Malaysia (UTM), Skudai Johor.
- Invited Speaker Academia Pro Hub Seminar, 24 June 2015, Title “*Thesis and Publication writing*”, Bandar Baru Bangi.

- Panel Interviewer for MOHE Scholarship Programme, 11 June 2015, ILKAP Bangi.
- Founder and Invited Speaker, “G.O. Time Series Workshop Malaysia Tour – Central Region”, Academia Pro Hub Seminar and sponsored by ICOE Construction, 27 May 2015. Location: Universiti Teknologi MARA, Shah Alam.
- Founder and Invited Speaker, “G.O. Time Series Workshop Malaysia Tour – Eastern Region entitled “*Strategic Management for Research study*”, Academia Pro Hub Seminar and sponsored by ICOE Construction, 8 April 2015. Location: Universiti Malaysia Pahang (UMP), Gambang.
- Industrial Panel Evaluator, Final Year Project Presentation (PTA), Advanced Technology Training Center (ADTEC Shah Alam), 7 November 2014.
- Verification Panel for Final Examination Questions (Manufacturing Field), Advanced Technology Training Center (ADTEC Shah Alam), 2 & 3 September 2014.
- Invited Speaker for International Invention, Innovation & Design Competition (IIID Johor 2014), 11 June 2014, Title “*Fishing for Gold: A Guide for Success*”.
- Panel Reviewer, Knowledge Transfer Programme (KTP) Internal Review Session, International Islamic University Malaysia (IIUM), 6 May 2014.
- Panel of Judges, Invention, Innovation & Design Competition (IID Johor 2013), 19 September 2013.
- Invited Speaker, Knowledge Transfer Workshop, International Islamic University Malaysia (IIUM), 2 September 2013.
- Panel Evaluator & Session Chair for Research Seminar (SHPKPT 2012) organised by Ministry of Higher Education (MOHE), AKEPT 8 – 9 November 2012.
- Chair of Panel Evaluators, Innovation Tracer Programme (Jejak Inovasi), Selangor, 4 – 22 October 2012.
- Panel of Judges, IID Johor 2012, UiTM Segamat, 13 September 2012
- Panel Evaluator of Text Book Division, Ministry of Education Malaysia February – May 2012
- Trainer for Industry Led Professional Certification (IPC) Programme at Malaysian Automotive Institute (MAI) 11–13 January 2012.
- Invited Speaker for Knowledge Transfer Programme Grant Application (at UiTM faculties and campuses) December 2011 – July 2012.
- Panel Evaluator (at Politeknik Shah Alam) for Malaysian Polytechnic Scholarship - PhD proposals, 2011.
- Main Committee and Business Matching, PECIPTA 2011, KLCC September 2011.

- Trainer for Finishing School and Programme Kemahiran Insaniah, UiTM, 2011-2012
- Invited Researcher at Centre of Applied Biomechanics, University of Malaysia (October 2010 – present)
- Technical Committee for the Malaysian Automotive Institute (MAI) Undergraduate Apprenticeship Programme (July 2010 – present)
- Invited speaker (at FKM Colloquium, Universiti Teknologi MARA, 28 July 2010). J Mahmud. *Research in Biomechanical Engineering*.
- Invited speaker (at Malaysian Automotive Institute (MAI) Undergraduate Apprenticeship Programme Technical Session, 2 September 2010). J Mahmud. *Basic Mechanics*.
- Curriculum Advisor Committee for MARA Skills Institute, Malaysia (2005)
- Invited academician to the Motorola Malaysia Sdn Bhd University Relations (2003)
- Panel Evaluator for the Technical Proposal (Malaysian IRPA Grant) (2003)

Journal Editorial Board (International/National Journal):

- **Editor-in-Chief**, Journal of Mechanical Engineering (JMEchE), ISSN 1823-5514 (Jan 2020 – Present) {Scopus indexed}
 - UiTM Best Journal and Best Journal (S&T) 2021 (+RM1000 & RM500 Cash Prize)
 - UiTM Best Journal and Best Journal (S&T) 2020
- Journal of Medical Device Technology (JMEDITEC), UTM Press, (Journal Editorial Board, 2021 – Present)
- International Journal of Engineering Sciences & Emerging Technologies (IJESET), ISSN 2231-6604 (Journal Editorial Board, 2012 – Present)
- Journal of Mechanical Engineering (International Journal), UiTM Press, ISSN 1823-5514 (Journal Editorial Board, 2003 – 2005)
- Journal of Human and Technology Interaction (IJHaTI), UTEM, ISSN 2590-3551 (Journal Editorial Board, 2017 – Present)
- International Journal of Solid Mechanics and Materials Science (IJSMMS), Sigma Research and Consulting Publications, (Journal Editorial Board, 2017 – Present)
- Applied Bionics and Biomechanics (Special Issue: Application of Current Biomechanics in Orthopaedic Surgery), JCR Impact Factor 0.703 (2015), Hindawi Publishing Corp, ISSN: 1176-2322 (Guest Editor)

- Jurnal Teknologi, Vol. 76, No. 11 (2015), Penerbit UTM Press, eISSN 2180-3722, (Guess Chief Editor)
- Jurnal Teknologi, Vol. 76, No. 7: *Bioengineering And Ergonomics* (2015), Penerbit UTM Press, eISSN 2180-3722, (Guess Editorial Board)
- Jurnal Teknologi, Vol 76, No 3: *Advances in Materials Science and Technology* (2015), Penerbit UTM Press, eISSN 2180-3722, (Guess Editorial Board)
- Guess Editorial Board, Applied Mechanics and Materials Vols 541-542 (2014), ISSN 1660-9336

Journal Reviewer (International/National Journal):

- Engineering Failure Analysis, Elsevier B.V., ISSN: 1350-6307 (Print), Scopus Indexed, Q1, JCR Impact Factor 2.157 (2018).
- Journal of Medical Imaging and Health Informatics, American Scientific Publishers, ISSN: 2156-7018 (Print): EISSN: 2156-7026 (Online), JCR Impact Factor 0.877 (2015).
- Materials Science (Medziagotyra), Kaunas University of Technology (Lithuania) Publishing, ISSN: 1392-1320, Scopus Indexed, Q3, JCR Impact Factor 0.428 (2015).
- International Journal of GEOMATE, The Geomate International Society, Japan, ISSN: 2182-2982 (Print), ISSN: 21862990 (Online), Scopus Indexed, Q2/ Q3.
- Journal of Structures, Hindawi Publishing Corporation, ISSN 2356-766X.
- Journal of Medical and Bioengineering (JOMB), Engineering and Technology Publishing (ETP), ISSN 2301-3796.
- Journal of Mechanical Engineering (International Journal), UiTM Press, ISSN 1823-5514. – SCOPUS indexed. Scopus Indexed, Q4.
- Jurnal Teknologi (Sciences & Engineering), UTM Press, e-ISSN 2180-3722. . – SCOPUS indexed, Scopus Indexed, Q3.

Book Editorial Board (International/National Journal):

- Panel Editor, Student Handbook 2013/2014, Faculty of Mechanical Engineering, UiTM Press

Paper Reviewer (International/National Conferences):

- International Conference on Biomechanics and Medical Engineering (ICBME 2021)
- 7th Mechanical Engineering Research Day (MERD'20)
- 6th International Conference on Advances in Mechanical Engineering (ICAME 2019)
- International Conference on Biomechanics and Medical Engineering (ICBME 2018)
- 5th International Conference on Advances in Mechanical Engineering (ICAME 2017)
- The Second International Conference on Science, Engineering & Environment (SEE-Osaka 2016)
- 2016 International Conference on Engineering Design and Analysis (ICEDA 2016)
- Mechanical Engineering & Science Postgraduate International Conference (MESPIC 2016)
- 4th International Conference on Advances in Mechanical Engineering (ICAME 2015)
- Advancement in Information Technology International Conference (ADVCIT 2014)
- Conference, Competition and Exhibition 2014 (CCE 2014)
- 2014 IEEE Colloquium on Humanities, Science and Engineering Research (CHUSER 2014)
- International Colloquium on Science and Technology 2014 (ICOST 2014)
- 2014 IEEE Symposium on Computer Applications & Industrial Electronics (ISCAIE 2014)
- 2014 IEEE International Conference on Power and Energy (PECON 2014)
- Third International Conference on Biomedical Engineering and Biotechnology (ICBEB 2014)
- International Colloquium of Art and Design Education Research (i-CADER 2014)
- International Colloquium on Textile Engineering, Fashion, Apparel & Design 2014 (ICTEFAD 2014)
- International Conference on Computing, Networking and Communication (ICNC 2014)
- 2013 International Conference on Business, Engineering and Industrial Applications (ISBEIA 2013)
- 2013 IEEE Symposium on Wireless Technology & Applications (ISWTA 2013)
- International Civil and Infrastructure Engineering Conference 2013 (InCIEC 2013)
- International Colloquium on Sports Science, Exercise, Engineering & Technology (ICoSSEET 2014)
- Second International Conference on Advanced Micro and Nanocomposite for Engineering 2014, (ICNC 2014).
- 2013 IEEE Symposium on Computers and Informatics (ISCI 2013)

- International Conference on Advances in Mechanical Engineering (ICAME 2013)
 - 2013 IEEE Business Engineering and Industrial Applications Colloquium (BEIAC 2013)
 - 2012 International Symposium on Humanities, Science & Engineering Research (SHUSER 2012)
 - 2011 IEEE Symposium on Computers and Informatics (ISCI 2011)
 - 2011 International Symposium on Humanities, Science & Engineering Research (SHUSER 2011)
 - 2011 International Conference on Business, Engineering and Industrial Applications (ICBEIA 2011)
 - 2011 IEEE International Conference on Signal and Image Processing Applications (ICSIPA 2011)
 - International Conference on Advances in Mechanical Engineering (ICAME 2010)
 - 2nd International Congress on Engineering Education (ICEED 2010)
 - 2010 International Conference on Computer Applications and Industrial Electronics (ICCAIE 2010)
 - 2010 International Conference on Science and Social Research (CSSR 2010)
 - Conference on Science and Social Research (CSSR 2004)
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CONFERENCE ORGANISING COMMITTEE

- 2nd International Conference on Biomechanics and Medical Engineering (ICBME 2021), 10 March 2021, Virtual Platform, Shah Alam
 - Conference Chair and Steering Committee for WCOSET 2021
- 7th International Conference on Applications & Design in Mechanical Engineering (ICADME 2021), Virtual Platform, Universiti Malaysia Perlis, Malaysia.
 - Advisory Panel
- Innovative Manufacturing, Mechatronics & Materials Forum 2020 (iM3F 2020), 6 August 2020, Virtual Platform, Universiti Malaysia Pahang, Malaysia.
 - Advisory Committee
- 2018 3rd International Conference on Mechatronics and Electrical Systems (ICMES 2018) 12 – 14 October 2018, Chulalongkorn University, Bangkok, Thailand
 - Conference Chair

- International Conference on Biomechanics and Medical Engineering (ICBME 2018)
12 – 14 September 2018, Kuala Lumpur
 - Conference Chair and Head Organiser (FKM UiTM)
- 2018 3rd International Conference on Functional Materials and Steel (ICFMS 2018)
10-12 September 2018, Kitakyushu, Japan
 - Publicity Chair
- 6th International Conference on Nanomaterials and Materials Engineering (ICNME 2018)
23 –25 March 2018, Langkawi Malaysia,
 - Conference Chair
- International Conference on Innovative Technology, Engineering and Sciences (iCITES 2018)
1 – 2 March 2018, Pekan Pahang
 - Advisory Committee
- 2nd International Conference on Mechatronics and Electrical Systems (ICMES 2017)
22 – 25 December 2017, Wuhan China
 - Conference Committee Chair
- International Medical Device & Technology Conference (iMEDITEC 2017),
6 – 7 September 2017, Universiti Teknologi Malaysia, Johor
 - Institution Reps Committee
- International Conference on Mechanical Engineering and Electrical Systems (ICMES 2016)4 –
6 December 2016, Hong Kong
 - Conference Co-Chair
- 4th International Conference on Advances in Mechanical Engineering (ICAME 2015)
26 – 27 August 2015, Patra Jasa Bali, Indonesia
 - Promotion and Technical Committee
 - Chairperson (Keynote Session), 4th International Conference on Advances in Mechanical Engineering (ICAME 2015) 26-27 August, 2015, Patra Jasa Bali, Indonesia
 - Session Co-Chair, 4th International Conference on Advances in Mechanical Engineering (ICAME 2015) 26-27 August, 2015, Patra Jasa Bali, Indonesia
- 4th International Conference on Medical Information and Bioengineering (ICMIB 2015)
6 – 7 March 2015, Malacca, Malaysia
 - Workshop Chair (ICMIB 2015)

- 6th International Conference Science and Technology (ICMST 2015),
1 – 2 June 2015, Bandar Seri Begawan, Brunei Darussalam
 - Honourable Conference Committee Members
- 2014 International Conference on Advance Materials Research and Application (AMRA 2014)
12 – 14 December 2014, Sanya, Hainan, China
 - Technical Programme Committee
- 2014 International Conference on Industrial Technology and Applications (ICITA 2014)
24 – 25 October 2014, Kuching Malaysia
 - Technical Committee
- 3rd International Conference on Medical Information and Bioengineering (ICMIB 2014)
10 – 11 March 2014, Gurney Hotel, Penang, Malaysia
 - Workshop Chair (ICMIB 2014)
- 2nd Global Conference on Materials Science and Engineering (CMSE 2013)
20 – 22 November 2013, Xianning, Hubei Province of China
 - Technical Program Committee
- 3rd International Conference on Advances in Mechanical Engineering (ICAME 2013),
28 – 29 August 2013, Malacca, Malaysia.
 - Sponsorship Committee
- 2012 International Symposium on Robotics and Intelligent Sensors 2012 (IRIS2012),
4 – 6 September 2012, Kuching, Sarawak, Malaysia
 - Technical Committee
- 1st German-Malaysian Workshop “Advances in Mechatronics and Engineering Technology”
which will be held as an integral part of the 1st Joint Symposium on System-Integrated
Intelligence (SysInt 2012), 27 – 29 June 2012, Hannover, Germany
 - Technical Committee
- Marketing Arms Workshop (MAW 2012)
8 – 9 February 2012, Intekma Resort, Shah Alam, Malaysia
 - Organising Chair
- Symposium of Academia, Businesses and Community Networking (SABCN) 2011 ,
10 November 2011, UiTM Shah Alam, Malaysia
 - Deputy Chairman II
- International Conference on Advances in Mechanical Engineering (ICAME 2010),
– 5 December 2010, Shah Alam Malaysia
 - Secretariat
 - Session Chair Person
 - Best Paper Panel Judge

- Eighth International Symposium on Computer Methods in Biomechanics and Biomedical Engineering (CMBBE 2008), 27 February – 1 March 2008, Porto, Portugal
 - Technical Assistant

 - National Conference on Advances in Mechanical Engineering (NAME '05) 18
– 20 May 2005, Malaysia
 - Secretariat
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PATENT/ COPYRIGHT/ INTELLECTUAL PROPERTY

- “A Method of Producing a Dental Implant Article with Nickel Titanium Alloy” Patent Number, **MY-173241-A**, Filed: January 2015. Granted: 08 January 2020 (Member)
 - “A Dental Inspection Apparatus”, Patent pending, **PI2020005321**, 2020 (Member).
 - “CHyCLOP: Compendious Hybrid Composite Failure Load Predictor”, Copyright pending, 2021 (Team Leader).
 - “MOBSil: Moringa Oleifera Bark – Silicone Biocomposite”, Copyright no.: **CRLY2021W01311**, 2021 (Team Leader).
 - “AJ FratNeP – Natural Frequency Predictor”, Copyright no.: **CRLY2021W03077**, 2021 (Team leader).
 - “BaSiC – Bamboo-Silicone Biocomposite”, Copyright no.: **CRLY00011032**, May 2018. (Team Leader)
 - “CarbonGlass Hybro”, Copyright no.: **CRLY00011004**, 2018. (Team Leader)
 - “AJ FALOP: A Matlab Programme for Failure and Deformation Analysis Based on High Order Shear Deformation Theory using Failure Theories with Interaction Terms”, Copyright Pending, **CRLY00008585**, 2018. (Team Leader)
 - “Arenga pinnata – Silicone Biocomposite for Cushioning Applications”, Copyright Pending, **CRLY00008337**, 2018. (Team Leader)
 - “FJ Sense”, Copyright, **LY2016001411**, June 2016.
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INNOVATION, INVENTION & DESIGN (IID) ACHIEVEMENT

International Level

<p>Product name: "MOBSil: Moringa Oleifera Bark – Silicone Biocomposite" (Team Leader)</p> <ul style="list-style-type: none"> • Gold Medal Award • Diploma and Special Award by Eurobusiness-Haller and Haller pro inventio Foundation • Special Award by Toronto International Society of Innovation & Advanced Skills (TISIAS) <p>6th Edition International Invention Innovation Competition in Canada (ICAN 2021), Toronto Canada, 28 August 2021</p>	2021
<p>Product name: "Compendious Hybrid Composite Failure Predictor (CHyCLOP)" (Team Leader)</p> <ul style="list-style-type: none"> • Gold Medal Award • Diploma and Special Award by Romanian Investors Forum and Euro Invent • Special Award by Toronto International Society of Innovation & Advanced Skills (TISIAS) <p>6th Edition International Invention Innovation Competition in Canada (ICAN 2021), Toronto Canada, 28 August 2021</p>	2021
<p>Product name: "HeBraC: Hevea brasiliensis – Silicone Biocomposite" (Team Leader)</p> <ul style="list-style-type: none"> • WICO 2021 Gold Medal Award • Special Award by Toronto International Society of Innovation & Advanced Skills (TISIAS) <p>10th World Inventions Olympics (WICO 2021), Korea, 10 July 2021</p>	2021
<p>Product name: "MOBSil: Moringa Oleifera Bark – Silicone Biocomposite" (Team Leader)</p> <ul style="list-style-type: none"> • WICO 2021 Gold Medal Award • Special Award by World Invention Intellectual Property Associations (WIIPA) • Special Award by Korea University Invention Association (KUIA) <p>10th World Inventions Olympics (WICO 2021), Korea, 10 July 2021</p>	2021
<p>Product name: "CV3D: Cekak Visual 3D"</p> <ul style="list-style-type: none"> • Gold Medal <p>iCAN 2018 3rd International Invention Innovation Competition, 2018 Toronto Canada, 1 September 2018</p>	2018
<p>Product name: "Porous NiTi Dental Screw Implant by Innovative Powder Metallurgy Route"</p> <ul style="list-style-type: none"> • Gold Medal • Special Award (iENA 2017) <p>ITEX 2017, KLCC</p>	2017
<p>Product name: "CV3D: Cekak Visual 3D"</p> <ul style="list-style-type: none"> • Gold Medal <p>International Engineering Invention & Innovation Exhibition (i-ENVEX 2016), Perlis</p>	2016

Product name: "Porous NiTi for Biomedical Implant" <ul style="list-style-type: none"> • Silver Award ITEX 2012, KLCC	2012
Product name: ""APSil: Arenga pinnata – Silicone Biocomposite for Cushioning Applications" (Team Leader) <ul style="list-style-type: none"> • Bronze Medal ITEX 2018, KLCC	2018
Product name: "Multi-Functional Trolley" <ul style="list-style-type: none"> • Bronze Medal IID ASEAN - UiTM Kedah	2011

International Level (Advisor to Students' Innovation Team)

- Champion – IMechE Asia Pacific Design Competition for the Visually Impaired (DCVI), Hong Kong "Navi-Sense" 2013

National Level

- Platinum Award (+RM200 Cash Prize) and Gold Medal, GDIID 2021 "Compendious Hybrid Composite Failure Predictor (CHyCLoP)" 2021
- Gold Medal (Top 3), GDIID 2021, "MOBSil: Moringa Oleifera Bark – Sil ..." 2021
- Gold Medal – iidex 2020, UiTM Shah Alam, "HeBraC: Hevea brasiliensis – Sil .." 2020
- Special Award – iidex 2018 Diamond Award (Design) (+RM1000 Cash Prize), "Multiple Angle Bisector..." 2018
- Special Award – iidex 2018 Diamond Award (Inventor - Student), (+ RM1000 Cash Prize), "Hybro: C/GFRP Hybrid Laminates ..." 2018
- Special Award – iidex 2016 Elevator Pitch (Bronze), "Porous NiTi Dental Implant" 2016
- Gold Award (+ RM3000 Cash Prize) – PATA HIID "Location Riskiness Index" 2012
- Gold Medal – iidex 2016, UiTM Shah Alam, "Multiple Angle Bisector..." 2018
- Gold Medal – iidex 2016, UiTM Shah Alam, "Hybro: C/GFRP Hybrid Laminates.." 2018
- Gold Medal – iidex 2018, UiTM Shah Alam, "BaSic: Bamboo-Silicone Biocomp.." 2018
- Gold Medal – iidex 2017, UiTM Shah Alam, "APSil: AP-Silicone Biocomposite" 2017
- Gold Medal – iidex 2017, UiTM Shah Alam, "AJ FaLoP: Failure Load Predictor" 2017
- Gold Medal – iidex 2016, UiTM Shah Alam, "FJ Sense: Low Cost Motion Capture" 2016
- Gold Medal – iidex 2016, UiTM Shah Alam, "Porous NiTi Dental Implant..." 2016
- Gold Medal – iidex 2016, UiTM Shah Alam, "Springback Defect Prediction..." 2016

- Gold Medal – IP 2012, Village Mall, Kedah “Basic NDE Education Kit...” 2012
- Gold Medal – IP 2012, Village Mall, “Homestay Eco-Experience Index” 2012
- Gold Medal – IID UiTM Johor, “Location Riskiness Index” 2012
- Silver Medal – Penang Invention, Innovation and Design (PIID 2015), Penang, “Cekak Visual 3D v1.0” 2015
- Silver Award – iideX 2013, UiTM Shah Alam, “Nanosilica Filled Fibre Composites” 2013
- Silver Award – iideX 2013, UiTM Shah Alam, “Alternative Fabrication of Porous Pseudo-Elastic NiTi Alloy...” 2013
- Silver Award – iideX 2013, UiTM Shah Alam, “Green Homestay Sustainable Index (GHSI)” 2013
- Silver Medal – IID UiTM Johor, “Near-Net-Shape Processing of Porous...” 2012
- Silver Medal – IID UiTM Terengganu, “Flawed Specimen using Acrylic...” 2012
- Bronze – IID UiTM Terengganu, “An interchangeable Turning Sprue...” 2012

AWARDS & RECOGNITION

International Level

- Best Paper Award (at CSSR 2021, Virtual Platform, organised by UiTM) 2021
“The Effects of Different Immersion Media on the Compressive Behaviour of Arenga Pinnata-Silicone Biocomposite”,
AA Abdulah Suhaimi & **J Mahmud**
- Best Paper Award (at ICBME 2018, Seri Pacific Hotel Kuala Lumpur, Malaysia) 2018
“Quantifying Tensile Properties of Bamboo Silicone Biocomposite using Yeoh Model”, KN Hassan, **J Mahmud**, AK Hussain & MA Yahaya.
- Best Paper Award (at ICBME 2018, Seri Pacific Hotel Kuala Lumpur, Malaysia) 2018
“The synthesis of agar silicone biocomposite and its mechanical properties”, NN Azmi, **J Mahmud** & MJA Latif.
- Best Paper Award (at ICAME 2017, Krabi Thailand) 2017
“Evaluation of four-wheel vehicle driven by lower limb with electric pedalling assistance for elderly people”, H Lee, MNAA Patar, T Komeda, **J Mahmud** & Y Takahashi

National Level

- PSSCM Special Recognition for publication contribution, 2017
“Buku Silat Cekak Silat Akademik, Jilid 2”

University/ Faculty Level

- Anugerah Penyelia Terbaik (Best Supervisor Award, UiTM Malaysia) (+ RM2000 Cash Prize) 2020
 - UiTM Best Journal & Best Journal (S&T) 2021 (+RM1000 & RM500 Cash Prize) 2022
Journal of Mechanical Engineering; as Editor-in Chief
 - Anugerah Pasukan Penyelidikan Cemerlang 2020 2021
in conjunction with Hari Anugerah Kualiti Dekan & Hari Apresiasi Staf FKM
 - Anugerah Penerbitan Berimpak Tinggi (High Impact Publications Award 2020) 2021
in conjunction with Hari Anugerah Kualiti Dekan & Hari Apresiasi Staf FKM
 - Anugerah Penyelidik Cemerlang (Excellent Researchers Award 2020) 2021
in conjunction with Hari Anugerah Kualiti Dekan & Hari Apresiasi Staf FKM
 - UiTM Best Journal & Best Journal (S&T) 2020 (+RM1000 & RM500 Cash Prize) 2021
Journal of Mechanical Engineering; as Editor-in Chief
 - First Place, Best Publication Award 2019 (Prisma), in conjunction with 2020
Hari Anugerah Kualiti Dekan & Hari Apresiasi Staf FKM
 - Impactful Publication Award 2019, in conjunction with 2020
Hari Anugerah Kualiti Dekan & Hari Apresiasi Staf FKM
 - Best Supervisor Award 2019, in conjunction with 2020
Hari Anugerah Kualiti Dekan & Hari Apresiasi Staf FKM
 - First Place, Best Publication Award 2017 (Prisma), in conjunction 2018
with Hari Anugerah Kualiti Dekan & Hari Apresiasi Staf FKM
 - Excellent Service Award (Anugerah Perkhidmatan Cemerlang UiTM) 2015
 - First Place, Best Publication Award 2014 – 2015 (Prisma), FKM 2015
 - Vice Chancellor’s Quality Award – Faculty Champion (Team Member) 2014
 - UiTM Incentive Award for High Impact Publication 2011
 - Vice Chancellor’s Quality Award – Faculty Champion (Project Member) 2011
 - Vice Chancellor’s Quality Award – Overall Champion (Project Coordinator) 2010
 - Best Fundamental Research Award (at CSSR 2004) 2004
 - Excellent Service Award (Anugerah Perkhidmatan Cemerlang UiTM) 2004
-

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