



## CURRICULUM VITAE



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### Education

1. Ph.D., Engineering, 2015, University of Liverpool, UK (UoL)
2. M.Sc. Materials and Design Engineering, 2009, Universiti Putra Malaysia (UPM)
3. B.Eng. Mechanical Engineering (Design and Innovation), 2007, Universiti Teknikal Malaysia Melaka (UTeM)

### Areas of Interest

1. Lightweight Sandwich Structures
2. Composite Materials
3. Building Information Modelling

### Professional Qualification/Membership/Affiliation

1. Graduate Member, Board of Engineers Malaysia (BEM) (No.: 54327A)
2. Member, International Association of Advanced Materials (IAAM) (No.: 847171602313)
3. Member, International Association of Engineers (IAENG) (No.: 135675)
4. Member, IAENG Society of Mechanical Engineering (ISME) (No.: 135675)
5. Member, International Society for Development and Sustainability (ISDS) (No.: M171589)
6. Persatuan Pembangunan dan Industri Enau Malaysia (PPIEM)

### Appointment

Position	Duration
<b>Universiti Putra Malaysia</b>	
1. Senior lecturer	2015 to date
2. Tutor	2010 – 2015
3. Teaching assistant	2009 – 2010
4. Graduate research fellowship	2008
5. Research assistant	2008
<b>University of Liverpool, UK</b>	
1. Lab demonstrator	2012

### Administrative Work

Position	Date Appointed
1. Head of Laboratory of Biocomposite Technology, Institute of Tropical Forestry and Forest Products (INTROP)	15 Mac 2023 to date



- |   |                             |
|---|-----------------------------|
| 2. Coordinator (Research), Department of Mechanical and Manufacturing Engineering                         | Feb 2022 to 14 Mar 2023     |
| 3. Head of Industry and Community Relations Unit, Faculty of Engineering                                  | 21 March 2019 – 31 Dec 2021 |
| 4. Committee Member of Industrial Relations, Universiti Putra Malaysia                                    | 15 July 2019 – 31 Dec 2021  |
| 5. Coordinator (Industry and Community Relations), Department of Mechanical and Manufacturing Engineering | 1 Jan 2016 – March 2019     |
| 6. Head of Laboratory (Dynamic and Vibration), Department of Mechanical and Manufacturing Engineering     | 25 August 2015 – March 2019 |
| 7. Chairman (Committee of Welfare and Social), Department of Mechanical and Manufacturing Engineering     | 2017 to 2023                |

## Publication

### Journals

1. Nazrin, A., Sapuan, S.M., **Zuhri, M.Y.M.**, Tawakkal, I.S.M.A., Ilyas, R.A. (2023) Mechanical degradation of sugar palm crystalline nanocellulose reinforced thermoplastic sugar palm starch (TPS)/poly (lactic acid) (PLA) blend bionanocomposites in aqueous environments, *Physical Sciences Reviews*, <https://doi.org/10.1515/psr-2022-0030>.
2. Maidin N.A., Sapuan S.M., Mastura M.T., **Zuhri M.Y.M.** (2023) Materials selection of thermoplastic matrices of natural fibre composites for cyclist helmet using an integration of DMAIC approach in six sigma method together with grey relational analysis approach, *Journal of Renewable Materials*, 11(5), 2381-2397.
3. H.T.N. Kuan, M.Y. Tan, M.Z. Hassan and **M.Y.M. Zuhri** (2022) Evaluation of Physico-Mechanical Properties on Oil Extracted Ground Coffee Waste Reinforced Polyethylene Composite, *Polymers*, 14(21), 4678.
4. S. Alsubari, **M.Y.M. Zuhri**, S.M. Sapuan and M.R. Ishak (2022) Effect of foam filling on the energy absorption behaviour of flax/polylactic acid composite interlocking sandwich structures, *Composite Structures*, 292, 115685.
5. Azlin M.N.M., Sapuan S.M., **Zuhri M.Y.M.**, Zainudin E.S. and Ilyas R.A. (2022) Thermal stability, dynamic mechanical analysis and flammability properties of woven kenaf/polyester-reinforced polylactic acid hybrid laminated composites, *Polymers*, 14(13), 2690.
6. R.A. Ilyas, H.A. Aisyah, A.H. Nordin, N. Ngadi, **M.Y.M. Zuhri**, M.R.M. Asyraf, S.M. Sapuan, E.S. Zainudin, S. Sharma, H. Abral, M. Asrofi, E. Syafri, N.H. Sari, M. Rafidah, S.Z.S. Zakaria, M.R. Razman, N.A. Majid, Z. Ramli, A. Azmi, S.P. Bangar and R. Ibrahim (2022) Natural-Fiber-Reinforced Chitosan, Chitosan Blends and Their Nanocomposites for Various Advanced Applications, *Polymers*, 14(5), 874.
7. S. Mohd Izwan, S.M. Sapuan, **M.Y.M. Zuhri** and A.R. Muhamed (2022) Effect of benzoyl treatment on the performance of sugar palm/kenaf fiber-reinforced polypropylene hybrid composites, *Textile Research Journal* 92 (5-6), 706-716.
8. Hazrol, M.D., Sapuan, S.M., Ilyas, R.A., Zainudin, E.S., **Zuhri, M.Y.M.**, Abdul Wahab, N.I. (2022) Morphology and selected properties of kenaf fiber/cornhusk reinforced corn starch hybrid biocomposites, *Polimery*, 67, 575-587
9. A. Isah, S.M. Sapuan, E.S. Zainudin, **M.Y.M. Zuhri**, Y. Ridwan and C.N.A. Jaafar (2022) An overview of mechanical and corrosion properties of aluminium matrix composites reinforced with plant based natural fibres, *Physical Sciences Reviews*.
10. R.M.O. Syafiq, S.M. Sapuan, **M.Y.M. Zuhri**, S.H. Othman and R.A. Ilyas (2022) Effect of plasticizers on the properties of sugar palm nanocellulose/cinnamon essential oil reinforced starch bionanocomposite films, *Nanotechnology Reviews*, 11(1), 423–437.
11. Ilyas R.A., **Zuhri M.Y.M.**, Aisyah H.A., Asyraf M.R.M., Hassan S.A., Zainudin E.S., Sapuan S.M., Sharma S., Bangar S.P., Jumaidin R., Nawab Y., Faudzi A.A.M., Abral H., Asrofi M., Syafri E.

- and Sari N.H. (2022) Natural fiber-reinforced polylactic acid, polylactic acid blends and their composites for advanced applications, *Polymers*, 14(1), 2022.
12. Ilyas R.A., **Zuhri M.Y.M.**, Norrrahim M.N.F., Misenan M.S.M., Jenol M.A., Samsudin S.A., Nurazzi N.M., Asyraf M.R.M., Supian A.B.M., Bangar S.P., Nadlene R., Sharma S. and Omran A.A.B. (2022) Natural fiber-reinforced polycaprolactone green and hybrid biocomposites for various advanced applications, *Polymers*, 14(1), 182.
  13. Azlin M.N.M., Ilyas R.A., **Zuhri M.Y.M.**, Sapuan S.M., Harussani M.M., Sharma S., Nordin A.H., Nurazzi N.M., and Afiqah A.N. (2022) 3D Printing and shaping polymers, composites, and nanocomposites: A review, *Polymers*, 14(1), 180.
  14. Azlin, M.N.M., Sapuan, S.M., **Zuhri, M.Y.M.** and Zainudin, E.S. (2022) Effect of stacking sequence and fiber content on mechanical and morphological properties of woven kenaf/polyester fiber reinforced polylactic acid (PLA) hybrid laminated composites, *Journal of Materials Research and Technology*, 16, 1190-1201.
  15. Nazrin, A., Sapuan, S.M., **Zuhri, M.Y.M.**, Tawakkal, I.S.M.A. and Ilyas, R.A. (2022) Flammability and physical stability of sugar palm crystalline nanocellulose reinforced thermoplastic sugar palm starch/poly(lactic acid) blend bionanocomposites, *Nanotechnology Reviews*, 11(1), 86-95.
  16. Azlin, M.N.M., Sapuan, S.M., **Zuhri, M.Y.M.**, Zainudin, E.S. (2022) Mechanical, morphological and thermal properties of woven polyester fiber reinforced polylactic acid (PLA) composites, *Fibers and Polymers*, 23(1), 234-242.
  17. Supian A.B.M., Sapuan S.M., Jawaaid M., **Zuhri M.Y.M.**, Ilyas R.A. and Syamsir A. (2022) Crashworthiness response of filament wound kenaf/glass fibre-reinforced epoxy composite tubes with influence of stacking sequence under intermediate-velocity impact load, *Fibers and Polymers*, 23(1), 222-233.
  18. **M.Y.M. Zuhri**, M.A. Nasrudin, M.A.M. Nasrodin, S.M. Sapuan and M.Z. Hassan (2021) Mechanical properties under quasi-static loading of the core made of flax/poly (lactic acid) composite, *Polimery*, 66 (3), 193-197.
  19. S.A.S.A. Saufi, **M.Y.M. Zuhri**, M. Lalegani Dezaki, S.M. Sapuan, R.A. Ilyas, A. As'arry, M.K.A. Ariffin and M. Bodaghi (2021) Compression behaviour of bio-inspired honeycomb reinforced starfish shape structures using 3D printing technology, *Polymers* 13 (24), 4388.
  20. Hazrati, K.Z., Sapuan, S.M., **Zuhri, M.Y.M.** and Jumaidin, R. (2021) Preparation and characterization of starch-based biocomposite films reinforced by Dioscorea hispida fibers, *Journal of Materials Research and Technology*, 15, 1342-1355.
  21. J.J.N. Amelia, **M.Y.M. Zuhri**, Z. Leman, N.I. Zahari, A. As'arry and R.A. Ilyas (2021) Quasi-Static Compression Properties of Bamboo and PVC Tube Reinforced Polymer Foam Structures, *Polymers* 13 (20), 3603.
  22. Suriani M.J., Ilyas R.A., **Zuhri M.Y.M.**, Khalina A., Sultan M.T.H., Sapuan S.M., Ruzaidi C.M., Wan, F. Nik., Zulkifli F., Harussani M.M., Azman M.A., Radzi F.S.M. and Sharma, S. (2021) Critical review of natural fiber reinforced hybrid composites: Processing, properties, applications and cost, *Polymers*, 13(20), 3514.
  23. S. Izwan, S.M. Sapuan **M.Y.M. Zuhri** and M. A. Rahman, (2021) Thermal stability and dynamic mechanical analysis of benzylation treated sugar palm/kenaf fiber reinforced polypropylene hybrid composites, *Polymers* 13 (17), 2961.
  24. Hazrati, K.Z., Sapuan, S.M., **Zuhri, M.Y.M.** and Jumaidin, R. (2021) Effect of plasticizers on physical, thermal, and tensile properties of thermoplastic films based on Dioscorea hispida starch, *International Journal of Biological Macromolecules*, 185, 219-228.
  25. Amir, A.L., Ishak, M.R., Yidris, N., **Zuhri, M.Y.M.** and Asyraf, M.R.M. (2021) Advances of composite cross arms with incorporation of material core structures: Manufacturability, recent progress and views, *Journal of Materials Research and Technology*, 13, 1115–1131.
  26. Amir, A.L., Ishak, M.R., Yidris, N., **Zuhri, M.Y.M.** and Asyraf, M.R.M. (2021) Potential of honeycomb-filled composite structure in composite cross-arm component: A review on recent progress and its mechanical properties, *Polymers*, 13(8), 1341.

27. Hazrati, K.Z., Sapuan, S.M., **Zuhri, M.Y.M.** and Jumaidin, R. (2021) Extraction and characterization of potential biodegradable materials based on dioscorea hispida tubers, *Polymers*, 13(4), 1-19, 584
28. S. Alsubari, **M.Y.M. Zuhri**, S.M. Sapuan, M.R. Ishak, R.A. Ilyas and M.R.M. Asyraf (2021) Potential of natural fiber reinforced polymer composites in sandwich structures: A review on its mechanical properties, *Polymers* 13 (3), 423.
29. Hazrol, M.D., Sapuan, S.M., Zainudin, E.S., **Zuhri, M.Y.M.**, Wahab, N.I.A. (2021) Corn starch (Zea mays) biopolymer plastic reaction in combination with sorbitol and glycerol, *Polymers*, 13(2), 1-22, 242.
30. Wahab, M.A.F.A., Sapuan, S.M., Harussani, M.M., **Zuhri, M.Y.M.** and Saleh, A.A. (2021) Conceptual design of glass/renewable natural fibre-reinforced polymer hybrid composite motorcycle side cover, *Journal of Renewable Materials*, 9(11), 1973–1989.
31. A.B.M. Supian, S.M. Sapuan, **M.Y.M. Zuhri**, E.S. Zainudin, H.H. Ya and H.N. Hisham (2021) Effect of winding orientation on energy absorption and failure modes of filament wound kenaf/glass fibre reinforced epoxy hybrid composite tubes under intermediate-velocity impact (IVI) load, *Journal of Materials Research and Technology* 10, 1-14.
32. A.B. M. Supian, S.M. Sapuan, **M.Y.M. Zuhri**, E.S. Zainudin and H.H. Ya (2020) Crashworthiness performance of hybrid kenaf/glass fiber reinforced epoxy tube on winding orientation effect under quasi-static compression load, *Defence Technology*, 16(5), 1051-1061.
33. S. Alsubari, **M.Y.M. Zuhri**, S.M. Sapuan and M.R. Ishak (2020) Quasi-static compression behaviour of interlocking core structures made of flax fibre reinforced polylactic acid composite, *Journal of Materials Research and Technology* 9 (6), 12065-12070
34. A. Nazrin, S.M. Sapuan, **M.Y.M. Zuhri**, R.A Ilyas, R. Syafiq and S.F.K Sherwani (2020) Nanocellulose reinforced thermoplastic starch (TPS), poly(lactic) acid (PLA), and poly(butylene Succinate) (PBS) for food packaging applications, *Frontiers in Chemistry*, 8, article 213, 12 pages.
35. H.N. Salwa, S.M. Sapuan, M.T. Mastura and **M.Y.M. Zuhri** (2020) Application of Shannon's entropy-analytic hierarchy process (AHP) in the selection of the most suitable starch for takeout food packaging design, *BioResources*, 15, no. 2, pp. 4065-5088.
36. M. A. Shaharuzaman, S.M. Sapuan, M. R. Mansor and **M.Y.M. Zuhri** (2020) Conceptual design of natural fiber composites as a side-door impact beam using hybrid approach, *Journal of Renewable Materials*, 8, no.5, pp. 549-563.
37. A.B.M. Supian, Mohd Sapuan Salit, **M.Y.M. Zuhri** and H.H. Ya (2020) The crashworthiness performance of stacking sequence on filament wound hybrid composite energy absorption tube subjected to quasi-static compression load, *Journal of Materials Research and Technology*, 9, no. 1, pp. 654-666.
38. M.I.J. Ibrahim, S.M. Sapuan, E.S. Zainudin and **M.Y.M. Zuhri** (2020) Preparation and characterization of cornhusk/sugar palm fibre reinforced cornstarch based hybrid composites, *Journal of Materials Research and Technology*, 9, no. 1, pp. 200-201.
39. M. Noryani, S.M. Sapuan, M.T. Mastura, **M.Y.M. Zuhri** and E. S. Zainudin (2020) Statistical inferences in material selection of a polymer matrix for natural fibre composites, *Polimery*, 65, no. 2, pp. 105-115.
40. Alaaeddin M.H., Sapuan S.M., **Zuhri M.Y.M.**, Zainudin E.S. and Al-Oqla F.M. (2019). Polymer matrix materials selection for short sugar palm composites using integrated multi criteria evaluation method, *Composites Part B: Engineering*, 176, 107342.
41. Alaaeddin M.H., Sapuan S.M., **Zuhri M.Y.M.**, Zainudin E.S. and Al-Oqla F.M. (2019). Physical and mechanical properties of polyvinylidene fluoride - Short sugar palm fiber nanocomposites, *Journal of Cleaner Production*, 235, pp.473-482.
42. Ibrahim, M.I.J., Sapuan, S.M., Zainudin, E.S., **Zuhri, M.Y.M.** (2019). Potential of using multiscale corn husk fiber as reinforcing filler in cornstarch-based biocomposites, *International Journal of Biological Macromolecules*, 139, pp. 596-604.

43. Alaaeddin, M.H., Sapuan, S.M., **Zuhri, M.Y.M.**, Zainudin, E.S., Al-Oqla, F.M. (2019). Development of photovoltaic module with fabricated and evaluated novel backsheets-based biocomposite materials, *Materials*, 12(18),3007.
44. Ibrahim, M.I.J., Sapuan, S.M., Zainudin, E.S., **Zuhri, M.Y.M.** (2019). Extraction, chemical composition, and characterization of potential lignocellulosic biomasses and polymers from corn plant parts, *BioResources*, 14(3), pp. 6485-6500.
45. Ibrahim, M.I.J., Sapuan, S.M., Zainudin, E.S., **Zuhri, M.Y.M.** (2019). Physical, thermal, morphological, and tensile properties of cornstarch-based films as affected by different plasticizers, *International Journal of Food Properties*, 22(1), pp.925-941.
46. Izyan Khairani Mohd Ismail, Che Nor Aiza Jaafar, Ismail Zainol and **Mohd Zuhri Mohamed Yusoff** (2019). Preparation and Characterization of Hydroxyapatite from Black Tilapia Fish Scales using Spray-drying Method, *Malaysian Journal of Microscopy*, 15, pp.155-163.
47. Salwa, H.N., Sapuan, S.M., Mastura, M.T., **Zuhri, M.Y.M.** (2019). Green bio composites for food packaging, *International Journal of Recent Technology and Engineering*, 8(2 Special Issue 4), pp. 450-459.
48. Salwa, H.N., Sapuan, S.M., Mastura, M.T., **Zuhri, M.Y.M.** (2019). Analytic hierarchy process (AHP) based materials selection system for natural fiber as reinforcement in biopolymer composites for food packaging, *BioResources*, 14(4), pp.10014-10036.
49. Shaharuzaman M.A., Sapuan S.M., Mansor M.R. and **Zuhri M.Y.M.** (2019). Decision support strategy in selecting natural fiber materials for automotive side-door impact beam composites, *Journal of Renewable Materials*, 17(10), pp.997-1010.
50. Shaharuzaman M.A., Sapuan S.M., Mansor M.R. and **Zuhri M.Y.M.** (2019). The weighting of product design specification for a composite side-door impact beam using the analytic hierarchy process method, *International Journal of Materials & Product Technology*, 59(1), pp.63-80.
51. Alaaeddin M.H., Sapuan S.M., **Zuhri M.Y.M.**, Zainudin E.S. and Al-Oqla F.M. (2019). Lightweight and durable PVDF-SSPF composites for photovoltaics backsheets applications: Thermal, optical and technical properties, *Materials*, 12(13),2104.
52. Noryani M., Sapuan S.M., Mastura M.T., **Zuhri M.Y.M.** and Zainudin E.S. (2019). Material selection of natural fibre using a stepwise regression model with error analysis, *Journal of Materials Research and Technology*, 8(3), pp.2865-2879.
53. Noryani M., Sapuan S.M., Mastura M.T., **Zuhri M.Y.M.** and Zainudin E.S. (2019). Material selection of a natural fibre reinforced polymer composites using an analytical approach, *Journal of Renewable Materials*, 7(11), pp.1166-1179.
54. Daud S.N.A., Tahir S.M., Jaafar C.N.A. and **Zuhri M.Y.M.** (2019). Physical and strength properties of Fe/SiC composites under microwave hybrid sintering method, *Journal of Metals, Materials and Minerals*, 29(2), pp.70-78.
55. **Zuhri M.Y.M.**, Liao Y., Wang Q.Y. and Guan Z.W. (2019). The energy absorbing properties of bamboo-based structures, *Journal of Sandwich Structures and Materials*, 0(00), pp.1-23.
56. Alaaeddin M.H., Sapuan S.M., **Zuhri M.Y.M.**, Zainudin E.S. and Al-Oqla F.M. (2019). Photovoltaic applications: Status and manufacturing prospects, *Renewable and Sustainable Energy Reviews*, 102, pp.318-332.
57. Alaaeddin M.H., Sapuan S.M., **Zuhri M.Y.M.**, Zainudin E.S. and Al-Oqla F.M. (2019). Polyvinyl fluoride (PVF); Its Properties, Applications, and Manufacturing Prospects, *IOP Conference Series: Materials Science and Engineering*, 538(1), 012010.
58. Munawar N.S.Z., Ishak M.R., Shahroze R.M., Jawaaid M. and **Zuhri M.Y.M.** (2019). An investigation of the morphological and tensile properties of vacuum resin impregnated sugar palm fibers with various thermosetting resins, *BioResources*, 14(3), pp.5212-5223.
59. A'liya Abdul Laziz, Norkhairunnisa Mazlan, **Mohd Zuhri Mohamed Yusoff** and Azmah Hanim Mohamed Ariff (2018). Review on low velocity impact of nanocomposite in addition of nanoclays, *International Journal of Engineering and Technology*, 7, pp.170-175.
60. Hassan C.S., Sapuan S.M., Abd Aziz N. and **Zuhri M.Y.M.** (2018). Effect of chemical treatment



- on the tensile properties of single oil palm empty fruit bunch (OPEFB) fibre, *Trends in Textile Engineering and Fashion Technology*, 3(2), pp.1-7.
61. Cik Suhana Hassan, Veyvein Durai, Mohd Sapuan Salit, Nuraini Abdul Aziz and **Mohd Zuhri Mohamed Yusoff** (2019). Mechanical and crash performance of unidirectional oil palm empty fruit bunch fibre-reinforced polypropylene composite, *BioResources*, 13(4), pp.8310-8328.
  62. Alaaeddin M.H., Sapuan S.M., **Zuhri M.Y.M.**, Zainudin E.S. and Al-Oqla F.M. (2018). Properties and Common Industrial Applications of Polyvinyl fluoride (PVF) and Polyvinylidene fluoride (PVDF), *IOP Conference Series: Materials Science and Engineering*, 409(1), 012021
  63. Shaharuzaman M.A., Sapuan S.M., Mansor M.R. and **Zuhri M.Y.M.** (2018). Passenger car's side door impact beam: A review, *Journal of Engineering and Technology*, 9(1), ISSN: 2180-3811.
  64. Supian A.B.M., Sapuan S.M., **Zuhri M.Y.M.**, Zainudin E.S. and Ya H.H. (2018). Hybrid reinforced thermoset polymer composite in energy absorption tube application: A review, *Defence Technology*, 14(4), pp. 291-305.
  65. Noryani M., Sapuan S.M., Mastura M.T., **Zuhri M.Y.M.** and Zainudin E.S. (2018). A statistical framework for selecting natural fibre reinforced polymer composites based on regression model, *Fibers and Polymers*, 19(5), pp. 1039-1049.
  66. Noryani M., Sapuan S.M., Mastura M.T., **Zuhri M.Y.M.** and Zainudin E.S. (2018). Material selection criteria for natural fibre composite in automotive component: A review, *IOP Conference Series: Materials Science and Engineering*, 368(1), 012002.
  67. Mohamed Ibrahim J. Ibrahim and **Mohd Zuhri Mohamed Yusoff**. (2018). Optimization of Interlocking Structures Made of Flax Fibre Composites to Improve Its Energy Absorption Capability, *Journal of Advanced Research in Applied Sciences and Engineering Technology*, 10(1), pp. 1 – 17.
  68. Ansari Z., Tan C.W., Rejab M.R.M., Bachtar D., Siregar J. and **Zuhri M.Y.M.** (2017). Crushing behaviour of composite square honeycomb structure: a finite element analysis, *Journal of Mechanical Engineering and Science*, 11(2), pp. 2637 – 2649.
  69. **Zuhri M.Y.M.**, Rao S. and Cantwell W.J. (2017). The mechanical properties of corrugated core structures based on flax fibre reinforced composites, *Current Analytical Chemistry*, 13, DOI : [10.2174/1573411013666171113144916](https://doi.org/10.2174/1573411013666171113144916)
  70. Mohamad Ikhwan Ibrahim, Rozzeta Dolah, **Mohd Zuhri Mohamed Yusoff**, Mohd Sapuan Salit, Mohamad Zaki Hassan. (2017). Chemical treatment evaluation of tensile properties for single Kenaf fiber, *Journal of Advanced Research in Applied Mechanics*, 32, pp. 9 – 14.
  71. Sahari J., Sapuan S.M., Zainudin E.S., Ishak M.R., Maleque M.A., **Zuhri M.Y.M.** and Akhtar R. (2017). Nanoindentation and the low velocity impact response of biofibre, biopolymer and its biocomposite derived from sugar palm tree, *Current Organic Synthesis*, 14(2), pp. 227 – 232.
  72. **Zuhri M.Y.M.**, Guan Z.W. and Cantwell W.J. (2014). The mechanical properties of natural fibre based honeycomb core materials, *Composites: Part B*, 58, pp. 1 – 9.
  73. **Zuhri M.Y.M.**, Sapuan S.M. and Ismail N. (2009). Tensile properties of single oil palm empty fruit bunch (OPEFB) fibre, *Sains Malaysiana*, 38(4), pp. 525 – 529.
  74. **Zuhri M.Y.M.**, Sapuan S.M., Ismail N. and Wirawan R. (2009). Mechanical properties of short random oil palm fibre reinforced epoxy composites, *Sains Malaysiana*, 2009; 39(1): 87 – 92.
  75. **Zuhri M.Y.M.**, Sapuan S.M. and Ismail N. Oil palm fibre reinforced polymer composites: A review, *Progress in Rubber, Plastics & Recycling Technology*, 25(4), pp. 233 – 246.
  76. **Zuhri M.Y.M.**, Sapuan S.M. and Ismail N. (2008). Tensile and flexural properties of oil palm fibre reinforced phenol formaldehyde composites. *Journal of Advanced Manufacturing Technology*, Special Edition Design Engineering Conference (DECON), 3(2), pp. 17 – 26.

#### Conference Proceedings

1. M.A.H.M. Yusri, **M.Y.M. Zuhri**, M.R. Ishak, M.A. Azman (2022) compression properties of square core sandwich structure made of kenaf/PLA composite, *The International Symposium on Polymeric Materials (ISPM) 2022*, 14-15 June 2022, Universiti Putra Malaysia.

2. S. Alsubari, **M.Y.M. Zuhri**, S.M. Sapuan, M.R. Ishak, M.I.J. Ibrahim (2019), Quasi-static compression behavior of environmentally-friendly interlocking core structures made of flax/polylactic acid composite, International Conference on Advances in Mechanical and Manufacturing Engineering (ICAM2E) 2019, 21 – 23 October 2019, Langkawi, Kedah.
3. S. Alsubari, **M.Y.M. Zuhri**, S.M. Sapuan, M.R. Ishak (2019), Sensitivity to variations of manufacturing temperature and pressing time on the tensile properties of flax reinforced polylactide composites, Prosiding Seminar Enau Kebangsaan 2019, 1-2 April 2019, Negeri Sembilan, pp.143-145.
4. **M.Y.M. Zuhri**, A.A.F. Abdullah, S.M. Sapuan and M.R. Ishak. (2019). The crushing characteristics of environmentally friendly corrugated core structures, The 10<sup>th</sup> AUN/SEED-Net RC MEManuE, 7<sup>th</sup> - 8<sup>th</sup> November 2019, Phnom Penh, Cambodia.
5. **Mohd Zuhri Mohamed Yusoff**, Muhammad Asyraf Nasrudin, Mohd Sapuan Salit, Mohamad Zaki Hassan. Effect of cell size on the compressive properties of interlocking flax composite structures, Proceedings of Mechanical Engineering Research Day 2018, UTeM, pp.254-255, May 2018.
6. M. Noryani, S.M. Sapuan, M.T. Mastura, **M.Y.M. Zuhri**, E.S. Zainudin. Stepwise regression for kenaf reinforced polypropylene composite, Proceedings of Mechanical Engineering Research Day 2018, UTeM, pp.48-49, May 2018.
7. Mohd Adrinata Shaharuzaman, Mohd Sapuan Salit, Muhd Ridzuan Mansor, **Mohd Zuhri Mohamed Yusoff**. Prioritizing the product design specification of side-door impact beam using analytic hierarchy process method, Proceedings of Mechanical Engineering Research Day 2018, UTeM, pp.34-35, May 2018.
8. Daud S.N.A, Tahir S.M., Jaafar C.N.A. and **Zuhri M.Y.M.** Preliminary comparison of Fe/SiC sintered using microwave hybrid and conventional sintering, AIP Conference Proceedings 2017, vol.1885 (1), <https://doi.org/10.1063/1.5002302>
9. Supian A.B.M., Sapuan S.M., **Zuhri M.Y.M.** and Ya H.H. A review of the development hybrid nature-synthetic fibre reinforced composite in energy absorption tube applications, Proceedings of the 5<sup>th</sup> Postgraduate Seminar on Natural Fiber Composites 2016, UPM Serdang, 2016.
10. **Zuhri M.Y.M.**, Guan Z.W. and Cantwell W.J. Modelling structural response of flax-based composite interlocking structures, The 5<sup>th</sup> International Conference on Computational Methods (ICCM), Cambridge, UK, 2014.
11. **Zuhri M.Y.M.**, Guan Z.W. and Cantwell W.J. The energy absorption of environmentally-friendly structures based on bamboo tubes, The 22<sup>nd</sup> Annual International Conference on Composites/Nano Engineering (ICCE-22), Malta, 2014.
12. **Zuhri M.Y.M.**, Guan Z.W. and Cantwell W.J. Compression properties of flax fibre based honeycomb core structures, SAMPE Tech Conference and Exhibition, Wichita, USA, 2013.
13. **Zuhri M.Y.M.** and Cantwell W.J. Biodegradable sandwich structures for lightweight environmentally-friendly design, SAMPE Europe 33<sup>rd</sup> International Conference SEICO 12, Paris, France, 2012.
14. **Zuhri M.Y.M.**, S.M. Sapuan and N. Ismail. 2009. An overview of oil palm fibre – polymer composites. 9<sup>th</sup> National Symposium on Polymeric Materials 2009, 14<sup>th</sup> – 16<sup>th</sup> December 2009, Putrajaya, Selangor, Malaysia.
15. **Zuhri M.Y.M.**, Ishak M.R., Leman Z., Sapuan S.M. and Edeerozey A.M.M. 2009. Effects of moisture content to flexural properties of kenaf bast fibre reinforced unsaturated polyester composites. 9<sup>th</sup> National Symposium on Polymeric Materials 2009, 14<sup>th</sup> – 16<sup>th</sup> December 2009, Putrajaya, Selangor, Malaysia.
16. **Zuhri M.Y.M.**, Sapuan S.M. and Hamdan H.I.M. 2009. Review on pineapple leaf fibre (PALF) – polymer composites. 9<sup>th</sup> National Symposium on Polymeric Materials 2009, 14<sup>th</sup> – 16<sup>th</sup> December 2009, Putrajaya, Selangor, Malaysia.
17. Ham K.W., Sapuan S.M., **Zuhri M.Y.M.** and Hang Tuah Baharuddin B.T. 2009. Development of computer casing using oil palm fibre reinforced epoxy composite. 9<sup>th</sup> National Symposium on

Polymeric Materials 2009, 14<sup>th</sup> – 16<sup>th</sup> December 2009, Putrajaya, Selangor, Malaysia.

18. M.R. Ishak, **M.Y.M. Zuhri**, S.M. Sapuan, Z. Leman, A.M.M. Edeerozey and I.S. Othman, Comparative study of tensile properties of kenaf bast and core fibre reinforced unsaturated polyester composites, 9<sup>th</sup> National Symposium on Polymeric Materials 2009, 14<sup>th</sup> – 16<sup>th</sup> December 2009, Putrajaya, Selangor, Malaysia.
19. **M.Y.M. Zuhri**, M.R. Ishak, Z. Leman, S.M. Sapuan and A.M.M. Edeerozey, Effects of moisture content to flexural properties of kenaf bast fibre reinforced unsaturated polyester composites, 9<sup>th</sup> National Symposium on Polymeric Materials 2009, 14<sup>th</sup> – 16<sup>th</sup> December 2009, Putrajaya, Selangor, Malaysia.
20. **Zuhri M.Y.M.**, Sapuan S.M. and Ismail N. 2008. Study on characterization of oil palm fibre. Postgraduate Seminar on Natural Fibre Composites, 10<sup>th</sup> June 2008, UPM, Serdang, Malaysia.
21. Hambali Boejang, Faiz Redza Ramli, Mohd Rizal Alkahari, Mohd Juzaila Abdul Latif and **Mohd Zuhri Mohamed Yusoff**. 2008. Performance Assessment of Rapid Prototyping Technologies. International Conference on Mechanical and Manufacturing Engineering 2008, 21<sup>st</sup> – 23<sup>rd</sup> May 2008, Johor, Malaysia.

### Books

1. Sapuan S.M., Mustapha F., Majid D.L., Leman Z., Ariff A.H.M., Ariffin M.K.A., **Zuhri M.Y.M.**, Ishak M.R. and Sahari J., Composite Science and Technology, Key Engineering Materials, vol. 471-472, part 1 & 2, 2011, ISBN-13: 978-3-03785-059-6.
2. Book of Abstract of the 8<sup>th</sup> International Conference on Composite Science and Technology 2011 (ICCST8 2011). S.M. Sapuan, F. Mustapha, D.L. Majid, Z. Leman, A.H.M. Ariff, M.K.A. Ariffin, **M.Y.M. Zuhri**, M.R. Ishak and J. Sahari, 2011. Published by Department of Mechanical and Manufacturing Engineering, Universiti Putra Malaysia. ISBN 978-967-960-291-3. (207 pages)
3. Sapuan S.M., Khalina A. and **Zuhri M.Y.M.** Proceeding of Postgraduate Seminar on Natural Fibre Composites, 2008, UPM Press, ISBN NO: 978-983-43995-0-4.

### Chapter in Books

1. Hazrol M.D., Sapuan S.M., **Zuhri M.Y.M.**, Zainudin E.S., Wahab N.I.A. and Ilyas R.A. (2021) Recent development in kenaf (*Hibiscus cannabinus*)-based biocomposites and their potential industrial applications: A review, in Design for Sustainability: Green Materials and Processes (Editors: S.M. Sapuan and Muhd Ridzuan Mansor), pp. 329-368, ISBN No.: 978-012819482-9.
2. Izwan, S.M., Sapuan, S.M., **Zuhri, M.Y.M.**, Mohamed, A.R., Ilyas, R.A. (2021) A comprehensive review of natural fiber reinforced polymer biocomposites and their applications, in Design for Sustainability: Green Materials and Processes (Editors: S.M. Sapuan and Muhd Ridzuan Mansor), pp. 287-305, ISBN No.: 978-012819482-9.
3. Alaaeddin M.H., Sapuan S.M., **Zuhri M.Y.M.**, Zainudin E.S. and Al-Oqla F.M. (2019). Natural fiber composites as functionally graded materials for advanced applications, in Hierarchical Composite Materials: Materials, Manufacturing and Engineering (Editor: Kaushik Kumar, J.Paulo Davim), pp. 73-89, ISBN No.: 978-3-11-054510-4.
4. M. Supian, S.M. Sapuan, **M.Y.M. Zuhri** and H.Y. Hamdan, Effect of stacking sequence and winding orientation on performance of fibre reinforced polymer hybrid filament wound composite energy absorption tubes, in Lignocellulosic Biomass, (Editors: Hidayah Ariffin, Mohd Sapuan Salit and Mohd Ali Hassan), Woodhead Publishing, An Imprint of Elsevier, Duxford, UK, to be published in 2019.
5. Siti Amni Roslan, Mohammad Zaki Hassan, Zainudin A Rasid, Noorazilizzzi Samsuddin, Mohd Sapuan Salit, and **Mohd Zuhri Mohamed Yusoff**, (Editors: M.T. Mastura and S.M. Sapuan), Evaluating the Implementation and Performance of Green Materials in Technology Development, IGI Global, Hershey, Pennsylvania, USA, 2018, accepted.
6. N. S. Hamdan, S.M. Sapuan, M.T. Mastura and **M.Y.M. Zuhri**, Post life cycle processing of reinforced thermoplastic polymer composites, in Reinforced Polymer Composites: Processing,





Characterization and Post Life Cycle Assessment (Editors: Inderdeep Singh and Pramendra Kumar Bajpal), Wiley- VCH Verlag GmbH & Co., Weinheim, 2018.

7. M.I.J. Ibrahim, S.M. Sapuan, E.S. Zainudin and **M.Y.M. Zuhri**, Corn (maize): Its fibres, polymers, composites, and applications, in Biodegradable Composites - Materials, Manufacturing and Engineering (Editors: Kaushik Kumar J. P. Davim), De Gruyter, Berlin, Germany, September 2019, ISBN 978-3-11-060203-6.
8. **Zuhri M.Y.M.**, Nasrudin M.A and Sapuan S.M. (2017). Effect of temperature on the properties of pre-preg flax reinforced polylactide composites, in Basic Methodology: Sample Preparation (Editor: M.A. Azmah Hanim, Z.N. Ismarrubie and Nima Ghamarian), pp.56-58, ISBN No.:978-983-2408-51-2.
9. **Zuhri M.Y.M.**, Nasrudin M.A, Saleh A. Sapuan S.M. and Hassan M.Z. (2018). Interlocking structures made of flax reinforced polylactide composite, in Basic Methodology: Sample Preparation and Characterization (Editor: M.A. Azmah Hanim, C.N. Aiza Jaafar and K. Vidyatharran), pp.121-124, ISBN 978-983-2408-64-2.

Research Grant/Consultation				
Leader				
No.	Title	Amount (RM)	Year	Source of Fund
1.	Development of Flax Fibre -based Sandwich Composite Structures	60,000	2016-2018	Putra-IPM (UPM)
2.	Mechanical and flammability properties of lightweight structure made of flax-based composite for aerospace application	25,000	2018-2020	Putra-IPS (UPM)
3.	Effect of core design parameter of sandwich structure engineered kenaf composite on the compression properties and energy-absorbing capabilities	158,000	2021-2024	FRGS
Member				
4.	Pemindahan ilmu proses moden penyadapan nira bagi meningkatkan kecekapan dan produktiviti gula enau	25,000	2017-2019	KTGS JINM (UPM)
5.	Energy absorption capability and strength analysis of metal matrix functionally graded composite structures during crashworthiness and rollover test for vehicle pillar structure	84,000	2017-2019	Putra-IPB (UPM)
6.	Investigation of Calcium Content, Water Absorption and Strength Analysis	14,831.52	2017-2018	Electrius Sdn Bhd (Consultation)
7.	Material Characterization of Failed Pultruded Composites Products	25,000	2018-2020	Putra-IPS (UPM)
8.	Development and characterization of corn/kenaf fiber reinforced corn starch hybrid composites	99,300	2019-2023	Putra Berimpak (UPM)
9.	Investigation of the filament wounded sandwich structures as a substitute to the existing pultruded glass fibre reinforced polymer composite in the cross-arm structure of the high transmission towers	149,000	2019-2023	FRGS
10.	Box-Behnken Design: An Approach to Optimize Three Simultaneous Effects on PLA Bio-Based Composite Filament for Additive Manufacturing	96,000	2020-2022	FRGS
11.	Surface modification on Selective Laser Melting (SLM) fabricated Ti-6Al-4V for Orthopedics and Dental Implants on Osseointegration	15380.56	2021-2022	RUG (UTM)
12.	Development and Characterization of Woven Kenaf/Polyester Reinforced Polylactic acid (PLA) Hybrid Composites	25,000	2021-2024	Putra-IPS (UPM)



13. Heat Treatment Training Program

53,636

2023

International  
Malaysia  
Training  
Centre (IMTC)  
(Consultation)

### Teaching

#### Undergraduate

Session	Semester	Course Code	Subject
2015/2016	2	EMM3508	Engineering Design II
2016/2017	1	EMM3506	Engineering Design I
	1	EMM4901	Industrial Training
	2	EMM3806	Mechanical Engineering Laboratory I
	2	EMM3126	Introduction to Programming Language
2017/2018	1	EMM3808	Mechanical Engineering Laboratory II
	1	EMM4901	Industrial Training
	1	EMM3506	Engineering Design I
	2	EMM3508	Engineering Design II
2018/2019	1	EMM3808	Mechanical Engineering Laboratory II
	1	EMM4901	Industrial Training
	2	EMM3409	Strength of Materials I
2019/2020	1	EMM4911	Industrial Training
	1	EMM3507	Engineering Design I
	2	EMM3806	Mechanical Engineering Laboratory I
	2	EMM3126	Introduction to Programming Language
2020/2021	1	EMM3518	Computer Aided Engineering Drawing
	2	EMM3806	Mechanical Engineering Laboratory I
	2	EMM3126	Introduction to Programming Language
2021/2022	1	ENG3201	Computer Aided Engineering Drawing
	1	EMM3808	Mechanical Engineering Laboratory II
	2	ENG3202	Computer Programming
	2	EMM3409	Strength of Materials I
2022/2023	1	EMM3507	Engineering Design I
	2	EMM4412	Advanced Engineering Materials

#### Postgraduate

Session	Semester	Course Code	Subject
2020/2021	2	EMM5100	Research Methodology
2021/2022	1	EMM5100	Research Methodology
	2	EMM5100	Research Methodology
2022/2023	1	EMM5706	Design of Manufacturing Systems
2022/2023	2	EMM5504	Engineering Product Design and Innovation



### Supervision of Student

#### Bachelor

No.	Name	Title	Status
1.	Wan Abdul Aziz Wan Mohd Zain (169599)	Tensile properties of polylactide-based hybrid composites	Graduated (2015/2016)
2.	Noraini Md Isa (1696967)	Effect of stacking sequence and hybridisation on tensile properties of polypropylene-based composites	Graduated (2015/2016)
3.	Muhammad Asyraf Nasrudin (174877)	The effect of cell size on the mechanical properties of flax composite structure	Graduated (2016/2017)
4.	Muhd 'Afif Mohamad Nasrodin (172216)	The properties of interlocking Structure made of flax/PLA composites	Graduated (2016/2017)
5.	Muhammad Helmi Farizad (178626)	Simulation of the recycled paperboard pallets using finite element analysis	Graduated (2017/2018)
6.	Ahmad Aizuddin Faiz Abdullah (179571)	Environmentally – friendly corrugated core structures made of flax-based composite	Graduated (2017/2018)
7.	Mahmmud Mohamed Rebei Abdella (Yemen) (181179)	Mechanical performance of flax composite honeycomb core materials	Graduated (2017/2018)
8.	Kenson Caleb John (185044)	The capability of interlocking structures made of flax reinforced polypropylene composite	Graduated (2018/2019)
9.	Muhammad Aizat Nor Azizan (183278)	The compression properties of honeycomb structure made of flax/polypropylene composite	Graduated (2018/2019)
10.	Muhammad Hafreez Haizi (189765)	Quasi-static crushing behaviour of flax/polypropylene based honeycomb sandwich structure	Graduated (2019/2020)
11.	Mohamad Taufik Mohamad Nasirruddin (190341)	Investigation on the corrugated core structures made of flax/polypropylene composite	Graduated (2019/2020)
12.	Nor Amelia Juria Juhar (191887)	Quasi-static compression properties of bamboo and PVC tubes reinforced foam structures	Graduated (2020/2021)
13.	Nurul Dayana Darayani (193846)	Analysis of energy consumption using building information modeling (BIM) technology	Graduated (2020/2021)
14.	Nur Farhanna Mohd Fadill (196821)	Performance of lightweight sandwich structure engineered with kenaf composite	Graduated (2021/2022)
15.	Alif Akmal Omar (198518)	The energy-absorbing characteristics of cellular core made of kenaf-based composite	Graduated (2021/2022)
16.	Jeyaraj A/L Raja Segar (203129)	Characterization of light weight 3D-printed structures for insole product under compression properties	Completed (2022/2023)
17.	Wan Nasharina Mohd Zaki (200641)	Energy absorption characteristic of sandwich core structure made of natural fibre composites	Completed (2022/2023)

#### Master

##### a) With Thesis

No.	Name	Title	Type of Supervision	Status
<b>Graduated Student</b>				
1.	Muhamad Arif Hakimi bin Muhamad Yusri (GS62829)	Effect of core design parameter of sandwich structure engineered kenaf composite on the compression	Chairman	On-going (2021)

		properties and energy-absorbing capabilities		
2.	Siti Nurul Adura Daud (GS44634)	Process performance and characterization of microwave hybrid and conventional sintering methods on iron/silicon carbide	Member	Graduated (2015-2019)
3.	Nur Sofeana Zulaika Mohd Nor Munawar (GS44554)	Properties of resin-impregnated sugar palm fibrereinforced epoxy composites	Member	Graduated (2015-2018)
4.	Izzyan Khairani Mohd Ismail (GS47565)	Physical, mechanical and thermal properties of tilapia scale hydroxyapatite-filled high density polyethylene composites	Member	Graduated (2016-2019)
5.	Ahmad Nazrin bin Johari (GS50388)	Influence of CaCO <sub>3</sub> in glass fibre/unsaturated polyester composite on thermal and flexural creep behaviour	Member	Graduated (2017-2019)
<b>Current Student</b>				
6.	A'liya Abdul Aziz (GS50378)	Effect of nanofillers in flax/Kevlar hybrid reinforced PLA composites for body armour application	Member	Completed (2018)
7.	Norazmi Mokni (GS45479)	Structure study of rollcage design for rally car	Member	- (2018)
8.	Mohd Fahme Azam (GS44735)	Determination of port distribution for sugar palm using vacuum infusion application	Member	Withdraw (2015-2016)

**b) Without Thesis**

No.	Name	Title	Type of Supervision	Status
1.	Mohamed Ibrahim (Iraq) (GS44108)	Optimization of interlocking structure made of natural fibre composites	Chairman	Graduated (2016/2017)
2.	Babayo Muhammad Abdullahi (Nigeria) (GS46717)	Composite structural analysis using Finite Element Analysis	Chairman	Graduated (2017/2018)
3.	Al-Aghbari Gamil Abdulhafedh Ahmed (Yemen) (GS46784)	Life broadcasting techniques in direct broadcast satellite (DBS)	Chairman	Graduated (2017/2018)
4.	Tan Kun Jui (GS47183)	The relationship between welfare and employee's work performance in an organization	Chairman	Graduated (2017/2018)
5.	Saba Omer Salem Mohammed Bawazir (Yemen) (GS46650)	Investigation of e-waste management in Malaysian universities	Chairman	Graduated (2017/2018)
6.	Syed Ahmad Saufi Syed Abdullah (GS51021)	The behavior of bio-inspired sandwich structure using 3D printing	Chairman	Graduated (2018/2019)
7.	Hamse Bashe (Somalia) (GS51420)	Hazard identification, risk assessment and risk control in roads of Somaliland	Chairman	Graduated (2018/2019)
8.	Wang Zi Chen (China) (GS50860)	Design and testing of joint-based square core structure with different topologies using 3D printer	Chairman	Graduated (2018/2019)
9.	Rohayu Tukiman (GS52190)	Research trends of natural fibre composites for engineering applications in Malaysia	Chairman	Graduated (2019/2020)
10.	Wang Heng Jing Qi (China) (GS56189)	Selection of starting lineup of football players by using Analytical Hierarchy Process and TRIZ method	Chairman	Completed (2019/2020)

11.	Lau Sie Lin (GS56014)	Investigation of the 3D printing parameters on the tensile properties	Chairman	Graduated (2019/2020)
12.	Mirza Syahmi Mahzan (GS58916)	Eco-impact assessment of environmentally friendly material for automotive application	Chairman	Completed (2020/2022)
13.	Wan Nur Athirah Mokhtar (GS59439)	Life cycle assessment of natural fibre materials for hybrid composites of engine beauty cover	Chairman	Completed (2020/2022)
14.	Wan Mohd Asraf Hussein Wan Omar (GS59129)	Case study on energy consumption using BIM technology	Chairman	Graduated (2021)
15.	Prakaash A/L Ramakrishnan (GS61507)	Energy efficiency assessment using bim technology for green building	Chairman	Completed (2022)
16.	Ben Gurion A/L David (GS62919)	Human resources for medical device: The role of biomedical Engineer and challenges in improving competency	Chairman	Completed (2022)
17.	Siti Nurshafanis Ahmad Raziff (GS63985)	Investigation on the energy analysis of solar panel using BIM technology	Chairman	Completed (2023)
18.	Nasser Ibrahim Khamis Awadh (Yemen) (GS63394)	Designing solar panel using BIM technology for green building	Chairman	Completed (2023)
19.	Mathan Raj A/L Rama Rao (GS65481)	Self-organizing network (SON) use case study for LTE base stations	Chairman	On-going (2023)

#### PhD

No.	Name	Title	Type of Supervision	Status
<b>Graduated Student</b>				
1.	Saleh Naji Musaed Alsubari (Yemen) (GS50661)	Quasi-static compression and fire properties of flax fibre reinforced polylactic acid sandwich composite	Chairman	Completed (2017-2023)
2.	Cik Suhana Hassan (GS36983)	Mechanical and crash performance analysis of unidirectional oil palm empty fruit bunch fibre reinforced polymer composites	Member	Graduated (2018)
3.	Alaaeddin M. H. Abed (Palestine) (GS46989)	Development and characterization of sugar palm fiber-reinforced polymer composites for photovoltaic backsheet material	Member	Graduated (2016-2020)
4.	Mohamed Ibrahim J Ibrahim (Iraq) (GS50780)	Characterization of corn/sugar palm fiber-reinforced corn starch biopolymer hybrid composites	Member	Graduated (2018-2020)
5.	Noryani Muhammad (GS46576)	Statistical analysis for material selection of natural fibre reinforced composite	Member	Graduated (2017-2020)
6.	Mohd Adrinata Shahraruzaman (GS46676)	Concurrent conceptual design of hybrid natural fiber composite for side door impact beam	Member	Graduated (2017-2020)
7.	Mohd Supian Abu Bakar (GS47054)	Effect of winding angles and hybridization on static and quasi-static crushing behaviour of kenaf/fibreglass hybrid reinforced composite tubes	Member	Graduated (2016-2020)
8.	Nor Salwa Hamdan (GS49838)	Material and design concept selection, and life cycle assessment (LCA) of green biopolymer composites for food packaging	Member	Graduated (2017-2021)





9.	Zatil Hazrati Kamaruddin (GS55324)	Development and characterization of ubi gadong Dioscorea hispida)/sugar palm fibre reinforced ubi gadong Dioscorea hispida ) starch biocomposites	Member	Graduated (2019-2022)
10.	Mohamad Omar Syafiq Razali (GS54002)	Antimicrobial activity, physical, mechanical and barrier properties of sugar palm nanocellulose reinforced sugar palm starch nanocomposite films incorporated with cinnamon essential oil as food packaging materials	Member	Graduated (2019-2022)
11.	Nazrin Nurarief Mardi Asmawi (GS54004)	Development and Characterization of Thermoplastic from Sugar Palm Starch and Sugar Palm Nanocellulose Fibre and their blends with Poly(lactic acid)	Member	Graduated (2019-2022)
12.	Mohd Izwan Shahrudin (GS52863)	Performance of kenaf (hibiscus cannabinus)/sugar palm (arenga pinnata wumb.) fibre reinforced polypropylene hybrid composites for non- structural automotive components	Member	Graduated (2018-2022)
13.	Waqas Ashraf (Bangladesh) (GS50333)	Investigation on the mechanical properties of hybrid honeycomb sandwich structure having facesheets reinforced with flax, kenaf and glass fibers	Member	Completed (2019-2022)
14.	Mohd Azlin Mohd Nor (GS55864)	Development and characterization of woven kenaf/polyester reinforced PLA hybrid composites	Member	Completed (2019-2023)
15.	Aliyu Isah (Nigeria) (GS59792)	-	Member	Completed (2021-2023)
<b>Current Student</b>				
16.	Almusawi Khalid Ibrahim Mohsin (Iraq) (GS60285)	-	Chairman	On-going (2020)
17.	Bong Pei Chien (GS65867)	Solar Panel using BIM	Chairman	On-going (2022)
18.	Nur Isnida Razali (GS42634)	The guidelines of the bus superstructure in sustaining the impact of the rollover event according to R66	Member	Submitted (2018)
19.	Mohamad Hazrol Md Damiri (GS56874)	Development and Characterization of Corn/Kenaf Fiber Reinforced Corn Starch Hybrid Composites	Member	Submitted (2019)
20.	Amir Abd Latif (GS56632)	-	Member	On-going (2020)
21.	Nurul Ain Maidin (GS58657)	Concurrent conceptual design of sustainable biocomposites cyclist helmet using a new integrated approach	Member	On-going (2021)
22.	Budati Sindhu (India) (GS57819)	AI algorithm for process parameters optimization during the drilling process of novel green composite in the application of UAV (unmanned aerial vehicles) vehicles.	Member	On-going (2021)
23.	Al Ghrairi Nashat Shakir Hammood (Iraq) (GS60020)	-	Member	On-going (2020)
24.	Mohd Khairul bin Domadi (GS61656)	Laser cutting of natural fiber-reinforced polymer composites	Member	On-going (2021)



Examiner/Chairman				
No.	Name	Title	Type	Institution
<b>Master</b>				
1.	Noor Azman bin Dollah (3080321)	Improvement of aerodynamics performance of WIG fuselage using blowing flow control method	External examiner	UPNM (2021)
2.	Chilabi Haider Jaafar Hussein (GS50443)	Harvesting energy from planetary gear using piezoelectric material	Co-chairman	UPM (2019)
3.	Vidyatharran A/L Krishna (GS49788)	Intermetallic morphology and shear strength assessment on the effect of carbon nanotubes and graphene reinforcement in SAC105 solder on electroless nickel/ immersion silver surface finish	Co-chairman	UPM (2020)
4.	Rozilah Abdullah (GS50792)	Characterization of silver nanoparticles (AGNPS) on the antimicrobial properties of sugar palm nanocrystalline cellulose (SPNCCS) reinforced sugar palm starch (SPS) nanocomposites film	Co-chairman	UPM (2021)
5.	Nur Diyana Ahmad Fazil (GS54086)	Characterization and properties of miswak ( <i>salvadora persica</i> ) fiber reinforced polylactic acid (PLA) composite	Co-chairman	UPM (2023)
<b>PhD</b>				
1.	Noor Azammi b. Abd Murat (GS44107)	Kenaf filled thermoplastic polyurethane (TPU)-natural rubber (NR) polymer composite for automotive engine rubber mounting	Co-Chairman	UPM (2019)
2.	Naveen Jesu Arockiam (GS49491)	Development and characterization of hybrid aramid/natural fiber reinforced graphene nanoplatelets modified epoxy composites	Co-Chairman	UPM (2019)
3.	Nik Syamsul Bahari Che Yusof (GS45349)	Conceptual design and selection of natural/glass fibre reinforced polyurethane hybrid composite automotive crash box	Co-Chairman	UPM (2020)
4.	Davood Zamani (GS33492)	Effect of cold rolling and subsequent annealing treatments on fatigue behaviour and microstructure evolution of a High-MN twip steel	Co-Chairman	UPM (2020)
5.	Tajul Adli Abdul Razak (GS44160)	Design and development of automated V-grooving machine for bamboo flattening production	Co-chairman	UPM (2021)
6.	Ayu Rafiqah Shafi (GS50241)	Development and characterization of oil palm ( <i>Elaeis Guineensis</i> ) empty fruit bunch fibre filled poly butylene succinate and tapioca starch biocomposites	Co-chairman	UPM (2021)
7.	Mohd Zurrayen Abdul Mutalib (GS46183)	Tool condition monitoring of friction drilling process using adaptive neuro-fuzzy inference system	Co-chairman	UPM (2021)
8.	Mohd Asnawi Omar (GS45040)	Stent strength improvement utilizing selective laser melting technology	Co-chairman	UPM (2021)
9.	Zaliha Wahid (GS47546)	Mechanical characterization of polymer parts produced via multi-jet printing and fused deposition modelling	Co-chairman	UPM (2021)



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| 10. | Sity Ainy Nor<br>Mohamed<br>(GS48306)                    | Haracterization of fatigue crack<br>propagation of rice husk polypropylene<br>composites under constant amplitude<br>loading   | Co-chairman | UPM (2021) |
| 11. | Sherwani Shah<br>Faisal Khan<br>(GS55328)                | Development and characterization of<br>sugar palm and glass fibre reinforced<br>poly (lactic acid) hybrid and non-hybrid<br>composites for potential use in<br>motorcycle components | Co-chairman | UPM (2021) |
| 12. | Hesham Ahmed<br>Abdul Mutaleb<br>Abas (GS49090)          | Development of a semi-active<br>suspension control for a quarter car<br>using magneto- rheological fluid (MR)<br>controlled by afcfuzzy- de-pid model                                | Co-chairman | UPM (2022) |
| 13. | Syamimi Mohd<br>Yusoff (GS49274)                         | Experimental and finite element<br>modelling on green bilayer iron powder<br>compaction  | Co-chairman | UPM (2022) |
| 14. | Msebawi<br>Muntadher Sabah<br>Abdul Hussein<br>(GS56528) | Effects of CuO and SiO <sub>2</sub> as<br>reinforcement in aluminium AA6061<br>chips hybrid nanocomposites using hot<br>extrusion process  | Co-chairman | UPM (2022) |
| 15. | Fathi Aluhishi<br>Muftah Masoud<br>(GS55307)             | Optimization of cutting parameters of<br>sugar palm fiber reinforced unsaturated<br>polyester composite with laser beam and<br>abrasive water jet cutting technologies               | Co-chairman | UPM (2023) |