

CURRICULUM VITAE



Dr. Adi Azriff Bin Basri
Department of Aerospace Engineering,
Faculty of Engineering,
Universiti Putra Malaysia,
43400 UPM Serdang, Selangor

T: 03-9769 4392
F: 03-9769 7125
Email: adiazriff@upm.edu.my

H-Index (Scopus): 15

Education

1. PhD. Aerospace Engineering, 2017, Universiti Putra Malaysia.
2. MSc. Innovation and Engineering Design, 2012, Universiti Putra Malaysia.
3. BEng.(Hons) Mechanical Engineering, 2009, Universiti Teknologi Malaysia.

Areas of Interest

1. Fluid-Structure Interaction Simulation (FSI): Application of Computational Fluid Dynamics (CFD) and Finite Element Analysis (FEA) for high elasticity deformation.
2. Computational Fluid Dynamics: Laminar and Turbulence Flow Modelling, Internal and External Flow Modelling, CFD in Biomedical Engineering.
3. Aerodynamics: Particle Image Velocimetry (PIV) in Aerodynamics Measurement and Fluid Flow, Multi-rotor UAV.
4. Product Design Optimization, Medical Device Product Design.

Professional Qualification/Membership/Affiliation

- | | |
|--------------------------------|---|
| 1. Graduate Member | Board of Engineers Malaysia (BEM) |
| 2. Member | Aerospace Society Malaysia (AEROS)
(Membership Number: AEROS00096) |
| 3. Associate Member | Institute of Research Engineers and Doctor
(Membership Number: AM101000584936) |
| 4. Certificate of Practitioner | The International TRIZ Association (MATRIZ)
The Malaysia TRIZ Innovation Association (MyTRIZ)
(Level 1 TRIZ Practitioner) |
| 5. Member | The Institution of Mechanical Engineers (IMechE), United Kingdom
(Membership Number: 80395169) |
| 6. Chartered Engineer | The Institution of Mechanical Engineers (IMechE), United Kingdom
(Membership Number: 80395169) |

Appointments (Inside and Outside UPM)

Date	Designation	Remarks
Feb 2024- Present	Innovation & Income Generation Unit Leader Coordinator	Faculty of Engineering, UPM.
Aug 2020- Present	Alumni Coordinator	Department of Aerospace Engineering, Faculty of Engineering, UPM.
Aug 2019 – Dec 2021	Research Fellow	Institute of Tropical Forestry and Forest Product, UPM
August 2018 - Present	Senior Lecturer	Department of Aerospace Engineering, Faculty of Engineering, UPM.



Nov 2017– July 2018	Research Assistant	Department of Mechanical Engineering, Manipal International University, Nilai, Seremban. - Outside UPM
Sept 2013 – Sept 2017	Young Academician (TAM)	Department of Aerospace Engineering, Faculty of Engineering, UPM.
June 2012 – June 2013	Assistant Lecturer	Department of Aerospace Engineering, Faculty of Engineering, UPM.
March 2012 – May 2012	Science Officer	Department of Aerospace Engineering, Faculty of Engineering, UPM.
Jan 2011 – June 2011	Part time Lecturer	Universiti Kuala Lumpur – Institute of Product Design and Manufacturing (UniKL-iProm) - Outside UPM
July 2010 – Dec 2010	Manager & Online System Developer	Cucci Launderette Enterprise, Ampang, Selangor - Outside UPM
July 2009 – June 2010	Mechanical Consultant Engineer	Perunding Hashim & NEH Sdn. Bhd. (PHNEH SDN BHD), Plaza Mont Kiara, Kuala Lumpur - Outside UPM

Teachings

Undergraduate Programme

1. ECC 3011/ENG 3001 Engineering Mathematics 1 3(3+0)
2. EMM 3315 Fluid Mechanics 1 3(3+0)
3. EMM 3508/ENG 3201 Engineering Drawing 3 (1+2)
4. ECC 3012/ENG 3002 Engineering Mathematics 2 3(3+0)
5. ENG 3102 Engineering Economy
6. EAS4703 Aerospace Simulation Modelling 3(3+0)

Postdergraduate Programme

1. EAS 5703 Advance Computer Aided Design 3 (1+2)

Administrative Appointment		
Position	Organization	Duration
1. Alumni Coordinator	Department of Aerospace, UPM	October 2020 - Present
2. Lab Coordinator	Department of Aerospace, UPM	January 2021 – Present
3. Penyelidik Bersekutu	Aerospace Malaysia Research Center (AMRC)	January 2021- Present
4. Penyelidik Bersekutu	Institute of Tropical Forestry and Forest Products (INTROP)	September 2022- Present
5. Innovation & Income Generation Unit Leader	Faculty of Engineering, UPM	February 2024- Present

Publications

Journals (30 recent journals)

2016

1. **Adi A. Basri**, Mohamed Zubair, Mohamad S. Zakaria, Ernnie I. Basri, Ahmad F.A. Aziz., Rosli M. Ali, Masaaki Tamagawa, Kamarul A. Ahmad (2016), "The Hemodynamic Effects of Paravalvular Leakage using Fluid Structure Interaction; TAVI Patient", *Journal of Medical Imaging and Health Informatics*, 6 (6), 1513-1518 (**ISI:Q4, IF: 0.621**).



2. **Adi A. Basri**, Mohamed Zubair, Mohamad S. Zakaria, Ernnie I. Basri, Ahmad F.A. Aziz., Rosli M. Ali, Masaaki Tamagawa, Kamarul A. Ahmad (2016), "The Effects of Aortic Stenosis on the Hemodynamic Flow Properties using Computational Fluid Dynamics", *International Journal of Fluids and Heat Transfer*, 1 (3), 33-42 (**IIJIF Index**).
3. Ernnie I. Basri, **Adi A. Basri**, Vizy N. Riazuddin, Siti F. Shahwir, Mohamed Zubair, Kamarul A. Ahmad (2016), "Computational Fluid Dynamics Study in Biomedical Applications: A Review", *International Journal of Fluids and Heat Transfer*, 1 (2), 2-14 (**IIJIF Index**).
4. Mohamad S. Zakaria, Farzad Ismail, Masaaki Tamagawa, Ahmad F. A Aziz, Surjatin Wiriaidjaya, **Adi A. Basri**, Kamarul A. Ahmad (2016), "Numerical analysis using a fixed grid method for cardiovascular flow application", *Journal of Medical Imaging and Health Informatics*, 6 (6), 1483-1488 (**ISI:Q4, IF: 0.621**).

2017

5. Mohamad S. Zakaria, Farzad Ismail, Masaaki Tamagawa, Ahmad F. A Aziz, Surjatin Wiriaidjaya, **Adi A. Basri**, Kamarul A. Ahmad (2017), "Review of numerical methods for simulation of mechanical heart valves and the potential for blood clotting", *Medical & Biological Engineering & Computing*, 55 (9), 1519-1548 (**Q2, IF: 1.916**)
6. M. Zuber, Vizy N. Riazuddin, Kamarul A. Ahmad, Abdul Khader, **Adi A. Basri** (2017), "Numerical Study of a Nasal Cavity Model Having a Constricted Pharyngeal Section Representing Obstructive Sleep Apnea", *Journal of Computational Methods in Sciences and Engineering* 17(2):1-8 (**Scopus**).
7. M. Zuber, M. S. B. Hisham, N. A. M. Nasir, **Adi A. Basri**, Abdul Khader (2017), "A Computational Fluid Dynamics Study of Combustion and Emission Performance in an Annular Combustor of a Jet Engine", *Pertanika Journal of Science and Technology* 25(3): 1019-1028 (**Scopus**).

2018

8. Shah. M. A. Khader, **Adi. A. Basri**, C. Johny, R. Pai, M. Zuber, Kamarul A. Arifin, Z. Ahmad (2018), "Haemodynamics Behaviour in Normal and Stenosed Renal Artery using Computational Fluid Dynamics", *Journal of Advanced Research in Fluid Mechanics and Thermal Sciences*, 51, Issue 1 (2018) 80-90, Published, (**Scopus**).
9. Shah. M. A. Khader, **Adi. A. Basri**, C. Johny, R. Pai, M. Zuber, Kamarul A. Arifin, Z. Ahmad (2018), "Haemodynamics Study in Subject-Specific Abdominal Aorta with Renal Bifurcation using CFD- A Case Study", *Journal of Advanced Research in Fluid Mechanics and Thermal Sciences*, 50, Issue 2 (2018) 118-121, Published, (**Scopus**).
10. Mohamad S. Zakaria, F. Ismail, M. Tamagawa, Ahmad F. A. Aziz, S. Wiriaidjaya, **Adi. A. Basri**, Kamarul. A. Ahmad (2018), "Computational Fluid Dynamics Study of Blood Flow in Aorta using Open FOAM", *Journal of Advanced Research in Fluid Mechanics and Thermal Sciences*, 43, Issue 1 (2018) 81-89, Published, (**Scopus**).
11. **Adi. A. Basri**, Shah. M. A. Khader, , C. Johny, R. Pai, M. Zuber, Kamarul A. Arifin, Z. Ahmad (2018), "Numerical Study of Haemodynamics Behaviour in Normal and Single Stenosed Renal Artery using Fluid – Structure Interaction", *Journal of Advanced Research in Fluid Mechanics and Thermal Sciences*, 51, Issue 1 (2018) 91-98, Published, (**Scopus**).
12. **Azriff, A.**, Johny, C., Abdul Khader, S.M., Raghuvir Pai, B., Zuber, M., Ahmed, K.A., Ahmad, Z. "Numerical study of haemodynamics in abdominal aorta with renal branches using fluid – structure interaction under rest and exercise conditions", *International Journal of Recent Technology and Engineering*, (2018), 7 (4), pp. 23-27 (**Scopus**).

2019

13. Mohamad S. Zakaria, F. Ismail, M. Tamagawa, Ahmad F. A. Aziz, S. Wiriaidjaya, **Adi. A. Basri**, Kamarul. A. Ahmad (2018), "A Cartesian non-boundary fitted grid method on complex geometries



- and its application to the blood flow in the aorta using OpenFOAM”, Mathematics and Computers in Simulation, 159 (2019) 220-250, Published3. ,**(ISI:Q2, IF: 1.409).**
14. Basri, E.I., Sultan, M.T.H., Faizal, M., **Basri, A.A.**, Ahmad, K.A. “Unmanned aerial vehicle (UAV) structural and manufacturing of conventional and humpback tubercles leading edge (TLE) in aeronautical applications”, International Journal of Recent Technology and Engineering, (2019), 8 (1), pp. 479-496 (**Scopus**).
 15. Basri, E.I., Sultan, M.T.H., Abas MF, Faizal, M., **Basri, A.A.**, Ahmad, K.A. “Conceptual design and simulation validation based finite element optimization for tubercle leading edge composite wing of an unmanned aerial vehicle”, Journal of Materials Research and Technology, (2019), (Published). **(ISI:Q1, IF: 3.327).**
 16. Basri, E.I., Sultan, M.T.H., Abas MF, Faizal, M., **Basri, A.A.**, Ahmad, K.A. “Performance analysis of composite ply orientation in aeronautical application of Unmanned Aerial Vehicle (UAV) NACA4415 wing”, Journal of Materials Research and Technology, (2019), (Published) **(ISI:Q1, IF: 3.327).**
 17. Basri, E.I., Sultan, M.T.H., Abas MF, Faizal, M., **Basri, A.A.**, Ahmad, K.A. “UAV NACA 4415 Wing Structural Performance Analysis Subjected to External Aerodynamic Load Using Schrenk’s Approximation”, Journal of Advanced Research in Fluid Mechanics and Thermal Sciences (2019), In-press, (**Scopus**).
 18. Abidin, N.M.Z., Sultan, M.T.H., Hua, L.S., **Basri, A.A.**, Md Shah, A.U., Safri, S.N.A. A brief review of computational analysis and experimental models of composite materials for aerospace applications, (2019). Journal of Reinforced Plastics and Composites, 38(23-24), pp.1031-1039. (**Scopus**)
 19. Nfawa SR, Talib AR, Masuri SU, **Basri AA**, Hasini H. Heat transfer enhancement in a corrugated-trapezoidal channel using winglet vortex generators. CFD Lett. 2019 Jan 1;11:69-80. (**Scopus**)
Basri AA, Khader SA, Johny C, Pai R, Zuber M, Ahmad Z, Ahmad KA. Effect of single and double stenosed on renal arteries of abdominal aorta: A computational fluid dynamics. CFD Letters. 2019 Jan 1;12(1):87-97. (**Scopus**)

2020

20. Nadzri, S. N. I. H. A., Sultan, M. T. H., Shah, A. U. M., Safri, S. N. A., Talib, A. R. A., Jawaid, M., & **Basri, A. A.** A comprehensive review of coconut shell powder composites: Preparation, processing, and characterization. (2020). Journal of Thermoplastic Composite Materials. –Article in Press
21. Ahmad Nadzri, S.N.Z.; Hameed Sultan, M.T.; Md Shah, A.U.; Safri, S.N.A.; **Basri, A.A.** A “Review on the Kenaf/Glass Hybrid Composites with Limitations on Mechanical and Low Velocity Impact Properties”. Polymers 2020, 12, 1285.
22. Nayak SY, Satish SB, Sultan MT, Kini CR, Shenoy KR, Samant R, Sarvade PP, **Basri AA**, Mustapha F. Influence of fabric orientation and compression factor on the mechanical properties of 3D E-glass reinforced epoxy composites. Journal of Materials Research and Technology. 2020 Jul 1;9(4):8517-27.
23. **Basri AA**, Zuber M, Basri EI, Zakaria MS, Aziz AF, Tamagawa M, Ahmad KA. Fluid Structure Interaction on Paravalvular Leakage of Transcatheter Aortic Valve Implantation Related to Aortic Stenosis: A Patient-Specific Case. Computational and Mathematical Methods in Medicine. 2020 May 4;2020. **(Q3, IF: 1.045)**
24. Arumugam S, Kandasamy J, Md Shah AU, Hameed Sultan MT, Safri SN, Abdul Majid MS, **Basri AA**, Mustapha F. Investigations on the Mechanical Properties of Glass Fiber/Sisal Fiber/Chitosan Reinforced Hybrid Polymer Sandwich Composite Scaffolds for Bone Fracture Fixation Applications. Polymers. 2020 Jul;12(7):1501.
25. Fadziruddin ZF, **Basri AA**, Basri EI. “Review on Dislodgement & Securement Risk of Peripheral Intravenous Catheter/Cannula and The Needs of PIVC Securement Device”. Malaysian Journal of Medicine and Health Sciences. 8 (16), pp. 55-65. 2020. (**Scopus**)
26. **Basri A.A.**, Khader S.M.A, Johny C., Pai R., Zuber M. Ahmad Z., Ahmad KA. “Fluid Structure Interaction of Renal Arteries of Abdominal Aorta Subjected to Single and Double Stenosed Complication”. Malaysian Journal of Medicine and Health Sciences. 8 (16), pp. 35-41. 2020. (**Scopus**)



27. **Basri A.A**, Khader S.M.A, Johny C., Pai R., Zuber M. Ahmad Z., Ahmad KA "Effect of Single and Double Stenosed on Renal Arteries of Abdominal Aorta: A Computational Fluid Dynamics." *CFD Letters* 12 (1) pp. 87-97 (2020). (**Scopus**)
28. A. F. A. Faris, **A. A. Basri**, E. I. Basri, M. T. H. Sultan, E. Gires, K. A. Ahmad, (2020) "Computational Fluid Dynamics Study On Aerodynamics Blade Design Of Advance Precision Composite (APC) Slow Flyer Propeller", *International Journal of Mechanical and Production Engineering Research and Development*, 10 (6), 265-280 (**Scopus**).
29. JE, P. C., Sultan, M. T., Selvan, C. P., Irulappasamy, S., Mustapha, F., **Basri, A. A.**, & Safri, S. N. (2020). Manufacturing challenges in self-healing technology for polymer composites—a review. *Journal of Materials Research and Technology*, 9(4), 7370-7379. (**ISI:Q1, IF: 3.327**).

2021

30. Moli, T., Sultan, M. T. H., Jawaid, M., Talib, A., Abu, R., **Basri, A. A.**, ... & Safri, S. N. A. (2021). Effect of NaOH Treatment of Cellulosic Lipstick Palm Fiber on Tensile and Fiber-Matrix Interfacial Strength with Phenolic Resin. In *Intelligent Manufacturing and Mechatronics* (pp. 831-839). Springer, Singapore.
31. Singh, B., Yidris, N., **Basri, A. A.**, Pai, R., & Ahmad, K. A. (2021). Study of Mosquito Aerodynamics for Imitation as a Small Robot and Flight in a Low-Density Environment. *Micromachines*, 12(5), 511.
32. Salleh, N. M., Zakaria, M. S., Abd Latif, M. J., & **Basri, A. A.** (2021). A Computational Study of a Passive Flow Device in a Mechanical Heart Valve for the Anatomic Aorta and the Axisymmetric Aorta. *CFD Letters*, 13(4), 69-79. (**Scopus**)
33. Basri, E.I., Sultan, M.T.H., Faizal, M., **Basri, A.A.**, Ahmad, K.A. (2021), "Consideration of Lamination Structural Analysis on Wing Design Application", *MDPI Materials: Structure Analysis and Characterization*, Published (**ISI:Q2, IF: 3.057**).
34. S. Balakrishnan, **A. A. Basri**, E. I. Basri, M. H. M. Yazik, (2021) "Effects of Different Thickness of UAV Airfoil on Aerodynamics Performance Using CFD Technique", *Journal of Aeronautics, Astronautics and Aviation*, 53 (2), 275-285. (**Scopus**)
35. N. N. M. Kamal, **A. A. Basri**, E. I. Basri, M. T. H. Sultan, A. S. M. Rafie, M. F. A. Hamid, (2021) "Validation and Verification of Aerodynamics Loading of Schrenk Approximation, Prandtl Lifting-Line and Computational Fluid Dynamics with Experiment on a NACA Series", *Journal of Aeronautics, Astronautics and Aviation*, 53 (2), 283-288. (**Scopus**)
36. A. F. A. Faris, **A. A. Basri**, E. I. Basri, M. T. H. Sultan, E. Gires, K. A. Ahmad, (2021) "Propeller Design and Performance Evaluation by Using Computational Fluid Dynamics (CFD): A Review", *Journal of Aeronautics, Astronautics and Aviation*, 53 (2), 263-274. (**Scopus**).
37. **A. A. Basri**, M. Zuber, E. I. Basri, M. S. Zakaria, A. F. A. Aziz, M. Tamagawa, K. A. Ahmad (2021) "Fluid-Structure Interaction in Problems of Patient Specific Transcatheter Aortic Valve Implantation With and without Paravalvular Leakage Complication", *Fluid Dynamics & Materials Processing*, Accepted. (**Scopus**)
38. Budhollya,S., Bhat, A., Raj,S.A,Sultan, M.T.H, Shah, A.U.M, **Basri, A.A.** (2021), "State of the art review about bio-inspired design and applications: An aerospace perspective", *MDPI Applied Sciences*, 14(13), 3705 (**ISI:Q3, IF: 2.679**).
39. Nfawa, S.R., Abu Talib, A.R., **Basri, A.A.**, Masuri, S.U., (2021)" Novel use of MgO nanoparticle additive for enhancing the thermal conductivity of CuO/water nanofluid", *Case Studies in Thermal Engineering*,27,101279, (**ISI:Q1, IF: 4.724**).
40. Loganathan, T.M., Sultan, M.T.H., Jawaid, M., ...Talib, A.R.A., **Basri, A.A.** (2021) "Physical, mechanical, and morphological properties of hybrid cyrtostachys renda/kenaf fiber reinforced with multi-walled carbon nanotubes (MWCNT)-phenolic composites", *Polymers*, 13(19), 3448 (**ISI:Q1, IF: 4.329**).
41. Loganathan, T.M., Sultan, M.T.H., Ahsan, Q., ...Talib, A.R.A., **Basri, A.A.** (2021) "Physico-mechanical and Flammability Properties of Cyrtostachys renda Fibers Reinforced Phenolic Resin Bio-composites ",*Journal of Polymers and the Environment*, 29(11), pp. 3703–3720 (**ISI:Q3, IF: 3.677**).
42. Loganathan, T.M., Sultan, M.T.H., Ahsan, Q., ...**Basri, A.A.**, Jaafar, C.N.A. (2021) "Effect of cyrtostachys renda fiber loading on the mechanical, morphology, and flammability properties of multi-walled carbon nanotubes/phenolic bio-composites", *Nanomaterials*, 11(11), 3049, (**ISI:Q2, IF: 5.076**).



43. Sanmuham, V., Sultan, M.T.H., Radzi, A.M., ...Safri, S.N.A., **Basri, A.A.** (2021), "Effect of silver nanopowder on mechanical, thermal and antimicrobial properties of kenaf/hdpe composites" *Polymers*, 13(22), 3928, 3448 (**ISI:Q1, IF: 4.329**).
44. Hashim, M.K.R., Majid, M.S.A., Jamir, M.R.M., ...Ahmad, K.A., **Basri, A.A.** (2021) "The effect of stacking sequence on fatigue behaviour of hybrid pineapple leaf fibre/carbon-fibre-reinforced epoxy composites", *Polymers*, 13(22), 3936, (**ISI:Q1, IF: 4.329**).

2022

45. Shahar, F.S., Hameed Sultan, M.T., Safri, S.N.A., ...**Basri, A.A.**, Md Shah, A.U. (2022) "Fatigue and impact properties of 3D printed PLA reinforced with kenaf particles", *Journal of Materials Research and Technology*, 16, pp. 461–470(**ISI:Q2, IF: 5.039**).
46. Chen, A., **Basri, A. A.** B., Ismail, N. B., Tamagawa, M., Zhu, D., & Ahmad, K. A. (2022). Simulation of Mechanical Heart Valve Dysfunction and the Non-Newtonian Blood Model Approach. *Applied Bionics and Biomechanics*, 2022. (**Scopus**)
47. Chen, A., **Basri, A. A.**, Ismail, N., Zhu, D., & Ahmad, K. A. (2022). Numerical Study of Subaortic Stenosis and Pannus Formation on Blood Flow Around Mechanical Heart Valves. *Journal of Advanced Research in Fluid Mechanics and Thermal Sciences*, 95(2), 180-190. (**Scopus**)
48. Yaacob, I. N. M., Singh, B., Mazlan, N., Gires, E., Basri, A. A., Ismail, O., ... & Ahmad, K. A. (2022). Numerical Study of the AP/AI/HTPB Composite Solid Propellant based Combustion Process in a Small Retro Rocket Motor. *Journal of Advanced Research in Fluid Mechanics and Thermal Sciences*, 96(2), 98-114. (**Scopus**)
49. Ningappa, A. H., Patil, S., Belur, G. S., Barboza, A. B. V., Kumar, N., Ballambat, R. P., ... & Tamagawa, M. (2022). Influence of Altered Pressures on Flow Dynamics in Carotid Bifurcation System Using Numerical Methods. *Journal of Advanced Research in Fluid Mechanics and Thermal Sciences*, 97(1), 47-61. (**Scopus**)
50. Loganathan, T. M., Sultan, M. T. H., Ahsan, Q., Jawaid, M., Naveen, J., Shah, A. U. M., ... & **Basri, A. A.** (2022). Thermal degradation, visco-elastic and fire-retardant behavior of hybrid Cyrtostachys Renda/kenaf fiber-reinforced MWCNT-modified phenolic composites. *Journal of Thermal Analysis and Calorimetry*, 1-18. (**ISI:Q**)
51. Basri, E. I., **Basri, A. A.**, Balakrishnan, S., Sultan, M. T. H. H., & Ahmad, K. A. (2022). Performance analysis of composite laminates wing skin with the aid of fluid structure interaction of aerodynamic loading-structural analysis. *Mechanics Based Design of Structures and Machines*, 1-21. (**ISI:Q1**)
52. Tamizi, N. S. M., Zainon, N., Deros, M. M., & **Basri, A. A.** (2022). Investigation on the Effect of Printing Parameters on Flexural properties of 3D Printed Polymeric Scaffolds. In *Journal of Physics: Conference Series* (Vol. 2169, No. 1, p. 012027). IOP Publishing. (**Scopus**)
53. Yamaguchi, T., **Basri, A. A.**, Ahmad, K. A. B., & Tamagawa, M. Prediction Of Thrombus Formation On Impinging Jet Flow By Eulerian Computational Fluid Dynamics (Cfd)–Effects Of Concentration Boundary Conditions On Platelet Adhesion. (**Scopus**)
54. Ahmad Nadzri, S. N. Z., Md Shah, A. U., Sultan, M. T. H., Safri, S. N. A., Shahar, F. S., & **Basri, A. A.** (2022). Failure mechanisms of kenaf/glass sandwich laminates subjected to low velocity impact loading. *Journal of Industrial Textiles*, 15280837221094643. (**ISI:Q**)
55. Singh, S., Zuber, M., Hamidon, M. N., Mazlan, N., **Basri, A. A.**, & Ahmad, K. A. (2022). Classification of actuation mechanism designs with structural block diagrams for flapping-wing drones: A comprehensive review. *Progress in Aerospace Sciences*, 132, 100833. (**ISI:Q**)
56. Shahar, F. S., Sultan, M. T. H., Safri, S. N. A., Jawaid, M., Talib, A. R. A., **Basri, A. A.**, & Shah, A. U. M. (2022). Physical, thermal and tensile behaviour of 3D printed kenaf/PLA to suggest its usability for ankle–foot orthosis—a preliminary study. *Rapid Prototyping Journal*. (**ISI:Q**)
57. Faris, A. F. A., **Basri, A. A.**, Basri, E. I., Sultan, M. T. H., & Ahmad, K. A. (2022). Aerodynamics Effects of APC Slow Flyer Propeller Blade Design with Different Airfoil Origin Positions. *Journal of Aeronautics, Astronautics and Aviation*, 54(3), 325-334. (**ISI:Q4**)
58. Nadzri, S. N. I. H. A., Sultan, M. T. H., Shah, A. U. M., Safri, S. N. A., Talib, A. R. A., Jawaid, M., & **Basri, A. A.** (2022). A comprehensive review of coconut shell powder composites: Preparation, processing, and characterization. *Journal of Thermoplastic Composite Materials*, 35(12), 2641-2664.



59. Singh, S., Muralidharan, A. K., Radhakrishnan, J., Zuber, M., **Basri, A. A.**, Mazlan, N., ... & Ahmad, K. A. (2022). Parametric Study and Experimental Investigations of a Single Crank–Slotted Dual Lever Mechanism for MAV Flapping Actuation. *Biomimetics*, 7(4), 208.
60. Chen, A., **Basri, A. A.**, Ismail, N. B., & Ahmad, K. A. (2022). The Numerical Analysis of Non-Newtonian Blood Flow in a Mechanical Heart Valve. *Processes*, 11(1), 37.
61. Ahmad Nadzri, S. N. Z., Md Shah, A. U., Sultan, M. T. H., Safri, S. N. A., Shahar, F. S., & **Basri, A. A.** (2022). Failure mechanisms of kenaf/glass sandwich laminates subjected to low velocity impact loading. *Journal of Industrial Textiles*, 51(3_suppl), 4167S-4183S.

2023

62. Abidin, N. M. Z., Sultan, M. T. H., Md Shah, A. U., Shahar, F. S., Najeeb, M. I., Ali, M. R., ... & Hui, D. (2023). The evaluation of the mechanical properties of glass, kenaf, and honeycomb fiber-reinforced composite. *Reviews on Advanced Materials Science*, 62(1), 20220299.
63. Nasaruddin, M. H., **Basri, A. A.**, Basri, E. I., Sultan, M. T. H. H., & Ahmad, K. A. (2023). Structural Analysis of Flexible Metal Wheel in the Application of Lunar Rover Vehicle. *Journal of Aeronautics, Astronautics and Aviation*, 55(1), 1-12.
64. Singh, S., Muralidharan, A. K., Radhakrishnan, J., Zuber, M., **Basri, A. A.**, Mazlan, N., ... & Ahmad, K. A. (2023). Study of X-Pattern Crank-Activated 4-Bar Fast Return Mechanism for Flapping Actuation in Robo Drones. *Journal of Advanced Research in Fluid Mechanics and Thermal Sciences*, 105(2), 115-128.
65. Basri, E. I., **Basri, A. A.**, & Salim, F. N. D. (2023). Study on the Effects of Individual Pitot Tube Inlet of a Bladeless Tesla Microturbine using Numerical Analysis. *CFD Letters*, 15(7), 14-30.

2024

66. Saravanakumar, Y. N., **Basri, A. A.**, Basri, E. I., & Sultan, M. T. H. (2024). Development and Optimization of a Wireless Power Charging System for an Inspection Drone. In E3S Web of Conferences (Vol. 477, p. 00077). EDP Sciences.
67. Mokhtar, M. I. M., **Basri, A. A.**, Basri, E. I., & Sultan, M. T. H. (2024). Defect Detection Image Processing for Drone Inspection on Wide-Body Aircraft Surface. In E3S Web of Conferences (Vol. 477, p. 00100). EDP Sciences.
68. Rajoo, P. G., **Basri, A. A.**, Basri, E. I., Thariq, M., & Sultan, H. H. (2024). Development of the drone frame kit made up of natural fiber. In E3S Web of Conferences (Vol. 477, p. 00065). EDP Sciences.
69. Chandran, N. K., **Basri, A. A.**, Basri, E. I., & Sultan, M. T. H. (2024). Experimental Study on Low-Cost Sensor Sensitivity of Inspection Quadcopter's Anti-Collision System. In E3S Web of Conferences (Vol. 477, p. 00026). EDP Sciences.
70. Nazri, Muhammad Nor Ikmal Muhamad, et al. "Experimental Study of Improvised Tesla Micro-Turbine." *Journal of Aeronautics, Astronautics and Aviation* 56.1S (2024): 461-468.

Conference Proceedings (30 recent Conference Proceedings)

2014

1. Adi A. Basri, Mohamed Zubair, Ahmad F.A. Aziz., Rosli M. Ali, Masaaki Tamagawa, Kamarul A. Ahmad,"Computational Fluid Dynamics Study of the Aortic Valve Opening on Hemodynamics Characteristics", IECBES 2014 ,Miri, Sarawak, 8-10 December 2014, pp: 99 - 102.
2. Adi A. Basri, Mohamed Zubair, Ahmad F.A. Aziz., Rosli M. Ali, Masaaki Tamagawa, Kamarul A. Ahmad, "The effect of Aortic Stenosis on the Hemodynamic flow properties using Computational Fluid Dynamics", ICCMEH 2014, Manipal, India, 17-19 December 2014.

2015

3. **Adi A. Basri**, Mohamed Zubair, Mohamad S. Zakaria, Ernnie I. Basri, Ahmad F.A. Aziz., Rosli M. Ali, Masaaki Tamagawa, Kamarul A. Ahmad (2015), "The Hemodynamic Effects of Paravalvular Leakage using Fluid Structure Interaction; TAVI Patient", ICCMEH 2015, UPM, Malaysia, 19-20 December 2015.



4. Ernnie I. Basri, **Adi A. Basri**, Vizy N. Riazuddin, Siti F. Shahwir, Mohamed Zubair, Kamarul A. Ahmad (2016), "Computational Fluid Dynamics Study in Biomedical Applications: A Review", ICCMEH 2015, UPM, Malaysia, 19-20 December 2015.

2016

5. **Adi A. Basri**, Mohamed Zubair, Yuji Sanjo, Mohamad S. Zakaria, Ernnie I. Basri, Ahmad F.A. Aziz., Rosli M. Ali, Masaaki Tamagawa, Kamarul A. Ahmad, "Validation of Patient Specific Aorta Model for Computational Fluid Dynamic Analysis", International Conference on Computational Method in Engineering and Health Sciences 2016 (ICCMEH 2016), Kyushu Institute of Technology, Japan, 17-18 December 2016.
6. **Adi A. Basri**, Mohamed Zubair, Mohamad S. Zakaria, Ernnie I. Basri, Ahmad F.A. Aziz., Rosli M. Ali, Masaaki Tamagawa, Kamarul A. Ahmad, "Experiment and Computational Fluid Dynamics Simulations of Patient Specific Aorta Model", SAES2016, Kyushu Institute of Technology, Japan, 17-18 December 2016.
7. Ernnie I. Basri, **Adi A. Basri**, Kamarul A. Ahmad, M. Zuber, M. Tamagawa, " Finite Element Analysis of NACA 4415 Tubercl Wing ", International Conference on Computational Method in Engineering and Health Sciences 2016 (ICCMEH 2016), Kyushu Institute of Technology, Japan, 17-18 December 2016.

2017

8. Shah. M. A. Khader, **Adi. A. Basri**, C. Johny, R. Pai, M. Zuber, Kamarul A. Arifin, Z. Ahmad (2018), " Haemodynamics Behaviour in Normal and Stenosed Renal Artery using Computational Fluid Dynamics", International Conference on Computational Method in Engineering and Health Sciences 2017 (ICCMEH 2017), ICCMEH 2017, Manipal, India, 17-19 December 2017..
9. Shah. M. A. Khader, **Adi. A. Basri**, C. Johny, R. Pai, M. Zuber, Kamarul A. Arifin, Z. Ahmad (2018), " Haemodynamics Study in Subject-Specific Abdominal Aorta with Renal Bifurcation using CFD- A Case Study", International Conference on Computational Method in Engineering and Health Sciences 2017 (ICCMEH 2017), ICCMEH 2017, Manipal, India, 17-19 December 2017.

2018

10. **Azriff, A.**, Johny, C., Abdul Khader, S.M., Raghuvir Pai, B., Zuber, M., Ahmed, K.A., Ahmad, Z. "Numerical study of haemodynamics in abdominal aorta with renal branches using fluid – structure interaction under rest and exercise conditions", 3rd International Conference on Engineering Mechanics and Applied Sciences 2018, 3-5 July 2018.

2019

11. N. N. M. Kamal, E. I. Basri, I. S. Basri, M. F. Abas, ,**A. A. Basri**, " Validation of schrenk's approximation method versus computational fluid dynamics of aerodynamic loading on a 3d wing", 5th International Conference on Computational Method in Engineering and Health Sciences 2019 (ICCMEH 2019), ICCMEH 2019, UPM, Malaysia, 16-17 July 2019.
12. Z. F. Z. Fadziruddin, E. I. Basri, **A. A. Basri**, " Dislodgement & Securement Risk of Peripheral Intravenous Catheter/Cannula: A Review", 5th International Conference on Computational Method in Engineering and Health Sciences 2019 (ICCMEH 2019), ICCMEH 2019, UPM, Malaysia, 16-17 July 2019.
13. **Azriff, A. Basri**, Johny, C., Abdul Khader, S.M., Raghuvir Pai, B., Zuber, M., Ahmed, K.A., Ahmad, Z. "Effect of single and double Stenosed on renal arteries of abdominal aorta: a computational fluid dynamics", 5th International Conference on Computational Method in Engineering and Health Sciences 2019 (ICCMEH 2019), ICCMEH 2019, UPM, Malaysia, 16-17 July 2019
14. Sadeq Rashid, A.R Abu Talib, Siti Ujila Masuri, Hasril Hasini and **Adi Azriff Basri**, "Heat transfer enhancement in a corrugated-trapezoidal channel using winglet vortex generators", SouthEast Asia Workshop on Aerospace Engineering 2019 (SAWAE 2019), Aug 29-30, Kuala Lumpur Malaysia.
15. A. F. A. Faris, **A. A. Basri**, E. I. Basri, M. T. H. Sultan, E. Gires, K. A. Ahmad "Aerodynamics Effects Of Different Propeller Blade Design For A Multi-Rotor Uav Using Computational Fluid Dynamics", SouthEast Asia Workshop on Aerospace Engineering 2019 (SAWAE 2019), Aug 29-30, Kuala Lumpur Malaysia.



2020

16. S. Balakrishnan, **A. A. Basri**, E. I. Basri, M. H. M. Yazik, "Aerodynamics Performance of Selig Airfoil Thickness using Computational Fluid Dynamics", International Symposium on Sustainable Aviation 2020 (ISSA 2020), UPM, Malaysia, 9-12 November 2020.
17. N. N. M. Kamal, **A. A. Basri**, E. I. Basri, M. T. H. Sultan, A. S. M. Rafie, M. F. A. Hamid, "Validation and Verification of Aerodynamics Loading of Schrenk Approximation, Prandtl Lifting-Line and Computational Fluid Dynamics with Experiment on a NACA Series", International Symposium on Sustainable Aviation 2020 (ISSA 2020), UPM, Malaysia, 9-12 November 2020.
18. A. F. A. Faris, **A. A. Basri**, E. I. Basri, M. T. H. Sultan, E. Gires, K. A. Ahmad, "Multi-Rotor Unmanned Aerial Vehicle (UAV) Aerodynamic Perspective of Different Propeller Blade Design: A Review", International Symposium on Sustainable Aviation 2020 (ISSA 2020), UPM, Malaysia, 9-12 November 2020.
19. F. N. D. Salim, **A. A. Basri**, E. I. Basri, "Numerical Analysis of Tesla Bladeless Micro-Turbine Performance on the Individual Pitot Tube Inlet", International Symposium on Sustainable Aviation 2020 (ISSA 2020), UPM, Malaysia, 9-12 November 2020.

2021

20. **A. A. Basri**, M. Zuber, E. I. Basri, M. S. Zakaria, A. F. A. Aziz, M. Tamagawa, K. A. Ahmad "Recent Development of Transcatheter Aortic Valve Implantation (TAVI): Reality in Malaysia", International Conference of Biosciences and Medical Engineering (ICBME 2021), UTM, Malaysia, 29-30 June 2021.
21. A. F. A. Faris, **A. A. Basri**, E. I. Basri, M. T. H. Sultan, K. A. Ahmad, "Aerodynamics Effects on Different Shape of APC Slow Flyer Propeller Blade Design Respected to the Different Position of Airfoil Origin using CFD Approach", AEROS Conference 2021, Malaysia, 12 December 2021.
22. M. H. Nasaruddin, **A. A. Basri**, E. I. Basri, M. T. H. Sultan, K. A. Ahmad, "Structural Analysis of Flexible Metal Wheel in the Application of Lunar Rover Vehicle", AEROS Conference 2021, Malaysia, 12 December 2021.

2022

23. Previndran Guinda Rajoo, Adi Azriff Basri, Ernnie Illyani Basri and Mohammed Thariq Hameed Sultan "Development Of The Drone Frame Kit Made Up Of Natural Fibre", Aerotech Conference 2022, UPM, Malaysia, 5-6 December 2022.
24. Muhammad Izham Mohd Mokhtar, Adi Azriff Basri, Ernnie Illyani Basri and Mohammed Thariq Hameed Sultan "Defect Detection Image Processing For Drone Inspection On Wide-Body Aircraft Surface", Aerotech Conference 2022, UPM, Malaysia, 5-6 December 2022.
25. Navaneetha Krisnan Chandran, Adi Azriff Basri, Ernnie Illyani Basri and Mohammed Thariq Hameed Sultan "Experimental Study On Low-Cost Sensor Sensitivity Of Inspection Quadcopter's Anti-Collision System", Aerotech Conference 2022, UPM, Malaysia, 5-6 December 2022.
26. Yavinaash Naidu Saravanakumar, Adi Azriff Basri, Ernnie Illyani Basri and Mohammed Thariq Hameed Sultan "Development and Optimization of a Wireless Power Charging System for an Inspection Drone", Aerotech Conference 2022, UPM, Malaysia, 5-6 December 2022.
27. Balbir Singh, Noorfaizal Yidris, Adi Azriff Basri, Raghuvir Pai and Kamarul Arifin Ahmad "Numerical Study of an External Flow around a Corrugated Wing using Lattice Boltzmann Method", Aerotech Conference 2022, UPM, Malaysia, 5-6 December 2022.
28. Izzat Najmi Mohd Yaacob, Norkhairunnisa Mazlan, Kamarul Arifin Ahmad, Adi Azriff Basri, Ezanee Gires, Norafizah Salleh, Osmera Ismail and Suraya Shahedi "Effect of metal additives on combustion products of AP/HTPB based composite propellant using Rocket Propulsion Analysis", Aerotech Conference 2022, UPM, Malaysia, 5-6 December 2022.
29. Ernnie Illyani Basri, Adi Azriff Basri, Kamarul Arifin Ahmad, "Computational Fluid Dynamics Analysis in Biomimetics Applications: A Review from Aerospace Engineering Perspective", International Conference Computational Method in Engineering and Health Sciences 2022, Kyushu Institute of Technology (Kyutech), Japan, 12-14 December 2022.
30. Thinesh S Balakrishnania, T Chandrana, Rendy Raja, KGP Palakisanana, Balbir Singha,b, Noorfaizal Yidrisa, Adi Azriff Basria, Raghuvir Paia, Kamarul Arifin Ahmad, "Aero-acoustic Environment of a Launch Vehicle at the Pad during Lift-off – A Numerical Study", International

Conference Computational Method in Engineering and Health Sciences 2022, Kyushu Institute of Technology (Kyutech), Japan, 12-14 December 2022.

31. Kaishan FENG, Yoshiki YANAGITA, Yuko MIYAMURA, Adi Azriff BASRI, Mohammad ZUBER, SiROHANI, Kamarul Arifin AHMAD, Masaaki TAMAGAWA, "Fundamental Investigation on Indoor Ventilation Evaluation for Airborne Virus Infection by CFD", International Conference Computational Method in Engineering and Health Sciences 2022, Kyushu Institute of Technology (Kyutech), Japan, 12-14 December 2022.
32. Yoshiki Yanagita, Kaishan Feng, Yuko Miyamura, Adi Azriff Basri, Mohammad Zuber, Si Rohani, Abdul Aziz, Kamarul Arifin Ahmad, Masaaki Tamagawa, "Evaluation of Virus Concentration Analysis in the Airway based on Indoor Ventilation Analysis by CFD", International Conference Computational Method in Engineering and Health Sciences 2022, Kyushu Institute of Technology (Kyutech), Japan, 12-14 December 2022.
33. Adi Azriff Basri, Ernnie Illyani Basri, Mohamed Zubair, Muhammad Shukr Zakaria, Ahmad Fazli Abdul Aziz, Masaaki.Tamagawa, Kamarul.Arifin Ahmad, "Experimental In Vitro Study on Hemodynamics Effect of Aorta with and without TAVI Implantation; Patient Specific Aorta Model", International Conference Computational Method in Engineering and Health Sciences 2022, Kyushu Institute of Technology (Kyutech), Japan, 12-14 December 2022.

2023

34. Nazri, Muhammad Nor Ikmal Muhamad, et al. "Experimental Study of Improvised Tesla Micro-Turbine." AEROS Conference 2023, Malaysia, 12 December 2023.
35. A.A.Basri et al. "Simulaton Study on Rocket Motor Performance Subjected to Spiral Nozzle using Computational Fluid Dynamics Approach", International Conference Computational Method in Engineering and Health Sciences 2023, Kuching, Malaysia, 2-3 October 2023.
36. F.Bajuri, A.A. Basri, E.I.Basri "Surveys On Safety Cannula/Catheter Protector Complications Among Malaysian Healthcare Workers", Asia-Pacific Society for Artificial Organs Congress, PAUM, Kuala Lumpur, 25-26 September 2023.
37. Adi Azriff Basri, Ernnie Illyani Basri, Mohamed Zubair, Muhammad Shukr Zakaria, Ahmad Fazli Abdul Aziz, Masaaki.Tamagawa, Kamarul.Arifin Ahmad "Recent Development of Transcatheter Aortic Valve Implantation (TAVI): Reality in Malaysia", Asia-Pacific Society for Artificial Organs Congress, PAUM, Kuala Lumpur, 25-26 September 2023.
- 38.

Books (If any)

Chapter in Books (If any)

Research Grants

	Leader (UPM)	Member	
Total (Accumulated) (RM)	RM 362,662	RM 194,000	
Year	Project Title	Amount (RM)	Source of Fund
2019-	Development of multi-role unmanned aerial Systems wing using Fluid Structure Interaction	RM 50,000	GERAN PUTRA-IPM (Leader)
2021			
2019-	Numerical Investigation of Kingfisher's Wing under Multiphase Flight through Rain	RM 90,000	GERAN PUTRA BERIMPAK (Member)
2021			
2019-	Aerodynamics Investigation of Solid Propellant Rocket Motor	RM 6000	GERAN SWASTA/ANTARABANGS A (Member)
2020			
2020-	Development of Solid Propellant Rocket	RM 98,000	MATCHING GRANT WITH INDUSTRY (Member)
2021			
2021-	Intravenous Cannula Protector	RM 60,000	GERAN KAJIAN VALIDASI PASARAN INNOHUB GRANT (Leader)
2022			

2022-2022	Intravenous Cannula Protector	RM 76, 000	GERAN PEMBANGUNAN PRODUK PENYELIDIKAN (Leader)
2023-2026	Aloe Vera Gel Infused Saba Banana Starch-based Polylactic Acid to Enhance the Biodegradability and Biocompatibility of Medical Frade Plastic	RM 176,662	Fundamental Research Grant Scheme (MOSTI) (Leader)

Awards/Recognition(Recent)

Year	Name of awards	Title	Award Authority	Award Type
2011	Gold Medal	Multifunction Disposable Safety Syringe	PRPRI, UPM 2011	University
2012	Silver Medal	Multifunction Disposable Safety Syringe	BioScience 2012	National
2016	Elsvier Reviewer Recognition	Certificate of Reviewing	International Journal of Cardiology (Q1:IF=6.189)	International
2019	Gold Medal FYP Open Day (Supervisor)	Cfd simulation on Aerodynamics Effects of Different Propeller Blade Design for a Multi-rotor UAV	Faculty of Engineering, Universiti Putra Malaysia	University
2019	Innovation Technology Expo 2019 (INTEX 2019) (Co-Researcher)	Gold Award: Pineapple Leaves Fiber Extractor Machine	INTEX 2019, Innovation and Technology Expo 2019,	National
2019	Innovation Technology Expo 2019 (INTEX 2019) (Co-Researcher)	Gold Award: Putra UAV: Bio-degradable Natural Fiber Composite Material	INTEX 2019, Innovation and Technology Expo 2019	National
2019	2 nd Digitalised International Invention, Innovation and Design Johor, 2019 (DIID JOHOR 2019) (Co-Researcher)	Gold Medal: Putra UAV: Sustainable Material Recreational UAV	Johor 2019: Digitalising The Malaysian Innovation	National
2019	2 nd Digitalised International Invention, Innovation and Design Johor, 2019 (DIID JOHOR 2019) (Co-Researcher)	Gold Medal: Putra UAV: Advance Pineapple Leave Fiber Extraction Machine	Johor 2019: Digitalising The Malaysian Innovation	National
2019	INDES 2019 (Co-Researcher)	Gold Medal for Project: Putra UAV: Novel BioDegradable Natural Fiber Composite	Ipoh International Summit on	International



		Material	Professionalism, Research and Education 2019 (INSPIRED) Ipoh International Summit on Professionalism, Research and Education 2019 (INSPIRED) Universiti Teknikal Melaka	International
2019	INDES 2019 (Co-Researcher)	Diamond Award for Project: Innovatory Pineapple Leaves Fiber Extraction Blade for Fiber Extraction Machine		
2019	INDES 2019 (Co-Researcher)	Best of The Best Award (Science, Engineering & Technology) for Project: Innovatory Pineapple Leaves Fiber Extraction Blade for Fiber Extraction Machine		
2019	INDES 2019 (Co-Researcher)	Best of The Best Award (Category B; Students of Higher Learning Institution) for Project: Innovatory Pineapple Leaves Fiber Extraction Blade for Fiber Extraction Machine		
2019	INDES 2019 (Co-Researcher)	Gold Medal for Project: Innovatory Pineapple Leaves Fiber Extraction Blade for Fiber Extraction Machine		
2019	Karnival Inovasi UTEMEX 2019 (Co-Researcher)	Gold Award Winner for project: Innovatory Pineapple Leaves Fiber Extraction Blade	Universiti Teknikal Melaka	National
2019	Karnival Inovasi UTEMEX 2019 (Co-Researcher)	Special Award Winner for project: Putra UAV: Novel Bio-Degradable Natural Fiber Composite	Universiti Teknikal Melaka	National
2019	Karnival Inovasi UTEMEX 2019 (Co-Researcher)	Gold Award Winner for project: Putra UAV: Novel Bio-Degradable Natural Fiber Composite	Universiti Teknikal Melaka	National
2019	Selangor Research, Development and Innovation	Top winner of the Machines & Equipment Cluster (University / College Category) which	Kerajaan Negeri Selangor	National



	Expo (Co-Researcher)	entailed a prize worth RM10,000 for project: Innovative Pineapple Leaves Fiber Extraction Blade for Fiber Extraction Machine		
2019	Engineering Innovation & Exhibition (Co-Researcher)	Innovation Awards” Silver Award for Innovative Pineapple Leaves Fiber Extraction Blade for Fiber Extraction Machine	Universiti Putra Malaysia	National
2019	Engineering Innovation & Exhibition (Co-Researcher)	Innovation Awards” Silver Award for Putra UAV: Novel BioDegradable Natural Fiber Composite Material	Universiti Putra Malaysia	National
2020	Malaysia Technology Expo 2020 (MTE2020) (Co-Researcher)	Invention and Innovation Silver Award for Category “Machinery, Equipment and Tools Heavy Equipment’s, Industrial Machinery” for project “Innovatory Pineapple Leaves Fiber Extraction Blade for Fiber Extraction Machine”	The 19th International Expo on Inventions and Innovations	International
2020	Malaysia Technology Expo 2020 (MTE2020) (Co-Researcher)	Invention and Innovation Bronze Award for Category “Aviation and Transportation” for project “Putra UAV: Novel Bio-Degradable Natural Fiber Composite Material”	The 19th International Expo on Inventions and Innovations	International
2021	Best Paper Award (Healthcare Technologies Track)	“Recent Development of Transcatheter Aortic Valve Implantation (TAVI): Reality in Malaysia”	International Conference of Biosciences and Medical Engineering (ICBME 2021)	International
2021	Virtual Innovation Competition 2021 (VIC21) (Leader)	•Gold Medal •Merit of Achievement Special Awards •Top 5 Special Award •The Best Special Award (Health & Wellness) •The Champion Special Awards for Project: IV Protector	Virtual Innovation Competition 2021	International
2021	Pertandingan Rekacipta dan Innovasi Nasional (PRIN21)	Bronze Medal for Project: IV Protector	Pertandingan Rekacipta dan Innovasi Nasional (PRIN21) UKM	National



2021	International Invention, Innovation, & Design Expo (INoDEx2021)	Silver Medal for Project: IV Protector	International Invention, Innovation, & Design Expo (INoDEx2021) USM	National
2021	International Invention, Innovation & technology Exhiition, Malaysia (ITEX 2021)	Bronze Medal for Project: IV Protector	International Invention, Innovation & technology Exhiition, Malaysia (ITEX 2021)	International
2022	International Conference of Computational Method Engineering and Health Sciences (ICCMEH 2022)	Best Presenter Award for Young Scientist	International Conference of Computational Method Engineering and Health Sciences	International
2023	International Borneo Innovation Exhibition & Competition (IBIEC 2023)	Gold Medal	International Borneo Innovation Exhibition & Competition (IBIEC 2023)	International
2023	Silver Medal FYP Open Day (Supervisor)	Implementation of Control Valves System on Micro Turbine Drone's Rotational Motion	Faculty of Engineering, Universiti Putra Malaysia	University

No	Year	Title	Amount
1.	2017	Compression Test of Fiber Glass Beam for Industrial Practitioner, Civil Engineering Laboratory, 10 th December 2017. (Assistant for Dr. Noorfaizal Yidris)	Rm 1000
2.	2018	CFD Analysis of Helideck for Oil and Gas Platform for Industrial Practitioner, ANSYS Software, 18 th January 2018, (Assistant for Dr. Mohammad Yazdi Harmin)	Rm 1000
3.	2018	<i>Bengkel Pemurnian Garis Panduan Permohonan Dan Penguatkuasaan Penggunaan Dron/Unmanned Aircraft System (UAS) Di Putrajaya</i> , 24 th – 26 th January 2018 (Fasilitator for Perbadanan Putrajaya).	RM 1000
4.	2019	Computational Fluid Dynamics Analysis of Cooling Pipe System in Hydroelectric Power Generator Kenyir.(Partner with Dr. Muhammad Azim Bin Azizi)	RM 4000
5.	2023	Design and Development of EV Bus (Transafe Consultant)	RM 4000

No.	Name	Title	Status
1.	Sadeq Rashid Nfawa	Numerical and Experimental Study of Nanofluid Flow and Heat Transfer Characteristics in a Corrugated Channels with Vortex Generator	Completed Co-Supervisor
2.	Muhammad Imran bin Najeeb	Performance Improvement of Leaf Fibre Extractor Machine and	Completed Co-Supervisor



		Characterization of Malaysian Pineapple (Yankee) Leaf Fibre and its Composites	
3.	Singh Spoorthi	Stability Analysis and Control Implementation Strategies for Insect Size Flapping Robofliers	Completed Co-Supervisor
4.	Balbir Singh	Morphology-Driven Design And Aerodynamic Performance Of Hovering Mosquito Inspired Pico Aerial Vehicle	Completed Co-Supervisor
5.	Alshaheeb Ali Mohammed Ali Abdulshaheed	Aerodynamic Parameters Influence Power Harvesting For Renewable Turbine Rotor	Ongoing Co-Supervisor
6.	Chen Aolin	Numerical Simulation of Non-Newtonian Blood Flow in MHV	Completed Co-Supervisor
7.	Nur Marini binti Zainal Abidin	Application of Natural Fibre Composite in UAV Wings using Finite Element Analysis	Ongoing Co-Supervisor
8.	Farah Syazwani binti Sahar	FEA Analysis and 3D Printing of an Ankle-Foot Othesis by using Kenaf composite Suitable for an Area with High Humidity and Temperature	Completed Co-Supervisor
9.	Tamil Moli a/p Loganathan	Impact Characterization of Crystostachys Renda/ Kenaf Fibre Reinforced Poly-Carbonate Composite as an Aircraft Interior Component Application	Completed Co-Supervisor
10.	Thinesh Sharma A/L Balakrishnan	ADVANCEMENT OF HYBRID PULTRUDED PROFILES REINFORCED WITH PLANT AND GLASS FIBRES FOR STRUCTURAL UTILIZATIONS	On-going Co-Supervisor
11.	Farid bin Bajuri	Design Of Radiation Detection System For Passive Dosimetry During Extravehicular Activity At International Space Station	Completed Co-Supervisor
12.	Alshaheeb Ali Mohamed Ali Abdulshahee	Power Harvesting From Pipes Network By Using Pump As Turbine	On-going Co-Supervisor
13.	Izzat Najmi Bin Mohd Yaacob	Evaluation Of Novel (Ap/Kmno4) As Dual Oxidizer On Reduction Of Hcl Gases And Combustion Properties Enhancement For Composite Solid Rocket Propellant.	On-going Co-Supervisor
14.	Tai Jan Lean	Evaluating Phased Array Corrosion Mapping Data Accuracy To Simulate High-Temperature On-Stream Inspection At The Process Plant	On-going Co-Supervisor
15.	Navaneetha Krishna A/L Chandran	Autonomous Control System Of Multi Purpose Drone Made Up Of Kenaf Fibre	On-going Co-Supervisor



MS with thesis (Main Supervisor)

No	Name	Title	Status
1.	Ahmad Fariduddin Bin Ahmad Faris	Cfd simulation on Aerodynamics Effects of Different Propeller Blade Design for a Multi-rotor Uav	Completed Supervisor
2.	Nur Nabillah Binti Mohd Kamal	Validation Of Schrenk's Approximation Method Versus Computational Fluid Dynamics Of Aerodynamic Loading On A 3d Wing	Completed Supervisor
3.	Thinesh a/l Chandrasegaran	Nonlinear Reduced Order Modelling of High Aspect Ratio and Flexible Wing Structure	Completed Co-Supervisor
4.	Ali Ahmad bin Mazlan	A Low Velocity Impact Properties of Hybrid Pineapple Leaf and Kenaf Fibre Reinforced Vinyl Ester Composites for Aerospace Application	Completed Co-Supervisor
5.	Seri Nur Iman Hidayah Zainal Abidin	Coconut Shell Powder Reinforced Polypropylene Application of Marine	Completed Co-Supervisor
6.	Seri Nur Zumaimi Zinal Abidin	Development of Kenaf/Glass Fibre Hybrid Composites for Bus Bumper Products	Completed Co-Supervisor
7.	Muhammad Nor Ikmal Mohd Nazri	Design And Development Of A Tesla Micro-turbine for Battery Charging Systems In Drone Applications	On-going Supervisor
8.	XIU QIAO	Computational Fluid Dynamics in Intracranial Atherosclerosis	On-going Supervisor
9.	Ahmad 'Irfan Nazarudin	Aloe Vera Gel Infused Saba Banana Starch-based Polylactic Acid to Enhance the Biodegradability and Biocompatibility of Medical Grade Plastic	On-going Supervisor
10.	Yavinaash Naidu A/L Saravanakumar	Development Of A Regenerative Propulsion System For Enhanced Efficiency And Sustainability In Uav Operations	On-going Supervisor
11.	Previndran A/L Guinda Rajoo	Design And Development Of Biodegradable Drone Frame Kit Made Up Of Natural Fiber Reinforced With Polymer Composites.	On-going Supervisor
12.	Hazare Graheeth	Neural Network-Based Optimization Of Flight Path For Solar-Powered Uavs	On-going Supervisor

MS without Thesis (Main Supervisor)

No.	Name	Title	Status
1.	Zubair Faramir Bin Zainul Fadziruddin	Dislodgement & Securement of Peripheral Intravenous Catheter/Cannula	Graduated 2019
2.	Moaddi bin Sapuan	Portable Exhaust Fans	Graduated 2022
3.	Li Jing	Fluid Structure Interaction of Aerodynamics Effect	On-going 2023
4.	Hilmy bin Ahmad@Mohamad	Design of Silicon tube protector	On-going 2023



Attended Seminars/Workshops/Forums both National And International

Professional Speaker

- | | | |
|---|----------------------|------------------------|
| 1. International Workshop on Engineering and Health Science 2017, Faculty of Engineering UPM 31 st January 2017 | International | Invited Speaker |
| 2. International UPM-KYUTECH Seminar 2017, Faculty of Biotechnology and Bimolecular Sciences, UPM, 8 th March 2017 | International | Invited Speaker |
| 3. CFD Workshop 2017, Faculty of Engineering, UPM, 18 th August 2017 | University | Instructor |
| 4. Newton Advanced Fellowship Workshop, University of Malaya, 14 th -16 th May 2019 | National | Invited Speaker |
| 5. Global Summit and Expo on Nanotechnology and Nanomaterials, 4 th -6 th November 2021 | International | Invited Speaker |
| 6. 12th Edition of Global Conference on Catalysis, Chemical Engineering and Technology, 5-7 September 2022. | International | Invited Speaker |
| 7. 2 nd Edition of Polymer Science and Composite Materials Virtual, 11-12 November 2022 | International | Keynote Speaker |
| 8. Mechanical and Aerospace Engineering Virtual, 9 June 2023 | International | Keynote Speaker |

Journal Editor

- | | | |
|--|----------------------|--------------|
| 1. Fluid Dynamics and Materials Processing (FDMS), Tech Science Press, USA (ISSN:155-2578) | International | Guest Editor |
|--|----------------------|--------------|

Journal Reviewer

	International Journal of Cardiology, ELSEVIER	JCR Q1
	Computer Methods in Biomechanics and Biomedical Engineering	JCR Q2
	Computer Methods and Programs in Biomedicine	JCR Q2
	Journal of Advanced Mechanical Engineering Applications (JAMEA)	SCOPUS
	The Pertanika Journal of Scholarly Research Reviews	SCOPUS
	In Fluid Dynamics and Materials Processing (FDMS)	SCOPUS
	Journal of Advanced Research in Fluid Mechanics and Thermal Sciences	SCOPUS
	Malaysia Journal of Medicine & Health Sciences (MJMHS)	SCOPUS
	Journal of Mechanical Engineering and Sciences (JMES)	SCOPUS
	International Journal of Integrated Engineering (IJIE)	SCOPUS
	Journal of Mechanics in Medicine and Biology	JCR Q4

Intellectual Property

Patent Granted

1. 2017, Jan 10. US Patent Granted no. US9539399 B2. Safety Syringe. A.R Abu Talib, **A.A Basri**, S.Z Mohd Zabidi, M.S Yahaya, K. Mat Isa.

Patent Filed

1. A.R Abu Talib, **A.A Basri**, S.Z Mohd Zabidi, M.S Yahaya, K. Mat Isa (2011), Multi-Purpose Safety Syringe, Patent Pending, MyIPO PI2011700110, Patent Cooperation Treaty (PCT) PCT/MY2012/000202, Indonesia Patent POO201400215, Australia Patent 201228100794, South Africa 2014100794, India Patent 149/DELNP/2014, 2014-520154 Japan Patent and UAE Patent 106/2014, 14/130,988 US Patent filling no.,2012281233.0 Australia Patent filling no.
2. M.T.Hameed Sultan, A. H. Ariffin, **A. A. Basri**, M. E. Azni, M. I. Najeeb,(2019) Rotating Blade for Natural Fiber Extraction Machine, Accepted (PI 2019005430)
3. **A. A. Basri**, M. T. H. Sultan, F. Mustapha, K. A. Ahmad, A. F. A. Aziz, Z, F, Z, Fadziruddin (2020), A Venipuncture Site Shielding Device, Accepted (PI 2020006748)

4. **A. A. Basri**, E.I. Basri, A. H. K. Y. Khan, M. Z. Bidin, M. T. H. Sultan, K. A. Ahmad (2023), Intravenous Catheter Protector, Accepted (PI 202302734)
5. M.T.Hameed Sultan, **A, A, Basri**, M.I. Previndran (2023) Drone Nautral Fibre Frame Kit, Accepted (UI2023002907)

Trademark Filed

1. M.T.Hameed Sultan, A.R. Abu Talib, K. A. Ahmad, **A. A. Basri** (2019) Aerospace Malaysia Research Center (AMRC), Accepted (In-press)
2. M.T.Hameed Sultan, N. K. Noordin, A.R. Abu Talib, R.S. M. Rashid, S. Yaakob, N. I. A. Wahab, W. A. W. A. K. Ghani, **A. A. Basri** (2019) Professional Engineer Application Clinic (PEngClinic), Accepted (TM2019036665 Kelas 10)
3. M.T.Hameed SultanM. Jawaid, A. M. Arifin, A. U. M. Shah, **A. A. Basri** (2019), Professor on Duty @ Bijak Matematik (ProfesOD), Accepted (TM2019042684 Kelas 41)

Industrial Design Filed

1. M.T.Hameed Sultan, W. R. Alvisse, **A. A. Basri** (2019) Putra UAV, Accepted (19-01281-0101)
2. **A. A. Basri**, E.I. Basri, A. H. K. Y. Khan, M. Z. Bidin, M. T. H. Sultan, K. A. Ahmad (2022), Intravenous Catheter Protector Infant, Accepted (AR2022W06014)

Copyright

1. **A, A, Basri**, M.I. Mokhtar, M.T.Hameed Sultan (2022) Defect Detection System for Drone Inspection, Accepted (CRLY2022W04741)
2. M.T.Hameed Sultan , **A, A, Basri**, Navneetha, (2022) Anti-collision Detection System for Drone Inspection, Accepted

