CURRICULUM VITAE

Ir. Ts. Dr. Abd. Rahim Bin Abu Talib, P.Eng, P.Tech

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Citations: 595 (Scopus), 966 (Google Scholar)

Education

1. **2003** - Doctor of Philosophy in Engineering Science, University of Oxford, U.K
2. **1998** - B.Eng (hons.) in Aeronautical Engineering, University of Salford, U.K
3. **1994** - A-Levels and IELTS, PPP/ITM, Shah Alam, Selangor D.E. Malaysia
4. **1992** - Sijil Pelajaran Malaysia (SPM), Kolej Islam Sultan Alam Shah, Klang, Selangor D.E. Malaysia
5. **1990** - Sijil Rendah Pelajaran (SRP), Sek. Men. Keb. Agama Maahad, Muar, Johor D.T. Malaysia

Areas of Interest

Experimental Heat Transfer and Fluid Flow, Sustainable Aviation, and Fire Precautions Technology.

Professional Qualification/ Membership/ Affiliation

1.	Professional Technologist, Malaysia Board of Technologist (MBoT) PT17100016	2017 to date
2.	Graduate Technologist, Malaysia Board of Technologist (MBoT) GT17100007	2017
3.	Member, Aerospace Society of Malaysia (AEROS) - 00019	2017 to date
4.	Member, Sustainable Aviation Research Society (SARES)	2016 to date
5.	Professional Engineer with Practicing Certificate, Board of Engineers (BEM) C1-16516	2016 to date
6.	Fellow, Malaysian Society of Engineering and Technology (FMSET) - 00095	2016 to date
7.	Professional Engineer, Board of Engineers Malaysia (BEM) - 16516	2014 – 2016
8.	Ordinary Member, Malaysian Society of Engineering and Technology (MySET) - 00095	2008 – 2016
9.	Graduate Member, Board of Engineers Malaysia (BEM) 43450-A	2003 – 2014
10.	Member, American Society of Mechanical Engineers (ASME)	2000 – 2018
11.	Student Member, Royal Aeronautical Society (RAeS)	1996 – 1998

Appointments

Position	Duration

1. **Head** — 1.10.2017 to date
   Department of Aerospace Engineering, Faculty of Engineering, Universiti Putra Malaysia

2. **Deputy Director** — 2016 - 2017
   Corporate Strategy and Communications, Office of the Vice Chancellor, Universiti Putra Malaysia
   Roles:
   Responsible for the Corporate Communications for UPM.
   Major Achievements: Successfully delivered the corporate publication for UPM including Tribun Putra, Corporate Profile, Diary and Calendar. The media coverage for UPM in 2017 has reached 7000 in news, articles and clips. There are three major PUTRA Bakti activities organised at the UPM level. The event organisation performance has achieved above 80% management effectiveness index for six major events in 2017.

3. **Head of Aerospace** — 2014 – 2015
   Industry Intelligence Division, Malaysia Industry-Government for High Technology (320059-P)
   Roles:
   Responsible for the aerospace and rail industry sector development.
   Major Achievements: Co-authored and successfully published the 2nd Aerospace Industry Blueprint 2030 and launched of the blueprint during LIMA 2015 in Langkawi by the Prime Minister. Also involved in the aerospace industry inter agency committee for the new EPP8 for Aerospace Manufacturing SME development and the ongoing EPP 5 and 7 under Business Services NKEA. Actively involved as subject matter expert and managed the technology transfer programme for human capital training modules for Rail rolling stock with China Southern Rail company and KTMB. Also responsible as subject matter expert for the Rail signaling and communications training modules technology transfer with THALES company in France, Portugal and Spain under the offset programme organised by Technology Depository Agency.

4. **Senior General Manager** — 2012 – 2014
   MIGHT-METEOR Advanced Manufacturing Sdn. Bhd. (570935-P)
   Roles: In charge of the operation of the company that includes governance, finance and procedures.
   Major Achievements: Successfully delivered the Human Capital Development training programme called National Talent Enhancement Programme (NTEP) for Rail Sector funded by PEMANDU. Also involved in the technology transfer under ICPD programme to FELDA and LEADER Aerospace Programme funded by the Ministry of Higher Education (MoHE).

5. **Chief Operating Officer** — 2011 - 2012
   Aerospace Malaysia Innovation Centre (944751-A)
   Roles: Responsible to look after the technical aspect of project management and programme development.
   Major Achievements: Successfully established the governance for the newly formed company linked by guaranteed in terms of staff manuals, finance, and research & technology guidelines. Managed to conduct a series of board of directors meeting that consist of representatives from Rolls Royce, Airbus, CTRM, MIGHT and UPM. AMIC also successfully being launched during LIMA 2011 by the Prime Minister.

6. **Associate Professor**, — 1.2.2010 to date
   Department of Aerospace Engineering, Faculty of Engineering, Universiti Putra Malaysia
7. **Deputy Dean** — 2009 - 2011
   Academic, Student Affairs, Alumni, and Industry-Society Network, Faculty of Engineering, Universiti Putra Malaysia
8. **Senior Lecturer** — 2008 – 2010
   Department of Aerospace Engineering, Faculty of Engineering, Universiti Putra Malaysia

9. **Head** 2007 – 2009
   Department of Aerospace Engineering, Faculty of Engineering, Universiti Putra Malaysia
10. **Lecturer** 2003 – 2007
    Department of Aerospace Engineering, Faculty of Engineering, Universiti Putra Malaysia
11. **Laboratory Demonstrator**, 2001 – 2002
    Osney Laboratory, Department of Engineering Science, University of Oxford, UK
12. **Tutor**, 1998 – 2003
    Department of Aerospace Engineering, Faculty of Engineering, Universiti Putra Malaysia

Teachings

Undergraduate Programme

1.	EAS4947 Aerospace Design Project	4(0+4) credits
2.	EAS3123 Management of Aerospace Industry	3(3+0) credits
3.	EAS4501 Air Breathing Engine	3(3+0) credits
4.	EAS3923 Aerospace Laboratory III (Propulsion)	1(0+1) credits
5.	EAS3103 Management of Aerospace Industry and Agriculture	2(2+0) credits
6.	EAS3921 Aerospace Laboratory I (Thermofluids)	1(0+1) credits
7.	EAS3211 Thermofluids	3(3+0) credits
8.	EAS3511 Aerothermodynamics	3(3+0) credits
9.	EAS3503 Propulsion	3(3+0) credits
10.	KAA3512 Heat Transfer	2(2+0) credits
11.	KAA3511 Thermodynamics	3(3+0) credits
12.	KAA3513 Propulsion	3(3+0) credits
13.	KAA3403 Propulsion II	3(3+0) credits
14.	KAA3202 Aerodynamics II	3(3+0) credits
15.	KAA3802 Power Generation System	3(3+0) credits

Postgraduate Programme

1.	EAS5100 Research Methodology	3(3+0) credits
2.	EAS5107 Entrepreneurship in Innovation	3(3+0) credits
3.	EAS5105 Innovation Studies	3(3+0) credits
4.	EAS5103 Group Business and Design Project	3(3+0) credits
5.	EAB5900 Research Methodology	3(3+0) credits
6.	EAS5101 Innovation Studies 1	3(3+0) credits
7.	KAA4203 Innovation Studies 1	3(3+0) credits

Publications

Journals

Year 2020

1. S. Salman, **A.R Abu Talib**, S. Saadon, M.T.H. Sultan (**2020**), Hybrid Nanofluid Flow and Heat Transfer Over Backward and Forward Steps: A Review, Powder Technology, 363: 448-472 (**JCR Q1**, **I.F = 3.413**)
2. Y.S.M Alterazi, **A.R Abu Talib**, S. Saadon, J. Yu, E. Gires, M.F Abdul Ghafir, and J. Lucas, On-Design Operation and Performance Characteristics of Custom Engine, Journal of Advanced Research in Fluid Mechanics and Thermal Sciences, *Accepted* (**Scopus Index**).
3. Ali Hilo, **A R Abu Talib**, A.A Iborra, M.T.H. Sultan, and M.F Abdul Hamid (**2020**), Effect of Corrugated Wall Combined with Backward-Facing Step Channel on Fluid Flow and Heat Transfer, Energy, 190: 1-10 (**JCR Q1, I.F = 5.537**).
4. N. Bheekhun and **A.R Abu Talib** (**2020**), Auditing the Aerospace Industry in Southeast Asia: 9100 Series, Journal of Aeronautics, Astronautics and Aviation, 52(1): 115-122 (**Scopus Index**).
5. L.C Leong, **A.R Abu Talib**, and V. Indiran (**2020**), Professional Pathway for Civil Aviation Authority of Malaysia (CAAM) Aircraft Maintenance License Holder Registered at BEM, Journal of Aeronautics, Astronautics and Aviation, 52(1): 105-114 (**Scopus Index**).
6. I. Muhammad and **A.R Abu Talib** (**2020**), Strength Behaviour of Silica Aerogel/Thermoset Polymer with Reinforced Fibre-metal Laminate Composites, Journal of Aeronautics, Astronautics and Aviation, 52(1): 24 (**Scopus Index**).

Year 2019

7. I. Muhammad and **A.R Abu Talib**, Burn-through Responses of Aero-engine Nacelle using Fibre Metal Composite by ISO2685 Burner, International Journal of Recent Technology and Engineering, 8(4): 9235-9238 (**Scopus Index**).

8. S. Salman, **A.R Abu Talib**, A. Hilo, S.R Nfawa, M.T.H Sultan and S. Saadon, (**2019**) Numerical Study on the Turbulent Mixed Convective Heat Transfer over 2D Microscale Backward-Facing Step, CFD Letters, 11(10): 31-45 (**Scopus Index**)
9. S.R Nfawa, **A.R Abu Talib**, A.A Basri, S.U Masuri, and H. Hasini (**2019**), Heat Transfer Enhancement in A Corrugated-Trapezoidal Channel Using Winglet Vortex Generators, CFD Letters, 11(10): 69-80 (**Scopus Index**)
10. M F Mohd Zulkeple, **A R Abu Talib**, E Gires, M T Hameed Sultan (**2019**), Microencapsulation and Thickness Effect on the Occurrence of Hysteresis of Thermochromic Liquid Crystal Calibration, Journal of Aeronautics, Astronautics and Aviation, 51(2): 171-181 (**Scopus Index**).
11. A.M.R Azmi, M.T.H Sultan, M. Jawaid, A.U.M Shah, A.F.M Nor, M.S.A Majid, and **A.R Abu Talib** (**2019**), Impact Properties of Kenaf/X-Ray Films Hybrid Composites for Structural Applications, Journal of Materials Research and Technology, 8(2): 1982-1990 (**JCR Q1, I.F = 3.327**).
12. **A.R Abu Talib**, W. Rujhan, I Mohammed, N.I Bheekhun (**2019**) Effect of Different Weightage of Enova© IC3100 Silica Aerogel on Aluminium Alloy Composites in ISO2685 Aviation Standard Fire-Test, International Journal of Sustainable Aviation, 5(1): 44-53.
13. S.Q Bootan, E.E Supeni, M.K.A Ariffin and **A.R Abu Talib** (**2019**), RSM Approach for Modelling of Designing Parameters for Inclined Fins of Solar Air Heater, Renewable Energy, 136: 48-68 (**JCR Q1, I.F = 5.439**).
14. S.Q Bootan, E.E Supeni, M.K.A Ariffin and **A.R Abu Talib** (**2019**), Numerical investigation of flow through inclined fins under absorber plate of solar air heater, Renewable Energy, 141: 468-481 (**JCR Q1, I.F = 5.439**).
15. **A R Abu Talib**, I Mohammed, N Mohamad Damshal, and M J Suleiman@Ahmad (2019), Physical and Mechanical Properties of Fireproof Inconel 718 with Palm Stearin and Stearic Acid Binder, Journal of Advanced Research in Fluid Mechanics and Thermal Sciences, 54(1): 112-123 (**Scopus Index**).
16. M F Mohd Zulkeple, **A R Abu Talib**, E Gires, M T Hameed Sultan (**2019**), Investigation on the Effect of Sample Preparation on the Performance of Thermochromic Liquid Crystal, Journal of Advanced Research in Fluid Mechanics and Thermal Sciences, 54(2): 150-164 (**Scopus Index**).
17. Ali Hilo, **A R Abu Talib**, Sadeq R. Nfawa, M.T.H.Sultan, M.F Abdul Hamid and M.I Nadiir Bheekhun (**2019**), Heat Transfer and Thermal Conductivity Enhancement using Graphene Nanofluid: A Review, Journal of Advanced Research in Fluid Mechanics and Thermal Sciences, 55(1): 74-87 (**Scopus Index**).

Year 2018

18. Ariff F.M Noor, Mohamed T.H Sultan, Mohammad Jawaid, **Abd. R. Abu Talib**, Ahmad M.R Azmi, Ahmad S. Harmaen and Ainun Z.M Asa'ari (**2018**), The Effects of Multi-Walled CNT in Bamboo/Glass Fibre Hybrid Composites: Tensile and Flexural Properties, BioResources, 13(2): 4404-4415 (**JCR Q2, I.F = 1.202**).
19. Ahmad M.R Azmi, Mohamed T.H Sultan, Mohammad Jawaid, **Abd. R.A Talib**, Ariff F.M Noor (**2018**), Tensile and Flextural Properties of a Newly Developed Bulletproof Vest using a Kenaf/X-ray Film Hybrid Composite, BioResources, 13(2): 4416-4427 (**JCR Q2, I.F = 1.396**).
20. I Mohammed, **A.R Abu Talib**, M T H Sultan and S Saadon (**2018**), Mechanical Properties of Fibre-Metal Laminates Made of Natural/Synthetic Fibre Composites, BioResources, 13(1): 2022-2034 (**JCR Q2, I.F = 1.396**).
21. N. Bheekhun, **A.R Abu Talib**, M.R Hassan (**2018**), Tailoring Aerogel for Thermal Spray Applications in Aero-Engine: A Screening Study, Advances in Materials Science and Engineering, Vol. 2018, Article ID 5670291, 1-11, (**JCR Q3, I.F = 1.399**).
22. **A.R Abu Talib**, and N. Bheekun (**2018**), Feasibility Study of a Novel Aerogel-Based Thermally Sprayed Coating, Journal of Engineering Science and Technology, 12: 1-9 (**Scopus Index**).
23. N.A Mohd Nasir, S. Saadon and **A.R Abu Talib** (**2018**), Performance analysis of an Organic Rankine Cycle (ORC) system for waste heat recovery of turbofan engine, International Journal of Engineering & Technology, 7(4): 120-124 (**Scopus Index**)
24. M.F Abdul Hamid, A.S Mohd Rafie, E. Gires and **A.R Abu Talib** (**2018**), Lift Force for Cylindrical and Elliptical Coandă Aircraft Design, International Journal of Engineering & Technology, 7(4): 137-140 (**Scopus Index**)
25. A. Hilo, **A.R Abu Talib**, S.R. Nfawa, M.T Hameed Sultan and M.F Abdul Hamid (**2018**), Review of Improvements on Heat Transfer using Nanofluids via Corrugated Facing Step, International Journal of Engineering & Technology, 7(4): 160-169 (**Scopus Index**)
26. M F Mohd Zulkeple, **A.R Abu Talib**, E Gires, M T Hameed Sultan and M S Ramli (**2018**), Heat Transfer Performance of Multiple Holes Impingement Cooling Technique, International Journal of Engineering & Technology, 7(4): 43-5 (**Scopus Index**)
27. I Mohammed, **A.R Abu Talib**, Mohamed T.H Sultan and S Saadon (**2018**), Fire behavioural and mechanical properties of carbon fibre reinforced aluminium laminate composites for aero-engine, International Journal of Engineering & Technology, 7(4): 22-27 (**Scopus Index**)
28. N. Bheekhun, **A.R Abu Talib** and F. Cardenas (**2018**), Towards a Sustainable Aerogel Airship: A Primer, International Journal of Engineering & Technology, 7(4): 141-145 (**Scopus Index**)
29. M.N Ishak, **A.R Abu Talib** and M.Y Harmin (2018), Material Selection and Design Analysis of Multi-Purpose Disposable Safety Syringe, International Journal of Engineering & Technology, 7(4): 214-220 (**Scopus Index**)
30. A.S.H Al-Ammari, Y.S.M Altarazi, **A.R Abu Talib** and N. Bheekhun (**2018**), CFD Simulation of Local Exhaust Ventilation for Aviation Fire-Test Lab, International Journal of Engineering & Technology, 7(4): 188-194 (**Scopus Index**)
31. I Mohammed and **A.R Abu Talib** (**2018**), Mechanical properties of carbon fibre reinforced aluminium laminates using two different layering pattern for aero engine application, Advances in Materials and Processing Technologies, Taylors & Francis,

5(1): 123-131, DOI: 10.1080/2374068X.2018.1530427

32. **A.R Abu Talib**, I Mohammed, K.A Mohammed and N. Bheekhun (2018), Aerogel Application on Fire Certification Techniques and Heat Transfer, International Journal of Pure and Applied Mathematics, 119(16): 1783-1790.
33. I Mohammed, **A.R Abu Talib**, Mohamed T.H Sultan and S Saadon (**2018**), Thermal Properties of Fibre Metal Laminates Composites, International Journal of Pure and Applied Mathematics, 119(15): 3761-3769.

Year 2017

34. K.A Mohammed, **A.R Abu Talib**, N. Abdul Aziz, K.A Ahmed (**2017**) Review of forced convection nanofluids through corrugated facing step, Renewable & Sustainable Energy Reviews, Vol.75: 234-241 (**JCR Q1, I.F = 9.184**).
35. R.I Ahmed, **A.R Abu Talib**, A.S Mohd Rafie, H. Djojodihardjo (**2017**), Aerodynamics and Flight Mechanics of MAV Based on Coandă Effect, Aerospace Science and Technology, 62: 136-147, doi: 10.1016/j.ast.2016.11.023 **(JCR Q1, I.F = 2.228**).
36. Ain U. Md Shah, Mohamed T. H. Sultan, Francisco Cardona, Mohammad Jawaid, **A.R Abu Talib,** and N. Yidris (**2017**), Thermal Analysis of Bamboo Fibre and Its Composites, BioResources, 12(2): 2394-2406 (**JCR Q2, I.F = 1.202**).
37. Ain U. Md Shah, Mohamed T.H. Sultan, Mohamad Jawaid, Francisco Cardona, and **A.R Abu Talib** (**2016**), A Review on the Tensile Properties of Bamboo Fiber Reinforced Polymer Composites, BioResources, 11(4): 0654-10676 (**JCR Q2, I.F = 1.202**).
38. H. Djojodihardjo, R.I Ahmed, **A.R Abu Talib**, A.S Mohd Rafie (**2017**), First Principle Analysis of Coandă Micro Air Vehicle Aerodynamic Forces for Preliminary Sizing, Aircraft Engineering and Aerospace Technology, 89(2): 231-245 (**JCR Q3, I.F = 0.753**), DOI: 10.1108/AEAT-03-2015-0080.
39. R.I Ahmed, H. Djojodihardjo, **A.R Abu Talib**, A.S Mohd Rafie (**2017**), Review on Progress and Application of Active Flow Control Devices Coandă Effect on Unmanned Aerial Vehicles, Pertanika Journal of Scholarly Research Reviews, 3(1): 113-137.
40. M.N Ishak, **A.R Abu Talib**, M. Y Harmin and R. Zahari (**2017**), Design Improvement of Multi-Purpose Disposable Safety Syringe, FEIIC International Journal of Engineering and Technology, 14(1): 25-34.
41. **A.R Abu Talib**, M.J Sulaiman @ Ahmad, R. Ibrahim, M.Y Harmin (**2017**) Hardness and Density Properties Measurements of Sintered Inconel 718 using Palm Oil Based Binder, International Journal for Sustainable Aviation, IJSA-153827, 3(1): 18-28.

Year 2016

42. H. Alrazen, **A.R Abu Talib**, K.A Ahmad (**2016**), A Two-component CFD Studies of the Effects of H_2, CNG, and Diesel Blend on Combustion Characteristics and Emissions of a Diesel Engine, International Journal of Hydrogen Energy, 41(24): 10483 - 10495 (**JCR Q1, I.F = 3.582**).
43. H. Alrazen, **A.R Abu Talib**, R. Adnan, and K.A Ahmad (**2016**), A Review of the Effect of Hydrogen Addition on the Performance and Emissions of the Compression – Ignition Engine, Renewable and Sustainable Energy Reviews, 54, 785 – 796. (**JCR Q1, I.F = 8.050**).

Year 2015

44. F. Cardona, M.T Sultan, **A.R Abu Talib**, F. Ezzah, A. Derahman (**2015**), Interpenetrating Polymer Network (IPN) with Epoxidized and Acrylated Bioresins and their Composites with Glass and Jute Fibres, BioResources, 11(1): 2820-2838 (**JCR Q1, I.F = 1.334**).

Year 2014

45. N. Bheekhun, **A.R Abu Talib**, M.R Hassan **(2014)**, Thermal spray coatings for polymer matrix composites in gas turbine engines: A literary preview, International Review of Aerospace Engineering, 7(3): 84-87 (**Scopus Index**).
46. **A.R Abu Talib**, E. Gires, M.T Ahmad (**2014**), Performance Evaluation of a Small-Scale Turbojet Engine Running on Palm Oil BioDiesel Blends, Journal of Fuels, Article ID 946485, doi: 10.1155/2014/946485.

Year 2013

47. A.A Ramadhan, **A.R. Abu Talib**, A.S Mohd Rafie, R. Zahari **(2013)**, High Velocity Impact Response of Kevlar-29/Epoxy and 6061-T6 Aluminum Laminated Panels, Materials and Design, 43(1): 307-321 (**JCR Q1, I.F = 3.171**)
48. **A.R. Abu Talib**, A.A Ramadhan, A.S Mohd Rafie, R. Zahari **(2013)**, Influence of Cut-Out Hole on Multi-Layer Kevlar-29/Epoxy Composite Laminated Plates, Materials and Design, 43(1): 89-98 (**JCR Q1, I.F = 3.171**)
49. N. Bheekhun, **A.R Abu Talib**, M.R Hassan **(2013)**, Aerogel in Aerospace: An Overview, Advances in Material Science and Engineering, Volume 2013, Article ID 406065, doi: 10.1155/2013/406065

Year 2012

50. **A.R. Abu Talib**, L.H. Abbud, A. Ali, F. Mustapha **(2012)**, Ballistic Impact Performance of Kevlar-29 and Al_2O_3 Powder/Epoxy Targets under High Velocity Impact, Materials and Design, 35(1): 12-19, (**JCR Q1, I.F = 2.913**)
51. Ali. A., Abbud, L.H., **Abu Talib, A.R.**, Mustapha, F., (**2012**), Impact resistance of armor composite made of Kevlar-29 and Al_2O_3 powder, Materialpruefung/Materials Testing, 54(3): 169-174 (**JCR Q3, I.F = 0.184**)
52. R. Ibrahim, M. Azmirruddin, M. Jabir, N. Johari, M. Muhamad, and **A.R. Abu Talib (2012)**, Injection Molding of Inconel718 Parts for Aerospace Application using Novel Binder System Based on Palm Oil Derivatives, International Journal of Aerospace and Mechanical Engineering, World Academy of Science, Engineering and Technology, 6(10): 2112-2116.

53. A.A Ramadhan, **A.R. Abu Talib**, A.S Mohd Rafie, R. Zahari, High Velocity Impact Damage in Kevlar29/Epoxy-AL_2O_3, **(2012)** Journal of Advanced Science and Engineering Research, 2(2): 138-154.
54. A.A Ramadhan, **A.R. Abu Talib**, A.S Mohd Rafie, R. Zahari, Experimental and Numerical Simulation of Energy Absorption on Composite Kevlar29/Polyester Under High Velocity Impact, **(2012)**, Journal of Advanced Science and Engineering Research, 2: 56-67.

Year 2011

55. L.H. Abbud, **A.R. Abu Talib**, A. Ali, F. Mustapha (**2011**), Mechanical properties of interlaminer Kevlar-29 and Al_2O_3 powder/epoxy composite plates using an analytical approach, Scientific Research and Essays, 6(21): 4455-4463, (***Scopus Index***).
56. A.R Hussein, N.A Abdul Jalil, **A.R Abu Talib**, (**2011**) Improvement of Mechanical Welding Properties by using Induced Harmonic Vibration, Journal of Applied Sciences, 11(2): 348-353 (***Scopus Index***).
57. L.H. Abbud, **A.R. Abu Talib**, F. Mustapha, A. Ali (**2011**), Ballistic Limit Behavior of Polymers Transparent Materials Under High Velocity Impact, International Journal of Engineering and Technology, 8(1): 55-60.

Year 2010

58. N. Abdullah, **A.R Abu Talib**, A.A Jaafar and M.A Mohd Salleh **(2010)** The Basics and Issues of Thermochromic Liquid Crystal Calibrations, Experimental Thermal and Fluid Science, 34(8): 1089-1121, (**JCR Q3, I.F = 1.267**).
59. **A.R Abu Talib**, A. Ali, G. Goudah, N.A Che Lah and A.F. Golestaneh **(2010)** Developing a composite based elliptic springs for automotive applications, Materials and Design, 31(1): 475-484 (**JCR Q2, I.F = 1.696**).
60. **A.R Abu Talib**, A. Ali, M.A. Badie. N.A Che Lah and A.F. Golestaneh **(2010)** Developing a hybrid, carbon/glass fiber-reinforced, epoxy composite automotive drive shaft. Materials and Design, 31(1): 514-521 (**JCR Q2, I.F = 1.696**).
61. L.H. Abbud, **A.R. Abu Talib**, F. Mustapha, H. Tawfique and F.A. Najim **(2010)** Behaviour of Transparent Material under High Velocity Impact, International Journal of Mechanical and Materials Engineering, 5(1): 123-128 (***Scopus Index***).

Year 2009

62. N. Abdullah, **A.R Abu Talib**, H.R Mohd. Saiah, A.A Jaafar and M.A Mohd Salleh (**2009**), Film thickness effects on calibrations of a narrowband thermochromic liquid crystal, Experimental Thermal and Fluid Science, 33(4): 561-578 (**JCR Q3, I.F = 1.234**).
63. Abdullah, Nadia, **A.R Abu Talib,** Mohd Saiah, Helmey Ramdhaney, Jaafar, Abdul Aziz, and Mohd Salleh, Mohamad Amran (**2009**) Comparison of Adhesives for Thermocouple Temperature Measurements, Journal of the Institution of Engineers Malaysia, 70(1): 21-35.

Year 2007

64. **A.R Abu Talib**, A.A Jafaar, A.S Mokhtar and N.A Abdul Jalil (**2007**) "Flow Measurements Downstream of an Axial Flow Fan Inside an Outdoor Air Conditioning Unit", International Journal of Engineering and Technology, 4(1): 44-56.
65. A.S Mokhtar, H.S Sultan, M.K Abdullah, E. Mahdi, **A.R Abu Talib** and A.M.S Hamouda (**2007**) Numerical Investigations into the Crushing Behaviour of Conical Shell System, International Journal of Engineering and Technology, 4(1): 77-85.

Year 2006

66. M.K Abdullah, N.R Mohd Suradi, N. Jamaluddin, A. S Mokhtar, **A.R Abu Talib** and M.F Zainuddin (**2006**) K-CHART: A Tool for Research Planning and Monitoring, Journal of Quality Measurement and Analysis, 2(1): 123-139.
67. M. A. Badie, A. Mahdi, **A. R. Abu Talib**, E. J. Abdullah and R. Yunus (**2006**) Automotive Composite Driveshafts: Investigation of the Design Variables Effects, International Journal of Engineering and Technology, 3(2): 227-237.
68. G. Goudah, E. Mahdi, **A.R. Abu Talib**, A.S. Mokhtar and R. Yunus (**2006**) Automobile Compression Composite Elliptic Spring, International Journal of Engineering and Technology, 3(2): 139-147.
69. **A.R Abu Talib**, A.A Jaafar, A.S Mokhtar, Mohd Saiah H.R, I. Abd. Rahim and M.S Abdul Karim (**2006**) Effects of Blowing Ratio on the Heat Transfer Coefficient Distribution Downstream of a Single Film Cooling Hole, International Journal of Engineering and Technology, 3(1): 37-46.

Year 2005

70. **A.R Abu Talib**, A.J Neely, P.T Ireland and A.J Mullender (**2005**) Detailed Investigation of Heat Flux Measurements Made in a Standard Propane-Air Fire-Certification Burner Compared to Levels Derived From a Low-Temperature Analogue Burner, Journal of Engineering for Power and Gas Turbine, 127(2): 249-256. (**JCR Q4, I.F = 0.282**)
71. **A.R Abu Talib**, P.T Ireland, A.J. Neely, A.J Mullender and A.S Mokhtar (**2005**) Low-Temperature Analogue Burner Face Plate Time Response, International Journal of Engineering and Technology, 2(2): 43-50.
72. **A.R Abu Talib**, P.T Ireland, A.J. Neely, A.J Mullender and A.A Jaafar (**2005**) Computational Study on Conduction Heat Transfer Through a Thin Film Gauge, International Journal of Engineering and Technology, 2(1): 1-7.

Year 2004

73. **A.R Abu Talib,** A.J Neely, P.T Ireland and A.J Mullender (**2004**) A Novel Liquid Crystal Image Processing Technique Using

Multiple Gas Temperature Steps to Determine Heat Transfer Coefficient Distribution and Adiabatic Wall Temperature, Journal of Turbomachinery, 126(4): 587-596. (**JCR Q4, I.F = 0.435**)

Conference Papers

Year 2019

1. Y.S.M Alterazi, **A.R Abu Talib**, S. Saadon, J. Yu, E. Gires, M.F Abdul Ghafir, and J. Lucas (**2019**), On-Design Operation and Performance Characteristics of Custom Engine, Presented at the 4th International Symposium on Fluid Mechanics and Thermal Sciences, Putrajaya, Malaysia, 15 Dec.
2. N. Bheekhun and **A.R Abu Talib** (**2019**), AEROGEL: Energizing Sustainability in Aerospace, Presented at the AEROS Conference and Networking Meeting, Bangi, Selangor, 12 Dec.
3. I. Mohammed and **A.R Abu Talib** (**2019**), Burn-through Responses of Aero-engine Nacelle using Fibre Metal Composite by ISO2685 Burner, Presented at the AEROS Conference and Networking Meeting, Bangi, Selangor, 12 Dec.
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96. A.J Neely, **A.R Abu Talib**, P.T Ireland and A.J Mullender (**2000**) Development of Low-Temperature Fire-Event Modeling Technique, Proceedings, International Congress of Aeronautical Science, Harrogate, UK.

Books

1. R. Wagiran, N.K Noordin, **A.R Abu Talib**, F. Hashim, H. Salleh, M.J. Megat Mohd Noor, and M.F A. Rasid, MyQUEST 2018: Instrument Development, Fakulti Kejuruteraan UPM, ISBN: 978-983-2408-69-7, **2019**.
2. M.S Jaafar, H. Salleh, M.I Saripan, M.J Megat Mohd Noor, M.H Marhaban, N.K Noordin, S. Mohammad, S Abdul Talib, Z Mohd Fahmi, **A.R Abu Talib**, M.F A. Rasid, and F. Hashim, Malaysia Integrated Rating for University and University College Excellence SETARA 2017, Ministry of Higher Education Malaysia, ISBN: 978-967-4585-8-7, **2018**.
3. N.K Noordin, R. Wagiran, M.F A. Rasid, **A.R Abu Talib**, F. Hashim, and M.I Saripan, Malaysian Quality Evaluation System for Private Colleges: MyQUEST 2016/2017, Kementerian Pengajian Tinggi, ISBN: 978-983-2408-58-1, **2017**.
4. M.A Abdul Rahman, M.S Jaafar, **A.R Abu Talib**, F Sufar, F. Hashim, K.N Mustapha, M.I Saripan, M.J Megat Mohd Noor, M.F A. Rasid, N.A Shairi, N.K Noordin, R. Wagiran, R. Razali, S. Mohamad, S. Abdul Talib, and Y. V. Muniandy, MyQUEST USER MANUAL (Version 01:2017), Kementerian Pengajian Tinggi, ISBN: 978-983-2408-50-5, **2017**.
5. M.R Baharudin, A. Arshad, M.K Tahir, N.K Noordin and **A.R Abu Talib**, Garis Panduan Pengurusan Risiko UPM, ISBN 978-967-3446-92-6. Penerbit UPM, **2017**.
6. M.A Abdul Rahman, M.S Jaafar, **A.R Abu Talib**, F. Hashim, K.N Mustapha, M.I Saripan, M.J Megat Mohd Noor, M.F A. Rasid, N. Yaakob, N.H Mat Salleh, N.A Shairi, N.K Noordin, R. Wagiran, R. Razali, S. Mohamad, S. Abdul Talib, and Y. V. Muniandy, *Malaysian Quality Evaluation System for Private Colleges* MyQUEST 2014/2015, Kementerian Pengajian Tinggi, ISBN: 987-983-2408-34-5, **2015**.
7. K. Zainal, **A.R Abu Talib**, and I. Hack, *Malaysian Aerospace Industry Blueprint 2030*, Malaysian Industry-Government Group for High Technology (MIGHT), ISBN: 978-967-11818-6-7, **2015**. (**POLICY PAPER)**
8. **A.R Abu Talib** and N. Nordin, *New Paradigm for Sustainable Human Capital Development*, MIGHT-METEOR Advanced Manufacturing, ISBN: 978-967-12475-0-1, **2014**.
9. **A.R Abu Talib** and N. Abdullah, *Innovation Methodology*, Penerbit UPM, ISBN: 978-967-3443-50-5, **2013**.
10. S.H Tapsir, M.A Abdul Rahman, M.S Jaafar, S. Mohamad, K.N Mustapha, S. Abdul Talib, N.K Noordin, M.J Megat Mohd Noor, **A.R Abu Talib**, R. Wagiran, M.I Saripan, *Malaysian Quality Evaluation System for Private Colleges* MyQUEST 2010/2011, Kementerian Pengajian Tinggi, ISBN: 978-967-0334-05-9, **2011**.
11. **A.R Abu Talib** *et al*., *Hala Tuju Program Aeroangkasa*, Institusi Pengajian Tinggi Awam 2010-2020, Jabatan Pengajian Tinggi, Kementerian Pengajian Tinggi Malaysia, Putrajaya, ISBN 978-983-3663-43-9. Penerbit UPM, **2010**. (**POLICY PAPER)**

Proceedings

1. R. Wagiran, A.G.L Abdullah, N.K Noordin, S Abdul Rashid, M.I Saripan, **A.R Abu Talib**, T.A Mohammed and M.J Megat Mohd Noor, Proceedings, *International Engineering Convention*, Damascus, Syria, ISBN 978-983-43571-5-3. FEIIC, **2009**.
2. R. Wagiran, A.G.L Abdullah, S. Abdul Rashid, **A.R Abu Talib**, N.K Noordin and M.J Megat Mohd Noor, Proceedings, *FEIIC Seminar on Engineering and Technology*, Kuching, Malaysia. ISBN 983-41705-3-X. FEIIC, **2008**.
3. S. Abdul Rashid, A.G.L Abdullah, **A.R Abu Talib**, R. Wagiran, A. Abdul Aziz, N.K Nordin, M.R Osman and M.J Megat Mohd Noor, Proceedings, *International Engineering Convention*, Jeddah, Saudi Arabia, ISBN 978-983-41705-4-7, FEIIC, **2007**.
4. A.S Mokhtar, E.J Abdullah, N.M Adam, **A.R Abu Talib**, N.A Abdul Jalil, R. Zahari, W.M.I Hassan and Z.A Zulkefli, Proceedings, World Engineering Congress, *Mechanical and Aerospace Engineering Conference*, Penang, Malaysia, ISBN 978-983-43571-1-5, FEIIC, **2007**.
5. **A.R Abu Talib**, A.G.L Abdullah, R. Wagiran, S. Abdul Rashid, M.R Osman and M.J Megat Mohd Noor, Proceedings, *FEIIC Seminar on Engineering and Technology*, Putrajaya, Malaysia. ISBN 983-41705-3-X. FEIIC, **2006**.

Chapter in Books/ Article in Professional Magazine

1. **A.R Abu Talib** and N. Bheekhun, Aerogel-Based Thermally Sprayed Coatings for Aero-Propulsion Systems: A Feasibility Study Based on Structural Health Monitoring Approach, Edited by Mohammad Jawaid *et al*.: Structural health monitoring of Biocomposites, Fibre reinforced composites and Hybrid composites, Woodhead Publishing, ELSEVIER, p.191-225, **2019**. https://doi.org/10.1016/B978-0-08-102291-7.00010-1
2. **A.R Abu Talib** and I. Mohammed, Synthetic / Natural fibre properties of fire designated zone of an aircraft engine – A Structural Health Monitoring Approach, Edited by Mohammad Jawaid *et al*.: Structural health monitoring of Biocomposites, Fibre reinforced composites and Hybrid composites, Woodhead Publishing, ELSEVIER, p.153-190, **2019**. https://doi.org/10.1016/B978-0-08-102291-7.00009-5
3. **A.R Abu Talib**, N. Bheekhun and L.C Leong, Growing Demand on Air Transportation: Global and Local Scenario, The Ingeniuer, Board of Engineers Malaysia, Vol. 74, pp. 9-18, Apr - Jun, **2018**.
4. I. Mohammed and **A.R Abu Talib** (**2018**), Mechanical Properties of Different Layering Pattern of Carbon Fibre Reinforced Aluminium Laminates for Aero Engine Application, Edited by M.A Azmah Hanim, C.N Aiza Jaafar and K. Vidyatharran: Basic Methodology – Sample Preparation and Characterization, Universiti Putra Malaysia, pp. 58-62, **2018** (ISBN: 978-983-2408-64-2).
5. N. Bheekhun and **A.R Abu Talib** (**2018**), Physical Properties of Powdered Silica Aerogels: A Comparative Study, Edited by M.A

Azmah Hanim, C.N Aiza Jaafar and K. Vidyatharran: Basic Methodology – Sample Preparation and Characterization, Universiti Putra Malaysia, pp. 73-77, **2018** (ISBN: 978-983-2408-64-2).

6. N. Bheekhun and **A.R Abu Talib**, Gaps in Engineering Education, *Engineering and Technology*, A Publication of the Malaysian Society for Engineering and Technology, MySET, Issue 44: 16 – 19, Jan-Feb, **2018**.
7. N. Bheekhun and **A.R Abu Talib**, Aeronautics in Qur'an, *Engineering and Technology*, A Publication of the Malaysian Society for Engineering and Technology, MySET, Issue 41: 15 – 16, July-August, **2017**.
8. **A.R Abu Talib**, Paths to Commercialization: From Idea to Market, The Ingeniuer, Board of Engineers Malaysia, Vol. 68, Oct - Dec, **2016**.
9. N. Bheekhun and **A.R Abu Talib**, Aerogel: An Economic Perspective, *Engineering and Technology*, A Publication of the Malaysian Society for Engineering and Technology, MySET, Issue 34: 12 – 16, March-April, **2016**.
10. **A.R Abu Talib**, The Key to Innovation Success - Part 2, *Engineering and Technology*, A Publication of the Malaysian Society for Engineering and Technology, MySET, Issue 30, Sept-Oct, **2015**.
11. **A.R Abu Talib**, The Key to Innovation Success - Part 1, *Engineering and Technology*, A Publication of the Malaysian Society for Engineering and Technology, MySET, Issue 29, Jul-Aug, **2015**.
12. **A.R Abu Talib** and N.F Helme, Aerospace Education & Training Demand and Supply in Malaysia, Malaysia's National Foresight Magazine (*myForesight*), Malaysian Industry-Government Group for High Technology (MIGHT), 1: 12-17, **2015**.
13. **A.R Abu Talib** and A.A Mansur, National Talent Enhancement Programme, *Malaysian Rail Supporting Industry Roadmap 2030*, Malaysian Industry-Government Group for High Technology (MIGHT), p.84, **2014**.
14. **A.R Abu Talib**, Fostering Future Technologist in Maritime Industry, *Engineering and Technology*, A Publication of the Malaysian Society for Engineering and Technology, MySET, Issue 25: 6-10, September-October **2014**.
15. J. Baba, **A.R Abu Talib**, B. Salleh, Nurturing Today's Talent for Future Leaders, Malaysia's National Foresight Magazine (*myForesight*), Malaysian Industry-Government Group for High Technology (MIGHT), 1: 35-40, **2013**.
16. **A.R Abu Talib**, Towards Green and Sustainable Aeronautics, Malaysia's National Foresight Magazine (*myForesight*), Malaysian Industry-Government Group for High Technology (MIGHT), 3: 26-30, **2012**.

Keynotes/ Invited Presentation

<u>International</u>

1. **Invited Speaker**, Development of Employer Perception Survey for Malaysia Integrated Rating among University and College University, FEIIC International Convention on Engineering Education & Research (FICEER), Madinah, Saudi Arabia, 1-5 November (**2019**).
2. **Invited Speaker**, Workshop on Equivalence Study for Engineer, Myanmar Engineering Council, Yangoon, 3 August (**2019**).
3. **Keynote Speaker**, Recent Development of Electric and Hybrid Propulsion Systems: Issues & Challenges, International Symposium on Sustainable Aviation (ISSA), Budapest, Hungary, 26-29 May (**2019**).
4. **Keynote Speaker**, Fire-Certification on Natural Fibre Composites Panels for Aircraft Engine Application, International Conference on Aeronautics, Astronautics and Aviation (ICAAA), Chennai, India, 23-24 March (**2018**).
5. **Invited Speaker**, Towards Sustainable Engineering Education: A Preview, FEIIC International Convention on Engineering Education & Research (FICEER), Madinah, Saudi Arabia, 16-17 December (**2017**).
6. **Invited Speaker**, World Research and Innovation Convention on Engineering and Technology, Adya Hotel, Langkawi, 25th October (**2016**).
7. **Invited Speaker**, Development of the Aerospace Industry: Charting the Path for Malaysia, Kuala Lumpur International Business Convention (KLIABC), MATRADE Convention Centre, Kuala Lumpur, 27-29th April, (**2015**).
8. **Invited Speaker**, Integrated Module Based Education Model for Engineering and Technology, International Engineering Education Conference (IEEC), Madinah, Saudi Arabia, (**2013**).

<u>National</u>

1. **Invited Speaker**, Route to Professional Engineer Workshop for Perbadanan Putra Jaya, Pulse Grande Hotel, Putrajaya, 18-20 Dec (**2019**).
2. **Keynote Speaker**, Human Factors in Aviation Safety, 4th International Conference on Ergonomics and 2nd International Conference on Industrial Engineering, Kuala Terengganu, 27-28 Aug (**2019**).
3. **Invited Speaker**, Registration of License Aircraft Maintenance Engineer with BEM, Association of Malaysia Airlines LAE (AMALAE), Malaysia Airlines Berhad, 19 July (**2019**).
4. **Visiting Professor Lecture**, Aerospace Industry Management, Faculty of Information Science and Engineering, Management Science University, 14 March (**2019**).
5. **Invited Lecture**, Self-Assessment Report Writing for Engineering Technician Programme Accreditation, Politeknik Banting, Department of Polytechnic Education, Ministry of Higher Education, 7-8 May (**2018**).
6. **Invited Lecture**, Self-Assessment Report Writing for Engineering Technician Programme Accreditation, Politeknik Kota Baharu, Department of Polytechnic Education, Ministry of Higher Education, 18-19 November (**2017**).
7. **Invited Lecture**, Self-Assessment Report Writing for Engineering Technology Programme Accreditation, UniKL MICET, 2-3 November (**2017**).

8. **Invited Lecture**, Self-Assessment Report Writing for Engineering Technician Programme Accreditation, Department of Polytechnic Education, Ministry of Higher Education, 27-29 September (**2017**).
9. **Invited Speaker**, MyQUEST Quality Evaluation System for Private Colleges, Felda Residence Hotel, Kuala Terengganu, 14 March (**2017**).
10. **Invited Speaker**, MyQUEST Quality Evaluation System for Private Colleges, Kolej Universiti Yayasan Sabah, Kota Kinabalu, 12 March (**2017**).
11. **Invited Speaker**, MyQUEST Quality Evaluation System for Private Colleges, Ministry of Higher Education, Putrajaya, 7-8 March (**2017**).
12. **Invited Speaker**, One Day Training on MyQUEST, Grand Continental Hotel, Langkawi, 23rd October (**2016**).
13. **Invited Speaker**, MyOBE Awareness Workshop, GMI Bandar Baru Bangi, September (**2016**).
14. **Invited Speaker**, OBE Awareness Workshop, GMI Bandar Baru Bangi, 10-11th August (**2016**).
15. **Invited Speaker**, One Day Training on MyQUEST, Bangi-Putrajaya Hotel, 6th August (**2016**).
16. **Special Guest Speaker**, Creativity and Innovation Segment, Radio Nasional FM, Wisma Radio RTM, Angkasapuri, 2nd July (**2016**).
17. **Invited Speaker**, MyOBE Awareness, Faculty of Mechanical Engineering, UiTM Shah Alam, 23rd February (**2016**).
18. **Invited Speaker**, Malaysian Rail Industry, Destini Berhad, Shah Alam, 3rd December, (**2015**).
19. **Keynote Speaker**, Aerospace Manufacturing Landscape in Malaysia, Advanced Powder Metallurgy Symposium, Seberang Perai, Penang, 17th November, (**2015**).
20. **Keynote Speaker**, Malaysian Aerospace Industry: Opportunities and Challenges, AeroFest, USM, 21st November, (**2015**).
21. **Keynote Speaker**, Characterization of Maerogel – A Rice Husk Derived Aerogel, Advanced Materials Conference, Langkawi, 25-26th November, (**2014**).
22. **Invited Speaker**, 2-Day Awareness and Implementation of OBE, TATiUC, Kijal, (**2013**).
23. **Invited Speaker**, Literature Review, TATiUC, Kijal (**2013**)
24. **Invited Speaker**, Teaching and Learning Workshop 3-Days, TATiUC, Kijal (**2013**)
25. **Invited Speaker**, Outcome Based Education Workshop 2-Days, TATiUC, Kijal (**2013**)
26. **Invited Speaker**, Seminar on Outcome Based Engineering Education, Hilton Hotel, Kuching (**2011**)
27. **Invited Speaker**, Workshop on Curriculum Review and OBE, TATIUC Kuantan, (**2011**)
28. **Invited Speaker**, Workshop on K-Chart, BMI-UniKL, (**2007**)
29. **Invited Speaker**, Workshop on K-Chart, UniTEN, (**2007**)
30. **Invited Speaker**, Workshop on Youth for Space, ANGKASA, (**2007**)

University

1. **Invited Speaker**, Programme Self Review Report, Centre for Quality Assurance, UPM, 26th November (**2019**)
2. **Invited Speaker**, Outcome Based Education: Curriculum Design, Centre for Academic Development, UPM, 6th February (**2018**).
3. **Invited Speaker**, Auditing Enhancement Training on New MQA COPPA 2017, Centre for Quality Assurance, UPM, 19th September (**2017**).
4. **Invited Speaker**, University Risk Management, UPM Kampus Bintulu, 12 April 2017.
5. **Invited Speaker**, Route to Commercialization, Innovation Open Day, Faculty of Engineering, UPM, 23rd September (**2016**).
6. **Invited Speaker**, Effective Audit Report Writing, Centre for Quality Assurance, UPM, 29th June (**2016**).
7. **Invited Speaker**, Engineering Team @ MySET, Seminar on The Route to Become a Chartered Engineer and Professional Engineer, Faculty of Engineering, UPM, 1st April (**2016**).
8. **Invited Speaker**, Awareness on Outcome Based Education, Fac. of Engineering, UPM (**2010**)
9. **Invited Speaker**, General Awareness Training MS ISO 9001:2000, Fac. of Engineering UPM, (**2007**)

Research Grants

No	Project Title	Amount (RM)	Year	Source of Fund
1.	Experimental Investigation on Gas Turbine Engine Performance running on alternative fuels (***Leader***)	RM25,000	2019-2021	IPS Grant, UPM (9681600) (*On-Going*)
2.	The Effect of Heat Transfer Enhancement in Turbular Heater of Stirling Engine for Waste Heat Recovery with Different Materials and Fins Attachments (***Member***)	RM118,000	2019-2021	FRGS/1/2018/TK07/UPM/02/2 (5540072) (*On-Going*)
3.	Development of Hybrid Powerplants for Multi-role Unmanned Aerial Systems (***Member***)	RM60,000	2018-2020	IPM Grant, UPM (9634100) (*On-Going*)

4.	Kajian Pembangunan Modul Instrumen bagi Menilai Prestasi Sesebuah Institusi Pengajian Tinggi oleh Majikan (***Leader***)	RM420,221.84	2018-2019	Ministry of Higher Education Malaysia (6377900) (*Completed*)
5.	Strategic Partnership Travel Grant (***Leader***)	RM12,000 (EUR2500)	2018	A4U Alliance of 4 Spanish Universities (*Completed*)
6.	Active Flow Control for Coanda Aircraft (***Member***)	RM60,000	2017-2019	IPM Grant, UPM (9537900) (*Completed*)
7.	Fire Testing of Aluminium Alloy with Carbon Fiber and Kenaf Sandwich Panel for Aerospace Application (***Leader***)	RM20,000	2017-2019	IPS Grant, UPM (9538500) (*Completed*)
8.	Thermodynamic and Economic Performance Optimization of an Organic Rankine Cycle System using Exhaust Heat of a Jet Engine Core (***Member***)	RM50,000	2016- 2019	IPM Grant, UPM (9498100) (*Completed*)
9.	Kajian Pembangunan Sistem Penarafan Universiti dan Universiti Kolej (SETARA) (***Member)***	RM2,100,000	2017-2017	Ministry of Higher Education Malaysia (6377900) (*Completed*)
10.	Sistem Penilaian Kualiti dan Kesetaraan Kolej Swasta (MyQUEST) (***Member***)	RM960,000	2017-2017	Ministry of Higher Education Malaysia (6377900) (*Completed*)
11.	Analysis on Correlations between Preparation conditions-microstructure Properties of Graphene Aerogels (***Leader***)	RM76,000	2016- 2019	Fundamental Research Grant Scheme (FRGS) TK05/UPM/02/7 (5524896) (*Completed*)
12.	Quick Release Disposable Safety Syringe (***Leader***)	RM230,000	2014- 2016	Prototype Research Grant Scheme (PRGS) TK01/UPM/02/1 (5530400) (*Completed*)
13.	Fundamental Study of Temperature and Heat Flux Measurements made in Aeronautical-Certified Propane-Air Burner (***Leader***)	RM86,500	2014- 2016	Fundamental Research Grant Scheme (FRGS) (5524611) (*Completed*)
14.	Modelling of Proof-of-Concept Prototyping of Coanda Jet Dynamics Performance Enhancement for Micro Air Vehicle (***Leader***)	RM8,000	2014- 2015	IPS Grant, UPM (9433914) (*Completed*)
15.	Detailed Investigation on the Factors Affecting Thermochromic Liquid Crystal Calibrations (***Leader***)	RM13,500	2014- 2015	IPS Grant, UPM (9429300) (*Completed*)
16.	Fire Testing (***Leader***)	RM10,000	2013-2014	Geran Sanjungan UPM (6385800) (*Completed*)
17.	Establishing Surface Sensible Heat Transfer Properties Utilizing Thermochromic Liquid Crystal (***Leader***)	RM103,200	2011-2013	Experimental Research Grant Scheme (ERGS) (5527022) (*Completed*)
18.	Development of Inconel 718 Parts using Super Critical Carbon Dioxide (CO_2) Debinding Technique for Potential Aerospace Industry Application (***Member)***	RM282,600	2011-2013	ScienceFund, MOSTI Project no. 03-03-02-SF0148 (*Completed*)

19.	Student-Centered Learning; UPM's Experience (***Member***)	RM50,230	2011-2012	Research University Grant Scheme, 06-03-11-1459RU, (*Completed*)
20.	Cooling enhancement on Aero Engine Combustor Liner (***Leader***)	RM45,580	2010-2012	Fundamental Research Grant Scheme (FRGS), MoHE Project no. 02-10-10-927FR (*Completed*)
21.	Fluids Mixing Characteristics for Aeroengine Combustion (***Leader***)	RM189,000	2009-2012	Research University Grant Scheme (RUGS), UPM (*Completed*)
22.	Measurement of Heat Transfer in Dimpled Channels using Thermochromic Liquid Crystals (***Leader***)	RM101,745 (AUS$ 29,925)	2008-2009	UNSW Engineering-ADFA International Research Collaboration Scheme (*Completed*)
23.	Fundamental Study of Vacuum Cooling Technique for Non-Porous Materials (***Member***)	RM105,000	2008-2009	Fundamental Research Grant Scheme (FRGS), MoHE Project no. 07-10-07-392FR (*Completed*)
24.	Adopting Eddy Viscosity Hyphothesis in the Development of a Specific-Purpose Computer Code (***Member***)	RM80,000	2006-2009	Fundamental Research Grant Scheme (FRGS), MoHE Project no. 02-01-07-046FR (*Completed*)
25.	Advancement of Thermochromic Liquid Crystal Technique in Experimental Heat Transfer Testing on Aero Engine Components (***Leader***)	RM115,996	2006-2009	Sciencefund, MOSTI, Project no. 04-01-04-SF0601 (*Completed*)
26.	Experimental Investigation on the Hysteresis in Thermochromic Liquid Crystal for Heat Transfer Testing (***Leader***)	RM106,493	2006-2008	Fundamental Research Grant. Scheme, MoHE Project no. 01-01-07-032FR (*Completed*)
27.	The Significance of Solar Radiation on Under Cowl Temperature (***Leader***)	RM10,000	2005-2006	Skim Penyelidikan Pensyarah Lantikan Baru, UPM (*Completed*)
28.	Significance of Solar Radiation on Undercowl Temperature (***Leader***)	RM11,000 (GBP2,000)	2004-2005	Rolls-Royce plc. UK (*Completed*)

Awards/Recognition

No.	Name of Award	Title	Award Authority	Award Type	Year
1.	PUTRA InnoCreative Award	Best InnoCreative Educator in Alternative Assessments	PUTRA InnoCreative Carnival In Teaching and Learning, UPM	UPM	2019
2.	SARES Young Scientist Award	-	Sustainable Aviation Research Society (SARES)	International	2019

3.	Silver Award	Sugar Rocket Propulsion	International Science Technology Engineering Mathematics Olympiad ISTEMO, Serdang, Malaysia.	International	2018
4.	Bronze Medal	Development of Inconel 718 Parts using Super Critical Carbon Dioxide (CO_2) Debinding Technique for Potential Aerospace Industry Application	25th International Invention, Innovation & Technology Exhibition (ITEX), K.L Malaysia.	International	2014
5.	Silver Medal Commercial - ization Category	A System to Administer an Outcome Based Education	International Conference & Exposition on Inventions of Institutions of Higher Learning (PECIPTA), KLCC, Malaysia	International	2013
6.	Bronze Medal	Non-Penetrative Vacuum Blood Container	International Conference & Exposition on Inventions of Institutions of Higher Learning (PECIPTA), KLCC, Malaysia	International	2011
7.	Bronze Medal Open Category	A System to Administer an Outcome Based Education	International Conference & Exposition on Inventions of Institutions of Higher Learning (PECIPTA), KLCC, Malaysia	International	2011
8.	Silver Medal	SJ-Safety Syringe	BioMalaysia Conference & Exhibition, Malaysia	National	2011
9.	Gold Medal	Multi-Purpose Safety Syringe	Research Innovation and Commercialization Exhibition (PRPI), Universiti Putra Malaysia, Malaysia	University	2011
10.	Bronze Medal	Micro Gas Turbine Engine Performance Test Rig	International Engineering Invention and Innovation Exhibition (i-ENVEX), UniMAP	International	2011
11.	Gold Medal	A System to Administer an Outcome Based Education	Malaysian Technology Exhibition (MTE), KLCC, Malaysia	National	2011
12.	Silver Medal	Non-Penetrative Vacuum Blood Container	Malaysian Technology Exhibition (MTE), KLCC, Malaysia	National	2011
13.	Silver Medal	A System to Administer an Outcome Based Education	Research Innovation and Commercialization Exhibition (PRPI), Universiti Putra Malaysia, Malaysia	University	2010
14.	Gold Medal	Non-Penetrative Vacuum Blood Container	Research Innovation and Commercialization Exhibition (PRPI), Universiti Putra Malaysia, Malaysia	University	2010
15.	Bronze Medal	Thermochromic Liquid Crystal Technique for Heat Transfer Measurements	Research Innovation and Commercialization Exhibition, Faculty of Engineering, Universiti Putra	University	2006

			Malaysia, Malaysia		
16.	Bronze Medal	Composite semi-elliptic suspension spring	Research Innovation and Commercialization Exhibition, Faculty of Engineering, Universiti Putra Malaysia, Malaysia	University	2006
17.	Consodilation Prize	Sistem Pengurusan Kualiti – Putra 3Q	Pertandingan Konvensyen Kumpulan Meningkat Mutu Kerja (KMK), Negeri Selangor	National	2006
18.	Edgell Sheppee Award	Travel Grant	Exeter College, University of Oxford	International	2001

Professional Services/ Consultation

Professional Services

International

1. **Secretary General**, SouthEast Asia Network on Aerospace Engineering (SANAE) (**2019**)
2. **Chair**, International Symposium on Sustainable Aviation (ISSA), Langkawi (**2020**).
3. **International Technical Committee Member**, International Symposium on Aircraft Technology, MRO and Operations (ISATECH), Amsterdam (**2019**)
4. **Advisory Board (Int. Scientific Committee)**, International Symposium on Sustainable Aviation (ISSA), Budapest (**2019**)
5. **Joint Chair**, 4th SouthEast Asia Workshop on Aerospace Engineering (SAWAE), Kuala Lumpur (**2018-2019**).
6. **Executive Board Member**, SouthEast Asia Network in Aerospace Engineering (SANAE), **2018-2020**.
7. **International Technical Committee Member**, 2nd Asia Conference on Mechanical and Aerospace Engineering, Singapore (**2018**).
8. **International Technical Committee Member**, 3rd SouthEast Asia Workshop on Aerospace Engineering (SAWAE), Katsetsart University, Bangkok Thailand (**2018**).
9. **International Technical Committee Member**, International Conference on Aeronautics, Astronautics, and Aviation (ICAAA), Chennal, India (**2018**).
10. **Committee Member**, FEIIC International Engineering Education and Research Convention (FICEER), Madinah, Saudi Arabia (**2017**).
11. **Chairman**, International AEROTECH VI Conference: Innovation in Aerospace Engineering and Technology, Kuala Lumpur (**2016**).
12. **Joint Chair**, World Research & Innovation Conf. on Engineering & Technology (WRICET), Langkawi (**2016**).
13. **Subject Matter Expert**, Rail signaling and communications training modules technology transfer with THALES companies in France, Portugal and Spain under the offset programme organised by Technology Depository Agency (TDA) MiGHT (**2015**).
14. **Programme Director**, Outreach to School III at Langkawi, Sponsored by BAe Systems UK (**2015**).
15. **Head of Delegation** and **Subject Matter Expert**, Technology transfer programme for human capital training modules for Rail rolling stock with China Southern Rail company and KTMB, A Project under the Technology Depository Agency (TDA), MiGHT (**2014**).
16. **Programme Director**, Outreach to School II at Langkawi, Sponsored by BAe Systems UK (**2013**).
17. **Committee Member**, International Engineering Education Convention (IEEC), Federation of Engineering Institutions in Islamic Countries (FEIIC), Madinah, Saudi Arabia (**2013**).
18. **Programme Director**, Outreach to School at Bintulu, Sponsored by BAe Systems UK (**2012**)
19. **Chief Operating Officer**, Aerospace Malaysia Innovation Centre (944751-A), An international organisation established together with AIRBUS, Rolls-Royce, MiGHT, CTRM and UPM, A company limited by guaranteed by the Malaysian Government (**2011**).
20. **Committee Member**, International Engineering Education Convention (IEEC), Federation of Engineering Institutions in Islamic Countries (FEIIC), Madinah, Saudi Arabia (**2011**).
21. **Chairman**, Conference on Aerospace and Mechanical Engineering (CAME), World Engineering Congress, Kuching, Sarawak (**2010**)
22. **Treasurer**, International Engineering Convention (InTEC), Federation of Engineering Institutions in Islamic Countries (FEIIC), Damascus, Syria (**2009**).
23. **Treasurer**, World Engineering Congress, Federation of Engineering Institutions in Islamic Countries (FEIIC), Penang (**2008**).
24. **Treasurer**, International Engineering Convention (InTEC), Federation of Engineering Institutions in Islamic Countries (FEIIC), Jeddah, Saudi Arabia (**2007**).

25. **Executive Committee Member**, Regional Office, Federation of Engineering Institutions in Islamic Countries (FEIIC) (**2005** - present)

International: Journal Editor

1. Journal of Aircraft and Spacecraft Technology, Science Publications, Dubai, UAE.
2. Journal of Aeronautics, Astronautics, and Aviation, iPress, The Aeronautical and Astronautical Society of the Republic of China. (**SCOPUS Index**).
3. International Journal of Education Sciences and Learning Technology, Nobel Science and Research Center.
4. American Journal of Engineering and Applied Sciences, Science Publications, Dubai, UAE.
5. FEIIC International Journal of Engineering and Technology, Federation of Engineering Institution for Islamic Countries (FEIIC).

International: Journal Reviewer

1. Experimental Thermal and Fluid Science, ELSEVIER (**JCR Q1**)
2. Flow Measurement and Instrumentation, ELSEVIER (**JCR Q1**)
3. Journal of Aerospace Engineering, American Society of Civil Engineers (**JCR Q2**)
4. FEIIC International Journal of Engineering and Technology, Federation of Engineering Institution for Islamic Countries (FEIIC).
5. International Journal of Automotive and Mechanical Engineering, Universiti Malaysia Pahang (**SCOPUS Index**).

National: Professional Body/ Society

1. **Board of Director**, Terengganu Science & Creativity Centre, (**2019-2020**)
2. **Vice President**, Malaysian Society for Engineering & Technology (**2018 – 2021**)
3. **Member**, Examination and Qualification Committee, Board of Engineers Malaysia (**2017 – present**)
4. **Member**, Accreditation and Qualification Committee, Malaysian Society for Engineering and Technology (MySET) (**2017 – present**)
5. **Member**, Working Committee for Engineering Technology and Engineering Technician Programme Accreditation, Engineering Technology Accreditation Council (ETAC), Board of Engineers Malaysia, (**2016 – 2018**)
6. **Chair**, Activities and Welfare Standing Committee, Malaysian Society for Engineering & Technology (**2015 – 2018**)
7. **Chair**, Young Professional Group, Malaysian Society for Engineering & Technology (MySET) (**2015 – 2018**)
8. **Vice President**, Malaysian Society for Engineering & Technology (**2015 – 2018**)
9. **Lead Auditor**, Malaysia Quality Evaluation System (MyQuest), Ministry of Higher Education (MoHE) (**2015**)
10. **Committee Member**, Malaysian Aerospace industry inter-agency committee (MIGHT, PEMANDU, SMECorp) for the new EPP8 for Aerospace Manufacturing SME development and the ongoing EPP 5 and 7 under Business Services NKEA (**2014 - 2015**)
11. **Lead Auditor**, Malaysia Quality Evaluation System (MyQuest), Ministry of Higher Education (MoHE) (**2011, 2013, 2015, 2017**)
12. **Chairman**, Innovation Conference (INNOCONF), Shah Alam (**2012**)
13. **Vice President**, AKEPT Young Researcher Circle, Ministry of Higher Education (MoHE) (**2011 – 2012**)
14. **Chair**, Malaysian Aerospace Engineering Deans Council, Ministry of Higher Education (MoHE) (**2009 – 2011**)
15. **Lead Auditor**, Penarafan Institut Perguruan (IPGrating), Ministry of Education (MoE) (**2013**)
16. **Lead Auditor**, Penarafan Politeknik (Polyrate), Department of Polytechnic Education, Ministry of Higher Education (MoHE) (**2013**)
17. **Lead Auditor**, Sistem Pengurusan Kualiti Kolej Komuniti (MySPEKK), Department of Community college Education, Ministry of Higher Education (MoHE) (**2013**)
18. **Panel Auditor** EAC, Board of Engineers Malaysia (BEM), (**2012 – present**)
19. **Chair**, Young Professional Section, Malaysian Society for Engineering & Technology (mSET) (**2009 – 2011**)
20. **Treasurer**, AYRC X3: Young Researchers Conference, AKEPT, Ministry of Higher Education (MoHE) (**2011**)
21. **Committee Member**, Council of Engineering Deans, Ministry of Higher Education (MoHE) (**2009 – 2011**)
22. **Monitoring Committee**, LEADER in Aerospace Programme, MiGHT-Meteor (**2010 – 2012**)
23. **Lead Trainer**, Training Needs Analysis, Board of Engineers Malaysia (BEM) (**2010**)
24. **Panel**, HCD Aerospace Scholarship, MoHE (**2010**)
25. **Member**, National Aerospace Symposium (Aerotech III), K.L (**2009**)
26. **Treasurer**, Symposium of Engineering and Technology, Kuching (**2008**)
27. **Lead Auditor**, Internal Audit, BEM (**2007 – present**)
28. **Member**, Quality Committee, Board of Engineers Malaysia (**2007 – present**)
29. **Treasurer**, National Aerospace Symposium (Aerotech II), Putrajaya (**2007**)
30. **Secretary**, Symposium of Engineering and Technology, Putrajaya (**2006**)

31. **Lead Accreditation Panel** MQA for Aerospace Engineering and Technology (**2005 – present**)
32. **Treasurer**, National Aerospace Symposium (Aerotech), Putrajaya (**2005**)

National: Academic Involvement

No.	Item	Programme	Institution	Duration
1.	External Assessor/Examiner	PhD in Engineering, UniTEN		2019-2021
2.	External Assessor/Examiner	B.Eng Tech Aeronautical (Aircraft Maintenance), Faculty of Mechanical and Manufacturing, Universiti Tun Hussein Onn Malaysia (UTHM)		2019-2021
3.	External Assessor/Examiner	Diploma Aircraft Maintenance Engineering, Politeknik Banting, Selangor		2019-2020
4.	External Examiner and Visiting Professor	Aerospace Engineering Field, Faculty of Information System and Engineering, Management Science University		2018-2020
5.	External Assessor/Examiner	Master Aeronautic, Faculty Engineering, Universiti Teknologi Malaysia (UTM)		2018-2019
6.	External Assessor/Examiner	B.Eng Tech Aircraft Manufacturing, Faculty of Mechanical and Manufacturing, Universiti Tun Hussein Onn Malaysia (UTHM)		2018-2020
7.	Board of Studies Committee	Master of Science in Aviation Management, UniKL Malaysian Institute of Aviation Technology (MIAT)		2018-2019
8.	External Assessor/Examiner	Diploma Mechanical Engineering, Politeknik Kota Baharu, Kelantan		2018-2020
9.	External Assessor/Examiner	B.Eng Tech Aeronautical (Aircraft Maintenance), Faculty of Mechanical and Manufacturing, Universiti Tun Hussein Onn Malaysia (UTHM)		2017-2019
10.	External Assessor/ Examiner	B.E Mechanical (Aeronautic), Universiti Teknologi Malaysia (UTM)		2016-2017
11.	Board of Studies Committee	Doctor of Philosophy (Aerospace), UniKL Malaysian Institute of Aviation Technology (MIAT)		2016-2017
12.	Board of Studies Committee	Master of Engineering Technology (Aerospace), UniKL Malaysian Institute of Aviation Technology (MIAT)		2016-2017
13.	External Assessor/ Examiner	B.E Mechanical (Aeronautic), Universiti Teknologi Malaysia (UTM)		2013-2014
14.	Industrial Advisor	B.E Mechanical (Aeronautic), Universiti Teknologi Malaysia (UTM)		2010 – 2012

University

1. **Associate Fellow**, Corporate Strategy and Communication, Vice Chancellor Office, UPM (**2019-2021**)
2. **Mentor**, Basic Education Course - Dr Ezanee Gires, CADe, UPM (**2017**)
3. **Panel Jury**, Vice Chancellor Fellowship Award (Teaching Category), UPM (**2017-2018**)
4. **Member**, UPM Transformation Programme 2017-2025.
5. **Committee Member**, Maklumbalas Laporan Swa Akreditasi, UPM (**2017**)
6. **Committee Member**, Waqaf Fasiliti Masjid, WAZAN UPM (**2017**)

7. **Committee Member**, Risk Management, UPM (**2016 - 2017**)
8. **Chairman**, PUTRA Bakti Central Committee, UPM (**2016 - 2017**)
9. **Advisor and Chairman**, TribunPutra Editorial Committee, UPM (**2016 - 2017**)
10. **Mentor**, Basic Education Course - Dr Syamimi Saadon, CADe, UPM (**2016**)
11. **Panel Evaluator**, Educational Programme, Centre of Quality Assurance, UPM (**2016 - 2017**)
12. **Co-ordinator**, Master of Innovation & Engineering Design, (**2006 – 2009**)
13. **Trainer**, ISO9008:2008 Quality Management System, Faculty of Engineering UPM, (**2006 – 2011**)
14. **Lead Auditor**, Internal Audit, Faculty of Engineering, UPM (**2006 – 2009**)
15. **Co-ordinator Internal Audit**, Quality Assurance Unit, Faculty of Engineering, UPM (**2004 – 2009**)

Community

1. **Yang diPertua** (YDP), Persatuan Ibu bapa & Guru (PIBG), Sekolah Agama Menengah Sg. Merab Luar (SAM SML), Sepang, Selangor (**2018 - 2019**).
2. **Yang diPertua** (YDP), Persatuan Ibu bapa & Guru (PIBG), Sekolah Agama Menengah Sg. Merab Luar (SAM SML), Sepang, Selangor (**2017 - 2018**).
3. **Committee Member**, Persatuan Ibu bapa & Guru (PIBG), Sekolah Agama Menengah Sg. Merab Luar, Sepang (SAM SML), Selangor (**2016 - 2017**).
4. **Yang diPertua** (YDP), Jemaah Ibu bapa & Guru (JIBG), Sekolah Rendah/Menengah Integrasi Tahfiz Ilmuwan, Bandar Baru Bangi, Selangor, (**2012 - 2015**).

Consultation Services

Lead Consultant

1. **2018** - Outreach to School V @ Butterworth, BAe Systems UK and MiGHT Academy, RM11,000 (***Project Leader***).
2. **2018** - Street Lantern Wind Tunnel Testing, Novabright Sdn. Bhd., RM8162 (***Project Leader***).
3. **2017** - Outreach to School V @ Labuan, BAe Systems UK and MiGHT-Meteor Advanced Manufacturing Sdn Bhd, RM9000 (***Project Leader***).
4. **2016** - Outreach to School IV @ Kuantan, BAe Systems UK and MiGHT-Meteor Advanced Manufacturing Sdn Bhd, RM12,500 (***Project Leader***).
5. **2012** - Kajian Rintis Implementasi Modul Inovasi, Jabatan Pengajian Tinggi, Kementerian Pengajian Tinggi, RM30,000 (***Project Leader***).
6. **2011** - Pembentukan Modul dan Kurikulum Inovasi, Jabatan Pengajian Tinggi, Kementerian Pengajian Tinggi, RM50,000 (***Project Leader***).
7. **2011** - Kursus Tambahan Graduan Kejuruteraan UniMAP, Universiti Malaysia Perlis, RM202,860 (***Project Leader***).
8. **2010** - Gun Tunnel Impact Test II, Agensi Nuklear Malaysia (MINT), RM2817.50 (***Project Leader***).
9. **2009** - Gun Tunnel Impact Test I, Agensi Nuklear Malaysia (MINT), RM2817.50 (*Project* ***Leader***).
10. **2008** - Wind Tunnel Testing for Vortex Generator, School of Aerospace Engineering, USM, RM17,250 (***Project Leader***).
11. **2008** - Street Lantern Wind Tunnel Testing, Success Electric & Transformer Manufacturer Sdn. Bhd., RM8050 (***Project Leader***).
12. **2008** - Nikkon S419-150 HPS150W and S419-250 HPS250W Wind Tunnel Test, Success Electric & Transformer Manufacturer Sdn. Bhd., RM6440 (***Project Leader***).
13. **2008** - Wind Tunnel Testing for Street Lantern, Initial Electric Sdn. Bhd., RM8050 (***Project Leader***).
14. **2008** - Street Lantern Wind Loading Test, Vantage Group, RM8050 (***Project Leader***).
15. **2007** - Thermal and Flow Measurements on Beachcraft B200T Aircraft, Airod (M) Sdn. Bhd., RM6000 (***Project Leader***).

Member of Consultation Project

1. **2019** - Street Lantern Wind Tunnel Testing, Success Electric & Transformer Manufacturer Sdn. Bhd., RM8162 (***Project Member***).
2. **2018** – Preliminary Study of CFD Analysis for Offshore Helideck, Prima Tech Solution, RM2,000 (***Project Member***).
3. **2017** - Kajian Analisa Jurang Ketersediaan Infrastruktur dan Aplikasi Komunikasi Bagi Pelaksanaan Bandar Pintar, Kementerian Komunikasi dan Multimedia, RM490,000 (***Project Member***).
4. **2017** - Perlaksanaan Sistem Pengurusan Kualiti MyQUEST 4, Jabatan Pengajian Tinggi, Kementerian Pendidikan Malaysia, RM910,600 (***Project Member***).
5. **2014** - Perlaksanaan Sistem Pengurusan Kualiti MyQUEST 3, Jabatan Pengajian Tinggi, Kementerian Pendidikan Malaysia (***Project Member***).
6. **2013** - Perlaksanaan Sistem Pengurusan Kualiti MyQUEST 2, Jabatan Pengajian Tinggi, Kementerian Pendidikan Malaysia, RM688,000 (***Project Member***).
7. **2013** - Kajian Pembangunan Instrumen Indeks Kepuasan Pelanggan dan Majikan, Kementerian Pengajian Tinggi, RM186,000 (***Project Member***).
8. **2013** - Kajian Pembangunan Sistem Penarafan Kolej Komuniti – MySPeKK, Kementerian Pengajian Tinggi, RM226,000 (***Project Member***).

9. **2013** - Kajian Pembangunan Instrumen Penarafan Institusi Pendidikan Guru, Kementerian Pelajaran Malaysia, RM460,000 (***Project Member***).
10. **2012** - Pembinaan Modul Training of Trainers (ToT) dalam Bidang Project-Oriented Problem-Based Learning, Jabatan Pengajian Tinggi, Kementerian Pengajian Tinggi, RM170,000 (***Project Member***).
11. **2010** - Kajian Pembangunan Sistem Pengukuran Kualiti MyQUEST, Jabatan Pengajian Tinggi, Kementerian Pengajian Tinggi, RM1,139,900 (***Project Member***).
12. **2010** - Projek Perintis Membina Sistem Pengurusan '*Outcome Based Education*', Jabatan Pengajian Tinggi, Kementerian Pengajian Tinggi, RM250,000 (***Project Member***).
13. **2010** - Sistem Pengukuran Kualiti dan Kesetaraan Kolej Swasta, Jabatan Pengajian Tinggi, Kementerian Pengajian Tinggi, RM365,555 (***Project Member***).
14. **2009** - Bird Impact Test and Fatigue Test on F5 Canopy as per ASTM F330-89, Airod (M) Sdn. Bhd. and Royal Malaysian Airforce, RM92,000, (***Project Member***).
15. **2009** - Wind Loading Testing for Commercial Street Lantern Types PTEX STL VIII, IX, and XII, Permintex Electronic Sdn. Bhd., RM5600 (***Project Member***).
16. **2008** - Assessing the Resonance Frequency for a Flat Plate Panel Mounting System on a MARITIME Helicopter using Modal Testing Technique, Centre for Aerospace Design (CAeD) Sdn. Bhd., RM6000 (***Project Member***).
17. **2008** - Wind Loading Testing for Commercial Street Lantern Types PTEX STL I, II, III and IV, Permintex Electronic Sdn. Bhd., RM8050 (***Project Member***).
18. **2008** - Wind Tunnel Testing for Street Lantern, PCO Lighting Sdn. Bhd., RM8050 (***Project Member***).
19. **2007** - Commercial Street Lamp Wind Tunnel Testing, Muarlite Industry Sdn. Bhd., RM7,187.50 (***Project Member***).
20. **2007** - Peranan PIMA Sebagai Badan Bertanggungjawab ke atas Institut Memandu di Malaysia, Persatuan Institut Memandu Malaysia, RM6210 (***Project Member***).
21. **2006** - Flow Measurements Downstream of a Propeller Fan, OYL Research & Development Centre Sdn. Bhd., RM8050 (***Project Member***).

Student Supervision

PhD

No.	Name	Title	Status
1.	Ayad Farag Abd Allah Diabris (GS56867)	Heat Transfer Study on Heat Exchanger	On Going **Main Supervisor**
2.	Alammari Aiman Saleh Hasan	Experimental and Numerical Heat Transfer Study	On Going **Main Supervisor**
3.	Nik Kechik Mujahidah Nik Abdul Rahman (GS54734)	Waste Heat Recovery using Stirling Engine Research	On-Going **Co-Supervisor**
4.	Yazan Sofyan Mohamed Altarazi (GS52811)	Experimental Investigation on Gas Turbine Engine Performance	On Going **Main Supervisor (Joint PhD)** THE UNIVERSITY OF NEWCASTLE AUSTRALIA
5.	Sadeq Rashid Nfawa (GS51860)	Numerical and Experimental Study of Nanofluid flow and Heat Transfer Characteristics in a Corrugated Channels with Vortex Generators	On Going **Main Supervisor**
6.	Albuhamdan Sadeq Salman Abed (GS51110)	Heat Transfer and Fluid Flow over Microscale Backward/ Forward Facing Step utilizing Hybrid Nanofluid	On Going **Main Supervisor**
7.	AlBehadili Ali Kareem Hilo (GS50612)	Experimental Investigation of The Effect of Nanofluid on the Performance Efficiency of the Heat Exchanger	On Going **Main Supervisor**
8.	Farah Syazwani Shahar (GS52900)	FEA Analysis and 3D Printing of an Ankle-Foot Othosis by using Kenaf composite Suitable for an Area with High Humidity and Temperature	On-Going **Co-Supervisor**
9.	Tabrej Khan (GS49088)	The Effect of Orientations on Mechanical Properties of Sodium Hydroxide Treated Kenaf/Jute Hybrid Reinforced Epoxy Hybrid Composites for Aerospace Applications	On Going **Co-Supervisor**
10.	Ismail Al-Masalha (GS52580)	Mechanical Engineering	Defer **Co-Supervisor**
11.	Nur Marini Zainal Abidin (GS52504)	Application of Natural Fibre Composite in UAV Wings using Finite Element Analysis	On Going **Co-Supervisor**

12.	Tamil Moli A/P Loganathan (GS52316)	Impact Characterization of Crystostachys Renda/ Kenaf Fibre Reinforced Poly-Carbonate Composite as an Aircraft Interior Component Application	On Going **Co-Supervisor**
13.	Abdul Raof Zahari (GS43553)	Development of Regulation Guideline For Future Suborbital Flight Operation In Malaysia	On Going **Co-Supervisor**
14.	Muhamad Hasfanizam Mat Yazik. (GS47710)	Thermo-Mechanical Properties of Shape Memory Epoxy Nanocomposites Modified with Nanoclay/CNT for Morphing Wing Skin Applications	On Going **Co-Supervisor**
15.	Norrahim Abu Bakar (GS47740)	Natural Bio-Composite	On Going **Co-Supervisor**
16.	Noorshazlin Binti Razali (GS42466)	Impact Characterization and Thermal Analysis of Flax/ Kenaf/Epoxy Composites with the Hybridization of Different Types of Glass Fibre Reinforced Polymer	Thesis Submitted **Co-Supervisor**
17.	Syafiqah Nur Azrie Bt Safri (GS42459)	Mechanical Thermal and Impact Damage Characterization of Hybridised Long Sugar Palm/Glass Fibre Reinforced Polymer Composites	2019 Graduated **Co-supervisor**
18.	Ibrahim Mohammed (GS45161)	Development of Hybrid Composite Fire Blanket for Aeroengine Application	2018 Graduated **Main Supervisor**
19.	Ain Umaira Binti Md. Shah (GS42642)	Low Velocity Impact Sandwich Structure Bamboo for Aerospace Applications	2018 Graduated **Co-Supervisor**
20.	Kafel Abdul Azeez Mohammed (GS40375)	The Effect of Nanofluid on the Performance Efficiency of the Heat Exchanger	2018 Graduated **Main Supervisor**
21.	Muhammad Ibrahim Nadiir Bheekhun (GS32468)	Parametric Analyses for a Single Layered Aerogel-Based Coating using Thermal Spray for Aerospace Applications	2017 Graduated **Main Supervisor**
22.	Riyadh Ibraheem Ahmed (GS38458)	Modeling and Proof Concept of Prototyping of Coanda Jet Lift to Drag Ratio Enhancement for Wind Turbine and Micro Air Vehicle	2016 Graduated **Main-Supervisor**
23.	Ayad Abed Rahman (GS22313)	The Influence of Impact on Composite Ceramic/ Aramid Armour Systems	2012 Graduated **Main Supervisor**
24.	Ashgar Pishgahi (GS16861)	Flow and Heat Transfer for a Tangential Jet Flow in Sudden Expansion Channel	2012 Graduated **Co-Supervisor**

MS with Thesis

No.	Name	Title	Status
1.	Azwin binti Azizul Hassan (GS54129)	Fire Certification of Aircraft Engine	Defer **Main Supervisor**
2.	Seri Nur Iman Hidayah binti Ahmad Nadzri (GS54200)	Coconut Shell Powder Reinforced Polypropylene Application of Marine	On-Going **Co-Supervisor**
3.	Seri Nur Zumaimi binti Ahmad Nadzri (GS54012)	Development of Kenaf/Glass Fibre Hybrid Composites for Bus Bumper Products	On-Going **Co-Supervisor**
4.	Ali Ahmad Mazlan (GS52223)	A Low Velocity Impact Properties of Hybrid Pineapple Leaf and Kenaf Fibre Reinforced Vinyl Ester Composites for Aerospace Application	On-Going **Co-Supervisor**
5.	Muhammad Imran Najeeb (GS52215)	Performance Improvement of Leaf Fibre Extractor Machine and Characterization of Malaysian Pineapple (Yankee) Leaf Fibre and its Composites	On-Going **Co-Supervisor**
6.	Nur Athirah Mohd Nasir (GS46939)	Thermodynamic and Economic Performance Optimization of an Organic Rankine Cycle System using Exhaust Heat of a Jet Engine Core	On Going **Co-Supervisor**

MS with Thesis			
No.	**Name**	**Title**	**Status**
7.	Muhammad Hafizal Hamidon	Investigation of Mechanical Properties and Damage Progression of Treated/Untreated Kenaf Hybrid Composites for Potential Application on EC-130 Helicopter Door	On Going **Co-Supervisor**
8.	Muhammad Fitri Mohd Zulkeple (GS49510)	Impingement Cooling Heat Transfer Enhancement	Thesis Submitted **Main-Supervisor**
9.	Muhammad Jabir Suleiman @ Ahmad (GS37574)	The Effect of Palm Oil Based Binder Ratio on Inconel 718 Metal Injection Molding Technique	2019 Graduated **Main Supervisor**
10.	Muhammad Faizzuddin Bin Ismail (GS45839)	Low Velocity Impact Analysis of Glass/Kenaf Hybrid Composites for Aerospace Structural Applications	2019 Graduated **Co-Supervisor**
11.	Khairul Izwan Ismail (GS47447)	BioComposite Material Reinforced Epoxy Composite Modified by Carbon Nanotube	2018 Graduated **Co-Supervisor**
12.	Ariff Farhan Mohd Nor (GS47435)	Enhancement of Low Velocity Impact Properties of Bamboo/ Glass Fibre Hybrid Composites Using Carbon Nanotubes for Aerospace Structural Applications	2018 Graduated **Co-Supervisor**
13.	Ahmad Mustafa Rayney Azmi (GS47432)	Design and Development of a Bulletproof Vest using Kenaf Fibre and X-Ray Films - Waste to Wealth	2018 Graduated **Co-Supervisor**
14.	Bootan Sherzad Qader (GS45642)	Numerical Investigation of Solar Air Collector	2018 Graduated **Co-Supervisor**
15.	Mohd Nasri Ishak (GS42540)	Development of Multi-Purpose Safety Syringe	2018 Graduated **Main Supervisor**
16.	Pauline Epsipha (GS38494)	A Numerical Study of Performance Characteristic In Transonic Axial Compressor Rotor Blade Using Circular Jets	2017 Graduated **Co-Supervisor**
17.	Hayder Abdullah Luaibi Alrazen (GS38374)	Numerical Simulation of the Effect of Combination of CNG, Diesel and H_2 usage on the 4 Stroke Engine	2016 Graduated **Co-Supervisor**
18.	Ezanee Gires (GS24584)	Performance Testing of a Small Gas Turbine Engine Fuelled by Biodiesel and Kerosene Based Fuels	2013 Graduated **Main Supervisor**
19.	Halid Agil (GS19157)	Mitigation of Rain Attenuation in Equatorial Region for MEASAT-2 and MEASAT-3 using Orbital Diversity	2012 Graduated **Co-Supervisor**
20.	Thamer H. Ahmed (GS19494)	Synthesis and Characterization of Carbon Nanotubes in a Vertical Floating Catalyst Chemical Vapour Deposition Reactor	2012 Graduated **Co-Supervisor**
21.	Helmey Ramdhaney Mohd Saiah (GS17732)	Effects of Non-Isothermal Single Circular Impinging Jet on a Quasi-Adiabatic Flat Plate	2011 Graduated **Main Supervisor**
22.	Norzihan Abdullah @ Aziz (GS19903)	Development of a New Approach for Aircraft Component Modelling using CAD Technique	2011 Graduated **Main Supervisor**
23.	Alaa Raad (GS22241)	Effect of Vibration Frequencies on the Welding Properties of Rectangular Mild Steel Plate	2011 Graduated **Co-Supervisor**
24.	Amar Ali Hussein (GS21324)	Numerical Performance Evaluation of Plain Fin Tube Heat Exchanger Under Frosty Conditions	2010 Graduated **Main Supervisor**
25.	Abu Zaid Bakar (GS17159)	Stability and Control Assessment of an Aerial Target Drone Based on a Scale Model of A-4 Skyhawk Jet Fighter	2010 Graduated **Main Supervisor**
26.	Zhang Si Wei (GS18447)	Experimental Investigation of a Vacuum Cooling System	2010 Graduated

MS with Thesis			
No.	**Name**	**Title**	**Status**
			Co-Supervisor
27.	Nadia Abdullah (GS16827)	Effect of Film Thickness on Narrowband Thermochromic Liquid Crystal Calibration	2009 Graduated **Main Supervisor**
28.	Mohamed Abdel Badie Mohamed (GS15447)	Design and Finite Element Analysis of Hybrid Carbon/Glass Fiber–Reinforced Epoxy Composite Automotive Drive Shaft	2007 Graduated **Co-Supervisor**
29.	Gehad Goudah Soliman Mosleh Hamdan (GS15568)	Static and Dynamic Mechanical Performance of Composite Elliptic Springs for Vehicle Suspension	2007 Graduated **Co-Supervisor**
30.	Irfan Abd.Rahim (GS12743)	The Development of an Experimental Facility of a Tangential Jet Flow in a Sudden Expansion Channel	2006 Graduated **Co-Supervisor**

MS without Thesis (Main Supervisor)			
No.	**Name**	**Title**	**Status**
1.	Tan Kiah Chuan (GS50248)	Forest Wind Speed Detector Sensor	2019 Completed
2.	Yazan Sofyan Mohamed Altarazi (GS46573)	Performance of Small Turbojet Engine using Palm-Oil Biodiesel-Jet a Blend	2018 Completed
3.	Aiman Saleh Alammari (GS43389)	Design of Smoke and Fume Extractor for Laboratory Application	2018 Completed
4.	Muhammad Hannan Baharin (GS43734)	Design and Development of Self-Charging Hybrid Power Bank	2017 Completed
5.	Mohd. Amirfaris Yazid (GS42808)	Numerical Analysis of Metal tubes Subjected to Oblique Loading using Finite Element Analysis	2017 Completed
6.	Muhammad Khalil Zakaria (GS32370)	Design Analysis of Mold and Fabrication of Dead End Clamp	2013 Completed
7.	Ahmad Fadzli Che Yaacob (GS31141)	Optimisation of Dead End Clamp for High Tension Power Cable	2013 Completed
8.	Mohd. Yusairi Mohd Yusof (GS28677)	Design Analysis of Dead End Clamp	2012 Completed
9.	Adi Azriff Basri (GS26971)	Safety Syringe Product Development	2011 Completed
10.	Siti Zuraifah Mohd Zabidi (GS26564)	Design and Development of Safety Syringe	2010 Completed
11.	Siti Aishah Adam (GS21568)	Design and Fabrication of Vacuum Chamber and Capping System for Pharmaceutical Application	2009 Completed
12.	Ummi Noor Nazahiah Abdullah (GS20240)	Blood Container, Capping and Vacuuming Parts Modular Concept Design and Development for Vacuum Blood Container	2009 Completed
13.	Hafizah Mohd Nasir (GS19523)	Thermal Infrared Sensor Characteristic: A Study on the Colour Temperature and Emissivity Utilizing Blackbody Fitting Method	2008 Completed
14.	Marini Abdul Hamid (GS16870)	TNBMON: TNB Substation Monitoring System	2008 Completed
15.	Rashidi Rahim (GS17861)	Design and Development of a New Composite Firewall for Light Sport Category Aircraft	2008 Completed
16.	Jaronie Mohd Jani (GS17482)	Power Train-Dyno Management System	2007 Completed
17.	Mohd. Azwir Azlan (GS15904)	Design and Develop a Lubricant Test Device for CVT Application	2007 Completed

Student Examination (Internal/External Examiner/ Chairman)

Doctor of Philosophy			
No.	**Name**	**Title**	**Year**

1.	Ahmad MR N Alrashidi GS43323 **Universiti Putra Malaysia (UPM)** (*Internal Examiner*)	Potential Alternative Fuel by Combustion of Bio-Fuel and Plasma Technology in the Operation Jet Engine	2020
2.	Norhafizah Mohamad Dasuki (GS39366) **Universiti Putra Malaysia (UPM)** (*Internal Examiner*)	Conceptual Development of Passenger Standing Cabin Design for Commercial Transport Aircraft: A Malaysian Case Study	2020
3.	Lim Chong Lye (GS32454) **Universiti Putra Malaysia (UPM)** (*Internal Examiner*)	Cryogenic Pipe Flow Simulation for Liquid Nitrogen under Steady State Conditions	2019
4.	Negin Ozve Aminian (GS34666) **Universiti Putra Malaysia (UPM)** (*Internal Examiner*)	Conceptual Development of an Ergonomics Passenger Cabin Design for Potential Commercial Urban Transport Airship in Malaysia	2019
5.	Siti Norbaya Binti Daud **Universiti Teknologi Malaysia (UTM)** (*External Examiner*)	The Relationship between Leadership Skills, Competencies, Characters and Energizing Entrepreneurial Amaong Engineering Students	2019
6.	Ummi Noor Nazahiah Abdullah **Lappeenranta-Lahti University of Technology (LUT), Finland** (*External Examiner - Opponent*)	Design and Development Methods for a Remote-Operated off-road Vehicle Interface	2019
7.	Ahmad MR N Alrashidi GS43323 **Universiti Putra Malaysia (UPM)** (*Internal Examiner*)	Potential Alternative Fuel by Combustion of Bio-Fuel and Plasma Technology in the Operation Jet Engine	2019
8.	Siti Nur Mariani Mohd Yunos **Universiti Tun Hussein Onn Malaysia (UTHM)** (*External Examiner*)	A Multidisciplinary Assessment and Optimization of Synthetic Paraffinic Kerosene Fuel	2018
9.	Wan Muhammad Syahmi Wan Fauzi **Universiti Teknologi MARA (UiTM)** (*External Examiner*)	Development of Information Architecture and Novel Simulation System for Pillion Assessment Workstation	2018
10.	Norhafizah Mohamad Dasuki (GS39366) **Universiti Putra Malaysia (UPM)** (*Internal Examiner*)	Conceptual Development of Passenger Standing Cabin Design for Commercial Transport Aircraft: A Malaysian Case Study	2018
11.	Lim Chong Lye (GS32454) **Universiti Putra Malaysia (UPM)** (*Internal Examiner*)	Cryogenic Pipe Flow Simulation for Liquid Nitrogen under Steady State Conditions	2018
12.	Negin Ozve Aminian (GS34666) **Universiti Putra Malaysia (UPM)** (*Internal Examiner*)	Conceptual Development of an Ergonomics Passenger Cabin Design for Potential Commercial Urban Transport Airship in Malaysia	2018
13.	Alsanossi Mohamed Aboghrara (GS35903) **Universiti Putra Malaysia (UPM)** (*Internal Examiner*)	Numerical and Experimental Investigation to Development of a Solar Air Heater with Impinging Jets on Corrugated Plate	2017
14.	Aidin Ghavamian (GS39914) **Universiti Putra Malaysia (UPM)** (*Chairman*)	Numerical Simulation and Experimental Investigation of Ultrasonic Guided Wave Propagation on Pipes with Defects	2018
15.	Ali Mohammed Hussein Mohsen **Universiti Tenaga Nasional (UniTEN)** (*External Examiner*)	Experimental and Numerical Study on High Speed Transient Flow in Shock Tunnel and Gun Tunnel	2017
16.	Syed Mohammed Aminuddin Aftab **Universiti Putra Malaysia (UPM)** (*Chairman*)	Experimental and Numerical Study Implementing Humpback Whale Leading Edge Tubercles	2017
17.	Ang Kiang Long **Universiti Teknologi Malaysia (UTM)** (*External Examiner*)	Mechanical and Ballistic Properties of a Polybutadiene for Meteorological Sounding Rocket Application	2016
18.	Mohd Salahuddin bin Mohd Basri **Universiti Putra Malaysia (UPM)** (*Internal Examiner*)	Development of Rice Husk Ash-Based Geopolymer Binder for Fire Resistant Coating and Panel using Statistical Approach	2016

19.	Roslina Mohamad **Universiti Putra Malaysia (UPM)** (*Chairman*)	Online Bit Error Rate Stopping Turbo Iteration Criterion	2016
20.	Zurriati Mohd Ali Mechanical Engineering **Universiti Teknologi MARA (UiTM)** (*External Examiner*)	Effect of Canard Configuration on the Aerodynamics of Blended Wing Body at Low Mach Number	2015
21.	Mohammed Abed Ahmed Mechanical Engineering **Universiti Tenaga Nasional (UniTEN)** (External Examiner)	Numerical and Experimental Investigations on the Flow and Heat Transfer of Nano fluids in Corrugated Channels	2014
22.	Kannan M. Munisamy Mechanical Engineering **Universiti Tenaga Nasional (UniTEN)** (External Examiner)	Investigation of Flow and Heat Transfer in Brake Disk Rotor Designs	2012
23.	Md. Moslemuddin Fakir Aerospace Engineering **Universiti Putra Malaysia (UPM)** (Chairman)	Finite Element and Differential Quadrature Methods for Heat Distribution in Rectangular Fins	2009

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No.	Name	Title	Year
1.	Muntasser Abdulabbas Mossa GS47857 **Universiti Putra Malaysia (UPM)** (Internal Examiner)	An Experimental Study of the Performance of a Homogeneous Charge Compression Ignition (HCCI) Engine Fuelled With Used Cooking Oil Based Biodiesel	2019
2.	Ahmad Fikri Bin Baharan **UniKL** (External Examiner)	Fixed Speed Pump Turbine Runner with Improved Operational Flexibility Using Flapping Blade Mechanism	2018
3.	Roger Ho **Universiti Sains Malaysia** (External Examiner)	Experimental and Simulation Study of Low Frequency Synthetic Jet Cooling Performance	2017
4.	Ziad Abdul Awal **Universiti Teknologi Malaysia (UTM)** (External Examiner)	The Effects of Idiosyncratic Gust Wind on Helicopter Main Rotor Air Flow Physiognomies	2017
5.	Radhwan Ali Abd Alreda **Universiti Putra Malaysia (UPM)** (Internal Examiner)	Numerical Simulation on the Effect of Mixing the LPG, Hydrogen and Diesel Fuel on the Combustion Characteristic and emission Levels in a Diesel Engine	2017
6.	Sadeq Rashid Nfawa **Universiti Putra Malaysia (UPM)** (Internal Examiner)	Heat Transfer Enhancement of Nanofluids in a Double Pipe Heat Exchanger with Rod Inserts	2016
7.	Ong Seong Shin **Multimedia University (MMU)** (External Examiner)	Flameless Oxidation in Toroidal Combustion Chamber for Reduced Nitrogen Oxide Formation	2016
8.	Wan Muhammad Syahmi Wan Fauzi **Universiti Teknologi MARA (UiTM)** (External Examiner)	Human Machine Environment Interface Element for Dynamic Motorcycle Test Rig	2015
9.	Nurnida Elmira Othman **Universiti Teknologi MARA (UiTM)** (External Examiner)	Design and Development of a Mouth Spacer for Dental Surgery Applications	2014
10.	Fauzi Hussin **Universiti Sains Malaysia (USM)** (External Examiner – reviva)	An Experimental Study of Oscillating Sub-Boundary Layer Vortex Generators Application on A Wing's Flap (re-viva)	2014
11.	Nazmi Che Ismail **Universiti Sains Malaysia (USM)** (External Examiner)	Numerical and Experimental Study on Single Bubble Rising Behaviour with and without Heat Transfer Effect (re-viva)	2014

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No.	Name	Title	Year
12.	Fauzi Hussin **Universiti Sains Malaysia (USM)** (External Examiner)	An Experimental Study of Oscillating Sub-Boundary Layer Vortex Generators Application on A Wing's Flap	2013
13.	Nazmi Che Ismail **Universiti Sains Malaysia (USM)** (External Examiner)	Numerical and Experimental Study on Single Bubble Rising Behaviour with and without Heat Transfer Effect	2013
14.	Ting Ming Chung **Universiti Sains Malaysia (USM)** (External Examiner)	Numerical Study on Hydrodynamic Performance of USM Shallow Underwater Glider Platform	2012
15.	Sevda Ahmadian **Universiti Putra Malaysia (UPM)** (Internal Examiner)	Pulse Jet Investigation	2012
16.	Mohd. Fairuz Zakaria **Universiti Sains Malaysia (USM)** (External Examiner)	3D Numerical Simulation on Aerodynamic Performance of Flapping Using Skin Flexibility	2012
17.	Khairul Ikhsan Yahaya **Universiti Sains Malaysia (USM)** (External Examiner)	Conceptual Design of Small UAV, School of Mechanical and Aerospace Engineering	2011
18.	Amir Aziz **Universiti Teknologi Malaysia (UTM)** (External Examiner)	Solid Propellant Propulsion	2011
19.	Nur Farahain Zulkefli **Universiti Sains Malaysia (USM)** (External Examiner)	A Numerical Study of Oscillating Sub-Boundary Layer Vortex Generators (SBUG) Application on a Wing's Flap	2011
20.	Aydin Khiabani **Universiti Putra Malaysia (UPM)** (Internal Examiner)	Design of Portable Shell and Tube Heat Exchanger for Solar Powered Water Distiller	2010
21.	Mahmod Abd. Hakim **Universiti Putra Malaysia (UPM)** (Internal Examiner – reviva)	One-Dimensional Higher-Order Compact Method Based on Advection Upstream Splitting Method (AUSM) Scheme for Solving Euler's Equations (re-viva)	2010
22.	Zuliana Ismail **Universiti Putra Malaysia (UPM)** (Chairman)	Attitude Control of Small Satellites with Reaction Wheels	2009
23.	Abolfazl Sousanabadi Farahani **Universiti Putra Malaysia (UPM)** (Internal Examiner)	Simulation of Airflow and Aerodynamic Forces Acting on a Commercial Turbine Ventilator	2009
24.	Ali Mohamed Wahdad **Universiti Putra Malaysia (UPM)** (Internal Examiner)	Effects of Selected Shading Devices on Office Room Temperature Distribution	2008
25.	Mahmod Abd. Hakim **Universiti Putra Malaysia (UPM)** (Internal Examiner)	One-Dimensional High Order Compact Method Based on AUSM Scheme for Solving Euler Equations	2008
26.	NoorFaizal Yidris **Universiti Putra Malaysia (UPM)** (Internal Examiner)	Analytical Crush Simulations of a Composite UAV Fuselage Section and Experimental Correlation	2007
27.	Siavash Talebi Taher **Universiti Putra Malaysia (UPM)** (Internal Examiner)	A New Composite Energy-Absorbing System for Aircraft and Helicopters Sub-Floor	2005
28.	Azizuddin Abd Aziz **Universiti Putra Malaysia (UPM)** (Internal Examiner)	Comparison between Unitary and Central Cooling system at Faculty of Engineering	2005

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No.	**Name**	**Title**	**Year**
29.	Hakim Samawi Sultan Al-Jibori **Universiti Putra Malaysia (UPM)** (Internal Examiner)	Towards an Optimum Composite Energy Absorption System	2004
30.	Saeed Eslamian **Universiti Putra Malaysia (UPM)** (Internal Examiner)	Fretting Fatigue Crack Nucleation of 5083-H321 Aluminium Alloy	2004

INTELLECTUAL PROPERTY

Patent Granted

1. **2018**, Oct 16. Malaysia Patent Granted no. MY-168256-A, Non-penetrative blood container and apparatus for vacuuming the same. **A.R Abu Talib**, M.S Yahaya, U.N.N Abdullah, S.A Adam, M.N Abdul Rahman.
2. **2018**, Sept 4. Malaysia Patent Granted no. MY-167522-A, Safety Syringe. **A.R Abu Talib**, A.A Basri, S.Z Mohd Zabidi, M.S Yahaya, K. Mat Isa.
3. **2017**, July 31. Malaysia Patent Granted no. MY-163006-A, A System to Administer an Outcome Based Education, M.S Jaafar, M.J. Megat Mohd Noor, **A.R. Abu Talib**, R. Wagiran, A. Abdul Aziz, N.K Noordin, M.F Abdul Rashid and M.I Saripan.
4. **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.
5. **2016**, Sept 2. Japan Patent Granted no. JP5995844, A System to Administer an Outcome Based Education, M.S Jaafar, M.J. Megat Mohd Noor, **A.R. Abu Talib**, R. Wagiran, A. Abdul Aziz, N.K Noordin, M.F Abdul Rashid and M.I Saripan.
6. **2015**, Feb 10. US Patent Granted no. US8950617 B2. Non-penetrative blood container and apparatus for vacuuming the same. **A.R Abu Talib**, M.S Yahaya, U.N.N Abdullah, S.A Adam, M.N Abdul Rahman.

Patent Filed

1. R. Ibrahim, M.A Ahmad, M.J Suleiman, N. Johari, **A.R Abu Talib**, (**2013**), Injection Molding using a Novel Binder System Based on Palm Oil Derivatives, Patent Pending MyIPO PI2013004110.
2. **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.
3. M.S Jaafar, M.J. Megat Mohd Noor, **A.R. Abu Talib**, R. Wagiran, A. Abdul Aziz, N.K Noordin, M.F Abdul Rashid and M.I Saripan (**2010**) A System to Administer an Outcome Based Education, Patent Pending, MyIPO PI2010003169, PCT India/Australia/US/Japan.
4. **A.R Abu Talib**, M.S Yahaya, U.N.N Abdullah, S.A Adam, M.N Abdul Rahman, Non-Penetrative Blood Container and Apparatus for Vacuuming the Same (**2010**), Patent Pending, MyIPO UI2010700039, Australia Patent: 2012204049, US Patent: 13547304.

Copyright and Trademark

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2. M.S Jaafar, M.J. Megat Mohd Noor, **A.R. Abu Talib**, R. Wagiran, A. Abdul Aziz, N.K Noordin, M.F Abdul Rashid and M.I Saripan (**2010**) A System to Administer an Outcome Based Education, TradeMark 2010022839 and Copyright SD.

COMMERCIALIZED PRODUCTS

1. Vacuum Blood Container, SJ-VacTube (**2016**) IP was sold to SeliaTek Industries Sdn. Bhd.
2. Multi-purpose Safety Syringe (**2016**) IP was sold to SeliaTek Industries Sdn. Bhd.
3. Outcome Based Education Management System, MyOBE (**2010**) IP was licensed to MIQEduSys Sdn Bhd and was sold to UniSEL, UPNM, UiTM Faculty of Mechanical Engineering, GMI, King Saud University, and Department of Politechnics Education, Ministry of Higher Education.