

CURRICULUM VITAE



Associate Professor Dr. Siti Ujila Masuri
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Education

1. Ph. D Mechanical Engineering, 2012, University of Canterbury. NZ
2. M. Sc. Mechanical Engineering, 2007, University of Minnesota, USA
3. B. Sc. Mechanical Engineering, 2006, University of Minnesota, USA

Areas of Interest

1. Fluid Engineering, Flow Assurance, Oilfield Scaling, Pipeline Pigging, Comp Fluid Dynamics
2. Thermal Engineering, Solar Energy, Solar Photovoltaic Cooling, Heat Exchanger

Professional Qualification/ Membership/ Affiliation

1. Graduate Member, (no. 83857A) Board of Engineers Malaysia (BEM)
2. Member, (no. 20190517001) Science and Engineering Institute (SCIEI)

Appointments

Position	Duration
1. Editorial Board Member, Fluid Dynamics and Materials Processing	August 2019-August 2021
2. Associate Professor, Dept. of Mechanical and Manufacturing Engineering, UPM	June 2019 to date
3. Head, Thermo-fluid Research Working Group (RWG)	December 2018 to date
4. Secretary, Empowering Engineers Volunteers (E2Vs)	June 2018 - May 2019
5. Publicity and Promotion Committee, Engineering Education Interest Group (E2IG)	February 2018 to date
6. Student Affairs Coordinator for Mechanical Engineering Program	January 2018 to date
7. Head, Fluid Mechanics Laboratory	2013 to date
8. Senior Lecturer, Dept. of Mechanical and Manufacturing Engineering, UPM	December 2012 – May 2019
9. Tutor, Dept. of Mechanical and Manufacturing Engineering, UPM	July 2006– December 2012
10. Tutor, University of Minnesota, USA	2003-2007

Publications

Journals

1. Hassan Sadah Muhssen, **Siti Ujila Masuri**, Barkawi Sahari, Abdul Aziz Hairuddin. Computational Fluid Dynamics Investigation of Air-Gas Pre Mixing Controller Mixer Designed for CNG-Diesel Dual-Fuel Engines. CFD Letters. 11 (6). 47-62. 2019. (SCOPUS)
2. Mahmood, H.A., Adam, N.M., Sahari, B.B., **Masuri, S.U.**, Ahmed, H.E. An investigation of air-gas mixer types designed for dual fuel engines: Review. Journal of Engineering and Applied Sciences. 14 (4). 1014-1033. 2019. (SCOPUS)
3. Ong Yong Wei, **Siti Ujila Masuri**. Computational Fluid Dynamics Analysis on Single Leak and Double Leaks Subsea Pipeline Leakage. CFD Letters. 11(2). 95-107. 2019. (SCOPUS)
4. Mahmood, H. A., Adam, N. M., Sahari, B. B., and **Masuri, S. U.** Development of a particle swarm optimisation model for estimating the homogeneity of a mixture inside a newly designed CNG-H

- 2-AIR mixer for a dual fuel engine: An experimental and theoretic study. *Fuel*. 217(13). 131-150. 2018. (JCR IF=4.908 Q1)
5. Mahmood, H. A., Adam, N. M., Sahari, B. B., and **Masuri, S. U.** New Design of a CNG-H₂-Air Mixer for Internal Combustion Engines: An Experimental and Numerical Study. *Energies*. 10(9). 1373. 2017. (JCR IF=2.676 Q2)
6. Mahmood, H. A., Adam, N. M., Sahari, B. B., and **Masuri, S. U.** Design of compressed natural gas-air mixer for dual fuel engine using three-dimensional computational fluid dynamics modeling. *Journal of Computational and Theoretical Nanoscience*. 14(7). 3125-3142. 2017. (IF=1.109 Q3)
7. Asim M.T.M., Ibrahim T.M.F.T., Adam N.M., **Masuri S.U.** Strategic energy management plan and MS ISO 50001:2011 compliance, *Journal of Mechanical Engineering*, Vol SI 2 (2), 1-25, 2017 (SCOPUS)
8. Mahmood, H.A., Adam, N.M., Sahari, B.B., **Masuri, S.U.** Investigation on the air-gas characteristics of air-gas mixer designed for bi-engines, *International Journal of Applied Engineering Research*. 11(12). 7786-7794. 2016. (SCOPUS)
9. Mahmood, H.A., Adam, N.M., Sahari, B.B., **Masuri, S.U.** Investigation on the air-gas characteristics of air-gas mixer designed for dual- fuel engines, *International Journal of Control Theory and Applications*. 9(30). 195-216. 2016. (SCOPUS)
10. K K Tamma, **S U Masuri**. A novel extension of GS4-1 time integrator to fluid dynamics type non-linear problems with illustrations to Burgers' equation, *International Journal of Numerical Methods for Heat & Fluid Flow*, 26(6). 1634-1660. 2016. (IF=2.450 Q2)
11. M. Shimada, **S. Masuri** and K. K. Tamma. A novel design of an isochronous integration [i]ntegration framework for first/second order multidisciplinary transient systems. *International Journal for Numerical Methods in Engineering*. 102 (3-4). 867–891. 2015. (IF=2.589 Q1)
12. John Kia Yu Teck, Radhiyatul Hikmah Binti Abu, **S U Masuri**. Numerical Study of Adsorption Enhancement by Nanoparticles Scale Inhibitor. *Advanced Materials Research*. 1119. 43-48. 2015. (ERA)
13. Muhamad Syukri bin Abdul Khalid, Radhiyatul Hikmah binti Abu, **S U Masuri**, Abdul Aziz bin Hairuddin. Effect of Initial Concentration and Solution Temperature on Adsorption of Calcium HEDP Scale Inhibitor. *Australian Journal of Basic and Applied Sciences*. 9(23). 376-379. 2015.
14. **Masuri S.**, Tamma K.K. The selective control feature for physically accurate solutions for all variables and application in first order transient hyperbolic systems, *CMES-Computer Modeling in Engineering and Sciences*. 106 (3). 147-168. 2015. (SCOPUS)
15. Z.N. Ismarrubie, Han Lin Goh, **S. Masuri**, Hanafiah Yussof. Bio-Mechanism Response of Mimosa Pudica against External Stimulation. *Advanced Materials Research*. 1125. 588-592. 2015. (ERA)
16. M. Shimada, **S. Masuri** & K. K. Tamma. Isochronous Explicit Time Integration Framework: Illustration to Thermal Stress Problems Involving Both First- and Second-Order Transient Systems, *Journal of Thermal Stresses*, 37:9, 1066-1079, 2014. (IF=1.852 Q2)
17. A. Adibah, O. Inayatullah, **M.S. Ujila**, A.A. Nuraini, S. Barkawi and J. Nordin, Single-Grade Engine Lubricant: Introduce Viscosity Index Numerical Order (VIno), *Applied Mechanics and Materials*. 564. 83-88. 2014. (SCOPUS)
18. **S.U. Masuri** and M. Sellier. Effects of Physicochemical Parameters on Colloidal Potentials. *Applied Mechanics and Materials*. 564. 222-227. 2014. (SCOPUS)
19. T. Abdulrazzaq, H. Togun, M. K. A. Ariffin, S. N. Kazi, A. Badarudin, N. M. Adam, and **S. Masuri**, Heat Transfer and Turbulent Fluid Flow over Vertical Double Forward-Facing Step. *International Journal of Mechanical, Aerospace, Industrial and Mechatronics Engineering*. 8 (2). 368-372. 2014.
20. T. Abdulrazzaq, H. Togun, M. K. A. Ariffin, S. N. Kazi, NM Adam, and **S. Masuri**. Numerical Simulation on Heat Transfer Enhancement in Channel by Triangular Ribs. *International Journal of Mechanical, Aerospace, Industrial and Mechatronics Engineering*. 7 (8). 122-126. 2013.
21. Tuqa Abdulrazzaq, Hussein Togun, M.K.A Ariffin, S.N. Kazi, A. Badarudin, N.M. Adam, **S. Masuri**, E. Sadeghinezhad. Enhancements Of Heat Transfer Nanofluid Flow In Circular Pipe With Twisted Tape Inserts: Review, *Australian Journal of Basic and Applied Sciences*. 7 (9). 97-102. 2013.
22. **S. Masuri**, K.K. Tamma, X. Zhou, and M. Sellier. GS4-1 Computational Framework for Heat Transfer Problems: Part 1-Linear Cases with Illustration to Thermal Shock Problem, *Numerical Heat Transfer, Part B: Fundamentals*. 62 (2-3):141-156. 2012. (IF=1.758 Q2)
23. **S. Masuri**, K.K. Tamma, X. Zhou, and M. Sellier. GS4-1 Computational Framework for Heat Transfer Problems: Part 2-Extension to Nonlinear Cases with Illustration to Radiation Heat Transfer Problem. *Numerical Heat Transfer, Part B: Fundamentals*. 62(2-3):157-180. 2012.

(IF=1.758 Q2)

24. V.M. Wheeler, **S. Masuri**, K.K. Tamma, X. Zhou, and M. Sellier. On the Applicability of an Isochronous Integration Framework for Parabolic/Hyperbolic Heat Conduction Type Problems. Numerical Heat Transfer Part A-Applications. 62(5): 372-392. 2012. (IF=2.407 Q2)
25. **S. Masuri**, M. Sellier, X. Zhou, and K.K. Tamma. Design of Order-Preserving Algorithms for Transient First-Order Systems with Controllable Numerical Dissipation. International Journal for Numerical Methods in Engineering, 88 (13). 1411 – 1448. 2011. (IF=2.589 Q1)
26. **S.U. Masuri**, A. Hoitink, X. Zhou, and K. K. Tamma. Algorithms by design: A new normalized time-weighted residual methodology and design of a family of energy–momentum conserving algorithms for non-linear structural dynamics, International Journal for Numerical Methods in Engineering, 79(9):1094–1146. 2009. (IF=2.589 Q1)
27. **S. Masuri**, A. Hoitink , X. Zhou & K. K. Tamma. Algorithms by Design: Part III—A Novel Normalized Time Weighted Residual Methodology and Design of Optimal Symplectic-Momentum Based Controllable Numerical Dissipative Algorithms for Nonlinear Structural Dynamics, International Journal for Computational Methods in Engineering Science and Mechanics, 10:1, 57-90. 2009. (SCOPUS)
28. **S. Masuri**, A. Hoitink , X. Zhou & K. K. Tamma. Algorithms by Design: Part II—A Novel Normalized Time Weighted Residual Methodology and Design of a Family of Symplectic-Momentum Conserving Algorithms for Nonlinear Structural Dynamics, International Journal for Computational Methods in Engineering Science and Mechanics, 10:1, 27-56, 2009. (SCOPUS)
29. A. Hoitink, **S. Masuri**, X. Zhou, and K. K. Tamma. Algorithms by Design: Part I—On the Hidden Point Collocation Within LMS Methods and Implications for Nonlinear Dynamics Applications. International Journal for Computational Methods in Engineering Science and Mechanics, 9 (6):383–407, 2008. (SCOPUS)

Conference Proceedings/Abstract

1. Ishana Nasuha Ihsham Shah Chandran Abdullah, **Siti Ujila Masuri** and Dong-Won Jung, Design of Solar Collectors for Medium Temperature Applications, 2nd International Conference on Metal Material Processes and Manufacturing 2019 (2nd ICMMPM2019), July 30-31, 2019, Jeju Island, South Korea.
2. O. Yong Wei and **S. U. Masuri**, Computational Fluid Dynamics Analysis on Single Leak and Double Leaks Subsea Pipeline Leakage, 2nd International Symposium on Fluid Mechanics and Thermal Sciences (2nd IS-FMTS 2018), 1st December 2018, Malaysia-Japan International Institute of Technology (MJIT), Universiti Teknologi Malaysia Kuala Lumpur.
3. L Kaniappan, R H Abu, and **S U Masuri**, Synthesis and characterization of nano Ca-DTPMP, nano Si-Zn-DTPMP, and nano Si-Ca-DTPMP scale inhibitors, Emerging Technologies in Mechanical Engineering 2018, August 19 - 22, 2018 / Ramada Plaza Jeju Hotel, Jeju, Korea.
4. Fatin Najihah Mat Ali, **Siti Ujila Masuri** and Azmah Hanim Mohamed Ariff, Synthesis of Nano Calcium Diethylenetriaminepenta (nano-Ca-DTPMP) Scale Inhibitor and Characterization against Ca-DTPMP counterpart and commercial DTPMP, Symposium and workshop on materials and characterization 2018, 24th-25th July 2018, Faculty of Engineering, UPM.
5. **S U Masuri**. Effect of Temperature on Adsorption of Nano Ca-DTPMP Scale Inhibitor. ICAMAME 2015: 17th International Conference on Aerospace, Mechanical, Automotive and Materials Engineering. London. 27-28 November 2015.
6. John Kia Yu Teck, Radhiyatul Hikmah Binti Abu, **Siti Ujila Binti Masuri**, Numerical study of adsorption enhancement by nanoparticles scale inhibitor, The 3rd International Conference on Nanostructures, Nanomaterials and Nanoengineering (ICNNN 2014), December 26-28, 2014, Hong Kong
7. Muhamad Syukri bin Abdul Khalid, Radhiyatul Hikmah binti Abu, **Siti Ujila binti Masuri** and Abdul Aziz bin Hairuddin, Effect of Initial Concentration and Solution Temperature on Adsorption of Calcium-HEDP Scale Inhibitor, International Conference on Material, Mechatronics, Manufacturing and Mechanical Engineering 2014, 24-25 October 2014, Kuching, Malaysia.
8. **S. Masuri** and M. Sellier. Effects of Physicochemical Parameters on Colloidal Potentials. International Conference on Advances in Mechanical and Manufacturing Engineering (ICAM2E 2013), Kuala Lumpur, 25-27 November 2013

9. **S. Masuri**, K. Brown, and M. Sellier. Numerical Studies of Silica Colloids Deposition: Effects of Flow and Physicochemical Parameters on Rate of Deposition. US-NZ Joint Geothermal Workshop 2012, Rotoroa, New Zealand, 16-20 April, 2012.
10. **S. Masuri**, M. Sellier, K. Brown, and M. Rock. Numerical Model of Silica Colloids Deposition. 2011 Biennial New Zealand Geochemical & Mineralogical Society (NZGeMS) and 4th meeting of the Stable Isotope Network for New Zealand (SINNz) Joint Conference, Christchurch, New Zealand, 16-18 November 2011.
11. **S. Masuri**, and M. Sellier. Solving time-dependent engineering problems: GS4-1, a new solver for first order system with optimal properties. 1st National Postgraduate Research Conference (1NPRC), Dunedin, New Zealand, 1 July 2011.
12. **S. U. Masuri**, V. Wheeler, M. Sellier, X. Zhou, and K.K. Tamma. A Unified Order Preserving Framework for Integrating First/Second Order Parabolic/Hyperbolic Systems. 11th US National Congress on Computational Mechanics (USNCCM11), Minneapolis, USA, 25-29 July 2011.
13. **S.U. Masuri**, M. Sellier, X. Zhou, and K.K. Tamma. GS4-1, a new timeintegrator with selective control of high frequency damping for integrating first order transient systems, 16th International Conference on Finite Elements in Flow Problems (FEF2011), Munich, Germany, 23-25 March 2011.
14. **Masuri S.**, Hoitink A., Zhou X., Tamma K.K. Algorithms by design: A novel normalized time weighted residual approach and design of a family of energy-momentum conserving algorithms for nonlinear structural dynamics, AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics and Materials Conference, 2008.
15. **Masuri S.**, Hoitink A., Zhou X., Tamma K.K. On the precise evaluation of acceleration computations for general structural dynamic applications: Issues and noteworthy perspectives, AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics and Materials Conference, 2008.

Books

1. Fatin Najihah Mat Ali and **Siti Ujila Masuri**. Nanotechnology: The effect of scaling inhibitors on mineral surface. Mauritius. LAP LAMBERT Academic Publishing. 2019.

Chapter in Books

1. F. N. Mat Ali, L. Kaniappan, **S. U. Masuri**, and M. A. Azmah Hanim. Adsorption of Nano Calcium Diethylenetriamine Pentamethylene Phosphonate (nano-Ca-DTPMP) Scale Inhibitor against Ca-DTPMP and Commercial DTPMP. *Case Study on Material Engineering and Applied Sciences: UPM and KU 2019*. Universiti Putra Malaysia and Kirikkale University. 284-297. 2019
2. F. N. Mat Ali, **S. U. Masuri**, and M. A. Azmah Hanim. Synthesis of Nano Calcium Diethylenetriaminepenta (nanoCa-DTPMP) Scale Inhibitor and Characterization against Ca-DTPMP counterpart and commercial DTPMP. *Basic Methodology: Sample Preparation and Characterization*. Universiti Putra Malaysia and CLMO Technology. 93-96. 2018
3. **S. U. Masuri** and K. K. Tamma. Application of GS4-1 Time Integration Framework to Linear Heat Transfer: Transient Heat Conduction. *Encyl. Thermal Stresses*. Springer Publishers. 1:181-191, 2014
4. **S. U. Masuri** and K. K. Tamma. Application of GS4-1 Time Integration Framework to Nonlinear Heat Transfer Transfer: Heat Conduction in Medium with Temperature Dependent Velocity. *Encyl. Thermal Stresses*. Springer Publishers. 1:191-206, 2014
5. **S. U. Masuri** and K. K. Tamma. Application of Isochronous Integration Framework to Dynamic Thermoelasticity. *Encyl. Thermal Stresses*. Springer Publishers. 1:206-216, 2014

Patents

1. Secondary Fuel-Air Mixer For Internal Combustion Engine And Fuel Burner, Universiti Putra Malaysia (PI2016703422)
2. Computer-Implemented Method for Performing Simulation, University of Minnesota (US 2015/0025859 A1)

Research Grants

No	Project Title	Amount (RM)	Year	Source of Fund
1.	Simulation of Bypass PIG (Industrial grant, Project Leader)	44,100	2019-2021	Eureka Efektif Sdn Bhd
2.	Conceptual design and Design Sustainability, Finite Element analysis and Optimization of hybrid glass/sugar palm fibre reinforced polyurethane composite automotive anti-roll bar (Member)	241,400	2015-2016	Putra Grant
3.	Establishing retention mechanisms of synthesized Metal-Phosphonate nanoparticles as scaling inhibitors through static compatibility and coupled adsorption/precipitation experiments (Project Leader)	78,000	2013-2016	FRGS
4.	Modelling Underlying Mechanism Governing Retention Process of Synthesized Metal-Phosphonate Nanoparticles as Scaling Inhibitors (Project Leader)	50,000	2013-2016	Putra Grant
5.	Mimosa Pudica Plant Biomechanism Sensing Principles (Member)	148,000	2013-2015	FRGS
6.	Develop the Numerical Method and Relationship Between Use Age, Temperature and Viscosity for Fully Synthetic Bi-Fuel Engine Oil (Project Leader)	15,000	2013-2015	Putra Grant
7.	Numerical Study of Geothermal Silica Scaling (Postgraduate researcher)	112,500 (NZD 45,000)	2009-2012	Mighty River Power (NZ company)

Awards

No	Name of awards/Title	Award Authority	Year
1.	Recipient of full financial support from Japan International Cooperation Agency (JICA) through JICA Project Office for AUN/SEED-Net for invitation in International Conference on Renewable Energy Research & Challenge (ICoRER) 2019 & The 12 th Regional Conference on Energy Engineering (RCEnE) 2019	International (Japan International Cooperation Agency (JICA) through JICA Project Office for AUN/SEED-Net)	2019
2.	Best Paper Award, 2nd International Conference on Metal Material Processes and Manufacturing 2019 (2nd ICMMPM2019)	International (ICMMPM2019 Organizing Committee)	2019
3.	Gold Medal STEM Teaching Innovation Award, Malaysia Technology Expo 2019 (MTE 2019)	National (National STEM Movement)	2019
4.	Gold Medal, Pertandingan Rekacipta Inovasi Nasional-Kejuruteraan dan Alam Bina (PRIN-KAB)	National (UKM and JPNSelangor)	2019
5.	High Impact JINM Award (Community)	UPM	2019
6.	Eureka Efektif Excellence Award for Best Final Year Project, Ishana Nasuha Bt Ihsham Shah Chandran Abdullah (supervisor)	Faculty of Engineering, UPM	2019
7.	Best Presenter (GOLD), Final Year Project of 2018/2019 (Discipline: Mechanical Engineering) Mohamad Zulhilmy Bin Mohd Ghazaly (supervisor)	Faculty of Engineering, UPM	2019
8.	Best Presenter (SILVER), Final Year Project of 2018/2019 (Discipline: Mechanical Engineering) Ishana Nasuha Bt Ihsham Shah Chandran Abdullah	Faculty of Engineering, UPM	2019

9.	(supervisor) Excellent teaching certificate	Faculty of Engineering, UPM	2018
10.	Best Presenter (SILVER), Final Year Project of 2017/2018 (Discipline: Mechanical Engineering) Ong Yong Wei (supervisor)	Faculty of Engineering, UPM	2018
11.	Best Presenter (BRONZE), Final Year Project of 2017/2018 (Discipline: Mechanical Engineering) Thum Guan Wei (supervisor)	Faculty of Engineering, UPM	2018
12.	Excellent teaching certificate	Faculty of Engineering, UPM	2017
13.	Best Final Year Project of 2015/2016, UEM Medal for Excellence in Engineering, Lingeswaran A/L Kaniappan (supervisor)	Industry (UEM Group Berhad)	2016
14.	Excellent teaching certificate	Faculty of Engineering, UPM	2016
15.	Best Presenter (GOLD), Final Year Project of 2014/2015, Zukhairi Bin Md Rahim (supervisor)	Faculty of Engineering, UPM	2015
16.	Excellent service certificate	UPM	2013
17.	Excellent service certificate	UPM	2012

Professional Services/Recognition

No	Year	Title	Position	Level
1.	2018-2022	Sponsorship for Best Student Award from Eureka Efektif Sdn Bhd, RM 1000/year for 5 years	Project Leader	Industrial
2.	2019	Journal of Advanced Research in Fluid Mechanics and Thermal Sciences	Journal Reviewer	International
3.	2019	Journal of Advances in Materials & Processing Technologies	Journal Reviewer	International
4.	2019	CFD Letters	Journal Reviewer	International
5.	2019	2nd International Conference on Metal Material Processes and Manufacturing 2019 (ICMMPM 2019)	Technical Committee	International
6.	2019	5th International Conference on Computational Methods in Engineering and Health Sciences (ICCMEH 2019)	Conference Paper Reviewer	International
7.	2019	International Conference on Advances in Mechanical and Manufacturing Engineering 2019 (ICAM2E 2019)	Mech. Eng. Technical Committee	International
8.	2019	Forum: Problem Based Learning (PBL) for Education 4.0	Moderator	National
9.	2019	Muntasser Abdulabbas Mossa	Viva Voce Chairman (Master)	University
10.	2019	Hasyuzariza Binti Muhamad Tobib	Thesis Examiner (Master)	University
11.	2019	Majlis Minggu Perkasa Putra	Committee Member	Faculty
12.	2019	Final Year Project Exhibition, Faculty of Engineering UPM 2019	Committee Member	Faculty
13.	2019	Student Mobility Programme to Yildiz Technical University, Turkey	Advisor & Accompanying Lecturer	Department
14.	2019	Zhang Mengxi (GS52805)	Master Dissertation Examiner	Department

15.	2018	The Pertanika Journal of Scholarly Research Reviews (PJSRR)	Journal Reviewer	International
16.	2018	Provide consultation to Cellstra Sdn Bhd on design and analysis of plate heat exchanger for solid oxide fuel cell	Project Leader	Industrial
17.	2018	Provide consultation to Eureka Efektif Sdn Bhd on simulation of Bypass PIG	Project Leader	Industrial
18.	2018	4th International Conference on Energy Materials and Applications (ICEMA2019)	Technical Committee	International
19.	2018	The Second International Symposium on Fluid Mechanics and Thermal Sciences (2nd IS-FMTS 2018)	Session chair	International
20.	2018	2018 3rd International Conference on Energy Materials and Applications (ICEMA2018)	Technical Committee	International
21.	2018	Mostapha Musavi (Sistan and Baluchestan University, Iran)	Co-supervisor (outside UPM)	International
22.	2018	Ruhullah Chughtai (Sistan and Baluchestan University, Iran)	Co-supervisor (outside UPM)	International
23.	2018	Pelaksanaan Program Pengukuhan STEM (Kejuruteraan) Murid Sekolah Orang Asli (STEM-MOA) bersama Islamic Relief Malaysia	Team Member (Facilitator)	National
24.	2018	Program Jelajah Minda Sains Gemilang (JMSG2018) bersama Kementerian Pendidikan Malaysia	Team Member (Facilitator)	National
25.	2018	Bootan Sherzad Qader	Thesis Examiner (Master)	University
26.	2018	Ahmad Fadzel bin Mohd Mokhtar	Master Dissertation Examiner	University
27.	2018	Majlis Penutupan Seminar Pengurusan Keselamatan dan Kesihatan Pekerjaan (OSH) 3.0	Invited Guest	University
28.	2018	Seminar Pengurusan Keselamatan dan Kesihatan Pekerjaan (OSH) 3.0	Monitoring Officer	University
29.	2018	Final Year Project Exhibition, Faculty of Engineering UPM 2018	Committee member	Faculty
30.	2018	Majlis Minggu Perkasa Putra	Committee member	Faculty
31.	2017	International Journal of Heat and Mass Transfer	Journal reviewer	International
32.	2017	Majlis Anugerah Kecemerlangan Akademik ke 43, SMK Batu Laut, Tanjung Sepat, Selangor	Invited Speaker	National
33.	2017	Program Ceramah Motivasi Nadi Aspirasi Kolej 10 2017	Invited speaker	University
34.	2015	Journal of Advances in Materials and Processing Technologies	Journal Reviewer	International
35.	2015	ICAMAME 2015: 17th International Conference on Aerospace, Mechanical, Automotive and Materials Engineering. London. 27-28 November 2015	Session chair	International
36.	2015	Postgraduate Symposium on Biocomposite Technology 2015	Judge	National
37.	2015	International Conference on Mechatronics and Mechanical Engineering (ICMME 2015)	Reviewer	International
38.	2015	The 2nd International Materials, Industrial, and Manufacturing Engineering Conference (MIMEC2015)	Reviewer	International
39.	2015	Rancangan Assalamualaikum TV Al Hijrah - Panel Jemputan (Topik: Bahaya Eskalator)	Invited Speaker	National
40.	2015	Program Kamilah Juara di Sekolah Menengah Agama Majlis Agama Islam Wilayah	Invited Speaker	National

		Persekutuan, No 2 Jalan Sri Permaisuri 56000 Cheras Kuala Lumpur		
41.	2014	2014 International Conference on Mechatronics, Materials and Manufacturing	Conference Committee	International
42.	2014	International Postgraduate Network Conference Summit 2014, 17-18 Oktober 2014, Langkawi Malaysia	Technical Committee	International
43.	2014	Postgraduate Symposium on Composites Science and Technology 2014 & 4th Postgraduate Seminar on Natural Fibre Composites 2014	Advisory Committee	National
44.	2014	Starting School Course	Speaker	University
45.	2013	Applied Mechanics And Materials	Journal Reviewer	International
46.	2013	ASEAN Engineering Journal	Journal Reviewer	International
47.	2013	International Conference on Advances in Mechanical and Manufacturing Engineering 2013 (ICAM2E 2013)	Session chair	International
48.	2013	International Conference on Advances in Mechanical and Manufacturing 2013 (ICAMM 2013)	Thermofluid and Energy Technical Committee	International
49.	2013	AUN/SEED-Net Regional Conference on Mechanical and Manufacturing Engineering (RCMME 2013)	Reviewer	International
50.	2013	AUN/SEED-Net Regional Conference on Mechanical and Manufacturing Engineering (RCMME 2013)	Technical Committee	International

Student Supervision

PhD (Main Supervisor)

No.	Name	Title	Status
1.	Ismail Al-Masalha (GS52580)	Cooling of Solar Photovoltaic Panel for Performance Enhancement	Ongoing

PhD (Co-Supervisor)

No.	Name	Title	Status
1.	Sadeq Rashid Nfawa (GS51860)	Heat Transfer Enhancement in Corrugated Trapezoidal Channel Using Winglet Vortex Generators	Ongoing
2.	Hussein Adel Mahmood (GS39966)	Development of Smart CNG-H ₂ -Air Mixer	Graduated
3.	Tuqa Abdul Razzaq Flayyih (GS32519)	Investigation of Heat Transfer Enhancement in Capillary Tube by Using Nanofluids	Graduated

MS with thesis (Main Supervisor)

No.	Name	Title	Status
1.	Md Insiat Islam Rabby (GS55006)	Numerical Simulation of Bypass PIG	Ongoing
2.	Radhiyatul Hikmah Binti Abu (GS39615)	Establishing Mechanism Of Synthesized Ca-DTPMP Nanoparticles As Scaling Inhibitors Through Static Compatibility And Coupled Adsorption/Precipitation Experiment.	Ongoing
3.	Sadeq Rashid Nfawa (GS41171)	Effect of Rod Insert and Nanofluid on Heat Transfer Enhancement and Pressure Drop in Double Pipe Heat Exchanger	Graduated
4.	Hassan Sadah Muhssen (GS39557)	Numerical Simulation of Mixing Characteristics of CNG-Air-Mixer for Dual-Fuel Vehicle	Graduated

MS with thesis (Co-Supervisor) (Outside UPM)

No.	Name	Title	Status
1.	Mostapha Musavi (Sistan and Baluchestan University, Iran)	Fabrication and application of phase change material nanocomposites using graphene and SiO ₂ nanoparticles as thermal energy storage systems and temperature control in the intelligent buildings	Ongoing
2.	Ruhullah Chughtai (Sistan and Baluchestan University, Iran)	Design and Fabrication of Anode Electrode for the Improvement of Fuel Cell Performance	Ongoing

MS without Thesis (Main Supervisor)

No.	Name	Title	Status
1.	Deva Kumar A/L Ramu	Energy management: compressed air system	Ongoing
2.	Ibrahim Ghanim	Impact of information and communication technology on teaching and learning process (UPM as a case study)	Ongoing
3.	Lingeswaran Kaniappan	Efficiency improvement of solar panel's power output by using water based cooling system	Graduated
4.	Mohammadmehdi Avazpour	Efficiency improvement of solar panel's power output by using phase change material (misai kucing plants)	Graduated
5.	Parvathy Babu	Employee Participation in Organisational Commitment in the Manufacturing Industry in Malaysia	Graduated

Undergraduate Final Year Project (Main Supervisor)

No.	Name	Title	Status
1	Mohamed Gamal Ahmed Elsherbini (2019/2020)	Suitable energy efficiency measures for building energy consumption reduction	Ongoing
2	Umairatul Afifah Md Nazri (2019/2020)	Computational fluid dynamics analysis on cooling walls for eco-friendly house	Ongoing
3	Mohamad Zulhilmy Bin Mohd Ghazaly (2018/2019)	Computational fluid dynamics analysis on thermo hydraulic performance parameter of solar air heater	Graduated
4	Ishana Nasuha Bt Ihsham Shah Chandran Abdullah (2018/2019)	Improved thermal efficiency & levelized cost of heat of solar collectors for medium temperature applications by using ansys simulation software	Graduated
5	Ong Yong Wei (2017/2018)	Computational Fluid Dynamics Based on Single Leak and Double Leaks Pipeline Leakage	Graduated
6	Thum Guan Wei (2017/2018)	Numerical simulation of crystallization fouling of calcium carbonate in heat exchanger	Graduated
7	Elbara Mohamed (2016/2017)	Evaluation and optimization of the existing artificial fish lures through design and simulation	Graduated
8	Fatin Najihah Mat Ali (2015/2016)	Effect of particle size of different scaling inhibitors on the adsorption performance through static adsorption test	Graduated
9	Lingeswaran A/L Kaniappan (2015/2016)	Adsorption of nano Ca –DTPMP, nano Si-Zn-DTPMP, and nano Si-Ca-DTPMP scale inhibitors for oil and gas application	Graduated

No.	Name	Title	Status
10	Muhammad Syazwan Bin Sulaiman (2014/2015)	Numerical study of oilfield scaling and fabrication of nano-Ca-DTPMP scale inhibitor	Graduated
11	Zukhairi Bin Md Rahim (2014/2015)	Experimental Study of Nano-Ca-DTPMP Scale Inhibitor For Oil & Gas Application	Graduated
12	John Kia Yu Teck (2013/2014)	Potential application of nanotechnology in oilfield scaling mitigation	Graduated
13	Muhamad Syukri Bin Abdul Khalid (2013/2014)	The effect of scale inhibitor concentration changes on its adsorption	Graduated
14	Mohd Edman Bin Mohd Suleiman (2012/2013)	Study of Barium Sulfate scale deposition in petroleum industry	Graduated
15	Muhammad Khairul Anuar Bin Salim (2012/2013)	Study of of Calcium Carbonate scale deposition in petroleum industry	Graduated