

## CURRICULUM VITAE



### **Professor Ir. Dr. Hasfalina Che Man**

Department of Biological and Agricultural Engineering, Faculty of Engineering,  
Universiti Putra Malaysia  
43400 UPM, Serdang MALAYSIA

T: +603-97694340 / +6019-7527476  
E-mail: hasfalina@upm.edu.my F: +603- 97696425

PhD. Civil Engineering and Geosciences, 2006, University of Newcastle upon Tyne, U.K.  
Bachelor of Chemical and Process Engineering, 1999, National University of Malaysia (UKM).

**Field of research/Specialization:** Bio-environmental Engineering, Environmental Engineering, Wastewater Treatment, Agricultural Waste Engineering.

### Professional Qualification/ Membership/ Affiliation

1. Profesional Engineer, Board of Engineers Malaysia (BEM) (Branch of Engineering: Chemical, Registration Number P121418). (Dec. 2020-Dec.2021).
2. Honorary Secretary, Malaysian Society Agricultural Engineering (MSAE) 2013- 2017
3. Vice President (Admin), MSAE 2017-2019
4. Vice President (Technical) MSAE 2019-2021 (Membership Number: P1087)
5. Member, ICCheme, Institution of Chemical Engineers. Since 2011 ((Membership Number: 99949523)
6. Chartered Member (CEng) of ICCheme. 8<sup>th</sup> July 2019. Registrant Number : 666135
7. Graduate Member, The Institution of Engineers, Malaysia (IEM). Since 2011 (Membership Number:45851)
8. Graduate Member, Board of Engineers Malaysia (BEM). Since 2011 ((Membership Number: GE70309R)
9. Member, mySET : Malaysian Society for Engineering and Technology. Since 2010
10. Member, Malaysian Water Association. Since 2010
11. Profesional Member, American Society of Agricultural and Biological Engineers. Since 2008
12. Member and Auditor, Biochar Association of Malaysia. Since 2018
13. Member of UPM Cooperative (Koperasi UPM). Since 2018 (Membership Number:3427)
14. Member of Association of Academic Staff UPM (PPAUPM) (Membership Number:A03048/14-389)
15. Member of the International Water Association (IWA)(Membership Number: 1617640)

### Appointments

Position	Duration
1. Deputy Director of International Office UPM	15 <sup>th</sup> February 2020- Feb. 2023
2. Committee Member of Supervisory and Examiners Postgraduate, UPM (JKPPPTP Universiti)	Jan 2019 - Jan 2022
3. Postgraduate Coordinator, Department of Biological and Agricultural Engineering, Faculty of Engineering, UPM	September 2015 to 2017 June. 2017-June. 2020
3. Supervisor to a Postdoc (Dr Nadavala Siva Kumar), Faculty of Engineering, UPM	August 2013- August 2014
4. Coordinator of Occupational, Safety and Health, Faculty of Engineering UPM	2011- 2014
5. Technical Committee Immersion Programme, Faculty of Engineering UPM	January 2013– January 2014
6. Head of Environmental Biosystem Lab, Department of	February 2010 to Feb.2020



7.	Coordinator of Industry and Community Relations, Department of Biological and Agricultural Engineering, Faculty of Engineering, UPM	January 2010– January 2014
8.	Postgraduate Coordinator Department of Biological and Agricultural Engineering, Faculty of Engineering, UPM	2009- 2011
9.	Practical Training Coordinator Semester II 2009/2010 Department of Biological and Agricultural Engineering, Faculty of Engineering, UPM	2009- 2010
10.	Head of Postgraduate with Thesis (Agricultural Waste Engineering), Department of Biological and Agricultural Engineering, Faculty of Engineering, UPM	August 2007 to February 2020
11.	Head of Academic (Bioprocess & Environmental)	August 2007- August 2009
12.	Technical Committee for Emergency Response Planning (ERP), Department of Biological and Agricultural Engineering, Faculty of Engineering, UPM	2006- 2008
13.	Coordinator of Final Year Project (KBP 3919 B) for Undergraduate Students 2005/2006	2005- 2008
14.	Senior Lecturer (DS52), Department of Biological and Agricultural Engineering, Faculty of Engineering UPM	1 January 2009-2012
15.	Associate Professor (DS54), Department of Biological and Agricultural Engineering, Faculty of Engineering UPM	1 August 2012 to date
16.	Co-Researcher at Smart Farming Technology Research Centre, Faculty of Engineering, UPM	Jan.2016-Jan.2020

## Publications

### Journals

1. Kamil Kayode Katibi, Khairul Faezah Yunos, **Hasfalina Che Man**, Ahmad Zaharin Aris, Mohd Zuhair Mohd Nor and Rabaah Syahidah Azis (2021) Recent Advances in the Rejection of Endocrine-Disrupting Compounds from Water Using Membrane and Membrane Bioreactor Technologies: A Review. *Polymers*, 13 (3), pp. 1-52, 392. <https://doi.org/10.3390/polym13030392>. Q1
2. Mohammed Umar Abba, **Hasfalina Che Man**, Raba'ah Syahidah Azis ,Aida Isma Idris , Muhammad Hazwan Hamzah , Khairul Faezah Yunos , Kamil Kayode Katibi (2021) Novel PVDF-PVP Hollow Fibre Membrane Augmented with TiO<sub>2</sub> Nanoparticles: Preparation, Characterization and Application for Copper Removal from Leachate. *Nanomaterials*. 11 (2), pp. 1-18,399. Q1
3. Jia Boh Tan, Nur Syakina Jamali , Wei En Tan, **Hasfalina Che Man**, Zurina Zainal Abidin (2021) Techno-economic assessment of on-farm anaerobic digestion system mobilize on attached-biofilm reactor in Dairy Industry. *Sustainability*. 13(4), pp.1-15. Q1
4. Mohammed Umar Abba, **Hasfalina Che Man**, Aida Isma Idris, Muhammad Hamzah, Mohammed Abdulsalam, Raba'ah Syahidah Azis (2021) Synthesis of Nano-Magnetite from Industrial Mill chips for the Application of Boron Removal: Characterization and Adsorption Efficacy. *International Journal of Environmental Research and Public Health*. 18(4),pp.1-18, 1400. Q1

5. Ong, T.H., Hamzah, M.H., **Che Man, H.** (2021) Optimization of palm oil extraction from decanter cake using Soxhlet extraction and effects of microwaves pre-treatment on extraction yield and physicochemical properties of palm oil. Food Research 5 (Suppl.1) 25-32. Scopus.
6. **Hasfalina, C.M.**, Norshafiqah, K.A., Muhammad Hazwan, H., Syazwani, I., Nik Norsyahariati, N.D. (2021) The Potential Use of Decanter Cake Waste for Methane Production Under Mesophilic Condition. Journal of Engineering Science and Technology. Volume 16, Issue 3 (2021) 2356-2367, Scopus
7. Anjiofor Sandra, C., **Hasfalina, C.M.**, Norsyahariati, N.D. (2020) Molecular Diversity and Compositional Analysis of Microbiota in Aged Refuse Revealed by Amplicon Sequencing. Basrah Journal of Agricultural Sciences. Vol.3, 135. ISSN 1814-5868. Scopus
8. Nur Asyikin Ahmad Nazri, Raba'ah Syahidah Azis, Muhammad Syazwan Mustaffa, Abdul Halim Shaari, Ismayadi Ismail, **Hasfalina Che Man** (2021) Structural, Morphological, Magnetic and Adsorption Properties of Fe<sub>3</sub>O<sub>4</sub> for Copper Removal from Aqueous Solution. Desalination and Water Treatment. 215, pp. 136-146.
9. Othman, N.F. Su, A.M. Ya'acob, M.E. **Man, H.C.** Iskandar, N. (2020) Micro climate evaluation based on 6-level temperature for agrivoltaic tropical condition. AIP Conference Proceedings. 2291, 00249149. Scopus.
10. Mahat, S.B. Omar, R. **Man, H.C.** Idris, A. Anuar, N.K. (2020) Influence of substrate to inoculum ratio (S/I) on the treatment performance of food processing wastewater containing high oil and grease (O&G) in batch mode. Desalination and Water Treatment. 203, pp. 267–278
11. Azman, P.N.M.A. Shamsudin, R. **Man, H.C.** Ya'acob, M.E. (2020) Some physical properties and mass modelling of pepper berries (*Piper nigrum* L.), variety kuching, at different maturity levels. Processes, 8(10), pp. 1–15, 1314, Q1
12. Azman, P.N.M.A. Shamsudin, R. **Man, H.C.** Ya'acob, M.E. (2020) Kinetics of quality changes in soaking water during the retting process of pepper berries (*Piper nigrum* L.) Processes, 8(10), pp. 1–11, 1255, Q1
13. Abdulsalam, M. **Man, H.C.** Abidin, Z.Z. Yunos, K.F. Idris, A.I. (2020) Decolorization of Palm Oil Mill Effluent by Klebsiella Pneumonia ABZ11: Remediation Efficacy and Statistical Optimization of Treatment Conditions. Frontiers in Microbiology, 11 (675), pp. 1-15. Q1
14. Nur Azizah Bachik, Norhashila Hashim, Aimrun Wayayok, **Hasfalina Che Man**, Maimunah Mohd Ali (2020) Optical Imaging Techniques for Rice Diseases Detection: A Review. Journal of Agricultural and Food Engineering .1 (2020) 0001. DOI: <http://doi.org/10.37865/jafe.2020.0001>.
15. Kenneth Ikenna, O., Rowshon, K.M., **Hasfalina, C.M.** (2020) Advances in Utilization of Wastewater in Agricultural Practice: A Technical Note. Irrigation and Drainage. Vol. 69, Issue 1, 149-163. <https://doi.org/10.1002/ird.2384>, Q3
16. Nur Asyikin Ahmad Nazri, Raba'ah Syahidah Azis, Muhammad Syazwan Mustaffa, Abdul Halim Shaari, Ismayadi Ismail, **Hasfalina Che Man**, Norlaily Mohd Saiden & Nor Hapishah Abdullah (2020) Magnetite Nanoparticels (MNPs) used as Cadmium Metal Removal from the Aqueous Solution from Mill Scales Waste Sources. Sains Malaysiana 49(4)(2020): 847-858. <http://dx.doi.org/10.17576/jsm-2020-4904-14>. Scopus.
17. Aili Hamzah, A.F., Hamzah, M.H., Ahmad Mazlan, F.N., **Hasfalina, C.M.**, Nur Syakina Jamali, Shamsul Izhar Siajam (2020) Anaerobic co-digestion of pineapple wastes with cow dung: Effect of different total solid content on bio-methane yield. Adv Agri Food Res J. 1(1): a0000109. <https://doi.org/10.36877/aafrj.a0000109>. Scopus

18. Hasfalina, C.M., Chai, Y.X., Khairul Faezah, M.Y., Abdulsalam, M., Muhammad Hazwan, H.,(2020) Optimizing Hydrogen Production from the Landfill Leachate by Electro-coagulation Technique. Journal of Agricultural and Food Engineering. 3, 0020.
19. Hameed, Y.T., Idris, A., Hussain, S.A., Abdullah, N., Che Man, H. (2020) Effect of Pre-treatment with a Tannin-based Coagulant And Flocculant On A Biofilm Bacterial Community And The Nitrification Process In A Municipal Wastewater Biofilm Treatment Unit. Journal of Environmental Chemical Engineering, 8, 103679, 2213-3437, Q1
20. Mohammed Abdulsalam, Hasfalina Che Man, Khairul Faezah Yunos, Zurina Zainal Abidin, Aida Isma M.I. and Hamzah, M.H (2020) Augmented yeast-extract and diary-waste for enhancing bio-decolourization of palm oil mill effluent using activated sludge. Journal of Water Process Engineering. 36, 101263, 1-14. Q1
21. Mohammed Abdulsalam, Hasfalina Che Man, Zurina Zainal Abidin, Khairul Faezah Yunos and Aida Isma Idris (2020) Decolourization of Palm Oil Mill Effluent by Klebsiella Pneumonia ABZ11: Remediation Efficacy and Statistical Optimization of Treatment Conditions. Frontiers in Microbiology- Microbiotechnology. Volume 11, Article 675, 1-15. Q1
22. Hasfalina Che Man, Mohammed Umar Abba, Mohammed Abdulsalam, Raba'ah Syahidah Aziz, Aida Isma Idris, Muhammad Hazwan Hamzah (2020) Utilization of Nano-TiO<sub>2</sub> as an Influential additive for complementing separation performance of a hybrid PVDF-PVP Hollow Fiber: Boron Removal from Leachate. Polymers. 12, 2511, 2-19. doi:10.3390/polym12112511. Q1
23. Hameed, Y.T., Idris, A., Hussain, S.A., Abdullah, N., Che Man, H. (2020) Decolourization-treatment with a tannin-based coagulant and flocculant on a biofilm bacterial community and the nitrification process in a municipal wastewater biofilm treatment. Journal of Environmental Chemical Engineering. Volume 8, Issue 2, 103679.Q1
24. Mohammed Abdulsalam, Hasfalina Che Man, Pei Sean Goh, Khairul Faezah Yunos, Zurina Zainal Abidin, Aida Isma M.I. and Ahmad Fauzi Ismail (2020) Permeability and Antifouling Augmentation of a Hybrid PVDF-PEG Membrane Using Nano-Magnesium Oxide as a Powerful Mediator for POME Decolorization. Polymers, 12, 549; doi:10.3390/polym12030549. Q1
25. Megat, A.A.P.N., Shamsudin, R., Che Man, H. and Ya'acob, M.E. (2020) Effect of soaking process on physical properties of mature pepper berries (*Piper nigrum* L.). Food Research 4 (Suppl. 1): 116 – 123. [https://doi.org/10.26656/fr.2017.4\(S1\).S04](https://doi.org/10.26656/fr.2017.4(S1).S04). Scopus
26. Siti Baizura Mahat, Rozita Omar, Hasfalina Che Man, Jing Ling Lee, Siti Mazlina Mustapa Kamal, Aida Isma Mohd Idris, Azni Idris (2020) Effect of Pore Size of Monofilament Woven Filter Cloth as Supporting Material for Dynamic Membrane (DM) Filtration on Performance using Aerobic Membrane Bioreactor (MBR) Technology. Asia-Pacific Journal of Chemical Engineering, pp.2-12, <https://doi.org/10.1002/apj.2453>, Q2
27. Mazhar Iqbal, Md. Rowshon Kamal, M.S.M Amin, Muhammad Yamin, Mohd Fazly M., Hasfalina Che Man, Hadi Hamaaziz Muhammed (2020) HYDRUS-1D Simulation of Nitrogen Dynamics in Rainfed Sweet Corn Production. Appl. Sci. 2020, 10(4)1219, Q2
28. Tengku Roslina Tuan Yusof, Nor'Aini Abdul Rahman, Arbakariya B. Ariff, Hasfalina Che Man (2019) Evaluation of Hydrogen and Methane Production from Co-digestion of Chicken Manure and Food Waste. Polish Journal of Environmental Studies. Vol.28, Issue 4, 1-11. Q3
29. N.S. Abd Rasid, M.N. Naim, H. Che Man, N.F. Abu Bakar, M.N. Mokhtar (2019) Evaluation of surface water treated with lotus plant; *Nelumbo nucifera*. Journal of Environmental Chemical Engineering, 7, 103048, 1- 7.Q1

30. Syazana Sulaiman, Raba'ah Syahidah Azis, Ismayadi Ismail, **Hasfalina Che Man**, Nur Asyikin Ahmad Nazri. (2019) Adsorption Potential of Magnetite Nanoparticles for Copper Removal From Aqueous Solution Int. J. of Innovative Technology and Exploring Eng. Vo. 1 (Issue 1) 5424-5429. DOI: 10.35940/ijitee.A8101.119119
31. Mohammed Ali Musa, Syazwani Idrus, **Hasfalina Che Man** and Nik Norsyahariati Nik Daud. (2019) Performance Comparison of Conventional and Modified Upflow Anaerobic Sludge Blanket (UASB) Reactors Treating High-Strength Cattle Slaughterhouse Wastewater. Water. 11, 806. doi:10.3390/w11040806
32. Khaled Shahot, Azni Idris, Rozita Omar R. Omar, **Hasfalina Che Man**, Fatihah Suja. (2019) Investigation of Activated Carbon Coating in the Adsorption Process of Methylene Blue from Aqueous Solution. Advanced Science, Engineering and Medicine. Vol. 11, pg 879-887
33. Raba'ah Syahidah Azis, Ismayadi Ismail, N.M. Saiden, **Hasfalina Che Man**, S.A. Halim, Nur Asyikin Ahmad Nazri. (2019) Equilibrium Studies and Dynamic Behaviour of Cadmium Adsorption by Magnetite Nanoparticles Extracted from Mill Scales Waste. Desalination and Water Treatment, 171, 115-131. doi: 10.5004/dwt.2019.25002
34. Pitchaya Suaisom, Patiroop Pholchan, **Hasfalina Che Man** and Pruk Aggarangsi. (2019) Optimization of Hydrothermal Conditioning Conditions for *Pennisetum purpureum* x *Pennisetum americanum* (Napier PakChong1 grass) to Produce the Press Fluid for Biogas Production. Pertanika J. Sci. & Technol. 27 (4), 109-122, e-ISSN: 2231-8526.
35. Mohammad Nazri Ebrahim, **Hasfalina Che Man**, Mohamed Azwan Mohamed Zawawi and Muhammad Hazwan Hamzah (2019) Prediction of Groundwater Contaminants from Cattle Farm using Visual MODFLOW. Pertanika J. Sci. & Technol. 27 (4)
36. Muhammad Hazwan Hamzah, Muhammad Fitri Ahmad Asri, **Hasfalina Che Man**, Abdulsalam Mohammed (2019) Prospective Application of Palm Oil Mill Boiler Ash as a Biosorbent: Effect of Microwave Irradiation and Palm Oil Mill Effluent Decolorization by Adsorption. Int. J. Environ. Res. Public Health, Volume 16, Issue 18, 3453
37. Noratiqah Masri, Faradiella Mohd Kusin, Nik Norsyahariati Nik Daud and **Hasfalina Che Man** (2019) Strength Assessment of Mining Soil Treated with Steel Slag as Liner Material for Retention Pond. Pertanika J. Sci. & Technol. 27 (4), 2305 – 2315
38. Luqman, C. A., **Hasfalina, Che Man**, Shariff, A. R. M., Emmanuel (2019) GIS Based Analysis of Plastic Waste Leakage in Parts of Selangor State of Malaysia 2019 ASABE Annual International Meeting. doi:10.13031/aim.201900079. Scopus.
39. Anijiofor, S.C., Nik Daud, N.N., Idrus, S., **Che Man, H.** (2018) Recycling of fishpond wastewater by adsorption of pollutants using aged refuse as an alternative low-cost adsorbent. Sustainable Environment Research DOI: 10.1016/j.serj.2018.05.005.Issue 6, 315-321,Q3
40. Abdulsalam, M., **Man, H.C.**, Idris, A.I., Abidin, Z.Z., Yunos, K.F (2018) The pertinence of microwave irradiated coconut shell bio-sorbent for wastewater decolorization: Structural morphology and adsorption optimization using the response surface method (RSM) 15(10). *Int. J. Environ. Res. Public Health*, 15(10), 2200 DOI: 10.3390/ijerph15102200, Q2
41. Abdulsalam, M., **Man, H.C.**, Idris, A.I., Yunos, K.F., Abidin, Z.Z. (2018) Treatment of palm oil mill effluent using membrane bioreactor: Novel processes and their major drawbacks. *Water*, 10(9), 1165; <https://doi.org/10.3390/w10091165>, Q1
42. Abdulsalam, M., **Hasfalina, C.M.**, Mohamed, H.A., Abd Karim, S.F. and Faiez, M.S. (2018) Microwave irradiated coconut shell-activated carbon for decolourisation of palm oil mill effluent (POME). *Food Research*. 2 (6) 526 - 534 DOI: 10.26656/fr.2017.2(6).103, Scopus
43. Sukri, N., Hashib, S.A., Rahman, N.A., **Hasfalina, C.M.** and Abdulsalam, M (2018) Effect of maltodextrin concentration and slurry temperature on pineapple powder using ultrasonic spray dryer. *Food Research*. 2 (6) : 582 – 586; DOI: 10.26656/fr.2017.2(6).116, Scopus

44. Hameed, Y.T., Idris, A., A., Hussain, S.A., Abdullah, N., **Hasfalina, C.M.**, Suja, F. (2018) A tannin-based agent for coagulation and flocculation of municipal wastewater as a pretreatment for biofilm process. *Journal of Cleaner Production*. DOI: 10.1016/j.jenvman.2016.10.033 182,198-205, Q1
45. Musa, M., Idrus, S., **Che Man, H.**, & Nik Daud, N. (2018). Wastewater Treatment and Biogas Recovery Using Anaerobic Membrane Bioreactors (AnMBRs): Strategies and Achievements. *Energies*, 11(7), 1675; DOI: 10.3390/en11071675, Q2
46. Musa, M., Idrus, S., **Hasfalina, C.**, & Daud, N. (2018). Effect of Organic Loading Rate on Anaerobic Digestion Performance of Mesophilic (UASB) Reactor Using Cattle Slaughterhouse Wastewater as Substrate. *Int. J. Environ. Res. Public Health* 2018, 15(10), 2220; DOI: 10.3390/ijerph15102220, Q2
47. N. Khairul Anuar, **H. Che Man**, S. Idrus, N.N. Nik Daud (2018) Biochemical methane potential from anaerobic co-digestion of sewage sludge and decanter cake. IOP Conf. Series: Materials Science and Engineering, IOP Publishing for The Wood and Biofiber International Conference, 368, 012027, pg 1-8, doi:10.1088/1757-899X/368/1/012027
48. Shamshiri, R.R., Ibrahim, B., Ahmad, D., **Hasfalina, C.M.**, Wayayok, A. (2018) An overview of the system of rice intensification for paddy fields of Malaysia. *Indian Journal of Science and Technology*. Vol. 11 (18). ISSN (online) 0974-5645, Q3
49. Abdikani, A.M., Rowshon, K., Hadi, H.M., Nasehir Khan, E.M.Y., Mohamed Azwan, M.Z., **Hasfalina, C.M.**, Aimrun, W. (2018) An assessment of the vertical movement of water in a flooded paddy rice field experiment using Hydrus-1D. *Water*, 10(6), 783; <https://doi.org/10.3390/w10060783>, Q1=2.06
50. Che Hamzah, N.H., Yahya, A., **Hasfalina, C.M.**, Azhari, S.B., (2018) Effect of pretreatments on compost production from shredded oil palm empty fruit bunch with palm oil mill effluent anaerobic sludge and chicken manure. *Bioresources*. Vo1.13, No.3, pp. 4998-5012, Q1
51. M.N.A. Uda, Subash, C.B. Gopinath, **C.M. Hasfalina**, S. Faridah, S.N. Bunawan, W. Nur Sabrina, N.A. Parmin, Uda Hashim, M.N., Afnana Uda, M. Mazidah (2018) Production and purification of antibody by immunizing rabbit with rice tungro bacilliform and rice tungro spherical viruses. *Process Biochemistry*. Vol.68, pages 37-42, DOI: 10.1016/j.procbio.2018.02.019, Q1
52. Ramin Shamshiri, R., Jones, J.W., Thorp, K.R., Ahmad, D., **Hasfalina, C.M.**, Sima, T. (2018) Review of optimum temperature, humidity, and vapour pressure deficit for microclimate evaluation and control in greenhouse cultivation of tomato: a review. *Int. Agrophysics*. 32,287-302, DOI: 10.1515/intag-2017- 0005,Q2
53. Ramin Shamshiri, Wan Ishak Wan Ismail, **Hasfalina Che Man**, Desa Ahmad (2017). Membership Function Model for Defining Optimality of Vapor Pressure Deficit in Closed-field Cultivation of Tomato. II International Conference on Agricultural and Food Engineering. *Acta Horticulturae*. 281-290, DOI: 10.17660/ActaHortic.2017.1152.38, Q3
54. Bachik, N.A., Hashim, N., Wayayok, A., **Che Man, H.**, Saipin, S. (2017) The determination of nitrogen value at various reading points on rice leaf using RGB imaging. *Acta Horticulturae*. 1152, 381-386
55. N.M.L. Hanira, **C.M. Hasfalina**, M. Rashid, C.A. Luqman, A.M. Abdullah (2017) Pre-treatment of ammonia- nitrogen (NH<sub>3</sub>-N) removal from scheduled waste leachate by air stripping. *Desalination and Water Treatment*. 68, 330–337, Q2

56. R. Shamshiri, P. van Beveren, **H. Che Man**, and A. J. Zakaria (2017) Dynamic Assessment of Air Temperature for Tomato (*Lycopersicon esculentum* Mill) Cultivation in a Naturally Ventilated Net-Screen Greenhouse under Tropical Lowlands Climate. *J. Agr. Sci. Tech.* Vol.19, 59-72, Q2
57. Nurul Hanira Mat Lazim, **Hasfalina C.M.**, A. Sani, M.Rashid (2017) Pre-Treatment Ammonia Removal of scheduled waste leachate with hydrated lime and caustic soda. *Jurnal Teknologi*, Vol 79 (No.1) 107-118, DOI: 10.11113/jt.v79.7784
58. N.M.L. Hanira, **C.M. Hasfalina**, M. Rashid, C.A. Luqman, A.M. Abdullah (2017) Effect of dilution and operating parameters on ammonia removal from scheduled waste landfill leachate in a lab-scale ammonia stripping reactor. *IOP Conf. Series: Materials Science and Engineering*. 206, 012076 DOI:10.1088/1757-899X/206/1/012076
59. Ramin Shamshiri, Wan Ishak Wan Ismail, **Hasfalina Che Man**, Desa Ahmad (2017). Digital Growth Response Map for Assessment of Cooling Requirement in Greenhouse Production of Tomato. II International Conference on Agricultural and Food Engineering. *Acta Horticulturae*. DOI: 10.17660/ActaHortic.2017.1152.16, 117-124,Q3
60. R.Z. Maryam, **C.M. Hasfalina** and C.A. Luqman. (2017) Kinetic Study for Copper (II) Removal from Aqueous Solution by Adsorption onto Unmodified Kenaf Fibre. *Acta Horticulturae*. DOI 10.17660/ActaHortic.2017.1152.35, pp.257-264,Q3
61. M. N. A. Uda, **C. M. Hasfalina**, A. A. Samsuzana, S. Faridah, Rafidah A. R., U. Hashim, Shahrul A. B. Ariffin, and Subash C. B. Gopinath (2017) Determination of set potential voltages for cucumber mosaic virus detection using screen printed carbon electrode. *AIP Conference Proceedings*. 1808, 020056. DOI: 10.1063/1.4975289
62. M.N.A. Uda, **C.M. Hasfalina**, A.A. Samsuzana, S. Faridah, Zamri, Rafidah A.R, U. Hashim, Shahrul A.B Ariffin, Subash C.B. Gopinath (2017) Immunosensor development for rice tungro bacilliform virus (RTBV) detection using antibody nano-gold conjugate. *AIP Conference Proceedings*. Published by American Institute of Physics. doi: 10.1063/1.4975289 Vol. 1808, Issue 1. 11th Asian Conference on Chemical Sensor. Published by AIP Publishing. 978-0-7354-1476-1/ Scopus
63. M.N.A. Uda, **C.M. Hasfalina**, A.A. Samsuzana, S. Faridah, Zamri, Rafidah A.R, U. Hashim, Shahrul A.B Ariffin, Subash C.B. Gopinath (2017) Immunosensor development formatting for tungro disease detection using nano-gold antibody particles application .*AIP Conference Proceedings*.Published by American Institute of Physics. doi: 10.1063/1.4975289 Vol. 1808, Issue 1. 11th Asian Conference on Chemical Sensor. Published by AIP Publishing. 978-0-7354-1476-1/ Scopus
64. M.N.A. Uda, **C.M. Hasfalina**, A.A. Samsuzana, S. Faridah, Zamri, Rafidah A.R, U. Hashim, Shahrul A.B Ariffin, Subash C.B. Gopinath (2017) Determination of fixed-potential selection using chronoamperometry analysis by screen-printed carbon electrode for rice tungro bacilliform virus (RTBV) detection . *AIP Conference Proceedings*.Published by American Institute of Physics. doi: 10.1063/1.4975289 Vol. 1808, Issue 1. 11th Asian Conference on Chemical Sensor. Published by AIP Publishing. 978-0-7354-1476-1/ Scopus
65. A. A. Peter, **C. M. Hasfalina**, M.A. Soom., A.M. Thamer and C.O. Akinbile. (2017) Contaminants leaching from fresh poultry waste: A lysimeter study on sandy soils under tropical conditions. *Environment and Pollution*. Vol 6., No.1:2017. ISSN 1927-0909.
66. A. H. Nabilah Huda, M. T. Ramlah, M. I. Aida Isma, G. Siti Aisyah, A. Nor Munirah and **C.M. Hasfalina**. (2016) Polysulfone Membrane Tests For Nutrients Reclamation Of Kenaf Retted Wastewater. *Jurnal Teknologi*. 78 (1-2): 59-63, DOI: 10.11113/jt.v78.7261, Scopus
67. C. O. Akinbile,O. R. Semowo, T. E. Babalola and **C. M. Hasfalina**. (2016) Assessment of the Influence Of Continuous And Intermittent Irrigation On Greenhouse Gas Emissions From Paddy Rice. *Jurnal Teknologi*. 78 (1-2): 1-7, DOI: 10.11113/jt.v78.7252, Scopus

68. R. Shamshiri, Ahmad, D., P. van Beveren, A. J. Zakaria, **Man, H.C.**, Yamin, M. (2016) Evaluation of the reduced state-variable TOMGRO model using boundary data. 2016 American Society of Agricultural and Biological Engineers Annual International Meeting, ASABE 2016, Scopus
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44. Adeoye, Peter Aderemi, **Hasfalina, Che Man**, Mohd Amin Soom, Thamer Ahmad Mohammed and Christopher Oluwakunmi Akinbile. (2012) Poultry Waste Effects On Shallow Groundwater Quality In Selected Farms In Minna, North-Central Nigeria. Int. Conf. on Agricultural and Food Engineering, Putrajaya.
45. A. Afzali, M. Rashid, S. Rosman and **C.M. Hasfalina**. (2011) An evaluation of the air quality impact from an incinerator using air dispersion modeling: A case study of Kualiti Alam incineration plant. (2011) Proceeding: Opportunities and Challenges for Regional Cooperation in Green Engineering and Technology. Vol. 1, No.1,pp. 37-44. ISBN 978-967-5995-06-4. Published by Federation of Engineering Institutions of Islamic Countries.
46. Mohd Fauzi Jusoh, Mohamed Azwan Mohamed Zawawi, **Hasfalina Che Man**. (2011) Drawdown prediction from pumping well on shallow alluvial aquifer at paddy cultivation area (2011) Proceeding: 1st AKEPT Young Researchers Conference and Exhibition (AYRC X3 2011). 19- 20th Dec 2011. PWTC, Kuala Lumpur.Vol.1., No. 1, pp. 261-269.
47. **C.M Hasfalina**, R.Z. Maryam, C.A Luqman, M. Rashid (2009) The potential use of kenaf as the low-cost bioadsorbent. Proceedings of Agriculture Congress. Palace Golden Horses, Selangor.
48. **C.M Hasfalina**, R.Z. Maryam, C.A Luqman, M. Rashid (2009) The potential use of kenaf as biosorbent for the removal of copper and nickel from aqueous solution. Proceedings of International Conference on Kenaf and Allied Fibers 2009.
49. Mitra, M, **Hasfalina C.M**, Mohd Ali,H, Yoshihito, S., Phang L.Y. (2009) Recovery and purification of polyhydroxyalkanoates from recombinant *Ralstonia* sp. by NaOH. Proceedings of the 2nd International Conference on Bio-based Polymers. 11-13 November 2009. University Science Malaysia
50. Hishamuddin J., **Hasfalina C.M**, Norhidayah H., Faezawaty J.N.(2007) A Prototype Batch Ohmic Heating System For Small Scale Quality Food Processing. Proceedings of World Engineering Congress. 5-9 Ogos 2007. Pulau Pinang
- Book /Chapters in book**
1. **Hasfalina Che Man**. Insight into enhanced biological phosphate removal (EBPR); mechanism, process and its microbial. (2011) LAP Lambert Academic Publisher. ISBN: 978-3-8433-8104-8.
  2. Adaptive Management Framework for Evaluating and Adjusting Microclimate Parameters in Tropical Greenhouse Crop Production Systems (2017) Redmond Ramin Shamshiri, Kelly Thorp, Muhammad Razif Mahadi, Desa Ahmad, Wan Ishak Wan Ismail, **Hasfalina Che Man** and Abd.Jamil Zakaria. INTECH Publication. Book title: Plant Engineering. ISBN 978-953-51-5282-8.
  3. Treatment of scheduled waste landfill leachate: Perspective in Malaysia. **Hasfalina, C.M.**, Nurul Hanira, M.L., Aida Isma, M.I., M.Rashid, M.Y., Luqman Chuah, A., Daniel, I.O. In Nutrients, Wastewater and Leachate: Testing, Risks and Hazards. (2018) Environmental Science, Engineering and Technology Nova Science Publishers, Inc. New York. Amimul Ahsan, Editor. ISBN 978-1-53613-949-5
  4. Magnetic materials and their applications: role of magnetite nanoparticles for metal absorbents in wastewater (2018) **Hasfalina Che Man**, Ismayadi, N.M. Saiden, S.A. Halim, J. Hassan, R.S. Azis. Merging themes in fundamental and applied sciences-physics. Higher education text book. UPM Publisher. 978-967-3348135, 47-52
  5. A Disposable Biosensor Based on Antibody-Antigen Interaction for Tungro Disease Detection (2019) In book: Nanobiosensors for Biomolecular Targeting. M.N.A. Uda, **C.M. Hasfalina**, A.A. Samsuzana, S. Faridah, Subash C.B. Gopinath, N.A. Parmin, U. Hashim, Mazidah Mat. pp.147-164. Elsevier. DOI: 10.1016/B978-0-12-813900-4.00006-3

6. System of Rice Intensification for Methane Mitigation (2020) Pardis Fazli, **Hasfalina Che Man**, Mohamed Azwan Mohamed Zawawi, Abdulsalam Mohammed, pp. 58-92. In Smart Technology for paddy cultivation : The Malaysian Experience. Editors: Norhashila Hashim, Azmi Yahya, Desa Ahmad, Abdul Rashid Mohamed Sharif. ISBN 978-967-2395-67-6. Universiti Putra Malaysia Press

**Editorial Work: Conference Proceeding**

1. Editors: Azman Hamzah, **Hasfalina Che Man**, Muhammad Hazwan Hamzah, Nurulhuda Khairudin, Mohd Zuhair Mohd Nor, Rosnah Shamsudin. Proceedings National Convention Of Agricultural And Food Engineering 2019 "Roles Of Engineers In Sustaining National Agriculture And Food Industry"Conference 21 March 2019 Wisma Tani, Putrajaya.ISBN 978-967-16145-1-8. Publisher: Malaysian Society of Agricultural Engineers
2. Editors: **Hasfalina Che Man**, Muhammad Hazwan Hamzah, Siti Nur Aisyah Mohamad Othman, Mohd Zuhair Mohd Nor, Rosnah Shamsudin. Proceedings MSAE Conference 2018. ISBN 978-967-16145, 1-485. Publisher : Malaysian Society of Agricultural Engineers
3. Editors: Mohd Shamsul Anuar, Othman, S.H., Rosnah, Khairunniza Bejo, F.S. Taip, Mustapha Kamal, S.M., Saufi, M.K.M., **Hasfalina, Che Man** (2016) Proceedings International Conference on Agricultural and Food Engineering 2016 "Sustaining Agriculture, Preserving Life (Cafei2016). 1-146, e-ISBN: 978- 967-960-401-6
4. Editors: Salmiaton, Rozita Omar, R., S.Abd. Aziz, Badronnisa, **Hasfalina Che Man** (2010) Conference on Natural Resources and Green Technology. "Engineering and Technology for Global Stability and Security". World Engineering Congress 2010. August 2-5 2010 at Kuching, Sarawak. Published by the Federation of Engineering Institutions of Islamic Countries. ISBN 978-983-43571-8-4
5. Editors: **Hasfalina Che Man**, R., Wagiran (2011) Proceedings of Engineering and Technology 2011, 1-251, ISBN 978-967-5995-06-4
6. Guest Editor of Pertanika Journal Science and Technology. Vol. 20 (1) Jan. 2012. Selected Articles from the WEC2010, Natural Resources and Green Technology. Cited Scopus
7. Guest Editor of Pertanika Journal Science and Technology. Vol. 20 (2) July 2012. Selected Articles from the WEC2010, Natural Resources and Green Technology. Cited Scopus
8. Editors: **Hasfalina, Che Man**, Shiki, F.S. Taip, S. Abd.Aziz, Talib, Rosnita A., Roseliza Kadir Basha (2012) Proceedings International Conference on Agricultural and Food Engineering. ISBN: e-ISBN 978- 967-960-322-4
9. Guest editor of Jurnal Teknologi Vol.78, No.1-2 (2016) Volume II Solution for Sustainable Water and Environmental Management for Special Issue Pawees and INWEPF International Conference (PIJIC2015)
10. Guest editor of Procedia of Agriculture Science (Elsevier) for International Conference on Agricultural and Food Engineering 2014 (Cafei2014)
11. Guest editor of Jurnal Teknologi Vol. 76, No 15: (2015) Solution for Sustainable Water and Environmental Management. Special Issue Pawees and INWEPF International Conference (PIJIC2015)
12. Editor: **Hasfalina Che Man** (2010) International Conference on Natural Resources and Green Technology, 1-488. ISBN: 978-983-43571-8-4. Publisher: Federation of Engineering Institutions of Islamic Countries

## Monograph (with copyright)

M.I. N, Isa, B. Pradhan, B. Noorhisham, **C.M. Hasfalina**, A.Murni Melati, M.K Ahmad Zulfa, W.A.Z. Noor Amila (2012) Monograph 2nd ACLRI Annual Roundtable: Sustainable Transformation Agenda For High Income Nation And Competitive Human Capital Through Academic Research Leadership. Advancing Engineering for Nation Sustainability. Publisher: AKEPT. ISBN: 978-967-10602-8-5

## Profesional Magazine

S.Abd Aziz & **Hasfalina, C.M.** (2013) Strengthening employability skills programme and IEM's AFETD membership drive. Buletin Jurutera, 1, January, 39-40

## Patent/Copyright

**1. WO 2011/108916 A2.** A method for recovering an intracellular polyhydroxyalkanoate. International Publication Date PI 2010000891 1 March 2010. **Inventors:** Mohd Ali Hassan, Mitra Mohammadi, Nor Asma Abd Razak, Chong Mei Ling, Suraini Abd Aziz, Wan Md Zin Wan Yunus, Yoshihito Shirai, Amirul Al-Ashraf Abdullah, **Hasfalina Che Man**, Siti Nor Syairah Anis, Phang Lai Yee.

**2. PI 2019006570 (2020) Hasfalina Che Man**, Khairul Md Yunos, Zurina Zainal Abidin, Azni Idris, Aida Isma Md. Idris (2019) *A Hybrid System & Method For Treating Palm Oil Mill Effluent*

**3. AR2019006279 (2020) Hasfalina Che Man**, Khairul Md Yunos, Zurina Zainal Abidin, Azni Idris, Aida Isma M. Idris (2019) *Operating and Maintenance Manual for Hybrid Aerobic-Sorbent-Membrane Application*

**4. AR2020003562.** Modern Pig Farming Model (MPF) UPM (2020). Faez Firdaus Jesse Abdullah, Hairunnisak Jalil, Nurul Nizam Haron, **Hasfalina Che Man**, Ainul Mardhiyyah Mohamed Ghazali, Muhammad Syafiq Kamal, Hassan Hj Alli, Mohd Azmi Mohd Lila, Ooi Peck Toung, Loh Teck Chwen, Mansor Abu Talib, Anas Mohd Mustafah, Badronnisa Yusuf, Nik Norsyahariati Nik Daud, Syazwani Idrus, Muhammad Hazwan Hamzah, Eris Ellandy Supeni, Mohd Khair Hassan, Fakhrul Zaman Rokhani, Raizal Saifulnaz Muhammad Rashid, Mohammad Yazah Mat Raschid, Raja Ahmad Azmeer R.A. Effendi, Saiful Hasley Ramil, Mohd Shahrizal Dolah, Nurul Wahidah Mohammad Nasir, Mohd Kamarulzaman Ismail, Faridah Abdullah, Basri Bakar

Research Grants				
No.	Project Title	Amount (RM)	Year	Source of Fund
1.	Simulation and mathematical modeling of glutinous rice quality attributes during postharvest processing	206,352 (Member)	2020-2023	TRGS
2.	Effects of ohmic heating pretreatment on delignification kinetics for integrated biohydrogen production	138,600 (Leader)	2020-2023	FRGS
3.	Knowledge Transfer Grant Scheme KTGS JINM 2020 "Program Pengurusan dan Pembuatan Baja dari Sisa Pepejal dan Sisa Dapur Ke Arah Kelestarian Alam Sekitar di Kampung Bako, Kuching, Sarawak	10,000 (Member)	2020-2021	KTGS JINM
4.	Development of Rapid Chopper Machine for Pineapple Residue	70,000 (Leader)	2019-2022	Putra IPB
5.	Intrinsic mass transfer mechanism and thermodynamic interaction of solute particle in wastewater and magnetic responsive polymer membrane	80,000 (Member)	2020-2022	FRGS
6.	Quantifying sinks and sources of ammonia in a rice plant system: A comparative study of model-based and data-driven approaches	160,000 (Member)	2019-2022	FRGS

7.	New approaches in utilizing aquaculture for high value beneficial microalgal and herb production. Ahli Antarabangsa (SATREP) bagi Projek Continous Operation System for Microalgae Production Optimized for Sustainable Tropical Aquaculture (COSMOS)	275,500 (Member)	2016-2021	SATREP
8.	A study on the strawberry-based product, packaging and storage technologies in Japan food industries.	53,053.00 (Member)	2019-2022	SUMITOMO
9.	Production of biosurfactant produce from palm fatty acid distillate (PFAD) via fermentation process	55,000 (Member)	2019-2021	PUTRA IPM
10.	Effects of Anti-Browning treatment on fresh cut banana cultivar Nipah (Musa AcuminataBalbisiana) for domestic cooking	96,000 (Member)	2017-2019	Putra Impak Grant
11.	Heavy metal contaminants separation using low cost recycled iron oxides magnetic nanopowders from steel scrap waste for nanoabsorbance wastewater treatment	88,100 (Member)	2017-2020	Putra Impak Grant
12.	Penambahbaik pemasaran beras usang dan peningkatan kondisi kilang ke arah pensijilan GMP	16,500 (Member)	2017-2018	Industri (LPP)
13.	Methane production from co-digestion of sewage sludge and decanter cake	20,000 (Leader)	2016-2018	Putra Siswazah Grant
14.	Co-digestion of Pineapple Waste for Mesophilic Bio-Methane Production	60,000 (Member)	2018-2020	Putra Young Lecturer
15.	Treatment of Palm Oil Mill Effluent (POME) using combination of baffled-Air Flotation and Membrane Bioreactor	86,000 (Leader)	2017-2019	Putra Impak Grant
16.	Study on the performance of palm oil mill boiler fuel ash (POMBFA) and palm oil mill boiler bottom ash (POMBBA) as potential filler with hot mix Asphalt (HMA) pavement for low-cost road purposes	20,000 (Leader)	2017-2019	Putra Siswazah Grant
17.	Dana Tautan (DT0036) VOT: 9200202	6486 (Leader)	2017-2018	Dana Tautan
18.	Characterization of Carbon and Greenhouse Gas Emissions of Repeated Burnt Peat Swamp Forest In Peninsular Malaysia	102,200 (Member)	2015-2017	FRGS (by Ministry Of Higher Education)
19.	Behavioural pattern of groundwater pollution by poultry waste using MODFLOW simulation model	USD 5,000 (Leader)	2016-2017	TWAS International Grant
20.	Precision farming applications in planting, disease control and water management for sustainable rice production	664,200 (Member)	2015-2017	Putra IPB Grant

1	Immunosensor Development for Tungro Disease Detection in Paddy Plantation	167,900 (Leader)	2014-2016	Putra IBT Grant
1	Ammonia Removal From Leachate of a scheduled waste landfill	30,500 (Leader)	2013-2015	Putra IPS Grant
1	Gaharu Oil Extraction by Ohmic Heater Hydrodistillation	15,000 (Leader)	2012-2013	RUGS (UPM)
1	Methane-oxidizer bacteria (MOB) characterization in paddy soil as methane sequester for green environment	110,000 (Leader)	2011-2013	ERGS (Ministry Of Higher Education)
1	The use of shallow groundwater as source of irrigation in rice cultivation area	30,000 (Leader)	2008-2010	RUGS (UPM)
1	Performance study of pulse ohmic heating For Herb's Oil Extraction	100,000 (Leader)	2007-2009	FRGS (by Ministry Of Higher Education)
1	New Lecturer Grant Scheme 2007: A Prototype Batch Ohmic Heating System For Small Scale Quality Food Processing	10,000 (Leader)	2007	RUGS (UPM)
28.	Development of a self-propelled turning-spraying-shredding machine for windrow composting of unchopped oil palm EFB Mixed with POME (Project No.: 05-12-12-2200RU, VOT: 9377000)	130,000 (Member)	2012-2014	RUGS (UPM)

#### Awards/Recognition

No	Name of awards	Title	Award Authority	Award Type	Year
1.	Silver Medal	Pact Detect Kit: Immunosensor for plant diseases	Magis, Mardi	National	2015
2.	Teaching Award	Certificate of Excellent Teaching	Faculty of Engineering, UPM	University	2013, 2011, 2012, 2010, 2009, 2007, 2016, 2015, 2018
3.	Service Award	Certificate of Excellent Service	University Putra Malaysia (UPM)	National	<b>2010, 2011, 2012, 2013, 2014, 2015, 2016 &amp; 2017, 2018</b>
4.	Gold Medal	Eco-friendly non-halogenated method for recovery of intracellular	ITEX2011 (International Invention, Innovation & Technology) By MOSTI	International	2011
5.	Invited Speaker	Molecular Approach in Teaching: Denaturing gradient gel electrophoresis (DGGE) and Fluorescence in situ Hybridization (FISH)	University of Maejo, Chiang Mai, Thailand	International	2010

6.	Gold Medal	Efficient Recovery Method for Intracellular Polyhydroxyalkanoates by Non-solvent System	Exhibition of Innovation, Research and Invention UPM (PRPI), 2010.	National	2010
7.	Bronze Medal	Biohydrogen production from food waste fermentation	Exhibition of Innovation, Research and Invention University Putra Malaysia (PRPI), 2010.	National	2010
8.	Invited Speaker	Application of Denaturing gradient gel electrophoresis (DGGE) and Fluorescence in situ Hybridization (FISH) in Environmental Studies	Institute of Bioscience, UPM	University	2008
9.	Bronze Medal	A prototype batch ohmic heating system for small scale food processing.	Exhibition of Innovation, Research and Invention UPM (PRPI), 2007.	National	2007
10.	Bronze Medal	The application of Multivariate analysis and artificial neural network for predicting suspended solids using Microsoft Excel	Exhibition of Innovation, Research and Invention UPM (PRPI), 2006.	National	2006
11.	Bronze Medal	Cost and Time Effective Sampling – Use of chemometrics in the sustainable utilization of water resources: Langat Basin as a Case Study.	Exhibition of Innovation, Research and Invention UPM (PRPI), 2006.	National	2006
12.	Gold Medal	Electrostatic self-assembled of chitosan on colloidal magnetite nanoparticles with ultrasonication assisted	Materials Technology Challenges (MTC2019)	National	2019
13.	Anugerah Pingat Emas Master	Immunosensor –Based detection of Tungro disease in rice plant (Muhammad Nur Aiman Uda)	Konvokesyen UPM	UPM	2014
14.	Best Paper Award	The potential use of palm oil fuel ash (POFA) as properties of lightweight concrete	Konvensyen Kebangsaan Kejuuteraan Pertanian dan Makanan Negara	National	2019
15.	Gold Medal	SPCE Tungro Disease Detection in Paddy Plantation	iCAN, Montrea, Canada	International	2019

## Teaching Activities

No.	Code/Subject	Credit Hour	No. of Student	Teaching Evaluation	Semester/Academic year
1.	(KKK3002) Engineering Mathematics II	3+0 (Tutorial 1 hr)	32	4.35	2006/2007 Sem 2
2 .	(KBP5603) Emergency Response and Contingency Planning	3+0	10		2006/2007 Sem 1
3 .	(ECC 3003) Engineering Mathematics III	3+0 (Tutorial 1 hr)	47	4.27	2007/2008
4 .	(ECC3002) Engineering Mathematics II	3+0 (Tutorial 1 hr)	48	4.19	2007/2008 Sem 2
5 .	(KBP4108) Agricultural Waste Management	3+0	50	4.10	2007/2008
6 .	(ECC 3003) Engineering Mathematics III	3+0 (Tutorial 1 hr)	49	4.24	2008/2009
7 .	(EAB3206) Biosystem Environment	3+0	6	4.61	2008/2009 Sem 2
8 .	(KBP4108) Agricultural Waste Management	3+0	16	4.39	2008/2009 Sem 1
9 .	(EAB4202) Bioprocess Engineering Operation	3+0	11	4.72	2009/2010 Sem2
10.	(EAB4208) Agricultural Waste Management	2+1	11	4.72 4.09 (MSc)	2009/2010 Sem 1
11.	(EAB3206) Biosystem Environment	3+0	51	4.67	2009/2010
12.	(EAB4208)Agricultural Waste Management	2+1	10 (4 Msc)	4.22	2010/2011 Sem 1
13 .	(EAB3206)Biosystem Environment	3+0	74	4.24	2010/2011 Sem 2
14 .	(EAB4208)Agricultural Waste Management	2+1	6	4.33	2011/2012\ Sem 1
15 .	(EAB3206)Biosystem Environment	3+0	17	4.33	2011/2012 Sem 2
16 .	(EAB3206)Biosystem Environment	3+0	16	4.23	2012/2013 Sem 2
17 .	(EAB4208)Agricultural Waste Management	2+1	6	4.20	2013/2014 Sem 1
18 .	(EAB3204) Agricultural Processing Engineering	3+1	46	4.24	2013/2014 Sem 2
19 .	(EAB3901) Industrial training	(0+5)	38	4.35	2013/2014
	Sabatical leave (No teaching from 14 July 2014 until 13 April 2015)				2014/2015
20 .	(EAB3206)Biosystem Environment	3+0	56	4.48	2015/2016 Sem 1
21.	(EAB4204) Controlled Environment Structures	3+0	15	4.63	2015/2016 Sem 1
22.	(EAB4310) Water Quality for Agriculture	2+1	15	4.86	Sem 2 2015/2016
23.	(EAB4204) Controlled Environment Structures	3+0	19	4.67	Sem 1 2016/2017

24.	(EAB3206) Biosystem Environment	3+0	41	4.71	Sem 1 2016/2017
25.	(EAB3208)Agricultural Waste Management	2+1	13	4.48	Sem 2 2016/2017
26.	(EAB4204) Controlled Environment	3+0	18	4.49	Sem1 2017/2018
27.	(ECV5401) Water Quality Control	3+0	9	4.05	Sem1 2017/2018
28.	(EAB3208) Agricultural Waste Management	2+1	44	4.83	Sem2 2017/2018
29.	(EAB4204) Controlled Environment	3+0	11	4.87	Sem 1 2018/2019
30.	(EAB4205) Controlled Environment	3+0	5	4.8	Sem 1 2018/2019
31.	(EAB3208) Agricultural Waste Management	2+1	60	NA	Sem 2 2018/2019
32.	(EAB4205) Controlled Environment	3+0	62		Sem. 1 2019/2020
33.	(EAB3208) Agricultural Waste Management	2+1	42		Sem.2 2019/2020

### Student Supervision

#### Main Supervisor (PhD students)

No.	Name	Title	Status
1.	Pardis Fazli	Effects of cultivation system and temperature on methane emissions, water consumption and methane-oxidizer bacteria communities in paddy soil	Completed
2.	Adeoye Peter Aderemi	Assessment of shallow groundwater pollution by poultry waste in Minna, Nigeria	Completed
3.	Nurul Hanira Mat Lazim	Ammonia Removal From Leachate of a scheduled waste landfill	Completed
4.	Ahmed Rufai Dahiru	Risk assessment and prediction of heavy metal in selected rivers sediment in Malaysia	On-going
5.	Abdulsalam Mohammed	Treatment of POME using combination of Baffled-Air Flotation and Membrane Bioreactor	Completed
6.	Sivakumar a/l Pallikodathan	Enhancement of methane production from palm oil effluent at a full scale anaerobic digester	On-going
7.	Mohammed Umar Abba	Hazardous leachate treatment by hybrid system of membrane and air stripping	Completed

**Co- Supervisor  
PhD**

1. Negisa Darajeh	Phytoremediation of palm oil mill effluent (POME) by vetiver system technology	Completed
2. Shakeel Hussain Chattha	Methods of grain storage and their effects on grain quality of wheat in Sindh, Pakistan	Completed
3. Mitra Mohammadi	Non-halogenated recovery methods of intracellular polyhydroxyalkanoates from local isolate Comamonas sp. EB172	Completed
4. Abdikani Abdullah Mo'allim	Modeling solute transport for improved fertiliser use in rice production system	Completed
Anijiofor Sandra		
5. Chinenyenwa	Adsorption and biodegradation of pollutants from livestock wastewater by aged refuse bioreactor	Completed
6. Mazhar Iqbal	Behaviour of solute transport phenomenon from rainfed sweet corn field in tropical climate	Completed
7. Nur Asyikin Ahmad Nazri	Nano-magnetite extracted from mill scales with cation polymer coated in application for Cd(II) removal from aqueous solution	On-going
8. Mohammed Ali Musa	Biological treatment of cattle slaughterhouse wastewater and biogas production using upflow anaerobic sludge blanket reactors	Completed
9. Siti Baizura Mahat	Treatment of high strength industrial wastewater via two-staged anaerobic digestion low-cost membrane bioreactor (An-MBR)	On-going
10. Siti Fatimah Ismail	Bio-methane production from food waste using clay-ceramic biomedia with digestate as nutrient supplier	On-going
11. Katibi Kamil Kayode	Removal of EDC by using membrane	On-going

**Main Supervisor (MSc Students)**

No.	Name	Title	Status
1.	Maryam Rahmati Zadeh	Adsorption potential of Kenaf for Copper and Nickel Removal from aqueous solution	Completed
2.	Fauzi Jusoh	Evaluation of groundwater potential for irrigation at the Seberang Perak Aquifer, Malaysia	Completed
3.	Muhammad Hazwan Hamzah	Optimization and kinetics of Citronella Oil extraction by Ohmic heated Hydrodistillation	Completed
4.	Tengku Roslina Tuan Yusof	Optimization of methane gas production from co-digestion of poultry manure and food waste using Artificial Neural Network (ANN) and Response Surface Methodology (RSM)	Completed
5.	Nika Alemahdi	Hydrogen production from sewage sludge and paddy straw	Completed
6.	Muhammad Nur Aiman bin Uda	Immunosensor Development for Tungro Disease Detection in Paddy Plantation	Completed
7.	Norshafiqah Khairul Anuar	Methane production from co-digestion of sewage sludge and decanter cake	Submitted

8.	Mohd Shaifuudin Mohd Natzri	Various soil strength on studies by incorporating eco-friendly material from palm oil waste with asphalt pavement for practical road purposes	Submitted
9.	Tie Hieng Ong	Optimization Of Composting Process And Recover Ammonia From Shrimp Aquaculture Sludge	On-going

**Co-Supervisor (MSc Students)**

1.	Nazlina Haiza Mohd Yasin	Biohydrogen production from food waste at different pH	Completed
2.	Mohd Firdaus Kamuri	Mass balance of biomass composting	Completed
3.	Sabrina Mohd Ariffin		Completed
4.	Abdul Shukor Abdul Aziz	Equilibrium studies and dynamic behavior of Cadmium and Copper adsorption onto palm oil fly ash	Completed
5.	Nurul Husna Che Hamzah	Effect of adding palm oil mill effluent and treating high pressure steam on the degradation of oil palm empty fruit bunches	Completed
6.	Norfaizal Mohamed	Determination of <sup>137</sup> Cs and <sup>109</sup> Cd transfer factor for Malaysian cockle ( <i>Anadara granosa</i> )	Completed
7.	Odoemena Kenneth Ikenna	Health use in reuse of wastewater for irrigation	Completed
8.	Noratiqah Masri	Geotechnical, mineralogical and chemical characterization of soil in the design of liner for retention of acid mine drainage (AMD)	Completed
9.	Nurul Solehah Mohd Zaini	Utilization of clay particles for minimizing nitrogen contamination in surface water using phytoremediation technique	Completed
10.	Syazana Sulaiman	The efficiency of magnetite nanoparticles for the removal of copper, nickel and cobalt ions in aqueous solutions extracted from mill scale waste	On-going
11.	Puteri Nurain Megat Ahmad Azman	Influence of soaking on physical properties of pepper berries	On-going
12.	Tan Jia Boh	Assessment of on-farm anaerobic digestion system mobilize on attached-biofilm reactor in diary industry	On-going
13.	Adila Fazliyana Aili Hamzah	Anaerobic co-digestion of pineapple waste with cow dung	On-going

**Undergraduate (as Main Supervisor)**

No.	Name	Title	Year Graduated
1.	Abdul Halim Md Ali	Kenaf core as the potential absorbent	2008
2.	Anis Musyam Mohd Fadzil	Use of sewage sludge and palm oil empty fruit bunch (EFB) for potted chilies	2008
3.	Kamaleswaran Elangovan	Treatment of kenaf retting wastewater using effective microorganisms (EM)	2008
4.	Siti Yohanis Abu Hassan	Application of chemical substance in kenaf retting	2008
5.	Janatul Jamila Zakri	Mat Determination of hydraulic characteristics at Seberang Perak aquifer	2008
6.	Premalatha Sinnappan	Reduction of heavy metals from palm oil mill effluent (POME) using effective microorganism (EM) and limestone	2008
7.	Mastura Malik	Treatment of landfill leachate by using granular activated carbon and Ez-Enzyme	2009

8.	Norfaedatun Simaa Jumri	The potential of EZ-Enzyme to treat leachate	2009
9.	Seri Nur Farhana Mohd Noh	Removal of heavy metals from leachate using rice husk and sawdust as bioadsorbent	2009
10.	Wan Mohd Nor Wan Ismail	Removal of Boron in an aqueous solution using sawdust	2009
11.	Meenaloshiny Kumarasamy	A comparative analysis of biogas yield from poultry and cattle wastes	2010
12.	Muhammad Hazwan Hamzah	The performance study of solvent extraction for Gaharu essential oil	2010
13.	Shirlene Jerry	Assessment of fine particulate concentration in paddy field	2010
14.	Hamdy Roslie	Ultrasonic pre-treatment effect on Gaharu essential oil extraction	2010
15.	Roasma Muhamad Nasir	Batch study of Boron removal using kenaf core	2011
16.	Mohamad Fiqri Shaffie	Terminalia Catappa leaves as filtrate in aquaculture water treatment	2011
17.	Ainur Atiqah Amid	Effect of kenaf core for Copper removal in column study	2011
18.	Syazwani Ibrahim	Effect of Sodium Hydroxide on Gaharu extraction using microwave pre-treatment	2011
19.	Chin Wei Hong	The study of Boron removal by using rice husk	2011
20.	Siti Salbiah Munit	Ginger extraction by ohmic heating	2011
21.	Roasma Muhamad Nasir	Batch study of boron removal using kenaf core	2011
22.	Natasyah Hani Misman	Desorption of Copper from kenaf adsorbent	2012
23.	Mas Ernawati	Batch study of boron removal from leachate using filter aid	2012
24.	Azrina Mohd Fauzi	Extraction of oil from gaharu-optimization and kinetics	2012
25.	Jamilah Zakaria	Removal of pollutants from leachate using modularized Biological treatment	2012
26.	Nurdalya Osman Manah	Development of a portable kitchen waste digester	2013
27.	Nur Hazwani Mohammed Saad	Adsorption of Copper from aqueous solution by using oil palm leaves as an adsorbent	2013
28.	Muhammad Azzam Mutaza	The effect of microwave pre-treatment on the extraction of essential oils from Sarawak black pepper	2014
29.	Chin Jun Xun	Fixed-bed column study for methylene blue removal by using coconut husk as an adsorbent	2014
30.	Chai Yi Xue	Biohydrogen production from leachate by electro-coagulation process	2015
31.	Resmercia Mercie Dikau	Comparison of hollow fibre and plate membrane performance for water treatment	2015
32.	Tuan Norhaslinda Tuan Man	Utilization of paddy straw for biohydrogen production by co-digestion	2015
33.	Muhammad Nazri Ebrahim	Monitoring Of Pollutants From Cattle Farm Disposal By Modflow	2016
34.	Shaiful Nizam Abu Samah	Assessment Of Greenhouse Gaseous (Ghg) Emission From Burnt And Unburnt Peatland	2016
35.	Siti Nur Aida Damanhuri	Assessment of water quality analysis at the area of manure storage basin	2016
36.	Adam Danial Lim Jefri Lim	Characterization and potential use of waste from acetylene gas industry	2018
37.	Corolin Baing	Potential use of palm oil mill ashes as road material	2017
38.	Muhammad Fitri Ahmad Asri	Decolorisation of palm oil mill effluent (POME) by pretreated activated carbon	2018

39.	Maisuroh Hasibuan Tanjung	Performance of Membrane bioreactor (MBR) for landfill leachate treatment	2017
40.	Loo Jing Huam	Composting and biofertilizer production from market waste by EM	2017
41.	Firdaus Baharuddin	Electro-coagulation process for blackpepper retting wastewater treatment	2019
42.	Chen Yee Being	Application of ammonia stripping in sewage for ammonia removal	2019

**Internal Examiner Thesis (Bachelor Engineering)**

No.	Name	Title	Year
1	Christianto bin Soning	Bio-hydrogen generation from mixed fruit waste using anaerobic contact filter	2007
2	Mohammed Razif bin Sulaiman	Aerobic treatment of beer brewery wastewater usnig sequence batch reactor	2007
3	Norhidayah Hashim	Study of ohmic heating: pasteurization of sugared solution by batch ohmic heating	2007
4	Tariq Syahman bin Fadzin	Electrochemical treatment of aquaculture	2007
5	Mohamad Amiruddin Md Nor	Determination of moisture content at different soil layer at paddy field	2008
6	Mohamad Hasmawi bin Hassan	Application of ohmic heater on kenaf retting process	2008
7	Norarma Baharudin	Analysis of solute transport in variably saturated porous media	2008
8	Noor Haszumaimah bt Yusof	Determination of nitrogen balance of Aquilaria plantation under difference soil water condition	2008
9	Noor Hafizah bt Nizar	Simulates 3-D advechive-dispersive transport to of dissolved solutes in groundwater aquifer	2008
10	Adibah Sabrina bt Mohd Sebri	Horizontal and vertical TDR measurements of soil water content in rice cultivation area	2008
11	Nor Shuhaida bt Shufi	Measurement of field soil hydraulic and solute transport parameters	2008
12	Marsyia Modingin	Waste crop residuals composting as mushroom growing media (paddy straw)	2008
13	Siti Effarizah Datu Manong	Model system tangki bagi pengeluaran udang galah-oxygen enrichment	2008
14	Sivaneswary A/P Selvaratnam	Comparison of different waste crop residue as mushroom growing media	2008
15	Zuzana Puasa	Water requirement in a paddy field at Seberang Perak rice cultivation area	2009
16	Noor Suraya Jantan	Determination of soil physical characteristic at Seberang Perak rice cultivation area	2009
17	Siti Rohayu Abdul Aziz	Design of production and monitoring shallow tube wells at Seberang Perak paddy field area	2009
18	Nor Azimah Mohd Arshad	Analysis of water productivity in rice cultivation area	2009
19	Juseelin Tan	Measurement of infiltration rate and hydraulic resistance in puddle rice soils	2009
20	Mimi Safra Othman	Design and development of kenaf decorticator	2009
21	Mohd Shaifuudin Mohd Nazri	Design and development of ½ scaled model of palm oil biodiesel blender	2009
22	Yusnida binti Mohd Yusoff	Evaluation of ECA and NIR on Corn Plot	2010

23	Nurnadiah bt. Esa	Evaluation of ECA and Penetrologger on Compaction Soil at Oil Palm	2010
24	Zareen bt. Zulkifli	Evaluation of ECA and NIR on Oil Palm Plantation	2010
25	Nur Imanurain binti Abdullah	Deep percolation in the paddy field	2010
26	Abd. Rahman b Mohamad Nazri	Drainage problem and solution: Sg. Chempias	2010
27	Chong Jou Enn	Performance evaluation of raingun for kenaf cultivation	2010
28	Noorazila bt Ismail	Bioretting water treatment for field dry kenaf stem	2010
29	Norfadhlah binti Mahamad	Bioretting water treatment for rotten stem	2010
30	Elizabeth Embai Anak Lanie	Development of mechanical combing for kenaf fibre	2010
31	Nor Aini Binti Adnan	Development of Efficient Mechanical Water Retting for Kenaf Bast Ribbons	2010
32	Nurul Fazeeda Binti Abdul Muda	Studies On Kenaf Decorticator Performance On Small Scale Farmers In Kelantan.	2010
33	Nur Dalilah Husna Binti Abu Shahar	Development Of Bast Ribbons Peeling Device For Small Scale Farmers In Terengganu	2010
34	Shazelia Ashikin bt. Sulaiman	Determination of Paddy Soil Layer Using Penetrologger	2011
35	Aimi Athirah bt. Aznan	Determination of Unsaturated Hydraulic Conductivity of paddy soil at sawah sempadan Irrigation Compartment, Tanjung Karang	2011
35	Aimi Athirah bt. Aznan	Determination of Unsaturated Hydraulic Conductivity of paddy soil at sawah sempadan Irrigation Compartment, Tanjung Karang	2011
36	Fathin Ayuni bt. Azizan	Correlation of Irrigation Water Level and Groundwater Level in Rice Cultivation Area	2011
37	Ahmad Saruli Jalaluddin	Evaluation of the suitability of pump characteristics and well Accessories to the exploited Aquifer	2011
38	Mohd Shahril bin Mislan	Evaluation of the suitability of various type of pumping test for Bukit Merah Aquifer	2011
39	Norfadhlah binti Mahamad	Bioretting water treatment for rotten stem	2011
40	Nurnadiah bt. Esa	Evaluation of ECA and Penetrologger on Compaction Soil at Oil Palm	2011
41	Nur Imanurain binti	Deep percolation in the paddy field	2011
42	Yusnida binti Mohd Yusoff	Evaluation of ECA and NIR on Corn Plot	2011
43	Zareen bt. Zulkifli	Evaluation of ECA and NIR on Oil Palm Plantation	2011
44	Noorazila bt Ismail	Bioretting water treatment for field dry kenaf stem	2011
45	Muhammad Izzat Bin Ahmad Jamali	Pengubahsuaian Peranti Kutip biji kelapa sawit Terlerai	2012
46	Muhammad Zulhilmi Bin Haris	Pengubahsuaian mesin racik kegunaan seni taman dalaman (domestic landscaping)	2012

47	Puteri Aisyatun Nadia Binti Megat Abd Wahab	Utilization of Matlab in Hydraulic System Database	2012
48	Rosfazillah Binti Sapikit	Design and development of a cleaning machine for rubber leaves.	2012
49	Afaliq Yusof	Bruise Indexes of Malaysian Fruits	2012
50	Nurdalyla Osman Mana	Development of a portable kitchen waste digester	2013
51	Ezdalina Binti Abdul Rahaman	An experimental study on drying kinetics of pumpkin in a convective hot air dryer	2014
52	Harith Ridhzwan Bin Roslan	Effect of hydrocooling on quality and storage life of Chokonan mango	2014
53	Noor Azirah Binti Kader Maidin	Relationship Between Impedance Values And Total Polar Compound Of Palm Oil	2014
54	Nur Azizah Binti Bachik	Effects of Corn stem as a soil conditioner towards a green approach of a waste management	2014
55	Nur Edayu Binti Nor Azlan	Comparison Between Optical Sensing And Impedance Sensing For Ssc Determination In Banana	2014
56	Mohamad Rizal Ramli	Feasibility study of running a small scale aquaponic system	2015
57	Muhamad Hasif Mansor	Evaluation of irrigation system efficiency at Ladang 2 UPM	2015
58	Muhammad Faris Jaafar	Evaluation of natural factors affecting well system performance	2015
59	Najihah Mustapha	Formulation of high efficiency nano porous pipe for irrigation and drainage systems	2015
60	Nur Dahlia Shamsudin	Differentiate low electrical resistive between clay and groundwater using different geophysical method	2015
61	Siti Zunikha Azmira Abdul Rahim	Utilization of biocompost from food waste for wall vegetable farming	2015
62	Wan Noor Fatihah Hamimah	RGB imaging system for non-invasive monitoring of quality changes of seedless watermelon during storage	2015

#### Examiner Industrial Training Report

1	Azlini binti Mohd. Fauzi	Minda Agrimachinery Sdn. Bhd., Pt. 9 & 10 Kwsn. Perindustrian Mara Fasa 2, K.I.M. Jln. Padang Tembak, 16100 Pengkalan Chepa, Kota Bharu, Kelantan.	2011
2	Abu Bakar Abdul Razak	Jurutera Daerah, Jabatan Pengairan dan Saliran Raja Malaysia, Daerah Kuala Kangsar/ Hulu Perak, Jalan Chulan, 33000 Kuala Kangsar, Perak.	2010
3	Abdul Rahman Mohamad Nazri	Jurutera Daerah, Jabatan Pengairan dan Saliran Raja Malaysia, Daerah Kuala Kangsar/ Hulu Perak, Jalan Chulan, 33000 Kuala Kangsar, Perak.	2010
4	Mohamad Fiqri Shaffie	Lembaga Air Perak, Jalan St. John, 30200 Ipoh, Perak.	2010
5	Tan Poh Ying	MSBB Engineering Sdn Bhd, Kawasan Perindustrian Pengkalan 2, 31550 Pusing, Perak.	2010

6	Khairil Hairani	Azhar	Petro-Equips (M) Sdn. Bhd., Warehouse 12, Door 13, Kemaman Supply Base, 24007, Kemaman, Terengganu	2009
7	Wan Mohd Nor Wan Ismail		Bangunan SUKIMI, Lot 83, Seksyen 23, Jalan Telipot, 15150 Kota Bharu, Kelantan	2009
8	Nor Shafura Mohd Sazali		Lembaga Kemajuan Pertanian, Jalan Dato' Lundang, Peti surat 127, 15710 Kota Bharu, Kelantan.	2009
9	Marini Nafi		Lembaga Kemajuan Pertanian Kemubu, Jalan Dato' Lundang, Peti surat 127, 15710 Kota Bharu, Kelantan.	2009
10	Nooradeela Mohammad		Pejabat Pertanian Jajahan Pasir Puteh, 16800, Pasir Puteh, Kelantan.	2009
11	Lee Wing Onn		MSHK Engineering Sdn Bhd, Perak	2014
12	Lim Yihang		IOI plantation	2014
13	Mohd Izwan Mohd Khalid		Felda Palm Oil Mill Trolak, Perak	2014
14	Muhammad Nazrul Hakim Amran		Perak Agro Mills, Perak	2014
15	Ar-Reshma		Felcra Plantation	2014
16	Siti Nuradilah Abdul Wahab		Felda Pasir Besar	2014
17	Ahmed Khalfan Al Mayahi		Student Intern from Sultan Qaboos Universiti, Oman	2015
18	Seham Hareb Al Mahrooqi		Student Intern from Sultan Qaboos Universiti, Oman	2015
19	Waad Ahmed Al Aghbari		Student Intern from Sultan Qaboos Universiti, Oman	2015
20	Nuradila Athirah Binti Lockman		MSHK Engineering Sdn Bhd	2016
21	Adam Danial Lim Bin Jefri Lim		MCB Sdn Berhad, Perak	2017
22	Nurshazreen Alya Jamsari		KenEp Consultancy, Perak	2017
23	Khoy Shi Feng		Seng Fong Leong Marketing Sdn Bhd., Cameron Highland	2017
24	Humairak Aliah Mohamed		Student Intern from Uiitm Shah Alam. Attach at Environmental Biosystem Lab	2017
25	Muhammad Nurfaiez Mohd Sukri		Student Intern from Uiitm Shah Alam. Attach at Environmental Biosystem Lab	2017
26	Mohammed Ali Obaid		Student Intern from Segi University. Attach at Environmental Biosystem Lab	2018
27	Abdullahi Mohamadi		Student Intern from Segi University. Attach at Environmental Biosystem Lab	2018
28	Safwan Mukmin Bin Mohammad Aminuddin		JPS Kuala Kangsar, Perak.	2018

#### Extension and Public Services

No.	Role	Title	Year
1.	Coordinator	Practical/Internship program for undergrad students from Sultan Qaboos University	2013
2.	Associate Researcher	Smart Farming Technology Research Centre (SFTRC)	2013/2015
3.	Session Chair	Int. Conference of Civil, Structural and Environmental Engineering, Zurich, Switzerland	2013
4.	Co-opt member	Institute of Engineers Malaysia (IEM) for (AFETD) Agricultural and Food Engineering Technical Division	2012
5.	Representative	Exhibition Day for Postgraduate Programme.	2011
6.	Participant	Dana Penyelidikan KPTM	2011
7.	Secretary	Regional Science Engineering Technology Seminar 2011	2011

8.	Coordinator	MoU Preparation between UPM and University of Agriculture, Faisalabad Pakistan	2011
9.	Coordinator	MoU Preparation between UPM and Federal University of Technology, Akure, Nigeria	2011
10.	Session Chair	3rd Regional Symposium on Engineering & Technology 2011 (RSET2011). Conf. on 21-23 Nov. 2011, Kuching, Sarawak	2011
11.	Secretariat	Agricultural Machinery Maintenance at Biological and Agricultural Engineering	2011
12.	Session Chair	1st AKEPT Young Researchers Conference and Exhibition (AYRC X3 2011). 20th Dec 2011. PWTC, KL.	2011
13.	Technical Committee	1st AKEPT Young Researchers Conference and Exhibition (AYRC X3 2011). 19-20th Dec 2011. PWTC, KL.	2011
14.	Editorial Manager	Proceedings on Engineering and Technology 2011. ISBN 978-967-5995-06-4. Published by Federation of Engineering Institutions of Islamic Countries.	2011
15.	Member	mSET Standing Committee on Young Professional.	2011
16.	Participant	Yayasan Pak Rashid Public Lecture Series – Dinner Talk 2009, Sime Darby Convention Centre, Bukit Kiara, Kuala Lumpur.	2009
17.	Representative	Draft Preparation for Farm Mechanisation and Automation Policy at National Level.	2009
18.	Conference Committee	Int. Advanced Technology Congress (ATCI2009)	2009
19.	Conference Committee	Int. Conference on Natural Resources and Green Technology, World Engineering Congress 2010	2010
20.	Conference Committee (Secretary)	Regional Symposium on Engineering and Technology	2011
21.	Conference Committee (Expert Reference)	Symposium Low Carbon Asia Research, Putri Pacific, JB	2011
22.	Author	Column VArsiti BH to promote student interns	2011
23.	Committee	English Immersion Programme Faculty	2011
24.	Conference Committee (Scientific)	International Conference of Agricultural and Food Engineering 2014 ( Cafei2014)	2014
25.	Fasilitator	Round Table Discussion (MPN) 'Advancing Engineering for Nation Sustainability: Innovation and Evolution'	2012
26.	Assessor	Evaluation of research grant proposal for FRGS	2012
27.	Participant	International Leadership Capacity Building Workshop for Women Academic Leaders 2012, 17-20 Dec 2012	2012
28.	Session Chair	International Conference on Civil, Structural and Environmental Engineering, ICCSEE 2013 World Academy of Science,Engineering and technology, Zurich, Switzerland 2013	2013
29.	Mentor	Teaching fundamental Course (KAP) -Dr Norhashila	2014
30.	Fasilitator	Organized a talk by Ir Izhar at IEM	2014
31.	Mentor	Mobility student from Tsukuba University	2014
32.	Mentor	Mobility Student from USQ	2014
33.	Fasilitator	Student Exchange Tom Denny Grob from Beuth Applied University of Sciences Berlin from Jun 2014-September 2014	2014

34.	Mentor	Student competition in AVF-Won 1 <sup>st</sup> Prize	2016
35.	Examiner	Master ERP Project	2016
36.	Secretary	Course Profesional Engineering by MSAE	2015
37.	Expert Reference	Development of local emission factor of rice cultivation in Malaysia	2015
38.	Evaluator	FRGS research proposal evaluation KPT (myGrants)	2018 (3), 2017 (3), 2016, 2013 (2)
39.	Evaluator	PUTRA grant at UPM	2017 ,2018, 2019
40.	Consultation	Rundingan Pelan SusunAtur Setiu Wetland by UPM Consultancy	2016
41.	Representative	MSAE activities-Anugerah Hijau	2018 (2)
42.	Supervisor	2 Interns from Segi UNiversity	2018
43.	Academic Advisor	Research attachment for a Master student at Tsukuba University	2018
44.	Panel Assessor	Panel Jawatankuasa penilai bagi pembentangan seminar/konferens pljr UPM keluar negara	April - Disember 2018
45.	Expert reference	for International proposal-Flair Fellowships	2018
46.	Referee	Postdoc Application for Massey University	2018
47.		Panel Penilai Laporan Akhir Projek Penyelidikan /Laporan Kemajuan	2018
48.	Representative	Wakil MSAE ke SIMA ASEAN Thailand 2017 being held on 7-9 September 2017	2017
49.	Secretariat	4th AUCFA (ASEAN Universities Consortium on Food and Agro-based Engineering and Technology. Education) Conference and Workshop; and The 2nd AUCFA Student Seminar and Competition on February 4 - 5,2016 at Kasetsart University, Bangkok, Thailand.	2016
50.	Assesor	Panel penilai luar pembentangan FYP Program Alam Sekitar sem 1 2016/2017	2017
	Fasilitator	Global i-Lead STEM Camp 1Malaysia. 17-22 Dec.2017.	2017
51.	Referee	Application for academic Post: Referee evaluator UMT for Nor Shaerah Abd Rasid	2018
52.	Trainer	Speaker for Training Course at Chiang Mai University, 17-21 <sup>st</sup> January 2018	2018
53.	Member	Pertandingan Inovasi MPSJ	2018
54.	Session Chair	International Conference of Food and Agricultural Engineering2018	2012, 2014, 2016, 2018
55.	Supervisor	Post Doc Fellow, Dr Nadavala Siva Kumar (G9641612) , Andra Pradesh, India Dec. 2012-Dec. 2013.	2012/ 2013
56.	Participant	Atilze Smart Fertigation Training	2019
57.	Secretariat	4 <sup>th</sup> Agricultural Engineering Student Chapter Annual Regional Convention (ARC) di Universitas Gadjah Mada, Indonesia on 12-15 Nov. 2018.	2018
58.	Representative MSAE	Signing MOU between MSAE and Korean Society of Agricultural Machinery (KSAM) btw 16-19 Oct.2019, Seoul, Korea	2020
59.	Judge	5 <sup>th</sup> Agricultural Engineering Student Chapter Annual Regional Convention (ARC) Politeknik Kota Bharu, Malaysia on 22-25 September 2019	2019

No.	Role	Title	Year
1.	Technical reviewer of Journal Applied Microbiology	Which are the polyphosphate accumulating organisms in full- scale activated sludge enhanced biological phosphate removal systems in Australia? Beer, M., Stratton, H.M., Griffiths, P.C., Seviour, R.J. Published in Volume 100, Number 2, pp. 233-243 (11).	2006
2.	Technical reviewer of Jurnal Teknologi. UTM	Degradation of phenol by ozonation using Zsm-5 and Beta Catalysts.	2007
3.	Technical reviewer of International Journal of Environment and Waste Management	Assessment of biological and chemical contamination of groundwater due to sewage sludge disposal for a selected site in Malaysia.	2008
4.	Technical reviewer of International Journal of Engineering and Technology (IJET)	Ms. Ref. No.: IJET-BAG-08-0003 .Effects of Wind speed on the ventilation rates of crop protection structure in Malaysia.	2008
5.	Research Associate	Smart Farming Technology Lab, ITMA, UPM.	2009- to date
6.	Panel Expert	Biochar Malaysia Workshop.	2009
7.	Session Chair	Conference on Smart Farming 2009 in conjunction with International Advanced Technology Congress (ATCI 2009) at PWTC, KL	2009
8.	Secretary and Editorial Manager	International Conference on Natural Resources and Green Technology, World Engineering Congress 2010.	2010
9.	Technical reviewer of Journal IEM (AFETD)	Seberang Perai Rice Scheme Irrigation Water Quality Assessment.	2010
10.	Technical reviewer of World Engineering Congress 2010	WEC CNRGT59: Cadmium (Cd) removal from aqueous solution using microwave incinerated rice husk ash (MIRHA)	2010
11.	Technical reviewer of World Engineering Congress 2010	WEC-107: Utilizing fly ash and bottom ash from Sejingkat coal fired power plant in Kuching in geopolymers mortar	2010
12.	Technical reviewer of World Engineering Congress 2010	WEC-CNRGT111: Vermicomposting of yard waste and shredded paper using Eisenia Foetida	2010
13.	Technical reviewer of World Engineering Congress 2010	WEC-CNRGT64 : Development Strategies for Bario and Long Lamai ICT Telecentres in Borneo: A Comparison	2010
14.	Technical reviewer of World Engineering Congress 2010	WEC-CNRGT45: Adsorption of Cadmium by activated carbon prepared from oil palm empty fruit bunch fibres	2010
15.	Technical reviewer of Pertanika JST	WEC CAPM66: Production of yeast alcohol dehydrogenase 1 in E Coli Top10 for further use in biocatalyst.	2010
16.	Technical reviewer of Pertanika JST	Manuscript ID. JST-0295-2011 (NR01) 2011	2011
17.	Technical reviewer of Pertanika JST	WEC CNRGT59: Cadmium (Cd) removal from aqueous solution using microwave incinerated rice husk ash (MIRHA)	2011
19.	Editorial Board	International Journal of Environmental Health Sciences (Pollution and Control). Azad University	2011
20.	Technical reviewer of IJET	Water quality in dissolved air floatation treatment plant and efficiencies of dissolved air flotation pilot plant	2011
21.	Technical reviewer of African Journal of Biotechnology	Comparative water relation of three varieties of Hibiscus Cannabinus L. (Kenaf)	2011
22.	Editorial Manager	International Conference of Agricultural and Food Engineering 2012 Proceeding (Cafei2012)	2011- 2012

23.	Treasurer	Organizing Committee for the World Research & Innovation Convention on Engineering & Technology (WRICET2012)	2012
24.	Technical Paper Manager	International Conference of Agricultural and Food Engineering 2012 Proceeding (Cafei2012)	2012
25.	Technical reviewer of Industrial Crops and Products	Ms. Ref. No.: INDCRO-D-12-00089 Optimisation of a method to extract the active coagulant agent from Jatropha curcas seeds for use in wastewater treatment	2012
26.	Technical reviewer of African Journal of Agricultural Research	Performance simulation of industrial wastewater treatment plant using a combination of neural network and principal component analysis	2012
27.	Technical reviewer of Pertanika	Modified Fenton (FeGAC/H <sub>2</sub> O <sub>2</sub> ) Pretreatment of Antibiotics in Aqueous Solution" (Manuscript ID. JST-0388-2012)	2012
28.	Technical reviewer of Journal of Toxicology and Environmental Health Sciences	Process and function of advance wastewater treatment technology for textile based effluent	2012
29.	Technical reviewer of African Journal of Food Science	Impact of olives and irrigation with treated wastewater on the oil quality: simulation of olive mill conditions	2012
30.	Technical reviewer of International Food Research Journal	Processing methods and quality of white pepper :A Review (IFRJ-2012-208)	2012
31.	Technical reviewer of African Journal of Agricultural Research	Performance Simulation of Industrial Wastewater Treatment Plant Using a Combination of Neural Network and Principal Component Analysis	2012
32.	Technical reviewer of Pertanika	Determination of the relationship between the moisture content and microwave dielectric constant in kenaf stem	2013
33.	Technical Reviewer of Cafei2012	CAFEi2012-129 entitled "Response to various environmental stresses of Cold-shocked Morganella morganii".	2012
34.		CAFEi2012-73 entitled "Extraction and characterization of Solar-grade biosilica from rice husk"	
35.		CAFEi2012-43 entitled "Water Sorption Isotherms of Libyan Date Paste"	
36.		CAFEi2012-45 entitled "Medicinal Plants Use and its Potential Dangers to the Environment" Treatment for Agricultural Produce: Malaysia's Experience	
37.	Technical reviewer of Cafei2012	CAFEi2012-191 entitled "Simultaneous degumming and deacidification of crude palm oil using polymeric hollow fiber membranes"	2012
38.		CAFEi2012-57 entitled "Comparison of different extraction methods for extraction of total phenolic compounds from Winter Melon (Benincasa Hispida) Seeds"	
39.		CAFEi2012-209 entitled "Kinetic study of ultrasound assisted extraction on Cyprus Mentha viridis".	
40.		CAFEi2012-30 entitled "Submerged fermentation of mushroom mycelial for exopolysaccharide production	
42.	Technical reviewer of IJET	Water quality in dissolved air floatation treatment plant and efficiencies of dissolved air flotation pilot plant	2012
41.		CAFEi2012-189 entitled "Evaluation as a Preliminary Surface modification of coconut shell-based activated carbon with acidic and basic treatment	2012
43.	Technical reviewer of IJET	Seberang Perai Rice Scheme Irrigation Water Quality Assesment	2012
44.	Technical reviewer of IEM Journal	Supercritical CO <sub>2</sub> Extraction of Quercus infectoria galls and its comparison with Soxhlet Extraction	2014

46.	Technical reviewer of British Journal of Applied Science & Technology	Determination of the Effectiveness of Waste Water Treatment Process of Kaduna Refinery and Petrochemical Company (KRPC)	2014
47.	Technical reviewer of African Journal of Biotechnology	Rubber processing industry effluent treatment using a bacterial consortium	2014
48.	Editor for Agriculture and Agricultural Science Procedia (Elsevier)	International Conference of Agricultural and Food Engineering 2014 (Cafei2014)	2014
49.	Honorary Secretary	Malaysian Society of Agricultural Engineers (MSAE)	2013/ 2015
50.	Technical reviewer of Journal of Water and Climate Change	Trend analysis in climatic variables and impacts on rice yield in Nigeria	2014
51.	Technical reviewer of Journal of Engineering Science and Technology	Changes of Backscattering Parameters during Chilling Injury in Bananas	2014
52.	Technical reviewer of Environmental Science and Pollution Research	Remediation of feedlot nutrients runoff by electrolysis process	2014
53.	Expert panel for Staff Recruitment	Assessor for class presentation and report evaluation for Dr Norhashila Hashim	2014
54.	Conference reviewer Cafei2014	-An Innovative Oil Palm Residue Management Strategy: A Review Remote Sensing as a Tool for Irrigation Water Management -Effects of Physicochemical Characteristics of Pummelo Fruit Juice towards UVC Inactivation of <i>Salmonella typhimurium</i>	2014
55.		-Pectin Extraction from Pummelo ( <i>Citrus Grandis L. Osbeck</i> ) Peels Using Ultrasound-Assisted Extraction	
56.	Reviewer Environmental Technology	Development of BR-UASB-DHS System for natural rubber processing wastewater (AG14-TENT-2015-0246)	2015
57.			
58.	Conference reviewer Cafei2014	-Relationship between Soil Apparent Electrical Conductivity and pH Value of Jawa Series Soil in Oil Palm Plantation -Quality Evaluation and Characterization of Oil Extracted from Nigerian Mango Kernel Seed ( <i>Mangifera Indica L</i> )	2014
59.		-Extraction and Characterization of Pectin from Passion Fruit Peel Using Various Extraction Condition	
60.		-Extraction and Characterization of Cellulose from Durian Rind Drying Kinetics of Cocoa Nibs and Selected Qualities of Dried Nibs Under Convective Drying Technique	
61.		-Multivari ATE Analysis of Vegetative and Physiological Traits in Oil Palm ( <i>ElaeisguineensisJacq.</i> ) GERMPLASM	
62.		-An Integrated Modelling Framework for Water Resources Management in Newly Developed River Basin in Malaysia. I: -Development Of Local Model To Assess Climate Change And Kinetic -	
63.			

64.	Model Of Drying Process Of Pumpkins ( <i>Cucurbita Moschata</i> ) In A Convective Hot AIR Dryer	
65.	-Analyzing Fertility Effect on Growth and Yield of Amaranthus Curentus in Nigeria	
66.	-Investigation of Biogas Production Potential from Different Species of Grass in Thailand	
67.	-Sustainable Smallholder Agricultural Development Using the Chiefdom Development Plan (CDP) As a Community	
68.	-Development Framework Overview of Bacterial - A case Study	
69.	Cellulose Production and Application	
70.	Expert reference for Colloquium RACE 2015 Reviewer for Colloquium RACE 2015	2014
71.	Jury for poster exhibition Panel Jury at Symposium on the Malaysian Society for Microbiology (MSM2014)	2014
72.	Co-supervisory PhD student at Chiang Mai University, Thailand Extension	2014
73.	Supervisor UPM-TWAS Visiting Scholar Fellowship Supervisor for Dr Christopher Akinbile from Federal University of Technology Akure, Nigeria (Feb.-Mac 2015)	2015
74.	Reviewer of Desalination and Water Treatment Continous column study of Cu(II) and Pb(II) ions on alkali treated coir	2015
75.	Reviewer Pawees-	-Improvement of morphological properties of kenaf by adding nutrients
76.	Inwepf Joint	-Adsorption of acid orange 7 by Cetylpyridinium bromide modified
77.	International Conference 2015Pawees-inwepf Joint International Conference 2015	sugarcane bagasse -Plant feeding habit of the red eared slider turtle based on analysis of environmental DNA extracted from their feces
78.	Reviewer IFRJ Food waste handling in Malaysia and Comparison with other Asian countries	2016
79.	Reviewer Acta Horticulture -Development of coconut-based floating structure for stand-alone solar PV system in the tropics	2016
80.	-Effect of growing media from agriculture waste seed germination of tomato ( <i>Lycopersiconesculentum</i> Mill.) cv. Sida	
81.	-Livestock wastewater generation and farm management: The gap analysis	
82.	-Different combinations of light spectrum of LED and nitrogen affect the growth and yield of lettuce ( <i>Lactuca sativa</i> )	
83.	Reviewer Journal of Physical Science Kinetics study of oil extraction from <i>Calophyllum inophyllum</i> seeds using ultrasonic-assisted extraction technique	2016
84.	Reviewer Environment Protection Engineering Effect of Hydraulic retention time and temperature on biogas production from rural domestic wastewater treatment using anaerobic filter reactor	2016
85.	Reviewer Cafei 2016 -Evaluation Of Physical And Chemical Properties O F Maikunkele Stream For Irrigation Purpose Using Water Quality Index	2016
86.	-Study on River Water Quality Treatment Using Phytoremediation Technique	
87.	-Water quality monitoring for heavy metal contamination associated with acid mine drainage at abandoned and active mining sites in Pahang	
88.	-Increasing the Biogas Yield of a Floating Drum Anaerobic Digester using Poultry Droppings with Banana Peels	
89.	-Development of coconut-based floating structure for stand-alone solar PV system in the tropics	
90.	-Achieving best management practices in an oil palm plantation at tropical peatland: a gap analysis	

91.	Reviewer Journal of Tropical Agricultural Science	Effects of corn stem as a soil conditioner towards a green approach on waste management	2017
92.	Reviewer IOP Conference Series: Materials Science and Engineering-WOBIC2017	Carbon Degradation by Microbes in Soils: A Mini Review	2017
93.	Reviewer	7th Iwa-Aspire Conference & Exhibition 2017, Kuala Lumpur, Malaysia	2017
94.	Environmental Science and Pollution Research	Magnetically activated carbon fibers felt (MACFF) as an effective adsorbent for successful removal of cephalexin and amoxicillin from water	2018
95.	Reviewer Paper konferens iENFORCE2018	Feno As Biomarker Of Airways Inflammation In Exposure To Air Pollutants Among School Children Near Industrial Area In Terengganu	2018
96.	Reviewer Cafei 2018	- Reclamation of Sodic Soil at Thomas Irrigation Scheme using Millet Chaff as Organic Amendment -An investigative study on effects of mechanical parameters of automated grain drinks processing machine on drink consistency -Low carbon energy production strategies from solid waste-coal combination with special focus to Bauchi Metropolis, North-Eastern Nigeria	2018
97.	Reviewer 5th International Conference on Biotechnology Engineering	Effective EM for pretreatment of wet market wastewater	2018
98.	Reviewer Pertanika 2018	Potential dye adsorbance by Foxtail palm fruit activated carbon	2018
99.	Reviewer Chemosphere	Universal and reusable hapten/antibody-mediated portable optofluidic immunosensing platform for rapid on- site detection of pathogens	2018
100.	Reviewer Petroleum Science and technology, Taylor and Francis	Treatment of Waste Caustic Effluent Using by Integrated Physicochemical Process	2018
101.	Reviewer Thermal Science	Prototype And Model Of Solar Driven Desalination Plant In Arid Environment	2018
102.	Reviewer Environmental Science and Pollution Research	Potential use of composts and vermicomposts as low-cost and green adsorbents for dye removal: an overlooked application	2019
103.	Reviewer Konvensyen Kebangsaan Kejuruteraan Pertanian dan Makanan 2019	-Application of electrical resistivity method to identify suitable location of shallow tube well for irrigation -Development and Design of Household Composter -Evaluation of Performance for Young Coconut Husk Processing Machine and Its Product Quality -Hot Water Treatment of Oil Palm Decanter Cake (OPDC) For Bio-organic Media Preliminary Study of Oil Palm Seedlings	2019
104.	Keynote Speaker	FISH technique to environmental analysis (18-19 Nov 2010) at Maejo University, Thailand	2010, 2017, 2018
105.	Keynote Speaker	Sustainable Approaches in Minimizing Grain Losses. International Symposium on Agricultural Education for Sustainable Development at Tsukuba University, Japan from 16-20 November 2015	2015

106.	Keynote Speaker	The Application of DGGE and FISH Workshop from 25-28 August 2008	2008
107.	External Examiner Thesis	UTM 2013 (Master) Hanna Ilyani UTM 2014 (Master) Siti Nur Suhaila Mirin & Siti Fatimah Kamarudin USM 2016 (Master) Siti Fairos Abd Shattar UTM 2016 (Master) Nor Syahidah Zulkapli Master	2013, 2014, 2016,
108.	External Examiner Thesis	UTM 2018 (Master) Muhamad Firdaus Sabaruddin & Muhammad Aswae Md Eusoff USM 2018 (Master) Muhammad Fitri Mohd Akhir	2018
109.	External Examiner Thesis	USM 2019 (Master) Syafiq Shaharuddin	2019
110.	Expert panel for Staff Recruitment	Assessor for class presentation and report evaluation for Dr Sharence Nai Sowat (KAP)	2018
111.	Expert panel for Staff Recruitment	Assessor for class presentation and report evaluation for Dr Muhammad Hazwan Hamzah (KAP)	2019
112.	Consultation	Pembangunan BIPV Integrasi Ladang Pernakan Kambing di Puchong ,Selangor oleh Syarikat Ennesa Power Sdn. Bhd	2018/ 2019
113.	Consultation	Pengadaptasian Sistem Modern Pig Farming Negeri Melaka Program Putra Pemindahan Ilmu	2019
114.	Consultation	Research and collaboration with Barema Palm Oil Mill, West New Britain Province, Papua New Guinea	2018
115.	Consultation	-Kualiti Alam: RM15,000 -Felcro MSPO -AK Consult -SATREPS (Theme 4)	2019
116.	Referee	3Minute Thesis Competition at Faculty of Engineering 2019	2019
117.	Assist. Chairman	Kursus Teknik mudah ternak kelulut di laman rumah	2018
118.	Editorial Journal Member	Advances in Food Science, Sustainable Agriculture and Agroindustrial Engineering, E-ISSN 2622-5921, Jurnal Universitas Brawijaya	2019
119.	Advisory Board Member	20th World Conference on Applied Science, Engineering and Technology. 26-27th June 2019. KL	2019
120.	External Examiner Master	1. UKM (Faculty of Engineering) : Muhamad Farhan bin Md Yusoff (28 Jan 2020) Biopenggilapan Air Sisa Industri Pulpa Dan Kertas Kitar Semula Menggunakan Tumbuhan Akuatik Tempatan (Scirpus Grossus Dan Eichhornia Crassipes) 2. UTeM (Faculty of Mechanical Engineering): Muhammad Asyraf Said. Application Of Silterra Cleaning Solution In Post Chemical Mechanical Polishing Oxide Cleaning	2020
121.	International External examiner PhD	1. Royal Melbourne Institute of Technology (RMIT) (School of Engineering, College of Science, Engineering and Health). Zubayeda Zahan (30 Sept. 2019). Assessment of biogas production from Chicken Litter through Anaerobic Co-digestion with Food and Agro-industrial Wastes, an Australian case study: The use of C/N for Substrate Mixing and Semi Solid versus Conventional Anaerobic Digestion	2019
122.	As Chairman Viva Master	1. Izat Jaris Dzulkifli 2. Muhammad Aidil Hakim Md Ramzam 3. Muhammad Faiz Che Hashim 4. Mohammad Nazri Ebrahim	2020
123.	As Chairman Viva PhD	1. Osmaah Al Hajj Mohammed Hamdan 2. Farkad Morteda Hameed Al Musawi 3. Izrahayu Che Hashim 4. Muhammad Nurfaiz Abd Kharim	2020

	5.	Bernard Anak Maringgal	
	6.	Ezrin Mohd Husin	
	7.	Rabia Daw Ali	
	8.	Siti Jamilah Hanim Mohd Yusof	
124.	Competition Judge	5th Southeast Asian Agricultural Engineering Student Chapter Annual Regional Convention 2019 (ARC2019) 22-25 September 2019, Politeknik Kota Baru.	2019
125.	Reviewer International Journal	1. Separation Science and Technology : Optimization of extraction of divalent heavy metals like Cu (II) and Cd (II) using pickering emulsion liquid membrane by taguchi design 2. Environmental Science and Pollution Research: Potential use of composts and vermicomposts as low-cost adsorbents for dye removal: an overlooked application 3. Journal Science and Technology: Nutrient Leaching in Flooded Paddy Rice Field Experiment Using Hydrus-1D 4. Journal Science and Technology: Dye removal by membrane processes for wastewater treatment using a cationic carrier" 5. Desalination and Water Treatment: Membrane Bioreactor for Palm Oil Mill Effluent: A Review on Fouling Mechanism"	2019
126.	Reviewer International Journal	1. International Journal of Phytoremediation: "Electro-kinetic remediation coupled with phytoremediation in treatment of the solid waste leachate in hydroponic system" 2. Journal Science and Technology : "Turbidity Removal Using High Gradient Magnetic Separation in the Presence of Steel Wool on Wastewater Treatment" 3. Journal Science and Technology : "Consuming Agricultural and Industrial Wastes in Manufacturing Eco-Friendly Bricks" 4. Journal of Water and Environmental Nanotechnology: Effect of Organic Loading Rate on Removal of COD and BOD5 of Sugar Mill Waste Water Using Activated Sludge Process. 5. Energy Sources, Part A: Recovery, Utilization, and Environmental Effects:"Investigation Of Effects Of Seasonal Variation On Biogas Production From Abattoir Waste" 6. Environmental Science and Pollution Research "Tight sorption of arsenic, cadmium, mercury and lead by medical grade activated carbon and acid-processed montmorillonite clay" Ms. No. ESPR-D-20-05814	2020

### Conference/Training Attended

No.	Year :	2006
1		International Conference on Agricultural Wastes "Turning Wastes to Wealth".21-23 Mac 2006. Marriott Putrajaya
2		Workshop on Strategic Planning Department
3		Course 'Introduction to Management' Faculty of Engineering.Series 1/2006
4		Workshop on Strengthening the Management and Research for New Appointment Lecturer and Assistant
5		International Conference on Natural Resources Engineering and Technology: Value added products through process intensification
6		Outcome Based Education (OBE) Workshop
7		Exhibition Design, Research and Innovation (PRPI) UPM 2006
8		Workshop on Supervision and Evaluation of Engineering Graduate Student Thesis
9		Research and Industry Forum 2006: National Economy Catalyst.5-6 Sept. 2006, Fac. Of Eng., UPM
10		Techniques in Molecular Morphology, Imaging, Gene Expression and Behavioural Analysis
<b>2007</b>		
11		Induction courses for General and Specific Module for Professional and Management Group. Series 6/2007, UPM
12		Team-Building Workshop
13		ESQ Training 2007

- 14 Internal Audit Course. Series 1/2007  
15 World Engineering Congress- the 3<sup>rd</sup>. 5-9 Ogos 2007.  
16 International Seminar on Sustainability Wetlands.4-6 Sept. 2007. Puteri Pan Pacific, JB.  
17 Exhibition Design, Research and Innovation (PRPI) UPM 2007  
18 Symposium of Sustainable Agriculture: Issues and the Way Forward.6-8 Dec.2007,UPM.

### **2008**

- 19 International Conference & Expo on Environmental Management and Technologies  
20 DGGE and FISH Workshop (Speaker) .25-28 Ogos 2008, IBS, UPM

### **2009**

- 21 Awareness Briefing Engineering Management Research Labaratory  
22 Academic Writing Workshop  
23 Direction of Precision Farming and Grant Proposal Writing Workshop,13-15 Mac 2009, Avillion Hotel.  
24 Workshop on Curriculum Review Programme of Engineering (Biological and Agricultural)  
25 Academic Performance Audit Briefing (APA)  
26 National Seminar on Technology and Innovation in Teaching and Learning 2009. 28-29 April 2009.  
IOI Resort, Putrajaya  
27 Transfer Courses Thesis to Book. 18-21 Mei 2009, Hotel Seaview, Langkawi  
28 Half Year Performance Evaluation Workshop ITMA  
29 Agriculture Congress  
30 International Conference on Kenaf and Allied Fibres 2009,1-3 Dec.2009. Legend Hotel, KL  
31 Presitting Annual Review Workshop on Quality Management System (QMS) Putra 3Q  
32 International Advanced Technology Congress (ATCI 2009) 3-5 Nov. 2009, PWTC,KL.  
33 Workshop Presentation of the first draft of documentation changes on Quality Management System (QMS) Putra 3Q  
34 Updating Workshop Review Paper Master without Thesis  
35 Course on Postgraduate Studies SPK, TNCAA  
36 Departmental Curriculum Review Workshop
- 37 Biochar Malaysia Workshop 2009,14<sup>th</sup> Dec. 2009. Mines Wellness Hotel

### **2010**

- 38 National Seminar "Providing Ubiquitous Connectivity".29<sup>th</sup> July 2010. Mariott Hotel.  
39 World Engineering Congress. 2-5 August 2010, Kuching, Sarawak.  
40 Lecture series" Optical sensors for Environmental Monitoring" – Assc.Prof Nor Azah Yusof  
41 Public Lecture 'Energy Issues and Renewable Energy from Biomass/Wastes"-Prof Dr Kuniyuki, Nagoya Japan  
42 Inaugural Lecture "Concurrent engineering for composites" –Prof Ir Dr Mohd Sapuan Salit  
43 Seminar on Branding of mSET. Palm Garden Hotel. 27 Feb.2010  
44 Registration for Engineers  
45 Training on Turnitin  
46 Seminar on Biofuel and Integrated Biorefineries – Prof Dr Said Nashaie  
47 Public Lecture "Google the Earth: What's Next" –Prof Dr Shattri Mansor  
48 One Day Seminar on Green Technology and Renewable Energy.21<sup>st</sup> Oct. 2010. Dewan Taklimat. Fac. Engineering UPM  
49 Seminar on enhancing and optimizing local feed resources in livestock production.10 Nov. 2010. ITaFOS, UPM

### **2011**

- 50 Bengkel Penulisan Akademik (Siri 2)  
51 Kursus Penyeliaan Berkesan Pasca Siswazah  
52 Symposium on Low Carbon Asia Research Project- Low carbon Society study for Iskandar . 4<sup>th</sup> July 2011. Pan Pacific Hotel  
53 4th USM-JIRCAS Joint International Symposium  
54 Biomass sustainable natural resource and innovation for a greener future.18-20 Januari 2011. Parkroyal Hotel, Penang  
55 Program Mesra Pelanggan Pembukaan Kilang Konsesi Utama –Gaharu Product  
56 Taklimat Pengurusan Sisa Kimia Terjadual  
57 Bengkel Portfolio Pengajaran Berkesan  
58 Bengkel Penyediaan Modul Keselamatan dan Kesihatan dalam Pertanian  
59 Majlis Perutusan 100 Hari Naib Canselor  
60 Workshop on Zero Discharge from Palm Oil Industry  
61 YPF-MANCID: Knowledge Sharing  
62 Training of trainers for Starting School  
63 Taklimat Pemantauan Hasil Pembelajaran LO4  
64 National Symposium on Climate Change Adaptation  
65 3rd Regional Symposium on Engineering & Technology 2011.21-23 Nov. 2011. Kuching, Sarawak

66 AKEPTs 1<sup>st</sup> Annual Young Researchers Conference and Exhibition. 19-20 Dec. 2011, PWTC,KL

### **2012**

- 67 Program Pembangunan Kepimpinan Tunas Akademia 1<sup>st</sup> Series
- 68 Workshop on Immersion Programme
- 69 Workshop of Young Researcher (AKEPT) : The direction of AYRC for 2012-2015
- 70 Workshop on Department's Direction 2012
- 71 Workshop on Hazard Analysis (Occupational, Safety and Health)
- 72 Round Table Discussion (MPN) 'Advancing Engineering for Nation Sustainability: Innovation and Evolution'
- 73 Conference 1<sup>st</sup> Regional on Agrobiodiversity conservation and Sustainable Utilization (RAC-1) 2012.25-27 Sept. 2012. One Hotel Helang, Langkawi.
- 74 EU-Asia Biomass Best Practices and Business Partnering Conference 2012. 7-10 May 2012. PWTC,KL
- 75 Int. Conf. on Chemistry and Chemical Process (ICCCP2012)
- 76 Seminar on Good Agricultural and collection practice for quality herbal raw materials.12-13 Jun 2012. Hotel Nouvelle. Seri Kembangan
- 77 Bengkel Pendedahan Mengenai Sumber teknologi tenaga boleh baharu dari biojisim pertanian kepada pihak Berkuasa dan Pemaju-pemaju. Organized by Sustainable Energy Development Authority Malaysia (SEDA). 31<sup>st</sup> Oct. 2012. Mariott Hotel
- 78 International Leadership Capacity Building Workshop for Women Academic leaders 2012 (LEAD2012) on Dec. 17-20, 2012. Renaissance Hotel, Kuala Lumpur
- 79 International Conference on Agricultural and Food Engineering, 26-28 Nov.2012. Palm Garden Hotel, Putrajaya

### **2014**

- 80 32<sup>nd</sup> Symposium of Malaysian Society for microbiology, 6-8 Dec. 2014, Terengganu
- 81 National Conference on Agricultural and food mechanization, Sutera Harbour, sabah,20-22 mei 2014
- 82 1<sup>st</sup> regional conference on campus sustainability, UMS Kota Kinabalu, Sabah. 7-9 April 2014
- 83 Int. workshop on Smart Farming XI. 11 August 2014, UPM
- 84 2<sup>nd</sup> International Conference on global sustainability and Chemical Engineering, CitiTel, Mid valley, Kuala Lumpur. 20-22 August 2014
- 85 2<sup>nd</sup> International Conference on Agricultural and Food Engineering, 1-3 Dec. 2014, Kuala Lumpur

### **2015**

- 86 IICBE Int.Conference, 3-4 Feb.2015, Bali, Indonesia
- 87 Persidangan Kebangsaan Pemindahan Teknologi (Confertech 2015) Mardi .7-9 April 2015. Riverside Majestic, Kuching
- 88 Ag-ESD Symposium 2015. Food Loss and Food Waste Ag-ESD Symposium for Global Action Program. University of Tsukuba, Japan. 16-20 Nov. 2015 (Keynote-Speaker)

### **2016**

- 89 SOMCHE2016. 1-3 Dec. 2016. Miri Mariot, Sarawak
- 90 Precision in crop farming concept and application, UPM
- 91 The 4<sup>th</sup> AUCFA Conference and Workshop. 4-5 February 2016. Bangkok, Thailand
- 92 Kursus Efluen anjuran MPOB. Plasma, Pahang.
- 93 Asia-Water2016. 6-8 April 2016, KLCC.
- 94 15<sup>th</sup> Int. PEAT Congress. 15-19 August 2016. Kuching, Sarawak
- 95 3<sup>rd</sup> International Conference on Aqricultural and Food Enqineering. Kuala Lumpur

### **2017**

- 96 International Workshop. Satreps (JST and JICA) Project on Promotion of green economy with palm oil industry for biodiversity conservation. 28-29 Mac 2017, Promenade Hotel, Kota Kinabalu
  - 97 Konvensyen Kebangsaan AE , 6 APRIL 2017, UPM
  - 98 Regional Workshop on proteceted cultivation of high value crops under changing climate conditions. 12-14 Sept. 2017. Mardi , Serdang
  - 99 The Southeast Asian Agri-Business Show (SIMA) 7-9 September 2017, Bangkok Thailand
  - 100 Global Civil Engineering conference. 25-28 July 2017. Seri Pacific Hotel,KL
  - 101 Asian –Pacific Aquaculture 2017. PWTC. 27 July 2017.
- KPM Edu-Visit to UTM Skudai and National University of Singapore. 16-18 october 2017

### **2018**

- 102 Karnival Pendidikan Tinggi Negara ,24-25 Februari 2018, Persada Johor (Pempamer)
- 103 The 6<sup>th</sup> In. Symposium on Applied Engineering and Sciences (SAES 2018) , 15-16 Dec. 2018, Kyushu Inst. Of Tech, Japan
- 104 National Conference on on Agricultural and food mechanization (NCAFM2018). 17-18 April 2018, Pullman Kuching
- 105 MSAE Conference 2018. Faculty of Engineering, UPM

## 2019

- 106 Workshop on Developing Project proposals to apply for International funds. 9<sup>th</sup> April 2019. Putrajaya Mariott Hotel. Mestec.
- 107 Workshop on Constructed Wetland. 17<sup>th</sup> April 2019. Jungle Lodge Alang Sedayu, Gombak. MalaysiaGBC
- 108 Konvensyen Kebangsaan Kejuruteraan Pertanian dan Makanan 2019. 21 Mac 2019. MOA Wisma Tani.
- 109 International Advisory Board: World Conference on Applied Sceinces, Engineering and Technology (WCASET 2019) to be held 26-27 June 2019, Kuala Lumpur Malaysia
- 110 Technical visit of MSAE to Universiti Maejo, and adiCET, Thailand on 7-11 Februari 2019.
- 111 4th International Conference on Desalination using Membrane Technology, 1 – 4 December 2019, Perth, Australia "Membrane Application for Contaminants and Color Removal from Palm Oil Mill Effluent: Challenges and Way Forward"
- 112 Seminar Constructed Wetland. 17<sup>th</sup> April 2019. Organized by MalaysiaGBC.
- 113 Workshop on Module " Modern Pig Farm" on 11th Julai 2019.
- 114 Competition of Research and Development Selangor State S (2019).10-13 October 2019, MITEC, KL. National Level, 3<sup>rd</sup> Place.
- 115 International Competiton iCAN2019 di Montreal, Canada "SPCE Tungro Disease Detection in Paddy Plantation". Gold Award

## 2020

- 116 Chief-Editor of e-Newsletter for i-PUTRA from year May 2020- May 2023. Had applied e-ISSN 2773-5095
- 117 Secretariat for National Conference of Agricultural and Food Engineering. Organized by MSAE and MARDI on 23-24<sup>th</sup> March 2021
- 118 Supervisor for Eng. Iwar Raphael Terungwa from Benue State, Nigeria for Non-graduating programme (Research attachment) at department from September 2021-Dec.2021
- 119 Recipient of Fullbright Visiting Fellowship at North Dakota State University, US in September 2021-December 2021.
- 120 Pensyarah bagi projek Wake-up Cambodia untuk Pembangunan Kesukarelawan II pada 4-6 Februari dan 3-8 April 2020 di Kampong Chhnang, Cambodia bagi menyediakan fasiliti untuk membekalkan air bersih untuk penduduk kampung
- 121 Visiting lecturer in the 3 in 1 Program organized by Agroindustrial Technology (DAIT), Faculty of Agricultural Technology, Universitas Brawijaya, Indonesia between September-December 2020.

## Contract Research

No	Project		Role	Year
1	Assessment of the Quarterly environmental monitoring report (EMP) on water quality of Kualiti Alam	Messr.: AMR Environmental (RM1000 per report)	Assessing the report and provide the recommendation on the water quality status on the finding of the report	2010
2	Evaluation and investigation on Water Quality of Sungai Melaka	UTem (RM1200 per report)	Assessing the report and provide the recommendation on the water quality status on the finding of the report	2010
3	Assessment of the Quarterly environmental monitoring report (EMP) on water quality of Kualiti Alam	Messr.: AMR Environmental (RM1000 per report)	Assessing the report and provide the recommendation on the water quality status on the finding of the report	2011
4	Evaluation and investigation on wastewater quality of Ethylene Sdn Berhad, Petronas	Messr.: AMR Environmental (RM2000 per report)	To provide an expert advice on water quality analysis and experimental set-up	2012

5	Evaluation and investigation on wastewater quality of Jelutong Sewage Treatment Plant (JSTP)	Messr.: AMR Environmental (RM1000 per report)	To provide an expert advice on water quality	2012
6	Pembangunan BIPV Integrasi Ladang Pernakan Kambing di Puchong ,Selangor oleh Syarikat Ennesa Power Sdn. Bhd	Ennesa Solar Sdn. Bhd (In-kind fasiliti)	To provide an expert advice on water quality for desalination by solar panel	2018/2019
7	Pengadaptasian Sistem Modern Pig Farming Negeri Melaka Program Putra Pemindahan Ilmu	UCTC UPM (Geran dari Kerajaan Negeri Melaka-masih mohon)	To provide an expert advice on water quality analysis and troubleshooting	2019
8	Research and collaboration with Barema Palm Oil Mill, West New Britain Province, Papua New Guinea	Barema Palm Oil Mill (In-kind fasiliti)	To provide an expert advice on biogas set-up	2018/2021
9	Troubleshooting on Water Quality of Leachate at Kualiti Alam	Kualiti Alam, Seremban (One-off: RM15000. Will pay thru UPM Holdings)	To provide an expert advice on water quality analysis and troubleshooting	May 2019-Aug 2019
10	Assessment on the progress commissioning of MBR in STP	AK Consult Sdn Bhd (RM3000 per report)	Assessing the report and provide the recommendation on the progress	May 2019-May 2020
11	Research and collaboration with Tokyo Inst. Of Tech. Japan for SATREPS (under Prof. Fatimah)	SATREPS Japan (In-kind fasiliti & GRA payment)	To provide a report on the production of ammonia from aquaculture sludge	May 2019-May 2020
12	Water Quality Monitoring for MSPO , Felcra	MSPO Felcra HQ (RM1000 per report)	To provide an expert advice on water quality analysis and troubleshooting	May 2019-May 2020
13	Research and collaboration with IPMA Industry, Kedah	MSAE (In-kind fasiliti)	To provide an expert advice on the RnD of rice processing	2017/2018
14	Research and collaboration with MCB Sdn. Bhd	MCB Sdn Bhd (In-kind fasiliti)	To provide an expert advice on the RnD of carbide lime	2017/2019
15	Research and collaboration with AMR Sdn.Bhd.	AMR Environmental (RM2000 per report)	Assessing the report and provide the recommendation on the water quality status on the finding of the report-Bioassay analysis	May 2019-July 2019
16	As technical working group (TWG)	SWCORP	Animal feed production and enzyme research	June 2020
17	In-kind 4 pre-processing of paddy with value of MYR100,000 to MSAE and UPM	IPMA Industry Sdn Bhd	Hand-over ceremony during Cafei 2020 on 3 <sup>rd</sup> Feb.2021	April 2020