

CURRICULUM VITAE



Assoc. Prof. Dr. Syazwani Idrus

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Education

1. Ph.D (Environmental Eng.–Wastewater Treatment), Faculty of Engineering and the Environment, University of Southampton, Hampshire, United Kingdom - 2013
2. MSc. (Civil Eng.) (Environmental Eng.) Universiti Teknologi Mara, Malaysia - 2007
3. BEng. Hons (Civil Eng.) Universiti Teknologi Mara, Malaysia - 2005

Areas of Interest

1. Environmental Engineering – Water and Wastewater Treatment Technology
2. Anaerobic conversion of biomass for biogas production
3. Water Treatment: Adsorbent and coagulant development
4. Groundwater Treatment Technology

Professional Qualification/ Membership/ Affiliation

1. Member, Board of Engineers, Malaysia – BEM
2. International Water Association - IWA

Appointments

Position	Duration
1. Associate Professor, Department of Civil Engineering, Faculty of Engineering UPM	Oct 2019 – to date
2. Senior Lecturer, Department of Civil Engineering, Faculty of Engineering UPM	July 2013 - Sept 2019
3. Mobility Coordinator and Summer Programme Coordinator, Faculty of Engineering, UPM - Appointed by Deputy of Vice Chancellor (Academic and International), UPM	Jan 2018 – May 2020
4. Head of Linkages, Alumni and Mobility Unit, Faculty of Engineering, UPM	June 2017 – May 2020
5. Evaluation Committee Member, “Tabung Amanah Jaringan Industri dan Masyarakat (JINM) Faculty of Engineering, UPM”	June 2017 – May 2020
6. Project Leader, Food Waste Characterization for Biogas Anaerobic Digestion Process, TNBR Sdn Bhd	Oct 2018 – June 2019
7. Project Leader, Chemical and Biochemical Analysis of Anaerobic Digestion Process Using Food Waste as Feedstock, TNBR Sdn Bhd	Aug 2019 – Sept 2020
8. Head, Protocol Unit, Global Civil Engineering Conference 2017 (Officiated by Minister of Works)	2017
9. Programme Director, Alumni Dinner Civil Engineering Department, 2016, “The Establishment of 30 Years of Department.”	2015 – 2016

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| 10. | Project Leader, 'Projek Amal Pembinaan 2 Unit Rumah Orang Asli, Kampung Kachau Luar, Semenyih', NBOS Grant, Ministry of Higher Education | 2015 – 2016 |
| 11. | Head, Public Health Laboratory | 2014 – to date |
| 12. | Students Affairs' and Alumni Coordinator | Dec 2013 -May 2017 |
| 13. | Tutor, Department of Civil Engineering, UPM | 2007 – June 2013 |
| 14. | Civil Engineer (Ministry of Works, Malaysia) | 2007 |

Related Appointments			
Position			Year
1.	External Examiner (Ph.D) Griffith University, Australia	Plastic Waste Management and Policy in the Fast-Food Industry in Vietnam.	2021
2.	Subject matter experts	Amendments to the Environmental Quality (Sewage) Regulations 2019: Workshop with Stakeholders Organized by Department of Environment, Ministry of Environment and Water.	2021
3.	Invited Speaker	Waste Treatment Technology, Organized by Department of Veterinary and Services, Putrajaya, Ministry of Agriculture and Food Industries.	2021
4.	External Examiner (Ph.D) Universiti Teknologi Mara (UiTM)	Seawater Desalination Using Newly Developed Kenaf MCC Flat sheet membrane.	2021
5.	Internal Examiner (Ph.D)	Malaysian River Stability Index (MRSI) By Incorporating Morphological Assessment.	2021
6.	External Examiner (Master- Research) Universiti Kebangsaan Malaysia (UKM)	Sustainable Domestic Wastewater Treatment By Fungal Pellets Of Medicinal Mushroom <i>Ganoderma Lucidum</i>	2021
7.	Facilitator: Head of Technology and Innovation Cluster	National Sewerage Policy Study Workshop organized by Ministry of Water, Land and Natural Resources.	2020
8.	External Examiner (Ph.D) Savitribai Pune University, India	Experimental and Analytical investigation of Ferrocement Panel under impact loading.	2020
9.	External Examiner (Master-Research) Griffith University, Australia	Effect of steam explosion pre-treatment and feed ratio on methane yields during anaerobic co-digestion of sugarcane bagasse with chicken manure.	2020
10.	Internal Examiner (Master- Research)	An Experimental Study on the Effectiveness of a Narrow Crested Submerged Breakwater Under Varying Wave Conditions.	2020
11.	Invited Speaker	Livestock Wastewater Treatment – Department of Veterinary Services ,Perak and UCTC UPM	2019
12.	Invited Speaker	Livestock Wastewater Treatment – Department of Veterinary Services ,Pulau Pinang and UCTC UPM	2019
13.	Keynote speaker	International Forum on wastewater treatment and Management: Textile wastewater Treatment, Universitas Brawijaya, Indonesia	2019

14.	Guest Lecture	International Guest Lecture, Food waste as source of biogas Production, Universitas Brawijaya, Indonesia	2019
15.	Subject matter experts	Modern Pig Farming (Waste Treatment) - Department of Veterinary Services, Melaka and UCTC UPM	2019
16.	Guest Lecture	Waste Treatment Technology – Inbound Mobility Programme from Kunming University of Science and Technology, China	2019
17.	Panel Interview (PhD Scholarship)	Ministry of Education, Malaysia	2019
18.	Officiator	Graduation day (Form 5), Sekolah Menengah Tunku Abdul Jalil, Hulu Langat.	2019
19.	Invited Speaker	Fundamental of Anaerobic Digestion, Tenaga Nasional Berhad (TNB Research Sdn Bhd)	2018
20.	Escorting Officer	Mobility Programme to University Teknologi Brunei	2018
21.	Escorting Officer	Mobility programme to Kunming University of Science and Technology, China	2018
22.	University/Committee member	Crisis Management Plan Workshop (International Student Affairs), Putra International Centre, UPM	2018
23.	Committee member	Researcher Links Workshop: Innovative Designs of Sustainable Agro-Hydro Health Systems (Jointly organized by UPM and Imperial College London)	2017
24.	Escorting Officer	Mobility programme to Nanyang Technological University and Nanyang Environment & Water Research Institute, Singapore	2017
25.	Scientific committee	International Symposium of water and wastewater management, Malatya, Turkey	2017
26.	Technical Committee	ICBAE 2017 – 3 rd International Conference on Biotechnology and Agriculture Engineering, Osaka Japan	2017
27.	Co Advisor Final Year Project	Waste Detained and Oil Trap - Politeknik Sabak Bernam, Selangor	2015
28.	Technical Committee Member & Editor Journal Technology Special Issue	Paddy and Water Environment Engineering Society (PAWEES) - International Network for Water and Ecosystems in Paddy Fields (INWEPF) Joint Conference 2015	2015

Publications

Indexed Journals

1. Tuan Nurfarhana Tuan Mohd Marzuki, **Syazwani Idrus***, Mohammed Ali Musa, Abdul Malek Abdul Wahab, Nur Syakina Jamali, Hasfalina Che Man and Sabrina Ng Muhamad Ng, Enhancement of Bioreactor Performance Using Acclimatised Seed Sludge in Anaerobic Treatment of Chicken Slaughterhouse Wastewater: Laboratory Achievement, Energy Recovery, and Its Commercial-Scale Potential. *Animals* Vol 11(11) 2021 (Special issue: Recent Advancements in Livestock Waste and Wastewater Management) Q1 (Top 10%)
2. Sabrina Ng Muhamad Ng, **Syazwani Idrus***, Amimul Ahsan, Tuan Nurfarhana Tuan Mohd Marzuki and Siti Baizura Mahat, Treatment of Wastewater from a Food and Beverage Industry Using Conventional Wastewater Treatment Integrated with Membrane Bioreactor System: A Pilot-Scale Case Study. *Membranes* Vol 11(6) 2021. Q2

3. Mohammed Ali Musa and **Syazwani Idrus***, Physical and Biological Treatment Technologies of Slaughterhouse wastewater: A Review, *Sustainability* Vol 13 (9), 2021. Q2
4. Hasfalina Che Man, Norshafiqah Khairul Anuar, Muhammad Hazwan Hamzah, **Syazwani Idrus**, Nik Norsyahariati Nik Daud, The Potential Use Of Decanter Cake Waste As Co-Substrate for Methane Production Under Mesophilic Condition, *Journal of Engineering Science and Technology*, Vol 16, Issue 3, 2021
5. Mohammed Ali Musa and **Syazwani Idrus***, Effect of Hydraulic Retention Time on the Treatment of Real Cattle Slaughterhouse Wastewater and Biogas Production from HUASB reactor, *Water* Vol 12 (2), 2020. Q2
6. Mohammed Ali Musa, **Syazwani Idrus***, Mohd Razif Harun Tuan Farhana Tuan Mohd Marzuki and Abdul Malek Abdul Wahab, A Comparative Study of Biogas Production from Cattle Slaughterhouse Wastewater Using Conventional and Modified Upflow Anaerobic Sludge Blanket (UASB) Reactors, *International Journal of Environmental Research and Public Health*, Vol 17(10), 2020. Q1
7. Mohammed Ali Musa, **Syazwani Idrus***, Hasfalina Che Man and Nik Norsyahariati Nik Daud, Performance Comparison of Conventional and Modified Upflow Anaerobic Sludge Blanket (UASB) Reactors Treating High-Strength Cattle Slaughterhouse Wastewater, *Water* Vol 11(4), p806, 2019. Q2
8. Mohammed Ali Musa, **Idrus Syazwani***, Hasfalina Che Man , Nik Norsyahariati Nik Daud, Effect of Organic Loading Rate on Anaerobic Digestion Performance of Mesophilic Upflow Anaerobic Sludge Blanket Reactor (UASB) using Cattle Slaughterhouse Wastewater as Substrate, *International Journal of Environmental Research and Public Health*, Vol 15(10), 2018. Q2
9. Mohammed Ali Musa, **Syazwani Idrus***, Hasfalina Che Man, Nik Norsyahariati Nik Daud, Wastewater Treatment and Biogas Recovery using Anaerobic, Membrane bioreactors (AnMBR) – Review Paper: Strategies and Achievements, *Energies* (Special Issue: Biofuel and Bioenergy Technology), Vol 11(7), 2018 Q2
10. **Syazwani Idrus**, Sim Jian Zhe, Nurul Shafiqah Rosli and Nik Norsyahariati Nik Daud, Co-Digestion of Rice Straw Leachate and Domestic Waste Water for Biogas Production with Addition of Urea as Nitrogen Source, *International Journal of Engineering and Technology* Vol 10(1) p 76 – 81, 2018
11. **S. Idrus**, A. Ahsan and Nik Daud, N., Anaerobic Digestion of Domestic Wastewater in different Salinity Levels: The Adaptation Process, *Pertanika: Journal Of Science & Technology*, Vol. 25(1), 2017
12. SC Anijiofor, NNN Daud, **S Idrus**, HC Man, Recycling of fishpond wastewater by adsorption of pollutants using aged refuse as an alternative low-cost adsorbent, *Sustainable Environment Research*, Vol 28(6), 315 – 321, 2018
13. AO Al-Sulttani, A Ahsan, AN Hanoon, A Rahman, NNN Daud, **S Idrus**, Hourly yield prediction of a double-slope solar still hybrid with rubber scrapers in low-latitude areas based on the particle swarm optimization technique, *Journal of Applied Energy*, Vol. 203 p. 280 – 303, 2017 Q1
14. Iqbal K Erabee, Amimul Ahsan, Bipin Jose, T Arunkumar, R Sathyamurthy, **Syazwani Idrus**, NN Nik Daud, Effects of electric potential, NaCl, pH and distance between electrodes on efficiency of electrolysis in landfill leachate treatment, *Journal of Environmental Science and Health, Part A*, p. 1 – 7, 2017
15. IK Erabee, A Ahsan, NNN Daud, **S Idrus**, S Shams, Manufacture of Low-cost Activated Carbon Using Sago Palm Bark and Date Pits by Physiochemical Activation, *BioResources* Vol 12(1), 1916 – 1923, 2017 Q2
16. Ali Omran Al-Sulttani, Amimul Ahsan, Aatur Rahman, NN Nik Daud, **S Idrus**, Heat transfer coefficients and yield analysis of a double-slope solar still hybrid with rubber scrapers: An experimental and theoretical study, *Desalination* Vol 407, 61 – 74, 2017 Q1
17. Iqbal Khalaf Erabee, Amimul Ahsan, Abid Wahid Zularisam, **Syazwani Idrus**, Nik Norsyahariati Nik Daud, Thirugnanasambantham Arunkumar, Ravishankar Sathyamurthy, Aiman Eid Al-Rawajfeh, A New Activated Carbon Prepared from Sago Palm Bark through Physiochemical Activated Process with Zinc Chloride, *Engineering Journal*, Vol 21(5), p. 1 – 14, 2017
18. IK Erabee, A Ahsan, B Jose, MMA Aziz, AWM Ng, **S Idrus**, NNN Daud, Adsorptive treatment of landfill leachate using activated carbon modified with three different methods, *Korean Society Civil Engineer Journal of Civil Engineering* Vol 22(4) p1 – 13, 2017
19. Nurul Shafiqah Rosli and **Syazwani Idrus***, Assessment of Potential Biogas Production from Rice Straw Leachate in Upflow Anaerobic Sludge Blanket Reactor (UASB), *International Journal of Smart Grid and Clean Energy*, Vol 5(3) p 135 – 143, 2016
20. Nik Norsyahariati Nik Daud, Nursheela Abu Mansor, Amimul Ahsan, **Syazwani Idrus**, Leachate Treatment Using Aged Refuse as Biofilter Medium, *Pol. Journal of Environmental Study* Vol. 24(2), p 605 – 609, 2015

21. A. Ahsan, M. Alamgir, M. Imteaz S. Shams, M.K. Rowshon, M.G. Aziz, **S. Idrus**, Municipal Solid Waste Generation, Composition and Management: Issues and Challenges - A Case Study, Environment Protection Engineering Vol 41(3) p 43 – 59, 2015
22. Amimul Ahsan, Maskedah Kamaludin, M. M. Rahman, A. H. M. F. Anwar, M. A. Bek, **S. Idrus**, Removal of Various Pollutants from Leachate Using a Low-Cost Technique: Integration of Electrolysis with Activated Carbon Contactor, Water, Air, & Soil Pollution Vol 225(2163) p 1 – 9, 2014
23. **Idrus, S.**, Banks, C., & Heaven, S., Assessment of the potential for biogas production from wheat straw washwater in upflow anaerobic sludge blanket digesters, Water Science and technology: A Journal of the International Association on Water Pollution Research Vol 66(12) p 2737 – 2744, 2012

Publications

Non- indexed Journals

24. Anijofor, S.C., Nik Daud, N.N., **Idrus S** and Ahsan A., Aged refuse characterization as resource for wastewater treatment and landfill remediation, International Journal of Waste Resources Vol 7(2) p 1 – 4, 2017
25. N. N. Nik Daud, O. A. Adeleke and **S. Idrus**, Preliminary Assessment of Lakes Water Quality Status at Campus Area in Selangor, Malaysia, Malaysian Journal of Civil Engineering (MJCE) Special Issue Vol 28(1) p 42 – 49, 2016
26. **Idrus, S.**, Banks, C., & Heaven, S., Comparison of an Upflow Anaerobic Sludge Blanket and an Anaerobic Filter for Treating Wheat Straw Washed water, Journal of Hydrology and Environment Research, Vol 3(1) p 30 – 37, 2015

Conference Proceedings

1. **Syazwani Idrus** and Nor Liyana Hussain, Anaerobic co-digestion of Textile Wastewater with Food Waste and Cow Manure in Upflow Anaerobic Sludge Blanket Reactor: A comparative study. International E-Conference on Developments in Chemical, Biological and Environmental Sciences (DCBES-2021), Hyderabad India, 2021
2. Anijofor Sandra, Hasfalina Che Man, Nik Norsyahariati Nik Daud and **Syazwani Idrus**, Molecular Diversity and Compositional Analysis of Microbiota In Aged Refuse Biofilter Revealed By Amplicon Sequencing, 5th International Conference on Agricultural and Food Engineering Joint Conference (CAFE-i-2021), Universiti Putra Malaysia, 2021
3. **Syazwani Idrus** and Darwina Rone, Adsorptive Removal of Ferum from Groundwater using Waste Derived Adsorbent, International E-Conference on Advances In Science And Technology for Betterment Of Health, Environment And Energy, Bengaluru India, 2020
4. **Syazwani Idrus**, Sim Jian Zhe, Nurul Shafiqah Rosli and Nik Norsyahariati Nik Daud, Co-Digestion of Rice Straw Leachate and Domestic Wastewater for Biogas Production with Addition of Urea as Nitrogen Source, Proceedings – 3rd International Conference on Biotechnology and Agriculture Engineering, Osaka Japan, 2017
5. **Syazwani Idrus**, Uzana Ismail, Nik Norsyahariati Nik Daud, Mesophilic Co-digestion of Automotive Wastewater And Rice Straw Leachate In Continuous Stirred Tank Reactor (CSTR), Proceedings – International Symposium of Water and Wastewater Management, Malatya Turkey, 2016
6. Nurul Shafiqah Rosli, **S. Idrus**, Md Dom A. and Nik Daud N., Potential of pineapple waste extract (PWE) as co-substrate in Anaerobic Digestion of Rice straw Washed Water (RSWW): Enhancement of biogas production, Proceedings – Global Civil Engineering Conference, Kuala Lumpur, 2017
7. **Idrus, S.**, Banks, C., & Heaven, S., Comparison of an Upflow Anaerobic Sludge Blanket and an Anaerobic Filter for Treating Wheat Straw Washwater, Proceedings – International Conference on Future Environment and Energy, Dubai UAE, 2015
8. **Idrus, S.**, Banks, C.J., Heaven, S. and Nik Daud, N., Anaerobic Digestion of Domestic Wastewater in different Salinity Levels: The Adaptation Process, Proceedings – World Research and Innovation Convention on Engineering and Technology, Putrajaya Malaysia, 2014
9. Khairul Anuar, N., Che Man, H., **Idrus, S.**, Nik Daud, N. N, Biochemical Methane Potential (BMP) from Anaerobic Co-digestion of Sewage Sludge and Decanter Cake, IOP Conference Series: Materials Science and Engineering Vol. 368(1), p.12 – 27, 2018

10. Nik Norsyahariati Nik Daud, A Abdul Rahman, **S Idrus**, Preliminary assessment of lakes water quality status at campus area in Selangor Malaysia, Proceedings – Malaysian Journal of Civil Engineering 28, 2016
11. Adeleke A.O, Nik Daud, N. and **S. Idrus**, Preliminary Assessment of Lakes Water Quality Status at Campus Area in Selangor, Malaysia, Proceedings – World Research and Innovation Convention on Engineering and Technology, Putrajaya Malaysia, 2014
12. **Idrus, S.**, Banks, C., & Heaven, S., Assessment of the potential for biogas production from wheat straw washwater in upflow anaerobic sludge blanket digesters, Proceedings – International Symposium on Anaerobic Digestion of Solid Waste and Energy Crops, Vienna Austria, 2012
13. **Idrus, S.** & Tajuddin, R.M., The effect of bubble size on the Rate Of Oxygen Transfer During Aeration Process, Proceedings – World Engineering Conference, Penang, Malaysia, 2007

Publications

Books

1. Rosli N.S., **Idrus S***, Md Dom A., Nik Daud N. N., Potential of Pineapple Waste Extract (PWE) as Co-substrate in Anaerobic Digestion of Rice Straw Washwater (RSWW): Enhancement of Biogas Production., Lecture Notes in Civil Engineering, Springer (Vol 9, pg. 1479 – 1493, 2019. Indexed in Scopus)
2. Badronnisa Yusuf, Aidi Hizami Ales@Alias, Mohd Shahrizal Ab Razak, Noor Azline Mohd Nasir, Nabilah Abu Bakar, **Syazwani Idrus**, Zainuddin Md Yusoff, Nuzul Azam Haron, Nor Azizi Safiee, Farah Nora Aznieta Abd Aziz, Fauzan Mohd Jakarni “1985 – 2015, 30 Tahun Jabatan Kejuruteraan Awam, UPM”, Universiti Putra Malaysia, ISBN 978-967-344-592-9, 2016

Publications

Monograph/Module/Popular Writing & Article/Design

1. Newspaper article “Pembinaan 2 Unit Rumah Orang Asli” 24th July 2016, Utusan Malaysia
2. Innovation in wastewater and recyclable semi-solid wastes produces gas, Website Universiti Putra Malaysia, News :Published 31 Jan 2020
https://www.upm.edu.my/berita/inovasi_air_sisa_dan_sisa_separa_pepejal_boleh_diguna_semula_hasilkan_gas-55157?L=en

Research Grants *Principal Investigator (PI) Co-researcher (Co)				
No	Project Title	Amount (RM)	Year	Source of Fund
1.	Food Waste Characterization for Biogas Anaerobic Digestion Process *(PI)	RM 219,803	Aug 2019 to June 2022	TNB Renewable Energy and TNBR Sdn Bhd (Industrial Grant)
2.	Biogas Production from Slaughterhouse Wastewater and Treatment using Hybrid Upflow Anaerobic Membrane Bioreactor *(PI)	RM 25,000	Apr 2018 to Oct 2020	Geran Putra Inisiatif Siswazah, Putra-UPM (IPS)
3.	Co-digestion of Rice Straw Leachate and Domestic Wastewater for Biogas Production in Continuous Stirred Tank Reactor (CSTR) *(PI)	RM 50,000	Mar 2015 to Sep 2017	Geran Putra Inisiatif Pensyaaah Muda (IPM)
4.	Investigating the kinetics of co-digestion of Rice Straw Leachate and Domestic Wastewater for Optimal Biogas Production in UASB *(PI)	RM 76,000	Dec 2014 to Aug 2017	FRGS-MOHE

5.	Community Project: Construction of 2 unit houses for Orang Asli, Kampung Kachau Luar, Semenyih *(PI)	RM 86,000	2015 to 2017	NBOS-MOHE
6.	Determination of Permeability and Soil Water Characteristics Curve (SWCC) of the Lateritic Soil treated with Lime under Cyclic Wetting and Drying Conditions (Co -researcher)	RM 20,000	1 Nov 2019- 31 Oct 2021	Matching Grant UPM-UTM
7.	A feasibility Study on Biogas Production using Continuous Stirred Tank Reactor from Domestic Wastewater Produced by 'Off-grid' households and communities in Royal Belum (Co -researcher)	RM 13,000	Nov 2017 to Apr 2018	Newton Fund (Researcher Link- Work shop)
8.	Innovative designs of sustainable agro-hydro-health systems for off-grid communities in a changing Malaysia (Co -researcher)	RM 245, 933	Apr 2017 to Mar 2018	International Grant
9.	Integration of electrocoagulation and palm-shell activated carbon contactor to remove multi-pollutants from landfill leachate: a sustainable approach. (Co -researcher)	RM 20,000	Apr 2016 to Sep 2017	Geran Putra Inisiatif Siswazah
10.	The Efficiency Of Aged Refuse As A Biofilter For Leachate Treatment. (Co -researcher)	RM 90,000	Jan 2015 to Jan 2018	Geran Putra Individu/ Berimpak
11.	Braided River Enhancement Using Spur Dikes. (Co -researcher)	RM 110,000	Mar 2015 to Mar 2017	Geran Putra Individu/ Berimpak
12.	A Comparative Study On The Properties Of Pofa Blended Concrete (Co -researcher)	RM 50,000	Mar 2015 to Sep 2017	Geran Putra Inisiatif Putra Muda
13.	Development of an Active Forced Convection Solar Still Coupled With External Condenser, Solar Panel and Heater To Produce Potable Water From Saline Water (AFSSCP) (Co -researcher)	RM 20,000	Dec 2015 to Dec 2017	Geran Putra Inisiatif Siswazah
14.	Anaerobic conversion of biomass for biogas production, Bio reactor design - Upflow Anaerobic Sludge Blanket, Continuous Stirred Tank Reactor and Anaerobic Filter	-	2009 – 2013	Bioenergy and Organic Resources Research Group , University of Southampton, UK

Consultation/ Industrial Collaboration (Project Leader)

Project Title	Amount (RM)	Year	Source of Fund
Anaerobic Treatment of Molasses wastewater	In-kind Contribution	2021	Forward Energy Sdn Bhd
Chemical and Biochemical Analysis of Anaerobic Digestion Process Using Food Waste as Feedstock	RM 130,838	Oct 2018 to Jun 2019	TNB Research Sdn. Bhd.

Awards/Recognition

No	Award Type	Title	Award Authority	Level	Year
1.	Award	Excellent Service Award (Anugerah Perkhidmatan Cemerlang-APC)	UPM	University	2016 and 2020
2.	Certificate	Excellent Service Certificate (Sijil Perkhidmatan Cemerlang)	UPM	University	2019
3.	Industrial Grant	Head of Project, Food Waste Characterization for Biogas Anaerobic Digestion Process	Tenaga Nasional Berhad Research & TNB RE	National	2019 – 2021
4.	Bronze medal	Cattle Slaughterhouse Wastewater Treatment Using Modified UASB	Universiti Putra Malaysia	Engineering Innovation Exhibition	2019
5.	Industrial Project	Head of Project, Chemical and Biochemical Analysis of Anaerobic Digestion Process Using Food Waste as Feedstock	Tenaga Nasional Berhad Research Sdn Bhd	National	2018 – 2019
6.	Gold Medal	Research Project, Adsorptive Removal of Heavy Metals from Groundwater	Faculty of Engineering, UPM	FYP Open Day	2018
7.	Silver Medal	Research Project, Biodegradation Rate of Textile Wastewater by Co Digestion of Food Waste and Cow Manure	Faculty of Engineering, UPM	FYP Open Day	2018
8.	Best Project Award	Adsorptive removal of heavy metals from groundwater	Faculty of Engineering, UPM	Pre-Graduation Ceremony	2018
9.	Bronze Medal	A Comparison Between Ambient, Mesophilic and Thermophilic Upflow Anaerobic Sludge Blanket (UASB) Reactors Treating Livestock Wastewater	Faculty of Engineering, UPM	FYP Open Day	2017
10.	Certificate	Excellent Teaching Award (Undergraduates)	UPM	University	2018
11.	Certificate	Excellent Teaching Award (Postgraduates)	UPM	University	2018
12.	Certificate	Excellent Teaching Award	UPM	University	2017
13.	Certificate	Excellent Service Award (Anugerah Perkhidmatan Cemerlang)	UPM	University	2017
14.	Certificate, Award	Excellent Service Award	UPM	University	2016
15.	Certificate	Excellent Service Award	UPM	University	2012
16.	Certificate	Academic Award	UPM	University	2008

Student Supervision			
PhD (Main Supervisor)			
No.	Name	Title	Status
1.	Mohammed Ali Musa (2017-2020)	Treatment of Cattle Slaughterhouse Wastewater and Biogas Production Using Upflow Anaerobic Sludge Blanket (UASB) Reactors	Completed (Graduated on time)
2.	Gilbert Jee Wen Cheng	Ballasted Flocculation for Simultaneous Removal of Total Solids and Persistent Organic Pollutants from Contaminated Drinking Water Sources - A Combination of Photooxidation System	On going
3.	Hamad Nouri	Development of Modified Empty Fruit Bunch via ZnCl ₂ As Adsorbent for Removal of Methylene Blue From Aqueous Solutions	On going

PhD (Co-Supervisor)			
No.	Name	Title	Status
1.	Ali Omran Muhsin Al-Sulttani	Productivity Enhancement and Modelling of A New Double-Slope Solar Still with Rubber Scrapers In Low Latitude Areas for Desalination of Seawater	Completed
2.	Anijiofor Sandra Chinenyenwa	Adsorption and Biodegradation of Pollutants from Livestock Wastewater by Aged Refuse Bioreactor	Completed
3.	Iqbal Khalaf Erabee	Development of A Hybrid Technique by Integrating Electrolysis with Sago Palm Bark Activated Carbon to Treat Landfill Leachate	Completed
4.	Nur Muhammad Afifi Bin Zainal	Biogas Optimization from Anaerobic Digestion of Food waste: Techno-economic assessment	On going
5.	Nina Farhana Binti Mohd Jamaludin	Biomethane production from poultry leachate utilizing immobilized cell and biochar membrane in anaerobic membrane bioreactor (AnMBR).	On going

Master with thesis (Main Supervisor)

No.	Name	Title	Status
1.	Nurul Shafiqah Rosli	Rice Straw Wash water with Urea and Co-Digestion of Anaerobic Treatment Application	Completed
2.	Tuan Nurfarhana Tuan Mohd Marzuki	Enhancement of Bioreactor Performance using Acclimatized Seed Sludge in Anaerobic Digestion of Chicken Slaughterhouse Wastewater: Energy recovery and its commercial-scale potential.	Viva voce scheduled on 24 th Nov 2021
3.	Khairina Jaman@Zaman	Performance Comparison and Kinetics Evaluation of Dry and Wet Anaerobic Co-Digestion of Cow Manure and Food Processing Waste Produced from Agro-Food Industry.	On-going

Master with thesis (Co- supervisor)

No.	Name	Title	Status
1.	Norshafiqah Binti Khairul Anuar	Biomethane production from anaerobic process of sewage sludge	On-going
2.	Zhang Ye	Grey water treatment for irrigation purposes	On going

Master by coursework (Main Supervisor)

No.	Name	Title	Status
1.	Azmir Md Dom	Assessment of Potential for Biogas Production from Rice Straw Leachate (RSL) & Fruit Waste Extract (FWE) in UASB (Upflow Anaerobic Sludge Blanket) Reactor	Completed
2.	Uzana Ismail	Evaluation Of Potential Of Biogas Production From Automotive Wastewater And Rice Straw Leachate In Continuous Stirred Tank Reactor (CSTR)	Completed
3.	Fauziah Abdul Wahid	Treatment Of Food Court Wastewater Using UASB Reactor: The Biogas Production and Removal Of Oil & Grease.	Completed
4.	Ahmad Abdi Ginde	Evaluation Of The Potential Of Lake Water Treatment Using Synthetic Adsorbent And Aeration Process	Completed
5.	Abdulrahman Abdullahi Osman	Investigating the Effectiveness of Natural Adsorbent Couple with Membrane Filtration In Treating Slaughterhouse Wastewater	Completed
6.	Prakash A/L Peechmani	Investigating The Efficiency Of Adsorption Technique As Pretreatment For Membrane Filtration In Eliminating Metals In Groundwater	Completed
7.	Hussein Shuaib Said	Investigating The Potential Of Grey Water For Agricultural Purposes	Completed
8.	Rayner Thiam	Textile Wastewater Treatment Using Anaerobic Digestion And Adsorptive Method	Completed
9.	Ali Ismail Gurhan	Investigating The Potential Of Coconut Shell And Rice Husk For Food Court Wastewater Treatment	Completed
10.	Ahmad Fuad Zainudin	Zero Effluent Discharge Of Water Treatment Plant Using Atomix Cougulator	Completed
11.	Mir Naveed Ahmed Zehri	Development Of Agro Waste Adsorbent For The Removal Of Organic Matter And Iron From Groundwater	Completed
12.	Gilbert Jee Wen Cheng	Recycled Glass As Alternative Ballasting Agent For Ballasted Flocculant Treatment Process	Completed
13.	Hamad Nouri	Investigating the potential of Agro Waste Adsorbent For Groundwater Treatment: Column Filtration vs Batch Study	Completed
14.	Barre Ahmed Jama	Assessment of slaughterhouse waste water treatment using upflow anaerobic sludge blanket reactor	Completed
15.	Abdirahman Abdiqani Jamal	Treatment of cow manure using continuous stirred tank reactor under thermophilic condition	Completed
16.	Sabrina Ng Muhammad Ng	The Effectiveness of Wastewater Treatment Plant Using Membrane Bioreactor System (MBR) For Food and Beverage (F&B) Industries	Completed
17.	Ozza Wahiddah Umar Pandih	Enhancing Coagulation Process for Low Turbidity Water Using Magnesium Hydroxide	Completed
18.	Mohamed Hassan Wasuge	Anaerobic digestion/co-digestion of fish market wastewater and vegetable waste: Bioreactor performance and energy production	On-going
19.	Ahmad Badli Yusoff	Investigating the Potential of Aluminum Sludge (Water treatment Proces) for Removal of Phosphorus from Raw Water	On-going
20.	Ahmad Musthaain	Adsorbent Development for removal of Iron from groundwater	On-going

Bachelor (Final Year Project - Main Supervisor)

No.	Name	Title	Status
1.	Sim Jian Zhi	Co-digestion of rice straw leachate and domestic wastewater for biogas production: The carbon balance	Completed
2.	Lee Yau Loon	Co-digestion of rice straw leachate and domestic wastewater for biogas production: The removal of light metal cations	Completed
3.	Low Phak Sheng	Co-digestion of rice straw leachate and domestic wastewater for biogas production: The accumulation of total ammonia nitrogen	Completed
4.	Marziyah Md Isa	Thermophilic digestion of chicken slaughtering house wastewater (formation of total ammonia nitrogen)	Completed
5.	Zulkarnain Shamsuri	Thermophilic digestion of Rice straw washed water and domestic wastewater	Completed
6.	Wan Nur Akalili Wan Tajudin Shah	Comparison Between Ambient, Mesophilic, and Thermophilic using UASB in Treating Livestock Wastewater	Completed
7.	Nurhasanah Ashard Binti Bustari	Anaerobic co digestion of rice straw washed water and organic waste in different salinity level	Completed
8.	Muhammad Hanif Bin Mohd Suhaimi	Performance of solar still coupled with dc heater to produce potable water from seawater	Completed
9.	Norliyana Hussin	Co-Digestion Of Textile Industry Wastewater And Food Waste At Low Temperature	Completed
10.	Darwina Anak Rone	Adsorptive Removal Of Metals From Groundwater	Completed
11.	Rusfaradila Madda	Groundwater Treatment Using Membrane Technology And Physical Separation	Completed
12.	Natasha Adlin Mansor	Investigating The Potential Of Dyes Removal In Textile Wastewater Using Anaerobic Rector Bio Granular System	Completed
13.	Said Nuh Iqbal Said Indra	Assessment Of The Potential For Biogas Production From Food Waste At Room And Mesophilic Temperature	Completed
14.	Muhammad Idham Che Lah	Evaluation of effective microorganism (EM) and anaerobic process (AD) for treatment of livestock wastewater	Completed
15.	Najua Emelda Hakimi Taib	Co-digestion of food and chicken manure with mixed sludge from wastewater treatment in continuously stirred tank reactors	Completed
16.	Wan Nur Syafiqah W. Ahmad Puzi	Integrated anaerobic digestion and adsorbent technique for textile wastewater treatment	Completed
17.	Nur Jannah Amir	Methane production from anaerobic digestion of food waste: A comparative study of pilot plant and laboratory scale reactor	Completed
18.	Khairina Jaman	Investigating the effect of co substrate addition during anaerobic digestion of chicken dung: A comparative study on mono digestion and co digestion	Completed
19.	Nurfarah Izzati Mohd Jantan	Anaerobic digestion of cow manure: Laboratory achievements and its commercial-scale application potential.	On-going
20.	Thinesh Kanpathy Raman	Performance comparison and kinetics evaluation of anaerobic reactors treating food processing wastewater and agro-waste	On-going
21.	Siti Aina Aziz	Technoeconomic assessment of an on-farm cattle slaughterhouse wastewater treatment	On-going

Bachelor - Main Supervisor (Industrial training during pandemic with Industrial Collaboration)

No.	Name	Title	Industry	Status
1.	Mohd Asyraf Nasar Khan	Development of plant for food waste treatment: Energy recovery and commercial-scale application potential	Tenaga Nasional Berhad Research	Completed
2.	Muhammad Amirul Hamzah	Development of Plant for molasses wastewater treatment: Technoeconomic assessment of an on-site treatment	Tenaga Nasional Berhad Research	Completed

Teaching Experience				
No	Course	Credit hour	Level	Semester
1.	ECV 3405 Water & Wastewater Engineering	3 (2+1)	Bachelor	Semester 2 2013/2014
2.	ECV 3408 Environmental Engineering	2 (2+0)	Bachelor	Semester 1 2014/2015
3.	ECV 5409 Water Quality & Quantity Laboratory	1 (0+1)	Master	
4.	ECV 3405 Water & Wastewater Engineering	3 (2+1)	Bachelor	Semester 2 2014/2015
5.	ECV 3408 Environmental Engineering	2 (2+0)	Bachelor	Semester 1 2015/2016
6.	ECV 3405 Water & Wastewater Engineering	3 (2+1)	Bachelor	Semester 2 2015/2016
7.	ECV 3408 Environmental Engineering	1 (1+0)	Bachelor	Semester 1 2016/2017
8.	ECV 4406 Advance Water & Wastewater Engineering	3 (3+0)	Bachelor	
9.	ECV 4403 Groundwater Engineering	3 (3+0)	Bachelor	Semester 2 2016/2017
10.	ECV 5403 Design of Water and Wastewater Treatment	3 (3+0)	Master	
11.	ECV 4406 Advance Water & Wastewater Engineering	3 (3+0)	Bachelor	Semester 1 2017/2018
12.	ECV 5406 Groundwater Hydraulics	3 (3+0)	Master	
13.	ECV 4403 Groundwater Engineering	3 (3+0)	Bachelor	Semester 2 2017/2018
14.	ECV 5415 Design of Water and Wastewater Treatment	3 (3+0)	Master	
15.	ECV 4406 Advance Water & Wastewater Engineering	3 (3+0)	Bachelor	Semester 1 2018/2019
16.	ECV 5417 Groundwater Hydraulics	3 (3+0)	Master	

17.	ECV 3413 Environmental Engineering Laboratory	4(3+1)	Bachelor	Semester 2 2018/2019
18.	ECV 4403 Groundwater Engineering	3 (3+0)	Bachelor	
19.	ECV 5415 Design of Water and Wastewater Treatment	3 (3+0)	Master	
20.	ECV 3413 Environmental Engineering	4(3+1)	Bachelor	Semester 1 2019/2020
21.	ECV 5417 Groundwater Hydraulics	3 (3+0)	Master	
22.	ECV 4412 Water and wastewater Treatment	3 (3+0)	Bachelor	Semester 2 2019/2020
23.	ECV 5415 Design of Water and Wastewater Treatment	3 (3+0)	Master	
24.	ECV 3413 Environmental Engineering	4(3+1)	Bachelor	Semester 1 2020/2021
25.	ECV 5417 Groundwater Hydraulics	3 (3+0)	Master	
26.	ECV 4412 Water and wastewater Treatment	3 (3+0)	Bachelor	Semester 2 2020/2021
27.	ECV 5415 Design of Water and Wastewater Treatment	3 (3+0)	Master	
28.	ECV 3413 Environmental Engineering	4(3+1)	Bachelor	Semester 1 2021/2022
29.	ECV 5417 Groundwater Hydraulics	3 (3+0)	Master	