



CURRICULUM VITAE



Associate Prof. Dr. Rozita Omar
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Education

1. Ph.D Chemical Engineering, 2010, Universiti Putra Malaysia
2. M.Sc. Bioprocess and Fermentation Technology, 2003, Universiti Putra Malaysia
3. B.Sc. Chemical Engineering and Petroleum Refining, 1998, Colorado School of Mines, USA

Areas of Interest

1. Microwave-assisted and subcritical liquid processes
2. Water and Wastewater Treatment
3. Biogas Digestate Hydroponics

Professional Qualification/Membership/Affiliation

1. Graduate Member, Board of Engineers Malaysia (BEM)
2. Member, Malaysia Science and Engineering Technology (MSET)
3. Member, Malaysian Water Association (MWA)
4. Member, Academic Staff Association UPM (PPAUPM)
5. Member, Universiti Putra Malaysia Alumni

Appointments

Position	Duration
1. Associate Professor, Department of Chemical and Environmental Engineering, Faculty of Engineering, UPM	Jun 2017 – present
2. Postdoctoral Fellow, National Centre of Microwave Processing, University Nottingham, UK	Dec 2011 – Nov 2012
3. Senior Lecturer, Department of Chemical and Environmental Engineering, Faculty of Engineering, UPM	Aug 2008 – Jun 2017
4. Lecturer, Department of Chemical and Environmental Engineering, Faculty of Engineering, UPM	Oct 2003 – Jul 2008
5. Tutor, Department of Chemical and Environmental Engineering, Faculty of Engineering, UPM	Jan 1999 – Oct 2003

Management Positions

Management Positions	Duration
1. Coordinator, Program Master of Process Safety and Loss Prevention	Aug 2020 – Dec 2022
2. Head of Environment Engineering Laboratory	2010-2012, 2013, 2020, 2023-present
3. Academic Coordinator I	2015-2017
4. Academic Coordinator II	2014-2015
5. Head of Combustion Laboratory	2012-2013
6. Committee Member Curriculum Review, Master of Process	2014

- Safety and Loss Prevention
7. Committee Member, National ChemECar Competition 2014

National and International Services	Duration
1. Organizing Committee, 1 st International Conference in Chemical Engineering and Technology 2021	2020-2021
2. Research Associate, Plantation Research Institute, UPM	2020-2023
3. Organizing Committee, Symposium of Malaysian Chemical Engineers	2018
4. Program Assessor Committee, University Kuala Lumpur (UNIKL-MICET)	2015-2017, 2021-2024
5. Organizing Committee, World Research and Innovation Conference on Engineering and Technology	2014,2016,2018
6. Committee Member, Biochar Malaysian Workshop 2015, Persatuan Biochar Malaysia	2015
7. Evaluation Panel, BSc (Environmental and Occupational Health), UPM SWA Accreditation	2011
8. Head Technical Committee, Conference on Natural Resources and Green Technology, WEC2010	2011

Publications

Journals

- Segaran, R., Omar, R., Kusumastuti, Y., Harun, R., Mustafa Kamal, S.M. (2022). Combined microwave-assisted subcritical liquid extraction of chitosan from crab shell waste. *Progress on Chemistry and Application of Chitin and its Derivatives*. XXVII (2002): 204-216. 10.15259/PCACD.27.016 (Q4 ECSI).
- Syed Sabeer Ali, S.N., Omar, R., Che Man, H., Md Idris, A.I., Tajuddin, H.A. (2022). Foaming tendency in anaerobic digestion of wastewater inoculated with anaerobic sludge and cow manure: Effect of protein concentration. *IOP Conference Series: Material Science and Engineering*. 1257: 012043. DOI: 10.1088/1757-899X/1257/1/012043 (Scopus)
- Nabilah Aliyah A.N., Omar, R., Nik Nor Lyana NI. (2022). Emergency preparedness and response in palm oil mill and investigation of the employees' emergency preparedness knowledge and attitude. *Process Safety Progress* 41(3): 1-9. DOI: 10.1002/prs.12363 (Q4)
- Nurfatimah Mohd Thani, Mustapa Kamal S.M., Farah Saleena Taip, Alifdino Sulaiman, Omar R., Mohd Hafizz Wondi (2022). Risk Assessment of Subcritical Water Hydrolysis (SWH) System for Sugar Recovery using Failure Modes and Effects Analysis (FMEA) Methods. *Sains Malaysiana*, 51(10): 333-3345. DOI: 10.17576/jsm-2022-5110-18 (Q4)
- Siti Maisurah Zakaria, Mustapa Kamal S.M., Harun R., Omar R., Sijam S.I. (2022). Extraction of phenolic compounds from *Chlorella* sp. microalgae using pressurized hot water: kinetics study. *Biomass Conversion and Biorefinery*, 12(1): 1-9. DOI: 10.1007/s13399-020-01027-y
- Nur Aliah Fatin Mohd Nizam Ong, Mohd Tohir, M.Z., Mahmood Mutlak, M., Sadiq, M.A., Omar, R., Md Said, M.S. (2022). BowTie analysis of rooftop grid-connected photovoltaic systems. *Process Safety Progress*, 41(3). DOI: 10.1002/prs.12338 (Q4)
- Mahat. S.B., Omar. R., Che Man C. H., Mohd Idris A.I., Mustapa Kamal S.M., Idris. A. C. Shreeshivadasan C., Abdullah, L.C. (2021). Dynamic anaerobic membrane bioreactor (DAnMBR) with phase separation for food processing wastewater treatment at mesophilic temperature: Characterization of cake layer. *Journal of Environmental Chemical Engineering*, 9, 105718. (Q2)
- Mahat. S.B., Omar. R., Che Man C. H., Mohd Idris A.I., Mustapa Kamal S.M., Idris. A. C. Shreeshivadasan C., Jamali N.S., Abdullah, L.C. (2021). Performance of dynamic anaerobic membrane bioreactor (DAnMBR) with phase separation in treating high strength food wastewater. *Journal of Environmental Chemical Engineering*, 9, 105245. (Q2)
- Nurafifah Fuad, Rozita Omar, Suryani Kamarudin, Razif Harun, A. Idris, W.A.K.G. Wan Azlina (2021). Harvesting Marine Microalgae *Nannochloropsis* sp. using Dissolved Air Floatation (DAF) Technique. *Sains Malaysiana* 50(1): 73-83. (Q4)
- Khaled Shahot, Azni Idris, Rozita Omar (2021). Pilot-scale comparison of non-coated and activated carbon-coated Cosmoball® for removal of organic matter and nutrients from municipal wastewater. *Desalination and Water Treatment* 250: 155-168.

DOI: 10.5004/dwt.2021.27408 (Q4)

11. Nur Atiqah Mohamad Aziz, Robiah Yunus, Rozita Omar, Umer Rashid, Zulkifly Abbas (2021). Optimization of microwave-assisted transesterification reaction of trimethylolpropane triesters. Special Issue of Catalyst: Sustainable Catalyst for Biofuel Production.
12. Nurfatimah Mohd Thani, Siti Mazlina Mustapa Kamal, Alifdalino Sulaiman, Farah Saleena Taip, Rozita Omar (2021). Sugar recovery from bakery leftovers through enzymatic hydrolysis: Effect of process conditions and product characterization. *Sains Malaysiana* 50(10): 2977-2991. DOI: 10.17576/jsm-2021-5010-12
13. Nurfatimah Mohd Thani, Siti Mazlina Mustapa Kamal, Alifdalino Sulaiman, Farah Saleena Taip, Rozita Omar (2021). Subcritical water hydrolysis for sugar recovery from bakery leftovers: kinetic and thermodynamic analysis. *Biomass Conversion and Biorefinery*, March 2021. Doi: 10.1007/s13399-021-01416-x
14. Dina Kania, Robiah Yunus, Rozita Omar, Suraya Abdul Rashid, Badrul Mohamed Jan (2021). Rheological investigation of synthetic-based drilling fluid containing non-ionic surfactant pentaerythritol ester using full factorial design. *Colloids and Surfaces A Physicochemical and Engineering Aspects*. 625(1-3): 126700. Doi: 10.1016/j.colsifa.2021.126700
15. Dina Kania, Robiah Yunus, Rozita Omar, Suraya Abdul Rashid, Badrul Mohamed Jan, Akma Aulia (2021). Lubricity performance of non-ionic surfactants in high-solid drilling fluids: A perspective from quantum chemical calculations and filtration properties. *Journal of Petroleum Science and Engineering*, 207(4): 109162. Doi: 10.1016/j.petrol.2021.109162
16. Dina Kania, Robiah Yunus, Rozita Omar, Suraya Abdul Rashid, Badrul Mohamed Jan, Akma Aulia (2021). Adsorption of non-ionic surfactants on organoclays in drilling fluid investigated by molecular descriptors and Monte Carlo random walk simulations. *Apply Surface Science* 538(17): 148154. Doi: 10.1016/j.apsusc.2020.148154
17. Shiva Rezaei Motlagh, Razif Harun, Dayang Radiah, Siti Aslina Hussain, Rozita Omar, Ramin Khezri (2021). Ionic liquid-based microwave-assisted extraction of lipid and eicosapentaenoic acid from *Nannochloropsis oceanica* biomass: experimental optimization approach. *Journal of Applied Phycology*, 33(4). Doi: 10.1007/s10811-021-02437-9
18. Shiva Rezaei Motlagh, Amal Ahmed Elgharbawy, Ramin Khezri, Razif Harun, Rozita Omar, (2021). Ionic liquid-based microwave-assisted extraction of protein from *Nannochloropsis sp* biomass. *Biomass Conversion and Biorefinery*: 10.1007/s13399-021-01778-2
19. Saleem Ethaib, Rozita Omar, Mustapa Kamal Siti Mazlina and Awang Biak Dayang Radiah (2020). Evaluation of the Interactive Effect Pretreatment Parameters via Three Types of Microwave-Assisted Pretreatment and Enzymatic Hydrolysis on Sugar Yield. *Processes*, 2020, 8(7), 787. <https://doi.org/10.3390/pr8070787>.
20. Saleem Ethaib, Rozita Omar, Mustapa Kamal Siti Mazlina and Awang Biak Dayang Radiah (2020). Comparison of sodium hydroxide and sodium bicarbonate pretreatment methods for the characteristic and enzymatic hydrolysis of sago palm bark. *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*. (Published online April 2020). <https://doi.org/10.1080/15567036.2020.1753857>
21. Mahat. S.B., Omar. R., Che Man C. H., Mohd Idris A.I., Mustapa Kamal S.M., Idris. A. (2020). Influence of substrate to inoculum ratio (S/I) on the treatment performance of food processing wastewater containing high and grease (O&G) in batch mode. *Desalination and Water Treatment*, 203: 267-278. DOI: 10.5004/dwt.2020.26231 (Q4)
22. Mahat. S.B., Omar. R., Che Man C. H., Mohd Idris A.I., Mustapa Kamal S.M., Idris. A. (2020). Effect of Pore Size of Monofilament Woven Filter Cloth as Supporting Material for Dynamic Membrane Filter Performance using Aerobic Membrane Bioreactor Technology. *Asia-Pacific Journal of Chemical Engineering*. 15: e2453. <https://doi.org/10.1002/apj.2453>. (Q4)
23. Nour Zghaibi, Rozita Omar, Siti Mazlina Mustapa Kamal, Dayang Radiah Awang Biak and Razif Harun (2020). Kinetics Study of Microwave-assisted Brine Extraction of Lipid from Microalgae *Nannochloropsis sp*. *Molecules*, 25(4): 784.
24. Nurfatimah Mohd Thani, Siti Mazlina Mustapa Kamal, Alifdalino Sulaiman, Farah Saleena Taip, Rozita Omar & Shamsul Izhar (2020), Hydrolysis and characterization of sugar recovery from bakery waste under optimized subcritical water conditions. *Journal of Food Science and Technology*. Published online on 23rd. March 2020 (DOI: 10.1007/s13197-020-04345-1) (JCR Impact Factor: Q2)

25. Nurfatimah Mohd Thani, Siti Mazlina Mustapa Kamal, Alifdalino Sulaiman, Farah Saleena Taip, Rozita Omar & Shamsul Izhar (2020), Sugar Recovery from Food Waste via Sub-critical Water Treatment, *Food Reviews International*, 36(3):241-257 (DOI: 10.1080/87559129.2019.1636815) (JCR Impact Factor: Q1)
26. Motlagh, S.R., Harun, R., Awang Biak, D.R., Hussain, S.A., Omar, R., Elgharbawy, A.A. (2020). COSMO-RS Based Prediction for Alpha-Linolenic Acid (ALA) Extraction from Microalgae Biomass Using Room Temperature Ionic Liquids (RTILs). *Marine Drugs*, 18 (108): 1-22.
27. NurAtiqah M.A., Abd Hamid, Hamidah, Yunus, R., Abbas, Z., Omar, R., Rashid, U., Azhari, M.S. (2020). Kinetic and thermodynamics of synthesis of palm oil-based trimethylolpropane trimer using microwave irradiation. *Journal of Saudi Chemical Society*. (in press). <https://doi.org/10.1016/j.jscs.2020.05.006>
28. NurAtiqah M.A., Robiah Yunus, Abd Hamid, Hamidah, Alsultan Abdul Kareem Ghassan, Rozita Omar, Umer Rashid, Zulkifly Abbas (2020). An acceleration of microwave-assisted transesterification of palm oil-based methyl ester into trimethylolpropane ester. *Scientific reports*. 10(1): 1-17.
29. Umami Kalsum Hasanah Mohd Nadzim, Robiah Yunus, Rozita Omar, Bo Yuan Lim (2020) Factors contributing to oil losses in crude palm oil production process in Malaysia: A review. *International Journal of Biomass and Renewables* 9(1): 10-24.
30. Nour Zghaibi, Rozita Omar, Siti Mazlina Mustapa Kamal, Dayang Radiah Awang Biak and Razif Harun (2019). Microwave-assisted brine extraction for enhancement of the quantity and quality of lipid production from microalgae *Nannochloropsis* sp. *Molecules* 24 (3581): 1-21.
31. NM Thani, SMM Kamal, FS Taip, A Sulaiman, R Omar (2019). Effect of sub-critical water hydrolysis on sugar recovery from bakery leftovers. *Food and Bioproducts Processing* 117: 105-112.
32. N Mohd Thani, SM Mustapa Kamal, A Sulaiman, FS Taip, R Omar, S Izhar (2019). Sugar Recovery from Food Waste via Sub-critical Water Treatment. *Food Reviews International*, 1-17.
33. NM Thani, SMM Kamal, FS Taip, A Sulaiman, R Omar (2019). Effect of enzyme concentrations on total reducing sugar from leftover croissants and doughnuts via enzymatic hydrolysis. *Food Research* 3(4): 313-326.
34. Rafeah Wahi, Effa Radika Bidin, Nawwar Muntaj Mohamed Asif, Nur Athirah Nor Hamizat, Zainab gaini, Rozita Omar and Jamliah Jamel (2019). Nutrient availability in sago bark and empty fruit bunch composts for the growth of water spinach and green mustard. *Environmental Science and Pollution Research*. 26(22): 22246-22253
35. K Shahot, A Idris, R Omar, H Che, F Suja (2019). Investigation of Activated Carbon Coating in the Adsorption Process of Methylene Blue from Aqueous Solution. *Advanced Science, Engineering and Medicine* 11 (9): 879-887.
36. Nurafifah Fuad, Rozita Omar, Suryani Kamarudin, Razif Harun, A. Idris, W.A.K.G. Wan Azlina (2018). Effective use of tannin based natural biopolymer, AFlok-BP1 to harvest marine microalgae *Nannochloropsis* sp. *Journal of Environmental Chemical Engineering* 6 (2018): 4318–4328.
37. Siti Baizura Mahat, Rozita Omar, Azni Idris, Siti Mazlina Mustapa Kamal, Aida Isma Mohd Idris (2018). Dynamic membrane applications in anaerobic and aerobic digestion for industrial wastewater: A mini review. *Food Bioprod Process*. 112 (Nov): 150-168.
38. Fuad, Nurafifah, Omar, Rozita, Kamarudin, Suryani, Harun, Razif, Idris, A., W.A.K.G., Wan Azlina (2018). Mass harvesting of marine microalgae using different techniques. *Food and Bioproducts Processing*, 112: 169-184.
39. Saleem Ethaib, Rozita Omar, Mustapa Kamal Siti Mazlina, Awang Biak Dayang Radiah, S. Syafie (2018). Development of a hybrid PSO-ANN model for estimating glucose and xylose yields for microwave-assisted pretreatment and the enzymatic hydrolysis of lignocellulosic biomass. *Neural Comput & Application* 30:1111–1121 (IF: 1.492, Q2)
40. R. Nor Aisyah, R. Omar, MK Siti Mazlina, D R Awang Biak, and SS Lam. (2018). Microwave-assisted pretreatment and enzymatic hydrolysis of sardine processing waste. *Journal of*

- Engineering Science and Technology. Special Issue on WRICET2016, December (2018): 71-77. (Scopus)
41. Mokhtar, N.M., Ethaib, S., Omar, R. (2018). Effect of microwave adsorbers on the products of microwave pyrolysis of oily sludge. *Journal of Engineering Science and Technology* 13 (10): 3313-3330. (Scopus)
 42. Dina Kania, R. Yunus. R. Omar, A.R. Suraya, M.J Badril, N, Arsanjani (2018). Non-ionic polyol esters as thinner and lubricity enhancer for synthetic-based drilling fluids. *Journal of Molecular Liquids* 266: 846-855.
 43. Dina Kania, R. Yunus. R. Omar, A.R. Suraya, M.J Badril, N, Arsanjani (2017). Performance evaluation of polyol esters from palm oil as a lubricant for bentonite suspension drilling fluid. *Tribology Online* 12(5): 247-250.
 44. M A Rahimi, R Omar, S Ethaib, MK Siti Mazlina, D R Awang Biak, and R Nor Aisyah (2017). Microwave-assisted extraction of lipid from fish waste. *IOP Conf. Series: Materials Science and Engineering* 206: 012096.
 45. Siti Maisurah Zakaria, Siti Mazlina Mustapa Kamal, Mohd Razif Harun, Rozita Omar and Shamsul Izhar Siajam (2017) Subcritical Water Technology for Extraction of Phenolic Compounds from *Chlorella* sp. *Microalgae and Assessment on Its Antioxidant Activity*. *Molecules*, 22: 1105
 46. S M Zakaria, S M Mustapa Kamal, M R Harun, R Omar, and S I Siajam (2017) Extraction of antioxidants from *Chlorella* sp. using subcritical water treatment. *IOP Conf. Series: Materials Science and Engineering*, 206:012035
 47. Mohammad, Salem, Omar, Rozita, Mustapa Kamal, S.M., Awang Biak, D.R., Syafie, M.Y. Harun (2017). Microwave-Assisted Pretreatment of Sago Palm Bark. *Journal of Wood Chemistry and Technology*. 37:26–42. (IF: 1.334, Q1).
 48. Faten Hameed Kamil, S. Ali, Raja Mohamad Hafriz, R. Omar, Abdulkareem Ghassan Alsuлтssan (2017). Characterization and application of aluminum dross as catalyst in pyrolysis of waste cooking oil, *Bulletin of Chemical Reaction Engineering & Catalysis*, 12(1): 81-88.
 49. Lam, S.S., Wan Mahari W.A., Cheng, C.K., Omar, R., Chong C.T., Chase H.A. (2016). Recovery of diesel-like fuel from waste palm oil by pyrolysis using a microwave heated bed of activated carbon, *Energy* 115: 791-799. (IF: 4.292, Q1)
 50. M. Nasir, T. I. Mohd. Ghazi, R. Omar & W.A.K.G. Wan Azlina (2017). Anaerobic batch digestion of cattle manure under various oscillatory flow mixing. *Pertanika J. Sci. & Technol.*, 25(1): 161-170
 51. Saleem Ethaib, Rozita Omar, Mustapa Kamal Siti Mazlina, Awang Biak Dayang Radiah, S. Syafie (2016). Development of a hybrid PSO–ANN model for estimating glucose and xylose yields for microwave-assisted pretreatment and the enzymatic hydrolysis of lignocellulosic biomass. *Neural Comput & Application*. Published online December 2016. DOI: 10.1007/s00521-016-2755-0 (IF: 1.492, Q2)
 52. Ethaib, S., Omar, R., Mazlina, M., Radiah, A., Syafie, S. and Harun, M. Y. (2016). Effect of microwave-assisted acid or alkali pretreatment on sugar release from Dragon fruit foliage. *International Food Research Journal*, 23 (Suppl): S149-S154.
 53. Aida Isma, A. Idris, R. Omar, Mohd Ali Hassan & Zakaria M.P. (2016). Characterization of Bio Fouling in Membrane Bioreactor. *International Journal of Advances in Science Engineering and Technology*. Special Issue February 2016.
 54. Lingeswara, S., Omar, R., Ghazi, T.I.M (2016). Reliability Analysis On A Shell And Tube Heat Exchanger. *Institute of Physics Publishing*, Vol. 36(1): Article ID: 012012 (Scopus Cited)
 55. Mohammad, Salem, Omar, Rozita, Mustapa Kamal, S.M., Awang Biak, D.R., Syafie (2016). Microwave-assisted Dilute Acid Pretreatment and Enzymatic Hydrolysis of Sago Palm Bark. *BioResources*, 11(3): 5687-5702.
 56. Khaled Shahot, Azni Idris, Zulkifli Rosli, Rozita Omar, Hamdan Yusoff, Suraya Abdul Rashid, Ahmed Ekhmaj, Rabaah Azis & Ismail Abd Ghani (2016). Microstructure of Activated Carbon Particles Coated on High Density Polyethylene (HDPE) for Wastewater Treatment Application. *Advanced Materials Research*, 1134: 88-95.
 57. Aida Isma, A. Idris, R. Omar, Mohd Ali Hassan & Zakaria M.P. (2016). Characterization of Bio

Fouling in Membrane Bioreactor. International Journal of Advances in Science Engineering and Technology. Special Issue February 2016.

58. Mohammad, Salem, Omar, Rozita, Mustapa Kamal, S.M. & Awang Biak, D.R (2015). Microwave-assisted Pretreatment of Lignocellulosic Biomass: A Review. Journal of Engineering Science and Technology, Special Issue on SOMCHE 2014 Conference. January (2015) 97 – 109
59. Rozita Omar, J.P. Robinson (2014). Conventional and microwave-assisted pyrolysis of rapeseed oil for bio-fuel production. Journal of Pyrolysis and Applied Pyrolysis 105: 131-142.

Conference Proceedings

1. Mahat. S.B., Omar. R., Che Man C. H., Khairul Anuar. N., Mohd Idris A.I., Mustapa Kamal S.M., Idris. A. (2018). Influence of Inoculum to Substrate Ratio on the Biochemical Methane Potential of Food Processing Wastewater in Batch Anaerobic Assays. Symposium of Malaysian Chemical Engineering Engineers. Proceeding of 30th Symposium of Malaysian Chemical Engineers, Subang Jaya, Selangor. 5-6 December 2018.
2. Nur Hashimah MS, Nur Ainaa AR, R. Omar, Siti Mazlina MK, Wan Azlina WAKG, Dayang Radiah A.B., Harun R. (2018). Microwave-assisted and Conventional Pretreatment of Sago Palm Bark and Enzyme Hydrolysis for Sugar Production. Symposium of Malaysian Chemical Engineering Engineers. Proceeding of 30th Symposium of Malaysian Chemical Engineers, Subang Jaya, Selangor. 5-6 December 2018.
3. Rozita Omar, Azni Idris, Razif Harun, Suryani Kamarudin, W.A.K.G Wan Azlina Wan, Siti Mazlina, DR Awang Biak, Nurafifah Fuad. (2017). Comparison of Lipid Quality of Nannochloropsis sp. Flocculated via Autoflocculation, AFlok-B1 and Alum. Proceeding of International Symposium on Applied Engineering and Sciences (SAES2017), Serdang, Selangor. 14-15 November 2017.
4. DR Awang Biaj, MR Harun, R. Omar, WAKG Wan Azlina (2017). Integrating Facilitative Teaching in Design Based Course. 2017 7th World Engineering Education Forum (WEEF). 13-16 November 2017.
5. Nor Aisyah R., Rozita Omar, Siti Mazlina M.K., Awang Biak D.R. and Su Shiung Lam. (2016). Microwave-assisted pretreatment and enzymatic hydrolysis of sardine processing waste. Proceeding of World Research & Innovation Convention on Engineering & Technology (WRICET2016), Langkawi, Malaysia. 24-25th October 2016.
6. Fatin Nur Lyana A.B., R. Omar, Harun M.R. & A. Idris (2016). Flocculation of algae Chlorella vulgaris using Aflok-BP1 and aluminium sulphate. Proceeding of UMT International Annual Symposium on Sustainability Science and Management (UMTAS2016), Kuala Terengganu, Malaysia. 13-16th December 2016.
7. Saleem Ethaib, R. Omar, M.K. Siti Mazlinaa, Dayang Radiah (2016). A comparison of solvent effect on sugar yield from sago palm bark during microwave-assisted pretreatment. Proceeding on Global Conference on Engineering and Technology. Kuala Lumpur, Malaysia. 1-2 June 2016.
8. M.A. Rahimi, R. Omar, Siti Mazlina M.K., Awang Biak D.R., Saleem Ethaib and Nor Aisyah R. (2016). Microwave-assisted Extraction of Lipid from Fish Waste. Proceeding of 29th Symposium of Malaysian Chemical Engineers, Miri, Sarawak. 1-3 December 2016.

Chapter in Books

1. Robiah Yunus, Rozita Omar, Zurina Zainal Abidin, Dayang Radiah Awang Baik (2012). Oil Palm as Bioenergy Feedstock. In Palm Oil: Production, Processing, Characterization, and Uses (Eds.) Oi-Ming Lai, Chin-Ping Tan, and Casimir C. Akoh. (ISBN: 978-0-9818936-9-3)

Research Grants

No.	Project Title	Role/Amount	Year	Source
1.	Modified Chitosan as A Smart Biomaterial Produced from Crab Shell Waste via Combined Microwave-assisted and Subcritical Liquid (MwSL) Technique	Project Leader (USD5,000)	2020-2021	University Consortium Seed Fund
2.	Ammonia Recovery from High Lipid	Project Leader	2022-2024	UPM-IPS

	Wastewater as A Source of Organic Fertilizer	(RM 20,000)		Grant
3.	Penghuraian Anaerobik	Co-Researcher	2019-2020	Geran Kecil Alam Sekitar
4.	Performance Evaluation of Anaerobic Bioreactor with Submerged Dynamic Membrane Configuration for Treating Food Wastewater	Project Leader (RM 50,000)	2018-2020	UPM-Putra Grant
5.	Feasibility study on application of forward osmosis (FO) membrane for concentrating tropical juice	Co-Researcher	2019-2021	UPM-Segi University Matching Grant
6.	Treatment of High Industrial Wastewater via 2-staged Anaerobic Digestion Low Cost Membrane Bioreactor (AN-MBR)	Project Leader (RM 20,000)	2017-2019	UPM-IPS Grant
7.	Kinetics and mechanism of subcritical hydrolysis of waste products (leftovers) from bakery industry for oligosaccharides formation	Co-researcher	2017-2019	FRGS, MOE
8.	Evaluation on the Production of Sugar (Oligosaccharides) from Bakery Waste using Subcritical Water Treatment	Co-researcher	2017-2019	UPM-IPS Grant
9.	Recovery of Protein from Fish Waste via Enzymatic Hydrolysis couples with Microwave Pretreatment	Project Leader (RM 20,000)	2016-2018	UPM-IPS Grant
10.	Dewatering of <i>Nannochloropsis</i> sp. For High Lipids and Biomass Production	Co-Researcher	2016-2018	UPM-IPB Grant
10.	Evaluation on extraction of Omega 3 Fatty from <i>Nannochloropsis</i> sp. using subcritical water technique	Co-Researcher	2016-2018	UPM-IPB Grant
11.	Evaluation and Modeling of subcritical water extraction (SWE) of bioactive compound from microalgae polysaccharides	Project Leader (RM 70,000)	2015-2017	FRGS, MOE
12.	Pressurized water extraction (PWE) for extracting polysaccharide from freshwater microalgae	Co-Researcher	2015-2017	UPM-IPS Grant
13.	Waste reduction of fat, oil and grease from Medan Selera, Pasar Besar Melaka	Co-Researcher	2015-2017	KTP-MOE
14.	Applicator chamber design – simulation study on power and energy intensity distribution on high power microwave heating	Co-researcher	2015	Demand-Driven Innovation Project by Public-Private Research Network (PPRN), MOE
15.	Development of Green Process Via Microwave- assisted Pretreatment using RSM to enhance Enzymatic Saccharification of lignocellulosic	Project Leader (RM 15,000)	2015-2017	UPM-IPS Grant

biomass for the production of sugar

16.	Characterization of soluble microbial products (SMP) in membrane bioreactor (MBR) and its effect on membrane fouling potential.	Co-Researcher	2014-2016	FRGS, KPM
17.	Microwave Assisted Acid Extraction and Recovery of metals from E-waste	Project Leader (RM 80,000)	2011-2013	RUGS, UPM
18.	Simultaneous Drying, Pyrolysis and Gasification of Sludge using Microwave for Syngas Production	Project Leader (RM 100,000)	2008-2010	RUGS, UPM
19.	Biofilter-Treatment of Wastewater	Co-Researcher	2007-2009	Technofund-MOSTI
20.	Renewable Energy Production from Agro- industry Biomass using Microwave Technology	Project Leader (RM 120,000)	2006-2008	EScienceFund, MOSTI
21.	Numerical Modeling and simulation on temperature distribution of empty fruit bunch microwave pyrolysis	Project Leader (RM 80,000)	2006-2008	FRGS, MOHE

Award/Recognition

No.	Name of awards	Title	Award Authority	Award Type	Year
1.	Excellent Service Awards		UPM	University	2019
2.	Travel Grant Award	Visiting Researcher	Southeast Asian Regional Center for Graduate for Agriculture (SEARCA)	International	2019
2.	Excellent Service Award		UPM	University	2016
3.	Excellent Teaching Awards		Faculty of Engineering	Faculty	2004-2019
4.	Postdoctoral Scholarships	Post doctorate	Ministry of Higher Education	National	2012
5.	Bronze & Gold Medal	PRPI, UPM	UPM	University	2009
6.	Silver Medal	PRPI, UPM	UPM	University	2008

Professional Services/Consultation

No.	Year	Title	Authority	Amount
1.	2018-2019	Technical Advisor, Micronutrient for water & wastewater treatment	Rhino Alliance Sdn. Bhd.	-
2.	2017	Program Advisory Committee	UniKL-MICET	-
3.	2015	Rubber-scrap RDF	Malaysian Rubber Board	RM 13,000
4.	2010	SPBio Fuel Saver Testing	Steam-Pro Holdings Sdn. Bhd.	RM 7,625
5.	2009	Carbonization of EFB from Oil Palm	Nasmech Technology Sdn. Bhd.	-
6.	2008	Production of Biogas from Cattle Manure	National Feedlot Corporation	-

7.	2007	Gas Treatment and Storage of Landfill Gas	UNITEN	-
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Student Supervision

Main Supervision

No.	Name	Title	Program	Status
1.	Siti Baizurah Mahat	Treatment of High Industrial Wastewater via Two- Staged Anaerobic Digestion Low Cost Membrane Bioreactor (AnMBR)	Ph.D	On-going
2.	Syarifah Nazura	Anaerobic Treatment of High Oil and Grease Wastewater in Dynamic Membrane Anaerobic Bioreactor Aided with Antifoamers and Surfactants	M.Sc	On-going
3.	Nour A.T. Zghaibi	PUFA Production from Nannochloropsis Sp. Microalgae using Innovative Microwave Technology	Ph.D	Graduated (2019)
4.	Saleem Ethaib Mohammad	Microwave Pre-treatment of Sago Palm Bark and Enzymatic Hydrolysis for Sugar Production	Ph.D	Graduated (2017)
5.	Nor Aisyah Amirah Ramzi	Microwave-assisted extraction of lipid from fish waste	M.Sc	NA
6.	Nur Mustika Mokhtar	Simultaneous drying, pyrolysis and gasification of sludge using microwave for syngas production	M.Sc	Graduated (2012)

Member of Supervisory Committee (UPM)

No.	Name	Title	Program	Status
1.	Quin anak Emparan	A Sustainable Technology for Palm Oil Mill Effluent (POME) Treatment with Simultaneous CO ₂ Capture using Microalgae	Ph.D	On-going
2.	Nurfatimah Mohd Thani	Sugar Recovery from Bakery Leftovers via Subcritical Water Hydrolysis	Ph.D	Graduated
3.	Nur Atikah Mohamad Aziz	Microwave-assisted Transesterification of Palm Oil Methyl Ester for Production of Palm-Based Polyol Ester for Gear Applications	Ph.D	On-going
4.	Ummi Kalsum Hasanah Mohd Nadzim	Process Simulation and Optimization of Palm Oil Milling Process using Aspen Plus	Ph.D	On-going
5.	Nurul Nadhirah Rus	Oscillatory Flow Mixing of Food Waste Anaerobic Digestion for Biogas Production	M.Sc.	On-going
6.	Hussein Saeed Rasheed	Improvement in Lubricating Properties of Engine Oil by Blending with Palm Oil, TMP Ester and Nanoparticles	M.Sc.	On-going
7.	Afzal Nida	Evaluation of forward osmosis membrane process for pink	M.Sc.	On-going

guava juice concentration

8.	Siti Maisurah Zakaria	Extraction of Bioactive Polysaccharide Compounds from <i>Chlorella</i> Sp. Microalgae by Subcritical Water Extraction	Ph.D	Graduated
9.	Dina Kania	Polyol Ester Biolubricant as a Differential Sticking Reducer in Synthetic Based Drilling Fluid	Ph.D	Graduated
10.	Khaled Muftah Shahot	Aerobic Treatment using Activated Carbon Coated Cosmo Ball for Municipal Wastewater	Ph.D	Graduated
11.	Ismail Muhammad Nasir	Study of the Effect of Chemical Pre-treatment on the Anaerobic Digestion of Cattle Manure and Investigation of Kinetics	Ph.D	Graduated
12.	Aida Isma Mohamad Idris	Removal of Biodegradable Organic Matter using Ultrafiltration Membrane for Wastewater Treatment	Ph.D	Graduated
13.	Nurafifah Mat Fuad	Dewatering of <i>Nannochloropsis</i> Sp. For High Lipid and Biomass Production	M.Sc.	Graduated
14.	Faten Hameed Kamil	Waste Material as a Potential Cracking Catalyst of Mixed Plastic Cracking for Fuel Recovery	M.Sc.	Graduated
15.	Amir Syariffuddeen Muhd Adnan	Comparison between Glycolysis and Microwave- assisted Technique in Depolymerization of PET wastes	M.Sc	Graduated
16.	Ismail Muhammad Nasir	Anaerobic Digestion of Cattle Manure for Biogas Production	M.Sc	Graduated

Member of Supervisory Committee (External)

No.	Name	Title	Program	University	Status
1.	Wan Adibah binti Wan Mahari	Microwave-heated Pyrolysis in Recycling Waste Cooking Oil	Ph.D	Universiti Malaysia Terengganu	Graduated
2.	Nur Fatimah Zainuddin	Microwave-heated Pyrolysis in Recycling Waste Lubricating Oil	M.Sc.	Universiti Malaysia Terengganu	Graduated