

CURRICULUM VITAE

DR. ROZITA BINTI OMAR

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JABATAN KEJURUTERAAN KIMIA DAN ALAM SEKITAR
FAKULTI KEJURUTERAAN
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1. **Full Name:** ROZITA BINTI OMAR

2. **Title:** Associate Prof. Dr.

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4. **Email:** rozitaom@upm.edu.my

5. **Field:** Chemical Engineering

6. **Research interest:** Water and Wastewater Treatment & Utilization, Waste Management, Microwave Applied Technology

H-index: 23 (Scopus); Citations: 2179 (Scopus)

7. Education and Academic Qualifications

Name of Institution	Qualification Obtained	Area of Specialisation	Year
Universiti Putra Malaysia	PhD	Chemical Engineering	2010
Universiti Putra Malaysia	MSc	Bioprocess and Fermentation Technology	2003
Colorado School of Mines	BEng.	Chemical Engineering	1998

8. Professional Membership

Institution/Affiliation/Registration	Status
Board of Engineers Malaysia (BEM)	Graduate Member
Malaysian Society for Engineering & Technology (MySET)	Member

9. Employment/Working Experience

Post Held	Employer	Duration
Lecturer Lecturer/Senior Lecturer/Associate	Dept. of Chemical & Environmental Engineering, Universiti Putra Malaysia	Oct. 2003 – To date
Postdoctoral Fellow	Dept. of Chemical Engineering, University of Nottingham, UK	Dec. 2011 – Nov 2012
Tutor	Dept. of Chemical and Environmental Engineering, Universiti Putra Malaysia	Jan. 1999 – Sep. 2003

10. Administrative Post/Academic Post / Additional Responsibility (UPM)

Post	From	To
Program Coordinator, Master of Process Safety and Loss Prevention, Faculty of Engineering	September 2020	December 2022
Head of Environmental Engineering Laboratory, Dept. of Chemical and Environmental Engineering, Faculty of Engineering	January 2024 January 2020	Present August 2020
Academic Coordinator I, Department of Chemical & Environmental Engineering, Faculty of Engineering	January 2015	December 2017
Academic Coordinator II, Department of Chemical & Environmental Engineering, Faculty of Engineering	May 2014	December 2014
Head of Environmental Engineering Laboratory, Dept. of Chemical and Environmental Engineering, Faculty of Engineering	February 2013	April 2014
Head of Combustion Laboratory, Dept. of Chemical and Environmental Engineering, Faculty of Engineering	March 2010	November 2011
Academic Advisor – BEng. (Chemical) Student	2003-2006; 2010	To Date

11. Research Grants and Activities

i. Research grants On-going (As Head of Project)

Project Title	Position Held	Date/Duration	Source of Fund
Penghasilan Baja Organik dari Air Sisa Penternakan Lembu Secara Vermikompos untuk Kelestarian Alam Sekitar di Kandang Penternakan Lembu di Kuang, Selangor	Head of Project	Jun 2024 – Aug 2025	KTGS-UPM (RM10,000)
Ammonia Recovery from High Lipid Wastewater as A Source of Organic Fertilizer	Head of Project	Sep 2022- Aug 2024	IPS –UPM (RM20,000)

ii. Research grants On-going (Member of Project)

Project Title	Head of Project	Date/Duration	Source of Fund
Rawatan Air Sisa Kandang Penternakan untuk Kelestarian Teknologi Hijau bagi Komuniti Penternak Ruminan Kawasan Hulu Langat	AP. Dr. Nor'aini Abdul Rahmah	Jun 2024 – Aug 2025	KTGS-UPM (RM10,000)
The interaction mechanism between a green synthesis of Hydroxyapatite nanoparticles and Thermoanaerobacterium-rich species for granule formation in biohydrogen production.	Dr. Nur Syakina Jamali	Oct 2023 – Sep 2025	FRGS (RM129,000)

iii. Research Grants Completed (As Head of Project)

Project Title	Status	Source of Fund
Modified Chitosan as A Smart Biomaterial Produced from Crab Shell Waste via Combined Microwave-assisted and Subcritical Liquid (MwSL) Technique	Completed 2022	University Consortium Seed Fund (SEARCA) (USD5,000)
Performance evaluation of anaerobic bioreactor with submerged dynamic membrane configuration for treating food wastewater	Completed 2020	Putra Grant – UPM (RM50,000)
Treatment of High Industrial Wastewater via 2 staged Anaerobic Digestion Low Cost Membrane Bioreactor	Completed 2019	IPS-UPM (RM20,000)
Recovery of Protein from Fish Waste via Enzymatic Hydrolysis couples with Microwave Pretreatment	Completed 2018	IPS-UPM (RM20,000)
Development of Green Process Via Microwave-assisted Pretreatment using RSM to enhance Enzymatic Saccharification of lignocellulosic biomass for the production of sugar	Completed 2017	IPS-UPM (RM15,000)
Evaluation and modeling of subcritical water extraction (SWE) of bioactive compounds from microalgae polysaccharides	Completed 2018	FRGS- MOHE (RM118,000)
Microwave Assisted Acid Extraction and Recovery of metals from E-waste	Completed 2013	RUGS, UPM (RM80,000)
Simultaneous Drying, Pyrolysis and Gasification of Sludge using Microwave for Syngas Production	Completed 2010	RUGS, UPM (RM168,400)
Numerical Modeling and simulation on temperature distribution of empty fruit bunch microwave pyrolysis	Completed 2008	FRGS, MOHE (80,000)
Renewable Energy Production from Agro- industry Biomass using Microwave Technology	Completed 2008	EScienceFund, MOSTI (RM124,794)

Total: RM 716,194.00

iv. Research Grant Completed (Member of Project)

Project Title	Head of Project	Year	Source of Fund
Intervensi Permasalahan Bantut menerusi Pemindahan Ilmu Pemakanan Seimbang dalam kalangan Ibu dan Kanak-kanak di Presint 5, Putrajaya menggunakan Konsep Pinggan Sihat Malaysia	Dr. Muhammad Heikal bin Ismail	Jan 2022 – Jan 2023	Kementerian Kesihatan Malaysia (RM9,000)
Feasibility study on application of forward osmosis (FO) membrane for concentrating tropical juice	Prof. Dr. Siti Mazlina	Completed 2021	Matching Grant Putra (RM50,000)
Penghuraian Anaerobik	Dr. Muhammad Heikal Ismail	Completed 2020	Geran Kecil Alam Sekitar, Negeri Selangor (RM10,000)
Feasibility study of application of Ionic Liquids (ILs) in bio-product development from microalgae and lignocellulosic materials	Prof Ir. Dr Wan Azlina Wan Abdul Karim	Completed 2019	Collaboration Grant (UPM -UTP) (RM50,000)

Kinetics and mechanism of subcritical hydrolysis of waste products (leftovers) from bakery industry for oligosaccharides formation	Prof. Dr. Siti Mazlina	Completed 2019	FRGS – MOHE/MOE (RM 101,442)
Evaluation On The Production Of Sugars (Oligosaccharides) From Bakery Wastes Using Subcritical Water Treatment	Prof. Dr. Siti Mazlina	Completed 2020	IPS –UPM (RM25,000)
Dewatering of <i>Nannochloropsis</i> sp. For High Lipids and Biomass Production	Prof. Dr. Azni Idris	Completed 2019	UPM-IPB Grant (RM50,000)
Evaluation on extraction of omega - 3 FA from <i>Nannochloropsis</i> sp. using subcritical water technique	Prof. Dr. Siti Mazlina	Completed 2019	IPB – UPM Grants (RM100,000)
Pressurized water extraction (PWE) for extracting polysaccharide from freshwater microalgae	Prof. Dr. Siti Mazlina	Completed 2017	UPM-IPS (RM 20,000)
Waste reduction of fat, oil and grease from Medan Selera, Pasar Besar Melaka	P.M. Dr. Salmiaton Ali	Completed 2017	KTP-MOE (RM296,225)
Fabrication of 10 kW integrated mobile gasifier for sustainable power and biofuels production	P.M Dr Wan Azlina Wan Abdul Karim	Completed 2016	PRGS, MOHE (RM165,000)
Characterization of soluble microbial products (SMP) in membrane bioreactor (MBR) and its effect on membrane fouling potential.	Prof. Azni Idris	Completed 2016	FRGS, MOHE (RM81,000)
Development of a Novel and Sustainable Microwave Pyrolysis Process for the Production of Potential Fuel Products from Waste Oil	Prof. Dr. Lam Shu Shiung (Universiti Malaysia Terengganu)	Completed 2016	eScienceFund, MOSTI (RM356,300)
Evaluation of high hydrostatic pressure (HHP) extraction of bioactive compounds from microalgae	Prof. Dr. Siti Mazlina	Completed 2015	FRGS, MOHE (RM92,000)
Elucidation of the catalytic effects and Heating Characteristics of Particulate carbon as a Reaction bed in Microwave pyrolysis of waste oil	Prof. Dr. Lam Shu Shiung (Universiti Malaysia Terengganu)	Completed 2015	FRGS, MOHE (RM138,990)
Ultra-sonication effects on ultra-filtration membrane cleaning and fouling mitigation	Prof. Dr. Azni Idris	Completed 2008	RUGS UPM (RM15,000)
Gasification of agro-waste to produce biofuel	P.M Dr Wan Azlina Wan Abdul Karim	Completed 2008	eScienceFund, MOSTI (RM105,796)
Formulation of Natural Synthetic Lubricant For Hydraulic Fluids	Prof. Dr. Robiah Yunus	Completed 2006	IRPA, MOSTI (RM112,000)

Total: RM 1,485,00.00

- MOE – Ministry of Education
- MOHE – Ministry of Higher Education

- MOSTI – Ministry of Science, Technology and Innovation

i. Consultation Project, Research Contract and Other Funding

Title	Client / Collaborator	Year
JICA Project for AunSEED, 14 th Regional Conference on Chemical Engineering (Head Scretariat)	AUNSeed-NET	2020-2021
MoA between UPM and SEGi University Sdn. Bhd. Project title: Feasibility Study on Application of Forward Osmosis (FO) Membrane for Concentrating Tropical Juice (Member of Project for UPM)	SEGi University Sdn. Bhd.	2019 - 2021
MoA between UPM and UTP. Project title : Feasibility study of application of Ionic Liquids (ILs) in bio-product development from microalgae and lignocellulosic materials (Member of Project for UPM)	Universiti Teknologi Petronas	2017 - 2019
Technical Advisor: Micronutrient for Water & Wastewater Treatment	Rhino Alliance Sdn. Bhd.	2018-2019
UC Faculty Travel Grant: Department of Chemical Engineering, Universitas Gadjah Mada, Yogyakarta, Indonesia Visiting Lecturer, Seminar and Speaker at Summer School	Sponsorship from University Consortium, SEARCA	2019
Workshop on Anaerobic Digestion & Biogas Production	TNB Research Sdn. Bhd	2018
Rubber-scrap Refuse Derive Fuel (Member of Project)	Malaysian Rubber Board	2015
SPBio Fuel Saver Testing (Member of Project)	Steam-Pro Holdings Sdn. Bhd.	2010
Carbonization of EFB from Oil Palm (Member of Project)	Nasmech Technology Sdn. Bhd.	2009
Production of Biogas from Cattle Manure (Member of Project)	National Feedlot Cooperation	2008
Gas Treatment and Storage of Landfill Gas	UNITEN	2007

2. Publications

(i) PhD Thesis

Title: Evaluation of Microwave Pyrolysis of Oil Palm Empty Fruit Bunchs (PhD – 2010)

(ii) Journal (Scopus/JCR) – First, Corresponding, and Senior Author

No.	Titles and Journal
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1.	Mohd Syazwan Mohd Shukor, Rozita Omar, Mohamad Rezi Abdul Hamid, Mohd Razif Harun, Mohamad Syazarudin Md Said (2024). Dispersion evaluation of hydrogen sulfide inclusion in a cryogenic distillation pilot plant. <i>Process Safety Progress</i> , 2024: 1-11. DOI: 10.1002/prs.12597 (Q4)
2.	Syed Sabeer Ali, S.N., Omar, R. , Che Man, H., Md Idris, A.I., Tajuddin, H.A. (2023). Two-Stage Anaerobic Digestion using Protein-Rich Wastewater inoculated with Anaerobic Sludge. <i>Desalination and Water Treatment</i> , 302: 82-90. DOI: 10.5004/dwt.2023.29783 (JCR-Q4)
3.	Rozita Omar, Mahat, S.B., Muhamad Saufi, M.K., Aida Isma, M.I. (2023). Ammonia conversion in an aquaponics system using activated carbon coated and non-coated bioball in the biological treatment tank. <i>Materials Today: Proceedings</i> . April 2023. 10.1016/j.matpr.2023.03.678 (Scopus)
4.	Daniel Timotius, Kusumastuti, Y., Rozita Omar, Razif Harun, Siti Mazlina Mustapa Kamal, Siti Nurul Aisyiyah, J., Petrus, H.T.B.M. (2022). The study of methylene blue loading into chitosan-graft-maleic sponges. <i>International Journal of Technology</i> 13(8): 1976. 10.14716/ijtech.v13i8.6133. (Scopus)
5.	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. <i>Progress on Chemistry and Application of Chitin and its Derivatives. XXVII (2002): 204-216. 10.15259/PCACD.27.016 (Q4 ECSI).</i>
6.	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. <i>Process Safety Progress</i> 41(3): 1-9. DOI: 10.1002/prs.12363 (Q4)
7.	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. <i>IOP Conference Series: Material Science and Engineering</i> . 1257: 012043. DOI: 10.1088/1757-899X/1257/1/012043 (Scopus)
8.	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. <i>Journal of Environmental Chemical Engineering</i> , 9, 105718. (Q1)
9.	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. <i>Journal of Environmental Chemical Engineering</i> , 9, 105245. (Q1)
10.	Nurafifah Fuad, Rozita Omar, Suryani Kamarudin, Razif Harun, A. Idris, W.A.K.G. Wan Azlina (2021). Harvesting Marine Microalgae <i>Nannochloropsis</i> sp. using Dissolved Air Flotation (DAF) Technique. <i>Sains Malaysiana</i> 50(1): 73-83. (Q4)
11.	Saleem Ethaib, Rozita Omar, Mustapa Kamal Siti Mazlina, Awang Biak Dayang Radiah, and Zubaidi Salah (2020). Microwave-assisted pyrolysis of biomass waste: A mini review. <i>Processes</i> , 8(9): 1190. 10.3390/PR8091190 (Q2)
12.	Saleem Ethaib, Rozita Omar, Mustapa Kamal Siti Mazlina, Awang Biak Dayang Radiah (2020). Toward Sustainable Processes of Pretreatment Technologies of Lignocellulosic Biomass for Enzymatic Production of Biofuels and Chemicals: A Review. <i>BioResources</i> , 15(4): 10063-10088. 10.15376/biores.15.4.ethaib. (CIJ)
13.	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. <i>Energy Sources, Part A: Recovery, Utilization, and Environmental Effects</i> . (Published online April 2020). https://doi.org/10.1080/15567036.2020.1753857
14.	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. <i>Desalination and Water Treatment</i> , 203: 267-278. DOI: 10.5004/dwt.2020.26231 (Q4)

15.	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. <i>Asia-Pacific Journal of Chemical Engineering</i> . 15: e2453. https://doi.org/10.1002/apj.2453 . (Q4)
16.	Saleem Ethaib, Rozita Omar, Mustapa Kamal Siti Mazlina and Awang Biak Dayang Radiah (2020). Evaluation Solvent Level Effect on Sugar Yield during Microwave-assisted Pretreatment. <i>IOP Conference Series: Material Science and Engineering</i> , 12034. 10.1088/1757-899X/871/1/012034
17.	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 <i>Nannochloropsis</i> sp. <i>Molecules</i> , 25(4): 784.
18.	Nour Zghaibi, Rozita Omar, Siti Mazlina Mustapa Kamal, Dayang Radiah Awang Biak and Razif Harun (2019). Microwave-assisted brine extraction for enchancement of the quantity and quality of lipid production from microalgae <i>Nannochloropsis</i> sp. <i>Molecules</i> 24 (3581): 1-21.
19.	Rafeah Wahi, Effa Radika Bidin, Nawwar Muntaj Mohamed Asif, Nur Athirah Nor ^[1] _[SEP] 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. <i>Environmental Science and Pollution Research</i> . 26(22): 22246-22253
20.	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. <i>Journal of Engineering Science and Technology</i> . Special Issue on WRICET2016, December (2018): 71-77. (Scopus)
21.	Nurafifah Fuad, Rozita Omar, Suryani Kamarudin, Razif Harun, A. Idris, W.A.K.G. Wan Azlina (2018). Mass harvesting of marine microalgae using different techniques. <i>Food Bioprod Process</i> . 112: 169-184. 10.1016/j.fbp.2018.10.006
22.	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. <i>Food Bioprod Process</i> . 112: 150-168. 10.1016/j.fbp.2018.09.008
23.	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 <i>Nannochloropsis</i> sp. <i>Journal of Environmental Chemical Engineering</i> 6 (2018): 4318–4328.
24.	Mokhtar, N.M., Ethaib, S., Omar, R. (2018). Effect of microwave adsorbers on the products of microwave pyrolysis of oily sludge. <i>Journal of Engineering Science and Technology</i> 13 (10): 3313-3330. (Scopus)
25.	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 ^[1] _[SEP] and the enzymatic hydrolysis of lignocellulosic biomass. <i>Neural Comput & Application</i> 30:1111–1121 (IF: 1.492, Q2)
26.	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. <i>IOP Conf. Series: Materials Science and Engineering</i> 206: 012096. ^[1] _[SEP]
27.	Mohammad, Salem, Omar, Rozita, Mustapa Kamal, S.M., Awang Biak, D.R., Syafie, M.Y. Harun (2017). Microwave-Assisted Pretreatment of Sago Palm Bark. <i>Journal of Wood Chemistry and Technology</i> . 37:26–42. (IF: 1.334, Q1).
28.	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, <i>International Food Research Journal</i> , 23(Suppl): S149-S154 (JCR Impact Factor: Q4)
29.	Lam, S.S., Wan Mahari, W.A., Cheng, C.K., R. Omar , 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. <i>Energy</i> , 115: 791-799 (Q1)

30.	Lingeswara, S., Omar, R., Ghazi, T.I.M. (2016). Reliability analysis on a shell and tube heat exchanger. IOP Conference Series: Earth and Environmental Science 36(1): 1-11. 10.1088/1755-1315/36/1/012012
31.	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. (IF:1.830, Q1)
32.	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, 10(2): 97-109
33.	Rozita Omar and J.P. Robinson. Conventional and microwave-assisted pyrolysis of rapeseed oil for bio-fuel production. Journal of Analytical and Applied Pyrolysis. 105: 131–142. (IF:3.652, Q1)
34.	Hussain, S.A., Bano, S., Yeoh, H.S., Rozita, O. (2014). Simulation on temperature distribution of oil palm empty fruit bunches during the microwave pyrolysis process. Asia-Pacific Journal of Chemical Engineering 9(1): 39-49. 10.1002/apj.1744
35.	Nur Mustika Mokhtar, Rozita Omar , Azni Idris. Microwave Pyrolysis for Conversion of Materials to Energy: A Brief Review. Energy Sources Part A Recovery, Utilization, and Environmental Effects 34:2104–2122. (IF: 0.386)
36.	Rozita Omar , A. Idris, R. Yunus, K. Khalid and M.I. Aida Isma (2011). Characterization of Empty Fruit Bunch for Microwave-assisted Pyrolysis. Fuel 90:536-1544. (IF:3.611, Q1)
37.	Rozita Omar , M.A. Abdullah, M.A. Hasan, M. Rosfarizan and M. Marziah. Kinetics and Modelling of Cell Growth and Substrate Uptake in Centella asiatica Cell Culture. Korean Journal of Biotechnology and Bioprocess Engineering, 11(3): 223-229
38.	Rozita Omar , M.A. Abdullah, M.A. Hasan and M. Marziah. Optimization and Elucidation of Interactions between Ammonium, Nitrate and Phosphate in Centella asiatica Cell Culture using Response Surface Methodology. Korean Journal of Biotechnology and Bioprocess Engineering, 10 (3): 192-197.

(iii) Journal (Scopus/JCR) – Co-Author

No.	Titles and Journal
1.	M.S. Md Said, K. Kannan, Rozita Omar, M.Z. Mohd Tohir, Mus'ab Abdul Razak. Thermal and kinetic analyses of Malaysian forest peat soil. International Journal of Environmental Science and Technology. June 2024 DOI: 10.1007/s13762-024-05786-3
2.	Lee Yang, Sunghwan Park, Wong Zhong Han, Mus'ab Abdul Razak, Lee Yong Zhen, Muhammed Faires, Rozita Omar, Thomas Shean Yeaw Chong, Rosiah Rohani, Mohamad Rezi Abdul Hamid (2024). Systemic narrowing of ZIF-8 Apertures via Controlled 2-Ethylimidazole doping for hydrogen/carbon dioxide separation. Korean Journal of Chemical Engineering, May 2024. DOI: 10.1007/s11814-024-00192-4
3.	Shishita Zishan, Nur Syakina Jamali, Hasfalina Che Man, Rozita Omar, Juan Ping Tan, Shareen Faizul Abdul Manaf (2024). Biohydrogen production using eggshell waste-derived green-synthesized hydroxyapatite nanoparticles (HapNps) as biomedica. Preprint
4.	Shiva Rezei Motlagh, Razif Harun, Rozita Omar, Amal Elgharbawy, Ramin Khezri (2023). Ionic liquid-based microwave-assisted extraction of protein from Nannochloropsis sp. biomass. Biomass Conversion and Biorefinery, 13(9): 8327-8338. (JCR – Q2)
5.	Ummi Kalsum Mohd Nadzim, Robiah Yunus, Rozita Omar, Mohd Halim Shah Ismail (2023). Simulation of energy consumption in sterilisation process using ASPEN PLUS and Response Surface Methodology. Journal of Oil Palm Research, 35(2): 281-295 (JCR-Q4)

6.	Izzah Farhana Ab Aziz, Hasfalina Che Man, Ali Dermici, Rozita Omar, Muhammad Hazwan Hamzah, Nur Syakina Jamali, Kamil Kayode Katibi, Abdulsalam Mohammed (2023). Biogas production from lignocellulosic biomass, opportunities and challenges: A review on sustainable energy from Malaysian perspectives. Journal of Oil Palm Research, Accepted (JCR-Q4)
7.	Izzah Farhana Ab Aziz, Hasfalina Che Man, Rozita Omar, Muhammad Hazwan Hamzah, Nur Syakina Jamali (2023). Novel Pre-Treatment for Lignocellulosic Biomass Delignification Using Alkaline-Assisted Ohmic Heating. Pertanika Journal of Science and Technology, 31(6): 3039-3057. (Scopus)
8.	Nurfatimah Mohd Thani, Siti Mazlina Mustapa Kamal, Alifdino Sulaiman, Farah Saleena Taip, Rozita Omar (2023). Subcritical water hydrolysis for sugar recovery from bakery leftovers: kinetic and thermodynamic analysis. Biomass Conversion and Biorefinery, 13(2): 1927-1935. (JCR Q2)
9.	Nurfatimah Mohd Thani, Siti Mazlina Mustapa Kamal, Alifdino Sulaiman, Farah Saleena Taip, Rozita Omar (2023). Subcritical water hydrolysis of industrial cake leftovers for sugar production. Food Science and Technology, 17(3): 2204-2212. (SCIE Q3)
10.	Aida Isma, M.I., Siti Mazlina, M.K., Alifdino, S., Rozita Omar, Munira Mohammad (2022). Characterization of cellulose acetate membrane at different thicknesses for Sucrose Concentration by Forward Osmosis. ASEAN Journal of Chemical Engineering 22(2): 337. 10.22146/ajche.77350 (Scopus)
11.	Siti Mazlina, M.K., Nurfatimah, M.T., Farah Saleena, T., Alifdino, S., Rozita Omar (2022). Subcritical water hydrolysis of industrial cake leftovers for sugar production. Journal of Food Measurement and Characterization, December 2022. 10.1007/s11694-022-01756-w.
12.	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)
13.	Siti Maisurah Zakaria, Mustapa Kamal S.M., Harun R., Omar R., Siajam S.I. (2022). Extraction of phenolic compounds from <i>Chlorella</i> sp. microalgae using pressurized hot water: kinetics study. Biomass Conversion and Biorefinery, 12(1): 1-9. DOI: 10.1007/s13399-020-01027-y
14.	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)
15.	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)
16.	Nurfatimah Mohd Thani, Siti Mazlina Mustapa Kamal, Alifdalino Sulaiman, Farah Saleena Taip, Rozita Omar (2021). Sugar recovery form 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
17.	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
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19.	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

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21.	Shiva Rezaei Motlagh, Amal Ahmed Elgharbawy, Ramin Khezri, Razif Harun, Rozita Omar, (2021). Ionic liquid-based microwave-assisted extraction of protein from <i>Nannochloropsis</i> sp biomass. Biomass Conversion and Biorefinery: 10.1007/s13399-021-01778-2
22.	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)
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38.	Khaled Shahot, Azni Idris, Rozita Omar and Hamdan M. Yusoff. (2014) Review on Biofilm Processes for Wastewater Treatment. <i>Life Science Journal</i> , 11(11): 1-13.
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(iv) Journal (Non -Citation) – First, Corresponding, Senior Author

No.	Titles and Journal
1.	Aida Isma Md. Idris, Putri Razreena Ab Razak, Rozita Omar , Azni Idris (2014). Effects of sludge retention time and hydraulic retention time on treatment performance of membrane bioreactor (MBR) and membrane fouling. <i>International Journal of Chemical, Molecular, Nuclear, Materials and Metallurgical Engineering</i> , 8(6): 488-492.
2.	Aida Isma Md. Idris, Putri Razreena Ab Razak, Rozita Omar , Azni Idris (2013). Performance of membrane bioreactor (MBR) in a high phosphate wastewater. <i>International Journal of Environmental, Chemical, Ecological, Geological and Geophysical Engineering</i> , 7(1): 54-58.
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(v) Journal (Non -Citation) – Co-Author

No.	Titles and Journal
1.	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. <i>Applied Surface Science</i> 538(17): 148154. Doi: 10.1016/j.apsusc.2020.148154
2.	Ummi 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. <i>International Journal of Biomass and Renewables</i> 9(1): 10-24.
3.	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. <i>Advanced Science, Engineering and Medicine</i> 11 (9): 879-887.
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(vi) Proceedings and Book of Abstracts

No.	Titles
1.	M Syazwan M Shukor, Rozita Omar , Mohammad Rezi Abd Hamid, Razif Harun. Dispersion evaluation of hydrogen sulfide inclusion in a cryogenic distillation pilot plant. <i>Loss Prevention Asia 2023</i> , 21-22 August 2023, Kuala Lumpur, Malaysia
2.	A. Ismail, Athirah Azemi, Rozita Omar , Siti B.Mahat, Sharifah N. Syed Saber Ali. Post-treatment of A Digestate from An Aerobically Digested Food Processing Wastewater using Recirculating Hydroponic Planting System. <i>World Research & Innovation Convention on Engineering & Technology 2023</i> , 10-11 July 2023.
3.	Nurul Maisarah VAJ, Rozita Omar , Siti Baizurah Mahat, Muhamad Saufi MK, Aida Isma MI. Performance assessments of aquaponics system using activated carbon coated and non-coated bioball in the biological treatment tank. <i>Proceeding of 2nd Regional Congress on Membrane Technology & 2nd Regional Conference on Environmental Engineering 2022</i> , Johor Bahru, Malaysia. 21-22 September 2022.
4.	Nabila Aliyah Ahmad Naim, Rozita Omar , Nik Nor Liyana Nik Ibrahim, Emergency preparedness and response in palm oil mill and investigation of the employees' emergency preparedness, knowledge and attitude. <i>Loss Prevention Asia 2021</i> . Virtual Event. 22-23 November 2021.
5.	A.I. Juasikin and R. Omar , Risk Assessment in a Production Area at a Metal Recovery Waste Plant. 14 th AUN/SEED-Net Regional Conference on Chemical Engineering 2021 and 1 st International Conference on Innovation in Chemical Engineering and Technology. Virtual Event. 30 November – 1 December 2021.
6.	S. B. Mahat, R. Omar , A. I. Md. Idris, S.M. Mustapa Kamal, A. Idris, H. Che Man., K. Yunus. Two-stage dynamic anaerobic membrane bioreactor (2-DANMBR) for food processing wastewater treatment at mesophilic temperature: Characterization of cake layer. <i>Proceeding Regional Congress on Membrane Technology 2020 and Regional Conference Environmental Engineering</i> . Johor Bahru, 16-17 January 2021.
7.	Choo Boon Chong and R. Omar . Evaluation of Foreign Workers' Awareness on Chemical Handling in Company A. 1 st Internatinal Conference on Universal Well Being, Kuala Lumpur, Malaysia. 4-6 December 2019.
8.	R. Muhammad Hanafi, R. Omar , M.K. Siti Mazlina and R. Harun, Microwave-assisted extraction of lipid from <i>Nannochloropsis</i> sp. Microalgae using green solvents, I-OCEANS 2019, Terengganu, Malaysia
9.	S. B. Mahat, R. Omar , A. I. Md. Idris, S.M. Mustapa Kamal, A. Idris. (2018). Influence of inoculum to

	substrate ratio on the biochemical methane potential of food processing wastewater in batch anaerobic assays. Proceeding of 31 st Symposium of Malaysian Chemical Engineers, Kuala Lumpur. 5-6 December 2018.
10.	Siti Mazlina Mustapa Kamal, Nurfatimah Mohd Thani, Alifdalino Sulaiman, Farah Saleena Taip, and Rozita Omar , Evaluation on effect of consumers' delayed consumption of various bakery products towards its physical properties and chemical compositions, Chemeca 2018, Queenstown, NZ
11.	Nurfatimah Mohd Thani, Siti Mazlina Mustapa Kamal, Farah Saleena Taip, Alifdalino Sulaiman and Rozita Omar , Effect of enzyme concentrations on total reducing sugar from croissants and doughnuts letfovers via enzymatic hydrolysis. CAFEi2018, Putrajaya, 2018
12.	S. B. Mahat, R. Omar , A. I. Md. Idris, S.M. Mustapa Kamal, A. Idris. (2017). Dynamic membrane applications in anaerobic and aerobic digestion for industrial wastewater: A mini review. Proceeding of 30 th Symposium of Malaysian Chemical Engineers, Monash University Kuala Lumpur. 6-7 December 2017.
13.	Nurafifah Fuad, Suryani Kamarudin, Rozita Omar , A. Idris, Razif Harun, W.A.K.G. Wan Azlina (2017). Harvesting approaches of marine microalgae for the production of biofuel and bioproducts. Proceeding of 30 st Symposium of Malaysian Chemical Engineers, Monash University Kuala Lumpur. 6-7 December 2017.
14.	R. Omar , A. Idris, Razif Harun, Suryani Kamaruddin, W.A.K.G. Wan Azlina Wan, M.K. Siti Mazlina, D.R. Awang Biak, Nurafifah Fuad (2017). Comparison of lipid quality of <i>Nannochloropsis</i> sp. flocculated via autoflocculation, AFlok-BP1 and Alum. International Symposium on Applied Engineering and Sciences, Serdang Selangor. 14-15 November 2017.
15.	S.M Mustapa Kamal, S.M Zakaria, M.R Harun, R. Omar , and S.I Siajam, Recovery of Phenolic Compounds from <i>Chlorella</i> sp. Microalgae by Conventional Soxhlet, Ultrasound-Assisted and Subcritical Water Extraction. ICFSN 2017, Kota Kinabalu, Sabah
16.	Siti Maisurah Zakaria, Siti Mazlina Mustapa Kamal, Rozita Omar , Mohd Razif Harun and Shamsul Izhar, Extraction of antioxidants from <i>Chlorella</i> sp. using subcritical water treatment. SOMChE 2016, Miri Sarawak, 2016
17.	M.A Rahim, R.Omar , Siti Mazlina M.K., Awang Biak D.R, Saleem Ethaib and Nor Aisyah R., Microwave-assisted extraction of lipid from fish waste, SOMChE 2016, Miri Sarawak, 2016
18.	Nor Aisyah R., Rozita Omar , Siti Mazlina M.K., Awang Biak D.R. and Su Shiung Lam. Microwave-assisted pretreatment and enzymatic hydrolysis of sardine processing waste. Proceeding of World Research & Innovation Convention on Engineering & Technology (WRICET2016), Langkawi, Malaysia. 24-25 th October 2016.
19.	Fatin Nur Lyana A.B, R.Omar , Harun M.R & A.Idris. <i>Flocculation of Algae Chlorella Vulgaris Using AFLOK-BPI and Aluminium Sulfate (ALUM)</i> . Proceeding of the Universiti Malaysia Terengganu International Annual Symposium on Sustainability Science and Management (UMTAS), 2016, Marang Terengganu, Malaysia.
20.	Saleem Ethaib, R. Omar , M.K. Siti Mazlina, Dayang Radiah (2016). A comparison of solvent effect on sugar yield from sago palm bark during microwave-assisted pretreatment. Proceeding of Global Conference on Engineering and Technology. Kuala Lumpur, Malaysia. 1-2 June 2016.
21.	Lingeswara, S., Rozita Omar , Mohd. Ghazi, T.I., <i>Reliability Analysis On A Shell And Tube Heat Exchanger</i> . Proceeding of the 5th International Conference on Chemical and Bioprocess Engineering ICCBPE, 2015, Kota Kinabalu, Sabah, Malaysia.
22.	S.M. Zakaria, S.M. Mustapa Kamal, M.R. Harun, R. Omar & J. Roslan (2015). Optimization of Ultrasonic-assisted Water Extraction of Crude Polysaccharides from <i>Chlorella</i> Sp. by Response Surface Methodology. Proceeding of 5 th International Conference on Chemical and Bioprocess Engineering. Kota Kinabalu, Sabah, Malaysia. 9-12 December 2015.
23.	Saleem Ethaib, R. Omar , M.K. Siti Mazlina, Dayang Radiah, S. Syafie, M.Y. Harun (2015). Evaluation solvent effect during microwave-assisted pretreatment on releasing sugar from agricultural waste. The 7th International Conference on Sustainable Agriculture for Food, Energy and Industry in Regional and Global Context, ICSAFEI2015, Serdang, Malaysia, 25-27 August 2015.
24.	Omar, Rozita , Liew, SL, Mustapa Kamal, S.M. & Awang Biak, D.R and Mohammad, Salem E. (2014). Microwave-assisted Pretreatment of Dragon Fruit Peel for Sugar Production. International Conference of Food and Agriculture Engineering. Serdang, Malaysia, 1-3 December 2014.

25.	Mohammad, Salem, Omar, Rozita , Mustapa Kamal, S.M. & Awang Biak, D.R (2014). Microwave-assisted Pretreatment of Lignocellulosic Biomass: A Review. Proceeding of 27 th Symposium of Malaysian Chemical Engineers in conjunction with 21 st Regional Symposium on Chemical Engineering. Kuala Lumpur, Malaysia, 28-30 October 2014.
26.	Aida Isma Md. Idris, Putri Razreena Ab Razak, Rozita Omar , Azni Idris (2014). Effects of sludge retention time and hydraulic retention time on treatment performance of membrane bioreactor (MBR) and membrane fouling. Proceeding of International conference on Environmental and Biochemical Engineering (ICEBE 2014). Copanhagen, Denmark, 12-13 June 2014.
27.	Rozita Omar , Azni Idris, Robiah Yunus, and Gwendoline Ee (2014). Aspen Simulation of Microwave Pyrolysis of Industrial Wastes. Proceeding of International Conference on Biological, Chemical and Environmental Sciences (BCES-2014). Phuket, Thailand, 21-22 January 2014.
28.	Nur Baiti AK, R. Omar , S. Ali, S. Sobri (2013). Metal Recovery from Printed Circuit Board using Microwave-assisted Acid Leaching. International Conference of Chemical Engineering and Industrial Biotechnology 2013. Kuantan, Pahang, 28-29 August 2013.
29.	Ismail M. Nasir, Tinia I. Mohd. Ghazi, Rozita Omar , Azni Idris, (2012). Anaerobic Digestion of Cattle Manure: Influence of Inoculum Concentration. Proceedings of World Research and Innovation Convention on Engineering and Technology (WRICET) 2012, 3-5 Dec 2012, Kuala Lumpur, Malaysia.
30.	Ismail M. Nasir, Tinia I. Mohd. Ghazi, Rozita Omar , Azni Idris, (2012). Palm Oil Mill Effluent as an Additive with Cattle Manure in Biogas Production, Proceeding of International Conference on Advances Science and Contemporary Engineering, 24 – 25 October 2012, Jakarta, Indonesia.
31.	Ismail M. Nasir, Tinia I. Mohd. Ghazi, Rozita Omar , Azni Idris, (2012). Batch and Semi-Continuous Biogas Production from Cattle Manure, World Congress on Engineering & Technology, 1 – 3 June 2012, Almaty, Kazakstan.
32.	R. Omar , A. Idris, R. Yunus and K. Khalid. (2010) Microwave Absorber Addition in Microwave Pyrolysis of Oil Palm Empty Fruit Bunch. Proceeding of 3 rd International Symposium on Energy from Biomass and Waste, Venice, Italy, 8-11 November 2010.
33.	T.I. Mohd Ghazi, I. Muhammad Nasir, R. Omar , A. Idris. (2010) Comparison Study between Regulated and Unregulated pH in Anaerobic Digestion of Cattle Manure for Biogas Production. 3 rd International Symposium on Energy from Biomass and Waste, Venice, Italy, 8-11 November 2010.
34.	N.M. Mokhtar, R. Omar , MA Mohd Salleh, A Idris. (2010). Characterization of Sludge from the Wastewater Treatment Plant of A Refinery. World Engineering Congress 2010, Kuching, Malaysia, 2-5 August 2010.
35.	Aida Isma Md. Idris, Azni Idris, Rozita Omar . (2010). Biodiesel Wastewater Treatment using Anaerobic-aerobic Process. World Engineering Congress 2010, Kuching, Malaysia, 2-5 August 2010.
36.	Rozita Omar , Nur Mustika Mokhtar, MA Mohd Salleh, A Idris (2009). Microwave Pyrolysis for Conversion of Waste to Energy: A Review. International Advanced of Technology Congress, Kuala Lumpur, Malaysia, 3-5 November 2009.
37.	Rozita Omar , Razif M Harun, Azni Idris, Robiah Yunus, Tinia Idaty Mohd Ghazi, Wan Azlina Abdul Karim Ghani. (2008). Anaerobic Treatment of Cattle Manure for Biogas Production, American Institute of Chemical Engineers Annual Meeting 2008, Philadelphia, USA, 16-21 November 2008.
38.	Siti Aslina Hussain, Nor Maizatul A.K., Rozita Omar , K. Khalid (2008). Temperature Distribution of Empty Fruit Bunch in a Verticle Reactor 3D Model Simulated by Computational Fluid Dynamics. Proceeding of Symposium on Engineering and Technology 2008, Universiti Malaysia Sarawak, 15-16 December 2008.
39.	W. Rafeah, Rozita Omar , A. Idris, M.A. Mohammad Salleh and K. Khalid. (2007). Low-Temperature Microwave and Conventional Pyrolysis of Sewage Sludge: A Comparison. Proceeding International Waste To Wealth Conference 2007. 26-28 November 2007, Kuala Lumpur.
40.	Rozita Omar , A. Idris, K. Khalid, R. Yunus and W.A.K.G. Wan Azlina (2007). Characterization of Empty Fruit Bunch (EFB) as Biofuel. World Engineering Conference 2007. 5-8 August 2007, Pulau Pinang
41.	Nor Maizatul A.K., Siti Aslina H and Rozita Omar (2007). Review: Experimental and Simulation on Microwave Pyrolysis. Proceeding of 21 st Symposium of Chemical Engineers, Universiti Putra Malaysia, pg 122.

42.	M.K. Siti Mazlina, A.G.L. Abdullah, A.R. Nur 'Aliaa, Siti Aslina Hussain, and R. Omar . (2007). Comparison on Optimization of Star Fruit Juice using RSM between Two Malaysian Commercial Varieties (B11 and B10) of Star Fruit, World Engineering Conference 2007. 5-8 August 2007, Pulau Pinang
43.	Wan Azlina WAKG, A. Idris, Salmiaton Ali, Rozita Omar (2007). Characterization of agricultural waste as biofuels: significance and impact. Proceeding of 21 st Symposium of Chemical Engineers, UPM
44.	Rozita Omar , A. Idris, R. Yunus. (2006). Thermal treatment of palm oil solid waste in Malaysia, International Conference on Environment, Pulau Pinang, 13-15 November 2006.

(vii) 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)

3. Professional Contributions

(i) Technical Activities (National/University Level)

Year	Activity
To date	Internal and External Examiner for Undergraduate, Master and PhD students at UPM and other Institute of Higher Learning (IHL)
To date	Chairman of viva voce examination for Master and PhD Students at UPM
To date	Grant Evaluator Panel at UPM (FRGS, PRGS, UPM Grants etc.)
2021-2026	External Examiner for Diploma in Chemical Engineering Technology (Environment) programme at Universiti Kuala Lumpur Kampus Cawangan Malaysia Institute of Chemical & Bioengineering Technology (UniKL-MICET)
2023	Secretary for Workshop on 'Design for Safe Handling of Industrial Chemicals' May 2023, UPM (Participants: Industry, Academician and Students)
2023, 2020	Director for 'Postgraduate Chemical Engineering Symposium' Department of Chemical Engineering (Participants: Postgraduate students by Research and Taught Course)
2021-2023	Committee Member for 'Final Year Project Final Presentation, (FYP Day), Faculty of Engineering
2022	Interviewer Panel for 'Program Hadiah Latihan Persekutuan', Public Service Department (JPA)
2022	Director for Workshop on 'Process Safety Management' November 2022, UPM (Participants: Industry, Academician and Students)
2021-2022	Advisor for 'Postgraduate Chemical Engineering Symposium' Department of Chemical Engineering (Participants: Postgraduate students by Research and Taught Course)
2021	Technical Committee Request for Proposal (RfP) Solid Waste Treatment Plant Waste to Energy (WtE) at Bukit Payong Batu Pahat, Johor through Public-Private Cooperation
2021	Judge for 'National Chemical Engineering Symposium (NACES) 2021 – Technical Case Study Competition at UTM, Skudai.
2020	Mentor 'Kursus Asas Pengajaran (KAP)' (Lesson Basic Course (KAP)' of Candidate/Mentee – Dr. Muhammad Heikal bin Ismail – Programme under Centre for Academic Development (CADE), UPM
2018-	Director for 'Process Safety and Loss Prevention Postgraduate Symposium' Department of

2019	Chemical Engineering (Participants: Postgraduate students by Taught Course)
2018	Speaker for ‘Training Workshop on Anaerobic Digestion and Biogas Production 2018’ Dept. of Chemical & Environmental Engineering, UPM (4 April 2018)
2018	Judge for ‘Global I-Lead STEM Camp, GISC 2018 & International STEM Olympiad (ISTEMO 2018)
2018	Committee member of the Self-Assessment Report (SAR) preparation for Bachelor of Chemical Engineering programme for Accreditation activities (EAC)
2018	Supervisor for Inbound Industrial Training Mr. Shahrukh Ahmed from SEGi University.
2016	Supervisor for ‘Pertandingan Projek Inovasi Sains, Matematik dan Kejuruteraan Kebangsaan 2016/17 SMK Saujana Impian
2015-2017	Program Assessor for Diploma in Chemical Engineering Technology (Environment) programme Universiti Kuala Lumpur Kampus Cawangan Malaysia Institute of Chemical & Bioengineering Technology (UniKL-MICET)
2010-2017	Committee Member for Workshops organized by Program Masters of Process Safety and Loss Prevention biannually, UPM (Participants: Industry, Academician and Students)
2016	Committee member for organizing Workshop on Algal Biotechnology, joint organized by UPM with MySET and TNBR (29-30 August 2016, Putrajaya) (Participant: Industry, Academic and Student)
2015	Committee Member for ‘Biochar Malaysia Workshop’ organized by Biochar Malaysia Association
2014	Committee Member, National ChemECar Competition organized by IEM and UPM
2013	Director for Workshop on ‘Design for Safe Handling of Industrial Chemicals’ April 2013, UPM (Participants: Industry, Academician and Students)
2013	Mentor, Immersion English Language Program, Faculty of Engineering
2011	Advisory officer during ‘Postgraduate Study UPM Exhibition’
2011	Guest lecturer for ‘Starting School Course (7 th) organized by Centre of Entrepreneurship Innovation and Student Development, UPM
2010	Committee member for program formation ‘Master in Process Safety and Loss Prevention’
2011	Chairman Auditor for Full Accreditation Audit Evaluator (COPPA) Program Master of Economics, UPM
2007	Organizing Committee for the Symposium of Malaysian Chemical Engineers (SOMCHE) 2007 (Dec. 2007 – Serdang, Malaysia)

(ii) Technical Activities (International Level)

Year	Activity
2022-23	Committee Member, for 14th AUN/SEED-Net Regional Conference on Chemical Engineering 2021 (RCCHE2021) and 1st International Conference on Innovation in Chemical Engineering and Technology’
2023	Technical Committee Member for the ‘13 th International Conference on Environmental and Agricultural Engineering (ICEAE2023), University of Chulalongkorn, Bangkok, Thailand
2020-	Head of Registration for 14th AUN/SEED-Net Regional Conference on Chemical Engineering

21	2021 (RCChE2021) and 1st International Conference on Innovation in Chemical Engineering and Technology'
2019	Visiting Lecturer, Universitas Gadjah Mada sponsored by University Consortium, SEARCA
2018	Treasurer for 'Symposium of Chemical Engineers 2018' organized by IChemE and UPM
2016	Technical Committee Member for the 'World Research and Innovation Convention on Engineering and Technology 2016' organized by MySET and Federal of Engineering Institutions of Islamic Countries (FEIIC)
2014	Technical Committee Member for the 'World Research and Innovation Convention on Engineering and Technology 2014' organized by MySET and Federal of Engineering Institutions of Islamic Countries (FEIIC)
2011	Technical Editor, International Journal of Engineering & Technology (IJET), FIEIIC
2010	Committee Member for 'Pameran Teknologi UPM at Asiawater 2010 Expo and Forum' organized by InformaMarkets and Malaysian Water Association
2010	Technical Paper Committee Member of the International Conference on Natural Resources and Green Technology for World Engineering Congress (WEC) 2010 (August 2010 – Kuching, Sarawak)

(iii) Reviewers – Journal

List of Journal
International Journal of Phytoremediation
Environmental Science and Pollution Research
CLEAN – Soil, Air, Water
European Journal of Wood and Wood Products
Energy Sources, Part A: Recovery, Utilization, and Environmental Effects
Applied Energy
BioMed Research International
Journal of Analytical and Applied Pyrolysis
Materials Today Proceedings
Applied Biochemistry and Biotechnology
Energy and Fuels
Microwave Processing of Biodiesel (Book)
Asian Journal of Fisheries and Aquatic Research
Journal of Sustainability Science and Management
Borneo Journal Resource Science Technology
Jurnal Teknologi
Bioresource Technology Report

4. Supervision of Students

i. MSc – Post-graduate Thesis by Research: Project Supervision/Co-supervision

No.	Student	Status
1.	Syarifah Nazura binti Syed Saber Ali (MSc in Chemical Engineering) - Supervisor - Title: Investigation on The Effect of Protein and Lipid to Foam and Scum in Anaerobic Digestion of Food Processing Wastewater	Graduated 2023
2.	Nida Afzal (MSc in Food Engineering) - Co-Supervisor - Title: Evaluation of Forward Osmosis Membrane Process for Passion	On-going

	Fruit Juice Concentration	
3.	Hussein Saeed Rasheed (MSc in Chemical Engineering) - Co-supervisor - Title: Improvement in lubricating properties of engine oil by blending with palm oil, TMP ester and nanoparticles	Graduated 2023
4.	Nurafifah Mat Fuad (MSc in Chemical Engineering) - Co-supervisor - Title: Dewatering of marine microalgae <i>Nannochloropsis</i> sp. for high biomass production.	Graduated 2021
5.	Faten Hameed Kamil (MSc. Chemical Engineering) - Co-supervisor - Title: Modified solid industrial waste as potential catalyst in pyrolysis	Graduated 2020
6.	Nur Mustika Mokhtar - Supervisor - Title: Simultaneous Drying, Pyrolysis and Gasification of Sludge using Microwave for Syngas Production	Graduated 2021
7.	Ismail Muhammad Nasir (MSc. Environmental Engineering) - Co-supervisor - Title: Anaerobic digestion of cattle manure for biogas production	Graduated 2019
8.	Amir Syarifuddeen Mohd Adnan (MSc. In Biochemical Engineering) - Co-supervisor - Title: Comparison between Glycolysis and microwave-assisted technique in depolymerization of pet waste	Graduated 2019
9.	Wan Adibah binti Wan Mahari (Universiti Malaysia Terengganu) - Co-supervisor - Title: Microwave-heated pyrolysis in recycling waste cooking oil	Graduated
10.	Nur Fatimah Zainuddin (Universiti Malaysia Terengganu) - Co-supervisor - Title: Microwave heated pyrolysis in recycling waste lubricating oil	Graduated

ii. PhD – Post-graduate Thesis by Research: Project Supervision/Co-supervision

No.	Student	Status
1.	Zisha Shishita Zahan (PhD in Biochemical Engineering) - Co-Supervisor - Title: Thermophilic Biohydrogen Production using Attached-biofilm of A Newly Isolated Strain from Palm Oil Mill Effluent	On-going
2.	Izzah Farhana Ab Aziz (PhD in Agricultural Waste Engineering) - Co-Supervisor - Title: Delignification of Fibrous Material by Pre-treatment in Optimization of Biomethane Production from Anaerobic Digestion	On-going
3.	Nur Aliah Fatin Mohd Nizam Ong (PhD in Safety Engineering) - Co-Supervisor - Title: Fire Safety of Rooftop Grid-connected Photovoltaic System	Passed Viva 2023
4.	Quin Anak Emparan (PhD in Chemical Engineering) - Co-Supervisor - Title: A Sustainable Technology for Palm Oil Mill Effluent Treatment using Microalgae	Graduated 2023
5.	Siti Baizurah Mahat (PhD in Environmental Engineering) - Supervisor - Title: Performance of Two-stage Dynamic Anaerobic Membrane Bioreactor for Treating High Strength Food Processing Wastewater	Graduated 2021

6.	Saleem Ethaib Mohammad (PhD in Environmental Engineering) - Supervisor - Title: Microwave-assisted Pretreatment and Enzymatic Hydrolysis for Sugar Production from Sago Palm Bark	Graduated 2017
7.	Nour A.T. Zghaibi (PhD in Environmental Engineering) - Supervisor - Title: Microwave-assisted Extraction of Lipid from <i>Nannochloropsis</i> sp. Microalgae using Brine Solution	Graduated 2019
8.	Nurfatihah bt Mohd Thani (PhD in Food Engineering) - Co-Supervisor - Title: Sugar recovery from bakery leftovers via Subcritical Water Hydrolysis	Graduated 2020
9.	Nur Atiqah Mohamad Aziz (PhD in Chemical Engineering) - Co-Supervisor - Title: Transesterification of Palm-based Methyl Ester and Trimethylpropane for Trimethylpropane Ester Production using Microwave-assisted Heating	Graduated 2021
10.	Umami Kalsum Hasanah Mohd Nadzim (PhD in Chemical Engineering) - Co-Supervisor - Title: Process Simulation, Exergy Analysis and Optimization of Palm Oil Milling Process using ASPEN Plus	Graduated 2021
11.	Siti Maisurah Zakaria (PhD in Food Engineering) - Co-Supervisor - Title: Evaluation on Subcritical Water Extraction of Phenolic Compounds from <i>Chlorella</i> sp. Microalgae	Graduated 2019
12.	Dina Kania (PhD in Chemical Engineering) - Co-Supervisor - Title: Polyol Esters as Thinner and Biolubricant Additives for Synthetic-based Drilling Fluid	Graduated
13.	Khaled Muftah Shahot (PhD in Environmental Engineering) - Co-Supervisor - Title: Activated Carbon Coated Cosmoball for Wastewater Treatment	Graduated
14.	Ismail Muhammad Nasir (PhD in Chemical Engineering) - Co-Supervisor - Title: Study of the Effect of Chemical Pre-treatment on the Anaerobic Digestion of Cattle Manure and Investigation of Kinetics	Graduated
15.	Aida Isma Mohamad Idris (PhD in Environmental Engineering) - Co-Supervisor - Title: Removal of Biodegradable Organic Matter using Ultrafiltration Membrane for Wastewater Treatment	Graduated