CURRICULUM VITAE

A. BUTIR-BUTIR PERIBADI *(Personal Details)*			
Nama Penuh *(Full Name)*	Mohd Shamzi bin Mohamed		Gelaran *(Title):* Dr
No. MyKad / No. Pasport *(Mykad No. / Passport No.)*	Warganegara *(Citizenship)* Malaysia	Bangsa *(Race)* Malay	Jantina *(Gender)* Male
Jawatan *(Designation)*	Senior Lecturer	Tarikh Lahir *(Date of Birth)*	22 February 1978

Alamat Semasa *(Current Address)*	Jabatan/Fakulti *(Department/Faculty)*	E-mel dan URL *(E-mail and URL)*
No. 45, Jalan Sastera 1/2 Alam Sari 43000 Kajang Selangor Tel: 03-8741 5177	Department of Bioprocess Technology, Faculty of Biotechnology and Biomolecular Sciences, Universiti Putra Malaysia, 43400 UPM Serdang Tel: 03-9769 4545 Fax: 03-8946 7590	m_shamzi@upm.edu.my H/P: 017-2122671

B. KELAYAKAN AKADEMIK *(Academic Qualification)*			
Nama Sijil / Kelayakan *(Certificate / Qualification obtained)*	Nama Sekolah Institusi *(Name of School / Institution)*	Tahun *(Year)*	Bidang pengkhususan *(Area of Specialization)*
Doctor of Philosophy	Universiti Putra Malaysia	2014	Fermentation Technology and Bioprocess Engineering
Master of Science	Universiti Putra Malaysia	2009	Industrial Biotechnology
Bachelor of Engineering (Chemical)	University Malaya	2002	Chemical Engineering

C. KEMAHIRAN BAHASA *(Language Proficiency)*					
Bahasa / *Language*	Lemah *Poor (1)*	Sederhana *Moderate (2)*	Baik *Good (3)*	Amat Baik *Very good (4)*	Cemerlang *Excellent (5)*
English					✓
Bahasa Melayu					✓

D. PENGALAMAN SAINTIFIK DAN PENGKHUSUSAN *(Scientific experience and Specialization)*				
No.	*Year*	*Role*	*Information*	*Organization*
1.	2025	Journal Reviewer	Plant Foods for Human Nutrition	Springer Nature
2.	2025	Journal Reviewer	Engineering in Life Sciences	John Wiley & Sons
3.	2025	Journal Reviewer	Biotechnology and Applied Biochemistry	John Wiley & Sons
4.	2025	Journal Reviewer	Indian Chemical Engineer	Taylor & Francis Online
5.	2025	Journal Reviewer	Malaysian Applied Biology	Malaysian Society of Applied Biology
6.	2024	Journal Reviewer	Catalysis Letters	Springer Science + Business Media
7.	2024	Journal Reviewer	Journal of Biological Engineering	Springer Nature
8.	2024	Journal Reviewer	Cleaner Engineering and Technology	Elsevier
9.	2024 2021 2020 2019	Journal Reviewer	Biocatalysis and Agricultural Biotechnology	Elsevier
10.	2024	Journal Reviewer	Qeios	Qeios.com
11.	2024	Journal Reviewer	Journal of Agriculture and Food Research	Elsevier
12.	2024 2023	Journal Reviewer	ACS Omega	ACS Publications
13.	2023	Journal Reviewer	Total Environmental Advances	Elsevier
14.	2023	Journal Reviewer	Biotechnology and Bioengineering	John Wiley & Sons
15.	2023	Journal Reviewer	Sains Malaysiana	Penerbit UKM

16.	2023	Journal Reviewer	Ceramic International	Elsevier
17.	2023 2022	Journal Reviewer	Biotechnology and Bioprocess Engineering	Springer Nature
18.	2022	Journal Reviewer	Environmental Science and Pollution Research	Springer Nature
19.	2022	Journal Reviewer	Algal Research	Elsevier
20.	2022	Journal Reviewer	Biomass Conversion and Biorefinery	Springer Nature
21.	2022	Speaker / Trainer	Workshop on Basic Data Analysis for Life Science and Biotechnology Students	Department of Bioprocess Technology
22.	2021	Journal Reviewer	Luminescence: The Journal of Biological and Chemical Luminescence	John Wiley & Sons
23.	2021	Journal Reviewer	Agriculture and Natural Resources	Kasetsart University Research and Development Institute (KURDI)
24.	2021	Director Speaker	Workshop on Basic Data Analysis for Life Science and Biotechnology Students	Department of Bioprocess Technology
25.	2021 2020	Journal Reviewer	Journal of Oil Palm Research	MPOB
26.	2020	Journal Reviewer	Biotechnology Letters	Springer
27.	2024 2020	Journal Reviewer	Asia Pacific Journal of Molecular Biology and Biotechnology	MSMBB
28.	2020	Journal Reviewer	Springer Nature SN Applied Sciences	Springer
29.	2021 2020	Journal Reviewer	Malaysian Journal of Biochemistry and Molecular Biology	MSMBB
30.	2019	Journal Reviewer	Pest Management Science	Wiley
31.	2023 2021 2019	Journal Reviewer	Bioprocess and Biosystems Engineering	Springer
32.	2019	Journal Reviewer	IOP Conference Series: Material Science and Engineering	IOP Science
33.	2022 2021 2019	Journal Reviewer	Jurnal Teknologi (Science and Engineering)	UTM

34.	2019	Journal Reviewer	Universitas Scientiarum	Pontificia Universidad Javeriana, Colombia
35.	2019	Judge (Poster Session)	7th International Symposium on Applied Engineering and Sciences (SAES), 11 – 12 November 2019. Faculty of Engineering, Universiti Putra Malaysia.	UPM
36.	2019	Judge (Oral Presentation)	The Third Bioprocessing and Biomanufacturing Symposium 2019 (BBS2019), Swiss Garden Resort, Lumut, Perak. (9th – 10th April 2019)	UPM & USM
37.	2018	Judge (Poster Session)	Asian Federation of Biotechnology - Malaysian Chapter International Symposium 2018 (18th – 21st Aug 2018)	AFOB-Malaysia Chapter
38.	2021 2018	Journal Reviewer	Malaysian Journal of Microbiology	Malaysian Society of Microbiology
39.	2018	Journal Reviewer	Biotechnology Progress	Wiley
40.	2018	Journal Reviewer	Anti-microbes	SciCell.org
41.	2018	Speaker	Training on Bioreactor Operation Workshop	Biomanufacturing and Bioprocessing Research Centre
42.	2017	Chairman	The Second Bioprocessing & Biomanufacturing Symposium 2017 (BBS 2017), USM, Penang (12th – 13th Dec 2017).	UPM & USM
43.	2016	Journal Reviewer	Journal of Microbiology, Biotechnology and Food Sciences	Faculty of Biotechnology and Food Sciences, Slovak University of Agriculture
44.	2016	Director	Total Organic Carbon Analysis (TOC) Workshop	Department of Bioprocess Technology
45.	2016	Speaker Facilitator	The use of Response Surface Methodology and Artificial Neural Network for Optimisation of Bioprocess	Biomanufacturing and Bioprocessing Research Centre

E. PERLANTIKAN DAN PENGIKTIRAFAN *(Appointment and Recognition)*

Majikan */ Employer*	Jawatan / *Designation*	Jabatan / *Department*	Tarikh lantikan / *Start Date*	Tarikh tamat / *Date Ended*
Universiti Putra Malaysia	Senior Lecturer	Dept of Bioprocess Technology, Faculty of Biotechnology and Biomolecular Sciences	2014	To date

Universiti Putra Malaysia	Tutor	Department of Bioprocess Technology, Faculty of Biotechnology and Biomolecular Sciences, Universiti Putra Malaysia	2005	2014
SPM-TACS Services (M) Sdn Bhd	Chemical Engineer	Transformer Insulating Oil Testing Laboratory	2003	2005
Europasia Engineering Services Sdn Bhd	Environmental Executive	-	2002	2003

F. ANUGERAH DAN HADIAH *(Honours and Awards)*

Name of awards	*Title*	*Award Authority*	*Award Type*	*Year*
Fellowship Award	Visiting Researcher to the Biological and Environmental Research Group, Applied Microbiology Research Centre, Serpong, South Tangerang City, Indonesia	Badan Riset dan Inovasi Nasional (BRIN) Indonesia (Aug 2023)	International	2023
Academic Awards	Skim Latihan Akademik Bumiputera (SLAB) for PhD	Ministry of Higher Education (MOHE), Malaysia	National	2009
	UPM Scholarship Award for MSc	UPM, Malaysia	National	2005
Non-Academic Awards	Excellent Service Award (APC 2023)	UPM	University	2024
	Excellent Service Certificate (2022)	UPM	University	2023
	Excellent Service Certificate (2021)	UPM	University	2022
	Excellent Service Certificate (2020)	UPM	University	2021
	Excellent Service Certificate (2018)	UPM	University	2019
	Excellent Service Certificate (2017)	UPM	University	2018
	Excellent Service Award (APC 2008)	UPM	University	2009

Awards of Merits	Faculty of Biotechnology & Biomolecular Sciences Top Three H-Index (Senior Lecturer Category)	UPM	Faculty	2023 2022
	Gold Award at International Research, Invention. and Innovation Exhibition 2016 (IRIIE 2016)	IIUM	National	2016

G. SENARAI PENERBITAN (Sila masukan nama pengarang, tajuk, nama jurnal, jilid, muka surat dan tahun diterbitkan) *(List of publications – author (s), title, journal, volume, page and year published)*

Citation (Scopus & Google Scholar): 1187, 1586
H-index (Scopus & Google Scholar): 18, 20

Publication Type	Year	List of Publications
Journal	2025	1. Chan Chiu Peng, Huang Zhen Ni, Sangkaran Pannerchelvan, Murni Halim, Joo Shun Tan, Nor Azman Kasan, **Mohd Shamzi Mohamed** (2025), Optimization of trace metal composition utilizing Taguchi orthogonal array enhances biomass and superoxide dismutase production in *Tetraselmis chuii* under mixotrophic condition: implications for antioxidant formulations. *International Microbiology* (Article in Press): pp 1-13. https://doi.org/10.1007/s10123-025-00672-5
		2. Nurhazwani Sa'aid, Joo Shun Tan, **Mohd Shamzi Mohamed**, Lakshmanan Muthulakshmi (2025), Comparative analysis of Lactobacillus spp. fermentation in five fruit drinks: impacts on lactic acid production and cell viability. *Malaysian Applied Biology*, 54(2): pp 55-64. https://doi.org/10.55230/mabjournal.v54i2.3305
		3. Gao Jianfeng**,** Murni Halim, **Mohd Shamzi Mohamed,** Rosfarizan Mohamad (2025). A heterotrophic nitrification and aerobic denitrification strain Acinetobacter sp. MLW2301. *Korean Journal of Microbiology* 61(1): pp 8 – 21. https://doi.org/10.7845/kjm.2025.4089
		4. Siti Syazwani Mahamad, **Mohd Shamzi Mohamed**, Mohd Nazren Radzuan, James Winterburn, and Mohd Rafein Zakaria (2025), Optimizing rhamnolipid bio-surfactant production in a bioreactor using waste glycerol. *Bioprocess and Biosystems Engineering:* pp 1-18. https://doi.org/10.1007/s00449-025-03224-3
		5. Mahamad, Siti Syazwani, **Mohd Shamzi Mohamed**, Mohd Nazren Radzuan, James Winterburn, and Mohd Rafein Zakaria (2025). Enhanced Recovery of Rhamnolipid via Foam Fractionation from the Fermentation Broth of Waste Glycerol by *Pseudomonas aeruginosa* RS6." *Journal of Surfactants and Detergents*: https://doi.org/10.1002/jsde.12897
		6. Jia Sim Kwa, Siu Chee Tan, Arbakariya B. Ariff, Mohd Ezuan Khayat, **Mohd Shamzi Mohamed**, and Fadzlie Wong Faizal Wong (2025). "High-productive recovery and purification of superoxide dismutase from Tetraselmis chuii using integrated ultrasonication–aqueous two-phase system. *Preparative Biochemistry & Biotechnology*: pp 1-10. https://doi.org/10.1080/10826068.2025.2538149

		7. Talitha Philofia Sopandi, Akhmad Adi Sulianto, Fajri Anugroho, Mohd Zulkhairi Mohd Yusoff, **Mohd Shamzi Mohamed**, Mohammed Abdillah Ahmad Farid, Hendrix Yulis Setyawan (2025). RSM-optimized biochar production from young coconut waste (Cocos nucifera): Multivariate analysis of non-linear interactions between temperature, time, and activator concentration. *Industrial Crops and Products* 223: Article no. 120157. https://doi.org/10.1016/j.indcrop.2024.120157
		8. Sangkaran Pannerchelvan, Louise Lorna Lanne Jawlan, Helmi Wasoh, Mohd **Shamzi Mohamed**, Fadzlie Wong Faizal Wong, Mohamad Zulfazli Mohd Sobri, Rosfarizan Mohamad, and Murni Halim (2025). Enhancing cell viability and GABA production in fermented milk using fruit juice-coated alginate microencapsulated Lactiplantibacillus plantarum B7 during storage. International *Microbiology* (Article in Press): pp 1-18. https://doi.org/10.1007/s10123-025-00662-7
	2024	9. Muhammad Syawaluddin Hilmi Yahya, Murni Halim, Fadzlie Wong Faizal Wong, Helmi Wasoh, Joo Shun Tan, And **Mohd Shamzi Mohamed** (2024). Enhancing the production of phycocyanin biopigment from microalga *Arthrospira maxima* through medium manipulation utilizing Box-Behnken Design. *Nusantara Bioscience* 16 (2): pp 263 – 276. https://doi.org/10.13057/nusbiosci/n160213
		10. Sangkaran Pannerchelvan, Leonardo Rios-Solis, Helmi Wasoh, Mohamad Zulfazli Mohd Sobri, Fadzlie Wong Faizal Wong, **Mohd Shamzi Mohamed**, Rosfarizan Mohamad, and Murni Halim (2024). Functional yogurt: a comprehensive review of its nutritional composition and health benefits. *Food and Function* 15(22), pp 10927 - 10955. https://doi.org/10.1039/D4FO03671A
		11. Diffa Althafania Thivaly, Hendrix Yulis Setyawan, Mohd Zulkhairi Mohd Yusoff, **Mohd Shamzi Mohamed**, and Mohammed Abdillah Ahmad Farid (2024). Activated biochar production from young coconut waste (Cocos nucifera) as bioadsorbent: a pathway through Artificial Neural Network (ANN) optimization. *Environmental Monitoring and Assessment* 196(10): Article no.962. https://doi.org/10.1007/s10661-024-13119-7
		12. Sangkaran Pannerchelvan, Fadzlie Wong Faizal Wong, Helmi Wasoh, **Mohd Shamzi Mohamed**, Rosfarizan Mohamad, and Murni Halim (2024). Medium Formulation and Optimisation of Fermentation Condition Enhancing γ-aminobutyric Acid (GABA) Biosynthesis by Lactiplantibacillus plantarum B7. *Journal of Pure and Applied Microbiology* 18(3): 1931 – 1948. https://doi.org/10.22207/JPAM.18.3.44
		13. Sangkaran Pannerchelvan, Faris Nulhaqim Muhamad, Helmi Wasoh, **Mohd Shamzi Mohamed,** Fadzlie Wong Faizal Wong, Rosfarizan Mohamad, Murni Halim (2024). Improvement of ɣ-aminobutyric acid production and cell viability of *Lactiplantibacillus plantarum* B7 via whole-cell immobilisation in repeated batch fermentation system. *Probiotic and Antimicrobial Protein* 16(6): pp 1907 – 1924. https://doi.org/10.1007/s12602-023-10200-4
		14. Gao Jianfeng**,** Murni Halim, **Mohd Shamzi Mohamed,** Rosfarizan Mohamad (2024). Chemical oxygen demand reduction in wastewater by locally isolated Priestia sp. BA01 strain. *Asia Pacific Journal of Molecular Biology and Biotechnology* 32(4): pp 51 – 64. https://doi.org/10.35118/apjmbb.2024.032.4(Special).05
	2023	15. Hsean Ren Loi, Sahar Abbasiliasi, Pandian Bothi Raja, **Mohd Shamzi Mohamed,** Wen-Nee Tan, Hui Suan Ng, John Chi-Wei Lan, Joo Shun

		Tan (2023). Biosynthesis of silver nanoparticles using nitrate reductase produced by Lactobacillus plantarum CAM 4: Characterization and in vitro evaluation of its antimicrobial efficiency. *Journal of Molecular Liquids*. 376: pp 121476. https://doi.org/10.1016/j.molliq.2023.121476
		16. Gao Jianfeng**,** Rosfarizan Mohamad, Murni Halim, **Mohd Shamzi Mohamed** (2023). *Pseudomonas otitidis*: Discovery, Mechanisms and Potential Biotechnological Applications. *European Journal of Biology* 82(2): pp 224 – 238. https://10.26650/EurJBiol.2023.1247822
		17. Sangkaran Pannerchelvan, Leonardo Rios-Solis, Fadzlie Wong Faizal Wong, Uswatun Hasanah Zaidan, Helmi Wasoh, **Mohd Shamzi Mohamed,** Joo Shun Tan**,** Rosfarizan Mohamad, Murni Halim (2023). Strategies for improvement of gamma-aminobutyric acid (GABA) biosynthesis via lactic acid bacteria (LAB) fermentation. *Food and Function* 14(9): pp 3929 – 3948. https://doi.org/10.1039/D2FO03936B
		18. Ibtihal Alkarim, Fadzlie Wong Faizal Wong, **Mohd Shamzi Mohamed,** Murni Halim, Arbakariya B. Ariff (2023). A review on the application of biofilm-based bioreactors in the removal of pharmaceutically active compounds (PhACs) from wastewater. *Journal of Environmental Chemical Engineering* 11(3): pp 110226. https://doi.org/10.1016/j.jece.2023.110226
		19. Lau Hui Lane, Fadzlie Wong Faizal Wong, Raja Noor Zaliha Abdul Rahman, **Mohd Shamzi Mohamed,** Arbakariya B. Ariff, Hii Siew Ling (2023). Optimization of fermentation medium components by response surface methodology (RSM) and artificial neural network hybrid with genetic algorithm (ANN-GA) for lipase production by *Burkholderia cenocepacia* ST8 using used automotive engine oil as substrate. *Biocatalysis and Agricultural Biotechnology* 50: pp 102696.
	2022	20. Kavithraashree Arumugam, Rosfarizan Mohamad, Siti Efliza Ashari, Joo Shun Tan and **Mohd Shamzi Mohamed** (2022). Bioprospecting microalgae with the capacity for inducing calcium carbonate biomineral precipitation. *Asia-Pacific Journal of Chemical Engineering* 17(3): pp e2767.
		21. Muhammad Fakhri Zainuddin, Chong Kar Fai, **Mohd Shamzi Mohamed,** Nor' Aini Abdul Rahman and Murni Halim (2022). Production of single cell oil by Yarrowia lipolytica JCM 2320 using detoxified desiccated coconut residue hydrolysate. *PeerJ* 10: e12833.
		22. Siew Khim Lim, Rosma Ahmad, **Mohd Shamzi Mohamed**, Arbakariya B. Ariff, and Joo Shun Tan (2022). Pre-treatment of Soy Okara Using Multi-enzyme Complex on Sugar Extraction and Its Effect on Chemical Composition, Morphological Structure, and Antioxidant Capacity. *Waste and Biomass Valorization* 13(3): pp 1503 - 1513.
	2021	23. Mohd Riza Mohd Roslan, Nashrul Fazli Mohd Nasir, Nur Farahiyah Mohammad, Ee Meng Cheng, **Mohd Shamzi Mohamed,** Mohd Nasir Abdullah (2021). The Influences of Sintering Process on the Characteristics of Corbiculacea (Etok) Shells Based Hydroxyapatite Powder. *Journal of Physic: Conference Series* 2071(1). Article no: 012007.

		24. Dharni Kuhan Sreedharan, Sahar Abbasiliasi, **Mohd Shamzi Mohamed,** Zhang Jin Ng, Arbakariya B. Ariff, Chee Keong Lee, and Joo Shun Tan (2021). Fermentation strategies for improving the production of bacteriocin-like inhibitory substances by *Lactobacillus brevis* C23 with nutrient supplementation, pH, and temperature variations. *Journal of Food Processing and Preservation* 45(11). Article no: e15914
		25. Mohd Riza Mohd Roslan, Nadhiya Liyana Mohd Kamal, Muhammad Farid Abdul Khalid, Nashrul Fazli Mohd Nasir, Ee Meng Cheng, Chong You Beh, Joo Shun Tan, and **Mohd Shamzi Mohamed** (2021). The State of Starch/Hydroxyapatite Composite Scaffold in Bone Tissue Engineering with Consideration for Dielectric Measurement as an Alternative Characterization Technique. *Materials* 14(8) 1960. DOI: 1960. https://doi.org/10.3390/ma14081960.
		26. Siti Nur Hazwani Oslan, Noor Fazliani Shorpawe, Abdul Hafidz Yusoff, Ainihayati Abdul Rahim, Chang Seng Chang, Joo Shun Tan, Siti Nurbaya Oslan, Kavithraashree Arumugam, Arbakariya B. Ariff, Ahmad Ziad Sulaiman and **Mohd Shamzi Mohamed** (2021). A Review on *Haematococcus pluvialis* Bioprocess Optimization of Green and Red Stage Culture Conditions for the Production of Astaxanthin. *Biomolecules* 11(2): DOI: 10.3390/biom11020256.
		27. Shobanah Menon Baskaran, Mohd Rafein Zakaria, Ahmad Syafiq Mukhlis Ahmad Sabri, **Mohd Shamzi Mohamed**, Helmi Wasoh, Maeda Toshinari, Mohd Ali Hassan, Ibrahim M. Banat (2021). Valorization of Biodiesel Side Stream Waste Glycerol for Rhamnolipids Production by *Pseudomonas aeruginosa* RS6. Environmental Pollution 276: Article no. 116742.
	2020	28. Chin Zheng Wei, Kavithraashree Arumugam, Siti Efliza Ashari, Fadzlie Wong Faizal Wong, Tan Joo Shun, Arbakariya B. Ariff, and **Mohd Shamzi Mohamed** (2020). Enhancement of Biomass and Calcium Carbonate Biomineralization of *Chlorella vulgaris* through Plackett-Burman Screening and Box-Behnken Optimization Approach. *Molecules* 25(15): DOI: 10.3390/molecules25153416.
		29. Bavistra Ravindran, Mohd Asyraf Kassim, **Mohd Shamzi Mohamed** (2020). Screening of Medium Constituents for the Cultivation of *Scenedesmus dimorphus* UTEX1237 using 2^k Factorial Design Approach. *IOP Conference Series: Materials Science and Engineering* 716(1). Article no: 012003.
		30. Mohd Asyraf Kassim, Muhammad Faris Izaan Mat Adnan, Tan Keang Meng, Mohamad Hafizi Abu Bakar, Japareng Lalung, **Mohd Shamzi Mohamed** (2020). Carbonic anhydrase (CA) activity by *Chlorella* sp. In immobilized matrix under carbon dioxide rich cultivation condition. *IOP Conference Series: Materials Science and Engineering* 716(1). Article no: 012015.
	2019	31. Nurfarahin Abdul Hamid**, Mohd Shamzi Mohamed**, and Lai Yee Phang (2019). Development of palm fatty acid distillate-containing medium for biosurfactant production by *Pseudomonas* sp. LM19. *Molecules* 24(14): DOI: 10.3390/molecules24142613.
		32. Mojtaba Azma, Joo Shun Tan, Sahar Abbasiliasi, **Mohd Shamzi Mohamed**, Raha Abdul Rahim and Arbakariya B Ariff (2019). Influence of culture trophic conditions on growth performance and microanatomy changes of microalgae *Tetraselmis suecica*. *World Journal of Aquaculture Research & Development* 1(1): pp. 017 – 022.
		33. Siti Nur Hazwani Oslan, Joo Shun Tan, Mohd Zamri Saad, Murni Halim, **Mohd Shamzi Mohamed** and Arbakariya B. Ariff (2019). Influence of amino acids and vitamins on the growth of *gdhA* derivative *Pasteurella multocida* B:2 for use as an animal vaccine. *Bioprocess and Biosystem Engineering* 42(3): pp 355-36.

	2018	34. Chai, Siu Yeng, Sahar Abbasiliasi, Chee Keong Lee, Tengku Azmi Tengku Ibrahim, Saeid Kadkhodaei, **Mohd Shamzi Mohamed**, Rokiah Hashim, and Joo Shun Tan (2018). Extraction of fresh banana waste juice as non-cellulosic and non-food renewable feedstock for direct lipase production. *Renewable Energy* 126: pp 431-436.
		35. Nurfarahin Abdul Hamid**, Mohd Shamzi Mohamed**, and Lai Yee Phang (2018) Culture Medium Development for Microbial-Derived Surfactants Production – An Overview. *Molecules* 23(5). DOI: 10.3390/molecules2305104.
		36. Nurazwa Ishak, Ahmad Firdaus B. Lajis, Rosfarizan Mohamad, Arbakariya B. Ariff, **Mohd Shamzi Mohamed**, Murni Halim, Helmi Wasoh (2018). Kinetics and Optimization of Lipophilic Kojic Acid Derivate Synthesis in Polar Aprotic Solvent using Lipozyme RMIM and its rheological study. *Molecules* 23(2) 501. DOI: 10.3390/molecules23020501
	2017	37. Norfarina Muhamad Nor, **Mohd-Shamzi Mohamed**, Loh Teck Chwen**,** Foo Hoi Ling, Raha Abdul Rahim, Tan Joo Shun, and Rosfarizan Mohamad (2017). Comparative analyses on medium optimization using one-factor-at-a-time, response surface methodology, and artificial neural network for lysine–methionine biosynthesis by Pediococcus pentosaceus RF-1. *Biotechnology and Biotechnological Equipment.* 31(5): pp 935 – 947.
	2016	38. Mokhzanni Mustapa, Nor Jannah Sallehudin, **Mohd Shamzi Mohamed,** Normawaty Mohammad Noor, and Raha Abdul Raus (2016). Decontamination of *Chlorella sp.* Culture Using Antibiotics and Antifungal Cocktail Treatment. *ARPN Journal of Engineering and Applied Sciences*. 11: pp 104 – 109
	2015	39. Saeid Kadkhodaei, Sahar Abbasiliasi, Tan Joo Shun, Hamid Reza Fard Masoumi, **Mohd Shamzi Mohamed**, Ali Movahedi, Raha Abdul Rahim, and Arbakariya B. Ariff (2015). "Enhancement of protein production by microalgae *Dunaliella salina* under mixotrophic conditions using response surface methodology." *RSC Advances* 5(48): pp 38141-38151.
		40. Suhaili, Nurashikin, Joo Shun Tan, **Mohd-Shamzi Mohamed**, Murni Halim, and Arbakariya B. Ariff (2015). "Effects of dual impeller system of Rushton turbine, concave disk turbine and their combinations on the performance of kojic acid fermentation by Aspergillus flavus Link 44-1." *Asia-Pacific Journal of Chemical Engineering* 10: pp 65-74.
	2014	41. **Mohd Shamzi Mohamed**, Joo Shun Tan, Saeid Kadkhodaei, Rosfarizan Mohamad, Mohd Noriznan Mokhtar and Arbakariya B. Ariff (2014). Kinetics and Modelling of Microalga *Tetraselmis* sp. FTC 209 Growth with Respect to its Adaptation Towards Different Trophic Conditions. *Biochemical Engineering Journal* 88: pp 30 – 41.
		42. Joo Shun Tan, Sahar Abbasiliasi, Yu Kiat Lin, **Mohd Shamzi Mohamed**, Mohammad Rizal Kapri, Saeid Kadkhodaei, Yew Joon Tam, Raja Noor Zaliha Abdul Rahman, and Arbakariya B. Ariff (2014). Primary Recovery of Thermostable Lipase 42 Derived from Recombinant *Escherichia coli* BL21 in Aqueous Two-Phase Flotation. *Separation and Purification Technology* 133: pp 328 – 334.
	2013	43. **Mohd Shamzi Mohamed**, Joo Shun Tan, Rosfarizan Mohamad, Mohd Noriznan Mokhtar and Arbakariya B. Ariff (2013). Comparative Analyses of Response Surface Methodology and Artificial Neural Network on Medium Optimization for *Tetraselmis* sp. FTC 209 Grown under Mixotrophic Condition. *The Scientific World Journal*. DOI:10.1155/2013/948940.
	2012	44. **Mohd Shamzi Mohamed,** Rosfarizan Mohamad, Musaalbakri Abdul Manan and Arbakariya B. Ariff (2012). Enhancement of Red Pigment Production by *Monascus purpureus* FTC 5391 through Retrofitting of Helical Ribbon Impeller in Stirred Tank Fermenter. *Food and Bioprocess Technology* 5(1): pp 80 – 91.

	2011	45. **Mohd Shamzi Mohamed,** Lai Zee Wei and Arbakariya B. Ariff (2011). Heterotrophic cultivation of microalgae for production of biodiesel. *Recent Patents on Biotechnology* 5(2): pp 95 - 107.
		46. Mojtaba Azma, **Mohd Shamzi Mohamed**, Rosfarizan Mohamad, Raha Abdul Rahim and Arbakariya B. Ariff (2011). Improvement of medium composition for heterotrophic cultivation of green microalgae, *Tetraselmis suecica,* using response surface methodology. *Biochemical Engineering Journal* 53(2): pp 187 - 195.
	2010	47. Rosfarizan Mohamad, **Mohd Shamzi Mohamed,** Nurashikin Suhaili, Madihah Mohd Salleh and Arbakariya B. Ariff (2010). Kojic acid: Applications and Development of Fermentation Process for Production. *Biotechnology and Molecular Biology Reviews* 5(2): pp 24 – 37.
		48. B. Basar, **M. Mohd Shamzi,** M. Rosfarizan, N.N.T. Puspaningsih and A.B. Ariff (2010). Enhanced Production of Thermophilic Xylanase by Recombinant *Escherichia coli* DH5α through Optimization of Medium and Dissolved Oxygen Level. *International Journal of Agriculture and Biology* 12(3): pp 321 – 328.
		49. Nurashikin Suhaili, **Mohd Shamzi Mohamed,** Rosfarizan Mohamad and Arbakariya B. Ariff (2010). Gas–Liquid Mass Transfer Performance of Dual Impeller System Employing Rushtons, Concave-bladed Disc (CD-6) Turbines and Their Combinations in Stirred Tank Bioreactor. *Journal of Applied Sciences Research* 6(3): pp 234 – 244.
	2009	50. **Mohd Shamzi Mohamed**, Rosfarizan Mohamad, Ramakrishnan Nagasundara Ramanan, Musaalbakri Abdul Manan and Arbakariya B. Ariff (2009). Modeling of Oxygen Transfer Correlations for Stirred Tank Bioreactor Agitated with Atypical Helical Ribbon Impeller. *American Journal of Applied Sciences* 6(5): pp 735 - 743.
		51. Farliahati Mohd Rusli, **Mohd Shamzi Mohamed**, Rosfarizan Mohamad, Ni Nyoman Tri Puspaningsih and Arbakariya B. Ariff (2009). Kinetic of Xylanase Fermentation by Recombinant *Escherichia coli* DH5α in Shake Flask Culture. *American Journal of Biochemistry and Biotechnology* 5(3): pp 110 – 118.
		52. Ramakrishnan Nagasundara Ramanan, Joo Shun Tan, **Mohd Shamzi Mohamed**, Tau Chuan Ling, Beng Ti Tey and Arbakariya B. Ariff (2009). Optimization of osmotic shock process variables for enhancement of the release of periplasmic interferon-α2b from *Escherichia coli* using response surface method. *Process Biochemistry* 45(2): pp 196 - 202.
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Books/Book Chapters/ Monographs	1. Mohamad Ridzuan Yahya, Izzuddin Zahimi, **Mohd Shamzi Mohamed,** Rosfarizan Mohamad. "Nata de Fruit" *In* NYAWA' 19: Nature's Yield and Wonders of Art, Universiti Putra Malaysia Press (2019). Vol. 8: ISBN 978-967-960-472-6. pp 54-55.	
Other Publications	**Abstracts of invited talks/conferences/seminars given** 1. **Mohd Shamzi Mohamed (Invited Speaker).** *Microalgae Selection and Medium Optimization to Enhance CaCO3 Precipitation by Chlorella vulgaris and Synechocystis* sp. AFOB-Malaysian Chapter International Symposium 2022. 18 – 21 September 2022, Pelangi Beach Resort and Spa, Langkawi, Malaysia. 2. Eng Pei Qi, **Mohd Shamzi Mohamed (Invited speaker)**. *Selection of Medium for Phycocyanin Production by Microalgae from Local Collection and Evaluation of Different Extraction Methods.* The 3rd International Conference on Food Science and Engineering (ICFSE) 2020, 29 – 30 September 2020, Faculty of Agriculture, Universitas Sebelas Maret (UNS), Surakarta, Central Java, Indonesia.	

	3. Kavithraashree Arumugam, Rosfarizan Mohamad, Siti Efliza Ashari, **Mohd Shamzi Mohamed.** *Microbially induced calcium carbonate precipitation (MICP) by microalgae strains as a potential biomineral source.* The Third Bioprocessing and Biomanufacturing Symposium 2019, 9 - 10 April 2019, Swiss Garden Beach Resort, Lumut, Perak. *4.* **Mohd Shamzi Mohamed. (Invited Speaker)** *Design of experiment modelling approach to improving the performance of triple-impeller configuration in stirred tank bioreactor.* AFOB-Malaysian Chapter International Symposium 2018. 18 – 21 August 2018, Pullman Hotels and Resorts Kuching, Sarawak, Malaysia. 5. Mokhzanni Mustapa, Nor Jannah Sallehudin, **Mohd Shamzi Mohamed**, Normawaty Mohammad Noor, and Raha Ahmad Raus. *Decontamination of Chlorella sp. Culture using antibiotics and antifungal cocktail treatment.* The International Postgraduate Conference on Engineering Research (IPCER 2015), 27 – 28 October 2015, Kuliyyah of Engineering, International Islamic University, Kuala Lumpur, Malaysia. 6. **Mohd Shamzi Mohamed.** *Trophic Modification and Photobioreactor Design for Microalgae Cultivation.* The Inaugural Bioprocessing and Biomanufacturing Seminar 2015, 12 November 2015, Canselori Putra, UPM Serdang, Selangor. 7. **Mohd Shamzi Mohamed.** *Mixing system design for cultivating mixotrophic Marine Microalga Tetraselmis sp. FTC 208 in Stirred Tank Photobioreactor*. Biotech Mini Symposium 2015, 14 April 2015, Faculty of Biotechnology and Biomolecular Sciences, UPM, Selangor, Malaysia. 8. Arbakariya B. Ariff, Rosfarizan Mohamad, Ni Nyoman Tri Puspaningsih, **Mohd Shamzi Mohamed***, Farliahati Mohd Rusli and Bazilah Basar. *Bioreactor System for Production of Thermophilic Xylanolytic Enzymes by Recombinant Escherichia Coli DH5α.* National Biotechnology Seminar 2010, 24 – 26 May 2010, Putra World Trade Center, Kuala Lumpur, Malaysia.
	<u>Poster abstracts</u> 1. Huang Zhen Ni, **Mohd Shamzi Mohamed**, Murni Halim, Mohd Ezuan Mohd Khayat. In *The Role of Nutrients and Environmental Stressors toward Enriching Superoxide Dismutase (SOD) in Tetraselmis chuii Biomass*. AFOB-Malaysian Chapter International Symposium 2022. 18 – 21 September 2022, Pelangi Beach Resort and Spa, Langkawi, Malaysia. 2. Gao Jianfeng, Murni Halim, **Mohd Shamzi Mohamed**, Rosfarizan Mohamad. In *Isolation, Identification, and Culture Conditions Optimization of Pseudomonas spp. for Water Quality Improvement*. AFOB-Malaysian Chapter International Symposium 2022. 18 – 21 September 2022, Pelangi Beach Resort and Spa, Langkawi, Malaysia. 3. Siti Syazwani Mahamad, Shobanah Menon Baskaran, Adieya Atyrrah Adnan, Mohd Rafein Zakaria, Mohd Ali Hassan, Mohd Nazren Radzuan, Mohd **Shamzi Mohamed**, James Winterburn. In *Recent Progress in Rhamnolipids Production: Scale-up Strategies and Potential Use in Agriculture Industry*. AFOB-Malaysian Chapter International Symposium 2022. 18 – 21 September 2022, Pelangi Beach Resort and Spa, Langkawi, Malaysia. 4. Huang Zhen Ni, **Mohd Shamzi Mohamed**, Murni Halim, Mohd Ezuan Mohd Khayat. In *The Role of Nutrients and Environmental Stressors toward Enriching Superoxide Dismutase (SOD) Antioxidant in Local Microalga Tetraselmis chuii Biomass as Potential Novel Food*. 9th International Symposium on Applied Engineering and Sciences (SAES2021). 5th – 8th December 2021 (Virtual).

	Universiti Putra Malaysia, Serdang. 5. Shobanah Menon Baskaran, Mohd Rafein Zakaria, **Mohd Shamzi Mohamed**, Mohd Ali Hassan. In *Optimization of Biosurfactant Production from Biodiesel Side Stream Glycerin by Pseudomonas aeruginosa RS6*. The International Congress of the Malaysian Society for Microbiology 2019 (ICMSM2019). 13 November 2019. The Royale Chulan, Seremban, Negeri Sembilan. 6. Muhammad Fakhri Zainuddin, Arbakariya Ariff, **Mohd Shamzi Mohamed**, Murni Halim. *In Single Cell Oil Production by Yarrowia lipolytica Using Hydrolysates from Pre-treatment of Desiccated Coconut Waste.* 7th International Symposium on Applied Engineering and Sciences (SAES2019), 11 – 12 November 2019. Faculty of Engineering, Universiti Putra Malaysia. 7. Mohd Rafein Zakaria, Shobanah Menon Baskaran, Ahmad Syafiq Mukhlis Ahmad Sabri, **Mohd Shamzi Mohamed**, Helmi Wasoh, Toshinari Maeda, Mohd Ali Hassan, Ibrahim M. Banat. In *Rhamnolipids Biosurfactant: A Green and Environmentally Chemicals Derived from Pseudomonas aeruginosa RS6.* 7th International Symposium on Applied Engineering and Sciences (SAES2019), 11 – 12 November 2019. Faculty of Engineering, Universiti Putra Malaysia. 8. Shobanah Menon Baskaran, Mohd Rafein Zakaria, **Mohd Shamzi Mohamed,** Mohd Ali Hassan. In *Production of Biosurfactant from Biodiesel Side Stream Glycerin by Pseudomonas aeruginosa RS6.* 7th International Symposium on Applied Engineering and Sciences (SAES2019), 11 – 12 November 2019. Faculty of Engineering, Universiti Putra Malaysia. 9. Kavithraashree Arumugam, Rosfarizan Mohamad, Siti Efliza Ashari, **Mohd Shamzi Mohamed.** In *Screening of Microalgae Strains Capable to Induce Calcium Carbonate Precipitation as a Potential Source of Biomineral.* AFOB Malaysia Chapter International Symposium 2019. 20 – 23 October 2019. The Everly Putrajaya, Malaysia 10. Eng Pei Qi, **Mohamed Shamzi Mohamed.** In Medium Selection Phycocyanin Production by Microalgae from Local Collection and Evaluation of Different Extraction Methods. AFOB Malaysia Chapter International Symposium 2019. 20 – 23 October 2019. The Everly Putrajaya, Malaysia. 11. Mohd Rafein Zakaria, Shobanah Menon Baskaran, Ahmad Syafiq Mukhlis Ahmad Sabri, **Mohd Shamzi Mohamed**, Helmi Wasoh, Toshinari Maeda, Mohd Ali Hassan, Ibrahim M. Banat. In *Valorization of Biodiesel Side Stream Waste Glycerol for Rhamnolipids Production by Pseudomonas aeruginosa RS6.* AFOB Malaysia Chapter International Symposium 2019. 20 – 23 October 2019. The Everly Putrajaya, Malaysia. 12. Nur Aini Mat Hussin, **Mohd Shamzi Mohamed.** In *Optimization of Medium Formulation via Response Surface Methodology (RSM) for Improving the Growth of Freshwater Microalgae Scenedesmus Dimorphus UTEX 1237.* The Third Bioprocessing and Biomanufacturing Symposium 2019, 9-10 April 2019. Swiss Garden Beach Resort, Lumut, Perak. 13. Bavistra Ravindran, **Mohd Shamzi Mohamed.** In *Screening of Medium Constituents for Cultivation of Freshwater Microalgae Scenedesmus Dimorphus UTEX 1237 Using 2^k Factorial Design.* The Second Bioprocessing and Biomanufacturing Symposium 2017, 12-13 December 2017. Sains@USM, Bukit Jambul, Penang. 14. Nurfarahin Abdul Hamid, **Mohd Shamzi Mohamed**, and Phang Lai Yee. In *Palm-based oleochemicals as substrate for biosurfactant production by Pseudomonas sp. LM19 in different production media.* The Second Bioprocessing and

	Biomanufacturing Symposium 2017, 12-13 December 2017. Sains@USM, Bukit Jambul, Penang. 15. Murni Halim, Nor Iziani Mohd Samin, **Mohd Shamzi Mohamed** and Arbakariya B. Ariff. In *Effects of Anionic Polyacrylamide Flocculant and Oxidant on the Flocculation Efficiency of Tetraselmis striata*. The Inaugural Bioprocessing and Biomanufacturing Seminar 2015, 12 November 2015, Canselori Putra, UPM Serdang, Selangor. 16. Subhashini Sri Nagesh Sivasamboo, Sahar Abbasiliasi, Joo Shun Tan, Fadzlie Wong Faizal Wong, Murni Halim, **Mohd Shamzi Mohamed**, Arbakariya B. Ariff. In *The Potential Use of Pediococcus acidilactici Kp10 as Starter Culture in the Food Industry.* The Inaugural Bioprocessing and Biomanufacturing Seminar 2015, 12 November 2015, Canselori Putra, UPM Serdang, Selangor. 17. Nurashikin Suhaili, **Mohd Shamzi Mohamed** and Arbakariya B. Ariff. In *Intensified Capability of Double CD-6 Agitated Vessel as Potential Mixer for Aerobic Viscous Bioprocesses.* Universiti Malaysia Terengganu 10th International Annual Symposium (UMTAS 2011). 11-13 July 2011, Permai Hotel Kuala Terengganu, Kuala Terengganu, Malaysia. 18. B. Basar, **M. Mohd-Shamzi**, N.N.T. Puspaningsih and A.B. Ariff. In *Effect of Medium Formulation and Dissolved Oxygen Tension on Xylanase Production by Recombinant Escherichia coli DH5α in Stirred Tank Bioreactor*. 2nd International Conference and Workshops on Basic and Applied Sciences and Regional Annual Fundamental Science Seminar 2009. 2 – 4 June 2009, The Zone Regency Hotel, Johor Bahru, Malaysia,
Patent Filed	1. Method for high cell density cultivation of heterotrophic *Tetraselmis suecica* using glucose as primary carbon source. Inventors: Arbakariya b. Ariff, Mojtaba Azma, **Mohd Shamzi Mohamed**, Raha Abdul Rahim, Rosfarizan Mohamad, and Mohammad Rizal Kapri. (Malaysian Patent Filed - P1 2011003151).
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ID PUBLISHING *(Publishing ID)*

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H. PROJEK PENYELIDIKAN TERDAHULU *(Past Research Project)*					
Project No.	*Project Title*	*Role*	*Year*	*Source of fund*	*Status*
6300588-14201	Development Of Pilot-Scale Production of BNC And Bioprocessing Strategies Using 2-Phase Fermentation for Industrially Feasible Production	Principal researcher	2025 -2027	MIGHT-Tubitak Grant *RM100,000*	On-going
6300482-14201	Development of Integrated Bio-manufacturing and Applications of High-value Products from Sustainable Agricultural Waste Resources	Co-researcher	2024 -2026	MIGHT-Tubitak Grant *RM300,000*	On-going
6300270-14201	Research and Development on Food and Food Supplements in Human Health	Co-researcher	2020 -2023	PNT Research Sdn. Bhd. *RM130,000*	On-going
01-01-20-2221FR *(Vot: 5540353)*	The Role of Nutrients and Environmental Stressors Towards Enriching Superoxide Dismutase (SOD) Antioxidant in Local Microalga Tetraselmis chuii Biomass as Potential Novel Food for Human Nourishment	Principal researcher	2020-2022	FRGS (MOHE) *RM116,200*	On-going
01-01-19-2051FR *(Vot; 5540176)*	Development of in-situ product recovery (ISPR) system by exploiting polymeric resins for enhanced biosynthesis of hyaluronic acid	Co-researcher	2019-2022	FRGS (MOHE) *RM165,800*	On-going
UPM/700-2/1/GP-IPROF.MADYA */2017/9551600*	Microbially-Induced Calcium Carbonate Precipitation as Potential Biomineral Sources Derived from Microalgae	Principal researcher	2017-2020	GP-IPM (UPM) *RM60,000*	Completed
FRGS Top Down *(Vot: 5524117)*	Development of effective strategies in the up scaling of heterotrophic cultivation of microalgae in stirred tank bioreactor for	Co-researcher (PhD student)	2011 - 2014	MOHE	Completed

	biofuel production				

I. PROFESSIONAL SERVICES *(Perkhidmatan profesional)*				
Consultation & Advisory Services (Perundingan & khidmat nasihat)	***Position (Peranan)***	***Start (Mula)***	***End (Tamat)***	***Expertise (Kepakaran)***
Technical and Vocational Education Division, Ministry of Education (MOE), Malaysia	Program Advisor	2022	2023	Academic Advisory Panel for Malaysian Vocational Diploma in Biotechnology for Ministry of Education.
Teluk Intan Vocational College (KVTI), Teluk Intan, Perak	Program Advisor	2021	2023	External advisor for Agricultural Biotechnology Diploma
Technical and Vocational Education Division, Ministry of Education (MOE), Malaysia	Program Advisor	2020	2021	Academic Advisory Panel for Malaysian Vocational Diploma in Biotechnology for Ministry of Education.
Teluk Intan Vocational College (KVTI), Teluk Intan, Perak	Program Advisor	2018	2020	External advisor for Agricultural Biotechnology Diploma program offered by KVTI Perak
Department of Skills Development, Ministry of Human Resources (MOHR), Malaysia UPM Education & Training Sdn. Bhd.	Assessor *(Pegawai Penilai; PP-PPT)*	2018	2018	Appointed portfolio assessor in Malaysian Skill Certificate (SKM) competency interview for awarding Biotechnology Laboratory Manager level 5 based on previous achievement portfolio (PPT) and past skills experience report (LPKT) presentation. Candidate: teaching staff of Agriculture Biotech diploma program Chenor Vocational College.
Department of Skills Development, Ministry of Human Resources (MOHR), Malaysia Smart K-Worker Professional Consortium Sdn. Bhd.	Assessor *(Pegawai Pengesah Luaran; PPL-PPT)*	2018	2018	Appointed verification panel in the Malaysian Skill Certificate (SKM) competency interview for awarding Senior Analytical Laboratory Technician (SKM Level 3) certification based on previous achievement portfolio (PPT). Candidates: lab technicians from UNIPEG Sdn Bhd (MTDC-UKM).
Department of Skills Development, Ministry of Human Resources (MOHR), Malaysia	Assessor *(Pegawai Penilai; PP-PPT)*	2017	2017	Appointed portfolio assessor in Malaysian Skill Certificate (SKM) competency interview for awarding Biotechnology Laboratory Manager level 5 based on previous achievement portfolio (PPT) and past skills experience report (LPKT)

				presentation. Candidate: teaching staff of Biotech diploma program Banting Vocational College.
Department of Skills Development, Ministry of Human Resources (MOHR), Malaysia	Subject Matter Expert	2017	2017	Development & Improvement of NOSS Registry Complying to MSIC 2008 Guideline
Department of Skills Development, Ministry of Human Resources (MOHR), Malaysia Smart K-Worker Professional Consortium Sdn. Bhd.	Assessor *(Pegawai Pengesah Luaran; PPL-PPT)*	2017	2017	Appointed verification panel in the Malaysian Skill Certificate (SKM) competency interview for awarding Analytical Laboratory Technician (SKM Level 2) certification based on previous achievement portfolio (PPT). Candidates: lab technicians from UNIPEG Sdn Bhd (MTDC-UKM).
Department of Skills Development, Ministry of Human Resources (MOHR), Malaysia	Assessor *(Pegawai Penilai; PP-PPT)*	2017	2017	Appointed portfolio assessor for Malaysian Skill Certificate (SKM) competency interview for awarding Biotechnology Laboratory Manager Level 5 certification based on previous achievements portfolio (PPT) and past skills experience report (LPKT) presentation. Candidates: teaching staffs of Biotech diploma program Lahad Datu Vocational College (KVLD).
Department of Skills Development, Ministry of Human Resources (MOHR), Malaysia	Assessor *(Pegawai Penilai; PP-PPT)*	2016	2016	Appointed portfolio assessor in Malaysian Skill Certificate (SKM) competency interview for awarding Senior Analytical Laboratory Technician (SKM Level 3) certification based on previous achievements portfolio (PPT). Candidate: lab technician from Sekolah Menengah Kebangsaan Pernu, Melaka.
Technical and Vocational Education Division, Ministry of Education (MOE), Malaysia	Subject Matter Expert	2015	2016	Preparing MQA 01 (Area 2: Curriculum Standards and Delivery) on Biotechnology Vocational Program for Cohort 2 and 3 Session 2/2015 for TIVET division, MOE Malaysia.
J-Bio Microbe Industries Sdn. Bhd.	Consultant Team	2013	2015	Designing, constructing, and commissioning of renovation work for factory belonging to J-Bio Microbe industries Sdn. Bhd. for the production of mMix bioproduct.

Microwell Bio Solutions Sdn. Bhd.	Consultant Team	2014	2015	Development and optimization of medium formulations and culture conditions for the efficient cultivation of GanoEB1 and GanoEB2.
Department of Skills Development, Ministry of Human Resources (MOHR), Malaysia	Industrial Expert (PIND)	2014	To date	Registered as Industrial Expert (PIND) under the Directory of National Industrial Experts (Reg. no: 780222035883) for sector: Biotechnology and sub-sector: Agricultural Biotechnology and Industrial Biotechnology
Malaysian Biotechnology Corporation Department of Skills Development, Ministry of Human Resources (MOHR), Malaysia	Subject Matter Expert	2014	2015	Appointed panel for Competency Profile (CP) assessment of National Occupational Skill Standards (NOSS) documentation for Biotech Corp and the Department of Skills Development, Ministry of Human Resources on "Bio-Algae Level 1 – 5".
Malaysian Biotechnology Corporation Department of Skills Development, Ministry of Human Resources (MOHR), Malaysia	Subject Matter Expert	2014	2015	Appointed panel for the Development of National Occupational Skill Standards (NOSS) documentation for the accreditation of Malaysian Skill Certificate under Biotech Corp (Industry Lead Body) and the Department of Skills Development, Ministry of Human Resources on "Bio-Algae Level 1 – 5".

Pentadbiran *(Administrative)*	***Date Start***	***Date End***	***Peringkat (Level)***
A member of Evaluation and Recognition of Skills Qualification Committee (Jawantankuasa Penilaian dan Pengiktirafan Kelayakan Kemahiran – JPPKK), Ministry of Human Resource, Malaysia (MOHR)	2018	2020	National
Jawatankuasa 3U1I Bacelor Sains Bioteknologi dengan Kepujian	2017	2019	Department
Jawatankuasa Penasihat Akademik Fakulti Bioteknologi dan Sains Biomolekul	2016	2018	Faculty
Jawatankuasa Latihan Industri Fakulti Bioteknologi dan Sains Biomolekul	2016	2018	Faculty
Jawatankuasa Kurikulum Jabatan Teknologi Bioproses	2015	2017	Department

Badan Saintifik & Professional (Scientific & Professional bodies)	***Date Start***	***Date End***	***Peringkat (Level)***
Asian Federation of Biotechnology (AFOB) – Member	2018	To date	International

(Reg. no. MY00638)			
Hong Kong Chemical, Biological & Environmental Engineering Society (HKCBEES) (Formerly known as Asia-Pacific Chemical, Biological & Environmental Engineering Society) (Reg. no. 202811)	2018	To date	International
Asian Federation of Biotechnology Malaysian Chapter (AFOB-MC) – Life Member (Reg. no. PPM-011-10-12112013)	2018	To date	National

J. RANGKAIAN SOSIAL *(Social Networking)*

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L. KHIDMAT MASYARAKAT *(Community services)*

No.	*Society/Club*	*Date Start*	*Date End*	*Position*
1.	Iltizam III & IV Resident Association, Alam Sari, Kajang, Selangor	2016	2018	Working committee
2.	Iltizam III & IV Resident Association, Alam Sari, Kajang, Selangor	2014	To date	Ordinary Member