

# DR MOHD ZULKHAIRI MOHD YUSOFF

Department of Bioprocess Technology,
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Personal Details	
Citizenship	Malaysia
Race	Malay
Gender	Male
Date of Birth	23 October 1983
Affiliation	Department of Bioprocess Technology, Faculty of Biotechnology and Biomolecular Sciences, Universiti Putra Malaysia,
Specialization	Environmental Biotechnology
Date of Birth	23 October 1983
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Researcher Profile	
Affiliation	Department of Bioprocess Technology, Universiti Putra Malaysia
Researcher ID	F-6930-2011
Author ID	55362951100
ORCiD	http://orcid.org/0000-0002-6787-9350
Total citations (SCOPUS)	295
h Index (SCOPUS)	9
Documents	23

Academic qualification (Higher education)							
Institution	Certificate	Year awarded	Area of Specialization				
Kyushu Institute of Technology, Japan	Ph.D	2013	Environmental Biotechnology				
Universiti Putra Malaysia, Malaysia	Master Science	2010	Environmental Biotechnology				
Universiti Putra Malaysia, Malaysia	Bachelor of Science	2006	Biotechnology				

Language Proficiency					
Language	Poor (1)	Moderate (2)	Good (3)	Very good (4)	Excellent (5)
English			√		
Bahasa Melayu				V	
Lain-lain (other): Japanese	√				

### **Professional societies**

Member, Asian Federation of Biotechnology (AFOB) since 2014- present

Ordinary Member, Malaysian Society for Microbiology (MSM) 2017- present

Member Persatuan Pegawai Akademik Universiti Putra Malaysia since 2014- present

Member, The Society for Biotechnology, Japan (SBJ) 2015-2016

**Member**, Asian Federation of Biotechnology, Malaysia Chapter (AFOB-MC) since 2014-present

Graduate Technologist, Malaysia Board Of Technologists (MBOT), June 2019 - present

### **Appointments**

**Head of Academic Advisor,** Department of Bioporcess Technology, Faculty of Biotechnology and Biomolecular Sciences, UPM. **Jan 2018 – Dec 2020.** 

**Associate Researcher**, Institute of Tropical Forestry and Forest Products, Universiti Putra Malaysia, 1st August 2016 (2 years)

**Coordinator, Gas Chromatography,** Department of Bioporcess Technology, Faculty of Biotechnology and Biomolecular Sciences, UPM.

**Assistant Coordinator,** 3U1i Program, Bachelor Science Biotechnology with Honours, Department of Bioporcess Technology, Faculty of Biotechnology and Biomolecular Sciences, UPM. April 2017 (2 years)

**Senior Lecturer,** Department of Bioprocess Technology, Faculty of Biotechnology and Biomolecular Sciences, Universiti Putra Malaysia, 30<sup>th</sup> September 2013 – Present.

*Tutor*, Department of Bioprocess Technology, Faculty of Biotechnology and Biomolecular Sciences, Universiti Putra Malaysia, 26<sup>th</sup> November 2010 – 29<sup>th</sup> September 2013

Teacl	ning Activities				
No	Code and Course name	Credit hour	Number of Students	Role	Semester/ Academic Year
1	BTC3401 Waste Management and Utilization	2 (2+0)	51	Lecturer	II 2013/2014
2	BTC4901 Industrial Training	6 (0+6)	48	Lecturer	II 2013/2014
3	BTC4404 Wastewater Treatment Technology	4 (3+1)	38	Lecturer	I 2014/2015
4	BTC4402 Environmental Biotechnology	4 (3+1)	48	Coordinator	I 2014/2015
5	BTC4405 Solid Waste Treatment Technology	4 (3+1)	25	Lecturer	II 2014/2015
6	BTC3401 Waste Management and Utilization	2 (2+0)	40	Lecturer	II 2014/2015
7	BTC4901 Industrial Training	6 (0+6)	36	Coordinator	II 2014/2015
8	BTC4402 Environmental Biotechnology	4 (3+1)	42	Coordinator	I 2017/2018
9	BTC4405 Solid Waste Treatment Technology	4 (3+1)	26	Lecturer	I 2017/2018
10	BTC3402 Waste Management and Utilization	3 (2+1)	48	Lecturer	II 2017/2018
11	BTC4402 Environmental Biotechnology	4 (3+1)	21	Coordinator	I 2018/2019
12	BTC4405 Solid Waste Treatment Technology	4 (3+1)	9	Lecturer	I 2018/2019
13	BTC3402 Waste Management and Utilization	3 (2+1)	34	Coordinator	II 2018/2019
14	BTC4408 Wastewater Treatment Technology	3 (2+1)	17	Coordinator	II 2018/2019

Sup	ervision of Students			
Doc	tor of Philosophy (PhD)			
No	Name of Student	Role	Title of Research Project	Status
1	Mohd Idham Hakimi Razal	Chairman	Utilization of Oil Palm Trunk for Nano-porous Biochar Production as Bioadsorbent	On-going
2	Fatini Mat Arisah	Chairman	Bioremediation by Biosurfactant Producing Pseudomonas	On-going
3	Siti Suliza Salamat	Co- Supervisor	The use of oil palm empty fruit bunch and palm oil mill effluent compost in oil palm plantations as nutrients recycling system for oil palm industry	On-going
4	Yuya Hashiguchi	Co- Supervisor	Understanding unexplained POME wastewater treatment to approach a better way	On-going
	Mohd Hafif Samsudin	Co- Supervisor		
Mas	ter (MS)			
No	Name of Student	Role	Title of Research Project	Status
1.	Nurhajirah Mohamed Biran	Chairman	Construction of knock-out mutants of <i>Escherichia coli</i> BW25113 for improved polyhydroxyalkanoate production	Graduated 2018
2.	Muhammad Azman Zakaria	Chairman	The role of yqig pseudogene in Escherichia coli towards biohydrogen production	Graduated 2018
3.	Marahaini binti Md Mokhtar	Chairman	Elucidation of uncharacterized ydfW pseudogene, as a functional protein during hydrogen metabolism	Graduated 2019
4	Mohd Hafif Samsudin	Co- Supervisor	Pilot Scale Co-Composting of Kitchen And Garden Wastes with Addition of Biochar	Graduated 2018
5	Mohd Faiz bin Mat Saad	Co- Supervisor	Enhancement of Biohythane Production From C0-Digestion of Food Waste and Chicken Manure	Graduated 2018
6	Azam Fikri bin Taifor	Co- Supervisor	Utilization of Palm Oil Mill Effluent for Biohydrogen Production	Graduated 2018
7	Nur Fatin Sakinah Rosman	Chairman	Biohydrogen production from biodiesel derived crude glycerol using engineered <i>Escherichia coli</i> strain	On-going
8	Izzatul Syazana Ismail	Co-	Valorization of waste cooking	On-going

	T	10 .		
		Supervisor	oil for sustainable production	
			of biosurfactants by	
			Pseudomonas Aeruginosa RW9	
9	Erwan Syah Tugiman	Co-	Biochar as organic soil	On-going
		Supervisor	amendment and alternative	
			fertilizer to increase oil palm	
			growth	
10	Nurhasliza Zolkefli	Co-	Confirmation Study on the	On-going
		Supervisor	proposed Alcaligenaceae and Chromatiaceae as the Reliable	
			Bioindicator for POME	
			Pollution in Receiving Rivers	
Bac	helor		1 Ollution in receiving revers	
1	Muhammad harunsani b	Main	Utilization of Pretreated	On-going
	mohamed hassan	Supervisor	Organic Waste For Green	on going
	190177	0.00.	Energy Production Using	
			Indigenous Bacteria	
2	Tan Shang Wei 188013	Main		On-going
		Supervisor		
3	Nuraishah Abd Rahim	Main	Pollutant Removal from	On-going
	191025	Supervisor	Landfill Leachate Using	
			Woodchip-	
			Derived Biochar Adsorbents	
4	Nazihah Nasri	Main	Biohydrogen Production from	Graduated
-	183343	Supervisor	Glycerol by using	2019
	100010	Caparvisor	Chyconol by doing	2010
			Engineered Escherichia coli	
			BW25113	
5	Muhammad Hanif Mohd	Main		Graduated
	Azizan	Supervisor		2019
	182168			
6	Nurul Sazwani Mishuan	Main	Isolation and screening of	Graduated
	179650	Supervisor	polyhydroxyalkanoates	2018
			producing bacteria from environmental sources	
			environmental sources	
7	Valerie Bulan Boniface	Main	Profiling of sugar in honey	Graduated
'	176503	Supervisor	through fermentation process	2018
		25,5000	using Escherichia Coli	
			BW25113	
8	Murni Zabar	Main	Biohydrogen Production from	Graduated
		Supervisor	Biodiesel Glycerol Waste of	2015
			Used Cooking Oil By	
			Engineered Escherichia Coli	
			Strains.	
9	Amar Ab Malik	Main	Biohydrogen Production From	Graduated
	163106	Supervisor	Palm Oil Mill Effluent Using	2015
			Engineered Escherichia Coli	
			Strain	

Resea	arch Grant			
No	Role/Title/Amount	Duration	Level /Funder/name	Status
1	Principal Investigator Adsorptive removal of heavy metal ions from leachate final discharge using activated biochar-derived adsorbent from oil palm biomass RM113650	September 2019- August 2021	National Ministry of Higher Education (MOHE) FRGS	On-going
2	Principal Investigator Bioconversion of biodiesel derived crude glycerol into biohydrogen by engineered Escherichia coli strain RM 50000	December 2017 – November 2019	<b>National</b> UPM GP-IPM	On-going
3	Principal Investigator Investigation on the role of pseudogene ydfW in Escherichia coli for biohydrogen production RM 146000	July 2014 – December 2016	National Ministry of Higher Education (MOHE) FRGS	Completed
4	Member Utilization of Municipal Solid Waste for Bioenergy Production in Universiti Putra Malaysia Bintulu Campus RM 150000	Jan 2019 – December 2020	<b>National</b> UPM GP-IPB	Completed
5	Member Towards zero emission via synthesis of nanoporous biocharcoal-derived adsorbents from palm biomass waste RM 250000	April 20418 – Mac 2020	National Ministry of Education FRGS	On-going
6	Member Characterization of mycelium-based oil palm biomass composite produced using different local fungi RM 93000	Mac 2018 – Feb 2020	National Ministry of Education FRGS	On-going
7	Member Assessment of bacterial community of polluted rivers caused by palm oil mill effluent final discharge and relationship with environmental factors for the development of bioindicator assessment system RM	August 2017 - August 2019	<b>National</b> Ministry of Education FRGS	On-going
8	Member Biosynthesis of Carbohydrate and	Nov 2015 – May 2019	Ministry of	On-going

	Lipid in Chlorella sp. and Scenedesmus sp. under Nitrogen- Depletion Condition for Biofuels Feedstock Production		Education FRGS	
9	Member Promotion of Green Economy with Palm Oil Industry for Biodiversity Conservation in Malaysia	Sept 2019 – Aug 2018	Ministry of Education SATREPS	Completed
10	Member Science and Technology Research Partnership for Sustainable Development (SATREPS) RM 3 000 000	Sept 2019 – Aug 2018	SATREPS	Completed
11	Member Utilization of municipal solid waste for green energy in UPM RM 150 000	Feb 2018 – Jan 2019	SWCorp	Completed
12	Member Research Study on the effectiveness of biofertilizer pellets for landscape plant RM 40000	Mac 2015- Feb 2016	IWK	Completed
13	Sub-project leader Color Removal of Textile Wastewater Final Discharge Using Biochar Activated Carbon from Biomass. RM 21000	1/11/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1/1	PPRN Ministry of Education	Completed

Cons	ultancy		
No	Role/Title/Amount	Duration	Funder
1	Project Leader One-step self-sustained low-temperature carbonization of woodchips to produce a biochar-derived bioadsorbent	6 months	WLSB Sdn Bhd
2	Project Leader Survey on municipal solid waste composition, Utilization And Management in Selected Cities In Malaysia	6 months	Mitsubishi Heavy Industries Asia Pacific Pte. Ltd. (MHI-AP)
3	Member Start up and batch operations of composting process to Kemaman Palm Oil Mill.	6 months	TDM Bhd

4	Member  Collaborative research on the use of hydrothermal carbonization technology for treatment of oil palm biomass to be used in composting	6 months	Mitsubishi Heavy Industries Asia Pacific Pte. Ltd. (MHI-AP)
5	Member  Research on future of renewable energy and palm oil industry in Malaysia	6 months	Mitsubishi Heavy Industries Asia Pacific Pte. Ltd. (MHI-AP)
6	Member  Research Study on The Effectiveness of Biofertilizer Pellets For Landscape Plant	6 months	IWK Sdn Bhd
7	Member  Research study on accelerated biocompost production from rice husk and chicken manure mixture	6 months	Novozymes bhd
8	Sub-project leader  Color removal of textile wastewater final discharge using biochar activated carbon from biomass.	3 months	Microclear Sdn Bhd

# Publications Science Citation Indexed Journals – Thompson/Scopus)

- Mokhtar, M., Mohd Yusoff, M. Z., Mohamad Ali, M. S., Mustapha, N. A., Wood, T. K., & Maeda, T. (2019). Pseudogene YdfW in Escherichia coli decreases hydrogen production through nitrate respiration pathways. *International Journal of Hydrogen Energy*, 44(31), 16212-16223. ISI journals (IF:4.229)
- 2. Zulkifli, A. A., **Mohd Yusoff, M. Z.,** Abd Manaf, L., Zakaria, M. R., Roslan, A. M., Ariffin, H., . . . Hassan, M. A. (2019). Assessment of Municipal Solid Waste Generation in Universiti Putra Malaysia and Its Potential for Green Energy Production. *Sustainability*, *11*(14), 3909. **ISI journals (IF:2.592)**
- Mat Saad, M. F., Abdul Rahman, N. A., & Mohd Yusoff, M. Z. (2019). Hydrogen and Methane Production from Co-digestion of Food Waste and Chicken Manure. *Polish Journal of Environmental Studies*, 28(4), 2805-2814. doi:10.15244/pjoes/83670 ISI journals (IF:1.186)
- 4. Nordin, N., Yusof, N., Md Nadzir, S., **Mohd Yusoff, M. Z.,** & Hassan, M. A. (2019). Effect of photo-autotrophic cultural conditions on the biomass productivity and composition of Chlorella vulgaris. *Biofuels*, 1-11. doi:10.1080/17597269.2019.1652787 **ISI journals (IF:1.130)**
- Samsudin, M. H., Hassan, M. A., Idris, J., Ramli, N., Mohd Yusoff, M. Z., Ibrahim, I., . . . Shirai, Y. (2019). A one-step self-sustained low temperature carbonization of coconut shell biomass produced a high specific surface area biochar-derived nano-adsorbent. Waste Manag Res, 37(5), 551-555. ISI journals (IF:2.015)

- Zakaria, M.A., Mohd Yusoff, M. Z., Zakaria, M. R., Hassan, M. A., Wood, T.K, and Maeda, T., 2018. Pseudogene product YqiG is important for *pflB* expression and biohydrogen production in *Escherichia coli* BW25113. 3Biotech (accepted galley proof) ISI journals (IF: 1.79)
- Mohamed Biran, N., Mohd Yusoff, M. Z., Maeda, T., Zakaria, M. R., Yee, L-N., Hassan, M. A., 2018. Triple knockout of frdC gltA and pta genes enhanced PHA production in Escherichia coli. Asia Pac. J. Mol. Biol. Biotechnol. (accepted galley proof) Scopus Indexed Journal.
- 8. Ahmad, N., Zakaria, M. R., **Mohd Yusoff, M. Z.,** Fujimoto, S., Inoue, H., Ariffin, H., Hassan, M. A., Shirai, Y., 2018. Subcritical Water-Carbon Dioxide Pretreatment of Oil Palm Mesocarp Fiber for Xylooligosaccharide and Glucose Production. *Molecules* (Basel, Switzerland). 23. **ISI journals (IF: 3.098)**
- 9. Taifor, A. F., Zakaria, M. R., **Mohd Yusoff, M. Z.,** Toshinari, M., Hassan, M. A., Shirai, Y., 2017. Elucidating substrate utilization in biohydrogen production from palm oil mill effluent by *Escherichia coli. Int J Hydrogen Energy*. 42, 5812-5819 **ISI journals (IF:4.229)**
- Mohd Yusoff M.Z., Akita H , Hassan M.A, Fujimoto. S., Yoshida.M, Nakashima.N, Hoshino.T. (2017) Production of acetoin from hydrothermally pretreated oil mesocarp fiber using metabolically engineered Escherichia coli in a bioreactor system. *Bioresource Technology*, 245(Part A), 1040–1048. ISI journals (IF:5.807)
- 11. Akita H, Kimura Z-i, **Mohd Yusoff**, **M.Z.**, Nakashima N, Hoshino T. (2017) Identification and characterization of Burkholderia multivorans CCA53. *BMC Research Notes* **SCImago Journal Rank (IF:0.69)**
- 12. Akita H, Kimura Z-i, **Mohd Yusoff**, **M.Z.**, Nakashima N, Hoshino T (2016) Draft Genome Sequence of Burkholderia sp. Strain CCA53, Isolated from Leaf Soil *Genome Announcements* 4:e **SCImago Journal Rank (IF:0.55)**
- 13. Akita H, Kimura Z-i, **Mohd Yusoff**, **M.Z.**, Nakashima N, Hoshino T (2016) Isolation of *Pseudomonas* sp. Strain CCA1 from Leaf Soil and Preliminary Characterization Its Ligninolytic Activity *JSM Biotechnology & Biomedical Engineering* 3:2-4. Citex indexed journal.
- 14. Akita, H., Kimura, Z., **Mohd Yusoff, M.Z.,** Nakashima, N., and Hoshino, T. (2016) Isolation and characterization of Burkholderia sp. strain CCA53 exhibiting ligninolytic potential, SpringerPlus 5, 596. **ISI journals (IF:1.130)**
- 15. Ibrahim, M., Yusof, N., **Mohd Yusoff, M.Z.,** and Hassan, M. A. (2015) Enrichment of anaerobic ammonium oxidation (anammox) bacteria for short start-up of the anammox process: a review, *Desalination and Water Treatment*, 1-21. **ISI journals (IF:1.383)**
- 16. Nguyen, M. T., Maeda, T., **Mohd Yusoff, M.Z.**, and Ogawa, H. I. (2014) Effect of azithromycin on enhancement of methane production from waste activated sludge, *J Ind Microbiol Biotechnol* 41, 1051-1059. **ISI journals (IF:3.103)**
- 17. Sanchez-Torres, V., **Mohd Yusoff, M.Z.,** Nakano, C., Maeda, T., Ogawa, H. I., and Wood, T. K. (2013) Influence of Escherichia coli hydrogenases on hydrogen fermentation from glycerol, *Int J Hydrogen Energy* 38, 3905-3912. **ISI journals (IF:4.229)**
- 18. **Mohd Yusoff, M.Z.,** Hu, A., Feng, C., Maeda, T., Shirai, Y., Hassan, M. A., and Yu, C.-P. (2013) Influence of pretreated activated sludge for electricity generation in microbial fuel cell application. *Bioresource Technology* 145, 90-96. **ISI journals (IF:5.807)**

- 19. **Mohd Yusoff, M.Z.,** Hashiguchi, Y., Maeda, T., and Wood, T. K. (2013) Four products from Escherichia coli pseudogenes increase hydrogen production, *Biochemical and Biophysical Research Communications* 439, 576-579. **Scopus cited (IF:2.559)**
- 20. **Mohd Yusoff, M.Z.,** Maeda, T., Sanchez-Torres, V., Ogawa, H. I., Shirai, Y., Hassan, M. A., and Wood, T. K. (2012) Uncharacterized *Escherichia coli* proteins YdjA and YhjY are related to biohydrogen production, Int J Hydrogen Energ 37, 17778-17787. **ISI journals (IF:4.229)**
- 21. Mohd Yasin, N. H., Rahman, N. A. A., Man, H. C., Mohd Yusoff, M.Z., and Hassan, M. A. (2011) Microbial characterization of hydrogen-producing bacteria in fermented food waste at different pH values, Int J Hydrogen Energ 36, 9571-9580. ISI journals (IF:4.229)
- 22. **Mohd Yusoff, M.Z.,** Nor`Aini, A. R., Abd-Aziz, S., Chong, M. L., Hassan, M. A., and Shirai, Y. (2010) The Effect of Hydraulic Retention Time and Volatile Fatty Acids on Biohydrogen Production from Palm Oil Mill Effluent under Non-Sterile Condition, *Australian Journal of Basic and Applied Sciences* 4, 577-587. **SCImago Journal**
- Sulaiman, A., Tabatabaei, M., Mohd Yusoff, M.Z., Ibrahim, M. F., Hassan, M. A., and Shirai, Y. (2010) Accelerated Start-up of a Semi-commercial Digester Tank Treating Palm Oil Mill Effluent with Sludge Seeding for Methane Production, World Applied Sciences Journal 8, 247-258. SCImago Journal Rank (IF:0.16)
- 24. Baharuddin, A. S., Lim, S. H., **Mohd Yusoff, M.Z.,** Nor'Aini, A. R., Md Shah, U. K., Hassan, M. A., Wakisaka, M., Sakai, K., and Yoshihito, S. (2010) Effects of palm oil mill effluent (POME) anaerobic sludge from 500 m3 of closed anaerobic methane digested tank on pressed-shredded empty fruit bunch (EFB) composting process, *African Journal of Biotechnology* 9, 2427-2436. **ISI journals (IF:0.573)**
- 25. Rasdi, Z., Nor`Aini, A. R., Abd-Aziz, S., Phang, L.-Y., **Mohd Yusoff, M.Z.,** Chong, M. L., and Hassan, M. A. (2009) Statistical Optimization of Biohydrogen Production from Palm Oil Mill Effluent by Natural Microflora *The Open Biotechnology Journal* 3, 79-86. **Scopus Indexed Journal**
- 26. Mohd Yusoff, M.Z., Hassan, M. A., Abd-Aziz, S., and Nor`Aini, A. R. (2009) Start-Up of Biohydrogen Production from Palm Oil Mill Effluent under Non-Sterile Condition in 50 L Continuous Stirred Tank Reactor, *International Journal of Agricultural Research* 4, 163-168. SCImago Journal Rank (IF:0.14)

### Conference

- M.A. Zakaria, M. Mokhtar, M.Z. Mohd Yusoff, M.A. Hassan, M. R. Zakaria, & Maeda., T. (2015a). *Escherichia coli yqiG: Pseudogene or functional allele for biohydrogen production*. Paper presented at the 3rd International Symposium on Applied Engineering and Sciences (SAES2015), Universiti Putra Malaysia.
- M. A. Zakaria, M. Mokhtar, M.Z. Mohd Yusoff, M.A. Hassan, M. R. Zakaria, & Maeda., T. (2015b). *Esherichia Coli yqiG Pseudogene is Not Pseudogene Influenced Hydrogen Evolution*. Paper presented at the Asian Congress on Biotechnology 2015 (ACB2015), Hotel Istana, Kuala Lumpur, Malaysia.
- M.Z. Mohd Yusoff. (2017). *KYUTECH Alumni Session*. Paper presented at the 5th International Symposium on Applied Engineering and Sciences (SAES2017), Universiti Putra Malaysia, Serdang.

- M.Z. Mohd Yusoff. (2018). *Waste management and Green Energy Production via Anaerobic Digestion*. Paper presented at the Workshop Anaerobic Digester on Food Waste 2018, TNB Renewables Sdn Bhd, Petaling Jaya.
- M.Z. Mohd Yusoff, A. A. Zulkifli, L. Abd Manaf, & Hassan., M. A. (2019). *Municipal Solid Waste Management and Green Energy Production via Anaerobic Digestion*. Paper presented at the 8th International Forum on Industrial Bioprocessing (IBA-IFIBiop 2019), Imperial Hotel, Miri, Malaysia.
- M.Z. Mohd Yusoff, C.J. Feng, A. Hu, C.P. YU, T. Maeda, Shirai., Y., . . . Hassan., M. A. (2012). *Microbial Fuel Cells using Activated Sewage Sludge for electricity generation*. Paper presented at the International Biotechnology Symposium 2012,, Daegu, Korea.
- M.Z. Mohd Yusoff, H. Akita, N. Nakashima, & Hoshino., T. (2016). *Utilization of Oil Palm Biomass for Acetoin Production using Engineered Escherichia coli*. Paper presented at the The Society for Biotechnology, Japan, Toyama International Conference Center.
- M.Z. Mohd Yusoff, H. Akita, N. Nakashima, S. Fujimoto, M.A. Hassan, & Hoshino., T. (2016). *Transformation of oil palm biomass into value added product.* Paper presented at the 4th International Symposium on Applied Engineering and Sciences (SAES2016).
- M.Z. Mohd Yusoff, H. Akita, S. Fujimoto, & Hassan., M. A. (2017). *Pretreated hydrolysate from oil palm mesocarp fiber influence the fermentation process*. Paper presented at the Wood and Biofiber International Conference (WOBIC2017), Hotel Bangi Putrajaya, Malaysia.
- M.Z. Mohd Yusoff, I. Ibrahim, & Hassan., M. A. (2018). *Biocharcoal from oil palm biomass as a potential adsorbent for textile final discharges* Paper presented at the 6th International Symposium on Applied Engineering and Sciences (SAES2018), Kyushu Institute of Technology.
- M.Z. Mohd Yusoff, M. Mokhtar, T. Maeda, M.S. Mohamad Ali, & Hassan., M. A. (2018). *The importance of pseudogenes in hydrogen metabolism of Escherichia coli*. Paper presented at the AFOB Malaysia Chapter International Symposium 2018, Pullman Hotels and Resorts Kuching, Sarawak, Malaysia.
- M.Z. Mohd Yusoff, & Maeda., T. (2019). *Biodiesel derived crude glycerol as a substrate for biohydrogen production using engineered Escherichia coli strain*. Paper presented at the AFOB Malaysia Chapter International Symposium 2019, The Everly Putrajaya, Malaysia.
- M.Z. Mohd Yusoff, N. Nasri, F. S. Rosman, & Hassan., M. A. (2019). *Biohydrogen Production From Waste Glycerine Using Engineered Escherichia Coli BW25113*. Paper presented at the 7th International Symposium on Applied Engineering and Sciences (SAES2019), Universiti Putra Malaysia, Serdang, Selangor.
- M.Z. Mohd Yusoff, T. Maeda, H. I. Ogawa, Hassan., M. A., & Shirai., Y. (2012). *Elucidation of Uncharacterized Genes Associated to Biohydrogen Production in Escherichia coli through Molecular Biotechnology Approaches*. Paper presented at the JSPS seminar. Universiti Putra Malaysia, Malaysia
- M.Z. Mohd Yusoff, T. Maeda, H. Yuya, Shirai., Y., Hassan., M. A., & T.K. Wood. (2015). *Pseudogene ydfw in Escherichia Coli Known to be an Essential Protein in Biohydrogen Metabolism*. Paper presented at the AFOB Regional Symposium 2015, Universitas Indonesia, Depok, Indonesia.
- M.Z. Mohd Yusoff, T. Maeda, H. Yuya, T.K. Wood, Shirai., Y., H. I. Ogawa, & Hassan., M. A. (2012). *Unrealized function of Escherichia coli genes; sufD and yehP in biohydrogen evolution*. Paper presented at the The Society for Biotechnology, Symposium, Kobe, Japan. Symposium

## retrieved from

M.Z. Mohd Yusoff, T. Maeda, S-T. Viviana, T.K. Wood, Shirai., Y., H. I. Ogawa, & Hassan., M. A. (2011). *Functional Analysis of an Important Gene Related to Biohydrogen Production in Escherichia coli*. Paper presented at the BioMicroWorld2011, Torremolinos, Malaga.

Samsudin;, M. H., Hassan;, M. A., Ramli;, N., Yusoff;, M. Z. M., & Shirai., Y. (2014, 20-21 Dec). *Pilot Scale Co-Composting of Kitchen and Garden Wastes with Addition of Biochar.* Paper presented at the 2nd International Symposium on Applied Engineering and Sciences (SAES 2014), Tobata Campus, Kyushu Institute of Technology, Japan.

Scientific experience and Specialisation					
Organization	Position	Start Date	End Date	Field	
Advanced Industrial Science and Technology (AIST), JAPAN	Post-Doctoral	October 2015	March 2017	Biomass utilization	
Universiti Putra Malaysia MALAYSIA	Senior Lecturer	October 2013	Present	Department of Bioprocess Technology	
Penn State University, USA	Research Scholar	January 2013	March 2013	Microarray	
Gebze Institute of Technology, TURKEY	Research Scholar	August 2012	October 2012	Fuel cell and Microbial fuel cells	
Massey University, NEW ZEALAND	Research Scholar	May 2012	July 2012	Algae cultivation	
Institute of Urban Environment, CHINA	Research Scholar	January 2012	March 2012	Microbial fuel cells	
Universiti Putra Malaysia MALAYSIA	Tutor	November 2006	September 2013	Department of Bioprocess Technology	

Honours and Awards			
Name of awards	Title	Award Authority	Year
Sijil Penghargaan	Anugerah Perkhidmatan Cemerlang	UPM	2017
Sijil Penghargaan	Anugerah Perkhidmatan Cemerlang	UPM	2018
Sijil Penghargaan	Top 3 H-index & Citations (Senior	Deputy Vice Counselor	2018
	Lecturer Category)	(Research)	
Sasakawa Scientific	Identification and determination of	The Japan Science	2012
Research Award	functional prominent genes related to	Society	
	Escherichia coli for hydrogen		
	production.		