

CURRICULUM VITAE

Dr. Mohd Fakhurul Zaman Raja Yahya
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ACADEMIC BACKGROUND

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| 1. PhD in Biochemistry | Universiti of Malaya, Kuala Lumpur |
| 2. MSc in Biochemistry | National University of Malaysia, Kuala Lumpur |
| 3. BSc (Hons) in Biochemistry | National University of Malaysia, Kuala Lumpur |

PROFESSIONAL EXPERIENCES

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| 1. Sept 2016-Now | Senior Lecturer | Universiti Teknologi MARA |
| 2. July 2009-Sept 2016 | Lecturer | Universiti Teknologi MARA |

TEACHING EXPERIENCES

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|-----------|--------------------------|---------------------------|
| 1. BIO462 | Biochemistry | Universiti Teknologi MARA |
| 3. BIO552 | Analytical Biochemistry | Universiti Teknologi MARA |
| 4. BIO711 | Advanced Instrumentation | Universiti Teknologi MARA |
| 5. BMS661 | Proteomics | Universiti Teknologi MARA |

RESEARCH AREA

1. Proteomics
2. Bioinformatics
3. Biofilmology
4. Natural products

POSTGRADUATE SUPERVISION

1. Ahmad Hisham Mohamed Aris (2017). Aerobic and aerobic biocorrosion of mild and stainless steel by *Pseudomonas aeruginosa*. Mode of study: MSc. Status: **Complete**.
2. Mohamad Shamil Anwar Ibrahim (2019). Proteomics analysis of *Pseudomonas aeruginosa* biofilm following treatment with *Chromolaena odorata* chloroform extract. Mode of study: MSc. Status: **Complete**.
3. Wan Mohamad Afifi Wan Mohd Zawawi (2020). Effect of *Chromolaena odorata* ethanolic extract on membrane proteome of *Pseudomonas aeruginosa* biofilm. Mode of study: MSc. Status: **Complete**.

RESEARCH GRANTS

1. FRGS (MOHE), RM68,500. 600-RMI/ST/FRGS 5/3/FST (148/2010). Microbiologically-influenced corrosion (MIC) study of stainless and mild steels by *Pseudomonas aeruginosa*. Role: Co-researcher.
2. UiTM Excellent Fund, RM32,000. 600-RMI/DANA 5/3/RIF (54/2012) Inhibitory effects of *Chromolaena Odorata* on *Pseudomonas Aeruginosa* biofilm. Role: **Principal Researcher**.
3. Science Fund (MOSTI) RM250,000. 100-RMI/MOSTI 16/6/2 (1/2012). Evaluation of toxicological effects of peptides in vivo and in vitro. Role: Co-researcher.

4. RAGS (MOHE), RM80,000. 600-RMI/RAGS 5/3 (11/2012) Integral polytopic proteome of surface-attached *Pseudomonas aeruginosa* biofilm. Role: **Principal researcher.**
5. FRGS (MOHE), RM152,100. FRGS/1/2014/SKK11/UITM/02/1 A study on inhibition of *Streptococcus mutans* growth and disruption of established biofilm on orthodontic appliances using biosurfactant. Role: Co-researcher.
6. FRGS (MOHE), RM170, 200. 600-IRMI/FRGS 5/3 (417/2019) Differential whole-cell proteome expression and protein interaction network in the biofilm of *Corynebacterium pseudotuberculosis* clinical isolates. Role: **Principal researcher.**

SELECTED PUBLICATIONS

Full paper proceedings

1. MM Mahat, AM Aris, MFZR Yahya and R Ramli (2011). Infinite Focus Microscope (IFM): Microbiologically Influenced Corrosion (MIC) behavior on Mild Steel by *Pseudomonas aeruginosa*. Proceedings in 2011 SHUSER pp 111-115 [ISBN 978-1-4577-0263-1].
2. MMM Mahat, AM Aris, MFZR Yahya and R Ramli, NN Bonnia, MT Mamat (2012). A preliminary study on Microbiologically influenced corrosion (MIC) of mild steel by *Pseudomonas aeruginosa* by using infinite focus microscope (IFM). AIP Conference Proceedings, Volume 1455, pp. 117-123. [ISSN 1551-7616].
3. MFZR Yahya, SFM Isa and UMA Hamid (2013). Electrophoretic protein typing of microbial planktons and biofilms: an investigation of different growth modes of *Candida albicans* and *Pseudomonas aeruginosa*. Proceedings in 2013 BEIAC. pp 852-857.
4. MFZR Yahya, SFM Isa, NB Kamarulzaman and MS Kamaruddin (2014). Azadirachta Excelsa ethanolic extract and its effects on enteropathogenic bacteria. Proceedings in 2014 CHUSER. pp 279-283.

Journals

1. MFZR Yahya, NFHA Saifuddin and UMA Hamid (2013). Zingiber officinale ethanolic extract inhibits formation of *Pseudomonas aeruginosa* biofilm. International Journal of Pharmacy and Biological Sciences. Volume 3(1): pp 45-64. [ISSN 2230-7605].
2. MFZR Yahya, MSA Ibrahim, WMAWM Zawawi and UMA Hamid (2014). Biofilm Killing Effects of *Chromolaena odorata* Extracts against *Pseudomonas aeruginosa*. Research Journal of Phytochemistry. 8(3): 64-73.
3. MFZR Yahya, UMA Hamid, MY Norfatimah and R Kambol (2014). In silico Analysis of Essential Tricarboxylic Acid Cycle Enzymes from Biofilm-forming Bacteria. Trends in Bioinformatics. 7(1): 19-26.
4. Yahya MFZR, Ibrahim MSA and Abdul Hamid UM (2014). Electrophoretic Protein Separation Reveals the Possible Antibiofilm Mechanism of *Chromolaena odorata* Chloroform Extract Against *Pseudomonas aeruginosa*: A Preliminary Investigation. Journal of Applied Biological Sciences 8 (2): 55-61.
5. MFZR Yahya, SA Karsani, Z Alias (2017). Subtractive Protein Profiling of *Salmonella typhimurium* Biofilm Treated with DMSO. The Protein Journal, Volume 36, Issue 4, pp 286–298.
6. MFZR Yahya, SA Karsani, Z Alias (2018) Antibiofilm activity and mode of action of DMSO alone and its combination with afatinib against Gram-negative pathogens. Folia Microbiologica, Volume 63, Issue 1, pp 23–30.
7. NSM Zaini, AHM Aris, MM Mahat, MFZR Yahya (2019). Impact of *Chromolaena odorata* Ethanol Extract on Biofilm-Associated Corrosion of Mild steel in Enriched Artificial Seawater Medium. International Journal of Pharmacy and Biological Sciences-IJPBSTM, 9 (3): 498-504.
8. NA Johari, SSD Amran, ANA Kamaruzzaman, CAIC Man, MFZR Yahya (2020). Anti-biofilm Potential and Mode of Action of Malaysian Plant Species: A Review. Science Letters. 14(2): 34-46.
9. WMAWM Zawawi, MSA Ibrahim, N Rahmad, UMA Hamid, MFZR Yahya (2020). Proteomic analysis of *Pseudomonas aeruginosa* biofilm treated with *Chromolaena odorata* extracts. Malaysian Journal of Microbiology, Vol 16(2) 2020, pp. 124-133.
10. SFM Isa, MFZR Yahya, UMA Hamid (2020). Effects of erythromycin, nystatin and their combination on *Pseudomonas aeruginosa* and *Candida albicans* biofilms. Int. Pharm. Acta. (1):e3.

Book

1. WRM Hassan, MFZR Yahya and ZZ Ariffin. (2012). Biochemistry laboratory manual. UiTM Press [ISBN 978-967-363-434-7].

AWARDS

1. Bronze medal in IIDEX 2013. Product: Topical cream formulated with *Chromolaena odorata* leaf extract for wound healing and microbial disinfection.
2. Excellent Service Award 2013
3. Bronze medal in IIDEX 2018. Product: Anti-Salmonella Biofilm Kit.
4. Best Poster Award in ICASIT 2018

EXPERTISE

1. Reviewer, Bulletin FSG Insight, 2009
2. Reviewer, Science Letters, 2012, 2020
3. Reviewer, SHUSER, 2013
4. Reviewer, ISBEIA, 2013.
5. Reviewer, CHUSER, 2014
6. Reviewer, Annals of Clinical Pathology, 2018
7. Reviewer, Journal of Veterinary Medicine and Research, 2018
8. Judge, MSMPs, 2018
9. Judge, ICASIT, 2018
10. Reviewer, ICASIT, 2018
11. Reviewer, Malaysian Journal of Microbiology, 2018
12. Session Chairman, PABC, 2019.
13. Judge, PABC, 2019.
14. Lead Guest Editor for Junior Science Communication, 2020.

SERVICES

University

1. Ahli Jawatankuasa Penerbitan dan Kolokium. Tempoh: 2010-2012.
2. Ahli Jawatankuasa Penggalakan Buku. Tempoh: 2010-2012
3. Ahli Jawatankuasa Pembangunan Pelajar. Tempoh: 2011-2013.
4. Ahli Jawatankuasa Marketing Arm. Tempoh: 2012-2014.
5. Ahli Jawatankuasa Korporat. Tempoh: 2010-2011.
6. Ahli Jawatankuasa Penubuhan Program Master of Science in Applied Biology. Tempoh: 2011-2012.
7. Ahli Jawatankuasa Pengembangan Program Akademik dan Pengantarabangsaan. Tempoh: 2011.
8. Koordinator IT & Multimedia. Tempoh: 2013-2015.
9. Penasihat Persatuan Pelajar Biologi. Tempoh: 2012-2014.
10. Ahli Jawatankuasa Kualiti (ISO). Tempoh: 2013-2014.
11. Ahli Jawatankuasa Piawai Akademi. Tempoh: 2017-2019.
12. Ahli Jawatankuasa ASC 2018
13. Ahli Jawatankuasa MSMPs 2018
14. Ahli Jawatankuasa ICASIT 2018
15. Pengerusi Jawatankuasa Data Analisis. Tempoh: 2019-2021.
16. Pengerusi Jawatankuasa MyRA. Tempoh: 2019-2021.

Industrial Linkage

1. Ahli Jawatankuasa Program Sci-Biz Know How Sharing Talk Session, 2017 (AlgaeTech International Sdn Bhd)
2. Ahli Jawatankuasa Program "Interactive Demo on Leica Biosystems", 2018 (Histocenter (M) Sdn. Bhd)
3. Ahli Jawatankuasa Program Sci-Biz Know How Sharing Talk Session, 2018 (Yakult Sdn Bhd)
4. Ahli Jawatankuasa Program Sci-Biz Know How Sharing Talk Session, 2018 (FC Bios Sdn Bhd)
5. Ahli Jawatankuasa Program Jaringan Alumni Biologi Siri 1.0, 2018 (Europasia Engineering Services Sdn. Bhd)
6. Penasihat Program "Yakult Factory Tour", 2018 (Yakult Sdn. Bhd)

7. Penasihat Program "Career Talk On Pharmaceutical Microbiology", 2019 (Pharmaniaga Sdn. Bhd)

Community

1. Ahli Jawatankuasa Program Bagai Aur Dengan Tebing, Melaka, Fasa 1, 2011
2. Ahli Jawatankuasa Program Bagai Aur Dengan Tebing, Melaka, Fasa 2, 2012
3. Penasihat Program Jom Makan "No One Deserves Hunger", Pusat Transit Gelandangan KL, 2018
4. Penasihat Program "Volunteering For Zoo Negara", Zoo Negara KL, 2018
5. Penceramah/Jurulatih Program "Basic Self Defense System", Menara SAAS UiTM Shah Alam, 2018
6. Penasihat Program "Biology Outreach", SMK Raja Mahadi Klang, 2018

Income generation

1. Ahli Jawatankuasa Program Sci-Biz Know How Sharing Talk Session, 2017 (AlgaeTech International Sdn Bhd)
2. Ahli Jawatankuasa Program "Interactive Demo on Leica Biosystems", 2018 (Histocenter (M) Sdn. Bhd)
3. Ahli Jawatankuasa Program Sci-Biz Know How Sharing Talk Session, 2018 (Yakult Sdn Bhd)
4. Ahli Jawatankuasa Program Sci-Biz Know How Sharing Talk Session, 2018 (FC Bios Sdn Bhd)
5. Ahli Jawatankuasa MSMPS 2018
6. Ahli Jawatankuasa ICASIT 2018
7. Ahli Jawatankuasa ASC 2018