

CURRICULUM VITAE



| A. BUTIR-BUTIR PERIBADI <i>(Personal Details)</i> | | | |
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| Nama Penuh <i>(Full Name)</i> | Muhamad Hafiz Abd Rahim | | Gelaran <i>(Title)</i> : Dr. |
| No. MyKad / No. Pasport <i>(Mykad No. / Passport No.)</i> 860819-XX-XXXX | Warganegara <i>(Citizenship)</i> Malaysia | Bangsa <i>(Race)</i> Malay | Jantina <i>(Gender)</i> Male |
| Jawatan <i>(Designation)</i> | Senior Lecturer | Tarikh Lahir <i>(Date of Birth)</i> | 19 August 1986 |

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| Alamat Semasa <i>(Current Address)</i> | Jabatan/Fakulti <i>(Department/Faculty)</i> | E-mel dan URL <i>(E-mail Address and URL)</i> |
| No XX Jalan P11F/14, Presint 11, 62300 Putrajaya | Department of Food Science, Faculty of Food Science and Technology, Universiti Putra Malaysia | Email: muhdhafiz@upm.edu.my URL: H/P:012-2787895 |

| B. KELAYAKAN AKADEMIK <i>(Academic Qualification)</i> | | | |
|---|--|---------------------------------|--|
| Nama Sijil / Kelayakan <i>(Certificate / Qualification obtained)</i> | Nama Sekolah/ Institusi <i>(Name of School / Institution)</i> | Tahun <i>(Year obtained)</i> | Bidang pengkhususan <i>(Area of Specialization)</i> |
| Ph.D. | The University of Sydney, Australia | 2015 | Bioprocess |
| B.Sc. (Hons) | University of Adelaide, Australia | 2009 | Biotechnology |

| C. KEMAHIRAN BAHASA <i>(Language Proficiency)</i> | | | | | |
|--|--------------------------|----------------------------------|-------------------------|-----------------------------------|-----------------------------------|
| Bahasa / Language | Lemah <i>Poor (1)</i> | Sederhana <i>Moderate (2)</i> | Baik <i>Good (3)</i> | Amat Baik <i>Very good (4)</i> | Cemerlang <i>Excellent (5)</i> |
| English | | | | √ | |
| Bahasa Melayu | | | | | √ |

D. PENGALAMAN SAINTIFIK DAN PENGKHUSUSAN
(*Scientific experience and Specialization*)

| Organization | Position | Start Date | End Date | Expertise |
|--------------|----------|------------|----------|-----------|
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E. PEKERJAAN (*Employment*)

| Majikan / Employer | Jawatan / Designation | Jabatan / Department | Tarikh lantikan / Start Date | Tarikh tamat / Date Ended |
|------------------------------------|-----------------------------|--|------------------------------|---------------------------|
| Universiti Putra Malaysia | Senior Lecturer | Food Science, Faculty of Food Science and Technology | September, 2015 | Present |
| Universiti Putra Malaysia | Tutor | Food Science, Faculty of Food Science and Technology | January, 2010 | September 2015 |
| Universiti Pendidikan Sultan Idris | Tutor | Biology Department, Faculty of Science and Mathematics | July, 2009 | December, 2009 |
| Universiti Putra Malaysia | Graduate Research Assistant | Institut Biosains, Universiti Putra Malaysia | January, 2009 | July, 2009 |

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

| Name of awards | Title | Award Authority | Award Type | Year |
|-----------------|--|------------------------------|---------------|-----------|
| Academic Awards | Skim Latihan Akademik Bumiputra (SLAB) | Ministry of Higher Education | National | 2006-2008 |
| Academic Awards | Honour's scholarship | University of Adelaide | International | 2008 |
| Academic Awards | Skim Pelajar Cemerlang MARA | Ministry of Education | National | 2004-2008 |

G. PROJEK PENYELIDIKAN TERDAHULU (*Past Research Project*)

| Project No. | Project Title | Role | Year | Source of fund | Status |
|-------------|--|------------------------|------|---------------------------|---------|
| GPB- | Differentiation of sheep induced pluripotent stem cells into cultured meat: proof of concept | Member | 2022 | Universiti Putra Malaysia | |
| IPS-9740400 | Development and Characterization of Coconut Milk-Based Yogurt Alternative | Principal Investigator | 2022 | Universiti Putra Malaysia | Ongoing |

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| | from Different Breeds of Malaysian Coconut and Novel LAB Isolated from Local Fermented Lassi | | | | |
| - | Production Of Meat Analogues From Plant-Based Protein | Member | 2022 | Private | Ongoing |
| FRGS-5540455 | The Potential of Fermented Food as Biofertiliser | Principal Investigator | 2020-2022 | Ministry of Higher Education | Ongoing |
| IPM-9595400 | Quality Attributes Profiling and Shelf-Life Improvement of Red Sugarcane (<i>Saccharum Officinarum</i> L.) | Principal investigator | 2018-2020 | Universiti Putra Malaysia | Finished |
| - | The Production of Lovastatin From <i>Aspergillus terreus</i> | Investigator | 2011-2015 | The University of Sydney | Finished |
| - | The Expression of Intracellular Signaling Molecules During Osteoclast Development | Investigator | 2007-2008 | University of Adelaide | Finished |

H. PUBLICATIONS

| No. | Publication | Impact factor |
|-----|--|---------------|
| 1. | Gengan, G., Zaini, N. S. M., Saari, N., Hussin, A. S. M., Jaafar, A. H., Hasan, H., Lim, E. J., Wan-Mohtar, W. A. A. Q. I., & Rahim, M. H. A. (2024). Nutritional and therapeutic benefits of coconut milk and its potential as a plant-based functional yogurt alternative: a review. <i>Food Science and Human Wellness</i> . https://doi.org/10.26599/FSHW.2024.9250004 | 7.0 |
| 2. | Mohd Zaini, N. S., Hasan, H., Abbas, A., Montoya, A., & Abd Rahim, M. H. (2024). Impact of elicitors (alginate, <i>Bacillus cereus</i> , and cholesterol) on the production of secondary metabolite (lovastatin, (+)-geodin, and sulochrin) by <i>Aspergillus terreus</i> ATCC 20542 during submerged fermentation. <i>Biocatalysis and Agricultural Biotechnology</i> , 55, 102974. https://doi.org/10.1016/j.bcab.2023.102974 | 4 |
| 3. | Lee, Z., Lim, J. A., Harikrishna, J. A., Islam, T., Abd Rahim, M. H., & Yaacob, J. S. (2024). Regulation of Plant Responses to Temperature Stress: A Key Factor in Food Security and for Mitigating Effects of Climate Change. <i>International Journal of Plant Production</i> . https://doi.org/10.1007/s42106-024-00282-7 | 2.5 |
| 4. | Zaini, N. S. M., Ng, R. N., Abedelazeez, K. J. D., Idris, H., & Abd Rahim, M. H. (2024). The Nutritional, Physico-chemical, and Antioxidant Changes during the Production of Soursop Vinegar Influenced by Yeast and Aeration. <i>Pertanika Journal of Tropical Agricultural Science</i> , 47(1). | - |
| 5. | Khan, R., Brishti, F. H., Arulrajah, B., Goh, Y. M., Abd Rahim, M. H., Karim, R., Hajar-Azhari, S., Kin Kit, S., Anwar, F., & Saari, N. (2024). Mycoprotein as a meat substitute: production, functional properties, and current challenges-a review. <i>International Journal of Food Science & Technology</i> , 59(1), 522–544. | 3.3 |

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| | https://doi.org/https://doi.org/10.1111/ijfs.16791 | |
| 6. | Nor A'azizam, N. M., Chopra, S., Guleria, P., Kumar, V., Abd Rahim, M. H., & Yaacob, J. S. (2024). Harnessing the potential of mutation breeding, CRISPR genome editing, and beyond for sustainable agriculture. <i>Functional & Integrative Genomics</i> , 24(2), 44. https://doi.org/10.1007/s10142-024-01325-y | 2.9 |
| 7. | Mohsin, A. Z., Norsah, E., Marzlan, A. A., Abd Rahim, M. H., & Meor Hussin, A. S. (2024). Exploring the applications of plant-based coagulants in cheese production: A review. <i>International Dairy Journal</i> , 148, 105792. https://doi.org/https://doi.org/10.1016/j.idairyj.2023.105792 | 3.1 |
| 8. | Mohsin, A. Z., Hui Ci, N., Ismail, A. R., Marzlan, A. A., Abd Rahim, M. H., & Meor Hussin, A. S. (2023). Gouda cheese with different coagulants and types of milk: physicochemical, biochemical, microbiological, and sensory properties. <i>Journal of Food Measurement and Characterization</i> . https://doi.org/10.1007/s11694-023-02218-7 | 3.4 |
| 9. | Wan-Mohtar, W. A. A. Q. I., Khalid, N. I., Rahim, M. H. A., Luthfi, A. A. I., Zaini, N. S. M., Din, N. A. S., & Mohd Zaini, N. A. (2023). Underutilized Malaysian Agro-Industrial Wastes as Sustainable Carbon Sources for Lactic Acid Production. <i>Fermentation</i> , 9(10). https://doi.org/10.3390/fermentation9100905 | 3.7 |
| 10. | Khalid, N. I., Ab Aziz, N., Noh, T. U., & Abd Rahim, M. H. (2023). Alkaline electrolyzed water AS a potential green degreaser for meat processing stainless steel surface. <i>Journal of Food Process Engineering</i> , 46(12), e14465. https://doi.org/https://doi.org/10.1111/jfpe.14465 | 3 |
| 11. | Zaini, N. S. M., Mansor, N., Yusoff, M. M., & Rahim, M. H. A. (2023). Physico-chemical and Sensory Properties of Red Palm Oil-based Ice Cream Using Maltodextrin or Modified Starch as Stabilizers. <i>Journal of Oleo Science</i> , 72(9), 811–818. https://doi.org/10.5650/jos.ess23036 | 1.628 |
| 12. | Vayabari, D. A. G., Ilham, Z., Md Saad, N., Usuldin, S. R. A., Norhisham, D. A., Abd Rahim, M. H., & Wan-Mohtar, W. A. A. Q. I. (2023). Cultivation Strategies of Kenaf (<i>Hibiscus cannabinus</i> L.) as a Future Approach in Malaysian Agriculture Industry. <i>Horticulturae</i> , 9(8). https://doi.org/10.3390/horticulturae9080925 | 3.1 |
| 13. | Mohd Zaini, N. S., Khudair, J. D. A., Mohsin, Z. A., Jitming Lim, E., Minato, W., Idris, H., Yaacob, J. S., & Abd Rahim, M. H. (2023). Biotransformation of food waste into biofertilisers through composting and anaerobic digestion: a review. <i>Plant, Soil and Environment</i> , 69(9), 409–420. https://pse.agriculturejournals.cz/artkey/pse-202309-0001.php | 2.2 |
| 14. | Mohd Zaini, N. S., Khudair, A. J. D., Gengan, G., Abd Rahim, M. H., Meor Hussin, A. S., Idris, H., & Mohsin, A. Z. (2023). Enhancing the Nutritional Profile of Vegan Diet: A Review of Fermented Plant-Based Milk as a Nutritious Supplement. <i>Journal of Food Composition and Analysis</i> , 105567. https://doi.org/https://doi.org/10.1016/j.jfca.2023.105567 | 4.3 |
| 15. | Mohd Fazla, S. N., Marzlan, A. A., Meor Hussin, A. S., Abd Rahim, M. H., Madzuki, I. N., & Mohsin, A. Z. (2023). Physicochemical, microbiological, and sensorial properties of chickpea yogurt analogue produced with | - |

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| | different types of stabilizers. <i>Discover Food</i> , 3(1), 19. https://doi.org/10.1007/s44187-023-00059-3 | |
| 16. | Gengatharan, A., & Abd Rahim, M. H. (2023). The application of clove extracts as a potential functional component in active food packaging materials and model food systems: A mini-review. <i>Applied Food Research</i> , 3(1), 100283. https://doi.org/https://doi.org/10.1016/j.afres.2023.100283 | - |
| 17. | Abedelazeez, Khudair. J. D., Nurul Solehah, M. Z., Jaafar, A. H., Meor Hussin, A. S., Wan-Mohtar, W. A. A. Q. I., & Abd Rahim, M. H. (2023). Production, Organoleptic, and Biological Activities of Belacan (Shrimp Paste) and Pekasam (Fermented Freshwater Fish), the Ethnic Food from the Malay Archipelago. <i>Sains Malaysiana</i> , 52(4), 1217–1230. http://doi.org/10.17576/jsm-2023-5204-14 | 0.8 |
| 18. | Nurul Aqilah Mohd Zaini, Nur Asyiqin Zahia Azizan, Muhamad Hafiz Abd Rahim*, Adi Ainurzaman Jamaludin, António Raposo, Siva Raseetha, Renata P. Zandonadi, Mona N. Bin Mowyna, Dele Raheem, Linda H. Lho*, Heesup Han* and Wan Abd Al Qadr Imad Wan-Mohtar*, A Narrative Action on the Battle against Hunger using Mushroom, Peanut, and Soybean-based Wastes (2023), <i>Front. Public Health</i> , 11(2023), doi: 10.3389/fpubh.2023.1175509 | 6.461 |
| 19. | Faizal, F. A., Ahmad, N. H., Yaacob, J. S., Abdul-Halim Lim, S., Abd Rahim, M. H., Yaacob, J. S., & Abd Rahim, M. H. (2023). Food processing to reduce anti-nutrients in plant-based food. <i>International Food Research Journal</i> , 30(1), 25–45. https://doi.org/https://doi.org/10.47836/ifrj.30.1.02 | 1.169 |
| 20. | Suganisha, S., Mohd Zaini, N. S., Abd Rahim, M. H., & Ahmad, N. H. (2023). Insects and worms as an alternative protein source in the halal food industry. In <i>Innovation of Food Products in Halal Supply Worldwide</i> . | Book Chapter |
| 21. | Rahim, M. H. A., Hazrin-Chong, N. H., Harith, H. H., Wan-Mohtar, W. A. A. Q. I., & Sukor, R. (2023). Roles of fermented plant-, dairy- and meat-based foods in the modulation of allergic responses. <i>Food Science and Human Wellness</i> , 12(3), 691–701. https://doi.org/https://doi.org/10.1016/j.fshw.2022.09.002 | 8.022 |
| 22. | Mohd Zaini, N. S., Lim, E. J., Ahmad, N. H., Gengatharan, A., Wan-Mohtar, W. A. A. Q. I., & Abd Rahim, M. H. (2023). The Review of Cooking, Drying, and Green Extraction Methods on General Nutritional Properties of Mealworms and Locusts. <i>Food and Bioprocess Technology</i> . https://doi.org/10.1007/s11947-023-03020-5 | 5.581 |
| 23. | Mohd Zaini, N. S., Idris, H., Yaacob, J. S., Wan-Mohtar, W. A., Putra Samsudin, N. I., Abdul Sukor, A. S., Lim, E. J., & Abd Rahim, M. H. (2022). The Potential of Fermented Food from Southeast Asia as Biofertiliser. In <i>Horticulturae</i> (Vol. 8, Issue 2). https://doi.org/10.3390/horticulturae8020102 | 2.923 |
| 24. | Ahmad Fauzi, N. S., Abd Rahim, M. H., Abdul Majid, N., Othman, R., & Yaacob, J. S. (2022). Evaluation of the effect of jasmonic acid elicitation on composition of pigments and biological activities in green callus of | 5.005 |

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| | neem (<i>Azadirachta indica</i>). In <i>Frontiers in Sustainable Food Systems</i> (Vol. 6). https://www.frontiersin.org/articles/10.3389/fsufs.2022.1017398 | |
| 25. | Hasan, H., Abd Rahim, M. H., Campbell, L., Carter, D., Abbas, A., & Montoya, A. (2022). Increasing Lovastatin Production by Re-routing the Precursors Flow of <i>Aspergillus terreus</i> via Metabolic Engineering. <i>Molecular Biotechnology</i> , 64(1), 90–99. https://doi.org/10.1007/s12033-021-00393-w | 2.86 |
| 26. | Hajar-Azhari, S., Hafiz Abd Rahim, M., Razid Sarbini, S., Muhialdin, B. J., Olusegun, L., & Saari, N. (2021). Enzymatically synthesised fructooligosaccharides from sugarcane syrup modulate the composition and short-chain fatty acid production of the human intestinal microbiota. <i>Food Research International</i> , 149, 110677. https://doi.org/https://doi.org/10.1016/j.foodres.2021.110677 | 7.425 |
| 27. | Shin Yee, C., Sohedein, M. N. A., Poh Suan, O., Weng Loen, A. W., Abd Rahim, M. H., Soumaya, S., Ilham, Z., & Wan-Mohtar, W. A. A. Q. I. (2021). The production of functional γ -aminobutyric acid Malaysian soy sauce koji and moromi using the trio of <i>Aspergillus oryzae</i> NSK, <i>Bacillus cereus</i> KBC, and the newly identified <i>Tetragenococcus halophilus</i> KBC in liquid-state fermentation. <i>Future Foods</i> , 4, 100055. https://doi.org/https://doi.org/10.1016/j.fufo.2021.100055 | - |
| 28. | Wan Abd Al Qadr Imad Wan-Mohtar, Sarina Abdul Halim-Lim, Nurul Zahidah Kamarudin, Muhamad Hafiz Abd Rahim, Zul Ilham, Fruiting-body-base flour from an Oyster mushroom waste in the development of antioxidative chicken patty <i>Journal of Food Science</i> 85(1), August 2020 | 2.479 |
| 29. | Hajar-Azhari, S., Rahim, M. H. A., Wan-Mohtar, W. A. A. Q. I., Sarbini, S. R., & Saari, N. (2020). Novel fructooligosaccharide conversion from sugarcane syrup using a specialised enzymatic pH-stat bioreactor. <i>Process Biochemistry</i> , 95, 55–63. https://doi.org/https://doi.org/10.1016/j.procbio.2020.04.031 | 2.952 |
| 30. | Norhidayah Mohd Taufek, Hanis Harith, Muhamad Hafiz Abd Rahim, Wan Abd Al Qadr Imad Wan-Mohtar. Performance of mycelial biomass and exopolysaccharide from Malaysian <i>Ganoderma lucidum</i> for the fungivore red hybrid <i>Tilapia</i> (<i>Oreochromis</i> sp.) in Zebrafish embryo. <i>Aquaculture Reports</i> 17 April 2020 | 2.289 |
| 31. | Sharmilla Ashokhan, Rashidi Othman, Muhamad Hafiz Abd Rahim, Jamilah Syafawati Yaacob, Effect of Plant Growth Regulators on Coloured Callus Formation and Accumulation of Azadirachtin, an Essential Biopesticide in <i>Azadirachta indica</i> . <i>March 2020 Plants</i> 9(3):352 | 2.762 |
| 32. | Wan Nusrah Wan Mansor, Nurul Shazini Ramli, Siti Hajar Azhari, Muhamad Hafiz Abd Rahim, Effects of Different Preservation Treatments on Nutritional Profile on Juices from Different Sugar Cane Varieties <i>Sains Malaysiana</i> . February 2020 49(2):283-291 | 0.643 |
| 33. | Abd Rahim MH, Lim EJ, Hasan H, Abbas A. The investigation of media components for optimal metabolite production of <i>Aspergillus terreus</i> ATCC 20542. <i>J Microbiol Methods</i> . 2019 Sep;164:105672 | 1.803 |

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| 34. | Hasan H, Abd Rahim MH, Campbell L, Carter D, Abbas A, Montoya A. Improved lovastatin production by inhibiting (+)-geodin biosynthesis in <i>Aspergillus terreus</i> . N Biotechnol. 2019 Sep 25;52:19-24 | 3.739 |
| 35. | Muhamad Hafiz Abd Rahim, Hanan Hasan, Elicia Jitming Lim, Phebe K. Samrani, Ali Abbas. Pretreatment Strategies to Improve Crude Glycerol Utilisation and Metabolite Production by <i>Aspergillus terreus</i> International Journal of Chemical Engineering 2019:1-6 | 1.877 |
| 36. | Siti Hajar-Azhari, Raudzah Shahrudin, Muhamad Hafiz Abd Rahim. The effect of heat treatment and sonication on physicochemical and colour attributes of yellow sugarcane juice. Malaysian Applied Biology 47(5):129-134 | - |
| 37. | Hasan H, Abd Rahim MH, Campbell L, Carter D, Abbas A, Montoya A. Overexpression of acetyl-CoA carboxylase in <i>Aspergillus terreus</i> to increase lovastatin production. N Biotechnol. 2018 Sep 25;44:64-71 | 3.739 |
| 38. | Siti Hajar-Azhari, Wan Abd Al Qadr Imad Wan-Mohtar, Safuan Ab Kadir, Muhamad Hafiz Abd Rahim, Nazamid Saari. Evaluation of a Malaysian soy sauce koji strain <i>Aspergillus oryzae</i> NSK for γ -aminobutyric acid (GABA) production using different native sugars. Food Science and Biotechnology, 2018, Volume 27, Issue 2, pp 479–488 | 0.888 |
| 39. | Rahim MHA, Hasan H, Harith HH, Abbas A. The effect of viscosity, friction, and sonication on the morphology and metabolite production from <i>Aspergillus terreus</i> ATCC 20542. Bioprocess Biosyst Eng. 2017 Dec;40(12):1753-1761 | 2.371 |
| 40. | Muhamad Hafiz Abd Rahim, Hanis H. Harith, Alejandro Montoya, Ali Abbas, Growth and lovastatin production by <i>Aspergillus terreus</i> under different carbohydrates as carbon sources, Biocatalysis and Agricultural Biotechnology, Volume 10, April 2017, Pages 379-385, ISSN 1878-8181, https://doi.org/10.1016/j.bcab.2017.04.011 . | 0.76 |
| 41. | Abd Rahim, M. H., Hasan, H., Montoya, A. and Abbas, A. (2015), Lovastatin and (+)-geodin production by <i>Aspergillus terreus</i> from crude glycerol. Eng. Life Sci., 15: 220–228. doi:10.1002/elsc.201400140 | 2.168 |
| 42. | Abd R, Hafiz M; Hasan, Hanan; Antonio, Bernadeth; Solchenbach, Sophie; Montoya, Alejandro and Abbas, Ali. The feasibility of lovastatin production from crude glycerol by using <i>aspergillus terreus</i> [online]. In: Chemeca 2012: Quality of life through chemical engineering: 23-26 September 2012, Wellington, New Zealand. Barton, A.C.T.: Engineers Australia, 2012 | - |
| 43. | Antonio, Bernadeth S; Abd R, Hafiz M; Solchenbach, Sophie; Montoya, Alejandro; Rollon, Analiza P; Siringan, Maria Auxilia T and Abbas, Ali. Biodiesel-derived crude glycerol for the fungal production of lovastatin [online]. In: Chemeca 2013 (41st : 2013 : Brisbane, Qld.). Chemeca 2013: Challenging Tomorrow. Barton, ACT: Engineers Australia, 2013: 657-662 | - |
| 44. | Rahsia Keenakan Rasa, Dewan Kosmik, Oktober 2016 | - |
| 45. | Diet Atkins : Baik Atau Buruk?, Dewan Masyarakat, 2017 | - |

