

CURRICULUM VITAE



A. BUTIR-BUTIR PERIBADI (<i>Personal Details</i>)			
Nama Penuh (<i>Full Name</i>)	Uswatun Hasanah Zaidan		Gelaran (<i>Title</i>): Associate Professor Dr.
No. MyKad/ No. Pasport (<i>Mykad No./ Passport No.</i>)	Warganegara (<i>Citizenship</i>) Malaysia	Bangsa (<i>Race</i>) Melayu	Jantina (<i>Gender</i>) Perempuan
Bidang Pengkhususan (<i>Specialized field</i>)	Food and Nutritional Biochemistry/ Functional Food/ Nutraceutical/ Biocatalysis/ Halal Science & Product Development		
Jawatan (<i>Designation</i>)	Pensyarah	Tarikh Lahir (<i>Date of Birth</i>)	7 th April 1981

Alamat Semasa (<i>Current Address</i>)	Jabatan/Fakulti (<i>Department/Faculty</i>)	E-mel dan URL (<i>E-mail Address and URL</i>)
No. 25, Jalan Dillenia 7, Nilai Impian, 71800 Nilai. Negeri Sembilan. Tel: 06-7948310	<p><i>Address 1:</i> Department of Biochemistry, Faculty of Biotechnology and Biomolecular Sciences, Universiti Putra Malaysia, 43400 UPM Serdang, Selangor, Malaysia.</p> <p><i>Address 2:</i> Laboratory of Halal Science Research, Halal Products Research Institute (IPPH), Universiti Putra Malaysia, 43400 UPM Serdang, Selangor, Malaysia.</p> <p>Tel: 03-9769 7620 Fax: 03-8943 0913</p>	<p><i>E-mail:</i> uswatun@upm.edu.my uswah704@gmail.com</p> <p>H/p: 013-3870291</p>

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>)
Postdoctoral Research Scheme	Division of Food Science, School of Biological Sciences, University of Nottingham, United Kingdom	2013-2015	Food Chemistry/ Biochemistry
Doctor of Philosophy (Best PhD Chemistry Award, 2011)	Department of Chemistry, Faculty of Science, Universiti Putra Malaysia	2008-2011	Biocatalysis
Master of Science	Department of Chemistry, Faculty of Science, Universiti Putra Malaysia	2004/05-2007	Biocatalysis
Bachelor of Science (Honours)	Department of Biochemistry, Faculty of Science and Environmental, Universiti Putra Malaysia	2001-2003	Biochemistry

C. KEAHLIAN PROFESIONAL SEMASA/SOSIAL (<i>Current Professional/Social Membership</i>)
<ul style="list-style-type: none"> • Principal Researcher, University Driven Research Program (UDRP-Halal Healthcare and Wellness), Halal Products Research Institute (IPPH), UPM (2024-present) • Editorial Board Member, International Journal of Food Science and Agriculture Technology (FSAT), Semarak Ilmu Publishing (2024-present) • Research Fellow (Science & Technology), Future Research Sdn. Bhd. (2025-2027) • Associate Researcher, Halal Products Research Institute (IPPH), UPM (2017-present) • Halal Science Strategic Group, Academy of Sciences Malaysia (ASM) (2017-present) • Member of Malaysian Society for Biochemistry and Molecular Biology (MSBMB) (2016-present)

D. TANGGUNGJAWAB PENGAJARAN DAN PENTADBIRAN SEMASA
(Current Teaching and Administration Responsibility)

Kursus Pengajaran (Teaching Course)	Jam Kredit (Credit hours)	Semester/Tahun (Semester/Year)
• Lipid and Membrane Metabolism (BCM3104)	3 + 0	Sem 2- 2011/2012
• Comprehensive Biochemistry I (BCH3001)	3 + 0	Sem 1- 2012/2013
• Comprehensive Biochemistry II (BCH3002)	3 + 1	Sem 1- 2012/2013
• Food Biochemistry (BCM4306)	3 + 0	Sem 1- 2012/2013
• Nutritional Biochemistry (BCM4306)	3 + 0	Sem 2- 2012/2013
• Food Biochemistry (BCH4304)-K1	3 + 0	Sem 1- 2015/2016
• Food Biochemistry (BCH4304)-K2	3 + 0	Sem 1- 2015/2016
• Biomolecules (BCH3101)	4 + 0	Sem 1- 2015/2016
• Protein and Nucleic Acid Metabolism (BCH3104)	3 + 0	Sem 2- 2015/2016
• Nutritional Biochemistry (BCH4305)	3 + 0	Sem 2- 2015/2016
• Industrial Training (BCH4901)	0 + 6	Sem 2- 2015/2016
• Analysis of Biomolecules (BCH3201)	1 + 1	Sem 1- 2016/2017
• Protein and Nucleic Acid Metabolism (BCH3104)	3 + 0	Sem 2- 2016/2017
• Nutritional Biochemistry (BCH4305)	3 + 0	Sem 2- 2016/2017
• Industrial Training (BCH4901)	0 + 6	Sem 2- 2016/2017
• Analysis of Biomolecules (BCH3203)	1 + 1	Sem 1- 2017/2018
• Food Biochemistry (BCH4304)-K1	3 + 0	Sem 1- 2017/2018
• Nutritional Biochemistry (BCH4305)	3 + 0	Sem 2- 2017/2018
• Food Biochemistry (BCH4304)-K1	3 + 0	Sem 1- 2018/2019
• Analysis of Biomolecules (BCH3203)-K1	1 + 1	Sem 1- 2018/2019
• Analysis of Biomolecules (BCH3201)-K2	1 + 1	Sem 1- 2018/2019
• Nutritional Biochemistry (BCH4305)	3 + 0	Sem 2- 2018/2019

• Analysis of Biomolecules (BCH3203)	1 + 1	Sem 1- 2019/2020
• Research Methodology (BBS5901)	3 + 0	Sem 1- 2019/2020
• Food Biochemistry (BCH4304)	3 + 0	Sem 1- 2019/2020
• Nutritional Biochemistry (BCH4305)	3 + 0	Sem 2- 2019/2020
• Food Biochemistry (BCH4304)	3 + 0	Sem 1- 2020/2021
• Analysis of Biomolecules (BCH3203)	1 + 1	Sem 2- 2020/2021
• Food Biochemistry (BCH4304)-K1	3 + 0	Sem 1- 2021/2022
• Analysis of Biomolecules (BCH3203)-K1	1 + 1	Sem 1- 2021/2022
• Research Methodology (BBS5901)	3 + 0	Sem 1- 2021/2022
• Nutritional Biochemistry (BCH4305)	3 + 0	Sem 2- 2021/2022
• Food Biochemistry (BCH4304)-K1	3 + 0	Sem 1- 2022/2023
• Food Biochemistry (BCH4304)-K2	3 + 0	Sem 1- 2022/2023
• Analysis of Biomolecules (BCH3203)-K1	1 + 1	Sem 1- 2022/2023
• Nutritional Biochemistry (BCH4305)	3 + 0	Sem 2- 2022/2023
• Food Biochemistry (BCH4304)-K1	3 + 0	Sem 1- 2023/2024
• Analysis of Biomolecules (BCH3204)-K1	2+ 1	Sem 1- 2023/2024
• Nutritional Biochemistry (BCH4305)	3 + 0	Sem 2- 2023/2024
• Biomolecules (BCH3107)	3 + 0	Sem 2- 2023/2024
• Food Biochemistry (BCH4304)-K1	3 + 0	Sem 1- 2024/2025
• Analysis of Biomolecules (BCH3204)-K1	2+ 1	Sem 1- 2024/2025
• Nutritional Biochemistry (BCH4305)	3 + 0	Sem 2- 2024/2025
• Food Biochemistry (BCH4304)-K1	3 + 0	Sem 1- 2025/2026
• Analysis of Biomolecules (BCH3204)-K1	2+ 1	Sem 1- 2025/2026

Pentadbiran (<i>Administration</i>) <ul style="list-style-type: none"> • Chairman of the Code of Practice and Program Accreditation (COPPA), Department of Biochemistry, Faculty of Biotechnology and Biomolecular Sciences, UPM (2024-present) • Principal Researcher of the University Driven Research Program (UDRP-Halal Healthcare and Wellness), Halal Products Research Institute, UPM (2024-present) • Committee Member of Food Security (Keterjaminan Makanan), Faculty of Biotechnology and Biomolecular Sciences, UPM (2024-present) • Head of Curriculum Committee (Undergraduate), Department of Biochemistry, Faculty of Biotechnology and Biomolecular Sciences, UPM (2024-present) • Member of the Curriculum Committee (Undergraduate), Faculty of Biotechnology and Biomolecular Sciences, UPM (2024-present) • Head of Academic Advisor, Department of Biochemistry, Faculty of Biotechnology and Biomolecular Sciences, UPM (2019-2023) 		

E. PENGALAMAN PEKERJAAN (*Employment Experience*)

Majikan (<i>Employer</i>)	Jawatan (<i>Designation</i>)	Tarikh lantikan - tamat (<i>Date start until ended</i>)
Department of Biochemistry, Faculty of Biotechnology and Biomolecular Sciences, Universiti Putra Malaysia (UPM).	Associate Professor	1 st July 2019 - present
	Senior Lecturer	1 st April 2012
Institute of Tropical Agriculture (ITA), Universiti Putra Malaysia	Research Officer	1 st September 2010 - 30 th March 2012
Institute of Bioscience (IBS), Universiti Putra Malaysia	Research Officer (Contract)	1 st April 2006 - 30 th August 2007
Department of Chemistry, Faculty of Science, Universiti Putra Malaysia (UPM).	Research Assistant	Jan - Jun 2004

F. KEMAHIRAN BAHASA (*Language Proficiency*)

Bahasa / <i>Language</i>	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					√
Lain-lain (<i>other</i>): <i>Arabic</i>		√			

G. PERSIDANGAN, SEMINAR DAN LATIHAN (*Conference, Seminar and Training, Invention*)

1. **Uswatun Hasanah Zaidan**, Clare Ting Siew Chin, Suhaili Shamsi and Wan Nur Ismah Wan Ahmad Kamil. Malaysia International Halal Research and Education Conference (MIHREC 2025), 19-22 September 2025, The Everly Putrajaya, Malaysia. **(Oral Presenter & Poster Judge)**
2. **Uswatun Hasanah Zaidan**, Shobha A/P Paramasivan, Suhaili Shamsi. 34th Intervarsity Biochemistry Seminar (IBS 2024). 7th December 2024, International Medical University (IMU), Bukit Jalil, Kuala Lumpur, **MALAYSIA. (Oral Presenter)**
3. **Uswatun Hasanah Zaidan**, Mohamad Raziq Irfan Redzuan, Kamalin Sofiya. MAHSA International Conference on Advances in Life Sciences and Engineering (MI-CALSE 2024). 25-26th October 2024, MAHSA University, Bandar Saujana Putra, Jenjarom, Selangor, **MALAYSIA. (Keynote Speaker)**
4. International Halal Product Development Conference (IHPDC 2024), 27th November 2024, Session II: Halal Healthcare and Wellness Products, Institut Penyelidikan Produk Halal, UPM **(Invited Judge)**
5. **Uswatun Hasanah Zaidan**, Nur Syazwani Kamaruzaman, Suhaili Shamsi, Farihin Azhari, Siti Salwa Abd. Gani. National Biotechnology Symposium 2023, 8-9th November 2023, Putrajaya Marriott Hotel, IOI Resort City, **MALAYSIA.**
6. Advanced High Performance Liquid Chromatography (HPLC) Workshop, 6-8th December 2023, Jabatan Biokimia, Fakulti Bioteknologi dan Sains Biomolekul, UPM
7. Siri Micro-teaching dan Portfolio Anugerah Fellowship Naib Canselori Kategori Pengajaran (AFNC-KP 2022), Kategori Pengajar Cemerlang, Kelompok Sains Tulen, Pusat Pembangunan dan Kecemerlangan Kepemimpinan Akademik (CADE-Lead), UPM **(Finalis AFNC-KP 2022)**
8. International University Carnival on E-Learning (IUCEL 2022) Proceedings, June-Julai 2022, Pusat Pembangunan dan Kecemerlangan Kepemimpinan Akademik (CADE-Lead), UPM **(Invited reviewer)**
9. **Uswatun Hasanah Zaidan**, Azrina Azlan, Farihin Azhari. 3rd Asia Skin Microbiome Congress, 13th-14th September 2022, Grand Copthorne Waterfront Hotel, **SINGAPORE. (Research & Industry Networking Meeting)**
10. Uswatun Hasanah Zaidan, Mohd. Badrin Hanizam Abdul Rahim. From Nutri-View to Prevalent Health Issues: An Immersive Learning Approach. *International Putra InnoCreative Carnival in Teaching & Learning (PICTL) 2022*, 25th-28th October 2022, Universiti Putra Malaysia. **MALAYSIA (Silver Medal Award @Putra InnoCreative Poster Competition)**
11. **Uswatun Hasanah Zaidan.** *International Conference on Industry-Academia*

Initiatives in Biotechnology and Chemistry (Virtual iCIABC 2021), 20th-21st December 2021, Faculty of Industrial Sciences and Technology, Universiti Malaysia Pahang. **MALAYSIA (Invited Scientific Reviewer)**

12. **Uswatun Hasanah Zaidan**, Mohd. Badrin Hanizam Abdul Rahim. Virtual Nutri-Engagement: An Immersive Learning Experience with Nutritional Division, Ministry of Health. *International Putra InnoCreative Carnival in Teaching & Learning (PICTL) 2021*, 21st-28th October 2021, Universiti Putra Malaysia. **MALAYSIA (Gold Medal Award @Putra InnoCreative Poster Competition)**
13. **Uswatun Hasanah Zaidan**. *Carnival of Research and Innovation (CRI 2021)*, 20th-21st September 2021, Research Management and Innovation Centre, Universiti Malaysia Kelantan. **MALAYSIA (Invited Judge)**
14. **Uswatun Hasanah Zaidan**, Mohammad Effendy Yaacob, Noor Fadzlinda Othman, Hanun Nadzirah. Bioactive compounds and Antioxidative Profiles of *Orthosiphon stamineous* (Misai Kucing) Extracts Grown under Solar Photovoltaic Panel. *5th International Conference on Agricultural and Food Engineering (CAFEi) 2021*, 3rd-4th February 2021. Kuala Lumpur. **MALAYSIA (Oral Presenter)**
15. **Uswatun Hasanah Zaidan**, Mohd. Badrin Hanizam Abdul Rahim and Nur Adeela Yasid. Nutritional Impacts: An Immersive Learning Experience with Ministry of Health. *International Putra InnoCreative Carnival in Teaching & Learning (PICTL) 2020*, 22nd-30th October 2020, Universiti Putra Malaysia. **MALAYSIA (Gold Medal Award @Putra InnoCreative Poster Competition)**
16. **Uswatun Hasanah Zaidan**, Aizul Nazrin Afnizar, Muhd Irfan Daniel Ismail, Muhd Naz Han Kamal and Daniel Hakeem Ismail. Projek Pelajar MRSM-SEM Type III. *Online JINM Showcase Digital (Projek Komuniti)*, 18th May 2020. Universiti Putra Malaysia. **MALAYSIA (Oral Presenter)**
17. **Uswatun Hasanah Zaidan**, Nur Liyana Abd Ghani, Mohd Badrin Hanizam Abd Rahim, Siti Salwa Abd Gani. Functional Characteristics of Banana Peels Dietary Fibre (BPDF) and Their Associated in Vitro Antidiabetic Properties. *2nd International Food Research Conference 2019*, 27-29th August 2019. Everly Hotel, Putrajaya. **MALAYSIA (Oral Presenter)**
18. Aizul Nazrin Afnizar, Muhd Irfan Daniel Ismail, Muhd Naz Han Kamal, Daniel Hakeem Ismail and **Uswatun Hasanah Zaidan**. Developing Anti-Obesity & Anti-Diabetic Agents from *Musa acuminata* & *Mangifera indica* Dietary Fibres for Reducing Lipid & Glucose Absorption. *Schoolwide Enrichment Model (SEM-PESTA TYPE III 2019)* Project with MRSM Kuala Berang, Terengganu. 24th June 2019. **MALAYSIA (Most Prestigious MRSM Project Award)**
19. Shahreena Amira Shahrin, Nurin Zulaikha Azmi, **Uswatun Hasanah Zaidan**, Nur Syuhada Zahari, Fatim Nor Amirah Jailani. Functional Nano-sized Eggshell for Calcium Fortified Food. *International STEM Olympiad ISTEMO (Global I-Lead STEM Camp 2018)*, 20-21 December 2018. Universiti Putra Malaysia. **MALAYSIA (Gold Award)**

20. **Uswatun Hasanah Zaidan**, Nor Aida Amran, Siti Salwa Abd Gani, Nur Izzati Mohd Zen. Evaluation of Solvent Effects on the Extraction of Phenolic Compounds and In Vitro Antidiabetic Potential of *Stevia rebaudiana* Extracts. *5th International Conference & Exhibition on Herbal and Traditional Medicine*, 5-6th November 2018. **LONDON, UNITED KINGDOM (Keynote Session Speaker)**

21. Farihin Azhari, **Uswatun Hasanah Zaidan**, Syahida Ahmad, Siti Salwa Abd Gani. Optimization Using Statistical Approach of Response Surface Methodology in The Synthesis of *Nigella Sativa* Oil-Based Ferulate Ester. *International Halal Ecosystem Conference (IHEC2018)*, 13-15 November 2018. Faculty of Science and Technology, UKM, Bangi, **MALAYSIA**

22. Nur Izzati Mohd Zen, **Uswatun Hasanah Zaidan**, Suhaili Shamsi, Siti Salwa Abd Gani, Izuan Effendi Halmi. Essential Oil Constituents Assessment and Antioxidant Profiles of *Stevia rebaudiana* Bertoni Leaves from Malaysia. *International Halal Ecosystem Conference (IHEC2018)*, 13-15 November 2018. Faculty of Science and Technology, UKM, Bangi, **MALAYSIA**

23. **Uswatun Hasanah Zaidan**, Nor Aida Amran, Suhaili Shamsi, Siti Salwa Abd Gani, Nur Izzati Mohd Zen. Biochemical Study of Phenolic Compounds and Steviol Glycoside from *Stevia rebaudiana* Extracts Associated with In Vitro Antidiabetic Potential. *International Conference on Biotechnology for the Wellness Industry (7th ICBWI)*, 27-29th November 2018. UTM, Kuala Lumpur, **MALAYSIA (Best Oral Presenter Award)**

24. Farihin Azhari, **Uswatun Hasanah Zaidan**, Syahida Ahmad and Siti Salwa Abd Gani. Optimization of *Nigella sativa* Oils-based Ferulate Ester using Response Surface Methodology. *International Conference on Biochemistry, Molecular Biology & Biotechnology (ICBMBB)*, 15-16th August 2018. Sheraton Puchong, Selangor, **MALAYSIA**

25. **Uswatun Hasanah Zaidan**, Noria Abdul Karim, Syahida Ahmad and Siti Salwa Abd Gani. Nutraceutical Evaluation and Antioxidative Capacity of Bean Seed Coats from Red Kidney Bean (*Phaseolus vulgaris*) and Chickpea (*Cicer arietinum*). *International Food Science and Agrotechnology Conference (IFoSAC)*, 7-9th August 2018. Kompleks Kuliah Berpusat, Universiti Malaysia Terengganu, **MALAYSIA. (Chairperson & Oral Presenter)**

26. **Uswatun Hasanah Zaidan**, Syahida Ahmad, Azizah Hamid and Muhammad Fahmi Mat Yusof. Subcritical CO₂ Extraction, Chemical Composition and Bioactivities of Essential Oil from *Stevia rebaudiana* Bertoni. *International Conference on Agriculture & Biotechnology (ICABT)*, 27-29th December 2017. Sunroute Plaza Hotel, Shinjuku, Tokyo, **JAPAN (Oral Presenter)**

27. **Uswatun Hasanah Zaidan**, Siti Nurhafamazmirza Maisarah, Muhammad Fahmi Mat Yusof, Siti Salwa Abd Gani and Suhaili Shamsi. Chemical Evaluation and Antioxidant Properties of Extracts and Essential Oil from *Stevia rebaudiana* Leaves. *International Conference on Recent Advancement in Science & Technology (ICORAST)*, 7-8th November 2017, Novotel Hotel, Melaka, **MALAYSIA. (Keynote Session Speaker)**

28. **Uswatun Hasanah Zaidan**, Muhammad Fahmi Mat Yusof, Syahida Ahmad and Azizah Hamid. Chemical Characterization of *Stevia rebaudiana* Essential Oil using Subcritical Carbon Dioxide (SC-CO₂) Extraction. *International Meeting & 42nd Annual Conference of the Malaysian Society for Biochemistry & Molecular Biology*, 16-17th August 2017, Pullman KL Bangsar Hotel, **MALAYSIA (Poster Presenter)**
29. Muhammad Fahmi Mat Yusof, **Uswatun Hasanah Zaidan**, Syahida Ahmad and Azizah Hamid. Extraction and Isolation of Bioactive Compounds from *Stevia rebaudiana* Essential Oil for their Antioxidant and Antimicrobial Potential. *6th International Conference on Biotechnology for the Wellness Industry (ICBWI)*, 16-17th August 2016, Institute of Bioproduct Development, UTM Johor, **MALAYSIA (Oral presenter)**
30. **Uswatun Hasanah Zaidan**. Biochemical Production of Fatty Acid Sugar-Based Biosurfactant (FASB) via Green Enzymatic Route as Potential Application. *Pharmaceutical Asia Pharma International Conference 2016*, 13-15th July 2016, Ramada Plaza Dual Sentral, Kuala Lumpur, **MALAYSIA. (Invited Speaker)**
31. **Uswatun Hasanah Zaidan**, Ni Yang, Heng Hui Gan and Ian D. Fisk. Optimising Consumers Quality Factors for A Bioactive Beverage. *International Conference on Biomedical and Health Science Research (ICBHSR)*, 25-27th January 2015, Putrajaya, Kuala Lumpur, **MALAYSIA (Poster presenter)**
32. Ni Yang, **Uswatun Zaidan**, Chujiao Liu, Heng Hui Gan and Ian D. Fisk. Correlation of analytic techniques (GC-MS and APCI-MS) with chemometrics to differentiate roast coffee aroma profiles. *The XIV Weurman Flavour Research Symposium*, 7-8th February 2014. **NOTTINGHAM, UNITED KINGDOM**
33. **Uswatun Hasanah Zaidan**, Ian D. Fisk, Ni Yang, and Heng Hui Gan. Physicochemical Attributes of Functional Coffee Crema using Principal Component Analysis (PCA). *Conference on Trends in Food Flavor*, 16-17th April 2015. University of Nottingham, **NOTTINGHAM, UNITED KINGDOM (Oral Presenter)**
34. **Uswatun Hasanah Zaidan**, Mohd Basyaruddin Abdul Rahman, Abu Bakar Salleh, Mahiran Basri and Siti Salhah Othman. Fatty Acid Sugar Ester Synthesis using Lipase Immobilised on Mica. *37th Annual International Conference of the Malaysian Society for Biochemistry & Molecular Biology*, 18-19th July 2012. Sime Darby Convention Centre, Kuala Lumpur, **MALAYSIA (Oral Presenter)**
35. Siti Salwa Abd Gani, Suhana Mustafa, Shakirah Arifin, Nor Fadzillah Mokhtar, **Uswatun Hasanah Zaidan**. Phase Behavior Study of Vegetables Oils with Tween85 and Tween80 in Emulsion System. *ISER - 108th International Conference on Agricultural and Biological Science (ICABS)*. 23rd-24th February, 2018. Mecca, **SAUDI ARABIA**.
36. Arief Huzaimi Md Yusof, Siti Salwa Abd Gani, **Uswatun Hasanah Zaidan** and Mohd Izuan Effendi Halmi, Azila Abdul Karim, Norliza Abdul Wahab.

Optimization of ultrasound-assisted extraction condition for polyphenol and flavonoid compound from Clone PBC 140 Malaysia Cocoa Shell (*Theobroma Cacao*) using Response Surface Methodology. *4th World Congress on Medicinal Plants and Natural Products Research*. 8th -9th August 2018. Osaka, **JAPAN**.

37. Asiah Abdullah, Siti Salwa Abd Gani, Taufiq Yap Yun Hin, Zaibunnisa Abdul Haiyee, **Uswatun Hasanah Zaidan**, Mohd Azlan Kassim and Mohd Izuan Effendi Halmi. Lipase-catalyzed synthesis and characterization of red pitaya (*Hylocereus polyrhizus*) seed oil esters. *International Conference on Chemical and Biochemical Engineering*, 15th – 16th June 2018, Mecca, **SAUDI ARABIA**.
38. Nur Royhaila Mohamad, Siti Salwa Abd Gani, Roswanira Abdul Wahab, **Uswatun Hasanah Zaidan**. Photoprotective Activities of Different Solvent Extraction of *Hibiscus Sabdariffa* by Ultraviolet Spectrophotometry. *3rd International Conference on Science and Natural Resources (ICSNR 2018)*. 1st-2nd April 2018. Kota Kinabalu, Sabah, **MALAYSIA**.
39. Siti Salwa Abd Gani, Siti Fatimah Balqis Jamaludin, **Uswatun Hasanah Zaidan** and Izuan Effendi Halmi. Modeling of Clay Body Wash Containing Pitaya (*Hylocereus polyrhizus*) Seed Oil Using Artificial Neural Networks. *3rd International Conference on Science and Natural Resources (ICSNR 2018)*. 1st-2nd April 2018. Kota Kinabalu, Sabah, **MALAYSIA**.
40. Siti Salwa Abd Gani, Siti Atikah Zulkifli, Wan Nadia Farisha Wan Mazlan, **Uswatun Hasanah Zaidan** and Izuan Effendi Halmi. Phase Behaviour Study of Oryza Sativa using Non-Ionic Surfactants. *3rd International Conference on Science and Natural Resources (ICSNR 2018)*. 1st-2nd April 2018. Kota Kinabalu, Sabah, **MALAYSIA**.
41. Siti Salwa Abd Gani, Asiah Abdullah, Taufiq Yap Yun Hin, Zaibunnisa Abdul Haiyee, **Uswatun Hasanah Zaidan**, Mohd Izuan Effendi Halmi Lipase-Catalyzed Synthesis of Red Pitaya (*Hylocereus Polyrhizus*) Seed Oil Esters for Cosmeceutical Purpose. *International Invention, Innovation and Design (IIIDUiTM 2018)*. 18th April 2018. Universiti Teknologi Mara Negeri Sembilan, **MALAYSIA. (Gold Medal)**
42. Nur Royhaila Mohamad, Siti Salwa Abd Gani, Roswanira Abd Wahab and **Uswatun Hasanah Zaidan**. Antioxidant, anti-wrinkle and tyrosinase inhibitory activities of roselle (*Hibiscus sabdariffa L.*) for cosmeceutical. *2nd International Conference on Pharma Sciences and Biotechnology (ICPSB 2018)*. 18th - 20th January 2018. Jeju, **SOUTH KOREA**.
43. Siti Salwa Abd Gani, Nor Fadzillah Mohd Mokhtar, **Uswatun Hasanah Zaidan**, Farrah Payyadhah Borhan, Khalijah Talha and Nur Fauwizah Azahar. Optimization of Moisturizing Clay Soap Containing Pitaya (*Hylocereus polyrhizus*) Seed Extract Using D-Optimal Mixture Experimental Design. *PACE International Conference on Science and Technology*. 25th - 27th July 2017. Four Points by Sheraton, Penang, **MALAYSIA**.

44. Nur Royhaila Mohamad, Siti Salwa Abd Gani, Roswanira Abdul Wahab and **Uswatun Hasanah Zaidan**. Phytochemical and antimicrobial activities of different solvent extracts of *Hibiscus sabdariffa*. *International Conference on Recent Advancements in Science and Technology (ICoRAST2017)*. 7-9th November 2017. Melaka, **MALAYSIA**.
45. Workshop on Statistical Tools for Scientific Research organized by Formulation and Applied Science (FAS group), 28th June 2018. Halal Products Research Institute (IPPH), Universiti Putra Malaysia, **MALAYSIA** (Facilitator)
46. ASM Halal Science Initiative Meeting, Academy of Sciences Malaysia, 6th June 2018. Level 20, West Wing, MATRADE Tower, Kuala Lumpur, **MALAYSIA** (Participant)
47. Seminar on Determination of Halal and Haram through Syariah and Scientific Methods, 2nd March 2018. Halal Products Research Institute (IPPH), Universiti Putra Malaysia, **MALAYSIA** (Participant)
48. Workshop Series on Halal Science Strategic Planning 2.0 with Academy of Sciences Malaysia (ASM), 21st February 2018. MARTRADE, Kuala Lumpur, **MALAYSIA** (Participant)
49. Seminar (Sharing talk) on “Immersive Learning through Cybergogy”, by Assoc. Prof. Dr Wan Zuhainis, 23rd January 2018. Faculty of Biotechnology and Biomolecular Sciences, Universiti Putra Malaysia, **MALAYSIA** (Participant)
50. 4th Enzyme Purification Workshop, 24-28th March 2016. Faculty of Biotechnology & Biomolecular Sciences, Universiti Putra Malaysia, **MALAYSIA** (Participant)
51. Training Course on Food Flavor, 13-15th April 2015. University of Nottingham, **NOTTINGHAM, UNITED KINGDOM**
52. Fatty Acid and Lipids-Chemistry and Analysis Course, 27-28th February 2014. **SCOTLAND, UNITED KINGDOM**.

H. SENARAI PENYELIDIKAN DAN PENERBITAN (*List of researches and publications – author (s), title, journal, volume, page and year published*)

<i>Journal</i>	<ol style="list-style-type: none"> 1. U.H. Zaidan, C.T.S. Chin, S. Shamsi and W.N.I.W.A. Kamil (2025). Antidiabetic Effect and Hypoglycemic Activity of <i>Nigella sativa</i> Oil (NSO) in the Hyperglycemia-Induced Zebrafish (<i>Danio rerio</i>) Embryo. <i>International Food Research Journal</i> (Under review) 2. U.H. Zaidan, N.S. Kamaruzaman, F. Azhari and S.S.A. Gani (2024). Anthocyanin stability and antioxidant capacity in <i>Clitoria ternatea</i> incorporated jelly. <i>Food Research</i>, (8): 59-66. 3. N.I.M. Zen, U.H. Zaidan, S.S.A. Gani, S. Shamsi, M. Hassan and M.N. Marikkar (2024). Exploring the Therapeutic Potential of
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Malaysian *Stevia rebaudiana* Bertoni Leaves Essential Oils: A Comprehensive Study on Cell Viability and Biological Effects for Topical Applications. *Journal of Medicinal Plants and By-Product*, (3): 504-512.

4. N.S. Ismail, **U.H. Zaidan**, S. Shamsi, S.S.A. Gani, and N. Elexson. (2024). Proximate Composition and Phytochemical Analysis of Malaysian *Liberica* sp. Coffee Bean and Its Pulp. *Pertanika Journal of Tropical Agricultural Science*, 47(2): 533-547.
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<i>Patent</i>	<p>Mohd Shukuri Mohamad Ali, Abu Bakar Salleh, Uswatun Hasanah Zaidan, Raja Noor Zaliha Raja Abd Rahman. A method to produce a synthetic flavour compound of ester. Malaysia Patent Filing. PI2017702045 (2017).</p> <p>Mohd Basyaruddin Abdul Rahman, Uswatun Hasanah Zaidan, Abu Bakar Salleh, Raja Noor Zaliha Raja Abd Rahman. An immobilised enzyme using a mica carrier. Malaysia Patent Application. PI2010004391 (2010).</p> <p>Uswatun Hasanah Zaidan, Siti Salwa Abd Gani, Suhaili Shamsi, Muhd Izuan Effendi Halmi, Nur Izzati Md Zen. Stevia oil-based nanoemulsion with wound healing properties (on-going)</p>
<i>Copyright</i>	Uswatun Hasanah Zaidan and Suhaili Shamsi. School holiday program module “The Biochemistry Art of Cheese Making and Fermentation” (2025)
<i>Book Chapter</i>	<p>©2019 Universiti Putra Malaysia Press (Print 2019) Perpustakaan Negara Malaysia This Catalogue is published in conjunction with :</p>

<p>&</p> <p><i>Archived Exhibition</i></p>	<p>Nature's Yield And Wonders of Art (NYAWA) 19 : FOOD Chapter 4: Health Horizon SweetLeaf</p> <p>Uswatun Hasanah Zaidan, Suhaili Shamsi, Dayang Moharina Mohamed, Fatin Nor Amirah Mohd. Jailani, Amelia Najiha Othman ISBN 978-967-960-472-6</p> <p>Nature (Aesthetic) - - Exhibitions. 2. Food - - Exhibitions Art and Science - - Exhibitions. I. Universiti Putra Malaysia. NYAWA '19 : FOOD Held at Galeri Serdang, Faculty of Design and Architecture, Universiti Putra Malaysia on 23 September – 31 December, 2019</p>
<p><i>UCTC-UPM E-Bulletin</i></p>	<p>Universiti Putra Malaysia Press (E-Bulletin, July-December 2020) UPM 'Nurtures' Society UPM High Impact Projects Page 14 Schoolwide Enrichment Model (SEM Type III)</p> <p>Assoc. Prof. Dr. Uswatun Hasanah Zaidan & Form 4 Students (MRSM Kuala Berang, Terengganu, Malaysia.) eISSN 2710-6659</p>

I. PROJEK/AKTIVITI PENYELIDIKAN (*Research Project/Activity*)

Tajuk Projek (<i>Project Title</i>)	Geran (<i>Grant</i>)	Jumlah (<i>Amount</i>)
<ul style="list-style-type: none"> Extraction of Essential Oil from <i>Stevia rebaudiana</i> by Subcritical CO₂ Method and Their Chemical Composition, In Vitro Antioxidant and Antimicrobial Activities - completed 	<p>Geran PUTRA- IPS (GPIPS 9471300) Feb 2016 – Feb 2018</p>	<p>RM 20,000</p>
<ul style="list-style-type: none"> Antioxidant Study of Enzymatic Synthesis of <i>Punica granatum</i> and <i>Nigella sativa</i> Oils-based Ferulate Esters - completed 	<p>Geran PUTRA- IPM (GPIPM 9473500) Mac 2016 – Mac 2018</p>	<p>RM 51,500</p>

<ul style="list-style-type: none"> Development and Characterization of FASE-based Nanoformulation containing Essential Oil Extracted from <i>Stevia rebaudiana</i> for Topical Application - completed 	<p>Geran PUTRA- IPS (GPIPS 9519400)</p> <p>Mac 2017 – Mac 2019</p>	RM 15,000
<ul style="list-style-type: none"> Mechanistic Insights on the Development of <i>Stevia rebaudiana</i> Bertoni (SrB) Essential Oil Nanoemulsion and its Effects on Wound Healing Study - completed 	<p>Geran PUTRA (GP 9631600)</p> <p>Apr 2018 – Jan 2022</p>	RM 50,000
<ul style="list-style-type: none"> Chemical Identification, Antioxidative and Antidiabetic Potential of <i>Pandanus amaryllifolius</i> Essential Oils from Different Location of Malaysia - completed 	<p>Geran PUTRA- IPS (GPIPS 9651300)</p> <p>June 2018 – March 2021</p>	RM 25,000
<ul style="list-style-type: none"> Investigating Antioxidant Capacity of <i>Clitoria ternatea</i> (Telang) Extracts and Its Effect on Skin Defence for Potential Cosmeceutical Properties 	<p>Geran PUTRA- IPS (GPIPS 9701100)</p> <p>July 2021 – Aug 2025</p>	RM 25,000
<ul style="list-style-type: none"> Optimized the extraction yield of <i>Hibiscus Sabdariffa</i> by statistical method and determine its antioxidant activities - completed 	<p>Geran PUTRA- IPS</p> <p>Apr 2018 – Apr 2020</p>	RM 25,000
<ul style="list-style-type: none"> Synthesis and Optimization of Pitaya Seed Oil Esters Nanoemulsion for Cosmeceutical Application - completed 	<p>Geran PUTRA- IPS</p> <p>Apr 2018 – Apr 2020</p>	RM 25,000
<ul style="list-style-type: none"> The Evaluation of Functional Cosmetic Properties Exhibited by The Underutilized Pitaya Peels for The Formulation of Skin Care Product 	<p>Geran PUTRA-Berimpak</p> <p>Sept 2017 – Aug 2019</p>	RM 150,000

- completed		
<ul style="list-style-type: none"> The Antioxidants and Functional Cosmeceuticals Properties of Leaves Extracts In Melastomataceae Family Species and its Potential for Stratum Corneum Applications 	FRGS Jan 2019 – Sept 2021	RM 78,200
<ul style="list-style-type: none"> Elucidating the mechanism of action of gut microbial short-chain fatty acid metabolites in regulating pancreatic β-cells function and its potential protection role against non-esterified fatty acid (NEFA) and cytokines-induced β-cells damage in vitro 	FRGS Jan 2019 – Sept 2021	RM 202,400
<ul style="list-style-type: none"> Photoluminescence and Electroluminescence Properties of Palm Oil for Organic Light Emitting Diode Emissive Layer 	FRGS Jan 2019 – Aug 2022	RM 94,000
<ul style="list-style-type: none"> Elucidation of anti-oxidant and anti-diabetic properties of pectin from Dragon fruit peel on high glucose-induced diabetic retinopathy in a zebrafish model. 	GP-IPM July 2022 – June 2024	RM 30,000
<ul style="list-style-type: none"> Immunomodulatory effects of <i>Mitragyna speciosa</i> Methanolic Extract (MSME) on cellular immunity investigated in a sheep red blood cells (SRBC)-induced delayed type hypersensitivity (DTH) in Balb/c mouse 	Geran PUTRA- IPS July 2022 – June 2024	RM 20,000
<ul style="list-style-type: none"> Development and Characterization of <i>Nigella sativa</i> Oil and Seed Cake enriched Skincare for Quality Enhancement in Soap Formulation 	Geran PUTRA- IPS June 2025 – May 2027	RM 25,000

J. PENYELIAAN PELAJAR SISWAZAH/PRASISWAZAH
(Postgraduate/Undergraduate Students Supervision)

Nama Pelajar (Name of students)	Program/Tahun (Programme/ Year)	Tajuk Penyelidikan (Research Title)
Graduated (Main SV):		
<ul style="list-style-type: none"> Nur Izzati Mohamad Zen 	PhD 2019-2025	Development of <i>Stevia rebaudiana</i> Bertoni (SrB) Essential Oil Nanoemulsion and its Effects on Wound Healing In Vitro and In Vivo Studies
<ul style="list-style-type: none"> Nurul Ain Hasya Azhar 	MSc 2022-2023/24	Optimization of the Antioxidant Potential of Cocoa Pod Husk and Its Functional Cosmeceutical Properties
<ul style="list-style-type: none"> Nurhuda Syahirah Ismail 	MSc 2022-2023/24	Nutraceutical Evaluation, Antioxidative Protective Effects and Cytotoxicity study of Coffee Bean and Pulp from <i>Liberica sp.</i>
<ul style="list-style-type: none"> Nur Syuhada Zahari 	MSc 2018-2022	Biofunctional Characteristics and Antioxidant Capacity of Dietary Fiber from <i>Ziziphus mauritiana</i> (Bidara) Associated with Antidiabetic Effect
<ul style="list-style-type: none"> Fatin Nor Amirah Mohd. Jailani 	MSc 2018-2021	Nutraceutical Evaluation and Antioxidant Properties of Malaysian Underutilized Fruit of <i>Ziziphus mauritiana</i> (Bidara)
<ul style="list-style-type: none"> Farihin Azhari 	MSc 2016-2019	Optimization of Lipase-catalyzed Production of <i>Nigella sativa</i> Oil-based Ferulate using Response Surface Methodology and Antioxidant Activities
<ul style="list-style-type: none"> Muhammad Fahmi Mat Yusof 	MSc 2015-2018	Chemical Characterization and Antioxidant Potential of Essential Oil from <i>Stevia rebaudiana</i> Bertoni Extracted using Subcritical CO ₂ Method
On-going (Main SV):		
<ul style="list-style-type: none"> Mafisah Umairah Khairuddin 	PhD 2020-present	Optimization of Oligosaccharides Extraction and Profile Analysis from Selected Fruit Peels
<ul style="list-style-type: none"> Nurul Adlin Syahirah Mohd 	PhD 2020- present	Prebiotic Assessment of Oligosaccharides from Selected Fruit Peels

Rosdi		
<ul style="list-style-type: none"> • Farihin Azhari 	PhD 2021- present	Antioxidant Capacity of <i>Clitoria ternatea</i> (Telang) Extracts and Its Effect on Skin Defence for Cosmeceutical
<ul style="list-style-type: none"> • Amirah Shariff 	PhD 2021- present	Evaluation and Characterization of Cocoa Bean Shell (<i>Theobroma cacao</i> L.) Bioactive Compounds for Development of Nutraceutical Products
Graduated: (Co-SV)		
<ul style="list-style-type: none"> • Hidayat Mohd Yusof 	PhD 2018-2023	Biosynthesis of Zinc Oxide Nanoparticles (ZnONPs) by Indigenous Bacteria from Metal Rich Soil in Malaysia as Feed Additives in Broiler Chicken
<ul style="list-style-type: none"> • Arief Huzaimi Md Yusof 	PhD 2018-2023	Enhancement of Ultrasound-Assisted Extraction of Antioxidants from Cocoa Shell and Its Cosmeceutical Properties
<ul style="list-style-type: none"> • Nur Royhaila Mohamad 	PhD 2016-2019	Optimization and Characterization of Nanoemulsion Incorporated <i>Hibiscus sabdariffa</i> for Cosmeceuticals Applications
<ul style="list-style-type: none"> • Ramya Vijayakumar 	PhD 2016-2019	The Evaluation of The Functional Cosmetic Properties of The Underutilized Red Pitaya Peels and It's Application in The Development of Anti-Aging Nanoemulsion for Stratum Corneum
<ul style="list-style-type: none"> • Nur Fauwizah Azahar 	PhD 2017-2019	Antioxidants and Functional Cosmeceuticals Properties In Melastomataceae Family Species (<i>M. Malabathricum</i> , <i>M. Decemfidum</i> and <i>M. Hirta</i>) Leaves Extract and Its Potential In Nano-Emulsion System For Stratum Corneum Applications
<ul style="list-style-type: none"> • Nur Izzati Mohamad Zen 	MSc 2014-2016	Development of Soybean Waste Nutrition Formulation for Dietary Supplement
<ul style="list-style-type: none"> • Adekola Khadijat Adetola 	MSc 2015-2017	Phenolic Content, Antioxidative Properties and Anti-Diabetic Potentials of Coconut Testa and Varieties of Bean Seed Coat
<ul style="list-style-type: none"> • Khurul Ain 	MSc	Development of <i>Phaleria macrocarpa</i> (Scheff.) Boerl Fruits Using Response

Mahzir	2015-2018	Surface Methodology Focused on Phenolics, Flavonoids and Antioxidant Properties
On-going (Co-SV):		
• Siti Atikah Zulkifli	PhD 2018-present	Optimization and Evaluation of <i>Hylocereus polyrhizus</i> (Red Pitaya)-Based Colour Pigment for Cosmeceutical Application
• Intan Nur Balqis M. Khalid Wong	MSc 2018- present	Optimization Study on Antioxidant in <i>Pereskia Bleo Kunth</i> in Malaysia Using Response Surface Methodology
• Ezzah Abd. Manan	MSc 2018- present	Characterization and Development of Red Dragon Fruit Powder as Functional Beverages for Nutraceutical Industry
• Nur Asyiqin Ramli	MSc 2018- present	Optimisation and Characterization of Date's Extract (<i>Phoenix dactylifera</i>) for Nutraceutical Application
• Siti Fatimah Balqis Jamaludin	MSc 2017- present	The Development of Phytochemical Screening and Optimization Extraction Process of <i>Actinodaphne Sesquipedalis</i> (Lauraceae) Leaves By Response Surface Methodology on Anti-Oxidant Activity
• Suzziyana Hosni	MSc 2018-2020	Evaluation of Date (<i>Phoenix dactylifera</i> L.) Seed on Its Nutraceutical Properties
• Adlina Selamat	MSc 2018-2020	Formulation and Characterization of Biodegradable Plate from Coconut Husk
• Muhammad Yusuf Abdul Rashid	MSc 2018-2020	Antidiabetic and Antioxidant Capacities of Local Banana Peels Extract by Using Subcritical Water Extraction Technique
Final Year Project: (Graduated)		
• Ng Wei Ting	Bachelor 2020-2021	Enhanced Antioxidant Potential Of <i>Orthosiphon stamineus</i> (Misai Kucing) Using Ultrasound-Assisted Extraction Method
• NurulAin Hasya Azhar	Bachelor 2020-2021	Nutraceutical Assessment of Antioxidant and Antidiabetic Profile of Commercial Pure And Premix Coffee Products

• Hanun Nadzirah Anuarul Azhar	Bachelor 2019-2020	Antioxidative Profiles and Characterization of the Selected Bioactive Compounds from <i>Orthosiphon stamineus</i> (Misai Kucing) Grown under Solar Photovoltaic Panel
• Nurul Farah Nabila Mohd Sukeri	Bachelor 2019-2020	Phytochemical Analysis and In Vitro Antioxidant Potential of Malaysian <i>Murraya koenigi</i> Linn (Curry Leaf)
• Nor Azila Ayop Khan	Bachelor 2019-2020	Phenolic Content, Amylase and Glucosidase Inhibitory Activity of Malaysian <i>Spondias dulcis</i> (Kedondong) Associated with Antidiabetic Properties
• Nur Liyana Abd Ghani	Bachelor 2018-2019	Functional Characterization of Banana Peels Fiber and Its Antidiabetic Potential
• Nur Hazwani	Bachelor 2018-2019	Effects of <i>Stevia rebaudiana</i> Extraction Parameters on Antioxidative Properties using PCA Analysis
• Nor Aida Amran	Bachelor 2017-2018	Evaluation of Solvent Effects On The Extraction of Phenolic Compounds and In Vitro Antidiabetic Effects of <i>Stevia rebaudiana</i> Leaf Extracts
• Faeznur Suriani M. Lana	Bachelor 2017-2018	Nutritional Evaluation and Antioxidant Potential of Bidara (<i>Zizyphus mauritiana</i>) Fruits and Leaves
• Ahmad Syuaib Yusof	Bachelor 2017-2018	Antioxidant and Antidiabetic Properties of Selected Malaysian Honeys
• Siti Nurhafama	Bachelor 2016-2017	Phytochemical Screening and Antioxidant Activity of <i>Stevia rebaudiana</i> Extracts and Essential Oil
• Olivia Julan Augustine	Bachelor 2016-2017	Extraction, Isolation and Physicochemical Characterization of Stevioside from <i>Stevia rebaudiana</i>
• Nur Dieana Mohd Ismail	Bachelor 2016-2017	Antimicrobial Potential of <i>Stevia rebaudiana</i> Bertoni Leaves Extracts and Essential Oil
• Ahmad Zuhair Kamal	Bachelor 2015-2016	Optimization of <i>Stevia rebaudiana</i> Bertoni Extraction and Its Antioxidant Potential
• Noria Abd. Karim	Bachelor 2015-2016	Compositional, Nutritional and Biofunctional Characteristics of Bean Seed Coats of Red Kidney Bean (<i>Phaseolus</i>

<ul style="list-style-type: none"> • Nur Nadia Mohd Iskandar 	Bachelor 2015-2016	<i>vulgaris</i>) and Chickpea (<i>Cicer arietenum</i>)
<ul style="list-style-type: none"> • Nur Izzati Mohamad Zen 	Bachelor 2012-2013	Compositional, Nutritional and Biofunctional Characteristics of Coconut Testa
<ul style="list-style-type: none"> • Lim Yit Foong 	Bachelor 2012-2013	Enzymatic Synthesis of Flavour Esters using Immobilized Lipases
		Effect of Various Matrices and Modification on Lipase Immobilization

K. ANUGERAH (Award)

Anugerah	Badan Penganugerahan	Jenis Anugerah	Tahun
Program KPT Inspirasi: 1 IPT 1 Daerah	Pusat Transformasi Komuniti Universiti (UCTC), UPM	Pengiktirafan Projek Komuniti	2025
Anugerah Fellowship Naib Canselori Kategori Pengajaran (Finalis AFNC-KP 2022)	Pusat Pembangunan dan Kecemerlangan Kepemimpinan Akademik (CADe-Lead), UPM	Kategori Pengajar Cemerlang, Kelompok Sains Tulen	2023
Silver Medal (PICTL2022) From Nutri-View to Prevalent Health Issues: An Immersive Learning Approach	Pusat Pembangunan dan Kecemerlangan Kepemimpinan Akademik (CADe-Lead), UPM	Putra InnoCreative Poster Competition	2022
Anugerah JINM Berimpak Tinggi (<i>Schoolwide Enrichment Model@MRSM Gemencheh</i>)	Pejabat JINM, Fakulti Bioteknologi dan Sains Biomolekul, UPM	Projek Komuniti Terbaik	2021
<i>Gold Medal</i> (PICTL2021) Virtual Nutri-Engagement: An Immersive Learning Experience with Nutritional Division (Ministry of Health)	Pusat Pembangunan dan Kecemerlangan Kepemimpinan Akademik (CADe-Lead), UPM	Putra InnoCreative Poster Competition	2021
Anugerah Perkhidmatan Cemerlang (APC2021)	Pejabat Pendaftar, UPM	Majlis Gemilang Putra	2021
<i>Gold Medal</i> (PICTL2020)	Pusat Pembangunan dan	Putra InnoCreative	2020

Nutritional Impact: An Immersive Learning Experience with Nutritional Division (Ministry of Health)	Kecemerlangan Kepemimpinan Akademik (CADe-Lead), UPM	Poster Competition	
L. KERJA PERUNDINGAN (<i>Consultation Work</i>)			
Projek>Nama Tugas (<i>Project/Name of Task</i>)	Tempat (<i>Place</i>)	Tempoh Tugas (<i>Date/Period of Task</i>)	
<u>School Project Advisor:</u>			
<ul style="list-style-type: none"> • Programme of Schoolwide Enrichment Model (SEM), Sekolah MRSM Gemencheh (Mini project “<i>Eggshell as An Alternative Calcium Source</i>”) • Programme of Schoolwide Enrichment Model (SEM), Sekolah MRSM Kuala Berang, Terengganu (Mini project “<i>Antiobesity and Antidiabetic Potential of Dietary Fibers from Plant Waste Residue</i>”) 	<p>Laboratory of FAMTech, Faculty of Biotechnology and Biomolecular Sciences, UPM</p> <p>Laboratory of FAMTech, Faculty of Biotechnology and Biomolecular Sciences, UPM</p>	<p>August 2017 – December 2017</p> <p>April 2019 – August 2019</p>	
<u>School Mentor/Facilitator:</u>			
Science, Technology, Engineering & Mathematic (STEM) mentoring project with Sekolah Angkat (SMK Saujana Utama, Sg. Buloh)	SMK Saujana Utama, Sg. Buloh, Selangor (Sekolah Angkat)	January 2018 – present	
<u>ASM Strategic Team Planner:</u>			
Halal Science Initiative Meeting on Strategic Planning 2.0 with Academy of Science Malaysia (ASM)	Academy of Science Malaysia (ASM), MARTRADE Tower, Kuala Lumpur.	October 2017 – present	
<u>Research Networking:</u>			
UPM-University of Nottingham (UoN) Research Collaboration	UPM-UoN, MYS-UK	January 2018 – present	
<u>Industrial Networking:</u>			

<ul style="list-style-type: none"> Al-Baladul Amin Trading Sdn Bhd., Pusat Industri Ringan (PIRF). National Sport Institute, Bukit Jalil, Kuala Lumpur. Tropical Fruits Farming, Saliran Mampan Sdn. Bhd. <i>Stevia & Roselle</i> Syarikat Koperasi Warisan Munshi (KOWARIS) 	<p>FELDA Jengka 2, Bandar Jengka, Pahang.</p> <p>Bukit Jalil, Kuala Lumpur.</p> <p>Syarikat Saliran Mampan Sdn. Bhd., Raub, Pahang.</p> <p>Syarikat Koperasi Warisan Munshi (KOWARIS), Setiawangsa, Kuala Lumpur.</p>	<p>April 2022 – present</p> <p>April 2021-2022</p> <p>July 2018 – 2019</p> <p>November 2015 – 2018</p>
M. KHIDMAT AWAM DAN PENGIKTIRAFAN (<i>Public Service and Recognition</i>)		
Nama/Maklumat Tugas (<i>Name/Information of Responsibility</i>)		Tarikh Tugas (<i>Date/Period of Task</i>)
<u>Community Network</u>		
<ul style="list-style-type: none"> Ketua Projek Komuniti (<i>Knowledge Transfer Grant Scheme (KTGS)</i>), UPM Pemindahan Ilmu Khasiat Bioaktif Tumbuhan Aromatik kepada Produk Detergen & Aditif Makanan di Kalangan Kariah Serdang Ketua Projek Komuniti Kilat FBSB Aplikasi Khasiat Bioaktif Pandan kepada Makanan Aditif Halalan Thoyyiban Fakulti Bioteknologi dan Sains Biomolekul, UPM 		<p>Mac 2025- Mac 2026</p> <p>Oktober 2024</p>
<u>Invited Journal Reviewer</u>		
<ul style="list-style-type: none"> Food Research <i>Determination of ethanol in import and local prepared vinegar for halal in accordance with Shafi'i school of jurisprudence</i> Food Research <i>Formulation and characterization of polyherbal anti-acne gel containing Citrus aurantifolia and Aloe barbadensis extracts</i> Food Research <i>Greener approaches to improve phenolic acid composition and antioxidant activity of different cultivation methods of Zingiber officinale Roscoe extracts</i> 		<p>Aug 2022</p> <p>Aug 2022</p> <p>July – Aug 2022</p>

<ul style="list-style-type: none"> • IUCEL 2022 Proceedings <i>Producing Theatre for A Live Online Audience: The Pov (Point Of View) Technique To Simulate Audience Interactivity</i> 	June – July 2022
<ul style="list-style-type: none"> • Malaysian Journal of Syariah & Law <i>3D Bio-Printed Halal Food Products: A Halal Forensics Review.</i> 	Apr 2022
<ul style="list-style-type: none"> • United Scientific Group <i>Biochemical Study on the Anti-Hyperglycemic Effects of Coconut Testa (Cocos nucifera L.) and Red Kidney Bean (Phaseolus vulgaris) Seed Coat in Streptozotocin-Induced Diabetic Rats</i> 	Dec 2021 – Jan 2022
<ul style="list-style-type: none"> • iCIABC 2021 <i>Effect of Gibberellic Acid And Eggshells On Hylocereus Polyrhizus</i> 	Sept 2021
<ul style="list-style-type: none"> • Indonesian Journal of Chemistry <i>Flavonoid Extraction from Moringa oleifera using Sequential Combination of Microwave and Ultrasonic-Assisted Extraction Method and Application as Bio-antioxidant</i> 	May 2021
<ul style="list-style-type: none"> • Evidence-based Complementary and Alternative Medicine (EBCAM) <i>Experimental gastroprotective potential of the dry hydroalcoholic extract from flowers of Tagetes erecta L., a useful medicinal plant in gastrointestinal diseases</i> 	Aug 2021
<ul style="list-style-type: none"> • Nusantara Bioscience <i>Antioxidant, antibacterial and Fractional Inhibitory Index (FICI) of ethanolic extract of Melastoma malabathricum leaves with amoxicillin against pathogenic bacteria</i> 	July 2021
<ul style="list-style-type: none"> • Bioanalysis and Agricultural Biotechnology (BAB) <i>Fighting coronaviruses with natural polyphenols</i> 	July 2021
<ul style="list-style-type: none"> • Malaysian Applied Biology Journal <i>Carotenoid Pigments from Selected Green and Blue-Green Algae Species Cell Culture as Potential Halal Food Colorants</i> 	December 2021
<ul style="list-style-type: none"> • Waste and Biomass Valorization <i>Valorization of Mexican Ricinus communis L. leaves as a source of minerals and antioxidant compounds</i> 	May – Jun 2020
<ul style="list-style-type: none"> • Malaysian Journal of Biochemistry & Molecular Biology 	

<p><i>Synthesis and antimicrobial activity of new quaternary ammonium salt derived from natural amino acids</i></p>	Jan – Feb 2020
<ul style="list-style-type: none"> • Indian Journal of Natural Products and Resources <i>Nutritional composition, bioactive compounds and free radical scavenging activity of wheatgrass.</i> 	Jan – Feb 2020
<ul style="list-style-type: none"> • Food Research <i>Knowledge, use of complementary alternative medicine and health-related quality of life among cardiovascular disease patients</i> 	April – May 2019
<ul style="list-style-type: none"> • Biocatal & Agri Biotech <i>Properties of Bromelain Extract from Different parts of the Pineapple variety Morris</i> 	March – April 2019
<ul style="list-style-type: none"> • Journal of Engineering (UKM) <i>Evaluation of Physicochemical Profiles of Trigona sp. from Various Districts of Johor</i> 	February – March 2019
<ul style="list-style-type: none"> • Biocatal & Agri Biotech <i>Inhibition of lipoxygenases and cyclooxygenases by Momordica charantia extract</i> 	January – February 2019
<ul style="list-style-type: none"> • Asia Pacific J Mol Bio & Biotech <i>Improvement of microbiological quality, antioxidant content and shelf life of jujube (Ziziphus mauritiana Lamk.) fruit by gamma irradiation</i> 	December 2018 – January 2019
<ul style="list-style-type: none"> • Pertanika Journal of Scholarly Research Review <i>Stingless Bee Rearing and Colony Splitting A Brief Review</i> 	November – December 2018
<ul style="list-style-type: none"> • Journal of Traditional and Complementary Medicine <i>Vasculoprotective Effects of Centella asiatica, Justicia gendarussa, and Imperata cylindrical Decoction via the NOXx-ROS-NF-kB pathway in Spontaneously Hypertensive Rats</i> 	October – November 2018
<ul style="list-style-type: none"> • Indonesian J. of Chemistry <i>Optimisation and Characterisation on Enzymatic Synthesis of Betulinic Acid Amide in Organic Solvent by Response Surface Methodology (RSM)</i> 	April – May 2018
<ul style="list-style-type: none"> • Malaysian J. of Microbiology <i>Antibacterial Activity and Toxicity of Duckweed, Lemna minor L. (Arales: Lemnaceae) from Malaysia</i> 	June – July 2018
<ul style="list-style-type: none"> • Medical and Clinical Reviews 	Feb – March 2017

<p><i>Pharmaceutical Developability of Clinically Relevant Flavonoid like Curcumin</i></p> <ul style="list-style-type: none"> • Insights in Enzyme Research <i>Water-Retaining Polymers in Organic Solvent Increase Lipase Activity for Biodiesel Synthesis</i> • Industrial Crops and Products: <i>Chemical composition, antioxidant, antimicrobial and haemolytic activities of essential oil from Baccharis trinervis (Lam.) Pers. (Asteraceae)</i> 	<p>Feb – March 2017</p> <p>Jan – March 2015</p>
<p><u>Book Chapters Reviewer:</u></p> <ul style="list-style-type: none"> • <i>The Response Surface Methodological Approach Optimizing Enzymatic Reactions: Design, Analysis and Interpretations</i>, Penerbit UTM Press, Johor. (Chapter I–V, pg 1–35) 	<p>March – April 2016</p>
<p><u>External Thesis Examiner:</u></p> <ul style="list-style-type: none"> • Final Year Project “<i>Antiulcer Properties of Melicope Induced by Ulcerogens In Cell Culture</i>” by Nurul Jannah Zahraa Badrul Zaman, UCSI University, Kuala Lumpur • MSc Thesis: <i>Isolation and characterization of angiotensin converting enzyme (ACE) inhibitory compounds and antioxidant activities of Tacca integrifolia</i> 	<p>June – Sept 2012</p> <p>May – July 2012</p>
<p><u>Invited Media Speaker “Slot Professional @IKIM”</u></p> <ul style="list-style-type: none"> • “<i>Meriahkan Bahan Bioaktif Dalam Juadah Rumah Terbuka</i>” Pusat IKIM, Kuala Lumpur. 	<p>5 Mac 2025</p>
<p><u>Invited Panel MyHalal TV1</u></p> <ul style="list-style-type: none"> • “<i>Diet Rasulullah & Nutrisi</i>” Angkasapuri, Kuala Lumpur. 6-7pm Monday. 	<p>10th Nov 2019</p>
<p><u>Evaluator for Animal Study Ethic</u></p> <ul style="list-style-type: none"> • Sugar content in Kelulut Bee Honey (invited by FSTM) 	<p>Aug 2020</p>
<p><u>SEM Project Leader:</u></p> <ul style="list-style-type: none"> • Programme of Schoolwide Enrichment Model (SEM), MRSM Kuala Berang, Terengganu (Mini project) 	<p>April 2019 - August 2019</p>

<p><i>“Antiobesity and Antidiabetic Potential of Dietary Fibers from Plant Waste Residue”</i>)</p> <ul style="list-style-type: none"> • Achievement: The Best Award for SEM Project 	
<p><u>SEM Project Leader:</u></p> <ul style="list-style-type: none"> • Programme of Schoolwide Enrichment Model (SEM), MRSM Gemenchah (Mini project <i>“Eggshell as An Alternative Calcium Source”</i>) • Achievement: 2nd Place, InnoTVET Competition, UPSI & Silver Medal, KLESF Competition, UTAR 	<p>August 2017 - December 2017</p>
<p><u>STEM-UPM Camp Project Leader:</u></p> <ul style="list-style-type: none"> • International STEM Olympiad ISTEMO (Global I-Lead Science Camp (MRSM Gemenchah) (Mini project <i>“Functional Nano-sized Eggshell for Calcium Fortified Chocolate Cake”</i>) • Achievement: Gold Award 	<p>15-21 December 2018</p>
<p><u>STEM Carnival (Facilitator, Speaker & Exhibitor)::</u></p> <ul style="list-style-type: none"> • Science, Technology, Engineering & Mathematic Exhibition, SMK Saujana Utama, Sg. Buloh : Specific Topic of Nutrition Science • Community Programme: Science Carnival, Sek. Keb. Kampung Rahmat, Parlimen Setiu, Terengganu. • STEM Carnival, SMK Bandar Baru Seri petaling, Kuala Lumpur. 	<p>25-26 January 2018</p> <p>27th March 2016</p> <p>12th July 2023</p>
<p><u>PICTL: Teaching & Learning Innovation Poster Competition, organized by CADE</u></p> <ul style="list-style-type: none"> • <i>Gold Medal</i> (PICTL2020) Nutritional Impact: An Immersive Learning Experience with Nutritional Division (Ministry of Health) • <i>Gold Medal</i> (PICTL2021) Virtual Nutri-Engagement: An Immersive Learning Experience with Nutritional Division (Ministry of Health) • Silver Medal (PICTL2022) From Nutri-View to Prevalent Health Issues: An Immersive Learning Approach 	<p>22-30 October 2020</p> <p>21-28 October 2021</p> <p>25-28 October 2022</p>

<p><u>Invited/ Keynote Speaker:</u></p> <ul style="list-style-type: none"> • MAHSA International Conference on Advances in Life Sciences and Engineering (MI-CALSE 2024), MAHSA University, Bandar Saujana Putra, Jenjarom, Selangor, MALAYSIA. (Keynote Speaker) • 7th International Conference on Biotechnology for Wellness Industry (ICBWI2018), 27-28 Nov 2018, UTM, Kuala Lumpur. Biochemical Evaluation of <i>Phenolic Compounds and Steviol Glycoside Associated with Antidiabetic Potential</i> (Best Oral Presenter Award) • 5th International Conference & Exhibition on Herbal and Traditional Medicine, 5-6th November 2018. London, United Kingdom. <i>Evaluation of Solvent Effects on the Extraction of Phenolic Compounds and In Vitro Antidiabetic Potential of Stevia rebaudiana Extracts</i> (Keynote Forum Speaker) • International Conference on Recent Advancement in Science and Technology (ICORAST), Novotel Hotel, Melaka. <i>Chemical Evaluation and Antioxidant Properties of Extracts and Essential Oil from Stevia rebaudiana Leaves</i> (Keynote Session Speaker) • Asia Pharma International Conference, Ramada Plaza Dual Sentral, Kuala Lumpur. <i>Biochemical Production of Fatty Acid Sugar-based Biosurfactant As Potential Pharmaceutical</i> (Invited Speaker) 	<p>25-26th October 2024</p> <p>27-28th November 2018</p> <p>5-6th November 2018</p> <p>13-15th July 2016</p> <p>13-15th July 2015</p>
<p><u>Conference Session Chairperson:</u></p> <ul style="list-style-type: none"> • 5th International Conference & Exhibition on Herbal and Traditional Medicine, London, United Kingdom • International Food Science and Agrotechnology Conference (IFoSAC), Kompleks Kuliah Berpusat, Universiti Malaysia Terengganu. • International Conference on Recent Advancement in Science and Technology (ICORAST), Novotel Hotel, Melaka. • 2nd Biotech UPM-Prince of Songkla University (PSU) Joint Seminar, Faculty of Biotechnology & Biomolecular Sciences, UPM. 	<p>5-6th November 2018</p> <p>7-9th August 2018</p> <p>7-8th November 2017</p> <p>13th August 2015</p>

<ul style="list-style-type: none"> International Conference on Biomedical and Health Research (ICBHSR2015), Everly Hotel, Putrajaya. 	25-27 th January 2015
<u>Invited Scientific Committee:</u> <ul style="list-style-type: none"> Scientific Reviewer Committee, ICIAB 2021 Scientific Committee Member, International Conference on Biotechnology for the Wellness Industry (7th ICBWI), Institute of Bioproduct Development, UTM. Scientific Committee Member, International Postgraduate Symposium on Biotechnology (IPSB), Institute of Bioproduct Development, UTM. 	<p>2021</p> <p>2018-2019</p> <p>2019</p>
<u>PIBG Community:</u> <ul style="list-style-type: none"> Committee Member (Academic Development) of <i>Persatuan Ibu Bapa Guru (PIBG) SMKA Maahad Hamidiah Kajang</i> Committee Member (Communication and Network) of <i>Persatuan Ibu Bapa Guru (PIBG) SMKA Maahad Hamidiah Kajang</i> Committee Member (Academic Development) of <i>Persatuan Ibu Bapa Guru (PIBG) Sek Keb Bandar Bukit Mahkota, Bandar Bukit Mahkota, Bangi.</i> 	<p>2022-2023</p> <p>2021-2022</p> <p>2017-2019</p>