CURRICULUM VITAE

BUTIR-BUTIR PERIBADI (Personal Details)			
Nama Penuh (Full Name)	**EZZAT BINTI MOHAMAD AZMAN**		Gelaran (Title): **DR.**
No. MyKad / No. Pasport (Mykad No. /Passport No.) **851017-35-5066**	Warganegara (Nationality) Malaysia **MALAYSIA**	Bangsa (Race) **MALAY**	Jantina (Gender) **FEMALE**
Jawatan (Designation)	**SENIOR LECTURER**	Tarikh Lahir (Date of Birth)	**17 October 1985**
H-index	**13 (Scopus)** **14 (Google Scholar)**	Citations	**490 (Scopus)** **634 (Google Scholar)**

Alamat Semasa (Current Address)	**Jabatan/Fakulti (Department/Faculty)**	**E-mel dan URL** **(E-mail Address and URL)**
No.5, Jalan 15/5G, 43650, Bandar Baru Bangi, Selangor, Malaysia	**Department of Food Technology, Faculty of Food Science and Technology, Universiti Putra Malaysia, 43400, Serdang, Selangor, Malaysia**	**ezzat@upm.edu.my**

B. KELAYAKAN AKADEMIK (Academic Qualification)

Nama Sijil / Kelayakan **(Certificate / Qualification obtained)**	**Nama Sekolah Institusi** **(Name of School / Institution)**	**Tahun** **(Year obtained)**	**Bidang pengkhususan** **(Area of Specialization)**
Degree of Doctor of Philosophy (PhD)	**University of Reading, UK**	**2019**	**Food Processing and Technology**
Master of Science	**Universiti Putra Malaysia**	**2014**	**Food Processing and Technology**
Bachelor's Degree	**University of Yamanashi, Japan**	**2009**	**Biotechnology**

C. KEMAHIRAN BAHASA (Language Proficiency)

Bahasa / Language	**Lemah** **Poor(1)**	**Sederhana** **Moderate (2)**	**Baik** **Good (3)**	**Amat Baik** **Very good (4)**	**Cemerlang** **Excellent (5)**
English				√	
Bahasa Melayu					√
Japanese			√		

D. PENGALAMAN SAINTIFIK DAN PENGKHUSUSAN
(Scientific experience and Specialisation)

Organization	**Position**	**Start Date**	**End Date**	**Expertise**
International Technical Committee ISO/TC 34/AHG 2 – Food Products (Lead by Japan)	**Technical Committee**	**September 2025**	**On Going**	**Functional Food**
Technical Committee on Beverages and Beverages Products (NSC 21/TC 5)	**Technical Committee**	**August 2024**	**On Going**	**Beverage Products**
Discover Food Journal	**Guest Editor**	**October 2025**	**July 2026**	**Anthocyanins and Polyphenols in Food Systems**

Discover Industrial Chemistry and Materials	Guest Editor	December 2025	December 2027	Anthocyanins and Polyphenols in Food Systems

E. PEKERJAAN (Employment)

Majikan/Employer	Jawatan/Designation	Jabatan/Department	Tarikh lantikan/ Start Date	Tarikh tamat / Date Ended
Altera Corporation, Penang	Japanese Translator	Translation	July 2009	May 2011
Faculty Food Science and Technology, Universiti Putra Malaysia	Tutor	Food Technology	May 2011	December 2018
Faculty Food Science and Technology, Universiti Putra Malaysia	Senior Lecturer	Food Technology	January 2019	Present

F. ANUGERAH DAN HADIAH (Honours and Awards)

Name of awards	Title	Award Authority	Award Type	Year
	Fundamental Research Grant Scheme (FRGS)	Ministry of Higher Education Malaysia	Research Grant (RM 101,900)	2020-2024
	Geran Inisiatif Putra Muda (GP-IPM)	Universiti Putra Malaysia	Research Grant (RM 46,000)	2020-2023
	International Research Collaboration	Valent Biosciences, Libertyville, Illinois, USA	International Industrial Grant (RM 16,566)	2022
	International Research Collaboration	Valent Biosciences, Libertyville, Illinois, USA	International Industrial Grant (RM 20,000)	2023
	International Research Collaboration	Valent Biosciences, Libertyville, Illinois, USA	International Research Grant (RM 23,100)	2024-2026
	Geran Putra Siswazah (GP-IPS)	Universiti Putra Malaysia	Research Grant (RM 20,000)	2024-2026
	Putra Initiative Grant (GPI)	Universiti Putra Malaysia	Research Grant (RM 6,000)	2024-2025
	Product Development and Branding Program	Department of Agriculture, Ministry of Agriculture and Food Security Malaysia	Research Grant (RM 25,200)	2025-2026
	International Research Collaboration	US Blueberry Council	International Research Collaboration (RM 10,175.00)	2025
Non-Academic Awards	Anugerah Perkhidmatan Cemerlang (2024)	Universiti Putra Malaysia		2024
Awards of Merit	The 4th International Joint Symposium on Agriculture and Food Security	School of Agro-Industry, Mah Fah Luang University	Best Presentation Award (Giroon ljod)	2024
	Third International Food Research Conference 2024	Faculty of Food Science and Technology, UPM	Consolation Prize, Student Poster Presenter Award	2024

			(Giroon Ijod)	
	Third International Food Research Conference 2024	**Faculty of Food Science and Technology, UPM**	**3rd Prize (Bronze), Student Poster Presenter Award (Nur Izzati Mohamed Nawawi)**	**2024**
	Dewina Award	**Faculty of Food Science and Technology, UPM**	**First Prize (Wan Nur Balqis Faalihah)**	**2024**

G. SENARAI PENERBITAN (Publication Identity)	
Database	**ID**
Scopus	**Ezzat Mohamad Azman, Scopus ID: 57574580800**
ORCID	**orcid.org/0000-0003-2035-4466**
Google Scholar	**Ezzat Mohamad Azman**
ResearchGate	**Ezzat Mohamad Azman**
LinkedIn	-

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

JOURNALS

1. Ijod, G., Nawawi, N. I. M., Qoms, M. S., Fitry, M. R. I., Abd Rahim, M. H., Charalampopoulos, D., ... & ***Azman, E. M.** (2025). Synergistic effects of intermolecular copigmentation and high-pressure processing on stabilizing mangosteen pericarp anthocyanins. *Food Chemistry*, 143888. **(10% Q1)** https://doi.org/10.1016/j.foodchem.2025.143888
2. Ijod, G., Nawawi, N. I. M., Sulaiman, R., Ismail-Fitry, M. R., Adzahan, N. M., Anwar, F., & ***Azman, E. M.** (2024). Elevating anthocyanin extraction from mangosteen pericarp: A comparative exploration of conventional and emerging non-thermal technology. *Food Chemistry: X*, 24, 101882. **(10% Q1)** https://doi.org/10.1016/j.fochx.2024.101882
3. Jafri, N. I. S., Adzahan, N. M., **Azman, E. M.,** Juhari, N. H., & Subha, S. T. (2025). Rheological and textural characterisation of high-pressure processed ready-to-drink dysphagia-friendly beverages. *Innovative Food Science & Emerging Technologies*, 104356. **(Q1)** https://doi.org/10.1016/j.ifset.2025.104356
4. Nawawi, N. I. M., Ijod, G., Abas, F., Ramli, N. S., Mohd Adzahan, N., & ***Mohamad Azman, E.** (2023). Influence of Different Drying Methods on Anthocyanins Composition and Antioxidant Activities of Mangosteen (*Garcinia mangostana* L.) Pericarps and LC-MS Analysis of the Active Extract. *Foods*, 12(12), 2351. **(Q1)** https://doi.org/10.3390/foods12122351
5. **Azman, E. M.,** Nor, N. D. M., Charalampopoulos, D., & Chatzifragkou, A. (2022). Effect of acidified water on phenolic profile and antioxidant activity of dried blackcurrant (*Ribes nigrum* L.) pomace extracts. *LWT*, 154, 112733. **(Q1)** https://doi.org/10.1016/j.lwt.2021.112733
6. Senevirathna, S. S. J., Ramli, N. S., **Azman, E. M.**, Juhari, N. H., & Karim, R. (2021). Optimization of the Drum Drying Parameters and Citric Acid Level to Produce Purple Sweet Potato (*Ipomoea batatas* L.) Powder Using Response Surface Methodology. *Foods*, 10(6), 1378. **(Q1)** https://doi.org/10.3390/foods10061378
7. Ramlan, N. A. F. M., **Mohamad Azman, E**., Muhammad, K., Jusoh, A. Z., Johari, N. A., Yusof, Y. A., & Zawawi, N. (2023). Physicochemical Homogeneity of Stingless Bee Honey (Heterotrigona itama) Produced in the West Coast, East Coast and Inland Area of Peninsular Malaysia. *Journal of the Science of Food and Agriculture.* **(Q1)** https://doi.org/10.1002/jsfa.13067
8. **Ezzat, M. A.**, Zare, D., Karim, R., & Ghazali, H. M. (2015). Trans-and cis-urocanic acid, biogenic amine and amino acid contents in *ikan pekasam* (fermented fish) produced from Javanese carp (*Puntius gonionotus*) and black tilapia (*Oreochromis mossambicus). Food Chemistry*, 172, 893-899. **(Q1)** https://doi.org/10.1016/j.foodchem.2014.09.158
9. Hasanah, N. N., **Mohamad Azman, E.**, Rozzamri, A., Zainal Abedin, N. H., & Ismail-Fitry, M. R. (2023). A Systematic Review of Butterfly Pea Flower (*Clitoria ternatea* L.): Extraction and Application as a Food Freshness pH-Indicator for Polymer-Based Intelligent Packaging. Polymers, 15(11), 2541. **(Q1)** https://doi.org/10.3390/polym15112541

	10. Foong, H. L., Sulaiman, R., **Azman, E. M.**, Ashari, R., Sarıcaoğlu, F. T., Langowski, H. C., & Hanani, Z. N. (2025). Development and characterisation of polylactic acid/cinnamon bark oil films: Phenolic migration into various food simulants. *Food Packaging and Shelf Life*, *48*, 101455. **(10% Q1)** https://doi.org/10.1016/j.fpsl.2025.101455 11. Yusof, F. A. M., **Azman, E. M.,** Adzahan, N. M., & Yusof, N. L. (2025). The influence of exogenous melatonin treatment on quality, nutritional profile, and antioxidant system of fresh-cut carambola during cold storage. *Journal of Agriculture and Food Research*, *19*, 101704. **(Q1)** https://doi.org/10.1016/j.jafr.2025.101704 12. Ijod, G., Fatinah Mesran, N., Mohamed Nawawi, N. I., Ismail-Fitry, M. R., Abd Rahim, M. H., Mohd Adzahan, N., & ***Mohamad Azman, E.** (2026). Enhancing the stability of anthocyanins: Effects of encapsulation and drying in black grape juice powder. *Italian Journal of Food Science*, *38*(1), 250-269. **(Q2)** https://doi.org/10.15586/ijfs.v38i1.3062 13. Pattiram, P. D., Suleiman, N., Abas, F., **Azman, E. M.,** & Chong, G. H. (2025). Assessing Desiccated Coconut as Co-Extractant for Flavonoid Recovery from Propolis with Supercritical CO2. *Journal of Food Process Engineering*, *48*(11), e70240. **(Q2)** https://doi.org/10.1111/jfpe.70240 14. Ijod, G., Nawawi, N. I. M., Sulaiman, R., Khalid, N. I., Anwar, F., Adzahan, N. M., & ***Azman, E. M.** (2025). Inactivation of polyphenol oxidase and peroxidase activity in mangosteen pericarp via blanching: correlation between anthocyanins and enzyme activities. *International Journal of Food Science and Technology*, *60*(1), vvae010. **(Q2)** https://doi.org/10.1093/ijfood/vvae010 15. Maryam Adilah, Z. A., Nur Hanani, Z. A., **Ezzat, M. A.**, Nor Asma, A. R., & Noranizan, M. A. (2024). Impact of Ultrasound-Assisted Extraction on Physical Properties, Antioxidant Activity, and Colorimetric pH-Response of Blackcurrant Pomace Extract. *ACS Food Science & Technology*, *4*(11), 2645-2654. **(Q2)** https://doi.org/10.1021/acsfoodscitech.4c00486 16. Ijod, G., Nawawi, N. I. M., Anwar, F., Rahim, M. H. A., Ismail-Fitry, M. R., Adzahan, N. M., & ***Azman, E. M.** (2024). Recent microencapsulation trends for enhancing the stability and functionality of anthocyanins: a review. *Food Science and Biotechnology*, 1-26. **(Q2)** https://doi.org/10.1007/s10068-024-01603-2 17. Nawawi, N. I. M., Ijod, G., Senevirathna, S. S. J., Aadil, R. M., Yusof, N. L., Yusoff, M. M., ... & ***Azman, E. M.** (2023). Comparison of high pressure and thermal pasteurization on the quality parameters of strawberry products: a review. *Food Science and Biotechnology*, 1-19. **(Q2)** https://doi.org/10.1007/s10068-023-01276-3 18. Mohd Yusof, F. A., **Azman, E. M.**, Mohd Adzahan, N., & Yusof, N. L. (2023). Effect of vacuum impregnation with melatonin, γ-aminobutyric acid, and oxalic acid on chilling injury and quality of carambola. *International Journal of Food Science & Technology*, 58(12), 6432-6444. **(Q2)** https://doi.org/10.1111/ijfs.16755 19. **Azman, E. M.**, Yusof, N., Chatzifragkou, A., & Charalampopoulos, D. (2022). Stability enhancement of anthocyanins from blackcurrant (*Ribes nigrum* L.) pomace through intermolecular copigmentation. *Molecules*, 27(17), 5489. **(Q2)** https://doi.org/10.3390/molecules27175489 20. **Azman, E. M.,** House, A., Charalampopoulos, D., & Chatzifragkou, A. (2021). Effect of dehydration on phenolic compounds and antioxidant activity of blackcurrant (*Ribes nigrum* L.) pomace. *International Journal of Food Science & Technology*, 56(2), 600-607. **(Q2)** https://doi.org/10.1111/ijfs.14762 21. **Azman, E.**, Charalampopoulos, D., & Chatzifragkou, A. (2020). Acetic acid buffer as extraction medium for free and bound phenolics from dried blackcurrant (*Ribes nigrum* L.) skins. *Journal of Food Science*. **(Q2)** https://doi.org/10.1111/1750-3841.15466 22. Jamaluddin, F., Mohd Adzahan, N., **Azman, E. M.**, Mohamad, A., Yusof, N. L., & Sulaiman, A. (2021). A Review of Clean-Label Approaches to Chilli Paste Processing. *International Journal of Food Science & Technology*. **(Q2)** https://doi.org/10.1111/ijfs.15293 23. Pattiram, P. D., Abas, F., Suleiman, N., **Mohamad Azman, E.,** & Chong, G. H. (2022). Edible oils as a co-extractant for the supercritical carbon dioxide extraction of flavonoids from propolis. *Plos one*, 17(4), e0266673. **(Q2)** https://doi.org/10.1371/journal.pone.0266673 24. Loh, M. Y., Adzahan, N. M., **Azman, E. M.**, Koh, S. P., & Yusof, N. L. (2024). Enhancing cold tolerance and quality characteristics of *Carica papaya* Linn through the application of 1-

	methylcyclopropene, geranium and lavender oil. *International Journal of Food Science & Technology*. **(Q2)** https://doi.org/10.1111/ijfs.17070 25. Mahooti, M., Safaei, F., Mousavian, Z., Samimiazad, A., Bakhtiyarizadeh, M., Emadi, A., Babae, L., Hassani, F.S., Eskandari, A., **Azman, E.M.** and Zare, D., 2026. Potential of yeast probiotics as immunomodulators: a new frontier in cancer management. *Future Microbiology*, pp.1-13. **(Q3)** https://doi.org/10.1080/17460913.2026.2624283 26. Ijod, G., Nawawi, N. I. M., Sulaiman, R., Adzahan, N. M., Anwar, F., & ***Azman, E. M.** (2024). Blanching-Induced Changes in Polyphenol Oxidase, Antioxidants and Phenolic Profile of Mangosteen Pericarp. *Food Technology and Biotechnology*, *62*(4), 465-479. **(Q3)** https://doi.org/10.17113/ftb.62.04.24.8513 27. Ijod, G., Musa, F. N., Anwar, F., Suleiman, N., Adzahan, N. M., & ***Azman, E. M.** (2022). Thermal and Non-thermal Pre-treatment Methods for the Extraction of Anthocyanins: A Review. *Journal of Food Processing and Preservation*, e17255. (**Q3**). https://doi.org/10.1111/jfpp.17255 28. Othman, N., Chong, G. H., **Azman, E. M.,** & Suleiman, N. (2022). Effect of process variables in supercritical carbon dioxide extraction of tocotrienols from hydrolyzed palm fatty acid distillate (PFAD). *Journal of Food Processing and Preservation*, e16533. **(Q3)** https://doi.org/10.1371/journal.pone.0266673 29. Senevirathna, S. S. J., Ramli, N. S., **Azman, E. M.**, Juhari, N. H., & Karim, R. (2022). Production of innovative antioxidant-rich and gluten-free extruded puffed breakfast cereals from purple sweet potato (*Ipomoea batatas* L.) and red rice using a mixture design approach. *Journal of Food Processing and Preservation*, *46*(7), e16666. **(Q3)** https://doi.org/10.1111/jfpp.16666 30. Ismail, N. H. S., Nawawi, N. I. M., Ijod, G., Anzian, A., Ismail-Fitry, M. R., Ahmad, N. H., ... & ***Azman, E. M.** (2024). Shelf life and quality assessment of pasteurised red dragon fruit (*Hylocereus polyrhizus* L.) purée: Comparative study of high-pressure and thermal processing. *International Food Research Journal*, 31(2). **(Q4)** https://doi.org/10.47836/ifrj.31.2.22 31. Senevirathna, S. S. J., Ramli, N. S., **Azman, E. M.**, Juhari, N. H., & Karim, R. (2023) Optimisation of extrusion conditions for production of antioxidant-rich extruded breakfast cereals from purple sweet potato (*Ipomoea batatas* L.) and red rice using response surface methodology. *International Food Research Journal*. **(Q4)** https://doi.org/10.47836/ifrj.30.2.15 32. OTHMAN, N., HEAN, C. G., **AZMAN, E. M.**, & SULEIMAN, N. (2023). CO-SOLVENT SELECTION FOR TOCOTRIENOL EXTRACTION FROM PALM FATTY ACID DISTILLATE USING SUPERCRITICAL CARBON DIOXIDE. 6 Persiaran Institusi, Bandar Baru Bangi 43000 Kajang, Selangor, Malaysia Tel: 603-8769 4400, 35(3), 467-475. **(Q4)** https://doi.org/10.21894/jopr.2022.0071 33. Saravanan, S., Abdullah, N. A., Hasanah, N. N., **Azman, E. M.**, Abedin, N. H. Z., & Ismail-Fitry, M. R. (2024). Development of Semolina Starch/Agar-Based Intelligent Films by Incorporating Butterfly Pea Flower Anthocyanins to Monitor the Freshness of Prawns. Sains Malaysiana, 53(1), 87-98. **(Q4)** http://doi.org/10.17576/jsm-2024-5301-07 34. En, C. L., Nawawi, N. I. M., Ijod, G., Hasanah, N. N., Abedin, N. H. Z., Rahman, Q., Ismail-Fitry, M. R., & ***Azman, E. M.** (2025). Potato starch/agar-based intelligent films infused with dried blackcurrant pomace anthocyanins for freshness monitoring of freshwater prawns. International Food Research Journal, 32(3), 762-775. **(Q4)** 35. Juhari, N. I. M., Nurhayati, Y., Huat, T. J. Y., **Azman, E. M.**, & Abd Ghani, A. (2025). A review: amino acids, biogenic amines, and microbial diversity in traditional asian fermented shrimp-based products. *Journal of Tropical Resources and Sustainable Science (JTRSS)*, *13*(2), 390-403. **(Scopus)** https://doi.org/10.47253/jtrss.v13i2.1957 36. Hasanah, N. N., **Azman, E. M.**, Rozzamri, A., Abedin, N. H. Z., & Ismail-Fitry, M. R. (2025). Development of pH indicator film containing butterfly pea flower (*Clitoria ternatea* L.) anthocyanin using locust bean gum/unbleached wheat flour matrix. *Next Materials*, *9*, 101208. **(Scopus)** https://doi.org/10.1016/j.nxmate.2025.101208 37. Yunus, M. S. A. M., Hasanah, N. N., **Azman, E. M.**, Sumarto, S., Bakar, J., & Ismail-Fitry, M. R. (2025). Development of pH Indicator Film Containing Butterfly Pea Flower (*Clitoria ternatea* L.) Extract for Monitoring Sardines and Catfish Freshness During Chilled Storage. *Malaysian Applied Biology*, *54*(3), 99-109. **(Scopus)** https://doi.org/10.55230/mabjournal.v54i3.3362 38. Abdullah, N. A., Hean, C. G., **Azman, E. M.,** & Abedin, N. H. Z. (2025). Evaluation of Butterfly Pea (*Clitoria ternatea*) Extract with Different Ethanol-Water Solutions for Potential Natural

Colorant Indicator. *Food Science and Engineering*, 263-275. **(Scopus)** https://doi.org/10.37256/fse.6220256856

39. Nawawi, N. I. M., Khushairi, N. A. A. A., Ijod, G., & ***Azman, E. M.** (2025). Extraction of Anthocyanins and Other Phenolics from Dried Blackcurrant (*Ribes nigrum* L.) Pomace via Ultrasonication. *Sustainable Chemistry for the Environment*, 100208. **(Scopus)** https://doi.org/10.1016/j.scenv.2025.100208
40. Ahmad Danial, A.N., Ismail, N.A., Nor-Khaizura, M.A.R., **Azman, E.M.**, Noranizan, M.A. & Ismail-Fitry, M.R. (2024). The combined effect of ultrasound treatment and papain on the quality properties of beef. *Food Research*, *8*(7), 8-15. **(Scopus)**
41. ***Ezzat, M.A.**, Abetra, K., Noranizan, M.A. & Yusof, N.L. (2020). Production and properties of spray dried *Clinacanthus nutans* using modified corn starch as drying agent. *Food Research*, 4(5), 1700–1709. **(Scopus)** https://doi.org/10.26656/fr.2017.4(5).20
42. ***Ezzat, M. A.**, Ghazali, M. H., Roselina, K., & Zare, D. (2021). Organic acid composition and consumer acceptability of fermented fish produced from black tilapia (*Oreochromis mossambicus*) and Javanese carp (*Puntius gonionotus*) using natural and acid-assisted fermentation. *Food Research*, 5(2), 262-271. **(Scopus)** https://doi.org/10.26656/fr.2017.5(2).583
43. ***Azman, E.M.**, Zare, D., Nurhayati, Y., Karim, R., & Ghazali, M.H. (2024). Physicochemical properties, urocanic acid and biogenic amine contents of blackpomfret (*Parastromateus niger*) as affected by fermentation times. *Food Research*, 8(2), 92-104. **(Scopus)** https://doi.org/10.26656/fr.2017.8(2).275
44. Hamzah, N., Ramli, N. S., Mat Deris, I. H., Moses, C., & ***Azman, E. M.** (2024). Effect of Preharvest Treatment Using Jasmonic Acid and Methyl Jasmonate on the Physicochemical Properties and Antioxidant Activities of Red-fleshed Dragon Fruit (*Hylocereus polyrhizus* L.). *Pertanika Journal of Tropical Agricultural Science*, *47*(2). **(Scopus)**
45. Nuraisyah, Z., ***Ezzat, M. A.**, Radhiah, S., & Prima, L. (2021). The effects of heat treatment and modified atmosphere packaging on the storage stability of noni (*Morinda citrifolia* L.) fruit. *Food Research*. **(Scopus)**
46. Chan, H. Y., Rukayadi, Y., **Azman, E. M.**, Ashaari, R., & Halim Lim, S. A. (2024). Microbiological, Phytochemical Constituents, and Antioxidant Properties of Fermented Green Robusta Coffee Beans. *Pertanika Journal of Tropical Agricultural Science*, 47(2). **(Scopus)**
47. Chan, H. Y., Rukayadi, Y., **Azman, E. M.**, Ashari, R., & Lim, S. A. H. (2024). Physicochemical Properties and Sensory Acceptability of Fermented Roasted Robusta Coffee (*Coffea canephora* L.) Beans. *Journal of Engineering and Technological Sciences*, 56(3), 389-403. **(Scopus)**
48. Yunus, M. S. A. M., Hasanah, N. N., **Azman, E. M.**, Sumarto, S., Bakar, J., & Ismail-Fitry, M. R. (2025). Development of pH Indicator Film Containing Butterfly Pea Flower (*Clitoria ternatea* L.) Extract for Monitoring Sardines and Catfish Freshness During Chilled Storage. *Malaysian Applied Biology*, *54*(3), 99-109. **(Scopus)** https://doi.org/10.55230/mabjournal.v54i3.3362
49. Hasanah, N. N., **Azman, E. M.**, Rozzamri, A., Abedin, N. H. Z., & Ismail-Fitry, M. R. (2025). Development of pH indicator film containing butterfly pea flower (*Clitoria ternatea* L.) anthocyanin using locust bean gum/unbleached wheat flour matrix. *Next Materials*, *9*, 101208. **(Scopus)** https://doi.org/10.1016/j.nxmate.2025.101208
50. Zainuddin, N., Khalid, N. I., Mohsin, A. Z., **Azman, E. M.,** Mahmud, N. K., Rashid, A., & Abd Rahim, M. H. (2024). Physicochemical, Microbiological, and Sensory Properties of Almond Milk Yogurt-Like Products with Varied Concentrations of Tapioca Starch as Stabilizer. *Journal of Biochemistry, Microbiology and Biotechnology*, 12(SP1), 90-92. **(MYCITE)**
51. Gengan, G., Sha'ari, A. A. M., Khalid, N. I., Mohsin, A. Z., **Azman, E. M.**, Mahmud, N. K., ... & Abd Rahim, M. H. (2024). Properties of Malaysian Coconut-Breed (MATAG, MAWA, and Pandan) Yogurts: A Preliminary Analysis of Chemical, Microbiological, and Sensorial Characteristics. *Journal of Biochemistry, Microbiology and Biotechnology*, 12(SP1), 93-95. **(MYCITE)**
52. Gengan, G., Abdullah, A. H., **Azman, E. M.**, Khalid, N. I., Mahmud, N. K. M., Abd Rahim, M. H., & Sukor, R. (2024). Physicochemical Properties, Nutritional Composition, and Microbial Profiles of Locally Fermented Yogurt Drink (Lassi) across Three Restaurants in Malaysia. *Journal of Biochemistry, Microbiology and Biotechnology*, 12(SP1), 46-49. **(MYCITE)**
53. Nurhayati, Y., **Azman, E. M.**, Ghani, A. A., Yusof, N., & Tang, J. Y. H. (2021). The effect of cellulase hydrolyzed chitosan on the degree of deacetylation, solubility and viscosity of chitosan oligosaccharides. *Bioscience Research*. **(Non-citation Index)**

	54. **Azman, E. M.** (2014). Characterisation of Local *Ikan Pekasam* and Development of Process for Production of *Ikan Pekasam* from Black Pomfret (*Parastromateus Niger Bloch*) (Doctoral dissertation, Universiti Putra Malaysia). 55. **Azman, M**. (2019). Extraction of anthocyanins from dried blackcurrant (*Ribes nigrum* L.) skins and evaluation of their potential as natural colourants (Doctoral dissertation, University of Reading).
Books/Monographs	
Chapter in Books	**Azman, E. M.**, Ahmad, N. H., Ijod, G., Mazón-Villegas, B., & Cortés-Muñoz, M. (2025). High-Pressure Processing of Date Products. In Date Fruits and By-Products Processing Volume 1 (pp. 47-102). Cham: Springer Nature Switzerland. https://doi.org/10.1007/978-3-032-05284-1_4
Proceedings	
Other Publications	

* & underlined- Corresponding author; *Senior Author; Bold - Co-author

H. PROJEK PENYELIDIKAN (Research Projects)

Project No.	Project Title	Role	Year	Source of fund	Status
1.	Stability enhancement of spray-dried natural beverage colourant produced through intermolecular copigmentation of mangosteen pericarps anthocyanins	**Main-Researcher** (Master student)	2020	**GP-IPM**	**Completed**
2.	Stability enhancement of anthocyanins from dried mangosteen pericarps through enzymatic acylation and intermolecular copigmentation	**Main-Researcher** (PhD student)	2020	**FRGS**	On-Going
3.	Effects of Anthocyanins Self-Association on the Stability and Equality of Jaboticaba (*Myciaria jaboticaba*) Juice	**Main-Researcher** (Master student)	2022	**Self-funding**	On-Going
4.	Stability Enhancement of Intermolecularly Copigmented Anthocyanins in Kombucha Tea Through Spray Drying Microencapsultion Technique	**Main-Researcher** (Master student)	2024	**GP-IPS**	On-Going
5.	Elucidating the protective effects of encapsulated cyanidin-3-O-sophoroside against microplastic-induced intestinal barrier dysfunction using a Caco-2/HT29-MTX co-culture model	**Main-Researcher** (PhD student)	2026	**Self-funding**	On-Going
6.	Application of coating agents for shelf life, chemical and physical properties, and nutritional values of papaya	**Main-Researcher** (Master student)	2026	**Myanmar Scholarship**	On-Going
7.	Assisted Supercritical Carbon Dioxide Extraction of Tocotrienols from Palm Fatty Acid Distillate (PFAD)	Co-Researcher (Master student)	2018	GP-IPM	**Completed**
8.	Development of Antioxidant-Rich Extruded Puffed Breakfast Cereal Containing Purple Sweet Potato (*Ipomoea batatas* L.)	Co-Researcher (PhD student)	2019	Sri Lanka Council for Agricultural Research Policy	**Completed**
9.	Correlation of Sugar Profile and Antioxidant Activities of Malaysian Stingless Bee Honey	Co-Researcher (Master student)	2019	Self-funding	**Completed**
10.	Physicochemical, microbiological and bioactivity properties of fermented roasted coffee Robusta (*Coffea canephora* L.) bean	Co-Researcher (PhD student)	2019	Self-funding	**Completed**
11.	The effect of different pre-treatment on chilling injury and metabolic changes on *Carica papaya* L. during cold storage	Co-Researcher (PhD student)	2021	Self-funding	**Completed**
12.	Stability of film packaging made of dried blackcurrant pomace (*Ribes nigrum* L.) anthocyanins	Co-Researcher (PhD student)	2021	Ministry of Education Malaysia	**Completed**
13.	Supercritical carbon dioxide extraction of flavonoids compounds from Malaysian species	Co-Researcher (PhD student)	2015	Ministry of Education Malaysia	**Completed**

	propolis assisted with edible oils as co-extractants				
14.	Mitigating chilling injuries by vacuum impregnation of plant stress hormones on carambola (*Averrhoa carambola*)	Co-Researcher (PhD student)	2022	Self-funding	**Completed**
15.	Functional properties of protein-starch film matrix incorporated with rambutan (*Nephelium lappaceum* L.) peel extract as an active packaging for food product	Co-Researcher (PhD student)	2022	Ministry of Education Malaysia	**Completed**
16.	Development of gelatin-based film with *Clitoria ternatea* as a smart packaging system	Co-Researcher (PhD student)	2022	Self-funding	**Completed**
17.	Monitoring the freshness of muscle foods via pH indicator films immobilized with anthocyanin from selected plant extracts	Co-Researcher (Master student)	2022	Self-funding	**Completed**
18.	Biogenic amine, microbial analysis and polyunsaturated fatty acid contents of fish and shrimp paste towards quality and safety monitoring	Co-Researcher (Master student UnisZa)	2022	FRGS	On-Going
19.	Modifying Rheological Properties and Palatability of Dysphagia-Friendly Beverages Using High-Pressure Processing	Co-Researcher (PhD student)	2024	FRGS	On-Going
20.	Development Of Fat Replacer from Pea Protein Isolate and Its Application on Meat Patties Production	Co-Researcher (PhD student)	2023	Ministry of Education Indonesia	On-Going
21.	The Development of Coconut Yoghurt Using Different Breeds of Coconuts and Its Extension of Shelf-Life	Co-Researcher (Master student)	2024	Self-funding	On-Going
22.	Effects of Different Drying Methods on Physicochemical Analysis, Flavour Profile, Prebiotic Activity, Sensory Evaluation and Shelf Life of *Musa acuminata* and *Musa paradisiaca* Peel Pastilles	Co-Researcher (Master student)	2024	Self-funding	On-Going
23.	Molecular, Functional, and Sustainability Characterization of Mango Seed-Derived Milk for Application in Structurally Optimized Plant-Based Ice Cream	Co-Researcher (PhD student)	2025	Self-funding	On-Going
24.	Harnessing *Cyclea barbata* Miers as a source of bioactive compounds for the development of functional foods: Evaluation of quality, safety, and efficacy	Co-Researcher (PhD student)	2025	GP-Geran Putra Berimpak	On-Going
25.	Green Extraction of Bioactive Compounds from MD2 Pineapple (*Ananas Comosus*. L) Peel using Supercritical Carbon Dioxide and Co-solvent with Integration of Kinetic Modeling	Co-Researcher (Master student)	2026	Self-funding	On-Going
26.	Mechanism Of Blue Light and UV Synergy in Regulating the Storage Quality of Fresh-Cut Chinese Water Chestnuts	Co-Researcher (PhD student)	2026	Self-funding	On-Going

I. TEACHING EXPERIENCE	
Courses Name / Code	**Level**
FST5303 (Shelf Life of Food)	**Master by Coursework**
FST5999 (Dissertation)	**Master by Coursework**
FST4837 (Beverage Technology)	**Undergraduate (BSTM)**
FST4408 (Food Packaging)	**Undergraduate (BSTM / BSOPM)**
FST4409 (Water and Wastewater Management in Food Industry)	**Undergraduate (BSTM)**
FST4410 (Food Industrial Waste Engineering)	**Undergraduate (BSOPM)**
FST4914 (Food Industry Waste Engineering)	**Undergraduate (BSPMK)**
FST4411 (Food Plant Design)	**Undergraduate (BSTM / BSOPM)**
FST4406 (Food Process and Plant Design)	**Undergraduate (BSPMK)**