CURRICULUM VITAE



| A. BUTIR-BUTIR PERIBADI (Personal Details) | | | | |
|---|---|---------------------------------|-------------------------|--|
| Nama Penuh (Full Name) | SITI HAJAR BINTI ARIFFIN Gelaran (Title): DR. | | | |
| No. MyKad / No. Pasport (Mykad No. / Passport No.) 901213-05-5370 | Warganegara (Citizenship) MALAYSIA | Bangsa (Race) MALAY | Jantina (Gender) FEMALE | |
| Jawatan (Designation) | SENIOR LECTURER | Tarikh Lahir (Date of Birth) | 13 DECEMBER 1990 | |

| Alamat Semasa (Current Address) | Jabatan/Fakulti (Department/Faculty) | E-mel dan URL (E-mail Address and URL) |
|---|--|--|
| TCA-13-08, CLIO 2, PERSIARAN IRC 5, IOI RESORT CITY, 62502, PUTRAJAYA, MALAYSIA | DEPARTMENT OF PROCESS AND FOOD ENGINEERING, FACULTY OF ENGINEERING, UNIVERSITI PUTRA MALAYSIA | E-mail: hajarariffin@upm.edu.my ORCiD: https://orcid.org/0000- 0002-0992-9954 H/P: 018-9031312 |

| B. KELAYAKAN AKADEMIK (Academic Qualification) | | | | |
|---|--|-----------------------------|---|--|
| Nama Sijil / Kelayakan (Certificate / Qualification obtained) | Nama Sekolah Institusi (Name of School / Institution) | Tahun (Year obtained) | Bidang pengkhusususan (Area of Specialization) | |
| PhD | UNIVERSITY OF BIRMINGHAM, UK | 2019 | PACKAGING ENGINEERING, POSTHARVEST HANDLING, MODELING, QUALITY AND SHELF LIFE, SENSORY AND CONSUMER STUDIES | |
| BSc | IOWA STATE UNIVERSITY, USA | 2013 | CHEMICAL ENGINEERING | |

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

| D. PENGALAMAN SAINTIFIK DAN PENGKHUSUSAN (Scientific Experience and Specialization) | | | | | |
|---|---------------------|------------|-------------|---|--|
| Organization | Position | Start Date | End Date | Expertise | |
| Faculty of Applied Sciences, UCSI University, Malaysia | Adjunct lecturer | 1 Dec 2020 | 30 Nov 2022 | Packaging engineering, postharvest handling, quality and shelf life, modeling, sensory and consumer studies | |
| Department of Food Science and Human Nutrition, Iowa State University, USA | Teaching assistant | Aug 2012 | May 2013 | Food engineering | |
| Department of Chemical and Biological Engineering, Iowa State University, USA | Teaching assistant | Aug 2012 | May 2013 | Separation course | |
| Department of Agricultural and Bio-system Engineering, Iowa State University, USA | Teaching assistant | Jan 2012 | May 2012 | Heat and mass transfer course | |

| E. PEKERJAAN (Employment) | | | | | |
|------------------------------|-----------------------|--|---------------------------------|------------------------------|--|
| Majikan / Employer | Jawatan / Designation | Jabatan / Department | Tarikh lantikan / Start Date | Tarikh tamat / Date Ended | |
| Universiti Putra Malaysia | SENIOR LECTURER | DEPARTMENT OF PROCESS AND FOOD ENGINEERING | 18 APRIL 2019 | | |

| F. ANUGER | AH DAN HADIAH (Hono | ors and Awards) | | |
|----------------|-----------------------|--|---------------|------|
| Name of awards | Award Title | Award Authority | Award Level | Year |
| Academic | Best Paper – Track in | 8 th International Conference on Food | International | 2022 |
| Awards | Food and Postharvest | Engineering Network of Thailand | | |
| | Best Final Year | Faculty of Engineering, UPM | University | 2022 |
| | Project | | | |
| | Bronze | Final Year Project Exhibition Day, | University | 2022 |
| | | Faculty of Engineering, UPM | | |
| | Gold | Asia Packaging Network (APN) | International | 2021 |
| | | International Packaging Symposium | | |
| | Best Paper Award | 5th International Conference on | International | 2021 |
| | (Special Jury) | Agricultural and Food | | |
| | 77 | Engineering/13 th International | | |
| | | FRUTIC Symposium | | |
| | Silver | National Agricultural Engineering and | National | 2021 |
| | | Food Engineering Convention | | |
| | Gold | Final Year Project Exhibition Day, | University | 2021 |
| | | Faculty of Engineering, UPM | | |
| | Best Final Year | Faculty of Engineering, UPM | University | 2020 |
| | Project | , | | |
| | Best Poster | University of Birmingham, | International | 2017 |
| | | Postgraduate Open Day | | |
| | Best Presentation | University of Birmingham, | International | 2017 |

| | | Postgraduate Open Day | | |
|----------------------------|--|---|---------------|------|
| | Honor Award | National Chemical Engineering Honor Society, OMEGA CHI EPSILON, Iowa State University, USA | International | 2013 |
| | Best Final Year Process and Plant Design Project | Methanol Recovery Process and Plant Design for DOW Chemical Company, Iowa State University, USA | International | 2013 |
| Non- Academic Awards | President Award | The National Society of Leadership & Success, SIGMA ALPHA PI, Iowa State University, USA | International | 2013 |
| | Ambassador | Iowa State University Engineering Career Fair | International | 2012 |
| | Ambassador | Iowa State University Engineering Week | International | 2012 |
| | Gold medal | Badminton Inter University Tournament at Iowa State University | International | 2012 |

G. SENARAI PENERBITAN (List of publications)

Journal

- 1. Ranjith, F. H., **Ariffin, S. H.,** Muhialdin, B. J., Liyana, N., Mohammed, N. K., Asyila, A., Hussin, M. (2022). Influence of natural antifungal coatings produced by Lacto-fermented antifungal substances on respiration, quality, antioxidant attributes, and shelf life of mango (Mangifera indica L.). Postharvest Biology and Technology. (Q1)
- 2. Ranjith, F. H., Adhikari, B., Muhialdin, B. J., Liyana, N., Mohammed, N. K., **Ariffin, S. H.,** Hussin, M. (2022). Peptide-based edible coatings to control postharvest fungal spoilage of mango (Mangifera indica L.) fruit. Food Control (Q1)
- 3. Adila, A., Halim, A., Shamsudin, R., **Ariffin, S. H.**, Nor, W., & Zainol, Z. (2022). Kinetic Models on Quality Changes during Heat Blanching of Some Fruit and Vegetables. Advances in Agricultural and Food Research Journal, 3(1), 1–10 (Indexed journal)
- 4. Shamsudin, R., **Ariffin, S. H.,** Nor, W., Zainol, Z., & Azmi, N. S. (2021). Modelling the Kinetics of Color and Texture Changes of Dabai (Canarium odontophyllum Miq.) during Blanching. Agronomy, 11(11) (Q1)
- Othman, S., Othman, N., RA, S., Ariffin, S.H., & Yunos, K. F. (2021).
 Corn Starch /chitosan nanoparticles/thymol bio-nanocomposite films for potential food packaging applications. Polymers, 13(3) (Q1)
- 6. Salahuddin, M., Basri, M., Nadiah, N., Karim, A., Sulaiman, A., Syafinaz, I., **Ariffin, S. H.** (2021). Progress in the Valorization of Fruit and Vegetable Wastes: Technologies Used for Bioactive Compound Extraction. Polymers, 13(20) (Q1)
- 7. Sohany, M., Syafinaz, I., Amin, M., & **Ariffin, S. H.** (2021). Characterization of Anthocyanin Associated Purple Sweet Potato Starch and Peel-Based pH Indicator Films. Foods, 10(9) (Q1)
- 8. Shapawi, Z. I. A., **Ariffin, S. H.,** Shamsudin, R., Tawakkal, I. S. M. A., & Gkatzionis, K. (2020). Modeling Respiration Rate of Fresh-cut Sweet

- Potato (Anggun) Stored in Different Packaging Films. Food Packaging and Shelf Life (Q1)
- 9. Nordin, N., Romzi, N.A.S., Manaf, Y.N., Tawakkal, I.S.M.A., **Ariffin, S. H.**, Othman, S. H., & Yusof, Y. N. (2020). Characterization of Active Sweet Potato-based Films Containing Thymol at Different Varieties: Vitato and Anggun. Food Packaging and Shelf Life (Q1)
- Ariffin, S. H., Gkatzionis, K., Bakalis, S., & T.Moxxon. (2020). Effect of Compression on Mechanical Property of Ready-to-Eat (RTE) Spinach Varieties. Malaysian Applied Biology. (Q4)
- Basri, M. S. M., Jais, N. M., Sulaiman, A., Nor, M. Z. M., Shah, N. N. A. K., & Ariffin, S. H. (2020). Optimizing the Processing Factor and Formulation of Oat-Based Cookie Dough for Enhancement in. Processes, 8(7). (Q2)
- 12. **Ariffin, S. H.**, Shamsudin, R., & Tawakkal, I. S. M. A. (2020). Dabai Fruit: Postharvest handling and storage. Advances in Agricultural and Food Research Journal. (Indexed journal)
- 13. **Ariffin, S. H.,** Gkatzionis, K., & Bakalis, S. (2017). Leaf injury and its effect towards shelf-life and quality of ready-to-eat (RTE) spinach. Energy Procedia, 123, 105–112. (Scopus)

Proceedings

- Z.I.A. Shapawi, S.H. Ariffin, R. Shamsudin, I.S.M.A Tawakkal, M.S.M. Basri – Modeling Respiration Rate of Dabai Fruit Stored in Different Packaging Films. 2nd International Scientific Conference on Indigenous Crop, Congress on Sustainable Agriculture and Food Security. 2022
- Z.I.A. Shapawi, S.H. Ariffin, R. Shamsudin, M.S.H.M.F. How, A.H. Baharom – The effect of edible coatings on the quality and shelf life of starfruit (Averrhoa Carambola L. cv.) B10. The 8th International Conference on Food Engineering Network of Thailand. 2022
- N.A.Zabidi, N.N. Zainal, M. Sohany, I.S.M.A Tawakkal, S.H. Ariffin, M.N. Naim – Effect of different loadings on Polybutylene Succinate (PBS) on the properties of polylactic acid (PLA)/ polybutylene succinate (PBS) blend films. The 8th International Conference on Food Engineering Network of Thailand. 2022
- 4. Z.I.A. Shapawi, **S.H. Ariffin,** R. Shamsudin, I.S.M.A Tawakkal, K. Gkatzionis Modeling respiration rate of fresh-cut sweet potato Anggun stored in different packaging films. 5th International Conference on Agricultural and Food Engineering. 2021
- S. H. Ariffin, K. Gkatzionis, S. Bakalis, Quantitative Tools for Sustainable Food and Energy in the Food Chain – Predictive Modelling, ERASMUS, Syros, Greece. 2017
- S. H. Ariffin, K. Gkatzionis, S. Bakalis, Effect of Leaf Injury on Mechanical Property of Ready-to-Eat (RTE) Spinach. Centre for Sustainable Energy Use in Food Chains, London, UK. 2017
- S. H. Ariffin, K. Gkatzionis, S. Bakalis, Leaf Injury and its Effect Towards Shelf-Life and Quality of Ready-to-Eat (RTE) Spinach. 18th World Congress of Food Science and Technology, Dublin, Ireland. 2016
- 8. **S. H. Ariffin**, K. Gkatzionis, S. Bakalis, Quantitative Tools for Sustainable Food and Energy in the Food Chain, ERASMUS, Malta. 2016

| H. PROJI | EK PENYELIDIKAN (Research i | Project) | | | |
|-------------|---------------------------------|------------|-------------|----------------|-----------|
| Project No. | Project Title | Role | Year | Source of fund | Status |
| | Effects of edible coatings on | Project | Nov 2020 – | Geran Putra | On-going |
| | quality and shelf life of | Leader | Nov 2023 | IPM | |
| | carambola ('Bintang Mas') | | | | |
| | stored at different storage | | | | |
| | and packaging treatments | | | | |
| | Physico-chemical, | Co - | Aug 2018 – | Geran Putra | Completed |
| | mechanical, functional | researcher | Aug 2021 | IPB | - |
| | properties and storage quality | | | | |
| | of local sweet potato plants | | | | |
| | Physico-chemical, | Co - | Sept 2019 - | FRGS | Completed |
| | mechanical and functional | researcher | Sept 2021 | | |
| | properties of Dabai fruit | | | | |
| | Canarium Odontophyllum | | | | |
| | Mig.) | | | | |
| | Effect of processing on quality | Main | May 2014 – | MOHE | Completed |
| | and shelf life of ready-to-eat | researcher | May 2017 | | |
| | (RTE) leafy vegetables | | | | |

| I. KURSUS YANG D | I. KURSUS YANG DIAJAR (Taught Courses) | | | | |
|------------------|---|--------------|--|--|--|
| Year | Course | Credit hours | | | |
| 2019 - 2022 | EPF 4804: Process Simulation and Optimization | 3 (2+1) | | | |
| 2019 | ECC 3004: Engineering Statistics | 3 (3+0) | | | |
| 2019 - 2023 | EPF 3501: Waste Treatment and Utilization | 3 (3+0) | | | |
| 2019 - 2021 | EPF 3105: Food Process Engineering Lab II | 1 (1+0) | | | |
| 2020 - 2022 | EPF 3106: Food Process Engineering Lab III | 1 (1+0) | | | |
| 2022 - 2023 | ENG 3001: Engineering Mathematics I | 3 (3+0) | | | |

| J. PENY | J. PENYELIAAN (Supervisions) | | | | | |
|---------|------------------------------|---|---------------------|------------|--|--|
| Туре | Name | Project | Status | Roles | | |
| Final | Zahrah-Izati | Modeling Respiration Rates of | Completed with Best | Main | | |
| Year | Azhar Shapawi | Fresh-cut Sweet Potato | Project Award | supervisor | | |
| Project | - | (Anggun) Stored in Different Packaging Films | - | | | |
| | Nur Nisya | RGB Imaging for the | Completed with Gold | | | |
| | Farhah | Characterization of Ripening | Award for FYP Open | | | |
| | | Banana for Waste Critical Point | Day | | | |
| | | Determination | | | | |
| | Nazurah Yunos | RGB Imaging for Monitoring Quality Changes of Star Fruit During Storage | Completed | | | |
| | Aqilah Azahari | Mathematical Modeling of Color | Completed with Best | | | |
| | | and Texture Kinetics of Fresh-cut | Project Award and | | | |
| | | Star Fruit Stored at Different | Bronze Award for | | | |
| | | Packaging Film and Storage | FYP Open Day | | | |
| | | Conditions | | | | |

| PhD | Fernando Hewage Ranjith Piyasiri | Enhancement of Shelf Life and Postharvest Quality of Mango (Mangifera indica L.) with Natural Disinfectant Produced by Lacto- fermented Agricultural by- products | Completed | Co- supervisor |
|-----|--|--|-----------|--------------------|
| MSc | Zahrah-Izati Azhar Shapawi | Effects of edible coatings on quality and shelf life of carambola ('Bintang Mas') stored at different storage and packaging treatments | On-going | Main supervisor |
| | Nazurah Yunos | Consumer Freshness Perception of Fresh-cut Star Fruit Stored at Different Packaging Conditions | On-going | |
| | Nur Afiqah Hani Binti Abdul Rashid | Effects of Active and Passive Modified Atmosphere Packaging (MAP) on Quality and Shelf Life of Dabai (Canarium Odontophyllum Miq.) during Storage | On-going | Co- supervisor |
| | Nur 'Afifah Zabidi | Shelf-life Mechanism of Active Biopolymer Based Films Containing Essential Oil Nanoparticle for Food Packaging | On-going | |

| K. PROJEK KOMUNITI (Community Projects) | | | | | |
|---|---|--|--|---------------|-----------|
| Roles. | Project Title | Location | Fund | Level | Year |
| Project leader | Transfer Knowledge on the Innovation of Water Filtration and Treatment using Natural Sources | Desa Bagan Melibur, Kepulauan Meranti, Indonesia | EMP Mega Persada, Indonesia (RM 10,342) | International | 2019/2020 |
| Project leader | Waste Champ | Pulau Carey, Selangor | Bank Rakyat (RM 2,100) | National | 2019/2020 |