

## CURRICULUM VITAE

**MOHAMMED S. S. ABUALQUMSSAN (QOMS), Ph.D.**

Senior Lecturer

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| A. Personal Details                                                                                                          |                             |                                                              |                              |
|------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------------------------------------------------------|------------------------------|
| Full Name                                                                                                                    | MOHAMMED S. S. ABUALQUMSSAN |                                                              |                              |
| Citizenship:<br>Palestine                                                                                                    | Race:<br>Arab               | Gender:<br>Male                                              | Date of Birth:<br>07-12-1993 |
| Address                                                                                                                      |                             | Email                                                        |                              |
| Department of Food Science<br>Faculty of Food Science and Technology<br>Universiti Putra Malaysia<br>43400, Serdang Selangor |                             | <a href="mailto:mohammed@upm.edu.my">mohammed@upm.edu.my</a> |                              |

| B. Academic Qualification          |                              |               |                                   |
|------------------------------------|------------------------------|---------------|-----------------------------------|
| Certificate/Qualification obtained | Name of School / Institution | Year obtained | Area of specialization            |
| Doctor of Philosophy (Ph.D)        | Universiti Putra Malaysia    | 2024          | Food Science                      |
| Master of Science (M.Sc)           | Universiti Putra Malaysia    | 2019          | Food Safety and Quality Assurance |
| Bachelor of Science (B.Sc)         | Al-Azhar University Gaza     | 2015          | Food Science and Technology       |

| C. Language Proficiency |          |              |          |               |               |
|-------------------------|----------|--------------|----------|---------------|---------------|
| Language                | Poor (1) | Moderate (2) | Good (3) | Very Good (4) | Excellent (5) |
| English                 |          |              |          | /             |               |
| Arabic                  |          |              |          |               | /             |
| Malay                   |          | /            |          |               |               |

| <b>D. Working Experience</b>                                                          |                           |                         |                                                                                                                                                                                                                                                                                                                                       |
|---------------------------------------------------------------------------------------|---------------------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Department/Institute</b>                                                           | <b>Duration</b>           | <b>Position held</b>    | <b>Brief responsibilities</b>                                                                                                                                                                                                                                                                                                         |
| Department of Biochemistry, Faculty of Medicine, Universiti Kebangsaan Malaysia (UKM) | January 2025-January 2026 | Postdoctoral Researcher | <ul style="list-style-type: none"> <li>• Production and purification of anti-obesity peptides from marine fungal proteins</li> <li>• Monitoring and guiding postgraduate students</li> <li>• Preparing technical reports and manuscripts for publication.</li> <li>• Participating in seminars and journal club activities</li> </ul> |

| <b>E. Areas of Expertise</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Food chemistry</li> <li>• Food bioprocessing</li> <li>• Structure-function relationships of food components</li> <li>• Chemical and molecular interactions in foods</li> <li>• Gut microbiome-food interactions</li> <li>• Health-related bioactive molecules</li> <li>• Functional food development</li> <li>• Proteomics and peptidomics</li> <li>• Computational modelling</li> <li>• Data analysis and interpretation</li> </ul> |

| <b>F. Honors and Awards</b> |                                                   |                                        |                   |                   |
|-----------------------------|---------------------------------------------------|----------------------------------------|-------------------|-------------------|
| <b>Name of Awards</b>       | <b>Title</b>                                      | <b>Award Authority</b>                 | <b>Award Type</b> | <b>Year</b>       |
| Academic Awards             | Special Graduate Research Allowance Scheme (SGRA) | Ministry of Higher Education, Malaysia | Scholarship       | Sep 2022-Apr 2024 |

| <b>G. Supervision</b> |               |                       |               |
|-----------------------|---------------|-----------------------|---------------|
| <b>Role</b>           | <b>Degree</b> | <b>No. of student</b> | <b>Status</b> |
| Co-supervisor         | Ph.D.         | 2                     | On-going      |

#### **H. List of publications – authors, title, journal, volume, page and year published**

1. **Qoms, M. S.**, Arulrajah, B., Ibadullah, W. Z. W., Ramli, N. S., Chau, D. M., Sarbini, S. R., & Saari, N. (2024). Performance of *Azolla pinnata* fern protein hydrolysates as emulsifier and nutraceutical ingredient in an O/W emulsion system and their effect on human gut microbiota and mammalian cells. *Food & Function*, 15, 6578-6596. (SCIE Q1)
2. **Qoms, M. S.**, Arulrajah, B., Ibadullah, W. Z. W., Ramli, N. S., Shamsudin, R., Chau, D. M., & Saari, N. (2024). Antihypertensive, Antidiabetic, and Antioxidant Properties of Novel *Azolla pinnata* Fern Protein Hydrolysates: Inhibition Mechanism, Stability, Profiling, and Molecular Docking. *Food & Bioprocess Technology*, 1-18. (SCIE Q1)
3. **Qoms, M. S.**, Arulrajah, B., Shamsudin, R., Ramli, N. S., Ibadullah, W. Z. W., Chau, D. M., & Saari, N. (2023). Enzymolysis of *Azolla pinnata* protein concentrate: Effect of protease types and hydrolysis extents on the physicochemical, techno-functional and biological properties. *Food Bioscience*, 53, 102787. (SCIE Q1)
4. **Qoms, M. S.**, Arulrajah, B., Shamsudin, R., Ibadullah, W. Z. W., & Saari, N. (2022). Valorization of green biomass *Azolla pinnata* fern: multi-parameter evaluation of processing conditions on protein extractability and their influence on the physicochemical, structural, techno-functional properties and protein quality. *Journal of the Science of Food & Agriculture*, 102(15), 6974-6983. (SCIE Q2)
5. **Qoms, M. S.**, Wong, S. K., Fauzi, N. M., Husain, K., Makpol, S., Tan, J. K., (2025). Microalgae-Derived Peptides Targeting Lifestyle-Related Diseases: Discovery, Mechanisms, Structure-Activity Relationships and Structural Modifications. *Antioxidants*. (SCIE Q1)
6. **Arulrajah, B.\***, **Qoms, M. S.\***, Ibadullah, W. Z. W., & Saari, N. (2025). Innovative deep eutectic solvent approach vs. conventional alkaline for kenaf seed protein extraction: A comprehensive comparison of structural, thermal, nutritional and techno-functional properties. *Innovative Food Science & Emerging Technologies*, 102, 103972. (SCIE Q1; \*Indicates equal contribution with first author)
7. **Arulrajah, B.\***, **Qoms, M. S.\***, Barkia, I., Ibadullah, W. Z. W., Zakaria, M. H., & Saari, N. (2025). Exploring the potential of kenaf seed proteins produced via freeze, spray and vacuum oven drying: A comparison with commercial soy and whey proteins. *Applied Food Research*, 101063. (ESCI Q1; \*Indicates equal contribution with first author.)
8. Ijod, G., Nawawi, N. I. M., **Qoms, M. S.**, Fitry, M. R. I., Abd Rahim, M. H., Charalampopoulos, D., Sulaiman, R., Adzhan, M. N., & Azman, E. M. (2025). Synergistic effects of intermolecular copigmentation and high-pressure processing on stabilizing mangosteen pericarp anthocyanins. *Food Chemistry*, 480, 143888. (SCIE Q1)

9. Gholivand, S., Tan, T. B., Yusoff, M. M., **Qoms, M. S.**, Wang, Y., Liu, Y., Nyam, K. L., & Tan, C. P. (2025). Eco-friendly encapsulation: Investigating plant-based protein-alginate shells for efficient delivery and digestion of hemp seed oil encapsulated via supercritical CO<sub>2</sub> dispersion. *Food Chemistry*, 141515. (SCIE Q1)
10. Gholivand, S., Tan, T. B., Yusoff, M. M., **Qoms, M. S.**, Wang, Y., Liu, Y., Nyam, K. L., & Tan, C. P. (2025). Innovative microencapsulation of hemp seed oil using plant-based biopolymers: a comparative analysis of dehydration techniques on core stability, digestibility and release pattern. *Food Hydrocolloids*, 110683. (SCIE Q1)
11. Arulrajah, B., **Qoms, M. S.**, Muhialdin, B. J., Hussin, A. S. M., Hasan, H., Zarei, M., Chau, D. M., Ramasamy, R., & Saari, N. (2023). Elucidating the mechanisms underlying the action of kenaf seed peptides mixture against gram-positive and gram-negative bacteria and its efficacy in whole milk preservation. *LWT*, 181, 114757. (SCIE Q1)
12. Arulrajah, B., **Qoms, M. S.**, Muhialdin, B. J., Zarei, M., Hussin, A. S. M., Hasan, H., Chau, D. M., Ramasamy, R., & Saari, N. (2023). Antifungal efficacy of kenaf seed peptides mixture in cheese, safety assessment and unravelling its action mechanism against food spoilage fungi. *Food Bioscience*, 52, 102395. (SCIE Q1)
13. Arulrajah, B., **Qoms, M. S.**, Muhialdin, B. J., Hasan, H., Zarei, M., Hussin, A. S. M., Chau, D. M., & Saari, N. (2022). Antibacterial and antifungal activity of kenaf seed peptides and their effect on microbiological safety and physicochemical properties of some food models. *Food Control*, 140, 109119. (SCIE Q1)
14. Arulrajah, B., Muhialdin, B. J., **Qoms, M. S.**, Zarei, M., Hussin, A. S. M., Hasan, H., & Saari, N. (2021). Production of cationic antifungal peptides from kenaf seed protein as natural bio preservatives to prolong the shelf-life of tomato puree. *International Journal of Food Microbiology*, 359, 109418. (SCIE Q1)

#### I. Research Identifiers

|                | Author ID     | Name              |
|----------------|---------------|-------------------|
| Scopus         | 57279156400   | Qoms, Mohammed S. |
| Web of Science | KWU-3139-2024 | Qoms, Mohammed S. |

#### J. Research Profiles

|                |                                  |
|----------------|----------------------------------|
| Google Scholar | <a href="#">Mohammed S. Qoms</a> |
| ResearchGate   | <a href="#">Mohammed S. Qoms</a> |
| LinkedIn       | <a href="#">Mohammed S. Qoms</a> |