Preface

We are pleased to present the second volume of the *Pertanika Journal of Science and Technology* Special Issue, featuring another selection of peer-reviewed articles presented at the **International Conference on Agricultural and Food Engineering 2023 (CAFEi 2023)**. Held under the theme *"Global Food and Agriculture Recovery in the Post-Pandemic World,"* the conference served as a vital forum for advancing knowledge and fostering innovation in rebuilding agri-food systems for greater sustainability, safety, and resilience.

This second volume continues to showcase the interdisciplinary strength of CAFEi2023 by highlighting original research from diverse fields, including food safety, agricultural biotechnology, postharvest engineering, environmental monitoring, and digital agriculture. The studies presented here reflect a shared regional and global commitment to addressing complex challenges in agriculture and food production through the application of science and technology.

Notable contributions in this volume include:

- **Environmental health and crop safety**, as explored in a study on heavy metal accumulation in crops near nickel mining areas in the Philippines.
- **Postharvest innovation**, focusing on research into drying kinetics and nutritional preservation of Pegaga (*Centella asiatica L.*) leaves using various pretreatment methods.
- **Digital and AI-enhanced agriculture**, demonstrated by the application of artificial neural networks for monitoring moisture levels in dried earthworms, highlights the integration of machine learning in agricultural process control.
- **Green bioprocessing and functional materials**, such as the use of liquid biphasic flotation for protein separation from *Azolla pinnata* and the development of biodegradable composite polymer materials for agricultural use.
- **Food quality and authenticity** were addressed using Vis-NIR spectroscopy and chemometrics to detect pork adulteration in beef and mutton products, emphasizing the importance of food traceability and consumer trust.
- **Engineering innovations in fermentation** through the development of a compact fermentation container with stirring mechanisms to improve cocoa bean quality.

Each of these studies represents a valuable contribution to the body of knowledge supporting sustainable and technology-driven transformations in the agricultural and food sectors.

We extend our deepest gratitude to all authors for their high-quality submissions, to the reviewers for their critical insights and timely evaluations, and to the editorial and publishing team at *Pertanika Journal of Science and Technology* for their unwavering support.

We hope that this volume, along with the first, will serve as a lasting reference for researchers, practitioners, and policymakers and continue to inspire collaborative innovation for a more sustainable and secure global agri-food future.

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