CURRICULUM VITAE

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Scopus	: Mohamad Firdza Shukery

Education

- Ph.D. Environmental Engineering, 2017, Universiti Teknologi Malaysia, Skudai, Johor, Malaysia
- M.Sc. Biomechanical Engineering, 2012, Universiti Putra Malaysia, Serdang, Selangor, Malaysia
- B. E. Biological and Agricultural, 2008, Universiti Putra Malaysia, Serdang, Selangor, Malaysia

Research Interest

- Bioresource and Technology
- Agricultural Waste Engineering
- Sustainable Plantation Management
- Agricultural Mechanization and Automation
- Computational Operation Research

Professional Membership & Learned Society

- Member, Malaysian Society of Agricultural Engineers (MSAE)
- Graduate Member, Board of Engineers Malaysia (BEM)

Appointments

• Senior Lecturer, Dept. of Biological and Agricultural Engineering, UPM	2017 – to date
• Tutor, Dept. of Biological and Agricultural Engineering, UPM	2009 – 2017
• Research Assistant, Dept. of Biological and Agricultural Engineering, UPM	2009 – 2009

Publications

- LK Loon, **MF Shukery**, N Hashim. MILP model for optimal operation of biomass facility treatment for efficient oil palm biomass management. Clean Technologies and Environmental Policy. 2024. 1-13. **(IF 4.3)**
- MN Radzuan, NAM Zakhi, NH Radzali, **MFM Shukery**. Determination of optimal application of biosurfactant by using linear programming (LP) model. Advances in Agricultural and Food Research Journal. 2022. 2-2. **(MyCite)**
- N Zulkifli, N Hashim, HH Harith, **MFM Shukery**, DI Onwude, M Sairi. Reliability of Finite Element Analysis to Determine the Mechanical Responses in Fruits and Root-Vegetables. Advances in Agricultural and Food Research Journal. 2021. 2-1. **(MyCite)**
- S. Elsoragaby, A. Yahya, N. M. Nawi, M. R. Mahadi, M. Mairghany, A Muazu, **M. F. Shukery**. Comparison between conventional human energy measurement and physical human energy measurement methods in wetland rice production. Heliyon. 2020. 6-11. **(IF 3.776)**
- N Zulkifli, N Hashim, HH Harith, **MFM Shukery**. Finite element modelling for fruit stress analysis-A review. Trends in Food Science & Technology. 2020. 97. 29-37. **(IF 12.563)**
- **MF Shukery**, H. Hashim, JS Lim. Optimal Location and Allocation for the Development of Oil Palm Eco-Industrial Town: Case Study in State of Johor. Chemical Engineering Transactions. 2017. 56. 1417-1422. **(Scopus)**
- **M.F.M Shukery**, H. Hashim, J.S. Lim. Superstructure-based synthesis and optimisation of an oil palm eco-industrial town: a case study in Iskandar Malaysia. Clean Technologies and Environmental Policy. 2016. 1–11. **(IF=2.337)**

Conference Proceedings/Academic Talks

- **MF Shukery**, H. Che Man. MILP Model for optimal conversion of food waste into poultry pellets. 6th International Conference on Agricultural & Food Engineering. UPM. Malaysia. 2023
- **M.F. Shukery**, H. Hashim, J.S Lim. Towards Developing an Oil Palm Eco-Industrial Town (EIT): Optimal Planning through Multi-period Optimization Model. The 4th International Conference on Agricultural and Food Engineering. Kuala Lumpur. 2018
- **M.F. Shukery**, H. Hashim, J.S. Lim. Optimal Operating System and Location for Development of Oil Palm Eco-Industrial Town (EIT): Case Study in State of Johor. The 9th Regional Conference on Chemical Engineering. Kuala Lumpur. 2016
- **M.F. Shukery**, H. Hashim, J.S Lim. A Multi-Period Model for Steady Planning of Oil Palm Eco-Industrial Town. International Conference of Low Carbon Asia (ICLCA 2015), Johor Bahru, Malaysia. 2015
- **M.F. Shukery**, H. Hashim, J.S Lim. Optimal Design of Oil Palm Eco-Industrial Town by Using Mathematical Modeling Approach: Case Study in Iskandar Malaysia. 18th Conference Process Integration, Modelling and Optimisation for Energy Saving and Pollution Reduction (PRES 15). Kuching, Malaysia. 2015

Research Grants

• Finite element analysis of mechanical response of Carica papaya L. under impact loading. **(Member)**	FRGS	2020 – 2024	RM 146,700
• Application of a Novel Integrated Harvesting and Collecting Implement for Harvesting Lemongrass in Soft Soil. **(Member)**	UCTC(UPM)	2019 – 2020	RM 10,000
• Optimal Planning of Oil Palm Biomass Facility for Sustainable Oil Palm Biomass Management. **(Leader)**	GP-IPM	2018 – 2023	RM 58,000

Community or Industry Projects/Grants

- Optimal Generation of Methane Gas from Palm Oil Mill. **(Member)** 2017-2026 -

Professional Services (Journal Reviewer, editorial works, etc.)

- **Journal reviewer**
  Elsevier (Energy Reports) 2021
  Elsevier (Energy Reports) 2019
  Elsevier (Energy Reports) 2018
- **Conference reviewer**
  International Conference on Agricultural & Food Engineering 2023
- **Conference committee**
  International Conference on Agricultural & Food Engineering 2023

Teaching Experience

- Fluid Mechanics Engineering
- Computer-Aided Engineering Drawing
- Engineering Properties of Agricultural Materials
- Principles of Heat Transfer