

NATIONAL AGRICULTURAL AND FOOD ENGINEERING CONVENTION (NAFEC) 2024

“DIGITAL AGRICULTURE: DRIVING INNOVATIONS FOR SUSTAINABLE AGROFOOD PRODUCTION”

**15 & 16 MAY 2024
UniMAP, PERLIS**



UNIVERSITI MALAYSIA PERLIS



PARALELL SESSION (15 MAY 2024)

Room 1	
TOPIC 1: Postharvest and Food Engineering (I)	
Session Chair: Assoc. Prof. Ts. Dr. Khairul Farihan Kasim	
Agency/Institution: UniMAP	
TIME	PRESENTER
2.00 – 2.05 pm (5 min)	OPENING BY SESSION CHAIR
2.05 – 2.15 pm	Presenter 1: DR Siti Faridah Mohd Amin Institution/Agency: UMS Paper ID: 68 Title: Physicochemical Properties of Spray-Dried Pomegranate (<i>Punica Granatum</i>) Juice Powder
2.20 – 2.30 pm	Presenter 2: MR Jimoh Kabiru Ayobami Institution/Agency: UPM Paper ID: 18 Title: Application of Hyperspectral Imaging Coupled with Wavelength Selection for Monitoring the Drying Process of Glutinous Rice
2.35 – 2.45 pm	Presenter 3: DR Anisuzzaman Institution/Agency: UMS Paper ID: 3 Title: Production of spray dried tomato powder from enzymatic liquefied juice
2.50 – 3.00 pm	Presenter 4: DR Rovina Kobun Institution/Agency: UMS Paper ID: 93 Title: Development of Banana Starch and Alginate Biofilms Fortified with Orange Peel Extract for Fruit Preservation
3.05 – 3.15 pm	Presenter 5: DR Jumardi Roslan Institution/Agency: UMS Paper ID: 34 Title: Effect of Pasteurization and Sterilization on Rheological and Physicochemical Properties of Bambangan (<i>Mangifera pajang</i>) Puree
3.15 – 3.30 pm	Q&A (1)
3.35 – 3.45 pm	Presenter 6: DR Ahmad Hazim Abdul Aziz Institution/Agency: UMS Paper ID: 24 Title: Optimizing Total Phenolic, Flavonoid, and Antioxidant Activity in Sabah Coffea canephora: A Comparative Assessment of Supercritical Carbon Dioxide and Subcritical Water Extraction Methods
3.50 – 4.00 pm	Presenter 7: Ageh Opeyemi Micheal Institution/Agency: UPM Paper ID: 19 Title: RGB Imaging for monitoring glutinous rice quality during storage.
4.05 – 4.15 pm	Presenter 8: TS Farah Syahirah Abdul Shukri Institution/Agency: University of Technology Sarawak Paper ID: 86 Title: Development of Spread Derived from Dabai Kernel (<i>Canarium Odontophyllum</i> Miq.)

4.20 – 4.30 pm	Presenter 9: Ts. Dr. Mohd. Azrie Awang Institution/Agency: UMS Paper ID: 54 Title: Extraction Kinetics Study of <i>Morinda citrifolia L.</i> (Noni) Fruits: Evaluating Yield and Flavonoid Content to Enhance Antioxidant Activity
4.30 – 4.45 pm	Q &A (2)
END OF SESSION	

Room 2	
TOPIC 2: Environment & Waste Management, Water, Land and Natural Resources,	
Session Chair: Assoc. Prof Dr Ku Syahidah Ku Ismail	
Agency/Institution: UniMAP	
TIME	PRESENTER
2.00 – 2.05 pm (5 min)	OPENING BY SESSION CHAIR
2.05 – 2.15 pm	Presenter 1: MS Adila Fazliyana Binti Aili Hamzah Institution/Agency: UPM Paper ID: 17 Title: Formation of methane precursor and lignocellulose-derived furan byproducts during delignification of subcritical water pre-treated empty fruit bunch
2.20 – 2.30 pm	Presenter 2: MR Mohd Mustakim Mohamad Institution/Agency: MPOB Paper ID: 132 Title: Performance of <i>Elaeis Oleifera</i> and interspecific hybrid (<i>Elaeis Guineensis</i> × <i>Elaeis Oleifera</i>) in some MPOB Collections
2.35 – 2.45 pm	Presenter 3: MS Nor Faizah Jalani Institution/Agency: MPOB Paper ID: 29 Title: A hybrid electrochemical process for treating palm oil mill effluent
2.50 – 3.00 pm	Presenter 4: DR Nurulhuda Khairudin Institution/Agency: UPM Paper ID: 55 Title: Ammonia Emissions from Fertilized Rice Fields
3.00 – 3.20 pm	Q&A (1)
3.25 – 3.35 pm	Presenter 5: DR Mohamad Norisham Mohamad Rosdi Institution/Agency: UMS Paper ID: 52 Title: Analysis of the Effect of Solvent Concentration on the Antioxidant Properties of <i>Passiflora edulis</i> (Passion Fruit) Peel
3.40 – 3.50 pm	Presenter 6: TS DR Nahrul Hayawin Zainal, MS Nor Faizah Jalani, MS Noorshamsiana Abdul Wahab Institution/Agency: MPOB Paper ID: 30 Title: Palm Oil Mill Effluent (POME) Treatment Using Advanced Treatment System
3.55 – 4.05 pm	Presenter 7: MS Nour Shazana Shahiful Hizam Institution/Agency: UITM ARAU Paper ID: 91 Title: Sustainability of Poultry Waste: Bacterial Isolates for Efficient Biodegradation of Chicken Feathers
4.10 – 4.30 pm	Q&A (2)
END OF SESSION	

Room 3	
TOPIC 3: IR 4.0 in Agriculture	
Session Chair: Dr Ahmad Kamil B Hj Mohd Jaaffar	
Agency/Institution: Malaysian Cocoa Board	
TIME	PRESENTER
2.00 – 2.05 pm (5 min)	OPENING BY SESSION CHAIR
2.05 – 2.15 pm	Presenter 1: MS Eleanor Daniella Lokman Institution/Agency: UPM Paper ID: 58 Title: Aquaculture Farmers’ Spatial Distribution and Intention to Adopt the “Sistem Pengurusan Kawalan Biosekuriti Perikanan (BioDOF-Map)”
2.20 – 2.30 pm	Presenter 2: MR Sheikh Mohamad Naim Shikh Shatir Institution/Agency: UNIMAP Paper ID: 36 Title: Hyperspectral NDVI Analysis Based on Low-Cost Setup Devices for Harumanis Plantation
2.35 – 2.45 pm	Presenter 3: DR Diyana Binti Jamaludin Institution/Agency: UPM Paper ID: 56 Title: Off-type paddy plants identification using RGB images
2.50 – 3.00 pm	Presenter 4: TS Syarifah Noor Irma Suryani Syed Ahmad Institution/Agency: FELCRA Paper ID: 16 Title: Application of Hyperspectral Imaging to Identify Spectral signature of grassy weeds in rice at early stages: A Review
3.05 – 3.15 pm	Presenter 5: DR Mohd Najib Ahmad Institution/Agency: UPM Paper ID: 130 Title: Function and application of Soil EC sensor in agriculture
3.15 – 3.30 pm	Q&A (1)
3.35 – 3.45 pm	Presenter 6: MS Nur Annisa Mat Nordin Institution/Agency: UPM Paper ID: 63 Title: Discrimination of Matag Coconut Seedlings using Hyperspectral Data and Machine Learning Technique
3.50 – 4.00 pm	Presenter 7: MS Nurul Liyana Rozali Institution/Agency: MPOB Paper ID: 79 Title: Authentication of geographical origin of crude palm oil (CPO) by spectroscopic fingerprinting, fatty acid profile and physicochemical properties combined with chemometrics
4.05 – 4.15 pm	Presenter 8: DR Anas Mohd. Mustafah Institution/Agency: UPM Paper ID: 77 Title: Prediction Potential of Drone Spraying Drift in Indoor Drone Laboratory, UPM
4.20 – 4.30 pm	Presenter 9: DR Samsuzana Abd Aziz Institution/Agency: UPM Paper ID: 83 Title: Inspection of Paddy Seedlings Using Deep Learning on Drone Images
4.30 – 4.45 pm	Q&A (2)
END OF SESSION	

Room 4 TOPIC 4: Postharvest and Food Engineering (II) & Agriculture Machinery and Automation Session Chair: Assoc. Prof Dr Farizul Hafiz Kasim Agency/Institution: UniMAP	
TIME	PRESENTER
2.00 – 2.05 pm (5 min)	OPENING BY SESSION CHAIR
2.05 – 2.15 pm	Presenter 1: MS Nur Azlin Razali Institution/Agency: MARDI Paper ID: 143 Title: The potential of cryogenic freezing for new value-added products of Harumanis Mango and J33 Jackfruit
2.20 – 2.30 pm	Presenter 2: MS Rohazita Bahari Institution/Agency: UNIMAP Paper ID: 89 Title: Phytochemicals and Antioxidative Study of Pruned Harumanis Mango Leaves Extract
2.35 – 2.45 pm	Presenter 3: DR Sylvester Mantihal Institution/Agency: UMS Paper ID: 75 Title: Development of Dusun Fermented Fish Using Different Concentration of Etlingera Coccinea
2.50 – 3.00 pm	Presenter 4: MS Fatimah Zakiah Binti Shahrudin Institution/Agency: UM Paper ID: 72 Title: Halal Food Industry in Malaysia: Issues and Challenges
3.05 – 3.15 pm	Presenter 5: DR Nazmi Bin Mat Nawi Institution/Agency: UPM Paper ID: 147 Title: Prediction and Classification of Pesticide Residue on Cabbages Based on Spectral data of Visible Shortwave Near Infrared Spectroscopy
3.15 – 3.30 pm	Q&A (1)
3.35 – 3.45 pm	Presenter 6: DR Hasmadi Mamat Institution/Agency: UMS Paper ID: 31 Title: Physicochemical and Functional Properties of Sabah Commercial Rice and Its Flour
3.50 – 4.00 pm	Presenter 7: MS Rosnani Hasan Institution/Agency: Politeknik Kota Bharu Paper ID: 57 Title: Kajian Pembangunan Mesin Pengisar Tinja Kambing
4.05 – 4.15 pm	Presenter 8: DR Wolyna Pindi Institution/Agency: UMS Paper ID: 74 Title: Effects of palm stearin and seaweed powder (<i>Kappaphycus alvarezii</i>) on the quality of reduced-fat chicken sausages
4.20 – 4.40 pm	Q&A (2)
END OF SESSION	