









AGRONETICS

ONETICS

URIZE GROWTH

OMATION

SMART SYSTEMS, ENHANCING EFFICIENCY
REDUCING ERRORS

NET OF

REAL-TIME DATA, OBJECT DATA
OPERATION ACROSS INDUSTRIES

IAL INTELLIG

DATA INTO INSIGHTS, OBJECT DATA
INNOVATION ACROSS INDUSTRIES

CONSULTATION • SOLUTION

ITEM25: THE NOVEL ANIMAL FEED FOR BROILER BASED ON TRICHANTERA GIGANTEA AND SOLID WASTE

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INTRODUCTION

STIMULATING

PROBLEM STATEMENT

High resistance of chicken against disease
High operating cost for chicken feed because conventional feed contains antibiotics
The chicken feed because of high concentration

ULFIT-PRO INGREDIENTS

TRICHANTERA GIGANTEA

GROWTH RATE

Easy to grow
High protein content (18-22%)
Can be directly feed to the chicken or processed
High palatability
Environment friendly
Antimicrobial effect

ITEM25 GOLD AWARD

30 May 2025, 12:03

UMPSA research recognised with 3 gold and 3 silver medals at ITEX 2025

4 June 2025

KUALA LUMPUR, 30 May 2025 – Six research projects from Universiti Malaysia Pahang Al-Sultan Abdullah (UMPSA) were recognised after winning three gold and three silver medals at this year's International Invention, Innovation & Technology Exhibition (ITEX) 2025.

The research of Dr. Mohd Azraai Mohd Razman from the Faculty of Manufacturing and Mechatronic Engineering Technology (FTKPM) won a gold medal for the project Smart Enabled System Automation and IoT, an innovation aimed at developing a user-friendly IoT-based automation system that can be adapted to various smart industrial applications.

The second gold medal was awarded to a researcher from the Faculty of Electrical and Electronic Engineering Technology (FTKEE), Ts. Muhammad Ikram Mohd Rashid, through the project Illuminating Mobility: EVSE Integration in Lighting Infrastructure, which integrates public lighting infrastructure with electric vehicle (EV) charging systems towards a sustainable smart city.

Another gold medal was awarded to the research project by Associate Professor Dr. Abdul Syukor Abdul Razak from the Faculty of Civil Engineering Technology (FTKA), titled Pouffit-Pro: The Novel Animal Feed from *Trichantera gigantea* and Solid Waste for Broiler, which offers an innovative and eco-friendly livestock feed alternative utilising *Trichanthera gigantea* (ketum ayam) plants and solid waste.

Meanwhile, Associate Professor Ts. Dr. Saidatul Shima Jamari from the Faculty of Chemical and Process Engineering Technology (FTKCP) won a silver medal with the project Eco-Savvy Portable Used Oil Regeneration System (Eco-Port), an innovative mobile system for efficiently filtering and recycling used oil, contributing to a more sustainable industrial waste management approach.

Another silver medal was awarded to the project by Associate Professor Dr. Nadzirah Mohd Mokhtar from FTKA titled Distilwise IoT: Compact Membrane Distillation with IoT Monitoring System, which explores membrane-based water distillation technology with IoT monitoring, suitable for use in remote and disaster-affected areas.

The third silver medal was contributed by Dr. Norwahida [Yakub@Yaakub](#) from the Faculty of Industrial Sciences and Technology (FSTI) with the project titled Risk Assessment Matrix of

Occupational Stress Apps (RAMOSA).

This digital application project can help organisations systematically assess and address workplace stress levels based on data.

Vice-Chancellor, Professor Dr. Yatimah Alias, expressed her gratitude and pride over the achievement, which demonstrates UMPSA's strength in producing high-impact and relevant research.

"This success aligns with the aspiration of realising the UMPSA Strategic Plan 25 in line with the five transformation agendas outlined in the Vice-Chancellor's Address 2025 to strengthen research, industry, and community engagement.

"It also emphasises high-quality, solution-oriented research capable of contributing to community well-being and industrial development.

"It reflects UMPSA's capacity to continue competing and making an impact at the global level," she said.

Additionally, two research projects from the Faculty of Electrical and Electronic Engineering Technology (FTKEE), the collaboration between UMPSA lecturers and MIMOS Berhad, also won medals.

FTKEE Dean, Associate Professor Ts. Dr. Hamzah Ahmad, won a gold medal for his research titled Low Cost AGV for Product Transportation in Manufacturing Plant, while Dr. Ahmad Afif Ahmad Faudzi received a silver medal for the project Modular IoT Enabled Egg Incubator for SME Poultry Producers.

Deputy Vice-Chancellor (Research and Innovation), Professor Ts. Dr. Aida Mustapha, was also present to show support and witness the ITEX 2025 exhibition held at the Kuala Lumpur Convention Centre (KLCC) from 29 to 31 May 2025.

ITEX is one of the world's leading platforms showcasing the latest innovations from various countries.

It also brings together researchers and innovators from both local and international backgrounds to exhibit inventions, designs, and cutting-edge technological solutions across a wide range of fields.

Moreover, ITEX serves as a strategic collaboration medium among academia, industry, and related agencies in strengthening the national innovation ecosystem.

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