

UTP shines at IChemE Global Awards with groundbreaking innovation

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Universiti Teknologi Petronas (UTP) has secured multiple victories at the prestigious IChemE Global Awards 2023 held in Birmingham, United Kingdom recently. - Pic courtesy UTP

KUALA LUMPUR: Universiti Teknologi Petronas (UTP) has secured multiple victories at the prestigious IChemE Global Awards 2023 held in Birmingham, United Kingdom recently.

In a statement, UTP said its Centre for Biofuel and Biochemical Engineering, acknowledged as a Higher Institution Centre of Excellence by the Higher Education Ministry, won the Research Project Award and a Highly Commended accolade in the Biochemical Engineering Award category.

The IChemE Global Awards are widely acknowledged as the world's most prestigious chemical engineering awards.

The Research Project Award specifically highlights groundbreaking inventions with the potential for industrial-scale applications, while the Biochemical Engineering Award celebrates innovations in biochemical engineering excellence, encompassing bioprocessing, bioengineering, bioenergy, biocatalysis, bioreactors and nanotechnology.

"The Research Project Award acknowledges the groundbreaking Solar Integrated Anaerobic Digester and Aerobic Composter (Sidac), a circular economy-based treatment unit, spearheaded by Dr M. Rashid Shamsuddin, serving as the principal investigator, together with his research officers, M. Devendran Manogaran and Mohd Hakimi Rosli," read the statement.

It also said that Sidac revolutionises waste management by ingeniously converting organic waste into biomethane, a potent biofuel.

"This transformative technology aligns seamlessly with UTP's sustainability initiatives and various United Nations Sustainable Development Goals, supporting Petronas's vision for Net Zero Carbon Emissions by 2050.

"By addressing the adverse environmental impacts of conventional waste disposal, Sidac not only mitigates health hazards but also complies with national regulations," it said, adding that Sidac creates job opportunities and fosters collaborations between academia and industry.

UTP said that plans are underway to integrate Sidac into a smart poultry house system, effectively treating waste and generating green energy, contributing to the nation's sustainability efforts. As Sidac gains traction, it becomes a beacon for environmentally responsible practices, driving the transition towards a greener and more sustainable future.

In addition to the project's success, Devendran emerged as a finalist for the Young Researcher Award.

"Devendran's achievements in the biochemical conversion of biomass exemplify UTP's commitment to fostering impactful solutions.

"Specialising in the biochemical conversion of biomass, he has demonstrated remarkable accomplishments, co-authoring over ten scholarly articles published in high-impact journals and winning more than ten innovation competitions within just two years of his PhD candidacy," it said. — BERNAMA