

UMS wins Sustainability Award in IChemE Malaysia Awards

TBP 06.10.2021 P. 06

KOTA KINABALU: University Malaysia Sabah (UMS) won the Sustainability Award in Institution of Chemical Engineers' (IChemE) Malaysia Awards 2021 for developing Water and Energy Production using Membrane Distillation and Osmotic Membrane Distillation (MD-OMD) system.

This pilot plant research was conducted by Prof Ir Dr Rosalam Sarbatly, a Chemical Engineering Professor in UMS Faculty of Engineering.

According to him, this system uses hydrophobic nanofiber membranes to simultaneously produce clean water and energy by utilizing seawater and solar power.

"It enabled electricity production and up to 18,512 litres of water per day to around 20 of the 500 residents and 25 staff in a small rural resort.

"This patented system of integrated MD-OMD for desalination allows safe and clean drinking water.

"Without the need to depend on arguably more fresh water and alternative energy resources outside of the village, the project is to solve clean water issues and electricity shortages in rural coastal regions, especially during seasons of drought," he said.

Rosalam thanked IChemE for the opportunity to share with the industries and scientific community the latest technology for further research collaboration and commercialisation.

"In today's era in transition from zero scale civilization to scale one, technological development is no longer about new scientific discovery, but more about solving engineering problem to ensure their solution

of practical, sustainable and competitive.

"I hope the recognition of engineering innovation is intensified to promote solution of engineering problem," he said.

For the record, there were six awards presented during the ninth IChemE Malaysia Awards 2021, which was held virtually on October 1.

The Young Researcher Award went to How Bing Shen from Swinburne University of Technology Sarawak Campus; Student Chapter Award (University of Nottingham Malaysia), and Oil and Gas Award won by Petronas Penapisan (Terengganu)'s visual gas sampling points.

Another two awards were won by Petronas Digital (Training and Development Award) and ASEAN Bintulu Fertilizer (Process Safety Award).