MoU/MoA

E-anfun detects odour volatility in industry, UMP and SDR find solution due to pollution

Mon, 01/24/2022 - 15:24

PAYA BESAR, 11 January 2022 - The collaboration between researchers from Universiti Malaysia Pahang (UMP) and Sime Darby Plantation Research (SDPR) in the project The Development of Odor Sensor to Monitor The Soybean Extraction Plant for Odor Mitigation Project via an MTUN matching grant successfully detected the source of odour pollution at the soy oil extraction plant (Sime Darby Oil) located in a local community in Nonthaburi, Thailand.

Using an electronic nose device, known as e-anfun, from the expertise of UMP researchers, Associate Professor Dr. Muhammad Sharfi Najib from the Faculty of Manufacturing and Mechatronics Engineering Technology (FTKPM) and Associate Professor Dr. Saiful Nizam Tajuddin from the Faculty of Industrial Sciences and Technology (FSTI), this team successfully managed the volatile odour spreading from industrial operations that produce odour through the odour mapping method.

E-anfun uses scientific methods based on consistent and non-biased data, and the method of detection using e-anfun is very effective and can reduce the operating cost of overcoming the volatile odour problem.

According to Professor Dato' Ts. Dr. Yuserrie Zainuddin, who performs the function of the Vice-Chancellor of UMP, this project has been well implemented, and no further complaints have been received from nearby communities.



“Sime Darby Plantation is satisfied and intends to install several sensor units for continuous monitoring at the plant.

“This success leads to a second project related to the monitoring of coconut oil quality through the mobile e-anfun odour sensor, which saves time and cost as there is no need for analysis in the laboratory,” he said.

“UMP is grateful for the trust given by Sime Darby Plantation,” he said.

This collaboration has been a testament to UMP’s ability to produce high quality products and have commercial value at the industry level.

He was present at a briefing on the development of e-anfun project and device at the Odour Sensor Handover Ceremony with Sime Darby Plantation Research (SDPR) recently organised by the Bioaromatic Research Centre in collaboration with the Research and Innovation Department. Also present were the Head of Processing and Technology Division of SDPR, Ir. Dr. Mohd Shiraz Aris, Deputy Vice-Chancellor (Research and Innovation), Professor Ts. Dr. Kamal Zuhairi Zamli and Dean of Industry Innovation, Associate Professor Dr. Abdul Adam Abdullah.

Meanwhile, Ir. Dr. Mohd Shiraz said the expertise of UMP researchers and the facilities provided supported the success of this project.

“The commitment and management in addressing the industry problems given by the UMP team are exceptional, especially in the tests conducted.

“Knowing the UMP team, we expect more products to be produced that can be used in the industry in the future,” he said.

There was also palm trees (*Elaeis guineensis*) planting event at the compound of the Bioaromatic Research Centre as a gimmick of close collaboration between the two parties.

E-anfun, which won the New Innovator Award in Malaysia Commercialisation Year (MYC2019), has been able to help the industry cope with the volatile odour effects such as in the oil and gas industry, chemical industry, livestock industry, palm oil and rubber industries.

Besides that, it can also address the issue of odour pollution, which affects the daily lives of the local community.

By: Mimi Rabita Abdul Wahit, Corporate Communications Unit, The Office of The Vice-Chancellor

Translation by: Dr. Rozaimi Abu Samah, Engineering College/Faculty of Chemical and Process Engineering Technology

- 220 views

View PDF