



Thiruchelvam (left) and Dr Ismail exchanging the signed agreement witnessed by Benedict (middle). Also present were representatives from UMS Engineering Faculty, Gamalux Oils, MIDA, POIC Sabah and DOSH.

UMS, company to conduct research on palm oil waste

TBP 16.03.2023 P.05

KOTA KINABALU: Universiti Malaysia Sabah' (UMS) Engineering Faculty and Gamalux Oils Sdn Bhd yesterday signed a Letter of Intent (LoI) to conduct research on palm oil waste material namely, 'De-Oiled Bleaching Earth (DOBE)'.

Representing UMS was the faculty's Dean Associate Professor Ts Dr Ismail Saad while signing on behalf of Gamalux Oils was its Plant Facilities Head, James Thiruchelvam.

Dr Ismail in his speech at the signing ceremony said among the objectives of the LoI was to create a cooperation between the two parties to conduct research on DOBE and provide impact support in the interest of the national industry in the purpose of researching palm oil waste material.

According to him, the collaboration between UMS's Engineering Faculty and Gamalux Oils Sdn Bhd is apt and an excellent effort to study whether DOBE waste materials can be used as construction materials.

"Preliminary studies

conducted by the faculty's researchers showed that DOBE has the potential to be used as a material in soil stabilization and to produce concrete. The use of DOBE as a material in the construction industry could reduce DOBE waste produced in the production of palm oil and also provide a positive impact on the environment," he said.

Dr Ismail added that further research needs to be done to understand the implications of using DOBE in soil stabilization and concrete production to ensure that the concrete produced meets the set standards.

The faculty, he said, is also actively conducting research involving waste materials such as plastic, tires, glass to be used as materials in producing bricks, 'paver blocks' and so on.

He added that the faculty has also established a research unit called the Green Materials and Advanced Construction Technology Research Unit (GMACT) which focuses on research related to green materials for use in the construction industry.

Meanwhile James in his speech said that Gamalux Oils Sdn Bhd emphasises on Green Technology and ESG (Environmental Social and Governance) and refers to the three key factors when measuring the sustainability and ethical impact of an investment in its business.

According to him, Gamalux Oils produces products that are 100 per cent from waste products which are generated by sustainable waste oil and vegetable oils.

These products, he said, are used as raw material in the manufacturing of biodiesel, chemicals and animal feed making them one of the most desirable and coveted items in the sustainable market globally.

"We have built a sustainable environment especially in reducing adverse impact on environmental pollution and is certified by international organizations such as International Sustainability and Carbon Certification (ISCC) for Renewable Energy Directive (RED) approved by the European Commission and Italian National

Scheme (NIS).

"We greatly prioritise proper implementation of safety, health, environmental, social and governance aspects in supporting the sustainability of the palm oil industry in Malaysia. We are also ensuring that the organization remains vigilant and consecutively reflects the company's values," he said.

Thiruchelvam said that there is a need to work towards zero wastage from palm oil industries.

This is where strategizing and pursuing pragmatic collaboration among government agencies and local universities to carry out research and studies on sustainability of palm oil industries, overall supply chain and waste management for other industrial usage is needed.

"We need to also focus on innovation to automation in the industry, more collaboration among big industry players and also other faculties," he added.

The LoI signing ceremony was witnessed by Industrial and Entrepreneur Development Ministry's Deputy Permanent Secretary Benedict Bisoni.