



From left to right: Dr Khin, Dr Januarius, Dr Rayner and Dr Jidon.

UMS reps to present four inventions at IENA 2018

BP 30-10-2018 4

KOTA KINABALU: Five participants from Universiti Malaysia Sabah (UMS) yesterday traveled to Nuremberg, Germany to take part in the International Trade Fairs-Ideas-Inventions-New Products (IENA) 2018, which will be held from Nov 1 to Nov 4.

The team of five consisting of UMS Associate Professor Dr Rayner Alfred, who leads the delegation, Professor Khin Maung Ohn, Associate Professor Dr Jidon Adrian Janaun, Dr Januarius Gobilik and Rayner Henry Pailus will showcase four inventions of products that will be promoted at the trade fairs.

These include MADBoost: Multiple Adaptive Diversified Boosting approach to Infrared Face Recognition based on Ensemble Classifiers by Dr Rayner and Rayner Pailus, who are recipients of the ITEX 2018 and iCAN2018 Gold Awards; Novel POP Roller (NOPORO) by Dr Khin, the recipient of ITEX2018 Gold and Special Awards; UMS Residual Oil Trap by Dr Jidon Adrian, the recipient of MTE2018 Gold Award; and UMS-Hafiz O Booster by Dr Januarius, the recipient of the PECIPTA 2017 Gold Award.

According to Dr Rayner, MADBoost: The Multiple Adaptive Diversified Boosting approach to Infrared Face REcognition based on Ensemble Classifiers was designed based on multiple feature extraction and selection methods and also the ensemble classifiers in order to produce a more robust infrared

face recognition.

"Based on the experimental results obtained, the face recognition accuracy is higher when an enriched image representation can be produced by using multiple methods for feature extraction and also optimizing the feature selection using a genetic algorithm. An ensemble approach is also applied to ensure optimum performance can be achieved. The infrared face recognition can be used for smart building access in a low light environment," he said.

He went on to explain that the NOPORO was designed to assist the usage of plaster cast for treatment of fractures or other orthopedic ailments by minimizing the high pressure points and also to reduce the plaster cast complications.

"The NOPORO innovation not only simplified the technical difficulties encountered in the traditional POP casting application but also mitigating the undesirable effects such as pressure sores due to unevenness of the manual application," he said.

And with regard to the UMS residual oil trap, he said it consisted of several tanks in series connected directly to the de-oiling tank of the palm oil mill.

"Each tank contains suspended polypropylene-based macro nanofiber (PP-MNF), a sparger and a bottom-up over flow pipe. The system enhances contact between the POME and PP-MNF

while preventing clogging. This system can be used for palm oil mill residual oil recovery as the recovery of the residual oil increases revenue and also clean up the environment."

As for the UMS- Hafiz O Booster: Hafiz FEED, he said it was produced from a probiotic fermentation of organic agricultural wastes from oil palm, flour, fish and starch industries.

Experiment results indicate that by using Hafiz FEED, farmers could increase concentrate production and use by six - seven tonnes/day, improve liveweight gain of cattle by 2.5 kg/head/day depending on the breed, age and the health condition of the cattle, he said.

The international trade fair iENA 2018 in Nuremberg, Germany, is well known for its reputation as the most important specialized trade show for the international invention scene. About 800 ideas, inventions and new products from all areas of life will be presented at the iENA.

It is hoped that with this participation from the UMS delegation, local and national products and ideas can be shared and commercialized at the international level.

At the same time also these researchers may have the opportunities to initiate any international collaborations and also promote UMS products at the international trade fairs in Nuremberg, Germany.