

Mechanical and Manufacturing Engineering Department, Faculty of Engineering Students Won Eight Medals and One Leading Innovation Awards at i-Envex 2014



KUCHING: Faculty of Engineering made Universiti Malaysia Sarawak (UNIMAS) proud once again when the team from Mechanical and Manufacturing Engineering Department, Faculty of Engineering, won 8 medals and award of "Leading Innovation Award" from the International Intellectual Property Network Forum at the International Engineering Invention and Innovation Exhibition (i-ENVEX 2014) held at UniMAP, Universiti Malaysia Perlis, recently. The event was co-organized with Malaysian Ministry of Science, Technology and Innovation Malaysia (MOSTI), Malaysian Ministry of Education (MoE), ENVEX Young Research Club (EYReC) and the Malaysian Invention and Design Society (MINDS). i-Envex is an event which has strong international partnerships with agencies such as World Invention Intellectual Property Associations (WIIPA), Korean University Invention Association (KUIA) and Association of Young Innovator and Scientist Indonesia (AYISI). The event, which was held from 11-13 April 2014, was an international expo participated by more than 10 countries, including Indonesia, Cambodia, Romania, Korea, Taiwan, India, Egypt, Croatia, Iraq, Philippines, Ukraine, Armenia, Kazakhstan, Moldova, Georgia, Turkmenistan and Kyrgyzstan. During the event, the Malaysia International Robot Competitions (MIROc) 2014 were also conducted simultaneously in UniMAP.

There were altogether eight projects from UNIMAS, which four of them were projects from Mechanical and Manufacturing Engineering Department's Final Year Project funded by Faculty of Engineering and Ministry of Education Malaysia. The two projects, which won gold medals, were projects invented by the students for their departmental course offered in class under the subject "Integrated Design". This innovative subject is a newly introduced subject for the first time this year for Mechanical and Manufacturing Engineering Department's final year students. Meanwhile, the project of "Hybrid-powered White Pepper Retting Machine with Pectinase from *Aspergillus* sp. As Catalyst" was a project funded by the Faculty of Resource Science and Technology and Ministry of Education, a collaborative research project between Dr Danial Ibrahim and Dr Azham Zulkharnain. Dr Danial (sitting third from left) was one of the invited jury in the event for the second consecutive year this time. The criteria and selection for the awards and medals was getting tougher because participants are required to have collaborations with other institutions or agencies, supported with reliable journals and IP registration proofs, and has to have commercial values in the level of pre-commercialization. UNIMAS teams were distributed to classes of Agriculture, Environmental and Renewable Energy; Biotechnology, Health & Chemicals; Manufacturing Process, Machine & Equipment. The summary of the medals that were awarded is presented in Table 1 below. Written in bold are the students who represented Unimas in i-Envex 2014. At the closing ceremony which was held at UniMAP Ulu Pauh Main Campus' Main Hall, the Deputy Secretary General (Policy), Ministry of Science, Technology and Innovation Malaysia (MOSTI), Datuk Dr .Mohd Azhar Yahaya and the vice Chancellor of UniMAP, Brig. General Dato' Prof. Dr Khamarudin Hussin, witnessed the award and medal presentations to the winners. There were more than 400 participants from numerous institutions of higher learning from all over the world took part in this exhibition-cum-competition event. During the same event, there were hundreds of high school students and associations who participated in the MIYIO and MIROC clusters. The three-day symposium welcomed both public and private institutions to join to showcase creative and innovative idea in inculcating engineering advancements and research for the society.

	Abu Bakar Bin Umar Syarifudin , Muhamad Fadzli Bin Ashari, Abdul Hafiz Bin Abdul Karim, Dr Azham Bin Zulkarnain	Automated Sorting System with Image Processing for Colony Enumeration System	Bronze Prize
2	Lee Meng Chuen, Barnarby Vyner Anak Silvester Ragam , Nurhanna Zulaikha Bt Ishank, Christine Maria Lee, Ervina Junaidi, Dr Syed Tarmizi Syed Shazali, Dr Ana Zakura Zainal Abidin, Annisa Jamali	Design of Sarawak Layer Cake Machine using Back-forward Mechanism	Gold Prize and Leading Innovation Award (International Intellectual Property Network Forum)
3	Mohd Hisyamuddin Bin Sulaiman , Mohd Fareez Edzuan Bin Abdullah, Noor Aliah Binti Abdul Majid, Mohd Syahmi Bin Jamaludin	Feasibility of Rice Waste Bioethanol as Fuel Additive to Reduce Diesel Exhaust Emission	Bronze Prize
4	Nur Atiqah Nadia Bt Remmy Iskandar , Dr Mohd Danial Ibrahim, Mohd Fadzli Ashaari, Dr Azham Zulkarnain, Assoc. Prof. Dr Awang Ahmad Sallehin Awang Hussaini, Yap Chin Ann	Hybrid-powered White Pepper Retting Machine with Pectinase from Aspergillus sp. As Catalyst	Bronze Prize
5	Siti Nazirah Bt Abdullah , Dr Mohd Danial Ibrahim, Assoc. Prof. Dr Miyanaga Norifum, Dr Nabilah Ibrahim, Muhd Fadzli Ashaari, Asliana Asmara	Effects of Whale-inspired Blade Designs Modifications onto Dynamic Profiles of Tidal Turbines	Bronze Prize
6	Siti Nazirah Binti Abdullah , Boon Sie Cha, Ivy Elora George, Mcmaygray Ewington Anak Achu, Dr Syed Tarmizi Syed Shazali, Prof Dr Amir Azam Khan, Dr Abdullah Hj Yassin, Dr Magdalene Andrew Munot, Dr Ana Sakura Zainal Abidin, Ervina Junaidi, Siti Nor Ain Musa, Muhamad Fadzli Ashari, Annisa Jamali, Abang Mohamad Aizuddin Abang Mohd Mohtar	Development of Sectional Base Sarawak Layer Cake System	Gold Prize
7	Tan Wai Kong , Dr Mohd Danial Ibrahim, Assoc. Prof. Dr Miyanaga Norifum, Assoc. Prof. Ir. Dr. Mohammad Shahril Osman	Thermodynamics Profiles for Near Actual Model of Ultra-high Speed Hard Disk Drives	Bronze Prize
8	Tigang Anak Doris Debong , Mohd Izfihar Izwan B Hazmi, Annisa Jamali	Portable Design of Upper Limb Impairment Rehabilitation Robot	Silver Prize

By

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