

Universiti Malaysia Pahang (UMP) won big in the US when four of its researchers brought home four gold medals and a special award following their successful feats at the 'Invention and New Product Exposition' (INPEX 2013) held at Monroeville Convention Centre, Pittsburgh, US.

The four researchers were Dr Hadi Manap (Faculty of Technology – FT), Professor Dr Jose Rajan (Faculty of Industrial Sciences & Technology – FSTI), Mohd Najib Razali (Faculty of Chemical & Natural Resources Engineering - FKKSA) and Professor Dr Jasni Mohamad Zain (Faculty of Computer Systems & Software Engineering - FSKKP).

UMP Vice-Chancellor, Professor Dato' Dr Daing Nasir Ibrahim said, INPEX was the biggest exhibition in the US and it was managed by Invent Help.

He added that it was a platform where a variety of inventions, new products and innovations were put on display.

It was also the gathering of creators, designers, entrepreneurs, universities and industrial representatives of the country, he said.

"UMP researcher Dr Hadi Manap garnered two gold medals in the electrical/electronic category and safety/industrial control category. His winning entry was titled 'Real Time NH3 Monitoring and Alarm System'. It gives out alarm and uses the light system.

"This chemical research finding will be able to help industries to trace the presence of ammonia gas in a short period of time – as fast as three seconds as compared to the normal method that detects the gas in six minutes.

"This finding can help prevent deaths in incidents such as ammonia leakage, accident or fire," he told a press conference held to announce the researchers' successful feats at Bukit Gambang Resort on July 1, 2013.

Professor Dr Jose Rajan won a gold medal in the agriculture category for his work, 'Clean Energy Storage Device from Oil Palm Waste'.

He discovered that energy (carbon) could be sourced from oil palm waste, specifically from the kernel and that these seeds were abundant in the oil palm industry in Malaysia.

Others involved in the research were FSTI Dean, Professor Dr Mashitah Mohd Yusoff, Nurul Khairiyah Mohd Zain, Izan Izwan Misnon, Radiyah Abd Aziz and Professor Dato' Dr Rosli Mohd Yunus.

UMP RESEARCH WORKS RECEIVED RECOGNITION IN THE US



Another gold medallist was Mohd Najib Razali who won in the environment category for his work titled, 'Innovative Green Technology Waste Emulsion Treatment System (From Waste to Wealth)'.

His research revolved around the situation faced by industries in having to incur high expenses in treating waste oil emulsion discharged by the manufacturing industry.

According to Mohd Najib, the study conducted found that factories in the manufacturing industry in Malaysia produced between 50 and 60 tonnes of the emulsion stuff monthly.

The new technology uses a mixture of various natural solvents to separate impurity in the sediment as a by-product.

He said its unique features included expediting flocculation – removing oil from the emulsion waste and water filtration process so the waste could be safely discharged into the river.

As such, the technology would not only save cost but could also be recycled for industrial use, he added.

The product was jointly carried out with Deputy Vice-Chancellor (Research & Innovation), Professor Dato' Dr Rosli Mohd Yunus and Associate Professor Dr. Abdurahman H Nour.

UMP has also found a quick means to identify timbers – using 'Automated Wood Species Recognition for Malaysian Timber'.

The research team, led by FSKKP Dean, Professor Dr. Jasni Mohamad Zain discovered a new way to identify timbers by using a digital software system and that it won a special award for Best Invention in Pacific Brim.

The method is not only user-friendly but also reduces the time for results produced are accurate and fast.

Most importantly, it is cheap and does not require an expert to determine the type of a timber.

Other members in the team were Zalili Musa, Tuty Asmawati Abdul Kadir, Abbas Salimi Lokman and Chu Kai Chuan.

Dato' Dr Daing congratulated all the winners and researchers and hoped that their successes would drive others to continue to acculturate the world of research and innovation.

"The success achieved at the international invention competition is not something that is easy to pull off but this university has demonstrated that the world recognises UMP's research works," he said.