## Pahang pupil is world's 'best young inventor'

Eleven-year-old bags three prestigious awards for sustainable livestock feed



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SHE may be 11 years old but Maryam Muzamir is already establishing herself as a bona fide inventor.

The Year Five student at SK (P)
Methodist Kuantan, Pahang, recently notched up not one, not two, but
three achievements in her first
international competition – earning
praise from Prime Minister Datuk
Seri Ismail Sabri Yaakob and United
States talk show host James Corden.

Emerging as the youngest winner among more than 600 participants from 70 countries, she took home the Best Young Inventor Award, the Canadian Special Award and a gold medal at the 6th International Invention Innovation Competition in Canada (ICAN).

In an email interview with StarEdu, Maryam said winning three awards at a prestigious competition like iCan was beyond her expectations.

Sharing in her joy, her father "Juzamir Hasan said Maryam's success proved to him that age is ust a number.

Winning at iCAN is a very big

achievement since it is the biggest invention competition in North America, especially when there's no specific category in it," he added.

For her submission, Maryam devised her soon-to-be-patented invention named YAM2.0: Sustainable Livestock Feed, which involved recycling food waste from prawn shells and sea snail shells into livestock feed.

Last Thursday, Domestic Trade and Consumer Affairs Minister Datuk Seri Alexander Nanta Linggi announced that his ministry would be contributing to the cost of at least RM10,000 for filing the invention patent for the creation.

The Intellectual Property Corporation of Malaysia (MyIPO), Nanta said, would evaluate the innovation to increase the probability of YAM 2.0 being registered under the Patents Act 1983.

Citing reports of 15,000 tonnes of food waste being produced daily in Malaysia, Maryam said her inspiration came from trips to seafood restaurants, where she saw large numbers of shells being thrown away.

Combined with the knowledge that these shells contain chitin, which is good for livestock, and that the prices of meats are increasing due to the expensive materials used in conventional livestock feed, she set out to invent a sustainable and



cheaper alternative.

Her attempt was, however, met with challenges such as determining the exact proportion of the materials used to maintain the nutrients and taste.

Thanks to support from Universiti Malaysia Pahang (UMP), where her father works as an associate professor, and engineering company Global Lab Engineering Sdn Bhd, which helped her to conduct laboratory tests, she managed to overcome them after several rounds of trial and error.

Maryam shared that the American sitcom The Big Bang Theory – which revolves around the lives of scientists and their careers – first sparked her fascination with science, technology, engineering and mathematics (STEM).

Aspiring to be a professor in STEM-related fields, Maryam said she is also inspired by Greta Thunberg, the Swedish youth climate activist who advocates improving the environment by reducing food waste.



Yes, iCan: Maryam (second from right) and her family posing with her awards from the competition.

Before participating in innovation competitions, Maryam had entered several science and mathematics competitions, from which she became encouraged to develop her own inventions.

She had won gold medals in three other innovation competitions – at the 2020 and 2021 Creation. Innovation, Technology & Research Exposition organised by UMP, and at the International Research Invention, Innovation and Exhibition 2021 organised by Universiti Teknologi Mara.

When she found out about iCAN 2021 from her father, she decided to give it a shot, she said.

Muzamir said invention competitions like iCAN are "good platforms to display knowledge and skills, and more importantly to unleash the potential of students".

"By competing in competitions such as this, it shows that Malaysians are on par with, if not better than, competitors from other countries," he added.

iCAN 2021 participants were required to submit several docu-

ments, including a poster, a pamphlet, technical reports, cost analysis reports and presentation slides.

For the finals, which were held on Aug 28, competing finalists were required to prepare a video explaining their inventions.

iCAN 2021 was organised by the Toronto International Society of Innovation & Advanced Skills, and supported by Innovation Initiative Co-operative Inc., the International Federation of Inventors' Associations, and the World Invention Intellectual Property Associations.

Shinz Jo, 17, a student in Penang, is a participant of the BRATs Young Journalist Programme run by The Star's Newspaper-in-Education (Star-NiE) team. Throughout the year-long programme, participants aged between 14 and 22 from all across the country experience life as journalists, contributing ideas, conducting interviews, and completing writing assignments. To join Star-NiE's online youth community, go to face-book com/niebrats.