## BERITA ONLINE THE STAR TARIKH: 30.03.2022 (RABU)

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## UTP's Mohd Khairul Anuar Jamaluddin awarded the National Technologist Science Award 2021



VIETNAM 16h ago in Vietnam to preserve

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SERI ISKANDAR: Mohd Khairul Anuar Jamaluddin of Universiti Teknologi Petronas (UTP) has won the National Technologist Science Award 2021 from the Science, Technology and Innovation Ministry (Mosti).

He received a RM10,000 cash prize, a certificate and a trophy from Mosti secretary general Datuk Zainal Abidin Abu Hassan and its deputy secretary general (planning and culture of science) Dr Nagulendran Kangayatkarasu.

The National Technologist Science Award acknowledges the excellent work and achievements of technologists whose work is related to the field of science and technology. It promotes increased excellence and creativity, as well as intensified efforts to assist the nation's development of research in science and technology.

Mohd Khairul received commendation for his research works on Cellulose Nanofibers from Palm Bio-waste as Separator Membrane for Electric Double Layer Capacitor (EDLC). The palm-bio waste (empty fruit bunch) is utilised as an alternative to paper to develop separators for the EDLC.

The use of bio-waste helps to reduce or delay the consumption of natural resources and amount of waste generated. Bio-waste is a greener and sustainable alternative material for separators in EDLC to replace the commercial paper separators made from trees. Cutting

trees can cause climate change, desertification, soil erosion, fewer crops, flooding and increase greenhouse gases in the atmosphere.

The research supports the national agenda towards green growth and is aimed at improving awareness on national sustainable waste management and reduction of waste generation. It is intended to address deforestation issue and minimised the requirements for a dedicated landfill, which is aligned with the Water Malaysia's Green Technology Master Plan 2017-2030 (Section 6 - Waste).

The research also won a silver medal at UTP 43rd Science and Engineering Design Exhibition (SEDEX43).

As one of the authors, Mohd Khairul presented this research at the sixth International Conference on Fundamental and Applied Sciences (ICFAS), World Engineering, Science and Technology Congress (ESTCON 2020). It was also published in the Springer Proceedings in Complexity Journal in January this year.

Mohd Khairul acknowledges that the research and laboratory facilities in UTP plays a major role in his research.

"The research environment and the culture of innovation and creativity in UTP is very much geared toward new findings and breakthrough inventions," he said.

"This research and accomplishment are a team effort, and I have been extremely fortunate to be working with the great minds in UTP – from the principal investigators, project leaders and academicians, to my fellow technologists.

"With their guidance and directions, they have helped me to understand more on the theoretical and practical part of technology.

"The management has also been very encouraging and supportive, and it would not have been possible without all these supporting factors and features," he added.

Mohd Khairul is a quality and statutory compliance senior executive of UTP Laboratory Management Department (LMG). Prior to this, he was a lead technologist at the same department and had been serving the university's Department of Civil and Environmental Engineering and Centralised Analytical Lab. He holds a Bachelor of Science (Hons) in Applied Physics from UTP.

Before Mohd Khairul, UTP technologists had won the award for three consecutive years through Noor Azwan Ahmad (2017), Shaiful Hisham Samsudin (2016) and Adz Jamros Jamali (2015).