



## Showcasing smart tropical design

**I**N maintaining the sustainable tropical environmental design, STEdex 2018 showcases an exciting collection of artefacts contributed by all three departments — Architecture, Industrial Design and Landscape Architecture — of Universiti Putra Malaysia's (UPM) Faculty of Design and Architecture.

Themed "Smart Tropical Design", the exhibition displays more than 40 research products at the Serdang Gallery until Oct 31.

UPM deputy vice-chancellor (student affairs and alumni) Professor Dr Mohd Roslan Sulaiman said STEdex 2018 is seen as a platform for the faculty's lecturers to promote their research applications and outcomes based on design and architecture.

He said highlighting uniqueness in the field of design and architecture can push forward the faculty in the industry and build networks with industry partners and other higher institutions.

"This exhibition was also to pave the way for recognitions by external parties, including embassies and international visitors, and this will increase UPM's visibility," he said at the opening of STEdex 2018 at UPM recently.

Faculty of Design and Architecture dean Associate Professor Dr Osman Mohd Tahir said the objective of STEdex was to showcase creative works produced by UPM lecturers and students and to encourage debates on issues of public interest in design and architecture.

"STEdex has given an impact to the faculty's key performance index as the research products will be listed in Chapter in Books and MyRA (Malaysian Research Assessment Instrument). The faculty is also trying to bring STEdex to a higher level as Exhibition Conference," he said.

The exhibition, which began in 2009,

has been highlighting the works of the faculty's students and lecturers.

Osman said students and faculty members' artefacts would become part of the permanent collection at the faculty.

One of the products being displayed at the exhibition was DADD — Drivers' Anti-Drowsy Device, a self alert device that helps to prevent drivers from falling asleep.

The wake-up alarm comes in a wearable form, which is better than built-in automatic devices in the vehicle. It is designed by industrial design undergraduate Syuhada Mohd Daud.

Industrial Design Department senior lecturer cum project supervisor Dr Rosalam Che Me said one of the major causes of road accidents was driving while feeling tired and sleepy, and the integrated system works to detect the physical changes of drivers and their level of drowsiness, such as bobbing head, yawning, blinking eyes and slower heart rate.

"The alert given to the users is in the form of haptic stimuli — it gives a mild but adequate vibration alert. The device is designed to be wearable for ease and practicality of use," he said.

Also on display were "bilitec", a device to detect and monitor bilirubin level on newborns; "No-Mo", a multifunction ultrasonic mosquitoes repellent; and "Da bao", a beautifully designed intelligent dietary box.

Under the landscape research category, there was "The Variety", a concept of the ideal habitat between boundaries. It was designed based on three different factors, such as cube, earth and site of the Lake Gardens in Taiping.

Another display was "RUMaH", which stands for a Robust Urban Malaysian Habitat, which emphasised on experimental, contemporary and innovative themes.



1. Rosalam Che Me explaining his student's design, DADD - Drivers' Anti-Drowsy Device which is on display at STEdex 2018. 2. A display under the landscape research category presenting an idea on reinforcing place identity of Kuala Kangsar Royal Town through traditional plant characteristics. 3. Mohd Roslan Sulaiman (second from right) and Osman Mohd Tahir (right) listening to the explanation given by one of the students. 4. A group photo of STEdex 2018 participants. 5. Visitors thronging the Serdang Gallery. 6. Dekoponix Wall Planter is designed for outdoor and indoor planting.