

UPM first M'sian varsity to test optic fibre samples in space

By **SANDHYA MENON**
educate@thestar.com.my

SERDANG: Universiti Putra Malaysia (UPM) is the first Malaysian university to send optic fibre samples to the Japan Aerospace Exploration Agency (Jaxa), which will be tested in the International Space Station (ISS).

Both optic fibres, known as E-SOFPADS and I-SOFPADS (Smart Optical Fibres for Passive Dosimetry in Space), will detect space radiation outside and inside the ISS.

"These radiation are harmful to astronauts' health.

"Often, they contract diseases such as osteoporosis and heart diseases.

"Also, sometimes, when free radicals interact with our body, they will change the structure of our DNA," UPM Centre for Diagnostic Nuclear Imaging SOFPADS chief researcher Dr Noramaliza Mohd Nor said at a press conference yesterday.

The samples will be sent from Jaxa to ISS in February 2019.

The E-SOFPADS will be in space for 360 days while the I-SOFPADS will detect radiation within the ISS for 300 days, said Dr Noramaliza, after which, the samples will be returned to UPM for analysis.

Three UPM researchers were involved in the building of the samples, in collaboration with Universiti Malaya, Multimedia University,

Sunway University and the National Space Agency (Angkasa).

Dr Noramaliza said the dosimeter of optical fibres will be exposed in space under various conditions and will be stored in the Kibo module, a Japanese science module developed by Jaxa for ISS.

"It took us one-and-a-half years to build these samples," she explained.