

### Seminar on Building Material Quality, 14 Feb 2017

In February 14, 2017 Department of Infrastructure and Geomatic Engineering, Faculty of Civil and Environmental Engineering, UTHM organised a one day seminar on Road Quality was held involving contractors and sub-contractors of Amona infra care Sdn Bhd. Through this seminar, participants have been exposed to the management of road construction materials as well as lab and field laboratory testing. The aim of the seminar is to highlight the best methods that can be adopted in producing high quality road maintenance.



### Johor Natural Heritage Seminar 2017 (Seminar Warisan Semulajadi Johor 2017)

Perbadanan Taman Negara Johor organises Johor Natural Heritage Seminar 2017 with co-organisers Universiti Tun Hussein Onn Malaysia, Forest Research Institute Malaysia and Malaysia Nature Society. The seminar was held on 12 to 14th February 2017 at M Suite Hotel, Johor Baharu. This seminar is about sharing the findings from the 2016 expedition at Bukit Tukau, Bukit Belading and Bukit Reban Kambing at Ledang as well as Sedeli Besar. The participants from government agencies and NGO's. These expeditions aimed to gazetted the areas as a Johor National Park. Faculty of Civil and Environmental Engineering actively involved in that research activity in Ledang. Geology team leads by Associate Professor Dr Aziman Madun, Mr Mohd Hazreek Zainal Abidin and Dr Mohd Faizal Tajul Baharudin was studying the geological rocks and features at Bukit Belading, Bukit Tukau and Bukit Reban Kambing. The finding indicates that the metasandstone areas, which located at Bukit Tukau and Bukit Reban Kambing are home for the rare plant species of *Cycas Cantafolia*.

Photo: Plant species of *Cycas Cantafolia* were found at steep terrain at Bukit Reban Kambing

### Tunneling Short Course, on 26<sup>th</sup> March 2017

In 26th of March, 2017, Faculty of Civil Engineering, Universiti Teknologi Malaysia has conducted a short course related to Tunnel Engineering. One lecturer and two master students (Dr. Mohd Firdaus Bin Md Dan @ Azlan, Syahrul Aida Binti Amaran and Ummu Aiman Binti Idris) from Faculty of Civil and Environmental Engineering, Universiti Tun Hussein Onn Malaysia have been invited as participants. The speakers in this short course are Ir. Syed Rajah Hussain Bin Mohd Haniff, as a chairman from Tunnelling & Underground Space Technical Division, IEM, and Mr. Ilanchelvan Polanippan from Tunnelling & Underground Space Technical Division, IEM. This course explained on the underground survey, tunnelling in soft ground and hard rock, mechanized tunnelling and tunnel lining, instrumentation and monitoring and health, safety and environment in tunnel construction.





## Lawatan Kem Geologi ke Mersing, Johor dan Sungai Lembang, Pahang

A total of 228 students from 4 sections divided into 3 groups were involved in the engineering geology site visit. Each tour was supported by 3 lecturers and 1 assistant engineer. The program was successfully implemented in 3-5 April 2017 for the first site visit to Kuantan and Sungai Lembang, Pahang. The second site visit was in 14-15 April 2017 and 21-22 April 2017 to Pulau Mawar, Mersing, Johor. Through this program, the students had been conducted several field experiments including identifying rock mass structures and classifying weathering grades, observing and analyse the stability of rock slopes using kinematic analysis and measuring the rock strength. The site visit went to the Department of Mineral and Geosciences, Pahang to know the geology activities in Pahang like mining and quarry as well as exposed on how to panning for the gold.



## Report of JKIG Industrial Talk 1/2007

speaker:  
MR. ERIC LIEW  
Senior Technical Manager, SOLMAX

Organized by:  
Department of Infrastructure & Geomatic Eng.,  
Faculty of Civil & Environmental Engineering, UTHM

06 March 2017 // Bilik Taklimat, Level 1, FKAAS // 9 am - 11 a.m

Department of Infrastructure and Geomatic Engineering (JKIG), FKAAS had successfully organized its first industrial talk on 6 March 2017 (Monday). The title of the industrial talk is “Geomembrane HDPE for Waste Containment Application”. The talk is delivered by Mr. Eric Liew, Senior Technical Manager of SOLMAX International. SOLMAX International is an international company which based at Canada and has a branch factory in Malaysia. The talk was attended by 66 students who are taking subject Geoenvironment and also some postgraduate students who are involved in relevant research. Apart of it, some of the lecturers also attended the talk namely Assoc. Prof. Dr. Aziman Madun, Dr. Felix Ling Ngee Leh and Mr. Mohd. Hazreek Zainal Abidin. The audience were exposed to different important aspects that designer needs to consider when choosing Geomembrane for different applications. In addition to it, the advantages of different market available Geomembrane were also been highlighted. The audiences were encouraged to participate actively and those who were able to answer the questions correctly were rewarded with souvenir from Solmax International. At the end of the talk,

the speaker was given plaque university and certificate of appreciation as a token of appreciation. The industrial talk was successfully in educating the audience on the right method in choosing Geomembrane.

## High Performance Thermoplastic as New Material for Transverse Rumble Strips

Federal road FT050 which linking Batu Pahat and Kluang (FT050) is among the most dangerous road in Malaysia. This motivates Datuk Ab Aziz Kaprawi, the Deputy Minister of Ministry of Transport and who is also the Member of Parliament of Sri Gading initiated Intervention Plan of Road Safety under Cluster of National Blue Ocean Strategy (NBOS) to boost road safety of FT050. This plan hope to use FT050 as pilot study on road safety enhancement and if successful, the plan will be imitated to other high risk road throughout the country. Members of this committee are UTHM Smart Driving Research Centre (SDRC), Batu Pahat Public Work Department (JKR Batu Pahat), Public Work Centre of Excellence in Engineering and Technology (JKR Create) and Road Safety Department (JKJR).





As part of the strategy to control speed and reduce the accident risk in some of the black spot area in FT050, this committee has adopted transverse rumble strips (TRS) approach. TRS is relatively cheaper and easier to install, thus make it widely used as road furniture and traffic calming devices throughout the country. However, thermoplastic, which is the material TRS made from, could has short life span in high density and high speed traffic as it could 'worn off' quite easily. This might lower its effectiveness, hence, unable to slow down the traffic and warns drivers on the hazard ahead.

Therefore, GT-Roadtech SDN BHD introduced new pavement marking material, High Performance Thermoplastic (HPT) which is more durable and visible at night as it more reflective to headlight.

This new product was came from their innovation and had demonstrated an encouraging result in their first test lay in Serdang, Selangor. Based on this reason, on 6, 17 and 18 April 2017, JKR Batu Pahat and GT Roadtech SDN BHD installed HPT for TRS and road marking in two FT050 black spot areas as the first test lay in Johor. The black spots were FT050 road stretch in front of Taman Ria and in front of Sek. Men. Sri Lalang. These black spots recorded annual three and above fatal accidents.



A team from UTHM SDRC consists of Dr. Mohd Hanifi Othman and En. Sahidin Ghazali were joined to witness the installation process of the TRS on 6 and 17 April 2017. The process was led by JKR Batu Pahat and also attended by JKR Create. GT Roadtech SDN BHD demonstrated the installation process in which include laying the base coat as first layer, laying the fine aggregate as second layer and finally the reflective paint as top layer. Traffic management and road closure were carried out by JKR Batu Pahat to facilitate the installation process and providing the safety to the crews. To evaluate the TRS effectiveness, UTHM SDRC planned to conduct the before-after speed study for the TRS and the

result would determine whether TRS is suitable to be used as traffic safety measure for FT050. Therefore, this collaboration among government agencies, industry and academia hopeful-

## "JKIG STALKER"



Geological Camp Trip to Sg. Lembing, Pahang