

## CERAMAH TEKNIK TECHNICAL TALK

### **Occurrence of Early Eocene to Middle Eocene planktic foraminifera from bedded shale at the Suang Pai quarry, Kudat, Sabah: A preliminary interpretation**

Junaidi Asis (UMS)

### **Effects of moisture and clay minerals on the strength of soil along Kota Belud – Ranau Road, Tamparuli, Sabah**

Mohd Ali Yusuf (UMS)

16 May 2014, School of Science & Technology, UMS

Technical talk series 1 (Sabah zone) was held on the 16th May 2014 at the Bilik Mesyuarat Utama (BMU), Faculty of Science and Natural Resources (FSSA-Fakulti Sains dan Sumber Alam), Universiti Malaysia Sabah (UMS), organized in collaboration with the Geological Society of Malaysia (GSM) and the FSSA, UMS. The technical talk was officiated by the Dean of FSSA, UMS, Assoc. Prof. Dr. Baba Musta, followed by opening from Mr. Rodeano Hj. Roslee, GSM-regional representative of Sabah zone.

Technical talk series 1 (Sabah zone) is aimed to provide a platform for discussing the current geosciences research conducted in Sabah, Malaysia. This event attracted participants from various government agencies namely the Mineral and Geosciences Department of Malaysia (JMG), Meteorological Department of Malaysia (JMM), Department of environmental protection of Sabah (JAPAS), Kota Kinabalu City Hall (DBKK), Public Works Department of Sabah (JKR), Environment Department of Malaysia (JAS), as well as researchers, academicians and students from UMS.

## PERTEMUAN PERSATUAN (MEETINGS OF THE SOCIETY)

Two technical papers were presented by Sdr. Junaidi Asis (UMS) and Sdr. Mohd Ali Yusuf Mohd Husin (UMS).

Sdr. Junaidi Asis has presented a paper entitled "Occurrence of Early Eocene to Middle Eocene planktic foraminifera from bedded shale at the Suang Pai quarry, Kudat, Sabah: a preliminary interpretation". In this research, four samples of shale from the Suang Pai quarry, Kudat, Sabah have been collected and processed according to micropaleontological technique. Sdr. Junaidi found that all samples contain an abundance of planktic and benthic foraminifera. A total of sixteen taxa of planktic foraminifera have been identified and eleven selected species are used for age determination. He concluded that the planktic foraminiferal assemblage represents an age of Ypresian to Bartonian (Early Eocene to Middle Eocene). The age and characteristic of the shale unit can be interpreted as part of the Crocker Formation.

Sdr. Mohd Ali Yusuf Mohd Husin has presented a paper entitled "Effects of moisture and clay minerals on the strength of soil along Kota Belud – Ranau Road, Tamparuli, Sabah". The main objective of the study is to determine the effects of moisture, mineral and microstructure on the strength of soil. In this research, the soil samples were collected from the major road of Kota Belud – Ranau, Sabah. Moisture analysis was applied by using manipulation of Unconfined Compression Test by treating the samples with 5% of increment and decrement of moisture from the optimum moisture content. The analysis yielded the strength of soil ranges from 50.5 kPa to 131 kPa for optimum moisture, 20.5 kPa to 50 kPa for 5% increment and 98 kPa to 210.5 kPa for 5% decrement. He found that the sandy soil have a higher shear strength when subjected to less moisture and clay soil have a lower shear strength when more moisture is added. As a conclusion, this research shows that effect of moisture is characterize by the mineral and microstructure properties of the sample and it has a direct impact on the shear strength of soil.

The presentation by the two speakers was followed by a question and answer session. The technical talks received a very good response from the 38 participants. Closing remarks and a summary of the technical talk were given by Mr. Rodeano Roslee. Besides that, token of appreciation were delivered to the presenters by Prof. Dr. Sanudin Hj. Tahir.

Rodeano Roslee

Regional Presentatives of GSM (Sabah zone), Universiti Malaysia Sabah

