## PERTEMUAN PERSATUAN (MEETINGS OF THE SOCIETY)

## TECHNICAL TALK

C.R. JONES: Geological and mineral exploration of the Kalahari, SW Africa

Dr. C.R. Jones, presently Regional Geologist Asia and the Middle East, Overseas Division, Institute of Geological Sciences, London, is no stranger to Malaysia for he is well-known for his classic memoirs of the Grik and Langkawi/Perlis areas and his studies on the Lower Palaeozoic of Peninsular Malaysia are significant contributions towards the understanding of Malaysian geology.

About 30 members were present at the Dept. of Geology, University of Malaya, on Friday, 19 November 1982 to take advantage of one of the rare opportunities to meet and listen to Dr. Jones.

In his talk Dr. Jones gave details of the Survey's exploration and mapping of Botswana with emphasis on the largely unexplored Kalahari Desert. The geology was explained with a series of colour slides and satellite photographs. The oldest rocks in the country are Archean metamorphics forming the basement and this is overlain by the Karroo rocks which include the Dwyka tillites, Ecca clastics and Beaufort sandstone. Younger sediments are generally flat lying. Other interesting geology include the discovery of a possible failed third arm of a rift and the geomorphology of 'ancient' dume fields.

The main economic deposits exploited at present are diamonds from kimberlite pipes, coal from the Ecca and salt, potash, soda ash from inland lakes. Revenue from mining contributes significantly to the economy of Botswana which is one of the relatively more prosperous African country (population  $\frac{3}{4}$  million). Notwithstanding, mineral exploration of the relatively unexplored Kalahari which covers about 80% of Botswana is being encouraged. To attact mining companies to invest in mineral exploration of the Kalahari, the Survey has undertaken geological and geophysical surveys of the region. Airborne geomagnetic and gravity surveys have been completed and many potentially interesting areas have been identified. In addition funds from various countries such as Canada, Germany, and Japan have been obtained for drilling and other projects to provide more details of the mineral potential of the Kalahari. To date, however, there has yet to be a 'rush' to take up concessions for exploration by mining companies as the Kalahari is rather inhospitable and an expensive area to explore. However, considering the trend of mineral belts in neighbouring Zimbabwe, Namibia and South Africa, Dr. Jones is of the opinion that the Botswana Kalahari is potentially mineral-rich.

T.T. Khoo