

CERAMAH TEKNIK (TECHNICAL TALKS)

S.P. Chen, D. Kelter & K.K. Liaw: Coal Exploration in Sarawak

Three workers, Encik S.P. Chen, Dr. b. Kelter and Encik K.K. Liaw gave a technical talk to the Society in the Department of Geology, University of Malaya on coal exploration in Sarawak on 14th January, 1988. The talk was structured in 2 parts. Part 1 concerned the methodology and status of coal exploration and in part 2, a special coal exploration technique of retilting was introduced, and its application in environment of deposition and structural studies of coal basin was elaborated.

The Geological Survey of Malaysia is carrying out coal exploration work in the Merit Pila Coal Field and exploration is centered in the Merit, Tebulan and Musa Blocks covering about 50 km². To-date evaluation of the Merit Block was completed and the report published. Field work for Tebulan Block was also finished. The coal exploration methodology from literature research stage in the office to field geological and topographic mapping, coal outcrop studies, shallow vacuum and deep drilling, and borehole logging techniques was discussed. Presentation of data in a series of maps and plans to show cross sections, seam variation, seam thickness distribution seam structure, overburden thickness and ratio and resource computation were shown.

The Malaysia Coal Reserve Classification which can accommodate reserve figures with various geological cut-off including thickness, depth, ash, etc. and a schematic representation of coal and rock based on grain size were introduced. The simplified schematic representation of lithologic type gives a good visual impact and simplifies correlation.

The speakers also demonstrated how a basin, through increasing angles of tilt can cause distortion of the concentric structural lines typical that of a basin, to hyperbolic to parallel lines at 5°. Applying this in the reverse, with the aid of computer programme, the palaeo-land form can be re-constructed by simulating the correct retilt of the seam. This concept was illustrated by using data from the Tebulan Block. By comparing the retilted structure with other data such as seam thickness, ash distribution, etc. discontinuities caused by tectonics, such as a graben, can be delineated. When the effect of the structure is compensated, the palaeo-relief could be established.

S.P. Chen

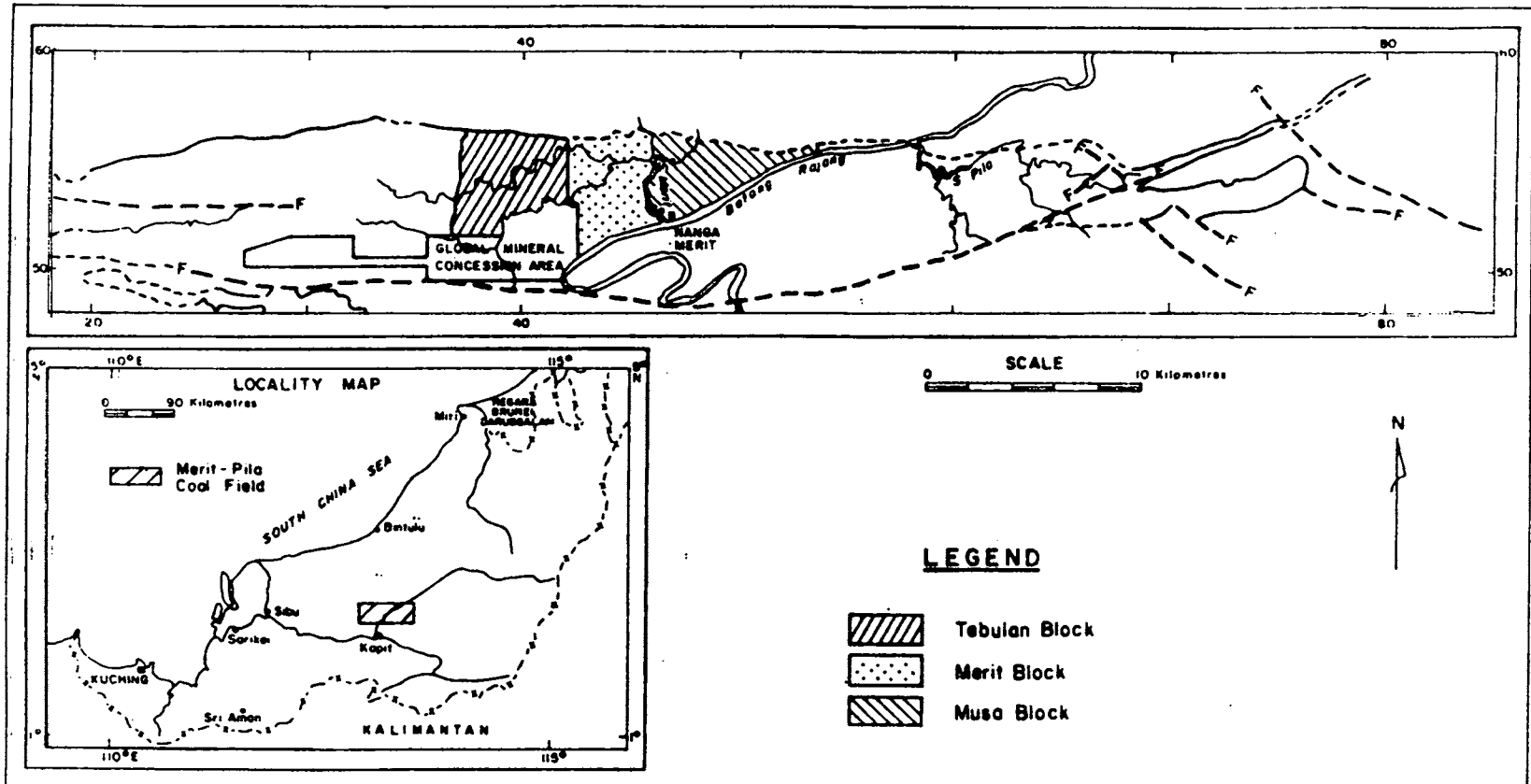
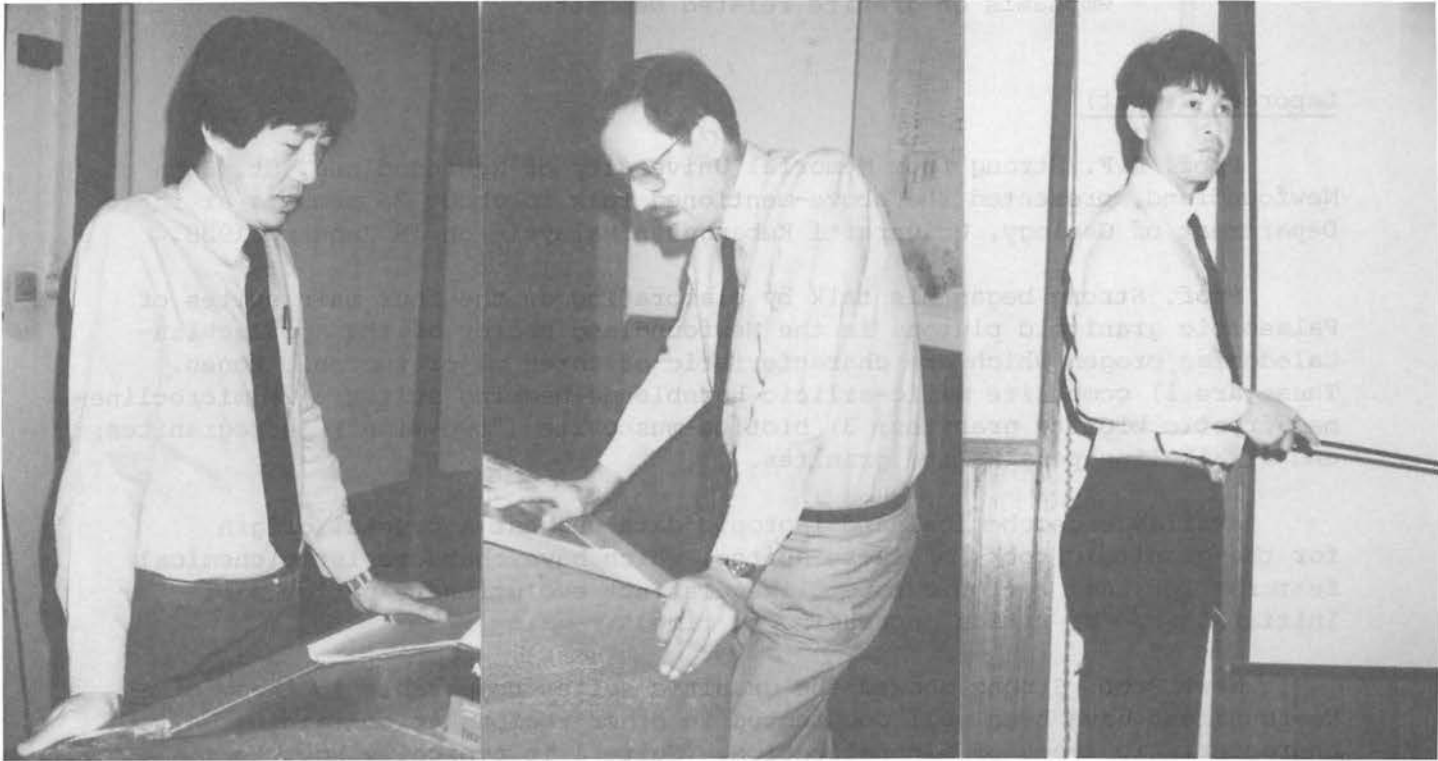


Fig. 1. The Merit Pila Coal Field, Sarawak.



S.P. CHEN

D. KELTER

K.K. LIAW



THE INTERESTED AUDIENCE