# KESATUAN KAJIBUMI MAKAYSIA GEOLOGICAL SOCIETY OF MALAYSIA

## NEWSLETTER

Number 1

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#### INTRODUCING THE NEWSLETTER

This Newsletter, which will be sent free to all members of the Geological Society of Malaysia, is designed to be a forum for exchange of information on geological matters. It is planned to issue the Newsletter frequently, probably bi-monthly.

The Newsletter will be a vehicle for many different kinds

of items:

- 1. Announcements of coming events, such as meetings, symposia, public lectures, and visits to Malaysia by geologists and people in related fields.
- 2. Brief descriptions and progress reports of research and exploration projects being pursued in Malaysia.
- 3. Requests for, and exchange of, specific items of geological information.
- 4. Reports of developments in industry, legislation, and government policy of interest to geologists.
- 5. Notes on new geological discoveries of interest to this area.
  - 6. Reviews of new publications bearing on Malaysian geology.
- 7. Any other miscellaneous items which may be of interest to geologists in Malaysia.

Most such items must be sent in to your editor by the member of the Society who happens to possess the information, and the usefulness and success of the Newsletter will depend very largely on the willingness of the members to contribute items. So please do not hold back - if you have something appropriate for inclusion in the Newsletter, send it in.

#### THE GEOLOGICAL SOCIETY OF MALAYSIA

For some time individual geologists working in Malaysia have felt the need for a society to cater for their interests. The Geological Society of Malaysia has now been formed by a committee consisting of geologists from the Malaysian Surveys, the University of Malaya, and the mining industry. This Newsletter is being sent to about one hundred geologists, working in Malaysia or in contact with geological work in Malaysia, in the hope that they will support the development of the Society.

The Geological Society of Malaysia aims to provide a

forum for the exchange of information and ideas on all aspects of Malaysian geology. It hopes to do this by keeping in touch with all interested parties, by producing this Newsletter, by organising meetings and symposia, and by publishing members' papers in the form of a journal.

At present a committee is being formed to consider the principles of stratigraphic nomenclature in Malaysia and to clarify the usage of stratigraphic names, published and unpublished. In this and other matters it is intended that the Society shall have close contact with other geological societies and shall represent Malaysia on international geological bodies. The Society will participate in the Second Symposium on Scientific and Technological Research in Malaysia to be held in the University of Malaya in February 1967. At that time the new Geology Building of the University should be completed.

Three classes of members may be elected to the Society:

- 1. Associate Membership is open to any person interested in geology.
- 2. <u>Full Membership</u> is open to all who have a Bachelor's degree in geology or an equivalent qualification in a related science or an equivalent training through practical experience.
- 3. Student Membership is open to any person enrolled as a student in an institution of recognised standing in geology.

An entrance fee of M\$5 is payable by Associate and Full Members on election. The annual subscription is M\$10 for Associate and Full Members and M\$5 for Student Members. It is payable in advance before the first day of each calendar year. Members elected after June 30 may pay a subscription of M\$5 only for that year. All members elected before December 31, 1967 will be Founder Members.

An application form for membership of the Society is included with this Newsletter.

Note: If you know of anyone potentially interested in the Society, whom we have missed or may have missed, please send us his name and address. While we have tried to contact all geologists and other potential members, there may well be such persons we are unaware of.



#### VISIT OF JAPANESE PALAEONTOLOGISTS

Three Japanese palaeontologists, Dr. Ken-ichi Ishii of Osaka City University, Dr. Yasuo Nogami of the University of Kyoto, and Dr. Makoto Kato of Hokkaido University will visit Malaysia during December 1966 and January 1967.

They intend to carry out detailed biostratigraphic surveys of the Triassic limestone hills near Kodiang, Kedah and of the Upper Palaeozoic limestones in the Kampar area, Perak. They also wish to study the Permian and Triassic rocks along the Temerloh - Maran road in Pahang and in the Kuching area of Sarawak. This programme is sponsored by the Committee for South-East Asian Studies of Osaka City University and is a continuation of earlier work in Malaya by Dr. Ishii.

In connection with the proposed study in the Kampar area, it should be mentioned that the richly fossiliferous middle Devonian to middle Permian limestones are also being investigated by Dr. R.L. Batten of the American Museum of Natural History, New York (gastropods); Dr. D.J. Gobbett of the University of Malaya (fusulines and brachiopods); and Mr. T. Suntharalingam, a University of Malaya student (biostratigraphy and palaeoecology).

- DJG

#### ORE MINERALOGY RESEARCH AT KUALA LUMPUR

Mr. J.H. Leow of the Department of Geology, University of Malaya is conducting research in the techniques of reflectivity measurements of ore minerals. The use of reflectivity, and micro-indentation hardness, as the bases of microscopical identification of the opaque minerals is a new concept which is receiving much attention, particularly in Europe. Mr. Leow is currently measuring the spectral reflectivity of various minerals both in air and in oil, from which measurements other data such as refractive index, adsorption index and absorption coefficient can be calculated. It is hoped that such information should be useful contributions to the 'Tables of Quantitative Data for Ore Microscopy' which the Commission on Ore Microscopy of the International Mineralogical Association is now preparing.

#### VISIT OF FORMER SURVEY GEOLOGIST

Dr. J.A. Richardson visited Malaya in July 1966 during which time he paid visits to the Geological Survey Feadquarters in Ipoh, the Geology Department of the University at Kuala Lumpur and amongst other places, visited Penang, Kuala Lipis, Raub, Cameron Highlands, Fraser's Hill and Singapore. Dr. Richardson joined the staff of the Geological Survey of Malaya on the 7th January 1937 as a Field Geologist. He mapped areas of Pahang during the following years until the invasion of Malaya by the Japanese in 1941. During the Japanese war, he joined the Volunteer Forces as lieutenant. He was captured by the Japanese and held as a prisoner of war, being taken to Thailand. After his release he returned to Malaya and continued in the Geological Survey until he resigned on the 13 July 1946.

During his service in Malaya, Dr. Richardson published two memoirs:

'The Geology and Mineral Resources of the Neighbourhood of Raub, Pahang, Federated Malay States, with an account of the Geology of the Raub Australian Gold Mine' - Memoir No. 3.

'The Geology and Mineral Resources of the Neighbourhood of Chegar, Perak and Merapoh, Pahang' - Memoir No. 4 (New Series),

He also published a paper entitled 'The Origin of the Amphibole-Schist Series of Pahang, Malaya" in the <u>Geological Magazine</u> (v. 84, No. 4, 1947, p. 241-249).

Dr. Richardson was accompanied during this visit by Mrs. Richardson, who had also lived in Malaya and had accompanied her husband on many of his field mapping expeditions.

After leaving the Geological Survey, Dr. Richardson Shell Oil Company and has worked for many years in Venezuela. The Richardsons now live in Tucson, Arizona in retirement, but each year travel widely over the North American Continent, and occasionally pay visits to their homeland of England.

#### THE CONTINENTAL SHELF - MALAYSIA'S NEW FRONTIER?

An act entitled the Continental Shelf Act was passed by the Malaysian Parliament (Dewan Ra'ayat) at the session held in July 1966. The bill lays claim to the sea-bed and subsoil of the sea off Western Malaysia (Malaya) beyond the 3-mile territorial limit and as far as the 200-meter isobath. Supplementary legislation, the Petroleum Mining Enactment, regulates prospecting and exploration for oil. These acts empower the Federal Minister of Lands and Mines to issue licenses over the continental shelf for exploration, prospecting, and mining of natural resources. Resources within the 3-mile limit will be under the control of State Governments.

It is known that a number of companies have applied for prospecting licenses for tin and oil on the continental shelf off the coasts of Malaya. Interest by oil companies has so far been confined to the east coast offshore area, whereas interest in tin is centered on the shelf off the west coast. The shelf off eastern Malaya is over 600 kilometers wide; it forms part of the Sunda shelf which joins Malaya, Sumatra, Borneo, and Java, and is one of the most extensive shelf seas of the world. It has an average depth of only about 70 The delineation of the boundaries between the parts of the shelf owned by Malaysia, Thailand, Vietnam, and Indonesia may present some problems, and does not seem to have been attempted yet, but the parts of the shelf over which Malaysia claims sovereignty probably exceed the land area of Malaysia.

The mineral potential of the Continental Shelf off Sabah and Sarawak (Eastern Malaysia) has long been recognized, and legislation laying claim to the shelf was enacted there as long ago as 1954. The Shell Group of Companies has been vigorously prospecting and drilling over large areas of the Shelf off Sarawak, Brunei, and western Sabah, but so far has met with only minor successes. Many promising structures, however, remain to be drilled.

Now that Malaysia has assumed sovereignty over such a huge area, it may be hoped that some attention will be given to the responsibilities of conducting scientific surveys, including marine geological surveys, over the shelf, and the adjoining South China Sea. So far, apart from oil company work, the results of which are mostly confidential, only one expedition, by the Geological Survey (Borneo Region) in 1963, in co-operation with the Shell Group and the British Navy,

has been made. In spite of being done on a shoe-string budget and without sophisticated equipment, this produced significant results, indicating the wide scope for future work on the shelf off Malaysia's coasts.

Virtually nothing is known of the geology of the shelf off Malaya, although a single aero-magnetic traverse is said to have indicated a sedimentary basin off the northeast coast, giving hopes of possible oil-bearing strata. Since most of Malaya has probably been emergent, and subject to active erosion, since late Mesozoic times, something must have happened to the eroded material, and it seems reasonable to suppose that it was dumped on the continental shelves; sedimentary rocks of Palaeozoic and early Mesozoic age may also exist beneath the continental shelf, and these may, unlike their on-shore counterparts, be unmetamorphosed. Thus wide possibilities exist for potentially oil-bearing basins under the shallow seas of Malaysia.

Intelligent prospecting for oil and tin off-shore will depend on an understanding of the geological history of peninsular Malaya and of Borneo, as well as of the shelf itself. Geological exploration of the shelf will, in turn, deepen our understanding of the on-shore geology.

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#### A FINAL NOTE

Your editor would like to encourage you once again to join the Geological Society, and to pass along items of interest for use in this Newsletter. Send any contributions to:

The Editor
Geol. Society of Malaysia Newsletter
c/o Department of Geology
University of Malaya
Kuala Lumpur