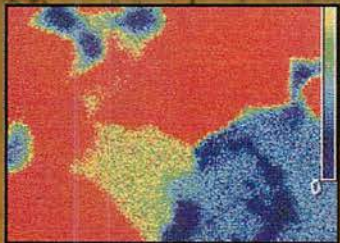




PERSATUAN GEOLOGI MALAYSIA

WARTA GEOLOGI

NEWSLETTER OF THE GEOLOGICAL SOCIETY OF MALAYSIA



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Geological Society of Malaysia

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About the Society

The Society was founded in 1967 with the aim of promoting the advancement of earth sciences particularly in Malaysia and the Southeast Asian region.

The Society has a membership of about 600 earth scientists interested in Malaysia and other Southeast Asian regions. The membership is worldwide in distribution.

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CATATAN GEOLOGI GEOLOGICAL NOTES

Invisible gold in massive sulphides at Tasik Chini, Pahang

TEH GUAN HOE, MOHAMMAD HAFIZI B. OSMAN, SHAHRUL AMIN AHMAD
AND JASMI HAFIZ B. ABD. AZIZ

Geology Department
University of Malaya
50603 Kuala Lumpur

Abstract: Gold in the Tasik Chini area in the vicinity of Bukit Botol averages 5–10 microns and is not visible to the naked eye. The fine gold is normally found in cooler parts of quartz, pyrite and barite in particular along fractures and mineral boundaries. The gold is associated with silver in different proportions in different portions of the massive sulphide outcrop. Besides gold and silver, the massive sulphide deposit contains cassiterite, tin sulphides, silver sulphides, bismuthinite and galena besides chalcopyrite, sphalerite, rutile and enargite and supergene minerals like covellite, malachite and azurite.

INTRODUCTION

This paper highlights the fine gold as revealed by a preliminary EPMA (Electronprobe microanalyser) study of the massive sulphide ore of the Tasik Chini area in the vicinity of Bukit Botol. Various aspects of the Tasik Chini area have been studied by Bean (1969), Foo (1975), Aw (1978), Gebert (1985) and the mineralization in particular by Teoh (1974), Shahrul Amin Ahmad (1989), Teh and Hutchinson (1987) and Teh *et al.* (1991).

MASSIVE SULPHIDE DEPOSITS AT THE TASIK CHINI AREA

The Tasik Chini area has long history of iron-manganese mining near the top of the hills that was later followed by barite mining at stratigraphically lower levels (Teoh, 1974). The iron-barite-massive sulphide mineralization at Bukit Botol and Bukit Ketaya have been reported to have the characteristics of a Kuroko-type massive sulphide deposit (Hutchinson, 1986; Teh and Hutchinson, 1987; Shahrul Amin Ahmad, 1989; Teh and Mohd. Sabar Ahmad, 1989). Massive sulphide deposits are known to contain appreciable amounts of gold and

silver (Hutchinson, 1986; Large, 1977). Gold has been reported in both the Bukit Botol and Bukit Ketaya deposits by Teh *et al.* (1991) from INAA data on massive sulphides collected from both localities.

GOLD AND ASSOCIATED MINERALS

The reason gold is hardly seen in handspecimens is because the EPMA recently revealed that the gold in the massive sulphide deposit at Bukit Botol hardly exceeds 20 microns in size and actually averages about 5–10 microns (Figs. 1–6). Earlier INAA studies of crushed samples of the massive sulphides always show significant gold and REE contents (Teh *et al.*, 1991). The fine gold grains are found in cooler parts of quartz, pyrite and barite, in particular along fractures and mineral boundaries (Figs. 8–9).

This preliminary EPMA study of the massive sulphide ore from Bukit Botol area shows the gold associated with silver as native silver, and silver sulphides (like argentite Ag_2S , stromeyerite AgCuS , matildite AgBiS_2 and aquilarite Ag_4SeS), bismuthinite Bi_2S_3 , and galena (Teh *et al.*, in preparation). Gold appears



Figure 1. Gold (white) deposited in a groove in barite. Sample Tc5, Bukit Botol.

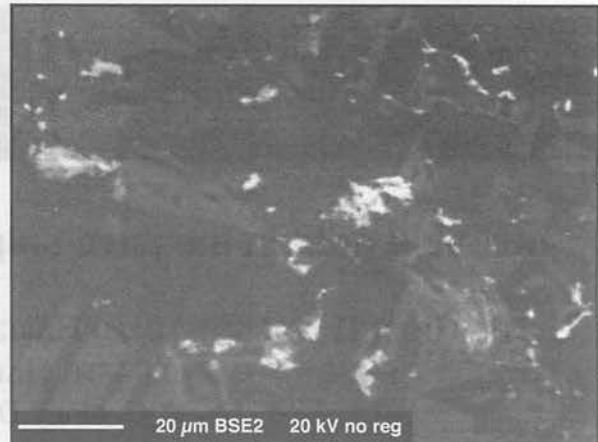


Figure 2. Gold (white) and argentite (light grey) in cavities in quartz. Sample Tc5(1), Bukit Botol.

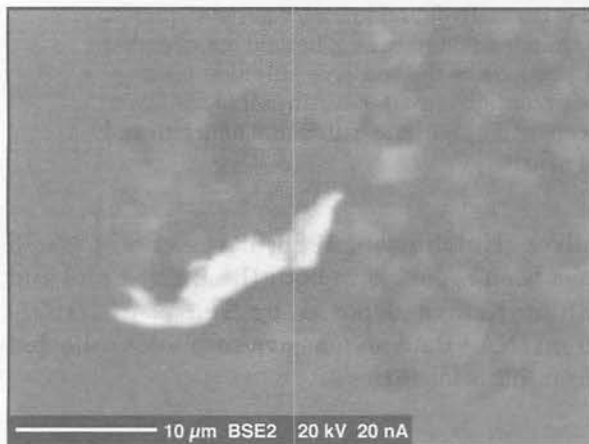


Figure 3. Gold filling within a cavity in quartz. Sample Tc5(b), Bukit Botol.

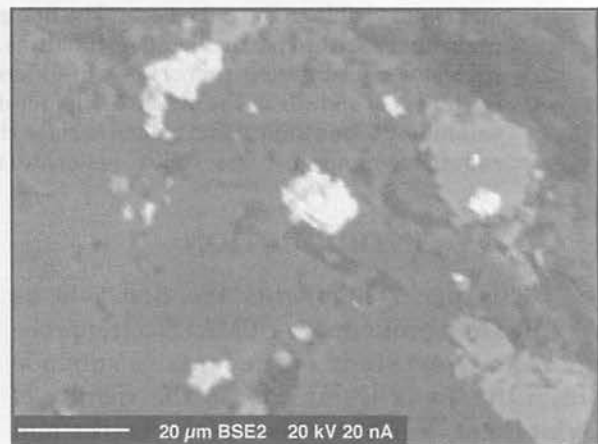


Figure 4. Gold grains (white) in cavities in quartz (grey) and barite (light grey). Sample Tc5(b), Bukit Botol.



Figure 5. Gold grains (white) with larger argentite (light grey) in cavity in barite. Sample Tc7, Bukit Botol.



Figure 6. Gold grains infilling cavity in quartz. Sample Tc5(b), Bukit Botol.

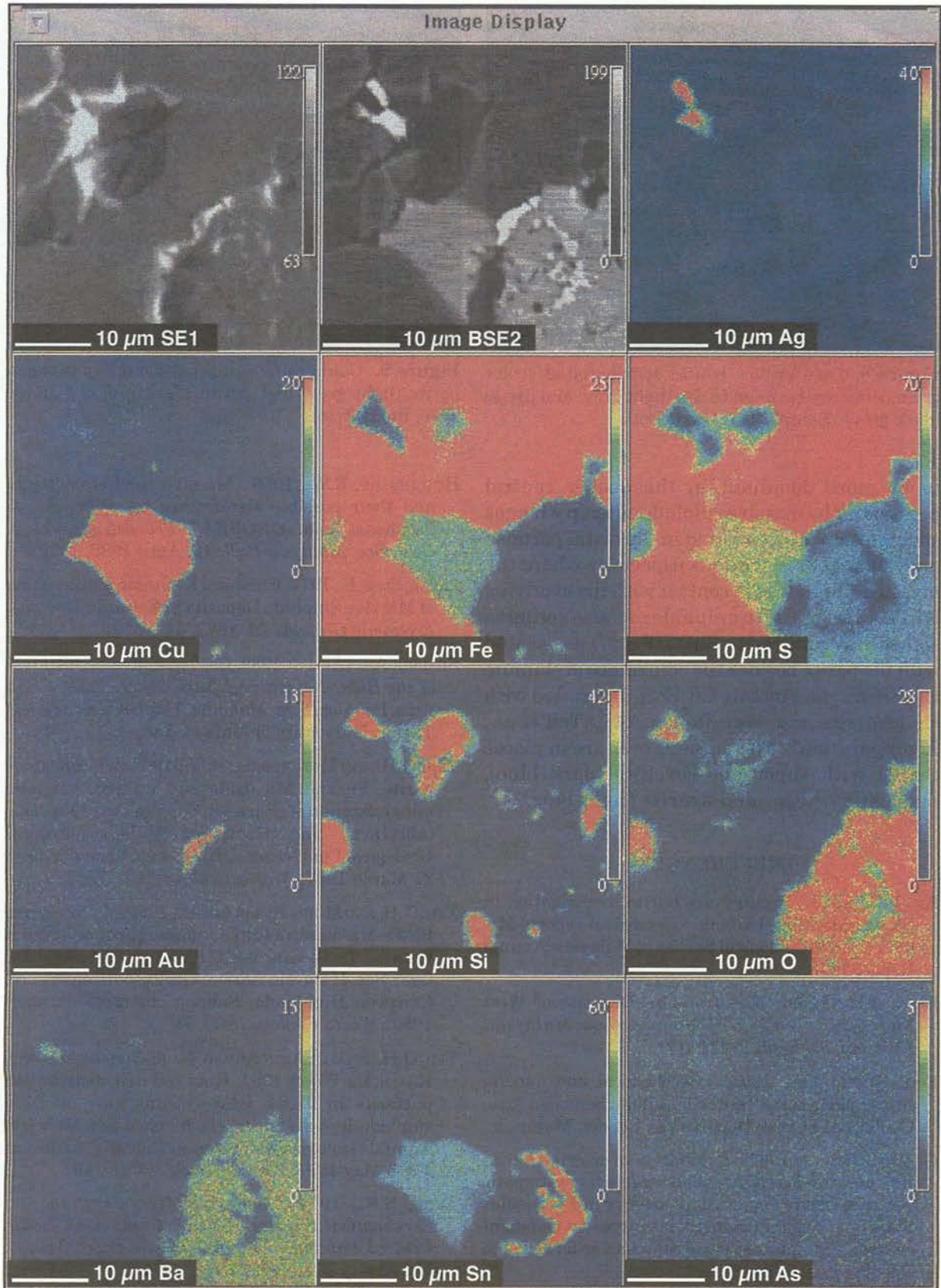


Figure 7. X-ray map showing gold at the boundary between pyrite (Fe, S) and barite (Ba, S, O), associated with stannite (Cu, Fe, Sn, S), cassiterite (Sn, O) and argentite (Ag, S). Sample Tc7, Bukit Botol.



Figure 8. Gold grains (white) distributed at cooler grain boundary between barite (light grey) and pyrite (dark grey). Sample Tc7, Bukit Botol.



Figure 9. Gold grains (white) at boundary between barite (light grey) and pyrite (dark grey). Sample Tc7c, Bukit Botol.

to be more dominant in the deeper central portions of the massive sulphide outcrop whereas silver is more concentrated in the distal portions and the higher elevations especially where the massive sulphide is in contact with the overlying barite. The massive sulphide ore also contains significant cassiterite SnO_2 (Fig. 7) associated with the barite besides the occurrence of stannite $\text{Cu}_2\text{FeSnS}_4$ and mohite Cu_2SnS_3 associated with chalcopyrite and enargite Cu_3AsS_4 (Teh *et al.*, in preparation). The massive ores are in places coated with supergene covellite (dark blue), malachite (green) and azurite (light blue).

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PERTEMUAN PERSATUAN MEETINGS OF THE SOCIETY

Ceramah Teknik (Technical Talk)

Azhar Hussin's Talks

Laporan (Report)

The Society is indeed fortunate when Dr. Azhar volunteered to present two talks on his recent experience in Antarctica on Tuesday 9 March 2004 from 3.30–4.30 pm and then from 5.00–6.00 pm after a tea break.

Dr. Azhar was of one of 63 participants in the IV South Africa National Antarctica Expedition (SANAE) spending 42 days in Antarctica from December 28, 2003 to February 7, 2004, establishing a record for the longest stay by a Malaysian geologist on the icy continent.



In searching for a new route into the Ahlmannryggen from the west, Dr. Azhar was rewarded by being able to map in detail an area which has not been mapped previously by researchers in South Africa.

In his presentations, Dr. Azhar thrilled the audience with very sharp pictures of the geology and spectacular scenery of the areas covered together with a lively account of the expedition where he spent three fruitful months on. He is already looking forward to another trip to the icy continent at the end of 2004, and we look forward to another invigorating talk after that.

Return to Gondwanaland: geowandering in Cape Peninsula, South Africa and Western Dronning Maud Land, East Antarctica

AZHAR HUSSIN

Abstrak (Abstract)

This talk will focus on the travel to the ancient pieces of the Gondwanaland found in South Africa and East Antarctica. The stratigraphy, sedimentology and structure of the ancient Gondwana sequences as well as the underlying rocks will be discussed. The fragmentation and dispersion of this ancient continent occurred in Jurassic and the two landmasses are now separated by the Southern Ocean. A postulation of the continental reassembly and the phases of the tectonic history will be attempted.

The sedimentary geology off Mesoprotozoic Ahlmannryggen Group, Western Dronning Maud Land, East Antarctica: prospects for future research

AZHAR HUSSIN

Abstrak (Abstract)

Field studies conducted on the Mesoprotozoic Ahlmannryggen Group in Western Dronning Maud Land in East Antarctica in summer 2003/2004 revealed that sediments the Ahlmannryggen Group are more widespread and varied than previously mapped. Emphasis were made on two previously mapped Formations of this Group: the Pyramiden Formation and the Grunehogna Formation. In addition, a thick widespread mixed clastic-carbonate sequence were found to the west of the Ahlmannryggen Mountain which had not been previously known.

The oldest clastic Pyramiden Formation is composed of at least 7 cycles of dark, very burrowed shale overlain by cross-bedded sandstones and capped by thin shales and lenticular and flaser beds. Mud cracks and organic trails are abundantly present in the mud caps. This cycles are interpreted as the progradation of beach sand over lagoonal mud and capped with tidal flats sediments. A detailed petrological study of these clastics is currently undertaken to unravel the sources of these sediments. This provenance study will help understand the pre-existing geology of this region and afford a more precise reconstruction of the East Antarctic craton and their reassembly with other known cratons.

The younger Grunehogna Formation is composed of at least 4 units, each of a different facies. The oldest unit is composed of laterally uneven thickness of slumped and plastically-distorted sandstone-shale beds which were deposited on an uneven volcanic basin floor. Syn-sedimentary volcanic injection are common within this horizon. The overlying predominantly shale sequence contains thin graded sandstone which in turn is overlain with a thick blanket

sequence of cross-bedded sandstone with large shale clasts. The youngest unit is composed of interbeds of rippled sandstone bed, conglomerate-breccia beds rich in volcanic clasts and shale with abundant burrows and mud-cracks. The Grunehogna sequence is interpreted to be a filling of a volcanic basin. Uneven basin floor together with syn-sedimentary volcanism induced an unstable environment leading to the collapse and slumping of the oldest sedimentary unit followed by a quiescence phase in which the shale accumulated with intermittent turbidity current flow bringing in the sand. The sequence built up into a high energy environment, probably a beach or a fan delta and overlain by a braided stream deposit and flood plain in a arid setting. Extensive diagenetic changes was probably induced by the reactive volcanic-hydrothermal system as well as the arid condition. Further detailed study of the Grunehogna Formation will help unravel the paleoenvironmental and paleoclimatic condition during its deposition.

A new thick mixed clastic-carbonate sequence underneath the volcanics in the western Ahlmannryggen which have not been mapped before. It is named as the Flarjuven sequence after the large nunatak where this sequence is best exposed and is the thickest and the most widespread of all the sedimentary sequence in the Ahlmannryggen. Accessibility to these nunataks is difficult as the largest and deepest windscoops are found here. Its stratigraphic position has to be resolved as they are 30 km from the nearest Pyramiden exposure and about 20 km from the Grunehogna Formation. As they are overlain by dolerite, they have been thermally metamorphosed beneath the contacts and have a hornfelsic texture. Primary structures are still visible especially in thicker sequences away from these contacts. Thick cross-bedded sandstones forming shallow channellised sandbodies, overlain by dark shales and carbonate couplets with algal growth structures and teepee structures and in places mud cracks which are overlain by intraformational conglomerates are interpreted as tidal flat progradation on tidal channel deposits. These dolerites have been dated as 1100 Ma and hence the mixed clastic-carbonate is probably of Mesoprotozoic age. This is the oldest carbonate sequence in Dronning Maud Land and among the oldest known in Antarctica.

G.H. Teh



Ceramah Teknik (Technical Talk)

Natural attenuation: a geochemical property for contaminant transport mitigation

RAYMOND N. YONG

Laporan (Report)

Professor Raymond N. Yong who was in town for an International Conference was invited by the B.K. Tan, Chairman of the Engineering Geology & Hydrogeology Working Group to present the above talk to the Society on 15 March 2004 at 5.30 pm at Geology Department, University of Malaya.

Natural attenuation has become widely recognized as an effective and low-cost remediation alternative. However, there are uncertainties about natural attenuation's long-term effects and risks to the environment. There is a particular need to develop a high level of understanding of the natural attenuation processes in order to enable its proper implementation.

Among the topics covered in his very interesting talk Prof. Yong touched on interacting between organic contaminants and soil-water systems, biological transformation of contaminants, field performance and assessments and finally the applications and future directions for natural attenuation.

G.H. Teh



GSM

Report on the 2004 Annual General Meeting

This year's Annual General Meeting (AGM) was held on the 24th April 2004 in the Eastin Hotel, Petaling Jaya, Selangor. Members started trickling in at about 4.30 pm. The President, Dr. Mohd Shafeea Leman called the meeting to order at 5.00 pm and welcomed all the 22 members who were present. The meeting began with the confirmation of the minutes of the previous AGM. The next item on the Agenda was Matters Arising and the members noted that there should be a Registry of Inventory listing all the assets of the Society and where they are housed. This was followed by a short tea break of 15 minutes.

The President presented his report highlighting on the 2003 Annual Geological Conference; COSTAM's Science and Technology Congress whereby our Immediate Past President Prof. Dr. Ibrahim Komoo delivered a keynote address; the Geophysics Seminar; and the Petroleum Geology Conference and Exhibition.

The Assistant Secretary presented the Secretary's Report which also incorporated the Assistant's Secretary Report; and the minutes and the Powerpoint slides presented at the Redefinition of GSM EGM held on 10/1/04. He also reported on the resignations of the Secretary and the President during the course of the session.

In the absence of the Editor, the President read out the Editor's Report in the Annual Report. The AGM directed the Council to formulate a publication policy whereby the cost and content of all the Society's publications have to be approved by the Council before publishing. The Council was also mandated to look into reducing the cost of publications.

The Treasurer presented his and the Honorary Auditor's report and the members commended him on the professional approach taken on reporting the Society's finances. The Treasurer stressed that there will be changes in the Society's accounting "habits", and there will be budgets for all the Society's activities. He hopes that all major activities of the Society can be self-supporting if possible. Sales of publications will be promoted in the Society's website.

S.F. Lee & Co was elected to be the Society's Honorary Auditor for Year 2004.

Two other matters were brought up. On the first matter, the Council on behalf of the Society acknowledges a vote of thanks to the late Mr. Jimmy Khoo as Organising Chairman of the AGC 1996 in Kota Kinabalu. On the second matter, a committee will be formed to review the whole Constitution of the Society, recommend to the Council, call for an EGM and conduct a postal ballot to approve the revised Constitution.

The new Council for the 2004/2005 session was announced:-

President : Lee Chai Peng
Vice-President : Yunus Abdul Razak
Secretary : Abd Rasid Jaapar
Assistant Secretary : Low Keng Lok
Treasurer : Ahmad Nizam Hasan
Editor : Liew Kit Kong

Councillors (2 years) : Juhari Mat Akhir
Lau Yin Leong
Nur Iskandar Taib
Safarudin Mat Tahir

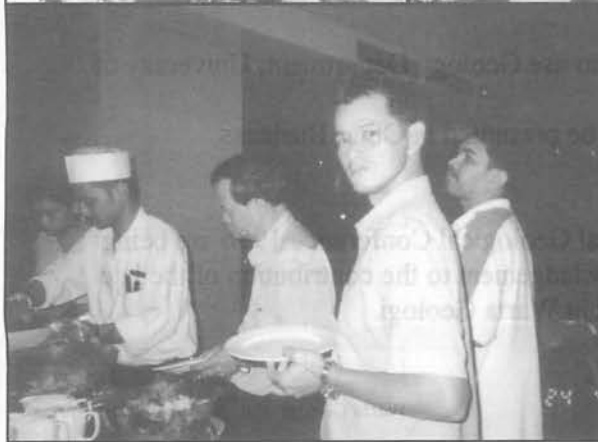
Councillors (1 year) : Tan Boon Kong
Zakaria Mohammad

Immediate Past President : Mohd Shafeea Leman

The in-coming President, Dr. Lee Chai Peng spoke on the change that the members wanted, the good that had been done in the past with a vote of thanks to previous Council members, especially the President Dr. Abdul Ghani Rafek and the Editor Dr. Teh Guan Hoe for their hard work and sacrifices, and welcomed support from all the members to bring the Society to greater heights. The meeting ended at 7.25 pm.

Prepared by
Low Keng Lok
4th May 2004

Annual General Meeting & Annual Dinner 2004



Minutes of the 37th Annual General Meeting (2002/2003)

Minutes of the 37th Annual General Meeting held at the Geology lecture Hall, Department of Geology, University of Malaya at 2.30 PM on the 26th April 2003

Present:

Abdul Ghani Rafek (Chairman)
Liew Kit Kong (Minute Writer)
Lee Chai Peng
Lau Yin Leong
S. Paramanathan
Choo Mun Keong
Gan Lay Chin
Arul Mawi Shaniti
Nik Ramli Nik Hassan
C. S. Hutchison

Abdul Hanan Ahmad Nadzmi
K. Narayanamooty
Teh Guan Hoe
Low Keng Lok
Ahmad Nizam Hasan
Azman Abdul Ghani
Yunus Abdul Razak
Abdul Rasid Jaapar
Nur Iskandar Taib
Nicholas Jacob

A minute of silence was observed for the late Mr. Jimmy Khoo at the beginning of the AGM.

Attendance of all Council Members is compulsory in the AGM.

1. Confirmation of the minutes of the previous AGM (2002)

The minutes of the 36th AGM were passed on the proposal of S. Paramanathan and seconded by Nik Ramli Nik Hassan with the following amendments or corrections:

Page3 , Editor's Report, para 3, line 1: Jmmy corrected to Jimmy.

2. Matters Arising

1. President's report

- i. Members have easier access to use Geology Department, University of Malaya's library
- ii. The new vision of GSM is to be presented in Other Business.

2. Editor's Report

- i. Papers presented at the Annual Geological Conference 1996 are being printed in Bulletin 40. Acknowledgement to the contribution of the late Jimmy Khoo will be recorded in Warta Geologi.

3. Treasurer's and Honorary Auditor's report

- i. Reemphasis the need to have paid professional to do the accounts to ensure transparency and good governance

3. President's Reports

The President thanks everyone involved in making the various activities a success. He reported that successful organisation of two major conferences, i.e. the Annual Geological Conference 2002 in Kota Bharu, Kelantan and the Petroleum Geology Conference 2002 in Kuala Lumpur. He thanked Dr. Ismail Yusoff (UM) and Mr. Ali Md Shariff (PETRONAS) the respective organising chairman and their committees for their effort.

He reported encouraging responses for two seminars, twenty technical talks and one photographic competition and recorded appreciation for all Working Group Chairmen for their hard work.

He also reported an increase of membership from 429 to 503. A few regional representatives were appointed to get various activities going throughout the country.

Members commented that the President's and Secretary's report still overlap. The President's pointed out that the President's report only highlighted the main activities whereas Secretary's report provided the details. Members proposed that President's report should visionary in nature (a presidency address), i.e. reflecting on current progress, presenting issues and future challenges of the society, and proposing future directions for the society.

Dr. L.C Gan proposed to have close working relationships between GSM and IGM.

Members commented that GSM members comprise mainly of elderly people. There must be continuous efforts to recruit new members. University lecturers, and senior staff in private and public organisations can be role models and play important roles to recruit members for GSM. The benefits of joining GSM should be improved and make transparent to the members.

Prof. C.S. Hutchison proposed to have student members or younger members to be in the Council. Abdul Ghani and CP Lee will look into a student representative from UKM and UM respectively to be invited as observers in Council meetings.

S. Paramanathan proposed the report to be accepted seconded by Abdul Rasid Jaapar.

4. Secretary's Report (read by the President)

The Secretary reported the co-option of Dr. S. Paramanathan into the Council to fill up the vacancy for the 1-year councillor. He also reported an increase of 17.2% in the total memberships of the Society mainly from student members.

Both the Annual Geological Conference and the Annual Petroleum Geology Conference were successfully organised. The Society also co-organised the Persidangan Warisan Geologi. With the assistance of the Working Groups a total of 2 conferences, 2 seminars, 19 technical talks and a photographic competition were organised.

The Society also embarked on an initiative to "redefine" itself.

An EGM was called but was aborted.

Members commented that the attendance of council members in Council meetings is a reflection of the council members' commitment to the Society.

Members proposed that membership could be broken down by sectors. E.g. petroleum industry, etc.

Prof C.S. Hutchison proposed to improve the internal communication within GSM to ensure the availability of external talks can be promptly communicated to GSM members.

Members proposed to tailor technical talks to the needs of members in terms of subject matters and timing.

Abdul Rasid Jaapar proposed the report to be accepted seconded by Abdul Hanan Nizam.

5. Assistant Secretary's Report (read by the President)

The Assistant Secretary reported that the Society's publications are up-to-date. The sale of the Society publication showed better improvement compared to previous year.

Members commented that the list of publications is not complete. E.g. Field Guide by C.S. Hutchison (out-of-stock) and Langkawi Field Guide are not listed.

Members proposed that a note should be added to provide a list of professional bodies and libraries that have exchange arrangements with GSM.

S. Paramanathan proposed the report to be accepted seconded by C.S. Hutchison.

6. Editor's Report

The Editor reported that the Society's publications are up-to-date. The Editor extended his appreciation to members for being patient with the publications.

The Society will extend a letter of explanation to Dr. Ian Metcalfe for the late publication, but will maintain the date of publication as it reflects the state-of-knowledge at the date of publication.

Members were pleased with the publications and commented that future publications should be kept up-to-date.

L.C. Gan proposed the report to be accepted seconded by Abdul Hanan Nizam.

7. Treasurer's and Honorary Auditor's Report

The Treasurer reported that the current net asset has decreased from the previous year RM 694,891.62 to RM 470,072.34. The big drop is mainly due to significant increase in expenditure and a corresponding drop in income.

Members proposed to show a list of assets reported under plant and equipment.

M.K. Choo suggested that the book-keeping practice has to reflect the yearly income and expenditure, following standard accounting practices. He also suggested that part-time professional accounting service is required to improve the accounting. He will propose part-time professional accounting service providers to the Council.

Members proposed the Council to look comprehensively at ways to improve the financial standing of the Society, particularly in the area of publication as publication is costly. Members may be required to pay for the Bulletin, but not for Warta. Members commented that fees charged by the Society for its activities should be realistic to reflect the cost, rather than presently, being subsidised. There should be a significant difference between fees charged to members and non-members for Society's activities, to encourage more non-members to become members.

Members proposed the Council to look for other auditors, for the coming years.

Members extended their appreciation to C.P. Lee for the service of being the Treasurer for such a long time.

C.S. Hutchison proposed that the report be adopted and was seconded by L.Y. Lau.

9. Other Business

1. Redefining GSM.

K.K. Liew proposed the vision, mission, strategies and activities for the Society. He also highlighted the need to have a permanent secretariat for the efficient running of the administration of the Society.

The vision, mission, strategies and activities were endorsed by the members.

C.S. Hutchison proposed to have cost-benefit analysis before setting up a permanent secretariat.

Members proposed that the Council to look comprehensively at the current status of the Society and to develop detail implementation plans. An EGM will be held in November 2003 to provide status updates and action plans.

10. Announcement of the new Council (2003/2004)

President	:	Abd. Ghani Rafek (UKM)
Vice-President	:	Mohd Shafeea Leman (UKM)
Secretary	:	Ahmad Tajuddin Ibrahim (UM)
Assistant Secretary	:	Low Keng Lok (LKL Technology)
Treasurer	:	Ahmad Nizam Hasan (CADENCE)
Editor	:	Teh Guan Hoe (UM)
Councillors (2-year)	:	Tan Boon Kong (UKM) Liew Kit Kong (PETRONAS Carigali) Zakaria Mohamad (JMG) Lee Chai Peng (UM)
Councillors (1-year)	:	Abdul Rahim Samsudin (UKM) Chow Weng Sum (JMG) Nik Ramli Nik Hassan (Foradex) Ibrahim Abdullah (UKM)
Immediate Past President	:	Ibrahim Komoo (UKM)

The meeting was adjourned at 6.30 pm.

Laporan Presiden Tahun 2003-2004

Sepanjang sesi 2003-4, PGM telah menjalankan pelbagai aktiviti termasuk penganjuran Persidangan, seminar, forum, ceramah teknik, lawatan lapangan dan sebagainya. Persatuan juga telah berjaya menerbitkan Buletin dan Warta tertangguh. Perincian mengenai aktiviti PGM akan dibentang oleh saudara Penolong Setiausaha.

Aktiviti PGM 2003-4 bermula dengan Persidangan Tahunan Geologi 2003 yang telah diadakan di Kuching Sarawak pada 24-26 Mei 2003. Persidangan kali ini disertai oleh 121 peserta dan telah dirasmikan oleh YB Menteri Muda di Jabatan Ketua Menteri Sarawak. Sebanyak 4 kertas ucapnama dan 76 kertas teknikal telah dibentangkan. Kertaskerja penuh persidangan telah diterbitkan dalam Bulletin PGM no 46. Persidangan kali ini menyaksikan penglibatan besar-besaran Jabatan Mineral dan Geosains Sarawak. Tahniah dan terima kasih diucapkan kepada Pengerusi Persidangan saudara Alex Unya Ambun (JMG Sarawak) dan AJK beliau atas kejayaan penganjuran persidangan ini. Sempena persidangan ini, 1 kerjalapangan pra-persidangan dan 1 kerjalapangan mid-persidangan telah dilakukan di sekitar Kuching. Sebelum itu, pada 22 Mei 2003, PGM telah menganjurkan bersama Persidangan Kebangsaan Warisan Geologi Malaysia ketiga yang juga diadakan di Kuching

Pada 23-25 September 2003, Gabungan Persatuan-Persatuan Sains dan Teknologi Malaysia (COSTAM) telah mengadakan Kongres Sains dan Teknologi. Hasil usaha gigih mantan Presiden dan Setiausaha PGM yang menjadi wakil persatuan, persidangan kali ini telah memasukkan satu sesi khusus untuk Sains Bumi. Dalam sesi ini salah seorang mantan Presiden PGM, Prof. Dr. Ibrahim Komoo telah diberi penghormatan membentangkan kertas ucapnama.

Pada 11 Oktober 2003 pula, PGM bersama Jabatan Geologi UM telah menganjurkan Seminar Geofizik yang telah dihadiri seramai 75 peserta. Tahniah dan terima kasih diucapkan kepada Pengerusi Persidangan, Prof. Madya Dr. Samsudin Haji Taib dan AJK beliau dalam menganjurkan seminar ini.

Petroleum Geology Conference and Exhibition telah dilangsungkan dengan jayanya pada 17-18 Disember 2003 di Kuala Lumpur. Persidangan kali ini mencatat sejarah kehadiran lebih 500 peserta, dengan 2 kertas ucapnama dan 62 kertas teknikal dibentangkan. Syabas dan terima kasih diucapkan kepada Pengerusi Persidangan, Dr. Jaizan Hardy Mohamed Jais dan AJK beliau dalam menjayakan penganjuran persidangan tahunan ini.

Pada tahun ini juga PGM telah mengaktifkan kembali siri Ceramah Pengerusi, di mana setiap pengerusi Kumpulan Kerja yang aktif telah memberikan ceramah teknik mereka.

Mengenai pendefinasian semula PGM, JK *ad hoc* yang diketuai oleh Dr. Liew Kit Kong telah berjaya menyelesaikan beberapa tugas yang diberikan termasuk penyediaan beberapa SOP, TOR dan laman web untuk PGM. Hasil tugas ini telah dibentang dan diluluskan dalam EGM yang diadakan pada 10 Januari 2004.

Secretary's Report

1. The Council

Members of the Council of the Geological Society of Malaysia for the 2003/2004 session are as follows:

President	:	Abd. Ghani Rafek (resigned on 06/01/04)
Vice-President	:	Mohd Shafeea Leman
Secretary	:	Ahmad Tajuddin (resigned on 16/07/03)
Assistant Secretary	:	Low Keng Lok
Treasurer	:	Ahmad Nizam Hassan
Editor	:	Teh Guan Hoe
Councillors (2 years)	:	Lee Chai Peng Liew Kit Kong Tan Boon Kong Zakaria Mohammad
Councillors (1 year)	:	Abdul Rahim Samsudin Chow Weng Sum Nik Ramli Nik Hassan Ibrahim Abdullah
Immediate Past-President:		Ibrahim Komoo

Following the resignation of the President Abd Ghani Rafek, the Vice-President Mohd Shafeea Leman assumed the office of President; and the Assistant Secretary Low Keng Lok acted for the Secretary Ahmad Tajuddin after the latter's resignation.

2. Council Meetings

During the whole 2003/2004 session 11 Council Meetings were held. The attendances of the Council Members are listed in Appendix 1. The Council would like to take this opportunity to thank the Geology Department, University of Malaya for the use of their premises for the Council Meetings.

3. Membership

As at 31st December 2003, the total number of members in the Society stands at 570 and this is an increase of 13.3% over the previous year's total of 503. There is an increase in all categories of membership except Associate members. Appendix 2 shows the breakdown of the various categories and regions.

4. Society's Activities

The Society successfully carried out its two core activities – the Annual Geological Conference (AGC) and the Petroleum Geology Conference & Exhibition (PGCE).

The AGC was held on 24-26 May 2003 in Kuching, Sarawak despite the threat by the occurrence of SARS. The Organising Chairman, Alex Unya Ambun and his committee ably put together a very successful event with 76 papers presented and 2 fieldtrips to the surroundings of Kuching. The Assistant Minister in the Sarawak Chief Minister's

Department graced the opening of the AGC which was themed "Perseverance in Geoscience towards Sustainable Development." A total of 121 participants attended the AGC with 24 attendees for the Serian fieldtrip and 33 for the Santubong fieldtrip.

The PGCE was held on 17-18th December 2003 in Shangri-La Hotel, Kuala Lumpur. This is the 25th Petroleum Conference and it was very well attended by 521 participants (the largest number ever). Parallel sessions were held to cater for the 44 papers and 2 keynote papers presented together with 15 poster sessions and 31 booths of exhibitions. The Deputy Minister of Energy, Communications and Multimedia, YB Datuk Tan Chai Ho officiated the opening of the PGCE. A special note of thanks goes to the Organising Chairman, Jaizan Hadi and his committee for putting up such a successful event.

During this session, the Council with cooperation of the Working Groups, especially the Engineering Geology/Hydrogeology and Geophysics working groups; and other organisations were able to organise 4 seminars, 9 technical talks, 1 Chairman's Lecture, 1 Forum and a photographic competition other than the AGC and PGCE. The details of these activities are enclosed in Appendix 3.

5. Redefinition of GSM

With the acceptance of the Redefinition of GSM proposal by the 2003 AGM, the Council appointed Liew Kit Kong to spearhead this project which went full steam ahead culminating in the setting up of an official permanent website for the Society. The Society's website address is www.gsm.org.my and the Website working group is headed by Lim Chee Keong. Two other aspects of the Redefinition – Standard Operating Procedures (SOP) and Permanent Secretariat of the Society were also looked into. Abdul Rasid Jaapar is overseeing the establishment of the SOP while KK Liew is looking after the Permanent Secretariat. An update of the action plans of the Redefinition was presented to members of the Society in an EGM (Appendix 4) on 10/01/04 and it was well accepted.

6. Assistant Secretary's Report

All backlogged bulletins brought up-to-date by the Editor were published and distributed to all members including Bulletin 47 which was distributed during the 2003 PGCE. The sale of the Society's publications is slow as compared to the previous year. The 2003 sales figures and the stock remaining are shown in Appendix 5. The calendar for Year 2004 was published, distributed during the 2003 PGCE and sent out to all members.

7. Acknowledgements

As a final note, the Society would like to extend its utmost appreciation to all the individuals and organisations that have helped in one way or another in the organising of the Society's activities during this session. Special thanks goes the Head and his staff in the Geology Department, University of Malaya for the use of its premises for most the Society's meetings and activities, and also the Secretariat; Universiti Kebangsaan Malaysia; Jabatan Mineral dan Geosains, in particular its Sarawak Branch for the AGC 2003; Petronas and its staff for the PGCE 2003; and last but not least our Society's members for their advice, guidance and support throughout the session. Thank you.

Prepared by
Low Keng Lok

Appendix 1 Attendance of Council Members at Council Meetings

NAME	13/5	10/6	15/7	19/8	9/9	14/10	2/12	6/1	17/2	12/3	8/4
Abd Ghani Rafek	X	X	X	X	X	X	X	O	r	r	r
Md Shafeea Leman	O	O	X	X	O	O	X	X	X	X	X
Ahmad Tajuddin	O	X	O	r	r	r	r	r	r	r	r
Low Keng Lok	X	X	O	X	X	X	X	X	X	X	X
Ahamad Nizam	O	X	X	O	X	X	X	X	X	O	X
Teh Guan Hoe	X	X	X	X	X	X	X	X	O	O	X
Lee Chai Peng	X	X	X	X	X	X	X	X	X	X	X
Liew Kit Kong	X	O	O	X	O	X	X	X	O	O	O
Tan Boon Kong	O	O	O	X	X	X	X	X	X	X	X
Zakaria Mohammad	O	O	X	O	O	O	X	X	O	X	O
A Rahim Samsudin	O	X	O	O	O	O	O	O	O	O	X
Chow Weng Sum	X	O	X	X	O	X	X	X	X	X	X
Nik Ramli Hassan	X	O	X	O	X	X	X	O	X	O	O
Ibrahim Abdullah	O	X	O	O	O	O	O	O	O	O	X
Ibrahim Komoo	O	O	O	O	O	O	O	O	O	O	O

X = Present

O = Absent

r = resigned

Appendix 2 Memberships for Year 2003

Country	Full	Life	Institution	Student	Associate	Honorary	Total	2002 Total
Australia	1	11	2	1			15	17
Brunei	2	1					3	2
Canada		2					2	2
Europe	5	8	1				14	15
Hong Kong		1					1	1
Indonesia	1	6					7	7
Japan		3					3	2
Middle East	2	3					5	5
Philippines		2					2	2
Singapore		5	1				6	7
Thailand		2					2	2
USA	4	10					14	14
Malaysia	162	128	7	188	8	3	496	427
Total:	177	182	11	189	8	3	570	503

Appendix 3

Society's Activities for Year 2003/2004

DATE	EVENT
24–26/05/03	<i>2003 Annual Geology Conference</i> in Kuching, Sarawak.
17/09/03	Technical talk on <i>Turbidite Sandstone Reservoirs: Depositional Models and Exploration Experience</i> by Howard D Johnson of Petronas Carigali in the Geology Department, University of Malaya.
25/09/03	Seminar entitled <i>Malam Jurutera / Engineers Nite 2003 (Slope Engineering)</i> by the Engineering Geology & Hydrogeology Working Group in the Geology Department, University of Malaya. Speakers include Eddie Ng T.S. of ADEPT Consultancy, Liew S.S. of Gue & Partners, and Neoh C.A., a consultant.
26/09/03	Technical talk on <i>Characterising and Sourcing Archaeological Stone Tools and Pottery in Malaysia</i> by Dr. Stephen Chia of Pusat Penyelidikan Arkeologi Malaysia, Universiti Sains Malaysia in the Geology Department, University of Malaya.
29/09/03	Technical talk on <i>Age and Correlation of the Permian-Triassic Boundary and Mass Extinction in China</i> by Dr. Ian Metcalfe of Asia Centre, University of New England, Australia in the Geology Department, University of Malaya.
11/10/03	Seminar on <i>Geophysics – Effective Utilisation of Geophysical Techniques in Site Investigation</i> in the Geology Department, University of Malaya. Jointly organised with the Geology Department, University of Malaya and collaborated with the Geology Programme, Universiti Kebangsaan Malaysia and Geophysics programme, Universiti Sains Malaysia.
21/10/03	Technical talk on <i>Phanerozoic Global Climatic Zones and Paleogeographic Changes Through Time</i> by Prof. Emeritus Art Boucot of the Oregon State University, USA in the Geology Department, University of Malaya.
22/10/03	Technical talk on <i>Some Thoughts about the Shah-Thai Terrane</i> by Prof. Emeritus Art Boucot of the Oregon State University, USA in the Minerals & Geoscience Department Malaysia, Ipoh.
23/10/03	Seminar on <i>Malam Pencemaran / Pollution Nite</i> by the Engineering Geology & Hydrogeology Working Group in the Geology Department, University of Malaya. Speakers include Tai Tang On of ENVIRON, Alan Mair of ENVIRON, and Wan Zuhairi of UKM.
10/12/03	Forum on <i>Medical Geology</i> in the Geology Department, University of Malaya. Jointly organised with Institute of Geology Malaysia and Institute for Environment and Development (LESTARI). Speakers include Dr. Robert B Finkelman of US Geological Survey, and Dr. Olle Selinus of Geological Survey of Sweden.
17–18/12/03	<i>2003 Petroleum Geology Conference & Exhibition</i> in Hotel Shangri-La, Kuala Lumpur.
19/12/03	Technical talk on <i>The Quest for Energy</i> by Peter M Lloyd of NExT, Middle East & Asia Pacific in the Geology Department, University of Malaya.
08/01/04	Technical Talk on <i>Scientific Problems for Creation Science</i> by Prof. Robert C Newman of Interdisciplinary Biblical Research Institute, USA in the Geology Department, University of Malaya.

Appendix 3 (cont'd)
Society's Activities for Year 2003/2004

DATE	EVENT
09/01/04	Technical talk on <i>Specialise Geophysics Application to Petroleum Industry</i> by Dr. Deva Ghosh of Petronas Carigali in the Geology Department, University of Malaya.
10/01/04	Extraordinary General Meeting on <i>Redefinition of GSM</i> in the Geology Department, University of Malaya.
10/02/04	Seminar on <i>Malam Geo-Kejuruteraan JMG/Engineering Geology DMG Nite</i> by the Engineering Geology & Hydrogeology Working Group in the Geology Department, University of Malaya. Speakers include Zakaria Mohamad, Saim Suratman and Chow Weng Sum all of Jabatan Mineral & Geosains Malaysia.
28/02/04	Chairman's Lecture IV by Ibrahim b Abdullah of the Structural Geology Working Group on <i>Deformation History of the Eastern Belt, Peninsular Malaysia</i> in the Program Geologi, Universiti Kebangsaan Malaysia.
15/03/04	Technical talk on <i>Natural Attenuation: A Geochemical Property for Contamination Transport Mitigation</i> by Prof. Raymond N Yong in the Geology Department, University of Malaya.
24/04/04	<i>Annual General Meeting and Annual Dinner</i> in Eastin Hotel, Petaling Jaya.

Appendix 4

Minutes of EGM on 10 January 2004

Minutes of the Extraordinary General Meeting of the Geological Society of Malaysia held on 10th January 2004 at 2.55pm in the Geology Department, University of Malaya, Kuala Lumpur.

Present

Abd. Rasid Jaapar
 Damian Lee Eu Hong
 Lau Yin Leong
 Liew Kit Kong
 Low Keng Lok
 Mohd Shafeea Leman
 Samsudin
 Anna Lee (by invitation)

Ahmad Nizam Hasan
 Eugene Yee Wei Chiun
 Lee Chai Peng
 Lim Chee Keong
 Margaret Hall
 Nur Iskandar Taib
 Tan Bock Kang

1.0 Chairman's Opening Remarks

The Vice-President, Shafeea chaired the meeting by welcoming all members who are present and stating the agenda for this meeting. He then invited KK Liew to present to the meeting the Action Plans for the Redefinition of GSM and the Update of the Action taken.

2.0 Redefinition Team Members

KK Liew introduced the following members of his team and their portfolios:-

- a) Overall – KK Liew
- b) Website – CK Lim
- c) SOP – Rasid
- d) Permanent Secretariat – KK Liew
- e) Others – Damian Lee & Lau Yin Leong

3.0 Slide Presentation

A slide presentation of the Action Plans, Schedule of Plans, Status of Plans, Website Elements and Terms of Reference, Standard Operating Procedures of GSM's administration was shown. A handout of the 28 slides is attached with these minutes.

Slides 1-5 were presented by KK Liew. Slides 6-7 & the website were presented by CK Lim. Slides 8-27 were presented by Rasid. The last slide was presented by KK Liew.

4.0 Redefinition of GSM

The meeting agreed to redefine GSM to show its worthiness as a learned society by upgrading itself to meet with the present technological advances. Thus, the establishment of the website whereby a permanent www address has been obtained. The administration of the Society should also be streamlined into a systematic manner and in this area a SOP will be developed.

Appendix 4 (cont'd)

Minutes of EGM on 10 January 2004

5.0 Website

All elements of the website are already uploaded awaiting members and Council approval before being officially launched. The contents of the website were presented and the meeting noted that a lot of good work has been done. The meeting also recommended that the Council approve the present website content. A copy of the contents of the website is attached to these minutes.

6.0 SOP

The meeting agreed that SOP for the administration of the Society be established for its smooth operation. The following steps will be undertaken:-

- a) To map the existing administration procedures
- b) To redesign the administration procedures
- c) To document the new administration procedures
- d) To roll-out the new administration procedures

Rasid has been given this task.

The SOP will have to be approved by the Council before its implementation.

7.0 Permanent Secretariat

After much discussion, the meeting agreed that the Society cannot afford to move to another place (rented or own) now, and the best option is still to stay put in UM but on a permanent basis.

The meeting directs the Council to negotiate with UM for a permanent space in the Geology Department, preferably the old Seminar room. The Society in return can offer some "goodies" like student scholarships, loans, Best Student awards, budget an annual sum of RM1,000 for books for the library and if necessary to pay rent for the space.

For the Society to be on a stronger footing, the meeting also agreed that future conference fees be increased gradually to cater for the expected increase in expenses for the permanent secretariat.

The meeting concluded with a vote of thanks to KK Liew and his team for their efforts. The meeting ended at 5.00pm

Prepared by
LOW KENG LOK
Acting Secretary

Appendix 5 Stock of Publications

BULLETIN NO./PUBLICATIONS	SALES 2003	STOCK REMAINING
2	2	238
3	2	227
4	1	104
6	2	443
7	2	278
11	2	28
13	2	77
16	2	11
17	1	69
18	7	49
19	4	591
20	4	425
21	1	220
22	3	282
23	2	280
24	2	448
25	3	235
26	1	269
27	5	143
28	1	156
29	3	148
30	1	229
31	3	162
32	4	200
33	10	306
34	4	114
35	3	127
36	4	155
37	9	405
38	538*	262
39	547*	253
40	552*	248
42	519*	281
43	8	223
44	551*	249
45	5	222
46	532*	268
47	543*	257
Abstracts (Bulletin 6)	0	4
Stratigraphic Correlation	16	185
Rocks and Mineral Poster	6	249
Geological Evolution of SEA (CSH)	15	369
Malaysian Stratigraphic Guide	9	750
Annual Conference 2000 Proceedings	5	156
Annual Conference 2001 Proceedings	5	337
CD Geology of Borneo Island	7	913
Map: Geology of Borneo Island	22	968

* includes free copies to members

Editor's Report 2003/2004

The Society's publications have been brought up-to-date. Among the publications and activities involved are the following:

- (1) The latest bulletin, Bulletin 47, contained papers presented at the Petroleum Geology Conference & Exhibition 2002 and was made available for the Petroleum Geology Conference & Exhibition 2003 in December 2003
- (2) Petroleum Geology Conference & Exhibition 2003 Programme and Abstracts of Papers (held at Hotel Shangri-La, Kuala Lumpur, 17–18 December 2003) was made available for the Conference & Exhibition
- (3) GSM Calendar 2004 was also made available during the Petroleum Geology Conference & Exhibition 2003
- (4) Bulletin 46, contained papers presented at the Annual Geological Conference 2003 (held at Kuching, Sarawak, 24–26 May, 2003) was made available for the Conference
- (5) The latest *Warta Geologi* is Vol. 30 No. 2, Mar-Apr 2004
- (6) First Circular for the Annual Geological Conference 2004
- (7) The circulars for the Annual Geological Conference 2003 and Petroleum Geology Conference & Exhibition 2003
- (8) The GSM Photographic Competition 2003 attracted 27 entries

The Editor is grateful to the Editorial Subcommittee members, in particular A.K. Fan and T.F. Ng for their tireless efforts and dedication to preserve the standard and quality of the Society's publications. The reviewers of papers are thanked for their contributions. Last but not least we are grateful to authors of papers for their valuable contributions and support for the Society's publications

G.H. Teh
Editor

Honorary Treasurer's Report 2003

For the Financial Year 2003, the society's posted a financial deficit of RM 125,596 which was lower than the deficit recorded for Financial Year 2002 at RM 186,351. The net current asset have decreased from RM 470,113 to RM 344,517.

Operating revenue increased tremendously by 307% or RM 125,321 from RM 40,744 to RM 166,065. The increased of revenue is mainly from Entrance Fees by RM 760 from RM 340 to RM 1,100, Subscriptions by 35.10% from RM 16,091 to RM 21,730, Sales of Publications by RM 2,875 from RM 2,040 to RM 4,915, Petroleum Geology & Exhibition Conference 2003 gain by RM 121,702 (including balance payment after Dec 2002 for PGEC 2002), and profited by RM 5,810 from Donation and Registration fees.

Total operating expenditure for Financial Year 2003 was RM 291,661 increased by 29% compared to RM 227,095 for Financial Year 2002. The increased of expenditure mainly due to the significant increase in Printing of Warta Geology by 305% or RM 61,595 from RM 20,205 to RM 81,800, Printing of Buletin by RM 74,137 or 140% from RM 53,056 to RM 127,193, Honorarium by 18% from RM 18,725 to RM 22,115 and postage slightly increased from RM 9,766 to RM 10,082.

The Hon.Treasure would like to express a great appreciation to all the donors and sponsors for their contributions and support that contibute to an increase of total revenue. Congratulation to organising commitees of PGEC 2002/03 and Seminar Geophysic 2003 for the effort by implementing wise and profitable budget.

Ahmad Nizam Hasan

Hon. Treasurer

NOTES

1. The RM 8,389 is still held in trust for the Evaluation Formation Working Group to finance their activities.
2. Surplus of RM 121,702 under PGEC 2003 are including payment for PGEC 2002 received after Financial Year 2002 is closed. The final account for PGEC 2003 has yet to be closed due to the incoming payment from sponsors and exhibitor. This account balance would be accumulated into Financial Year 2004.
3. Miscellaneous paper and envelopes etc. totalling of RM 1,146.
4. Printing cost of Warta Geologi for 18 numbers of issues and GSM Calender 2004 totalling RM 81,800.00.
5. Printing cost of Bulletin for Vol. 38/1995 at RM 16,800, Vol. 39/1996 at RM 22,000, Vol.40/1997 at RM 21,600, Vol.42/1998 at RM 22,720 and Vol.46/2003 at RM 44,000; giving at total of RM 127,193.

New publications from the Geological Society of Malaysia

Geological Map of Borneo

Scale 1:1.5 million

Printed on two sheets (each 950 mm x 680 mm) with an overlap of 50 mm between the two sheets. On glossy plain paper or waterproof laminated paper for field use.

Together with accompanying notes, 12p A4.

Price: Members: RM15.00; non-members: RM30.00
excluding postage and packing.

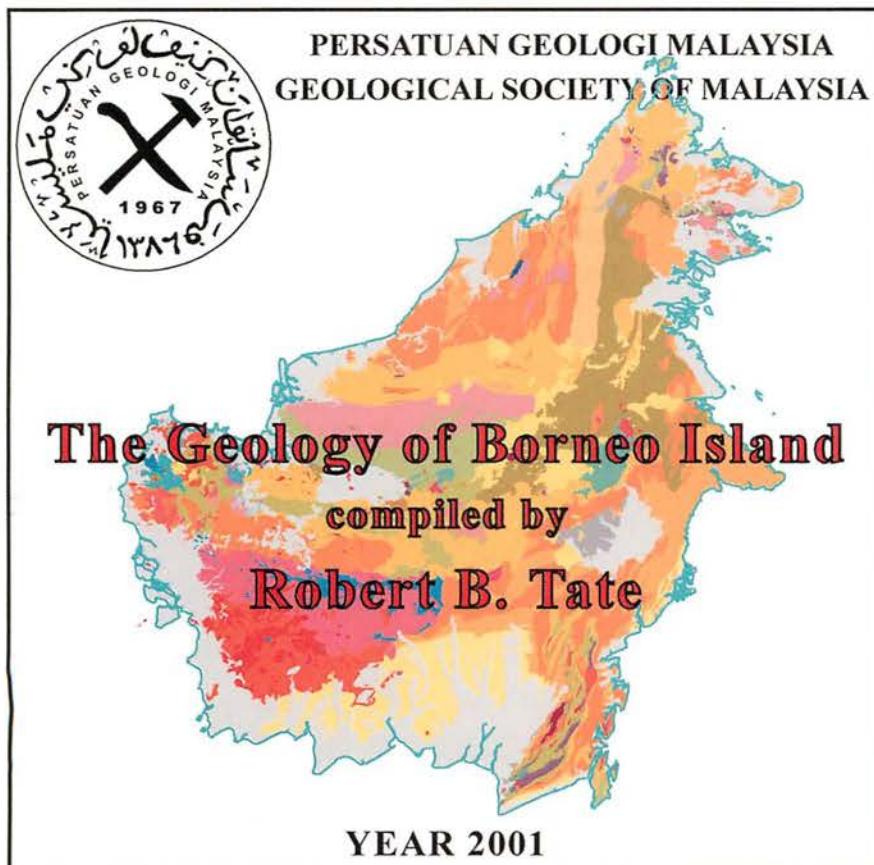
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c/o Department of Geology, University of Malaya
50603 Kuala Lumpur, Malaysia

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and stating the type of paper finish required.

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other recent publications.



The Geology of Borneo Island

compiled by

Robert Tate

on CD Rom

Price: RM60.00
exclusive of postage

Statement by the Council

We, Mohd Shafeea Leman and Ahmad Nizam Hasan, being the Vice President and Treasurer respectively, of the Persatuan Geologi Malaysia (Geological Society Of Malaysia) do hereby state that, in the opinion of the Council, the financial statements set out pages 4 to 10 are properly drawn up in accordance with applicable approved accounting standards so as to give a true and fair view of the state of affairs of the Persatuan Geologi Malaysia (Geological Society of Malaysia) as at 31 December 2003, and of the results and cash flows for the year then ended.



Mohd Shafeea Leman
Vice President



Ahmad Nizam Hasan
Treasurer

Kuala Lumpur

Dated 22 APR 2004

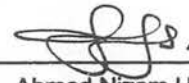
Declaration by the Officer Primarily Responsible for the Financial Management of the Society

I, Ahmad Nizam Hasan, the officer primarily responsible for the financial management of the Persatuan Geologi Malaysia (Geological Society Of Malaysia), do solemnly and sincerely declare that the accompanying financial statements set out on pages 4 to 10 are, to the best of my knowledge and belief correct, and I make this solemn declaration conscientiously believing the same to be true and by virtue of the provisions of the Statutory Declarations Act, 1960.

Subscribed and solemnly declared by)

the abovenamed Ahmad Nizam Hasan)
KUALA LUMPUR
WILAYAH PERSEKUTUAN
 at Petaling Jaya in Selangor Darul Ehoan)

on 22 APR 2004)



Ahmad Nizam Hasan



Before me,




Commissioner for Oaths
 NO. 2, MEDAN PEPERKAM,
 OFF. JALAN GENTING KELANG,
 SETIAK 53300 KUALA LUMPUR.


Report of the Auditors to Members of the Persatuan Geologi Malaysia

We have audited the financial statements set out on pages 4 to 10. These financial statements are the responsibility of the Council Members of the Society. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with approved auditing standards in Malaysia. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by the Council Members, as well as evaluating the overall financial statements presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements give a true and fair view of the state of affairs of the Society as at 31 December 2003 and the deficit of income over expenditure of the Society for the year then ended on that date in accordance with the basis of accounting described in Note 1 to the financial statements.


S.F. LEE & CO. (AF 0670)
Chartered Accountants


LEE SIEW FATT
(1179/9/04J)
Chartered Accountant

Kuala Lumpur

Date : 22 APR 2004



Balance Sheet as at 31 December 2003

	2003 RM	2002 RM
PLANT AND EQUIPMENT	48,191	50,301
CURRENT ASSETS		
Inventories	19,937	10,033
Deposits	600	600
Fixed deposits with licensed bank	242,908	351,202
Bank balance	34,369	57,977
	297,814	419,812
CURRENT LIABILITY		
Accruals	1,488	-
	1,488	-
NET CURRENT ASSETS	296,326	419,812
	344,517	470,113
FINANCED BY:		
GENERAL FUND	332,570	458,166
STUDENT LOAN FUND	415	415
EVOLUTION FORMATION WORKING GROUP FUND	8,389	8,389
YOUNG GEOSCIENTIST AWARD FUND	3,143	3,143
	344,517	470,113

The accompanying notes are an integral part of these statements

Income and Expenditure Account for the Year Ended 31 December 2003

INCOME	2003	2002
	RM	RM
Entrance fees	1,100	340
Fixed deposits interest	10,808	19,473
Subscription	21,730	16,091
Sales of publications	4,915	2,040
Petroleum Geology Conference	121,702	-
Xerox	-	1,342
Sales of CD	-	1,458
Donation and registration fees	5,810	-
	<u>166,065</u>	<u>40,744</u>
EXPENDITURE		
Annual Geological Conference	19,622	25,141
Annual dinner	2,581	1,621
Bank charges	-	33
Book prize	-	3,000
Honorarium	22,115	18,725
Loss on disposal of plant and equipment	8,115	-
Petroleum Geology Conference	-	60,408
Photo competition	2,300	2,300
Postages	10,082	9,766
Printing and Stationery		
- Miscellaneous	1,146	12,357
- Warta Geologi	81,800	20,205
- Bulletin	127,193	53,056
Professional fee	800	787
Promotion of Geoscience	-	2,722
Refreshment	1,233	1,548
Speakers' account	1,027	2,464
Subscription to Professional body	-	100
Balance carried forward	<u>278,014</u>	<u>214,233</u>
Balance brought forward	278,014	214,233
Sundry expenses	2,086	2,034
Telefax	562	925
Telephone	593	672
Working groups	2,909	3,642
Xerox	1,018	-
Depreciation on plant and equipment	6,479	5,589
	<u>291,661</u>	<u>227,095</u>
Deficit for the year	<u>(125,596)</u>	<u>(186,351)</u>

Cash Flow Statement for the Year Ended 31 December 2003

	2003 RM	2002 RM
Cash flows from operating activities		
<u>Cash receipts</u>		
Subscriptions	21,730	16,091
Geological conference 2003	121,702	-
Entrance fees	1,100	340
Donation and registration fees	5,810	-
Proceeds from publications	4,915	2,040
Proceeds from sale of compass and maps	3,443	3,540
Others	2,041	3,816
	160,741	25,827
Payment for operating expenses	(277,067)	(193,221)
Purchase of compass and maps	(13,900)	(8,100)
Net cash used in operating activities	(130,226)	(175,494)
Cash flows from investing activities		
Purchase of plant and equipment	(14,484)	-
Proceeds from disposal of plant and equipment	2,000	-
Interest received from fixed deposits	10,808	19,473
Net cash used in investing activities	(1,676)	19,473
Net decrease in cash and cash equivalents	(131,902)	(156,021)
Cash and cash equivalents at the beginning of the year	409,179	565,200
Cash and cash equivalents at the end of the year	277,277	409,179
<u>Analysis of cash and cash equivalents</u>	2003	2002
	RM	RM
Bank balance	34,369	57,977
Fixed deposits with licensed bank	242,908	351,202
	277,277	409,179

Notes to the Financial Statements

1. OBJECTIVE

The objective of the Society is to promote the advancement of the geological sciences in Malaysia.

2. ACCOUNTING POLICIES

a) Basis of Accounting

The financial statements have been prepared under the historical cost convention and comply with applicable approved accounting standards.

b) Plant and equipment

Office equipment is stated at historical cost less accumulated depreciation. Depreciation on office equipment is computed on the reducing balance method calculated to write-off the cost of the assets over its estimated useful life at the rate of 10% per annum.

The carrying values of the assets are reviewed for impairment when there is an indication that the assets might be impaired. Impairment is measured by comparing the carrying values of the assets with their recoverable amounts.

An impairment loss is charged to the income statement immediately, unless the the asset is carried at revalued amount. Any impairment loss of a revalued asset is treated as a revaluation decrease to the extent of previously recognised revaluation surplus for the same asset.

Subsequent increase in the recoverable amount of an asset is treated as reversal of the previous impairment loss and is recognised to the extent of carrying amount of the asset that would have been determined (net of amortisation and depreciation) had no impairment loss been recognised. The reversal is recognised in the income statement immediately, unless the asset is carried at revalued amount.

c) Inventories

Inventories consists of compass and maps valued at the lower of cost and net realizable value.

d) Deferred taxation

Provision is made using the liability method for taxation deferred in respect of all timing differences except where it is considered reasonably probable that the tax effects of such deferral will continue in the foreseeable future.

Notes to the Financial Statements (cont'd)

e) Income recognition

Membership subscription is payable annually at the beginning of the financial year. All subscriptions received during the financial year is recognised as income.

Income from sale of publications is recognised upon delivery of goods.

Income from organising conference is recognised on receipt basis.

Fixed deposit interest income is recognised on an accrual basis.

f) Financial instruments

(i) Financial risk management objectives and policies

The Society's financial risk management objectives are to ensure that the society creates value and maximises returns to the society and its members at large. The Society has been financing its operations from internally generated funds and therefore is not exposed to interest rate risk arising from bank borrowings.

(ii) Credit risk

Credit risk, or the risk of counter parties defaulting is controlled by the ongoing monitoring procedures. The Society also exercised strict control in removing members in arrears in more than six months as provided under the Society's constitution and by-laws.

(iii) Liquidity risk

The Society practises prudent liquidity management to minimise the mismatch of financial assets and liabilities and to maintain sufficient levels of cash and cash equivalents to meet its working capital requirement.

(iv) Fair value

The carrying amounts of cash and cash equivalents, inventories and payables approximate their fair values due to the relatively short term nature of these financial instruments.

3. PLANT AND EQUIPMENT

2003	Cost			
	Balance at 1/1/2003	Additions	Disposal	Balance at 31/12/2003
	RM	RM	RM	RM
Office equipment	127,566	14,484	(14,450)	127,600
	127,566	14,484	(14,450)	127,600

Notes to the Financial Statements (cont'd)

	Accumulated depreciation				Net Book Value at 31/12/2003
	Balance at 1/1/2003	Charge for the year	Disposal	Balance at 31/12/2003	
	RM	RM	RM	RM	
Office equipment	77,265	6,479	(4,335)	79,409	48,191
	77,265	6,479	(4,335)	79,409	48,191

2002	Cost			
	Balance at 1/1/2002	Additions	Disposal	Balance at 31/12/2002
	RM	RM	RM	RM
Office equipment	127,566	-	-	127,566
	127,566	-	-	127,566

	Accumulated depreciation				Net Book Value at 31/12/2002
	Balance at 1/1/2002	Charge for the year	Disposal	Balance at 31/12/2002	
	RM	RM	RM	RM	
Office equipment	71,676	5,589	-	77,265	50,301
	71,676	5,589	-	77,265	50,301

4. INVENTORIES	2003	2002
	RM	RM
Maps	6,352	7,695
Compass	13,585	1,330
	19,937	9,025

5. FIXED DEPOSITS WITH LICENSED BANK

The fixed deposits with licensed bank have a maturity of 15 months (2002: 15 months). interest rates for the deposits ranged from 3.75% to 5.00% (2002: 3.75% to 5.00%) per annum.

6. GENERAL FUND

	2003	2002
	RM	RM
At 1 January	458,166	644,517
Deficit for the year	(125,596)	(186,351)
At 31 December	332,570	458,166

7. COMPARATIVE FIGURES

Certain comparative figures have been reclassified to conform with current year's presentation.

Council Members for 2004/2005

President	:	Lee Chai Peng
Vice-President	:	Yunus Abdul Razak
Secretary	:	Abd Rasid Jaapar
Asst. Secretary	:	Low Keng Lok
Treasurer	:	Ahmad Nizam Hasan
Editor	:	Liew Kit Kong
Councillors (2 years)	:	Juhari Mat Akhir Lau Yin Leong Nur Iskandar Taib Safarudin Mat Tahir
Councillors (1 year)	:	Tan Boon Kong Zakaria Mohammad
Immediate Past President	:	Mohd. Shafeea Leman



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BERITA-BERITA PERSATUAN NEWS OF THE SOCIETY

KEAHLIAN (Membership)

The following applications for membership were approved:

Full Members

1. Mohd Mokhtar b. Abdul Ghani
8 Jalan Kiara SD11/6B, Bandar Sri
Damansara, 52000 Kuala Lumpur.

Student Members

1. Mohammad Yasir b. Mohammad Said
LESTARI, UKM, 43600 Bangi, Selangor.
2. Cheong Tze Ling
47, Raja Udang 2B, Taman Kingfisher 11,
88450 Kota Kinabalu, Sabah.

GSM

PETUKARAN ALAMAT (Change of Address)

The following members have informed the Society of their new addresses:

- | | |
|--|--|
| <ol style="list-style-type: none"> 1. T.T. Khoo
56 Valley Road, Epping 2121, Australia. | <ol style="list-style-type: none"> 2. Tee Say Li
78, Jalan Harmoni 8, Taman Sungai
Pinang, off Jalan Sungai Putus, 42100
Klang, Selangor, |
|--|--|

GSM

CURRENT ADDRESS WANTED

The GSM is seeking the address of the following member. Anyone knowing the new address please inform the Society.

1. Dr. Adnan A.M. Aqrawi
Smedvig Technologies AS, Gamle Forusvei
17, P.O. Box 172, N-4033 Stavanger,
Norway.

GSM

PERTAMBAHAN BAHARU PERPUSTAKAAN (New Library Additions)

The Society has received the following publications:

- | | |
|--|--|
| <ol style="list-style-type: none"> 1. <i>Annales Academiae Scientiarum Fennicae Geologica-Geographica</i>, no. 165, 2003. 2. <i>Monthly statistics on mining industry in Malaysia</i>, Sept., Oct, 2003. 3. <i>Geosciences Journal</i>, vol. 7, no. 4, 2003. 4. <i>AAPG Bulletin</i>, vol. 88, no. 3 & 4, 2004. 5. <i>AAPG Explorer</i>, March & April, 2004. 6. <i>Geologica Belgica</i>, vol. 7, nos. 1-2, 2004. | <ol style="list-style-type: none"> 7. <i>Geological Survey of Japan, Bulletin</i>, vol. 54, no. 7/8, 2003. 8. <i>Humans & Nature</i>, no. 14, no. 1-10, 2003. 9. <i>Nature & Human Activities</i>, no. 8, 2004. 10. <i>Episodes</i>, vol. 27, no. 1, 2004. 11. <i>USGS Professional Paper: 2003</i> — nos. 1416-E, 1656A, 1590. 2003 — nos. 1655. |
|--|--|

GSM

PETUKARAN ALAMAT (Change of Address)

The following members have informed the Society of their new addresses:

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. T.T. Hano
38 Valley Road, Epping NSW, Australia | <ol style="list-style-type: none"> 2. Terjay Li
78 Jalan Harmoni 8, Taman Sungai
Pinnang, off Jalan Sungai Pinnang, 42100
Klang, Selangor. |
|--|---|

CURRENT ADDRESS WANTED

The GSM is seeking the address of the following member. Anyone knowing the new address please inform the Society.

- | |
|--|
| <ol style="list-style-type: none"> 1. Dr. Abnan A.M. Arwani
Smartly Technologies AS, Gards Fornevis
17, P.O. Box 172, N-1033 Slangerup,
Norway. |
|--|

BERITA-BERITA LAIN OTHER NEWS



SEAPEX Exploration Conference April 2005

PRESS RELEASE

(Singapore 20th March 2004)

SEAPEX Exploration Conference 2005

Singapore-based South East Asia Petroleum Exploration Society (SEAPEX) announced today that the next biannual SEAPEX EXPLORATION CONFERENCE will be held from Tuesday 5th April to Thursday 7th April 2005.

For the third time, the SEAPEX Exploration Conference (SEC) will be a stand-alone event. The intention is a focused conference aimed at the upstream/new ventures activities and opportunities in the Asia Pacific region. Timing is aimed at a period of anticipated expansion after the budgets for such activities have been approved. The conference will end at noon on Thursday 7th to allow for the Singapore Scout Check Meeting to be held in the afternoon.

There will also be the usual SEAPEX Golf Tournament on Friday 8th April which again will be held at Ria Bintan, Indonesia. The SEAPEX Tennis Tournament will be on Monday 4th April.

The venue is the same as the last two conferences: the Orchard Hotel in Singapore, a location well known to the SEAPEX members and Scout Check attendees. The two and a half day program of talks and farmout poster presentations will be divided into three geographical areas and feature keynote speakers and industry experts talking on a wide variety of interesting topics.

The SEAPEX Exploration Conferences in 2001 and 2003 were very successful. The 2005 SEAPEX Conference Committee will seek support from potential speakers and sponsors to reach its goal of making once again this Conference the premier petroleum upstream event in Southeast Asia.

For further details please refer to the SEAPEX webpage: www.seapex.org, email "seapex@seapex.org" or fax +65 438 2703, or contact Jeff Lobao, The Technical Programme Director, email Jeff.Lobao@shell.com or Jon Savage, Conference Chairman, email savage@starhub.net.sg

Common Rocks of Malaysia

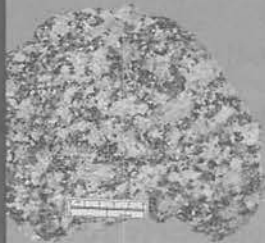
A full colour poster illustrating 28 common rocks of Malaysia. With concise description of the features and characteristics of each rock type including common textures of igneous, sedimentary and metamorphic rocks.

Laminated

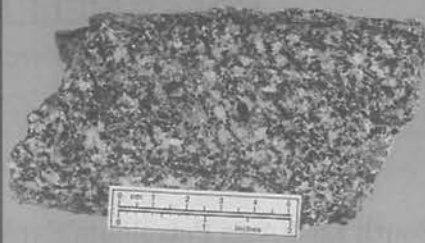
Size: 94 cm x 66 cm (42" x 26")

Price: Student members RM7.00 (one copy per member, subsequent copies RM10.00 each)
 Members RM8.00 (one copy per member, subsequent copies RM10.00 each)
 Non-members RM10.00 per copy

COMMON ROCKS



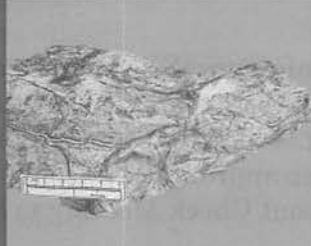
Granite (Tampin, Negri Sembilan)



5. Diorite (Kg. Kemahang, Kelantan)



6. Basalt (Segamat, Johor)



Serpentine (Fraub, Pahang)



12. Pegmatite (Bukit Mor, Johor)



13. Conglomerate (Pulau Redang, Terengganu)



Mudstone (Kg. Laloh, Kelantan)



19. Chert (Nenering, Kedah)



20. Coal (Batu Arang, Selangor)



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KALENDAR (CALENDAR)

2004

June 27 – July 2

WATER-ROCK INTERACTION (11th International Symposium), Saratoga Springs, New York, USA. (Contact: Dr. Susan Brantley, Secretary General, Dept. of Geosciences, The Pennsylvania State University, 239 Deike Building, University Park PA 16802, USA. Tel: +1-814 863 1739; Fax: +1-814 863 8724; Website: www.outreach.psu.edu/C&I/WRI/)

July 4–9

INTERNATIONAL PALYNOLOGICAL CONGRESS (11th), Granada, Spain. (Contact: Technical Secretary. E-mail: eurocongres@eurocongres.es; Website: www.ugr.es/~bioveg/)

August 20–28

INTERNATIONAL GEOLOGICAL CONGRESS (32nd), “*The Renaissance of Geology*”, Florence, Italy. (Contact: Ms. Chiara Manetti, Università degli Studi di Firenze, Dipartimento di Scienze della Terra, Via La Pira, 4, 50121 Firenze, Italy. Tel/Fax: +39-055 238 2146; E-mail: cmanetti@geo.unifi.it; To request the First Circular, send e-mail to: 32igc@32igc.org or visit the Congress Website: www.32igc.org)

August 27 – September 4

VLADIVOSTOK-2004 INTERIM IAGOD CONFERENCE (*Metallogeny of the Pacific Northwest: Tectonics, Magmatism & Metallogeny of Active Continental Margins*), Vladivostok, Khabarovsk, Magadan, Russian Far East, Russia. (Contact: Russian National IAGOD Group, Federal Far East Geological Institute, Far Eastern Branch of Russian Academy of Sciences, 159, Prospekt 100-letiya, Vladivostok, 690022, Russia. Tel: 7(4232)31-87-50; Fax: 7(4232)31-78-47; E-mail: iagodconf@fegi.ru or fegi@online.marine.su; Website: <http://www.fegi.ru/IAGOD/index.htm>)

September 11–19

TECTONICS, MAGMATISM AND METALLOGENY OF ACTIVE CONTINENTAL MARGINS (Interim International Conference on Metallogeny of the Pacific Northwest), Vladivostok, Russia. Sponsored by the Russian Academy of Sciences and The Society of Economic Geologists. (Contact: Far East Geological Institute, Far Eastern Branch of Russian Academy of Sciences, 159, Prospekt 100-letiya, Vladivostok, 690022 Russia. Tel: +7(4232)31-87-50; Fax: +7(4232)31-78-47; E-mail: iagodconf@fegi.ru or fegi@online.marine.su; Website: <http://www.fegi.ru/IAGOD/>)

September 15–17

SEDIMENTOLOGY (23rd Annual Meeting of the International Association of Sedimentology), Coimbra, Portugal. (Contact: Rui Pena dos Reis, uiversidade de Coimbra, Dpto. Ciências da Terra, Largo Marquês de Pombal, 3014 Coimbra, Portugal; E-mail: penareis@ci.uc.pt)

October 10–15

SOCIETY OF EXPLORATION GEOPHYSICISTS (74th Annual Meeting and International Exposition), Denver, Colorado, USA. (Contact: Debbi Hyer, 8801 S. Yale, Tulsa, OK 74137, USA. Tel: (+1-918) 497 5500; E-mail: dhyer@seg.org; Website: meeting.seg.org)

November 7–10

GEOLOGICAL SOCIETY OF AMERICA (Annual Meeting), Denver, Colorado, USA. (Contact: GSA Meetings Dept., P.O. Box 9140, Boulder, CO 80301-9140, USA. Tel: +1 303 447 2020; Fax: +1 303 447 1133; E-mail: meetings@geosociety.org; Website: <http://www.geosociety.org/meetings/index.htm>)

December 13–17

AMERICAN GEOPHYSICAL UNION (Fall Meeting), San Francisco, California, USA. (Contact: AGU Meetings Department, 2000 Florida Avenue, NW, Washington, DC 20009 USA; Tel: +1 202 462 6900; Fax: +1 202 328 0566; E-mail: meetinginfo@agu.org; Website: <http://www.agu.org/meetings>).

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Cover photo: Wire-cutting marble blocks, Simpang Pulai, Perak by Tan Boon Kong

