

NEWSLETTER

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Articles of a technical nature, as well as reports of interesting events, reviews and other topical items are welcome. Contributions must be short. 1,200 words is regarded as the normal acceptable length, although exceptions may be made at the discretion of the Society. Figures, tables and half-tone plates must be kept to a minimum and must all be on separate sheets.

Typescripts must be accurate and in their final form. Two complete copies should be sent to the Secretary. Typescripts should be double-spaced, including references, on one side of the paper only with a 2.5 cm margin on each side. A4 paper is preferred. All pages should bear the author's name and be numbered serially.

Send only photocopies of illustrations, retaining the originals until the Society asks for them. Originals should bear the author's name. Diagrams should be in black on tracing material or smooth white paper or board with a line weight and lettering suitable for reduction. A metric scale should be included, and north point (or where relevant, coordinates of latitude and longitude) on all maps.

References : The author is responsible for ensuring that the references are correct and that Journal abbreviations comply with those in the List of Serial Publications held in the Library of the Geological Society of London (Geological Society, 1978).

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REPORT ON THE "GEOLOGY OF SURFICIAL DEPOSITS IN HONG KONG" CONFERENCE, HELD AT THE UNIVERSITY OF HONG KONG, 19-21 SEPTEMBER, 83

A.D. Burnett, Geotechnical Control Office
D.R. Workman, W.W.S. Yim, University of Hong Kong

A local Conference on the "Geology of Surficial Deposits in Hong Kong" was held at the University of Hong Kong between September 19th-21st under the joint auspices of the Geological Society of Hong Kong and the Department of Geography and Geology of Hong Kong University.

This 3-day meeting was attended by about 100 geologists and engineers. It represents a notable landmark in the progress of geology in Hong Kong as it was the first organised attempt by geologists in recent years to gather in numbers and discuss in depth a topic of importance to Hong Kong.

The conference comprised a first and last day of technical discussions, separated by a day devoted to a field excursion to various sites of interest on Lantau.

The first day started with brief speeches of welcome by Professor C.J. Grant on behalf of the University and Dr. A.D. Burnett on behalf of the Society.

The first technical session covered the topic of colluvium and landslides.

S. Hui, one of the Society's Honorary members, opened the proceedings with a paper on the geological recognition and likely origin and age of colluvium in the Happy Valley area.

K. Styles presented the second paper of the morning, which dealt with the mapping of superficial deposits as undertaken by the Terrain Evaluation Section of the Geotechnical Control Office.

The following paper, by K.W. Lai and B.W. Taylor, described a 3-class classification system which the authors have developed for the colluvial deposits of the Territory, and a discussion of the likely ages of the three classes.

R. Harris described what was probably the first systematic landslide-hazard zoning system used in Hong Kong, which combined landslide-inducing factors into a model to identify areas of regional hazard. The engineering geology and engineering properties and behaviour of colluvium were then presented and discussed by P. Randall, who suggested that colluvium may be more inherently stable than many of the residual soils of Hong Kong.

The afternoon session of the first day took the theme of marine and alluvial deposits. P. Whiteside opened the session with a paper on the pattern of Quaternary sediments revealed during piling works at Shatin. The deep alluvial channel deposits intersected by the MTRC tunnels at Victoria Park were then discussed in a paper by A. Willis and J.N. Shirlaw.

The results of a sedimentological study of the sea floor sediments which were exposed during the construction of the High Island Dam scheme were then discussed by W. Yim. These studies were the first on the double sequence of marine sediments which has since been recognised at many other locations in the territory.

A paper by M. Chalmers on the preliminary assessment of sedimentation in Victoria Harbour over the last century came next. This author demonstrated, using both numerical and historical methods, that little natural sedimentation had in fact occurred over this period.

The session was brought to a conclusion by J. Sadler who presented the paper on the location of nearshore marine sand and gravel deposits using acoustic techniques.

The programme for the second day of the conference consisted of a field trip to Lantau. Fifty conference participants attended. In a late change to the programmes, a planned visit to the Tung Chung Laboratory of the Engineering Development Department was regrettably cancelled because of typhoon damage.

The first stop was made at Pui O to examine sand bar deposits which are of disputed origin. Both the outer and inner sand bars were visited. W. Yim presented his arguments in favour of a storm beach and dune sand origin as opposed to a raised beach origin proposed by some previous workers.

The second stop was made at a viewpoint overlooking Tung Chung Bay and Chek Lap Kok. R. Chung of the North Lantau and Airport Replacement Division spoke on the engineering aspects of the site investigation work carried out. He pointed out that the original plan to locate the airport on the eastern side of Chek Lap Kok was abandoned because of the greater thickness of surficial deposits on the sea floor as compared to the western side.

The third stop was made on the Shek Pik dam. D.L. Hall, formerly with the Waterworks Department, gave a brief description of the Shek Pik Water Scheme. W. Yim mentioned that at the time of construction of the dam, the term 'colluvium' was not in general use in Hong Kong and as a result alluvium and residual soil were the only surficial deposits recognised at the dam site.

The final destination of the day was Tai O. W.J. Dickson of Wilbur Smith and Associates and A. Cipullo of the Geotechnical Control Office were there to meet the group and Mr. Dickson outlined the findings from the boreholes drilled recently in the Tai O harbour area. The group visited two sites to study settlement problems associated with construction work on the soft Holocene marine muds and afterwards walked to Po Chue Tam to examine an interesting coastal cliff exposure of alluvium and colluvium.

After an excellent day blessed with good weather, the party returned to Mui Wo to catch the ferry to Central.

The final day of the Conference and the second full day of technical papers was divided into two sessions headed "General Aspects" and "Engineering Applications" respectively. K.H. Liu opened the first session with a general paper on Quaternary geology, weathering and geomorphology in Hong Kong, which attempted to make correlations with the Quaternary geology of northern China, as well as to assign dates (Holocene, Upper Pleistocene, Middle Pleistocene) to certain deposits.

The next paper, by C.J. Beggs, reviewed developments in soft-ground sampling methods and testing techniques introduced recently in Hong Kong. This was followed by a paper on weathering of shore-line rock masses by J.R.A. Gammon.

Dr. A.D. Burnett of the Geotechnical Control Office then outlined a proposed scheme for classification and description of superficial deposits and Dr. R. Addison described the methods being adopted for mapping superficial deposits in connexion with the new geological survey of Hong Kong now under way.

The final paper of the morning session, by A.J. Brimicombe, described how computer-stored data bases could provide the basis for rapid graphical analysis of site investigation data and effective communication of the results, specifically in elucidating and displaying the 3-dimensional distribution of superficial deposits.

In the afternoon session, three papers were given. J.M. Nash and M.J. Dale presented an examination of the mechanism by which natural tunnel erosion, or soil piping, develops in colluvial and residual soils in Hong Kong. The authors pointed out the often unexpectedly high frequency of such occurrences and discussed their important influence on slope stability. This was followed by a paper by P. Blacker on the geology and engineering properties of surficial deposits at Tai Long Wan, Chi Ma Wan, Lantau, where a leisure community development including a marina and reservoir are under construction.

Finally, M.D. Howat and R.W. Cater presented a paper on the way in which analysis of ground surface settlement monitoring by engineering methods had given an understanding of the geometry and geology of surficial deposits in an area of NW Kowloon traversed by the MTR, which interpretation of data from closely-spaced boreholes had failed to provide.

The meeting concluded with an open session of floor contributions and general discussion chaired by Prof. P. Lumb. Floor contributions were given by G.W. Lovegrove and K.W. Lai. G.W. Lovegrove described a simplified method for establishing and defining the overconsolidated characteristics of the marine clays and K.W. Lai extended his hypothesis regarding the age of different classes of colluvium.

General discussion then followed, covering two major topics - sea level changes and the age of weathering in Hong Kong. Both topics aroused lively discussions. It was after 5.30 p.m. when the meeting came to a close.

WORKING GROUPS ON ASPECTS OF HONG KONG GEOLOGY

The Committee has endorsed the general idea of setting up working groups of members interested in particular topics, as a means of promoting research, sharing information and improving our knowledge of Hong Kong's geology. Ideas are warmly welcomed, and should be conveyed to the secretary or any Committee member.

It is not intended that membership of such working groups will involve any obligation or pressure to devote any specific time or effort to the activity in question. Each group would establish its own programme, objectives and procedure, and set its own pace geared to participants' wishes.

Two proposals have been received so far, as follows:-

Marine Studies Group

It is proposed to set up a Marine Studies Group to build on the encouraging response shown by participants at the recent meeting on 'Geology of surficial deposits in Hong Kong'. The provisional objectives of the Group, subject to agreement of participants, are as follows:-

- (1) To encourage research work on sea-floor sediments in Hong Kong.
- (2) To promote the exchange of information on sea-floor sediments.
- (3) To provide a data bank on sea-floor sediments in Hong Kong.

It may be possible to obtain funding for laboratory work, such as radiocarbon dating.

Anyone interested in joining the activities of such a group and would like to offer any suggestions on its operation, should contact Wyss Yim either by writing or by phone, at the Department of Geography and Geology, University of Hong Kong (telephone number 5-4097229).

Stratigraphic Correlation Group

This proposal is for a working group to collect, compile and review information on mappable stratigraphic units in Hong Kong, especially in the northern New Territories and Lantau, and make a comparative study of all these occurrences together with equivalent formations in Guangdong province. Interested members are invited to contact the secretary. An informal meeting of those responding will be held early in 1984 to discuss the idea in more detail.

REPORT ON A VISIT TO GUANGDONG

W.S. Yim Department of Geography & Geology, University of Hong Kong

During a week-long visit to Guangdong in mid-July, I was able to establish contacts with a number of important establishments in Guangzhou.

Discussions were held at the Department of Geology, Zhongshan University, with Professor Y. Huang (黃玉堯), Honorary Member, and, other members of the teaching staff. Mr. Q. Y. Li (李前裕), a lecturer in the Department, is currently working in collaboration with me on a foraminiferal study of Hong Kong sediments.

At the South China Sea Institute of Oceanology, I met a number of research scientists including Professor Z. Liu, Honorary Member and Assistant Director of the Institute, to discuss research matters and future cooperation. A delegation from the Institute passed through Hong Kong on their way back to China from North America in October and were able to meet members of the Society (see separate news item).

A meeting was held at the Guangdong Geological Bureau with Mr J.B. Chen (陳若拔), Chief Secretary of the 2000-plus strong Geological Society of Guangdong. General information on the goals and organisation of the two Societies were exchanged, and informal discussions were held on cooperation, including topics such as exchange visits. I was then introduced to Mr. Y. Nan (南頌), the author of the important work on the stratigraphy of Guangdong.

A field excursion was arranged for me to the Seven Star Crags by Professor Huang in the company of two committee members of the Seismological Society of Guangdong, Mr. Z. Ren (任鎮巖) and Mr. E. Chen (陳恩氏). Both Mr. Ren and Mr. Chen are research scientists at the Guangdong Seismological Bureau. Mr. Ren is also the Chief Secretary of the Guangdong Seismological Bureau Research Committee while Mr. Chen was commended nationally earlier this year for this research work on the 1605 Qiongzhou earthquake.

In the company of Professor Huang, I visited the Guangzhou headquarters of British Petroleum to meet their Chief Geologist Dr. I. Prince, who, with several other members of the B.P. Team, has recently joined our Society. British Petroleum will have twenty geologists in Guangzhou by the end of this year.

I would like to thank Professor Huang particularly for making my visit such a success.

PLATES

1. FROM TO RIGHT - Y. NAN, W.S. YIM, J.B. CHEN AND PROF. Y. HUANG
2. FROM LEFT TO RIGHT - PROF. S. FAN, W.S. YIM, W.L. LUO, PROF. C. WENG AND PROF. Z. LIU.



PLATE 1



PLATE 2

MEETINGS WITH CHINESE GEOSCIENTISTS

Members of the Society were able on two occasions recently to meet Chinese geoscience delegations passing through Hong Kong.

The first occasion was on October 17th, when a group from the South China Sea Institute of Oceanology, returning from a visit to oceanographic research institutions in the United States, held informal discussions at H.K.U. (and afterwards at dinner at a nearby restaurant) with the Chairman and eight other society members*. The visiting group comprised Professor Liu Zhaoshu, Assistant Director, Head, Department of Marine Tectonics (and Hon. Member, GSHK); Professor Chen Senqiang, Specialist in Petroleum Geology and Structural Geology; Professor Fan Shiquing, Head, Department of Marine Sedimentology, and Mr. Su Daquan, Geophysical Engineer, Specialist in Gravity Methods. The talks centred on the work of the South China Sea Institute and ways of developing co-operative activities in areas of mutual interest (the society will invite Professor Liu to visit Hong Kong again next year to address a meeting of the society).

Professor Liu has presented to the society a copy of the new geotectonic map referred to in his article in the May issue of the Newsletter.

The second group of visitors was from the Ministry of Geology and Mineral Resources in Beijing. The six members of the party, led by Mr. Yang Zhiling, Director of the Ministry's Bureau of Foreign Affairs, made a tour of inspection of the H.K.U. Department of Geography and Geology on October 22nd. Mr. Zhang himself was evidently well aware of the accelerated pace of geological activities in Hong Kong and expressed great interest in what is going on. We hope that this meeting also may lead to further contacts.

* (M.D. Howat, K.W. Lai, C.M. Lee, P.S. Nau, P.A. Randall, C.H. Tan, D.R. Workman and W.S. Yim)

GEOLOGICAL EXCURSION TO PIONEER QUARRY

9TH JULY 1983

M.J. Atherton

Twelve members made the trip to the quarry which is situated off Anderson Road above Sau Mau Ping.

The contact between the Hong Kong granite and Repulse Bay Formation tuffs occurs high up on the quarry face and can be inspected from the higher benches. The contact is very sharp, one can draw a pencil line along the contact, and many veins and stringers of aplite and pegmatite from the batholith invade the country rock. Of particular interest is the finely crystalline chilled margin of the granite, about one cm thick, proving the granite to be intrusive. The granite near the contact contains crystals of fluorite, pyrite, molybdenite and quartz, and calcite filled vugs. Calcite also occurs along joint planes. The baked tuff is much harder than the granite and has caused problems in the quarry jaw crushing plant.

The Society would like to thank Pioneer Quarries (HK) Ltd. for the opportunity to visit their quarry.

FIELD EXCURSION TO CHAI WAN MTR DEPOT

Peter Randall

Twenty five members travelled to Pak Sha Wan on a very sunny 22nd October, to the site of the MTR Depot for the new Island Line. After a brief introduction to project and the local geology the group donned their safety hats and ventured out onto the site. First stop was one of the 70 m high rock cuttings made to provide room for Route 81 (Island Eastern Corridor) alongside the depot. The rock exposed was a dark green porphyritic tuff of the Repulse Bay Formation. Seawards of the eastern cutting a large ridge had been completely removed and this had contained areas of coarsely agglomeratic tuff as indicated by boulders still remaining on the site. This agglomerate consisted of a fine to medium grained matrix containing upto 60% of rounded cobble or boulder - sized fragments of medium to coarse grained tuff.

The group climbed the western cut slope for a view of the entire site. Within the huge site could be seen the construction of seawalls, land reclamation, embankments, tunnels and the depot structure itself. As the group continued towards the northwest corner of the site the tuffs passed into monzonite with abundant, aligned feldspar crystals. The monzonite corresponded to a depression in the topography, and on its northern limit passed back into the tuffs. This northern contact was very gradual with the monzonite becoming slightly finer grained with more ferromagnesian minerals, in places resembling Tai Po Granodiorite. This passed into coarse grained slightly porphyritic tuff and finally into medium grained tuff.

Along the northwest side of the site another rock cutting, this time for an internal road, was studied by the group (or at least those who had energy left for the climb!). Another contact was exposed, this time with the tuffs passing northwards into granite. The contact was very sharp with only a 50 to 200 mm zone of recrystallisation and sometimes less. The contact was approximately vertical with a 2 m offset by a sub-horizontal fault at mid height of the exposure. To reach the contact the group had to pick their way above the portals of the twin tunnels leading to Shaukiwan. Unfortunately on this visit it was not possible to enter the tunnels, although it was interesting to inspect the rail track-mounted equipment that the tunnelling contractor was using. A near-vertical fault passed through the granite and into one of the tunnels and took the form of a 0.5 to 1.5 m wide decomposed zone with water seepages. The fault trended northwestwards and was one of the major NW-SE or N-S trending fault sets which passed through the site and had a marked influence on bedrock level.

The group stopped briefly by the present seaward limit of reclamation for a well-earned drink before returning directly across the depot site.

Everyone enjoyed the visit (and the exercise!) and some appeared to be taking half the site home with them in the form of bagfuls of rock samples.

It is hoped that similar visits to other MTR sites may be possible before large temporary exposures of rock are covered up.

FORTHCOMING PROGRAMME

1983 Review

Wednesday 14th December

A light hearted look at our successes (or otherwise) in the first full year of operation of the Geological Society. The meeting will review our meetings and excursions (both local and foreign) and the colleagues and friends we have made in other countries.

We can try to answer the following questions. What lies ahead for us in 1984? What should the Society be aiming for? Is the Society arranging the sort of events that most of the members want? What is the meaning of life?

Hopefully there will be time for Maurice to show some of his excellent films. Please try to come along.

Hong Kong Polytechnic Room A702 6.00 pm

Field Excursion to Ping Chau

Sunday 15th January

A junk trip has been arranged to the island of Ping Chau in Mirs Bay. Hopefully this will be "second time lucky" for our attempts to visit the island. The island is especially interesting for its exposures of Repulse Bay sedimentary rocks and many unusual minerals. It also has a pleasant beach and the trip there, along Tolo Channel, should be beautiful.

The junk will leave from the Chinese University Ferry Pier at 9.00 a.m. and the charge will be \$35 for adults and \$20 for children. Please complete and return the reply slip as soon as possible with your cheque.

**Rockfall and it s Control
Joint Meeting with the HKIE Geotechnical Group**

Tuesday 21st February

The first annual joint meeting with the Geotechnical Group of the Hong Kong Institution of Engineers will be on the topic of falling rocks. The subject was chosen since it is an "engineering" problem that seems to be frequently left to geologists to solve. Falling rock is an interesting (and worrying) subject, whether it is natural falls due to erosion processes, unstable blocks falling from man-made cut slopes, or simply children pushing lumps over a cliff. Each is a real danger. The design of measures to control possible falls is a broad subject covering the prediction of falls and the trajectory of falling or rolling rock together with the choice of barrier or rock trap.

It is presently planned to have three main speakers covering the topics above followed by an opportunity for a few 5-minute contributions.

The lectures should be very interesting and you are all encouraged to come along. If you feel you can make a contribution and would like to be considered for a 5-minute slot please contact Peter Randall of Ove Arup and Partners on 5-283031.

The meeting will be held in the auditorium of the Duke of Windsor Building 1/F, 15 Hennessy Road, Hong Kong. 5.15 for 5.45 pm.

TREASURER'S REPORT

I would like to welcome the following new members to the society since newsletter No. 5.

Brown H.O.	Lai W.K.
Choi K.H.	Lau C.W.
Choi K.F.	Lee W.K.
Downing J.H.	Mitchell H.G.
	Pepper A.S.
Endicott L.J.	Pepper L.C.
Hing B.K.	Price I.
Ko W.K.	Robins P.
	Woods N.W.

M.J. Atherton

13th October, 1983.

CORRIGENDA

South China Sea Institute of Oceanology, Academia Sinica

Professor Liu Zhaoshu (Hon. Member) informs us that the correct current address of the Institute is 164 West Xin Gang Road, Guangzhao.

Article on South China Sea Basin, September Newsletter

The word "and" in line 4 was not in the original. It should be replaced by a full stop.

REPLY SLIP (Field Excursion to Ping Chau)

Sunday 15th January 1984

I wish to attend. Please find enclosed a cheque in the sum of \$ _____ for (_____) adults and (_____) children.

Name : _____ Day time contact Tel. No. _____

Send this slip to Mrs. A. Pearson, C7 Hillgrove, 18 Cape Drive, Chung Hom Kok, Hong Kong. Make out crossed cheques to the Geological Society of Hong Kong.

柴灣地車廠工地考察 (節譯)

十月廿二日那天有25位會員一同到柴灣去參觀港島綫的地車廠。經過簡短的介紹後，首先視察的是那70公尺高部份為港島東走廊而做的石削坡。該處見到的岩石為淺水灣組的斑晶凝灰岩及集塊凝灰岩。

當上至削坡的西面，參觀者可以有一個這龐大工地的鳥瞰，可以見到在建造中的海堤、隧道、車廠及填海工程。在西北角又可見到侵入凝灰岩的二長岩。

在工地的西北另一個石削坡展露出凝灰岩和花崗岩的接觸面及一些斷層。

大部份的會員此行都大有收獲，特別是標本的採集。唯一的失望是未能進入隧道參觀。

節目預告

1983年回顧 十二月十四日星期三

我們將會在這聚會裏輕鬆地檢討本年第一年的會務和節目的安排，以及討論在1984年的展望。同時我們希望在會後能夠安排播影一些理工學院的珍貴科技電影。

聚會將在下午六時在香港理工A702室舉行。

東坪洲考察 八四年一月十五日星期日

我們再一次嘗試安排去考察大鵬灣的坪洲。該小島最吸引的是淺水灣組的沉積岩，一些不常見的礦物和島上的一個美麗的海灘。而且途上景色相當怡人。

乘搭的船隻將於該日上午九時從中文大學碼頭出發。收費為成人\$35小童\$20。準備參加者請儘快將附條填妥連同支票寄回。

岩崩及塌石之預防措施 八四年二月廿一日星期二

這個將會是一年一度和香港工程師學會土力組合辦的盛會第一次主題是關於岩崩及塌石。這個工程上的難題通常都是交由地質師們去解決。塌石的預防，控制以及怎樣縮窄影響範圍都是有趣的問題。

研討會裏將有三位主講人，隨後將有一段時間給聽講者作不超過五分鐘的自由發揮。有興趣想佔有五分鐘發表時間的會員請預先與Peter Randall聯絡(電話：5-283031)。

司庫報告

自第五期通訊出版後，有16位新會員參加了本會，芳名列在英文版。

香港大學地理地質系嚴維樞先生於本年七月中旬間曾到廣州作為期一週的訪問，並與當地的一些機構聯絡及建立連繫。

訪問期間曾與中山大學以黃玉崑教授為首的教席們進行研討。該大學之李前裕講師現正與嚴先生合作研究香港沉積之有孔蟲類。

在南中國海海洋研究所中嚴先生曾與劉昭蜀教授及一些研究學者討論將來的合作問題。該研究所的一代表團曾於十月間訪問北美洲後回程時途經本港，並與本會一些會員會面。

嚴先生又曾與廣東地質所之陳君拔先生（廣東地質學會主任秘書）會談，商討有關兩會之間的目标、合作及交換訪問等問題。其後嚴先生並被介紹與廣東地層重要著述之作者南頤先生會面。

訪問期間黃教授安排了嚴先生去視察七星岩，同行還有兩位廣東地震所的研究員任鎮寰先生和陳恩民先生；他們兩位也是廣東地震學會常務委員會的成員。任先生為廣東地震局研究委會之主任秘書而陳先生年初時發表關於1605年瓊州大地震的論文更獲得國內學者的廣泛讚揚。

在黃教授的陪同下，嚴先生並拜訪了英國石油公司在廣州的總部。該公司的總地質師Dr. I. Price及一部份成員最近已加入了本會為會員。英國石油公司在廣州的地質隊成員在本年底前將會增加至20人。

香港地質問題研究小組

本會之常務委員會已贊同由會員組成個別專題研究小組，用以推動研究，分享資料，以為增進我們對香港地質的認識。我們歡迎會員們與本會秘書或任何常務委員聯絡及提出意見。

該等小組的成立並不會對參加的會員有任何時間或工作的縛束。每小組可由該組成員制定目標，程序及完成時間去適應他們的工作。

現有的兩小組為：一

海洋研究組

主要目標須待組成員決定，但初定為：

1. 贊助對香港海床沉積物之研究；
2. 促進交換有關海床沉積之資料；
3. 設立一個香港海床沉積物之研究資料儲存中心。

該研究有可能獲得贊助作例如放射性碳確定年代之化驗室工作。有興趣參加或提供意見者請與香港大學地理地質系嚴維樞先生聯絡（電話：5-4097229）。

地層對比組

計劃是成立一小組進行收集，編纂及審核香港區內（特別是在大嶼山及新界）可繪之地層單位，以及將這些單位和廣東省的作一對比。請有興趣的會員與本會秘書聯絡（David Workman 5-4097231）。我們將在1984年初舉行一次聚會討論工作細節。

參觀派安石礦場(1983年7月9日)一節譯

12位會員參加了這次參觀在秀茂坪對上安達臣道的石礦場。

在石礦的剖面上我們可見到香港花崗岩和淺水灣組凝灰岩的接觸。近接觸帶裏的花崗岩含有很多的礦物晶體。

本會謹向派安石礦公司為安排這次參觀致謝。

香港地表沉積地質學討論會記實

李作明

爲了進一步推進香港第四紀地質工作，香港地質學會與香港大學地理地質系聯合主辦召開了關於第四紀殘積物、坡積物（註：在香港此類型堆積物的英文名稱用Collurium），沖積物及海積物的“香港地表沉積地質學”討論會。會議於一九八三年九月十九日至二十二日在香港大學舉行，共有六、七十位學人參加了會議。

會議進行了三天，中間的一天安排了大嶼山第四紀地質旅行，會議共宣讀論文二十二篇，並同時印發了論文摘要合訂本。

這次會議內容豐富，討論踴躍，氣氛良好。主要內容可概括爲下述總論、坡積物及滑坡、海積物及積物和工程應用等四個方面。

第一是總論及綜合性方面問題。

會議爲與會者提供了按照成因類型，堆積特點及地形地貌特徵等原則所擬定的香港地區第四紀地表沉積劃分類型及描述方案。探討了第四紀特別是海積及沖積地層的劃分，地貌形態類型及風化等級，並首次與中國第四紀進行了初步對比。會議介紹了海岸濱綫岩塊的風化，香港地表沉積製圖及香港現代沉積物鑑定和取樣方法。

其次，與會就香港坡積物按其特徵，生成先後次序及工程性質進行時代劃分的可能性和可靠性展開了討論，探討了坡積物工程學性質，介紹了香港島滑坡危險地帶的區劃及跑馬地地表地質新知。

第三方面，會議介紹了根據近百年來海流作用及潮汐作用及物探資料對香港維多利亞海港現代沉積作用所作的初步評價，反應良好，與會者探討了香港海濱堆積和古人類活動過的堆積建造及其演化。會議介紹了萬宜水庫東壩海床沉積鑽探岩蕊剖面，取得的微體古生物化石並以此爲依據所進行的時代劃分，這是香港首次對第四紀的時代劃分提供了可靠的古生物依據。地下鐵路的開挖及鑽探資料揭示了銅鑼灣維多利亞公園沖積層特徵。探討了根據衆多鑽探資料所揭示的新界沙田第四紀沉積物的結構。

最後，會議指出香港關於新技術如何應用於第四紀工程地質方面已有了新的進展。會議介紹了如何利用聲學技術研究香港海成砂及礫石層，運用電子機算計對地表沉積信息的庫存，香港地表沉積層中隧道的自然侵蝕及水文地質作用的研究等。

此外，會議及時發行了野外地質旅行指南，並在野外現場考察的東涌海床沉積物特徵及其古生物時代劃分；石壁水庫地質及工程建築和大澳汽車站覆土、基岩及海濱高、低階地堆積物等特徵一一作了詳盡介紹，與會者均感收穫大，很滿意。

總之，這次會議，時間雖短，但安排緊湊，涉及第四紀各個領域較廣，是香港地區首次較詳細地研討第四紀地質及其工程應用的一次學術盛會，爲進一步推動香港第四紀地質的研究作了良好開端。會議還決定將公開發行這次會議論文正文合訂本。

南海海洋地質研究所專家訪港

以劉昭蜀教授爲首的四位南海海洋研究所的成員所組成的訪美代表團（其他的三位成員爲陳森強，范時清及蘇達權）在結束美國的訪問後，於回國途中經過香港並作短暫停留。十月十七日（星期一）下午，他們一行四人應邀訪問香港大學地理地質學系。當日下午六時，代表團四位成員不辭勞苦與香港地質學會的部份會員會晤並舉行座談。座談由嚴維樞先生主持，出席座談會的成員包括香港地質學會的主席，秘書等共十餘人。會後共進晚餐。

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香港地質學會

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