

Less than spectacular attendance at the last annual Volcanology Division meeting held at the University of Manitoba, May 19, 1982 (5:00 p.m.) was apparently the result of an unfortunate conflict of schedules - the embarkation of participants on post-conference field trips and the 'after hours' securing of entrance doors to the meeting hall. Regardless, the main business was completed with the confirmation of five nominees to the Division executive. The slate of incumbent officers now stands.

*PAST CHAIRMAN - J. Nicholls, University of Calgary, Calgary	
*CHAIRMAN - Neil Church, B.C. Ministry of Energy, Mines and Petroleum resources, Victoria	1982-84
*VICE CHAIRMAN - Leopold Gélinas, Ecole Polytechnique, Montreal	1982-84
*SECRETARY TREASURER - Mikkel Schau, G.S.C., Ottawa	1982-84
*COUNCILLOR WEST - Chris Scarfe, University of Alberta, Edmonton	1982-85
*COUNCILLOR GEOPHYSICS-OCEANOGRAPHY - Trevor Lewis, Physics, Patricia Bay	Earth 1982-85
COUNCILLOR CENTRAL - P.C. Thurston, O.G.S., Toronto	1980-83
COUNCILLOR EAST - Sandra Barr, Acadia University, Wolfville	1981-84
COUNCILLOR ECONOMIC GEOLOGY - Peter Money, Texas Gulf In Toronto	nc., 1981-84
EX-OFFICIO CNC-IUGG REPRESENTATIVE - Maurice Lambert, G.S.C., Ottawa	1979-83

*Elected at this general meeting

VD ACT OUTSTDESSES TO SUIT TO SEE

Field trips continue to be the principal concern of the Division. Good accounts of the recent trip to St. Vincent and Martinique have been provided by Les Coleman (Geolog, Vol. 10, part 4, p. 12-13) and Mikkel Schau in the last issue of Ash Fall. The next major expedition leaves Victoria, B.C. for Hawaii in May 1982 - see description in Geolog, Vol. 11, part 2, p. 29-31 and for details contact R.M. Easton, Ontario Geological Survey, Toronto. Other volcanological tours accompanying the May 1983 meeting in Victoria include a review of Early Tertiary volcanic basins and outliers in south-central B.C. and a visit to Mount St. Helens volcano (the U.S.G.S. and weather permitting) - contact Vic Preto, tour organizer in Victoria for details, telephone (604) 387-5538. A field trip to the Trans-Mexico volcanic belt is being organized by J. Nicholls and J.K. Russell of the University of Calgary for 1984.

Another important function of the Division is contribution of a chapter on current research in the Canadian Geophysical Bulletin. It is the responsibility of the vice chairman to secure brief reports annually from the membership with cross country representation. These are now arriving - please give them your attention now.

In 1982, forty reports were received from thirteen institutions, including federal and provincial government groups and many universities. The investigations focused mainly on the geochemistry and petrography of volcanic suites in support of mapping projects, with special interest in komatiites and ophiolites and the REE elements. Structural geology has also received much attention, with emphasis on plate tectonics. Ancillary studies include stratigraphy, geochronology, economic geology, paleomagnetic studies, gravity surveys and physical volcanology.

Contacts with the I.A.V.C.E.I. and other overseas organizations are maintained by the Division's representative to the Canadian National Committee for the I.U.G.G. Communications here have been informal and supplied from time to time in Ash Fall and Geolog by Maurice Lambert and Bob Baragar of the G.S.C.

Suggestions for studies, meetings, field trips and general information are welcomed and solicited by the executive.

ANNOUNCEMENT

The Volcanology Division would like to organize a symposium for the 1984 G.A.C. meeting in London, Ontario on "Volcanic Feeders". This would include work on dykes, sills and subvolcanic features of all kinds. No special publication is planned, but authors may wish to use this occasion to present early results on work destined for the international symposium on dyke swarms planned for Canada in 1985. Potential contributors should contact W.R.A. Baragar, Geological Survey of Canada, 588 Booth Street, Ottawa, KIA 0E4. For further information on the 1985 International Symposium on dykes apply to H.C. Halls, Department of Geology, Erindale College, Mississauga, Ontario.

CYPRUS CRUSTAL STUDY PROJECT

The International Research Drilling Group, an informal association of earth scientists from 8 countries, has been coring sections through segments of the Troodos ophiolite in Cyprus since April 1982. This project must be one of the major earth science studies underway at the present time. It is managed and led by Jim Hall and Paul Robinson of Dalhousie University, and financed by research grants from Canada, U.K., West Germany, Denmark and Cyprus. Fifty or more scientists from around the world are engaged in research related to this project.

Troodos, like typical ophiolite complexes comprises 4 major units which in descending order are: 1) a pillow lava sequence 1-2 km thick that corresponds to layer 2 of the oceanic crust; 2) a layer of continuous vertical dyking, also 1-2 km thick, that seemingly both penetrates and merges with the units above and below; 3) a layered gabbro-ultramafic plutonic sequence, 2-3 km thick, which with the sheeted dykes corresponds to layer 3 of the oceanic crust; and 4) tectonized harzburgite, which corresponds to the upper mantle. Theoretically the upper 3 units should be geochemically interdependent; pillow lavas fed by sheeted dykes from a plutonic magma chamber. Preliminary work by Paul Robinson on glasses from surface exposures of the pillow lavas has shown that two magmatic groupings are present, neither of which has the characteristics of ocean ridge basalts. A boninitic suite forms the upper part and an andesitic-dacitic suite the lower part of the lava sequence. It remains to be seen whether or not the sheeted dykes and plutonic complex are compatible with these compositions.

Such evidence compels a re-thinking of the views (generally accepted for the last decade with rare dissenting opinions) that ophiolites are slices of the oceanic crust. Tectonic and petrologic remodelling is a primary purpose of the present undertaking. A related study concerns the associated ore deposits and their link to the genesis of the ophiolite complexes.

Diamond drilling is being carried out by Bradley Brothers of Noranda. By next April, when the drilling phase of the project is expected to be completed, they will have drilled about 4 1/2 kms through the principal components of the ophiolite - the pillow lavas and the plutonic complex - and through an ore body and its underlying alteration pipe.

The first drill hole began at the upper contact of the pillow lava sequence, with the intent of penetrating to the top of the sheeted dykes. Unexpected, severe caving forced abandonment at 500 m, but drilling will continue at a later date from a correspondingly lower stratigraphic level. The next hole was drilled through an ore body and subjacent alteration pipe in the pillow lavas and was completed at 700 m depth. Currently, drilling is underway in the plutonic complex with a planned penetration of 2 km starting at the base of the sheeted dyke layer. Core logging, systematic sampling, and crushing and grinding of the samples is done continuously with the drilling in a specially equipped core laboratory at an abandoned mine not far from the drilling sites. Sample powders are sent to laboratories in Canada, West Germany, and the U.K. for analyses. The core itself will be permanently stored by the Geological Survey Department, Cyrpus, where it will be available for future studies. Concurrent and subsequent studies of the core and surface exposures will provide the most searching examination of an ophiolite complex yet undertaken, and should yield, if anything will, new insights into their tectonic significance.

Canadian participation in this project is extensive and we hope it will provide us with new concepts not only on the tectonic significance of our own ophiolites, but also on processes of volcanogenic ore formation and mechanisms of magma evolution and emplacement.

MINUTES OF ANNUAL MEETING AT WINNIPEG, 1982

Minutes of the 1981 meeting were approved. R.M. Easton reported on the plans for the field trip to Hawaii, 1983. A copy of the report is enclosed*. J. Nicholls will try to organize a field trip to the Trans-Mexico volcanic belt in 1984. J.K. Russell will be asked to help organize the trip. The slate of new officers was moved by R.M. Easton and seconded by S. Barr. The slate was elected unanimously. The list of officers is appended**. A motion for adjournment was made by S. Barr and seconded by R.M. Easton. The minutes were taken by N. Church.

- * Available from R.M. Easton (see below).
- ** See President's report.

HAWAII

CONTACT:

R.M. Easton,
Ontario Geological Survey,
Precambrian Section,
77 Grenville Street,
Toronto, Ontario.
M5S 1B3

IMMEDIATELY

TREASURER'S REPORT - May, 1982

Carryover - May, 1981	304.21
Membership	516.00
Interest	83.08
Total	903.29
Expenses	
Newsletter	135.97
Bank charges	.15
Total	136.12
Carryover - May, 1982	767.32

Money was shifted from a chequing account to a savings account September 22, 1981.

Questions arising from budget - are fees too high, what should we do with money?

CNC/IUGG

Did anybody take notes at the August 15-22 Reykjavic, Iceland meeting on Generation of Major Basalt Types? Could we have a report?

Update on Krakatau: Symposium August 27, 1983.

Update on Martinique - Lawrence Weismann - whom I inadvertently left off the list of participants, has produced a thought-provoking photo exhibition of pictures taken at Martinique.

Grand Assembly of IUGG in Vancouver, 1987. A convenient deadline for your big project.