

September 1985 #14

### VOLCANOLOGY DIVISION SUMMARY

Volcanology Division has a new slate of executive officers, who are:

Chairman

Vice-Chairman

Secretary

Treasurer

Jaroslav Dostal Ray Goldie

Monica Gaiswinkler Easton

Glen Johns

This occurred due to the resignation of Mikkel Schau as Secretary-Treasurer in May, and the death of Division Chairman Leopold Gelinas in February. It is with regret that the Volcanology Division records the names of the following deceased members:

E. Dimroth L. Gelinas V.S. Papezik W.W. Weber

The new \$100 thesis prize from the division will be named the Leopold Gelinas Volcanology Award and will be awarded to a student who has completed a M.Sc. or Ph.D. volcanology-based thesis at a Canadian University in the calendar year for which the prize will be awarded. Because the award was agreed upon by the members in 1984, but not announced, two awards - one for 1984 and one for 1985, will be presented at the Ottawa '86 GAC Annual Business Meeting. Nominations and at least one copy of the thesis should be received by the Chairman by 31 December 1985.

The International Conference on Mafic Dyke Swarms, held 4-7 June 1985 at Erindale Campus of the University of Toronto, was, by all accounts, a tremendous success. Congratulations to Henry Halls for a successful conference.

Future activities include sessions and field trips at the CNC/IUGG in August 1987 in Vancouver, and sessions and a possible short course at GAC-MAC '87 in Saskatoon. Details on the forthcoming Mexico Trip organized by Walter Gibbins are contained in this issue.

#### COUNCILLOR COMMENTS

This issue of Ashfall sees a rebirth of the Volcanology Division, which, for the past year or so, for a variety of reasons, has been less active than usual. With the infusion of some new blood into the membership and the executive, it should be possible once again to make Volcanology Division one of the more active divisions of GAC. In addition to Ashfall, it is hoped to have a regular report in GEOLOG on Division activities, and consequently, spur interest and increase membership in the Division.

The main services the Division has provided to members, other than a commmon interest in volcanoes, are:

- 1) Ashfall
- 2) Organization of volcanology-related field trips
- 3) Organization of symposia and special sessions at GAC-MAC Annual Meetings
- 4) Organization of short courses at GAC-MAC Annual Meetings.

A number of new actions taken by the Division, and the GAC Council have broadened this slate of services to include, in addition to the above:

5) Recognition of significant volcanological thesis work in Canada through the Leopold Gelinas Volcanology Award. This should make such work more widely known.

6) To prepare a series of guidebooks to volcanic sites in Canada and elsewhere.

7) To organize field conferences in areas generally not accessible to large groups. For example: it is now possible to hold a GAC-Volcanology Division co-sponsored meeting in Noranda in August 1988. This meeting would include sessions and a field trip.

Further activities could include a series of volcanological articles in Geoscience Canada. Thus, there is a great deal of potential for expanding the Volcanology Division's activities, and for the Division to play a larger role in spawning volcanology-related research in Canada. However, this potential can only be realized if members are interested in organizing events and seeing them come to fruition. To date, it has been a small core of people who have organized most of the past activities of the Division. If you have an idea that you would like to see pursued by the Division, contact the executive (addresses and phone numbers are given in this issue of Ashfall), discuss it, and let's see if we can put it into action.

# R.M. Easton Councillor-Central

Secretary's Note: In the interest of producing Ashfall sometime this year, it was not possible to include an address from J. Dostal, the Division Chairman. We hope to include a report in the next issue.

# MINUTES-Volcanology Division Business Meeting 16 May 1984, London, Ontario

The meeting was called to order by the Chairman, Neil Church, who acknowledged that a quorum was present (19 members plus an unspecified number of proxies).

The Chairman summarized the activities of the Division for the previous year. The highlights of these activities included a special symposium on Dyke Swarms and Subvolcanic Structures and a short course on the Growth and Evolution of Volcanic Edifices, both held at the GAC-MAC Annual Meeting in London, May 1984.

Mikkel Schau gave a verbal presentation of the financial status of the Division. His report (as below) was accepted by the members.

## Financial Statement 16 May 1984

Carry over from 1983	\$	964.21
Income - 1983 Membership Dues - Interest	•	436.00 60.10 496.10
Expenses - Ashfall Fall 83/April 84 - Annual Meeting - Postage	\$	425.40 36.00 11.09 472.49
Total funds on hand	\$	987.82

Report on Publications: With regard to the Annual Compilation of Volcanological Research in Canada, 57 people reported from 24 institutions making the effort still worthwhile.

Report on Field Trips: The Abitibi Trip was cancelled (part of the session on Dyke Swarms) due to lack of participants. The Mexico trip was deferred to 1985-86 (See report, this issue Ashfall). Field Trip 10B of the London Meeting led by J.M. Moore and J.R. Bartlett examined a number of exposures of Grenvillian volcanic rocks. Unfortunately, the guidebooks sold out during the meeting.

Sandra Barr advised the meeting of the Special Session on Future Activities: Lamprophyres, Lamproites, Ultrapotassic and Related Basic and Ultrabasic Rocks is to be sponsored by the MAC at the 1985 Fredericton GAC-MAC meeting.

H.C. Halls from Erindale College, University of Toronto reported on the

International Conference on Mafic Dyke Swarms to take place in June 1985 under the

sponsorship of the Volcanology Division.

Walter Gibbins informed the Division of the 1987 CNC/IUGG meeting in couver. Walter asked for assistance in the form of ideas for activities that Vancouver. could be sponsored by the Division at the meeting.

Election of Officers: A slate of officers of the Volcanology Division was elected:

Past-Chairman Chairman Secretary-Treasurer Vice-Chairman Economic Geology Councillor (East) Representative to CNC/IUGG Representative to GAC Publications Committee

B. Neil Church Leopold Gelinas Mikkel P. Schau Ray J. Goldie Roy Watanabe Nancy Van Wagoner Walter Gibbins

Jaroslav Dostal

Other Business: The establishment of a student award in volcanology was discussed and approved. "A prize of \$100 (CDN) for the best thesis on a volcanology-related topic presented at a Canadian university or by a Canadian student" is to be awarded annually by the Division. The Regional Councillors should solicit nominations from university department chairpersons and volcanology professors. The nominations are to be submitted to the Chairman of the Volcanology Division for the final decision. The selection should be completed well in advance of the GAC-MAC Annual Meeting. The award will be announced in GEOLOG and Geoscience Canada, and presented at the Annual Business Meeting of the GAC.

GAC has decided that Field Trip Guidebooks of local interest could be handled by GAC sections and divisions, thereby allowing Volcanology Division to consider a series of volcanology-related guidebooks. If need be, seed money may also be available from the GAC Publications Committee as well as from the Volcanology Division. Revenue from sales would go to the Division after paying back any loans from the Publications Committee. Potential volcanology guidebooks include selfguiding trips to Noranda and Yellowknife. Following a general discussion, it was agreed that the Volcanology Division should provide seed money for the publication of the 1983 Field Guide to Hawaii prepared by Mike and Monica Easton.

Leo Gelinas thanked Neil Church for his work as Chairman.

The meeting was adjourned.

Minutes compiled by M. Schau, B.N. Church, and R.M. Easton

## MINUTES-Volcanology Division Business Meeting 16 May 1985, Fredericton, New Brunswick

The meeting was called to order by the acting-Chairman, Jaroslav Dostal at  $5:35~\mathrm{pm}$  who acknowledged quorum based on  $10~\mathrm{members}$  plus  $40~\mathrm{proxies}$ .

The acting-Chairman summarized the activities of the Division for the previous year including the death of Leopold Gelinas, Chairman of the Division; and the resignation of the Secretary-Treasurer, Mikkel Schau, in early May. The acting-Chairman also read Mikkel's financial statement and remarks to the membership:

#### Outgoing Secretary-Treasurer's Report

The bookkeeping, such as it is, has passed from my hands to new more enthusiastic people. My lesson is that volunteer work is great fun when one is deeply involved as I was in the earlier field excursions and becomes a guilt-ridden chore when interest passes. So, since there are always new people with great new ideas to keep it going, I pass this burden on to them. Good luck.

### Financial Statement 3 May 1985

Carry over from 1984	\$ 987.82
Income - 1984 Membership Dues - 1985 Membership Dues - Interest	\$ 446.00 \$ 346.00 \$ 92.69 \$ 884.69
Expenses - Bank Charges - 1984 Annual Meeting	\$ 1.00 \$ 11.51 \$ 12.51
Total available funds (and accrued interest) transferred to G.W. Johns, Treasurer-Elect	\$1879.00

Reports were presented on the International Conference on Mafic Dyke Swarms being organized by Henry Halls, to be held on 4-7 June 1985 at Erindale Campus of the University of Toronto. Volcanology Division was a co-sponsor of this meeting. A report was also given on the Trans-Mexico Field Trip being organized by Walter Gibbins for 4-18 January 1986 (see this issue of Ashfall for further details). The Division agreed to the following motion. "We will support Walter Gibbins' request for \$200 towards travel costs to bring Steve Nelson and Gerardo Sanchez-Rubio [leaders of the Field Trip] to the Ottawa 1986 GAC-MAC Annual Meeting." Lajoie/Ludden/unanimous.

With regard to the CNC/IUGG meeting in Vancouver in 1987, it was reported that Tark Hamilton was organizing a session on Alkaline Volcanic Rocks; Don Francis and John Ludden were organizing a session on Volcanism at Divergent and Convergent Boundaries; Jack Souther was organizing a field trip, and that possible field trips were being planned for the Yukon and Mt. Garibaldi.

Considerable discussion followed regarding future Volcanology Division Activities. Ideas included an Aug-Sept 1988 Field Conference in the Noranda Area, with an associated field trip, and a special session which could be published as a GAC Special Paper dedicated to Leopold Gelinas. Other ideas included special sessions at future meetings of the GAC, possible field trip guidebooks and short courses, and a Volcanology series in Geoscience Canada. In particular, discussion focussed on some sort of tie-in with the Precambrian Division-sponsored session on the Trans-Hudson Orogen at the 1987 GAC-MAC Annual Meeting in Saskatoon. Les Coleman said that he would oversee Volcanology Division interests on the Saskatoon Organizing Committee. Nancy Van Wagoner expressed concern that many of the topics suggested for special sessions and symposia were not attacking problems within Canada. No concrete proposals were forthcoming, but the matter of future activities is going to be pursued by the executive.

A motion was passed "That the Volcanology Division Thesis Award be named the Leopold Gelinas Volcanology Award." Padgham/Van Wagoner/unanimous. Two prizes will be awarded for theses completed in 1984 and 1985, respectively, in time for the 1986 Annual Meeting in Ottawa.

Election of Officers: A slate of officers of the Volcanology Division was elected:

Chairman
Vice-Chairman
Treasurer
Secretary
Councillor (West)
Past-Chairman

Jaroslav Dostal Ray Goldie Glen Johns Monica Gaiswinkler Easton Tark Hamilton B. Neil Church

Jean Lajoie will investigate Leopold Gelinas' papers and will advise the Division if it is possible to put together material for a special publication. With regard to reprinting the 1983 Hawaii Guidebook, R.M. Easton reported that it would be updated in Spring 1986 and could be reprinted soon after.

The meeting adjourned at 6:30 PM. Coleman/Easton/unanimous.

# Mexican Field Trip - Update

As of June 1985, fifteen persons had expressed an interest in the Trans Mexican Volcanic Belt (TMVB) Field Seminar to be held 4-18 January 1986. The maximum for this trip is 35 persons and the minimum 15. The estimated cost is \$1000 Canadian plus air fare (Vancouver, Victoria, Edmonton, Calgary -\$549; Toronto - \$642; Ottawa - \$655; Halifax - \$870). Details of the trip and intinerary were given in the Spring issue of GEOLOG and can also be obtained from Walter Gibbins, field trip co-ordinator. Dr. Steve Nelson of Tulane University and Dr. Gerardo Sanchez-Rubio of the National University of Mexico, Guanajuato, have agreed to be our leaders in the central and western parts of the TMVB, respectively. We hope our field leaders will be able to attend the GAC '86 Annual Meeting in Ottawa.

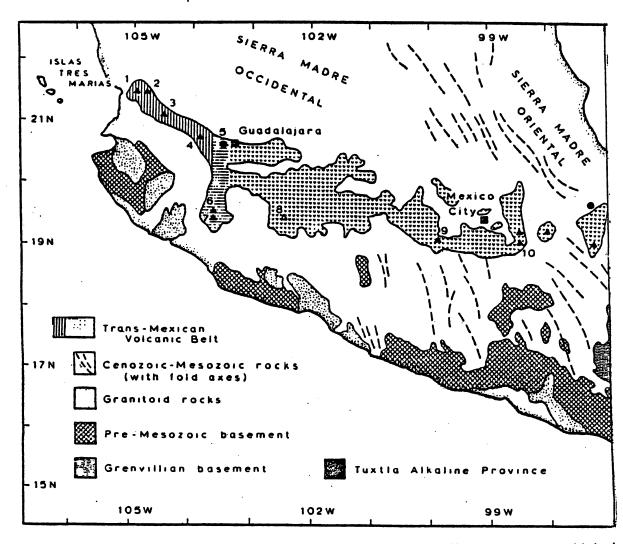
The Canadian Geoscience Foundation has made a generous grant to the Volcanology Division to help prepare and print a guidebook for the trip. The Volcanology Division has allocated \$200 toward bringing Drs. Nelson and Sanchez-Rubio to the Annual Meeting in Ottawa.

Falcon Travel of Vancouver will be making our travel arrangements, and the Canadian Embassy in Mexico will co-ordinate travel and accommodations in Mexico. Pre- and post-field trip extensions will be available. Persons living in smaller communities may wish to drive or otherwise find their own way to the airport of a larger centre near them, rather than flying direct.

We are now prepared to accept applications from non-Volcanology Division members on a first-come, first-served basis. For applications and additional details, please write or call:

Telephone: (403) 920-8216

Walter Gibbins, Field Trip Co-ordinator Geology Division Department of Indian Affairs and Northern Development P.O. Box 1500 Yellowknife, N.W.T. X1A 2R3



Map indicating stops on the GAC Volcanology Division Trans-Mexican Volcanic Belt Field Seminar 4-18 January 1986. Generalized tectonic map of Mexico (from paper by G.T. Nixon, 1982 (GSA Bulletin, v. 93, p. 515)). Numbers indicate stops at caldera complexes: 1-San Juan; 2 Sanganguey; 3-Ceboruco; 4-Tequila; 5-Sierra La Primavera; 6-Nevado de Colima; 7-Volcan Colima; 8-Paricutin; 9-Nevado de Toluca; and, 10-Popocatepetl.

# INCOMING SECRETARY'S REPORT

Ashfall has had a varied publication history since its inception in 1978, ranging from 3 issues a year totalling 15-20 pages in 1978 and 1979, to anywhere from 1 or 2, 3-to-8 page issues in 1980-1985. This in part reflects higher publication costs (postage), but also reflects the activity of the Division. We hope to publish Ashfall on a more regular basis in future, in order to keep the membership better informed of Volcanology Division plans. In addition, it is also hoped that regular contributions can be made to GEOLOG reporting on Division activities, with the goal of spurring interest in the Division and increasing membership. On behalf of the membership, I would like to thank Mikkel Schau for his efforts as Secretary-Treasurer for the last 5 years.

Monica Gaiswinkler Easton Secretary

#### INCOMING TREASURER'S REPORT

Financial Statement 4 September 1985

Received from previous treasurer \$1879.00 Interest accrued \$22.86 Current Balance (31 July 1985) \$1901.86

More than enough for a beer even at current prices.

Glen W. Johns Treasurer

#### LEOPOLD GELINAS

Le professeur Léopold Gélinas est décédé le 8 février dernier à l'âge de 54 ans. Après un bref séjour au ministère des Richesses Naturelles du Québec, il avait été nommé professeur adjoint au département de Génie minéral (anciennement Génie géologique) de l'Ecole Polytechnique en 1963 où il devint professeur titulaire en 1972. La réorganization de l'enseignement de la géologie sur le campus vit transfert au département de Géologie de l'Université de Montréal en juin 1982, ou il continua à prodiquer son enseignement en pétrologie ignée.

Le professeur Gélinas était fellow de l'Association géolgique du Canada et y fut membre du Conseil de 1979 à 1982. Il en était cette année président de la Division de la Volcanologie. Ses nombreux travaux ainsi que ceux de ses étudiants, notamment dan la région de Rouyn-Noranda, auront sans aucun doute marqué la géologie de cette région.

Professor Léopold Gélinas died on February 8th at the age of 54. After a few years at the Quebec Department of Natural Resources he was named assistant professor at the departement de Genie mineral (formerly Geological Engineering) de l'Ecole Polytechnique in 1963, where he became full professor in 1972. He was transferred to the département de Géologie de l'Université de Montreal in 1982 due to a reorganization of teaching responsibilites on the Campus, where he continued to teach Igneous Petrology.

Professor Gelinas was a Fellow of the Geological Association of Canada where he served as Councillor between 1979 and 1982, and at the time of his death he was Chairman of the Volcanology Division. His work and that of his students, particularly in the area of Rouyn-Noranda, will certainly constitute a bench-mark in the geology of that region.

#### ERICH DIMROTH

Le professeur Erich Dimroth a été trouvé sans vie à son domicile le 29 juillet 1985. Il laisse dan le deuil son frère et sa belle-soeur, Monsieur et Madame Peter Dimroth, une nièce ainsi que de nombreux collègues et amis. Son décès constitue une perte énorme pour la Science et pour l'Université.

Le professeur Erich Dimroth est né à Wurzburg en Allemagne le 14 avril 1934. Il a obtenu son PhD en Géologie de l'Université de Munich (Allemagne) en 1960. Par la suite, il a été associé de recherche à l'Université McGill (1961-1962 temps complet, 1963-1974 temps partiel), géologue au Ministère des Richesses Naturelles du Québec (1963-1974), et enfin successivement professeur invité (1975-1979), agrégé (1979-1981) et titulaire (1981-1985) au département des Sciences appliquées de l'Université du Québec à Chicoutimi. Il a dirigé à l'Université du Québec à Chicoutimi 11 thèses de maîtrise en Géologie et, dans d'autres universités, 4 thèses de doctorat et 3 thèses de maîtrise.

Son expertise, régulièrement sollicitée par la communauté scientifique canadienne à titre d'Editeur associé au Journal Canadien des Sciences de la Terre (1975-1978), de membre du comité d'appréciation du Fonds FCAC (1976-1979) et, par la suite, du comité des actions spontanées de FCAC (1981-1984), était aussi mondialement reconnue comme en témoigne la présidence (1979-1980) du comité sur les processus exogéniques précambriens de l'IGCP (International Geological Correlation Program).

Outre ses enseignements précieux aux nombreux étudiants qui l'ont fréquenté, et l'organisation de trois symposiums internationaux très réussis, il laisse à la communauté scientifique 47 publications dans des revues avec jury, 12 rapports géologiques (11 au Ministère des Richesses Naturelles du Québec et 1 au Services géologiques de Bavière) et 5 autres articles scientifiques.

Ces réalisations nombreuses justifiaient la préparation de sa candidature au titre de <<Fellow>> de la Société Royale du Canada. Cette candidature aurait été déposée au mois d'août 1985 se ses jours ne s'étaient pa si soudainement terminés. Voic le texte preliminaire des documents d'appui à sa candidature, qui résume bien ses contributions à l'avancement de la Géologie:

<<L'innovation et l'excellence caractérisent la recherche du Professeur Erich Dimroth. Ses travaux sur la fosse du Labrador, une très ancienne chaîne de montagnes, constituent une étape importante dans la reconstruction de cette zone mobile précambrienne L'étude qu'il y a faite, notamment sur l'évolution des formations de fer, demeure un classique de la littérature géologique et sert de base aux discussions sur l'origine de la vie et sur la composition de l'atmosphère au Précambrien. Ce sont des traces de cet air qu'il a cherché à retrouver dans les plus vieilles roches du globe au Groënland (3,8 milliards d'années) et en Afrique du Sud (3 milliards d'années).

La zone interne du <<Grenville>>, qui constitue la marge Sud-est du Bouclier canadien et dans laquelle se situent le Saguenay et le Lac St-Jean, est maintenant mieux comprise grâce aux études sur les migmatisations et sur les générations de dykes mafiques qu'il a suscitées.

Son intérêt actuel sur la paléogéographie et la tectonique de la bande de roches vertes de l'Abitibi se traduit par des travaux poussés de volcanologie physique comparée entre les roches des époques les plus jeunes (le Cénozoique du Japon et de l'Islande) et celles des plus anciennes (l'Archéen du Canada). Ses résultats fournissent des guides précieux à la recherche de gîtes minéraux dans ces terrains.>>

Bref le Professeur Erich Dimroth a consacré sa vie à la science. Il a su inculquer à ses étudiants son souci de l'observation exacte et complète et son enthousiasme pour le recherche. Sa vaste culture scientifique lui permettait de tirer de ses observations des interprétations audacieuses et de devenir ainsi le promoteur de nouvelles voies d'advancement de la science. Enfin, ceux qui l'ont bien connu se souviendront toujours que sous des dehors parfois grognonsse cachait une extrême délicatesse pour les autres.

### ANNOUNCEMENTS

#### BULLETIN VOLCANOLOGIQUE

As of January 1st, 1986, Bulletin Volcanologique will be renamed Bulletin of Volcanology, and will be published by Springer-Verlag. IAVECI transferred the journal to an international publisher and introduced a new editorial policy in order to improve the format, style, and scientific standards of the journal. Volume 48 of the renamed journal will appear in 1986, with 6 issues. Current Bulletin Volcanologique subscribers will receive subscription renewal notices shortly. Cost of the new journal has not been announced. The editorial board consists of A. Ewart, Y. Katsui, P.W. Lipman, R. Scandone, H.-U. Schmincke, R.S.J. Sparks, and D.A. Swanson. Manuscripts may be submitted to any of these editors.

### CALL FOR THESES

Department Chairpersons and Professors of Volcanology or related fields who are aware of high-quality M.Sc. or Ph.D. level theses completed in 1984 or 1985 should advise the Chairman, or any of the Regional Councillors of these works, so that they may be considered for the 1985 and the 1986 Leopold Gelinas Volcanology Award (\$100).

# HAWAII SYMPOSIUM ON HOW VOLCANOES WORK

....in celebration of the Diamond Jubilee of the Hawaiian Volcano Observatory. This symposium is sponsored by the U.S. Geological Survey, the American Geophysical Union, the World Organization of Volcano Observatories, and the Hawaii Institute of Geophysics; other sponsors are pending.

The symposium will meet in HILO, HAWAII on 19-23 JANUARY 1987. The major topics may include: Conceptual Models of How Volcanoes Work, Internal and Deep Structure of Volcanoes, Dynamics of Eruption and Intrusion Processes, Monitoring Active Volcanoes, Forecasting Volcanic Eruptions, Assessing Volcanic Hazards, and Reducing Volcanic Risk.

Presentations may be both lecture-discussion sessions and poster sessions. Field trips will probably be held before, during and after the symposium on the islands of Oahu, Hawaii and Maui.

Please post or pass around the First Circular. Send a postcard or note to Robert Decker, U.S. Geological Survey, Mail Stop 910, 345 Middlefield Road, Menlo Park, CA 94025, USA, if you are interested in receiving the Second Circular to be released in the fall of 1985. Please print your name and address clearly and request to be on the HVO Diamond Jubilee mailing list.

The U.S. Geological Survey is preparing a Professional Paper (1399) on the geology of Hawaii to be released at the meeting.

# CALENDAR OF VOLCANOLOGY CONFERENCES

#### SEPTEMBER

16-21 POTASSIC VOLCANISM - MT. ETNA VOLCANO, 1985, IAVECI SCIENTIFIC Assembly, Giardini-Naxos, Italy. FOR DETAILS: 1985 IAVECI Assembly Organizing Committee, c/o EGA Congress, Pizza Trento, 2; 95128-Catania (Italy). Telex: 912277 EGA 1

# 1986

## **FEBRUARY**

1-9 INTERNATIONAL VOLCANOLOGICAL CONGRESS, sponsored by IAVCEI and the Royal Society of New Zealand, Auckland, Hamilton and Rotorua, New Zealand. FOR DETAILS: J.A. Gamble, IVC 1986, Dept. of Geology, Victoria University of Wellington, Private Bag, Wellington, New Zealand. Telex: VUWLIB NZ30882 (VOLCANO).

#### APRIL

GEOCHEMISTRY AND MINERALIZATION OF PROTEROZOIC VOLCANIC SUITES, an international symposium, British Geological Survey, Keyworth, Nottingham, sponsored by IGCP Project 217 and Working Group 3 of the International Lithosphere Program. FOR DETAILS: Tim Pharaoh, Deep Geology Research Group, British Geological Survey, Keyworth, Nottingham NC12 500 2-5 Nottingham NG12 5GG.

#### 1987

#### **JANUARY**

Hawaii Symposium on HOW VOLCANOES WORK, Hilo, Hawaii, in CELEBRATION OF THE 75th ANNIVERSARY OF THE HAWAIIAN VOLCANO OBSERVATORY. FOR DETAILS: Robert Decker, U.S. Geological Survey 19-23 MS-910, 345 Middlefield Road, Menlo Park, California 94025.

# VOLCANOLOGY DIVISION

VOLCANOLOGY DIVISION OFFICERS	
B. Neil Church (Past-Chairman) B.C. Ministry of Energy, Mines and Petroleum Resources, Douglas Building Victoria, B.C. V8V 1X4 (Tel. 604 387-5068)	<u>TERM</u> 1984-1986
Jaroslav Dostal (Chairman) Department of Geology St. Mary's University Halifax, Nova Scotia B3H 3C3 (Tel. 902 429-9780)	1985-1986
Monica Gaiswinkler Easton (Secretary) 19 Gable Drive Brampton, Ontario L6V 2H2 (Tel. 416 978-8841Bus.)	1985-1988
Glen Johns (Treasurer) Ontario Geological Survey 9th Floor, 77 Grenville Street Toronto, Ontario M5S 1B3 (Tel. 416 965-7046)	1985-1988
Ray J Goldie (Vice-Chairman) 9 Palmerston Gardens Toronto, Ontario M6G 1V8 (Tel. 416 860-3400Bus.)	1984-1986
Roy Y. Watanabe (Economic Geology) Selco Inc., 55 University Ave., Suite 1700 Toronto, Ontario M5J 2H7	1984-1987
R. Michael Easton (Councillor-Central) Ontario Geological Survey 910-77 Grenville Street Toronto, Ontario M5S 1B3 (Tel. 416 965-4817)	1983-1986
Nancy Van Wagoner (Councillor-East) Department of Geology Acadia University Wolfville, Nova Scotia BOP 1X0 (Tel. 902 542-2201)	1984-1987
Tark S. Hamilton (Councillor-West) Pacific Geoscience Centre, Box 6000 Sidney, British Columbia V8L 4B2. (Tel. 604 656-8423)	1985 <b>-</b> 1988
Walter A. Gibbins (Representative to CNC/IUGG) Geology Office, P.O. Box 1500, D.I.A.N.A. Yellowknife, N.W.T. X1A 2R3 (Tel. 403 920-8216)	1984-1987

(Tel. 403 920-8216)