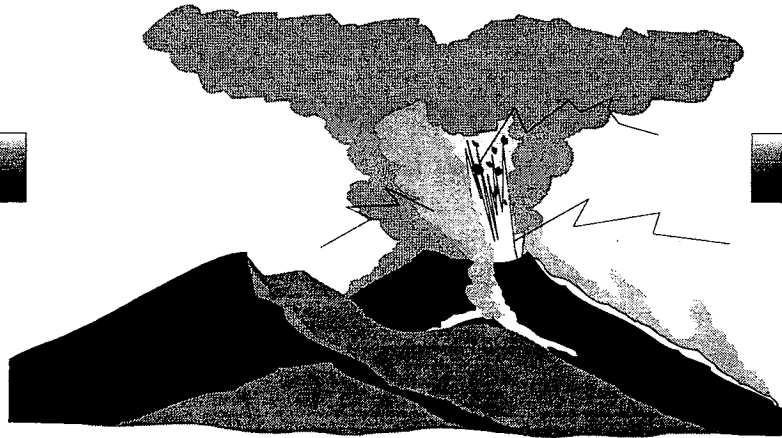


ASH



FALL

Newsletter of the Volcanology and Igneous Petrology Division
Geological Association of Canada

#35

April, 1994

MESSAGE FROM THE CHAIRMAN

As another Ash Fall rolls off the assembly line of Metcalfe (chief assembler), Hickson and Higman (a forced recruit!), I just wanted to take this opportunity to announce the winners of the **Career Achievement Medal** and the **Leopold Gelinás Silver Medal** for best M.Sc. thesis.

Ms. Shelley L. Higman is the recipient of the **Leopold Gelinás Silver Medal** for best M.Sc. thesis. Her thesis, entitled, "An application of nonlinear dynamics to the theory of oscillatory zoned magmatic plagioclase" was completed at Queen's University under the Supervision of Prof. Tom Pearce.

This year's recipient of the **Career Achievement Medal** (the striking of which was made possible through a grant from the Jerome Remick III Fund) is **Dr. William H. Mathews** (Professor Emeritus) of the University of British Columbia. The Division is delighted to honour Dr. Mathews' 45 year long professorial career in this way. Bill has agreed to give a short talk, highlighting some of his volcanological research started in the 1940's while an Associate Mining Engineer with the B.C. Dept. of Mines. His Ph.D. work at Mount Garibaldi, under Howell Williams at the University of Berkeley and his early work on ice contact volcanism in northern B.C. will be highlighted in his presentation.

Please attend the Division business meeting, Tuesday, May 17, Room DC-1302, 12:00 to honour the recipients of this years awards.

Cathy

GEORGE LESLIE CUMMING

1930-1994

On Sunday February 27th, 1994, Professor George Cumming finally lost a difficult battle with cancer and passed away. George had been a member of the Physics Department at the University of Alberta for thirty-five years, contributing greatly to the field of mass spectrometry and radiogenic isotopes and, indirectly, to the fields of volcanology and igneous petrology. His family is setting up a memorial fund which will be used to support graduate student research in this field.

Professor George Leslie Cumming was born in 1930 at Saskatoon, Saskatchewan. He obtained a B.A. Degree at the University of Toronto in 1951, an M.A. degree at the University of Saskatchewan in 1953 and a Ph.D. in Geophysics at the University of Toronto in 1955. There he married Eva, his life-long companion and mother of their three children: Stephen, Paul and Anne. After four years spent with the British American Oil Co. as senior Geophysicist he came to the University of Alberta as an Assistant Professor in the department of Physics in 1959. He was appointed Associate Professor in 1962 and Professor of Physics in 1969. In the years following, he served as the Director of the Institute of Earth and Planetary Physics from 1981 to 1985 and was the Chairman of the Physics department from 1984 to 1988. Throughout his career, he held guest appointments and fellowships at universities and research centres in Oxford, Hamburg, Canberra, Zurich, Oslo, Toronto and Cambridge.

In Professor Cumming's thirty-five years with the University of Alberta, he published almost 100 papers on a range of topics including seismology, half-life measurements of radioactive nuclides, detailed systematics of lead isotopes in rocks and minerals and in environmental contamination studies. His work was truly international and Professor Cumming collaborated with and enjoyed the respect of scientists from many countries.

The majority of Professor Cumming's research publications deal with the detailed chronology of ore deposits and related host and source rocks. In particular, he used the variation in trace lead isotope ratios in sulphide ore deposits which are very difficult to date by more conventional techniques. The application of this lead isotope method yields unique age information but often produces complex patterns of isotope variations which are more difficult to interpret than are data from more conventional techniques. Thus understanding of multiple-stage evolution of minerals and rocks requires very high precision isotopic ratios. Professor Cumming spent much of his career constantly improving the methodology of the measuring techniques to achieve this precision.

Scientists from many laboratories around the world have visited the Mass Spectrometry laboratory to learn the analytical techniques developed there because only a few laboratories in the world are capable of producing such high precision data. Such collaborations, together with a career-long association with the department of Geology at the University of Alberta, has resulted in a stream of graduate students who have learned the analytical mass spectrometric techniques in Professor Cumming's laboratory.

Professor Cumming devoted his career to the department of Physics and saw it triple in size over the years. He served a term as chairman and throughout his career he displayed integrity, and honesty.

Beside his career, Professor Cumming had wide range of interests. Perhaps his most favoured pastimes were music - he was accomplished piano and guitar player - and wood-working, at which he was a fine craftsman. He loved, and was very proud of his family. He was a good husband, loving father and an inspiration to his children and everyone around him but most of all, he was a good and kind human being. We have lost a good friend and shall miss him sorely, but we have memories to keep.

Dragan Krstic, University of Alberta

G.L. CUMMING MEMORIAL SCHOLARSHIP FUND

The G.L. Cumming Memorial Scholarship fund has been established. Its purpose will be to support a graduate student who decides to follow in the Professor Cumming's footsteps of excellence in the field of mass spectrometry, radiogenic isotopes and geochronology. Contributions to the fund should be sent to:

**G.L. Cumming Memorial Fund
General Office
Department of Physics
University of Alberta
Edmonton, Alta
T6G 2J1**

Dragan Krstic

EDITOR

My personal thanks go to Dragan Krstic at the University of Alberta for the text above. I have little to add except to say that I benefited greatly from the time spent in the U. of A. Physics Department, through George Cumming's courtesy and kindness to me, at a time when I most needed it. I know of several among you who knew George well and who share the feelings Dragan expressed so well. Enough said.

Back in my capacity as secretary-treasurer again, it is a pleasure to report, finally, that our cheque in the mail from the Canadian Geological Foundation has arrived. Our sincere thanks go to the GAC President of Vice, Fred Longstaffe, for expediting this. The cheque, for \$1300, comes from the Jerome Rémick III Fund. Our thanks also, once again, to Jerry.

I thought it appropriate to publish the division's finances in this issue, to give you time to prepare any awkward questions *before* the meeting in May. To summarize, the inflow basically comprises the donation from Jerry, via the C.G.F., and membership dues; the outflow comprises *Ash Fall* production and mailing expenses, plus the amount we forked out for medal production. You'll note that I have included neither *Ash Fall* #35 expenses (obviously), nor the costs for this round of medal engraving etc. Estimates are, respectively, seventy and thirty bucks. The bottom line is that we are breaking even, or a bit better, from two years ago. Suggestions, anyone?

I have been underwhelmed by nominations for the offices up for election this May. Opinions can differ here. Either we're doing a good enough job that you, the voting public, have no desire to change anything, or we've driven(?) you into deep apathy. Either way, nominations are now closed. The ballot sheet at the back does give you the option to vote "nay" to any of the candidates, so exercise your right to vote! If you do vote "nay" to anyone, bear in mind that we'll find a way to saddle *you* with that job, eventually.....

Jerry Rémick contacted Cathie recently, with the news that the poster *Le Volcanisme au Québec* will still be available at no charge until (possibly) May 15th of this year. The poster is available rolled or folded and he sent us a couple of folded samples to bring to the A.G.M. in Waterloo.

Which brings me to my last point: **The May A.G.M. in Waterloo is set for Tuesday, May 17th, at 12:30 pm, in Room DC-1302.....**

**VOLCANOLOGY AND IGNEOUS PETROLOGY DIVISION FINANCES
1993-1994**

<i>Items</i>	<i>Credits</i>	<i>Debits</i>	
Balance May 18th 1993			2432.92
Medal manufacture		1345.91	<u>1345.91</u>
Balance June 14th 1993			1087.01
Xeroxing - 93 AGM		4.82	
Pizza - 93 AGM		36.13	
		40.95	<u>40.95</u>
Balance June 21st 1993			1046.06
Membership dues 1993	706.00		<u>706.00</u>
Balance December 31st 1993			1752.06
Ash Fall 33 Xeroxing		56.95	
Ash Fall 33 Postage		55.73	
Ash Fall 34 Xeroxing		89.28	
Ash Fall 34 Postage		92.04	
Envelopes		<u>15.81</u>	
		309.81	<u>309.81</u>
Balance March 25th 1994			1442.25
CGF - Jerry Remick donation	1299.43		<u>1299.43</u>
Balance March 31st 1994			<u>2741.68</u>

VSSAC 1995 CALENDARS

The Volcanological Society of Sacramento did not produce a 1995 calendar, but are planning a 1995 full-colour version. Their March newsletter requested submissions of favourite photographs of volcanic features from all its members; no reason why we shouldn't contribute. The address is:

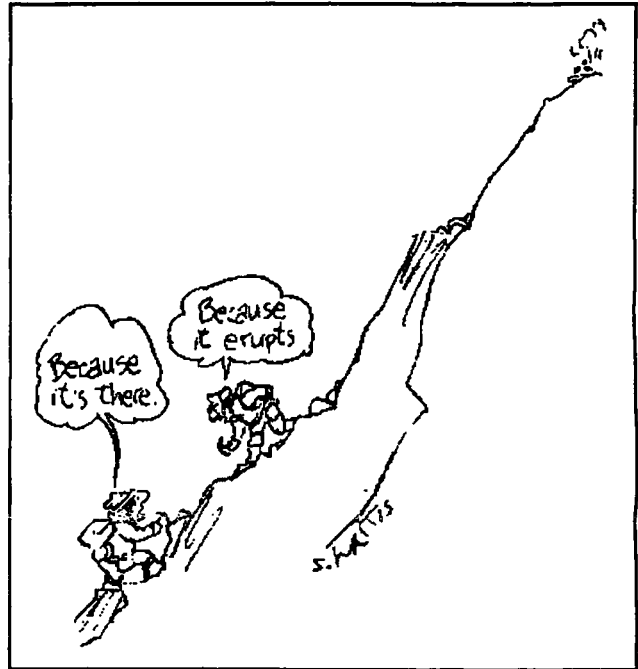
**Brian Hausback
Geology Dept.
California State University
6000 J Street
Sacramento, CA
95819-6043**

ETNA 1992 OPERATION "THE MOVIE"

This video can be ordered by writing to:
Gruppo Nazionale per la Vulcanologia
via Nizza 128
00198
ROMA
ITALIA
Fax: 39-6-8543263

Include, of course, an international money order, or equivalent; \$55 U.S. within Europe and \$60 U.S. for delivery outside Europe.

The video is on VHS; for different formats, contact GNV at 39-6-8848995



GEOLOGICAL SOCIETY OF AMERICA ANNUAL MEETING SEATTLE; OCTOBER 24th-27th "VOLCANIC HAZARDS AND DISASTERS IN MAN'S ANTIQUITY"

This cheery little title is a theme session for the 1994 G.S.A. in Seattle. The session, as its name indicates, will consider volcanic hazards in both the geological and archaeological record. The doors are open, either for your latest research, or for an appropriate review of past work; the session is attempting to reach as broad a cross-section of the geological science community as possible.

Abstract deadline is July 6th; remember to mark the session name in the theme sessions box on the bureaucratic part of the form. (*Or submit an abstract for a completely different session and come anyway! -ed.*) If you're interested, abstract forms are available from:

Nancy Carlson
Geological Society of America
P.O. Box 9140
Boulder, Colorado
80301
Tel: 303-447-8850, Ext. 161

(Adapted, with thanks, from a contribution from Grant Heiken)

DIVISION EXECUTIVE ELECTION

ARTICLE IV

4. *Nomination of Officers:*

At least sixty days before the Annual Meeting, the executive shall prepare and mail to the members a list of nominations which shall comprise the slate of candidates for all elective offices that will become vacant at the time of the Annual Meeting. Any three members may provide additional nominations for one or more of the elective offices by mailing the names, together with the names of the nominating members, to the Secretary-Treasurer. All nominations that have been legally filed with the Secretary-Treasurer at least forty days before the Annual Meeting shall be mailed to members together with a ballot at least twenty-five days before the Annual Meeting.

We have presented nominations (*Ash Fall* #34) for the following positions:

Chairman (1994-1996)
Vice-Chairman (1994-1996)
Secretary-Treasurer (1994-1996)
Councillor (Research) (1994-1997)
Councillor (East) (1994-1997)
Past Chairman (1994-1996)

There have been no other nominations. Nominations are now closed.

5. *Teller Committee:*

The Executive shall appoint a Teller Committee which will count the ballots and announce the results at the Annual Meeting.

The address for the teller committee is:

Wulf Mueller
Dept. of Earth Sciences
Université de Québec à Chicoutimi
555 Boul. De l'Université
Chicoutimi, Québec
G7H 2B1

and is printed on the back of the ballot forms. Those of you who have not received ballot forms are no longer on the list of paid-up members. If you distinctly remember paying your division fees, please contact Karen Johnson (GAC associate secretary-treasurer) at (709)737-7660.

Ballots should reach the above address *by mail and by May 13th.*