

THE ASSOCIATION OF EXPLORATION GEOCHEMISTS



President:

R. L. Erickson
United States Geological Survey,
Federal Center
Denver, Colorado 80225

NEWSLETTER #8

Vice Presidents:

E. M. Cameron
Geological Survey of Canada
601 Booth St.
Ottawa 4, Ontario

H. E. Hawkes
RFD 2, Box 162-5
Orleans, Vermont 05860

Secretary:

H. Bloom
Geology Department
Colorado School of Mines
Golden, Colorado 80401

Treasurer:

R. F. Horsnail
AMAX Exploration, Inc.
601-535 Thurlow St.
Vancouver 5, B.C.

Councillors:

R. W. Boyle
P. M. D. Bradshaw
J. A. Coope (ex-officio)
F. C. Canney
I. L. Elliott
C. F. Gleeson
J. A. Hansuld (ex-officio)
C. J. Lepeltier
M. B. Mehrrens
I. Nichol
A. W. Rose
F. N. Ward

By now the membership should have received their first free issue of our Journal of Geochemical Exploration. Apparently there have been some problems in mailing so that the time of receipt of the Journal in various parts of the world has been rather erratic. Our Editor and Secretary have been in touch with Elsevier, and hopefully succeeding issues will arrive on time. Overall I am most pleased with the format and quality of the Journal. I am sure I speak for the entire membership in congratulating Dr. Cameron, Editor-in-Chief, and his staff for an outstanding effort in what must have been a difficult and frustrating task in getting a new journal underway. Please remember that the continued success of our Journal depends upon the interest and support of the membership, particularly in providing a smooth flow of good papers for publication. In a very direct way, to insure the success and excellence of our Journal is to insure the success and acceptance of exploration geochemistry. I urge all of you who have the makings of an interesting and informative paper in exploration geochemistry to make a special effort to submit a manuscript to our Editor-in-Chief, or at least to inform him of when he may expect a manuscript from you. Contributors to the Journal need not be members of AEG.

If any of you who were members in good standing in 1972 have not received the Journal, please notify Secretary Bloom and be sure to include your correct address.

Officers Elect, 1973-74

At a council meeting held at Golden, Colorado, October 19, 1972, the following members were elected to the Executive for 1973-74:

President-----Ian Nichol
Vice President--R. B. Boyle
Secretary-----R. F. Horsnail
Treasurer-----H. Bloom

These officers elect will take office at the Annual General Meeting in April 1973.

1973 AGM

The Annual General Meeting of AEG will be held at 2:00 p.m., Tuesday, April 17, 1973, in the Garibaldi Room Hotel Vancouver, Vancouver, B.C. The CIM meetings are also scheduled in Vancouver April 15-18, 1973.

Student Membership Fees

Council has voted that subscription to the Journal of Geochemical Exploration is not mandatory for student members of AEG. They will be granted the option to subscribe or not subscribe. Journal subscription is mandatory and is included in membership billing for all other classes of membership.

1974 Symposium

The Symposium organizing committee (I. L. Elliott, Chairman) announces that the Symposium will be held at the Hyatt Regency Hotel, Vancouver, B.C., Monday, April 1 through Thursday, April 4, 1974. The first circular should reach prospective delegates about mid-January 1973.

Applications for Membership

Applications from the following persons and corporate bodies have been approved by the Admissions Committee and ratified by Council:

Members: Anthony, L. M., Professor of Mineral Exploration, University of Alaska
Bose, S. K., Geochemist, United Nations
Cathrall, J. B., Assistant Professor of Geology, Northfield, Vermont
Cruft, E. F., President, International Mineral Expl. & Mng. Co.
Good, R. S., Geologist, Virginia Division of Mineral Resources
Granier, C. L., Consulting Geochemist, France
Hahn, L., Geologist, German Geological Survey
Jaffe, F. C., Professor of Economic Geology, Geneva
Kahler, D. E., Project Geologist, Dresser Industries, Inc.
Kulms, H., Geochemist, Argentina
Lehnertz, C. A., Jr., Consulting Exploration Geologist, Denver, Colo.
Lord, F. R., Supervising Geochemist, Australia
McKillen, T. N., Geologist, Dublin
Mehrotra, P. N., Exploration Geologist, Toronto
Muller, A., Exploration Geochemist, Federal Geological Survey, Germany
Ong, H. L., Consultant/Teaching, Indonesia
Schlottmann, J. D., Exploration Geologist, Rioamex, Denver, Colo.
Shikawa, M., Professor of Geology, Akita University
Steininger, R. C., Staff Geologist/Exploration, Climax Molybdenum Co.
Subramanian, V., Geologist, Madras, India
Trost, P. B., Geochemist, Denver, Colo.
Wallace, S. R., Director of Exploration, Mine Finders, Inc., Denver, Colo.
Zantop, H., Senior Exploration Geologist, Galicia, Spain

Affiliate Members: Tam, H. H., Chemist, Amax Exploration, Inc.

Student Members: Fu-Tzu, H., Penn State University
Lusty, Q. C., Colorado School of Mines
Newell, R. A., Stanford University
Olade, M. A., University of British Columbia
Sektheera, M. S., ITC, Delft, The Netherlands

Corporate Members: Barringer Research Ltd., Rexdale, Ontario, Canada
Falconbridge Nickel Mines Ltd., Toronto, Ontario, Canada
British Newfoundland Expl. Ltd., Montreal, Quebec, Canada
Newmont Exploration Ltd., Danbury, Connecticut
Newmont Mining Corp. of Canada, Toronto, Ontario, Canada
St. Joe Minerals Corporation, Princeton, New Jersey
Rio Tinto Canadian Expl. Ltd., Toronto, Ontario, Canada
Canadian Johns-Manville Co., Ltd., Asbestos, Quebec,
Canada
Bondar-Clegg & Co., Ltd., Ottawa, Ontario, Canada
Amax Exploration, Inc., Toronto, Ontario, Canada
GX Labs, Inc., Golden, Colorado
X-Ray Assay Laboratories Ltd., Don Mills, Ontario, Canada
Humble Oil & Refining Co., Denver, Colorado
Union Miniere Expl. & Mng. Corp., Don Mills, Ontario,
Canada
Imperial Oil Limited, Vancouver, British Columbia, Canada
Kennecott Exploration, Inc., Salt Lake City, Utah
Selco Mining Corp., Ltd., Toronto, Ontario, Canada
Resources Associates of Alaska, College, Alaska
Soquem, Ste. Foy, Quebec, Canada
Metallgesellschaft AG, Reuterweg, West Germany

Ballot for Election of Ordinary Councillors

Voting members will find enclosed with this Newsletter your ballot for selecting the incoming Council. Please remember that by Constitutional Amendment, the period of office of each Ordinary Councillor shall be 2 years, and half the total number of Ordinary Councillors, or such larger number as may be required to constitute a full compliment of Ordinary Councillors, shall be elected each year. Also attached to the ballot is a brief resume of each candidate.

Dues Reminder

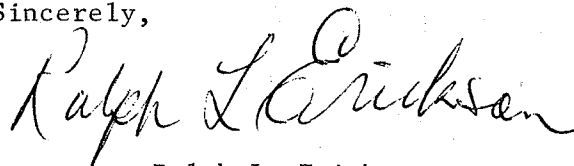
Billing for 1973 membership fees accompanied Newsletter #7, September 19, 1972. Please remember that membership fees are payable in advance on January 1 of the calendar year. In order to update our records, I ask those of you who have not yet remitted your 1973 fees to please include your present position as well as address on the return portion of your billing.

Bibliography

The 1972 Supplement to Exploration Geochemistry Bibliography prepared by Herb Hawkes and his committee is now available in Xerox preprints at a cost of \$1.00 each from M. B. Mehrtens, Rio Tinto Exploration, 120 Adelaide Street West, Toronto. This bibliography and index is a supplement to the Bibliography of Exploration Geochemistry, 1965-1971, published as Special Volume No. 1 by the Association of Exploration Geochemists. This publication is still available from the AEG at a cost of \$5.00 from Mr. Mehrtens. As before, an attempt has been made to put together a complete collection of all the generally available literature on geochemistry as applied in exploration for minerals, exclusive of petroleum. The emphasis has been on applications. Various aspects of geochemistry that might be significant and important to research workers in ore genesis or exploration technology have not been included, partly because the limits of such fields of interest would have been almost impossible to define, and partly because such coverage would have involved at the very least some five times the present number of citations. This list differs from the previous bibliography only in including abstracts of unpublished articles. As before, newspaper articles and privately distributed reports have not been included, and Russian citations are included only where an English-language translation or substantive abstract is available. No attempt is made to provide complete coverage of radiometric prospecting, or the geochemistry of isotopes, sea-floor deposits, geothermal energy, and pollution.

Source material is Chemical Abstracts (through vol. 77, no. 22), Bibliography and Index of Geology (through September 1972), IMM Abstracts (through September 1972) and the private files of Committee members. Throughout the list, the abbreviation "CA" refers to synopses of papers published in Chemical Abstracts.

Sincerely,



Ralph L. Erickson

THE ASSOCIATION OF EXPLORATION GEOCHEMISTS

**President:**

R. L. Erickson
United States Geological Survey,
Federal Center
Denver, Colorado 80225

January 10, 1973

Election of Councillors 1973

Vice Presidents:

E. M. Cameron
Geological Survey of Canada
601 Booth St.
Ottawa 4, Ontario

H. E. Hawkes
RFD 2, Box 162-5
Orleans, Vermont 05860

Secretary:

H. Bloom
Geology Department
Colorado School of Mines
Golden, Colorado 80401

The following persons have been nominated to stand for election as Ordinary Councillors for a 2-year term (1973-74). You are asked to vote for up to 7 by striking out the names of persons for whom you do not wish to vote. The 5 nominees receiving the highest number of votes will serve a 2-year term. The 2 nominees receiving the sixth and seventh highest number of votes will serve for 1 year to complete the unexpired 2-year term of Ian Nichol and R. W. Boyle, President and Vice-President Elect, respectively, of A.E.G. for 1973. As Past Presidents, J. A. Hansuld and R. L. Erickson will be ex-officio members of Council.

Treasurer:

R. F. Horsnail
AMAX Exploration, Inc.
601-535 Thurlow St.
Vancouver 5, B.C.

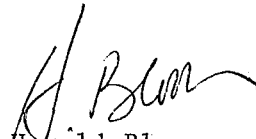
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M. B. Mehrtens
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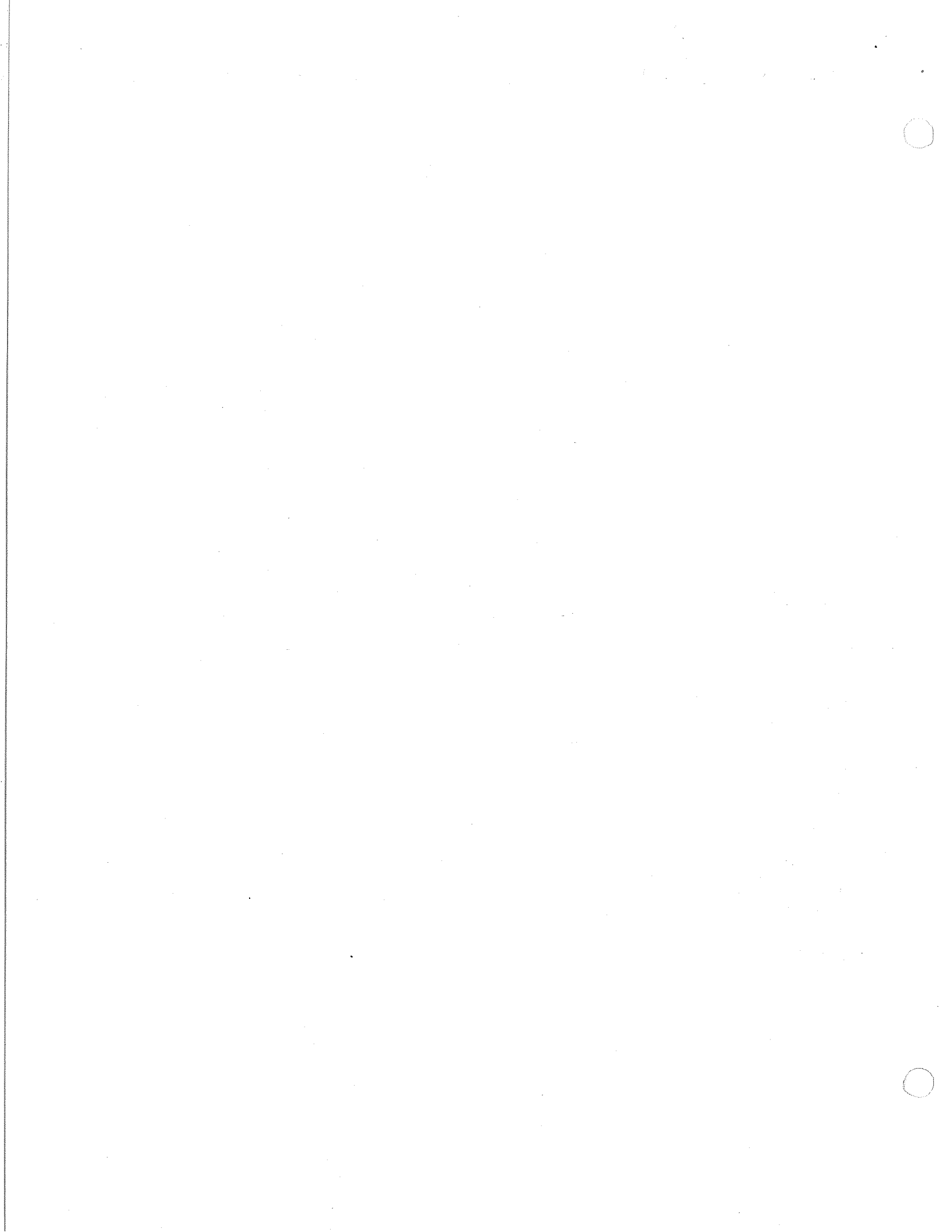
Awald, J. T.
Bondar, W. F.
Carpenter, R. H.
Coope, J. A.
Elliott, I. L.
Fletcher, W. K.
Forgeron, F. G.
Gleeson, C. F.
Hawkes, H. E.
Jonasson, I. R.

Leggo, M. D.
Marranzino, A. P.
Mehrtens, M. B.
Norton, D. L.
Post, E. V.
Rose, A. W.
Siems, P. L.
Thompson, I. S.
Warren, H. V.

Your ballots should be returned to me in an envelope marked A.E.G. Election by March 31, 1973. Counting will take place at the A.E.G. Annual Meeting to be held during the C.I.M. meetings in Vancouver, British Columbia, April 15-18, 1973.


Harold Bloom
Secretary

HB:jg



BRIEF RESUME OF NOMINEES FOR ORDINARY COUNCILLOR

- Awald, J. T. Research geologist, Amax Exploration, Denver, Colorado. Application of systems approach to geochemical regional exploration for copper and molybdenum.
- Bondar, W. F. President, Bondar-Clegg & Co., Ottawa, Ontario, Canada. Geochemical exploration consultants and geochemical service laboratories.
- Carpenter, R. H. Professor of geology, University of Georgia, Athens, Georgia. Teaching Economic Geology, Ore Microscopy, Exploration Geochemistry and Geophysics. Exploration consultant in Southeast U.S. and Brazil. Chairman, Research and Education Committee of A.E.G.
- Coope, J. A. Manager of Exploration, Eastern Division, Newmont Mining, Toronto, Ontario, Canada. First President of A.E.G. Supervision and interpretation of all geochemical work done by Newmont companies in Canada.
- Elliott, I. L. Chief geochemist, Falconbridge Nickel Mines, Vancouver, B.C. Chairman, world wide geochemical exploration service for the company. Organizing Committee, A.E.G. for 5th International Geochemical Exploration Symposium, Vancouver, B.C., 1974.
- Fletcher, W. K. Geochemist, University of British Columbia, Vancouver, B.C. Organization and supervision of graduate research in exploration and environmental geochemistry. Chairman, A.E.G. Committee on Regional Geochemical Data Compilation. Member, 1974 Symposium Organizing Committee.
- Forgeron, F. G. Consultant geochemist, Vancouver, B.C. Design and management of field, laboratory and research geochemical-geologic projects. Member, 1974 Symposium Organizing Committee.
- Gleeson, C. F. President, C. F. Gleeson & Associates, Ltd., Ottawa, Ontario, Canada. Chief geochemist, all exploration programs for SOQUEM. Past Treasurer and Councillor of A.E.G.
- Hawkes, H. E. Consultant geochemist, Tucson, Arizona. Pioneer and acknowledged leader in geochemical exploration. Past Vice-President of A.E.G. and Chairman of Bibliography Committee.
- Jonasson, I. R. Geochemist, Geological Survey of Canada, Ottawa. Post-doctoral Research Fellow (NRC).

BRIEF RESUME OF NOMINEES FOR ORDINARY COUNCILLOR
(cont.)

- Leggo, M. D. Geochemist, Amax Exploration (Australia) Inc., Sydney, Australia. Responsible for geochemical surveys over large areas.
- Marranzino, A. P. Supervisory Research Chemist, U.S. Geological Survey, Denver, Colorado. Construction, organization, training and direction of major geochemical laboratories in U.S., Puerto Rico and Brazil.
- Mehrtens, M. B. Consulting Geochemist, Rio Tinto Canadian Exploration Ltd., Toronto. Responsible for all geochemical exploration work in Canada and U.S. Chairman, Admissions Committee of A.E.G.
- Norton, D. L. Chief Geochemist, Kennecott Copper Corp., Salt Lake City, Utah. Supervises geochemical group responsible for analytical and interpretation aspects of geochemistry.
- Post, E. V. President and Chief Geologist, Skyline Labs, Inc., Denver, Colorado. Geochemical exploration consultants and geochemical service laboratories.
- Rose, A. W. Professor of Geochemistry, Penn State University, Pa. Carried out extensive geochemical studies of porphyry copper deposits. Supervises graduate study in the application of geochemistry, mineralogy, statistics to ore deposits. A.E.G. Councillor, 1972
- Siems, P. L. Professor of Geology, University of Idaho. Consultant in exploration geochemistry, foreign and domestic.
- Thompson, I. S. Consulting Geologist, Derry, Michener and Booth, Toronto. Supervisor of major geochemical exploration projects in Ireland, Ecuador, British Honduras and Canada.
- Warren, H. V. Professor and Consulting geological engineer, University of British Columbia, Vancouver. Pioneered new approaches to exploration geochemistry and epidemiology.

THE ASSOCIATION OF EXPLORATION GEOCHEMISTS



January 8, 1973.

President:

R. L. Erickson
United States Geological Survey,
Federal Center
Denver, Colorado 80225

TO: The Voting Membership of The Association
of Exploration Geochemists

FROM: J. Alan Coope, Chairman, Constitution
Committee

Vice Presidents:

E. M. Cameron
Geological Survey of Canada
601 Booth St.
Ottawa 4, Ontario

RE: Proposed Amendments to the Constitution

H. E. Hawkes
RFD 2, Box 162-5
Orleans, Vermont 05860

The following pages contain proposed amendments to the Constitution which have been reviewed and recommended, in principle, by a majority of Council Members and Constitution Committee Members.

Secretary:

H. Bloom
Geology Department
Colorado School of Mines
Golden, Colorado 80401

Discussion of these constitutional matters will be included in the agenda of the next Annual General Meeting scheduled for Vancouver in April, and the Voting Membership attending this meeting will be asked to approve these changes as per By-law 58 (iii)* [59 (ii)]**.

Treasurer:

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By-law 58 (iv) [59 (iii)] states that "When any proposal to make a new By-law or to revoke or alter any existing By-law is moved at an Annual General Meeting, further action on this proposal shall be postponed at least five months pending the result of a mail ballot on the proposal by all Voting Members." In order to expedite constitutional changes approved by the Annual General Meeting, the approval of the Voting Membership is requested to waive By-law 58 (iv) [59 (iii)] for the purposes of the Vancouver meeting in order that constitutional changes approved by the Annual General Meeting may be put into effect immediately.

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I. Nichol
A. W. Rose
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* This reference refers to current Constitution as amended after the 1972 Annual General Meeting.

** Reference in square brackets [59 (ii)] refers to relevant section of original Constitution dated 1970.

The Voting Membership is therefore asked to indicate their approval or disapproval by mail vote of the proposal that By-law 58 (iv) [59 (iii)] be waived following the approval of constitutional changes by the Annual General Meeting in Vancouver in April 1973. This waiver will apply only to the 1973 Annual General Meeting.

This proposal will be approved only if in excess of 67% of the Voting Membership indicate that this waiver is acceptable to them. For the purposes of this mail vote the onus will be placed on the Voting Membership who disapprove of this action, and if no reply is received from any Voting Member it will be assumed that the Voting Member approves of the waiver action. Under these terms, therefore, if fewer than 33% of the Voting Membership indicate their objection in writing to the Secretary to arrive in Golden by a deadline date of April 6, 1973, this will be considered to be an affirmative vote in favour of waiving By-law 58 (iv) [59 (iii)].

Voting Membership should use the enclosed voting form to indicate their disapproval. This form should not be signed but should be forwarded to the Secretary contained in a sealed envelope bearing the Voting Member's name and marked "CONSTITUTION REVISION BALLOT." This sealed envelope should be placed in another envelope for mailing.

The following constitutional amendments are clearly identified by capital letters of the alphabet. The same capital letters are present on the appended voting form and Membership should use this form as a convenient means for expressing their opinions. Once again, if no reply is received from a Voting Member, it will be assumed that his vote is in favour of the proposed changes. The number of votes required to reject any of the proposed changes will be calculated from the number of eligible Voting Members in the Register at the date of this memorandum.

Members who plan to attend the Annual General Meeting have the option of completing and submitting the form or of indicating their vote from the floor at the Meeting. Each Voting Member will have one vote on each of the amendments proposed.

A Following discussion from the floor during the 1972 Annual General Meeting in London, the Constitution Committee and the Council have approved the amendment of Article III, Section 15 [Article III, Section 16] as follows:

(i) CANDIDATES FOR TRANSFER OR ELECTION SHALL BE PROPOSED AS PROVIDED HEREUNDER ON A FORM APPROVED BY THE COUNCIL OBTAINABLE FROM THE SECRETARY OF THE ASSOCIATION.

(a) THE PROPOSAL FORM OF ANY PERSON DESIROUS OF BECOMING A MEMBER SHALL BE SIGNED BY AT LEAST THREE VOTING MEMBERS.

A (Cont'd)

(b) THE PROPOSAL FORM OF ANY PERSON DESIROUS OF BECOMING AN AFFILIATE SHALL BE SIGNED BY AT LEAST TWO VOTING MEMBERS.

(c) THE PROPOSAL FORM OF ANY PERSON DESIROUS OF BECOMING A STUDENT SHALL BE SIGNED BY A PROFESSOR OF HIS UNIVERSITY, OR PRINCIPAL OF HIS SCHOOL OF MINES, OR BY TWO VOTING MEMBERS.

(ii) A CANDIDATE FOR CORPORATE MEMBERSHIP SHALL COMPLETE A FORM APPROVED BY COUNCIL AND SHALL PROVIDE ALL RELEVANT INFORMATION REQUIRED BY COUNCIL.

B

With the publication of the Journal of Geochemical Exploration, it is the wish of Council to include the cost of this magazine in the annual subscription of the membership. As you are aware, the Association membership gets a preferred subscription rate for the Journal which is presently calculated to be within U.S.\$ 16.00-17.00. It is the opinion of Council that Members and Affiliate Members should be levied an annual subscription of U.S.\$ 27.00, which would be inclusive of the present annual subscription of \$ 10.00 and a Journal subscription of \$ 17.00. It is also recommended that Student Members should not be levied with the cost of the Journal and should have the option of becoming a member of the Association without subscribing to the Journal. A Journal subscription will be included in the Corporate Membership rate of \$ 50.00.

You are asked, therefore, to indicate your approval or disapproval of the following changes in Article V, Section 31 [Article V, Section 32], and Article V, Section 33 [Article V, Section 34]:

31. THE ENTRANCE FEES AND ANNUAL SUBSCRIPTIONS SHALL BE AS FOLLOWS:

	<u>ANNUAL SUBSCRIPTION</u>
MEMBERS	U.S.\$ 27.00
AFFILIATE MEMBERS	U.S.\$ 27.00

STUDENT MEMBERS UNDERTAKING A FULL TIME COURSE OF STUDY	U.S.\$ 3.00
OTHER STUDENT MEMBERS	U.S.\$ 5.00
CORPORATE MEMBERS	U.S.\$ 50.00

33. (i) MEMBERS, AFFILIATE MEMBERS AND CORPORATE MEMBERS ELECTED PRIOR TO OCTOBER 1ST IN ANY YEAR SHALL PAY FULL ANNUAL SUBSCRIPTION FOR THAT CALENDAR YEAR AND SHALL BE ENTITLED TO RECEIVE UPON REQUEST, ALL PUBLICATIONS OF THE ASSOCIATION FOR THAT YEAR. THOSE ELECTED SUBSEQUENT TO SEPTEMBER 30TH SHALL PAY NO ANNUAL SUBSCRIPTION FOR THE BALANCE OF THE CALENDAR YEAR, NOR SHALL THEY BE ENTITLED TO ANY PUBLICATIONS OF THE ASSOCIATION FOR THAT YEAR.

(ii) STUDENT MEMBERS ELECTED PRIOR TO OCTOBER 1ST IN ANY YEAR SHALL PAY THE FULL ANNUAL SUBSCRIPTION FOR THAT YEAR AND THOSE ELECTED SUBSEQUENT TO SEPTEMBER 30TH SHALL PAY NO ANNUAL SUBSCRIPTION FOR THAT YEAR. STUDENT MEMBERS WILL NOT BE ENTITLED TO RECEIVE ALL PUBLICATIONS OF THE ASSOCIATION, BUT WILL QUALIFY TO RECEIVE, UPON REQUEST, THE JOURNAL OF GEOCHEMICAL EXPLORATION AND OTHER SPECIFIED PUBLICATIONS AT SPECIAL SUBSCRIPTION RATES NEGOTIATED BY THE ASSOCIATION AND APPROVED BY COUNCIL.

THE ASSOCIATION OF EXPLORATION GEOCHEMISTS

V O T I N G P A P E R

ON

CONSTITUTION AMENDMENTS

(Detailed in Memorandum to Membership
dated January 8, 1973 by J. Alan Coope)

(Please check (✓) one)

I am in favour of waiving Section 58 (iv)
[59 (iii)] of the Constitution of the A.E.G.
for the purposes of the 1973 A.G.M.

Yes No

A I am in favour of the changes in the
Constitution described under "A" in
the memorandum.

Yes No

B I am in favour of the changes in the
Constitution described under "B" in
the memorandum.

Yes No

Voting Members should use this form as their ballot. It should not be signed and should be forwarded to the Secretary contained in a sealed envelope bearing the Voting Member's name and marked "CONSTITUTION REVISION BALLOT". This sealed envelope should be placed in another envelope and mailed to Professor H. Bloom, Geology Department, Colorado School of Mines, Golden, Colorado 80401.