



# THE ASSOCIATION OF EXPLORATION GEOCHEMISTS

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CANADA

## NEWSLETTER NO. 26

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Athens, Georgia 30602  
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SEPTEMBER 1978

**P.K. Theobald**

U.S. Geological Survey  
Branch of Exploration Research  
Building 25, Federal Center  
Denver, Colorado 80225  
U.S.A.

This is the second Newsletter of the 1978-1979 Association Year.

### PERSONAL COLUMN

*Secretary:*

**R.C. Armstrong**  
Cominco Ltd, Suite 1700  
120 Adelaide St. W.  
Toronto, Ontario M5H 1T1  
CANADA

A personal column containing information on members of the Association is planned as a regular feature in the Newsletter. Notes received to date include:

Graham Closs has joined the staff of the Colorado School of Mines, Golden, Colorado, and is lecturing in geochemistry. Graham continues to prepare the bibliography for the Newsletter.

*Treasurer:*

**F.N. Ward**  
U.S. Geological Survey  
Branch of Exploration Research  
Building 25, Federal Center  
Denver, Colorado 80225  
U.S.A.

Dave Evans has joined E and B Explorations Ltd., Calgary, Alberta as a senior geologist.

Tim Meyer has moved to Denver, Colorado, as a senior geologist/geochemist with Barringer Research.

*Councillors:*

1978-79  
**M.A. Chaffee**  
**L.G. Closs**  
**I.L. Elliott**  
**W.B. Coker**  
**A.W. Rose**  
**G.R. Webber**

Jim Galbraith is working with Texas Instruments and is stationed in Texas.

Steve Earl has completed his Ph.D. at the Royal School of Mines in London, England. He has taken a position as geochemist with the Saskatchewan Mining and Development Corporation in Saskatoon, Saskatchewan.

1978-80  
**R.G. Garrett**  
**L.D. James**  
**K.A. Lovstrom**  
**T.W. Meyer**  
**J.H. McCarthy**  
**I. Thomson**

Any members who would like to add a personal note concerning themselves or their fellow members, please write the Association's office in Rexdale, Ontario. We don't hear much current personal news outside North America so how about it those of you in Europe, Australia, Africa, South America ?

*Asian Regional Councillor*  
**Sifillan**

*European Regional Councillor*  
**G.H.W. Friedrich**

MEMBERS COMMENTS

"I just received my copy of Journal of Geochemical Exploration, Vol.8, No.1/2 and wanted to communicate some thoughts on Peter Moeskops' paper, "Yilgarn Nickel Gossans Geochemistry- A Review with New Data". I was pleasantly surprised to see that some of the graphs from a paper I co-authored a few years ago are being built upon. Peter's paper is the first one, to my knowledge, to appear in our journal in which statistical data from a paper which we previously published has been taken, and broadened by adding new data to it as well as adding new methods and approaches to a problem. The re-application of practical information in papers such as Peter's I think is extremely valuable, serving as a check of previous work and a summation of progress. I also feel this marks the "coming of age" of our publication. I hope we see more papers of this type, as I firmly believe that geochemistry has been given, through the use of numbers, an opportunity to fill in many of the gaps in the science of exploration.

I might mention a couple of small errors. For some reason manganese has been omitted in Figure 3 as part of the sum of elements that gives M%. Needless to say, it makes some difference if someone is trying to use it. The other point is of an historical nature. During the Australian nickel boom many people were working on methods of distinguishing gossans from other ironstones. It is too bad that more of these techniques have not been published; I am sure that some of the better ones are probably still buried in company files for various "security" reasons. I believe that Nick Stevens-Hoare and I were the first to utilize acid-soluble chrome as a discriminator of nickel gossans. We presented this in a paper at the joint specialists' meeting of the Geological Society of Australia in Canberra in 1972. Unfortunately, publication of this information was considerably delayed by the decision made by the Association to collect all of the Australian papers into one special issue, which was not published until late 1973. In the interim, of course, a number of other people began using the acid-soluble chrome technique, and one or two papers mentioning it were published. In retrospect, this gives the impression that we got the acid-soluble chrome concept from other people rather than the other way around.

Peter's paper also brings up another subject which I have noted occurring in quite a few journals, this is the variable usage of geologic terms with respect to geochemistry. I feel that some standardization is necessary. For example, should the definition for "false gossan" be that it does not include economic sulfides at the time the paper is written? Or that it is derived from rocks devoid of sulfides? Or should it mean a certain volume percent of sulfides were contained in the original rock whether they are economic or not? At present do we have a group within the association working on the semantics and definitions of terms as used in our journal?

And so, to be more concise, perhaps some questions I would like to ask are: 1) is there some way that we can speed up getting our association's papers, particularly those in special issues into print while 2) maintaining good proof and editorial control, and 3) would it be worthwhile for the association to take it upon itself to standardize the definitions that are used in its journals?"

John M. Clema  
2434 W. Central  
Missoula, Montana 59801 U.S.A.

Ed. Note: Thank-you for allowing the Newsletter to publish your letter. Any comments regarding John's letter would be received with interest.

MEMBERS COMMENTS (con't)

Dr. John Callahan, Assoc. Prof. of Geology at Appalachian State University, Boone, North Carolina writes,

"I was quite concerned over the poor quality of the slides at many of the presentations at the recent Symposium. For the past year we have been making our own blue-white line diazochrome slides for meetings. The technique we use requires a darkroom, but it is fast, cheap and produces excellent quality slides for meetings. I would like to suggest that you print our techniques or refer to one recently published by Ken Steele (Jour. Geological Education, 1977, V. 25, p. 149-150).

Appalachian State University's Technique for  
Diazochrome Transparencies developed by Fred Webb

1. Cut fresh blue diazochrome sheets into size needed but do not expose to any source of illumination.
2. Place diazochrome strip on flat surface. On top of the strip place a standard negative 35 mm strip with emulsion side down. Cover with glass plate. Expose to any UV light source for 1½ to 2½ minutes. A sunlamp would be a good source of UV light.
3. Develop exposed diazochrome strips in fresh ammonia fumes (household ammonia) for approximately 15 minutes. Do not let diazochrome strips come into contact with ammonia. A wide mouth jar partially filled with ammonia and with the strips suspended from clips works best.
4. Cut into appropriate size and place into 35 mm ready-mounts. Use a warm iron to seal edges but do not touch transparencies.

Supplies

1. High contrast copy film, however, Kodak Panatomic X is fair.
2. Teenifax Diazochrome color film KBL  
Blue image ammonia developing  
.005" Acetate  
Catalog No.-Diazochrome Blue KBL, control No. 4D 3320 8½ x 11" - 25 sheets.  
available from  
Scott Graphics Inc.,  
Holyoke, Mass. USA 01040
3. Household ammonia

Note: In our experience the blue diazochrome sheets produce the best quality slides but other colors are available. The exposure time varies with the darkness of the negative."

Ed.Note: Thanks for the timely tip, Jack. I'm sure many authors will be interested in your technique.

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FUTURE MEETINGS1979 BASIN AND RANGE THEME MEETING

this will be a limited attendance symposium, concerned specifically with geochemical exploration in the Basin and Range Province of the southwestern United States. This

meeting will be held in Tucson, Arizona on April 9th-10th, 1979. A first announcement and a call for papers was attached to Newsletter No. 25.

1979 URANIUM THEME MEETING

There will be a one day symposium on geochemical exploration for uranium to be held on November 4, 1979 in San Diego, California, in conjunction with the 1979 Annual GSA meeting.

This symposium will be a series of invited papers intended to give an over-view on geochemistry specifically within the United States. Details of the program will be announced in the next Newsletter. People interested in further information should contact the Chairman of the Organizing Committee, Dr. R.H. Carpenter, Department of Geology, University of Georgia, Athens, Georgia 30602, U.S.A.,

1982 INTERNATIONAL GEOCHEMICAL EXPLORATION SYMPOSIUM

The 1982 symposium will be held in North America. Its location will be determined by Council in the next 2 months. Any group interested in hosting this meeting should write to the Association office in Rexdale, Ontario.

SHORT COURSE -- "Geochemical Exploration in the Canadian Shield" Jan.22-26, 1979.

The Department of Geological Sciences, McGill University, in association with the Mineral Exploration Research Institute, will offer a one week professional short course on the theme "Geochemical Exploration in the Canadian Shield" from January 22 to January 26, 1979.

Lectures, case histories and workshops will be conducted by personnel from government, mining companies, universities, and independent consultants.

Registration will be limited. The registration fee will be \$400.00.

Inquiries and requests for registration should be directed to :

G.R. Webber  
 Department of Geological Sciences,  
 McGill University  
 3450 University Street  
 Montreal, Quebec  
 H3A 2A7

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JOURNAL NEWS

Dr. E.M. Cameron recently announced the current membership of the editorial board of the Journal of Geochemical Exploration as follows:

|                 |                                  |
|-----------------|----------------------------------|
| E.M. Cameron    | Editor-in-Chief                  |
| P.M.D. Bradshaw | Associate Editor, Case Histories |
| C.R.M. Butt     | Associate Editor, Australia      |
| J.A. Hansuld    | Associate Editor, Business       |

B. Hitchon  
 L.K. Kauranne  
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 P.R. Donovan  
 G. Friedrich  
 R.G. Garrett  
 G.J.S. Govett  
 H.E. Hawkes  
 J.S. Webb

Associate Editor, Petroleum Geochemistry,  
 Associate Editor, Fennoscandinavia  
 Associate Editor, Reviews

Any person who has any questions concerning the Journal, especially submission of papers or technical notes should write directly to:

Dr. E.M. Cameron,  
 Editor-in-Chief  
 Journal of Geochemical Exploration  
 Geological Survey of Canada  
 601 Booth Street  
 Ottawa, Ontario K1A 0E8  
 CANADA

or contact one of the members of the Editorial Board. The Journal policy is to publish high quality manuscripts of original material.

Apart from regular issues, plans are being made for the publication of the following special issues during the 1980 publication year:

Australian Conceptual Models Volume (Dr. C. Butt, editor)  
 Uranium Workshop (Dr. R. Carpenter, editor)

Paid subscriptions for the Journal has shown a further growth of 8% in the past year.

#### PUBLICATION COMMITTEE OF THE A.E.G.

A committee has been set up to advise the Council on the publication policy the A.E.G. should follow. The committee is considering such matters as the cost of the Journal of Geochemical Exploration, the Journal format and quality and a publication policy for special volumes of the A.E.G. such as the Bibliography supplement, etc.

Any member of the Association who would like to submit comments to this committee should address their remarks to the Chairman, Dr. W. T. Meyer, Barringer Research Inc., 6869 S. Emporia Street, Suite 200, Englewood, Colorado 80110. The committee will have their first set of recommendations ready for the Council to consider by the end of October, 1978. Submissions should reach them before that time.

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#### 1979 MEMBERSHIP DUES --- 2nd Call

Do not forget to submit your 1979 dues as soon as possible. Subscriptions are due January 1, 1979 and failure to pay dues prior to this date results in the cancellation of your subscription as well as removal of your name from the mailing list. The yellow dues notice is attached to this Newsletter. Payment of dues is requested in US dollars.

BIBLIOGRAPHYRECENT PAPERS ON EXPLORATION GEOCHEMISTRY

This list comprises titles that have appeared in major publications since the compilation presented in Newsletter No. Journals routinely covered and abbreviations used are as follows: Economic Geology (EG); Geochimica et Cosmochimica Acta (GCA); The USGS Journal of Research (USGS JR); Circular (USGS CIR); and Open File Report (USGS OFR); Geological Survey of Canada Papers (GSC Paper) and Open File Report (GSC OFR); Bulletin of the Canadian Institute of Mining and Metallurgy (CIM Bull); Transactions of Institute of Mining and Metallurgy, Section B: Applied Earth Sciences, (Trans IMM). Publications less frequently cited are identified in full. Compiled by L. Graham Closs, Colorado School of Mines, Member AEG Bibliography Committee.

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