



THE ASSOCIATION OF EXPLORATION GEOCHEMISTS

P.O. Box 523, (Metropolitan Toronto), Rexdale, Ontario, M9W 5L4 Canada

NEWSLETTER

NO. 41

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SEPTEMBER 1982

PERSONAL COLUMN

Information on Association Members is received from around the world. To keep your fellow members informed of your latest moves send a brief summary to the Rexdale office.

I. Devereux, ROCKLABS, geochemical equipment company, 187 Morrin Road, Auckland, New Zealand, has advised us that he will be visiting the G.S.A. Annual Conference and Exhibition (Oct. 18-21st, New Orleans, USA.). He would very much like to meet any other AEG members who may be attending the meeting and he can be contacted at exhibition stand number 75.

C.-I. Huang would like to announce that he has resigned from Houston International Minerals and is taking a new position as the Chief Geochemist with FMC Natural Resources Division in Denver.

1982 MEMBERSHIP LIST UPDATE

Our apologies to members incorrectly recorded in the 1982 Membership List. Correction below.

Phillip A. Molling
c/o Molycorp, Inc.
P.O. Box 469
Questa, New Mexico 87556
USA

ADMISSIONS COMMITTEE REPORT

The following persons have been accepted for Membership in the Association by Council. The Association is pleased to welcome the new members.

VOTING MEMBERS

Chon, H.T. (transfer) Assistant Professor, College of Engineering, Seoul National University, Seoul, Korea.

Domenico, J.A. Supervisory research chemist with the Branch of Exploration Research, USGS, Denver, Colorado, USA.

Ferrier, J.A. Exploration geologist, Anglo American Prospecting, Kimberley, South Africa.

Keil, T.R. Project geologist, Gulf Minerals Canada Ltd., Oakville, Ontario, Canada.

Smith, D.B. Research geologist with the USGS, Denver, Colorado, USA.

Wenrich, K.J. Uranium geologist with the USGS at the Federal Center, Denver, Colorado, USA.

AFFILIATE MEMBERS

Aaker, S.K. Exploration geologist with W.A. Bowes Inc., Steamboat Spgs. Colorado, USA.

Baird, R.A. Exploration geologist with Mobil Corp. Dallas, Texas, USA.

Barth, A.P. Research geologist with Cyprus Industrial Minerals Co., Los Angeles, California, USA.

Berchermann, H.H. Project geologist with the BP-Norge, Trondheim, Norway.

Burmiester, N.W. Geological Engineer and president of Bull Run Gold Mines Ltd., Vancouver, B.C., Canada.

Chatham, J.R. Research Geochemist-ARCO Oil and Gas Co., Plano, Texas, USA.

Crowl, W.J. Manager, Mineral Evaluation with Homestake Mining Co., Golden, Colorado, USA.

Fraser, S.C. Exploration and mine geologist with Esso Resources Canada Ltd., Stewart, B.C. Canada.

Gazzaz, M.A. Head of Geochemistry Dept., King Abdulaziz University, Jeddah, Saudi Arabia.

Leedy, W.P. Exploration geologist with Kerr-McGee Corp., Casper, Wyoming, USA.

Londry, J.W. Exploration geologist with Camflo Mines Ltd., Winnipeg, Manitoba, Canada.

Masters, B.K. Senior exploration geologist, Western Sands Ltd., Capel, W.A. Australia.

Tan, L.-P. Professor, Dept. of Geology, National Taiwan University. During 1982 visiting Professor at King Abdulaziz Univeristy, Jeddah, Saudi Arabia.

Tucker, J.D. (transfer) Production geologist with Nufuels Corp., Crown Point, Manitoba, Canada.

FUTURE MEETINGS

1983 CANADIAN INSTITUTE OF MINING AND METALLURGY ANNUAL GENERAL MEETING

The 85th Annual General Meeting of the Canadian Institute of Mining and Metallurgy will be held in Winnipeg, Manitoba, Canada, from April 17th to 20th, 1983. The theme of this meeting will be "Canadian Mining-World Competitor". A Plenary Session will be held on Monday April 18th and a broad range of topics covering the mining industry, mineral, and petroleum exploration will be discussed by the various Institute Division/Societies on the following two days. Further details can be obtained from:

C.E. Anderson, Chairman 85 A.G.M. Technical Program Committee
Underwood McLellan Ltd.,
1479 Buffalo Place,
Winnipeg, Manitoba, R3T 1L7 CANADA
Phone (204) 284-0580

GEOCHEMICAL EXPLORATION IN ARID AND DEEPLY WEATHERED ENVIRONMENTS

PERTH, W.A. AUSTRALIA, MAY 23-26, 1983

For details see page 10 of newsletter.

CALENDAR OF UPCOMING EVENTS

In addition to the more normal announcement of meetings to be held we are also including a calendar of geochemical and exploration related events for the next three months.

CALENDAR OF EVENTS

- Oct. 17-21 Society of Exploration Geophysicists Annual Meeting
Dallas, Texas,
Details J. Hyden, Box 3098, Tulsa, OK. 74101
Phone 918-743-1365
- Oct. 18-21 Geological Society of America Meeting, New Orleans.
Details G.S.A., 3300 Perose Place, Boulder, Colorado
80301, USA. Phone 303-447-2020.
- Oct. 17-22 Course on Advanced Geostatistics (Dr. A.G. Journel)
Dept. of Applied Earth Sciences, Stanford Univeristy,
California, Stanford, California, USA.
Details R. Hoffman Phone 415-497-0847
- Oct. 21-23 Atlantic Universities Geological Conference, Mount
Allison University, Sackville, New Brunswick,
Canada EOA 3C0.
- Oct. 27-29 Mineral Exploration, Hannover, F.D. Germany
Details R. Weber, Federal Institute of Geosciences and
Resources, Box 510153 D-3000, Hannover 51, Federal
Republic of Germany.
- Nov. 8 -14 III Congreso Geologico Chilene. Seminars and Field
trips. Concepcion, Chile.
Details L.L. Diaz, Dpto Geosciencias, Univeristy de
Concepcion, Apartado 10, Concepcion, Chile.
- Nov. 17 Workshop on Instrumental Analysis of Precious Metals.
IMPI, New York, USA.
Details Phone 212-625-3339.
- Dec. 6 -10 Remote Sensing for Exploration Geology, Ft. Worth, Texas.
Details D.R. Moris-Jones, Environmental Research
Institute of Michigan, Box 8618, Ann Arbor, 48107, USA.
Phone 313-994-1200
- Dec. 13-17 Ore Deposits-Annual Workshop. Toronto
Details E.T.C. Spooner, Dept. of Geology, University
of Toronto, Toronto, Ontario, Canada M5S 1A1.
- Dec. 9-11 88th Annual North West Mining Association Convention.
Spokane, Washington, USA.
Details NWMA - 633 Peyton Building, Spokane Wa. 99201 USA.

FROM THE SECRETARY'S OFFICE ----- Ray Lett

WARNING; The January deadline for payment of your 1983 Membership dues approaches fast. At the last count there were 799 Members in good standing with just over 50 who have still to make contributions for this year. If you are in this group you will shortly receive a letter urging you to make payments before the end of the year or the Association will regretably be forced to delete your name from the membership list.

On the 1983 Dues Notice enclosed with this Newsletter you will see various methods of preferred payment. Probably the easiest and least expensive procedure is for the Association to handle cheques drawn on North American banks and International Money Orders. We realise that this can be difficult for some members and therefore, we will accept UNESCO coupons and International Postal Orders, but please if you use this method and think there may be additional handling charges include them with your payment. You may also pay directly via bank transfer if this is more convenient. The Association account is with,

The Canadian Imperial Bank of Commerce,
Rexdale and Islington Branch,
2267 Islington Ave.,
Rexdale, Ontario M9W 3W7, CANADA

If you use this method please still return your "Dues Notice" to us with a note of the originating bank, any draft number they may provide and the date. This allows our Rexdale office to maintain an accurate record of which member has payed dues.

There is a good reason for our constant nagging you to promptly pay your annual dues by January. A major bill for the forthcoming 1983 Journal issues arrives early in the New Year and occassionally we encounter cash-flow problems due to the lag between receipt of dues and our commitments. Through shrewd management we have kept Membership Dues constant over the past eight years and during 1982 have provided you with two free publications.

There have been several complaints from members who have not yet received current editions of the Journal. If you joined the Association before 1982 (and are not in arrears with your dues) there may be a problem with mailing and you should contact the Rexdale office to confirm your mailing address. So far this year Elsevier have published Volume 16, No. 3 in June and Volume 17, No. 1 in September (my copy just arrived). Volume 17, No. 2 is expected in November. If you joined the Association in 1982 you will only receive the Volume 17 numbers since volume 16, No. 3 is part of the 1981 issues.

Some confusion may have occurred concerning the availability of Special Publication Number 10 (Precious Metals in the Northern Cordillera, Vancouver 1981) and Number 11 (Exploration Geochemistry Bibliography H.E. Hawkes, 1982). These publications are free to all 1982 payed-up members and were mailed during the summer. If you joined the Association during 1982 you many have missed the first distribution and therefore, I would ask you to be patient because both volumes will be mailed to you in the next two months.

Several members have contacted the Rexdale office to request copies of publications listed in the Newsletter bibliography update. We would like to remind you that these publications are not available through the Association and if you do require reprints you should contact authors directly.

Relocations are common in the minerals industry and over the years we have lost contact with a number of members due to lack of a forwarding address when Newsletters are returned, undelivered to the Rexdale office. The Association would like to re-establish contact with these members and if possible a correct address, please see list on pages 7 and 8.

In 1983 the full student subscription (including Newsletter and Journal) will be US\$15.00 rather than the old rate of US\$35.50. However, students are reminded that we must have proof of their status through a written statement (with phone number) from their Department Head or Supervisor.

Finally a few remarks on the Newsletter. The Newsletter exists to provide NEWS; news of all members, a to new members, details of future Association and other meetings, a bibliography of recent publications and most important a forum for ideas and comments. In view of the fact that international membership of the Association is over 800, the lack of contributions to the Newsletter is disappointing. Preparation and distribution of the Newsletter is expensive and the content should be well worth the effort. Contributions, particularly those which may stimulate debate, are always welcome and are, in fact essential if the Newsletter is to main a focal point of the Association. Give these remarks some thought and support your Association Newsletter.

LOST MEMBERS

- Aral, H. 1120½ Washington Ave., Golden, Colorado 80401, USA.
- Aydinian, G.A. 1700 W. Broadway, Andrews, Texas 79714, USA.
- Ballhorn, R. P.O.Box 757, 2 ZT. Swakopmund, Southwest Africa.
- Bandeira, C.S. Noronha Torresao, M/404 B -S. Rosa, Niteroi -RJ CEP 24.240, Brasil.
- Blain, C.F. Mining Geology Dept., Royal School of Mines, Prince Consort Road, London SW7 2BP, United Kingdom.
- Brown, B.W. 2407 Mamie St., Hattiesburg, Mississippi, 39401, USA.
- Buhlmann, E. Preussag Metal Exploraiton Pty. Ltd, P.O.Box 62073 Marshalltown, Transvaal, 2107 Rep. of South Africa.
- Cameron, W.L. P.O.Box 479, Kalgoorlie, W.A. 6430, Australia.
- Carraway, K.E. 10065 Imperial St., El Paso, Texas, 79924, USA.
- Cochrane, R.H.A. Geol. Survey of Ausralia, 66 Adelaide Terrace, Perth, WA 6000 Australia.
- Coelho Da Rocha, M.A. Avenida dal Generalisim, 70-7, Madrid, 16, Spain.
- Collins, B.I. 1020 15th St., Apt. 20-G, Denver, Colorado 80202, USA.
- Criswell, J.A. 1108½ Washington Ave., Golden, Colorado, 80401, USA.
- Desgouttes, Y.R.H. Flat D, Lady Place, 41 High St., Sutton Courtenay, Berkshire, U.K.
- Dewhurst, R.H. 36 Clarence St., Sydney, NSW 2000 Australia.
- Dunbar, G.L. Dept. of Geology, Imperial College, Prince Consort Rd., London, SW7 2BP, United Kingdom.
- Dyson, C.V. Chevron Standard Ltd., Minerals, 355 Burrard St., Ste. 901 Vancouver, B.C. V6C 2G8, Canada.
- Ellerington, J.D. United Keno Hill Mine, Elsa, Yukon T. Canada.
- Erickson, M.S. 10165 W. 25th Ave., Lakewood, Colorado 80225, USA.
- Geddes, .R.W. 657, 7th St., Boulder City, Nevada, 89005, USA.
- Geronsin, R.L. 700 E. 12th St., Rolla, Missouri, 65401, USA.
- Gogineni, S.V. Cotter Corp., 9305 W. Alameda Parkway, Lakewood, Colorado, 80226 USA.
- Gorichon, A.G. BRGM, Div. V.B., Rue H. Pichenit, F-44300 Nantes, France.
- Han, Tai-Hwan Korea Tungsten Mining Co. Ltd., Yonggae-Ri, Gachang-Myon, Dalsung-Gun, J Kyongsangbuk-Do, Korea.
- Hecht, C. SQS 207, Bloco E, Apt. 103, Brasilia - DF Cep. 701253 Brasil.

W.H. Hunt 4810 Field Cr., Arvada, Colorado. 80002, USA.

Kelso, P.F. Australian Dev. Ltd., P.O.Box 43, Tennant Creek, N.T. 5760 Australia.

Kremko, M.B. Box 982, Thunder Bay, Ontario, P7C 4X8, Canada.

Kumi, K. R. Geology Dept., Ashanti Goldfields Corp., P.O.Box 10, Obuasi, Ghana.

Lin, Chong-Pin 1562 Barry Ave. Apt. 1, West Los Angeles, Calif. 90025, USA.

McDermont, D.S. c/o Longreach Metals N.L., 43 Ventnor Ave., West Perth, W.A. 6005 Australia.

McLeod, G.D. 694 Main St., Matuchen, N.J. 08840, USA.

Mosquera, D.T. I.T.C. Kanaalweg 3, Delft, The Netherlands.

Newman, D. 16 Aled Drive, Rhos-On-Sea, Colwyn Bay, Denbighshire, U.K.

Otton, J.K. U.S.G.S. Room 36, Bldg. 56, Denver Federal Center, Denver, Co. USA.

Philpott, D.E. 204 River Rd., Rivonia. Johannesburg, Transvaal, 2000, Rep.of S.Africa.

Reagor, E.C. Geochemical Surveys, Inc., 5320 Tanbark Rd., Dallas, Texas 75229 USA.

Richards. G.L. P.O.Box 17031, Salt Lake City, Utah 84117, USA.

Sepponen, S.S. Union Carbide Corp., 6009 Osuna N.E. Albuquerque, N.E. 87109, USA

Shrestha, P.L. F. Senghennydd House, Salisbury Road, Cathyas, Cardiff, Wales, UK.

Smith, F.J. First National Bank Bldg., 621, 17th St., Ste. 2201, Denver, Co., USA.

Thomson, R.R. c/o William Johnson and Associates, 196 Adelaide Terrace, Perth, W.A. 6000 Australia.

Toledo, L.A. Avenida Luis Viana Filho S/N, Cento Administrativo Da Baha, Salvador - Ba, CEP 40.000 Brasil

Uriarte M.H. c/o Philippine Iron Mines, Oledan Bldg., Ayala Ave., Makati 0708 Phillinines.

Williams, X.K. c/o Pharma Natura, P.O.Box 5502 Johannesburg, Transvaal, Rep. of South Africa.

Wilson, J.G. c/o R.F. Loxton, Hunting & Assoc. P.O.Box 39265, Bramley, Transvaal, Rep. of South Africa

Wilson, T.A. Inter AM, 960 Market Street, Ste. 900, San Francisco, Calif. 94104 USA.

Woolf, D.L. c/o UNRFNRE P.O.Box 3521, Nicosia, Cyprus.

Zuleta, R. Hertalerstr. 5, 51 Aachen, Fed. Rep. of Germany.

CHANGE OF ADDRESS INFORMATION FOR THE ABOVE MEMBERS WOULD BE GREATLY APPRECIATED

BIBLIOGRAPHYRECENT PAPERS ON EXPLORATION GEOCHEMISTRY

We regret that the Bibliography normally published is still in compilation and will be available for the next Newsletter. However, an abbreviated list comprising titles that have appeared in recent issues of major journals is given: Compiled by R. Lett - Secretary.

- Boyle, R.W. 1982. Geochemical Methods for the discovery of wind mineral deposits: Part 2. Canadian Institute of Mining and Metallurgy Bulletin. 75. No. 845, pp 113-133.
- Bridge, J.S. 1982. A physical model and FORTRAM IV programs to stimulate bed load grain size distributions in unidirectional turbulent flow. Computers and Geoscience. 18 No.1 pp 37-46.
- Brookins, D.G. 1982. Geochemistry of clay minerals for Uranium explorations in the Grant Mineral Belt, New Mexico. Mineralium Deposita. 17 pp 37-53.
- Capaldi, C., De Vivo, B., Lima, A., Pece, P., and Pingue, L., 1982 Factor and regression analysis of residual soils and active stream sediments from Luganda River Basin Mozambique. Institute of Mining and Metallurgy Transactions 91 B111-122.
- Imeokparia, E.G. 1982. Bedrock geochemistry as a guide to potential ore-bearing granites, Afu Yonger Granite Complex, central Nigeria. Institution of Mining and Metallurgy Transactions 91 B 123-129.
- King, P.T., Michel, J. and Moore, W.S. 1982. Ground water geochemistry of 228 Ra, 226 Ra and 222 Rn. Geochimica et Cosmochimica Acta 46 No. 7. pp 1173-1182.
- Richers, D.M., Reed, R.J., Hortsman, K.C. Michels, G.D., Baker, R.N. Lundell, L. and R.W. Harris, 1982. Landsat and soil-gas geochemical studey of the Patrick Draw oil field-Sweetwater Co., Wyoming. A.A.P.G. Bulleting 66 No. 7 pp 903-922.
- Ross, H.P. Nielson, D.L. and Moore, J.N. 1982. Roosevelt Hot Springs Geothermal System, Utah Case Study American Association Petroelum Geologist Bulletin 66 No. 7 pp 879-902.
- Slavin W. and Manning P.C. 1982. Graphite furnace interferences - A guide to the literature Progress in Analytical Spectroscopy 15. No. 2/3 pp 243-340.
- Wilkinson, A.F. 1982. Exploration for phosphate in Ecuador. Institution of Mining and Metallurgy Transactions B 130-145.

SHORT COURSE/WORKSHOPGEOCHEMICAL EXPLORATION IN DEEPLY WEATHERED TERRAIN

The Division of Mineralogy, CSIRO Institute of Energy and Earth Resources, will be repeating its four-day short course/workshop as follows:

7th-10th December, 1982
1st- 4th March, 1983

Perth, W.A.
Sydney, N.S.W.

The course caters for geochemists and geologists who wish to become familiar with current CSIRO research activities in methods of minerals exploration. It emphasises the inter-relationships between weathering processes and the development of secondary dispersion from mineral deposits.

Topics will include:

- processes involved in the development of secondary haloes.
- multi-element, pathfinder geochemistry in weathered terrain.
- detection of weathered primary haloes.
- weathering of sulphide bodies.
- gossan and ironstone geochemistry.
- Pb isotopes in exploration.
- movement of gold in the weathering environment.
- water as a prospecting medium.
- use of the volatiles He and Hg in exploration.
- rare earth elements in exploration (Sydney).
- mathematical treatment of multi-element data.

Speakers will include: C.R.M. Butt (P&S), N. Campbell (P), M. Cameron (S), P. Eadington (S), A. Giblin (S), B.L. Gulson (P&S), A.W. Mann (P&S), E.H. Nickel (P), K.M. Scott (S), R.E. Smith (P&S), G.F. Taylor (P&S), M.R. Thornber (P&S), D. Whitford (S), J.R. Wilmshurst (P&S), A. Andrew (S).

Course Fee: \$175 for the Perth session, \$230 for the Sydney session — includes morning and afternoon teas, lunches and a publication of the course notes.

Enquiries and requests for circulars should be sent to: Dr. Raymond E. Smith, CSIRO, Division of Mineralogy, P.O., Wembley, W.A., 6014; or Dr. Graham F. Taylor, CSIRO, Division of Mineralogy, P.O. Box 136, North Ryde, N.S.W., 2113.