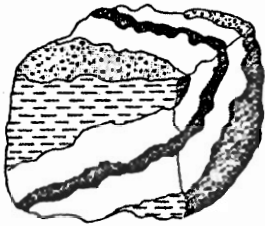


# THE OREWORLD



Newsletter of the Mineral Deposits Division

Geological Association of Canada

No. 4

January 1980

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Welcome to the 1980 Cordilleran Section Symposium!

Again the Cordilleran Section has organized an outstanding series of presentations in its annual Symposium, this year on volcanogenic mineral deposits and their related rocks. The program, of particular interest to the large and active group of economic geologists working in the Canadian Cordillera, is largely the result of the organizing efforts of Colin Godwin of U.B.C. The eight sessions in the two-day symposium commence Friday morning, January 25, and will include geologic overviews as well as sessions dealing with individual tectonic belts.

Halifax '80: Mineral Deposits Division Annual Meeting

The Division will hold a luncheon in conjunction with its first Annual Meeting at Halifax '80. The meeting will feature announcement of the first recipient of the Duncan Derry medal and election results for the Executive Committee for 1980-81 (see below). Reports will be given by the outgoing executive, and members will be encouraged to express their opinions on the affairs of the MDD over the past year.

The gala event is scheduled for noon Tuesday, May 20 and will cost about \$7.00. All MDD members, GAC members and guests are welcome.

Duncan Derry Medal: Last call for nominations

Members are reminded that they have one more week to submit nominations for the Duncan Derry medal. Nominations must be made by three MDD members, supported by relevant biographical data, and submitted to Steve Scott at the Department of Geology, University of Toronto. The award, to be presented at Halifax '80, will honour outstanding achievement in economic geology.

MDD Executive Elections

The Executive Committee will have completed its one-year term of office in May, 1980. Nomination of candidates may be made by any three MDD members, and should be submitted to the Secretary at the address below before March 20, 1980. The Nominating Committee will mail out to members a slate of all nominees for elective offices two months prior to the May 20th Annual Meeting, and ballots will follow in mid-April.

Positions open for nominations include Chairman, Vice-Chairman, Secretary, Treasurer, Program Chairman and Publications Chairman.

Send nominations to  
V.F. Hollister  
Duval Corporation  
844 West Hastings St.  
Vancouver, B.C. V6C 1C8

Publications

Publications Chairman Jim Allen reports that the first paper of the mineral deposits model series is in press. The paper, on porphyry copper-molybdenum deposits by W.J. McMillan and A. Panteleyev, will be published in the next issue of Geoscience Canada. Papers on stratiform shale-hosted PbZn and massive sulphides are in preparation. Topics and authors are still being sought, and suggestions are welcome.

Conference Reports: Seventh Geoscience Forum

Whitehorse, December 2-4, 1979

The annual Forums in Whitehorse and Yellowknife (see following report) have become a recognized western geological institution in which industry, government and

academic geologists summarize their recent field activities, to their mutual interest and benefit.

The success of the Geoscience Forum, as witnessed by the attendance, may be attributed largely to the quality of the technical sessions organized by DIANA staff, particularly Jim Morin and Bill Padgham.

A record 304 registrants of mainly western Canadian origin, but including a significant Alaskan contingent, heard 34 presentations in 5 technical sessions at the Whitehorse Travelodge. A lead-off session on regional geology in Yukon and Alaska was followed by two keynote sessions on massive sulphides. Representative Alaskan deposits in the Ambler and Alaska Range districts could be compared to those in the Anvil district, Pelly and St. Elias Mountains of Yukon, and the Kutcho and Kechika areas of northern British Columbia. Steve Scott presented an interesting comparison of Kuroko and Noranda-type deposits, and a summary of the massive sulphide sessions with reference to German examples.

Deposits described in the general sessions reflected the current exploration emphasis on silver, molybdenum and tungsten. Government geologists presented exploration highlights, geochemical programs and government field program plans for 1980.

Papers on coal by Darrel Long (GSC) and J.S. McKinney (Pan Ocean) generated interest, particularly in the economic feasibility of a thermal generating plant on Pan Ocean's coal measures in the Bonnet Plume Basin.

Banquet guest speaker Robert L. Cook, Senior Vice-President and Treasurer of Cyprus Anvil Mining Corporation, presented an economic comparison unfavourable to Canada between the Korean and Canadian approach to smelting and marketing of base metals.

We noted with mixed feelings some innovations in the 1979 Whitehorse meeting that included a poster display room, publication of abstracts and introduction of hospitality suites. One hopes that these aspects do not herald a further formalization of the original format of casual interchange.

Ken Dawson

#### Gold Workshop and Forum, Yellowknife, Dec. 4-7, 1979

The Annual Geoscience Forum brought Federal Government geologists and administrators and 200 mineral exploration and mining people, mostly geologists, to Yellowknife to talk about recent developments in geological mapping, mineral exploration and mine development in the Northwest Territories.

Exploration, mainly for uranium, continues at record levels. With the announcement of production from the Polaris lead-zinc deposit to commence in 1982 and plans to have three small gold deposits (Camlaren, Cullaton Lake and Contwoyto Lake) in production by then, mining will maintain its position as the predominant industrial enterprise in the northern third of Canada.

Interest in gold, as evidenced by the 120 attendees at the Gold Workshop, is developing strongly. Corporate managers may have finally been convinced that the price of the yellow metal will continue to advance as fast or faster than the rate of inflation. Gold exploration in the N.W.T. has increased slowly since the first flurry of activity following the freeing of the gold price. There are numerous prospects mainly in Archean rocks.

Trips to the mines were oversubscribed with 56 people visiting the Con and 50 the Giant underground operations. Those who visited Giant Mines also took in an open pit where rock grading 0.18 to 0.2 oz/ton is mined profitably.

Gold Workshop technical sessions included an overview of the geology of the Con and Giant Mines, and the Yellowknife volcanic belt and a session on gold and the economics of gold and the economics of gold mining. Industry representatives appear to view gold as having great potential whereas a bank representative warned that financiers were prepared to loan money, provided the mining industry took essentially ALL the risks!

Technical sessions explored geochemistry, exploration, placer deposits, N.W.T. gold deposits and gave insights into gold transport and deposition and the formation of shear zones and their contained ore shoots.

A memorable discourse on the early history of the Yellowknife gold camp was presented by Professor Emeritus A.W. Jolliffe. He recounted the discovery of gold in the Yellowknife volcanics by part of his G.S.C. mapping crew while they showed prospectors favourable 'environments' around a small granitic stock that is now exposed along the road to the Yellowknife airport. After hearing recent ideas on mobilization and transport of gold at earlier technical sessions, Jolliffe commented that clearly we gave them the wrong information but in spite of that they found gold and the Yellowknife mines resulted.

A volume on the technical proceedings at the workshop is in preparation and should be available in 6 months.

W.A. Padgham

#### Coming Events

1980 Symposium on Archean Volcanic-Hosted Gold Deposits  
March 7, University of Waterloo

A discussion of the volcanic-tectonic setting and geochemistry of Archean volcanic-hosted gold deposits will be given by participants engaged in field work and research in the Timmins, Kirkland Lake, and Red Lake districts.

Registration fee \$10.00. Contact Dr. R. Gwilym Roberts, Dept. of Earth Sciences, University of Waterloo, Waterloo, Ontario, N2L 3G1.  
Tel: (519) 885-1211, Ext. 3379.

1980 International Prospectors and Developers Annual Convention  
March 9-12, Royal York Hotel, Toronto

Preliminary program details and registration forms may be obtained from Prospectors and Developers Association, Ste. 219-220 - 159 Bay St., Toronto, Ontario, M5J 1J7.

Evaluation of Western Canadian Coal for the 1980's  
CIM District 6 meeting, Vancouver, Feb. 14-15.

109th Annual Meeting of AIME  
Las Vegas, Nevada, Feb. 24-28.

82nd CIM Annual General Meeting  
Toronto, Ontario, April 20-23.

#### Announcements

Seminar Programme: University of Toronto Department of Geology

Thursday Jan. 31	Professor Roger Walker, McMaster University "Shallow marine storm deposits and their significance in Jura-Cretaceous reservoirs in Western Canada"
Tuesday Feb. 5	Professor D.A. Pretorius, University of Johannesburg, Room 128, Mining Building, 4 p.m. "Exploration for diamonds in southern Africa"
Tuesday Feb. 12	Professor Andrew Hynes, McGill University "Constraints on the evolution of the Cape Smith fold belt, New Quebec"
Tuesday Feb. 26	Professor M.E. Fleet, University of Western Ontario "Is Sudbury really an Astrobleme?"
Tuesday Mar. 4	Professor Rolf Ludvigsen, University of Toronto "Lithofacies and biofacies models, late Cambrian of Western North America"
Tuesday Mar. 11	Professor Ian Campbell, University of Toronto "Some problems with crystal settling in magma chambers"
Tuesday Mar. 18	Dr. Graham Williams, Atlantic Geoscience Centre "Geological evolution of the Canadian eastern continental shelf"

All talks at 4 PM in Room 202, Mining Building. Coffee at 3:30.

University of Ottawa Public Lectures 1980

- Feb. 4 D.A. St-Onge, Dept. of Geography, University of Ottawa  
Glacial Lake, Coppermine, N.W.T.
- Feb. 18 H. Dillon-Leitch, Dept. of Geology, University of Ottawa  
Structure and stratigraphy, Courageous-Mackay Lake greenstone  
belt, Slave Province, N.W.T.
- Feb. 25 J. Briden, Dept. of Earth Sciences, University of Leeds, U.K.  
Paleomagnetism and geochronological studies of an island arc:  
The Lesser Antilles
- Mar. 3 I. Gibson, Dept. of Earth Sciences, University of Waterloo  
The crustal structure of eastern Iceland: A 2 km borehole study.
- Mar. 10 A.D. Miall, Dept. of Geology, University of Toronto  
Tertiary sedimentation, Arctic Islands, and its relationship to  
the Eureka Orogeny.
- Mar. 17 W.R.A. Baragar, Geological Survey of Canada  
The Circum-Superior Belt, a Proterozoic plate boundary?
- Mar. 24 B. Williams, Dept. of Geology, University of Bristol, U.K.  
Sedimentation in continental block-fault basins: The Old Red  
Sandstone of southern Britain and eastern Canada
- Mar. 31 M.R. St-Onge, Dept. of Geology, Queen's University  
Metamorphic conditions, northern Wopmay Orogen: Geothermometry,  
geobarometry and regional configuration of isograds, Hepburn  
Lake, N.W.T.

All lectures are at 11:45 a.m. in Room D-103, Colonel By Hall, University of Ottawa. The lectures are preceded by coffee and doughnut informal meetings in the Department of Geology (Mezzanine floor).

The Ganguer welcomes all announcements, reports, reviews and other items of interest to economic geologists. Please send items to Ken Dawson, Geological Survey of Canada, Vancouver, V6B 1R8.

Membership

Division dues of \$4.00 are payable with the annual GAC dues statement in December.

Otherwise, you may submit your dues to the MDD Treasurer directly, by mailing the form below to

Dr. A.J. Sinclair, Treasurer  
G.A.C. Mineral Deposits Division  
Department of Geological Sciences  
University of British Columbia  
Vancouver, B.C. V6T 1W5

As a member in good standing of the Geological Association of Canada, I enclose \$Can 4.00 (cheque or money order) in payment of 1980 dues for the Mineral Deposits Division.

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ Province (State) \_\_\_\_\_

Country \_\_\_\_\_ Postal Code \_\_\_\_\_

Please make cheque payable to Geological Association of Canada, Mineral Deposits Division.