International Association of
Geochemistry and Cosmochemistry

Newsletter

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Highlights of 1993/94

- Council Meeting was held in Edinburgh, U.K., August 28, 1994.
- Membership is up slightly to 589 paid-up Individual Members.
- Finances are in good shape. Our Treasurer for 14 years, Dr. Ernie Angino, has retired; Dr. David Long steps into his shoes.
- Council has decided that we will not purchase 50% of Applied Geochemistry; instead we will negotiate a separate agreement with Elsevier.
- Six international conferences were sponsored by the IAGC in 1994. (Is this a record?)

IAGC Business Activities

Council Meeting

An IAGC Council Meeting was held on August 28, 1994, in conjunction with the V.M. Goldschmidt Conference in Edinburgh, Scotland. Unfortunately due to surgery (H. Sakai, President), a minor accident (H. Wanke, Past-President) and a lack of Council members, a quorum was not achieved. A committee meeting was held, therefore, between attending Council members (E. Angino, G. Faure and M. Gascoyne) and invited attendees (R. Fuge - Executive Editor, Applied Geochemistry, D. Green - IMA Representative, and B. Hitchon - representing A. Levinson for the Publications Committee). Comments and approvals on recommendations made by the committee were sought by mail from Council members afterwards. Significant actions and decisions were:

- Because of the need for cancer surgery and a prolonged recovery, the IAGC President, Hitoshi Sakai, has asked the Vice-President, Gunter Faure to take over his responsibilities until further notice.

- The Treasurer, Ernie Angino retired from the Executive as of August 29, 1994 and David Long took over the post.

- The IAGC will not exercise its option to purchase a 50% share of Applied Geochemistry next year (see item later); instead, we intend to negotiate a new contract with Elsevier and funds accumulated to date by the IAGC for the purchase will be put into general revenues.

- Al Levinson resigned as Chairman of the Publications Committee; Gunter Faure took on his post as Interim Chairman (see item later).

- Progress on striking a Vernadsky Medal was suspended pending the results of inquiries concerning the existence of a similar award in Russia.

The meeting lasted 6 hours and thanks are due to Prof. Ben Harte (Geology Dept., University of Edinburgh) for providing a room in the University for the meeting.

Conferences Supported

The IAGC sponsored six international meetings and symposia during 1994 giving the opportunity for scientists from developing countries to attend. The meetings were:

- 57th Annual Meeting of the Meteoritical Society, Prague, Czech Republic, July 24-29, 1994.

- V.M. Goldschmidt Conference, Edinburgh, U.K., August 29 - September 2, 1994.

- 16th General Meeting of the International Mineralogical Association, Pisa, Italy, September 3-8, 1994.

- Symposium on Mineral Equilibria and Problems of Environmental Protection at the IMA meeting, Pisa, Italy, September 3-8, 1994.

- 4th International Symposium on Geochemical Prospecting, Irkutsk, Russia, September 8-12, 1994.

- 3th International Symposium on Environmental Geochemistry, Kraków, Poland, September 12-15, 1994.

In total this represents over $12,000 that will have been paid out to support conferences during 1994. This figure is almost double our total revenues for the year. The shortfall will be drawn from our cash balance (see the Treasurer's Report).

Vernadsky Medal

A preliminary striking of the Vernadsky Medal, by the Russian Mint, was reviewed at the Council Meeting in August, 1994. Some indication was given at this meeting and at the Goldschmidt Conference that a Vernadsky award may already have been presented to distinguished scientists within Russia and concern was expressed that the IAGC should not be making a comparable award. Further developments await more information on this matter.

Ingerson Lecture 1994

Dr. K. Hans Wedepohl from Göttingen University was the Ingerson Distinguished Lecturer for 1994. Dr. Wedepohl was introduced by Dr. Jochen Hoefs and presented a lecture to a capacity audience entitled "The Composition of the Continental Crust" at the V.M. Goldschmidt Conference in Edinburgh, Scotland, on August 31, 1994.

Membership

Membership of the IAGC currently stands at 589 Individual members and 20 National members. We are maintaining our numbers of Individual Members although there is some decline in the number of members from developing countries, probably for financial reasons.

Treasurer's Report, 1993/94

A complete statement of income and expenses for 1993 is given below (only a 6 month statement was given in the last newsletter). As the statements shows, income exceeded expenditure by over $5,000 in 1993, partly due to the fact that only three conferences were sponsored during that year and unused funds were repaid by two of these meetings.

◊ *Statement of Income and Expenses January 1, 1993 to December 31, 1993*

Beginning Balance, January 1, 1993		$53,182.15
Income:		
Member Dues	$7,187.83	
National Dues	4,283.20	
Miscellaneous	18.00	
Interest	1,684.26	
Russian Meeting, Novosibirsk	1,000.00	
SEGH Meeting, New Orleans, U.S.	567.86	14,741.15
		$67,923.30
Expenses:		
Membership Fee - IUPAC	$ 50.00	
Miscellaneous	18.00	
Postage	58.00	
Faxes, etc.	150.00	
Stationery	283.30	
SEGH Conference, New Orleans	2,000.00	
AGS Meeting	250.00	
Secretarial & Accounting	355.00	
Bank Charges	101.10	
Journal Costs	67.00	
Newsletter	426.83	
Applied Isotope Geochem. Symposium, Anaheim, Norway	2,000.00	
Novisibirsk Meeting, Russia	1,000.00	
AGU Meeting, Baltimore, US	250.00	
Environment Geochem. Meeting Kraków, Poland	2,000.00	9,009.26
Cash Balance, December 31, 1993		$58,914.04
Total Excess Income Over Expenditures 1993		$ 5,731.89
Certificate of Deposit #109598	$12,210.55	
Checking Account #047031	21,055.15	
Ingerson Fund #111988	12,328.18	
Journal Sinking Fund #999910	13,320.16	
	$58,914.04	

The statement for the first part of 1994 (below) shows a loss of over $1,000 although dues payments will likely exceed this in the remainder of the year. However, an invoice of over $4,000 from the Alberta Research Council for various costs associated with the past Secretary's position (eg. binding of IAGC records) will likely cause a deficit this year.

◊ *Statement of Income and Expenses January 1, 1994 to June 30, 1994*

Beginning Balance, January 1, 1994		$58,914.04
Income:		
Member Dues	$ 4,280.00	
National Dues	1,595.00	
Interest	696.54	6,571.54
		$65,485.58
Expenses:		
Newsletter	$ 922.05	
Secretarial & Accounting	225.00	
Membership Fee - IUPAC	50.00	
Pisa, Italy - Conf. Min. Equil.	2,027.00	
Goldschmidt Conference	2,000.00	
Pisa, Italy - IMA	2,000.00	
Edinburgh Meeting	400.00	
Bank Fees	24.50	
Faxes	19.75	
Legal - File Taxes	95.00	7,763.30
Cash Balance, June 30, 1994		$57,722.28
Total Excess Income Over Expenditures 1994		($ 1,191.76)
Checking Account #047031	$26,731.36	
Ingerson Fund #109598	12,210.55	
Journal Sinking Fund	18,780.37	
	$57,722.28	

Because of the IAGC's healthy finances, members should note that support for international meetings is available from the IAGC by application through any of the Working Groups listed at the end of this newsletter. Typically $2,000 is given per meeting to allow attendance of scientists from developing countries at the meeting. Occasionally, however, the funds may be used to bring a distinguished scientist as a keynote speaker to a meeting in a developing country if he/she is not able to attend for financial reasons. In this case, the request should be specifically indicated by the meeting organizer.

Applied Geochemistry

Past Performance

Elsevier Science (the new publisher of the IAGC journal, Applied Geochemistry) has been researching the types of papers published in the journal since its inception in 1986. The major categories of papers are:

Environmental geochemistry (including medical and agricultural geochemistry)	26%
Exploration: mineral resources (gold, metallic deposits, hydrothermal systems, industrial minerals)	21%
Exploration: energy resources (petroleum and natural gas, geothermal, nuclear)	17%
Radioactive waste disposal, radioactivity	13%
Formation waters and groundwaters	11%
Archaeological geochemistry	4%
Others	5%

Elsevier informs us that past issues are available at £183.00 (US $292.00) per issue. Current subscribers can obtain 25% off this price. Orders should be directed to the Oxford Fulfilment Centre, Elsevier Science Ltd, The Boulevard, Langford Lane, Kidlington, Oxford, U.K., OX5 1GB, Attention: Sue Cloke, Senior Marketing Manager.

Future Plans

The IAGC is not intending to exercise its option to purchase a 50% share in its journal, *Applied Geochemistry*, at the end of 1995. Instead, the Executive and Council, under the leadership of Gunter Faure, the Interim Chairman of the Publication Committee, are proposing to seek a new partnership with Elsevier Science Ltd., based on the following principles:

1. Elsevier Science Ltd. will remain the sole owner of *Applied Geochemistry*.

2. IAGC will continue to sponsor *Applied Geochemistry* and takes responsibility for the scientific merit of the papers approved by the Executive Editor.

3. Elsevier Science Ltd. will pay IAGC an annual sum or a royalty based on income from Individual and Institutional subscriptions.

4. IAGC will undertake a sustained effort to recruit new Individual and Institutional subscribers and will continue to use an appropriate fraction of the royalty payments to support research and education in geochemistry and cosmochemistry, especially in countries where environmental problems require urgent attention.

5. Elsevier Science Ltd. will continue to provide a low subscription rate to *Applied Geochemistry* for Individual Members of IAGC. The amount will be determined in negotiations with the Association prior to December 31, 1995 for a specific period.

6. IAGC will not participate in the determination of the annual Institutional subscription rate for *Applied Geochemistry* except to urge that the rate remain competitive in order to attract new Institutional subscribers.

7. Elsevier Science Ltd. will increase the annual page budget for *Applied Geochemistry* and the financial support of its Executive Editor and Associate Editors to permit the anticipated growth of the journal.

8. IAGC will be responsible for selecting the Executive Editor of *Applied Geochemistry* and will present his or her credentials to Elsevier Science Ltd. prior to concluding the appointment.

The partnership between the IAGC and Elsevier Science Ltd. will be beneficial to both parties because the reduced subscription rate for Individual Members of the IAGC attracts dues-paying members to the Association, thereby increasing the circulation of the journal and hence its value as a commercial property. The IAGC dispenses a significant fraction of the income it receives from the annual dues of its Individual Members in support of research and education in geochemistry and cosmochemistry.

In view of the widespread interest in the applications of geochemistry and isotope geology to the study of environmental problems, *Applied Geochemistry* is in a strong position to become one of the leading journals in the field. The IAGC is prepared to work with Elsevier Science Ltd. to increase the circulation of the journal as well as the number of high-quality papers it publishes annually. As the circulation of the journal increases, the new members of IAGC will be able to exert pressure on institutional libraries to subscribe to the journal.

In anticipation of the above developments in the future of *Applied Geochemistry*, and to demonstrate the commitment of the IAGC Executive, a membership drive will begin early in 1995 with the emphasis on the potential for growth of *Applied Geochemistry* in the area of environmental geochemistry.

Activities of Working Groups (1993/94)

1. **Thermodynamics of Natural Processes**
(G. Kolonin)

The International Mineralogical Association held a meeting, IMA 1994, in Pisa, Italy, during September, 1994. Twenty-five presentations were given by scientists from 12 countries. IAGC support for the meeting allowed registration fees, accommodation and meals to be paid for five scientists from China, Poland, Ukraine, Russia and Bulgaria. It is hoped to publish the proceedings of the meeting, perhaps in a new international journal 'Chemistry for Sustainable Development' edited at the Novosibirsk Scientific Centre.

Dr. Kolonin has proposed to the NATO Scientific Affairs Division in Brussels that an 'Advanced Research Workshop' be established, devoted to the application of geochemistry and mineralogy as a theoretical base for estimation of environmental protection problems and effective geotechnologies. The workshop is scheduled for some time during 1995-96. Those interested should contact Dr. Kolonin at his address in the USA (see listing at end).

2. **Geochemistry of the Earth Surface**
(R.A. Berner)

The last meeting of this Working Group took place at Penn State University, August, 1993 (see Newsletter 26). The next meeting (GES-94) is planned for July 20-24, 1996 in Ilkley, near Leeds, U.K. and will concentrate on environmental aspects of geochemistry. Dr. Robert Raiswell, Dept. of Earth Sciences, Leeds University is the Secretary General and should be contacted for more details.

3. **Global Geochemical Mapping**
(A. Darnley, P. Koval)

This Working Group has been very active over the last year and has completed a 65,000 word report entitled "Global Geochemical Baselines: Recommendations for International Geochemical Mapping". The report is co-authored by A.G. Darnley (Geological Survey of Canada); A. Björklund (Abo Akademi, Finland); B. Bølviken (Geological Survey of Norway, Trondheim); N. Gustavsson (Geological Survey of Finland); P.V. Koval (Russian Academy of Sciences, Irkutsk); J.A. Plant (British Geological Survey, Nottingham); A.Steenflet (Geological Survey of Greenland, Copenhagen); M. Tauchid (International Atomic Energy Agency, Vienna) and Xie Xuejing (Academy of Sciences, Beijing).

The joint IGCP-IAGC Working Group has prepared detailed recommendations relating to the establishment of a global network of geochemical reference samples; sample collection and preparation specifications; analytical requirements and standards; gamma radiation methods applicable to natural and man-made radioelements; and data management procedures. Practical considerations affecting the implementation of the recommendations are discussed. As and when implementation takes place, it will be possible to assemble geochemical baseline data for all non-gaseous elements. A world geochemical atlas will be one of many possible products which can be derived from these data.

Summaries of the report will be presented at the Tauson Memorial Symposium in Irkutsk, Russia, and the Environmental Geochemistry Symposium in Kraków, Poland, both in September, 1994. Arrangements are in hand for the full recommendations to be published in late 1994, with the support of UNESCO and The Royal Society of London.

4. **Extraterrestrial Geochemistry** **(P. Jakes)**

The 57th Annual Meeting of the Meteoritical Society was held in July in Prague, Czech Republic. The meeting was preceded by an extremely successful field excursion and course (3 days) featuring some well-known geochemists as guest speakers and attracted students from over 5 countries. About 300 registrants attended the meeting which incidentally occurred at the time of the comet impact on Jupiter. The Plenary session featured memories of the Apollo Lunar landing in 1969. IAGC support enabled a scientist from India to attend and assisted students at the Meeting.

Past IAGC Meetings

Brian Hitchon (with assistance from Kathie Skogg) has recently compiled a list of all IAGC-sponsored meetings over the period 1967 to 1993. Brian reports that while some may have been proposed but never actually took

place, at least 62 did occur and many resulted in publications. The list is too long to include in the Newsletter but copies are available from the Secretary.

IAGC-Sponsored Meetings

◊ ***Fifth Annual Goldschmidt Conference***
1995 May 24-26
Penn State University
University Park, PA 16802
U.S.A.
Contact: H. Barnes or P. Deines, at above address
Fax: (814) 863-2001

◊ ***Water-Rock Interaction (WRI-8)***
1995 August 17-22
Vladivostok, Russia
Contact: Oleg Chudaev (Secretary-General), Far East Geological Institute
690022 Vladivostok, 159, Russia
Fax: 7 50985 12430

1996 General Assembly of the IAGC

The IAGC General Assembly for the period 1992-96 is planned to convene during the International Geological Congress, in Beijing, China, 4-14 August 1996. At this Assembly, a new slate of Executive and Council members will be voted upon for the period 1996-2000. More details of the Assembly and the IGC will be given in the next newsletter. Meanwhile, further information can be obtained from the Secretariat Bureau, 30th International Geological Congress, P.O. Box 823, Beijing 100037, P.R.China.

Other Meetings of Interest

◊ ***The Ames Structure and Similar Features***
1995 March 28-29
Norman, Oklahoma
Contact: K.S. Johnson or J.A. Campbell,
Oklahoma Geological Survey, 100 E. Boyd St.,
Room N-131, Norman, OK 73019
Fax: (405) 325-7069
Comments: The Ames Structure is a buried circular feature that is a prolific source of oil and gas. Discovered in 1991, it is variously interpreted as a meteorite-impact crater, a volcanic caldera or a solution/collapse feature. Presentations on impact structures in general are welcome, including their geochemistry and hydrocarbon potential.

◊ ***32nd Annual Meeting, Clay Minerals Society***
1995 June 4-8
Baltimore, Maryland, USA
Contact: P.J. Eberl, CMS,
P.O. Box 4416, Boulder, CO 80306
Fax: (303) 444-2260
Comments: Symposium on clays, surfaces and the environment is planned, preceded by a workshop on reactions of organic pollutants with clays (June 3).

◊ ***Centennial Congress, Geological Society***
1995 April 3-7
Johannesburg, South Africa
Contact: The Congress Secretariat, Centennial Geocongress, P.O. Box 36815, Menlo Park
0102 South Africa
Tel/Fax: 27 12 47 3398
Comments: Presentations on all aspects of the geology of Africa and Gondwana. Global geology contributions are also welcome. Field trips include the Witwatersrand Gold Field and the Bushveld Complex.

Addresses of Executive and Council (1992-1996)

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Thermodynamics of Natural Processes

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