

International Association of Geochemistry and Cosmochemistry

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and Analytical Chemistry
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NEWSLETTER

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N° 15

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October 1982

Edited by S. DEUTSCH

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I. REYKJAVIK COUNCIL MEETING

The meeting was held in Reykjavik, before and during the IAVCEI-IAGC scientific assembly on Generation of Major Basalt Types, 15-22/08/1982. The following members were present : GRUNENFELDER Marc (Switzerland), Vice-President, HITCHON Brian (Canada), Vice-President, WETHERILL George (USA), Past-President, ANGINO Ernest (USA), Treasurer, KOGARKO Liya (USSR), Council Member, BARNES Ivan (USA), Council Member, WANKE Heinrich (FRG), Council Member, DEUTSCH Sarah (Belgium), Secretary. President BARSUKOV was delayed because of his attendance at the Second International Cosmical Meeting of the United Nations in Vienna, but his views on various subjects discussed were provided by L. KOGARKO.

1. Designation of the Nominating Committee

Following the statutes of IAGC, "A nominating committee of five members should be appointed by the Council. This committee shall submit for approval of Council a list of nominations for officers and ordinary members of the Council for the ensuing period". Names were suggested for the chairman and for the members of this committee. President BARSUKOV will obtain their acceptance and will provide them with clear instruction relative to their assignment. A list of the nominating committee and a possible set of candidates for the next term will be presented at the next Council meeting in Japan (August 1983).

2. Discussion of the work of the "Geochemistry and Cosmochemistry" section at the International Geological Congress in Moscow, 1984

Again, the whole scientific program of this congress concerning the sessions of geochemistry and cosmochemistry was carefully discussed and now it is ready to be published in the second circular of the "International Geological Congress". 6 sessions and 3 symposia have been arranged by IAGC for this conference (see Newsletter N° 14). Suggestions were made for inviting chairmen of some of these sessions if those originally chosen declined, or did not answer the invitation. Lists of names of scientists to be directly invited to give papers or to disseminate information about the IAGC activities will be sent by the Council members to L. KOGARKO (Vernadsky Institute, Moscow).

3. New Working Groups (W.G.)

A. INTERNATIONAL STANDARDS

Subsequent to the decisions of the last Council meeting and as a result of the correspondence between V. BARSUKOV and K. GOVINDARAJU (Editor-in-Chief of Geostandards Newsletter), H. WANKE was appointed to the editorial board of Geostandards Newsletter as approved by IAGC Council members. Moreover, a letter from V. BARSUKOV will be published in this newsletter. There were numerous replies to the invitation for the creation of such a W.G. which showed the interest of many scientists.

It was agreed that such a W.G. should first aim at compiling a list of standards available by searching the literature and getting in contact with the laboratories which prepared them. UNESCO funds may be available for such an activity. The Council suggested that K. GOVINDARAJU be asked to chair this W.G. and to contact some individuals who replied to the letter, such as F. FLANAGAN, Th. HUGI, G.R. ARGENT, C. INGAMELS, B. DOF.

B. INTERNATIONAL TEACHING OF GEOCHEMISTRY W.G.

A first circular on the possibility for this W.G. to organize an annual seminar on applied geochemistry was sent to several developing countries in agreement with the decisions taken at the Irkutsk Council meeting. Ethiopia and Brazil have showed real interest.

The organization of such a seminar in Ethiopia in 1983 or 1984 might represent a first experience for this W.G. The Council members suggested the involvement of

existing IAGC W.G., such as the ones on laterites, applied geochemistry and isotopic geochemistry, and these W.G. will be asked to identify experts and to prepare a tentative program for the seminar. The chairmen of these groups (J. GONI, L. TAUSON, Y. ASWATHARAYANA) will be contacted by F. RYIGENKO, who will be asked also to attend the AEG and IAGC joint symposium in Helsinki 1983 to discuss this problem with the scientists present and to determine the experts who could present geochemical lectures in Ethiopia at the proper level.

4. Financial policy

A. The financial report was presented by Treasurer E. ANGINO and approved by the Council (see p. 4).

B. E. ANGINO suggested changes in the IAGC statutes so that the Association be in conformance with U.S. tax law (see p. 5). The Council approved them. The corporate members will be informed directly but these changes will be submitted for approval at the next General Assembly (in Moscow, 1984).

C. The Executive Committee of IUGS allocated to IAGC an increased amount of 500 dollars for 1982 activities (as compared to 400 dollars in 1981). The funds were given on the basis of the report for 1981 activity. From the minutes (p. 21) of the XXIVth Executive Committee Meeting of IUGC (Fev. 1982, Lochmühle, FGR), the activities of the IAGC were reported as follows :

4c International Association of Geochemistry and Cosmochemistry (IAGC)

C. WEBER (commentator) gave a brief description of the work carried out by the different commissions and working groups. The Commission of Geochemistry and Natural Waters comprises 11 subcommissions covering 47 countries. The Commission on Extra-Terrestrial Geochemistry is preparing an international symposium (from Asteroids to Meteorites) to be held in F.R.G. in 1983. The three active working groups are : Exploration Geochemistry, Laterites and Laterization and Geochemistry of Isotopes. A new working group has been formed on Thermodynamics of Natural Processes. The plans for the next few years are well-defined.

The Committee APPROVED the Association's report, commenting on its quality.

D. UNESCO Funds

It was agreed that the organizations of the three forthcoming IAGC-sponsored meetings will ask for UNESCO funding. This request was already made by B. HITCHON for WRI-4 in Japan. The organizers will have to send the program of their symposium and a list of invited scientists (some of whom should be from developing countries) before November 1982, directly to President BARSUKOV for transmittal to UNESCO.

5. Discussion of the work of the W.G. "Geochemistry of Health and Disease"

Concern was expressed about the lack of activity in this area of research. Several individuals were named as those who might be interested in heading up a working group on this subject. E. ANGINO who presented the report suggested that these individuals be contacted as soon as possible.

COMMISSION ON "EXTRATERRESTRIAL GEOCHEMISTRY"

H. WANKE took over as chairman of this commission. This appointment was approved by the Council members. In order to stimulate scientific collaboration in the field of Cosmochemistry, the Council asked L. KOGARKO to supply the chairman with a list of Soviet scientists in this field to be invited to join the Commission on Extraterrestrial Geochemistry. This commission will organize a symposium "From Asteroids to Meteorites" to be held in conjunction with the 46th Annual Meeting of the Meteoritical Society in Mainz, September 5-9, 1983.

In order to cover the expenses of invited speakers to this symposium or of those scientists who could not attend for financial difficulties, the Council unanimously decided to allocate up to 2,000 US dollars to the organizers, upon request to the treasurer.

INTERNATIONAL ASSOCIATION OF GEOCHEMISTRY & COSMOCHEMISTRY

REVENUE AND EXPENDITURE REPORT

FOR THE PERIOD OCTOBER 1, 1981 TO JUNE 30, 1982

Fund Balance, October 1, 1981		\$12,674.09
Revenues:		
Corporate Dues	\$2670.00	
Membership Dues	2287.00	
Travel Reimbursement (NAS)	1000.00	
IUGS Support for 1982	500.00	
Interest on Bank Account	<u>286.56</u>	
		<u>6,743.56</u>
		\$19,367.65
Expenditures:		
Support for Intl. Conference Geochron.- Cosmochronology, Japan, July 1982	\$2000.00	
Meeting-Iceland, Origin of Basalts	1500.00	
Newsletter for IAGC	1010.00	
Basalt Meeting--partial travel expenses for 5 councilors	1140.00	
Postage	161.46	
Secretarial Services	121.00	
Miscellaneous (telegram, labels, etc.)	64.09	
Auditing and Bank Charges	<u>38.90</u>	
		<u>6,035.45</u>
FUND BALANCE, JUNE 30, 1982		<u>\$13,332.20</u>

Corporate Members Not Current in Dues--Therefore not voting members.
Date in parenthesis is year of last payment as of August 1, 1982.

1. Germany (DDR) (1976)
2. Hungary (1979)
3. Iran (1975)

I have examined the books and bank account maintained by Treasurer, E. E. Angino, and believe the accompanying financial statement for the period ending June 30, 1982 to be a true and correct record of the Association's financial affairs.

Margaret L. Angino

Margaret L. Angino
Public Accountant

PROPOSED AMENDMENTS TO THE STATUTES OF THE
INTERNATIONAL ASSOCIATION OF
GEOCHEMISTRY AND COSMOCHEMISTRY

For purposes of qualification as an organization exempt from federal income tax under the Internal Revenue Laws of the United States of America, the following additions to Article I of the Statutes of the Association are proposed:

D. This Association is organized exclusively for scientific and educational purposes, including, for such purposes, the making of distributions to organizations that qualify as exempt organizations under Section 501(c)(3) of the Internal Revenue Code of 1954, as amended, of the United States of America.

E. No part of the net earnings of the Association shall inure to the benefit of, or be distributable to, its members, officers, or other private persons, except that the Association shall be authorized and empowered to pay reasonable compensation for services rendered and to make payments and distributions in furtherance of the purposes set forth in this statute. No substantial part of the activities of the Association shall be the carrying on of propoganda, or otherwise attempting to influence legislation, and the Association shall not participate in, or intervene in (including the publishing and distribution of statements) any political campaign on behalf of any candidate for public office. Notwithstanding any other provision of these articles, the Association shall not carry on any other activities not permitted to be carried on by an association exempt from federal income tax under Section 501(c)(3) of the Internal Revenue Code of 1954 (or the corresponding provision of any future Internal Revenue Law) of the United States of America.

F. Upon the dissolution of the Association, the Council shall, after paying or making provision for the payment of all of the liabilities of the Association, dispose of all of the assets of the Association exclusively for the purposes of the Association in such manner, or to such organization or organizations organized and operated exclusively for charitable, educational, or scientific purposes, as the Council shall determine.

6. Official Journal of IAGC

The Council members decided to reconsider the whole policy of IAGC having an official journal. They voted unanimously that the journal "ORGANIC CHEMISTRY" no longer be considered the official journal of IAGC because this journal does not cover all branches of geochemical and cosmochemical fields represented by the Association. A committee including G. WETHERILL, M. GRUNENFELDER and B. HITCHON was appointed with the assignment of presenting recommendations to the next council meeting about the possibilities for IAGC adopting an official journal in the future.

7. Relations with International Union of Geological Sciences (IUGS)

IAGC, as an affiliated member of IUGS, was invited to propose names for the members of the Executive Committee of IUGS for the period 1984-88, before July 15, 1982. V. BARSUKOV, after consultation with M. GRUNENFELDER, proposed G. WETHERILL. This was approved by the Council members.

8. Relations with International Union of Pure and Applied Chemistry (IUPAC)

The publications of IUPAC have been received by I. BARNES, liaison member between IAGC and IUPAC, on a regular basis, courtesy of the secretary of IUPAC. No data on thermodynamic properties of geological materials have been found in these IUPAC publications. Concerning the activity of the W.G. on Thermodynamics in the Earth and Planetary Sciences, I. BARNES reported that B. STAPLES (U.S. Bureau of Standards) is compiling data on solutes and electrolyte solutions. J. HAAS is justifying data on oxides and I. KHODAKOVSKY is incorporating both sets of data in his compilation.

9. Report of the W.G. on Water-Rock Interaction

B. HITCHON, chairman of the W.G. on Water-Rock Interaction, presented his report to IAGC Council (see p. 7).
The constitution and bylaws were modified and approved by the Council members.

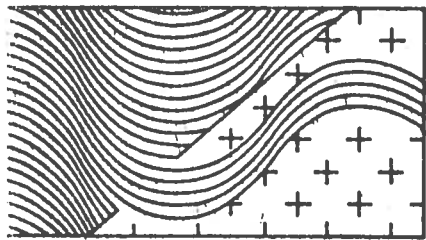
10. Proposal of IAGC statute change

The proposed change is a technical modification necessary to remove an ambiguity in the present statutes. At present, the Council is authorized to establish commissions and working groups, but has no explicit authority to ever make any changes in these commissions of W.G. once established. It will not take force before presented for ratification at the next General Assembly. The proposed changes are as follows :
II.B.a : Subsequent to each General Assembly, the new Council will appoint the Chairman and Members of all commissions and working groups. Existing appointments will remain effective until these new appointments are made. The Council may also at any time establish new commissions, working groups or committees, as well as discontinue or change the membership of existing commissions, working groups or committees.

11. General secretary's report

Two newsletters were edited last year as recommended at the last Council meeting in Irkutsk. The bibliography on Isotope Geology was not published as the Chairman of this group did not send it in.
The secretary sent out all circulars for the W.G. on Geochemical Standards and International Geochemistry teaching, dispatched the correspondence to the Council members, maintained the connection between Council members for the Reykjavik meeting and with E. SIGVALDASON, organiser of the Scientific Assembly.
Contacts were also maintained with UNESCO representatives who sponsored the Japan Geochronology meeting (6,000 dollars) and the Reykjavik one (8,000 dollars).
Discussion between Council members revealed that the newsletters were not properly sent to the corporate members or to the Chairmen of the W.G. The Council recommended that letters should be sent to those members to ask for the addresses of members to be reached directly and also for greater distribution of the Newsletter among their members.

WATER-ROCK INTERACTION



INTERNATIONAL

**Interest Group on Water-Rock Interaction
International Association of
Geochemistry and Cosmochemistry**

Alberta Research Council,
11315 - 87th Avenue,
Edmonton, Alberta
Canada T6G 2C2

Chairman:
Dr. BRIAN HITCHON,
Alberta Research Council,
315 - 87th Avenue,
Edmonton, Alberta,
Canada. T6G 2C2

Co-Chairman and
Secretary for International
operation:

Dr. TOMÁS PÁČES,
Geological Survey,
Malostranské nám. 19,
8 21 Praha 1,
Czechoslovakia

REPORT OF CHAIRMAN TO IAGC COUNCIL

This report covers the period between the IAGC Council meeting in Irkutsk, U.S.S.R. in late September, 1981, and mid-August, 1982.

WRI Constitution and Bylaws

The Chairman prepared a seven-page Constitution and Bylaws for WRI, which was submitted on 1982-04-20 to Dr. T. Paces, Dr. D. E. White, former and present WRI Secretary-General's, 8 Interest Group Chairmen, 33 National Contacts and the IAGC Executive Council members for comment. It is based on the IAGC Constitution and Bylaws, modified to take into account some special features of WRI. A revised draft based on the comments received has not yet been prepared, but in any case it will differ little from the original draft, and certainly in no substantive manner. It will be presented to the WRI-4 Business Meeting for ratification, and elections for the 1983-1986 WRI Executive are also expected to take place at that time.

WRI-4

WRI-4 is scheduled for Misasa, Japan, from 08-29 to 09-08, 1983. Considering the current state of the world economy, response to the First Circular has been very good. At 1982-04-09, when latest figures are available, there were 245 responses. Applications came from USA (55), Japan (41), USSR (37), Canada (17), France (14), Italy (9), Israel (8), New Zealand (7) and UK (5). Countries with less than 5 responses were Australia, Belgium, Brazil, Bulgaria, Czechoslovakia, Democratic Republic of Germany, Denmark, Egypt, Federal Republic of Germany, Hungary, Iceland, India, Kuwait, Mexico, Netherlands, Norway, Poland, Saudi Arabia, Senegal, Spain, Sweden, Switzerland, Syria, and Taiwan. About 56% of respondents indicated a good chance to attend WRI-4. The initial response indicates, therefore, a potentially successful meeting, with good international representation and a very full and varied program.

WRI-5

A country is presently being sought to host WRI-5 in 1986. Any firm proposal(s) will be submitted to the WRI-4 Business Meeting for ratification.

UNESCO

Initial contact has been made with UNESCO regarding travel funds for WRI-4. This matter will be on the Agenda of the IAGC Council meeting in Reykjavik, Iceland.

Brian Hitchon
Chairman, WRI

12. Meeting between IAGC Council members and IAVCEI Executive Committee

This took place on August 17th, 1982.

Present for IAVCEI: S.A. FEDOTOV (USSR), President, I. Mc DOUGALL (Australia), Vice-President, R.W. DECKER (USA), Past President, G.E. SIGVALDASON (Iceland), Member of Executive Committee
for IAGC : E. ANGINO, I. BARNES, S. DEUTSCH, B. HITCHON, L. KOGARKO, H. WANKE, G. WETHERILL.

It was noted that both organizations had interests that overlapped to a considerable extent. This was evident from the fact that both organizations quite commonly acted as co-sponsors of scientific meetings, as here in Iceland. Considerable discussion followed and there was general agreement that :

1. It was desirable to maintain communication between the two organizations (exchange of newsletters, etc...) especially through the respective secretaries.
2. Further meetings between the two executive committees should occur in the future, with the possibility suggested that the IAVCEI inter-union assembly might well be an appropriate time.
3. The projected IAVCEI 1985 Mediterranean Volcanism meeting was thought to be an appropriate time to meet again.
4. IAGC indicated that it would be interested in becoming formally involved in the Mediterranean meeting. The possibility that this meeting become a joint one between the two organizations was welcome.
5. During the 27th International Geological Congress in Moscow in 1984, one of the IAGC organized open sessions will be "Geochemistry of Magmatic Processes". An invitation was extended by IAGC for IAVCEI to become involved in organizing this session. G.E. SIGVALDASON agreed to be nominated as a cochairman, representing IAVCEI.

It was noted that IAGC had its formal business meetings during IUGS Geological Congresses, whereas IAVCEI held its formal meetings during IUGG General Assemblies.

II. FORTHCOMING IAGC MEETINGS

- 1983, August 27-28, Misasa (Japan)
Council meeting
- 1983, August 29 - September 9, Misasa (Japan)
4th International Symposium on Water-Rock Interaction organized by the Institute for Thermal Spring Research, OKAYAMA Univ., the Geochemical Society of Japan and the Geothermal Research Society of Japan, sponsored by IAGC.
Circular available from Prof. HITOSHI SAKAI, Institute for Thermal Spring Research, OKAYAMA University, MISASA, Tottori-ken 682-02 (Japan)
- 1983, August 28 - September 2, Helsinki (Finland)
10th International Geochemical Exploration Symposium and 3d Symposium on Methods of Applied Geochemistry - Joint Symposium AEG-IAGC.
Address : Dr. A. BJORKLUND, Geological Survey of Finland, SF-02150 ESPOO 15 Finland
- 1983, September 5-9, Mainz (West Germany)
Symposium "From Asteroids to Meteorites" : sponsored by IAGC ; to be held in conjunction with the 46th Annual Meeting of the Meteoritical Society.
Address : Prof. H. WANKE, Max Planck Institute für Chemie, Abteilung Kosmochemie, Saarstrasse, 23 - 6500 MAINZ (West Germany)

III. LIST OF BOOKS ON GEOCHEMISTRY PUBLISHED IN 1978-1982 (continue)

INTEREST GROUP ON WATER-ROCK INTERACTION : ACTIVE GEOTHERMAL SYSTEMS

Chairman : R.W. HENLEY

Department of Scientific and Industrial Research
Wairakei, Private Bag, TAUPO, New Zealand.

Browne P.R.L. (1978). Hydrothermal alteration in active geothermal fields.
Ann. Rev. Earth Planet. Science, 6, 229-250.

Giggenbach W.F. (1980). Geothermal Gas Equilibria.
Geochim. et Cosmochim. Acta, 44, 2021-2032.

Giggenbach W.F. (1981). Geothermal Mineral Equilibria.
Geochim. et Cosmochim. Acta, 45, 393-410.

Truesdell A.H. and Hulston J.R. (1979). Isotope evidence on environments of geothermal waters. In Natural Isotopes in Environmental Studies. ed. J.C. Fontes and Fritz P. Elsevier, Press.

Henley R.W. and Ellis A.J. (1982). Geothermal Systems - Ancient and Modern.
Earth Science Reviews (in press).

IV. THE 27TH INTERNATIONAL GEOLOGICAL CONGRESS IS SCHEDULED IN MOSCOW ON
AUGUST 4 - 14, 1984

There will be special

SESSIONS ON GEOCHEMISTRY : - geochemical cycles
- geochemistry of ore formation
- magmatic processes
- applied geochemistry
- isotope geochemistry
- geochemistry of the solar system

and SYMPOSIA on - the composition and structure of upper mantle
- oil forming processes
- rare gases

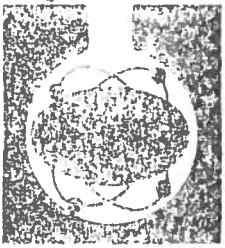
For receiving the second circular, write to :

Professor V.L. BARSUKOV

Vernadsky Institute of Geochemistry and Analytical Chemistry

Academy of Sciences of USSR

MOSCOW 117334 - USSR



International Association of Geochemistry and Cosmochemistry

Application for Membership
Questionnaire d'Admission
Anmeldungs formular

Date: _____

Name : _____
(Nom, Name)

Address : _____
(Adresse, Anschrift)

Employment
Organization _____
(Employé Organisation, Anstellung Organisation)

Address : _____
(Adresse, Anschrift)

Title : _____
(Titre, Titel)

Education
Degree(s) : _____
(Diplômes universitaires, Akademische Grade)

Institution : _____
(Institution, Erziehungsanstalt)

Major Fields
of Interest : _____
(Domaines d'intérêts, Interessengebiete)

Membership in the Association is open to individuals who are interested in any aspect of pure or applied geochemistry (Statutes of the Association, Section I.C.2).

Dues are \$10.00 U.S. per annum.

The application, together with \$10.00, or the equivalent, should be sent to the Treasurer :

Prof. E.E. ANGINO
Department of Geology
University of Kansas
210, Lindley Hall
Lawrence, Kansas 66045
U.S.A.