

INTERNATIONAL ASSOCIATION OF GEOCHEMISTRY AND COSMOCHEMISTRY

IAGC NEWSLETTER - NO. 6, FEBRUARY, 1977

BUSINESS MEETING SCHEDULED

Business meetings of the IAGC Council and General Assembly are scheduled to be held during the Second International Symposium on the Origin and Distribution of the Elements in Paris, May 10 - 13, 1977.

According to Section V of the Statutes, these meetings should take place during the quadrennial sessions of the International Geological Congress. In 1976, however, when IGC met in Australia it was not possible to get a quorum in attendance, so the meetings were rescheduled for Paris.

Members of IAGC who have questions to ask the Council, or who have problems or suggestions appropriate for discussion, are invited to attend the Council meetings. All members are urged to attend the General Assembly, although voting is by delegates representing the Member Organizations.

Members who cannot attend the meetings are urged to submit by mail items appropriate for consideration by the Council. These can have to do with organization, administration, programs and activities, publications, etc. Suggestions should be sent to:

Dr. Klaus Keil, Secretary
International Association of Geochemistry
and Cosmochemistry
Institute of Meteoritics
University of New Mexico
Albuquerque, New Mexico 87106 U.S.A.

Although there were no formal sessions of IAGC during the IGC meetings in Australia, interested individuals did get together on August 19 and August 23 to discuss problems confronting the Association. The following recommendations, "adopted" at the meetings, have been taken from memoranda prepared by William L. Petrie, Executive Secretary of the U. S. National Committee for Geochemistry:

1. Each Member Organization should have copies of the statutes. (These were supplied originally, but duplicates have not been sent as composition of the Member Organizations changed.)
2. The Nominating Committee should routinely seek nominations for IAGC officers by letter to the Member Organizations. (According to Section III.A.1 the Council prepares and circulates the list of nominations.)

3. There is a need for a current roster of officers and committees of the IAGC with names and addresses.

4. There is a need for an annual financial statement to members of IAGC.

5. A newsletter at least semi-annually is a vital need. The financial statement could be included in the newsletter to save cost.

6. Notices of meetings, symposia, etc. should be sent to the membership as soon as possible. (Most geochemists attending the August 19 meeting were surprised to learn that a General Assembly was being planned for Paris in May 1977.)

7. Formal notice of meetings should be given to each Member Organization in advance to elicit Agenda items. (The General Assembly consists of delegates drawn from the Member Organizations. All actions of the Council must be ratified by the General Assembly.)

No notice that the August 1975 General Assembly was to be postponed was received from the Secretary-General.

8. Have Council meetings and meetings of the General Assembly at International Geological Congresses. (This is specified in the statutes.) To postpone such a meeting (especially without adequate notice) is an affront to those planning to attend.

9. Relatively few countries are represented. The Secretary-General should be responsible for recruiting representation from other countries. Where financial problems exist, another class of membership should be possible - a zero (0) class that pays no dues but receives meeting notices.

PUBLICATIONS

Journals. It has long been felt that, in addition to symposium volumes, newsletters, etc., there should be a regularly scheduled journal for IAGC if a field could be identified where there is a real need for such a journal.

Recent independent studies by the Council and by Pergamon Press have indicated that the time is right to establish a journal of organic geochemistry. Pergamon Press has agreed to publish, on behalf of the Association, such a journal, to be called ORGANIC GEOCHEMISTRY.

The following brief sketch will supply essential information for members of IAGC and other interested individuals:

Rationale: ORGANIC GEOCHEMISTRY has been established in response to the need for a specialized medium for the publication of research in this highly interdisciplinary field. At present papers concerned with interrelated fields such as organic geochemistry, inorganic chemistry, geology, mineralogy, biogeochemistry, oceanography,

hydrology, atmospheric, and extraterrestrial subjects are published in many scattered journals. It is intended that ORGANIC GEOCHEMISTRY serve as a medium for the publication of reports on all phases of geochemistry in which organic substances play a role. Interpretation of this policy will be liberal to permit the broadest possible exchange of ideas. Among others, papers related to crude oils, coals, natural gas, and shales and their associated substances will be welcome, as will reports of studies on the roles of organic substances in the geochemical cycles of various elements. Reports of paleontological and coal petrographic studies will be considered favorably if they are geochemically oriented. Letters to the Editor, relevant news, and book reviews will be published. Individual issues of ORGANIC GEOCHEMISTRY may be devoted to papers presented at symposia.

Editorial staff:

Editor-in-Chief: Irving A. Breger
U. S. Geological Survey
923 National Center
Reston, Virginia 22092 U.S.A.

Associate Editors:

B. Alpern, Creil, France
J. Farrington, Woods Hole, Mass., USA
H. J. Gluskoter, Urbana, Ill., USA
T. Goldstein, Princeton, N.J., USA
E. Hare, Washington, D.C., USA
B. Hitchon, Edmonton, Alberta, Canada
T. Koyama, Nagoya, Japan
R. E. Miller, Reston, Va., USA
K. Niklas, Bronx, N.Y., USA
J. Oro, Barcelona, Spain
W. E. Robinson, Laramie, Wyo., USA
P. A. Schenck, Delft, The Netherlands
J. W. Smith, North Ryde, N.S.W., Australia
N. B. Vassoevich, Moscow, USSR
D. Victorovic, Belgrade, Yugoslavia

Schedule: The plan is to start the journal early in 1977 (March?). The first volume probably will consist of four issues. As receipt of manuscripts justifies it the numbers will be increased to six, eight, and eventually to twelve issues per volume (year).

Subscription price: Subscriptions can be sent to:

Pergamon Press, Ltd.
Headington Hill Hall
Oxford OX3 0BW
England

The initial price will be \$12.50 per volume for members of the IAGC. As numbers of pages and cost per page go up increases will undoubtedly be necessary. However, such increases will go into effect only after consultation with and approval by IAGC.

The President of IAGC, Prof. L. H. Ahrens, suggested two other potential journals that might be sponsored by the Association:

1. The series PHYSICS AND CHEMISTRY OF THE EARTH with its forthcoming volume, No. 10, is being given journal as opposed to monographic form. The publisher, Pergamon, agreed that IAGC could adopt the geochemical part as a regular journal of the Association at a very substantial reduction in subscription price to Association members. The Council has given its approval. Publication details are forthcoming and will be announced in future Newsletters as they become available.

2. GEOSTANDARDS NEWSLETTER. Many laboratories are preparing geochemical standards for analytical control, interlaboratory comparisons, comparisons of analytical techniques, etc. For example, a recent article by F. J. Flanagan, Geochim. Cosmochim. Acta, Vol. 38 (1974), pp. 1731-1744, lists 215 such standards from 38 different sources.

The stage has been reached where a newsletter is needed to keep up with availability of the samples, results of analyses of the materials, -- including computer techniques for processing the data, -- discussions of techniques for analyzing various kinds of samples, etc.

No. 1 of such a newsletter, GEOSTANDARDS NEWSLETTER, appeared in July, 1976, under the editorship of K. Govindaraju. It is published by the Working Group on Analytical Standards of Minerals, Ores, and Rocks of the Association Nationale de la Recherche Technique, Paris.

The editor of the Newsletter and Dr. H. de la Roche, the new Director of the Centre National de la Recherche Scientifique, have been favorably impressed by Prof. Ahrens' suggestion of adoption by IAGC, especially if a Working Group on Geostandards were organized in the Association to assist in editing the Newsletter and in administering the program. For example, the scope of sampling might be expanded to include samples of natural waters, meteorites, various kinds of organic matter not already included, etc.

Again, details need to be worked out and developments will be outlined in future IAGC Newsletters. In the meantime, membership in the Working Group is available to interested individuals at 250 French francs per year. Membership fee includes a subscription to the Newsletter. The journal can also be purchased by non-members at 70 FF per issue. Write to:

Association Nationale de la Recherche Technique (Groupe 35 A)
101, Avenue Raymond Poincare, 75116
Paris, France

Other publications. Most of the publications with which IAGC has been concerned are listed on pp. 13-14 of Newsletter No. 5 (q.v.). One important proceedings volume was inadvertently omitted, however. This was the proceedings of the First

International Conference on Kimberlites, which was held in Capetown, South Africa, Sept. 23-29, 1973. IAGC was a co-sponsor.

The proceedings volume was edited by L. H. Ahrens, J. B. Dawson, A. R. Duncan and A. J. Erlank and was published as No. 9 in the series Physics and Chemistry of the Earth, Pergamon Press, Ltd., Oxford. The volume is hard cover, is dated 1975 and contains 940 pages. It can be ordered from:

Maxwell Scientific, Inc.
Fairview Park
Elmsford, N.Y. 10523

The retail price is \$87.50 plus postage. IAGC members receive a 60% discount on the volume; the special price is \$35.00. When ordering, members must indicate that they are members of IAGC and must pre-pay the full amount.

Another proceedings volume appeared late in 1976, from the First International Symposium on Water-Rock Interaction, Prague, 1964. (See IAGC Newsletter No. 5, pp. 2-3.) The volume was edited by J. Cadek and T. Paces. It is paperback, approximately seven by ten inches in size, and contains 464 pages. It can be obtained by writing to:

Dr. Josef Cadek
Geological Survey Prague
Malostranske nam. 19
Prague 1, Czechoslovakia

Two interesting reports that have not been reviewed or widely circulated have recently been issued. A recent letter from Cyril Ponnamparuma, Director of the Laboratory of Chemical Evolution at the University of Maryland, calls attention to two colloquia recently held at College Park:

1. Chemical Evolution of the Early Precambrian, held October 29-November 1, 1975.
2. Chemical Evolution: Comparative Planetology, held September 29-October 1, 1976.

Reports of the two colloquia were issued by the Laboratory, but are no longer available. The first one will be published by Academic Press in April, 1977, and the second one by the end of 1977.

Another forthcoming volume is Review of Research on Modern Problems in Geochemistry. UNESCO invited the Association to prepare this volume and it has done so under the editorship of Frederic R. Siegel, Department of Geology, George Washington University, Washington, D. C. The volume, which includes a dozen chapters by 18 authors, is in press at Unesco. Details of publication are forthcoming.

MEETINGS

Most of the recent and planned meetings and symposia involving IAGC are outlined in Newsletter No. 5.

A. Meetings Already Held.

Two important meetings not listed there, of which IAGC was a sponsor, are the Sixth and Seventh International Congresses of Organic Geochemistry. The Sixth was held in Paris, September 18-21, 1973, and the Seventh in Madrid, September 16-19, 1975.

At the Sixth Congress there were eight subject sections:

1. Organic geochemistry of humic substances and kerogen.
2. Steroids and terpenoids from geological sources.
3. Origin of oil, gas, and coal in sedimentary basins.
4. Organic geochemistry of oceans and other natural waters.
5. Sulfur in fossil fuels and sediments.
6. Organic-inorganic interactions.
7. Proteins, purines, and pyrimidines.
8. Environmental geochemistry.

Most of the papers have been published in a Proceedings Volume of the Congress. It is a hard cover volume published by a consortium of French publishers, Scientific and Medical Publications of France, Inc. The volume is available from the publisher for US\$163.50, at the following address:

S.M.P.F., Inc.
111 West 57th Street
Suite 317
New York, New York 10019 USA

There are no reduced prices either for members of IAGC or for the authors who contributed to the volume.

No proceedings volume has been published for the Seventh Congress (Madrid, 1975).

B. Future Meetings.

Tenth International Congress on Sedimentology, Jerusalem, July 9-14, 1978.

Themes of the Congress:

1. Dynamics of sedimentary processes
2. Modern environments of deposition - detailed studies of specific environments
3. Diagenesis and lithification
4. Regional syntheses of sedimentary basins

7. Sedimentary aspects of geomorphology, paleoclimatology and hydrogeology
8. Sedimentary mineral deposits
9. Chemical sedimentology
10. Effects of man on sedimentation

Symposia:

1. Environments of deposition of chalk and chert associations
2. Stratigraphy and environments of deposition of Nubian Sandstone (Middle East and North Africa)
3. New aspects of sedimentation in small ocean basins: the JOIDES results from the Mediterranean Sea, the Red Sea and the Black Sea
4. Sedimentary basins and the origin of fossil fuels
5. Calcrete - past and present
6. Sedimentological and biological interactions in coral reefs
7. Global tectonics and sedimentation
8. The effect of human activities on the ecology and sedimentation of lakes and reservoirs
9. Phosphorites
10. Evaporites: deep-sea, shallow water or subaerial?

There will be two pre-congress excursions in Israel, July 2-6, and nine post-congress excursions, July 16-18 and July 19-21; also, overseas excursions to Turkey and Cyprus, July 23-29.

Copies of the first circular and other pertinent information can be obtained from:

Secretariat
10th International Congress on Sedimentology
P. O. Box 10271
Tel Aviv, Israel

Brief notices of other meetings of interest to members of IAGC are listed here:

Eighth Lunar Science Conference, Johnson Space Center, Houston, Texas. For information contact: Program Committee, 8th Lunar Science Conference, Lunar Science Institute, 3303 NASA Rd., Houston, TX 77058. Dates: March 14-18, 1977.

Solid-Fluid Interactions, Leeds, England. For information contact: H. Elderfield, Dept. of Earth Sciences, University of Leeds, Leeds LS2 9JT, England. Dates: April 18-20, 1977. This is the triennial meeting of the Geochemistry Group of the Mineralogical Society.

Nuclear techniques in exploration, extraction, and processing of mineral resources, Vienna, Austria. For information contact: John H. Kane, Office of Public Affairs, Energy Research and Development Administration, Washington, D. C. 20545. Dates: March 7-11, 1977.

Symposium on the Relationship of Plate Tectonics to Alaskan Geology and Resources, Anchorage, Alaska. For information contact: Alaska Geological Society, Box 1288, Anchorage, Alaska 99510. Dates: April 3-6, 1977.

Colloquium on Earth Sciences and Measurement, Orleans, France. For information contact: J. Bodelle, Director of the Service Geologique National, BRGM, Boite Postale 6009, 45018 Orleans Cedex, France. Dates: May 4-5, 1977.

Annual meeting of the Institute of Environmental Sciences. For information contact: Betty L. Peterson, Institute of Environmental Sciences, 940 Northwest Highway, Mount Prospect, Ill. 60056. Dates: April 25-28, 1977.

Conference on Uranium and Thorium Research and Resources, Golden, Colorado. For information contact: J. A. Campbell, U. S. Geological Survey, 976 Denver Federal Center, Denver, Colorado 80225. Dates: April 27-28, 1977.

Symposium on Machine Processing of Remotely Sensed Data, Purdue University. For information contact: J. C. Lindenlaub, Laboratory for Applications of Remote Sensing, Purdue Univ., West Lafayette, Indiana 47906. Dates: June 21-23, 1977.

Short Course on X-ray Spectrometry, Albany, New York. For information contact: Henry Chessin, State University of New York, Department of Physics, 1400 Washington Avenue, Albany, N.Y. 12222. Dates: June 6-17, 1977.

Annual meeting of the Meteoritical Society, Cambridge, England. For information contact: E.R.D. Scott, Dept. of Mineralogy and Petrology, Downing Place, Cambridge CB2 3EW, England. Dates: July 24-30, 1977.

Annual meeting on Trace Substances in Environmental Health, Columbia, Missouri. For information contact: D. D. Hemphill, Environmental Trace Substance Research Center, University of Missouri, Columbia, Missouri 65201. Dates: June 7-9, 1977.

International Symposium on Modern and Ancient Lake Sediments, Copenhagen. For information contact: M. E. Tucker, Dept. of Geology, Newcastle-upon-Tyne, England, or A Matter, Dept. of Geology, Berne, Switzerland. This symposium is sponsored by the International Association of Sedimentologists and the Societe International Limnologiae. Dates: August 12-13, 1977.

General Assembly of the Internat. Assoc. of Volcanology and Chemistry of the Earth's Interior and the International Association of Seismology and Physics of the Earth's Interior, Durham, England. For information contact: R. E. Long, Department of Geological Sciences, University of Durham, South Road, Durham DH1 3LE, England. Dates: August 9-19, 1977.

Clay Minerals Conference and Annual Meeting of the Clay Minerals Society, Kingston, Jamaica. For information contact: V. G. Hill, Ministry of Mining and Natural Resources, P. O. Box 495, Kingston, Jamaica. Dates: August 14-20, 1977.

Meeting on Mineral Resources in Developing Countries and later field trips, Lusaka, Zambia. For information contact: A. G. Shakespeare, School of Mines, University of Zambia, Box 2379, Lusaka, Zambia. Dates: August 3-5, 1977. As a follow-up to this meeting there will be a geochemical workshop to provide intensive training in applied geochemistry for young scientists attending the meetings. Information about the training sessions can be obtained from P. G. Cooray, Department of Geology, School of Mines, University of Zambia, Lusaka. Dates for this session are August 14-21, 1977.

Symposium on the Effects of Urbanization and Industrialization on the Hydrological Regime and on Water Quality, Amsterdam, The Netherlands. For information contact: A. I. Johnson, U. S. Geological Survey, Mail Stop 417, Reston, Virginia 22092. Dates: October 2-7, 1977.

Annual Meeting of the American Water Resources Assn., Tucson, Arizona. For information contact: D. D. Evans, Department of Hydrology and Water Resources, University of Arizona, Tucson, Arizona 85721. Dates: October 31-November 3, 1977. The theme for the meeting is the assessment, management and politics of water. Tentative topics for the sessions include: national water assessment; water law; water and energy; water and industry; water-based recreation; quality control; desalination; conservation; water reuse; limnology; irrigation practices; hydrologic modeling; water planning; flood-plain management; education and manpower; decision making; climatic change; world hunger and water development.

Symposium on Lithium, Corning, New York. For information contact: George Edwards, Corning Glass Works, Bldg. 52, 2nd floor, Corning, N.Y. 14830. Dates: October 12-14, 1977.

Field Conference on Archaean Geochemistry, Hyderabad, India. For information contact: G. N. Hansen, Dept. of Earth and Space Sciences, State University of New York, Stony Brook, New York 11794. Dates: November 15-27, 1977.

Annual meetings of the Geological Society of America, Seattle, Washington. For information contact: GSA Headquarters, 3300 Penrose Pl., Boulder, Colorado 80301. Dates: November 7-9, 1977. Other associated societies holding meetings at the GSA meeting: Paleontological Society, Society of Economic Geologists, Mineralogical Society of America, Geoscience Information Society, Geochemical Society, National Association of Geology Teachers, Society of Vertebrate Paleontology, and the Cushman Foundation.

GSA Penrose Conference on Subaqueous Volcanic Rocks, Santa Barbara, California. Field trips to Miocene subaqueous volcanic rocks. For information contact: R. V. Fisher, Dept. of Geological Sciences, University of California at Santa Barbara, Santa Barbara, California 93106. Dates: November 27-December 3, 1977. Sessions will be on three main topics: physical characteristics, and mechanisms of fragmentation and emplacement; morphology and origin of subaqueous lavas; geochemical interaction of water and effusive lavas and volcanoclastic materials and possible changes through time. Purpose is to identify problems related to the geology of subaqueous volcanic rocks and to survey the present state of knowledge of subaqueous volcanic processes.

LIAISON WITH UNESCO

UNESCO has requested IAGC to suggest a program in Geochemistry that could be developed by UNESCO on an international scale. A committee has been appointed to consider the problem, but no recommendations have been made to UNESCO.

The first subject considered was Applied Geochemistry (essentially Geochemical Exploration). This appeared promising at first glance, but now that the Association of Exploration Geochemists and its Journal of Exploration Geochemistry are operating internationally the field is much less attractive for UNESCO.

Environmental Geochemistry and Health has also been considered. Since the food supply of most Third World countries is largely locally derived this subject could be attractive and important for UNESCO.

There is a Society of Environmental Geochemistry and Health, but it is headquartered in the United States, most of its members and contributors are from the U.S., and most of the papers presented and published (some in its journal Interface) are more general than geographic deficiencies and excesses of trace elements, which can be so important in developing countries.

If members have comments on these suggestions, or other suggestions, they should be sent to the Chairman of the Liaison Committee (Earl Ingerson) or to the President of the Association.

TREASURER'S REPORT

Several members have expressed interest in the Association's financial condition. For general information the Treasurer's financial statement for the fiscal period July 1, 1975 to August 13, 1976, is reproduced herewith. Statements for previous fiscal periods back to July, 1972, are available from the Treasurer.

July 1, 1975, to August 13, 1976

Credit balance brought forward as shown on statement from June 30, 1974 to June 30, 1975		\$9,475.68
Income received since that date - Ordinary Membership and Corporate Membership	2,103.84	
Interest to June 30, 1976	<u>337.59</u>	<u>2,441.43</u>
<u>Total Income</u>		<u>\$11,917.11</u>

EXPENDITURES

Bank draft Dr. A. El Goresy refund Chem. Geol. fees	13.58
Bank draft Prof. Aswathanarayana, toward expenses of Directory of Geochemists (\$125 US)	99.32
Bank draft Prof. L.H. Ahrens - financial support symposium	258.05
Secretarial assistance Mrs. M. Germaine	100.00
	96.25

(Treasurer's report, continued)

Postage, IAGC notices	25.00
Secretarial assistance Mrs. M. Germaine	200.00
Phone call, Sydney; Prof. J. F. Lovering	6.00
Bank charges	<u>2.35</u>
<u>Total expenditures</u>	<u>800.55</u>
Balance in hand as of August 13, 1976	<u>\$11,116.56</u>

ORGANIZATION

Current officers and council members of IAGC are:

President:

Prof. L. H. Ahrens
Dept. of Geochemistry
University of Cape Town
Private Bag, Rondebosch
Cape, South Africa

Treasurer:

Prof. J. F. Lovering
Dept. of Geology
University of Melbourne
Parkville, Victoria 3052
Australia

Vice Presidents:

Prof. V. V. Shcherbina
Vernadsky Institute of Geochemistry
and Analytical Chemistry
USSR Academy of Sciences
Vorobeyskoe Shosse 47a
Moscow V-334, USSR

Associate Treasurer:

Dr. Z. Pacal
Na Chodovci 2489
Praha 4 - Sporilov 11
Czechoslovakia

Prof. K. H. Wedepohl
Geochemisches Institut der
Universität Göttingen
Goldschmidtstrasse 1
34 Göttingen, West Germany

Council Members

Prof. G. M. Brown
Dept. of Geology
The University
Durham, England

Secretary:

Prof. Klaus Keil
Institute of Meteoritics
University of New Mexico
Albuquerque, N.M. 87106 USA

Dr. Giorgio Ferrara
Laboratorio per Recherche
Radiometriche
Applicato alla Geocronologia
e Paleoecologia
Via S. Maria 22
56100 Pisa, Italy

Associate Secretary:

Prof. Ralph M. Perhac
Electric Power Research Institute
P.O. Box 10.412
Palo Alto, California 94304 USA

Dr. Juan Goni
Bureau de Recherche Geologique
et Miniere
B. P. 6009
Orleans la Source 45, France

(Continued)

(Council members , continued)

Professor Earl Ingerson , Past President
Dept. of Geological Sciences
University of Texas at Austin
Austin , Texas 78712

Prof. E. Lal
Tata Institute of Fundamental Research
Homi Bhabha Road
Bombay 5 , India

Prof. D. M. Shaw
Department of Geology
McMaster University
Hamilton , Ontario
Canada

Prof. Ken Sugawara
9 of-7 Chome
Denenchofu , Otaku
Tokyo , Japan

Prof. E. Szadeczký-Kardoss
Museum korut 4/a
Budapest VII , Hungary

Prof. N. B. Vassoevich
Dept. of Geochemistry
Moscow State University
Moscow V-234 , USSR

Corporate Members of IAGC , with the contact individual for each are:

The Royal Society
c/o The Executive Secretary
Attn.: Miss N. P. Norris
6 Carlton House Terrace
London SW 1 , England

Consiglio Nazionale della Ricerche
Piazzale delle Scienze 7
00100 Roma , Italy

National Committee for Geochemistry
and Cosmochemistry
c/o The Executive Secretary
Australian Academy of Science

P. O. Box 216 , Civic Square
Canberra City , A.C.T. 2608
Australia

South African Council for Scientific and
Industrial Research
c/o Prof. L. H. Ahrens
Dept. of Geochemistry
University of Cape Town
Private Bag , Rondebosch
Cape , South Africa

Norwegian Academy of Science and Letters
c/o Prof. K. S. Heier
Norges Geologiske
Under-Søkelse , Postboks 3006
Trondheim , Norway

(continued)

Kon Ned Akademie v. Wet Schappen
c/o Dr. N. M. De Rooij, Secretary
Geochemische Kring
Princetonplein 5
Utrecht 2506, Holland
The Netherlands

Schweiz Mineralogische und Petrographische
Gesellschaft, Zurich
c/o Dr. H. A. Stalder
Naturhistorisches Museum
Bernstrasse 15
3000 Bern, Switzerland

Geological Survey of Iran
c/o Dr. N. Khadem, Managing Director
P. O. Box 1964
Tehran, Iran

Deutsche Mineralogische Gesellschaft
c/o Prof. W. Knoll
D-5090 Leverkusen 3
Am Wasserturm 15A, Germany

Japanese Joint Commission
c/o Mr. T. Morinaga, Chief Acct. Section
Science Council of Japan
22-34 Roppongi, 7 Chome
Minato-Ku, Tokyo, Japan

U. S. National Academy of Sciences
c/o Dr. W. L. Petrie, Executive Secretary
National Research Council
Division of Earth Sciences
2101 Constitution Avenue
Washington, D. C. 20418 U.S.A.

Czechoslovakian National Committee
c/o Dr. B. Čambel
Slovenska Akademia Viet Geol. Ustav-Biblio.
Ulica Obrancov Mieru 41
886 25 Bratislava, Czechoslovakia

Committee of Soviet Geologists
c/o Dr. V. V. Shcherbina
U.S.S.R. Academy of Sciences
Vorobevskoe Shosse 47a
Moscow V-334, U.S.S.R.

STATUTES

The Statutes of the Association have not been revised recently. Some of the provisions need to be changed. Suggestions have been made to the Standing Committee on Statutes but thus far no action has been taken.

With the thought that many members will be interested in the rules that govern the activities of IAGC the complete set of current statutes is reproduced herewith.

STATUTES OF THE INTERNATIONAL ASSOCIATION OF GEOCHEMISTRY AND COSMOCHEMISTRY

I. Name, objectives and membership of the Association.

- A. The organization shall be known as the International Association of Geochemistry and Cosmochemistry (I.A.G.C.). The word "geochemistry", where used alone hereinafter, shall be understood always to include "cosmochemistry".
- B. The principal objective of the Association shall be to foster co-operation in, and advancement of geochemistry and cosmochemistry in their broadest sense,

1. By working with any interested group in planning symposia and other types of meetings related to geochemistry;
2. By sponsoring publications in geochemistry of a type not normally covered by existing organizations;
3. By appointment of Commissions to study problems that require, or would profit from international co-operation.

C. Membership of the Association shall be of four classes:

1. Corporate members who shall be

national organizations, such as committees, societies, academies, councils, or groups of geochemists, one of which in each country shall be designated as the official representative (Member Organization) of that country and shall be entitled to vote in the General Assembly;

2. Individuals who are interested in any aspect of pure or applied geochemistry;

3. Sustaining members who shall be individuals or organizations particularly interested in the Association and its work and who make annual contributions substantially greater than the regular dues, as specified below under Finances;

4. Honorary Fellows. Individuals distinguished for their contributions to geochemistry or cosmochemistry may be nominated as Honorary Fellows from time to time by the Council, their election being ratified by a General Assembly of the Association. Such Honorary Fellows shall be elected for life and shall pay no dues to the Association.

II. Administration.

A. General Assembly

1. Final authority and decisions on all matters shall rest with the General Assembly.
2. At a business meeting of the Association, the voting members of the General Assembly shall consist of delegates from Member Organizations. Voting power and dues category of each Member Organization shall be determined by the Group into which it falls in the following table:

Group	A	B	C	D	E	F
Number of geochemists represented	< 25	26-100	101-250	251-500	500-1000	> 1000
Voting power	1	1	2	2	3	3
Dues (Units)	1	1	4	6	8	10

3. Each Member Organization may be represented at the General Assembly by a number of Delegates not exceeding its voting power. Each Member Organization may also appoint not more than two Alternates who may take part in the General Assembly, but who have no vote. The Delegates and Alternates must present their credentials to the Secretary in advance of the General Assembly.
4. Representatives of other organizations that are corporate or sustaining members may attend meetings and take part in discussions, but shall have no vote.
5. In case it should become necessary to take postal ballots between regular meetings, all of the corporate members representing their respective countries shall be polled by air mail.

B. Council

1. The Council shall consist of a President, two Vice-Presidents, Secretary, Treasurer and eight ordinary members, all of whom shall be elected by the General Assembly. No two of the ordinary members shall be from the same country. The President, two Vice-Presidents, and ordinary members of the Council shall not be eligible for immediate re-election, but the retiring President shall serve for one term as an additional ordinary member. The Council shall have power to fill casual vacancies among the officers and members of the Council for the remainder of the period of office of the retiring member.
2. The Council shall be responsible for supervising the activities, conducting the business, and achieving the objectives of the Association.
 - a. The Council or the General Assembly may appoint commissions or committees, as required, to carry out functions of the Association.
 - b. The Council shall instruct the Treasurer as to the kinds of expenses for which funds may be used, but shall not authorize each disbursement.
 - c. The Council shall act for the General Assembly between meetings of the latter.
 - d. The actions of the Council must be ratified by the General Assembly at its next meeting.

C. Executive Committee

1. There shall be an Executive Committee, consisting of the President, the two Vice-Presidents, Secretary, and Treasurer.
2. The Executive Committee is empowered to take emergency action on behalf of the Council when there is not time to poll the entire Council, and to act on minor matters on which polling the entire Council is not justified.

3. Interim actions of the Executive Committee must be ratified by the Council at its next meeting.

III. Nomination and election of Officers and Council.

A. Nominations

1. The Council shall prepare a list of nominations for Officers and members of the Council for the ensuing period, and cause the list to be sent to all voting members of the Association, via air mail, at least 90 days prior to the regular meeting of the General Assembly, together with notice of the said meeting.
2. Additional nominations for one or more officers or members of the Council may be made in writing to the Secretary by 15 or more members of the Association not less than 60 days prior to the meeting of the General Assembly.

- #### B. Election of officers and councilors shall be by majority vote of the General Assembly and term of office shall be the period until the next regular meeting of the General Assembly.

IV. Finances.

A. Dues and contributions.

1. Annual dues of all classes of members shall be established by the Council and ratified by the General Assembly.
2. Member Organizations shall pay annual dues according to the group in which they fall into the table of Article II, A, 2.
3. Other corporate members shall pay annual dues significantly greater than those of individual members.
4. Sustaining members shall make annual contributions to the Association substantially larger than the annual dues they would pay as individual or corporate members.
5. Changes in the dues and contributions may be made on the recommendation of the Council and ratification by the General Assembly.

- #### B. The Treasurer shall make an annual report of receipts and disbursements to the General Assembly through the Council. The Council shall appoint a committee to verify the accuracy of the report in advance of its presentation.

- #### C. The funds of the Association shall be lodged in a bank in the country of the Treasurer and be at his disposal, subject to the instructions from the Council. In the event that the office of the Treasurer should be vacant, the President may transfer the funds to the custody of an Acting Treasurer until another Treasurer is duly elected.

V. General.

- A. The Association may affiliate with appropriate international union and other international organizations with geochemical interests in order to further the objectives of the Association. Any affiliation sought at the time of organization may be by vote of those present at the organizational meeting. Subsequent ones should be upon recommendation by the Council.
- B. National, local, and specialistic organizations seeking affiliation with the Association should become Corporate Members thereof.
- C. Regular meetings of the General Assembly shall be held at the same time and place as those of the International Union of Geological Sciences.
- D. The Council shall also hold regular meetings at these times, but may also hold interim meetings, as deemed necessary by the Executive Committee, either separately or in conjunction with meetings of other appropriate organizations. The Council may take ballots via air mail on important or emergency matters in lieu of interim meetings.
- E. Within the framework of these statutes, the Council shall have the power to adopt By-Laws.
- F. The Executive Committee may meet at the above-specified times, or at others when the Council does not meet, if such meetings appear essential. Normally, however, their interim decisions shall be made by correspondence, telegrams, etc.
- G. The official languages of the Association shall be English, French, German, and Russian. The English text shall be considered the authoritative one in the interpretation of these statutes.
- H. Changes in these statutes may be effected only by a two-thirds majority vote of the General Assembly. Recommendations for changes may be submitted either by the Council or by a group of at least 20 members of the Association. Such recommendations must be in the hands of the Secretary at least six months prior to the date of the next meeting of the General Assembly.

