

# International Association of Geochemistry and Cosmochemistry

## President

Valery L. Barsukov  
Director  
Veradsky Institute of Geochemistry  
and Analytical Chemistry  
Academy of Sciences of the U.S.S.R.  
Moscou 117334. U.S.S.R.

NEWSLETTER

N° 13

## Vice-Presidents

Mark H. Grönenfelder  
Swiss Federal Institute of Technology  
Sonneggstrasse  
CH-8092 Zurich. SWITZERLAND

December 1981

Brian Hitchon  
Alberta Research Council  
11315-87 Avenue  
Edmonton, Alberta  
T6G 2C2 CANADA

Edited by S. DEUTSCH

## Secretary

Sarah Deutsch  
Universite Libre de Bruxelles  
Laboratoires de Mineralogie et de Petrologie  
Avenue F.-D. Roosevelt, 50  
1050 Bruxelles, BELGIUM

## Treasurer

Ernest E. Angino  
Department of Geology  
University of Kansas  
Lawrence, Kansas 66045. U.S.A.

## Past President

George Wetherill  
Director  
Department of Terrestrial Magnetism  
Carnegie Institution of Washington  
5241 Broad Branch Road, N.W.  
Washington, D.C. 20015. U.S.A.

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## I. IRKUTSK COUNCIL MEETING

This council meeting took place during the second International Symposium on "Methods of Applied Geochemistry" organized by the IAGC Working Group on Geochemical Prospecting (Irkutsk, USSR, September 1981).

The following members were present : V. BARSUKOV, President, USSR - B. HITCHON, Vice-President, Canada - S. DEUTSCH, Secretary, Belgium - E. ANGINO, Treasurer, USA - G. WETHERILL, Past-President, USA - I. BARNES, Council Member, USA - L. KOGARKO, Council Member, USSR.

### 1. PRESIDENT BARSUKOV'S REMARKS

Since the time of reelection of the executive committee and members of the Council of IAGC, which took place in Paris in July 1980, the main attention has been directed towards the elaboration of the program of the section "Geochemistry and Cosmochemistry" of the future Geological Congress to be held in Moscow in 1984. The tentative program has now been completed and presented for discussion (see §3).

To fulfil the desire of some scientists in the field of the geochemistry of alkaline rocks as addressed to President BARSUKOV at the Paris Meeting, a field trip to Kola Peninsula was organized by the Institute of Geochemistry and Analytical Chemistry and by the Institute of Ore Deposits of the Academy of Sciences (USSR). It took place from July 15th to August 12th, 1981. Seven participants - from Canada, Denmark and Western Germany - attended this trip.

In addition, IAGC has taken part in the organization of the coming joint IAGC-IAVCEI (International Association of Volcanology and Chemistry of the Earth's Interior) symposium "Generation of Major Basalt Types" which is planned to be held in Reykjavik, Iceland, in August 1982. IAGC will also sponsor the 5th International Conference on Geochronology, Cosmochronology and Isotope Geology in June, 1982, Tokyo, Japan.

President BARSUKOV pointed out that it was necessary to concentrate our efforts on the fulfilment of the programs and symposia which were planned by the former Council (1976-80). It was necessary to examine the reports of the working groups, to eliminate the inactive working groups and to promote new ones as required by the present state of development of geochemistry. Three new working groups will be proposed :

- Thermodynamics of Natural Processes
- International Geochemical Standards
- International Geochemistry Teaching

President BARSUKOV emphasized the necessity of strengthening the work of the National groups of IAGC and that of forming such groups in the countries where they are lacking. He suggested to ask representative members of these groups to spread information concerning IAGC activities.

A report on the 1981 activities of IAGC including medium to long term plans is required before December 1981 by IUGS ; it should be discussed by the Council members.

### 2. TREASURER'S REPORT

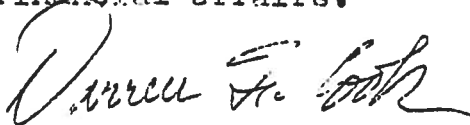
In September 1981, membership stood at 337 individual members and 19 corporate members ; of corporate members, 13 have paid for 1981. New dues notices will be sent about Jan. 1st, 1982.

INTERNATIONAL ASSOCIATION OF GEOCHEMISTRY & COSMOCHEMISTRY  
REVENUE AND EXPENDITURE REPORT  
FOR THE PERIOD JULY 1, 1980 TO SEPTEMBER 30, 1981

Fund Balance at 7/1/80			\$10,000.00
Revenues:			
Individual Dues	\$4077.17		
Corporate Dues	<u>2124.40</u>	\$6201.57	
Expenditures:			
Newsletter	\$1010.00		
Prepayment for 1982 Tokyo Geochronology Conference	200.00		
Postage	142.58		
Printing	113.89		
Secretarial Services	93.32		
Travel	1728.00*		
Miscellaneous	<u>289.69</u>	<u>3577.48</u>	
Excess of Revenues over Expenditures			<u>2,624.09</u>
FUND BALANCE at 9/30/81			<u>\$12,624.09</u>

\*At least \$1000. is reimbursable via NAS.

I have examined the books and bank account maintained by Treasurer, E. E. Angino, and believe the accompanying financial statement for the period ending September 30, 1981 to be a true and correct record of the Association's financial affairs.

  
Darren E. Cook  
Independent Accounting Services

### 3. DISCUSSION OF THE PROGRAM OF "GEOCHEMISTRY AND COSMOCHEMISTRY" SECTION AT THE 27th SESSION OF THE INTERNATIONAL GEOLOGICAL CONGRESS (IGC), MOSCOW, 1984

President BARSUKOV is a member of the Presidium of the Organizing Committee of IGC and Dr KOGARKO is a member of the Committee.

The tentative program was discussed. Council members were urged to send their suggestions and comments before Jan. 1st, 1982. It was suggested, at this meeting, by Dr WETHERILL to organize a symposium on "Implications of noble gas studies on the origin and early history of the Earth and the Planets" in collaboration with the IUGS Committee on Comparative Planetology. He is intending to discuss with the Chairman of committee to cosponsor it. The IAGC Council supported this proposal.

The Council agreed to propose the following persons as organizers of the final program of the section "Geochemistry and Cosmochemistry": V. BARSUKOV (USSR), M. GRUNENFELDER (Switzerland), B. HITCHON (Canada) and G. WETHERILL (USA).

### 4. REPORTS OF THE WORKING GROUPS (W.G.)

The Council heard reports from:

- Dr L.V. TAUSON, Irkutsk Institute of Geochemistry, on "Geochemical Prospecting";
- Dr G. VALYASHKO, Dept. of Geochemistry (Moscow), on "Geochemistry of Natural Waters";
- Dr B. HITCHON, Alberta (Canada), on "Interaction between Water and Rock";
- Dr J. GONI, B.R.G.M., Orléans (France), on "Laterites and Laterization".
- Dr ZARTMAN and Dr ASWATHANARAYANA sent a report on the W.G. on Isotope Geochemistry.
- The Council decided to reactivate two commissions on:
  - a) "Geochemistry and Health"  
Dr E. ANGINO agreed to contact scientists who might be interested in that field;
  - b) "Extraterrestrial Geochemistry"  
Dr G. WETHERILL proposed that this IAGC working group should sponsor a one day symposium to be held in conjunction with the 46th Meeting of the Meteoritic Society in Mainz (W.Germany) in 1983. The title would be: "From Asteroids to meteorites". He agreed to contact the Council of the Meteoritic Society to discuss this proposal. The IAGC Council approved this proposal.

Summaries of the reports of the W.G. are added to this Newsletter.

### 5. ORGANIZATION OF NEW WORKING GROUPS

#### a) Thermodynamics in the Earth and Planetary Sciences

Dr I.L. KHODAKOVSKY, from the Vernadsky Institute of Geochemistry, Moscow, explained the aims of the proposed working group:

- periodical information on the current and planned experimental and theoretical investigations in this field;
- compilation of a thermodynamical data bank for minerals, aqueous solutions and gas covering a wide temperature and pressure range;
- organization of International symposia and schools on the application of thermodynamics in Geochemistry and Cosmochemistry.

The Council approved unanimously the formation of this W.G., in which more than 40 scientists from different countries have already expressed their interest.

Dr KHODAKOVSKY was appointed Chairman of this group.

Dr HITCHON mentioned the interaction of this new W.G. with interest groups 6, 7, 8 of the subsection E "Interaction between Water and Rock" of the commission on the geochemistry of natural waters. He proposed to cancel these interest groups and to hand the membership list to the new W.G.

#### b) International Geochemistry Teaching

Dr RYIGENKO, from Vernadsky Institute, Moscow, presented the main aims of the proposed W.G. :

- expand of geochemical understanding among field geologists and geology post graduates ;
- regular organization of schools, mostly in the field of Applied Geochemistry.

Particular emphasis would be placed on education in developing countries.

Taking into account the financial difficulties of such a project, particularly the increasing travel expenses, the decision has been taken to postpone the creation of this W.G. A concrete proposal should be presented to the next Council meeting after due inquiry for financial support from UNESCO and other United Nations Agencies.

#### c) International Standards

For many years, the possibility of providing international and national reference samples of rocks has been discussed by IAGC councils. The opinion of IAGC members on this subject was solicited by letter in July 1981. The answers have shown a real interest in this topic and the necessity of working along this line. It was decided, as a first step; to propose the nomination of IAGC members on the Editorial Board of Geostandards Newsletter as suggested by Dr K. GOVINDARAJU (editor-in-chief). The names of Dr H. WÄNKE (W.Germany) and Dr BELYAEV (USSR) were proposed.

President BARSUKOV intends to discuss this problem further with Dr H. de la ROCHE, President of Geostandards Newsletter and Dr GOVINDARAJU.

#### 6. RELATIONS WITH THE ASSOCIATION OF EXPLORATION GEOCHEMISTRY (AEG)

Because the aims of the AEG and the IAGC working group on "Geochemical prospecting" are so similar, the possibility of a better connection between them was discussed.

Dr A. BJORKLUND, Dr K. KAURANNE, from the Geological Survey of Finland, and Dr B. BÖLVIKEN, from the Geological Survey of Norway, discussed the possibility of arranging a joint symposium for AEG and IAGC in Helsinki in 1983. The Scandinavian organizing committee for the 10th International Geochemical Exploration Symposium (IGES) could take responsibility for arranging the 3rd "Methods of Applied Geochemistry" (MAG) Symposium on behalf of the IAGC's W.G. on Geochemical Prospecting.

This means that the 1983 Symposium in Helsinki would be the 10th IGES, the 3rd MAG with a common organizing committee. Dr TAUSON and the IAGC's W.G. on geochemical prospecting fully supported this suggestion. The Council of IAGC endorsed this arrangement. It will be submitted by Dr BJORKLUND to Dr LOWSTROM, USA, AEG President, Dr WETHERILL will contact him also.

A joint symposium in Helsinki would provide the possibility for IAGC and AEG to get together and discuss forms of additional cooperation for future.

#### 7. RECOMMENDATIONS FOR THE CONTENT OF NEWSLETTER

In order to draw the interest of the geochemists and to provide more information, it was decided to aim at publishing lists of the most important books in different domain of geochemistry. The Chairman of the various W.G. are asked to send such lists to the Secretary to be published in Newsletter at least twice a year.

#### 8. INFORMATION ABOUT THE COMING COUNCIL MEETING

The following decisions were made :

- 1982 : the Council Meeting will be held before the IAVCEI/IAGC Meeting on "Generation of major basalt types", August 15 to 22, Reykjavik (Iceland) ;
- 1983 : Meeting in Japan during 4th International Symposium on "Water Rock Interaction" sponsored by IAGC and organized by the WRI W.G. (from August 29 to September 8) ;

1984 : Meeting in Moscow during 27th Session of the IGC.

#### 9. RELATIONS BETWEEN IAGC AND INTERNATIONAL UNION OF PURE AND APPLIED CHEMISTRY (IUPAC)

A meeting was held at Leuven, Belgium (August 1981) between IUPAC and Associated Organizations (OAS).

This meeting was sufficiently successful to warrant a similar meeting at the next IUPAC General Assembly (Lyngby, Denmark, August 1982). It was suggested that AOS should monitor IUPAC programs and comment about overlap or need for collaboration outside IUPAC and that AOS should feel free to reproduce appropriate items from IUPAC publications for wider dissemination in AOS Newsletters.

Dr I. BARNES argued that in view of the new W.G. on thermodynamics links with IUPAC are to be maintained. He agreed to serve as liaison member to IUPAC and to report at the second meeting IUPAC - AOS in 1982 in Denmark.

#### 10. CHANGES IN THE STATUTES

It appeared that the language of paragraph B-2-a was not clear : the procedure for changing chairmanship and membership of commissions is not explicitly mentioned. Dr ANGINO agreed to draft new wording for this paragraph to clarify its meaning and to present changes at the next Council Meeting.

#### 11. REQUESTS FOR FINANCIAL SUPPORT FOR FUTURE SYMPOSIA

##### - 3rd International Kimberlite Conference, September 1982, Clermont-Ferrand (France)

The Council agreed to sponsor this conference. Small amounts of money will be available at a later date, provided adequate justification be presented to the Council for example, expenses for publishing the proceedings.

##### - Reykjavik Meeting, August 1982

In anticipation of a request, the Council agreed to approve an amount of \$ 1,000 to \$ 2,000 - in as much as no Council meeting will be held before the beginning of the Reykjavik meeting.

The high Russian standards of hospitality were demonstrated once more at this meeting and were greatly appreciated by all officers and Council members who has the good fortune to be able to come to Irkutsk.

#### II. LIST OF COMING SYMPOSIA

1982 - May - ROSTOV-ON-DON (USSR)

2nd Symposium on Geochemistry of Natural Waters

Address : Prof. VALYASHKO, Dept of Geochemistry, Moscow State University,  
MOSCOW V-234 USSR

1982 - August 15-22 - REYKJAVIK (Iceland)

on "Generation of Major Basalt Types" - IAVCEI/IAGC Meeting

Address : Basalt Meeting, c/o Dr G.E. SIGVALDASON, Nordic Volcanological Inst.  
101 REYKJAVIK - Iceland

1982 - June 27 - July 2 in NIKKO NATIONAL PARK (Japan)

5th International Conference on Geochronology, Cosmochronology, Isotope Geology

Address : Dr Ken SHIBATA, 5th International Conference, Geological Survey of Japan  
HIGASHI 1-1-3, YATABE, IBARAKI 305 (Japan)

- 1982 - July - SAO PAOLO (Brazil)  
International Meeting on Laterites  
Address : Dr J. GONI, Bureau de Recherches Géologiques et Minières (B.R.G.M.)  
B.P. 6009, 45018 ORLEANS-Cedex (France)
- 1982 - September - CLERMONT-FERRAND (France)  
3d International Kimberlite Conference
- 1983 - August 29-September 8 - 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.  
First circular available from Prof. HITOSHI SAKAI, Institute for Thermal Spring Research, OKAYAMA University, MISASA, Tottori-ken 682-02 (Japan)
- 1983 - August - HELSINKI (Finland)  
10th International Geochemical Exploration Symposium and 3d Symposium on Methods of Applied Geochemistry - Joint symposium AEG - IAGC in preparation  
Address : Dr A. BJORKLUND, Geological Survey of Finland, SF-02150 ESP00 15 (Finland)
- 1984 - MOSCOW (USSR)  
27th International Geological Congress  
Address : Prof. V. BARSUKOV, Vernadsky Institute of Geochemistry,  
Vorobyov Shosse, 47a - 117976 GSP1 MOSCOW V334 (USSR)

Information on some IUPAC-sponsored symposia in 1982 and 1983

1. International Symposium on the Safe Use of Solvents - Brighton, UK - 23rd-27th March 1982
2. 6th IUPAC Conference on Physical Organic Chemistry - Louvain-la-Neuve, Belgium - 11th-16th July 1982
3. 23rd Microsymposium on Macromolecules : Selective Polymeric Sorbents - Prague, Czechoslovakia - 19th-22nd July 1982
4. 22nd International Conference on Coordination Chemistry - Budapest, Hungary - 23rd-27th August 1982
5. International Symposium on Theoretical Organic Chemistry - Dubrovnik, Yugoslavia - 30th August-3rd September 1982
6. 29th IUPAC Congress - Cologne, FRG - 4th-12th June 1983

The main lectures from meetings 1, 2, 3, 4 and 6 will be published by the Union, either in the official journal of IUPAC, Pure and Applied Chemistry, or in separate book form.

III. CHANGES IN STATUTES

In the last NEWSLETTER N° 12, December 1980, the statute changes relative to paragraph III A-2 as decided on fourth Quadrennial General Assembly were unfortunately omitted. They are as follows (added or changed sections are underlined) :

III A-2 Additional nominations for one or more officers or ordinary members of the Council may be made in writing to the Secretary by two or more national members or by 15 or more individual members of the Association not less than 60 days prior to the meeting of the General Assembly.



IV. IAGC WORKING GROUPS AND COMMISSIONS (november 1981)

1. Working Group on Geochemical Prospecting  
Chairman : Dr L.V. TAUSON, Director, Irkutsk Institute fo Geochemistry  
33-IRKUTSK, USSR
2. Commission on the Geochemistry of Natural Waters  
Chairman : Prof M.G. VALYASHKO, Dept. of Geochemistry, Moscow State University  
MOSCOW V-234, USSR

Sub-sections :

- a. Water pollution (inactive at present)
- b. Chemical Analyses of Natural Waters  
Chairman : Dr A.J. ELLIS, Chemistry Division, D.S.I.R., Petone, New Zealand
- c. Interstitial Waters  
Chairman : Dr P.A. KRJUKOV, Novosibirsk, USSR
- d. Interaction Between Water and Living Matter  
Chairman : Dr G.G. POLIKARPOV, Sevastopol, USSR
- e. Interaction Between Water and Rock  
Chairman : Dr Brian HITCHON, Alberta Research Council, 11315-87th Avenue,  
Edmonton, Alberta, Canada T6G 2C2  
Vice-Chairman and Secretary for International Cooperation  
Dr Tomas PACES, Geological Survey, Malostranske nam. 19,  
118 21 Praha 1, Czechoslovakia

8 interest Groups have been formed :

- <sup>1</sup> Dilute water-rock interaction, low temperature  
Dr Emmanuel MAZOR, Isotope Department, Weizmann Institute of Science  
Rehovot, Israel
- <sup>2</sup> Diagenetic reactions, saline environments, low to moderate temperatures  
Dr W.M. EDMUNDS, Hydrogeological Dept., Institute of Geological Sciences  
Maclean Building, Crowmarsh Gifford, Wallingford, Oxfordshire OX10 8BB  
United Kingdom
- <sup>3</sup> Metamorphic environments  
Dr Yotaro SEKI, Dept. of Foundation Engineering, Saitama University,  
URAWA 338, Japan
- <sup>4</sup> Magmatic environments  
Prof S.I. NABOKO, Institute of Volcanology, Pobeda Ave., 19,  
Petropavlovsk-Kamchatskii, USSR
- <sup>5</sup> Active geothermal systems  
Dr A.J. ELLIS, Chemistry Division, D.S.I.R., Petone, New Zealand
- <sup>6</sup> Membrane phenomena in natural systems  
Dr Yousif K. KHARAKA, U.S. Geological Survey, 345 Middlefield Road,  
Menlo Park, California 94025, U.S.A.
- <sup>7</sup> Solution-mineral interaction in soil genesis  
Dr J.M. VERSTRATTEN, Fysisch Geografisch en Bodemkundig Laboratorium,  
Universiteit van Amsterdam, Dapperstraat 115, Amsterdam-Oost,  
The Netherlands
- <sup>8</sup> Water-rock-organic reactions  
Dr J.A. BOON, Canada

3. Commission on Extraterrestrial Geochemistry  
Chairman : Dr N. GREVESSE, Institut d'Astrophysique, Université de Liège,  
LIEGE, Belgium

4. Working Group on Laterites and Laterization  
Chairman : Dr J. GONI, Bureau de Recherches Géologiques et Minières,  
B.P. 6009, 45018 Orléans, Cedex, France
5. Isotope Geochemistry  
joint working group with that on Radiogenic Isotopes and their Geophysical Applications (IAVCEI)  
Chairman for IAGC : Dr V. ASWATHANARAYANA, Dept. of Geology, University of Dares Salaam  
P.O. Box 35052, Dares Salaam (Tanzania) (untill August 1982)  
- Centre of Advanced Study in Geology, University of Saugar,  
Saugar MP - 470003 India  
  
Chairman for IAVCEI : Dr Borwin GRAUERT, Institute für Mineralogie,  
Westfälische Wilhems Universität Munster, Gieven Becker Weg 61  
D-4400 Münster, West Germany
6. Thermodynamics in the Earth and Planetary Sciences  
Chairman : Dr I.L. KHODAKOVSKY, Vernadsky Institute of Geochemistry, Moscow, USSR

#### V. SUMMARIES OF THE REPORTS OF THE WORKING GROUPS

#### PROGRAMS AND REALIZATION OF THE WORKING GROUP "LATERITES AND LATERITIZATION"

J. GONI (France), F. MRNA (Tchecoslovakia) A. MELFI (Brazil)

##### A. Aims

The proposed group is dedicated to the perfecting of geochemical methods, adapted to metal prospecting by using bore-hole samples (Cu-Pb-Zn-Mo-Ag-Au), because the geochemical methods in use at the present time are ineffectual when applied to a lateritic context.

##### B. Research Program

###### 1. Choice of research zones

The subjects liable to be studied should be chosen according to miscellaneous criteria, such as "mother" rocks, the climate, the morphology, the primary mineral paragenesis and the importance of the lateritic cover. The effects of three tropical climates must be studied : - wet tropical zone (forest) - dry tropical zone (savana) - semi-desert zone

###### 2. Choice of the horizons in lateritic profiles

a) sample taking ; b) mechanical preparation of the standard profiles ; c) laboratory test (global chemistry, ponctual analysis, mineralogical determination, physical prospecting,...)

3. Training of technological transfer for the staff and technical experts of the developing countries. Their active participation in all the research phases is essential.

##### C. Working group's Achievements

###### 1. West Africa (Region of Goren, Upper Volta)

We began the present methodological study on the surroundings of the Cu-Mo anomalies of Goren, marked by a lateritic cuirasse. The Goren anomaly of Cu-Mo sulfides spread throughout a siliceous interlacing vein connected with a subvolcanic diorite intrusion in the heart of a volcano-sedimentary series of the Birrimien.  
Main objectives already advanced : sampling, training of local engineers, preparation of samples for distribution (1982).

###### 2. Brazil (Bahia and Goais Regions)

2.1 The IAGC group counts on the complete support of the authorities of the Boquirá (Bahia) mine (Cu-Pb-Zn) for a study of the evolution of these metals in a tropical climate and for the sampling and analysis of the oxide mineralization and also the supergen weathering zones (soils and ferrallitic profiles).

2.2 The Geochemical studies of the complete lateritic profile(s) in Goias developed on sulfide mineralization is conducted in a similar way to that of Goren (W. Africa). Lastly there will be intercommunication between groups working on the projects. Samples will be exchanged along with results as research work progresses.

#### D. Organization of the International Meeting on Laterites and Laterization

This will be held around July 1982 in Sao Paulo (Brazil)

#### BRIEF REPORT ON THE ACTIVITIES OF THE INTERNATIONAL COMMISSION OF GEOCHEMISTRY OF NATURAL WATERS FOR THE PERIOD OF 1975-1981.

Professor M.G. VALYASHKO (USSR)

The most active was sub-section "Interaction between water and rock" - head Prof. B. HITCHON (Canada) See separate report.

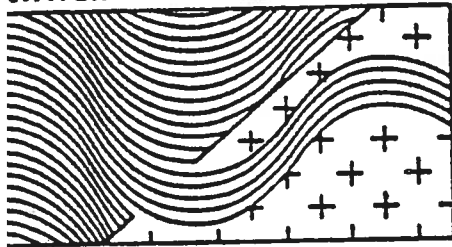
Subgroup "Chemical Analyses of Natural Waters" chairman Dr. A.J. ELLIS led a great deal of work on the organization of the international comparison of analyses of natural waters, in which 30 labs of different countries of the world took part. The results were summed up by Dr. ELLIS and Dr. STEVENSON.

In October 1975, the 1st symposium devoted to the problem of Water-Living Matter Interaction was convened in Odessa (USSR). The symposium was a success. Prof. AHRENS, President of the Association, took part in it. The long-term program on Water-Living Matter Interaction prepared by the subgroup have been discussed at the symposium. In 1979, the publishinghouse "Nauka" had published the transactions of the symposium (in Russian and in English), edited by Prof. E.V. KRASNOV, Yu. P. ZAITSEV and K.M. HALLOV.

In August 1975, the first symposium on Geochemistry of natural waters was convened in Burlington (Canada). It covered the problems of the 1st and 2nd subgroups and the general questions of formations of the chemical composition of natural waters. The abstracts have been published at the beginning of the symposium. The chairman of the Organizing Committee was Mary Thompson. The symposium was organized on the basis of the Canadian Institute of Inner Waters.

The 2nd symposium on Geochemistry of natural waters is to be held in Rostov-on-Don in May 1982. It is worth mentioning that the activities of the Commission on geochemistry of natural waters helped in the decision of many cardinal questions such as : Water-Rock Interaction, being very popular now and questions on Water-Living Matter Interaction. Unfortunately, the problem of the protection of waters did not find a suitable acclaim but we hope that the 2nd symposium will help in the solution of this problem.

## WATER-ROCK INTERACTION



INTERNATIONAL

### Report of Chairman to IAGC Council

#### Activities

The Third International Symposium on Water-Rock Interaction, co-sponsored by IAGC and the Alberta Research Council, was held in Edmonton, Alberta, Canada, July 14 - 24, 1980, attended by 143 geochemists from 23 countries. The four-day session attracted 75 papers and activities included a one-day pre-session field trip to the Athabasca oil sand deposit and a four-day post-session field trip to four hydrological field projects run by the Alberta Research Council and to the Rocky Mountains. The Proceedings and Guide Book to the Symposium are available from the Chairman.

The Sub-Group will co-sponsor a one-day symposium on "Equilibria and Kinetics of Clay Minerals in Aqueous Solutions" at the 7th International Clay Conference, September 6 - 12, 1981, in Bologna, Italy.

"In conjunction with the Institute for Thermal Spring Research, Okayama University, the Geochemical Society of Japan and the Geothermal Research Society of Japan, the I.A.G.C. is sponsoring the Fourth International Symposium on Water-Rock Interaction in Misasa, Japan, August 29th to September 8th, 1983. In addition to the formal sessions there is a mid-session field trip (half-day), and a five-day post-session field trip, including visits to the Ningyotoge uranium deposits, and the geothermal areas of Hakone Volcano and Tanzawa Mountains. The First Circular is now available from the Secretary-General, WRI-4, Professor Hitoshi Sakai, Institute for Thermal Spring Research, Okayama University, Misasa, Tottori-ken 682-02, Japan."

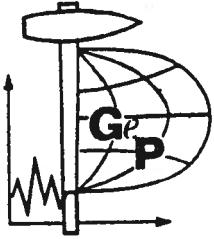
Brian Hitchon

#### Membership:

654, drawn from 47 countries (51.3% Universities; 36.3% Government; 9.4% Private Industry; 3.0% Unknown/Retired).

#### National Contacts:

A system of national contacts has been set up in 31 countries.



# International Association of Geochemistry and Cosmochemistry

WORKING GROUP - GEOCHEMICAL PROSPECTING

CHAIRMEN

L.V. Tauson  
Director  
Vinoogradov  
Institut of  
Geochemistry,  
P.O.B. 701  
664033 Irkutsk  
USSR

COUNCIL OF THE INTERNATIONAL ASSOCIATION  
of GEOCHEMISTRY AND COSMOCHEMISTRY

VICE-CHAIRMEN

F. Mrňa  
Geolog. Survey  
Malostr.nám. 19  
118 21 Praha 1  
Czechoslovakia

R E P O R T

SECRETARY

E. Wilhelm  
B.R.G.M.  
B.P. 6009  
45818 Orléans  
France

of the activity of the Working Group  
of Exploration Geochemistry of the  
International Association of Geochemistry  
and Cosmochemistry

During the last three years the Working Group held two International symposia.

At the first International symposium held in September 1979 in Ostrava (Czechoslovakia) participated more than 200 geochemists of 20 countries. There two problems have been discussed:

a) The scientific basis of search of deep-seated ore deposits;

b) Search upon secondary flows and dispersion halos.  
The Proceedings of this symposium have been issued in 1981.

At the Second Symposium held in September 1981 in Irkutsk (USSR) participated more than 250 geochemists of 15 countries. There were four problems:

- a) Geochemical search upon primary halos;
- b) Geochemical search in regions of Precambrian consolidation;
- c) Hydrogeochemical methods for search of deposits and earthquake prediction;
- d) Processing methods of geochemical information by IBM.

The third symposium is to be in August 1983 in Helsinki (Finland) together with the Association of Exploration Geochemists.

The Working Group has acted in schooling seminars on exploration geochemistry taking place in Czechoslovakia every second year which are financed by UNESCO (1975, 1977, 1979).

Presently in the Working Group are 16 specialists of 12 countries. The formation of the Group continues.

In the nearest time is planned:

- the prolongation of schooling seminars on exploration geochemistry for geologists of developing countries;
- the issue of manuals for geochemical methods of exploration;
- the making of geochemical standards for geochemical search and bibliographic handbooks of literature on geochemical exploration methods.

Chairman

*L.V. Tauson*  
L.V. TAUSON  
2/8/81

REPORT TO THE JOINT WORKING GROUPS ON RADIOGENIC ISOTOPES  
AND THEIR GEOPHYSICAL APPLICATIONS [IAVCEI] AND ON  
ISOTOPE GEOCHEMISTRY [IAGC]

August, 1981

I (Zartman) am writing to you what probably is my last newsletter as IAVCEI co-chairman of the joint IAVCEI-IAGC Working Groups on Radiogenic Isotopes/Isotope Geochemistry. After a rather lengthy search for a successor, I'm pleased to announce that Dr. Borwin Grauert of the University of Munster has consented to replace me as co-chairman. Our intent was to find someone who could best serve the interests of the Working Group in preparing for the Hamburg IUGG General Assembly in 1983, and Dr. Grauert's location in West Germany will be much to our advantage. All pertinent correspondence that I've accumulated related to the XVIII General Assembly has been sent to him, and he needs to know of any additional ideas you may have concerning possible symposia or other activities for that meeting. While planning to remain on as a member of the Working Group, I use this occasion to transfer the duties and responsibilities of its chairmanship to Dr. Grauert, and I ask that relevant future correspondences please be addressed to him. I've enjoyed the decade (almost) of work that accompanied this position, but must now admit to being a bit burned out and glad for a reprieve!

Admittedly, following the reorganization and partial change in membership accompanying our merger of two formerly separate groups, we've been rather inactive while awaiting someone to share the leadership with Professor Aswathanarayana. Certainly, in part, I purposely delayed any commitment to a rigid agenda so that my successor could begin largely with a clean slate. Some activities, such as a revised directory of isotope geochemists/geophysicists, an inventory of radiometric age/isotope data banks, and the compilation of standards information, have been proposed and only await implementation.

With Professor Aswathanarayana already well familiar with the functioning of the group, I anticipate a smooth and rapid transition back into a dynamic organization.

The highlights of my tenure in office was the opportunity to convene an interdisciplinary symposium during the XVII IUGG General assembly in Canberra in December, 1979. My co-convenor, Professor S. R. Taylor of ANU, and I were able to bring together a very impressive roster of speakers on the subject of "The evolution of the Upper Mantle". Subsequently, we also served as co-editors of a special issue of Tectonophysics dedicated to the publication of selected papers given at the symposium. That issue has now appeared on your local newsstands--Volume 75, No. 1-2, May 10, 1981--and I recommend it for reading to each of you. For everyone on the pre-merger IAVCEI Working Group who helped me to make that occasion a success, I wish to convey my heartfelt gratitude and appreciation. Without a doubt under our new leadership the Working Group can bring to fruition an equally if not more ambitious undertaking.

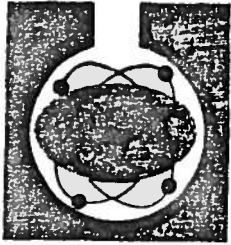
Thanks again for all the support given to me, and I ask that you give similarly to my successor.

Sincerely yours,

Robert E. Zartman

U. Aswathanarayana





# International Association of Geochemistry and Cosmochemistry

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