

INTERNATIONAL ASSOCIATION OF GEOCHEMISTRY AND COSMOCHEMISTRY

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IAGC NEWSLETTER - NO. 3, OCTOBER 1973

1972 GENERAL ASSEMBLY MEETING OF IAGC
MONTREAL, CANADA (AUGUST 19, 1972)

The General Assembly meeting was held following two days of meetings by the Council. Some of the items covered are given below. Other items of business are covered elsewhere in this Newsletter.

New Officers

Professor Fornaseri (Italy), chairman of the nominating committee, presented to the Council a proposed slate of officers. The slate was approved by the Council and later elected unanimously by the General Assembly on August 29, 1972. Those elected were:

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| President: | L. H. Ahrens (South Africa) |
| Past President: | E. Ingerson (USA) |
| Vice-Presidents: | W. V. Shcherbina (USSR) K. H. Wedepohl (W. Germany) |
| Secretary: | K. Keil (USA) |
| Treasurer: | J. F. Lovering (Australia) |
| Council Members: | M. Brown (United Kingdom) M. Ferrara (Italy) J. Goni (France) D. Lal (India) D. M. Shaw (Canada) K. Sugawara (Japan) E. Szadeczky-Kardoss (Hungary) N. B. Vassoevich (USSR) |

Honorary Members

Dr. E. Ingerson reported that, as a result of a mail balloting, Academician A. P. Vinogradov (USSR) and Professor Tom F. W. Barth (Norway) were elected Honorary Members of IAGC.

Committee Establishment

Three new committees were established: (1) Committee on Program and Budget, (2) Committee on Membership and Directory of Geochemists, and (3) Committee on the Program for UNESCO.

Working Group on Natural Waters

At the suggestion of M. G. Valyashko (USSR), the name of the Working Group on Hydrogeochemistry was changed to Working Group on Natural Waters.

1973 IAGC COUNCIL MEETING MANNED SPACE CENTER, HOUSTON, TEXAS (MARCH 5-8, 1973)

Present at the Council meeting were President L. H. Ahrens, Past President E. Ingerson, Vice-President W. V. Shcherbina, Secretary K. Keil, Assistant Secretary M. Prinz, Treasurer J. F. Lovering, and Council Members M. Brown and D. M. Shaw. Some of the items covered at the meeting are discussed below.

IAGC-IUPAC

President L. H. Ahrens has been approached by the International Union of Pure and Applied Chemistry (IUPAC) in an attempt to have IAGC become an associate organization of IUPAC. The purpose of the association would be to establish contact between the two organizations without IAGC being an actual part of IUPAC structure. The proposal is being considered by the Council.

Publication of Books

It was reported that Professor L. B. Tauson (USSR), Chairman of the Working Group on Geochemical Prospecting, proposes publishing a book on Problems of Applied Geochemistry (in English and Russian), hopefully with financial support from IAGC. President Ahrens suggested that Council Member D. M. Shaw (Canada) serve as Chairman of an IAGC Publications Committee to consider the question of IAGC sponsoring publication of books.

Proceedings of the International Geochemical Congress (USSR)

Vice-President W. V. Shcherbina reported that the English text of the proceedings needs extensive editing. He raised the question as to who should edit and publish the English version. Past President Ingerson agreed to contact Dr. Frank Manheim (USA) to inquire if he would take the responsibility of editing the volumes. Dr. Ingerson also agreed to contact the National Science Foundation (USA) in an attempt to obtain funds to help defray cost of manuscript preparation. Dr. Manheim needs volunteers to help edit and prepare the English-version manuscript.

Proposed Conference on Trace Elements

Councilor D. M. Shaw proposed that the IAGC consider co-sponsorship of a meeting on Trace Elements in the Earth's Crust and Mantle as a Guide to Petrological Problems. He suggested that lunar and meteorite work might be included in this meeting as well and tentatively proposed a location in Canada in 1975 as a meeting place. The Council agreed in principle that this would be a worthwhile meeting to be sponsored by the IAGC, and President L. H. Ahrens asked Councilor Shaw to present a more detailed outline of such a conference to the Council at a later date.

Proposed Working Group on Subduction Zones

Professor E. Szadeczky-Kardoss (Hungary) has proposed that IAGC establish a Working Group on Subduction Zones, emphasis being on the chemical aspects of such zones. The Council agreed that President Ahrens should request from Dr. Szadeczky-Kardoss more details, as well as a list of names of prospective members of the group, before any further action is taken.

Working Group of the Geochemistry of Health and Disease

President Ahrens presented to the Council a letter from Dr. E. J. Underwood (Australia), Chairman of the Working Group. Dr. Underwood pointed out that the lack of activity of the Group is largely a function of funds which prevented members from meeting. Past-President Ingerson, as Chairman of the UNESCO Liaison Committee was asked to write to UNESCO and/or the National Science Foundation (USA) in an attempt to arrange financial support for the Working Group. Dr. Ingerson agreed.

IAGC Commissions and Working Groups

President Ahrens proposed that the Council name individual Council Members to have "portfolio" responsibilities for specific IAGC Commissions and Working Groups. This proposal carried unanimously. The following assignments were approved:

- Commission on Cosmochemistry (J. F. Lovering)
- Working Group on the Geochemistry of Health and Disease (E. Ingerson)
- Working Group on the Geochemistry of Sediments (K. H. Wedepohl)
- Working Group on Hydrogeochemistry (E. Ingerson)
- Working Group on Geochemical Prospecting (W. V. Shcherbina)
- Commission on Organic Geochemistry (N. B. Vassoevich)
- Working Group on Isotope Geochemistry (D. Lal)

Drs. J. F. Lovering, E. Ingerson, and W. V. Shcherbina agreed to accept the assignments. The others will be contacted by Secretary K. Keil in order to obtain their consent to serve.

Proposed Symposium on Chemical Composition of Ocean Sediments

The Council considered the request of Vice-President K. H. Wedepohl to organize a symposium dealing with the chemical composition of ocean sediments. In principle, the Council approved this proposal. Secretary K. Keil was asked to request more details from Dr. Wedepohl before further action is taken.

Proposed Meeting on Minor Elements and the Environment

Vice-President Wedepohl proposed that IAGC seek UNESCO support for a meeting on Minor Elements and the Environment. Past-President E. Ingerson pointed out that Dr. D. Hemphill (University of Missouri, USA) is responsible for a meeting held annually on Trace Substances and Environmental Health, and proposed that Secretary K. Keil write to Dr. Wedepohl asking for a more detailed proposition regarding the meeting and, in particular, the possibility of coordinating such a meeting with the Missouri meetings. Subsequent correspondence has resulted in changing of the tentative title to International Symposium on the Geochemistry of Health and Disease, and has secured the active collaboration of the IAGC Working Group on The Geochemistry of Health and Disease.

INTERNATIONAL SYMPOSIUM ON KIMBERLITES
SOUTH AFRICA, SEPTEMBER 1973

IAGC was one of the sponsors of the Kimberlite Symposium, held in September 1973 in South Africa. One week was spent in field excursions in the Kimberley area, a second involved the presentation of papers at the University of Cape Town and the third, field excursions in Lesotho. The conference attracted 180 persons from 20 countries. Approximately 90 papers were presented. The papers will appear as a Special Proceedings Volume in Physics and Chemistry of the Earth, Volume 9.

FUTURE SYMPOSIA

MAN'S EFFECT ON THE CARBON CYCLE - July 1974

The symposium is tentatively scheduled to be held in California, USA, at the NASA Ames Research Center at Moffett Field and at Stanford University. The chairman for the meeting is Dr. Keith Kvenvolden, NASA Ames Research 239-9, Moffett Field, California 94035, USA.

INTERACTION OF ROCK AND WATER - September 1974

IAGC and the Czechoslovakia Geological Survey are sponsoring a symposium on the Interaction of Rock and Water to be held in Prague on September 9-17, 1974. IAGC is currently exploring the possibility of obtaining from UNESCO or from the Czechoslovakia Academy of Science financial assistance for travel to the meeting. Further information may be had from T. Paces, Geological Survey Prague, Malostrainske nam. 19, 11821, Praha 1, Czechoslovakia or from Dr. D. E. White, U. S. Geological Survey, Menlo Park, California, USA.

ORE DEPOSITS - September 1974

This symposium is scheduled to be held at Varna, Bulgaria. Topics covered will be: (1) factors controlling the vertical extent of ore bodies, (2) base metal mineralization associated with volcanism, and (3) significance of isotopic composition for genetic interpretation of ore deposits. No other details are available at present; however, more information may be available from the Organizing Committee of the IVth IAGOD Symposium, 36 Street - Block 2, Sofia 13, Bulgaria or from Professor M. Vanecek, Charles University, Prague, Czechoslovakia.

INTERACTION OF WATER AND LIVING MATTER - October 1974

Yalta will be the site of this symposium. Its chairman is Professor G. G. Polikarpov, Institute of Biology of South Seas, 2 Nakimov Street, Sevastopol, USSR. The dates for the symposium are October 3-9, 1974.

CARBONATES - 1974

IAGC will co-sponsor a symposium on carbonatites to be held in Brazil. Additional information can be obtained from Dr. E. Ingerson, Department of Geological Sciences, University of Texas, Austin, Texas, USA.

GEOCHEMISTRY OF NATURAL WATERS - August 1975

An international symposium on the Geochemistry of Natural Waters is being organized by IAGC with the co-sponsorship of the International Association of Hydrological Sciences and the Canada Centre for Inland Waters. The meeting is tentatively scheduled for August 18-20, 1975 at Burlington, Ontario, Canada. The preliminary program draft indicates that the themes will be: (1) quality of geochemical data (analytical methods, data storage, use of unites, interlaboratory comparisons), (2) uses of geochemical data (stability of water systems against perurbation, geochemical and mathematical models for natural waters), and (3) unpolluted natural waters and programs to prevent their pollution. The local organizing committee is chaired by Dr. Mary E. Thompson, Canada Centre for Inland Waters, Box 5050, Burlington, Ontario, Canada.

BOOK REVIEW

GEOCHEMICAL TABLES by H. J. Rosler and H. Lange, 1972, American Elsevier Publishing Company, New York, 468 p., \$27.95 USA. Reviewed by Dr. Ralph M. Perhac, Professor of Geochemistry, University of Tennessee, Knoxville, Tennessee, USA.

This book brings together in one volume much valuable data which are spread throughout the literature. It consists primarily of a series of tables which are accompanied by brief discussions of the fundamental principles underlying the use and significance of the data. The section on atomic and ionic sizes illustrates well the general format. The section has the usual tabular listing of size. For ionic radii, however, not just one value is given, but those of Goldschmidt, Pauling, Zachariasen, Wyckoff, and Ahrens are included. Atomic and ionic radii are also shown pictorially (using different size circles superimposed on a periodic chart) and graphically (in a plot of size versus atomic number). Accompanying the tables is a brief discussion of: (1) how radii are calculated, (2) general laws relating size to periodicity, and (3) relation of size to valence, polarization, ionic potential, and coordination. The entire section covers thirteen pages of which about nine comprise tables.

In addition to the above, the book contains sections on atomic parameters, analytical methods, mathematical processes, cosmic and terrestrial elemental abundances, thermodynamic data, geochemical prospecting, isotope geochemistry, and units of measurement. Each section has its own bibliography, and the listings are excellent, with no apparent bias toward any one school of thought. This book differs from other similar books in the type of text material. The text attempts not only to explain the tables but to teach the reader general concepts. In fact, the

authors state that the book is useful as a textbook. The written sections do, however, seem much too brief to allow use as a textbook. This volume seems much more useful as a reference. In particular, for anyone teaching a course in geochemistry which covers a wide range of topics, the book would be invaluable.

The translation from the German is excellent. The paper is high quality and the line drawings are generally good. Unfortunately the price puts it out of reach of most students, hence its greatest use will be by professional researchers, both industrial and academic.

JOURNAL FOR IAGC

Over the past couple years, discussions have been held with Elsevier Publishing Company about the feasibility of IAGC adopting Chemical Geology as its official journal. At the 1972 IAGC Council meeting in Montreal, Canada, the Elsevier representative proposed giving IAGC members the journal (8 issues per year) for \$12.00 USA per year provided 200 members would subscribe. This is a significant reduction over the regular \$18.00 subscription charge. If IAGC were to adopt Chemical Geology, articles to be published would not be limited to those submitted by IAGC members. Elsevier further proposed that IAGC collect the subscriptions from its members, send the money and a list of subscribers to Elsevier. The company would then mail the issues to the subscribers.

The question of adopting Chemical Geology arose again at the 1973 Council meeting which was held in March in Houston, Texas, USA. Dr. Lovering, IAGC Treasurer, reported that notices had been mailed to IAGC members to ascertain how many would wish to subscribe to the journal. He suggested that IAGC await response from the membership before attempting to sponsor Chemical Geology.

CHANGE OF ADDRESS

Please notify the editor of any address change: Dr. Ralph M. Perhac, Department of Geology, University of Tennessee, Knoxville, Tennessee 37916, USA.

