

I. A. M. G.

NEWS

LETTER

Report on the 3rd General Assembly

The General Assembly of IAMG, which is held every four years in conjunction with the International Geological Congress, was convened on 25 August 1976, in Sydney, Australia, by President Richard Reymont. A presidential address was delivered, which will be published in complete form in MATHEMATICAL GEOLOGY. President Reymont's remarks were followed by reports from the Treasurers. John Davis (Western Treasurer) listed Association assets of \$11,034 and 362 members (of which 73 are delinquent) in 39 countries. Vaclav Nemeč (Eastern Treasurer) reported an Eastern Bloc balance of 2461 Czech crowns.

Both Association journals are doing well. The bimonthly journal MATHEMATICAL GEOLOGY has completed volume 8 on schedule and Dick McCarron has assumed the job of Editor-in-Chief. He is anxious to continue the flow of good manuscripts and will keep the backlog low to speed publication. The quarterly COMPUTERS & GEOSCIENCES has completed volume 2 and will be on schedule with volume 3. Volume 2, no. 1, contained the Proceedings of the 4th Geochautauqua at Syracuse on "CAI in Geology."

Results obtained by the Membership Committee (Brent Hempkins, Chairman) were disappointing. Problems stem from communication, but hopefully can be resolved in the future. The Educational Committee's GEOINSTRUCT proposal (George Koch, Chairman) was submitted to NSF but unfortunately was rejected. No report was made by the Finance Committee (Mike Horn, Chairman). Results from the Project Committee (Alan Cook, Chairman) were evident in the program of the 25th International Geologic Congress in Sydney. With the exception of the session on "Random Events in Geology," the meetings were well attended and well received.

The Association maintains liaisons with other organizations which share similar interests or programs. These include UNESCO, the United Nations, COGEO DATA, International Geological Correlation Program (IGCP) and the International Palaeontological Association (IPA). Cooperation with COGEO DATA and IGCP

is complete and satisfactory. Our communications with the other organizations are poor to nonexistent. Proceedings of the COGEO DATA "Symposium on Capture, Management, and Display of Geological Data, with Special Emphasis on Energy and Mineral Resources" appears in COMPUTERS & GEOSCIENCES, vol. 2. Two IGCP proposals of special interest are #98 "Standards for Computer Applications in Resource Studies," by A. L. Clark, and #148 "A New Method of Quantified Biostratigraphic Correlation," by J. C. Brower. A proposal on quantitative lithostratigraphic correlation is being prepared.

All of the IAMG Regional Organizations are active. Reports were received from Brasil, Canada, Czechoslovakia, Hungary, UK, and USA. Numerous meetings have been or will be held by these groups. They also are involved in educational projects in the various countries.

Several meetings were approved for co-sponsorship by the IAMG. These include the 5th Geochautauqua at Syracuse University (29-30 October 1976); the Mining Příbram Symposium in Czechoslovakia (October 1977), a US regional group session at the GSA annual meeting in Seattle (7-9 November 1977), a session at the SEFM annual meeting in Washington, D.C. (13-16 June 1977), and several sessions at the International Sedimentological Congress (IAS) in Israel (9-14 July 1978). Dan Gill is organizer of the IAMG sessions which will be held in conjunction with the IAS meetings. Proceedings of the IAMG session at the last Sedimentological Congress (SEDIM-NICE) are now available from Pergamon Press as Quantitative Techniques in the Analysis of Sediments, D. F. Merriam, editor, 176 p.

The Association will soon be making a survey of available computer programs of interest to Earth scientists. The results will be published in a future issue of COMPUTERS & GEOSCIENCES. It is hoped that all members of the Association will cooperate to make the survey as complete as possible.

Several changes in the statutes and by-laws of the Association were approved by the Assembly. Officers or Council members whose dues are in arrears or who have been dropped from membership for other reasons will be replaced. Only one-third of the members of Council need be present for a quorum, but that quorum must contain at least two officers. The Assembly approved unanimously a William Christian Krumbein Award which will

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● 1977 DUES ARE DUE! SEE LAST PAGE. ●

(report...continued)

be given each year for exceptional contributions to mathematical geology. The Award will recognize original contributions, service, and support of the Association and will be the highest honor given by the Association. Lastly, the Council approved a best-paper award to be given annually for the outstanding article published in MATHEMATICAL GEOLOGY or COMPUTERS & GEOSCIENCES.

The new Officers and Council of the International Association for Mathematical Geology, elected at the Third General Assembly, are:

President: D.F. Merriam (USA)
Past-President: R.A. Reymont (Sweden)
Vice-President: G. Hill (Australia)
Treasurers,
Eastern: V. Nemeo (CSSR)
Western: J.C. Davis (USA)
Secretary-General: E.H.T. Whitten (USA)
Council: F.P. Agterberg (Canada)
K.L. Burns (Australia)
G. de Marsily (France)
D. Gill (Israel)
D.M. Hawkins (South Africa)
R.J. Howarth (UK)
W. Schwarzacher (UK)

Editors,

MATHEMATICAL GEOLOGY: R.B. McCammon
(USA)

COMPUTERS & GEOSCIENCES: D.F. Merriam
(USA)

IAMG NEWS LETTER: J.C. Davis (USA)

With election of the new Council, the meeting was adjourned by President Reymont. The next International Geological Congress and the 4th General Assembly of the IAMG will be in Paris in 1980.

The next four years will be crucial ones for the Association, but the Officers and Council look forward to serving your interests to the best of their ability.

-D. F. Merriam, Secretary-General



Special Deal

The IAMG is a Corporate Member of the International Palaeontological Association. Therefore, all IAMG members are eligible to subscribe to LETHAIA, the official journal of the IPA, at a discount rate of \$15.00 US. The complete set of back issues (vol. 1-8) is available for \$80.00 US. New subscribers will receive a free copy of the Directory of Palaeontologists of the World. Send subscription orders to Publisher of LETHAIA, Universitetsforlaget, P.O. Box 307, Blindern, Oslo 3, Norway. Mention that you belong to IAMG and want a Subscribing Membership.

A Word from the (New) Editor of MATHEMATICAL GEOLOGY

As most of you know, Dan Merriam has been editor of MATHEMATICAL GEOLOGY since its beginning in 1969. In that time, largely through Dan's efforts, the Journal has increased in the number of pages per volume from 400 to 700 and been transformed from a quarterly to a bimonthly publication. At present, the Journal is being abstracted by most of the leading scientific information documentation services, both national and international. Most importantly, however, the Journal is now a venture of international cooperation among those interested in the development and application of mathematics in the geosciences. Not a bad record for a journal only seven years old!

As most of you also know, Dan was recently elected President of the IAMG. Along with his other responsibility as editor of the newly founded COMPUTERS & GEOSCIENCES, it is not surprising that the task of editing MATHEMATICAL GEOLOGY has been passed on to another, namely myself. I will try to maintain the pace set by Dan. We will continue to seek manuscripts of high quality of interest to the readers. In this regard, a new editorial board has been selected which represents a cross section of the international geomathematical community. We urge all members of IAMG to submit manuscripts. You should take note that we plan to expand the Letters to the Editor and the Short Notes sections of the Journal to promote more rapid dissemination of views and results of recent research. In coming issues, we also plan to publish the proceedings of research colloquia of interest to mathematical geologists. It goes almost without saying that as editor I welcome any comments and suggestions as to how the Journal can provide more effective communication for the readers. Don't hesitate; send me your views and send me a manuscript.

-Richard B. McCammon
Editor, MATHEMATICAL GEOLOGY
U.S. Geological Survey
National Center 952
Reston, Virginia 22092 USA

Another Deal

The IAMG is affiliated with the International Union of Geological Sciences (IUGS). Members can subscribe to the GEOLOGICAL NEWS-LETTER at the reduced rate of Dfl. 20 or \$8.00 US. Payments made by postal or international money order are entitled to an additional 10% discount. Orders should be sent to S. van der Heide, Secretary-General, IUGS, Rijks Geologische Dienst, Postbus 379, Haarlem, The Netherlands.

William Christian Krumbein Award

The Council of the International Association for Mathematical Geology has established an honorary award to be presented in recognition of outstanding contributions to mathematical geology. To be known as the William Christian Krumbein Award, it pays honor to this pioneering leader of our field. Conditions of the Award include (1) original contributions to the science, (2) service to the profession, and (3) support of the Association. At most, one award may be given in a year. The William Christian Krumbein Award is the highest recognition given by the Association and the recipient will be so honored and acknowledged. The Bylaw to the IAMG Statutes which established the Award was adopted unanimously at the 3rd General Assembly.

When informed by President D. F. Merriam of the establishment of the Award, Professor Krumbein replied:

"I was greatly pleased to learn from your recent letter that the Council of the International Association for Mathematical Geology has voted to inaugurate the William Christian Krumbein Award for exceptional contributions in the field of mathematical geology. I am deeply moved by this generous action: so much so that I am at a loss for appropriate words to express my appreciation. The most I seem able to do is to thank you and the Council for honoring me in this enduring manner."

-Bill Krumbein

The Council is now soliciting nominations for the first recipient of the William Christian Krumbein Award. Letters of nomination should be sent to D. F. Merriam, Department of Geology, Syracuse University, Syracuse, New York 13210. The recipient will be chosen by a five-member committee appointed by the President, who acts as the chairman.

Circular or Spherical Geostatisticians?

An encouraging number of geologists, statisticians and allied scientists were sufficiently interested in research on the application of circular or spherical statistics to geological problems to respond to the request in News Letter No. 9 to contact Dr. R. A. Reyment. The responses have been forwarded to Dr. G. W. Hill, P.O. Box 124, Port Melbourne, 3207, Australia. A coordinated bibliography and address list is being prepared for distribution to members who have manifested interest in this topic.

IAMG Financial Report

The four-year financial report presented at the 3rd General Assembly by the Western Treasurer shows that the Association has assets of \$11,034 US and liabilities of \$735 US. Of the balance, \$6,490 US is invested in long-term (30-mo.) notes or in Swiss francs. The Association received contributions of \$300 from Corporate and Academic members in 1976 (down from \$700 in the previous year) and royalties of \$1275 (up from nothing in previous years).

Although the Association is in good financial shape compared to many professional societies, it is important that we continue and accelerate our efforts to establish a significant reserve fund. Such a fund may be necessary as an inflationary hedge in a time of rapidly escalating printing and mailing costs, and to provide seed money for new projects and services to our members.

This report describes the financial condition of the Association as of 15 July 1976. An official year-end report will appear in the next News Letter.



GSA-IAMG Symposium

The newly formed Mathematical Geologists of the United States (MGUS) regional organization of IAMG is sponsoring a one-half day symposium entitled "Models for Prediction in the Earth Sciences" at the annual meeting of GSA in Seattle, 7-9 November 1977. Seven speakers have agreed to participate and will present papers in the fields of resource analysis, remote sensing, geochemistry, hydrology, seismology, geomorphology and petrology. The symposium is intended to focus attention on the increasing involvement of geoscientists in the development of models for prediction, the step beyond quantification.

If enough contributed abstracts earmarked mathematical geology are received by GSA, there is no reason why a session made up of contributed papers could not also be arranged. If you are working on or have a paper in mathematical geology, be sure to submit your abstract to GSA in 1977. Titles of the papers of the symposium and whatever progress is made in arranging a session of contributed papers will be announced in future issues of the News Letter.

Position Wanted

PhD statistician with government and academic experience seeks responsible position in industry or governmental research. Specialist in econometric analysis, including work in fuels and natural resources. Direct inquiries to the IAMG Western Treasurer, 1930 Avenue "A", Campus West, Lawrence, Kansas, 66044 USA.

WORLD CONFERENCE ON MATHEMATICS AT THE SERVICE OF MAN. 11-16 July 1977 Barcelona, Spain.

A forum where mathematical ideas and techniques of present or potential use can be discussed by investigators with common research interests. Of interest to medical, engineering, natural, social, political and economic scientists. Co-sponsored by the Society for Mathematical Biology, SIAM, and the University of Barcelona. Contact: Mrs. Roser Lluch, Colcerola 24, Barcelona 6, Spain.

SIGGRAPH '77 20-22 July 1977 San Jose, California.

Computer graphics and interactive techniques in cartography, sponsored by the Special Interest Group on Graphics of the Association for Computing Machinery. Contact: James George, P. O. Box 1663, M.S. 272, Los Alamos, New Mexico 87545 USA.

PENROSE CONFERENCE ON GEOSTATISTICAL CONCEPTS AND STOCHASTIC METHODS IN HYDROGEOLOGY. 29 August-2 Sept. 1977 Harrison Hot Springs, British Columbia.

Conference to examine the applicability of geostatistical methods in hydrogeological modelling. Contact: R. Allan Freeze, Dept. Geological Sciences, University of British Columbia, Vancouver, B.C., Canada.

SHORT COURSE ON PROBABILITY METHODS IN OIL EXPLORATION 11-16 September 1977 Snowmass, Colorado.

A school and workshop covering the theory and application of systematic probability methods of exploration for oil and gas. Contact: Probability Short Course, Stanford University P.O. Box 8888, Stanford, California 94305 USA.

6TH GEOCHAULTAUQUA 28-29 October 1977 Syracuse, New York.

Symposium on quantitative stratigraphic correlation techniques, and a workshop on catastrophe-theory models in the geosciences. Sponsored by Syracuse University, IAMG, MGUS, IGCP, and SEPM. Contact: John M. Cubitt, Dept. Geology, Syracuse University, Syracuse, New York 13210 USA.

To Authors of Papers on Statistics in Geology

The editor of the 1976 Current Index to Statistics would like titles of papers in geology published in 1976 and 1978 dealing with methods and applications in statistics. If you want a title included, send R. B. McCammon a copy of the table of contents of the journal in which the article was published, along with one or two key words. Who knows? We may start getting reprint requests from statisticians.

Plan Ahead for Bernoulli.

Closer ties between the IAMG and the Bernoulli Society for Mathematical Statistics and Probability would be "beneficial to both our organizations," in the view of Dr. Fred C. Leone, chairman of its Committee on Statistics in the Physical Sciences. He "would be pleased to develop closer communication... concerning the possibility of joint meetings or seminars," which would undoubtedly benefit members of the IAMG.

Parented by the International Statistical Institute, the Bernoulli Society sponsored, with IMS, the well-attended Ninth European Meeting of Statisticians last September in Grenoble, France. Down-to-Earth statisticians, aware of "L'heritage de Bernoulli," should make a note of the organizer, Professor J. L. Tengels (Katholieke Univ. te Leuven, Celestijnenlaan 200 B, 303 Heverlee, Belgium), the date 22-26 August 1977, and the place, Leuven (Louvain), Belgium, for the Tenth European Meeting of Statisticians and plan ahead for the 11th in this series to be held in Oslo, 14-18 August 1978. The program for Bernoulli Society participation in the 1977 ISI 41st Biennial Session in New Delhi, 7-17 December 1977, is even now "fairly well locked in." Other possibilities of programs further in the future are under consideration.

Mathematical Geologists of the United States (MGUS)

The Organizational Meeting of the IAMG Regional Organization for the US (MGUS) was held on 18 November 1976, in Denver, Colorado. The bylaws of the new organization were approved at the meeting. The possibility of affiliation with one or more national geological or mathematical association was discussed. Among the possibilities are the GSA, ACM, AIME, ASA, and the AAPG-SEPM. A range of possible MGUS activities was outlined, including sponsorship of future geochautauquas and other meetings, tutorials for students, and publication of review articles.

MGUS has applied to the GSA to hold a special symposium at the 1977 GSA meeting in Seattle, Washington. The theme of the symposium will be Mathematical Models as the Basis for Prediction in Geology. Seven speakers have been invited to participate.

Further information and copies of the MGUS bylaws can be obtained from the Secretary, Richard B. McCammon, U. S. Geological Survey, National Center 952, Reston, Virginia, 22092 USA.



Remember, the News Letter is a service to all IAMG members. We will be pleased to publish announcements from members, regional organizations, and other news of interest.

INTERNATIONAL ASSOCIATION FOR MATHEMATICAL GEOLOGY

OFFICE OF THE WESTERN TREASURER

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The IAMG, which strives to promote the development and application of quantitative methods in the Earth sciences, presently includes over 380 members. It is an affiliate of the International Geological Union and the International Statistical Association. IAMG Regional Organizations are also affiliated with numerous national societies, including the Geological Society of London, the Geological Society of America, and the Canadian Society of Petroleum Geologists.

MAIL YOUR CHECK, MONEY ORDER, OR UNESCO COUPONS, TOGETHER WITH THIS FORM, TO:

DR. JOHN C. DAVIS, WESTERN TREASURER

INTERNATIONAL ASSOCIATION FOR MATHEMATICAL GEOLOGY

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LAWRENCE, KANSAS 66044 U.S.A.

THE INTERNATIONAL ASSOCIATION FOR MATHEMATICAL GEOLOGY

"The International Association for Mathematical Geology is affiliated with the International Union of Geological Sciences and the International Statistical Institute. The aim of the Association is to promote international cooperation in the application and use of mathematics in geological research and technology. This is done through the organization of meetings (commonly in association with the International Geological Congress), of field excursions, and of visits to centers of research and technology; by the issuance of publications on the application of mathematics in the geological sciences; and by cooperation with other organizations professionally concerned with applications of mathematics and statistics to the biological sciences, earth sciences, and planetary sciences....

"The IAMG accepts as members geoscientists, statisticians, and other interested individuals."

...from the Statutes of the IAMG

The IAMG publishes two journals, MATHEMATICAL GEOLOGY and COMPUTERS & GEOSCIENCES, and issues the NEWS LETTER. Annual dues include a subscription to one or both journals and the NEWS LETTER.

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KANSAS GEOLOGICAL SURVEY
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