I.A.M.G. NEWSLETTER

I.A.M.G. BOOTH - A SUCCESS AGAIN

Our booth was once again in place to greet the more than 8,500 geologists who attended the annual meetings of the American Association of Petroleum Geologists and the Society of Economic Paleontologists and Mineralogists held in Houston last April. Several hundred I.A.M.G. membership applications were distributed to individuals who dropped by. The Association banner is rapidly becoming a fixture at professional meetings. Look for it at APCOM in Tucson in October and GSA in San Diego in November.

DUES MUST GO UP

Since 1970, the Association has held member's dues at a constant $15 per year. This has been done in spite of inflation, rising postal rates, and increases in printing costs, not to mention an expansion of the Journal of Mathematical Geology from a quarterly to a bimonthly. This in a time when dues to all other professional societies have increased by 20%, 50%, and even over 100%!

Our contract with Plenum Publishing Co. allows for inflationary increases in the member's price of the Journal, based upon increases in the U.S. cost of living index over two years. The first increase occurred in 1978, which the Association elected to absorb rather than pass on to the members at that time. However, an inexorable law of finance says that income must at least equal expenses, has caught up with the I.A.M.G., and DUES MUST GO UP.

1980 dues will be $18.00 U.S. with a subscription to the Journal of Mathematical Geology; $33.00 U.S. with a subscription to Computers and Geosciences, and $48.00 U.S. with subscriptions to both journals. Remember that dues are due BEFORE JANUARY 1, 1980! A dues notice will appear in the next News Letter.

GEODESY AND RANDOM PROCESSES

The geodesy community makes extensive use of random process theory. A review paper, "Statistical Geodesy--An engineering perspective" (R.A. Nash, Jr., Proc. IEEE, v. 66, no. 5, May 1978, pp. 532-550) describes some of the work in this field. In order to promote interdisciplinary interchange between the geodesy community and other physical science and engineering activities, an External Liaison Committee has been established by the Geodesy Section of the American Geophysical Union. I.A.M.G. members interested in the activities of geodesists in the area of random processes are urged to contact External Liaison Representative Dr. Robert Brammer, TASC, Six Jacob Way, Reading, MA 01867 USA.

NEW GUINEA MEMBER LOST

Actually Norm Hanson isn't lost--he has moved from Papua, New Guinea, back to Australia. Alex Beets is now our candidate for the exotic, far-away-places award. Alex has relocated from the Netherlands to Lobatse, Botswana.

Richard Arthur Reymert, Professor of Historical Geology at the University of Uppsala, Sweden, was recently named the fourth recipient of the William Christian Krumbein Medal. This medal is the highest distinction that the IAMG can bestow and it is a fitting acknowledgment of a founding member, former Secretary-General, former President, and the current Past-President of the Association. The inspiration for founding the IAMG in 1968 came in considerable measure from Dick Reymert's enthusiasm to get mathematicians interested in geological problems. In a sense, the vision was that of emulating in the Earth sciences the recent successes achieved by the biometricians.

Born in Melbourne, Australia, in 1926, Richard Reymert graduated from the University of Melbourne in 1948; he was subsequently awarded the M.S. (1955) and the D.Sc. (1967) degrees from that University, and the Philosophie Doktor (1956) from the University of Stockholm. He has had a truly international professional career. After working for six years with the Geological Survey of Nigeria (1950-6) Dick Reymert served on the academic staff of the University of Stockholm (twice) and the University of Ibadan, Nigeria, before being appointed to his present professorship within the Paleontological Institute of the University of Uppsala in 1967. In addition, he has been a visiting scientist or visiting professor at the University of Moscow (1960-1), the State Geological Survey of Kansas (1966-7), the University of Syracuse (1972), Fukuoka University (1973), the University of Paris (four times), and the University of Cambridge (1979).

Professor Reymert is well known for his wide-ranging research on mathematical methods in the geological and biological sciences, and especially for statistical applications in palaeogenetics and ecology. His active research interests have also embraced magnetic reversals, ammonites, ostracods, and the foraminifera—especially those of the Cretaceous System and the Paleogene. In addition to his many journal articles, five books are evidence of his research and scholarly achievements. He authored "Aspects of the geology of Nigeria" (Ibadan University Press, 1965), "Introduction to quantitative paleoecology" (Elsevier, 1971), and "Morphometric methods in quantitative biostratigraphy" (Academic Press, 1979). In addition, "Multivariate morphometrics" (Academic Press, 1971) was written jointly with R.E. Blackith, while "Geological factor analysis" (Elsevier, 1976) was coauthored with K.G. Jöreskog and J.E. Klovan.

Professor Reymert serves in various editorial capacities for the Bulletin of the Geological Institutes of the University of Uppsala, "Cretaceous Research," the Elsevier series on Geomathematics, and for "Palaeogeography, Palaeoclimatology, and Palaeoecology." He is a Fellow of the Royal Statistical Society and of the Royal Swedish Academy of Sciences, a past president of the Swedish Geological Society, and he is affiliated with the Biometric Society and numerous other scientific societies in Brazil, Nigeria, and the USA. Richard Reymert also finds time to be a Project Leader of IGCP Project 58 on "Mid-Cretaceous Events" and a member of the IGCP quantitative biostratigraphy project.

E.H.T. Whitten, Secretary-General

Richard A. Reymert, 1979 W.C. Krumbein Medalist

The Prez Sez

"I hope you were pleased with your copy of SUGG 9—GEOMATHMATICS: PRESENT, PAST, AND PROSPECTS, which commemorates the 10th anniversary of the IAMG...

"Pergamon will release the proceedings of the Jerusalem meeting, edited by D. Gill and D.F. Merriam, hopefully in September...

"The following papers are tentatively scheduled for the October Geochaatqua to be held in Syracuse: Agterberg, F.P., Computers as an aid in mineral-resource evaluation; Brower, J.C., Aspects of quantitative biostratigraphic analysis; Burns, K.L., Computer applications and developments in petrology; Cubitt, J.M., Computer applications in sedimentology; Davis, J.C., Looking harder and finding less—use of the computer in petroleum exploration; Dobrin, M.B., Computer processing of seismic reflections in petroleum exploration. Harbaugh,

"IAMG exhibits at US national meetings--GSA and AAPG--have been highly successful. We plan to continue our efforts to enlist new members and show off our wares. We invite your comments and suggestions...

"Sessions at GSA in San Diego and AAPG in Denver will be cosponsored by the Association. Watch for and if possible part in these important meetings...

"The 1979 recipient of the W.C. Krumbein Medal has been announced--Prof. R.A. Reymert of Uppsala University in Sweden. He is a good choice as he was the promoter of the Association in the beginning and instrumental in forming our group at IGC in Prague. Congratulations! He joins John Griffiths, Walther Schwarzacher, and Frits Agterberg--an elite group...

"Our best-paper committees (one for JMG, one for C&G) are busy picking the best paper in each journal for 1978. The diverse nature of papers in the two journals made selection difficult--hence, two committees...

"Other committees are hard at work. The Finance Committee would appreciate help in finding donors (the Association budget approved by IUGS was about half of that requested). The Membership Committee, under chairmanship of Brent Hempkins, has been especially active in recruiting new members. The goal is 1000 by 1980--please help...

"Two problems which seem to have no easy solution: reduced subscription rate for students--rates now are very reasonable and it does not seem possible to reduce them more; Eastern European membership--none of many alternatives explored seem satisfactory. We will continue to consider the problems...

"Our immediate problem, which you can solve by returning the questionnaire below, is that of mail vote. If I gauge the responses from the last inquiry correctly, sentiment is in favor of a mail ballot for the election of officers. I am asking therefore that you respond to the questionnaire as soon as possible so that we can implement the procedure for the IGC meetings in Paris...

"All else seems to be going well. Please let me hear your ideas."

D.F. Merriam, President

* Cut Along Dotted Line * Cut Along Dotted Line * Cut Along Dotted Line *

QUESTIONNAIRE

Mail Ballot for Officers and Council Members

I am (strike one) in favor of a mail ballot for Officers and Council Members. The mail ballot would be taken approximately 3 months prior to the IGC. The slate of candidates would be proposed (with the candidates' permission for the use of their names on the ballot) by a Nominating Committee as prescribed by the Association bylaws. The sealed ballots would be taken to the Congress and those attending the general meeting of the Association could reclaim their ballot and vote in person. The remaining ballots would be counted at that time.

Signature
A SOLUBLE FISCAL DILEMMA

The Association continues to be victimized by the vagaries of the international banking conspiracy, and we must appeal for help and cooperation from our South American, Canadian, and other members paying dues in other than US currency. Please make sure the Association receives the correct amount. Unless the member specifies that bank charges for "foreign" (i.e., non-US) checks are to be borne by the remitter, the charges are deducted from the amount due the Association. For example, $5 is deducted from each $45 check drawn on a South American bank that goes through a clearinghouse in the USA. The Association loses all of its dues plus $2.00 on these memberships. Although to date we have absorbed this loss, we cannot continue to do so; in the future subscriptions will not be entered until we have received the member's dues in full. We have brought to the attention of our Canadian members that dues are payable in US funds, however, we still receive membership dues payable for $15/$33/$45 Canadian. Of course we lose money on this; in the future we will have to return such checks. Help us out!

POSITIONS AVAILABLE

Fluor Mining & Metals, Inc., 177 Bovet Road, San Mateo, CA 94402, has announced the availability of the following positions: Metallurgical Systems Analyst - Mandatory BS, prefer a MS degree in Metallurgical Engineering, Computer Science or related field with three years professional experience. This position is for a group leader dealing with computer simulation of metallurgical (largely hydrometallurgical) process. Metallurgical Programmer - Mandatory BS plus two years experience in Computer Science, Metallurgical Engineering or a related field. Must have a strong background in computer programming with a working knowledge of metallurgical unit operations. Mining/Geological Programmer - Mandatory BS plus two years experience or a MS with no experience in Computer Science, Metallurgical Engineering, Mining Engineering, Geology or related field. Must have a strong background in computer programming with a working knowledge of mining engineering or geology. Contact Stephen L. Hudson in San Mateo, telephone (415) 572-3706.

NEXT MEETING OF THE US GROUP OF IGBA

Correspondence from Felix Chayes, Chairman of IGCP Project 163 (IGBA), lists potential topics for the meeting of the US Group of IGBA at GSA-San Diego in November: 1. Status of the group's systematic scan of US primary literature and of the base project as a whole; 2. Current state of the art of petrographic description as revealed by the US literature scan and other contributions to the base; 3. Information content of the current version of the data form and items requiring clarification. Proposals for additions or deletions, to be reviewed at the next international meeting, or by mail; 4. Experience in moving information from the data form to punched cards or card image files. Suggestions for additional topics were solicited from IGCP Project 163 participants.

Mail form, in an envelope*, to:

D.F. Merriam, President
IAMS
Department of Geology
Syracuse University
Syracuse, NY 13210 USA

*U.S. postal regulations do not permit use of this form as a postal card.
and services." A one-year subscription (24 issues) may be ordered from William Nisen, Laboratory for Computer Graphics, Harvard University, 48 Quincy St., Cambridge, MA 02138, for $125.

**QUANTITATIVE SOCIOLOGY NEWSLETTER:** Subscriptions of £2.00 (surface mail) or £4.00 (aer-mail) for 1979-80 are now due. Contact Social Statistics Laboratory, University of Strathclyde, McCance Bldg., 16 Richmond Street, Glasgow G1 1XQ, Scotland. Back issues are available and include topics such as: "Official statistics of education: a description & appraisal," "Being realistic about sociological experimentation," "An introduction to a multidimensional scaling package," "Network analysis of company directorships," "Sociological applications of catastrophe theory," "Interactive path analysis," "On data reduction and a review thereof."

IPA

Support in the form of a corporate membership is provided to the International Palaeontological Association by the IAMG. In a letter thanking the Association for its continued support, IPA Treasurer Dr. Richard H. Benson urges our membership to support IPA individually. An individual subscription to *Lethaia* is $23 (postage $3), of which IPA receives $2 automatically. President of IPA is Dr. Curt Teichert, Department of Geological Sciences, University of Rochester, Rochester, NY 14627 USA.

**CNR GEOLOGICAL DATA BANK**

An extended report on the Geological Data Bank being developed by Consiglio Nazionale delle Richerche (Milano) as part of Project Geodynamics will be given at the Pribram Symposium in October. In the meantime, this several-months-old progress report by IAMG member Roberto Potenza highlights activities. Four full-time researchers and others representing the equivalent of three full-time persons are devoted to this task. Programming is difficult because data being merged are produced on a variety of computers; interface programs that work well for flat files do not perform as well on more complicated data bases, as for example bibliographic data bases. Different structure of the archives also complicates the project—a sample-oriented data base of petrochemical and geochemical data; well-oriented data bases for subsurface data, and a formation-oriented data base for general purposes. Potenza reports that in spite of manpower difficulties and organizational complexity, the implementation of programs and systems, as well as data capture, is progressing satisfactorily.

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**NEWSLETTERS IN THE NEWS**

- asc newsletter - association of systematic collections: Published bimonthly (Feb., Apr., June, Aug., Oct., Dec.) by the Association of Systematics Collections, Museum of Natural History, The University of Kansas, Lawrence, KS 66045, the *asc newsletter* is circulated free of charge upon request. The June 1979 issue contains the report of the ASC Seventh Annual Meeting, testimony of ASC Vice-President Mahan before the DOE on "Standby conservation plan to emergency building temperature restrictions," ASC publications list, positions available, and topics of general interest.

- COGEBDATA NEWSLETTER: This informative newsletter, published by the Committee on Storage, Automatic Processing and Retrieval of Geological Data of the International Union of Geological Sciences and edited by C.F. Burk, Jr., Canada Centre for Geoscience Data, 560 Booth Street, Ottawa, Ont. K1A OER, Canada, is receiving support from outside sources during a temporary financial restraint imposed by the Canadian government. The April 1979 issue (issued July 1979) was made possible by World Data Centre A for Solid-Earth Geophysics, Environmental Data Service, NOAA, Boulder, CO.

ON THE BRITISH SCENE

IAMG member Richard Howarth and M. F. Horder of the Institute of Geological Sciences, London, co-convenors of a forthcoming joint meeting of the GIG and the British group of the IAMG, have issued the following call for papers:

GEOLOGICAL INFORMATION GROUP
JOINT MEETING WITH THE INTERNATIONAL ASSOCIATION FOR
MATHEMATICAL GEOLOGY — CALL FOR PAPERS

Meeting 14 February 1980

"COMPUTER APPLICATIONS IN GEOLOGY - II"

Contributions of between 10 and 20 minutes are invited for presentation at the above meeting. It is intended as a state-of-the-art meeting covering a broad range of applications and as the sequel to the February 1979 meeting on the same topic. It is hoped that the papers will be published subsequently.

Please send abstract of 100 - 500 words of your proposed contribution to Dr. M. F. Horder by 1 December 1979. Those authors selected to present their papers will be informed by 1 January 1980. Contributors wishing to mount displays either in conjunction with their papers or independently should also inform Dr. Horder by 1 December 1979.

Dr. Horder's address is: National Geochemical Data Bank, Institute of Geological Sciences, Exhibition Road, London SW7 2DE, England. Telephone: 01 - 589 344 Ext. 329.

MORE ON R.G.V. EIGEN

The R.G.V. Eigen Memorial Committee has received the following letter, reproduced here in its entirety. The Committee is grateful for the insight on the life and times of R.G.V.E. supplied by readers such as MNC who has forwarded this information.

Dear Sir,

In line with the suggestion of HS in the number 10 Newsletter, I have been able to discover that there is yet another claimant to the Eigen value crown. Yvonne La Tente, daughter of Claude La Tente (who is himself known for his work on the heat content of materials at the end of the eighteenth century) is also credited in some circles with the derivation of what became known as the La Tente roots of matrices. It is interest-

COMING EVENTS


Battelle, Pacific Northwest Laboratory and the Center for Geostatistics of the Paris School of Mines - Short course on Geostatistics and Kriging. Dates: Oct. 2-6, and Oct. 8-12, 1979. Contact: Dr. P. G. Doctor, Battelle-Northwest, P.O. Box 999, Richland, WA 99352, USA. Telephone 509/942-4326.


American Congress on Surveying and Mapping, American Society of Photogrammetry, U.S. Public Health Service - International Symposium on Computer-Assisted Cartography "AUTO-CARTO IV." Date: Nov. 4-8, 1979 (Reston, VA). Contact: James A. Smith, Conference Management Branch, NCHS, Room 2-12, Center Building, 3700 East West Highway, Hyattsville, MD 20782, USA. Telephone 301/436-7122.

Federal Institute for Geoscience and Natural Resources, Hannover - CODEGDATA Workshop on Development of Geological Data Systems. Date: Nov. 28-29, 1979 (Hannover, FRG). Contact: Dr. G. Gabert, Federal Institute for Geoscience and Natural Resources, Stilleweg 2, P.O. Box 510153, 3 Hannover 51, Federal Republic of Germany.


International Union of Geological Sciences - International Geological Congress. Timetable: June 26-July 5 - Pre-Congress scientific excursions; July 7-17 - Congress meets at Palais des Congres at Porte Maillot; July 18-27 - Post-Congress scientific excursions. IAMG is co-sponsor of Symposium S.12.2.1 - Predictive Geology (G. de Marsily, D.F. Merriman); S.12.2.4 - Current tendencies in mathematical geology (J.C. Davis, E.H.T. Whitten); S.12.3.1 -
Quantitative stratigraphic correlation (R. A. Reyment, J. M. Cubitt).

Science Council of Japan, Chemical Society of Japan, and Japan Society for CODATA — Announce Seventh International CODATA Conference, "Role of Data in a Dynamic World." Date: Oct. 8-11, 1980 (Kyoto, Japan). Contact: Japan Society for CODATA, Dai-ichi Kanamori Bldg., 1-5-31 Yushima, Bunkyo-ku, Tokyo, 113 Japan.

CODATA NEWS

The CODATA Task Group on Space and Time Dependent Data, under the chairmanship of R. F. Tomlinson, has been reactivated. The group is preparing a report on methods used for handling space and time dependent data in nine observational sciences, to be published in a single volume to promote interdisciplinary exchanges. The geology report, prepared by a COGEOCDATA committee under John Davis, has been submitted, as has the meteorology report. Drafts for geography and geophysics are nearing completion. The geology report will also appear as a separate publication issued by the Kansas Geological Survey in its Series on Spatial Analysis.

Two new members have joined CODATA: the Federation of Astronomical and Geophysical Services (FAGS) has become CODATA's second Co-opted Member. Dr. G. A. Wilkins of the H.M. Nautical Almanac Office, UK, is the FAGS delegate to CODATA. The International Union of Immunological Sciences (IUIS) has joined CODATA as a Union Member. Prof. Alain Bussard of the Institut Pasteur, Paris, will represent IUIS.

CODATA is publishing a series of Guides for the Presentation of Numerical Data in the Primary Literature as Issues of the CODATA Bulletin. Guides include experimental data (no. 9), biology (no. 25), and physical properties (no. 30). A guide for geology is now in press and will be distributed by the IAMG as a service to its members.

KGS/BRGM EXCHANGE

Charles Ross of the Kansas Geological Survey is working at BRGM in Orleans, France, as part of a continuing exchange program between the two organizations. The objective of the cooperative research effort is to develop an automated cartographic system for production of geologic maps.

* The IAMG News Letter is made possible by a grant from the Kansas Geological Survey *

I.A.M.G.
KANSAS GEOLOGICAL SURVEY
1930 Avenue "A" Campus West
University of Kansas
Lawrence, Kansas 66045

NO. 21-22

FIRST CLASS
### 1979 Dues Notice!

**International Association for Mathematical Geology**

#### 1979 Dues Notice!

<table>
<thead>
<tr>
<th>Membership Level</th>
<th>Membership Benefits</th>
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<tbody>
<tr>
<td>$15.00 US (Includes JOURNAL OF MATHEMATICAL GEOLOGY)</td>
<td>$35.00 US (Includes COMPUTERS &amp; GEO SCIENCES)</td>
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<tr>
<td>$45.00 US (Includes MATHEMATICAL GEOLOGY &amp; COMPUTERS &amp; GEO SCIENCES)</td>
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Enclosed are my 1979 Dues in the amount of $____.

[Complete following. Please PRINT all information.]

**Title**—Mr., Dr., etc.  (new member write "NEW")

**Name**

**Organization**

**Street address or postal box**

**City**  **State or province**

**Country**  **Postal or ZIP code**

Your dues are unpaid!

**Members outside U.S.—Want to receive IAMG NEWSLETTER and IAMG JOURNAL?**

Airmail shipment of the journals can be arranged upon special request, but the postal charges are very high.

The IAMG, which strives to promote the development and application of quantitative methods in the Earth sciences, presently includes over 450 members. It is an affiliate of the International Geological Union and the International Statistical Institute. IAMG Regional Organizations are affiliated with numerous national societies, including 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**

1930 Avenue "A", Campus West

Lawrence, Kansas 66044 U.S.A.