

IAMG NEWSLETTER

NO. 49, NOVEMBER, 1994

1992 AND 1993 KRUMBEIN MEDALISTS

IAMG President, **Michael Hohn**, has announced the 1992 and 1993 Krumbein Medalists. For 1992, the medalist is past IAMG President, **Richard McCammon**. In his letter of June 8, 1994, Hohn wrote McCammon that the medal was being presented for his "distinguished career as author and researcher in the field of mathematical geology." Moreover, McCammon has made a tremendous contribution to IAMG, serving, of course, as past President. Furthermore, Dick McCammon is the editor of IAMG's newest journal, Nonrenewable Resources.

The Krumbein medalist for 1993 is **DeVerle P. Harris**, professor of mineral economics at the University of Arizona in Tucson, Arizona. In his letter of June 8 to Harris notifying him of his selection, Hohn recognized in particular Harris' contribution to teaching. Furthermore, Harris' contributions to research are numerous and outstanding.

Both recipients received their medals at the 1994 IAMG Annual Meeting in Mont Tremblant. A complete biographical sketch of each recipient will appear in a future issue of Mathematical Geology.

SRIVASTAVA 1993 PRESIDENT'S PRIZE WINNER

Mohan Srivastava is the 1993 recipient of IAMG's President's Prize. This award is made to an individual, 35 years old or younger, who has made an outstanding contribution of mathematics to the geological sciences. Srivastava was selected by a committee composed of six scientists representing five different countries. A more complete profile of Mohan will appear in the spring issue of this Newsletter.

BEST PAPER AWARD, C&G

The best paper for 1993 in Computers and Geosciences is by **A.D. Fowler** and **D.E. Roach**, "Dimensionality analysis of time-series data: nonlinear methods.

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Georges Verly, B.P. Research Center, Chertsey
Road Sunbury-on-Thames, Middlesex TW 167 LN, England

John Tipper, Geologisches Institut der Albert-Ludwig-Universitat,
d-7800 Freiburg, IM. Breisgau, Albertstrasse 23B, GERMANY

Eric Grunsky, Geological Survey Branch, Ministry of Energy,
Mines and Petroleum Resources, 553 Superior St., Victoria,
B.C., Canada, V8V 1X4.

Zhou Di, No. 164, W. Xinggang Rd., S. China Sea
Oceanographic Inst., Ocean Structure Section, Guangzhou,
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CO, 80225-0046

Editors

Mathematical Geology: Daniel F. Merriam (Acting)
(address shown below for Computers
and Geosciences);

Computers and Geosciences: Daniel F. Merriam
Kansas Geological Survey
1930 Constant Avenue
University of Kansas
Lawrence, KS 66047

Nonrenewable Resources: Richard McCammon, U.S.
Geological Survey, National Center 920,
Reston, VA 22092

PRESIDENT'S FORUM

by Michael Hohn

I have just returned from the Annual Meeting of the IAMG at Mt. Tremblant, Canada. For those not familiar with Canadian geography, the meeting site is northwest of Montreal, and truly a beautiful place. The IAMG Council has approved a proposal to hold the next Annual Meeting of the IAMG in Osaka, Japan. This Newsletter includes the first announcement. Japan is a long way away for many of us, but the western Pacific rim has long had a history of involvement in mathematical geology, but few meetings sponsored by the IAMG have been held there, until now. The IAMG will sponsor a number of symposia as part of the International Geological Congress in 1996, to be held in Beijing, China. A site for the 1997 meeting has not been selected, so we will be accepting proposals from organizations wishing to host that meeting.

There is a move on to create a regional organization of the IAMG in Europe. A number of such organizations have been created in the past and have sometimes distributed newsletters and held meetings. MGUS (Mathematical Geologists of the United States) held two very successful meetings and published a directory of mathematical geologists in North America, which I found very useful. We encourage such organizations because they create the type of local activities that keep many scientists interested in associations like ours.

As a final word, the IAMG exists because of volunteers giving their time and expertise. No officer, council member, or editor gets a paycheck for their work for the Association. Each year, I have set up a number of committees, largely for awards. I ask people who have helped in the past, or who I have met and seem to be responsive. I cannot meet everyone, so if any member would like to serve on a committee, just let me know. The commitment in time is minimal and the work is conducted through the mail for the most part.

EDITOR'S NOTE: THE FOLLOWING IS CONTRIBUTED BY RICARDO OLEA, KANSAS GEOLOGICAL SURVEY:

INDIVIDUAL MEMBERSHIP

Established during the XXIII International Congress in Prague, the IAMG was founded in a meeting on August 22, 1968, attended by 20 individuals from ten countries. Five membership categories were approved—individual, institution, company, sustaining, and patron—but only the first one has had a continuous subscription. In an effort to be a truly international organization, the IAMG nominated two treasurers and was flexible in the type of the currency used to pay dues, a move intended to facilitate payments by those living in countries with monetary controls. One could either send five Swiss francs (US\$1.50) or its equivalent on another currency of easy acceptance in the western world to T. V. Loudon in London or ten Czechoslovakian crowns to Václav Nemeč in Prague. Individual members received the IAMG Newsletter free and could order personal copies of the journal at half the list price, which started by publishing two issues a year in 1969 at the list price of US\$ 6 per issue. Figure 1 is a pictorial view by our first western treasurer of the birth of our organization.

Figure 2 shows the first update of Loudon's graph in Figure 1 that I have prepared based primarily on information provided by the active treasurers and documents found at the IAMG archives at the Kansas Geological Survey in Lawrence, USA. Those individuals who paid dues during 1969 received a special certificate and the title of Charter Members. Collection of membership dues and the subscription were marred by numerous irregularities that contributed to a decline instead of an increase in membership. The general assembly gathered in Montreal on August 28, 1972, and approved adjustments to remedy the situation. The main change was a centralization of payments at a time when our only journal was appearing quarterly. Individual membership dues were raised exactly ten fold to US\$15, but included the journal for "free." In other words, subscription to the journal was not optional anymore and one could no longer send payments directly to the publisher. The IAMG kept only US\$3 and the remainder of any payment went to the publisher to pay for the subscription, a situation that still holds. The new arrangement reduced dramatically the number of members complaining about not receiving the journal regularly, despite an increase in the volume of the publications. The year 1975 saw *Mathematical Geology* going up to six issues a year and the appearance of the new journal *Computers and Geosciences*, which started as a quarterly.

Unfortunately the new system put an end to worldwide equity among individual members. Although the statutes have to this day a provision for special arrangements for those in countries with currency regulations, the rule of no dollars no journal has yet to be broken. Starting in 1972, membership in Figure 2 includes only those individuals paying dues to the western treasurer. I could not obtain counts for those individuals primarily in eastern Europe who for many years have been making payments to the eastern treasurer for the right to receive a newsletter. In 1992 the general assembly approved the new category of corresponding members, allowing individuals in countries with inconvertible currencies to receive the newsletter for free.

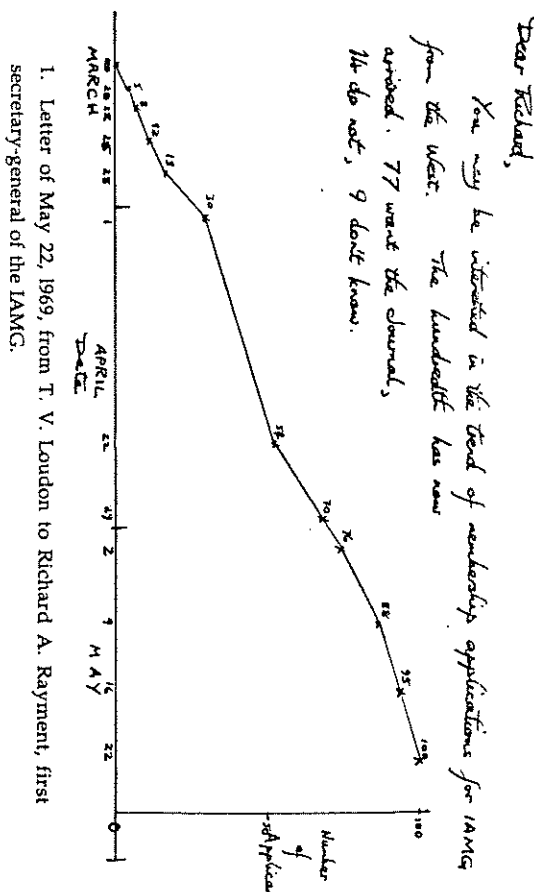
Figure 2 contains the bare numbers. Interpretation of the fluctuations is debatable and as easy to explain as the ups and downs of stock markets. I see three periods in the life of our organization. Until 1978 the organization remained stagnant with an average membership of 291 members. The eve of 10th anniversary of the IAMG marks the beginning of the most impressive membership surge in our short history. Membership went from 233 in 1977 to 800 in 1984, more than a three fold increase, despite an increase of US\$3 in the membership dues for those members taking *Mathematical Geology*. The period coincides with a surge in the price of several mineral commodities, in particular oil, and a serious attempt by the membership committee to attract more members. Contractions in the minerals market made a dent in our membership by 1985, ending five years of continuous growth. At the present time we are in a second plateau at 549 members, almost twice the level of the first one. The short-lived increase of 1992 coincides with another vigorous drive to increase membership.

The IAMG, like any other professional organization, never has a complete renewal rate among its existing members, which means that the recruiting of new members is important even to achieve zero growth in membership. When we have been able to overcompensate for the losses, the association has grown. In 1991 for instance, we had 170 new members, but because 90 of the 1990 members did not renew their membership, the net gain was only 80 individuals. In less fortunate years, when the dropouts exceeded the new members, the IAMG has had net losses in membership.

It is the duty of the membership committee, not the treasurers', to recruit new members. Membership drives, however, are expensive and fairly inefficient. Despite the best mailing screening, for example, the success ratio of our last membership drive was 4% and the average cost about US\$20 per new member recruited. A larger membership is important to many of our programs, especially to the survival of our newest journal, *Nonrenewable Resources*. During its first two years of publication the IAMG has had to pay US\$25,000 in penalties for a subscription level below the minimum specified in the contract with the publisher.

Members often know about peers active in mathematical geology or related fields that are not members of the IAMG and have a high likelihood of joining us. If each member would be able to recruit just one new member, we should take care of problems such as the subscription to *Nonrenewable Resources* and finally reach the target of 1,000 members announced in 1970 in the first issue of our newsletter.

Ricardo A. Olea



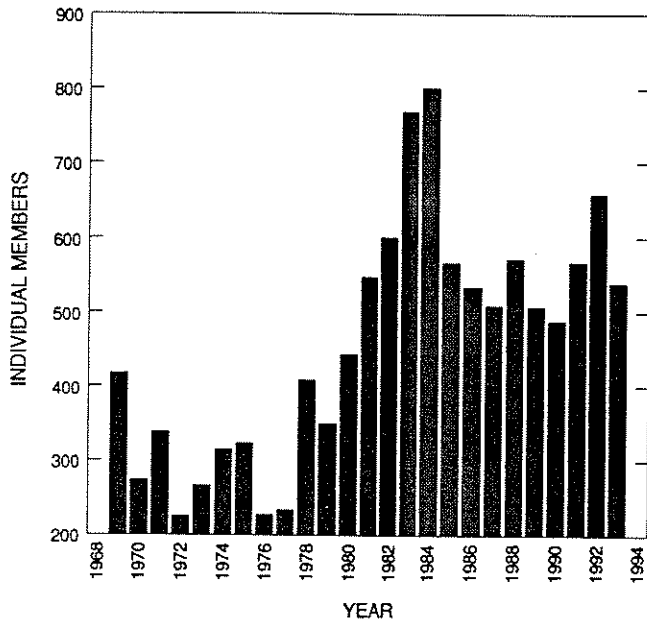


FIGURE 2 FROM R. OLEA

MEMBERSHIP INFORMATION

Join the world of quantitative geology!

IAMG
INTERNATIONAL ASSOCIATION
FOR MATHEMATICAL GEOLOGY

1994 IAMG DUES: Your choice of journal subscription determines your dues. (Circle ONE combination below.)

Mathematical Geology (MG)	US\$ 30.00
Computers & Geosciences (C&G)	58.00
Nonrenewable Resources (NR)	45.00
MG + NR	73.00
MG + C&G	86.00
NR + C&G	101.00
MG + NR + C&G	133.00

Mathematical Geology appears eight times per year, Computers & Geosciences, ten times, and Nonrenewable Resources, quarterly.

.... and (if you wish) order from the IAMG Monograph Series: Studies in Mathematical Geology

CIRCLE PRICES OF DESIRED MONOGRAPHS

#1: "Use and Abuse of Statistical Methods in the Earth Sciences" edited by William B. Size US\$ 25.60

#2: "Oil and Gas Forecasting - Reflections of a Petroleum Geologist" by Lawrence J. Drew 31.50

#3: "Geostatistical Glossary and Multilingual Dictionary" edited by Ricardo Olea 31.95

#4: "Techniques for Determining Probabilities of Geologic Events and Processes - A Review" edited by R.L. Hunter and C.J. Mann 31.50

#5: "Computers in Geology - 25 Years of Progress" edited by J.C. Davis and U.C. Herzfeld 31.00

Total Monographs US\$ _____

Send to:
INTERNATIONAL ASSOCIATION
FOR MATHEMATICAL GEOLOGY
Dr. John O. Kork, Western Treasurer,
U.S. Geological Survey, Mail Stop 937,
Box 25046, Denver Federal Center,
Denver, Colorado USA 80225-0046



YOUR ADDRESS:

Name _____

Street _____

City/State/ZIP _____



International Association for Mathematical Geology

1995 Annual Conference

29 October - 2 November 1995

Osaka International Communication Hall, Osaka, Japan

First Announcement

Sponsors: International Association for Mathematical Geology
Japan Society of Geoinformatics
Osaka City

You are kindly invited to participate in the 1995 Annual Conference of the International Association for Mathematical Geology which will be held on 29 October - 2 November in Osaka, Japan. The conference consists of an open lecture for citizen entitled 'Global environment and urban ecology', several scientific sessions and workshops. It is the first IAMG annual conference in Asia. We hope many participants from Asia and Oceania will attend, and it will help the development of mathematical geology in these areas. The following is a tentative plan of the conference, and your proposals and suggestions are greatly acknowledged.

Main Theme

Mathematical Geology for the Studies of Resource, Environment, Hazard and Urban Geology

Scientific Topics

Mathematical application in environmental studies
Geostatistics for resource assessment and exploration
Mathematical prediction and prevention of geological hazard
Urban geology and its data processing
Integration of geological systems

Workshop

Several workshops are planned on new methods and systems for applied geology by using computers. New proposals of workshop are also invited.

Organizing Committee

Chairman: Prof. Kiyoshi Wadatsumi, Osaka City University, Japan
Vice Chairman: Prof. Nirehi Nishiwaki, Nara University, Japan
Secretary: Prof. Kiyoji Shiono, Osaka City University, Japan

Members:

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Prof. A. Iwamatsu, Kagoshima University, Japan
Dr. Y. Iwasaki, Osaka Soil Laboratory, Japan
Dr. K. Koike, Kumamoto University, Japan
Dr. R. Kouda, Geological Survey of Japan
Dr. S. Masumoto, Osaka City University, Japan
Dr. R. B. McCammon, US Geological Survey, USA
Prof. T. Shoji, Tokyo University, Japan
Prof. K. Yamamoto, Koka Women's Jr. College, Japan
Prof. S. Yokota, Kagoshima University, Japan
Prof. Zhao Pengda, China University of Geology, China

Conference Program

Sun 29 October	Open Lecture for Citizen Registration
Mon 30 October	Opening Session Scientific Sessions Reception
Tue 31 October	Scientific Sessions
Wed 1 November	Scientific Sessions Closing Session
Thu 2 November	Workshops and Short Courses

Abstract

An abstract of each paper should be submitted to and reviewed by the scientific program committee. Details for preparing the abstract will be given in the second circular.

Proceedings

A special issue of 'Geoinformatics' (Journal of Japan Society of Geoinformatics) will be published for this conference. Papers presented at the conference should be published in one of four journals: Geoinformatics, Mathematical Geology, Computers & Geosciences, or Nonrenewable Resources.

Registration Fee	Nonmembers	Members
	JPY 20,000	JPY 18,000 (after July 1, 1995)
	JPY 18,000	JPY 16,000 (until June 30, 1995)

All the nonmember participants automatically have one year membership of the IAMG including subscription of Mathematical Geology. Participants who wish to subscribe other IAMG journals (Computers & Geosciences, Nonrenewable Resources) will pay the difference from the basic fee.

Accommodation

Accommodation facilities are available at Osaka International Communication Hall, which costs about JPY 6,000 per night. There are also many hotels near the conference site. Their details will appear on the next circular.

Language

Official language is English for scientific sessions. Simultaneous translation between English and Japanese will be available only for the Open Lecture for Citizen.

Support

Partial support of travel and staying costs for selected participants from developing countries will be available. Details of its application form will be appear on the second circular.

Travel to Osaka

Osaka is the center of southwest Japan and the second biggest city in Japan. There are many direct flights from many cities in the world to Kansai International Airport (the new international airport of Osaka), which is 50 km south from the downtown and requires 40 minutes by train. It is also possible to access to Osaka via Tokyo, but it requires much time.

Climate

Climate of Osaka in late October is generally mild and fine, with several rain days. Daily temperature is 9 to 20 °C, and the average humidity is 72 %.

Second Circular

The second circular, containing more detailed information, will be issued in December and sent to all the IAMG members and people who sent the attached reply form.

Contact Address

All the correspondence on this conference should be addressed to:
 Prof. Niichi Nishiwaki, Vice Chairman of IAMG 1995
 Faculty of Social Research, Nara University
 1500 Misasagi-cho, Nara City, 631, Japan
 Telephone +81-720-81-7548
 Telefax +81-720-81-7548

Please check applicable blocks of the following form, and send it back by telefax or airmail to:

Prof. Niichi Nishiwaki, Vice Chairman of IAMG 1995
 Faculty of Social Research, Nara University
 1500 Misasagi-cho, Nara City, 631, Japan
 Telefax: +81-720-81-7548

1. I am interested in the IAMG Annual Conference 1995.

2. I will attend the conference certainly probably

3. I will oral presentation
 present paper(s) in poster presentation
 I will not

Tentative title of paper: _____

4. I will hold workshop(s) on _____

5. Comments: _____

Name _____ Title _____ Given Name _____ Initial _____ Family Name _____

Institution: _____

Section etc.: _____

Address: _____

State _____ # _____ Zip Code _____ Country _____

Telephone + _____ Country Code _____ Area Code _____ Number _____

E-Mail Address: _____

INTERNATIONAL CONFERENCE ON APPLICATION OF MATHEMATICAL METHODS IN SCIENCE AND TECHNOLOGY

Your Colleague,

We are pleased to inform you about the International Conference "Application of Mathematical Methods in Science and Technique" organized during the 4-th International Symposium on Application of Mathematical Methods and Computers in Geology, Mining and Metallurgy in Krakow. The subject matter of the Conference is the application of logistics and its programming to economic problems including human activity.

Our experience gained during the organization of former symposia has revealed the need to develop logistic systems in the individual branches of economic life.

When formulated these systems show common features although they are being developed in different fields of problems. Hence the idea arose of extending the scope of the Symposium to include related problems utilizing similar assumptions of logistic procedure so as to cover the whole of the knowledge, in particular the essential aspects of human activity.

The wide programme of the Conference includes geology, mining, metallurgy, industrial activity in general, economic problems, management with an emphasis put on human activity.

The Conference will provide an occasion to exchange opinions on the logistic systems solved individually in the particular fields of science in Poland and abroad. Besides presenting their own achievements the participants will also have the occasion to meet the representatives of other fields of science and become acquainted with the local problems in the particular countries.

Our former symposia were mainly devoted to problems in geology, surveying and exploitation. Now we invite papers on other subjects also, including economy, building engineering, industry, agriculture, commerce and the man's role in these problems including health. The papers will be discussed in separate panel sections and published in the Symposium Bulletins. The particular sections will be organized depending on the number of submitted papers. The languages of papers are English, Russian, German and Polish, each paper including an abstract in English and Russian.

Deadlines:

Registration and submission of abstracts (not exceeding one page) - October 30, 1994

Submission of papers - December 31, 1994

Final registration - March 31, 1995

We cordially invite you to participate in the Symposium and to present some of your achievements in the respective field of science.

Appreciating your contribution to the Symposium, we are looking forward to your kind reply.

Payments:

Participants 80 USD
Printed materials 50 USD

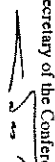
Accommodation:

Hotel prices (1994, USD)					
4-stars	single	115	double	130	room
3-stars	single	70	double	90	room
2-stars	single	50	double	80	room
students	hostel			25	

Correspondence:

All the enquiries should be directed to:

Zdzisław Galaś, D. Sc. in Eng.
University of Mining and Metallurgy
Faculty of Mining
Al. Mickiewicza 30
30-059 Cracow
Poland
FAX: 4812 331014

Secretary of the Conference

Zdzisław Galaś, D. Sc. in Eng.

International Conference: "Application of Mathematical Methods in Science and Technique"
organized during the 4-th International Symposium on
Application of Mathematical Methods and Computers in Geology, Mining and Metallurgy
20-21 June 1995 Cracow, Poland

REGISTRATION CARD:

Name:

Title:

Organization:

Address:

Phone: FAX: Telex:

I will submit a paper:

yes	<input type="checkbox"/>	no	<input type="checkbox"/>
poster:	yes <input type="checkbox"/>	no <input type="checkbox"/>	
oral:	yes <input type="checkbox"/>	no <input type="checkbox"/>	

Title of my paper:

Date: Signature: