

# IAMG News Letter No. 26

XXVII GEOLOGICAL CONGRESS

BANG!

The 27th International Geological Congress will be held in Moscow in 1984. Mathematical Geology and Geological Information will be the themes for meetings in Section C.20. Specific subjects include:

- C.20.1.1. Mathematical models of geological processes.
- C.20.1.2. Mathematical approaches to geological classification
- C.20.1.3. Geostatistics
- C.20.1.4. Mathematical analysis of geological information obtained from space; image analysis and application to geologic mapping

Inter-section symposia include:

- S.20.2.1. Computerized evaluation and forecast of geological resources
- S.20.2.2. Geological information; collection, storage, distribution and management of geological data

Convenors for the sessions have not yet been selected. Comments and suggestions can be directed to Dr. Iskander Jafarov, Narimanov St. 33, Institute of Problems of Deep-seated Oil and Gas Deposits, Az SSR Academy of Science, 370143 Baku, USSR, or to IAMG President E.H.T. Whitten (Dept. Geological Sciences, Northwestern University, Evanston, IL 60201 USA).

## PRIBRAM MINING SYMPOSIUM

The IAMG will again cosponsor the section on Mathematical Methods in Geology at the Pribram conference in Czechoslovakia on October 12-16, 1981. The section will concentrate on problems of exploration and reserve estimation. Those interested should contact at once Dr. Vaclav Nemeč, Hornická Pribram, Box 41, 26102 Pribram 2, CZECHOSLOVAKIA.



NEWSLETTER EDITOR: JOHN C. DAVIS

The Bulletin of Australian News in Geomathematics (BANG) has begun publication. It will be issued bimonthly and will provide topical information on all aspects of geomathematics in Australia. Contact Dr. N. I. Fisher, CSIRO Institute of Earth Resources, P.O. Box 136, North Ryde, NSW, AUSTRALIA 2113.

## GEOSTATISTICS SCHOOL

Courses titled "A Practical Introduction to Geostatistics" (September 7-11, 1981) and "Geostatistics for the Mining Industry" (September 14-18, 1981) will be offered by the Centre de Geostatistique, l'École des Mines de Paris, in Fontainebleau, France. Registration is FF 2700 per session. Contact the Centre at 35 Rue St.-Honore, 77305 Fontainebleau, FRANCE.

## INTERNATIONAL WORKSHOP

Construction of composite standards for biostratigraphic correlation is the topic of a three-day workshop in Tallinn, Estonia, on October 13-15, 1981. Request additional information on this meeting of IGCP Project 148 from Dr. Madis Rubel, Institute of Geology, Estonia, pst.7, Tallinn 200101 USSR.

## CODATA CONFERENCE

The 8th International CODATA Conference will be held at Kozubnik, Poland, October 3-7, 1982. The conference will be devoted in large part to consideration of data aspects of world raw materials resources. Additional information on geoscience aspects can be obtained from Dr. Richard Sinding-Larsen, Norwegian Geological Survey, Postboks 3006, Trondheim 7001 NORWAY.



KANSAS GEOLOGICAL SURVEY, 1930 AVENUE "A" CAMPUS WEST  
UNIVERSITY OF KANSAS LAWRENCE, KANSAS 66044, USA

BY THE WAY,

...Much of this News Letter is devoted to MGUS, the Mathematical Geologists of the U.S., which is the IAMG Regional Organization of the USA. MGUS is undergoing a burst of activity at the present time, reflecting in part the excellent support of its membership, and the realization that whatever the organization achieves, it must do on its own initiative. Overtures to affiliate with either of the two major U.S. geological societies (GSA and AAPG) were rebuffed for various bureaucratic reasons, although one suspects that the reluctance of "real" geologists to associate with those of us who stoop to the use of numbers may have had much to do with the rejections. In any case, MGUS resolved that it must make its way independently, even though this means doing without the logistical and other support which a large national society can provide. This also means that the membership itself must volunteer to do all of the organizational work required to make a professional society function! So far, the achievements of MGUS have been outstanding, and promise to be even better in the future. Those who have worked so hard for the organization are to be congratulated, and other mathematical geologists in the USA are urged to pitch in

The following is excerpted from IAMG News Letter No. 6 (1975) as a service to IAMG members unacquainted with R.G.V. Eigen. *Centenary of Pioneer Geomathematician: Rudolf Gottlieb Viktor Eigen (1833-1876) is remembered by all mathematical geologists for his elucidation of the matrix properties that bear his name. Less well known are his pioneer mathematical investigations of glacial topology that distinguish him as possibly the true "father of mathematical geology."* Eigen was born in the Austrian mountain village of Heiligenblut, the second son of a local pastor and, following a brilliant student career at the University of Göttingen, became the youngest professor of mathematics in the history of that illustrious university. The stocky young professor was highly popular with his students although his stringent academic demands earned him the nickname of "Eigen" (ogre). Eigen's somewhat bohemian lifestyle resulted in conflict with the university authorities and ultimately led to his enforced resignation following a scandal that rocked the university and purportedly involved no less than 5 professors' daughters. The embittered Eigen returned home and singlemindedly devoted himself to his second love, mountaineering. He eked out a modest living by acting as guide for rich Victorian climbers, supplementing his income by delivering invited lectures to mathematical societies in England and France. Eigen was acquainted with many of the prominent European mathematicians of the day, including Charles Dodgson ("Lewis Carroll") who may have used him as the inspirational basis for the Alice character, "the White Rabbit." He was also a gifted amateur chess player who drew with Morphy in an exhibition match in Paris, using a highly unorthodox opening (still known as the "Eigen Gambit") anticipating Réti's hypermodern school by 50 years. Eigen published little and is chiefly remembered for his monumental "Überbrückungsschlüsse der Zahlen" (out of print) and his fragmentary, vituperative correspondence with Cayley (originator of matrix algebra). Eigen's life ended prematurely when he fell to his death in a crevasse on the Pasterzen glacier following a successful ascent of the Grossglockner. [Other Eigen information that has appeared in the News Letter will be reprinted if interest is expressed by IAMG members. Readers familiar with biographical details or possessing memorabilia of R.G.V. Eigen, please contact the News Letter editor.]

and help! Serve as an officer or committee member, attend the meetings, and help MGUS serve the mathematical geologists of the U.S.!

...Vassil Vuchev, IAMG Eastern Treasurer, has been appointed Research Scientist for Leg 79 of the Deep-Sea Drilling Project. He currently is on board the GLOMAR CHALLENGER, which is drilling off the coast of Africa. Dr. Vuchev is Visiting Research Scientist with the Kansas Geological Survey, on leave from the Bulgarian Academy of Science.

...Mr. Li Yuwei, of the Institute of Mineral Deposits of the Chinese Academy of Geological Sciences, has invited IAMG Secretary-General John Davis to provide a written address to the Second National Conference of Mathematical Geology, to be held April 21-25, in Changsha, China. The meeting will include over 250 papers, and attendance is anticipated to be in excess of 260 persons. The meeting will mark the founding of the Specialized Committee for Mathematical Geology of the Geological Society of China. Since it is likely that the SCMG will become a regional organization of the IAMG, the Secretary-General took this opportunity to welcome the Chinese geomathematical community into the international association.

## XI SEDIMENTOLOGICAL CONGRESS

"Applications of Numerical Methods in Sedimentology" is the title of Symposium 37 to be held at the 10th International Sedimentological Congress in Hamilton, Ontario, Canada, on August 22-28, 1982. For additional information, contact session co-chairman Prof. D. F. Merriam, Dept. Geology, Syracuse University, Syracuse, NY 13210 USA.

## RESOURCE ANALYSIS

The Geological Information Group will hold a meeting on "Computer Methods in Resource Analysis" on November 24-26, in London, England. Contact Dr. M. F. Horder, IGS, 154 Clerkenwell Road, London EC1R 5DV, ENGLAND.

## 10th GEOCHAUTAUQUA

The Canadian Geological Survey will cosponsor the 10th Geochautauqua on Computer Applications in the Earth Sciences in Ottawa, Canada, on October 23-24, 1981. The theme will be use of computers in mineral-resources evaluation. Papers will cover computer-based systems for resource analysis, integration of geological, geophysical, and geochemical data, computer simulation of ore-forming processes, and multivariate statistical analysis of geoscience map data. The conference will be preceded by a three-day workshop on interactive graphic computer programs for multivariate analysis and image analysis. Contact Dr. Frits Agterberg, Geological Survey of Canada, 601 Booth Street, Ottawa, Ontario K1A 0E8 CANADA.

## AAPG RESEARCH CONFERENCE

A symposium on "Computer Applications to Exploration" will be held May 10-12, 1982, in Keystone, Colorado, USA. Attendance is by invitation. For information, contact Dr. David Matuszak, Amoco Production Co., P. O. Box 591, Tulsa, OK 74102 USA.

## AAPG TECHNICAL SESSION

A technical session on computer applications to exploration will be held on June 3, 1981, at the AAPG annual convention in San Francisco, California, USA. The meeting will be in Room 408 of the Civic Auditorium at 1:30 p.m. Nine technical papers are scheduled.

## MATHEMATICAL GEOLOGISTS OF THE U.S. (MGUS)

Call for Nominations: Nominations are now being solicited for members willing to

serve as officers of MGUS for the next two years, 1982-1984. Each nomination must be signed by three MGUS members and forwarded to MGUS Secretary, Thomas A. Jones, Exxon Production Research Co., P.O. Box 2189, Houston, Texas 77001. Nominations must be received by the Secretary no later than August 15, 1981. Offices to be filled are president, vice-president, secretary, and treasurer. Ballots for the slate of nominees will be sent to each MGUS member before September 15, 1981; voting must be completed prior to November 15, 1981. Ballots will be counted by the Executive Board before the annual meeting of MGUS to be held January 27-29, 1982, in Golden, Colorado, when results will be announced. Newly elected officers will assume their offices at the annual meeting and serve until the 1984 annual meeting.

## EIGEN RESEARCH NOTE

[The following information has been received at the office of the IAMG Secretary-General.]

"In cleaning out an attic at the Sthlm Geological Survey (prior to re-localization) an ancient brief-case was unearthed which turned out to be rich in Eigenlore.\* Most of the documents will need much time for their deciphering but the following tid-bit is available:

"During his youth, Eigen was particularly interested in Gypsy Lore and, in fact, a member of the clan of the Kalderash gypsies was inter-married with the Eigens, thus being the forebear of one of the manush branches of Sinti gypsies. Following in the footsteps of the Habsburgs (Crown Prince Otto, for whom Eigen had an unbounded, even obsequious admiration-- fishing for a title eh?) Eigen seems to have prepared a vocabulary and grammar of the dialect spoken by his relative (whose name, it seems, was Johann Dimitri). The list contains some 400 words and a sketch of Romani grammatical rules. In all fairness, it must be suspected that Eigen cribbed a good deal of this from Otto von Habsburg's list, even to the extent of slavishly copying printing errors.

"Although the present note brings us no further into the field of Eigen's mathematical studies, it does show us that he was also interested in linguistics. RAR

\*The identity of the original owner is unknown, but Aloysius Thaddeusz Jacobi is under suspicion--a nephew of Eigen's rival Carolus Jacobi."

This flyer will be distributed at several meetings, and by means of several mailing lists. If you receive more than one copy, please encourage others to complete and return this form to:

Professor James B. Campbell  
Department of Geography  
Virginia Polytechnic Institute  
Blacksburg, VA 24061  
(703) 961-5841

Information must be received by December 15, 1981 to be included in the 1982 edition.

If you contributed to the 1980 edition, please send updated information.

I contributed to the 1980 edition, and am now enclosing updated information for the 1982 edition

I am submitting information for the 1982 edition; I will be listed in the 1982 edition for the first time

Information for the 1982 edition of  
DIRECTORY OF NORTH AMERICAN GEOSCIENTISTS ENGAGED IN MATHEMATICS, STATISTICS  
AND COMPUTER APPLICATIONS

Name \_\_\_\_\_ Subject \_\_\_\_\_ School \_\_\_\_\_ Yr \_\_\_\_\_  
Business Address \_\_\_\_\_ Degrees: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Business Phone: ( ) \_\_\_\_\_  
Professional Specialities (list as many as appropriate)  
\_\_\_\_\_  
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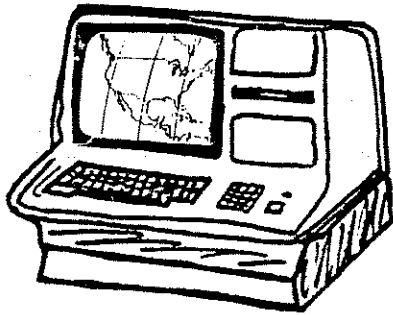
Recent professional affiliations:  
\_\_\_\_\_  
\_\_\_\_\_



Attach a recent black and white photograph of yourself. Lightly print your name and address on the back so we can keep all the Smiths and Joneses straight!

(We still have photos from the first edition, so those who are contributing for the second time have the option of using the old photograph, or providing a more recent one.)

FIRST ANNOUNCEMENT AND CALL FOR PAPERS  
**FIRST ANNUAL CONFERENCE  
ON THE MANAGEMENT,  
ANALYSIS AND DISPLAY OF  
GEOSCIENCE DATA**



January 27-29, 1982  
Colorado School of Mines  
Golden, Colorado

**Mathematical Geologists of the  
United States**

The First Annual Conference on the Management, Analysis, and Display of Geoscience Data will be held January 27-29, 1982 at the campus of the Colorado School of Mines in Golden, Colorado. Convenor: The Mathematical Geologists of the United States.

The conference will provide a forum for geoscientists, mathematicians, statisticians and computer scientists to discuss progress in theoretical and applied approaches.

The program will include invited review papers on the following topics:

- General
- Advances in geostatistics
- Developments in geomathematics
- Computer applications
- Computer graphics
- Database management

Contributed papers are invited on any of these topics. Suggestions or contributions on other, related topics will also be considered by the organizing committee. Abstracts of all presentations will be distributed at the conference.

Those interested in attending or those wishing to submit an abstract should complete the form below and mail to: Richard B. McCammon, U.S. Geological Survey, National Center 920, Reston, VA 22092. The deadline for receiving this information is August 15, 1981.

Registration forms and titles of papers to be presented will be mailed in the Fall.

tear below and return

- I am interested in attending the conference.
- I would like to present a paper. The tentative title is:

\_\_\_\_\_

\_\_\_\_\_

Name \_\_\_\_\_ Title \_\_\_\_\_

Organization \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

\*\*\*1982 DIRECTORY OF MATH AND COMPUTER GEOSCIENTISTS\*\*\* The Mathematical Geologists of the U.S. (MGUS), a regional organization of the IAMG, is currently compiling the 1982 edition of the Directory of North American Geoscientists Engaged in Mathematics, Statistics and Computer Applications. The directory lists individuals from industry, government, and universities who have an interest in applying quantitative methods and computers to problems in the Earth sciences. Each entry includes address, research interests, professional experience, and educational background. The first edition (1980), lists over 200 geoscientists with backgrounds in a wide variety of fields at all educational levels. The directory was supported by contributions from industry and a state survey. Sales of the first edition placed copies in libraries of major research universities and industrial corporations in North America and Europe. We seek to expand the 1982 edition, and are soliciting new entries. If you contributed to the 1980 edition, please submit updated information. Please circulate this flyer among colleagues who may wish to be included in the 1982 edition. Each contributor will receive a free copy.

\*\*\*\*\* ORDER FORM FOR THE 1980 EDITION \*\*\*\*\*

Copies of the 1980 edition of the DIRECTORY OF NORTH AMERICAN GEOSCIENTISTS ENGAGED IN MATHEMATICS, STATISTICS AND COMPUTER APPLICATIONS is still available at a cost of \$2.75 (postpaid) from:

Professor James B. Campbell  
 Department of Geography  
 Virginia Polytechnic Institute  
 Blacksburg, VA 24061 USA

Cost: \$2.75 (including postage). Make checks payable to "MGUS" (Math. Geologists of the United States).

Ship to: \_\_\_\_\_  
 (Name)  
 \_\_\_\_\_  
 (Address)  
 \_\_\_\_\_  
 (State) (Zip)

\*\*\*\*\*  
*The I.A.M.G. News Letter is made possible by a grant from the Kansas Geological Survey.*

I.A.M.G.  
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