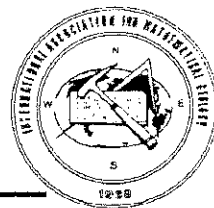


IAMG NEWS LETTER NO. 36



New IAMG Book Series

The first volume in the new IAMG series, *Studies in Mathematical Geology*, will be "Use and Abuse of Statistical Methods in the Earth Sciences," edited by W.B. Size. The book is meant for those who want a closer look at the underlying assumptions of randomness, normality, and variance of sample data used with statistical methods. It discusses the use of statistical measures of association, correlation, and regression with uncontrolled and extremely variable natural observations. The book was developed from an IAMG Symposium at the 1984 Geological Society of America (GSA) meeting in Reno, Nevada.

The new book will be issued for the IAMG by Oxford Press in spring 1987. A significant discount will be available to IAMG members. Watch for a future announcement.

North American Geostatistics Council

The University of Wyoming hosted the first workshop of the North American Council on Geostatistics in August, 1986. The workshop, held at the Trail Lake Ranch Conference Center near Dubois, Wyoming, was attended by 22 invited geostatisticians from the United States of America and Canada.

The sessions were devoted to technical and administrative matters, including informal discussions of the robustness and limitations of least-squares geostatistics as well as the general need for future research in geostatistics. No formal papers were presented and no proceedings will be prepared.

The main objectives of the North American Council on Geostatistics are to facilitate communication among practitioners and promote geostatistical education and research. It was the feeling of the Council that future informal regional gatherings involving a small number of participants will continue to be beneficial. The Council decided to publish a quarterly newsletter as a basic means of achieving its objectives. **Randal Barnes** (University of Minnesota, 500 Pillsbury Dr. SE, Minneapolis, MN 55455; tel. 612-625-5828) was appointed editor. Geostatisticians in North America may contact Dr. Barnes to contribute news or to request copies of the newsletter, which will be distributed, at least initially, without charge.

The second meeting of the Council will be hosted by the University of Arizona during summer 1987. The Steering Committee for the 1987 meeting includes **Don Myers** and **Shlomo Neumann**, University of Arizona; **André Journel**, Stanford University; **Leon Borgman**, University of Wyoming; and **Stan Miller**, University of

Idaho (Secretary). The format will be similar to the first workshop. Those interested in attending may contact any member of the steering committee.

R.A. Olea, Chairman

IAMG Committee on Geostatistics



Krumbein Medal Awarded

John W. Harbaugh accepts the 10th William Christian Krumbein Medal from **Dan Merriam** in a ceremony on June 17th at the 1986 Annual Meeting of the American Association of Petroleum Geologists in Atlanta, GA. The presentation marked the opening of the Computer Applications Session at the AAPG's annual meeting, an especially appropriate forum since John Harbaugh founded the AAPG's Computer Applications Committee. In his presentation on behalf of the IAMG, C&G Editor Merriam conducted a whirlwind slide review of John's worldwide travels over the years, and at the conclusion, presented John with the collection of slides.

Replacement Copies

Members should note that the publishers of *Math Geology* and *Computers & Geosciences* both have the policy that they will replace copies lost in the mail free of charge if claims are made within six months of publication. Both journals are sent to members directly by the publishers; to avoid delay, requests for replacement copies should be sent to the publishers at the addresses listed on the inner cover of every issue. It is to each member's advantage not to wait a year or longer before noticing an issue is missing.

The IAMG News Letter is made possible by a grant from the Kansas Geological Survey, Univ. of Kansas. Published at Lawrence, Kansas.
News Letter Editors: J. C. Davis and Jo Anne DeGraffenreid.
Contributions are warmly welcomed!

A N N O U N C E M E N T
AND CALL FOR PAPERS

INTERNATIONAL CONFERENCE
AND TRAINING COURSE ON GEOMATHEMATICS AND GEOSTATISTICS
APPLIED TO SPACE- AND TIME-DEPENDENT DATA

May 18-22, 1987

University of Wroclaw
Wroclaw, Poland

Sponsored by CODATA - IAMG - IUGS - UNESCO

Objectives: To appraise advances made in analysis of space- and time-dependent data. Themes to be developed are resource assessment, environmental surveillance, and land use planning.

During the past twenty years, enormous efforts have been made gathering and analyzing geoscience information, such as geochemical, geophysical, atmospheric, remotely sensed, and natural resource data. Extensive facilities, some sponsored by CODATA, have been established to organize and disseminate these data. However, little coordinated international effort has focused on analysis and interpretation of geoscience data. As a consequence, researchers in one country may remain unaware of developments in another, methodologies are rediscovered after great duplication of effort, and valuable techniques remain underutilized. More importantly, differences in methodologies may lead to widely varying interpretations of the same global phenomena and consequent international misunderstanding.

The **International Conference and Training Course on Geomathematics and Geostatistics Applied to Space- and Time-Dependent Data** is intended to promote the exchange of ideas and concepts between leading geoscientists from the Eastern and Western countries, and from Developing Nations. It will provide scientists of all nations the opportunity to compare methodologies and to determine their comparative advantages. It

should result in better understanding of global processes and the nature of differences in interpretation. Members of the Organizing Committee include CODATA Vice-President A. Bylicki, Polish Academy of Science; IAMG President John C. Davis, Kansas Geological Survey, USA; P. Dowd, University of Leeds, UK; A.G. Fabbri, Canada Center for Remote Sensing; G. Matheron and Margaret Armstrong, Centre de Geostatistique, France; D.E. Myers, Univ. of Arizona, USA; B. Namyslawska-Wilczynska, Univ. of Wroclaw, Poland; CODATA Geoscience Committee representative J.J. Royer, Centre de Recherches Petrographiques et Geochimiques, France; and IUGS Secretary-General Richard Sinding-Larsen, Norwegian Technical Institute.

Participants. Number of participants is limited to 100. Registration fee is \$120 US. Conference venue is the University of Wroclaw, exact site to be decided by the Poland Organizing Committee which will arrange accommodations for invited lecturers and participants.

Publication of Proceedings. Contributed papers and lectures will appear in book form. Publication of the proceedings volume is anticipated within 6 months following the conference.

INTL. CONF. & TRAINING COURSE ON GEOMATHEMATICS AND GEOSTATISTICS APPLIED TO SPACE- AND TIME-DEPENDENT DATA -- Wroclaw, Poland -- May 18-22, 1987

Call for Papers: Authors are invited to submit papers, in English, dealing with aspects of space- and time-dependent data in resource assessment, environmental surveillance, and land use planning. Abstracts required by December 1986. Authors will be notified of acceptance by the end of January 1987.

Submission of Papers. Contributed papers should be forwarded to the appropriate Organizing Committee director—

Eastern Countries:

Prof. A. Bylicki
Institute of Physical Chemistry
Polish Academy of Sciences
P.O. Box 49
ul. Kasprzaka 44/52, 01-224 Warsaw
POLAND

Cable: CHEMFIZPAN
Phone: (22)771 6652

Western Countries:

Dr. J.J. Royer
C.R.P.G. [Centre de Recherches
Petrographiques et Geochimiques]
B.P. 20, 15 rue Nd des Pauvres
54501 Vandoeuvres-les-Nancy Cedex
FRANCE

Telex: 960 431 ADNANCY
Phone: (338)351 22 13

North American contributions may be forwarded via:

Dr. John C. Davis
Kansas Geological Survey
The University of Kansas
1930 Constant Avenue
Lawrence, KS USA 66046

Telex: 535004 DEPT PHYS ASTR
Phone: (913)864-4991

Tentative Program. The tentative program for the **International Conference and Training Course on Geomathematics and Geostatistics Applied to Space- and Time-Dependent Data** includes joint lectures by scientists from Eastern and Western countries on the topics of "Geostatistical Models for the Evaluation of Spatial Data" • "The Practical Aspects of Using Geostatistics in Resources Appraisal" • "Spatial Analysis in Petroleum Assessment" • "Use of Geostatistics for Appraisal of Energy Resources and Hydrology" • "Multivariable Geostatistical Analysis for Environmental Monitoring" • "Statistical and Geostatistical Analysis of Geochemical Data" • "Relationship between Data Analysis, Image Analysis, and Resource Appraisal" • "Development of Integrated System for Multivariate Analysis—Use of Image Analysis in Exploration." Lectures will be held during morning and afternoon sessions on the first four days of the conference, followed by presentation of contributed papers and discussion. The morning session of the final day of the Conference will feature a training course on geomathematics and geostatistics. The afternoon will be devoted to contributed papers, and to discussion of needs for further developments in analysis of space- and time-dependent data and how CODATA can help in problems common to geoscience activities. The conference will conclude with panel discussions summarizing the state of the art.

Sponsors of the **International Conference and Training Course on Geomathematics and Geostatistics Applied to Space- and Time-Dependent Data** are:

UNESCO – United Nations Educational, Scientific and Cultural Organization
CODATA – Committee on DATA, International Council of Scientific Unions
IAMG – International Association for Mathematical Geology
IUGS – International Union of Geological Sciences.

IGCP Program Meeting

The 14th session of the International Geological Correlation Programme (IGCP) board meeting was held February 3-7, 1986, at UNESCO headquarters in Paris. The IAMG was represented by **D.F. Merriam**. The board reviewed the status of 44 IGCP projects. Because of the withdrawal of the United States and Great Britain from UNESCO, there is severe financial strain on the IGCP. However, funding will increase slightly during the next biennium.

The IAMG has participated in the IGCP program through six projects. Only one of these, No. 239--Exploration of IGBADAT, under the directorship of **Felix Chayes**, is presently active. All of the quantitative projects have been considered to be highly successful and serve as models for other IGCP programs.

In spite of its past successes, there are concerns about the present direction of the IGCP and for its future well-being. The emphasis of the program has shifted from scientific cooperation and exchange to technology transfer and regional development, particularly in third-world nations. The result is a lessening of the scientific content of the programs. Most of the IGCP projects are descriptive compilations; many are regionally oriented and not global in nature; only a few focus on processes and techniques; and most do not address questions at the forefront of the Earth sciences. These factors have contributed to the lessening of contribution by the IAMG to the programs of the IGCP. In light of the financial problems, it is unlikely that this unfortunate tendency will be reversed in the near future.

D.F. Merriam

IAMG Representative to the IGCP

[*Editors' note:* Since Dan filed his report, additional developments have affected the IGCP. Felix Chayes has retired as Chairman of Project 239; the new Chairman is **Joe Frizado** of Bowling Green University (USA). **E. Dudich**, former director of the Hungarian Geological Survey, has been appointed IGCP Director. And, the USA and UK have contributed funding directly to the IGCP, equivalent to what would have been passed through UNESCO.]

New Journal

Elsevier Scientific Publishers have announced a new journal, *Chemometrics and Intelligent Laboratory Systems*. The journal will emphasize papers that apply statistics to the analysis of chemical data, particularly that obtained in environmental studies, the natural sciences, and industrial processes. Editor of the journal is **P.K. Hopke**, Institute for Environmental Studies, University of Illinois at Urbana/Champaign, 1005 W. Western Ave., Urbana, IL 61801 USA. The journal is issued quarterly and the annual subscription is US\$ 89.75. A special rate is available to members of the Chemometric Society.

Institute Big Success

The Advanced Study Institute, "Statistical Treatment for Estimation of Mineral and Energy Resources," was held at Il Ciocco, a mountainside retreat near Lucca, Italy, in June and July. The Institute, sponsored by the NATO Scientific Affairs Division, was attended by 80 participants, mostly from western Europe and North America. Leaders of the NATO ASI were **A.G. Fabbri** (Italy), **C.F. Chung** (Canada), and **R. Sinding-Larsen** (Norway). Participants included geologists, statisticians, and mineral economists. The Institute featured a series of tutorials by leading experts in the field, and a full schedule of presentations by the participants. Other features included a workshop on artificial intelligence and a series of roundtables that produced position papers on the state of the art in various areas associated with resource appraisal. These reports, along with the texts of the major presentations, will be published in a volume issued by D. Reidel Publishing Company, Dordrecht, The Netherlands. An announcement will appear in the *IAMG News Letter* when the volume is available.

In addition to the formal technical contributions of the Institute, it provided an opportunity for personal interaction and exchange around the sun-drenched swimming pool. Not the least of the extracurricular highlights was the sterling performance by the Institute soccer team, coached by **John Griffiths**. The Institute footballers came very close to beating a "semi-pro" team fielded by Mercedes-Benz!

MGUS-87 Conference on "EMERGING CONCEPTS" set for April '87

April 13-15, 1987, has been set as the date for MGUS-87; the first announcement appeared mid-summer. The meeting will be held at company headquarters of Fluor Engineers, Inc., Redwood City, California. **Harry M. Parker** is Local Committee Chairman. Topics for sessions and the names of session chairmen are listed below, along with telephone numbers in case there are specific questions regarding the sessions. The second announcement will be sent on request only and will include program, registration, and hotel information. Write or call Local Committee Chairman Parker (Fluor Engineers, Inc., 10 Twin Dolphin Drive, Redwood City, CA 94065; tel. 415-595-6395).

- Computer Graphics - **John O. Kork** (303-236-5709)
- Artificial Intelligence and Expert Systems - **Richard B. McCammon** (703-860-6150)
- Risk Analysis in Geological Hazards - **C. John Mann** (217-333-1166)
- Frequency Distributions - **John C. Houghton** (703-860-6455)
- New Advances in Geostatistics - **André Journel** (415-723-1594)
- Fractals in Geosciences - **Rane Curl** (313-764-3489)
- General, Including Fuzzy Logic - **Jen Ho Fang** (205-348-5095)

Reidel Offers 20% Discount on Quantitative Stratigraphy

A special offer on prepaid orders (individual IAMG members only) is available from D. Reidel Publishing Company for *Quantitative Stratigraphy* (F.M. Gradstein, F.P. Agterberg, J.C. Brower and W.S. Schwarzacher, 1985, 632 pp., hardbound, ISBN 90-277-2116-5). Contents include: I. Introduction: Quantitative Stratigraphic Correlation Techniques--IGCP Proj. 148. Stratigraphy and the Fossil Record; II. Biostratigraphic Zonation; III. Biostratigraphic Correlation; IV. Lithostratigraphy; V. Timescales, Subsidence and Sedimentation; and an Appendix of nine data bases with applications of ranking and scaling of stratigraphic events, and computer programs. The volume is available to IAMG members for Dfl. 176.00 / US\$ 61.60 (including postage and handling), 20% off the list price. Forward the following order form:

KLUWER ACADEMIC PUBLISHERS GROUP, P.O. Box 322, 3300 AZ Dordrecht, The Netherlands.

I declare that I am a member of the IAMG.

Please send me copy(ies) of *Quantitative Stratigraphy* by F.M. Gradstein *et al.* (ISBN 90-277-2116-5) at the special IAMG membership price of Dfl. 176.00 / US\$ 61.60.

I enclose Check Bank draft *or*

I authorize you to charge my credit card account:

Card No. _____ Expiration date _____

American Express Visa Eurocard

Master Card

Access Diners Club Bank Americard

NAME _____

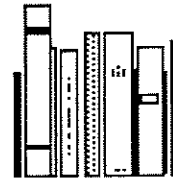
ADDRESS _____

COUNTRY _____

SIGNATURE _____ DATE _____

CASE Medallist in Our Midst

Professor Donald B. McIntyre, Department of Geology, Pomona College (USA), was one of nine Gold Medallists in the 1986 National Professor of the Year Competition sponsored by the Council for Advancement and Support of Education. ["Professor of the Year" went to Rosemarie Tong, Associate Professor of Philosophy at Williams College.]



New Books

Computer-Based Storage, Processing and Retrieval of Geo-Information, Part I, a bibliography of European publications on computer databases in the Earth sciences for 1977-1983, has been issued by Geofond, Czechoslovakia. The bibliography includes 249 citations, giving titles both in their original language and in English. The citations are listed alphabetically by author and cross-indexed by country of origin and Earth science subject area. Compiled by Jan Hruska for Working Group 4 of COGEO DATA, the 52-page booklet is available from GEOFOND, 170 000 Praha 7, Kostelni 26, Czechoslovakia.

Computer Aided Data Analysis, A Practical Guide, by W. R. Green, 1985. John Wiley & Sons, New York, 288 p., US\$ 29.95. This book is a broad introduction to data analysis techniques used in the applied sciences, with an emphasis on graphic displays. The book is not specifically aimed at the Earth science market. However, the author is a computer applications specialist for Placer Development Ltd., a large Canadian mining firm, and as a result, most of the examples are from mining and mineral exploration. The text is extremely readable, and a valuable addition to the geomathematical literature.

Oil and Gas Assessment--Methods and Applications, edited by D. R. Rice, 1986. This is AAPG *Studies in Geology 21*. It contains 22 papers covering assessment methodologies and case studies. Available from the AAPG Bookstore, P.O. Box 979, Tulsa, OK 74101 USA. 270 p. US\$ 30.

Microcomputer Applications in Geology, edited by J. T. Hanley and D. F. Merriam, 1986. Pergamon Press, Oxford, England, 258 p., US\$ 37.50. The papers in this collection cover geophysics, data management, digitizing, and graphics, as well as applications for specific geologic disciplines. Their common focus is on applications of personal computers. This is the latest volume in Pergamon's series, *Computers and Geology*.

Computers in the Petroleum Industry: "Integrated Approaches"



Report on Canadian Geochautauqua

Calgary was the site of the 15th Geochautauqua, October 2-4, 1986, cosponsored by the Canadian Society of Petroleum Geologists. In keeping with the location of the meeting in the home city of the Canadian Oil Patch, the program was developed around "Computers in the Petroleum Industry." The organizing committee was led by **Michael Marchand** (Gen. Chm.) and **Gordon Williams** (Program Chm.). They arranged two days of sessions with the theme "Integrated Approaches." Attendees listened to topics ranging over database management, geostatistics, expert systems, thrust-belt modelling, biostratigraphy, and other areas. There were several memorable moments. These included an attempt by **Graeme Philip** to goad a good-natured audience to react to his critical assessment of the potential shortcomings of kriging as a method for spatial data interpolation. Also noteworthy was the banquet speech of **John F. Rivette**, who gave an informative and nostalgic retrospect of the early days of computer applications in the Canadian oil industry. The meeting concluded with a panel discussion that addressed the question: "Integrated Exploration System--What Does It Mean?"

John H. Doveton
Kansas Geological Survey

A New Newsletter

Computers & Mining is a newsletter on mining computer applications designed for mine operators and developers. The newsletter will report on the latest developments in mining software and related applications. Case histories and program evaluations will be emphasized. *Computers & Mining* is published by Gibbs Associates, P.O. Box 706, Boulder, CO 80306 USA. Subscription is US\$ 90 per year for 12 issues. Gibbs Associates also publishes a computerized software search designed to locate sources of specific programs for petroleum exploration and in the mining area.

The 16th Geochautauqua, Oct. 12-16, 1987--Outside North America For the First Time

The 16th Annual Geochautauqua, cosponsored by the IAMG and the Czechoslovak Scientific and Technical Society, will convene October 12, 1987, in Czechoslovakia (birthplace of the IAMG) as a regular international section of The Mining Pribram Symposium on Mathematical Methods in Geology.

Research presented at the 12 previous Pribram sessions (organized annually from 1968 to 1973, and every second year thereafter) accounts for a considerable body of scientific

literature: 584 papers (numbering 6716 pages) from 544 authors, representing 25 different countries.

The 16th Geochautauqua will concern itself with both traditional and relatively new topics, focusing attention on the application of mathematical methods, computers, and the techniques of interrelated disciplines in the following directions:

- 1) Geological exploration
- 2) Exploitation models (based on geological models of ore deposits)
- 3) Hydrogeological problems
- 4) Tectonics (at all scales)
- 5) Applied geochemistry
- 6) Use of stereology in geology and mining engineering
- 7) Problems of education in mathematical geology
- 8) Artificial intelligence in geology

Topics will be addressed in various ways (plenary sessions, specialized working groups, poster sessions, individual discussions, etc.) in order to reach the maximum saturation of interest.

If you wish to attend and have not yet contacted the organizers, write now to the Convener of the Section, **Václav Nemeč**, c/o GEOINDUSTRIA, Geologická 2, 15200 Praha 5-Barrandov, Czechoslovakia. If you wish to present a paper, a short abstract (no more than 2 pages) should be sent immediately to Dr. Nemeč for inclusion in the Symposium proceedings. Authors of papers selected for complete publication will be requested by the Organizing Committee to submit full manuscripts before March 31, 1987. Publication of selected contributions is also being planned as a special volume of *Math Geology*.

Journal on Remote Sensing

The Geocarto International Centre is offering *GEO-CARTO International*, a Multi-disciplinary Journal of Remote Sensing, published quarterly in March, June, September, and December. All articles are published in English. An international editorial committee of 10 specialists represents 8 different countries. The journal is designed to promote multi-disciplinary research in and application of remote sensing; enhance international exchange of information on new developments, foster interest and understanding of the technology, and encourage publication of timely papers and research results in remote sensing. Annual subscription rates are: Individual, US\$ 30, Institution, US\$ 60. Send all subscriptions, correspondence, and manuscripts to: Geocarto International Centre, GPO Box 4122, Hong Kong. [Also available from GIC are current data maps of China (23 in. x 34 in.) published by the Asian Research Service. The maps are available as a set of 11 (US\$ 195) or individually priced at US\$ 25; they cover human resources, hydrocarbon potential, water power development, coal mining industry, railway network, growth of industry, agricultural economy, urban development, coastal cities, and special economic zones.]

Forthcoming Meetings

Computer Graphics and Geologic Applications. A short course sponsored by the Geological Society of America, in San Antonio, TX, Nov. 8-9, 1986. Contact GSA Headquarters, P.O. Box 9140, Boulder, CO 80301 USA.

AUTO-CARTO 8. International symposium on automation in cartography, to be held in Baltimore, MD, USA. Mar. 30-Apr. 2, 1987. Sponsored by the American Congress on Surveying and Mapping. Contact Dr. **Nicholas Chrisman**, 3809 Nakoma Rd., Madison, WI 53711 USA.

MGUS-87, Redwood City, CA, USA. Apr. 13-15, 1987. DETAILS ELSEWHERE

International Conference and Training Course on Geomathematics and Geostatistics Applied to Space- and Time-Dependent Data, Wroclaw, Poland. May 18-22, 1987. DETAILS ELSEWHERE

Rock Mechanics. 28th U.S. Symposium, sponsored by the National Academy of Sciences and the University of Arizona, in Tucson, AZ, June 29-July 1, 1987. Contact Dr. **Ian Farmer**, Dept. Mining and Geological Engineering, University of Arizona, Tucson, AZ 85721 USA.

Computerized Basin Analysis, with Emphasis on Hydrocarbon Exploration. An international workshop sponsored by COGEO DATA and the Hungarian Geological Society, at Szeged, Hungary, Sept. 7-12, 1987. Contact Dr. **László Somos**, Geological Survey of Hungary, Pf. 106, H-1442 Budapest, Hungary, Népstadion ut 14. Deadline for registration, Dec. 31, 1986.

Advanced Geostatistics for Mining and the Environment, Las Vegas, Nevada, USA, Jan. 12-16, 1987. Short Course sponsored by Stanford Univ. Applied Earth Sciences Dept. and US Environmental Protection Agency. Instructors: **A. G. Journel** and **Nancy Fisher**. Contact **Diane Lau**, Program Coordinator, Dept. Applied Earth Sciences, Stanford, California 94305; Telephone 415-725-0575.

"Forward into the Past!" - SEPM Annual Midyear Meeting, Austin, Texas, USA, Aug. 2-23, 1987. Contact **Bob Morton**, Gen. Chm., Bureau of Econ. Geology, Univ. Texas at Austin, University Station, Box X, Austin, TX 78713.

Computer Applications and Management of Petrological Databases. An IGCP Project 239 workshop sponsored by UNESCO, IUGS, and Kuwait University, in Safat, Kuwait, Sept. 12-23, 1987. Contact **John Durham**, British Geological Survey, 154 Clerkenwell Rd., London, England.

16th Annual Geochautauqua + 13th Mining Příbram Symposium, Příbram, Czechoslovakia. Oct. 12-16, 1987. DETAILS ELSEWHERE.

APCOM 87 - 20th International Symposium on the Application of Computers and Mathematics in the Mineral

Industries, Johannesburg, South Africa, 19-23 Oct., 1987. Contact The Conference Secretary (C.31), Mintek, Private Bag X3015, Randburg, 2125 South Africa, Telex 4-24867 SA.

Mathematical Methods of Ore & Oil Deposits Research, Baku, USSR. October, 1988. DETAILS ELSEWHERE.

Third International Geostatistics Congress, Avignon, Southern France, Sept. 5-9, 1988. Deadline for abstracts Oct. 1, 1987. Contact GEOSTAT CONGRESS 1988, Centre de Géostatistique, 35 rue St-Honoré, 77305 Fontainebleau, France.

Publications from "Symposium Alma-Ata 85"

Proceedings of the International Symposium "Major New Trends in Quantitative Methods for Predicting and Resource Evaluation of Mineral, Oil and Gas Deposits" (Alma-Ata, USSR, Sept. 23-29, 1985) are available in two volumes. Most of the articles are in Russian, although some are in English. Volume 1 is *Quantitative methods of analysis of geological models and prediction of petroleum resources*. Subjects include geological models for prediction, the geochemical-genetic basis for prediction, models of spatial distributions for prediction purposes, computer modelling of tectonic structures, computer modelling of oil fields, and computer-assisted construction of geophysical volumetric models. Other papers are devoted to estimating the probabilities of discovering oil accumulations, evaluating petroleum resources from seismic data, and the application of computerized systems for predicting oil and gas potential.

Volume 2 is *Quantitative methods of prediction and appraisal of resources in mineral deposits*. Papers discuss mathematical methods for prediction of mineral deposits, methods of quantitative depth geophysical prediction, remote sensing data for prediction, application of fuzzy set theory, and quantitative appraisal of prognostic resources as well as computer-aided prediction of systems of mineral deposits.

Inquiries and orders should be addressed to:

VO "Mezhdunarodnaya kniga," Ul. Dimitrova 39
Moscow, 113 095 USSR

Tom 1 "Kolichestvennyye metody analiza geologicheskikh modeley i prognozirovaniye resursov mestorozhdeniy nefi i gaza." Trudy Mezhdunarodnogo simpoziuma, Alma-Ata, 1985, KazIMS.

Tom 2 "Kolichestvennyye metody prognozirovaniya i ozenki resursov mestorozhdeniy tverdykh polezhykh iskopaemykh." Trudy Mezhdunarodnogo simpoziuma, Alma-Ata, 1985, KazIMS.

Technical details about the publications can be obtained from **A. N. Bugaets**, K. Marx str. 105, Alma-Ata 480091, USSR.

Sciences de la Terre -- Série "Informatique Géologique"

Publications in the Série "Informatique Géologique" (ISSN 0335-9255) of Sciences de la Terre cover all aspects of mathematical geology, including multivariate statistics, geostatistics, automated cartography, remote sensing, and other topics. Many volumes contain the proceedings of important international conferences. Selected titles in the series include:

No. 2. Grandclaude, Ph., 1974, Contribution à la méthodologie d'un système d'information en géologie. Application à la géochimie, 277 p., 135 FF.

No. 15. Royer, J.-J., and Leymarie, P. [Eds.], 1980, Tendances du traitement automatique et des modèles mathématiques en géologie (Symposium S.12, 26th IGC, Paris, 1980), 167 p., 168 FF.

No. 16. Wenpeng, S., *et al.*, 1983, Some data processing in earth science [in English], 83 p., 85 FF.

No. 17. Aissani, B., 1983, Analyse statistique et cartographie automatique de champs pluviométriques, 292 p., 195 FF.

No. 18. Bouchind'homme, J.-F., *et al.*, 1984, Quelques études géostatistiques. A symposium (1983) organized by the Centre de Géostatistique, Fontainebleau, 185 p., 175 FF.

No. 20. Royer, J.-J. [Ed.], 1984, Computers in earth sciences for natural resources characterization [in English & French]. A COGEO DATA symposium at Nancy, in two volumes, 697 p. [price unavail.]

No. 21. Royer, J.-J. [Ed.], 1985, Etudes géostatistiques [in English & French]. A symposium (1984) organized by the Centre de Géostatistique, Fontainebleau, 210 p., 175 FF.

For additional information and to place orders, write:



Sciences de la Terre
Rue du Doyen Marcel Roubault
B.P. 40
F-54501 Vandoeuvre-lès-Nancy
France



Preliminary Announcement -- IAMG Conference Baku '88

The IAMG will cosponsor the conference "Mathematical Methods of Ore and Oil Deposits Research," to be held in Baku, USSR, in October 1988. The final date of the meeting has not yet been set. Other cosponsors are COGEO DATA, the USSR Academy of Sciences and the Azerbaydzhan Academy of Sciences. It is anticipated that about 100-150 Soviet and foreign scientists will participate in the three-day conference. To receive the First Announcement and Call for Papers, contact R. Volkov, Executive Secretary, USSR National Committee of Geologists, Pyzhevsky 7, 109017 Moscow Zh-17, USSR (Telex 411848 GIN SU).

**International Association for
Mathematical Geology
c/o Kansas Geological Survey
The University of Kansas
1930 Constant Avenue
Lawrence, KS 66046-2598 USA**