GEOSCIENCE INFORMATION SOCIETY

NEWSLETTER no. 12 January 1970

GIS OFFICERS

The new GIS Executive Committee for 1970 is:

President:
H. Robert Malinwosky (Assistant Director of Libraries, Univ of Kansas, Lawrence, Kans. 66044)

Vice-President:
Dr. Cornelius F. Burk, jr. (National Coordinator, Secretariat for Geoscience Data, 601 Booth Street, Ottawa 4, Ontario, Canada)

Secretary:
Mrs. Marjorie W. Wheeler (Science-Technology Librarian, Lamar State College of Technology, Beaumont, Tex.; preferred address: 5775 Viking Dr, Beaumont, Tex. 77706)

Treasurer:
Donald B. Gwens (Associate Chief, Information Operations Division, Battelle Memorial Institute, 505 King Ave, Columbus, Ohio 43201)

Past President:
Eleanore E. Wilkins (Librarian, U.S. Geological Survey, 345 Middlefield Rd, Menlo Park, Calif. 94025)

The new officers assumed their positions on 1 January 1970.

1969 GIS CONVENTION in ATLANTIC CITY

The 4th Annual Convention of the Geoscience Information Society was held 10-11 November 1969 in Atlantic City, N.J., in conjunction with the meetings of the Geological Society of America. We had an excellent turnout of about 40 persons for a workshop on editorial problems in the morning of the 10th, followed by a technical session on geoscience information in the afternoon. There was a 90-minute business meeting after lunch on Tuesday the 11th.

The 3-hour Workshop on Editorial Problems explored some of the numerous problems generated for librarians and readers by publishers and editors--and vice versa. The workshop, moderated by Dr. Gerald M. Friedman (professor of geology at Rensselaer Polytechnic Institute and editor of Journal of sedimentary petrology), elicited considerable comments from both the panelists and the audience, and was considered a great success. Panelists, their subjects, and selected comments:

Virginia Neuschel (U.S. Geological Survey) discussed content, length, purposes, and uses of ABSTRACTS. The most important requirement is that the abstract be informative, not indicative; it should be concise (best length is 10-15 lines, or about 250 words). Author abstracts during the past five years have "improved tremendously", are of great help in covering the "overwhelming" amount of literature, and tend to "get the message across" better than do specially prepared abstracts. It is hard to find competent abstracters, especially those with geologic backgrounds; more and more, abstracting services must rely on in-house workers or field volunteers. Reference was made to K.K. Landes' papers in the Bulletin of the American Association of Petroleum Geologists (1951, v.35, p.1660, and 1966, v.50, p.1992) on preparation of a good abstract.

Mark W. Pangborn, jr. (U.S. Geological Survey) discussed publication format, with emphasis on MAPS. Editors are in a position to simplify certain bibliographic tasks confronting librarians and map curators. Using maps to illustrate poor bibliographic examples, Mr. Pangborn urged editors: (1) to give clear-cut titles and other bibliographic data for proper citations; (2) to print short texts on map margins or as supplementary sheets accompanying the maps, rather than to separate textual materials from the corresponding maps; (3) to avoid using paper envelopes of high acid content to house maps;

and (4) to include a bar scale on all maps (in this age of prolific photocopying). Physical storage problems of maps due to size (80% of all maps go into drawers) were cited. Guidebooks were also discussed: they are the "worst" editorial offenders in geology. It was suggested that a booklet of editorial "hints" and "instructions" be prepared to assist publishers and editors of guidebooks and maps. Also, the USGS should be urged to issue a more elaborate and complete edition of its Suggestions to authors (1958).

Charles O. Reville, jr. (Williams & Wilkins Co.) substituted for the scheduled panelist, William M. Passano, and discussed the status of legal action and the enforcement of controls in regard to COPYRIGHT and FAIR PRACTICE in COPYING. He outlined the events leading to Williams & Wilkins' suit against the National Library of Medicine and the libraries of the National Institutes of Health (more than one million pages of the company's publications were copied by 200 medical libraries in 1968). An analogy was drawn between unrestricted photocopying and environmental pollution: although xerography serves an "essential purpose" in transfer of information, uncontrolled photocopying (esp. of scientific periodicals) will result in harmful conditions working to the detriment of the scientific world. Publishers want to be reimbursed for the privilege of copying their publications, perhaps in the form of royalties from libraries. There was a discussion of the availability of (and difficulty of obtaining) microforms.

Thomas F. Rafter, jr. (American Geological Institute, and chairman of the Association of Earth Science Editors) discussed selection, accuracy, availability, publication, and cost of TRANSLATIONS. He outlined the AGI translation program, begun in 1958, with emphasis on cost: 60% of the cost is borne by subscribers (mostly institutional), and 40% by the National Science Foundation --but NSF wants the program to be self-sustaining. AGI frequently receives requests to translate something already translated; therefore, an up-to-date directory of translations is needed. Only 4% of U.S. geologists have Russian-language capability, yet in 1970 the U.S.S.R. will increase the number of pages of geologic literature from 17 to 51%. Cover-to-cover translations of leading journals is the most effective method of keeping abreast of foreign literature, coupled with selective translations of significant papers for immediate dissemination with the availability of those not selected in other forms (photocopy, microform, etc.) to interested researchers at minimum cost. Such a program requires active demand on the part of the geologic profession. The most immediate information on what geologists are doing in the U.S.S.R. is found in Doklady of the Soviet Academy of Sciences; all its earth-science sections are translated and published by AGI within 6 months.

The Technical Session on Geoscience Information included six papers. Co-chairmen were Bill L. Long (National Council on Marine Resources and Engineering Development) and Marjorie Hooker (U.S. Geological Survey).

The first paper, by Dan Gill (Univ of Michigan), described a computer-oriented method for the zonation of ordered data sets and its application to reservoir evaluation and digitized log analysis. The method is general and is applicable to the zonation of one-dimensional functions in various disciplines; e.g. it was used to subdivide a digitized gamma-ray curve logged through the Salina Group (Upper Silurian) of Michigan.

Robert B. Sanders (Pennsylvania State Univ) discussed the complex information structure of descriptive paleontological studies, using analyses of palynological papers as an example. The information structure consists of a hierarchy of three major objective data levels: bibliographic (reference data, some generalized geographic and stratigraphic data); sample (lithologic, sampling, processing, and detailed stratigraphic-geographic data), and form (nomenclature, synonymy, morphography, taxonomy, and detailed distribution of each form present). An artificial assemblage level is also usually present, consisting of the "natural groups" present as subjectively defined by stratigraphy, ecology, or geography. The form-to-assemblag and the form-to-bibliographic linkages are generally well treated by authors, but the form-to-lithology and form-to-geography link-

ages are inadequate. In published papers, all data should either be adequately linked or deleted.

D.W. Moody and Olaf Kays (U.S. Geological Survey) described the application of the Generalized Information Processing System (GIPSY) to the storage and retrieval of earth sciences literature. GIPSY, developed by the Merrick Computing Center of the Univ of Oklahoma, provides a simple and flexible means of searching the machine-readable data base of an estimated 96,100 citations and abstracts prepared and collected by the USGS during the past five years. GIPSY enables the user to formulate his own search for numbers, works, word stems, or phrases contained in variable-field, variable-length records. Limited experience with files ranging from a few thousand to more than 30,000 records (citations and abstracts) suggests that a search using 3 to 4 index terms is sufficient to satisfy most user requests with a high degree of recall; a permuted title index of the retrieved records enables the user to quickly select those documents that are most relevant to his query. There are 123,000 citations in the Bibliography of North American geology (1732-1960); it will cost $150,000 to put them into GIPSY.

Keith M. Clayton (Univ of East Anglia, Norwich, England) gave a progress report on the United Kingdom geological literature project. Beginning in August 1968, the U.K. Office of Scientific and Technical Information has supported the abstracting of British geological literature as input to the GSA/AGI Bibliography and index of geology. This involves at present about 2000 articles a year from 420 national and 100 local journals, very few of which are restricted to geology. Long-term plans include: (1) a current-contents publication to cover the major world journals as well as the U.K. literature, using proof contents pages to provide a prompt current-awareness service; (2) monthly abstract and keyword publications to compare the effectiveness of these two styles; (3) an annual bibliography with abstracts of the U.K. literature; and (4) a computerized retrieval service using the GSA/AGI tapes. An SDI service and a citation index are also being considered, but are not part of the current project.

Darinka Z. Briggs and Louis I. Briggs (Univ of Michigan) described a system of information analysis for geological documents. In the document-analysis and information system used in the Subsurface Laboratory at the Univ of Michigan, relevance of retrieval is enhanced by search definition based on descriptors and concepts in which information content is defined as the associated intensities of classification elements. When the classification is structured on levels defined as the derivatives of concepts, a scheme of coordinate reduction can be used to obtain a relatively small group of descriptors for analysis of information content in the documents. Also, documents can be searched by concepts defined by clusters of associated descriptors and their degree of relevance to the concept.

David H. Elazar (Wayne State Univ) discussed orientation of graduate students to the geology library. It is a false assumption that students who have declared their majors and who are currently involved in specialized research are familiar with the literature in their respective fields, especially with the interrelation of one work to another and with such tools that will aid them to know what is available in their fields and to keep up with the literature. A two-part orientation program (a 40-minute subject-oriented lecture and a library exercise) gives the student an opportunity to learn the library while simultaneously preparing a basic bibliography for his research.

The Business Meeting immediately following lunch on November 11th was convened at 1:20 p.m. in the Peacock Room of Haddon Hall Hotel by President Eleanore E. Wilkins. There were about 25 GIS members in attendance. The minutes of the 1968 meeting of GIS (held in Mexico City, 11 November) were read by Secretary Marjorie W. Wheeler and accepted.

Treasurer Donald H. Owens presented the GIS financial report (see page 7 of this newsletter). Brief reports of GIS committees and projects were heard:

Committee on Geoscience Serials: The committee is inactive, but an AGI-funded project, conducted by committee member H. Robert Malinowsky (Univ of Kansas), to compile a checklist and inventory analysis of the world's geoscience serials is well underway and sched-

uled for completion by June 1970. More than 10,000 unverified titles, dealing with the geological sciences in the broadest sense, have been identified; these titles include serials, of all kinds, that may deal wholly with the geosciences or that may carry only one geoscience article per year. Full bibliographic and historical information will be provided. Geoscience librarians willing to check and verify serial titles are urged to contact Mr. Malinowsky. The project has been extended until June 1970 by the AGI Committee on Geoscience Information, and is being administered by the University of Kansas.

Guidebook and Ephemeral Materials Committee: Chairman Mrs. Elizabeth F. Loomis hopes to set up regional representatives to identify current and retrospective local guidebook series. Also, the committee is interested in obtaining guidebook holdings from geoscience libraries in New England, the mid-Atlantic states, and the Southeast U.S. Members interested in working with the committee should write to Mrs. Loomis, c/o Clark Oil & Refining Corp, 820 Aquitaine Tower, 540 5th Ave SW, Calgary 1, Alberta, Canada.

Bibliography of Theses in Geology: Dederick C. Ward reported that the 1965-1966 bibliography of theses in geology accepted by U.S. and Canadian colleges and universities was published by the American Geological Institute in cooperation with GIS. The bibliography was prepared by automatic data-processing equipment, and its contents are stored on magnetic tape as part of the GSA/AGI permanent data file. The theses are grouped in the subject categories used in the published format of the GSA/AGI Bibliography and index of geology; the subject index follows the form and philosophy of the USGS guide to indexing, thereby making it compatible with the indexes used in the USGS and GSA bibliographies. Most of the titles for the 1967-1968 bibliography of theses have been indexed by AGI, and the bibliography will be published in the new format as soon as funds are forthcoming from the National Science Foundation. Titles of 1969 theses are presently being collected and edited. Mr. Ward is hopeful of issuing future bibliographies annually (instead of biennially) and is discussing the possibility of a five-year cumulation.

Manpower Committee: Chairman Mark W. Pangborn reported that for the second consecutive year three ads (intended to encourage students with geological backgrounds to enter library schools) were run in Geotimes in 1969. More than 100 letters were received, and perhaps seven or eight geoscientists have entered (or will enter) library schools as a result of the ads. The campaign has been funded by the Geological Society of America, but GIS will not ask for more GSA funding to continue the ads until results of the first two series of ads have been analyzed. Mr. Pangborn is anxious to obtain some feedback from the campaign.

Nominating Committee: Chairman Jack L. Morrison reported that 104 ballots (49% of the membership) were returned during the election of GIS officers for 1970. The winning candidates were introduced (see page 1 of this newsletter).

The meeting was open for new business. President Wilkins proposed that there be developed around the country a depository network of libraries that would receive publications from local geological societies and that would agree to service the collection and provide access to it. Volunteers are needed to study the mechanics of such a network and to tackle such problems as various printing and distribution policies of the societies, the lack of editors, inadequate financing, and constantly changing publishers. There is a desire for libraries to obtain such "fugitive" publications by some efficient method (such as through standing orders). The discussion led to a motion by Hartley K. Phinney that GIS prepare a resolution to be sent to the Geological Society of America stating that the present method of distribution of GSA field guidebooks is unsatisfactory and requesting that GSA consider formulating a more adequate distribution policy. The motion was seconded and carried.

Mark W. Pangborn suggested that booklets containing "helpful hints" or guidelines be prepared for publishers and editors of guidebooks and maps. Robert McAfee suggested that such booklets be prepared in cooperation with the Association of Earth Science Editors. A motion was made, seconded, and carried that GIS sponsor these booklets. The GIS Executive Committee will appoint a committee to develop this project.

Mr. Pangborn proposed that a background panel for a GIS exhibit booth be developed and reported that the U.S. Geological Survey would be willing to prepare a 4x5-ft panel on GIS functions and flow of information in the geosciences. The GIS Executive Committee will consider the proposal and submit a report. Mr. Pangborn also proposed that GIS prepare a brochure outlining the functions and history of the society, and that GIS set up a "distinguished service" award to be given to members (or nonmembers) for outstanding service to the profession or to GIS. It was moved and seconded that the GIS Secretary prepare a letter for the President's signature commending Dr. James W. Clarke for his efforts in printing volume 1 of the Proceedings of the Geoscience Information Society.

President Wilkins announced that the dues for membership in the Society have been increased beginning in 1970: personal memberships are now $10 per year (an increase of $4) and institutional memberships are now $25 per year (an increase of $15). Sustaining memberships are $100 (minimum). The GIS Executive Committee was reluctant to take this action, but it was felt to be absolutely necessary in order for GIS to continue making progress toward its goals. Treasurer Owens presented a report that studied the dues increase, and by way of justification, mentioned the need to finance new projects and committee work, travel expenses for the President and others when necessary, publication expenses, and the increase in AGI membership dues from $1.00 per stipulated society member to $2.00 per member effective in July 1970.

Joel J. Lloyd (Director of Science Information, American Geological Institute) spoke to the members in regard to the AGI geoscience information program (see page 9 of this newsletter).

The meeting was adjourned at 2:55 p.m. The 5th Annual Convention of GIS will be held in Milwaukee, Wisc., during the annual meetings of the Geological Society of America, 11-13 November 1970.

PRESIDENT WILKINS' LETTER to GIS

The 1969 Annual Convention of the Geoscience Information Society was successful and well-attended. For its success I would like to thank the moderator and the panelists of our workshop and those who presented papers at the technical session, as well as all the GSA personnel who were so helpful in making all the necessary arrangements.

The workshop generated considerable enthusiasm for similar sessions in the future and provided the hoped-for opportunity for exchange of ideas and information. Professor Friedman's stimulating leadership provided the spark (and the sparkle) that made it go and we are especially grateful to him for taking time from his busy schedule to participate in our meeting.

The workshop and the business meeting provided considerable scope for discussion of GIS affairs and directions. We hope those attending will take back some of the ideas to members in their vicinity who could not be present in Atlantic City. I hope that these ideas will be implemented in programs of the Society.

Your Executive Committee tried, during 1969, to involve more of the membership in our work, carrying on a policy begun by Dederick Ward the previous year. It is hoped that we can proceed with this even further in the future, for the Geoscience Information Society can only remain viable through the participation of the membership in its activities. The development of a network of depository libraries, which we proposed in the October 1969 Newsletter, can only become a reality through such participation. General calls for volunteers are usually ineffective, but I urge any of you who would be willing to work on this project to contact any member of the Executive Committee.

I wish to congratulate the new officers of the Society and wish them well. My work this year was made infinitely easier because of the tremendous support I received from Marge Wheeler, Don Owens, and Dedy Ward, and I want to express my heartfelt thanks for their work and their enthusiasm. I also want to acknowledge the considerable support which the Society has received from the institutions and organizations that employ the officers and some active members.

Sincerely,
Eleanore E. Wilkins
GIS President, 1969

PRESIDENT-ELECT MALINOWSKY'S LETTER to GIS

Greetings from your President for 1970;

I have the unique challenge of starting the Seventies for GIS in its 5th year. In four years our elite group has grown to over 200 members encompassing librarians, documentalists, administrators, geologists, editors, professors, and many others. We have members from 35 states, the District of Columbia, 13 foreign countries, and 7 Canadian provinces. I would like to see us have, by the end of 1970, members from all fifty states and additional members from Canada and foreign countries. We are growing and will continue to grow.

GIS has, in its first 4 years, operated on a shirt-tail budget. We were just becoming organized and did not have many projects firm in our mind. We now have projects to implement. These projects need money and the only way to obtain money is to raise our modest dues to ten dollars per year. This has been approved by the Executive Committee and will be in effect immediately.

I mentioned projects. Projects mean work. Work means people. People means involvement by GIS members. I hope that everyone can be relied upon to contribute to the Society if asked during the year and thus become involved so that certain projects can be carried through.

Let's consider some of these projects. The first one to think about is an information brochure about GIS. This would be a brochure giving the history and purpose of our Society, its dues, publications, and other information concerning membership in the Society. This project is now underway.

Another project that has tentatively been started is the design of a set of display panels describing the Society, its function, and its service to the geoscience community. This would be used at national and international meetings.

Several members have suggested the publications of booklets covering such areas as guides for map libraries, instructions for guidebook editors, and suggestions for the standardization of map publishing. The Executive Committee would welcome other suggestions for publications of this type.

As everyone knows, the GIS issued the Geologic field trip guidebooks of North America published in 1968 by Phil Wilson, Houston. The Guidebook and Ephemeral Materials Committee is continuing to acquire new material and is making corrections in the first edition. We would also like to consider setting up regional depositories for the various guidebooks so that a library in a particular region could be assured of having all of the guidebooks for its area. This will take some surveying, planning, and, above all, cooperation both with the depository libraries and with the agencies that produce the guidebooks.

As you can see, I am very interested in seeing that GIS makes a name for itself. We are a unique and important society in the geoscience community. If we want to continue to grow and really show our worth, we have to become involved. The above projects are only a few. There are others. Let me hear from you. I need suggestions and volunteers.

By the same token, we, as the Geoscience Information Society, should avoid duplicating projects, services, and publications already started by other associated societies in the geoscience field. The only way to do this is to work closely with the American Geological Institute. We can benefit greatly by letting AGI be the coordinator of activities being carried on in the geosciences. Without this, we may be guilty of contributing to the mammoth deluge of duplicate published materials and services that plague the libraries today.

I would like to thank Eleanore Wilkins and her Executive Committee for a job well done in 1969. The meetings in Atlantic City proved to be quite interesting and well-attended by members and nonmembers. Many interested persons stopped at our small but important display in the exhibit area. Plans are underway to make the November 1970 Milwaukee meeting an equally interesting session.

The point that should be emphasized is involvement--in projects, committees, annual-meeting activities, and local geoscience activities. With involvement comes cooperation and with cooperation comes a better informed geoscience community.

I would like to be able to say that I know

all of the members personally, but I cannot. However, a letter from you would help me become better acquainted with you so that we can become involved together with the activities of GIS. See you in Milwaukee in November.

Sincerely,
H. Robert Malinowsky
GIS President, 1970

GIS TREASURER'S REPORT

At the GIS annual convention in Atlantic City, 11 November 1969, Treasurer Donald H. Owens reported for the interim between 1 January 1969 and 11 November 1969:

Balance (1 Jan 1969)	$ 428.81
Received (1.1.69 to 11.11.69)	1,624.66
Disbursed (1.1.69 to 11.11.69)	945.40
Balance (11 Nov 1969)	$ 1,108.07

Dues for 1969 were received from 231 members, 23 of them new (18 individuals and 5 institutions). A few dues for 1970 have already been received. Proceeds from sales of the "Directory of Geoscience Libraries" have netted $188.16. The largest expenses have been AGI affiliation dues ($214.00), postage & telephone ($277.01), and printing & duplicating ($111.68).

The Society's account will end the year with a positive balance. For 1970, however, the Executive Committee anticipates expenditures approaching $2,000. Since membership dues are still the Society's principal source of income, it appears that the dues must be increased in order to maintain a positive balance.

The records and accounts of GIS were examined by an auditing committee (James L. Wood and John F. Splettstoesser, members), and were found to be correct and in accordance with standard accounting procedures. The audit covered the period 1 January 1969 to 25 September 1969.

Summarizing the Treasurer's activities for 1969, in addition to handling the GIS funds, tax reports were filed with the U.S. Internal Revenue Service and with the District of Columbia, and the required annual report was submitted to the Recorder of Deeds of the District of Columbia. A change of the Society's Registered Agent in the District of Columbia was necessitated by Mark W. Pangborn's change of address--Mrs. Georgianna D. Conant has graciously accepted that responsibility for the Society.

GISers in the NEWS

Raymond C. Becker retired 1 December 1969 as executive secretary of the Geological Society of America.

James W. Clarke and others have published an 86-page "Directory of geological research in the Southeast" (Southeastern geology, 1969, special publication no.2). It is available for $1 from Dept of Geology, Duke Univ, Durham, N.C. 27708.

Harold W. Dubach, former deputy director of the National Oceanographic Data Center, retired from the U.S. Naval Oceanographic Office on 31 October 1969 after more than 28 years of Federal service in the environmental sciences. He is now associated with the Coastal Plains Regional Commission as oceanographer-meteorologist for the Center of Marine Development Sciences. The Center will coordinate scientific and technical information exchange among the marine research and development activities in the Carolinas and Georgia.

Anthony P. Harvey, librarian of the palaeontology dept at the British Museum (Natural History), is editor of Geoscience documentation published by GeoServices (London and Calgary). Members of the editorial board of the publication include GISers C.F. Burk jr., Frank T. Dolan, Harold W. Dubach, H. Robert Malinowsky, Edward P. Thatcher, and Leopold Walschot.

Marjorie Hooker has published a 53-page "Bibliography and index of the geology of Puerto Rico and vicinity, 1866-1968" (1969). It is available for $5 from the Geological Society of Puerto Rico, San Juan.

Hartley K. Phinney, jr., geology librarian at Princeton Univ, assumes a new librarian

position at the Chevron Research Company, La Habra, Calif., in February 1970.

Thomas F. Rafter, jr., assistant director of science information at the American Geological Institute, has been elected the 1969-1970 chairman of the Association of Earth Science Editors. He attended the general assembly of Editerra (an association of European geoscience editors) in Ghent, Belgium, 17-19 December 1969.

Dr. Evelyn Sinha of the Ocean Engineering Information Service is editor of two serials published by the Service: Oceanic instrumentation reporter (issued monthly) and Ocean engineering information series (vol.1 titled "Oceanic patents, 1959-1968" and vol.2 titled "Oceanography from space and aircraft; state of the art--technology/applications"). Subscription information is available from Dr. Sinha, OEIS, Box 989, La Jolla, Calif. 92037.

Leopold Walschot is editor of a new annual series entitled Abstracts of Belgian geology and physical geography, published by the Geological Institute of the Univ of Ghent. The first volume (issued in English in 1969 and covering the 1967 literature) has 79 pages and 242 entries, with subject and geographic indexes. Subscription price is $3 to Univ of Ghent, Rozier 6, Ghent, Belgium.

WESTERN ASSOCIATION of MAP LIBRARIANS

The Western Association of Map Librarians met at the Univ of California, Davis, on 24 October 1969. The guest speaker, Prof. David Lee, told of the use of maps in advertising and propaganda, and referred to maps that had been deliberately falsified or exaggerated.

A panel discussion on geological maps was conducted by three GIS members. Edward C. Jestes, who coordinated the panel, discussed geological maps and their use; he emphasized the various types of geological maps and how to read them, along with mentioning the part played by librarians and geologists in using them. Mrs. Beatrice L. Lukens explained the problems she encountered when she was given the responsibility of organizing and arranging the maps in the Earth Sciences Library at the Univ of California, Berkeley; especially time consuming was the effort to bring together maps that had been removed from journals and other publications. William Sanders concluded with a discussion of the classification scheme of the U.S. Geological Survey at Menlo Park, Calif.

Two other panel discussions treated the topics of nautical charts and of the acquisition of free and inexpensive maps. There also was a review of the oceanographic surveys of the Scripps Institution of Oceanography.

The Association, founded 1 July 1967, has 44 individual members and three institution members, and embraces eight states (Alaska, Arizona, California, Hawaii, Idaho, Nevada, Oregon, & Washington) and two provinces (Alberta & British Columbia). Its purpose is "to encourage high standards in every phase of the organization and administration of map libraries", and it has published (1969) a directory of map collections for its region.

Any GIS members who would like to learn more about the Western Association of Map Librarians or to participate in its meetings are urged to write President Robert Sivers, Sciences-Engineering Library, Univ of California, Santa Barbara, Calif. 93106.

ANNOUNCEMENTS

No more free copies of volume 1 of the Proceedings of the Geoscience Information Society, entitled Handling geoscience data and information, will be distributed to members. The publication is temporarily out of print; when reprinted, the document will be available for $2.00 per copy from the Secretary, Mrs. Marjorie W. Wheeler, 5775 Viking Dr, Beaumont, Tex. 77706.

The British Group of the International Association for Mathematical Geology sponsored a colloquium on "The Structure of Geological Information" in London, 2 January 1970. Topics discussed included the organization of information, software for geological in-

formation, and hardware such as the Quantimat 720 Image Analyzing Computer. Gordon Y. Craig presented diagrams showing how geological information is structured. GISer Graham Lea reviewed the present state of geological information.

AGI GEOSCIENCE INFORMATION ACTIVITIES

The American Geological Institute's Committee on Science Information has changed its name to the Committee on Geoscience Information in order to define the scope of its interests. Dr. William C. Krumbein, who has chaired the committee since its inception, has resigned from the chairmanship but will continue as a member of the committee. He has been succeeded in the chair by Dr. William Hambleton of the Univ of Kansas and the Kansas State Geological Survey.

The Committee's task forces for Thesauri and for Primary Publications are preparing studies for submittal to the full body at its next meeting in April 1970. The Thesauri study, chaired by Dr. Robert Van Nostrand, is collecting extant vocabulary lists and analyzing their contents to evaluate the need to make new lists or to correlate existing ones. Dr. George Becraft, who heads the Primary Publication group, is preparing a paper on the problem in its practical (economic) and philosophic aspects as a preliminary to recommendations for solution.

The Kentucky Geological Survey has authorized AGI's bibliographic group to compile and prepare indexed camera-ready listings of a bibliography of coal in Kentucky. The bibliography, which will cover the subject from the 19th century to the present, will be published by the Survey and is expected to be released sometime in mid-1970.

Dr. John Steinhart of the AGI Committee on Geoscience Information has resigned from the President's Federal Council on Science and Technology and is joining the faculty of the Univ of Wisconsin at Madison.

The GSA/AGI Bibliography and index of geology closed its 1969 volume year with a total of 27,557 citations. This is an increase of close to 150% over the 1967 edition which was the first year in its monthly automated format. The 1970 goal of the Bibliography has been set at 30,000 entries.

The AGI bibliography group has contracted to prepare year-end indexes for the American mineralogist and the three sections of Journal of geophysical research. This work is in addition to the preparation of the GSA Bulletin index, which the group has prepared since 1967.

The councils of the Paleontological Society and of the Society of Economic Paleontologists and Mineralogists have appointed a joint committee, under direction of Dr. Doris Curtis, to study membership reactions to a proposed format change for the Journal of paleontology. If their studies warrant a change and the committee's recommendation is favorable, the journal will appear in 1971 with full printed texts of only articles of general interest, and extended summaries of original papers on specialized themes. The full texts of the latter papers will be obtainable from the Journal on request.

Peter Blau has joined the AGI information section as Professional Staff Assistant. Mr. Blau, who graduated from Amherst and obtained his M.S. from the Univ of Oklahoma, recently returned from several years of petroleum exploration in Europe and Africa.

Joel J. Lloyd, AGI's Director of Science Information, has been elected to the Board of Directors of the National Federation of Science Abstracting and Information Services (NFSAIS).

NEW MEMBERS of GIS

Information Analysis and Management Associates: 1501 Dixon St, Corvallis, Ore. 97330

Jahn, Richard P.: Teacher, Farmington Public Schools, 33000 Thomas St, Farmington, Mich. 48024

O'Callaghan, Tim C.: Associate Director, GSA/AGI Bibliography Project, American Geological Institute, 2201 M St NW, Washington, D.C. 20037