



newsletter

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FROM THE PRESIDENT

I've always wondered, though never seriously questioned, what GIS members got for their dues to AGI. Was it just a requirement, as an official part of the geoscience community?

I knew that we had a GIS member on the AGI Governing Board and that the GEOREF User Group Steering Committee and our representatives on the GIS Advisory Board were constantly working with GEO-REF to improve the database. Was this participation what we got from AGI?

Well, in the last few months I've learned more about what AGI does, and what AGI does for us.

I received a letter from AGI with important news for the geoscience information community, including:

- President Reagan signed the Education for Economic Security Act (P.L. 98-377) that authorizes a billion dollars to aid science and mathematics education. Most of the funds go to the Department of Education to be passed on to the states, and \$200 million is for NSF programs to train and retrain teachers in science and mathematics
- Universities are by-passing federal agencies and getting direct appropriations from Congress for construction and renovation. Lobbyists are using this direct means to circumvent the funding agencies' usual internal review methods.
- NSF is making plans for a National Science Week in May 1985.

Then, AGI President Turner asked me to nominate someone to the 24-person National Science Foundation Board of Directors (to replace Dr. Peter Flawn, retiring President of the University of Texas-Austin). The NSF Board makes policy and makes recommendations to President Reagan on issues effecting the vitality of the nation's research capacity. President Turner included biographies of a dozen scientists who had been recommended for the 6-year term on the Board. After consulting a variety of University of Oklahoma geology and geophysics faculty, I will recommend a person who has a broad background in research and leadership

(continued, p. 3)

LIBRARY OF THE URBANA-CHAMPAIGN

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GIS members are encouraged to contribute articles or news of general interest to the membership. Please send any manuscripts to the Chairperson of the Editorial Board. All other items, such as citations, letters to the editor, job announcements, publication notices, and general news should be sent to the Newsletter Editor.

Material for the June Newsletter should be received by the editor no later than May 31, 1985.

The GIS Newsletter is published bi-monthly in February, April, June, August, October, and December by the Geoscience Information Society. Subscription to the Newsletter is \$20.00 per year and is included in the Society's annual membership dues. All correspondence relating to dues, membership status and address changes should be directed to the GIS Secretary.

and who, by the consensus of this group, would be a strong and persuasive advocate for all the earth sciences. I will forward his name on behalf of GIS to Dr. Turner for his consideration.

Marvin Kauffman, Executive Director of AGI, has asked to meet with the GIS Executive Board to "bring greetings from AGI, to tell a little about what AGI is doing, and to answer any questions our Board may have." Dr. Kauffman has accepted my invitation to meet with the GIS Executive Board on Sunday, October 27, 1985. (If members have any questions for Dr. Kauffman, please let me know.)

These examples show that, through AGI, GIS increases its effectiveness, both in the geoscience community and in the larger scientific community. As I learn more about how GIS and other member societies interact with AGI I'll pass it on.

THESIS PROJECT

In the late 1970s a five-person GIS committee was appointed to obtain listings of theses and dissertations from all schools in the U.S. and Canada which granted advanced degrees in the earth science disciplines. The information was gathered and the index cards were prepared for approximately 30,000 items. Geographic, institution, and general subject indexes were planned.

But the project became so large that the membership decided they could no longer support it financially. The cards were sent to committee member Reggie Brown, who agreed to store them and who wanted to compile a regional list from the information. Reggie now needs the space the cards have occupied so she has asked me to find a place for most of them. (She will keep the cards for Ohio and its surrounding states and provinces until 1988 when she will send all of them to GEOREF.) John Mulvihill, GEOREF Director, will store the cards until he can input them into the database, since, according to the survey conducted in 1984 (see GIS Proceedings, v. 15, p. 139-163), the input of these

records was not the highest priority.

The effort that has gone into this project will eventually be available in the GEOREF database, and possibly a cumulative, hard copy list of all earth science theses and dissertations will be published.

FROM THE EDITORS

Our thanks to everyone who has contributed to the newsletters— keep up the good work! We've enjoyed reading your comments about the last issue.

We'd like to offer our special thanks to Nancy Herman of the Washington Division of Geology and Earth Resources for donating her time and expertise on the design and production of the newsletter.

Delivery of the last issue was delayed for some members because of postal problems which have since been resolved. There have also been a few instances when submitted material has not been received by the editors, so if you were expecting to see an item and it wasn't there, please let us know.

This issue contains numerous announcements about meetings, available publications, jobs, and services. A list of the 1985 Committees and Representatives has been included, as well as a new set of Geophysics Index Terms as prepared by the AGU.

There is an interesting and especially timely article by Edward Liszewski on the automation system at the USGS Library. Many libraries are considering and implementing integrated systems, making the selection criteria used by various libraries important reading. We encourage anyone who has experience in evaluating or implementing an on-line system to share this information with the GIS membership.

Finally, we would like to extend our appreciation to Claren Kidd for editing and publishing the Proceedings of the 1984 Reno meeting. This volume will be a valuable resource for the geoscience community.

PUBLICATIONS

PROCEEDINGS

The Proceedings of the 27th International Geological Congress, held in Moscow, August 4-14, 1984 are now available from VNU Science Press. The contributions are published in 23 volumes and provide a comprehensive source for current research in the geological sciences. Cost for the set is DM 1990. For additional information, write to:

VNU Science Press
P. O. Box 2073
3500GB Utrecht
The Netherlands

✓ The Proceedings of the Eighteenth International Symposium on Computer Applications in the Mineral Industries, held on March 26-30, 1984, in London, are now available. Papers cover a wide range of topics concerning mineral processing, estimation, and analysis. The cost for the 892 page paperback is \$116.95, and is available from:

The Institution of Mining and Metallurgy
North American Publications Center
Old Post Road
Brookfield, VT 05036
(802) 276-3162

✓ The Proceedings of the Australian Geoscience Information Association Seminar on Information Needs of the Exploration Geoscientist, edited by G. E. Campbell, are now available. The seminar was held at the Australian Mineral Foundation, Glenside, South Australia, on December 5-7, 1983, and it provided information on reference systems and services useful to the exploration geoscientist. The volume is 239 pages, it sells for \$A 10.00, and is available from:

AGIA-South Australia Branch
C/- South Australian Department of Mines and Energy
191 Greenhill Road
Parkside, South Australia 5063

Dudich, E., editor, 1984, Contributions to the history of geological mapping: Hungarian Academy of Sciences, 442 p. \$34.

Contains the proceedings of the 10th symposium on the International Commission of the History of Geological Sciences, Budapest, August 1982. Order from: Akademiai Kiado, P. O. Box 24, H-1363 Budapest, Hungary.

JOURNALS

GEOSCIENCE CONTENTS TO BE AVAILABLE

Beginning this spring a new service will be available to the geoscience community. *Geoscience Contents*, a quarterly publication, will provide contents pages from thirteen journals and excerpted references to articles in a fourteenth. Special emphasis will be given to journals covering marine geology and sedimentary geology. The journals include:

Journal of Sedimentary Petrology
Journal of Geophysical Research
(Oceans Section)
Marine Geology
Sedimentary Geology
Sedimentology
Geological Society of America Bulletin
Journal of Geology
American Association of Petroleum Geologists Bulletin
Deep-Sea Research
Limnology and Oceanography
Journal of Physical Oceanography
Marine Geophysical Researches
Environmental Geology and Water Research

selected references to *Science*

Subscription rates are \$18 for individuals and \$29.50 for institutions, with slightly higher rates for Canadian and foreign subscribers. For additional information, contact:

Geoscience Contents
P. O. Box 1036
Old Lyme, CT 06371

In February 1986, the Society of Economic Paleontologists and Mineralogists will begin publishing a new journal, *Palaios*. Articles will contain timely information on paleontological research that will aim to stimulate new developments in the field and help provide solutions to geologic problems. Each issue will contain comprehensive lead articles, short papers, book reviews, relevant news items, and invited editorials. For information on submissions or subscriptions, write to:

Dr. Leo F. Laporte, Palaios
Earth Sciences
University of California, Santa Cruz
Santa Cruz, CA 95064

BOOKS

The *Bibliography of 1979-1982* of the Commission on the Coastal Environment of the International Geographical Union is now available. The price is \$16 (US) or \$20 (US) with the addition of the guidebook of the 1984 excursion of the Commission, *The Atlantic Coast of France from Arcachon to the Loire Estuary* (in French). Postage is included in the price. Send prepaid orders to:

Dr. Roland P. Paskoff
10 Square Saint-Florentin
78150 Le Chesnay, France

Q622, 338015
The Four Corners Geological Society has announced that the *Oil and Gas Fields of the Four Corners Area, Volume III* is available. The publication, designed to complement Volumes I and II, includes all fields in the area to January 1, 1983. Volume III contains 7 special papers, 14 general papers, and 95 field papers, to a total of 415 pages. The price is \$55 including postage and handling. The 1985 publication sales list is also available from the Society. Address all inquiries to:

Four Corners Geological Society
P. O. Box 1501
Durango, CO 81302

Kroner, A.; Greiling, R., editors, 1984, Precambrian tectonics illustrated: Schweizerbart'she, 419 p., \$71.60. A

24 illustrated accounts of typical Precambrian tectonic features, compiled by the IUGS Commission on Tectonics. Order from: E. Schweizerbart'she Verlagsbuchhandlung, Johannesstrasse 3A, D-7000 Stuttgart, F.R.G.

— from *Episodes*, v. 7, no. 3,
September 1984.

Sheahan, Patricia, 1984, Computer applications in mineral exploration 1984—Program with abstracts: Canadian Exploration Geophysical Society, Geological Association of Canada, Mineral Deposits Division (and others), 62 p., (photocopy), \$10 (Canadian). Available from: Konsult International Inc., 44 Gemini Road, Willowdale, Ontario, Canada M2K 2G6.

Sheahan, Patricia, 1984, Geological bibliography of mid-continent basement U.S.A.: Geological Society of America Microform Publication 15, 1 card. \$4. CIP ISBN 0-8137-6015-1.

Tinsley, E. J.; Hollander, J. P., compilers, 1984, Worldwide directory of national earth-science agencies and related international organizations: U.S. Geological Survey Circular 934, 102 p. Available free upon request from: to Dedy's office
see also p. 7

Distribution Branch
Text Products Section
U.S. Geological Survey
604 South Pickett Street
Alexandria, VA 22304

Zapfe, C. A., 1984, Geohydrothermodynamics of a water planet—A new geological model; Volume I, Quaternary Glaciation theories: CAZlab, 170 p. \$20 for North America and Hawaii, \$21 elsewhere (includes postage). A

Order from:

CAZlab
6410 Murray Hill Road
Baltimore, MD 21212

REPRINTS (ETC.)

The Geological Society of Iowa has reprinted all its earlier guidebooks. The prices generally range from \$1.50 to \$3.00. For further information, contact:

Carol Thompson
Iowa Geological Survey
123 North Capitol Street
Iowa City, Iowa 52242

The Montana Tech Library has extra copies of many USGS folio atlases for most states, published 1894-1919. They are available to public access libraries on a first come, first served basis and we only ask that you reimburse us for postage. If you would like to see the list, let us know, or you may ask for any individual folios.

Because the folios require substantial packing, they take time to send. Send inquiries to:

Elizabeth Morrissett
Library
Montana Tech
Butte, MT 59701

OUT-OF-PRINT TOPO MAPS AVAILABLE

A selection of out-of-print topographic maps for the United States is available for purchase from John P. Coll, Books. The maps are all original publications in good to fine condition, issued from the late 1800's through the middle 1900's. To receive the catalog *Topographic Mapping in the United States* or any further information, contact:

John P. Coll, Books
P. O. Box 5626
Berkeley, CA 94705
(415) 845-8475

ANNOUNCEMENTS

EXPLORATION SCANNING SERVICE AVAILABLE

A comprehensive scanning service and list of current information for the exploration geologist is available from Konsult International, Inc. The monthly issues are approximately 50 pages, and include all relevant journal citations, book reviews, tables of contents of recent books, guidebooks, conference papers, and items from publication lists. Subscription cost is \$2400 (US) per year. Examples (two issues) and an outline of the service are available at \$25 (US), prepaid, from:

Konsult International, Inc.
44 Gemini Road
Willowdale, Ontario
Canada M2K 2G6

DIALOG users now have access to a new database—Soviet Science and Technology, File 270. This database provides some of the latest research from the Soviet Union and Soviet Bloc countries. Produced by IFI/Plenum Data Co., it con-

tains more than 80,000 records dating from 1975 to the present. The records include basic bibliographic data and English-language abstracts, if available, drawn from journal articles, technical reports, conference papers, and patents. More details are available from the *DIALOG Chronolog*, April 1985, v. 13, p. 68.

WARNING!!!

GIS members should be aware that some of the Blackwell Scientific Publications catalogs provide incomplete information about certain items—specifically, books published in the GSA Special Publications series. In some catalogs the descriptions of these volumes don't mention that they are part of the series, so if your library has a standing order for the series this omission could cause unnecessary duplication. Please check all catalog descriptions carefully.

The Association for Women Geoscientists has announced its officers for 1985: President, Elizabeth A. E. Johnson, Union Oil Co., Los Angeles, CA; Vice-President, Kathleen M. Johnson, USGS, Denver, CO; Secretary, Patricia H.

Pecora, Minerals Management Service, Reston, VA; Treasurer, Amy S. Mohler, Superior Oil International, Houston, TX; Editor, Carol Dickerson, Stauffer Chemical Co., Richmond, CA; Past President, Laurie L. Langer, Pittsburgh Public Schools, Pittsburgh, PA.

MEMBERS IN THE NEWS

Dorothy Vitaliano's translation of *The Biological Fractionation of Isotopes*, by E. M. Galinov has just been published by Academic Press (1985). This is her fourth full-length published translation—the others are Yu. P. Mel'nik's *Precambrian Banded Iron-Formations* (Elsevier, 1982), G. N. Baturin's *Phosphorites on the Sea Floor* (Elsevier, 1982), and A. V. Sher's *Pleistocene Mammals and Stratigraphy of the Far North-east U.S.S.R. and North America* (published in four separately-paged installments in the *International Geology Review*, v. 16, 1974).

She was also the co-author of a paper presented at the International Geological Congress in Moscow last summer, "The non-existence of moissanite, SiC," by Charles Milton and Dorothy B. Vitaliano.

AND...

Kit Fuller is the co-author of a new USGS publication, *Guide to obtaining USGS information*, by Kurt Dodd, H. Kit Fuller, and Paul F. Clarke, published as U.S. Geological Survey Circular 900, 1985.

The report describes sources of USGS information and gives tables showing the types of USGS products and where they are available. Information can be found quickly by subject, by product, and by organization, and descriptions of sources include addresses and telephone numbers. A section called "How to obtain USGS products" will guide those unfamiliar with USGS ordering procedures. This report supersedes USGS Circular 777.

✓
Dorothy's office

AGU INDEX TERMS

The January 29th issue of *Eos* presented AGU's revised index terms for journal articles and *Geophysical Abstracts in Press*. The accompanying article also discussed a brief history of the difficulties and time involved in developing the list. Included here is a copy of the index terms.

LIBRARY U. OF I. URBANA-CHAMPAIGN

New AGU Index Terms

Listed below are AGU's revised terms for indexing journal articles and for labeling Geophysical Abstracts in Press (GAP) for *Eos*. The new index set, which is the product of several years of updating and fine tuning the previous index set (see article this page), divides the geophysical disciplines into 33 major categories (compared to the 24 categories used previously) and employs more than 480 index terms (the former index set used 230-some terms).

Please clip and save these terms for future use. For instructions on preparing GAP abstracts, contact one of the AGU journal editors or the AGU Publications Office, 2000 Florida Avenue, N.W., Washington, DC 20009 (telephone: 202-462-6903).

ATMOSPHERIC COMPOSITION AND STRUCTURE

- 0305 Aerosols and particles
- 0310 Airglow and aurora
- 0315 Biosphere-atmosphere interactions
- 0320 Cloud physics and chemistry
- 0325 Evolution of the atmosphere
- 0330 Geochemical cycles
- 0335 Ion chemistry of the atmosphere
- 0340 Middle atmosphere—composition and chemistry
- 0345 Pollution—urban and regional
- 0350 Pressure, density, and temperature
- 0355 Thermosphere—composition and chemistry
- 0360 Transmission and scattering of radiation
- 0365 Troposphere—composition and chemistry
- 0370 Volcanic effects
- 0394 Instruments and techniques
- 0399 General or miscellaneous

ELECTROMAGNETICS

- 0604 Antenna arrays
- 0609 Antennas
- 0614 Biological effects
- 0619 Electromagnetic theory
- 0624 Guided waves
- 0629 Inverse scattering
- 0634 Measurement and standards
- 0639 Nonlinear electromagnetics
- 0644 Numerical methods
- 0649 Optics
- 0654 Plasmas
- 0659 Random media and rough surfaces
- 0664 Reflectors and feeds
- 0669 Scattering and diffraction
- 0674 Signal processing and adaptive antennas
- 0679 Singularity expansion method
- 0684 Transient and time domain
- 0689 Wave propagation
- 0694 Instrumentation and techniques
- 0699 General or miscellaneous

EXPLORATION GEOPHYSICS

- 0905 Continental structures
- 0910 Data processing
- 0915 Downhole methods
- 0920 Gravity methods
- 0925 Magnetic and electrical methods
- 0930 Oceanic structures
- 0935 Seismic methods
- 0994 Instruments and techniques
- 0999 General or miscellaneous

GEODESY AND GRAVITY

- 1204 Control surveys
- 1209 Crustal movements
- 1214 Geopotential theory and determination
- 1219 Local gravity anomalies and crustal structure
- 1224 Photogrammetry
- 1229 Reference systems
- 1234 Regional and global gravity anomalies and earth structure
- 1239 Rotational variations
- 1244 Standards and absolute measurements
- 1249 Tides
- 1294 Instruments and techniques
- 1299 General or miscellaneous

GEOMAGNETISM AND PALEOMAGNETISM

- 1505 Biomagnetism
- 1510 Dynamo theories
- 1515 Geomagnetic induction
- 1520 Paleomagnetic secular variation
- 1525 Paleomagnetism applied to tectonics
- 1530 Rapid time variations
- 1535 Reversals (process, time scale, magnetostratigraphy)
- 1540 Rock and mineral magnetism
- 1545 Spatial variations (all harmonics and anomalies)
- 1550 Spatial variations attributed to sea floor spreading
- 1555 Time variations, diurnal to secular
- 1560 Time variations, secular and long term
- 1594 Instruments and techniques
- 1599 General or miscellaneous

HISTORY OF GEOPHYSICS

- 1704 Atmospheric sciences
- 1709 Geodesy
- 1714 Geomagnetism and paleomagnetism
- 1719 Hydrology
- 1724 Ocean sciences
- 1729 Planetology
- 1734 Seismology
- 1739 Solar-planetary relationships
- 1744 Tectonophysics
- 1749 Volcanology, geochemistry, and petrology
- 1794 Instruments and techniques
- 1799 General or miscellaneous

HYDROLOGY

- 1803 Anthropogenic effects
- 1806 Chemistry of fresh water
- 1809 Desertification
- 1812 Drought
- 1815 Erosion and sedimentation
- 1818 Evapotranspiration
- 1821 Floods
- 1824 Geomorphology
- 1827 Glaciology
- 1830 Groundwater
- 1833 Hydroclimatology
- 1836 Hydrologic budget
- 1839 Infiltration
- 1842 Irrigation
- 1845 Limnology
- 1848 Networks
- 1851 Plant ecology
- 1854 Precipitation
- 1857 Reservoirs
- 1860 Runoff and streamflow
- 1863 Snow and ice
- 1866 Soil moisture
- 1869 Stochastic processes
- 1872 Transport
- 1875 Water balance
- 1878 Water-energy interactions
- 1881 Water quality
- 1884 Water supply
- 1894 Instruments and techniques
- 1899 General or miscellaneous

INTERPLANETARY PHYSICS

- 2104 Cosmic rays
- 2109 Discontinuities
- 2114 Energetic particles
- 2119 Flare and stream dynamics
- 2124 Heliopause and solar wind termination
- 2129 Interplanetary dust
- 2134 Interplanetary magnetic fields
- 2139 Interplanetary shocks
- 2144 Interstellar gas
- 2149 MHD waves and turbulence
- 2154 Planetary bow shocks
- 2159 Plasma waves and turbulence
- 2164 Solar wind plasma
- 2169 Sources of the solar wind
- 2194 Instruments and techniques
- 2199 General or miscellaneous

IONOSPHERE

- 2403 Active experiments
- 2407 Auroral ionosphere
- 2411 Electric fields and currents
- 2415 Equatorial ionosphere
- 2419 Ion chemistry and composition
- 2423 Ionization mechanisms
- 2427 Ionosphere-atmosphere interactions
- 2431 Ionosphere-magnetosphere interactions
- 2435 Ionospheric disturbances
- 2439 Ionospheric irregularities
- 2443 Mid-latitude ionosphere
- 2447 Modeling and forecasting
- 2451 Particle acceleration
- 2455 Particle precipitation
- 2459 Planetary ionospheres
- 2463 Plasma convection
- 2467 Plasma temperature and density

- 2471 Plasma waves and instabilities
- 2475 Polar ionosphere
- 2479 Solar radiation and cosmic ray effects
- 2483 Wave-particle interactions
- 2487 Wave propagation
- 2494 Instruments and techniques
- 2499 General or miscellaneous

MAGNETOSPHERIC PHYSICS

- 2704 Auroral phenomena
- 2708 Current systems
- 2712 Electric fields
- 2716 Energetic particles, precipitating
- 2720 Energetic particles, trapped
- 2724 Magnetopause, cusp, and boundary layers
- 2728 Magnetosheath
- 2732 Magnetosphere interactions with satellites and rings
- 2736 Magnetosphere-ionosphere interactions
- 2740 Magnetospheric configuration and dynamics
- 2744 Magnetotail
- 2748 Magnetotail boundary layers
- 2752 MHD waves and instabilities
- 2756 Planetary magnetospheres
- 2760 Plasma convection
- 2764 Plasma sheet
- 2768 Plasmasphere
- 2772 Plasma waves and instabilities
- 2776 Polar cap phenomena
- 2780 Solar wind interactions with unmagnetized bodies
- 2784 Solar wind-magnetosphere interactions
- 2788 Storms and substorms
- 2794 Instruments and techniques
- 2799 General or miscellaneous

MARINE GEOLOGY AND GEOPHYSICS

- 3005 Geomagnetism
- 3010 Gravity
- 3015 Heat flow (benthic) and hydrothermal processes
- 3020 Littoral processes
- 3025 Marine seismics
- 3030 Micropaleontology
- 3035 Mid-ocean ridge processes
- 3040 Plate tectonics
- 3045 Seafloor morphology and bottom photography
- 3050 Sediment transport
- 3094 Instruments and techniques
- 3099 General or miscellaneous

METEOROLOGY AND ATMOSPHERIC DYNAMICS

- 3304 Atmospheric electricity
- 3309 Climatology
- 3314 Convective processes
- 3319 General circulation
- 3324 Lightning
- 3329 Mesoscale meteorology
- 3334 Middle atmosphere dynamics
- 3339 Ocean-atmosphere interactions
- 3344 Paleoclimatology
- 3349 Polar meteorology
- 3354 Precipitation
- 3359 Radiative processes
- 3364 Synoptic-scale meteorology
- 3369 Thermospheric dynamics
- 3374 Tropical meteorology
- 3379 Turbulence
- 3384 Waves and tides
- 3394 Instruments and techniques
- 3399 General or miscellaneous

MINERALOGY, PETROLOGY, AND ROCK CHEMISTRY

- 3605 Chemical evolution
- 3610 Composition of the crust
- 3615 Composition of the mantle and core
- 3620 Crystal chemistry
- 3625 Descriptive mineralogy
- 3630 Experimental mineralogy and petrology
- 3635 Geochronology (radiometric)
- 3640 Igneous petrology
- 3645 Isotope composition

MINERALOGY, PETROLOGY, AND ROCK CHEMISTRY (continued)

- 3650 Low-temperature and organic geochemistry
- 3655 Major element composition
- 3660 Metamorphic petrology
- 3665 Mineral occurrences and deposits
- 3670 Minor and trace element composition
- 3675 Sedimentary petrology
- 3694 Instruments and techniques
- 3699 General or miscellaneous

MINERAL PHYSICS

- 3904 Defects
- 3909 Elasticity and anelasticity
- 3914 Electrical properties
- 3919 Equations of state
- 3924 High-pressure behavior
- 3929 NMR, Mossbauer effects, and other magnetic properties
- 3934 Optical, infrared, and Raman spectroscopy
- 3939 Physical thermodynamics
- 3944 Shock wave experiments
- 3949 Thermal expansivity
- 3954 X ray, neutron, and electron spectroscopy and diffraction
- 3994 Instruments and techniques
- 3999 General or miscellaneous

OCEANOGRAPHY: GENERAL

- 4203 Analytical modeling
- 4207 Arctic and Antarctic oceanography
- 4211 Benthic and benthic layers
- 4215 Climate and interannual variability
- 4219 Continental shelf processes
- 4223 Descriptive and regional oceanography
- 4227 Diurnal, seasonal, and annual cycles
- 4231 Equatorial oceanography
- 4235 Estuarine processes
- 4239 Limnology
- 4243 Marginal and semiclosed seas
- 4247 Marine meteorology
- 4251 Marine pollution
- 4255 Numerical modeling
- 4259 Ocean acoustics
- 4263 Ocean prediction
- 4267 Paleoceanography
- 4271 Physical and chemical properties of sea water
- 4275 Remote sensing and electromagnetic processes
- 4279 Upwelling and convergences
- 4283 Water masses
- 4294 Instruments and techniques
- 4299 General or miscellaneous

OCEANOGRAPHY: PHYSICAL

- 4504 Air-sea interactions
- 4508 Coriolis effects
- 4512 Currents
- 4516 Eastern boundary currents
- 4520 Eddies and mesoscale processes
- 4524 Fine structure and microstructure
- 4528 Fronts and jets
- 4532 General circulation
- 4536 Hydrography
- 4540 Ice mechanics and air-sea-ice exchange processes
- 4544 Internal and inertial waves
- 4548 Ocean fog and aerosols
- 4552 Ocean optics
- 4556 Sea level variations
- 4560 Surface waves and tides
- 4564 Tsunamis and storm surges
- 4568 Turbulence, diffusion, and mixing processes
- 4572 Upper ocean processes
- 4576 Western boundary currents
- 4594 Instruments and techniques
- 4599 General or miscellaneous

OCEANOGRAPHY: BIOLOGICAL AND CHEMICAL

- 4805 Biochemistry and food chains
- 4810 Corrosion
- 4815 Ecosystems and ecology
- 4820 Fouling and boring organisms
- 4825 Geochemistry
- 4830 Higher marine organisms
- 4835 Inorganic marine chemistry
- 4840 Microbiology
- 4845 Nutrients
- 4850 Organic marine chemistry
- 4855 Plankton
- 4860 Radioactivity and radioisotopes
- 4894 Instruments and techniques
- 4899 General or miscellaneous

PHYSICAL PROPERTIES OF ROCKS

- 5104 Fracture and flow
- 5109 Magnetic and electrical properties
- 5114 Permeability and porosity
- 5129 Sound velocities
- 5134 Thermal properties
- 5139 Transport properties
- 5144 Wave attenuation
- 5194 Instruments and techniques
- 5199 General or miscellaneous

PLANETOLOGY: SOLID SURFACE PLANETS AND SATELLITES

- 5405 Atmospheric composition and chemistry
- 5410 Composition
- 5415 Cratering
- 5420 Gravitational fields
- 5421 Interactions with particles and fields
- 5430 Interiors
- 5435 Ionospheres
- 5440 Magnetic fields
- 5445 Meteorology
- 5450 Orbital and rotational dynamics
- 5455 Origin and evolution
- 5460 Physical properties of materials
- 5465 Rings and dust
- 5470 Surfaces
- 5475 Tectonics
- 5480 Volcanism
- 5494 Instruments and techniques
- 5499 General or miscellaneous

PLANETOLOGY: FLUID PLANETS

- 5704 Atmospheric composition and chemistry
- 5709 Composition
- 5714 Gravitational fields
- 5719 Interactions with particles and fields
- 5724 Interiors
- 5729 Ionospheres
- 5734 Magnetic fields
- 5739 Meteorology
- 5744 Orbital and rotational dynamics
- 5749 Origin and evolution
- 5754 Physical properties of materials
- 5759 Rings and dust
- 5764 Surfaces
- 5794 Instruments and techniques
- 5799 General or miscellaneous

PLANETOLOGY: COMETS AND SMALL BODIES

- 6005 Atmospheric and ionospheric composition and chemistry
- 6008 Composition
- 6015 Dust
- 6019 Gravitational fields
- 6025 Interactions with solar wind plasma and fields
- 6030 Magnetic fields
- 6035 Orbital and rotational dynamics
- 6040 Origin and evolution
- 6045 Physics and chemistry of materials
- 6050 Plasma and MHD instabilities
- 6055 Surfaces and interiors
- 6060 Radiation and spectra
- 6094 Instruments and techniques
- 6099 General or miscellaneous

POLICY SCIENCES

- 6304 Benefit/cost analysis
- 6309 Decision making under uncertainty
- 6314 Demand estimation
- 6319 Institutions
- 6324 Legislation and regulations
- 6329 Project evaluation
- 6334 Regional planning
- 6339 System design
- 6344 System operation and management
- 6399 General or miscellaneous

PUBLIC ISSUES

- 6605 Education
- 6610 Funding
- 6615 Legislation and regulation
- 6620 Science policy
- 6699 General or miscellaneous

RADIO SCIENCE

- 6904 Atmospheric propagation
- 6909 Electromagnetic metrology
- 6914 Electromagnetic noise and interference
- 6919 Electro-optics
- 6924 Interferometry
- 6929 Ionospheric physics
- 6934 Ionospheric propagation
- 6939 Magnetospheric physics
- 6944 Nonlinear phenomena
- 6949 Radar astronomy
- 6954 Radio astronomy
- 6959 Radio oceanography
- 6964 Radio wave propagation
- 6969 Remote sensing
- 6974 Signal processing
- 6979 Space and satellite communication
- 6984 Waves in plasma
- 6994 Instruments and techniques
- 6999 General or miscellaneous

SEISMOLOGY

- 7205 Body waves
- 7210 Earthquake dynamics
- 7215 Earthquake parameters
- 7220 Earthquake prediction
- 7225 Nuclear test detection
- 7230 Seismicity
- 7235 Strong motions and engineering seismology
- 7240 Structure of mantle and core

- 7245 Structure of the crust
- 7250 Structure of the lithosphere and upper mantle
- 7255 Surface waves and free oscillations
- 7294 Instruments and techniques
- 7299 General or miscellaneous

SOLAR PHYSICS, ASTROPHYSICS, AND ASTRONOMY

- 7504 Celestial mechanics
- 7509 Corona and transition region
- 7514 Energetic particles
- 7519 Flares and mass ejections
- 7524 Magnetic fields
- 7529 Photosphere and chromosphere
- 7534 Radio emissions
- 7539 Stellar astronomy
- 7544 Stellar interiors and dynamo theory
- 7549 Ultraviolet emissions
- 7554 X rays and gamma rays
- 7594 Instruments and techniques
- 7599 General or miscellaneous

SPACE PLASMA PHYSICS

- 7803 Active perturbation experiments
- 7807 Charged particle motion and acceleration
- 7811 Discontinuities
- 7815 Electrostatic structures
- 7819 Experimental and mathematical techniques
- 7823 Ionization processes
- 7827 Kinetic and MHD theory
- 7831 Laboratory studies
- 7835 Magnetic reconnection
- 7839 Nonlinear phenomena
- 7843 Numerical simulation studies
- 7847 Radiation processes
- 7851 Shock waves
- 7855 Spacecraft sheaths, wakes, charging
- 7859 Transport processes
- 7863 Turbulence
- 7867 Wave-particle interactions
- 7871 Waves and instabilities
- 7875 Wave-wave interactions
- 7894 Instruments and techniques
- 7899 General or miscellaneous

TECTONOPHYSICS

- 8105 Composition and state of the earth's interior
- 8110 Continental tectonics
- 8115 Core processes
- 8120 Dynamics of the lithosphere and mantle
- 8125 Evolution of the earth
- 8130 Heat generation and transport (except hydrothermal)
- 8135 Hydrothermal systems
- 8140 Lithosphere and mantle stresses
- 8145 Physics of magma and magma bodies
- 8150 Plate boundary structures and processes
- 8155 Plate motions, past and present
- 8160 Rheology of the lithosphere and mantle
- 8165 Structural geology (crustal structure and mechanics)
- 8194 Instruments and techniques
- 8199 General or miscellaneous

VOLCANOLOGY

- 8404 Ash deposits
- 8409 Atmospheric effects
- 8414 Eruption mechanisms
- 8419 Eruption monitoring
- 8424 Hydrothermal systems
- 8429 Lava rheology and morphology
- 8434 Magma migration
- 8439 Physics and chemistry of magma bodies
- 8494 Instruments and techniques
- 8499 General or miscellaneous

INFORMATION RELATED TO GEOGRAPHIC REGION

- 9305 Africa
- 9310 Antarctica
- 9315 Arctic region
- 9320 Asia
- 9325 Atlantic Ocean
- 9330 Australia
- 9335 Europe
- 9340 Indian Ocean
- 9345 Large bodies of water (e.g., lakes and inland seas)
- 9350 North America
- 9355 Pacific Ocean
- 9360 South America
- 9399 General or miscellaneous

INFORMATION RELATED TO GEOLOGIC TIME

- 9604 Cenozoic
- 9609 Mesozoic
- 9614 Paleozoic
- 9619 Precambrian
- 9699 General or miscellaneous

GENERAL OR MISCELLANEOUS

- 9805 Instruments useful in three or more fields
- 9810 New fields (not classifiable under other headings)
- 9815 Notices and announcements
- 9820 Techniques applicable in three or more fields

9900 CORRECTIONS

LIBRARY U. OF I. URBANA-CHAMPAIGN

THE USGS LIBRARY'S LS/2000 INTEGRATED LIBRARY SYSTEM

by

Edward H. Liszewski
U.S. Geological Survey Library
National Center, Mail Stop 950
Reston, VA 22092

Abstract

The USGS Library has implemented the LS/2000 integrated Library System (ILS), a microcomputer-based library automation system. Implementation activities included hardware and software procurement and modifications, conversion of files, and communication links. The system implementation will result in major changes in circulation, information access and technical processing.

The United States Geological Survey Library has implemented the LS/2000 Integrated Library System¹. The Survey Library system consists of a headquarters library in Reston, Va. and branch libraries serving users in Denver, Colo., Menlo Park, Calif., and Flagstaff, Ariz.

Pursuing the long-range goals of enhancing services and reducing costs through automation, the Survey Library staff examined available computerized library systems in 1982. They also sought a means to fulfill the immediate need for service to the users at field locations. In evaluating existing systems, the library staff learned that the National Library of Medicine (NLM) was developing the Integrated Library System (ILS) applications software running under Meditech Interpretive Information Systems (MIIS) operating system.

In 1983, the USGS Library staff visited

NLM, the Pentagon Library where a prototype of the ILS was developed, the Naval Research Laboratory Library, the Welch Medical Library of Johns Hopkins University, and the Health Sciences Library of the University of Maryland. The library staff concluded that ILS had the capability of meeting most of the criteria established for the selection of an automated online, interactive library system. Of particular interest was the capability of the system to accommodate multi-branch circulation and online catalog searching.

In September 1983 the library signed a contract with Avatar Systems, Inc. to install the ILS. By December 1983 Avatar Systems was wholly purchased by OCLC and Avatar's enhanced ILS became a major part of OCLC's LS/2000.

The system includes four major subsystems which support multi-branch circulation and online catalog searching, online cataloging and authority file maintenance, management report generation, and system set-up parameters for local policy and customization. All functions access a common data base, the Master Bibliographic File (MBF), which contains MARC II compatible bibliographic information and is linked with copy specific records that reflect the availability status of items in the collection. Together, the MBF and the item status function are able to control library materials from the time they are ordered until they are withdrawn from the collection.

¹ Any trade names are used for descriptive purposes only and do not constitute endorsement by the U.S. Geological Survey.

To search the online catalog at any location, the user may select, from the system-supplied menu, such access points as author, title, subject heading, keyword, call number, title key, author/title key, series, Superintendent of Documents number, corporate/conference name, or map coordinates. The primary search reveals data contained in the entire system. Searches may be conducted by specifying which library location the users wishes to access. The Boolean 'AND' limitation permits users to narrow the original search. Additional limitations, defined by the library, narrow searches by publication year, series, author name, subject heading, or keyword. Diacritics are accommodated by a special feature in the MIIIS operating system.

The ILS is run on a Data General Eclipse S-280 minicomputer, three 300-megabyte disk drives, a tape drive, 64 communications ports, and workstation equipment consisting of 43 terminals, 29 printers, and 14 bar code readers. More than 85,000 full-MARC records are currently stored on the Survey discs that, at peak capacity, will hold approximately 200,000 records. The library anticipates adding more disk drives and communication ports to accommodate future growth.

Cables were run from the computer room to all workstation sites in the Reston facility. The branch libraries are being supported by interfacing the government's high-speed data links from Virginia to the branch locations. In addition, four dial-up lines were linked to the system and four cables were connected to the Survey's port contention units. The PBX allows access to the ILS online catalog via any terminal with a 'BREAK' key and a modem.

The computer is housed in a secure, temperature- and humidity-controlled room outside the library. The system is maintained and operated by the library staff. The contractor supplies monthly preventive maintenance that includes cleaning and testing the compon-

ent parts of the central processing unit, disk drives, and tape drive.

Software Modifications

The original software to the ILS, which is in the public domain, was modified and enhanced by the contractor. Some modifications were specified in the contract. A computer tape supplied by the personnel office was used to create a patron file. Loan period modifications were made to control length of loans and renewals on basis of time and patron category. Stopword lists and phrase lists were added to speed retrieval access.

The library staff generated lists of requirements and, subsequently, reviewed the contractor's design. After a final design was accepted, programming and testing began. When the new program met the requirements, it was put into use and debugged while subjected to the rigors of "real life" operations.

Data Base Conversion

The creation of the MBF, a major task of the library, will require both the conversion of bibliographic records to machine-readable form and the creation of a link between the records and the items attached to that record.

Bibliographic records are being read into the MBF from OCLC archival tapes. These records consist of all materials cataloged by the library from October 1975 to January 1985. Programming was written to "flip" the records to AACR II format. As new records are added to the collection, a direct interface between the system and OCLC terminals allows a cataloger to transfer a specific record directly into the ILS through the OCLC terminal printer port. Multiple copy records are automatically created. A retrospective conversion project is underway to convert all active serial titles and all USGS publication records into machine-readable

form. After these records are added to those of the OCLC archival tape records, a data base of well over 100,000 titles will be available in the MBF. A library task force is examining areas for future retrospective conversion to enrich the data base.

Future Plans

As functions are added to the system and as the staff becomes more aware of the possibilities of automation, ILS will play an even larger role in the library. A special serials subsystem is being developing in conjunction with OCLC which will be based on multi-station microcomputers. It will include check-in, automatic claiming, bindery management, and summary statements of holdings. Plans are being made at the Survey to begin work on the acquisitions subsystem.

The USGS and the geoscience community will benefit from the efforts being made by this library to implement the ILS. Access to the MBF will expedite the transfer of information for those interested in geoscience information. This data, and future developments in networking and machine-to-machine communications, will have far-reaching effects which will enhance the exchange of information vital to our community of users.

Biographical Sketch

Edward H. Liszewski is the Assistant Chief, Branch of Library and Information Services of the U.S. Geological Survey. He is the Systems Coordinator for the implementation of the LS/2000 Integrated Library System project.

NEW MEMBERS

INDIVIDUALS ...

Mary E. Batchelor
Science/Engineering Library
Southern Methodist University
Dallas, TX 75275

Edward H. Liszewski
9400 Union Place
Gaithersburg, MD 20879

Robert M. Rich
6906 Rock Royal Drive
Holiday, FL 33590

Chris Roche
Kansas Geological Survey
1930 Constant Avenue
Lawrence, KS 66043

Patricia Ann Routledge
649 Riverwood Avenue
Winnipeg, Manitoba
Canada R3T 1K3

Pamela F. Yorks
Converse Consultants
300 Elliott Avenue W., Suite 350
Seattle, WA 98119

AND INSTITUTIONS ...

National Water Well Association
500 W. Wilson Bridge Road
Worthington, OH 43085
Attention: Valerie Orr

AFGL Research Library
FL 2807, SULLS
Hanscom AFB
Bedford, MA 01731
Attention: Ruth K. Seidman

1985 GIS COMMITTEES AND REPRESENTATIVES

Representatives

American Geological Institute, Governing Board—Unni H. Rowell
American Library Association, Map and Geography Round Table—Susan Klimley
American Society for Information Science—
Cartographic Information Society—Dorothy McGarry
Cartographic Users Advisory Council—Nancy Pruett; 2nd representative, Charlotte Derksen
Special Libraries Association, Geography and Map Division—Dorothy McGarry
Special Libraries Association, Petroleum Division—Ann Coppin
GeoRef Advisory Board—Nancy Pruett

Committees and Individual Appointments

Annual Meeting Program Chairperson—Annette Bourgeois
Annual Meeting Exhibit Manager—John Crissinger
Committee for the Third International Conference on Geological Information, 1986, Adelaide—Nancy Pruett (GIS Liaison); Annette Bourgeois, Reggie Brown, Susan Klimley, Amanda Master-son, Jeane Moore, Hart Phinney, Patricia Price, Ghassam Rassam, Unni Rowell, Rosalind Walcott, Dick Walker, Dederick Ward, Connie Wick
Membership Committee—Dena Fracolli Stepp (chair); Ralph Farrar, Gerald Friedman, Lois Heiser
Newsletter Editors—Judy Geitgey, Connie Manson
Publications Manager—Jim O'Donnell
Newsletter Editorial Board—Miriam Sheaves (chair); Barbara Christy, Katherine Shanks

Nominating Committee—Unni Rowell (chair); John Crissinger, Julie Bichteler
Guidebooks Committee—Charlotte Derksen (chair); Dena Fracolli Stepp, Claren Kidd, Richard Spohn, Nancy Thurston, Louise Zipp, Brigida Cobb
GeoRef User Group, Steering Committee—Nancy Pruett (chair); Carol Messick, Ann Coppin, Jim O'Donnell, Barbara Pearson, Miriam Sheaves, Dena Fracolli Stepp, Phil Stoffer, Susan Thompson, Dederick Ward, Mary Ann Whitney
1988 GSA Centennial Meeting Program Committee—Dederick Ward (chair); Bob Bier, Fran Drummond, Hart Phinney, Unni Rowell
Best Paper Award—Rosalind Walcott (chair); Mary Ansari, Julie Bichteler, Reggie Brown
Directory of Geoscience Libraries—Nancy Crossfield (chair); Ralph Farrar, Charlene Sullivan, Liz Frebold, Mark Finnegan

Ad Hoc Committees

Ad Hoc Committee on Careers in Geoscience Information—Nancy Crossfield (chair); Kathryn Hale
Ad Hoc Committee to Develop the Criteria for Reviewing Geoscience Journals—John Crissinger (chair); Ina Brownfield, Gerald Friedman, Barbara Pearson
Ad Hoc Committee on Liaison for Improved Indexing of Geological Materials with LC and Other Indexing Institutions—Elizabeth Morrissett (chair); Susan Thompson, Bob Bier, Jean Eaglesfield, Sue Cvejanovich

MEETINGS AND CONFERENCES

FUNDS AVAILABLE FOR THE THIRD INTERNATIONAL MEETING ON GEOSCIENCE INFORMATION

As of December 31, 1984, \$10,673.64 had been earned from the Second International Meeting on Geoscience Information (IMGI). The GIS Executive Board has decided that \$8000 of this will be used to fund the Third IMGI in Adelaide, Australia (Table 1).

The remaining funds will stay in an interest-bearing account.

Members who are in a fundable category should send their request for support to the GIS President by February 1, 1986. (Notification of awards will be made in early 1986.) A member can apply for only one GIS grant, and all persons within a category will receive equal funding. Payment will be made after a documented expense claim is filed with the GIS Treasurer, after the Adelaide meeting.

Any comments or questions about these procedures should be sent to the GIS President before the Orlando meeting.

	Table 1 per individual	maximum amount for each category
GIS display to be shipped, round-trip, to Adelaide	\$ 200	\$ 200
GIS members who are keynote or theme speakers	\$ 600 - \$ 1000	\$ 2000
GIS members whose contributed papers have been accepted for presentation	\$ 600	\$ 4800
GIS 1986 President	\$ 600 - \$ 1000	\$ 1000
		<hr style="width: 100%; border: 0.5px solid black;"/> \$ 8000

HELP UP PLAN AN EFFECTIVE GEOREF WORKSHOP

As a member of the GeoRef User Group Steering Committee, I am helping plan the GeoRef workshops for the GIS annual meeting in Orlando this fall. We have arranged for two sessions: a GeoRef beginners workshop on Thursday morning (10/31), and a session for experienced GeoRef users on Monday morning (10/28). The advanced session will probably include an update from AGI on recent and planned enhancements to the database as well as a round table discussion.

I would like your ideas on what you'd like these two GeoRef workshops to include (or not include). If you have

attended past GeoRef workshops, I'm sure you have opinions on what you liked and what you didn't. If you have not been to a GeoRef workshop, you certainly have some expectations that you hope would be met. Whether or not you plan to attend the Orlando meeting (and I hope you do!), I'd like to hear from you.

Please send (or phone) your comments to:

Miriam L. Sheaves
Geology Library
Mitchell Hall 029A
University of North Carolina
Chapel Hill, NC 27514
(919) 962-2386

GEOGRAPHICAL INFORMATION ANALYSIS
WORKSHOP SERIES

Locations and dates for the 8th Annual Geographic Information Analysis Workshop Series have been announced. The intensive two-day workshops will focus on the fundamental operations used in computer-assisted map analysis, and will consist of both lectures and hands-on exercises. The workshops will be held at the following places and times:

- University of California, Berkeley, May 22 and 23
- Yale University, New Haven, May 28 and 29
- University of Georgia, Athens, June 13 and 14
- Purdue University, West Lafayette, June 28 and 29
- Colorado State University, Fort Collins, July 25 and 26
- Oregon State University, Corvallis, September 4 and 5

Additional information is available by writing or calling:

Dr. Joseph K. Berry
Yale University
School of Forestry and Environmental Studies
205 Prospect Street
New Haven, CT 06511
(203) 436-0440

ASSESSMENT MAPPING WORKSHOP

The International Association of Assessing Officers (IAAO) will conduct two workshops on assessment mapping in support of property ownership. The two-day program will be held on June 13-14 in Cincinnati, Ohio, and on September 19-20 in Salt Lake City, Utah. Registration is \$200, \$75 for IAAO members. For more information and for registration material, please write or call:

Bob Clatanoff
IAAO
1313 East 60th Street
Chicago, IL 60637
(312) 947-2054

6th LATIN AMERICAN GEOLOGICAL
CONGRESS

The VI Latin American Geological Congress will be held October 9-12, 1985, in Bogota, Colombia. The Congress is open to professionals in geology and the other earth sciences, with the objective of contributing to a better understanding of the geologic problems of Latin America. Registration is \$150.00. For additional information, contact:

Dr. Jorge Valdieri W.
Executive Secretary
VI Latin American Geological Congress
INGEOMINAS - AGID
Diagonal 53 No. 34-53
P. O. Box 4865
Cable: INGEOMINAS
Bogota, D.E.-Colombia

FORTHCOMING MEETINGS

- May 15-17, 1985—Geological Association of Canada/Mineralogical Association of Canada; annual meeting; Fredericton, New Brunswick
- May 27-31, 1985—American Geophysical Union; spring meeting; Baltimore, MD
- June 8-13, 1985—Special Libraries Association; annual meeting; Winnipeg, Manitoba
- July 6-11, 1985—American Library Association; annual meeting; Chicago
- Sept. 19-20, 1985—Western Association of Map Libraries; fall meeting, Davis, CA.
- Oct. 6-10, 1985—Society of Exploration Geophysicists; annual meeting, Washington, D.C.
- Oct. 28-31, 1985—Geological Society of America; annual meeting; Orlando, FL
- Dec. 9-13, 1985—American Geophysical Union; fall meeting; San Francisco

JOB ANNOUNCEMENTS

CHIEF LIBRARIAN, U.S. GEOLOGICAL SURVEY

Applications are invited for the position of Chief, Branch of Library and Information Services. Salary: GS-15, \$52,262 - \$67,940 per annum.

The Chief Librarian is directly responsible for all library operations at the National Center, including long-range planning, budget, policy development, collection building and resource sharing, with oversight responsibility for branch operations.

The USGS Library system consists of the National Center Library in Reston, VA; branches in Denver, CO, Menlo Park, CA, and Flagstaff, AZ; a staff of 73 FTE; and 1+ million volumes.

Minimum qualifications: accredited MLS; 3 years of progressively responsible professional experience in science libraries, skill in personnel and budget management, knowledge of information technology, strong communication skills and the ability to work effectively with people. Training in earth sciences is highly desirable.

For further information contact John M. Aaron, Chief, Office of Scientific Publications, USGS, 904 National Center, Reston, VA 22092; (703) 860-6575. USGS is an Equal Opportunity/Affirmative Action employer.

PHYSICAL SCIENCES RESOURCE LIBRARIAN/ GEOLOGY LIBRARY, YALE UNIVERSITY LIBRARY

Responsible for coordinating collection development and services for the library

Responsible for coordinating collection development and services for the libraries which support teaching and research programs in the physical sciences and engineering. Responsible for the collection and services of the geology library.

Requires MLS degree; training in the physical sciences (BS required, MS preferred). Knowledge of the literature of the earth sciences. Several years of professional experience in collection development and public services; experience supervising full-time staff; experience selecting and processing maps desirable. Reading knowledge of Russian or German desirable. Experience searching on-line databases desirable.

Rank and salary dependent on experience and qualifications, from a minimum of \$25,000. Fringe benefits.

Please send resume listing the names of three references by June 28, 1985, to:

Maureen Sullivan, Head
Library Personnel
Yale University Libraries
Box 1603-A
Yale Station
New Haven, CT 06520

All interested persons are encouraged to apply.

HEAD, PHYSICAL SCIENCES AND TECHNOLOGY LIBRARIES, UNIVERSITY OF CALIFORNIA, LOS ANGELES

Responsible for coordinating the operations, long-range planning, and direction of four libraries (Engineering and Math Science, Chemistry, Physics, and Geology), a technical processing unit, and an interlibrary loan operation, including on-line support system applications and bibliographic instruction; collection management and control; personnel management; funding; expenditure control; space utilization; statistical, evaluative, planning and other reports; the promotion of good relations with faculty, students, and the public.

The candidates must have demonstrated competence in administration in a complex organizational environment, particularly: competence in planning, setting objectives and priorities, communicating, mobilizing individuals to group action, and organizing for effective action; capability of working with various academic, library, and public groups and individuals; understanding of the mission of higher education and faculty/student information needs in the sciences; familiarity with research trends in the physical sciences and technology; complete understanding of academic library services to the sciences and the ability to formulate, advocate, and relate goals and programs to the fields served.

Salary range is \$25,692 - \$43,464. Send resume stating qualifications, education, and experience, with names of at least three references to:

Rita A. Scherrei, Director
Administrative Systems and Personnel
Services
University Research Library
UCLA
405 Hilgard Avenue
Los Angeles, CA 90024

Candidates replying by May 15, 1985 will be given first consideration.

**SUPERVISOR, COMPUTER SYSTEMS,
UNIVERSITY OF NEBRASKA-LINCOLN**

A position is available for Supervisor, Computer Systems, at the University of Nebraska-Lincoln, Conservation and Survey Division. The Division is responsible for basic data related to natural resources, and contains the State Geological Survey, Water Survey, Soil Survey, Water Resources Center, Remote Sensing Center, and Map Information Center.

Primary responsibilities include documentation, organization, maintenance, and management of the computer service activities in the Division. Other duties related to the support of the Division's programs will also be assigned.

Applicants should have a background in computer science and in hydrology, geography, or geology. Demonstrated aptitude, interest, and experience in high-level languages for the management of large data bases; computer graphics desirable. M.S. (preferred), minimum 9 years education/experience. The salary is commensurate with experience and qualifications; minimum \$25,000.

Send resume, transcripts, and three references to:

Computing Search
Conservation and Survey Division
University of Nebraska-Lincoln
Lincoln, NE 68588-0517

Applications received by May 1, 1985 will be given priority.

INSTRUCTIONS FOR CONTRIBUTORS

The GIS Newsletter welcomes original, previously unpublished English language papers related to geoscience information. Manuscripts should be typed on opaque paper, on one side only, double-spaced throughout, with 3 cm margins on all sides, and all pages numbered consecutively. Length should not exceed 12 pages.

The title page should include the title, the name(s) of the author(s) and their institutional address(es). References should be mentioned in the text (author and date), with a list of "References cited" appearing at the end of the paper, following GSA reference style. Provide on a separate sheet an informative abstract of no more than 200 words and a biographical sketch of the author(s), of

no more than 100 words, which includes current position and education.

Clear, black and white (glossy) photographs and illustrations with strong contrast should be submitted on separate sheets from the text and numbered consecutively in order of reference in the text. Tables and figures should be submitted on separate sheets from the text, numbered, and referred to in the text by number.

Send two (2) copies of the manuscript to the Chairperson, GIS Newsletter Editorial Board. Include a phone number where the author(s) may be reached and a self-addressed stamped envelope for notification of receipt of manuscript. Each manuscript will be reviewed by at least two persons.

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