



GSA news & information

G.S.A. ARCHIVES

VOLUME 5, NUMBER 3

MARCH 1983

1982 REPORT

GSA Member Support of Foundation Increases

by Dwight Roberts

President, GSA Foundation

Approaching the last half of its second full year of operation, the GSA Foundation continues to gain in acceptance by the membership and hence in usefulness to the Society.

Through December 28, 1982, dramatic increases in numbers of donors and dollars are apparent: 765 donors have given \$678,468 so far this year, compared with 295 and \$574,248 for 1981.

While the Decade of North American Geology (DNAG) continues to be the top priority for funding, other areas of support are beginning to show significant gains. Gifts for research now total \$6,453; unrestricted gifts total \$13,698; gifts earmarked for publications are \$864; for the minority fund, \$685; for History of Geology, \$383; for Penrose Conferences, \$15,359; and memorial gifts total \$4,016. Each of these represents a marked increase over 1981.

The DNAG fund continues to grow with the recent \$101,500 in gifts and commitments from Tenneco Oil Exploration and Production Company and Occidental Exploration and Production Company. The fund now totals \$3,435,600, exclusive of gifts from Canadian companies. The Foundation has reimbursed the Society for past DNAG expenses and is now covering expenditures as they occur.

Thanks to the good efforts of GSA Councilor Bruce Hanshaw, the Northeastern and Southeastern Sections and the Hydrogeology Division have made gifts to the Foundation. Bruce hopes that this will encourage the other sections and divisions to follow suit.

During 1982, the Foundation established its Planned Giving Program. Because of the cost involved, the program was directed at a limited number (1,800) of the GSA membership. The program consists of a set of six brochures and response booklets. We have sent brochures I and II to all on our limited mailing list and brochure III to one-half of the list. To date, we have received

responses from 220. The entire GSA membership received our December tax mailing, and responses from that mailing for our booklet "1982 Tax Act and Your Planning" have totaled 600. These returns are surprisingly high and indicate the interest many members have in the estate and tax planning areas. As budget allows, we hope to expand this program to include a larger segment of the membership.

The Foundation trustees reluctantly accepted the resignation of Robert L. Fuchs as trustee and Vice Chairman at its October meeting in New Orleans. Bob was elected treasurer of GSA and felt it necessary to give up his seat on the Board of Trustees. While our loss is Council's gain, we take comfort in knowing that he will be available for counsel. The trustees elected Donald F. Carlos, Vice-President of Getty Oil, to fill Bob's remaining term on the board. Lawrence W. Funkhauser, Vice-President and Director of Chevron, and Harrison C. Jamison, President of Arco Exploration Company were, elected to five-year terms, increasing the board seats to seven. Remaining trustees include Chairman Caswell Silver, Hollis D. Hedberg, John C. Maxwell, and Michel T. Halbouty.

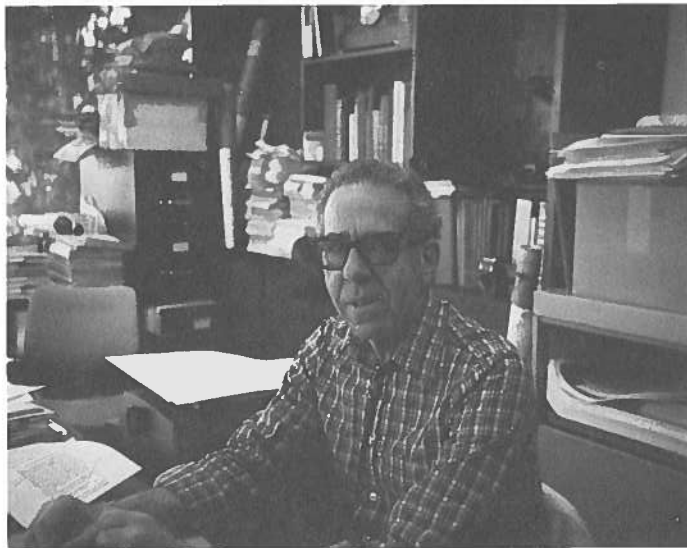
The trustees also have agreed to seek funds for purchase of GSA's computer system and for support of Penrose Conferences.

Because of its increasing need for space, the Foundation moved in December from the two leased rooms in the Headquarters building to the first floor of the house adjacent to Headquarters and owned by the Society. Minimal improvements in the space have provided the Foundation with ample room for its present needs and those anticipated for the future. The Foundation expects to have its records fully automated by mid-1983.

1982 has been a year of change and progress for the GSA Foundation. With the continued support of the membership and of industry, the Foundation will be able to play an important role in helping the Society meet the challenges of the coming years.



Managing Editor Faith Rogers considers possible stories for an upcoming issue of *News & Information*.



Associate Editor Lee Gladish brings newsletter experience and his talent as a photographer to *News & Information*.

Editors Appointed for *News & Information*

More news and more information are in store for readers of *GSA News & Information* as Headquarters staff members Faith Rogers and Lee Gladish take on the editing of the Society's newsletter. Executive Director F. Michael Wahl appointed Rogers managing editor and Gladish associate editor on January 7, 1983.

"We want to change completely the image, style, and content of *News & Information* and make it more interesting and informative for the membership," Wahl said, in announcing the appointments.

Rogers and Gladish both have other major responsibilities in the GSA Publications Department. Rogers is managing editor of *Geology* and editorial coordinator for the department, and Gladish is coordinator for GSA books and the Maps and Charts series.

Rogers earned a B.S. in journalism at the University of Colorado in 1967 and has been an editorial assistant for a college textbook publisher and a copy editor for a daily newspaper. She joined the Headquarters staff in November 1972 as a part-time proofreader. By 1973 she had become a full-time staff editor, copy-editing articles for the *GSA Bulletin* and *Geology*. She has been managing editor of *Geology* since November 1979 and editorial coordinator for the Publications Department since November 1981.

Gladish, who earned a B.A. cum laude in journalism at the University of Minnesota in 1957, came to headquarters in December 1980, bringing his experience of more than 15 years as head of the Publication Unit at the Western Interstate Commission for Higher Education and 2 years as the executive editor of the University of Colorado's *Colorado Quarterly*.

News & Information will continue to provide announcements of meetings and conferences, scholarships and grants, and GSA business and projects. Rogers and Gladish plan to add feature articles on the Society's services and the people behind those services. "We also want to report GSA members' appointments, promotions, transfers, and awards," Rogers said. "Our main purpose is to keep GSA members well informed about their Society and their fellow members."

Do you have a news item, comment, or suggestion
for *GSA News & Information*?
Send it to Faith Rogers,
Geological Society of America,
P.O. Box 9140, Boulder, CO 80301.

GSA News & Information

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Prepared from contributions from the staff and membership. Executive Director: F. Michael Wahl; Managing Editor: Faith Rogers; Associate Editor: Lee Gladish; Production and Advertising Manager: James R. Clark; Production Assistants: Ann H. Fogel and June E. Thomas.

Abstracts Due by June 3, 1983

Deadline for receipt of abstracts at GSA headquarters for the Annual Meeting in Indianapolis is June 3, 1983. Mail volunteered abstracts to Abstracts Secretary, Geological Society of America, P.O. Box 9140, Boulder, CO 80301 to arrive on or before June 3. Abstract forms are available upon request.

SEE APRIL NEWS & INFORMATION FOR FIELD TRIPS, SYMPOSIA, AND OTHER ANNUAL MEETING ACTIVITIES.



CENTENNIAL NEWS by Allison R. (Pete) Palmer

DNAG Synthesis Volume on *The Cordilleran Orogen: U.S.* now organized

An organizational workshop for the DNAG synthesis volume on *The Cordilleran Orogen: U.S.* was held in February 1982 in Denver, Colorado. Identification of leadership for all of the major units of this synthesis volume is now complete and the proposed outline is given below. As with the other synthesis volumes, the chapter leaders listed below will be in

touch with other contributors to assist in preparing the best possible synthesis of current knowledge about this region. Peer-reviewable copies of the manuscripts and maps for this volume are to be in the hands of the editors by the time of the second Cordilleran workshop in the early fall of 1984.

- I. Introduction—*B. C. Burchfiel, P. W. Lipman, G. P. Eaton*
- II. Time Slice Analysis
 1. Pre-latest Precambrian time:
Formation of the craton—*L. T. Silver*
 2. Latest Precambrian to latest Devonian time:
Development of a passive margin—*F. G. Poole*
 3. Latest Devonian to Permian-Triassic time:
Initiation of an active margin—*E. L. Miller*
 4. Permian-Triassic into Latest Jurassic time:
Development of an Andean arc—*J. B. Saleeby*
 5. Late Jurassic into Late Cretaceous time:
Culmination of igneous and tectonic activity along the Andean margin—*D. S. Cowan*
6. Late Cretaceous and Eocene time:
Eastward migration of Laramide igneous and tectonic activity—*D. M. Miller*
7. Eocene to Holocene time:
Transition to extensional and transform tectonics—*R. S. Yeats, R. L. Christiansen*
8. Contemporary tectonics and lithospheric structure—*R. B. Smith*
- III. Interpretative Synthesis—*B. C. Burchfiel, P. W. Lipman, G. P. Eaton*

More industry support for the DNAG Project

The list of major industry contributors to the DNAG Project increased in December with the addition of grants from TENNECO and Occidental Petroleum Corporation. The total of funds pledged or contributed to the GSA Foundation by the petroleum and mining industry for the support of GSA's compo-

nents of the DNAG Project has now reached \$2,836,500. This support is enabling first-class syntheses to be prepared and published at affordable prices. Continent-Ocean transects around the margins of North America will begin to appear in 1983 as the major publication program of the DNAG Project gets under way.

Are You Receiving More than 1 Copy of GSA Mailings?

By Jim Clark

After receiving four separate copies of the December mailing of our 1982/83 Fall/Winter Publications Price List, M. E. Bickford of the University of Kansas wrote to ask why. We know he was not the only one to receive multiple copies of our recent mailings, and his question gives us an opportunity to explain the situation and ask for your help.

These mailings were not addressed from GSA's membership list, but from a special marketing list, primarily made up of nonmembers, which has been compiled on a time-available basis since the installation of our Publications Department micro-computer in 1980. Before that time GSA had no significant list of nonmembers to use for promoting sales of our publications, and the need for one was great. Some members are on this special list, too, because we do not yet have the means of checking entries against our membership file.

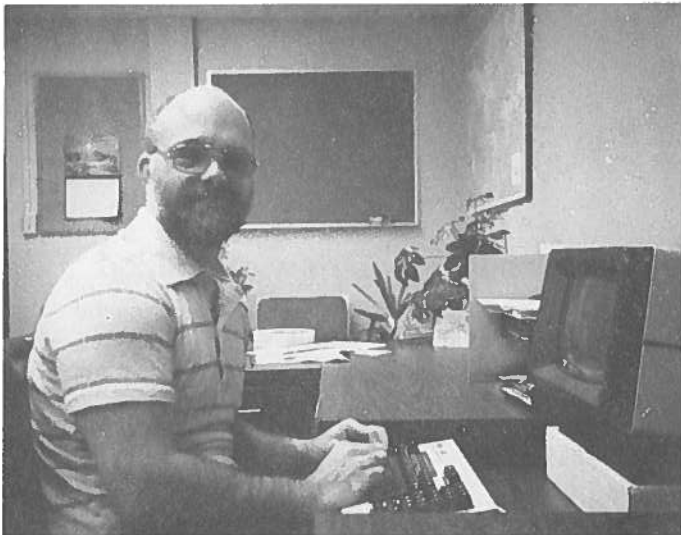
When we began this list, we did not have the budget for an expensive computer program that would provide for multiple selection keys for each record, positive avoidance of duplication,

and other niceties. Yet we needed to be able to identify each of 9 sublists so we could keep them separate for use on specific projects. For example, the annual automatic mailing of the current year's abstract forms is addressed only to those who submitted abstracts for the past year.

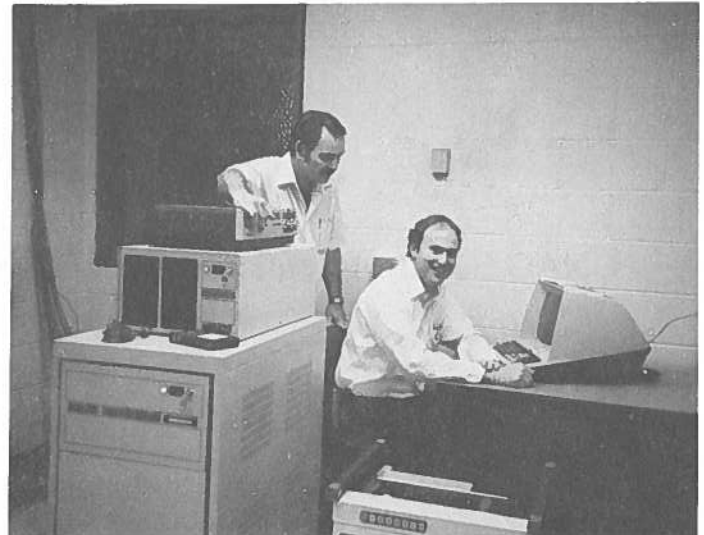
Of course, we inevitably captured some of the same names on two or more of these sublists. When we combine several sublists for a large mailing, duplicates cannot be avoided without prohibitively expensive and time-consuming editing operations.

We knew and accepted this limitation at the outset, believing it would be better to send out three or four items to one individual than to send none at all, for GSA urgently needed to build sales of books, maps, and charts. We looked forward to the day when we would be able to obtain a good mailing-list program, realizing that the data we were capturing could then be loaded

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Bruce Overmyer, GSA's staff programmer and operator, at work on the new computer.



Doug Tidwell, Senior Field Engineer for Consultant Field Engineering, Inc. (left) and Andrew Linch, GSA's consulting system analyst, watch the new computer come on-line for the first time.

New Computer System Installed at Headquarters

By Jim Clark

Two years of discussion, research, budgeting, and planning finally culminated on January 4, 1983, when GSA's new in-house computer system flashed its lights and generated its first message, "The time is 04:05:00." While admittedly not earth-shaking in content, this message nevertheless marked the start of a totally new and exciting era for the Society.

Although the new system is the second one for GSA, it far overshadows the 3-year-old publications department system in size, capability, and speed. It will serve the Membership, Accounting, Meetings, and Administration Departments and will allow for a great deal of improvement in these operations.

The new system is the same brand as the older one, an Alpha Micro, manufactured by Alpha Microsystems, of Irvine, California. A model AM1000L, it is a 32-bit, time-sharing, multi-tasking system capable of serving up to 60 terminals on-line, although only about 15 terminals will be brought on-line in the first year, and GSA probably will never use the full terminal capability.

Each terminal will have about 40,000 bytes of dedicated memory. In such a system each terminal is, in essence, a separately functioning computer system sharing the central processing unit (CPU) and the peripheral devices such as printers, mass data storage, and telecommunications.

Data storage on the system will be on a 60-megabyte (Mb) Winchester hard disk drive, with videotape backup and a 9-track tape device for formatted outputs. A 600-line-per-minute chain printer will print mailing lists, reports, and other voluminous items, and several Diablo daisy-wheel letter-quality printers are being installed in strategic locations throughout the building to serve the specific needs of the various departments for correspondence, forms, and reports.

As part of the package, the Publications Department system is being upgraded from the present AM100 to a much faster AM100T model equipped with a 32-Mb Winchester storage

system, bringing its total data storage to 42 Mb, including one of the present two Hawk disk drive systems already there. The AM100 CPU will then be dedicated as word-processing system for the Administration Department with data storage to be on the other 10-Mb Hawk hard disk drive now in the Publications Department system.

That Hawk drive will be switchable from the Administration Department system to the main system. With all three systems thus able to access Hawk disk drives, data may be transferred among any of the three systems via Hawk disk packs. The same media will provide for transfer of data from any of the three

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GSA Executive Director F. Michael Wahl tests the structure and operation of the new computer.

Bulletin Manuscript Reviewers

The following is a list of reviewers of manuscripts submitted to the *Bulletin* during the past year. These people have taken a great deal of time without compensation to make the review process work with a minimum of difficulties. The Society owes them a debt of gratitude and provides this acknowledgment as a small payment on that debt.

Robert D. Hatcher, Jr.
William E. Thomas
Editors, *GSA Bulletin*

Hans D. Ackermann	James Case	Michael Fuller	Ronald W. Kistler	Zell Peterman	Rolf S. Stanley
Carlos L. V. Aiken	John A. Chamberlain	Gordon Gastil	George De Vries Klein	Troy L. Péwé	Robert J. Stanton
Richard W. Allmendinger	Charles E. Chapin	Henri E. Gaudette	K. P. Kodama	Orrin Pilkey	David W. Stearns
J. Lawford Anderson	Thomas E. Chase	Stephen J. Gawarecki	Frank E. Kottlowski	George Pipiringos	Michael Steckler
Thomas H. Anderson	Earl Christenson	David G. Gee	W. N. Krebs	Walter Pitman	Donald Steeples
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Edgar H. Bailey	Frederick A. Cook	Thomas L. T. Grose	Ivo Lucchitta	Dallas D. Rhodes	Warren M. Thomas
Richard Baker	Lindrieth Cordell	David Gross	Steven P. Lund	Gerald M. Richmond	Hans P. Trettin
W. Scott Baldrige	John K. Costain	John T. Hack	Daniel R. Lux	Dale F. Ritter	Elazar Uchupi
Albert W. Bally	Edward Cotter	John Haller	Richard F. Madole	W. H. Roberts III	Jaime Urrutia-Fucugauchi
M. J. Barcelona	Gary Couples	W. K. Hamblin	C. John Mann	Peter Robinson	Tracy L. Vallier
Y. Bartov	Maria Luisa Crawford	Wallace R. Hansen	Ray G. Martin	Harold B. Rollins	William R. Van Schmus
Myrl E. Beck, Jr.	Bruce Crowe	William R. Hansen	Chad McCabe	Peter A. Rona	Jan Veizer
Z. Berger	John Crowell	Walter A. Hansenmueller	Jefferson R. McCleary	William I. Rose, Jr.	Edith Vincent
William A. Berggren	Kevin D. Crowley	Bruce B. Hanshaw	Fred W. McDowell	Joshua Rosenfeld	Thomas A. Vogel
M. E. Bickford	R. A. Dalrymple	Jennifer Harden	James W. Mercer	Jason Saleeby	Barry Voight
John M. Bird	Arthur Darrow	W. Brian Harland	David Mickelson	Matt Salsbury	Geoffrey Wadge
Robert F. Black	Earl Davis	Paul F. Harris	Elizabeth L. Miller	Steven Schamel	Theodore R. Walker
Milton C. Blake, Jr.	Stuart L. Dean	Stan Hart	Hugh H. Mills	Seymour O. Schlanger	C. A. Wallace
Ronald Blom	Zoltan De Cserna	J. Hartshorne	Daniel J. Milton	David W. Scholl	Matt Walton
Robert G. Bohannon	David P. Dethier	David Harwood	Robert M. Mitchum, Jr.	Klaus Schulz	Peter D. Ward
James R. Boles	Edward Dewitt	James W. Hawkins, Jr.	Shankar Mitra	William Schweller	Aaron C. Waters
Gerald Bond	J. F. Diehl	Dennis Hayes	J. Casey Moore	John G. Sclater	A. John Watkinson
Harold Bonham	Alan Donaldson	James Hickin	Glenn Morey	C. R. Scotese	William J. Wayne
Glenn A. Borchardt	Julie M. Donnelly-Nolan	Charles G. Higgins	Mike J. Mottle	Victor Seiders	David L. Weide
William P. Bosworth	Wakefield Dort, Jr.	Paul Hoffman	Eric W. Mountjoy	William E. Seyfried	Malcolm P. Weiss
Steve Boyer	Thomas Dougan	Troy L. Holcombe	Michael G. Mudrey, Jr.	Peter M. Sheehan	Stephen G. Wells
J. P. Bradbury	Helmut H. Dowling	Richard K. Hose	William R. Muehlberger	Michael F. Sheridan	David B. Wenner
William A. Braddock	Avery A. Drake, Jr.	David Howell	L. J. Patrick Muffler	Thomas Shipley	John T. Whetten
William C. Bradley	David E. Drake	James C. Hower	Felix E. Mutschler	Peter N. Shive	Ian M. Whillans
William Breed	Russell R. Dutcher	N. King Huber	Robert C. Newton	Miles Silberman	Donald Whitehead
James Brice	R. L. Earhart	Peter J. Hudleston	Tor Nilsen	Paul K. Sims	L. S. Wiener
Laurie Brown	Mark Edwards	Terence J. Hughes	Donald C. Noble	Leslie A. Sirkin	John Williams
Peter M. Brown	Wilfred A. Elders	James Ingle	Warren Nockleberg	Virginia B. Sisson	Garnett Williams
William R. Brown	Brooks B. Ellwood	R. S. Jacoby	Robert Oldale	James W. Skehan, S. J.	Donald Winston
Hannes K. Brueckner	John A. Elson	Donald L. Johnson	Sakiko N. Olsen	Scott Smithson	Donald U. Wise
Lloyd Burkle	Terry Engelder	D. Jones	Neil D. Opdyke	P. D. Snavely	Sherwood W. Wise
James R. Butler	Donald E. Eschman	David L. Jones	Steven S. Oriel	John Snyder	Jack Wolfe
Parker Calkin	Stanley Evans	Daniel Karig	F. Ortega-Gutierrez	Walter S. Snyder	Glenn Woodsworth
Jonathan F. Callender	Oscar J. Ferrians, Jr.	Robert Kay	John K. Osmond	Norman Sohl	Lee A. Woodward
C. Scott Cameron	John Ferry	Ralph O. Kehle	Robert O'Sullivan	Frank S. Spear	Dan Worall
John A. Campbell	George Fisher	Vincent C. Kelley	A. R. Palmer	R. C. Speed	Ronald G. Worl
James Carl	Chip Fletcher	Chris Kendall	Arthur N. Palmer	Frank Spera	Keith Young
Richard W. Carlson	Derek C. Ford	James P. Kennett	Michael A. Payne	Cathy J. Spera-Busby	Steve P. Yurkovich
Michael E. Carr	P. Jeff Fox	Stephen Kesler	Russell A. Pepper	Robert F. Stallard	

New Computer

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systems to the AM Varityper phototypesetter in the publications Production Department for fast, inexpensive typesetting of forms, directory front matter, and other appropriate items. However, the system will not be used for processing the text of manuscripts for the *Bulletin*, *Geology*, and books; that would require a much larger installation.

Headquarters personnel are learning use of the equipment and word-processing operations. Software is being developed for the Membership Department, the first major system to be brought on-line. The first generation of that system should be completed, tested, and debugged in the first quarter of 1983. Following that,

membership data will be transferred from the University Computer Center in Boulder to GSA's computer and be brought on-line for operation.

After completion of the membership system, the Accounting Department software package will be developed and installed, to be followed by software for the Meetings Department. All departments will be able to use their terminals for word processing. That capability will help automate several functions throughout Headquarters.

Look for progress reports on the ways we will be using this new tool.

Geology Manuscript Reviewers

Reviewers of *Geology* manuscripts in the past year have helped immeasurably to ensure speedy decisions and thus timely publication of the papers that are making *Geology* the leading journal for innovative contributions to the earth sciences. On behalf of GSA and *Geology's* readers, I thank these reviewers for their invaluable service.

Eldridge Moores, Editor, *Geology*

John B. Adams	Sherman T. Crough	J. M. Hall	Ivo Lucchitta	Rex H. Pilger	Kenneth O. Stanley
Arden L. Albee	John Crowell	Paul Hancock	Paul Lyons	Orrin Pilkey	John H. Stewart
Clarence R. Allen	Joseph R. Curry	Gilbert N. Hanson	R. K. Matthews	Walter Pitman	Sam Stewart
Alfred T. Anderson	John Davies	W. Brian Harland	James W. Mattinson	Howard Pohn	David B. Stone
Edwin J. Anderson	Gregory A. Davis	Anita Harris	Gerald Mavko	Peter Popenoe	David Strong
J. Lawford Anderson	Howard W. Day	Christopher G. A. Harrison	John C. Maxwell	Raymond A. Price	Chris Suczek
R. Ernest Anderson	Kenneth S. Deffeyes	John C. Harrison	Lawrence M. Mayer	Douglas Rankin	Donald A. Swanson
Thomas H. Anderson	Stephen De Long	David Harwood	Alex McBirney	George R. Rapp	Sam Swanson
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Tanya Atwater	George Desborough	John Hayes	Dave McCullough	Stephen J. Reynolds	Pradeep Talwani
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S. K. Banerjee	Julie M. Donnelly-Nolan	Michael J. Holdaway	Edwin McKee	Richard Robison	Robert I. Tilling
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Arthur Bloom	J. Wyatt Durham	David Howell	Gerard V. Middleton	J. Phillip Schafer	Robert J. Twiss
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Wallace Broecker	Frank Ethridge	Richard H. Jahns	Ralph Moberly	Stanley Schumm	Robert J. Varga
Douglas Brookins	Udo Fehn	David L. Jones	Paul Mohr	Richard A. Schweickert	Kenneth L. Verosub
Bob Brown	Phil Fenn	Daniel Karig	Bruce F. Molnia	Jon Scoates	George W. Walker
George Bryan	Richard V. Fisher	Marv Kauffman	George Moore	Leonardo Seeber	Stephen H. Watts
Richard Buffler	Romeo Flores	Robert Kay	Gregory Moore	Robert P. Sharp	Lynn Whittig
B. Clark Burchfiel	Derek C. Ford	Thomas Kellogg	J. Casey Moore	James H. Shea	Ronald E. Wilcox
Kevin Burke	Peter Francis	James P. Kennett	James Moore	Eugene Shinn	Roy Wilcox
Debbie Carter	Frank C. Frischknecht	Elizabeth King	Jeffrey Mount	Norman F. Silberling	Pat Wilde
James L. Carter	Gordon Gastil	John Klasner	William R. Muehlberger	Paul K. Sims	Harold Williams
Clement G. Chase	Edward Ghent	Kim Klitgord	George Mustoe	James W. Sकेhan, S.J.	Jack Wolfe
D. A. Clague	Robert Giegengack, Jr.	Charles Kluth	Charles Naeser	Douglas Smith	H. E. Wright
David L. Clark	P. D. Gingerich	Harley J. Knebel	Thornton Neathery	Scott Smithson	Lauren Wright
James A. Clark	A. M. Goodwin	Paul Komar	Richard P. Nickelsen	Walter S. Snyder	Thomas L. Wright
Robert G. Coleman	Donn S. Gorsline	Marvin Lanphere	Warren Nokleberg	Henry Spall	Peter J. Wyllie
Frederick A. Cook	David E. Grandstaff	Leo Laporte	Hallan C. Noltmier	R. C. Speed	Bob Yerkes
Richard Cowen	Ronald Greeley	Gerhard W. Leo	Neil D. Opdyke	William Spence	A. M. Ziegler
Allan V. Cox	Harry Green II	Everett Lindsey	A. R. Palmer	Eve S. Sprunt	Isidore Zietz
Thomas M. Cronin	Morris Green	J. P. Lockwood	Zell Peterman	Daniel J. Stanley	Robert Zimmerman

LAST CALL FOR PROPOSALS

1984

GSA ANNUAL MEETING FIELD TRIPS

Contact Field Trip Chairman



Joseph Lintz, Jr.
Dept. of Geological Sciences
Mackay School of Mines
University of Nevada
Reno, Nevada 89557
(702) 784-6050

Deadline: APRIL 1, 1983

GSA Mailings

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into the new system with multiple keys that would eliminate the duplications without sacrificing the needed flexibility.

With the installation of our new computer system (see article in this issue), we plan to bring a good mailing-list program on line in 1983 and begin the reprocessing of these nonmember lists. We also will begin making periodic merge operations with the membership list to cull the GSA members from our nonmember list.

We believe that it is important to have the ability to advertise our publications beyond the membership of our Society via direct mail. GSA, as a nonprofit organization, can use a very favorable third-class mail rate, which makes this advertising medium relatively inexpensive. We are beginning to see growth in sales as a result of our efforts so far, and we think these efforts will be handsomely rewarded in the future. Increased sales will help us to reduce publication costs in several areas, especially in warehousing.

Although it may be irritating to receive more than one flyer or price list, you can help turn this temporary disadvantage into an advantage. If you receive more than one copy, pass any extras along to associates who might be interested in GSA publications. Meanwhile, be assured that we are working on the problem and hope to eliminate the excess mailings this year.



**THE
GEOLOGICAL SOCIETY
OF AMERICA**

P.O. Box 9140 • Boulder, Colorado 80301
(303) 447-2020

MEMBER NUMBER _____
(leave blank)

NAME _____

Phone number during business hours: () _____

Dear GSA Member:

Do your Society and nonmembers a favor. Pass this and the following three pages on to them and ask them to join GSA.

Tell them about the advantages of membership: GSA Annual Meetings, Section meetings, the Employment Service, subscriptions to the *Bulletin*, *Geology*, and *News & Information*, and substantial discounts on books and maps. You can probably think of others from your own experience as a member.

GSA need you and new members. Help GSA grow.

TO HELP US GATHER MEMBERSHIP DATA, PLEASE CHECK the ONE CATEGORY that best describes your current professional status:

<u>CONSULTING:</u>	<u>GOVERNMENT:</u>	<u>RESOURCE COMPANIES:</u>	<u>RESOURCE COMPANIES:</u>	<u>OTHER:</u>
1 <input type="checkbox"/> Engineering/Environmental	4 <input type="checkbox"/> Federal	6 <input type="checkbox"/> Coal	9 <input type="checkbox"/> Petroleum	11 <input type="checkbox"/> Academic
2 <input type="checkbox"/> Mineral Resources	5 <input type="checkbox"/> Other	7 <input type="checkbox"/> Metallic	10 <input type="checkbox"/> Uranium	12 <input type="checkbox"/> Retired
3 <input type="checkbox"/> Petroleum		8 <input type="checkbox"/> Nonmetallic		13 <input type="checkbox"/> Student
				14 <input type="checkbox"/> Other _____

1983 ANNUAL DUES AND PUBLICATION SELECTION

(Please see explanation on back of form.)

GSA MEMBERSHIP DUES:

Dues are required and include receipt of: *The Geological Society of America Bulletin*, *Geology*, and *GSA News & Information*. Both journals will automatically be sent in paper copy unless you indicate your preference for positive microfiche by checking the appropriate box/boxes.

(1) MEMBER/FELLOW \$54 \$ 54.00
(3) SPOUSE/MEMBER \$22 \$ _____
(See explanation on back of form.)

(4) *Bulletin*, positive microfiche
(5) *Geology*, positive microfiche

DIVISION DUES:

CHECK AFFILIATIONS DESIRED	(10) <input type="checkbox"/> Archaeological Geology \$3	(14) <input type="checkbox"/> Coal Geology \$2	TOTAL COST OF ALL DIVISIONS CHECKED \$ _____
	(11) <input type="checkbox"/> Engineering Geology \$5	(15) <input type="checkbox"/> Geophysics \$3	
	(12) <input type="checkbox"/> History of Geology \$3	(16) <input type="checkbox"/> Hydrogeology \$3	
	(13) <input type="checkbox"/> Quaternary Geology & Geomorphology \$2	(17) <input type="checkbox"/> Planetary Geology \$3	
		(18) <input type="checkbox"/> Structural Geology & Tectonics . . . \$3	

ABSTRACTS WITH PROGRAMS:

CHECK ABSTRACTS DESIRED	(25) <input type="checkbox"/> Annual Meeting \$6	(29) <input type="checkbox"/> South-Central \$3	TOTAL COST OF ALL ABSTRACTS CHECKED \$ _____
	(26) <input type="checkbox"/> Cordilleran/Rocky Mountain . . . \$3	(30) <input type="checkbox"/> Northeastern \$3	
	(28) <input type="checkbox"/> North-Central \$3	(31) <input type="checkbox"/> Southeastern \$3	

MEMBERSHIP DIRECTORY (Yearbook) mailed in spring (32) **\$6.50** \$ _____

Check or Money Order

Card Number

Mo Yr Card Expires

Signature _____ Required for credit card payment

REGISTRATION FEE (Required of all *New Members*.) (\$ 5) \$ 5.00

TOTAL AMOUNT REMITTED FOR 1983 \$ _____

For your information . . .

MEMBERSHIP DUES

All members are required to pay annual dues. Participation as a member sustains the Society's activities. In addition to receiving all membership benefits, members receive monthly copies of the *Bulletin*, *Geology*, and *GSA News & Information*. Other publications are optional.

DIVISION DUES

The annual dues of the divisions support the activities of the specific divisions. Divisions meet at the time of the Society's annual meeting. Each of the divisions has its own newsletter, issued at irregular intervals.

THE GEOLOGICAL SOCIETY OF AMERICA BULLETIN

The *Bulletin* is a monthly journal, usually 128 pages. Generally, articles will not exceed 20 printed pages, including tables and illustrations. The *Bulletin* is published both in the traditional paper copy format and in positive mode microfiche. The microfiche is a reproduction of the printed paper copy. Each microfiche (card) contains 98 frames (pages) and is most easily read at 24X magnification. Positive microfiche is black type on a transparent background which reduces eyestrain when read for prolonged periods with the aid of a microfiche reader.

GEOLOGY

Geology is a monthly journal of 8 to 12 short scientific articles per issue. This journal is also available both in the traditional paper format and in positive microfiche.

ABSTRACTS WITH PROGRAMS

To assure prompt arrival before the meetings, please be sure to order your *Abstracts with Programs* when you pay your dues. *Abstracts with Programs* are published approximately two months before each meeting.

OVERSEAS MAILING

Publications mailed overseas by second-class postage take as long as 3 to 4 months to arrive at their destinations. If you are interested in air-printed-matter postage rates (this is in addition to dues and publications), please check this box.

ADVERTISING LISTINGS

We occasionally allow universities and publishing houses to use our membership list for the purpose of advertising scientific courses, books, or periodicals. If you do not want your name and address to be released for such purposes, please check this box.

SPOUSE MEMBER INFORMATION

Married couples who are both GSA members will be allowed a reduction in 1983 dues. Such couples will pay \$54.00 for the first member (\$28.00 for Student Associates) and \$22.00 for the second. They will receive a single subscription to the *Bulletin* and *Geology*, but both members will continue to receive *GSA News & Information*, ballots, and other miscellaneous mailings. Please identify your spouse and which one is requesting a reduction in the dues in the spaces below. We can activate the policy for married couples only upon specific instructions from you.

Full-paying member's name

Spouse member receiving reduction in dues



Please contact the Membership Department if you have any questions.

ANY COMMENTS and SUGGESTIONS you have about YOUR SOCIETY may be included in the SPACE BELOW.



**THE
GEOLOGICAL SOCIETY
OF AMERICA**

P.O. Box 9140 • 3300 Penrose Place
Boulder, Colorado 80301

N & I

For office use only.

type _____

42 _____

46 _____

47 _____

48 _____

49 _____

APPLICATION FOR MEMBERSHIP

(Note to Students: Please do not use this form to apply for Student
Associateship. Headquarters will supply the proper form upon request.)

No. _____
Leave blank

1. NAME _____
Last First Middle

2. ADDRESS _____

City/Province State/Country Zip

3. BIRTH DATE _____ 4. BIRTH PLACE _____

5. MARITAL STATUS _____ 6. NAME OF SPOUSE _____

TELEPHONE NUMBERS _____ Home _____ Business _____

7. EDUCATION – If student, list institution currently enrolled in first.

College, university, or other institutions attended	Date of attendance (from–to)	Degree and year received	Major and minor subjects
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

8. PRESENT EMPLOYER _____
(Name of firm)

a. Your position with above firm or organization _____

9. SECTION AFFILIATION DESIRED (check one only)

Cordilleran Rocky Mountain North-Central South-Central Northeastern Southeastern

10. DIVISION AFFILIATIONS DESIRED

Archaeological Geology Coal Geology Engineering Geology Geophysics History of Geology Hydrogeology
Planetary Geology Quaternary Geology & Geomorphology Structural Geology & Tectonics

Note: Those having knowledge of me or my work may be requested to submit their views to the Committee on Membership and to the Council in passing on my application.

SIGNED _____

In accordance with the applicant's desire, I, the undersigned, being a member of the Geological Society of America, respectfully nominate the above person for Member.

SIGNATURE OF SPONSOR

Member-Fellow GSA

Date

Print or type name

11. MEDALS, PRIZES, HONORS _____
12. MEMBERSHIP IN OTHER SCIENTIFIC OR PROFESSIONAL ORGANIZATIONS _____
13. CHRONOLOGIC RECORD OF PROFESSIONAL ACTIVITIES (including summer field work) _____
14. PUBLICATIONS (give complete bibliographic citation—use separate sheet if necessary) _____

MEMBERSHIP INFORMATION

MINIMUM ELIGIBILITY REQUIREMENTS

- (1) A bachelor's degree with a major in geology or a related science, or equivalent training through practical experience; or
- (2) Active connection with geology through employment in geological work, or in teaching geology, or through status as a graduate student in the geosciences.

SPONSORSHIP REQUIREMENTS

Candidates must be sponsored by a member of the Society, either Fellow or Member, who is personally acquainted with them and their qualifications. Student Associates do not qualify as sponsors.

MEMBERSHIP

New Members are taken in monthly upon the approval of the Committee on Membership. Annual dues statements for the coming year are mailed in September of each year. Members are also entitled to a price discount on the purchase of any GSA publication except periodicals.

Transfers from Student Associate must be indicated on the yearly dues statement by securing a GSA Member's signature as sponsor.

SUBMISSION OF FORM

Completed application, dues form, and appropriate payment should be sent to

Membership Department
Geological Society of America
P.O. Box 9140
Boulder, CO 80301

REGISTRATION FEE — \$5.

MEMBERSHIP DUES — See attached dues form for information regarding membership dues.

Meetings

Penrose Conference on Cretaceous Climates

Many hypotheses have been presented to describe or explain warm, equable "ice-free" geologic periods. The Cretaceous Period is of particular interest because it is the time of greatest contrast to the present-day "glacial" regime which can be well documented. As such, Cretaceous paleoclimatic studies have implications for a wide variety of problems in the geologic sciences and for climate in general. In order to develop better interpretations, test hypotheses, and formulate climate model experiments, multidisciplinary associations must be developed to take full advantage of the Cretaceous geologic record and modern concepts of oceanic and atmospheric processes.

To promote these associations, a GSA Penrose Conference on "Cretaceous Climates" will be held October 2-7, 1983, in the Colorado Rockies. Conveners are Eric J. Barron (National Center for Atmospheric Research, Boulder, Colorado), William W. Hay (University of Colorado Museum, Boulder), and Erle G. Kauffman (Department of Geology, University of Colorado). The conference will be cosponsored by the International Geologic Correlation Program.

The major objective of the proposed conference is to bring together scientists from a diverse group of geologic disciplines actively working on problems directly related to Cretaceous paleoclimates. The geologic record of Cretaceous climatology,

including paleobotany, vertebrate paleontology, invertebrate paleontology, micropaleontology, sedimentology, and isotopic geochemistry, will be a major focus. This will include a global coverage of the geologic record incorporating data from continents, epicontinental seas and shelf regions, and the surface and deep oceans. Cretaceous paleogeography and plate reconstruction will be a second focus. The conference will also take advantage of recent climate model experiments that are based on the physical laws that govern atmospheric and oceanic circulation.

This broad multidisciplinary approach to Cretaceous climate will promote a much better understanding of the Cretaceous Period and warm climates in general and will provide an important stimulus in a variety of disciplines.

A one-day field trip in the Pueblo, Colorado, area will be held mid-week to examine a complete Cretaceous sea-level cycle and the associated biologic and climatic record.

The registration fee is expected to be about \$400, including food, lodging, and the field trip. Applications should be sent to Eric J. Barron, National Center for Atmospheric Research, P.O. Box 3000, Boulder, CO 80307 by June 1, 1983. Those wishing to attend the conference should include a brief description of the topics they want to contribute or reason for attending the conference.

FUTURE GSA MEETING DATES

Annual Meetings

1983

October 31-November 3 Indianapolis, Indiana

1984

November 5-8 Reno, Nevada

1985

October 14-17 Boston, Massachusetts

1983 Section Meetings

South-Central

March 3-4 College Station, Texas

Southeastern

March 16-18 Tallahassee, Florida

Northeastern

March 23-25 Kiamesha Lake, New York

North-Central

April 28-29 Madison, Wisconsin

Combined Cordilleran and Rocky Mountain

May 2-4 Salt Lake City, Utah

American Institute of Professional Geologists Annual Meeting Dates

1983—September 7-10

Ramada Snow King Inn, Jackson Hole, Wyoming

General chairman: Gene R. George, P.O. Box 2775, Casper, WY 82601 (307) 265-9199

1984—October 17-19

Dutch Resort Inn/Disney World, Orlando, Florida

General chairman: Bobby J. Timmons, Timmons Associates, P.O. Box 50606, Jacksonville, FL 32250 (904) 246-4533

1985—September 17-21

St. Paul Hotel, St. Paul, Minnesota

General chairman: Robert E. Pendergast, 1925 Oakcrest Avenue, Roseville, MN 55113 (612) 636-7744

Meetings announcements and other items of general interest to the geologic community are published in News & Information as space allows. Send announcements to News & Information editor, Geological Society of America, P.O. Box 9140, Boulder, CO 80301.

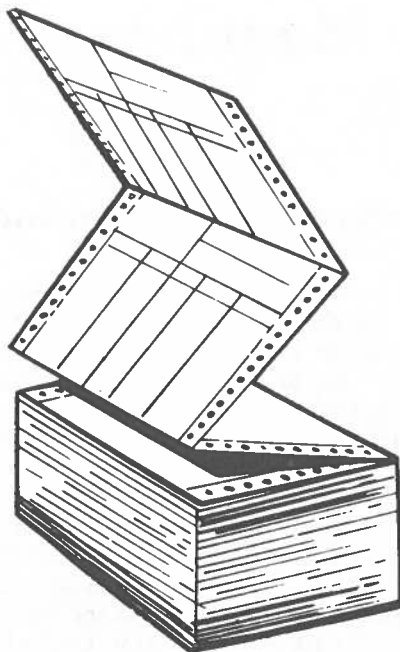
Looking for a new job?

Whether you are new to the field of geology or have had years of experience, the GSA Employment Service is your most economical way to locate that new position. More and more potential employers are turning to the Service each year as their place to find the qualified individuals they need.

You may register any time throughout the year and your name will be provided to all participating employers seeking individuals with your qualifications. If possible, take advantage of GSA's Employment Interview Service conducted each fall in conjunction with the Society-wide Annual Meeting (this year in Indianapolis, Oct. 31–Nov. 3) where potential employers will be available for face-to-face interviews.

To register, complete the application form on the following page, make up a one-page typed resume, and mail with your check or money order to the address given below. One-year listing for GSA Members and Student Associates — \$20, nonmembers — \$40. That's less than a week or two of want ads in your hometown newspaper and much more effective.

For additional information and submission of forms, contact:
Clara Hodgson, Membership Coordinator
Geological Society of America
P.O. Box 9140 • Boulder, Colorado • (303) 447-2020



Looking for a new geoscientist employee?

Your nation-wide search for geoscientists can be as simple as filling out the Employer's Request for Earth Science Applicants on the following page. You specify educational and professional experience required and specialty area or areas, and GSA's computerized file will take it from there. You will be provided with a printout which includes applicants' names, addresses, phone numbers, areas of specialty, type of employment desired, degree held, years of professional experience, and current employment status. For 1983 the cost of a printout of one or two specialty codes is \$120. Each additional listing is \$40. A printout of the entire applicant listing in all specialties may be purchased for \$325.

GSA also conducts the Employment Interview Service each fall in conjunction with the Society-wide Annual Meeting (this year in Indianapolis, Oct. 31–Nov.

3). Interview space may be rented in half-day increments and our staff will schedule all interviews with attending job applicants for each recruiter. Additional services available for employer participants include a message service, complete listing of applicants, copies of resumes at no additional charge, and posting of all vacancies.

**APPLICANT AND EMPLOYER FORMS ARE
BACK-TO-BACK ON THE FOLLOWING PAGES**

Geologic Map of Kentucky Now Available

A new geologic map for the entire Commonwealth of Kentucky has been published by the U.S. Geological Survey in cooperation with the Kentucky Geological Survey. The map is printed in color at a scale of 1:250,000 (1 inch equals about 4 miles). It is designed as a wall map and consists of three sheets, 42 by 58 inches each. The map is accompanied by numerous columnar sections, stratigraphic diagrams, correlation charts, and structure sections.

The *Geologic Map of Kentucky*, by R. C. McDowell, G. J. Grabowski, and S. L. Moore, represents the culmination of 18 years of detailed geologic mapping. It is probably one of the most accurate geologic maps ever printed because it was compiled by photoreducing and generalizing 707 detailed 7.5-minute geologic quadrangle maps (scale 1:24,000) that resulted from a statewide cooperative geologic mapping project between the Kentucky Geological Survey and the U.S. Geological Survey. The new map makes it easier to comprehend the overall distribution of geologic units in the state and to delineate regional structural trends and other features that are difficult to see on the larger scale maps.

Copies of the *Geologic Map of Kentucky* may be purchased from the Kentucky Geological Survey, University of Kentucky, Lexington, KY 40506-0056, or from the U.S. Geological Survey, Branch of Distribution, Arlington, VA 22202.

Memorial Preprints

The following memorial preprints are now available, free of charge, by writing to GSA, P.O. Box 9140, Boulder, CO 80301:

Paul Livingston Applin, by George V. Cohee
J. Eric Bucher, by Suzanne Takken
Charles Lewis Camp, by Carl Briggs
Charles Eric Bruce Conybeare, by Michael John Rickard
and David Ingle Smith
Chauncey DePew Holmes, by Ernest H. Muller
and James K. Rogers
John Warfield Huddle, by Frank C. Whitmore, Jr.,
and John E. Repetski
Wolfgang Krebs, by Eric Mountjoy
John Theron Sanford, by Willard H. Parsons
J. Fred Smith, Jr., by Irving J. Witkind
George Alfred Thiel, by Frederick M. Swain
Alfred Dinsmore Wandke, by Arthur R. Still

IN MEMORIAM

Max D. Crittenden, Jr. Menlo Park, California	G. Gordon Suffel Ontario, Canada
Harry S. Ladd Chevy Chase, Maryland	Frank M. Swartz Tucson, Arizona
R. E. Somers Newark, Ohio	



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Rec. \$20 \$40

Ck # _____

Ltr. _____

GSA _____

Add. _____

APPLICATION FOR EMPLOYMENT MATCHING SERVICE (Please type or print legibly with black ink)

NAME _____ Date _____
(last name first)

Mailing Address _____

City _____ State _____ Zip Code _____

Date Available _____ Telephone () _____ Visa _____
area code Business Home If not U.S. citizen, list visa

EXPERIENCE

Must use specialty codes listed below. Choose as many as three that best describe your expertise in order of importance. **MUST have at least one listed.**

* 1. _____ 2. _____ 3. _____

Interested in

- Academic
- Government
- Industry
- Other

TYPE OF POSITION DESIRED

Specific interest

- Administration
- Exploration/Production
- Field
- Research
- Teaching

Will accept employment in

- U.S. only
- U.S. with foreign assignments
- Either

PRESENT SPECIALTY

Choose one from codes listed below _____ **YEARS EXPERIENCE IN THIS SPECIALTY** _____

PRESENT EMPLOYER _____

May he/she be contacted? Yes No

If you do not wish to be listed for employment with a specific organization, check here and list organization on an attached sheet.

Give number of years experience for any of the following that are applicable:

Administrative _____ Exploration/Production _____ Field _____ Research _____ Teaching _____ Total geological working experience _____
Foreign languages _____ Spoken (fluency) _____ Written _____

ACADEMIC TRAINING

College or University	Degree (rec'd or expected)	Year	Major	Minor

Postgraduate work beyond highest degree in (field) _____ Number of years _____

SPECIALTY CODES

Select those that best describe your ability. Use codes in bold face only when other breakdowns are inadequate.

- | | | | | |
|---------------------------------------|---------------------------|--------------------------|------------------------------|-------------------------|
| 100. Economic Geology | 223. stable isotopes | 352. statistical geology | 500. Petroleum Geology | 650. Sedimentology |
| 101. coal geology | 224. unstable isotopes | 400. Mineralogy | 501. exploration | 700. Seismology |
| 102. geothermal, etc. | 250. Geomorphology | 401. crystallography | 502. subsurface stratigraphy | 720. Stratigraphy |
| 103. metallic deposits | 251. Pleistocene geology | 402. clay mineralogy | 520. Petrology | 721. Cenozoic |
| 104. nonmetallic deposits | 300. Geophysics | 410. Museum (curator) | 521. igneous | 722. Mesozoic |
| 105. mining geology | 301. exploration | 420. Oceanography | 522. metamorphic | 723. Paleozoic |
| 120. Engineering Geology | 302. paleomagnetism | 421. marine geology | 523. sedimentary | 724. Precambrian |
| 121. rock mechanics | 303. theoretical | 422. coastal geology | 550. Planetology | 750. Structural Geology |
| 150. Environmental Geology | 320. Hydrogeology | 450. Paleontology | 600. Regional Geology | 751. tectonics |
| 151. public education & communication | 321. hydrochemistry | 451. invertebrate | 620. Remote Sensing | 752. tectonophysics |
| 200. General Geology | 322. ground water | 452. vertebrate | 621. photogeology | 800. Volcanology |
| 220. Geochemistry | 323. surface water | 453. micropaleontology | 622. photogrammetry | |
| 221. organic | 330. Library | 454. paleobotany | 630. Science Editing | |
| 222. inorganic | 350. Mathematical Geology | 455. paleoecology | | |
| | 351. computer science | | | |

* Resume must be attached. Only one page typewritten on one side will be accepted for reproduction to employers. Include concise detail of work experience and college majors and minors on degrees.

* Fee: \$20 if you are a Member or Student Associate of GSA in good standing (Member # _____); \$40 if you are not a member of GSA. Payment in U.S. funds (check or money order, or charge information, MasterCard or VISA) **MUST ACCOMPANY FORM.**

MAKE CHECK PAYABLE TO THE GEOLOGICAL SOCIETY OF AMERICA

Check or Money Order Card Expires Mo Yr _____ Card Number _____

 Signature _____ (Required for credit card payment)

I agree to release GSA or their representatives from responsibility for errors that may occur in processing or distributing this data. I understand that GSA makes no guarantees of contact by an employer in this service. I agree to notify GSA Employment Service immediately of (1) change of address, (2) acceptance of a position.

*SIGNATURE (required) _____ I will attend the 19____ GSA Annual Meeting in _____

*THESE ITEMS ARE ABSOLUTELY NECESSARY TO PROCESS THIS APPLICATION This application will be active for 1 year 1/83



**THE
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OF AMERICA**
P.O. Box 9140, Boulder, Colorado 80301

EMPLOYER'S REQUEST FOR EARTH SCIENCE APPLICANTS

(Please type or print legibly with **Black Ink**)

R _____ -1

Name _____ Date _____

Organization _____

Mailing address _____

R _____ -2

City _____ State _____ Zip code _____ Telephone number (____) _____
Area code Number

SPECIALTY CODES (see list below)

List the specialty code numbers that you wish to order, or check here if you want entire file of applicants in **ALL** specialties.

1. _____ 2. _____ 3. _____ 4. _____ 5. _____ 6. _____

SPECIALTY CODES							
100. Economic Geology	222. inorganic	350. Mathematical Geology	453. micropaleontology	621. photogeology			
101. coal geology	223. stable isotopes	351. computer science	454. paleobotany	622. photogrammetry			
102. geothermal, etc.	224. unstable isotopes	352. statistical geology	455. paleoecology	630. Science Editing			
103. metallic deposits	250. Geomorphology	400. Mineralogy	500. Petroleum Geology	650. Sedimentology			
104. nonmetallic deposits	251. Pleistocene geology	401. crystallography	501. exploration	700. Seismology			
105. mining geology	300. Geophysics	402. clay mineralogy	502. subsurface stratigraphy	720. Stratigraphy			
120. Engineering Geology	301. exploration	410. Museum (curator)	520. Petrology	721. Cenozoic			
121. rock mechanics	302. paleomagnetism	420. Oceanography	521. igneous	722. Mesozoic			
150. Environmental Geology	303. theoretical	421. marine geology	522. metamorphic	723. Paleozoic			
151. public education and communication	320. Hydrogeology	422. coastal geology	523. sedimentary	724. Precambrian			
200. General Geology	321. hydrochemistry	450. Paleontology	550. Planetology	750. Structural Geology			
220. Geochemistry	322. ground water	451. invertebrate	600. Regional Geology	751. tectonics			
221. organic	323. surface water	452. vertebrate	620. Remote Sensing	752. tectonophysics			
	330. Library			800. Volcanology			

Applicants seeking employment in:

- Academic
- Government
- Industry
- Other _____

Minimum degree required

- None
- B.A. or B.S.
- M.A. or M.S.
- Ph.D.

Minimum professional experience

- None
- 1-5 yrs
- 6-plus

Experience desired (yrs)

	None	1-5	6-plus
Administrative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Exploration/Production	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Field	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Research	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teaching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

I am interested in interviewing applicants through the GSA Employment Service at the 19____ Annual Meeting in _____.

See attached sheet for current fee schedule.

1. I agree to use this service for valid recruiting purposes.
2. I agree that no placement charges will be assessed to any applicant participating in the GSA Employment Matching Service.

Total fee enclosed \$ _____
or invoice requested \$ _____

Signature (required) _____

SPECIMEN OF THE MONTH



We'll start with an easy one. The specimen pictured above is an important rock-forming mineral and, after feldspar, is the second most common mineral. Conchoidal fracture and the absence of cleavage are readily apparent in the sample. These features, along with a hardness of 7, confirm the identification.

This unique specimen of quartz, which weighs 86.6 kilograms (191 pounds), is one of the lobby displays at Geological Society of America Headquarters. It is on indefinite loan from the National Bureau of Standards Time and Frequency Division. You are cordially invited to view this specimen and the many others on display when you visit your Society's building in Boulder, Colorado.

ARE YOU MISSING OUT ON ONE OF YOUR MEMBERSHIP PRIVILEGES?

YOUR MEMBER DISCOUNT ON GSA BOOKS AND MAPS

Complete details of the Membership Purchase Privileges are printed on one side of your membership card.

When ordering GSA books and maps, be sure to claim your member discount. You must deduct the discount from your order (GSA order clerks cannot do it for you). IT'S EASY TO DO. HERE'S HOW . . .

1. Write your GSA I.D. number opposite your name on your order. This is the 8-digit number on your membership card and mailing labels on *News & information*, *Geology*, and *Bulletin*.

2. Deduct the discount from the total amount of your order. (Colorado residents: do this before you add the appropriate sales tax.) See reverse side of your membership card for the amount of discount allowed.

3. Send your order and payment to GSA Publication Sales, P.O. Box 9140, Boulder, CO 80301.

Keep your membership card handy for reference whenever you are placing an order.



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INTERPRETATION OF WINDFLOW CHARACTERISTICS FROM EOLIAN LANDFORMS

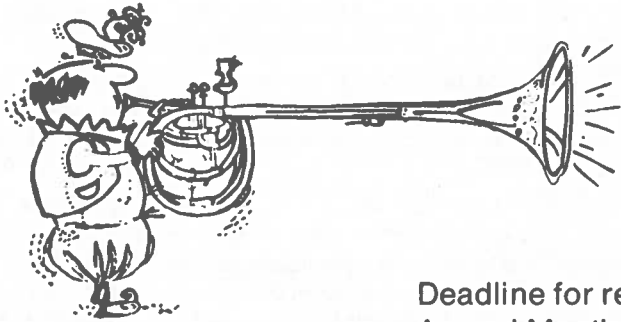
Edited by Ronald W. Marris and Kenneth E. Kolm

This collection of nine papers synthesizes research in which the traditional procedures and knowledge of stratigraphy, sedimentology, and geomorphology are combined with new remote sensing and statistical methods to decipher relationships between eolian processes and resulting landforms. The applications of this knowledge range from oil and gas exploration to locating and evaluating areas of high wind energy potential. More than 100 photos and line drawings.

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REMINDER

Deadline for receipt of abstracts at GSA headquarters for the Annual Meeting in Indianapolis, Oct. 31–Nov. 3, 1983 is June 3, 1983. Mail volunteered abstracts* to Abstracts Secretary, Geological Society of America, P.O. Box 9140, Boulder, CO 80301 to arrive on or before **June 3**.

ABSTRACTS DEADLINE JUNE 3

*Abstract forms available upon request from the above address.

Watch for *Geology's* new cover—coming in April

INSIDE _ _ _

New computer installed at GSA Headquarters p. 40
GSA membership application p. 43



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