

G.S.A. ARCHIVES

GSA NEWS & INFORMATION

Monthly Newsletter of
The Geological Society of America

VOLUME 7, NUMBER 1

JANUARY 1985

6065!!!—LARGEST MEETING IN GSA'S HISTORY

by Sue Beggs

The Society's November 1984 meeting in Reno, Nevada, attracted 6065 earth scientists and guests, setting a new attendance record. This exceeds the previous record of 5351 for the 1976 Denver meeting. It exceeds the usual attendance at GSA Annual Meetings by 20%.

Larger is not necessarily better, but in this case, the largest meeting was also the most enthusiastically attended and the best organized Annual Meeting to date. Momentum had been building for Reno for several years. Our intuition that we would have a popular meeting was reinforced when we received 1824 volunteered abstracts by June 8, 1984, an increase of 65% over 1983, and 34% over 1982. This was followed by a preregistration of 4214 by October 5, 1984. We knew we had a history-making event on our hands, befitting the unusually flamboyant setting of the MGM Grand Hotel. On-site the numbers swelled daily to the grand total of 6065. Geologists everywhere!

Registration

For record keepers, GSA's historic patterns continued with 4092 professional registrants (67.5%), 1588 student registrants (26.2%), and 385 guest registrants (6.3%). Included in this total are 175 one-day registrants (2.8%), and 761 complimentary registrants (12.5%), primarily local committee members, student assistants, and exhibitors.

Abstracts

A grand total of 1596 papers were given during volunteered, poster, and symposia sessions. A total of 1824 volunteered abstracts were submitted. Of these 477 were rejected. Of the 1347 accepted, 880 were given in oral presentation and 467 were given

in poster presentation. In addition, 249 papers were given during symposia.

Field Trips

The 15 premeeting field trips, one half-day trip during the meeting, and the eight postmeeting trips attracted 1010 registrants. Guidebooks were published in four volumes by the Geological Society of America. Postmeeting distribution is being handled by the Department of Geology, Mackay School of Mines, University of Nevada.

Professional Horizons

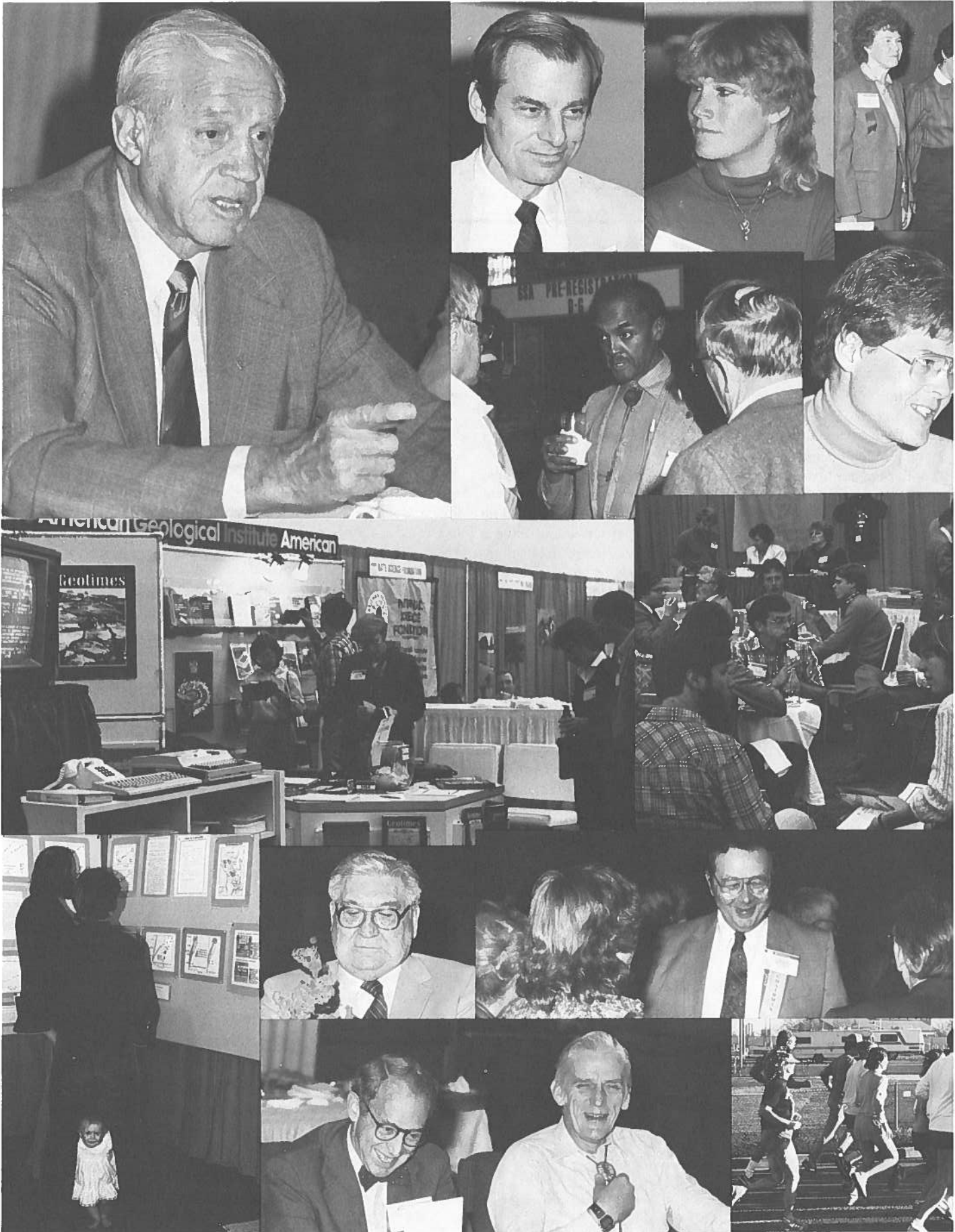
Preceding the meeting, GSA sponsored four of its own courses and workshops. Other societies and GSA divisions sponsored an additional five programs. In addition, two public forums were held: "Future Employment Opportunities in the Geological Sciences," sponsored by GSA's Membership Department, and "Mineral Resources on the Federal Lands: The Public Policy Challenge," sponsored by GSA's Committee on Geology and Public Policy. GSA's Committee on Minorities joined with the U.S. Geological Survey to offer a one-day field trip for high school students. As a service to geoscience administrators, GSA and Mackay School of Mines cosponsored a seminar for university administrators, "Computer Technology for Educational Programs in the Geosciences."

Exhibit

Even the exhibit was larger and better than ever. A total of 179 booth spaces were filled by 131 exhibitors. The Reno show

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November 5-8, 1984, Reno, Nevada

Ecological Society of America



6065!!—Largest Meeting

(continued from page 1)

marked both a 31% growth rate as a result of participation by many new high-technology exhibitors and expanded displays by long-term exhibitors. The exhibitors offered prize drawings and sponsored beverage service within the hall.

Employment Service

The Employment Interview Service was used by 39 employers, who conducted 505 interviews with 218 applicants interviewing for 61 positions. Of the positions available, 46 were classified as academic, 11 as corporate, and 4 as government or other.

Innovations

This was a meeting of firsts. A first for the technical program was the use of high-intensity ORC xenon equipment and 12' x 12' screens in seven of the ten session rooms. Another first was two special poster displays: the COCORP Poster Symposium and the Marine Geology four-part presentation. Session Chairmen Orientation Breakfasts were started in Reno in order to initiate chairmen into the technical-session procedures. Finally, video was used for the first time in a GSA session—a video tape during the Debris Flows Symposium. What next? MTV?

At Reno, GSA launched its program of short courses, collaborating with its divisions on marketing and administration.

A full program of courses that will be offered each year is now being developed.

For the first time, GSA drew national news media attention—and did it in the face of the Presidential Election. Representatives from the Public Broadcasting System, *National Geographic* magazine and the National Geographic Society cartography unit, and *Science News* attended. GSA's program also made the Associated Press wire service and the nightly news programs on Reno television. GSA registrants were able to see reruns of the television newscasts and interviews on the TV monitor set up in the lobby.

The last first—but of course not the least—was the Reno Run. Cosponsored by GSA and the local running club, the 10K and 5K races registered more than 200 runners. Wednesday morning was a great day for the race, and except for a few who claimed an altitude handicap, the racers enjoyed themselves in the fresh mountain air.

The Reno meeting goes down in the history books. A report like this would be incomplete, however, without recognition of the local committee and the GSA headquarters staff who organized this major national function. It is a cliché to thank those who worked "behind the scene." Registrants are not supposed to see the blood, sweat, and tears. Even so, on behalf of someone who sees it all, this Reno Local Committee and the GSA staff have been a superb group to work with—from chairmen to packet stuffers, from symposia conveners to registration clerks. Their dedication and effectiveness were invaluable.

SIR-A Movie Available from NSSDC

The National Space Science Data Center (NSSDC) has acquired a 16-mm motion picture from the Jet Propulsion Laboratory entitled "The SIR-A Movie."

This 11-minute color motion-picture film with sound, produced by the Jet Propulsion Laboratory, begins with footage showing the actual launch of the Space Shuttle and continues with examples of the radar imagery acquired with the Shuttle Imaging Radar-A flown on STS-2. The narrator is Charles Elachi, the SIR-A Principal Investigator, who is affiliated with the Jet Propulsion Laboratory. The film is made in such a way that the viewer sees the imagery as it would appear if he or she were flying on the shuttle. Examples of imagery include the coast of southern California, villages and tectonic features in China, river patterns in Borneo, and buried drainage patterns in the Egyptian/Sudanese desert.

Specific questions concerning the technical aspects of the film should be directed to William Rowe, Jet Propulsion Laboratory, Photographic Services, Mail Stop 111-115, Pasadena, CA 91109. FTS (818) 792-5100.

The film is available to requesters on loan. Requesters who live in the United States should direct inquiries to

National Space Science Data Center
Code 601.4

Goddard Space Flight Center
Greenbelt, MD 20771

Telephone: (301) 344-6695 FTS: 344-6695.

Mexican University Needs Mineralogy Lab Material, Equipment

The University of Sonora mineralogy laboratory requests donations of microscopes, microscope parts, thin sections, books, and specimens. If you can help the lab with this material or equipment, write to Juan José Palafox Torres, Departamento de Geología, Universidad de Sonora, Hermosillo, Sonora, Mexico.

In Memoriam

Walter C. Ackerman
Cheyenne, Wyoming
March 3, 1983

William B. Arper
Salida, Colorado
September 12, 1984

Louis S. Gardner
Pleasant Grove, Utah
September 16, 1983

Frank Gouin
Memphis, Tennessee

John Haller
Belmont, Massachusetts
May 1, 1984

Esther A. Holm
Green Valley, Arizona
May 4, 1984

Krishna Mohan
Calgary, Alberta

D. V. Nalivkin
Leningrad, USSR

Fred R. Neumann
Durham, California
October 4, 1983

William D. Pitt
Portales, New Mexico
May 21, 1983

George G. Simpson
Tucson, Arizona
October 11, 1984

D. Carlton Vickers
Danville, West Virginia
March 8, 1984

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CENTENNIAL NEWS

By Allison R. (Pete) Palmer

GSA's Divisions Are Major Contributors to the DNAG Project

The Decade of North American Geology (DNAG) Project has components being prepared by many different groups both within and outside of GSA. As the project was being organized, the regional Sections, topical Divisions, and Associated Societies were all invited to propose special projects to honor GSA's Centennial. Readers of this column or various DNAG brochures are well aware of the *Centennial Field Guides*, which will be the products of the regional GSA Sections. The GSA Divisions also have their special projects; these are the focus of this summary.

The **Hydrogeology Division** proposal to prepare syntheses about the ground water and surface water hydrology of North America was so central to the DNAG theme that these volumes were added to the basic set of volumes on *The Geology of North America*, enlarging this to 27 volumes. *Ground Water Hydrology of North America* is being edited by W. Back and P. R. Seaber; *Surface Water Hydrology of North America* editors are M. E. Moss, M. G. Wolman, and H. C. Riggs. Both volumes have had organizational meetings of their principal chapter authors and are now in development.

The **History of Geology Division** received approval for a volume now titled *Geologists and Ideas: A History of North American Geology*, edited by Ellen T. Drake and William M. Jordan. More than half of the chapters for this volume are now through the review process and in copy-editing or galley proof stage.

Discussion about the possibilities of preparing a geologic "snapshot" of the action on a crustal plate led to a joint proposal for a complex neotectonics project by the

Structural Geology and Tectonics Division and the **Geophysics Division**. The project includes four 1:5,000,000 maps and an accompanying volume focused on the significance of the map compilations. The maps and their chief compilers are *Seismicity* (E. R. Engdahl), *Thermal Aspects* (D. D. Blackwell), *Stress* (M. D. Zoback), and *Neotectonics sensu stricto* (C. M. Wentworth, Jr.). A committee of representatives from both Divisions, including the chief compilers and chaired by D. B. Slemmons, will supervise preparation of the volume to accompany the maps. Organizational meetings for the seismicity, thermal aspects, and stress maps have already been held, and the organizational meeting for the neotectonics map will be held early in 1985.

The **Coal Geology Division** is contributing its talents, under the leadership of H. J. Gluskoter, to the section on coal in the DNAG synthesis volume on *Economic Geology: U.S.* The organizational meeting for the section on coal was held in September.

The **Quaternary Geology and Geomorphology Division** received approval in May for its project, *Geomorphic Systems of North America*, edited by W. L. Graf.

The **Engineering Geology Division's** proposal for a volume *The Heritage of Engineering Geology—The First Hundred Years*, edited by C. C. Mathewson and G. A. Kiersch, was approved at the GSA Annual Meeting in Reno.

The **Archaeological Geology Division** has a proposal in development, and the **Planetary Geology Division** is still to be heard from.

Hydrogeology Division Names Kreitler 1984-1985 Birdsall Lecturer

GSA's Hydrogeology Division has named Charles W. Kreitler, research scientist at the Texas Bureau of Economic Geology, its eighth Birdsall Distinguished Lecturer. Kreitler will give two formal presentations, as well as holding informal discussions with faculty and students, at each host institution. His subjects as

Birdsall Lecturer are "Hydrogeology: The Interaction Between Hydrologic and Geologic Processes" and "Hydrologic Characterization of a Sedimentary Basin: The Palo Duro Basin as an Example."

Kreitler's interests include the hydrology of deep basins, evaporite deposits, and isotope hydrology. He has been involved on behalf of the U.S. Department of Energy in investigations of salt deposits in Texas for their suitability for nuclear waste isolation. He previously has conducted research on nitrogen-isotope geochemistry, subsidence and faulting in Houston, Texas, and Gulf Coast hydrology.

The Birdsall Lectures are funded by an endowment from the late John M. Birdsall, hydrogeologist, to acquaint students with distinguished professionals in the field of hydrogeology. Transportation expenses are paid by the Hydrogeology Division; the host institution pays local expenses of the lecturer.

If you would like your institution included in Kreitler's Birdsall Lecture tour, write or call Charles W. Kreitler, Texas Bureau of Economic Geology, University Station, Box X, Austin, TX 78713-7508; (512) 471-7721.

Southeastern Section Offers Student Grants

GSA's Southeastern Section announces its fourth annual grants-in-aid program for student research. Grants may be for graduate or undergraduate research and are available for Student Associates of GSA who are attending colleges or universities within the geographical boundaries of the Southeastern Section. In 1984, nine grants were awarded for up to \$500 each. Information and applications can be obtained from

Stephen H. Stow
Oak Ridge National Laboratory
P.O. Box X
Oak Ridge, TN 37830.

Completed applications are due by March 1, 1985. The final decision on awards will be made in April 1985.

Final Announcement

SOUTH-CENTRAL SECTION, GSA, Annual Meeting Fayetteville, Arkansas April 15-16, 1985

The Department of Geology at the University of Arkansas and the Arkansas Geological Commission will host the 19th Annual Meeting of the South-Central Section of the Geological Society of America on Monday and Tuesday, April 15-16, 1985, in Fayetteville, Arkansas. The meeting will consist of two days of symposia and volunteered papers, four field trips, a welcoming party, a luncheon, and an informal dinner. For further information, write or call General Chairman Robert C. Morris, (501) 575-3355, Technical Program Chairman Kenneth F. Steele, (501) 575-3410, or Field Trip Chairman Walter L. Manger, (501) 575-3370, Department of Geology, 118 Ozark Hall, University of Arkansas, Fayetteville, Arkansas 72701.

REGISTRATION

All persons participating in any event, including technical sessions, exhibits, or field trips *must be registered*.

Preregistration. Advance registration is \$35 for professionals and \$15 for students if the registration form, with payment, is postmarked by *March 15, 1985*. One free luncheon ticket is provided. Those planning to attend field trips *must* preregister by March 15, 1985. Preregistration after this date will require the full registration fee and will not include the complimentary luncheon ticket. Requests for refunds of preregistration or field-trip fees will be honored if received by March 15, 1985, although there is a \$10 processing fee. Preregistrants can pick up their meeting materials and badges at the Continuing Education Center (adjacent to Fayetteville Hilton, headquarters hotel) on Sunday, April 14, 1985, from 1800 to 2000 hours, or on Monday and Tuesday after 0800 hours.

Registration. On-site registration or preregistration received after March 15, 1985, will be \$40 for professionals or \$15 for students. Registration will be held Sunday, April 14, 1985, from 1800 to 2000 hours and on Monday and Tuesday after 0800 hours at the Continuing Education Center. Some tickets for the informal dinner and for the postmeeting field trips may be available Sunday evening and Monday morning, on a space-available basis.

TECHNICAL PROGRAM

Technical sessions will consist of oral presentations and poster sessions on Monday, April 15, and Tuesday, April 16, 1985.

Symposia

1. **Tectonic and Sedimentological History of the Arkoma Basin.** Doy L. Zachry, University of Arkansas.
2. **Alkalic Rocks and Kimberlites.** Ellen D. Mullen, University of Arkansas, and Jill D. Pasteris, Washington University.
 - a. *Mantle Metasomatism and Origin of Alkaline Magmas*
 - b. *Kimberlites and Similar Rocks*
 - c. *Alkalic Rocks—Oceanic*
 - d. *Alkalic Rocks—Continental*
3. **Quaternary History of the Mississippi Valley and Its Tributaries.** Margaret J. Guccione, University of Arkansas.
4. **Quaternary Geology of the Mountains, High Plains, and Plateaus of the South-Central U.S.** Margaret J. Guccione, University of Arkansas.
5. **Karst Hydrology and the Environment.** Albert E. Ogden, Southwest Texas State University.
6. **Waste Disposal Problems in South-Central U.S.A.** James H. Williams, Missouri Department of Natural Resources.
7. **Future of Aerial Remote Sensing for Geologic Investigations.** Harold C. MacDonald, University of Arkansas, and Louis F. Dellwig, University of Kansas.

8. **Ouachita Mountains Update.** George W. Viele, University of Missouri, and Jay Zimmerman, Southern Illinois University.

9. **Thermal Maturation Studies: Midcontinent, U.S.A.** David W. Houseknecht, University of Missouri.

PROJECTION EQUIPMENT

All slides used in presentations must be 2" x 2" and fit a standard 35-mm carousel and projector. Only one projector and screen will be provided in each meeting room. Please plan presentations accordingly, and bring your own loaded carousel tray if possible.

EXHIBIT SPACE

Exhibits will be in the Continuing Education Center, where all programs will be conducted. A single booth is anticipated to cost \$100 for use during the 3 days. For additional information contact Beth Hollandsworth, Division of Continuing Education, #2 University Center, Fayetteville, AR 72701; (501) 575-3604.

FIELD TRIPS

Two field trips will precede the meeting, and two will follow the meeting. Field-trip coordinator is Walter L. Manger, Department of Geology, 118 Ozark, University of Arkansas, Fayetteville, AR 72701; (501) 575-3370. *Field trip registrants must preregister for the meeting.* Full refunds will be made for any oversubscribed trips and for any trips that may be canceled.

Premeeting

1. **Lower Atoka Sandstone Units of the Southern Boston Mountains.** April 14, 1985. Leader: Doy L. Zachry, University of Arkansas. The basal succession of Atoka sandstone units (Spiro and Cecil Series of the Arkoma Basin) will be examined from the standpoint of petrographic character and environmental setting in the southern Boston Mountains immediately north of the Arkoma Basin. A hike of about 2 miles along a well-defined trail will be required. *Limit: 20. Cost: \$30*, including transportation, lunch, and guidebook. Participants will depart from the Hilton Hotel at 0800 hours and return at 1800 hours.
2. **Devonian-Lower Mississippian Lithostratigraphy, Southern Ozark Region.** April 14, 1985. Leader: Walter L. Manger, University of Arkansas. This trip will examine exposures of the Devonian Clifty and Chattanooga Formations and the lower Mississippian St. Joe and Boone Limestones in northern Arkansas. Emphasis will be on the Devonian-Mississippian—an unconformable contact, facies changes within the St. Joe Limestone, and the development of chert within the Boone Limestone. *Limit: 20. Cost: \$25*, including transportation,

lunch, and guidebook. Participants will depart from the Continuing Education Center at 0800 hours and return at 1700 hours.

Postmeeting

3. **Alkalic Rocks of Arkansas.** April 16-18, 1985. Leaders: Ellen D. Mullen, University of Arkansas, and Michael Howard, Arkansas Geological Commission. Day 1 will focus on syenites of Granite Mountain and Saline County, including problems of multiple intrusion and/or fenitization, kimberlite or upper-mantle xenoliths, and textural varieties of syenites (trachoidal and comb-layered). Day 2 will include the Magnet

Cove complex (ijolite, carbonatite, and jacapirangite), lamproite dikes of Benton County, and kimberlitic (lamproite) intrusions of the Murfreesboro area and Scott County. *Limit: 45.* Cost: \$110, including transportation, lunches, two nights lodging, and guidebook. The group will depart from the Hilton Hotel at 2000 hours on April 16 and arrive at a motel in Little Rock at midnight, where they also will have accommodations the night of April 17. The field trip will return to the same motel at 1800 hours on April 18. Participants may choose to (1) depart for their homes from Little Rock on April 18,

(continued on page 8)

PREREGISTRATION FORM

South-Central Section, GSA, 19th Annual Meeting
April 15-16, 1985
Fayetteville, Arkansas

IMPORTANT

1. Full payment must accompany registration.
2. Register one: professional, student, or spouse/guest.
3. Your check will be your receipt. Copy this form for your record.
4. Preregistration deadline: **Must be postmarked no later than March 15, 1985.**

FOR OFFICE USE ONLY

M.O. # _____ Personal check \$ _____
Other check _____ issued by _____
Amount _____

PRINT OR TYPE

Name _____
last first middle nickname for badge

Registered as: Professional Student Spouse/Guest

Affiliation (abbreviate for badge) _____

Professional address _____

City _____ State _____ Zip _____

Phone: Business _____ Residence _____

REGISTRATION FEES

Preregistration, Professional _____	\$35	\$	_____
Registration, Professional (after March 15, 1985) _____	\$40	\$	_____
Preregistration, Student _____	\$15	\$	_____
Registration, Student (after March 15, 1985) _____	\$15	\$	_____
Spouse/Guest _____	\$15	\$	_____
Ozark Mountain Smoke House Dinner (April 15) _____	\$10	\$	_____
NAGT Luncheon (April 15) _____	\$ 7	\$	_____

FIELD-TRIP PREREGISTRATION

All field-trip participants *must* preregister for the meeting.

Field Trip 1. Lower Atoka Sandstones--Boston Mountains _____	\$ 30	\$	_____
Field Trip 2. Devonian--Lower Mississippian Lithostratigraphy _____	\$ 25	\$	_____
Field Trip 3. Alkalic Rocks of Arkansas _____	\$110	\$	_____
Field Trip 4. Slope-Fan Systems, Frontal Ouachita Mountains _____	\$110	\$	_____

TOTAL FEES

Enclose check or money order, U.S. funds, payable to **The University of Arkansas** _____ \$ _____

STUDENT VERIFICATION: I certify that the above registration is for a full-time student.

Signature _____ Business Phone _____
Head or Department Chairman

Institution _____

Mail this preregistration form and check (payable to the University of Arkansas) to:

Beth Hollandsworth
Division of Continuing Education
#2 University Center
Fayetteville, AR 72701

South-Central Section (continued from page 7)

(2) remain at (again) the same motel (at their own expense) to depart from Little Rock on April 19, or (3) remain at the same motel (at their own expense) and return to Fayetteville on April 19 (arrival approximately 12:30 p.m.).

4. **Slope and Axial Fan Systems in Carboniferous Rocks, Frontal Ouachita Mountains, Oklahoma and Arkansas.** April 16-18, 1985. Leader: Robert C. Morris, University of Arkansas. The objective of the trip is to emphasize the south-facing Carboniferous (Stanley, Jackfork, Johns Valley, and Atoka) slope-rise depositional systems across the frontal Ouachita Mountains and to make comparisons with adjacent deeper-water axial-fan systems. Some walking will be required. *Limit:* 30. *Cost:* \$110, including transportation, lunches, two nights lodging (one night before trip, at motel from which trip originates), and guidebook. Participants will depart from the Hilton Hotel at 1600 hours on April 16 and drive to Poteau, Oklahoma, for orientation for the next two days of the trip. Trip will end in Little Rock, Arkansas, at 1800 hours on April 18. Participants may choose to depart that evening from Little Rock or remain overnight in Little Rock (at their own expense) for departure the next day. Free van transportation back to Fayetteville will be provided the next morning (April 19).

SPECIAL EVENTS

Welcoming Party. An informal cocktail party (cash bar) will be held for all registrants at the Hilton Hotel from 1900 to 2100 hours, Sunday, April 14, 1985. Suitable beverages and snacks will be available.

Ozark Mountain Smoke House Dinner. An informal gathering, with food and beverages provided, will be held at 1930 hours, Monday, April 15, in the Ozark Mountain Smoke House, 215 W. Dickson (see housing map). Cost of the dinner will be \$10. Some tickets will be available during the on-site registration period.

Preregistration Complimentary Luncheon. A complimentary luncheon will be held in the Continuing Education Center at 1200 hours, Monday, April 15, for all participants who preregistered. No tickets will be available during registration.

Annual Business Meeting. The annual business meeting will be held at 1530 hours, Monday, April 15, in the Continuing Education Center. The election of officers for 1986-1987, announcement of board actions during the past year, and other announcements will be on the agenda.

Friends of Pleistocene Field Trip. This trip, held in connection with the GSA meeting, will demonstrate the stratigraphy of three loesses in the Mississippi Valley, beginning April 12 in Baton Rouge, Louisiana. The trip will end April 14 by noon in Vicksburg, Mississippi, permitting time to travel to Fayetteville before the GSA meeting. If interested, contact Bob Miller, Department of Agronomy, Louisiana State University, Baton Rouge, LA 70803-2110.

STUDENT AWARDS

The South-Central Section will present three cash awards (\$200, \$100, and \$50) for the best papers written and delivered exclusively by students. Prizes awarded for student papers with more than one author will be divided equally.

STUDENT TRAVEL SUPPORT

Partial support for student travel to attend the Alkalic Rocks and Kimberlites Symposium is available to students whose thesis

or dissertation research relates to these rocks. Applications for travel support must be completed by the preregistration deadlines. Information and application forms may be obtained from Jill D. Pasteris, Department of Earth and Planetary Sciences, Campus Box 1169, Washington University, St. Louis, MO 63130.

HOUSING

Lodging is available to suit a range of tastes and budgets. Rooms have been blocked at several motels and hotels. To reserve a room at one of these, *contact the motel or hotel directly.* Group rates, lower than those quoted below, are available at most of the establishments listed for those attending the GSA meeting. Please identify yourself as a GSA meeting attendee. Rooms not reserved by March 15, 1985, will be released. A shuttle service will be provided from the hotels indicated by a double asterisk (**) to the convention center in the early mornings and return in late afternoons. Bus schedules will be posted at the motels.

Fayetteville Hilton (Headquarters)
70 N. East Street
Fayetteville, AR 72701
Phone: (501) 442-5555
Rates: Single—\$44; Double—\$52

Best Western Inn**
1000 Highway 71 Bypass
Fayetteville, AR 72701
Phone: (501) 442-3041
Rates: 1 bed, 1 person—\$32; 2 beds, 2 persons—\$36;
Double—\$40; \$4 for each additional person above double
room occupancy

Holiday Inn**
2402 North College
Fayetteville, AR 72701
Phone: (501) 443-4323
Rates: Single—\$34; Double—\$39; \$4 for each additional
person above double room occupancy

Mountain Inn
21 South College
Fayetteville, AR 72701
Phone: (501) 521-1000
Rates: Double—\$44; King—\$45; Poolside—\$50

Ramada Inn**
3901 North College
Fayetteville, AR 72701
Phone: (501) 443-3431; Toll Free: 1-800-228-2828
Rates: Single—\$34; Double—\$39

Sands Motel
229 North College
Fayetteville, AR 72701
Phone: (501) 442-2313
Rates: 1 bed, 1 person—\$16; 1 bed, 2 persons—\$18; 2 beds,
2 persons—\$21; \$2 for each additional person above
double room occupancy

In addition, there are some pleasant rooms in one of the University of Arkansas dormitories (Pomfret Complex) available to both professionals and students. Pomfret Complex is located at Stadium Drive on the UA campus. A shuttle bus runs every 15 minutes to downtown Fayetteville square. Rates: \$12 per person (2 people per room only). You must make reservations through Beth Hollandsworth, Division of Continuing Education, #2 University Center, Fayetteville, AR 72701; (501) 575-3604.

Final Announcement

ROCKY MOUNTAIN SECTION, GSA, Annual Meeting

Boise, Idaho

April 22-24, 1985

The Department of Geology and Geophysics of Boise State University, Agriculture Research Service, USDA, U.S. Geological Survey Water Resources Division, and the Idaho Association of Professional Geologists will host the 38th Annual Meeting of the Rocky Mountain Section of the Geological Society of America on April 22, 23, and 24 (Monday, Tuesday, and Wednesday), 1985. The meetings will be held in Boise at the Red Lion Inn, Riverside.

Local Committee Chairman: Claude Spinosa, Department of Geology and Geophysics, Boise State University, Boise, ID 83725; (208) 385-3660 or 385-1631.

Local Committee Vice-Chairman: Monte D. Wilson, Department of Geology and Geophysics, Boise State University, Boise, ID 83725; (208) 385-3651 or 385-1631.

Program Chairman: Gordon R. Stephenson, USDA-ARS, (208) 334-1363, or c/o Department of Geology and Geophysics, Boise State University, Boise, ID 83725; (208) 385-3660 or 385-1631.

Field-Trip Chairman: E. G. (Jerry) Crosthwaite, USGS (retired), c/o Department of Geology and Geophysics, Boise State University, Boise, ID 83725; (208) 385-1631 or 362-4123.

Treasurer: Deborah H. Parlman, USGS, (208) 334-9174, or c/o Department of Geology and Geophysics, Boise State University, Boise, ID 83725; (208) 385-1631.

Housing and Registration: Craig M. White, Department of Geology and Geophysics, Boise State University, Boise, ID 83725; (208) 385-3633 or 336-2496.

REGISTRATION

All persons participating in any events of the meeting must be registered.

Preregistration: You are urged to preregister at the reduced rate to aid the local committee in making final plans. Preregistration forms, with payment, must be postmarked no later than **Friday, March 29, 1985**. Complete the registration form and return it with a check or money order in U.S. currency to Rocky Mountain Section GSA, Department of Geology and Geophysics, Boise State University, Boise, ID 83725.

Those planning to attend field trips must preregister. Refunds for canceled preregistration will be made in full until April 8, 1985. After this date no refunds will be made except for field trips that are canceled or oversubscribed.

On-Site Registration: The registration and information desk will be located in the lobby of the Convention Center at the Red Lion Inn, Riverside. Name tags and other meeting materials may be picked up from 1800 to 2200 on Sunday, April 21, from 700 to 1600 on Monday, April 22, and from 800 to 1600 on April 23 and 24.

TECHNICAL PROGRAM

Technical sessions will be scheduled as oral presentations and poster sessions on Monday, Tuesday, and Wednesday, April 22, 23, and 24.

Symposia

- Geology of the Idaho Batholith.** *Earl Bennett, (208) 885-7991; Thor H. Kiilsgaard.
- Structure and Stratigraphy of the Snake River Plain.** Harold E. Malde; *S. H. Wood, (208) 385-3629.
- Volcanic Geology of the Western Snake River Plain and Adjacent Areas.** * William K. Hart, (513) 529-3216; William P. Leeman.
- Geology and Mining of Western Phosphate Deposits.** *Peter Oberlindacher, (208) 334-1189, FTS 554-1189; R. David Hovland, Steven W. Moore.
- Paleontology and Stratigraphy of Western Phosphate**

Deposits. *Ernest H. Gilmour, (509) 359-2286; Bruce R. Wardlaw.

- Idaho-Wyoming-Northern Utah Thrust Belt: Stratigraphy, Structural and Economic Geology.** *Paul K. Link, (208) 236-3846; Ronald L. Bruhn.
- Geothermal Resources and Occurrences of the Snake River Plain and Adjacent Areas.** *L. L. Mink, (208) 386-5031; Clayton R. Nichols.
- Epithermal Silver and Gold Deposits.** * Dave Giles, (303) 989-3879; B. Berger.
- Late Cretaceous Dinosaur Faunas of the Rocky Mountain American Interior.** *David D. Gillette, (505) 841-8830; (505) 281-2917 (evenings).
- A Spectrum of Molybdenum-bearing Ore Deposits.** *Bill Threlkeld, (303) 988-6434; Art Bookstrom.
- Paleozoic and Proterozoic Rocks of Central Idaho.** *Betty Skipp, (303) 236-1242; Peter Isaacson.
- Intermountain Seismic Belt.** *Jack Pelton, (208) 385-3640.
- Hydrogeologic Investigations for Hazardous Waste Disposal.** *G. Stephenson, (208) 334-1363; C. Duffey.

FIELD TRIPS

Field-Trip Chairman is E. G. (Jerry) Crosthwaite, USGS (retired), 8821 Churchill Road, Boise, ID 83725, (208) 362-4123. Field-trip registrants must also register for the meeting. Field-trip registration is on a first-come basis. If a trip is oversubscribed or canceled, the field-trip fee will be refunded. **Preregistration for field trips must be received by March 29, 1985, accompanied by full payment.** Trips may be canceled if registration is insufficient or for reasons beyond our control. No trip refunds will be made after April 8, 1985. All field trips will depart from the Red Lion Inn, Riverside, Boise, Idaho, except trip 4 which will depart from the Driftwood Motel, Idaho Falls, Idaho.

The elevations of the field trips range from about 2000 to 7000 feet. The following temperature information is for Boise (elevation 2840 ft) and Mackay (elevation 5900 ft).

(continued on page 10)

Rocky Mountain Section (continued from page 9)

April 19-25	(°F)	Min.	Mean min.	Max.	Mean max.
Boise		22	38	92	64
Mackay		10	30	80	58

Also, the wind can be strong. Please be prepared for unpredictable weather.

Premeeting

1. Power-Raft Trip through the National Birds of Prey Natural Area to View Canyon-filling Volcanics and Lake Beds of the Pleistocene Snake River. Leaders: Harold E. Malde, USGS, Denver, Colorado; Morlan Nelson, National Raptor Research Center, Boise, Idaho. Two days, April 20 and 21 (trip is repeated April 25-26). Departs Red Lion Inn, Riverside at 7:30 a.m. on April 20. Camping overnight in the throat of a dissected volcano. **Limit: 26. Cost: \$200**, includes transportation, all meals (5), and guidebook. Participants should be prepared for inclement weather (rain and wind), and each must bring a sleeping bag and personal items. Return to Red Lion Inn at 7:00 p.m. on April 21.

The canyon habitat for this scenic bird refuge cuts through canyon-filling volcanics and lake beds of the Pleistocene Snake River. The spectacle of volcanism in damming and diverting the ancestral river unfolds as the canyon is followed from Grand View to Walters Ferry, a reach of 45 miles. By floating on a powered pontoon boat and by taking short walks on foot, participants will see the geology as well as the birds during the nesting season when they are most visible.

2. Tertiary Volcanics and Epithermal Mineralization in the Owyhee Mountains, Southwestern Idaho. Leaders: E. B. Ekren, Evergreen, Colorado; Bill Strowd, Jordan Valley, Oregon. One day, April 21. Departs Red Lion Inn, Riverside at 8:00 a.m. on April 21, returns at 6:00 p.m. **Limit: 40. Cost: \$35**, includes transportation, box lunch, slide show, guide at DeLamar Mine, and guidebook.

The trip will go across the western Snake River Plain and part of the Owyhee Plateau to Jordan Valley, Oregon, and thence to the DeLamar Silver Mine in Idaho. Features of geologic interest in the plain will be pointed out en route, and three stops are planned on the plateau to examine one or more of the high-temperature, large-volume ash-flow tuffs that coalesced to liquids before cooling and coming to rest. These unusual rocks make up the bulk of the volcanic strata on the Owyhee Plateau. They also form much of the bedrock adjacent to the DeLamar Mine. A lecture and slide presentation at the DeLamar Mine (fourth largest silver producer in the U.S.) on the epithermal mineralization will be followed by an examination of the open-pit mine.

3. Late Cenozoic Volcanic Geology of the Jordan Valley-Owyhee River Region, Southeastern Oregon. Leaders: W. K. Hart, Miami University; S. A. Mertzman; R. W. Carlson. Two days, April 20 and 21. Departs Red Lion Inn, Riverside at 8:00 a.m. on April 20, returns at 6:00 p.m. on April 21. **Limit: 27. Cost: \$75**, includes transportation, one night lodging, two box lunches, and guidebook.

We intend to spend most of our time examining the young alkaline basalt flows and sources (e.g., Jordan Crater) northwest of Jordan Valley, the chronologic and stratigraphic relationships between these basalts and spatially associated tholeiites and

rhyolites, and the overall volcanic stratigraphy of this region as exposed in the walls of the Owyhee River canyon at various locations between Rome and Three Forks. Discussions will center on sequences for which we have extensive K-Ar, elemental, and isotopic data. On the basis of these data and the observations we will make in the field, petrologic models will be presented and discussed in light of the regional volcanic and tectonic evolution.

4. The Borah Peak Earthquake of October 28, 1983: Surface Faulting, Mass Movement, and Quaternary Tectonic Setting. Leaders: A. J. Crone, M. N. Machette, K. L. Pierce, U.S. Geological Survey, Denver, Colorado; E. L. Harp, U.S. Geological Survey, Menlo Park, California; C. J. Waag, Boise State University, Boise, Idaho. Two days, April 20 and 21. Departs Driftwood Motel, Idaho Falls, Idaho, at 7:00 a.m. on April 20; overnight stop at Challis, Idaho; ends at Red Lion Inn, Riverside, Boise, at 7:00 p.m. on April 21. **Limit: 50. Cost: \$135**, includes transportation, two nights lodging, two box lunches, and guidebook.

Participants will examine and discuss Quaternary fault scarps along the Lost River Range and the implications of scarp morphology, the large lateral spread that formed during the earthquake in Thousand Springs Valley, and the 1984 surface faulting and a trench across the fault scarp at Doublesprings Pass Road. We will also examine the northern termination of the ruptures associated with the earthquake in Warm Springs Valley and the hydrogeologic changes, hydraulic piping, and sediment boil formation associated with the earthquake at Chilly Buttes. **Note:** Because of the possibility that snow may limit access to some areas, parts of the trip may have to be modified. Participants should be prepared for hiking in cold, wet conditions.

5. Thrust Belt in South-Central Idaho at the Fish Creek Reservoir Window. Leaders: Betty Skipp, Wayne Hall, U.S. Geological Survey. One day, April 21. Departs Red Lion Inn, Riverside at 7:30 a.m. on April 21, returns at 6:00 p.m. **Limit: 28. Cost: \$35**, includes transportation, box lunch, and guidebook.

Devonian and Silurian rocks of transitional and miogeoclinal facies are in thrust contact within the Fish Creek Reservoir structural window on the northeast margin of the Cenozoic Snake River Plain. These lower Paleozoic rocks are present beneath two thrust plates; the structurally higher plate, the Wood River, consists of Permian-Pennsylvanian marginal-basin sedimentary rocks, and the structurally lower plate is made up of Lower Mississippian flysch of the Copper Basin Formation. Steep younger normal faults offset the thrust plates. This one-day field trip will examine segments of the three major thrusts and lithologies and faunas of the Silurian-Devonian Roberts Mountains Formation, the Devonian Carey, Jefferson, and Picabo Formations, the Lower Mississippian part of the Copper Basin Formation, and the Pennsylvanian part of the Wood River Formation.

Postmeeting

6. Repeat of Trip 1. Leaves Red Lion Inn, Riverside at 7:30 a.m. on April 25, returns at 6:00 p.m. on April 26.

7. Boise Geothermal System, Western Snake River Plain, Idaho. Leaders: S. H. Wood, Boise State University, Boise, Idaho; W. L. Burnham, U.S. Geological Survey (retired). Three-fourths day, April 25. Departs Red Lion Inn, Riverside at 8:00 a.m. on April 25, returns at 3:00 p.m. **Limit: 30. Cost: \$25**, includes transportation, box lunch, and guidebook.

Rocky Mountain Section (continued from page 11)

canyon-filling deposits and their relationship to springs. Localities visited will display geologic contact relationships, various types of canyon-fill deposits, and major springs. Discussions will center on the history of canyon-filling episodes, the regional hydrologic system, and local geologic control on springs.

SPECIAL EVENTS

Welcoming Party. An informal gathering will be held for all registrants from 1900 to 2200 hours, April 21, 1985, at the headquarters hotel, the Red Lion Inn, Riverside. A cash bar will be available.

Annual Banquet. The annual banquet will be held at the Red Lion Inn, Riverside, in conjunction with the annual banquet of the Idaho Association of Professional Geologists on April 22, 1985, from 1800 to 2200 hours. A cash bar will be available at 1800 hours.

Annual Business Meeting and Campus Representative Meeting. The annual business meeting will be held at noon, Tuesday, April 23, in the Red Lion Inn, Riverside. Election of officers for 1985-1986, selection of future meeting sites, a brief review of Campus Representatives' activities, and other section business will be on the agenda.

Paleontological Society—Rocky Mountain Section. The formation of a Rocky Mountain Section of the Paleontological Society is being approved, and the new group will meet in conjunction with the GSA Rocky Mountain Section in Boise. The new group is sponsoring two symposia:

Paleontology and Stratigraphy of Western Phosphate Deposits.

Late Cretaceous Dinosaur Faunas of the Rocky Mountain American Interior.

A meeting and social function are planned. For suggestions and volunteers, please call Ernest Gilmour, (509) 359-2286, or Claude Spinosa, (208) 385-3660.

Rocky Mountain Section Management Board Breakfast, April 23, at 0700 hours.

Spouse/Guest Activities. Boise is the location of the Idaho Historical Museum, the Boise Gallery of Art, the Morrison Center for Performing Arts (at Boise State University), and Old Idaho Penitentiary. Self-guided visits to these sites and to certain interesting shopping areas are possible; brochures describing these unique attractions will be available at the registration desk and at a suite in the Red Lion Inn, Riverside, reserved as the Guest Hospitality Center. A planned bus tour to historical Idaho City will be organized if sufficient interest exists. Call Jean Spinosa, (208) 343-2583 (working hours); (208) 286-7649 (evenings).

STUDENT AWARDS

The Rocky Mountain Section will award \$100 for the best student paper and \$50 for the runner-up. Both oral and poster-session presentations will be eligible. The abstract must be by one author and be designated on the abstract form as a student paper.

EXHIBITS

Exhibit space will be available near the technical sessions. Educational and nonprofit institutions will pay a reduced rate. For additional information, contact Charles J. Waag, Department of Geology and Geophysics, Boise State University, Boise, ID 83725, (208) 385-3658 or 385-1631.

HOUSING FORM
GSA Rocky Mountain Section

PLEASE RESERVE THE FOLLOWING ACCOMMODATIONS:

Red Lion Inn, Riverside (headquarters), 2900 Chinden Blvd., Boise, ID 83714, (208) 343-1871

- Single (1 person per room) \$48.00
- Double (2, 3, or 4 persons per room) \$55.00

Red Lion Inn, Downtowner, 1800 Fairview, Boise, ID 83702, (208) 344-7691

- Single (1 person per room) \$40.00
- Double (2, 3, or 4 persons per room) \$47.00

Date of arrival _____ Time _____ No. of Nights _____

If your first choice is not available, do you want a comparable room reserved for you at the other Red Lion Inn? Yes No

Name

Address

City State Zip

Credit Card _____
number exp. date

Rooms will be held until 6:00 p.m. unless guaranteed by major credit card. If you are delayed, a phone call will hold reservations for a reasonable time. Guaranteed reservations not canceled before 6:00 p.m. of arrival date will be billed one night's charge. All rooms subject to 8% tax.

Mail completed housing form with preregistration form and fees to

**Rocky Mountain Section, GSA
Department of Geology and Geophysics
Boise State University
Boise, ID 83725**

Refunds on canceled preregistrations will be made in full until April 8, 1985. After that date no refunds will be made, except for canceled field trips.

Copy for your records.

TRAVEL

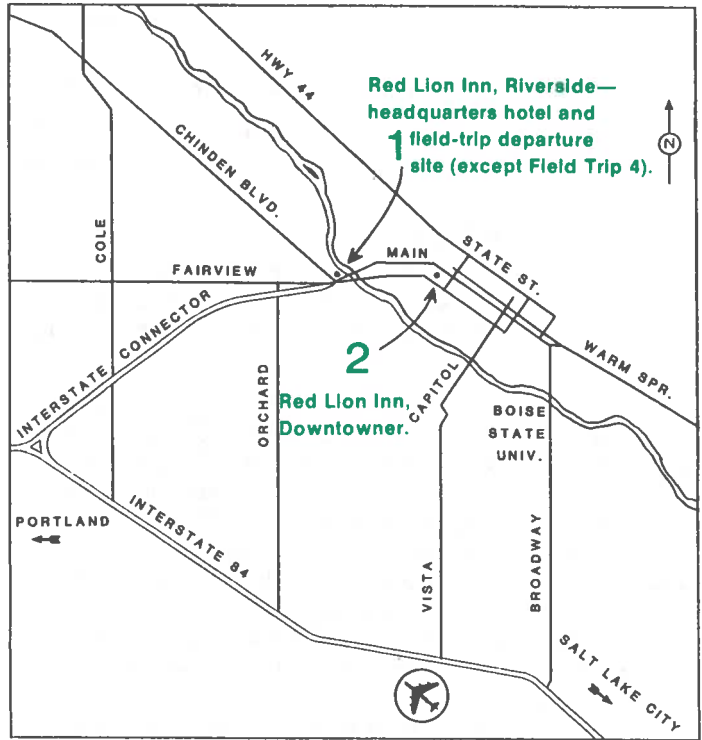
Boise is served by United, Western, Frontier, Wien, Horizon, Alaska, and Cascade Airlines. Free limousine and commercial taxi service are available from the airport to the Red Lion Inn hotels and to other hotels. Boise Urban Stages operates bus service in Boise and vicinity, including the vicinity of the headquarters hotel. Interstate 84 is the main highway corridor to Boise, and a connector of I-84 reaches the Red Lion Inn, Riverside.

HOUSING

The local committee has blocked rooms at two hotels: the Red Lion Inn, Riverside and the Red Lion Inn, Downtowner. The Red Lion Inn, Riverside will serve as the headquarters hotel and will be the site of all of the technical sessions. It is located in a parklike setting along the Boise River Greenbelt and offers excellent accommodations, including two restaurants, a coffee shop, and two cocktail lounges. The Red Lion Inn, Downtowner also provides fine accommodations and is located less than a mile from the headquarters hotel. Free shuttle service will be available between the two hotels as well as to and from the Boise airport.

You can reserve rooms at the Red Lion Inn, Riverside or the Red Lion Inn, Downtowner at reduced GSA rates by filling out the housing part of your preregistration form and returning it to the local committee. Confirmation of your room reservation will be mailed to you by the hotel. **Deadline for receipt of all registration materials including hotel reservations is March 29, 1985.** Reservations after that date must be made directly with the hotel. Be sure to indicate that you are a GSA registrant to take advantage of the special GSA convention rate. Cancellations should be made in writing or by telephone directly to the hotel.

The local committee *will not* coordinate reservations at hotels other than the Red Lion Inn, Riverside and the Red Lion Inn, Downtowner. The names, addresses, and current rates of two hotels that are within walking distance of the headquarters hotel are given for your convenience. No rooms have been



blocked at these hotels, and you must contact them directly for reservations. All hotel rooms in Boise are subject to 8% tax.

- Shilo Inn, 3031 Main Street, Boise, ID 83702, (208) 344-3521
Single—\$32.40; Double—\$37.80; each additional person—\$5.00
- Landmark Inn, 2155 N. Garden, Boise, ID 83704, (208) 344-4030
Single—\$26.00; Double—\$34.00; each additional person—\$5.00

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THE GEOLOGICAL SOCIETY OF AMERICA

Final Announcement

NORTH-CENTRAL SECTION, GSA, 19th Annual Meeting

April 25-26, 1985

DeKalb, Illinois

The Department of Geology, Northern Illinois University, will host the 19th Annual Meeting of the North-Central Section of the Geological Society of America concurrently with the North-Central Section of the Paleontological Society, the Great Lakes Section of the Society of Economic Paleontologists and Mineralogists, and the National Association of Geology Teachers on April 25 and 26, 1985.

For further information, write or call Local Committee Chairman Jonathan H. Berg; Program Committee Chairmen Clarence J. Casella and E. C. Perry; or Field Trip Chairman Ronald C. Flemal, all at Department of Geology, Northern Illinois University, DeKalb, IL 60115, (815) 753-1943.

Registration is required for all those attending the meeting, field trips, shuttle buses to and from O'Hare Airport, and planned social events. A discount is offered for those who use the forms accompanying this notice before March 22, 1985. Student registrants must present proper identification or verification to be eligible for student discounts.

Please direct all questions about transportation, meals, and hotel arrangements to Deborah Booth, College of Continuing Education, Northern Illinois University, DeKalb, IL 61015, (815) 753-1458.

REGISTRATION

Preregistration: You are requested to register in advance so that the local committee can plan more efficiently. Your registration form and payment must be postmarked no later than **Friday, March 22, 1985**, to qualify for the reduced preregistration fees. Please complete the accompanying registration form and return it with a check or money order (payable to Northern Illinois University) to the Non-credit Registrar, College of Continuing Education, Northern Illinois University, DeKalb, IL 60115.

On-Site Registration: Registration will be held from 6:30 p.m. to 8:30 p.m. on Wednesday, April 24, outside the Regency Room in the Holmes Student Center and from 8:00 a.m. to 4:30 p.m. Thursday, April 25, and Friday, April 26, in the lounge near the hotel registration desk of the Holmes Student Center. Pre-registrants can pick up their packets of registration materials and tickets at the registration desk. A limited number of tickets will be available for those who did not preregister.

Requests for advance registration refunds will be honored until April 10, 1985, for all but field-trip fees, which will only be refunded if the space can be resold.

TECHNICAL PROGRAM

Technical sessions, symposia, and workshops will be held in the Holmes Student Center at Northern Illinois University. Depending upon the abstracts submitted, there will be sessions on paleontology, paleoecology, stratigraphy, sedimentology, economic geology, geomorphology, hydrogeology, Quaternary geology, mineralogy and petrology, geochemistry, structural geology, geophysics, engineering and environmental geology, and general geology. In addition, there will be the following symposia:

1. **Paleozoic Marine Invertebrates: Their Paleobiology and Paleoecology.** Robert J. Elias. Sponsored by the Paleontological Society of America.

2. **Sedimentation and Stratigraphy of the Lake Michigan Basin during the Late Quaternary.** Allan F. Schneider, Gordon Fraser.
3. **Glaciogenic Deposystem Models: Processes, Lithofacies, and Landforms.** Ross D. Powell, Dan Lawson. Sponsored by the Great Lakes Section of the Society of Economic Paleontologists and Mineralogists.
4. **Silurian of the Great Lakes Region.** Don Mikulic.
5. **Use of Microcomputers in Geological Instruction.** Robert S. Nelson, Richard J. Gentile. Sponsored by the North-Central Section of the National Association of Geology Teachers.

PROJECTION EQUIPMENT

All slides must be 2" x 2" and fit a standard 35-mm carousel projector. Only one projector will be available in each meeting room.

SPECIAL EVENTS

Welcoming Party. A welcoming party will be held for all registrants in the Regency Room of the Holmes Student Center from 7:00 p.m. to 9:00 p.m. on Wednesday, April 24, 1985.

Annual Banquet. The annual banquet of the North-Central section of GSA will be at 7:00 p.m. on Thursday, April 25, 1985, in the Regency Room of the Holmes Student Center. Cost: \$10.00. A short business meeting of the North-Central Section of GSA will take place after the banquet. This will be followed by an invited lecture.

Paleontological Society Luncheon. The Paleontological Society will have a luncheon at 12:00 noon Thursday, April 25. The luncheon will be followed by the Paleontological Society Business meeting. Cost: \$7.25. Information about the room will be available at registration.

SPOUSE/GUEST PROGRAM

We would be happy to arrange transportation for a day in Chicago if there is enough interest. Cost, depending on numbers, will be about \$9.00 per person. Other possible trips are a visit to Geneva, a historic town about 25 miles from DeKalb (cost, again depending on numbers, will be about \$4.00 per person) and a visit to the Ellwood House, a mansion once owned by the inventor of barbed wire (cost, including admission, about \$3.50 per person).

Please indicate on the registration form what trip you would be interested in taking. We reserve the right to cancel any trips if there is insufficient interest.

MEALS

Meals are available at the Holmes Student Center and at many local restaurants. A flyer with the names and addresses of local restaurants will be available at the meeting.

STUDENT AWARDS

The North-Central Section will award \$100 to the best paper written and delivered exclusively by a student.

TRAVEL

DeKalb is located about 65 miles west of Chicago on Interstate Route 5. Those coming from the west can also use Route 5.

A map with the parking lots marked will be sent to all those who preregister for the conference.

which is the closest lot for those without Northern Illinois University stickers. A bus to campus runs past this parking lot every 15 minutes during the day.

For those flying into O'Hare Airport on Wednesday, April 24, there will be a shuttle bus waiting at 5:00 p.m. outside the lower baggage level of the United Airways Terminal.

(continued on page 16)

PREREGISTRATION FORM

North-Central Section, GSA, Annual Meeting
April 25-26, 1985
DeKalb, Illinois

PRINT OR TYPE

Name
Registered as: Professional Student Spouse/Guest
Spouse/Guest name for badge
Affiliation (abbreviate for name tag)
Professional address
City, State, Zip
Phone: Business Home
GSA member yes no GSA student associate yes no Speaker yes no
Enclosed is a check or money order (U.S. funds) payable to Northern Illinois University in the amount of \$ for

Table with registration fees: Professional preregistration (\$25.00), Student preregistration (\$8.00), Spouse/Guest registration (\$8.00), Annual banquet (\$10.00), Paleontological Society luncheon (\$7.25), Shuttle bus services (\$6.00).

ALL FIELD-TRIP REGISTRANTS MUST ALSO PREREGISTER FOR THE GENERAL MEETING

Field Trips

Registration deadline: April 12

Table with field trip details: Depositional Environments and Correlation Problems (\$25.00), Silurian Geology (\$25.00), Early Pennsylvanian Paleotopography (\$25.00), Geological Investigation of the Low-level Nuclear Waste Disposal Site (\$25.00), Thornton Quarry Reef (No chg).

For registration discounts, mail this Preregistration Form by March 22, 1985 to

Northern Illinois University
College of Continuing Education
DeKalb, IL 60115-9984
Attn: Deborah Booth

NORTH-CENTRAL SECTION (continued from page 15)

If you are flying into O'Hare and would not find the 5:00 p.m. shuttle bus convenient, you can arrange for a limousine by calling the DeKalb-O'Hare Limousine Service at (815) 758-0631. The cost of a limousine to or from O'Hare is \$30 for one person, \$25 for two or more.

HOUSING

We urge conference participants who know they will be staying overnight to make early hotel arrangements, as space in DeKalb is somewhat limited. Please, too, be willing to share rooms whenever possible for the same reason.

The Holmes Student Center, site of the meeting, has 80 hotel rooms, all of which have two beds, and all of which are currently available for the GSA meeting. Cost is about \$25 for a single and about \$30 for a double. Please indicate on the Room Reservation Form if you want a room in the Holmes Student Center and whether you would be willing to share. Return this form with the Preregistration Form to the College of Continuing Education.

We have also reserved rooms at several hotels (see list). Both the Holiday Inn and Motel 6 are within walking distance. To make reservations, call the hotel and mention that you will be attending the GSA meeting. Again, space is limited and you are urged to be willing to share rooms and to make reservations as soon as possible.

Holiday Inn (\$29-\$49 plus tax)
1212 W. Lincoln Highway
DeKalb, IL 60115
(815) 758-8661

Georgetown Motel (\$23-\$28 plus tax)
1321 W. Lincoln Highway
DeKalb, IL 60115
(815) 756-1451

Motel 6 (prepayment necessary) (\$19-\$23 plus tax)
1116 W. Lincoln Highway
DeKalb, IL 60115
(815) 756-6605

DeKalb Motel (prepayment necessary) (\$21-\$24 plus tax)
1815 E. Lincoln Highway
DeKalb, IL 60115
(815) 756-5411

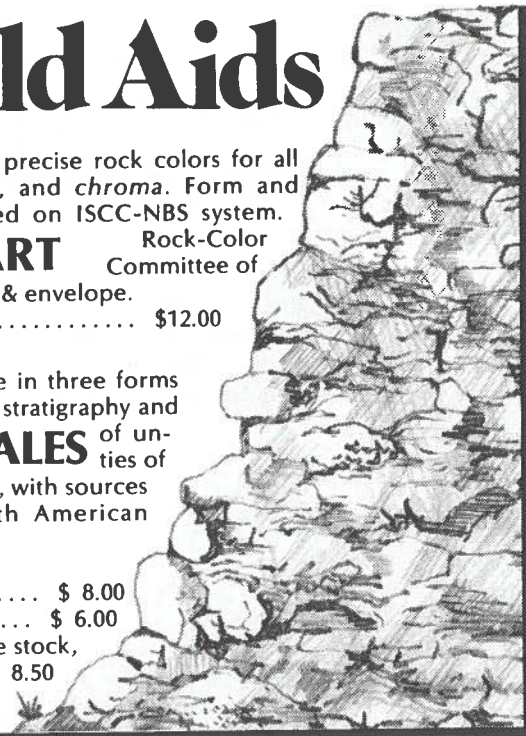
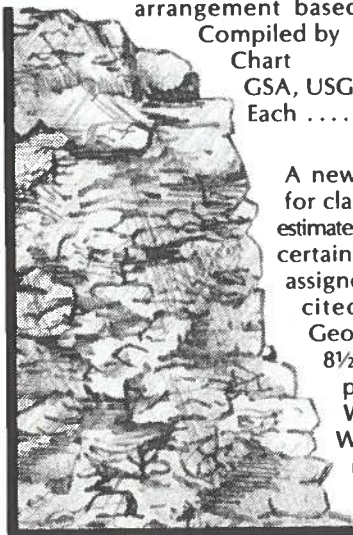
Stratford Inn (\$31-\$54 plus tax)
State and California
Sycamore, IL 60178
(815) 895-5315

Golden Harvest (\$19-\$24)
Sycamore Road
DeKalb, IL 60115
(815) 758-3482

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North-Central Section, GSA, April 25-26, 1985

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DeKalb, IL 60115-9984
Attn: Deborah Booth

single room _____

double room _____

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departure date _____ time _____

(check out time is 1 p.m.)

I wish to share a double with _____

Please reserve for

Name _____

Street _____

City _____

State _____ Zip _____ Phone () _____

(separate reservation form for each)

with any registrant _____

SEND THIS FORM TO THE COLLEGE OF CONTINUING EDUCATION WITH PREREGISTRATION. DO NOT SEND A DEPOSIT. ROOMS WILL BE HELD FOR THIS MEETING UNTIL APRIL 15, 1985.

FIELD TRIPS

All field trip participants must preregister. **Registration deadline is April 12.** Trips will depart from and return to the Carroll Avenue side of the Holmes Student Center.

1. **Depositional Environments and Correlation Problems of the Wedron Formation (Wisconsinan).** Saturday, April 27. Leaders: W. Hilton Johnson, Ardith Hansel, Leon Follmer, Betty Socha, and John M. Masters. Departs at 7:30 a.m., returns at about 5:00 p.m. The trip will examine the Wedron Formation at its type section and in immediately adjacent areas of northeastern Illinois. Emphasis will be on mechanisms of till deposition and methods by which units may be traced away from the type section. **Limit: 40. Cost: \$25,** includes transportation, box lunch, refreshments, and guidebook.
2. **Silurian Geology and the Ordovician/Silurian Unconformity along the Des Plaines River Valley, Northeastern Illinois.** Saturday, April 27. Leaders: Don Mikulic, Mike Sargent, Rod Norby, and Dennis Kolata. Departs at 7:30 a.m., returns at about 8:00 p.m. The trip will examine the section from the Maquoketa Group (Ordovician) through the Racine Formation (Silurian). Special topics include Silurian reef development, conodont biostratigraphy, character of the Ordovician/Silurian unconformity, and structural character of the Sandwich Fault Zone. **Limit: 40. Cost: \$25,** includes transportation, box lunch, refreshments, and guidebook.

3. **Early Pennsylvanian Paleotopography and Depositional Environments, Rock County, Illinois.** Saturday, April 27. Leaders: Richard L. Leary and C. Brian Trask. Departs at 7:30 a.m., returns at about 6:00 p.m. The trip will examine the sub-Pennsylvanian unconformity and lower Pennsylvanian section along the northwest edge of the Illinois Basin. Emphases will include Early Pennsylvanian floral remains. **Limit: 40. Cost: \$25,** includes transportation, box lunch, refreshments, and guidebook.
4. **Geological Investigation of the Low-level Nuclear Waste Disposal Site at Sheffield, Illinois.** Saturday, April 27. Leaders: R. W. Healy, John Gray, and Rob Striegl. Departs at 8:00 a.m., returns at about 5:00 p.m. The trip will examine instrumentation and techniques used by the U.S. Geological Survey to study subsurface water, gas, and radionuclide movement, surface runoff, and surface sediment transport at the famous Sheffield waste disposal site. **Limit: 40. Cost: \$25,** includes transportation, box lunch, refreshments, and guidebook.
5. An informal half-day field trip to the **Thornton Quarry Reef (Silurian)** will be on Sunday, April 28, if there is sufficient interest. Contact Don Mikulic, Illinois State Geological Survey, 615 East Peabody Drive, Champaign, IL 61820, (217) 344-1481, for further information.

USGS Solicits Research Proposals

The U.S. Geological Survey invites proposals for research contracts and grants under the continuing Earthquake Hazard Reduction Program. The proposed research must be directed toward the goal of identifying, evaluating, and characterizing the immediate and long-term seismic hazard. Program objectives and tasks required to achieve those objectives are described in Proposal Information Package No. RFP-1586.

Written inquiries concerning this program, and requests for Proposals Information Package No. RFP-1586, should be addressed to: Contracting Officer, U.S. Geological Survey, Mail Stop 285, 345 Middlefield Road, Menlo Park, CA 94025.

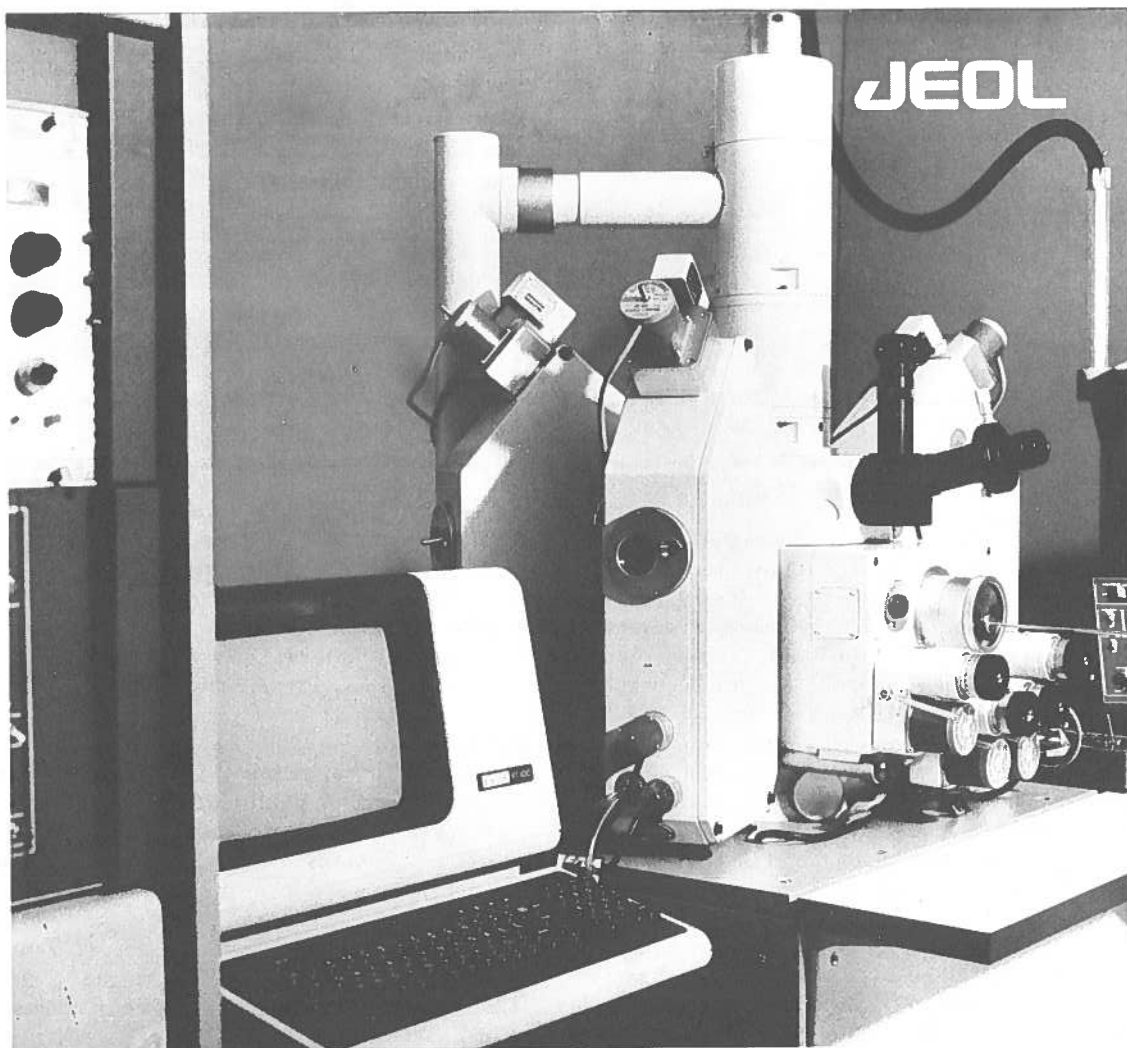
Proposals are due in early February 1985. It is anticipated that funding of selected programs will start on or after October 1, 1985.

PEOPLE

GSA Fellow **Arden L. Albee** has been named dean of graduate studies at the California Institute of Technology.

Member **Gary B. Glass**, State Geologist/Director, Wyoming Geological Survey, has been elected 1985-1986 editor of the American Institute of Professional Geologists (AIPG). Member **Travis H. Hughes**, consulting geologist and vice-president of P.E. LaMoreaux & Associates, Tuscaloosa, Alabama, was voted AIPG president-elect.

Fellow **Ihsan Ketin**, professor emeritus, Technical University of Istanbul, has been elected an honorary fellow of the Geological Society of London.



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Brian J. Skinner



W. Gary Ernst



M. Gordon Wolman



Robert L. Fuchs

GSA Officers and Councilors for 1985

PRESIDENT

Brian J. Skinner

b. Wallaroo, S. Australia, 12-15-28; natl. U.S.; m. 54; c. 3. **GEOCHEMISTRY, ECONOMIC GEOLOGY.** *Educ.*: Univ. Adelaide, BSc, 50; Harvard Univ., AM, 52, PhD, 55. *Prof. Exp.*: lectr. in crystallog., Univ. Adelaide, 55-58; res. geol., 58-62, chief Br. Exp. Geochem. & Mineral., 62-66 U.S. Geol. Surv.; prof. geol. & geophys., 66-, chmn. dept. geol. & geophys., 67-73. **EUGENE HIGGINS PROF. YALE UNIV., 72-**. *Concurrent pos.*: mem. Lunar Sci. Plan. Team, 65-70; exec. comm. Div. Earth Sci. NRC, 66-69; Guggenheim fel., 69-70; ed. *Econ. Geol.*, 70-; chmn. Bd. of Overseers, *Am. Journal of Science*, 72-; chmn. Comm. Mineral Resources and the Environ., NAS-NRC, 73-75; ed. bd. *Am. Scientist*, 74-; USNC Geol., 74-77; McKinstry Memorial lectr. Harvard Univ., 78; duToit Memorial lectr. S. Africa, 79; chmn. Panel Mineral Resources, Continental Scientific Drilling Comm., 80-81, mem. 82-; Soc. Econ. Geologists medal, 81; Cecil and Ida Green lectr., Univ. British Columbia, 83; Thayer Lindsley Visiting lectr., 83-84. *Honors and Awards*: Assoc. Earth Sci. Eds. Distinguished Contributions Award, 79; *Mem.*: fel. Mineral. Soc. Amer.; Mineral. Soc. Canada (counc., 75-78); Geochem. Soc. (v.-pres., 72, pres., 73); Soc. Econ. Geol.; Geol. Soc. Amer. (counc., 76-78, v.-pres., 84, pres., 85). *Res.*: Phase equilibria in systems containing sulfur; geochemistry of ore deposits. *Mailing address*: Dept. of Geology and Geophysics, Yale University, New Haven, CT 06520. Phone: (203) 436-1073.

VICE-PRESIDENT

W. Gary Ernst

b. St. Louis, MO, 12-14-31; m. 56; c. 4. **PETROLOGY, GEOCHEMISTRY.** *Educ.*: Carleton Coll., BA, 53; Univ. Minnesota, MS, 55; Johns Hopkins Univ., PhD (geol.), 59. *Prof. exp.*: geol. U.S. Geol. Surv. Petrol. Br., 55-56; fel. Geophys. Lab., Johns Hopkins Univ., 58-60; from asst. prof. to assoc. prof., 60-68, chmn. dept. geol., 70-74. **PROF. GEOL. & GEOPHYS. UNIV. CALIF., LOS ANGELES, 68-**, chmn. dept. earth & space sci., 78-82. *Concurrent pos.*: Fulbright fel. Univ. Tokyo, 63; NSF sr. fel. Univ. Basel, 70-71; Guggenheim fel. Swiss Fed. Inst. Technol., 75-76; William Evans visiting prof. Univ. Otago, 82-83; chmn. NRC Bd. on Earth Sci., 84-. *Honors & awards*: Mineral. Soc. Amer. award, 69. *Mem.*: Natl. Acad. Sci.; Am. Assoc. Adv. Sci.; fel. Mineral. Soc. Amer.; Am. Acad. Arts and Sci.; Am. Geophys. Union; Geol. Soc. Amer. (counc., 76-78; v. pres., 85). *Res.*: Igneous and metamorphic petrology; application of theoretical and experimental phase equilibria to geologic problems; plate tectonics. *Mailing address*: Dept. of Earth & Space Sciences, University of California, Los Angeles, CA 90024. Phone: (213) 825-7970.

PAST-PRESIDENT

M. Gordon Wolman

b. Baltimore, MD, 8-16-24; m. 51; c. 4. **GEOLOGY.** *Educ.*: Johns Hopkins Univ., BA, 49; Harvard Univ., MA, 51, PhD (geol.), 53. *Prof. exp.*: geol. U.S. Geol. Surv., 51-58; **PROF. GEOG. 58-**, and **CHMN. DEPT. GEOGRAPHY & ENVIRONMENTAL ENGINEERING, JOHNS HOPKINS UNIV., 68-**. *Concurrent pos.*: Exec. Comm. Div. Earth Sci., 66-68, 72-74, Comm. on Water, 65-68, Commission on Resources and Environ., 73-75, NRC-NAS; chmn. Natl. Comm. on Water Quality Policy, 74-76, NRC/NAS/NAE; chmn. Bd. of Resources for the Future, 78-83. *Honors and awards*: Assoc. Amer. Geogr. Meritorious Contribution Award, 72. *Mem.*: fel. Amer. Acad. Arts and Sciences; fel. Geol. Soc. Amer. (counc., 77-79; v.-pres., 83, pres., 84); Soc.

Econ. Paleont. and Mineral.; Amer. Geophys. Union (Hydrology sec. pres., 70-72); Assoc. Amer. Geogr.; Amer. Geogr. Soc. (counc., 66-70); fel. Am. Assoc. Adv. Sci. *Res.*: Geomorphology, sedimentation, fluvial processes, water quality, environmental processes. *Mailing address*: Dept. of Geography & Environmental Engineering, Johns Hopkins University, Baltimore, MD 21218. Phone: (301) 338-7090.

TREASURER

Robert L. Fuchs

b. Bay Shore, NY, 12-7-29; m. 53; c. 2. **GEOLOGY.** *Educ.*: Cornell Univ., BA, 51; Univ. Illinois, MS, 52. *Mil. serv.*: U.S. Navy. *Prof. exp.*: Area expl. supervisor, analyst, staff geol., party chief, jr. geol., Mobil Oil, NY, Louisiana, Venezuela, Libya, 52-65; dir. programs support Flow Labs., Inc., 65-66; pres., founder, dir. Con-Serv Corp. & Automation Institute, 66-69; sr. v.-pres., Intercontinental Energy Corp., 69-71; pres., dir., Tioga Land Co., Inc., 81-; pres., dir., Sheffield Explor. Co., Inc., 81-; dir. Canyon Resources Corp., 80-; dir. Sundance Oil Co., 82-; **PRES., FOUNDER, DIR. GEOSYSTEMS CORP., 71-**. *Mem.*: Am. Assoc. Petrol. Geol., Energy Minerals Div. (pres., 81-82); Am. Inst. Prof. Geol.; Petrol. Explor. Soc. NY (pres., 73); Am. Inst. Min. Eng.; fel. Geol. Soc. Amer. (treasurer, 83-); Geol. Soc. Amer. Foundation (trustee, v.-chmn., 81-82); Canadian Soc. Petrol. Geol.; Geothermal Resources Council; Soc. Econ. Paleont. and Mineral.; Natl. Assoc. Petrol. Investment Analysts. *Res.*: Natural resource exploration, technical analytical exploration management, venture management, asset management, economic geology of petroleum. *Mailing address*: Geosystems Corp., 1 Barclay Plaza, Suite 720, 1675 Larimer St., Denver, CO 80202. Phone: (303) 571-0885.

COUNCILOR 1983-1985

Maria Luisa B. Crawford

b. Beverly, MA, 7-18-39; m. 63. **PETROLOGY, MINERALOGY.** *Educ.*: Bryn Mawr Coll., BA, 60; Univ. Calif., Berkeley, PhD (geol.), 65. *Prof. exp.*: asst. prof., 65-73, assoc. prof., 73-79. **PROF. GEOL., 79-**, **DEPT. CHMN., 76-**, **BRYN MAWR COLL. Concurrent pos.**: USNC Geochem., 79-82; Women GeoSciences Comm., 73-77, chmn. 76-77. *Educ. Comm.* 74-76, *Nom. Comm.*, 78-79, *Amer. Geol. Inst.*; advisor Assoc. Women Geosci. Found., 84-86. *Mem.*: fel. Geol. Soc. Amer. (counc., 83-85); fel. Mineral. Soc. Amer.; Mineral. Assoc. Canada; Philadelphia Geol. Soc.; Friends of Mineralogy; Norweg. Geol. Soc.; Amer. Geophys. Union; Amer. Women in Sci. *Res.*: Petrology, mineralogy, and geochemistry of metamorphic and igneous rocks; fluid inclusion studies. *Mailing address*: Dept. of Geology, Bryn Mawr College, Bryn Mawr, PA 19010. Phone: (215) 645-5111.

COUNCILOR 1983-1985

Doris M. Curtis

b. Brooklyn, NY, 1-12-14. **GEOLOGY.** *Educ.*: Brooklyn Coll., BA, 33; Columbia Univ., MA, 34, PhD (geol.), 49. *Prof. exp.*: paleontologist, stratigrapher, geologist Shell Oil Co., 41-49; from asst. prof. to assoc. prof., geol., Univ. Houston, 50-52; assoc. res. geol. Scripps Inst. Oceanog., 52-54; from asst. prof. to assoc. prof., geol., Univ. Oklahoma, 54-59; sr. geol., staff geol. Shell Oil Co., 59-79; **PARTNER CURTIS AND ECHOLS, GEOLOGICAL CONSULTANTS, 79-**; **ADJUNCT PROF. GEOL. RICE UNIV., 80-**. *Concurrent*

(continued on page 20)

Officers and Councilors for 1985

(continued from page 19)

pos.: pres. 80-81, Amer. Geol. Inst.; Sci. Comm. Intl. Geol. Correlation Prog. UNESCO-IUGS, 80-; USNC Geol., 79-82 (chmn. 81-82), Comm. on Global and Intl. Geol., Earth Sci. Bd., 82-, NAS. *Mem.*: fel. Geol. Soc. Amer. (counc., 83-85); fel. Amer. Assoc. Adv. Sci. (chmn., Sec. E, 80); hon. mem. Soc. Econ. Paleont. and Mineral. (sec.-treas., 64-66, pres., 78-79); hon. mem. Amer. Assoc. Petrol. Geol.; Amer. Inst. Prof. Geol.; Intl. Assoc. Sedimentol. Res.; Stratigraphy, sedimentology, petroleum geology, basin analysis. *Mailing address*: Curtis and Echols, Geological Consultants, 800 Anderson, Bellaire, TX 77401. Phone: (713) 661-7245.

COUNCILOR 1983-1985

George A. Thompson

b. Swissvale, PA, 6-5-19; m. 44; c. 3. GEOPHYSICS, GEOLOGY. *Educ.*: Pennsylvania State Univ., BS, 41; Massachusetts Inst. Technol., MS, 42; Stanford Univ., PhD (geol.), 49. *Mil. serv.*: USNR, 44-46. *Prof. exp.*: geol., geophys., U.S. Geol. Survey, 42-76; from asst. prof. to assoc. prof., 49-60, chmn. geol. dept., 79-82. PROF. GEOPHYS., 60-, CHMN. GEOPHYSICS DEPT., 67-, OTTO N. MILLER PROF. EARTH SCI., 80-, STANFORD UNIV. *Concurrent pos.*: NSF postdoctoral fel., 56-57; Guggenheim fel., 63-64. *Honors and awards*: G.K. Gilbert award seismic geol., 64; George P. Woollard award, 83. *Mem.*: fel. Amer. Assoc. Adv. Sci.; fel. Geol. Soc. Amer. (counc., 83-85); Am. Geophys. Union; Seismol. Soc. Amer.; Soc. Explr. Geophys.; Soc. Econ. Geol. Res.: Structure and geophysics of Basin Range Province: crust-mantle structure; lunar traverse gravity experiment; geophysics of ultramafic rocks; geology of quicksilver deposits. *Mailing address*: Dept. of Geophysics, Stanford University, Stanford, CA 94305. Phone: (415) 497-3714.

COUNCILOR 1983-1985

Peter J. Wyllie

b. London, England, 2-8-30; m. 56; c. 3. GEOLOGY, GEOCHEMISTRY. *Educ.*: Univ. St. Andrews, BSc., 52 and 55, PhD, 58. Hon. degrees: Univ. St. Andrews, DSc, 74. *Prof. exp.*: geol., Brit. N. Greenland Exped., 52-54; asst. lectr. geol., Univ. St. Andrews, 55-56; asst. geochem., 56-58, asst. prof., 58-59, Pennsylvania State Univ.; res. fel., 59-60, lectr. exp. petrol., 60-61, Leeds Univ.; assoc. prof. petrol., 61-65, Pennsylvania State Univ.; prof. petrol., geochem., 65-83, master of coll. and assoc. dean phys. sci. div., 72-73, Homer J. Livingston prof., 78-83, chmn. dept. geophys. sci., 79-82, Univ. Chicago; CHMN. DIV. GEOL. & PLANETARY SCI., CALIFORNIA INST. TECHNOLOGY, 83-. *Concurrent pos.*: Int. Commission Exp. Petrol. at High Pressures and Temperatures, 71-, chmn., 76-80; adv. panel earth sci., NSF, 75-78; USNC Geol., 78-82; chmn. earth sci. div. adv. comm., NSF, 79-82; USNC for IUGG, 80-; USNC Geochem., 81-; Comm. on Ocean Drilling, NRC, 81-82; chmn. ad hoc adv. group, Continental Drilling, NSF, 84; ed.-in-chief *Minerals and Rocks*, Springer-Verlag; ed. Smith-Wyllie series, *Intermediate Geology*; ed. John Wiley, *Geology*, 66-83. *Honors and awards*: Polar Medal for Geol. Surv. and Explr. in Greenland; Mineral. Soc. Amer. award, 65; Quantrell award, 79; elected to NAS, foreign assoc.; Wollaston Medal from Geol. Soc. London, 82; fel. Royal Society of London, 84. *Mem.*: Amer. Geophys. Union; Mineral. Soc. London; Geochem. Soc.; Geol. Soc. Amer. (counc., 83-85); Int. Mineral Assoc. (second v.-pres., 78-82, first v.-pres., 82-86); Mineral. Soc. Amer. (v.-pres., 76-77, pres., 77-78). *Res.*: Igneous and metamorphic petrology; experimental petrology; high-pressure studies on hydrothermal systems; application of phase equilibrium studies to batholiths, andesites, kimberlites, and carbonatites. *Mailing address*: Division of Geological and Planetary Sciences, 170-25, California Institute of Technology, Pasadena, CA 91125. Phone: (818) 356-6108.

COUNCILOR 1984-1986

Charles J. Mankin

b. Dallas, TX, 1-15-32; m. 53; c. 3. GEOLOGY. *Educ.*: Univ. Texas, BS, 54, MA, 55, PhD (geol.), 58. *Prof. exp.*: instr. geol. Univ. Texas, 56-57; asst. prof. California Inst. Technol., 58-59; asst. prof., 59-63, assoc. prof., 63-66, actg. dir. sch. geol. and geophys., 63-64, dir. sch. geol. and geophys., 64-77, PROF. GEOL. UNIV. OKLAHOMA, 64-; DIR. ENERGY RESOURCES INST., 78-; DIR. OKLAHOMA GEOL. SURVEY, 67-. *Concurrent pos.*: mem. Gulf Univ. Res. Consortium-Energy Counc., 74-79, mem. Bd. of Dir., Exec. Comm., 80-84, and Nat. Petrol. Counc.-Exec. Adv. Counc. Nat. Gas Survey, 75; mem. Commission Nat. Resources, NAS-NRC, 77-82, and Bd. on Mineral and Energy Resources, 76- (v.-chmn., 77-80, chmn., 80-); mem. Comm. Phys. Sciences, Math. and Resources, NAS-NRC, 82-; mem. Research Assoc. Prog., 81-. Panel on Earth and Atmos. Sciences (chmn. 82-); mem. USNC Geol., 77-80. *Mem.*: Assoc. Am. State Geol. (pres., 75-76); Am. Assoc. Petrol. Geol.; Am. Inst. Prof. Geol. (v.-pres., 84); Geol. Soc. Amer. (counc., 84-86); Soc. Econ. Paleont. and Mineral. (pres. Mid-Continent Sec., 83). *Res.*: Sedimentary petrology and geochemistry; clay mineralogy. *Mailing address*: Oklahoma

Geological Survey, 830 Van Vleet Oval, Rm. 163, Norman, OK 73019. Phone: (405) 325-3031.

COUNCILOR 1984-1986

James W. H. Monger

b. Reading, England, 9-26-37 (natl. Can. citz., 66); m. 60; c. 4. GEOLOGY. *Educ.*: Reading Univ., BSc, 59; Univ. Kansas, MS, 61; Univ. British Columbia, PhD, 66. *Prof. exp.*: GEOLOGIST, GEOLOGICAL SURVEY CANADA, 65-. *Concurrent pos.*: mem. Canadian Geodynamics subcom., 72-75; assoc. ed. *Canadian Jour. Earth Sci.*, 81-; Am. Assoc. Petrol. Geol. distinguished lectr., 81-82; v.-chmn. WG2 Int. Comm. Lith., 82-. *Mem.*: fel. Geol. Soc. Am. (counc., 84-86); Geol. Assoc. Canada (pres. Cord. Sec., 80-81); Royal Soc. Canada. *Res.*: Cordilleran stratigraphy, structure, tectonics. *Mailing address*: Geological Survey of Canada, 100 West Pender Street, Vancouver, BC, Canada V6B 1R8. Phone: (604) 666-6743.

COUNCILOR 1984-1986

Geoffrey G. Snow

b. Salt Lake City, UT, 8-25-33; m. 84; c. 2. GEOLOGY. *Educ.*: Dartmouth Coll., AB, 55; Univ. Utah, MS, 60; PhD (geol.), 63. *Prof. exp.*: Dow Chemical Co., 63-67; Climax Molybdenum Co., 67-69; Midwest Oil Corp., 69-72; v.-pres. Exploration, 72-78, PRES. NORANDA EXPLORATION, INC., 78-. *Concurrent pos.*: Seminar leader, university-sponsored program, "Management of Exploration"; sr. author (w/B.W. Mackenzie) of paper "The Environment of Exploration: Economic, Organizational, and Society Constraints," pub. 75th Anniv. Vol. Economic Geology, 81. *Mem.*: Geol. Soc. Amer. (counc., 84-86); Soc. Econ. Geol.; AIME; Canadian Inst. Mining and Metallurgy; Colorado Mining Assoc. (past dir.); Northwest Mining Assoc. (trustee); Minerals Exploration Coalition (founder, past pres., past dir.); Colorado Scientific Soc. (councilor). *Res.*: Mineral exploration. *Mailing address*: Noranda Exploration, Inc., 12640 W. Cedar Dr., P.O. Box 15638, Denver, CO 80215. Phone: (303) 988-6456.

COUNCILOR 1984-1986

William A. Thomas

b. Berea, KY, 7-23-36; m. 57; c. 2. GEOLOGY. *Educ.*: Univ. Kentucky, BS, 56, MS, 57; Virginia Polytech. Inst., PhD (geol.), 60. *Prof. exp.*: geol. California Co., 59-63; from assoc. prof. to prof. geol., 63-70, chmn. dept., 67-70, Birmingham-Southern Coll.; assoc. prof., 70-72, chmn. dept., 71-72, Queens Coll., NY; prof. geol. and chmn. dept., Georgia State Univ., 72-79; PROF. GEOL., UNIV. ALABAMA, 79-. *Concurrent pos.*: ed. *GSA Bulletin. Mem.*: fel. Geol. Soc. Amer. (counc., 84-86); Am. Assoc. Petrol. Geol.; Soc. Econ. Paleont. and Mineral. Res.: Tectonics and tectonic framework of sedimentation; stratigraphic and structural continuity of Appalachian and Ouachita mountains; stratigraphy of Gulf Coastal Plain; Appalachian structure and stratigraphy; Mississippian stratigraphy. *Mailing address*: Dept. of Geology, University of Alabama, P.O. Box 1945, Tuscaloosa, AL 35486. Phone: (205) 348-5095.

COUNCILOR 1985-1987

Samuel S. Adams

b. Lincoln, NH, 1-26-37; m. 58; c. 3. ECONOMIC GEOLOGY. *Educ.*: Dartmouth Coll., AB, 59, AM, 61; Harvard Univ., PhD (geol.), 67. *Prof. exp.*: Mine geol., explor. geol. International Minerals and Chemical Corp., 61-67; geol., chief geol. uranium and aluminum, v.-pres. The Anaconda Co., 67-77; v.-pres. Erteck Rocky Mtn., Inc., 80-82; CONSULTING GEOLOGIST ADAMS AND ASSOC., 77-; PRES. CARCAJOU EXPLORATION CO., 83-. *Concurrent pos.*: Thayer Lindsley lectr., 78-79; Geol. Sci. Bd., NAS, 80-83. *Mem.*: Soc. Econ. Geol. (counc., 83-85, Res. Comm., 82-84, Comm. on Committees, 81); fel. Geol. Soc. Amer. (counc., 85-87); Am. Inst. Prof. Geol.; Am. Assoc. Petrol. Geol.; Am. Assoc. Adv. Sci. *Res.*: Exploration and mining geology; industrial and metallic mineral deposits in sediments; integrated data-process-recognition criteria mineral deposit models for exploration, deposit evaluation, resource studies, and research. *Mailing address*: Adams and Associates, 3030 Third St., Boulder, CO 80302. Phone: (303) 447-9093.

COUNCILOR 1985-1987

David E. Dunn

b. Dallas, TX, 10-13-35; m. 58; c. 2. ROCK MECHANICS, STRUCTURAL GEOLOGY. *Educ.*: Southern Methodist Univ., BS, 57, MS, 59; Univ. Texas, PhD (geol.), 64. *Prof. exp.*: asst. prof. struct. geol. Texas Tech. Coll., 62-63; visiting asst. prof. Univ. North Carolina, Chapel Hill, 63-64, from asst. prof. to assoc. prof., 64-73, actg. chmn. dept. geol., 67, asst. chmn., 66-69, prof. struct. geol., 73-79; prof. Earth Sci. and dean Coll. Sci., Univ. New Orleans, 79-84; PROF. GEOSCIENCES AND DEAN NATURAL SCI. & MATH., UNIV. TEXAS AT DALLAS, 84-. *Concurrent pos.*: consult. geol., 80-84; Louisi-

(continued on page 21)

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ana Univ. Marine Consortium, 79-84, chmn., 81-83. *Mem.*: Am. Assoc. Adv. Sci.; Am. Geophys. Union; Am. Inst. Prof. Geol.; Geol. Soc. Amer. (counc., 85-87); Natl. Assoc. Geol. Teachers. *Res.*: Deformation in orogenic belts; rock mechanics. *Mailing address*: Natural Sci. & Math., Univ. of Texas at Dallas, Box 830688, Richardson, TX 75083-0688. Phone: (214) 690-2516.

COUNCILOR 1985-1987

Melvin C. Schroeder

b. Saskatoon, Canada, 7-19-17; natl. U.S.; m. 82; c. 2. **GROUNDWATER GEOLOGY.** *Educ.*: Washington State Univ., BS, 42, MS, 47, PhD, 53 (geol.). *Mil. serv.*: U.S. Air Corps, 43-46 (radar). *Prof. exp.*: miner, Idaho mines, 41; survey crew United Engr. and Found., 42; summer field asst. Washington Div. Mines and Geol., 46-48; geol. U.S. Geol. Surv. Ground Water Br., 49-55; from asst. prof. to assoc. prof., 54-63. **PROF. GEOL. TEXAS A&M UNIV.**, 63-. *Mem.*: Am. Assoc. Petrol. Geol.; fel., Geol. Soc. Amer. (counc., 85-87); Natl.

Assoc. Geol. Teachers (Texas Sect., sec.-treas., 66, v.-pres., 67, pres., 68). *Honors & awards*: Phi Kappa Phi; fel. Texas Acad. Sci.; Sigma Gamma Epsilon; Sigma Xi; hon. life mem. Sci. Teachers Assoc. Texas. *Res.*: ground-water management, radio-hydrology. *Mailing address*: Dept. of Geology, Texas A&M University, College Station, TX 77843. Phone: (409) 845-8973.

COUNCILOR 1985-1987

Lee J. Suttner

b. Hilbert, WI, 6-3-39; m. 65; c. 2. **GEOLOGY.** *Educ.*: Univ. Notre Dame, BS, 61; Univ. Wisconsin, MS, 63, PhD (geol.), 66. *Prof. exp.*: from asst. prof. to assoc. prof. geol., 66-78, **PROF. GEOL. INDIANA UNIV., BLOOMINGTON, 78-**. *Mem.*: Natl. Assoc. Geol. Teachers (v.-pres., 80-81, pres., 81-82); Internat. Assoc. Sediment.; Soc. Econ. Paleont. and Mineral. (Great Lakes Sect. pres., 77); fel. Geol. Soc. Amer. (counc., 85-87). *Concurrent pos.*: assoc. ed. *Jour. Sed. Petrology*, 80-. *Res.*: Sedimentology and sedimentary petrology. *Mailing address*: Dept. of Geology, Indiana University at Bloomington, Bloomington, IN 47401. Phone: (812) 335-4957.

Membership Campaign Update

AND THE MUG-A-MEMBER WINNERS ARE . . .

by Nancy Reed

Richard A. Paull, GSA Fellow and professor in the geological sciences department at the University of Wisconsin—Milwaukee, is the grand prize winner in the "Every-Member-Get-A-Member" membership campaign drawing. The drawing was part of the Awards Luncheon during the 97th Annual Meeting in Reno, Nevada. Dick's support of GSA membership efforts as chairman of the Membership Committee from 1978 to 1980 and as an active supporter of the Membership Employment Forum since 1978 makes him the ideal winner of this prize.

Dick's grand prize is an expense-paid trip for him and his wife Rachel to the 1985 GSA meeting in Orlando. The prize includes air transportation, lodging at one of the meeting's officially designated hotels, meeting registration, and \$150 to cover subsistence costs.

This package was intended for the winner and his/her spouse or guest. With Dick Paull as the winner, there is an extra bonus. His wife Rachel is also a GSA Fellow; we will have two geologists attend the 98th Annual Meeting on one prize. Dick's attendance in Orlando will continue his unbelievable GSA meeting attendance record; he has missed only three Annual Meetings since 1965!

The drawing for second and third prizes was held at GSA headquarters. Albert G. Roussin of Brookfield, Illinois, and David J. Pertl of Amarillo, Texas, are second-prize winners. Both are

GSA Student Associates. Each received \$150 gift certificates for GSA publications. The three third-prize winners—Louis Pavlides of College Park, Maryland, R. Morgan Button of Oklahoma City, Oklahoma, and James I. Lyons, Jr., of Littleton, Colorado—each receive free membership dues for 1985.

Although GSA can recognize only a handful of successful recruiters, the Council and Executive Committee thank every member who "mugged" a new member. As of November 26, GSA has 1,145 new members who were recruited during the first phase of the "Every-Member-Get-A-Member" campaign. The Cordilleran and Northeastern sections have recruited the most new members to date. Cliff Hopson, Chairman of the Committee on Research Grants, has recruited nine new members. Cliff will have quite a mug collection!

The real winner of this membership campaign is our Society. As Dick Paull said, "I don't think most of us did it for the trip. Never in my wildest dreams did I imagine that I would win. The best thing about the 'Mug-A-Member' membership campaign is how successful it has been. It gave many of us the impetus to recruit the new members we knew GSA should have."

Watch for a complete report on the first phase of our "Every-Member-Get-A-Member" campaign in an upcoming issue of *GSA News & Information*.

HELP DIRECT GSA'S FUTURE

The GSA Committee on Nominations requests your help in compiling a list of GSA members qualified for service as officers and councilors of the Society. The committee requests that each nomination be accompanied by basic data and a description of the qualifications of the individual for the position recommended (vice-president; treasurer, councilor).

NOMINATIONS MUST BE RECEIVED at GSA headquarters no later than **FEBRUARY 15, 1985.**

Please send nominations and backup material to
Administrative Department
Geological Society of America
P.O. Box 9140
Boulder, CO 80301.

MEETINGS

1985

International Association of Hydrogeologists 17th International Congress, Hydrogeology of Rocks of Low Permeability, January 7-12, 1985, Tucson, Arizona. Information: Eugene S. Simpson, Hydrology & Water Resources, University of Arizona, Tucson, AZ 85721.

U.S. Geological Survey Forum on Research in Mineral Resources, February 6-7, 1985, Denver, Colorado. Information: William R. Miller, USGS, P.O. Box 25046, M.S. 912, Federal Center, Denver, CO 80225; (303) 236-5558.

Salts and Brines '85, February 24-28, 1985, New York. Information: William C. Larson, Twin Cities Research Center, Bureau of Mines, 5629 Minnehaha Ave. S., Minneapolis, MN 55417; (612) 725-3464.

American Institute of Mining, Metallurgical and Petroleum Engineers Annual Meeting, February 24-28, 1985, New York. Information: Joan M. Andelman, AIME, 345 E. 47th St., New York, NY 10017; (212) 705-7677.

Geology of the Oceans, Geologische Vereinigung 75th annual meeting, February 27-March 2, 1985. Information: Michael Sarnthein, Geologisch-Palaeontologisches Institut, Universitaet, Olshausenstrasse, D-2300 Kiel, Federal Republic of Germany.

Paul F. Kerr Memorial Symposium, February 28, 1985, New York. Information: Otto C. Kopp, Dept. of Geological Sciences, University of Tennessee, Knoxville, TN 37996-1410.

American Association of Petroleum Geologists Annual Convention, March 24-27, 1985, New Orleans, Louisiana. Information: Kathy Watson, AAPG, P.O. Box 979, Tulsa, OK 74101; (918) 584-2555.

Symposium on Organics and Ore Deposits, April 25-26, 1985, Denver, Colorado. Information: Denver Region Exploration Geologists Society, 5025 Ward Rd., Suite 508, Wheat Ridge, CO 80033.

IGCP Field Workshop and Seminar on Neogene Phosphorites of the Southeastern United States, May 6-15, 1985, North Carolina and Florida. Information: Stanley R. Riggs, Dept. of Geology, East Carolina University, Greenville, NC 27834; (919) 757-6360.

IGCP Symposium on Genesis of Neogene to Modern Phosphorites, May 16-17, 1985, Tallahassee, Florida. Information: William C. Burnett, Dept. of Oceanography, Florida State University, Tallahassee, FL 32306; (904) 644-6700.

Symposium on Neutral Models in Evolutionary Biology, May 10-11, 1985, Chicago, Illinois. Information: Matthew H. Nitecki, Dept. of Geology, Field Museum of Natural History, Roosevelt Rd. at Lake Shore Dr., Chicago, IL 60605; (312) 922-9410.

Geological Association of Canada-Mineralogical Association of Canada Annual Meeting, May 15-18, 1985, Fredericton, New Brunswick, Canada. Information: H. W. Van de Poll, Dept. of Geology, University of New Brunswick, P.O. Box 4400, Fredericton, N.B., Canada E3B 5A3; (506) 453-4803; Telex 014-46-202.

Symposium on Degradation of Materials Due to Acid Rain, June 17-19, 1985, Arlington, Virginia. Information: Bruce R. Doe, U.S. Department of the Interior, National Park Service, Washington, DC 20240.

26th U.S. Symposium on Rock Mechanics, June 26-28, 1985, Rapid City, South Dakota. Information: Eileen Ashworth, Dept. of Mining Engineering, South Dakota School of Mines and Technology, Rapid City, SD 57701-3995; (605) 394-2344.

International Symposium on Karst Water Resources, July 7-19, 1985, Ankara and Antalya, Turkey. Information: A. Ivan Johnson, Woodward-Clyde Consultants, 7600 East Orchard Rd., Harlequin Plaza North, Englewood, CO 80111.

Conference on Stable Isotopes and Fluid Processes in Mineralization, July 10-12, 1985, Brisbane, Australia. Information: John M.W. Rynn, Dept. of Geology and Mineralogy, University of Queensland, St. Lucia, Queensland 4067, Australia.

International Estuarine Conference, July 28-August 2, 1985, Durham, New Hampshire. Information: Bjorn Kjerfve, Belle W. Baruch Institute for Marine Biology and Coastal Research, University of South Carolina, Columbia, SC 29208; (803) 777-4529. Abstracts deadline is February 18, 1985.

International Clay Conference, July 28-August 2, 1985, Denver, Colorado. Information: Western Experience, Ltd., 2450 Central Ave., P2, Boulder, CO 80302; (303) 449-3352.

Zeolite '85, August 12-16, 1985, Budapest, Hungary. Information: J. Engelhardt, Central Research Institute for Chemistry, Hungarian Academy of Sciences, H-1525 Budapest, P.O. Box 17, Hungary.

Sixth Gondwana Symposium, August 19-23, 1985, Columbus, Ohio. Information: Sixth Gondwana Symposium, Institute of Polar Studies, Ohio State University, Columbus, OH 43210; (614) 422-5431.

IVth Chilean Geological Congress, August 19-24, 1985, Antofagasta, Chile. Information: Organizing Committee, IVth Chilean Geological Congress, Dept. of Geosciences, Universidad del Norte, Casilla 1280, Antofagasta, Chile; phone 222040-205.

Symposium on Modern and Ancient Clastic Tidal Deposits, August 26-28, 1985, Utrecht, Netherlands. Information: S. D. Nio, Comparative Sedimentology Division, University of Utrecht, Budapestlaan 4, 3584 CD Utrecht, Netherlands; telephone 030/53.51.21.

Tectonostratigraphic Terranes of Circum-Pacific Orogenic Belts and Their Relationships to Energy and Mineral Resources, August 26-29, 1985, Sydney, Australia. Information: Secretary, 3rd Circum-Pacific Terrane Conference, Earth Resources Foundation, Edgeworth David Building, University of Sydney, New South Wales 2006, Australia.

Problems of the Stratigraphy and Paleogeography of Loesses, September 6-10, 1985, Lublin, Poland. Information: Henryk Maruszczak, Department of Physical Geography, University Marie Curie-Sklodowska, Akademicka 19, 20-33 Lublin, Poland.

American Institute of Professional Geologists Annual Meeting, September 17-21, 1985, St. Paul, Minnesota. Information: Robert E. Pendergast, Geotechnical Engineering Corp., 1925 Oakcrest Ave., Roseville, MN 55113; (612) 636-7744.

Second International Mine Water Congress, September 17-21, 1985, Granada, Spain. Information: R. Fernandez Rubio, School of Mines, Technical University of Madrid, Rios Rosas, 21, Madrid 3, Spain.

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MEETINGS

International Symposium on Management of Hazardous Chemical Waste Sites, October 9-10, 1985, Winston-Salem, North Carolina. Information: Norman R. Tilford, Dept. of Geology, Texas A&M University, College Station, TX 77843-3115; (409) 845-9682.

Geological Society of America Annual Meeting, October 28-31, 1985, Orlando, Florida. Information: Anthony F. Randazzo, Dept. of Geology, University of Florida, Gainesville, FL 32611; (904) 392-6127.

1985 Penrose Conferences

Geomorphic and Stratigraphic Indicators of Neogene-Quaternary Climatic Change in Arid and Semiarid Environments, Lake Havasu, Arizona, April 14-19, 1985. Information: John C. Dohrenwend, U.S. Geological Survey, M.S. 41, 345 Middlefield Rd., Menlo Park, CA 94025; (415) 323-8111, ext. 2169.

Terranes in the Circum-Atlantic Paleozoic Orogens, May 27-June 2, 1985, Halifax, Nova Scotia. Information: John D. Keppie, Nova Scotia Department of Mines & Energy, P.O. Box 1087, 1690 Hollis St., Halifax, Nova Scotia, Canada B3J 2X1; (902) 424-5943 or 4015.

1985 GSA Section Meetings

Northeastern Section, March 13-16, 1985, Lancaster, Pennsylvania. Information: William M. Jordan, Dept. Earth Sciences, Millersville University, Millersville, PA 17551; (717) 872-3289.

Southeastern Section, March 20-22, 1985, Knoxville, Tennessee. Information: Kenneth R. Walker, Dept. Geological Sciences, University of Tennessee, Knoxville, TN 37996; (615) 974-5499.

South-Central Section, April 14-16, 1985, Fayetteville, Arkansas. Information: Robert C. Morris, Dept. of Geology, OH 118, University of Arkansas, Fayetteville, AR 72701; (501) 575-3355.

Rocky Mountain Section, April 22-24, 1985, Boise, Idaho. Information: Claude Spinosa, Dept. Geology and Geophysics, Boise State University, Boise, ID 83725; (208) 385-3660.

North-Central Section, April 25-26, 1985, DeKalb, Illinois. Information: Jonathan H. Berg, Dept. Geology, Northern Illinois University, DeKalb, IL 60115; (815) 753-1943.

Cordilleran Section, May 8-10, 1985, Vancouver, British Columbia. Information: W. H. Mathews, Dept. Geological Sciences, University of British Columbia, Vancouver, B.C., Canada V6T 2B4; (604) 228-2624.

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