

GSA NEWS & INFORMATION

Monthly Newsletter of
The Geological Society of America

VOLUME 6, NUMBER 9

SEPTEMBER 1984

GSA Honors Outstanding Scientists

By Dorothy M. Palmer

The Geological Society of America regularly awards two gold medals, the Penrose Medal and the Arthur L. Day Medal, to honor scientists who have achieved special distinction in their contributions to research in geology. Annually, the Society also elects certain internationally outstanding geologists as Honorary Fellows. In addition to these Society-wide awards, the nine GSA divisions give annual awards to individuals for particular achievements within their specialties. The terms of all these awards, as defined by their donors and the divisions, are described below.

Penrose Medal

The Penrose Medal is awarded to an individual in recognition of outstanding original research, contributions, or achievements that mark a decided advance in the science of geology. R.A.F. Penrose, Jr., endowed the award in 1927, to encourage original work in purely scientific geology. Penrose Medalists may or may not be members of the Geological Society of America and may be from any nation. The GSA Council makes the selection.

The award consists of a gold medal, a bronze replica, and the remission of Society dues for life. The deadline for receipt of nominations at headquarters is February 1 each year.

See Call for Nominations for 1985 Penrose and Day Medals, p. 149, for names of recipients to date.

Arthur L. Day Medal

The Arthur L. Day Medal is awarded to an individual for outstanding distinction in contributing to geologic knowledge through the application of physics and chemistry to the solution of geologic problems. Arthur L. Day endowed the award in 1948

to recognize outstanding achievement and to inspire further effort, rather than to reward a distinguished career. The GSA Council selects the medalist.

The award consists of a gold medal, a bronze replica, and the remission of Society dues for life.

The deadline for receipt of nominations at headquarters is February 1 each year.

See Call for Nominations for 1985 Penrose and Day Medals, p. 149, for names of recipients to date.

Honorary Fellows

Honorary Fellows (formerly called Correspondents) are internationally outstanding geologists who have distinguished themselves as geological investigators or who have rendered special service to the Society. Except in exceptional circumstances, the candidates live and work outside of North America. Normally, three are named by the Council annually. The honor was instituted in 1909.

The award consists of an engrossed certificate and life membership in the Society.

Deadline for receipt of nominations at headquarters is February 1 each year.

See Call for Nominations for Honorary Fellows, p. 150, for a list of current Honorary Fellows.

Archaeological Geology Division Award

GSA's Archaeological Geology Division makes this award to an individual who has contributed in an outstanding manner to
(continued on p. 142)



Penrose Medal



Day Medal



GSA Honors (continued from p. 141)

the interdisciplinary field of archaeological geology. The recipient of the award need not be a member of the Geological Society of America or a citizen of the United States. The award, established by the Archaeological Geology Division in 1982, consists of an engrossed certificate and a small pewter Revere bowl.

The deadline for receipt of nominations by the selection committee chairman is February 15 each year.

George R. Rapp, Jr., received the award in 1983. C. Vance Haynes received it in 1984.

Gilbert H. Cady Award

GSA's Coal Geology Division gives this award to an individual for outstanding contributions considered to advance the field of coal geology in North America. Contributions by workers outside of North America deemed to advance coal geology in North America may be considered for the award. This award, established by the Coal Geology Division in 1971, was named in honor of Gilbert H. Cady, one of North America's foremost authorities on the geology of coal.

The award, generally made biennially, consists of an engrossed certificate and a silver tray.

The deadline for receipt of nominations by the selection committee chairman is February 1 each year.

See Call for Nominations for 1985 Cady Award, p. 150, for names of recipients to date.

E. B. Burwell, Jr., Award

This award, by GSA's Engineering Geology Division, is made to the author or authors of a published paper of distinction which advances knowledge concerning principles or practice of engineering geology, or of related fields of applied soil or rock mechanics where the role of geology is emphasized.

The paper constituting the basis of the award must (a) deal with engineering geology or a closely related field, and (b) have been published not more than 5 years prior to its selection. There are no restrictions as to the publisher or publishing agency of the paper. The author or authors of the selected paper need not be a member(s) of the Engineering Geology Division or of the Geological Society of America and need not be a resident(s) or citizen(s) of the United States.

The award, established by the Engineering Geology Division in 1968, honors the memory of one of the founders of the division and a Chief Geologist of the U.S. Army Corps of Engineers. It consists of an engrossed certificate.

The deadline for receipt of nominations by the selection committee chairman is February 1 each year.

Recipients of the Burwell Award to date are Lloyd B. Underwood (1969), Glenn R. Scott and David J. Varnes (1970), Edwin B. Eckel (1971), R. J. Proctor (1972), J. E. Hackett and Murray R. McComas (1973) Robert F. Legget (1974), Erhard M. Winkler (1975), David J. Varnes (1976), Richard E. Goodman (1977), Nicholas R. Barton (1978), John W. Bray and Evert Hoek (1979), Kerry E. Sieh (1980), Allen W. Hatheway and Cole R. McClure, Jr. (1981), F. Lionel Peckover and Douglas R. Piteau (1982), Peter W. Lipman and Donal R. Mullineaux (1983), and Roy E. Hunt (1984).

George P. Woollard Award

This award, by the Geophysics Division, is made to an individual who has contributed in an outstanding manner to geology through the application of the principles and techniques

of geophysics. The recipient of the award may be a citizen of any country and need not be a member of the Geological Society of America. The award, established by the Geophysics Division in 1981, is named in honor of the noted geophysicist, George P. Woollard. It consists of an engrossed certificate.

The deadline for receipt of nominations by the selection committee chairman is February 1 each year.

The award went to George A. Thompson in 1983 and to Manik Talwani in 1984.

History of Geology Award

The History of Geology Division gives this award to an individual for contributions of fundamental importance to the understanding of the history of the geological sciences.

The award, established by the History of Geology Division in 1981, consists of an engrossed certificate and a pewter Revere bowl.

The deadline for receipt of nominations by the selection committee chairman is April 1 each year.

Recipients of the award to date are George W. White (1982), Claude C. Albritton, Jr. (1983), and Mary C. Rabbitt (1984).

O. E. Meinzer Award

The Hydrogeology Division gives this award to the author or authors of a published paper or body of papers of distinction advancing the science of hydrogeology or some related field such as ground-water hydraulics or geochemistry. The paper or body of papers constituting the basis for the award must (a) deal with hydrogeology or a closely related field, and (b) have been published not more than 5 years prior to selection. A single paper or body of papers may be considered more than once any time within the 5-year period. A paper or body of papers prepared by a member of the award selection committee is not eligible for the award. There are no restrictions as to the publishing agency of such a paper or body of papers, and the author or authors need not be a member(s) of the Hydrogeology Division or of the Geological Society of America and need not be a resident(s) or citizen(s) of the United States.

The award, established in 1963, is named for Oscar E. Meinzer, considered the father of the study of ground-water geology in North America. It consists of an engrossed certificate; an engraved, miniature, silver Revere bowl; and possession of a large, silver Revere bowl (a gift of John M. Birdsall) for the year.

The deadline for receipt of nominations by the selection committee chairman is February 1 each year.

Recipients of the Meinzer Award to date are Jozsef Toth (1965), Charles L. McGuinness (1966), Robert W. Stallman (1967), Mahdi S. Hantush (1968), Hilton H. Cooper, Jr. (1969), Victor T. Stringfield (1970), George B. Maxey (1971), Joseph F. Poland and George H. Davis (1972), William Back and Bruce B. Hanshaw

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GSA News & Information

Vol. 6, no. 9

September 1984

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Prepared from contributions from the staff and membership. Executive Director: F. Michael Wahl; Managing Editor: Faith Rogers; Associate Editor: Lee Gladish; Director of Communications: Nancy A. Reed; Production and Advertising Manager: James R. Clark; Marketing/Advertising Assistant: Ann H. Fogel; Assistant Production Manager: Meredith Larson; Production Assistant: June E. Thomas.

PRELIMINARY ANNOUNCEMENT AND CALL FOR PAPERS

NORTHEASTERN SECTION, GSA, 20th Annual Meeting
Lancaster, Pennsylvania
March 13-16, 1985

The Northeastern Section of the Geological Society of America will meet at the Americana Host Farm Resort Motel in Lancaster, Pennsylvania, together with the Eastern Section of the Society of Economic Paleontologists and Mineralogists, the Northeast Section of the Paleontological Society, and the Eastern Section of the National Association of Geology Teachers. The meeting is sponsored by Bloomsburg University, Cheyney University, Franklin and Marshall College, Kutztown University, Millersville University, Shippensburg University, and West Chester University.

CALL FOR PAPERS

Papers are invited for presentation at traditional technical poster sessions as well as symposia. Fifteen minutes for presentation and five minutes for discussion will be the format for the technical sessions. Papers of regional interest to geologists in the northeastern United States, as well as those of general geological interest, will be considered for the program. Poster papers are encouraged. Every attempt will be made to assure that poster sessions will not conflict with related technical sessions. Abstracts for symposia should be submitted directly to the appropriate convener.

SYMPOSIA

The following symposia have been organized or are in the final stages of organization. For further information, contact the convener(s) of individual symposia.

1. **Lacustrine Processes and Sequences.** John F. Hubert, Department of Geology/Geography, University of Massachusetts, Amherst, MA 01003.
2. **Deformation of the Middle Appalachian Foreland: Geometry, Sequence, Environment, Mechanisms.** Richard P. Nickelson, Department of Geology/Geography, Bucknell University, Lewisburg, PA 17837.
3. **The Taconian Flysch Belt of the Appalachians: Problems of Origin and Deformation.** Edward C. Beutner, Department of Geology, Franklin and Marshall College, P.O. Box 3003, Lancaster, PA 17604; Peter T. Lyttle, U.S. Geological Survey, Mail Stop 926, National Center, Reston, VA 22092.
4. **Paleobiomechanics: A Quantitative Approach to the Analysis of Form and Function in Fossils.** John A. Chamberlain, Department of Geology, Brooklyn College, City University of New York, Brooklyn, NY 11210.
5. **Pre-Woodfordian Glacial Geology of Central and Eastern Pennsylvania.** Duane D. Braun, Department of Geography/Earth Science, Bloomsburg University, Bloomsburg, PA 17815; Thomas W. Gardner, Pennsylvania State University, University Park, PA 16802.
6. **Hydrologic Transport of Organic Chemicals: I. Fundamental Processes; II. Case Studies.** Frank J. Wobber, Office of Energy Research, U.S. Department of Energy, Washington, DC 20545; Jeffrey P. Sgambat, Geraghty and Miller, Inc., 844 West Street, Annapolis, MD 20401.

For general information on the symposia, contact
Roger D.K. Thomas, Symposia Chairman
Department of Geology
Franklin and Marshall College
P.O. Box 3003
Lancaster, PA 17604
(717) 291-4135

ABSTRACTS

Abstracts are limited to 250 words and must be submitted camera-ready on the official 1985 abstract form, available from

| | | |
|-------------------------------|----|------------------------------|
| Abstracts Coordinator | or | William Jordan |
| Geological Society of America | | Department of Earth Sciences |
| P.O. Box 9140 | | Millersville University |
| Boulder, CO 80301 | | Millersville, PA 17551 |
| (303) 447-8850 | | (717) 872-3289 |

Send one original and five copies of abstracts to be considered for technical sessions and poster sessions to the Technical Program Chairman

William Jordan
Department of Earth Sciences
Millersville University
Millersville, PA 17551

Send one original and five copies of abstracts for symposia directly to the convener (first name following the symposium topic or title above). Acceptance or rejection of all abstracts will be based on review by the Technical Program Committee. Abstracts will be judged on the basis of scientific merit, informative content, readability, and relevance to geologic problems of the northeast. There is no limit to the number of abstracts that may be submitted, but no more than two abstracts bearing an individual's name as first author will be accepted for the program. No author may give more than one oral presentation. Authors will be notified of acceptance during December 1984.

ABSTRACTS ARE DUE OCTOBER 17, 1984

STUDENT PAPERS

Students are encouraged to submit abstracts. Awards will be made for outstanding student papers presented in the technical sessions. To be eligible and judged, an abstract must be authored exclusively by a student and must be designated on the abstract form as a student paper.

PROJECTION EQUIPMENT

All slides must be 2" x 2" and fit a standard 35mm carousel tray. Only one projector and screen will be provided in each of the technical sessions. Overhead projectors will not be available. Please bring your own loaded carousel tray, if possible.

EXHIBITS

Exhibits will be adjacent to technical session rooms. The cost of booths for educational and nonprofit institutions will be reduced. For further information contact

James Lauffer or Laverne McClure
Department of Geography and Earth Sciences
Bloomsburg University
Bloomsburg, PA 17815
(717) 389-4142

SPECIAL EVENTS

A welcoming party will be held Wednesday evening, March 13, and the Annual Banquet will be held Thursday evening, March 14.

Guest activities include sightseeing of the Pennsylvania "Dutch" countryside that surrounds Lancaster.

DETAILED INFORMATION

Information concerning registration, accommodations, and activities will appear in a future issue of *GSA News & Informa-*

tion and as part of *Abstracts with Programs* for 1985. Requests for additional information or suggestions should be addressed to the General Chairman

Seymour S. Greenberg
Department of Geology and Astronomy
West Chester University
West Chester, PA 19383
(215) 436-2788

PRELIMINARY ANNOUNCEMENT AND CALL FOR PAPERS

SOUTHEASTERN SECTION, GSA, Annual Meeting

Knoxville, Tennessee

March 20-22, 1985

The Southeastern Section of the Geological Society of America will meet at the Hilton Hotel in Knoxville, Tennessee, together with the Southeast Section of the Paleontological Society, the Southeastern Section of NAGT, and the Pander Society. The meeting is sponsored by the University of Tennessee.

CALL FOR PAPERS

Papers are invited for presentation at technical and poster sessions and symposia. Fifteen minutes for presentation and five minutes for discussion will be allowed for the technical sessions. Papers of regional interest to geologists in the southeastern United States, as well as those of general geologic interest, will be considered for the program. Abstracts not accepted for symposia will be considered for regular technical sessions.

SYMPOSIA

- 1. Geometry and Mechanisms of Appalachian Thrusting.** Steven Wojtal, Department of Geology, Oberlin College, Oberlin, OH 44074; Gautam Mitra, Department of Geological Sciences, University of Rochester, Rochester, NY 14627; Thrust fault geometry, mechanisms by which thrust faults develop and move, and interaction between thrust mechanisms and geometry.
- 2. Petrology and Geochronology of Metamorphism in the Southern Appalachians.** David W. Mohr, Department of Geology, Texas A&M University, College Station, TX 77843; Stephen A. Kish, Department of Geology, Florida State University, Tallahassee, FL 32306; Taconic versus Acadian versus Alleghenian (Hercynian?) metamorphism; use of geothermometry and geobarometry to characterize Barrovian versus other styles of metamorphism, with geodynamic implications.
- 3. Volcanogenic Sulfide and Precious Metal Mineralization in the Southernmost Appalachians.** Thornton L. Neathery, Geological Survey of Alabama, P.O. Box O, University Station, Tuscaloosa, AL 35486; Kula C. Misra, Department of Geological Sciences, University of Tennessee, Knoxville, TN 37996; Geologic setting of the region with respect to possible mineralization, mineralization models, geochemical signatures, mineral zonation, and geophysics.
- 4. Recent Advances in Biozonation in the Southeast.** Sponsored by the Southeast Section of the Paleontological Society. Scott Brande, Department of Geology, University of Alabama in Birmingham, Birmingham, AL 35294; David R. Schwimmer, Department of Earth Science, Columbus College, Columbus, GA 31907. Papers will deal with newer

aspects of age relationships based upon fossils in all terranes in the southeastern U.S.

- 5. Pander Society Sponsorship.** Symposium topic to be announced. Walter C. Sweet, Department of Geology & Mineralogy, Ohio State University, Columbus, OH 43210.

FIELD TRIPS

Premeeting

1. Zinc Mineralization in the Knox Group Carbonates, East Tennessee. J. Edward McCormick, Kula C. Misra, Habte G. Churnet, and Otto C. Kopp. Includes visits to the Coy Zinc mine (underground), a mineralized section in the Copper Ridge district, and an unmineralized section of Knox Group carbonates. Leaves Knoxville Wed., March 20, and returns the same evening. Limit: 20.

2. Lower Pennsylvanian Clastic Sediments and Associated Coals in the Walden Ridge South. Habte G. Churnet and Richard E. Bergenback. Excellent outcrops of Lower Pennsylvanian clastic sediments and some associated coals are exposed along Highways 30 and 27 on both the east and west side of Walden Ridge (part of the Cumberland Plateau). Trip offers an excellent opportunity to examine lithofacies relationships in Lower Pennsylvanian rocks. Departs early Wed., March 20, and returns the same evening. Limit: 40.

Postmeeting

3. Structural Transect in SW Virginia and NE Tennessee. Frederick W. Diegel and Steven F. Wojtal. Six stops across the Valley and Ridge and Blue Ridge front from Duffield, Virginia, to Mountain City, Tennessee. Will visit the Hunter Valley and Saltville thrusts, the core of the Bays Mountain Synclinorium and the Mountain City Window. Departs Knoxville Fri. evening, March 22; night in Kingsport, Tennessee; return to Knoxville about 8 p.m., Sat., March 23. Limit: 25.

4. Ophiolites(?) of the Southern Appalachian Blue Ridge. Harry Y. McSween, Jr., and Robert D. Hatcher, Jr. Outcrops of the Chunky Gal Mountain, Carroll Knob, and Laurel

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Southeastern Section (continued from p. 145)

Creek mafic-ultramafic complexes in northwestern North Carolina and northern Georgia. Includes studies of the petrologic, structural, and metamorphic features of these complexes and discussion of the evidence for ophiolitic origin. Departs Knoxville Fri. evening, March 22; returns Sun. afternoon, March 24. Fri. and Sat. nights in Dillard, Georgia. Limit: 40.

5. Sulfide Deposits of the Ducktown Mining District, Tennessee. Randy Slater and Kula Misra. Includes visits to the Cherokee mine (underground) and open-pit operations, and several stops to examine metamorphism, deformation, and mineralization in the country rocks. Departs Knoxville, Sat., March 23, morning; returns the same evening. Limit: 20.

6. Paleozoic Stratigraphy in the Knoxville Part of the Tennessee Valley and Ridge Province. Don W. Byerly, Steven Driese, and Kenneth R. Walker. Visits the classic Thorn Hill section, ranging from the Lower Cambrian Rome Formation at the Copper Creek fault to the Mississippian Grainger Formation at the Saltville fault. Aside from the classical stratigraphy to be studied, state-of-the-art engineering geology can be viewed along the recent cuts across Clinch Mountain. Departs early Sat., March 23; returns that evening. Limit: 40.

7. Quaternary Geology and Paleoecology of East Tennessee. Paul A. Delcourt and Hazel R. Delcourt. Presents geomorphic, paleoecologic, and archaeological studies of late Quaternary river terraces along the Lower Little Tennessee River Valley from Lenoir City to Chilhowee; colluvial and periglacial deposits in the western part of Great Smoky Mountains National Park; synthesis of late Quaternary environments in the Ridge and Valley and the Blue Ridge physiographic provinces of east Tennessee. Departs Knoxville early Sat., March 23; returns late that afternoon. Limit: 13.

For further information, contact Nicholas B. Woodward, Department of Geological Sciences, University of Tennessee, Knoxville, TN 37996.

SHORT COURSE

An Outline of Balanced Structure Sections. Lecturers: Nicholas B. Woodward and Steven E. Boyer. This one-day short course reviews the goals of "balancing" and the principles and assumptions upon which balanced sections are based. It also examines the methods that different scientists have used to "restore" sections. The morning lectures will be followed by an afternoon workshop session in which examples of sections from the Appalachians and the Cordillera will be balanced, compared,

and dissected. Participants can bring a section of their choice to work on during the workshop. For further information, contact Nick Woodward, Department of Geological Sciences, University of Tennessee, Knoxville, TN 37996.

ABSTRACTS

Abstracts are limited to 250 words and must be submitted camera-ready on official 1985 abstract forms. Obtain forms from
Abstracts Coordinator
Geological Society of America
P.O. Box 9140
Boulder, CO 80301
(303) 447-8850

ABSTRACTS ARE DUE OCTOBER 23, 1984

Symposium abstracts should be sent to the appropriate coordinator. Technical and poster-session abstracts (one original and five copies) should be submitted to
Larry Taylor
Department of Geological Sciences
University of Tennessee
Knoxville, TN 37996
(615) 974-6013

PROJECTION EQUIPMENT

Equipment will be provided for 2" x 2" slides, single projectors only. Please bring your own loaded carousel trays, if possible.

EXHIBITS

Exhibits representing education, research, and industry will be on display at the meeting site. For further information, contact Paul Delcourt, Department of Geological Sciences, University of Tennessee, Knoxville, TN 37996; (615) 974-6003.

DETAILED INFORMATION

Information concerning registration, accommodations, and activities will appear in a future issue of *GSA News & Information* and as part of *Abstracts with Programs* for 1985.

Inquiries, additional information, requests, or suggestions should be addressed to

Kenneth R. Walker
Local Committee Chairman
Department of Geological Sciences
University of Tennessee
Knoxville, TN 37996
(615) 974-5499

Call for Symposia Proposals

1985 GSA Annual Meeting

Orlando, Florida

October 28-31, 1985

Include title, conveners, purpose, content, speakers

Submit questions and/or proposals to

James F. Tull, Technical Program Chairman

Dept. of Geology, Florida State University

Tallahassee, FL 32306

(904) 644-5860

DEADLINE: JANUARY 1, 1985

In Memoriam

| | |
|---|--|
| Ira C. Bechtold La Habra Heights, California April 1984 | John T. Stark Michigan City, Indiana May 10, 1984 |
| Frank S. Parker Pasadena, California January 30, 1984 | Walter Voskuil Reno, Nevada |
| Nathaniel Perlmutter Tampa, Florida March 24, 1984 | Robert W. Webb Santa Barbara, California May 4, 1984 |
| John W. Reynolds Vincent, Alabama | |

PRELIMINARY ANNOUNCEMENT AND CALL FOR PAPERS

SOUTH-CENTRAL SECTION, GSA, 19th Annual Meeting
Fayetteville, Arkansas
April 14-16, 1985

The South-Central Section of the Geological Society of America will hold its 19th Annual Meeting at the University of Arkansas in Fayetteville, Arkansas, hosted by the Department of Geology.

TECHNICAL SESSIONS

Two days of technical sessions will be held on April 15 and 16 in the Continuing Education Center of the University of Arkansas, Fayetteville. The sessions will consist of both volunteered papers and invited symposia.

CALL FOR PAPERS

Papers of regional interest to those working in the south-central United States, including work on sedimentation, stratigraphy, geophysics, tectonics, geomorphology, and petrology are encouraged, as are papers of general interest. Papers dealing with the Ouachitas and the Southern mid-continent are especially welcome. Technical and poster sessions will be arranged on the basis of abstracts accepted. Abstracts for symposia should be submitted directly to the symposium convener. Abstracts that may be deemed inappropriate for the symposia to which they are submitted will be considered for general sessions. All general-session papers are to be a maximum of 15 minutes, with five minutes additional time devoted to discussion. Time limits for symposia papers will be established by the conveners.

SYMPOSIA

The following symposia are planned. For additional information, please contact the convener.

1. **Tectonic and Sedimentological History of the Arkoma Basin.** Convener: Doy L. Zachry, (501) 575-6603.
2. **Alkalic Rocks and Kimberlites.** Four parts: Alkalic Rocks of Continents and Rift Zones; Oceanic Alkalic Rocks; Kimberlitic Rocks; Mantle Metasomatism. A volume of contributed papers will be published from this symposium. Conveners: Ellen D. Mullen, (501) 575-3411; and Jill D. Pasteris (Washington University), (314) 889-5434.
3. **Quaternary History of the Mississippi Valley and Its Tributaries.** Convener: Margaret Guccione, (501) 575-2583.
4. **Quaternary Geology of the Mountains, High Plains, and Plateaus of the South-Central U.S.** Convener: Margaret Guccione, (501) 575-2853.
5. **Karst Hydrology and the Environment.** Convener: Albert Ogden (Edwards Aquifer Research and Data Center), (512) 245-2329.
6. **Waste Disposal Problems in South-Central U.S.A.** Convener: James H. Williams (Missouri Geological Survey), (314) 364-1752.
7. **Future of Aerial Remote Sensing for Geologic Investigations.** Conveners: H. C. MacDonald, (501) 575-4748; and L. F. Dellwig (University of Kansas), (913) 864-3771.

FIELD TRIPS

Premeeting

1. **Lower Atoka Stratigraphy in the Southern Boston Mountains.** April 14, 1985. Doy L. Zachry.

2. **Alkalic and Kimberlitic Rocks of Arkansas.** April 13-14, 1985. Ellen D. Mullen and Michael Howard.

Postmeeting

3. **Northern Slope Systems in Carboniferous Rocks, Frontal Ouachita Mountains.** April 17-18, 1985. Robert C. Morris.

4. **Devonian-Lower Mississippian Stratigraphy of Northwest Arkansas.** April 17, 1985. Walter Manger.

ABSTRACTS

One original and five copies of abstracts for symposia and technical and poster sessions must be submitted as camera-ready copy on the 1985 GSA abstract form, available from

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|------------------------|----|-------------------------------|
| Abstracts | or | Abstracts Coordinator |
| Department of Geology | | Geological Society of America |
| OH 118 | | P.O. Box 9140 |
| University of Arkansas | | Boulder, CO 80301 |
| Fayetteville, AR 72701 | | (303) 447-8850 |
| (501) 575-3355 | | |

Acceptance or rejection of abstracts for technical and poster sessions will be based upon review by the Technical Program Committee. No more than two abstracts bearing an individual's name as first author will be accepted for the technical or poster sessions.

Submit one original and five copies of abstracts for technical and poster sessions to

Kenneth F. Steele
Department of Geology
OH 118
University of Arkansas
Fayetteville, AR 72701

ALL ABSTRACTS ARE DUE NOVEMBER 21, 1984

Submit abstracts for symposia addressed to the convener at

Department of Geology
OH 118
University of Arkansas
Fayetteville, AR 72701

STUDENT PAPERS

Students are encouraged to submit abstracts. Awards will be given for outstanding student papers presented in technical sessions. To be eligible, abstracts must be authored exclusively by students, and must be so designated on the abstract form.

PROJECTION EQUIPMENT

All slides must be 2" x 2" and fit a standard carousel tray and projector. Please bring your slides loaded in a carousel tray, if possible. Only one projector and screen will be available in technical sessions.

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South-Central Section (continued from p. 147)
EXHIBITS

Commercial and educational exhibits will be located adjacent to the technical sessions in the Continuing Education Center. For additional information, contact

Robert Langston
Department of Geology OH 118
University of Arkansas
Fayetteville, AR 72701
(501) 575-2570

SPECIAL EVENTS

A welcoming party will be held Sunday evening, April 14. The annual banquet is tentatively planned for lunch on Monday, April

15, and an Arkansas barbecue is being considered for Monday evening, April 15.

ACCOMMODATIONS

Headquarters will be in the Hilton Inn, Fayetteville, Arkansas. A list of many other available accommodations in Fayetteville convenient to the center will be included in a later announcement.

DETAILED INFORMATION

Information concerning registration, accommodations, and other activities will appear in a future issue of *GSA News & Information* and as part of *Abstracts with Programs* for 1985. For additional information, contact

Robert C. Morris
Department of Geology
OH 118
University of Arkansas
Fayetteville, AR 72701
(501) 575-3355.

ALERT!

GSA MEMBERSHIP CAMPAIGN

WHAT: "Every-Member-Get-A-Member" Campaign

WHO: Every current GSA member recruits a new GSA member

WHEN: October 1-31, 1984

WHERE: At your office, in the field, wherever you meet colleagues

WHY: To increase the number of geologists who receive the benefits of membership in the Geological Society of America

Watch your mail for further information on GSA's first major membership campaign.

Grow with us!

**MUG
-A-
MEMBER**

Tyler Prize Nominations Due

The John and Alice Tyler Prize, established in 1973, honors achievements of benefit to mankind in the fields of ecology or energy. The prize is awarded for protecting, maintaining, improving or understanding ecological and environmental conditions anywhere in the world, for the discovery, further development, improvement, or understanding of known sources of energy, including but not limited to oil, coal, solar, hydroelectric, geothermal, wind, oil shale, nuclear, and tar sands, or for the discovery, development, or understanding of new sources of energy.

The prize includes a cash award and a gold medallion. Nominees can be individuals or institutions of any nation and associated with any field of science. Nominated institutions can be universities, foundations, corporations, or other types of organizations.

Nominations for the 1985 Tyler Prize are due Oct. 15, 1984. For nomination forms or more information, contact Jerome B. Walker, Executive Director, Tyler Prize, University of Southern California, Los Angeles, CA 90089-4019; (213) 743-6343.

PEOPLE

GSA Fellows **B. Clark Burchfiel**, **Karl Turekian**, and **James Valentine** were elected this year to the National Academy of Sciences.

Fellow **Donald M. Davidson, Jr.**, has been appointed chairman of the Department of Geology, Northern Illinois University.

GSA Treasurer **Robert L. Fuchs** has been named Chairman of the Board of Sundance Oil Co.

Member **K. Lal Gauri** received honorable mention in the 1984 Rolex Awards for Enterprise.

Fellow **Roger Revelle** has received the Vannevar Bush Award from the National Sciences Board and is one of the two recipients of the 1984 Tyler Ecology-Energy Prize.

The Public Broadcasting System television series "Planet Earth," to air in September 1985, will include interviews with GSA Fellows **Don L. Anderson**, **Allan Cox**, **Brent Dalrymple**, **Charles Drake**, **David L. Hones**, **David G. Howell**, **Drummond Matthews**, **C. Dan Miller**, **A. R. Palmer**, **Robert B. Smith**, and **Frederick Vine** and Member **Christopher Scotese**.

Call for Nominations for 1985 Penrose and Day Medals

Nominations for GSA's two most prestigious awards, the Penrose and Day Medals, are due at headquarters by February 1, 1985. Members and Fellows of the Society are encouraged to participate in this important process by nominating candidates for these high honors.

Penrose Medal

The Penrose Medal was established in 1927 by R.A.F. Penrose, Jr., to be awarded in recognition of eminent research in pure geology, for outstanding original contributions or achievements which mark a major advance in the science of geology. The award is made only at such time as the Council may decide. Nominees are selected by the Council, may or may not be members of the Society, and may be from any nation. Penrose's sole object in making the gift was to encourage original work in purely scientific geology.

Day Medal

The Day Medal was established in 1948 by Arthur L. Day to be awarded annually, or less frequently, at the discretion of the Council, for outstanding distinction in contributing to geologic knowledge through the application of physics and chemistry to

the solution of geologic problems. Day's intent was to recognize outstanding achievement and inspire further effort, rather than to reward a distinguished career.

How to Nominate

To ensure thorough consideration by the respective subcommittees, submit for each candidate a brief biographical sketch, such as used in *American Men and Women of Science*, a summary of the candidate's scientific contributions to geology, and a selected bibliography of no more than 20 titles. In choosing candidates, scientific achievements should be considered rather than contributions in administration and service.

The form for submitting the name of a candidate for either the Penrose or Day medal is on the next two pages.

Each nomination **MUST BE SUPPORTED** by the signatures of five GSA members.

The names of unsuccessful candidates proposed to the Council will remain for consideration by the respective subcommittees for three years.

Recipients of the Penrose and Day Medals to date are as follows:

PENROSE MEDALISTS

| | | | | | |
|------|---------------------------------|------|---------------------------|------|-----------------------|
| 1927 | Thomas Chrowder Chamberlin | 1947 | Arthur Louis Day | 1966 | Harry H. Hess |
| 1928 | Jakob Johannes Sederholm | 1948 | Hans Cloos | 1967 | Herbert Harold Read |
| 1929 | <i>No award given</i> | 1949 | Wendell P. Woodring | 1968 | J. Tuzo Wilson |
| 1930 | François Alfred Antoine Lacroix | 1950 | Morley Evans Wilson | 1969 | Francis Birch |
| 1931 | William Morris Davis | 1951 | Pentti Eskola | 1970 | Ralph Alger Bagnold |
| 1932 | Edward Oscar Ulrich | 1952 | George Gaylord Simpson | 1971 | Marshall Kay |
| 1933 | Waldemar Lindgren | 1953 | Esper S. Larsen, Jr. | 1972 | Wilmot H. Bradley |
| 1934 | Charles Schuchert | 1954 | Arthur Francis Buddington | 1973 | M. King Hubbert |
| 1935 | Reginald Aldworth Daly | 1955 | Maurice Gignoux | 1974 | William Maurice Ewing |
| 1936 | Arthur Philemon Coleman | 1956 | Arthur Holmes | 1975 | Francis J. Pettijohn |
| 1937 | <i>No award given</i> | 1957 | Bruno Sander | 1976 | Preston Cloud |
| 1938 | Andrew Cowper Lawson | 1958 | James Gilluly | 1977 | Robert P. Sharp |
| 1939 | William Berryman Scott | 1959 | Adolph Knopf | 1978 | Robert M. Garrels |
| 1940 | Nelson Horatio Darton | 1960 | Walter Herman Bucher | 1979 | J Harlen Bretz |
| 1941 | Norman Levi Bowen | 1961 | Philip Henry Kuenen | 1980 | Hollis D. Hedberg |
| 1942 | Charles Kenneth Leith | 1962 | Alfred Sherwood Romer | 1981 | John Rodgers |
| 1943 | <i>No award given</i> | 1963 | William Walden Rubey | 1982 | Aaron C. Waters |
| 1944 | Bailey Willis | 1964 | Donnel Foster Hewett | 1983 | G. Arthur Cooper |
| 1945 | Felix Andries Vening-Meinesz | 1965 | Philip Burke King | 1984 | Donald E. White |
| 1946 | T. Wayland Vaughan | | | | |

ARTHUR L. DAY MEDALISTS

| | | | | | |
|------|-----------------------|------|------------------------------|------|---------------------|
| 1948 | George W. Morey | 1961 | Willard F. Libby | 1973 | David T. Griggs |
| 1949 | William Maurice Ewing | 1962 | Hatten Schuyler Yoder | 1974 | A. E. Ringwood |
| 1950 | Francis Birch | 1963 | Keith Edward Bullen | 1975 | Allan Cox |
| 1951 | Martin J. Buerger | 1964 | James Burleigh Thompson, Jr. | 1976 | Hans Ramberg |
| 1952 | Sterling Hendricks | 1965 | Walter H. Munk | 1977 | Akiho Miyashiro |
| 1953 | John F. Schairer | 1966 | Robert M. Garrels | 1978 | Samuel Epstein |
| 1954 | Marion King Hubbert | 1967 | O. Frank Tuttle | 1979 | Walter M. Elsasser |
| 1955 | Earl Ingerson | 1968 | Frederick J. Vine | 1980 | Henry G. Thode |
| 1956 | Alfred O. C. Nier | 1969 | Harold C. Urey | 1981 | Donald L. Turcotte |
| 1957 | Hugo Benioff | 1970 | Gerald J. Wasserburg | 1982 | Eugene M. Shoemaker |
| 1958 | John Verhoogen | 1971 | Hans P. Eugster | 1983 | Harmon Craig |
| 1959 | Sir Edward C. Bullard | 1972 | Frank Press | 1984 | Wallace S. Broecker |
| 1960 | Konrad B. Krauskopf | | | | |

Call for Nominations for Honorary Fellows

Honorary Fellows of the Society are selected from geologists throughout the world who have distinguished themselves as geological investigators or who have rendered special service to the Society. The candidates are usually residents outside North America.

The following information is required for each candidate:

- Biographical data similar to that found in *American Men and Women of Science* and *Who's Who in America*

- 200-word-or-less summary of the candidate's contributions to geology

- Selected bibliography of no more than 20 titles

Deadline for receipt of nominations at headquarters: February 1, 1985.

The form for submitting the name of a candidate is on the next two pages.

Current Honorary Fellows are

Antonio Almela
Neil Armstrong
Jean A. Aubouin
Ralph A. Bagnold
V. V. Belousov
Roland Brinkmann
S. Warren Carey
Michael Collins
William Compston
Douglas Saxon Coombs
Kingsley C. Dunham
Stanislaw Dzulynski
William S. Fyfe
Augusto Gansser
Jean Goguel
Dorothy Hill

Kenneth J. Hsu
Emilie Jager
Harold Jeffreys
Huang Jiqing
Teiichi Kobayashi
Dmitri S. Korzhinskii
Michael W. McElhinny
D. V. Nalivkin
A. V. Peive
Wallace S. Pitcher
Jean Piveteau
Ferdinand Prantl
Desmond A. Pretorius
Hans Ramberg
P.G.K. Ramdohr

John G. Ramsay
Alfred Rittmann
Hitoshi Sakai
Harrison Hagan Schmitt
Eugen Seibold
Ahti J. Simonen
Boris Sergeevich Sokolov
John Sutton
Bernard P. Tissot
Livio Trevisan
Rudolph Trumphy
Seitaro Tsuboi
Harry B. Whittington
Alwyn Williams
Quido Zaruba

Call for Nominations for 1985 Cady Award

GSA's Coal Geology Division Award Committee requests nominations of potential recipients of the Gilbert H. Cady Award.

The Cady Award is made biennially for outstanding contributions in the field of coal geology, defined for this purpose as referring to "a field of knowledge concerning the origin, occurrence, relationships, and geologic characteristics of the many varieties of coal and associated sedimentary rocks, including economic implications." Generally, the award is made for contributions by a North American coal geologist which are considered to advance the field of coal geology in North America, but contributions by workers outside of North America deemed to advance coal geology in North America may be considered for the award.

Nominations are to be submitted to William Spackman, Jr., Chairman of the Cady Award Committee, 517 Deike Building, Pennsylvania State University, University Park, PA 16802, telephone (814) 865-6545.


Each nomination must include the following:

- (1) Name, office or title, and affiliation of the nominee.
- (2) Date and place of birth, education, degrees, honors and awards.
- (3) Major events in the nominee's professional career, including a bibliography of the 20 most significant publications.
- (4) Outstanding achievements and accomplishments that warrant the nomination.

Past nominees are kept in an active file and need not be renominated each year.

Deadline for receipt of nominations is February 1, 1985.

Cady Award winners to date are James M. Schopf (1973), Jack A. Simon (1975), William Spackman, Jr. (1977), Peter A. Hacquebard (1979), Clayton G. Ball (1981), and Paul Averitt (1983).



THE GEOLOGICAL SOCIETY OF AMERICA ANNUAL MEETING

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THE GEOLOGICAL SOCIETY OF AMERICA

Nomination for Penrose Medal, Day Medal, or Honorary Fellowship

(please circle one)

DEADLINE: Please return this form to headquarters by February 1.

NAME OF CANDIDATE:

ADDRESS:

BIOGRAPHICAL INFORMATION: (suggested sources)

American Men and Women of Science

Who's Who in America

GSA Service Record (obtainable from headquarters)

Other

SUMMARY OF SCIENTIFIC CONTRIBUTIONS TO GEOLOGY:

(not more than 200 words)

SELECTED BIBLIOGRAPHY:
(no more than 20 titles)

A nomination for the Penrose Medal or Day Medal must be supported by the signatures of five GSA Fellows or Members. Signed supporting letters from five GSA Fellows or Members may be attached to this form in lieu of the signatures. A nomination for Honorary Fellowship requires only this form with name, address, and signature of the person making the nomination (no other signatures required) and supporting letters, if any.

1. (Name of person making the nomination) _____

Address: _____

Date: _____ Signature: _____

2. _____

3. _____

4. _____

5. _____

6. _____

RETURN TO: Executive Director
The Geological Society of America
P.O. Box 9140
Boulder, CO 80301
(303) 447-2020

DEADLINE: Please return this form to headquarters by February 1.

DUES STATEMENTS COMING THIS MONTH

1985 DUES INCLUDE *BULLETIN AND GEOLOGY*

The 1985 membership dues statements are now being prepared for mailing about mid-month. Please note that all dues-paying Fellows, Members, and Student Associates receive three monthly publications, *The Geological Society of America Bulletin*, *Geology*, and *GSA News & Information* as part of their membership package.

The annual dues for a Fellow or Member for 1985 will be \$62 (the same as 1984) for the entire package, including membership and 12 issues each of the *Bulletin*, *Geology*, and *GSA News & Information*. The required dues for Student Associates for the same package will be \$32 (the same as 1984 also). Dues-exempt members who wish to receive the two journals for 1985 may do so for \$32 also (they already receive *GSA News & Information*).

Married couples who are *both* current GSA members will be allowed a reduction in 1985 dues. Married couples will pay \$62 for the first member (\$32 for Student Associates) and \$26 for the second. They will receive a single subscription to the *Bulletin and Geology*, but both members will continue to receive *GSA News & Information*, ballots, and other miscellaneous mailings. Please identify your spouse and indicate in the spaces provided on the back of the dues form who is requesting a reduction in dues. Please submit separate dues statements. *If a spouse is not currently a member*, do NOT send dues payment without requesting and completing a membership application. The policy for married couples will apply *only* upon specific instructions from you.

Please inform us as soon as possible of any address change, as it usually takes 6 to 8 weeks to correct the files. Meanwhile,



publications will continue to go to your former address. They are sent second class; therefore, the Post Office will not forward them without special instructions from (and expense to) you.

We must receive your 1985 dues payment no later than November 30, 1984, to avoid a delay in receipt of your 1985 GSA publications. If you have any questions or do not receive your 1985 dues statement, please contact the Membership Department.

Cordilleran Section Meeting Draws 1000

By Martin Stout

Secretary, Cordilleran Section

GSA's Cordilleran Section held its 80th Annual Meeting at the William A. Egan Convention Center in Anchorage, Alaska, on May 30 and 31 and June 1, 1984. More than 1000 registrants made this the largest geological meeting ever held in Anchorage. The meeting was held in conjunction with the Seismological Society of America and the Pacific Coast Section of the Paleontological Society. More than 300 papers were presented, with a strong emphasis on defining terranes within Alaska. John Davies, Alaska State Seismologist, was General Chairman.

Twenty-four Student Associates of the Cordilleran Section received more than \$5000 to subsidize travel expenses to present papers at the Anchorage meeting. The students were Kurt S. Anderson, Western Washington University; Andrew P. Barth, California State University, Los Angeles; Joan Bernhard, University of California, Davis; David B. Cook, Michigan State University, Lansing; Kenneth D. Ehman, University of California, Davis; Carol Evenchick, Queens University; Carolyn H. Eyles, University of Toronto; Samuel P. Figuli, Kent State University; Brian R. Globerman, University of California, Santa Cruz; Tekla A. Harms, University of Arizona; Ronald A. Harris, University of Alaska, Fairbanks; Brian R. Hoyt, Kent State University; Eric W. James, University of California, Santa Barbara; Barbara E. John, University of California, Santa Barbara; Jane Kozinski, State University of New York, Albany; Jill McCarthy, Stanford University; Susan McCauslin, Kent State University; Jeffrey A. Morehouse, University of Arizona; Ingrid A. Myers, University of Nevada, Las Vegas; Brian E. Patrick, University of Washington; Jerome P. Siok, University of Alaska, Fairbanks; Constance M. Soja, Uni-

versity of Oregon; Stephen D. Stahl, Northwestern University; Gordon Thrupp, University of California, Santa Cruz.

The Cordilleran Section will again subsidize travel expenses for Student Associates presenting papers next year at Vancouver, B.C. However, to be eligible, students *must* be a member of the Cordilleran Section as of Jan. 1, 1985. The Vancouver meeting will be May 8-11, 1985, on the campus of the University of British Columbia.

Divisions Announce 1984 Award Winners

The 1984 Archaeological Geology Division Award goes to **C. Vance Haynes**, 7421 North Mountain Shadows Road, Tucson, Arizona 85718.

The Engineering Geology Division 1984 E. B. Burwell Award goes to **Roy E. Hunt**, 244 A Columbine Avenue, Whiting, New Jersey 08759, and c/o Avenida Atlantica 290, Apt. 65, Rio de Janeiro, RJ 22010, Brasil.

The Structural Geology and Tectonics Division Best Paper Award for 1984 goes to **Peter J. Coney**, Department of Geosciences, University of Arizona, Tucson, Arizona 85721; **David L. Jones**, U.S. Geological Survey, 345 Middlefield Road, Menlo Park, California 94025; and **James W.H. Monger**, Geological Survey of Canada, 100 West Pender Street, Vancouver, B.C., Canada V6B 1R8, for their paper "Cordilleran Suspect Terranes" (*Nature*, November 1980, v. 288, p. 329-333).

MEETINGS

Symposium on Evolution of the Caledonide-Appalachian Orogen, September 3-8, 1984, Glasgow, Scotland. Information: Matt Bates, A. T. Mays, 12 Nineyard St., Scottcoats, Scotland KA21 5HP, U.K.

Oceans 84: Industry, Government, and Education—Designs for the Future, conference and exposition, September 10-12, 1984, Washington, D.C. Information: Oceans 84, Marine Technology Society, 1730 M St. N.W., Suite 412, Washington, DC 20036; (202) 659-3251.

International Gas Research Conference, September 10-13, 1984, Washington, D.C. Information: International Gas Research Conference, c/o Gas Research Institute, 8600 West Bryn Mawr Ave., Chicago, IL 60631; (312) 399-8300; Telex 253812.

Recent Advances in Petroleum Exploration and Development, Circum-Pacific Council for Energy and Mineral Resources and Chinese Petroleum Geology Society symposium, September 20-24, 1984. Information: Robert J. Foster, BHP Oil & Gas Division, P.O. Box 1911R, Melbourne, Australia, or Frank F. H. Wang, Office of Marine Geology, U.S. Geological Survey, 345 Middlefield Rd., Menlo Park, CA 94025

Petroleum and Natural Gas Markets Conference, September 24-25, 1984, Calgary, Alberta, Canada. Information: Shane Streifel, Canadian Energy Research Institute, 3512 33rd St. N.W., Calgary, Alberta T2G 2C4, Canada.

Recent Advances in Petroleum Exploration and Development, September 24-28, 1984, Beijing, China. Information: BHP Petroleum, G.P.O. Box 1911R, Melbourne, 3001, Australia.

Tectonic Geomorphology, 15th Annual Binghamton Geomorphology Symposium, September 28-29, 1984, Binghamton, New York. Information: Marie Morisawa, Dept. of Geological Sciences, SUNY, Binghamton, NY 13901; (607) 798-2615.

Clay Minerals Society Annual Meeting, September 30-October 3, 1984, Baton Rouge, Louisiana. Information: Ray E. Ferrell, Dept. of Geology, Louisiana State University, Baton Rouge, LA 70803; (504) 388-5306.

International Symposium on Recent Investigations in the Zone of Aeration, October 1-5, 1984, Munich, West Germany. Information: P. Udluft, Inst. für Wasserchemie der TU München, Marchioninstr. 17, 8000 München 70, West Germany; telephone 089/7095 7086-98-80.

Research Methods on Mini- and Microcomputers, 13th Annual Geochautauqua, October 4-5, 1984, Morgantown, West Virginia. Information: M. E. Hohn, West Virginia Geological Survey, Morgantown, WV 26507; (304) 594-2331.

Association of Engineering Geologists 27th Annual Meeting, October 7-13, Boston, Massachusetts. Information: Richard Sherman, Meeting Chairman, Metcalf & Eddy, 50 Staniford St., Boston, MA 02114; (617) 367-4236.

GEOTECH 84—Personal Computers in Geology, October 10-12, 1984, Denver, Colorado. Information: Douglas C. Peter, U.S. Bureau of Mines, Box 25086, Bldg. 20, Federal Center, Denver, CO 80225; (303) 236-0772.

Society for Organic Petrology First Annual Meeting, October 16-17, 1984, Tysons Corner, Virginia. Information: Ann B. Reaugh, GeoChem Laboratories, Inc., 1143-C Brittmore, Houston, TX 77043; (713) 467-7011.

American Institute of Professional Geologists Annual Meeting, October 17-19, 1984, Orlando, Florida. Information: Bobby J. Timmons, Timmons Associates, P.O. Box 50606, Jacksonville Beach, FL 32250; (904) 246-4533.

Advances in Reef Science, Joint Meeting of Atlantic Reef Committee and International Society for Reef Studies, October 26-28, 1984, Miami, Florida. Information: Alice Kashuba, Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL 33139; (305) 672-1840.

Underwater Mining Institute, October 28-30, 1984, Madison, Wisconsin. Information: Gene A. Wock, University of Wisconsin, Sea Grant Institute, 1800 University Avenue, Madison, WI 53705; (608) 262-0905.

North Atlantic Palaeoceanography Conference, November 6-7, 1984, London, England. Information: N. Shackleton, Dept. of Quaternary Research, Godwin Laboratory, Free School Lane, Cambridge CB2 3RS, England.

International Conference on Ground-Water Technology, November 12-17, 1984, Johannesburg, South Africa. Information: David M. Nielsen, National Water Well Association, 500 West Wilson Bridge Rd., Worthington, OH 43085; (614) 846-9355.

Ophiolites through Time, November 13-15, 1984, Nancy, France. Information: Jacqueline Desmons, Université de Nancy I, Faculté des Sciences, Laboratoire de Petrologie, B.P. n° 239, F-54506 Vandoeuvre-les-Nancy Cedex, France. (Abstracts deadline is September 1, 1984.)

Southeastern Section Awards Research Grants

GSA's Southeastern Section has awarded nine research grants to students in the section. The grants ranged from \$200 to \$450 and averaged \$350. This is the third year that the Southeastern Section has awarded student research grants; the grant program is similar to that administered by GSA headquarters. The money to support the program is generated from interest on investments, surplus from section meetings, and contributions from GSA members.

To be eligible for an award, a student must be a GSA Student Associate, must be attending a school in the Southeastern Section area, and must submit an application outlining a research project. Applications are reviewed by the Student Support Committee, this year consisting of Chairman William Size and members Robert Deininger, George Devore, and Gerald Johnson.

The recipients and the titles of their research projects are
Jerry W. Beets, University of Tennessee: A Mesofabric and Microfabric Analysis of the White Oak Mountain, Hunter Valley, and Wallen Valley Fault Intersection in the Powell Quadrangle, Anderson County, Tennessee

Barry N. Chamberlain, Memphis State University: Gravity Models of Subsurface Structure in the Tallapoosa Block of the Northern Piedmont, Tallapoosa County, Alabama

Mary Cudzil, University of Tennessee: Depositional Environments of the Chilhowee Group, Northeast Tennessee

John M. Elder, University of Georgia: Stratigraphy, Sedimentology, and Depositional Environments of the Raccoon Mountain Formation in Its Type Area, Southernmost Tennessee and Northwesternmost Georgia

(continued on p. 155)

Southeastern Section Awards (continued from p. 154)

Kenneth Finkelstein, Virginia Institute of Marine Science:
The Sedimentology, Stratigraphy, and Depositional History of a Virginia Barrier Island and Its Associated Backbarrier Environment

Stephen Johnson, University of Alabama: Greisen Mineralization in Park County, Colorado

Lauren J. McKeever, Virginia Polytechnic Institute and State

University: Macroevolutionary Patterns of Cenozoic Molluscs of the Atlantic Coastal Plain

Douglas C. Miller, Memphis State University: Stratigraphy of the Tensleep Formation (Pennsylvanian), Northeast Flank of the Bighorn Mountains, Wyoming

John R. Noel, University of Georgia: Paleomagnetism of the Carolina Slate Belt.

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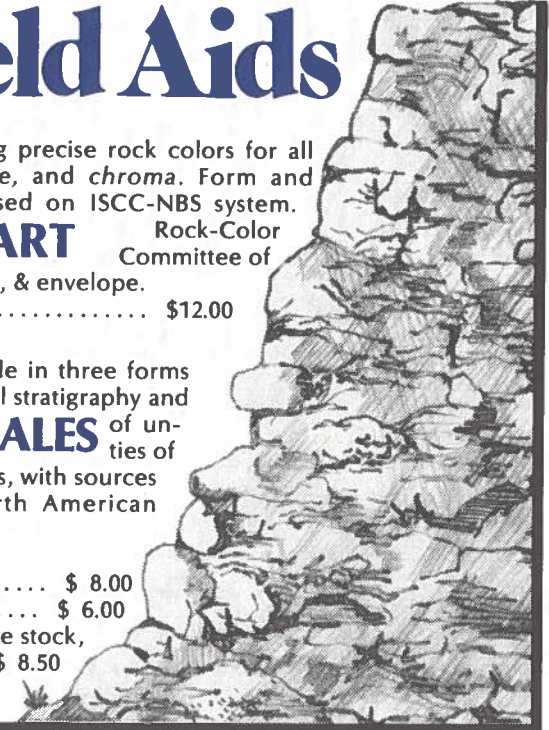
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The Caribbean- South American Plate Boundary and Regional Tectonics

The fact that the debate continues on the evolution of the Caribbean plate and its borderlands is reflected in the 28 papers included in this volume. Some authors postulate a distant Pacific source for Caribbean crust; others consider the geometry, timing, and effects of collision; still others view the process of evolution from the vantage point of the craton, from the time prior to collision, through the ensuing orogeny caused by collision, to the youngest phases of Plio-Pleistocene time.

Surprising to the editors is the accumulating evidence for increasingly radical, large-scale rotations and translations in the heretofore sacrosanct cratonic "autochthon." Most evidence is for such occurrence prior to the earliest Cretaceous, but there is also evidence that such movement is continuing today.

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EDITED BY WILLIAM E. BONINI,
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