



GSA news & information

VOLUME 4, NUMBER 10

G.S.A. ARCHIVES

OCTOBER 1982

1982 Research Grants Awarded

The Committee on Research Grants met at headquarters in Boulder, Colorado, on April 22 and 23, 1982.

A total amount of \$90,110 was available to the committee for allocation. This included \$80,000 from the Penrose Endowment, as well as industrial donations (\$6,500), donations from members and past recipients (\$425), funds from the Harold T. Stearns Fund (\$1,000) and the Arthur L. Day Fund (\$550), and contributions through the GSA Foundation (\$1,635). Also available was \$1,200 for the presentation of the Gladys W. Cole Memorial Award.

Support was recommended for a total of 145 of the 391 proposals received and evaluated. This included 80 doctoral proposals and 65 master's proposals. The average grant was \$623 and the success rate was 37% of proposals received. Proposals from women numbered 110 as compared to 106 for 1981.

The committee noted that the ratio of PhD proposals to MS/MA proposals declined in 1982 which reflects trends in the general graduate student community probably resulting from the exceptionally good job opportunities in the industrial sector over the past 2 to 3 years.

There was no significant change in the success percentage from the past three years, nor was the amount of the funding per successful grant materially changing. Table 1 appears to show that a plateau was reached in about 1980 with only minor fluctuations since that time. It is evident that a major break-through in fund development will be necessary to change the present pattern.

ROBERT K. FAHNESTOCK AWARD

The Robert K. Fahnestock Award is given to honor the memory of Dr. Fahnestock, a former member of the committee, who died indirectly as a result of service on the committee. The grant is awarded to the proposee with the best application in fluvial geomor-

phology and sediment transport, Dr. Fahnestock's field. The 1982 nominee is:

Thomas F. Bullard, University of New Mexico, Albuquerque
Late Quaternary geomorphic evolution of a tributary to the Chaco River, southeastern Colorado Plateau, northwestern New Mexico: Bedrock influence on complex geomorphic responses within a large drainage system.

HAROLD T. STEARNS FELLOWSHIP AWARD

The generous contributions from Dr. Harold T. Stearns have provided an endowment which earned an income of over \$1,000 for 1982. The committee voted to recommend one candidate for this award for research on aspects of the geology of Pacific Islands and the circum-Pacific region. The nominee is:

George E. Gehrels, California Institute of Technology
Structural, petrologic, and U/Pb geochronologic analysis of the southern Alexander terrane, southeastern Alaska

GLADYS W. COLE MEMORIAL RESEARCH AWARD

The committee received three applications for the Cole Award this year. The proposals received a preliminary evaluation and ranking by the officers of the Quaternary Geology and Geomorphology Division prior to the final screening of the committee. William J. Breed of Flagstaff, Arizona, was chosen as this year's recipient. He proposes to investigate the processes that form and control the distribution of giant star dunes in Gran Desierto, northwest Sonora, Mexico. His application is completely in accordance with the guidelines as specified by W. Storrs Cole in establishing the award. The amount of the award is \$1,200. This is the first presentation of the award.

(continued next page)

History of GSA Grants (Table 1)

	1960	1965	1970	1975	1978	1980	1981	1982
Applicants	40	86	256	320	263	402	374	391
No. Supported	13	53	128	95	124	192	177	145
% Supported	32%	62%	50%	30%	47%	48%	47%	37%
Amt. Requested	\$17,709	116,036	302,606	296,382	264,589	420,247	405,789	424,266
Total Granted	\$10,763	37,200	76,846	62,430	85,000	81,000	101,737	90,110
Average Grant	\$827	702	600	657	686	422	575	623
% of Funding	61%	32%	25%	21%	30%	19%	25%	21%

DONATIONS FROM CONOCO, MARATHON, AND MOBIL

A total of \$6,500 was received from Conoco (\$2,000), Marathon (\$2,500), and Mobil (\$2,000) in support of the research grants program.

Nine promising young earth scientists were partially supported by these funds. They are:

Kathy Ann Breining, University of Michigan, Ann Arbor
Diagenetic Evolution of Silurian Reefal Limestone and Evaluation

James V. Browning, University of Southern California, Los Angeles
Paleoecology of the Upper Cretaceous Jalama Formation, Western Santa Ynez Mountains, California

Quentin H. Goodbody, University of Alberta, Edmonton, Alberta, Canada
Sedimentology and Biostratigraphy of the Devonian Bird Fiord Formation of the Canadian Arctic Archipelago

Paul L. Heller, University of Arizona, Tucson
Comparative sedimentation and tectonics of the Eocene flysch basins in western Oregon and southwestern Washington

Terence P. Hughes, The Johns Hopkins University, Baltimore, Maryland
The geological significance of Coral growth

Julie S. Menack, Cornell University, Ithaca, New York
The Eel River Basin: Evolution of a Neogene Forearc

Eugene R. Meyer, The Johns Hopkins University, Baltimore, Maryland
Evolutionary Relationships of Crocodylians

Paul Robert Miller, University of Oregon, Eugene
Mid-Tertiary Stratigraphy and Paleoecology of the Central Western Cascades, Oregon

Michelle T. Silk, George Washington University, Washington, D.C.
The Biostratigraphy and Taxonomy of Mesozoic Radiolaria from North Pacific D.S.D.P. Legs 7, 20, and 32

OUTSTANDING MENTION

The committee specially recognized thirteen of those proposals that were funded as being particularly well conceived and presented. It is their desire that this merit should be brought to the attention of the membership, and be given proper recognition by the Society. Those so honored are:

Kathy Ann Breining, University of Michigan, Ann Arbor
Diagenetic Evolution of Silurian Reefal Limestone and Evaluation of the Timing and Mechanism of Dolomitization

James Gerald Brophy, The Johns Hopkins University, Baltimore, Maryland
The Geology and Petrology of the Cold Bay Volcanic Center, Alaska

Paul K. Carpenter, University of Oregon, Eugene
Origin of Comb Layering in the Willow Lake Intrusion, N.E. Oregon

Michael Peter Connelly, University of Utah, Salt Lake City
A petrologic and fluid inclusion study of the Maria and Bwana copper skarns

Christopher J. Fridrich, Stanford University, Stanford, California
Geology and Petrology of the Grizzly Peak cauldron, Sawatch Range, Colorado

George Ellery Gehrels, California Institute of Technology, Pasadena
Structural, petrologic, and U/Pb geochronologic analysis of the southern Alexander terrane, southeastern Alaska

Vicki L. Hansen, University of Montana, Missoula
Textural and chemical trends of progressively mylonitized granite, Bitterroot Range, Montana

Paul L. Heller, University of Arizona, Tucson
Comparative sedimentation and tectonics of the Eocene flysch basins in western Oregon and southwestern Washington

Terence P. Hughes, The Johns Hopkins University, Baltimore, Maryland
The geological significance of Coral growth

Elizabeth Lincoln Mathieson, Stanford University, Stanford, California
Investigation of the history of activity of the Madison Range fault along its 1959 rupture, Madison County, Montana

Julie S. Menack, Cornell University, Ithaca, New York
The Eel River Basin: Evolution of a Neogene Forearc

Eugene R. Meyer, The Johns Hopkins University, Baltimore, Maryland
Evolutionary Relationships of Crocodylians

Douglas G. Pyle, Oregon State University, Corvallis
Volcanism in the southern Oregon Coast Range and its constraint on early Tertiary tectonism in western North America

1983

RESEARCH GRANTS PROGRAM

Application forms and detailed instructions for 1983 grants will be sent, upon request, by the Executive Director, Geological Society of America, P.O. Box 9140, Boulder, CO 80301. **Please note:** Confidential evaluations from two faculty members are required from master and doctoral candidates and must accompany applications submitted.

Please use only the 1983 application and appraisal forms. Applications must be postmarked by February 15, 1983.

GSA News & Information

Vol. 4, no. 10 October 1982

GSA NEWS & INFORMATION (ISSN 0164-5854) is the monthly newsletter of The Geological Society of America, Inc., P.O. Box 9140, Boulder, Colorado 80301. Second-class postage rates paid at Boulder, Colorado, and at additional mailing office.

Prepared from contributions from the staff and membership by F. Michael Wahl, Executive Director; James R. Clark, Production and Advertising Sales Manager; June Thomas and Ann H. Fogel, Production Assistants.



CENTENNIAL NEWS

Atlantic Margin Synthesis Volume Organized

The organizational meeting for the DNAG synthesis volume on *The Atlantic Continental Margin: U.S.* was held at Woods Hole, Massachusetts on May 14 and 15, 1982. An outline with the names of the chapter organizers is given below. As with the other volumes, the chapter organizers may be contacting additional individual contributors as the synthesis progresses. Final manuscripts and accompanying synthesis maps for this volume are to be in the hands of the editors, J. A. Grow and R. E. Sheridan by January, 1984.

I. Introduction

- A. Atlantic Type Continental Margins — R. Sheridan, J. Grow
- B. Physiography — A. Shor
- C. Tectonic Framework — K. Klitgord, H. Schouten
- D. History of Exploration — C. Drake

II. Neogene Stratigraphy and Processes — S. Riggs, D. Swift D. Belknap

III. Coastal Plain

- A. North of Cape Hatteras — R. Olsson
- B. South of Cape Hatteras — G. Gohn

IV. Deeper Stratigraphy of Shelf, Slope, & Rise — W. Poag, P. Valentine, K. Klitgord, C. Bowin

V. Geophysical Data — Magnetism, Gravity, Refraction, and Multichannel Reflection — R. Sheridan, J. Grow

VI. Synthesis of Major Mesozoic and Cenozoic Basins

- A. Onshore Prerift and Synrift Grabens — W. Manspeizer
- B. Mesozoic and Cenozoic Volcanism — J. DeBoer
- C. Georges Bank Basin — J. Schlee, K. Klitgord
- D. Baltimore Canyon Trough — J. Grow, K. Klitgord, J. Schlee
- E. Carolina Trough — W. Dillon, P. Popenoe, K. Klitgord
- F. Blake Plateau Basin — W. Dillon, C. Paull, K. Klitgord
- G. Bahamas — R. Sheridan, M. Ball, H. Mullins

VII. Paleoenvironments — J. Schlee, R. Landrum, W. Manspeizer, D. Swift, S. Riggs

VIII. Deep Crustal Structure

- A. Gravity and Magnetic Models — J. Grow, K. Klitgord, D. Hutchinson, A. Swift
- B. Large Aperture Seismic Experiments — J. Ewing, P. Stoffa, M. Talwani

IX. Rifting and Subsidence Theory

- A. Mechanics of Rifting — R. Sheridan
- B. Subsidence and Thermal Evolution — T. Watts, J. Sclater
- C. Sealevel Variations — W. Pitman, P. Vail

X. Regional Geochemistry — F. Manheim

XI. Mineral Resources

- A. Oil and Gas — R. Mattick, M. Ball
- B. Ground Water — F. Kohout
- C. Sand and Gravel — D. Duane
- D. Hard Minerals — S. Riggs, F. Manheim
- E. Geothermal — J. Costain

XII. Environmental Hazards

- A. Petroleum Exploration — D. Folger
- B. Coastal Zone — O. Pilkey
- C. Cretaceous and Cenozoic Faulting — D. Prowell
- D. Earthquakes — L. Sykes, J. Armbruster
- E. Seafloor Mining — S. Riggs
- F. Waste Disposal — H. Palmer
- G. Environmental Overview — D. Folger

XIII. Synthesis and Unanswered Questions

- R. Sheridan, J. Grow

Pocket Maps

1. Bathymetry Map — A. Shor
2. Magnetism Map — K. Klitgord
3. Gravity Map — C. Bowin
4. Refraction Map — R. Sheridan
5. Multichannel Reflection Profile Map with Drill Holes — J. Grow
6. Earthquake Map — L. Sykes, J. Armbruster
7. Tectonic Map — K. Klitgord, H. Schouten
8. Depth to Basement Map — K. Klitgord, J. Grow, W. P. Dillon, J. Schlee
9. Reflection Profile across Georges Bank Basin — J. Schlee, K. Klitgord
10. Reflection Profile across Baltimore Canyon Trough — J. Grow, K. Klitgord, J. Schlee
11. Reflection Profile across Carolina Trough — W. Dillon, P. Popenoe, K. Klitgord
12. Reflection Profile across Blake Plateau Basin — W. Dillon, C. Paull, K. Klitgord
13. Reflection Profile across Bahamas — R. Sheridan, M. Ball, H. Mullins.

PENROSE CONFERENCE

Tectonic Geomorphology

The rapidly evolving field of "Tectonic Geomorphology" will be the subject of a 4-day Penrose Conference, April 18-21, 1983, at the University of Arizona Conference Center near Tucson, Arizona. The past decade has been characterized by many new ideas about marine and fluvial terraces, fault scarps, soils chronosequences of tectonic and climatic terraces, modelling of the effects of base-level change on the landforms of fluvial systems, and the typical landscapes associated with normal, strike-slip, and reverse faults. Earth scientists are now being asked to define more than the structural characteristics of fault zones. Tectonic geologists want to know more about regional patterns of Quaternary earth deformation and how they relate to plate interactions. Engineers and planners need to know more about frequencies, magnitudes, and locations of Pleistocene and Holocene surface-rupture events.

Our discussions will stress multidisciplinary approaches in tectonic geomorphology as a tool for deciphering late Quaternary earth deformation. We intend to assess the present state of the art and initiate ideas for cooperative studies in this cornerstone discipline of neotectonics.

Those desiring to participate in such discussions should write William B. Bull (address given below) **before December 15, 1982**, and should include a succinct summary of their current research interests and specific reasons for attending the conference. Most of the conference will be devoted to discussions, but persons interested in giving an oral presentation or poster session are invited to submit a title and description of their topic. A registration fee of \$400 per person will include food, lodging, and ground transportation.

Conveners:

William B. Bull
Geosciences Department
University of Arizona
Tucson, AZ 85721

Robert E. Wallace
U.S. Geological Survey
MS 77 345 Middlefield Rd.
Menlo Park, CA 94025

CALL FOR NOMINATION OF CANDIDATES FOR HONORARY FELLOWSHIP IN THE SOCIETY

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, 1983

Forms are available from:

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

PRELIMINARY ANNOUNCEMENT AND CALL FOR PAPERS

NORTH-CENTRAL SECTION, GSA, 17th Annual Meeting Madison, Wisconsin, April 28–29, 1983

The Department of Geology and Geophysics, University of Wisconsin-Madison, will host the 17th Annual Meeting of the North-Central Section of the Geological Society of America concurrently with the North-Central Section of the Paleontological Society, the Pander Society, and the Great Lakes Section of the Society of Economic Paleontologists and Mineralogists on April 28 and 29, 1983.

CALL FOR PAPERS. Technical sessions on Thursday, April 28, and Friday, April 29, will include the following: paleontology, paleoecology, stratigraphy, sedimentology, economic geology, geomorphology, hydrogeology, Quaternary geology, mineralogy and petrology, geochemistry, structural geology, geophysics, engineering and environmental geology, and general geology. Papers on these and other subject areas are solicited. Other sessions may be arranged after abstracts have been received by the Program Committee.

SYMPOSIA (April 28, 29)

- (1) Biofacies and Provincialism in Conodonts: Invited symposium by the Pander Society (David L. Clark)
- (2) Recognition of Till Facies in the Mid-Continent Region (Lee Clayton and Timothy J. Kemmis)
- (3) Groundwater Geology (Mary P. Anderson and Kenneth R. Bradbury)
- (4) Hematitic and Calcareous Oolitic Strata at the Ordovician-Silurian Boundary of the Mid-Continent (Donald G. Mikulic and Joanne L. Kluessendorf)

ABSTRACTS. Abstracts, which are limited to 250 words, must be submitted camera ready on official abstract forms available from

S. W. Bailey Program Committee Chairman Department of Geology & Geophysics University of Wisconsin-Madison Madison, WI 53706 (608) 262-1806	or	Abstracts Coordinator Geological Society of America P.O. Box 9140 Boulder, CO 80301 (303) 447-8850
--	----	--

Abstracts are due **December 7, 1982**. Acceptance or rejection of an abstract will be based on the abstract as submitted by the author.

Send one original
and five copies to

S. W. Bailey
Department of Geology & Geophysics
University of Wisconsin-Madison
Madison, WI 53706

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.

STUDENT AWARDS. Student papers are encouraged, and awards will be made to students presenting the most outstanding papers. Student papers must be clearly identified as such and should be authored exclusively by students. Prizes awarded for student papers with more than one author will be divided among the authors.

FIELD TRIPS. All field trips will be scheduled for Saturday, April 30. Field-trip coordinator is Michael G. Mudrey, Jr.

- (1) Middle Proterozoic to Cambrian Rocks in Central Wisconsin: Anorogenic Sedimentary and Igneous Activity (Jeffrey K. Greenberg and Bruce A. Brown).
- (2) Precambrian Rhyolite and Granite Inliers in South-Central Wisconsin (Eugene I. Smith).
- (3) Late Glacial History and Environmental Geology of Southeastern Wisconsin (David M. Mickelson).
- (4) Neda Oolite at the Ordovician-Silurian Boundary in Eastern Wisconsin (Donald G. Mikulic and Joanne L. Kluessendorf).
- (5) Sedimentology of Ordovician Carbonates and Sandstones of Southwestern Wisconsin (Charles W. Byers, Robert H. Dott, Jr., and Lloyd C. Pray).

In addition, an informal trip to Ordovician conodont localities in southwestern Wisconsin will be led by David L. Clark.

SOCIAL EVENTS. A welcoming party will be held on Wednesday evening, April 27, and the annual banquet will be held on Thursday evening, April 28. An open house is planned for late Thursday afternoon at Lewis G. Weeks Hall, the new home of the Department of Geology and Geophysics.

DETAILED INFORMATION concerning registration, motel and hotel accommodations, and other activities will appear in a later issue of *GSA News & Information* and as a part of the *Abstracts with Programs* for 1983.

ADDITIONAL INFORMATION, REQUESTS, OR SUGGESTIONS SHOULD BE DIRECTED TO

Campbell Craddock, Local Committee Chairman
Department of Geology & Geophysics
University of Wisconsin-Madison
Madison, WI 53706
(608) 262-1317 or 262-8960

PRELIMINARY ANNOUNCEMENT AND CALL FOR PAPERS

CORDILLERAN SECTION, GSA, 79th Annual Meeting ROCKY MOUNTAIN SECTION, GSA, 36th Annual Meeting Combined Annual Meetings, Salt Lake City, May 2-4, 1983

COMBINED MEETING, CORDILLERAN AND ROCKY MOUNTAIN SECTIONS. The Department of Geology and Geophysics, University of Utah, will host a joint annual meeting of the **Cordilleran and the Rocky Mountain Sections of the Geological Society of America**, the annual meeting of the **Seismological Society of America**, and the annual meeting of the **Pacific Coast Section of the Paleontological Society**, on May 2-4, 1983, at the Salt Palace Convention Center, Salt Lake City, Utah.

REGISTRATION

Preregistration will be made by mail. On-site registration will take place on Sunday, May 1, from 1700 to 2000 hours at the Marriott Hotel and during the meeting at the Salt Palace. Preregistration fees are \$35 for professionals, \$3 for GSA Student Associates, and \$6 for other students. On-site registration is \$45 for professionals and \$6 for all students. All are urged to take advantage of the lower preregistration rates. **Preregister by March 28, 1983.**

SYMPOSIA

- A. Cretaceous-Tertiary boundary in the San Juan basin and related problems (J. Keith Rigby, Jr., and Jim Fassett)
- B. Trace fossils and bioturbation in nonmarine sedimentary deposits (M. Dane Picard and A. A. Ekdale)
- C. Stratigraphy and paleoecology of Lower Mesozoic non-marine strata in the Colorado Plateau (Sidney R. Ash)
- D. Tertiary tectonics and volcanism of the eastern Great Basin (Donald W. Fiesinger and David Miller)
- E. Eocene-Quaternary synthesis of the Cordilleran orogen (Robert S. Yeats and R. L. Christiansen)
- F. Engineering geology of liquifiable deposits in the western U.S. (Jeffrey R. Keaton and William Lund)
- G. Late Quaternary history of Clear Lake, California (John D. Sims)
- H. Contrasts of structural style of the foreland and hinterland of the Sevier orogenic belt (Paul K. Link)
- I. Rio Grande Rift: new research (Robert E. Reicker and Charles Chapin)
- J. Stratigraphy, paleoenvironments, and neotectonics of Quaternary lakes in the Great Basin (Don Currey)
- K. Mesozoic orogenesis in the U.S. Cordillera and Rocky Mountains (Gregory Harper and Jason Saleeby)
- L. Continental extensional processes (Roy Dokka and James Opton)
- M. Pacific margin tectonostratigraphic terranes from Washington to Alaska (Norman M. Savage)
- N. Engineering geology of the Wasatch Front (William Lund)

Joint GSA-SSA Symposia:

- O. Earthquake hazard and risk evaluations in intraplate regions

- P. Seismicity, crustal structure, and contemporary tectonics of extensional domains

SSA Symposia (tentative):

- Q. Results of regional seismic network monitoring
- R. Synthetic seismograms for two-dimensional velocity and Q-structures

FIELD TRIPS

Premeeting

1. Geology of the Albion-Raft River-Grouse Creek Mountain area, northwestern Utah and southern Idaho (D. M. Miller, R. L. Armstrong, R. R. Compton, and V. R. Todd)
2. Mesozoic and Cenozoic sedimentary and tectonic history of the central Utah Overthrust Belt (R. L. Bruhn, M. D. Picard, and S. Beck)
3. Upper Proterozoic diamictites and volcanic rocks of the Pocatello Formation and correlative units, southeastern Idaho and northern Utah (Paul Karl Link)
4. Holocene basalt volcanism of the eastern Snake River Plain, Idaho (M. A. Kuntz, R. H. Lefebure, D. E. Champion)
5. Paleoseismicity along the Wasatch Front and adjacent areas, central Utah (R. C. Bucknam, A. J. Crone, A. R. Nelson, D. P. Schwartz, F. H. Swan, and J. T. Sullivan)

During Meeting

6. Structures produced by movement on thrust sheets (Paul A. Washington)

Postmeeting

7. Timing and style of Tertiary extension in east-central Nevada (Elizabeth L. Miller and Phillip B. Gans)
8. Early Mesozoic stratigraphy — southwestern Colorado Plateau to southern Inyo Mountains (John E. Marzolf and George C. Dunne)
9. The geology in and near Canyonlands and Arches National Parks (D. L. Baars)
10. Oligocene and Miocene volcanism in southwestern Utah and adjacent Nevada (M. G. Best and Jeff Keith)
11. Lake Bonneville stratigraphy, geomorphology, and neotectonics in west-central Utah (D. R. Currey, C. G. Oviatt, and W. Dorman-Ligh)
12. Geology of the Upper Stillwater Dam Site and Stillwater Tunnel (James L. Rogers, M. Deming)
13. Engineering geology problems along Utah's megalopolis (Bruce Kaliser)

PRELIMINARY ANNOUNCEMENT AND CALL FOR PAPERS

GSA ABSTRACTS for talks and poster sessions, which are limited to 250 words, **MUST** be submitted camera ready on official abstract forms available from either:

Abstracts Coordinator Geological Society of America P.O. Box 9140 Boulder, CO 80301	GSA Abstracts Dept. of Geology & Geophysics University of Utah Salt Lake City, UT 84112-1183
--	---

Abstracts are due November 29, 1982. Acceptance or rejection of an abstract will be based on the abstract as submitted by the author.

Send one original and five copies to

Abstracts
Peter H. Roth
Department of Geology and Geophysics
University of Utah
Salt Lake City, UT 84112-1183

All papers in ordinary sessions will be 15 minutes, plus 5 minutes for discussion. Poster presentations will be on display for one-half day.

All abstracts will be reviewed for informative content, correct structure, reliability of data, appropriate geographic coverage, and originality. Only one paper will be accepted from a single author; if papers are co-authored, no more than one paper may be presented by an author. These restrictions apply to technical sessions other than invited symposia. Authors will be notified of acceptance well in advance of the meeting.

CAROUSEL PROJECTION EQUIPMENT will be provided for 2" x 2" (35mm) slides only (dual projectors by prior request only). Please bring your own loaded carousel trays.

BUSINESS MEETINGS. The Cordilleran and Rocky Mountain Sections will hold their respective business meeting luncheons at the Marriott Hotel at 1215 hours on Tuesday, May 3, 1983. The annual Seismological Society of America luncheon will also be held at 1215 hours in the Marriott Hotel on Tuesday, May 3, 1983.

EXHIBITS of educational and commercial organizations will be on display. Exhibit space must be reserved by **February 14, 1983.**

SOCIAL ACTIVITIES. A no-host reception will be held from 1930 to 2300 hours on Sunday, May 1, at the Marriott Hotel. Activities such as visits to historical sites and the Bingham Mine are being organized.

HOUSING. The headquarters hotel will be the Salt Lake City Marriott Hotel, located across the street from the Salt Palace. A variety of housing is available and will be coordinated by the Salt Lake City Visitors and Convention Bureau.

DETAILED INFORMATION will appear in a later issue of *GSA News & Information* and as part of the *Abstracts with Programs* for 1983.

INQUIRIES AND SUGGESTIONS should be directed to

William P. Nash, General Chairman
Department of Geology and Geophysics
University of Utah
Salt Lake City, UT 84112-1183
(801) 581-7162

1983 ANNUAL MEETING CALL FOR:

SYMPOSIA PROPOSALS

Send titles and descriptions to:

Haydn Murray, Department of Geology, Indiana University, Bloomington, IN 47405, (812) 335-5582

CENTENNIAL SYMPOSIUM PROPOSALS

Send titles and descriptions to:

A. R. Palmer, Centennial Science Coordinator, GSA, P.O. Box 9140, Boulder, CO 80301, (303) 447-8851

DEADLINES FOR EACH: JANUARY 1, 1983



Special Paper 188

Sedimentary Structures in Dunes of the Namib Desert, South West Africa

By Edwin D. McKee

The Namib Desert covers some 34,000 km² and is great both from the standpoint of areal extent and from the height and bulk of individual dunes. In this volume Dr. McKee describes in detail the structures of the various types of dunes to be found in the area – linear, star, barchan and barchanoid ridge, transverse, reversing, dome, blowout, and coppice. Profusely illustrated with photos taken from both the ground and the air.

Special Paper 188,
paper bound, iii + 64 pages,
62 photos, CIP,
ISBN 0-8137-2188-1 \$8.00

Order from:
 Publication Sales, GSA
 P.O. Box 9140, Boulder, CO 80301



Great Lakes Region Gravity and Magnetic Map Sequence

Compiled by Norbert W. O'Hara

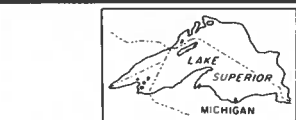
Gravity and magnetic anomalies are strongly affected by the lithology of the igneous and metamorphic basement rock. Maps showing the gravity and magnetic anomalies illustrate trends and lineaments reflecting tectonic and structural relationships. Therefore, anomaly maps are often used to study the tectonic framework, structural configuration, and geologic history of the basement complex. From this basic information, economically motivated investigations of the overlying rock units may delineate mineral and petroleum resources. More recently, gravity and magnetic maps have been used extensively to help provide the tectonic information required for the siting of nuclear power plants.

Individual MCs 37 through 41 Folded: \$10.50
 Rolled: \$12.00

SAVE ON THE ENTIRE SEQUENCE!
 MC-37 through 41 Set Folded only: \$47.00

To order mail check or money order in U.S. funds or provide MasterCard or VISA charge information. GSA Member discount allowed. Colorado residents add sales tax.

GSA Publication Sales • P.O. Box 9140 • Boulder, CO 80301



MC-37¹ Lake Superior Bouguer gravity and total magnetic maps. Two sheets in color 36" x 23". Text².



MC-38¹ Lake Michigan Bouguer gravity and total magnetic maps. Two sheets in color 24" x 34". Text².



MC-39¹ Lake Huron Bouguer gravity and total magnetic maps. Two sheets in color 29" x 26". Text².



MC-40¹ Michigan Basin Bouguer gravity and total magnetic maps. Two sheets in color 30" x 27". Text².

MC-41³ Great Lakes area Bouguer gravity, total magnetic intensity, and free-air gravity maps. Two sheets in color 28" x 33" and one sheet b&w 28" x 34". Text².



¹ Contour interval- gravity maps, 5 mgal; magnetic maps, 100γ. Scale- 1:750,000. Projection- Universal Transverse Mercator.

² The same 12-page text serves for all maps in this sequence.

³ Contour interval- gravity maps, 5 mgal; magnetic maps, 200γ. Scale- 1:2,500,000. Projection- Universal Transverse Mercator.

Second Announcement and Final Call for Abstracts

Eighth World Conference on Earthquake Engineering
July 21-28, 1984
San Francisco, California, USA

Purpose. The purpose of the conference is to foster the advancement of earthquake engineering by providing a forum where participants from all related disciplines can meet to exchange ideas and information on recent developments.

Place and Dates of the Conference. July 21-28, 1984. Fairmont Hotel, San Francisco, California.

Topics. The technical sessions of the conference will cover all aspects of earthquake engineering, including:

1. Seismic risk and hazard.
2. Ground motion and seismicity.
3. Soil stability, soil-structure interaction, and foundations.
4. Experimental methods and tests of structures and components.
5. Design of structures and structural components.
6. Special structures and critical facilities.
7. Response of structures.
8. Repair, strengthening, and retrofit of structures.
9. Urban design, socioeconomic issues, and public policy.
10. Lifelines—utility and transportation systems.
11. Non-structural systems and building contents.
12. Development and enforcement of seismic codes and standards.

The conference will also include a special session on recent earthquakes, invited lectures, a keynote address, and opening and closing ceremonies.

Conference Presentations. Papers accepted for the conference can be presented in one of two formats, depending on the wishes of the author: (1) a 15-minute oral presentation, with an additional 5 minutes for discussion, to an audience seated theatre style; or (2) a 2-hour display presentation of graphs, figures, and other materials to a small circulating audience.

Proceedings. Papers accepted for the conference will be published in the Conference Proceedings, which will serve as a permanent reference. The Proceedings will be distributed at the conference. Papers printed in the Proceedings should be no more than 8 pages in length—typewritten, single spaced, including figures and tables.

Official Language. The official language of the conference will be English.

Abstracts. Persons wishing to present papers at the conference are requested to submit an abstract of their papers to the President of the International Association for Earthquake Engineering (IAEE) on or before October 15, 1982. Abstracts should be typewritten (single spaced) and not more than 400 words in length. The format should be as follows: title of paper; author (or authors) with full mailing address of principal author; and text of abstract. Please also indicate on the upper left corner of the page the topic number most appropriate for your paper.

Prospective authors may submit more than one abstract for consideration, but an author may present only one paper at the conference.

Four copies of each abstract should be mailed to the following address:

Professor D. E. Hudson, President
International Association for Earthquake Engineering
Department of Civil Engineering
University of Southern California
Los Angeles, California 90007, U.S.A.

Authors of selected abstracts will be notified by May 15, 1983. Detailed instructions for the complete manuscripts and additional information about display presentations will be sent to prospective authors at the time of acceptance notification. At that time, authors will be asked to indicate whether they wish to make an oral presentation or a display presentation.

Host Organization:

Earthquake Engineering Research Institute
2620 Telegraph Avenue
Berkeley, California 94704, U.S.A.

Specific questions and requests for future announcements should be directed to the Steering Committee at the following address: EERI-8WCEE

2620 Telegraph Avenue
Berkeley, California 94704, U.S.A.

1983 Southwest Section AAPG Convention

The 1983 Southwest Section AAPG Convention is to be held at the Civic Center in Abilene, Texas, March 6-8, 1983. The theme for this meeting is "Exploration in a Mature Area." The general chairman is Bill Nicholson of Sun Exploration in Abilene.

IN MEMORIAM

Gordon H. Burgess
East Aurora, New York

Randall Lee Gresens
Seattle, Washington

E. Bates McKee, Jr.
Seattle, Washington

UPDATE

Statement on Geological Sciences in the 1980s

The Geological Sciences Board is conducting a study of the trends, needs and priorities of the geological sciences for the decade of the 1980s. Many organizations and individuals already have been contacted regarding this task. In order to ensure that the forthcoming report is based broadly on ideas from the scientific community, the Board solicits your thoughts about the substance of the study.

So that proper consideration may be given to them, your responses should be received by Dr. William R. Dickinson, Chairman, Geological Sciences Board, National Academy of Sciences,

Room 169, 2101 Constitution Avenue, NW, Washington, DC 20418, by early fall 1982.

The Geological Sciences Board has appointed a steering committee consisting of Drs. Clarence R. Allen, John C. Crowell, William W. Hay, Charles L. Drake, V. Rama Murthy, John C. Harms, David B. Stewart, and Samuel S. Adams, who will prepare a draft report by January 1, 1983. Drs. Bruce B. Hanshaw, Robin Brett, and A. G. Unklesbay are serving as liaison members.

Opportunities in China for graduate students and postdoctoral scholars

The Committee on Scholarly Communication with the People's Republic of China (CSCPRC) announces opportunities under the National Program for Advanced Study and Research in China for graduate students and postdoctoral scholars in the natural sciences, engineering, social sciences, and humanities for 1983-84. This program makes possible long-term study (10-12 months) or research (3-12 months) in affiliation with Chinese universities and research institutes. Application is open to citizens of the United States regardless of national origin, sex, or religious affiliation. Grants, the number of which depends on available funding, include transporta-

tion to and from China, stipend, living and travel allowances while in China, and a limited research and educational materials allowance. The program does not provide dependent travel or support. The program has two components; application should be made either to the Graduate Program or to the Research Program. Inquiries should be addressed to the CSCPRC, National Academy of Sciences, 2101 Constitution Avenue, Washington, DC 20418.

Postmark/Mailing deadline for applications: November 5, 1982.

Grants-in-aid for student research in 1983 available

The Southeastern Section, GSA, will award a limited number of grants-in-aid for student research in 1983. Grants may be for graduate or undergraduate research and will be restricted to student associates of GSA who are in attendance at colleges or universities within the geographical boundaries of the section. Postdoctoral research will not be supported. The 1982 grants ranged in size from \$300 to \$550. For further information and necessary application forms, contact Dr. Stephen Stow, Secretary-Treasurer,

SEGSA, Oak Ridge National Laboratory, Box X, Oak Ridge, TN 37830, (615) 574-7830.

to whom completed applications should be sent by Feb. 15, 1983. Final decisions and announcement of grants will be made as soon as possible after the SEGSA 1983 meeting.

REMINDER FROM THE MEMBERSHIP DEPARTMENT

Last year most members remitted their annual dues payments before the November 30 deadline. For them there was no delay in receiving the publications they desired.

This year the timing is even more critical because section meeting *Abstracts with Programs* will be mailed to members the first part of 1983. If your dues payment is not received at headquarters before mid-December, you may miss that much-needed *Abstracts with Programs* for the section meeting you plan to attend. **Remember**, back orders take 6 to 8 weeks to reach you!



THE GEOLOGICAL SOCIETY OF AMERICA

Annual research awards program 1983

The Geological Society of America will continue its annual research awards program in 1983. Eligibility is not restricted to GSA members. New application forms for 1983 and detailed requirements are available in the geology departments of most colleges and universities in the United States or upon request from the Executive Director, the Geological Society of America, P.O. Box 9140, Boulder, Colorado 80301. PLEASE USE ONLY THE 1983 APPLICATION AND APPRAISAL FORMS.

The primary role of the research grant program is to provide partial support of master's and doctoral thesis research for graduate students at universities in the United States, Canada, Mexico, and Central America. If necessary, applications may be submitted in Spanish or French.

The Geological Society of America awarded \$90,000 for grants in 1982. The grants went to 145 students doing research for advanced degrees. The average amount granted was \$623. The highest grant was \$1,000, but there is no predetermined maximum amount.

Confidential evaluations from two faculty members are required from master's and doctoral candidates and must accompany applications submitted. PLEASE USE THE NEW "APPRAISAL OF APPLICANT" FORMS, WHICH ACCOMPANY THE 1983 APPLICATION FORMS.

Applications will also be accepted for the Harold T. Stearns Fellowship(s). These grants are awarded periodically in support of research on one or more aspects of the geology of Pacific Islands and of the circum-Pacific region. They are distinct from the GSA Penrose research grants and are restricted in their use to the particular region. The awardee(s) will be selected by the Research Grants Committee. Applications must be postmarked by **February 15**. Application forms are the same as those used for the Penrose research grants.

The Committee on Research Grants meets in April to evaluate applications and to award grants. In May all applicants for grants will be informed of the committee's actions by the Executive Director of the Geological Society of America.

ALL APPLICATIONS MUST BE SUBMITTED ON THE 1983 FORMS AND POSTMARKED BY FEBRUARY 15, 1983.

(PLEASE POST)

Special Paper 189

Recent Trends in Hydrogeology

Edited by T. N. Narasimhan

A state-of-the-art survey of the directions in which hydrogeology is proceeding. The 23 papers by 29 authors presented in this volume are divided into 5 sections: Conceptual Aspects, Measurement Aspects, Mathematical Aspects, Regional Aspects, and Engineering Aspects. Subjects covered range from Aquifer Thermal Energy Storage to Hydrogeology of Induced Seismicity and Tectonism to Well-Loss Function and the Skin Effect.

Special Paper 189, paper bound, viii + 448 pages, 8½ x 11, 1982,
CIP, ISBN 0-1837-2189-X \$32.00

To order your copy, mail check or money order in U.S. funds for full amount or include MasterCard or VISA account number, expiration date, and your signature. Colorado residents add sales tax.

Order from: Publication Sales
Geological Society of America
P.O. Box 9140
Boulder, CO 80301



INSIDE---

- Call for nominations for honorary GSA fellowship p. 152
- Preliminary announcements and calls for papers
 - North-Central Section p. 153
 - Cordilleran Section, Rocky Mountain Section – Combined meeting p. 154



**THE
GEOLOGICAL SOCIETY
OF AMERICA**
P.O. Box 9140 • 3300 Penrose Place
Boulder, Colorado 80301

SECOND CLASS
Postage Paid
at Boulder, Colorado
and at additional mailing office