San Antonio Hosts GSA’s 99th Annual Meeting
by Sue Beggs
GSA Meetings Manager

It has been a difficult year for many geologists, so we were pleased that 4452 people attended GSA’s 1986 Annual Meeting, in San Antonio, Texas. The talk between sessions and along the River Walk was mostly about the economic trends and when (not if) the upturn would occur. The mood was positive, and the meeting was a way to share the anticipation. In spite of the construction at the Convention Center and the unusually cold weather, the 99th meeting, November 10-13, provided a useful forum for geoscience professionals to exchange ideas and to renew friendships.

Registration
Of the 4452 attendees, 2995 registered as professionals, 1114 registered as students, and 343 registered as guests. Preregistrants constituted 75% of the total registrations. This follows a trend of early registration that has been building over the past few years as the advantages of preregistration have increased. In 1983, 63% of attendees preregistered; in 1984, 67%; and in 1985, 70%.

Abstracts
Volunteered and symposia papers submitted totaled 1865. (The 1985 meeting drew 1629 abstracts; the record high is 2074, for the 1984 meeting.) A total of 1515 papers were presented at the meeting, 761 in oral sessions; 324 in symposia; and 430 in poster sessions.

Field Trips
The eight premeeting and four postmeeting field trips provided in-depth looks at a variety of geologic features for 310 registrants. Those interested in guidebooks used for the trips should contact E. G. Wermund, Bureau of Economic Geology, University of Texas at Austin, Austin, TX 78712, (512) 571-1534.

Exhibits
The number of exhibits at GSA annual meetings has doubled since 1982, and the quality of the displays has increased. Recognition for this achievement goes to 12-year staff member Kathy Ohmje, who is also the field trip coordinator and registration manager for GSA annual meetings. If you would like to recommend an exhibitor or, better yet, become an exhibitor at an annual meeting, call GSA headquarters.

GSA Bookstore
GSA is maximizing its utilization of the exhibit format for both the Decade of North American Geology (DNAG) and other GSA publications and products. The GSA Bookstore and DNAG display were two of the highlights of the exhibition. Several new publications—including two new DNAG volumes—sparked interest and spurred sales. Be sure to see the newest GSA books in the mini bookstore at the spring GSA Section meetings, and look for us under the banner at Phoenix in ’87!

Employment Service
The service provided interview opportunities in approximately the same numbers as 1985. Thirty-one employers used the service to interview for 131 positions. Applicants totaled 270, and 578 interviews were conducted. Of the jobs available, 21 were corporate; 28 were academic; and 82 were for government positions.

Professional Horizons
In its third year of sponsoring its own short courses, GSA offered seven courses, covering topics such as microcomputers, computer graphics, contaminant hydrogeology, and rock mechanics. Other societies and GSA divisions sponsored an additional five courses.

The Science Theater provided an interesting addition to the technical program, especially with the showing of the final segments of the Planet Earth television series.

Technical Program
The 1986 technical program offered some interesting innovations. The public policy forum was a full-day symposium, "Engineering Geology in Public Policy." Geologist Elisabeth Guerry Newton began the keynote address by quoting Will Durant: "Civilization exists by geological consent.... subject to change without notice." A wide variety of symposia over the following three days verified Durant’s observation. The Paleontological Society symposium session was standing room only by the end of the morning. Biologist and paleontologist Stephen Jay Gould gave the closing remarks, complete with an illustration of the ontogeny of Mickey Mouse. The planetary geology session looked at Mars, "Ten (continued on p. 4)
99th Annual Meeting (continued from p. 1)
Years after Viking" and at the Uranian satellites. Of interest to the local news media were the K/T Boundary symposium, the special student forum, and the carbonate aquifers symposium, as well as the special forum on the Hubbard Glacier.

Special Events
Pictures tell part of the story, but you really had to be there to enjoy the excitement of "Burros & Burritos." After four days of meeting events and technical papers, geologists and guests enjoyed themselves at an evening of food, music, and dancing. The country/rock band inspired some to two-step and others to jitterbug. Everyone, however, enjoyed watching the traditional Spanish dancers. GSA President Gary Ernst arrived at the event wearing a sombrero and riding a burro; he was later "arrested" at the "border" but was out of the handcuffs in short order.

The 5K/10K races have become a part of this meeting. We are not at the New York Marathon stage, but we do have runners who enjoy the sport just as much as do more lauded runners. This year's winners: 10K men—Bob Anderson, at 33:23:7; 10K women—Alisa Mast, at 38:59:3; 5K men—Larry Krissyk, at 16:35:8; 5K women—E. O'Leary, at 20:42:6.

The tennis tournament players took advantage of the best weather of the meeting; they volleyed, lobbed, and smashed for four hours. Winners (starting with first place) were Dan Weill (also 1985 first place), Lucian Platt, and Paul Melancon.

Presidential Address, Awards Ceremonies, and Reception
Among the most significant innovations for this meeting was the Awards Reception that followed W. Gary Ernst's Presidential Address and the Awards Ceremonies for AGI's Ian Campbell Award to William B. Heroy, Jr., and GSA's Penrose Medal to Laurence L. Sloss and Day Medal to E-an Zen. The tributes to the awardees provided an unusually moving and memorable event. The Awards Reception included toasting of the medalists before an audience of 3000.

Thanks
James Jones, 1986 General Chairman, deserves the praise for leading his committee over the past five years. It would be impossible to manage the annual meeting without the leadership of such geologists, who contribute personal time on behalf of GSA.

Let's also recognize the sherpas—GSA staff. In the Himalayas, sherpas carry the equipment and do a lot of the heavy work that gets an expedition team to the top of a magnificent peak. They rarely get their pictures taken holding the flag at 24,000 feet, but you can be sure their dedication and willingness to put in long hours help to make everything possible.


Applications Sought for Senior and Postdoctoral Research Associateships
The National Research Council announces the 1987 Resident, Cooperative, and Postdoctoral Research Associateship Programs for research in the sciences and engineering to be conducted in behalf of 26 federal agencies or research institutions, whose laboratories are located throughout the United States. The programs provide Ph.D. scientists and engineers of unusual promise and ability with opportunities to perform research on problems of their own choosing yet compatible with the research interests of the sponsoring laboratory. Initiated in 1954, the Associateship Programs have contributed to the career development of more than 4000 scientists, from recent Ph.D. recipients to distinguished senior scientists.

Approximately 450 new full-time Associateships will be awarded on a competitive basis in 1987 for research in chemistry, earth and atmospheric sciences; engineering and applied sciences; biological, health, and behavioral sciences and biotechnology; mathematics; space and planetary sciences; and physics. Most of the programs are open to both U.S. and non-U.S. nationals, and to both recent Ph.D. degree recipients and senior investigators.

Awards are made for one or two years; senior applicants who have held the doctorate at least five years may request shorter tenure. Stipends for the 1987 program year will begin at $26,350 a year for recent Ph.D.s and will be appropriately higher for senior Associates. A stipend supplement of about $5000 may be available to regular (not senior) awardees holding recognized doctoral degrees in those disciplines wherein the number of degrees conferred by U.S. graduate schools is significantly below the current demand. In the 1986 program year these areas were engineering, computer science, and space-related biomedical science.

Reimbursement is provided for allowable relocation costs and for limited professional travel during tenure. The host laboratory provides the Associate with programmatic assistance including facilities, support services, necessary equipment, and travel necessary for the conduct of the approved research program.

Applications to the National Research Council must be postmarked no later than January 15, April 15, and August 15, 1987. Initial awards will be announced in March and April (July and November for the two later competitions), followed by awards to alternates later.

Information on specific research opportunities and federal laboratories, as well as application materials, may be obtained from the Associateship Programs, Office of Scientific and Engineering Personnel, JH 608-D3, National Research Council, 2101 Constitution Ave. N.W., Washington, D.C. 20418, (202) 334-2760.

Cole Award Applications Due
The Gladys W. Cole Memorial Research Award, for investigations of the geomorphology of semiarid and arid terrains in the United States and Mexico, is given each year to a GSA Fellow between 30 and 65 years old who has published one or more significant papers in geomorphology. The minimum amount of the award has been increased to $2100. Funds cannot be used for work already accomplished, but previous recipients may reapply if additional support is needed to complete their work.

Application forms for the award can be obtained from Research Grants Administrator, Geological Society of America, P.O. Box 9140, Boulder, CO 80301; (303) 447-2020. Applications must be postmarked by February 15, 1987.

Vol. 9, no. 1 GSA News & Information January 1987
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Prepared from contributions from the staff and membership: Executive Director: F. Michael Water: Managing Editor: Faith Rogers; Associate Editor: Lee Gludish; Director of Communications: Nancy A. Reed; Production and Advertising Manager: James R. Clark; Marketing/Advertising Assistant: Ann H. Fogel; Assistant Production Manager: Meredith L. Larson; Production Assistants: Marcia T. Grisales and Joan E. Manley.

CENTENNIAL NEWS
by Allison (Pete) Palmer

Publication Schedule Picking Up Speed

Although predicting has turned out to be difficult in the DNAG Project, it appears that the following books should probably be at the printers by the time this text (written November 1) is printed:

1. Centennial Field Guide, Northeastern Section. All 100 texts are in hand and have been through copy-editing. This will be published before the spring Northeastern Section meeting, which means that for the spring meetings, the best 200 geologic localities for the entire east-coast sector of the U.S. and Canada will be available. Dave Roy of Boston College has done an outstanding job of bringing this book to completion.

2. Geomorphic Systems of North America. This is the Centennial contribution from the Quaternary Geology and Geomorphology Division and will be the second Division project to be completed. Will Graf of the University of Arizona has done a first-class job as editor of this volume. All 14 chapters in this book are already into copy-editing.

On the basis of current information, the following books should have all their parts through the review process and be in the final production phases, getting ready to go to the printer early in 1987:

- Centennial Field Guide, Rocky Mountain Section
- Centennial Field Guide, North-Central Section
- Centennial Field Guide, South-Central Section
- Centennial Field Guide, Cordilleran Section
- Groundwater Hydrogeology of North America
- Surface Water Hydrology of North America
- North America and Adjacent Oceans During the Last Deglaciation

Overdue authors for chapters in several more volumes are promising their chapters before the end of the year, so all chapters for these volumes should be at least in review or beyond:

1. Sedimentary Cover of the Craton
2. The Arctic Ocean Region
3. The Appalachian and Ouachita Orogens: U.S.
4. The Atlantic Continental Margin: U.S.

I hope by the time I write the March column in early January there will be a better fix on completion of overdue chapters in several more of the volumes that had been expected last year.

To all of those who have completed their commitments in this enormous project, many thanks and have a good (and less harassed?) New Year.

In Memoriam

Victor T. Allen  Jeffrey A. Morehouse
Carlsbad, California  Flagstaff, Arizona
March 1985

Stephen W. Dana  Newman W. Thibault
Redlands, California  Worcester, Massachusetts
October 11, 1986  September 10, 1986

Harold T. Stearns

It was with sorrow that we learned of the death of Harold T. Stearns on July 28, 1986. Harold Stearns was a Fellow and benefactor of the Society and through a major gift in 1974 established the Harold T. Stearns Fellowship Fund. The income from this fund has been used to award grants for support of research on the geology of the circum-Pacific region. To date, more than 32 investigators have received awards totaling more than $25,000. Harold Stearns was also author of Memoirs of a Geologist, From Poverty Peak to Piggery Gulch. In this book he recounted experiences and impressions of his 60-year career as a U.S. Geological Survey geologist and an independent consultant. As a geologist, author and benefactor, he will be missed by all those who knew him.

F. Michael Wahl

PBS Series PLANET EARTH to Run Again

The 1986 Emmy Award-winning public television series PLANET EARTH returns to the Public Broadcasting Service beginning Monday, January 19 at 8 p.m. ET (please check local listings), exploring the most significant achievements in geoscience.

The culmination of four years of research and production, PLANET EARTH travels to every continent, to the depths of the seas, and to outer space as it tracks the work of the men and women who have produced what some have described as a contemporary revolution in our knowledge about Earth. The seven-part prime-time series (and television course) is made possible by major funding from The Annenberg/CPB Project with corporate funding from IBM. It is produced by WQED/Pittsburgh (co-producer of the National Geographic Specials) in association with the National Academy of Sciences. The series was first aired in 1985.

Each program features rare film footage (the first program contains film of Alfred Wegener's final expedition), interviews with the scientists (many of whom are GSA members) whose patient, expert work is producing new knowledge, and a look at the contemporary tools used by scientists.

The PLANET EARTH television programs are also offered as part of a college- and university-level television course nationwide. The series is also available as 14 30-minute programs for college, university, and secondary school use. (Anyone wanting more information about the television course can call 1-800-LEARNER.)
CALL FOR APPLICATIONS & NOMINATIONS

FOR

GEOLOGY CO-EDITOR

GSA solicits applications and nominations for the position of co-editor of Geology, to serve with outgoing editor E. M. Moores for the remainder of 1987 and to continue for a full three-year term, with option for one renewal, as one of a two-editor team. Desirable characteristics for the successful candidate include:

1. Broad interest and experience in geology
2. Iconoclastic
3. International stature
4. Willing to take risks and try innovations
5. Sense of humor
6. Sense of perspective
7. Organized and productive
8. No "ego-trip"
9. Willing to work closely with GSA headquarters staff.

This is not a salaried position, but GSA pays the expenses for secretarial assistance, mail, telephone, and travel to GSA headquarters.

If you wish to be considered, please submit a resume and a brief letter describing why you should be chosen. If you wish to nominate another, submit a letter of nomination and the individual's written permission and resume. Send nominations and applications to F. Michael Wahl, Executive Director, Geological Society of America, P.O. Box 9140, Boulder, CO 80301, by February 28, 1987. For more information, call Eldridge Moores, (916) 752-0352.

THE GEOLOGICAL SOCIETY OF AMERICA
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Officers and Councilors (continued)


Call for Field Trips

GSA Centennial Celebration • Denver, Colorado, October 31–November 3, 1988

Field trips for the GSA Centennial Celebration 1988 should have a flavor different from field trips for our regular annual meetings. Not only are the paradigms for interpretation of geologic data in all parts of earth science largely different, but many have been replaced. Looking back to the past to see how our thought processes have changed can help prepare us for the similar changes that no doubt will take place in the next 100 years.

In keeping with the GSA Centennial theme, the focus of the trips should be on geologic problems or areas of classic geology about which our understanding now is much different from what it was 100 years ago. Flabbergasting notions such as “Along Part of the 40th Parallel with King” would be welcome.

The following guidelines should be followed:

• Eighteen to perhaps as many as 24 field trips, about evenly divided before and after the meeting, will be selected from those offered.
• Pre-Centennial trips may start and end at any point of convenient access, but travel to Denver at the conclusion of the trip should be arranged.
• Post-Centennial trips should start in Denver; travel to initial point should be part of the field trip. The trip may end at any convenient point for dispersal.
• Length should be 1–3 days for most trips, but longer ones are possible.
• Although the trips will have a topical or areal orientation, as much information as possible should be included on development of geologic knowledge and changes in concepts as our science has matured in the past 100 years.

It will be helpful if all proposals can be in the same format, and a form has been prepared for your use. In order for the summer of 1987 to be available to field trip leaders for work on the trip, as needed, please respond by April 30, 1987. Write or call GSA headquarters at the address below, and the form will be sent to you along with a brief statement of duties and responsibilities of field trip leaders.

Gregory S. Holden
Geology Department
Colorado School of Mines
Golden, CO 80401
Phone: (303) 273-3800

The GSA seal rendered as a husky, solid-brass belt buckle. This gold on black DynaBuckle® is a deeply etched casting, 2-3/4" diameter, slightly curved for comfort, for belts to 1-7/8" wide at buckle loop, and has an angled adjusting tooth.

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GSA NEWS & INFORMATION, January 1987
The Geological Society of America invites applications for the 1987–1988 Congressional Science Fellowship. The Fellow selected will spend a year (September 1987–August 1988) on the staff of a member of Congress or a congressional committee advising on a wide range of scientific issues as they pertain to public questions. Guided by the American Association for the Advancement of Science, the Fellow selects a congressional staff position in which he or she can work on major legislative issues.

CRITERIA
Requirements for the Fellowship include a Ph.D and exceptional competence in some area of the earth sciences, cognizance of a broad range of matters outside the Fellow’s particular area, and a strong interest in working on a range of public policy problems.

AWARD
The GSA Congressional Science Fellowship carries with it a $25,000 stipend and a limited relocation and travel allowance.

TO APPLY
Procedures for application and detailed requirements are available in the geology departments of most colleges and universities in the United States or upon request from

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

Deadline for receipt of all application materials is March 31, 1987
Penrose Conference on Cordilleran Metamorphic Core Complexes
Has April Application Deadline

A GSA Penrose Conference, "Cordilleran Metamorphic Core Complexes, Revisited: Implications for Crustal Extension and Shortening in the North American Cordillera" will be held September 14-17, 1987, in Elko, Nevada. A two-day field trip will precede the conference and begin from Salt Lake City, Utah. The conveners for this conference are Arthur W. Snok, University of Wyoming; Gordon S. Lister, Australian Bureau of Mineral Resources; and Charles H. Thorman, U.S. Geological Survey.

The purpose of the conference is to provide a forum to bring together regional geologists, geophysicists, igneous and metamorphic petrologists, and various others interested in the role of Cordilleran metamorphic core complexes in the tectonic evolution of the western North American Cordillera. The focus will be to provide an overview of the developmental history of Cordilleran metamorphic core complexes as well as an opportunity to evaluate specific constraints on the tectonic history provided by the rapidly evolving battery of studies on fabric transitions and kinematics, uplift history, P-T-t variations, granite magmagenesis, and deep crustal seismic reflection profiling.

A polygenetic history is indicated by many recent studies of Cordilleran metamorphic core complexes. Commonly, the early history developed during a regime of compressional tectonics, while the later deformation, including the tectonic denudation of the complex, was during continental crustal extension. In this light, several key questions arise: (1) How can the structural features developed during compressional tectonics be separated from structural features developed during the regional crustal extension history? (2) What are the time and spatial relations between the compressional and extensional history recorded in the core complexes and broad-scale, regional tectonic features of the Cordillera (e.g., the foreland fold and thrust belt and the Basin and Range province)? (3) How can geophysical and rock mechanical understanding of processes in present-day extending terranes be reconciled with the apparently conflicting observations made by geologists in the metamorphic core terranes? (4) What are the implications of observations in Cordilleran core complexes for tectonic processes in other terranes where similar processes may be important in the unroofing history of deep-seated crystalline complexes?

Numerous other more specific problems exist concerning modes of extension in the upper and middle crust, the role of Precambrian crystalline basement in the evolution of the complexes, and the nature of the metamorphism and magmatism associated with the core complexes.

Prospective participants should send a letter of application which outlines (1) their experience in the topic, (2) areas in which they might expect to contribute, and (3) their reason for wanting to attend the conference to Arthur W. Snok, Department of Geology and Geophysics, P.O. Box 3006, University of Wyoming, Laramie, WY 82071, (307) 766-5457. Deadline for applications is April 15, 1987. The registration fee, which has not been established, will cover lodging, meals, and field trip.

Limited support may be available for a few graduate students who are actively involved in research related to Cordilleran metamorphic core complexes or possible similar phenomena in other orogenic belts.

Application for participation in a Penrose Conference

Title of Penrose Conference ________________________________

Your name and title ________________________________________

Organization ____________________________________________

Mailing address __________________________________________

Street or P.O. Box

City and State __________________ Zip Code _________________

Telephone number _________________________________

Area Code Number

Field of interest ________________________________________

Please state briefly what your interest and experience have been with regard to the conference topic.
International Geological Congress 1989

Charles L. Drake, president of the 28th International Geological Congress, has announced that President Ronald Reagan issued a Presidential message (reproduced below) concerning the IGC. He also stated that Vice-President Bush has accepted the position of honorary president of the Congress. A draft of the First Circular is currently undergoing review by the Organizing Committee; more than 100,000 copies will be mailed to the world geoscience community in early 1987.

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THE WHITE HOUSE

WASHINGTON

August 5, 1986

I am delighted to send a word of greetings and encouragement to members of the geological community of the United States who are helping to plan the 28th International Geological Congress to be held in Washington in July 1989.

The development and prosperity of the entire world depend largely on the availability of water, energy, and mineral resources. A deeper understanding of geological hazards such as earthquakes, floods, landslides, and volcanic eruptions can reduce loss of lives and property. By expanding the boundaries of geologic knowledge, the earth’s hidden riches can be transformed into needed productive reserves.

Scientific advance, and the search for it, stimulates communication among nations. The relevance of geology to major societal problems requires that all earth scientists work together to continue the long tradition of geology in service to mankind. The United States recognizes that environmental problems do not end at national boundaries. We will continue to collaborate closely with other nations to discover new and better ways of searching for and managing natural resources, in order to improve the quality of living conditions throughout the world.

This will be the first time in more than 50 years that the United States has welcomed the earth scientists of the world to its shores. The 28th International Geological Congress, by affording thousands of geoscientists from around the world a unique opportunity to share new scientific data and theories, will help further the noble task of improving the welfare of the world through science and through the sharing of new knowledge.

God bless you.
NEW GSA MEMBERS

The following 307 Members have been elected to Membership by Council action during the period from February 1, 1986, through August 29, 1986 (* indicates transfer from Student Associate Member).

David W. Abbott
Seyned N. Alavi
*Allen V. Ambrose
Robert Anderhalt
Camille L. Anderson
Duwayne M. Anderson
Abu A. Azmi
Peter S. Baker
Stephen S. Ball
John W. Ballantyne
Stanton N. Ballard
John A. Bery
Mark W. Bartlett
Lee W. Beaver
Stacey A. Benfer
Christopher L. Berlin
Leslie F. Berks
Michael G. Bersch
Allan H. Biddlecomb
Paul R. Bierman
Paul A. Blankwelder
Donald S. Blakeley
Patrick V. Boales
Daniel P. Bodner
Michael B.E. Bograd
John E. Bowser
Gregory A. Bowles
Bruce D. Bowman
Carl B. Bowman
Charles F. Boyette
Daniel G. Bradfield
Stephen E. Bradstreet
Tracy A. Branchaud
*Clifford N. Brandon III
Vaughn J. Brennan III
Jeffrey B. Cange
Eric C. Brown
James O. Brown
Laurenne H. Brushte
Robert C. Bubek
*Rachel J. Burks
Karen R. Burrow
*Brian F. Butler
Robert A. Butts
Thomas R. Byrnes
Mark S. Cable
J. Gary Caldwell
Allan G. Campbell
Maynard C. Campbell, Jr.
Jeffrey B. Cange
Patrick J. Carey
Raul S. Carrasco
*Kristine D. Carter
George D. Casey
Peter J. Castro
Gregory J. Cavallo
Frank H. Chapelle
Mel-In. M. Chou
Reno C. Cisno
Monica D. Clement
David A. Cochrane
Hughbert A. Collier
James I. Conna
*Sterling S. Cook
Bradley L. Cornell
*Richard M. Cousineau
Ana-Maria Cox
Catherine S. Cravens
Neil B.Crow
David G. Derby
Wang Daiwei
James M. de Lambert
*Nancy J. Dellamorte
John P. de Melar
Maarten J. de Wit
William E. Doll
Michael E. Donnelly
Paul E. Drue
William M. Dunne
*Bharati L. Dutrow
Larry D. Dyke
Denise M. Dyhr
Edwin H. East
Harvey S. Edwards
*Michael A. Eger
Mervat E. El Haddad
Donald L. Ellison
Craig F. Erdman
Bradley G. Erskine
Samuel Estrada
James G. Evans
Lauren E. Evans
*Carol A. Evenchick
Patrick L. Fahey
Olubode O. Faseke
Michael S. Fedosh
*Samuell P. Figlioli
John D. Fife
Edward A. Flinn III
*Paul V. Fluck
Kenneth W. Fossey
Kurt R. Freese
Alvin L. Franks
Roy W. Freeman
Benjamin R. Frothingham
Alfred L. Futrell, Jr.
James H. Funk
Michael E. Gantenbein
Rafael A. Garcia
Jack Garvin
Michael Gauthier
Draka J. Gentry
Jeff D. Gentry
Matthew L. Gibson
Lisa A. Gilbert
Harry Gils
John B. Gilmore
*Steven L. Gobelman
*Steven R. Gordon
*Samuel W. Gowan
Michael A. Graves
Scott R. Green
David M. Greenan
David J. Grever
David L. Grumman, Jr.
Jasmar Hadiadeh
*James W. Haggart
*Walter R. Hale
Donald R. Hallam
Burt C. Harnd
Mustafa M. Hariri
Danny W. Harrelson
*Glen E. Harrington
Robert N. Harris
David L. Hartfield
Nancy R. Hasenmueller
Edward F. Hawkins
*Mary J. Hedrick
Robert W. Heitzman
Mark A. Hemphill-Coley
J. Otto R. Hemelma
Alan R. Hershay
Rachid E. Hersi
Jason F. Hicks
I. Bruce Hing
William T. Hill
*Sarah E. Höffman
Karen D. Hollway
Robert D. Holleyfield
Alex E. Hrynychyn, Jr.
Brian D. Hughes
Kim A. Hughes
Robert P. Hunt
Bret E. Hutherford
Jim Husman
Patricia A. Jakobberger
*Gary L. Jacobson
Nina V. Jacobson
*John J. Jakubak
*John E. Jenkins
Anne B. Jennings
Maureen Y. Jordan
Diana Y. Kabah
Raynold Irvin Kablanov II
Samuel Kamekere
Richard C. Karr, Jr.
Ernst H. Kastning
Jeffrey K. Katzen
Karen K. Katz
Richard S. Kaufman
David T. Kendrick
Charles Kohans
Mary J. Keskiem
Youjin Kim
Paul H. King
Stephen C. Knowles
R. Craig Kochel
*Daniel J. Kontak
John H. Kreiger
Barbara I. Kronberg
Scott W. Krueger
*Keith E. L. Kuchta
Mary Jo P. Kuhns
Kenji Kurikura
*Elizabeth C. Kurzus
Timothy R. Kustic
Frank T. Kyle
Nicholas Lancaster
Jeanne P. Lawler
Linda P. le Sueur
Shaul Levi
*Barry R. Levine
Frank M. Lewis
Ronald D. Lewis
Xu Z. Liang
W. David Liddell
Christopher D. Lidstone
Paul A. Lipinski
David M. Lis
*Lester A. Litzinger
Daniel J. Lombardi
Carol S. Lopp
Gordon S. Magenau
Arum Majumdar
J. K. Manful
Michael J. Mangini
*Bernard Markunas
Jay J. Martin
Steve Massie
David M. Neves
Dennis L. Matson
David M. Matzen
Michael D. Max
J. Rolle Maxon
Hope E. May
*Stephen R. Maynard
Colin C. McCaen
Jane S. McColloch
John J. McCue
Richard E. McCutchen
Martin P. McDermott
Rowan P. McKiritch
Kathryn Mear
Richard M. Meissner
Scott Minor
Joanne R. Mitock
David M. Monk
Nancy E. Molin
Thomas S. Moore
Paul E. Mooney
*Judy E. Moore
Albert R. Morejohn
A. Edward Morelan
Jenny N. Morrison
*Deborah L. Motycka
Laura E. Munger
*Josep A. Munoz de la Fuente
Christina A. Neal
*Bruce K. Nelson
Peter Neumann-Mahlkönig
Frederick A. Newcomb
Dragas Novokhovsky
*Helena M. Nuckolls
James G. Ogo
David A. Okaya
*Todd D. Palm
Rodney F. Parcel, Jr.
Stephen K. Park
David J. Parratt
*Jay B. Parrish
Larry G. Patkowski
*Joseph B. Paul
*Elizabeth Pearson
John W. Peterson
Richard T. Pfundstein
Kevin O. Pope
Eric N. Powell
L. Greer Price
Sarah E. Prowel
Martin A. Prutta
James D. Rasmussen
*Wanda J. Ratiff
Lothar Ratschbacher
Thomas C. Ray
*Melanie B. Redding
John W. Reelf
Nathan M. Reese
Ruth P. Reid
Richard F. Reimers
G. W. Renz
Alastair H.F. Robertson
*Scott E. Robinson
David W. Rodgers
Gary D. Rogers
*Cynthia L. Romano
Leslie Rosenberg
Reid J. Rousbeck
Jody M. Roud
Randall P. ROWLEY
Skip Rowley
*Joseph M. Runyan
Clayton M. Runyan
Gary D. Runnels
John S. Saddlington
Prem K. Saint
Charles M. Salzberg
Vimalan Samwar
*Michael G. Sawlan
James A. Saye III
*Charles B. Schneider, Jr.
*Peter J. Schubert
Mark R. Schulke
Dann C. Schwartzkopf
Thomas Servilla
Richard W. Shatz
*William J. Shaw
Neal E. Siler
Jeffrey M. Simonson
John C.B. Simonson
Francisco L. Sims
David A. Smith
George M. Smith III
Alison M. Snow
John C. Snowden
Jerry N. Morrison
Daniel H. Soeder
Jon G. Soul
*Janet M. Sowers
*Stephen D. Stahl
*Michael J. Stepnow
John F. Stickey
Michael C. Stickey
Mark D. Stock
Duugas B. Stoeper
Winter C. Stog
Patrick C. Stong
Stephen M. Strachan
Rudolph G. Strand
Claude P. Stricklan
Kathleen E. Struebbe-Malone
Mark J. Sutherland
William M. Swartz
*Stephen A. Swift
Tim L. Syverson
James G. Talpey
Kensaku Tamaki
Tetsuo Tanaka
Gregson W. Taylor
*Jose L. Stecker
James B. Terry
Christian P. Teysisseur
*Raymond R. Thibault
Keren K. Thomas
*Keith G. Thompson
*Linda K. Trogini
James B. Truman
F. M. Tully
Catherine A. Uelty
Miguel A. Ulloa
*Karla L. Urbanowicz
Marcus R. Van Baalen
Amy L. Vanderhill
Rimesh Venkatakrishnan
Richard A. Verstrate
Chandrakarasan Vijayakumar
Lawrence E. Vicente
Raymond A. Wagner
George B. Walker
A. Wesley Ward, Jr.
*Jeffrey A. Wasrud
*Timothy A. Watchers
*Richard F. Wells
*Christopher W. Wenzel

GSA NEWS & INFORMATION, January 1987

13
NEW GSA FELLOWS

The following candidates were elected to Fellowship by Council action at the November 1986 meeting.

James A. Austin, Jr.  
Lawrence W. Braile  
James Malcolm Coleman  
Robert G. Douglas  
Pembroke J. Hart  

Richard T. Williams  
Scott C. Wilmot  
Mark C. Wiseman  
Todd A. Worsfold  
Douglas H. Wright  
Howard A. Wright  
Kenneth W. Yarbrough  
Peter B. Yuan  
Zahanez  

Cynthia F. Zauner  
William G. Zempolch  
Abdulaziz M. Ziaib  
Terrence J. Zich  

NEW GSA STUDENT ASSOCIATES

Listed are 427 Student Associates who became affiliated with the Society during the period from February 1, 1986, through August 29, 1986.

Anthony S. Able  
Kelly L. Acker  
Benjamin N. Adams  
Patrice L. Agostino  
Jonathan C. Ashton  
Gregory R. Albright  
Gordon P. Alexander  
Safī Al-Hajjār  
Arnold W. Allison  
James J. Alfred  
Charles N. Alpers  
Robert S. Anderson  
Steven C. Anderson  
Robert J. Andrews  
Deborah J. Anthony  
T. Bruce Appelgate, Jr.  
Cynthia P. Ardito  
Mark J. Arniola  
James R. Ashby  
Jon M. Aspe  
Jack W. Austin  
David B. Bagley  
Brett Baker  
Edward B. Baker  
James M. Barish  
Karim M. Berovich  
Michael J. Becker  
James A. Bercovici  
Henry T. Belenski  
Marian S. Benham  
Maryann W. Benoit  
James A. Bergen  
Janell A. Bergman  
Augusto Bertohoro  
Steven E. Best  
Robert J. Beyer  
Glenn P. Bisli  
David M. Bice  
Matthew E. Bidwell  
Bill D. Black  
Bonnie A. Blackwell  
David E. Blake  
Mary A. Bloodgood  
Margaret H. Bloom  
Michael D. Blum  
Margaret E. Bonacker  
Pamela S. Bowen  
Timothy L. Bowers  
George E. Boyajian  
Kenneth C. Bransky, Jr.  
Thomas F. Bray, Jr.  
Glen D. Brecken  
Melissa A. Brown  
Charles R. Bryan  

John T. Bryant  
Douglas M. Buchanan  
Paul E. Buck  
Mark W. Bulman  
David L. Burdette  
Richard K. Burroughs  
Marcus I. Bursik  
Mohamed N. Bushara  
Tim L. Butts  
Nancy J. Byrd  
Shawna W. Caldwell  
Daniel G. Carpenter  
David L. Carr  
Brian L. Carter  
Larry S. Carter  
Tracey E. Cascadden  
Augusto C.M. Castro, Jr.  
Ronald L. Catararo  
Steven R. Chambers  
Peter P. Chaplinsky  
Punya Charsisri  
Janet L. Chase  
Craig A. Chesner  
Arthur D. Cienkowski  
Alan L. Clark  
Melanie L. Clark  
Julia S. Clay  
Valentine C. Coffin  
Catherine A. Coffin  
Mark R. Collberg  
Richard R. Condren  
Sean D. Connell  
Jane M. Connet  
Chris J. Conway  
Peter A. Corson  
Laurie M. Corwin  
David S. Cowie  
Esteban Crespo  
Peter M. Cronan  
John A. Csatis  
Daniel A. Cutrone  
Charles M. Darling  
Gareth J. Davies  
John M. Davis  
Larry A. Davis  
Mark J. Davis  
Marlene A. Dean  
Susan M. Debari  
Richard A. De Jong  
Anne Demitrack  
Sydney B. Dent  
Mary M. Dew  
Emidio Dicenzo  
Raya A. Dickerson  

Peter M. Dillon  
Leonard J. Dippima, Jr.  
William R. Dorsch  
Rosemarie Doss  
Ted Doughty  
Larry A. Drake  
Michael E. Duffin  
M. John M. Duke  
Brenda S. Dulaney  
Edward M. Dullahan  
Trevor A. Dumitru  
Gilbert R. Dunn  
Lisa A. Durham  
Kurt L. Easby  
Cortland F. Eble  
Cynthia A. Edwards  
Gloria Eiseindstadt  
David C. Elbert  
Yehouda Enzel  
Jay B. Erickson  
Mary T. Ervin  
Jane E. Estes  
Arthur C. Evans  
John W. Ewert  
Dennis J. Fagundes  
Steven R. Feikete  
Bernard G. Fenelon  
Greg Ferdock  
Judy E. Fierstein  
Tom K. Fink  
Thomas J. Fitz  
Cynthia L. Fong  
Robert Craig Ford  
Paul W. Gavoneve  
Carol E. Gerber  
Larry D. Gerken  
Stephen R. Getty  
Ronada L. Gwion  
Christopher W. Goetz  
Patrick M. Goldstand  
Juan L. Gonzalez  
Laurel E. Goodwin  
Wendy C. Grant  
Dennis J. Graves  
Michael G. Gray  
Thomas E. Gray  
Maureen Green  
Karen M. Griffin  
Alice E. Gripp  
Jay A. Gunderson  
Bjorn Gunnarsson  
Maij Hageman  
Peter J. Haeussler  
Mohamad Hafid  

Steven J. Hageman  
David J. Hagen  
Laurie B. Haines  
Edwin R. Hajic  
John D. Hallman  
Jean P. Hall  
William W. Hallinan  
Steven A. Hammett  
Diana K. Hansen  
Patricia E. Hardt  
Douglas E. Harris  
Mark T. Harris  
William M. Harris, Jr.  
Pat L. Harting  
Allan P. Hascall  
Scott W. Hasler  
Erik H. Hauri  
Harold Hovstad III  
Jennifer Hess  
Lindsay R. Hill  
Jane M. Hiller  
Karl F. Hillier  
Mark L. Tineline  
Michael P. Hingston  
Michael M. Hobby  
Steve R. Hoshenese  
Hanaya M. Holahil  
Thomas J. Holis  
Hillary E. Hollister  
Thomas K. Honeycutt  
Marcie R. Horowitz  
J. Richard Hounacuran  
Lawrence D. Hoy  
William F. Hunkene  
Paul K. Hunter  
Bethany A. Ihle  
Robert P. Ichikawa  
William B. Isbell  
Jin-Shun Je  
Anne E. Jennings  
Chad J. Johnson  
Jennifer D. Johnson  
Nicholas M. Johnson  
Laura E. Jones  
Edward L. Kaczmarek  
Theresa A. Kalgur  
Philippos M. Katsonis  
Kim C. Keith-Hyatt  
Kevin M. Kelly  
Choon S. Kim  
Randy M. Kirby  
Andrew P. Kisieli  
Martin O. Klein  
Martin C. Kleinrock  

Darin R. Klewaas  
Douglas P. Kliicman  
Lari A. Klencheau  
Martin A. Knoll  
Celia M. Kohn  
C. Eugene Kooper  
Bridget P. Krause  
Katherine A. Kuhn  
Kay K. Kunert  
Jeffrey P. Kurr  
Keith B. Kurth  
Frank P. Lambert IV  
Timothy N. Lambert  
John H. Lanbee  
Bradley D. Larsen  
Thomas S. Lawrence  
Theresa G.M. Lebar  
David S. Leigh  
Corinne R. Lemieux  
Keith R. Libert  
Scott C. Lindwall  
Katharine S. Little  
Curtis D. Littleton  
Barbara A. Livingston  
Christen J. Loftefin  
Stephen L. Lombardo  
Ronald G. Long  
Judy A. Lopas  
Baron D. Loucks  
Pamela L. Lucas  
Stephen L. Lucas  
Milena M. Macisich  
David V. Magnotta  
Paul A. Magnani  
Lonnie W. Mansell  
Anthony J. Martin  
Hamid Massoud  
Jeffrey M. Matthews  
John J. Maurer  
Kevin F. McCartney  
Richard F. McCartney  
Mary A. McCaskey  
Daniel C. McCormack  
Veronica A. McFarland  
Kevin B. McGillicuddy  
Kara A. McGuirk  
Lawrence W. McKenna  
David W.A. McMillen  
Norman C. Meek  
Monty Mehlhorn  
Douglas B. Mendelson  
Javier J. Menezes-Rocha  
Paul E. Meriney

GSA NEWS & INFORMATION, January 1987 (continued on p. 15)
Student Associates (continued)

Elise E. Mezger
Asta Miklius
Kenneth W. Milender
Jean Luc R. Miossec
Kim R. Montanez
Daniel K. Moore
Martir V. Moran
Julia R. Morgan
Stephanie A. Mosher
Chris Mosley
Gerald J. Murphy
Mark A. Naughton
Kerri E. Nee
Stephen T. Nelson
William M. Nelson
Brigitta P. Neus
Virginia A. Newbem
Lynda S. Nicholson
Dru R. Nelson
Elliot J. Nightingale
Michael A. Nix
Thomas E. Noce
Michael D. Noll
Christopher C. Nyce
Jennifer A. O'Brien
James C. Ohaman
Daniel L. Orange
Michael H. Ortiz
Craig W. Owen
David G. Palais
John M. Pandolfi

Phillip A. Pappano, Jr.
Vikram S. Patel
Joseph D. Peterlin
Bruce D. Peterman
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Don J. Pettit
Randall F. Pfahler
Deborah S. Pfahler
Robert B. Pharr
Aaron R. Phillips
Andrew T. Phillips
Lyle V. Phillips
Mark E. Phillips
Perri A. Phillips
Victoria A. Phillips
Steven W. Pierce
Laurie A. Pilsura
Walter E. Pittman, Jr.
Walter J. Pochron
Roland D. Pool
Michael B. Portnoy
Jeffrey M. Prewitt
Lance B. Provtko
Kenneth R. Puentes
Tina Quo
Judith K. Radoff
Anthony J. Rinaldi
Frank R. Rancadore
Joris B. Rapsele
Brian C. Reed
Michael K. Regan

Chris E. Reinheimer
Paul R. Remme
Charles E. Reynolds
Jeremy P. Richards
Jon L. Riedel
Peter E. Riemersma
John R. Rihls
Greg W. Riley
John A. Ring
Zein E. Rizk
Lance C. Robert
Susan M. Roberts
Bret A. Robinson
David M. Ronnei
Bruce C. Ross
Eric A. Roth
Marilyn K. Rothstein
William D. Rowe, Jr.
Julie L. Rowen
Michael W. Ruddy
Scott H. Rugg
Silvio J. Sandino
Marc W. Sanford
Gultekin Savci
Lawrence W. Schenmeyer
Eric B. Schmidley
Jack C. Schmidt
David A. Schneider
Robert V. Schneider
David S. Shafer
Erik A. Shaumberger
Gerald L. Sharp
Joyce L. Sheridan
Judith M. Sheridan

Robert L. Shipman
Frank E. Shore
Thomas A. Stewart
Neil S. Simmons
Taeyoung S. Song
Steven R. Spengler
Timothy M. Stepp
Michael R. Stevens
Lisa L. Stillings
John P. Stimpson
Thomas M. Stodd
Gary F. Straub
Ruth A. Strauss
Georgiana L. Strickland
Elizabeth D. Stroock
Joseph H. Summerour, Jr.
Kenneth C. Summerour
Robin L. Sweeney
Brian L. Tanaka
Sara E. Tarr-Weaver
Rick R. Tate
Doug S. Taylor
Gary L. Thompson
Michael T. Toole
Paul J. Treble
Jacques Trottier
Lori K. Tuck
Bruce N. Turbeville
Julanne M. Turko
Kenneth C. Tyson
James W. Vallance
Gregory T. Van
Christel Van Den Bogaard
Karl M. Villemmez

David L. Violette
Sándor C. Wang
Wayang J. Wang
W. Bruce Ward
Scott J. Weber
Matthias Weiger
Alic N. Werner
Rachel L. Werner
Susan B. Werner
Christopher E. Wernicke
David L. West
Charlene K. White
Jack H. White
Wendi J. Whitehead-Williams
Ian J. Whyte
Naraldean A. Widatalla
Greg C. Wiles
Debra A. Willard
Sheryl E. Williams
Thomas J. Williams
Jacqueline Windh
Richard B. Winston
Michael J. Wood
Robert A. Wood
Michael A. Wopat
Julie I. Wolff
Richard L. Wunderman
Bran K. Yamamura
Ar Yin
Evelyn Zeman
Shihua Zhao
J. David Zuber
Dennis R. Zum

GSA REVIEWS IN
ENGINEERING GEOLOGY VI
MAN-INDUCED LAND
SUBLINCE
Edited by Thomas L. Holzer

Every earth scientist should be keenly interested in the timely and important subject of this GSA volume. Land subsidence has been caused by man in at least 37 states of the U.S.A. It affects an aggregate area of more than 40,000 km² and may cost the nation as much as $100 million annually.

This review includes nine papers in three categories: (1) Fluid withdrawal from porous media; (2) Drainage of organic soil; and (3) Collapse into man-made and natural cavities.

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THE GEOLOGICAL SOCIETY OF AMERICA

GSA NEWS & INFORMATION, January 1987 15
Final Announcement

South-Central Section, GSA, 21st Annual Meeting

Waco, Texas
March 30–31, 1987

The South-Central Section of the Geological Society of America will meet at the Waco Convention Center and adjoining Hilton Hotel, together with the Pander Society and the Texas Section of the National Association of Geology Teachers. The meeting is sponsored by the Geology Department of Baylor University.

Local Committee: Chairman: Rena M. Bonem; Technical Program Chairmen: Don F. Parker; Field Trip Co-Chairman: O. T. Hayward and Joe Yellderman. All are at the Department of Geology, Baylor University, Waco, TX 76798, (817) 755-2361.

REGISTRATION

Registration is required for all persons participating in any event, including technical sessions, symposia, exhibits, planned social events, and field trips.

Preregistration. You are urged to register in advance to aid the local committee in making final plans. A discount is offered to those who preregister using the accompanying forms before February 20, 1987. Preregistration is required for those who plan to attend field trips or guest/spouse activities.

Complete the preregistration form and return it with check or money order for U.S. funds (made payable to South-Central Section, GSA 1987 Annual Meeting) to South-Central GSA, Department of Geology, Baylor University, Waco, TX 76798. Preregistration must be postmarked no later than February 20, 1987, to qualify for discounted registration rates. Refunds on canceled registration will be made until February 20, 1987. After that date, no refunds will be made except for field trips that are canceled or oversubscribed.

On-Site Registration. Registration and pick-up of meeting materials will be from 3 to 8 p.m. on Sunday, March 29, 1987, in the lobby of the Waco Hilton. On Monday and Tuesday, March 30 and 31, registration will be held from 8 a.m. to 5 p.m. in the lower level of the Waco Convention Center.

WELCOMING PARTY

A welcoming party for those attending the meeting will be held Sunday evening, March 29, from 8 to 10 p.m. The party will be held adjacent to the Waco Hilton on the historic Waco Suspension Bridge over the Brazos River. In case of inclement weather, the party will be held in the Waco Hilton.

TECHNICAL PROGRAM

Technical sessions on a variety of topics and symposia will be presented on Monday and Tuesday, March 30 and 31. Symposia topics will include

7. Late Paleozoic Sedimentary Facies: Relationship Between Cyclic Sedimentation and Diagenesis. Robert Grayson.

STUDENT AWARDS

The South-Central Section will present three cash awards ($200, $100, and $50) for the best student papers. Only papers written and presented by students will be eligible.

FIELD TRIPS

Field trip participants must preregister for the meeting. Field trip registration is on a first-come, first-served basis. If a trip is oversubscribed or canceled, the field trip fee will be refunded. Preregistration for field trips, accompanied by full payment, must be postmarked by February 20, 1987. Requests for refunds will be honored until that date. Trips may be canceled by the South-Central Section if registration is insufficient or for reasons beyond our control. Notification of cancellation will be made if possible by March 15. All field trips will depart from the Waco Hilton unless otherwise noted.

Premeetιng Trips

1. Early and Late Paleozoic Conodont Faunas of the Llano Uplift Region, Central Texas—Biostratigraphy, Systemic Boundary Relationships, and Stratigraphic Importance. This field trip provides an opportunity to collect stratigraphically significant conodont faunas from Cambrian-Ordovician, Early Mississippian, Mississippian-Pennsylvanian, and Middle Pennsylvanian stratigraphic units of the Llano Uplift region in central Texas. Special emphasis will be given to (1) the potential of the Llano Uplift Cambrian-Ordovician succession as a boundary stratotype, (2) conodont evidence for conformity at the Mississippian-Pennsylvanian boundary and the diachronous development of the lower Marble Falls carbonate platform, and (3) application of conodont lineages and biofacies to resolution of Carboniferous stratigraphic problems. Leaders: Robert C. Grayson Jr., Baylor University, Waco, Texas 76798, phone (817) 755-2361; Glen K. Merrill, University of Houston—Downtown; James F. Miller, Southwest Missouri State University, Springfield.


Limit: 40 participants.

2. Lower Cretaceous Dinosaur Footprints of the Paluxy River Valley, Somervell County, Texas. This one-day field trip will visit the classic dinosaur track sites in and around Dinosaur Valley State Park, Glen Rose, Texas. Topics to be considered in the field include the stratigraphy of the footprint sites, the kinds of dinosaurs represented in the ichnofauna, factors affecting footprint morphology, and information about dinosaur locomotion and behavior ascertained from trackways. Leader: James O. Farlow, Indiana University—Purdue University at Fort Wayne, Fort Wayne, Indiana 46805, phone (219) 481-6251.

Date: March 29, 1987.

Cost: $60, includes guidebook, lunch, and transportation.

Limit: 20 participants.

(continued on p. 17)
South-Central Section Annual Meeting (continued)

3. Hydrogeology of the Edwards Aquifer in the Northern Balcones and Washita Prairie Segments. The Edwards and associated limestones form one of the major aquifers in Texas. The Edwards Limestone is the principal water-bearing unit in the Edwards Plateau and along the Balcones fault zone. The Balcones Edwards aquifer is no longer considered a major aquifer north of Salado, Texas, but the Edwards Limestone continues to the northwest where it crops out in the Washita Prairie and Lampasas Cut Plain. Participants will examine the hydrogeology along this transition zone, comparing and contrasting the transition zone with the area to the south. Stops will include several major historical springs.

Leaders: Raymond M. Slade, Jr., USGS, Austin, Texas; John M. Sharp, Jr., University of Texas, Austin; Charles M. Woodruff, Jr., Austin, Texas; Joe C. Yelderman, Jr., Baylor University, Waco, Texas 76798, phone (817) 755-2361.


Cost: $130, includes guidebook, 2 lunches, banquet dinner, transportation, and lodging for Saturday night (double occupancy at Stagecoach Inn in Salado).

Limit: 40 participants.

Postmeeting Trips

4. Pre-Pennsylvanian Geology of the Arbuckle Mountain Region, Southern Oklahoma. Participants will study outcrops of pre-Pennsylvanian rocks in the Arbuckle Mountain region of southern Oklahoma. Emphasis will be on the depositional history and structural development of the Arbuckle Anticline and Tishomingo Uplift. Particular attention will be given to the development of local structures as evidence of the regional structural style. Changes in the depositional history of the area will be discussed, and the role stratigraphy played in controlling bedrock-plain thrusts will be demonstrated.

Leaders: Robert Lauter, Southern Methodist University, Dallas, Texas; William G. Brown, Baylor University, Waco, Texas 76798, phone (817) 755-2361.

Dates: Leave Waco Tuesday afternoon, March 31, and return Thursday afternoon, April 2.

Cost: $120, includes guidebook, 2 lunches, transportation, and motel for 2 nights (double occupancy).

Limit: 40 participants.

5. Edwards-dominated Landscapes in the Lampasas Cut Plain: Form, Processes, and Evolution. "The Lampasas Cut Plain is the modified northern extension of the great Edwards Plateau... It is a greatly dissected dip plain now recognizable by the general level of its many remnant summits, which dominate all the country south of the Brazos between the Western Cross Timbers and the Balcones Fault Zone" (Hill, 1901, p. 78). While for many years this land of buttes and mesas has been considered to be a product of a simple geomorphic history, recent work suggests that it reflects a far more complicated sequence of events. Within the cut plain are drainage systems with complex entrenched valleys, extensive erosional surfaces apparently unrelated to modern drainage, and alien alluvial soils in unusual physiographic positions. Most of these features appear to have implications far beyond the area of the cut plain. The purpose of this trip is to see the cut plain in typical development, to consider its geomorphic development, and to introduce questions yet unanswered, but of major importance in the study of landscape evolution.

Leaders: P. M. Allen and O. T. Hayward, Baylor University, Waco, Texas 76798, phone (817) 755-2361.

Dates: Leave Waco at 8 a.m., Wednesday, April 1, and return at 5 p.m., Thursday, April 2.

Cost: $100, includes guidebook, transportation, 2 lunches, banquet, and lodging for one night (double occupancy, Holiday Inn, Brownwood, Texas).

Limit: 20 participants.

PUBLICATIONS

Additional copies of Abstracts with Programs for the meeting and a limited number of field trip guidebooks may be purchased at the registration desk. After the meeting, remaining guidebooks may be purchased from the Department of Geology, Baylor University, Waco, TX 76798.

PROJECTION EQUIPMENT

All slides used in presentations must be 2" × 2" and fit in a standard 35-mm carousel tray and projector. Only one projector and screen will be provided in each meeting room. Please plan your presentations accordingly and bring your own loaded carousel tray (80-slide capacity only) if possible. A technical assistance and speaker preparation room will be available in Ranger Room #3 of the Waco Convention Center from 8 a.m. to 5 p.m. on Monday and Tuesday.

EXHIBITS

Exhibits of geological books, equipment, and research and educational materials will be on display during the meeting in Texas Room #2 of the Waco Convention Center. Rental fees for single (8" × 8") exhibit booths will be $125. Larger booths will also be available. Special rates are available for nonprofit organizations and educational institutions. For additional information, contact H. H. Beaver, Department of Geology, Baylor University, Waco, TX 76798, phone (817) 755-2361.

SPECIAL EVENTS

GSA South-Central Section Annual Banquet, Monday, March 30, 7:30 p.m.
Department Chairmen Breakfast, Tuesday, March 31, 7 a.m.
Pander Society Luncheon, Tuesday, March 31, 12 noon.
NAGT Texas Section Luncheon, Tuesday, March 31, 12 noon.

GSA South-Central Section Management Board Meeting, Sunday, March 29, 6 to 8 p.m. in the Huaco Room, Waco Convention Center.

GSA South-Central Section Business Meeting, Monday, March 30, 4 p.m.

GUEST/SPOUSE ACTIVITIES

The following activities have been planned for guests of spouses of convention participants. Preregistration is required by February 20, 1987.

1. Salado Shopping Spree. Participants will visit antique stores and arts and crafts shops in scenic Salado and have lunch in the historic Stagecoach Inn.

Date: Monday, March 30, 9 a.m. to 2:30 p.m. Leaves from the Waco Convention Center.

Cost: $25, includes transportation to Salado, lunch, and return to Waco.

Limit: 40 participants.

2. Field Trip for People Who Learn Geology by Osmosis. This look at urban geology of the Waco area will be led by Baylor geology students. Please dress appropriately for weather and casual walking over broken ground.

(continued on p. 18)
South-Central Section Annual Meeting (continued from p. 17)
Date: Tuesday, March 31, 9 a.m. to 2 p.m. Leaves from the Waco Convention Center.
Cost: $15, includes transportation and box lunch.
Limit: 40 participants.

TRAVEL
Waco is conveniently located on Interstate 35 between the Dallas–Fort Worth Metroplex and Austin. Greyhound and Continental Trailways bus service is available. Air service to Waco is provided from Dallas/Fort Worth Airport by American Eagle and Rio Airways. In addition, the Waco Eagle shuttle van travels between Dallas–Fort Worth and Waco; call (817) 772-0430 for information or reservations.

HOUSING
Several hotels and motels are available in the Waco area. Special rates for convention participants have been arranged at the Waco Hilton (headquarters hotel), the Riverplace Inn, and Old Main Lodge. Reservations may be made by contacting the hotel directly or through the Waco Convention Center by using the accompanying form. Reservations through the Convention Center must be made prior to February 27, 1987.

1. Waco Hilton (headquarters hotel), located adjacent to the Convention Center in downtown Waco. This is the only hotel within easy walking distance of the Convention Center and will be the location of many special events. At 113 South University Parks Drive, Waco, TX 76701; phone (817) 754-8484, or toll-free 1-800-HILTONS. Rates: $50 single; $60 double, triple, or quad.

2. Riverplace Inn, located on the Brazos River at 101 N. Interstate 35 and Lake Brazos Drive, Waco, TX 76704, across from the Texas Ranger Hall of Fame and Ft. Fisher. Free continental breakfast. Phone (817) 752-8222, or Texas toll-free 1-800-792-3267. Rates: $30 standard single with a double bed for 1 or 2, $36 single, double, triple, or quad with 2 double beds and balcony overlooking Brazos River.

3. Old Main Lodge (Best Western), located off the 5th Street exit of Interstate 35 adjacent to Baylor University and 4 blocks (0.6 mile) from the Convention Center. Extra-large rooms with queen-size beds. Free continental breakfast. At 215 Dutton Ave., P.O. Box 174, Waco, TX 76701, phone (817) 753-0316, or toll-free 1-800-528-1234. Rates: $30 single; $34 double, triple, or quad.

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HOUSING FORM
South-Central Section, GSA, March 30–31, 1987, Waco, Texas

DEADLINE FOR RESERVATIONS: February 27, 1987

Please type or print the information required below. Complete only ONE form for EACH room requested. Confirmations will be sent by the hotel to the first person listed on the form unless you specify otherwise. Telephone reservations cannot be made through the Waco Convention Center, and no reservations will be accepted after February 27, 1987. Requests made after that date must be made directly to the hotel, are subject to room availability, and may not qualify for the convention rates. Cancellations must be made at least 48 hours prior to scheduled arrival. Credit card or first-night deposit will be required by the hotel to guarantee reservations.

Name ________________________________________________

Address ____________________________________________

City ____________________________________________ State __________ ZIP code __________

Phone ____________________________

Hotel/motel choices: Type of room desired (circle one)
1st choice: __________________________ Single Double Triple Quad
2nd choice: __________________________ Single Double Triple Quad

Arrival date: __________________________ Time: _______ a.m. or p.m.
Departure date: ________________________ Time: _______ a.m. or p.m.

Others staying in room: Name: ____________________________________________

Address ____________________________________________

Name: ____________________________________________ Address: ____________________________________________

Credit card information for guaranteed reservation (check one)
____ American Express ______ Diners Club ______ VISA ______ MasterCard
Name of cardholder: ____________________________________________

Address for billing: ____________________________________________

Credit card number: __________________________ Exp. date __________

Signature ____________________________________________

Mail completed housing form to
SC GSA Reservations
Waco Convention Bureau
P.O. Box 2570
Waco, TX 76702-2570

GSANew & Information January 1987
PREREGISTRATION FORM
South-Central Section, GSA, 21st Annual Meeting
March 30-31, 1987, Waco, Texas

IMPORTANT
1. Full payment must accompany registration.
2. Register one: professional, student, spouse/guest per form.
3. Your check will be your receipt. Copy this form for your records. If you wish acknowledgment of your preregistration, please enclose a self-addressed, stamped envelope.

Please print or type

Name ____________________________________________
last first middle

Registered as: ___ Professional ___ Student ___ Spouse/Guest

Affiliation (abbreviate for badge) ________________________________

Professional address _________________________________________

street

city state ZIP code

Phone: business ( ) ___________________________ residence ( ) ________________

GSA member: yes no GSA Student Associate: yes no

Preregistration (before February 20, 1987)
GSA member ____________________________________________ $ 30
Non-GSA member __________________________________________ $ 34
GSA Student Associate ____________________________________ $ 8
Non-GSA student __________________________________________ $ 11

Registration (after February 20, 1987)
GSA member ____________________________________________ $ 34
Non-GSA member __________________________________________ $ 39
GSA Student Associate ____________________________________ $ 11
Non-GSA student __________________________________________ $ 14

Spouse/guest ____________________________________________ $ 5
GSA South-Central Section Banquet (March 30) ___________________ $ 15
Pander Society Luncheon (March 31) ____________________________ $ 8
NAGT Texas Section Luncheon and Meeting (March 31) _______ $ 8
Department Chairmen Breakfast (March 31) ____________________ $ 6

Field Trips and Spouse/Guest Activities
(Preregistration deadline is February 20, 1987)

1. Early and Late Paleozoic Conodont Faunas (March 28–29) $120
2. Lower Cretaceous Dinosaur Footprints (March 29) $ 60
3. Hydrogeology of the Edwards Aquifer (March 28–29) $130
Postmeeting Field Trips
4. Pre-Pennsylvania Geology of the Arbuckle Mountains (March 31–April 2) $120
5. Edwards-dominated Landscapes (April 1–2) $100

Spouse/Guest Activities
1. Salado Shopping Spree (March 30) ________________________ $ 25
2. Field Trip for People Who Learn Geology by Osmosis (March 31) $ 15

TOTAL FEES ____________________________________________ $_____

Enclose check or money order, U.S. funds only, made payable to South-Central Section GSA, 1987 Annual Meeting

PREREGISTRATION FORMS MUST BE POSTMARKED NO LATER THAN FEBRUARY 20, 1987

Full refunds on canceled registrations will be made until February 20, 1987. After that date, no refunds will be made except for canceled field trips. Mail completed registration forms and fee remissions to SC GSA Registration
Department of Geology
Baylor University
Waco, TX 76798
TRANSECTS
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A-2: Kodiak to Kuskokwim, Alaska
B-1: Intermontane Belt (Skeena Mountains) to Insular Belt (Queen Charlotte Islands)
C.J. Yorath, G.J. Woodworth, R.P. Riddihough, R.G. Currie, R.D. Hyndman, C.G. Rogers, D.A. Seemann, A.D. Collins, 1985. Two sheets in color; each 52" x 39" TRA B-1 .................................................. Rolled $17.00; folded $15.00
B-2: Juan de Fuca Plate to Alberta Plains
B-3: Juan de Fuca Spreading Ridge to Montana Thrust Belt
D.S. Cowan, C.J. Potter, 1985. Three sheets in color, each 50" x 40" TRA B-3 .................................................. Rolled $25.80; folded $24.30
C-2: Central California Offshore to Colorado Plateau (San Francisco to Socorro)
J. Salsey and others, 1986. Two sheets in color, 40½" x 56" TRA C-2 .................................................. Rolled $18.20; folded $16.20
C-3: Pacific Abyssal Plain to the Rio Grande Riff
D-1: Northern Appalachian: (West sheet) Grenville Province, Quebec, to Newfoundland. (East sheet) Riffed Margin Offshore Northeast Newfoundland
R.T. Haworth, H. Williams, C.E. Keen, 1985. Two sheets in color, each 56½" x 41" TRA D-1 .................................................. Rolled $17.00; folded $15.00
D-2: Transform Margin South of Grand Banks: Offshore Eastern Canada
C.E. Keen, R.T. Haworth, 1985. One sheet in color, 38" x 57" TRA D-2 .................................................. Rolled $9.50; folded $7.50
D-3: Riffed Continental Margin Off Nova Scotia: Offshore Eastern Canada
C.E. Keen, R.T. Haworth, 1985. One sheet in color, 38" x 57" TRA D-3 .................................................. Rolled $9.50; folded $7.50
D-4: Riffed Continental Margin Off Labrador
C.E. Keen, R.T. Haworth, 1985. One sheet in color, 32" x 54½" TRA D-4 .................................................. Rolled $9.50; folded $7.50
G: Canadian Arctic, Somerset Island to Canada Basin
J.F. Sweeney and others, 1986. Two sheets in color, 40½" x 57", with 5-page text TRA G .................................................. Rolled $19.40; folded $17.40

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THE GEOLOGICAL SOCIETY OF AMERICA
GSA NEWS & INFORMATION, January 1987
MEETINGS
(Asterisk indicates new or changed information)


International Symposium on Granites and Associated Mineralizations, January 21–31, 1987, Salvador, Brazil. Information: Augusto J. Pedreira, ISGAM, SME-CPM, Rua Ceara, 3-Pituba, 40.000, Salvador, Bahia, Brazil.

Canadian Reef Research Symposium, January 27–30, 1987, Banff, Alberta, Canada. Information: Canadian Reef Research Symposium, University of Calgary, Conference Office, 2500 University Dr. N.W., Calgary, Alberta T2N 1N4, Canada.


*Ninth Geophysical Convention of Turkey, March 23–27, 1987, Ankara, Turkey. Information: TMMOB Jeofizik Mühendisleri Odası,
(continued on p. 22)
Türkiye Jeofizik Bilimsel ve Teknik Kurultayi, Yurttime Kurulu, Bayindir Sok. 7/14, P.K. 255, Kizilay-Ankara, Turkey.


Workshop to Develop Scientific Drilling Initiatives in the South Atlantic and Adjacent Southern Ocean, April 6–8, 1987, Woods Hole, Massachusetts. Information: J. A. Austin, Jr., Inst. for Geophysics, University of Texas, 4920 North I.H. 35, Austin, TX 78751.

*23rd Annual Symposium on Engineering Geology and Soils Engineering, April 6–9, 1987, Logan, Utah. Information: James McCalpin, Department of Geology, Utah State University, Logan, UT 84322-0705; (801) 750-1273.


Society of Economic Paleontologists and Mineralogists Permain Basin Section Spring Field Conference, April 29–May 2, 1987. Information: Chris Chandler, P.O. Box 2990, Midland, TX 79702; (915) 675-0575.

Analysis of Naturally Fractured Reservoirs, May 4–8, 1987, Snowbird, Utah. Information: Jane Rider, AAPG Education Dept., P.O. Box 98, Tulsa, OK 74101-0979; (918) 584-2555.

*10th Annual Spring Systematics Symposium, Evolutionary Ideas of Progress, May 9, 1987, Chicago, Illinois. Information: Matthew H. Nitecki, Field Museum of Natural History, Roosevelt Rd. at Lakeshore Dr., Chicago, IL 60605-2496; telephone (312) 922-9410.

Institute on Lake Superior Geology Annual Meeting, May 11–14, 1987, Wawa, Ontario. Information: E. D. Frey, P.O. Box 57, Wawa, Ontario P0S 1K0, Canada; (705) 856-2396.

Coastal Sediments '87, May 12–14, 1987, New Orleans, Louisiana. Information: Nicholas C. Kraus, USAE Waterways Experiment Station, Coastal Engineering Research Center, P.O. Box 631, Attn. WESC.R-P, Vicksburg, MS 35180-0631.


First International Congress, Geochemistry and Cosmochemistry, June 30–July 6, 1987, Paris, France. Information: C. J. Allegré, Lab. de Géochimie et Cosmochimie, 4 place Jussieu, Tour 14, 3 étage, 75252 Paris Cedex, France; telephone 43.54.84.63.


4th International Congress of the Regional Committee on Pacific Neogene Stratigraphy (affiliated with IUGS) and joint meeting of IGCP Project 246, July 29–31, 1987, Berkeley, California. Information: Charlotte Brunner, Chairperson of Organizing Committee, Dept. of Paleontology, University of California, Berkeley, CA 94720.


Society of Economic Paleontologists and Mineralogists Fourth Annual Midyear Meeting, August 20–23, 1987, Austin, Texas. Information: SEPM, P.O. Box 4756, Tulsa, OK 74159; (918) 743-9765.

XVI Pacific Science Congress, August 20–30, 1987, Seoul, Korea. Information: Choon Ho Park, XVI Pacific Science Congress, K.P.O. Box 1008, Seoul 110, Korea; telephone (2) 733-4478; Telex ILSKOR 23881.

Correlation of the Silurian Rocks of China
by Mu En-zhi, A.J. Boucot, Chen Xu, Rong Jia-yu
edited by A.J. Boucot and W.B.N. Berry, 1986
A comprehensive compilation of information relevant to the correlation of
the Chinese Silurian rocks by means both of fossils and physical data
available through 1980 is presented.
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Soils and Quaternary Geology of the Southwestern United States
edited by David L. Weide, 1985
Five papers explore the pedogenic process of carbonate and clay
accumulation of their rates and depths of formation. Three papers are a
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Special Paper 203, 158 pages, illustrated, ISBN 0-8137-2203-9,
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Mastodon-Bearing Springs and Late Quaternary
Geochronology of the Lower Pomme de Terre Valley, Missouri
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Fourteen field sessions in the area have provided a radiocarbon-dated
chronostratigraphic sequence in 4 terraces reflecting 5 major episodes
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contain bone beds associated with peat lenses containing pollen, plant,
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The Geology and Geochemistry of Cenozoic Topaz Rhyolites
from the Western United States
by Eric H. Christiansen, Michael F. Sheridan, Donald M. Burt, 1986
High-silica, topaz-bearing rhyolites of Cenozoic age are widely
distributed across the western U.S. and Mexico. In the U.S., their ages
span much of the Cenozoic Era. Emplacement followed or was
contemporaneous with calc-alkaline and basaltic magmatism in the
Basin and Range province, along the Rio Grande rift, and in Montana.
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Relative Motions Between Oceanic and Continental Plates in
the Pacific Basin
by David C. Engbretson, Allan Cox, and Richard G. Gordon, 1985
A model is presented for the displacement history between western
North America, eastern Eurasia, and adjacent oceanic plates for the past
180 million years. The model uses a new determination for relative
motion between the oceanic plates of the Pacific basin.
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THE GEOLOGICAL SOCIETY OF AMERICA
Meetings (continued from p. 22)

International Congress on Geology, Structure, Mineralization, and Economics of the Pacific Rim, August 26-29, 1987, Queensland, Australia. Information: C/-Aus. IMM Congress Secretariat, P.O. Box 731, Toowong 4066, Queensland, Australia.

Sixth International Congress on Rock Mechanics, August 31-September 3, 1987, Montreal, Quebec, Canada. Information: J. Franklin, Dept. of Earth Sciences, University of Waterloo, Waterloo, Ontario N2L 3G1, Canada.


Fifth International Flint Symposium, September 27-October 2, 1987, Bordeaux, France. Information: 5th International Flint Symposium, Secreteria General, c/o Michel Lenoir, Institut du Quaternaire, Batiment de Geologie, Avenue des Facultes, Universite de Bordeaux I, 33405 Talence Cedex, France.


*Mathematical Methods in Geology, 16th Annual Geochimtauts, October 12-16, 1987, Pribiam, Czechoslovakia. Information: V. Nemic, Geoinstitut, Geologicka 2, 152 00 Praha 5, Barrandov, Czechoslovakia; telephone (4202) 590228 or (4202) 7811801.

Society of Economic Paleontologists and Mineralogists Gulf Coast Section 8th Annual Research Conference, Paleontological Applications in Petroleum Exploration, December 6-9, 1987, Houston, Texas. Information: Charles L. McNulty, Dept. of Geology, University of Texas, UTA Box 19049, Arlington, TX 76019; (817) 273-2979.

GSA 1987

Section Meetings

Annual Meeting, October 26-29, Phoenix, Arizona

Penrose Conferences

Late Quaternary Sea Level: The Marine and Terrestrial Record, April 6-12, 1987, Ferry Reach, Bermuda. Information: James L. Carew, Dept. of Geology, College of Charleston, Charleston, SC 29424; (803) 792-5589.


Glacial Facies Models, May 3-8, 1987, Manitoulin Island, Ontario. Information: Nicholas Eyles, Dept. of Geology, Scarborough Campus, University of Toronto, Scarborough, Ontario M1C 1A4, Canada; (416) 284-3336.


GSA NEWS & INFORMATION, January 1987
The Geological Society of America will continue its annual research awards program in 1987. Eligibility is not restricted to GSA members. New application forms for the current year and detailed requirements are available each fall in the geology departments of colleges and universities offering graduate degrees in earth sciences. Forms are mailed annually to GSA Campus Representatives and department secretaries and chairmen in the United States and Canada. They are also available upon request from the Research Grants Administrator, Geological Society of America, P.O. Box 9140, Boulder, Colorado 80301. PLEASE USE ONLY THE 1987 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 $146,000 in grants in 1986. The awards went to 168 students doing research for advanced degrees. The average amount awarded was $871. The largest award was $1,500, 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 "APPR AISAL OF APPLICANT" FORMS, WHICH ACCOMPANY THE 1987 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 will meet in April to evaluate applications and award grants. In April, 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 1987 FORMS AND POSTMARKED BY FEBRUARY 15, 1987
A new GSA Special Paper by A. M. C. Şengör, the product of his long-standing interest in Tethyan problems.

With this work, Şengör hoped to fill an important gap he saw in the regional tectonic literature of Eurasia, namely a synthetic overview of the early history of the Alpine-Himalayan mountain ranges and its expected implications for the “Tethyan paradox,” first brought into focus by Alan Smith of Cambridge.

SPECIAL FOR EMPLOYERS

A Free Want-Ad Listing in the May '87 Issue of GSA News & Information

GSA is concerned about the number of geologists who are unemployed because of today's tight job market. So, we're making the May, 1987 issue of our membership newsletter, GSA News & Information, a special issue of job opportunities for geologists.

We are offering a FREE $80-value want ad listing in this issue to any employer who has a job opening for a geologist.

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The only limitations are: (1) Your ad must describe a real job opening for a geologist; (2) your ad may not exceed 175 words, including headlines; and (3) your typed ad copy must reach GSA no later than March 1, 1987. We'll do the rest.

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