



GSA news & information

VOLUME 4, NUMBER 4

G.S.A. ARCHIVES

APRIL 1982

F. Michael Wahl named new Executive Director

To assume GSA duties July 1, 1982

When the 100-mile-per-hour-plus winds blowing outside in Boulder did not scare him off, the GSA Executive Committee felt they had found their man, and President Digby J. McLaren announced the appointment of Dr. F. Michael Wahl as GSA's new Executive Director to replace retiring Dr. John C. Frye.

Dr. Wahl is no stranger to GSA activities. He has

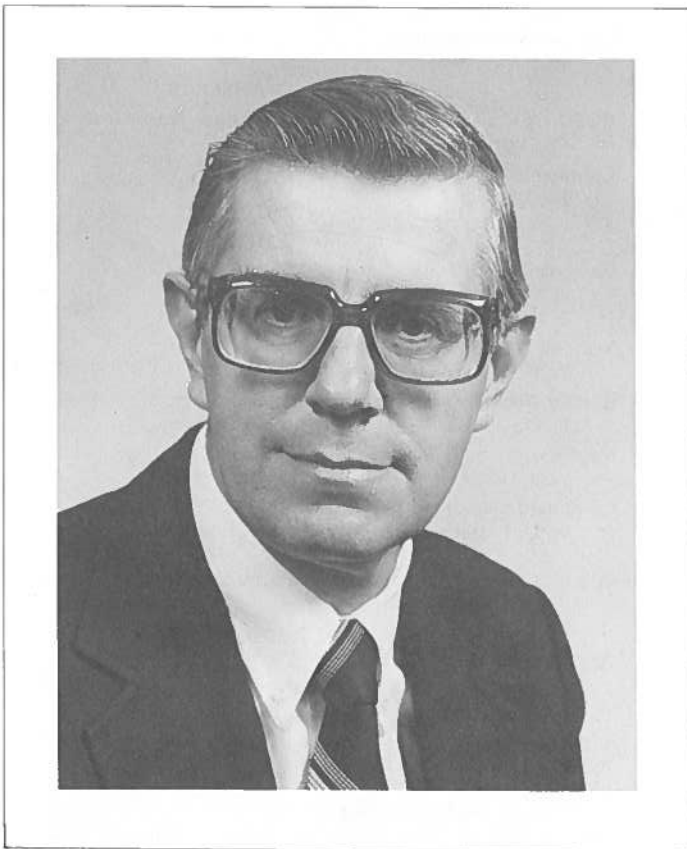
been a Member since 1958, a Fellow since 1965, served as General Chairman of the 1974 Annual Meeting in Miami Beach, and has been a member of numerous committees, including the Committee on Nominations.

He earned his A.B. *cum laude* in 1953 at DePauw University and his M.S. and Ph.D. degrees at the University of Illinois, where he taught geology from 1958 through 1969. He was then appointed Professor and Chairman of the Department of Geology, University of Florida, where he most recently served as Dean for Graduate Studies and Research. Shortly before GSA's search for a new Executive Director, Dr. Wahl had made the decision to leave academic administration and devote full time to professional geological activities.

In his position as Dean, he was responsible for the administration of all graduate programs, including master's programs in 92 fields and the doctorate in 51 disciplines involving 4,300 graduate students and an annual operating budget in excess of \$2.2 million. While the demands of this position have made it necessary to curtail his personal research activities, his research interests and publications are in the areas of clay mineralogy and sedimentary geochemistry.

He has been a geological consultant for the past 25 years and has also worked for the Illinois State Geological Survey and for the Shell Development Company. He served with the U.S. Army Corps of Engineers, 1953-55.

Dr. Wahl will assume his new duties as GSA Executive Director on July 1, 1982, at which time he and his wife, Dottie, and daughter, Kathryn, will move to Boulder. Three sons will remain in Florida to complete their studies at the University of Florida.



F. Michael Wahl



CENTENNIAL NEWS

D-NAG Project Leaders Update

As with any complex project such as the synthesis of the Geology of North America, the cast of characters periodically needs updating. The listing below gives the names of the principal organizers for each of the components of the D-NAG project as of February 1982. In every case these organizers are involving teams of co-workers in the process of synthesis or compilation. The total list of geologists involved in some facets of the D-NAG project will ultimately include several hundred names. As the individual projects approach completion, the full lists of participants will be given in this column.

SYNTHESIS VOLUMES

- The Geology of North America: Summary
A. W. Bally
- The Geology of Canada: Summary
J. O. Wheeler
- Precambrian: Canada and Greenland
P. F. Hoffman A. Davidson
K. D. Card
- Precambrian: Conterminous U.S.
J. C. Reed, Jr. L. T. Silver
P. K. Sims D. W. Rankin
R. S. Houston M. W. Reynolds
- Continental Interior and Platform Basins: Canada
D. F. Stott J. D. Aitken
- The Midcontinent Province: U.S.
L. L. Sloss P. R. Vail
C. J. Mankin
- The Innuitian Region
H. Trettin
- The Appalachian/Caledonian Region: Canada and Greenland
H. Williams
- The Appalachian and Ouachita Regions: U.S.
R. D. Hatcher, Jr. G. W. Viele
- The Cordilleran Orogen: Alaska
G. Plafker D. L. Jones

- The Cordilleran Orogen: Canada
H. Gabrielse C. J. Yorath
- The Cordilleran Orogen: U.S.
B. C. Burchfiel G. P. Eaton
P. W. Lipman
- The Geology of Mexico
J. Guerrero F. Ortega
- The Caribbean Region
G. Dengo J. E. Case
- The Continental Margin: Eastern Canada
R. T. Haworth
- The Atlantic Continental Margin: U.S.
R. E. Sheridan J. A. Grow
- The Gulf of Mexico Basin
A. Salvador R. T. Buffler
- Quaternary: Canada
R. J. Fulton
- Quaternary: U.S.
H. E. Wright, Jr. W. F. Ruddiman
- The Arctic Region
A. Grantz J. F. Sweeney
L. Johnson
- The Western Atlantic Region
P. R. Vogt B. R. Tucholke
- The Eastern Pacific Region
D. M. Hussong E. L. Winterer
R. W. Decker
- Economic Geology: Canada
R. I. Thorpe
- Economic Geology: Mexico
G. P. Salas
- Surface Water Hydrology
M. E. Moss M. G. Wolman
- Groundwater Hydrology
W. Back

CHARTS AND TRANSECTS

- COSUNA (Correlation of Stratigraphic Units, North America)
O. E. Childs
- Continent-Ocean Transects
R. C. Speed

MAPS

- Geologic Map of North America
A. R. Palmer R. A. Price
J. C. Reed, Jr. J. Guerrero
- Tectonic Map of North America
W. R. Muehlberger
- Gravity Anomaly Map of North America
N. W. O'Hara P. L. Lyons
- Magnetic Anomaly Map of North America
W. J. Hinze
- Lineament Map of North America
W. D. Carter

Necrology

Notice has been received of the following deaths: Paul L. Applin, Fort Worth, Texas; Lamoraal U. De Sitter, Utrecht, Netherlands; Chauncey D. Holmes, Tulley, New York; Wolfgang Krebs, Braunschweig, West Germany; Albert Maucher, Munich, West Germany; Willis P. Popenoe, Los Angeles, California; Wallace E. Pratt, Tucson, Arizona; Richard W. Smith, Columbia, Maryland; Gerhard Solle, Darmstadt, West Germany; Hermann J. Tschopp, Riehen, Switzerland; Nancy A. Wright, Reston, Virginia.

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

Report of the President

To the Council and Membership of The Geological Society of America, Inc.:



Howard R. Gould

1981 was a year of action and change that promises to greatly strengthen our Society and the science of geology in the years ahead. Many of the actions and policies adopted were the outgrowth of work begun during the administration of Larry Sloss, my very able predecessor, and prior administrations, but there were new initiatives as well.

The most important and far-reaching action concerned the Society's publications. Plagued by

the high cost of its publications and the very unpopular two-part format of the *Bulletin*, Council implemented wide-sweeping changes to solve these problems. Acting on recommendations by the Ad Hoc Special Publications Study Committee chaired by Brian Skinner, Council returned the *Bulletin* to its traditional one-part format, placed scientific editorial responsibility for each of the Society's publications with appointed members as outside editors, required that all members receive both the *Bulletin* and *Geology* as a part of membership, and adopted other policies that have greatly reduced the cost of Society publications and improved their scientific content.

The Centennial Decade Program to commemorate the Society's 100th anniversary in 1988 gained full momentum during the year. Under the enlightened leadership of Pete Palmer, the centerpiece project—the Decade of North American Geology—moved swiftly ahead. The organization for the 27 regional synthesis volumes and continent-wide geological and geophysical maps was established, incorporating the best talent available throughout all sectors of the North American earth science community. The products of the Decade Project, including a series of Continental Ocean Margin Transects sponsored by the U.S. Geodynamics Committee, will be published stepwise beginning in 1983 and concluding in 1990. This program will not only greatly enhance our understanding of the geology of the continent but will provide a valuable new data base for further expansion of geological knowledge and its practical application.

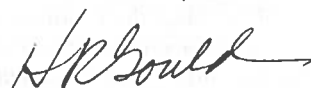
In order to raise the major funds required for the Centennial Program and additional monies in support of longer

range goals, Council established a permanent Foundation, named The Geological Society of America Foundation, Inc. This organization, which is freestanding and completely separate from the Society itself, is fully organized and operational. Dwight Roberts, President of the Foundation, under the direction of a distinguished Board of Trustees (Caswell Silver, Chairman; Robert L. Fuchs, Vice Chairman; and members Michel T. Halbouty, Hollis D. Hedberg, and John C. Maxwell), is now engaged in an aggressive program of fund raising. The priority goals are, first, to raise the estimated \$4 million required for the Centennial Decade Program, and, second, to build an endowment of \$5 million to support longer range programs. While raising funds for the Decade Program will not be easy, the Foundation is encouraged by the early receipt of two very generous personal contributions and by the program's enthusiastic acceptance by the petroleum and minerals industry whose major contributions are now being received. Such sizeable gifts are absolutely necessary, but the program will be successful only if it enjoys broad support from both large and small contributors, and especially GSA members. Therefore, I strongly encourage all of you to get behind the program. Your contributions, whatever size, are essential to its success.

As the year closed, Council was busily engaged in search for a new Executive Director to replace John Frye, who will be retiring next July after more than 8 years of outstanding and dedicated service. Replacing a man of John's exceptional talents and capabilities will not be easy, but I am encouraged by the list of strong candidates that a very able successor will be found.

For me personally, I have been pleased and honored to serve this year as President of the Geological Society of America. I have enjoyed immensely my contacts with the members and with the many Committees, Divisions, Associated Societies, Council, and GSA staff whose hard work and dedicated service have made this a very successful year. With Digby J. McLaren now at the helm, the Society is in good hands and the future has never been brighter.

Respectfully submitted,



Howard R. Gould, President, 1981

Annual Report for 1981 The Geological Society of America

Report of the Executive Director

To the Council and Membership of the Geological Society of America, Inc.:

A major program during the year 1981 was the implementation of actions of the Council taken during its meetings in November 1980 and May 1981. These actions called for a complete restructuring of the publications program of the Society. All phases of the new system were in place and functioning by the end of 1981. Major items of change were (1) the appointment of remote editors for the *Bulletin* (two editors), for *Geology*, for Books and Special Papers, and for Maps and Charts series; (2) a restructuring of the Society's Committee on Publications; (3) the requirement that all dues-paying members receive both the *Bulletin* and *Geology*, as well as *GSA News & Information* and other membership mailings; (4) that the *Bulletin* return to a one-part monthly journal printed on paper; (5) that both *Bulletin* and *Geology* be made available to members and nonmember subscribers in a microfiche edition if they preferred; (6) that commercial advertising be accepted by all of the Society's periodical publications; and (7) that stringent economy measures be instituted throughout the Society's publications program. All of these directives were carried out during the year and were functioning by year's end.

The Geological Society of America Foundation, Inc., authorized during 1980, became a functioning organization during 1981. During most of the year the independent Foundation occupied two office rooms in the Society's headquarters building and had two full-time employees. The creation of a foundation had been recommended to the Council by the former Centennial Development Committee. The Foundation has agreed in principle to support the costs of the Centennial program and the Decade of North American Geology.

The Centennial D-NAG program which got under way during the last half of 1980 operated at full speed throughout 1981. The steering committee, under the chairmanship of the immediate past-president of GSA, is broadly representative of the continent. Organization for the synthesis volumes, designed to cover the geology of North America, has been completed, a series of workshops organized, and other projects are in the formative stage.

During the year the total membership of the Society grew slightly to 12,841 (an all-time high) on the rolls by year's end. The number of dues-exempt Fellows and Members grew at a faster rate to a total of 635 at year's end. The membership consists of 44 Honorary Fellows, 3,255 Fellows, 7,707 Members, and 1,835 Student Associates.

The 1982 dues notice, mailed during September 1981, contained a questionnaire on areas of major interest of the membership. Sixteen specialty areas were listed, and each member was asked to mark the one that indicated his or her major area of interest. The percentages ranged downward from a high of 13.6% for petroleum geology. The applied areas of economic, petroleum, and coal geology accounted for more than ¼ of the membership (28.8%), and the grouping of engineering geology, environmental geology, and

hydrogeology contained an additional 18.3%. Mineralogy, petrology, volcanology, and geochemistry contained 13.5%; structural geology and tectonics 9.4%; stratigraphy and sedimentology 8%; and geomorphology/glaciology and paleontology each with more than 5%. Clearly, the Society continues to have a broad and diversified membership.

The November Annual Meeting in Cincinnati was a success in all regards. It continued the pattern of 4-day meetings as directed by Council two years ago. The grand total registration of 4,670 places it third in size of all annual meetings (after Denver, 1976, and Toronto, 1978). Of the total at Cincinnati, 2,915 were professional, 1,534 students, and 221 guests. Of the total, 2,875 had preregistered, and 306 registered for one day only.

A total of 1,366 abstracts were submitted. Of these, 1,101 were submitted for general sessions and 265 were submitted for the 25 symposia. Of the abstracts submitted for general sessions, 876 (79.5%) were accepted; 671 were presented in 48 half-day sessions, and 205 were presented during the 6 poster sessions. Several events supplemented the formal program. The GSA Public Forum was held for the second time, with this year's topic being "The Exploration of Venus, Jupiter, and Saturn." In addition, six short courses, workshops, and forums were sponsored by GSA, MSA, PS, and AGI. There were 311 who participated in 10 premeeting and 9 postmeeting trips. Guidebooks were published in three volumes by AGI, which will handle future distribution. As always, the field trips were a major undertaking, and all involved are to be congratulated.

All six of the GSA sections conducted successful annual meetings during the year. The total attendance at the six meetings was approximately 3,750, and more than 1,200 papers were presented. During the year three topical Penrose Conferences were held. As usual, they represented a range of topics and were quite successful.

Eleven years ago GSA started a modest employment program at the annual meeting, originally as a service for students. Since then a similar service has been offered at each succeeding annual meeting. Also, applicant data have been kept on the computer file through the years in order to maintain the service by mail throughout the year. During 1981 the service was used by 134 employers seeking to fill 222 positions. At the annual meeting in Cincinnati, 77 employers seeking to fill 165 positions used the service, accounting for about ¾ of the usage for the year. At the meeting 1,090 interviews were conducted with 309 applicants. The total number of applicants through the year was 530.

During 1981 there were 374 applicants for research grants, of which 177 were supported. The total amount granted was \$101,737 compared to the total requested of \$405,789. The average grant was \$575. Of the total grants four were supported from the Harold T. Stearns fund, and 16 were supported from funds contributed from industry. The industry support was \$2,000 from Mobil, \$2,500 from Marathon, and

(continued next page)

Annual Report for 1981 – The Geological Society of America

\$1,500 from Texaco. In the future, industry contributions will be made by way of the GSA Foundation. In addition there were individual contributions from members and former recipients. The remainder of the grants was funded from income from the Penrose Endowment Fund. Plans were made for the awarding of the first Gladys W. Cole Memorial Research Award during 1982.

The headquarters staff was at the level of 37 to 39 full-time equivalent employees through the year. Changes in the structure of the publications program led to a few changes and some reduction of the headquarters staff, but the key personnel remained stable during the year.

Although at the time of this writing the books have not yet been closed for 1981, it appears that the Society's total operations for the year 1981 finished slightly in the black; income from investments (not including capital gain or loss), from dues, from publication sales, and from meetings at least equalled the total expenditures. The Irving Trust Company of New York continues to be custodian for the Society's securities, and advice is furnished to the Committee on Investments by the Irving Trust Company, by William G. Campbell & Co., Inc., and by Reich and Tang, Inc., also of New York.

Respectfully submitted,
John C. Frye, Executive Director

"Channel Straightening—A Potential Problem," a sound-slide presentation available

The U.S. Geological Survey has recently released a new sound-slide presentation on the effects of stream straightening entitled "Channel Straightening — A Potential Problem." The 16-minute slide show, produced in cooperation with the Federal Emergency Management Agency, shows the conditions before and after the channelization of Big Spring Creek in central Montana.

The slide show introduces stream dynamics to non-technical audiences. It discusses how communities can avoid the adverse consequences of channel modification by taking natural stream characteristics and processes into consideration. It also presents alternatives to stream straightening.

For additional information concerning contents of the slide show, contact U.S. Geological Survey, Earth Sciences Assistance Office, Mail Stop 720, National Center, Reston, VA 22092.

The slide show is available for short-term loan, free of charge, by writing to
Visual Information Services Office
U.S. Geological Survey
790 National Center
Reston, VA 22092.

ANNOUNCEMENT

THE REASON WHY...

YOUR ORDERS WERE DELAYED FOR SO LONG...

Your magnificent response to our warehouse removal sale reduced inventory considerably. BUT the warehouse move was still a whale of a job. It took much longer than anticipated. We are just now able to fill orders after a hiatus of a few months. We are pouring on the steam to get the backlog worked off as quickly as we can. Please bear with us a little longer. If you don't have your order by mid-May, let us know.

The GSA warehouse is operated by Johnson Publishing Company at a location just two and a half miles from headquarters. All orders and queries on orders must still be directed to Publication Sales here at GSA headquarters: P.O. Box 9140, Boulder, CO 80301; phone (303) 447-2020.

1982 GSA Committees and Representatives

The president, or a representative designated by him, shall be an ex officio member of every committee.

EXECUTIVE COMMITTEE

Digby J. McLaren, *Chairman*, Paul A. Bailly, William B. Heroy, Jr., Howard R. Gould, Frank E. Kottowski (Committee on the Budget Member of the Executive Committee).

AUDIT COMMITTEE

Dallas L. Peck, *Chairman*, Hubert Gabrielse, Robert D. Hatcher, Jr.; Conferee: William B. Heroy, Jr.

COMMITTEE ON THE BUDGET

Frank E. Kottowski, *Chairman*, Digby J. McLaren, Paul A. Bailly, William B. Heroy, Jr., Howard R. Gould; Ex Officio: C. Harry Burgess (Committee on Investments, Chairman).

COMMITTEE ON COMMITTEES

Thornton L. Neathery, *Chairman*, Samuel S. Adams, Robert G. Coleman, William L. Fisher, John Imbrie (terms are for one year only).

COMMITTEE ON GEOLOGY & PUBLIC POLICY

Charles G. Groat, *Chairman* (1981-83), Ernest E. Angino (1980-82), Victor R. Baker (1980-82), John C. Harms (1981-82), Larry J. Doyle (1981-83), Geoffrey G. Snow (1981-83), Priscilla C. Grew (1982-84), James W. Skehan (1982-84), Harry W. Smedes (1982-84).

HEADQUARTERS ADVISORY COMMITTEE

Robert J. Weimer, *Chairman* (1980-82), John C. Harms (1980-82), Donald D. Runnells (1980-82), John D. Haun (1981-83), William R. Keefer (1981-83).

COMMITTEE ON HONORS AND AWARDS

Hubert Gabrielse, *Chairman*, Bruce B. Hanshaw, Burrell C. Burchfiel, Peter J. Wyllie.

SUBCOMMITTEE ON THE PENROSE MEDAL AWARD

Hubert Gabrielse, *Chairman* (1982), Paul B. Barton (1980-82), M. Gordon Wolman (1980-82), Peter A. Rona (1981-83), George A. Thompson (1981-83), Donald L. Everhart (1982-84), Ursula B. Marvin (1982-84).

SUBCOMMITTEE ON THE ARTHUR L. DAY MEDAL AWARD

Bruce B. Hanshaw, *Chairman* (1982), Rosemary J. Vidale (1980-82), Amos M. Nur (1981-83), Charles B. Sclar (1982-83), Susan W. Kieffer (1982-84), Neil D. Opdyke (1982-84), Joseph V. Smith (1982-84).

SUBCOMMITTEE ON HONORARY FELLOWS

Burrell C. Burchfiel, *Chairman* (1982-84), William Back (1980-82), Hans P. Eugster (1980-82), John M. Guilbert (1981-83), E. H. Timothy Whitten (1981-83), Reuben J. Ross, Jr. (1982-84).

SUBCOMMITTEE ON THE NATIONAL MEDAL OF SCIENCE

Peter J. Wyllie, *Chairman* (1980-82), John C. Crowell (1981-83), Vincent E. McKelvey (1982-84).

COAL GEOLOGY DIVISION PANEL ON GILBERT H. CADY AWARD

Heinz H. Damberger (1980-83), Edward C. Beaumont (1980-83), William Spackman, Jr., *Chairman* (1982-84), Clayton G. Ball (Immediate Past Recipient), Russell A. Brant (Division Chairman, 1982), John C. Crelling (Division First Vice-Chairman, 1982).

ENGINEERING GEOLOGY DIVISION PANEL ON E. B. BURWELL, JR., AWARD

Ellis L. Krinitzky, *Chairman* (1980-82), John H. Peck (1980-82), David M. Cruden (1981-83), John F. Gartner (1981-83), Rachel M. Barker (1982-84), Roy J. Shlemon (1982-84).

HISTORY OF GEOLOGY DIVISION AWARD PANEL

Ursula B. Marvin, *Chairman* (1982-83), Brian J. Skinner (1982-84), Ellen T. Drake (1982).

HYDROGEOLOGY DIVISION PANEL ON O. E. MEINZER AWARD

James J. Geraghty, *Chairman* (1980-82), Wayne A. Pettyjohn (1981-83), Frank W. Trainer (1981-83), Richard L. Cooley (1982-84), Paul A. Witherspoon, Jr. (1982-84).

QUATERNARY GEOLOGY & GEOMORPHOLOGY DIVISION PANEL ON KIRK BRYAN AWARD

Richard F. Madole, *Chairman*, Edward B. Evenson (1981-82), Allan F. Schneider (1981-82), George I. Smith (1981-82), Robert F. Black (1982-83), Joseph H. Hartshorn (1982-83), Nathaniel W. Rutter (1982-83).

COMMITTEE ON INVESTMENTS

C. Harry Burgess, *Chairman* (1981-83), Donald A. Parks (1980-82), Thomas W. Stern (1980-82), James A. Anderson (1981-83), Robert L. Fuchs (1981-83), Ex Officio: William B. Heroy, Jr., Treasurer (voting), Frank E. Kottowski, Committee on the Budget Chairman (non-voting).

COMMITTEE ON MEMBERSHIP

William A. Thomas, *Chairman* (1981-83), Penelope M. Hanshaw (1980-82), F. Beach Leighton (1981-83), Patrick K. Sutherland (1982-83), Aureal T. Cross (1982-84), Eric W. Mountjoy (1982-84).

COMMITTEE ON NOMINATIONS

Dallas L. Peck, *Chairman*, Geoffrey B. Leech, John C. Reed, Jr., Theresa F. Schwarzer, Francis G. Stehli (terms are for one year only).

COMMITTEE ON PENROSE CONFERENCES

Lee J. Suttner, *Chairman* (1980-82), Marie Morisawa (1981-82), Elwood R. Brooks (1981-83), Daniel R. Shawe (1981-83).

PROGRAM REVIEW COMMITTEE

Bruce B. Hanshaw, *Chairman* (1981-83), Robert D. Hatcher, Jr. (1980 JTPC Chairman), Norman Hester (1981 JTPC Chairman), William W. Craig (1982 JTPC Chairman), Haydn H. Murray (1983 JTPC Chairman).

COMMITTEE ON PUBLICATIONS

Robert D. Hatcher, Jr., *Chairman* (Editor of the *Bulletin*), Gerald M. Friedman (1980-82), Edmund G. Wermund, Jr. (1980-82), Charles L. Pillmore (1981-83), John W. Rold (1981-83), William A. Thomas (Editor of the *Bulletin*), Eldridge M. Moores (Editor of *Geology*), William G. E. Caldwell (Editor of *Memoirs and Special Papers*), John C. Reed, Jr. (Editor of *Maps and Charts*); Conferee: John C. Frye, Executive Director; F. Michael Wahl, Executive Director, effective July 1, 1982.

COMMITTEE ON RESEARCH GRANTS

Donn S. Gorsline, *Chairman* (1982-84), Robert E. Riecker (1982-83), Clifford A. Hopson (1982-84); Conferee: Robin Brett (1982).

TREATISE ON INVERTEBRATE PALEONTOLOGY ADVISORY COMMITTEE

Richard E. Grant, *Chairman* (1979-1982), Robert E. Lundin (1981-84), John C. Frye (Continuing).

AD HOC COMMITTEE ON MINORITIES IN THE GEOSCIENCES

Louis A. Fernandez, *Chairman*, Charles A. Baskerville, David A. Lopez, Louis C. Pakiser.

GSA STEERING COMMITTEE ON "DECADE OF NORTH AMERICAN GEOLOGY"

Howard R. Gould, *Chairman*, Albert W. Bally (1980-82), Robin Brett (1980-82), Gabriel Dengo (1980-82), Charles L. Drake (1980-82), Jose C. Guerrero (1980-82), William R. Keefer (1980-82), John C. Reed, Jr. (1981-83), Leon T. Silver (1981-83), Laurence L. Sloss (1981-83), Robert G. Blackadar, Raymond A. Price, John W. Wheeler; Ex Officio: Digby J. McLaren, President; Paul A. Bailly, Vice-President; John C. Frye,

Executive Director; F. Michael Wahl, Executive Director, effective July 1, 1982; A. R. "Pete" Palmer, Centennial Science Program Coordinator.

GSA REPRESENTATIVES TO AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE (AAAS)

Peter A. Rona (January 9, 1982-May 28, 1985) Section E-Geology & Geography, Richard R. Parizek (January 9, 1982-May 28, 1985), Section W-Atmospheric & Hydrospheric Sciences.

GSA DESIGNEES TO NORTH AMERICAN COMMISSION ON STRATIGRAPHIC NOMENCLATURE (NACSN)

GSA has three representatives (commissioners) each year and one commissioner-elect on the NACSN. The term is for three years. Appointments terminate and commence at the end of the NACSN annual meetings which are held during the GSA annual meetings. The commissioner-elect takes office one year following his appointment.

Malcolm P. Weiss (1979-82), A. R. "Pete" Palmer (1980-83), Michael A. Murphy (1981-84), Norman P. Lasca, Jr. (1982-85) Commissioner-elect; term begins during NACSN meeting in New Orleans.

GSA DESIGNEES TO JOINT ASCE-GSA-AEG COMMITTEE ON ENGINEERING GEOLOGY (AMERICAN SOCIETY OF CIVIL ENGINEERS)

John B. Ivey (July 1, 1978-June 30, 1984), Cole R. McClure, Jr. (July 1, 1979-June 30, 1985).

GSA REPRESENTATIVE TO U.S. NATIONAL COMMITTEE ON ROCK MECHANICS (USNCORM)

George A. Kiersch (July 1, 1980-June 30, 1983).

GSA REPRESENTATIVE TO U.S. NATIONAL COMMITTEE ON TUNNELING TECHNOLOGY

Lloyd B. Underwood (January 1, 1981-June 30, 1983).

GSA DESIGNEES TO GSA-SSSA INTER-DISCIPLINARY COMMITTEE (SOIL SCIENCE SOCIETY OF AMERICA)

Leon R. Follmer, John W. Hawley, Robert V. Ruhe, Peter W. Birkeland.

GSA MEMBER OF THE AGI GOVERNING BOARD

Howard R. Gould (January 1, 1981-December 31, 1983).

GSA DESIGNEE TO THE STEERING COMMITTEE OF COSUNA (CORRELATION OF STRATIGRAPHIC UNITS OF NORTH AMERICA)

Robert R. Jordan.

GSA DESIGNEE TO U.S. COMMITTEE FOR THE INTERNATIONAL ASSOCIATION OF HYDROGEOLOGISTS

David A. Stephenson (1978-82).



THE 1982 ANNUAL MEETING COMMITTEE . . .



Back row, left to right: James Hartman, Joseph Kelley, Louise Draper, William W. Craig, Lyle Harvey, Robert Sabate, Olga Braunstein, M. Robert Douglass, Irene Brohm, Oran R. Carter; front row, left to right: Alfred Baker, Alan Thomson, Jules Braunstein, Michael Fein, Inez De Gruji (representing Leonard Limes), David Cooke, (Charles Groat, not pictured).

1982 LOCAL COMMITTEE – NEW ORLEANS

GENERAL CHAIRMAN, Jules Braunstein, University of New Orleans; CO-CHAIRMAN/TREASURER, Alan F. Thomson, Shell Oil Company; ENTERTAINMENT, Robert W. Sabate, Koch Oil Company; EXHIBITS, M. Robert Douglass, Westover Oil, Louise Draper, Amoco; FIELD TRIPS, Charles G. Groat, Louisiana Geological Survey; MESSAGES/INFORMATION, David W. Cooke, U.S. Geological Survey; PRINTING, Irene M. Brohm, Odeco Oil & Gas Company; PUBLICITY, Alfred H. Baker, McMoran Exploration Company; SCIENCE THEATER, James A. Hartman, Shell Oil Company;

SECURITY, Leonard L. Limes, El Tres Petroleum Company; SPECIAL EVENTS, Michael N. Fein, CNG Producing Company; SPORTING EVENTS, Lyle Harvey, Ingram Exploration, SPOUSE/GUEST, Olga Braunstein; STUDENT ASSISTANTS, Joseph T. Kelley, University of New Orleans; TECHNICAL PROGRAM, William W. Craig, University of New Orleans, Lou Fernandez, University of New Orleans; TECHNICAL SERVICES, Mark Alberty, Gearhart Industries; TRANSPORTATION, Oran R. Carter, Atwater Consultants, Ltd.; TRAVEL, Richard W. Boebel, Cryptic Exploration Company.

. . . INVITES YOU TO NEW ORLEANS, OCTOBER 18-21



WANT GOOD SLIDES?

Keep in mind that:

Clear, readable slides are essential for a well-presented paper at a scientific meeting. Although nearly everyone is aware of this fact, many of us get carried away with the volume and importance of our data that we forget to put the principle into practice.

Articles and books have been written on proper preparation of slides, but in the last-minute rush to get our slides finished for our upcoming meeting, many of us do not take time to read the available guidance and continue with our bad habits. There are, however, a few simple rules that are easy to remember. If followed they will assure at least acceptable slides for presentation.

First, be certain that lines and lettering can be read from any point in the room. An easy test is if you can read all the information on the slide with unaided eye, it will project properly. This test can be applied only after the slide is prepared. In copy preparation, you can assume that you will achieve this if you confine yourself to a 7x10 sheet of paper, leave a 1" blank on all sides, use no lettering less than 5mm high and no line width less than 1mm, avoid serif or italic type, and keep your lettering on the horizontal.

Crowded tabular data should be avoided.

Stark black on white (or white on black in some cases) can be eye-tiring. Consider a light blue, green, or yellow (not red) background. There are materials available for achieving this effect.

If a diagram is presented in color, do not surround the subject matter with white, and do not expect fine line patterns to be easily readable.

If field photos are used, don't try to illustrate the entire stratigraphic sequence with one photo; be sure the picture was properly exposed and has adequate color density for large size projection.

Above all, remember a slide should reinforce a scientific presentation, not BE one.

Look familiar?



... and this diagram clearly explains the principle underlying this very important concept. Next slide please ...

Could you have been this speaker?

Good data and good science attract attention *when* the information is presented clearly.

**FACULTY POSITION OPEN
AT
STANFORD UNIVERSITY**

Applications are invited for a faculty position in engineering geology in the Department of Applied Earth Sciences, Stanford University. We seek an individual fully committed to a vigorous research and teaching career, one whose background demonstrates skill in inventive fundamental research and interest in engineering applications. The principal field of research can be in any branch of geology relevant to engineering problems. Fields such as structural geology or quantitative geomorphology, which complement existing strengths in Stanford's Departments of Geology, Applied Earth Sciences, and Civil Engineering are preferred.

The level of appointment will depend upon the qualifications of the individual, but our search will focus at the assistant and associate professor levels. We anticipate that the new faculty member will join us during the 1982-83 academic year. Interested individuals should send a complete resume, a statement of teaching and research interests, and the names of at least three references to Prof. Richard H. Jahns, Applied Earth Sciences, Stanford University, Stanford, CA 94305.

Applications will be accepted until May 15, 1982. Stanford is an equal opportunity/affirmative action employer.

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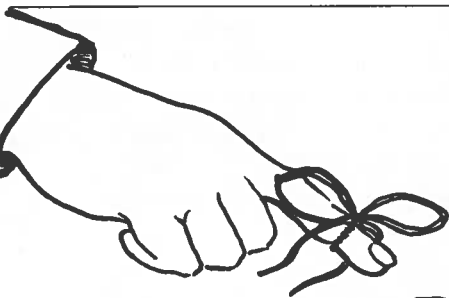
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REMINDER

Deadline for receipt of abstracts at GSA headquarters for the Annual Meeting in New Orleans is May 21, 1982. Mail volunteered abstracts* to Abstracts Secretary, Geological Society of America, P.O. Box 9140, Boulder, CO 80301 to arrive on or before May 21.

ABSTRACTS DEADLINE

*Abstract forms available upon request from the above address.

MAY 21

Joint Technical Program Committee

The Joint Technical Program Committee (JTPC) will meet at GSA Headquarters in Boulder, Colorado, on June 25 and 26, 1982. JTPC is responsible for final selection and rejection of all abstracts submitted for presentation at the annual meeting. The following list includes representatives and conferees from GSA divisions and associated societies who will participate in the JTPC meeting:

Chairman	William W. Craig
Cochairman	Louis A. Fernandez
General Chairman, Local Committee	Jules Braunstein
Chairman, 1981 JTPC	Norman C. Hester
Chairman, 1983 JTPC	Haydn H. Murray
President, GSA, ex officio	Digby J. McLaren
Executive Director, GSA, ex officio	John C. Frye
GSA Representatives-at-Large	Thomas H. Anderson (1980-82), Lynn Glover III (1980-82), Steven S. Oriel (1980-82), George E. Plafker (1981-83), Daniel E. Karig (1981-83)

GSA DIVISION REPRESENTATIVES

Archaeological Geology	Claude C. Albritton, Jr.	Hydrogeology	Irwin H. Kantrowitz
Coal Geology	John C. Crelling	Planetary Geology	Harold Masursky
Engineering Geology	Frank W. Wilson	Quaternary Geology and Geomorphology	John T. Andrews
Geophysics	William J. Hinze	Structural Geology and Tectonics	David E. Dunn
History of Geology	Ursula B. Marvin		

ASSOCIATED SOCIETY REPRESENTATIVES

Cushman Foundation	Don L. Eicher	Paleontological Society	Roger D. K. Thomas
Geochemical Society	Carl E. Hedge	Society of Economic Geologists	John E. "Jack" Frost
Geoscience Information Society	Regina A. Brown	Society of Vertebrate Paleontologists	Not meeting with GSA this year
Mineralogical Society of America	Dean Presnall		
National Assn. of Geology Teachers	Lee J. Suttner		

ASSOCIATED SOCIETY CONFEREES

Cushman Foundation	None appointed	Paleontological Society	Erle G. Kauffman or A. R. "Pete" Palmer
Geochemical Society	None appointed	Society of Economic Geologists	Arnold L. Brokaw
Geoscience Information Society	None appointed	Society of Vertebrate Paleontologists	Not meeting with GSA this year
Mineralogical Society of America	Gordon E. Brown, Jr., and Timothy L. Grove		
National Assn. of Geology Teachers	None appointed		

CHANGE OF ADDRESS*

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*North American members should report address changes 6 weeks in advance; all others, 3 months, in advance.

Announcing the World Organization of Volcano Observatories

In volcanology, the past decade was unusually eventful. Many volcanic eruptions occurred, some of them posing considerable hazard to populated areas. For example, the 1973 volcanic eruption on Heimaey, Iceland, which partly destroyed the town of Vestmannaeyjar on the island, stands out for the massive effort made by the inhabitants to save the town from total destruction by advancing lava flows.

Rumblings of the Soufriere volcano on Guadeloupe, West Indies, resulted in the evacuation of about 74,000 people living on the slopes of the volcano. The "volcanic crisis" created an administrative and scientific dilemma centering on which criteria should be used to judge the situation safe enough to allow the people to return to their homes.

In Iceland the building of a geothermal power station had just started when, in 1975, Krafla Volcano gave signs of renewed activity. Volcanologists warned that activity might increase and last for years, but government officials concluded that the credibility of the volcanological advice was not sufficient to declare a major hazard warning. As partial compensation for a power station without power, Krafla has provided an excellent opportunity to study volcanic and tectonic processes associated with crustal rifting.

In Italy, Etna has created both civil defense problems and opportunities for scientific study; and on Kamtchatka, USSR, volcanologists were able to predict the eruption of Tolbachik volcano on the basis of premonitory seismicity.

In the United States, when the first signs of reawakening of Mt. St. Helens became apparent in March 1980, volcanologists worked closely with local authorities to continually assess the volcanic and associated hazards posed by the eruption that began on March 27. The culmination of an eventful decade in volcanology came on May 18, 1980, when Mt. St. Helens erupted catastrophically, causing considerable destruction and loss of life. This eruption will probably go down in history as the best-documented volcanic event since the beginning of modern volcanology, and the experience gained should materially improve our understanding of explosive eruptions, as well as improve the interaction between scientists and decision makers in matters relating to volcanic hazards.

In the examples mentioned above, volcanologists, in addition to being scientists, also had to play an important social role as advisers to administrators. In many cases, they were poorly prepared, partly because of the low priority volcanology has been given in scientific research funding allocations through the years and partly because they were faced with new situations never experienced before.

The political decision to evacuate the population on Guadeloupe and the ensuing social disruptions exposed the French volcanologists to a much more severe scrutiny than previously experienced by members of this profession. They met the challenge by completely reorganizing their system of volcano observatories, as well as increasing their activity in fundamental research in volcanology.

In recognition of this recent reorganization and of the associated modernization of volcano observatories on Guadeloupe and Martinique, the French Government invited representatives of volcano observatories and institutions from all over the world to meet February 18-21, 1981. The main objective of the meeting was to establish or improve ties between people who have either direct or indirect responsi-

CORRECTION

The dates for the following Penrose Conference have been changed from May 20-25, 1982, to May 23-28, 1982.

HYDRODYNAMICS AND GEOCHEMISTRY OF ORE GENERATION IN SEDIMENTARY ENVIRONMENTS

Millstone Lodge, Gravois Mills, MO 65037

Conveners: William C. Kelly, Department of Geological Sciences, University of Michigan, Ann Arbor, MI 48109; John M. Sharp, Jr., Department of Geology, University of Missouri, Columbia, MO 65211; Donald E. White, USGS, 345 Middlefield Road, Menlo Park, CA 94025.

Information concerning the conference may be obtained by writing Dr. John M. Sharp, Jr., Department of Geology, University of Missouri, Columbia, MO 65211, or by telephoning him at (314) 882-6673 or (314) 882-6785.

bility for volcano monitoring in the respective countries and for those people to serve as advisers to public authorities. Besides the host country, France, the following countries were represented: Costa Rica, Iceland, Indonesia, Italy, Japan, Portugal, Mexico, and the U.S.A.

The meeting, after constructive discussion and exchange of information, resulted in the establishment of a formal organization named "World Organization of Volcano Observatories" (WOVO). As its name implies, WOVO is concerned exclusively with volcano observatories and volcano monitoring, so that its activities would not duplicate those of existing international organizations (e.g., IAVCEI) that focus on the general field of volcanology and alluvial topics. The principal objectives of this new organization are the following:

1. To create or improve ties between observatories and institutions directly involved in volcano monitoring.
2. To facilitate exchange of views and experience by convening periodic, perhaps annual, meetings.
3. To maintain an up-to-date inventory of instrumentation and manpower which could be made available to any of the member institutions, if a situation arises that requires scientific reinforcement teams.
4. To promote funding from international organizations which could help defray travel and related expenses of scientific reinforcement teams.

An executive board was elected, consisting of the following persons: Dr. Gudmundur E. Sigvaldason, Iceland, president; Dr. Robert I. Tilling, U.S.A.; Prof. I. Yokoyama, Japan; and Dr. J. L. Le Mouel, France.

In addition to the above-mentioned countries, Ecuador, New Zealand, the Philippines, Tobago, and Trinidad have expressed interest in participating in the organization. The Guadeloupe meeting decided that any country could join the organization as a founding member until the time of the next meeting planned for August 1982 in Iceland in connection with the IAVCEI/IAGC meeting on "The Generation of Major Basalt Types." Send requests for further information to Dr. G. E. Sigvaldason, Nordic Volcanological Institute, Geoscience Building, University of Iceland, Reykjavik, ICELAND.

**THE 1982 COMMITTEE ON COMMITTEES
SEEKS CANDIDATES FOR COMMITTEE APPOINTMENTS**

The Committee on Committees requests help from all members. As is customary, a committee has been appointed by Vice-President Paul A. Bailly. Its sole purpose is to look for talent to serve GSA as members of our committees and as our representatives to other organizations.

The Committee on Committees will meet in late July or early August and will present at least two nominations for each open position to Council at its October 20 meeting in New Orleans. During that meeting, individual councilors may add other names to the lists for consideration. The entire Council will then select appointees for all positions, thus completing the process of bringing new expertise into Society affairs.

The Committee on Committees for 1982 is made up of the following people: *Thornton L. Neathery*, Chairman Geological Survey of Alabama, P.O. Drawer O, University, AL 35486, Phone (205) 349-2852; *Samuel S. Adams*, 3030 Third Street, Boulder, CO 80302, Phone (303) 277-0900; *Robert G. Coleman*, Department of Geology, Stanford University, Stanford, CA 94305, Phone (415) 497-9205;

William L. Fisher, Bureau of Economic Geology, University of Texas, Austin, TX 78712, Phone (512) 471-1534; *John Imbrie*, Department of Geology, Brown University, Providence, RI 02912, Phone (401) 863-3196.

This group is broadly based, both geographically and in disciplines, but its members cannot possibly know all the GSA members who are potential candidates for serving the Society. You can help them immensely by volunteering yourself or by suggesting names of others who you think should be considered for any of the openings.

To ensure thorough consideration of your candidates, please include a note explaining their special qualifications for particular jobs. Please be sure that your candidates are Members or Fellows of the Society.

All nominations sent through headquarters will be forwarded to the committee members. **Deadline: June 15, 1982.** Listed below are the committees on which vacancies will occur. Appointments will be made by Council at its meeting in New Orleans on October 20, 1982.

**PLEASE RETURN THIS FORM TO CHAIRMAN THORNTON L. NEATHERY OR TO HEADQUARTERS
BY JUNE 15, 1982**

GSA Committees for 1983	Members suggested to serve on committees
Day Medal _____ (1 vacancy)	
Geology & Public Policy _____ (3 vacancies)	
Headquarters Advisory _____ (3 vacancies)	
Honorary Fellows _____ (2 vacancies)	
Investments _____ (2 vacancies)	
Membership _____ (1 vacancy)	
National Medal of Science _____ (1 vacancy)	
Nominations _____ (5 vacancies)	
Penrose Conferences _____ (2 vacancies)	
Penrose Medal _____ (2 vacancies)	

Publications _____
(1 vacancy)

Treatise on Invertebrate Paleontology Advisory _____
(1 vacancy)

GSA Representatives for 1983 **Members suggested to serve
as GSA Representative**

North American Commission on Stratigraphic Nomenclature
(1 vacancy)

Remarks: _____

Signature (optional) _____

Officers and Past Chairmen of Sections and Divisions

CORDILLERAN SECTION – 1982-1983

To be elected at 1982 Section Meeting Chairman
To be elected at 1982 Section Meeting Vice-Chairman
 Martin L. Stout Secretary
 William H. Mathews Past Chairman

ROCKY MOUNTAIN SECTION – 1982-1983

William P. Nash Chairman
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 Stanley S. Beus Secretary
 John Montagne Past Chairman
 Robert A. Chadwick Past Vice-Chairman

NORTH-CENTRAL SECTION – 1982-1983

Campbell Craddock Chairman
 Sturges W. Bailey Vice-Chairman
 Kenneth G. Brill, Jr. Secretary
 Herbert J. Howe Past Chairman
 Terry R. West Past Vice-Chairman

SOUTH-CENTRAL SECTION – 1982-1983

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 Melvin C. Schroeder Vice-Chairman
 Page C. Twiss Secretary-Treasurer
 Donald E. McGannon, Jr. Past Chairman

NORTHEASTERN SECTION – 1982-1983

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 Maria Luisa Crawford Vice-Chairman
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 Robert W. Metsger Past Chairman

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TO KEEP YOU ABREAST OF THE WIDE WORLD OF GEOLOGY

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Memoir 153, vi + 490, 7 x 10, hard bound, LC 80-67489, ISBN 0-8137-1153-3 \$27.00

Nazca Plate: Crustal Formation and Andean Convergence edited by LaVerne D. Kulm, Jack Dymond, E. Julius Dasch, and Donald M. Hussong. A multidisciplinary investigation of the geology, geochemistry, and geophysics of an entire lithospheric plate and its plate-tectonic boundaries.

Memoir 154, x + 824, 7 x 10, hard bound, CIP, ISBN 0-8137-1154-1, special low price possible because of a generous contribution \$18.00

Treatise on Invertebrate Paleontology, Part F (Supplement 1) Coelenterata, Anthozoa: Subclasses Rugosa and Tabulata by Dorothy Hill. The increase in knowledge of these subclasses, including many taxa first published in Russian and Chinese, is reflected in the expansion of systematic descriptions to 497 pages (more than 1,050 generic descriptions) in this Supplement.

Treatise on Invertebrate Paleontology, Part F (Supplement 1) in 2 volumes, xi + 762, 7 x 10, hard bound, 462 figures (3,317 photos and line drawings), 3 tables, LC 53-12913, ISBN 0-8137-3029-5 \$38.00

Paleontology in China, 1979 edited by Curt Teichert, Liu Lu, and Chen Pei-ji. Twenty-four selected papers from those presented at the Palaeontological Society of China meetings held in Suzhou in April 1979. Includes a listing of Chinese personal and geographic names in Wade-Giles and Pinyin romanization.

Special Paper 187, viii + 264, 8½ x 11, soft bound, 85 plates and figures, CIP, ISBN 0-8137-2187-3 \$44.00

Role of Volcanism in Climate and Evolution by Daniel I. Axelrod. Many aspects of volcanism are presented: historic effects, volcanism during the Tertiary, Miocene forests and volcanism, Oligocene forests and volcanism, and volcanism's effects on Tertiary mammals, grassland, woodland, and marine life.

Special Paper 185, iv + 60, 8½ x 11, soft bound, LC 81-80345, ISBN 0-8137-2185-7 \$ 7.00

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December 1, 2, 3, 1982

Lamont-Doherty Geological Observatory of Columbia University, Palisades, New York 10964

This symposium is being held to evaluate progress in understanding and modeling the mechanisms by which the climate system responds to orbital variation. The program will be organized to reflect both the recent rapid progress in numerical climate modeling and the mounting geological evidence in support of the astronomical theory.

Proposed sessions will examine: 1. *Orbital variations* and their impact on the insolation regime;

2. *Numerical modeling* of the climatic response to orbital forcing; 3. *Geological record of climate* in the context of the astronomical theory; 4. *Recommendations for future research* (Final workshop).

English will be the language of the Conference. Co-chairmen are John Imbrie, Brown University, Dept. of Geological Sciences, Providence, RI and Andre Berger, Univ. Catholique de Louvain, Louvain-la-Neuve, Belgium.

DEADLINE FOR 250 WORD ABSTRACT: JUNE 15, 1982

Mail to Rose Marie Cline, Symposium Coordinator
Lamont-Doherty Geological Observatory
Palisades, NY 10964

Support is being sought for publication of a symposium volume.
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