



NEWSLETTER

American Association of Stratigraphic Palynologists, Inc.

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Vaughn M. Bryant, Jr., Editor
Texas A&M University, College Station, TX 77843

THANKS AND ACCOLADES

Those of you who were unable to attend the joint AASP-CIMP meeting in Halifax, Nova Scotia, missed a truly outstanding event—one whose technical content was superb and which was exceptionally well-organized. Our sincerest thanks and appreciation go to Sedley Barss, Jon Bujak, Graham Williams and Colin McGregor for their efforts in organizing and orchestrating the program, and to Bernard Owens for soliciting the papers from CIMP members. The presence of, and technical contributions by, members of CIMP provided great dimension to the meeting.

The meeting began on Tuesday with an Acritarch Forum convened by Charles Downie in the morning and a Dino Update convened by Bill Evitt in the afternoon. Both were well organized and set high standards which were carried forward by participants in the technical sessions. Thanks to both of these gentlemen for an outstanding job.

The Technical Sessions began on Wednesday morning, and were officially opened by the Town Crier of Halifax. Herb Sullivan and George Hart presided over sessions on Continental Drift and Floral Provincialism, and Correlation Techniques. These sessions included invited papers by Nick Rast, Mary Dettmann, and F. X. Miller. Thursday featured a session on Paleozoic Palynology presided over by Bernard Owens, with an invited paper by John Richardson; and one on General Palynology with Al Traverse presiding. Friday morning's session on Paleozoic Palynology was chaired by Maurice Streel; the afternoon session on Palynology of Continental Margins saw Serge Jardine presiding, with an invited paper by John Wade. We deeply appreciate the efforts of the Session Chairmen, Invited Speakers, and all who contributed papers. They provided us with a sterling technical program.

The luncheon on Friday was highlighted by a kilted piper who piped the Executive into the Room, and by the presentation of the first AASP Sex Symbol Award. Those of you who heard it will long remember the acceptance speech as a classic.

Congratulations also to Ann Reaugh who received the Best Student Presentation Award and a check for \$50.00.

Saturday's field trip to the Annapolis Valley examined outcrops of the Horton Group and visited historical sites of interest at Halliburton Memorial Museum and at Grande Pre. Thanks go to Colin McGregor for leading this fascinating excursion.

Thanks are also due the staff of the Chateau Halifax for making our stay enjoyable; to Agnes Zareski, Irene Schroeder, Maisie Trapnell and Moe Oldfield who assisted with registration, typing, and the dozens of other tasks inherent to a meeting; and to the projectionists, Bill MacMillan and Bernard Crilley, who did a really outstanding job.

Finally, I would like to take this means to thank the members of the AASP for their support, and especially the members of the 1976 Board of Directors for their responsiveness, courage and enthusiasm which allowed us to make the decisions required in the past year. New vistas and more serious decisions await the AASP in 1977, but I am confident that Rick's capable leadership and hard work by the Board and the Committees will provide the basis for correct decisions.

Kenneth M. Piel
Past President

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AASP/CIMP MEETING - HALIFAX '76

The 9th Annual Meeting of AASP (for the first time held jointly with the CIMP) was officially opened on Wednesday, October 13th by the Halifax Town Crier, Mr. Peter Cox. The address of welcome to the delegates was given by Mr. John Smith, Deputy Minister of Mines, Nova Scotia.

A total of 125 persons officially registered at the Halifax meeting; thirteen were students. Overseas visitors included Catherine Croxton, Barrie Dale, Mary Dettmann, Charles Downie, Bob Dunay, Ken Higgs, Paul Hill, Serge Jardine, James Keegan, Svein Manum, Jack Morbey, Marjorie Muir, Bernard Owens, Geoff Playford, John Richardson and Maurice Streele. Although no record for attendance was set, quality may be the keyword. Certainly the quality of the presentations was high and hopefully many will choose to publish in our new AASP journal - "Palynology".

Abstracts for the meeting can be obtained from Jack Burgess for the cost of handling and mailing (\$1.00).

There were four papers presented in the Acritarch Forum and six in the Dino Update sessions. Forty-three papers were presented in the Technical Sessions: Continental Drift and Floral Provincialism with ten papers, including two invited speakers; Correlation Techniques with one invited and two twenty-minute presentations; two sessions of Paleozoic Palynology with fourteen papers, including two invited; General Palynology with nine papers; and Palynology of Continental Margins with seven papers, including one invited paper.

On Saturday, fifty-six persons partook of a field trip to scenic and historic sites of Annapolis Valley of Nova Scotia.

The Best Student Presentation Award of \$50.00 was presented to Ann Brooke Reaugh for "Acritarch assemblages from the Couvinian-Tournaisian Chattanooga black shales in Northwestern Tennessee, U.S.A."

The Icebreaker and Smoker were very well attended, giving one a chance to meet old friends and to catch up on what is new in the world of paly-nology.

In true Nova Scotian tradition, the old and new Executive Committees were piped to the head table at the annual luncheon by a Scottish piper and the delegates were presented with the "Order of Good Time" certificate, making them members of the oldest social club in the New World.

A highlight of the luncheon was the presentation of the "Sexiest Paly-nologist" (male category) award to Dewey McLean. Dewey accepted the honor with all due modesty, saying that he was glad to have risen to the occasion.

The group photo turned out excellently, (all 123 faces can be seen) and can be ordered from Sedley Barss; cost is \$3.00.

M. Sedley Barss

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EXECUTIVE MEETING

The AASP Executive Committee held meetings on October 12 and October 15 at the Chateau Halifax. Minutes of the meetings are available from our Secretary-Treasurer, Jack Burgess. Some of the more important items discussed were:

1. Accepted the Treasurer's Report. Total assets as of October 1, were \$9,965.78. However, neither the Calgary nor the Houston volumes have yet been paid for; together they will cost the Society around \$16,000.
2. Accepted the Secretary's Annual Membership Report. As of October 1, the Society had 421 paid members. Of that total 42 are new members. We also have 9 institutional members and an additional 34 members who were not counted in the total because they were terminated for failure to pay back dues.
3. Accepted the Editor's Report. During the last year four Newsletters were published (Vol. 9), and a membership directory was mailed to each member. The Calgary volume should be mailed

from LSU any day now and the Houston volume is being printed and should be ready for mailing by early 1977.

4. Reviewed plans for the 10th annual meeting (1977) to be held in Tulsa. The co-chairmen for that meeting are Dick Hedlund and Leonard Eames.
5. Reviewed plans for the 11th annual meeting (1978) to be held in Tempe or Phoenix, Arizona. The chairman of that committee is James Canright.
6. Discussed and accepted a motion to award Dr. Knut Faegri honorary membership in AASP at the Tulsa Meeting.
7. Discussed the question of dual editorship and decided to maintain only one editor for the present.
8. Discussed the name for our new journal and decided upon the name Palynology.
9. Discussed the progress of the Tenth Anniversary Volume. Herb Sullivan reported that it has met with some difficulty but that he hoped it would be ready by next year.
10. Discussed a possible logo or emblem for the Society. The Committee could not reach a decision so the matter was tabled.
11. Reappointed the following members to committees:
 - a. Al Traverse-as our representative on the International Commission for Palynology.
 - b. Colin McGregor-to chair the Committee for International affairs.
 - c. Norman Norton (chairman), Robert Clarke, and Raymond Malloy-Financial Development Committee.
 - d. F. X. Miller-Stratigraphic Correlation Chart Committee.
12. Accepted Sedley Barss' report on the Halifax meeting. The Executive Committee also thanked Sedley and his committee for the great job they performed in making the annual meeting such a success.
13. Discussed the permanent storage of our historical records in the Hunt Botanical Library. Our past records are now being shipped to Norman Norton for him to organize and then send to the Hunt Botanical Library Archive section.
14. Agreed to republish a revised form of, "A Glossary of the Terminology Applied to Dinoflagellate Amphiesmae and Cysts and Arcitarts". These will be ready in early 1977, and will be sold to members for \$5.00 and to non-members for \$7.50.
15. Donald F. Oltz was appointed Head of the Nomination Committee.

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THE NEW JOURNAL "PALYNOLOGY"

Beginning with the proceedings from the Houston Meeting the Society will publish its own annual journal called, Palynology. The journal will remain the same size as previous additions of Geoscience and Man but it will have a slightly different internal format. These differences are discussed in detail in "A Guide to Authors" which is available from the editor upon request. The primary objective of our new journal is to publish high quality manuscripts which are the result of papers presented at the annual meeting. However, other manuscripts not pertaining to papers presented at the annual meeting are also encouraged and will be considered for publication in our annual journal. All manuscripts should be articles in the field of palynology which reflect original research and/or discuss new techniques, methods, or theory in palynology. Our new journal belongs to the membership and can only be as good as the articles it prints. It is up to you to write and submit the future articles. Let's make it a journal that each of us will be proud to own.

The deadline for submission of manuscripts for publication consideration in the next issue will be April 1, 1977. It would be helpful if contributors could send copies before that date, but manuscripts will still be accepted up to the deadline date of April 1, 1977. Manuscripts submitted after April 1, 1977 will be considered for publication in subsequent issues.

At the present time the major problem facing our Society is obtaining sufficient funds to pay the costs of publishing our annual journal. A large part of this problem was caused by having to cover the rising costs of publishing our journal through the LSU Press. Although they produced an excellent journal for us in past years the rising per copy cost rose to over \$13.50. By contrast, the first issue of our new journal Palynology printed by Hart Graphics of Austin will cost the Society about \$8.00 per copy. With these savings the Society will be able to get financially back into the black in several years. In the meantime, the Executive Committee has decided to continue its policy of asking all journal authors to help finance the publication costs by paying page charges.

Page charges will be sent to each author who has an article accepted for publication. If the individual has a grant that they can use to help defray these costs (or if their company or institution will provide them funds) then they will be asked to pay them. If an individual does not have a source of funds to pay the page charges then they may write the editor and request that the page charge costs be waived. The editor and the other members of the Executive Committee will then determine whether or not to waive the page charges and publish the individual's article at the expense of the Society. One final note, individuals are urged to try and secure whatever funding they can, even if the amount of funds is far less than the total assessed. Any author having questions concerning our page charge policy is urged to write to the editor for clarification. The page charges for the Halifax journal will be \$50.00 per printed page or page of illustration (not per manuscript page).

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CALL FOR AASP REVIEWERS

All articles submitted for publication consideration in our journal are sent out for review before any decision is made to accept or reject the submitted article. In order to send articles out for review I need to know which members would be willing to serve as reviewers and what areas of palynology they feel they could review. Reviewing is an important function and only through the review process can we assure that the published articles in our journal will meet the high standards we want to maintain.

A form asking for reviewers is on the back of your dues notice. Send it along with your 1977 dues payment. Jack Burgess will forward it on to me.

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1977 MEMBERSHIP DIRECTORY

Dave Mishell is currently working on the membership list of the Society and is updating it with changes of address and telephone numbers. Dave and I hope to have the 1977 membership directory ready soon and hope to send it out to the general membership by the beginning of the year. Unless we are able to find a generous benefactor the directory this year will not be as elegant as the ones in the past. Due to the cost increase for printing and binding, next year's directory will probably be mimeographed and stapled instead of being printed and bound in booklet form. If anyone feels that their company or institution would be willing to underwrite the cost of reproducing a more elegant type directory (similar to the one last year) please let the editor know as soon as possible. If I do not hear from anyone concerning this matter before January 1st then we will print the directory as mentioned above.

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JOURNAL STORAGE

Now that the Society has decided to publish its own journal we have a problem as to where to store our back issues for later sale. For the Houston volume we will have 500 extra copies printed for later sale to new members and libraries. However, in the meantime we need someplace to store the past issue of journals. The Society would like to find some location for storage that would be fairly permanent since it would be too expensive to continue to transfer these past issues from one location to the next. The Society would appreciate hearing from some member who feels that he or she will be fairly permanently located and would have the space to store forthcoming issues of our new journal for

the Society. Please write the editor if you have any suggestions.

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NEW MEMBERS NEEDED

We are approaching our tenth anniversary and it would be nice if we could celebrate that event by increasing our membership. We are the only society of palynologists in North America yet there are still many palynologists who have either not heard about AASP or have not been asked to join. If you know of a palynologist who is not a member please send me their name so I can send them a personal invitation to join and a free copy of the December Newsletter. Hopefully these individuals will want to join.

All members are also urged to ask libraries, institutions, and companies to subscribe to our Newsletter and journal. This is especially important since after this year we will no longer be publishing our journal through the LSU Press.

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TERMINATION OF AASP MEMBERS

At the Halifax Executive Meeting it was decided that 34 AASP members would be sent notices that their membership had been terminated effective as of December 1, 1976. The By-Laws of the Society specify that dues should be paid by January 1, of each year. Failure to pay them by March 1, can result in membership termination. The 34 AASP members that were terminated had been sent several dues notices yet were still delinquent. Had the Executive Committee not terminated those members then they would have automatically received copies of this year's issue of Geoscience and Man. This would have cost the society over \$500.00.

Please pay next year's dues on time. The Executive Committee does not want to terminate anyone because of unpaid dues.

DUES DELINQUENT MEMBERS TO BE DROPPED FROM AASP.

K. C. Allen	Amtul Khadeer	Richard A. Scott
Grace S. Brush	Robert C. Koch	Allan B. Shaw
Ann Butler	Peter R. Kremer	Marilyn E. D. Shriver
Fred J. Carter	Meredeth H. Lieux	William Spackman
Arthur V. Chadwick	Robert Littlejohn	D. M. Sutherland
Norman K. Cohen		Joyce W. Swanberg
Roger J. Davey	Robert C. Melchoir	Matsuo Tsukado
Robert L. Fienning	Norma M. Melo da Costa	Krista M. Walch
Martha R. Fletcher		Jamison B. Warg
Robert Q. Gutzler	F. X. Miller	Larry M. Wigent
Arun Kumar	Bob F. Perkins	
C. D. Johnson	Morton Polugar	

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PALYNOLOGY POSITIONS WANTED

As a regular part of the Newsletter I would like to encourage members seeking positions to please send notices to the editor so that this information can be distributed to our membership. Likewise I would also like to encourage any member who knows of an open position in palynology to please list the opening in the Newsletter.

The following individuals have indicated their interest in seeking employment in the field of palynology. A brief resume for each individual is included below. For more detailed information please contact the individuals directly.

Dr. John R. Rowley is seeking a position as a palynologist. He received his Ph.D. in Botany (Cytology and Palynology) from the University of Minnesota. His areas of interest include pollen grain development and germination. Dr. Rowley has nineteen years of teaching and research experience. For six of those nineteen years Dr. Rowley was head of the Gunnar Erdtman Palynological Laboratory in Sweden. Dr. Rowley's present address is: Botanical Institute, University of Stockholm, Lilla Frescati, S-104-05 Stockholm, Sweden.

Dr. F. F. Damblon is seeking a position as a palynologist in North America, preferably Canada. Dr. Damblon received his Ph.D. from the University of Louvain-la Neuve in Belgium. He speaks fluent French, English, and German and his main field of research interest is Quaternary Palynology. In addition to palynology Dr. Damblon has also had experience identifying plant macrofossil remains from peat deposits. Dr. Damblon is 33 years old and his wife is a professional archaeologist. His current address is: 1, A, Tessenstraat, B-3000 Leuven, Belgium.

Ms. Glenna Williams-Dean is seeking a position as a palynologist and/or ethnobotanist. She is a candidate for the Ph.D. degree (Botany) and will complete her studies at Texas A&M University in May, 1977. Her areas of research interest include palynology, reconstruction of pre-historic diets, and ethnobotany. Ms. Williams-Dean has had teaching experience and is also a trained professional archaeologist. Her current address is: Department of Biology, Texas A&M University, College Station, Texas, 77843.

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TENTH INTERNATIONAL CONGRESS ON SEDIMENTOLOGY

The following news item may be of interest to some of our membership.

The Tenth International Congress on Sedimentology will take place in Jerusalem, Israel, on July 9-14, 1978. One of the themes of this Congress will be the sedimentary aspects of geomorphology, paleoclimatology, and hydrogeology, which will include discussions on paleotemperatures as

reflected in Quaternary sediments, sedimentological criteria for reconstructing climates, duricrusts and paleosols, slope processes and geomorphic responses to sedimentation, sedimentary responses to groundwater, geochronology of sedimentary processes, isotope geochronology and paleoclimatology, fluvial and lacustrine sediments, glacial and pluvial sediments and geomorphology, marine and continental terraces.

Those interested in obtaining additional information concerning this forthcoming meeting are asked to contact: Dr. Alarron Horowitz, Institute of Archaeology, Tel Aviv University, Ramat Aviv, Israel.

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DINOFLAGELLATE SYMPOSIUM

The following papers are scheduled for presentation this December at the 4th International Palynological Conference in Lucknow, India:

Caro, Y. Lower Tertiary dinoflagellates from northern Spain.

Chateauneuf, J. J. Upper Eocene and Oligocene Dinophyceae of the Paris Basin (France).

Costa, L. and Downie, C. The Wetzeliellaceae, Paleogene dinoflagellates.

Eaton, G. L. Observations on the pattern of ornament distribution in the fossil dinoflagellate cyst genus.

Harland, R. The Wetzeliella (Apectodinium) homomorpha plexus from the Palaeocene/earliest Eocene of North-West Europe.

Norris, G. Arctic Tertiary dinoflagellates from the subsurface Mackenzie Delta, Northwest Territories, Canada.

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AL TRAVERSE REQUESTS:

Al Traverse has asked me to include the following notice: "On the way home from the Halifax meeting I lost my trusty little black notebook in which I always take down requests for information, reprints, etc. Could you please put a note in the December Newsletter asking people who made requests at the meeting (that they saw me write in my black notebook) to please drop me a postcard repeating the requests."

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NO! IT ISN'T A LOGO

The pollen grain on the front of the Newsletter is not an official AASP logo. For quick identification purposes and to dress up the Newsletter I plan to include a different palynomorph on each issue. Anyone interested in sending in palynomorph suggestions is urged to do so. Please accompany your suggestions with a full identification of the palynomorph and a suitable drawing or photograph. Winning palynomorphs will be redrawn by our Palynology Laboratory artist, Reed Smith. These will then appear on later issues of the Newsletter. The drawing on the present Newsletter was drawn by Reed Smith and represents Nymphaea advena.

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FOSSIL COMPOSITAE NEEDED

Dr. Spencer Tomb is conducting a study of late Oligocene and Miocene age Compositae pollen. Dr. Tomb and Dr. Skvarla have combined their efforts to study these fossil grains using both the TEM and SEM. Dr. Tomb indicated that the fossil samples need not contain abundant Compositae pollen but should have enough pollen to make it practical for him to conduct his studies. Dr. Tomb has also requested that anyone having suggestions concerning his research with fossil Compositae pollen is urged to contact him at the below address. Dr. Tomb can be reached c/o: The Division of Biology, Kansas State University, Manhattan, Kansas 66506.

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POLLEN SLIDE EXCHANGE

Several palynologists have written and asked if there are others who would be interested in exchanging reference slides (either modern or fossil). If those individuals who are interested would write me, I shall include a list of their names in the next Newsletter. After that those interested in conducting exchanges can write each other directly for lists of available pollen types.

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NEW MEMBERS

AASP is pleased to welcome the following new members:

Ager, Thomas A., U.S. Geological Survey, 971 National Center, Reston, Virginia 22092 Telephone # 703-860-6179.

Balme, Brasil E., Depart. of Geology, University of Western Australia,
Nedlands, Western Australia 6009 Telephone # 80-2672.

Clippinger, Hal J., Shell Development Co., P.O. Box 481, Houston, TX
77001 Telephone # 713-667-5661.

Dirk, P. C. H., Dept. of Mines, Geological Survey, P.O. Box 38, Rundle
P.O. Adelaide, South Australia, Australia.

Goldberger, Martin M., 77-31 166th St., Flushing, N.Y. 11366 Telephone
212-969-8564.

Holloway, Richard G., P.O. Box 3303, College Station Texas 77840,
Telephone # 713-845-6828.

O'Hare, Jim F., P.O. Box 349, Pyote, Texas 79777. Telephone # 915-
(Pyote Operator and ask for 4871).

Patten, Harvey L., 127 Country Club Drive, Covington, Louisiana 70433,
Telephone # 588-6845.

Phillips, Tom L., Department of Botany, University of Illinois, Urbana,
Illinois 61801, Telephone # 217-333-0653.

Poulsen, Nicls E., Lundtoftegardsvej 11,10 2800 LYNGEY Denmark,
Telephone # 02-88-72-45.

Speelman, Johannes, D., Dept. of Geology, University of Calgary, Alberta,
Canada, T2L-2A7, Telephone # 403-284-6596.

Strother, Paul K., 22 Divinity Ave., Cambridge, Mass. 02138, Telephone #
617-495-3200.

Wong, Chen F., MXL/3 Sarawak Shell Berhad, Lutong, Sarawak, Malaysia.

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DIRECTORY CHANGES

The following AASP members have notified the editor that their addresses
have been changed. These include the following individuals:

1. Bell, David G., Continental Shelf Institute (IKU)
P.O. Box 1883, 7001 Trondheim, Norway 075-15660
2. van Gijzel, Pieter, LANKFORST 27-11, Nijmegen, Netherlands
3. Hall, Stephen A., 310-7 West Alden Place, DeKalb, Illinois, 60115
Telephone #815-758-5322
4. Jarzen, David M., National Museum of Natural Sciences, Paleobiology
Division, 1767 Woodward Drive, Ottawa, Ontario Canada K1A-0M8
Telephone # 613-996-4518

5. Kravosky, Elena, 8427 Silver Springs Rd. N.W., Calgary, Alberta
CANADA T3B-4A6 Telephone # 286-6320
6. Legault, Jacelyn A., Department of Earth Science,
University of Waterloo, Waterloo Ontario, CANADA
N3L-3G1
7. Pierce, Sarah T., Department of Geology, USLA, Los
Angeles, CA 90024 Telephone # 213-347-1900
8. Reid, Philip C., Institute for Marine Environmental
Research, 67 Citadel Rd., Plymouth, ENGLAND PL1-3DH
Telephone # 0752-60256
9. Zeiss, Harvey S., Homer Research Lab, Bethlehem Steel
Corp., Bethlehem, Penn. 18016 Telephone # 215-694-6517

NEWS ITEMS FOR NEWSLETTER

The Newsletter is our way of keeping each other abreast of what is happening in the field of Palynology. If you know of a news item or other information that you feel the general membership should hear about please let me know.

REGISTRANTS FOR AASP/CIMP MEETING, HALIFAX

DARRAH G. ARTZNER, Geology Dept., Univ. of Toronto, Toronto, Ontario, Canada M5S 1A1
RICHARD AURISANO, Geology Dept., Rutgers Univ., New Brunswick, New Jersey 08903, USA
M. SEDLEY BARSS, Geological Survey of Canada, Box 1006, Dartmouth, Nova Scotia,
Canada B2Y 4A2
DAN BEJU, Amoco Production Co., 4137 East 41st Place, Tulsa, Oklahoma 74135, USA
ALICE J. BELLING, Biology Dept., New York Univ., New York, New York 10003, USA
JOHN E. BENNETT, Atlantic Richfield Co., Box 2819, Dallas, Texas 75221, USA
ALBERT A. BERTI, Chevron Standard Ltd., 400-5th Ave., S.W., Calgary, Alberta,
Canada T2P 0L7
EUGENE W. BORDEN, Exxon Co., Box 2189, Houston, Texas 77001, USA
DENNIS R. BRAMAN, Univ. of Calgary, 4539-17th Ave., N.W., Calgary, Alberta, Canada
T3B 0N9
WAYNE W. BRIDEAUX, Geological Survey of Canada, 3303-33rd St., N.W., Calgary,
Alberta T2L 2A7
VAUGHN BRYANT, Anthropology Research Lab., Texas A & M Univ., College Station,
Texas 77843, USA
JON BUJAK, Geological Survey of Canada, Box 1006, Dartmouth, Nova Scotia, Canada
B2Y 4A2
ELLIOTT BURDEN, Geol. Dept., Univ. of Toronto, Toronto, Ontario, Canada M5S 1A1
JACK D. BURGESS, Gulf Research & Development Co., P. O. Drawer 2038, Pittsburgh,
Pennsylvania 15230, USA
JAMES CANRIGHT, Arizona State Univ., Tempe, Arizona 85281, USA
BYUNG CHI, BP Canada, 335-8th Ave., S.W., Calgary, Alberta, Canada
RAY CHRISTOPHER, U.S. Geological Survey, 971 National Centre, Reston, Virginia
22092, USA
CAROLE ANNE CHMURA, Chevron Oil Field Research Co., Box 446, La Habre, California
90631, USA
JOHN A. CLENDENING, Amoco Production Co., Box 3092, Houston, Texas 77001, USA
THEODORE D. COOK, Shell Oil Co., Box 481, Houston, Texas 77001, USA
HAROLD L. COUSMINER, American Museum of Natural History, 79 St. & Central Park West,
New York, New York, USA
CATHERINE CROXTON, Geological Survey of Greenland, Øster Voldgade 10, Copenhagen,
Denmark DK-1350
BARRIE DALE, Institute for Marine Biology, Univ. of Oslo, Box 1069, Blindern,
Oslo 3, Norway
EDWARD DAVIES, Univ. of Toronto, Toronto, Ontario, Canada M5S 1A1
MARY E. DETTMANN, Univ. of Queensland, Brisbane, Queensland, Australia 4067
GRAHAM DOLBY, Robertson Research (N.A.) Ltd. 501 Cleveland Crescent S. E., Calgary,
Alberta, Canada T2G 4R8
GUNTER DORHOFER, Geology Dept., Univ. of Toronto, Toronto, Ontario M5S 1A1
CHARLES DOWNIE, Geology Dept., Univ. of Sheffield, Sheffield, England
WARREN S. DRUGG, Chevron Oil Field Research Co., 3282 Beach Blvd., La Habra,
California 90631, USA
ROBERT E. DUNAY, Mobil North Sea, Ltd. 54/60 Victoria St., London, England SW1E 6QB
LEONARD E. EAMES, Amoco Production Co., Box 591, Tulsa, Oklahoma 74102, USA
DEL EDLEMAN Mobil Oil Corp., Box 900, Dallas, Texas 75221, USA
DONALD W. ENGELHARDT, Amoco Production Co., Security Life Bldg., Denver, Colorado
80202, USA
BILL EVITT, Stanford Univ., Stanford, California 94305, USA
ARMANKO FASOLA, Univ. of Toronto, Toronto, Ontario, Canada M5S 1A1
CHARLES FELIX, Suntech Inc., 503 North Central Expressway, Richardson, Texas
75080, USA

BOB FENSOME, 108 General Purpose Bldg., Univ. of Saskatchewan, Saskatoon, Saskatchewan, Canada S7N 0W0

WILLIAM H. FORBES, Math. & Sciences, Univ. of Maine, Presque Isle, Maine 04769, USA

NORMAN FREDERIKSEN, U. S. Geological Survey, Sunrise Valley Drive, Reston, Virginia, USA

PATRICIA G. GENSEL, Botany Dept., Univ. of North Carolina, Chapel Hill, North Carolina 27514, USA

DAVID K. GOODMAN, Geology Dept., Stanford Univ., Stanford, California 94305, USA

CHUCK GRIFFITH, Mobil Oil Corp., Box 900, Dallas, Texas, USA

PETER H. GRIGGS, Shell Oil Co., Box 481, Houston, Texas 77001, USA

RAPHAEL GUILLORY, Amoco Production Co., 500 Jefferson Bldg., Houston, Texas 77001, USA

PAUL R. GUNTHER, Geological Survey of Canada, 3303-33rd St., N. W., Calgary, Alberta, Canada T2L 2A7

JOE GUENNEL, Marathon Oil Co., Box 269, Littleton, Colorado 80120, USA

DANIEL HABIB, Queens College, Flushing, New York 11367, USA

HIDEYO HAGA, AWA, Inc., 11526 Sorrento Valley Rd., San Diego, California 92121, USA

GEORGE F. HART, Louisiana State Univ., Baton Rouge, Louisiana 70803, USA

KENNETH HIGGS, Geological Survey of Ireland, 14 Hume St., Dublin 2, Ireland

PAUL J. HILL, Derby College of Art & Technology, Kedleston Road, Derby, Derbyshire, England, DE3 1GB

STEPHEN R. JACOBSON, Ohio State Univ., Columbus, Ohio 43210, USA

JAN JANSONIUS, Imperial Oil Ltd., 339-50 Ave., S. E., Calgary, Alberta, Canada T2G 2B3

SERGE JARDINE, Elf R. E. Laboratoire d'Exploration, Boussens, France 31360

DAVID M. JARZEN, National Museums of Canada, 1767 Woodward Dr., Ottawa, Ontario, Canada K1A 0M8

W. A. M. JENKINS, Geological Survey of Canada, 3303-33rd Street, N. W., Calgary, Alberta, Canada T2L 2A7

RICHARD JONES, Amoco Production Co. Research Centre, Box 591, Tulsa, Oklahoma 74135, USA

HAROLD V. KASKA, Chevron Overseas Petroleum, 575 Market St., San Francisco, California 94105, USA

ANDREW E. KASPER, Botany Dept., Rutgers Univ., 195 University Ave., Newark, New Jersey 07102, USA

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