A.A.S.P. NEWSLETTER

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A.A.S.P.

American Association of Stratigraphic Palynologists Inc.

The American Association of Stratigraphic Palynologists, Inc. - AASP - was established in 1967 by a group of 31 founding members to promote the science of palynology. Today AASP has a world-wide membership of about 800 and is run by an executive comprising an elected Board of Directors and subsidiary boards and committees. AASP welcomes new members. The AASP Foundation publishes the journal Palynology (annually), the AASP Newsletter (quarterly), and the AASP Contributions Series (mostly monographs, issued irregularly), as well as several books and miscellaneous items. AASP organises an Annual Meeting which usually includes a field trip, a business luncheon, social events, and technical sessions where research results are presented on all aspects of palynology.

AASP Scientific Medal recipients
Professor William R. Evitt (awarded 1982)
Professor William G. Chaloner (awarded 1984)
Dr. Lewis E. Stover (awarded 1988)
Dr. Graham Lee Williams (awarded 1996)
Dr. Hans Gocht (awarded 1996)

AASP Board of Directors Award recipient
Robert T. Clarke (awarded 1994)

AASP Honorary Members
Professor Dr. Alfred Eisenack (elected 1975)
Dr. William S. Hoffmeister (elected 1975)
Professor Leonard R. Wilson (elected 1975)
Professor Knut Faegri (elected 1977)
Professor Charles Downie (elected 1982)
Professor William R. Evitt (elected 1989)
Professor Lucy M. Cranwell (elected 1989)
Dr. Tamara F. Vozzhennikova (elected 1990)
Professor Aureal T. Cross (elected 1991)

AASP Distinguished Service Award recipients
Robert T. Clarke (awarded 1978)
Norman J. Norton (awarded 1978)
Jack D. Burgess (awarded 1982)
Richard W. Hedlund (awarded 1982)
John A. Clendening (awarded 1987)
Kenneth M. Piel (awarded 1990)
Gordon D. Wood (awarded 1993)
Jan Jansonius (awarded 1995)
D. Colin McGregor (awarded 1995)
John H. Wrenn (awarded 1998)

Awards at each Annual Meeting: Unocal Best Applications Paper Award, Best Student Paper Award, and Best Poster Award.

Student Scholarships to support studies in palynology. Currently up to two scholarships of $1000 (U.S.) each annually. The qualification of the student, the originality and imagination evident in the proposed project, and the likelihood of significant contribution to the science of palynology are factors that will be weighed in selection of award winners. Previous winners of this award are eligible only if they are pursuing a different degree than the one they were pursuing when they received the previous award. AASP Scholarships are available to all students of palynology in all countries. Students need not be AASP members. Application forms appear in the January issue of the AASP Newsletter. Chairman of the AASP Awards Committee is Owen K. Davis (palynolo@geo.Arizona.EDU).

AASP Membership Application - Membership in AASP is for the calendar year. Dues are $30.00 U.S. per year for individuals and $40.00 U.S. per year for institutional members. All members of AASP receive Palynology which is published annually, the AASP Newsletter, which is mailed out four times a year, and an annual Membership Directory. Dues may be paid up to three years in advance. Overseas AASP Members (Individual or Institutional) who would like to receive their AASP Newsletter and Palynology by air mail, rather than book rate surface mail, need to include the applicable postage surcharge (noted below). Credit card users must pay a $1.00 U.S. surcharge per transaction. Air mail surcharge (increased for 1995 and beyond): Europe & South America: $12.00 U.S. per year. Africa, Asia & Australia: $15.00 U.S. per year. Credit card surcharge $1.00 per transaction.

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Marloes Kloosterboer van Hoeve, Editor

The AASP Newsletter is published four times annually. Members are encouraged to submit articles, "letters to the editor", technical notes, meetings reports, information about "members in the news", new websites and information about job openings in the industry. Every effort will be made to publish all information received from our membership. Contributions which include photographs should be submitted a week before the deadline. Deadlines for next issues of the newsletter, are May 1, 2000 and September 1, 2000. All information should be sent on computer disks (MS Word for Windows is best) or by email; if possible, send a hard copy. Always send a duplicate typescript of all electronic copy sent for checking. If possible, please illustrate your contribution with art, line drawings, eye-catching logos, black & white photos, colour photos, etc. We **DO** look forward to contributions from our membership.

PRESIDENTIAL ADDRESS
by Fred Rich

Since having been inaugurated at the annual meeting of AASP in Savannah, my activites as President have been limited to relatively few things. These have been important, however, as we in AASP continue to find our place in the larger community of natural scientists. I was, for example, asked to write a brief description of AASP and the activiies that palynoloists get involved with for the American Geological Institute (AGI). AGI's monthly publication, Geotimes, is widely distributed and read, and provides an excellent avenue for informing the earth science community of world and regional affairs. The "Comment" column is dedicated to a particular topic each month, and February is the month for palynology. I hope I did our science and our organization justice because this was a nearly unique opportunity.

I have also worked weekly with Thomas Demchuk as he prepares for our entry into the world of the Geological Society of America. In my Presidential message in October I discussed some of the pros and cons of being affiliated with GSA at their national meeting, and we have rolled up our sleeves as we prepare to work with GSA in presenting ourselves before the very, very large audience of geoscientists that will attend the meeting in Reno, Nevada next November 13-16. You should all have received the fluorescent pink notice concerning the meeting, and I hope you kept it close at hand. For our many members that live outside the US, the Reno meeting might be difficult to attend, but I hope you will make every effort to do so. GSA is the largest organization of academically oriented geoscientists in the nation, and the meetings typically have staggering attendances. Furthermore, this is the show place for new analytical and instructional tools in the geosciences, so new technologies and approaches can be seen and experienced first-hand. Additionally, Reno is an exciting city, lying immediately east of the Sierra Nevada and on the western edge of the Great Basin deserts. There are also many casinos and a variety of showplaces where you can spend all your money. Please give serious consideration to attending the Reno meeting. Thomas Demchuk has put a great deal of effort into organizing a special AASP-sponsored topical session, entitled " Frontiers in the Palynological Sciences", and he is still accepting ideas for especially good presentations that will
illustrate the nature of palynology in the early 21st Century. Should you know of someone whom you believe might give an expecially good presentation, you might contact Thomas at thomas.d.demchuk@usa.conoco.com.

Finally, with the kind help of Past-president Chris Denison, we have been working on plans to hold one of our future meetings in Europe again. It's been a long time since we met with CIMP in Dublin, and the time is right for us to strengthen our considerable ties to palynologists in Europe. AASP cannot afford to hold its annual meetings in too many foreign locations, and we're really limited to Canadian and western Europe. Should our plans work out, however, it will be those of us in the US who will be boarding transatlantic flights in 2002. This plan follows our others in that I hope it will present AASP as an important organization that is confined by neither ideological nor political borders. To paraphrase a familiar Biblical line, we will not keep our candle under a basket.

Best wishes to you all, Fredrick J. Rich, President, AASP

2000-2001 BOARD OF DIRECTORS CANDIDATES

For President Elect:	Martin Head
	David Jarzen
For Secretary/Treasurer:	Thomas Demchuk
For Managing Editor:	Owen Davies
For Director at Large:	Merrell Miller
	John Firth
	Francine McCarthy
	Thomas Davies

Martin Head is a Senior Research Associate in the Geography Department at the University of Cambridge where he also holds a Visiting Fellowship at Wolfson College. He is currently working on a variety of projects involving Cenozoic palynology, particularly dinoflagellates, climate change and carbonate diagenesis. Mavis Butterworth, the renowned Carboniferous palynologist, delivered Martin gently into the world of palynology during his undergraduate days at Aston in Birmingham (UK). Martin went on to study Paleogene palynology for his PhD at Aberdeen with David Batten (now at Aberystwyth) and then spent 15 years in the Geology Department at Toronto, starting as a research associate with Geoff Norris and going on to hold a variety of research and teaching positions. Research at Toronto was generously supported by an AASP-led oil company consortium comprising Amoco, Elf-Aquitaine, Norsk Hydro, Phillips, Statoil, and Unocal. Martin continues to maintain strong links with industry and with Toronto, both in research and graduate supervision.

Martin has participated on two Ocean Drilling Program (ODP) cruises, and he is a strong advocate for ODP within the palynological community. He also serves on the editorial boards of the *Journal of Paleontology* and the Elsevier journal *Palaeogeography, Palaeoclimatology, Palaeoecology*, and has organized numerous short courses, symposia, and workshops on late Cenozoic dinoflagellates. As the Canadian Association of Palynologists' current President, and as a Canadian (as well as UK) citizen with a "mid-Atlantic" family and countless American connections, Martin has kept a foot solidly in North America.

A member of AASP since 1981, Martin organized the first ever AASP-sponsored short course, in Tulsa, 1989, and went on to co-author, with John Wrenn, an AASP Foundation book on Neogene and Quaternary dinoflagellates (Head and Wrenn, 1992). Martin served on AASP's executive as Director-at-large during 1992–1994 and became its Newsletter Editor during 1994–1996. AASP's website was created by Martin in 1995 and he has served as its WebMaster ever since, although Paul Strother will have taken over the reins by the time you read this, so breathing new life into an old horse. AASP's strength lies in its balance of academic and industrial interests, its international outlook, its affordability to students, and its prodigious publishing output. Martin would like to see AASP build on these and other strengths and increase its visibility both in the national and international arenas.

David M. Jarzen has been a member of AASP since 1969. He is currently Senior Biologist and Collections Manager in Paleobotany and Palynology at the Florida Museum of Natural History, University of Florida, Gainesville Florida. Born in Cleveland, Ohio, he grew up in northern Ohio gaining an early interest in biology and natural history. He earned his B.S. degree in 1967 from Kent State University majoring in Biological Sciences, and two years later, under the direction of Alan Graham, received his M.A. degree in Botany from the same institution. In 1973, studying with Geoff Norris, he was awarded the Ph.D. in Geology from the University of Toronto. His research interests in the nature of plant life during the Earth's geologic history have provided extensive field work in all regions of the United States and Canada, as well as Europe, Africa, Panama, Mexico, Colombia, New Caledonia, New Zealand, Fiji, and several localities in northeastern and western Australia. The focus of his work incorporates a global view towards understanding the evolution of major plant life at the Cretaceous/Tertiary boundary, especially flowering plant evolution. His publications of scientific papers number over 150, including both professional papers and popular articles. His work has been incorporated in several television productions including the CBC's "Nature of Things", the PBS NOVA Series, tbe NHK (Japan) Series "The Miracle Planet", the National Film Board of Canada, the Discovery Channel and other North American cable networks. His work has been recognized by his colleagues through election as President of the Canadian Association of Palynologists [CAP] (1979-1980), Secretary-Treasurer to the International Federation of Palynological Societies [IFPS] (1984-1988); Vice President of the IFS (1992-1996), and from 1988-1996 HE represented the Canadian Association of Palynologists as

Councilor to the IFS. He was an invited Visiting Scholar to the Department of Geology & Mineralogy (1987-1988) of The University of Queensland, Brisbane, Australia, and in 1991 and 1994 to the Botany Department of the same university. It was in Australia where he worked with Mary Dettmann on the history of the Proteaceae via pollen studies. He has been a member of 14 learned scientific societies as well as the honorary scientific society, Sigma Xi. He has served the scientific community and general public through many slide lectures, videos, photographic displays and magazine articles. The Palynology and Paleobotany Databases at the Canadian Museum of Nature, Ottawa, Canada, were designed and developed by David and Raymond Bellamy of the Canadian Heritage Information Network. Over the past three years he designed and developed the Paleobotany/Palynology database at the Florida Museum of Natural History, Gainesville, Florida. His eclectic interests include nearly all forms of music, nature photography, writing, scientific illustration, and snorkeling.

Thomas Demchuk: I enjoy urban hang gliding. When I'm bored, I build large suspension bridges in my yard. On Wednesdays, after school, I repair electrical appliances free of charge. I am an abstract artist, a concrete analyst, and a ruthless bookie. Critics worldwide swoon over my original line of corduroy evening wear. I don't perspire. I am a private citizen, yet I receive fan mail. I have been caller number nine and have won the weekend passes. Last summer I toured New Jersey with a traveling centrifugal-force demonstration. I bat 400. My deft floral arrangements have earned me fame in international botany circles. Children trust me. I can hurl tennis rackets at small moving objects with deadly accuracy. I once read Paradise Lost, Moby Dick, and David Copperfield in one day and still had time to refurbish an entire dining room that evening. I know the exact location of every food item in the supermarket. I herd armadillos, break wild stallions, and perform lasso rope tricks in a travelling wild-west show. I despise cats, depose dictators, and dispose of trash. With these talents, I look forward to serving AASP as Secretary-Treasurer for the year 2001.

I have been an AASP member since the early 1980's. I have served as Secretary-Treasurer since 1998, served as Director-at-Large from 1992-1994, and on the organizing committee for the AASP Annual meeting in Banff 1990. Further, I am currently overseeing our first annual meeting as an Associated Society with the Geological Society of America in Reno 2000, and in charge of organizing what will hopefully be a very exciting Annual meeting in San Antonio for 2001. Graduating from the University in Calgary with my Ph.D. in 1992, I was employed with Amoco in Houston from 1992 through 1997, before joining Conoco in my current position as a Geological Advisor-Biostratigrapher in their Exploration Technology Group. I look forward to seeing many of you in Reno.

Dr. Owen Kent Davis is a Professor in the Department of Geosciences, University of Arizona., where he is the Director of the Palynology Laboratory and co-Director of the Center for Earth System Processes. He teaches classes on Environ-mental Geology, Palynology, and Quaternary Ecology. He has authored over 200 publications. He was born March 13, 1949, in Nampa, Idaho, received his M.S. in Botany in 1974, and his Ph.D. in Ecology in 1981. Owen first attended an AASP meeting in 1974, and has been a member since 1982. He has been a member of the PALYNOLOGY Editorial Board since 1995, and is on the Editorial Boards of The Review of Paleobotany and Palynology, Radiocarbon, Aerobiologia, and the internet journal Conservation Biology. He is President of the Arizona-Nevada Academy of Science, and President of the International Federation of Palynological Societies.

Merrell Miller has been an AASP member since 1977. He was a field trip leader for both the New York and Tulsa annual meetings and a member of the organizing committee for the second Tulsa meeting. He served as Awards Committee Chairman from 1992 until 1996 and as a fundraiser for the Center in Palynology at LSU. Merrell received his B.Sc. in geology at the University of Akron in 1973, and completed a M.Sc. on Ordovician Chitinozoa under Prof. Stig Bergström at Ohio State University in 1976. At Texaco, in Houston, he worked on Neogene forams ("bug picking" on offshore drilling wells) and was introduced to Mesozoic palynology by Don Benson. In 1978, Merrell joined Amoco to pursue research interests in Early Paleozoic palynology at Amoco s Tulsa Research Center. His investigations concerned taxonomy and biostratigraphy of acritarchs, chitinozoans and cryptospores. He also worked on numerous technical services from Amoco's international exploration group. Later he worked on Silurian source rock depositional controls and distribution. In 1991, he was transferred to Houston where he was a technical group supervisor for two years and then worked on various Paleozoic and Mesozoic projects including the Paleozoic of China, Mesozoic of West Africa, and Early Paleozoic of the Arabian Plate. Following the BP Amoco merger, he was temporarily retained for the disagreeable task of disbanding Amoco s paleontology offices and labs. Merrell is currently an Associate of the IRF Group.

John Firth received his B.S. in Geology at Virginia Tech in 1981, and stayed to get his M.S. degree in palynology under Dewey McLean in 1984. He received one of the first AASP student scholarships for his thesis on Maastrichtian /Danian dinoflagellates. He then went to Florida State University to get his Ph.D. studying calcareous nannofossils under Woody Wise. During his tenure at FSU, he sailed on the Ocean Drilling Program Leg 105 to Baffin Bay and the Labrador Sea, as a calcareous nannofossil specialist. On this cruise, he first met Martin Head and Anne de Vernal, and enjoyed talking dinos with them while studying much tinier microfossils. Finishing his PhD in 1989, he was hired at the Ocean Drilling Program at Texas A&M University as a staff research scientist. He sailed on 7 ODP cruises in the Pacific, Arctic, and North Atlantic and found that these cruises were always full of nannofossil specialists, so he instead looked for, and found, interesting palynology projects in the deep sea. In 1996, John became the Curator of ODP, where he supervises four core repositories and all curatorial/sampling activity on the ODP drillship. As an adjunct faculty member in the TAMU Department of Geology and Geophysics, he has supervised one M.S. student in palynology, and currently has one Ph.D. student studying Upper Cretaceous/Paleogene dinos from Colombia and Venezuela. Also, John is Curator of a JOIDES Micropaleontology Research Center Collection, and of the BP/Amoco Microfossil Research Collection recently donated to TAMU. His research interests remain with Upper Cretaceous and Paleogene dinoflagellate and calcareous nannofossil biostratigraphy and paleoecology, palynofacies, and paleoceanography. John has been a member of AASP since 1982, and he helped organize a tour and field trip for the 1994 AASP meeting in College Station.

Francine McCarthy is an associate professor of Earth Sciences at Brock University, where she has been teaching since 1991. She was educated at Dalhousie University (BSc Hons., 1984 & PhD, 1992) and at the University of Toronto (MSc, 1986). Her broad palynological interests (and those of her students) range from small lakes to abyssal marine environ-ments, from the Miocene to historic times, with applications for paleoclimatic reconstruction, stratigraphy and sedimentation, sea- and lake-level fluctuation and archeology.

Thomas Davies

Tom Davies is a Geological Associate at ExxonMobil Exploration Company, Houston, Texas with 20 years of coal and petroleum exploration experience. He worked as a coal scientist at the Los Alamos National Laboratory in New Mexico from 1979-1980 and a coal and organic petrologist at Exxon Production Research Company in Houston from 1980-1983. Tom began his career in palynology as an exploration palynologist and organi petrologist at Exxon Production Research in 1983 and has worked for Exxon on various exploration and production assignments in Houston and in Bordeaux, France to the present. He has been a member of the AASP since the late 1970's, and served on the ballot committe and as a judge for the Best Student Paper award. Tom holds a BS degree from Allengheny College in Meadville, Pennsylvania and received a PhD from The Pennsylvania State University for his thesis on peat formation in Florida Bay. At Penn State he worked under the direction of Bill Spackman and was introduced to and encouraged to use palynology by Al Traverse. At Exxon, Tom worked closely with Lew Stover and provided Paleogene and Upper Cretaceous palynological data as part of the exploration team that developed sequence stratigraphy. He has worldwde palynology experience and frequently works on Paleogene and Cretaceous marine and nonmarine palynology, palynofacies and source rock analysis. More recently he has conducted studies on calibrating Lower cretaceous Tethyan dinoflagellates to the global cycle chart. Tom enjoys jogging, fishing, boating, and gardening, is a member of the Galveston Island Sea Isle Planters Bunch and collects and refinishes early American furniture and clocks.

AASP'S NEW WEBSITE!

AASP's website has moved to Boston College where it is administered by AASP's new webmaster Paul K. Strother. Web technology and accessibility have expanded rapidly in the past several years, and for some while I've felt that the AASP website needed a face-lift and a fresh approach. I am pleased to say that Paul's current version of our website (http://www.bc.edu/bc_org/associations/aasp/) is a big improvement on my original, and I wish him every success in its maintenance and development. Please contact Paul (strother@bc.edu) regarding any web-related enquiries, and please continue to support the AASP website by sending current news items, job ads, meeting announcements etc. I started AASP's website in 1995 at the suggestion of Reed Wicander (then President of AASP). It was a tall order because I was editing the AASP Newsletter also at this time, but Reed's enthusiasm made this new initiative seem less daunting. Five years on, and more than 22,867 site hits later, I'd like to take this opportunity to thank all those who have visited and supported AASP's website, especially Vaughn Bryant and Bob Clarke, and to express particular gratitude to the Department of Geology, University of Toronto, which hosted the website during this time at no charge to AASP. Martin J. Head, AASP past-webmaster

JANE GRAY
compiled by Mark Turner and other University of Oregon Scientists

Professor Jane Gray, Department of Biology, University of Oregon, Eugene, died January 9, 2000 of cancer. She was born in Nebraska on April 19, 1929 to Muriel Barrett Gray and Col. Ernest Gray, a West Point Graduate. Jane Gray received her B.S. degree from Radcliffe College in 1951 and her Ph.D. from the University of California, Berkeley in 1958. Her dissertation dealt with fossil pollen and spores of the Miocene in eastern Oregon. She served as an Instructor in the Department of Geolgy, University of Texas, Austin, for several years until marrying a fellow professor in the Biology Department, which automatically lead to her dismissal owing to nepotism rules in force at the time. Following this she held a position in the Desert Research Institute, University of Arizona, Tucson for several years, where she continued her work on Tertiary pollen and spores. She then moved to the Museum of Natural History, University of Oregon, Eugene. Subsequently she joined the Department of Biology at the University of Oregon where she served until her death. She taught both undergraduate students and graduate students in biology, geology, geography, and anthropology.

Her research career, supported in large part by the National Science Foundation and the Whitehall Foundation, included a number of outstanding discoveries. Her work on the early evolution of land plants showed that higher land plants first appeared in the Middle Ordovician 40 million years earlier than had been previously thought. This discovery, which faced great opposition, is widely accepted today and used in many textbooks. Her masterful book-length monograph on nonmarine paleoecology is widely used as a synthesis of what was known in this area up through 1988.

At the time of her death she was investigating the nature of atmospheric carbon dioxide present since the Cambrian. Her compilation and correlation of a massive amount of botanical and geological data will substantially revise previous estimates. This work will be completed by her colleagues. She was also working on a groundbreaking amount of evidence for a widespread Precambrian nonmarine biota, chiefly at the bacterial level.

She taught and mentored many students who found her work and ideas highly original. Her enthusiasm encouraged many to forge ahead in their respective areas. Her death deprives the scientific community of a highly original and innovative worker who undoubtably would have provided even more significant contributions had time permitted. She will be sorely missed by many colleagues, students, and friends.

Dr. Gray was devoted to animal rights and welfare. Memorial contributions may be made to Greenhill Humane Society http://www.green-hill.org/. There will be no memorial service at her request.

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On Sunday, February 13th, Professor Don Engelhardt from the University of South Carolina passed away after fighting cancer for several months. Don Engelhardt was a long time member and former President of AASP.

NEWS ON THE MIDDLE JURASSIC PALYNOLOGICAL SCENE IN POLAND

by Niels E. Poulsen (GEUS) and Marcin Barski (University of Warsaw), E-mail: nep@geus.dk

My (NEP) palynological studies of the Jurassic of Poland started many years ago at the 2nd International Symposium on Jurassic Stratigraphy in Lisbon, Portugal in 1988, where I met Prof. Andrzej Matyja and Prof. Andrzej Wierzbowski. In the following year I went to Poland to do fieldwork in co-operation with Andrzej and Andrzej. These first studies ended up as part of my Ph.D. thesis (published in Poulsen, 1993 (Acta Geologica Polonica, 43), Poulsen, N. E., 1994 (Geobios, M. S. 17) and Poulsen, 1996 (AASP Cont. Ser. 31). The co-operation continued in the following years, when we formed a research collaboration between the Geological Survey of Denmark and Greenland (GEUS) and the Geological Institute (University of Warsaw), which studied the Middle-Late Jurassic in central Poland. The Results from this project have been published in a number of papers in Acta Geologica Polonica (e.g. Kutek and Zeiss, 1997, Matyja and Wierzbowski 1997 and 1998, Poulsen, 1998,). These projects were followed up by Marcin Barski, a Ph.D. student at the Geological Institute (University of Warsaw). Marcin's subject (working title) is "Dinoflagellate cyst biostratigraphy and palaeoenvironmental analyses using palynofacies studies of the Middle Jurassic of Central Poland." Marcin is currently on a sabbatical study visit here at GEUS, funded by the Danish Rectors' Conference. At present the research continues and we look forward informing you of the latest achievements.

NEWS FROM AUSTRALIA AND THE UK

by Jim Riding

News from the UK this quarter is that the research council funding input to the University of Sheffield MSc course in palynology is to be reviewed. The funding body, the Natural Environment Research Council (NERC), periodically appoints a committee of experts to review all the postgraduate courses which it sponsors via the provision of studentships. We wish the Centre for Palynology at Sheffield all the best during the review process.

In my last report, I gave a brief overview of the state of the palynological scene in Australia. Inevitably, I inadvertently omitted some individuals and laboratories. In particular, there is a thriving centre, the Antarctic CRC within the Institute of Antarctic and Southern Ocean Studies, at the University of Tasmania in Hobart, Tasmania. Here, Dr Andrew McMinn leads a team of researchers in Neogene and Quaternary palynology and related fields. His research interests lie in the ecology and climatic affinities of dinoflagellates and diatoms around Antarctica and throughout the Southern Ocean. I would be delighted to append accounts of any other Australian palynologists and laboratories where palynology is practiced for the Newsletter. E-mail your text to me at: jim.riding@agso.gov.au and I will submit your article.

Also in the last edition, I referred to the perceived state of palaeontology in Australia and concerns about dwindling numbers of active specialists and real fears that the subject is in a profound decline. In order to confront and discuss the issues, a meeting of 48 delegates from both Australia and New Zealand was held at the headquarters of the Australian Geological Survey Organisation (AGSO) in Canberra, ACT on the 13th of December 1999. The meeting was announced in AGSO Geonews, 54, p. 22. Palaeontologists from universities, independent consultants, oil companies, state geological surveys, museums and federal government agencies attended. The gathering sought to promote cooperation between palaeontologists in order to maximise the impact of both human and financial resources. Furthermore, another aim was to set priorities for palaeontological research in order to maximise the impact of results with the user community. For example, the Late Triassic and Jurassic of north-west Australia are of huge economic importance to the country due to the abundant oil and gas reserves there. Specifically, three outcomes were sought. These are: (i), for the Australasian community to understand the science drivers operating at AGSO in palaeontology/biostra-tigraphy; (ii), to review the status of biozonation and key issues in the Precambrian through Neogene of Australasia and (iii), to plan a mutually-agreed mechanism for the coordination and promotion of research links in Australian palaeontology. The AGSO delegates stressed the continued need for biozonation and timescale research, especially in the offshore area and the organisation actively wishes to coordinate and facilitate research activity in this field. In a plenary session, six time slices were reviewed by specialists (these were: Precambrian, pre-Permian Palaeozoic, Permian-Mid Triassic, Late Triassic-Jurassic, Early Cretaceous, and Late Cretaceous-Neogene). These reviews prompted wide-ranging discussion. The relative scarcity of active

researchers, especially in the Palaeozoic, is alarming. It was further noted that more work on provincialism is urgently needed. The ageing palaeontological community is also a matter of concern and it was stressed that an acute shortage of micropalaeontologists in Australia is anticipated in 5-10 years time. It became clear that no single institution in Australia could possibly adequately cover the entire Phanerozoic, therefore cooperation is absolutely crucial. Integration with absolute dating methods such as SHRIMP evidence and the use of digital techniques such as the compiling of major databases was also discussed. The establishment of focus groups was suggested, with the result of promoting communication between geographically widely separated workers in related areas of research.

I am sure that the concerns of the Australasian palaeontological community are mirrored by workers globally. The meeting in December at AGSO potentially represents a necessary first step in the revitalisation of our subject in Australasia.

Employment Opportunity for a palynologist

A pioneer in the energy industry since 1933, Saudi Aramco has consistently defined the cutting edge of petroleum exploration and production. Now at the cusp of the new millennium, Saudi Aramco continues to spearhead innovations through our international team of professionals - a group of world-class minds and talents united in developing the next generation of power solutions for the planet. We invite you to explore the following opportunity in Saudi Arabia: **Palynologist**, **F05-108116**

A palynologist is required for operational and research activities within Aramco's Geological R&D Division. The emphasis is on stratigraphic palynology. For the current position a sound knowledge of both marine and non-marine aspects of Paleozoic palynology (especially the lower to middle Paleozoic) is requisite; knowledge of younger parts of the succession, as well as palynofacies and source-rock aspects would be useful. The applicant will be a member of a team that integrates palynology, stratigraphy, sedimentology, petrography and wireline log data for geological interpretation. Familiarity with Arabian Plate geology would be a significant advantage. A PhD or MSc and at least seven years' experience are required, preferably in a commercial oil/gas exploration/producing environment. Rapid palynozone assessment for current drilling wells, at either a wellsite mobile laboratory or at headquarters, is a necessity of the position.

In return for your talents, please expect a very attractive compensation package including comprehensive benefits. To learn more, send or fax your resume/salary history to: Aramco Services Company, Dept. 06E-AASP P.O. Box 4530, Houston, TX 77210-4530. Fax: (713) 432-4600. E-mail: resumes@aramco.com, SAUDI ARAMCO www.aramcoservices.com

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Two new doctoral theses on Eocene palynology in Germany
by dr Walter Riegel

Two doctoral theses in palynology have recently been completed under my supervision at the Insitute and Museum of Geology and Palaeontology of Göttingen University. Both are concerned with the reconstruction of environments in the lignite bearing Eocene sequences at Helmstedt in Northern Germany.

The Eocene sequence at Helmstedt is divided by a marine transgression into a lower and an upper lignite bearing portion of Lower respectively Middle Eocene age. Both portions were deposited in similar lower coastal plain environments despite some striking differences in the general make-up of the seams. Excellent exposures provided by mining operations allowed for comparisons and correlations between several rather closely spaced sections. The thesis references are:

Hammer-Schiemann, G., 1998: Palynologische Untersuchungen zur Fazies und Ökologie der Unterflözgruppe im Tagebau Schöningen (Untereozän, Helmstedt, Bez. Braunschweig). - Unpublished doctoral thesis, 1-143, Göttingen University.

Lenz, O., 2000: Paläoökologie eines Küstenmoores aus dem Eozän Mitteleuropas am Beispiel der Wulfersdorfer Flöze und deren Begleitschichten (Helmstedter Oberflözgruppe, Tagebau Helmstedt). - Unpublished doctoral thesis, 1-228, Göttingen University.

The thesis of Hammer-Schiemann deals with the lower three out of a sequence of eight seams and the clastic interbeds sandwiched between them and describes and figures 193 taxa of palynomorphs. The quantitative evaluation of 168 samples is shown in two diagrams representing sections of the same interval which are about 2km apart. The entire section was subdivided into 19 floral zones showing changes from a Nyssa-Taxodiaceae swamp forest to a swamp forest dominated by Betulaceae and Ulmaceae in which open water areas formed temporarily and provided space for the invasion of new plant communities. In addition, the normal succession of plant communities was interrupted by erosion surfaces. The frequent occurrence of fusain layers is commonly associated with marked spikes of fern and Sphagnum spores suggesting a highly disturbed mire environment.

Based on 92 guide taxa the assignment of the Lower Seam Group of Helmstedt to the Lower Eocene has been substantiated. 14 taxa previously known only from the Middle Eocene upward have been recorded from the Lower Eocene for the first time. The dominance of thermophilous elements in association with intermediate elements suggests a subtropical climate tolerating some elements adapted to cooler climates.

The thesis of Lenz deals with the lower three seams and their interbeds (Wulfersdorf member) from the Middle Eocene sequence. 182 taxa of palynomorphs are described and

figured, 93 of them are in common with the thesis of Hammer-Schiemann. Two to three sections from each of the seams and their associated clastic interbeds have been described and sampled during mining progress over a period of more than three years. 232 samples have been included in an ecological study based on quantitative counts.

Microfloral zones were established on presence/absence and increase/decrease criteria. In addition, cluster analysis and principal component analysis have been applied. On this basis two types of mangrove environments characterized by Rhizophora, Avicennia, Diporoconia and Nypa, a brackish and a fresh-water marsh and two types of hammock/hardwood of swamp forest could be distinguished. The threefold alternation of the clastic interbeds interpreted as estuarine in origin and the lignite seams is overprinted by a gradual decline of marine influence.

Of special interest are the results of isopollen maps of 24 selected taxa based on 28 samples from a narrow carbonaceous band considered to represent a synchronous surface. They show the restricted local distribution of some azonal taxa and the broad distribution of probably anemophilous taxa. In addition, they clearly outline the lateral succession of vegetation zones in an Middle Eocene coastal plain environment.

The striking difference between the Lower and the Middle Eocene seams regarding their petrographic constitution and the composition and succession of their palynological assemblages is the subject of a separate paper by Riegel et al. (2000) presented at the 5th European Palaeobotanical/Palynological Conference at Cracow in July 1998. It is demonstrated there that seam formation in the Lower Seam Group apparently was heterogeneous and highly disturbed but homogeneous and equable in the Upper Seam Group. The frequency of fusain layers in the Lower Seam Group suggests highly fluctuating water tables, while the total lack of fusain in the Upper Seam Group suggests perhumid conditions.

The thesis of G. Hammer-Schiemann has already been reviewed and accepted for publication in Palaeontographica B.

References:

Riegel, W., Bode, Th., Hammer, J., Hammer-Schiemann, G., Lenz, O., & Wilde, V., 2000: The Paleoecology of the Lower and Middle Eocene at Helmstedt, Northern Germany - A Study in Contrast. - Acta Palaeont. Pol., in press.

BOOK REVIEW

Mediterranean Melissopalynology. Giancarlo Ricciardelli D'Albore. Universita Degli Studi di Perugia, Instituto di Entomologia agrania Publication (1998). Perugia, Italy. 466 pages, 218 B&W light pollen photomicrographs. Cost: $12.00 (US) (you must send international money order or cash..no personal checks or credit cards accepted, not sure about invoice billing).

This comprehensive examination of Mediterranean honey types is an extensive study of the subject and the book is well worth its modest price. The author points out that since the early 1960s, there has been a flood of publications and a great deal of interest created in leaning more about the floral composition of domestically produced honey in regions that boarder the Mediterranean Sea. In the book's extensive bibliography of previous works published on the subject, one fact is quickly obvious; much of the earlier pollen work was conducted by the French, but during the last decade most of the studies of domestic honey in this region have been conducted by the Spanish or Italians.

D'Albore's most recent book represents a massive amount of work. He and his assistants collected fresh flowers from over different 200 plants, made taxonomic identifications, and prepared microscope slides for the pollen (but did not acetolyze) from each specimen within six weeks of collection. Each pollen sample was stained, and then they selected 50 pollen grains from each sample to make a number of morphological measurements. The author also included between two and six B&W photomicrographs of each pollen taxon showing various views and keying the pictures to written morphological data on the facing page. For each pollen taxon the author also has included: 1) family name; 2) genus and species; 3) the plant's common name in five European languages; 4) the pollen grain's symmetry, aperturation, polarity, and shape; 5) the pollen's polar, equatorial, aperture, apocolpial and mesocolpial measurements (when appropriate); 6) the pollen's P/E ratio; 7) the type and thickness of both the intine and exine; 8) type of ornamentation; 9) type of cytoplasm and, when appropriate, the color; 10) the availability and distribution of the plant throughout the Mediterranean region; and 11) the plant's value as a source of honey.

Overall, this book is a welcome edition to the field of melissopalynology and contains much useful information for those working with the analysis of honey in areas of Europe, including the Mediterranean region. Some of the book's information is also of general value to anyone working in the field of melissopalynology, regardless of geographical location. For example, many of the pollen types the author includes an estimate of the number of pollen grains one should expect to recover per gram in a unifloral honey for the taxon. There are also eight pages of maps of the Mediterranean region noting the "general"distribution for many of the plants known to produce major unifloral honey types found in that area. The introduction section also includes a brief discussion of some of the major phytogeographical regions in the Mediterranean area, a brief note about the primary cultivated and ornamental plants found in each of those regions, and how important each is to the production of honey in the region. Of particular interest to many researchers will be the author's discussion section called, "pollen presenting problems in melissopalynology." In that section, he discusses some of the 200 plus plant taxa in his book and notes which of them produces pollen that tends to be either underrepresented or over-represented in the domestic honey of the Mediterranean region. In some cases, he even includes the expected number of pollen grains for these taxa per gram of produced honey. I found this section especially useful because it confirms some of the data noted by other melissopalynogists working in regions outside the borders of the Mediterranean Sea.

One problem that has long plagued melisso-palynologists concerns the pollen percentages needed for many specific taxa in order to classify the honey as a

unifloral type. The ratios of pollen per gram of honey for a number of important floral taxa is not the same. Some melisso-palynotogists, such as Rex Sawyer, have attempted to construct expected ratios of pollen/gram to predict pollen coefficient values for honey samples. Those coefficient values are then applied to the raw pollen counts for a given honey sample. Sawyer and others believe that by using these types of corrective values one can accurately assign unifloral values to honey samples even when the relative pollen percentages would not warrant such assignments.

Several other useful features of D'Albore's book include a section discussing how to identify and recognize honey types from various Mediterranean regions and how to detect mislabeled honey that is purported to be from one location, but instead is fraudulently assigned to some other region. There is also a lengthy discussion of major honeydew types that commonly occur in the Mediterranean region. The book includes a four-page glossary of melisso-palynology terminology that would be especially useful for those new to the discipline. At the end of the book, there is an extensive bibliography and an alphabetical index to all the pollen taxa discussed in the text.

As a reviewer, I know that it is always easier to be critical of another's work than it is to do the initial work yourself. This is why I hesitate to "cast stones" at another's research unless I feel the author has made a serious error in judgment or data representation. I find no errors of this type in this book and that is why overall I would give this author and this research a "five-star" rating. Nevertheless, there is one minor complaint that I could mention. The illustrations, I believe, could have been presented in a better manner. All pictures of each pollen taxon are on a separate page next to the written data for the same pollen type. Thus, in some cases there may be only two tiny photomicrographs on a blank page that is 21 cm x 28 cm in size yet neither photo is larger than 1 cm^2. Why not make the photos larger, certainly there was enough room? In addition, the details of surface ornamentation and aperturation features are not always as clear in the photomicrographs. Nevertheless, I do realize that the pictures of each pollen type was taken of unacetolyzed pollen and often surface lipids or internal cytoplasm would prevent a "crisp" image of surface features or pollen wall morphology. I also believe it would have been more helpful if the author had included a bar scale beside each photomicrograph rather than relying on a verbal note about the size of the pollen grain in the accompanying text. Some of the micrographs are excellent, but others are too light or too dark. In addition, to reduce the cost of this book, the printing was done on inexpensive typing paper rather than high-quality printing paper containing a high clay content. The author does apologize for the quality of the photomicrographs in the beginning of the book when he notes that, "Unfortunately each pollen has its own capability of colour absorption; therefore the intensity of the color is variable; so some illustration are more or less dark, but yet the understanding and the interpretation of the details of each pollen grain are equally assured."

Would I recommend the purchase of this book? Certainly, yes! The modest cost, the pages of useful information, and the advantage that the entire volume is written in English makes D'Alborne's book a valuable reference source for anyone working in the field of honey production, melissopalynology, or any other field of palynology in general.

I found this book exceeding difficult to obtain. Normal ordering channels working through book companies produced no results. Finally, I resorted to asking a European colleague and prominent melissopalynologist to please find me a copy, which he did. Later, I contacted the book's author by email (entomol@unipg.it) and he assured me that copies were still available. Contact or write to the authort: Dr. Giancarlo R. D'Albore, Dipartimento de Arboricoltura, Universita Degli, Instituto di Entomologia Agracia, Borgo XX Giugno, 06121 Perugia, ITALY

Reviewed by: Vaughn M. Bryant, Jr.

BOOKS

Geologists now have an affordable and convenient reference to foreign terms with **Henry Aurand's GEOLOGY TERMS IN ENGLISH AND SPANISH**. Prior to its publication, the only book available was a very expensive (over $100) and hard-to-find reference published in the Netherlands. San Diego publisher Sunbelt Publications designed this condensed compendium of commonly used geological terms for field and casual use. It is not limited to technical terms but includes words from ordinary language that describe the earth. It is written to be used by both the armchair geologist and the seasoned professional. Naturalists, petroleum engineers, teachers,
and librarians will also find this specialty book helpful. Affordably priced, its convenient size makes it user-friendly in the field. GEOLOGY TERMS is the latest volume in a series from Sunbelt Publications dealing with the natural and cultural heritage of the borderlands. Availability: Directly from the publisher at 800-626-6579 (orders only)/619-258-4911, or through major on-line stores and chain stores in US.

MESSAGES

The Palaeontographia Italica is an international palaeontological journal that has been founded in year 1895 by the Italian palaeontologist M. Canavari and is printed in Pisa, Italy. Since 1895 the Palaeontographia Italica has been published yearly, almost without interruptions. The Palaeontographia Italica has a format of 32x24,5 cm (text and plates 25,5x18) and only publishes relevant monographs in the field of descriptive palaeontology, including extensive systematics and several plates. The print is of excellent quality. Since 1985 the official language is English but occasional articles in Italian or French are exceptionally considered for publication. For further information on Palaeontographia Italica, visit http://www.dst.unipi.it/dst/pal/index.html or directly contact: mailto:tong@dst.unipi.it

Year 2000 **Palaeontographia Italica Award:** THE PRIZE: The Palaeontographia Italica awards a prize of 2 Million Italian Lire to support a young palaeontologist who submits

for publication a relevant monograph in the field of descriptive palaeontology, including extensive systematics and several plates. PhD thesis are welcome. The official language is English. The awarded monograph will be issued in the year 2000 (Palaeontographia Italica, vol. LXXXVII). In addition to the customary 10 free reprints, 10 further complimentary copies of the monograph will be offered by Palaeontographia Italica to the author.

BASIS OF AWARD: The applicant must be not older than 35 years. The significant contribution to the science of palaeontology, the originality of the interpretations, the quality of the illustrations, and the strict conformity to the journal rules are factors that will be weighted in selection. The results of the selection will be published in our web site not later than June 30, 2000.

NOT AWARDED MONOGRAPHS: Palaeontographia Italica reserves the right to publish in 2001 (vol. LXXXVIII) the submitted monographs that are not awarded though judged valuable for publication.

HOW TO APPLY: Send your monograph to the "Redazione della Palaeontographia Italica, Year 2000 Award, c/o Dipartimento di Scienze della Terra dell'Università di Pisa, via S. Maria 53, 56126 Pisa, Italy". Add a short curriculum to be published in our web site. To be considered for the YEAR 2000 PALAEONTOGRAPHIA ITALICA AWARD , applications must reach the Editorial Board not later than April 30. The Editorial Board require all authors to carefully revise the manuscript before submission in order to strictly conform with the rules of the Palaeontographia Italica. The Italian Abstract ("Riassunto") will be translated by the Editorial Board from the English one. The submission should comprise a) 1.4 MB diskette in Word for PC or Word for Macintosh; b) original typewritten copy of the text (also comprising text-figure/plate captions) and the originals of both text-figures and plates; c) two good quality xerocopies of the manuscript and of text-figures and plates, for the referees.

For the rules of Palaeontographia Italica see: http://www.dst.unipi.it/dst/pal/istruzioni.html. The Editor in Chief Marco Tongiorgi, Dipartimento di Scienze della Terra, Universita' di Pisa, Via S. Maria 53 - 56126 PISA - ITALY

Paleo21

In September 1997 a group of over 100 paleontologists from all corners of our vast and sometimes unwieldy discipline met at the Senckenburg Museum in Frankfurt, Germany to discuss the future of paleontology. That meeting, code-named "**Paleo21**," was the brainchild of H. Richard Lane who envisioned a future where paleontologists took a more active role in directing their science. The Paleo21 meeting was designed to be a beginning point for discussion, and to that end the Paleo21 participants were organized prior to the meeting and asked to produce position papers on a variety of topics. Their papers can be found on the Paleo21 web site http://www.nhm.ac.uk/hosted_sites/paleonet/paleo21 or as hard copy in Kleine Senckenbergreihe, Vol. 25.

At the meeting summaries of the position papers were presented and the participants had a chance to meet in small groups to extend their discussions. In addition, a series of "pan-paleontological issues" were identified that seemed to cut across organizational and subject boundaries. Since the 1997 meeting Paleo21 participants have been hard at work revising the original position papers to reflect the Frankfurt discussions, drafting new articles on the pan-paleontological issues identified there, and preparing for the hard copy publication of this material by the Senckenburg Museum.

In addition to this, it was always part of the Paleo21 plan to hold an electronic discussion of the Paleo21 findings and recommendations with the on-line paleontological community. That discussion has been delayed by many factors. However, at the beginning of this millennium year it is wholly appropriate that we look back upon where paleontology is right now, where is has been in the past, and where it might go in the future. Therefore, in an attempt to give structure to these thoughts - which I'm sure all of us have - and (hopefully) spur us from thought to action, for the next 31 weeks PaleoNet will host and on-line discussion/debate on the Paleo21 Reports and Recommendations. This discussion will make use of both the listserver and the PaleoNet WWW Pages. Starting to day I will post the first set of Paleo21 articles at : http://www.nhm.ac.uk/hosted_sites/paleonet/paleo21/rr/

Anyone (and everyone) may access these on-line publications which are identical to the "final" article versions. New articles will follow in the order presented in the Table of Contents at a rate of one per week. If anyone has any thoughts on the article/topic under discussion that week (e.g., agreements, disagreements, alternative emphasis, alternative recommendations) he/she is encouraged to post their comments to the PaleoNet listserver (PaleoNet@ucmp1.berkeley.edu). Please remember that to post and receive messages to and from PaleoNet you must be a listsubscriber and that subscriptions are free. Complete subscription information is available in the PaleoNet web sites at: http://www.ucmp.berkeley.edu/Paleonet/Listservers/PaleoNet.Html Two articles are ready for access at the present time. An "Introduction" that provides more information about the 1997 Paleo21 meeting and the composition of the participants, and the first pan-paleontological issue article, by Jeff Thomason et al. on "The Image of Paleontology and Public Outreach." Please read the articles and, if you have any thoughts on the subject of important subject of outreach, post them to the list. Paleontology faces many challenges in the coming century. It is only by talking to each other, by listening to each other, and by moving from talk to action that those challenges will be met.

Announcement for American Paleontologists: The FY00 LexEn (**Life in EXtreme ENvironments**) Program Announcement can be found at: http://www.nsf.gov/cgi-bin/getpub?nsf0037. The deadline for submittal of proposals to this announcement is April 10, 2000. More information about the LExEn Program: http://www.nsf.gov/home/crssprgm/lexen/start.htm

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Nominations and applications for the 2000 Theodosius Dobzhansky prize

The Theodosius Dobzhansky Prize is awarded annually by the Society for the Study of Evolution to recognize the accomplishments and future promise of an outstanding

young evolutionary biologist. The prize was established in memory of Professor Dobzhansky by his friends and colleagues, and reflects his lifelong commitment to fostering the research careers of young scientists.

Eligibility.- The candidate must have a Ph.D. (or equivalent) awarded no earlier than June 1997 and no later than February 2000, and must be actively involved in research in the field of evolutionary biology. There are no other restrictions. Applicants do not have to be members of the Society for the Study of Evolution, but such membership is encouraged.

Nomination/Application.- Candidates may apply directly or may be nominated by someone else. Established researchers are encouraged to nominate outstanding young scientists, particularly from groups underrepresented in previous competitions (e.g., women and non-US citizens), who might not otherwise apply. Each candidacy must be supported by the following materials prepared by the candidate, and submitted by either the nominating scientist or the candidate: (1) a curriculum vitae, (2) a summary of research accomplishments, (3) a statement of research plans for the next several years, (4) copies of three recent publications, (5) names and addresses of three referees (including the nominating scientist where applicable) who have sent supporting letters. Three copies of all materials must be sent and none can be returned. The deadline for receipt of all materials, including letters of reference, is February 15, 2000. All materials should be sent to: Dr. Lynda Delph, SSE Secretary, Department of Biology, Jordan Hall, 1001 E. Third Street, Indiana University, Bloomington, IN 47405 USA

Award.- The Dobzhansky Prize is accompanied by a check for U.S. $5000, and will be awarded at the annual meeting of the Society for the Study of Evolution in Bloomington, IN, June 23 - 27, 2000. The recipient is expected to be present to receive the award, and to give an oral presentation about his/her research. To facilitate attendance, the SSE provides funds to cover the costs of conference registration, accommodations during the conference, and expenses for travel to and from the conference. The recipient will be notified of the award in early May 2000.

The Society for Organic Petrology (TSOP), **Graduate Student Research Grants**. TSOP invites applications for two graduate student research grants of up to $1000 each. The purpose of the grants is to foster research in organic petrology (which includes coal petrology, kerogen petrology, organic geochemistry and related disciplines) by providing support to graduate students who demonstrate the application of organic petrological concepts to research problems.

The Grant Program focuses on support of qualified candidates for masters or equivalent degrees. Qualified doctoral candidates with expenses beyond the usual scope of funding by other agencies are also encouraged to apply. Grants are to be applied to expenses directly related to the student's thesis work such as summer fieldwork, laboratory expenses, etc.

Grant application deadline is March 31, 2000. Grants will be awarded in September 2000. Detailed information and an application form are available on the TSOP Web page: http://www.tsop.org, or from C. L. Thompson- Rizer, Conoco Inc. PR 3072, P.O. Box 2197, Houston, TX 77252-2197 USA, Tel: +1-281-298-3160, Fax: +1-281-293-3833, carolyn.thompson-rizer@usa.conoco.com.

BMS Grants-in-aid

The British Micropalaeontological Society (BMS) funds a grants-in-aid scheme. BMS student members may apply to the Society for funds to help in field work, conference attendance or any other activity related to their research. A maximum of UK£200 can be awarded to each successful applicant, and a total of UK£600 is available each year.

Applications (a short letter outlining your research topic, and explaining how you propose to spend the grant) should be submitted by Email to the BMS Secretary: James Powell: ajp@dinosystems.co.uk by 29th February 2000 so that the Committee may adjudicate at their next meeting on 6th March 2000.

Three new geosciences web sites dealing with fossil algae:

1) http://www.multimania.com/bgranier/index.html
on Early Cretaceous calcareous Algae

2) http://www.angelfire.com/fl3/alga2000/index.html
on the PETRALGA (Permian and Triassic Algae) Project. The Project was launched in order to build a solid database for the fossil Algae from the Permian and Triassic epochs. A main going-on sub-project deals with a catalogue for the Dasycladales.

3) http://www.angelfire.com/sc2/cretace/index.html
on Early Cretaceous Tethyan Stratigraphy. The broad objective is to build up a detailed knowledge of the Early Cretaceous stratigraphy in the Tethyan realm. The approach will be systematic through the integration of basin reference sections (stratotypes), basin or platform control sections, biostratigraphic data, and sequence stratigraphy.

Rainforest and marine biology workshops

*Sites: Belize, Costa Rica, Honduras, Panama, Ecuador, Peru, southeast Alaska and Australia

*WORKSHOPS are field oriented and focus on natural history, rainforest and marine ecology, conservation, land management, medicinal uses of native plants, local cultures, archaeology and geology.

*Instruction features local Biologists and naturalist Guides.

*Proceeds go to the WORKSHOP host organization in each country and help support valuable conservation and education efforts.

*Three Undergraduate or Graduate credits are available for attending through Aquinas College of Grand Rapids, Michigan (www.aquinas.edu). Contact Tim Bennett at 616-459-8281x5469 or by e-mail at bennetim@aquinas.edu for registration information and materials.

*Customized programs can be designed for "specialty groups"

BELIZE. Length: 14 Days/13 Nights, Cost: $980.00 per person, Host/Workshop Coordinator: Belize Tropical Education Center (TEC)/Tony Garel, TEC Director/Belize City, Belize, Topics Covered: Tropical Moist Forest Ecology/ Marine Ecology/Mayan Archaeology/Garifuna and Creole Cultures, Pre/Post-Workshop extension to Tikal in Guatemala.

COSTA RICA. Length: 12 Days/11 Nights, Cost: $925.00 per person, Host/Workshop Coordinator: Juan Pablo Bello/San Jose, Costa Rica, Topics Covered: Tropical Rainforest and Dry Forest Ecology/Conservation and Land Management/Geology/Volcanoes, /Costa Rican history, Pre/Post-Workshop extensions to Corcovado and/or Tortuguero National Parks are available

HONDURAS. Length: 14 Days/13 Nights, Cost: $1050.00 per person, Host/Workshop Coordinator: Suyapa Dominguez, EduEco Director/San Pedro Sula, Honduras, Topics Covered: Tropical Rainforest and Marine Ecology/ Conservation and Land Management/Mayan Archaeology/ Garifuna Culture/White-Water Rafting, Pre/Post-Workshop extension to La Mosquitia and the Rio Platano, Biosphere Reserve is available

PANAMA. Length: 14 Days/13 Nights, Cost: $1100.00 per person, Host/Workshop Coordinator: Win Rice/Panama City, Panama, Topics Covered: Tropical Rainforest and Marine Ecology/Conservation and Land Management/Geology/Volcanoes/Indian Cultures/R.O.P.E. Course/Bird and Bat Ecology/White-water rafting/History of Panama/Panama Canal Engineering and Operation, Pre/ Post-Workshop partial and complete Panama Canal transits are available

ECUADOR. Length: 14 Days/13 Nights, Cost: $1100.00 per person, Host/Course Coordinator: Jatun Sacha Foundation/Dr. Michael McColm, Ph.D./Quito, Ecuador, Topics Covered: Tropical Rainforest Ecology/ Biodiversity/Conservation and Land Management/Quechua Indian Culture/Volcanoes/ Shamanism, Pre/Post-Workshop extensions to the Galapagos Islands and/or Cuzco and the Lost City of the Incas-Machu Picchu are available

PERU A. Length: 14 Days/13 Nights or 7 Days/6 Nights, Cost: $1350.00 per person-14 Days/13 Nights, $895.00 per person-7 Days/6 Nights, Host/Workshop Coordinator: Dr. Paul Beaver, Ph.D./Tampa, Florida, Topics Covered: Tropical Rainforest Ecology/Primate Ecology/ Biodiversity/Conservation and Land Management/Indian Cultures/Shamanism, Pre/Post-Workshop extensions to Cuzco and the Lost City of the Incas-Machu Picchu and/or the Galapagos Islands are available

PERU B. Length: 14 Days/13, Nights, Cost: $1490.00.00 per person, Host/Workshop Coordinator: Dr. Paul Beaver, Ph.D./Tampa, Florida, Topics Covered: Tropical Rainforest Ecology/Primate Ecology/Biodiversity/ Conservation and Land Management/Indian Cultures/ Shamanism/Inca archaeology at Cuzco and the Lost City of the Incas-Machu Picchu, Pre/Post-Workshop extension to the Galapagos Islands is available

SOUTHEAST ALASKA, Length: 14 Days/13 Nights, Cost: $1050.00 per person, Host/Workshop Coordinators: David Berg/Petersburg, Alaska/Camille Ferguson/Sitka, Alaska, Topics Covered: Temperate Rainforest and Marine Ecology/Conservation and Land Management/Marine Mammal Ecology/ Geology/Glaciers/ Volcanoes/Indian Cultures/Russian History/White-water rafting/Raptor rehabilitation

AUSTRALIA. Length: 15 Days/14 Nights, Cost: $1350.00 per person, Host/Workshop Coordinators: James Cook University/Dr. David Pearson, Ph.D./Director, School of Tropical Biology and Dr. John Choat, Ph.D., Director, School of Marine Biology/Queensland, Australia , Topics Covered: Tropical Rainforest and Coral Reef Ecology/ Conservation/Biodiversity/Local Cultures

For more information contact: Rainforest and Reef 501 (c)(3) non-profit, 29 Prospect NE Suite #8, Grand Rapids, Michigan 49503 USA, Phone/Fax: (616) 776-5928/ Toll Free: (877) 967-7467 (Fridays only), E-mail: rainforest@mail.org or mnolan01@sprynet.com

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AGENDA (with thanks to the CAP website)

2000

March 6-8 2000. Fourth Geological Meeting on Northwestern Mexico and Adjacent Areas. Universidad de Sonora, Hermosillo, Sonora, Mexico. Details: Cristina Penalba, UNAM, Instituto de Ecologica E-mail: penalba@servidor.unam.mx

March 16-18, 2000. 30th International Arctic Workshop, Institute of Arctic and Alpine Research (INSTAAR), University of Colorado, Boulder, Colorado, USA. The meeting will consist of oral and poster presentations covering all aspects of high-latitude environments, past and present. Details: Anne Jennings, E-mail: jenningsa@spot.colorado.edu Website: http://instaar.colorado.edu/AW2000/

March 27 - 31 2000. INQUA - Commission for the Holocene Meeting: Environmental Changes During the Holocene: Correlations Between Temperate and Semiarid Regions. Seville, Spain. Details: Secretary of the Meeting: Ana I. Porras, Departamento de Geografia Fisica, Facultad de Geografia e Historia c/Maria de Padilla, sn., Universidad de Sevilla, Spain, Tel: +34 954.551.377 Fax: +34 954.556.988, E-mail: aipor@cica.es. Environmental conditions during the last 10,000 years have been increasingly governed by the human factor and in some regions the climate controlled geodynamics have been altered. Geomorphic responses to climatic fluctuations and episodes vary spatially and temporally. We would like to shelter a forum for discussing the significance of climatic and antropic impulses: High spatial variability of the paleoenvironmental processes in small areas is a major topic. This meeting of the Commission is intended to bring together new research conceptions from worldwide researchers. Web: http://www.ku-eichstaett.de/MGF/geo/inqua1.htm

March 31 - April 1, 2000. The 132nd Annual Meeting of the Kansas Academy of Science at the Hutchinson Community College in Hutchinson, Kansas (see location at http://www.cosmo.org/. As a part of the KAS2000 meeting, we will be also hosting a Paleontology Symposium, called “Half a

Billion Years of Kansas History". Early indications are that we will have a record number of papers/posters in this area. The Call for Papers, registration form and other information is on line at: http://www.oceansofkansas.com/kas2000.html. Abstracts are due March 1, 2000. Please contact Mike Everhart (mike@oceansofkansas.com) if you have any questions.

April 4-8 2000. Association of American Geographers Annual Meeting. Pittsburgh, Pennsylvania. Website: http://www.aag.org

April 17-20 the GSA Rocky Mountain meeting (Missoula, Montana) including a paleontology symposium: "Critical Geologic Intervals: Mass Extinctions and Recoveries, and Biotic Changes". This meeting will include some fantastic geology field trips with a paleontology field trip to study Lower Mississippian reef-like mounds and fossils in central Montana. All can be reached throught the Geological Society of America web site: http://www.geosociety.org

18 April 2000, Lyell Symposium and Lecture: Plankton Evolution and Climate Change, taking place during the Geoscience 2000, Conference at the University of Manchester, England. It will consider the evidence for climatic controls on plankton evolution, and to what degree plankton have influenced climate change. Specialists from both the macro-and micro- palaeontological communities will review the possible links between palaeoclimatic conditions, oceanographic change and patterns of plankton evolution, radiation and extinction. Abstracts may be viewed on the British Micropalaeontological Society (BMS) website (http://www.bmsoc.or) either via the 'latest news' or 'meetings' pages. Details of Geoscience 2000 (Second Circular and Registration) may be accessed at the Geological Society of London website (http://www.geolsoc.org.uk).

May 5 2000. The British Micropaleontological Society's Foram Group (BMS-FG) Spring Meeting will take place in the Palaeontological Demonstration Room of the Natural History Museum in London. Anyone wishing to contribute a short technical presentation (or present a poster) should submit an abstract to Norman MacLeod (see address below). The deadline for abstract submission is 1 April 2000. All BMS-FG '99 abstracts will be published on http://www.nhm.ac.uk/hosted_sites/bms/. Students and professionals are encouraged to present updates on their research, techniques, industrial applications, software, movies, etc. Additional information about the meeting and field trip will be posted to this listserver and will be available on the BMS WWW pages. Abstracts may be sent electronically to N.MacLeod@nhm.ac.uk. For paper- copy abstracts use a 12-point font and send a clean copy as these will be electronically scanned to produce the final WWW test. Please send paper-copy abstract to Dr. Norman MacLeod, Micropalaeontological Research, Department of Palaeontology, The Natural History Museum, Cromwell Road, London, SW7 5BD. All abstracts must be less than or equal to 300 words of text. Finally, please provide five keywords in addition to your abstract. These will be used for electronic searching.

May 15-19 2000. International Symposium on Archaeometry. Mexico City, Mexico. Details: Archaeometry 2000, Instituto de Investigaciones Antropologicas, UNAM, Circuito Exterior s/n, Ciudad Universitaria, Del. Coyoac n, Mexico City, D.F. 04510 Mexico. E-mail: archaeom@servidor.unam.mx

May 22-24 2000. AMQUA 16th Biennial Meeting Fayetteville, Arkansas, USA. Theme: Landscape and Biotic Response to Climate Variability: Future Impacts and Past Lessons. Details: Margaret J. Guccione, Geosciences Department, OZAR-113, University of Arkansas, Fayetteville, Arkansas, AR 72701, USA, Tel: (501) 575-3354, Fax: (501) 575-3177, E-mail: guccione@comp.uark.edu, Website: http://vishnu.glg.nau.edu/amqua/

May 29 - June 2 2000. GEOCANADA 2000 Joint meeting of Canada's major geoscience societies, including the Geological Association of Canada (GAC), the Mineralogical Association of Canada (MAC), the Canadian Society of Petroleum Geologists (CSPG), the Canadian Society of Exploration Geophysicists (CSEG), the Canadian Well Logging Society (COOLS) and others. Will feaure a CAP-sponsored symposium on Palynology and Micropaleontology in Canadian Geoscience: New Frontiers and Applications University of Calgary, Alberta. Details: Dr Grant Mossop, Geological Survey of Canada, 3303-33rd Street N.W., Calgary, Alberta, T2L 2A7, Canada. Tel: (403) 292-7049, Fax: (403) 292-5377, E-mail: mossop@gsc.nrcan.gc.ca Website: http://www.geocanada2000.com

May 29 - June 3 2000. Canadian Association of Geographers (CAG) Annual Meeting Brock University, St Catharines, Ontario. Details: Hugh Gayler (hjgayler@spartan.ac.brocku.ca)

June 1-3 2000. Paleo-Grassland Research 2000. Sponsored by the National Science Foundation Geosciences: Earth System History and PAGES Past Global Changes - IGBP. Water's Edge Resort, Long Island Sound, Westbrook, Connecticut, USA. Co-ordinators and contacts: K.R.M. Beuning, Department of Earth and Environmental Sciences, 265 Church Street, Middletown, Connecticut, 06459-6067; kbeuning@wesleyan.edu and M.J. Wooller, Tropical Paleoenvironments Research Group, Department of Geography, University of Wales Swansea, Singleton Park, Swansea, SA2 8PP; m.wooller@swansea.ac.uk

June 4-8 2000. GSA Penrose Conference: Great Cascadia Earthquake Tricentennial. Seaside, Oregon, USA. Details: John J. Clague, Earth Sciences, Simon Fraser University, Burnaby, British Columbia, V5A 1S6 Canada. Tel: (604) 291-4924; Fax: (604) 291-4198; jclague@sfu.ca

June 18-23 2000. 17th International Radiocarbon Conference Jerusalem, Israel. Details: 17th International Radiocarbon Conference, PO Box 29041, Tel Aviv 61290, Israel, E-mail: trgt@netvision.net.il Website: http://www.radiocarbon.co.il/

June 24-30 2000. 10th International Palynological Congress (IPC) Nanjing, China. Details: Secretary of the Organizing Committee for 10th International Palynological

Conference, Nanjing Institute of Geology and Palaeontology, Academia Sinica, 39 East Beijing Road, Nanjing, 210008, People's Republic of China. Electronic version of first circular, with registration form, available at: http://members.spree.com/sip/spore/index.htm Information on International Palynological Congresses is available at http://geo.arizona.edu/palynology/ifps.html

June 26-30 2000. 2000 World Conference on Natural Resource Modelling. Wageningen, The Netherlands. Theme: The Ecology of Scale, and the emphasis will be on spatially explicit Models. Details: Max Rietkerk, Wageningen University, Department of Environmental Sciences, Bornsesteeg 69, 6708 PD Wageningen, The Netherlands. Tel: 31 317 485437; Fax: 31 317 484845; Max.Rietkerk@staf.ton.wau.nl Website: http://www.slm.wau.nl/natcons/RMAconf/

June 30 - July 2 2000, EPA Workshop 2000, Stable Isotopes in Palaeontology, Forschungsinstitut und Naturmuseum Senckenberg, Frankfurt, Germany. The theme of the workshop is "Stable isotopes in palaeontology". The purpose of the workshop is to discuss the role of stable isotopes in palaeontology and to evaluate their potential and limitations for palaeoenvironmental reconstructions and solving palaeontological questions. In addition, the role of biomarkers will be addressed. Deadline for registration: April 17th. For more information contact Prof. Dr. F. Steininger, Forschungsinstitut und Naturmuseum Senckenberg, Senckenbergallee 25, 60325 Frankfurt a.M., Germany; e-mail: fsteinin@sng.uni-frankfurt.de

July 10-14 2000. 8th International Symposium on Pollination Mosonmagyaróvár, Hungary. Theme: "Pollination: integrator of crops and native plant systems" Details: Prof. P.Benedek, Zoology Department, Faculty of Agricultural Sciences, Pannon University of Agricultural Sciences, H-9201 Mosonmagyaróvár, Vár 4. Hungary Fax: 36(96)215-931, E-mail: benedek@movar.pate.hu

July 11-15 2000: Barry Webby Symposium at Orange, NSW, Australia. A Symposium celebrating the contribution of Prof. Barry Webby to Australian and international palaeontology is a major component of the Palaeontology Down-Under Conference, being held in the inland city of Orange (260 km west of Sydney). Papers and posters dealing with aspects of palaeontology which are part of the broad spectrum of Barry Webby s research interests are welcomed. These could include topics such as Ordovician biodiversity, biogeography, biostratigraphy and correlations (in fact virtually anything to do with the life and times of the Ordovician), trace fossils, stromatoporoids, corals, trilobites, early Palaeozoic algae, and Devonian stratigraphy, to name but a few. The Barry Webby Symposium is scheduled for Tuesday 11 July and Wednesday 12 July. The Palaeo Down Under Conference will also include the Sir Frederick McCoy Silurian Symposium, the AUSCOS II conodont symposium, plus meetings of IGCP 410 and 421. Full details of the Palaeontology Down-Under Conference are available in the Second Circular, which can be accessed on the Web at http://www.es.mq.edu.au/MUCEP/auscos/auscos.htm

July 12-14 2000. 5th International Ancient DNA Conference Manchester, England, U.K. Details: Terry Brown adna5@bi.umist.ac.uk

July 30 - August 3 2000. Sixth Quadrennial Conference of the International Organization of Paleobotany (IOPC IV - 2000), Qinhuangdao, Hebei, China. Details: Prof. Lujun Liu, Secretary-General of IOPC-VI Organising Committee, Nanjing, Institute of Geology and Palaentology, Academia Sinica, 39 East Beijing Road, Nanjing 210008, PR China, Tel.: +86-25-6637 208, Fax: +86-25-3357 026 E-mail: paleobot@public1.ptt.js.cn

August 6-17 2000. 31st International Geological Congress Rio de Janeiro, Brazil. Theme: "Geology and Sustainable Development: Challenges for the Third Millennium". Details: Secretariat Bureau, Av. Pasteur, 404 - Casa Brazil 2000 - Urca, Rio de Janeiro - RJ - Brazil, CEP 22.290-240. Tel: 55 21 295 5847, Fax: 55 21 295 8094, E-mail: 31igc@31igc.org, Website: http://www.31igc.org

August 20-24 2000. 8th International Symposium on Paleolimnology Queen's University, Kingston, Ontario, Canada. Details from co-organizers John P. Smol smolj@biology.queensu.ca and Brian Cumming (cummingb@biology.queensu.ca), Paleoecological Environmental Assessment and Research Lab (PEARL), Department of Biology, Queen's University, Kingston, Ontario, K7L 3N6, Canada, Details also appear at the PEARL website at http://darwin.biology.queensu.ca/~pearl/

August 22-27 2000. Association québecoise pour l'étude du Quaternaire (AQQUA) 2000 and Canadian Geomorphology Research Group (CGRG) Annual Meeting. Université du Québec à Montréal, Montréal, Québec, Canada. Participants to this joint meeting are invited to take a critical look at the Québec and Canadian contribution over the last thirty years to the knowledge of the Quaternary, as well as to evaluate the impact of new technologies on solving the problems we face today. A special session on the Holocene and general presentations will complete the program. The first circular will be sent in May 2000. Until then, contact Michel Lamothe, Département des sciences de la Terre, UQAM; lamothe.michel@uqam.ca

August 25-27 2000. 16th International Diatom Symposium. Hellas, Greece; Athens 25-27 August, Aegean Islands, 28 August - 1 September. Details: Dr. Richard M. Crawford, Curator: Friedrich Hustedt Diatom Collection, Alfred Wegener Institute for Polar and Marine Research, AM Handelshafen 12, 27570 Bremerhaven, Germany. Tel: 49 471 4831 530; Fax: 49 471 4831 425; rcrawford@awi-bremerhaven.de Website: http://www.uoa.gr/IDS2000

August 27-31 2000. Application of Micro-organisms to Environmental Problems, 2nd International Conference. Winnipeg, Manitoba, Canada. Aim: to present results of innovative multidisciplinary research in microorganisms (e.g., bacteria, foraminifera, ostracoda, radiolaria, diatoms, calcareous nannoplankton, dinoflagellates, pollen and spores) and to show their significance in solving environmental/paleoenvironmental problems in the fields of

biosciences, geosciences and agriculture. Conference secretariat: Dr. Irena Motnenko, Avalon Institute of Applied Science, Box 60013 - RPO, Tuxedo Park, 110-2025 Corydon, Winnipeg, Manitoba, R3P 2G9,Canada; Tel: (204) 489-4569, Fax: (204) 489-5782; valyan@ilos.net

28 August - 2 September 2000 The XVIIIth (New) International Congress of Zoology, ATHENS, GREECE, The New Panorama of Animal Evolution. For more info contact: http://lionfish.ims.usm.edu/~musweb/icz_xviii/icz_home.html

September 4-8 2000. International Symposium, High Mountain Lakes and Streams: Indicators of a Changing World Innsbruck, Tyrol, Austria. Details: University of Innsbruck, Institute of Zoology and Limnology, Technikerstr. 25, A-6020 Innsbruck, Austria. E-mail: hmls2000@uibk.ac.at Website: http://zoology.uibk.ac.at/congress

September 4-9 2000. Second European Symposium on Aerobiology Vienna, Austria. Website: http://betula.hno.akh-wien.ac.at/s2000/linksprog.html

September 17-20, 2000. The Society for Organic Petrology (TSOP), 17th Annual Meeting, Bloomington, Indiana, USA. Information: Maria Mastalerz, Indiana Geological Survey, 611 North Walnut Grove, Bloomington, Indiana 47405 USA, phone: 812-855-9416; fax: 812-855-2862, e-mail: mmastale@indiana.edu. Further details: http://adamite.igs.indiana.edu/tsop.

November 13-16 2000. Geological Society of America, Annual Meeting. Reno, Nevada, U.S.A. Conference theme: "Crossing Divides". Details: GSA HQ, Box 9140, 3300 Penrose Place, Boulder, Colorado 80301, U.S.A. Tel: (303) 447-2020, X133, E-mail: meetings@geosociety.org

November 13-16 2000. AASP 2000 Reno, Nevada, U.S.A., to be held in conjunction with the GSA Annual Meeting. For more info contact Tom Demchuk (thomas.d.demchuk@usa.conoco.com), Fred Rich (frich@gasou.edu), or Paul Strother (strother@bc.edu)

2001

May 27-30 2001. GAC/MAC Joint Annual Meeting St John's, Newfoundland. Details: Douglas Boyce, Department of Mines and Energy, Geological Survey Division, Regional Geology Section, P.O. Box 8700, St John's Newfoundland, A1B 4J6, Canada, Tel: (709) 729-2163, Fax: (709) 729-4270, E-mail: wdb@zeppo.geosurv.gov.nf.ca

May 29 - June 2 2001. Canadian Association of Geographers (CAG) Annual Meeting McGill University, Concordia University and Université de Montréal, Montreal, Canada. A joint event arranged by the three Montreal universities in celebration of the 50th anniversary of the founding of the CAG. Details: Tim Moore (moore@felix.geog.mcgill.ca), Patricia Thornton (thorpat@vax2.concordia.ca), André Roy (royandre@ere.umontreal.ca)

August 1-4 , 2001. 14th International Symposium on Ostracoda, Shizuoka University, Japan. Those wishing to present papers must submit an abstract on or before December 10, 2000. If you are interested in attending this meeting please reply, giving your name, address, phone/fax and e-mail, to ISO2001, Department of Biology and Geosciences, Shizuoka University, Oya 836, Shizuoka 422-8529, Japan, Fax: (81) 54 238 0491, E-mail: iso2001@se-geomail.sci.shizuoka.ac.jp

September 18-22 2001. PAGES - PEP III Conference. Le Centre de Congres, Aix-en-Provence, France. PAGES - PEPIII is concerned with studies of past climate variability in Europe and Africa. Key aims are to assess variability on different time-scales, to assess the impacts of past climate change on natural ecosystems and human society, and to provide a firm basis for the verification and testing of climate models. Details: Dr Catherine E. Stickley, Environmental Change Research Centre, University College London, 26 Bedford Way, London, WC1H 0AP, England, UK E-mail: C.stickley@ucl.ac.uk Website: http://www.geog.ucl.ac.uk/ecrc/pep3

November 5-8 2001. Geological Society of America, Annual Meeting. Boston, Massachusetts, U.S.A. Details: GSA HQ, Box 9140, 3300 Penrose Place, Boulder, Colorado 80301, U.S.A., Tel: (303) 447-2020, X133, E-mail: meetings@geosociety.org

2002

February 4 to February 8, 2002. Forams 2002: International Symposium on Foraminifera. International Symposia on Foraminifera have been held every few years since the first Benthos meeting in 1975 (Halifax). Meetings have been held at Pau (1981), Geneva (1986), Sendai (1990), Berkeley (1994), and Monterrey (1998). At Monterrey, it was decided to hold the next meeting in Perth (Australia) in 2002. The symposium is being co-ordinated by David Haig and Stefan Revets of the Department of Geology & Geophysics at the University of Western Australia (http://www.geol.uwa.edu.au/~biostrat/). We are establishing a web site. This will be in operation within a month or two. We also have a dedicated an email address (forams@geol.uwa.edu.au). Depending on your preference, we will communicate with you either via postor email. We plan to produce the First Circular for distribution later in 2000.

October 28-31 2002. Geological Society of America, Annual Meeting. Denver, Colorado, U.S.A. Details: GSA HQ, Box 9140, 3300 Penrose Place, Boulder, Colorado 80301, U.S.A. Tel: (303) 447-2020, X133, E-mail: meetings@geosociety.org

2003

November 2-5 2003. Geological Society of America, Annual Meeting. Seattle, Washington, U.S.A. Details: GSA HQ, Box 9140, 3300 Penrose Place, Boulder, Colorado 80301, U.S.A. Tel: (303) 447-2020, X133, E-mail: meetings@geosociety.org