

AMERICAN ASSOCIATION OF STRATIGRAPHIC PALYNOLOGISTS



Helianthus annuus
by Gretchen D. Jones and Ester F. Wilson, USDA-ARS, APMRU

NEWSLETTER



June 2008
Volume 41, Number 2



A.A.S.P. NEWSLETTER

Published Quarterly by the American Association of Stratigraphic Palynologists Inc.

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Volume 41, Number 2

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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)
Professor Svein B. Manum (awarded 2002)
Professor Barrie Dale (awarded 2004)
Dr. David Wall (awarded 2004)
Dr. Robin Helby (awarded 2005)
Dr. Satish K. Srivastava (awarded 2006)

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 Aural T. Cross (elected 1991)
Dr. Robert T. Clarke (awarded 2002)
Prof. Vaughn Bryant (awarded 2005)
Prof. Alfred Traverse (awarded 2005)

AASP Board of Directors Award recipient

Dr. Robert T. Clarke (awarded 1994)

Teaching medal recipients

Professor Aural T. Cross (awarded 1999)
Professor Alfred Traverse (awarded 2001)
Professor Bill Evitt (awarded 2006)

AASP Distinguished Service Award recipients

Dr. Robert T. Clarke (awarded 1978)
Dr. Norman J. Norton (awarded 1978)
Dr. Jack D. Burgess (awarded 1982)
Dr. Richard W. Hedlund (awarded 1982)
Dr. John A. Clendening (awarded 1987)
Dr. Kenneth M. Piel (awarded 1990)
Dr. Gordon D. Wood (awarded 1993)
Dr. Jan Jansonius (awarded 1995)
Dr. D. Colin McGregor (awarded 1995)
Professor John H. Wrenn (awarded 1998)
Professor Vaughn M. Bryant (awarded 1999)
Dr. Donald W. Engelhardt (awarded 2000)
Dr. David T. Pocknall (awarded 2005)
Dr. David K. Goodman (awarded 2005)
Prof. Owen K. Davis (awarded 2005)



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AASP BOOK REVIEW EDITOR

Reed Wicander, reed.wicander@cmich.edu

AASP WEBMASTER

Owen Davis, webmaster@palynology.org, website: <http://www.palynology.org>

AASP NEWSLETTER EDITOR

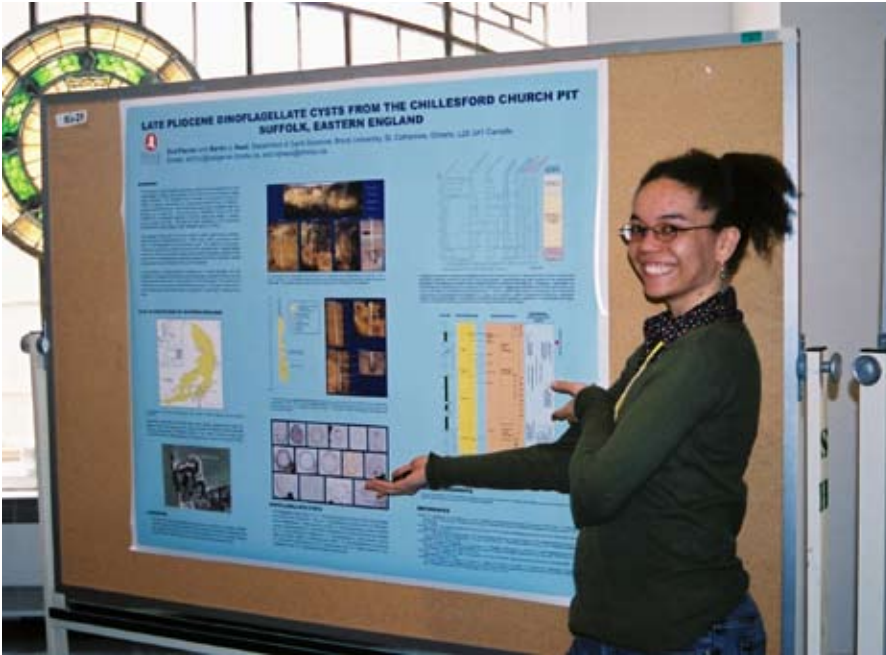
Sophie Warny, swarny@lsu.edu, Museum of Natural Science, Louisiana State University, 119 Foster Hall, Baton Rouge, 70803, Louisiana, USA.

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. Deadline for next issues of the newsletter is **August 15**. All information should be sent by email. 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.**

PRESIDENT'S PAGE

Dino 8

By Francine McCarthy



I recently attended DINO8 (AKA the *Eighth International Conference on Modern and Fossil Dinoflagellates*) in Montreal, where we unveiled our society's new name. Montreal is a great conference locale, and the organizers- Anne de Vernal and Andre Rochon, with Taoufik Radi and the rest of their team- put on a great meeting. The DINO conferences are always an interesting mix of phycologists and palynologists, allowing for fruitful interchange.... It turns out that dinoflagellates are even stranger organisms than we had previously thought, and that there may not be any true autotrophic dinoflagellates!

Our booth was a success, attracting several new members and allowing several members (particularly from outside North America) to easily renew their memberships. I was ably manned by two Brock students, Andrea Krueger and Eva Fischer, assisted by various AASP members like Ali Soliman, shown in the photo below, and numerous others, not shown.... Board member Barrie Dale wants me to convey the Society's gratitude to the booth brigade! The publications were a hit, several desk copies selling within the first few minutes, and several orders were processed for our more popular publications (Bill Evitt's book and the three volume set were particularly sought-after).

At the end of the DINO conference, long-time AASP member Rex Harland was recognized for his contributions to dinoflagellate cyst research, and Fabienne Marret and Jane Lewis announced that DINO 9 would be held in Liverpool, UK in 2011. We plan to hold the AASP meeting in Southampton that year, hopefully immediately before or after DINO9, in order to take advantage of synergies, increasingly important in light of more and more meetings and less and less funding!

Brock University students Andrea Krueger (shown on next page, left at the AASP booth with member Ali Soliman from Austria) and Eva Fischer (shown above, right in front of her research poster) bore the brunt of AASP booth duty at DINO8 in Montreal. Thanks to Andrea, Eva, and all of the AASP members who spent some time helping out at the booth!

Speaking of meetings, we will be meeting as part of the International Palynological Congress in Bonn this year (see www.paleontology.uni-bonn.de/congress08/index.htm for details). We have made several student travel awards available, so check out our website for application details. Because there are no on-site facilities available for the traditional AASP luncheon, we will be having an AASP supper/pub night at a traditional Bonn restaurant early on Thursday evening (September 4)- stop by the AASP booth to order tickets during the first few days of the congress, or contact me ahead of time if you want to reserve a ticket. Be sure to stop by the booth in any case, as this will be the formal unveiling of our new name, once we get all of the relevant Articles

amended in our constitution to legalize the name change voted on by the membership earlier this spring.

I've enjoyed my year as President, and intend to remain active as Past-President in order to follow through on the "re-branding", and will happily coordinate the AASP booth at the GSA meeting in Houston. Hope to see you all at the new booth!

Francine McCarthy

Thanks to all the AASP members who spent some time helping out at the booth!



2008 AASP STUDENT SCHOLARSHIP RECIPIENTS

Congratulations to this year's recipients of the Annual AASP Student Scholarships.
Alex Ireland and Brian Pedder will receive each a check for US\$1,500.

Alexander Ireland - awi207@Lehigh.edu - Lehigh University



Evaluating anthropogenic and climatic controls on quaking mire formation and expansion

I was born in western Pennsylvania USA where, as a child, I was fascinated by the woods that surrounded our house. After some exploration and experimentation, I finally decided to study forest ecology and earned a BS degree in biology at Clarion University of Pennsylvania. While at Clarion, I took an environmental history course taught by Dr. Charles E. Williams and became deeply interested in understanding the role of anthropogenic activities in the development of modern landscapes. I then spent the summers of 2006 and 2007 at the Harvard Forest in Petersham, Massachusetts USA learning the tools and techniques of paleoecology under the guidance of Dr. W. Wyatt Oswald and Dr. David R. Foster. Presently, I am working toward a master's degree in the Earth

and Environmental Science Department at Lehigh University under the direction of Dr. Robert K. Booth. My master's project focuses on understanding the anthropogenic and climatic drivers of late-Holocene quaking mire formation and expansion in the North American Great Lakes region. Quaking mires are valuable ecosystems that provide habitat to numerous rare and endangered plant species. The formation of many such systems apparently coincided with early European land clearance, but the exact hydrologic changes responsible for converting kettle-hole ponds into quaking mires are not well understood. I am currently conducting a detailed study of Titus Bog (Erie County, Pennsylvania USA) using multi-core pollen, testate amoebae, and macrofossil analyses, dendrochronology, and monitoring wells. This work will yield valuable insights into quaking mire development applicable to many sites throughout the region and provide long-term perspective necessary for successful conservation and management of these unique ecosystems.

Brian Pedder - bpedd@hotmail.com - University of Sheffield



Development and evolutionary patterns in Cambrian Eukaryotic primary producers and their relationship to perturbations in the carbon cycle

I began my working life as a pig farmer in Lancashire, England, but it wasn't for me. I stumbled into the heady world of theatre and spent twenty years as a props man, mostly in opera. I became interested in palaeontology whilst taking a part-time Open University course. This led to a full-time BSc in Geological Sciences at the University of Leeds and then an MSc in Micropalaeontology at University College London and the Natural History Museum, London. I came rather late to palaeontology: I will be 45 when I start my PhD at the University of Sheffield in October. The PhD will focus on Acritarchs. They underwent

major diversifications during the Late Cambrian resulting in the inception of new topological concepts: for the first time complex, dinoflagellate-like morphotypes occur, displaying bipolarities, tabulation and predetermined excystment structures. Recent $\delta^{13}\text{C}$ isotopic studies have led to the recognition of a positive carbon isotope anomaly (a shift of approximately 5‰) just above the Middle to Upper Cambrian transition: the "Steptoean positive carbon isotope excursion", ("SPICE" event). The acritarch evolutionary event broadly coincides with the SPICE event. This PhD project will test the hypothesis that the SPICE event and the phytoplankton evolutionary turnover are causally linked. It will also attempt to formulate a microfloral, biostratigraphic, zonation scheme for the Late Cambrian Laurentian System. My supervisors are Dr. Charles Wellman (Sheffield), Dr. Susanne Feist-Burkhardt (NHM, London) and Dr. Tim Potter (NHM, London). Many, many thanks to the Scholarship Committee.

ELECTION TIME

AASP Secretary-Treasurer



Dr. Thomas D. Demchuk

What else can I tell you about myself that you have not already heard over the past 10 years? Yes, it's been that long. When I accepted this position from David Pocknall back in 1998 I did not believe that I would serve for this long time. Not that I'm complaining mind you: I've cherished (almost) every minute as AASP Secretary-Treasurer and I thank my current employer (ConocoPhillips) for believing that such a "lofty" position within the Association is of benefit to them. They have been very supportive in my activities and have financed my travel to most the Board meetings I've needed to attend over this time period. I think CoP have benefited in that my attendance at many of the AASP functions has allowed me to meet many of you in person, many friendships of which have turned into research and business alliances.

The other important person who has had significant impact on this Secretary-Treasurer is my lovely wife Marta who has put up with late nights processing credit cards, cursing emanating from my study for an updated AASP file that won't save, and general lack of attention as I tend to AASP matters that are usually well past their deadlines. Without her patience and strength, I doubt I would have lasted this long.

I've also had significant opportunity to interact with several iterations of the Board of Directors, and I've witnessed on many occasions the glue that holds the AASP Inc. and the AASP Foundation together. People like Owen Davis, Vaughn Bryant Jr. and Bob Clarke are just a few names that deserve praise for the countless volunteer hours they put towards the AASP. We would be lost without their input to our day-to-day happenings, much of which is never seen by the membership but is instrumental in making everything run. Next time you meet any of these three, shake their hand and give them your hearty thanks.

Finally, I'm extremely excited to be part of the "new" AASP-The Palynological Society. As you read this biography you are well aware that we have already adopted our new name and have consulted legal counsel to amend our Articles of Incorporation and update our by-laws. All these things are great for the Association, reaching out beyond our stratigraphic roots but never losing the realization of where we have been and what has made our organization so fantastic. The road ahead will lead to many new exciting endeavors and I'm looking forward to being a part of it all for (at least) another year as your Secretary-Treasurer. See you all in Bonn.

Palynology Editor

Dr. James B. Riding

James Riding is a palynologist/stratigrapher with the British Geological Survey based in Nottingham, England. He has over 25 years experience in Mesozoic-Cenozoic palynology. In the 1980s he worked mainly on the Mesozoic palynology of onshore and offshore UK, principally the North Sea. His current

interests presently include the palynology of Europe, Australasia, Antarctica, west Africa, the Americas, Russia and the Middle East, together with palynomorph provincialism, forensic palynology, paleoenvironmental palynology, palynomorph preparation techniques and the morphology, systematics and taxonomy of dinoflagellate cysts. Jim studied geology at the University of Leicester, before pursuing palynology by



studying the famous MSc course at the University of Sheffield. He left Sheffield for BGS in 1980, where he received a PhD from the University of Sheffield in 1986 for a thesis on the Jurassic dinoflagellate cyst floras of northern and eastern England. The British Antarctic Survey have used Jim as a consultant palynologist and he has visited the Antarctic Peninsula for fieldwork tours during the Austral summers of 1989 and 2006. The most recent field season was spent on Seymour Island. He undertook a secondment to Geoscience Australia in Canberra, Australia in 1999-2000, where he worked on the taxonomy of Australian Jurassic dinoflagellate cysts with Robin Helby and Clinton Foster. The work emanating from this was published in 2001 as Memoir 24 of the Association of Australasian Palaeontologists. Jim was awarded a DSc by the University of Leicester in 2003. He served as a Director-at-Large of AASP between 1999 and 2001, was President in 2003 and became Managing Editor in 2004.

President-Elect

Dr. Joyce Lucas-Cark

Joyce Lucas-Clark received a B.A. in English, minor Geology (1969) and an M.A. in Geology at the University of California at Santa Barbara (1981). She earned a Ph.D. at Stanford University under William R. Evitt (1986). She joined AASP while working at a summer job in palynology for Mobil in 1977. Later she also held a summer position in palynology at Chevron Overseas Petroleum. During her Ph.D. program she started a consulting business, Clark Geological Services, consulting in palynology and organic petrography, and later asbestos analysis. In palynology she is mostly interested in Cretaceous and Tertiary dinoflagellates and has a fairly long list of publications in that area. Presently she teaches at the California State University at Hayward, and part time at the City College of San Francisco. She has served twice as a Director at Large for the AASP board, and has attended board meetings on a regular basis.



Directors-at-Large



Dr. James White

James White's master's research in Mayan archaeology stimulated his interest in paleoecology. His palynology career began in 1976 with doctoral research in late

Quaternary paleoecology of the Peace River district, Alberta, Canada. Since joining the Geological Survey of Canada in 1986 he has studied Cenozoic biostratigraphy of northwestern Canada and Alaska, resulting in a collaborative synthesis of Neogene palynostratigraphy and

paleoclimatology. He has also worked on Late Jurassic and Early Cretaceous biostratigraphy and has proposed techniques for graphing retrievals and modeling biostratigraphy from literature in the Palynodata database using PalynoPlot software. He has released PalynoPlot and, with the dissolution of the Palynodata consortium, is guiding the public release of the Palynodata database as G.S.C. Open File 5793. His recent focus is the biostratigraphy and paleoclimatology of the mid-Cenozoic based on the Mallik gas hydrate research borehole, Mackenzie Delta, which requires techniques for an explicit assessment of recycling.

Paleoclimatology is an inherent aspect of his research and he takes a particular interest in the current debate about anthropogenic global warming. He has presented talks on paleoclimates and climatic change to many academic and lay audiences.



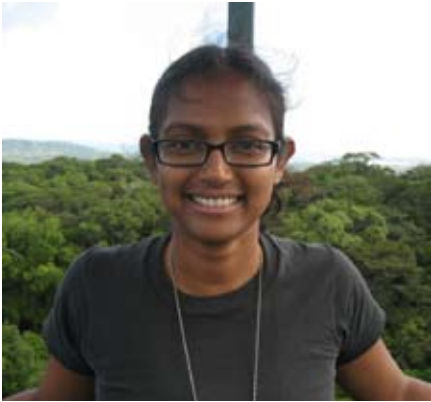
Dr. Pi Suhr Willumsen

During my undergraduate studies at Aarhus University, Denmark, I was introduced to Stratigraphy

and Palynology by Kaj Raunsgaard Pedersen. He taught an excellent palynological course which combined theoretical aspects with practical exercises behind a light microscope. I had my doubts when I had to select a topic for my Danish Msc. project. Should it be something direct relevant in connection with getting a job locally? Or should I choose the most interesting topic – PALYNOLOGY. Since my Msc. study of Danish Early Eocene

palynological assemblages I have worked as a palynologist. This profession has given me the opportunity to travel the world and be a part of interesting scientific projects. At AASP meetings I have experienced how members of this society share their science and ideas. They also show great hospitality which resulted in several days visit at David Pocknall's home after I attending my first International Palynological Conference held in Houston 1996. I also stayed in Dr. Alan Partridge home for a week as a part of my PhD research of marine palynology and palynofacies of the Cretaceous-Paleogene boundary in Southern Hemisphere, New Zealand. Since 2002 I have been Southern Hemisphere Newsletter reporter and I am honored to be asked to run for AASP Editor at Large. I look forward to do more work the Society which provides such an excellent forum for sharing the science of palynology.

Directors-at-Large (continued)



Dr. Surangi Punyasena

Surangi Punyasena is an Assistant Professor in Plant Biology at the University of Illinois.

Her research interests cross the divide between tropical ecology and Quaternary and pre-Quaternary paleoecology, and include the use of palynological and paleoclimatic data in examining the long-term ecological dynam-

ics of modern tropical forests.

Recent work includes analysis of spatial and temporal patterns of South American plant diversity, development of numerical Neotropical vegetation-climate models, and investigation of quantitative descriptors of pollen morphology. She completed her MS and PhD in Evolutionary Biology at the University of Chicago and is a graduate of Yale University. Academic honors received include a 1998 Fulbright Fellowship to Sri Lanka, a 2004 EPA STAR Fellowship, and a 2007 Smithsonian Postdoctoral Fellowship with Carlos Jaramillo at the Smithsonian Tropical Research Institute.



Dr. Stephen Louwe

Stephen Louwe was introduced to the field of palynology in 1983 by Jacques Verniers at Ghent University in Belgium. His first steps involved a biostratigraphical study with Chitinozoa of Silurian turbidites of the Brabant Massif in Belgium. After receiving a Masters degree in geology in 1984, he embarked on a PhD program under the guidance of Jan De Coninck. The research involved a taxonomical and biostratigraphical study with dinoflagellate cysts of the Upper Cretaceous of northwest Belgium. His postdoctoral work between 1990 and 2000 focussed on several topics: Quaternary sea level variations as recorded in the southern North Sea Basin, mapping of late Quater-

nary deposits, Cenozoic dinoflagellate cyst taxonomy, and Neogene dinoflagellate cyst biostratigraphy and paleoecology of the North Sea Basin and adjacent areas. His emphasis on these varied research areas results from his belief in integrated geological and paleobiological studies based on a multidisciplinary approach, in which palynology plays a key role. Stephen has published extensively on these topics in regional and international magazines. He is a member of the Geologica board - the Belgian Geological Society - and serves as editor of *Miscellanea Geologica*. He was appointed professor at Ghent University in 2001 and is responsible for the palynology, micropaleontology and paleobotany courses at undergraduate and graduate level. His current interests are integrated Neogene and Quaternary studies relying on dinocyst stratigraphy, sedimentology and geochemistry. Currently at the Paleontology Research Unit, three PhD students are working in the field of late Neogene and Quaternary dinoflagellate paleoecology and environmental reconstructions.



News from India

submitted by Pr. N.C. Mehrotra
Birbal Sahni Institute of Palaeobotany
53, University Road, Lucknow 226 007, INDIA

Symposium organized:

Keeping in view the significance and role of palynological research in the field of fossil fuel exploration including oil, gas, and coalbed methane, a National Symposium on Palynology in Fossil Fuel Exploration was hosted by Birbal Sahni Institute of Palaeobotany (BSIP), Lucknow during November 14-15, 2007, coinciding with its Founders' Day Function. The event was a part of Golden Jubilee celebration activities of Geological Society of India (Bangalore). Palynology has proven its application in all the commercially producing sedimentary basins of India and has strong potential in the Frontier basins also. The symposium aimed to provide a platform for in depth dialogue and discussion on the innovative approaches and breakthroughs in the fields of palynological, palynofacies, and organic petrological researches and their applications to address the basic and industrial problems related to hydrocarbon exploration in Indian context. Over 50 delegates, representing scientists, planners and academicians from Oil and Natural Gas Corporation (Dehradun & Vadodara), Directorate General of Hydrocarbons (New Delhi), Reliance Industries Ltd. (Navi Mumbai), Central Mining and Fuel Research Institute (Dhanbad), National Geophysical Research Institute (Hyderabad), BSIP (Lucknow), etc. attended the symposium. A Round Table discussion was held (in the end) aiming to project future directions/approaches in R&D in High Impact Palynological research, so as to find avenues to develop outsourcing hubs in institutions/research labs in the academia sector to take up exploration related palynological work from the industry.

Indian Colloquium:

Following the Symposium, the 21st Indian Colloquium on Micropalaeontology and Stratigraphy (XXI ICMS) was also organized by BSIP during November 16-17, 2007. The Colloquium was mainly focused on various aspects of Micropalaeontology and Stratigraphy from different geological ages and different geographical locations of the country. It was attended by over 200 delegates from different States of the country, representing scientists and research students from 12 Institutions, 28 Universities and Colleges; besides researchers from Geological Survey of India, Oil and Natural Gas Corporation, Directorate General of Hydrocarbons, and Reliance Industries Limited. Some fruitful discussions and interactions between the scientists from the academia and industries regarding



the applied aspects of micropalaeontology were one of the major achievements of this colloquium. Overwhelming response of young researchers revealed the earnestness of younger generation in the field of micropalaeontology. In all, 173 abstracts were contributed, out of which 62 research papers were presented orally and 85 posters were displayed, on various aspects of micropalaeontology dealing with the biotic assemblages from Precambrian to Recent.

Visiting scientist scheme:

BSIP has a visiting scientist scheme for eminent Palaeobotanists/Palynologists from abroad to do collaborative research/ impart training to Institutes' scientists. Under this scheme, Professor Robert A. Spicer of Open University, UK was here recently. During his stay for about 2 months (April-May, 2008), he trained a group of Institutes' scientists in the CLAMP (Climate Leaf Analysis Multivariate Program) programme for reconstruction of Tertiary palaeoclimate based on the study of Indian successions/ floras.

Palaeobotanical Society:

The Palaeobotanical Society of India proposes to organize a conference on "Plant life through Ages" jointly with BSIP during November 15-16, 2008. The details of the conference would soon be available on the website of the society (www.palaeobotanicalsociety.org). The society conferred the "International Medal-2007" to Professor R.A. Spicer for his excellence in palaeobotanical researches at a function organized on April 11, 2008 at BSIP.

Polar research cell:

BSIP is actively associating itself in the Polar research programme with National Centre for Antarctic and Ocean Research (NCAOR), Goa by undertaking palaeobotanical/ palynological investigations in both Arctic and Antarctic regions.

Interesting research find:

In one of the major research developments, Type I matured liptinite organic matter has recently been recorded from the late Neoproterozoic limestones in Rajasthan, western India. This find is considered to be significant from hydrocarbon exploration viewpoint as it opens up new field of research in prospective Precambrian basins in India.

EDITOR'S REPORT

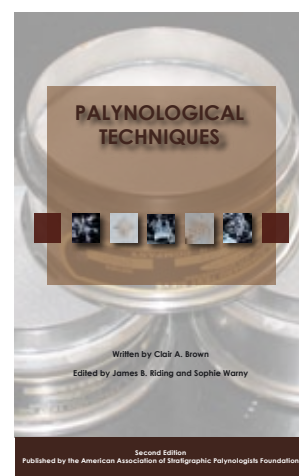
All members should by now have received their copy of volume 31 of *Palynology*. It includes 13 articles, and the proceedings of the 39th Annual Meeting in Philadelphia held during late October 2006. The latter includes the abstracts of talks presented at this meeting, the group photograph, and accounts of the two AASP awards presented in Philadelphia. My sincere thanks go to our Production Editor, Bob Clarke, for his superb production and distribution of this volume.

The 2008 issue of *Palynology*, volume 32, is in a healthy state at the time of writing; a provisional contents list is given below. I have also two manuscripts for final editing, four back with the authors for revision, and seven with referees.

The second edition of the book *Palynological Techniques*, originally privately published in 1960 by Clair A. Brown, is imminent. The scanned text has been edited by Sophie Warny and myself. The book is now in its production stage and we hope to publish it during the summer of 2008. All being well, copies should be available at the 12th IPC in Bonn in August/September 2008.

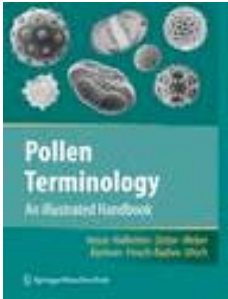
James B. Riding
Managing Editor - AASP
British Geological Survey, Kingsley Dunham Centre
Keyworth, Nottingham NG12 5GG, United Kingdom

Tel: +44 (0)115 9363447 Fax: +44 (0)115 9363200
E-mail: jbri@bgs.ac.uk or editor@palynology.org



Manuscripts for *Palynology* volume 32, to be published late 2008 as of 25th April 2008:

- 1 New species of angiosperm pollen from the Dakota Formation (Cenomanian, Upper Cretaceous) of Minnesota, U.S.A.
By Shusheng Hu, David M. Jarzen, and David L. Dilcher
- 2 A detailed protocol for the preparation and orientation of single fossil dinoflagellate cysts for transmission electron microscopy
By Gabrielle M. Kennaway, Geoffrey L. Eaton, and Susanne Feist-Burkhardt
- 3 Palynostratigraphy of the Hannibal Shale (Mississippian) of northeastern Missouri (U.S.A.), and correlation with western Europe
By Sarah Heal, and Geoff Clayton
- 4 Santonian to ?earliest Campanian (Late Cretaceous) fungi from the Milk River Formation, southern Alberta, Canada
By Ramakant M. Kalgutkar, and Dennis R. Braman
- 5 A history and overview of the American Association of Stratigraphic Palynologists (AASP)
By Thomas D. Demchuk, and James B. Riding



Pollen Terminology

An illustrated Handbook

**Hesse, M., Halbritter, H., Zetter, R., Weber, M., Buchner, R.,
Frosch-Radivo, A., Ulrich, S.**

2008, Approx. 500 p. 300 illus. in color., Hardcover

ISBN: 978-3-211-79893-5

Not yet published. Available: October 4, 2008

\$ 349

About this book

This handbook is a fully illustrated compendium of glossary terms and basic principles in palynology. It is an indispensable tool for all palynologists.

The General Chapter on pollen morphology, anatomy, pollen development etc. deals with essential characters in palynology. If appropriate, ambiguous or poorly recognized characters are commented, based on the present knowledge in palynology.

The Terminology Part comprises more than 300 widely used terms illustrated with over 1.000 high quality light and/or electron microscopic pictures. This part provides a detailed survey of the manifold ornamentation and structure of pollen walls, and gives insight in their stunning aesthetic beauty. Terms are grouped by character context to allow an easier and faster comparison of similar features. In general, each term is illustrated on a separate page, including definition, plant species, and, where necessary, a comprehensive explanatory comment. The use of the terms in LM, SEM or TEM and their assignment to anatomical, morphological and/or functional pollen features is indicated by icons and colour coding, respectively.

The Textual Glossary is arranged alphabetically for a quick search on terms. Important literature is mentioned and, where appropriate, cross references to the General Chapter are included for better comprehension.

Written for:

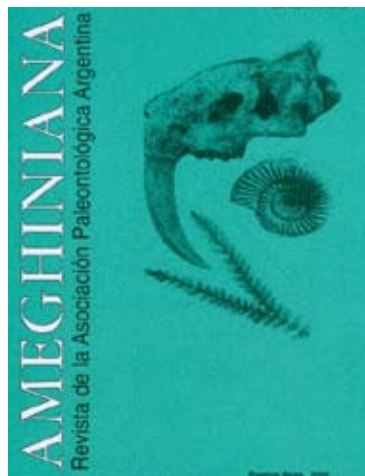
Biologists training to become biodiversity researchers, palynologists, systematists, doctors training to become allergologic specialists

Keywords:

- Aperture
- Botany
- Climate Change
- Glossary terms
- Ornamentation
- Palaeobotany
- Paleontology
- Palynology
- Pollen



News from Argentina by Mercedes di Pasquo



New Volume discusses topic such as:

Upper PROTEROZOIC and Lower PALEOZOIC

Upper PALEOZOIC and PALEOXILOLOGY

MESOZOIC Flora

TETRAPODS JURASSIC-CRETACEOUS

EVOLUCIÓN and DIVERSIFICACION OF THE ANGIOSPERMS.

CENOZOIC FISHS, AMPHIBIOUS and INVERTEBRATES

CENOZOIC CONTINENTALS MAMMALS

UPPER PROTEROZOIC and LOWER PALEOZOIC

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Barreda, V.D., Anzótegui, L.A., Prieto, A.R., Aceñolaza, P.G., Bianchi, M.M. Borromei, A.M., Brea, M., Caccavari, M., Cuadrado, G.A., Garralla, S., Grill, S., Guerslein, G.R., Lutz, A.I., Mancini, M.V., Mautino, L.R., Ottone, E.G., Quattrocchio, M.E., Romero, E.J., Zamaloa M. del C. y Zucol, A. 2007. Diversificación y cambios de las angiospermas durante el Neógeno en Argentina. En: S. Archangelsky, T. Sánchez y E.P. Tonni (eds.), Asociación Paleontológica Argentina , Publicación Especial 11, Ameghiniana 50° aniversario, pp. 173-191. Buenos Aires.

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Del Rio, C.J., Camacho, H.H., Aguirre, M., Caramés, A., Cusmisnyk, G., De Francesco, C., Farinati, E., Gordillo, S., Laprida, C., Miquel, S. y Morton, S. 2007. Invertebrados del Cenozoico de la Argentina. En: S. Archangelsky, T. Sánchez y E.P. Tonni (eds.), Asociación Paleontológica Argentina , Publicación Especial 11, Ameghiniana 50° aniversario, pp. 221-235. Buenos Aires.

CENOZOIC MAMALS

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**A book review submitted by D.M. Jarzen
Gainesville, Florida
May 21, 2008**

When I first took a course in palynology at Kent State University, my professor, Dr. Alan Graham, demonstrated the use of pollen studies in the solving of crimes through a story about some criminal being placed at the scene of the crime by the identification of pollen adhering to his boots. That was my introduction to Forensic Palynology, back in 1966. Today, in part due to advances in pollen identification, the use of scanning electron microscopy, and the work of several palynologists stressing the utility of palynology in criminal investigations, forensic palynology has come of age. Several books and symposium volumes have been published over the past few years providing the background needed to further our science in the field of forensics (see for example, Coyle, 2005, and Mildenhall, et al., 2006). Dallas Mildenhall, Vaughn Bryant, Owen Davis and others have been instrumental in bringing palynology to the attention of lawyers, doctors, law enforcement agencies, and others who may benefit from the use of pollen and spores as forensic tools.

Career Opportunities in Forensic Science is one of 32 titles in a series of popular career exploration and job prospect books written by the husband and wife team of Susan and Richard McDavid. The books are intended for readers of grades 9 to adulthood, seeking information on job titles, salary ranges, present and future prospects for a particular job and advancement opportunities in each of the fields covered by each of the books in the series. Some titles in the series include the automobile industry, the military, computers and cyberspace, health care, sports, travel, law enforcement, and writing.

This book on *Forensic Science* covers 82 separate fields of work that are directly or in part associated with the field of forensics. Careers including crime scene and criminal investigation personnel (usually the first to arrive at the crime scene), lab personnel, death investigation personnel (coroner, medical examiner etc.), forensic experts in art, medicine, natural sciences, mathematics & computing, engineering, behavioral sciences, business (accountants, fraud examiner etc.), language and speech, jurisprudence experts, science educators, reporters and researchers.

Each career choice is outlined in three or four pages and includes a general job description, the specific duties of the job, prerequisites and training needed for the position, the current salary range, employment prospects and advancement prospects. This career profile is accompanied by a "career ladder," showing the steps or positions one may expect to obtain through a specific career.

Forensic Palynologist, Forensic Geologist, Forensic Entomologist and Forensic Archaeologist each receive their fair credit in separate chapters, under the section heading *Forensic Experts in the Natural Sciences*. The chapter on palynology stresses that our science is really a blend of geology and botany, and the student wishing to enter the field of forensics might study these disciplines with the intent of specializing at some point. The road from palynologist to forensic palynologist may take

time, with current employment prospects noted as poor. This latter point of employment being poor is true for many of the fields discussed throughout the book. It seems that the employment prospects are, however, good in the health and medicine disciplines, as well as in area of jurisprudence.

Forensic Archaeologists likewise employ multiple disciplines in their work, including chemistry, anthropology, zoology, botany, geology and engineering. Their work often encompasses specific procedures or protocol in uncovering evidence at crime scenes or disaster scenes (including mass burials). As for Forensic Palynologists the job prospects for Forensic Archaeologist are currently poor, with advancement prospects being fair.

Perhaps the real value of this book lies in the appendices. These include:

- I. **Education and Training Resources on the Internet.** A collection of web sites where readers may find more information regarding a specific career choice. The AASP website was not provided as a source of information. Perhaps we should consider adding a page of career choices on our website home page, and include forensics as one selection, with a description and job responsibilities.
- II **Professional Certification Programs.** A listing of professional organizations, mostly American but with some international organizations provided, that will certify specific career positions, thus enhancing employability.
- III **Professional Unions and Associations.** Here are the websites and addresses, with phone and fax numbers of many professional societies where additional information may be found. The AASP website (www.palynology.org) is listed in this section.
- IV **Resources on the World Wide Web.** Web addresses from around the world where general information on the various aspects of forensics may be found. Three sites are listed under Forensic Palynologist, including Owen Davis' site at www.geo.arizona.edu/palynology/index.html

A decent glossary and bibliography complete the contents of the book. This book, and others in the series, are highly recommended for university career centers and high school libraries and counselors helping students in making career choices. At only \$49.00 per title most libraries will be able to select from the 32 titles to add to their shelves. The entire set is available from the publisher for \$1,479.95.

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Career Opportunities in Forensic Science.
Susan Echaore-McDavid and Richard A. McDavid. Ferguson
(an imprint of InfoBase Publishing), 132 West 31st. Street, New York, NY 10001. 318 pp.,
glossary, index. ISBN -10: 0-8160-6156-4 (Hardcover), \$49.50 US, 2008.



An Atlas of
Pollen-Vegetation-Climatic
Relationships for the United States and Canada.

AASP Foundation Special Contribution Series #43

Reviewed by Vaughn M. Bryant
Texas A&M University

A few years ago I attended a GSA Forensic Symposium being presented as part of the Geological Society of America's annual meeting. Among the presenters were two key forensic trace element scientists from the FBI (Federal Bureau of Investigation) Forensic Laboratories in Quantico, Virginia. Their symposium presentations focused on the importance of recovering trace element types of evidence from crime scenes and the importance of maintaining those samples in a sterile, contamination-free environment. They went into great detail illustrating how tiny traces of soils and various types of other trace element materials, such as single strands of fibers, hairs, fragments of insects cigarette ashes, powders of various types, gun residues, and the chemical traces left behind by exploded bombs were examples of critical trace elements that are collected and used in solving a myriad of crimes. Their talks were captivating, informative, and well-illustrated with PowerPoint slides.

After the symposium, I approached both FBI agents and introduced myself. I asked them why they had failed to include pollen in their discussions or in their list of important trace elements. Their response was, "We don't look for pollen because it wouldn't tell us anything if we found it!" To someone like me, who is a forensic palynologist, those were fighting words! After all, forensic palynology *does work*; I have been doing it since 1975! I pointed out to them that during the 1970s and 1980s I examined hundreds of forensic samples for the United States Treasury Department (Office of the Inspector General), U.S. Customs, and the US Department of Agriculture. I pointed out how pollen evidence had proven useful in determining the origin of some imported goods and how much of the forensic work focused on verifying honey samples purchased as part of the U.S. Farm Subsidy Program. As they should know, the USDA purchased honey is required to come from domestic sources. I pointed out that most of the honey had been produced from US locations but that about 6% of the honey samples I tested were produced in non-US locations. Finally, I mentioned that since the terrorist attacks of the World Trade Center in New York in 2001, I have been "extremely busy" doing top secret forensic work for another US agency. I also noted that I regularly do forensic work for the US National Institute of Justice and the US Department of Justice.

I could have continued citing examples of my past pollen forensic work with local and state police agencies, but I guessed by that time they were duly convinced of their “error in judgment.” I was wrong because they responded by saying that maybe I had been successful doing that type of research but that they personally, and the FBI in general, were not interested in pollen studies because there was, “*no national pollen database that they could consult or use for comparisons with samples they might collect!*” Unfortunately, that ended our conversation because at that time they were right; there was no published national pollen database. But all of that changed in December of 2006, when the AASP Foundation published “Contribution #43,” *An Atlas of Pollen–Vegetation–Climate Relationships for the United States and Canada*. As soon as possible, I sent a copy to the new atlas to those individuals working at the FBI Forensic Laboratory in Quantico, Virginia. After receiving no reply, I sent a follow up letter, which also received no reply. Thus, I must assume that in spite of the published data in Contribution # 43, the FBI is still not interested in the potential uses or applications of forensic palynology.

To any forensic palynologist wanting to work in North America, the new AASP Contribution # 43 is the “Rosetta Stone!” Before the publication of these pollen records, which report on the pollen types and percentages found in over 4,500 surface samples collected from virtually all parts of North America north of Mexico, one had to rely on hundreds of individual journal articles, reports, unpublished manuscripts, book chapters, and the personal memories of various palynologists in order to assemble the types of pollen information now available in this single source. Since the publication of AASP Contribution Series # 43, my forensic pollen work in North America has become much easier and I have suggested to others that this publication should serve as the example for what types of pollen data are much needed from other regions of the world.

Perhaps the oddest part about all this is that the palynologists who assembled this publica-

tion “never intended” it to be such an important contribution to the field of forensic palynology! Instead, Contribution #43 was conceived from the very beginning as a vast summary of surface pollen distributional information needed to allow for the accurate reconstruction and analyses between the relationships of modern pollen percentages and the environments they represent. For example, the authors note that for each pollen type they discuss they wanted to present five essential types of information, and they wanted to do this visually over two adjacent pages because it provides visualizations that are often lost when presenting only statistical data or tables of pollen counts. These five essential aspects include: 1) plotted percentages of abundance for each pollen type across North America, 2) plots of pollen percentages against various single climatic or bioclimatic variables, 3) plots of pollen percentages against multiple climatic variables, 4) ternary diagrams that show pollen abundance relative to the percentages of aerial cover, and 5) box plots to show the distribution of pollen percentages within vegetational formations.

This book is really a giant atlas based upon the compilation of pollen samples from a vast array of sources including surface samples analyzed from transect surveys, environmental studies, archaeological sites, and from moss polsters. There are 4,549 individual surface samples reported and there is also a web-based Excel file containing all of the book’s pollen data, which anyone can download. That file is maintained by the authors and is continuously updated with new pollen information from additional surface samples. The best feature about such a file, especially for pollen forensic use, is that once downloaded the file can be sorted for any category. This means that if a criminal suspect were caught but denied that he had ever left Houston, TX, but his clothing contained high percentages of both sagebrush and ash pollen, the forensic palynologist could find the locations in North America where high percentages of *Artemisia* combined with complementary high percentages of *Fraxinus*, could be found. That in-

formation might prove essential in determining the guilt of the suspect. Previously, it might have taken days or weeks of searching through countless pollen articles and vegetational atlases to obtain this type of information that is now available in minutes!

Not all pollen types found in North America could be reported in all the surface samples mentioned in this book, thus the authors selected what they considered to be the most important 134 pollen taxa found in North America. Also included for every one of the 4,549 pollen sampling locations is other important data covering details about the climate, the GIS coordinates, local vegetational attributes, and the original source where the pollen data was first published. For 106 taxa of the 134 major and minor pollen types represented, there are two separate pages full of charts and maps showing the sampling locations, vegetation types, pollen densities, and key attributes about the climate such as the moisture index, annual precipitation, and annual temperatures. Ten of the pollen types are considered important enough to have separate entry pages for their locations and pollen representations east and west of the Mississippi River. For some of the pollen taxa (i.e., *Acer*, *Alnus*, *Fraxinus*, *Juglans*, and others) there are three or more entries set aside in the book for each genus, first one entry to illustrate all of the pollen in that taxon and then separate pages and maps for several of the individual species within the genus.

There is so much more that could be mentioned about this new AASP Contribution Series book, which I lack the space or time to discuss. There are so many different uses that one can make of the pollen information and other data that are compiled in the pages of this book. As one of the Trustees of the AASP Foundation, I am responsible for sending out copies of this book. Since it was first printed there has been an active group of people who have contacted me by email, telephone, FAX, and through the AASP web site wanting copies of this book. At first many of the requests came from AASP members and fellow palynologists. However, within months after it was published I began getting requests from non-palynologists in

other more diverse disciplines including those in geography, meteorology, climatology, archaeology, forestry, geology, and people working in the field of air quality control. Because this new contribution focuses on the pollen records of North America north of Mexico I believed, incorrectly, that sales would be confined mostly to people working in North America. However, during most months of the past year the requests for this book from people living and working outside North America have exceeded those from North American locations. This book, combined with the AASP Foundation's newest printing of the *Guide to Pollen and Spores* (second edition), have become our recent "best sellers."

Although currently we still have an ample supply of Contribution Series 43, there continues to be a steady flow of new orders and sales. If you want a copy of this exceptional book, it might be a good time to order one, especially with the weak U.S. dollar making the book less expensive today for those outside the U.S. than when it was originally printed!

Authors:

John W. Williams, Bryan Shuman, Patrick J. Bartlein, Johanne Whitmore, Konrad Gajewski, Michael Sawada, Thomas Minckley, Sarah Shafer, Andre E. Viau, Thompson Webb III, Patricia Anderson, Linda Brubaker, Cathy Whitlock, and Owen K. Davis.

AASP Foundation, Dallas 293 pages (11 text-figures, 2 in color; 264 pages of vegetational maps and pollen plots) 8 1/2 x 11 format, "Hidden Wire-O" binding (ISSN 0160-8843). 2006. \$48.00 US



ASSISTANT/ASSOCIATE/FULL PROFESSOR

(Tenure-track position)

Atlantic Studies Multidisciplinary Hiring Initiative

Department of Geography and Anthropology

The Atlantic Studies Multidisciplinary Hiring Initiative (MHI) at Louisiana State University is seeking a paleoclimatologist interested in joining a multidisciplinary working group of faculty specialists in the humanities and social and natural sciences in reconstructing climate variability over the last 500-1000 years in the Gulf-Caribbean-South Atlantic-West African area. This is part of a larger project to re-examine human experiences in the specified area as a product of the interactions of environments, histories and cultures. A detailed discussion of the Atlantic Studies MHI and this project can be found at www.mhi.lsu.edu/atlanticstudies.

The tenure-track faculty position is 50% teaching (2 courses per semester), 50% research. Departmental/disciplinary home, rank, salary and tenure status will depend on the individual's qualifications. Joint departmental appointments will be arranged if desired and feasible. A start-up package is negotiable.

Required Qualifications: Doctorate degree. Additional Qualifications Desired: Record of collaborative research and publication. An offer of employment is contingent on a satisfactory pre-employment background check. Application deadline is July 15, 2008 or until the candidate is selected. Submit applications, which may be e-mailed, including a current curriculum vita (including e-mail address), a statement of intent (i.e., how the applicant envisions working with and furthering the goals of the initiative), a separate list of publications deemed relevant to the position, and a list of five potential referees to:

Dr. Kent Mathewson

Department of Geography & Anthropology

Louisiana State University

Ref: Log #1141

Baton Rouge, LA 70803

E-mail: kentm@lsu.edu

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FREE BOOK

Book Available: *Dinoflagellates*, edited by David L. Spector, 1984, 545 pages, Academic Press. I have an extra copy of this book, and am looking for a good home prior to donating it to the Salvation Army. Send mailing address and three reasons why you really must have this classic volume to Dave Goodman, flyfish@alaska.net or 907-346-4090.

Recent AASP-Member Publications

compiled by Sarah de la Rue

Note the new address: University of Idaho, Dept. of Geological Sciences
Moscow, ID 83844 (sarah.delarue@vandals.uidaho.edu)

Please send me your "in press" and published citations! Let others know what you've been working on!

Note: Manuscripts noted as 'in press' (below) may now be published!

AASP members' names are in bold. If I have overlooked any of our members, my sincere apology is given.

If there are any topics that you would like to see publications for, please email me! There are numerous related topics that fringe on the importance of palynological research.

- Anderson, R.S., Jass, R.B., Toney, J.L., Allen, C.D., Cisneros-Dozal, L.M., Hess, M., Heikoop, J., and Fessenden, J., 2008. Development of the mixed conifer forest in northern New Mexico and its relationship to Holocene environmental change. *Quaternary Research* 69 (2): 263-275.
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May 31, 2006

North Pole's ancient past holds clues about future global warming. *Purdue University News*:

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BY-LAW AMENDMENTS

Proposed By-law Amendments pertaining to the Amendment of the AASP Articles of Incorporation
From the desk of the Secretary-Treasurer
May 24, 2008

The following by-law amendments are here presented to the membership. Given is the original wording as current in the by-laws, and the proposed amendment. These changes are needed as a result of the impending amendment/update to the AASP Articles of Incorporation resulting from our name change. An e-mail ballot will be sent out to all members-in-good-standing in 60 days.

(1) Wording at Present:

Principal Office

1.01 *The principal office of the corporation in the State of Texas shall be located in the City of Arlington, County of Tarrant. The corporation may have such other offices, either within or without the State of Texas, as the Board of Directors may determine or as the affairs of the corporation may require from time to time.*

Amended Wording:

Principal Office

1.01 The principal office of the corporation in the State of Texas shall be located in the City of Houston, County of Harris. The corporation may have such other offices, either within or without the State of Texas, as the Board of Directors may determine or as the affairs of the corporation may require from time to time.

(2) Wording at Present:

Registered Office and Registered Agent

1.02 *The corporation shall have and continuously maintain in the State of Texas a registered office, and registered agent whose office is identical with such registered office, as required by the Texas Non-Profit Corporation Act. The registered office may be, but need not be, identical with the principal office of the corporation in the State of Texas, and the address of the registered office may be changed from time to time by the Board of Directors.*

Amended Wording:

Registered Office and Registered Agent

1.02 The corporation shall have and continuously maintain in the State of Texas a registered office, and registered agent whose office is identical with such registered office, as required by the Texas Business Organization Code . The registered office may be, but need not be, identical with the principal office of the corporation in the State of Texas, and the address of the registered office may be changed from time to time by the Board of Directors.

(3) Wording at Present:

WAIVER OF NOTICE

12.01 *Whenever any notice is required to be given under the provisions of the Texas Non-Profit Corporation Act or under the provisions of the articles of incorporation or the by-laws of the corporation, a waiver thereof in writing signed by the person or persons entitled to such notice, whether before or after the time stated therein, shall be deemed equivalent to the giving of such notice.*

Amended Wording

WAIVER OF NOTICE

12.01 Whenever any notice is required to be given under the provisions of the Texas Business Organization Code or under the provisions of the articles of incorporation or the by-laws of the corporation, a waiver thereof in writing signed by the person or persons entitled to such notice, whether before or after the time stated therein, shall be deemed equivalent to the giving of such notice.

(4) Wording at Present:

AMENDMENTS TO THE BY-LAWS

The principal office of the corporation in the State of Texas, as of the date of revision of these by-laws, shall be located in the City of Arlington, County of Tarrant.

The registered office of the corporation in the State of Texas, and the registered agent whose office is identical with such registered office, as required by the Texas Non-Profit Corporation Act, is, on the date of revision of these by-laws, identical with the principal office of the corporation in the State of Texas. The street address of the registered office of the corporation is 1708 Autumn Lane, Arlington, Texas 76012 and the name of the registered agent is Robert T. Clarke.

Amended Wording:

AMENDMENTS TO THE BY-LAWS

The principal office of the corporation in the State of Texas, as of the date of revision of these by-laws, shall be located in the City of Houston, County of Harris.

The registered office of the corporation in the State of Texas, and the registered agent whose office is identical with such registered office, as required by the Texas Business Organization Code, is, on the date of revision of these by-laws, identical with the principal office of the corporation in the State of Texas. The street address of the registered office of the corporation is 3807 Shadow Knoll Court, Houston, TX 77082 and the name of the registered agent is Thomas D. Demchuk.

Proposed By-law Amendments pertaining to the addition of the Newsletter Editor as member of the AASP Board of Directors

From the desk of the Secretary-Treasurer

May 26, 2008

The following by-law amendments are here presented to the membership. There is some new wording and additions to the current AASP by-laws. The decision was made at the last Board of Directors meeting to add the Newsletter Editor as a permanent member of the AASP Board of Directors. An e-mail ballot will be sent out to all members-in-good-standing in 60 days.

(1) Wording at Present:

Numbers and Tenure

4.02 *The number of Directors shall be ten. Each Director shall hold office until his or her successor shall have been elected and until the next annual meeting of the members. The newly constituted Board of Directors shall take office at the end of the annual business meeting provided for in Article 3.01.*

Amended Wording:

Numbers and Tenure

4.02 The number of Directors shall be eleven. Each Director shall hold office until his or her successor shall have been elected and until the next annual meeting of the members. The newly constituted Board of Directors shall take office at the end of the annual business meeting provided for in Article 3.01.

(2) Wording at Present

Officers

5.01 *The officers of the corporation shall be a President, President-Elect, Past-President, Secretary-Treasurer, Managing Editor, Webmaster, and four (4) Directors-at-Large, all ten (10) of whom shall be members of and constitute the Board of Directors.*

Amended Wording:

Officers

5.01 The officers of the corporation shall be a President, President-Elect, Past-President, Secretary-Treasurer, Managing Editor, Webmaster, Newsletter Editor, and four (4) Directors-at-Large, all eleven (11) of whom shall be members of and constitute the Board of Directors.

New Article:

Newsletter Editor

5.10 The Newsletter Editor shall be responsible for publishing the AASP Newsletter in a timely manner, and shall routinely distribute news and technical information of interest to the membership. He/She shall solicit pertinent material for publication in the Newsletter, and provide services as the Board of Directors may from time to time direct.

Current Article 5.10 "Directors at Large" will become the new Article 5.11



DINO 8 MEETING IN MONTREAL

May 4 to May 10, 2008.

The Eighth International Conference on Modern and Fossil Dinoflagellates “DINO8”, organized by Anne de Vernal (GEOTOP-UQAM) and André Rochon (GEOTOP-ISMER) at the faculty of science of UQAM, attracted 120 scientists from 27 countries: Germany, Saudi Arabia, Argentina, Australia, Austria, Belgium, Brazil, Canada, China, Colombia, Korea, Ivory Coast, Denmark, Spain, United States of America, Finland, France, Italy, Japan, Morocco, Mexico, Norway, The Nederland, The Philippines, Portugal, United Kingdom and Sweden.

This multidisciplinary conference takes place every 3 to 4 years and brings together biologists, chemists, petroleum geologists, paleontologists, oceanographers and paleoclimatologists whose work is related to dinoflagellates or their fossilisable cysts (dinocysts). Dinoflagellates are diversified unicellular eukaryotic organisms that are developing in almost all aquatic areas. Since the last decades, dinoflagellates have undergone an increasing attention due to their role in generating toxic blooms (red tides). Moreover, dinocysts are often very abundant in marine sediments and constitute useful proxy for the reconstruction of oceanic evolution.

The scientific program of DINO8 was established by a committee formed by Susan Carty (Heidelberg College, Ohio, USA), Marianne Ellegaard (University of Copenhagen, Denmark), Martin J. Head (Brock University, Canada), Alexandra Kraberg and Jens Matthiessen (Alfred Wegener Institute for Polar and Marine Research, Germany), Jane Lewis (University of Westminster, UK), Fabienne Marret (University of Liverpool, UK), Edwige Masure (Université Pierre et Marie Curie, France), Marina Montresor (Stazione zoologica di Napoli, Italy), Vera Pospelova (University of Victoria, Canada), Taoufik Radi (GEOTOP-UQAM, Canada), Suzanne Roy, (ISMER-UQAR, Canada) and Karin Zonneveld (University of Bremen, Germany).

12 keynote talks, 45 oral presentations and 56 posters were presented within 9 sessions:

The first session focussed on polar dinoflagellates and more specifically to dinocysts as paleoenvironmental tracers in the Arctic Ocean. Several Arctic research programs were presented, in particular, the IODP “Arctic Coring Expedition” (ACEX) project, which has for objective the reconstruction of the Lomonosov ridge paleoceanographical history during the Palaeogene and the Neogene. Additionally, several presentations illustrated qualitative or quantitative reconstructions based on dinocyst assemblages of Holocene sea surface temperature, salinity and sea ice cover. Finally, a new species “*Protoperidinium canadiense*” from the Canadian Arctic was described.

The second session dealt with harmful dinoflagellates and their blooms. Several presentations stated the toxicity of species such as *Alexandrium fundyense*, *Alexandrium ostenfeldii* and *Karenia brevis* notably in the Bay of Maine, the Bay of Fundy and the Florida and West Mexican coastal waters. Recent studies also demonstrated that micro-turbulences contribute to a modulation of toxic bloom dynamics by favouring encystments. The session ended with a public lecture “shady waters” given by André Rochon on the toxic tides and their economic and environmental impacts.

The third session explored the subject of living dinoflagellates, their life cycle and the relationship cyst-theca. Presentations showed that the biological cycle of dinoflagellates is extremely complex, including various morphological and physiological stages as well as different forms of encystment, which involve both sexual and asexual reproductions. Interestingly, it was demonstrated that in anoxic sediments, some dinoflagellate cysts remain viable over periods as long as 100 years. The relation cyst-theca of some species such as *Islandinium minutum* and *Polykrikos kofoidii* was also discussed.

The fourth session highlighted molecular, morphological and phylogenetic approaches to dinoflagellate ecology and paleoecology. By means of oral and poster presentations, some data on the effect of dimethylsulphide (produced by various dinoflagellates) upon climate were presented. Data on the molecular composition of dinocyst organic wall (i.e. dinosporine) and the use of macromolecules produced by dinoflagellates, such as dinosterols, as biomarkers in fossil records have been also presented.

The fifth session, on the biostratigraphy and the paleoecology of fossil dinoflagellates, highlighted the contribution of dinocysts to the Neogene biostratigraphy of the North Atlantic Ocean, the Arctic Ocean, the Nordic seas, the Porcupine basin (Southwest of Ireland), the Bahamas Islands and the basin of Vienna (Austria). The biostratigraphy of the Cretaceous was discussed using series from Western Greenland margins and Australia’s southern margins, notably in reference to the interest for oil exploration.

The sixth session concerned the dinoflagellates of continental water bodies. The topics of communications and discussions included the taxonomy, the genetic diversity, the taphonomy and the paleolimnological applications.

The seventh session dealt with the feeding mechanisms and behaviours of dinoflagellates, which seem much more variable than previously expected. Indeed, the mixotrophy occurs much more frequently than anticipated.

Dealing with the carbon budget, the eighth session was dedicated to dinoflagellates as tracers of primary productivity, upwelling intensity and eutrophication of coastal waters. Examples of upwelling and productivity changes during the Holocene were presented from studies performed in the Iberian sea, along the Californian margin as well as in the Gulf of St.-Lawrence, where the decrease of oxygen concentrations in the deep waters over the last decades seems more related to water masses warming rather than eutrophication.

Finally, the ninth session presented several examples on the use of dinocysts as paleoceanographical proxies. Some of these discussed recent variations in fjords; others showed changes during the Plio-Pleistocene and the Holocene in the Nordic seas, the Pacific Ocean, the Mediterranean Sea and the Black Sea. The use of a new proxy for salinity based on the processes length of *Lingulodinium machaerophorum* was also discussed. The quantitative reconstructions of sea surface conditions using dinocyst assemblages and applying the method of the modern analogues suggest that the use of a hemispherical reference database rather than regional databases should provide better reconstructions.

In addition to the aforementioned recent scientific advances, five methodological workshops were organized.

The first workshop, entitled “Quantitative treatments and paleoceanographical reconstructions from dinocyst assemblages”, was attended by 44 participants. During this workshop, given by Anne de Vernal, Taoufik Radi and Fabienne Marret, participants investigated various methodological approaches to transfer functions based on dinocyst assemblages. The objective of the workshop was to introduce the software packages and reference dinocyst databases through training exercises using the software “R” (<http://www.r-project.org>). The modern analogue techniques, revised analogue technique and the artificial neural network method were explored by the participants. The exercises also allowed the participants to assess of the different methods for computing errors and relevancy of data transformations.

The second workshop, entitled “Treatment of sediments for the analysis of the calcareous dinoflagellates” was given by Marion Kohn and Sonja Heinrich. Twenty participants attended a brief training on sediment laboratory preparation techniques for the observation of selected dinoflagellate calcareous shells, which can be used for isotopic measurements.

The third workshop “Taxonomy of Quaternary and Neogene dinocysts” was organized by Martin Head and Jane Lewis. Fifty-six participants met to observe “tricky” dinocyst specimens under the microscope. The workshop allowed “taxonomic” discussions concerning several taxa including the species belonging to the genera *Bitec-tatodinium*, *Echinidinium*, *Impagidinium*, *Islandinium*, *Polykrikos*, *Spiniferites* and *Stelladinium*.

Dinoflagellate databases on the Web were the subject of the fourth workshop. Alexandra Kraberg presented the available databases to 25 participants (e.g. <http://www.planktonnet.eu/en/home/>; <http://www.dinophyta.org/>). These databases include illustrations and descriptions of dinoflagellate thecas and cysts.

The fifth and final workshop, dealing with the culture of dinoflagellates, was organized by André Rochon and Jane Lewis. The various stages for a “fruitful” culture of dinoflagellates were explained by the organizers, which led to a discussion among the 44 participants on the various culture methods used in different laboratories.

The “DINO8” conference ended with the distribution of awards and bursaries for students. These awards were provided by the Faculty of Science of UQAM, GEOTOP, ISMER, the University of Victoria, the American Association for Stratigraphic Palynologists (AASP) and the Natural Science and Engineering Research Council of Canada (NSERC). Finally, the DINO8 medal was awarded to Rex Harland for his contribution to the study of Quaternary dinocysts.

At the end of the conference, Fabienne Marret from the University of Liverpool and Jane Lewis from the University of Westminster in London proposed to host the next international conference on modern and fossil dinoflagellates. The meeting “DINO9” will be held in Liverpool in 2011!

Dr. JAMES EDWARD CANRIGHT (1920-2008)

By David M. Jarzen, with contributions from
Michael Zavada and Michael Farabee

James Edward Canright passed away on April 9, 2008 at the Hospice of the Valley, Tempe, Arizona. At 88 years of age, Jim suffered from several ailments that eventually became too much for him to manage. Many AASP members, and other professionals will remember Jim as a direct, no nonsense-type of person, who spoke his thoughts clearly and with conviction. He was, it seemed, a part of the palynological scene forever. I can still recall my early days in palynology, hearing of Jim's impact on our science.

Jim Canright was born in Delaware, Ohio on March 1, 1920. He earned an A.B. degree from Miami University of Ohio in 1942. Working with I.W. Bailey, Jim attended Harvard University and completed his MA biology. Jim's work on primitive angiosperms in botany textbooks, in the US Coast Guard the Southwest Pacific ret Barnhouse in 1943, four children, James san and Eloise.

From 1949 served as Instructor at Indiana University, was here at IU that Jim Paleozoic plant fos- mid-west USA, but also world. His collections of the basis for several toral dissertations. I the Canright paleobo- they were eventually Museum of Natural in 1996 through 2002, I for Paleobotany and loguing and database



lection. These collections include both a core assemblage of representative fossil plants that were originally acquired primarily for teaching, as well as several subcollections, including fossil coal samples, fossil and extant pollen samples, and an extant wood and other plant anatomical structure collection. Some of this work was published in the well-illustrated "Fossil Plants of Indiana" published by the Indiana Department of Conservation, Geological Survey, in 1959.

In 1964 Jim and his lovely wife Peggy moved to Tempe, Arizona, where Jim assumed the position of Professor and Chairman of Botany and Microbiology at the Arizona State University. He served in this capacity from 1964 through 1972, eventually settling comfortably into the role as Pro-

(1947) and Ph.D. (1949) in evolution of the stamen in is still reproduced today He served as Lieutenant Reserve in 1942-1946 in area. Jim married Marga- and together they raised Douglass, Lawrence, Su-

through most of 1964 Jim and Professor of Botany Bloomington, Indiana. It began the collection of sils, primarily from the from several parts of the this material have formed Masters theses and Doc- became familiar with tanical collections when transferred to the Florida History, Gainesville, where was Collection Manager began a detailed cata- entry of the Canright col-

fessor of Botany until his retirement in 1985. ASU awarded Jim the position of Emeritus Professor upon his retirement, a position he respected and enjoyed.

In 1971, Jim was an invited Visiting Professor of Botany at the National Taiwan University in Taipei, Taiwan. Additionally Jim was recognized by his colleagues through his association in many professional organizations. He joined AASP in 1968, and held the office of President for the 1979-1980 term, member of the 1973 Nominating Committee, and Chairman of the 11th annual meeting in Phoenix, AZ. He served as President of the International Federation of Palynological Societies (IFPS) from 1992-1996. Jim was Editor of *Palynos*, the Newsletter for the IFPS, from 1997 (from its conception) through 1992. Jim Canright holds the distinction of being the only person to attend all nine of the IPCs, up to the 10th IPC in China. Perhaps a little known bit of trivia concerns the emblem/logo currently used for the IFPS. The stylized Acacia pollen grain with the letters IFPS was developed by Jim and designed by his son James Douglass in 1984 (see: *Palynos* vol. 7, no. 2, pgs. 1-2.)

Travel played an important part on Jim's life, and it seems, looking at his Curriculum Vitae, that he managed to live in six different countries and travel to at least 45 countries. Part of this travel was through the courtesy of Uncle Sam, as Jim served as Communications Officer with the US 7th Fleet (1943-1945) in the Southwest Pacific arena. While in Malaysia he learned the basics of the Malayan language. He lectured in Nepal and India.

Jim was also recognized by his peers through awards and presentations. Jim was a Fellow of the Indiana Academy of Science and the American Association for the Advancement of Science (AAAS). He served on the Governing Board for the American Institute of Biological Sciences (AIBS), and received the Outstanding Paleobotanist Award from the Botanical Society of America. In 1960 he received a John Simon

Guggenheim Fellowship. Jim's career has been profiled in *American Men and Women in Science*, and *Who's Who in America*.

Professor Canright served as Chair or Principle Advisor for many students working toward their graduate degrees, both at Indiana University and Arizona State University. Several of his students will be immediately recognized by AASP readers, and include Robert Romans, Joseph M. Wood, Gottfried Guennel, Donald Engelhardt, William Dickison, Robert A. Stewart, Jerome Ward, John D. Shane, Michael Zavada and Michael Farabee.

I really only truly got to know and appreciate Jim Canright through our association involving the IFPS. When I was Secretary-Treasurer of the IFPS, I worked closely with Jim on several matters. We attended all the scheduled meetings and a few ad hoc meetings together in order to firmly establish the "process and procedures" necessary to build a strong international association. The record shows that thanks to Jim's commitment as Editor and eventually President of the IFPS, that organization today stands on a firm, well thought out constitution and working bylaws. We as a group of scientists, as palynologists and paleobotanists owe a great deal to Jim Canright for his dedication and foresight in the early years of organizing our plans for the future. Today we are enjoying the effort of Jim and his colleagues through AASP and the IFPS.

Peggy Canright tells me that they have cremated Jim's remains, and for now his ashes will be placed in his study, among his years of documents and memorabilia (he discarded nothing!). Eventually, following Jim's wishes, the ashes will be strewn at sea. Jim loved the Pacific Ocean, and he will remain there forever. Although I was never a formal student of Jim's, I learned much from him. We shared many professional and personal times. Jim was truly a dear friend....I will miss him.

And Michael Farabee remembers.....

I first met Professor Canright when I was a student in his Plant Morphology class. Taking his class without the pre-requisite Plant Anatomy, I was captivated by the methodical presentation of plants in an evolutionary context, interspersed with stories and anecdotes that made a dull subject (so my friends told me) come alive. I returned to graduate school, luckily Paleobotany and Palynology were offered during the spring of 1980, so I signed up. To my surprise Jim remembered me and when he learned I was a graduate student, he quickly became my advisor, signed me up for Palynology, supported me in gaining regular graduate admission and eventually becoming his teaching assistant. To get me out of the lab, Jim invited me to play racquetball. Despite giving several decades to me, Jim never lost.

During one of those games he spoke of the academic life, encouraging me to think beyond the Master's and go for a Ph.D.

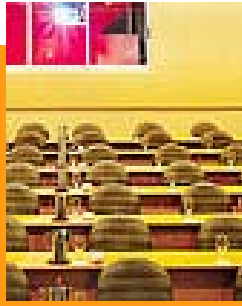
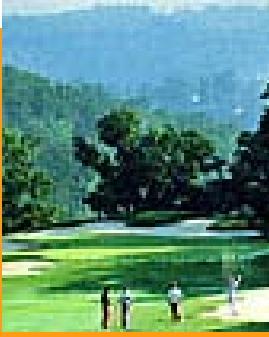
During one of those games he spoke of the academic life, encouraging me to think beyond the Master's and go for a Ph.D. This push from the nest (Jim told me that three degrees from ASU would not be a good thing, and that I needed to experience new settings and labs) led me to doctoral work with John Skvarla and L.R. Wilson at the University of Oklahoma, and then to a post-doc with Tom and Edith Taylor at The Ohio State University. Through it all Jim remained a friendly correspondent as my career progressed. From Jim I learned to steer my course by my own bearing, ignoring the currents and opinions that would way-lay me. I learned the value of passion and caring about the science of botany and palynology, to be organized and set rules that would allow others to follow in my wake. As the founding science faculty member at Estrella Mountain Community College I have held to these ideas.

Michael Zavada recalls as well.....

In 1971, I was in my second baseball season at the best baseball program in the country-- Arizona State University. I managed to squeeze in some education between the long, physically demanding practices. It had been my high school dream to be tutored by the blunt and no nonsense, three-time national champion Coach Bobby Winkles who was to show me the way to professional sports and success. It was the same year that I met the blunt and no nonsense Jim Canright. Jim's obvious intelligence and experience, coupled with his lucid way of delivering his intended message always caused you to pause and to reflect. Jim demanded hard work, a disciplined mind, stick-to-itiveness, intelligence and nothing less than excellence. Jim was the Bobby Winkles of Botany. There was never any doubt that Jim had my well being and development as a thinking person at the core of his demands and advice. Despite the lavish resources and the national reputation of the ASU baseball program, it was Jim who changed my life. He taught me the meaning of quality of life. He put me on a path that provided an outstanding living, adventure, travel, a greater appreciation of the wonder of the natural world, and the challenge of the academic life. I had the pleasure of knowing Jim for thirty-seven years and my appreciation for the significance that he played in my life at a crucial time and my affection for him have grown over the years. It was just about a week before Jim passed away that I received a newspaper clipping from him about Clint Myers, a successful women's

Jim demanded hard work, a disciplined mind, stick-to-itiveness, intelligence and nothing less than excellence.

softball coach at ASU who was my teammate and formidable competition as a catcher at ASU. Jim asked me if I had regrets about taking the career path that I have, rather than exploring the possibilities in professional sports. Jim, I have no regret, and I thank you for being an honest, fair and caring educator and friend.



The 42nd Annual AASP Meeting September 27-30, 2009, Tennessee

The 2009 AASP meeting will be held in the Tri-Cities area of East Tennessee at The Meadowview Resort and Conference Center.

Information on the resort can be found at:

(<http://www.marriott.com/hotels/travel/tricc-meadowview-conference-resort-and-convention-center/>)

The meeting begins Sunday September 27- with all day registration and the evening ice breaker. The meeting ends Wednesday, September 30, 2009 with the business meeting. This will be co-sponsored by East Tennessee State University and the ETSU General Shale Brick Natural History Museum and Visitor Center at the Gray Fossil Site. We are planning workshops prior to the start of the meeting on Saturday September 26, 2009. I am hoping that Vaughn Bryant will agree to a Forensic Palynology workshop and we are hoping a theme for another workshop will be "Educating the next Generation of Palynologists" workshops designed to include the regions K-12 teachers and how they can incorporate lecture or laboratory exercises in the lower grades, and may provide innovative ideas to our academic members. As an added feature of the meeting I would like to have three public lectures that would begin on Monday afternoon, Tuesday afternoon and Wednesday afternoon, the public and local educators will be invited to attend in addition to our students and professionals to hear talks on e.g., "Pollen and Allergies", "Palynology and Petroleum: Supplying Americas Energy Needs" *If you have any other suggested topics or speakers or wish to volunteer to speak that may inform and entertain a wide audience please let me know.* We are also entertaining a number of field trips to begin on Thursday October 1, and return Saturday October 3, among the suggestions are "Appalachian Habitats, a trip through the southern Appalachians for bear and bird watching, it will also include local geology", another is a "Visit to Dayton Tennessee

to the Rhea County Courthouse (Home of the scopes monkey trials) an then on to Paris, Tennessee for collecting in the Eocene Claiborne Formation of West Tennessee. These localities have superb plant fossils and also produces some very nice pollen floras. A third suggestion is the Appalachian flora and Cumberland gap either a hiking trip through the gap or a more sedate road trip through the gap and include the Paleozoic of Harlan County Ky. *Any other suggestions are welcome and anyone wishing to take a lead on any of these trips or other trips is welcome to contact me.* I would also like to open the field trips up to local teachers so they too can mingle with the professionals. Finally I need some input with regard to the cost of the meeting. I am trying to hold down the cost as much as possible to insure student participation, here is what I have so far;

This includes Sunday, Monday, and Tuesday night stay, coffee breaks, all meals, icebreaker, and registration fees. However, **no** Tuesday Night Banquet, **no** Wednesday Business Lunch.

	<u>Single</u>	<u>Double</u>	<u>Triple</u>	<u>Quadruple</u>
Total estimated Cost	775	1075	1375	1700
Per person rate	775	540*	460	425

If two students occupy one room, each student will have to pay \$540 each, 3 = \$460 each, 4 students to a room each pay \$425 each.

This includes Sunday, Monday, and Tuesday night stay, coffee breaks, all meals plus Tuesday Night Banquet and Wednesday Business lunch, icebreaker, registration fee.

	<u>Single</u>	<u>Double</u>	<u>Triple</u>	<u>Quadruple</u>
Total Estimated Cost	850	1225	1600	1950
Per Person rate	850	615	535	490

This includes Sunday Monday and Tuesday night stay, coffee breaks, all meals plus Tuesday Night Banquet and Business lunch, icebreaker, registration fee, plus one additional night for field trip (Wednesday Night) or workshop (Saturday night).

	<u>Single</u>	<u>Double</u>	<u>Triple</u>	<u>Quadruple</u>
Total Estimated Cost	1000	1350	1800	2075
Per Person Rate	1000	675	600	520

This includes Sunday, Monday, and Tuesday night stay, coffee breaks, all meals plus Tuesday Night Banquet and Wednesday Business lunch, icebreaker, registration fee, plus one additional night for the Workshop (Saturday Night) and one additional night for the field trip (Wednesday Night).

	<u>Single</u>	<u>Double</u>	<u>Triple</u>	<u>Quadruple</u>
Total Estimated Cost	1100	1500	1850	2200
Per Person rate	1100	750	620	550

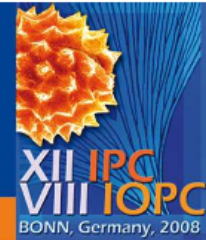
NOTE: A Friday arrival with a Friday night stay for the workshop, or on return from the field trip a one night stay (Saturday) will cost \$126.99

The cost will be presented in a traditional manor, i.e., as a registration fee which will have the option of alterative accommodations and food. I wanted to run this scenario by the members.

12th International Palynological Congress
IPC-XII 2008

and
8th International Organisation of Palaeobotany Conference
IOPC-VIII 2008

August 30 - September 5, 2008, Bonn, Germany



The next major international conferences in paleobotany and palynology, the 12th International Palynological Congress (IPC-XII 2008) and the 8th International Organisation of Palaeobotany Conference (IOPC-VIII 2008), will be held in Bonn, Germany, from August 30 to September 5, 2008. The joint congress is hosted by the German paleobotanists and palynologists, under the auspices of the *Arbeitskreis für Palaeobotanik und Palynologie*.

This promises to be a historical event, as both professional associations will not only be meeting in the same city, but at the same time and at the same place. To further interaction and integration between paleobotanists and palynologists, there will be joint symposia and sessions, as well as plenary lectures of interest to both fields. Moreover, the single registration fee for both conferences will encourage participants to move freely between the sessions of both disciplines.

Venue

The congress sessions will be held in the Main Building of the University of Bonn, an attractive 17th century, baroque palace located in the center of town, near the Old City Hall, a mere 5-minute walk from Bonn's main railway station. This historical building has a large auditorium, as well as a number of larger lecture rooms, medium-sized and smaller meeting rooms, which are all situated around a central courtyard, forming an ideal setting for the meeting.



AASP 41st Annual Meeting, Bonn, Germany

12IPC, Aug. 30 - Sept. 6, 2008

REGISTRATION €200 professional €150 student before Apr.30,2008
ABSTRACT DEADLINE Wed. April 30, 2008

CONFERENCE

Conference Organizers:

Thomas Litt, President IFPS t.litt@uni-bonn.de, Hans Kerp (IOPC), Carole Gee (IOPC/IPC Secretary) cgee@uni-bonn.de, AASP Coordinator Owen Davis

AASP Events:

Outgoing Board Meeting, 9:-1:00, Sat,Aug.30, Senate Rm, Main Bldg

Incoming Board Meeting, 4:-6:00, Fri,Sept.5, Senate Rm, Main Bldg

Procedures for Bonn Travel Grant Application: The committee has a total of \$2000 to award in variable amounts based on need.

Please submit applications by e-mail to the chair of the awards committee, who will make recommendations after consultation with the committee.

Applicants are required to submit:

- 1) A one paragraph justification for the request plus the abstract submitted for the presentation.
- 2) A simple budget outlining the requested amount and how the funds would be used. We suggest that the AASP award be used to offset the cost of airfare to the meeting.

These submissions should be included in one file attached to the e-mail with the name of the applicant in the file name. Please include a single e-mail contact address in the file.

Bonn IPC Travel Grant Applications are due JULY 1.
The address for submission is:

Martin B. Farley
Geology
University of North Carolina at Pembroke
Pembroke, NC 28372
mbfarley@sigmaxi.net



From the Desk of THOMAS D. DEMCHUK AASP Secretary-Treasurer Houston, TX

It is my pleasure to present to you the Secretary-Treasurer's report which was given at the recent mid-year Board of Directors meeting in St. Catharines, ON, on Saturday, April 5, 2008. I will apologize in advance for not presenting such numbers

following the Annual Meeting in Panama last fall.

Secretary's Report

As of March 29, 2008, membership totals stood at 522 members. This included 393 Individual members, 54 Retired status members, and 75 Institutional members. Of note, however, at that time there were 102 members who had not paid their membership for 2008. This number has been greatly reduced, and I thank those of you who have paid your membership over the past several weeks. According to my most recent membership listing, there are still 65 Individual and Retired members not paid for 2008, as well as 25 Institutions. For those of you in arrears, expect at least one more e-mail notification as well as a paper renewal form. Institutions can also expect another invoice. If your membership payment is in question, please check the website (www.palynology.org) where our Webmaster has included a Member Status page to see what years you have paid for. On a very bright note, we continue to attract new members, particularly students to the Association.

Treasurer's Report

As of February 28th, 2008 total AASP assets were US\$84,027.48. This is slightly lower than the total assets reported at this time last year, and there are several reasons for that: most importantly was the downturn in the stock market at the end of 2007 and beginning of 2008. Currently, over US\$65K of our assets are in mutual funds whose values fluctuate with the ups and downs of the stock market. Overall, our portfolio is relatively low risk, is constantly being reviewed, we continue to accrue dividends and interest and the Association safely continues to conduct daily business with a healthy checking account. Of significance, royalties from GeoScience World and BioOne contributed almost US\$8,000 to our accounts, and

there was a small profit from the Panama meeting (Thank you Carlos!). At the moment, the stock market has settled into a gradual upswing and membership renewals continue to come in. I believe that AASP's accounts are very healthy and we will continue to sponsor meetings of specific interest to the membership, and student's participation to these events.

On that point, AASP recently sponsored three students to attend the Dino8 meeting in Montreal. AASP offset some of their expenses by paying their registration to this conference. In the very near future, AASP will sponsor student's participation at the IPC in Bonn (September) and to the GSA in Houston (October). AASP will have a strong presence at both meetings, including the sponsoring of sessions and displaying the AASP booth along with Foundation publications. Look for announcements in the Newsletter, via e-mail and on the website for application for these student travel scholarships.

I would like to thank David Pocknall at BP for providing economical printing of the Newsletters and the recent Membership Directory, and for organizing the mailing to those members who still receive paper copies of these publications (please consider the digital copy!). Additional thanks to my employer COP for providing some mailing services. With the cost of postage continuing to rise, the savings on these services are greatly appreciated.

Finally, I am pleased to state that I will continue on as AASP Secretary-Treasurer for my 11th term. It is my pleasure to serve the membership, and please let me know your thoughts on how I handle my duties. I enjoy all the e-mails I receive from the membership (OK, almost all of them). I look forward to seeing you all in Bonn and Houston.

MEMBERS UPDATE

New Members

O'DONNELL, SHAWN
633 SAINT JAMES ROAD
NEWPORT BEACH, CA 92663
TEL. (949) 642-6394
FAX. (949) 642-9559
shawn.alden.odonnell@gmail.com

SALZMANN, ULRICH
HIGH STREET 52
COTON - CAMBRIDGE
UNITED KINGDOM CB23 7PL
TEL. 0044 1223 221379
usa@bas.ac.uk

YIBUDONGHA, YIKAREBOGHA
23 ETE ROAD, GRA
BENIN / EDO
NIGERIA 234
TEL. 08034697856
yikuba2002@yahoo.co.uk

Address Updates

DEAF, AMR SAID
SCHOOL OF OCEAN AND EARTH SCIENCE
NATIONAL OCEANOGRAPHY CENTER
SOUTHAMPTON, UNIVERSITY OF SOUTHAMPTON
EUROPEAN WAY
SOUTHAMPTON SO14 3ZH
UNITED KINGDOM
TEL. +44 078 1650 9174
FAX. +44 0 23 8059 3052
deaf@noc.soton.ac.uk

FARABEE, MICHAEL J
ESTRELLA MOUNTAIN COMMUNITY COLLEGE
3000 N. DYSART
AVONDALE, AZ 85392
TEL. (623) 935-8455
FAX. (623) 935-8480
mj.farabee@emcmail.maricopa.edu

GAPONOFF, SHARMA L
14104 RETRAC WAY
GRASS VALLEY, CA 9949
TEL. (530) 274-2475
FAX. (925) 984-4774
sharma@california.com

HOS, DIRK P
1 LOARING PLACE
MARGARET RIVER
WESTERN AUSTRALIA 6285
AUSTRALIA
TEL. 9758 7005
FAX. 0414 385 350
dhos@iscbiostrat.com

MARSHALL, DAWN
1708 TODD TRAIL
COLLEGE STATION, TX 77845
TEL. (979) 690-1225
pollengirl@gmail.com

OBOH-IKUENOBE, FRANCISCA
MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY
125 McNUTT HALL
2400 N. BISHOP
ROLLA, MO 65409-0410
TEL. (573) 341-6946
FAX. (573) 341-6935
ikuenobe@mst.edu

RODIGUEZ-FORERO, GUILLERMO
INSTITUTO COLOMBIANO DEL PETROLEO
ECOPETROL - ICP
KM 7 VIA PIEDECUESTA
SANTANDER, COLOMBIA
TEL. 57 7 6847212
guillermo.rodriguez@ecopetrol.com.co

STUKINS, STEPHEN
DEPT. OF GEOLOGY AND PETROLEUM GEOLOGY
MESTON BUILDING
KING'S COLLEGE
ABERDEEN AB24 3UE
SCOTLAND, UNITED KINGDOM
TEL. +44 1224273479
s.stukins@abdn.ac.uk

VERSTEEGH, GERARD J.M
ORGANIC GEOCHEMISTRY UNIT
AND PALAEOLOGY AND HISTORICAL GEOLOGY
UNIT
FACULTY OF EARTH SCIENCES
BREMEN UNIVERSITY
P.O. BOX 330440
D-28334 BREMEN
GERMANY
TEL. +49 421 218 4313
FAX. +49 421 218 4451
gerardv@nioz.nl

VOLKHEIMER, WOLFGANG
IANIGLA/CRYICYT
C.C. 330
(5500) MENDOZA, ARGENTINA
TEL. (54261) 4287029
FAX. (54261) 4274011
volkheim@Lab.cricyt.edu.ar