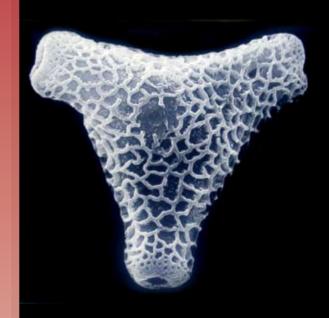
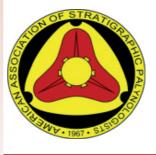
AMERICAN ASSOCIATION OF STRATIGRAPHIC PALYNOLOGISTS

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Proteacidites by D. M. Jarzen

NEWSLETTER



December 2007 Volume 40, Number 4

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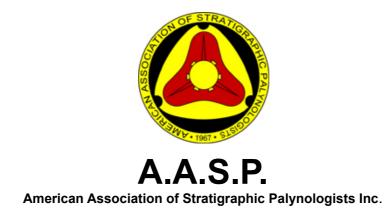


A.A.S.P. NEWSLETTER

Published Quarterly by the American Association of Stratigraphic Palynologists Inc.

December 2007 Volume 40, Number 4

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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)

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A.A.S.P. NEWSLETTER

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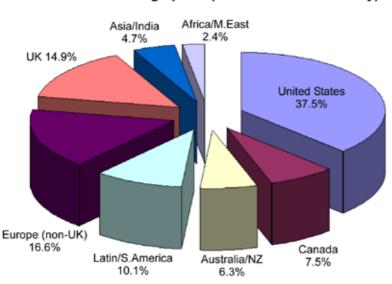
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Sophie Warny, swarny@lsu.edu, Museum of Natural Science, Louisiana State University, 119 Foster Hall, Baton Rouge, 70803, Louisiana, USA.

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 **February 1**. 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 <u>DO</u> look forward to contributions from our membership.

PRESIDENT'S PAGE A Rosa by any other name... might smell even sweeter? By Francine McCarthy



2007 AASP Demographics (Individual Members Only)

The name of the American Association of Stratigraphic Palynologists has been a matter for discussion and debate since before the association existed. Alfred Traverse summarized the history of the name in his oral presentation at the Annual Meeting in Panama this year, and he advocates changing the name to "The Palynological Society". This suggestion has been bandied about for years, and Sharma Gaponoff recently took on the task of canvassing the membership on the topic of adopting this more inclusive name, primarily in order to address membership decline. A quick look at the membership demographics provided by Thomas Demchuk, our Secretary Treasurer, shows that 62.5% of the membership is from outside the United States,

and even all of the Americas combined comprise only slightly more than half of the association. The abstract volume from this year's AASP meeting illustrates a diverse program including presentations focused on pollen morphology, evolution, biogeography, paleoecology, paleoclimatology, environmental science, and geoarcheology, in addition to stratigraphic studies.

While stratigraphic palynology was initially the mainstay of the association, its application to other fields has expanded rapidly. It's likely (based on anecdotal evidence) that the perception of our association as focused on stratigraphic studies makes us appear less relevant to the field of palynology than is truly the case. Although a membership survey conducted by Sarah de la Rue showed continued resistance to any change, particularly one that would drop "stratigraphic" from the name, support for a name change from long-time members like AI Traverse and Judy Lentin and many other active members convinced the Board of Directors to formally suggest a name change to the membership. Discussion at the Outgoing Board Meeting in Panama led to a unanimous decision to propose the name "AASP- The Palynological Society" to the membership, following the precedent set by the SEPM to "SEPM (Society for Sedimentary Geology)" from "Society for Economic Paleontologists and Mineralogists". Retaining the acronym provides continuity and will probably facilitate the legal process of name change, and the board decided to use the hyphen rather than the brackets (which seem to imply an afterthought!).

Changing our name can be accomplished by means of a referendum, with a ballot to be sent to each member in good standing shortly following the publication of this newsletter. A simple majority vote is all that is required. If the membership votes in favor of the new name, steps will immediately be taken to legalize the name change. This will also allow us to prepare new promotional material (including updating the logo) in time for the International Palynological Congress in Bonn next August-September, where we hope to unveil our new name and image and hopefully recruit new members!

We hope you will vote on this important issue!

2007 AASP MEETING STUDENT AWARD RECIPIENTS

As part of the award, these two students will be receiving framed certificates and twoyears free membership in the Association. Alexander Correa-Metrio is this year's winner of the L.R. Wilson Student Paper Award, and will receive a check for US\$500. Millerlandy Romero-Baez is the winner of this year's Best Student Poster Award, and will receive a check for US\$250.

Alexander Correa-Metrio - acorrea@fit.edu



8,200 years of climatic variability in the Amazonian Piedmont of Peru

Alexander Correa-Metrio, Mark B. Bush, and Miles Silman

The 20-m-long upper sedimentary record of Lake Sauce spans the last ~8200 yr of the environmental history of the area and its connections with the global ecological and geophysical processes. The record was approached through palynological and charcoal analysis, as well as digital imagery analysis of the uppermost 17 m of the core, which showed a laminated pattern. Despite two drier-than-present periods occurred between ~8300 and ~6000, and between

~4500 and ~3200 years BP, a general trend towards wetter conditions is shown by the record. Given its coincidence with the South Atlantic insolation curve for the Holocene, such a trend seems to correspond to orbital forcing mechanisms. On the other hand, lamina thickness, when evaluated through wavelets analysis, displayed significant variance on the ENSO band (3-7 years). Given the current behavior of the precipitation in the area and the terrigenous-dominated nature of the materials, this could be reflecting the activity of ENSO cold phase during the last ~5200 years. In such a way, the precipitation trends in the study area seem to be driven by the interaction between systems of the Atlantic and Pacific oceans. The first evidence on human occupation appears around 4000 years BP, and it seems to play a major role in the modeling of the landscape and the driving of the vegetation ecological processes at local and regional scales.

Millerlandy Romero-Baez - romerom@si.edu



Early Pliocene Palinodiversity of the Choco and Amazonia areas

Millerlandy Romero-Baez, Silane Silva, Vladimir Torres, and Carlos Jaramillo

Presently, both Choco and Amazonia are considered both a hotspots of diversity and as refugia areas in the Pleistocene climatic changes. However, few data about the history of those places are available. The Choco area covers a small range between Colombian Pacific coast and Western Cordillera of Andes, while the Amazon covers part of nine countries in South America. The environmental history of those places is related to geological changes caused by Andes orogeny during the Neogene. In the initial phases of the Miocene both areas were connected. Nevertheless, the Eastern Cordillera Andes Uplift separated them in the Pliocene allowing the floristic differentiation and high endemism rates. Herein, we are presenting pollen and spores data from Amazonia and Choco during the Pliocene. Five samples of each locality were used in order to compare the diversity and palinofloristic similarity. We are using rarefaction method to compare samples that have different count number, standardized in 300 grains. The similarity indices were established using genera information, whenever possible. Preliminary results suggest that the palinodiversity during the Pliocene in Choco area was higher than in Amazonia. The Choco Pliocene samples were compared with Holocene samples showing similar diversity indices. The Choco diversity was related to environmental heterogeneity caused by the proximity of two distinct environments.

European Geosciences Union General Assembly 2008 Vienna, Austria, April 13 – 18 2008 SSP11 - New applications and challenges in stratigraphic palynology.

The **EGU** (http://www.copernicus.org/EGU/) General Assembly 2008 will be held at the Austria Center Vienna (ACV) in Vienna on April 13-18 2008. The Assembly is the major scientific venue for Earth Science specialists in Europe, covering all aspects of Earth Science. The meeting provides the possibility of interdisciplinary interactions among scientists working on distinct fields, yet more closely related than generally considered.

The SSP11 - New applications and challenges in stratigraphic palynology session is intended to present a broad overview of current developments in stratigraphic palynology and their impact in pure and applied research. Submission of papers dealing on all aspects of palynostratigraphy of the entire stratigraphic column is strongly encouraged.

Placing precise chronostratigraphic constraints on biotic or physical events is fundamental for any geological and palaeobiological model, and palynostratigraphy is certainly one of the most suitable and powerful tools for high-resolution biostratigraphy and correlation.

Visit the SSP11 website

(http://www.cosis.net/members/meetings/programme/view.php?m_id= 49&p_id=315&day=1&view=schedule) to find more information on this session and instructions on how to submit an abstract or write to <u>Marco</u> <u>Vecoli</u> (marco.vecoli@univ-lille1.fr) . Deadline for abstract submission is **January 14th 2008**

Favorite Palynomorphs

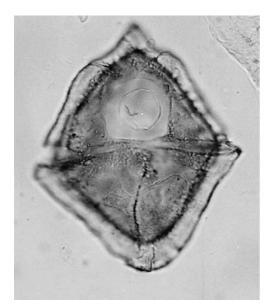
THE JURASSIC DINOFLAGELLATE CYST SCRINIODINIUM CRYSTALLINUM (DEFLANDRE 1939) KLEMENT 1960 EMENDED RIDING &FENSOME 2002

James B. Riding

It is often said that the quintessential Jurassic dinoflagellate cyst is *Gonyaulacysta jurassica* (Deflandre 1939) Norris & Sarjeant 1965. While not denying the undoubted aesthetic qualities of *Gonyaulacysta jurassica*, my personal favorite is definitely *Scriniodinium crystallinum*. Like (say) a classic sports car, it has a beautiful shape, with smooth curves and sleek lines. Furthermore, its circumcavate organisation gives this species a great sense of symmetry and three-dimensionality. Cavate cysts are assuredly the most attractive and distinctive dinoflagellate cyst taxa. Because of the characteristic shape, size and cavation style, isolated opercula of *Scriniodinium crystallinum* are easy to recognise (Riding and Fensome, 2002, pl. 3, fig. 4). *Scriniodinium crystallinum* is relatively large, on average 75 x 90 μ m, and hence sticks out in a crowd of palynomorphs, even using a lowpower objective. Interestingly, Australian specimens appear to be significantly larger than their European counterparts. It is one of those rare forms that have a global distribution. *Scriniodinium crystallinum* is also a good stratigraphic marker within the Late Jurassic. It is a reliable Oxfordian index in Europe, but has a younger range top (Kimmeridgian and Tithonian) in Australasia (Riding and Fensome, 2002, text-fig. 2).

Scriniodinium crystallinum was first described, as *Gymnodinium crystallinum*, by Deflandre (1939) from the Oxfordian strata of Villers-sur-Mer, Normandy, northern France. These classic Jurassic exposures are magnificent sea cliff sections locally known as the *Vaches Noires* (= Black Cows), and represent the most complete and extensive Oxfordian succession in France (Rioult et al., 1991). They are immediately to the west of Villers-sur-Mer, which is a classic small French seaside town, near Auberville (Bignot, 1957). Deflandre (1939) is a classic work in that it represents the first major work on Jurassic dinoflagellate cysts of the modern era of palynology. Other 'classic' species described by Deflandre (1939) include *Endoscrinium galeritum* (Deflandre 1939) Vozzhennikova 1967, *Endoscrinium luridum* (Deflandre 1939) Gocht 1970, *Gonyaulacysta eisenackii* (Deflandre 1939) Górka 1965, *Gonyaulacysta jurassica, Korystocysta pachyderma* (Deflandre 1939) Woollam 1983, *Nannoceratopsis pellucida* Deflandre 1939, *Rhynchodiniopsis cladophora* (Deflandre 1939) Below 1981, and *Rigaudella aemula* (Deflandre 1939) Below 1982. This major contribution is in a rather obscure French Journal (*Travaux de la Station zoologique de Wimereux*), but is well worth obtaining it on an inter-library loan. There are some good-quality light photomicrographs, but the majority of the illustrations are excellent line drawings.

The holotype of *Scriniodinium crystallinum* is curated at the Museum National d'Histoire Naturelle, Paris, France. It was re-figured in the monograph of Jan du Chêne et al. (1985, pl. 104, figs 1-4). It is a good specimen, but unfortunately there are two areas of dense pyrite crystal growth and an adherent piece of palynodebris to the top left. *Scriniodinium ?oxfordianum* Sarjeant 1962 and *Scriniodinium playfordii* Cookson & Eisenack 1960 both appear to be taxonomic junior synonyms of *Scriniodinium crystallinum* (see Riding and Fensome, 2002, and Fensome and Williams, 2004, p. 589).



Scriniodinium crystallinum exhibits characteristic features such as lateral equatorial claustra. These are basically holes in the periphragm in the lateral equatorial areas and these were also noticed by Hesketh and Underhill (2002). These authors stated that *Scriniodinium crystallinum* from the North Sea is morphologically variable. They described two end members, the first being forms with wide pericoels, equatorial claustra, and a subangular, diamondshaped, shape (Hesketh and Underhill, 2002, pl. 1E). The other end member has narrow pericoels, small (or no) claustra, and a more rounded, subovoidal shape (Hesketh and Underhill, 2002, pl. 1E). The other end intermediate morphotypes are also present. The subangular form and intermediate forms were illustrated in Riding and Fensome (2002), although pl. 2, fig. 5 approaches '*S. crystallinum* cf.'.



came directly from a conversation while working in Australia with Robin Helby in 2000. We were talking about tabulation, in particular the torsion ('twisting') of the hypocyst in relation to the epicyst (see Fensome et al., 1996, text-fig. 40). Robin asked me what I thought about the torsional style of *Scriniodinium crystallinum*. I replied that the specimens I have seen do not appear to have well-developed tabulation, the cingulum is generally indicated by low, smooth ridges. Other plate boundaries are rarely developed, and then only partially and vaguely (for example Riding and Fensome, 2002,

You can read much more about *Scriniodinium crystallinum* in Riding and Fensome (2002). This paper

text-fig. 3). Robin then showed me the specimen which was later illustrated and figured in Riding and Fensome (2002, text-fig. 1; pl. 1); in particular, fig. 4 of plate 1 clearly indicates dextral torsion. On my return from Australia Rob Fensome and myself emended *Scriniodinium crystallinum* in a review of the genera *Scriniodinium* and *Endoscrinium* (Riding and Fensome, 2002).

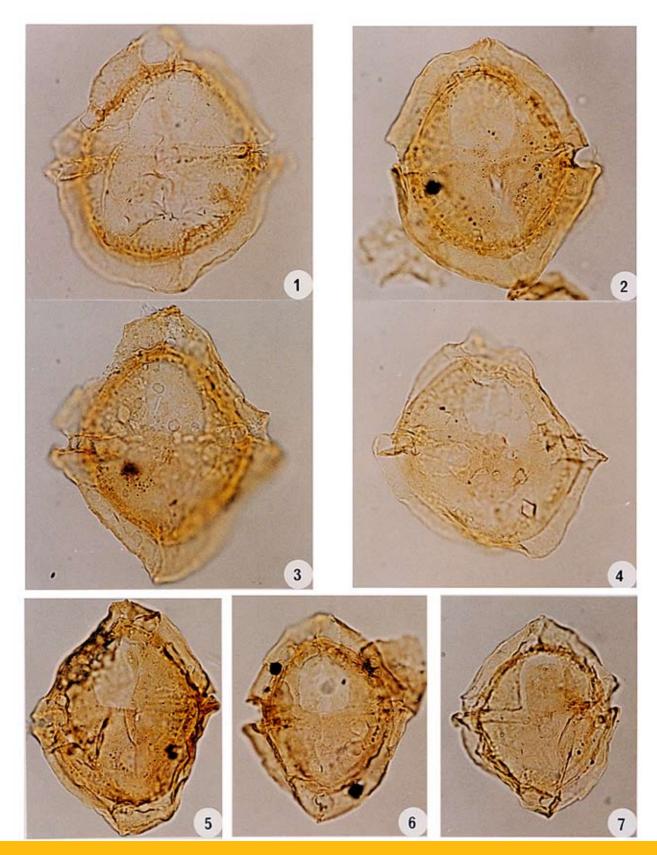
Legend from top to bottom:

- *Scriniodinium crystallinum* (from Riding and Fensome, 2002, plate 1, fig. 4).

- View of the outcrop where the species was described, also referred to as "The Vaches Noires", in this article. These pictures were taken by Jim Riding during a APLF fieldtrip in 1989. The town in the background is Villers-sur-Mer.

- Jamie Powell and close up view of the outcrop.





Scriniodinium crystallinum A montage of specimens from Scotland (hitherto unpublished).

References Cited

BIGNOT, A.

1957 Notice géologique sur Villers-sur-Mer et ses environs. Syndicat d'Initiative de Villers-sur-Mer (Calvados), No. 69: 16 p.

DEFLANDRE, G.

1939 Microplancton des mers Jurassiques conservé dans les marnes de Villers-sur-Mer (Calvados). Étude liminaire et considérations générales. Travaux de la Station zoologique de Wimereux, 13: 147-200.

FENSOME, R. A., RIDING, J. B., and TAYLOR, F. R. J.

1996 Chapter 6. Dinoflagellates. In: Jansonius, J. and McGregor, D. C. (eds.). Palvnology: principles and applications. American Association of Stratigraphic Palynologists Foundation, Dallas, 1: 107-169.

FENSOME, R.A., and WILLIAMS, G.L.

The Lentin and Williams index of fossil dinoflagellates 2004 edition. American Association of 2004 Stratigraphic Palynologists, Contributions Series, No. 42, 909 p.

HESKETH, R. A. P., and UNDERHILL, J. R.

2002 The biostratigraphic calibration of the Scottish and outer Moray Firth Upper Jurassic successions: a new basis for the correlation of late Oxfordian-early Kimmeridgian Humber Group reservoirs in the North Sea Basin. Marine and Petroleum Geology, 19: 541-562.

JAN DU CHÊNE, R., MASURE, E., BECHELER, I., BIFFI, U., DE VAINS, G., FAUCONNIER, D., FERRARIO, R., FOUCHER, J.-C., GAILLARD, M., HOCHULI, P., LACHKAR, G., MICHOUX, D., MONTEIL, E., MORON, J.-M., RAUSCHER, R., RAYNAUD, J.-F., TAUGOURDEAU, J., and TURON, J.-L.

1986 Guide pratique pour la détermination de kystes de dinoflagellés fossiles. Le complexe Gonyaulacysta. Bulletin des Centres de Recherches Exploration-Production Elf-Aquitaine, Mémoir 12: 479 p.

NEWS

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NEW ADDRESS FOR ERIC MONTEIL

Eric Monteil has left Geoscience Australia, Canberra, for Adelaide where he has started his own Palynological Consulting business, TimeMatters Biostratigraphic Services Pty Ltd.

> If you would like to contact him: TimeMatters, 27 Medway Street, Fullarton SA 5063, Australia Telephone/Fax:+61 8 8338 5159 e-mail: eric.monteil@bigpond.com

NOTE: Would you like to convince us that your favorite palynomorph is ours as well? Please send a short write up and a photo or two.

JOBS and CONFERENCES

PALEONTOLOGY UNIVERSIDAD DE LOS ANDES Bogota, Colombia

http://cienciasbiologicas.uniandes.edu.co/

The Department of Biological Sciences at the Universidad de los Andes (Bogotá, Colombia) seeks to fill a position for a full time assistant or associate professor with formal training and research

experience in Paleontology. Applicants must have a Ph.D. degree, preferably with postdoctoral research and teaching experience. Researchers with experience in evolutionary biology and neotropical paleontology are especially encouraged to apply.

The successful candidate is expected to teach and supervise undergraduate and graduate students, and to promote and conduct research projects in the proposed field.

Candidates send curriculum vitae, copies of recent publications, a research program, and two letters of recommendation by January 15, 2008 to:

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Or by email to:

ccontbio@uniandes.edu.co





RESEARCH ASSISTANSHIPS Paleocene-Eocene Stratigraphy

Geology and Geophysics Department, Texas A&M University

http://cienciasbiologicas.uniandes.edu.co/



Students are invited to apply for research assistantships in the following areas of stratigraphic research in the Geology & Geophysics Department, Texas A&M University, for Doctoral and Masters degree programs.

Ron Blakey, NAU

Paleogene palynological biostratigraphy

Outcrop exposures of the Paleocene-Eocene Wilcox Group and overlying Claiborne Group are primarily shorezone, estuarine and shalkow marine in origin. They contain abundant spores & pollen and dinoflagellates and will provide material for major advances in palynostratigraphy of the Paleogene. Students can train in the palynology lab at TAMU to become career biostratigraphers. Doctoral program preferred.



Eccene pollen grain, D.M. Jarzen, FMNH



Sequence boundary with nonmarine channel fill overhain by marine sands: Bastrop, Texas

Isotope stratigraphy: The PETM and Paleocene-Eocene boundary

Deposits spanning the P-E boundary interval in the northwest Gulf Coast geologic province consist mostly of shallow water multistones and sands with abundant plant organics. Isotopic stratigraphies are needed to determine paleoclimate trends and ocean response. Students can train in the stable isotope lab in our department to generate these profiles. Masters or Doctoral programs.

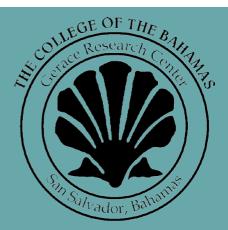


PETM isotope stratigraphy

Eligibility: admission into the graduate program in the Dept. Geology & Geophysics, Texas A&M University

To apply, read application information at: http://geoweb.tamu.edu/RProspective/ For more information, contact: tyancey@tamu.edu





A Key to the Pollen of the Bahamas

A review submitted by D.M.. Jarzen, Gainesville, Florida

I recently completed a preliminary study of the pollen and spores recovered from sediments deposited at the bottom of a Blue Hole on Abaco, Island, The Bahamas (Steadman et al., in press.) The sediments are fairly recent, certainly within a few thousand years, so identification of the contained pollen was not too difficult as I have access to a reasonable modern pollen reference collection of neotropical taxa. However, I could have benefited greatly if I would have had access to the "Key to the Pollen of the Bahamas©" (Snyder, et al. 2007) which has only been available online for the past month or so. (see: http://www.pollen.mtu.edu/).

All of us who routinely attempt to identify pollen and spores appreciate the efforts of those who have created keys to pollen types of a specific area or environment, or have produced an atlas of pollen and spore types from these regions. The works of Kapp, et al. (2000), Jones, et al. (1995) and Willard, et al. (2004), are some recent examples. These sources and many others, as well as the superb wall charts produced by Gretchen Jones and her colleagues, and sold through AASP, make the task of palynomorph identification just that much easier.

With the online availability of this key to the pollen of the Bahamas, palynologists may now add another source to assist in the identification of neotropical palynomorphs. The key is simple to use, providing a basic dichotomous key with two distinct choices at each level of the key. A master key is followed by 31 sub-keys that may be used if basic features as apertures and surface sculpture are pre-determined. In this way, use of the "Triporate Key" limits choices to those pollen types having three pores. Other sub-keys include, for example, a monoporate key, tricolporate key, tricolporate key, inaperturate and an irregular grains key, etc. This early choice, via buttons at the top of the first page, makes moving to specific pollen forms a quick operation. A total of 203 species are included in the keys, covering 70 angiosperm families, one gymnosperm family (Pinaceae) and two fern families.

Use of the key is facilitated through the use of technical terms being highlighted. When these terms are selected, the user is connected directly with the definitions and images contributed by the Glossary of Pollen and Spore Terminology, second and revised edition by Peter Hoen (see: http://www.bio.uu.nl/~palaeo/glossary/index.htm.)

Once the user has determined what pollen type they are likely trying to identify, the key provides two or more thumbnail photographs of that particular taxon. The thumbnails may be clicked and enlarged for more detailed examination. The pollen photographed comes from either taxa collected from Andros or San Salvador Islands, or from the herbarium of the Gerace Research Center, San Salvador Island. Photographs are all light microscope images, a useful choice as most routine scanning is still done with light microscopy.

The key may be used independently of the Internet by downloading to your hard drive. A simple set of instructions are provided by the authors in their introduction.

I found the key generally easy to use. Some of the photographs are not of the quality I like to see and use; however, the majority of the photographs are well done and provide the details necessary to identify a particular taxon. The dimensions of a particular species are sometimes but not always provided within the text of the key itself; however, a scale bar in each of the images would have been a nice addition. As in most keys and atlases, there are some identification problems which will need to be worked out in future editions.

My overall opinion of this key is that palynologists will benefit greatly through using this key not only for studies involving Bahamian floras and palynomorphs recovered from Blue Holes, but for general studies of fossil palynomorphs from Holocene and Quaternary deposits in much of the Caribbean region.

REFERENCES

Kapp, R.O., Davis, O.K. and King, J.E. 2000. *Ronald O. Kapp's Pollen and Spores*. American Association of Stratigraphic Palynologists Foundation Publication, 279 pp.

Jones, G. D., Bryant, V.M., Lieux, M.H. Jones, S.D. and Lingren, P.D. 1995. Pollen of the southeastern United States: with emphasis on melissopalynology and entomopalynology. American Association of Stratigraphic Palynologists, Contribution Series Number 30, 76 pp., 104 plates.

Snyder, T.P., Chiantello, J.L., Kjellmark, E. and Baumgardner, K.B. 2007. Key to the Pollen of the Bahamas. The Gerace Research Center, San Salvador, Bahamas. http://www.pollen.mtu.edu/

Steadman, D.W., Franz, R., Morgan, G.S., Albury, N.A., Kakuk, B., Broad, K., Tinker, K., Pateman, M., Lott, T.A., Jarzen, D.M., Dilcher, D.L. and Franz, S.E. (in press). Exceptionally well-preserved late Quaternary plant and vertebrate fossils from a blue hole on Abaco, Bahamas. Proceedings of the National Academy of Sciences.

Willard, D.A., Cooper, S.R., Gamez, D. and Jensen, Jennifer. 2004. Atlas of pollen and spores of the Florida Everglades. Palynology 28: 175-227.



The Sawmill Sink Blue Hole on the island of Abaco, The Bahamas. The key to the pollen of the Bahamas is very useful in identifying pollen trapped in the sediments at the bottom of blue holes.Photo Credit:Curt Bowen, Advanced Diver Magazine.



News from India

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

A Symposium on Palynology in Hydrocarbon Exploration was hosted by Birbal Sahni Institute of Palaeobotany (BSIP), Lucknow during November 14-15, 2007 as part of Golden Jubilee celebration of the Geological Society of India. Palynology has proven its application in all the commercially producing sedimentary basins of India and has strong potential in the Frontier Basins research also. The symposium, therefore, aimed to address the following focal themes:

- High-resolution biostratigraphy: regional case studies,
- Sequence biostratigraphy and palaeoenvironmental modeling,
- Palynofacies, organic petrology and source rock evaluation, and
- Modern techniques, tools and computer applications in organic matter characterization.

About 50 participants from research institutions and oil industry participated in the deliberations. After these deliberations, a Round Table discussion was held 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. The general consensus that emerged out of these discussions favoured greater involvement of academia in taking up research projects in consultation with industry in areas of focus with reference to Fossil fuel Exploration activities. It was also informed that ONGC has already taken concrete steps in this direction. Director, BSIP while presenting a vote of thanks, emphasized that BSIP is ready and capable of undertaking industry related palynological work and expressed the hope for greater and long term association with the industry.

The symposium on fossil fuel exploration was followed by the "**XXI In**dian Colloquium on Micropalaeontology & Stratigraphy" during Nov. 16-17, 2007. The Colloquium primarily aimed to focus on the both basic and applied aspects of micropalaeontological research and highlight its role and significance to enhance its visibility for end-users and stakeholders. Varied aspects of micropalaeontology and stratigraphy of the vast geologic time span ranging from Precambrain to Quaternary and from different sedimentary basins of India were deliberated during the two day meeting. About 200 delegates from various research institutions, universities and fossil fuel industry participated in the Colloquium.

The Indian Colloquium on Micropalaeontology & Stratigraphy (ICMS) being held since 1971 provides a common platform for meeting of scientists and students from both Academia and Industry in India studying varied groups of microfossils with diverse approaches. It has proved to be a strong Forum to discuss current themes and emerging areas of research, share experiences and excitements, and to project future directions for the development of micropalaeontological research in the country. Quantum shifts in research efforts and approaches due to multidisciplinary fusion with allied disciplines has made micropalaeontology indispensable with multifaceted applications in Earth System Sciences.

An abstract volume containing 173 abstracts was released. Sixty two research papers were presented orally on various aspects of micropalaeontogy and related fields. The overwhelming response of the poster session was the main attraction of the XXI ICMS. Eighty posters were presented and discussed during the poster session by the delegates and amongst these special awards were given to young researchers specifically for the poster session. A large number of young researchers amongst the participants was quite heartening as it revealed the earnestness of younger genera-



Courier Forschungsinstitut Senckenberg

Advances in Angiosperm Paleobotany and Paleoclimatic Reconstruction

Contributions Honouring David L. Dilcher and Jack A. Wolfe Contributions.

Editors: Jarzen, David M.; Manchester, Steven R.; Retallack, Gregory J.; Jarzen, Susan A. 2007. 189 pages, 100 figures, 18 tables, 1 plate, 30x21cm 189 pages, 100 figures, 18 tables, 1 plate, 30x21cm

ISBN 978-3-510-61388-5 paperback, EUR 39.80

News from Argentina

by Mercedes di Pasquo

Recent progresses of the members (Carlos Azcuy <u>azcuy@ciudad.com.ar</u>, Mercedes di Pasquo <u>medipa@gl.fcen.uba.ar</u>, Cecilia R. Amenábar <u>amenabar@gl.fcen.uba.ar</u>, Sol Noetinger <u>snoetinger@gl.fcen.uba.ar</u>) of the **Paly-nostratigraphy and Paleobotany Laboratory** (**PPL**) and Pablo Pazos of the **Stratigraphy Laboratory** (<u>pazos@gl.fcen.uba.ar</u>) from the Department of Geology (Facultad de Ciencias Exactas y Naturales (FCEN), Universidad de Buenos Aires (UBA), Argentina), are part of the information offer in our website (<u>http://palino.gl.fcen.uba.ar</u>) and summarised below. Some of the most recent contributions have been presented in the 4° European Meeting on Pale-ontology and Stratigraphy of Latin American, held in Madrid (september 12-14th) and they can be downloaded from the website <u>http://www.igme.es/4empsla</u>.

Palynostratigraphy and Paleobotany Laboratory (PPL) website (http://palino.gl.fcen.uba.ar)

We invite to visit this website where you can find information about different activities of the staff such as current research projects (in both english and spanish), teaching courses, a gallery of photographs of different events, links of interest including a map with the location of different Argentinean Palynological Groups. A list of contributions, some of them with pdf files (please contact M.M. di Pasquo to ask for them), is included in the section called "TRABAJOS DE INVESTIGACIÓN" and the section called "NEW" updated the information since 2005. Another new section is called "TAXONOMÍA" and includes the illustration of holotype and paratypes of new taxa defined by the members of the group. On the other hand, we want to acknowledge all the colleagues that have sent to us their reprints either by postmail or pdf versions!! We know that the reprint version is better than the pdf file, but it is very difficult for us to send reprints by postmail to everybody (long distances, huge prices and not enough funds for this issue!). Additionally, sometimes we do not have reprints of all contributions. So, this is the best way we find to share our information with all of you and we hope it will be useful as well. We are grateful if everybody can send to us either pdf files or reprints if it is possible of course. We are interested on palynology in general (all Periods and issues) and other paleontological researches are welcome as well.

More recent publications

- Amenábar, C.R. 2006. Significado estratigráfico de palinomorfos retrabajados en la Formación Malimán (Viseano) en la Sierra del Volcán, Provincia de San Juan, Argentina. Resultados preliminares. Revista Brasileira de Paleontologia 9 (1): 21-32.
- Amenábar, C.R, di Pasquo, M.M., Carrizo, H., Azcuy, C.L., 2007. Palynology of the Chigua and Malimán Formations in the Sierra del Volcán, San Juan province, Argentina. Part 2. Cavate and pseudosaccate spores. Ameghiniana 43(4).
- Amenábar, C.R, di Pasquo, M.M., Carrizo, H.A., Azcuy, C.L., 2006. Palynology of the Chigua and Malimán Formations in the Sierra del Volcán, San Juan province, Argentina. Part 1. Palaeomicroplankton and acavate smooth and ornamented spores. Ameghiniana, 43(2): 339-375.
- Azcuy, C.L., di Pasquo, M.M. 2005. Early Carboniferous palynoflora from the Ambo Formation, Pongo de Mainique, Peru. Review of Palaeobotany and Palynology 134(3/4): 153-184.
- Azcuy, C.L., di Pasquo, M.M., 2006. Additional systematic information of the Early Carboniferous palynoflora from the Ambo Formation, Pongo de Mainique, Peru. Revista Brasileira de Paleontologia, 9(1):15-26.
- Azcuy, C.L., Beri, A., Bernardes-de-Oliveira, M.E.C., Carrizo, H.A., di Pasquo, M., Díaz Saravia, P., González, C.,. Iannuzzi, R., Lemos, V.B.,. Melo, J.H.G, Pagani, A., Rohn, R., Rodriguez Amenábar, C., Sabattini, N., Souza, P.A., Taboada, A., Vergel, M.M. 2007. Cronoestratigrafia del Paleozoico Superior de América del Sur: primera etapa de trabajo hacia una nueva propuesta.. En: E. Díaz-Martínez, I. Rábano (eds.), 4º European Meeting on Paleontology and Stratigraphy of Latin American (Madrid), Instituto Geológico y Minero de España, Serie Cuadernos del Museo Geominero No. 8: 27-32. Madrid.
- Carrizo, H. A., Azcuy C. L. 2006. *Gilboaphyton argentinum* sp. nov.: a herbaceous lycopod from the Early Carboniferous of Argentina. Revista Brasileira de Paleontología 9(1):33-40.



Left is Cecilia R. Amenábar, center it is Sol Noetinger, and right is Mercedes di Pasquo.

- Césari, S.N., Gutiérrez, P.R., Sabattini, N., Archangelsky, A., Azcuy, C.L., Carrizo, H.A., Cisterna, G., Crisafulli, A., Cúneo, R.N., Díaz Saravia, P., di Pasquo, M.M., González, C.R., Lech, R., Pagani, M.A., Sterrern, A., Taboada, A.C., Vergel, M.M. 2007. Paleozoico Superior de Argentina: un registro fosílifero integral en el Gondwana Occidental. Ameghiniana, Volumen especial "50 años de Ameghiniana". In press.
- del Papa, C., di Pasquo, MM., 2006. Palaeoenvironmental interpretation and palynology of outcrop and subsurface sections of the Tarija Formation (Upper Carboniferous), Northwestern Argentina. Journal of South American Earth Sciences 23: 99-119.
- di Pasquo, M.M. 2007 b. Asociaciones palinológicas presentes en las Formaciones Los Monos (Devónico) e Itacua (Carbonífero Inferior) en el perfil de Balapuca, sur de Bolivia. Parte 2. Formación Itacua e interpretación estratigráfica y cronología de las formaciones Los Monos e Itacua. Revista Geológica de Chile 34(2): 163-198.
- di Pasquo, M.M., 2007 a. Asociaciones palinológicas presentes en las Formaciones Los Monos (Devónico) e Itacua (Carbonífero Inferior) en el perfil de Balapuca, sur de Bolivia. Parte 1. Formación Los Monos. Revista Geológica de Chile 34(1):98-137.
- di Pasquo, M.M. 2007. Update and importance of the Carboniferous and Permian paleontological records of the Tarija Basin. En: E. Díaz-Martínez, I. Rábano (eds.), 4º European Meeting on Paleontology and Stratigraphy of Latin American (Madrid), Instituto Geológico y Minero de España, Serie Cuadernos del Museo Geominero No. 8: 107-112. Madrid.
- di Pasquo, M.M., 2007. Unidades estratigráficas del Carbonífero de la Cuenca Tarija, Argentina. En: Léxico Estratigráfico de la Argentina. VIII Sistema Carbonífero. Asociación Geológica Argentina y SEGEMAR (Sent: 8/98. Accepted: 25/6/99). In press. <u>http://www.segemar.gov.ar/P_Lexico/index.htm</u>.
- di Pasquo, M.M., 2003. Unidades estratigráficas del Pérmico de la Cuenca Tarija, Argentina. En: Léxico Estratigráfico de la Argentina. VII Sistema Pérmico. Asociación Geológica Argentina y SEGEMAR. <u>http://www.segemar.gov.ar/P_Lexico/index.htm</u>
- di Pasquo, M, Martínez, M.A., Freije, H. 2007. Primer registro palinológico de la Formación Sauce Grande en las Sierras Australes, provincia de Buenos Aires, Argentina. Ameghiniana 44 (In press).
- Fasolo, Z., Vergel. M.M., Oller, J., Azcuy, C. 2006 "Nuevos datos palinológicos de la Formación Kaka (Viseano Serpukhoviano) en la Encañada de Beu, Subandino Norte de Bolivia" Revista Brasileira de Paleontología 9(1): 53-62.
- Noetinger S., di Pasquo M.M., 2007. Preliminary studies of Devonian microfloras of a borehole from the Tarija Basin, Northwestern Argentina. En: E. Díaz-Martínez, I. Rábano (eds.), 4º European Meeting on Paleontology and Stratigraphy of Latin American (Madrid), Instituto Geológico y Minero de España, Serie Cuadernos del Museo

Geominero No. 8: 285-290. Madrid.

Pazos, P.J., di Pasquo, M.M., Amenabar, R.C., 2007. Ichnology of the glacial to post-glacial transition in the El Imperial Formation (Upper Carboniferous), San Rafael basin, Argentina. SEPM Special Publication on Ichnology. In press.

Recent short communications in scientific events

- Amenábar, C.R., 2007. New palynological assemblage from the Chigua Formation (Early Late-Middle Devonian), at Del Chaco creek, Volcán Range, Precordillera Argentina. Field Meeting of the IGCP 499-UNESCO "Devonian Land-Sea Interaction: Evolution of Ecosystems and Climate" (DEVEC, San Juan 2007), p. 92-96. Serie Correlación Geológica, INSUGEO, Universidad Nacional de Tucumán, Special Issue.
- di Pasquo, M.M. 2007. State of the art of the Devonian palynological records in the northern Argentina, southern Bolivia and northwestern Paraguay. Field Meeting of the IGCP 499-UNESCO "Devonian Land-Sea Interaction: Evolution of Ecosystems and Climate" (DEVEC, San Juan 2007), p. 70-73. Serie Correlación Geológica, INSUGEO, Universidad Nacional de Tucumán, Special Issue.
- di Pasquo, M., Amenábar, C.R., Noetinger, S. 2007. The palaeobiogeographical significance of the spore *Grandispora pseudoreticulata* (Menéndez and Pöthe se Baldis) Ottone in the Middle to Late Devonian of Gondwana. Field Meeting of the IGCP 499-UNESCO "Devonian Land-Sea Interaction: Evolution of Ecosystems and Climate" (DEVEC, San Juan, 2007), p. 97-101. Serie Correlación Geológica, INSUGEO, Universidad Nacional de Tucumán, Special Issue.
- di Pasquo, M.M., 2005. Resultados palinológicos preliminares de estratos del Devónico y Carbonífero en el perfil de Balapuca, sur de Bolivia. XVI Congreso Geológico Argentino (La Plata). Vol. 3, p. 293-298.
- Pazos, P.J., di Pasquo, M.M., Amenabar, C.R., 2005. La sección basal de la Formación Malimán (Carbonífero Inferior) en la quebrada Don Agustín, provincia de San Juan, Argentina: rasgos sedimentarios y paleontología. XVI Congreso Geológico Argentino (La Plata). Vol. 3, p. 167-172.

Abstracts in scientific events

- Amenábar, C.R., di Pasquo, M. 2006. Nuevos datos palinológicos de la Formación El Ratón, Provincia de San Juan, Carbonífero Inferior de Argentina. 13º Simposio Argentino de Paleobotánica y Palinología (22-25 de Mayo de 2006, Bahía Blanca). Resúmenes: 20. UNIVERSIDAD NACIONAL DEL SUR.
- Amenábar, C.R., di Pasquo, M.M., Pazos, P.J., 2006. Nuevos registros paleontológicos de la Formación Malimán (carbonífero inferior), en la quebrada Don Agustín, Precordillera de Argentina. 9º Congreso Argentino de Paleontología y Bioestratigrafía (Córdoba, 18–22 de Septiembre), Resúmenes: 174.
- Amenábar, C.R., di Pasquo, M.M., Pazos, P., Azcuy, C. 2006. Información palinológica actualizada del Grupo Angualasto (Carbonífero Inferior), Cuenca Uspallata-Iglesia, Argentina. 13º Simposio Argentino de Paleobotánica y Palinología (22-25 de Mayo de 2006, Bahía Blanca). Resúmenes: 21. UNIVERSIDAD NACIONAL DEL SUR.
- Amenábar, C.R., di Pasquo, M.M., Carrizo, H.A., Pazos, P.J., 2006. Datos paleoflorísticos de la sección basal de la Formación Malimán (Carbonífero Inferior) en su localidad tipo, quebrada La Cortadera, Provincia de San Juan, Argentina. 9° Congreso Argentino de Paleontología y Bioestratigrafía (Córdoba, 18–22 de Septiembre), Resúmenes: 173.
- Carrizo, H.A. y Azcuy, C.L. 2006. *Krauselcladus Asterotheca* una Fitozona de Asociación del Carbonífero Tardío tardío reconocida en las Cuencas Paganzo y Río Blanco de Argentina. XIII Simposio Argentino de Paleobotánica y Palinología. Bahía Blanca (Argentina). Resúmenes: 30.
- Carrizo, H.A., Zamuner Alba, B., Azcuy, C.L. 2006. *Pietzschia* (Gothan) del Carbonífero Inferior de Argentina. Primera Cladoxylopsida anatómicamente preservada registrada en América del Sur. Jornada Geológica: 16. Dirección de Geología. Fundación Miguel Lillo.
- di Pasquo, M. 2006. Análisis crítico sobre la presencia de *Retispora lepidophyta* (Kedo) Playford en América del Sur. 13° Simposio Argentino de Paleobotánica y Palinología (22-25 de Mayo de 2006, Bahía Blanca). Resúmenes: 23. UNI-VERSIDAD NACIONAL DEL SUR.
- di Pasquo, M.M. 2006. Puesta al día de la información paleontológica del Carbonífero y Pérmico de la cuenca Tarija, Norte de Argentina y Sur de Bolivia. 13º Simposio Argentino de Paleobotánica y Palinología (22-25 de Mayo de 2006, Bahía Blanca). Resúmenes: 19. UNIVERSIDAD NACIONAL DEL SUR
- di Pasquo, M.M., Noetinger, S., 2006. Noticia sobre el registro palinológico y de plantas en el Angosto de Alarache (Loch-

koviano), Sierra de San Telmo, Departamento Tarija, Sur de Bolivia. 9º Congreso Argentino de Paleontología y Bioestratigrafía (Córdoba, 18–22 de Septiembre), Resúmenes: 157.

- di Pasquo, M., Azcuy, C. 2006. Información Micropaleontológica del Carbonífero y Pérmico de las Cuencas Madre de Dios (Bolivia Y Perú) y Arizaro (Chile y Argentina). 13º Simposio Argentino de Paleobotánica y Palinología (22-25 de Mayo de 2006, Bahía Blanca). Resúmenes: 14. UNIVERSIDAD NACIONAL DEL SUR.
- di Pasquo, M., Martínez, M.A., Freije, H. 2006. Noticia sobre el primer registro palinológico de la Formación Sauce Grande en las Sierras Australes, provincia de Buenos Aires, Argentina. 13º Simposio Argentino de Paleobotánica y Palinología (22-25 de Mayo de 2006, Bahía Blanca). Resúmenes: 7. UNIVERSIDAD NACIONAL DEL SUR.
- di Pasquo, M., Concheyro, A., Zurriaguz, V., Ambrosio, A., Adamonis, S. y Amenabar, C.R., 2006. Avances en la palinología de la Formacion Snow Hill island (Cretácico Superior) en Sanctuary Cliff, isla Cerro Nevado, Península Antártica. 9º Congreso Argentino de Paleontología y Bioestratigrafía (Córdoba, 18–22 de Septiembre), Resúmenes: 221.
- Loss, L. y Pazos, P.J., 2006. Arquitectura depositacional de la Formación El Imperial (Carbonífero superior), en el Cañon del Atuel, Cuenca San Rafael, Mendoza, Argentina. IV Congreso Latinoamericano de Sedimentología. Bariloche 11/2006.
- Pazos, P., Amenabar, C.R., di Pasquo, M.M., Azcuy, C.L., 2005. Are the Late Tournaisian-Viséan sequences in central western Argentina climatically controlled? The Maliman Formation data set. 12° Gondwana (Mendoza, 6-11 de noviembre).

Ph.D. News

Cecilia R. Amenábar has defended her Ph.D. theses, titled "Palynostratigraphy and palaeoenvironment of the Chigua (Chinguillos Group, Devonian), Malimán and El Ratón (Angualasto Group, Lower Carboniferous) formations, Uspallata-Iglesia Basin. Comparison and correlation with other palynofloras and characterization of the Devonian-Carboniferous boundary in the region", on june 21st at the University of Buenos Aires. She is currently working on the Late Cretaceous microfloras of the Sanctuary Cliff Formation in the Snow Hill Island, James Ross Basin, Antarctica Argentina. This research is carried on the framework of the PICTO (2005) 36166 project and supported by a grant from the National Research Council of Argentina (CONICET), Post-Doctoral position under the supervising of M. di Pasquo and A. Concheyro. A first result was presented in the "9° Congreso Argentino de Paleontología y Bioestratigrafía", held in Córdoba (september 18–22th 2006).

Sol Noetinger, biologist from the University of Buenos Aires (UBA), Buenos Aires, Argentina. During her undergraduate studies she collaborated in different areas of botany and time periods like Mesozoic and recent. Her main research interests are Devonian palynology, stratigraphy, palaeobotany, and palaeoecology of the north-western Argentinean basins. The purpose of her current studies is to improve the knowledge of this palaeoecological scenario added to the stratigraphic and chronological information of the Middle Palaeozoic Tarija Basin (north of Argentina and south of Bolivia) and other related areas of Argentina.

She is currently working, since April 2006, in the Geology Department at the Exact and Natural Sciences Faculty from the same university, on her PhD theses: "Studies of the Devonian and Lower Carboniferous microflora from northwestern Argentina and South of Bolivia", supported by a grant from the National Research Council of Argentina (CONICET) under the direction of Dr. M. di Pasquo.

Current projects

Members of the Palynostratigraphy and Paleobotany Laboratory (**PPL**) are involved in several projects (see below). These projects deal with taxonomical issues on palynology and palaeobotany that will allow to improve the comparison and correlation of mega and microfloras occurring from the Devonian to the Permian basins such as Madre de Dios (Bolivia), Tarija (southern Bolivia and northern Argentina), Uspallata/Iglesia, Paganzo, San Rafael (western Argentina) and Paraná (Brazil). Another project involves the palynologic and micropaleontologic studies on the Cretaceous and Tertiary in the James Ross Basin.

All these researches will contribute to the knowledge on the diastrophic and paleoclimatic events that generated

unconformities in those places from western Gondwana. These projects consider the formation of human resources through the accomplishment of doctoral theses, post-doctoral works, final degree works and also, of the production of a scientific work with students.

- UBACYT N° X 136. "ANÁLISIS ESTRATIGRÁFICO SECUENCIAL Y MONITOREO DE FACIES DU-RANTE EPISODIOS GLACIALES EN DIFERENTES MARCOS TECTOSEDIMENTARIOS NEOPALEOZOICOS (CUENCAS TARIJA- SAN RAFAEL Y RIO BLANCO)". Responsable: Pablo Pazos. Staff: Mercedes di Pasquo, Silvia Japas, Cecilia R. Amenábar. Period: 2004-2007.
- PICTR2004-00313/03 "BIODIVERSIDAD DE LAS DE TAFOFLORAS Y FAUNAS DE INVERTEBRADOS EN CUENCAS NEOPALEOZOICAS ARGENTINAS Y DEL SUR DE AMERICA DEL SUR: SISTEMATICA, BIOESTRATIGRAFIA Y CORRELACION". Period: 2005-2008. Project (AGENCIA). Responsable: Azcuy, Carlos Leopoldo. Staff: M. di Pasquo, P. Pazos, M. Vergel, H. Carrizo. UBA (FCEN) and Fundación Miguel Lillo.
- PIP 5518. "ESTUDIO DE MICROFLORAS (Y MEGAFLORAS) DEL DEVONICO Y CARBONIFERO DEL OESTE Y NOROESTE ARGENTINO Y DE OTRAS CUENCAS DEL SUR DE AMERICA DEL SUR". Responsable: M. di Pasquo. Staff: Cecilia R. Amenábar, Pablo Pazos, Sol Noetinger, Gustavo Holfeltz.. Institutions: UBA (FCEN)-CONICET. Period: 2005-2008.
- PICTO (2005) 36166. ESTUDIO PALEOBIOGEOGRAFICO DE LAS MICROBIOTAS DEL CRETÁCICO SUPERIOR Y CENOZOICO DE LA PENÍNSULA ANTÁRTICA Y REGIONES ADYACENTES. MODIFICACIONES EN SU DISTRIBUCIÓN VINCULADAS A CAMBIOS CLIMÁTICOS (AGENCIA-IAA). Responsable: Dr. Andrea Concheyro. Staff: Drs. Sara Ballent, Mercedes di Pasquo, Teresita Montenegro, Flavia Salani, Cecilia R. Amenábar, Lics. Susana Adamonis, Juan Manuel Lirio, Marina Lescano, Alfredo Ambrosio. Institutions: UBA (FCEN) - IAA. Period: 2007-2009.

Participation on foreign projects

CGL2006-07376/TE (20/7/2006): "REGISTRO SEDIMENTARIO DE CAMBIOS CLIMÁTICOS EN EL CARBON-ÍFERO DE BOLIVIA: BIOESTRATIGRAFÍA Y AMBIENTES SEDIMENTARIOS". Responsable. Enrique Díaz Martínez. Staff: **Mercedes di Pasquo**, Roberto Iannuzzi, Paulo Souza, Peter Isaacson, Oscar Arispe, Shirley Lopez, George Grader. Dirección de Geología y Geofísica. Institutions: Instituto Geológico y Minero de España. Period: 2006-2009

REDE SUL-AMERICANA DE COLEÇOES E ENSINO EM PALEOBOTANICA Y PALINOLOGIA (2007-2009). This project RESCEPP deal with the information about paleontological collections that are useful both for reseaching and teaching and most important, they are needed to preserve our paleontological "patrimonio" for our future generations. Coordinators: Paulo A. Souza, Roberto Iannuzzi, Tania Dutra (UFRGS). Staff: Cecília da Cunha Lana (PETROBRAS, Brasil), José Henrique Gonçalves de Melo (PETROBRAS, Brasil), Marcelo de Araújo Carvalho (UFRJ/Museu Nacional, Brasil), Maria Judite Garcia (UnG, Brasil), Rosemarie Rohn Davies (UNESP Rio Claro, Brasil), Aldo R. Prieto (Universidad Nacional de Mar del Plata, Argentina), Mercedes di Pasquo (Universidad Buenos Aires, Argentina), Luiza M. Anzótegui (Universidad Nacional del Nordeste, Argentina), Maria del Milagro Vergel (Fundación Miguel Lilo, Argentina), Mirta Quattrocchio (Universidad Nacional del Sur, Argentina), Ángeles Beri (UDELAR, Uruguai), Luis Mata Garcia (Petróleos de Venezuela SA, Venezuela).

Books or Special Publications

Biostratigraphy of the Upper Palaeozoic of South America: first step to a new chronostratigraphic proposal (Bioestratigrafia del Paleozoico Superior de América del Sur: Primera Etapa de Trabajo Hacia una Nueva Propuesta Cronoestratigráfica)



Carlos Azcuy, Angeles Beri, Mary E.C. Bernardes-de-Oliveira, Hugo A. Carrizo, Mercedes di Pasquo, Pamela Díaz Saravia, Carlos González, Roberto Iannuzzi, Valesca B. Lemos, José Henrique G. Melo, Alejandra Pagani, Rosemarie Rohn, Cecilia Rodríguez Amenábar, Nora Sabattini, Paulo A. Souza, Arturo Taboada, Maria del Milagro Vergel (Authors in alphabetical order).

An important achievement of the **Working Group on Upper Palaeozoic Chronostratigraphy of South America** that would be published soon (Azcuy et al., 2007), is the first result of the following meetings: The 1st Meeting of the Upper Palaeozoic Chronostratigraphy Committee of South America, held within the framework of the *XI Reunião de Paleobotânicos e Palinólogos* (Gramado, Brazil, 2004), included researchers from Argentina, Brazil and Uruguay and was coordinated by Carlos Azcuy. The meeting constituted the first step to discuss and establish a regional chronostratigraphic scheme of the Upper Paleozoic

of South America. The current scheme established in Western Europe, Russia and North America has been defined using fossil associations that are not common to the region of Gondwana. All of the participants agreed that the best way to establish a regional chronostratigraphy would be by synthesizing all systematical, palaeontological, and radiometrical works of Upper Palaeozoic basins from South America. It was agreed to divide the task among the participants with Dr. Carlos Azcuy, as Lead Coordinator. The first results of the project were discussed in the framework of the *XIII Simposio Argentino de Paleobotánica y Palinología* (Bahía Blanca, Argentina, 2006). The biostratigraphical units established for the different basins of South America as well as other data (more isolated and new information) are updated and discussed and a correlation chart is supported by a list of selected references.

Asociación Geológica Argentina. Serie Especial. Sent: 12/2006. Accepted: 06/07. In press but soon available. For more information please contact M. di Pasquo.



Pr. Eli Dricot

Deceased in Verviers, Belgium, November 7, 2007 at the age of 71.



Pr. Dricot produced remarkable works on Frasnian acritarchs from Europe. He was a retired faculty member from the Universite Catholique de Louvain where he was much appreciated by his colleagues and students. His colleagues remember him for his unique patience and thoroughness. He was an enquirer who could spent hours in the library researching a single acritarch that he could not identified. His door was always opened to discuss his interest with students. His work on European Frasnian acritarchs remains the most detailed and comprehensive to date.

Some of his most meaningful publications are:



Université catholique de Louvain Dricot E.M. 1960. Recherches palynologiques sur le plateau des Hautes Fagnes. **Bulletin de la Société Royale de Botanique de Belgique,** 92 (1, 2): 157-196.

G. Seret, E. Dricot & G. Wansard, 1990. Evidence for an early glacial maximum in the French Vosges during the last glacial cycle. **Nature**, 346 (6283): 453-456.

G. Seret, E. Dricot, J.-L. de Beaulieu, M. Reille & P. Ponel, 1992. The Southern Vosges Mountains, **Cahiers de Micropaleontologie**, 7: 238-251.

Dr. Eva Crane

Expert on World's Bees, Dies at 95

From an article written by DOUGLAS MARTIN, and submitted by Vaughn Bryant

Eva Crane, who earned a doctorate in nuclear physics and then abandoned the field to devote herself to expanding and spreading knowledge about bees as a researcher, historian, archivist, editor and author, died on Sept. 6 in Slough, England. She was 95, 57 years shy of the reputed life span of the 17th-century English farmer Thomas Parr who, she suggested in one of her books, owed his longevity to eating honey that she said he produced as a beekeeper.

For more than a half-century Dr. Crane worked in more than 60 countries to learn more and more about honeybees, sometimes traveling by dugout cance or dog sled to document the human use of bees from prehistoric times to the present. She found that ancient Babylonians used honey to preserve corpses, that bees were effectively used as military weapons by the Viet Cong, and that beekeepers in a remote corner of Pakistan use the same kind of hives

found in excavations usefulness of her findings when an official of the ment of Agriculture in Russian bees in one of veloped a resistance to devastating local bees, Baton Rouge reported. some Russian bees, and soon mite-resistant.

Dr. Crane wrote some books on bees and apilished more than 180 pa-It noted that she wrote

"She called her generation the last that would be able to see the world's rich variety of traditional beekeeping."

of ancient Greece. The was apparent in 2001 United States Depart-Louisiana read about her books. They had demites, which had been The Sunday Advocate of The agency imported the Louisiana bees were

of the most important culture. Dr. Crane pubpers, articles and books. most of them when she

was in her 70s and 80s, after stepping down in 1984 from the day-to-day running of the association. The Times of London in 1999 called her the queen bee among bee experts. For 20 years beginning in 1962, Dr. Crane edited the association's Journal of apicultural Research, as well as editing Bee World from 1949 until 1984. The meticulousness of Dr. Crane's research showed in her examination of ancient rock images involving bees and honey. She studied 152 sites in 17 countries from a register of rock art she established herself for her book "The Rock Art of Honey Hunter" (2001). Her goal was to show how ancient ways of cultivating bees persisted in still-used, but disappearing, methods. She called her generation the last that would be able to see the world's rich variety of traditional beekeeping.

Dr. Crane also offered advice on how to use honey as a cosmetic. She advised dissolving two tablespoons of honey in two tablespoons of water, then adding six more tablespoons of water to concoct an excellent facial cleanser.

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 !!

Make this column one of your many New Year resolutions!!!

Spread the news of your work to your palynological colleagues!!!

- Bos, J.A.A., van Geel, B., van der Plicht, J., Bohncke, S.J.P., 2007. Preboreal climate oscillations in Europe: Wiggle-match dating and synthesis of Dutch high-resolution multi-proxy records. *Quaternary Science Reviews* 26: 1927-1950. vanGeel@science.uva.nl
- Danelian, T., Baudin, F., Silvia Gardin, Edwige **Masure, E**., Ricordel, C., Fili, I., Meçaj, T., Muska, K., 2007. *Revue de Micropaleontologie* 50: 225-237. edmasure@ccr.jussieu.fr
- Krings, M., Kerp, H., Hass, H., Taylor, T.N., Dotzler, N., 2007. A filamentous cyanobacterium showing structured colonial growth from the Early Devonian Rhynie chert. *Review of Palaeobotany and Palynology* 146: 265-276. kerp@uni-muenster.de
- Kunzmann, L., **Mohr, B.A.R.,** Bernardes-de-Oliveira, M.E.C., 2007. <u>Novaolindia dubia</u> gen. et sp. nov., an enigmatic seed plant from the Early Cretaceous of northern Gondwana. *Review of Palaeobotany and Palynology* 147: 94-105. barbara.mohr@rz.hu-berlin.de
- Pott, C., van Konijnenburg-van Cittert, J.H.A., **Kerp, H**., Krings, M., 2007. Revision of the <u>Pterophyllum</u> species (Cycadophytina: Bennettitales) in the Carnian (Late Triassic) flora from Lunz, Lower Austria. *Review of Palaeobotany and Palynology* 146: 74-101. kerp@uni-muenster.de
- Shu, J.-W., Wang, W.-M., **Leopold, E.B.,** Wang, J.-S., Yin, D.-S., *in-press*. Pollen stratigraphy of coal-bearing deposits in the Neogene Jidong Basin, Heilongjiang Province, NE China: new insights on palaeoenvironment and age. *Review of Palaeobotany and Palynology*. eleopold@u.washington.edu
- Smith, F.A., **Wing, S.L**., Freeman, K.H., 2007. Magnitude of the carbon isotope excursion at the Paleocene–Eocene thermal maximum: The role of plant community change. *Earth and Planetary Science Letters* 262: 50-65. wing.scott@nmnh.si.edu
- Tang, P., Paris, F., Geng, L.-Y., Zhu, H.-C., 2007. Chitinozoan biostratigraphy across the base of Darriwilian Stage from the type area in Eastern China. *Review of Palaeobotany and Palynology* 146: 74-101. Florentin.Paris@univ-rennes1.fr
- Yeloff, D., Charman, D., **van Geel**, B., Mauquoy, D., 2007. Reconstruction of hydrology, vegetation and past climate change in bogs using fungal microfossils. *Review of Palaeobotany and Palynology* 146: 102-145. vanGeel@science.uva.nl
- Yeloff, D., Broekens, P., Innes, J., **van Geel, B.**, 2007. Late Holocene vegetation and land-use history in Denmark: A multi-decadally resolved record from Lille Vildmose, northeast Jutland. *Review of Palaeobotany and Palynology* 146: 182-192. vanGeel@science.uva.nl

HAPPY HOLIDAYS!!!!





THE 40TH AASP MEETING IN PANAMA

Eighty-two participants attended this year's annual meeting, held in Panama City, in the Republic of Panama, from September 9th to 12th (Picture above: Group in Tupper Center at Smithsonian Tropical Research Institute). The organizer and president of the AASP, Carlos Jaramillo (Smithsonian Tropical Research Institute, Panama), received 50 abstracts from 18 countries. This year's meeting was sponsored by AASP, Exxon, ConocoPhillips, Chevron, STATOIL, BP, Ecopetrol and STRI.

The meeting was held at the Tupper Conference Center of the Smithsonian Tropical Research Institute and began with welcoming remarks by Carlos Jaramillo and Eldredge Bermingham (STRI's Acting Director). The keynote address was by Alfred Traverse, entitled: "Founding the AASP: Critical Mass Reached in Tulsa in 1967". The diverse meeting program provided attendees the opportunity to learn about uses of palynomorphs in research ranging from climatic reconstruction to biogeography to archeology; as well as enjoy two paleobotanical symposia on "Pollen Morphology and Phylogeny" organized by David Jarzen, senior biologist and collections manager for paleobotany and palynology



Stephen Louwye's talk during a technical session. Photo: S. Warny



Participants attending a tour in Barro Colorado Island.



Transit at Miraflores Locks, Panama Canal Photo: S. Warny



Participants attending the Conference dinner Photo: S. Warny

at the Florida Museum of Natural History; and "Tropical Pollen and Spores: Tracking Vegetation Dynamics of the Neotropics during the Cenozoic" chaired by Steve Lowe from BP. The meeting also included a poster session and two general technical sessions.

In addition, participants had the option of attending a free, half-day workshop in analytical techniques for palynological analysis using the statistical freeware program "R", where participants obtained hands-on experience using the software.

The first night's social icebreaker took place in Punta Culebra Nature Center, where attendees got to meet each other and enjoy a wonderful Pacific sunset. There were also two optional field trips, one to rainforest of Barro Colorado Island (see second picture to the right) and other to a Canopy Crane System in the Parque Nacional Metropolitano, where participants were able to see the forest from above the canopy. Conference participants also visited the Miraflores Locks in the Panama Canal (see third picture to the right), and enjoyed the conference dinner at a fantastic local restaurant (bottom picture to the right).

The Business Luncheon held in the Tupper Conference Center helped to establish a stronger working relationship between attendees and organizers.

Edwin Correa, James White, Susan

Edwin Correa, James White, Susan Jarzen and Iann Sanchez at the Canopy Crane. Photo: D.M. Jarzen.

Update on an incident in Panama

by D.M. Jarzen

One of the problems in getting older is that your mind still thinks you are in your twenties or thirties while your body knows only all too well that in fact you're in your mid-sixties!

It was the beginning of the 40th Annual Meeting of the American Association of Stratigraphic Palynologists meetings in the Republic of Panama and Susan and I had arrived a day early in order to partake of the field trips planned by our hosts—The Smithsonian Tropical Research Institute (STRI). I had been in Panama in 1967, but this was Susan's first trip to the country and the canal. We had plans to see it all!

Saturday, the eighth of September, 2007 began with a cloudy overcast that would eventually turn into a steady rainfall for most of the day. We were out early in order to catch the truck to the Canopy Crane, just outside the city in the rainforest. The trip was a scheduled tour hosted by STRI, aimed at showing a part of their research facilities. Our guides were lann Sanchez and Edwin Correa who, along with AASP member, Dr. James White, comprised the entire group scheduled to see the crane.

The rain continued all morning, and the crane operator informed us that inasmuch as the crane ran on electricity, he could not by law allow us to go up into the canopy while it was raining. We reluctantly accepted his decision, and suggested that instead, if time permitted, that we take a walking tour of the forest at the crane site, and do a little botanizing. Both lann and Edwin were agreeable and were well trained in the biological sciences, so that for the next four hours we experienced a first rate, first-hand botanical tour of the Panamanian rainforest. In addition to the myriad of plants identified by the tour leaders, we were treated to a score of beautiful tropical bird life, Tamarin monkeys, and a Coatimundi.

A few hours provided so much enjoyment through a simple hike and careful observation of the plants and animals around us in such a small area.

Susan and I returned to our hotel room after lunch and cleaned up a bit in order to be respectable to meet other AASP members who would be arriving later in the day and early that evening. Soon, we met with

Dr. Vaughn Bryant from Texas A&M, and his wife Carol. We sat and talked for a few minutes and were soon joined by Professor James Doyle of the University of California at Davis, a respected angiosperm phylogenist. We talked some and then decided to walk the city streets at night toward the very beautiful Catholic church, just a couple blocks away from the hotel. We walked slowly and talked some. Jim Doyle was using a cane, as he had recently hurt his right leg in a minor fall. As we walked, Susan noted a small foot and a half high wall between the group and the church and suggested we walk a bit farther and walk around the wall. Susan took the safe route. The rest of us took the wall and climbed over it easily. Except for Doyle, who appeared to need some help. I stood on the other side of the wall and guided Jim over the small stone wall. Safe on the other side, I backed up one step and that is as far as my actual memory of the next few minutes can take me now!

I looked up from a pit in the ground, not certain of what just happened. I felt cramped, wet, and scared. I looked up to see people talking, scurrying, and in



The Pit. Photo: V.M. Bryant.



a somewhat confused state, calling to me to reach up, to extend my arms to stand up. I felt OK, but knew then I was not. I recall reaching up, holding onto something to boost myself out of this 3 meter pit in the ground. Somehow, the passersby and my colleagues pulled me out of the pit and I sat on the wall trying to regain my strength and my composure. I looked around and saw no signs warning people of the large hole in the sidewalk and the poor night lighting along the street made the hole even more invisible to pedestrians. It was a miracle that more of us didn't fall in the hole. As I sat there looking around I began to hurt a little.

The human body is a remarkable thing. I can recall as a young lad falling out of trees, jumping off garage roofs, hitting a brick wall

with my bike, and in all cases getting fairly well banged up. Indeed my mother must have worried daily about my safety as I was always getting into trouble and ending up with cuts, bruises and scrapes on nearly every part of my body. I never broke a bone, nor was I ever knocked unconscious. Each fall, each injury, however, mended with little note, and I was soon back on the road to jump, run, and fall all over again.

But this time, even though the adrenalin kicked in full force and masked the initial pain and damage, I knew that somehow this would be different. Susan and I managed to get back to the hotel, where I immediately laid down on the bed. Susan removed my shirt and jeans to see what had happened to my body. At first it did not appear too bad. A few scrapes and cuts and that was all. Susan called for the hotel doctor to have me checked out in more detail. Soon the doctor came as did the hotel security agent and the senior life guard (who provided the ice packs and materials to stop the bleeding. A final assessment of the damages showed that I must have fallen straight down the pit, and hit a slab of concrete that lay tilted against one wall.

This inclined plane buffeted my fall, slowing me a bit from falling straight down. The right side of my body was cut and very badly bruised (in a few days the bruises would fully develop and cover most of my upper right arm, my right side and rib cage, my thigh, calf and entire right foot.) The pain associated with this trauma was only partly lessened by the use of Tylenol and codeine. My 66-year-old body could cope just so much with the fall, and I knew, and the doctor and nearly everyone else reminded me, that this would take several weeks to perhaps months to cure completely. The doctor looked me over and in mixed Spanish and English exclaimed that I was indeed the luckiest person she had ever met, and that based on what she heard from others I was lucky to be alive. She noted that I must have a "guardian angel" on each of my shoulders.

For the next few weeks, Susan and I nursed me back to reasonable health. As I write this, four weeks have passed since the fall. I am able to make most of the day at work, and can walk well. I tire easily and get a back strain from sitting or sleeping in one position too long. Sleeping is the toughest, as I can not sleep on my side, but rather must lay the full night on my back. This awakens me after about three hours or so, and I must walk about to relieve the pain, and try to return to bed, or more often the comfortable reclining chair in my study.

Upon my return to Gainesville, we saw our own doctor, who like the doctor in Panama exclaimed that I must have very strong bones to have survived the fall without a single fracture (actually a CT scan showed that two of the lumbar vertebrae had minor hairline fractures on the processes. These would heal on their own.)

So it was that my trip to Panama and the 40th Annual Meeting was cut short. My lecture on the diet of Chilean Mummies was presented by my co-author Dr. Bryant, while the Special Session on Pollen Morphology and Plant Phylogeny, which I organized was chaired by Dr. Doug Nichols.

I feel that I was indeed very lucky not to have incurred serious injury, or paralyzed condition. The fall was sudden, and the injuries temporary. I didn't break any bones, and once again I will be back on the road to find more misadventure.



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.

	Single	Double	Triple	Quadruple
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.

	Single	Double	Triple	Quadruple
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).

	Single	Double	Triple	Quadruple
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).

	Single	Double	Triple	Quadruple
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.

Other meetings:



DINO8: Eighth International Conference on Modern and Fossil Dinoflagellates

Montréal, Canada

4-10 May 2008

The Eighth International Conference on Modern and Fossil Dinoflagellates (DINO8: http://www.dino8.uqam.ca) is being organized by the Geochemistry and Geodynamics Research Centre (GEOTOP; http://www.geotop.uqam.ca/) and will be held at UQAM in Montreal from May 4 to10, 2008. The conference will cover various fields of research relevant to the study of dinoflagellates including molecular biology, ecology, taxonomy, biostratigraphy, limnology, oceanography, paleoclimatology and paleoceanography.

Workshops are planned to provide hands-on knowledge on the taxonomy of Neogene and Quaternary dinoflagellate cysts, *in vitro* culture techniques, techniques of preparation and analyses, and quantitative data treatments for paleoceanographic purposes.

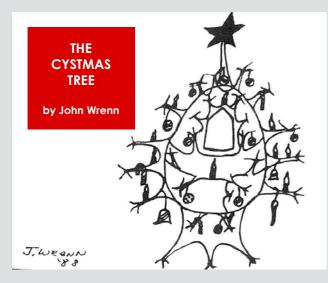
The preliminary program and information concerning registration are available on the internet at: http://www.dino8.uqam.ca

The organizing committee warmly welcomes students, researchers and professionals to attend DINO8.

Organizing committee:

Anne de Vernal (GEOTOP-UQAM) André Rochon (GEOTOP and ISMER)

Contact: Taoufik Radi at: dino8@uqam.ca



EDITOR'S NOTE

Dear AASP members,

Once again, we have a very full issue of the AASP Newsletter. Many thanks to all of you who keep providing feedback and material. It is a pleasure to work with such a great group.

As you saw, we have a new section presenting one of our members' favorite palynomorph, in addition of the highlight of one palynological laboratory - in this section, Argentina. My goal is to help our members and students find information about the various palynological

research groups that exist around the world. I hope this will encourage you to send me articles and illustrations about your lab (word format document and pictures attached separately are best). Depending on the success of this attempt, I will try to have one or two labs highlighted in each future issue of the newsletter.

I want to reiterate that this newsletter cannot be created without your support. I encourage each of you, AASP members, future members, and colleagues, to send your contributions or ideas. With this in mind, I am looking forward to receiving your contributions.

Please send items such as (note that the order is not a reflection on priorities):

- Student thesis abstracts, updates on student research, etc.
- Reports on meetings, workshops, etc.
- Reviews on unique palynomorphs (one will be selected to illustrate our new NL cover)
- Historical notes
- Reviews on active research (climate, archeology, etc.)
- News on upcoming palynological and related meetings
- News on publications
- Human interest stories about members and students
- Information from groups outside of the United States
- Opinion pieces on palynological subjects
- Job openings in your company, university, or that you are aware of
- News flash items, serious or humorous
- Advertisements on palynological-related items
- And any items our members think are appropriate.

Thank you and have a wonderful Holiday season!

Sophie Warny swarny@lsu.edu 1-225-578-5089 Louisiana State University

