

# PALYNOS

Volume 30, n°1 - June 2007

NEWSLETTER OF THE INTERNATIONAL FEDERATION OF PALYNOLOGICAL SOCIETIES

## MEETING ANNOUNCEMENT

**XII<sup>th</sup> International Palynological Congress  
(IPC-XII 2008)**

**VIII<sup>th</sup> International Organisation of  
Palaeobotany Conference (IOPC-VIII 2008)**

**Joint Congress, Bonn, Germany**

**30 August - 5 September 2008**

The 12th International Palynological Congress will be held in Bonn from Saturday 30th August to Friday 5th September 2008 in close conjunction with the 8th International Organization of Palaeobotany Conference. Both conferences are hosted by the German palaeobotanists and palynologists, unified in the Arbeitskreis für Palaeobotanik und Palynologie. In Germany, palaeobotanists and palynologists have always held joint meetings. This has been very successful and it has shown that a dialogue between palaeobotanists and palynologists is most fruitful. Due to various circumstances, participation in both the International Palaeobotanical Conference and International Palynological Congress in both 2000 and 2004 was very difficult for many individual scientists. Nevertheless, the organisers of 12th IPC and 8th IOPC feel that interactions between both disciplines are strongly needed, now maybe even more than ever before. Therefore, it was decided to hold both 2008 congresses in the same place

and at the same time.



The medium-sized City of Bonn, founded by the Romans, was chosen as the venue for the meeting. Bonn is located in the Rhine Valley and has a rich cultural heritage with a variety of historical buildings and several excellent art and history museums, ranking among the best of Germany. Bonn is well known for its medieval, baroque, rococo, and Victorian architecture and the city centre is known for its large variety of restaurants, bars and pubs. Until a few years ago Bonn was the capital of Germany and the city has an excellent infrastructure. Bonn can easily be reached

by air, by rail and by car. Cologne-Bonn Airport is served by several budget airlines and there are excellent and fast connections to the nearby Düsseldorf International Airport (40 minutes by train) and to Frankfurt International Airport (1 hour by high-speed train). Bonn has sufficient hotel accommodation in all price classes, from very reasonably priced pensions to luxury hotels, and a youth hostel; the city is served by an excellent public transport system (subway, streetcar, and busses).



The 12th IPC will be held in the main building of the University of Bonn, an attractive 17th century baroque palace located in the centre of town, near City Hall, and only five minutes walking distance from the main railway station. This historical building has a large Audimax lecture theatre, sufficient larger lecture rooms, and medium-sized to smaller meeting rooms situated around a central courtyard. Together these form an ideal setting for the meeting.

Because the conference will be held in university buildings, we will be able to keep the costs reasonably low. One of our aims is to keep conference fees as low as possible; they will not exceed €200.- for professionals - IOP members will pay a reduced fee. Registration for 12th IPC also enables participants to attend all 8th IPC symposia.

The opening ceremony will be in the afternoon of Saturday 30th August, followed by two key-note presentations and the icebreaker party. During the mid-conference break on Tuesday 2nd September several one-day excursions will be offered, including the Neogene browncoal deposits of the Lower Rhine Embayment, Tertiary and Quaternary volcanism and fossil deposits in the Eifel Mountains, the famous Messel quarry, the Carboniferous of the Ruhr District, and the Devonian of the Rhenish Slate Mountains.



For those who prefer culture during the mid-conference break, there will be an excursion to Cologne, including visits to the famous cathedral and the Roman-German museum, a unique exhibit on the daily life in the northern part of the Roman Empire. The conference dinner is scheduled for Wednesday evening and is preceded by a boat tour on the Rhine River. This part of the Rhine Valley with its steep vineyards, and many romantic castles and ruins is a UNESCO World Heritage Site.



### **2nd call for symposia**

Each symposium will have two convenors. Symposia will be restricted to time blocks of three hours; depending on the theme, a symposium may include two or more blocks. A symposium starts with a 10 minute introduction by the convenors and concludes with a short summary. Each speaker will have 15 minutes for the oral presentation and five minutes for discussion. In

order to avoid too many parallel sessions and to give everybody a fair chance to give an oral presentation, the number of oral presentations will be restricted to two per speaker. Convenors may invite a keynote speaker for their symposium. Keynotes can fill two time slots and counts as a single presentation. **Proposals for symposia, preferably in electronic format, should be sent to Thomas Litt (t.Litt@uni-bonn.de) before 15th September 2007.** Proposals should include (1) the title of the symposium, (2) the names and addresses of the convenors, (3) a brief summary of the symposium (c. ½ page), and, if possible, (4) a list of potential speakers. Because we want to encourage interactions between palaeobotanists and palynologists, proposals for interdisciplinary symposia dealing with both palaeobotanical and palynological aspects of the same theme (e.g., palaeoclimate, palaeoecology, extinction events) are particularly welcome.

More information on 12th IPC and 8th IOPC will soon be available on the internet at:  
<[www.paleontology.uni-bonn.de](http://www.paleontology.uni-bonn.de)>.

#### **Prof. Thomas Litt**

[President International Federation of Palynological Societies and Chair 12th IPC]

Institut für Paläontologie  
Universität Bonn  
Nussallee 8  
53115 Bonn  
Germany

Phone: 0049 228 732736  
E-mail: t.litt@uni-bonn.de

#### **Prof. Hans Kerp**

[Chair 8th IOPC]

Forschungsstelle für Paläobotanik  
am Geologisch-Paläontologischen Institut  
Westfälische Wilhelms-Universität Münster  
Hindenburgplatz 57  
48143 Münster  
Germany

E-mail: kerp@uni-muenster.de

***Please note the 2nd call for symposia for the forthcoming IPC/IOPC conferences in Bonn, Germany during August-September 2008. The new deadline for proposals is 15th September 2007.***



## **IFPS COUNCILLOR UPDATES**

There are no updates to the “Current IFPS Councillors” list published in the December 2006 issue of *PALYNOS*. This current list of IFPS councillors is provided overleaf. IFPS secretary-treasurer (Jiri Bek) and *PALYNOS* editor (Charles Wellman) should be informed of any errors or necessary changes.

The list of current IFPS councillors also includes information on website addresses for the various societies. Please inform the editor of changes to web addresses and information on new websites.



## Current IFPS Councillors

| Society  | Acronym [website]   | Councillor                 |
|--|---|----------------------------|
| American Association of Stratigraphic Palynologists        | AASP [ <a href="http://www.palynology.org">http://www.palynology.org</a> ]  | Owen Davies                |
| American Association of Stratigraphic Palynologists        | AASP [ <a href="http://www.palynology.org">http://www.palynology.org</a> ]  | Jim Riding                 |
| Asociacion de Palinologos de Lengua Espanol                | APLE [ <a href="http://aple.usal.es">http://aple.usal.es</a> ]  | Maria Carmen Fernández     |
| Association de Palynologistes de Langue Français           | APLF  | Marie-Pierre Ledru         |
| Association de Palynologistes de Langue Français           | APLF  | Nathalie Combourieu-Nebout |
| Arbeitskreis für Palaeobotanik und Palynologie             | APP [ <a href="http://www.uni-muenster.de/geopalaeontologie/palaeo/palbot/apptext.htm">http://www.uni-muenster.de/geopalaeontologie/palaeo/palbot/apptext.htm</a> ] | Rainer Brocke              |
| Canadian Association of Palynologists                      | CAP [ <a href="http://www.scirpus.ca/cap/cap.shtml">http://www.scirpus.ca/cap/cap.shtml</a> ]   | Jean Nicolas Haas          |
| Commission Internationale de Microflore du Paleozoique     | CIMP [ <a href="http://www.cimp.ulg.ac.be/">http://www.cimp.ulg.ac.be/</a> ]  | Ken Higgs                  |
| Commission Internationale de Microflore du Paleozoique     | CIMP [ <a href="http://www.cimp.ulg.ac.be/">http://www.cimp.ulg.ac.be/</a> ]  | Thomas Servais             |
| Collegium Palynologicum Scandinavicum                      | CPS [ <a href="http://palyno.net">http://palyno.net</a> ]   | Dagfinn Moe                |
| Gruppo di Palinologia della Societa Botanica Italiana      | GPSBI   | Laura Sadori               |
| International Association for Aerobiology                  | IAA [ <a href="http://www.isao.bo.cnr.it/aerobio/iaa/index.html">http://www.isao.bo.cnr.it/aerobio/iaa/index.html</a> ]   | Carmen Galán               |
| Linnean Society Palynology Specialist Group                | LSPSG   | Guy Harrington             |
| Organisation of Czech and Slovak Palynologists             | OCSP  | Olda Fatka                 |
| Palynologisch Kring (Netherlands)                          | PK [ <a href="http://www.geo.vu.nl/~palkring">http://www.geo.vu.nl/~palkring</a> ]  | Henry Hooghiemstra         |
| Palynologists and Plant Micropalaeontologists of Belgium   | PPMB  | Philippe Steemans          |
| Palynological Society of China                             | PSC   | Huaicheng Zhu              |
| Palynological Society of Japan                             | PSJ [ <a href="http://www.soc.nii.ac.jp/psj3/top.htm">http://www.soc.nii.ac.jp/psj3/top.htm</a> ]   | Reiko Kishikawa            |
| Palynological Society of Poland                            | PPS   | Malgorzata Malkiewicz      |
| Russian Palynological Commission                           | RPC   | Olga Dzyuba                |
| Russian Palynological Commission                           | RPC   | Elena Bezrukova            |
| The Micropalaeontological Society: Palynology section      | TMS [ <a href="http://www.nhm.ac.uk/hosted_sites/tms/paly.htm">http://www.nhm.ac.uk/hosted_sites/tms/paly.htm</a> ]   | Ian Harding                |
| Turkish Committee for Palynology                           | TCP   | Zutu Bati                  |
|  |   |                            |
| International Union of Geological Societies                | IUGS  | Lucy Edwards               |
| International Union of Biological Societies                | IUBS  | Jacques-Louis de Beaulieu  |
|  |   |                            |
| IFPS President – Thomas Litt                               |   |                            |
| IFPS Past President - Owen Davis                           |   |                            |
| IFPS Secretary-Treasurer - Jiri Bek                        |   |                            |
| IFPS Editor of PALYNOS – Charles Wellman                   |   |                            |
| <b>Societies on hold</b>                                   |   |                            |
| Asociacion Latinoamericana de Paleobotanica y Palinologia  | ALPP [ <a href="http://www.ufrgs.br/alpp">http://www.ufrgs.br/alpp</a> ]  |                            |
| International Association for African Palynology           | AIPA/IAAP   |                            |
| Palynological and Palaeobotanical Association of Australia | PPAA  |                            |
| Philippine Palynological Society                           | PPS   |                            |
| Palaeobotanical Society, Lucknow                           | PSL   |                            |

## FUTURE MEETINGS

### “Joint meeting of the CIMP Spores & Pollen and Acritarch Subcommissions”

Lisbon, Portugal

24-28 September 2007

This meeting will involve 3 days of technical sessions at the Geological Survey in Lisbon, followed by a 2 day post-meeting field trip in southern Portugal.

The meeting has been organized by INETI (Portuguese Geological Survey) and will be held in the Portuguese Geological Survey headquarters in Lisbon.

*Organizing committee:-*

Z. Pereira (INETI-GEOSCIENCES, Portuguese Geological Survey)

J. Thomas Oliveira (INETI-GEOSCIENCES, Portuguese Geological Survey)

P. Fernandes (University of Algarve, Portugal)

N. Vaz (University of Trás-os-Montes and Alto Douro, Portugal)

*Scientific committee:-*

G. Clayton (Trinity College, Dublin, Ireland)


J. Marshall (University of Southampton, UK)

Z. Pereira (INETI-GEOSCIENCES, Portuguese Geological Survey, Portugal)

P. Steemans (University of Liege, Belgium)

R. Wicander (Central Michigan University, USA)

Further details are available from the following website: <<http://e-geo.ineti.pt/CIMPLisbon07/index.html>>



### CIMP LISBON 2007


We are pleased to invite you to the CIMP Lisbon'07 joint meeting of the Spores/Pollen and Acritarch Subcommissions, organized by INETI-GEOSCIENCES (Portuguese Geological Survey), to be held in Lisbon, Portugal from September 24<sup>th</sup> to 28<sup>th</sup>, 2007. This meeting will involve three days of scientific sessions followed by a two-day post-meeting field trip to Southern Portugal. The venue is at the Portuguese Geological Survey headquarters. CIMP Lisbon'07 will be a forum for specialists interested in current progress, future developments, and application of Palaeozoic palynology.

You are strongly encouraged to participate and submit papers to CIMP Lisbon'07. The official working language is English and you are most welcome to visit the web page at <http://e-geo.ineti.pt/CIMPLisbon07> for further information. Please visit the web page and fill out the questionnaire regarding your possible attendance. Note that the deadline for filling out the questionnaire has been extended to March 30, 2007, the same date as for early registration. It would, however, help us greatly in planning for the meeting if you would answer the questionnaire as soon as possible so that we know approximately how many people plan to attend.

Lisbon, the capital of Portugal, is known throughout the world as the city of sun. It is located near the Atlantic Coast and is a well-known venue for international events. We hope to see you in Lisbon in September 2007.

**Organizing Committee**  
Z. Pereira (LNEG-LGM, Portuguese Geological Survey)  
J. Tomas Oliveira (LNEG-LGM, Portuguese Geological Survey)  
P. Fernandes (University of Algarve, Portugal)  
N. Vaz (University of Trás-os-Montes and Alto Douro, Portugal)

**Scientific Committee**  
G. Clayton (Trinity College, Dublin)  
J. Marshall (University of Southampton)  
Z. Pereira (LNEG-LGM, Portuguese Geological Survey)  
P. Steemans (University of Liege)  
R. Wicander (Central Michigan University)



**Location**  
The headquarters of the Portuguese Geological Survey are in Alfragide, near Lisbon, just in front of the Lisbon Camping Park, on the west side of the Lisboa-Cascais highway. In addition to a 300-seat auditorium, the Portuguese Geological Survey has all of the facilities required for scientific meetings, including a cantina where the conference lunches will be served. About 300 m from the Laboratory are bus stops to the city centre.

or contact:-

*Zélia Pereira*

Address: INETI (Portuguese Geological Survey),  
Department of Geology, Rua da Amieira, 4465-S.  
Mamede Infesta, Portugal

Tel: 00351229511915

Fax: 00351229511915

E-mail: [zelia.pereira@ineti.pt](mailto:zelia.pereira@ineti.pt).

OR

*Paulo Fernandes*

Address: University of Algarve, Campus  
Gambelas, 8000-117 Faro, Portugal

Tel: 00351289800995

Fax: 00351289818353

E-mail: [pfernandes@ualg.pt](mailto:pfernandes@ualg.pt)

## “40<sup>th</sup> AASP annual meeting”

**Panama City, Panama**

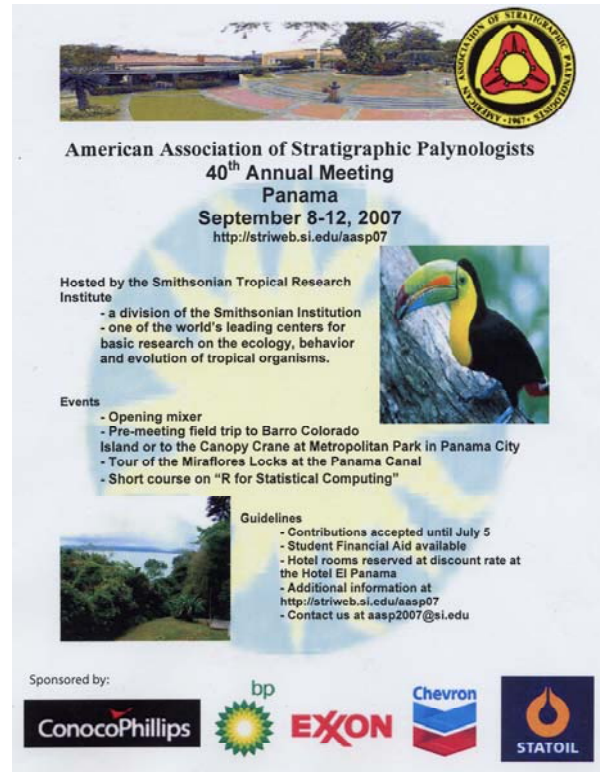
**8-12 September 2007**

The 40<sup>th</sup> AASP annual meeting will be hosted by the Smithsonian Tropical Research Institute in Panama City, Panama. Hotel rooms are reserved at a discounted rate at the Hotel El Panama.

The meeting will include a pre-meeting fieldtrip to Barro Colorado Island or the Canopy Crane at Metropolitan Park in Panama City and a tour of the Miraflores Locks at the Panama Canal.

Contributions will be accepted until 5<sup>th</sup> July. Student financial aid is available.

For further information go to the meeting website:  
<http://striweb.si.edu/aasp07>  
 or e-mail: aasp2007@si.edu.




**American Association of Stratigraphic Palynologists**  
**40<sup>th</sup> Annual Meeting**  
**Panama**  
**September 8-12, 2007**  
<http://striweb.si.edu/aasp07>

Hosted by the Smithsonian Tropical Research Institute  
 - a division of the Smithsonian Institution  
 - one of the world's leading centers for basic research on the ecology, behavior and evolution of tropical organisms.

**Events**  
 - Opening mixer  
 - Pre-meeting field trip to Barro Colorado Island or to the Canopy Crane at Metropolitan Park in Panama City  
 - Tour of the Miraflores Locks at the Panama Canal  
 - Short course on "R for Statistical Computing"

**Guidelines**  
 - Contributions accepted until July 5  
 - Student Financial Aid available  
 - Hotel rooms reserved at discount rate at the Hotel El Panama  
 - Additional information at <http://striweb.si.edu/aasp07>  
 - Contact us at [aasp2007@si.edu](mailto:aasp2007@si.edu)

Sponsored by:




## “LSPSG annual meeting: Evolution and development of pollen and spores: an integrated approach”

**Linnean Society of London, London**

**25 October 2007**

The annual one-day meeting of the Linnean Society Palynology Specialist Group (LSPSG) of the Linnean Society of London will take place in the Linnean Society of London (Burlington House, Piccadilly, London W1J 0BF) on 25th October 2007 (<http://www.linnean.org/>).

This meeting “Evolution and development of pollen and spores: an integrated approach” Will provide an informal forum to bring together scientists (including PhD students and postdoctoral researchers) from several interfacing fields of pollen and spore morphology and development, including those working on the genetic controls of pollen and spore development in the context of improved phylogenies. The elaborately patterned exines of pollen grains and spores have long been a source of scientific interest and utility. They are highly resistant to

decay and so form a major component of the plant fossil record, and thus are an important tool in understanding plant evolution. Their variation often has systematic significance and is used in the taxonomy of extant plants. Furthermore, developmental processes from sporocytes through meiosis and tetrad formation to deposition of the complex protective wall have been investigated using a range of techniques, including electron microscopy. Since the development of PCR techniques and the sequencing of the genome of the model organism *Arabidopsis*, developmental studies focusing at the genome level have proliferated. For example, several *Arabidopsis* mutants with defective pollen wall formation have been identified including *ms2*, *dex1*, *flp1* and *nefl*. Our goal is to initiate a discussion process between pollen morphologists, palaeobotanists and developmental geneticists towards more closely integrated research goals.

Contributed papers welcome. Registration free.

Contact: Carol Furness, Micromorphology Section, Jodrell Laboratory, Royal Botanic Gardens, Kew, Richmond, Surrey, TW9 3DS, UK (c.furness@kew.org)

## **“4<sup>th</sup> ESA-European Symposium on Aerobiology”**

**Turku, Finland**

**12-16 August 2008**

This organizing committee has the pleasure of welcoming you to the 4<sup>th</sup> ESA. The meeting will provide an update on various aspects of aerobiology. The topics of the meeting include forensic palynology, satellite imaging, meteorology and long-distance monitoring, and recent developments in modelling and methodology. Following the tradition of IAA, the meeting will provide an opportunity for young scientists to meet with experts in the field and present their own work as oral presentations and as posters. We hope that the outstanding scientific programme together with the social events in the summer nights in Turku will create an unforgettable atmosphere for informal and stimulating scientific discussions.



More details are available from the website: <http://www.utu.fi/4ESA2008>.

Abstract deadline: 15<sup>th</sup> March 2008.

Early registration deadline: 31<sup>st</sup> May 2008.

Contact:

*Mervi Oikonen (symposium coordinator)*

Address: 4<sup>th</sup> ESA 2008, c/o Aerobiology Unit, Section of Ecology, Department of Biology, FI-20014 University of Turku, Finland

Tel: +358 2 333 6065

Fax: +358 2 333 5565

E-mail: [esa2008-info@utu.fi](mailto:esa2008-info@utu.fi)



## **“8<sup>th</sup> European Palaeobotanical and Palynological Conference (8<sup>th</sup> EPPC)”**

**Budapest, Hungary**

**2010**



The 8<sup>th</sup> EPPC will be held in Budapest, Hungary in 2010. It will be organized by the Hungarian Natural History Museum, the Hungarian Academy of Sciences, the Eötvös Lóránd University and the Hungarian Geological Society. Further details will appear nearer the time.

## MEETING REPORTS

### “Annual meeting of the Linnean Society of London Palynology Specialist Group (LSPSG)”

London, UK

26 October 2006

The Linnean Society of London hosted the annual meeting of the Linnean Society Palynology Specialist Group (LSPSG) on 26<sup>th</sup> October 2006 in Burlington House, Piccadilly. The London meeting was well attended and attracted a varied audience of palynologists from across the spectrum of palynological investigation. Presentations reflected this mixture with discussions focused on many different topics. The evolution of morphology within Compositae formed the basis for Blackmore *et al.* Seed-plant evolution (Rudall & Bateman), the function and structure of various pollen and spore characteristics from orbicules (Huysman & Smets), proteins (Suárez-Cervera *et al.*), through wall structure (Wellman) to apertures (Banks *et al.*; Furness *et al.*) were discussed in depth too. Fossil studies were presented by Rudall & Bateman and Wellman as well as Chaloner who presented on the theme of how we name fossil spores. Finally Harrington finished proceedings with a completely different talk on the plant responses to Palaeocene-Eocene global warmth. Ample time was allowed for discussion between talks which allowed for a very informative and stimulating day organized well by Carol Furness. A list of all presentations is detailed below. The next meeting will take place in Burlington House on October 25<sup>th</sup> 2007. Further details regarding the meeting may be obtained from Carol Furness ([c.furness@rbgkew.org.uk](mailto:c.furness@rbgkew.org.uk)). Further details on the LSPSG are available from me ([g.j.harrington@bham.ac.uk](mailto:g.j.harrington@bham.ac.uk)).

### Evolution of pollen in the Compositae

Stephen Blackmore<sup>1</sup>, Alexandra Wortley<sup>1</sup>, John J. Skvarla<sup>2</sup> and Harold Robinson<sup>3</sup>

<sup>1</sup>Royal Botanic Garden Edinburgh, 20A Inverleith Row, Edinburgh, EH3 5LR, Scotland

<sup>2</sup>Dept. Botany & Microbiology, University of Oklahoma, Norman, OK 73019-0245, USA.

<sup>3</sup>Dept. Botany, Smithsonian Institution, PO Box 37012, Washington DC, USA.

### Orbicules: what do we (love to) know?

Suzy Huysmans<sup>1</sup> and Erik Smets<sup>1 2</sup>

<sup>1</sup>Laboratory of Plant Systematics, K.U. Leuven, Kasteelpark Arenberg 31, BE-3001 Leuven, Belgium.

<sup>2</sup>National Herbarium of the Netherlands, Leiden University Branch, PO Box 9514, 2300 RA Leiden, The Netherlands.

### Aspects of pollen aperture evolution in eudicots: endoapertures and inaperturate pollen

Carol A. Furness<sup>1</sup>, Susana Magallón<sup>2</sup> and Paula J. Rudall<sup>1</sup>

<sup>1</sup>Micromorphology Section, Jodrell Laboratory, Royal Botanic Gardens, Kew, Richmond, Surrey, TW9 3DS, UK.

<sup>2</sup>Instituto de Biología, Universidad Nacional Autónoma de México, A. P. 70-233, México D.F. 04510, Mexico.

### Another look at the pollen apertures of *Nelumbo* (Nelumbonaceae)

Hannah Banks<sup>1</sup>, Peter Crane<sup>2</sup> and Peter Stafford<sup>3</sup>

<sup>1</sup> Micromorphology Section, Jodrell Laboratory, Royal Botanic Gardens, Kew, Richmond, Surrey, TW9 3DS, UK.

<sup>2</sup>Geophysical Sciences Dept., University of Chicago, Chicago, Illinois 60637, USA.

<sup>3</sup> Natural History Museum, Cromwell Road, London, SW7 5BD, UK.

### The role of Cup a 3, a pollen thaumatin PR5-like protein, in *Cupressus arizonica* pollen grains

Maria Suárez-Cervera<sup>1</sup>, Teresa Castells<sup>1</sup>, <sup>2</sup>Ana Vega-Maray, <sup>2</sup>Delia Fernández-González, <sup>3</sup>Stella Moreno-Grau, <sup>4</sup>Carlos La Hoz, Juan A. Seoane-Camba<sup>1</sup>

<sup>1</sup>Department of Botany, Faculty of Pharmacy, University of Barcelona, Av. Diagonal s/n, 08028 Barcelona, Spain.

<sup>2</sup>Department of Vegetal Biology (Botany), Faculty of Biology, University of León, Campus de Vegazana s/n, 24071 León, Spain.



<sup>3</sup>Dept. of Environmental and Chemical Engineering, Technical University of Cartagena, 30202 Cartagena, Spain.

<sup>4</sup>Jimenez Díaz Foundation Capio, Av. Reyes Católicos 2, 28040 Madrid, Spain.

### **Naming fossil spores – does age matter ?**

Bill Chaloner

Geology Dept., Royal Holloway, University of London, Egham, Surrey, TW20 0EX, UK

### **Origin of the spore/pollen wall: morphological innovation and developmental genetics**

Charles H. Wellman

Dept. of Animal & Plant Sciences, University of Sheffield, Sheffield, UK

### **Developmental bases for key innovations in the seed-plant microgametophyte**

Paula J. Rudall and Richard M. Bateman

Royal Botanic Gardens, Kew, Richmond, Surrey, TW9 3DS, UK

### **Paratropical floral extinction in the Late Palaeocene-Early Eocene**

Guy J. Harrington<sup>1\*</sup> and Carlos A. Jaramillo<sup>2</sup>

<sup>1</sup>School of Geography, Earth and Environmental Sciences, The University of Birmingham, Birmingham, B15 2TT, UK

<sup>2</sup>Center for Tropical Paleocology and Archeology, Smithsonian Tropical Research Institute, Unit 0948, APO AA 34002, USA

## **ANNOUNCEMENTS**

### **MSc in Micropalaeontology jointly run by University College London and the Natural History Museum, London**

The famous MSc one-year postgraduate degree in Micropalaeontology (including palynology) is now being run jointly by the Department of Earth Sciences of University College London and the Palaeontology Department of The Natural History Museum, London. Full details on the course, funding and how to apply are available at the following website :

<[http://www.es.ucl.ac.uk/graduate/micropal/UCL-NHM\\_MSc.html](http://www.es.ucl.ac.uk/graduate/micropal/UCL-NHM_MSc.html)>.



### **A message from the managing Editor of the AASP journal *Palynology***

*Palynology* publishes high-standard scientific research of interest on all aspects of organic microfossils (i.e., palynomorphs: spores, pollen, dinocysts, acritarchs, fungal spores, chitinozoans, etc.). We encourage submissions not only in the traditional areas of stratigraphic biostratigraphy and paleoecology/paleoenvironments, but also those utilizing palynomorphs together with the collateral disciplines of sequence stratigraphy, geochemistry, geoarchaeology, organic petrology, etc. Short notes on preparation methods, taxonomy, storage problems, etc., are welcomed as well. If increased numbers of high quality submissions are received, AASP (a volunteer-based non-profit society) would consider publishing two issues per year.

*Palynology* is a premiere, peer-reviewed journal for the palynological sciences published annually by the American Association of Stratigraphic Palynologists (AASP). It is listed in the Thomson Scientific's Institute for Scientific Information (ISI) abstracting service, and is available through Geoscience World (GSW), BioOne, and JSTOR. Visit our web site for further information about other AASP publications ([www.palynology.org](http://www.palynology.org)).

James B. Riding <[editor@palynology.org](mailto:editor@palynology.org)>

## News from the Palynological Society of Japan (PSJ)



The 47<sup>th</sup> annual meeting of Palynological Society of Japan (PSJ) was held from the 13<sup>th</sup>-15<sup>th</sup> October 2006 in Wakayama city (135°10'E, 34°14'N), a town famous for its castle (pictured above). The meeting was organized by M. Enomoto, Director of Otorhinolaryngology in Wakayama red-cross hospital. A total of 24 oral presentations and 16 poster presentations covered the topics of aerobiology, pollinosis and pollen analysis and 156 members participated in the discussion (the poster session is pictured below). At the gala party we enjoyed a delicious dinner as well as the performance involved in preparation of sashimi from a huge fresh tuna.



The 18<sup>th</sup> International Congress of Biometeorology (ICB) will be held in Tokyo, Japan on the 22<sup>nd</sup> -26<sup>th</sup> September 2008. The organizer, M. Irie, is a professor at Yamanashi University. The theme is "Harmony within Nature". About 250 members will participate from 45 nations. A pollen symposium "Harmony with Climate and Pollinosis" is one of main

symposiums and will take place on the morning of 26<sup>th</sup> September. For further details on the conference visit the following website:  
<<http://www.icb2008.com>>.

Hanako San (the monitoring system of real time pollen dispersing), established by the Ministry of the Environment of the Government of Japan, begun to work in March 2006 during the pollination season of Japanese Cedar and Cupressaceae. The information will be used to predict JC pollinosis which is a very important early spring allergy in Japan. All of the Japanese data may be examined in real time at the following website  
<<http://kafun.taiki.go.jp/index.aspx>>.

## IOP change of website

The International Organization of Palaeobotany (IOP) has a new website. It is located at  
<<http://www.palaeobotany.org>>.

## New website for the Asociacion Latinoamericana de Paleobotanica y Palinologia (ALPP)

The Asociacion Latinoamericana de Paleobotanica y Palinologia (ALPP) has a new website. It is located at  
<<http://www6.ufrgs.br/alpp>>.

## News from the Canadian Association of Palynologists (CAP)

Following a poll CAP members voted to adopt a digital format for their newsletter. Thus CAP members will have recently received the May newsletter by e-mail in pdf form. The revamped newsletter looks fantastic and contains a wealth of information, including a fascinating essay by Vaughn Bryant (Texas A&M University) on "Starch and the palynologist".

## SYNTHESYS

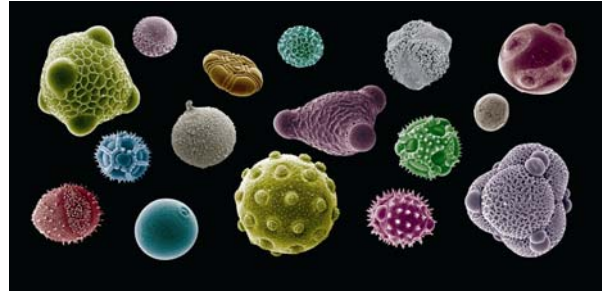
The next deadline for applications for SYNTHESYS (Synthesis of Systematic Resources) is 30th September 2007.

SYNTHESYS Project funding is available to provide scientists based in European Member and Associated States to undertake short visits to utilize the infrastructure (namely the collections, staff expertise and analytical facilities) at one of the 20 partner institutions for the purposes of their research. The 20 partner institutions are organised into 11 national Taxonomic Facilities (TAFs). TAF Users will be hosted by a TAF staff member. The 11 TAF institutions represent an unparalleled resource for taxonomic research offering: Collections amounting to over 337 million natural history specimens, including 3.3 million type specimens, Internationally renowned taxonomic and systematic skill base, Chemical analysis, molecular and imaging facilities. Proposals will be welcomed from high caliber researchers seeking access for short-term visits.

Further information is available at the following website <<http://www.synthesys.info>> or e-mail: [synthesys@nhm.ac.uk](mailto:synthesys@nhm.ac.uk)

## New publication

The IFPS is an affiliated organization of the forthcoming publication : “*Understanding pollen diversity and its role in plant systematics*”, a special issue of the journal *Plant Systematics and Evolution*, edited by Carol Furness and Michael Hesse. This special issue is based on the proceedings of a double symposium held at the XVII International Botanical Congress, Vienna, July 2005. The special issue is published as Volume 262 (Numbers 1-2) of the journal and was published in January 2007. It is also published online at the following website <[www.springerlink.com/content/1615-6110/](http://www.springerlink.com/content/1615-6110/)>.



### Contents:

- Furness, C. A. and Hesse, M: Preface: Understanding pollen diversity and its role in plant systematics
- Blackmore, S. Pollen and spores: Microscopic keys to understanding the earth's biodiversity.
- Tsou, C-H and Fu, Y-L. Octad pollen formation in *Cymbopetalum* (Annonaceae): the binding mechanism.
- Hemsley, A. R. and Gabarayeva, N. I. Exine development: the importance of looking through a colloid chemistry “window”.
- Weber, M. and Halbritter, H. Exploding pollen in *Montrichardia arborescens* (Araceae).
- Sampson, B. Variation and similarities in pollen features in some basal angiosperms, with some taxonomic implications.
- Furness, C. A., Magallón, S. and Rudall, P. J. Evolution of endoapertures in early-divergent eudicots, with particular reference to pollen morphology in Sabiaceae.
- Hesse, M. and Zetter, R. The fossil pollen record of Araceae.
- Zavada, M. S. The identification of fossil angiosperm pollen and its bearing on the time and place of the origin of angiosperms.





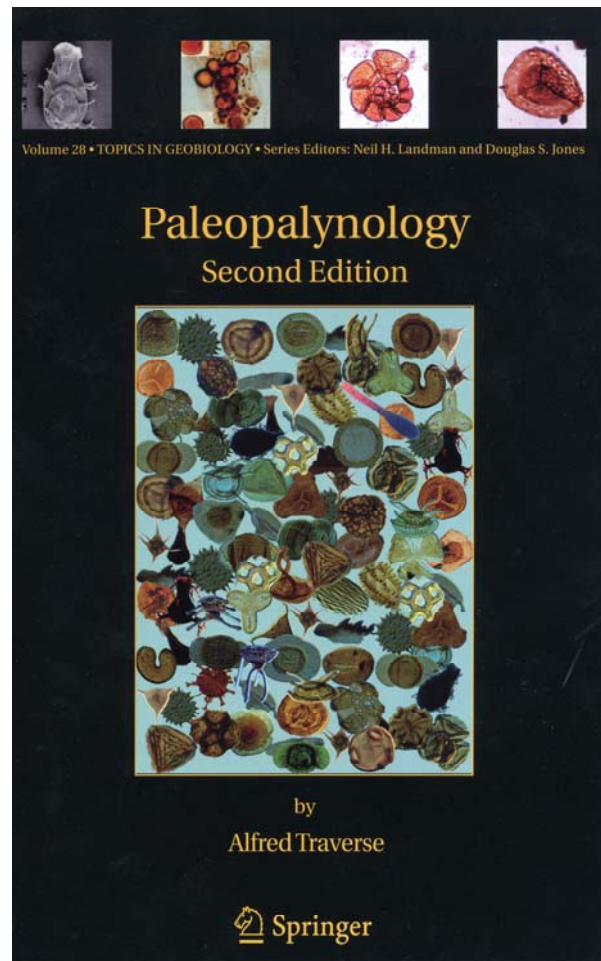
## NEW BOOKS

### **“Paleopalynology (Second Edition)” by Alfred Traverse**

Paleopalynology, second edition, provides a profusely illustrated treatment of fossil palynomorphs, including spores, pollen, dinoflagellate cysts, acritarchs, chitinozoans, scolecodonts, and various microscopic fungal and algal dispersal bodies. The book serves both as a student text and general reference work. Palynomorphs yield information about age, geological and biological environment, climate during deposition, and other significant factors about the enclosing rocks.

Extant spores and pollen are treated first, preparing the student for more difficult work with fossil sporomorphs and other kinds of palynomorph. Recognizing that palynomorphs occur together in rocks because of chemical robustness and stratigraphic distribution, not biological relationships, the central sections are organized stratigraphically. Among many other topics presented are the sedimentation and geothermal alteration of palynomorphs and palynofacies analysis. An appendix describes laboratory methods. The glossary, bibliographies

and index are useful tools for study of the literature.



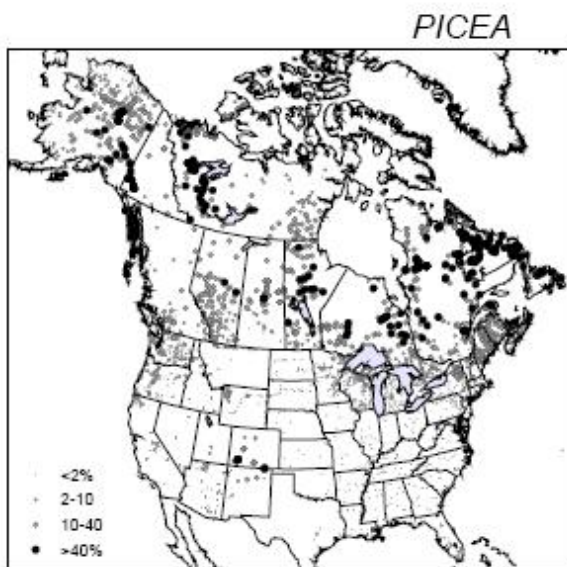
“Paleopalynology (Second Edition)” was published in 2007 by Springer. XVIII, 813 pages, 210 illustrations (14 colour). Hardback. Price 185.95 Euros. ISBN 978-1-4020-5609-3.

### **“An atlas of Pollen-Vegetation-Climate for the United States and Canada” by Williams, J. W., Shuman, B., Bartlein, P. J., Whitmore, J., Gajewski, K., Sawada, M., Minckley, T. Shafer, S., Viau, A. E., Webb, A. E., Anderson, P. M., Brubaker, L. B., Whitlock, C., Davis, O. K.**

The atlas contains maps and climate-space graphs of all taxa from the Whitmore *et al.* (2005, QSR) modern pollen dataset. Some taxa are further

subdivided into eastern and western groups to better identify climate relations. The entry for each taxon consists of two facing pages with 21 maps and graphs, including maps of the distribution of the pollen taxon in geographic and climate space, graphs illustrating the abundance of pollen as a function of several climate variables and indications of the relative abundance of the pollen taxon in different biomes. Entries are available not only for the major trees and shrubs, but also for many non-arboreal pollen (134 taxa in all).

“An atlas of Pollen-Vegetation-Climat relationships for the United States and Canada” was published in 2006 by the American Association of Stratigraphic Palynologists Foundation, Dallas, Texas. 293 pages. Price \$48 (US dollars) and can be purchased from the following website : <<https://payment.palynology.org>>. ISBN .

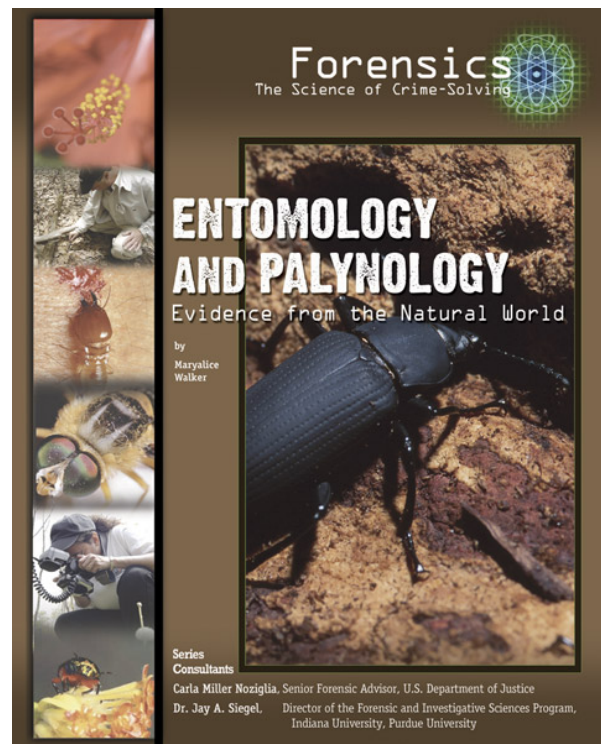


### “Entomology and palynology” by Maryalice Walker

Who committed the crime? When? Even the smallest of witnesses can tell scientists stories that will make or break a criminal case. Insects and pollen grains help forensic scientists bring criminals to justice. A suspect escapes a crime scene, leaving not a trace of evidence behind—except for the hind leg of a grasshopper, which helps convict him of a murder. A thief runs

through a cornfield, relieved that no one saw him commit the crime—no one, that is, except for the tiny grains of corn pollen stuck to his shirt. Plants and insects hold clues to guilt or innocence in the complexity of their day-to-day lives. The appetite of hungry young flies puts murderers behind bars, while a plant’s search for a mate incriminates a drug-trafficker walking through a meadow. Evidence from nature is all around us, silently and swiftly leaving fingerprints, unnoticed by even the most cunning of criminals.

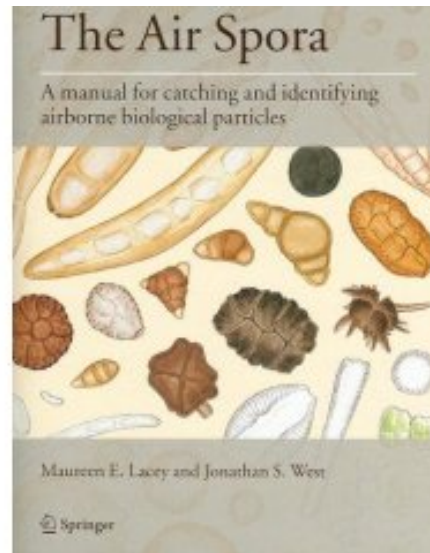
“Entomology and palynology” was published in 2006 by Mason Crest Publishers, Philadelphia. 112 pages. Hardback. Price \$22.95 (US dollars). ISBN 1-4222-0032-9.



### “The Air Spora” by Maureen Lacey & Jonathan West

The air spora is an illustrated guide to trapping, identifying and quantifying airborne biological particles such as fungus and plant spores and pollen. The book will be of use to anyone interested in aerobiology or studying applied aspects such as dispersal and effect of allergens, or human, animal and plant pathogens. Including a comprehensive review of what is in the air and

detailing the historical development of theories leading to modern aerobiology, the book explains the fundamental processes behind airborne dispersal and techniques used to sample, identify and quantify biological particles. Methods are explained in a step-by-step guide for the use of standard air sampling devices. Although formats applicable to modern molecular and immunological techniques are described, the emphasis of the book is on simple visual identification of particles in air samples using traditional microscopy. Consequently a chapter on setting-up and using a light microscope is included, although experienced researchers can skip to chapters showing photographs of examples of the Air Spora and nine colour plates of paintings of airborne particles at a magnification of x1000.



The book is written for university and institute research scientists, plant pathologists, those making the daily pollen count and working on airborne allergens and diseases.

“The Air Spora” was published in 2007 by Springer. XV, 156 pages. Spiral bound Price £69.00 (UK pounds sterling). ISBN 978-0-387-30252-2.

**PALYNOS** (ISSN 0256-1670) is published bi-annually (June and December) and is distributed electronically to all IFPS Councillors for local distribution to individual members of their **International Federation of Palynological Societies (IFPS)** affiliate society. The newsletter is also posted on the IFPS website (see below).

We welcome news items, reports on society activities, reviews etc. and members should forward these to the Editor:

**Charles Wellman**  
*c.wellman@sheffield.ac.uk*

Please don't forget to visit our IFPS web site at:

**<http://geo.arizona.edu/palynology/ifps.html>**