

PALYNOS

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NEWSLETTER OF THE INTERNATIONAL FEDERATION OF PALYNOLOGICAL SOCIETIES

IFPS COUNCILLOR UPDATES

MARIA CARMEN FERNÁNDEZ (APLE)

[replacing Ramon Pérez i Obiol]



(Maria Carmen Fernández e-mail: mcfdez@ugr.es)

Maria Carmen Fernández is Titular Professor in the Cell Biology Department of Granada University, Spain where she currently teaches plant histology-related courses. She received a degree in Biological Sciences in 1977 and a doctorate in Cellular Biology in 1986. Her doctoral research considered pollen grain development in *Olea europaea* L. As a member of the group of Biochemical and Cell and

Molecular Plant Biology (Estación Experimental del Zaidín, CSIC) Maria has taken part in more than 12 research projects on "cell and molecular basis of gametogenesis and induction mechanisms of gametic embryogenesis". This work is based on olive pollen and obtained important results locating its allergenic proteins as well as improving the harvest. These results have been published in more than 20 international papers. Maria recently co-operated with the Taxonomy Research Group of the Plant Biology Department of Granada University. This collaboration involves supplying ontogenetic data from pollen grain studies for phylogenetic analysis of the Papaveraceae family. As a member of APLE since 1984, Maria took part in the organization of its VII Symposium (1988), and in the IFPS XI International Palynological Congress, both of which were held in Granada.

JEAN NICOLAS HAAS (CAP)

[replacing Rolf Mathewes]

Prof. Dr. J. N. Haas works at the Institute of Botany of the University of Innsbruck, Austria (Division of Palynology, Geobotany and Plant Systematics, <http://botany.uibk.ac.at/>). As a Swiss working in Austria he is very much connected with Canadian Palynology since his post-doctoral work in the late 1990s at the J. H. McAndrews labs in Toronto, and subsequently became IFPS-councillor for the Canadian Association of Palynologists (CAP) during the last IPC meeting. Concerning his research and teaching interests, Jean Nicolas is focussing on northern hemispheric

phytodiversity changes during Quaternary Interglacials in relation to climatic and anthropogenic impact. Apart from pollen, spores and macrofossils his special interests extend to the so-called 'non pollen palynomorphs', i.e. cysts from snow algae, spores from coprophilous fungi, oocytes from *Neorhabdocoela* worms etc., which are receiving increasing attention from palynologists in order to characterize local environments and biodiversity during the Quaternary. Current research projects run by Jean Nicolas in connection with botanists, dendrochronologists, archaeologists, sedimentologists, geologists, geographers and zoologists deal with – among others – the history of Holocene snow avalanches and their impact on subalpine vegetation in Tyrol (Austria), Holocene climatic and environmental catastrophes (e.g. the *Tsuga canadensis* decline 5700 years ago) in southern Ontario (Canada), environmental impact of Neolithic and Bronze Age pile-dwellers in Switzerland and Poland, Holocene aquatic plant growth in western Ireland, as well as with the local flora of the Eemian/Sangamonian Interglacial stratigraphies at Hollerup (Denmark) and Fernbank (New York, USA).



(Jean Nicolas Haas
e-mail: jean-nicolas.haas@uibk.ac.at)

REIKO KISHIKAWA (PSJ)

[replacing Yuichi Takahashi]

Reiko Kishikawa is Director of the Allergology Division of the National Hospital Organization of the National Fukuoka Hospital and Clinical Research Center, Japan. She graduated from the Faculty of Medicine of the National Hirosaki University in 1979. Since 1981 she has been a medical doctor in the Internal Respiratory

Department of the National Minami-Fukuoka Chest Hospital (the hospital changed name in 2003 to the NHO Fukuoka Hospital). In 1990 Reiko obtained a doctorate in medicine from Kyoto University after training between 1987-1989 in the Respiratory Disease Institute of the Faculty of Medicine. Reiko has been the Director of MD in the Internal Respiratory Department of the National Minami-Fukuoka Chest Hospital since 1992 and the Director of MD in the Allergology Department since 1996. Reiko is a specialist in Clinical Allergology and Internal Pulmonology having been examined in both by the Allergology and Respiratory Society of Japan. She has also spent time as a visited scientist training in volumetric pollen monitoring at Tulsa University, Oklahoma, USA and monitoring and molecular biology at UTMB, Texas, USA.



(Reiko Kishikawa
e-mail: kishi@mfukuoka2.hosp.go.jp)

OTHER COUNCILLORS

A 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 [http://www.palynology.org]	Owen Davies
American Association of Stratigraphic Palynologists	AASP [http://www.palynology.org]	Jim Riding
Asociacion de Palinologos de Lengua Espanol	APLE [http://aple.usal.es]	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 [http://www.uni-muenster.de/geopalaeontologie/palaeo/palbot/apptext.htm]	Rainer Brocke
Canadian Association of Palynologists	CAP [http://www.scirpus.ca/cap/cap.shtml]	Jean Nicolas Haas
Commission Internationale de Microflore du Paleozoique	CIMP [http://www.cimp.ulg.ac.be/]	Ken Higgs
Commission Internationale de Microflore du Paleozoique	CIMP [http://www.cimp.ulg.ac.be/]	Thomas Servais
Collegium Palynologicum Scandinavicum	CPS [http://palyno.net]	Dagfinn Moe
Gruppo di Palinologia della Societa Botanica Italiana	GPSBI	Laura Sadori
International Association for Aerobiology	IAA [http://www.isao.bo.cnr.it/aerobio/iaa/index.html]	Carmen Galán
Linnean Society Palynology Specialist Group	LSPSG	Guy Harrington
Organisation of Czech and Slovak Palynologists	OCSP	Olda Fatka
Palynologisch Kring (Netherlands)	PK [http://www.geo.vu.nl/~palkring]	Henry Hooghiemstra
Palynologists and Plant Micropalaeontologists of Belgium	PPMB	Philippe Steemans
Palynological Society of China	PSC	Huaicheng Zhu
Palynological Society of Japan	PSJ [http://wwwsoc.nii.ac.jp/psj3/top.htm]	Reiko Kishikawa
Palynological Society of Poland	PSP	Malgorzata Malkiewicz
Russian Palynological Commission	RPC	Olga Dzyuba
Russian Palynological Commission	RPC	Elena Bezrukova
The Micropalaeontological Society: Palynology section	TMS [http://www.nhm.ac.uk/hosted_sites/tms/paly.htm]	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		
Societies on hold		
Asociacion Latinoamericana de Paleobotanica y Palinologia	ALPP	
International Association for African Palynology	AIPA/IAAP	
Palynological and Palaeobotanical Association of Australia	PPAA	
Philippine Palynological Society	PPS	
Palaeobotanical Society, Lucknow	PSL	

MEETING ANNOUNCEMENT

**XIIth International Palynological Congress
(IPC-XII 2008)**

**XIIIth International Organisation of
Palaeobotany Conference (IOPC-VIII 2008)**

Joint Congress, Bonn, Germany

August 30-September 6, 2008



The next major international conferences in palaeobotany and palynology, the IPC-XII and IOPC-VIII, will be held in Bonn, from August 30 to September 6, 2008.

This promises to be a historical event, as both professional associations will not only be meeting in the same city, but at the same time and at the same place.

To further interaction and integration between palaeobotanists and palynologists, there will be joint symposia and sessions, as well as plenary lectures of interest to both fields.

Moreover, the single registration fee for both conferences will encourage participants to move freely between the sessions of both disciplines.



The scientific sessions will be held at University of Bonn, in the Main Building located in the center of the city. This Baroque palace—built as

the residence of the Cologne Electors in the 17th century—contains meeting rooms of various sizes, ranging from large auditoriums to medium-sized and smaller lecture rooms.



The wealth of palaeontological localities in Germany offers a number of intriguing possibilities for pre- and post-conference field trips. The field trips will be of variable duration, ranging from one day to one week, and will include sites of both palaeobotanical and palynological interest, whenever possible. Potential field trips include:

- ▣ Tertiary and Quaternary volcanism in the Eifel hills near Bonn
- ▣ Neogene brown coal deposits (e.g., Lower Rhine Basin and Saxony)
- ▣ Eocene-Oligocene lacustrine biotas at Messel and Eckfeld
- ▣ Jurassic floras in southern Germany
- ▣ Carboniferous and Lower Permian floras (e.g., Saar-Nahe region, Thuringia, Saxony)
- ▣ Devonian and Carboniferous floras (Rhenish Massif and adjacent areas)



Bonn is a medium-sized university town with centuries of scholarly tradition, but it is also a dynamic city with an international outlook, owing to its pre-eminence and past history as the capital of Germany for 50 years. Thus, the infrastructure for hosting large conferences is excellent in Bonn. There is hotel accommodation in all price ranges, including a youth hostel, as well as an extensive public transportation system (subway, streetcar and buses).



The history of Bonn extends back well over 2000 years to when it was settled by the Romans. It thus has a long and rich cultural heritage, and Bonn is renowned for its medieval, baroque, rococo, and Victorian architecture as well.

Furthermore, there are world-class art and history museums in the city, and sites of interest include:

- the 11th century Bonn Cathedral (*Münster*)
- Beethoven’s birthplace (*Beethoven-Haus*)
- Art and Exhibition Hall of the Federal Republic of Germany
- Museum of Modern Art (*Kunstmuseum Bonn*)
- Museum of Contemporary German History (*Haus der Geschichte*)
- Zoological Museum of the University of Bonn (*Museum Koenig*)
- State Museum of the Rhineland (*Rheinisches LandesMuseum*)

- Bonn Opera House
- Poppelsdorf Summer Palace

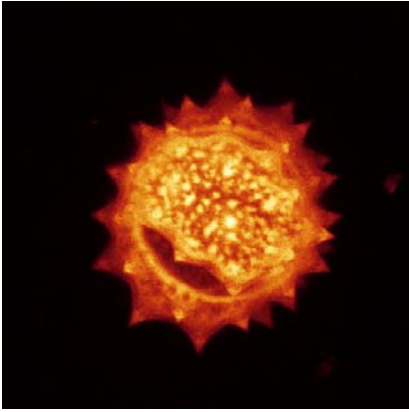


Located on the banks of the Rhine River, Bonn is the gateway to the romantic and beautiful Middle Rhine Valley (a World Heritage Site) which abounds in castles, vineyards and dramatic landscapes. The nearby metropolis of Cologne, with its Cathedral and multitude of excellent museums, is quickly and readily accessible by train or streetcar. Thus, Bonn also offers excellent opportunities for day trips for accompanying family.

The city of Bonn is very easy to reach, by air or by rail. You can fly into the following airports:

- Frankfurt International Airport (ca. 1 hour by high speed train)
- Dusseldorf International Airport (ca. 40 minutes by train)
- Cologne-Bonn Airport. This is the closest airport to Bonn, which is served by many low-fare airlines from many parts of Europe. There is a frequent and regular shuttle-bus service to the center of Bonn.

Bonn has excellent railway connections, as it is situated on a major north-south line and is only a brief train ride away from the international rail hub of Cologne.



More information on the scientific aspects of the conference, including symposium topics and technical details regarding presentations, will be available soon on the internet. The organizers of the joint congress are:



Prof. Thomas Litt (Chair IPC-XII 2008)

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Prof. Hans Kerp (Chair IOPC-VIII 2008)

Forschungsstelle für Paläobotanik
am Geologisch-Paläontologischen Institut
Westfälische Wilhelms-Universität Münster
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48143 Münster, Germany
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Supported by the German Palaeobotanists and Palynologists (APP – Arbeitskreis für Paläobotanik und Palynologie).

FUTURE MEETINGS

“14th Symposium of the International Work Group for Palaeoethnobotany”

Kracow, Poland

17-23 June 2007

We are pleased to invite you to the 14th IWGP Symposium

Local organisers

Dr. Aldona Bieniek (W. Szafer, Institute of Botany, Polish Academy of Sciences, Kraków) &

Dr. Marek Nowak (Institute of Archaeology, Jagiellonian University, Kraków)

Email: iwgp@dlg.krakow.pl

Consultative group

Prof. K. Wasylkowa, Dr. M. Badura, Prof. J. Chochorowski, Dr. M. Hajnalová, Dr. J. Jarosińska, Dr. L. Kubiak-Martens, Dr. M. Lityńska-Zajac, Prof. Z. Mirek, Dr. A. Wacnik

Location

Kraków: *Palac Larischa*, Bracka 12.

Registration Fee

95 € (includes symposium dinner and excursion)
It is our intention to reduce the Registration Fee for students.

Language

English. Proceedings will be published in *Vegetation History and Archaeobotany*.

Themes:

Regional Archaeobotany

Regional studies; Archaeobotany in environmental reconstructions.

Methods and Analytical archaeobotany

Methodology, Taphonomy, Molecular analyses, Qualitative and quantitative analyses.

Crops and Crop cultivation

Spread of farming, Gathering and cultivation, Crop diversity.

Ethnobotany

Collection, Husbandry and use of wild plants,
Traditional agricultural methods.

Open session

Other subjects

Two afternoons will be devoted to *laboratory demonstrations* for the examination and presentation of archaeobotanical material and *poster sessions*.

Field excursion

The field excursion will examine different aspects of landscape and anthropogenic vegetation in the loess areas of the Małopolska Upland and a selection of archaeological sites in the region. Transport by bus will be provided. Maps and other details will be given in the second circular in December 2006 and on the web site.

Accommodation

Accommodation will be arranged at the hotels of the city within 10 minutes walking distance to the meeting centre and in a hostel located at a distance of 15/20 minutes by tram. Every room in the hostel is equipped with bathroom and breakfast can be served.

Web site

Information regarding the 14th symposium, (location, travel, excursion etc.) will be available via the IWGP web site (<<http://www.palaeoethnobotany.com>>) which will be updated as regularly as possible. Copies of this circular and the registration form are also directly available on the web site: (<<http://www.ib-pan.krakow.pl/iwgp/>>).

Registration

The preliminary Registration Form can be downloaded from the web site. Hard copies can be posted to the following address:

IWGP Symposium,
Institute of Botany, Polish Academy of Sciences,
Lubicz 46,
PL 31-512 Kraków,
Poland
Tel. 0048 12 4241705
Fax 0048 12 4219790

or e-mail to: iwgp@dlg.krakow.pl

“XVI ICCP”

Nanjing, China

21-24 June 2007

The XVI International Congress on the Carboniferous and Permian (XVI ICCP) will be held in Nanjing, China. Proposed sessions include:-

S1 (Carboniferous and Permian palaeobotany and palynology).

S2 (Carboniferous and Permian macro- and micro-fossils).

S3 (Devonian F-F mass extinction and Mississippian recovery).

S4 (Biotic turnovers during the Mid Carboniferous boundary).

S11 (Stratotypes, boundaries, and global correlation).

Important dates are:-

31 December 2006 (Deadline for the return of the reply from the First Circular).

1 February 2007 (Second Circular e-mailed and available on line).

1 April 2007 (Deadline for pre-registration and abstract submission).

1 May 2007 (Third Circular available on line).

31 December 2007 (Deadline for manuscript submission to the proceedings volume).

“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 will be organized by INETI (Portuguese Geological Survey) and held in the Portuguese Geological Survey headquarters in Lisbon.

Further details are available from the following website: <<http://e-geo.ineti.pt/CIMPLisbon07>> or contact Zélia Pereira (e-mail: zelia.pereira@ineti.pt).

“40th AASP annual meeting”

Panama City, Panama

8-12 September 2007

The 40th AASP annual meeting will be held at the Smithsonian Tropical research Institute in Panama City, Panama. Further information is available from Carlos Jaramillo (e-mail: jaramilloc@si.edu).

MEETING REPORTS

“3rd Joint Meeting of the Palynology and Silicofossil groups of The Micropalaeontological Society (TMS)”

Utrecht, The Netherlands

9-10 March 2006

The 3rd Joint meeting of the Palynology and Silicofossil groups of The Micropalaeontological Society (TMS) was held on the 9-10 March 2006 at Utrecht University and convened by Henk Brinkhuis (Utrecht), Ian Harding (Southampton) and Catherine Stickley (Norwegian Polar Insitute). The hosts were Henk, Andy Lotter (Utrecht), Oscar Abbink and Holger Cremer (both TNO-NITG). Henk, Andy, Ian and Catherine chaired the oral and poster sessions, which took place inside the auditorium and reception

area of the remarkable new TNO–National Geological Survey (NITG) building. All meeting and catering arrangements were skillfully coordinated by Marjolein Mullen (Utrecht).

This mini-symposium was well attended by 40 scientists from across Europe as well as Japan and Canada (see group photo below).



Building on the 2nd Joint meeting at Cardiff University in June 2004, the aim of the Utrecht meeting was to bring together palynologists and silicofossil workers, from academia and industry, to demonstrate the mutual benefit of integrating palynological (particularly dinocysts) and siliceous groups (diatoms, radiolarians, silicoflagellates) in palaeoenvironmental and biostratigraphical studies.

To inspire us in this direction, two superb keynote lectures were delivered by Barrie Dale (Oslo) for the palynological perspective and Helen Bennion (UCL) for the silicofossil perspective. Barrie (photo) never fails to entertain enormously, with his inspirational lecturing style, and we were not disappointed by his kickoff lecture entitled “*Dinoflagellate cysts as indicators of palaeo-productivity*” where he set the pace for the rest of the meeting by enthusiastically leading some exciting discussions into the pros and cons of the use of dinocysts as proxies of productivity in the fossil record. We knew it was going to be a fun two days.

The discussions continued with further talks on a variety of topics and timescales for both groups: Gianluca Marino (Naples) on productivity patterns and early Holocene climate variability from dinocyst assemblages in sapropel S1 from the NE Aegean Sea; Sebastiaan Rampen (Texel, Netherlands) on lipids from the diatom *Proboscia* as indicators of palaeoproductivity; Kenneth Mertens (Gent) on coccoliths, dinoflagellates and diatoms as late

Quaternary palaeoceanographical tools for the Cariaco Basin; Jeroen Warnaar (Utrecht) on a dinoflagellate perspective of the palaeoceanographic and palaeoclimatic evolution of the Eocene Southern Ocean; Appy Sluijs (Utrecht) on tropical Arctic SSTs during the PETM and Ian Harding (Southampton) on “The Spitsbergen Expedition”, which included some superb video footage of Ian and a small group of lucky students from Southampton on fieldwork braving the cold (and Polar Bears) in spectacular surroundings. The afternoon session also included pause for the beautifully directed and now (in)famous, Arctic Coring Expedition DVD by Henk Brinkhuis and Co. during his talk on the main results from IODP Expedition 302 to the North Pole in August 2004. The poster session rounded the first day off in the late afternoon with 25 contributions covering a range of topics from new Middle Eocene Ebridians from the North Pole, to palynomorphs, diatoms and silicoflagellates in Holocene coastal sediments of South Brazil. If you would like to read more, the exact presentation titles and full abstracts of all the oral and poster contributions are available at the following

website <www.bio.uu.nl/~palaeo/Congressen/TMS2006/Intro_TMS2006.htm>.

With Marjolein and Henk as organisers, exceptional evening entertainment is always guaranteed. True to form, an excellent conference dinner took place over the entire upper floor of the Indonesian restaurant *Djakarta* in downtown Utrecht. Read ‘all you can eat’. And having done so, hearty discussions continued.

The following morning started with the fascinating and expertly crafted keynote lecture by Helen Bennion “*Reconstructing palaeo-productivity using diatoms and application to lake management*”. Helen guided us through the techniques used to reconstruct productivity from diatoms in lake sediment cores and outlined their use as a tool for defining lake reference conditions in the context of water quality assessment. We are particularly delighted that Helen could attend the meeting since the Silicofossil group continues to actively welcome new membership from the (palaeo)limnology community. Her attendance has inspired other palaeolimnologists to join TMS.

Day two continued with several further talks punctuated by a lunchtime guided tour of the TNO–National Geological Survey (NITG) building. Presentations included a mix of topics:

Roland Hall (Waterloo, Canada) on a sustained high-water stand in Lake Athabasca during the Little Ice Age; Jennifer Pike (Cardiff) on late Quaternary seasonal diatom records from the East Antarctic Margin; Karin Zonneveld (Bremen) on the use of selective aerobic degradation of dinoflagellates to quantify past net primary production and bottom water oxygen concentrations; Oscar Abbink (TNO-NITG, Utrecht) on play concepts based on new stratigraphic methods, examples from the Dutch ‘Upper Jurassic’; Przemek Gedl (Kraków) on the distribution of dinocysts in bathyal deposits of the Polish Carpathians; Bas van der Schootbrugge (Frankfurt) on anoxia, denitrification and changes in primary production across the Triassic/Jurassic boundary in SW Germany, and Paola Beccaro (Turin) on Oxfordian radiolarians from the Bucegi and Piatra Craiului Mountains in Romania.

In all, the meeting was enormously enjoyable and for that we are grateful to both of our keynote speakers, to the other 14 speakers and to all of poster participants for their superb contributions. The final word of thanks goes to our proficient hosts in Utrecht; Henk, Andy, Oscar, Holger and Marjolein for the guaranteed smooth running of two days of inspirational science and discussion in a relaxed atmosphere. Long may the Palynology and Silicofossil groups join forces!

Catherine Stickley
Ian Harding

“8th International Congress on Aerobiology”

Neuchâtel, Switzerland

21-25 August 2006

The International Association of Aerobiology (IAA) was founded in 1974 at the First International Congress of Ecology that took place in The Hague. Since 1978 the IAA has organized a quadrennial international congress. One of the main objectives of these congresses is to have the opportunity to exchange results and new ideas from different scientific research groups within the framework of an interdisciplinary forum. Last August the 8th International Congress on

Aerobiology (8ICA) was held in Neuchâtel, Switzerland.

Nowadays, interdisciplinary cooperation among different fields of science is becoming increasingly critical, in order to glean better information on different subjects by taking advantages of new technologies. Since its inception Aerobiology has promoted collaboration with different fields of science. This was evident at 8ICA from the content of the different sessions that formed the scientific programme.

Aerobiologists have long attempted to spread an understanding of Aerobiology among both scientific societies and politicians. To achieve this goal, we have several aims: a) to try to include Aerobiology in university educational programmes, as bachelor or master degrees, depending on the characteristics of the Universities; b) to promote offering information in schools through contacts with teachers and school supervisors; c) to offer aerobiological information through the media to inform the general public of its importance; d) to establish specific working groups to collaborate at local, regional and national level with governmental institutions. It is vital that aerobiologists participate at different governmental levels to ensure that Biological Air Quality remains an important parameter included in Environmental Agencies protocols.

At the IAA efforts are also focussed on promoting the progressive integration of young researchers with new perspectives, ideas and enthusiasm. At the last 8ICA we had the opportunity to learn new initiatives from them thanks to the active role of the Young Forum. One of the last goals of this association has been to develop an Educational Programme and scholarship trust to maintain and improve the quality of scientific research.

During the congress the Historical Session provided an excellent forum to reflect on the experiences of the IAA founders and other aerobiologists that have contributed an active role in Aerobiology. We would like to thank all of those that participated in this session for allowing us to share their experiences. We would like also to thank all of those interested in participating who unfortunately did not have the opportunity to attend: of course they were present in our mind.

During the General Assembly a new IAA Executive Committee was elected for 2006-2010:

President: Christine Roger (USA)
Vice president: Giuseppe Frenguelli (Italy)
General Secretary: Bernard Clot (Switzerland)
Treasurer: Estelle Levetin (USA)
Webmaster: Paola De Nuntiis (Italy)
Newsletter Editor: Siegfried Jaeger (Austria)
Members: Elena Severova (Russia), Constance Katelaris (Australia)
Past-President: Carmen Galán (Spain)



“2nd International Workshop on Quaternary Non-Pollen-palynomorphs (Extrafossils)”

Innsbruck, Austria

27-30 August 2006

More than 60 participants from 13 countries attended the 2nd International Workshop on non-pollen palynomorphs at the University of Innsbruck in August 2006. Jean Nicolas Haas hosted the workshop at the Department of Botany, which is situated in the midst of a venerable botanical garden--in fact, the gala dinner on the last evening of the workshop was held in a reception room in the greenhouse. Although the weather was a bit cool and quite wet during the workshop (see my photo), the warmth and greenery of the greenhouse--and of the participants!--made up for that.



The writer, Francine McCarthy, during an unseasonably cold and wet August at the Botanical Institute at the University of Innsbruck (Photo M. MacKinnon, Canada).

Following the format established the previous year by A. Prager and H. Joosten in Greifswald (Germany), Jean Nicolas organised a mix of oral and poster presentations, and microscopy and photo sessions. Participants brought material from most biological kingdoms and from a wide variety of environments, and several participants, including Bas van Geel (the ‘grandfather’ of these curious palynomorphs largely ignored by pollen researchers) brought reference material to help in identifying the material. I was most interested in the cysts of freshwater dinoflagellates identified by several workers, but learned a great deal about other acid-resistant oddities I have encountered in my pollen slides over the last 25 years. Presentations showed the application of these ‘extrafossils’ (algal cysts, fungal spores, various animal remains, and various others) to a variety of biological, archeological, environmental and geological problems. In each case, the non-pollen palynomorphs provided important insights that pollen analysis would not provide (see photo of poster session). Vigorous discussion attested to the high degree of interest maintained over the three days, both by the curiosity of the participants and by the diversity of material and of session type.

The proceedings will eventually be published in the journal *Vegetation History and Archaeobotany*--but for those of you anxious to learn more about non-pollen palynomorphs, the abstract volume was published in the review *Palyno-Bulletin* (<http://botany.uibk.ac.at/downloads/palynobulletinweb.pdf>) and Volume 141 (Issue 1-2) of the *Review of Palaeobotany and Palynology* edited

by Bas van Geel focuses on these palynomorphs that ‘deserve our attention’.



The organizer, Prof. J.N. Haas (middle), discussing a poster on Non-pollen-palynomorphs (NPP?s) from the Neolithic pile-dwellings site of Pfy-Breitenloo, NE-Switzerland, showing that abundant snow-fall must have existed 3706 BC as evidenced by the presence of the microscopical snow algae *Chlamydomonas nivalis* (Photo W. Kofler, Innsbruck).

“CIMP General Meeting”

Prague, Czech republic

4-6 September 2006

Whenever members of the CIMP get together, it is an assembly of friends, happy to see again their colleagues and to speak about their passion: palynology! And as expected Prague was a wonderful and very convivial meeting.

The congress was held in the Institute of Geology, Academy of Science, close to downtown Prague, the capital of the Czech Republic and a traditional centre of palaeontological research. Prague has always played an important role in the history of the nation, country and Europe. Since the Middle Age it has been recognised as one of the most beautiful cities in the world, and has received accolades such as "golden", "city of a hundred spires", "the crown of the world", "a stone dream". The meeting was jointly organized by the Academy of Sciences, Charles University and the Czech Geological Survey. Charles University was founded in 1348 and is the oldest European

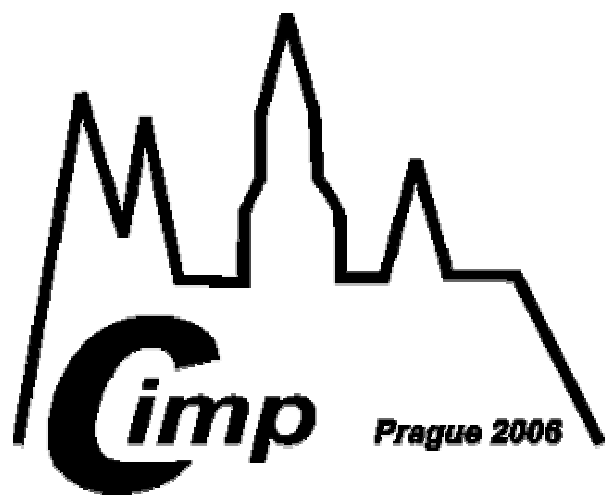
university. The organizing committee was composed of Jiří Bek, Jiřina Dašková (Institute of Geology, Academy of Science), Oldřich Fatka (Faculty of Sciences, Charles University), Jana Drábková (Czech Geological Survey) and Rainer Brocke (Forschungsinstitut Senckenberg, Germany).

The meeting started with the discovery of an important aspect of Czech life, the tasting of beers, which took place in a small brewery where the opening party and a dinner was organized. The CIMP General meeting was attended by 67 registered palynologists. The participants included palynologists from 19 nations: The Netherlands 2, Libya 2, Sultanate of Oman 3, UK 8, Saudi Arabia 2, France 2, Czech Republic 7, Belgium 4, Germany 9, USA 4, Ireland 5, Bulgaria 2, Poland 7, Iran 1, Estonia 1, Spain 1, Portugal, Russia 3 and China 1. The first morning's talks were devoted to three keynotes presented by R. Wicander (acritarchs), F. Paris (chitinozoans) and J. B. Richardson (miospores). A total of 71 talks were presented. The abstract volume of 67 pages (and 5 appendixes) was edited by J. Bek, R. Brocke and O. Fatka (a .pdf volume is planned on the CIMP website). All palynological aspects were covered from the Precambrian up to the Permian, on acritarchs, chitinozoans, scolecodonts, cryptospores, miospores, megaspores etc, including aspects of palaeogeography, biostratigraphy, palaeoclimatology, palynomorph chemical composition, biodiversity, databanks, terrestrialisation and so on.

The oral sessions were followed by the reports of the three working groups and the elections of new presidents and secretaries: acritarch working group (R. Wicander president re-elected, C. Duggan secretary) chitinozoan working group (K. Dorning president re-elected, T. Vandembroucke secretary) and spore working group (Z. Pereira president, M. Vecoli secretary). Two candidates stand in the CIMP presidential elections: J. Verniers and J. Marshall and this election is currently underway via email.

The next CIMP meeting will be held in Bonn during the XIIth IPC. The spore working group will meet in Lisbon, Portugal, during July 2007, invited by Z. Pereira, the new president of the working group.

Philippe Steemans (Université de Liège)



“XV International APLE Symposium of Palynology”

Benalmadena Costa, Malaga, Spain

18-21 September 2006

On the 18th-21st September 2006 the XV International APLE Symposium of Palynology was held at the Hotel Alay in Benalmadena, Malaga (Spain). It was attended by more than 200 participants from 14 different countries (Argentina, Austria, Ecuador, France, Germany, India, Italy, Mexico, Nigeria, Poland, Portugal, Spain, Sweden, Turkey). There were 101 contributions (oral or poster presentations) presented in five different sections: Aerobiology and Pollinosis, Pollen Biology, Pollen and Spore Morphology, Melisopalynology and Floral Phenology, and Palaeopalynology. Each

Symposia included keynote lectures, including those from Dr Michael Hesse, Dr Carmen Galán and Dr Maria Herrero, who contributed interesting information on their respective fields of work.



Some of the participants at the XV APLE Symposium

Various committee meetings were also interspersed with the symposia. These included the General Assembly of the A.P.L.E., the General Assembly of the A.E.A. and the Annual Meeting of the R.E.A.

After the closing dinner a deserved tribute was delivered to our colleagues Concepción Álvarez Ramis, Michele Dupre Ollivier, Madeline Harley, Annick Le Thomas, Danielle Lobreau-Callen, Emile Roche, Concepción Sáenz Laín, Juan Seoane Camba y Nuria Solé de Porta, in appreciation of their life's work dedicated to the study of pollen grains.

The Symposium finished with a visit to the city of Malaga, an excursion to the Natural Park "Mountains of Malaga" and a visit to the Botanical-Historical Garden "La Cocepción".

More information about the meeting is provided at the following website <<http://www.15aple.uma.es>>. The abstract book can be downloaded at: <http://webdeptos.uma.es/BiolVeg/15APLEMalaga/Espanol/index_es.htm>.



Tribute to our retired colleagues (M. Mar Trigo Chairwoman)

I am pleased to say that the conference was a great success due mainly to the competence of the organising committee presided over by Dr. M. Mar Trigo.

M. C. Fernández (APLE councillor)
Depto. de Biología Celular
University of Granada
Granada, Spain

“39th AASP Annual Conference”

Philadelphia, Pennsylvania, USA

22-26 October 2006

The 39th Annual Meeting of the American Association of Stratigraphic Palynologists took place in Philadelphia, Pennsylvania, U.S.A. 22-26 October 2006. AASP met in affiliation with *The Geological Society of America*. This is the second time AASP has met with GSA, the first was in 2000.

The meeting was planned by Tom Demchuk and Doug Nichols, with local logistical support by Peter McLaughlin. The AASP events began with a field trip to Cape May, New Jersey, on Saturday. Nine AASP members visited coastal localities south of Philadelphia, including the site of the Cape May lighthouse, and a Pine-Barrens lake.



Cape May Lighthouse



Pine Barrens Lake near Stockton State College

The Meeting's social events included the AASP Icebreaker, attended by fifty members and guests including Tom Davies, Director at Large, and Jim Riding, Editor *PALYNOLOGY*, pictured below. On Tuesday evening, AASP met with *The Cushman Foundation*, *NAMS*, and *CHRONOS* in the penthouse of the Loews Hotel. About 200 micropaleontologists, including long-time AASP Member Howard Simpson, pictured below, enjoyed a very entertaining evening.

Two meetings of the AASP Board of Directors took place on Sunday (outgoing board) and Wednesday (incoming board). The AASP booth in the Exhibition Hall featured AASP publications and gave advertising gifts to visitors. Several GSA attendees filled out membership applications after receiving information about AASP.



L-R Davies, Riding



Howard Simpson

AASP hosted two scientific sessions: "***Icehouse / Hothouse – An Analysis Of Late Paleozoic Floras And Their Response To Global Climate Change,***" was co-sponsored the GSA Coal Geology Division and took place in a packed lecture hall. "***Stratigraphic Palynology: Applications To Geologic Problems.***" was likewise very well attended. During the four day meetings, fifty talks featuring palynological applications were given.

About 45 AASP members attended the annual luncheon, at which ***Satish Srivastava*** received AASP's highest research award – The Medal for Scientific Excellence, and ***Bill Evitt*** was awarded the AASP Medal for Teaching Excellence in absentia. In accepting his award (given by former AASP President Sharma Gaponoff), Satish acknowledged the influence of palynologists such as A.K. Ghosh, C.R. Stelck, Lucy Cranwell, Ken Piel, Harry Leffingwell and Warren Drugg; and

the lasting support of Rosalind, his wife of 31 years.



L-R Gaponoff, Srivastava

Paul Strother, chairman of the AASP Awards Committee, presented the L. R. Wilson Award for The Best Student Paper to Niall Paterson for his talk entitled “*Palynological Correlation of Mississippian Stage Boundaries,*” and to Katrin Ruckwied for her talk entitled “*Dinoflagellate Cysts From The Upper Cretaceous of The Vocontian Basin (SE France) Highlighted With CLSM: Base For A Biostratigraphical Zonation.*”. Both recipients received a plaque and a check for \$250. Five students competed for this year’s award.



L-R Paterson, Ruckwied, Strother

At the end of the Business Meeting, President Bob Cushman passed the gavel to incoming President Carlos Jaramillo, who presented to the membership the venue of next year’s (2007) annual meeting in Panama City, Panama.

Owen Davis, (IFPS Councillor for AASP)

ARTICLE

Estimating past plant diversity from fossil pollen data by Chengyu Weng, Henry Hooghiemstra & Joos Duivenvoorden

Institute for Biodiversity and Ecosystem Dynamics,
University of Amsterdam
(hooghiemstra@science.uva.nl; weng@science.uva.nl)

The definition of the problem: plant diversity is threatened around the world. Apart from the degradation of natural ecosystems as a result of human impact, climate change may also cause the impoverishment of regional floras. During the Pleistocene period, ice-ages caused significant changes to the Earth’s surface, but it is unknown to which degree past climate change caused changes in plant diversity. The modern plant diversity experienced (and survived) the last million years and some ten ice-age cycles, and one may wonder how plant diversity relates to climate change. In the frame of the NWO project ‘Biodiversity in relation to Global Change’, we explored the possibilities of using pollen records to obtain an impression of changes in past plant diversity. A better understanding of relationships in the past may help to improve estimates for future diversity loss resulting from natural and/or anthropogenic changes to our environment.

Results: We identified acceptable methods and we learnt that we cannot avoid time consuming analyses. Existing data sets do not meet properly the requirements, but anticipation in future projects may improve estimates and reconstructions.

A measure for past plant diversity?

Fossil pollen data from sediment cores may be a source of information to reconstruct past plant diversity. In order to develop a feasible method, we must know the reliability, sensitivity, accuracy and ease of use of the different existing methods of measuring pollen diversity. An understanding has to be developed about various topics including: the

relationship between pollen diversity and plant diversity, how well pollen diversity is observed, and the measurement of pollen diversity.

The correspondence between pollen and plant diversity may be tested by either a comparison along a diversity gradient, or correlating the temporal changes of pollen diversity and plant diversity. In the spatial domain it is difficult to find a series of sedimentary archives along a transect with comparable pollen source ranges; the basin size also has impact on the pollen source. In the temporal domain it is not feasible to have data on plant diversity from different periods of time corresponding to the observed pollen diversity in a fossil pollen record. To avoid these problems, we correlated the pollen diversity recorded in sediment cores to the relative abundance of pollen from different altitudinal vegetation belts (subandean forest from 1000 to 2300 m, Andean forest from 2300 to 3200 m, subparamo from 3200 to 3500 m, and grassparamo from 3500 to 4200 m) in the same pollen assemblages for three pollen records at ca. 2600 m altitude from the tropical Andes in Colombia. The relative abundance of pollen taxa from the different vegetation belts indicated the distance of this vegetation to the study sites. As mountain slopes are steep, measured distance is for a significant portion 'altitudinal distance'. The vegetation surveys show that plant diversity in the modern vegetation declines with increasing altitude. Our results show that pollen diversity is positively correlated to the abundance of pollen originating from (warm) vegetation belts at low altitudes, and negatively correlated to pollen supplied from the (cool) grassparamo (Fig. 1). These results suggest that pollen diversity roughly reflects the diversity of the surrounding vegetation: under warmer climatic conditions, species-diverse vegetation characteristic of low altitudes shifted upslope and contributed more to the pollen diversity at the study sites. Under colder climatic conditions, species-poor grassparamo vegetation shifted downslope and observed pollen diversity was lower.

How representative are our pollen data?

However, the above correlation is tentative, and probably restrained by incomplete registration of the pollen taxa and low pollen count number (and also the availability of data). Ideally, if all pollen taxa are registered in an investigation the relationship may be improved. Based on the theory of probability, palynological richness is positively related to the pollen count (Fig. 2). In a low pollen count, mainly common taxa are detected, whereas rare taxa are only detected by chance. We analysed two samples and

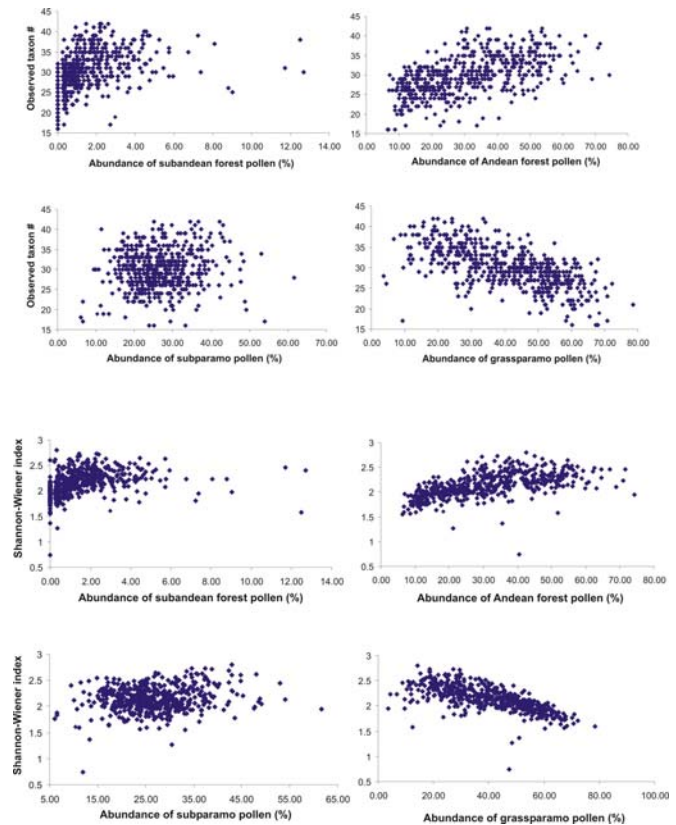


Figure 1. Scatter diagrams showing the relationship between the observed number of pollen taxa (a-d) and the relative abundance (percentage) (e-h) of pollen grains from different altitudinal vegetation belts in samples from the Funza-2A core (430-30 kyr Before Present). (a) to (d) show observed number of pollen taxa vs. (a) subandean forest; (b) Andean forest; (c) subparamo vegetation; (d) grassparamo vegetation. (e) to (h): Shannon-Wiener index vs. (e) subandean forest; (f) Andean forest; (g) subparamo vegetation; (h) grassparamo vegetation. The observed pollen taxon number was calibrated using a rarefaction method based on a pollen sum of 300 grains. The linear regression equations and R^2 values are also shown.

after having counted more than 5000 pollen grains (pollen sum = 5000), the number of new pollen taxa still increased! The curve showing the accumulated number of fossil pollen taxa had not reached the saturation level: showing plant diversity is very high. This implicates that the total number of taxa is only known when a higher pollen count is achieved. Obviously, registering all taxa in a pollen sample is too time consuming. Other methods of measuring pollen diversity may be more efficient.

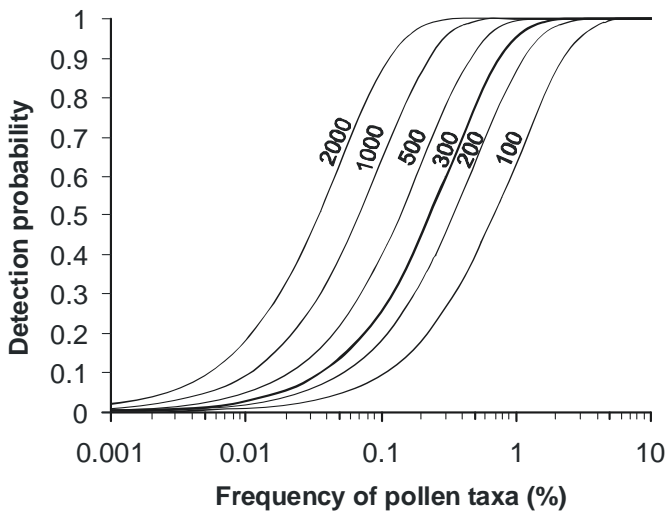


Figure 2. Relationship between the detection probability of fossil pollen taxa and pollen frequency for selected values of the pollen count. The number at the left of each curve shows the value of the pollen count. Note the logarithmic scale of the x-axis.

How to measure pollen diversity?

Rarefaction analysis estimates palynological richness in an exactly equal-sum count for all samples, making a comparison between samples meaningful. However, over-representation of some taxa suppresses the detection probability of rare taxa. In the case that no pollen taxa in a sample is dominant (i.e. a low total pollen abundance), the detection probability of rare taxa (either by low pollen production or grains arriving from a long distance) is enhanced. These factors bias the observed palynological richness and distort comparisons. We proposed the palynological richness observed in a pollen count proportional to its pollen influx may be a more reliable proxy for reconstructing temporal changes in plant diversity. This proxy overcomes most of the problems encountered in the rarefaction analysis, but it is constrained by inaccuracy in estimating the pollen influx due to the imprecise chronological control of the sediment.

Exploring diversity indices

Alternative methods for measuring pollen diversity include the use of diversity indices and estimating palynological richness by mathematical methods. In the two samples we analysed with a pollen sum of >5000, we found that the values from all chosen indices (Simpson's index, Shannon-Wiener index, and Fisher's Alpha) and the estimated total palynological richness based on non-parametric methods (Chao-1,

first-order Jackknife, second-order Jackknife, bootstrap, and incidence-based coverage estimator) were not independent of the pollen count number, and the relative relationship between samples may change with the pollen count. However, when the pollen count is high enough (>1500), the relative relationship is consistent in most indices and estimations. The Shannon-Wiener index appeared most stable with high counts. Moreover, the relative relationship is independent of pollen count which suggests it may be a better proxy than others (Fig. 3). Even when the number of analysed pollen grains exceeded 5000, the estimated total number of pollen taxa in the nonparametric analysis methods neither showed a clear asymptote value, suggesting the count was still insufficient.

Figure 3

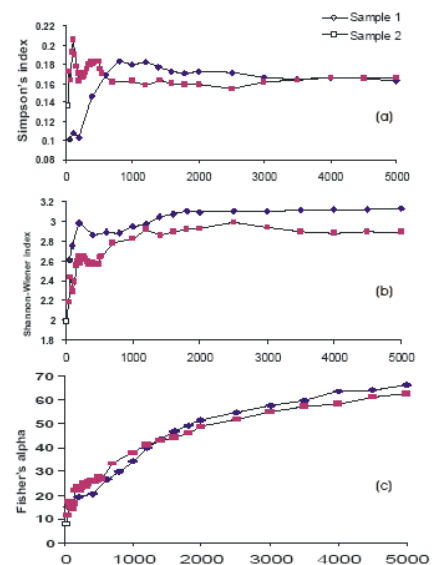


Figure 3. Variations of diversity indices with increasing pollen count for two samples from the Funza-2A core: (a) Simpson's index; (b) Shannon-Wiener index; (c) Fisher's Alpha.

In summary, we claim that pollen diversity may reflect plant diversity but measurement of pollen diversity has

to be well managed. Pollen diversity is not only influenced by the plants producing the pollen grains, but also by processes of pollen dispersal and the characteristics of the basin sediments (the recording archive). Pollen data tend to reflect plant diversity on a regional scale, but small basins (< 1 km diameter) show more of the diversity of the local vegetation immediately surrounding the lake; if the detection of each taxon is independent. Using results from large and small basins (e.g. forest-hollows) provides information about the regional and local plant diversity in the past. This is in particular true for plants with anemophilous pollen dispersal; plants with entomophilous pollen transport require a different strategy for measurement. Labour-intensive analyses cannot be avoided but a further development of the methodology and computerisation is possible. The present research was carried out in the frame of the programme 'Biodiversity in Relation to Global Change' of the Netherlands Science Foundation.

Publications:

- Weng, C., Hooghiemstra, H., Duivenvoorden, J.F., 2006. Challenges in estimating past plant diversity from fossil pollen data: statistical assessment, problems, and possible solutions. *Diversity and Distributions* 12, 310-318.
- Weng, C., Hooghiemstra, H., Duivenvoorden, J.F., 2006. Response of pollen diversity to the climate-driven altitudinal shift of vegetation belts in the Colombian Andes. *Philosophical Transactions of the Royal Society B* (in press)
- Weng, C., Hooghiemstra, H., Duivenvoorden, J.F., Influence of pollen count number on measurement of pollen diversity observed from two samples from the tropical Colombian Andes. *Review of Palaeobotany and Palynology* (in review).

About the authors:

Dr. Chengyu Weng is a palaeoecologist with interest in numerical data analysis (weng@science.uva.nl); Prof. dr. Henry Hooghiemstra is a tropical palynologist with interest in the dynamic history of tropical ecosystems in relation to climate change (hooghiemstra@science.uva.nl); Dr. Joost Duivenvoorden focuses on vegetation ecology and numerical data analysis, particularly in Amazonian systems (duivenvoorden@science.uva.nl).

ANNOUNCEMENTS

Chinese palynology books

China Scientific Book Services includes a comprehensive list of Chinese palynological, botanical and palaeobotanical books that may be browsed and purchased through their on-line catalogue. The website is <http://www.hceis.com>.

Message from the IFPS archivist : Al Traverse

As many of you know, Al Traverse is the official archivist for IFPS. He works with the archivists at Carnegie-Mellon University, in Pittsburg, USA, who archive information about personalities and important developments in palynology. The Hunt archivists collect information on all palynological activities, such as newsletters, meeting abstract volumes, copies of group photographs (preferably indexed), etc. For example, they would very much like photographs of all officers and council members of IFPS. Al is happy to collect all such things, and he makes several forays to the Hunt each year to deposit material and to check on the palynological archives and respond to requests for more information. Please help Al in this worthwhile endeavour by sending him photographs, newsletters, programs, from the constituent societies, as well as from the IFPS itself, in order that our science can maintain accurate historical archives.

New listserver

Denis Vernier (Palynology Unit, School of Agronomy, Montpellier, France) and ourselves have set up an e-mail discussion group (**PollenID**) open to palynologists interested in pollen grain identification. The list is intended not only as a discussion forum for research scientists in palynology wishing to post pictures of unidentified pollen grains, but also as a source of information and help for anyone interested in improving their expertise by sharing experience and knowledge. Please spread the news to as many interested palynologists as possible.

To learn more about "PollenID", please visit:
<<http://groups.yahoo.com/group/PollenID>>

To join "PollenID" send a blank message to:
<PollenID-subscribe@yahoogroups.com>

Florence Boutet and Christiane Tisse
DGCCRF Laboratory
(General Directorate for Fair Trading, Consumer
affairs and Fraud control)
146 traverse Charles Susini
13388 Marseille cédex 13 - France

New listserver

A new list server called **PalBoLat** (Paleobotanica Latinoamericana) has been launched. Its main purpose is to promote communication between palaeobotanists working in Latin America. More information and a subscription form can be found at the following website:
<<http://www.freelists.org/list/palbot>>. If you work, or are interested in palaeobotanical work, in this area of the world you are encouraged to sign up.

IOP change of website

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

SYNTHESYS fifth call

The SYNTHESYS Office is pleased to announce the Fifth call for proposals under the European Commission's FPVI European-funded Integrated Infrastructure Initiative. SYNTHESYS Project funding is available to provide scientists (Users) 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 (see full list below) 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.

SYNTHESYS is able to meet the Users' costs for:

- Research costs*
 - International travel
 - Local accommodation whilst based at the TAF
 - A per diem to contribute towards living costs
- * Research related costs including: bench fees and consumables (including molecular biology at some TAFs).

See <www.synthesys.info> for more information or e-mail: synthesys@nhm.ac.uk

Gemma Robinson
SYNTHESYS Administrator
Natural History Museum
Cromwell Road
London
SW7 5BD

SYNTHESYS Partners:

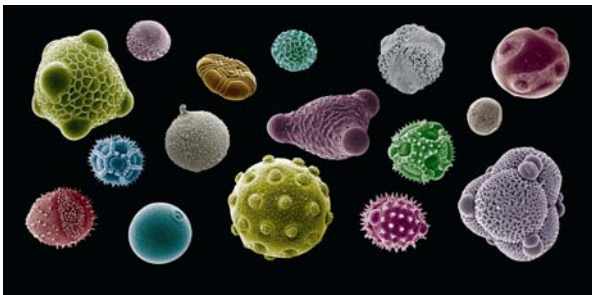
GB-TAF Natural History Museum, Royal Botanic Gardens, Kew, Royal Botanic Garden Edinburgh.
ES-TAF Museo Nacional de Ciencias Naturales, Real Jardín Botánico Naturales.
DK-TAF The Natural History Museum of Denmark.
FR-TAF Museum National d'Histoire Naturelle.
SE-TAF Naturhistoriska Riksmuseet.
NL-TAF University van Amsterdam, Nationaal Herbarium Nederland, Centraalbureau voor Schimmelcultures, National Natural History Museum Naturalis.
DE-TAF Museum für Naturkunde, Botanischer Garten und Botanisches Museum.
AT-TAF Naturhistorisches Museum, Wien.
HU-TAF Hungarian Natural History Museum.
PL-TAF Museum and Institute of Zoology, Polish Academy of Sciences.
BE-TAF Royal Belgian Institute of Natural Sciences, Koninklijk Museum voor Midden-Afrika, National Botanic Garden of Belgium.

The SYNTHESYS Partners are inviting applications from researchers based in the Member States of the EU: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg,

Malta, Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, United Kingdom plus the Associated Countries of the EU: Switzerland, Iceland, Israel, Liechtenstein, Norway and Candidate Countries of the EU : Bulgaria, Romania and Turkey.

Forthcoming publication

The IFPS is an affiliated organization of the forthcoming publication : «*Understanding pollen diversity and its role in plant systematics*» edited by Carol A. Furness and Michael Hesse. Plant Systematics and Evolution Special Issue based on the proceedings of a double symposium held at the XVII International Botanical Congress, Vienna, July 2005. In press (publication expected before the end of 2006). Also to be published online at the following website
<www.springerlink.com/content/1615-6110/>.



Contents:

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.



Award of the Jongmans medal

Many congratulations to Professor David Batten who was awarded the Jongmans Medal at the recent 7th European Palaeobotany-Palynology Congress in Prague. Below is the laudatio provided by Han van Konijnenburg-van Cittert and the response from David Batten.

Laudatio

Ladies and Gentlemen, dear colleagues,

We are here to present for the fourth time the Jongmans medal, this time again to a well-known palynologist: David John Batten. The Jongmans Award was established in 1994 by the Dutch Foundation Geology and Palaeontology to honour distinguished earth scientists and to commemorate the life and work of Professor dr. W. F. Jongmans. Recipients were Prof. dr. Remy of Munster University (IVth European Palaeobotanical-Palynological Conference, Heerlen, September 1994), Prof. dr. M. Strel of Liege University (Vth EPPC, Cracow 1998) and Prof. dr. H.

Walther of Dresden University (VIth EPPC, Athens 2002).

Dr Batten is not only a palynologist working on dinoflagellates and sporomorphs, but also sometimes a macro palaeobotanist or a scientist dealing with the palaeo-ecological and climatological implications of his work, and last but not least an editor! Many people not working directly in the field of palaeobotany and palynology know you only as the editor-in-chief of *Cretaceous Research* and of *Palaeontology*.

The first time I met you was at the Palaeobotany/Palynology conference in Utrecht in 1966, you as a young palynologist just graduated from University College, London; I as a student in the Yorkshire Jurassic flora, but both working on Mesozoic material from the UK and that has always been a bond between us, even when we went rather different ways.

When I looked through all the reprints I have of your work I see a lot of variation: Although plant macrofossils were not your main concern, you still wrote some papers on them, especially dealing with Cretaceous Equisetales. And in the 1990s you even worked with dispersed seed cuticles and other mesofossils.

Of course you are best-known for your palynological work including reworking and palynofacies; you studied not only miospore assemblages but I never realised until recently that you started work on megaspores already at a very young stage of your career. But later on you continued that work including very interesting ultrastructural work on Mesozoic micro- and megaspores reaching significant results on their affinities. And of course, together with Warren Kovach, your Catalogue of Mesozoic and Tertiary megaspores.

And finally your palaeoecological work as for example palynofacies and papers dealing with organic maturation, both topics related to petroleum geology. Your papers I used most in the early days were the 'Wealden palaeoecology from the distribution of plant fossils', and 'Wealden of the Weald - a new model'. Also your 'Palynology, climate and the development of Late Cretaceous floral provinces in the Northern Hemisphere; a review' is well known. Especially your review articles, for example in the three volumes textbook 'Palynology: Principles and Applications', are

much appreciated by many students and colleagues not familiar with a particular field of interest.

Your working places were initially, after your PhD at Cambridge and a postdoctoral fellowship there, in the oil industry with Robertson Research International in North Wales and British Petroleum at Aberdeen. You then moved on to the University of Aberdeen as a lecturer and later reader. You then moved to Aberystwyth in 1990 first as a senior lecturer and from 1992 onwards as a professor. When recently in that university things began to be bleak and you became emeritus professor, you had the courage not only to concentrate mainly on your editorial work, but also to go as honorary research professor to the University of Manchester, so that you still can continue your scientific work.

For all these reasons it is a great pleasure for the nominating committee and the Board of the Palynological Circle to award the 2006 medal to David J. Batten.

Response

Thank you Han for your kind words. I am honoured to receive this award. It came as a complete surprise. Had I known about it sooner, I might have had time to prepare a paper for this conference, but I was notified by an e-mail sent to my Aberystwyth address. As a result, a few weeks had passed before I read it because I am based mainly in Manchester University now. On the other hand, I have been so burdened with editing in recent years that I probably wouldn't have found the time to write one I would be happy with even if I had received more advanced warning.

I began my university education in Canada for reasons that I don't have time to go into. I went to Queen's University in Kingston, Ontario, in 1961 intending to study botany, but one of my first year courses was in geology and made me think about continuing in this field, especially since I had not found the botanical part of the biology course very interesting. However, during the rest of my time at the university I remained unsure of my future. One of the consequences of this was that I also took arts courses, in the end graduating with degrees in liberal arts in 1964 and honours geology, with a minor in biology, in 1965. Following graduation, I was still uncertain about what to do next, despite having been accepted by

the University of Chicago to pursue a PhD degree in vertebrate palaeontology. When I discussed this with my father he became a little worried that he might have to continue helping his son financially for several more years, so he suggested that I might consider something else that wouldn't last so long. As it happened, he had seen a newspaper advertisement for an MSc programme in micropalaeontology at University College London, so he suggested that I apply for that. I told him that I didn't know anything about micropalaeontology to which he replied 'well you don't know anything about vertebrate palaeontology either, so what's the difference?', or words to that effect. He also suggested that I might like to be based in London for a while, and since the cover of a recent issue of Time Magazine had been headed 'swinging London', I decided that this was actually rather a good idea.

At the time, the MSc course at UCL consisted of lectures, practicals and project work on palynology, ostracods and foraminifera. The palynology component came first and was presented by Bill Chaloner, who not only brought me back to botany but also inspired me to continue in the field. In addition, partly as a result of his influence, I didn't partake as fully as I might have done in the many extra-curricular activities that London had to offer. Indeed, when the possibility of working towards a PhD became a reality, I found the prospect of going to Cambridge more attractive than staying in the metropolis.

At Cambridge I was supervised by Norman Hughes, who wanted me to work on the distribution of spores and pollen grains in the Wealden (early Cretaceous) succession of south-east England in order to determine how sedimentary facies affected the stratigraphic ranges of these microfossils. However, it wasn't long before I began to find interesting relationships between rock types and the occurrence of not only palynomorphs but also the associated particulate organic matter, which laid the foundations of my longer term work on palynofacies, palaeoenvironments and the generation of hydrocarbons.

Cambridge in general, and the Department of Geology (as it was then) in particular, was a good place to be in the 1960s. Among the people who visited Norman or who had some study leave in Cambridge during my time there were Jim Doyle,

Blanka Pacltová and Geoff Creber, all of whom are here today. In my final year of PhD research, with the prospect of having to look for a job looming, Brian Harland unexpectedly offered me a place on an oil-company-funded programme of field work for just under three months in the Svalbard archipelago, supported by helicopters operating from a Norwegian ice-breaking sealer, and also a year's employment afterwards if I wanted it. This particular operation led to the foundation of the organization known as CASP (Cambridge Arctic Shelf Project), which continues to this day. In the event, I didn't need the job because on my return from the Arctic I learned that I had been awarded a two-year postdoctoral fellowship at Cambridge.

I joined the geological consultants Robertson Research in North Wales at the beginning of 1972 and was immediately expected to be an expert on the palynology of sedimentary successions of all ages in any part of the world. Being 'thrown in at the deep end' in this way was an interesting and valuable experience, which I put to good use when I went to work for British Petroleum early in 1974, briefly in London, then in Aberdeen. Towards the end of 1976 I moved on again, this time to a lectureship at Aberdeen University. While at BP I began correlating palynological with geochemical data in collaboration with the company's geochemists, and this research continued on and off during much of my time in Aberdeen.

Unfortunately, during the late 1980s there was a UK-wide, so-called 'rationalization' of university earth science departments, and for a time it looked as if the Department of Geology in Aberdeen would have to close, despite the fact that the North Sea oil industry was on its doorstep. I eventually decided to leave for the recently combined geology and geography departments at the University of Wales, Aberystwyth because future prospects there appeared to be brighter. How wrong I was! The first couple of years were more or less satisfactory, but the situation progressively deteriorated after that because of both internal-departmental and university-management politics, and culminated in the winding down and eventual closure of the geology department in 2000 when the last intake of its students graduated.

During the closing-down period I had little desire to transfer to another university, even if it had

been possible. In 1999, one of my departmental colleagues, Tim Palmer, who had recently secured part-time employment as the Executive Officer of the Palaeontological Association, suggested that I might like a similar part-time position as editor of the Association's publications. I was reluctant to consider this at first because I was already Editor-in-Chief of *Cretaceous Research*, but eventually agreed to be the technical editor. However, by early 2001 it had become clear to me that *Palaeontology* and the other publications of the Association needed to be managed in a different way, and it was then that I became Editor-in-Chief. At the same time I decided to relinquish my position with *Cretaceous Research*, but for various reasons it proved necessary for me to continue with this journal for a couple more years, and latterly it has not been possible to find anyone willing to step into my shoes. However, I have now decided that, regardless*, I must stop at the end of this year; being a chief editor of two journals is more than enough for any sane person. I need to find more time for research and especially to finish long-shelved, half-written papers that my co-authors, including the current IOP President, Margaret Collinson, have been waiting so patiently for me to work on again. Sorry once more Margaret! I am looking forward to my changed circumstances in 2007.

I end by reiterating that the award of the Jongmans Medal is a considerable honour, which I have greatly appreciated. Thank you.

David Batten
September 2006

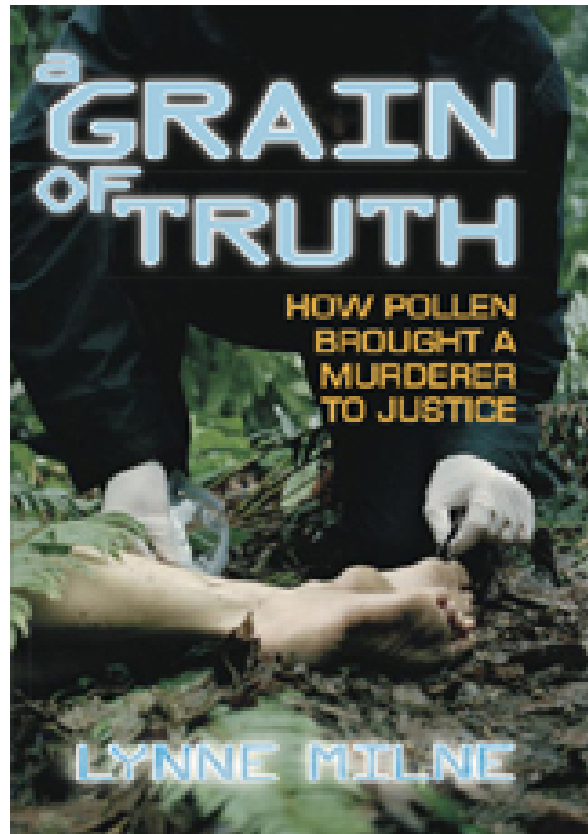
[*As of October 31, it seems that my replacement has been found.]

NEW BOOKS

A grain of truth: how pollen brought a murderer to justice by Lynne Milne

In 1996 Samantha Hall, a young mother of two, was brutally murdered and her body dumped in parkland near Noosa in the heart of Queensland's Sunshine Coast. Despite suspicions, evidence was thin until police called in a forensic palynologist. Forensic palynology is the use of pollen and

spores to help solve crimes. It is another investigation tool, like fingerprint analysis and DNA profiling, which is increasingly used by police to solve crimes. Interwoven with the unfolding story of how Samantha's killer was brought to justice, *A Grain of Truth* opens the door on a new tool that is being used to solve crimes and other mysteries.



“A grain of truth: How pollen brought a murderer to justice” was published in 2006 by New Holland Publishers Australia. Price \$27.95 (Australian dollars). ISBN 1877069027.

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