

# PALYNOLOGOS

ISSN 0256-1670

Volume 32, n°1 - 2009

NEWSLETTER OF THE INTERNATIONAL FEDERATION OF PALYNOLOGICAL SOCIETIES

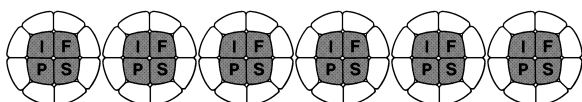
## VISIBLE POLLEN AND PALYNOLOGICAL VISIBILITY



Carpet of billions of *Abies alba* and *Picea abies* pollen at the lakeshore of Lake Schluchsee, Black Forest, Germany  
(Photo J.N. Haas, June 1995)

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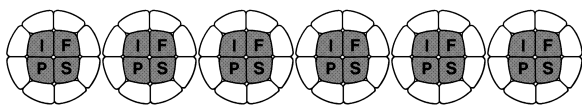


## NEW IFPS AFFILIATED SOCIETY

### PALAEOBOTANICAL SOCIETY LUCKNOW, INDIA (PSL)

We are very pleased to inform you that the Palaeobotanical Society Lucknow, India (<http://www.palaeobotanicalsociety.org>) has rejoined IFPS.

Dr Ashwini Kumar Srivastava (Birbal Sahni Institute of Palaeobotany, 53 University Road, Lucknow 226007, India, [ashwinisrivastava@hotmail.com](mailto:ashwinisrivastava@hotmail.com)) is the new councillor of PSL. A warm welcome to our new IFPS affiliated members from India!



## MEETING REPORTS

### 2009 CAP Sponsored Session at CANQUA 2009 Conference, Burnaby, British Columbia, Canada, May 3-8, 2009

Report by Terri Lacourse, University of  
Victoria, Canada ([tlacours@uvic.ca](mailto:tlacours@uvic.ca))

Putting the Ecology Back into Paleoecology:  
In May 2009, the [Canadian Association of  
Palynologists](#) sponsored a special conference

session at the 2009 meeting of the [Canadian Quaternary Association \(CANQUA\)](#) at Simon Fraser University in Burnaby, British Columbia, Canada. This session, entitled “[Putting the Ecology Back into Paleoecology](#)”, focused on the application of palynological and paleoecological techniques towards understanding long-term ecosystem structure and function. The intent of this session was to turn attention back towards the ecological component of Quaternary science, which is often neglected in paleoecological studies in lieu of a focus on climate change reconstruction and paleoenvironmental inference. The session highlighted recent and ongoing paleoecological research from across North America and included talks on using paleoecological data in ecosystem conservation, and in understanding disturbance regimes, productivity, community assembly, and vegetation succession. The session built nicely on the previous day’s session on the late-glacial biogeography of the Pacific Northwest region of North America and demonstrated clearly that the ecological component of Quaternary science is alive and well.

The session began with some opening remarks from the Session Chair, Terri Lacourse, explaining the impetus for the session. The idea for the session came on the heels of a discussion with Marlow Pellatt (Parks Canada) about the apparent preoccupation of paleoecologists with climate change and the lack of focus on the ecological information contained within Quaternary data. Biotic remains such as fossil pollen are often the best means to make inferences about paleoenvironment and paleoclimate. However, the application of paleoecological studies to questions about climate change has in some ways resulted in the neglect of using these same biotic remains to examine past ecosystem structure and function. The CAP-sponsored session was intended to bring some focus back to using paleoecological techniques to understand ecosystem dynamics and properties.

The opening address was given by Marlow Pellatt, who spoke on: *Can paleoenvironmental studies help conservation ecologists restore ecosystems and manage for ecological integrity?* Marlow's talk emphasized the need for conservation ecologists to recognize that paleo-data are the only sources of empirical data that allow us to examine ecosystem response to environmental change at the magnitude projected by global climate models. Marlow presented some of his recent research conducted on Canada's Pacific coast that uses a multi-proxy approach (fossil pollen and charcoal analysis, dendroecology, plant ecology, and bioclimate envelope modelling) applied to the assessment of ecosystem change and specifically the conservation of endangered Garry Oak ecosystems. His work demonstrated clearly the applicability of paleoecological research to the development of restoration projects and management plans. This opening talk brilliantly set the context for the remaining session talks.

Session speakers were:

Alexandra Gerber: *A Holocene-scale Analysis of Forest Fire Regimes near St.-Lawrence Islands National Park, Ontario, Using Charcoal as a Paleoindicator*. Alexandra has worked diligently to produce Holocene records of forest fire activity that complement historic records of the past 100 years. Together, these will be used to make recommendations for land management including prescribed burning.

Rolf Mathewes: *Comparing Historic Anthropogenic Disturbance and Paleoenvironmental Changes Using Modern and Fossil Pollen from a Temperate Rainforest*. Rolf's talk on the recent history of forest disturbance highlighted the potential for misinterpreting changes in pollen records as climate-driven, rather than disturbance driven.

Terri Lacourse: *The Role of Life History Variation in Postglacial Vegetation Dynamics*. Using various multivariate statistical analyses and fossil pollen records, Terri presented significant correlations between plant species traits and paleo-

environmental change and demonstrated that long-term forest composition is constrained through interspecific differences in plant traits.

Gail Chmura: *Reconstructing Wetland Succession on Rebounding Coastlines Using Modern Analogues*. In the context of wetland succession, Gail underscored the importance of modern calibration studies for accurate interpretation of fossil pollen assemblages and geochemical data.

Vera Pospelova: *Late Quaternary Climate and Marine Productivity Changes Along the California Margin*. In a very elegant study using dinoflagellate cysts, Vera demonstrated clearly a strong response in marine productivity to large-scale shifts in climate and ocean circulation over the past 42,000 years.

Richard Hebda: *Timing and Environments of the Olympia Non-Glacial Interval in the Fraser Lowland of British Columbia*. Richard gave a very enthusiastic talk on the results of pollen analyses that reveal a >22,000 yr record of vegetation just 300km inside the limit of the Late Wisconsin Cordilleran ice sheet. It was an energizing note to end the session on.

Poster presentations were:

Alwynne Beaudoin: *The Value of Reference Collections in Paleoecology*. Alwynne described collection, processing, and storage methods for pollen and seed reference collections and offered helpful advice for researchers establishing permanent reference collections.

Svetlana Esenkulova: *Dinoflagellate Cyst Production in the Central Strait of Georgia (BC, Canada) in Response to 1997-98 El-Niño Event*. Svetlana's poster outlined the effect of El-Niño events on the abundance, composition, and diversity of dinoflagellate cysts in coastal British Columbia.

Simon Goring: *How Sensitive are Pollen-based Climate Models to Large-scale Vegetation Change? An Example from Marion Lake, British Columbia*. Simon presented the results of pollen-based climate models from the same site as Rolf's study and showed that pollen-based climate

reconstructions from that site are not biased by the effects of recent logging.

Alanna Krepakevich: *The Impact of Sewage Discharge on Coastal Bays of Southern Vancouver Island (BC, Canada) Reflected in Phytoplankton Sedimentary Records.*

Alanna's poster described the use of dinoflagellate cysts and biogenic silica for assessing past and present estuarine health.

Diana Tirlea: *Climate-Mediated Terrestrial-Aquatic Linkages in Small Alpine Catchments in Banff National Park, Alberta.* Diana presented intriguing preliminary results on pollen and algal pigment analyses aimed at assessing the relationship between pollen input and primary productivity in alpine lakes. Diana also explored the impact of different sample storage methods (freezing vs. freeze-drying) on pollen preservation and found no significant differences in pollen degradation.

All of the presentations were of a high standard and were very well attended. The session generated substantial discussion and inspired debate at the CANQUA conference. The session attracted a multidisciplinary audience and highlighted paleoecological research in an engaging manner. A university colleague of mine, who is a geomorphologist and shall remain nameless, told me that he usually skips the "pollen talks" at conferences, but was very glad to have sat in on our entire session. All agreed that it was a success. On behalf of the participants, I thank the Canadian Association of Palynologists for sponsorship.

## **2009 Joint 21th APLF Meeting and 4<sup>th</sup> APF Congress, Lille, France, June 2-5, 2009**

*Report by Fabienne Marret, University of Liverpool, GB (F.Marret@liverpool.ac.uk)*

The 21<sup>st</sup> symposium of the APLF (Association des Palynologues de Langue Française) was held in Lille in conjunction with the 4<sup>th</sup> Congress of the APF (Association Paléontologique Française) from 2<sup>nd</sup> to 5<sup>th</sup> of June 2009. The meeting, regrouping around

100 participants, was organized and hosted by colleagues from the Université Catholique de Lille, under the theme "Perspectives en Paléontologie et Palynologie". The first and half days were dedicated as the "Journée Scientifique de l'APLF" with various presentations from established researchers and PhD candidates; APLF awards for the best student presentation and poster were given to Adèle Kuentz (*Changements climatiques holocènes au sud du Pérou*) and Sureje Lopez (*Etude biostratigraphique des kystes de dinoflagellés du stratotype historique de l'Aquitainien (Miocène inférieur)*) respectively. The APLF award for the best PhD thesis went to Anne-Laure Daniau (*Variabilité des incendies en Europe de l'Ouest au cours du dernier cycle climatique: relations avec le climat et les populations Paléolithiques. Etude des micro-charbons préservés dans les carottes marines*). The end of this scientific day was concluded by a remarkable discovery of "fresh" dinoflagellate thecates in amber from the Cretaceous, giving us an insight of cell fusion and sexual cycle of a new freshwater dinoflagellate, from Edwige Masure and colleagues (*Le cycle de vie à thèque cellulosique d'une peridiniaceae (dinoflagellés) de l'Albien terminal, fossilisée dans l'ambre d'Archingeay (Charente-Maritime)*). A new board for the APLF has been elected, with the following members: Séverine Fauquette; Didier Galop; Agnès Gauthier; Sébastien Joannin; Vincent Lebreton; Laurent Londeix; Fabienne Marret; Odile Peyron; Maria-Fernanda Sanchez-Goni. Wednesday afternoon was dedicated to a round table to discuss the future of Palynology and Palaeontology in the French academic system. This was followed up by the conference dinner in Belgium, at the Brasserie Dubuisson, where we had a tour of the brewery and a taste of different beers, the strongest one being 14.5 vol.! The following day was the "Journée scientifique de l'APF", with a wide range of presentations and posters as well. For me, it was the opportunity to discover the Chti's welcome and as the other participants have enjoyed their stay in the "Nord".



The participants of the Joint 21th APLF Meeting and 4th APF Congress, Lille, France, June 2-5, 2009

### **2009 TMS Palynology Group meeting report – 13<sup>th</sup> May 2009, Natural History Museum, London**

Report by Phil Jardine, University of Birmingham, England ([PEJ083@bham.ac.uk](mailto:PEJ083@bham.ac.uk))

This year's annual meeting of the TMS Palynology Group took place at the Natural History Museum, London on the 13<sup>th</sup> May. The meeting was co-organised by the TMS Group officers and local host Susanne Feist-Burkhardt and was attended by a pleasing mix of established names and post-graduates, with 28 participants in total.

The meeting began with a reception in the Earth Galleries of the NHM, which gave everyone a chance to catch-up/get acquainted before the talks started. Following an introduction by Susanne and Ian Harding, the first session of talks got underway with a keynote address by Dianne Edwards (University of

Cardiff). This focused on the wealth of knowledge available from the *in situ* spore record for properly understanding dispersed spore diversity and morphological trends. Using numerous examples from the mid-Palaeozoic, Dianne demonstrated the importance of combining the micro- and meso-/megafossil plant records, and provided a fascinating review of early land plant and spore evolution. Next, Charles Wellman (University of Sheffield) presented the results of a detailed study examining the wall ultrastructure of several species of the Devonian spore genus *Emphanisporites*. The overall aim was to determine the affinities of this taxonomically and morphologically diverse genus, using transmission electron microscopy on serial sections of many individual spores. Unexpected levels of ultrastructural variability in the species studied suggested that very different plant groups might have produced these spores, but converged on a

common morphological type. The prevalence of generalized but transient morphological themes in the spore and pollen fossil record was discussed in relation to evolutionary processes and models.

Phil Jardine (University of Birmingham) then skipped forward in time to the Late Paleocene, giving a talk on spatial heterogeneity in paratropical forests on the U.S. Gulf Coast. The sporomorph record from the Gulf Coast documents the response of highly diverse plant communities to environmental change, but whilst temporal trends are by now quite well understood, the spatial dynamics of this system have not been quantified. Despite the coarse spatial resolution imposed by the marginal marine deposits, this analysis showed clear compositional differences between the eastern and western Gulf Coast, demonstrating the possibility of quantifying spatial trends from the fossil pollen record.

A coffee break was followed by a demonstration of the John Williams Index of Palaeopalynology, given by the eponymous developer of this invaluable resource. This is in part an enormous collection of literature that has been photocopied, donated, and, since the advent of Google Scholar, downloaded over the last three decades. However, what sets this apart from simply being a library of palynological literature is the extensive card catalogue that John has painstakingly created. Every mention of every species of spore, pollen, dinoflagellate and acritarch that has passed under John's scrutiny has been carefully recorded, with the result that users of the Index can search for entries by taxon name, geological period, and geographical area. A discussion led by Susanne following the demonstration dealt with the possibility of digitalising the Index; a logistic nightmare, but a process that would make this meticulously organized collection available to a much wider community of researchers.

Ian Harding (University of Southampton) kicked off the second session of talks with an analysis of high latitude climatic change across the Eocene-Oligocene boundary (Nature, 18<sup>th</sup> June 2009). This interval marks

the transition from the greenhouse world of the Cretaceous and early Palaeogene to the icehouse world of the last 33 million years. Climatic conditions from northern high-latitudes during this period are poorly known, leading Ian and his colleagues to produce temperature estimates from terrestrially derived sporomorph assemblages preserved in the sediments of the Norwegian-Greenland Sea. Using a nearest living relative approach, this study suggests a reduction in mean winter temperatures and increased seasonality across the E/O transition, supporting previous analyses which indicate cooling at this time. Susanne Feist-Burkhardt (NHM) kept up the dinoflagellate end of palynology with a high-resolution study of dinoflagellate cyst assemblages throughout the Toarcian/Aalenian (Early/Mid Jurassic) in the Jura Basin of southwest Germany (Lethaia, 2009). This is a key period of diversification in dinoflagellate cyst evolution, and these well-preserved assemblages from Germany document unprecedented levels of diversity for this time period. Several new species have been recorded, including some not previously recognised as dinoflagellate cysts. Independent age-calibration has allowed a high-resolution biostratigraphic subdivision of the Aalenian stage.

The final talk was delivered by Keith Richards (KrA Stratigraphic), on the modern Volga Delta as an analogue for the Pliocene Productive Series in the Caspian Sea. Palynofacies analogous to environments in the modern delta had previously been identified within the palaeo-Volga deposits of the Productive Series. A study of the modern delta, involving detailed palynological reconstructions coupled with extensive seismic analyses, has documented the evolution of the Volga Delta since the Late Pleistocene. This work suggests that the modern Volga Delta is a partial analogue for the Pliocene palaeo-Volga, although major river incision occurred in the Late Miocene and Pliocene.

Palynological discussions are well known to work up an appetite, and those of us who didn't have trains to catch rounded off the

meeting with some Italian cuisine at Spago in South Kensington. Special thanks must go to Susanne for organizing a splendid meeting, and we look forward to a joint meeting with the TMS Silicofossil Group in 2010.

**2009 16<sup>th</sup> OFP International Congress: Present and future of Palaeobotany in Southwest Europe (in honour of Robert H. Wagner), Aguilar de Campoo, NW Spain, Sept. 9-11, 2009**

*Report by Antoine Bercovici, University of Rennes (France), Uxue Villanueva-Amadoz, University of Zaragoza ([uxuevil@unizar.es](mailto:uxuevil@unizar.es))*

The 16th OFP International congress was held at the Monastery of Santa María la Real in Aguilar de Campoo (Palencia Province, north-western Spain) from 9 to 11 September, 2009. Forty-five specialists gathered from 10 provinces of Spain (Córdoba, Lugo, Madrid, Murcia, Navarra, Palencia, Salamanca, Valencia, Vigo, and Zaragoza) as well as from other countries of Europe (Italy, Belgium, France, Great Britain, and Portugal), America (Mexico) and Asia (Japan).

The theme of the Conference was announced as "Present and future of Palaeobotany in Southwest Europe (in honour of Robert H. Wagner)". Its scientific programme was successfully realized due to the active work in planning plenary meetings and the high scientific level of the presented reports.

A. Background of the meeting: Present and future of Palaeobotany in Southwest Europe has been an international congress focussing on a wide spectrum of palaeobotanical and palynological topics, conducted by palaeobotanists of the Southwest European region, with collaboration and support of the OFP (Organization of French-speaking Palaeobotanists). The occasion marked the celebration of the research career of Dr. Robert H. Wagner who has contributed a lifetime's research to the Upper Carboniferous of the north of Spain. The symposium included two

fieldtrips and numerous social events such as the exposition of the palaeobotanical carboniferous fossils from Luis Sardina's collection, the guided visits to the Santa María la Real Monastery Museum, the Mining Interpretation Center of Barruelo de Santullán and the Aguilar de Campoo village.

Thirty-one communications were presented and discussed. They concerned a number of topics, ranging from Paleozoic to Quaternary in age, including biostratigraphy, palaeogeography, palaeoecology, palaeoclimatology and the use of new computational techniques in palaeobotany. Significant interest was aroused by the report of corresponding member of Cordoba Botanic Garden R.H. Wagner on the history of the carboniferous Palaeobotany in Spain.

The meeting recognized the importance of creating a discussion forum in order to attach importance to the research teams from the south-western Europe, showing the incredible research advances during the last decade, especially by many Spanish specialists and the huge palaeobotanical heritage of the Palentian Basin. Moreover, this congress yielded important conclusions and has contributed to the exchange of ideas and perspectives of the participants for the future developmental planning.

B. Welcome and opening remarks: These were made by José Bienvenido Diez, Chair of the congress, preceded by the opening conference in the charge of Jean Broutin from the Natural History Museum of Paris and University of Pierre et Marie Curie (Paris 6) about the Permian mixed floras of the southern Tethyan margin and its palaeogeographic and palaeoclimatic significance. The opening was supported by a great number of the institutional representatives from the Diputación de Palencia, Patrimonio Natural de Castilla y León Foundation, University of Valladolid, Aguilar de Campoo and Barruelo de Santullán Council Halls and the "Fundación para el estudio de los dinosaurios de Castilla y León".

C. Technical discussion: Two keynotes were provided during the congress. The first one

given by Jean Galtier was focused on the morphology and ecology of the Paleozoic Tedelean ferns and the second one by Luis Miguel Sender centred on the freshwater aquatic plants from the upper Albian-lower Cenomanian of Teruel province in the north-western Spain. The final keynote presentation was made by Professor Christopher Cleal, as a laudatio to Professor Robert H. Wagner. He provided a biography of Wagner's career and he focused his speech on the historical review of the research of the carboniferous flora.

D. Fieldtrips: The pre-congress fieldtrip consisted on the geological tour of the northern province of Palencia guided by Robert H. Wagner, explaining the main

geological structures and the stratigraphic succession of the Paleozoic age of the area. The second fieldtrip was organized by Robert H. Wagner and José Bienvenido Diez to the Carboniferous paleoforest of Verdeña and the Barruelian stratotype of Barruelo.

NOTE: More information about the congress can be found at:

<http://www.paleoserver.com/ofp/>

The Abstract volume of this congress is also available in the following website:

<http://www.paleoserver.com/ofp/congresofp/Abstracts.html>



The participants of the 16th OFP International Congress, Aguilar de Campóo, Spain, September 9-11, 2009

### **2009 1st Session of VIIIth National Palynological Congress and 30<sup>th</sup> Anniversary of PSC, Nanjing, Jiangsu Province, China, Sept. 16-19, 2009**

*Report by Li Jianguo, Nanjing Institute of Geology and Palaeontology, Chinese Academy of Sciences*

The 1<sup>st</sup> Session of VIIIth National Palynological Congress and 30<sup>th</sup> Anniversary of PSC were held in Nanjing, Jiangsu Province, China on September 16-19, 2009. A total of

108 representatives participated in the meeting. Altogether 60 abstracts were submitted with 49 oral presentations and 6 posters by the participants, focusing on a variety of academic themes including acritarchs, biostratigraphy, morphology and taxonomy, palynofacies, evaluation on energy sources, fossil megaspores, late Cenozoic palaeovegetation and climate change, agriculture, archaeology, marine palynology, surface soil pollen, pollen database, marine palynology, phytolith and pollen nutrition. Palynology in China was completely barren some sixty years ago, but it experienced an

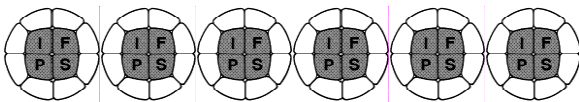


incredible fast development since the 1950s and finally led to the foundation of PSC in 1979. Today it owns a membership of over five hundred; many of them are

internationally active. The next session of the congress are scheduled to be held in 2011.



The participants of the 1<sup>st</sup> Session of the VIIIth National Palynological Congress and 30<sup>th</sup> anniversary of PSC, Nanjing, China, September 16-19, 2009



## FUTURE MEETINGS

### 2009 11<sup>th</sup> International Paleolimnology Symposium, Guadalajara, Jalisco, Mexico: **NEW DATE!** Dec. 15-18, 2009

The 11th International Paleolimnology Symposium will be held at Guadalajara, Mexico. New registration and abstract submission deadline: Oct. 10<sup>th</sup>, 2009! See <http://www.geofisica.unam.mx/paleolimnologia/> for details.

### 2010 4<sup>th</sup> International Workshop on Quaternary Non-Pollen-Palynomorphs, Besançon, France, June 2010

The 4th International Workshop on NPPs will be held at the University of Franche-Comté, Besançon, France, and organised by Emilie Gauthier ([Emilie.Gauthier@univ-fcomte.fr](mailto:Emilie.Gauthier@univ-fcomte.fr)). Further information will be available in due times.

### 2010 3rd International Palaeontological Congress (IPC), London, UK, June 28 – July 3, 2010

The 3rd International Palaeontological Congress will take place in London in June 2010. Further information available at <http://www.ipc3.org/>

### 2010 8<sup>th</sup> European Palaeobotanical and Palynological Conference, Budapest, Hungary, July 6-10, 2010

The 8<sup>th</sup> EPPC will be held in Budapest, Hungary, and will be organized by the Hungarian Natural History Museum, the Hungarian Academy of Sciences, the Eötvös Lóránd University and the Hungarian Geological Society. For further details see <http://www.eppc2010.org/>

### 2010 XVII International A.P.L.E. Symposium of Palynology, Ourense, Spain, July 7-10, 2010

The XVII APLE symposium will be held in Ourense (Galicia, Spain). Further information is available at <http://aple.usal.es>.

## 2010 9<sup>th</sup> International Congress on Aerobiology, Buenos Aires, Argentina, August 23-27, 2010

The 9<sup>th</sup> ICA will take place at the Museo Argentino de Ciencias Naturales “Bernardino Rivadavia” in Buenos Aires, Argentina in August 2010. Symposium subject will be “Expanding aerobiology”. More Information is available at <http://www.aerobiologia.com.ar/9thica.html>.

## 2010 AASP-CAP-CPC Joint Meeting, Halifax, Nova Scotia, Canada, Sept. 29 – Oct. 1<sup>st</sup>, 2010

The joint meeting will take place at the Harbourview Holiday Inn and will be organized by Rob Fensome, Peta Mudie and Graham Williams. See [www.palynology.org](http://www.palynology.org) for further details.

## 2010 CIMP General Meeting, Warsaw, Poland

The 2010 CIMP General Meeting will be held in Warsaw, Poland at the Institute of Geological Sciences of the Polish Academy of Sciences (with the co-operation of the other geological institutions). The meeting is planned for three-days of presentations (lectures and posters) and a two-day field trip to the Holy Cross Mountains to examine Palaeozoic deposits. Organizing committee: Monika Masiak ([mmasiak@twarda.pan.pl](mailto:mmasiak@twarda.pan.pl)), Marzena Oliwkiewicz-Miklasinska ([ndmiklas@cyf-kr.edu.pl](mailto:ndmiklas@cyf-kr.edu.pl)), Marzena Stampień-Salek ([mstaempie@twarda.pan.pl](mailto:mstaempie@twarda.pan.pl)).

## 2012 34<sup>th</sup> International Geological Congress, Brisbane, Australia, August 2-10, 2012

The 34<sup>th</sup> International Geological Congress will be held in Brisbane, Australia. Further information at <http://www.34igc.org/>.

## 2012 5<sup>th</sup> ESA-European Symposium on Aerobiology, Krakow, Poland

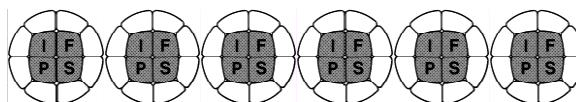
The 5<sup>th</sup> European Symposium on Aerobiology will be held in Krakow, Poland, in 2012, and will be organised under the patronage of the Rector of Jagiellonian University. Contact person is Dorota Myszkowska ([dmyszkow@cm-uj.krakow.pl](mailto:dmyszkow@cm-uj.krakow.pl)).

## 2012 IPC XIII / IOPC IX Joint Meeting in Tokyo, Japan: Palynology and Palaeobotany in the Century of the Environment

The joint meeting of the 13<sup>th</sup> International Palynological Congress (IPC-XIII 2012) and the 9<sup>th</sup> International Organisation of Palaeobotany Conference (IOPC-IX 2012) will be held in Chuo University, Tokyo, Japan. The Campus of Chuo University is located at central Tokyo where various transport, accommodation, and tourist services are provided. There is a variety of accommodation types, including well-equipped five-stars to medium class hotels, and Youth Hostels in Tokyo. Also, Tokyo is a well-known gourmet metropolis, providing various national and international foods to fulfil a variety of demands of visitors. The joint meeting of IPC and IOPC will be composed mainly of plenary sessions, poster sessions and oral sessions. Also, Symposia will be planned for special topics. Probable period of the joint meeting will be in August or September. Also, attractive field trips and social events are under consideration. More Details on the IPC XIII/IOPC IX joint meeting 2012 will be available in PALYNOS, and through the conference web site (<http://wwwsoc.nii.ac.jp/psj3/ipc13japan/IPC-IOPC/index.html>) in due times. For details on tourism in Japan, see the web sites of JNTO (<http://www.jnto.go.jp/>) and TCVB (<http://www.tcvb.or.jp/>). Welcome to Japan! See you in Tokyo, 2012!



*Sciadopitys verticillata*, endemic to Japan (Photo Takeoka & Takahara)



## BOOK REVIEW

**Fujiki, T. & Ozawa, T (2007): The pollen flora of Ryukyu, Japan. 156 pages, ISBN 978-4-9901917-8-8, Price 5000 yen**

Pollen atlases are instrumental to improve the quality of pollen-based studies of vegetational and climate change. Palynologists who start their work in poorly researched areas of the globe often have to resort on developing their own pollen reference collection by collecting well identified flowers in the field, or flowers from herbarium sheets. Although the past fifty years saw a dramatic increase in the number of pollen atlases, tropical areas in particular, where diversity is highest, are still underexplored and need better documentation. A review of tropical pollen atlases can be found in *The World list of Quaternary pollen and spore atlases* (Hooghiemstra & van Geel, 1998).

Printed pollen atlases are still much used; however, electronic pollen reference collections are becoming increasingly popular. In the current decade many institutions have reduced their book collections and, unfortunately, several classical pollen atlases have already become items of collectors. Instead of 'looking for the best suited picture' electronic pollen reference data bases do have many entries to arrive at the best possible identification of an unknown pollen grain. Young palynologists have a suite of pollen morphological studies at their disposal. The era that a palynologist started a PhD project with the task to only produce a pollen atlas have now become a distant memory. This should be valued as a significant progress because pollen analysis can directly be productive to develop answers to underlying research questions at present.

The technical quality of pollen atlases shows a distinct evolutionary development. Early atlases showed handmade drawings ranging from rough sketches to drawings of an amazing high quality, such as in the book *Pollen Morphology and Plant Taxonomy* of Erdtman (1952). This very useful book reached gradually the status of 'little known'. Pollen atlases published in the 1950s and

later show a similar range in the technical quality of photographs. Many recently published atlases have reached high standards of photographic documentation and reproduction. Regarding this I would particularly like to draw attention on the *Northwest European Pollen Flora* edited by Wim Punt since 1976, and the *Leitfaden der Pollenbestimmung für Mitteleuropa und angrenzende Gebiete* (Pollen Atlas for Central Europe and Adjacent Regions) by Hans-Jürgen Beug (2004). The series of books by Wim Punt show light microscope (LM) photographs in combination with scanning electron microscope (SEM) images. Although there are limitations to link the information of a SEM image to the information seen in a light microscope, the combined LM and SEM information offers a substantial advantage in judging the crucial morphological details.

Recently Japanese and Chinese palynologists have published pollen atlases including consequently LM photographs and SEM images. A fine example is the *The Pollen Flora of Yunnan, China* by Fujiki, Zhuo & Yasuda (2005). *The Pollen Flora of Ryukyu, Japan* is another fine example of a high standard pollen morphological documentation. The Ryukyu area includes the southernmost islands of Japan bordering the shallow East China Sea and is located at a short distance from Taiwan. In the first chapter it provides the basics of pollen morphology. Although at first sight this seems logical it also is superfluous, as the potential users of this pollen atlas probably already are trained in pollen morphology. In my opinion it would be more relevant that the first chapter would provide information on the regional vegetation composition. This would be helpful to all those who are unfamiliar with the flora, vegetation and region. The *Pollen Atlas of Quintana Roo, Yucatán, Mexico* by Palacios Cháves et al. (1991) is a good example of an adequate introduction of the composition of the regional vegetation.

The present book has been published in Japanese and it is a real pity that the authors have not provided the figures and plates with English captions. For all pollen atlases the photographs

are most important. Measured sizes of the pollen grains can also easily be understood from the present text. After 4 pages of pollen morphology, the morphological descriptions cover 21 pages. The atlas continues with 119 high quality page-sized plates. Species are mostly illustrated with 8 photographs. Representatives of the following 103 genera are presented:

*Cycas, Pinus, Cryptomeria, Podocarpus, Casuarina, Myrica, Alnus, Quercus, Castanopsis, Trema, Morus, Ficus, Gonostegia, Helicia, Hernandia, Ranunculus, Piper, Camellia, Schima, Ternstroemia, Eurya, Calophyllum, Garcinia, Distylium, Liquidambar, Pittosporum, Rubus, Rhamphiolepis, Leucaena, Caesalpinia, Erythrina, Mucuna, Bischofia, Glochidion, Croton, Macaranga, Mallotus, Daphniphyllum, Murraya, Citrus, Melia, Polygala, Mangifera, Acer, Meliosema, Ilex, Euonymus, Euscaphis, Turpinia, Elaeocarpus, Hibiscus, Wikstroemia, Elaeagnus, Idesia, Carica, Pemphis, Syzygium, Rhodomyrtus, Psidium, Sonneratia, Barringtonia, Melastoma, Bruguiera, Kandelia, Rhizophora, Terminalia, Lumnitzera, Schefflera, Dendropanax, Rhododendron, Pieris, Vaccinium, Maesa, Limonium, Pouteria, Styrax, Symplocos, Fraxinus, Cerbera, Anodendron, Mussaenda, Tarenna, Gardenia, Damnacanthus, Psychotria, Argusia, Ehretia, Avicennia, Callicarpa, Clerodendrum, Vitex, Premna, Solanum, Cestrum, Justicia, Myoporum, Viburnum, Sambucus, Scaevola, Enhalus, Livistona, Mascarena, and Pandanus.*

This list shows a very useful selection of taxa which is relevant to palynologists working with Pleistocene sediments from the Eurasian and North African tropics as well as with pre-Quaternary sediments of the temperate Eurasian areas.

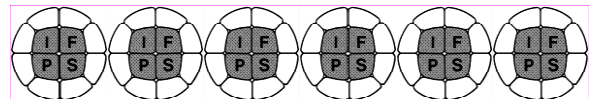
The book is completed with an index of the Latin plant names and a list of references. Most of the references refer to Japanese publications and the non-Japanese users of the book are unaware where to find additional pollen morphological literature in the Japanese literature. Judging the year of publication, the paper of Hooghiemstra & van Geel (1998) gives a clue for some of the references. In conclusion, this pollen atlas has

several practical shortcomings when used by the international palynological community. Nevertheless, the excellent quality of the photographs of many important Asian genera, reflecting the vegetation from wet tropical rainforest to cool deciduous forest, makes this atlas very useful. Therefore I warmly recommend this book.

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# IN MEMORIAM

## Prof. Dr. Dr. h.c. Herbert Straka (1920–2009)



Herbert Straka (1920–2009)

Herbert Straka – one of the most important German pollen analysts and vegetation scientists – was born in Brünn (today Brno, Czech Republic) on July 14th 1920. He already published his first botanical papers as a schoolboy but could not continue until the end of World War II which led him as a soldier to France (Paris and Montpellier) where he learned French and got into contact with the Mediterranean flora, both of great influence for his later scientific career. After studies in Innsbruck, Bonn and Stockholm he was awarded a doctoral degree in 1951 at the University of Bonn (“summa cum laude”) with investigations on the late Quaternary vegetation history of the Eifel volcanic region. Still in 1951, he followed his teacher Fritz Overbeck to the University of Kiel where he wrote and finished his Habilitation within only three years with investigations on flowers and fruits of the Aizoaceae including “living stones” (*Lithops*). Thus his broad range of scientific work reached from vegetation history and biogeography to the ecology of flowers and fruit dispersal, but his focus was always clearly on palynology and its relation to taxonomy.

His first expedition led him in 1957 to Madagascar and the Mascarene Islands, where he collected thousands of samples, the start of his studies on the vegetation history of these islands. The results were published in the following decades in a series edited by himself (*Palynologia Madagassica et Mascarenica*). Focussed on his beloved scientific work, he rejected honorary appointments to professorships at the Universities of Berlin and Innsbruck. Now professor since 1960 in Kiel he took part in a large project funded by the German research foundation (DFG) in Mexico, investigating the vegetation history of the Mexican highland from 1968 and onwards. Further expeditions led him to South Africa, southwest Africa, the Canary Islands and Madeira, to Scandinavia, Russia, Siberia and another two times to Madagascar. Until his retirement he worked as director of the Botanical Institute of the Christian-Albrechts University of Kiel. Due to his excellent reputation he was assigned as a member of many national and international scientific associations (for example, corresponding member of the Swedish plant geographical society at Uppsala, foreign corresponding member of the Academia Malgache Antananarivo, member of the Académie des Sciences d'Outre-Mer, 4<sup>o</sup> section - Sciences physiques, naturelles, biologiques et leurs applications). He was awarded Dr. h.c. of the University of Rennes (France) and honoured in 1987 as “Chevalier de l'ordre national malgache”. Beside botany, he was interested in astronomy and classical music. Herbert Straka died on May 23rd 2009, a short time before his 89th birthday, in Bad Honnef, Rhineland, Germany. We will keep him in good commemoration.

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### Heinrich Zoller (1923–2009)



Heinrich Zoller (1923–2009) during a botanical excursion through the Cévennes, France in 1986 (Photo J.N. Haas)

The Swiss palynologist Prof. Dr. Heinrich Zoller died on June 11, 2009. Heinrich Zoller was born on January 27, 1923 in Basel and was one of the most well-known and extraordinary field botanist, geobotanist and palynologist of Switzerland. Affected by a late poliomyelitis as a young adult, he was one of the few botanists in Switzerland who – during recovery – visited and experienced most of more than 2500 existing plant species of Switzerland *per pedes*, a notable matter today. Besides his love for all terms of palynology and botany, Heinrich Zoller was well known as Opera singer in his younger ages and had at a certain point to decide whether staying in botany, music, or theology, another of his renowned interests. Good for palynology he stayed on the botanical

side, also as his decision was simplified by the possibility of taking over a professorship for Geobotany at the University of Basel, Switzerland, in 1960, but his affinity for music and cultural live did never fade until his death. His colleagues in botany and palynologists all remember well his lively, fascinating university lectures and talks held more as a scientific ceremony, than as technical event as lots of lectures are today. Before taking over his professorship at the University of Basel he already had decided to focus on palynological methods in order to solve key questions in geobotany and plant systematics having implications and dimensions far over Europe. After his university studies in Basel, he became an assistant (1945-1954) of Prof. Dr. Werner Lüdi at the Geobotanical Research Institute Rübel (today Swiss Federal Institute of Technology Zürich ETH). After scientific studies on bog geology, as well as peat mosses in Finland, his post-doctoral stay in 1956 at the University of Göttingen, Germany, did heavily impact on his scientific Habilitation (1959) and latter palynological career, and Heinrich did himself call this phase his “Göttinger-Year” in acknowledgement of the possibility to stay at one or the leading palynological lab of that time (led by Prof. Dr. Franz Firbas), and because of memorable, endless palynological discussions far into the nights with colleagues like Prof. Dr. Hans-Jürgen Beug. During his professorship in Basel (1960-1989) some of his main palynological interests and contributions consisted in disentangling human from climatic impact on the former flora and vegetation since the beginnings of central European agriculture ca. 5600 BC. Apart from his palynological interests on Pleistocene vegetation development under climatic constrains, another of his palynological focuses consisted of describing short-lived, rapid cooling episodes for the Holocene, such as for example the well-known 8.2. kiloyear event, which was first (!) demonstrated and described by Heinrich Zoller in 1960 (and who named it the Misox oscillation according to the alpine valley in which he had identified it), long before it became a “hot” subject in

the late 1990<sup>th</sup>. After his retirement, Heinrich did work on one of his personal favourite plants, *Eritrichium nanum*, a rare, spectacular high-alpine species growing far above 2500 m a.s.l., and where Heinrich realized, that nearly nothing was known before when considering its life cycle, scattered distribution and ecology. In total, more than 20 monographs and more than 150 publications in scientific journals do highlight the huge impact in all kind of palynological and botanical fields Heinrich had, including some publications on philosophical aspects as well as on natural history and on the history of botanical sciences. Heinrich Zoller did hereby also supervise 35 PhD-Theses and several dozens of Diploma-Theses, resulting in a kind of 'Zoller-school' having still major scientific and public impact on fields such as palynology, plant systematics and taxonomy, geobotany, biogeography, and Nature conservation today. As colleagues and friends of Heinrich we all will remember him as a great, enthusiastic personality able to highly inspire his students, and we will keep him in our memories as one of the 'grands seigneurs' of Quaternary palynology.

List of Publication (1946-1992):

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## Svend Th. Andersen (1926–2009)



Svend Th. Høsterkøb Andersen (1926-2009) in front of the Eemian Stratigraphy of Hollerup, Jutland, Denmark (Photo J.N. Haas 1995)

The Danish palynologist Svend Th. Andersen died on February 8<sup>th</sup> 2009. Svend Th. Andersen was born on September 12<sup>th</sup> 1926 in Høsterkøb north of Copenhagen. Given his rather common surname within Danish palaeoecology he was as a young student given the nickname 'Høsterkøb' by Jørgen Troels-Smith – a nickname by which he was well known by Quaternary palynologists worldwide. After studies at Copenhagen University (1945-1953) he graduated in 1953, and – after collaborative work with Stanley Cain in Michigan – started work at the Danish Geological Survey, DGU (now the National Geological Surveys for Denmark and Greenland, GEUS), where he worked as a palynologist in the group of Johs. Iversen and where he finished his habilitation in 1961. From 1971 to 1996 he was appointed as State Geologist at DGU/GEUS, and after his retirement in 1996 Queen Margrethe II of Denmark awarded Svend Th. Andersen the Order of the Dannebrog. Svend Th. Andersen's many scientific contributions on Quaternary palynology – *inter alia* on the Interglacial flora in Northern Europe (as for example the Eemian key site and stratigraphy at Hollerup in Jutland, Denmark, see figure), on Late Glacial vegetation in North America, and on Holocene long-term vegetation

changes due to climate and man were all of outstanding quality (see Birks 2009 for a detailed summary of Svend Th. Andersen's scientific contributions). Svend Th. Andersen was one of the most influential European palynologists and all his colleagues will deeply miss his sharp palynological intellect as well as his great personality.

#### Acknowledgements

Many thanks go to Jens Peter Rasmussen for providing some detailed information on the life of Svend Th. Andersen.

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## **Nelli Nikolaevna Podgainaya (1939–2009)**



Nelli Nikolaevna Podgainaya (1939–2009)

Dr. Nelli Nikolaevna Podgainaya, a well known Russian palynologist, died on January 11, 2009, from sudden heart attack, three days only after the seventy-year anniversary. N.N. has graduated at the biological faculty of the Saratov State University (SSU) as “Biologist, palynologist” in 1961 and began to work in the Palynological laboratory of the biological faculty of SSU under a management of Prof. A.A. Chiguryaeva. N.N. was engaged in biometric and morphological studying of pollen of many families, genera and species of the modern flora of various areas of the USSR and also on problems of teratoid pollen. Simultaneously N.N. begun paleopalynological researches studying assemblages from Mesozoic – Cenozoic deposits of West Kazakhstan, Prekaspian, and the Volga region. Since 1975 N.N. Podgainaya worked in the Stratigrapho-paleontologic laboratory of “Nizhnevolzhskgeologiya”; since 1989 as the leading geologist-stratigrapher. N.N. was engaged in revealing assemblages of miospores and criteria of a detailed stratification and correlation of Devonian, Carboniferous, Perm and Triassic deposits of Kalmyk, the Astrakhan region, Saratov Zavolzhyia and the Ulyanovsk region. N.N. studied the structure and features of morphogenesis of Paleozoic miospores and rests of other microcompo-



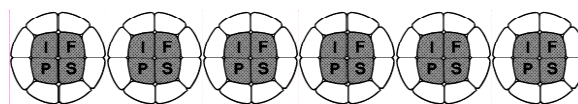
nents with the purpose of reconstruction of paleogeographical conditions. In 1988 N.N. received a PhD degree in Geology and Mineralogy for her palynological studies of the Upper Carboniferous, Permian and Lower Triassic oil-gas deposits of Astrakhan-Kalmyk Precaaspian. N.N. has brought especially essential contribution in studying the history of development of a phenomenon of striate miospores of the Phanerozoic, evolutions and morphogenesis in these miospores, and also phylogenetic aspects of fossil monosaccate pollen. In 1995 in connection with reduction of thematic works N.N. has left on pension. However, her scientific potential finds a way out in some publications. After 1995 she published 20 scientific articles, having written them without any material support. The saved up actual material and wide erudition allowed N.N. to carry out scientific generalizations and to give interesting interpretations. She has died, without having finished her creative plans. This loss remains will be irreplaceable for Palynology and for the stratigraphy of the Permian in Russia for many years. N.N. passion were not limited only by science, she was fond of classical music, the historical, philosophical and art literature. On the garden site on the coast of Volga she liked to cultivate some plants, and was sincerely pleased, when they responded to her care. N.N. was the kind, attentive and sympathetic person always trying to help another and not involve attention to her. N.N. Podgainaya was loved and respected by everyone who knew her and will be remembered by her friends and colleagues with the best of memories.

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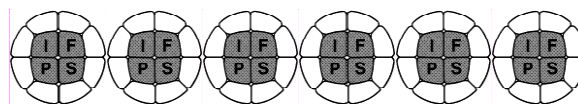


## ANNOUNCEMENTS

### NEW DIRECTORY OF PALYNOLOGISTS

Please note that the fourth edition of this invaluable directory has been published as a pdf by Owen K. Davis in 2008. It is available by request ([odavis@email.arizona.edu](mailto:odavis@email.arizona.edu)) or through your membership in an IFPS affiliated society, please ask your IFPS councillor for it.

*Jean Nicolas Haas, editor of PALYNOS*



### FOUNDATION OF THE EUROPEAN AEROBIOLOGY SOCIETY EAS

The foundation of an association dedicated to aerobiology is not frequent, and therefore deserves particular attention. The European Aerobiology Society EAS was founded on

August 14th, 2008, during the 4th European Symposium on Aerobiology held in Turku. Not less than 83 persons and 5 associations acted as founders. This event had been carefully prepared by an ad-hoc working group nominated in 2006 during the 8th International Congress on Aerobiology in Neuchâtel. According to the second article of its statutes, the aims of the Society shall be the following:

- to promote aerobiology and to further its development
- to facilitate collaboration, research, education, information, technical development and practical application in the field of aerobiology
- to create a platform for the persons, associations, societies and institutions with an interest in aerobiology in Europe
- to elect the body responsible for organizing the European Symposia on Aerobiology
- to encourage collaboration with other areas of science.

The Society shall be entitled to carry out any activity in accordance with these aims, such as organizing courses or developing educational programmes, coordinating or supporting projects, suggesting quality standards and quality control, encouraging young researchers and emerging networks, managing data bases, etc.” In particular, EAS aims at offering all the persons and associations active or interested in the field of aerobiology a common platform to support initiatives and

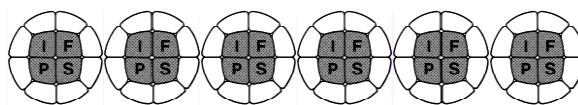
projects at European level. The increasing importance of European science financing structures will make EAS a particularly important tool for the development of our science in the coming years. With regard to International activities, the article three of the EAS statutes mentions that “the Society shall be affiliated with the International Association of Aerobiology”.

The “real life” of EAS is organised in the form of - and takes place in - Working Groups; therefore all members are invited to join and contribute. Five working groups have already started their business: “European projects”, “Quality control”, “European legislation”, “Education” and “European Symposium”. The WG “European Symposium” will decide on the organisation of the future European Symposia on Aerobiology and the WG “Education”, among other matters, on the organisation of the European Courses in Aerobiology. Interested persons, associations and societies are welcome to join EAS! Be at the forefront of the development of aerobiology in Europe. We count on the participation you all! For any question concerning EAS, you can contact the Secretary-General at the following email address: [rnsa@rnsa.fr](mailto:rnsa@rnsa.fr). <http://eas.polleninfo.org>

*Bernard Clot (MeteoSwiss, Switzerland) and Michel Thibaudon (RNSA, France)*



The founders of the European Aerobiology Society EAS



**POLLEN – SO SMALL – SO GREAT: NEW EXHIBITION ON POLLEN AT BERGEN MUSEUM, NORWAY**

An impressive and fascinating exhibition on all aspects of pollen was prepared by Kari Loe Hjelle and colleagues (University of

Bergen – Bergen Museum), so if you visit Bergen, have a look to it!

Address: Muséplass 3 in Bergen, Norway.


Opening hours: Tuesday-Friday: 10-15 h (summer: 10-16 h), Saturday-Sunday: 11-16 h (summer: 11-15h). Monday closed. More information available at [www.bergenmuseum.uib.no](http://www.bergenmuseum.uib.no)



**Pollen – så lite – så stort**  
**Pollen – so small – so great**

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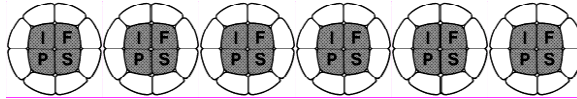
**BERGEN MUSEUM**  
De naturhistoriske samlinger  
Muséplass 3



## CURRENT IFPS COUNCILLORS

The current list of the IFPS officers and IFPS councillors is provided below. The IFPS president (Thomas Servais), IFPS secretary-treasurer (Charles Wellman) and *PALYNOS* editor (Jean Nicolas Haas) should be informed of any errors or necessary changes (see email addresses below; postal addresses of all officers and councillors: see <http://www.geo.arizona.edu/palynology/ifpscncl.html>). The list of current IFPS councillors also includes information on website addresses for the various societies. Please inform the editor of possible website changes.

IFPS Officers	Affiliation	Email
IFPS President – Thomas Servais	Univ. des Sciences & Technologies de Lille, France	<a href="mailto:thomas.servais@univ-lille1.fr">thomas.servais@univ-lille1.fr</a>
IFPS Past President – Thomas Litt	University of Bonn, Germany	<a href="mailto:t.litt@uni-bonn.de">t.litt@uni-bonn.de</a>
IFPS Secretary-Treasurer – Charles Wellman	University of Sheffield, England	<a href="mailto:C.Wellman@sheffield.ac.uk">C.Wellman@sheffield.ac.uk</a>
IFPS Editor of <i>PALYNOS</i> – Jean Nicolas Haas	University of Innsbruck, Austria	<a href="mailto:Jean-Nicolas.Haas@uibk.ac.at">Jean-Nicolas.Haas@uibk.ac.at</a>
IFPS Web-Master – Owen Davis	University of Arizona, USA	<a href="mailto:odavis@email.arizona.edu">odavis@email.arizona.edu</a>
IFPS affiliated Societies	Acronym & Website	Councillors
American Association of Stratigraphic Palynologists	AASP <a href="http://www.palynology.org">http://www.palynology.org</a>	Owen Davis & James Riding (IFPS Vice-president)
Arbeitskreis für Paläobotanik und Palynologie	APP <a href="http://www.palaeontologische-gesellschaft.de/palges/app/">http://www.palaeontologische-gesellschaft.de/palges/app/</a>	Rainer Brocke
Arbeitskreis für Vegetationsgeschichte der Reinhold-Tüxen-Gesellschaft	AVRTG <a href="http://www.reinhold-tuexen-gesellschaft.de/">http://www.reinhold-tuexen-gesellschaft.de/</a>	Klaus Oeggel
Asociación de Palinólogos de Lengua Española	APLE <a href="http://aple.usal.es">http://aple.usal.es</a>	Maria Carmen Fernández
Asociación Latinoamericana de Paleobotánica y Palinología	ALPP <a href="http://www.ufrgs.br/alpp">http://www.ufrgs.br/alpp</a>	Paulo Alves de Souza (IFPS Vice-president)
Association de Palynologues de Langue Française	APLF <a href="http://w3.laplf.univ-tlse2.fr/">http://w3.laplf.univ-tlse2.fr/</a>	Nathalie Combourieu-Nebout
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
Collegium Palynologicum Scandinavicum	CPS <a href="http://palyno.net">http://palyno.net</a>	Dagfinn Moe
Commission Internationale de Microflore du Paléozoïque	CIMP <a href="http://www.cimp.ulg.ac.be/">http://www.cimp.ulg.ac.be/</a>	Zelia Pereira
Gruppo di Palinologia della Società Botanica Italiana	GPSBI <a href="http://www.societabotanicaitaliana.it/laygruppo.asp?IDSezione=22">http://www.societabotanicaitaliana.it/laygruppo.asp?IDSezione=22</a>	Anna Maria Mercuri
International Association for Aerobiology	IAA <a href="http://www.isac.cnr.it/aerobio/iaa/index.html">http://www.isac.cnr.it/aerobio/iaa/index.html</a>	Bernard Clot
Linnean Society Palynology Specialist Group	LSPSG <a href="http://www.linnean.org/">http://www.linnean.org/</a>	Guy J. Harrington
Organisation of Czech and Slovak Palynologists	OCSP	Jiřina Dašková
Palynological Society of China	PSC <a href="http://www.nigpas.ac.cn/new/xuehui/02_english.htm">http://www.nigpas.ac.cn/new/xuehui/02_english.htm</a>	Huaicheng Zhu
Palynological Society of Japan	PSJ <a href="http://wwwsoc.nii.ac.jp/psj3/top.htm">http://wwwsoc.nii.ac.jp/psj3/top.htm</a>	Hikaru Takahara & Shinya Sugita (IFPS Vice-president)
Palynological Society of Poland	PSP	Ewa Durska
Palynologische Kring (Netherlands)	PK <a href="http://www.palynologischekring.nl">http://www.palynologischekring.nl</a>	Henry Hooghiemstra
Palynologists and Plant Micropalaeontologists of Belgium	PPMB	Philippe Steemans
Russian Palynological Commission	RPC	Valentina N. Mantsurova
The Micropalaeontological Society Palynology Group	TMS <a href="http://www.nhm.ac.uk/hosted_sites/tms/society.htm">http://www.nhm.ac.uk/hosted_sites/tms/society.htm</a>	Ian Harding
The Palaeobotanical Society (Lucknow, India)	PSL <a href="http://www.palaeobotanicalsociety.org">http://www.palaeobotanicalsociety.org</a>	Ashwini Kumar Srivastava
Turkish Committee for Palynology	TCP	Zühtü Bati
International Union of Geological Societies	IUGS	Lucy Edwards
International Union of Biological Societies	IUBS	Jacques-Louis de Beaulieu
Societies on hold		
International Association for African Palynology	AIPA/IAAP	
Palynological and Palaeobotanical Association of Australia	PPAA	
Philippine Palynological Society	PPS	



**PALYNOS** (ISSN 0256-1670) is published bi-annually 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:

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

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

