

NEWSLETTER OF THE INTERNATIONAL FEDERATION OF PALYNOLOGICAL SOCIETIES

http://palyno-ifps.com/

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IFPS BUSINESS XV IPC / XI IOPC, Prague, Czech Republic – Conference postponed



Ladies and gentlemen, dear colleagues,

for the last several months, the organizing committee of the XV IPC/XI IOPC Prague 2020 has been closely following all aspects surrounding the coronavirus COVID-19 pandemic. We all were shocked by its impact on people, families and everyday life - it has and continues affecting all of us. The borders of many countries were closed, people are working from their homes, etc. Human lives and safety must have priority over all. We all hope that the situation will keep improving during the next months.

Personal meetings with colleagues are vital for many of us. Personal communication among scientists is always useful and fruitful. Since the organizers cannot guarantee the safety of potential participants of the Conference this September in Prague, and after discussions between the organizing committee, representatives of the IFPS and the IOP, we decided to postpone our conference to 2021. The newly planned date for the conference is May 1st through May 7th. 2021. All necessary information concerning new terms, deadlines, payments etc. will be announced regularly on the web site (https://www.prague2020.cz/index.php). In the meantime, please find the third circular in this link.

Thank you for your support! We are trying as best as we can to prepare the Conference for you, and hope to meet you all in Prague next year. Stay with us!

XV IPC / XI IOPC Organizing Committee

ELECTION FOR THE NEXT IFPS PRESIDENT

In accordance with Article 9 of our constitution, the next president was elected by the current IFPS Council (consisting of the IFPS board of Officers and all Councillors) this past May 2020. We are glad to announce that we had a total of three very good candidates, and that we can officially announce our next IFPS president. From the IFPS officers board, we would like to sincerely thank the willingness of the three candidates for standing up for our community. Please see below the statemet of (first) the two candidates running, but not elected, and (second) the candidate statement of the new president-elect James B. Riding.

CANDIDATE STATEMENT #1 - Fabienne Marret-Davies



It is my great pleasure that I am standing for the position of the next IFPS president. My first encounter with a pollen grain was when I was an undergraduate geology student at the University of Aix-Marseille (France), in the beautiful campus of Luminy which was hosting le laboratoire de géologie du Quaternaire. I met with Dr Raymonde Bonnefille and Dr Annie Vincens, and I was hooked on the beautiful east African pollen. It

was with the support of Raymonde that I carried out graduate studies with Dr Jean-Louis Turon who introduced me to the world of Quaternary dinoflagellate cysts (and who prompted me to join the Association des Palynologues de Langue Française (APLF) in 1989). This knowledge was exported to Germany, under the tutelage of Prof Beug and Dr Lydie Dupont, investigating Quaternary West African climate through the study of marine cores. In 1992, I was one of the many helpers at the 8th International Palynological Congress organised by Dr Jean-Pierre Suc; to meet so many famous palynogists was quite overwhelming to say the least. It is one thing to read their papers, but meeting them in the flesh was quite exhilarating. Canada was my next home, in the laboratory of Dr Anne de Vernal, where we worked on development of databases of recent dinoflagellate cysts, in particular for the Southern Ocean, for palaeoceanographic reconstructions. It is then that I joined as a member of The American Association of Stratigraphic Palynologists -The Palynological Society. Since then I have been attending, when possible, the IPCs (Houston, Tokyo, Salvador de Bahia) and was hoping to attend the 15th IPC-IOP in Prague this year but the current pandemic situation may prevent it. I joined the board of the APLF in 2005, as the webmaster (my first attempt to create an official website for an association), and did two terms. I was then nominated and elected in 2013 to be a director-at-large for the AASP and was invited to become the new webmaster, as an ex-officio. Meanwhile, I was the Chair of Palynology TMS for the (The Micropalaeontological Society) and resurrected the annual palynological meetings (we started our van Post Lecture in 2014). I have been one of the Editors for the TMS Special Publications since 2015 and it is not a secret that we are preparing our next book on the application of Non-Pollen Palynomorphs. I have been involved in the IFPS as a councillor (first within the APLF, then the AASP); in 2017, I was elected as one of the vice-presidents.

As I am writing this statement, I have been pondering on the evolution of the different societies and palynology as a discipline. These numerous societies supporting the IFPS have been fundamental to keeping our discipline alive despite the ups (very few) and downs (too many) of the oil industry and limited academic positions. Palynology is one of the oldest and most versatile subjects in modern geology, and is central to understanding the evolutionary origin of plants as well as long-and short-term changes of terrestrial and marine ecosystems. Without our specialised societies, many undergraduate and graduate students would not have become team leaders in their country and kept this discipline alive and kicking. We have also embraced technological advancements to further our knowledge and to enhance our teaching (my 3D-printed pollen are always a hit with my students, thanks to the 3D pollen project). The current international situation has been eye opening in terms of future international meetings: is digital conferencing the way forward? Personally, I feel that nothing beats face-to-face meetings where indepth discussion is easier. It is very likely that we will need to rethink future meetings, as well as online teaching and remote working. However, I can see that our societies can play a major role developing platforms for communication, to share best practices in teaching as well as in research. My mission, if elected, is to carry on the solid work of our past presidents, keeping our federation as a fundamental hub for palynologists, all career stages and all regional to national societies. I also wish to see that all continents are represented in the IFPS through societies and will help to develop new ones where there is a gap. I will carry on supporting the new palynologist generation in their endeavour in teaching and research. Finally, I would like to reach out to other specialised societies and the public, which have links one way or the other to pollen and other palynomorphs to promote further our discipline.

Fabienne Marret-Davies University of Liverpool, UK

CANDIDATE STATEMENT #2 - Francine M.G. McCarthy



I am writing to confirm my willingness to stand for election for the position of President of the International Federation of Palynological Societies. I am the current councillor representing CAP (Canadian Association of Palynologists) and was previously (2012-16) one of the councillors representing AASP - The Palynological Society to the Federation. I have held several roles on the boards of both of those societies, including as President of AASP (2008-09) and President of CAP (2013-16).

My interest in serving as President of IFPS stems from my belief in the importance of community and communication. The role of scientific societies (and scientific meetings) is, arguably, evolving more rapidly now than at any time since the Age of Reason / Enlightenment when societies such as the Accademia dei Lincei, the Royal Society of London and the Académie des sciences (arguably, of course, since these societies were not initially open to the majority of us!). The recent disruptions caused by the COVID-19 pandemic have caused many scientific societies to turn to virtual meetings, and certainly, the technological advances in our digital age make these possible. There are many benefits afforded by these technologies, including increased availability of knowledge

and interaction for people in low-income countries and possibly greater appeal to techsavvy young scientists with limited access to travel funds. I suggest that technology cannot - or at least, should not - obviate the need for/ value of face-to-face personal interaction. the yearning for human anything. If interaction has become increasingly obvious in societies where lockdowns have been enforced to slow down the spread of the These restrictions have certainly virus. thrown a wrench into preparing the bid to next (?2025?) International host the Palynological Congress in Toronto, and of course, even more to the organizers of the postponed congress in Prague for whom I greatly sympathize. Despite probable continued uncertainty in committing to long hours on airplanes and other forms of public transportation to reach congress destinations, I feel confident that the desire for community will eventually prevail – and so the planning for the Toronto bid will resume as soon as the convention and tourism sectors re-open for business. Even if other societies may opt for virtual meetings even after travel restrictions are lifted, there is certainly value in meeting every four years to disseminate our findings and (more importantly) forge future collaborations.

As a university professor for the past 30 years (where did the time go?!) it has become increasingly clear that many young people prefer the opportunity to exploit digital technologies on their own terms to the oldstyle classroom instruction. I see many advantages to digital technologies and have incorporated many into my teaching, both at the undergraduate and graduate level, in order to reach this demographic. I have, however, retaining manv insisted on hands-on components and maintain an 'old-fashioned' insistence on the laborious work of improving written as well as oral skills of scientific communication among my students, and while the process can often be painful, the rewards are tangible and lasting. That is what good communication mandates - being in tune with your audience and modulating delivery to greatest advantage, but maintaining rigour, even when that may be perceived as archaic.

That is what I would commit to striving for as President of IFPS - working to increase the visibility of all branches of palynology to the general public by facilitating the ability of palynological societies around the world to build strong communities. It is my sincere hope that congresses will continue to draw palynologists from across the globe to interact and share their findings face-to-face, but that can also take advantage of we all afforded by technological opportunities advances to reach as many people as possible between congresses, and perhaps include virtual sessions at congresses to allow the participation of those who might not be able to travel.

Francine M.G. McCarthy Brock University, Ontario, Canada

CANDIDATESTATEMENT#3: James B. Riding

I am putting myself forward for election as the next President of IFPS. I am a palynologist, and I work at the British Geological Survey in Nottingham, UK. I am the present Secretary-Treasurer of IFPS, therefore I have several years of experience of this organisation.

Simply put, IFPS is an umbrella organisation for affiliated local/regional associations of palynologists throughout the world. The principal functions are as follows (in no particular order):

- 1. To maintain a website.
- 2. To produce a Newsletter.

3. To hold a business meeting at each quadrennial International Palynological Congress (IPC), at which the next venue is chosen.

4. To give out grants to help students to attend the IPCs and the European Palaeobotany and Palynology Conferences (EPPCs), which are paid for by annual subscriptions by each member society.



5. To produce the World Directory of Palynologists (there has been no new edition of this for eight years!).

Thus, IFPS has a relatively limited remit. For example, there is no journal, no awards and no annual meetings. The organisation of an IPS by IFPS begins and ends with a brief business meeting every four years to decide who wins the bid to host this congress. It is 100% the local volunteers who organise the IPCs.

If I am elected, I would envisage continuing the quadrennial business meeting to decide where the next IPC should be. Likewise, the Newsletter and the website are both very worthy, and, in my view, should be continued (but perhaps somewhat differently to as they are done at present).

It is probably not viable to compile and distribute the World Directory of Palynologists in the future because any digital storage of personal details may be in contravention of data protection legislation.

However, I really do not agree with the collection of US\$1.50 per member per year from each of the affiliated societies. This is

patently unfair on a global scale. US\$1.50 is far more affordable in some countries, and considerably less in others. It is also frequently very expensive to make money transfers, and quite a bit of your hard-earned cash simply goes to the banks in charges! This aspect often results in very awkward, risky movements of cash from country to country which are really not ideal in 2020! In essence, I believe this annual tax on members to be unfair and completely unnecessary.

If I am elected, I would review the existing Constitution and would formally propose revisions to this document which would remove the statutes which refer to the collection of this annual tax. This of course would be done after a suitable debate (perhaps by a virtual General Assembly), and would be voted on democratically, one vote per IFPS officer/councillor.

Should the societies vote to remove the annual tax, I envisage that IFPS would respectfully request that each society help at least one of its student members to attend each IPC (and the EPPC if appropriate). The societies would be of course free to support appropriate conferences of their choice (such as the Dinoflagellate meetings or AASP conferences for example). As an absolute minimum. IFPS would recommend that each society to give substantial financial help to at least one student per year, provided their finances can sustain this. In my view this would be a much fairer system, and would actually get more funds to deserving students. We can easily disburse our existing IFPS funds. Incidentally, I do not think that the organising committees of congresses need any start-up loans (see Article 16 of the Constitution).

Because IFPS is simply a very basic umbrella organisation, it should not need to collect and keep substantial amounts of money. The only aspect that may potentially need finance would be the annual maintenance of the website. However, I am sure that this aspect can be easily managed. After all, our website does not involve any financial transactions.

I would also attempt to help to relaunch/revamp the IFPS Newsletter.

Specifically, I would request that the representatives of each society contribute a short article on what their organisation has been doing recently for every quarterly issue. I feel sure that this would substantially enhance the 'team ethic' of IFPS. Furthermore, each student who receives financial help to attend a conference should be 'respectfully requested' to submit a short article/report on their experience at that conference.

I should also say that I am 100% committed to continuing to combine the IPCs with the quadrennial conferences of the International Organisation of Palaeobotany (IOP) wherever possible. Palaeobotany and palynology are very closely interrelated disciplines, and to have separate four-yearly conferences on palynology and palaeobotany makes no sense at all (even if your specific interest is focussed on marine palynomorphs!).

So, to sum up, if you would like "continuity-IFPS", vote for your choice of the other two candidates. Specifically, if you want your local/regional palynology society to continue to be taxed by IFPS every year, absolutely do not vote for me! However, if you share my strongly-held view that IFPS has become somewhat complacent and tired since its inception in 1976, and wish to see it become a more effective, fairer, inclusive, modern and vibrant organisation, please consider voting for me. I reiterate here, that any potential future changes to IFPS would be 100% democratically ratified.

If I am elected I would work hard to make sure that, when my term as President ends, I would be passing on a much better organisation than the one I inherited.

Thank you for reading this and your continued support of IFPS, whoever is President.

James B. Riding

British Geological Survey, Nottingham, UK



New IFPS officers

We would like to give a warm and safely social distanced welcoming to our new board members! Please see below a brief introduction of themselves, their new role and contact details.

NEW IFPS PRESIDENT-ELECT: JAMES B. RIDING (ELECTED IN MAY 2020)



Dear Members of IFPS,

I am the President-elect of IFPS. For those who do not know me, here are a few 'biographical details'.

I took a Batchelor's degree in geology at the University of Leicester, UK, then was fortunate to get a place on the legendary Master's course in Palynology at the University of Sheffield. I then joined the British Geological Survey (BGS) at their Leeds Office in West Yorkshire. My first boss was the famous Palaeozoic palynologist Bernard Owens. I have remained with BGS ever since, but I am now based at the headquarters in Nottingham.

I have mainly worked on Mesozoic and Cenozoic palynology of both hemispheres but I have wide-ranging interests in our subject including forensic palynology, the palynology of glaciogenic sediments and preparation techniques. I am particularly interested in the provincialism of palynomorphs and the implications for palaeobiology and palaeogeography. I am the current Managing Editor of AASP – The Palynological Society, the principal duty being to edit our journal *Palynology*.

My 'election statement' is reproduced elsewhere in this Newsletter. You will see that I plan to take a look at the constitution and finances of the organisation. I also plan to strengthen our ties with the International Organisation of Palaeobotany (IOP). Palynology and palaeobotany are inextricably linked. and the two representative organisations should aim to be as close as possible.

I would also like to encourage regular contributions from all the constituent societies in IFPS to our Newsletter Palynos. Additionally I would like to reinvent our archives. It would appear that we do not currently have an archivist. IFPS has a very interesting history and we should both record and respect that heritage.

I truly hope that the Prague meeting can go ahead in 2021. However, please be assured that, if it can be held, it will be executed in a fully safe environment. Take care

Jim Riding jbri(at)bgs.ac.uk

NEW IFPS WEB-MASTER: BENJAMIN DIETRE, PHD



have obtained a Master degree Ι in Environmental Sciences in 2010 at the University of Franche-Comté (France). There, Emilie Gauthier offered me to investigate the relationship between Non-Pollen Palynomorphs (NPPs) and pollen assemblages in surface samples for pasture woodlands in the Jura Mountains. I later enrolled in a PhD program with Jean Nicolas Haas at the University of Innsbruck (Austria), during which I studied human and climatic impact on palaeo-environments in the Alps thanks to palynological analyses.

I successfully defended my PhD-thesis in 2015, and I was awarded the prestiguous Pro Montes research prize for the future of Alpine cultural landscape by the Swiss Foundation for Alpine Research in 2016.

Since then, the question of past human activities has remained central in the various research projects I participated in, in collaboration with teams from Austria, Switzerland, Germany, France, and Italy. I am a computer programming enthusiast: I like to investigate questions related to data mining and statistics. I also developed my curiosity about other proxies such as geochemical and charcoal data. My research objective is to interlace these different kind of data to achieve a better comprehension of the drivers and dynamics of past vegetation changes.

As new web-master I will be pleased to update and improve the IFPS website <u>http://palyno-ifps.com/</u>, and of course, this will only be possible with your support. So, please send me your propositions for items to be uploaded on the IFPS website, and after a check by myself, and an eventual additional feedback by the IFPS board, it will be a please to do so.

Benjamin Dietre, IFPS Web-Master

benjamin.dietre(at)uibk.ac.at



SOCIETIES' NEWS AND ANNOUNCEMENTS

THE JOURNAL *Palynology*

AASP - The Palynological Society publishes a quarterly journal, unsurprisingly called Palynology. We are the only IFPS-affiliated society to issue a journal on our subject. It is a well-established title, and this year's volume is number 44. It is listed in the Web of Science, and our 2018 impact factor is 1.253. Palynology is published on behalf of by Taylor and Francis AASP (see https://www.tandfonline.com/toc/tpal20/curre nt). The contents of the latest issue are included below. It comprises pages 195 to 390 inclusive, and this part carries 11 articles plus an obituary for the late Bernard Owens.

All members of AASP have full access to all volumes of *Palynology* (so literally hundreds of articles), and can choose whether to receive a paper copy in addition to online access.

If you would like to receive *Palynology* (and get many other benefits), please consider

joining the society (see https://palynology.org/membership-options-

page/). The Secretary is Stephen Stukins (email: S.Stukins@nhm.ac.uk). Steve will happily advise you personally about all aspects of membership.

If you would like to submit a manuscript to Palynology, please visit :

https://mc.manuscriptcentral.com/tpal.

Note that you do not have to be a member of AASP to publish in the journal.

If you have any questions about Palynology please email me.

All the best and stay safe! Jim Riding (Managing Editor) jbri(at)bgs.ac.uk

Papers published in Palynology Volume 44, Part 2 (online and print) (May 2020):

1. Riding, J.B., McLean, D. and Wellman, C.H. Bernard Owens (1938–2019). 195–204.

2. Nohro, S., Bera, S.K. and Jayakumar, S. Modern pollen spectra from the Pala Wetland Reserve Forest, Siaha District, Southern Mizoram, north-eastern India. 205–216.

3. Quamar, M.F. and Kar, R. Modern pollen dispersal studies in India: a detailed synthesis and review. 217–236.

4. Mudie, P.J., Fensome, R.A., Rochon, A. and Bakrac, K. The dinoflagellate cysts Thalassiphora subreticulata n.sp. and Thalassiphora balcanica: their taxonomy, ontogenetic variation and evolution. 237–269.

5. Quamar, M.F. Surface pollen distribution from Akhnoor of Jammu District (Jammu and Kashmir), India: implications for the interpretation of fossil pollen records. 270–279.

6. Steeman, T., De Weirdt, J., Smith, T., De Putter, T., Mees, F. and Louwye, S. Dinoflagellate cyst biostratigraphy and palaeoecology of the early Paleogene Landana reference section, Cabinda Province, Angola. 280–309.

7. Gurdebeke, P.R., Mertens, K.N., Pospelova, V., Matsuoka, K., Li, Z., Gribble, K.E., Gu, H., Bogus, K., Vrielinck, H. and Louwye, S. Taxonomic revision, phylogeny, and cyst wall composition of the dinoflagellate cyst genus Votadinium Reid (Dinophyceae, Peridiniales, Protoperidiniaceae). 310–335.

8. Liu, T., Li, T.-T., Wang, Z. and Li, Z. Palynological record of Holocene climate change

from a Sphagnum peat mire on Qizimei Mountain, Central China. 336–343.

9. Paredes, R. and Bryant, V.M. Pollen analysis of honey samples from the Peruvian Amazon. 344–354.

10. Czerwiński, S., Margielewski, W., Gałka, M. and Kołaczek, P. Late Holocene transformations of lower montane forest in the Beskid Wyspowy Mountains (Western Carpathians, Central Europe): a case study from Mount Mogielica. 355–368.

11. Albert, B.M. and Innes, J.B. On the distinction of pollen grains of early varieties of Hordeum from Glyceria species: addressing the early cereal cultivation problem in palynology. 369–381.

12. Vieira, M., Casas-Gallego, M., Mahdi, S. and Fenton, J. Impagidinium obscurum sp. nov., a marker dinoflagellate cyst for the Thanetian (Paleocene) of the North Sea and the Barents Sea. 382–390.

ASSOCIATION DES PALYNOLOGUES DES LANGUE FRANÇAISE (APLF)"

As already announced in the last PALYNOS issue, APLF has a new website: https://assoaplf.wixsite.com/website

Where one can find all our newsletters and informations.

In addition, APLF would like to do the following announcement:

Given the alert situation caused by the coronavirus (COVID-19) outbreak, the Canarian Observatory of HABs (OCH) -FPCT University of Las Palmas de Gran Canaria, promoter of the 12th International Conference on Modern and Fossil Dinoflagellates (DINO12), planned to be held from 13th to 17th July 2020 in Las Palmas de Gran Canaria (Spain), has made the decision to postpone the Conference for July 2021, following the security measures taken by the Spanish Government aimed to prevent the covid-19 spread.

PALYNOLOGY SHORT TALKS

Resulted from an online survey done in Twitter, palynologists Limi Mao, Yoshi Maezumi, Jen o'Keefe and Nichola Strandberg have organised a series of short talks on palynology that will be held online. This is an excellent opportunity to keep updated of what your colleagues have been doing during the lockdown, and to enjoy of community gathering during these times.

Talks are scheduled monthly, but for more information please find attached the flyer of the event at the end of this newsletter, on page 15.



CONFERENCE REPORTS

1st, 2nd & 3rd Spring Pollen Seminar in China (2018–2020)



In the spring of 2018, Drs. Limi Mao and Junwu Shu organized the first Spring Pollen Seminar (SPS) at the Nanjing Institute of Geology & Palaeontology, Chinese Academy of Sciences (NIGPAS). A small group of Quaternary palynologists from Naniing attended the seminar. including Prof. Weiming Wang, the vice president of the International Federation of Palynological Societies (IFPS). 15 participants heard talks on palynological research from South Korea (by Bing Song), northeastern China (by Lydia Mackenzie) and a general introduction on

collaborative research between China and Australia (by Limi Mao). Inspired by the cherry blossoms (mainly *Prunus* × *yedoensis*, *P. serrulata*, and some other varieties) lining the road between NIGPAS and Xuanwu Lake the seminar participants also enjoyed a walk to view the beautiful flowers after the seminar on Mar 21, 2020 (photo 1).



Photo 1. Cherry blossoms lining the road between NIGPAS and Xuanwu Lake: from left to right, Limi Mao, Jinglian Ge, Haochen Pan, Lydia Makenzie, Bing Song, Wei Chen, Junwu Shu.

In its second year at NIGPAS the SPS attracted 59 attendees to hear 7 presentations, including an interesting study by Dr. Zhongjing Cheng on Anthropogenic modification of vegetated landscapes in southern China from 6,000 years ago, Nature published in Geoscience (https://doi.org/10.1038/s41561-018-0250-1). The seminar also included a hands-on workshop for Early Career Researchers (photo 2) to learn how to photograph pollen and spores using a CCD camera and software Photoshop, including Image J, nEO iMAGING and MS Publisher to produce pollen plates for publication. Additionally, a discussion panel (photo 3) concluded the seminar with researchers from different career stages sharing their opinions on hottopics in palynology, including challenges facing theoretical palynology in subtropical and tropical areas of China and the impact of human disturbance during the Holocene on vegetation changes.



Photo 2. Hands-on workshop for Early Career Researchers (lectures by Limi Mao at NIGPAS).



Photo 3. A discussion panel: researchers from different career stages (from left to right: Kangyou Huang, Junwu Shu, Deke Xu, Xiaozhong Huang, Qinghai Xu, Chengyu Weng, Yiman Fang).

Thanks to the hard work and dedication of Dr. Limi Mao and researchers at NIGPAS the 3rd Spring Pollen Seminar was successfully moved online during the global corona virus COVID-19 pandemic. Invited speakers from China. Australia, Germany and the Netherlands (photo 4) highlighted the important and significant research conducted across the country and abroad.



Photo 4. Huasheng Huang's online talk from University of Amsterdam on Eocene pollen record of palm.

The 200+ attendees heard 15 talks including a keynote presentation by Dr. Xinying Zhou on their recent work investigating a 5,200-year-old archaeological site in northern China published in Nature Plants (https://doi.org/10.1038/s41477-019-0581-y).

Other talks focused on pollen morphology, Quaternary vegetation history, pollen-based climate reconstructions and modelling, marine palynology, archaeopalynology, Eocene fossil pollen data, and phytolith analysis.

In the 3rd SPS the brief history and status of Quaternary palynology in China was also discussed by Dr. Limi Mao, with a summary of past and present PhD theses focusing on palynology to highlight the important contribution to the field by Chinese graduate students at home and abroad (Figure 1). Quaternary palynology is still a relatively young science in China with PhD graduates increasing since the 1990s. Past PhD theses have focused on Quaternary palynology, pollen-based reconstructing vegetation histories and past climatic change.

Like the 2^{nd} SPS the online meeting also ended in an exchange of ideas and discussion around current challenges facing the discipline. We hope the discussion and sharing of ideas will lead to advances in palynological science, and further collaboration between palynologists in China and abroad.



Figure 1. Overview of PhD theses in Quaternary pollen analysis through time.

Hope to see you all again next year to attend the 4th Spring Pollen Seminar and enjoy the cherry blossoms and some other beautiful spring flowers in China! We also warmly welcome international colleagues to join our future seminars, either online or in person.



More information on the talks and news on the past seminars can be found below:

1. The 1st Spring Pollen Seminar 2018.3.21

http://www.nigpas.cas.cn/xwzx/xshd/201803/t201 80319_4977983.html

2. The 2nd Spring Pollen Seminar 2019.3.22-23 http://www.nigpas.cas.cn/xwzx/xshd/201903/t201 90312 5254400.html

3. The 3rd Spring Pollen Seminar 2020.5.16 (moved online due to global pandemic)

http://www.nigpas.cas.cn/xwzx/xshd/202005/t202 00513 5579089.html

4. Brief news on the 3rd Spring Pollen Seminar (in Chinese)

http://www.nigpas.cas.cn/xwzx/zhxw/202005/t20 200522_5584703.html



PALYNOLOGICAL PUBLICATIONS:

PALYNOLOGY-BASED THESIS: MOISÉS MARTÍNEZ BRACERO (2019): AEROBIOLOGICAL AND PHENOLOGICAL STUDY OF THE VINEYARDS IN THE DENOMINATION OF ORIGIN MONTILLA-MORILES, SPAIN.

Supervisors: Carmen Galán Soldevilla and Purificación Alcázar Teno

Department of Botany, Ecology and Plant Physiology, Faculty of Sciences, Córdoba University (Spain).

<u>Abstract</u>

The vineyard is one of the most abundant perennial crops in the world, with the highest concentrations of hectares located in Europe. Principal vineyard diseases are powdery mildew (*Uncinula necator*), grey mould (*Botrytis cinerea*), and downy mildew (*Plasmopara viticola*).



Figure 1. PhD candidate, supervisory team and dissertation panel members, from left to right: Prof. Eugenio Domínguez Vilches (UCO), Prof. Carmen Galán Soldevilla (UCO), Dr Purificación Alcázar Teno (UCO), Dr. Moisés Martínez Bracero (Author, UCO), Prof. Javier Rodríguez Rajo (UV), and Dr José María Maya Manzano, investigador postdoctoral (TU Dublin).

Knowledge about airborne fungal spore concentrations is useful as indicator of pathogen development, while airborne pollen concentrations are an important tool for studying the timing and intensity of flowering.

The main goal of the thesis has been to know the relationships between the phenology of the vineyard, the airborne pollen and meteorological factors, as well as the study about pathogenic fungal spores causing diseases in the vineyard.

The study was carried out in four vineyards of the PDO Montilla-Moriles during the 2015-2018 period. The concentrations of fungal spores and pollen grains have been monitored using two types of impact collectors: a Hirst type and several passive spore traps (PTS). For aerobiological sampling, we proceeded according to the Management and Quality Spanish Network of manual of the Aerobiology (REA) and the minimum requirements of the European Aerobiogy Society (EAS). The analysis of pollen grains was performed exceeding 10% of the total surface area of the daily sample and for fungal spores the 5%. Phenological data were taken weekly (twice a week during flowering) for the 4 varieties under study (Pedro Ximénez, Verdejo, Small Grains Muscat and Chardonnay). Using the R program, Spearman correlations were made to compare pollen and fungal spore concentrations with the meteorological parameters. Due to the complex correlations between meteorology pollen and spore concentrations, and Redundancy Analysis (RDA) and decision trees were also carried out.

Regarding fungal spores detected in the PDO, *Uncinula necator* has been the most common spore, followed by *Botrytis cinerea* and *Plasmopara viticola*. The highest presence of spores was detected during the stages prior to flowering; the average temperature was the factor that most significantly affected the three spores. *Botrytis cinerea* has correlated with dew point, *Plasmopara viticola* with moisture and dew point and *Uncinula necator* with rainfall but not significantly.



Figure 2. Microscopic photograph (400x) of *Erysyphe necator* spores and *Vitis vinifera* pollen grains.

The most important pollen types in the sampling area, in order of abundance, were: Olea, Quercus, Poaceae, Urticaceae, Urtica membranacea, Vitis, Plantago, Pinus and Amaranthaceae. The meteorological parameters greatest influence with on airborne pollen were the temperature and the dew point. A significant correlation has been observed between the weekly pollen and spore concentrations of the passive and Hirsttype samplers, but the seasonal spore integral was always higher for the Hirst-type sampler than for the passive ones.



Figure 3. Front cover of the thesis.

The comparison between the passive and the Hirst samplers shows the good representation of the PDO according to the data obtained by sampler. the Hirst being the most recommended for large areas. In terms of the flowering period, the cultivars studied have been classified as "early cultivars". The pollen spectrum in the study area is a consequence of agricultural land use. increasing the pollen concentrations of cultivated species and decreasing the diversity of pollen types in the air. The RDA analysis has offered a better explanation of the complex relationship between the meteorological parameters and airborne pollen, comparing with the results of the Spearman correlation analysis between the studied variables.

Please visit the following links for more information and access to the thesis PDF:

https://www.educacion.gob.es/teseo/mostrarR ef.do?ref=1823550

https://helvia.uco.es/xmlui/handle/10396/191 96



FUTURE MEETINGS

2020

2020 7th European Symposium on Aerobiology

This meeting will take place in Córdoba, Spain, and has been postponed to be held now during **16–20th November**, **2020**. More information available at:

http://www.esacordoba2020.com/

2020 LINNEAN SOCIETY PALAEOBOTANY AND PALYNOLOGY SPECIALIST GROUP MEETING

This meeting will take place at Burlington House, London (GB) in **autumn 2020**. More information in due times.

2021

2021 XV IPC / XI IOPC, PRAGUE, CZECH REPUBLIC 2021

The newly planned date for our conference is **May 1st through May 7th, 2021**. All necessary information concerning new terms, deadlines, payments etc. will be announced regularly on the web site (<u>https://www.prague2020.cz/index.php</u>). In the meantime, please find the third circular in this <u>link</u>.

202112THINTERNATIONALCONFERENCEONMODERNANDFOSSIL DINOFLAGELLATES (DINO12)

This conference originally planned for 13th to 17th July 2020 in Las Palmas de Gran Canaria (Spain) has been postponed to **July 5–9, 2021.** More information at https://dino12conference.com/.

2021 AASP ANNUAL MEETING 2021

The AASP Annual Meeting 2021 will take place in Manizales, Colombia, probably end August/beginning of September. More information in due times at <u>https://palynology.org/aasp-annual-meeting-2021/</u>.

2021 MEDPALYNO 2021

The MedPalyno conference will take place at Paestum, Italy, as a joint meeting of APLF, APLE, and GPPSBI. More information in due times at

https://assoaplf.wixsite.com/website/colloque s-a-venir.

2022

2022 11TH EUROPEAN PALAEOBOT-ANY & PALYNOLOGY CONFERENCE

The 11th EPPC conference will take place in Sweden. More information in due times.



CURRENT IFPS AFFILIATED SOCIETIES AND COUNCILLORS

The current list of the IFPS officers and IFPS councillors is provided below. The IFPS president (Jean Nicloas Haas), IFPS secretary-treasurer (James B. Riding), IFPS editor of *PALYNOS* (Encarni Montoya), and the IFPS Web-Master (vacant) should be informed of any errors or necessary changes. Please inform the IFPS Officers of possible website or email address changes.

IFPS Officers	Affiliation	Email
IFPS President Jean Nicolas Haas	University of Innsbruck. Austria	Jean-Nicolas.Haas(at)uibk.ac.at
IFPS Past President Charles Wellman	University of Sheffield, UK	C.Wellman(at)sheffield.ac.uk
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Arbeitskreis für Paläobotanik und Palynologie	APP <u>https://www.palaeontologische-</u> gesellschaft.de/ueber-uns/arbeitskreise/ak-palaeobotanik- palynologie/	Martina Stebich
Arbeitskreis für Vegetationsgeschichte der Reinhold- Tüxen-Gesellschaft	AVRTG http://www.reinhold-tuexen-gesellschaft.de/	Hermann Behling
Asociación Latinoamericana de Paleobotánica y Palinología	ALPP <u>http://www.ufrgs.br/alpp</u>	<u>Mercedes di Pasquo</u>
Asociación de Palinólogos de Lengua Española	APLE https://aple.csic.es/	Pilar S. Testillano
Association des Palynologues de Langue Française	APLF https://assoaplf.wixsite.com/website	Marie-Pierre Ledru
Canadian Association of Palynologists	CAP https://capacp.wordpress.com/	Francine McCarthy
Collegium Palynologicum Scandinavicum	CPS <u>www.palynology.info</u>	<u>Heikki Seppä</u>
Commission Internationale de Microflore du Palëozoique	CIMP http://cimp.weebly.com/	Anthony Butcher
Gruppo di Palinologia della Società Botanica Italiana	GPSBI http://www.societabotanicaitaliana.it/gruppi/gruppo-	Laura Sadori
International Association for Aerobiology	IA A https://sites.google.com/site/aerobiology/international/	Dorota Myszkowska
Linnean Society Palynology Specialist Group	L SPSG http://www.linnean.org/	Barry Lomax
Organisation of Czech and Slovak Palynologists	OCSP http://www.ocsp.eu/	Marianna Kováčová
Palynological Association of Nigeria	PAN https://www.facebook.com/Palynological- Association-of-Nigeria_168093586579093/	Emuobosa Orijemie
Palynological Society of China	PSC http://www.chinapsc.cn/nalypology/en/index.asp	Wei-Ming Wang
Palynological Society of Japan	PSI http://www.emmapse.emparymology/em/maex.asp	Hikaru Takahara
Palynological Society of Poland		Milena Obremska
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Palynologists and Plant Micropalaeontologists of Belgium	PPMB	Philippe Steemans
Russian Palynological Commission	RPC	Elena Novenko
Society for the Promotion of Palynological Research in Austria	AUTPAL <u>http://www.autpal.at</u>	Reinhard Zetter
The Micropalaeontological Society Palynology Group	TMS http://www.tmsoc.org/paly.htm	Manuel Vieira
The Palaeobotanical Society India	PBS <u>http://palaeobotanicalsociety.org</u>	Rama S. Singh
Turkish Committee for Palynology	ТСР	Zühtü Bati
Affiliation/Membership of the IFPS at the:		
International Union of Geological Societies	IUGS	Lucy Edwards
International Union of Biological Societies	IUBS	<u>Jean Nicolas Haas</u> (ad interim)
Former Societies of the IFPS:		
International Association for African Palynology	AIPA/IAAP	
Palynological and Palaeobotanical Association of Australia	ΡΡΑΑ	
Philippine Palynological Society	PPS	



Palynology Short Talks

Heartily sick of the same old work Zoom meetings? Dismayed by the impacts of COVID-19 on conferences? Curious to see what your colleagues & students have been up to during our months apart? We were, and decided we needed a way for Palynologists to connect. A Twitter survey in mid-June showed you were interested, too!

We hope to attract palynologists from around the world to share some of their research in a series of online talks. Early career researchers and students are very welcome!

Students: Look out for the student research showcase and info-graphic & lightning talk sessions sponsored by AASP-TPS. One lucky student presenter in these sessions will be awarded the 2020 L.R. Wilson Award for Best Student Paper (research showcase) or the 2020 Vaughn Bryant Award for Best Student Poster (Info-graphic & lightning talks). These awards come with a certificate, cash prize, and two years' membership in AASP-TPS with free online access to *Palynology*.

When? 3rd Tuesday of the month beginning on 21 July 2020, 14:00-16:00 GMT

Where? Registrant-only Zoom meeting.

If you are interested in giving a presentation or an info-graphic lightning talk, or just want to attend, register at:

https://nastrandberg.wixsite.com/palynology

Organizers: Nichola Strandberg (University of Southampton) Limi Mao (Nanjing Institute of Geology & Paleontology, CAS) Jen O'Keefe (Department of Physics, Earth Science, and Space Systems Engineering, Morehead State University) Yoshi Maezumi (Faculty of Science Institute for Biodiversity and Ecosystem Dynamics, University of Amsterdam)

Questions? Please email Nichola Strandberg or Limi Mao

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

Encarni Montoya encarnacionmontoya(at)gmail.com

