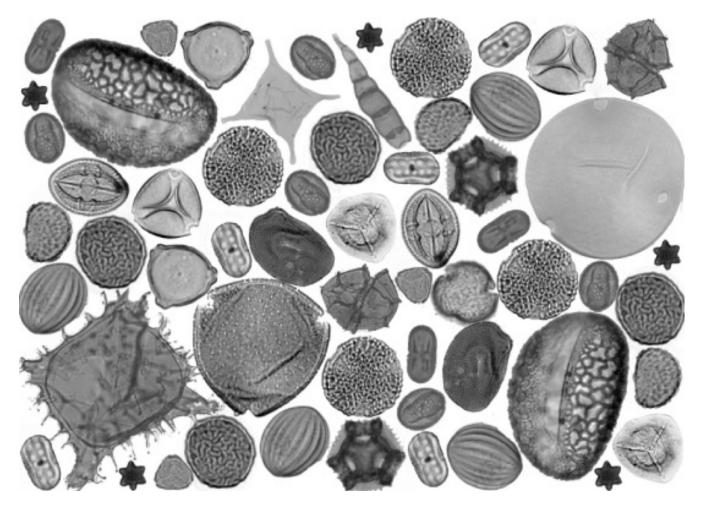


AASP – The Palynological Society

Promoting the Scientific Understanding of Palynology since 1967



NEWSLETTER December 2023 Volume 56, Number 4

Published Quarterly



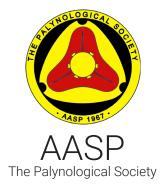
AASP - TPS NEWSLETTER

Published Quarterly by AASP - The Palynological Society

September 2023, Volume 56, Number 4

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The American Association of Stratigraphic Palynologists, Inc. - AASP – The Palynological Society - was established in 1967 by a group of 31 founding members to promote the science of palynology. Today AASP has a world-wide membership of about 200 and is run by an executive comprising an elected Board of Directors and subsidiary boards and committees. AASP welcomes new members.

The AASP Foundation publishes the journal Palynology (quarterly), the AASP Newsletter (quarterly), and the AASP Contributions Series (mostly monographs, issued irregularly), as well as several books and miscellaneous items. AASP organises an Annual Meeting which usually includes a field trip, a business luncheon, social events, and technical sessions where research results are presented on all aspects of palynology.

AASP-TPS Scientific Medal recipients

Professor William R. Evitt (awarded 1982) Professor William G. Chaloner (awarded 1984) Dr. Lewis E. Stover (awarded 1988) Dr. Graham Lee Williams (awarded 1996) Dr. Hans Gocht (awarded 1996) Professor Svein B. Manum (awarded 2002) Professor Barrie Dale (awarded 2004) Dr. David Wall (awarded 2004) Dr. Robin Helby (awarded 2005) Dr. Satish K. Srivastava (awarded 2006) Professor Estella B. Leopold (awarded 2013) Professor Vaughn M. Bryant (awarded 2016) Professor David Batten (awarded 2018)

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Professor Dr. Alfred Eisenack (elected 1975) Dr. William S. Hoffmeister (elected 1975) Professor Leonard R. Wilson (elected 1975) Professor Knut Faegri (elected 1977) Professor Charles Downie (elected 1982) Professor William R. Evitt (elected 1989) Professor Lucy M. Cranwell (elected 1989) Dr. Tamara F. Vozzhennikova (elected 1990) Professor Aureal T. Cross (elected 1991) Dr. Robert T. Clarke (awarded 2002) Professor Vaughn Bryant (awarded 2005) Professor Alfred Traverse (awarded 2005) Professor Bernard Owens (awarded 2011) Dr. John E. Williams (awarded 2013) Mr. Paul W. Nygreen (awarded 2013) Professor Norman Norton (awarded 2016) Professor George F. Hart (awarded 2020)

AASP-TPS Board of Directors Award recipient

Dr. Robert T. Clarke (awarded 1994) Dr. Thomas D. Demchuk (awarded 2014)

AASP-TPS Medal for Excellence in Education

Professor Aureal T. Cross (awarded 1999) Professor Alfred Traverse (awarded 2001) Professor Bill Evitt (awarded 2006) Professor Vaughn M. Bryant (awarded 2013) Professor Geoffrey Clayton (awarded 2016) Professor Sophie Warny (awarded 2021) Dr. Francisca Oboh-Ikuenobe (awarded 2023)

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Niall Paterson: 2021 – 2023

Sophie Warny: 2022 - 2023

Stephen Stukins: 2022 - 2023

Julia Gravendyck: 2021 - 2023

Martha Gibson: 2022 - 2024

Opeyemi Taiwo: 2022 - 2024

Vladimir Torres: 2022-2023

James Riding: 2022-2023

Fabienne Marret

Nordic Countries United Kingdom

Black Sea region

French-speaking Belgium

Flemish-speaking Belgium

United States

India

Asia

Germany

North Africa

South Africa

South America

Australia

Jan Hennissen

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Filipe Barreira, Laboratório Nacional de Energia e Geologia (LNEG), S. Mamede Infesta, Portugal

The AASP — TPS Newsletter is published four times annually. Members are encouraged to submit articles, "letters to the editor," technical notes, meetings reports, information about "members in the news," new websites and information about job openings. Every effort will be made to publish all information received from our membership. Contributions which include photographs should be submitted two weeks before the deadline. Deadline for submission for the next issue of the newsletter is March 1, 2024. All information should be sent by email. If possible, please illustrate your contribution with art, line drawings, eye-catching logos, black & white photos, colour photos, etc. We DO look forward to contributions from our members.

Volume 56, Number 4 Jan Hennissen, Editor

A Message From Our President

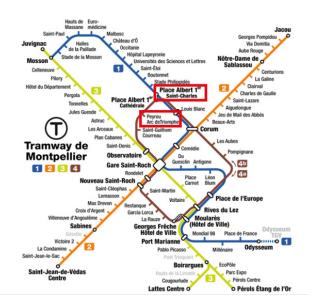
Dear AASP-The Palynological Society members,

I just came back from the beautiful city of Montpellier where I had the chance to be on sabbatical from September to October. My host (Severine Fauquette, University of Montpellier) and I spent time visiting sites and setting up the venues for our annual AASP-The Palynological Society annual meeting.

Since being back last week, I received several requests for information about our annual meeting as several of you would like to start planning. Our registration site (abstract submission, etc.) will open in January, but here is some information to help you plan.

This letter is meant as a summary of the program Severine and I have put together so far. Of course, there will likely be last minute changes and adaptations, but the program below should be more or less set in stone. As soon as everything is finalized and the website open, AASP Secretary Stephen Stukins will send an email to all members. But we hope the program and details below will help you planning for next summer.





I recommend that you reserve your hotel as soon as possible as there are a lot of competing events in this Mediterranean city. Please see the conference flier at the end of this Newsletter for details. Contact me or Severine if you would like to see a session on a specific topic.

Dates :

56th Annual Meeting AASP-The Palynological Society Montpellier, France June 24th – 28th, 2024

Organizing Committee :

Séverine Fauquette (ISEM, CNRS, Univ. Montpellier, France), Sophie Warny (CENEX, Louisiana State Univ., US), Vincent Montade (ISEM, CNRS, Univ. Montpellier, France), Vincent Girard (ISEM, CNRS, Univ. Montpellier, France), Ana Ejarque (ISEM, CNRS, Univ. Montpellier, France), Reyes Luelmo (ISEM, Univ. Montpellier, France), Jean-Pierre Suc (ISTeP, CNRS, Univ. Paris Sorbonne, France) and Yannick Miras (Muséum National d'Histoire Naturelle, Paris, France).

Conference program at a glance:

Sunday June 23rd

Arrival in Montpellier (3 public transport options):

- Montpellier Mediterranee airport : about a 25-minute drive to the conference site

- Train station 1: Gare Montpellier Saint Roch, walking distance to conference site in the historic center

- Train station 2 : Gare Montpellier Sud de France, 30 minutes of public transportation (bus from station to tram line 1). Line 1 will take you to the historic downtown (or Uber/ taxi). Another option is to fly to Paris, then take a direct train to Montpellier, either to Gare StRoch or Gare Montpellier Sud de France. Other options are to fly to London, Barcelona, and other European airports and take trains.

Monday June 24th

Pre-conference field trip (one short day) and Ice breaker in the evening

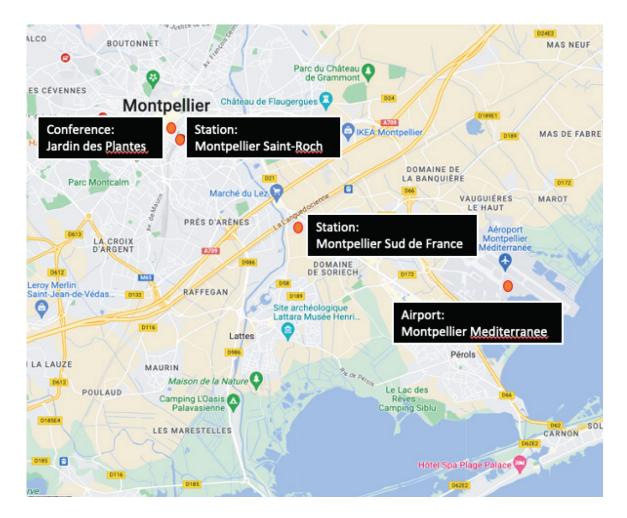
Tuesday, Wednesday, Thursday June 25th-27th

A three-day conference program

Conference dinner on Wednesday evening

Friday June 28th

Post-conference field trip (one long day)



Pre-conference field trip

Monday June 24th

1 short day to be back for the ice-breaker reception

Topic covered: The Rhone delta, Camargue



Deltaic environments, climate, flora and fauna in salt-water and fresh-water marshes, saline basin and salt extraction (pictured below to the right), visit of towns of Aigues Mortes (pictured below to the left) and Saintes Maries de la Mer.

Guides: Jean-Pierre Suc (ISTeP, Paris) and Serge Muller (ISEM, Montpellier).

Ice-breaker

Monday June 24th evening

Jardin des Plantes. Drinks and appetizers: included in the registration. Guest will be free to wander around the gardens.



Technical programme

Tuesday - Thursday June 25th-27th will be in the historic Botanical Institute of Montpellier

Conference lectures and poster presentations will be in the "Amphitheatre Charles Flahaut" of the former University of Montpellier's Botanical Institute which is listed as a Historical Monument of France (see pictures below). This building houses the Montpellier Herbarium, which will be accessible during the event. It is also adjacent to the Jardins des Plantes.

Sessions proposed so far include, but are not restricted to:

- · From palynological data to climate reconstructions and model simulations
- Human-environmental interactions and vegetation change
- Vegetation dynamics beyond the Quaternary as a source of information about mountain uplift, plate tectonics, sea-level fluctuations etc.
- A Herb Sullivan-dedicated session "The top 20 palynomorphs for stratigraphy or environment"
- A session focusing on dinoflagellate research.



Early Career Networking lunch

Tuesday 25th June in the Historic downtown, at the old school of Pharmacy restaurant: La Panacee

This is a short 10-minute walk from the Institut de Botanique, through the beautiful old town.

Main course plus soft drink or appetizer, plus café will be offered to all students and post-doc attending the meeting to encourage networking across various laboratories. See pictures of the Panacee restaurant below.



Conference dinner

Wednesday 26th June evening at the Château de Flaugergues

Listed as a Historic Monument, this château is located in the heart of the vineyards on the slopes of La Méjanelle. Built at the late 17th century in the Montpellier countryside, Flaugergues is one of the so-called "folies", an aristocrat mansion. Around the château, the park and gardens are a place of charm and harmony. In front of the château, the "à la française" garden has been classified as a "remarkable garden". We propose a site visit + wine tasting + country-side 3-course dinner/wine for 69 euros.



Lodging

The city of Montpellier offers a wide range of accommodation (hotels, Airbnb), suitable for all budgets. We recommend that participants select a hotel in the historic center (see map of hotels/Airbnb) at walking distance from the conference sites, or to select a hotel close to one of the tram lines. Don't wait too long. There are several big events in Montpellier in the summer. As an alternate options, there are towns such as La Grande Motte" or "Carnon" created in the 1960's that are on the beach, and about a 30-minutes drive to the historic center. This would require paying public parking in the historic town centre. There is public transport between the beach and Montpellier, but it would take about 90 minutes of bus and tram.

Post-conference field trip

Friday June 28th

Location and topic: Graissessac, Lac du Salagou and Mourèze (Coal mine, Permian volcanism, dolomite, paleoenvironment, vegetation change, plant macrofossils, trace fossils, paleoclimate)

Guides: Anne-Laure Decombeix (AMAP, Montpellier), Rodolphe Tabuce (ISEM, Montpellier) and Michel Lopez (Géosciences Montpellier).



Registration

\$350 (full cost for members), \$400 (full cost for non members), \$250 (full cost for studentmembers), \$285 (full cost for students who are not members).

Optional: business luncheon, conference dinner, field trips, and additional guests. Lunch will be on your own for the days of lectures (except for the business luncheon). There are a variety of venues around the conference site for lunch.

Financial support has been requested to the industry and from the University of Montpellier, and the Montpellier Métropole, by S. Fauquette and S. Warny. Financial help would help make student events (student/ECS networking and access to business luncheon) fully funded.

Additional free scientific visits on demand

If you are interested, you can contact Severine Fauquette during the meeting for these options:

Option 1: Visits to the ISEM palynological reference collection may be organised.

With more than 30,000 taxa, this is certainly one of the world largest collections. It was first built in 1945 when the Palynology Laboratory was founded by Madeleine Van Campo at the National Museum of Natural History in Paris. It moved to Montpellier in 1967 and it is now located at the ISEM laboratory. The collection is since then maintained and enriched with new samples, taken directly from plants during missions, from samples in herbarium, or obtained by exchange with other laboratories with French and foreign herbaria.

Option 2: Visits to the Montpellier Herbarium may be organised for those who would like to sample flowers of some species to extract and observe the pollen grains.

Option 3: Visit of the Jardin des Plantes with a botanist may also be organized. One of its notable specimens is the famous Gingko biloba (male tree) planted in 1795 and grafted with a female branch in 1830. The Botanical garden of Montpellier was founded in 1593 and is part of the heritage of the Faculty of Medicine of Montpellier and the University of Montpellier. It is the oldest botanical garden in France (see pictures below).



Tourism options

For family members traveling with participants or for those who would like to stay a few additional days, there are many sites of interest in and near Montpellier. The historic center in Montpellier is gorgeous. Restaurants and cafes are around every corner. There are also many unique beach towns of interest in that part of the Mediterranean region.





We can't wait to see you in Montpellier this summer and enjoy some great palynological discussions, lectures, field trips and meet with old and new colleagues.

Sophie Warny Professor of Palynology & Curator; President, AASP-The Palynological Society Department of Geology and Geophysics & Museum of Natural Science Louisiana State University E235 Howe Russell Geoscience Complex (Office room 109), Baton Rouge, La 70803 office 225-578-5089 | fax 225-578-2302; swarny@lsu.edu | www.geol.lsu.edu/warny

AASP – TPS 50th Anniversary Jewelry Collection

Exclusive, Custom-made 50th Anniversary Jewelry

Limited-Edition and availability



Special thanks to John Firth and Ingrid Romero for palynomorph images.

Celebrate the 50th anniversary of AASP – The Palynological Society with a beautiful, sterling silver palynomorph necklace. The Society board worked with jeweler and designer, 'Science-inspired jewelry', to create these one-of-a-kind, unique necklaces in honor of our golden anniversary. There are a limited number available of two designs, a pollen grain *Macrolobium multijugum* (a) and a dinoflagellate cyst of *Diphyes recurvatum* (b).

Each necklace comes with a commemorative information card that includes a picture and description of the palynomorph. **The society is selling them now for \$60.00 OR one** *M. mul-tijugum* **+ one** *D. recurvatum* **for \$100.00**. This is a wonderful way to support AASP-TPS and is a great conversation starter!

Payment can be arranged by contacting the AASP-TPS Treasurer, Vladimir Torres, at vladimir.torres@exxonmobil.com.

Managing Editor's Report

by Jim Riding

Part four of Palynology Volume 47 was published online in late October (https://www. tandfonline.com/toc/tpal20/current). This issue comprises 204 pages, and includes 12 research articles. These 12 papers make for a very diverse and interesting set of contributions.

All are exemplary but I would highlight a major 53-page study on palynofloras from the Lower Cambrian of North Greenland by Elise Wallet and colleagues which is superbly executed and illustrated.

There are also two beautiful papers on the palynology of the Triassic-Jurassic transition in Denmark co-authored and authored respectively by Sofie Lindström, and an extremely interesting study on pollen collected by bees in an urban setting in Brazil by Marcos Goncalves Ferreira and three co-authors.

The full contents of Volume 47/4 are listed below. Those members who subscribe to the print version of Palynology should have already received their hardcopy of Volume 47/3 & 4. If you have not got your copy, please contact me and I will sort it out.

The next issue of Palynology, which will be Number one of Volume 48, will be published online during February 2024. This part is now complete, and I will finalise the running order in late December.

May I remind members (and non-members!) of the association that we are no longer operating under a strict annual page budget enforced by the publishers. So now, in effect, we can publish as much as we like, whenever we like. This is a very enviable situation indeed to be in, and we should take full advantage of it. One of the major pluses is that accepted papers will be assigned to a volume/part with very short lead times. There should be a negligible time gap between online publication in the "latest articles" section of the website, and the permanent placement of the paper into an issue. So please keep the manuscripts coming in!

I was recently alerted to a typo in the online Instructions for Authors (https://www.tandfonline.com/action/authorSubmission?show =instructions&journalCode=tpal20), where a word limit of 3000 words for an article was mentioned. This was an error by the publishers and the entire sentence mentioning the word limit has now been deleted. For practical reasons, there has to be a maximum word limit, but we are very happy to work without a formal cutoff point.

As ever, thank you very much for your continued support of Palynology.

James B. Riding Managing Editor, AASP – The Palynological Society British Geological Survey Keyworth, Nottingham NG12 5GG, UK E-mail: jbri@bgs.ac.uk

The contents of Palynology Volume 47, Part 4 (November 2023)

Research Articles

1. Ferreira, M.G., Correia, F.C.S., Peruquetti, R.C. and da Silva, F.R.C. Botanical origin and seasonal variation in pollen collected by *Tetragonisca weyrauchi* (Apidae: Meliponini) in an urban area of Rio Branco, State of Acre, Brazil. Article number 2180100, 11 pp. 2. Rich, F. and Pirkle, F.L. The Neogene-Quaternary palynological record of *Castanea* in the American southeast. Article number 2209621, 8 pp.

3. Córdova-Rodríguez, A., Aragón-Moreno, A.A., Islebe, G.A. and Torrescano-Valle, N. Botanical characterization of *Apis mellifera* honeys in areas under different degrees of disturbance in the southern Yucatan peninsula, México. Article number 2215290, 12 pp.

4. González-Velasco, J., Galván-Escobedo, I.G., Burgos-Hernández, M. and Castillo-Campos, G. Pollen morphology of endemic *Linum* species (Linoideae: Linaceae) from Mexico. Article number 2222293, 14 pp.

5. Li, D., Zhai, X., Sun, L., Ji, X., Zhang, S., Zhang, Y., Shen, W., Zhang, H., Qian, F. and Liu, H. A taxonomic study on pollen morphology, karyotype features, floral and fruit pigment components of 13 taxa of *Lonicera* L. Article number 2221303, 15 pp.

6. Tsymbalyuk, Z.M., Nitsenko, L. M. and Mosyakin, S.L. Taxonomic significance of pollen morphology of selected taxa of *Bassia*, *Sedobassia*, *Spirobassia* and *Neokochia* (Chenopodiaceae/Amaranthaceae sensu APG IV). Article number 2233586, 16 pp.

7. Erarslan, Z.B. and Kültür, S. Pollen morphology of *Doronicum* L. (Asteraceae, Senecioneae) from Turkey and its taxonomical implications. Article number 2228365, 15 pp.

8. Lindström, S., Pedersen, G.K., Vosgerau, H., Hovikoski, J., Dybkjær, K. and Nielsen, L.H. Palynology of the Triassic–Jurassic transition of the Danish Basin (Denmark): a palynostratigraphic zonation of the Gassum–lower Fjerritslev formations. Article number 2241068, 34 pp.

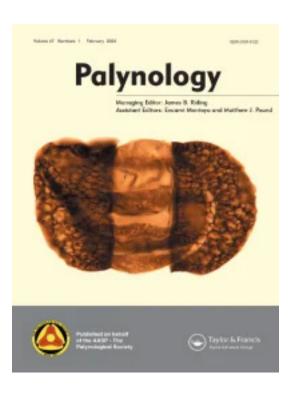
9. Lindström, S. Valvaeodinium hymenosynypha (Morbey) comb. nov., a dinoflagellate cyst from the uppermost Triassic and lowermost Jurassic (Rhaetian and Hettangian) of Europe. Article number 2252482, 8 pp.

10. Cartaxo-Pinto, S., Vieira, I.F.T., Nascimento, J.M., Bueno, V.R., Heiden, G., Mendonça, C.B.F. and Gonçalves-Esteves, V. Palynotaxonomy of *Calea* sect. *Meyeria* (Asteraceae: Neurolaeneae). Article number 2242449, 8 pp.

11. Dutra, F.V., Groppo, M. and Gasparino, E.C. Pollen morphology characterization of *Dryades* Groppo, Kallunki & Pirani, a new genus of Rutaceae, and its phylogenetically related species. Article number 2246534, 10 pp.

12. Wallet, E., Slater, B. and Willman, S. Organic-walled microfossils from the Lower Cambrian of North Greenland: a reappraisal of diversity. Article number 2251044, 53 pp.

(204 pages)



Palsys.org by Peter Bijl

Please allow me to introduce <u>palsys.org</u>, an online, fully open access database that houses taxonomic, stratigraphic and image data of organic-walled dinoflagellate cysts.

The AASP Foundation has generously contributed funds to make the launch of open access palsys.org happen. Below, I will describe how palsys.org came to be, explain the functionalities of the website and explain how academic quality control of the data on palsys.org is ensured.

The content on palsys.org is not yet complete, therefore we call upon you to contribute to palsys.org with comments, data, images, suggestions and corrections. Palsys. org is the starting point for a more interactive conversation about dinoflagellate cyst taxonomy and stratigraphy.

Why do we need an open access database for dinoflagellate cysts?

Academia is rapidly moving towards open access, and it is great. It is generally agreed that academic knowledge and data are public commodities and should as such be available to society barrier-free. Open access of data allows the widespread use, re-use and reinterpretation of data, and as such increases the societal and economic value of the data.

Micropalaeontology has been no exception to the closed nature of traditional science: taxonomic descriptions were scattered across a wide range of publications, in journals that typically only allow access after the purchase of a license fee. Therefore, traditionally, laboratories that managed (both financially and historically) to build up an extensive library of taxonomic work had the ability to build expertise in that microfossil group, whereas small universities, that could not afford the licence fees for these journals, have difficulties to start up the expertise. This has long limited many research groups from starting to work with these microfossils, which is a large loss of potential.

The open science movement in academia intends to end the barriers for end-users of academic data, by moving the financing of academic publishing to the front-end submission fees rather than end-user access fees. This opens up academic data to anyone who wants to use it.

In line with this movement, expert groups in calcareous nannoplankton and planktonic and benthic foraminifera already developed publicly available databases for taxonomic and stratigraphic data (nannotax and Mikrotax). For modern dinoflagellate cysts, the Modern Dinocyst Key on Karin Zonneveld's MARUM website is extremely useful. The citation index on **DINOFLAJ3** guides users through the taxonomy and synonymy to understand the suprageneric classification of cysts, synonymy, emendations and the source of original descriptions of modern and fossil dinoflagellate cysts. However, a comprehensive overview of taxonomic descriptions, stratigraphic ranges and emendations for dinoflagellate cysts is lacking thus far.

The history of palsys.org

Palsys.org started as an in-house database for organic-walled dinoflagellate cysts: PALSYS at the Laboratory of Palaeobotany and Palynology (LPP) Foundation, a Utrecht Universityembedded consultancy. The LPP Foundation initiated a Microsoft Access-based database



The Laboratory of Paleobotany and Palynology in 1992. From top to bottom and from left to right: Jan-Willem Weegink, Martin Wilpshaar, Peter Hoen, Oscar Abbink, Henk Visscher, Henk Brinkhuis, Michiel van Houte, Jordi Tarragona, Bart Derks, Jan van Tongeren, nomen nescio, Frederike Wagner-Cremer, Johan van de Burgh, Christian Mulder, Wolfram Kurschner, Andrea Santarelli, nomen nescio, Roel Verreusel, Raymond Below. Source: LPP archive.

framework for micropaleontological data and used it to catalogue taxonomic and stratigraphic data for in-house purposes. Parts of this collection were sold to the industry. With the earnings of the foundation further expansion of PALSYS was funded. In these days, many international colleagues voluntarily contributed copyright-free images to the database (see acknowledgements). Many students assisted in translating non-English taxa descriptions into English.

Towards the end of the '00s, it became increasingly clear that the MS Access software environment was no longer supported, neither was the dissemination strategy on CD-rom, for security reasons. PALSYS had to be transformed into an online platform. Moreover, the content on PALSYS needed a thorough overhaul, for instance the addition of new species, work-through of emendations, and revision of the stratigraphic content on PALSYS.

Meanwhile, the commercial activities of the LPP foundation were transferred to the Neth-

erlands Institute of Applied Scientific Research (TNO), and together with the research group Laboratory of Paleobotany and Palynology, they initiated the fundraising for the online transformation of PALSYS.

Key players here were Timme Donders from TNO and Peter Bijl and Sander Houben from Utrecht University. These funds were raised at interested industrial parties, however, without much success, also because the economic situation between 2008 and 2012 was not ideal.

In the meantime, the marine sector of the research lab Laboratory of Palaeobotany and Palynology expanded greatly with new permanent positions for Francesca Sangiorgi, Appy Sluijs and the professorship of Henk Brinkhuis, as well as many PhD students (see pictures).

In 2012, the LPP Foundation reconvened consultancy activities and took over the initiative, still under the UU umbrella, and continuous attempts were made to raise funds from in-



The same research group in 2009. Jan van Tongeren, Maarten van Hardenbroek, Wolfram Kurschner, Hans van Aken, Emilia Kirilova, nomen nescio, Sander Houben, Willemijn Quaijtaal, Maud Vastbinder, Johan van de Burgh, Micha Ruhl, Zwier Smeenk, Christof Pearce, Femke Holwerda, Oliver Heiri, Thierry Fonville, Han van Konijnenburgh-van Cittert, Jos Schilder, Andy Lotter, Boris Iljashiuk, Wim Sluis, Gea Zijlstra, Marjolein Mullen, Henk Brinkhuis, Frederike Wagner, Linda van Roij, Nina Bonis, Appy Sluijs, Peter Bijl, Emmy Lammertsma, Judith Barke, Peter Spierenburg, Henk Visscher. Source: LPP archive.

dustry to revamp the platform, for instance during stakeholder meetings at the "Advanced Jurassic-Cretaceous-Cenozoic course in organic-walled dinoflagellate cysts" meeting in Utrecht in 2012. When until 2015 this remained without much success, Peter Bijl funded the transformation of PALSYS to online out of LPP Foundation funds, augmented with funding from several stakeholder research institutes (e.g., Heidelberg University in Germany, GEUS in Denmark, GNS Science in New Zealand, and generous contributions from Utrecht University and TNO in the Netherlands).

This was successful because of a change in framing: palsys.org was presented as a contribution to reduce storage space, eliminate the need for extensive literature collections, a way to curate knowledge otherwise lost with the retirement of professionals and experts in research and industry and thus an opportunity to save money. The online version palsys. org was presented around 2016 and was accessible only after the purchase of a license. We used the revenues from these purchases to further improve the content on palsys.org.

When the LPP Foundation liquidated in 2019, funds were transferred to a non-commercial UU-embedded charity (Henk Visscher Fund) and the Department of Earth Sciences at Utrecht University became intellectual property owner of palsys.org. In those years, the university was already adopting the open science principles that are now becoming the norm in the Netherlands: University owned data should in principle be made publicly available, given the public function that a university plays in society. Open science principles advise that, in order to create the highest societal value for academic data, it should be Findable, Accessible, Interoperable, and Reusable (FAIR).

Meanwhile, across The Channel, in the UK,



The "Advanced course in Jurassic-Cretaceous-Cenozoic organic-walled dinoflagellate cysts" in 2012 jointly organised by The Netherlands Institute of Applied Research TNO and the LPP Foundation, during which the foundations of the new online palsys.org were laid. Source: LPP archive.

two open, public taxonomic databases had emerged: nannotax and mikrotax. Two databases that house taxonomic, stratigraphic and image data of calcareous nannoplankton and foraminifera, respectively. Extremely useful, open access databases for the use in industry, research, training and education. I knew that the time was there to make palsys. org open access too. With generous funding from the AASP foundation, and from The Micropaleontological Society, the Department of Earth Sciences and the Dutch Geological Survey, we redesigned palsys.org into an open access website, added practical functionalities and reviewed the content. The latter will be an on-going process, for which we for sure need your help.

Palsys.org setup, functionalities and navigation

Palsys.org has the formal descriptions in the peer-reviewed literature as basis. It also strictly follows the taxonomic citation index of Williams *et al.* (2017) and we will follow updates, additions and emendations from new iterations of their series of citation indices as they appear. Palsys.org is designed to house the taxonomic descriptions, and emendations of all active and inactive genera and species

of organic-walled dinoflagellate cysts. Currently we have ~90% of the species and genera descriptions included, the missing ones are the hardest to find, and mostly come from the non-English literature. It further contains the full taxonomic history with crosslinks between synonymous taxa. It has links to the complete stratigraphic database DINOSTRAT (Bijl, 2022) that reviewed all accurately calibrated stratigraphic ranges of organic-dinoflagellate cysts across the globe. Palsys.org currently houses about 25.000 image files of dinoflagellate cysts, and we are still working towards adding more. It further lists and links to the original literature involved in the taxonomic descriptions.

The home page of palsys.org lists all genera of organic-walled dinoflagellate cysts from DINOFLAJ3. The platform is designed with potential users in mind. They are assumed to already have basic, fundamental knowledge on dinocyst taxonomy and morphology in place, but seek information on specific definitions of genera and species in their work. Palsys.org has currently 3 ways in which the full list of genera can be filtered: (1) by hiding the currently inactive genera (2) by selecting with the slider the geologic time interval of interest, and (3) by filtering the genera on

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	60	Achilleodinium	Eaton, G.L. (1976)				
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Home page of palsys.org: full list of genera, filter options and login functionality. Every page has a feedback button to get in contact with the administrators of palsys.org.

morphological treats. The "Age" filter uses the last and first occurrence data we entered per genus, and we based this on DINOSTRAT and when unavailable, on an estimation based on the age of the type section. The "Filter by morphology" filters the genera based on the suprageneric classification of Fensome et al. (1993). The home page also links to an "About Us" page, the full "literature" database, and gives the possibility to "Log in" or "Register" on palsys.org.

Registering an account at palsys.org requires minimal input (name, email and affiliation), and opens up for you, free of charge, the option to add user-specific notes on each genus or species page. These notes are only visible for users of your login credentials. We use the information you provided at registration only to sporadically feed you with a palsys newsletter and to welcome you to the palsys.org community. In reply we ask you to voluntarily donate to our charity fund (the Henk Visscher Fund, deposited at the Utrecht University Alumni Foundation) that we use to keep palsys.org up to date and support students in their palynological research.

Clicking on a genus brings you to the Genusspecific "General" page. You see listed the link to the "Publication" that formally described the genus, the "Taxonomic Status", to which morphological "Group" of Evitt (1985) it belongs, its "Type" species, its "First" and "Last occurrence" and possible "Junior" or "Senior synonyms". From here you can navigate on to the formal "Description", an overview of the "Stratigraphy" range of the genus (from DINOSTRAT, when available for that genus), a list of "Literature" references, the accountspecific "Notes" page and a full "Species" list. Clicking on the latter allows you to navigate through to any species within that genus, active or inactive.

The species-specific "General" pages follow basically the same structure as that of the genus, with one addition, an "Image" tab that shows, when available, the image files of that species. Flicking through species is facilitated with a "Previous species" and "Next species" button. The "Back" button navigates hierarchically upwards, so from species page to genus page to home page. Users can use the backbutton of their browser to return to previously visited pages on palsys.org.

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	Original description: [Evit, 1963]:					
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The genus description page

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The species general page

Data quality control

The value of palsys.org relies on the quality of the information in the database. Since the content is fully based on the peer-reviewed scientific literature, academic quality control of the input on palsys.org is already secured. The intellectual property rights of palsys.org are with the department of Earth Sciences at Utrecht University. With over 50 years of experience in marine palynology, and currently 4 marine palynologists as permanent academic staff members, training about 20 students each year in marine palynology, and holding an extensive literature library, we have a lot of expertise inhouse for almost the entire stratigraphic column. The close link of palsys. org with a large, active academic research group ensures academic quality of the data on palsys.org. In order to achieve institutional independence of the data quality control, an academic advisory committee will be erected, with members from at least 3 different international institutes, that advises the owners of palsys.org on updates and revisions (solicited and unsolicited). The names of this advisory board will be posted on the palsys.org website and will include international academics with expertise in various sections of the stratigraphic column. Finally, we hope that all users of palsys.org are going to contribute to increasing the academic quality of the database, and how we enable this is explained below.

Interactive functionality

The importance of the academic quality dictates strict editorial control over the content on palsys.org. This is why we disabled editability of the content by website users. This ensures that we can keep logging changes and implement changes systematically.

However, such an uneditable website modus loses the opportunity for the community to actively contribute, and as such it misses the change to have palsys.org serve as platform of engagement and interactive discussion. As compromise, and to stimulate user participation, we provided every page of palsys. org with a feedback button, in the bottom right corner of the screen. Clicking this launches an email message to us, in which you can provide feedback, do suggestions for changes or updates or provide us with materials. We can then do some editorial checks and incorporate the changes onto palsys.org. We already see that the community of users seizes this opportunity and helps us improve the content of palsys.org even further.

Concluding remarks

The launch of palsys.org in the open access world represents a starting point, from which onwards we hope that dinocysts experts are going to use it for their research, for training students, for education (Fig. 6) and as medium to discuss. We have already experienced in the research group at Utrecht that by using it, taxonomic discussions can be much more easily held, as all necessary information is readily available. Through that, palsys.org can serve as a catalyst for solving taxonomic issues that are currently unresolved. To keep palsys.org up to date requires continuous scrutiny of the literature and the content on palsys.org. We have limited funding in place to do so, but any contribution to this cause is greatly appreciated. You can do so by donating to the Henk Visscher Fund.

Palsys.org can be used free of license, but we do ask that you cite the launch paper in Journal of Micropaleontology (Bijl and Brinkhuis, 2023) when you use palsys.org in your work. We also stress that the website interface is relatively easily multiplied into an empty platform, so if there are ideas to start other databases (e.g., acritarchs, sporomorphs, fungal spores), get in contact and we happily provide you with more information. The input of data is, with an administrators account, loaded into palsys.org from the front end of the website, so no coding skills are required for that.

Acknowledgements

The list of people to thank is long, and never complete. But first of all, the people at the LPP foundation in the '90s were starting off palsys: Henk Visscher, Jan-Willem Weegink (who also collected over the globe a huge number of dia images of holotypes) and Henk Brinkhuis. Later the people at TNO/RGD: Oscar Abbink, Timme Donders, Roel Verreusel, Dirk Munsterman, Sander Houben contributed heavily to the database content on palsys.org.

The DINOFLAJ citation index of Graham Williams, Rob Fensome and Andrew McRae, which on itself stands on a long history, serves as the backbone for the dinocyst database on PALSYS.org, and them sharing their efforts is invaluable. With apologies in advance for

omission, we definitely would like to thank Raymond Below, Jonathan Bujak, Sarah Damassa, Hans Gocht, Raquel Guerstein, Martin J. Head, Karl-Heinz Kirsch, Judith Lentin, Lars Henrik Nielsen, Martin Pearce, Michael Prauss, Walter Riegel, Kasia Sliwińska, Bruce Tocher, Laurent de Verteuil, Graeme Wilson, Martin Head, Jim Riding, Jörg Pross, Francesca Sangiorgi, Poul Schiøler, Appy Sluijs and Karin Zonneveld for providing content, images, texts, discussions, and user feedback. Without the financial help from the LPP foundation, Departments of Earth Sciences and Physical Geography of Utrecht University, TNO/RGD, Heidelberg University (Jörg Pross), GNS Science (Erica Crouch), GEUS (Lars Henrik Nielsen), the Micropaleontological Society and the American Association for Stratigraphic Palynologists Foundation, palsys.org would not have existed. Many students helped out over the past years: Karin Zwiep, Pam Vervoort, Carolien van der Weijst, Keechy Akkerman, Benjamin Hoogstraten, Emma Kilcoyne and Saskia Frauenschuh.

If you feel you should be added to this list, please let us know.

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Awards Committee News

By Marie Thomas

Society Awards Nominations for 2024

AASP-The Palynological Society has several awards that recognize outstanding service to the Society or to the discipline of palynology.

The basic nomination procedure is similar for most awards (main letter of nomination accompanied by letters of support, which include documentation of the accomplishment).

Details of the procedures for each award can be found at <u>https://palynology.org/student-</u> <u>support/professional-awards/award-proce-</u> <u>dures/</u>.

The deadline for submission of society awards nominations is March 1 of each year.

A complete list of previous winners can be found on the third page of this newsletter.

Distinguished Service Award

This award recognizes individuals who have generously supported the AASP-TPS with their work and resources over several years, and whose efforts have advanced the Society. Typically, recipients have held society office, participated in committees, or dealt with publications or meetings. There have been twenty recipients of this award, most recently Jen O'Keefe in 2023.

Honorary Life Membership

This is the oldest AASP-TPS award, with the first awards dating to 1975. This award is either bestowed upon individuals who have made a fundamental contribution to the discipline of palynology, or to people who have given devoted service to the AASP-TPS (or

both). Honorary Life Membership has been awarded to seventeen individuals, most recently to George Hart in 2020.

Medal for Excellence in Education

This medal recognizes leaders in palynological education. Nominees are expected to have considerable experience and accomplishment in aspects of academic education involving palynology. The medal has been awarded six times, most recently to Francisca Oboh-Ikuenobe in 2023.

Medal for Scientific Excellence

The Society's highest award for achievement in the science of palynology is the Medal for Scientific Excellence. The official description lists "fundamental contributions to the development of the science of palynology" as the main criterion. Recipients should have a substantial research history in the field. The medal has been awarded thirteen times in the history of the Society, most recently to David Batten in 2018.

Medal for Scientific Merit and Outstanding Promise

This newly established award recognizes individuals in their mid-career who have made important contributions to the science of palynology and who show the promise of continued excellence in the discipline. Typically, nominees will have no more than 15 years' experience beyond their M.Sc. or Ph.D. graduation (excluding time spent in industry or on leave).

Student Research Awards 2024

Call for Applications

AASP-The Palynological Society is pleased to announce its program of Student Research Awards. For 2023, there will be two awards of \$3000 (US) each, to support research in any area of palynology. Student Research Awards are to be used for costs directly connected to carrying out research, such as fieldwork and laboratory expenses, but not for travel expenses to attend a meeting. Typically, these awards are provided to students in the preliminary stages of their doctoral research, but MSc. and advanced undergraduate students may also apply.

Basis of awards: The qualification of the student, the novelty and imagination of the proposed project, and the likelihood of significant contribution to the science of palynology are factors that will be weighed in the selection process.

Application procedure

The application form can be downloaded from this webpage:

https://palynology.org/student-support/student-awards/student-research-grants/

Part A of this form is to be completed by the student, and Part B by the student's faculty supervisor. Applications must be accompanied by a photograph of the student (.jpeg format) for publication in the society's newsletter.

Additional material will not be considered.

The applicant's supervisor must submit both parts A and B of the form to the Awards Committee Chair, either as Word document or as a PDF:

Dr. Marie L. Thomas AASP–TPS Awards Committee Chair aaspawards@gmail.com

Please ensure that you have completed both parts A and B of this application form. The deadline for applications is April 15, 2024. Late or incomplete applications, as well as those that exceed the stated word limits in sections A or B will be disqualified.

As per society awards policy only students who are registered AASP–TPS members are eligible to apply (<u>https://palynology.org/join/#join</u>). Applications from non-members will not be accepted.

Undergraduate Student Awards

To support the teaching of palynology at the undergraduate level and to encourage and reward student achievement, AASP–The Palynological Society offers the Undergraduate Student Award. Each award consists of one year's free membership to the Society. This free membership includes access to digital issues of the Society's publications, the journal Palynology, and the quarterly newsletter; discounted registration fees at Society meetings; and eligibility for Society awards.

The awards are made annually to students nominated by faculty members teaching courses with significant palynological content. One student with meritorious achievement in some aspect of the course can be nominated per year, per institution.

The following institutions have approved courses from which undergraduate students may be selected: University of Southampton, Louisiana State University, University of Tennessee-Knoxville, University of Portsmouth and Morehead State University.

Additionally, course instructors who are members in good standing of AASP–TPS, and who teach an appropriate course, may nominate their course using the Registration Format found below. This should be cut-and-pasted into a word document and sent to the Awards Committee Chair at: aaspawards@gmail.com

Upon course approval, instructors may nominate a student to receive the award by sending the name, institutional address, and email address of the recipient to the Awards Committee Chair and Society Secretary (s.stukins@nhm.ac.uk) at any time of the year. Additionally, faculty must send the name of the winner, a paragraph about their achievements, and a photograph to the newsletter editor (aaspnews@gmail.com) for inclusion in the March (awards between July and December) or June newsletter (awards between January and June) each year.

Undergraduate Student Award, Course Registration Form

- Nominating faculty member:
- University/Higher Education Institution:
- Course Name:
- Course Description and level:
- Average number of students registered in the course annually:
- Number of hours of palynological instruction:
- Criteria used to determine the winning student:
- Date:

We are pleased to announce our first Undergraduate Student Award winner in four years! Dani Ahuatzin Gallardo received this award from Ian Harding and John Marshall for the 2021-2022 course "Microfossils, Environments, and Time" at the University of Southampton. Congratulations, Dani!

Student Travel Award – 56th Annual Meeting, Montpellier, France 2024

AASP–The Palynological Society is pleased to announce its Student Travel Awards program for 2024. These awards are designed to support travel for student members who intend to present a talk or poster at the 56th annual meeting of AASP - The Palynology Society in Montpellier, France.

Application procedure:

The application form can be downloaded from this webpage: <u>https://palynology.org/student-support/student-awards/student-travel-awards/</u>

Part A of this form is to be completed by the student, and Part B by the student's faculty supervisor. Applications must be accompanied by a photograph of the student (.jpeg format) for publication in the society's newsletter.

The applicant's supervisor must submit both parts A and B of the form to the Awards Committee Chair, either as Word document or as a PDF:

Dr. Marie L. Thomas AASP–TPS Awards Committee Chair aaspawards@gmail.com

Please ensure that you have completed both parts A and B of the application form.

The deadline for applications is March 15, 2024. Late or incomplete applications will not be considered. As per society awards policy, only students who are registered AASP–TPS members are eligible to apply (https://palynology.org/join/#join). Applications from non-members will not be accepted.



Obituary Geoffrey Norris (1937–2023)

By Martin J. Head

Geoffrey Norris, Professor Emeritus of the University of Toronto and a former AASP President, passed away at home in Toronto on June 26, 2023 at the age of 86.

Geoff was educated at the Royal Liberty School in Gidea Park, Romford, Essex, UK which was then a selective, traditional grammar school. From there he went up to Cambridge, being admitted to Gonville and Caius College where the famous stratigrapher W. Brian Harland was his personal tutor.

Geoff married Anne in 1958 and they started their family. He received his Bachelor of Arts degree (Cambridge does not grant BSc degrees) in 1959, his Master of Arts degree in 1962 (a seniority degree conferred by right on holders of the BA), and worked towards his PhD at Cambridge under the famous palynologist Norman Hughes.

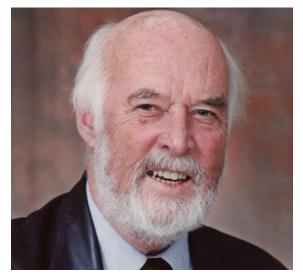
Living on a student grant and with a family to support, they moved to Lower Hutt, New Zealand in 1961 where Geoff took up a position as a Scientific Officer in the Palaeobotany Section of the NZ Geological Survey. It was there he met Dave McIntyre who became a lasting friend. With the low Survey salaries at that time and struggling to make ends meet, Geoff worked in his spare time at Griffin's biscuit factory. He also found time to finish his PhD under the external supervision of Sir Charles Fleming in 1964. Geoff enjoyed telling the story that upon award of his PhD he received a pay rise from the biscuit factory (a coincidence) but not the Survey.

His thesis was entitled "Upper Jurassic and Lower Cretaceous miospores and microplankton from southern England", representing one of the very early contributions to the study of Mesozoic dinoflagellate cysts. In 1964, the family moved to North America, initially to Hamilton, Ontario, Canada, where Geoff took up a post-doctoral position at McMaster University. In 1965 he joined Pan-American Petroleum at Tulsa, Oklahoma as a Senior Research Scientist where he developed a life-long interest in the application of palynostratigraphy to the oil industry.

He joined the Geology Department at the University of Toronto as an Assistant Professor (with tenure) in 1967, climbing through the ranks as an Associate Professor in 1968, and Professor in 1976. He served as Chair of his Department from 1980 to 1990 during which time he oversaw the department's move from its antiquated home in the old Mining Building to spacious purpose-built facilities in the new Earth Sciences Centre, meticulously ensuring that the design of this new centre would meet all faculty research and teaching needs.

Geoff was an effortless communicator. He enjoyed talking to people, had a tremendous sense of humour which helped he would say in dealing with university administration, and delighted in the ironies of life.He was a regular attendee at AASP Annual Meetings, having organized its third annual meeting in Toronto in 1970, and was a highly effective chair of committees. Among his many administrative appointments were serving as President of AASP (1971–1972), Secretary-Treasurer of the International Commission for Palynology (1976–1980), and President of the Canadian Association of Palynologists (1982).

He was admitted as a Fellow of the Royal Society of Canada (the nation's most prestigious scientific academy) in 1983 and served as its Director of the Division of Earth, Ocean and Atmospheric Sciences from 1993 to 1996. His superior grantsmanship enabled him to sup-



Geoff Norris (1937–2023) taken in 2003 as his departmental portrait

port an active research group through much of his academic career.

Geoff was highly regarded for his research in the areas of palynology, taxonomy and biostratigraphy. As a pioneer in the early study of fossil dinoflagellates, he contributed significantly to their modern understanding as vital tools in biostratigraphy and paleoenvironmental analysis. Geoff's lengthy publication record includes important contributions on dinoflagellate cyst morphology and systematics, acritarchs, Cretaceous and Cenozoic palynofloras, biostratigraphy, and paleoclimatic inference. Geoff proposed a dinoflagellate suprageneric classification at a time when such schemes were considered impractical. He pursued this research with others, most notably one of his research associates, Rob Fensome. This led to the now classic and universally embraced 1993 publication that integrates the taxonomy and classification of fossil dinoflagellates with their living relatives. Geoff also published a monograph on the Mesozoic geology of the Moose River Basin and co-authored with colleague Jock McAndrews the highly cited and still standard guide "Quaternary Pollen and Spores of the Great Lakes Region". He and his students made important contributions to the Ocean Drilling Program

and its successors. His interests were wide and global in scope. Over a lengthy career, Geoff inspired and mentored many students, postdocs and visiting scientists with his enthusiasm and innovative ideas.

Overseas activities included a Humboldt Fellowship in Cologne, Germany, a research program in Venezuela, several visiting lectureships in China, and a research stay at the Florida Bureau of Marine Research with Karen Steidinger. Geoff's students and visiting professionals were numerous and hailed from around the world. Many of his PhD students – Dave Jarzen, Ed Davies, A. Fasola, S. de Gasparis, Pierre Zippi, Omar Colmenares, Laurent de Verteuil, and Grace Parsons – and postdocs/research associates – Gunter Dörhöfer, Rob Fensome, Mao Shao-zhi, Martin Head Mike Melchin, and Owing Shu – went on to forge their own successful careers.

Later in his career, Geoff consulted for the IRF Group, an organization that provides paleoenvironmental and biostratigraphic information to the petroleum industry, and for some years he was active in supporting exploration work in the "sub-salt" plays in the Gulf of Mexico. He would talk enthusiastically about the complex structures and stratigraphy, hidden from seismic analysis beneath the thick salt, that the drilling was exploring and which added significant reserves to the already highly productive Gulf petroleum province. Owing to industry confidentiality he was unable to publish this work.Geoff has left a rich legacy of research. teaching and administrative service. His scientific interests were unusually broad and deep, but he was as fascinated by people as in the science itself. He had a quick and incisive mind and could intuitively size up complex problems. All these qualities made him an outstanding mentor. He will be remembered for these things but also for his warmth, kindness, irreverent sense of humour, and infectious laugh.

Candidates for the AASP Board 2024

Introducing the 2024 candidates for the AASP-The Palynological Society Board in the following positions: President Elect, Directorat-Large and Student Director-at-Large. In the following weeks, all AASP-TPS members will receive an email with a link to vote for the candidates.

President-elect



Matthew Pound President-elect

Matthew Pound is an Associate Professor in the Department of Geography and Environmental Sciences at Northumbria University, UK. Originally from the southwest of England

he has an undergraduate degree in Geology from the University of Bristol (2008) and after a summer volunteering on dinosaur excavations at the Museu da Lourinhã in Portugal, he saw the light and opted to continue his career in palynology. This led to a PhD in Palynology and Palaeoclimates from the University of Leeds (2013) that was funded by the British Geological Survey, and supervised by James Riding, Ulrich Salzmann and Alan Haywood.

Since 2012 he has worked for Northumbria University. Initially as a Research Assistant (2012 - 2013), then a Post-doc (2013 - 2015) and then as a staff member (2015 - present).

On top of his teaching across the department's BSc, BA and MSc programmes, Matthew has held roles and responsibilities including departmental ethics lead, programme leader for Environmental Sciences and is currently the departmental head for Equality, Diversity and Inclusion. He also sits on the university wide biodiversity steering committee in his role as the University Hedgehog Champion!

Outside of Northumbria, he has been involved in AASP since 2009, attending his first annual meeting in 2010 (Halifax, Nova Scotia), has been an assistant editor for Palynology since 2012 and was on the organising committee for the 50th Annual Meeting (2017 - British Geological Survey).

Matthew has also served on The Micropalaeontological Society committee since 2015 (Palynology Group secretary, Membership Secretary and currently Special Publications editor). He also co-chairs the Board of Trustees of the British Hedgehog Preservation Society – a nationwide wildlife conservation charity here in the UK. Since 2015, Matthew has volunteered to provide Nuffield Trust Research Placements to give 17-year-olds from underrepresented and minority backgrounds a taster of university life, research and, of course, palynology.

Matthew's research has been heavily focussed on climates of the Cenozoic with a particular penchant for the Miocene. This was recognised in 2013 by the Geological Society of London who bestowed upon him an early career President's award for his global reconstructions of Middle to Late Miocene biomes.

He is currently continuing work on the onshore Miocene strata in the UK and collaborative work into fossil fungi during the Middle Miocene Climatic Optimum with Jen O'Keefe and Sophie Warny (and the rest of our amazing team!). Away from the Miocene, Matthew has ongoing research into the Holocene of Cyprus, urban pollinators, melissopalynology and microplastics in terrestrial deposits.

Director-at-Large



Damián Cárdenas Director-at-large

I am a geologist and palynologist, recently appointed as Assistant Professor at the Universidad Nacional de Colombia. I earned a BSc in Geology from the Universidad Nacional de

Colombia in 2012 and a PhD in Geology and Geophysics from Missouri University of Science and Technology (Missouri S&T) in 2021.

During my senior year as an undergraduate student, I was introduced to paleopalynology during an intensive one-week workshop about the applications of palynology in both academia and the oil industry, which stimulated me to study palynology further.

My first steps into this field were under the guidance of Felipe de la Parra, who supervised my undergraduate research and thesis on the application of quantitative morphologic analyses of closely related pollen morphospecies to improve the taxonomic resolution of biostratigraphic data. On completion of my bachelor's, I joined Felipe's biostratigraphy team at the Colombian Petroleum Institute, where I worked for two and a half years as a junior palynologist analyzing Cretaceous pollen, spores and dinocysts from different sedimentary basins in Colombia.

Afterwards, I headed to the Smithsonian Tropical Research Institute in Panama to intern at Carlos Jaramillo's lab for two years, where I conducted research on Late Cretaceous dinocyst taxonomy and participated in several geological and palaeontological field trips across Panama. During my PhD studies at Missouri S&T under the supervision of Francisca Oboh-Ikuenobe and Carlos Jaramillo, I studied the Neogene marine palynological record in the tropical Americas to improve the paleoenvironmental and biostratigraphical knowledge of the region.

After finishing my PhD, I returned to the Colombian Petroleum Institute to perform a biostratigraphic characterization of several Neogene marine sequences in the Colombian Caribbean using dinoflagellate cysts. Since last July, I undertook an Assistant Professor position in the Department of Geosciences, Universidad Nacional de Colombia.

I am honored to be nominated as Director-at-Large for AASP - The Palynological Society after having the privilege of serving as student Director-at-Large (2020-2022) and participating in the organization of the 53rd and 54th Annual Meetings. I look forward to continue contributing to our society and to meeting you at Montpellier or any of the several annual meetings to come.

Eduardo Custódio Gasparino

Director-at-large



Introduction - Eduardo Custódio Gasparino is a distinguished Professor with a profound passion for Palynology. His career, marked by excellence in research, teaching, and service, has

significantly contributed to Actuopalynology, Pollen Flora, and Plant Morphology.

Academic Background - Born on August 2nd 1979, Eduardo Custódio Gasparino began his academic journey at São Paulo State University, where he earned a bachelor's degree in Biology with honors. He pursued his Doctoral Degree at the Botany Institute of São Paulo, specializing in Palynology. Dr. Gasparino earned his doctorate in 2008, and his groundbreaking dissertation, titled "Palynotaxonomy of Brazilian species of Gesneriaceae," explored the pollen grains of the family. **Professional Achievements** - Dr. Eduardo Gasparino has built an impressive career as an Associate Professor. He has published extensively in renowned academic journals, focusing on Palynology, Pollen grains, and Pollen Flora. His research has advanced the understanding of Pollen Morphology and influenced various applied areas of Palynology.

In addition to his academic work, Eduardo has actively contributed to the academic community by participating in conferences, reviewing journals, and serving on review boards and projects in other botany sub-areas. He has held roles such as undergraduate course coordinator, deputy head of the department, committee member, and president of the Brazilian palynology nucleus, demonstrating a commitment to promoting excellence in academia. Dr. Gasparino serves as a supervisor in the Postgraduate Programs in Agronomy (Genetics and Plant Improvement) at Unesp/ FCAV, Jaboticabal - SP, and Comparative Biology at USP/Ribeirão Preto-SP. He is also the coordinator and responsible for the Research Group: Palynology and Morphology of Embryophytes.

Teaching Philosophy - Dr. Eduardo Gasparino is a dedicated educator committed to inspiring the next generation of Palynology professionals. He believes in quality scientific research, promoting critical thinking, and preserving and conserving plant biodiversity. Eduardo Gasparino has taught various courses, including Plant Morphology, Palynology, Floral and Pollination Biology, and Plant Systematics. His dynamic teaching style has consistently won praise from students.

Notable Publications - Dr. Eduardo Gasparino has authored/co-authored numerous influential publications, including:

• "Pollen morphology characterization of Groppo, Kallunki & Pirani, a new genus of Rutaceae, and its phylogenetically related species." Palynology. 2023 • "Evolution of pollen grain morphology in Amorimia and allies evidences the importance of palynological apomorphies and homoplasies in Malpighiaceae systematics." Plant Ecology and Evolution. 2023

• "Pollen morphology of *Ligeriinae* Hanst. (Gesneriaceae): Diagnostic features and their systematic importance." Review of Palaeobotany and Palynology. 2021

• "Polyads types of the mimosoid clade (Caesalpinioideae, Fabaceae): size and pollen numbers variations." Grana. 2020

• "Pollen types of Sapindaceae from Brazilian forest fragments: apertural variation." Acta Botanica Brasilica. 2020

• "Pollen morphology in Brazilian species of *Codonanthe* (Mart.) Hanst. and *Nematanthus* Schrader (Gesneriaceae)." Grana. 2013

His work has been widely cited and has contributed to the ongoing discourse in Palynology.

Awards and Honors - In recognition of his outstanding contributions, Eduardo Gasparino has received awards and honors from students. Additionally, his mentors have received awards and achieved recognition for their projects. These accolades highlight his impact in the field and underscore his standing among peers.

Current Research Projects - Dr. Eduardo Gasparino is currently involved in palynology projects in the Brazilian Cerrado, analyzing the morphology of pollen grains from different botanical families. These projects aim to characterize pollen, providing support for various areas of palynology and representing his ongoing commitment to advancing knowledge in this scientific field.

Conclusion - As Dr. Eduardo Gasparino continues to make significant advances in Palynology, he remains dedicated to contributing to pollen morphology studies and supporting researchers. His passion for botany and palynology, combined with his commitment to academic excellence, make him a valuable asset to the university and the scientific community.



Paula Narvaez Director-at-large

I am currently an Associate Researcher at the National Scientific and Technical Research Council from Argentina (CONICET, since 2012) working in the Argentine Institute of Snow Research, Glaciology, and

Environmental Sciences (IANIGLA) at Mendoza province. My research is mostly focused on continental Cretaceous and Paleogene palynology from northern and central Argentina, with its environmental and climatic implications.

I began my training in palynology during my Ph.D. studies at the Universidad Nacional de Cuyo (Argentina, 2004–2009). The following year, I was awarded a postdoctoral fellowship from the Smithsonian Institution under the supervision of Dr. Carlos Jaramillo at the Smithsonian Tropical Research Institute (Panama), and later also with Dr. Caroline Strömberg at the University of Washington (Seattle, USA). During that time (2010-2011), I had the opportunity to broaden my palynological scope to include amazing palynofloral assemblages from K-Pg samples of Colombia. With all the data collected in conjunction with several researchers and students, a paper on the floral extinction after the end-Cretaceous catastrophic event and the origin of modern Neotropical rainforests was published in the Science journal in 2021.

I have also done three long research stays at the Universidad de Chile collaborating with Dr. Felipe Hinojosa in the study of Miocene samples from the central Chilean coast (2016–2018). And recently, during most of 2023 I have worked as a Research Assistant in Palynology in the Natural History Museum (London, UK), as part of a NERC project lead by Prof. Richard Twitchett and the AASP-TPS's very own secretary Stephen Stukins. I was part of an amazing project aiming to see the plant community changes during the Early Jurassic (Toarcian Oceanic Anoxic Event) through a high resolution study that involved fieldtrip in the Yorkshire coast (UK), laboratory processing, and microscope and data analysis.

My connection with AASP-TPS started in 2013 when I became a member. I also had a sideways collaboration during the 47th AASP-TPS Annual Meeting held together with the International Palaeontological Congress in Mendoza (2014), being part of the organizing committee of the latter. I look forward to getting more involved with the AASP-TPS and serve all the members that constitute the most important international palynological community.

Student Director-at-Large



Josh Barna

Student -director-at-large

The pitching and rolling of the ship were taking its toll; claustrophobia and panic were setting in. Nauseous and soaked with sweat, escape from this bulky neoprene prison couldn't wait one

second longer. I had to get out. I clawed clumsily at the zipper tab of my survival suit with thickly gloved hands but couldn't manage to free myself. I closed my eyes and took a few deep breaths, trying to regain my composure. After finally centering myself, I opened my eyes and found myself back in the central lab of the R/V Sikuliaq, the University of Alaska Fairbanks's research icebreaker. The captain was still droning on about last-minute safety protocol before leaving Nome on a 5-week cruise to collect sediment cores from the Bering Sea shelf.

I had finished my master's degree in Geoscience from the University of Alaska Fairbanks only a few weeks earlier, employing palynology to reconstruct the paleoclimate and land use history in a region of northern Mongolia. I decided that jumping straight into a PhD on this new NSF-funded project was something I couldn't pass up. Not only will I have a chance to analyze the changing vegetation communities of the emergent Bering Land Bridge during the Last Glacial Maximum, but I will also have an opportunity to expand my analytical skillset beyond pollen using additional proxies I studied at the Urbino Summer School in Paleoclimatology in July 2023, including stable isotopes in leaf waxes, GDGTs, and sedimentary DNA.

Over the past three summers, I have worked with rural Alaskan high school students in a fieldwork-oriented geoscience camp, encouraging interest in STEM fields (but especially Geoscience). Before this summer camp, most students had never traveled outside Alaska, and many had barely left their remote villages. Witnessing the students have that "aha moment" as classwork and fieldwork collided and fostered an understanding of geological concepts was one of the most rewarding experiences of my academic career to date. If selected as the Student Director-at-large of AASP, I will work tirelessly to stoke interest in palynology and promote the interests of The Palynological Society in addition to a broader push for more inclusion into STEM fields.

Thank you for your consideration!



Jamie Alumbaugh

Student -director-at-large

I am a Ph.D. candidate and palynologist in the Department of Geography at the University of Tennessee, Knoxville (UTK; USA), defending my dissertation in May 2024. My broad inter-

est is in human-environment interactions in southern hemisphere tropical ecosystems. I currently study montane grasslands in Ecuador and Costa Rica through environmental proxies from lake sediments dating back to the Pleistocene. In addition to pollen, my toolkit includes non-pollen palynomorphs, macroscopic charcoal, ancient sedimentary DNA (sedaDNA), stable carbon isotopes, and small mammal paleontology.

I am an active member of my department, having served as a student representative on a recent hiring committee for a tenure-track position, our last search committee for department head, and on the 2020 committee for revising our graduate handbook. I also currently serve on the committee for organizing special events. After the COVID-19 pandemic allowed a return to in-person gatherings, I established a weekly departmental coffee hour to help revive our sense of community- a small gesture that has led to many insightful conversations, laughs, and an improved sense of cohesion among our faculty and grads. Beyond the university, I serve on the Honor's Committee of the Paleoenvironmental Change specialty group of the American Association of Geographers.

My sense of service also extends to how I interact with students. I have been a teaching assistant for several courses ranging in geology, biology, and geography, and have served as a primary instructor for a 300-level course on Natural Hazards. Within the Laboratory of Paleoenvironmental Research at UTK, I recently mentored an undergraduate student working on fungal spores from lake sediments under a grant funded by the Tennessee Valley Authority, and have trained other students on macroscopic charcoal processing and analysis. I routinely advise my students who are preparing for graduate school, offering edits on admissions letters and helping them find our opportunities for laboratory experience.

I had the privilege of attending the AASP-TPS/CIMP joint meeting in Lexington, Kentucky in June 2023, and was struck by how welcoming and supportive this community is. I would be honored to contribute to AASP-TPS as your Student Director At-Large. One of this organization's strengths is its ability to bring different perspectives together. We have a fantastic international community focusing on a myriad of times and places, and building spaces where we can share our experiences is vital. In addition to our yearly in-person meetings, I would like to facilitate Zoom sessions throughout the year for student members to discuss salient topics such as grant applications, job options, laboratory successes and woes, and publishing. I also look forward to coordinating with the rest of the committee to find and share professional opportunities for students and early career researchers, and to promote the publications and successes of our members.



Shaan Heydenrych

Student -director-at-large

During my undergraduate studies at Rhodes University in South Africa, I discovered my passion for palynology and paleoenvironmental interpretation in a micropalaeontology course.

Subsequently, I pursued a BSc Honours year at the University of Pretoria, where my research

focused on reconstructing the paleoenvironment of Permian coalfields in South Africa using terrestrial palynomorphs.

Following this, I undertook a Master's degree in Geoscience at Keele University in the United Kingdom. My research during this period centered on Cretaceous sea level changes in the Vocontian Basin in France, with a specific focus on palynomorphs from a shallow marine carbonate shelf. Both my Honours and Master's research projects were conducted under the guidance of Professor Annette Goetz, with additional supervision during my Master's year by Dr. Michael Montenari.

Since 2021 I have been doing my Ph.D. in Geology at the University of Aberdeen. My research, supervised by Prof. David Jolley, focuses on the palynology and biostratigraphy of Triassic sediments from the Norwegian North Sea and Barents Sea. My project has provided me with the opportunity to acquire new palynological laboratory techniques and expand my knowledge and expertise in the realm of palynomorphs.

I have been an active student member of The Palynological Society for the last 2 years attending the 2 previous AGM's in Colombia and Kentucky. This was made possible through being a recipient of the Student Travel Grant from the society. The Palynological Society has provided me with invaluable experiences to present and receive feedback on my work and to meet fellow palynology students, as well as academic and industry experts. The society has been the driving force behind the feedback and mentorship that has shaped my project and created a friendly and open community that nurtures research.

I am running for the Student Director at Large position as I would like to do my part to give back to the society that has done so much for my academic and personal development.

Report of the Annual Meeting 2023

By Cortland Eble

Dates – June 6-10, 2023

Location – University of Kentucky, Lexington, Kentucky, USA

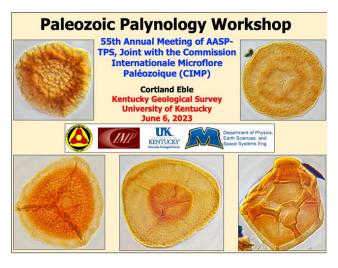
The 55th annual meeting of the Palynological Society was held in Lexington, Kentucky (USA) on June 6 – 10, 2023. The meeting was "hybrid" in design to accommodate people attending in person and on-line. On Tuesday, June 6th two short courses were convened.

1) Cenozoic Fungal Palynology in honor of Bill Elsik, Jan Jansonius, and Ramajant Kalkutkar, and presented by the "Fungi in a Warmer World" team. Participants learned modern methods of fungal identification and analyses in this microscopy-rich workshop.



2) CIMP-sponsored overview of local Paleozoic palynology and presented by Cortland Eble. Participants learned methods used for biostratigraphic and paleoecologic applications to Paleozoic strata and techniques used to extract/isolate spores and pollen from coal and rocks.

3) Pre-meeting field trip, June 7th– The pre-meeting field trip showcased Pennsylvanian geology and paleobotany. Roadcut exposures along KY highway 15 near Jackson, Kentucky, located approximately 100 km southeast of Lexington, provide excellent exposures of upper Lower and lower Middle Pennsylvanian strata on the western margin of the central Appalachian basin. Controls on coal formation and Pennsylvanian stratigraphy, and facies and sequence stratigraphic surfaces, including examples of marine flooding surfaces and scour-based sequence boundaries were discussed at field trip stops.







Pre-meeting field trip participants, leaders, and drivers.

Icebreaker - On the evening of Wednesday, June 7th, the meeting icebreaker was held at the Native Café, a popular outdoor venue in Lexington.



Early career event - Thursday and Friday, June 8-9th, were dedicated to oral and poster presentations, with an embedded student and early career researcher event each day. On Thursday, student enjoyed lunch as a local artisan pizza establishment, PieTana, co-sponsored by the Paleontological Society.

Conference Dinner - The Conference dinner at the Ethereal Brewery's public house in the downtown Lexington was a hit, with outstanding food and conversation in a low-key setting.



The business luncheon - featured local barbeque and the presentation of awards, followed by an afternoon of wonderful presentations. The main part of the meeting wrapped up with a mentoring event for students and early ECRs.





Post-meeting field trip - On Saturday, June 10th, a post-meeting field trip to Natural Bridge and Red River Gorge was run with 15 participants. Natural Bridge State Park Nature Preserve covers approximately 1,188 acres in Powell County, Kentucky. The preserve lies within the boundaries of Natural Bridge State Resort Park. This area was dedicated into the nature preserves system to protect a significant geological system and rare species habitat.

In east-central Kentucky, the Red River Gorge sits tucked away inside the expansive Daniel Boone National Forest. The historic Red River cuts through the gorge, and over millions of years carved the over 150 sandstone arches within the geological area's 29,000 acres.



What's this palynomorph?

In the December 2021 issue of the Newsletter (Vol. 54, Nr.4), we launched a new segment "What's this palynomorph?" where our readers can submit pictures of unidentified palynomorphs which they wish to share with the AASP-TPS community. I hope in this way we can downsize the Palynomorph spp. group and foster collaboration between palynologists across the stratigraphic column. Below, you will find the first submissions!

If you recognise any of the palynomorphs in the pictures below, or have a 'golden tip' that could lead to their correct identification, please don't hesitate and submit your suggestions to aaspnews@gmail.com entitled "Mystery Palynomorph" and clearly indicate which Palynomorph sp. you are providing information for. We will pass on the information to the authors of the images to initiate discussions.

This month, Shaan Heydenrych sent the following message and microphotographs.

"I found some weird things in digitised Triassic slides from the NPD and Niall suggested I send them in for the newsletter so that people can give their opinion on them. The slides are from the 80s and from core. They have a range of contamination from caving and these weird things are also contamination (I'm assuming modern lab contamination) but I can't quite figure out what they are. They have a central body and 8 legs/flagella. They are also huge."



AASP FOUNDATION CENTURY CLUB



What?

The Century Club of the American Association of Stratigraphic Palynologists Foundation is an organization founded by the Trustees of the Foundation in order to provide persons with the opportunity to support activities of the AASP Foundation.

Why?

1. To develop an established level of giving that will continue to provide a solid financial base for the Foundation.

2. To provide unrestricted funds to support the various publishing activities of the Foundation.

3. To provide a meaningful organization and method of recognition of dedicated "friends" of the AASP Foundation.

How?

Your tax-deductible contribution of \$100 or more to the AASP Foundation entitles you to belong to the Century Club. The 2023. "membership" drive is on now. Your contribution may be made by personal check or by a pledge which is **payable on or before December 31, 2023.**

Join!

To join the Century Club, simply complete the attached Contribution/Pledge Form and mail to the address listed below.

The AASP Foundation is a 501 (c)(3) not-for-profit, public organization registered in the United States. This means that contributions to the AASP Foundation are fully deductible on your U.S. Federal Income Tax return. Also, many employers have a matching gift program whereby they match your personal gift to not-for-profit organizations. It is well worth the effort to explore this possibility concerning your gift to the AASP Foundation.

2023 AASP Foundation Century Club Contribution Form

Mail to: Thomas D. Demchuck AASP Foundation Chair and Trustee 14419 Lotusbriar Ln. Houston, TX 77077

Ν	ar	n	e:	

Address: _

Contribution Enclosed: \$_____ I wish to pledge: \$____
