International Organisation of Palaeobotany

IOP NEWSLETTER 126

November 2021

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Letter from the president

Hello colleagues,

As those of us in the northern hemisphere prepare for winter conditions, we hope that those of you in the southern hemisphere can enjoy the opportunity for some field excursions, with ample caution against Covid 19. It has been nice to interact internationally with colleagues via video conferencing, but I think many of us share the desire for restoration of in-person conferences. Toward this goal, plans are well underway for the 11th European Paleobotanical and Palynological Conference (EPPC) to be held in person in Stockholm Sweden, 19–22 June, 2022. Please see details of venue, and procedures for registration, below. Early registration is encouraged because of limited capacity. IOP plans to hold a business meeting during EPPC.

We currently seek nominations for honorary members who may be announced at this venue. According to our by-laws, "Honorary Membership in IOP may be extended to individuals who have made exceptional contributions to palaeobotany (especially through a career long effort) and are now retired, or have given exceptional service to the IOP, or to regional palaeobotanical organisations but are now retired from that role. Honorary members will have free membership of IOP for life and enjoy all the benefits of a fully paid member." Nominations, accompanied by the names of two proposers, and a brief statement of justification, should be communicated to Lutz Kunzmann and/or me for consideration by the executive committee. Our next honorary members will be announced in conjunction with EPPC.

In this newsletter we are happy to highlight the paleobotanical history, collections and research programs of the Swedish Museum of Natural History, Stockholm, with an invited article by Stephen McLoughlin and Vivi Vajda. We would like to continue this series, featuring various institutions internationally, in forthcoming newsletters. Please consider providing a summary of paleobotanical history, collections, and activities of your own institution.

With best regards,

Steve

Steven Manchester (Gainesville, FL, USA), IOP President

Meeting report

Palaeobotany conference 2021 of the Palaeontological Society of China held in Changchun, Jilin Province

The joint academic conference 2021 of Palaeobotany Branch of the Palaeontological Society of China (PSC) and Jiangsu Province Palaeontological Society (JSPS) was held in Changchun, Jilin Province in 9-14 July. The conference was themed as “Green vegetation vs. Deep time environment” and undertaken by Paleontology and Stratigraphy Research Center of Jilin University. Mr Bian Tie, vice president of Jilin University addressed in the conference.

Group photo of participants of the joint academic conference 2021 of Palaeobotany Branch of the Palaeontological Society of China and Jiangsu Province Palaeontological Society

The joint conference included two-day’s indoor reporting and two-day’s post-meeting fieldwork. There were 187 participants participating from 43 units of universities, institutes, geology surveys, museums, and publishing houses. Ninety-three academic abstracts were received and published as an abstract collection. Eighty-six oral and 21 poster presentations were reported in the joint conference. Excellent oral and poster presentations were selected and awarded to about 1/3 of participant graduates.

The Palaeobotany Branch of the PSC holds an academic meeting every two years. The last one, the 9th Palaeobotany members conference of the PSC, was held in Zigui, Hubei Province in November of 2018. The present joint meeting was postponed on account of the COVID-19 pandemic, and has been the first national palaeobotanical meeting since 2018. Next one will be in Chang’an Univeristy (Xi’an) in 2023.

Two photos from post-conference fieldwork in Yanji, Jilin Province.

Palaeobotanical collections and research at the Swedish Museum of Natural History

Stephen McLoughlin & Vivi Vajda

The Swedish Museum of Natural History (Naturhistoriska riksmuseet: NRM), under the authority of the Swedish Ministry of Culture, is the largest museum in Sweden. Although officially founded in 1819 by the Royal Swedish Academy of Sciences, some collections held at the museum date back to donations received by the academy following its foundation in 1739. The museum includes six research departments (Palaeobiology, Zoology, Botany, Geology, Bioinformatics, and Environmental Science) along with separate divisions for exhibitions and education. Palaeobotanical research is currently carried out within the Department of Palaeobiology (PAL). The department's homepage can be found at: https://www.nrm.se/en/forskningochsamlingar/paleobiologi.9000584.html.

The department hosts about 2 million palaeontological specimens; about 400,000 of these are fossil plants, algae and fungi—making this one of the world's largest palaeobotanical resources. The department currently hosts 24 palaeontologists, of which seven are full-time permanent employees (Vajda & Skovsted, 2021). The remainder are emeriti, students, postdocs and researchers funded through scholarships, fellowships and other grants.

Main building of the Swedish Museum of Natural History (Naturhistoriska riksmuseet)

History

Palaeontological curation and research became established at NRM in the mid-1800s. The Department of Palaeobotany was established in 1884–85 to accommodate both fossil plants collected on various Swedish expeditions to the Arctic and the museum's extant cryptogam and gymnosperm collections. Adolf E. Nordenskiöld, generally best known for his discovery of the Northeast Passage, was instrumental in the establishment of the department and the

appointment of Alfred G. Nathorst as its first professor. The department moved from its original location in the central city area of Stockholm to its present site in the inner northern suburb of Frescati, beside Stockholm University, the Royal Academy and Stockholm Botanical Gardens (Bergianska Trädgården), in 1915. The core of the fossil plant collections was assembled through the work of the museum's early professors of palaeobotany (namely A.G. Nathorst and T. Halle) in the late 19th and early 20th centuries when the museum was under the auspices of the Royal Swedish Academy of Sciences. However, large-scale collecting expeditions have continued to the present day. The collections have also been increased by donations and inter-institutional exchanges of fossils, and in some cases by direct purchases of material, over the past 200 years.

Alfred G. Nathorst, Thore G. Halle and Britta Lundblad

The museum's administration was transferred to the Ministry of Culture in 1965. As part of a restructuring of administrative units within the museum, the departments of Palaeobotany and Palaeozology were merged in 2013 to create the Department of Palaeobiology (PAL). Since its inception, the Palaeobotany (later Palaeobiology) Department has had only six administrative/research heads: Alfred G. Nathorst (1885–1917), Thore G. Halle (1918–1950), Olof H. Selling (1951–1966), Britta Lundblad (1966–1986), Else Marie Friis (1987–2016), and Vivi Vajda (2016–present). A detailed history of the establishment and early development of the Palaeobotany Department was published by Nathorst (1916). An updated history was prepared in manuscript form by T.G. Halle for the VII International Botanical Congress held in Stockholm, in 1950, but was never published. An extended and updated history of the department is planned for publication within the abstract volume of the 11th European Palaeobotanical and Palynological Conference to be held in Stockholm in June, 2022.

Strengths of the palaeobotanical collections

The palaeobotanical collections are broadly representative of the evolution of the world's land flora since the mid-Palaeozoic. Beyond this, the collections also include examples of Proterozoic to modern bacterial, fungal, algal, and plant-hosted trace fossils from all parts of the Earth. Of particular importance are some of the historical collections recovered during expeditions by early researchers associated with the museum (e.g., Otto Nordenskiöld, Gunnar Andersson, Alfred Nathorst, and Thore Halle). Space precludes presenting a full list of the palaeobotanical collections here. Some key collections are documented on the department's website https://www.nrm.se/en/forskningochsamlingar/paleobiologi.9000584.html
and more specifically on the fossil plant collections page:
https://www.nrm.se/en/forskningochsamlingar/paleobiologi/samlingar/databaser.864.html

A list of, arguably, the top 25 most important collections hosted by the department includes:

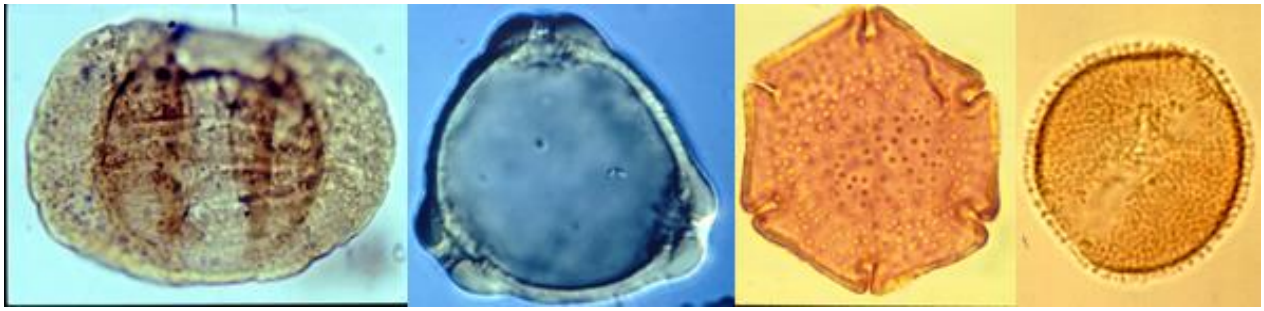
1. Devonian early land plant assemblages from Spitsbergen and Bear Island in the Norwegian Artic, along with material from Röragen in mainland Norway.
2. Extensive collections of Carboniferous plants from western Europe associated with coal-bearing deposits.
3. Small but important collections of coal balls, permineralized peats, leaf mats and sinter deposits with anatomically preserved plants from the coalfields of western Europe, Rhynie (Scotland), Grand-Croix (France), Frans Josefs Land (Russia), Homevale (Australia), and the Prince Charles Mountains (Antarctica).
4. A large (c. 10,000 specimens) collection of Permian plants from China associated with the historical collections of Gunnar Andersson and the publications of Thore Halle (Halle 1927) that probably represent the largest collection of Chinese fossil plants outside of China.
5. A modest but growing collection of Permian plants from various sites in eastern Australia.
6. Substantial collections of Triassic plants from central Europe including, for example, from Thale, Lunz and Neuewelt.

7. Very extensive (c. 25000 specimens) collections of Triassic–Jurassic compression-impression fossils from Skåne (southern Sweden) that track the vegetational changes across the Tr-J boundary.
8. Significant impression floras from numerous Lower to Upper Triassic deposits of eastern and southern Australia.
9. Substantial collections of Jurassic plants from various sites in China.
10. Significant Jurassic compression floras from Yorkshire, UK.
11. An important historical collection recovered from Jurassic strata of Hope Bay, Antarctic Peninsula, collected by the Swedish Antarctic Expedition of 1901–1904, and initially studied by Halle (1913).
12. Both Lower and Upper Cretaceous plant assemblages from Quedlingburg, Germany.
13. Extensive bulk plant-bearing siltstone and extracted and mounted mesofossil assemblages from Åsen, southern Sweden.
14. A modest collection of plant impressions from the Cretaceous of Portugal.
15. Various Cretaceous to Cenozoic assemblages from the United States.
16. Notable Paleogene polar plant assemblages from Greenland and Spitsbergen.
17. Neogene plant successions from Iceland that track the evolution of vegetation and climate in the North Atlantic over the past 15 million years.
18. Small but important Cenozoic assemblages from sites in various parts of the world that are now impossible, or difficult, to access (e.g., from Novaya Zemlya, Japan, Georgia, Albania, Greece, Egypt, Cameroon, Argentina, Chile and the Antarctic Peninsula).
19. Large collections of post-glacial Holocene calcretes and peats from various sites in Sweden that enable tracking of the vegetational changes in Scandinavia following deglaciation.
20. An extensive, but little-studied fossil wood collection containing material of various ages from diverse localities around the world.

21. The H.-J. Schweitzer Collection of fossil plants containing important early land plant assemblages from Germany and the Arctic, and Triassic-Jurassic assemblages from Iran and Afghanistan.

22. A substantial slide collection of thin-sectioned permineralized plants, cuticle preparations, and spore-pollen mounts, together with a large collection of comparative preparations of modern plants.
23. Several thousand strew slides of spore-pollen assemblages used largely for palynostratigraphic appraisal of Mesozoic strata in southern Sweden.
24. A large collection of modern diatom samples gathered from marine and fresh waters across the globe.
25. Modest collections of calcareous and carbonaceous algal remains mostly of Silurian to Triassic age from northern Europe.

The PAL collections contain a large number of type specimens spanning all geological time periods and most major plant groups. At present, about 95% of the palaeobotanical collections are registered within a Paradox database. Discussions are ongoing in regard to migrating this information to an alternative web-searchable database. At the same time, an intensive campaign to photograph key components of the collection aims to make illustrations of the fossil archives available to external researchers and the broader public.



Facilities

The PAL department hosts a broad range of modern equipment and laboratories that can be used by visitors under the supervision of staff. Key facilities include recently refurbished HF, Acetic Acid and H_2O_2 laboratories for processing plant mesofossils, cuticles, palynomorphs, and phosphatized remains. The department also hosts separate laboratories for rock cutting and polishing, photography, fungal culturing and slide preparation. The department has a dedicated room for brightfield, polarized and fluorescent incident and transmitted light microscopy, along with two workstations dedicated to manipulation of tomographic data. The department also has an extensive library and reprint collection of historical palaeobotanical literature. The research departments of the museum share usage of a centralized SEM facility. The museum's geology department also hosts a broad range of analytical facilities within NORDSIM (https://www.nrm.se/en/forskningochsamlingar/geovetenskap/nordsim.904.html) and the

Vegacentre (https://www.nrm.se/en/forskningochsamlingar/geovetenskap/vegacentret.8999657.html) that can be utilized by visiting researchers.

Current research

Palaeobotanical research at NRM PAL deals with questions spanning the evolution of plant and fungal life from the earliest unicellular microbes that helped oxygenate the Earth's atmosphere to the origins of modern equatorial to polar and deep biosphere to alpine ecosystems. Historically, the museum has strongly targeted research on Swedish fossils and high-latitude palaeofloras of both the northern and southern hemispheres. Research generally adopts an interdisciplinary approach, integrating morphological and anatomical data with, sedimentology, biogeochemistry, climate modeling, and phylogenetic methods to answer questions related to Earth's deep past and plant evolution. Research at the department is also targeting the response of individual plant groups and whole ecosystems to global environmental crises and the manner of vegetation recovery in the aftermath of mass extinctions.

Staff of PAL regularly carry out expeditions to enrich the collections in fossil materials. These expeditions are undertaken mostly as part of current research projects. Current palaeobotanical research in the department is focused around six themes:

1. The response of terrestrial communities (utilizing plant macrofossils, palynomorphs and plant-insect interactions) to the Permian-Triassic and Triassic-Jurassic biotic crises.
2. The palynology of hyperthermal and marine anoxic events and asteroid impact crises (especially the Toarcian Anoxic Event, the end-Cretaceous extinction, and Paleogene hyperthermals).
3. Cretaceous mesofossils (especially charcoalified flowers, cones, cuticles, and megaspores) used for studies of palaeobiodiversity, early angiosperm evolution, and biostratigraphy.
4. The evolution of Mediterranean floras through the Cenozoic using character traits of fossils and extant plants integrated into biogeographic and palaeoclimatic frameworks.

5. Fossil bacteria and fungi—from subaerial epiphyllous and parasitic forms to saprotrophic and mycorrhizal forms of the shallow biosphere and to enigmatic ecosystems of bacteria and fungi of the deep crustal biosphere.
6. Cuticles, stomata and leaf form and their applications to CO_2 and palaeoclimate analysis from the late Palaeozoic to Neogene.

Staff of the Palaeobiology Department at the Swedish Museum of Natural History, 2021

Visitors

The PAL department hosts numerous research visitors each year. A book held in the department recording visitors extending back to 1904 includes favourable comments by many of the "leading lights" of palaeobotanical research over the entire course of the last century. Researchers wishing to work on the collections should contact the Head of Department or relevant curator well in advance of their visit to ensure that the timing is convenient and that facilities are available for their use. Visitors are provided with a workspace and access to the

facilities relevant to their work. We welcome our palaeobotanical colleagues to study our collections!

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Nathorst, A.G., 1916. *Naturhistoriska riksmuseets historia—dess uppkomst och utveckling*. Almqvist & Wiksells Boktryckeri–Aktiebolag, Stockholm, 35 pp.

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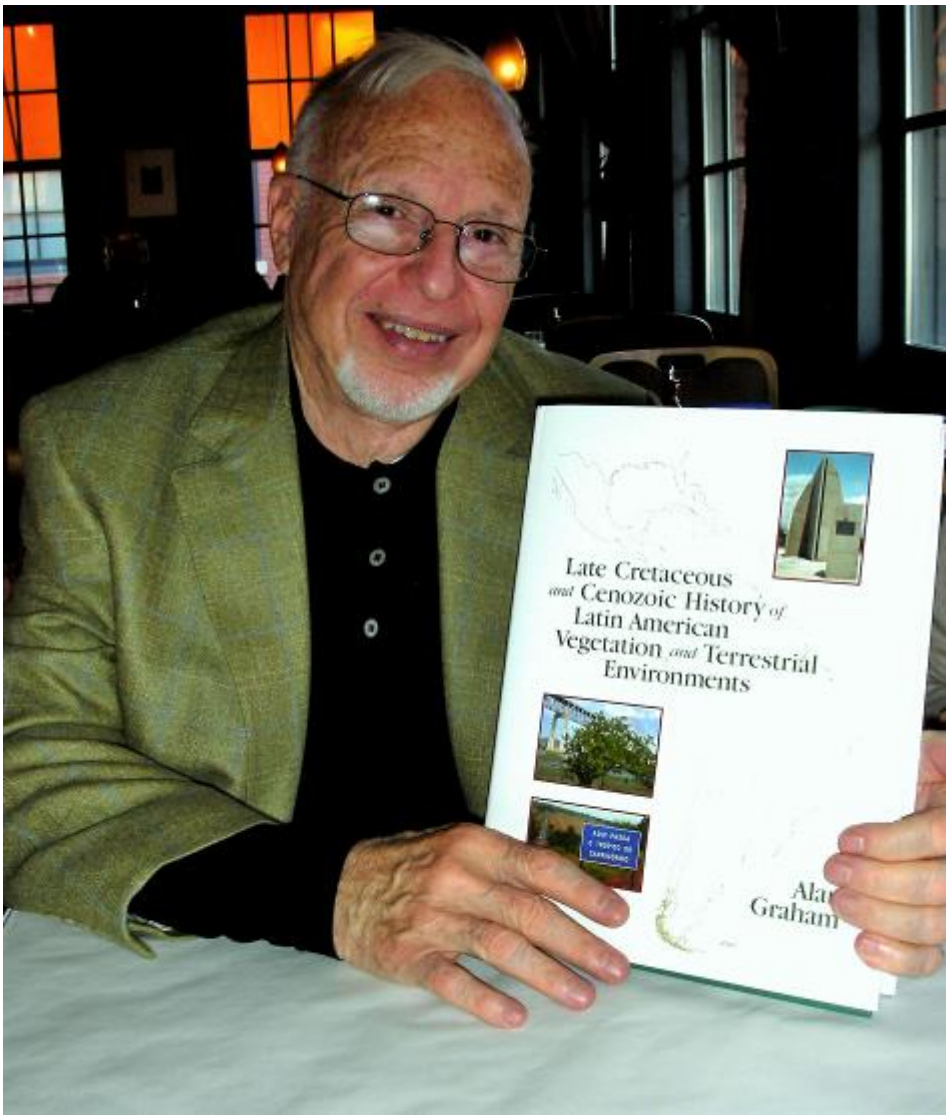
Obituary: Professor Alan Graham, 1934–2021

Alan K. Graham was born in Houston, Texas and received his Bachelor's and Master's degrees in Botany at the University of Texas (1956, 1958), supported by a full athletic tennis scholarship. He went to University of Michigan, Ann Arbor, to pursue his doctorate under the direction of paleobotanist, Chester Arnold. There he met his life-long companion and wife, Shirley. Following completion of their PhDs, they spent a year in post-doctoral work at Harvard University. They then moved to Kent State University in Ohio, where Alan held a joint faculty appointment in Botany and Geology for nearly 40 years. Upon retirement from Kent State, Alan and Shirley joined the Missouri Botanical Garden (St. Louis) as curators. There, Alan continued his research and was publishing articles and books for a further nineteen years. Professor Graham was nationally and internationally recognized for his research on fossil plants and vegetational history, particularly of the Neotropics.

Professor Graham had a long career investigating the forest history of the Cenozoic in Latin America, mostly Central America and the Caribbean. He carried out paleobotanical research in more than 15 countries, ranging from the Late Cretaceous to the Pliocene (e.g., Graham 1976, Graham 1985, Graham 1988a, Graham 1988b, Graham 1989, Graham 1990, Graham 1991a, Graham 1991b, Graham 1991c, Graham 1992, Graham 1993, Graham 1994, Graham et al. 2001, Graham and Jarzen 1969). His research is the only source of information we have today about the history of the highly diverse neotropical vegetation for many areas of Latin America. His numerous studies have given us a clear picture of former vegetation, showing that tropical forests are ever changing over geological time. He produced several outstanding books, besides more than 200 papers in peer-reviewed international journals. His two 2010 books "Late Cretaceous and Cenozoic History of Latin American Vegetation and Terrestrial Environments" and "A Natural History of the New World: The Ecology and Evolution of Plants in the Americas" (Graham 2010a, Graham 2010b) were an instant success giving the breadth of

knowledge that Professor Graham maintained and has become a required reference to anyone working in tropical America. His 2018 book "Land Bridges: Ancient Environments, Plant Migrations and New World Connections" (Graham 2018) presented a synthetic view of the biogeography of the Neotropics leading toward the establishment of one of the most biodiverse forests in the world. Besides his paleobotanical endeavors, he did extensive systematic work on several plant families including Rubiaceae, Asteraceae, Fabaceae, Lythraceae, and Rhizophoraceae (e.g., Graham 1977, Graham 1984, Graham 1987, Graham 1995, Graham 2006). A complete list of his publications can be found in a supplementary file (https://doi.org/10.25573/data.15035997.v1). He also maintained a useful web resource, "Catalog and Literature Guide for Cretaceous and Cenozoic Vascular Plants of the New World", which is accessible at
http://www.mobot.org/MOBOT/Research/CatalogFossil/catalog.shtml



Alan Graham presents his new book, St. Louis, MO, November 2010

During his tenure at Kent State University, Alan won several teaching awards and advised numerous undergraduate and graduate students. For many years he participated in an undergraduate assistantship program designed to provide support to undergraduate students and encourage their involvement in science. His excellent research program received National Science Foundation support for several decades. He has also participated in many organizations and panels over the years including the editorial board of Systematic Botany, and supporter of the Missouri Botanical Garden, Greenpeace and Nature Conservancy among many others. Together with Shirley, Alan made a significant contribution to the American Society for Plant Taxonomy providing research grants for Graduate Student Investigators. His awards include the Smithsonian José Cuatrecasas Medal, the Marsh Trust Award for Best Earth Sciences Book of the Year, the Asa Gray Award, the BSA Distinguished Merit and Fellow Awards of the Botanical Society of America, the Kent State Distinguished Scholar Award. He was also celebrated and honored with: "Paleobotany and Biogeography - A Festschrift for Alan Graham in his 80th year," Edited by W. D. Stevens, Olga Martha Montiel, and Peter Raven, 2014, published by Missouri Botanical Garden Press, 404 pp.

Alan Graham and Enrique Martínez-Hernández during field work in Veracruz, Mexico in 1967

Professor Graham also produced an amazing pollen reference collection including more than 25,000 prepared pollen slides of modern taxa, mostly from the neotropics, and thousands of pollen slides from his paleobotanical work. The collection also includes pollen residues and an

impressive collection of literature (over 16,000 reprints related primarily to the biology and geology of the New World with emphasis on Latin America). The collections began as part of an early palynology laboratory set up in the herbarium of the University of Texas in 1954 and expanded with original preparations and exchanges with numerous laboratories throughout the world. One special value of the modern reference component is that all original preparations are vouchered to a specific herbarium collection allowing identification of fossil material and specimens used in taxonomic studies to be verified. We are very fortunate that he decided to donate his collection to the Smithsonian Institution (Moreno et al. 2014).

Alan Graham and David M. Jarzen during the 5th IPC, Cambridge, England in 1980

Professor Graham was easy to talk to, and always open to new ideas and ways to analyze data. He leaves a personal legacy to all he knew. He was a loving and generous teacher and father, a mentor to his many students, including more than 350 whom he guided through 12 summers of "Biological Field Studies in Mexico and the American West", a scholar, world traveler, and one who touched lives over many decades with his friendship and erudite humor.

An expanded tribute to the memory of Professor Graham, also including personal recollections of his student, David M. Jarzen, and the literature sources cited above, was published by Carlos Jaramillo and David Jarzen in *Palynology*:
https://doi.org/10.1080/01916122.2021.1971121

David Jarzen, Carlos Jaramillo, and Steven Manchester

News from our members

Palaebotany collections at National Museum of Natural History in Paris

We are pleased to announce the reorganization of the MNHN's Paleobotany collections. They will be gathered together with all Paleontology collections, in an adjacent building, where conservation conditions will also be more optimal with temperature and humidity control. Please note that the collections will not be available for consultation between December 2021 and September 2022. Meanwhile, photographs of the types and historical specimens are still available online at the following address:
https://science.mnhn.fr/institution/mnhn/collection/f/item/search?lang=en_US

For any information or requests, please contact us directly.

All the Best,
Cédric Del Rio and Dario De Franceschi

View of the new facilities before the relocation

Cédric DEL RIO

I am very glad to share that I accepted a lecturer position in the Muséum national d'Histoire naturelle, Paris. This position consists on research, collection management and teaching in Paleobotany of terrestrial plants.

I obtained a PhD in Paleobotany in 2018 that was about the Icacinaceae of the Paleogene of the Paris Basin, at the MNHN. I then obtained a post-doctoral contract at Xishuangbanna, Yunnan, China, within the Paleoecology Research Group. I worked on the paleocarpological study of the Cenozoic flora of Southwest China and paleoenvironmental implications, from April 2019 to July 2021.

I'm interested in the evolution of floras during the Cenozoic. In particular, I am developing the study of migration and diversification of the tropical flora during and after the thermal maximum of the Paleocene-Eocene limit (PETM). I have worked on French (Paris Basin) and Chinese (Yunnan and Tibet) deposits, which allows me to address biogeographical questions on a Eurasian scale. The study of macro-remains, and in particular of fruits and seeds, constitutes the main part of my expertise.

My contact: cedric.del-rio@mnhn.fr

Nicolas GENTIS

I just started my first year as a PhD student in the Muséum national d'Histoire naturelle in Paris, under the supervision of Dario De Franceschi and Anaïs Boura. I'm studying the evolution of the climate and the paleobiogeography in the Bay of Bengal during the Cenozoic through the prism of fossil woods. I'm interested in wood anatomy and physiology of tropical trees. Monsoon is the climatic phenomenon I'm dealing with, as well as, concerning plants, a fair amount of Dipterocarpaceae. But I have to admit I'm quite excited by scientific mediation, graphic design and illustration

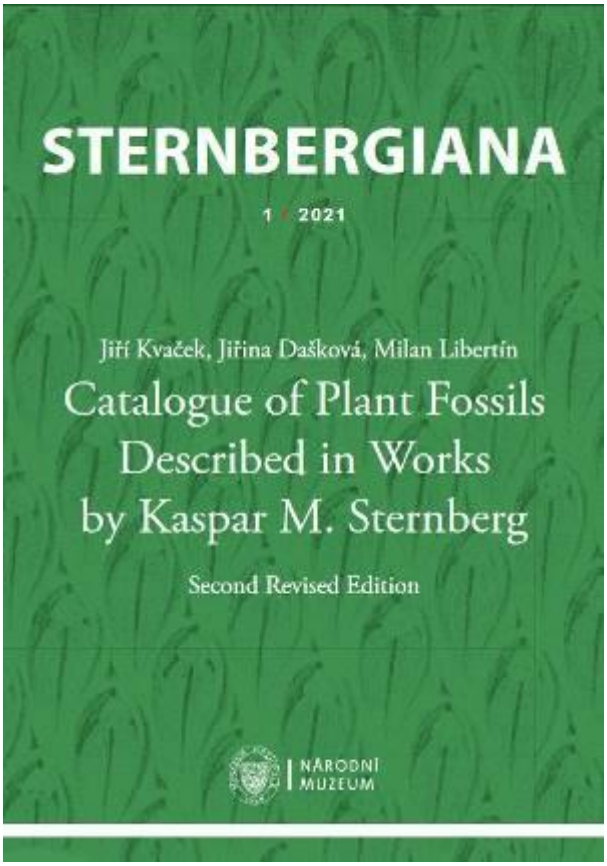
My contact: nicolas.gentis@edu.mnhn.fr

Book announcement: Second and revised edition of Sternberg's Plant Fossils

Jiří Kvaček, Jiřina Dašková, Milan Libertín (2021). Catalogue of plant fossils described in works by Kaspar M. Sternberg. Second revised edition. – Sternbergiana, 1: 1–309.

Abstract: This Catalogue is the second revised and expanded edition of the first edition, published in 1997 by J. Kvaček and Straková. The material presented in the original edition was completely revised nomenclaturally and newly photo-documented. This second edition provides as much updated information as it was possible to acquire. The Catalogue includes and reviews new nomenclatural and taxonomic assignments of Sternberg's type material and taxa published after 1997. It is clear that much of the impulse to conduct this new research came from the first edition of the Catalogue, as the community realized the type material is available for study. In summary, the second edition of the Catalogue comprises specimens that are types of 82 genera, 3 subgenera, 535 species and 14 varieties described by Kaspar Maria Count Sternberg and his collaborators: K.B. Presl and A.C.J. Corda. The type material of 32 genera, 233 species and 5 varieties is housed in the National Museum, Prague. The types of 79 species and 4 varieties have been located in other European museums. The rest of the type specimens are currently missing – destroyed, lost, or of unknown repository. For available specimens, more detailed taxonomic,

stratigraphic and geographical information is provided. All cases are noted where names in Sternberg's works have priority over names currently used, although the current names may be more widely known. Only two nomenclatural acts are published in the present work; they are designations of lectotypes for *Aspleniopteris difformis* Sternb. and *Cycadites salicifolius* C.PreSlin Sternberg.



Front page and Plate 5 from the new edition.

The first volume of STERNBERGIANA with the second edition of the Catalogue of Plant Fossils described in Works by Kaspar M. Sternberg in available for free download at: https://www.nm.cz/file/0540551344b8fe025e3c8cea6ce019fd/26478/Sternbergiana_-2021_1-1.pdf

Meeting announcments

11th European Palaeobotany and Palynology Conference
19–22 June, 2022, Stockholm, Sweden

Updated information!

Preparations are continuing for the 11th European Palaeobotany and Palynology conference to be held at Stockholm University and the Swedish Museum of Natural History 19th–22nd June, 2020.

The conference webpage for registration will be available in the next few weeks and the second circular will be distributed at that time. We are just finalizing some last-minute budgeting issues related to the fieldtrips and conference location.

Thirty-four symposia or research themes have been proposed for the conference. These range from the fossil record of early life to the pollen record of early human settlement, from fossil forests to marine phytoplankton, from amber to silicified ecosystems, from advanced tomography and phylogenetics to traditional morphotaxonomy and biostratigraphy, and everything in between.

A 1-day fossil nomenclature workshop will be held at the Museum on Sunday 19th June, limited to about 40 people—Organizers: Sandra Knapp s.knapp@nhm.ac.uk;
Nicholas Turland n.turland@bgbm.org; Kvaček Jiří jiri.kvacek@nm.cz;
Pat Herendeen pherendeen@chicagobotanic.org)

Fieldtrips

Five fieldtrips will be run in conjunction with the conference:

Pre-conference Fieldtrip F1: **Birka – an ancient Viking city in the Stockholm archipelago** (1-day excursion: boat trip and Viking archaeological site).

Post-conference Fieldtrip F2: **Uppsala – Hometown of Carl Linnaeus** (1-day excursion: Tour of Linnaeus' summer house, historical sites, botanic gardens, Evolution Museum in Uppsala, and Viking-age site).

Post-conference Fieldtrip 3. **Landscapes, vegetation and prehistory of northernmost Europe** (6-day trip to the forests and postglacial landscapes of the far north of Finland including the Sokli site where palynologists are basically rewriting the Late Quaternary history of Northern Europe).

Post-conference Fieldtrip 4. Skåne Palaeozoic-Mesozoic stratigraphy and palaeontology (4-day trip to examine Palaeozoic to Cretaceous strata and fossils, and Bronze-Age cultural sites, of southern Sweden).

Post-conference Fieldtrip 5. Boreal mire and forest ecosystems in Sweden. (1-day excursion to study the vegetation of Ryggmossen Nature Reserve—one of Uppland's largest, most typical, and undisturbed raised Holocene peat bogs).

Palaeo photo competition

The conference organizers invite registered participants to submit one or more of your best palaeobotanical/palynological photos for the Palaeo-Photo competition. These should be high-resolution images (minimum of 300 DPI at A4 size). Since these files are likely to be quite large, please submit your images via one of the free large file transfer services (e.g., WeTransfer: https://wetransfer.com/ or TransferNow: https://www.transfernow.net/en/send-large-files), or upload the file to Drop Box. Send the files or access permissions to **11th.eppc@gmail.com** . The

submitted photos will be printed out on poster paper and displayed in the scientific poster area at the conference for viewing by the participants. Prizes for the best three images will be handed out at the conference dinner.

Know your palaeobotanist/palynologist photo collage

The organizers also invite any palaeobotanists and palynologists (not just registered participants) to submit one or more images from past palaeobotanical meetings or historical photos of palaeobotanists/palynologists in the field or laboratory for the general interest of participants. These should also be high-resolution images (minimum of 300 DPI at A4 size) and be sent via the same methods outlined above. The photos should be accompanied by a short caption as to who/what the photo illustrates. The images will be printed on poster paper and displayed in the foyer of the conference for participants to guess the people/locations in the photos.

Conference dinner

The conference dinner will be held at the Vasa Museum in the shadow of the great wooden warship *Vasa*, which sank in 1628 on her maiden voyage and was raised from Stockholm harbour in the 1960s to become one of the city's greatest tourist attractions. The evening will include a guided tour of the museum with artefacts from life in the 1600s.

More details about the conference venue, symposia, fieldtrips, travel, and accommodation options will be forthcoming in the soon-to-be-released 2nd Circular. Full details will be available on the conference website, which we hope to have up and running and available for

registrations in the next few weeks. In the meantime, any updates about the conference will be posted to the conference Facebook page: https://www.facebook.com/11thEPPC . Any specific questions regarding the conference can be submitted to the conference organization's email address: 11th.eppc@gmail.com .

We look forward to seeing you during mid-summer week in Stockholm, 2022.

The 11th EPPC Organizing Committee

Organizing Committee Chair and facilities coordinator:

Vivi Vajda, Swedish Museum of Natural History

Organizing Committee Representatives:

Catarina Rydin, Stockholm University

Stephen McLoughlin, Swedish Museum of Natural History

Thomas Denk, Swedish Museum of Natural History, CPS

Björn Gedda, Swedish Museum of Natural History

Margret Steinthorsdottir, Swedish Museum of Natural History

Natasha Barbolini, University of Bergen/Stockholm University

Sam Slater, Swedish Museum of Natural History

Contact address for enquiries

Enquiries are best made via email to: **11th.eppc@gmail.com**

You can also keep up to date with information related to the conference at our Facebook page: **https://www.facebook.com/11thEPPC**

Naturhistoriska riksmuseet

Stockholms universitet

Save the Date - Friday May 6th to Sunday May 8th, 2022
MPC 2022 - Mid-Continent Paleobotanical Colloquium 2022
Oak Spring Garden Foundation, Upperville, Virginia

The 2022 MPC will be held on the 750-acre estate of the Oak Spring Garden Foundation (OSGF – see osgf.org), near Upperville in the rural Virginia Piedmont, from Friday May 6th to Sunday May 8th, 2022. Registration and accommodation will be free, but places need to be reserved by online registration that will open in January 2022. There will be no registration fee, or charges for accommodation or meals, but firm commitments of attendance are required for planning purposes. Participants who are not driving are asked to arrive at Dulles Airport (just west of Washington DC) – or to get to Dulles from downtown locations (advice will be provided on how to do that cost effectively). Transport (ca. 45 minute drive) will be arranged from Dulles to Oak Spring. For participants arriving on Thursday May 5th, or early on Friday May 6th, tours of the (interesting) landscape and (spectacular) library will be available during Friday. Arrival at Dulles no later than about 3.00pm on Friday May 6th is recommended.

The program will begin on Friday evening (May 6th) with a plenary lecture by Susana Magallon at 5.30pm, which will be followed by a mixer and dinner. The main program will be contributed papers on Saturday with a plenary lecture by Alejandra Gandolfo early on the Saturday evening (May 7th). Both plenary lectures will be taped and made available online. The Conference dinner will be on Saturday evening.

On Sunday (May 8th) there will be transport back to Dulles or into Washington DC. Those travelling into DC will have opportunities to visit the museums or National Botanical Garden on the Mall and after 5pm on Sunday (May 8th) the opportunity for a private tour of the Deep Time exhibit at the National Museum of Natural History led by Kirk Johnson and Scott Wing. Participants can stay over on Sunday evening at Oak Spring if that is helpful for their travel plans.

Save the Dates – First circular and request for expressions of interest

SENCKENBERG
world of biodiversity

Leibniz Association

Erika und Walter Datz-Stiftung

Invitation to joint meetings

Datz-Symposium

From functional traits to models – An interdisciplinary perspective on structure, functioning and evolution of ecosystems in deep-time

May 17-19, 2022; Dresden (Germany).

&

30th International Workshop on Plant Taphonomy

May 19-21, 2022; Dresden (Germany).

Dear colleagues,

We are pleased to announce that we organize two back-to-back meetings: a special symposium funded by the German Erika and Walther Datz Foundation and the annual international plant taphonomy workshop. They will take place at the Senckenberg Natural History Collections in Dresden, Germany.

Thematically, the Datz symposium engages on modern and interdisciplinary approaches to reconstruct structure, functioning and evolution of ecosystems in deep time based on the fossil record of plants and insects. In detail, the focus will be on various aspects of insect-plant interaction, plant functional traits and vegetation modelling. The symposium will be structured in four sessions that are supported by keynotes of internationally recognized scientists.

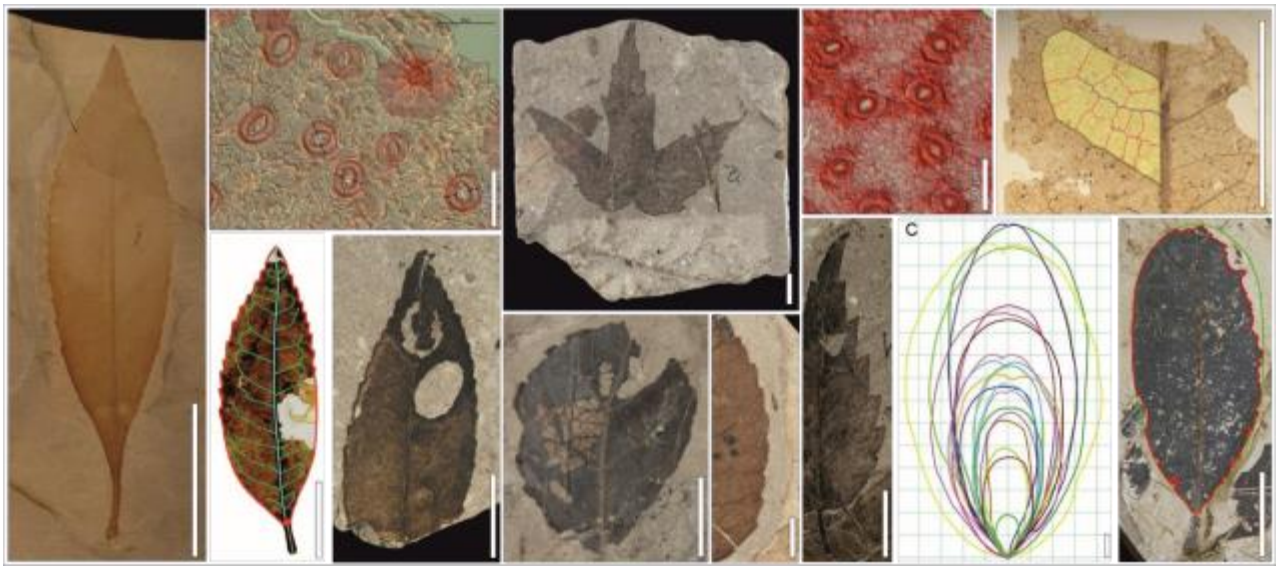
Session 1: ***The fossil record of insect herbivory pattern as key to insect-plant interaction and food web-structures in palaeoecosystems***.
Keynote: Conrad C. Labandeira (Smithsonian Institution, USA)

Session 2: ***Evolutionary history of insects – insights from the fossil record and evolutionary morphology.***
Keynote: Alexander Blanke (University of Bonn, Germany)

Session 3: ***Plant functional traits as key to environmental conditions and host plant characteristics.***
Keynote: Anita Roth-Nebelsick (State Museum of Natural History Stuttgart, Germany)

Session 4: ***Contributions of modelling to the reconstruction of palaeo-vegetation and trait-environment interactions.***

Keynote: Philipp Porada (University of Hamburg, Germany)



The International Workshop on Plant Taphonomy will focus on the general topic "Meaningfulness of fossil plant record: biases, pifalls and abominable uncertainties" but any other contributions to plant taphonomy are also welcome. The workshop will offer a one-day botanical excursion to a location in the vicinity of Dresden (please find options below).

Through the workshop character of both meetings, we will offer multiple opportunities for discussions and interdisciplinary exchange (e.g., round-table discussion).

Preliminary schedule:

Datz Symposium:

May 17:	Evening: Icebreaker, collection tour in institute
May 18:	Morning + afternoon: sessions 1–3
	Evening: guided city tour (walk)
May 19:	Morning: session 4 and final discussion

International Workshop on Plant Taphonomy:

May 19:	Afternoon: sessions
	Evening: joint meeting dinner
May 20:	Morning + afternoon: sessions
May 21:	Botanical excursions – options:
	"Tertiary" Forest in Cottbus (https://www.nvn-cottbus.de/tertiaerwald/)
	Forest Botanical Garden of TU Dresden (https://info.forstpark.de)
	National Park Saxon Switzerland (https://www.nationalpark-saechsische-schweiz.de)

Important information:

Venue: Institute building of the Senckenberg Natural History Collections Dresden, located in the district Dresden-Klotzsche, ca. 10 km far from city center, ca. 3 km from Dresden airport, ca. 15 km from Dresden main station, 4 km from the A4 / A13 highways.

Accomodation: Several hotels and pensions near the institute available.

Travel options: Dresden is connected by high-speed trains (ICE/IC) to, e.g., Frankfurt/M., Munich and Berlin, and by international trains (EC) to, e.g., Prague, Vienna and Budapest.Dresden airport is a destination for Lufthansa/Star Alliance, and some other international airlines and low-cost carriers.

Workshop fee: Costs for icebreaker, coffee/tea/lunch breaks are covered by the grant from the Datz Foundation. Participation on meeting dinner and botanical excursion is at one's own expense.

Important dates: 1st Circular – next week (request for expression of interest)

2nd Circular with call for talks/abstracts – end of January

Abstract submission deadline – appr. end of March

Registration deadline – appr. end of March

Pandemic regulations (Covid-19): most likely workshop participation is only possible by providing a certificate of full vaccination / recovering.

Venue: institute building of Senckenberg Natural History Collections Dresden, Germany
https://www.senckenberg.de/en/institutes/senckenberg-naturhistorische-sammlung-dresden/

We cordially invite the palaeobotanical, palaeoentomological, palaeo-modelling and plant taphomoy communities to Dresden in 2022. Oral contributions to the scientific sessions are quite welcome. We would especially encourage early career scientist to give a talk on their research projects.

Please let us know until **end of 2021** if you are interested in participation and giving a talk by sending us the completed form below by E-mail to: christian.mueller@senckenberg.de.

The organizing teams:

Datz Symposium:

Christian Müller (Senckenberg Dresden, Germany, Palaeobotany Group)
Agathe Toumoulin (University Rouen, France)
Dimitra Mantzouka (Athens, Greece, formerly Senckenberg Dresden)

International Workshop on Plant Taphonomy

Lutz Kunzmann and the palaeobotanical working group at Senckenberg Dresden: Denise Hennig, Carola Kunzmann, Christian Müller

(Please copy/paste this form into your Email message.)

Expression of interest:

Name:
Institution:
E-mail address:

I am interested in participation in:

- **O** **Datz Symposium:** ***From functional traits to models – An interdisciplinary perspective on structure, functioning and evolution of ecosystems in deep-time***
- **O** **30th International Workshop on Plant Taphonomy**
- **O** **Workshop excursion**

I intend giving a talk within:

- **O** **Datz Symposium: session #__**
- **O** **International Workshop on Plant Taphonomy**

Preliminary title:

Other upcoming meetings

2021

3rd Palaeontological Virtual Congress

1st-15th December, 2021

For further information and download of 1st Circular please visit:
http://palaeovc.org/index.php/downloads/

2022

FROM GONDWANA TO LAURASIA

IPC 6 THAILAND

THE 6TH INTERNATIONAL PALAEONTOLOGICAL CONGRESS

THAILAND 2022

FROM NOVEMBER 7TH TO 11TH, 2022, KHON KAEN

https://ipc6.msu.ac.th/ generalchair_ipc6@msu.ac.th

For further information please visit: https://ipc6.msu.ac.th/

Disclaimer:

Newsletter edited by Lutz Kunzmann & Steven Manchester.

The views expressed in the newsletter are those of its correspondents, and do not necessarily reflect the policy of IOP.

Newsletters are regularly issued in February, June and October every year.

Please send us your contributions for the next edition of our newsletter (127) until end of March 2022.
Contributions should be sent to Lutz.Kunzmann(at)senckenberg.de.

Homepage: *www.palaeobotany.org*

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