

International Organisation
— of Palaeobotany —



IOP NEWSLETTER 139

January 2026

CONTENTS

Letter from the president

Our stance on international collaboration (IOP Statement)

In memoriam Michael Charles Boulter

New article 40.8 of the 'Madrid Code'

News from Friends of Fossil Forests

Conference report

Upcoming meetings

Letter from the president

Dear Colleagues,

There are no winners in Earth's ecosystems. Ecosystems have evolved entirely as symbiotic systems, and we humans exist only as a result of that evolutionary process. It is therefore reasonable that Nature-based Solutions (NbS) have become a shared challenge for humans. Maintaining healthy ecosystems and biodiversity is now a common global objective. Understanding the origins and evolutionary history of terrestrial ecosystems contributes to the development of a biological ethics needed to achieve that goal.

We must reaffirm that paleobotany is a foundational science that makes a crucial contribution to elucidating the origin and evolution of plants and other organisms responsible for organic matter production as primary producers supporting Earth's ecosystems as a whole. On this basis, we wish to advocate more actively and firmly to society the scientific achievements accumulated by paleobotany over two centuries, together with the biological ethics that underpin them. We do so because, as a community of scientists who study the history of life, we are deeply concerned that the selfish and authoritarian actions currently occurring around the world run counter to the spirit of Nature-based Solutions (NbS) and may, in the not-so-distant future, inflict irreversible and catastrophic damage on the global environment and ecosystems.

Furthermore, such short-sighted global trends must not be allowed to progress toward a situation that restricts free thinking and scientific activity. We are confident that the activities of the IOP will contribute to the sustainable development shared by the global community. As a scientific organization that is a member of UNESCO and the International Science Council (ISC), the IOP reaffirms its commitment to maintaining an intellectually healthy world, and to continuing the responsible communication of scientific outcomes.

Confronted with a global crisis threatening knowledge and freedom at the start of the new year, the IOP issues a special edition of the newsletter and reaffirms its own statement. I would like to thank Anne-Laure Decombeix for drafting the primary version, and to all officers for providing additional reviews.

Finally, I feel extremely sorry to communicate that our former IOP secretary and ,principal officer' from 1977–2000, Michael ,Mike' C. Boulter passed away on December 4 2025. Please find two short obituaries written by Barry Thomas and by Jiří Kvaček in this newsletter. A longer biography will be provided in another newsletter later this year. I have to send my deepest condolences to Mike's family and friends and to all other families of palaeobotanists who passed away last year.

Please have a look at other important notices also included in this issue.
May peace prevails on Earth. Viva Palaeobotany.
Haru Nishida (IOP President)

Our stance on international collaboration (IOP statement)

In light of deeply concerning actions taken by some governments over the past years and into the first days of 2026, the IOP wishes to reaffirm its firm commitment to academic freedom, diversity, and the protection of researchers, scientific institutions and collections. We stand for the respect of international law, including humanitarian law, as a fundamental framework for peaceful cooperation and shared responsibility.

We recognize that these global developments affect our community in different ways, and we express our solidarity with all our members who are more directly impacted in their professional or personal lives. At the same time, we acknowledge that citizens and scientists should not be equated with the positions or actions of their governments.

As an international scientific organization and a member of UNESCO, the International Union of Biological Sciences (IUBS) and the International Science Council (ISC), the IOP is committed to maintain a free, inclusive, and diverse scientific environment that transcends ideology, and nationality, and to the responsibility of communicating scientific knowledge for the benefit of society.

The IOP remains confident that international scientific collaboration and open exchange are essential contributions to sustainable development and to a shared global future.

The International Organisation of Palaeobotany (January, 30, 2026)
(decided unanimously by the executive committee of IOP)



Online meeting of IOP executive committee on January 21, 2026

In memoriam

Michael Charles Boulter (22 November 1942 – 4 December 2025)

Mike and I first met in 1967 in University College London when he was studying a *Lepidostrotophyllum* from the Radstock Asturian and we had a long talk about Carboniferous lycopods. He published his new species *L.alatum* in *Palaeontology* in 1968, but I think plant taxonomy was something he did not want to pursue. So he changed to studying Tertiary spores, publishing on the Neogene of Derbyshire, the Brassington Formation, and more Neogene of the southern Pennines and the Fortes Field in the North Sea. His Ph.D came from this work. About this time Mike moved to West Ham College, later North West London Polytechnic. I had just moved to Goldsmith's College in South East London so it was comparatively easy for us to meet up quite often at one place or another and very soon we started the last Wednesday of the month palaeobotany meetings.

Mike continued with his Tertiary palynology work with a variety of people such as Walsh, Wilkinson and Collinson. I remember him being quite excited when he and Kvacek were working on the Mull Tertiary flora effectively finishing Seward's unpublished manuscript. The only time Mike and I got together to publish was with Bob Spicer on patterns of plant extinctions.

Mike was an editor to the *Palaeontological Association* (1975–81), secretary to the *International Organisation of Palaeobotany* (1977–2000) and the UK representative at the *International Union of Biological Sciences*. His college by now has changed it again to become the University of East London in which Mike became Professor in 1989.

He became notable for his book "Extinction: Evolution and the End of Man" in which he postulated that humankind may be closer to extinction than previously believed and was invited onto a radio program chaired by Jeremy Paxman. Mike's deep voice was very recognisable although I don't think he convinced Paxman at all.

Retiring in 2002 he worked for a while at the Natural History Museum and then started writing books about Scientists. The first was *Darwin's Garden*, about the scientist's life at his 16-acre home in Kent. A wonderful place that I have been to several times. One in 2017 was about the Bloomsbury Scientists, who lived and worked on either side of the Great War in close proximity to the more celebrated writers and artists. Then came an account of the scientist members of the Savile Club in Mayfair to mark its 150th anniversary in 2018.

We had known each other for nearly sixty years and apart from meeting in London we had usually gone to the same conferences at home and abroad. Mike went to the palaeobotany meeting in Prague in August 1968. I did not because I had only just returned home from Prague. He went out for an early morning stroll and encountered local people shouting and running. Turning the corner he realised the problem; there was a tank in the middle of the road because the Warsaw pact countries had invaded Czechoslovakia. Nemejc, the organiser, was nearly in tears about the ending of the 'Prague Spring' and the impending reemergence of repression but he organised a bus to evacuate the foreign participants of the conference to West Germany; an experience I was glad to have missed.

Barry Thomas, Aberystwyth, UK

Mike Boulter and Czechoslovakia

I had heard the name Mike Boulter since I was a child. He was a good colleague and friend of my father and the whole family. He often visited us in Prague.

My father met Mike Boulter in the spring of 1968 when he was in England on a scholarship. A few months later, they met again at an International Geological Congress held in Prague in August 1968. The congress was violently interrupted by the invasion of Warsaw Pact occupation troops. Mike was young and impressionable at the time, and the encounter with violence and occupation certainly affected him greatly. He shared great sympathy for his Czech colleagues and for Czechoslovakia as a whole. In terms of generation and opinion, Magda Konzalová, Antonín Hlušík, and Miroslav Krůta were closest to him in Prague.



Fig. 1. Mike Boulter and Zlatko Kvaček, Prague, August, 1968.

My father and Mike hit it off, as Mike writes (Boulter 2022), they had a lot in common, including their attitudes towards life and their views on palaeobotany. His experiences in August 1968 and his friendship with my father made him one of the few Western palaeobotanists who regularly visited Prague. His last visit before the revolution was to attend the conference Paleofloristic and Paleoclimatic Changes in the Cretaceous and Tertiary organized by Ervín Knobloch and Zlatko Kvaček in September 1989. I think it was around that time that he gave my father an Apple Macintosh computer. Thanks to the revolution, as a young palaeobotanist, I was

able to visit Mike at the University of East London in 1990. At that time, after the revolution, there wasn't much money at the National Museum where I was employed, so Mike simply put me up at his house in Hampstead. Once, I was there even with my colleague Markéta Straková. Mike was incredibly friendly and open to all young people from the East. He wanted as many young people as possible to see Western democracy. He was a great liberal and was convinced of the need to spread these ideas to post-communist countries. It was in his laboratory that I first met my good colleague Mihai Popa, a young palaeobotanist from Bucharest.



Fig. 2. Old friends. From right: Mike Boulter, Leon Stuchlik, Harald Walther, Dieter Mai, Zlatko Kvaček, Dieter Mai, Prague, June, 2007

At that time, Mike was no longer so involved in palaeobotany, but rather in computer data processing, which did not interest my father very much, but I had free capacity, so I immediately signed up for the project. Mike had his own group at the University of East London, which included younger colleagues Alan R. Hemsley, Peter L. Holmes, Shona Brown, and IT expert Martin Lhoták. Mike was a true pioneer in the use of computers. At a time when computer disk capacities were measured in tens of megabytes, he was already thinking about big data and its standardization. His project, The Plant Fossil Record, was unique and revolutionary at the time (Kvaček and Straková 1993). The project was discussed at many conferences, the first of which was in Frankfurt am Main in May 1990. A large number of palaeobotanists were involved in the project, and Mike was an excellent organizer. I remember scanning illustrations of spores from the Jansonius and Hill (1976) catalogue as part of the project at the botany department of the Natural History Museum in London.

Mike was also an excellent companion. I remember him telling me how some boys with guitars once came to their dorm in London and slept in their room. He later found out that these boys formed a band called The Beatles...



Fig. 4. Mike Boulter and Margaret Collinson in Egham, August, 2018.

After Mike retired and ended his tenure at the University of East London, his contacts with the Czechia became somewhat limited. Mike began writing books. He approached science from a literary perspective. He usually came to Prague for his birthday and my father's birthday. They would then meet with Antonín Hlušík and Magda Konzalová. Mike was last time in Prague in 2007. He saw my father one more time when the Czech palaeobotanists travelled together by car to the EPPC conference in Dublin in August 2018. We met thanks to Margaret Collinson at a restaurant in Egham.

Finally, it is important to mention that Mike was the long-time secretary and soul of the IOP, which he elevated to a new level. He was a great visionary, liberal, and democrat, and he was also one of my great role models.

Jiří Kvaček, Prague, CZ

References

- Boulter, M. (2022). My Czech mate. – *Fossil Imprint*, 78(1): II-IV.
- Kvaček, J., Straková, M. (1993): The Plant Fossil record, project of International Organisation of Palaeobotany (*Časopis Národního muzea, řada přírodovědná*, 161(1-4): 115-116.
- Jansonius, J., Hill, I.V. (1976): *Genera file of fossil spores*. Department of Geology, University of Calgary.

Describing a new fossil species: How to satisfy Art. 40.8 of the Madrid Code

Julia Gravendyck¹, Patrick S. Herendeen², Robert A. Fensome³, Martin J. Head⁴, Jiří Kvaček⁵, James B. Riding⁶

¹ Plant Biodiversity Section, Bonn Institute for Organismic Biology, University of Bonn, Bonn, Germany

² Chicago Botanic Garden, Glencoe, IL, USA

³ Natural Resources Canada, Geological Survey of Canada (Atlantic), Dartmouth, NS, Canada

⁴ Department of Earth Sciences, Brock University, St. Catharines, ON, Canada

⁵ National Museum Prague, Prague, Czechia

⁶ British Geological Survey, Nottingham, UK

Introduction

The Madrid Code (hereafter ‘Code’), the latest edition of the International Code of Nomenclature for algae, fungi, and plants (Turland et al. 2025), introduced several new rules to address the particular requirements for fossils (Turland 2025).

One challenge we often face is locating the type specimen of a previously described fossil-taxon, especially for microfossils such as pollen, spores and dinoflagellate cysts. Reference to types, allowing their restudy, is an essential component of taxonomic research. Previous studies have illustrated how challenging it can be to find a specimen in the absence of adequate information that facilitates its relocation (Gravendyck 2021; Gravendyck et al. 2021, 2022, 2023). Consequently, a new rule was introduced in the Code, among other rules and recommendations, to improve the definition, utility, and curation of type specimens:

Art. 40.8. “For the name of a new fossil-species or infraspecific fossil-taxon published **on or after 1 January 2026**, the protologue must clearly indicate where the holotype specimen (see Art. 8.6) is located within the rock, sediment, or preparation.”

The aim of this rule is to facilitate relocation of type specimens for future study. In stating “where the holotype specimen (see Art. 8.6) is located within the rock, sediment, or preparation” the focus is on the provision of all necessary information that facilitates finding the specimen. It is already standard scientific practice to provide collection numbers and indicate the location of the specimen when it co-occurs in a mixed preparation such as a palynological strew mount or in a rock sample with multiple macrofossils. Art. 40.8 makes the provision of this information a prerequisite for valid publication of a new name. While the rule is particularly important for microfossils, it pertains to all fossils.

The purpose of this short note, and a more detailed article in preparation, is to make the palaeobotanical and palynological communities aware of the new rule, and to explain briefly how it can be met.

What is a ‘protologue’?

A fundamental concept in the Code is the protologue. The Code and its glossary define the protologue as “everything associated with a name at its valid publication, e.g. description, diagnosis, illustrations, photographs of habitat, references, synonymy, geographical data, citation of specimens, discussion, and comments” (Art. 6.13 footnote). Accordingly, the information required by Art. 40.8, this being the location of the holotype within the rock, sediment, or preparation, must be included in the content accompanying the original description. In practice, this is usually achieved by providing information on the kind of fossil and its preparation (e.g. compression fossil, isolated mesofossil, cuticle preparation, palynological strew mount) and the accompanying collection information (e.g. collection number) as well as overview images of the type specimen together with explicit metadata or comments specifying its exact position.

For different kinds of fossils, the practices described below illustrate a selection of possibilities for putting this into practice. However, with equipment and techniques ever progressing, there are and likely will be many ways to “clearly indicate” the necessary information that allows the holotype specimen to be relocated within the rock, sediment, or preparation.

Microfossils (palynomorphs)

The least ambiguous way to relocate a single palynomorph is a single grain mount on a microscope slide (Riding 2021, p. 51–53). The information that it is a single grain preparation in combination with a slide or museum collection number clearly indicates where the palynomorph is located in the preparation. To make relocation straightforward, the specimen could be circled using an engraver or permanent ink, although ink markings on a polished glass surface are susceptible to degradation.

However, most palynomorph taxa are described from strew mounts on microscope slides used for routine observation and counting. In such mounts, the admixture of many thousands of grains can substantially hinder the relocation of a single specimen. A common and easy relocation method for strew mounts is the use of an England Finder (Riding 2021, p. 92–93; Gravendyck et al. 2021, 2022), which is a standardized coordinate grid etched or printed onto a microscope slide. The location within the grid square facilitates the unambiguous relocation of a single specimen (e.g. C12/4) (Graticules Ltd. 1962). Gonzalez (2012) described a method for digitally converting microscope stage coordinates into England Finder references.

Before the availability of the England Finder, palynologists used several other methods involving self-made grids or ink-markings on the slide (Riding 2021, supplementary data appendix 7.6). Many of these options are still helpful if an England Finder is unavailable or in cases where the slide in question is different in size to the England Finder. Physical marking using permanent ink rings or dots can be used to clearly indicate the position of a palynomorph (Riding 2021, fig. 58). When multiple specimens are designated as types on the same slide, ink

circles around the specimens in question can serve in the same way. In comparison to the relatively expensive England Finder slide, the marking method is quick, cheap, and sufficiently precise if conducted with care. However, even “permanent” ink can be degraded or erased when removing immersion oil from a microscope coverslip, so great care needs to be exercised. If a high-resolution digital scan of a slide with a type specimen can be undertaken, the location of individual specimens can easily be permanently recorded (Jaramillo et al. 2025).

Accordingly, the Code recommends the following: “if a type specimen is prepared on a microscope slide, it is strongly recommended that the position of the specimen be indicated by an England Finder reference [...] or equivalent unambiguous reference (e.g. single-grain mounts or permanent ink circling [...]) to facilitate finding it again.” (Recommendation 8A.5). Following this recommendation thus clearly satisfies the unambiguous relocation of specimens on microscope slides required in Art. 40.8.

Type specimens are rarely designated from SEM stubs in palynology, but in such cases the author should either use a grid system to indicate a location (e.g. Laing 1974, Zippi 1991) or document the stub number and location on the stub in another way to relocate the specimen. Another option for strew preparations on SEM stubs is to provide a digital overview scan of the stub with a marker to indicate the location of the type specimen. These methods can thus satisfy the necessity for location indication required in Art. 40.8.

Mesofossils (e.g. fruits, seeds etc.)

If a single mesofossil is mounted on an SEM stub, specification of the SEM stub identification number alone is sufficient to satisfy Art. 40.8. If multiple specimens are mounted on a single stub, Art. 40.8 is satisfied only if the protologue explicitly distinguishes the holotype from other specimens on the stub. For dispersed or disaggregated mesofossils stored in Petri dishes or other containers, Art. 40.8 can be satisfied by clearly labelling the storage container. In addition, the protologue should explicitly state that the specimen was removed from the original sample and is preserved as a single preparation and must cite the corresponding collection number under which this preparation is now curated.

Macrofossils

Macrofossils, such as leaf compressions preserved on a piece of rock or as inclusions in amber, are straightforward if only one fossil is present on the sample. Labelling with a catalog number, which is cited in the protologue, is standard practice. If multiple fossils are present on a rock sample, then some method of labelling the individual fossils is needed, along with an indication of the type specimen, ideally on the rock and in the figure caption in the protologue depicting the type specimen. One solution here is to firmly affix an annotated label with an arrow indicating the type specimen using water-insoluble glue.

Cuticle or pollen preparations prepared from macrofossils or mesofossils should be labelled with the same collection or catalog number as the type and ideally stored in the same

collection as the type material. If the preparations of the type specimen are stored in a separate collection (or institution), this fact should be mentioned in the protologue and the preparations should be adequately labelled.

Permineralized wood is usually documented through preparation of multiple thin-section slides from the specimen. Thus a new taxon based on a fossil wood specimen is almost always represented by one or more pieces of wood plus multiple anatomical thin section slides. The publication should provide clear indication of all the preparations and remaining materials that correspond to the type specimen, including their reference or collection numbers.

Anatomically preserved fossils in a coal ball or chert, for example, are often comingled with material from other taxa. They can be labelled much like macrofossils, although they may require more detailed labelling to indicate the type specimen. A specimen preserved in a coal ball is likely to be represented by multiple preparations and isolated pieces of the coal ball or acetate peels (Galtier and Phillips 1999). Information on the slides and/or collection numbers and location of these preparations, which all represent the holotype specimen, must be provided in the protologue, a practice that is already standard.

What if there is an “error” in the location information or if the preparation is altered?

Authors should of course make every effort to provide accurate details that are necessary for future workers to locate the type material, a critical need for future taxonomic research. The Code makes allowances for some kinds of inadvertent errors in the protologue (e.g., Art. 6.14, 9.10, 9.24, 23.5, 40.4, 41.3, 41.6, 41.8), and in these cases the error does not invalidate a nomenclatural act. However, omissions of required information are not forgiven, and the nomenclatural act is not validly published.

A common problem in palynology is that microscope slide preparations degrade or become altered through time, such as the palynomorph moving, the mountant drying out, or the cover slip detaching (Gravendyck et al. 2021). Similarly other types of collections may alter over time, either intentionally or unintentionally. We cannot anticipate all these eventualities, and they do not invalidate a nomenclatural act.

Summary

The intent of the new Article 40.8 is to make the relocation of type material easier for future researchers. While the wording of the Article may appear onerous or seem unnecessary, experience has shown that type material is commonly difficult to relocate, hindering new research. It is already standard practice for necessary specimen location details to be documented in the protologue. Art. 40.8 emphasizes as a requirement the need for this information to be well documented.

Madrid Code

The Madrid Code is freely available online through the International Association for Plant Taxonomy (IAPT) website. <https://www.iaptglobal.org/functions/code/madrid>

References

- Galtier, J. Phillips, T.L. 1999. Thin sections and wafering. In: Jones and Rowe (eds.), Fossil plants and spores, modern techniques. The Geological Society, London, pp. 76–81.
- Gonzalez F. 2012. Software for universally relocating specific points of interest on microscope slides. *Marine Micropaleontology* 96–97:63–65.
- Graticules Ltd. 1962. New instruments, materials and methods. *Journal of Scientific Instruments* 39:250.
- Gravendyck J. 2021. Shedding new light on the Triassic–Jurassic transition in the Germanic Basin: novel insights from the Bonenburg section and palynotaxonomy and nomenclature of plant microfossils. *ReFUBium*.
- Gravendyck J, Coiffard C, B. Bachelier J, Kürschner W. 2023. Re-evaluation of *Cerebropollenites thiergartii* Eberh. Schulz 1967 and related taxa: priority of *Sciadopityspollenites* and nomenclatural novelties. *Grana* 62:1–47.
- Gravendyck J, Fensome RA, Head MJ, Herendeen PS, Riding JB, Bachelier JB, Turland NJ. 2021. Taxonomy and nomenclature in palaeopalynology: basic principles, current challenges and future perspectives. *Palynology* 45:717–743. (<https://doi.org/10.1080/01916122.2021.1918279>).
- Gravendyck J, Fensome RA, Head MJ, Herendeen PS, Riding JB, Turland NJ. 2022. (142–148) Proposals to improve the definition, utility, and curation of (type) specimens of fossil algae, fungi, and plants. *Taxon* 71:705–706.
- Jaramillo C, Punyasena SW, de Alba D, Alveo R, Arcila A, Bermudez J, et al. 2025. Digitizing collections to unlock the full potential of palynology: a case study with the Smithsonian palynology collection. *Plants People Planet*. 2025:1–16. <https://doi.org/10.1002/ppp3.70073>.
- Laing JF. 1974. A specimen location technique for SEM strew mounts. *Palaeontology* 17:435–436.
- Riding JB. 2021. A guide to preparation protocols in palynology. *Palynology* 45:1–110.
- Turland NJ. 2025. From the Shenzhen Code to the Madrid Code: New rules and recommendations for naming algae, fungi, and plants. *American Journal of Botany* 112.
- Turland NJ, Wiersema JH, Barrie FR, Gandhi KN, Gravendyck J, Greuter W, Hawksworth DL, Herendeen PS, Klopffer RR, Knapp S, et al. 2025. International Code of Nomenclature for algae, fungi, and plants. Chicago: University of Chicago Press.
- Zippi PA. 1991. SEM and light microscope mounting and specimen location technique for same-specimen study of palynological strew mounts. *Micropaleontology* 37: 407–413.

News from friends of Fossil Forests (FFF)

The recently formed Friends of Fossil Forests (<https://www.fossilforests.org>) is an international organization open to new membership that is dedicated to promoting petrified wood research, education, and conservation through collaboration and community engagement. The Friends recently hosted a webinar showcasing research at the Piedra Chamana Fossil Forest, a 39-million-year-old assemblage of fossil woods and leaves in the northern Peruvian Andes (<https://sexi.fossilbeds.org>.) Petrified wood covers the ground surface at the site, which is located along the rim of a scenic canyon and was largely unknown until the 1990s. Three project members shared in the presentation. Herb Meyer summarized research at the site over the last 25+ years. He also discussed the collaborative relationships established with Florissant Fossil Beds National Monument in Colorado and the nonprofit Friends of the Florissant Fossil Beds, the monitoring project set up to track loss of fossil material and site disturbance, and conservation and preservation needs. Sarah Allen spoke about the fossil leaves, which are largely entire-margined and in smaller leaf-size classes. She explained some of the challenges encountered in morphotyping the leaves and the involvement of project members in curation of the fossils, which are part of the collections at the Museum of Natural History in Lima (MUSM). Deborah Woodcock spoke about the diversity of fossil wood present (with 32 taxa of woods now described) and affinities of the paleoflora with the flooded forests of the western Amazon. Future research will focus on the diverse monocot component of the vegetation and the in situ forests that were buried by volcanic eruptions and preserved essentially as they grew during the late Middle Eocene. A review paper dealing with the fossil forest is forthcoming in *Acta Palaeobotanica*. The webinar had participants from Asia, Europe, and North and South America. Friends of Fossil Forests is proving to be a lively forum bringing together scientists and fossil-wood enthusiasts across the globe.



Conference report

2025 International Symposium on Fossil Wood Study and Protection, Chengdu, China



The **2025 International Symposium on Fossil Wood Study and Protection** was successfully held in Chengdu, China from November 24 to 26, 2025. The event was hosted by the Nanjing Institute of Geology and Palaeontology, Chinese Academy of Sciences, and co-hosted by the Expert Committee of the China Fossil Preservation Foundation, Chengdu University of Technology, and the Sichuan Bureau of Geology and Mineral Resources. Over three days, nearly 100 experts, scholars and professionals from universities, museums, and institutions across Europe, Africa, Americas and Asia attended this symposium. These participants are engaged in diverse fields related to fossil wood, including scientific research, science popularization and education, museum exhibition, geological heritage and fossil site management, geopark development, and cultural tourism. Among them, 25 international delegates represented 15 countries, such as China, Germany, Greece, Japan, Russia, the United States, Romania, Spain, South Africa, India, Thailand, Cambodia, Vietnam, Nepal, and Indonesia.

The opening ceremony of the symposium kicked off on the morning of November 24 at the Chengdu Natural History Museum (Museum of Chengdu University of Technology). Prof. Yongdong Wang, Co-Chair of the Symposium Organizing Committee and palaeobotanist at the Nanjing Institute of Geology and Palaeontology (NIGPAS), Chinese Academy of Sciences, delivered the opening address. Prof. Jun Wang, Director of NIGPAS and President of the Palaeontological Society of China, extended a warm welcome to all attendees. Mr. Yueming Jia, President of the China Fossil Preservation Foundation; Prof. Nengpan Ju, Vice President of Chengdu University of Technology; and Mr. Haijun Hu, Deputy Director of the Sichuan Bureau of

Geology and Mineral Resources, delivered speeches on behalf of the co-organizers. Prof. Harufumi Nishida, President of the International Organization of Palaeobotany (IOP); Prof. Yafang Yin, Executive President of the International Association of Wood Anatomists (IAWA); and Academician Prof. Xu Xing, Director of the Expert Committee of the China Fossil Preservation Foundation, addressed the ceremony via written or video messages. The opening ceremony was hosted by Professor Sun Tao, Co-Chair of the Symposium Organizing Committee and Curator of the Museum of Chengdu University of Technology.



Group photo of the symposium participants in front of Chengdu Natural History Museum

Fossil wood, a key component of plant fossils, is a precious geological heritage formed over millions of years of geological evolution. It serves as an irreplaceable record for exploring the composition and evolution of ancient floras, reconstructing palaeoclimatic fluctuations, and deciphering the dynamics of terrestrial palaeoecosystems. To advance international cooperation in fossil wood research, strengthen technical exchanges in protection practices, and promote the sustainable utilization of this valuable resource, the symposium focused on two core themes: "Fossil Wood Study and Deep-Time Global Changes" and "Protection, Utilization of Fossil Wood and Cultural Tourism Development." The symposium program featured 37 oral presentations, including 8 plenary invited talks, 10 keynote invited talks, and 19 invited talks, alongside 10 poster presentations. A total of 46 English abstracts were submitted, showcasing cutting-edge research and practice in the field.

In the plenary session, nearly 10 Chinese and international experts shared the latest breakthroughs. Prof. Robert A. Spicer from The Open University (UK) delivered a talk titled "The

Power of Tree Rings," illuminating the potential of fossil tree rings in palaeoenvironmental reconstruction. Prof. Nikolaos C. Zouros from the University of the Aegean (Greece) reported on advances in fossil wood protection and conservation at the Lesvos UNESCO Global Geopark. Prof. Carole T. Gee from the University of Bonn (Germany) presented new findings on Late Jurassic fossil forests in Utah, USA. Ms. Wang Lixia, Deputy Director and Secretary-General of the Expert Committee of the China Fossil Preservation Foundation, introduced "Progress and Prospects of Fossil Conservation in China." Prof. Yongdong Wang reviewed the latest progress in fossil wood study and protection efforts in China.



Guests and leaders that delivered speeches at the opening ceremony

Additional plenary highlights included Prof. Alexei A. Oskolski (Komarov Botanical Institute, Russia; University of Johannesburg, South Africa) presenting findings on Late Pleistocene forests in the Maoming Basin (South China) as tropical vegetation refugia during the Last Glacial Period. Dr. Nareerat Boonchai, IOP member at large, and founder of Friends of Fossil Forests, a 501(c)(3) nonprofit organization (USA) shared global advances in fossil wood protection and conservation. Prof. Bihong Fu from the Aerospace Information Research Institute, Chinese Academy of Sciences, elaborated on the application of spatial information technology in supporting the conservation and sustainable development of UNESCO World Heritage Sites.

The invited keynote sessions fostered in-depth discussions around the two core themes. Under "Fossil Wood Study and Deep-Time Global Changes," delegates from Japan, Germany, Russia, Thailand, Romania, Cambodia, Argentina, India, China, and Vietnam explored cutting-edge topics such as systematic taxonomy of fossil wood, diversity patterns, fossil forest reconstruction, sedimentary environments and palaeogeography, taphonomic mechanisms, palaeoclimatic and palaeoenvironmental changes, and biotic responses to major global

geological events. Research covered geological timeframes from the Devonian to the Cenozoic, integrating methods such as systematic taxonomy, anatomical analysis, and big data applications.



Invited speakers that gave talks at the symposium plenary and keynote sessions

For "Fossil Wood Protection and Geotourism," representatives from museums, geoparks, and cultural tourism sectors in China, Thailand, Nepal, Indonesia, and Iran shared updates on fossil wood excavation and conservation, in-situ restoration and preservation, UNESCO Global Geopark construction, science popularization and education, fossil natural heritage management, and geotourism development. In addition, the poster session provided a platform for over 10 participants to showcase their research progress and conservation practices through interactive displays.

The symposium aimed to facilitate academic and technical exchanges, establish an international cooperation network for fossil wood research and conservation, develop authoritative protection technologies, and contribute to the preservation of geological relics, as well as the advancement of geo-cultural tourism. By bridging academic insights and practical experience, the symposium provides valuable insights for advancing the transformation of fossil wood resources from scientific value to social value, and laid a solid foundation for future transnational joint research, talent cultivation, and science popularization initiatives.

During the symposium, a visit tour to the Chongzhou Tianyan Museum in Chengdu was organized, featuring a "Tianyan Museum Night" themed activity. Participants visited the museum's collections, fossil conservation laboratories, and exhibitions. The event also included strategic cooperation signing ceremonies between the museum and universities/enterprises, as well as the appointment of museum experts and consultants. At the closing ceremony on the morning of November 26, certificates of excellent presentations were awarded to outstanding student speakers.



Left: Students receiving presentation awards. Right: Student volunteers recognized for supporting the symposium.



Group photo of the symposium participants in front of the Chongzhou Tianyan Museum

In addition, a post-symposium excursion was organized from November 26 to 29, to Shehong and Zigong cities in Sichuan Province. Nearly 30 Chinese and foreign participants from 15 countries joined this field trip. The delegation visited the Shehong Petrified Wood National

Geopark, the Geology Museum, the Petrified Wood Site Museum, and national key fossil sites in Shehong City, followed by the Zigong Dinosaur Museum, the Petrified Wood Site Museum, the Zigong World Geopark, and the Zigong Salt Industry Museum in Zigong City.

During the trip, all participants expressed profound admiration for the remarkable achievements made by Shehong and Zigong cities in the protection and study of palaeontological fossils, exhibition and display, geopark construction, and the development of geoscience-related cultural tourism (exemplified by dinosaur museums). They also expressed a strong willingness to strengthen cooperation to promote the development of palaeontological museums, geoparks, and geotourism globally. During the excursion, local government leaders from Shehong and Zigong met with the delegates, conducting in-depth discussions on fossil protection, geopark development, and cultural tourism collaboration.

The field trip was accompanied by officials from the Shehong Municipal Bureau of Natural Resources and Planning, the Administrative Committee of Shehong Poetry & Wine Cultural Tourism Park, the Shehong Petrified Wood National Geopark, the Zigong Dinosaur Museum, and the Zigong World Geopark.



Participants visited the Tianyan Museum



Post-symposium excursion to visit the Shehong Petrified Wood National Geopark



Post-symposium visit trip to Zigong Dinosaur Museum

As a precious geological heritage, fossil wood preserves invaluable information about palaeoclimatic evolution, palaeoecological changes, and palaeogeographic shifts, serving as a "living archive" for studying Earth's life history and environmental variations. In-depth research, effective protection, and sustainable utilization of fossil wood are crucial for advancing geoscience popularization and cultural tourism. This endeavor requires long-term joint efforts from global peers. The symposium not only deepened the understanding of fossil wood's scientific value among Chinese and foreign participants but also forged a global consensus on collaborative promotion of its protection, research, and utilization.

This symposium was sponsored by the Palaeontological Society of China, the China Fossil Preservation Foundation, the International Organization of Palaeobotany (IOP), and the

International Association of Wood Anatomists (IAWA). It was co-hosted by the Chengdu Natural History Museum (Museum of Chengdu University of Technology), the Chongzhou Tianyan Museum, the 11th Geological Brigade of Sichuan Province, and the Liaoning Palaeontological Museum.



Post-symposium visit trip to Jurassic fossil wood locality in Zigong UNESCO Global Geopark

The symposium co-organizers included the Shehong Municipal Bureau of Natural Resources and Planning, the Administrative Committee of Shehong Poetry & Wine Cultural Tourism Park, the Shehong Petrified Wood National Geopark, and the Zigong Dinosaur Museum. Additional support was provided by the Shenzhen Palaeontological Museum, the Beijing Yicai Institute of Natural Science and Technology, and the Liaoning Chaoyang Fossil Valley.

Yongdong Wang, Nanjing Institute of Geology and Palaeontology, CAS, Nanjing, China;

Tao Su, Museum of Chengdu University of Technology, Chengdu, China;

Nareerat Boonchai, Friends of Fossil Forests, USA.

Upcoming meetings



The website of the meeting is <<https://striresearch.si.edu/mpc2026/>>

Please, use **43mpc2026(at)gmail.com** for all communications related to the meeting.



Joint Meeting of the Austrian, German, Italian, and Swiss Paleontological Societies

PALEO4ALPS corresponds to the XXVI Paleodays of the Società Paleontologica Italiana, the 96th Annual Meeting of the Paläontologische Gesellschaft (PalGes), the 30th Annual Meeting of the Österreichischen Paläontologischen Gesellschaft and the Meeting of the Swiss Palaeontological Society. The first joint meeting is intended to create a shared forum at the heart of the Alpine region. The conference is explicitly open beyond the membership of these societies and welcomes participants from all areas of paleontological research worldwide.

PALEO4ALPS aims to unite paleontologists working across a wide range of disciplines, geological time periods, organism groups, and methodological approaches. By fostering exchange between different research traditions and perspectives, the meeting seeks to

simulate discussion, encourage interdisciplinary dialogue, and promote new scientific collaborations within the paleontological community.

The scientific program addresses both current and emerging topics in paleontology, ranging from Alpine case studies to global perspectives. A broad selection of multidisciplinary symposia provides a platform for integrative discussions, while field excursions to Bolca, the Dolomites, the Southern Alps, and the Carnic Alps will offer participants the opportunity to engage directly with the exceptional geological and paleontological heritage of the Alpine region.

Venue: Free University of Bolzano-Bozen, Piazza Università 1, 39100 Bolzano/Bozen, South Tyrol, Italy

The Free University of Bolzano-Bozen is a young, internally oriented university located in South Tyrol, Northern Italy. Founded in 1997, it is characterized by its trilingual profile, with teaching and research conducted in English, German, and Italian, and by its strong focus on interdisciplinary collaboration.

The university has established a dynamic research environment with a particular emphasis on sustainability, environmental change, and the interaction between natural and human systems. Through close links with regional research institutions, museums, and internal partners, the Free University of Bolzano-Bozen provides an ideal setting for scientific exchange at the interface of local Alpine research and global scientific questions.

Situated at the crossroads of the Alpine region, the university offers an inspiring location for PALEO4ALPS 2026, combining excellent research infrastructure with immediate access to classic geological and paleontological field areas. Hosting the conference at the Free University of Bolzano-Bozen underlines the meeting's commitment to internal collaboration, interdisciplinarity, and engagement with the unique natural heritage of the Alps.

Language: English is the official language of the workshop. All presentations, including oral presentations, posters and abstracts should be in English.

Homepage: <https://www.unibz.it/en/events/paleo4alps-2026>

Contact address: paleo4alps@tiroler-landesmuseen.at

Organizers:

Evelyn Kustatscher (Tiroler Landesmuseen, Museum of Nature South Tyrol)

Camilla Wellstein (Free University of Bolzano-Bozen)

Steering and scientific Committee (in alphabetical order): Gerald Auer (President ÖPG); Massimo Delfino (Vice-President SPI); Jan-Peter Duda (Vice-President PalGes); Iris Feichter (Vice-President ÖPG); Annalisa Ferretti (President SPI); Marie Hörnig (Vice-President PalGes); Christian Klug (Vice-President SPS); Alexander Nützel (President PalGes); Torsten Scheyer (President SPS); Tina Schlüter (headquarters PalGes)

Local organizing Committee (in alphabetical order):

Evelyn Kustatscher, Iván R. Barreiro, Massimo Bernardi, Roberta Branz, Mathias Delfosse-Allain, Elisabeth Frank, Joshua Gauweiler, Tina Schlüter.

Preliminary program

July 16-18: pre-conference field trip to the Carnic Alps

July 18: pre-conference field trip to Bolca

July 18: pre-conference field trip to Lavini di Marco

July 19: Early career day, Opening Ceremony, ice breaker Party

July 20: Scientific program, poster session

July 21: Scientific program, poster session, evening open talk for the public

July 22: Scientific program, Social Dinner

July 23: Scientific program, Closing Ceremony

July 24-26: post-conference field trip to the Dolomites

Pre-registration

Non-binding pre-registration is out on

<https://eventregistration.unibz.it/Login.asp?IDcommessa=UN26005&Lang=IT>

Travel and accommodation in Bolzano/Bozen

Bolzano/Bozen is located in the heart of the Alpine region and is easily accessible by public transport and by car from Italy, Austria, Germany, and Switzerland. The city is well connected to the European rail network, with regular train services from Verona and Innsbruck, providing convenient links to major international railway hubs. International participants can reach Bolzano/Bozen via several nearby airports, including Innsbruck, Verona, Venice, Milan, and Munich. From these airports, Bolzano/Bozen can be accessed by train or bus connections, with travel times ranging from approximately one to three hours, depending on the point of departure.

Bolzano/Bozen offers a wide range of accommodation options, including hotels, guesthouses, and budget-friendly lodging within walking distance or short public transport connections to the conference venue. As July is a peak travel season in the Alpine region, participants are strongly advised to book accommodation well in advance.

Deadlines

Deadline pre-registration: February 10, 2026

Second circular with registration fees: February 28, 2026

Deadline fieldtrip registration: April 15, 2026

Abstract submission: April 15, 2026

Deadline registration: May 31, 2026

Third circular with final program: June 30, 2026

12th European Palaeobotany and Palynology Conference, 20.–24.09.2026, Münster, Germany



Second circular is coming soon!



7th International Paleontological Congress, 30.11.–03.12.2026, Cape Town, South Africa

For more information please visit: <https://www.ipc7.site/>

Disclaimer:

Newsletter edited by Lutz Kunzmann & Harufumi Nishida.

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 (140) until end of April 2026.

Contributions should be sent to [Lutz.Kunzmann\(at\)senckenberg.de](mailto:Lutz.Kunzmann(at)senckenberg.de).



Homepage: www.palaeobotany.org



<https://www.facebook.com/International-Organisation-of-Palaeobotany-543548202500847/>



<https://www.instagram.com/explore/tags/paleobotany/?hl=en>