

IOP NEWSLETTER 131 June 2023

CONTENTS

Letter from the president Introducing: friends of fossil forests News from our members Featured collections: Senckenberg Frankfurt Featured journals: Palaeo-2 Meeting report: Zlatko Kvaček Memorial Seminar Upcoming meetings 1st Circular 31st International Workshop on Plant Taphonomy

Letter from the president

Dear Colleagues,

In this newsletter we continue our series of articles highlighting the Paleobotanical Collections and Research at different institutions--this time in the Senckenberg Research Institute and Nature Museum in Frankfurt on the Main, Germany. This follows prior articles on palaeobotanical collections at Senckenberg in Dresden (newletter 128), Queensland Museum (124), Cleveland Museum of Natural History (120), The Field Museum (119), and University of Kansas (118), all of which can be downloaded from our newsletter archive:

https://palaeobotany.org/index.php/members-lounge/newsletter-archive-2/

We welcome additions to this series. Please consider if you would like to report on the history and scope of collections at your home institution to share with our international readership. Please be aware that our next IOP conference is less than a year away: May 27 to 31, 2024 in Prague, Czech Republic. This is the eagerly awaited conference that had to be postponed because of Covid 19. Stay tuned for more information which will be linked on our website, palaeobotany.org. Later next year, another opportunity for paleobotanists to meet will be the 20th International Botanical Congress Madrid, Spain, July 21st to 27th, 2024. I hope to see you next year in Prague and/or Madrid!

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

Latest news from the community

Heinz Winterscheid collection

The private collection of fossil Cenozoic plants made by the late Heinz Winterscheid, amateur palaeobotanist and specialist of Oligocene and Miocene plants of northwestern Germany, is now housed at University of Bonn, Institute of Geosciences, Department of Palaeontology. The collection includes fossils and literature. Heinz Winterscheid published in collaboration with late Zlatko Kvaček (Prague), e.g., systematic studies on the classical fossil lagerstaette of Rott near Bonn (late Oligocene) in *Palaeontographica B*.

Contact: https://www.ifgeo.uni-bonn.de/museen/goldfuss-museum/willkommen-im-goldfuss-museum

Introducing Friends of Fossil Forests and our mission on fossil wood

Friends of Fossil Forests, Corp (FFF) is a non-profit organization dedicated to advancing petrified wood through research, education, and conservation on an international scale. Our mission is to support efforts to understand fossil wood deposits through the perspectives of cultural heritage and science by fostering collaboration among diverse individuals and organizations, regardless of geographical boundaries.

Founded in March 2023, FFF brings together a diverse group of professionals and enthusiasts, including paleobotanists,



hobbyists (citizen scientists), educators, and students, who share a common passion for petrified wood. Petrified wood deposits are a cultural ecosystem service that contributes to a local community's sense of place and to our scientific understanding of the history of life on Earth. At FFF, we strive to bridge the gap between professional researchers and citizen scientists, promoting inclusivity and welcoming members from all backgrounds, ages, nationalities, races, genders, careers, and abilities. Collaboration with citizen scientists is often fruitful–leading to valuable information about fossil wood and unexplored sites that hold the potential for groundbreaking discoveries. Our aim is to support and assist individuals and organizations, catering to local needs associated with fossil wood deposits while fostering interest in educational outreach focused on paleobotany.

Our inaugural project, "*Rediscovering North America's Forgotten Fossil Forests and Inspiring the Next Generation of Paleobotanists*," is set to launch this May. Supported by the National Geographic Society's Committee for Research and Exploration, Grant no. NGS-96427R-22, the project brings together a team of members from Thailand, the US, the UK, Indonesia, and Latin America. We also seek partnerships and collaboration with like-minded organizations, including the International Association of Wood Anatomists (IAWA), International Organisation of Palaeobotany (IOP), museums and parks.

For more information about our initiatives and how to get involved, please contact us at info@fossilforests.org.



Founder and co-founders: Nareerat Boonchai, Mike Viney, Indah Huegele and Sam Allen

News from our members

Gussie Maccracken - new at Denver Museum

Dr. Augusta Maccracken is now the Assistant Curator of Paleobotany at the Denver Museum of Nature & Science in Denver, Colorado, USA. She brings an expertise in fossil plants and their ecological associations with insect herbivores to the ~100,000 specimen paleobotanical collection at the DMNS. Her research focuses on Late Cretaceous–Paleogene ecosystems through the lenses of paleoecology, paleobiogeography, and taxonomy.



Dr. Maccracken grew up in Ohio, USA, as an avid nature lover and outdoor enthusiast. She fell in love with the field of paleobotany while interning for Dr. Ian Miller (National Geographic Society, former DMNS curator) as an undergraduate. After graduating from Colorado College in 2011 with a BA in Biology, she worked as a fossil preparator before moving to Washington DC for graduate school. In December of 2020, Dr. Maccracken earned a PhD in Entomology from the University of Maryland and was co-advised by Dr. Conrad Labandeira at the Smithsonian Institution National Museum of Natural History. She then served as a National Science Foundation (USA) Postdoctoral Research Fellow in Biology working on fossil landscapes across the Cretaceous–Paleogene mass extinction at the DMNS until landing her current position at curator.

Dr. Maccracken welcomes researchers and students to visit the paleobotanical collections at the DMNS, which are particularly strong in Mesozoic and Cenozoic floras from the Western Interior of the USA. Her email address is <u>Gussie.Maccracken@dmns.org</u> and recent publications include (see next page):

- Maccracken SA, Miller IM, Johnson KR, Sertich JJW, & Labandeira CC. 2022. Insect herbivory on *Catula gettyi* gen. et sp. nov. (Lauraceae) from the Kaiparowits Formation (Late Cretaceous, Utah, USA). *PLoS ONE*. 17(1), e0261397.
- Swain A, Azevedo Schmidt LE, Maccracken SA, Currano ED, Dunne J, Labandeira CC & Fagan WF. 2022. Sampling bias and the robustness of ecological metrics for plant–damage type association networks. *Ecology*. Accepted, in press.
- Serrano-Brañas CI, Espinosa-Chávez B, Maccracken SA, Barrera Guevara D, Torres-Rodríguez E. 2022. First record of caenagnathid dinosaurs (Theropoda, Oviraptorosauria) from the Cerro del Pueblo Formation (Campanian, Upper Cretaceous), Coahuila, Mexico. *Journal of South American Earth Sciences*. 119, 104046.
- Moreno-Domínguez R, Maccracken SA, Santos AA, Wappler T. 2022. Plant–insect interactions from the Late Oligocene of Spain (La Val fossil site, Estadilla, Huesca) and their palaeoclimatological implications. *Palaeogeography, Palaeoclimatology, Palaeoecology*. 586, 110782.
- Maccracken SA, Sohn J–C, Miller IM, & Labandeira CC. 2021. A new Late Cretaceous leaf mine Leucopteropsa spiralae gen. et sp. nov. (Lepidoptera: Lyonetiidae) represents the first confirmed fossil evidence of the Cemiostominae. Journal of Systematic Palaeontology. 19(2), 131–144.
- Currano ED, Azevedo-Schmidt LE*, **Maccracken SA***, Swain A*. 2021. Scars on fossil leaves: An exploration of ecological patterns in plant–insect herbivore associations during the Age of Angiosperms. *Palaeogeography, Palaeoclimatology, Palaeoecology*. 582, 110636. *Authors contributed equally.
- Xiao L, Labandeira CC, Yair B-D, **Maccracken SA**, Shih C, Dilcher DL, Ren D. 2021. Early Cretaceous mealybug herbivory on a laurel highlights the deep-time history of angiosperm– scale insect associations. *New Phytologist*. 1–10.
- Swain A, **Maccracken SA**, Fagan WF, Labandeira CC. 2021. Understanding the ecology of host plant–insect herbivore interactions in the fossil record through bipartite networks. *Paleobiology*. DOI: 10.1017/pab.2021.20.
- Maccracken SA & Labandeira CC. 2020. The middle Permian South Ash Pasture locality of northcentral Texas: Coniferophyte and gigantopterid herbivory and longer-term herbivory trends. *International Journal of Plant Sciences*. 181(3), 342–362.
- Schachat SR, Maccracken SA, & Labandeira CC. 2020. Sampling fossil floras for the study of insect herbivory: how many leaves is enough? *Fossil Record.* 23(1), 15–32.

Maccracken SA, Miller IM, & Labandeira CC. 2019. Late Cretaceous Domatia Reveals the Antiquity of Plant–Mite Mutualisms in Flowering Plants. *Biology Letters*. 15(11), 20190657.

Lyson TR, Miller IM, Bercovici AD, Weissenburger K, Fuentes AJ, Clyde WC, Hagadorn JW, Butrim MJ, Johnson KR, Fleming RF, Barclay RS, **Maccracken SA**, Lloyd B, Wilson GP, Krause DW, & Chester SGB. 2019. An Exceptional Continental Record of Biotic Recovery after the Cretaceous–Paleogene Mass Extinction. *Science.* eaay-2268.

The palaeobotanical collections at the Senckenberg Research Institute and Natural History Museum Frankfurt, Germany

Palaeobotany has a long tradition at the Senckenberg Research Institute and Natural History Museum Frankfurt, Germany (Senckenberg Frankfurt). The oldest parts of the palaeobotanical collections date back to the beginnings of the Senckenberg Society for Natural History Research in 1817 and were donated by some of the founders of the Society from their own, already existing private collections. Active palaeobotanical research started somewhat later in the 19th century with the works of Hermann Theodor Geyler, who was director of the botanical garden in Frankfurt and head of the section for botany and phytopalaeontology at the Senckenberg Museum. Besides material that has been collected in Frankfurt and the larger region, also material from several international localities entered the collections during this early period. Examples are a Miocene leaf flora from Sicily and plant macro-fossils from Borneo. Additionally material was bought or exchanged from several classical localities worldwide (e.g., Cretaceous of Kansas), mostly with the aim to get good-looking specimens for museum exhibitions.



Fig. 1: View of the main entrance of the Senckenberg Naturmuseum in Frankfurt/Main (S. Tränkner)

After a short period without considerable activity, palaeobotanical research at Senckenberg Frankfurt was re-established when Richard Kräusel moved to Frankfurt in 1920 as a school teacher. Since this time he was in close contact with Senckenberg not only working on the collections but also considerably enlarging them. In 1938 he became honorary head of the palaeobotanical collection at Senckenberg and in 1941 he was appointed honorary head of the

palaeobotanical department for life. During Kräusel's active time, which lasted until his death, Frankfurt became a hub of palaeobotanical research in Germany and worldwide, and the collections were constantly growing. Besides material from the Devonian of the Rhenish Slate Mountains and worldwide, as well as the Cenozoic of Hesse, abundant material collected during several expeditions to South Africa, Namibia and Brazil should be mentioned here. But also other imminent palaeobotanists, like Franz Kirchheimer, deposited fossil material in our collections during this time.

After his death in 1966, Kräusel was succeeded by Friedemann Schaarschmidt, who was the head of palaeobotany at Senckenberg until he retired in 1996. He enlarged the collection by material from many regional localities as his palaeobotanical interests were also very broad. In 1975 Senckenberg excavations started in the Messel open pit mine, now a UNESCO world heritage, but then under threat of becoming a site for waste disposal. Since this time annual excavations at Messel increased this particular collection to more than 31.000 catalogued specimens of plant macro-remains and Messel became one of the scientific focal points of Schaarschmidt's research. From 1996 to 2021 the collections were curated by Volker Wilde, who continued the work on Messel but who also added abundant material from other Eocene localities (e.g. Geiseltal, Schöningen), as well as several Cretaceous localities to the collection.



Fig. 2: Cuticle fragment of cf. *Cunninghamites squamosus* (SMB 12629) from the Cretaceous of Wyoming. This material comes from an accumulation of organic material found within an *Edmontosaurus* mummy, (erronously) interpreted by Kräusel in 1922 as part of the stomach contents of this dinosaur.

Since the retirement of Volker Wilde in late 2021, the collections are curated by me (Dieter Uhl). My research is mainly focusing on fossil plants as palaeoenvironmental and palaeoclimatic proxies from the late Palaeozoic up to the Neogene (with a focus on paleowildfires and parts of the former continent Gondwana). Recent additions to the collections come, for example, from the Mesozoic of the Middle East (i.e. Jordan and Saudi Arabia).

Without question, the largest palaeobotanical collection in Frankfurt is the Messel collection, which consists of so far almost 32.000 specimens (including not yet catalogued specimens from recent excavations). During the last three decades scientific work on Messel plants mainly focussed on carpological remains, palynology and flowers (ongoing project University of Vienna), whereas only a few studies have dealt with leaves from this important locality.



Fig. 3: Late Permian plant remains from NW Hesse, curated in the GeoArchive Marburg, originally figured by J. Ch. Ullmann in 1803 (SMF MBG 4887).

Besides the palaeobotanical collection proper there is also another large collection curated at Senckenberg Frankfurt, which contains a considerable number of plant fossils from a variety of localities: In 2013 Senckenberg Frankfurt took over the curation of the GeoArchive Marburg, the former palaeontological and geological collections of Marburg University, after the state of Hesse closed down the Geosciences Department in Marburg. This collection dates back to the beginning of the 19th century and includes not only a number of palaeobotanical type specimens as well as figured specimens, but also unpublished material from various Hessian, German and international localities. This collection is also curated by me, a task I gladly

accepted when I was asked to do this by our directorate, as I have been actively working on Late Permian plant material from this collection for more than 20 years.

The oldest figured material from the GeoArchive Marburg are indeed these Late Permian plant remains from NW-Hesse, figured by Johann Christian Ullmann in 1803. Although palaeobotany was never a focus of palaeontological research at Marburg University, scientists from Marburg eagerly collected plant fossils during numerous field trips in the vicinity of Marburg, but also many other localities worldwide. As this collection was not only a research collection but also a teaching collection, additional material from several important palaeobotanical localities was bought or exchanged to broaden the stratigraphic and taxonomic coverage of the collections. Examples are Carboniferous plants from Silesia and a large collection of Late Triassic plant fossil from Lunz in Austria.

Information about (published) parts of the collections are available via our online database (<u>https://search.senckenberg.de/aquila-public-search/search</u>), but please be aware that the larger portion of the palaeobotanical collections (mostly the huge amount of unpublished material) is still not available via this web-site. So, if you have any questions concerning the material in our collections (palaeobotany proper, as well as GeoArchive Marburg) don't hesitate to contact me, e.g. via email (dieter.uhl@senckenberg.de).

All colleagues who are interested in any palaeobotanical material curated at Senckenberg Frankfurt are welcome to visit our collections and to work with the material curated in these collections!

Dieter Uhl, Frankfurt am Main, Germany

Featured journals:

Palaeobiodiversity and Palaeoenvironments

- a Senckenberg journal with a long (palaeobotanical) tradition

Palaeobiodiversity and Palaeoenvironments started in 1919 as Senckenbergiana, a journal covering broad aspects of natural sciences (including botany, zoology, mineralogy, geology, palaeozoology and palaeobotany), published by the Senckenberg Natural Science Society in Frankfurt on the Main in Germany, mainly intended as an outlet for Senckenberg scientists and material from the Senckenberg collections. With volume 35, appearing in 1954, the journal was divided in two journals, the Senckenbergiana biologica, with a biological focus, and the Senckenbergiana lethaea, with a geoscientific focus, but still mainly as an outlet for Senckenberg scientists and material from the Senckenberg collections (or material that should be incorporated in the collections prior to publication, an 'interesting' and very successful way to enlarge the Senckenberg collections). Already during this period palaeobotanical studies appeared regularly in this journal.



SENCKENBERG

In 2009 the name and the philosophy of the journal changed again and it became Palaeobiodiversity and Palaeoenvironments, a peer-reviewed international journal for the publication of high-quality multidisciplinary studies in the fields of palaeobiodiversity, palaeoenvironments and palaeobiogeography published by Springer. Manuscripts submitted to the journal should have a global scope or implications of problems on a global scale significant not only for a single discipline, with a focus on the diversity of fossil organisms and the causes and processes of change in Earth's history. The topics covered by Palaeobiodiversity and Palaeoenvironments include: Systematic studies of all fossil animal/plant groups with a special focus on palaeoenvironmental investigations, palaeoecosystems and climate changes in (deep time = pre-

Quaternary) Earth's history, environment-organism interaction, comparison of modern and ancient sedimentary environments, palaeoecology and palaeobiogeography. Studies on palaeobotanical and palynological topics are highly welcome and when you have a look at the already published volumes and issues you will notice that many of our colleagues from palaeobotany and palynology have already chosen our journal for publishing their results (https://link.springer.com/journal/12549/volumes-and-issues). Also three special issues on palaeobotany have been published ("Green planet – 400 million years of terrestrial floras" in 2014; "Jurassic biodiversity and terrestrial environments" in 2018, and "Palaeobotanical contributions in honour of Volker Mosbrugger" in 2021).

Springer

We see Palaeobiodiversity and Palaeoenvironments as a multidimensional gateway for the exploration of scientific discoveries and new research in geological and palaeontological sciences. The scientific concept has a well-established special focus on the interaction of palaeoenvironments and fossils (as the remains of formerly living organisms) and we will continue to develop the journal in this direction during the next years to come. We will also continue to publish a mixture of Special Issues, Special Series and individual original papers as well as review articles and short notes, which proved to be highly successful so far. So, if you, or your colleagues next door, have any ideas for an interesting special issue or special series (which may run for several years, depending on its topics) please do not hesitate to contact us to discuss the possibilities (sinje.weber@senckenberg.de; dieter.uhl@senckenberg.de).

There is a long tradition at Senckenberg that editorial decisions should in no way be affected by the origins of a manuscript, the nationality, ethnicity, political beliefs, race, or religion of any of the authors! Thus, decisions to edit and publish should not be determined by the policies of governments or any other agencies beyond the journal itself, only by the science itself, which is absolutely in line with the Committee on Publication Ethics (COPE) standards, which the journal supports.

We are currently in a time of multiple global crises and although palaeontology can probably not contribute to help solving all of these, on a large scale man-made, crises, we are really convinced that studies on palaeobiodiversity and palaeoenvironments, including palaeoclimate, and their multitude of interactions have a really large potential to contribute useful lessons from the past, to add improved insights how the Earth system reacted to past (small and large) crises. Not as blueprints, to learn verbatim how the Earth system will behave in the future, but as case studies, to demonstrate how differently and often unpredictably (based only on previously existing knowledge) organisms and ecosystems have reacted to various smaller or larger disturbances on geological timescales.

We are eager to learn more about the outstanding ideas and research about palaeobiodiversity and palaeoenvironments as well as their interactions produced by authors from all over the world.

Sinje Weber (managing editor) & Dieter Uhl (editor-in-chief) Frankfurt am Main, Germany

Meeting report: Zlatko Kvaček memorial Seminar (Prague, March 29, 2023)



ÚSTAV GEOLOGIE A PALEONTOLOGIE přírodovědecké fakulty univerzity karlovy

si vás dovoluje pozvat na Paleontologický seminář (MG422S42A), který se koná ve středu **29. března 2023** od **09:00** ve **Velké paleontologické**





Group photo of the participants.

PROBRAMME		
time	names	presentation titles
9:00-9:10	Katarína Holcová	Welcome
9:10-9:20	Jiří Kvaček	My father
9:20-9:35	Jakub Sakala	Zlatko's publications between 2017 and 2022
9:35-10:15	Johanna Eder Kovar	Do we really understand the Miocene climate optimum?
10:20-10:50	Steven Manchester	Biogeographical significance of Zlatko Kvaček's collaborative research on the early Miocene Bílina flora of North Bohemia
10:55-11:25	Boglarka Erdei & Lilla Hably	Hidden treasures in the collection
11:30-12:00	Lutz Kunzmann	The Early Cretaceous Crato Flora in Brazil: A window into a tropical palaeoecosystem
12:05-12:35	Edoardo Martinetto	How fossil leaf studies could improve our knowledge of the late Cenozoic flora of NW Italy
12:35-14:00	Lunch	
14:00-14:20	Nela Doláková & Marianna Kováčová	Vegetation and climatic changes during the MCO and MCT (Oligocene to Late Miocene) in the northwestern part of the Central Paratethys
14:20-14:40	Josef Pšenička	Odontosoria marekgaltieri sp. nov. (Lindsaeaceae) from the lower Miocene of Bílina: first evidence of the genus in the fossil record
14:40-15:00	Vít Koutecký	Paradiospyroxylon kvacekii gen. et sp. nov. (Ebenaceae) from the lower Oligocene of České středohoří: a case study of individual variability and its significance for fossil wood systematics
15:00-15:20	Jakub Prokop	Cenozoic plants and insects: Remembering the work of Zlatko Kvaček
15:20-15:40	Jana Čepičková	Cuticle analysis as the most effective tool in describing Cenomanian leaf fossils
15:40-16:00	Veronika Veselá	News in Bryophyte research of the Bohemian Cretaceous and Cenozoic
16:00-16:20	Oleksandra Chernomorets	Largest fossil logs of <i>Paraphyllanthoxylon</i> -type from the Eastern Hemisphere (Upper Cretaceous, Czech Republic).
16:20-16:40	Jiří Kvaček & Marcela Svobodová	Palaeoenvironment and palaeovegetation of the Bohemian Cenomanian

Jiři Kvaček, National Museum Prague, Czechia

Upcoming meetings

2nd Asian Palaeontological Congress August 3–7, 2023, Tokyo, JAPAN

For more information please visit: <u>https://www.apc2.org</u>

31st International Workshop on Plant Taphonomy November 3–5, 2023, Lichtenberg Castle, Rheinland-Pfalz, Germany

For detailed information please see the 1st Circular and registration form below in this newsletter.

For information about the museum please: www.urweltmuseum-geoskop.de

XV International Palynological Congress / XI International Organization of Palaeobotany Conference May 25–31, 2024, Prague, Czech Republic

For more information please visit: <u>https://www.prague2020.cz/news.php</u>

XX International Botanical Congress July 21–27, 2024 Madrid, Spain

For more information please visit: https://ibcmadrid2024.com/

12th European Palaeobotany and Palynology Conference, 2026, Münster, Germany

For more information please read announcement on p. 3 of this newsletter.

31th International Plant Taphonomy Meeting

Urweltmuseum GEOSKOP Thallichtenberg, November 3th–5th, 2023

Dear participants,

We are pleased to announce that the coming **taphonomy workshop in 2023** will be held in Thallichtenberg from **3th to 5th November**. It will be an open meeting with talks and round table discussions on plant taphonomy, preparation techniques and documentation.

Conference language will be **English**. Beamer, Presenter (USB remote control / Laserpointer) und **Windows-10** netbook are available for standard **Powerpoint presentations**. The **length of presentations** should not exceed **15 minutes** each, in order to leave sufficient time for discussion of the contributions.



Urweltmuseum GEOSKOP, Burg Lichtenberg (Pfalz), Burgstraße 19, 66871 Thallichtenberg

Accommodation

We have reserved 12 four-bed rooms at the youth hostel Thallichtenberg in the Lichtenberg Castle complex nearby (distance ca. 100 m) from 3th to 5th November 2023. Overnight stay including breakfast is $26.00 \in \text{person/day}$ in the four-bed room. If you want to book this room as two-bed room it costs $32.20 \in \text{person/day}$, while a single room booking will be $40.20 \in \text{per day}$. In case of room reservation the principle of "first come, first booked" applies! Additional lunch can be booked at the youth hostel for $7.00 \in \text{person/day}$, while dinner costs $9.10 \in \text{person/day}$.



Around Lichtenberg Castle also several guest houses and hotels can be found:

- Hotel Burgblick (Thallichtenberg 750 m Fußweg zur Burg) http://www.hotel-burgblick.de/de/
- Hotel Reweschnier (Blaubach 5.8 km) http://reweschnier.de/
- Hotel Garni Saar (Kusel 6.0 km) http://hotelsaar.de/
- Waldhotel Felschbachhof (Ulmet 9.4 km) http://www.felschbachhof.de/
- Landgasthaus Steinerner Mann (Ulmet 9.5 km) http://www.steinerner-mann.de/hotel-ulmet.html
- Hotel Remigiusland (Altenglan 10.5 km) http://www.remigiusland.de/

In case of overnight stay outside of the castle or Thallichtenberg an own car is necessary. There is no public transport or transfer by the museum possible. Free parking is available in front of the castle.

Burg Lichtenberg Burgstraße 19 66871 Thallichtenberg Rheinland-Pfalz Germany



<u>By car</u>

Lichtenberg Castle can easily be reached by car via the motorway A62 from Landstuhl/Trier. Take exit "7-Kusel" and follow the direction "Kusel" (B420) for 3.4 km. Turn left in the direction "Thallichtenberg" (L176) and follow the road for 2.8 km up to village entrance "Thallichtenberg". Turn right and follow the road (Burgstraße) uphill to the parking area in front of the castle.

By train

Train connects Kusel via regional train from Landstuhl, which in turn can be reached from Mannheim via regional express in direction "Koblenz".

From the Kusel train station to the castle a bus (297) runs every hour and takes 13 minutes to reach it. Another possibility is to call us and asking for a ride.

By plan

From Frankfurt airport by bus or suburb train to Frankfurt main train station. From there continue driving by train to Mannheim, and further as described above.

From Frankfurt-Hahn airport by bus or train to Kusel. From there continue driving by bus (297) or pickup (inform us before about the latter).

From Saarbrücken airport by bus or train to Kusel. From there continue driving by bus (297) or pickup (inform us before about the latter).



Program

- November 3th Informal pre-meeting diner at "Burg Restaurant" Lichtenberg castle at 07:00 pm, at your own expense.
- November 4th Presentations and discussions (seminar room at the GEOSKOP) Coffee and snacks will be provided. Joint dinner at "Burg Restaurant" Lichtenberg castle at 07:00 pm (own expense).
- November 5th Excursion to the Remigiusberg quarry. Departure from the parking place of the castle at 09:00 am. We expect to be back at 01:00 pm. In order to reduce costs we suggest car sharing for the field trip.

Excursion

We offer a field trip to the hardstone Remigiusberg-Rammelskopf Quarry near Haschbach am Remigiusberg, about 8 km away from the castle. The quarry exposes an almost 40-m-thick succession of 300 Ma old fluvio-lacustrine sediments of the middle to upper part of the Remigiusberg Formation (Pennsylvanian-Permian boundary). Within the last five years, the quarry has developed into one of the most productive localities of early tetrapods in Europe due to extensive excavations by the GEOSKOP. Moreover, a highly diverse plant association from fluvial channel and overbank deposits has been found, such as sphenophytes, filicophytes, pteridospermophytes and coniferophytes.

As this is an active quarry, exposure conditions change very quickly and it is not possible to predict what can be sampled. Depending on the weather, the quarry can be very muddy and windy. Therefore, please take appropriate shoes and weatherproof clothing with you.

Fees

We will try to keep the costs of the meeting as low as possible, but we have to request a fee of $20.00 \in$ per person for snacks, coffee and tea during the meeting to be paid on-site.

Registration

Deadline for registration is **September 3**rd, **2023**. If you wish to stay in the Lichtenberg castle youth hostel, please inform us (number of nights, single/double/four-bed room, meals etc.). We will arrange accommodation.

Abstract & submission: If you have an oral presentation, please submit an abstract. The text should not exceed 1 page (DIN A4 format) comprising heading, authors name and institutional affiliation, address and text. **Deadline for abstract submission** is **September 3**rd, **2023**.

Contact addresses

Please direct all your questions or queries to the organizers.

Sebastian Voigt & Jan Fischer Urweltmuseum GEOSKOP / Burg Lichtenberg (Pfalz) Burgstraße 19 66871 Thallichtenberg Germany <u>s.voigt@pfalzmuseum.bv-pfalz.de</u> <u>j.fischer@pfalzmuseum.bv-pfalz.de</u>

31th International Plant Taphonomy Meeting Urweltmuseum GEOSKOP Thallichtenberg, November 3th– 5th, 2023

Registration form

Name:

Address:

E-mail:

Telephone:

- O I will attend the 31th International Plant Taphonomy Meeting
- I will give an oral presentation entitled:
- O I will join in the pre-meeting dinner on November 3th
- I will join the meeting dinner on November 4th
- I will participate in the excursion to the Remigiusberg quarry on November 5th
- I will join the excursion with my own car and I have free seats in my car

Participants are requested to return this registration form before **September 3**rd, or send us an e-mail with the requested information.

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 (132) until end of October 2023. Contributions should be sent to Lutz.Kunzmann(at)senckenberg.de.

Homepage: <u>www.palaeobotany.org</u>

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

<u>https://twitter.com/hashtag/paleobotany?lang=en</u>

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