

Since 2009, the world community of palynologists and palaeobotanists has met every four years to discuss the latest research, and to share experiences. This time, however, the $15^{\rm th}$ International Palynological Congress (IPC-XV 2020) and the $11^{\rm th}$ International Organisation of Palaeobotany Conference (IOPC-XI 2020) will happen on a five-year interval, due to the world pandemic. This upcoming joint congress will still be held in Prague, but the dates will be **May 1**st-8th, **2021**, hosted by Czech palynologists and palaeobotanists.

1820 is designated as the starting point for palaeobotanical nomenclature. In that year, **Caspar Maria Sternberg** published the first volume of his "**Flora der Vorwelt**". We are delighted to dedicate this meeting in honour of **200 years of Palaeobotany**.

It will be an excellent opportunity for the Czech Republic (a country rich in plant fossil finds, palynological sites, and palynological and palaeobotanical history) to host the leading experts in various disciplines, and to promote scientific innovations. Joint symposia are planned to foster interaction and integration between palynologists and palaeobotanists, as well as plenary sessions of general interest. The meeting is promoted by the collective efforts of the International Federation of Palynological Societies (IFPS) and the International Organisation of Palaeobotany (IOP).

Please complete the registration form on our website:

http://prague2020.cz/registration.php



Location

Prague is the largest city and the capital of the Czech Republic. Situated in the heart of Europe, it is one of the continent's most beautiful cities, and the primary Czech economic and cultural centre. It is famous for its historical monuments and sights, and has UNESCO World Heritage status. The Charles Bridge (Karlův most) across the Vltava River probably represents the city's most famous landmark. The winding course of the Vltava, with its succession of bridges and changing vistas, contrasts with the ever-present backdrop of the great castle of Hradčany (Prague Castle), which dominates the leftbank region of the city. Prague is famous for its cultural life. Wolfgang Amadeus Mozart lived here, and his Prague Symphony and Don Giovanni were first performed in Prague. In addition, the lyrical music of the great Czech composers Bedřich Smetana, Antonín Dvořák, and Leoš Janáček is commemorated each year in a music festival.

Venue

The congress will be held in the **Clarion Congress Hotel** Prague, Freyova 33, Prague 9 (https://www.clarioncongresshotelprague.com/en/). This is an international four-star hotel and a state-of-the-art conference center, providing high-quality services. The hotel is 30 minutes by car from the International Václav Havel Airport and 10 minutes by metro from the historic city centre of Prague. The conference centre is directly on the metro B line, station "Vysočanská".

Facilities

The hotel offers accommodation in 559 rooms. All rooms and public areas

are fully air-conditioned. Catering is provided in 3 hotel restaurants, which can seat 900 people. Conference facilities are divided into 23 halls and meeting rooms, comfortably seating up to 2 500 participants. The facilities are equipped with state-of-the-art audio-visual technology.

Transport access

Transfers from the International Airport are available via the hotel's limousine service, by public transport as well as Airport Transport services. A station for the Metro B line is adjacent to the hotel. Trams and buses run outside, and a train terminal is three minutes walk away.

Practical hints

Climate

May is wet and warm in Prague as the peak of spring brings beautiful sunny days to the city. The days are about 15 hours long. Temperatures are warm – $8.3\,^{\circ}$ C ($46.9\,^{\circ}$ F) to $19.4\,^{\circ}$ C ($66.9\,^{\circ}$ F). If you pack for Prague in May, expect warm weather, but also include a light rain jacket and a sweatshirt to cover most conditions.

Transportation

Arriving by plane – Václav Havel Airport is served by many international airlines. It is located 15 km from the city center and 18 km from the conference venue. Taxi from the airport to the venue is at present about €35. A shuttle bus service operates as well. City bus No. 119 will take you from the airport to the Veleslavín metro terminal, from where you can go by metro line A to Můstek, switch to line B and go to station Vysočanská (see City transportation).

Arriving by rail or car

Prague is easily reached by rail or car. If you arrive by train, you will find metro stations (line C) at the Central Railway Station and at the Holešovice Railway Station. From either you can go to Florenc station and switch to line B to go to Vysočanská station.

Parking

Clarion Congress Hotel has its own parking area priced 400 Kč/day/car.

City transportation

City Transportation Prague has a comprehensive network consisting of three metro lines, trams and buses. Single tickets or travel passes can be purchased at most newspaper stands or from the coin machines at metro stations.

https://www.dpp.cz/en/fares/fare-pricelist

Car rental

Most of the major car rental companies (e.g. Avis, Sixt) have offices in Prague. Detailed information is available from the Symposium secretariat. We recommend making reservations in advance.

Currency

Official currency is the Czech Crown (Kč). The present exchange rate is about 26 CZK per 1 Euro. Major credit cards are accepted in most shops, restaurants and hotels. You can buy Czech Crowns at banks and other authorized money exchange offices. ATMs accept most bank and credit cards. Travellers' cheques are only accepted by leading banks.

Visa Policy

Participants from most European countries and the USA can enter the Czech Republic without a visa. Other participants are advised to check requirements at their closest Czech embassy or consulate, and make their own arrangements. Detail information can be found on https://www.mzv.cz/bratislava/cz/vizove_a_konzularni_informace/vizova_agenda/obecne_vizove_informace/index.html. An official letter of invitation will be sent on request. Such a letter will not grant any financial support.

Insurance

The Organizing Committee does not accept any liability for personal injuries, or loss or damage to property belonging to participants or accompanying persons. Kindly check your personal and travel insurance before you travel.

Electricity

Electricity supply is 220 V, 50 Hz.

Tips for Prague visitors

Honest Guide: https://www.youtube.com/playlist?list=PLM9_ KZNJw8qEZd4MxOXfSvKszTJKLI_J2

https://www.voutube.com/channel/UCt7oj318iVQi7vRbc1bNjIA



List of symposia, workshops and colloquium

It is our pleasure to announced these submitted symposia so you can register your presentation (talk or poster) in one of them.

The following list of symposia was accepted by the Organizing Committee. Every participant can present only **one talk** OR **one poster** as a **presenting author**. Please select the most suitable for your presentation.

Please note that if there are not enough presentations in the symposium you choose, your presentation will be placed in another appropriate symposium.

Lecture / Poster: if there are too many lectures, your presentation may be changed to a poster. You will be informed in advance.

Symposia

- A01 Advances in Devonian palaeobotany a symposium in honor of Phillipe Gerrienne
- A02 Cryptosporophytes: a new group of early land Plants
- A03 Permian plant succession and the global climate changes
- A04 Glimpses into the evolution of Fungi
- A05 Late Palaeozoic continental ecosystems of Gondwana
- A06 Palaeozoic palaeobotany: taxonomy, diversity and palaeoecology
- B01 Permo-Carboniferous peat-forming tropical forrests buried in situ by volcanic ash in the light of palaeobotanical and palynological research; results from the Czech Republic and China
- B02 Palaeozoic palynology: a CIMP and Aramco-CIMP Special Project symposium dedicated to the memory of Professor Bernard Owens
- C01 The innovations of plants in the Mesozoic
- C02 Amber palaeobotany: What did the forests for all the fossil i nvertebrates look like?
- CO3 Palaeobotany and Palynology of the Late Cretaceous– Paleocene Deccan Intertrappean Beds of Central India
- CO4 Mesozoic plants: taxonomy, diversity, and palaeoecology
- C05 Evolution of Neotropical ecosystems
- C06 The Legacy of Plant diversity and environmental background across the critical intervals of the Mesozoic
- C07 Vegetation history and evolution of terrestrial ecosystems in Southern Africa, from early land plants to modern vegetation
- C08 Mesozoic plant cuticles: implications for evolution and palaeoenvironment
- D01 Honoring palaeopalynologist Reinhard Zetter
- D02 Mesozoic and Cenozoic palynology, mesofossil and palynofacies analysis: a tribute to the memory of David J. Batten
- D03 Reproductive organs of fossil plants and their in-situ spores and pollen
- H01 Quantitative reconstruction of Holocene land-use and land-

- cover change: advances and applications
- 102 Forward to the past research development on quantifying land cover change and its implication for the biosphere
- H03 Application of palynological and palaeoecological information in conservation and restoration
- H04 Back to the Future? Sub-boreal vegetation and climate as a reference for future environmental dynamics
- H05 Changing Island Ecosystems
- H06 Palynology for Sustainability: the Long-Term Perspective of Human Impact on Landscape for Environmental Change (LoTEC)
- H07 Long-term tropical forest dynamics; critical knowledge in a changing world
- H08 Mountain Palaeoecology on the move: the future of mountain ecosystems as seen through palaeoecology
- H09 Big events Big Impacts. Success and adaptation strategies of ancient populations to climate changes
- H010 High resolution palaeo-records tracking species and community responses to past fire dynamic
- M01 Modern pollen-vegetation studies for past land-cover reconstructions and calibration of the fossil pollen record
- M02 Exploring trends in surface pollen deposition in response to biotic and abiotic drivers
- M03 Recent advances in dinoflagellates and their cysts as environmental tracers
- M04 Extra microfossils in pollen slides: from environmental indicators to biotic interactions
- M05 Forensic Palynology
- M06 Pollen wall morphology, development, and developmental mechanisms
- M07 Pollen record from cave environments: The dark side of palynology
- M08 Fire as an ecological and evolutional driver of terrestrial biota
- M09 Molecular proxies in palaeoecology: recent developments and their implications for understanding past environments and ecosystems
- M10 Biopolymers in palynological and palaeobotanical research (session co-organised by the Palynology Specialist Groups of the Linnean Society and the Micropalaeontological Society)
- M11 Applied palynology: methodological innovations
- M12 Global forest dynamics: from pollen-based past reconstruction to future prediction
- Q01 A global view on Early Pleistocene Climate and Vegetation dynamics
- Q02 Exploring ecological concepts in the Quaternary
- Q03 Marine pollen records for direct land-sea correlation of Earth system dynamics
- Q04 Glacial-interglacial cycles as natural experiments
- Q05 Impact of aridity on vegetation: past and present evidence reveals our future
- T01 The evolution of plant diversity under palaeoenvironmental changes in the Qinghai-Tibetan Plateau Region
- T02 Cenozoic continental climate and vegetation patterns on both sides of the North Pacific an open NECLIME symposium
- Z01 IAWA Fossil Wood Symposium IPC-IOPC 2020
- Z02 Palaeobotany at the forefront of gender equality
- Z03 Phylogenetic Palaeobotany
- Z04 IAPT Early Career Investigator Symposium: New fossils, New Methods, New Ideas
- Z05 Palynology and palaeobotany in the digital era
- Z06 Plant-insect interaction and their co-evolution during deep time

Workshops & colloquium

- W01 Navigating Nomenclature Publishing, typifying and naming fossil-taxa (The International Code of Nomenclature for algae, fungi, and plants)
- W02 Estimating pollen productivity with R tools/disqover package
- W03 Registration of Plant Fossil Names
- W04 Artistic session
- NC Celebration of 200 Years of Palaeoboatny Botanical Nomenclature in Palaeobotany and Palaeopalynology

April / May $\mathbf{29^{th} - 01^{st}}$ Thursday – Saturday	May 1st Saturday	May 2 rd Sunday	May 3rd Monday	May 4th Tuesday	May 5th Wednesday	May 6th Thursday	May 7th Friday	May $8^{th} - 9^{th}$ Saturday – Sunday	Approx. timing:
Pre-Conference		Opening Key note talks	Key note talks	Mid-Conference Field-trips	Talks	Talks	Talks	Post-Conference Field-trips	8:30–10:30
Field-Trip ! starts in Dresden		Coffee break	Coffee break		Coffee break	Coffee break	Coffee break		10:30-11:00
		Talks	Talks		Talks	Talks	Talks		11:00-13:00
	Clarion hotel W01 (9:00 –16:00) W03 (16:00 – 17:00) NC (17:00 – 18:45) Charles University W02 (10:00 – 16:00)	Lunch	Lunch		Lunch	Lunch	Lunch		13:00-14:30
		Talks	Talks		Talks	Talks	Talks		14:30–16:30
		Coffee break	Coffee break		Coffee break	Coffee break	(Coffee break)		16:30–17:00
	Ice breaker party Clarion hotel 19:00 – 21:00	Talks	Talks & poster presentations		Talks & poster presentations	Talks & poster presentations	Closing Ceremony		17:00-19:00
			"Sternberg's" Dinner National museum (optional)						20:00–24:00

FEES & TERMS

Early registration

September 30, 2020 at the latest

490 EUR / 390 EUR student

Regular registration

October 1, 2020 - January 31, 2021

590 EUR / 490 EUR student

Late/Onsite registration

February 1 - May 7, 2021

690 EUR / 590 EUR student

Deadline for abstract submission

November 30, 2020

Registration fees

Registration fees cover admittance to Opening and Closing ceremonies, Ice Breaker Party, admittance to all symposia, Refreshment during coffe breaks, lunches (buffet, selection of vegetarian and nonvegetarian food), conference materials (abstract book – on-line, participants will receive password).

Sternberg's Dinner

Caspar M. Sternberg was not only a founder of palaeobotany, but also a key founder of the National Museum in Prague. In honor of his significance to the institution, Sternberg's Dinner will take place in the Historical palace of this museum (Wenceslas Square). This beautiful Neo-Renaissance building has just undergone a major reconstruction, and is known for its history, as well as being a popular location for filming (Casino Royale, From Hell). You will be offered a welcome drink, free bar with selection of soft drinks, wines, beer, coffee, tea and buffet menu (including appetizers and deserts). Estimated duration will be three hours.

Abstract book

Abstracts will be **published** only if payment is made before January 31, 2021.

FIELD-TRIPS

Permian continental ecosystems of SE Germany (Chemnitz, Manebach, Tambach)

(Pre-Conference Field Trip, 3 days; 330 EUR)

 $15\hbox{--}20$ attendees (transportation by minibusses; including the participants luggage)

Expected length: 800 km (bus), 2 km (walk) **Special requirements:** Field dress and shoes

Costs includes pick-up service from Dresden airport, accomodation and transport during excursion, breakfasts + lunch packages + diners and transfer to Prague, transportation by minibusses (including the participants luggage).

The field trip will present classical outcrops, ongoing excavations and leading exhibitions, which show fossil assemblages found in Permian terrestrial strata of SE Germany. Anatomically preserved plants, animals and their taphonomic pathways will be presented and discussed as modern methods of "fossil hunting" and collecting.

Guides: Ronny Rössler, Steffen Trümper

Lower Paleozoic of the Barrandian area

(Mid-Conference Field Trip, 1 day; 71 EUR)

1 bus = ca. 50 attendees

Expected length: 150 km (bus), 2 km (walk)

Special requirements: Geological hammer is recommended.

The excursion will provide a brief review of Cambrian, Ordovician and Silurian stratigraphy of the Barrandian area. Five visited outcrops will comprise: middle Cambrian at Medalův Mlýn (greywackes containing prasinophytes and cyanobacteria), Middle/Upper Ordovician locality at Kazín (shales with abundant chitinozoans), Upper Ordovician locality at Hlásná Třebáň (shales with abundant cryptospores), Wenlockian Vyskočilka in Prague (black shales and limestones with common chitinozoans), and Přídolí at the Kosov quarry near Beroun (limestones with tuffites containing remains of early land plants).

Guides: Oldřich Fatka, Jakub Vodička

Late Cretaceous of the Bohemian Cretaceous Basin

(Mid-Conference Field Trip, 1 day; 79 EUR)

1 bus = ca. 50 attendees

Expected length: 150 km (bus), 3 km (walk)

Special requirements: Visited localities are situated in open-



cast lignite mines, so solid shoes are needed. Geological hammer is recommended. A field trip to three localities: Horoušany, Vyšehořovice and Pecínov, where the exposed Peruc-Korycany Formation (Cenomanian, Late Cretaceous) will provide an overview of palaeobotany and sedimentology of the mid-Cretaceous part of the Bohemian Cretaceous Basin. In Horoušany and Pecínov, collecting of fossils and sampling for microfossils will be possible.

Guides: Jiří Kvaček (palaeobotany), David Uličný (geology), Marcela Svobodová (palynology)

Neogene of north-western Bohemia

(Mid-Conference Field Trip, 1 day; 108 EUR)

1 bus = ca. 50 attendees

Expected length: ca. 200 km (bus)

Preliminary itinerary: https://goo.gl/maps/QArWp7p8zqRE6cfK8



Special requirements: Both visited localities (Vršany, Bílina) are situated in open-cast lignite mines, so solid shoes are needed. Geological hammer is recommended.

Eocene to Pliocene sediments are preserved in depressions and grabens along the Krušné hory Mts. Besides fresh-water coal-bearing deposits, products of volcanic activity occur in Western and Northern Bohemia, forming the eastern branch of the

European Cenozoic Volcanic Alkaline Province. We will visit lower Miocene sediments of the Most Basin with two stops, first in Vršany in the morning, and second in Bílina in the afternoon. The first stop will mainly be devoted to collecting fossil plants within the main lignite seam; the second stop will rather be focused on explication of the overall geological situation in which the sediments were deposited, from the basement to the uppermost parts, situated in the MMCO.

Guides: Jakub Sakala (palaeobotany), Petr Šulcek and Tomáš Novotný (geology – Vršany), Karel Mach (geology – Bílina)

Postglacial of Šumava National Park

(Mid-Conference Field Trip, 1 day; 81 EUR)

1 bus = ca. 50 attendees

Expected length: 400 km (bus), 8 km (walk)

Map: https://en.mapy.cz/s/pevacuroju (drive), https://en.mapy.cz/s/maduzacese (hike)

Special requirements: The visited lake is situated in quite a remote area, away from the road, only accessible on foot. **The total hike is about 8 km**. Only persons able to undertake such a lengthy trail are allowed to register! Bring walking shoes and outdoor clothing (altitude of 1100 m).





This excursion will cover late Quaternary vegetation changes, with focus on long-term dynamics of natural mountain spruce forests and their disturbances. We will visit an investigated lake of glacial origin and a peat bog, where results from sedimentary archives will be presented. Along the trail, we will have an opportunity to observe mountain spruce forests that were recently affected by severe bark beetle infestations and wind disturbances, and are currently regenerating.

The excursion will lead through the most protected parts of the national park, only accessible on foot. A hike leading from a bus parking lot to a glacial-origin lake is planned with a total length of 8 km.

Guide: Petr Kuneš

Late Pleistocene and the Holocene of Bohemian Paradise

(Mid-Conference Field Trip, 1 day; 82 EUR)

1 bus = ca. 50 attendees

Expected length: 250 km (bus), 1 km (walk)

Barely hour and a half away from Prague, "rocky cities" built of Cretaceous sandstones offer an opportunity to enjoy picturesque, rarely seen landscapes and to visit some classical, as well as freshly investigated Late Pleistocene and Holocene sites. Emphasis will be given to stratified archaeological sites under rock shelters and adjacent wetlands, which together provided a wealth of environmental proxies. No special clothing or shoes are required. All



places visited will be easily accessible on foot. The walking distance from the bus will be within one kilometer. We will make several stops at which we will show the methods of field research and the results of palaeobotanical investigations.

Guide: Petr Pokorný

Modern pollen deposition in relation to Holocene vegetation changes in the Krkonoše Mts.

(Mid-Conference Field Trip, 1 day; 91 EUR)

1 bus = ca. 50 attendees

Expected length: 300 km (bus), 7 km (walk)

Special requirements: The visited sites are situated in quite a remote area, away from the road, only accessible on foot. **The total hike is about 7 km**. Only persons able to undertake such a lengthy trail are allowed to register!

Bring walking shoes and outdoor clothing (altitude of 1400 m).

This excursion will visit our highest mountain range in NE Bohemia.

In this iconic landscape covered in its highest part by azonal tundra accompanied by many peatbogs, a long-term pollen monitoring project has been carried out, since 1997. We will concentrate on pollen monitoring results in relation to Holocene development of mountain tundra and mountain forest.

Two or three hours walk around the Krkonoše plateau at an elevation of 1200 to 1400 m a.s.l. (Vrbatova bouda Chalet – Pančava





Waterfall – Labská louka meadow – Labská bouda Chalet – Labe (Elbe) Waterfall – the spring of Labe (Elbe) river – Pančava mire - Harrachovy kameny rocks - Kotelní jámy (Kettle holes) – Vrbatova bouda Chalet; 7km).

Guides: Helena Svitavská-Svobodová

Holocene of Bohemian Switzerland and Doksy region

(Mid-Conference Field Trip, 1 day; 93 EUR)

1 bus = ca. 50 attendees

Map: https://en.mapy.cz/s/numuhozada

Expected length: 300 km (bus), 1-2 km (walk)

Sandstone areas in the western part of the Czech Cretaceous basin developed in two contrasting landscapes. Bohemian Switzerland is characterized by spectacular rock towers and deep moisty gorges covered by peatlands. This steep geomorphological gradient is covered by a fine-grained mosaic of coniferous and broadleaved forests. We will visit the largest natural rock gate in Europe (Pravčice gate), and an adjacent peat deposit with pollen and charcoal record spanning the Late Holocene.

Sandstones in Doksy region are in the last stage of pseudokarst development. Gently sloped tablelands and shallow peaty basins prevail over sandstone hummocks. Dominance of pine, disjunct floristic elements, vacillating human colonization and unusual stability of vegetation development since the Early Holocene have put the area among the westernmost exclave populations of hemiboreal taiga.

Guides: Vojtěch Abraham, Přemysl Bobek

$Permo\hbox{-}Carboniferous\ of\ the\ Krkono\"{s}e\ Piedmont\ Basin$

(Post-Conference Field trip, 2 days; 206 EUR)

1 bus = ca. 40 attendees

Expected length: 350 km, (bus), 2-3 km (walk)

Special requirements: Field dress and shoes, geological hammer

1st day: Arrival at the Nova Paka Museum (Klenotnice), which is well known for its large collection of gemstones and silicified woods. The Castle Pecka (pecka = nodule in English) will be visited. This castle was built on the Carboniferous (Kasimovian) rocks of the Kumburk Formation containing silicified woods. A locality near Nova Paka with silicified woods will be visited, and a field with occurrences of silicate rocks and silicified woods. At the end of the day, we will

travel to Vrchlabí city, where we will stay overnight. This city is on the northern edge of the Krkonoše Piedmont Basin with a nice view of the Krkonoše (Gigant) mountains.

2nd day: Study of the Vrchlabí section that encompasses practically the whole Rudník Horizon (Permian, Asselian). 600 m in length, this horizon is about 180 m thick, with nine fossiliferous layers, from which about five are still available. 39 plant



species have been identified– Sphenopsids (Calamites, Annularia), marattialean ferns, pteridosperms (e.g. Odontopteris, Autunia), cordaitaleans and conifers (Culmitzschia, Ernestiodendron and Walchia). From animals: sharks, acanthodians, actinopterigians, amphibians, molluscs and conchostracans. The next locality will be in Nedvězí, where the tailing heap of the Otto adit is accessible. This adit exploited the Čikvásky coal seam (Carboniferous, Gzhelian), and it is still possible to find some fossils there. Flora of the Čikvásky Horizon is not very diverse: Lycopsids (Syringodendron), sphenopsids (Calamites), marattialean ferns, pteridosperms (Alethopteris, Odontopteris) and cordaitaleans; only fish scales from fauna. If time permits, a field (near Bítouchov village) with silicified woods will be also visited. In the evening we return to Prague.

Guides: Zbyněk Šimůnek, Václav Mencl, Jana Drábková.

Miocene - Quaternary of Southern Moravia (Palynology: Carpathian Foredeep, Moravian Karst, Archeological localities)

(Post-Conference Field Trip, 2 days; 232 EUR)

1 bus = ca. 50 attendees

Expected length: 730 km (bus), 2-3 km (walk)

This area of South Moravia is known not only for Czech vineyards and wine cellars (Mikulov), but also for Miocene deposits of the Carpathian Foredeep, several prehistorical localities and the Moravian Karst, with 15 palynologically evaluated caves. We will visit these localities: 1st day – Kůlna Cave (known for Neanderthal skeletal remains), Podbřežice (Langhian marine sediments, Bryozoal



limestones), Pavlov (Archeopark - Upper Paleolithic settlement), Mikulov (wine cellars in the evening); 2nd day – Hevlín (Upper Burdigalian deposits), Pohansko (Early Medieval Settlement), Čejč Lake deposits (Pleistocene-Holocene).

Guides: Nela Doláková, Eva Břízová, Marianna Kováčová

(Fees include: guides, lunch packages, transportation by buses, accomodation (hotel, double rooms) + dinner during 2 and 3 days trips; minimum: 20 attendees)

XV International Palynological Congress XI International Organization of Palaeobotany Conference

200 Years of Palaeobotany

1st–8th May, 2021, Prague, Czech Republic

http://www.prague2020.cz/