INTERNATIONAL UNION OF BIOLOGICAL SCIENCES SECTION FOR PALAEOBOTANY



International Organisation of Palaeobotany

IOP NEWSLETTER 111

October 2016

CONTENTS

FROM THE SECRETARY/TREASURER IPC XIV/IOPC X 2016 IOPC 2020 IOP MEMBERSHIP IOP EXECUTIVE COMMITTEE ELECTIONS IOP WEBMASTER POSITION BOOK REVIEW IOP HISTORY SPECIAL EDITION UPCOMING MEETINGS CALL FOR NEWS and NOTES Appendix 1 Appendix 2 Appendix 3 Appendix 4

The views expressed in the newsletter are those of its correspondents, and do not necessarily reflect the policy of IOP. Please send us your contributions for the next edition of our newsletter as soon as possible, and they will be passed on to the new leadership.

President: Johanna Eder-Kovar (Germany) Vice Presidents: Bob Spicer (Great Britain), Harufumi Nishida (Japan), Mihai Popa (Romania) Members at Large: Jun Wang (China), Hans Kerp (Germany), Alexej Herman (Russia) Secretary/Treasurer/Newsletter editor: Mike Dunn (USA) Conference/Congress Chair: Francisco de Assis Ribeiro dos Santos

IOP Logo: The evolution of plant architecture (© by A. R. Hemsley)

FROM THE SECRETARY/TREASURER

Dear IOP Members,

Wow it's hard to believe that I am writing my last newsletter as Secretary/Treasure of IOP. Has four years really passed since our meeting in Tokyo?

Yes it has, and I would like to thank all of you for allowing me to serve you and The International Organisation of Palaeobotanists. It has truly been my pleasure. I apologize for getting off to such a slow start, but hope that I leave this great organization in decent shape for the next Secretary/Treasurer.

Here, in this newsletter, we have the finalized agenda and logistics for what looks to be a great meeting in Salvador, Brazil. Very importantly, we also have a proposal for IOPC 2020. The formal proposal is Appendix 1.

In addition, Karl Niklas has a wonderful new book out that I hope all of you will add to your personal and institutional libraries, and Gar Rothwell has submitted a history of IOP, that I hope will inspire all of you to make a concerted effort to support this wonderful organization. This is appendix 2.

The minutes of the 2012 General Assembly are attached as Appendix 3, and the latest version of the General Assembly Agenda is attached as Appendix 4. This is a flexible agenda, and I welcome any and all suggestions. Again this is a membership driven organizaation, so please let me know what YOU want.

October 2016

Last but not least, even though I will no longer serve IOP on the Executive Council, I vow to you: the Membership, the new Executive Council, and most importantly to the incoming Secretary/Treasurer that I will do everything in my power to make this next term of leadership as great as you all want it to be. I am honored to have been at your service for the last four years, and I will be at your service as you see fit. You have my sword.

Respectfully,

Mike

P.S.

Although I will no be a member of the IOP Executive Council after the General Assembly, I will be happy to pass on any information to the next Secretary/Treasurer at:

Mike Dunn

Department of Biological Sciences Cameron University Lawton, Oklahoma 73505 Ph.: 580-581-2287 email: michaeld@cameron.edu

IPC XIV/IOPC X 2016

The 2016 joint meeting of the International Palynological Congress and the International Organization of Palaeobotanists is set to go 23-28 October 2016 at Salvador, Bahia, Brazil. The venue is The Bahia Othon Palace.



X International Organisation of Palaeobotany Conference

The homepage with registration details is up and running.

The Website is:

http://www.ipciopcbrazil.com/

All of the details and the agenda are posted, so please check them out. I look forward to seeing many of you at Salvador, but understand that we can't all be there. However, all of us do have a voice, so please send me any items you have for the General Assembly Agenda. In particular, please send any and all information or comments regarding the use of PayPal for dues payment. I have heard that many members dis-like, and/or distrust this portal, but I do not have the details. This is on the Agenda (Appendix 4) and I will be happy to be your advocate if you cannot attend the meeting, but I need to know what I am advocating. Also and very importantly, this agenda is still just a proposal, and I can and will add anything that I missed, or that needs to be discussed.

October 2016

are attached as Appendix 3. If you see anything that needs to be emended, please let me know.

IOPC 2020

AWESOME!!!!! We have a fantastic proposal to host IOPCXI/IPCXV at Prague, Czech Republic. The proposal is attached as Appendix 1. I am really stoked about this venue, and I hope you are too.

Thank you Jiri and your team.

IOP MEMBERSHIP

The by-laws of IOP dictate that any member more than 2 years in arrears with their dues shall be expunged, and I did that to clean the slate for the incoming Secretary/Treasurer. I understand that it is easy to forget to pay when one's membership expires on January 1, because you can't pay in advance if you are already a member. Also, many of our members live in areas where PayPal is not available.

I also know that some members have a bias against using Paypal. Please let me know what they are, so that we can discuss them at the Business Meeting. That system makes life very easy for the Secretary/Treasurer but if there are problems we need to know what they are so we can address them. Sending checks (or cash) in anything except US dollars is not helpful because the bank exchange costs (= Vigorish) are too prohibitive.

3

IOP EXECUTIVE COMMITTEE ELECTIONS

The IOP Executive Committee elections are still officially underway, however this email closes electronic voting. If you still haven't voted, but would still like to, you must vote by paper ballot at the General Assembly. However you must register with me by 5:00 pm local time to get a ballot. If you haven't voted, and will not be at the General Assembly, please request a paper ballot from me and have it delivered by a proxy at the General Assembly. This is the final call for ballots.

I will bring the email submitted ballots with me and they are open records for anyone to see. However, the email ballots will be counted three times, and Notarized. (A Notary Public is an official of integrity appointed by state government —typically by the secretary of state — to serve the public as an impartial witness in performing a variety of official fraud-deterrent acts related to the signing of important documents. These official acts are called notarizations, or notarial acts).

It is also important to note that I have not yet voted. I have reserved my vote to serve as a tie breaker should that be needed.

IOP Webmaster

I was very sorry to accept the resignation of Alan Spencer as our Webmaster. Alan has done a great job for us for more than 10 years now, but he has decided that he needs to focus on other things. I would personally

October 2016

like to thank him publically, and acknowledge how much he has helped me these past years. His help was invaluable. I hope all of you also take the time to thank him for his service to IOP.

But it does mean that we need someone to take on that position. Alan has generously offered to be there to assist in the transition, so things should go smoothly for our next webmaster. If you have an interest in the position, or know someone who would like to serve IOP as Webmaster, please let me know as soon as possible. This position is not voted on, and you can serve as long or as short of time as you would like.

Our organization can't function properly without a webmaster. Alan and our previous webmasters have done a great job of setting up and maintaining the site, so it just needs someone with the time and skills to keep it running. Please consider this position, if it fits your agenda.

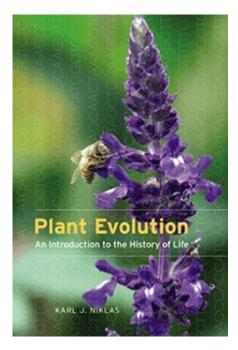
THE HISTORY OF IOP

Gar Rothwell submitted a wonderful pictorial history of The International Organisation of Palaeobotany that I hope will inspire you to get and/or stay involved.

I know that I am humbled to have stood on the shoulders of these greats of Palaeobotany.

Please see Appendix 2

BOOK REVIEW



Plant Evolution: An Introduction to the History of Life.

By: Karl J. Niklas

560 pages | 144 color plates, 16 halftones, 24 line drawings, 20 tables | 6 x 9 | © 2016

Paper \$45.00 ISBN: 9780226342146 Published August 2016 Cloth \$120.00 ISBN: 9780226342009 Published August 2016 E-book \$45.00 About E-books ISBN: 9780226342283 Will Publish August 2016 Also Available For Instructors

Although plants comprise more than 90% of all visible life, and land plants and algae collectively make up the most morphologically, physiologically, and ecologically diverse group of organisms on earth, books on evolution instead tend to focus on animals. October 2016

This book tries to fix that bias (Dunn)

Andrew Knoll, Harvard University

"In a true tour de force, Niklas assays the mechanisms and patterns of evolution, from molecules to ecosystems, using plants as examples. Must-reading for plant scientists, Plant Evolution will both delight and challenge everyone who peers into the heart of biology."

Bruce H. Tiffney, University of California, Santa Barbara

"This is a work of scholarship and of imagination, offering great insight onto patterns of plant evolution and the underlying processes that drive those patterns. It will attract a wide range of biologists as researchers and as teachers, some coming to it as evolutionary biologists, some as botanists and paleobotanists, some as physiologists and geneticists. All will be attracted by the general review of the evolutionary forces affecting plants, by the cutting edge research it summarizes, and by the interesting ideas and totally new insights interleaved throughout—several of which are cutting edge in their own right."

A NEW JOURNAL

Introducing a new journal:

Jiří Kvaček, National Museum Prague We take this opportunity to introduce the new international open access journal Fossil Imprint, issued by the National Museum in Prague. The journal is issued in both electronic and printed versions (ISSN print 2533-4050, electronic – 2533-4069). Its website http://fi.nm.cz/ provides free back

IOP 111

issues of Fossil Imprint, as well as its precursor Acta Musei Nationalis Pragae, series B – Historia Naturalis (Sborník Narodního muzea v Praze, řada B – přírodní vědy).

The journal covers palaeobotany, palaeozoology and palaeoanthropology. Its particular focus is on original papers dealing with terrestrial palaeobiota, their morphology, systematics and palaeoecology. It is a big challenge for all of us to successfully run a palaeontological journal in the Czech Republic, a country with a long tradition of palaeontological research. We are the second largest palaeontological journal in the country, after Bulletin of Geosciences, but the focus of Fossil Imprint will be in rather different topics. We would like to the majority of our articles to address systematics, particularly designations of new species. Palaeontological studies based on morphological observations of well-preserved fossils are key components of combined molecular and morphological analyses mapping evolution of global biota. Descriptions and analyses of palaeo-floras and palaeo-faunas are additional topics of interest to us.

An international editorial board that includes many world leading specialists in their disciplines will guarantee the quality of accepted papers. Our aim is to publish not only Czech and Mid-European authors; we would like to attract specialists from all over the world. Our goal is publication quickly on-line, using a blind review process of at least two reviewers, with guaranteed regularity – twice a year.

Additionally, in the National Museum we hope for help from the palaeobotanical

October 2016

community. For next three years we will be under the evaluation process of Thompson Reuters for impact factor. For fulfilling their requirements, and particularly periodicity, we would appreciate receiving manuscripts for publication.

SPECIAL EDITION

New publication on western North American Eocene paleobotany and paleontology

David R. Greenwood, Biology Dept., Brandon University, Brandon, Manitoba, Canada

In June 2016 the Canadian Journal of Earth Sciences published a special issue (volume 53, issue 6) titled "Eocene Paleontology and Geology of Western North America". http://www.nrcresearchpress.com/toc/cjes/5 3/6

This special issue of Canadian Journal of Earth Sciences features a series of papers arising from a session devoted to the same topic held as part of the annual meeting of the Geological Society of America in 2014 in Vancouver, British Columbia (Greenwood et al., 2016a). That session was co-organized and co-chaired by Bruce Archibald (a paleoentomologist), and IOP members Kathleen Pigg, Melanie DeVore, and David Greenwood. The special issue was co-edited by Kathleen, Melanie, and David, with Bruce acting as special editor for some contributed papers.

Of interest to IOP members are several papers devoted to the Eocene paleobotany of key fossil sites such as Florissant in Colorado (Zaborac-Reed & Leopold, 2016), Republic in Washington (DeVore & Pigg,

6

2016), and the Falkland, McAbee and Quilchena sites in British Columbia (Gushulak et al., 2016; Mathewes et al., 2016; Moss et al., 2016). The papers by Mathewes et al. (2016), Gushulak et al. (2016) and Zaborac-Reed and Leopold (2016) present paleobotanical interpretations of climate using a combination of leaf physiognomic methods and nearest living relative methods, but also provide overviews of the fossil floras of the sites they studied. Moss et al. (2016) present a high resolution pollen study of the Falkland site, showing how the local lake-side vegetation appears to have responded to the frequent volcanism-driven disturbance. DeVore and Pigg (2016) present a study of leaf form within taxa from the Republic locality, arguing for a record of hybridization within Rosaceae.

Together with Jim Basinger, the special issue editors also co-authored a review of the history of researchers and their contributions to understanding the Eocene fossil floras of the interior of British Columbia and northern Washington that are often collectively referred to as the 'Okanagan Highlands' fossil localities (Greenwood et al., 2016b). In this review we trace the study and understanding of these floras from the work of father and son Sir William Dawson and George Mercer Dawson, through D. Penhallow, E.W. Berry, R.W. Brown, Chester Arnold, the palynologist Glenn Rouse and his students, Len Hills, Jim Basinger and Gar Rothwell, Ruth Stockey and her students, Steve Manchester, Jack Wolfe and Howard Schorn, our own contributions and that of our students, as well as many others. This review also briefly addresses the confusion in the literature over the age of important

sites such as the Princeton Chert, McAbee, Driftwood Canyon (a.k.a. Smithers and Driftwood Creek), and Republic, noting that regardless of whether researchers use older K-Ar radiometric dates or more recent Ar-Ar and U-Pb dates, that as the early-middle Eocene boundary (i.e., Ypresian-Lutetian) has been placed at about 48 Ma since 1989 (Harland, 1990) vs. 52 Ma in the GSA time scale in Palmer (1983), and is now firmly dated at 47.8 Ma (Cohen et al., 2013), that all of these sites are early Eocene with the possible exception of the upper part of the Princeton Chert. Precision in assigning the age of these sites is critical as for example. fossil taxa from the Princeton Chert have been used to date nodes in recent molecular phylogenies of both ferns and palms. Other papers in the special issue examine invertebrates from both Florissant (Buskirk et al., 2016) and the middle to late Eocene Kishenehn Formation of Idaho-British Columbia (Greenwalt et al., 2016). illustrating the value of combined geochemical and traditional paleontological approaches to interpreting Eocene environments.

The individual papers are available online through the Canadian Journal of Earth Sciences, or from individual authors. The Introduction article and the review (Greenwood et al., 2016a & b) are both Open Access. The whole issue is available in hard copy through the publisher. Please note though that most articles are in color in PDF form only.

References

Buskirk BL, Bourgeois J, Meyer HW, Nesbitt EA. 2016. Freshwater molluscan fauna from the Florissant Formation, Colorado:

7

paleohydrologic reconstruction of a latest Eocene lake. Canadian Journal of Earth Sciences, 53(6): 630–643, 10.1139/cjes-2015-0168

Cohen KM, Finney SC, Gibbard PL, Fan J-X. 2013 (updated 2015). The ICS International Chronostratigraphic Chart. Episodes, 36: 199–204. [online]. http://www.stratigraphy.org/ICSchart /ChronostratChart2015-01.pdf.

DeVore ML, Pigg KB. 2016. Biotic processes in the Okanagan Highlands floras: possible evidence of hybridization in plants adapting to a temperate forest. Canadian Journal of Earth Sciences, 53(6): 622–629, 10.1139/cjes-2015-0190

Greenwood DR, Pigg KB, DeVore ML. 2016a. Eocene paleontology and geology of western North America. Canadian Journal of Earth Sciences, 53(6): 543–547, doi: 10.1139/cjes-2016-0043

- Greenwood DR, Pigg KB, Basinger JF, DeVore ML. 2016b. A review of paleobotanical studies of the Early Eocene Okanagan (Okanogan) Highlands floras of British Columbia, Canada and Washington, U.S.A. Canadian Journal of Earth Sciences, 53(6): 548–564, doi: 10.1139/cjes-2015-0177
- Gushulak CAC, West CK, Greenwood DR. 2016. Paleoclimate and precipitation seasonality of the Early Eocene McAbee megaflora, Kamloops Group, British Columbia. Canadian Journal of Earth Sciences, 53(6):

591–604, doi: 10.1139/cjes-2015-0160

- Harland WB. 1990. A geologic time scale 1989. Cambridge University Press.
- Mathewes RW, Greenwood DR, Archibald SB. 2016. Paleoenvironment of the Quilchena flora, British Columbia, during the Early Eocene Climatic Optimum. Canadian Journal of Earth Sciences, 53(6): 574–590, doi: 10.1139/cjes-2015-0163

Moss PT, Smith RY, Greenwood DR. 2016. A window into mid-latitudinal Early-Eocene environmental variability: A high-resolution palynological analysis of the Falkland site, Okanagan Highlands, British Columbia, Canada. Canadian Journal of Earth Sciences, 53(6): 605–613, doi: 10.1139/cjes-2015-0167.

Palmer AR. 1983. The Decade of North American Geology. 1983 Geologic Time Scale. Geology, 11: 503–504. doi: 10.1130/0091-7613(1983)11<503:T DONAG>2.0.CO;2

Zaborac-Reed SJ, Leopold EB. 2016. Determining the paleoclimate and elevation of the late Eocene Florissant flora: support from the coexistence approach. Canadian Journal of Earth Sciences, 53(6): 565–573, 10.1139/cjes-2015-0165 The Midcontinent Paleobotanical Colloqueum MPC, will be hosted by the University of Michigan during the spring of 2017.

The 10th European Palaeobotany and Palynology Conference



EUROPEAN PALAEOBOTANY & PALYNOLOGY CONFERENCE

The 10th European Palaeobotany and Palynology Conference will be held in Dublin on the 12th to 19th of August 2018 at University College Dublin. Partner organizations include Trinity College Dublin and the National Museum of Ireland. We look forward to welcoming you in 2018

Jennifer McElwain, Earth Institute, University College Dublin Chair of EPPC organizational committee

CALL FOR NEWS AND NOTES

Please send submissions for the next news letter to:

Mike Dunn Department of Biological Sciences Cameron University Lawton, Oklahoma 73505 Ph.: 580-581-2287 email: <u>michaeld@cameron.edu</u>

11th International Organisation of Palaeobotany Conference 15th International Palynological Congress

Prague, Czech Republic

A proposal for the IOPCXI/IPCXV joint meeting 2020

INTRODUCTION

It is a challenge and honour for us to organize the IOPC/IPC in Prague. There is a long tradition of palaeobotany research in this country. Names like K. M. Sternberg, A. Corda, K. B. Presl, O. Feistmantel and F. Němejc are familiar to all palaeobotanists. Moreover, the meeting in 2020 will not be just another world congress on palaeobotany and palynology, but also a **celebration of the starting point of palaeobotanical nomenclature**. The first fully scientific and comprehensive survey of fossil plants was published 200 years ago by Kaspar M. Sternberg, who issued his Versuch einer geognostische botanischen darstellung der Flora der Vorwelt on his own, during the years 1820–1838.

The unique geological setting of the Czech Republic provides important sites from the early Palaeozoic through the famous Carboniferous known from Sternberg's time. Cretaceous floras originally described by Corda are an important milestone in understanding of angiosperm evolution. Rich Tertiary floras provide insight in evolution of modern European flora. Quaternary, particularly Holocene floras well-represented in the country help us in understanding the evolution of processes forming the world as we know it today.



In 2006, Prague hosted the 7th European Palaeobotanical Palynology Conference, organized by the same group of palaeobotanists and palynologists who now propose to organize the **XI IOPC/XV IPC**. That event attracted palaeobotanists and palynologists not only from Europe, but also from overseas. Drawing on this experience, as well as using new material and knowledge gained since then, the group is fully prepared to host the next **IOPC/IPC conferences**.

WHY THE CZECH REPUBLIC AND PRAGUE?



The Czech Republic is a safe destination, with a politically and economically stable environment.

It is situated in the very centre of Europe, providing an ideal location and easy access. All major airlines serve Václav Havel International Airport (Prague, Ruzyně), as well as many budget carriers, like EasyJet. Direct flights from most major cities arrive daily. The Czech Republic has not only diverse geological localities from Precambrian to Quaternary, but it also has a rich cultural and historical heritage, with numerous UNESCO-listed sites.

Prague has one of the best public transportation systems in Europe.

A dense public transport network (metro, trams and busses) takes you around the city easily and quickly, at very low cost. We recommend buying a one-week pass, which allows unlimited use of the entire network, with no further need for purchasing or validating tickets. **Accommodation** for participants may be reserved at hotels in a wide range of prices and styles, all situated only few minutes travel from the conference venue, as well as directly in the venue of the meeting.





VENUE

Clarion Congress Hotel Prague **** Freyova 33, 190 00 Prague 9, website: <u>http://www.cchp.cz</u>



Category: International four-star hotel is a state-of-the-art conference centre, providing high quality services for hosting a variety of events.

Location: Prague 9 – directly on the metro B line, station "Vysočanská", close to the multifunction O2 Arena as well as aqua park Lagoon in Letňany. Easily accessible from all major points – the International Airport can be reached within 30 minutes by car, the historical city centre only 10 minutes by metro. Other activities available in the immediate area are the Big Wall climbing gym, Prague's newest and largest indoor climbing centre, Hurricane Factory wind tunnel, the only skydiving simulator in the Czech Republic and Freestyle Kolbenka, a newly-opened trampoline park.

Facilities: The hotel offers accommodation in 559 rooms that feature bathroom, minibar, personal in-room safes, satellite TV, telephone, iron, hairdryer and high speed Internet access. Non-smoking and rooms for handicapped are available. All rooms and public areas are fully air-conditioned. Boarding is provided in 3 hotel restaurants, with total capacity up to 900 seats. Brasserie VEDUTA (570 seats) is the main hotel restaurant, with Czech as well as international cuisine. Restaurant GOURMET provides a variety of culinary specialties a la France. Adjoining Citadela restaurant is unique with its atmosphere of a medieval tavern.

Large congress centre: available conference quarters are divided into 23 halls and meeting rooms, comfortably seating up to 2500 participants. The facilities are equipped with state-of-the-art audio-visual technology. The variable arrangement of space allows adapting the facilities to the needs of the conference. Reception and concierge service are available 24/7; amenities include secured parking facilities, room service, laundry service, Wi-Fi internet connection free of charge in all public areas, wellness and shopping centres.

Transport access: Airport transfers from the International Airport are available via the Hotels Limousine service, by public transport as well as Airport Transport services. A Metro B line station is directly adjacent to the hotel, trams and busses run on both adjacent streets, and a train terminal is a three minute walk from the hotel. For those arriving by car, the nearest freeway is just over a mile from the hotel, connected directly to the hotel site by a major thoroughfare, and the hotel has a secured parking garage.

CLIMATE

The weather at the place of the conference is usually warm and dry. Summer temperatures can vary between 15-30°C. Autumn temperatures are around 15°C. The conference is expected to be in September-October – a very nice time of the year. Peak tourist traffic has abated by then, but weather is still quite pleasant.

VISAS

Participants from most European countries, Canada and the USA can enter the Czech Republic without a visa. Participants from other countries are advised to check requirements at the nearest Embassy or Consulate of the Czech Republic, to be sure of what documents are necessary. Detailed information can be found on <u>www.mzv.cz</u>. An official letter of invitation to the conference is available upon request.

Proposed Schedule

	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8
8:30–10:30		Oral presentations	Oral presentations		Oral presentations	Oral presentations	Oral presentations	
10:30–11:00		Coffee break	Coffee break		Coffee break	Coffee break		
11:00–13:00	Pre- conference Field trips	Oral presentations	Oral presentations	Field trips	Oral presentations	Oral presentations	Oral presentations	Post- conference Field trips
13:00–14:30	Registration	Lunch	Lunch		Lunch	Lunch	Lunch	r ieiu trips
14:30–16:30	11:00–18:00	Oral presentations	Oral presentations		Oral presentations	Oral presentations	Workshops	
16:30–17:00	party 18:00–?	Coffee break	Coffee break		Coffee break	Coffee break		
17:00–19:00		Oral and poster presentations	Oral and poster presentations		Oral and poster presentations	Oral and poster presentations	Closing Ceremony	
20:00–24:00					Congress Dinner (Optional) 20:00–24.00			

LANGUAGE

Official language of the meeting is English.

ORGANIZERS

Charles University, Prague (CUP)

Comenius University, Bratislava (CUB)

Czech Academy of Sciences (CAS)

Czech Geological Survey (CGS)

National Museum Prague (NMP)

West Bohemian Museum Pilsen (WBMP)

President emeritus:	Zlatko Kvaček (CUP)		
Secretary:	Jiřina Dašková (NMP, AVCR)		
Organizing committee:	Jiří Bek (AVCR)		
	Petr Kuneš (CUP)		
	Jiří Kvaček (NMP)		
	Petr Pokorný (CUP)		
	Josef Pšenička (WBMP)		
	Jakub Sakala (CUP)		
	Vasilis Teodoridis (CUP)		

Fieldtrips co-organized by:Eva Břízová (CGS)Nela Doláková (MUB)Oldřich Fatka (CUP)Mariana Kováčová (CUB)

POSSIBLE FIELDTRIPS

Pre-conference and post-conference field trips will be arranged. There will be also variety of cultural programs in the middle of the conference, such as a trip to a UNESCO towns Prague, Kutná Hora, and a trip to a UNESCO geopark Český ráj (Bohemian Paradise).

A) LOWER PALAEOZOIC OF THE BARRANDIAN AREA

Each trip will leave Prague in the morning and return in the evening. Two- to three-day field-trips in Cambrian to Devonian sediments southwest of Prague will give an opportunity to visit new and classic localities, including the first GSSP of the Silurian-Devonian boundary. At all outcrops, collecting of fossils and sampling for microfossils will be possible.



B) PENNSYLVANIAN

Two field trips will be organized one visiting the in area of the Permian of Chemnitz (Germany), second to the Pennsylvanian (Late Carboniferous) of Radnice Basin (Czech Republic). Old and new outcrops will be open for participants.



C) LATE CRETACEOUS OF THE BOHEMIAN CRETACEOUS BASIN

A field trip to three localities: Horoušany, Brník, Pecínov of the Czech fresh water Cenomanian will provide an overview of palaeobotany and sedimentology of the Bohemian Cretaceous Basin. At all outcrops, collecting of fossils and sampling for microfossils will be possible.



D) TERTIARY OF NORTH BOHEMIA

Remnants of Eocene to Pliocene rocks are preserved in depressions and grabens, mainly along the Krušné hory piedmont. Besides fresh-water coal-bearing deposits, the products of volcanic centres occur in Western and Northern Bohemia, forming the eastern branch of the European Cenozoic Volcanic Alkaline Province. North Bohemian Most Basin will be visited with particular interest in Tušimice open cast mine locality. Some famous volcanic localities as Kučlín etc. will also be a part of the field trip.

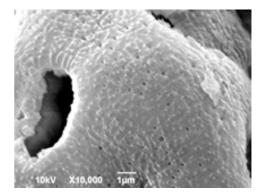


E) TERTIARY OF CARPATHIAN FOREDEEP AND VIENNA BASIN, PALYNOLOGICAL LOCALITIES

A Miocene filed trip to Hevlín – hypostratotype of the Karpatian age (upper Burdigalian), Pannonian (Tortonian – Messinian) of Vienna basin, Židlochovice – hypostratotype of the Badenian age (Langhian).

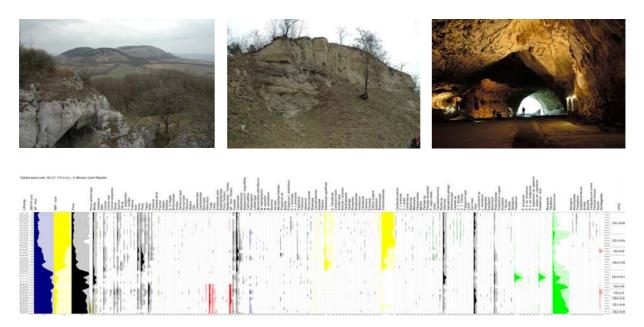






F) QUATERNARY - SOUTH MORAVIA, PALYNOLOGICAL LOCALITIES

The area of South Moravia known not only by Czech vineyards and wine cellars but also by several prehistorical localities (Dolní Věstonice – pedocomplex, loess, Pavlovské vrchy Hills, Pasohlávky – settlement), Vracov, Vacenovice, Čejčské Lakes and Moravian Karst with 15 palynologically evaluated caves (Kůlna Cave etc.).



INTERNATIONAL UNION OF BIOLOGICAL SCIENCES SECTION FOR PALEOBOTANY International Organisation of Palaeobotany

A brief pictorial history of IOP

Compiled by: Gar Rothwell for

IPC/IOPC 2012

Early Years of IOP 1954 – 1970s

Proposed by Edouard Boureau at the 1954 International Botanical Congress in Paris, and established at that time



Implemented as a section of the International Union of Biological Sciences

Principal meetings were held at International Botanical Congresses, where paper presentations and General Assemblies of the membership took place

Bill Chaloner acted as Secretary until 1977

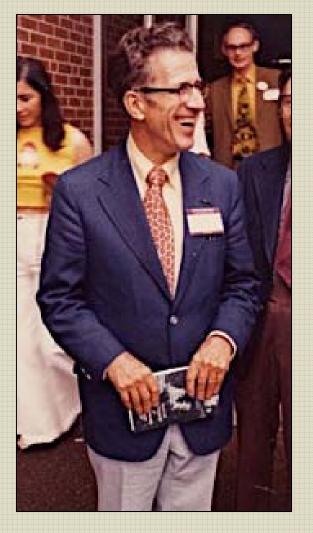
Information was Published in the "World Reports on Palaeobotany" until replaced by the IOP Newsletter in 1976

Newsletters Nos. 1 & 2 (1976) were edited by Hans Tralau, Newsletter No. 3 (1977) was Edited by James M. Schopf, Newsletters Nos. 4-68 were edited by Mike Boulter

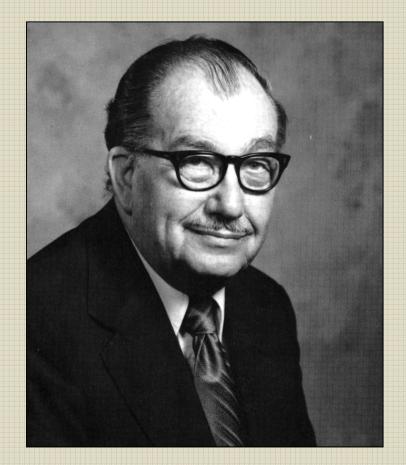
Business was conducted by traditional post until 2000, when the transition to electronic communications through the IOP Website was initiated

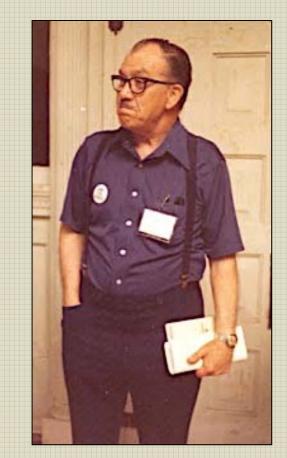
1975

Harlan P. Banks, USA - President



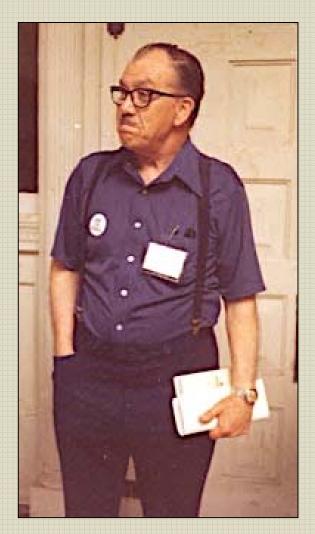
James M. (Jim) Schopf, USA – President



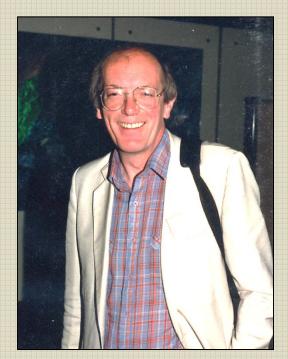


1977

Jim Schopf, USA – President



Mike Boulter, UK – Newsletter Editor



IOP Secretary (& principal operating officer; 1977 – 2000)

Theodore (Ted) Delevoryas, USA – President



Mike Boulter, UK



IOP Secretary

IOPC I, Reading, UK, 1980

William C. (Bill) Chaloner, UK – President



Mike Boulter, UK



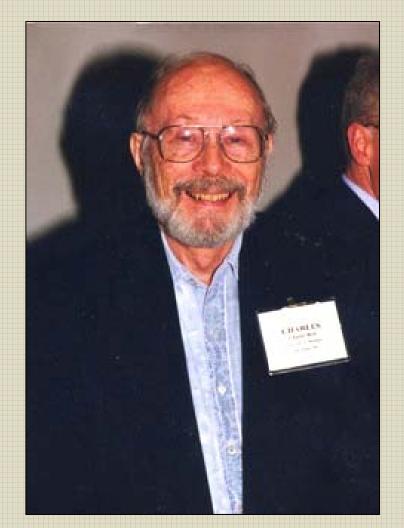
IOP Secretary

IOPC II, Edmonton, Canada, 1984

Charles B. (Charlie) Beck, USA – President



IOPC IV, Paris, France, 1992

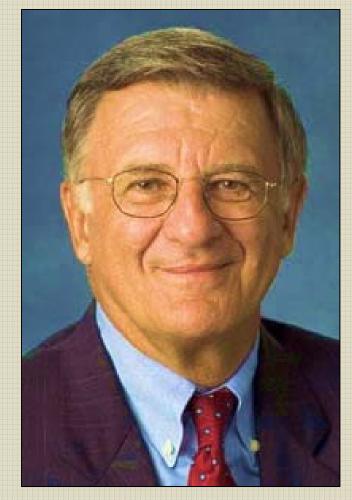


Mike Boulter, UK



IOP Secretary

Thomas N. (Tom) Taylor, USA – President



Mike Boulter, UK



IOP Secretary

IOPC V, Santa Barbara, California, USA, 1996

Jean Galtier, France – President

IOPC VI, Qinhuangdao, China, 2000



Mike Boulter, UK



IOP Secretary

Else Marie Friis, Sweden – President



Gar Rothwell, USA



Secretary/Treasurer

IOPC VII, Bariloche, Argentina, 2004

Margaret Collinson, UK – President



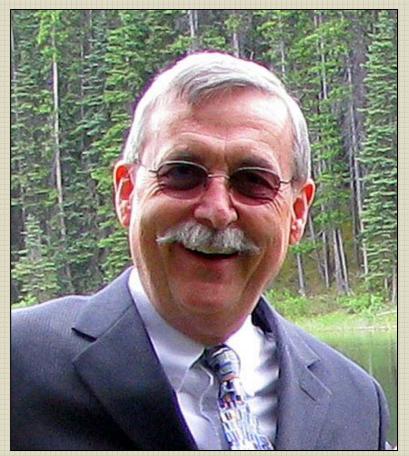
Gar Rothwell, USA



Secretary/Treasurer

IOPC VIII, Vienna, Austria, 2008

Gar Rothwell, USA – President



Johanna Eder Kovar, Germany



Secretary/Treasurer

IOPC IX, Tokyo, Japan, 2012

Johanna Eder Kovar, Germany – President

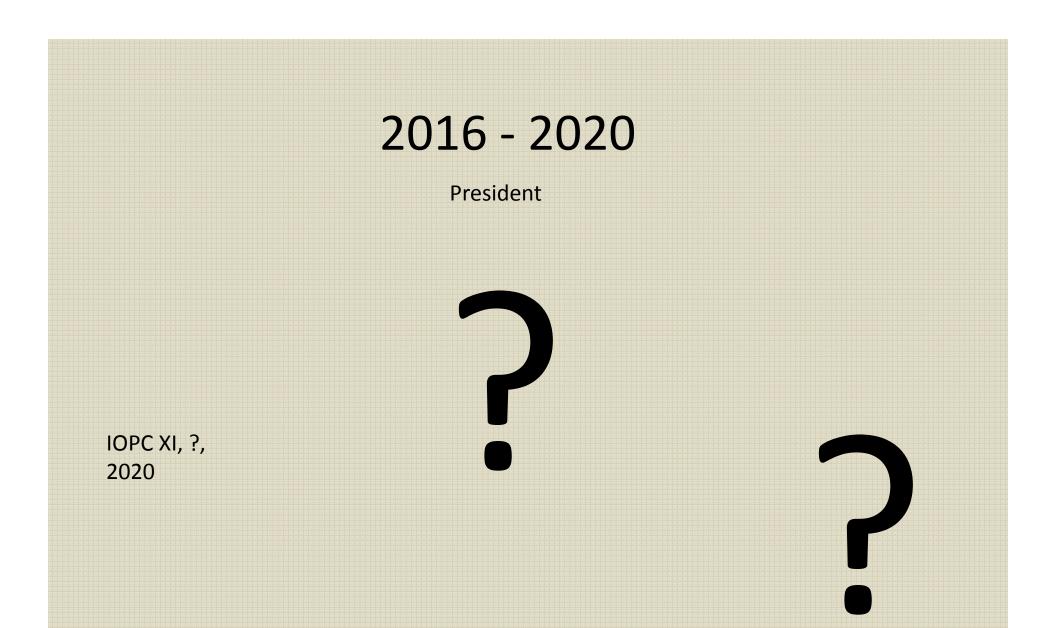


Mike Dunn, USA



Secretary/Treasurer

IOPC X, Salvador Brazil, 2016



To be Continued.....

Secretary/Treasurer

International Organisation of Palaeobotany General Assembly IPC XIII/IOPC IX Tokyo, Japan 28 August 2012 Minutes

The meeting was called to order at 13:30pm: President Gar Rothwell Presiding

77 Members were present

A moment of silence was held for IOP Members lost since 2008

Presidents Report: IOP is in good shape, as we were active for the last 4 years. The newsletters continue to go out on schedule, and the website is well maintained by Alan Spencer.

However, a call was put out to load member data onto the members page of the website.

Secretary/Treasurer Report:

The newsletters continue to go out 3 times per year in February-June and October

In 2008 we had 350 Members. In 2012 we have 460 Members. It is unknown how many of those members in current with their membership.

The Treasury holds: \$6545 in the bank account 2044 in Euros \$1080 in cash

Executive Council Election Results:

President:	Johanna
Vice Presidents:	Harufumi Nishida Mihai Popa Bob Spicer
Members-at-Large:	Alexi Hans Kerp Jun Wang

Secretary/Treasurer: Mike Dunn

IOPC X 2016: Three proposals were discussed

Brigitte Meyer-Berthaud proposed a joint meeting with IPC at Paris

Paulo A Sauza proposed a joint meeting with IPC at Salvador, Brazil

Carole Gee (for Bob Gastaldo) proposed a solo meeting at Colby College, Maine USA

A lively discussion followed, and it was agreed that the Membership wished to meet jointly with IPC. However, a decision could not be reached, and the decision was tabled to be finished online, after consultation with IPC.

The meeting was adjourned.

Respectfully submitted Mike Dunn Secretary/Treasurer Elect

International Organisation of Palaeobotany General Assembly IOPC X Salvador, Bahai, Brazil 26 October 2016 10:30-12:30

Agenda

Call to Order

Acceptance of the 2012 Minutes

A moment of silence for IOP Members lost since 2012

.

Presidents Report

Secretary/Treasurer Report

Old Business

New Business

IOPC XI 2020

Life membership

Why does IOP exist?

What are the advantages of being a member?

Webmaster position

Executive Council Election Results:

Adjournment.